

#### TOWNSHIP OF FERGUSON

3147 Research Drive • State College, Pennsylvania 16801 Telephone: 814-238-4651 • Fax: 814-238-3454 www.twp.ferguson.pa.us

#### FERGUSON TOWNSHIP PLANNING COMMISSION REGULAR MEETING AGENDA Monday, September 9, 2019 6:00 PM

- I. CALL TO ORDER
- II. CITIZEN INPUT

#### III. Musser Gap 2 Valleylands (MG2V)

CHARIMA YOUNG, from Penn State University, will present the Musser Gap 2 Valleylands (MG2V) initiative. Deb Nardone, Executive Director of ClearWater Conservancy is here as well. This initiative is a partnering between Penn State University and ClearWater Conservancy that aims to conserve the Musser Gap property located between Whitehall Road and Rothrock State Park Forest at Musser Gap.

<u>Staff Recommendation</u>: Listen to the presentation, ask questions and make comments as necessary. Map of Penn State Properties surrounding the Musser Gap is included in agenda packet for reference.

#### IV. WATKINS SUBDIVISION

On August 30, 2019 PennTerra Engineering, Inc., submitted The Watkins Subdivision on behalf of their client. The Watkins Subdivision is located at 550 Bloomsdorf Drive, T.P. # 24-017-,012-,0000. The purpose of this plan is to subdivide Tax Parcel 24-17-12 into two lots, revised T.P. 24-17-12 and Lot 3. The existing lot is 3.415 acres with 425.6 feet of frontage along Bloomsdorf Drive. The proposed lot 3 will be 1.067 acres with 89.97' frontage and be accessed on Bloomsdorf Drive only. Revised lot 24-17-12 will be 2.348 acres. The revised lot is serviced by State College Borough Water Authority and has on-site septic systems. Lot 3 will be served by individual wells and septic systems. Other considerations for this subdivision include park fee-in-lieu and sidewalk requirements. The parcel is located within the Single Family Residential (R1) zoning district.

<u>Staff Recommendation</u>: The Planning Commission review and make initial comments on the proposed subdivision.

#### V. SCBWA REPLOT

This proposed replot of lands owned by the State College Borough Water Authority (SCBWA) and Gary E. Myers and Carol J. Myers. a water treatment facility to be located at 3062 Ernest Lane (Tax Parcel 24-003-007F). Tax parcel 24-003-007F, owned by the State College Borough Water Authority is currently 15.071 acres and the proposed acreage is 18.047 acres. Mr. and Mrs. Myers own tax parcel 24-003-007K and is currently 45.673 acres, in which 2.974 acres is being transferred to the SCBWA. The land is zoned Rural Agricultural and the current use is a well field property and the proposed use is an addition to well field property. This project was granted seven variances; Variance

to encroach upon the fifty-foot riparian buffer, Variance to waive requirements of independent hydrologic and hydraulic study, Variance to allow improvements within the flood plain, Variance to allow construction activities and improvements within the flood way, Variance to minimum lot area (50 acres), and Nonconforming use in Rural Agricultural zoning district. At this point, all remaining comments are administrative.

**Staff Recommendation:** The Planning Commission make a recommendation to the Board of Supervisors to approve the Replot of Lands for the State College Borough Water Authority and Gary E. Myers and Carol J. Myers, submitted on June 26, 2019 and last revised on August 12, 2019 condition upon all outstanding items being completed.

#### VI. SCBWA WATER TREATMENT FACILITY LAND DEVELOPMENT PLAN

This Land Development Plan proposes a water treatment facility to be located at 3062 Ernest Lane (Tax Parcel 24-003-007F). The proposed water treatment plant will be 22,182 square feet and have five standard parking spaces and one ADA space, one loading space and will employ four people. The proposed structure will be located less than 1,000 feet from the nearest residential structure and be surrounded by a natural landscape buffer, a proposed landscape buffer and a fence line with privacy slats. A Water Treatment Facility is a Conditional Use within the Rural Agricultural Zoning District. The Conditional Use was approved by the Board of Supervisors on August 5, 2019 At this point, all remaining comments are administrative.

<u>Staff Recommendation:</u> The Planning Commission make a recommendation to the Board of Supervisors to approve the State College Borough Water Authority Water Treatment Facility Land Development Plan, submitted on June 26, 2019 and last revised on August 30, 2019 condition upon all outstanding items being completed.

#### VII. SALDO/ZONING ORDINANCE UPDATE:

During a Board of Supervisors Special Meeting held on Wednesday August 28, 2019, the Board continued to review and discuss parts of the zoning ordinance with the exception Rural Agriculture. Edits and modifications can be found in the latest draft. The public hearing, scheduled for September 16 has been cancelled by the Board of Supervisors at the September 3, 2019 meeting due to the number of changes that warrant further review. The public hearing will be rescheduled for October 21, 2019 at the Regular Board of Supervisors meeting. Comments from the Centre Region Planning Commission have been included in the agenda packet for review.

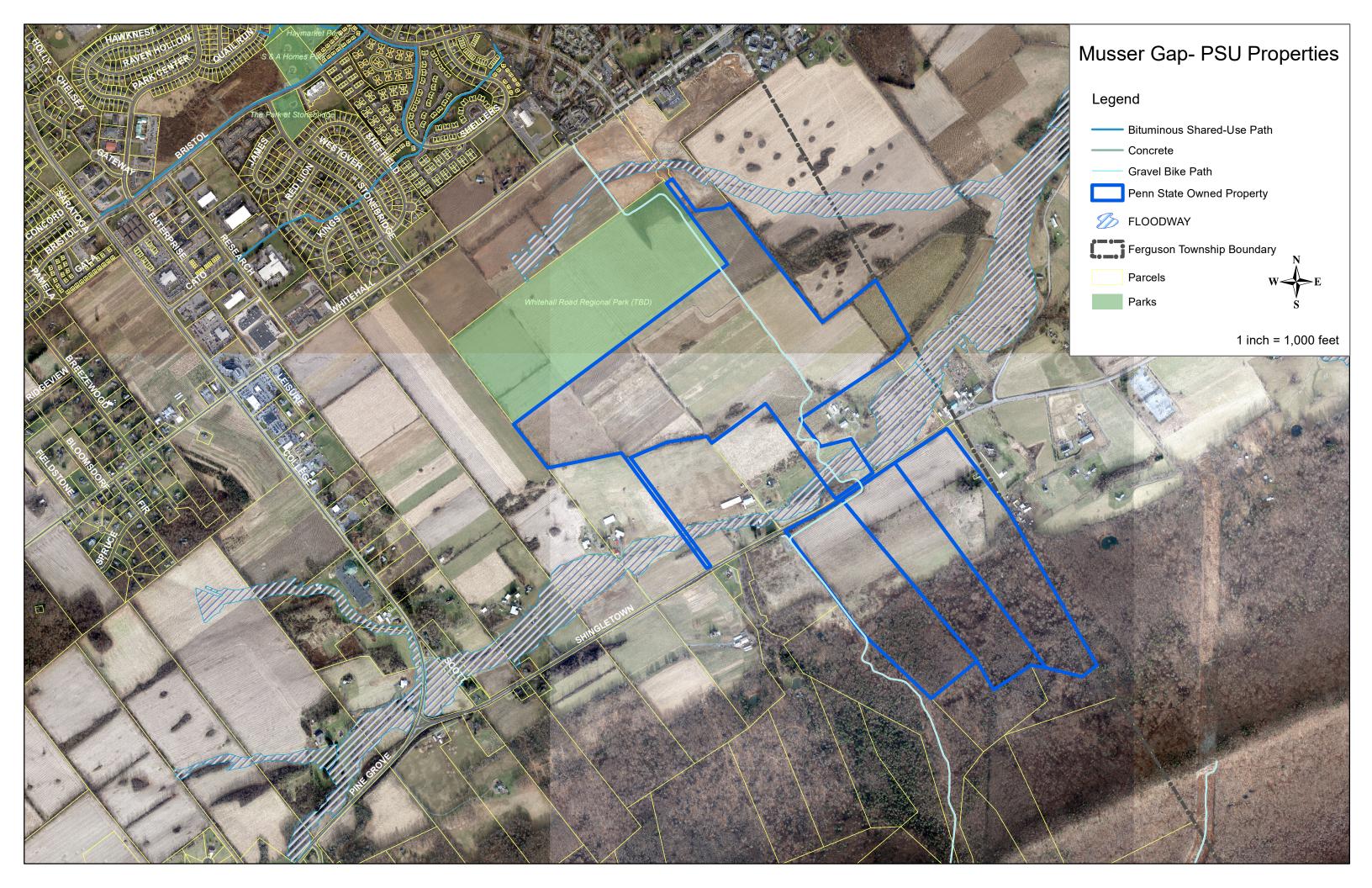
Due to the size of the draft ordinance, a link to the draft is provide below:

https://www.dropbox.com/home/Ferguson%20Township%20Draft%20Progress/FTOU%20Zoning%20Summer%202019

<u>Staff Recommendation</u>: That the Planning Commission continue to review changes and the quick views and provided feedback to staff to forward to the consultant.

Ferguson Township Planning Commission Agenda September 9, 2019 Page 3 of 3

- VIII. SUMMARY OF ACTIVE PLANS
- IX. CENTRE REGIONAL PLANNING COMMISSION REPORT
- X. APPROVAL OF REGULAR MEETING MINUTES AUGUST 26, 2019
- XI. ADJOURNMENT





# TOWNSHIP OF FERGUSON

3147 Research Drive • State College, Pennsylvania 16801 Telephone: 814-238-4651 • Fax: 814-238-3454 www.twp.ferguson.pa.us

TO: Planning Commission

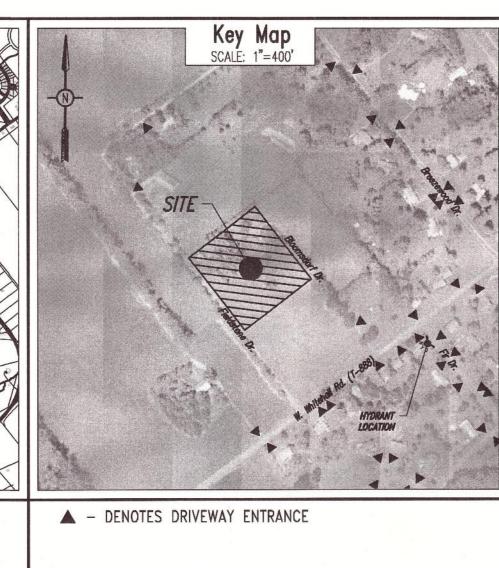
FROM: Kristina Aneckstein, Community Planner

DATE: September 9, 2019

SUBJECT: Watkins Subdivision

On August 30, 2019 PennTerra Engineering, Inc., submitted The Watkins Subdivision on behalf of their client. The Watkins Subdivision is located at 550 Bloomsdorf Drive, T.P. # 24-017-,012-,0000. The purpose of this plan is to subdivide Tax Parcel 24-17-12 into two lots, revised T.P. 24-17-12 and Lot 3. The existing lot is 3.415 acres with 425.6 feet of frontage along Bloomsdorf Drive. The proposed lot 3 will be 1.067 acres with 89.97' frontage and be accessed on Bloomsdorf Drive only. Revised lot 24-17-12 will be 2.348 acres. The revised lot is serviced by State College Borough Water Authority and has on-site septic systems. Lot 3 will be served by individual wells and septic systems. Other considerations for this subdivision include park fee-in-lieu and sidewalk requirements. The parcel is located within the Single Family Residential (R1) zoning district.

<u>Staff Recommendation</u>: The Planning Commission review and make initial comments on the proposed subdivision.



General Site Information: Randall J. Watkins a. Owner of Record: 550 Bloomsdorf Dr. State College, PA 16801 Record Book 1992, Page 728 b. Deed Information: c. Tax Parcel No.: 24-17-12 d. Size: 3.415 acres / 148,744 S.F. (T.P. 24-17-12) 2.348 acres / 102,253 S.F. (Revised T.P. 24-17-12) 1.067 acres / 46,491 S.F. (Proposed Lot 3) 3.415 acres / 148,744 S.F. Total Site R1 - Single Family Residential (Revised T.P. 24-17-12) f. Site Address: 550 Bloomsdorf Dr., State College, PA 16801 XXXXXXXXXXXXXXX, State College, PA 16801 (Proposed Lot 3) Residential (Existing) q. Site Use: h. Building Setbacks: Front - 50' on arterial streets, 25' on local or collector streets if 50' R/W Lot 3's Front Setback is 195' Rear - 30' Building Heights: 40' Maximum 100' @ building setback line, 75' @ street line Minimum Width: Impervious Area: Tax Parcel 24-17-12: 5,780 S.F. (2.84%) (Building) 3,975 S.F. (2.93%) (Driveway/Walks) 9,755 S.F. (5.77%) (Total)

2. Revised Tax Parcel 24-17-12 is served by the State College Borough Water Authority and utilizes an existing septic system. Lots 3 will be served by individual wells and septic systems.

Act 287 Utility Information (Serial No. 20142412473):

State College Borough Water Authority (SCBWA) a. Water: 1201 West Branch Road, State College, PA 16801; (814) 238-6766

On-site Septic Systems b. Sewer: Verizon Facilities Management Center 224 South Allen Street, State College, PA 16801; (814) 231-6511 d. Electric: West Penn Power Company

2800 East College Avenue, State College, PA 16801; (814) 237-5821 e. Cable Television: Comcast 60 Decibel Road, State College, PA 16801; (814) 238-5050 f. Gas Columbia Gas 2550 Carolean Drive, State College, PA 16801; (814) 238-6775

4. The purpose of this plan is to subdivide Tax Parcel 24-17-12 into two lots, Revised Tax Parcel 24-17-12 & Lot 3.

5. Revised Tax Parcel 24-17-12 will continue to utilize Bloomsdorf Drive and will not access Fieldstone

6. Lot 3 will access Bloomsdorf Drive and not Fieldstone Drive.

7. Since existing Tax Parcel 24-17-12 and Lot 3 will not have access to Fieldstone Drive, there is no increase on the number of lots accessing Fieldstone Drive. This subdivision will not affect the ability of existing lots to access Fieldstone Drive.

8. According to the Federal Emergency Management Agency (FEMA) flood insurance rate mapping for Community Panel No. 42027C0619F, dated May 4, 2009, and the FIRM (Flood Insurance Rate Map) Community Panel Number 420260; the tax parcel 24-17-12 is in the Zone X floodplain.

9. As determined from field views and by reviewing the National Wetlands Inventory mapping for State College, PA, there are no wetlands in the area of tax parcel 24-17-12.

10. A maintenance agreement for Bloomsdorf Drive is on record at the Centre County Courthouse, Record Book 2164, Page 399.

11. The Nolin soil line shown on the plan is based upon soil mapping and septic testing soil logs. No construction is permitted in the area shown as Nolin soils unless a soils report confirms the absence of

12. The existing building located on the northwest corner of revised Tax Parcel 24-17-12 is nonconforming in that it is located within the building setback.

13. This Record Plan conforms with the Plan receiving final approval by the Ferguson Township Board of Supervisors on \_\_\_\_\_\_. All improvements are or will be installed in accordance with such Plan in a manner and time so specified therein.

14. A parkland fee of \$1511.30 has been paid in lieu of providing parkland.

Tax Parcel 24-17-13A

N/F Lands of

Randall J. Watkins

R.B. 2165 / Pg. 320

TG=1224.19

INV=1221.03 "Bloomsdorf, Dr.

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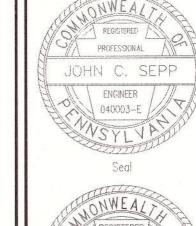
-Existing Fire Hydrant located (

Fir Dr. and W. Whitehall Rd., uis 220' Northeast of this logation.

ALLG 1214138,

B24 V/2 84

'50' onto Fir Drive, intersection of



ENGINEERING INC.

CENTRAL PENNSYLVANIA

3075 ENTERPRISE DRIVE

STATE COLLEGE, PA 16801

PH: 814-231-8285

Fax: 814-237-2308

REGION OFFICE:

SUITE 100

LANCASTER

REGION OFFICE:

3904 B ABEL DRIVE

COLUMBIA, PA 17512

PH: 717-522-5031 Fax: 717-522-5046

WWW.PENNTERRA.COM

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NEVIN L. GROVE LAND SURVEYOR

		Jeui	
Designer	· · · · · · · · · · · · · · · · · · ·		TLS
Draftsman			TLS
Proj.Manag	ger _		JCS
Surveyor			BRK
Perimeter	Ck		
Book	486	Pg _	28
Acad	14095	5-MD-(	CORRECTIVE
Layout		9	SUBDIVISION

WPP 133906, X844 Tax Parcel 24-17-12A N/F Lands of Mark A. & Sandra J. Kunkle R.B. 2171 / Pg. 12 & CARTWAY PB 90 / PG 24 B24 V/2 84B NED NED Date Description REVISIONS 8 WATKINS JG=1224.32 SUBDIVISION INV=1220.87 Existing 1 1/2" PVC Water Service to Tax Parcel 24-17-12 WPP 98100, X85 FERGUSON TOWNSHIP CENTRE COUNTY PENNSYLVANIA TG=1224.44 INV=1220.72 Storm Inlet -TG=1222.95 INV=1219.45 SUBDIVISION OF TAX PARCEL B165X2, WPP 386223 - P/P W/ DROPLINE 24-17-12 ALLG 1253074 "Fieldstone Dr." Tax Parcel/24-04-55 15" CPP -Storm Inlet -IG=1219,79 INV=1215:99 PROJECT NO. 14095 GRAPHIC SCALE AUGUST 22, 2019 ( IN FEET ) 1"=50' 1 inch = 50 ft.

EXISTING FEATURES LEGEND Existing Building

Existing Contours (2's) — Existing Contours (10's) ···... Existing Soil Limit Line / Boundary Existing Tree Line — — w — w — w — Existing 8" D.I.P. Water Line w / Valve EX CB ← . ₩ . — w Existing 1 ½" PVC Water Service w/ Curb Box = = = = = = = Existing Storm Sewer Line w/Inlet Existing Overhead Utility Line w/ Pole Existing Concrete Sidewalk Existing Retaining Wall -x-x-x-x-x-x Existing Fence / Type Existing Water Service Valve Existing Clean-Out Existing Light Pole/Standard Existing Sign Existing Mail Box M.B. == Existing Deciduous Tree Existing Evergreen Tree Existing Shrub 12% IP# 3 Septic Test Pit and Perculation Locations (All Proposed Systems will be in Ground Systems) (See Note 11)

SURVEY FEATURES LEGEND

Property Line, Lot Line or Right of Way Line ----- Adjoining Property Line ---- Building Setback Line ———— — Easement Line ----- Roadway Center Line 1/2" Steel Iron Pin

SOILS LEGEND

Soil cover on the site consists of: \*HaB - Hagerstown Silt Loam, 0%-3% Slopes \*No - Nolin Silt Loam, 3%-8% Slopes OhB - Opequon-Hagerstown Complex, 3%-8% Slopes

Prime Agricultural Soils are indicated on the plan with an "\*" next to the soil name.

N/F Lands of Thomas L. & Norma J. Merritt R.B. 2125 / Pg. 987 SIDE SETBACK Tax Parcel 24-17-10 N/F Lands of Thomas L. & Norma J. Merritt R.B. 2125 / Pg. 987

**PROJECT NOTES:** 

Tax Parcel 24-17-14 Tax Parcel 24-17-13 N/E Lands of Randall J. Watkins R.B. 2165 / Pg. 320 BLOOMSDORF DRIVE (PRIVATE) 1230-50' R/W FRONT **SETBACK** S37°56'31"E 425.06'

Tax Parcel 24-17-12

N/F Lands of

R.B. 1992 / Pg. 728

3.415 AC

148,744 S.F.

Existing Tax Parcel 24-17-12 = 3.415 acres (148,744 S.F.)

Revised Tax Parcel 24-17-12 = 2.348 acres (102,253 S.F.)

WPP 386225, B165,

X4, W/ Dropline

PROPOSED LOT 1 = 1.067 acres ( 46,491 S.F.)

FFE=1229.18

(SEE NOTE 12) REAR -

> Tax Parcel 24-17-06 N/F Lands of Bryan T. & Melissa Anne Lein Hoy

N37°56'31"W 425.06"

R.B. 2229 / Pg. 466

FIELDSTONE DRIVE (PRIVATE)

- SIDE

WPP 386224

← POSSIBLE

PROPOSED LOT 3

1.067 AC

46,491 S.F.

Pr. 15' Utility Easement-

SIDE

SETBACK

WELL LOCATION

Lisa M.\Campbell R.B. 1936 / Pg. 770

Ex. 15' Utility Easement

SIDE

**SETBACK** 

Ex. 30' Utility Easement

Tax Parcel 24-17-11

N/F Lands of

Nathan R. & Katie L. Bish

PB 90 / PG 24

R.B. 2202 / Pg. 122

N/F Lands of



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TO: Planning Commission

FROM: Kristina Aneckstein, Community Planner

DATE: September 9, 2019

SUBJECT: Replot of Lands for the State College Borough Water Authority and Gary E. Myers and Carol J.

Myers

This proposed replot of lands owned by the State College Borough Water Authority (SCBWA) and Gary E. Myers and Carol J. Myers. a water treatment facility to be located at 3062 Ernest Lane (Tax Parcel 24-003-007F). Tax parcel 24-003-007F, owned by the State College Borough Water Authority is currently 15.071 acres and the proposed acreage is 18.047 acres. Mr. and Mrs. Myers own tax parcel 24-003-007K and is currently 45.673 acres, in which 2.974 acres is being transferred to the SCBWA. The land is zoned Rural Agricultural and the current use is a well field property and the proposed use is an addition to well field property. This project was granted seven variances; Variance to encroach upon the fifty-foot riparian buffer, Variance to waive requirements of independent hydrologic and hydraulic study, Variance to allow improvements within the flood plain, Variance to allow construction activities and improvements within the flood way, Variance to minimum lot area (50 acres), and Nonconforming use in Rural Agricultural zoning district. At this point, all remaining comments are administrative and are outlined below.

- 1. A digital copy of the plan in accordance with Township requirements must be provided to the Township prior to final plan signature. (Chapter 22 Section 304.7) **Comment Stands.**
- 2. The plan must be signed, all fees paid to the Township and the plan recorded within the plan deadline. **Comment Stands**
- 3. The plan must be signed, all fees paid to the Township, and the plan recorded within the plan deadline. **Comment Stands.**

<u>Staff Recommendation</u>: The Planning Commission make a recommendation to the Board of Supervisors to approve the Replot of Lands for the State College Borough Water Authority and Gary E. Myers and Carol J. Myers, submitted on June 26, 2019 and last revised on August 12, 2019 condition upon all outstanding items being completed.

# PRELIMINARY/FINAL RE-PLOT OF LANDS

# STATE COLLEGE BOROUGH WATER AUTHORITY AND GARY E. AND CAROL J. MYERS FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

JUNE 26, 2019 LAST REVISED AUGUST 12, 2019

# COMMONWEALTH OF PENNSYLVANIA ACT NO. 287

THE CONTRACTOR SHALL COMPLY WITH ALL THE APPLICABLE REQUIREMENTS OF ACT NO. 287 OF THE GENERAL ASSEMBLY OF THE COMMONWEALTH OF PENNSYLVANIA, AS AMENDED BY ACT NO. 187 OF 1996, AS AMENDED BY ACT NO. 181 OF 2006, EFFECTIVE MARCH 29, 2007, AND AS AMENDED BY ACT 121 OF 2008, EFFECTIVE OCTOBER 9, 2008.

FERGUSON TOWNSHIP CENTRE COUNTY

3147 RESEARCH DRIVE

CONTACT: CHRIS LEIDY

WEST PENN POWER

ROOM B100N

800 CABIN HILL DRIVE

GREENSBURG, PA 15601 CONTACT: ROBERT PAINTER

STATE COLLEGE, PA. 16801

EMAIL: cleidi@twp.ferguson.pa.us

EMAIL: rpainte@firstenergycorp.com

THE FOLLOWING IS A LIST OF MEMBERS LOCATED WITHIN THE PROJECT AREA:

WATER/
WASTEWATER: 1576 SPRING VALLEY ROAD STORM:

STATE COLLEGE, PA. 16801

1576 SPRING VALLEY ROAD STATE COLLEGE, PA. 16801 CONTACT: MARK HARTER EMAIL: mharter@uaja.com (814) 238-8370

PENN STATE UNIVERSITY
WASTEWATER TREATMENT PLANT
501 UNIVERSITY DRIVE
STATE COLLEGE, PA. 16801
CONTACT: JEFF MCDONALD

STATE COLLEGE BOROUGH WATER AUTHORITY
1201 WEST BRANCH ROAD
STATE COLLEGE, PA. 16801
CONTACT: STEVE ALBRIGHT
EMAIL: steve@scbwa.org

CONTACT: STEVE ALBRIGHT
EMAIL: steve@scbwa.org
(814) 238-0885

PA ONE-CALL (800) 242-1776

PA ONE-CALL SERIAL NUMBER:

201917630841



PROJECT NOTES . GENERAL SITE/LOT INFORMATION A. OWNER: STATE COLLEGE BOROUGH WATER AUTHORITY GARY E. & CAROL J. MYERS 1201 WEST BRANCH ROAD 650 W CHERRY LANE STATE COLLEGE, PA. 16801 STATE COLLEGE, PA. 16803 B. TAX PARCEL: 24-003-007F-000 24-003-007K-000 C. DEED BOOK/PAGE: 410/533 D. EXISTING LOT AREA: 656,482 SQ. FT. OR 15.071 ACRES 1,989,516 SQ. FT. OR 45.673 ACRES E. PROPOSED LOT AREA: 786,137 SQ. FT. OR 18.047 ACRES 1,859,968 SQ. FT. OR 42.699 ACRES F. BUILDING SETBACKS: FRONT = 50FRONT = 50'SIDE = 100SIDE = 50'REAR = 75REAR = 50'G. MAXIMUM HEIGHT: 40' AGRICULTURE H. EXISTING USE: WELL FIELD PROPERTY AGRICULTURE I. PROPOSED USE: ADDITION TO WELL FIELD PROPERTY N/A J. MAXIMUM BUILDING COVERAGE: 15% 1Ó% K. MAXIMUM IMPERVIOUS COVERAGE: 50% L. PROPERTY ADDRESS: 3062 ERNEST LANE 3061 ERNEST LANE M. LAND IS ZONED: RURAL AGRICULTURAL (RA) N. BOUNDARY AND TOPOGRAPHIC INFORMATION BASED ON FIELD INSTRUMENT SURVEY COMPLETED BY GWIN, DOBSON AND FOREMAN, INC., COMPLETED FEBRUARY 9. 2018. O. SOILS INFORMATION FROM UNITED STATE DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE. P. EXISTING FLOOD PLAIN INFORMATION FROM FIRM MAP NO. 42027C0618F IS INDICATED ON THESE PLANS. Q. THERE WAS ONE WETLAND AREA IDENTIFIED THROUGH FIELD INVESTIGATION NEAR THE EXISTING CHLORINATION BUILDING, HOWEVER, THERE ARE NO WETLANDS WITHIN THE ENVIRONS OF THE PROJECT R. THERE ARE NO STEEP SLOPES (>25%) WITHIN THE ENVIRONS OF THE PROJECT LIMITS. 2. LIST OF APPROVED VARIANCES: (FEBRUARY 26, 2019) A. §27-213.4: VARIANCE TO ENCROACH UPON THE FIFTY (50) FOOT RIPARIAN BUFFER B. §27-801.1: VARIANCE TO WAIVE REQUIREMENTS OF INDEPENDENT HYDROLOGIC AND HYDRAULIC (H&H) C. §27-801.1.C.(1): VARIANCE TO ALLOW IMPROVEMENTS WITHIN THE FLOODPLAIN D. §27-801.1.H: VARIANCE TO ALLOW CONSTRUCTION ACTIVITIES AND IMPROVEMENTS WITHIN THE FLOODWAY E. §27-801.1.1: VARIANCE TO ENCROACH UPON THE FIFTY (50) FOOT FLOODPLAIN BUFFER F. §27-501.1.A VARIANCE TO MINIMUM LOT AREA (50 ACRES) G. §27-903 NONCONFORMING USE IN RURAL AGRICULTURAL ZONING DISTRICT 3. VARIANCE DECISION (FEBRUARY 26, 2019): APPLICANT'S REQUEST FOR VARIANCES FROM THE FLOODPLAIN REGULATIONS, INCLUDING SECTION 27-213.4 (RIPARIAN BUFFER OVERLAY), SECTION 27-801.1 (HYDROLOGIC AND HYDRAULIC STUDIES), SECTION 27-801.1C (NO NEW CONSTRUCTION WITHIN FLOODPLAINS); SECTION 27-801.H (NO NEW CONSTRUCTION IN FLOODWAYS) AND SECTION 27-801.I (NO ENCROACHMENT INTO 50 FOOT FLOODPLAIN BUFFER), ARE ALL GRANTED BY A VOTE OF 5 TO 0; PROVIDED THAT AS A CONDITION TO THE GRANT OF THE VARIANCE THE APPLICANT SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM REGULATIONS (60.3 a,b AND c), AND PROVIDED FURTHER THAT THE TOWNSHIP MUST ISSUE A LETTER TO THE APPLICANT ADVISING IT OF THE RISK OF AN INCREASE IN PREMIUM RATES FOR FLOOD INSURANCE AND AN INCREASE IN THE RISKS TO LIFE AND PROPERTY BECAUSE OF THE GRANT OF THE VARIANCE. THE APPLICANT'S REQUEST FOR A VARIANCE FROM SECTION 27-501.1A (MINIMUM LOT AREA) IS GRANTED AS DE MINIMIS BY A VOTE OF 5 TO O. THE APPLICANT'S REQUEST FOR A VARIANCE FROM SECTION 27-903 (NON-CONFORMING USES) IS GRANTED BY A VOTE OF 5 TO 0. 4. EXISTING FIRE HYDRANT FLOW DATA: 3062 ERNEST LANE 102psi 74psi 2050gpm 6/22/18 ERNEST LANE 5. THE RECORD PLAN CONFORMS WITH THE PLAN RECEIVING FINAL APPROVAL BY THE FERGUSON TOWNSHIP BOARD OF SUPERVISORS ON \_\_\_\_\_\_\_. ALL IMPROVEMENTS ARE OR WILL BE INSTALLED IN ACCORDANCE WITH SUCH PLAN IN A MANNER AND TIME SO SPECIFIED THEREIN.

RE-PLOT LOCATION A DENOTES DRIVEWA  $\frac{\text{KEY MAP}}{\text{SCALE: 1"}} = 400'$ CENTRE COUNTY RECORDER OF DEEDS CERTIFICATION OF OWNERSHIP TAX PARCEL 24-003-007F-0000 (SCBWA) OWNER SIGNATURE NOTARY PUBLIC COMMISSION EXPIRES COMMONWEALTH OF PENNSYLVANIA CERTIFICATION OF OWNERSHIP TAX PARCEL 24-003-007K-0000 (MYERS) \_\_\_\_\_, 20\_\_\_, THE UNDERSIGNED OWNER(S), PERSONALLY APPEAREI BEFORE ME AND CERTIFIED THAT THEY WERE THE OWNER(S) OF THE PROPERTIES SHOWN ON THIS PLAN AND ACKNOWLEDGE THE SAME TO BE THEIR ACT AND PLAN AND DESIGNS, THE SAME TO BE RECORDED AS SUCH, ACCORDING TO THE LAW. OWNER SIGNATURE OWNER PRINT NAME OWNER TITLE OWNER SIGNATURE WITNESS MY HAND AND SEAL, THIS DATE \_ COMMISSION EXPIRES FERGUSON TOWNSHIP ENGINEER CERTIFICATION , HAVE REVIEWED AND HEREBY CERTIFY THAT THE PLAN MEETS ALL ENGINEERING DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP CODE OF ORDINANCES. FERGUSON TOWNSHIP PLANNING COMMISSION FERGUSON TOWNSHIP PLANNING COMMISSION APPROVED FERGUSON TOWNSHIP BOARD OF SUPERVISORS FERGUSON TOWNSHIP BOARD OF SUPERVISORS APPROVED FERGUSON TOWNSHIP ZONING OFFICER FERGUSON TOWNSHIP ZONING OFFICER APPROVED ZONING OFFICER FIRE CHIEF CERTIFICATION HAVE REVIEWED AND HEREBY CERTIFY THAT THE LOCATION OF FIRE LANES AND FIRE HYDRANTS SHOWN ON THIS PLAN ARE ADEQUATE. FIRE CHIEF

COVER SHEET

STATE COLLEGE BOROUGH

WATER AUTHORITY

GARY E. AND CAROL J. MYERS

**RE-PLOT OF LANDS** 

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DRAWN BY: RLN

DATE: 06/26/19 JOB: 16049

ILE: 16049\_SD\_CS1

DOBSON &

**ENGINEERS** 

3121 Fairway Drive Altoona, PA 16602

814.943.5214 gdfengineers.com

CS-1

G: \16049\SUBDIVISION PLANS\16049\_SD\_CS

FOREMAN

ON WEA

HORACE G. McANUFF

PROFESSIONAL \

LAND SURVEYOR SU-046649-E

SEAL

INDEX OF DRAWNGS

CS-1 COVER SHEET

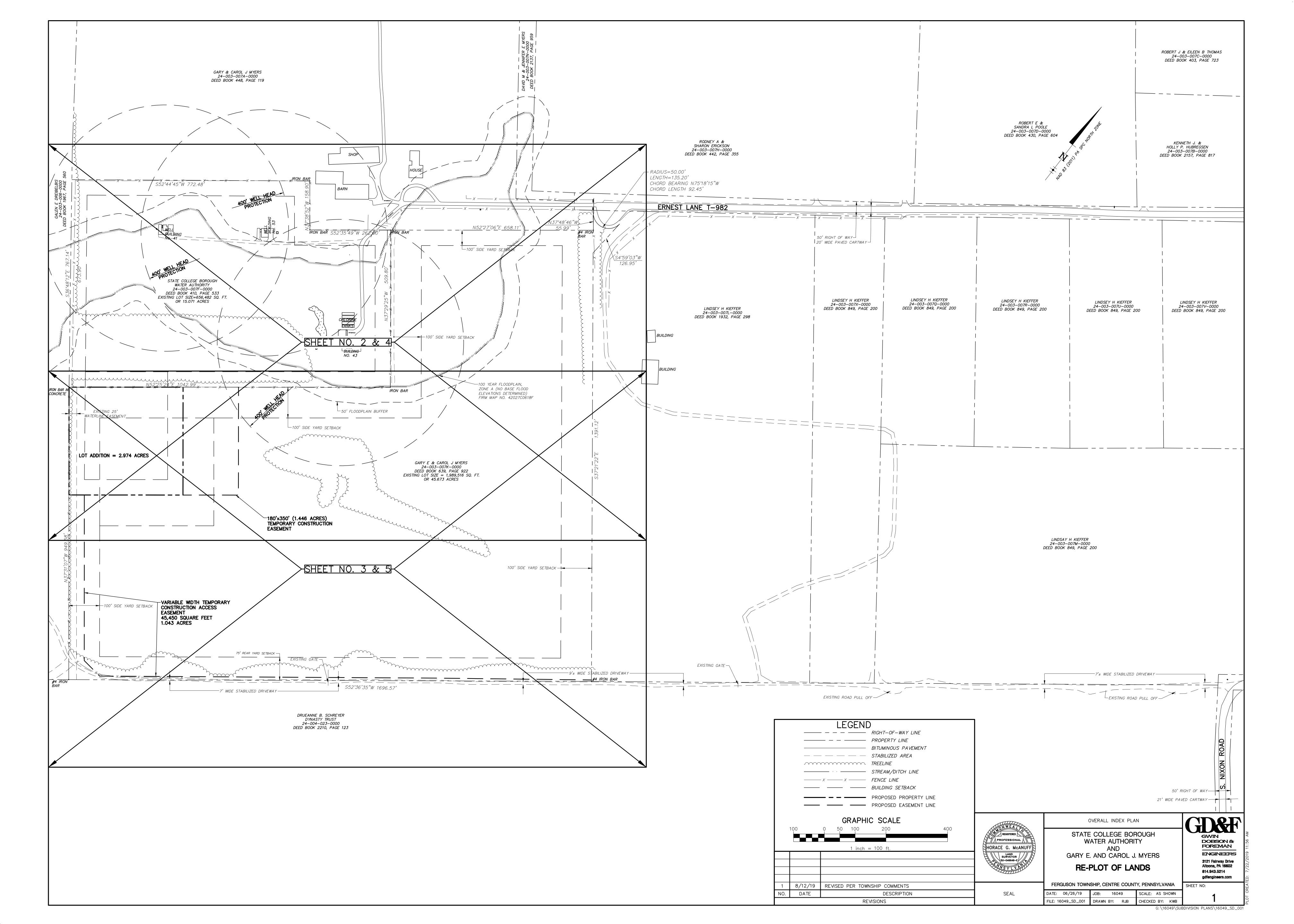
OVERALL INDEX PLAN
EXISTING CONDITIONS PLAN (NORTH)
PROPOSED RE-PLOT PLAN (NORTH)
PROPOSED RE-PLOT PLAN (SOUTH)
PROPOSED RE-PLOT PLAN (SOUTH)

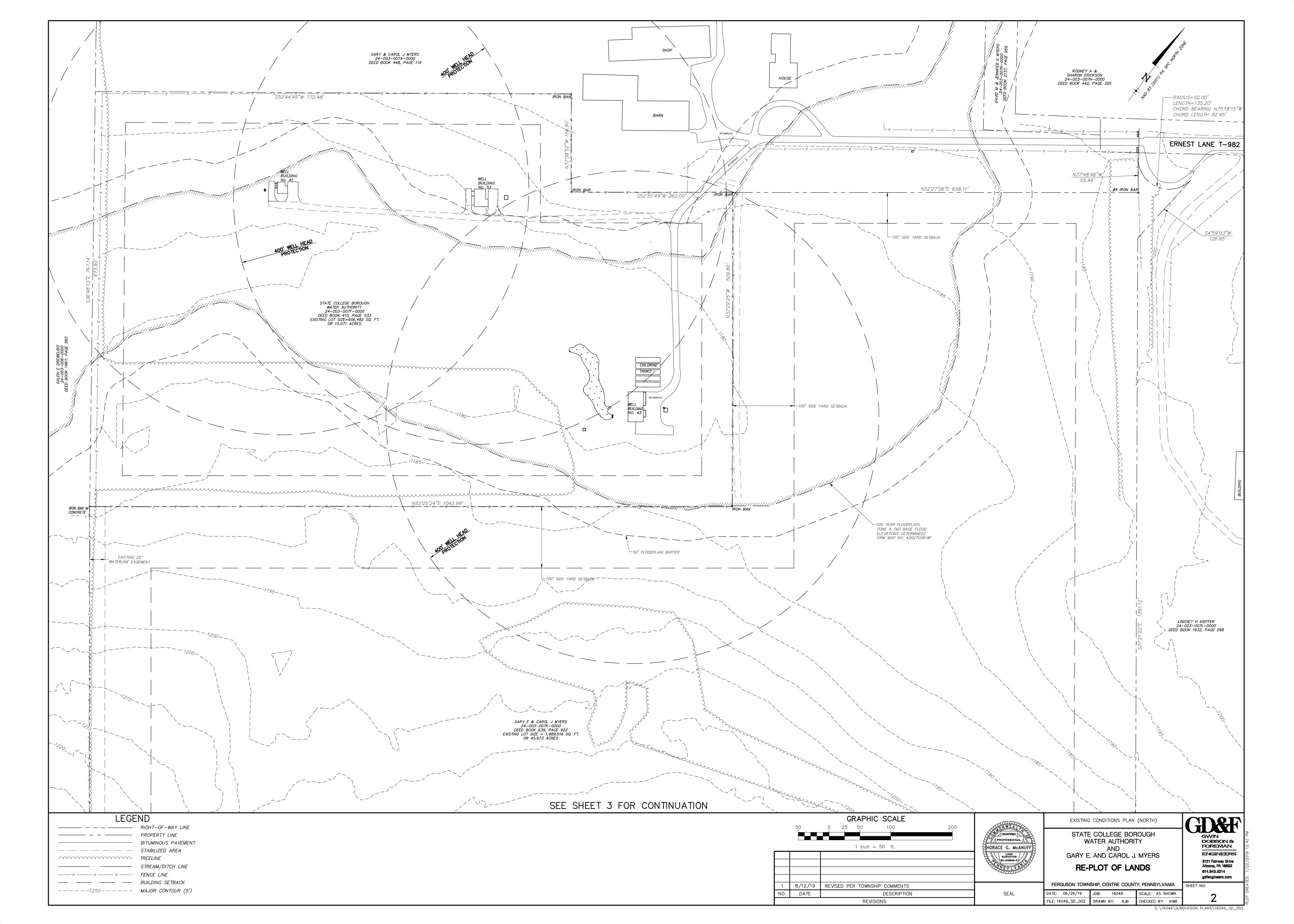
1 8/12/19 REVISED PER TOWNSHIP COMMENTS

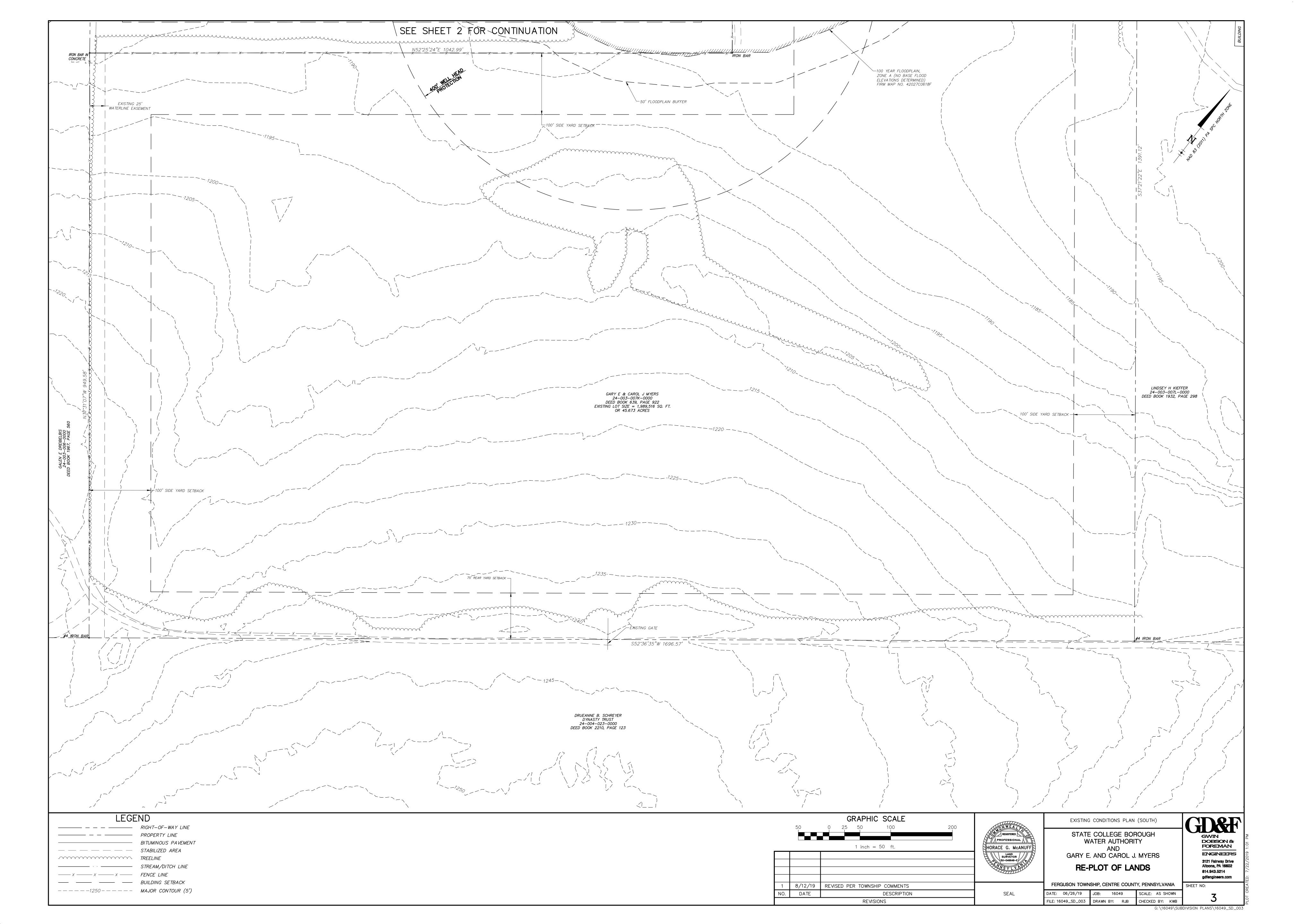
DATE

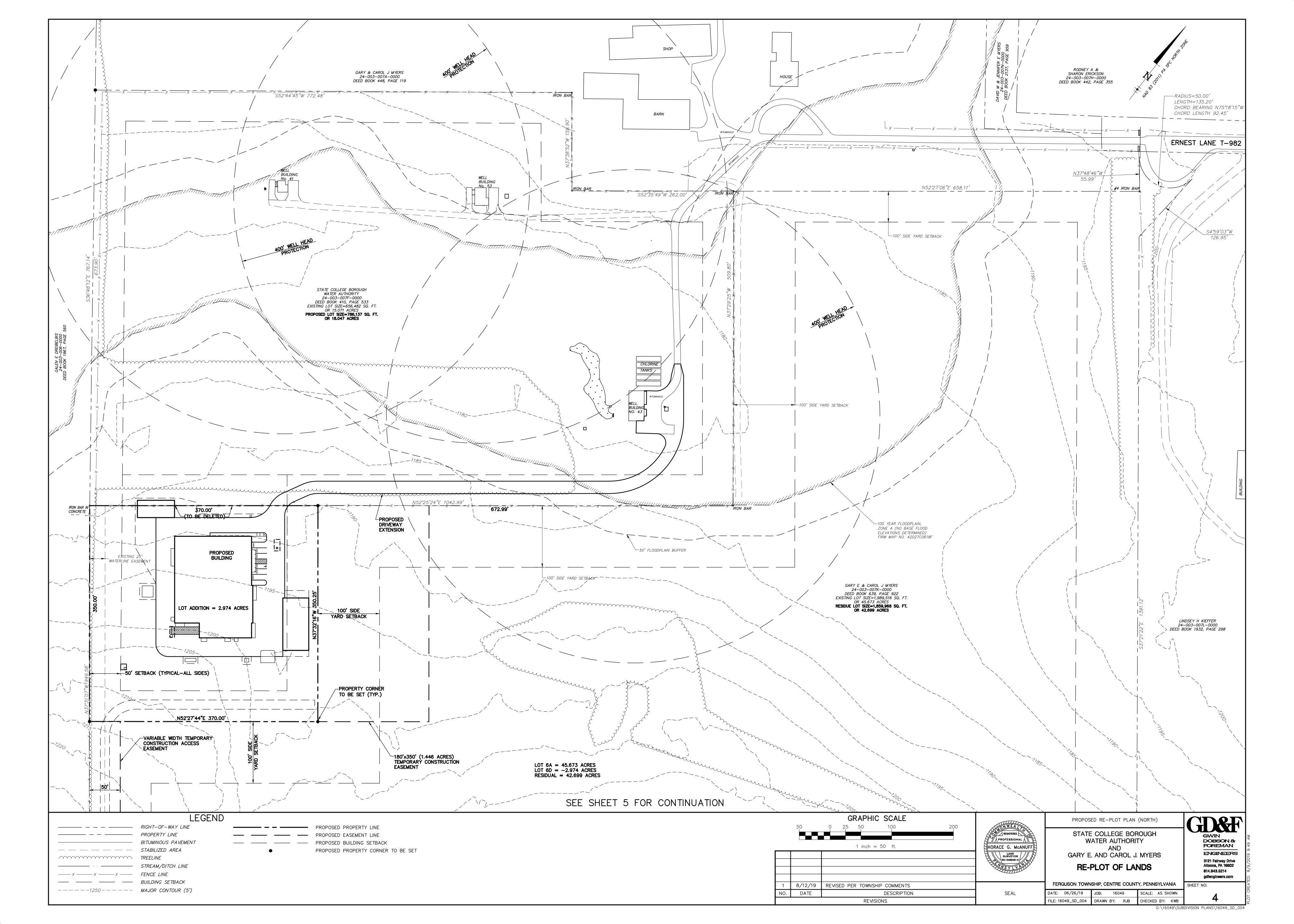
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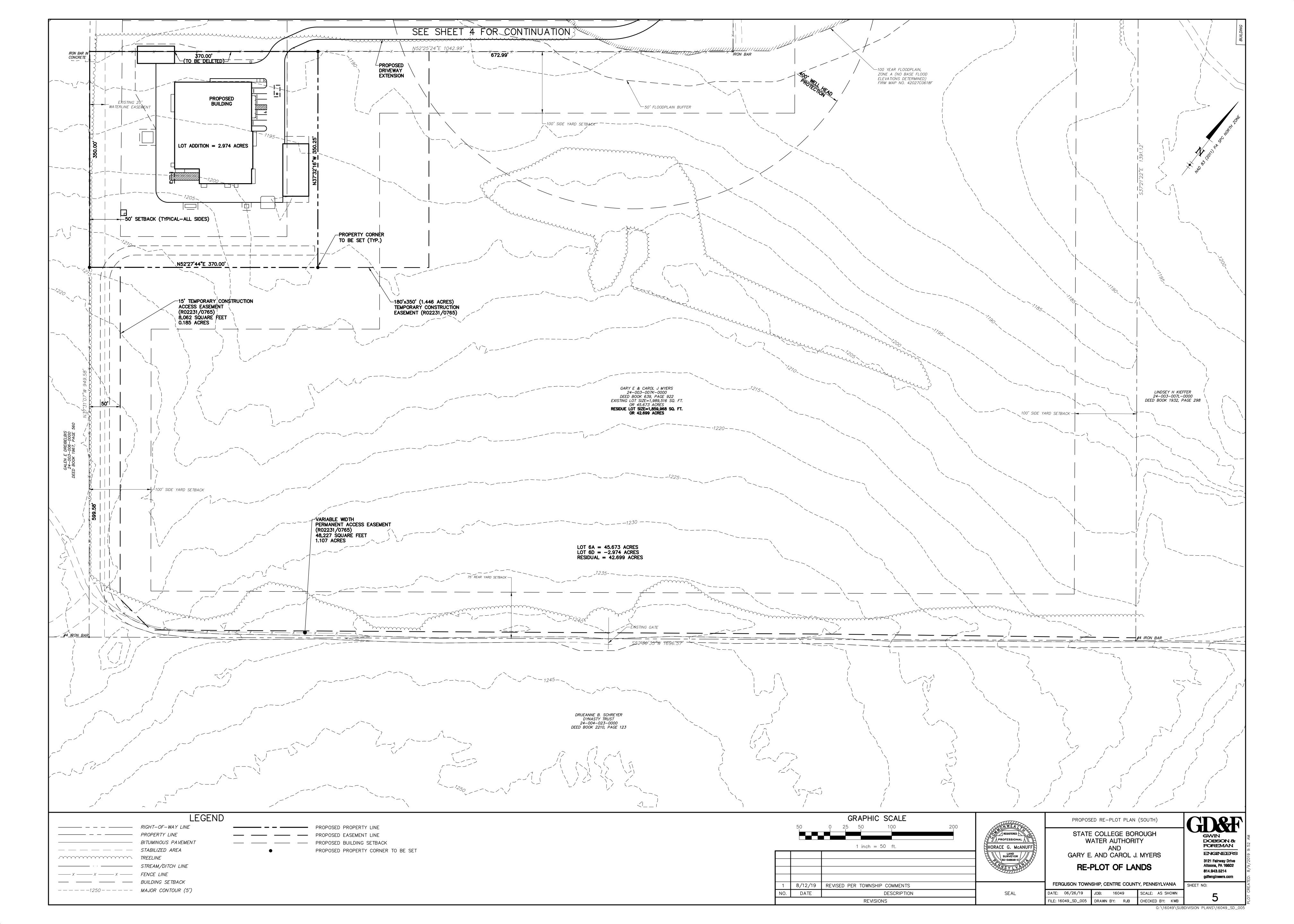
REVISIONS













# TOWNSHIP OF FERGUSON

3147 Research Drive • State College, Pennsylvania 16801 Telephone: 814-238-4651 • Fax: 814-238-3454 www.twp.ferguson.pa.us

TO: Planning Commission

FROM: Kristina Aneckstein, Community Planner

DATE: September 9, 2019

SUBJECT: State College Borough Water Authority Water Treatment Facility

This Land Development Plan proposes a water treatment facility to be located at 3062 Ernest Lane (Tax Parcel 24-003-007F). The proposed water treatment plant will be 22,182 square feet and have five standard parking spaces and one ADA space, one loading space and will employ four people. The structure will be located less than 1,000 feet from the nearest residential structure and be surrounded by a natural landscape buffer, a proposed landscape buffer and a fence line with privacy slats. A Water Treatment Facility is a Conditional Use within the Rural Agricultural Zoning District. The Conditional Use was approved by the Board of Supervisors on August 5, 2019 At this point, all remaining comments are administrative and are outlined below.

- 1. A digital copy of the plan in accordance with Township requirements must be provided to the Township prior to final plan signature. (Chapter 22 Section 304.7) **Comment Stands.**
- 2. The plan must be signed, all fees paid to the Township and the plan recorded within the plan deadline. **Comment Stands**
- 3. The plan must be signed, all fees paid to the Township, and the plan recorded within the plan deadline. **Comment Stands.**

<u>Staff Recommendation:</u> The Planning Commission make a recommendation to the Board of Supervisors to approve the State College Borough Water Authority Water Treatment Facility Land Development Plan, submitted on June 26, 2019 and last revised on August 30, 2019 condition upon all outstanding items being completed.

# STATE COLLEGE BOROUGH WATER AUTHORITY FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

# LOCATION ▲ DENOTES DRIVEWAY KEY MAP SCALE: 1" = 400'

# PRELIMINARY LAND DEVELOPMENT PLANS

FOR

# NIXON-KOCHER WATER TREATMENT FACILITY

JUNE 26, 2019 LAST REVISED AUGUST 30, 2019



# gdfengineers.com

PROJECT NOTES	COMMONWEALTH OF PENNSYLVANIA
1. GENERAL SITE/LOT INFORMATION	CERTIFICATION OF OWNERSHIP
A. OWNER/DEVELOPER: STATE COLLEGE BOROUGH WATER AUTHORITY B. TAX PARCEL NUMBER/LOT ACREAGE: 24-003-007F-0000/18.047 ACRES C. PROPERTY ADDRESS: 3062 ERNEST LANE	ON THIS, DAY OF  BEFORE ME AND CERTIFIED THAT THEY WERE
D. RECORD BOOK/PAGE NUMBER: 410/533	AND ACKNOWLEDGE THE CAME TO BE THEIR

D. RECORD BO E. LAND IS ZONED: RURAL AGRICULTURAL (RA)

PROPOSED LAND USE: WATER TREATMENT FACILITY

J. REQUIRED PARKING: 1 SPACE/4000 GFA (19,883 GFA/4000 = 5 SPACES) AND 1 LOADING SPACE K.PROPOSED PARKING: 7 SPACES (5 STANDARD, 1 ADA AND 1 LOADING SPACE`

. BOUNDARY AND TOPOGRAPHIC INFORMATION BASED ON FIELD INSTRUMENT SURVEY COMPLETED BY GWIN, DOBSON AND FOREMAN, INC., COMPLETED и. Soils information from united state department of agriculture NATURAL RESOURCES CONSERVATION SERVICE. ONSITE SOILS CONSIST

PRIMARILY OF SANDY LOAMS UNDERLAIN BY CARBONATE ROCK. I.EXISTING FLOODPLAIN INFORMATION FROM FIRM MAP NO. 42027C0618F EFFECTIVE DATE MAY 4, 2009, IS INDICATED ON THESE PLANS. ). THERE WAS ONE WETLAND AREA IDENTIFIED THROUGH FIELD INVESTIGATION NEAR THE EXISTING CHLORINATION BUILDING. HOWEVER, THERE ARE NO

WETLANDS WITHIN THE ENVIRONS OF THE PROJECT LIMITS. THERE ARE NO STEEP SLOPES (>25%) WITHIN THE ENVIRONS OF THE PROJECT LIMITS.

LOT COVERAGE:

A. MAXIMUM BUILDING COVERAGE = 15% B. PROPOSED BUILDING COVERAGE = 22,182 SQ. FT. OR 2.82% C. MAXIMUM IMPERVIOUS COVERAGE = 50%

D. PROPOSED IMPERVIOUS COVERAGE = 22,182 SQ. FT. (BUILDING) = 71,618 SQ. FT. (PAVEMENT/CONCRET = 93,804 SQ. FT. (TOTAL OR 11.93%)

. DATE OF ZONING PERMIT APPLICATION: JUNE 26, 2019 LIST OF APPROVED VARIANCES: (FEBRUARY 26, 2019)

A. §27-213.4: VARIANCE TO ENCROACH UPON THE FIFTY (50) FOOT RIPARIAN

B. §27-801.1: VARIANCE TO WAIVE REQUIREMENTS OF INDEPENDENT HYDROLOGIC AND HYDRAULIC (H&H) STUDY

C. §27-801.1.C.(1): VARIANCE TO ALLOW IMPROVEMENTS WITHIN THE D. §27-801.1.H: VARIANCE TO ALLOW CONSTRUCTION ACTIVITIES AND

IMPROVEMENTS WITHIN THE FLOODWAY E. \$27-801.1.I:  $\mathsf{VARIANCE}$  TO  $\mathsf{ENCROACH}$  UPON THE FIFTY (50) FOOT FLOODPLAIN BUFFER . \$27-501.1.A VARIANCE TO MINIMUM LOT AREA (50 ACRES)

3. §27—903 NONCONFORMING USE IN RURAL AGRICULTURAL ZONING DISTRICT

VARIANCE DECISION (FEBRUARY 26, 2019): APPLICANT'S REQUEST FOR VARIANCES FROM THE FLOODPLAIN REGULATIONS, INCLUDING SECTION 27—213.4 (RIPARIAN BUFFER OVERLAY), SECTION 27—801.1 (HYDROLOGIC AND HYDRAULIC STUDIES), SECTION 27-801.1C (NO NEW CONSTRUCTION WITHIN FLOODPLAINS); SECTION 27-801.H (NO NEW CONSTRUCTION IN THAT AS A CONDITION TO THE GRANT OF THE VARIANCE, THE APPLICANT SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM REGULATIONS (60.3 a,b AND c), AND PROVIDED FURTHER THAT THE TOWNSHIP MUST ISSUE A LETTER TO THE APPLICANT ADVISING IT OF THE RISK OF AN INCREASE IN PREMIUM RATES FOR FLOOD INSURANCE AND AN INCREASE IN THE RISKS TO LIFE AND PROPERTY BECAUSE OF THE GRANT OF THE VARIANCE.

THE APPLICANT'S REQUEST FOR A VARIANCE FROM SECTION 27-501.1A (MINIMUM LOT AREA) IS GRANTED AS DE MINIMIS BY A VOTE OF 5 TO 0. THE APPLICANT'S REQUEST FOR A VARIANCE FROM SECTION 27-903 (NON-CONFORMING USES) IS GRANTED BY A VOTE OF 5 TO 0.

THE PROPOSED BUILDING IS NOT REQUIRED TO BE SPRINKLERED BASED ON USE/OCCUPANCY.

EXISTING FIRE HYDRANT FLOW DATA:

2 8/30/19

8/12/19

DATE

STATIC RESIDUAL FLOW 3062 ERNEST LN ERNEST LN

THIS RECORD PLAN CONFORMS WITH THE PLAN RECEIVING FINAL APPROVA BY THE FERGUSON TOWNSHIP BOARD OF SUPERVISORS ON ALL IMPROVEMENTS ARE OR WILL BE INSTALLED IN ACCORDANCE WITH SUCH PLAN IN A MANNER AND TIME SO SPECIFIED THEREIN.

FINAL LAND DEVELOPMENT PLANS (AS-BUILTS) SHALL BE PROVIDED TO FERGUSON TOWNSHIP PRIOR TO OCCUPANCY OR RELEASE OF ANY SURETY.

REVISIONS

#### COUNTY OF CENTRE COMMONWEALTH OF PENNSYLVANIA

\_, 20\_\_\_, THE UNDERSIGNED OWNER(S), PERSONALLY APPEARE AND ACKNOWLEDGE THE SAME TO BE THEIR ACT AND PLAN AND DESIGNS, THE SAME TO BE RECORDED A SUCH, ACCORDING TO THE LAW.

OWNER SIGNATURE

COMMISSION EXPIRES

#### DESIGN PROFESSIONAL CERTIFICATION

WITNESS MY HAND AND SEAL, THIS DATE

CENTRE COUNTY RECORDER OF DEEDS

, KENNETH W. BELDIN, JR., PE, HAVE REVIEWED AND HEREBY CERTIFY THAT THIS LAND DEVELOPMENT MEETS ALL DESIGN REQUIREMENTS OF THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE, ZONING ORDINANCE AND ALL OTHER APPLICABLE CHAPTERS OF THE FERGUSON TOWNSHIP CODE.

#### DESIGN PROFESSIONAL STORMWATER CERTIFICATION

KENNETH W. BELDIN, JR., PE, HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.

# FERGUSON TOWNSHIP ENGINEER CERTIFICATION

HAVE REVIEWED AND HEREBY CERTIFY THAT THE PLAN MEETS ALL ENGINEERING DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP CODE OF ORDINANCES.

# FERGUSON TOWNSHIP ENGINEER STORMWATER CERTIFICATION

HAVE REVIEWED THIS STORMWATER MANAGEMENT PLAN IN ACCORDANCE WITH THE DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE

# FERGUSON TOWNSHIP PLANNING COMMISSION

FERGUSON TOWNSHIP BOARD OF SUPERVISORS

FERGUSON TOWNSHIP PLANNING COMMISSION APPROVED

FERGUSON TOWNSHIP BOARD OF SUPERVISORS APPROVED

SECRETARY

FERGUSON TOWNSHIP ZONING OFFICER APPROVED

# FIRE CHIEF CERTIFICATION

FERGUSON TOWNSHIP ZONING OFFICER

I HAVE REVIEWED AND HEREBY CERTIFY THAT THE LOCATION OF FIRE LANES AND FIRE HYDRANTS SHOWN ON THIS PLAN ARE ADEQUATE.

COVER SHEET STATE COLLEGE BOROUGH REGISTERED

PROFESSIONAL ( WATER AUTHORITY **NIXON-KOCHER** 

> FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA DATE: 8/30/19 JOB: 16049

KENNETH WILLIAM BELDIN, JR. ENGINEER / No. PE081568 WSYLYLY REVISED PER TOWNSHIP COMMENTS REVISED PER TOWNSHIP COMMENTS DESCRIPTION SEAL

FIRE CHIEF

WATER TREATMENT FACILITY

DOBSON & FOREMAN

**ENGINEERS** 

3121 Fairway Drive

Altoona, PA 16602 814.943.5214 gdfengineers.com

CS-

FILE: 16049 LD\_CS1 CHECKED BY: DRAWN BY: RLN G: \16049\LAND DEVELOPMENT\16049 LD\_CS RECORD SET SUBMITTED ON JUNE 27, 2019.

SIGNATURE

OWNER'S STORMWATER MANAGEMENT CERTIFICATION

THE RECORDED OPERATION AND MAINTENANCE (0&M) PROGRAM.

THE STATE COLLEGE BOROUGH WATER AUTHORITY (OWNER) ACKNOWLEDGES THAT ANY STORMWATER

TOWNSHIP AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, ITS AGENTS AND ASSIGNS, ARE

EXPRESSLY AUTHORIZED RIGHT-OF-ENTRY OVER AND THROUGH THE PROPERTY FOR THE PURPOSE OF

MANAGEMENT SYSTEMS IDENTIFIED ON THIS LAND DEVELOPMENT PLAN ARE PERMANENT FIXTURES THAT MAY

BE ALTERED OR REMOVED ONLY AFTER APPROVAL BY FERGUSON TOWNSHIP AND/OR THE DEPARTMENT OF

ENVIRONMENTAL PROTECTION OF A REVISED STORMWATER MANAGEMENT PLAN. FURTHERMORE, FERGUSON

INSPECTING ALL STORMWATER FACILITIES IDENTIFIED IN THIS LAND DEVELOPMENT PLAN UPON NOTIFICATION

TO THE AUTHORITY. THE STORMWATER MANAGEMENT SYSTEM IS TO BE MAINTAINED IN ACCORDANCE WITH

# COMMONWEALTH OF PENNSYLVANIA ACT NO. 287

THE CONTRACTOR SHALL COMPLY WITH ALL THE APPLICABLE REQUIREMENTS OF ACT NO. 287 OF THE GENERAL ASSEMBLY OF THE COMMONWEALTH OF PENNSYLVANIA, AS AMENDED BY ACT NO. 187 OF 1996, AS AMENDED BY ACT NO. 181 OF 2006, EFFECTIVE MARCH 29, 2007, AND AS AMENDED BY ACT 121 OF 2008, EFFECTIVE OCTOBER 9, 2008.

ELECTRIC:

THE FOLLOWING IS A LIST OF MEMBERS LOCATED WITHIN THE PROJECT AREA:

UNIVERSITY AREA JOINT AUTHORITY 1576 SPRING VALLEY ROAD STATE COLLEGE, PA. 16801 WASTEWATER: CONTACT: MARK HARTER EMAIL: mharter@uaja.com (814) 238-8370

PENN STATE UNIVERSITY WASTEWATER TREATMENT PLANT 501 UNIVERSITY DRIVE STATE COLLEGE, PA. 16801 CONTACT: JEFF MCDONALD EMAIL: jam86@psu.edu STATE COLLEGE BOROUGH WATER AUTHORITY 1201 WEST BRANCH ROAD STATE COLLEGE, PA. 16801

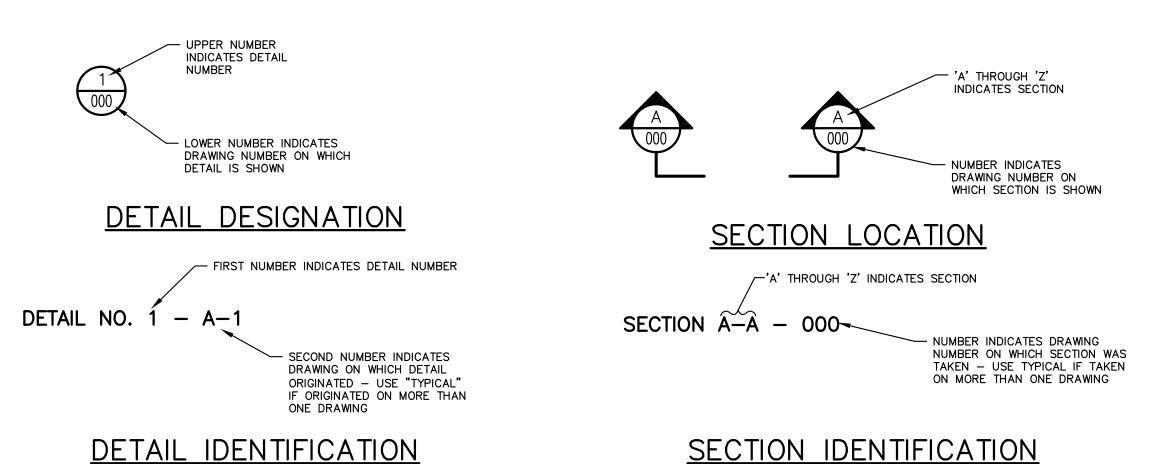
CONTACT: STEVE ALBRIGHT

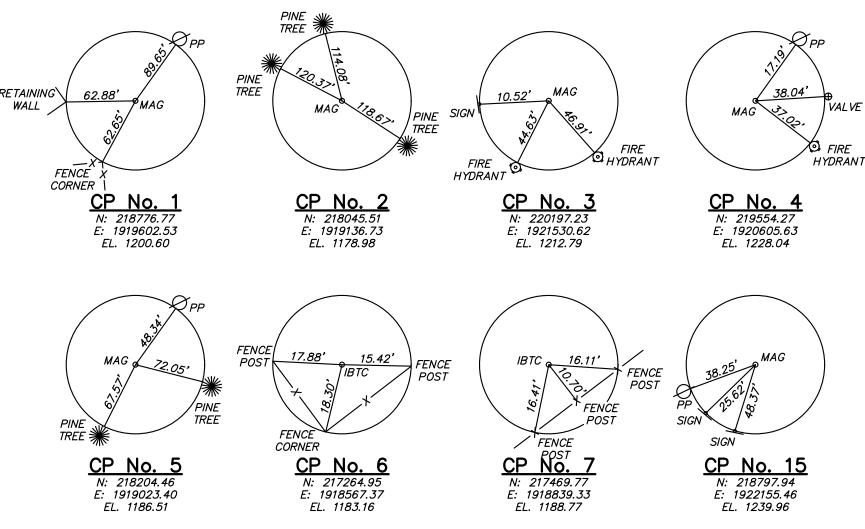
EMAIL: steve@scbwa.org

(814) 238-0885

WEST PENN POWER 800 CABIN HILL DRIVE ROOM B100N GREENSBURG, PA 15601 CONTACT: ROBERT PAINTER EMAIL: rpainte@firstenergycorp.com FERGUSON TOWNSHIP CENTRE COUNTY 3147 RESEARCH DRIVE STATE COLLEGE, PA. 16801 CONTACT: CHRIS LEIDY EMAIL: cleidi@twp.ferguson.pa.us







# **CONTROL POINTS:**

# **BENCHMARKS**:

BM-A - CROSS CUT ON CORNER OF CONCRETE HEADWALL LOCATED WEST OF WELL BUILDING, EL. 1176.19. BM-B - CROSS CUT ON CORNER OF CONCRETE PAD LOCATED EAST OF WELL BUILDING NO. 43, EL. 1179.39. USGS CONCRETE MONUMENT - LOCATED AT INTERSECTION OF PROPOSED TEMPORARY CONSTRUCTION ACCESS AND SOUTH NIXON ROAD, EL. 1236.31.

## **GENERAL NOTES:**

- 1. THE CONTRACTOR IS ADVISED OF THE EXISTENCE OF UNDERGROUND WATERLINES, SANITARY SEWERS, GAS LINES, SERVICE LINES, ELECTRIC AND TELEPHONE, AND OTHER UTILITIES. THE HORIZONTAL AND VERTICAL ALIGNMENTS ARE SHOWN ON THE DRAWINGS FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR IS ADVISED THAT PRIOR TO ANY EXCAVATION HE SHALL PERFORM EXPLORATORY EXCAVATIONS TO DETERMINE SAID LOCATIONS. IF CONFLICTS OCCUR WITH EXISTING UTILITIES, THE CONTRACTOR SHALL NOTIFY THE OWNER OF SAID CONFLICTS. THE CONTRACTOR SHALL ADJUST THE LOCATION OF THE PROPOSED PIPING AND STRUCTURES AS COORDINATED AND APPROVED BY THE OWNER. THE CONTRACTOR SHALL UNDERSTAND THAT NO SEPARATE PAYMENT SHALL BE MADE FOR THE REQUIRED EXPLORATORY EXCAVATIONS OR SUBSEQUENT ADJUSTMENTS REQUIRED. THE CONTRACTOR SHALL DETERMINE THE EXTENT OF EXPLORATORY EXCAVATIONS AND INCLUDE THE COSTS TO PERFORM SAID EXCAVATIONS AND ADJUSTMENTS IN THOSE ITEMS FOR WHICH PAYMENT SHALL BE MADE IN THE BID FORM. IN ADDITION, THE CONTRACTOR SHALL REPAIR ALL UTILITIES DAMAGED DURING THE COURSE OF CONSTRUCTION TO THE SATISFACTION OF THE THE OWNER. THE CONTRACTOR SHALL INSURE THE MAINTENANCE OF ALL UTILITY SERVICES AND LIMIT SHUTDOWNS, IF REQUIRED, TO A MINIMUM. NO SEPARATE PAYMENTS SHALL BE MADE FOR SAID UTILITY REPAIRS AND SERVICE MAINTENANCE. THE CONTRACTOR SHALL INCLUDE THESE COSTS IN THOSE ITEMS FOR WHICH PAYMENT SHALL BE MADE IN THE BID FORM.
- 2. CONTRACTOR SHALL IMPLEMENT ALL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) IN ACCORDANCE WITH THE APPROVED EROSION AND
- 3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS, TO AN EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO CONSTRUCTION.
- 4. THE CONTRACTOR WILL, AT ALL TIMES THROUGHOUT THE WORK, COOPERATE FULLY WITH THE OWNER IN PERMITTING ALL NECESSARY OPERATIONS OF THE OWNER TO PROCEED UNIMPEDED BY THE CONTRACTOR'S OPERATIONS.
- 5. DUE TO THE CHARACTER OF CERTAIN PORTIONS OF THE WORK, THE CONTRACTOR WILL REQUIRE THAT LIMITED LOCALIZED SYSTEM SERVICE OUTAGES BE PERMITTED BY OR THAT OPERATION CHANGES/ ADJUSTMENTS BE MADE BY THE OWNER TO ENABLE THE CONTRACTOR TO PROCEED WITH ITS WORK. SUCH OUTAGES, CHANGES AND/OR ADJUSTMENTS MAY BE REQUIRED FOR WORK ELEMENTS ASSOCIATED WITH THE INSTALLATION OF PIPING SYSTEMS AND INTERCONNECTIONS WITH EXISTING PIPING SYSTEMS: AND SIMILAR WORK. THE CONTRACTOR WILL CAREFULLY PLAN ITS WORK AND NOTIFY THE OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE OF ANY WORK ELEMENTS WHICH MAY REQUIRE SUCH OUTAGES, CHANGES, AND/OR ADJUSTMENTS. THE OWNER WILL ENDEAVOR TO ACCOMMODATE THE CONTRACTOR'S PLANNED SCHEDULING IN THIS REGARD. HOWEVER, IN CERTAIN INSTANCES, THE ONGOING RESPONSIBILITIES OF THE OWNER AND/OR PREVAILING OPERATIONS MAY REQUIRE THAT THE CONTRACTOR'S PLANNED SCHEDULE BE ALTERED ACCORDINGLY. THE CONTRACTOR MUST BE PREPARED TO ADJUST ITS SCHEDULE TO SUIT THE NEEDS OF THE OWNER AND TO PERFORM CERTAIN CRITICAL WORK ELEMENTS IN THE EVENINGS, OVER WEEKENDS, OR ON AN AROUND-THE-CLOCK BASIS, SHOULD THE OWNER DETERMINE THAT SUCH PROCEDURES AND WORK SCHEDULES ARE NECESSARY AND APPROPRIATE. THE CONTRACTOR WILL NOT BE ENTITLED TO ANY ADDITIONAL COMPENSATION ON ACCOUNT OF SUCH ALTERATIONS TO ITS WORK SCHEDULE AND/OR HOURS OF WORK SHOULD SUCH BE DEEMED NECESSARY BY THE OWNER. THE DECISION OF THE OWNER IN THIS REGARD WILL BE FINAL.
- 6. SERVICE OUTAGES WILL BE KEPT TO THE MINIMUM EXTENT PRACTICABLE. THE CONTRACTOR WILL MAINTAIN A RECORD OF THE DATE, TIME, AND DURATION OF ALL OUTAGES THROUGHOUT THE PERFORMANCE OF THE WORK AND WILL SUBMIT THIS RECORD MONTHLY TO THE ENGINEER ALONG WITH ITS PERIODIC ESTIMATES FOR PAYMENT. IN NO EVENT WILL ANY SERVICE BE PERMITTED TO BE CURTAILED DURING NONWORKING HOURS, OVERNIGHT, OR OVER WEEKENDS OR HOLIDAYS, UNLESS SPECIFICALLY APPROVED AND PLANNED IN ADVANCE BY THE ENGINEER AND OWNER. ALL PIPING MATERIALS AND PLANT NECESSARY TO INSTALL THE WORK NECESSITATING THE OUTAGE MUST BE ON SITE AND READY FOR INSTALLATION BEFORE NOTIFYING THE OWNER OF THE ANTICIPATED SHUTDOWN.
- 7. THE CONTRACTOR WILL PLAN, COORDINATE, AND SEQUENCE ITS WORK IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH HEREIN AND TO MEET THE NEEDS OF THE OWNER. THE OWNER RESERVES THE RIGHT TO COORDINATE THE SEQUENCING OF WORK ELEMENTS IN WHOLE OR IN PART AS THE JOB CONDITIONS MAY REQUIRE SAME, TO PROPERLY INTERFACE THE WORK OF THE PROJECT WITH PLANT OPERATIONS.
- 8. THE NATURE, LOCATION, CAPACITY, AND TYPE OF FACILITIES INTENDED FOR MAINTAINING CONTINUITY OF OWNER OPERATIONS WILL AT ALL TIMES BE SUBJECT TO THE APPROVAL OF THE OWNER AND ENGINEER.
- 9. THE CONTRACTOR MUST AT ALL TIMES COORDINATE ITS WORK SCHEDULE AND SEQUENCING, THROUGH THE OWNER AND ENGINEER, TO AVOID INTERFERENCE WITH NECESSARY OPERATIONS. IT IS ANTICIPATED THAT MAJOR ALTERATIONS OR ADJUSTMENTS TO THE SEQUENCING AND SCHEDULING OF THE WORK WILL BE PLANNED IN ADVANCE AT THE REGULARLY SCHEDULED PROJECT MEETINGS DURING WHICH REPRESENTATIVES OF THE OWNER AND THE CONTRACTOR WILL COORDINATE THE WORK ELEMENTS IN SUCH A WAY AS WILL BEST MEET THE NEEDS OF THE OWNER.
- 10. THE CONTRACTOR MUST COORDINATE ALL CONSTRUCTION ACTIVITIES AND PROVIDE MONTHLY WRITTEN SCHEDULES WITH WATER OPERATING PERSONNEL AND THE ENGINEER TO INSURE MINIMAL IMPACT ON THE OPERATION OF THE WATER SYSTEM. THIS WOULD INCLUDE DIVERSION OF WATER, WATER MANAGEMENT OF ANY KIND, LOGISTICAL FUNCTIONS, DELIVERIES, CONSTRUCTION ACTIVITIES IN CLOSE PROXIMITY TO THE SYSTEM, CLEAN-UP, SCHEDULING, STORAGE OF MATERIALS AND EQUIPMENT, OFFICE TRAILERS, STAGING FUNCTIONS, ANY OTHER ACTIVITIES THAT MAY IMPACT THE OWNER'S FACILITIES. FAILURE OF THE CONTRACTOR TO COMPLY WITH THE PROVISIONS OF THIS SPECIFICATION MAY BE CAUSE FOR THE OWNER/ENGINEER TO ORDER AN IMMEDIATE STOPPAGE OF THE WORK UNTIL THE SITUATION IS RECTIFIED TO THE SATISFACTION OF THE OWNER/ENGINEER.
- 11. IN THE ADMINISTRATION OF THIS CONTRACT, THE OWNER INTENDS TO EXERCISE DISCRETION IN A REASONABLE AND EQUITABLE MANNER TO PROTECT ITS INTERESTS AND TO PROMOTE TIMELY AND PROPER COMPLETION OF THE WORK OF THIS CONTRACT. SHOULD ANY DISPUTES ARISE WITH RESPECT TO THE COORDINATION OF THE WORK OF THIS CONTRACT AND THAT OF THE OWNER'S OPERATIONS, WHICH REQUIRE SETTLEMENT, THE DECISION OF THE ENGINEER WILL BE FINAL.
- 12. ALL OUTAGES MUST BE COORDINATED/SCHEDULED WITH OWNER AND THE OUTAGES SHALL BE A MAXIMUM OF 24 HOURS.
- 13. ALL EXCESS SPOIL MATERIAL SHALL BE TRANSPORTED AND DISPOSED OF AT A LOCATION WITH AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AND/OR NPDES PERMIT. REMOVAL AND PROPER DISPOSAL/RECYCLING OF ANY EXCESS EARTH AND ANY CONSTRUCTION WASTE, EXCESS CONSTRUCTION MATERIAL OR ANY OTHER WASTE GENERATED BY CONSTRUCTION ACTIVITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SEE EROSION AND SEDIMENT CONTROL NOTES.
- 14. HORIZONTAL INFORMATION IS REFERENCED TO THE PENNSYLVANIA STATE PLANE NORTH ZONE (NAD 83), VERTICAL INFORMATION IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

# INDEX OF DRAWINGS

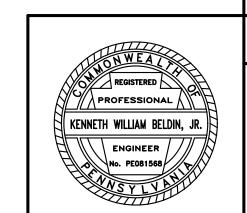
- CS-1 COVER SHEET
  CS-2 DRAWING INDEX, REFERENCES, BENCHMARKS, ONE CALL AND NOTES
  - OVERALL EXISTING SITE PLAN OVERALL PROPOSED SITE PLAN PROPOSED SITE LAYOUT PLAN PROPOSED SITE GRADING, STORMWATER AND UTILITY PLAN \* PROPOSED LANDSCAPING PLAN
  - PROPOSED SITE CROSS SECTIONS PROPOSED SITE CROSS SECTIONS PROPOSED PRIVATE ACCESS ROAD PROFILE PROPOSED PIPING PROFILES - BASELINES 12 THRU 14 \* PROPOSED PIPING PROFILES - BASELINE 17 \*
  - PROPOSED SITE LIGHTING PLAN FIRST FLOOR PLAN SITE DETAILS SITE DETAILS \*
- SITE DETAILS SITE DETAILS \*
  SITE DETAILS \* EROSION AND SEDIMENT CONTROL (ESC) PLAN EROSION AND SEDIMENT CONTROL (ESC) DETAILS
- EROSION AND SEDIMENT CONTROL (ESC) DETAILS EROSION AND SEDIMENT CONTROL (ESC) NOTES SEDIMENT/STORMWATER MANAGEMENT BASIN DETAILS \* PROPOSED LANDSCAPING DETAILS AND NOTES STORMWATER MANAGEMENT NOTES \*
- \* DENOTES DRAWINGS TO BE RECORDED WITH PCSM INSTRUMENT OF DECLARATION

# **ABBREVIATIONS:**

- CIP CAST IRON PIPE CMP CORRUGATED METAL PIPE D.I. DUCTILE IRON PIPE DIP - DUCTILE IRON PIPE
- EL. ELEVATION F.F. FINISHED FLOOR HDPE - HIGH DENSITY POLYETHYLENE PIPE H.P. - HIGH POINT
- LF LINEAR FEET L.P. LOW POINT PVC - POLYVINYL CHLORIDE PIPE RCP - REINFORCED CONCRETE PIPE T.O.W. - TOP OF WALL VCP - VITRIFIED CLAY PIPE

	•	
2	8/30/19	REVISED PER TOWNSHIP COMMENTS
1	8/12/19	REVISED PER TOWNSHIP COMMENTS
NO.	DATE	DESCRIPTION

REVISIONS



SEAL

DATE: 8/30/19

ILE: 16049 LD\_CS2

DRAWING INDEX, REFERENCES, BENCHMARKS, ONE CALL AND NOTES

> STATE COLLEGE BOROUGH WATER AUTHORITY

**NIXON-KOCHER** WATER TREATMENT FACILITY

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

JOB: 16049

DRAWN BY: RLN

gdfengineers.com

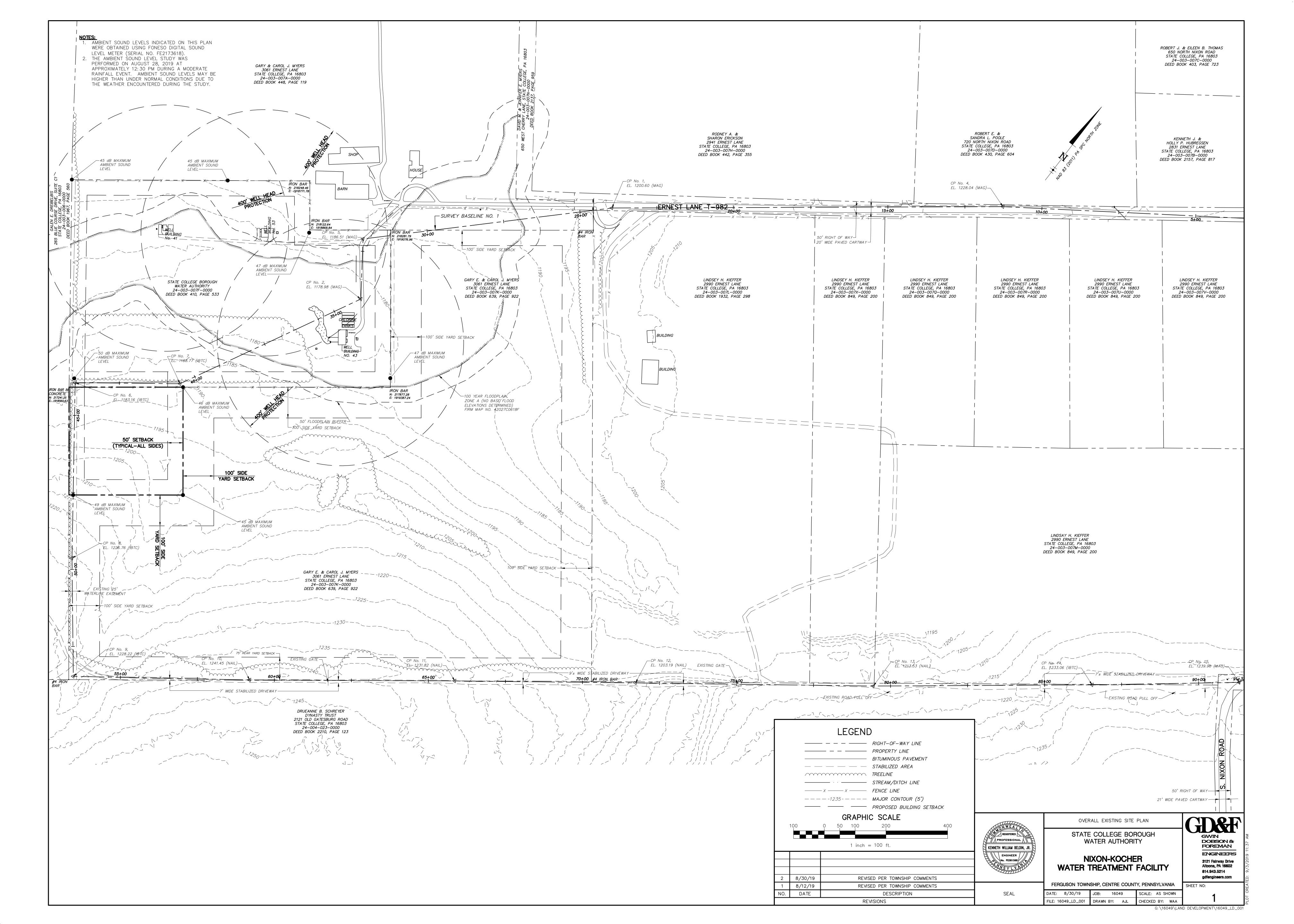
DOBSON & FOREMAN

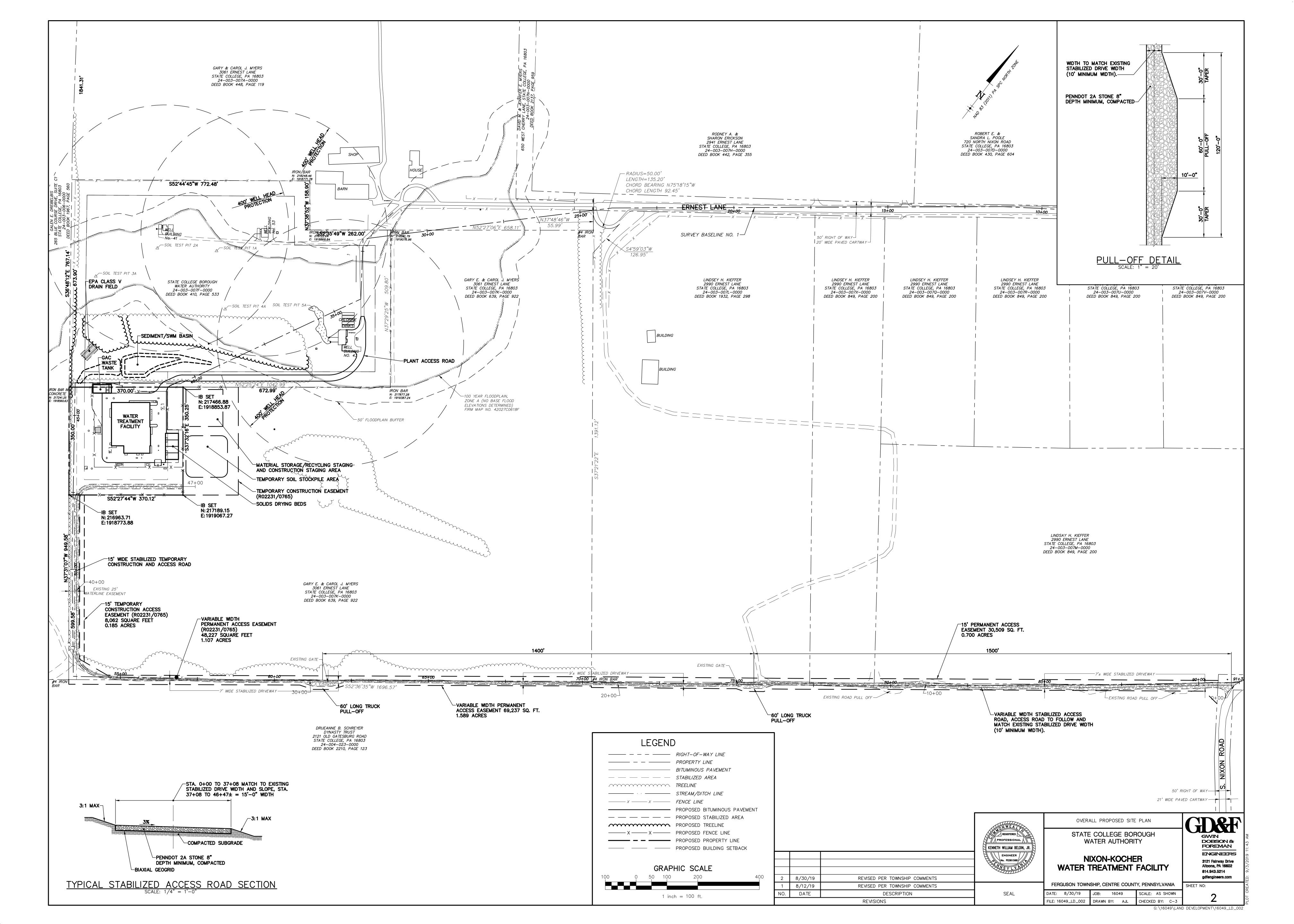
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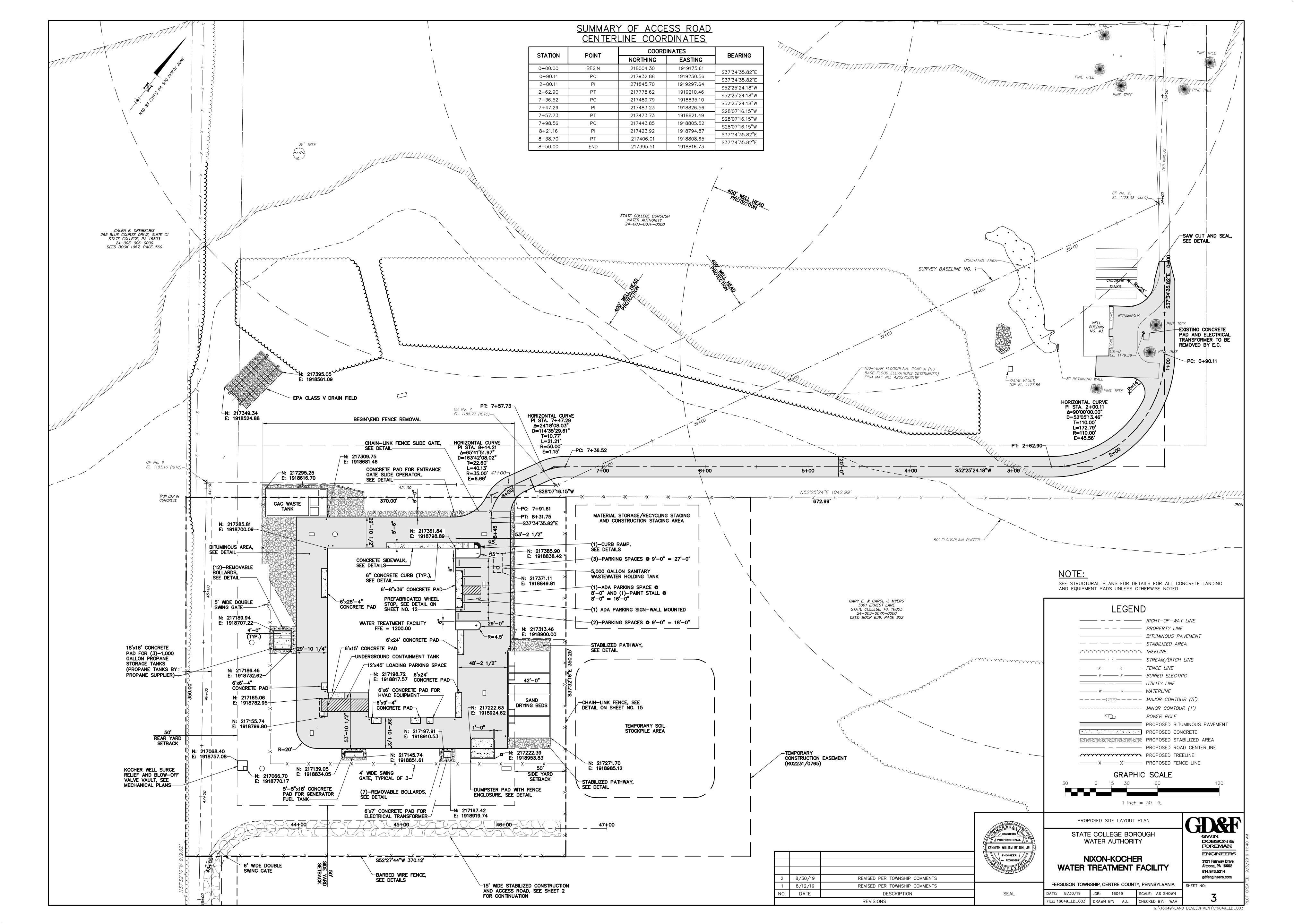
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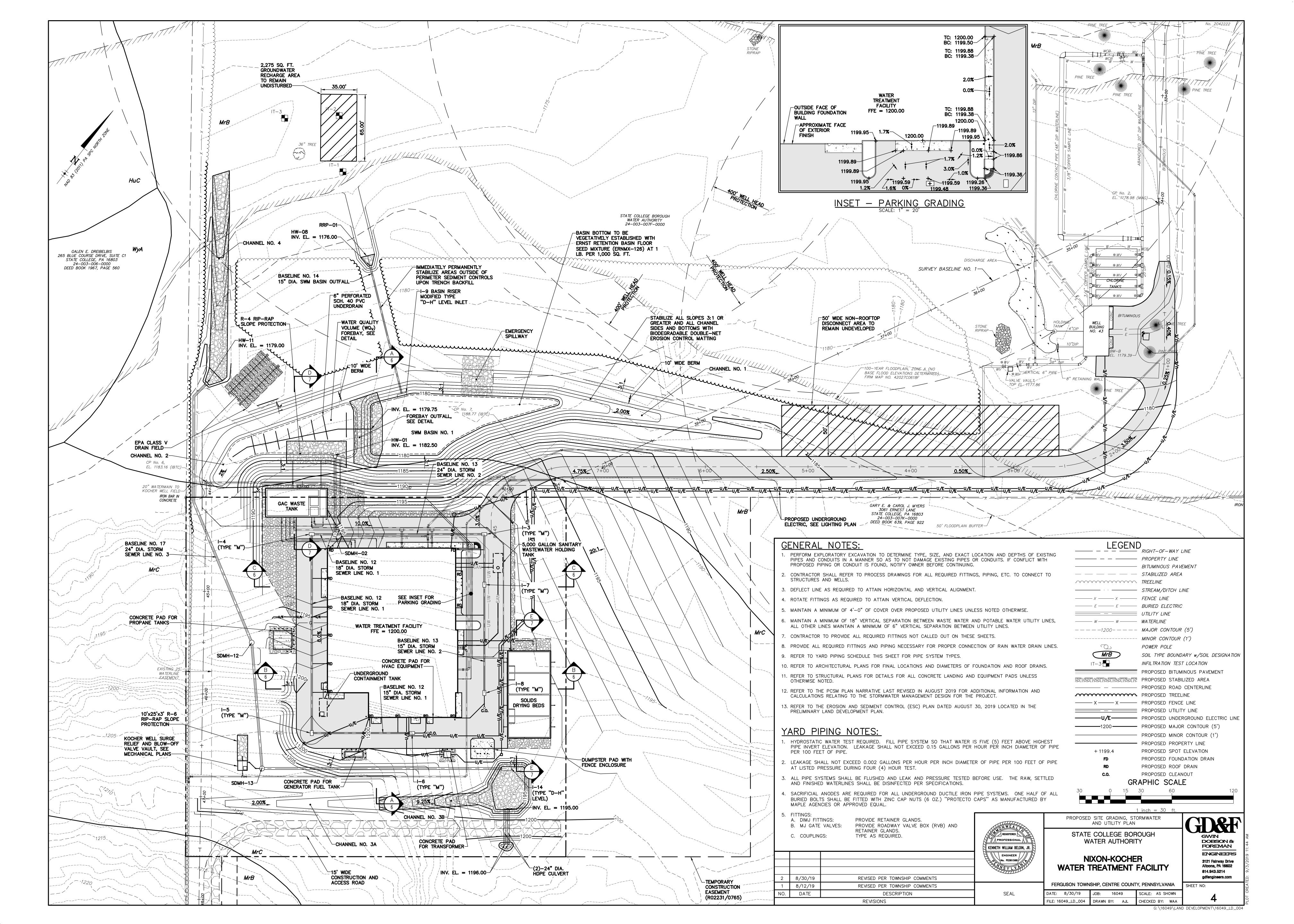
Altoona, PA 16602 814.943.5214

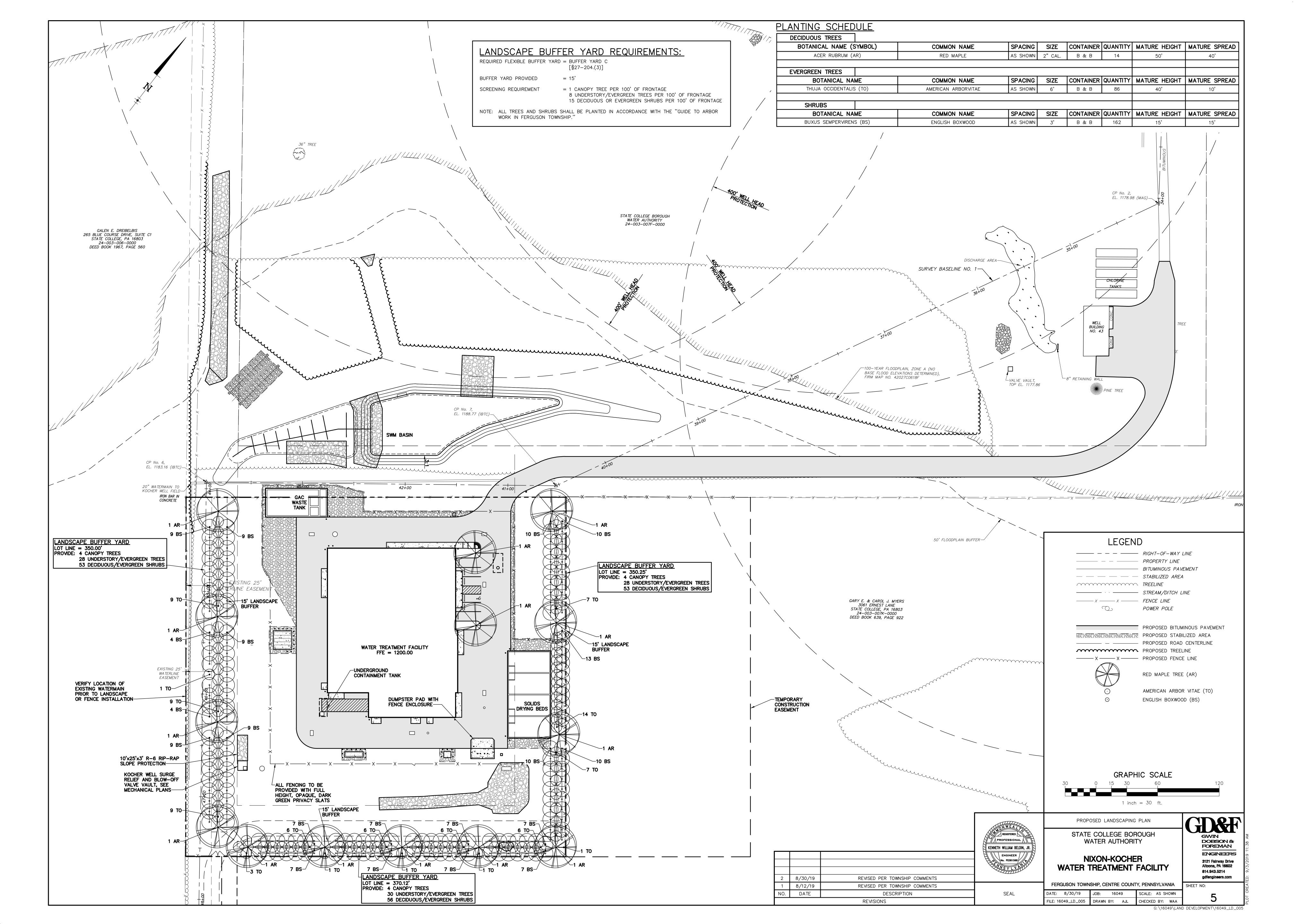
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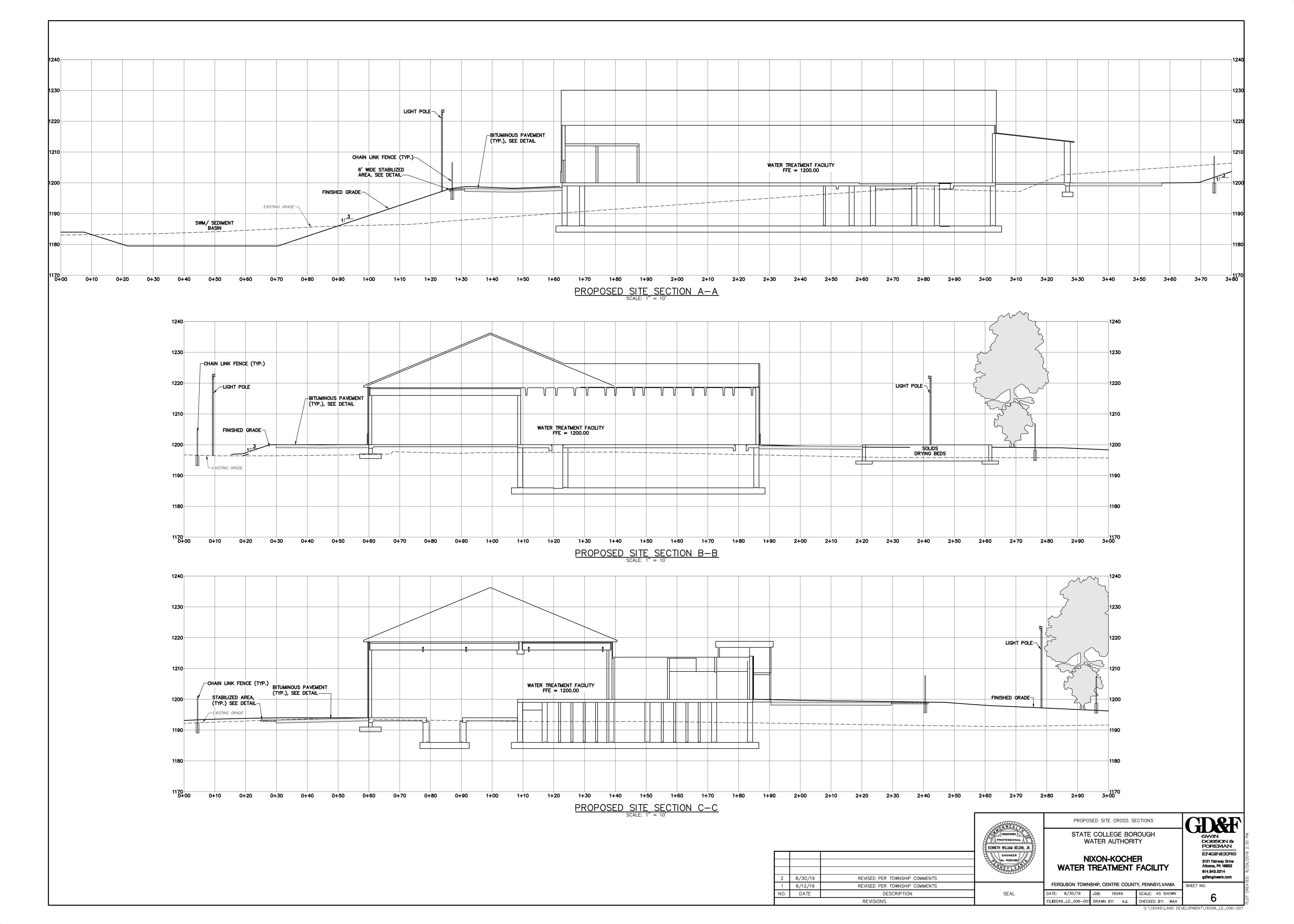


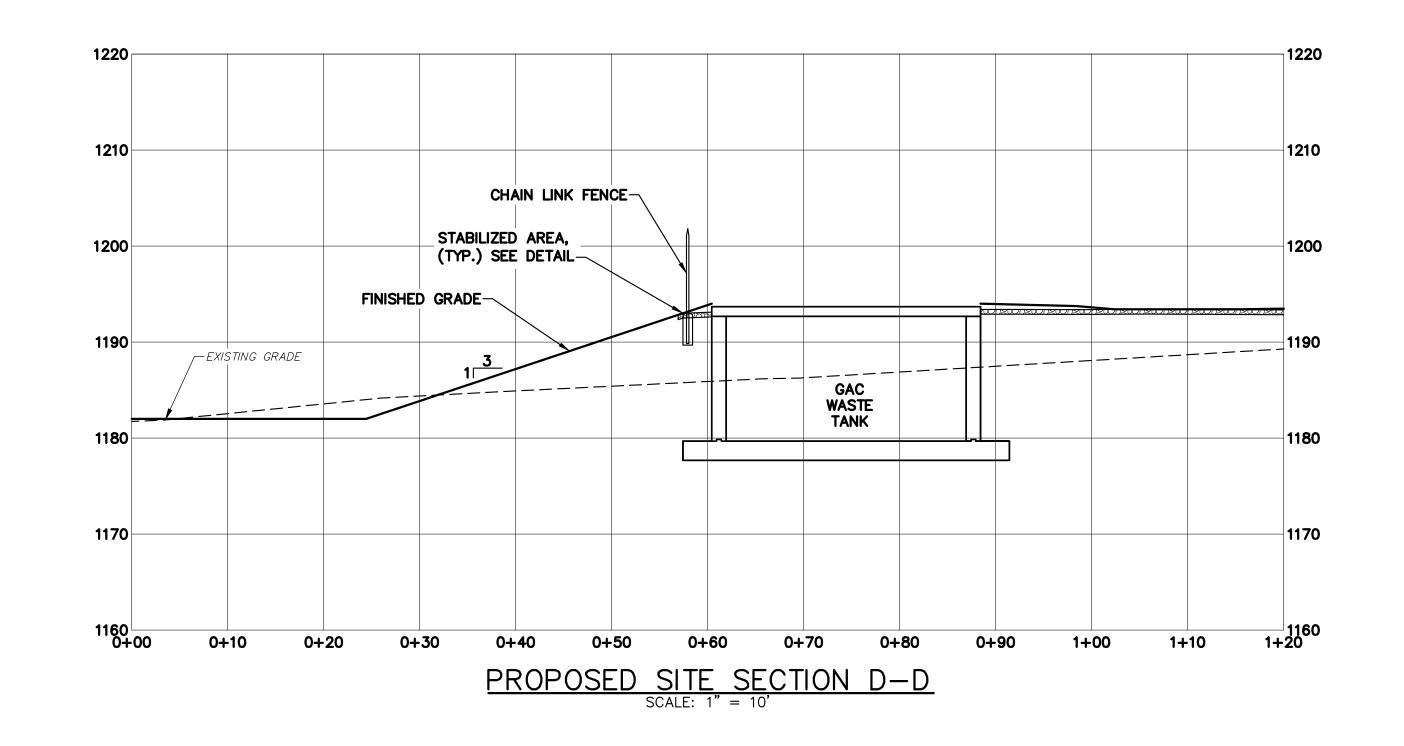


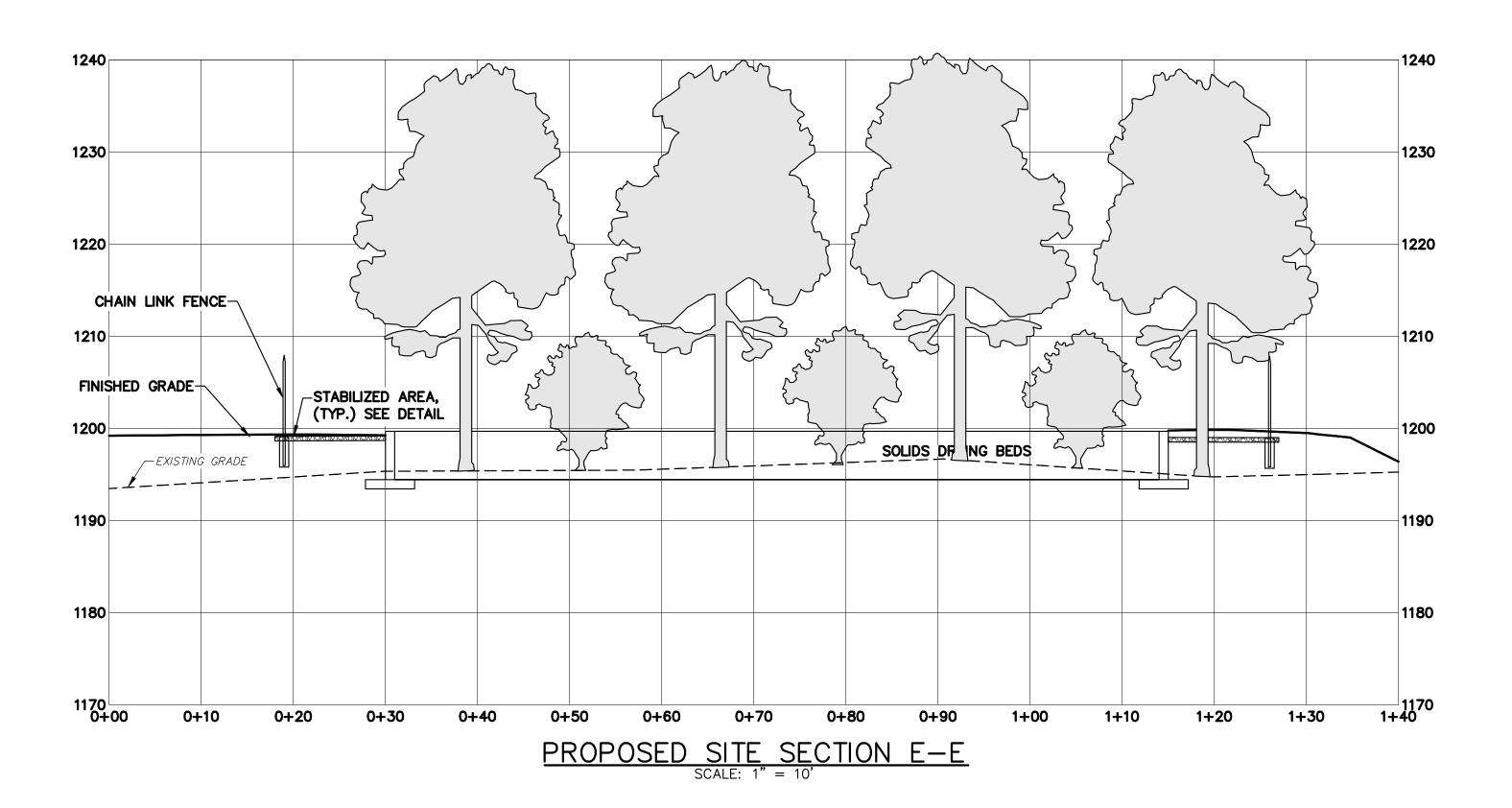


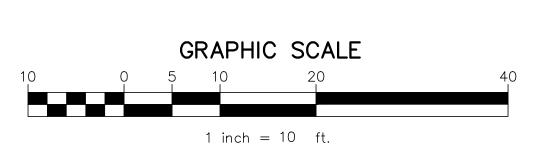












F				KENNETH WILLIAM BELDIN, JR.  ENGINEER No. PEO81568
	2	8/30/19	REVISED PER TOWNSHIP COMMENTS	
	1	8/12/19	REVISED PER TOWNSHIP COMMENTS	
1	NO.	DATE	DESCRIPTION	SEAL
			REVISIONS	1

PROPOSED SITE CROSS SECTIONS

STATE COLLEGE BOROLIGH

STATE COLLEGE BOROUGH WATER AUTHORITY

NIXON-KOCHER WATER TREATMENT FACILITY

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 8/30/19 JOB: 16049 SCALE: AS SHOWN

FILE6049\_LD\_006-007 DRAWN BY: AJL CHECKED BY: WAA

SHEET NO:

GD&F
GWIN
DOBSON &
FOREMAN

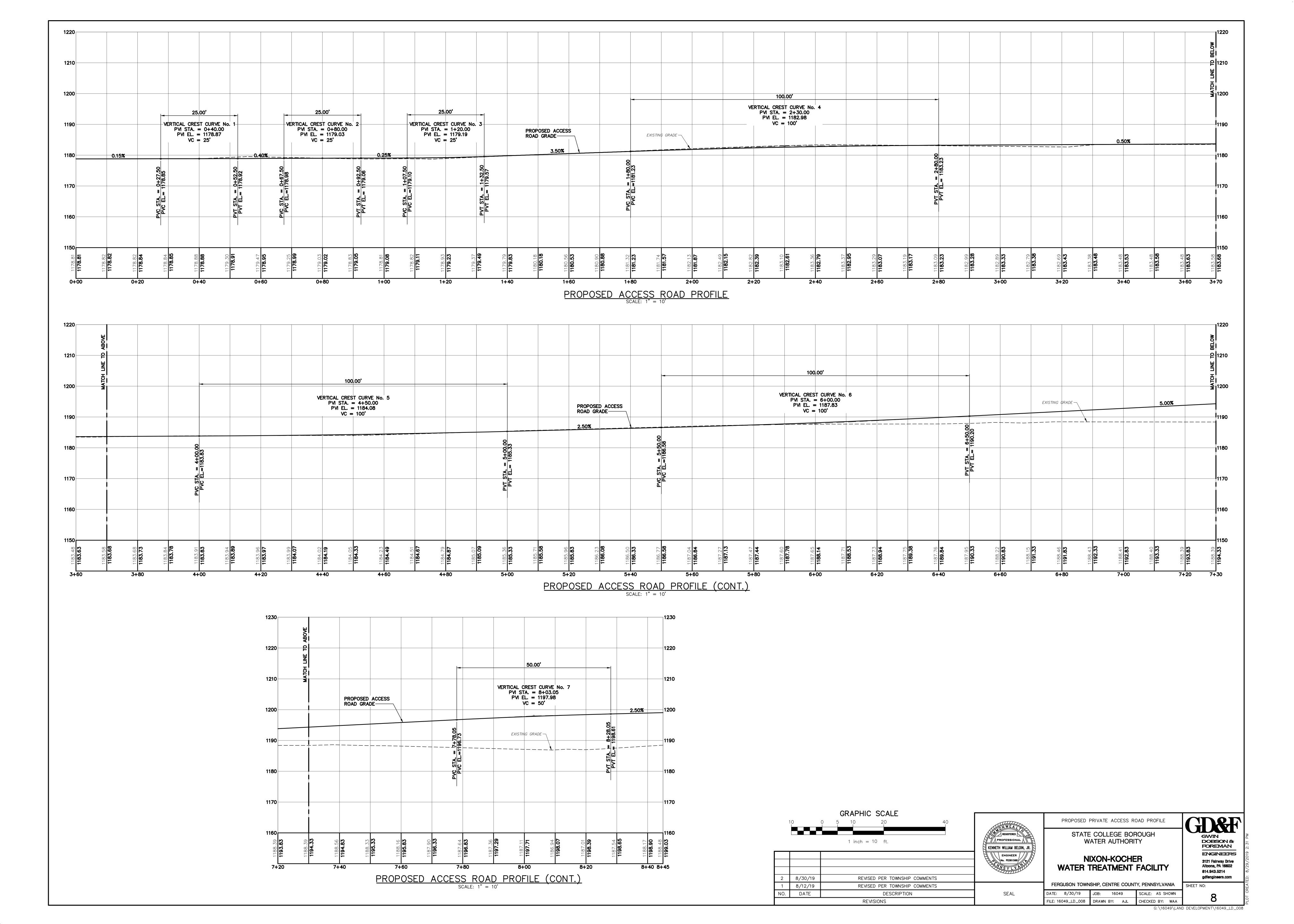
ENGINEERS

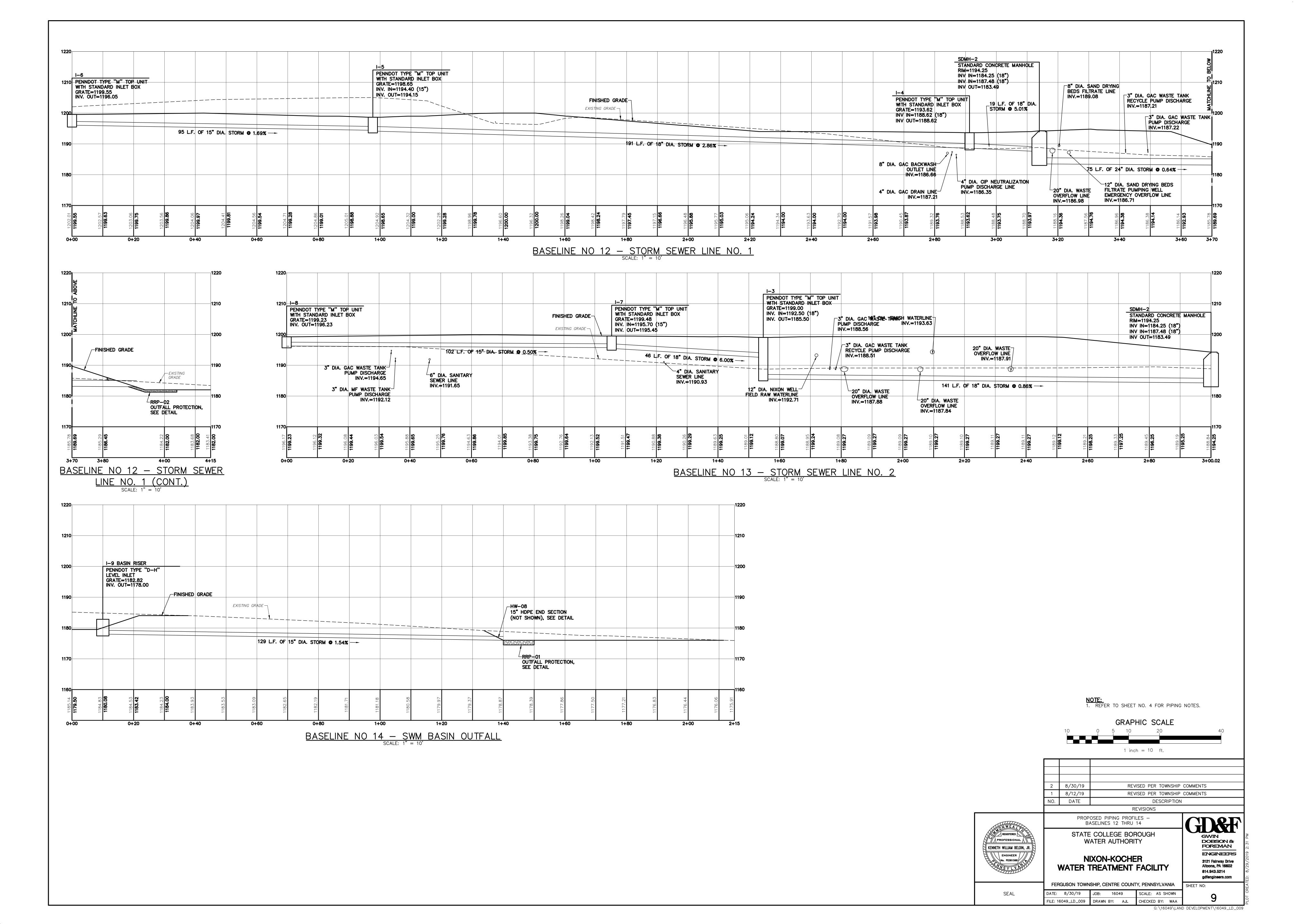
3121 Fairway Drive Altoona, PA 16602 814.943.5214

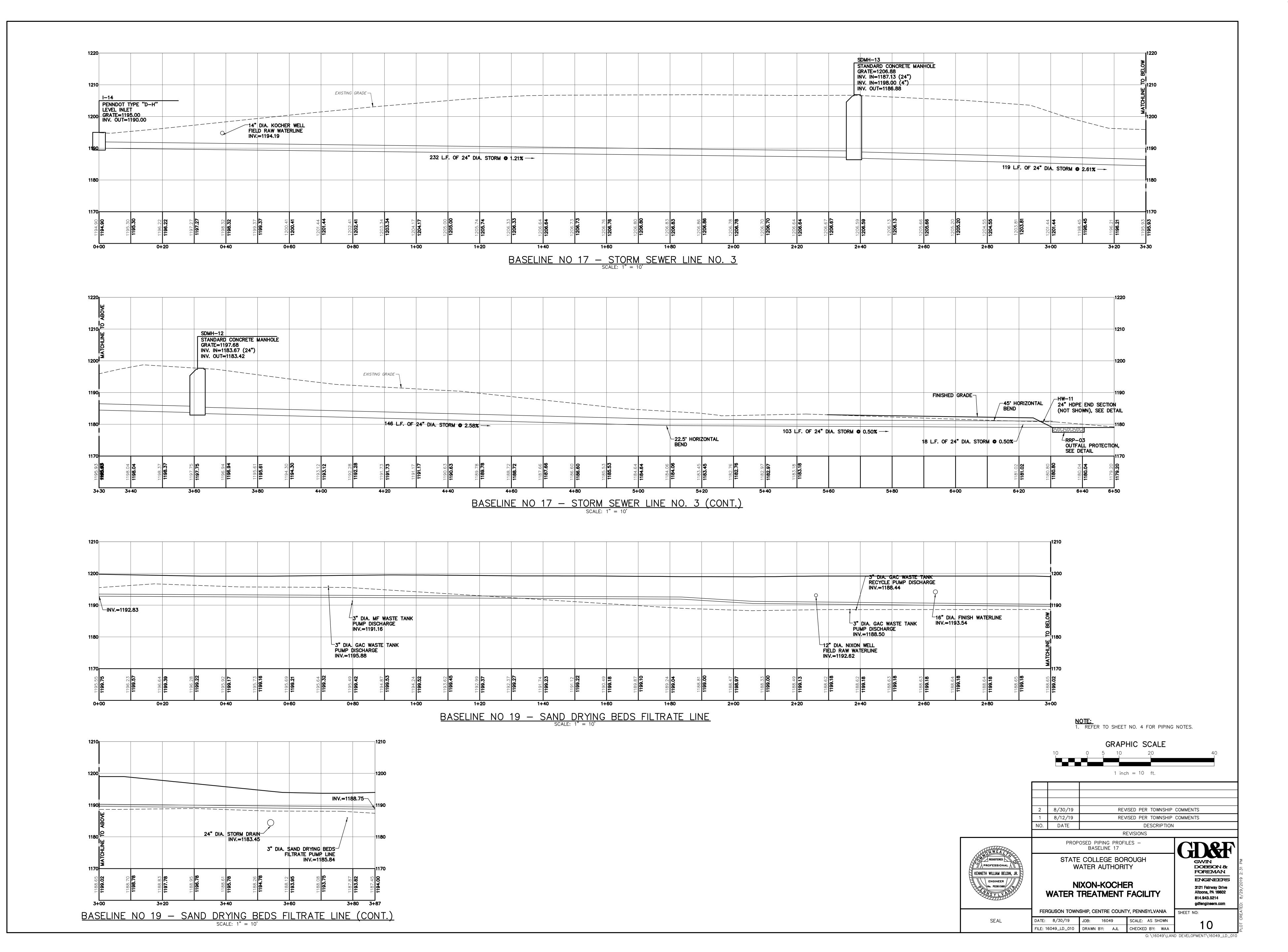
gdfengineers.com

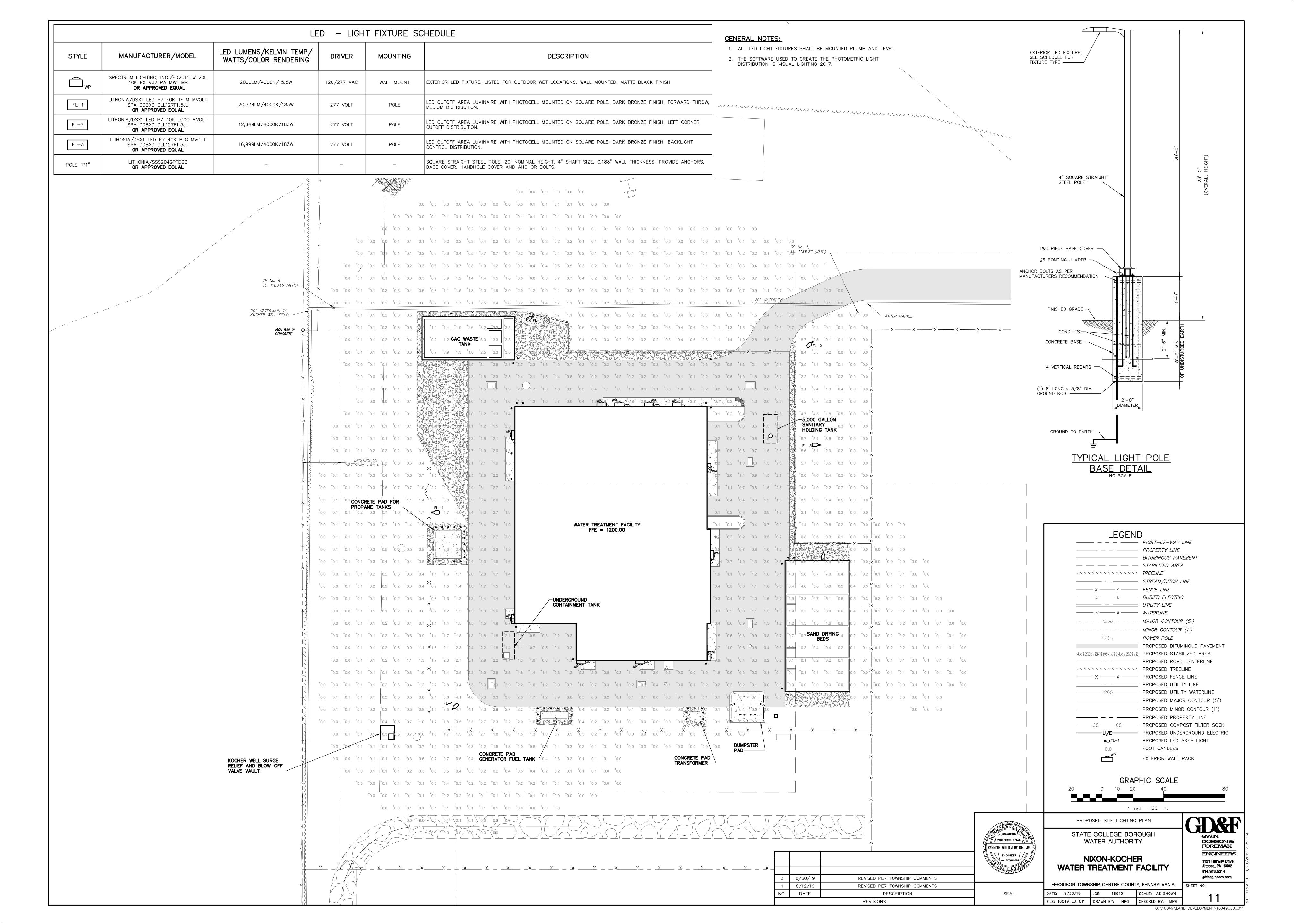
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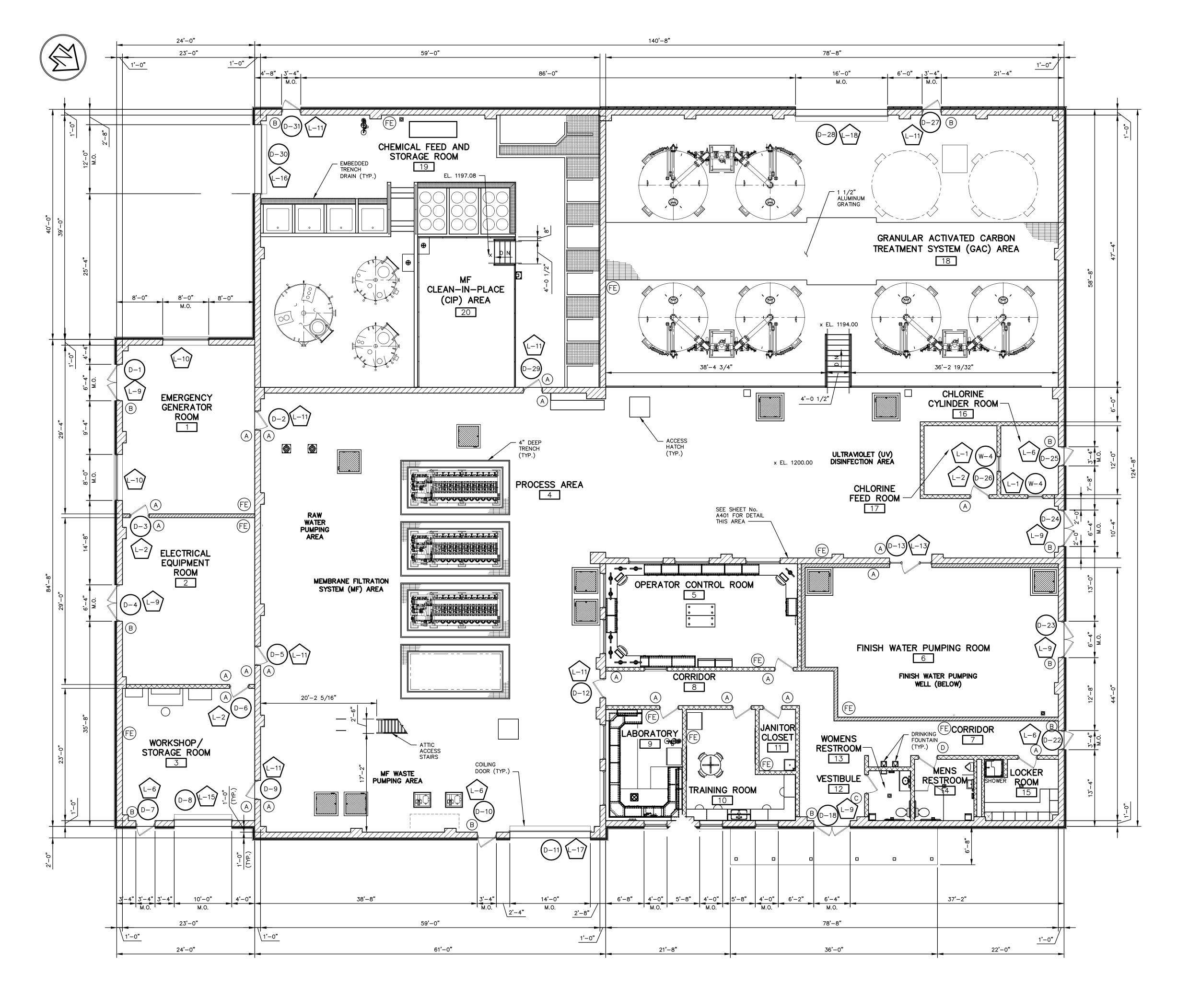
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INTERIOR ROOM SIGNAGE SCHEDULE ROOM/AREA NAME TYPE (ROOM NAME) SEE AREA SCHEDULE B ADA WOMEN'S ROOM D ADA MEN'S ROOM SIGNAGE NOTES:

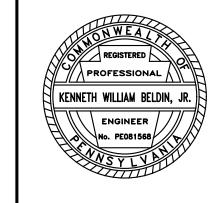
1. TACTILE CHARACTERS SHALL BE RAISED THE REQUIRED 1/32" INCHES FROM SIGN FACE. 2. ALL TEXT SHALL BE ACCOMPANIED BY GRADE 2 BRAILLE. BRAILLE SHALL BE SEPARATED "FROM THE CORRESPONDING RAISED CHARACTERS. GRADE 2 BRAILLE TRANSLATION TO BE PROVIDED BY SIGNAGE MANUFACTURER. 3. ALL LETTERS, NUMBERS AND/OR SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND. CHARACTERS AND BACKGROUND SHALL HAVE A NON-GLARE FINISH. 2"X REQUIRED LENGTH 3/4" HIGH LETTERS WITH GRADE 2 BRAILLE. 4. PLAQUE MATERIAL SHALL BE MELAMINE PLASTIC LAMINATE, APPROXIMATELY 1/8" THICK WITH CONTRASTING CORE COLOR. THE MELAMINE SHALL BE NON-STATIC, FIRE RETARDANT AND SELF-EXTINGUISHING. THE PLASTIC LAMINATE WILL BE IMPERVIOUS TO MOST ACIDS, ALKALIES, ALCOHOL, SOLVENTS, ABRASIVES AND BOILING WATER. 5. CORNERS: 1/2" RADIUS. 6. COPY POSITION: CC (CENTERED/CENTERED) 7. LETTER FONT STYLES: ARIAL OR UNIVERSAL 8. SIGNS SHALL BE MOUNTED USING VINYL TAPE FOR INTERIOR SIGNS. THE SIGNS SHALL BE MOUNTED ON THE WALL WITH DIMENSION FROM THE FLOOR TO THE CENTER OF THE SIGN TO CONFORM WITH ANSI A117.1 ON THE LATCH SIDE AND ON THE EXTERIOR OF THE EXTERIOR DOORS. THE DISTANCE BETWEEN THE DOOR FRAME AND SIGN SHOULD BE 2" TO CONFORM WITH ANSI A117.1. MOUNTING HEIGHT: 48" MINIMUM TO BASELINE OF LOWEST CHARACTER, 60" MAXIMUM TO BASELINE OF HIGHEST CHARACTER TYPE 1 - ROOM NAME PLATES - 2"X REQUIRED LENGTH 3/4" HIGH LETTERS WITH GRADE 2 BRAILLE. TYPE 2 — RESTROOM SIGN — DESIGN ADA—4 SIZE 8"X8" WITH A 4" ACCESSIBILITY SYMBOL, GENDER SYMBOL AND THE VERBAL DESCRIPTION PLACED DIRECTLY BELOW FOLLOWED BY GRADE 2 TYPE 3 - ROOM EXIT PLATES - 2"X REQUIRED LENGTH 3/4" HIGH LETTERS WITH GRADE 2 BRAILLE. COLOR TO BE SELECTED DURING SUBMITTAL PHASE. PROVIDE PLATES AT INTERIOR SIDE OF ALL EXIT DOORS FROM EACH ROOM AND ALL DOORS LEADING TO THE EXTERIOR.

	<u>LEGEND</u>							
A.F.F.	ABOVE FINISHED FLOOR	FE	FIRE EXTINGUISHER					
M.O.	MASONRY OPENING		ALUMINUM GRATING (SEE PLANS					
	CAVITY WALL (SEE WALL SECTIONS SHEETS No. A311)		FOR SIZE)					
	8" STANDARD CMU (UNLESS DIMENSIONED OTHERWISE)	$\left( D-1\right)$	DOOR (SEE DOOR SCHEDULE, SHEET No. A601)					
	12" STANDARD CMU	(W-1)	INTERIOR WINDOW (SEE DETAILS, SHEET No. A602)					
	8" ACOUSTIC CMU	$\left\langle \right\rangle$	LINTEL (SEE LINTEL SCHEDULE,					
1	ROOM AREA NUMBER	\/	SHEET No. A602)					
FD 📵	FLOOR DRAIN		EMBEDDED TRENCH DRAIN					
со 📵	CLEANOUT		FRP GRATING (SEE PLANS FOR SIZE)					

FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

2	8/30/19	REVISED PER TOWNSHIP COMMENTS
1	8/12/19	REVISED PER TOWNSHIP COMMENTS
NO.	DATE	DESCRIPTION
		REVISIONS



SEAL

FIRST FLOOR PLAN

STATE COLLEGE BOROUGH WATER AUTHORITY

**NIXON-KOCHER** WATER TREATMENT FACILITY

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

SHEET NO:

GWIN DOBSON & FOREMAN

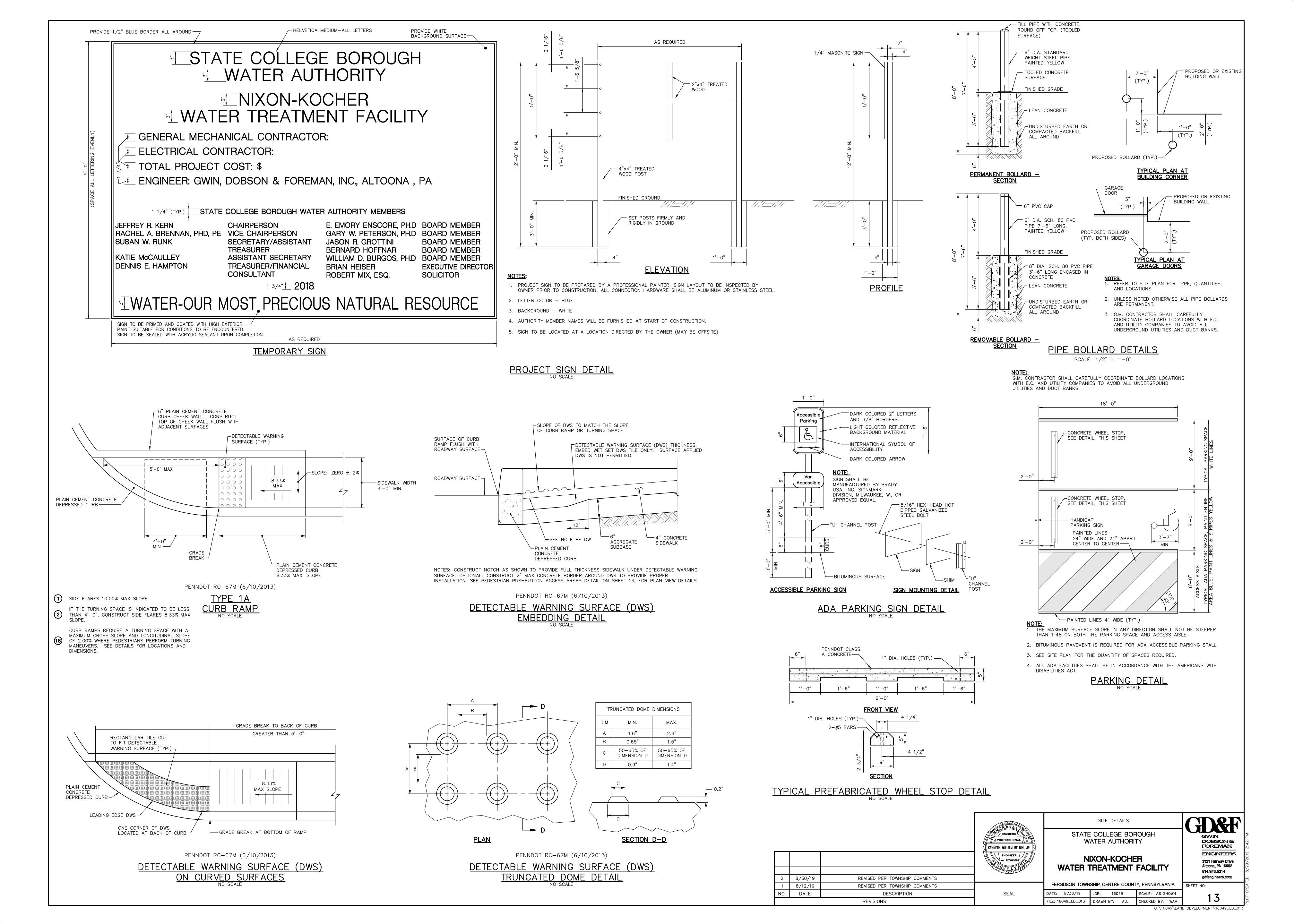
ENGINEERS

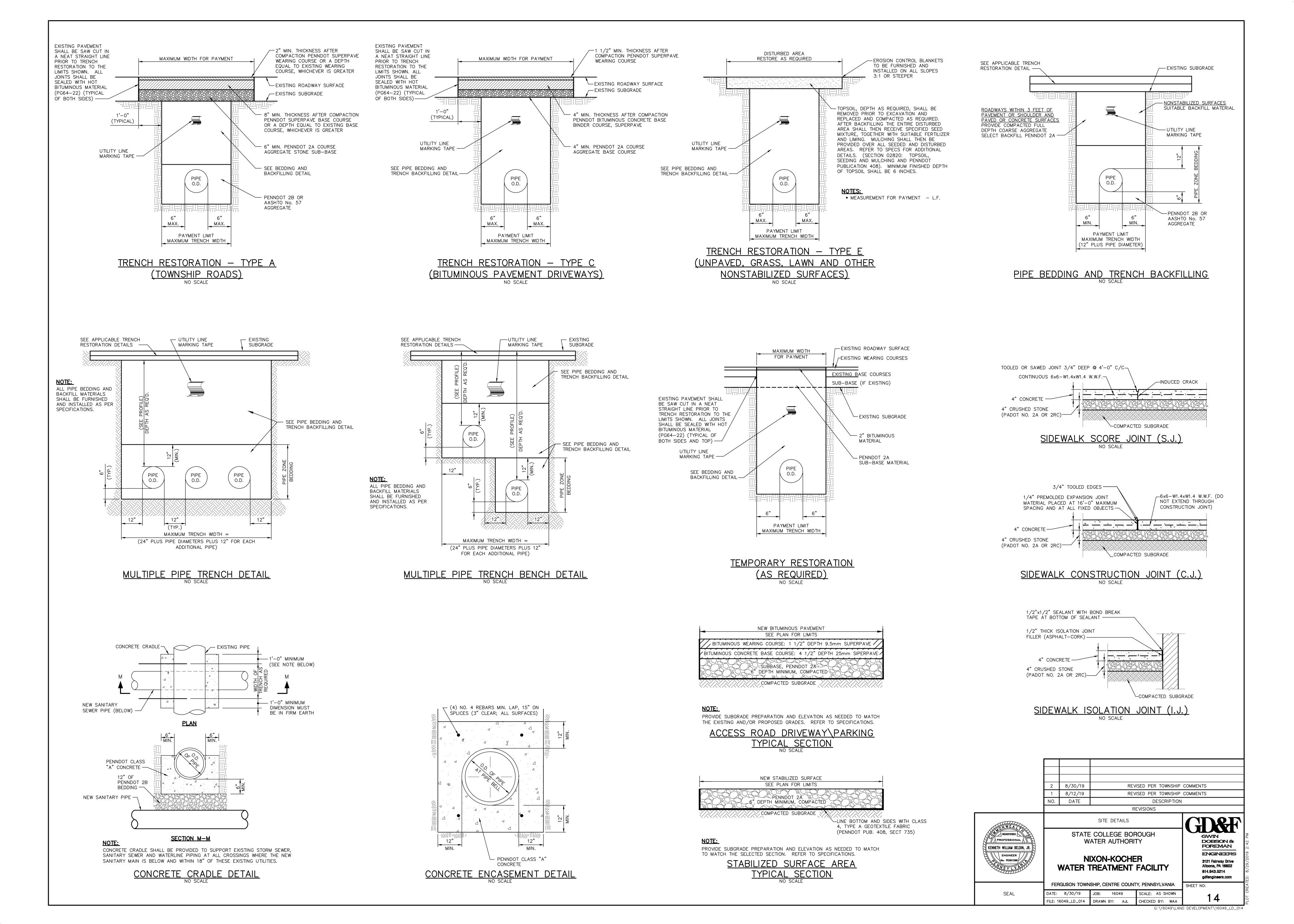
3121 Fairway Drive Altoona, PA 16602

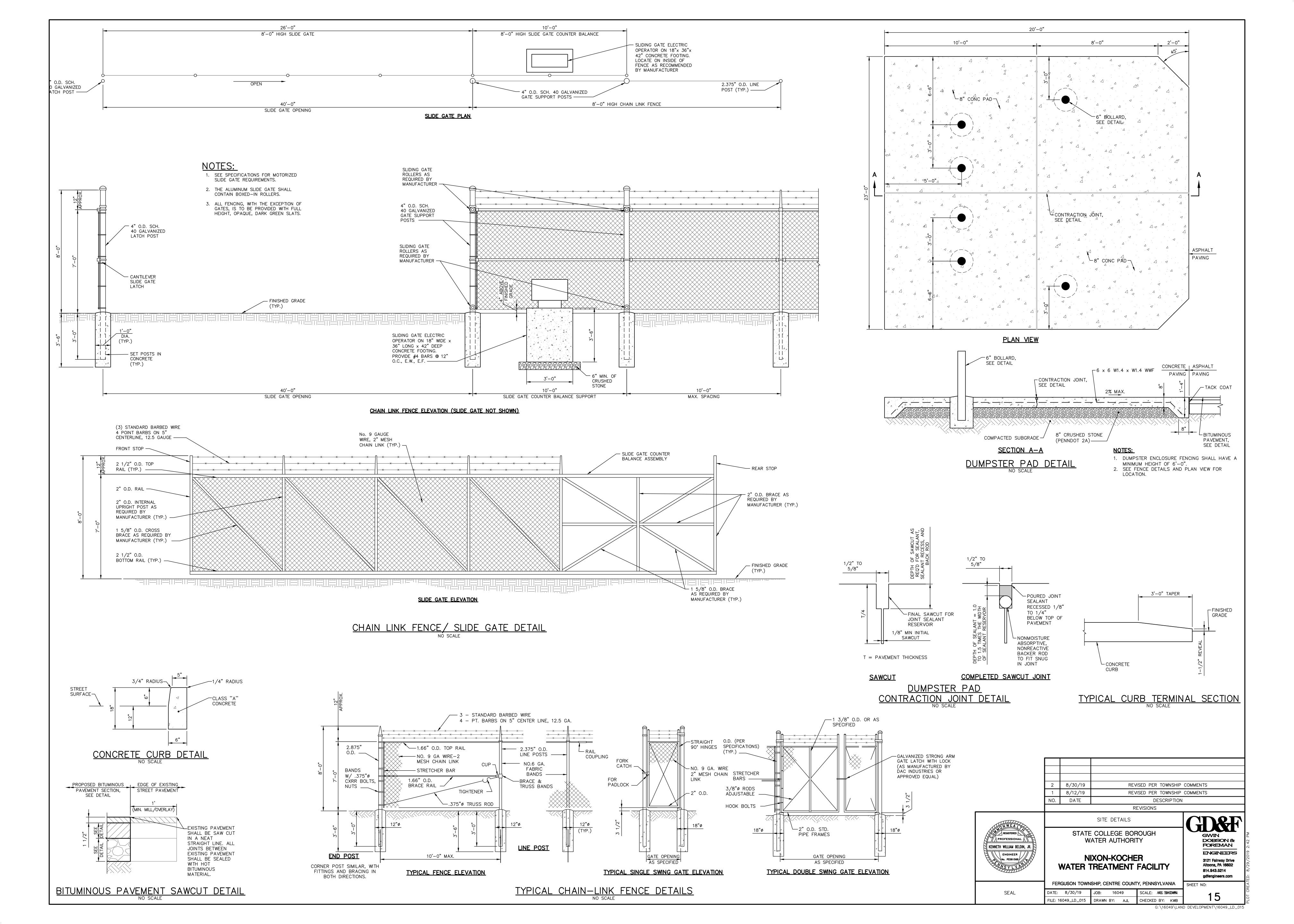
814.943.5214 gdfengineers.com

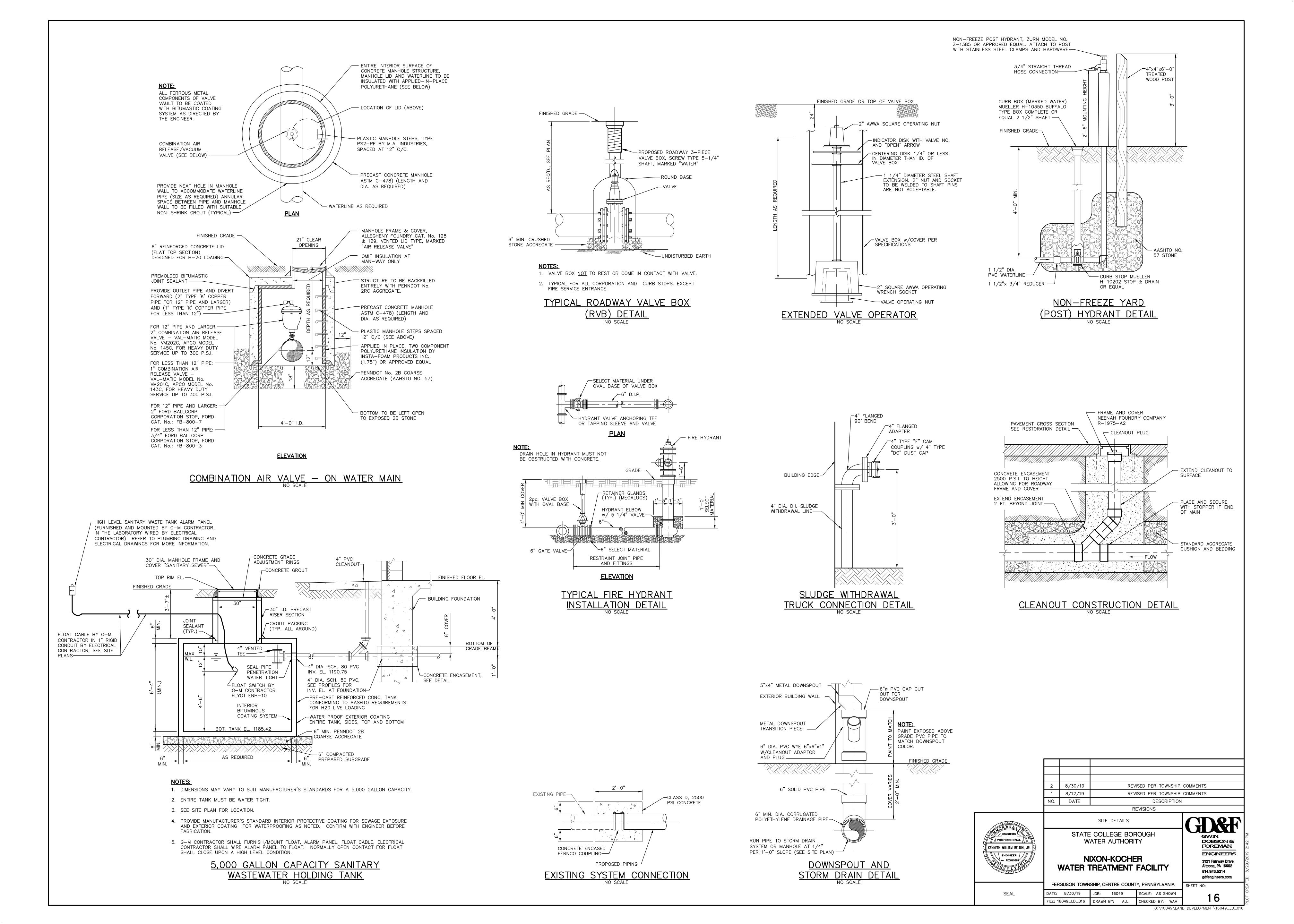
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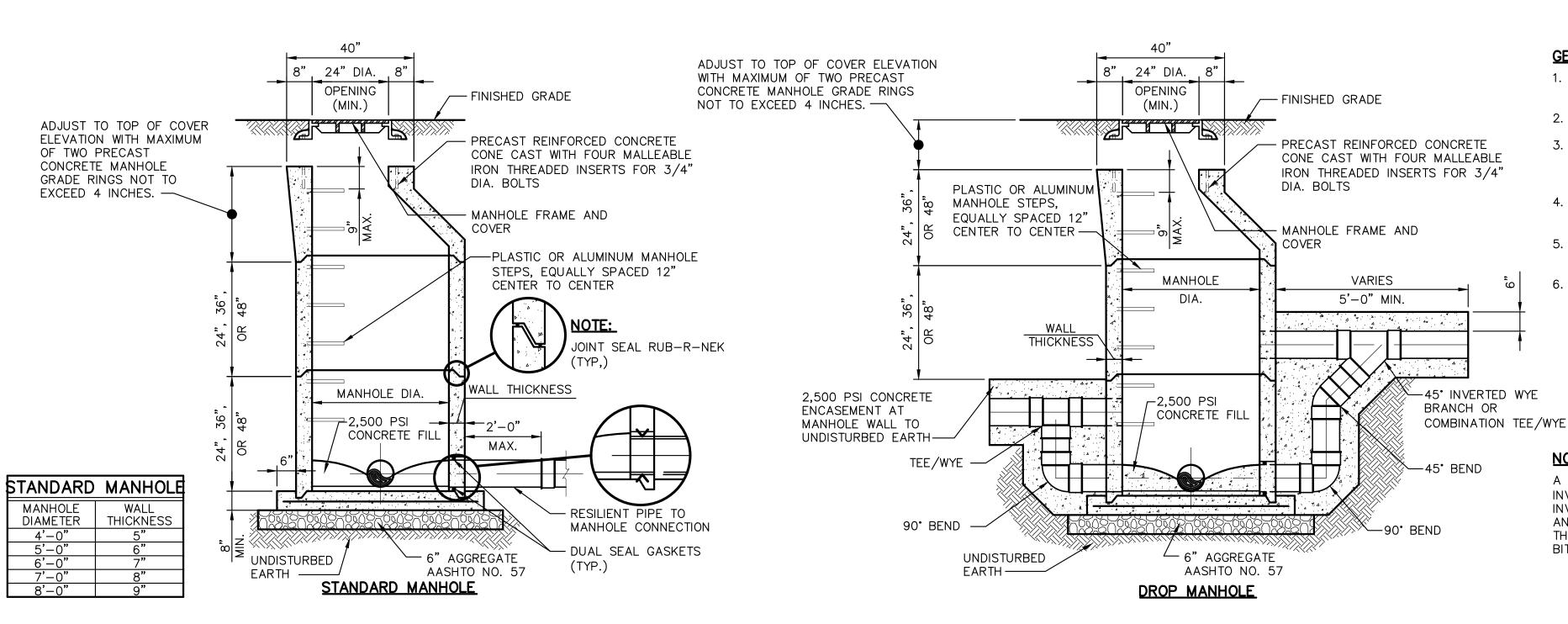
JOB: 16049 DRAWN BY: RLN FILE: 16049\_LD\_012 CHECKED BY: WAA







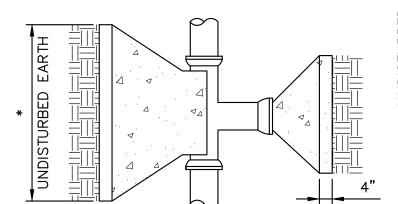




#### **GENERAL NOTES:**

- 1. CONCRETE MANHOLES AND BASES SHALL CONFORM TO ASTM C-478.
- 2. REINFORCING STEEL SHALL CONFORM TO ASTM A-185.
- 3. THE EXTERIOR SURFACE OF THE MANHOLE SHALL BE COATED WITH (2) TWO COATS SHERWIN WILLIAMS HI-MIL SHER-TAR EPOXY (DFT 16 MILS) OR APPROVED EQUAL.
- 4. DISTANCE FROM RIM OF MANHOLE TO TOP OF STEP SHALL EXCEED 30".
- 5. DISTANCE FROM BOTTOM STEP TO FLOOR OF MANHOLE SHALL NOT BE SHALL NOT BE GREATER THAN 2 FEET.
- 6. DO NOT LOCATE STEPS OVER CHANNELS.

A DROP CONNECTION SHALL BE INSTALLED WHEN THE PIPE INVERTS INTO THE MANHOLE ARE 2'-0" OR MORE ABOVE INVERT OUT OF THE MANHOLE. THE ENTIRE OUTER SURFACE AND CONCRETE ENCASEMENT AROUND THE MANHOLE AND THE CONNECTIONS SHALL BE COATED WITH TWO COATS OF BITUMASTIC.



PLAN-TEES. WYES AND PLUGS

ELEVATION—TEES, WYES AND BENDS

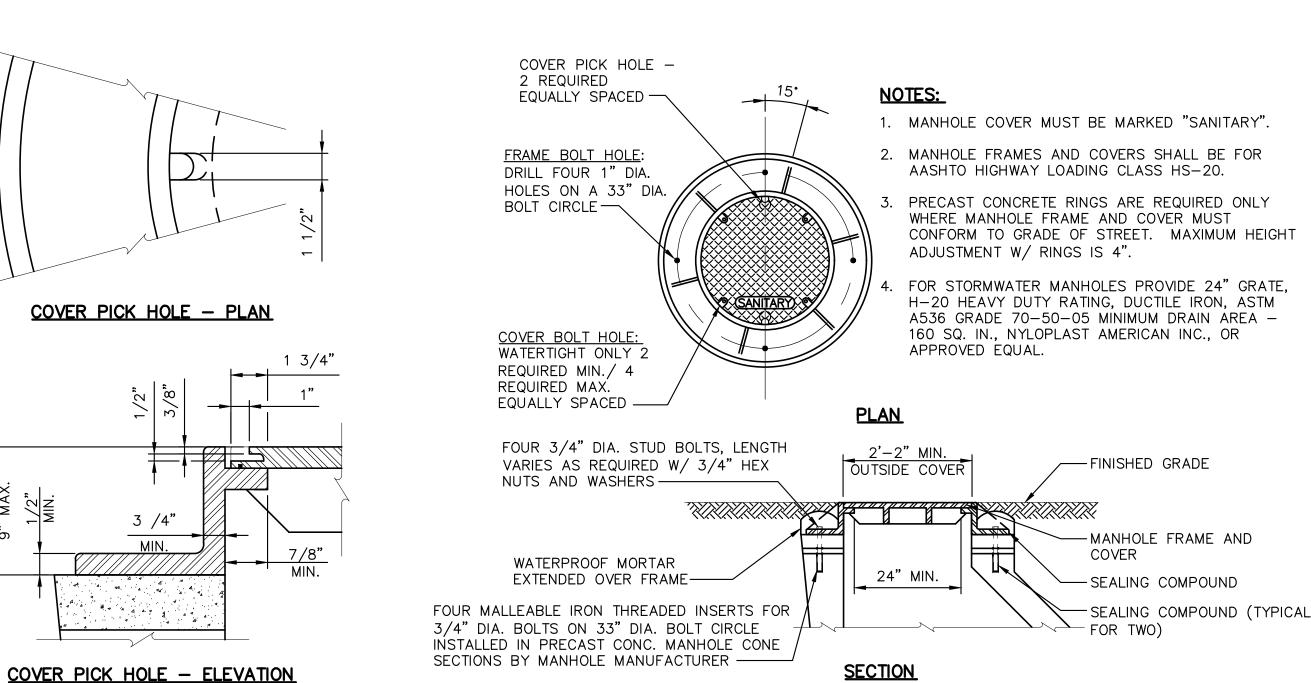
∠\*EITHER PLAN-BENDS

EARTH

- 1. ALL TEES, WYES, CROSSES, PLUGS AND BENDS SHALL BE BLOCKED AGAINST FIRM GROUND WITH CONCRETE.
- 2. EARTH PRESSURE FIGURED AT 4,000 PSF, AREA OF BLOCK MUST BE INCREASED PROPORTIONATELY IF EARTH ENCOUNTERED WILL NOT WITHSTAND THIS PRESSURE IN THE OPINION OF THE ENGINEER.
- 3. TABLE IS BASED UPON 225 PSI OR 150 LBS. WORKING PRESSURE PLUS 50% WATER
- 4. \* DENOTES FACE AREA NOT LESS THAN SHOWN IN TABLE.

PIPE		TOTAL	AREA OF BLOCK IN SQ. FT.					
SIZE (IN.)	AREA (SQ. IN.)	FORCE (LBS.)	TEES & PLUGS	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS	
4	12.57	2,827	1.0	1.0	1.0	1.0	1.0	
6	28.27	6,361	1.6	2.3	1.2	1.0	1.0	
8	50.26	11,308	2.8	4.0	2.2	1.1	1.0	
10	78.54	17,672	4.4	6.3	3.4	1.7	1.0	
12	113.16	25,461	6.4	9.0	4.9	3.0	1.3	
14	153.94	34,637	8.7	12.3	6.6	3.4	1.7	
16	201.06	45,239	11.3	16.0	8.7	4.4	2.2	
18	254.47	57,256	14.3	20.3	11.0	5.6	2.8	
20	314.16	70,686	17.7	25.0	13.5	6.9	3.5	
24	452.39	101,788	25.4	36.0	19.5	9.9	5.0	

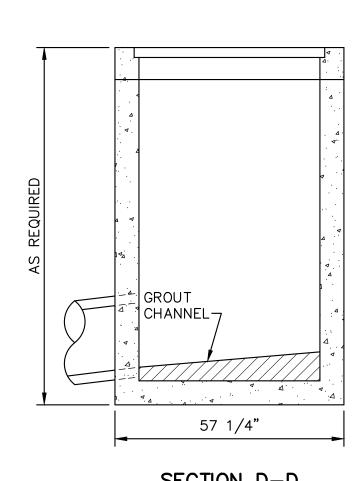
CONCRETE THRUST BLOCK DETAIL

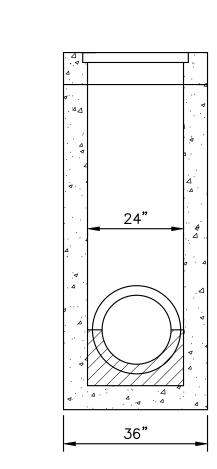


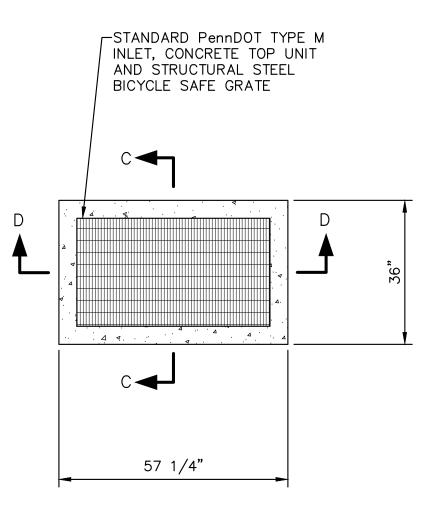
PRECAST CONCRETE MANHOLE FRAME AND COVER DETAILS

PRECAST MANHOLE BASE AND WALL DETAILS

# WATERTIGHT COVER SHALL HAVE MINIMUM OF TWO 1/2" DIA. STAINLESS STEEL BOLTS INSTALLED THROUGH THE COVER INTO THE FRAME CONTINUOUS FACTORY MACHINED NEOPRENE GASKET-DOVETAIL GROOVE IN BEARING SIDE OF COVER WATERTIGHT FRAME AND COVER







<u>PLAN</u>

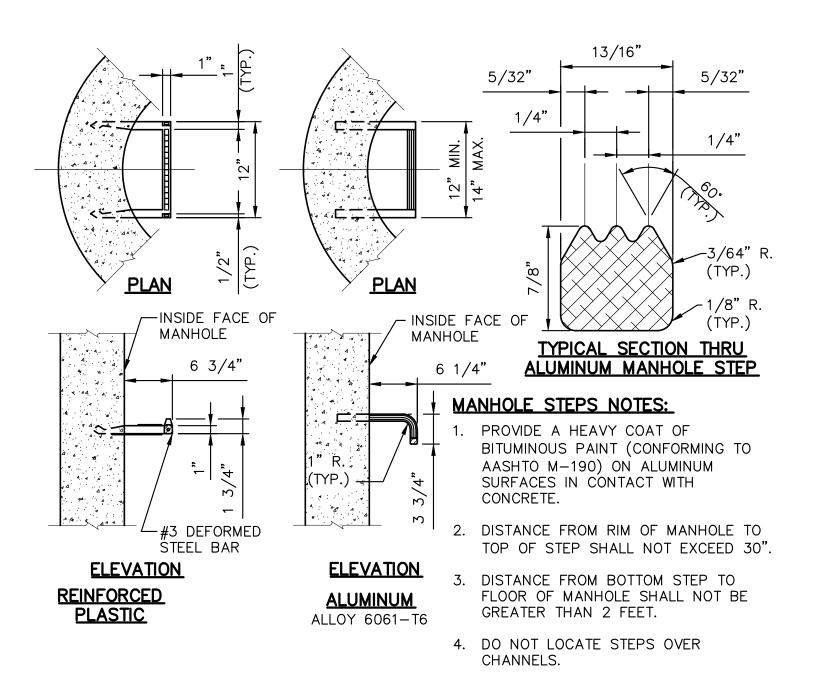
SECTION D-D

SECTION C-C

# NOTES: 1. INLETS SHALL CONFORM TO PennDOT RC-34.

 CONTRACTOR IS RESPONSIBLE FOR DETERMINING INLET BOX AND COVER ADJUSTMENT SLAB TYPE AS REQUIRED.

TYPICAL TYPE M INLET



── 1/2" DIA. BRONZE OR

HEAD BOLT

5/8" DIA. BOLT

CLEARANCE HOLE

FRAME FOR 1/2"

DIA. BOLT THREAD

THRU COVER

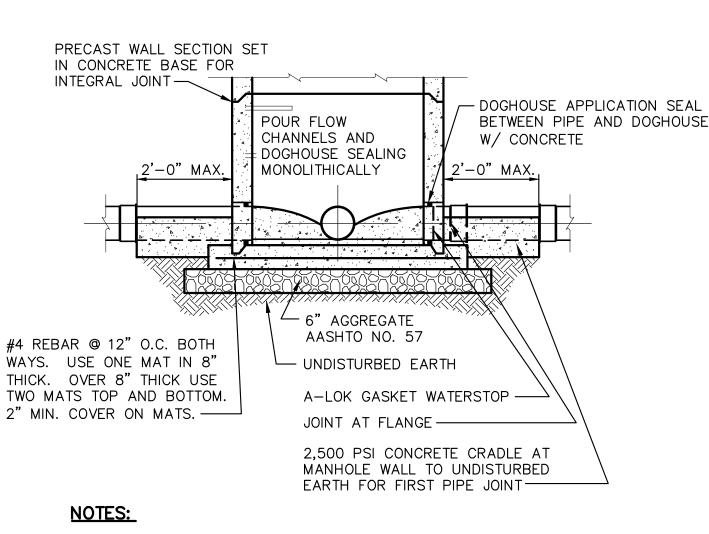
COVER BOLT HOLE - PLAN

COVER BOLT HOLE - ELEVATION

"O" RING GASKET

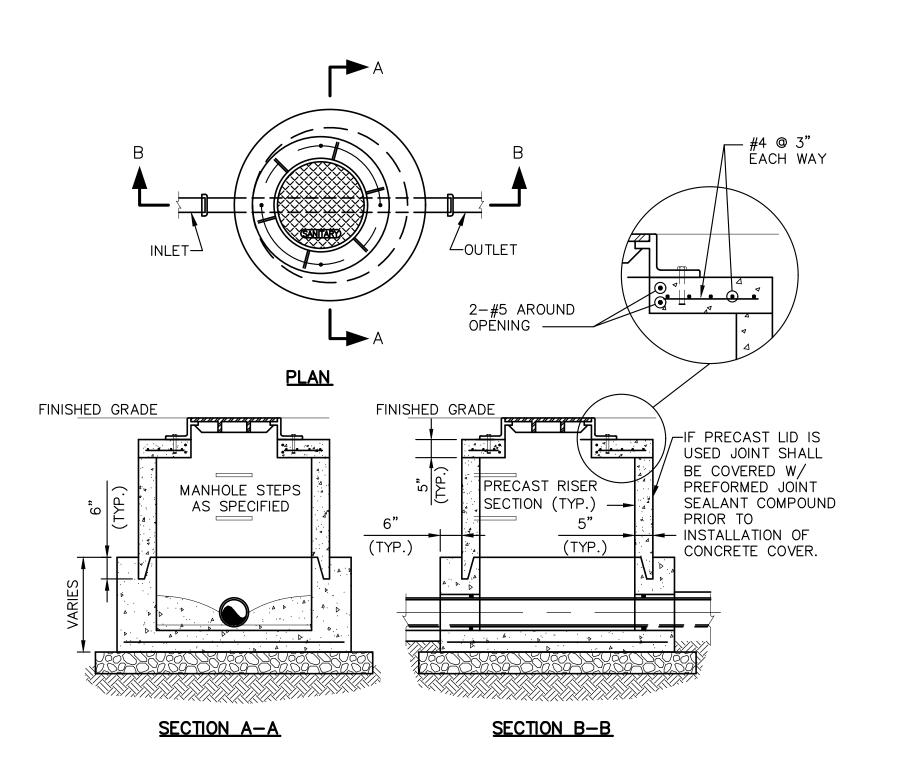
STAINLESS STEEL HEX

MANHOLE STEP DETAILS

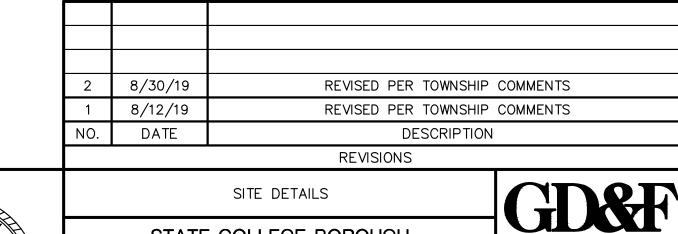


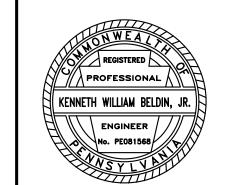
- 1. USE DOGHOUSE APPLICATION WHEN TYING INTO EXISTING MANHOLE, EXCEPT SEAL BETWEEN MANHOLE WALL AND PIPE W/ WATERPROOF MORTAR WORKED AROUND WATERSTOP.
- 2. FOR MANUAL BREAK IN CONDITION, PIP IS TO BE GASKETED TO FULL CIRCUMFERENCE W/ A RUBBER GASKET SIMILAR TO A-LOK.

CAST-IN-PLACE BASE AND PRECAST WALL SECTIONS



STANDARD SHALLOW PRECAST MANHOLE





SEAL

DATE: 8/30/19

FILE: 16049\_LD\_017

STATE COLLEGE BOROUGH WATER AUTHORITY

JOB: 16049

DRAWN BY: AJL

SITE DETAILS

**NIXON-KOCHER** 

WATER TREATMENT FACILITY FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

SCALE: AS SHOWN

CHECKED BY: WAA

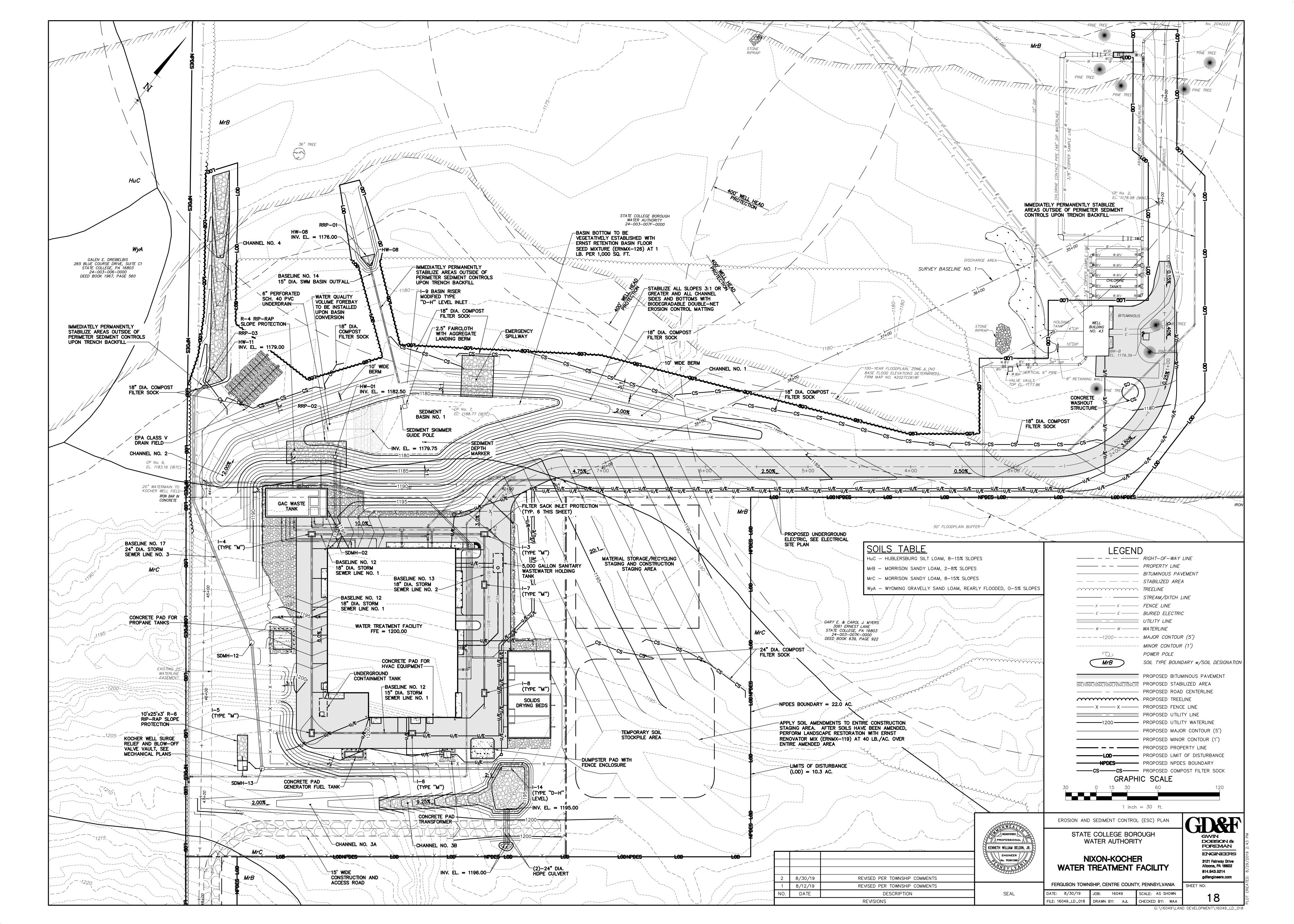
DOBSON & FOREMAN

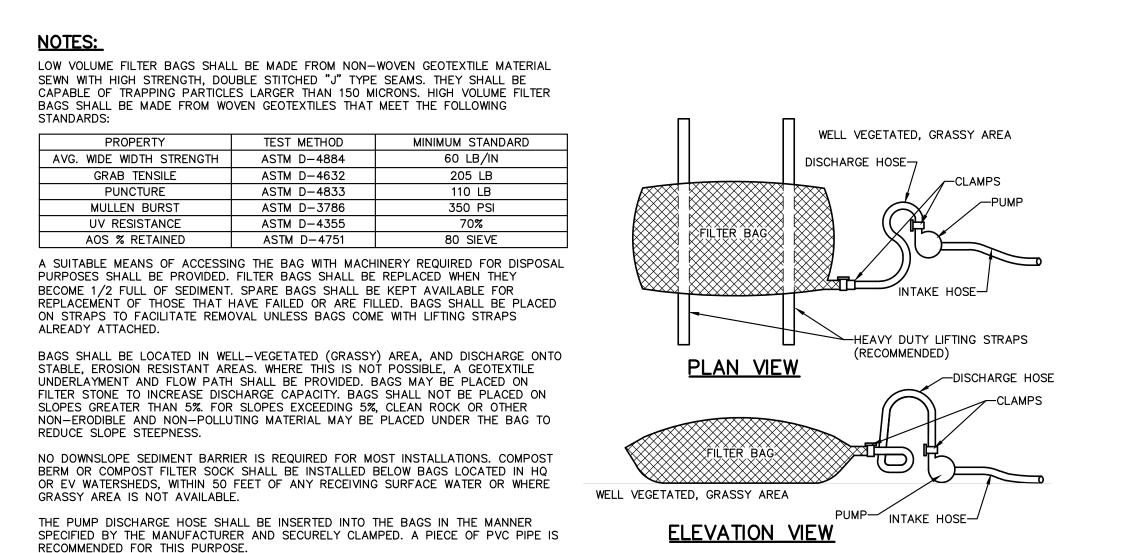
**ENGINEERS** 

3121 Fairway Drive

Altoona, PA 16602 814.943.5214 gdfengineers.com

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PUMPED WATER FILTER BAG DETAIL

1. THE INLET FILTER SACK SHOULD TRAP PARTICLES LARGER THAN 150 MICRONS.

— INLET GRATE

#8 REBAR FOR SACK

REMOVAL FROM INLET

- INLET GRATE

SACK

RUBBER

**EXPANSION** 

RESTRAINT

1/4" NYLON

BLOCK

STRUCTURE

INLET FILTER

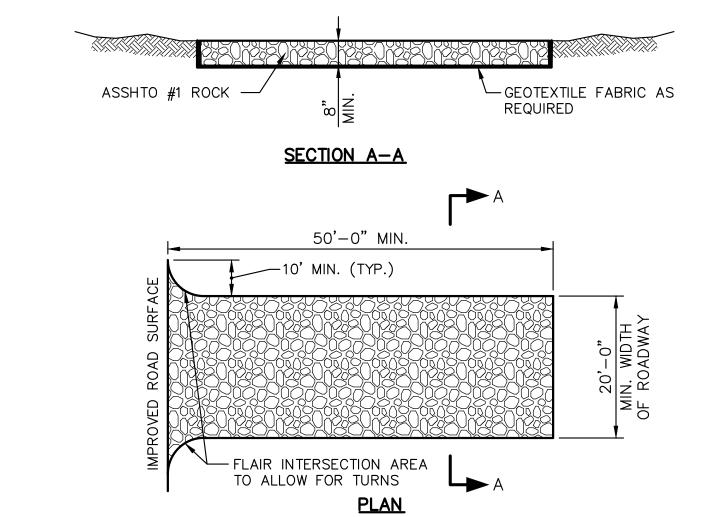
2. INLET FILTER BAGS SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. 3. FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE BAG IS 1/3 FULL.

4. DAMAGED FILTER BAGS SHOULD BE REPLACED. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER INSPECTION. 5. FOR INLETS WITH A CURB OPENING (i.e. TYPE C INLET), A FILTER LOG, SAND BAG,

LADEN WATER FROM ENTERING THE CURB OPENING AND BYPASSING THE FILTER BAG.

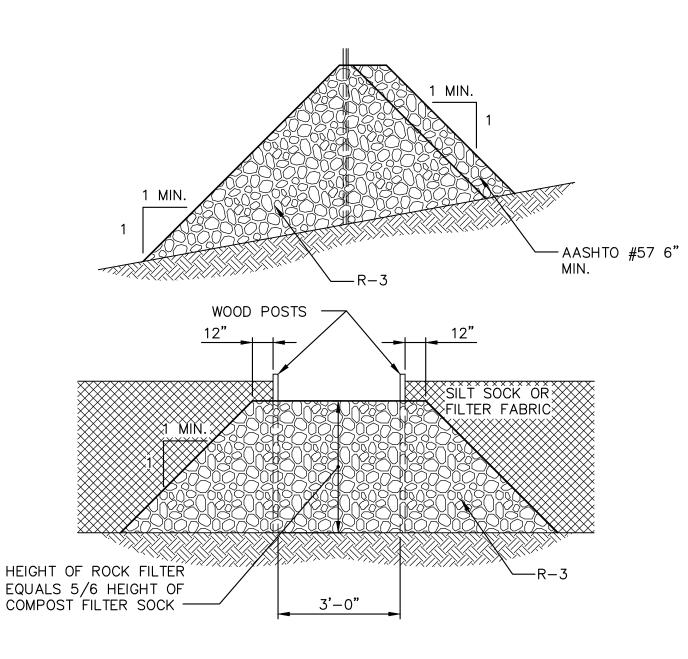
FILTER TUBE OR COMPOST FILTER SOCK SHALL BE USED TO PREVENT SEDIMENT

FILTER SACK INLET PROTECTION DETAILS



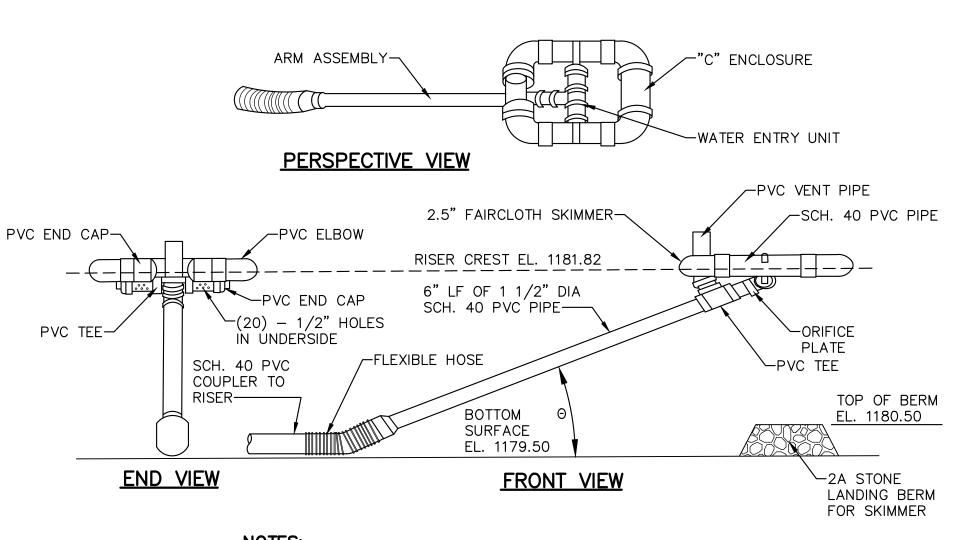
- 1. ROCK CONSTRUCTION ENTRANCES WILL BE CONSTRUCTED TO THE MINIMUM WIDTH, LENGTH, AND THICKNESS OF THE DIMENSIONS SHOWN.
- 2. ROCK WILL BE AASHTO #1 AS SPECIFIED IN SECTION 703.2 OF PENNDOT PUBLICATION
- 3. THE THICKNESS OF THE ROCK CONSTRUCTION ENTRANCE SHALL BE CONSISTENTLY MAINTAINED AT THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCK PILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON THE PUBLIC ROADWAYS WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAY WITH WATER IS NOT PERMITTED.

ROCK CONSTRUCTION ENTRANCE DETAIL



- 1. THE FILTER SHOULD BE EQUAL IN HEIGHT TO 5/6 THE TOTAL HEIGHT OF THE COMPOST FILTER SOCK OR SILT FENCE WITH A 6" DEPRESSION IN THE THE CENTER.
- 2. A SIX INCH THICK LAYER OF AASHTO NO. 57 STONE SHOULD BE PLACED ON THE UPSTREAM SIDE OF THE FILTER. FILTER FABRIC AND STRAW BALES SHOULD NOT BE USED IN ROCK FILTERS.
- 3. ROCK FILTER OUTLET IS TO BE USED IN AREAS WHERE COMPOST FILTER SOCK AND SILT FENCE HAVE FAILED.

ROCK FILTER OUTLET DETAIL



THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM

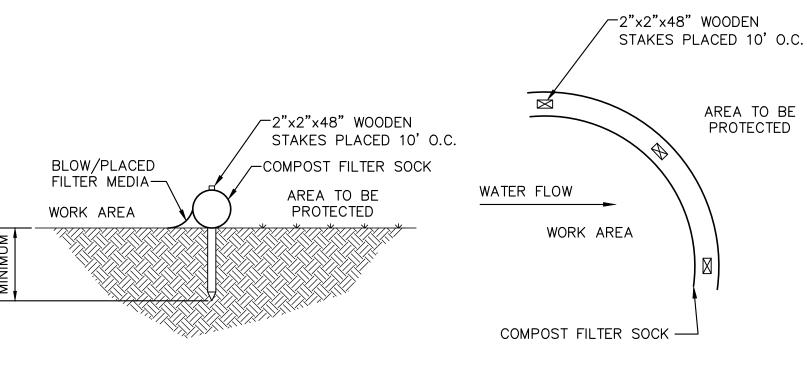
SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

FLOATING AND SCREENED.

1. O SHOULD BE 45° OR LESS WHEN THE WATER SURFACE IS AT THE MAXIMUM POOL ELEVATION.

2. APPROVAL OF THE USE OF A SKIMMER DOES NOT APPROVE THE USE OF ANY SKIMMER IN VIOLATION OF ANY PATENT, PATENT RIGHTS AND/OR PATENT LAW. SEDIMENT SKIMMER DETAIL



INLET FILTER SACK

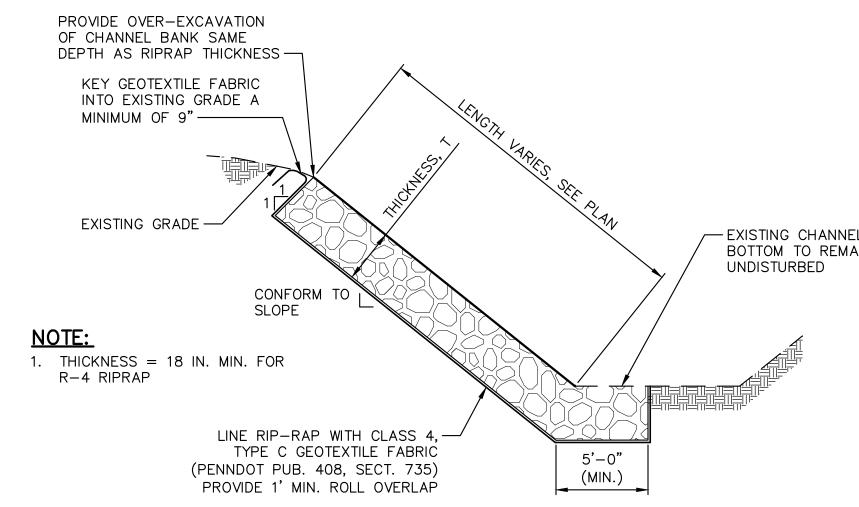
INLET STRUCTURE

NOTES:

# COMPOST FILTER SOCK

1. SEE PLAN VIEW FOR SOCK SIZE AND LOCATION.

- 2. SOCK FABRIC SHALL MEET THE STANDARDS OF TABLE 4.1 AND COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PADEP EROSION CONTROL BMP MANUAL.
- 3. SLOPE LENGTHS SHALL NOT EXCEED THE LENGTHS SHOWN ON FIGURE 4.2 OF THE PADEP EROSION CONTROL BMP MANUAL.



ROCK SLOPE STABILIZATION

# - EXISTING CHANNEL BOTTOM TO REMAIN

LENGTH OUTLET PIPE CLASS 4, TYPE A GEOTEXTILE FABRIC (PENNDOT PUB. 408, SECT. 735) —

OUTLET PIPE ROCK SIZE REFER TO TABLE

LENGTH

**ELEVATION** PLAN VIEW

RIP-RAP OUTLET PROTECTION CHART								
RIP-RAP No.	STRUCTURE TYPE	LENGTH (FT)	MIN. OUTLET WIDTH (FT)	END WIDTH (FT)	ROCK SIZE	PLACEMENT DEPTH (IN)	REMARKS	
RRP-01	15" HDPE	10.0	4.0	14.0	R-4	18	BASIN OUTFALL (HW-08)	
RRP-02	24" HDPE	10.0	6.0	10.0	R-3	9	STORM DRAIN OUTFALL (HW-01)	
RRP-03	24" HDPE	12.0	18.0	13.0	R-4	18	BYPASS OUTFALL (HW-11)	
	_				_			

OUTFALL PROTECTION DETAIL

# AMENDMENT SPECIFICATIONS AND APPLICATIONS

THIS SPECIFICATION COVERS THE USE OF COMPOST FOR SOIL AMENDMENT AND THE MECHANICAL RESTORATION OF COMPACTED, ERODED AND NON-VEGETATED SOILS. SOIL AMENDMENT AND RESTORATION IS NECESSARY WHERE EXISTING SOIL HAS BEEN DEEMED UNHEALTHY IN ORDER TO RESTORE SOIL STRUCTURE AND FUNCTION, INCREASE INFILTRATION POTENTIAL AND SUPPORT HEALTHY VEGETATIVE COMMUNITIES.

SOIL AMENDMENT MEDIA SHALL CONSISTS OF COMPOST, BUT CAN INCLUDE MULCH, MANURES, SAND, AND MANUFACTURED MICROBIAL SOLUTIONS.

COMPOST SHOULD BE ADDED AT A RATE OF 2:1 (SOIL: COMPOST). IF A PROPRIETARY PRODUCT IS USED, THE

MANUFACTURER'S INSTRUCTIONS SHOULD BE FOLLOWED IN TERMS OF MIXING AND APPLICATION RATE. ONLY COMPOST PRODUCTS THAT MEET ALL APPLICABLE STATE AND FEDERAL REGULATIONS PERTAINING TO ITS PRODUCTION AND DISTRIBUTION MAY BE USED IN THIS APPLICATION. APPROVED COMPOST PRODUCTS MUST MEET RELATED STATE AND FEDERAL CHEMICAL CONTAMINANT (E.G., HEAVY METALS, PESTICIDES, ETC.) AND PATHOGEN LIMIT

STANDARDS PERTAINING TO THE FEEDSTOCKS (SOURCE MATERIALS) IN WHICH IT IS DERIVED. VERY COARSE COMPOST SHOULD BE AVOIDED FOR SOIL AMENDMENT AS IT WILL MAKE PLANTING ESTABLISHMENT MORE

THE USE OF COMPOST PRODUCTS THAT ARE CERTIFIED BY THE U.S. COMPOSTING COUNCIL'S SEAL OF TESTING (STA) PROGRAM (WWW.COMPOSTINGCOUNCIL.ORG) WILL ALLOW FOR THE ACQUISITION OF PRODUCTS THAT ARE ANALYZED ON A ROUTINE BASIS, USING THE SPECIFIED TEST METHODS. STA PARTICIPANTS ARE ALSO REQUIRED TO PROVIDE A STANDARD PRODUCT LABEL TO ALL CUSTOMERS, ALLOWING EASY COMPARISON TO OTHER PRODUCTS.

SUB-SOILING TO RELIEVE COMPACTION

SUB-SOILED AREAS SHALL BE LOOSENED TO LESS THAN 1400 KPA (200 PSI) TO A DEPTH OF 20 INCHES BELOW FINAL TOPSOIL GRADE. THE CONTRACTOR SHALL VERIFY THAT THE SUB-SOILING WORK CONFORMS TO THE SPECIFIED DEPTH. SUB-SOILING SHALL FORM A TWO-DIRECTIONAL GRID. CHANNELS SHALL BE CREATED BY A COMMERCIALLY AVAILABLE, MULTI-SHANKED, PARALLELOGRAM IMPLEMENT (SOLID-SHANK RIPPER). THE EQUIPMENT SHALL BE CAPABLE OF EXERTING A PENETRATION FORCE NECESSARY FOR THE SITE. NO DISC CULTIVATORS CHISEL PLOWS, OR SPRING-LOADED EQUIPMENT WILL BE ALLOWED. THE GRID CHANNELS SHALL BE SPACED A MINIMUM OF 12 INCHES TO A MAXIMUM OF 36 INCHES APART, DEPENDING ON EQUIPMENT, SITE CONDITIONS, AND THE SOIL MANAGEMENT PLAN. THE CHANNEL DEPTH SHALL BE A MINIMUM OF 20 INCHES OR AS DIRECTED. IF SOILS ARE SATURATED, THE CONTRACTOR SHALL DELAY OPERATIONS UNTIL THE SOIL WILL NOT HOLD A BALL WHEN SQUEEZED. ONLY ONE PASS SHALL BE PERFORMED ON ERODIBLE SLOPES GREATER THAN 1 VERTICAL TO 3 HORIZONTAL. WHEN ONLY ONE PASS IS USED, WORK SHOULD BE AT RIGHT ANGLES TO THE DIRECTION OF SURFACE DRAINAGE, WHENEVER PRACTICAL.

EXCEPTIONS TO SUB-SOILING INCLUDE AREAS WITHIN THE DRIP LINE OF ANY EXISTING TREES, OVER UTILITY INSTALLATIONS WITHIN 30 INCHES OF THE SURFACE, WHERE TRENCHING/DRAINAGE LINES ARE INSTALLED, WHERE COMPACTION IS BY DESIGN (ABUTMENTS, FOOTINGS, OR IN SLOPES), AND ON INACCESSIBLE SLOPES.

DIFFICULT.

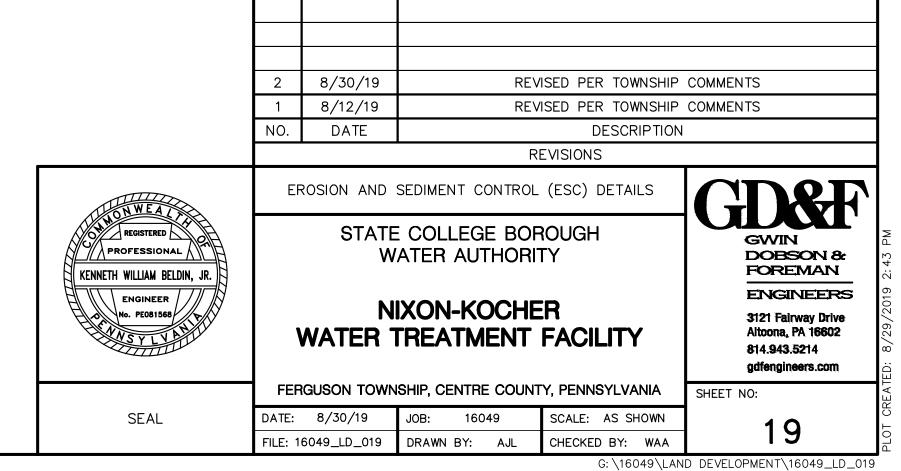
TIME THE COMPOST IS PLACED AND PREFERABLY WHEN EXCAVATION IS COMPLETED, THE SUBSOIL SHALL BE IN A LOOSE, FRIABLE CONDITION TO A DEPTH OF 20 INCHES BELOW FINAL TOPSOIL GRADE AND THERE SHALL BE NO EROSION RILLS OR WASHOUTS IN THE SUBSOIL SURFACE EXCEEDING 3 INCHES IN DEPTH.

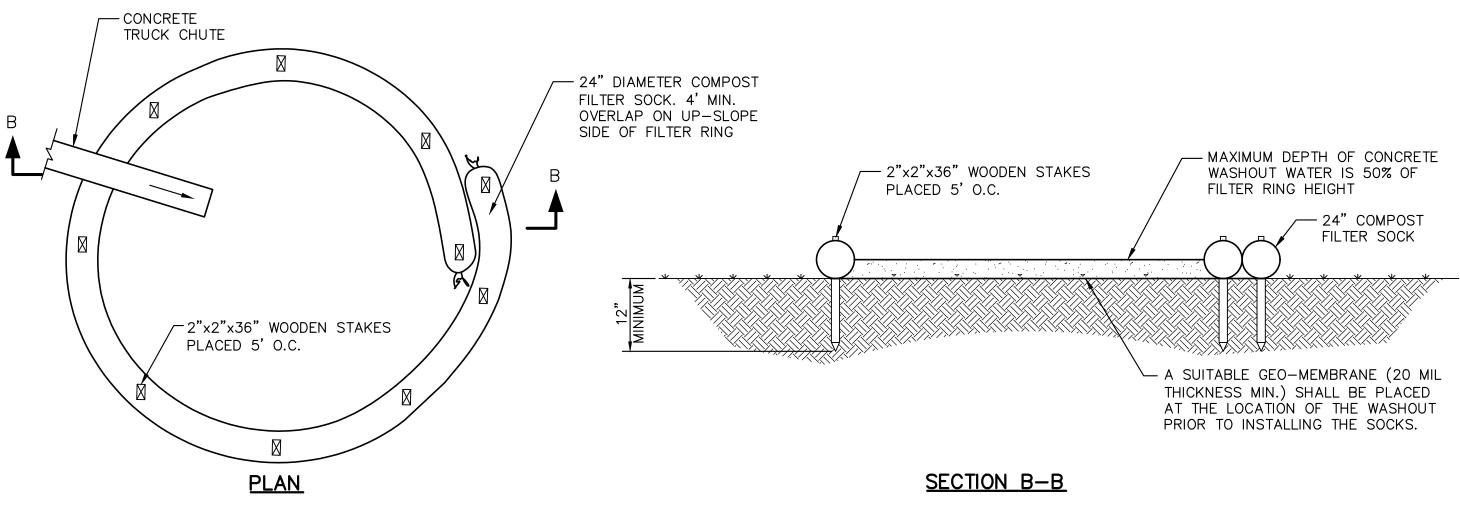
TO ACHIEVE THIS CONDITION, SUB-SOILING, RIPPING, OR SCARIFICATION OF THE SUBSOIL IS REQUIRED, WHEREVER THE SUBSOIL HAS BEEN COMPACTED BY EQUIPMENT OPERATION OR HAS BECOME DRIED OUT AND CRUSTED, AND WHERE NECESSARY TO OBLITERATE EROSION RILLS. SUB-SOILING SHALL BE REQUIRED TO REDUCE SOIL COMPACTION IN ALL AREAS WHERE PLANT ESTABLISHMENT IS PLANNED.

ON-SITE SOILS WITH AN ORGANIC CONTENT OF AT LEAST 5 PERCENT CAN BE PROPERLY STOCKPILED (TO MAINTAIN ORGANIC CONTENT) AND REUSED.

THE AREA TO RECEIVE THE SOIL AMENDMENTS SHALL BE LOOSENED TO LESS THAN 1400 KPA (200 PSI) TO A DEPTH OF 20 INCHES BELOW FINAL TOPSOIL GRADE. THIS MAY BE PERFORMED VIA COMMERCIALLY AVAILABLE SOIL RIPPERS, BUT A ROTO-TILLER IS PREFERABLE.

AFTER SOIL TILLING, REMOVE ANY ROCKS AND DISTRIBUTE A LAYER OF 10 INCHES OF COMPOST OVER THE AREA AND TILL THE COMPOST INTO THE SOIL A MINIMUM OF 20 INCHES. APPLY PERMANENT SEED AND MULCH AT THE RATES SHOWN IN THE APPROVED PLAN.

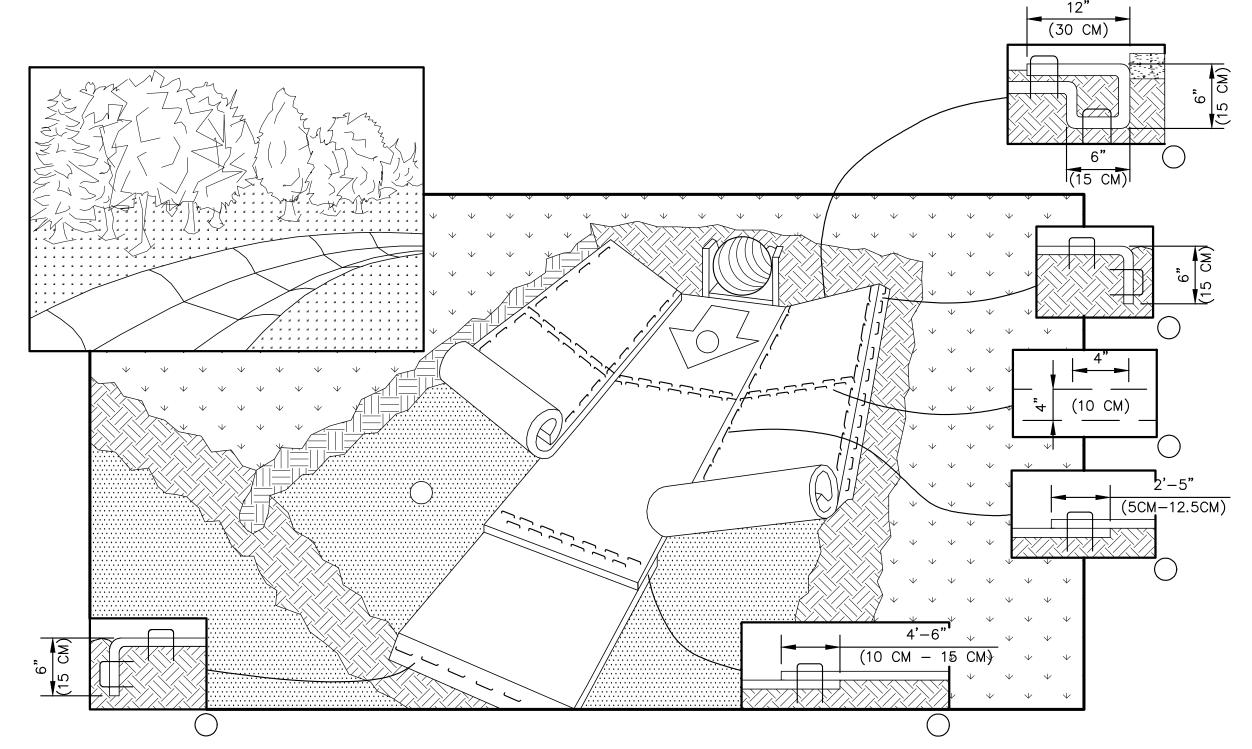




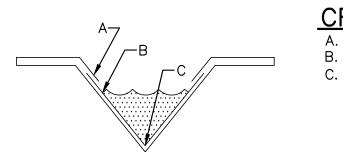
NOTES:

- 1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
- 2. 18" DIAMETER MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.

COMPOST SOCK WASHOUT INSTALLATION



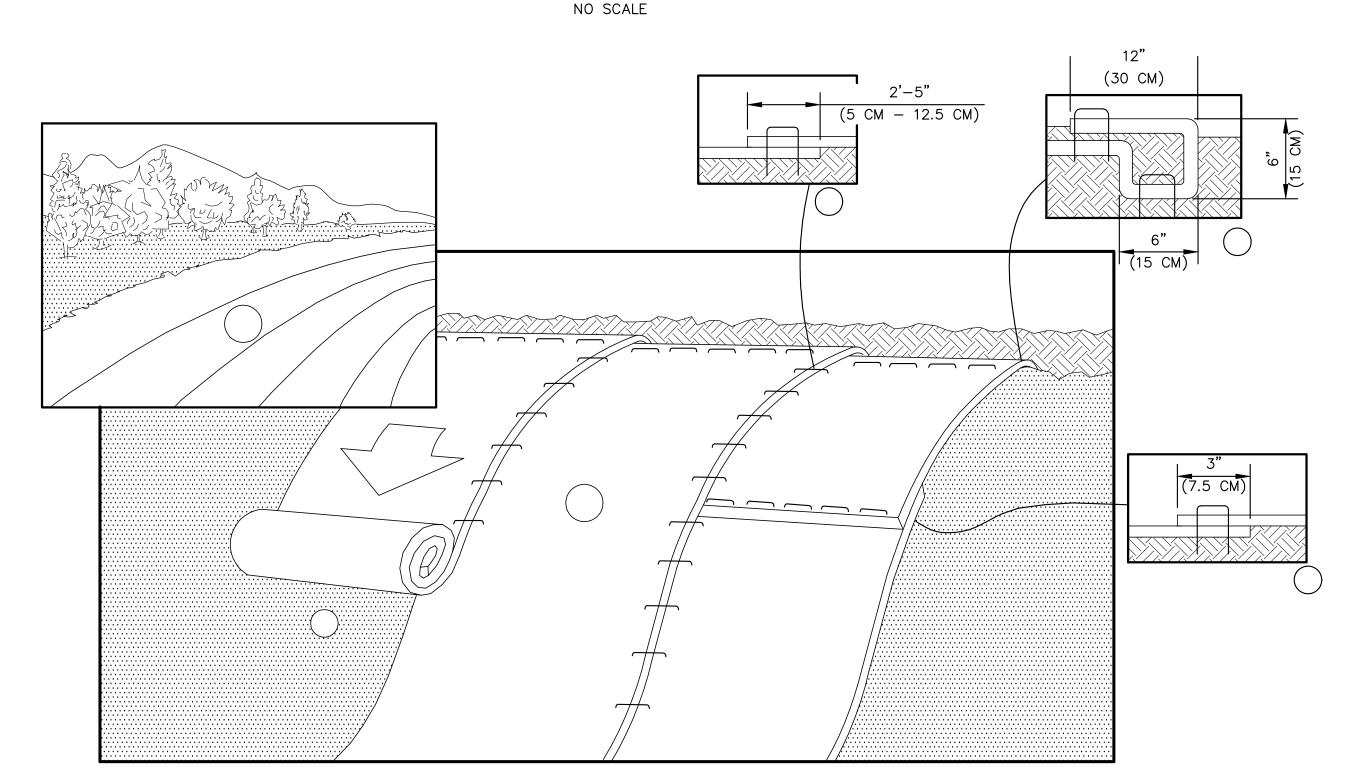
- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPs), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- 2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECPS IN A 6" (15CM) DEEP x 6" (15CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30CM) PORTION OF RECPS BACK OVER SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) ACROSS THE WIDTH OF THE RECPs.
- 3. ROLL CENTER RECPS IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. PLACE CONSECUTIVE RECPS END OVER END (SHINGLE STYLE) WITH A 4"-6" (10CM-15CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10CM) APART AND 4" (10CM) ON CENTER TO SECURE RECPs.
- 5. FULL LENGTH EDGE OF RECPs AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN A 6" (15CM) DEEP  $\times$  6" (15CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- 6. ADJACENT RECPS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5CM-12.5CM) (DEPENDING ON RECPS TYPE) AND STAPLED.
- IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9M-12M) INTERVALS. USE A DOUBLE ROW STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
- 8. THE TERMINAL END OF THE RECPS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP x 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- 9. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECPS.



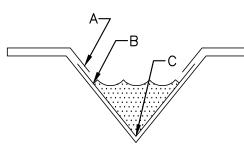
#### CRITICAL POINTS: A. OVERLAPS AND SEAMS B. PROJECTED WATER LINE CHANNEL BOTTOM/SIDE SLOPE VERTICES

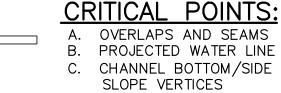
- \* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
- \*\* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

# CHANNEL INSTALLATION



- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPs), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPS IN A 6" (15CM) DEEP x 6" (15CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30CM) APART ACROSS THE WIDTH OF THE RECPs.
- 3. ROLL CENTER RECPs (A.) DOWN OR (B.) HORIZONTALLY ACROSS SLOPE. RECPs WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPs MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. THE EDGES OF PARALLEL RECPS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5CM-12.5CM) OVERLAP DEPENDING ON RECPS TYPE.
- 5. CONSECUTIVE RECPs SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30CM) APART ACROSS ENTIRE RECPs WIDTH.
- 6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECPS.





# NOTES:

- \* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
- \*\* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

TEMPORARY AND PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS PROJECT NAME: NIXON-KOCHER WTF FERGUSON TOWNSHIP, LOCATION: CENTRE COUNTY, PA PREPARED BY: AJL DATE: 8/8/19 8/8/19 CHECKED BY: KWB DATE:

SPECIFICATIONS: THE DEPARTMENT RECOMMENDS THE USE OF THE PENN STATE PUBLICATION, "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND." AS THE STANDARD TO USE FOR THE SELECTION OF SPECIES. SEED SPECIFICATIONS. MIXTURES, LIMING AND FERTILIZING, TIME OF SEEDING, AND SEEDING METHODS. SPECIFICATIONS FOR THESE ITEMS MAY ALSO BE OBTAINED FROM PENNDOT PUBLICATION #408. SECTION 804 OR BY CONTACTING THE APPLICABLE COUNTY CONSERVATION DISTRICT. UPON SELECTION OF A REFERENCE. THAT REFERENCE SHOULD BE USED TO PROVIDE ALL SPECIFICATIONS FOR SEEDING, MULCHING, AND SOIL AMENDMENTS. THE FOLLOWING SPECIFICATION WILL BE USED FOR THIS PROJECT:

#### (TEMPORARY)

*SPECIES:	ANNUAL RYEGRASS OR WINTER RYE
% PURE LIVE SEED:	SEE SEEDING TABLE
APPLICATION RATE:	10 (RYEGRASS) OR 56 (WINTER RYE) LB./ACRE
FERTILIZER TYPE:	10-10-10
FERTILIZER APPL. RATE:	500 LB./ACRE
LIMING RATE:	1 T./ACRE
MULCH TYPE:	STRAW
MULCHING RATE:	3 T./ACRE

#### (PERMANENT

TOPSOIL PLACEMENT DEPTH:	6 IN.
*SPECIES:	FORMULA B
% PURE LIVE SEED:	SEE SEEDING TABLE
APPLICATION RATE:	SEE SEEDING TABLE
FERTILIZER TYPE:	10-10-20
FERTILIZER APPL. RATE:	1000 LB./ACRE
LIMING RATE:	6 T./ACRE
MULCH TYPE:	STRAW
MULCHING RATE:	3 T./ACRE
ANCHOR MATERIAL:	N/A
ANCHORING METHOD:	MECHANICAL CRIMPING
RATE OF ANCHOR MATERIAL APPL:	N/A
SEEDING SEASON DATES:	MARCH 15 - JUNE 1 AND AUGUST 1 - OCTOBER 1

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TOPSOIL PLACEMENT DEPTH:	6 IN.
*SPECIES:	FORMULA D
% PURE LIVE SEED:	SEE SEEDING TABLE
APPLICATION RATE:	SEE SEEDING TABLE
FERTILIZER TYPE:	10-10-20
FERTILIZER APPL. RATE:	1000 LB./ACRE
LIMING RATE:	6 T./ACRE
MULCH TYPE:	STRAW
MULCHING RATE:	3 T./ACRE
ANCHOR MATERIAL:	N/A
ANCHORING METHOD:	MECHANICAL CRIMPING
RATE OF ANCHOR MATERIAL APPL:	N/A
SEEDING SEASON DATES:	MARCH 15 - JUNE 1 AND AUGUST 1 - OCTOBER 1

#### SEED MIXTURES AND APPLICATION RATES MINIMUM % SEEDING RATE % BY MAX. % FORMULA AND SPECIES $(lbs. \1000 yd^2)$ WEIGHT WEED SEED PURITY GERMINATION FORMULA B MIX **42.0 TOTAL** PERENNIAL RYEGRASS MIXTURE (LOLIUM PERENNE). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE 20 97 0.10 VARIETY EXCEEDING 50% OF THE TOTAL RYEGRASS COMPONENT CREEPING RED FESCUE OR CHEWINGS FESCUE (FESTUCA RUBRA OR SSP COMMUTATE) (IMPROVED AND CERTIFIED) KENTUCKY BLUEGRASS MIXTURE (POA PRATENSIS). A 97 50 0.15 21.0 COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL BLUEGRASS COMPONENT FORMULA D CONSERVATION MIX 50.0 TOTAL TALL FESCUE (FESTUCA ARUNDINACEA VAR. KENTUCKY 31) 96 0.10 30.0 CREEPING RED FESCUE OR CHEWINGS FESCUE (FESTUCA RUBRA 97 0.10 15.0 OR SSP COMMUTATE) (IMPROVED AND CERTIFIED) ANNUAL RYEGRASS (LOLIUM MULTIFLORUM) 10 95 0.10 5.0

# MULCHING AND SEEDING NOTES:

- A. SEED MIXTURES AND APPLICATION RATES SHALL BE AS SET FORTH IN SECTION 804 OF THE PENNDOT CONSTRUCTION SPECIFICATIONS (PUBLICATION 408). PLEASE NOTE THAT THERE MAY BE ACIDIC SOILS PRESENT ON THE SITE. THIS LIMITS THE TYPE AND SPECIES OF VEGETATION TO BE USED FOR STABILIZATION.
- B. PROVIDE SEED CONFORMING TO THE REGULATIONS OF CHAPTER 71 SEED OF THE PENNSYLVANIA SEED ACT 164 OF 2004, EFFECTIVE JANUARY 29, 2005, AND AMENDMENTS AND MEET ANY OTHER APPLICABLE REGULATIONS OF THE SEED, TESTING AND CERTIFICATION PROGRAMS OF THE PENNSYLVANIA DEPARTMENT OF AGRICULTURE (PDA), BUREAU OF PLANT INDUSTRY. PROVIDE SEEDS THAT HAVE BEEN TESTED AND APPROVED FOR THE SPECIFIED SEED FORMULA'S PURITY, GERMINATION, AND WEED SEED ANALYSIS LIMITS AND OTHER APPLICABLE PDA RULES FOR SEED TESTING. PROVIDE CERTIFIED SEED FOR ALL KENTUCKY BLUEGRASS. PERENNIAL RYEGRASS. CREEPING RED FESCUE, CHEWINGS FESCUE AND HARD FESCUE VARIETIES SUBMITTED FOR EACH SEED FORMULA.
- C. PROVIDE PREMIXED SEED MIXTURES FROM A LICENSED SEED DISTRIBUTOR/SEED MIXING COMPANY LOCATED WITHIN THE COMMONWEALTH AND MIXED UNDER THE SUPERVISION OF THE PDA FOR THE DESIGNATED PENNDOT SEED FORMULAS. USE ONLY SEED THAT HAS AN APPROVED SEED INSPECTOR'S TAG OR LABEL SIGNED BY A PDA INSPECTOR SEWN OR STAPLED TO THE OUTSIDE OF EACH SEED BAG OR OTHER CONTAINER IN A CONSPICUOUS PLACE. PRESSURE SENSITIVE LABELS MAY BE USED ON PAPER OR PLASTIC CONTAINERS.
- D. SEED MIXTURES MAY ALSO BE MIXED TO PROJECT SPECIFICATIONS AT THE PROJECT SITE FOR SPECIAL SEED FORMULAS IF ALL SPECIFIED SEED SPECIES HAVE BEEN PREVIOUSLY INSPECTED, TESTED, AND APPROVED BY PDA FOR THE DESIGNATED PURITY, GERMINATION, WEED SEED LIMITS, OR PURE LIVE SEED ANALYSIS. MIX THE SEED SPECIES TO THE DESIGNATED FORMULA OR MIXTURE SPECIFICATIONS UNDER SUPERVISION BY THE ENGINEER.
- E. DO NOT USE SEED FROM CONTAINERS THAT HAVE NOT BEEN PROPERLY SEALED. DO NOT USE SEED THAT HAS A SELL-BY DATE OF MORE THAN 15 MONTHS FROM THE DATE OF THE INSPECTION, EXCLUSIVE OF THE MONTH OF THE TEST. THE ENGINEER MAY REJECT OR REQUEST RE-TESTING FOR ANY QUESTIONABLE SEED DELIVERED TO THE PROJECT.
- F. KEEP SEEDING RATE TO THAT RECOMMENDED IN THE TABLES. SEED MIXTURES CONTAINING INVASIVE SPECIES SHOULD NOT BE USED IN AREAS ADJACENT TO WETLANDS OR STREAM CHANNELS.
- G. PREPARE AREAS FOR SEEDING BY UNIFORMLY APPLYING SUPPLEMENTS. BLEND THE INITIAL SOIL SUPPLEMENTS INTO THE SOIL AT LEAST 2 INCHES, ON TOPSOILED AREAS, BY RAKING, DISKING, HARROWING, OR OTHER ACCEPTABLE METHODS. BLEND THE SUPPLEMENTS INTO THE SOIL DURING TILLAGE OPERATIONS.
- H. APPLY SLOW-RELEASE NITROGEN FERTILIZER TO THE SURFACE OF FORMULA B AND D SEEDED AREAS BEFORE PROJECT COMPLETION. DO NOT
- APPLY SLOW-RELEASE NITROGEN FERTILIZER SUPPLEMENT TO FORMULA C SEEDED AREAS. I. FILL SLOPES SHOULD BE SEEDED AND MULCHED AT REGULAR VERTICAL INCREMENTS, 15 TO 25 FEET MAXIMUM, AS THE FILL IS BEING CONSTRUCTED. THIS WILL ALLOW THE BOTTOM OF THE FILL TO PROGRESS TOWARD STABILIZATION WHILE WORK CONTINUES ON THE UPPER

PORTION, MAKING FINAL STABILIZATION EASIER TO ACHIEVE AND PROVIDING SOME VEGETATIVE BUFFERING AT THE BOTTOM OF THE SLOPE.

- J. WHEREVER SEED AND/OR MULCH IS APPLIED BY HYDROSEEDING METHODS, THE SEED AND MULCH SHOULD BE APPLIED IN SEPARATE APPLICATIONS WITH THE SEED BEING APPLIED FIRST AND THE MULCH SPRAYED ON TOP OF THE SEED. THIS IS TO ENSURE THAT THE SEED MAKES CONTACT WITH THE UNDERLYING SOIL. SOIL PREPARATION SHOULD BE COMPLETED PRIOR TO ADDING SEED TO THE HYDROSEEDING EQUIPMENT. RUNNING SEED THROUGH THE PUMPING SYSTEM CAN RESULT IN EXCESSIVE ABRASION OF THE SEED AND REDUCE THE PERCENTAGE OF PURE LIVE SEED IN THE APPLICATION. THEREFORE ALL SITE PREPARATION SHOULD BE COMPLETED PRIOR TO THE ARRIVAL
- K. VEHICULAR TRAFFIC SHOULD BE RESTRICTED FROM AREAS TO BE SEEDED TO PREVENT SOIL COMPACTION.
- L. PLACE MULCH, OF THE TYPE INDICATED, IMMEDIATELY AFTER SEEDING IS COMPLETED. UNLESS OTHERWISE INDICATED, PLACE ONLY STRAW OR WOOD FIBER OVER TOPSOILED AREAS. USE HAY, STRAW, OR WOOD FIBER IN OTHER AREAS.
- M. PLACE HAY OR STRAW UNIFORMLY, IN A CONTINUOUS BLANKET, AT A MINIMUM RATE OF 1,200 POUNDS PER 1,000 SQUARE YARDS. AN ACCEPTABLE MECHANICAL BLOWER MAY BE USED TO APPLY MULCH. DO NOT USE MACHINES THAT CUT MULCH INTO SHORT PIECES.
- N. MULCH TEMPORARILY SEEDED AREAS WITH HAY.

OF THE HYDROSEEDER.

# RECYCLING AND DISPOSAL OF WASTE MATERIAL

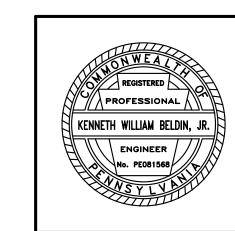
- 1. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH DEP'S SOLID WASTE MANAGEMENT REGULATIONS OF 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ. AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.
- 2. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF WASTE FROM THIS PROJECT AT AN APPROVED DISPOSAL SITE (SEE NOTES 2 AND 3 BELOW). THE CONTRACTOR WILL INSPECT THE PROJECT AREA WEEKLY. THE CONTRACTOR WILL PROPERLY AND LEGALLY DISPOSE OF ALL CONSTRUCTION WASTES. MATERIALS WILL BE SEPARATED FROM OTHER WASTES AND HANDLING FOR SUITABLE RECYCLING. RECEIPTS FROM THE RECYCLING CENTERS SHALL BE FILED WITH THE ENGINEER.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR DEPOSITING OF ALL CLEAN/SAFE FILL, AS DEFINED BY PA CODE, TITLE 25, INCLUDING, BUT NOT LIMITED TO, EXCESS SOIL MATERIALS, AT AN OFFSITE LOCATION TO BE DETERMINED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. IF POTENTIALLY HAZARDOUS MATERIAL IS OBSERVED DURING CONSTRUCTION EXCAVATION, THE ENGINEER WILL EVALUATE THE MATERIAL IN ACCORDANCE WITH THE CLEAN/SAFE FILL POLICY REGULATIONS. IF QUESTIONABLE MATERIAL IS ENCOUNTERED, ALL CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL THE SITE IS ENVIRONMENTALLY CLEARED.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SEPARATE WRITTEN E&S PLAN FOR PROPOSED PERMANENT WASTE/SPOIL AREAS GREATER THAN 5.000 SQUARE FEET IN DISTURBANCE: THE WASTE AREA MUST COMPLY WITH ALL CHAPTER 102 EROSION CONTROL RULES AND REGULATIONS, INCLUDING NPDES PERMIT REQUIREMENTS IF GREATER THAN 1 ACRE OF DISTURBED GROUND OCCURS: THE WASTE/SPOIL AREA MUST COMPLY WITH CHAPTER 105 STREAM ENCROACHMENT REGULATIONS AND BE MORE THAN 50 FEET FROM ANY FLOODWAY. TOP OF STREAM
- 5. ANY MATERIAL THAT DOES NOT MEET THE CRITERIA OF THE CLEAN/SAFE FILL POLICY SHALL BE DISPOSED OF AT A PA DEP APPROVED SITE.
- 6. ALL MATERIALS USED FOR THE CONSTRUCTION AND MAINTENANCE OF THE TREATMENT FACILITY AND ANY APPURTENANT CONSTRUCTION, AS WELL AS ANY UNDISCLOSED OR UNKNOWN ITEMS/OBJECTS REVEALED BY EXCAVATING OR GRADING. WILL BE REMOVED FROM THE PROJECT AREA BY THE CONTRACTOR AND DISPOSED OF PROPERLY. WASTE DISPOSAL IN LANDFILLS SHALL BE MINIMIZED TO THE GREATEST EXTENT POSSIBLE. OF THE INEVITABLE WASTE THAT IS GENERATED, AS MUCH OF THE WASTE MATERIAL AS ECONOMICALLY FEASIBLE SHALL BE SALVAGED, RECYCLED OR REUSED.

THE CONTRACTOR SHALL USE ALL REASONABLE MEANS TO DIVERT CONSTRUCTION AND DEMOLITION WASTE FROM LANDFILLS AND INCINERATORS, AND FACILITATE THEIR SALVAGE AND RECYCLE INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

- A. WASTE MANAGEMENT PLAN DEVELOPMENT AND IMPLEMENTATION. B. TECHNIQUES TO MINIMIZE WASTE GENERATION.
- C. SORTING AND SEPARATING OF WASTE MATERIALS D. SALVAGE OF EXISTING MATERIALS AND ITEMS FOR REUSE OR RESALE.
- E. RECYCLING OF MATERIALS THAT CANNOT BE REUSED OR SOLD.
- AT A MINIMUM, THE FOLLOWING WASTE CATEGORIES SHALL BE DIVERTED FROM LANDFILLS:
- INERTS (EG, CONCRETE, MASONRY AND ASPHALT). CLEAN DIMENSIONAL WOOD AND PALETTE WOOD.
- GREEN WASTE (BIODEGRADABLE LANDSCAPING MATERIALS). • ENGINEERED WOOD PRODUCTS (PLYWOOD, PARTICLE BOARD AND I-JOISTS, ETC). • METAL PRODUCTS (EG, STEEL, WIRE, BEVERAGE CONTAINERS, COPPER, ETC).
- CARDBOARD, PAPER AND PACKAGING. BITUMEN ROOFING MATERIALS.
- PLASTICS (EG, ABS, PVC). CARPET AND/OR PAD AND OTHER FLOORING MATERIALS.
- GYPSUM BOARD. INSULATION.
- PAINT. FLUORESCENT LAMPS.
- THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN THE MANAGEMENT OF NON-HAZARDOUS BUILDING CONSTRUCTION AND DEMOLITION WASTE. THEY SHALL ALSO CONDUCT A SITE ASSESSMENT TO ESTIMATE THE TYPES OF MATERIALS THAT WILL BE GENERATED BY DEMOLITION AND CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF ANY SPECIAL PROGRAMS INVOLVING REBATES OR SIMILAR INCENTIVES RELATED TO RECYCLING AND PROVIDE ALL DEMOLITION, REMOVAL AND LEGAL DISPOSAL OF MATERIALS. THE CONTRACTOR SHALL ENSURE THAT FACILITIES USED FOR RECYCLING, REUSE AND DISPOSAL SHALL BE PERMITTED FOR THE INTENDED USE TO THE EXTENT REQUIRED BY LOCAL, STATE, FEDERAL REGULATIONS. THE WHOLE BUILDING DESIGN GUIDE WEBSITE (HTTP://WWW.WBDG.ORG/TOOLS/CWM.PHP) PROVIDES A CONSTRUCTION WASTE MANAGEMENT DATABASE THAT CONTAINS INFORMATION ON COMPANIES THAT HAUL, COLLECT, AND PROCESS RECYCLABLE

THE CONTRACTOR SHALL ASSIGN A SPECIFIC ONSITE AREA TO FACILITATE SEPARATION OF MATERIALS FOR REUSE, SALVAGE, RECYCLING AND RETURN. SUCH AREAS ARE TO BE KEPT NEAT AND CLEAN AND CLEARLY MARKED IN ORDER TO AVOID CONTAMINATION OR MIXING OF MATERIALS. ONSITE INSTRUCTIONS AND SUPERVISION OF SEPARATION, HANDLING, SALVAGING, RECYCLING, REUSE AND RETURN METHODS TO BE USED BY ALL PARTIES DURING WASTE GENERATING STAGES SHALL BE AVAILABLE AT ALL TIMES. RECORDS OF DAILY REPORTS INDICATING ANY PROBLEMS IN COMPLYING WITH REUSE, SALVAGE, RECYCLING AND RETURN SHALL BE KEPT ONSITE AT ALL TIMES AND SHALL NOTE ANY CORRECTIVE ACTIONS TAKEN FOR COMPLIANCE.

> REVISED PER TOWNSHIP COMMENTS 8/30/19 8/12/19 REVISED PER TOWNSHIP COMMENTS DATE DESCRIPTION REVISIONS



SEAL

EROSION AND SEDIMENT CONTROL (ESC) DETAILS STATE COLLEGE BOROUGH

FILE: 16049\_LD\_020

WATER AUTHORITY NIXON-KOCHER

WATER TREATMENT FACILITY

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA DATE: 8/30/19

JOB: 16049 SCALE: AS SHOWN DRAWN BY: AJL CHECKED BY: WAA

**SLOPE INSTALLATION** 

DOBSON & **FOREMAN** 

**ENGINEERS** 

3121 Fairway Drive

Altoona, PA 16602

gdfengineers.com

814.943.5214

### STANDARD EROSION AND SEDIMENT CONTROL NOTES:

- 1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- 2. AT LEAST TEN (10) DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL ÍNVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- 3. AT LEAST THREE (3) BUSINESS DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND
- 4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCES PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) PRIOR TO IMPLEMENTATION.
- 5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- 6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- 7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- 8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES
- 9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE CENTRE COUNTY CONSERVATION DISTRICT AND/OR THE DEP REGIONAL OFFICE.
- 10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- 11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE PADEP FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- 13. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 14. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- 15. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 16. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED IN THE PLAN.
- 17. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES 6 TO 12 INCHES ON COMPACTED SOILS -PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 6 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- 18. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR
- 19. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- 20. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 21. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 22. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

SHALL BE 2H:1V OR FLATTER.

- 23. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- 24. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- 25. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUB-AREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- 26. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- 27. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- 28. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE CENTRE COUNTY CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S
- 29. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID RE-VEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 30. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE CENTRE COUNTY CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
- 31. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PADEP AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- 32. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED IN THE PLAN. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
- 33. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.
- 34. CHANNELS HAVING RIPRAP, RENO MATTRESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.
- 35. BIODEGRADABLE DOUBLE NET EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES GREATER THAN 3H: 1V, ALL CHANNEL SIDES

AND BOTTOMS AND IN ALL DISTURBED AREAS WITHIN 50 FEET OF WATER OF THE COMMONWEALTH.

- 36. MULCH APPLIED TO PERMANENTLY STABILIZED AREAS IS TO BE MECHANICALLY CRIMPED TO PREVENT BLOW OFF AND LOSS OF MULCH FROM RAINFALL. IN THE EVENT THAT MECHANICAL CRIMPING IS INEFFECTIVE, THE MULCH SHALL BE ANCHORED BY A NON-TOXIC BINDING EMULSION APPLIED TO THE MULCH AT THE MANUFACTURERS RECOMMENDED RATE. MANUFACTURERS INFORMATION MUST BE PROVIDED TO THE ENGINEER TO VERIFY THAT THE COMPONENTS OF THE EMULSION ARE NON-TOXIC TO VEGETATION AND ANIMAL SPECIES.
- 37. ALL CHANNELS MUST BE KEPT FREE OF OBSTRUCTIONS SUCH AS FILL GROUND. FALLEN LEAVES & WOODY DEBRIS. ACCUMULATED SEDIMENT. AND CONSTRUCTION MATERIALS/WASTES. CHANNELS SHOULD BE KEPT MOWED AND/OR FREE OF ALL WEEDY, BRUSHY OR WOODY GROWTH.
- 38. ANY UNDERGROUND UTILITIES RUNNING ACROSS/ THROUGH THE CHANNEL(S) SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL(S) REPAIRED AND STABILIZED PER THE CHANNEL CROSS-SECTION DETAIL.
- 39. VEGETATED CHANNELS SHALL BE CONSTRUCTED FREE OF ROCKS, TREE ROOTS, STUMPS OR OTHER PROJECTIONS THAT WILL IMPEDE NORMAL CHANNEL FLOW AND OR PREVENT GOOD LINING TO SOIL CONTACT. THE CHANNEL SHALL BE INITIALLY OVER-EXCAVATED TO ALLOW FOR THE PLACEMENT OF TOPSOIL.
- 40. SEDIMENT BASINS/TRAPS SHALL BE KEPT FREE OF ALL TRASH. CONCRETE WASH WATER AND OTHER DEBRIS THAT POSE THE POTENTIAL FOR CLOGGING THE BASIN/TRAP OUTLET STRUCTURES AND/OR POSE THE POTENTIAL FOR POLLUTION TO WATERS OF THE COMMONWEALTH. WHEN SEDIMENT HAS ACCUMULATED TO THE CLEAN OUT ELEVATION ON ANY STAKE. ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE ENTIRE TRAP/BASIN BOTTOM. ANY SEDIMENT REMOVED FROM TRAPS, BASINS OR THE BMP'S SHALL BE RETURNED TO UPSLOPE AREAS AND INCORPORATED INTO THE SITE GRADING.
- 41. APPROVAL OF THE USE OF SKIMMER(S) DOES NOT APPROVE USE OF ANY SKIMMER(S) IN VIOLATION OF ANY PATENT, PATENT RIGHTS, AND/OR PATENT LAWS.
- 42. SEDIMENT BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
- 43. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, CENTRE COUNTY CONSERVATION DISTRICT AND THE OWNER OF THE DAMAGED PROPERTY.
- 44. UPON REQUEST. THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, CENTRE COUNTY CONSERVATION DISTRICT. OR THE PA DEP.

#### EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE:

- ALL SEDIMENT AND EROSION CONTROL FACILITIES SHALL BE CHECKED FOR DAMAGE AND CLOGGING ON A WEEKLY BASIS AND AFTER EACH STORM EVENT. ALL FACILITIES THAT ARE DAMAGED, CLOGGED, OR CAN NO LONGER PERFORM IN THE MANNER FOR WHICH THEY WERE DESIGNED
- ANY PERMANENTLY STABILIZED AREAS THAT BECOME ERODED SHALL HAVE THE TOPSOIL REPLACED AND THE GRASS SOWN AGAIN WITH NEW MULCH APPLIED. IF CULTIVATION OF A NEW LEGUME OR GRASS CROP IS NOT PRACTICAL IN THE ERODED AREA, THE CONTRACTOR SHALL INSTALL NYLON EROSION CONTROL MATS.
- IF THE VEGETATIVE COVER ESTABLISHED IS ALLOWED TO DETERIORATE AND BECOME INEFFECTIVE, A FERTILIZATION AND SEEDING PROGRAM SHALL BE ESTABLISHED AND CARRIED OUT AS THE CONSTRUCTION PROCEEDS. AREAS WHERE FAILURES HAVE BEEN EXPERIENCED IN THE ESTABLISHMENT OF BOTH PERMANENT AND TEMPORARY VEGETATIVE PROTECTION SHALL BE PROMPTLY TREATED. THE RE-ESTABLISHMENT OF PERMANENT VEGETATIVE COVER SHALL BE INITIATED AS SOON AS POSSIBLE
- WHEN THE ACCUMULATION OF SEDIMENT IN THE CONTROL DEVICES REACHES 1/3 THE DEPTH OF THE DEVICE OR AS SPECIFIED BY THE MANUFACTURER. THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN SUCH LOCATIONS AS DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER. THESE LOCATIONS SHALL BE SELECTED SUCH THAT THE SEDIMENT WILL NOT ERODE INTO THE CONSTRUCTION AREA OR ANY NATURAL WATERWAY.
- ALL SEDIMENT AND EROSION FACILITIES MUST BE MAINTAINED IN OPERATING CONDITION UNTIL UPSTREAM AREAS ARE STABILIZED WITH FINAL GROUND COVER AND HAVE ESTABLISHED UNIFORM 70% VEGETATIVE COVER OR GREATER OF EROSION RESISTANT PERENNIAL SPECIES.
- SEDIMENT DEPOSITED ON PAVED ROADWAYS SHOULD BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE THROUGH STREET SWEEPING AS NEEDED. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO THE ROADWAY DITCHES, SEWERS, CULVERTS OR OTHER DRAINAGE COURSES
- THE CONTRACTOR SHALL IMPLEMENT THIS PLAN, INCLUDING CONSTRUCTION AND MAINTENANCE.
- THE OWNER IS RESPONSIBLE TO INSURE THAT THE CONTRACTOR IS PERFORMING THE WORK AS DETAILED IN THIS PLAN.
- THE OWNER IS RESPONSIBLE FOR CONDUCTING INSPECTIONS DURING CONSTRUCTION ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT AND RECORDING ANY DEFICIENCIES THAT MAY BE FOUND IN A LOG WHICH WILL BE MADE AVAILABLE UPON REQUEST.
- THE CONTRACTOR SHALL PERMIT ALL OFFICIAL REPRESENTATIVES FROM PADEP AND THE CENTRE COUNTY CONSERVATION DISTRICT ON SITE TO INSPECT THE EROSION CONTROLS INSTALLED FOR THIS PROJECT. ALL DEFICIENCIES IN THE CONTROLS MUST BE CORRECTED IMMEDIATELY.
- 11. ALL TEMPORARY CONTROLS SHALL BE MAINTAINED AS FOLLOWS:

#### A. ROCK CONSTRUCTION ENTRANCE MAINTENANCE: THE THICKNESS OF THE ROCK CONSTRUCTION ENTRANCE SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS, WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING THE ROADWAY WITH WATER IS NOT ACCEPTABLE.

- B. COMPOST FILTER SOCK MAINTENANCE:
- ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE COMPOST FILTER SOCK FUNCTIONAL. IN ALL CASES, REMOVE DEPOSITS WHERE ACCUMULATIONS REACH 1/3 THE ABOVE GROUND HEIGHT OF THE COMPOST FILTER SOCK.
- DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS FOR REPLACING COMPOST FILTER SOCK DUE TO WEATHERING.

THE COMPOST FILTER SOCK INSTALLATION SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL EVENT.

#### C. ROCK FILTER MAINTENANCE

- SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.
- ROCK FILTERS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT. ANY DAMAGE IDENTIFIED SHALL BE REPAIRED WITHIN 24 HOURS OF THE INSPECTION.

#### D. EROSION CONTROL BLANKETS MAINTENANCE

- BLANKETED AREAS SHALL BE INSPECTED WEEKLY OR AFTER ANY RAINFALL EVENT UNTIL A MINIMUM UNIFORM 70% COVERAGE OF EROSION RESISTANT PERENNIAL VEGETATION IS ESTABLISHED.
- DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN FOUR (4) CALENDAR DAYS.

#### E. CONCRETE WASHOUT STRUCTURES MAINTENANCE

CONCRETE WASHOUT STRUCTURES SHALL BE INSPECTED DAILY.

- DAMAGED OR LEAKING STRUCTURES SHALL BE DE-ACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
- ACCUMULATED MATERIALS SHALL BE REMOVED WHEN THEY REACH 50% CAPACITY.
- PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

#### F. INLET PROTECTION MAINTENANCE THE INLET PROTECTION SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT. DAMAGE OR CLOGGED BAGS SHALL BE REPLACED

- ANY DAMAGED / CLOGGED FILTER BAG OR THE SEDIMENT REMOVED FROM THE BAG SHALL BE PROPERLY DISPOSED.
- BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN 1/2 FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE
- 4. A SUPPLY OF EXTRA FILTER BAGS SHALL BE KEPT ON SITE.

FLOODING OR BYPASSING OF THE INLET.

INLET PROTECTION SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM CONTRIBUTING AREAS HAVE REACHED PERMANENT VEGETATIVE STABILIZATION OR HAVE BEEN STRUCTURALLY STABILIZED.

- G. PUMPED WATER FILTER BAG MAINTENANCE A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED.
- FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
- BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
- FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEMS ARE DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

# H. <u>SEDIMENT BASIN MAINTENANCE</u>

- INSPECT ALL SEDIMENT BASINS ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE ESC
- EMBANKMENTS SHOULD BE MAINTAINED WITH A GRASSY VEGETATIVE COVER, FREE OF BRUSH AND TREES.
- BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE INSPECTED FOR EROSION, PIPING AND SETTLEMENT. ANY NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY.
- CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER AS NECESSARY.
- THE DEWATERING SKIMMER SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
- ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED SO AS TO ALLOW THE SKIMMER TO RESPOND TO FLUCTUATING WATER ELEVATIONS.

# EROSION AND SEDIMENT CONTROL CRITICAL STAGES OF CONSTRUCTION

- 1. A LICENSED PROFESSIONAL OR HIS DESIGNEE SHALL BE PRESENT DURING THE CONSTRUCTION OF THE SEDIMENT BASIN TO ENSURE THE COMPACTION OF EXISTING SOILS IS MINIMIZED. A LICENSED PROFESSIONAL OR HIS DESIGNEE SHALL ALSO CONDUCT AN INSPECTION OF THE EROSION AND SEDIMENT CONTROLS TO ENSURE THAT THE CONTROLS ARE INSTALLED PROPERLY AND IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- 2. A LICENSED PROFESSIONAL OR HIS DESIGNEE SHALL BE PRESENT DURING THE CONVERSION OF THE SEDIMENT BASIN TO A STORMWATER MANAGEMENT BASIN TO ENSURE THAT THE PROPER STEPS ARE TAKEN TO COMPLETE THE CONVERSION.
- 3. RECORD DRAWINGS WILL BE CERTIFIED AND PROVIDED UPON CONSTRUCTION COMPLETION. PER TITLE 25 PA CODE §, CHAPTER 102.8L, THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS THE FOLLOWING:

DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 PA.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF. THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS. ARE TRUE AND CORRECT. AND ARE CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

# EROSION AND SEDIMENT CONTROL CONSTRUCTION SEQUENCE:

- A. ALL EARTH DISTURBANCE AND CONSTRUCTION ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE DRAWINGS. DEVIATION FROM THIS SEQUENCE MUST BE APPROVED BY THE ENGINEER, THE CENTRE COUNTY CONSERVATION DISTRICT AND/OR THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT AS NOTED.
- B. A PRE-CONSTRUCTION MEETING SHALL BE HELD AND NOTIFICATION MUST BE PROVIDED TO THE ENGINEER PRIOR TO THE ISSUANCE OF NOTICE TO PROCEED WITH CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE ENGINEER, OWNER AND THE CENTRE COUNTY CONSERVATION DISTRICT AT LEAST TEN (10) WORKING DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION TO SCHEDULE THE MEETING. THE CONTRACTOR MAY ALSO BE REQUIRED BY THE STATE COLLEGE BOROUGH WATER AUTHORITY TO BE LISTED AS A CO-PERMITTEE ON SOME PERMITS.
- C. AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA THAT WAS PREVIOUSLY UNMARKED, NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM FOR THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES. THE LIMITS OF DISTURBANCE (LOD). WATERS OF THE COMMONWEALTH AND ANY OTHER SENSITIVE ENVIRONMENTAL FEATURES SHALL ALSO BE CLEARLY MARKED AND DELINEATED IN THE FIELD PRIOR TO THE BEGINNING OF ANY EARTH DISTURBANCE ACTIVITY.
- D. AREAS TO BE PROTECTED. WATERS OF THE COMMONWEALTH AND ANY OTHER SENSITIVE ENVIRONMENTAL FEATURES SHALL ALSO BE CLEARLY MARKED AND DELINEATED IN THE FIELD PRIOR TO THE BEGINNING OF ANY EARTH DISTURBANCE ACTIVITY. ANY AREA THAT IS LEFT UNDISTURBED FOR FOUR (4) DAYS OR GREATER SHALL BE TEMPORARILY STABILIZED UNTIL GRADING OPERATIONS RE-COMMENCE. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES GREATER THAN 3H:1V AND IN ALL DISTURBED AREAS WITHIN 100 FEET OF WATERS OF THE COMMONWEALTH. AREAS WITHIN 100 FEET OF WATERS OF THE COMMONWEALTH SHALL BE PERMANENTLY STABILIZED WITH SEED AND EROSION CONTROL MATTING IMMEDIATELY UPON REACHING FINAL GRADE.
- E. INSTALL ROCK CONSTRUCTION ENTRANCE (RCE) AT THE LOCATION SHOWN ON THE APPROVED ESC PLAN DRAWINGS. CLEAR AND GRUB THE AREA AS NECESSARY TO INSTALL THE PERIMETER SEDIMENT CONTROLS (COMPOST FILTER SOCKS, ETC.) FOR THE PROPOSED CONSTRUCTION ACCESS ROAD. INSTALL COMPOST FILTER SOCKS AS SHOWN ON THE APPROVED ESC PLAN DRAWINGS. AFTER INSTALLATION OF THE PERIMETER SEDIMENT CONTROLS, NOTIFY THE CENTRE COUNTY CONSERVATION DISTRICT AT LEAST THREE (3) WORKING DAYS PRIOR TO ANY FURTHER CONSTRUCTION TO PERFORM AN INSPECTION OF THE LOCATION AND CONSTRUCTION OF THE PERIMETER SEDIMENT CONTROLS. NO CONSTRUCTION ACTIVITIES MAY BE PERFORMED UNTIL AUTHORIZATION TO PROCEED WITH CONSTRUCTION ACTIVITIES IS PROVIDED TO THE CONTRACTOR BY A REPRESENTATIVE FROM THE CENTRE COUNTY CONSERVATION DISTRICT.
- F. INSTALL GRAVEL CONSTRUCTION ACCESS ROAD FROM SOUTH NIXON ROAD TO THE TREATMENT FACILITY SITE. TREE CLEARING OR VEGETATION REMOVAL FOR THE INSTALLATION OF THE ACCESS ROAD SHALL BE KEPT TO THE MINIMUM NECESSARY FOR ROAD INSTALLATION. UPON REACHING THE LIMITS OF THE DOUBLE 18" HDPE CULVERT, INSTALL THE CULVERTS AND PROPOSED BYPASS CHANNEL, BYPASS STORM DRAIN SYSTEM AND OUTFALL AS INDICATED ON THE APPROVED EROSION AND SEDIMENT CONTROL (ESC) PLAN DRAWINGS. IMMEDIATELY VEGETATIVELY STABILIZE ALL AREAS DISTURBED FOR THE CONSTRUCTION BYPASS. APPLY BIODEGRADABLE DOUBLE-NET EROSION CONTROL MATTING OR RIP-RAP AS APPLICABLE.
- G. AFTER CONSTRUCTION OF THE BYPASS SYSTEM, CLEAR AND GRUB THE AREAS NECESSARY TO INSTALL THE PERIMETER SEDIMENT CONTROLS (COMPOST FILTER SOCKS, ETC.) BELOW THE PROPOSED SEDIMENT BASIN. UPON COMPLETION OF THE PERIMETER CONTROLS, NOTIFY THE CENTRE COUNTY CONSERVATION DISTRICT AT LEAST THREE (3) WORKING DAYS PRIOR TO ANY FURTHER CONSTRUCTION TO PERFORM AN INSPECTION OF THE LOCATION AND CONSTRUCTION OF THE PERIMETER SEDIMENT CONTROLS. NO CONSTRUCTION ACTIVITIES MAY BE PERFORMED UNTIL AUTHORIZATION TO PROCEED WITH CONSTRUCTION ACTIVITIES IS PROVIDED TO THE CONTRACTOR BY A REPRESENTATIVE FROM THE CENTRE COUNTY CONSERVATION DISTRICT.
- H. UPON APPROVAL OF THE CONSERVATION DISTRICT, BEGIN CONSTRUCTION OF THE SEDIMENT BASIN EMBANKMENT AND OUTFALL AS IDENTIFIED ON THE APPROVED ESC PLAN DRAWINGS. EXTREME CARE IS TO BE TAKEN BY THE CONTRACTOR DURING EXCAVATION. WATER INFILTRATION INTO THE SOILS AND BEDROCK AT THE SITE WILL RESULT IN PIPING OF THE SOILS INTO THE FRACTURES IN THE UNDERLYING CARBONATE BEDROCK AND EVENTUALLY LEAD TO THE DEVELOPMENT OF SINKHOLES OR SUBSIDENCE FEATURES. THE POTENTIAL FOR SINKHOLE FORMATION WILL BE ESPECIALLY HIGH DURING CONSTRUCTION ACTIVITIES, THEREFORE, EVERY EFFORT SHOULD BE TAKEN DURING CONSTRUCTION TO PREVENT THE ACCUMULATION AND INFILTRATION OF STORMWATER RUNOFF IN THE VICINITY OF THE SEDIMENT BASIN. IN THE EVENT THAT SINKHOLES DEVELOP DURING OR AFTER CONSTRUCTION, A GEOTECHNICAL ENGINEER SHOULD BE CONSULTED PRIOR TO ANY FURTHER EXCAVATION OR DISTURBANCE. INSTALL SEDIMENT SKIMMER, SKIMMER GUIDE POLES, LANDING BERM AND BAFFLES UPON COMPLETION OF THE RISER STRUCTURE.
- UPON COMPLETION OF THE BASIN EMBANKMENT, INSTALL ANY REMAINING PERIMETER EROSION AND SEDIMENT CONTROLS AND BEGIN EARTHWORK OPERATIONS. REMOVE ANY UNSUITABLE SUBGRADE MATERIALS AS DIRECTED BY THE GEOTECHNICAL REPORT AND DISPOSE OF THE SPOIL AS DIRECTED ON THE ESC PLAN DRAWINGS. THE POTENTIAL FOR SINKHOLE FORMATION WILL BE ESPECIALLY HIGH DURING CONSTRUCTION ACTIVITIES, THEREFORE, EVERY EFFORT SHOULD BE TAKEN DURING CONSTRUCTION TO PREVENT THE ACCUMULATION AND INFILTRATION OF STORMWATER RUNOFF DURING EARTHWORK.
- J. BEGIN CONSTRUCTION OF TREATMENT FACILITY FOUNDATION PILES. UPON COMPLETION OF THE PILES, CONSTRUCT TREATMENT FACILITY FOUNDATION, GRANULATED ACTIVATE CARBON (GAC) WASTE TANK, SEPTIC HOLDING TANK, SITE PIPING AND DISTRIBUTION SYSTEM INTERCONNECTIONS, ELECTRICAL CONDUITS AND STORM DRAINAGE PIPING, BACKFILL THE FOUNDATION AND CONTINUE THE ROUGH GRADING OF THE SITE, UPON REACHING THE FINISHED FLOOR ELEVATION, TEMPORARILY STABILIZE ALL DISTURBED AREAS WITH SEED, MULCH AND AS APPLICABLE, DOUBLE-NET EROSION CONTROL MATTING. NO VERTICAL CONSTRUCTION MAY CONTINUE UNTIL ALL DISTURBED AREAS ARE TEMPORARILY STABILIZED. ADDITIONALLY. DUST CONTROL SHALL BE PROVIDED ON AS NEEDED BASIS THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
- K. CONTINUE THE CONSTRUCTION OF THE TREATMENT FACILITY, SOLIDS DRYING BEDS, NATURAL GAS PAD AND TRANSFORMER PAD. ALL WASTE MATERIALS GENERATED DURING ANY CONSTRUCTION SHALL BE SORTED IN A DEDICATED AREA ON THE SITE. DISPOSE OF THE WASTE MATERIAL AS DIRECTED ON THE ESC PLAN DRAWINGS.
- L. UPON SUBSTANTIAL COMPLETION OF THE TREATMENT FACILITY, CONSTRUCT THE BITUMINOUS PAVED AREAS ACCESS ROAD FROM THE EXISTING NIXON WELL FIELD SITE. THE PAVEMENT IS TO BE BROUGHT TO A BITUMINOUS BASE COURSE CONDITION UNTIL THE FINAL COMPLETION OF CONSTRUCTION. REMOVE THE TEMPORARY ACCESS ROAD AND 18" HDPE CULVERTS LOCATED ON TREATMENT FACILITY SITE. THE REMAINDER OF THE GRAVEL CONSTRUCTION ACCESS ROAD IS TO REMAIN IN PLACE.
- M. INSTALL ANY REQUIRED LANDSCAPING AND FENCING. PERFORM ANY NECESSARY FINE GRADING AT THIS TIME. UPON COMPLETION, APPLY BITUMINOUS TACK COAT TO ALL PAVED SURFACES AND APPLY BITUMINOUS WEARING COURSE.
- N. REMOVE REMAINING SEDIMENT AND EROSION CONTROLS AFTER UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL VEGETATION HAS BEEN ESTABLISHED AND APPROVAL TO REMOVE THE CONTROLS HAS BEEN PROVIDED BY THE CENTRE COUNTY CONSERVATION DISTRICT. REMOVE ANY ACCUMULATED SEDIMENT IN THE CHANNELS AND STORM DRAINS. BEGIN THE CONVERSION OF THE SEDIMENT BASIN FOR USE AS A DETENTION BASIN. REMOVE THE SEDIMENT SKIMMER AND GUIDE POLES. AGGREGATE LANDING BERM AND ANY BAFFLES. INSTALL TRASH RACKS AND PLACE INLET FRAME AND GRATE ON TOP OF THE CONSTRUCTED RISER. THE SEDIMENT WITHIN THE SEDIMENT BASIN IS TO BE REMOVED AND THE BASIN IS TO BE RESTORED TO THE LINES AND GRADES INDICATED ON THE APPROVED ESC PLAN DRAWINGS. THE CONTRACTOR IS TO REMOVE THE SEDIMENT AND DISPOSE OF IT PROPERLY ONSITE OR AT A SITE WITH AN APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- O. PERMANENTLY STABILIZE ALL AREAS DISTURBED DURING THE REMOVAL OF THE PERIMETER CONTROLS. ADDITIONAL SEED AND MULCH, AND IF APPLICABLE, EROSION CONTROL MATTING ARE TO BE PLACED AS NECESSARY TO PROMOTE REVEGETATION OF ANY AREAS WHICH ARE DISTURBED DUE TO REMOVAL OF CONTROLS OR CONVERSION OF THE SEDIMENT BASIN.
- NOTE: DUE TO THE SCOPE OF CONSTRUCTION, ITEMS J. THROUGH L. MAY BE PERFORMED CONCURRENTLY AND ARE NOT REQUIRED TO BE PERFORMED IN THE ORDER LISTED IN THE INDIVIDUAL SEQUENCE ITEM.

# IMPORTING FILL MATERIAL

PROCESSED FOR RE-USE.)

- 1. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINE THAT ALL FILL IMPORTED MEETS PA DEP'S DEFINITION OF CLEAN FILL.
- 2. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN
- 3. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.

# LANDSCAPE RESTORATION SPECIFICATIONS

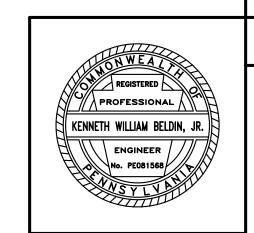
#### SITE PREPARATION AND PLANTING ALL WEEDS OR EXISTING VEGETATION MUST BE ELIMINATED PRIOR TO SEEDING.

- 2. PERENNIAL WEEDS MAY REQUIRE YEAR LONG SMOTHERING, REPEATED SPRAYINGS WITH HERBICIDES, OR REPEATED TILLAGE WITH EQUIPMENT THAT CAN UPROOT AND KILL PERENNIAL WEEDS.
- 3. PLANTING IN JULY AND AUGUST IS GENERALLY NOT RECOMMENDED DUE TO THE FREQUENCY OF DROUGHT DURING THIS TIME.
- 4. SEEDING CAN BE ACCOMPLISHED BY A VARIETY OF METHODS: NO-TILL SEEDER FOR MULTI-ACRE PLANTING; BROADCAST SEEDER; HAND BROADCAST FOR SMALL AREAS OF ONE ACRE OR LESS.
- 5. SEED QUALITY IS CRITICAL AND A SEED MIX SHOULD BE USED WITH A MINIMUM PERCENTAGE OF NON-SEED PLANT PARTS.

#### 1. IN THE FIRST YEAR, WEEDS MUST BE CAREFULLY CONTROLLED AND CONSISTENTLY MOWED BACK TO 4—6 INCHES TALL WHEN THEY REACH 12 INCHES IN HEIGHT. IN THE SECOND YEAR, WEEDS SHOULD CONTINUE TO BE MONITORED AND MOWED AND CHIZOMATOUS WEEDS SHOULD BE HAND

- 2. WEEDS SHOULD NOT BE SPRAYED WITH HERBICIDE AS THE DRIFT FROM THE SPRAY MAY KILL LARGE PATCHES OF DESIRABLE PLANTS, ALLOWING WEEDS TO MOVE INTO THESE NEW OPEN AREAS.
- 3. IN THE BEGINNING OF THE THIRD SEASON, THE AREA SHOULD BE BURNED OFF IN MID-SPRING. IF BURNING IS NOT POSSIBLE THE AREA SHOULD BE MOWED VERY CLOSELY TO THE GROUND INSTEAD, THE MOWED MATERIAL SHOULD BE REMOVED FROM THE SITE TO EXPOSE THE SOIL TO THE SUN. THIS HELPS ENCOURAGE RAPID SOIL WARMING WHICH FAVORS THE ESTABLISHMENT OF "WARM SEASON" PLANTS OVER "COOL SEASON" SEEDS.

REVISED PER TOWNSHIP COMMENTS 8/30/19 8/12/19 REVISED PER TOWNSHIP COMMENTS DATE DESCRIPTION REVISIONS



SEAL

NIXON-KOCHEF WATER TREATMENT FACILITY

DRAWN BY: AJL

TILE: 16049 LD 021

EROSION AND SEDIMENT CONTROL (ESC) NOTES

STATE COLLEGE BOROUGH

WATER AUTHORITY

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA DATE: 8/30/19 JOB: 16049 SCALE: AS SHOWN

CHECKED BY: WAA

G: \16049\LAND DEVELOPMENT\16049\_LD\_02

DOBSON & **FOREMAN** 

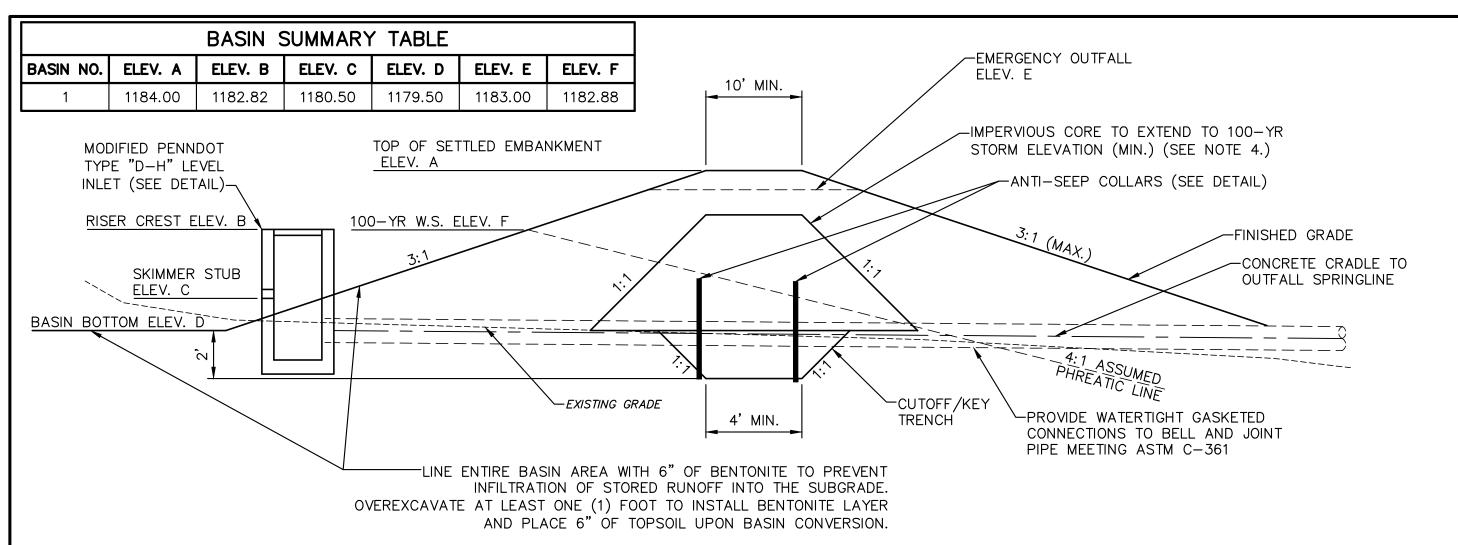
**ENGINEERS** 

3121 Fairway Drive

Altoona, PA 16602

gdfengineers.com

814.943.5214



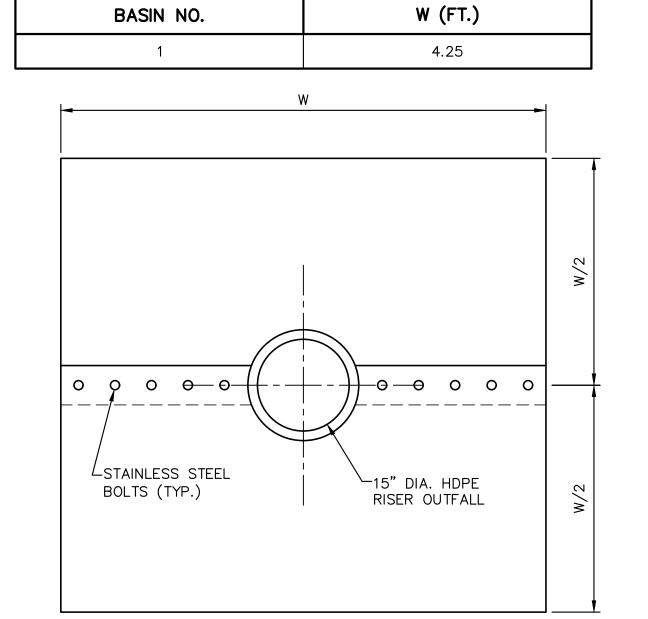
# BASIN EMBANKMENT DETAIL

#### **BASIN GENERAL NOTES:**

- THE AREA UNDER THE EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A MINIMUM DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. IN ORDER TO FACILITATE MAINTENANCE AND RESTORATION, THE POOL AREA SHALL BE CLEARED OF ALL BRUSH, TREES, AND OBJECTIONABLE MATERIAL.
- 2. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS.
- 3. SOILS ACCEPTABLE FOR EMBANKMENT CONSTRUCTION SHALL BE LIMITED TO GC, GM, SC, SM, CL OR ML AS DESCRIBED IN ASTM D-2487 (UNIFIED SOILS CLASSIFICATION).
- 4. THE EMBANKMENT CORE AND CUTOFF TRENCH SHALL CONSIST OF MATERIAL CONFORMING TO UNIFIED SOIL CLASSIFICATION GC, SC, CH, OR CL AND MUST HAVE AT LEAST 30% PASSING THE #200 SIEVE.
- 5. ONSITE SOILS MAY BE USED IF THE SOILS MEET THE CLASSIFICATIONS LISTED ABOVE. ANY SOIL, WHETHER ONSITE OR IMPORTED, WHICH IS TO BE USED IN THE EMBANKMENT MUST BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING AGENCY AND APPROVED BY THE ENGINEER PRIOR TO THE SOIL BEING PLACED AND COMPACTED.
- 6. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6".
- 7. THE REQUIRED EMBANKMENT DENSITY SHALL NOT BE LESS THAN 95% OF MAXIMUM DRY DENSITY, AS DETERMINED BY THE AASHTO METHOD T-99 (STANDARD PROCTOR), WITH MOISTURE CONTENT WITHIN 2% OF THE OPTIMUM. EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THIS DENSITY AND IS TO BE CERTIFIED AT THE TIME OF CONSTRUCTION.
- 8. ALL BASIN EMBANKMENTS SHALL BE COMPACTED BY SHEEPSFOOT OR PAD ROLLER. FIVE PASSES OF THE COMPACTION EQUIPMENT OVER THE ENTIRE SURFACE OF EACH LIFT IS REQUIRED. EMBANKMENT COMPACTION TO VISIBLE NON-MOVEMENT IS REQUIRED.
- 9. UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED, MULCHED, BLANKETED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS.
- 10. ALL ORIFICES ON PERMANENT RISER SHALL HAVE WATER-TIGHT TEMPORARY SEALS PROVIDED.

ANTI-SEEP COLLAR SUMMARY TABLE

11. IMPERVIOUS CORE, CUTOFF/KEY TRENCHES AREA REQUIRED ALONG THE ENTIRE LENGTH OF ALL CONSTRUCTED EMBANKMENTS AND BE INSTALLED FOR A MINIMUM OF 10 FEET ON EITHER SIDE OF THE OUTLET PIPE FOR ALL BASINS.



- 1. CONNECTING BAND TO OUTFALL BARREL SHALL EXTEND A MINIMUM OF 12" ON EACH
- 2. CONNECTING BAND SHALL BE SECURELY FASTENED TO THE OUTFALL BARREL BY TWO (2) 1/2" STAINLESS STEEL CLAMP BANDS ON EACH SIDE OF THE COLLAR.
- 3. ALL STAINLESS STEEL SHALL BE GRADE 304 OR BETTER. 4. COLLAR MATERIAL SHALL CONSIST OF 1/4" THICK RIGID HIGH DENSITY POLYETHYLENE
- (HDPE) MATERIAL 5. À CORRUGATED METAL COLLAR IS AN ACCEPTABLE ALTERNATIVE TO HDPE.
- 6. COLLAR SHALL BE A MINIMUM OF ONE (1) FOOT AWAY FROM ANY PIPE JOINT. 7. TWO (2) COLLARS SHALL BE PROVIDED WITH A MINIMUM SEPARATION OF TEN FEET.

4" SCH. 40 PVC

WALL SLEEVE AND

PENETRATION (TYP.)

PIPE THROUGH

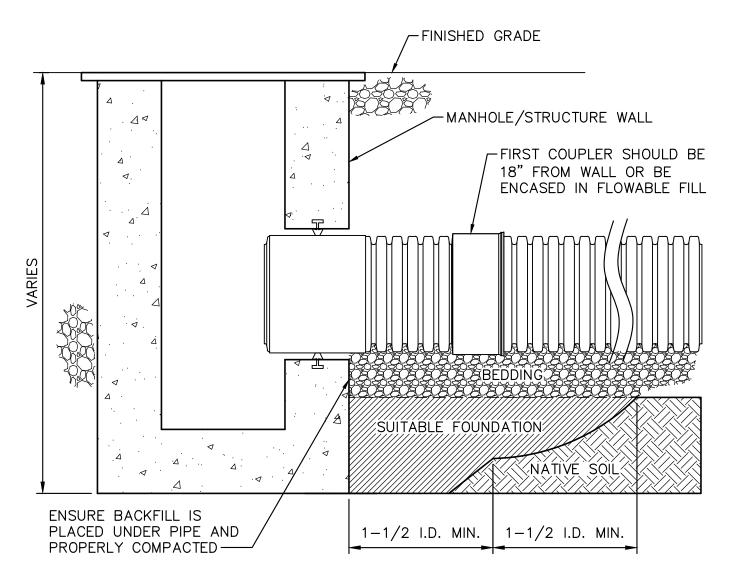
STUB-

SEDIMENT SKIMMER

# ANTI-SEEP COLLAR DETAIL

EL. 1177.00

NOTES:



STANDARD PENNDOT TYPE

"D-H" LEVEL INLET

FRAME AND STRUCTURAL

STEEL GRATE

PENNDOT TYPE

─15" HDPE OUTFALL

INV. EL. 1178.00

REFER TO PENNDOT STANDARD DETAILS RC-45M AND RC-46M.

3. ALL PIPE CONNECTIONS TO RISER SHALL BE WATER TIGHT.

1. FOR ALL DIMENSIONS, MATERIALS, DETAILS AND SPECIFICATIONS NOT SHOWN, PLEASE

2. STRUCTURAL STEEL GRATE IS TO BE REMOVED FROM THE BASIN DURING USE OF THE

BASIN FOR SEDIMENT CONTROL AND REPLACED AT THE TIME OF BASIN CONVERSION.

BASIN RISER DETAILS

. 1182.82

2'-3"

15" HDPE OUTFALL

INV. EL. 1178.00——

- 1. MAXIMUM INSERTION ANGLE SHALL NOT EXCEED REQUIREMENTS AS SPECIFIED BY THE MANUFACTURER.
- 2. SEE STANDARD DETAILS STD-202 AND 202A THROUGH STD-204 (A-F) FOR STRUCTURE CONNECTIONS, PRODUCT INFORMATION AND DIMENSIONAL PIPE DATA. INSTALLATION RECOMMENDATIONS ARE ALSO SPECIFIED IN TECHNICAL NOTE 5.04: HDPE CONNECTIONS TO MANHOLES AND STRUCTURES.
- 3. PERFORMANCE HIGHLY DEPENDENT ON INSTALLATION. CONTRACTOR MUST INSURE MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

-2" DIA. ORIFICE TO BE

TEMPORARILY BLOCKED

DURING EROSION CONTROL

PHASE - INV. EL. 1179.50

# STORM DRAIN CONNECTION DETAIL

EL. 1182.82

EL. 1177.00

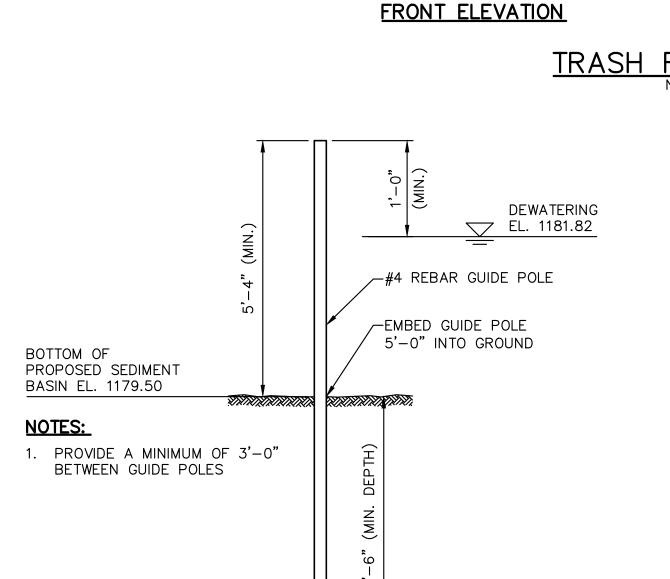
—4" SCH. 40 PVC SEDIMENT

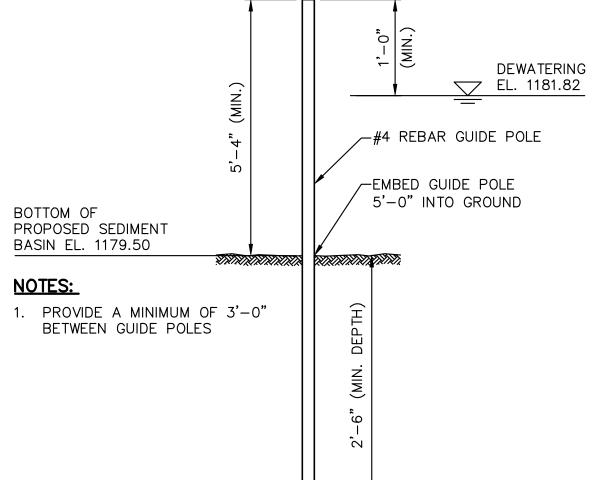
SKIMMER STUB (STUB TO

UPON BASIN CONVERSION)

BE CUT AND CAPPED

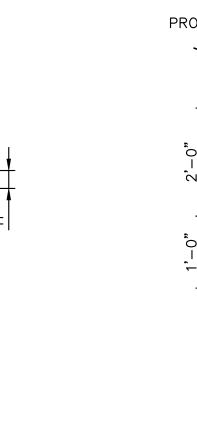
- INV. EL. 1180.50





SKIMMER GUIDE POLE DETAIL

2. WHEN SEDIMENT HAS ACCUMULATED TO THE CLEAN OUT ELEVATION ON ANY STAKE, ALL ACCUMULATED SEDIMENT SHALL BE REMOVED



SIDE VIEW

3610 NP | 7.5 (190) | 25.0 (450) | 8.6 (218) |58.0 (1473)|63.0 (1600

END VIEW

B (MAX)

1810 NP | 7.5 (190) | 15.0 (380) | 6.5 (168) | 32.0 (812) | 35.0 (890

2410 NP | 7.5 (190) | 18.0 (450) | 6.5 (165) | 36.0 (900) | 45.0 (1140

3010 NP | 7.5 (190) | 22.0 (559) | 8.6 (218) |58.0 (1473)|63.0 (1600

DIMENSIONS, INCHES (MM)

2, 15 (300, 375)| 1210 NP | 6.5 (165) | 10.0 (254)| 6.5 (165) | 25.0 (635)| 29.0 (736

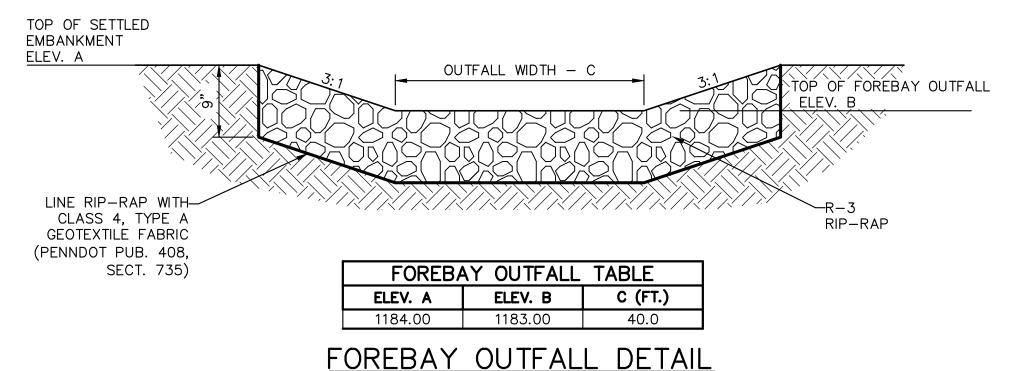
TOP VIEW

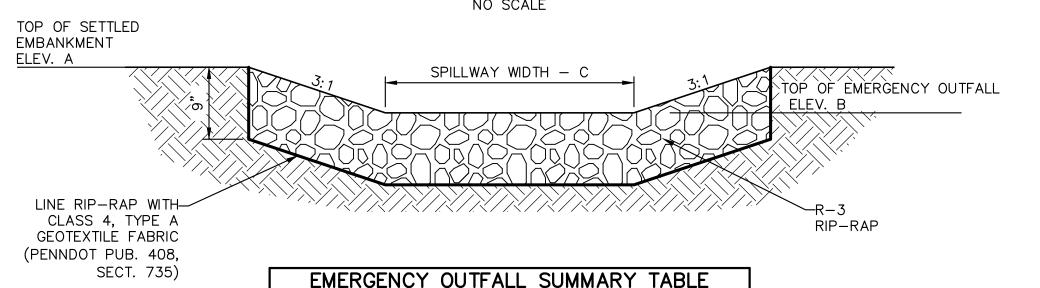
DIAMETER

24 (600)

30 (750)

PART NO.

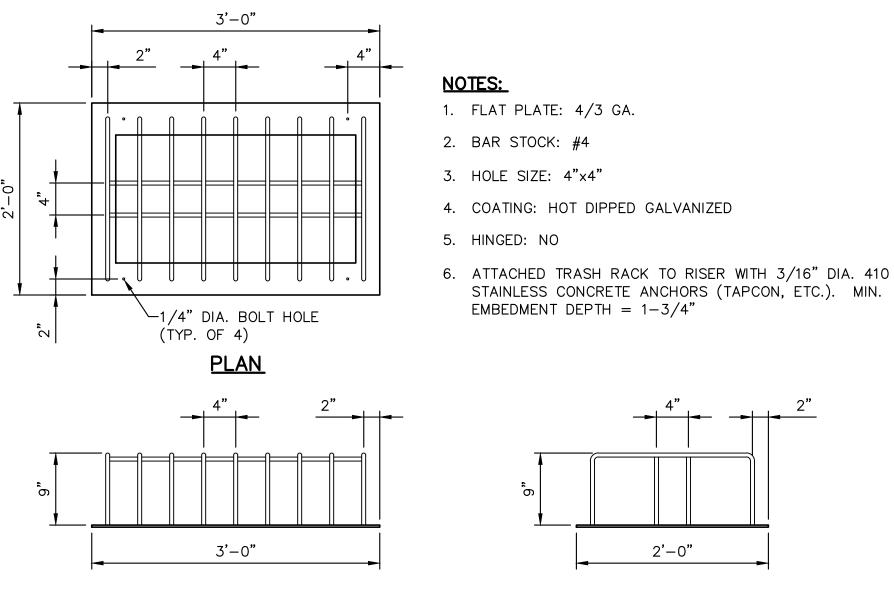


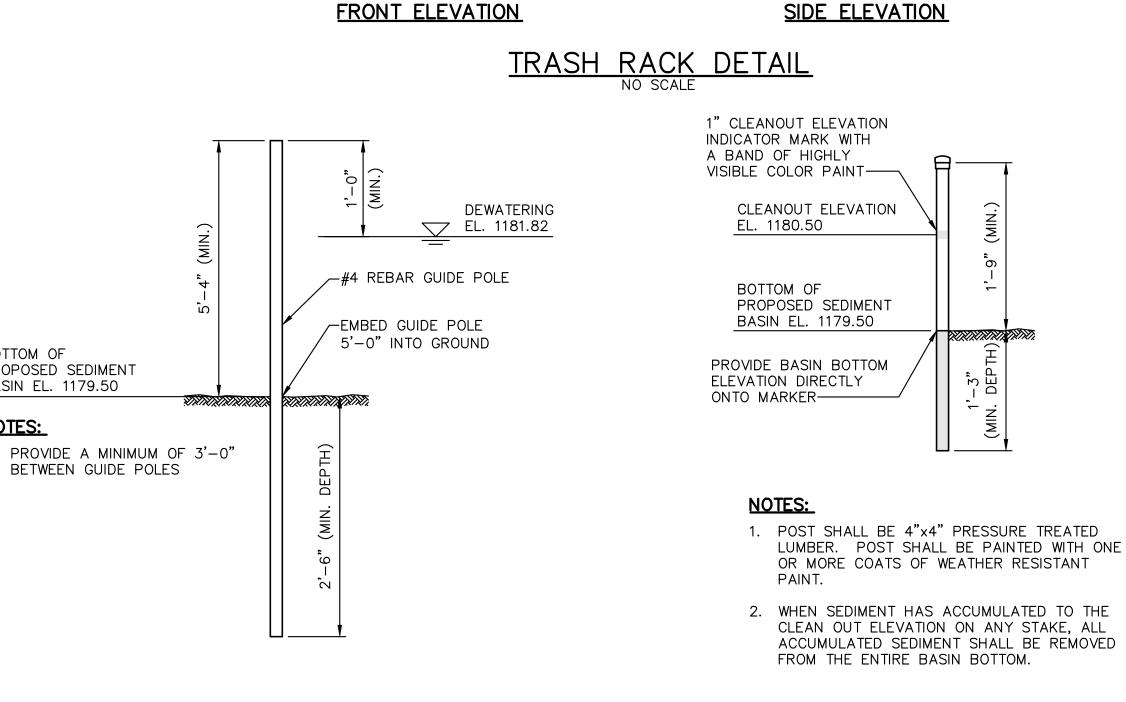


# EMERGENCY OUTFALL DETAIL

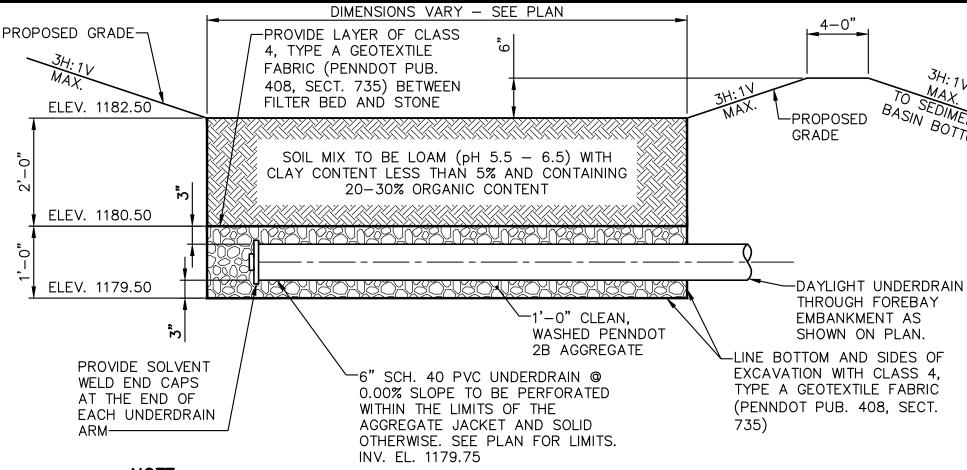
BASIN NO. | ELEV. A | ELEV. B | C (FT.)

1184.00 1183.00 25.0



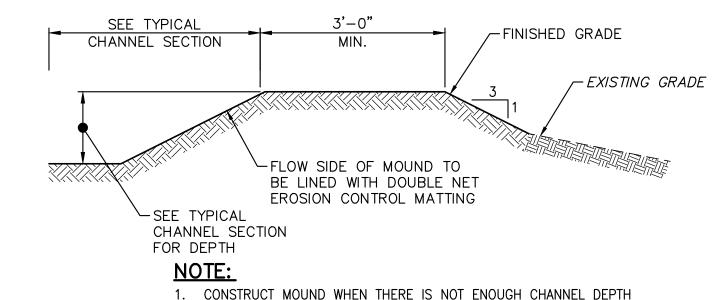


SEDIMENT DEPTH MARKER DETAIL
NO SCALE

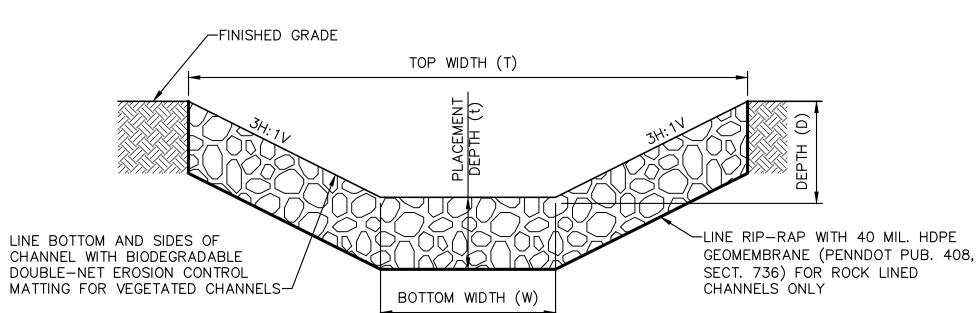


1. FURNISHED SOIL MIX SHALL HAVE A MINIMUM INFILTRATION RATE OF 0.10 IN. / HR. AND A MAXIMUM INFILTRATION RATE OF 0.25 IN. / HR. THE INFILTRATION RATE SHALL BE FIELD VERIFIED UPON BASIN CONVERSION AND THE INSTALLATION OF FILTER BED. IT IS RECOMMENDED THAT THE CONTRACTOR CONSULT A SOIL SCIENTIST OR GEOTECHNICAL ENGINEER TO VERIFY THE INFILTRATION RATE OF THE FILTER BED MATERIAL PRIOR TO INSTALLATION IN THE FOREBAY.

# WATER QUALITY FOREBAY TYPICAL SECTION

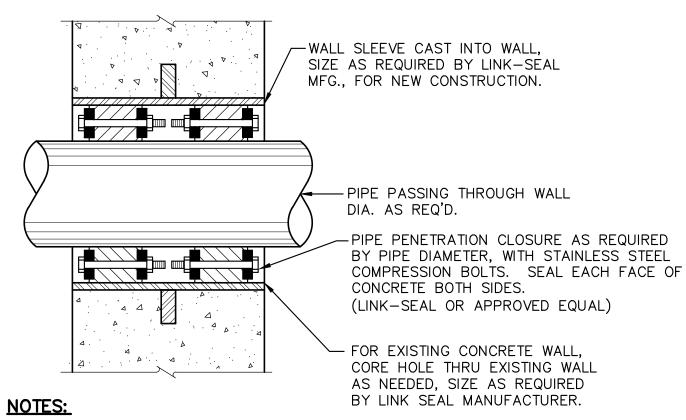


# BETWEEN BOTTOM OF CHANNEL AND EXISTING GRADE.



CHANNEL SUMMARY TABLE								
I STITE I WILLIE I I I I I I I I I I I I I I I I I					PLACEMENT DEPTH (t) IN.			
1	7.0	16.0	1.5	3:1	N/A	N/A		
2	7.0	16.0	1.5	3:1	N/A	N/A		
3A	6.0	15.0	1.5	3:1	N/A	N/A		
3B	6.0	15.0	1.5	3:1	R-6	36		
4	6.0	15.0	1.5	3:1	R-4	18		

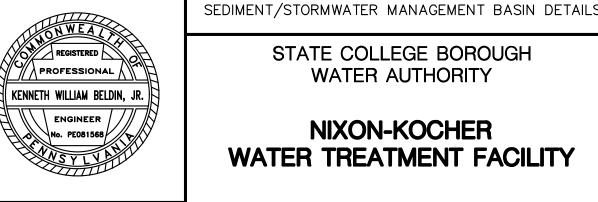
# TYPICAL CHANNEL DETAIL



1. WALL SLEEVE MATERIAL SHALL BE SCHEDULE 40 STEEL. ASTM A53

# TYPICAL PIPE PENETRATION DETAIL

2	8/30/19	REVISED PER TOWNSHIP COMMENTS
1	8/12/19	REVISED PER TOWNSHIP COMMENTS
NO.	DATE	DESCRIPTION
		REVISIONS



DATE: 8/30/19

TILE: 16049\_LD\_022

SEAL

**NIXON-KOCHER** WATER TREATMENT FACILITY FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

JOB: 16049

DRAWN BY: AJL

FOREMAN **ENGINEERS** 3121 Fairway Drive Altoona, PA 16602 814.943.5214 gdfengineers.com

GD&F

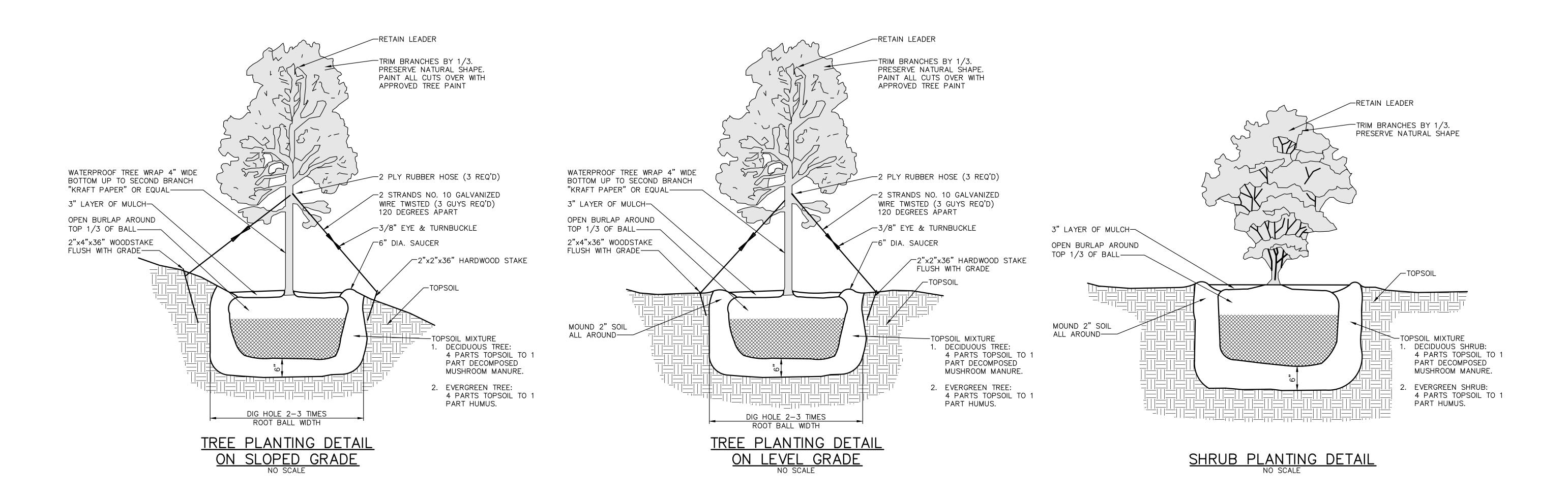
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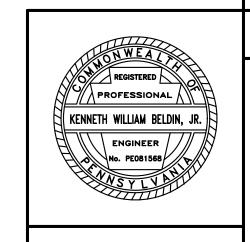
SCALE: AS SHOWN

### LANDSCAPING GENERAL NOTES:

- 1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- 2. THE CONTRACTOR SHALL REFER TO THE PLANT LIST FOR SEASONAL REQUIREMENTS AND OTHER RESTRICTIONS RELATED TO THE TIME OF PLANTING.
- 3. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON ALL DRAWINGS.
- 4. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT.
- 5. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN FINISHED AND APPROVED BY THE PROJECT ENGINEER.
- 6. THE DAY PRIOR TO PLANTING, THE LOCATION OF ALL TREES AND SHRUBS SHALL BE STAKED FOR APPROVAL BY THE OWNER.
- 7. ALL PLANTS SHALL BE INSTALLED AS PER DETAILS AND THE CONTRACT SPECIFICATIONS AND IN ACCORDANCE WITH THE "GUIDE TO PLANTING IN FERGUSON TOWNSHIP."
- 8. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING.
- 9. ALL PLANTS SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT WRAPPING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT TIME OF PLANTING.
- 10. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE CONTAINER BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS.
- 11. PLANT AT ABOUT THE SAME DEPTH, OR NOT TO EXCEED ONE-HALF INCH DEEPER THAN IT WAS IN THE NURSERY. USE THE ROOT COLLAR FOR DEPTH JUDGMENT.
- 12. INSTALL THE MAIN ROOTS NEARLY STRAIGHT AND SPREAD OUT, NOT DOUBLED, OR SHARPLY BENT.
- 13. INSTALL THE SOIL FIRMLY AROUND THE ROOTS. LEAVE NO AIR POCKETS.
- 14. INSTALL THE TREE IN AN UPRIGHT POSITION, AND HAVE IT NEARLY EVEN WITH THE GENERAL GROUND LEVEL, NOT SUNK IN A HOLE OR RAISED ON A MOUND.
- 15. ALL PLANTS AND STAKES SHALL BE SET PLUMB UNLESS OTHERWISE SPECIFIED.
- 16. ALL PLANTS SHALL BE SPRAYED WITH AN ANTIDESSICANT WITHIN 24 HOURS AFTER PLANTING. IN TEMPERATE ZONES, ALL PLANTS SHALL BE SPRAYED WITH AN ANTIDESSICANT AT THE BEGINNING OF THEIR FIRST WINTER.
- 17. THE CONTRACTOR SHALL PROVIDE LOAM FILL AS PER THE CONTRACT DOCUMENTS.
- 18. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR MORE OFTEN, IF NECESSARY, DURING THE FIRST GROWING SEASON.
- 19. THE GENERAL CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 20. MULCH COLOR TO BE SELECTED BY THE OWNER. MINIMUM MULCH DIAMETER SHALL BE 6 FEET.
- 21. ALL TREES SHALL HAVE TEMPORARY TAGS IDENTIFYING SIZE, SPECIES AND SOURCE OF MATERIALS FIRMLY ATTACHED TO TRUNK.



2	8/30/19	REVISED PER TOWNSHIP COMMENTS	
1	8/12/19	REVISED PER TOWNSHIP COMMENTS	
NO.	DATE	DESCRIPTION	
		REVISIONS	



SEAL

STATE COLLEGE BOROUGH WATER AUTHORITY

PROPOSED LANDSCAPING DETAILS AND NOTES

NIXON-KOCHER WATER TREATMENT FACILITY

G: \16049\LAND DEVELOPMENT\16049\_LD\_02

DOBSON & FOREMAN

ENGINEERS

3121 Fairway Drive

Altoona, PA 16602

# PCSM OPERATION AND MAINTENANCE (O&M) PLAN

- A. PCSM OPERATION AND MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE ON THIS PLAN. ANY SEDIMENT THAT IS REMOVED SHALL BE PROPERLY DISPOSED OF ONSITE OR AT AN APPROVED OFFSITE LOCATION.
- B. A LOG SHOWING THE DATES OF EACH INSPECTION, ANY DEFICIENCIES FOUND, CORRECTIVE ACTIONS TAKEN TO REMEDY THE DEFICIENCIES AND THE DATE THE DEFICIENCIES WERE CORRECTED SHALL BE MAINTAINED AT THE SITE.
- C. THIS PCSM O&M PLAN SHALL REMAIN IN EFFECT UNTIL SUCH TIME THE PROPERTY IS REDEVELOPED AND AN ALTERNATIVE SOURCE OF PROVIDING STORMWATER MANAGEMENT IS CONSTRUCTED.
- D. THE PCSM O&M PLAN SHALL BE RECORDED AT THE CENTRE COUNTY RECORDER OF DEEDS AND SHALL RUN WITH THE PROPERTY.
- E. THE STATE COLLEGE BOROUGH WATER AUTHORITY (OWNER) OR THEIR DESIGNATED REPRESENTATIVE SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEMS, IN ACCORDANCE WITH THIS O&M PLAN, UNTIL SUCH TIME AS THE PROPERTY, OR ANY PORTION OF THE PROPERTY THAT CONTAINS A STORMWATER MANAGEMENT DEVICE, MEANS OF RUNOFF CONVEYANCE, ETC., IS SOLD OR TRANSFERRED TO ANOTHER PARTY, AT WHICH TIME SAID PARTY OR THEIR DESIGNEES SHALL ASSUME STORMWATER MANAGEMENT MAINTENANCE RESPONSIBILITIES, AS IS APPLICABLE.

## PCSM MAINTENANCE SCHEDULE

STORMWATER MANAGEMENT BEST MANAGEMENT PRACTICE (BMP)	INSPECTION FREQUENCY	MAINTENANCE REQUIREMENTS
,		
		REMOVE ANY LARGE DEBRIS OR TRASH. MOW ONLY AS APPROPRIATE FOR THE
		VEGETATIVE COVER SPECIES. THE VEGETATION ALONG THE SURFACE AND SIDES OF
		THE FOREBAY SHALL BE MAINTAINED IN GOOD CONDITION. ANY SIGNS OF
		EROSION WITHIN THE FOREBAY SIDE SLOPES OR BOTTOM SHALL BE RE-STABILIZED
		AS SOON AS IS POSSIBLE. SHORT TERM DOUBLE NET EROSION CONTROL MATTING
		AND AN APPROPRIATE SEED MIXTURE SHALL BE USED ON ALL STABILIZED AREAS
		UNTIL THE ERODED AREA HAS BEEN VEGETATIVELY RE-ESTABLISHED. TOPSOIL
		SHALL BE PLACED AS NECESSARY TO ESTABLISH THE ORIGINAL GRADE AND
		DIMENSION OF THE FOREBAY. IF IMPOUNDED RUNOFF DOES NOT DRAIN WITHIN
		72 HOURS, PUMP ACCUMULATED RUNOFF THROUGH AN APPROPRIATE FILTER BAG
		TO A STABLE OUTFALL. REMOVE ANY ACCUMULATED SEDIMENT AND DISC OR
		OTHERWISE AERATE THE FOREBAY BOTTOM TO RESTORE INFILTRATION CAPACITY.
		RESTORE THE ORIGINAL CROSS SECTION OF THE BASIN AND SEED OR SOD THE
		DISTURBED AREAS TO RESTORE GROUND COVER. CARE SHALL BE TAKEN TO AVOID
		DAMAGE TO THE UNDERDRAIN SYSTEM. THE BOTTOM ON THE FOREBAY SHALL BE
		AERATED AND RESTORED AS DESCRIBED ABOVE EVERY FIVE YEARS, REGARDLESS OF
	AFTER EACH RAINFALL OF 1.00 INCHES	WHETHER THE BASIN DRAINS IN LESS THAN 72 HOURS.
WATER QUALITY FOREBAY	OR GREATER IN A 24-HOUR PERIOD	
		REMOVE ANY LARGE DEBRIS OR TRASH. MOW ONLY AS APPROPRIATE FOR THE
		VEGETATIVE COVER SPECIES. THE VEGETATION ALONG THE SURFACE AND SIDES OF
		THE BASIN SHALL BE MAINTAINED IN GOOD CONDITION. ANY SIGNS OF EROSION
		WITHIN THE BASIN SIDE SLOPES OR BOTTOM SHALL BE RE-STABILIZED AS SOON AS
		IS POSSIBLE. SHORT TERM DOUBLE NET EROSION CONTROL MATTING AND AN
		APPROPRIATE SEED MIXTURE SHALL BE USED ON ALL STABILIZED AREAS UNTIL THE
		ERODED AREA HAS BEEN VEGETATIVELY RE-ESTABLISHED. TOPSOIL SHALL BE
		PLACED AS NECESSARY TO ESTABLISH THE ORIGINAL GRADE AND DIMENSION OF
		THE BASIN. RESTORE THE ORIGINAL CROSS SECTION OF THE BASIN AND SEED OR
		SOD THE DISTURBED AREAS TO RESTORE GROUND COVER. IF IMPOUNDED RUNOFF
		DOES NOT DRAIN WITHIN 72 HOURS, PUMP ACCUMULATED RUNOFF THROUGH AN
		APPROPRIATE FILTER BAG TO A STABLE OUTFALL. REMOVE ANY ACCUMULATED
	AFTER EACH RAINFALL OF 1.00 INCHES	SEDIMENT AND INSPECT THE RISER, RISER OPENINGS AND OUTFALL BARREL FOR
WET POND	OR GREATER IN A 24-HOUR PERIOD	BLOCKAGE.
		STORM DRAINS, INLETS AND MANHOLES SHALL BE THOROUGHLY CLEANED AND
		INSPECTED FOR DAMAGE AT LEAST TWO TIMES PER YEAR. UPON DISCOVERY OF
		DAMAGE, APPROPRIATE REMEDIAL ACTION, UP TO AND INCLUDING REPLACEMENT
STORM DRAINS, INLETS AND MANHOLES	EVERY 6 MONTHS	OF THE DAMAGED STRUCTURE, SHALL OCCUR IMMEDIATELY.
		REMOVE ANY LARGE DEBRIS OR TRASH. ANY DISPLACED RIP-RAP, GEOTEXTILE
		FABRIC, ETC. LOCATED IN THE CHANNELS, ROCK SLOPE PROTECTION AND OUTFALL
		APRONS SHALL BE RESTORED TO THE ORIGINAL DIMENSIONS AND LOCATIONS
		SHOWN ON THE RECORDED PLAN DRAWINGS. DETERIORATED OR TORN
		GEOTEXTILE FABRIC SHALL BE REPLACED IMMEDIATELY. ANY SIGNS OF EROSION
		WITHIN THE VEGETATED CHANNELS SHALL BE RE-STABILIZED AS SOON AS IS
		POSSIBLE. SHORT TERM DOUBLE NET EROSION CONTROL MATTING AND AN
	AFTER EACH RAINFALL OF 1.00 INCHES	APPROPRIATE SEED MIXTURE SHALL BE USED IN ALL CHANNELS UNTIL THE ERODED
CHANNELS, ROCK SLOPE PROTECTION AND STORM DRAIN OUTFALLS	OR GREATER IN A 24-HOUR PERIOD	AREA HAS BEEN VEGETATIVELY RE-ESTABLISHED.
		MOW ONLY AS APPROPRIATE FOR THE VEGETATIVE COVER SPECIES. ANY SIGNS OF
		EROSION WITHIN THE DISCONNECT AREA SHALL BE RE-STABILIZED AS SOON AS IS
		POSSIBLE. IN THE EVENT THAT MAINTENANCE OF SUBSURFACE UTILITIES IS
		NECESSARY, THE DISTURBED AREA SHALL BE STABILIZED WITH SHORT TERM DOUBLE
		NET EROSION CONTROL MATTING AND AN APPROPRIATE SEED MIXTURE
		IMMEDIATELY UPON TRENCH BACKFILL. THE STABILIZATION MEASURES SHALL
NON BOOTTON BUSINESS ASSET	EVEDV C MONTHS	REMAIN IN PLACE UNTIL THE ERODED AREA HAS BEEN VEGETATIVELY RE-
NON-ROOFTOP DISCONNECT AREA	EVERY 6 MONTHS	ESTABLISHED.

# PCSM CRITICAL STAGES OF CONSTRUCTION

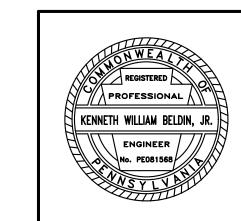
- 1. A LICENSED PROFESSIONAL OR THEIR DESIGNEE SHALL BE PRESENT DURING THE CONVERSION OF THE SEDIMENT BASIN FOR POST-CONSTRUCTION STORMWATER MANAGEMENT PURPOSES TO ENSURE THAT THE PROPER ACTIONS ARE TAKEN TO COMPLETE THE CONVERSION.
- 2. RECORD DRAWINGS WILL BE CERTIFIED AND PROVIDED UPON CONSTRUCTION COMPLETION. PER TITLE 25 PA CODE §, CHAPTER 102.8L, THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS THE FOLLOWING:

"I \_\_\_\_\_\_ DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 PA.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

# PCSM SEQUENCE OF CONSTRUCTION

- A. REMOVE ANY ACCUMULATED SEDIMENT IN THE CHANNELS AND STORM DRAINS. THE CONTRACTOR IS TO REMOVE THE SEDIMENT AND DISPOSE OF IT PROPERLY.
- B. AFTER UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL VEGETATION HAS BEEN ESTABLISHED, REMOVE ANY REMAINING PERIMETER SEDIMENT AND EROSION CONTROLS. APPROVAL TO REMOVE THE CONTROLS MUST BE PROVIDED BY A REPRESENTATIVE OF THE CENTRE COUNTY CONSERVATION DISTRICT.
- C. PERMANENTLY STABILIZE ALL AREAS DISTURBED DURING THE REMOVAL OF THE PERIMETER CONTROLS.
- D. CONVERT THE SEDIMENT BASIN TO A STORMWATER MANAGEMENT BASIN. ANY ACCUMULATED SEDIMENT WITHIN THE BASIN IS TO BE REMOVED AND DISPOSED OF PROPERLY. REMOVE THE SKIMMER, GUIDE RAILS AND AGGREGATE LANDING BERM. REMOVE ANY TEMPORARY ORIFICE BLOCKAGES AND PERMANENTLY BLOCK ANY ORIFICES IDENTIFIED ON THE PLANS WITH NON-SHRINK GROUT. CONSTRUCT THE WATER QUALITY FOREBAY EMBANKMENT AND UNDERDRAIN SYSTEM. UPON COMPLETION OF THE EMBANKMENT, CONSTRUCT THE AGGREGATE JACKET AROUND THE UNDERDRAIN AND INSTALL GEOTEXTILE FABRIC. PROVIDE APPROPRIATE FILTER BED SOIL MIXTURE TO THE LIMITS AND GRADES INDICATED ON THE PLAN DRAWINGS.
- E. PERMANENTLY STABILIZE ALL AREAS DISTURBED DURING THE CONVERSION OF THE SEDIMENT BASIN TO A STORMWATER MANAGEMENT BASIN.
- F. BEGIN POST-CONSTRUCTION STORMWATER MANAGEMENT OPERATIONS AND MAINTENANCE AS DESCRIBED IN THE O&M PLAN.

2	8/30/19	REVISED PER TOWNSHIP COMMENTS
1	8/12/19	REVISED PER TOWNSHIP COMMENTS
NO.	DATE	DESCRIPTION
		DEVISIONS



SEAL

STORMWATER MANAGEMENT NOTES STATE COLLEGE BOROUGH

WATER AUTHORITY DOBSON & FOREMAN ENGINEERS 3121 Fairway Drive Altoona, PA 16602 814.943.5214 gdfengineers.com

SCALE: AS SHOWN

**NIXON-KOCHER** WATER TREATMENT FACILITY FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

JOB: 16049

DRAWN BY: AJL

CHECKED BY: WAA



# TOWNSHIP OF FERGUSON

3147 Research Drive, State College, Pennsylvania 16801 Telephone: 814-238-4651 Fax: 814-238-3454

TO: Ferguson Township Board of Supervisors

FROM: Kristina M. Aneckstein, Community Planner

DATE: September 6, 2019

SUBJECT: Active Development Projects Update

In an effort to keep the Planning Commission and Board of Supervisors up-to-date on pending proposals and applications, staff is providing a list of Active Plans and other Projects in the Township.

Currently, the Township has seven (7) Active Plans and two (2) conditionally approved plan.

#### Preliminary/Final Re-Plot of Lands for the State College Borough Water Authority and Gary E. and Carol J. Myers:

Gwin Dobson & Foreman submitted a Preliminary/Final Re-Plot of Lands on behalf of their client, the State College Borough Water Authority. Tax parcel 24-003-007F, owned by the State College Borough Water Authority is currently 15.071 acres and the proposed acreage is 18.047 acres. Mr. and Mrs. Myers own tax parcel 24-003-007K and is currently 45.673 acres, in which 2.974 acres is being transferred to the SCBWA. The land is zoned Rural Agricultural and the current use is a well field property and the proposed use is an addition to well field property. This project was granted seven variances; Variance to encroach upon the fifty foot riparian buffer, Variance to waive requirements of independent hydrologic and hydraulic study, Variance to allow improvements within the flood plain, Variance to allow construction activities and improvements within the flood way, Variance to minimum lot area (50 acres), and Nonconforming use in Rural Agricultural zoning district. *Plan Expiration is October 10, 2019. Staff is recommending that the Planning Commission give a recommendation for approval.* 

#### 2. Preliminary Land Development Plan for Nixon-Kocher Water Treatment Facility:

Gwin Dobson & Foreman submitted a Preliminary Land Development Plan for the Nixon-Kocher Water Treatment Facility on behalf of the State College Borough Water Authority. Tax Parcel 24-003-007F-0000 is 18.047 acres. The existing land use is forested land/agricultural, the proposed land use is a water treatment facility. We have received a conditional use application; a water treatment facility is a conditional use in the rural agriculture zoning district. Plan Expiration is October 10, 2019. Staff is recommending that the Planning Commission give a recommendation for approval.

#### 3. Whitehall Road Regional Park Phase 1:

Stahl Schaeffer Engineering submitted the final land development plan for the proposed Whitehall Road Regional Park Phase 1 on behalf of Centre Region Parks and Recreation Authority. This is located off the future Blue Course Drive extension, south of the intersection of Blue Course Drive and Whitehall Road. The proposed Phase 1 development involves the development of approximately 55 acres of the 100 acre park property. The property will include: two lighted grass fields (alternate to synthetic turf), two unlighted grass fields, two grass practice/open space areas, accessible walking trail, All-Ability and Universally-Accessible Playground, All-Season Pavilion with attached concession stand and restrooms, and a three-bay park operations storage building. The required park infrastructure includes a paved entrance road, paved parking lots (just under 500 spaces), accessible connector sidewalks and trails, public water and sanitary sewer service, and natural gas service. There will be green stormwater management facilities such as bioswales, stormwater infiltration basins, and rain gardens, all of which connect to the storm water system. A solar installation on the All-Season Pavilion will support the building's energy needs, and there is a proposed landscaping buffer system to include trees, shrubs, and native grasses. Plan Expiration is November 12, 2019. Comments were sent to Stahl Schaeffer. A meeting with Stahl Schaeffer and staff is set for September 12 to discuss the landscaping plan.

## 4. Harner Farm Subdivision Plan – Subdivision of Tax Parcel 24-4-67 and Replot of Tax Parcel 24-4-67:

Penn Terra Engineering, Inc. on behalf of the applicant, Aspen Whitehall Partners LLC submitted a Plan for the subdivision of tax parcel 24-4-67 and replot of tax parcel 24-4-67C. The purpose of this plan is to subdivide Tax Parcel 24-4-67 into four (4) lots, replot Tax Parcel 24-467C and dedicate land from Tax Parcel 24-4-67 to Ferguson Township Right of Way. In conjunction with this Subdivision/Replot Plan is a Land Development Plan for the State College, PA Whitehall Road Sheetz. *Plan Expiration is October 1, 2019. Plan is currently with PennTerra Engineering addressing comments from staff and other required agencies.* 

#### 5. Orchard View Land Development Plan:

This land development plan, submitted by Penn Terra Engineering on behalf of the applicants, Aspen Whitehall Partners, LLC proposes a 36 lot subdivision on tax parcel yet to be determined by the approval of the Subdivision & Replot Plan for the Harner Farm (Tax Parcel 24-4-67/C). The land is located in the single-family residential zoning district with corridor overlay. *Plan Expiration November 5, 2019. Plans have been resubmitted and staff is currently reviewing the Plans.* 

#### 6. Preliminary/Final Land Development Plan – State College, PA (Whitehall Road) Sheetz:

Penn Terra Engineering, Inc. on behalf of the applicant, Aspen Whitehall Partners LLC submitted a Preliminary/Final Land Development Plan for the State College, PA (Whitehall Road) Sheetz. Prior to the submission of this land development plan, a pre-application conference was held with the Ferguson Township Planning Commission as per the optional section 22.302 of the Ferguson Township Subdivision and Land Development Ordinance. The overall concept plan for Harner Farm was discussed at the pre-application conference, including the proposed Sheetz Convenience Store and the subdivision of land as part of the project. The proposed Sheetz Convenience store will be developed on 5.7 acres at the southwest corner of Whitehall Road and West College Avenue. The building will be 6,077 square feet, the site will also have a car wash, stormwater management basins and required access points. A Traffic Impact Study, Stormwater Management Plan and Lighting Plan have been submitted for review. A Transportation Improvement Agreement may not be necessary if all improvements are addressed and designs are on the plans and surety posted.

A plan to subdivide tax parcel 24-4-67 and replot of tax parcel 24-4-67C is also being considered concurrently with the review of the land development plan. *Plan Expiration is October 1, 2019.* 

Plans have been resubmitted to Stahl Schaeffer and are addressing the TIS comments from staff and consultant.

#### **Conditionally Approved Plans:**

- 1. Hummel Subdivision: Plan shall be recorded by November 26, 2019 (2<sup>nd</sup> Time Extension)
- 2. Ferguson Township Public Works Facility: Plan shall be recorded by October 15, 2019
- 3. Pine Hall Traditional Town Development General Master Plan

#### FERGUSON TOWNSHIP PLANNING COMMISSION REGULAR MEETING MINUTES Monday, AUGUST 26, 2019 6:00 PM

#### **ATTENDANCE**

The Planning Commission held its second meeting of the month on Monday, August 26, 2019 at the Ferguson Township Municipal Building. In attendance were:

Commission:

Staff:

Bill Keough, Chair-person Ralph Wheland Erik Scott Jeremie Thompson Jerry Binney Shannon Holliday Rob Crassweller, Secretary

Dr. Ellen Taricani-Alternate

Kristina Aneckstein, Community Planner Jeff Ressler, Zoning Administrator

Others in attendance were: Summer Krape, Recording Secretary; David Pribulka, Ferguson Township Manager.

#### I. CALL TO ORDER

Mr. Keough called the Planning Commission meeting to order on Monday, August 26, 2019 at 6:05 pm.

#### II. CITIZEN INPUT

None

#### III. INTRODUCTION OF NEW ALTERNATE PLANNING COMMISSION MEMBER

Mr. Keough introduced the Planning Commission's new alternate, Dr. Ellen Taricani. Tonight will be her first meeting.

#### IV. ZONING/SALDO UPDATE

Ms. Aneckstein explained to the Commission the Zoning/SALDO updates that have been recommended by the Board of Supervisors from work session that was held on August 20. 2019. Ms. Aneckstein stated they discussed the land development process and how to make it smoother. Staff was reviewing preliminary and final plans at the same when the ordinance states that plans should be reviewed separately in a preliminary plan state and a final plan when it's ready. Mr. Keough asked if they discussed the difference between small and large land development plans and if there should be a difference in the reviewing process. Such as doing the preliminary and final review together for a smaller development plan to help the resident with costs but what would be considered a small subdivision plan. Mr. Ressler explained that in table one of the previous version of the SALDO a minor subdivision is any subdivision of land located within the adopted regional growth boundary which does not require an extension of sewer or water mains or the construction of new streets. Secondly, the subdivision of up to four lots of single family detached dwellings or farm uses in the RA and RR zone where the installation of streets, offsite or community water or waste water systems, storm water drainage. These plans will still need to go through the Planning Commission and the Board. Mr. Pribulka stated that it's not the size or complexity but is based more on the conditions of approval. Mr. Keough asked how minor

lot subdivisions are affected by what was stated. Mr. Ressler stated that with minor lot subdivisions there are about four different things that don't need to be shown on the plans that larger plan would need to have shown.

Ms. Aneckstein followed up with easements. This issue is not addressed in the SALDO, other forms of easements are addressed but off site easements such as the Cottages is not. This type of easement does not occur a lot but needs to be written into the new ordinance. The Board also discussed parking/overflow parking. A main concern with parking that was brought up was Rush Cliff Street the street was allowed for the movement of traffic and not parking and there was an issue of residents parking on the street. Ms. Aneckstein stated that this issue has not been resolved and asked the Commission if they had any comments. Mr. Pribulka stated this is a big thing as parking is normally listed in Zoning and not the SALDO. This was done with the goal of not having so many parking variances.

Ms. Aneckstein noted that the Board went over a few of the zoning districts and will be covering the rest at the Wednesday work session. Ms. Aneckstein stated that the Board discussed eliminating the industrial district, she stated this came up because there only a few parcels that are zoned industrial and the properties in this area could benefit if it was zoned commercial. However, the possible elimination this could cause legal issues. The Board discussed the possibility of an inter-municipal agreement with other townships such as College Township if they were to eliminate the industrial district. Ms. Aneckstein stated that there was discussion on chickens in the single family residential district. The Board added them in as a permitted use, child care and tutoring services were also added as permitted uses in this zone. Ms. Aneckstein stated that the Board briefly covered R1,2,3, and 4 not much changed in these zones other than the adding of chickens and a community garden was added as a permitted use in R3 for 1 acre. Mr. Keough stated that 1 acre is a large portion of land to be used for just a community garden. Ms. Aneckstein stated that this one acre would include a small building/single family home and the community garden, it would all need to occupy the one acre.

Ms. Aneckstein stated that the Board did not cover RA, RR or AR yet. Mr. Pribulka also noted that the Board has added a fair amount of what was once a prohibited us or use by right as conditional uses. Ms. Aneckstein also wanted to note to the Commission that in the village, schools were removed as a use, convenience stores were moved to a conditional use, and there was a proposal of the keeping of livestock was discussed.

#### V. CONSENT AGENDA

None

#### VI. ACTIVE PLANS REPORT – COMMUNITY PLANNER

Ms. Aneckstein stated that there are no new active plans. As a refresher Ms. Aneckstein went over the status of all current plans. The State College Borough Water Authority's Gary and Carol Myers replot and Nixon-Kocher Water treatment facility will be coming in front of the Commission soon. Ms. Aneckstein stated that she has spoken with Ms. Froehlich from Stahl Sheaffer Engineering regarding the Whitehall Road Regional Park and she hopes to have another draft submitted next week. Mr. Pribulka wanted to note that he has scheduled a meeting for September 12, 2019 with CRPR, representatives from the Township, one

Ferguson Township Planning Commission Monday, August 26, 2019 Page 3

> member of the tree commission and one member of the parks and recreation committee will be present and possibly a member of the Planning Commission. The purpose of this meeting is to discuss the landscape plan and tree planting plan.

> Ms. Aneckstein stated that Harner Farm, Orchard View, and Sheetz go hand in hand and the developer would like to present them all at the same time. Staff has sent comments back to Penn Terra and they are currently addressing them and will resubmit shortly. Ms. Aneckstein stated that Pine Hall was approved at last Board meeting. The terms and conditions and transportation agreement were sent to Derek Anderson at Residential Housing, and we are currently waiting for signatures to be returned so we can proceed. Mr. Keough asked for a status update in the work force housing that is included in this project. Mr. Pribulka stated that he can give a general update. The plan has about 101 workforce housing units in the development. Mr. Keough asked if it was possible in the future for the Commission to get a detailed report on the work force housing. Mr. Pribulka stated that the Commission will see this information prior to the review and recommendation of this implementation plan.

Mr. Keough stated that he has spoken with the new Planning Director and they feel that with the hiring of a new Planning Director and the possibility of a new Commission members in the upcoming months they would like to have a skills and learning work shop. This will be a half day event and is for the new Planning Director and new Commission members to go over everything the Commission does and address any questions. Mr. Keough asked the Commission is they had any questions, issues, or discussion topics that need to be talked about at future meetings. Mr. Thompson stated that he would like to talk about transportation. Mr. Binney agreed and stated that with all the current development going on in the Township there will be some major road/transportation changes coming. Mr. Pribulka stated that in 2022 the Board has agreed to a lot \$232,000 for a Ferguson Township wide traffic study. Mr. Keough stated that it would be good to meet with staff to talk about some pinch points so they can be highlighted in the study.

Mr. Keough stated he would like the possibility of a GIS tour of Ferguson Township. He would like to discuss the primary growth area, review vacant land in the growth area, and developable land in the growth areas. Mr. Keough stated the possibility of rezoning some of these lots.

#### X. CENTRE REGIONAL PLANNING COMMISSION REPORT

Mr. Thompson stated that the Centre Regional Planning Commission meeting was held on Tuesday, August 1, 2019. They discussed the Zoning and SALDO update for Ferguson Township. The commission wanted to further discuss this at the September meeting since it is such a long document. The commission reviewed some of the UAJA task activity reports, Scott Road pump station report. This facility is recommended to be expanded as it is nearing capacity. There was more discussion on the regional bus tour, they would like to visit the northland area mobility study and student housing complex downtown. Possible Dates for this tour will be November 22<sup>nd</sup>, November 16<sup>th</sup>, or October 26<sup>th</sup>. This tour will be held on a Saturday from 8-9:00 am and will finish around noon and lunch will be provided. The next meeting will be held on September 5<sup>th</sup>, 2019 at 7:00 pm in the forum room in the COG Building.

Ferguson Township Planning Commission Monday, August 26, 2019 Page 4

#### XI. APPROVAL OF REGULAR MEETING MINUTES JULY 22, 2019

Mr. Keough entertained a motion to approve the July 22, 2019 minutes. Mr. Crassweller moved the motion and Mr. Wheland seconded the motion. Mr. Binney stated that on page 4, second paragraph it states "any drop offs" he would like it to say "decrease in level of service on blue course road" as the exact language.

#### XII. ADJOURNMENT

The Planning Commission meeting for Monday August 26, 2019 was adjourned at 8:00 pm.

Respectfully Submitted,

Rob Crassweller, Secretary For the Planning Commission