

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, July 8, 2019 6:00 PM

- I. CALL TO ORDER
- II. CITIZEN INPUT
- III. FERGUSON TOWNSHIP ZONING AND SUBDIVISION AND LAND DEVELOPMENT ORDINANCES UPDATE:

 Carolyn Yagle will be present to discuss the changes made since the Planning Commission and the Agricultural Ad Hoc Committee reviewed the Ordinance, dated June 21, 2019. Ms. Yagle has prepared a matrix for the Planning Commission to review, to ensure all of the comments that have been discussed the past few meetings have been satisfied and included in the ordinances. A tentative schedule is attached with the Agenda packet within the Interim Planning Director Report.

<u>Staff Recommendation:</u> That the Planning Commission review the memo and recommend approval of the Zoning Ordinance and Map as of July 8, 2019 and the Subdivision and Land Development Ordinance, as of July 8, 2019 and to recommend the Board of Supervisors Authorize Advertising of both Ordinances.

IV. PRELIMINARY/FINAL REPLOT OF LANDS OF THE STATE COLLEGE BOROUGH WATER AUTHORITY & GARY AND CAROL MYERS – INITIAL REVIEW & COMMENT: Attached within the Agenda Packet is a transmittal letter and the Proposed Replot Plan.

Staff Recommendation: That the Planning Commission review and make initial comments upon the Plan.

V. PRELIMINARY LAND DEVELOPMENT PLAN FOR THE NIXON-KOCHER WATER TREATMENT FACILITY.

Attached within the Agenda Packet is a transmittal letter and the Proposed Land

Development Plan for the Nixon-Kocher Water Treatment Facility.

Staff Recommendation: That the Planning Commission review and make initial comments upon the Plan.

- VI. CONSENT AGENDA
- VII. INTERIM PLANNING DIRECTOR REPORT
- VIII. CENTRE REGIONAL PLANNING COMMISSION REPORT
- IX. ZONING/SALDO UPDATE
- X. PINE GROVE MILLS SMALL AREA PLAN
- XI. Approval of Regular Meeting Minutes June 24, 2019
- XII. ADJOURNMENT



100 Ross Street, Suite 500 Pittsburgh, PA 15219 (412) 261-6000 www.epd-pgh.com

July 8, 2019

To: Lindsay Schoch From: Carolyn Yagle

Re: July 2019 Ordinance Updates

MEMORANDUM

Attached, please find a status listing of changes in preparation of 7/8/19 Planning Commission meeting discussion.

Principals

Andrew JG Schwartz Susan M. Simmers Jack R. Scholl

Senior Associate

Carolyn E. Yagle

Associates

Katherine A. Kovalchik Jiayu Qin

Emeritus

John Ormsbee Simonds Philip D. Simonds Paul Dorr Wolfe

orginal 2/11/19.1 rev. 7/3/19

Legend

Plain text: Comment addressed prior to 6/24/19 Plannign Commission meeting discussion Italic: comment addressed as follow-up to 6/24/19 Planning Commission meeting discussion

Zoning Ordinance Section	Comment	Manner Addressed	Status
119	Letter D permits a "meeting room" in a dwelling unit to be	Removed "meeting room reference"	completed
,,,	used for people to gather for personal and/or professional purposes. Consideration for removal		completed
RA Quick view.	Area and bulk category 1. A category should read "Usual farm structures and single and two family dwellings not to exceed three dwelling units.	Category re-worded	completed
	Remove single family dwellings (50+acre tract)	Removed (echoing 5/28/19 QV)	completed
	Remove single family attached dwellings (50 + acre tract)	Removed (echoing 5/28/19 QV)	completed
	Remove two family dwellings (50+acre tract)	Removed (echoing 5/28/19 QV)	completed
	Remove "Single –family /two family dwellings (one dwelling for every 50 acres of a primary use, not to exceed 3 dwellings on any one lot".	Removed (echoing 5/28/19 QV)	completed
	Add to area and bulk category 2 " One single family detached dwelling (for every 50 acres of a primary use- as determined and calculated before the subdivision).	Removed (echoing 5/28/19 QV)	completed
	Area and bulk category 2 dimensions. For category 2 the building and impervious coverages are both listed as 30%. Suggest that the total impervious coverage be changed to 50%.	Updated to 50%	completed
RA , RR and AR Quick	Accessory uses lists "accessory food operations" as a	Fine-tuned definition; referenced also to Usual farm	completed
View	permitted accessory use in categories 1 and 2. It is not clear based on the definition of Accessory food operation what this use is and why we would want this as an accessory use. Possibly clarify the definition.	structures	
AR Quick View	Area and bulk category dimension table category 2 the	Updated to 30%	completed
	building and impervious surface calculations are both listed as 30%. The total impervious coverage could be listed as 50%.	•	
R-1 Quick View	Area and bulk category 4 the building and impervious	Updated to 50%	completed
	coverage are listed as 30%. The total impervious coverage		
R1-B Quick View	could be listed as 50%. The area and bulk categories dimensions chart for category 4 lists the building and impervious coverage as 20%. The	Updated to 30%	completed
Villerere Ordele Vierre	impervious surface coverage should be 30%. Bed and breakfasts are listed as permitted and conditional	Demondrate Colonia 2	
Village Quick View	use for Category 3. By definition a bed and breakfast is an "owner occupied single family dwelling". Category 3 does not list single family dwelling as a use.	Removed use from Category 3	completed
Office Commercial Quick View	Home based business, no impact is listed as a permitted accessory use for categories 2 and 3. This should be removed. Dwelling units are not permitted.	Removed use from Categories 2 and 3	completed
27-712 Accessory Stru	ct. Recommend changing #1 to only apply to RA and RR zoned properties of less than 5 acres. The proposed version applies to all districts.	Updated to RA and RR	completed
	Recommend changing #2 to only apply to RA and RR zoned properties greater than 5 acres. The proposed version applies to all districts.	Updated to RA and RR	completed
	Recommend amending and maintaining our current language in Chapter 27-204 A-1 (1) to read as follows; for all residential lots (excluding RA and RR zoned lots) of 2 acres or less, the combined square footage of all accessory	Updated per recommendation	completed
	structures may not exceed 25% of the gross useable floor area of the principle building. Maximum of two accessory structures."		
	Recommend amending and changing our current language in Chapter 27-204-A-1 (2) to read as follows: On nonresidential lots or those residential lots (excluding RA and RR zoned lots), the combined square footage of all accessory structure shall not exceed 50% of the area of the principle [sic] building on the same lot. Maximum of two accessory structures.	Updated per recommendation	completed
27-207.B Request for Reasonable	Letter D should be changed to Board of Supervisors instead of "Board of Commissioners".	Updated Supervisors	completed
Accommodations 302.B.2.b.14)	Lighting shall be provided for transit services.	"If said service facility is on the lot, a shelter and seating with lighting shall be provided."	completed
302.G	A. Post Final. Comment on potential re-wording	As per PA MPC	No change
303.B.4 402.C.11	reference to Chapter 25 40%	added "Chapter 25, Trees" revised 'or through the conditional use process provided for in paragraphs .D through .G below, at least "40%" of healthy trees on the site shall be maintained or replaced immediately following construction. Replacement trees "shall be native species to Pennsylvania" and shall have a'	completed completed
		·	
403.A.4	Question posed: Do homeowners associations have control over some of these areas, if not, should we add "or" HOA?	deleted "25%" Added "or as otherwise stipulated by the Ferguson Township Stormwater Management Ordinance." at end of sentence	completed
	•	-	

erguson rownsnip			//3/19
Ordinance Section 403.B.2	Comment Series of questions posed as related to federal references and impacts	Manner Addressed Updated per 5/28/19 comments: 3) Lands, water bodies and wetlands as regulated by State and/or Federal designation 4) Similar land and/or water to those outlined above as encountered during the process of subdivision and land development within Ferguson Township.	Status completed
404A, D and E	Align Airport name if applicable; account for interior and exterior permit needs and wording on variances	Aligned Airport name; no other update found to be applicable	completed
405.G.1 Part 5 701.C.1 and 701.C.2	Complete consistency between updated land use names Designations/Listing of Conditional Uses/Special Exceptions to be consistent with Quick Views Change back to current wording	Aligned Land Use terms Aligned uses and criteria; updated DD. Water Authority reference Returned to original language; shift from 2017 memo	completed completed
707.A.2 707.A.2.g	Question of where the plant list is general mark-up	requested direction Plant list is in same section per Subsection G. added "Mitigate stormwater runoff on site and improving the	no change
707.B.2	general mark-up	quality of this water through the use of vegetation." added "provided it is not recognized as an invasive plant by the Commonwealth of Pennsylvania Department of	•
707.B.3 707.B.6	have arborist participate in review rather than engineer general mark-up	Conservation & Natural Resources." added "and Township Arborist" added "6. All landscaping plans should be verified by the Zoning Administrator and Township Arborist with	
707.G.1	general mark-up + Do we need to go above and beyond what is stated in our plant list guide plantings?	consultation from the Tree Commission." added "height of at maturity of at least 30 feet with a spread of at least 30 feet"	completed
707.H.1	general mark-up + If feel if the tree is not susceptible to invasive, then ever if they are not on the list – can be kept	deleted "minimum height of 20 feet at maturity" added "strongly" encouraged and substituted for one new tree "that is listed on Township's official plant list";	completed
		deleted "The existing tree must be listed on the Township's official plant list or determined by the Township to not be susceptible to invasive growth."	
		revised "All changes to the existing hedgerow or forested area must be approved by the Township Zoning Administrator and Township Arborist with consultation from the Tree Commission."	
707.H.2	should	retained "may be" as should and may are parallel in the Ordinance	no change
707.H.3	why?' noted in mark-up	retained "In an area where the canopy trees will not allow for the planting and growth of understory trees, four shrubs could be planted in lieu of each required understory tree." per 12/2019 Township Staff Coordination discussions to date	•
707.H.4	general mark-up	Added "substitution or removal of existing vegetation must be approved by the Zoning Administrator and Arborist with consultation for the Tree Commission."	•
		Deleted "substitution must be verified by the Zoning Administrator"	
707.I	Wording requested as related to preservation	Included equation	completed; no additonal comments submitted
707.E and 707.M.2 707.M.2.a-d; f	Resolution 2014-25 reference "why are these [tree/shrub ratios] not the same?" (Arborist); The tree Commission feels that canopy density is to sparse i.e. canopy tree density could be increased."	Techanical title included reviewed with Township Staff in May 2019 were refined as applicable of the above and incorporated into the May 2019 draft	completed
707.M.2.e 707.M.3.b	6 what simplify	added " if preserved" bufferyard language adjusted per coordination and mark-up of Township Staff	completed completed
707.M.3.c(2)	numbers should be examined (Arborist); TC would like to know how the density of vegtation, including trees, can be increased"	reviewed with Township Staff in May 2019 were refined as applicable of the above and incorporated into the May 2019 draft	completed
707.M.3 707.M.3c following	avoid mulch volcanoes crossed out, then "no"	Text refined retained existing per cancellation of cross-out	Align with construction specification/detail no change
table 707.N.1	allow no curb for stormwater - required	no change to text	Align with Chapter 26
707.IN. I	allow no curb for slottifiwater - required	no change to text	Stormwater Management and Township Construction Details
707.N.4	general mark-up (Arborist); TC feels should be revised to increase inclusion of vegetation Mititgate stormwater runoff Improve water through the use of vegetation	no ratios received per Summer/Fall 2018 inquiries; per 12/2018 deleted "No islands are required in parking lots that are less than 62 feet in width as long as perimter planting is used around the entire parking lot with the exception of where the parking lot abuts the building."	align stormwater items in Chapter 26; revised
707.N.4 707.N.5 711	parking space quantity references change 45 to 40 Simplify reference to notification	retained quanitities per deletion of islands comment revised 45s to 40s Updated language to "written form"; removed mail reference	completed completed completed

* 2017-2018 Township Staff comments incorporated into previous drafts

completed

Ordinance Section Comment Manner Addressed Status completed One definition in ordinance; Page 110 Conditional In 717 - Supplemental regulations for those bed and Use/Special Exception , letter E lists a minimum of 4 rooms breakfasts permitted by right have been modified; Bed and shall be offered as part of this use; In the RA, RR bed and breakfasts were removed from R1-B in Spring 2019; breakfasts are permitted accessory uses , 1 to 3 rooms and 4 definition fine-tuned to 10 rooms are permitted; In the R-1, $\,$ 1 to 3 rooms are permitted; It does not appear that bed and breakfasts are permitted in other zoning districts for example the R1-B; It does not appear that there are any standards or criteria for a bed and breakfast Part 8 Series of questions posed No changes No changes 904 Phasing question Per general process No changes general mark-up 1102 refined canopy tree definition "shall reach a height of at least completed 30 feet with a spread of at least 30 feet." Other definitions updated per coordination of 5/28/19 mark-completed up received 6/11/19 * All other Tree Commission-related comments reviewed with Township Staff in May 2019 were refined as applicable of the above and incorporated completed into the May 2019 draft *2018 Ag Ad Hoc Committee comments focused on land uses updated in 2018 and 2019 completed Reminaing associated Ag AdHoc Committee comments otherwise pertinent to all other changes completed completed

erguson Township Ordinance Sectio	on Comment	Manner Addressed	7/3/19 Status
3 SALDO Ordinance Sectio 103.F	on Comment general mark-up	Manner Addressed Added "Promoting the desirability of Ferguson Township as a place live, work and do business through maximum strategic use of vegetation. Vegetation, in particular trees and shrubs, is known to be effective in mitigation the effects of heat islands by reducing amount temperature; water filtration and purification; stormwater management; improving air quality; providing habitat for pollinators, birds and wildlife; improving the aesthetics and priority values of neighborhoods and commercial developments; and ongoing civic engagement by improving the walkability of transportation corridors."	Status completed
303.C 304.C.1 401.A.1.b.3(i)	Staff coordination; general mark-up Staff coordination; general mark-up general mark-up	added Tree Commission to Final Plan review list Inventory of theses over 6" diameter trees to preserve, trees to remove	completed completed For inclusion within Tree Preservation Ordinance rather than SALDO
22-501			not completed - scale of text
502.E.7	general mark-up	refined "approval of the Township Engineer after consultation with the Township Arborist"	completed
502.A	general comment	Use vegetation to design streets as gardens or forest. Use vegetation for traffic commute, improving aesthetics of neighborhood street, mitigating heat island effort on streets	completed; Align with design specifics/construction standards
503.C	general comment	request to Add Mid-block walkways encourage ground cover on one or both sides of walkway or other kind of suitable vegetation; no change as already included in document	completed
509	general comment	percentage of the impervious surface. Canopy width is just as important as height of tree as maturity	general reference made to Code of Ordinances - text placed in 707 Zoning can remain there or moved to another ordinance.
501A		(reference to Terraced Streetscape District): Intent Add: to the sentence that starts "Adherence to these design standards will ensure that the built environment is attractive and harmonious, with both other parts of the built environment and the natural environment.	completed
504A		Goals Add to specific goals: To ensure maximum use of vegetation in the design and green practices during development. (Another way to say this is: To ensure sustainability of the development.)	completed
505A			completed
506A		Design Principles B. 4: Use landscaping, green space and existing vegetation to address traffic calming, aesthetics, issues of identity, territoriality and privacy. (mentioned later if Section 507A).	completed
507A 509A			not completed - scale of text
		planter beds: Can these be built as rain gardens? Four feet is not wide enough for trees; the authors of "Low Impact Development" recommend six or eight feet Make sure the wells are deep enough for trees as well as wide enough Planter beds: Design and install to accept stormwater? Through use of openings in planter curbs; related to rain garden concept g) Still A3: Language is weak as is. Use this concept as an incentive to strengthen? A.5: Re: street trees: again, specify canopy size; canopy width needs to be proportional to combined width of sidewalk and street to mitigate heat island effect	
513A		Storefront Design add) F. Encourage use of vegetation as enhancement for storefronts.	completed
513.B.2b	comments provided on 513.A.2 and 3.	the definition of community facilities; and e.g. Preserve 1 acre of forest land in Lieu of 4 acres of parkland of similar equivalent"	completed
		Refined: The amount of of parkland to be dedicated in each development shall be determined "based upon the calculation identified within Township Fee Schedule or approved equivalent."	
		Therefore, A.3 edits not applicable. Community facilities are not part of calculation, so A.2 definition request not applicable.	

Zoning Ordinance Ferguson Township	DRA	FT	
Ordinance Section 513.B.5 and 6	Comment request provided to add: "Natural Areas" as one of the criteria for the BOS in determining if the land is accessible for dedication as parkland and Tree Commission: "Natural Areas" is addition to accessory bicycle and pedestrian parts as parkland.	Manner Addressed No change per Township Staff Coordination discussions to date	Status no change
514A		Corner Building Sites. A. 3: Encourage use of vegetation to create public spaces.	completed
515A		Parking Structures and Incentives A. Design: Add green roof to parking structures; it's mentioned in incentives but add it to design?	·
501B	general mark-up	A. 1. h. 1): Reference to removing invasive species: Work in cooperation with the Township arborist to identify invasive	completed

species.

parking areas

Ratios and references revised

A.5.: Parking, parking lots, parking structures; a.14):

Landscaping standards: Add stormwater management and

heat mitigation as two more functions of landscaping in

Parking Page 95. Too many sentences stating Required off-street parkina.

general mark-up

501B

Page 96. # 17 Car Washes parking is listed as "4 stalls + 1 vacuum unit". This should probably be listed as 4 stalls per wash/detail bay and 1 space per vacuum unit.

Page 96 #31 Eating and drinking establishments, sitdown." 1 space per 50 square feet of net indoor floor area plus 1 per 4 chairs of outdoor seating." It is my opinion that the outdoor seating should be based on area not the number of seats. The number of chairs can change in an area.. I space per 100 square feet of outdoor seating area would be sufficient.

Page 97 #48 Hotels and motels. "1.2 spaces per rooming unit" Should this be changed to room instead of rooming unit?

Page 98 #74 Retail Establishments, General. 1 space per 200 square feet of net floor area. The current ordinance has statement that for retail establishments only those areas used to consummate retail sales are counted for the parking calculations. Storage areas are excluded.

The ordinance no longer has spillover parking. There are times that spillover parking is needed, especially in townhouse and multi- family developments.

Page 103 the diagram at the top of the page has the wrong width listed for parking space. The width is listed as 10'. The ordinance states the that the width is 9'. Realize that this is an old diagram, but it should be corrected.

* All other Tree Commission-related comments reviewed with Township Staff in May 2019 were refined as applicable of the above and incorporated completed into the May 2019 draft

* 2017-2018 Township Staff comments incorporated into previous drafts

completed

EPD, LLC

7/3/19

completed (now

subsection 13)

completed



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

July 3, 2019

Ferguson Township Planning & Zoning Department 3147 Research Drive State College, PA 16801

Ronald A. Seybert, P.E., Ferguson Township 3147 Research Drive State College, PA 16801

Steve Bair, Director, Centre Region Fire Protection 400 West Beaver Ave State College, PA 16801 Mr. James May, Director, CRPA; CATA & Pam Adams
DELIVER TO James Way/CRPA FIRST
Centre Regional Planning Agency
2643 Gateway Drive
State College, PA 16801

Joe Green, Esquire 115 East High Street Bellefonte, PA 16823

Raymond J. Stolinas, AICP Director Centre County Planning & Community Development 420 Holmes Street Bellefonte, PA 16823

Enclosed please find a copy of the following Land Development Plan for your review:

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.

<u>Please Reference ES # 399 in all Correspondence.</u> Kindly have review comments back to me by Wednesday, July 17, 2019, (Plan Expiration date is Friday, August 16, 2019).

Thank you.

Sincerely,

cc:

Correspondence File/Plan File/Faith Norris/Paula Hockenberry

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

COMMONWEALTH OF PENNSYLVANIA ACT NO. 287

HE 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

GREENSBURG, PA 15601

CONTACT: ROBERT PAINTER

EMAIL: rpainte@firstenergycorp.com

WEST PENN POWER 800 CABIN HILL DRIVE

ROOM B100N

STATE COLLEGE, PA. 16801

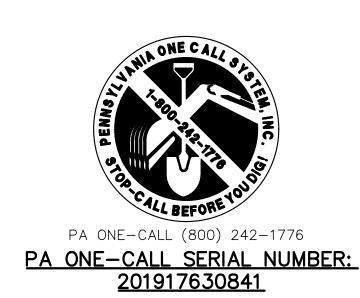
EMAIL: cleidi@twp.ferguson.pa.us

THE FOLLOWING IS A LIST OF MEMBERS LOCATED WITHIN THE PROJECT AREA: UNIVERSITY AREA JOINT AUTHORITY WASTEWATER: 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 (814) 238-0885

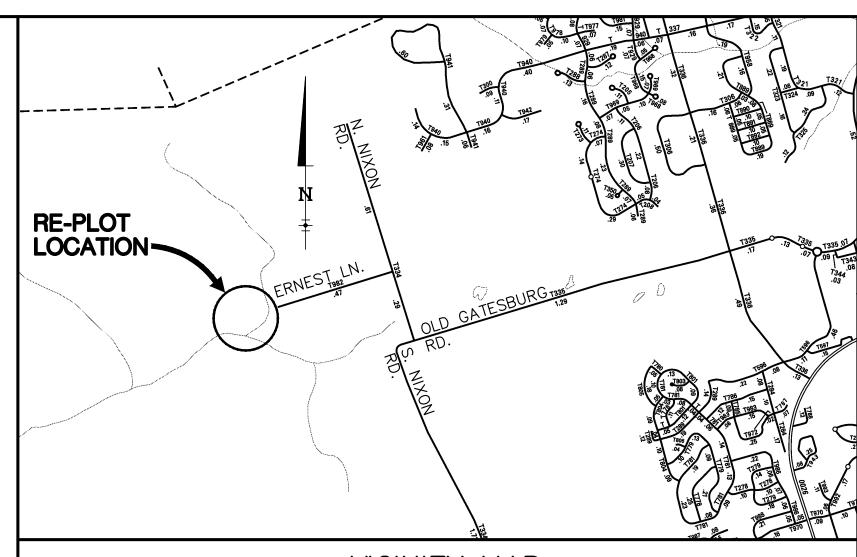


GWIN DOBSON & **FOREMAN ENGINEERS** 3121 Fairway Drive Altoona, PA 16602 814.943.5214 gdfengineers.com

PROJECT NOTES 1. 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. 16803 STATE COLLEGE, PA. 16801 B. TAX PARCEL: 24-003-007F-000 24-003-007K-000 C. DEED BOOK / PAGE: 410 / 533 639/922 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 = 50' FRONT = 50'SIDE = 100SIDE = 50'REAR = 50REAR = 75G. MAXIMUM HEIGHT: 40' AGRICULTURE H. EXISTING USE: WELL FIELD PROPERTY I. PROPOSED USE: ADDITION TO WELL FIELD PROPERTY AGRICULTURE N/A J. MAXIMUM BUILDING COVERAGE: 15% 10% K. MAXIMUM IMPERVIOUS COVERAGE: 50% 3061 ERNEST LANE L. PROPERTY ADDRESS: 3062 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.I: 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. EXISTING FIRE HYDRANT FLOW DATA: 3062 ERNEST LANE 102psi 74psi 2050gpm 6/22/18 (WELL FIELD) ERNEST LANE

FIRE CHIEF INDEX OF DRAWINGS PROFESSIONAL LAND SURVEY CERTIFICATION CS-1 COVER SHEET OVERALL INDEX PLAN EXISTING CONDITIONS PLAN (NORTH EXISTING CONDITIONS PLAN (SOUTH) IN THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THE PROPOSED RE-PLOT PLAN (NORTH) PLAN CORRECTLY REPRESENTS THE TRACT OF LAND SHOWN. PROPOSED RE-PLOT PLAN (SOUTH) NO. DATE DESCRIPTION

REVISIONS



VICINITY MAP

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)

ON THIS, _____ DAY OF _____, 20__, THE UNDERSIGNED OWNER(S), PERSONALLY APPEARED 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

WITNESS MY HAND AND SEAL, THIS DATE _

NOTARY PUBLIC 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

SECRETARY

FERGUSON TOWNSHIP BOARD OF SUPERVISORS

FERGUSON TOWNSHIP BOARD OF SUPERVISORS APPROVED

SECRETARY

FERGUSON TOWNSHIP ZONING OFFICER FERGUSON TOWNSHIP ZONING OFFICER APPROVED

ZONING OFFICER

FIRE CHIEF CERTIFICATION

SEAL

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

DRAWN BY: RLN

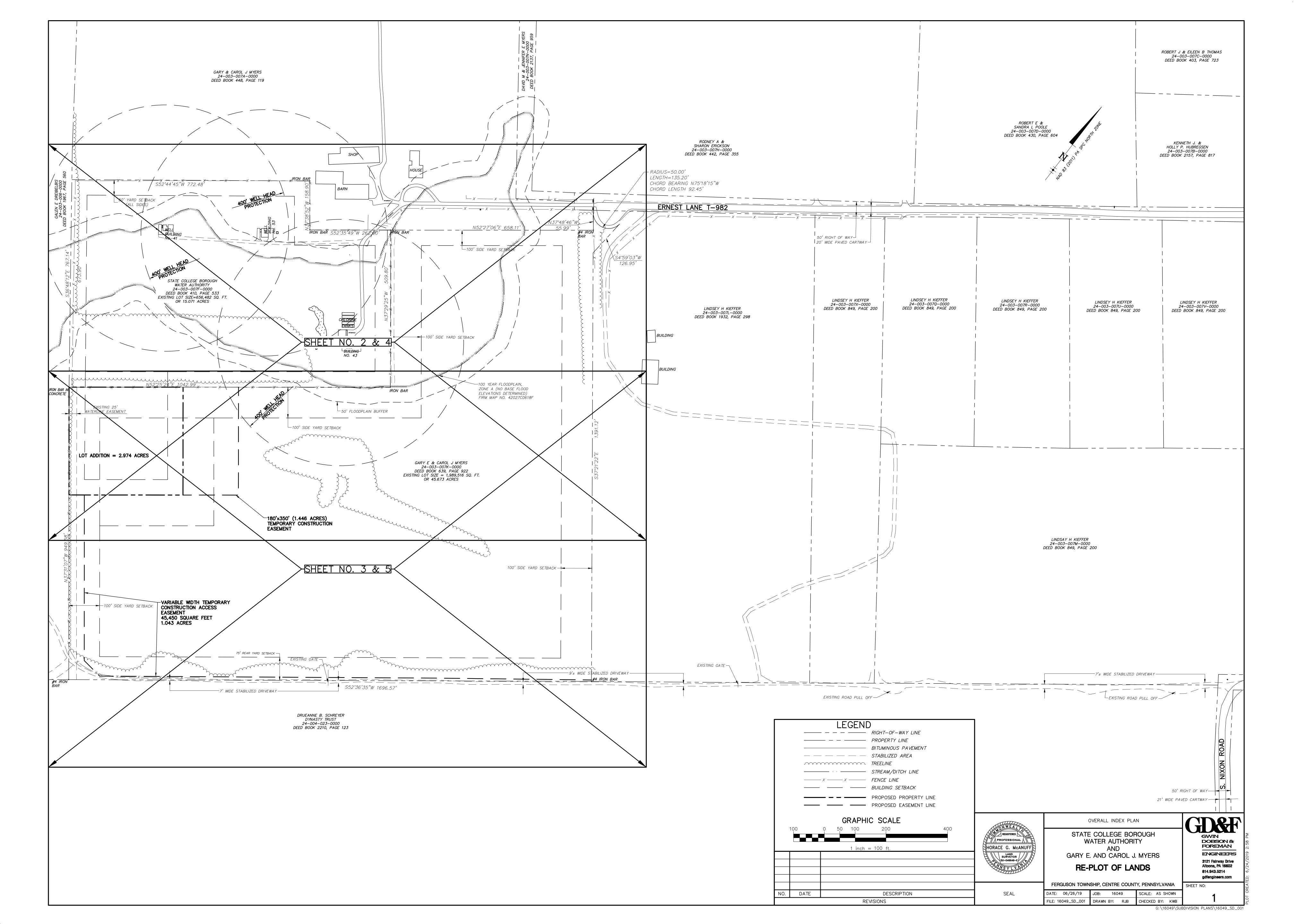
COVER SHEET REGISTERED STATE COLLEGE BOROUGH PROFESSIONAL / WATER AUTHORITY HORACE G. McANUFF LAND SURVEYOR SU-046649-E GARY E. AND CAROL J. MYERS **RE-PLOT OF LANDS**

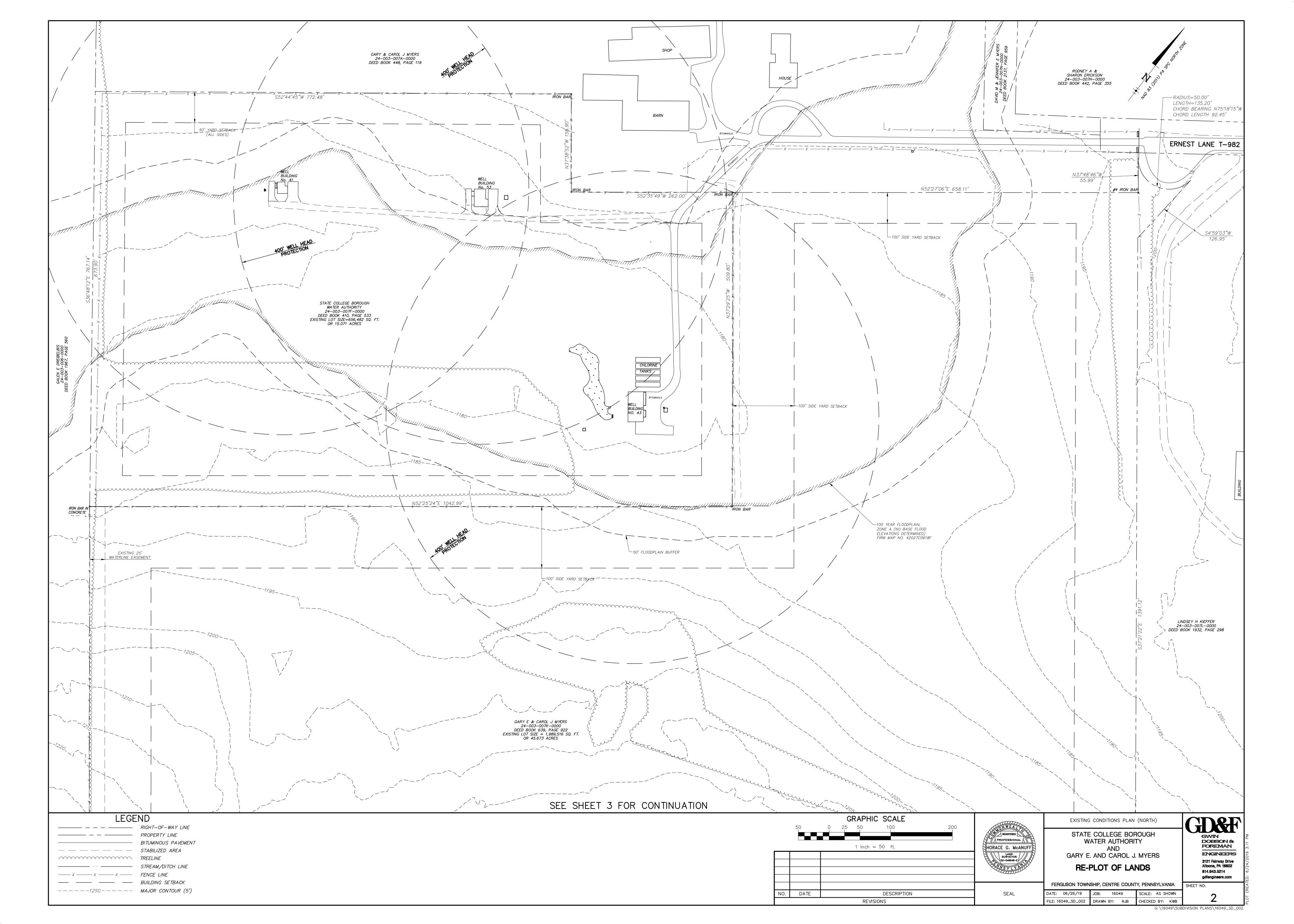
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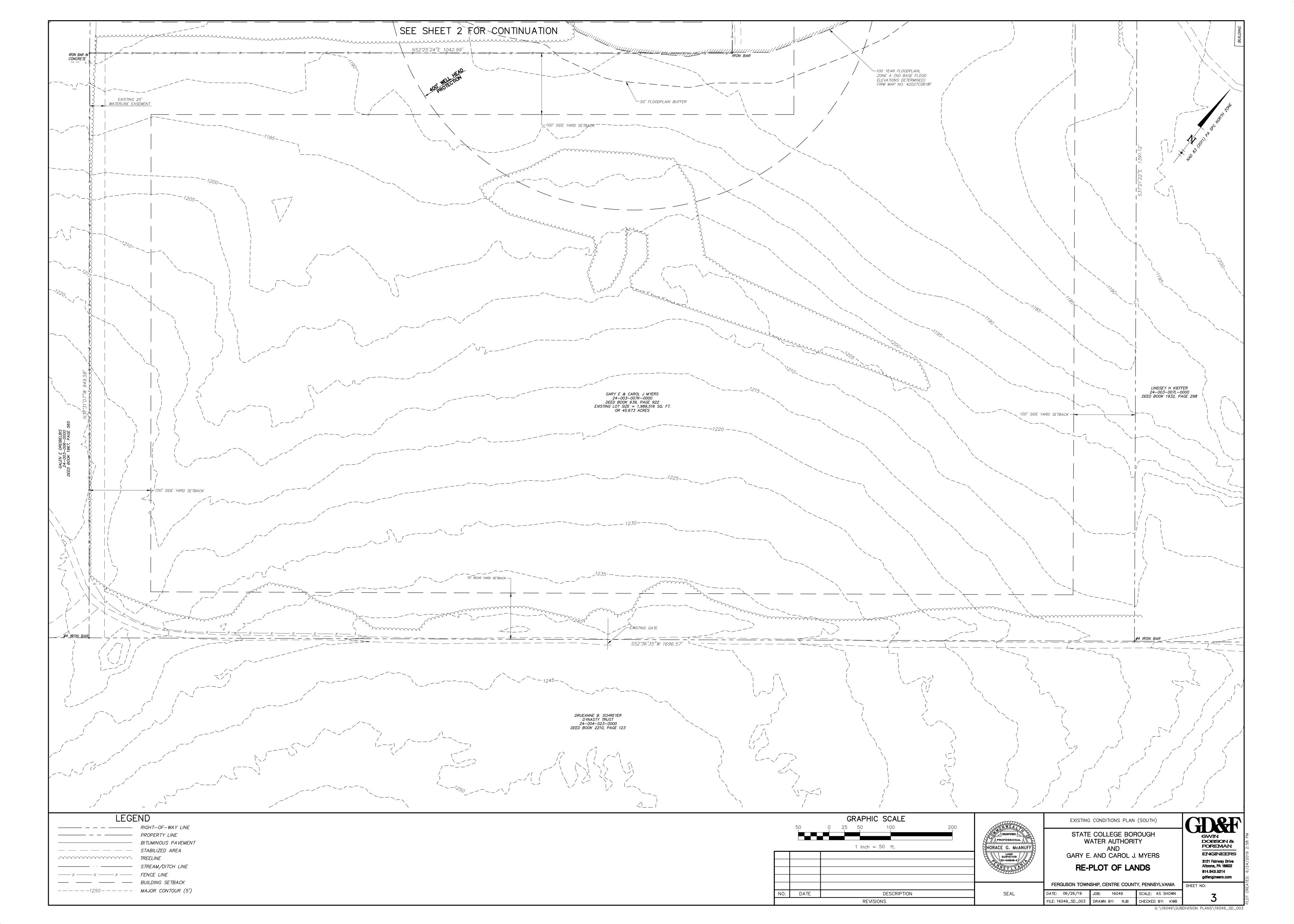
DOBSON & FOREMAN **ENGINEERS** 3121 Fairway Drive Altoona, PA 16602 814.943.5214 gdfengineers.com FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA DATE: 06/26/19 JOB: 16049

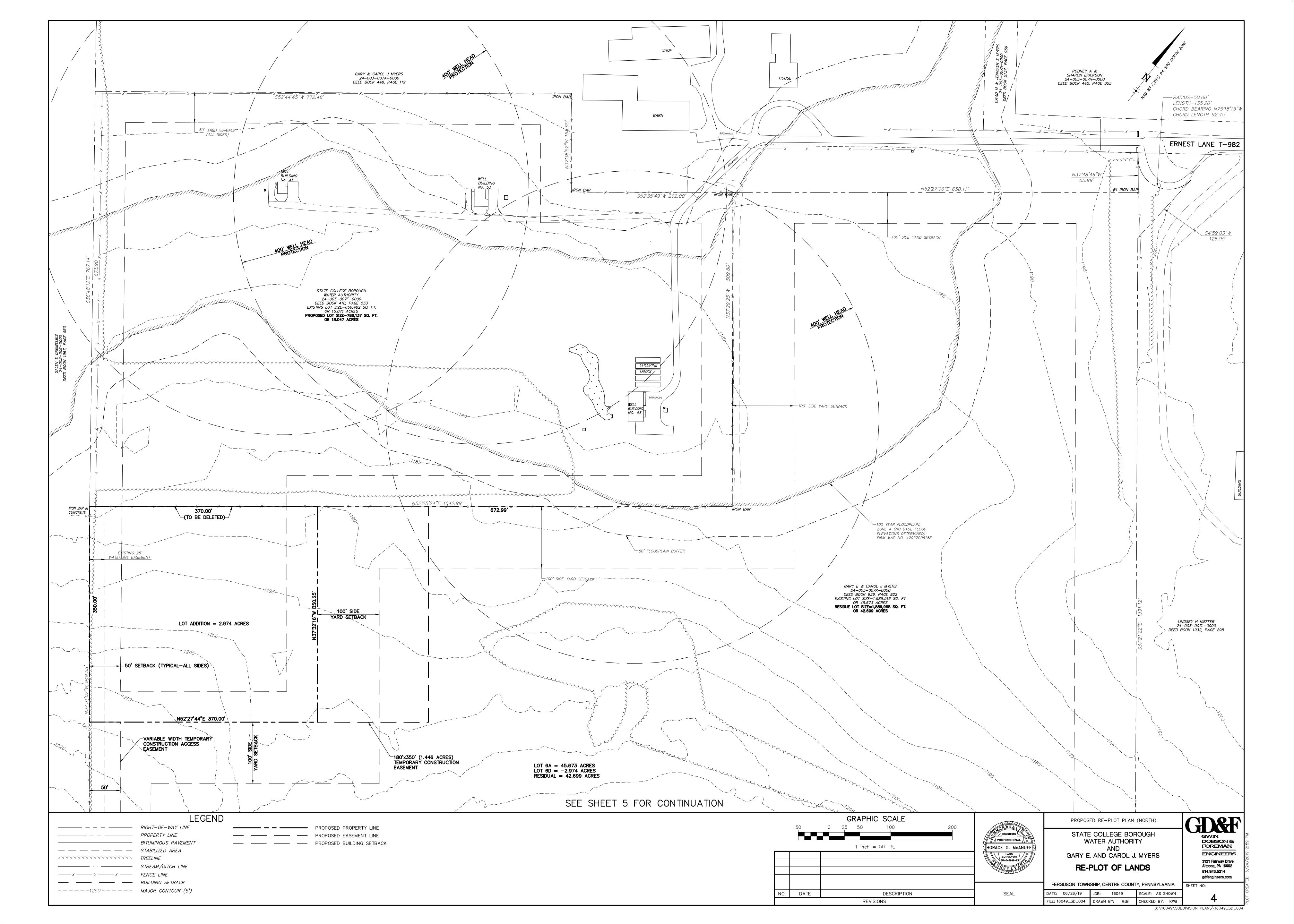
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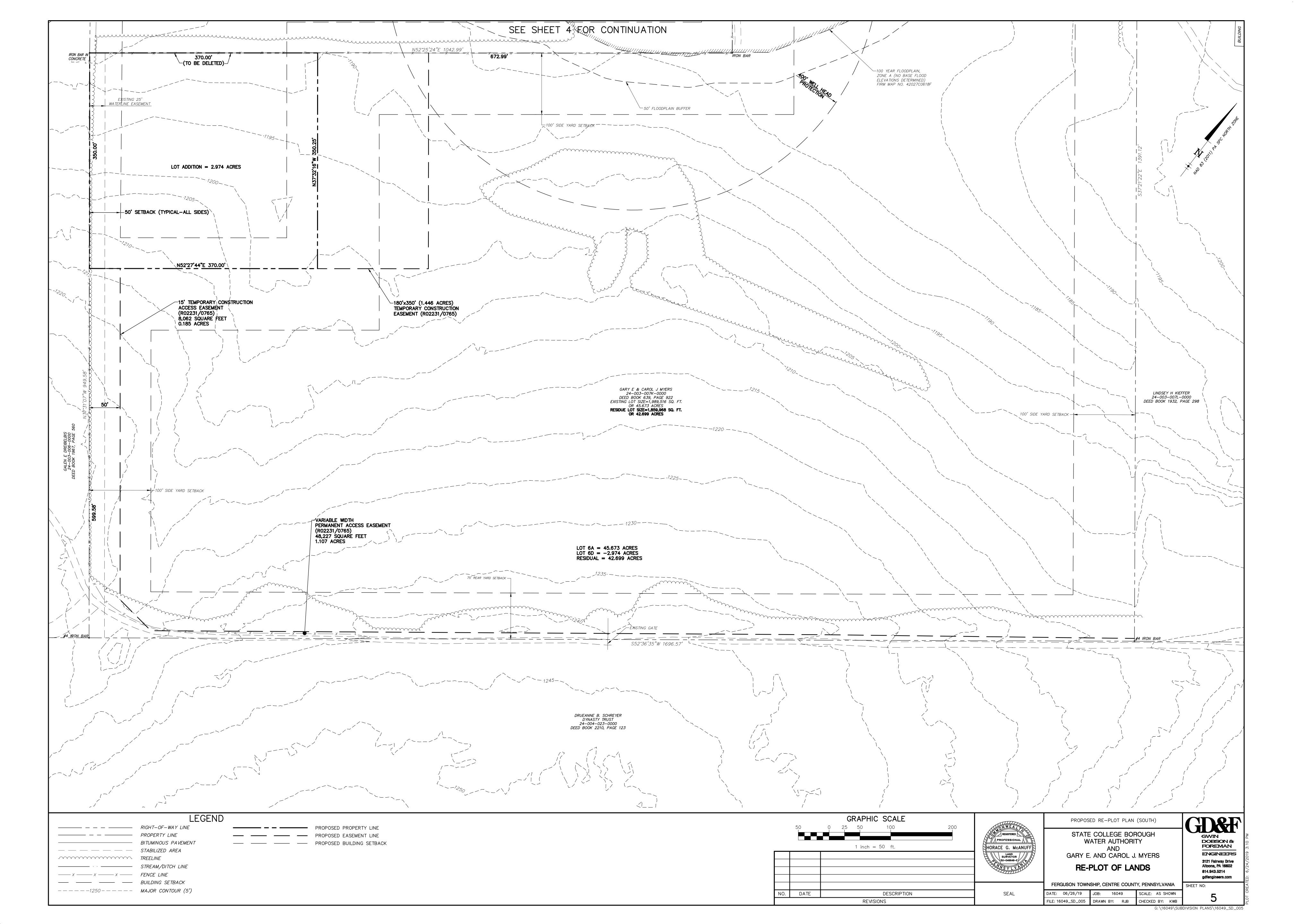
G: \16049\SUBDIVISION PLANS\16049_SD_CS













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

July 3, 2019

Ferguson Township Planning & Zoning Department 3147 Research Drive State College, PA 16801

Raymond J. Stolinas, AICP Director Centre County Planning & Community Development 420 Holmes Street Bellefonte, PA 16823

Steve Bair, Director, Centre Region Fire Protection 400 West Beaver Ave State College, PA 16801

Ronald A. Seybert, P.E., Ferguson Township 3147 Research Drive State College, PA 16801

Ed Poprik, Director of Physical Plant Panorama Village Building 240 Villa Crest Drive State College, PA 16801 Scott Brown, NTM Engineering, Inc. 341 Science Park Road, Suite 203 State College, PA 16803

Mr. James May, Director, CRPA; CATA & Pam Adams

DELIVER TO James May/CRPA FIRST

Centre Regional Planning Agency

2643 Gateway Drive

State College, PA 16801

Joe Green, Esquire 115 East High Street Bellefonte, PA 16823

Howard Fescemyer, Ferguson Township Tree Commission 621 Old Farm Lane State College, PA 16803

Lance King, Township Arborist 3147 Research Drive State College, PA 16801

Enclosed please find a copy of the following Land Development Plan for your review: 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.

<u>Please Reference ES # 399 in all Correspondence.</u> Kindly have review comments back to me by Wednesday, July 17, 2019, (Plan Expiration date is Friday, August 16, 2019).

Thank you.

Sincerely,

cc:

Lindsay K. Schoch

Interim Planning & Zoning Director

Correspondence File/Plan File/Faith Norris/Paula Hockenberry



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

TO: Ferguson Township Planning Commission

FROM: Lindsay K. Schoch, Interim Planning and Zoning Director

DATE: July 3, 2019

SUBJECT: Active Development Projects & Interim Planning and Zoning Department 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 five (5) Active Plans and two (2) conditionally approved plan.

- Whitehall Road Regional Park Phase 1: Stahl Sheaffer 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 September 9, 2019. Plan currently under review. Variance request scheduled for the July 23, 2019 Zoning **Hearing Board.**
- 2. Orchard View Land Development Plan: This land development plan, submitted by Penn Terra Engineering on behalf of the applicants, Aspen Whitehall Partners, LLC proposed 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. The Plans were submitted to staff on Tuesday, May 14 and will be sent to reviewers. Plan Expiration is Tuesday, August 16, 2019. Plan Review Comments sent to Penn Terra for their review and consideration.

- 3. 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. Construction is scheduled to begin in the fall of 2019 and last a year to eighteen months. Prior to the proposed development, the land was actively farmed for the past fifty years. 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. The Plan is currently being reviewed by staff and other required agencies with comments due back to the Community Planner on May 8, 2019. Plan Expiration is July 18, 2019. Plan Comments sent to Penn Terra. Staff waiting for response.
- 4. Harner Farm Subdivision Plan Subdivision of Tax Parcel 24-4-67 and Replot of Tax Parcel 244-67C: 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. The Plan is currently being reviewed by staff and other required agencies with comments due back to the Community Planner on May 8, 2019. Plan Expiration is July 18, 2019. Plan Comments sent to Penn Terra. Staff waiting for response.
- 5. Pine Hall Traditional Town Development General Master Plan: Staff is currently working with the developer and have come up with the following schedule: July 22, staff will ask the Planning Commission for a recommendation. On August 5, the Board of Supervisors will hold a Public Hearing. On August 19, the Board of Supervisors will act on the Plan. Plan Expiration is August 30, 2019. Staff meets with the developer and others to discuss traffic mitigations on July 9, 2019.

Conditionally Approved Plans:

- 1. Hummel Subdivision: Plan shall be recorded by August 4, 2019
- 2. Ferguson Township Public Works Facility: Plan shall be recorded by August 2, 2019

Tentative Schedule moving forward with the Zoning and SALDO Update:

June 24	Planning Commission to reviewed changes and had comments. Staff has gathered all remaining comments and sent to the consultant with the hopes we will receive a memo from EPD outlining where these changes have been made, satisfying staff and the Planning Commission	
July 8, 2019	Planning Commission to review the memo from EPD and the changes, then make a recommendation to the BOS.	
July 15, 2019	BOS Authorizes Advertisement of the Zoning Ordinance, SALDO and Map.	
July 16, 2019	45 day Public Review Period begins	Ordinances go to CRPC, CRPA, County Planning and Community Development Office
August 1, 2019	Centre Regional Planning Commission	Prepare presentation for CRPC
September 14, 2019	End of 45 Day Public Review Period.	
September 16, 2019	Public Hearing of Board of Supervisors	Can hold Public Hearing any time after September 14.

Interim Planning & Zoning Director's Report June 26, 2019

- On June 3, 2019, the Interim Planning & Zoning Director and Zoning Administrator met with Joseph Waters and Alexander Piehl to discuss tax parcel18-4-004, which is a Patton Township property proposed for Commercial Development. The Ferguson Township portion of this property is zoned residential, so we discussed the options. One being a preapplication conference.
- 2. On June 4, the Interim Planning & Zoning Director and Zoning Administrator met to discuss the Traffic Study for Young Scholars.
- 3. On June 5, 2019, the Interim Planning & Zoning Director and Zoning Administrator met with Carolyn Yagle, EPD, to discuss the SALDO and remaining comments.
- 4. On June 7, the Interim Planning & Zoning Director and Zoning Administrator met with Brandi Robinson to discuss an approxmiatly 8 acre property in Pine Grove Mills and how it could be potentially subdivied.
- 5. On June 13, The Interim Planning and Zoning Director met with the Township Manager to review all changes proposed to the Zoning Ordinance and the SALDO and discussed the schedule moving forward; the Zoning Administrator met with the Township Engineer to discuss the requirements for the traffic study and if the school can continue adding students when they are over their agreed upon enrollment numbers; The Interim Planning and Zoning Director met with the Township Manager to discuss Hunters Chase and the existing park land options.
- 6. On June 27, the Interim Planning and Zoning Director met with the Communications Coordinator to discuss planning items for the fall print newsletter.

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

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

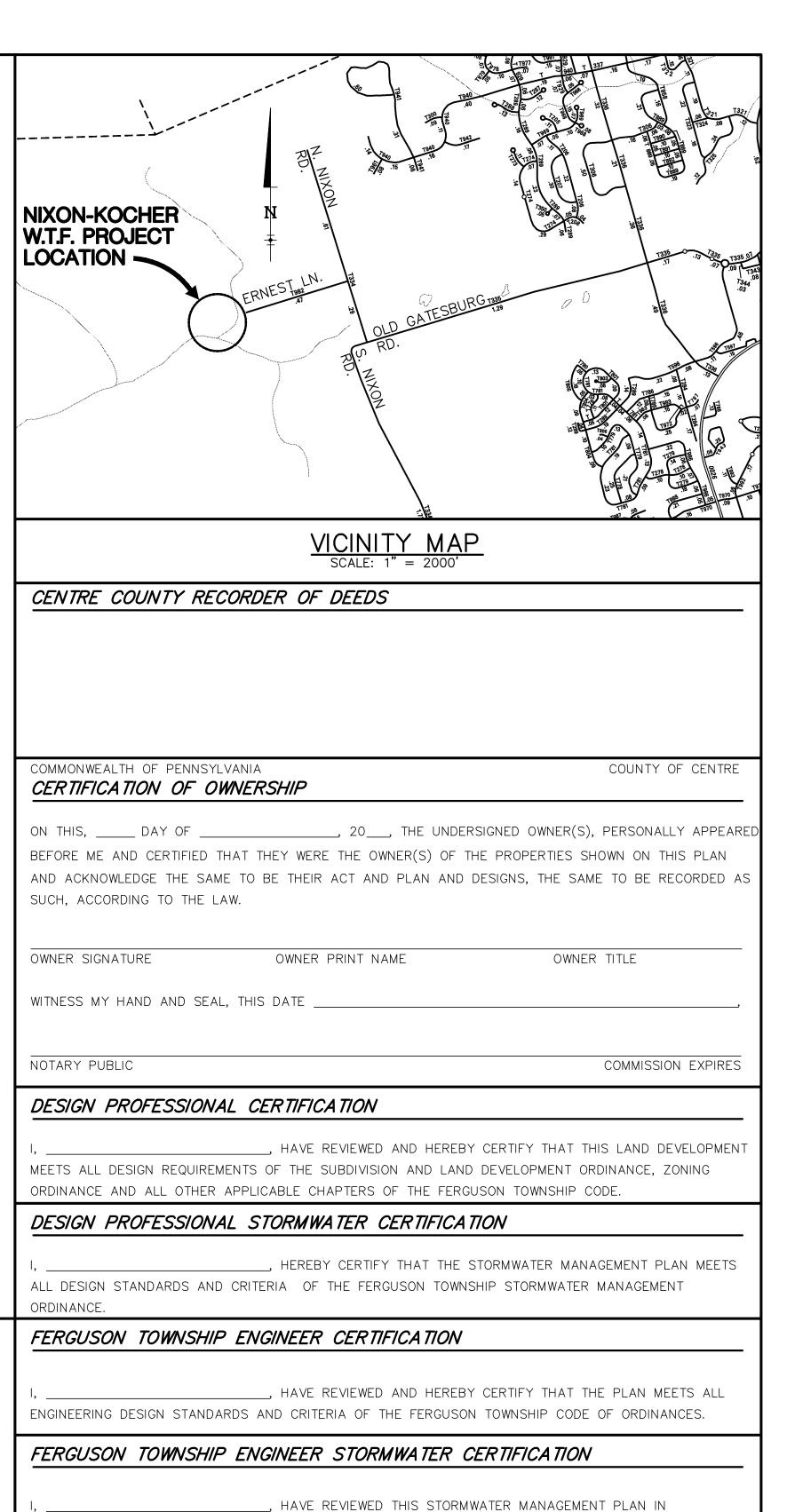
NIXON-KOCHER WATER TREATMENT FACILITY

JUNE 26, 2019



	I, ALL DESIGN STANDAR ORDINANCE.	, HEREBY CERTIFY THAT THE STORMWATER MEDS AND CRITERIA OF THE FERGUSON TOWNSHIP STORMWAT	
PROJECT NOTES	FERGUSON TOW	NSHIP ENGINEER CERTIFICATION	
1. GENERAL SITE/LOT INFORMATION			
A. OWNER/DEVELOPER: STATE COLLEGE BOROUGH WATER AUTHORITY B. TAX PARCEL NUMBER/LOT ACREAGE: 24-003-007F-0000/18.047 C. RECORD BOOK/PAGE NUMBER: 410/533 D. LAND IS ZONED: RURAL AGRICULTURAL (RA)	ACRES I,	, HAVE REVIEWED AND HEREBY CERTIFY THAT STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP CO	
E. BUILDING SETBACK LINE: FRONT YARD = 50' SIDE YARD = 50'	FERGUSON TOW	NSHIP ENGINEER STORMWATER CERTIFICATION	ON
REAR YARD = 50' F. LOT REQUIREMENTS: EXISTING LOT AREA (FOLLOWING RE PLOT) = 786,137 S.F. OR 18.047 ACRES MAXIMUM BUILDING HEIGHT = 40'/PROPOSED G. EXISTING LAND USE: FORESTED LAND/AGRICULTURAL H. PROPOSED LAND USE: WATER TREATMENT FACILITY I. REQUIRED PARKING: 1 SPACE/4000 GFA (19,883 GFA/4000 = 5 S)	MANAGEMENT ORDINA	, HAVE REVIEWED THIS STORMWATER MANAGE HE DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TO NCE.	
AND 1 LOADING SPACE J. PROPOSED PARKING: 7 SPACES (5 STANDARD, 1 ADA AND 1 LOADING	FERCUSON TOW	NSHIP PLANNING COMMISSION	
K. BOUNDARY AND TOPOGRAPHIC INFORMATION BASED ON FIELD INSTE SURVEY COMPLETED BY GWIN, DOBSON AND FOREMAN, INC., COMPL FEBRUARY 9. 2018. L. SOILS INFORMATION FROM UNITED STATE DEPARTMENT OF AGRICULT	RUMENT LETED	FERGUSON TOWNSHIP PLANNING COMMISSION APPROVE	D
NATURAL RESOURCES CONSERVATION SERVICE. M. EXISTING FLOOD PLAIN INFORMATION FROM FIRM MAP NO. 42027CO INDICATED ON THESE PLANS. N. THERE WAS ONE WETLAND AREA IDENTIFIED THROUGH FIELD INVEST	TIGATION		DAT
NEAR THE EXISTING CHLORINATION BUILDING, HOWEVER, THERE ARE WETLANDS WITHIN THE ENVIRONS OF THE PROJECT LIMITS.	CHAIDMAN		DA
O. THERE ARE NO STEEP SLOPES (>25%) WITHIN THE ENVIRONS OF THE PROJECT LIMITS.		INSHIP BOARD OF SUPERVISORS	
2. LOT COVERAGE: A. MAXIMUM BUILDING COVERAGE = 15%	7211003011 1011	FERGUSON TOWNSHIP BOARD OF SUPERVISORS APPROV	 ED
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/C) = 93,804 SQ. FT. (TOTAL OR 1)	, I		DA ⁻
3. DATE OF ZONING PERMIT APPLICATION: JUNE 26, 2019 4. LIST OF APPROVED VARIANCES: (FEBRUARY 26, 2019)	OLIMBMAN		D.A. ⁻
A. §27-213.4: VARIANCE TO ENCROACH UPON THE FIFTY (50) FOOT I	CHAIRMAN RIPARIAN		DA
BUFFER 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	FERGUSUN TUN	FERGUSON TOWNSHIP ZONING OFFICER APPROVED	
FLOODPLAIN D. §27-801.1.H: VARIANCE TO ALLOW CONSTRUCTION ACTIVITIES AND	ZONING OFFICER		DA
IMPROVEMENTS WITHIN THE FLOODWAY E. §27-801.1.1: VARIANCE TO ENCROACH UPON THE FIFTY (50) FOOT			DA
FLOODPLAIN BUFFER F. §27-501.1.A VARIANCE TO MINIMUM LOT AREA (50 ACRES)	FIRE CHIEF CER	CIIFICA IIUN	
G. §27-903 NONCONFORMING USE IN RURAL AGRICULTURAL ZONING D. 5. THE PROPOSED BUILDING IS NOT REQUIRED TO BE SPRINKLERED BASUSE/OCCUPANCY.	ON THE BLAN ARE	D HEREBY CERTIFY THAT THE LOCATION OF FIRE LANES AND ADEQUATE.	O FIRE HYDRANTS SHOWN
6. EXISTING FIRE HYDRANT FLOW DATA:	FIDE OUTE		C 4
HYD # LOCATION STATIC RESIDUAL FLOW I	FIRE CHIEF DATE		DA
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(WELL FIELD) 50002.00 ERNEST LN 82psi 68psi 2000gpm	8/16/17 REGISTERED PROFESSIONAL KENNETH WILLIAM BELDIN, JR.	STATE COLLEGE BOROUGH WATER AUTHORITY	GWIN DOBSON & FOREMAN
	ENGINEER No. PE081568	NIXON-KOCHER WATER TREATMENT FACILTY	ENGINEERS 3121 Fairway Drive Altoona, PA 16602 814.943.5214
		FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA	gdfengineers.com SHEET NO:
NO. DATE DESCRIPTION	SEAL	DATE: 06/26/19 JOB: 16049 SCALE: AS SHOWN	

REVISIONS



DRAWN BY: RLN

FILE: 16049_LD_CS1

CS-1

SEAL

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:

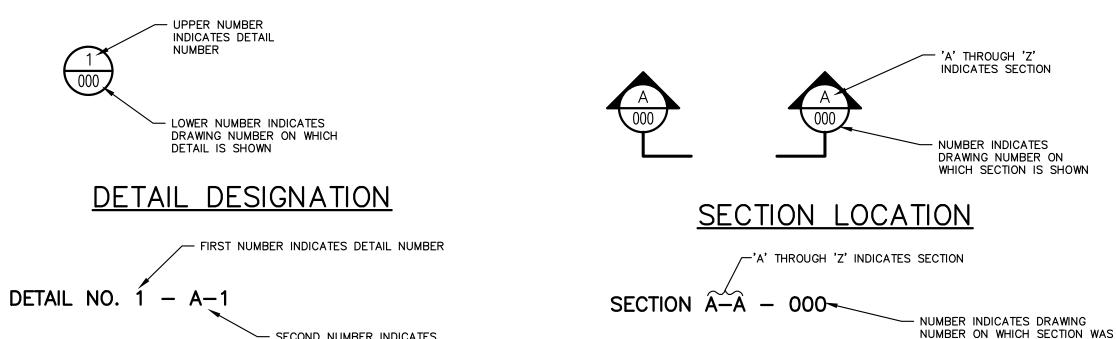
UNIVERSITY AREA JOINT AUTHORITY 1576 SPRING VALLEY ROAD STATE COLLEGE, PA. 16801 WASTEWATER: CONTACT: MARK HARTER EMAIL: mharter@uaja.com (814) 238-8370

PENN STATE UNIVERSITY WASTEWATER TREATMENT PLANT 501 UNIVERSITY DRIVE STATE COLLEGE, PA. 16801 CONTACT: JEFF MCDONALD EMAIL: jam86@psu.edu

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

STATE COLLEGE BOROUGH WATER AUTHORITY 1201 WEST BRANCH ROAD STATE COLLEGE, PA. 16801 CONTACT: STEVE ALBRIGHT EMAIL: steve@scbwa.org (814) 238-0885

> PA ONE-CALL (800) 242-1776 PA ONE-CALL SERIAL NUMBER:



DETAIL IDENTIFICATION

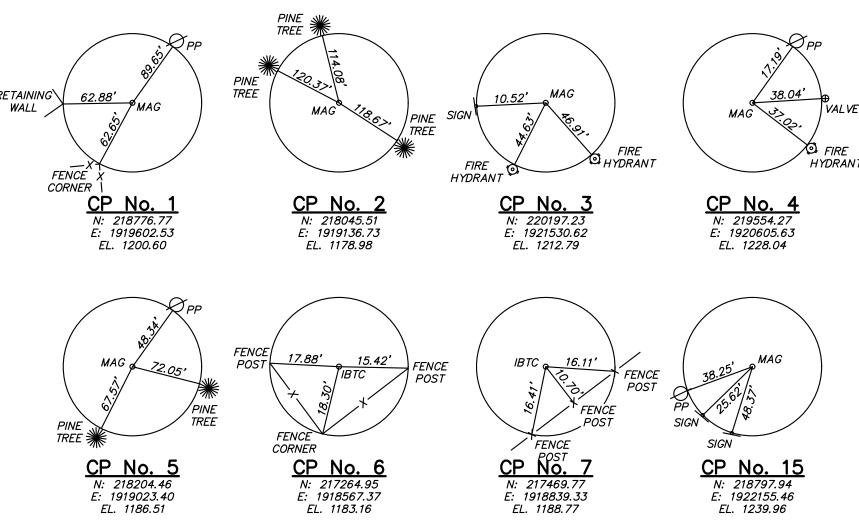
SECOND NUMBER INDICATES

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ONE DRAWING

SECTION IDENTIFICATION

TAKEN — USE TYPICAL IF TAKEN ON MORE THAN ONE DRAWING



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

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

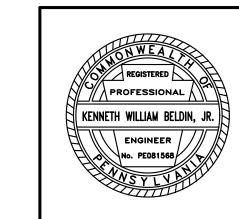
ABBREVIATIONS:

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

DATE DESCRIPTION REVISIONS



SEAL

ONE CALL AND NOTES STATE COLLEGE BOROUGH

DRAWING INDEX, REFERENCES, BENCHMARKS,

WATER AUTHORITY

16049

DRAWN BY: RLN

FILE: 16049_LD_CS2

NIXON-KOCHER WATER TREATMENT FACILTY

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA DATE: 6/26/19

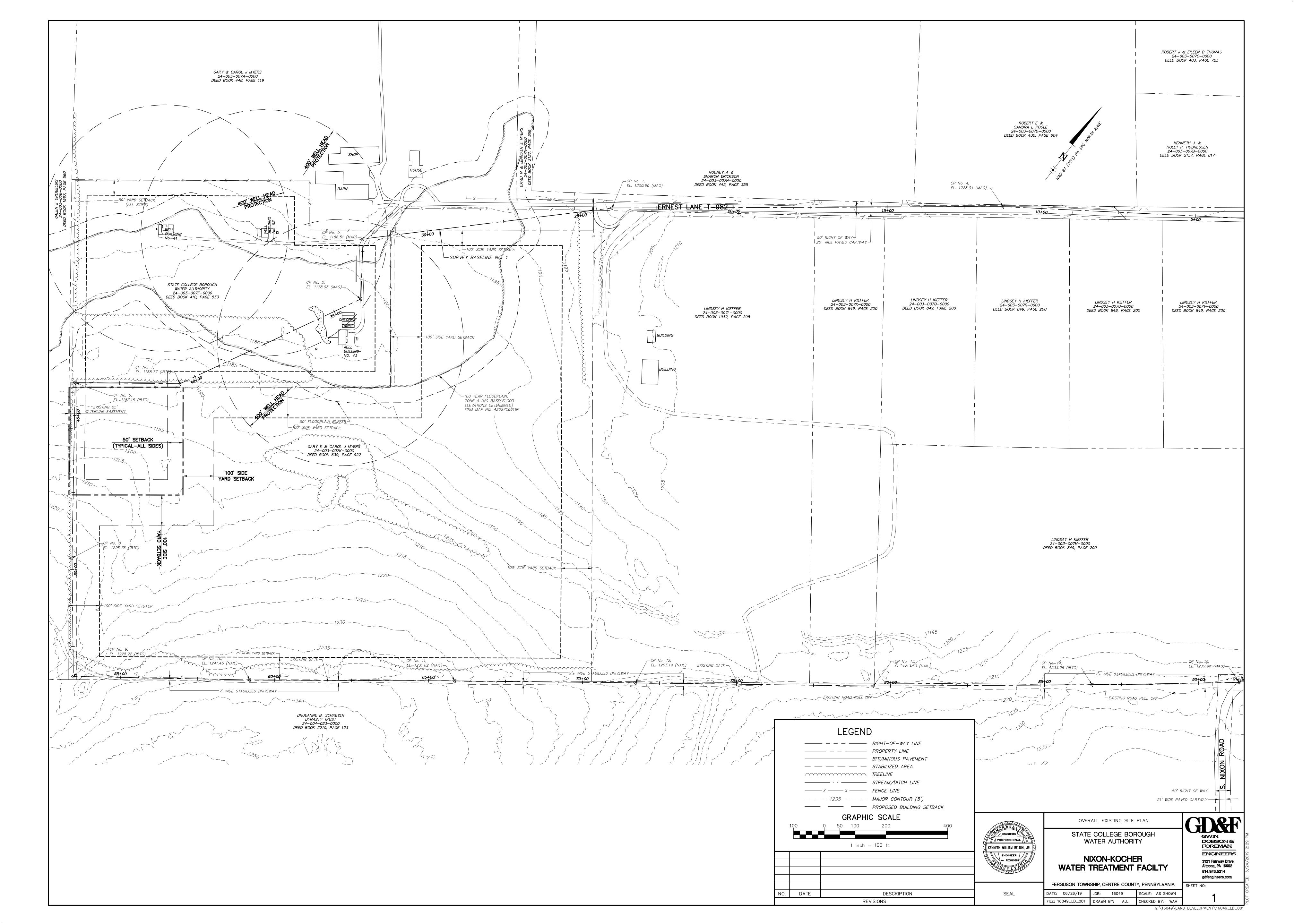
DOBSON & FOREMAN

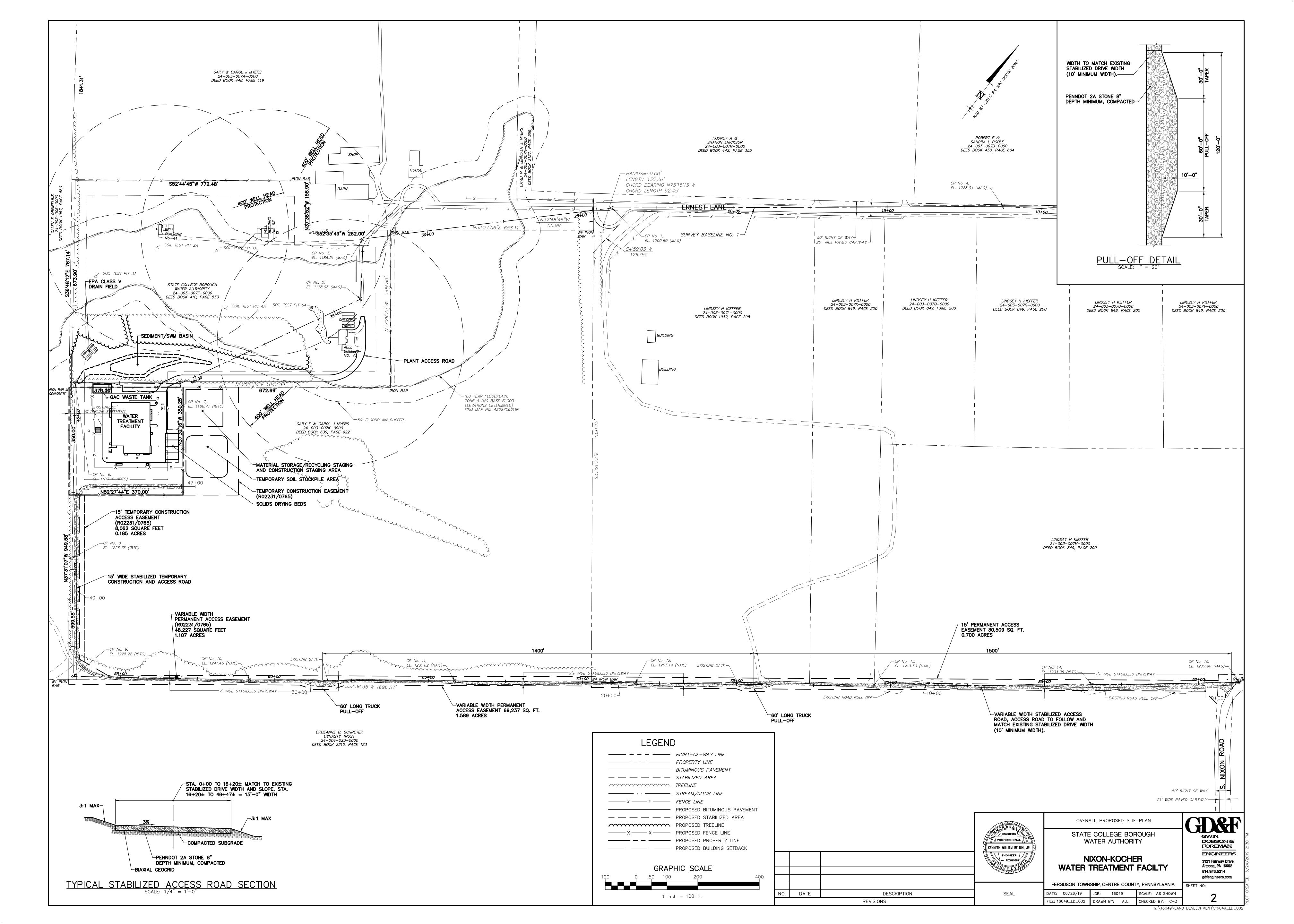
ENGINEERS

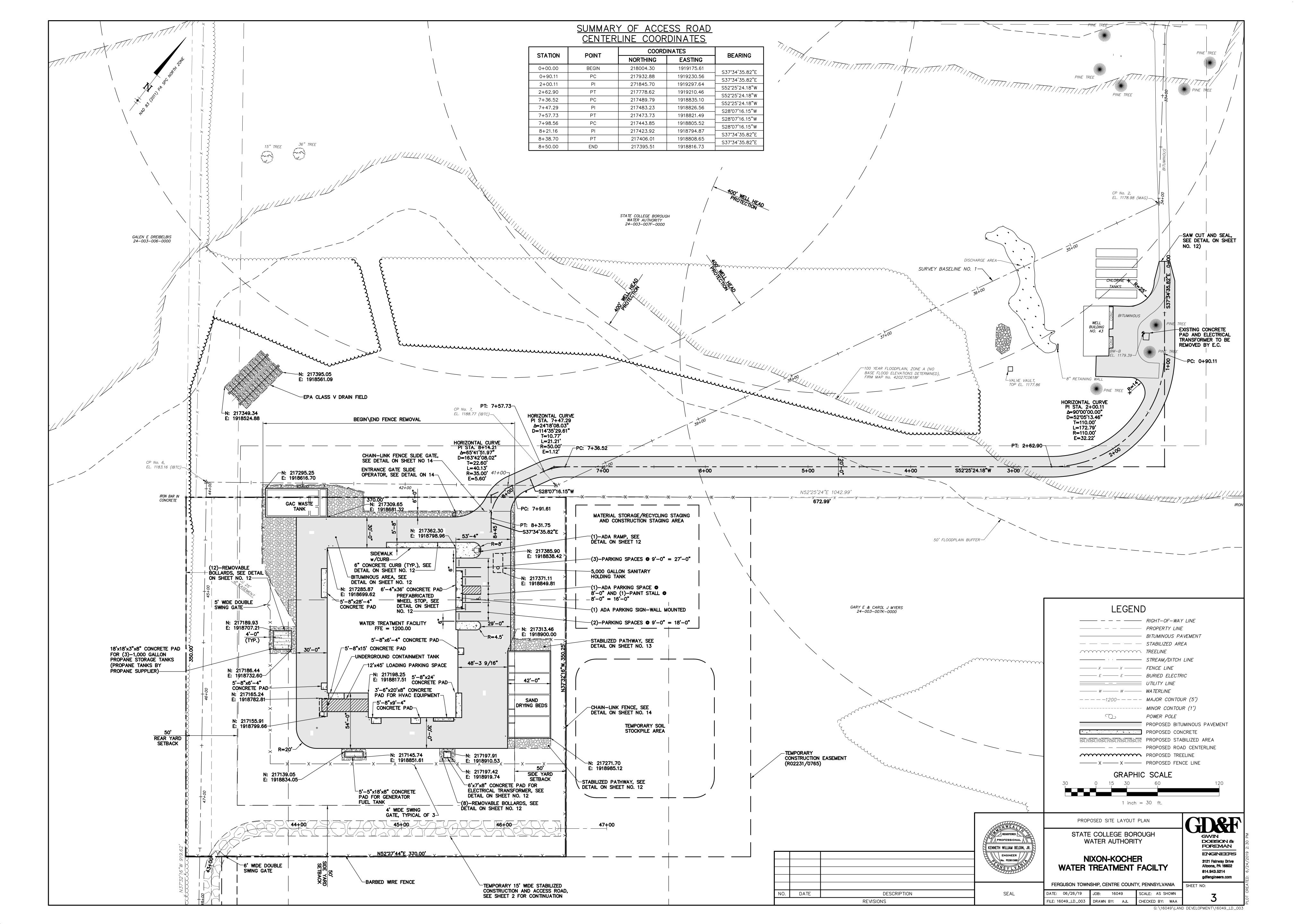
3121 Fairway Drive

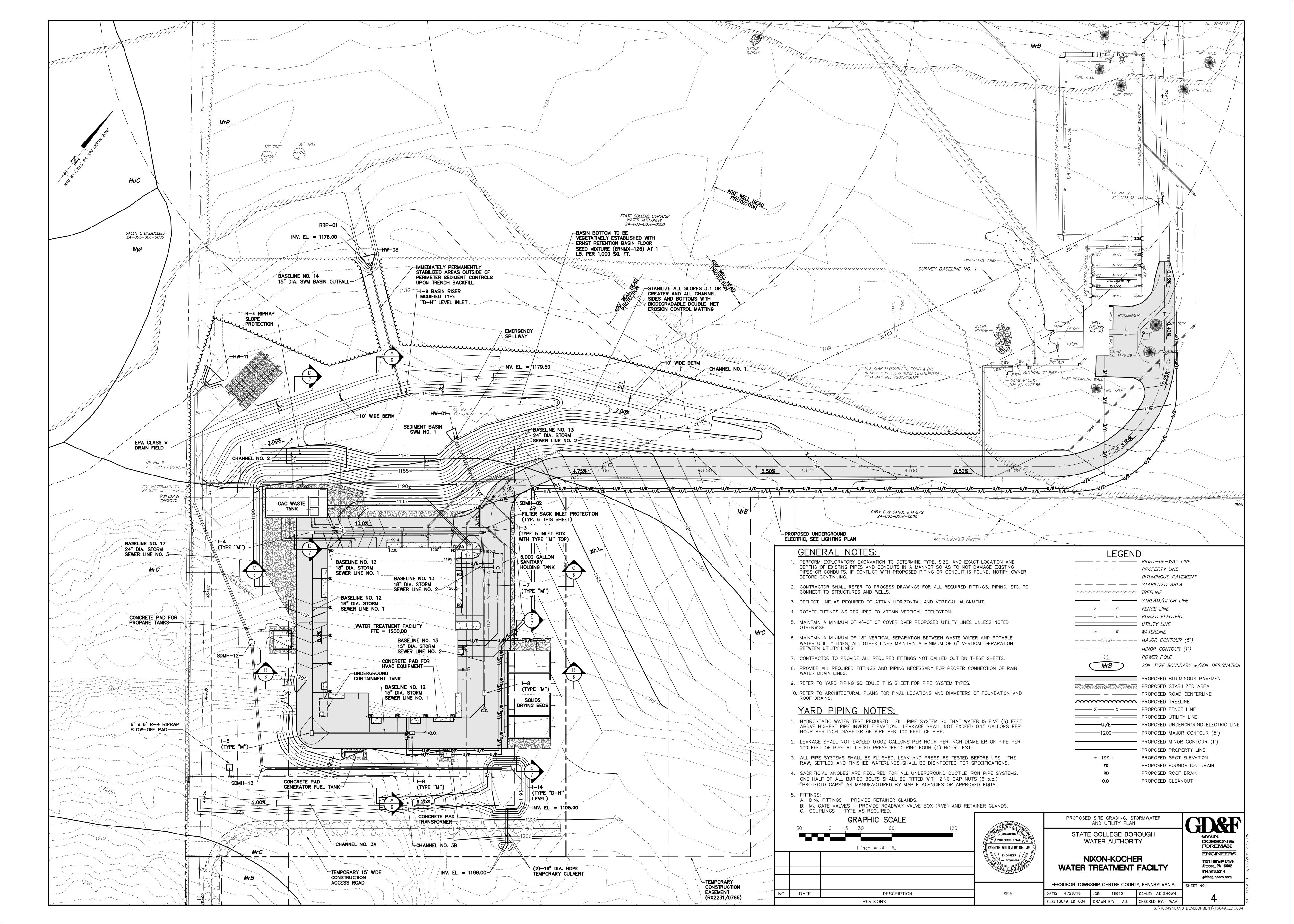
Altoona, PA 16602 814.943.5214 gdfengineers.com

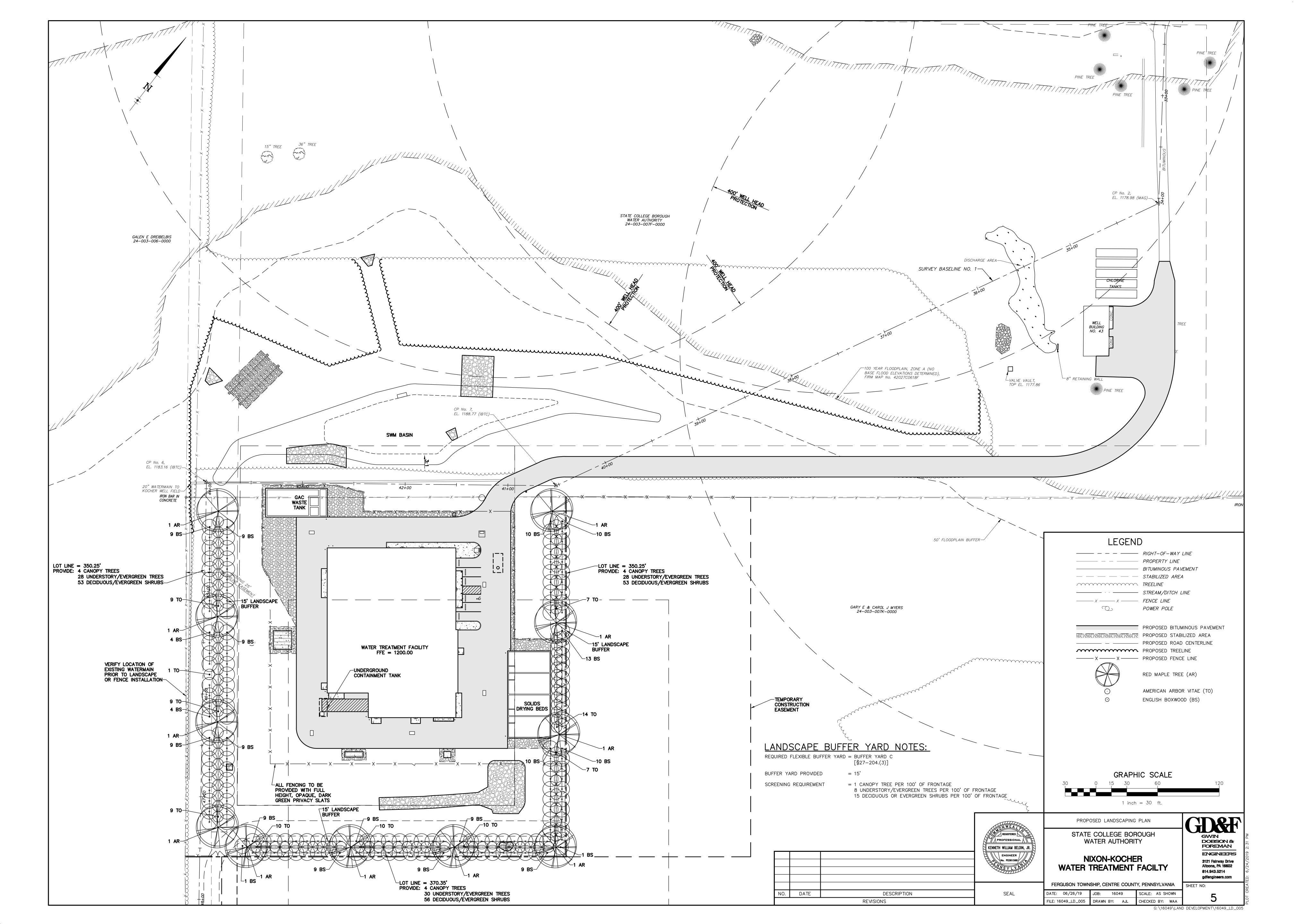
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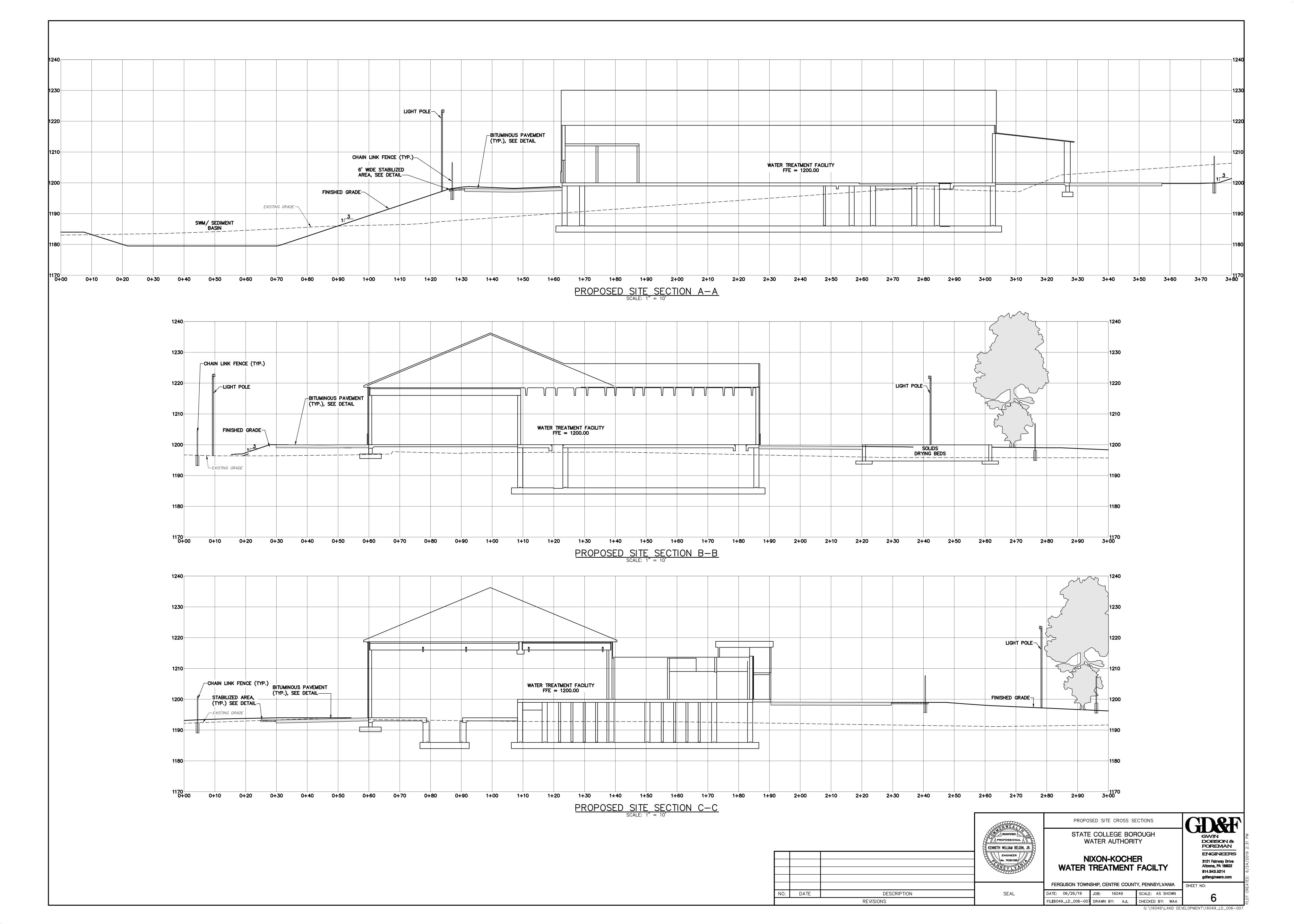


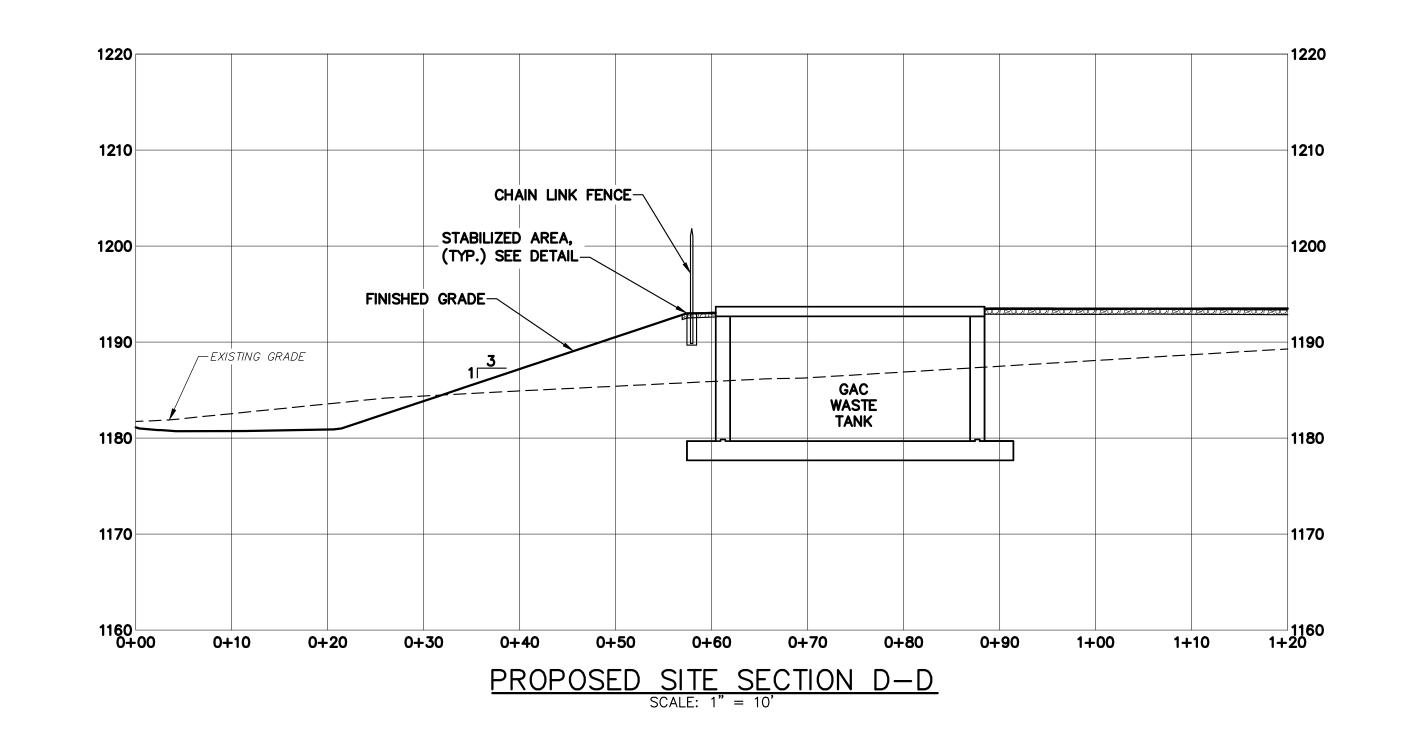


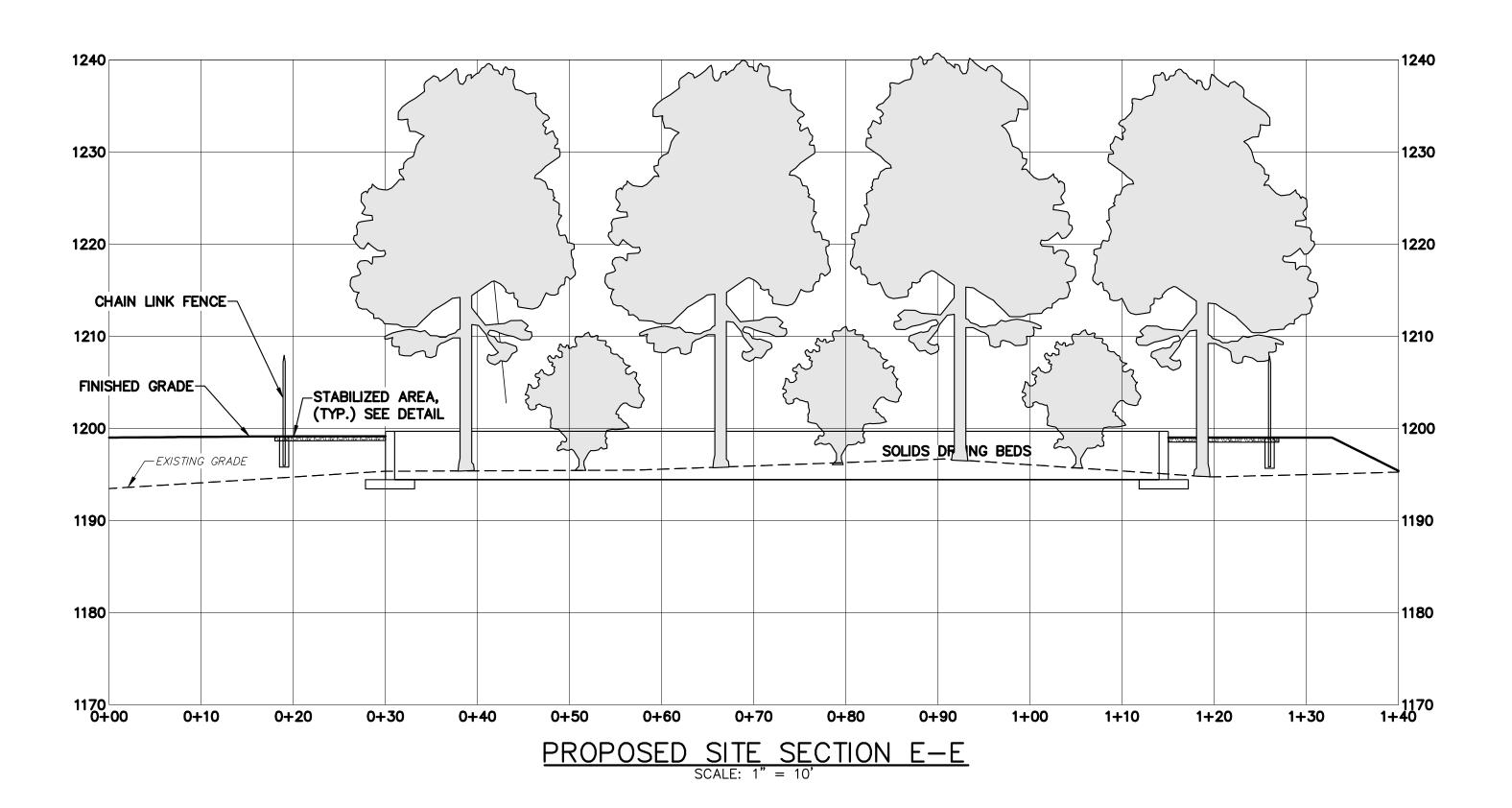


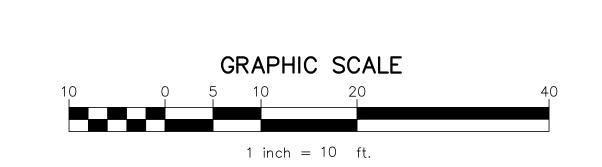












			REGISTERED PROFESSIONAL KENNETH WILLIAM BELDIN, JR. ENGINEER No. PE081568
110	5.475	DECORPORA	05.11
NO.	DATE	DESCRIPTION	SEAL
		REVISIONS	

PROPOSED SITE CROSS SECTIONS

STATE COLLEGE BOROUGH

STATE COLLEGE BOROUGH
WATER AUTHORITY

NIXON-KOCHER

WATER TREATMENT FACILTY

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 06/26/19 JOB: 16049 SCALE: AS SHOWN

SHEET NO:

GD&F
GWIN
DOBSON &
FOREMAN

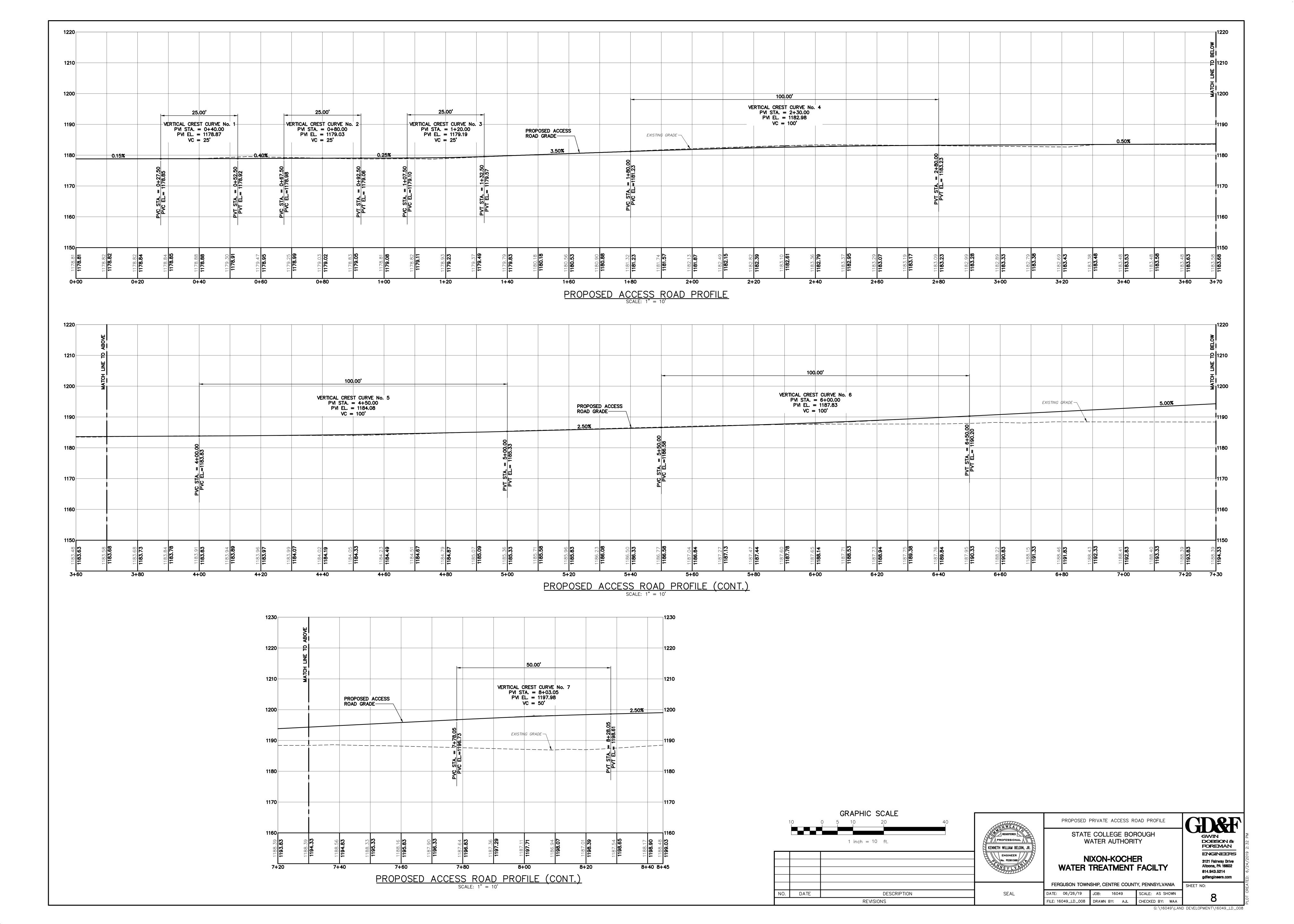
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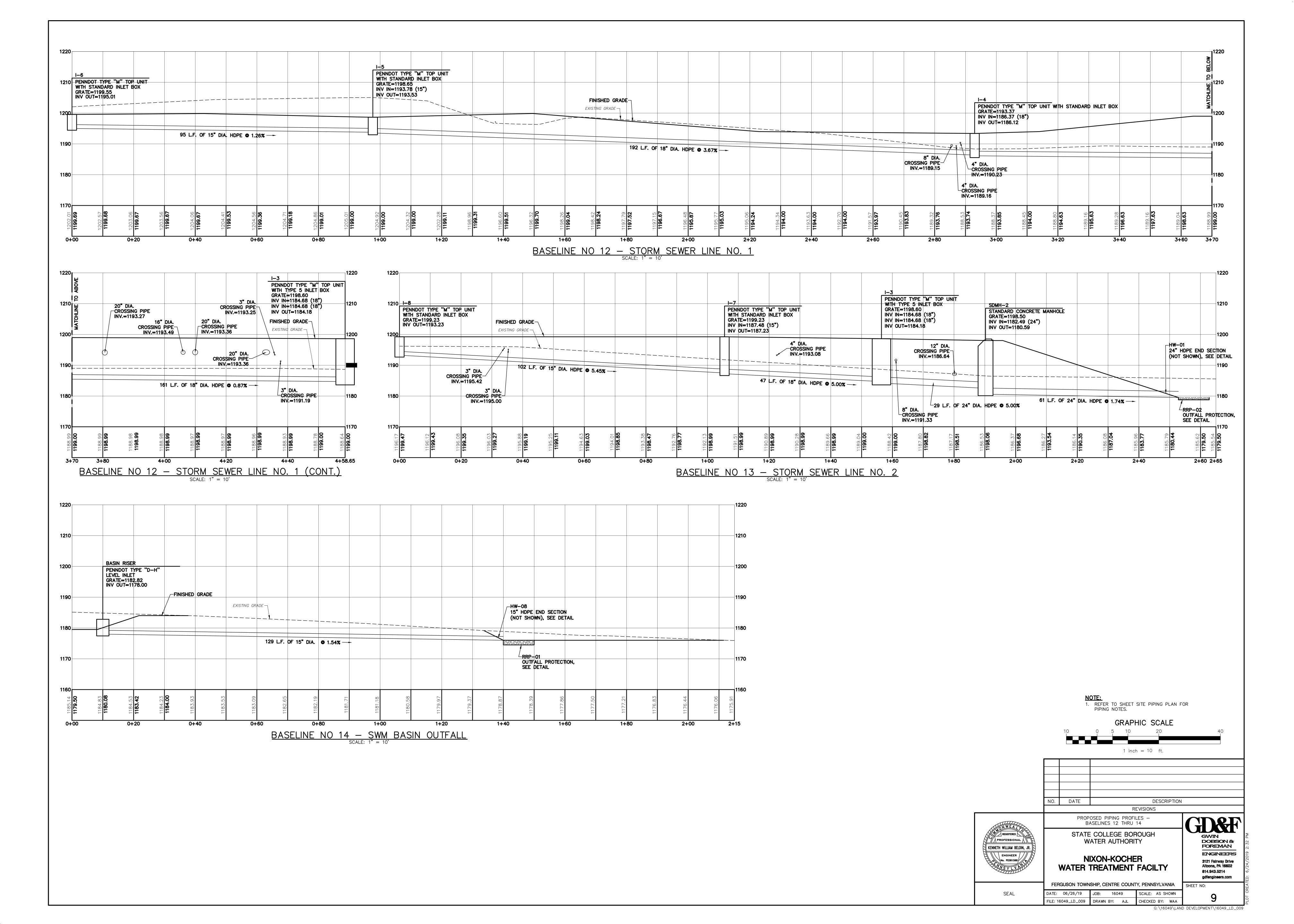
3121 Fairway Drive Altoona, PA 16602 814.943.5214

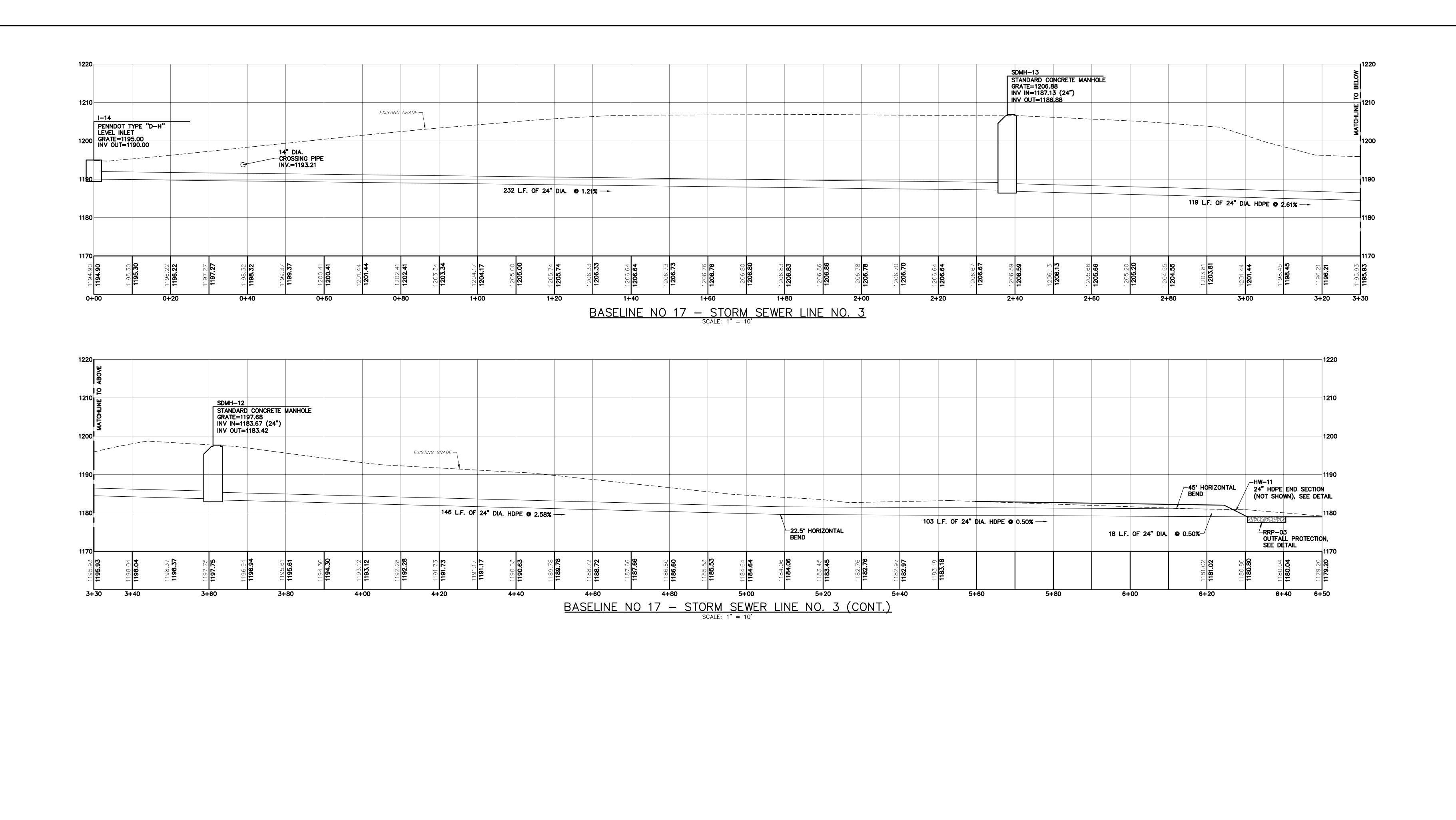
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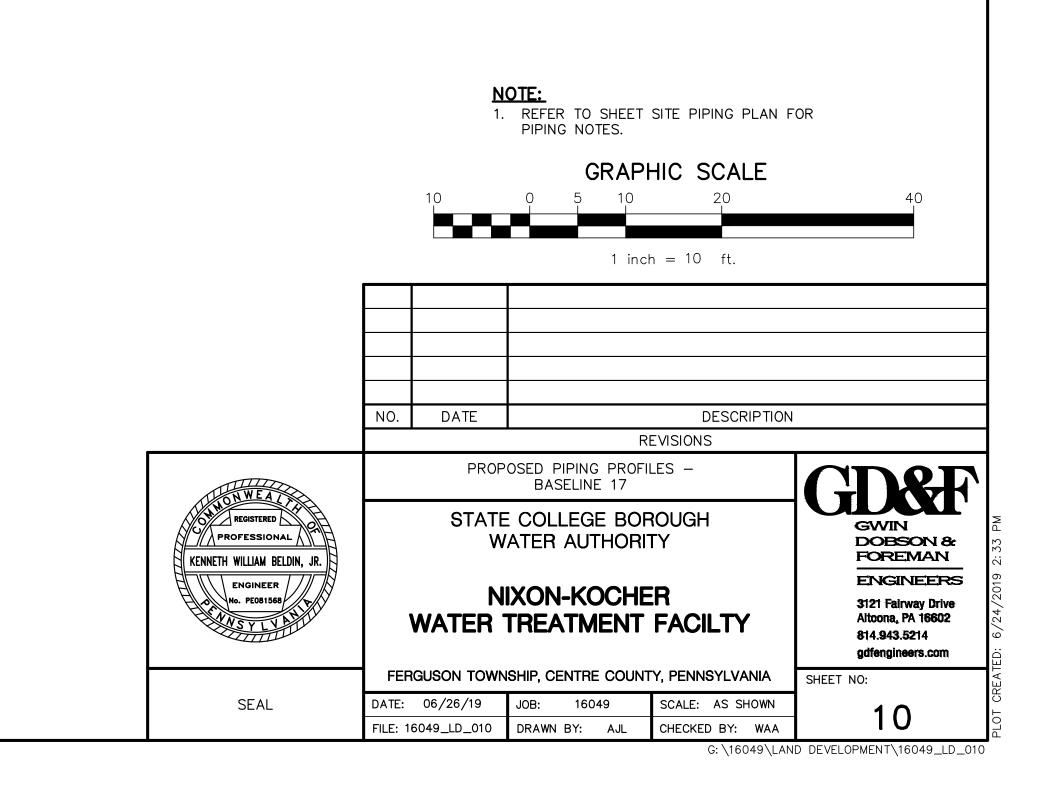
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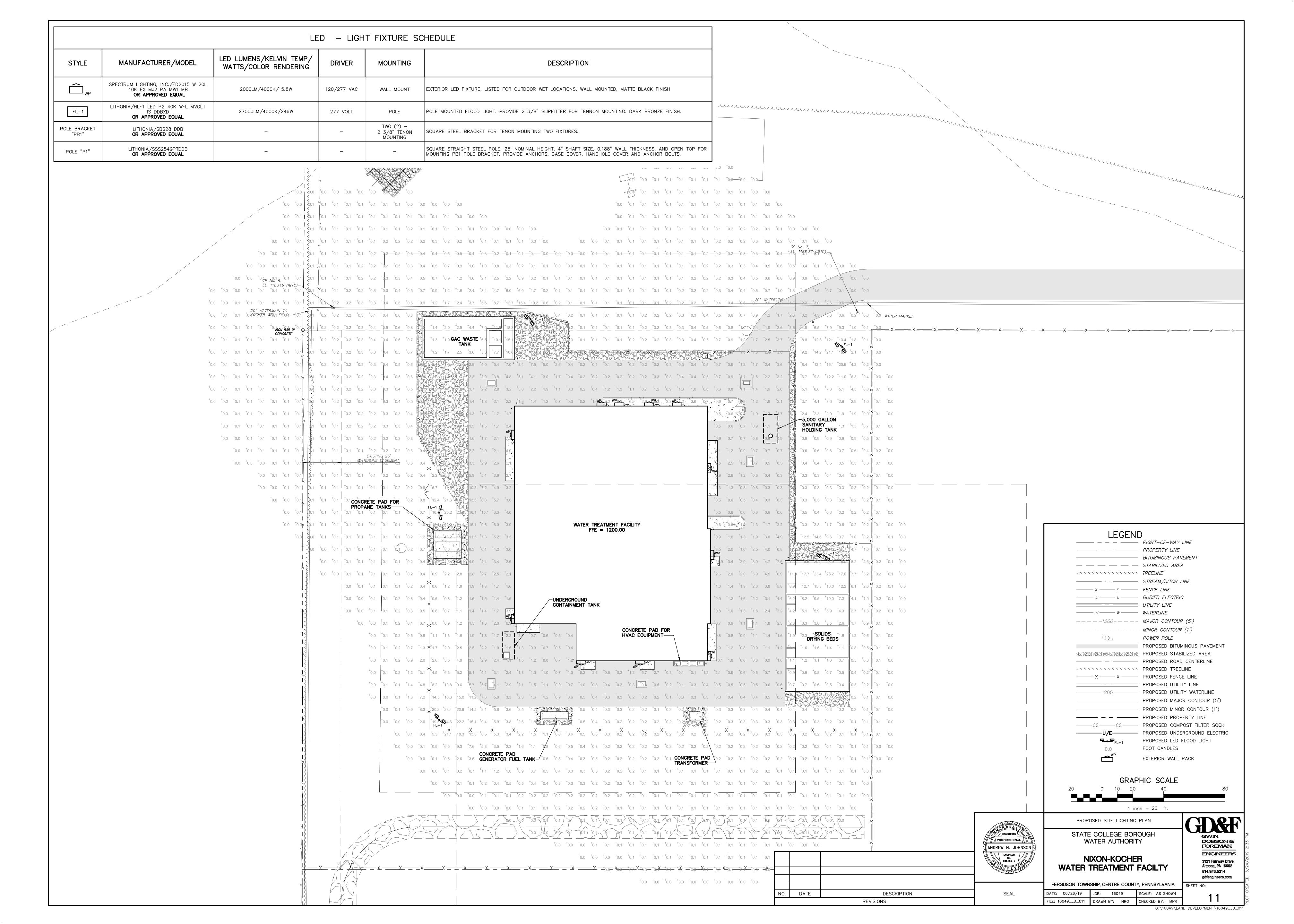
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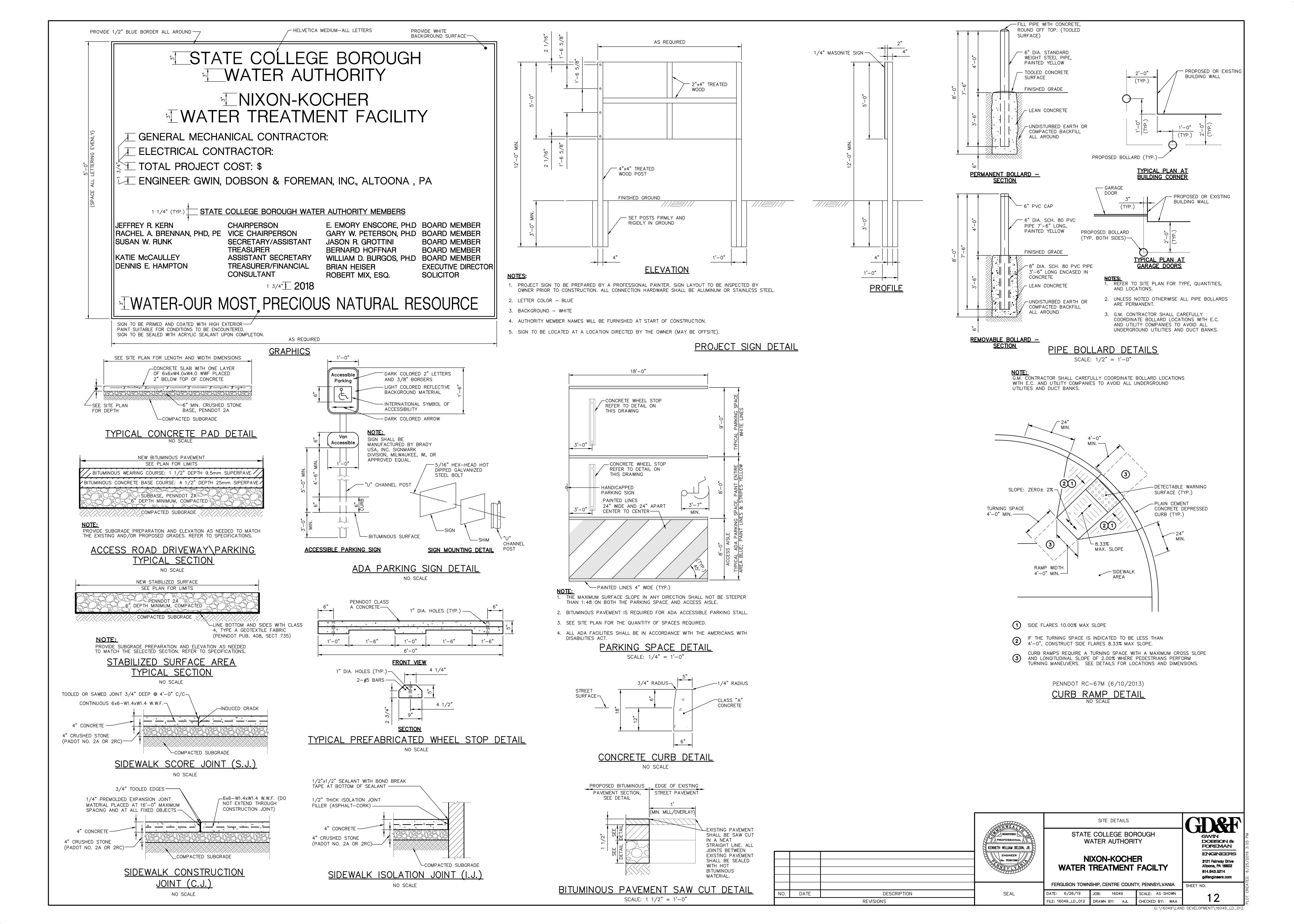


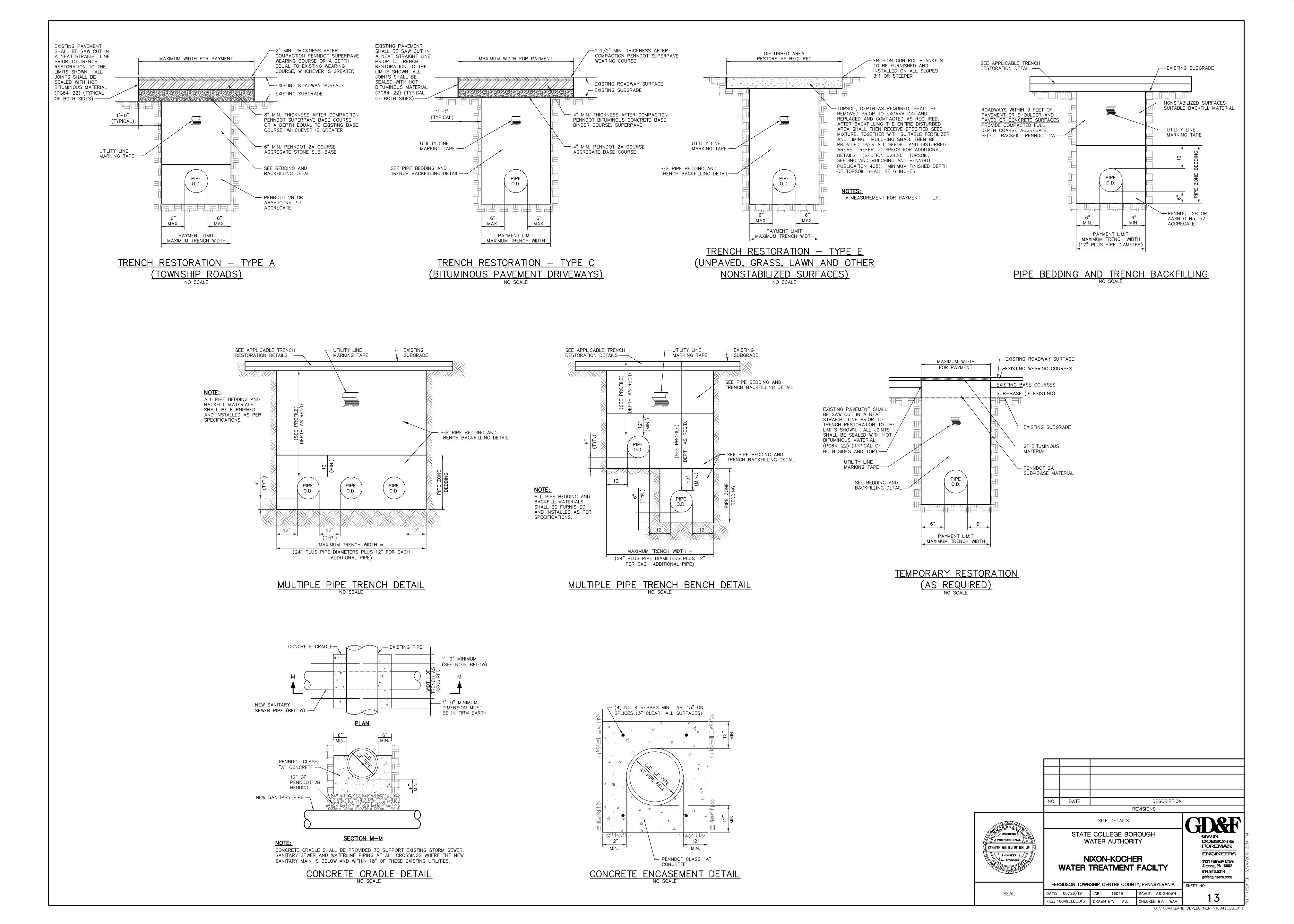


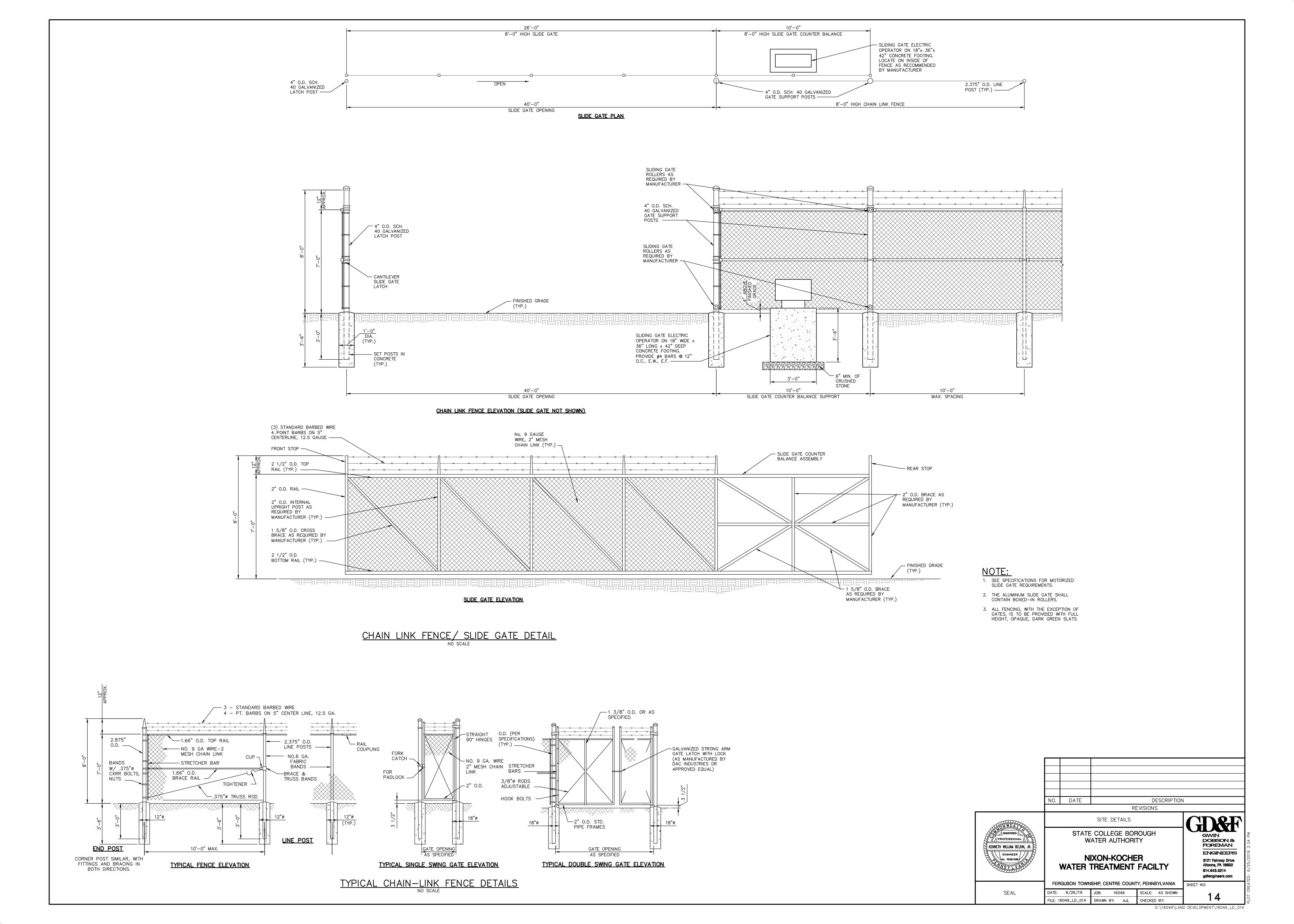


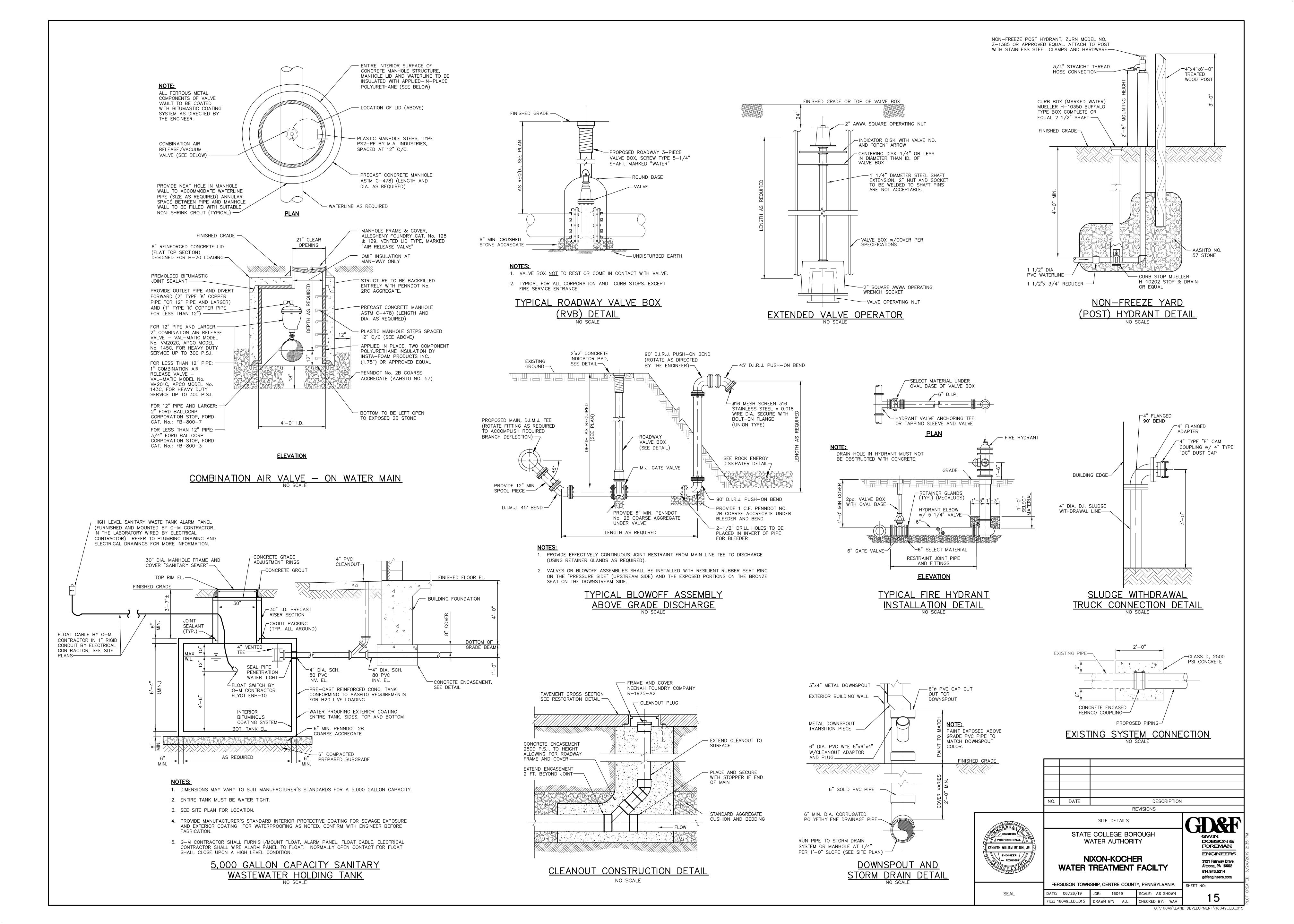


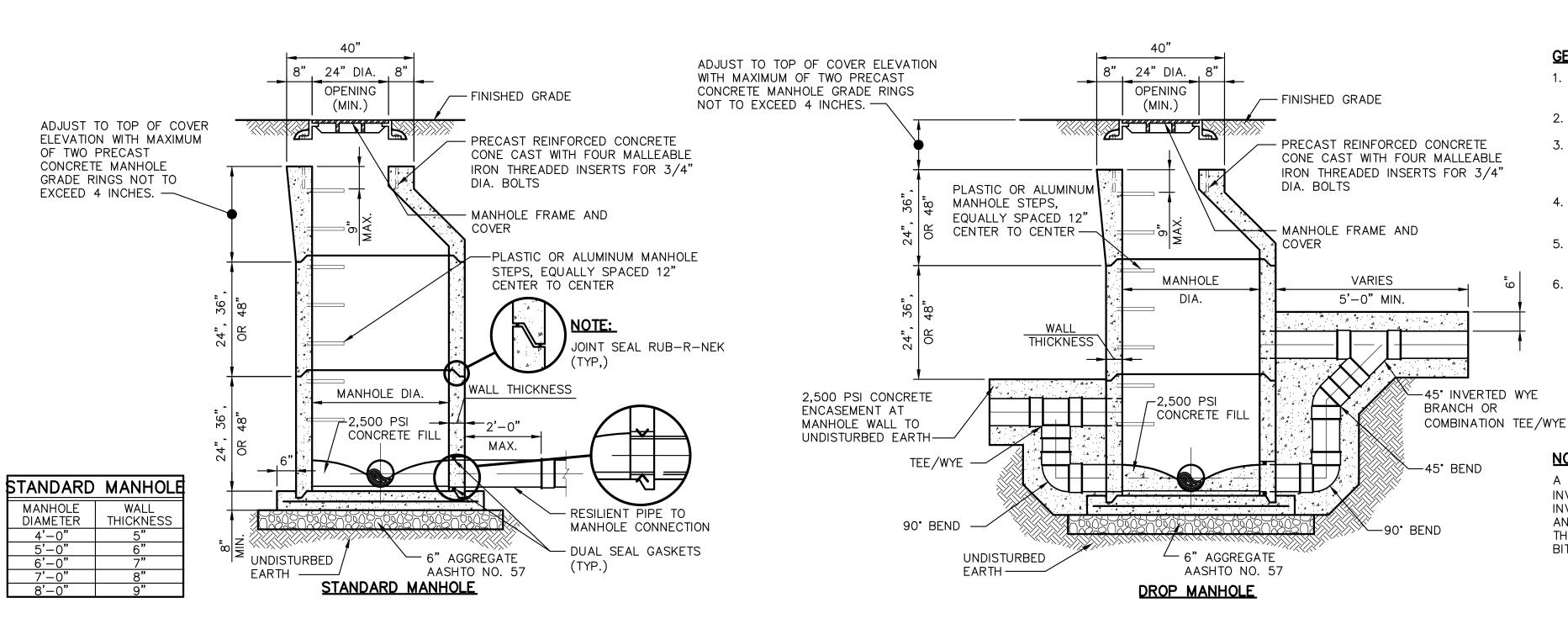










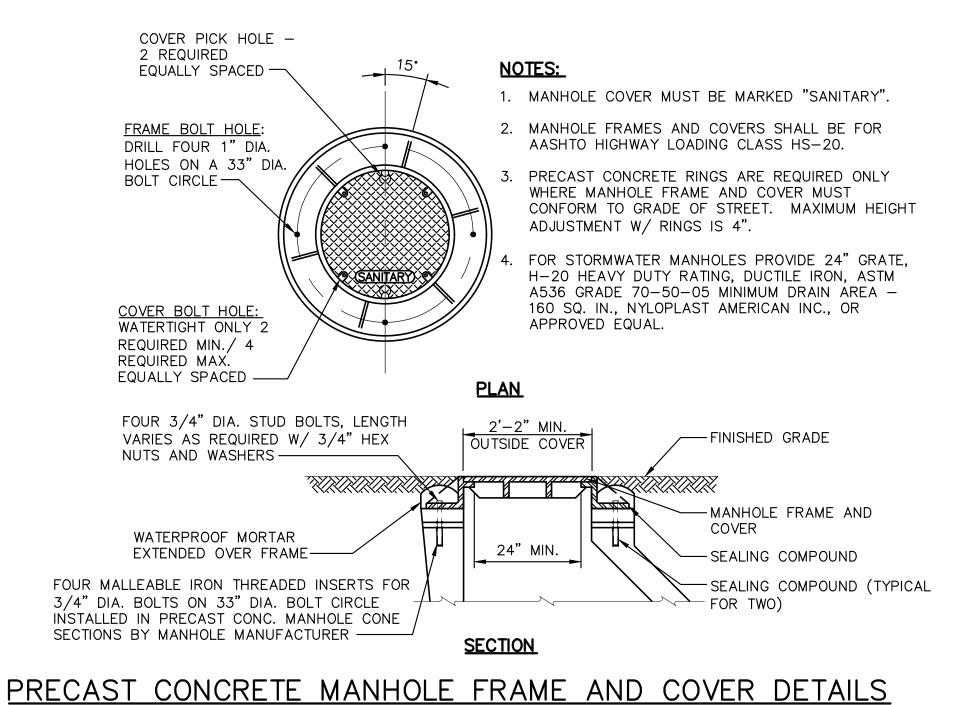


GENERAL NOTES:

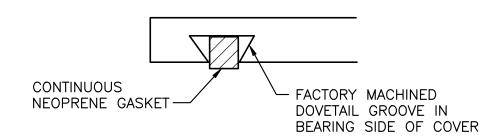
- 1. CONCRETE MANHOLES AND BASES SHALL CONFORM TO ASTM C-478.
- 2. REINFORCING STEEL SHALL CONFORM TO ASTM A-185.
- 3. THE EXTERIOR SURFACE OF THE MANHOLE SHALL BE COATED WITH (2) TWO COATS SHERWIN WILLIAMS HI-MIL SHER-TAR EPOXY (DFT 16 MILS) OR APPROVED EQUAL.
- 4. DISTANCE FROM RIM OF MANHOLE TO TOP 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.

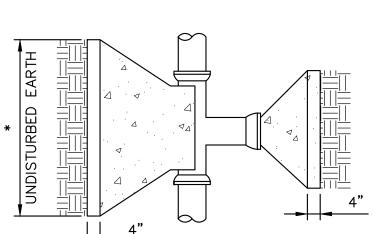
PRECAST MANHOLE BASE AND WALL DETAILS



WATERTIGHT COVER SHALL HAVE MINIMUM OF TWO 1/2" DIA. STAINLESS STEEL BOLTS INSTALLED THROUGH THE COVER INTO THE FRAME



WATERTIGHT FRAME AND COVER



PLAN-TEES. WYES AND PLUGS

ELEVATION—TEES, WYES AND BENDS

∠*EITHER

1. ALL TEES, WYES, CROSSES, PLUGS AND BENDS SHALL BE BLOCKED AGAINST FIRM GROUND WITH CONCRETE.

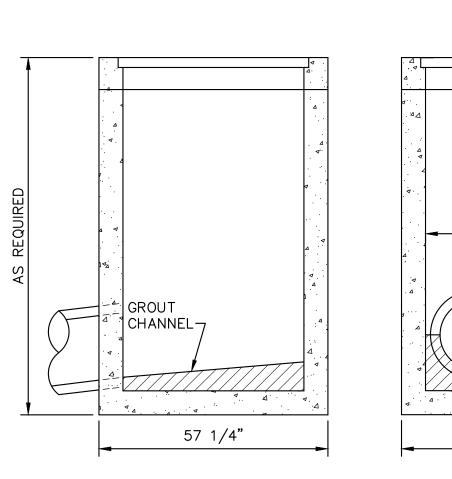
EARTH

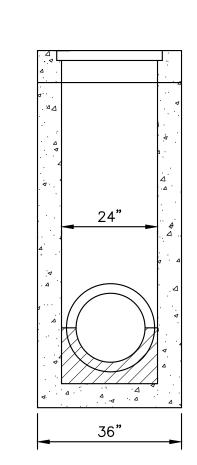
PLAN-BENDS

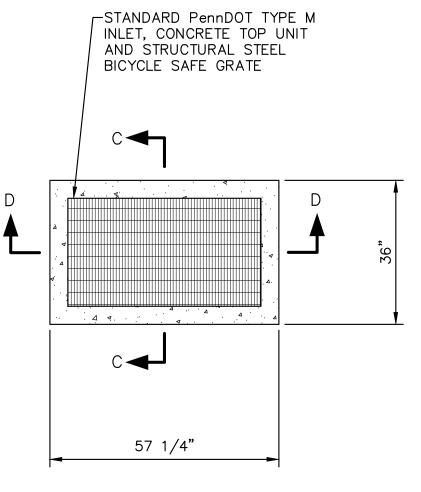
- 2. EARTH PRESSURE FIGURED AT 4,000 PSF, AREA OF BLOCK MUST BE INCREASED PROPORTIONATELY IF EARTH ENCOUNTERED WILL NOT WITHSTAND THIS PRESSURE IN THE OPINION OF THE ENGINEER.
- 3. TABLE IS BASED UPON 225 PSI OR 150 LBS. WORKING PRESSURE PLUS 50% WATER
- 4. * DENOTES FACE AREA NOT LESS THAN SHOWN IN TABLE.

PIPE		TOTAL		AREA OF	BLOCK II	N 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







SECTION D-D

SECTION C-C

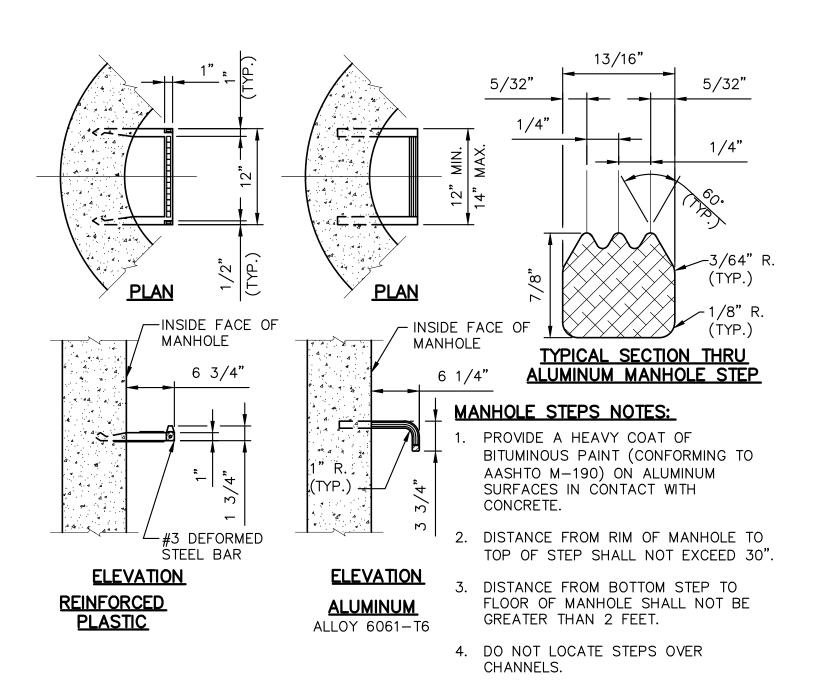
<u>PLAN</u>

NOTES:

1. INLETS SHALL CONFORM TO PennDOT RC-34. CONTRACTOR IS RESPONSIBLE FOR DETERMINING INLET BOX AND COVER

TYPICAL TYPE M INLET

ADJUSTMENT SLAB TYPE AS REQUIRED.



── 1/2" DIA. BRONZE OR

HEAD BOLT

5/8" DIA. BOLT

CLEARANCE HOLE

THRU COVER

FRAME FOR 1/2"

DIA. BOLT THREAD

COVER BOLT HOLE - PLAN

COVER BOLT HOLE - ELEVATION

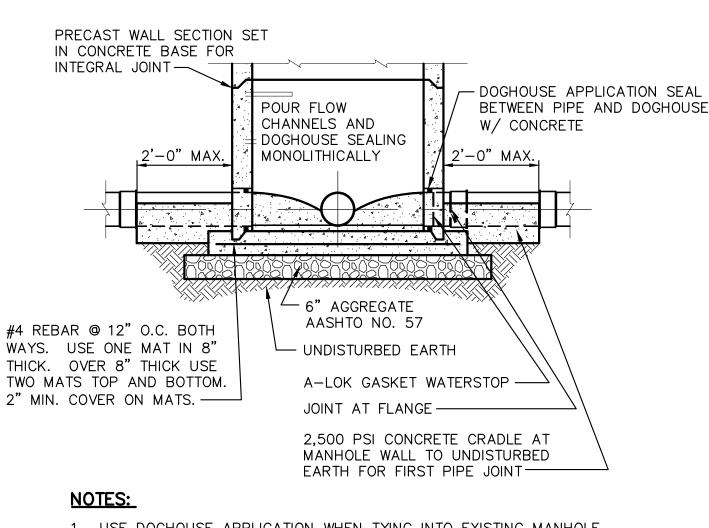
"O" RING GASKET

STAINLESS STEEL HEX

COVER PICK HOLE - PLAN

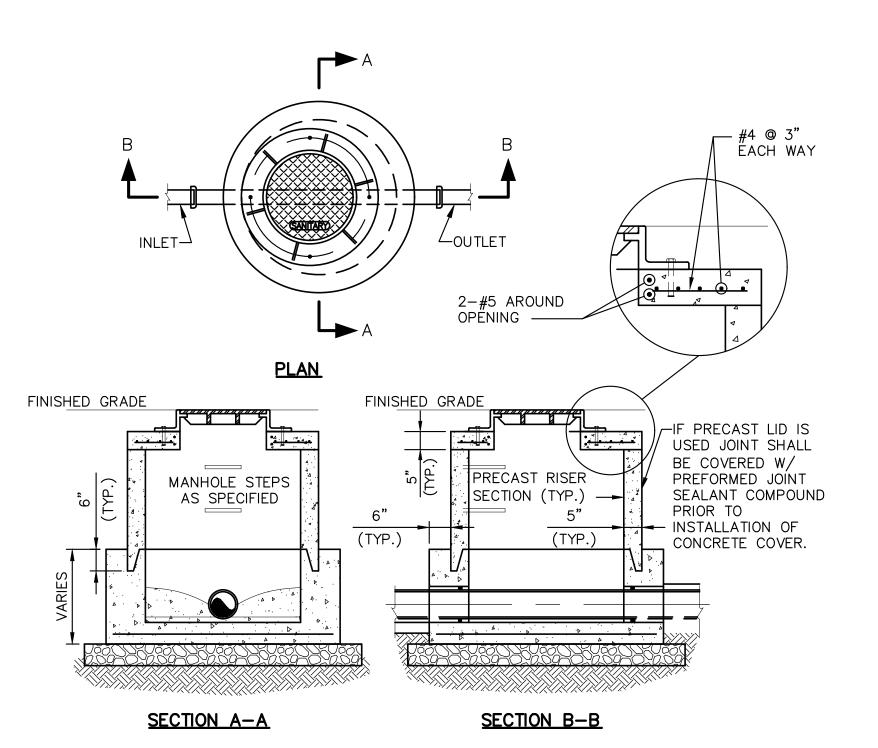
COVER PICK HOLE - ELEVATION

MANHOLE STEP DETAILS

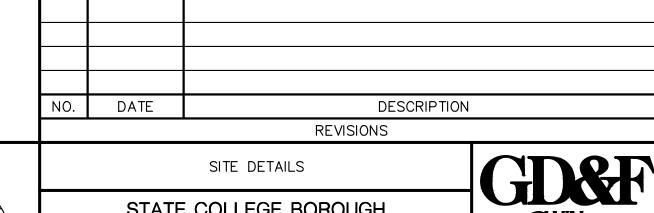


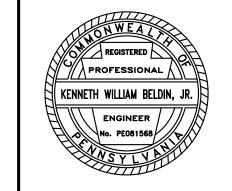
- 1. USE DOGHOUSE APPLICATION WHEN TYING INTO EXISTING MANHOLE, EXCEPT SEAL BETWEEN MANHOLE WALL AND PIPE W/ WATERPROOF MORTAR WORKED AROUND WATERSTOP.
- 2. FOR MANUAL BREAK IN CONDITION, PIP IS TO BE GASKETED TO FULL CIRCUMFERENCE W/ A RUBBER GASKET SIMILAR TO A-LOK.

CAST-IN-PLACE BASE AND PRECAST WALL SECTIONS



STANDARD SHALLOW PRECAST MANHOLE





SEAL

STATE COLLEGE BOROUGH WATER AUTHORITY

NIXON-KOCHER

SCALE: AS SHOWN

CHECKED BY: WAA

WATER TREATMENT FACILTY FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

JOB: 16049

DRAWN BY: AJL

DATE: 06/26/19

FILE: 16049_LD_016

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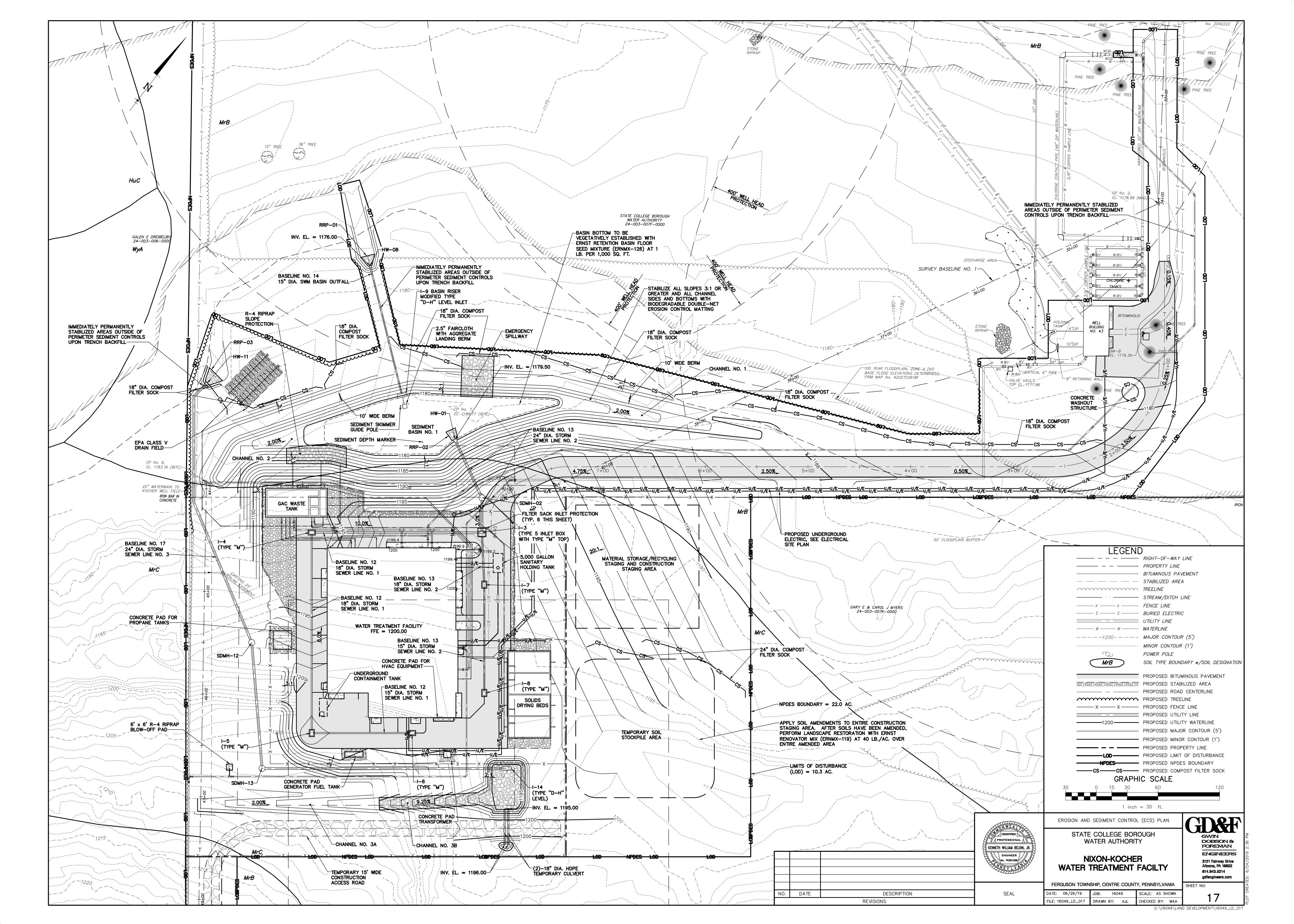
DOBSON & FOREMAN

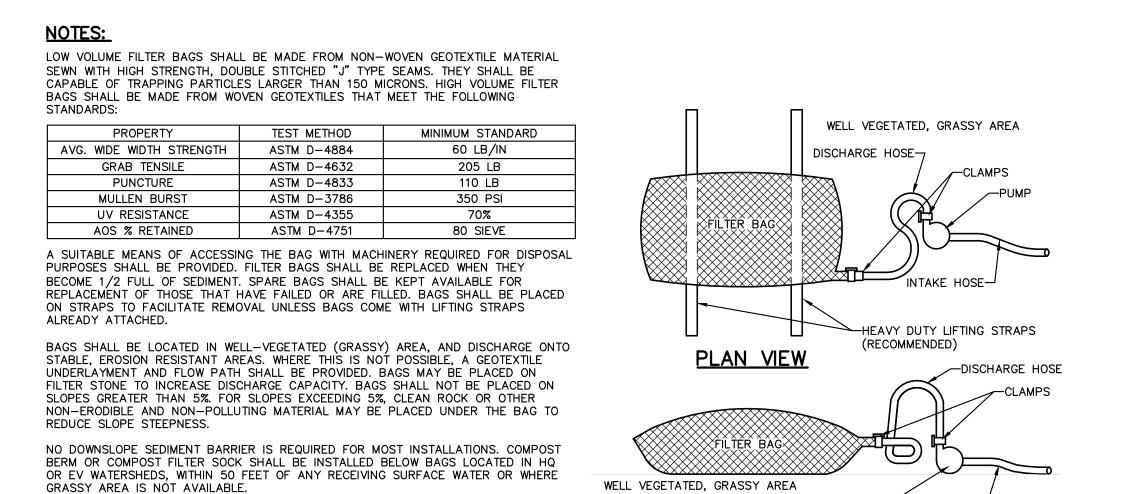
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SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

PUMPED WATER FILTER BAG DETAIL

NTAKE HOSE-

ELEVATION VIEW

— INLET GRATE #8 REBAR FOR SACK REMOVAL FROM INLET - INLET GRATE INLET FILTER SACK STRUCTURE INLET STRUCTURE INLET FILTER SACK RUBBER BLOCK **EXPANSION** RESTRAINT 1/4" NYLON NOTES:

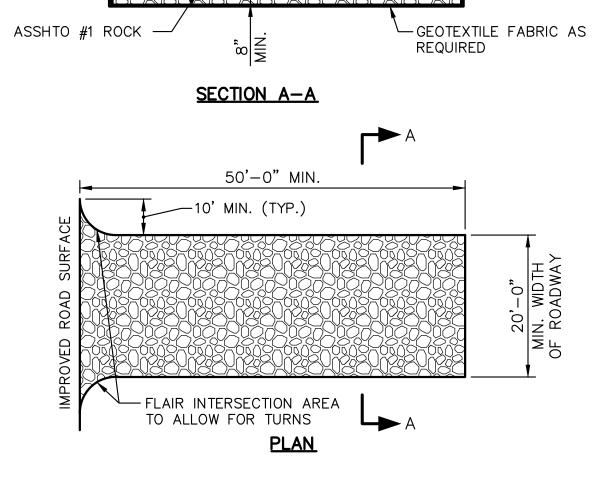
1. THE INLET FILTER SACK SHOULD TRAP PARTICLES LARGER THAN 150 MICRONS.

- 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,

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

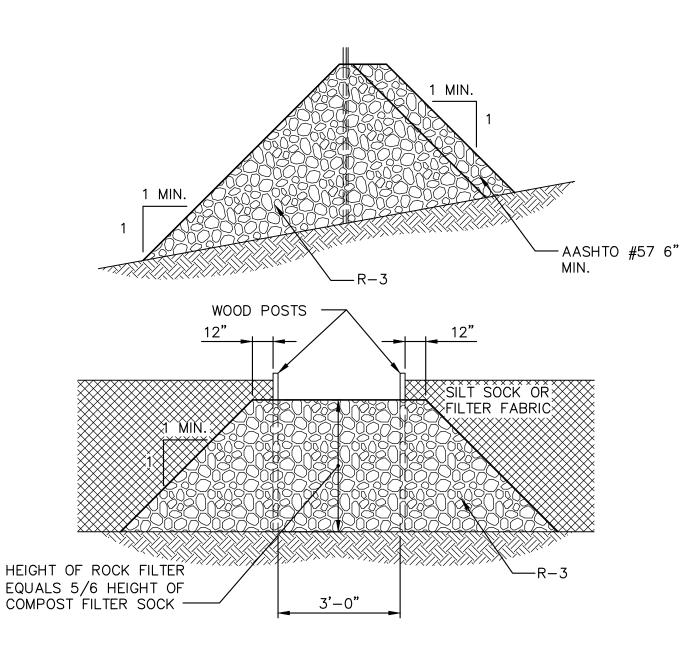
FILTER SACK INLET PROTECTION DETAILS

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



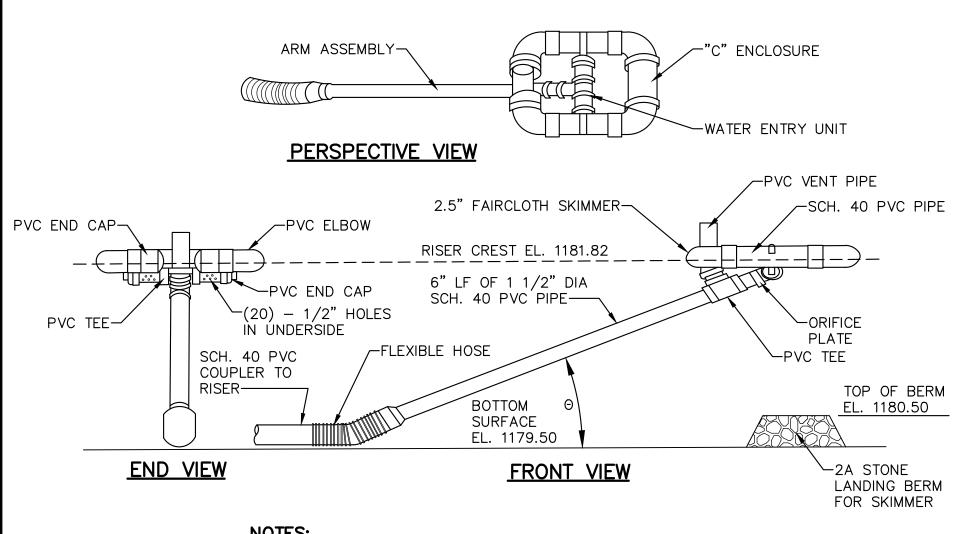
- 1. ROCK CONSTRUCTION ENTRANCES WILL BE CONSTRUCTED TO THE MINIMUM WIDTH, LENGTH, AND THICKNESS OF THE DIMENSIONS SHOWN.
- 2. ROCK WILL BE AASHTO #1 AS SPECIFIED IN SECTION 703.2 OF PENNDOT PUBLICATION
- 3. THE THICKNESS OF THE ROCK CONSTRUCTION ENTRANCE SHALL BE CONSISTENTLY MAINTAINED AT THE SPECIFIED 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 PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER

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

RECOMMENDED FOR THIS PURPOSE.

FLOATING AND SCREENED.

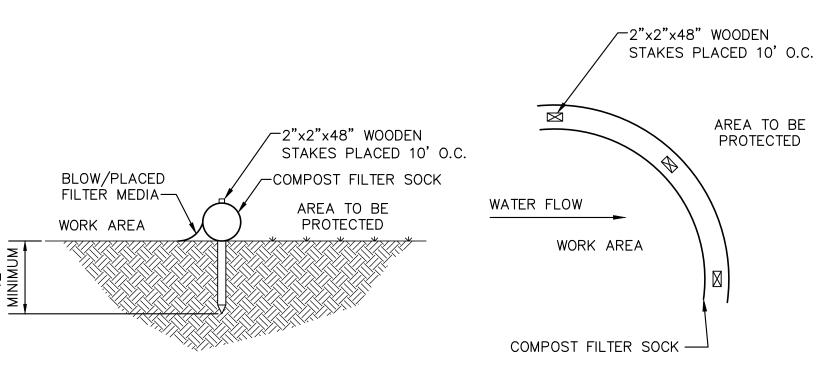
SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS

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.

- CONCRETE

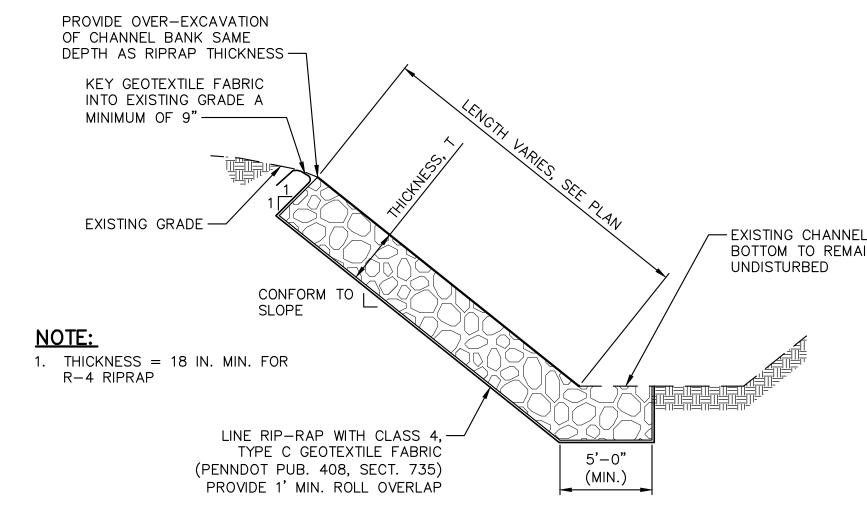
SEDIMENT SKIMMER DETAIL



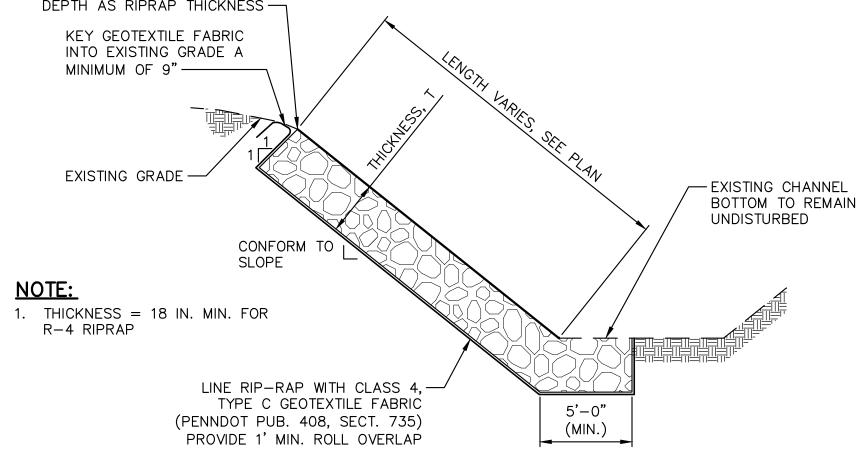
COMPOST FILTER SOCK

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



LENGTH LENGTH OUTLET PIPE OUTLET PIPE CLASS 4, TYPE A GEOTEXTILE FABRIC ROCK SIZE (PENNDOT PUB. 408, REFER TO TABLE SECT. 735) —

PLAN VIEW

ELEVATION

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.

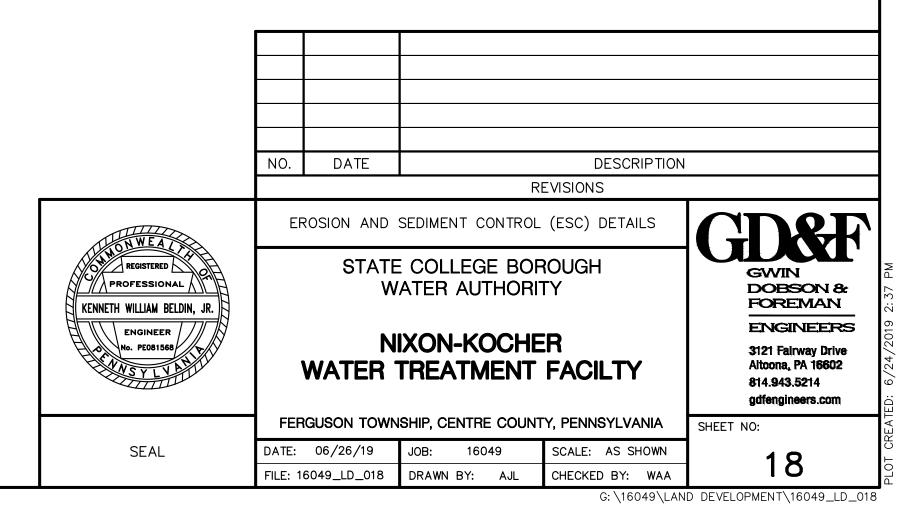
TIME THE COMPOST IS PLACED AND PREFERABLY WHEN EXCAVATION IS COMPLETED, THE SUBSOIL SHALL BE IN A LOOSE, FRIABLE CONDITION TO A DEPTH OF 20 INCHES BELOW FINAL TOPSOIL GRADE AND THERE SHALL BE NO EROSION RILLS OR WASHOUTS IN THE SUBSOIL SURFACE EXCEEDING 3 INCHES IN DEPTH.

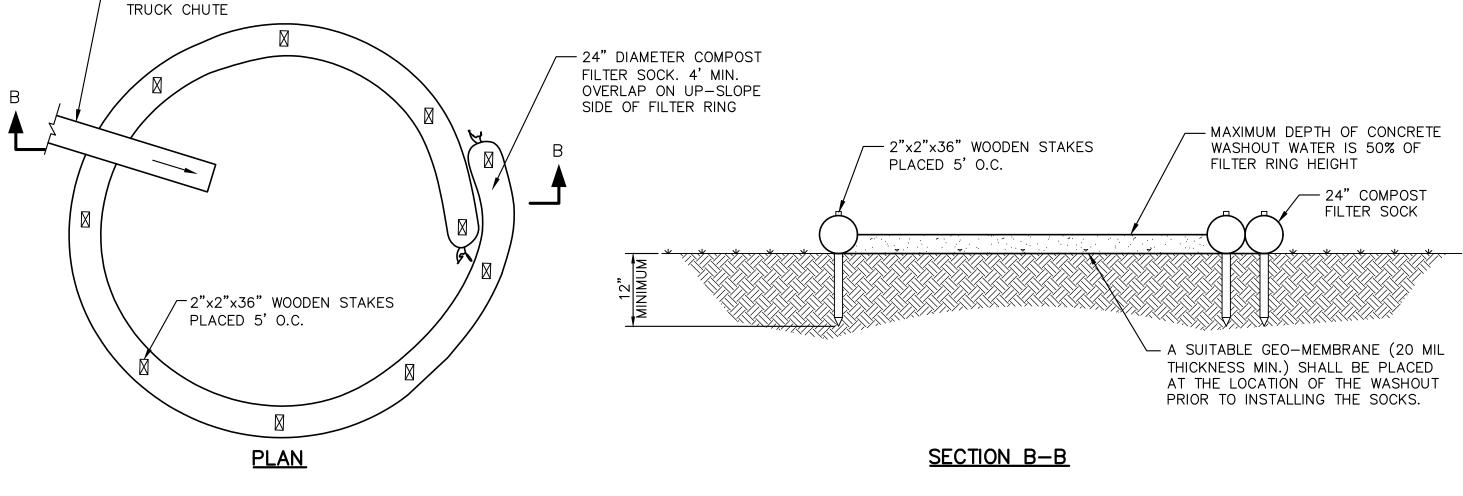
TO ACHIEVE THIS CONDITION, SUB-SOILING, RIPPING, OR SCARIFICATION OF THE SUBSOIL IS REQUIRED, WHEREVER THE SUBSOIL HAS BEEN COMPACTED BY EQUIPMENT OPERATION OR HAS BECOME DRIED OUT AND CRUSTED, AND WHERE NECESSARY TO OBLITERATE EROSION RILLS. SUB-SOILING SHALL BE REQUIRED TO REDUCE SOIL COMPACTION IN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



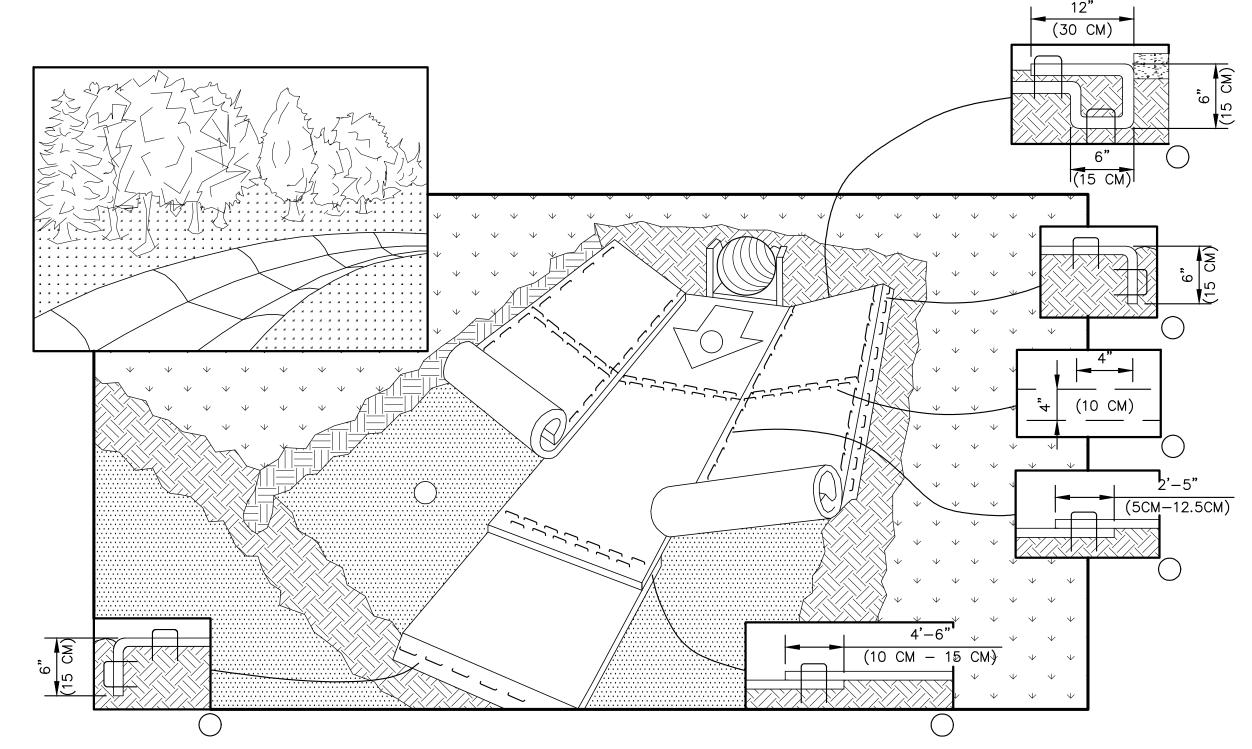


NOTES: 1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE

COMPOST SOCK WASHOUT INSTALLATION

2. 18" DIAMETER MAY BE STACKED ONTO DOUBLE 24" DIAMETER

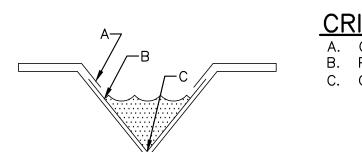
SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.



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.

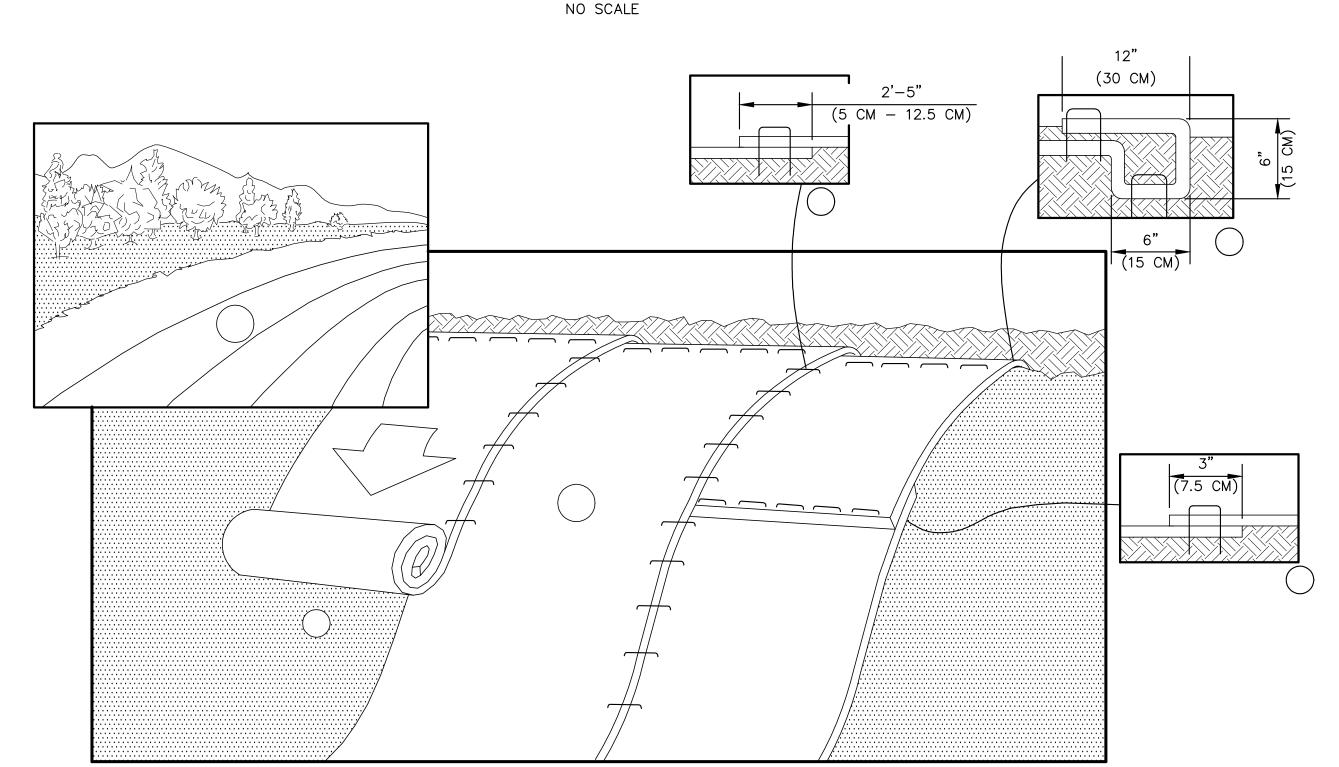
- 3. ROLL CENTER RECPS IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, 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

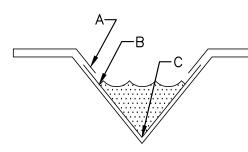
- * HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
- ** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

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.



CRITICAL POINTS: OVERLAPS AND SEAMS PROJECTED WATER LINE CHANNEL BOTTOM/SIDE

SLOPE VERTICES

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.

TEMPOR A	ARY AND PERMANENT VEGE	TATIVE STABILI	ZATION SPECIFICATIONS
PROJECT NAME:	NIXON-KOCHER WTF		
LOCATION:	FERGUSON TOWNSHIP, CENTRE COUNTY, PA		
PREPARED BY:	AJL	DATE:	06/24/19
CHECKED BY:	KWB	DATE:	06/24/19

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 STRAW		
MULCH TYPE:			
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 50 97 COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE 0.15 21.0 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

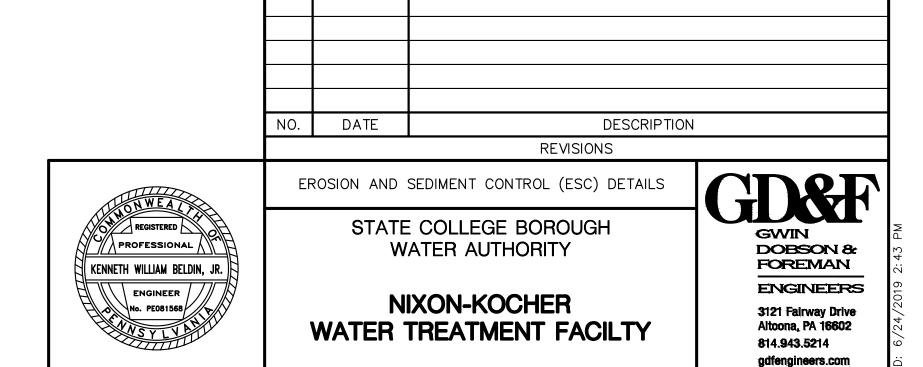
- 1. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH DEP'S SOLID WASTE MANAGEMENT REGULATIONS OF 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ. AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED MATERIALS SHALL BE BURNED, BURIED, DUMPED 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.

SEAL



FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DRAWN BY: AJL

SCALE: AS SHOWN

DATE: 06/26/19 JOB: 16049

TILE: 16049_LD_019

SLOPE INSTALLATION

CHECKED BY: WAA G: \16049\LAND DEVELOPMENT\16049_LD_01

STANDARD EROSION AND SEDIMENT CONTROL NOTES:

REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.

- 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
- 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
- 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.

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

- 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 FLOODING OR BYPASSING OF THE INLET.
- 4. A SUPPLY OF EXTRA FILTER BAGS SHALL BE KEPT ON SITE.
- 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

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

PROBLEM IS CORRECTED.

- 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

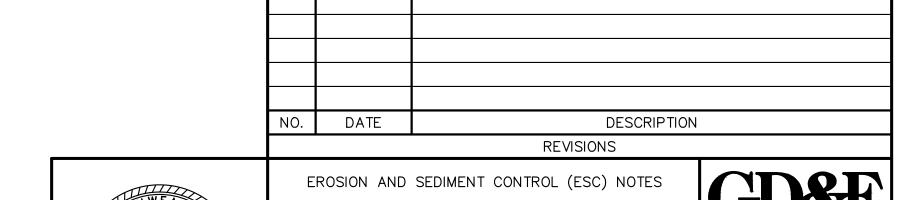
SITE PREPARATION AND PLANTING ALL WEEDS OR EXISTING VEGETATION MUST BE ELIMINATED PRIOR TO SEEDING.

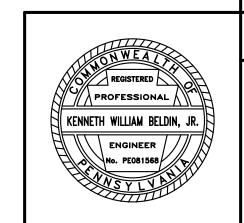
- 2. PERENNIAL WEEDS MAY REQUIRE YEAR LONG SMOTHERING, REPEATED SPRAYINGS WITH HERBICIDES, OR REPEATED TILLAGE WITH EQUIPMENT THAT CAN UPROOT AND KILL PERENNIAL WEEDS.
- 3. PLANTING IN JULY AND AUGUST IS GENERALLY NOT RECOMMENDED DUE TO THE FREQUENCY OF DROUGHT DURING THIS TIME.
- 4. SEEDING CAN BE ACCOMPLISHED 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.





SEAL

NIXON-KOCHEF

WATER TREATMENT FACILTY

DATE: 06/26/19

FILE: 16049_LD_020

STATE COLLEGE BOROUGH

WATER AUTHORITY

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA JOB: 16049 SCALE: AS SHOWN DRAWN BY: AJL CHECKED BY: WAA

G: \16049\LAND DEVELOPMENT\16049_LD_02

DOBSON & **FOREMAN**

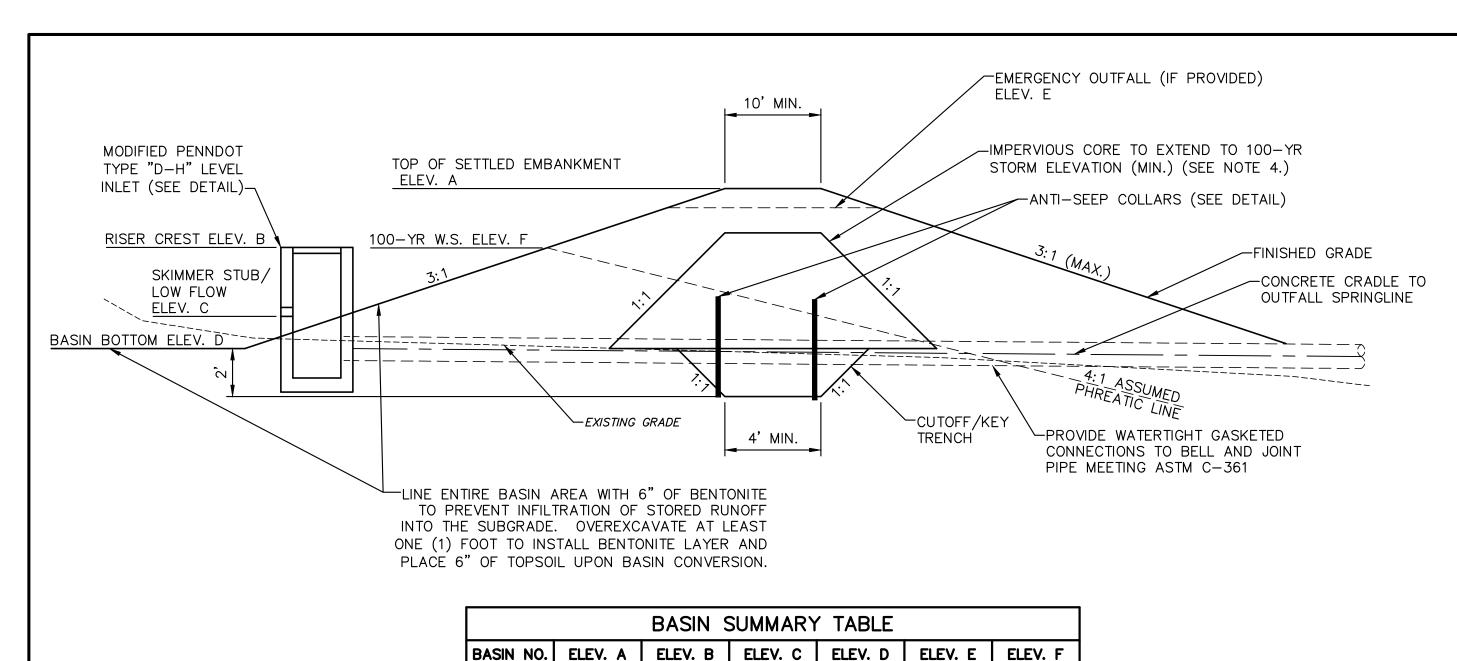
ENGINEERS

3121 Fairway Drive

Altoona, PA 16602

gdfengineers.com

814.943.5214



BASIN EMBANKMENT DETAIL

ANTI-SEEP COLLAR SUMMARY TABLE

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

4. COLLAR MATERIAL SHALL CONSIST OF 1/4" THICK RIGID HIGH DENSITY POLYETHYLENE

7. TWO (2) COLLARS SHALL BE PROVIDED WITH A MINIMUM SEPARATION OF TEN FEET.

ANTI-SEEP COLLAR DETAIL

(2) 1/2" STAINLESS STEEL CLAMP BANDS ON EACH SIDE OF THE COLLAR.

5. A CORRUGATED METAL COLLAR IS AN ACCEPTABLE ALTERNATIVE TO HDPE.

6. COLLAR SHALL BE A MINIMUM OF ONE (1) FOOT AWAY FROM ANY PIPE JOINT.

BASIN NO.

0 0 0 0 0 | |

_**!**__ _ _ _ _ _ _ _ _

LSTAINLESS STEEL

3. ALL STAINLESS STEEL SHALL BE GRADE 304 OR BETTER.

BOLTS (TYP.)

SIDE OF THE COLLAR.

(HDPE) MATERIAL.

W (FT.)

4.25

 $+ \circ - \circ \circ \circ$

└15" DIA. HDPE

RISER OUTFALL

| 1184.00 | 1182.82 | 1180.50 | 1179.50 | 1183.00 | 1182.88

BASIN GENERAL NOTES:

FINISHED GRADE

-MANHOLE/STRUCTURE WALL

1-1/2 I.D. MIN. | 1-1/2 I.D. MIN.

NATIVE SOIL

SUITABLE FOUNDATION

1. MAXIMUM INSERTION ANGLE SHALL NOT EXCEED REQUIREMENTS AS SPECIFIED BY THE

STRUCTURE CONNECTIONS, PRODUCT INFORMATION AND DIMENSIONAL PIPE DATA.

INSTALLATION RECOMMENDATIONS ARE ALSO SPECIFIED IN TECHNICAL NOTE 5.04:

MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE

STORM DRAIN CONNECTION DETAIL

3. PERFORMANCE HIGHLY DEPENDENT ON INSTALLATION. CONTRACTOR MUST INSURE

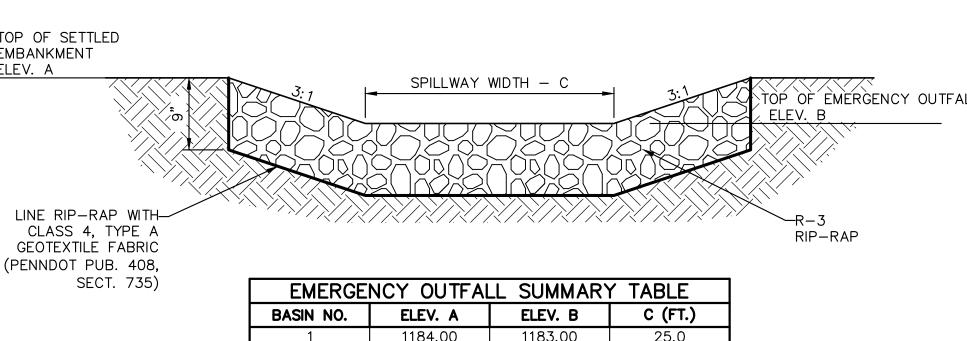
2. SEE STANDARD DETAILS STD-202 AND 202A THROUGH STD-204 (A-F) FOR

HDPE CONNECTIONS TO MANHOLES AND STRUCTURES.

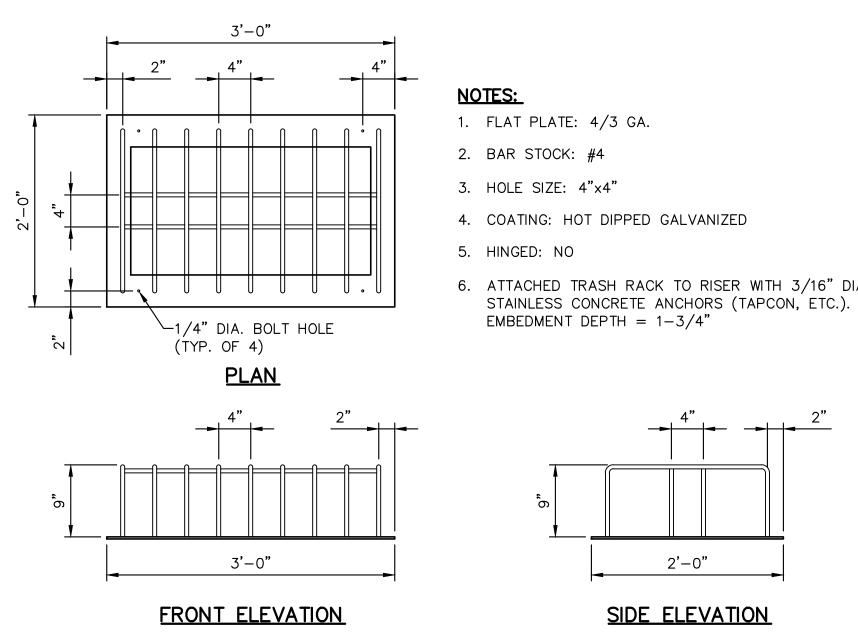
FIRST COUPLER SHOULD BE 18" FROM WALL OR BE

ENCASED IN FLOWABLE FILL

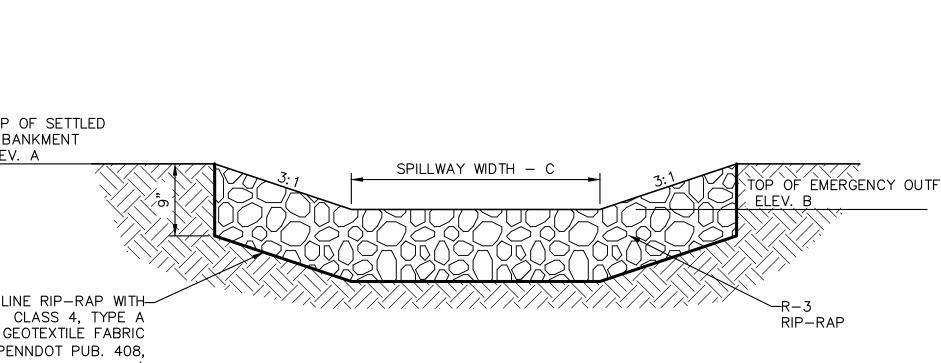
- 1. THE AREA UNDER THE EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A MINIMUM DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. IN ORDER TO FACILITATE MAINTENANCE AND RESTORATION, THE POOL AREA SHALL BE CLEARED OF ALL BRUSH, TREES, AND OBJECTIONABLE MATERIAL.
- 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.
- 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.

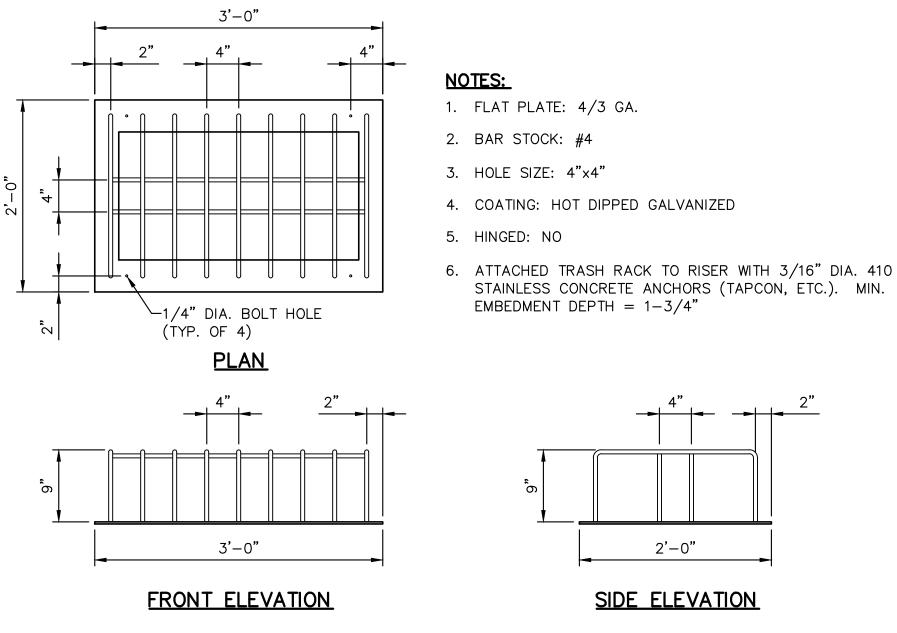


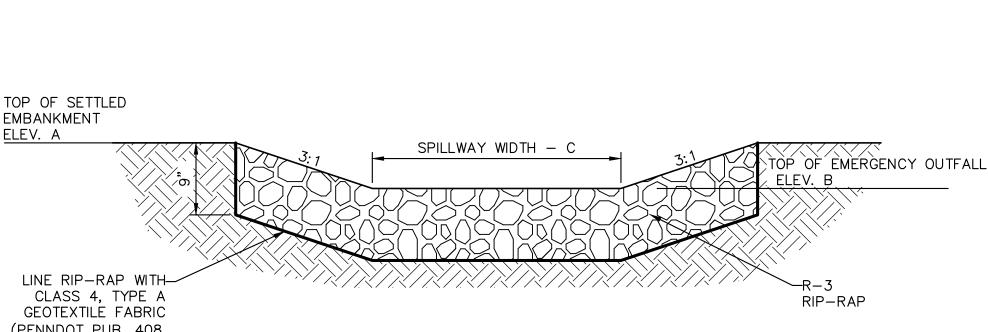
EMERGENCY OUTFALL DETAIL



TRASH RACK DETAIL







-FINISHED GRADE

HDPE FLARED END SECTION DETAIL

END VIEW

DIMENSIONS, INCHES (MM)

B (MAX)

1210 NP | 6.5 (165) | 10.0 (254) | 6.5 (165) | 25.0 (635) | 29.0 (736)

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)

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

SIDE VIEW

TOP VIEW

DIAMETER

18 (450)

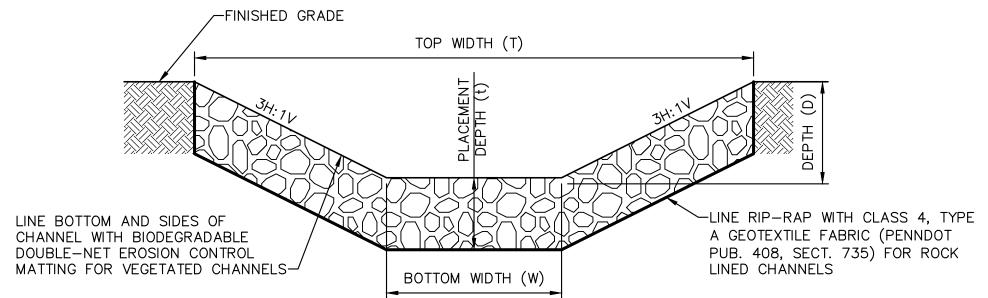
24 (600)

30 (750)

36 (900)

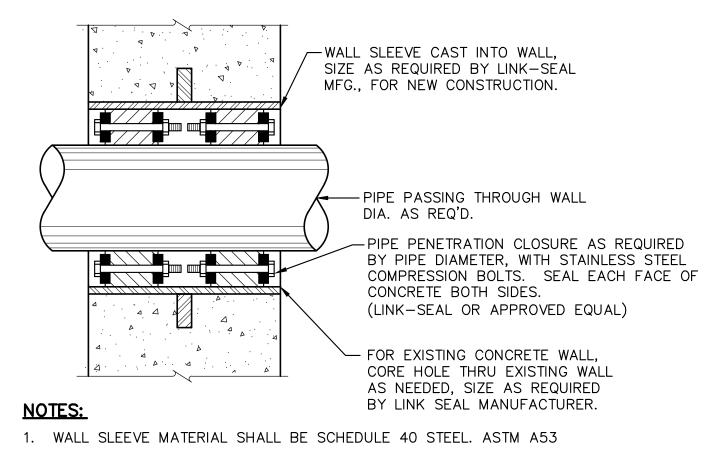
2, 15 (300, 375)

PART NO.



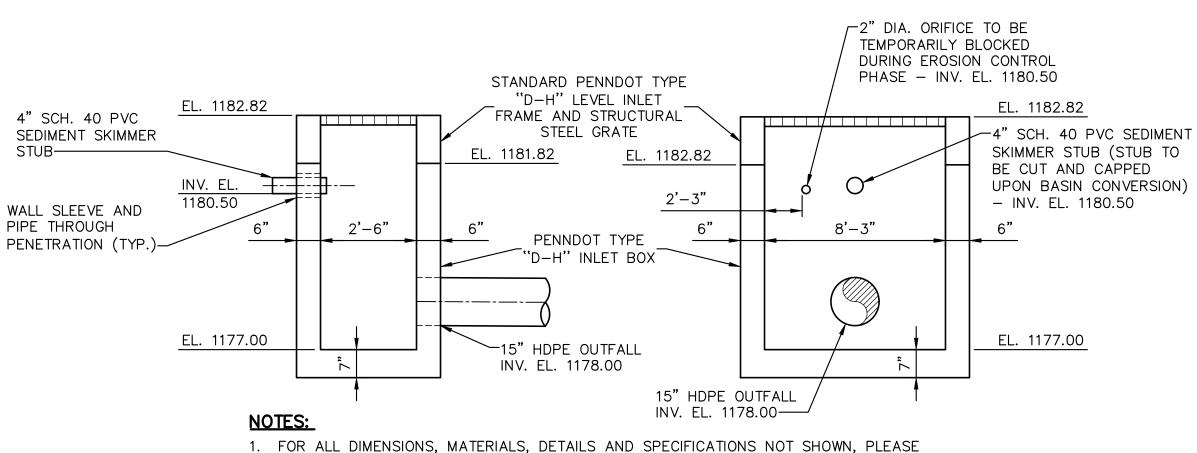
	CHANNEL SUMMARY TABLE						
CHANNEL NUMBER	BOTTOM WIDTH (W) FT.	TOP WIDTH (T) FT.	DEPTH (D) FT.	SIDE SLOPES	ROCK SIZE	PLACEMENT DEPTH (t) IN.	
1	7.0	16.0	1.5	3:1	N/A	N/A	
2	7.0	16.0	1.5	3:1	N/A	N/A	
3A	6.0	15.0	1.5	3:1	N/A	N/A	
3B	6.0	15.0	1.5	3:1	R-5	27	

TYPICAL CHANNEL DETAIL



TYPICAL PIPE PENETRATION THROUGH SLAB OR WALL

SEAL



ENSURE BACKFILL IS

MANUFACTURER.

PIPE AND MANHOLE.

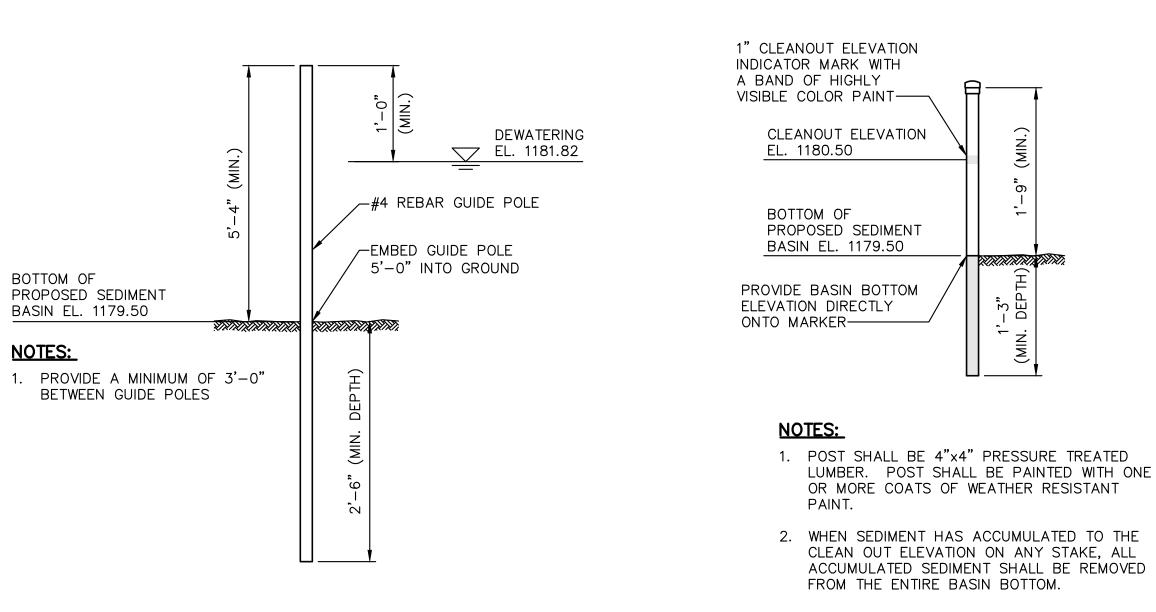
PLACED UNDER PIPE AND

PROPERLY COMPACTED -

- REFER TO PENNDOT STANDARD DETAILS RC-45M AND RC-46M.
- 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.
- 3. ALL PIPE CONNECTIONS TO RISER SHALL BE WATER TIGHT.

BASIN RISER DETAILS

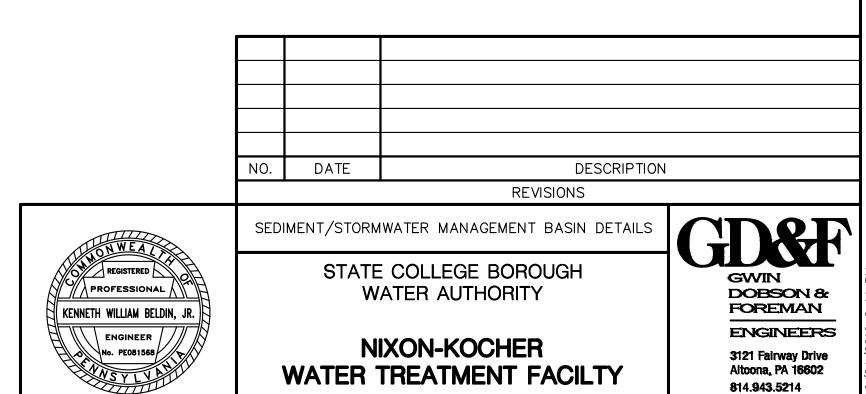
NO SCALE



SKIMMER GUIDE POLE DETAIL

SEDIMENT DEPTH MARKER DETAIL

NO SCALE



WATER TREATMENT FACILTY FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

JOB: 16049

DRAWN BY: AJL

DATE: 06/26/19

TILE: 16049_LD_021

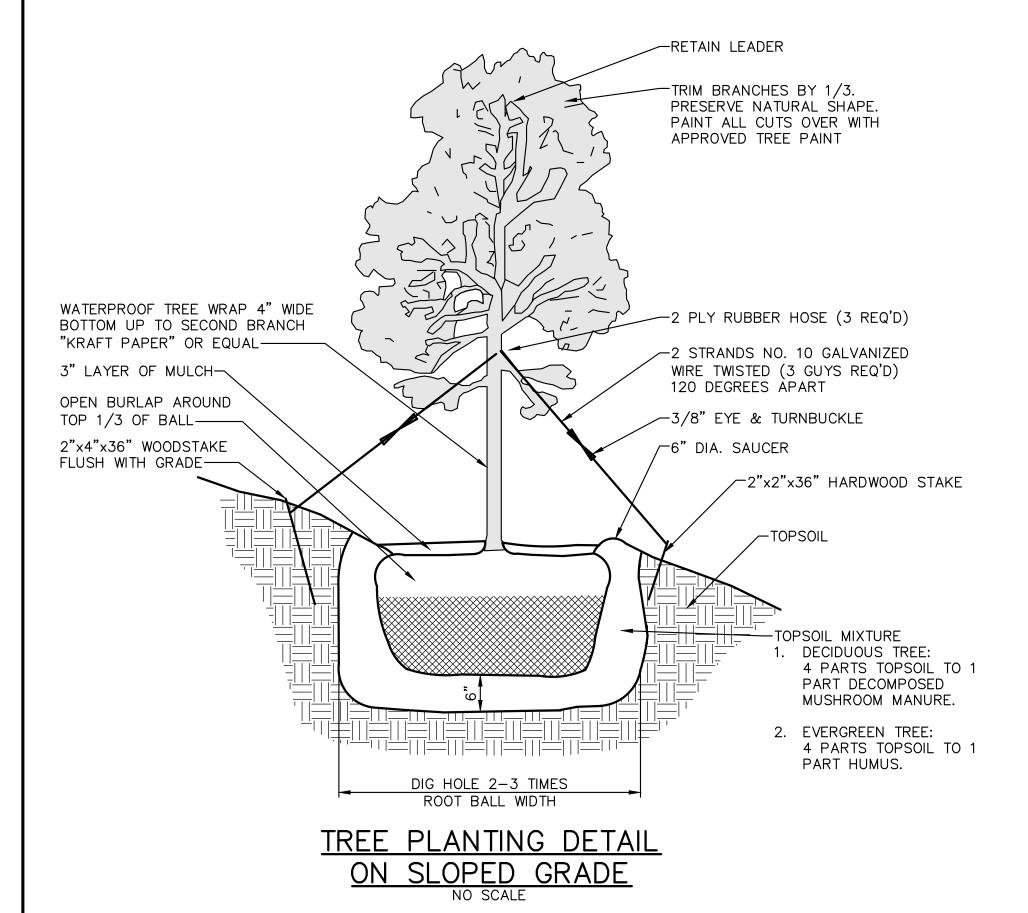
SCALE: AS SHOWN CHECKED BY: WAA G: \16049\LAND DEVELOPMENT\16049_LD_02

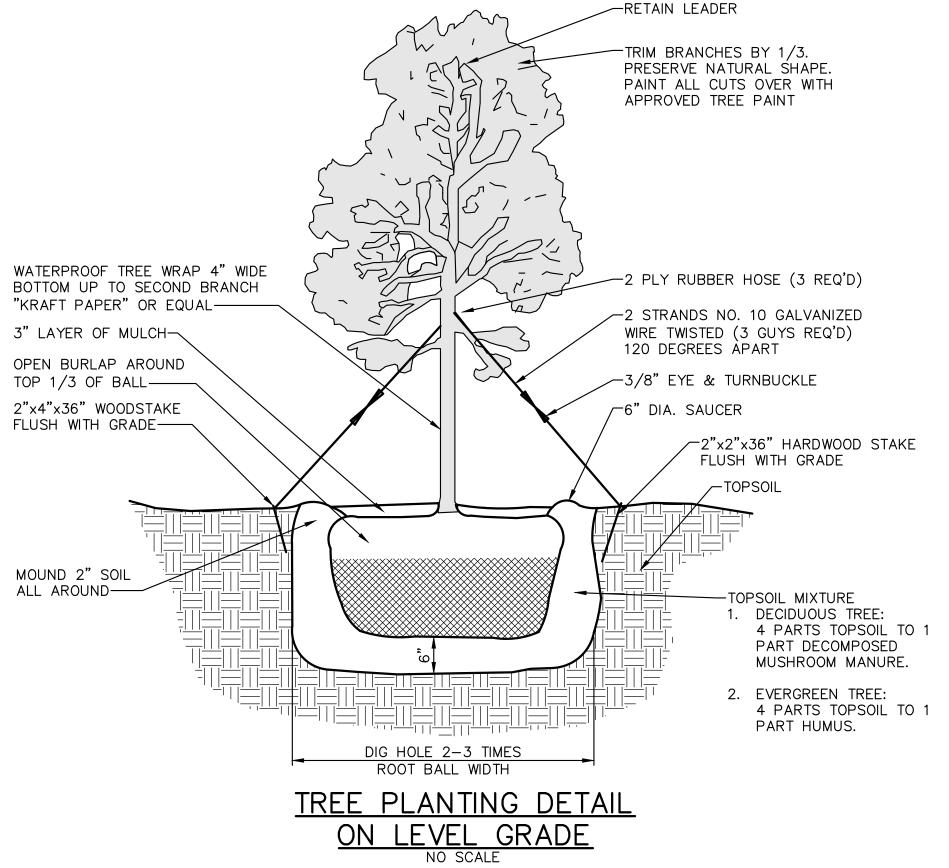
gdfengineers.com

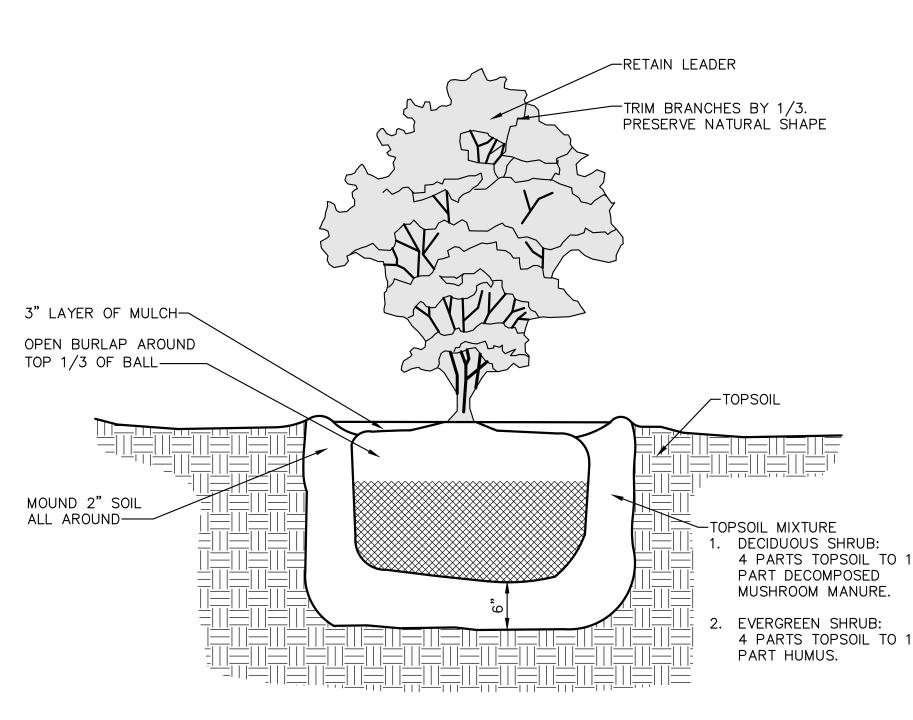
LANDSCAPING GENERAL NOTES:

THE PLANTING SHOWN ON ALL DRAWINGS.

- 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
- 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
- 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
- 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.







PLANTING SCHEDULE

BOTANICAL NAME (SYMBOL)

ACER RUBRUM (AR)

BOTANICAL NAME

THUJA OCCIDENTALIS (TO)

BOTANICAL NAME

BUXUS SEMPERVIRENS (BS)

COMMON NAME

RED MAPLE

COMMON NAME

AMERICAN ARBORVITAE

COMMON NAME

ENGLISH BOXWOOD

DECIDUOUS TREES

EVERGREEN TREES

SHRUBS

SHRUB PLANTING DETAIL

NO SCALE

NO.	DATE	DESCRIPTION	
	REVISIONS		

N W E A PROFESSIONAL (\) KENNETH WILLIAM BELDIN, JR. ENGINEER /// No. PEO81568

SEAL

STATE COLLEGE BOROUGH WATER AUTHORITY

PROPOSED LANDSCAPING DETAILS AND NOTES

SPACING | SIZE | CONTAINER | QUANTITY | MATURE HEIGHT | MATURE SPREAD

SPACING | SIZE | CONTAINER | QUANTITY | MATURE HEIGHT | MATURE SPREAD

SPACING | SIZE | CONTAINER | QUANTITY | MATURE HEIGHT | MATURE SPREAD

162

40'

12

B & B

B & B

AS SHOWN 2" CAL. B & B

AS SHOWN

AS SHOWN

NIXON-KOCHER WATER TREATMENT FACILTY

DRAWN BY: AJL

FILE: 16049_LD_022

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA DATE: 06/26/19 JOB: 16049 SCALE: AS SHOWN

22 CHECKED BY: WAA G: \16049\LAND DEVELOPMENT\16049_LD_022

GD&F

DOBSON & FOREMAN

ENGINEERS

3121 Fairway Drive

Altoona, PA 16602 814.943.5214 gdfengineers.com



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, July 8, 2019 6:00 PM

- I. CALL TO ORDER
- II. CITIZEN INPUT
- III. FERGUSON TOWNSHIP ZONING AND SUBDIVISION AND LAND DEVELOPMENT ORDINANCES UPDATE:

 Carolyn Yagle will be present to discuss the changes made since the Planning Commission and the Agricultural Ad Hoc Committee reviewed the Ordinance, dated June 21, 2019. Ms. Yagle has prepared a matrix for the Planning Commission to review, to ensure all of the comments that have been discussed the past few meetings have been satisfied and included in the ordinances. A tentative schedule is attached with the Agenda packet within the Interim Planning Director Report.

<u>Staff Recommendation:</u> That the Planning Commission review the memo and recommend approval of the Zoning Ordinance and Map as of July 8, 2019 and the Subdivision and Land Development Ordinance, as of July 8, 2019 and to recommend the Board of Supervisors Authorize Advertising of both Ordinances.

IV. PRELIMINARY/FINAL REPLOT OF LANDS OF THE STATE COLLEGE BOROUGH WATER AUTHORITY & GARY AND CAROL MYERS – INITIAL REVIEW & COMMENT: Attached within the Agenda Packet is a transmittal letter and the Proposed Replot Plan.

Staff Recommendation: That the Planning Commission review and make initial comments upon the Plan.

V. PRELIMINARY LAND DEVELOPMENT PLAN FOR THE NIXON-KOCHER WATER TREATMENT FACILITY.

Attached within the Agenda Packet is a transmittal letter and the Proposed Land

Development Plan for the Nixon-Kocher Water Treatment Facility.

Staff Recommendation: That the Planning Commission review and make initial comments upon the Plan.

- VI. CONSENT AGENDA
- VII. INTERIM PLANNING DIRECTOR REPORT
- VIII. CENTRE REGIONAL PLANNING COMMISSION REPORT
- IX. ZONING/SALDO UPDATE
- X. PINE GROVE MILLS SMALL AREA PLAN
- XI. Approval of Regular Meeting Minutes June 24, 2019
- XII. ADJOURNMENT