

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

PRELIMINARY LAND
DEVELOPMENT PLANS

FOR

NIXON-KOCHER
WATER TREATMENT FACILITY

JUNE 26, 2019
LAST REVISED AUGUST 12, 2019

GD&F

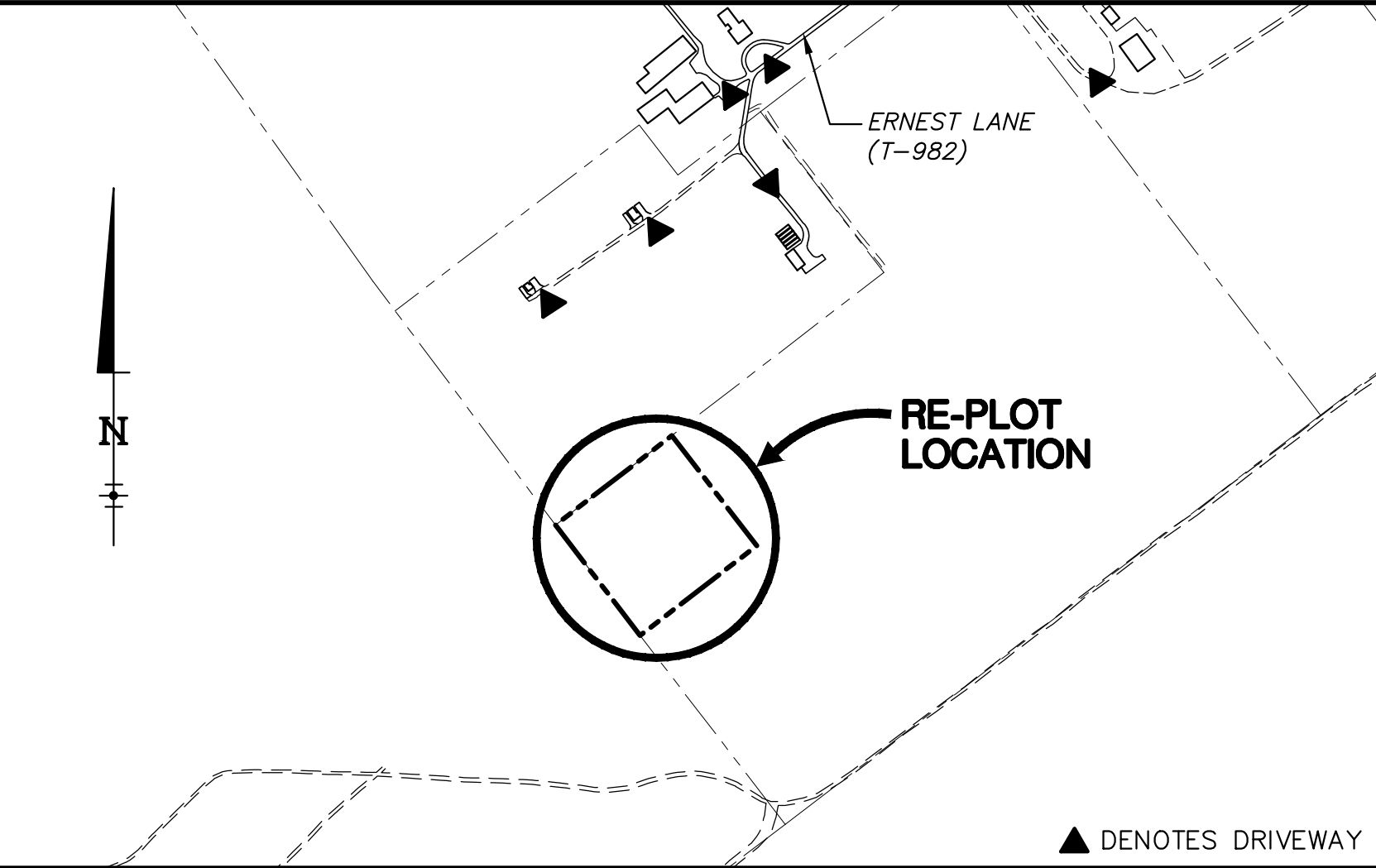
GWIN
DOBSON &
FOREMAN
ENGINEERS

3121 Fairway Drive
Altoona, PA 16602
814.943.5214
gdfengineers.com

OWNER'S STORMWATER MANAGEMENT CERTIFICATION

THE STATE COLLEGE BOROUGH WATER AUTHORITY (OWNER) ACKNOWLEDGES THAT ANY STORMWATER MANAGEMENT SYSTEMS IDENTIFIED ON THIS LAND DEVELOPMENT PLAN ARE PERMANENT FIXTURES THAT MAY BE ALTERED OR REMOVED ONLY AFTER APPROVAL BY FERGUSON TOWNSHIP AND/OR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION OF A REVISED STORMWATER MANAGEMENT PLAN. FURTHERMORE, FERGUSON TOWNSHIP AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, ITS AGENTS AND ASSIGNS, ARE EXPRESSLY AUTHORIZED RIGHT-OF-ENTRY OVER AND THROUGH THE PROPERTY FOR THE PURPOSE OF INSPECTING ALL STORMWATER FACILITIES IDENTIFIED IN THIS LAND DEVELOPMENT PLAN UPON NOTIFICATION TO THE AUTHORITY. THE STORMWATER MANAGEMENT SYSTEM IS TO BE MAINTAINED IN ACCORDANCE WITH THE RECORDED OPERATION AND MAINTENANCE (O&M) PROGRAM.

SIGNATURE _____ DATE _____



KEY MAP
SCALE: 1" = 400'

CENTRE COUNTY RECORDER OF DEEDS

PROJECT NOTES

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 ACRES
C. PROPERTY ADDRESS: 3062 ERNEST LANE
D. RECORD BOOK/PAGE NUMBER: 410/533
E. LAND IS ZONED: RURAL AGRICULTURAL (RA)
F. BUILDING SETBACK LINE: FRONT YARD = 50'
SIDE YARD = 50'
REAR YARD = 50'
G. LOT REQUIREMENTS: EXISTING LOT AREA (FOLLOWING RE PLOT) = 786,137 S.F. OR 18.047 ACRES
MAXIMUM BUILDING HEIGHT = 40'
PROPOSED = 39.89'
H. EXISTING LAND USE: FORESTED LAND/AGRICULTURAL
I. PROPOSED LAND USE: WATER TREATMENT FACILITY
J. REQUIRED PARKING: 1 SPACE/4000 GFA (19,883 GFA/4000 = 5 SPACES) AND 1 LOADING SPACE
K. PROPOSED PARKING: 7 SPACES (5 STANDARD, 1 ADA AND 1 LOADING SPACE)
L. BOUNDARY AND TOPOGRAPHIC INFORMATION BASED ON FIELD INSTRUMENT SURVEY COMPLETED BY GWM, DOBSON AND FOREMAN, INC., COMPLETED FEBRUARY 9, 2018.
M. SOILS INFORMATION FROM UNITED STATE DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE. ONSITE SOILS CONSIST PRIMARILY OF SANDY LOAMS UNDERLAIN BY CARBONATE ROCK.
N. EXISTING FLOODPLAIN INFORMATION FROM FIRM MAP NO. 42027C0618F, EFFECTIVE DATE MAY 4, 2009, IS INDICATED ON THESE PLANS.
O. THERE WAS ONE WETLAND AREA IDENTIFIED THROUGH FIELD INVESTIGATION NEAR THE EXISTING CHLORINATION BUILDING. HOWEVER, THERE ARE NO WETLANDS WITHIN THE ENVIRONS OF THE PROJECT LIMITS.
P. THERE ARE NO STEEP SLOPES (>25%) WITHIN THE ENVIRONS OF THE PROJECT LIMITS.

2. LOT COVERAGE:

A. MAXIMUM BUILDING COVERAGE = 15%
B. PROPOSED BUILDING COVERAGE = 22,182 SQ. FT. OR 2.82%
C. MAXIMUM IMPERVIOUS COVERAGE = 50%
D. PROPOSED IMPERVIOUS COVERAGE = 22,182 SQ. FT. (BUILDING) = 71,618 SQ. FT. (PAVEMENT/CONCRETE) = 93,804 SQ. FT. (TOTAL OR 11.93%)

3. DATE OF ZONING PERMIT APPLICATION: JUNE 26, 2019

4. 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) STUDY
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.J: 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

5. VARIANCE DECISION (FEBRUARY 26, 2019): APPLICANT'S REQUEST FOR VARIANCES FROM THE FLOODPLAIN REGULATIONS, INCLUDING SECTION 27-213.4 (RIPARIAN BUFFER OVERLAY), SECTION 27-801.1 (HYDROLOGIC AND HYDRAULIC STUDIES), SECTION 27-801.1.C (NO NEW CONSTRUCTION WITHIN FLOODPLAINS), SECTION 27-801.H (NO NEW CONSTRUCTION IN FLOODWAYS) AND SECTION 27-801.J (NO ENCROACHMENT INTO 50 FOOT FLOODPLAIN BUFFER), ARE ALL GRANTED BY A VOTE OF 5 TO 0; PROVIDED THAT AS A CONDITION TO THE GRANT OF THE VARIANCE, THE APPLICANT SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM REGULATIONS (60.3 a.b. AND c), AND PROVIDED FURTHER THAT THE TOWNSHIP MUST ISSUE A LETTER TO THE APPLICANT ADVISING IT OF THE RISK OF AN INCREASE IN PREMIUM RATES FOR FLOOD INSURANCE AND AN INCREASE IN THE RISKS TO LIFE AND PROPERTY BECAUSE OF THE GRANT OF THE VARIANCE.

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

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

7. EXISTING FIRE HYDRANT FLOW DATA:

HYD #	LOCATION	STATIC	RESIDUAL	FLOW	DATE
50001.00	3062 ERNEST LN (WELL FIELD)	102psi	74psi	2050gpm	6/22/18
50002.00	ERNEST LN	82psi	68psi	2000gpm	8/16/17

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

9. FINAL LAND DEVELOPMENT PLANS (AS-BUILTS) SHALL BE PROVIDED TO FERGUSON TOWNSHIP PRIOR TO OCCUPANCY OR RELEASE OF ANY SURETY.
- | | | |
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| | | |
| | | |
| 1 | 8/12/19 | REVISED PER TOWNSHIP COMMENTS |
| NO. | DATE | DESCRIPTION |
| | | REVISIONS |
- COMMONWEALTH OF PENNSYLVANIA COUNTY OF CENTRE
CERTIFICATION OF OWNERSHIP

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 _____
- DESIGN PROFESSIONAL CERTIFICATION
- I, KENNETH W. BELDIN, JR., PE, HAVE REVIEWED AND HEREBY CERTIFY THAT THIS LAND DEVELOPMENT MEETS ALL DESIGN REQUIREMENTS OF THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE, ZONING ORDINANCE AND ALL OTHER APPLICABLE CHAPTERS OF THE FERGUSON TOWNSHIP CODE.
- DESIGN PROFESSIONAL STORMWATER CERTIFICATION
- I, KENNETH W. BELDIN, JR., PE, HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.
- FERGUSON TOWNSHIP ENGINEER CERTIFICATION
- I, _____, HAVE REVIEWED AND HEREBY CERTIFY THAT THE PLAN MEETS ALL ENGINEERING DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP CODE OF ORDINANCES.
- FERGUSON TOWNSHIP ENGINEER STORMWATER CERTIFICATION
- I, _____, HAVE REVIEWED THIS STORMWATER MANAGEMENT PLAN IN ACCORDANCE WITH THE DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.
- FERGUSON TOWNSHIP PLANNING COMMISSION
- FERGUSON TOWNSHIP PLANNING COMMISSION APPROVED
- SECRETARY _____ DATE _____
- CHAIRMAN _____ DATE _____
- FERGUSON TOWNSHIP BOARD OF SUPERVISORS
- FERGUSON TOWNSHIP BOARD OF SUPERVISORS APPROVED
- SECRETARY _____ DATE _____
- CHAIRMAN _____ DATE _____
- FERGUSON TOWNSHIP ZONING OFFICER
- FERGUSON TOWNSHIP ZONING OFFICER APPROVED
- ZONING OFFICER _____ DATE _____
- FIRE CHIEF CERTIFICATION
- I HAVE REVIEWED AND HEREBY CERTIFY THAT THE LOCATION OF FIRE LANES AND FIRE HYDRANTS SHOWN ON THIS PLAN ARE ADEQUATE.
- FIRE CHIEF _____ DATE _____
- COVER SHEET

STATE COLLEGE BOROUGH
WATER AUTHORITY

NIXON-KOCHER
WATER TREATMENT FACILITY

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 8/12/19 JOB: 16049 SCALE: AS SHOWN
FILE: 16049_LD_CST DRAWN BY: RLN CHECKED BY:

SEAL

3121 Fairway Drive
Altoona, PA 16602
814.943.5214
gdfengineers.com

SHEET NO:
CS-1
- RECORD SET SUBMITTED ON JUNE 27, 2019.
- G:\16049\LAND DEVELOPMENT\16049_LD_CST
- PLOT CREATED: 8/12/2019 12:58 PM

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.

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

WATER/
WASTEWATER:

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

PENN STATE UNIVERSITY
WASTEWATER TREATMENT PLANT
3147 RESEARCH DRIVE
STATE COLLEGE, PA. 16801
CONTACT: JEFF McDONALD
EMAIL: jmc86@psu.edu

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

ELECTRIC:

WEST PENN POWER
800 CABIN HILL DRIVE
ROOM B100N
GREENSBURG, PA 15601
CONTACT: ROBERT PAINTER
EMAIL: rpainter@firstenergycorp.com

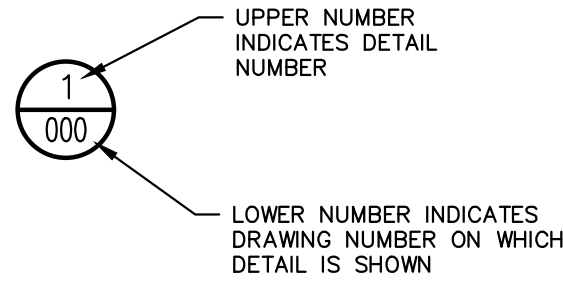
ROADS/
STORM:

FERGUSON TOWNSHIP CENTRE COUNTY
3147 RESEARCH DRIVE
STATE COLLEGE, PA. 16801
CONTACT: CHRIS LEIDY
EMAIL: cledid@wp.ferguson.pa.us

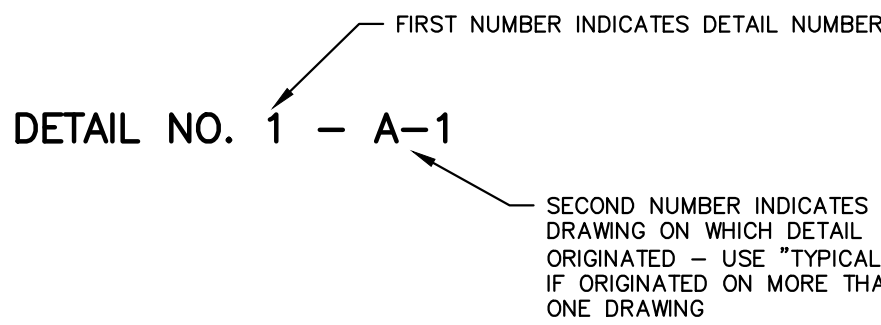


PA ONE-CALL (800) 242-1776

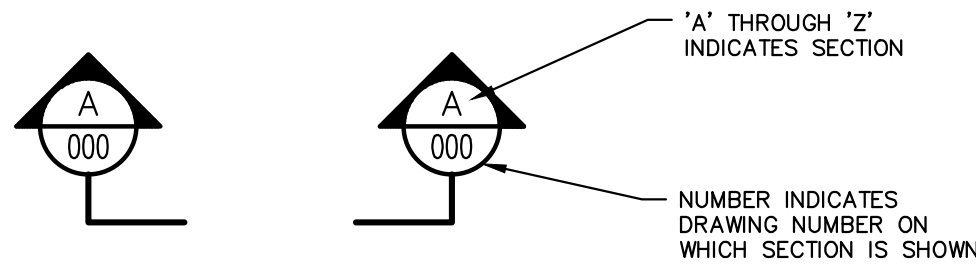
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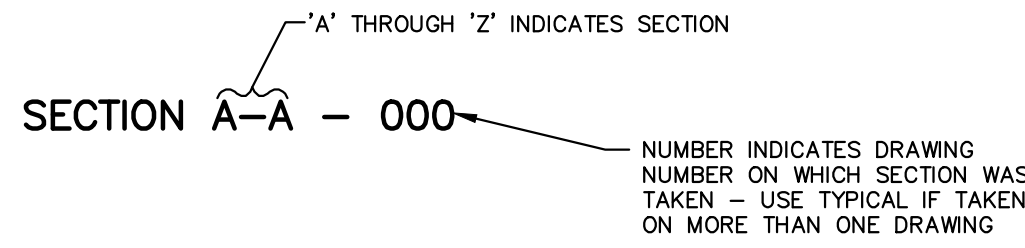
DETAIL DESIGNATION



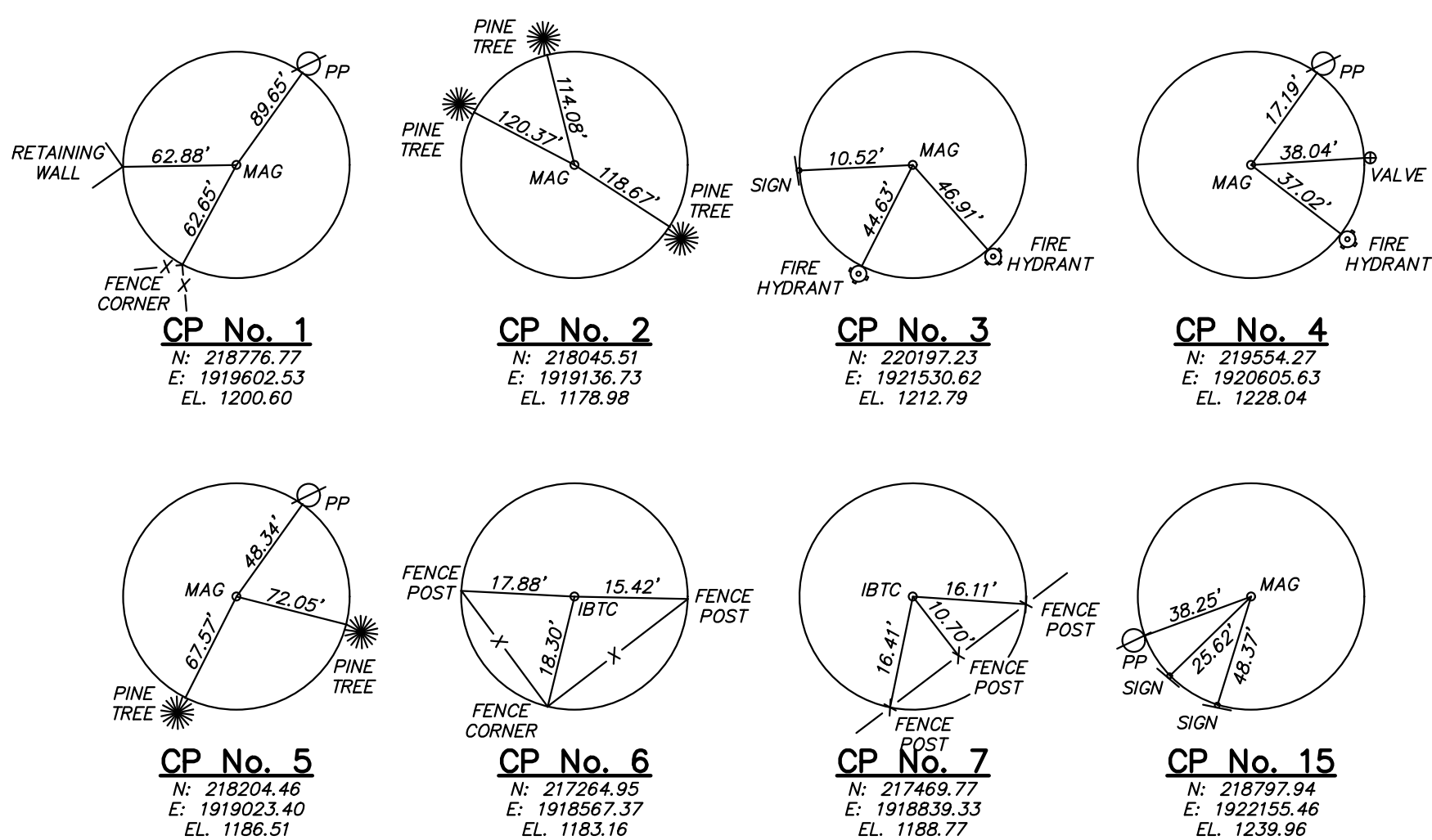
DETAIL IDENTIFICATION



SECTION LOCATION



SECTION IDENTIFICATION



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:

- 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 THE EXISTENCE OF UTILITIES. 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 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.
- CONTRACTOR SHALL IMPLEMENT ALL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS, TO AN EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO CONSTRUCTION.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- ALL OUTAGES MUST BE COORDINATED/SCHEDULED WITH OWNER AND THE OUTAGES SHALL BE A MAXIMUM OF 24 HOURS.
- ALL EXCESS SPILL 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.
- 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).

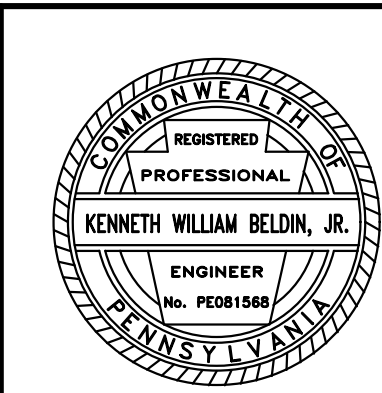
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7	PROPOSED SITE CROSS SECTIONS
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24	STORMWATER MANAGEMENT NOTES *

* - DENOTES DRAWINGS TO BE RECORDED WITH PCSM INSTRUMENT OF DECLARATION

ABBREVIATIONS:

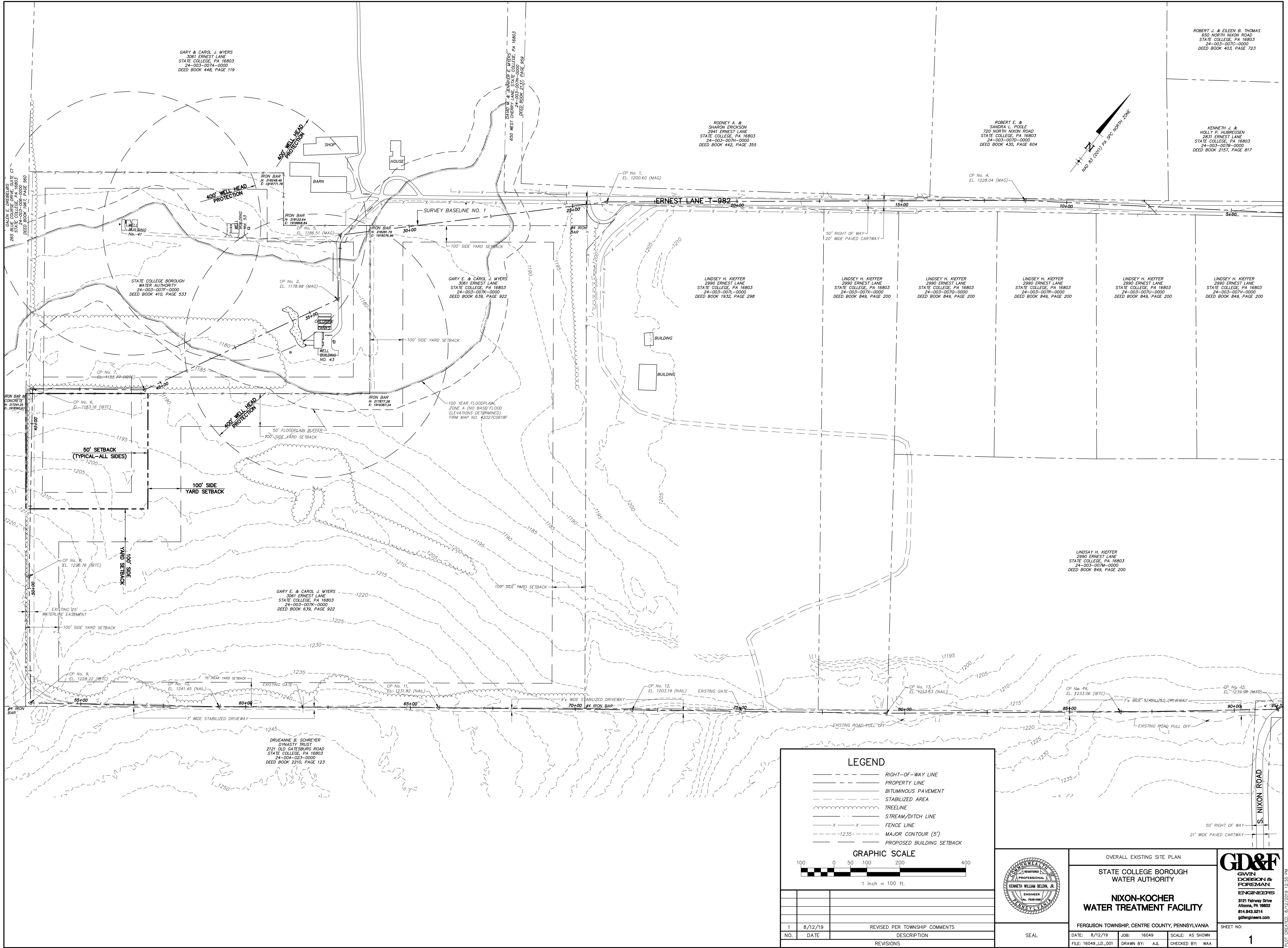
CIP	- CAST IRON PIPE
CMP	- CORRUGATED METAL PIPE
D.I.	- DUCTILE IRON PIPE
DIP	- DUCTILE IRON PIPE
EL	- ELEVATION
F.F.	- FINISHED FLOOR
HDPE	- HIGH DENSITY POLYETHYLENE PIPE
H.P.	- HIGH POINT
LF	- LINEAR FEET
L.P.	- LOW POINT
PVC	- POLYVINYL CHLORIDE PIPE
RCP	- REINFORCED CONCRETE PIPE
T.O.W.	- TOP OF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



SEAL

NO.	DATE	DESCRIPTION
REVISIONS		
DRAWING INDEX, REFERENCES, BENCHMARKS, ONE CALL AND NOTES		
STATE COLLEGE BOROUGH WATER AUTHORITY		
NIXON-KOCHER WATER TREATMENT FACILITY		
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA		
DATE: 6/28/19	JOB: 16049	SCALE: AS SHOWN
FILE: 16049_LD_CS2	DRAWN BY: RLN	CHECKED BY: WAA
SHEET NO:		CS-2





ROBERT J. & EILEEN B. THOMAS
650 NORTH NIXON ROAD
STATE COLLEGE, PA 16803
24-003-007C-0000
DEED BOOK 403, PAGE 723

KENNETH J. &
HOLLY P. HUBBESSEN
2831 ERNEST LANE
STATE COLLEGE, PA 16803
24-003-007B-0000
DEED BOOK 2157, PAGE 817

ROBERT E. &
SANDRA L. POOLE
720 NORTH NIXON ROAD
STATE COLLEGE, PA 16803
24-003-007D-0000
DEED BOOK 430, PAGE 604

ROONEY A. &
SHARON ERIKSON
2941 ERNEST LANE
STATE COLLEGE, PA 16803
24-003-007H-0000
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DONALD M. & JENNIFER E. MYERS
650 WEST CHERRY LANE
STATE COLLEGE, PA 16803
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GARY & CAROL J. MYERS
3061 ERNEST LANE
STATE COLLEGE, PA 16803
24-003-007A-0000
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GARY E. & CAROL J. MYERS
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STATE COLLEGE BOROUGH
WATER AUTHORITY
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GARY E. & CAROL J. MYERS
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LINDSEY H. KIEFFER
2990 ERNEST LANE
STATE COLLEGE, PA 16803
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24-003-007O-0000
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LINDSEY H. KIEFFER
2990 ERNEST LANE
STATE COLLEGE, PA 16803
24-003-007P-0000
DEED BOOK 849, PAGE 200

LINDSEY H. KIEFFER
2990 ERNEST LANE
STATE COLLEGE, PA 16803
24-003-007Q-0000
DEED BOOK 849, PAGE 200

LINDSEY H. KIEFFER
2990 ERNEST LANE
STATE COLLEGE, PA 16803
24-003-007R-0000
DEED BOOK 849, PAGE 200

LINDSEY H. KIEFFER
2990 ERNEST LANE
STATE COLLEGE, PA 16803
24-003-007S-0000
DEED BOOK 849, PAGE 200

LINDSEY H. KIEFFER
2990 ERNEST LANE
STATE COLLEGE, PA 16803
24-003-007T-0000
DEED BOOK 849, PAGE 200

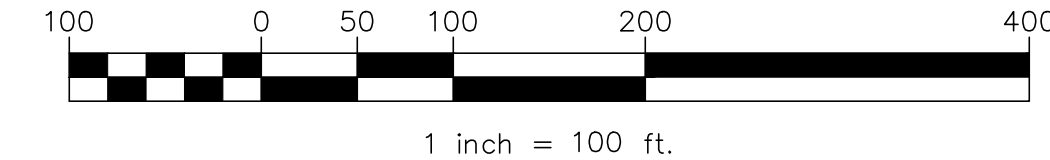
GARY E. & CAROL J. MYERS
3061 ERNEST LANE
STATE COLLEGE, PA 16803
24-003-007K-0000
DEED BOOK 639, PAGE 922

DRUEANNE B. SCHREYER
DYNASTY TRUST
2121 OLD GATESBURG ROAD
STATE COLLEGE, PA 16803
24-004-023-0000
DEED BOOK 2210, PAGE 123

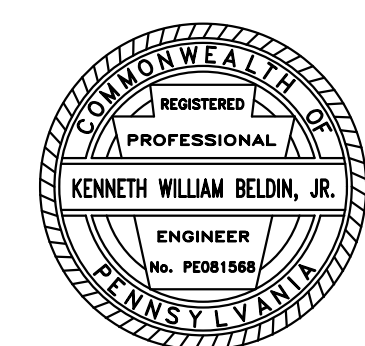
LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- FENCE LINE
- MAJOR CONTOUR (5')
- PROPOSED BUILDING SETBACK

GRAPHIC SCALE



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

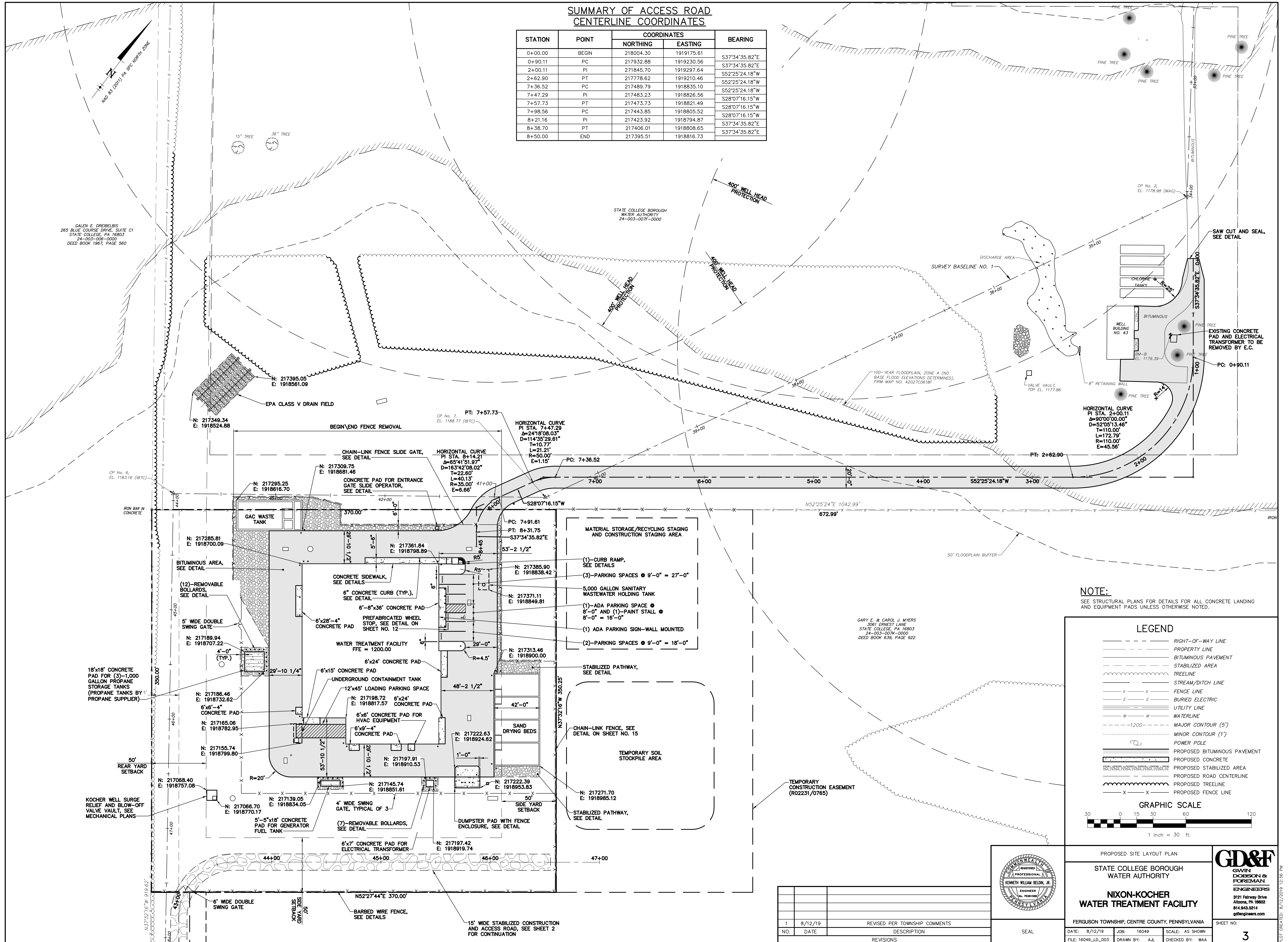


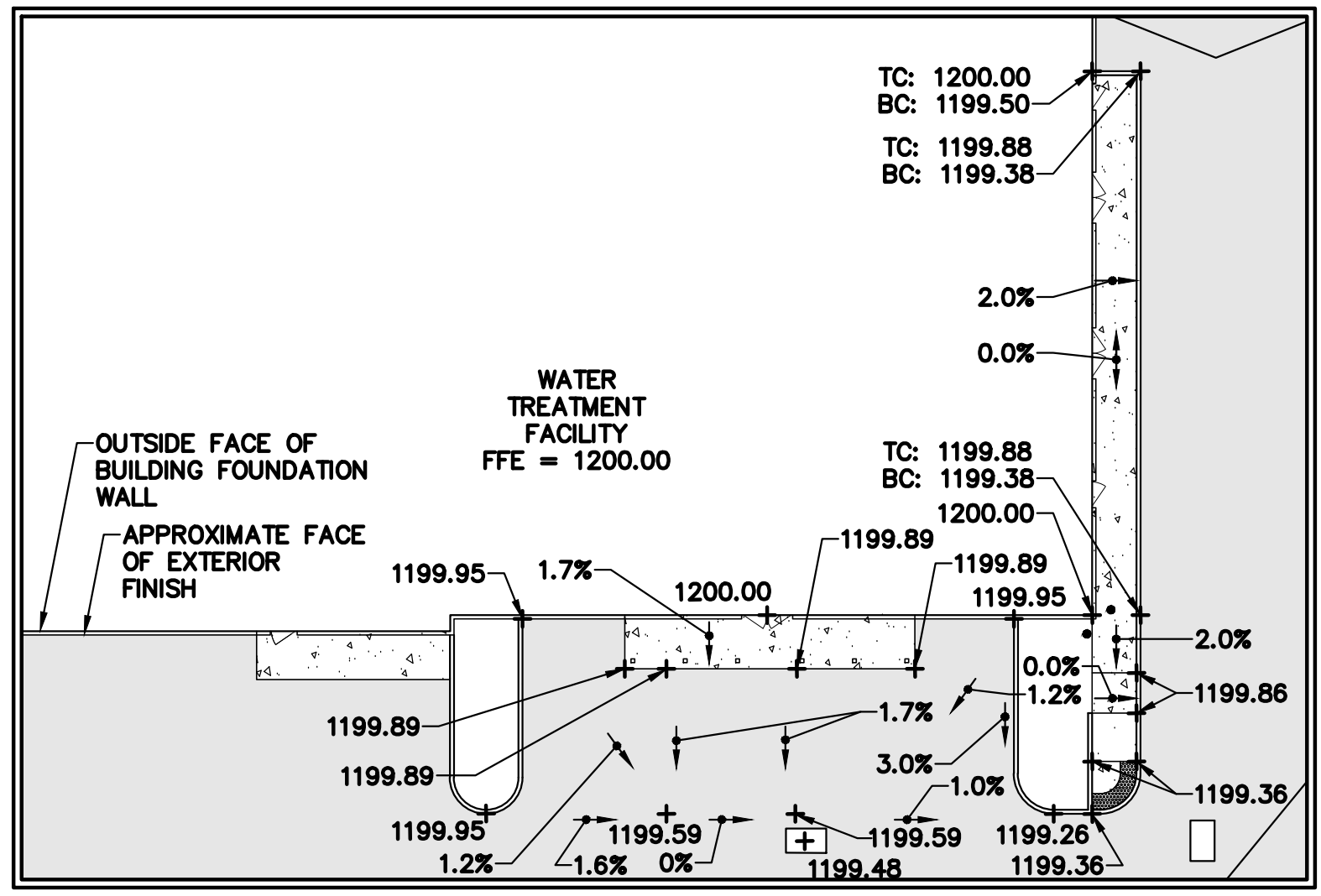
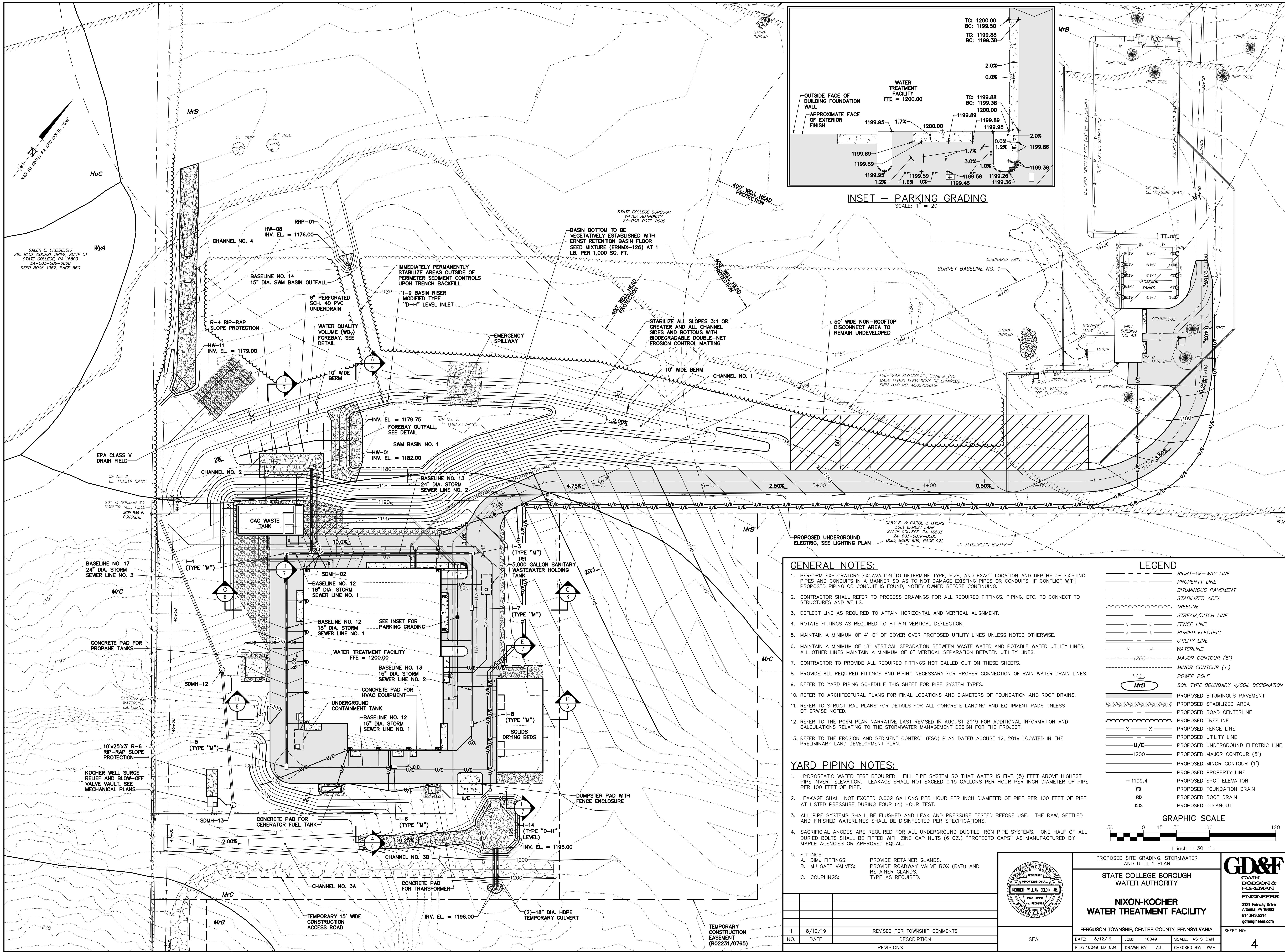
OVERALL EXISTING SITE PLAN	
STATE COLLEGE BOROUGH WATER AUTHORITY	
NIXON-KOCHER WATER TREATMENT FACILITY	
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA	
DATE: 8/12/19	JOB: 16049
FILE: 16049_LD_001	DRAWN BY: AJL
	CHECKED BY: WAA
SCALE: AS SHOWN	



SHEET NO:	1
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STATION	POINT	COORDINATES		BEARING
		NORTHING	EASTING	
0+00.00	BEGIN	218004.30	1919175.61	
0+90.11	PC	217932.88	1919230.56	S37°34'35.82"E
2+00.11	PI	217845.70	1919297.64	S37°34'35.82"E
2+62.90	PT	217778.62	1919210.46	S52°25'24.18"W
7+36.52	PI	217489.79	1918835.10	S52°25'24.18"W
7+47.29	PT	217483.23	1918826.56	S28°07'16.15"W
7+57.73	PI	217473.73	1918821.49	S28°07'16.15"W
7+98.56	PT	217443.85	1918805.52	S28°07'16.15"W
8+21.16	PI	217423.92	1918794.87	S37°34'35.82"E
8+38.70	PT	217406.01	1918808.65	S37°34'35.82"E
8+50.00	END	217395.51	1918816.73	





GENERAL NOTES:

1. PERFORM EXPLORATORY EXCAVATION TO DETERMINE TYPE, SIZE, AND EXACT LOCATION AND DEPTHS OF EXISTING PIPES AND CONDUITS IN A MANNER SO AS TO NOT DAMAGE EXISTING PIPES OR CONDUITS. IF CONFLICT WITH PROPOSED PIPING OR CONDUIT IS FOUND, NOTIFY OWNER BEFORE CONTINUING.
2. CONTRACTOR SHALL REFER TO PROCESS DRAWINGS FOR ALL REQUIRED FITTINGS, PIPING, ETC. TO CONNECT TO STRUCTURES AND WELLS.
3. DEFLECT LINE AS REQUIRED TO ATTAIN HORIZONTAL AND VERTICAL ALIGNMENT.
4. ROTATE FITTINGS AS REQUIRED TO ATTAIN VERTICAL DEFLECTION.
5. MAINTAIN A MINIMUM OF 4'-0" OF COVER OVER PROPOSED UTILITY LINES UNLESS NOTED OTHERWISE.
6. MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN WASTE WATER AND POTABLE WATER UTILITY LINES. ALL OTHER LINES MAINTAIN A MINIMUM OF 6" VERTICAL SEPARATION BETWEEN UTILITY LINES.
7. CONTRACTOR TO PROVIDE ALL REQUIRED FITTINGS NOT CALLED OUT ON THESE SHEETS.
8. PROVIDE ALL REQUIRED FITTINGS AND PIPING NECESSARY FOR PROPER CONNECTION OF RAIN WATER DRAIN LINES.
9. REFER TO YARD PIPING SCHEDULE THIS SHEET FOR PIPE SYSTEM TYPES.
10. REFER TO ARCHITECTURAL PLANS FOR FINAL LOCATIONS AND DIAMETERS OF FOUNDATION AND ROOF DRAINS.
11. REFER TO STRUCTURAL PLANS FOR DETAILS FOR ALL CONCRETE LANDING AND EQUIPMENT PADS UNLESS OTHERWISE NOTED.
12. REFER TO THE PCSM PLAN NARRATIVE LAST REVISED IN AUGUST 2019 FOR ADDITIONAL INFORMATION AND CALCULATIONS RELATING TO THE STORMWATER MANAGEMENT DESIGN FOR THE PROJECT.
13. REFER TO THE EROSION AND SEDIMENT CONTROL (ESC) PLAN DATED AUGUST 12, 2019 LOCATED IN THE PRELIMINARY LAND DEVELOPMENT PLAN.

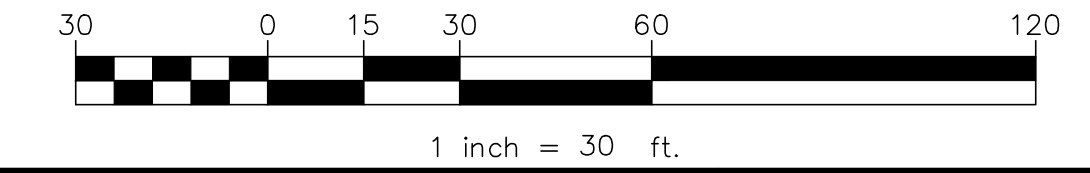
YARD PIPING NOTES:

1. HYDROSTATIC WATER TEST REQUIRED. FILL PIPE SYSTEM SO THAT WATER IS FIVE (5) FEET ABOVE HIGHEST PIPE INVERT ELEVATION. LEAKAGE SHALL NOT EXCEED 0.15 GALLONS PER HOUR PER INCH DIAMETER OF PIPE PER 100 FEET OF PIPE.
2. LEAKAGE SHALL NOT EXCEED 0.002 GALLONS PER HOUR PER INCH DIAMETER OF PIPE PER 100 FEET OF PIPE AT LISTED PRESSURE DURING FOUR (4) HOUR TEST.
3. ALL PIPE SYSTEMS SHALL BE FLUSHED AND LEAK AND PRESSURE TESTED BEFORE USE. THE RAW, SETTLED AND FINISHED WATERLINES SHALL BE DISINFECTED PER SPECIFICATIONS.
4. SACRIFICIAL ANODES ARE REQUIRED FOR ALL UNDERGROUND DUCTILE IRON PIPE SYSTEMS. ONE HALF OF ALL BURIED BOLTS SHALL BE FITTED WITH ZINC CAP NUTS (6 OZ.) "PROTECTO CAPS" AS MANUFACTURED BY MAPLE AGENCIES OR APPROVED EQUAL.
5. FITTINGS:
 - A. DIM J FITTINGS: PROVIDE RETAINER GLANDS.
 - B. MJ GATE VALVES: PROVIDE ROADWAY VALVE BOX (RVB) AND RETAINER GLANDS.
 - C. COUPLINGS: TYPE AS REQUIRED.

LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- FENCE LINE
- BURIED ELECTRIC
- UTILITY LINE
- WATERLINE
- MAJOR CONTOUR (5')
- MINOR CONTOUR (1')
- POWER POLE
- SOIL TYPE BOUNDARY w/ SOIL DESIGNATION
- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED STABILIZED AREA
- PROPOSED ROAD CENTERLINE
- PROPOSED TREELINE
- PROPOSED UTILITY LINE
- PROPOSED UNDERGROUND ELECTRIC LINE
- PROPOSED MAJOR CONTOUR (5')
- PROPOSED MINOR CONTOUR (1')
- PROPOSED PROPERTY LINE
- PROPOSED SPOT ELEVATION
- PROPOSED FOUNDATION DRAIN
- PROPOSED FENCE DRAIN
- PROPOSED CROFOUT

GRAPHIC SCALE



PROPOSED SITE GRADING, STORMWATER AND UTILITY PLAN
STATE COLLEGE BOROUGH WATER AUTHORITY
NIXON-KOCHER WATER TREATMENT FACILITY
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA



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

DATE: 8/12/19	JOB: 16049	SCALE: AS SHOWN
FILE: 16049_LD_004	DRAWN BY: AJL	CHECKED BY: WAA

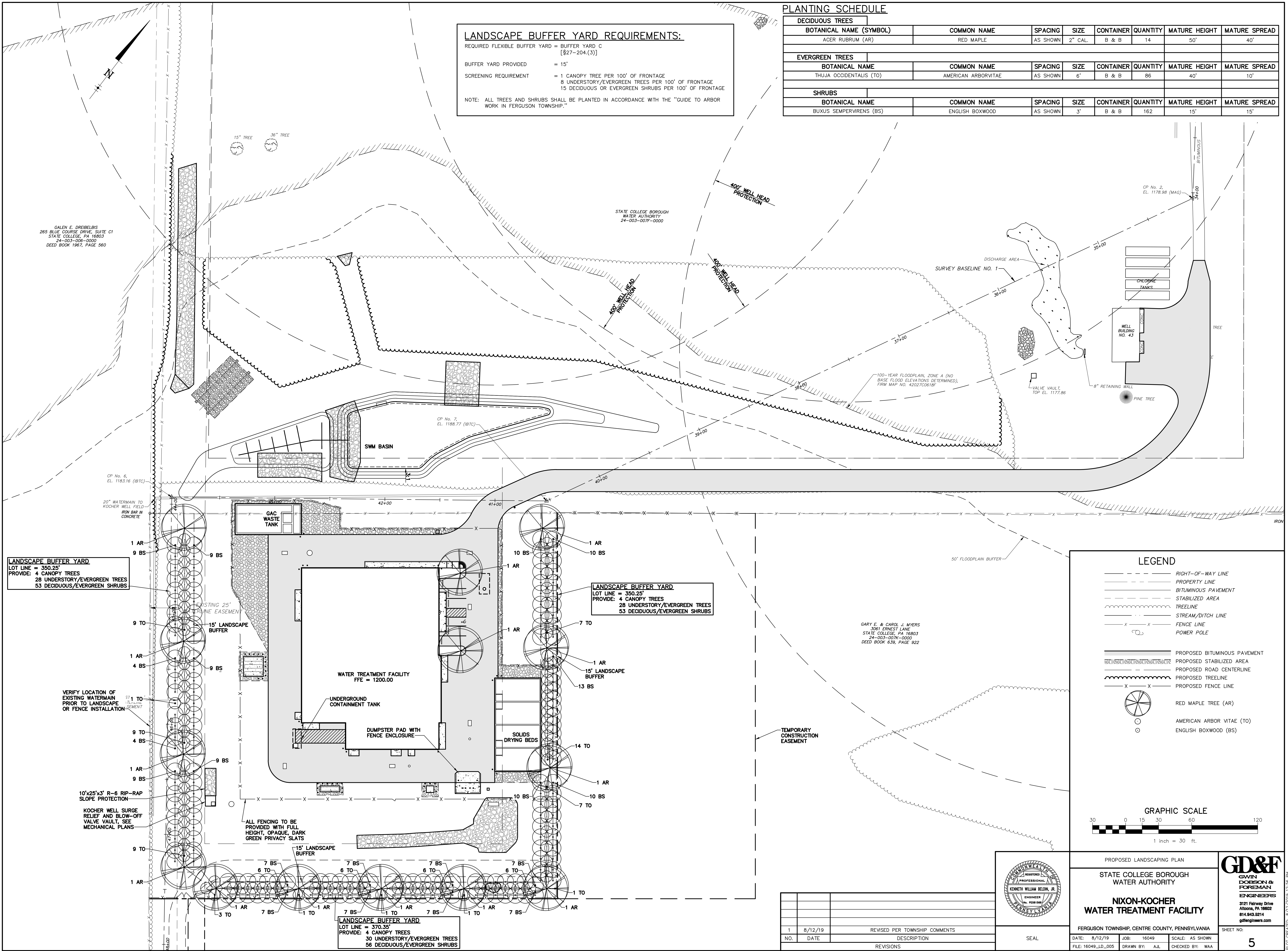
SHEET NO:	4
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PLOT CREATED: 8/12/2019 10:54 PM
G:\16049\LAND DEVELOPMENT\16049_LD_004

LANDSCAPE BUFFER YARD REQUIREMENTS:
REQUIRED FLEXIBLE BUFFER YARD = BUFFER YARD C
[§27-204.(3)]
BUFFER YARD PROVIDED = 15'
SCREENING REQUIREMENT = 1 CANOPY TREE PER 100' OF FRONTAGE
8 UNDERSTORY/EVERGREEN TREES PER 100' OF FRONTAGE
15 DECIDUOUS OR EVERGREEN SHRUBS PER 100' OF FRONTAGE
NOTE: ALL TREES AND SHRUBS SHALL BE PLANTED IN ACCORDANCE WITH THE "GUIDE TO ARBOR
WORK IN FERGUSON TOWNSHIP."

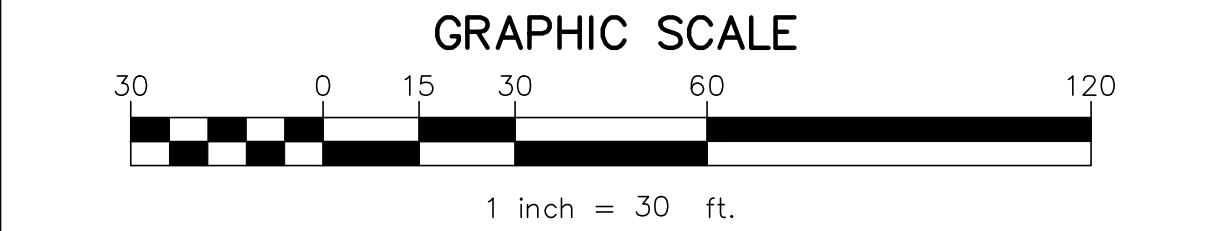
PLANTING SCHEDULE

DECIDUOUS TREES								
BOTANICAL NAME (SYMBOL)	COMMON NAME	SPACING	SIZE	CONTAINER	QUANTITY	MATURE HEIGHT	MATURE SPREAD	
ACER RUBRUM (AR)	RED MAPLE	AS SHOWN	2" CAL.	B & B	14	50'	40'	
EVERGREEN TREES								
BOTANICAL NAME	COMMON NAME	SPACING	SIZE	CONTAINER	QUANTITY	MATURE HEIGHT	MATURE SPREAD	
THUJA OCCIDENTALIS (TO)	AMERICAN ARBORVITAE	AS SHOWN	6'	B & B	86	40'	10'	
SHRUBS								
BOTANICAL NAME	COMMON NAME	SPACING	SIZE	CONTAINER	QUANTITY	MATURE HEIGHT	MATURE SPREAD	
BUXUS SEMPERVIRENS (BS)	ENGLISH BOXWOOD	AS SHOWN	3'	B & B	162	15'	15'	

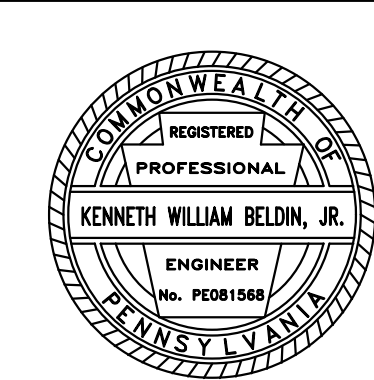


LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- FENCE LINE
- POWER POLE
- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED STABILIZED AREA
- PROPOSED ROAD CENTERLINE
- PROPOSED TREELINE
- PROPOSED FENCE LINE
- RED MAPLE TREE (AR)
- AMERICAN ARBOR VITAE (TO)
- ENGLISH BOXWOOD (BS)



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



PROPOSED LANDSCAPING PLAN

STATE COLLEGE BOROUGH
WATER AUTHORITY

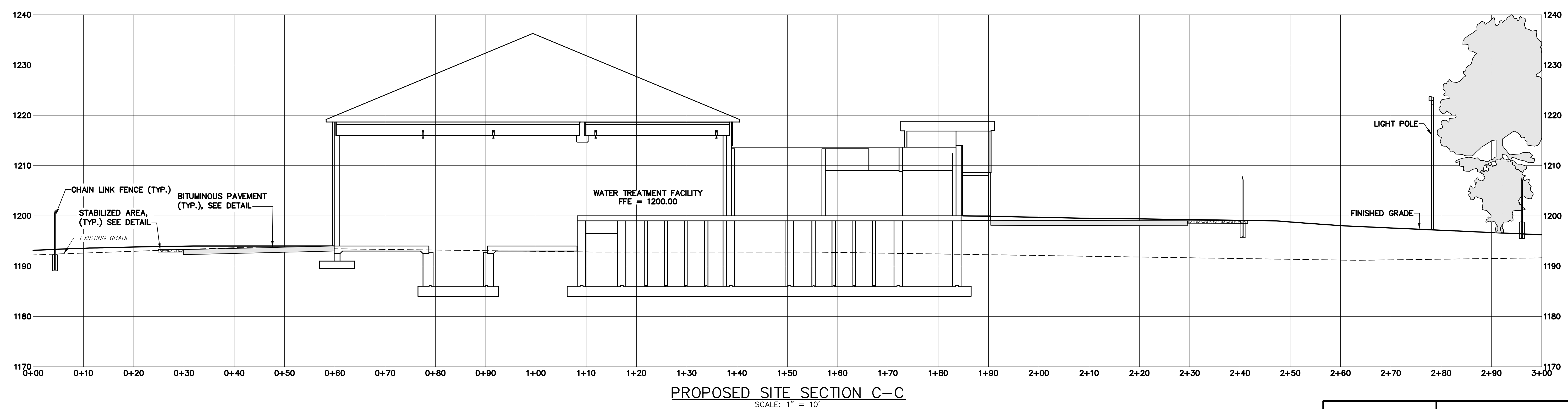
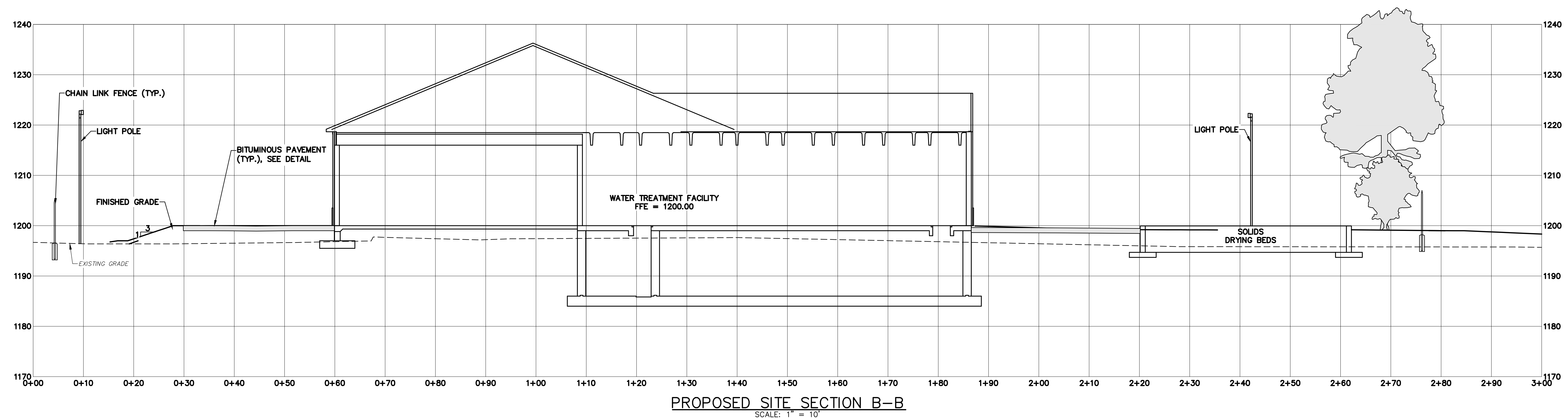
**NIXON-KOCHER
WATER TREATMENT FACILITY**

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

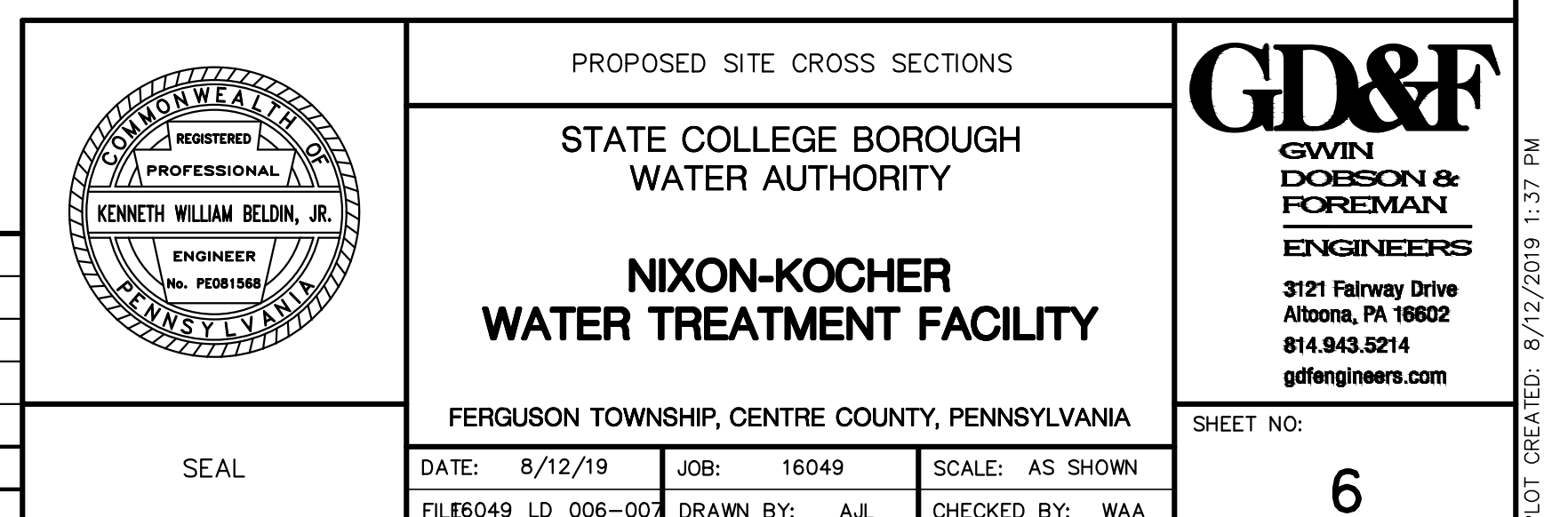
DATE: 8/12/19 JOB: 16049 SCALE: AS SHOWN
FILE: 16049_LD_005 DRAWN BY: AJL CHECKED BY: WAA

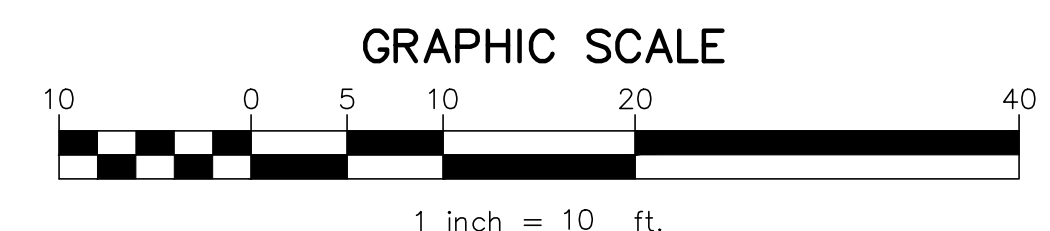
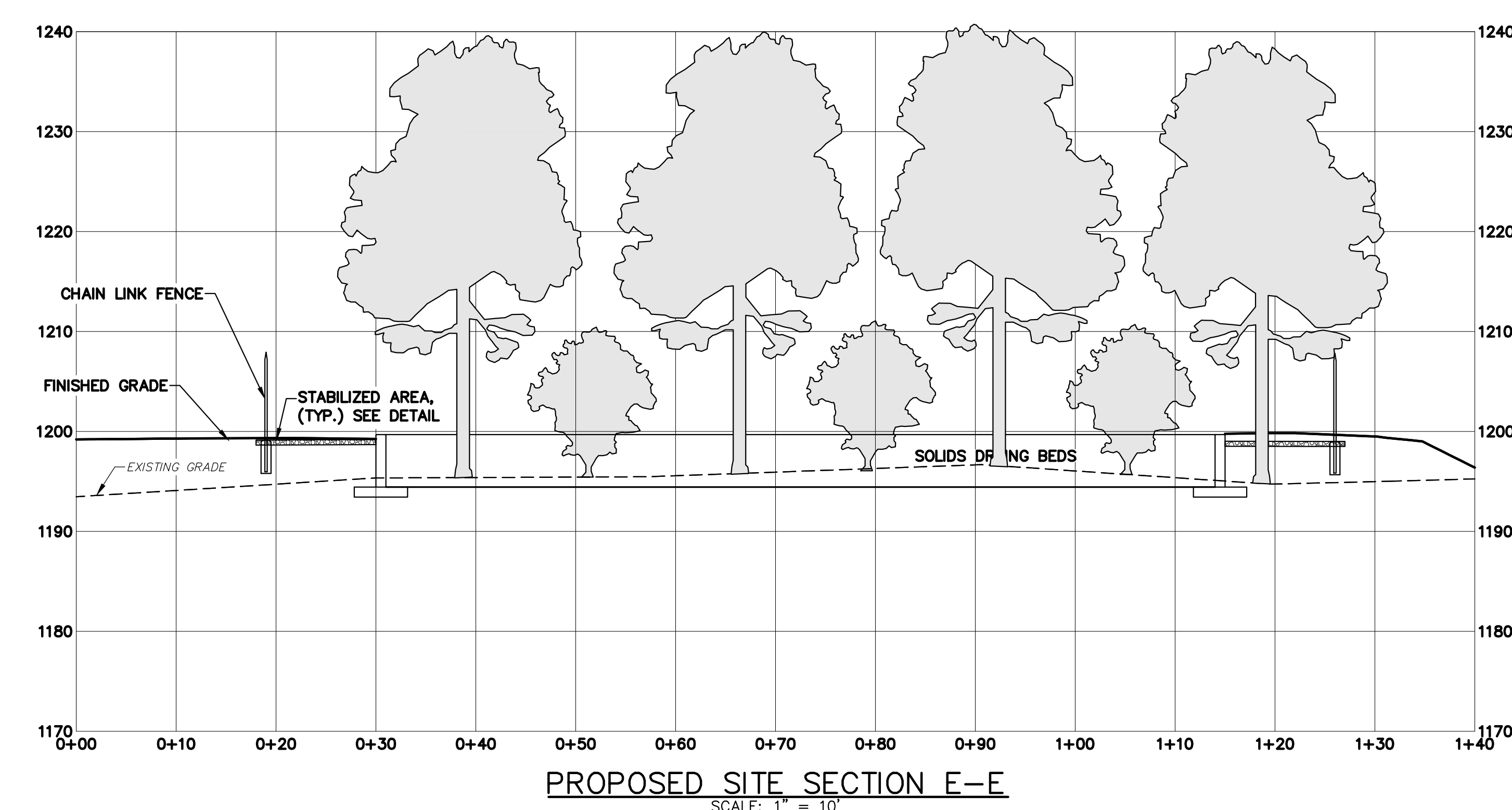
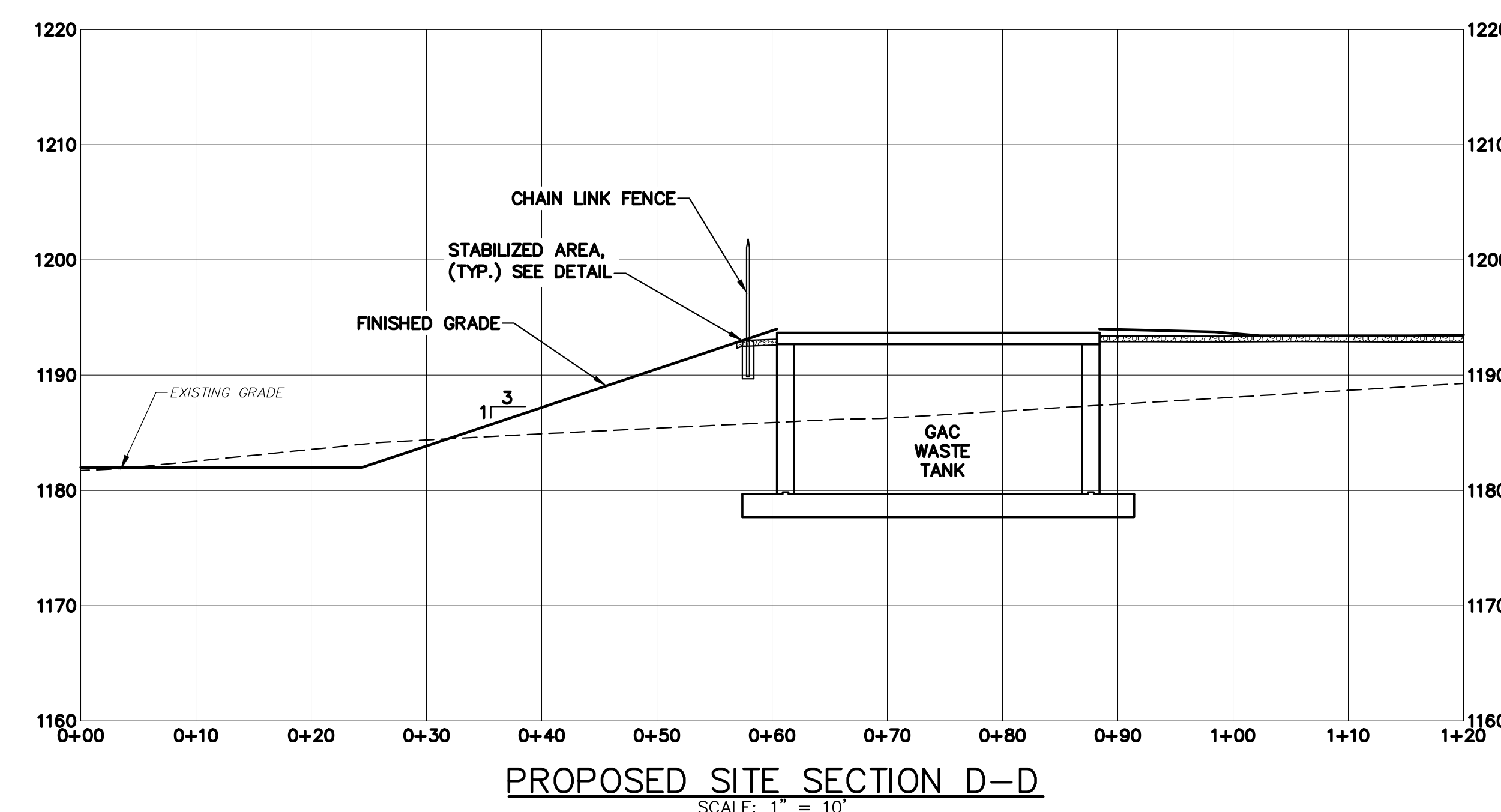
GD&F
GWIN DOBSON & FOREMAN
ENGINEERS
3121 Fairway Drive
Allison, PA 16802
814.943.9214
gdfengineers.com

SHEET NO: **5**



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





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

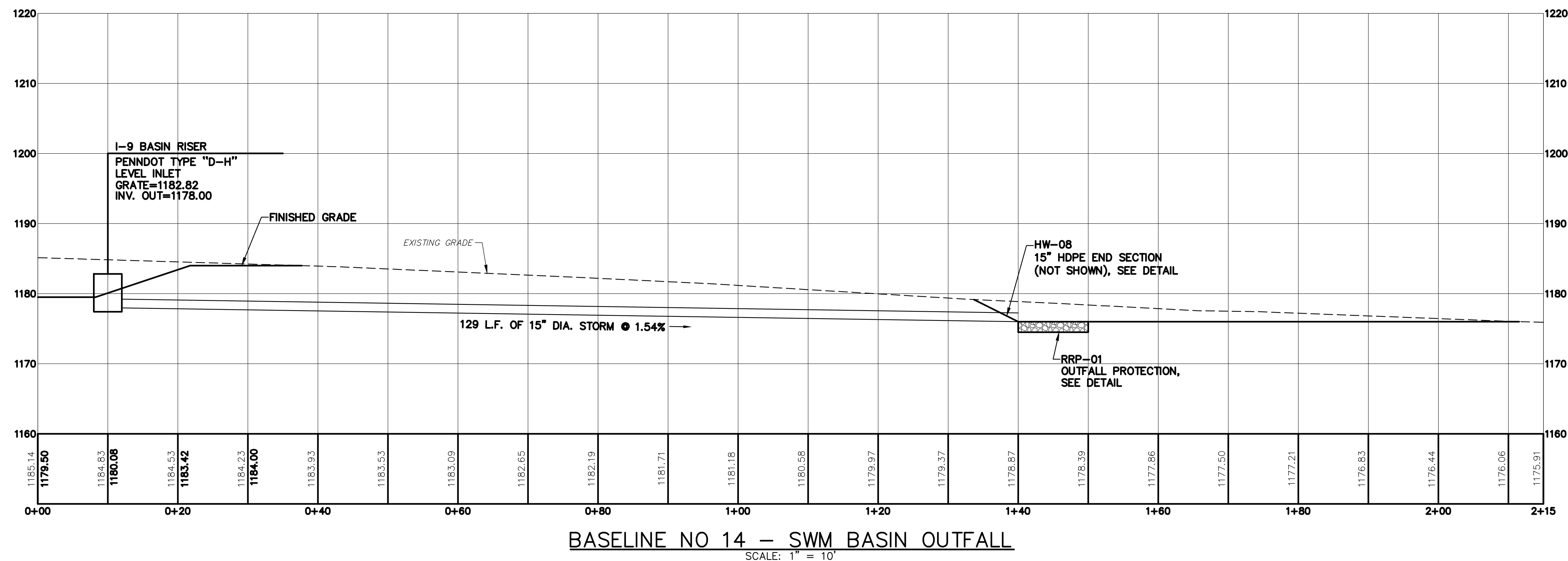
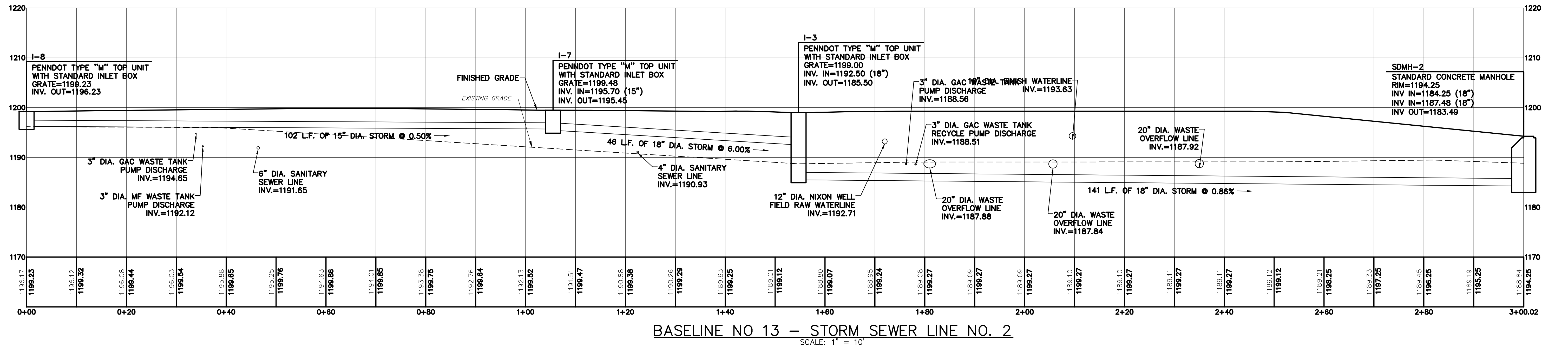
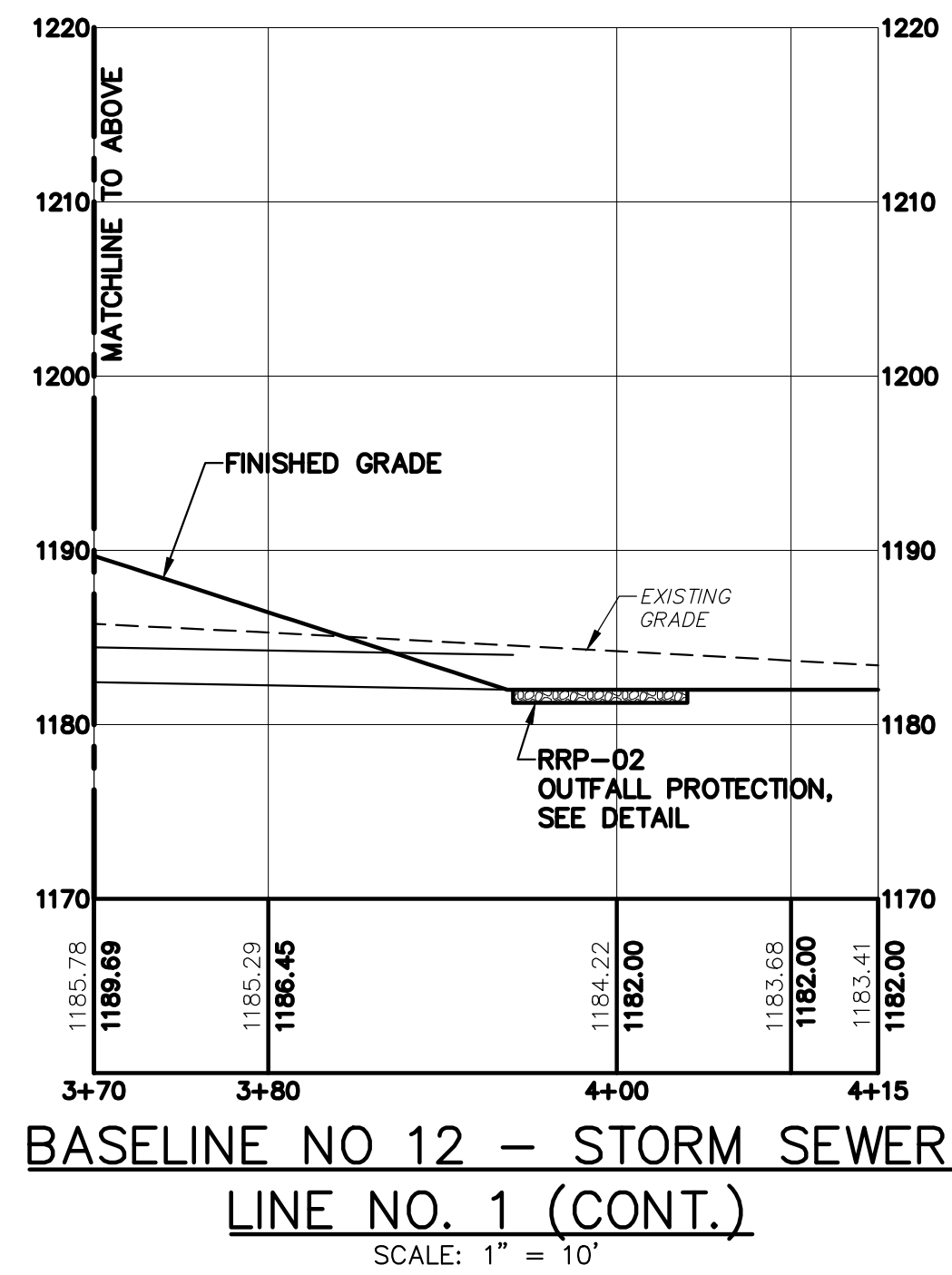
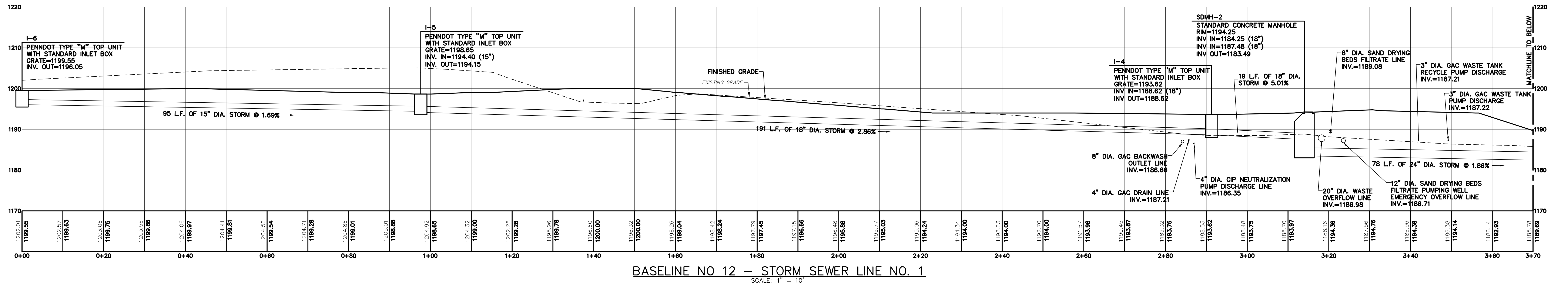
	PROPOSED SITE CROSS SECTIONS		
	STATE COLLEGE BOROUGH WATER AUTHORITY		
	NIXON-KOCHER WATER TREATMENT FACILITY		
	FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA		
SEAL	DATE: 8/12/19 FILE6049_LD_006-007	JOB: 16049 DRAWN BY: AJL	SCALE: AS SHOWN CHECKED BY: WAA
SHEET NO: 7			



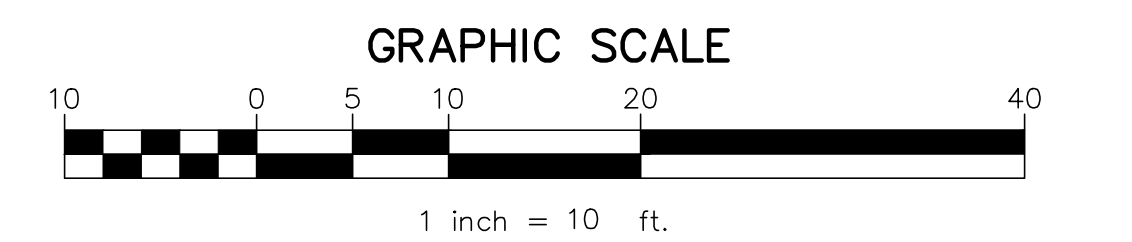
PROPOSED ACCESS ROAD PROFILE (CONT.)

PROPOSED ACCESS ROAD PROFILE (CONT.)

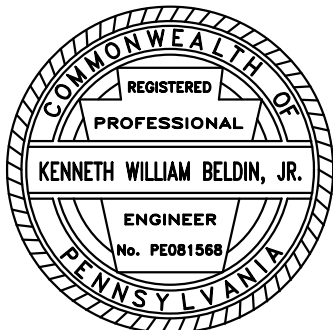

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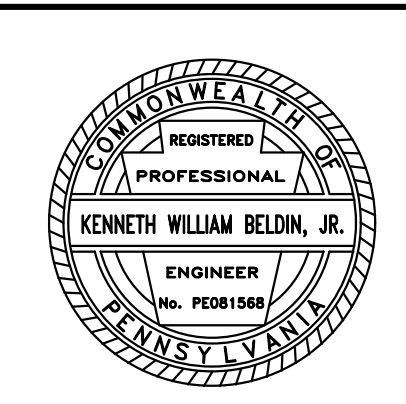
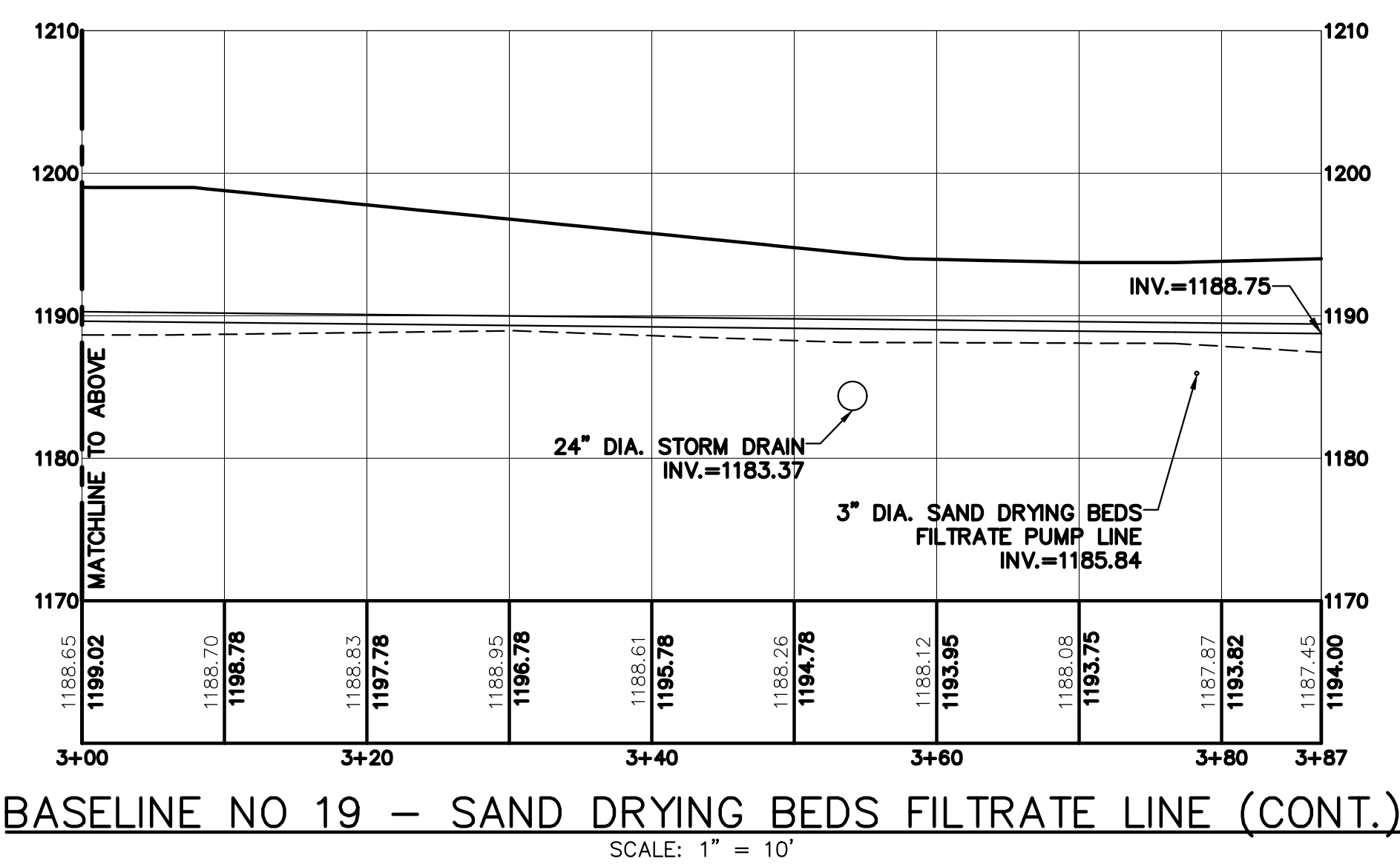
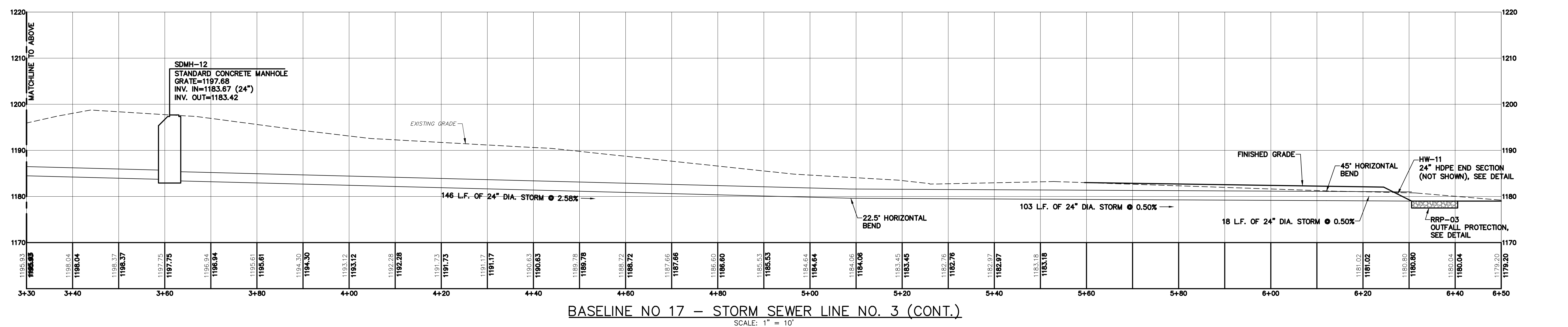
NOTE:
1. REFER TO SHEET NO. 4 FOR PIPING NOTES.

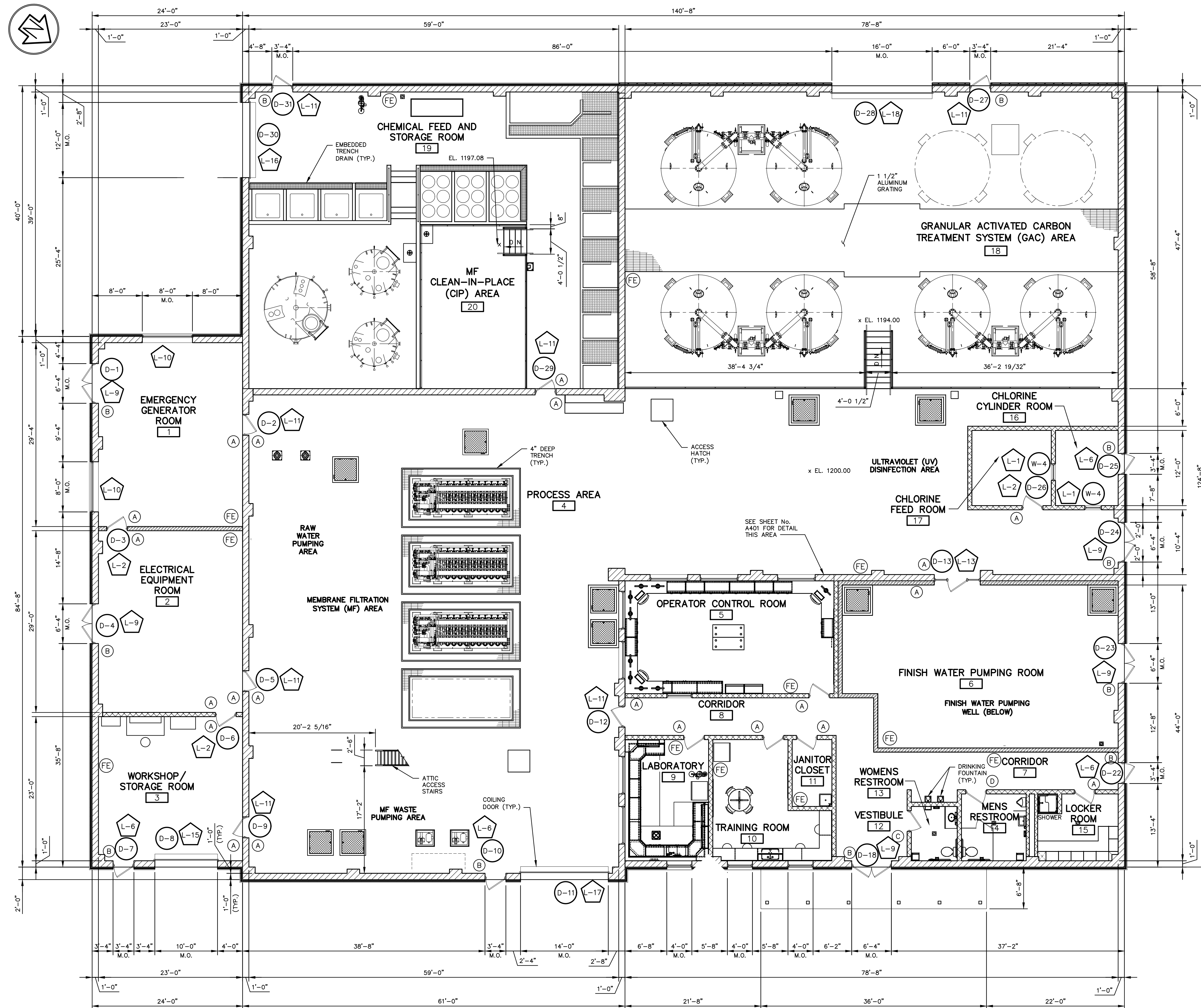


1	8/12/19	REVISED PER TOWNSHIP COMMENTS			
NO.	DATE	DESCRIPTION			
REVISIONS					
PROPOSED PIPING PROFILES – BASELINES 12 THRU 14					
STATE COLLEGE BOROUGH WATER AUTHORITY					
NIXON-KOCHER WATER TREATMENT FACILITY					
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA					
DATE: 8/12/19		JOB: 16049		SCALE: AS SHOWN	
FILE: 16049_LD_009		DRAWN BY: AJL		CHECKED BY: WAA	
SEAL		SHEET NO: 9			

	 GWIN DOBSON & FOREMAN ENGINEERS 3121 Fairway Drive Altoona, PA 16602 814.943.5214 gwinengineers.com
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8/12/2019 1:38 PM
PLOT CREATED: 8/12/2019 1:38 PM





FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

INTERIOR ROOM SIGNAGE SCHEDULE		
I.D.	ROOM/AREA NAME	SIGN TYPE
(A)	(ROOM NAME) SEE AREA SCHEDULE	TYPE 1
(B)	EXIT	TYPE 3
(C)	ADA WOMEN'S ROOM	TYPE 2
(D)	ADA MEN'S ROOM	TYPE 2

SIGNAGE NOTES:

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

TYPE 1 - ROOM NAME PLATES - 2"X REQUIRED LENGTH 3/4" HIGH LETTERS WITH GRADE 2 BRAILLE.

TYPE 2 - RESTROOM SIGN - DESIGN ADA-4 SIZE 8"X8" WITH A 4" ACCESSIBILITY SYMBOL, GENDER SYMBOL AND THE VERBAL DESCRIPTION PLACED DIRECTLY BELOW FOLLOWED BY GRADE 2 BRAILLE.

TYPE 3 - ROOM EXIT PLATES - 2"X REQUIRED LENGTH 3/4" HIGH LETTERS WITH GRADE 2 BRAILLE. COLOR TO BE SELECTED DURING SUBMITTAL PHASE. PROVIDE PLATES AT INTERIOR SIDE OF ALL EXIT DOORS FROM EACH ROOM AND ALL DOORS LEADING TO THE EXTERIOR.

LEGEND	
A.F.F.	ABOVE FINISHED FLOOR
M.O.	MASONRY OPENING
	CAVITY WALL (SEE WALL SECTIONS SHEETS No. A311)
	8" STANDARD CMU (UNLESS DIMENSIONED OTHERWISE)
	12" STANDARD CMU
	8" ACOUSTIC CMU
1	ROOM AREA NUMBER
FD	FLOOR DRAIN
CO	CLEANOUT
(FE)	FIRE EXTINGUISHER
	ALUMINUM GRATING (SEE PLANS FOR SIZE)
(D-1)	DOOR (SEE DOOR SCHEDULE, SHEET No. A601)
(W-1)	INTERIOR WINDOW (SEE DETAILS, SHEET No. A602)
(L-1)	UNTEL (SEE UNTEL SCHEDULE, SHEET No. A602)
	EMBEDDED TRENCH DRAIN
	FRP GRATING (SEE PLANS FOR SIZE)

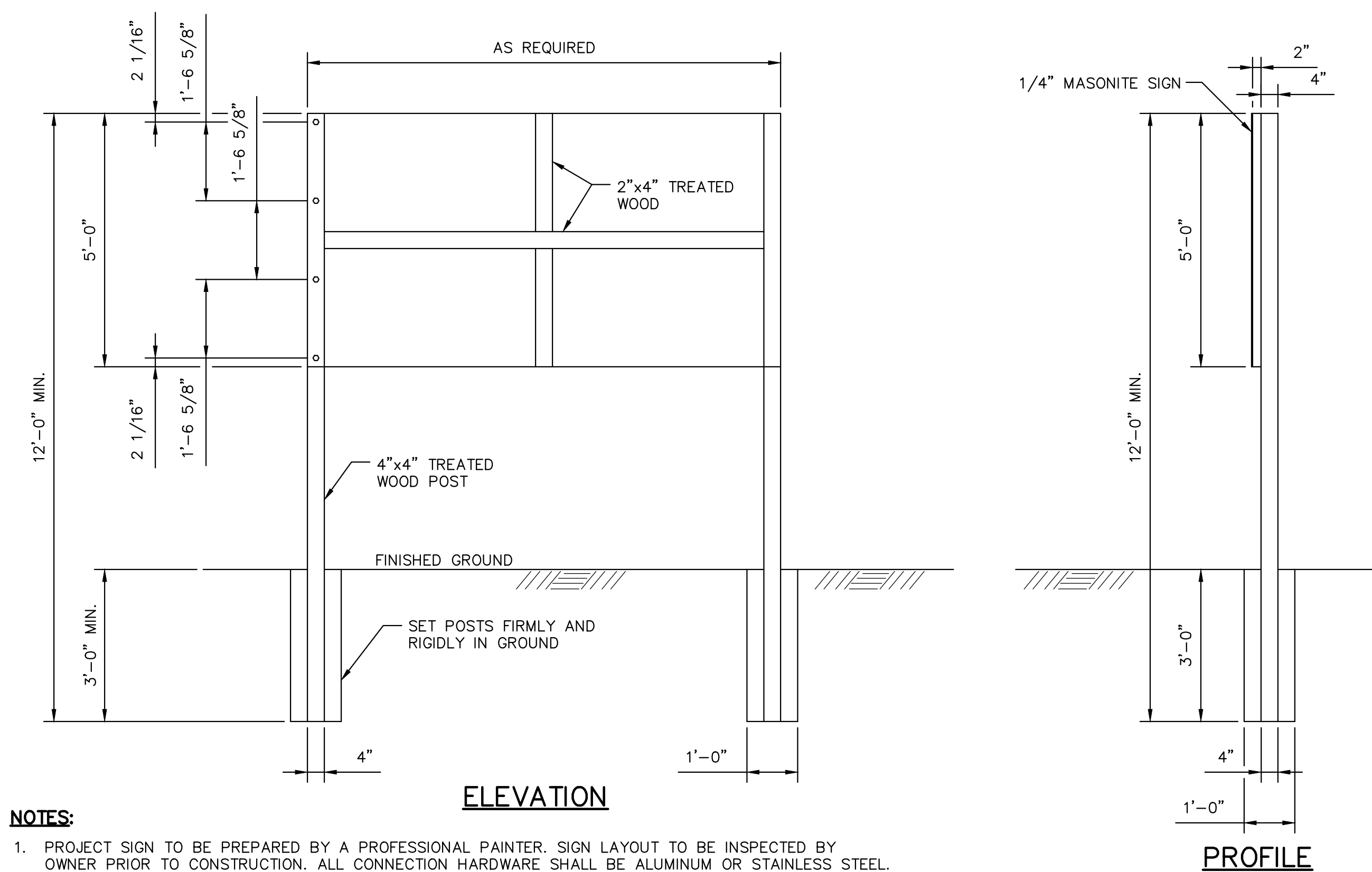
1	8/12/19	REVISED PER TOWNSHIP COMMENTS
NO.	DATE	DESCRIPTION
REVISIONS		
FIRST FLOOR PLAN		
STATE COLLEGE BOROUGH WATER AUTHORITY		
NIXON-KOCHER WATER TREATMENT FACILITY		
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA		
DATE: 8/12/19	JOB: 16049	SCALE: AS SHOWN
FILE: 16049_LD_012	DRAWN BY: RUN	CHECKED BY: WAA

SEAL

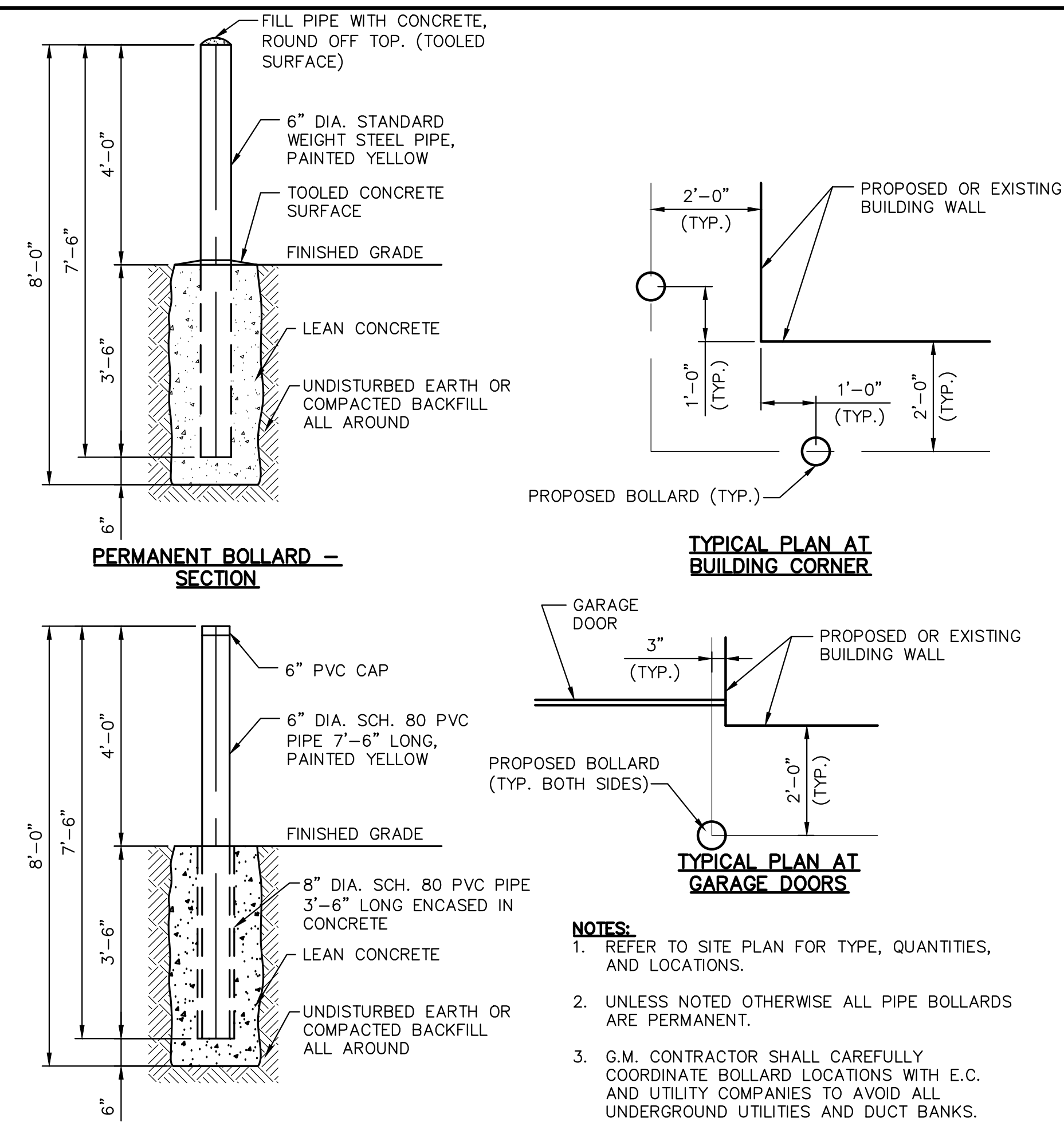
3121 Fairway Drive
Allentown, PA 18602
610.943.5214
gdfengineers.com

SHEET NO:

12



1. PROJECT SIGN TO BE PREPARED BY A PROFESSIONAL PAINTER, SIGN LAYOUT TO BE INSPECTED BY OWNER PRIOR TO CONSTRUCTION. ALL CONNECTION HARDWARE SHALL BE ALUMINUM OR STAINLESS STEEL.
2. LETTER COLOR - BLUE
3. BACKGROUND - WHITE
4. AUTHORITY MEMBER NAMES WILL BE FURNISHED AT START OF CONSTRUCTION.
5. SIGN TO BE LOCATED AT A LOCATION DIRECTED BY THE OWNER (MAY BE OFFSITE).

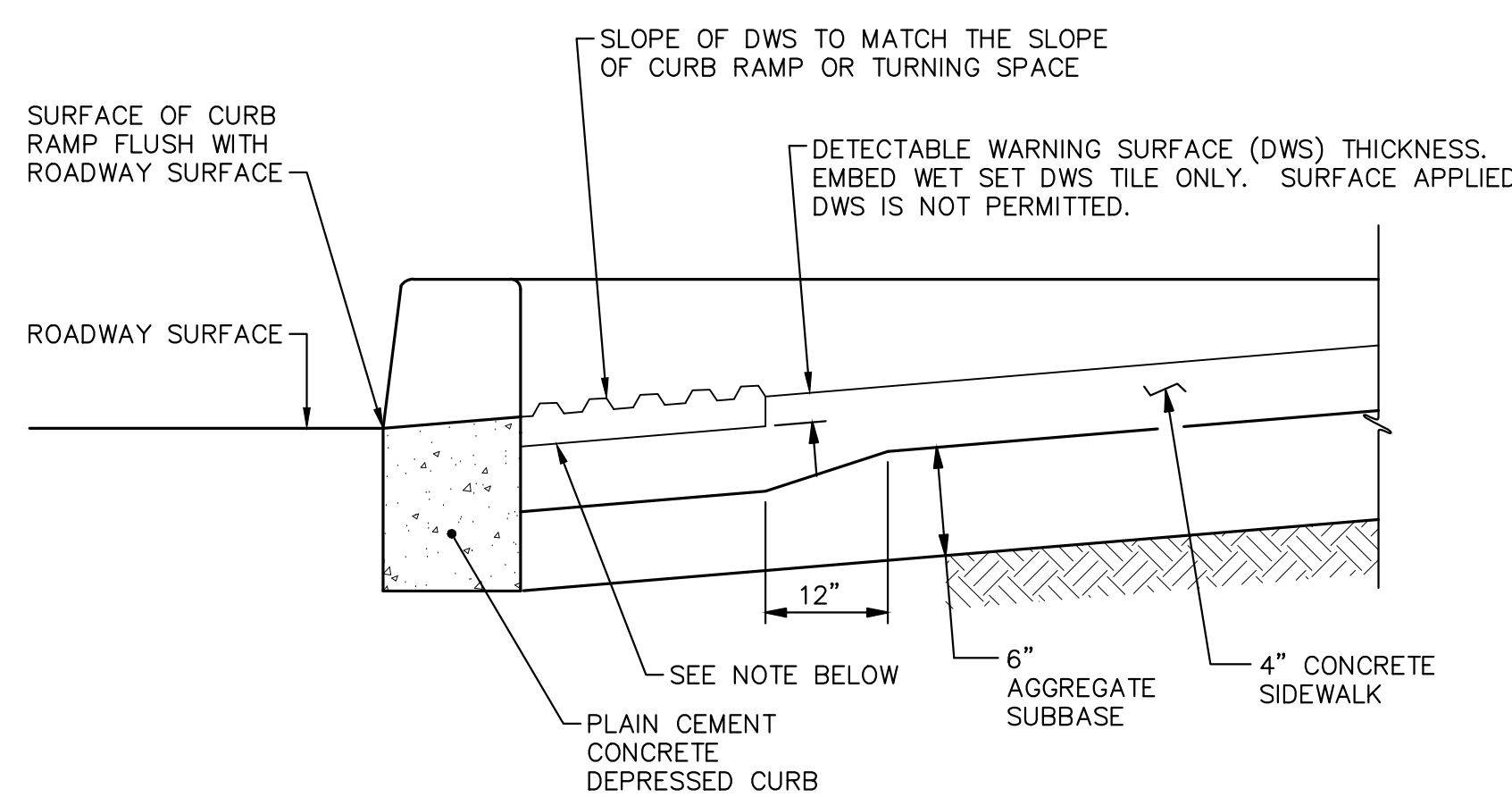


1. REFER TO SITE PLAN FOR TYPE, QUANTITIES, AND LOCATIONS.
2. UNLESS NOTED OTHERWISE ALL PIPE BOLLARDS ARE PERMANENT.
3. G.M. CONTRACTOR SHALL CAREFULLY COORDINATE BOLLARD LOCATIONS WITH E.C. AND UTILITY COMPANIES TO AVOID ALL UNDERGROUND UTILITIES AND DUCT BANKS.

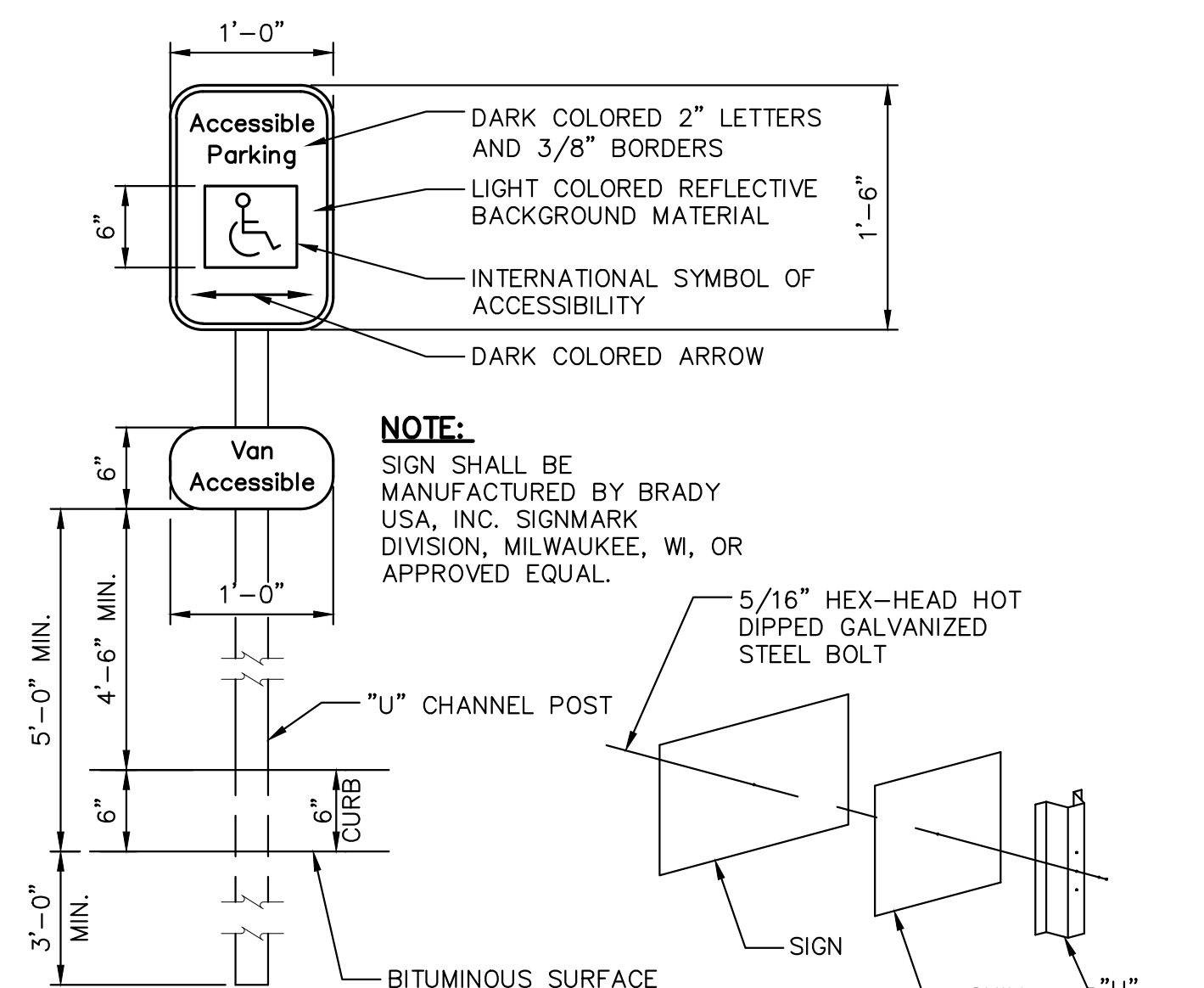
PIPE BOLLARD DETAILS

SCALE: 1/2" = 1'-0"

G.M. CONTRACTOR SHALL CAREFULLY COORDINATE BOLLARD LOCATIONS WITH E.C. AND UTILITY COMPANIES TO AVOID ALL UNDERGROUND UTILITIES AND DUCT BANKS.



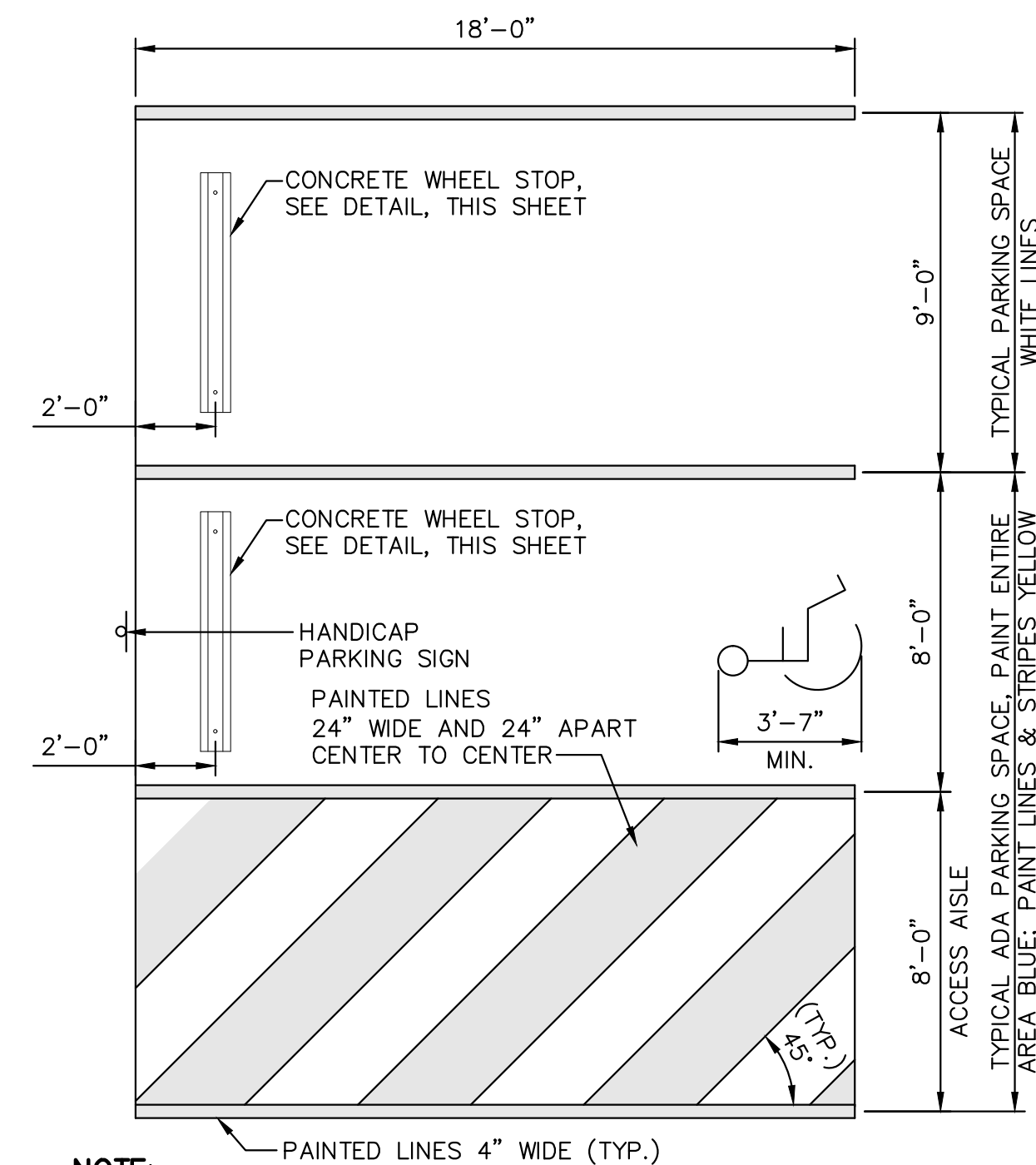
NOTES: CONSTRUCT NOTCH AS SHOWN TO PROVIDE FULL THICKNESS SIDEWALK UNDER DETECTABLE WARNING SURFACE. OPTIONAL: CONSTRUCT 2" MAX CONCRETE BORDER AROUND DWS TO PROVIDE PROPER INSTALLATION. SEE PEDESTRIAN PUSHBUTTON ACCESS AREAS DETAIL ON SHEET 14, FOR PLAN VIEW DETAILS.



SIGN MOUNTING DETAIL

ADA PARKING SIGN DETAIL

NO SCALE

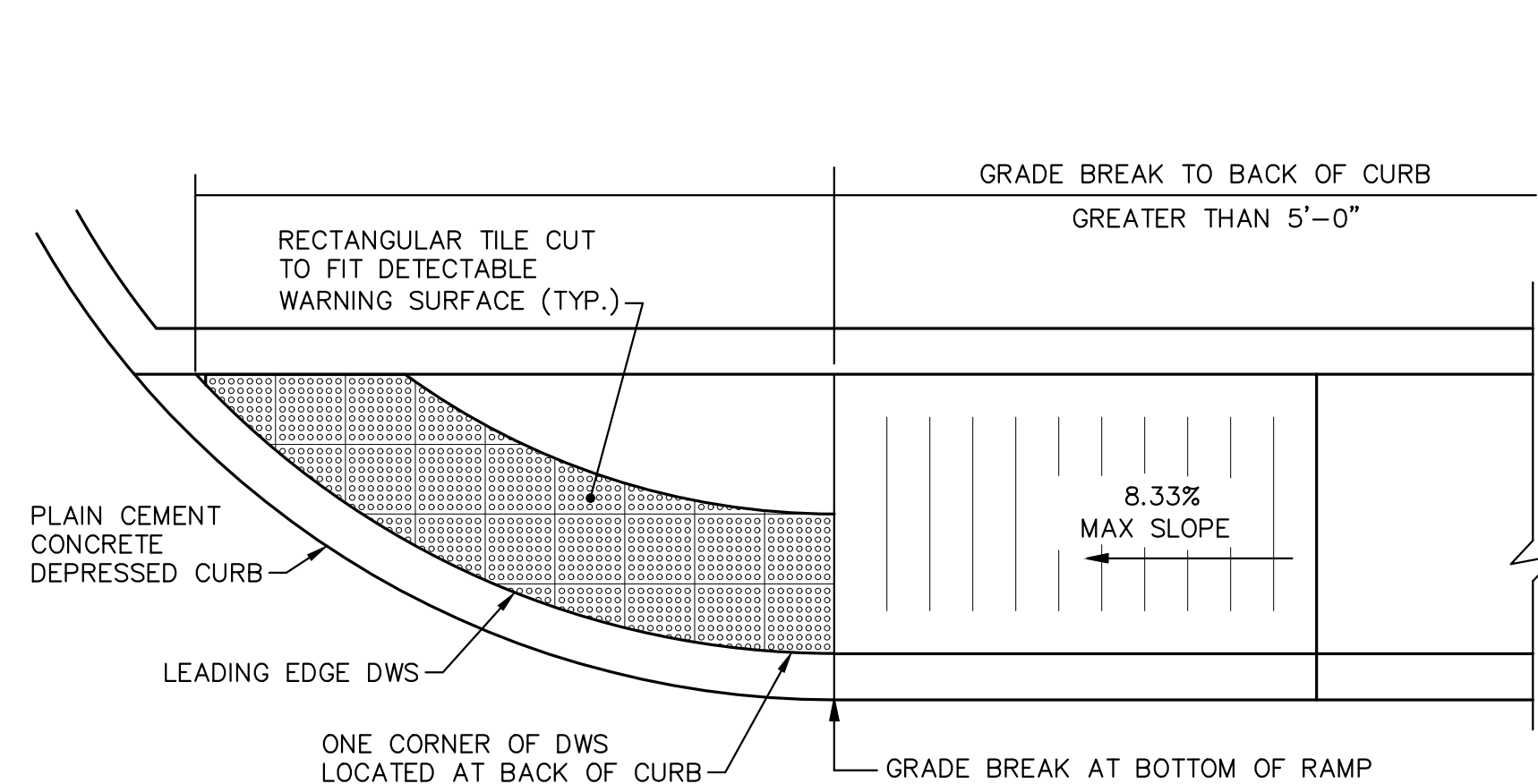
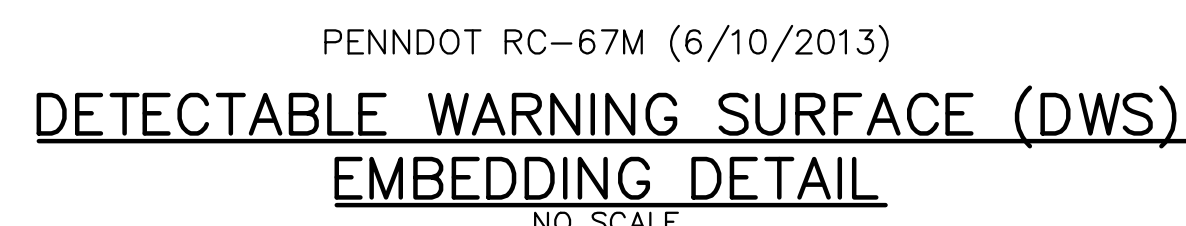


1. THE MAXIMUM SURFACE SLOPE IN ANY DIRECTION SHALL NOT BE STEEPER THAN 1:48 ON BOTH THE PARKING SPACE AND ACCESS AISLE.
2. BITUMINOUS PAVEMENT IS REQUIRED FOR ADA ACCESSIBLE PARKING SPACES.
3. SEE SITE PLAN FOR THE QUANTITY OF SPACES REQUIRED.
4. ALL ADA FACILITIES SHALL BE IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT.

PARKING DETAIL

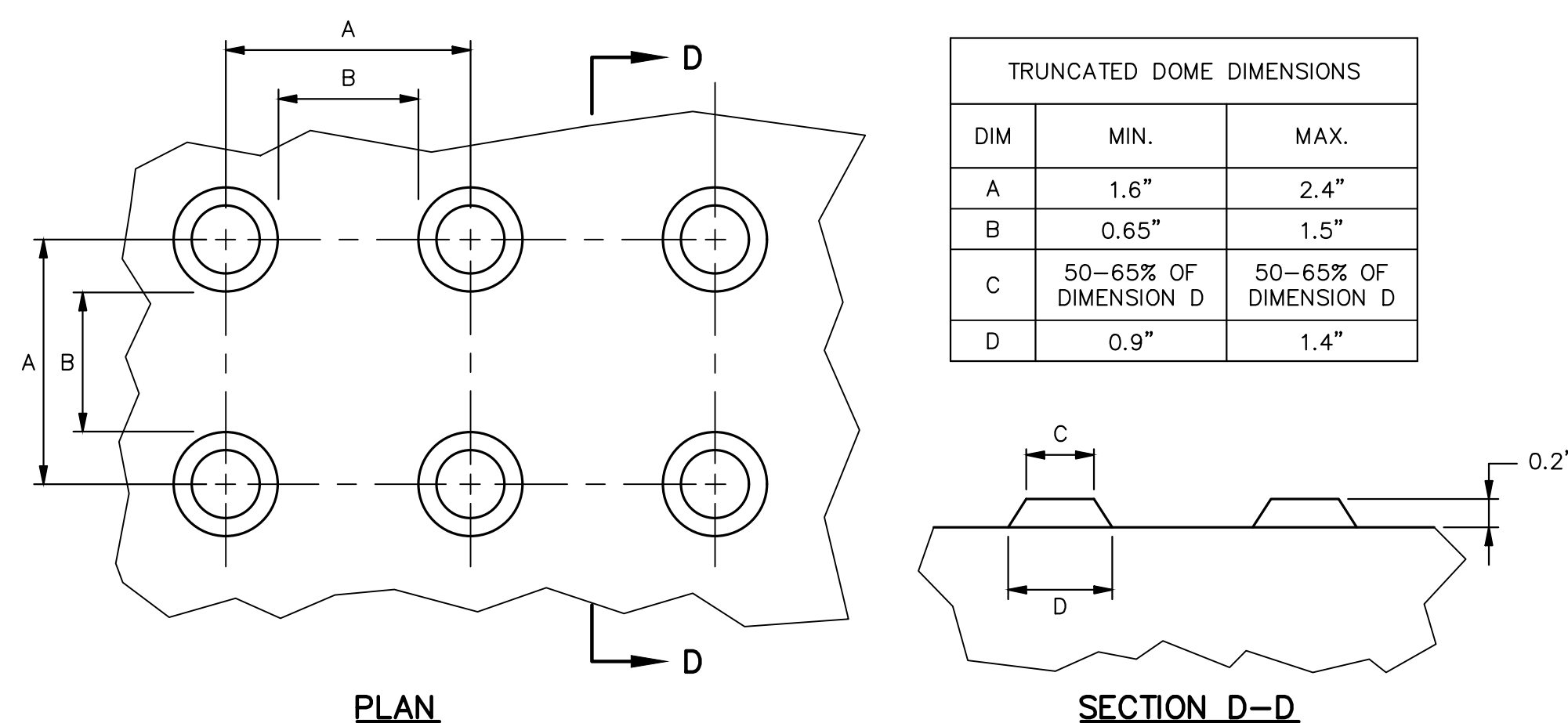
NO SCALE

- TYPE 1A
CURB RAMP



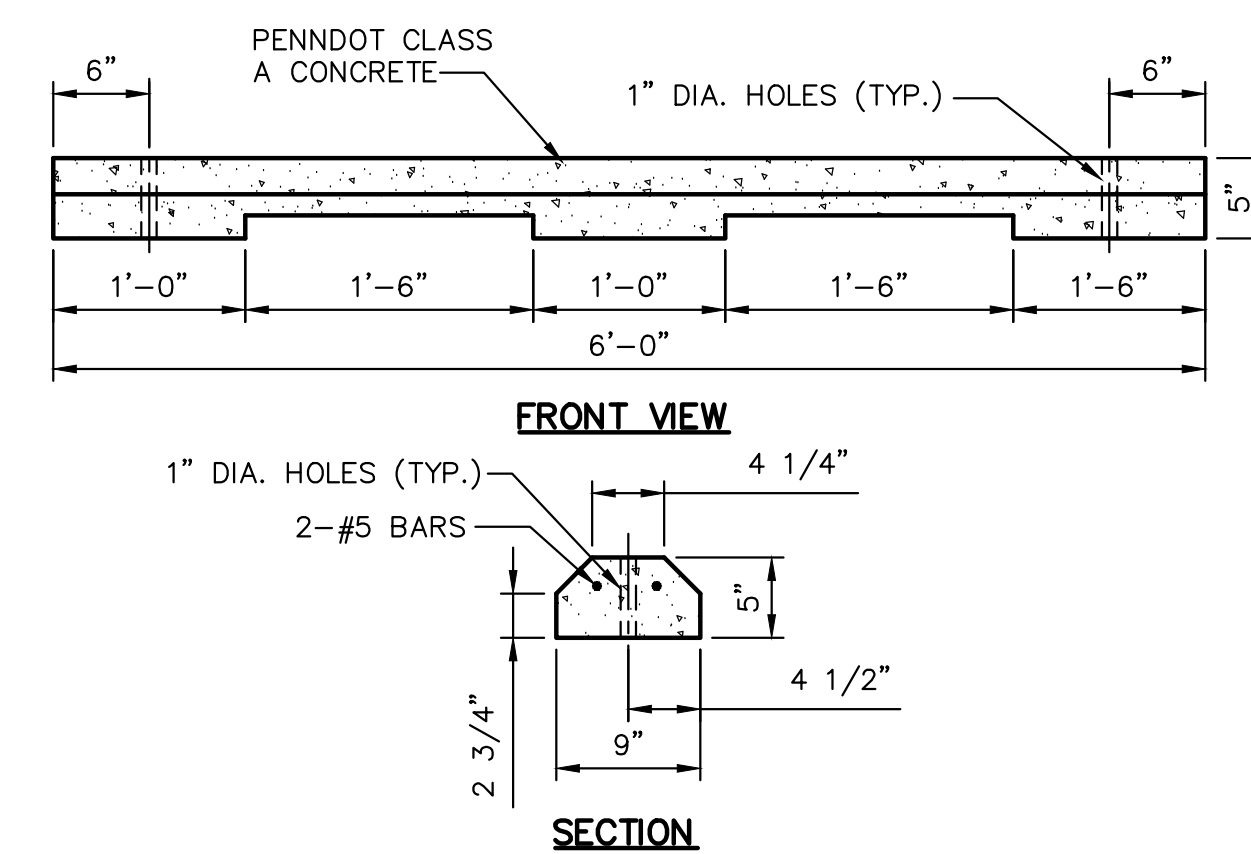
PENNDOT RC-67M (6/10/2013)

DETECTABLE WARNING SURFACE (DWS)
ON CURVED SURFACES



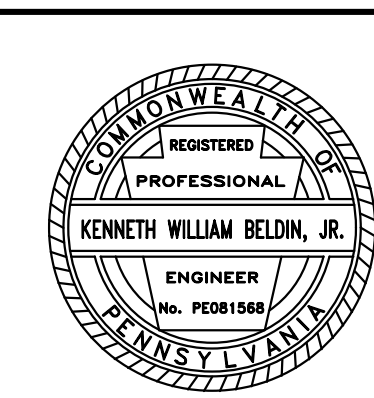
PLAN

DETECTABLE WARNING SURFACE (DWS)
TRUNCATED DOME DETAIL



TYPICAL PREFABRICATED WHEEL STOP DETAIL

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



SEAL

SITE DETAILS

STATE COLLEGE BOROUGH
WATER AUTHORITY

**NIXON-KOCHER
WATER TREATMENT FACILITY**

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

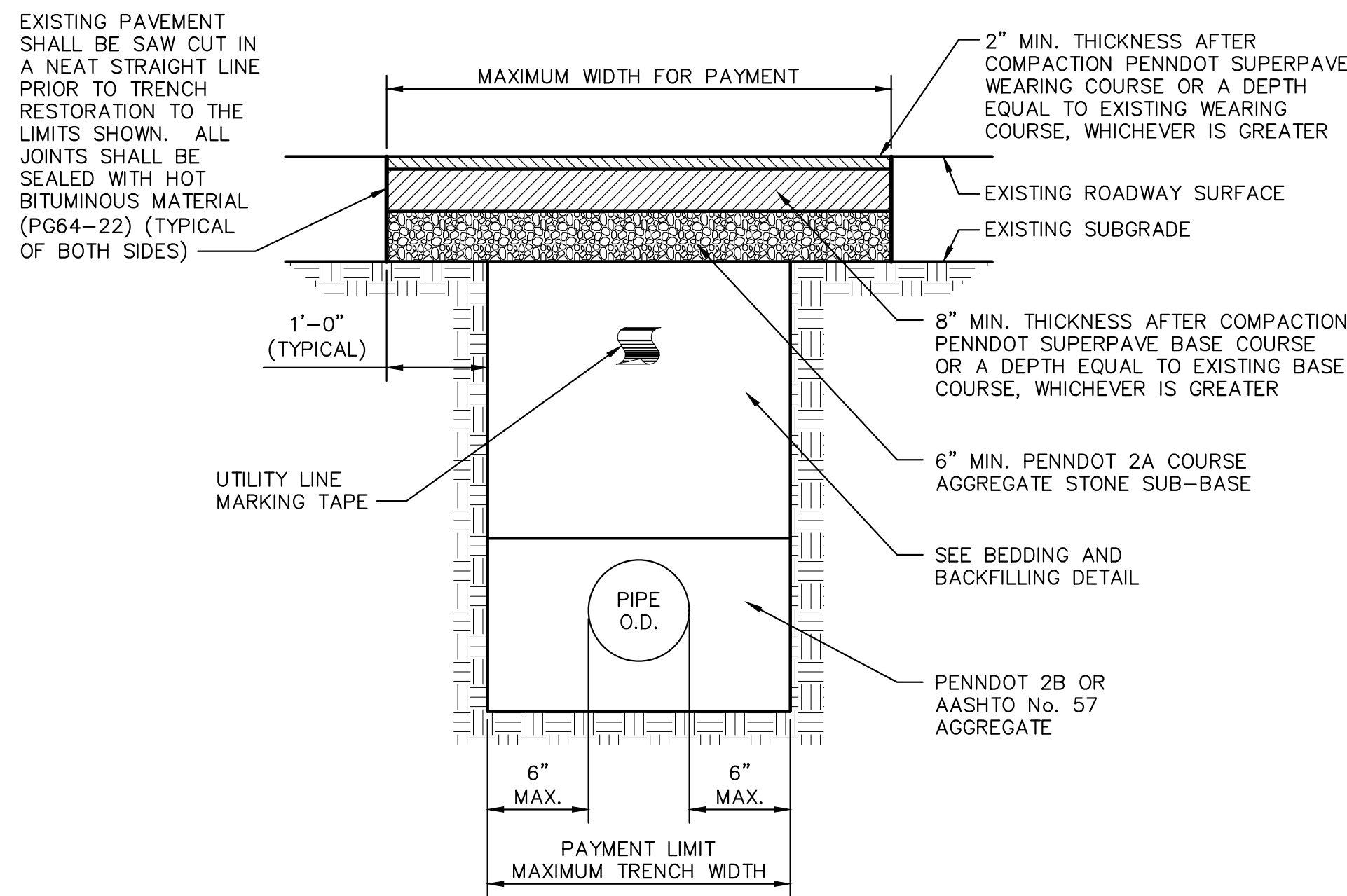
DATE:	8/12/19	JOB:	16049	SCALE:	AS SHOWN
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FILE: 16049 LD 013	DRAWN BY: A-JI	CHECKED BY: WA
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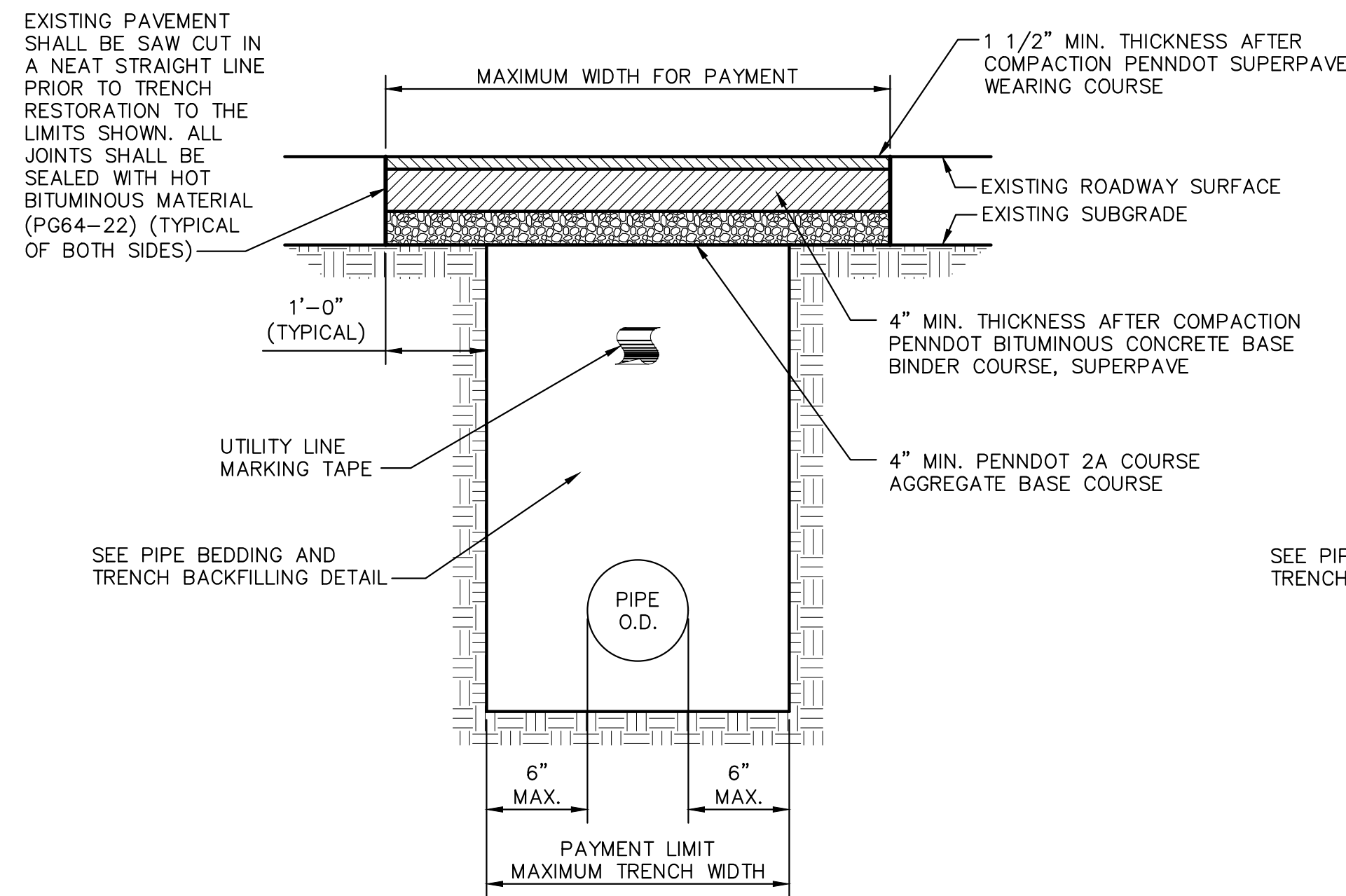
GD&F
GWIN
DOBSON &
FOREMAN
ENGINEERS
3121 Fairway Drive
Altoona, PA 16602
814.943.5214
gdfengineers.com

SHEET NO.

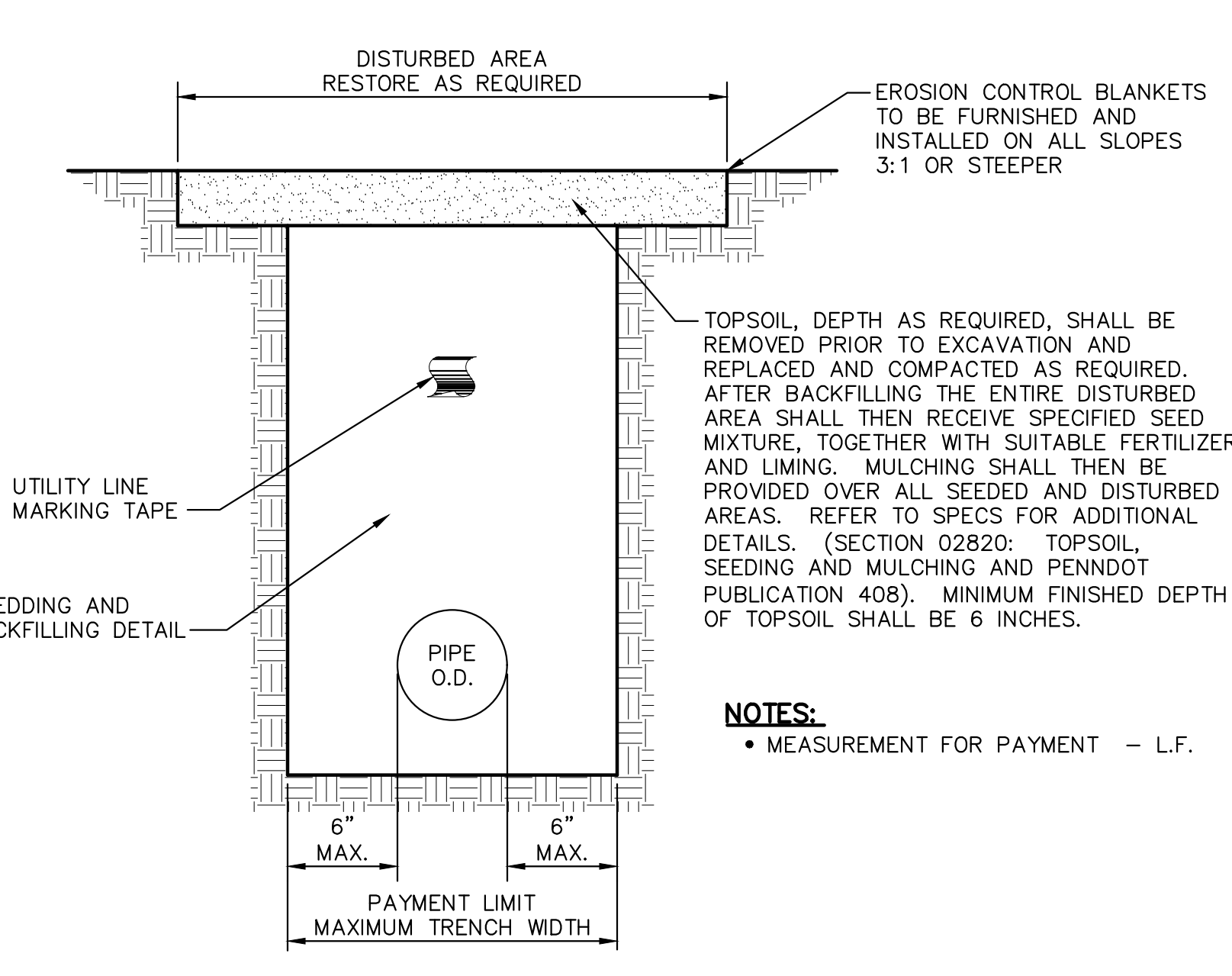
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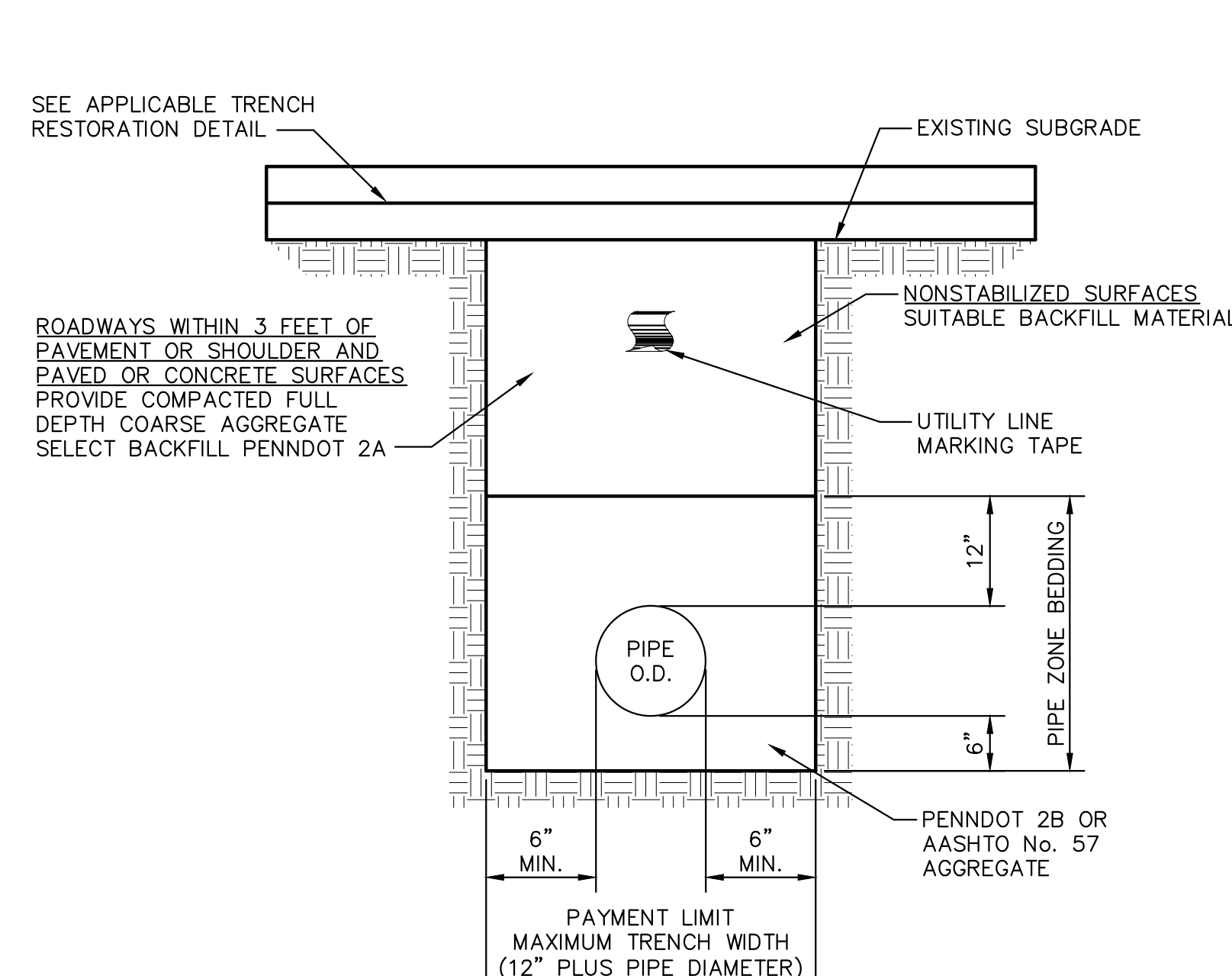
TRENCH RESTORATION - TYPE A
(TOWNSHIP ROADS)
NO SCALE



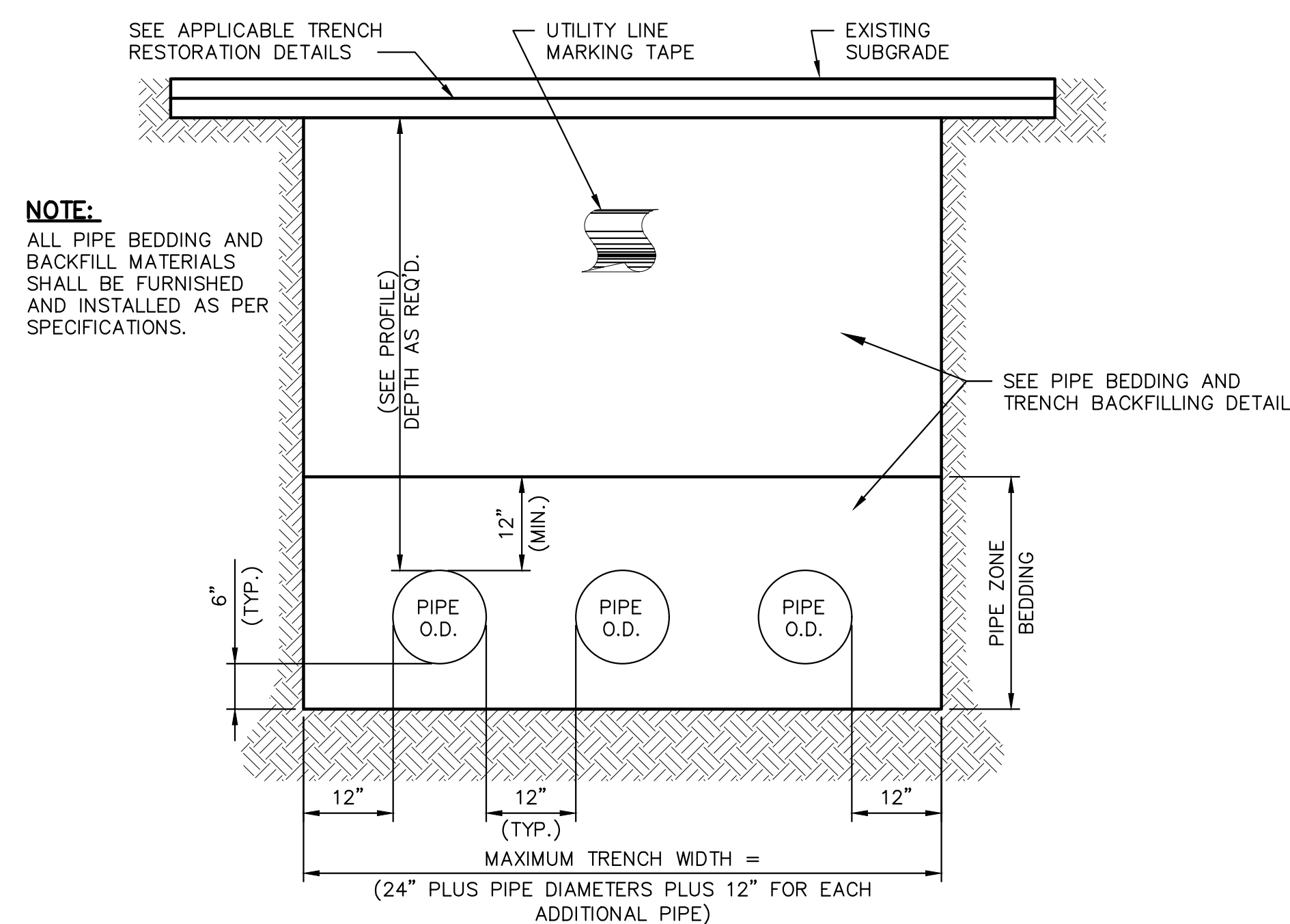
TRENCH RESTORATION - TYPE C
(BITUMINOUS PAVEMENT DRIVEWAYS)
NO SCALE



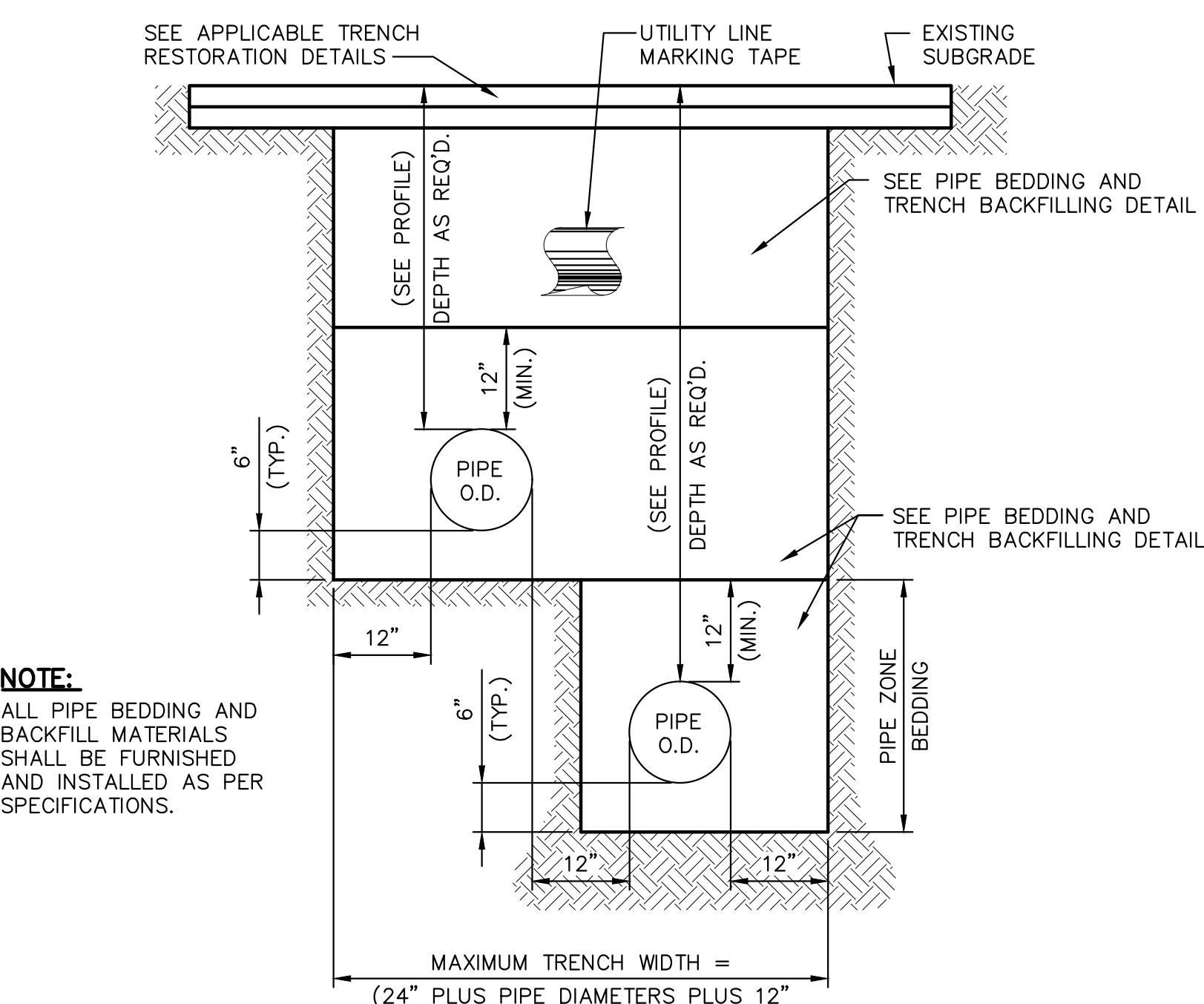
TRENCH RESTORATION - TYPE E
(UNPAVED, GRASS, LAWN AND OTHER
NONSTABILIZED SURFACES)
NO SCALE



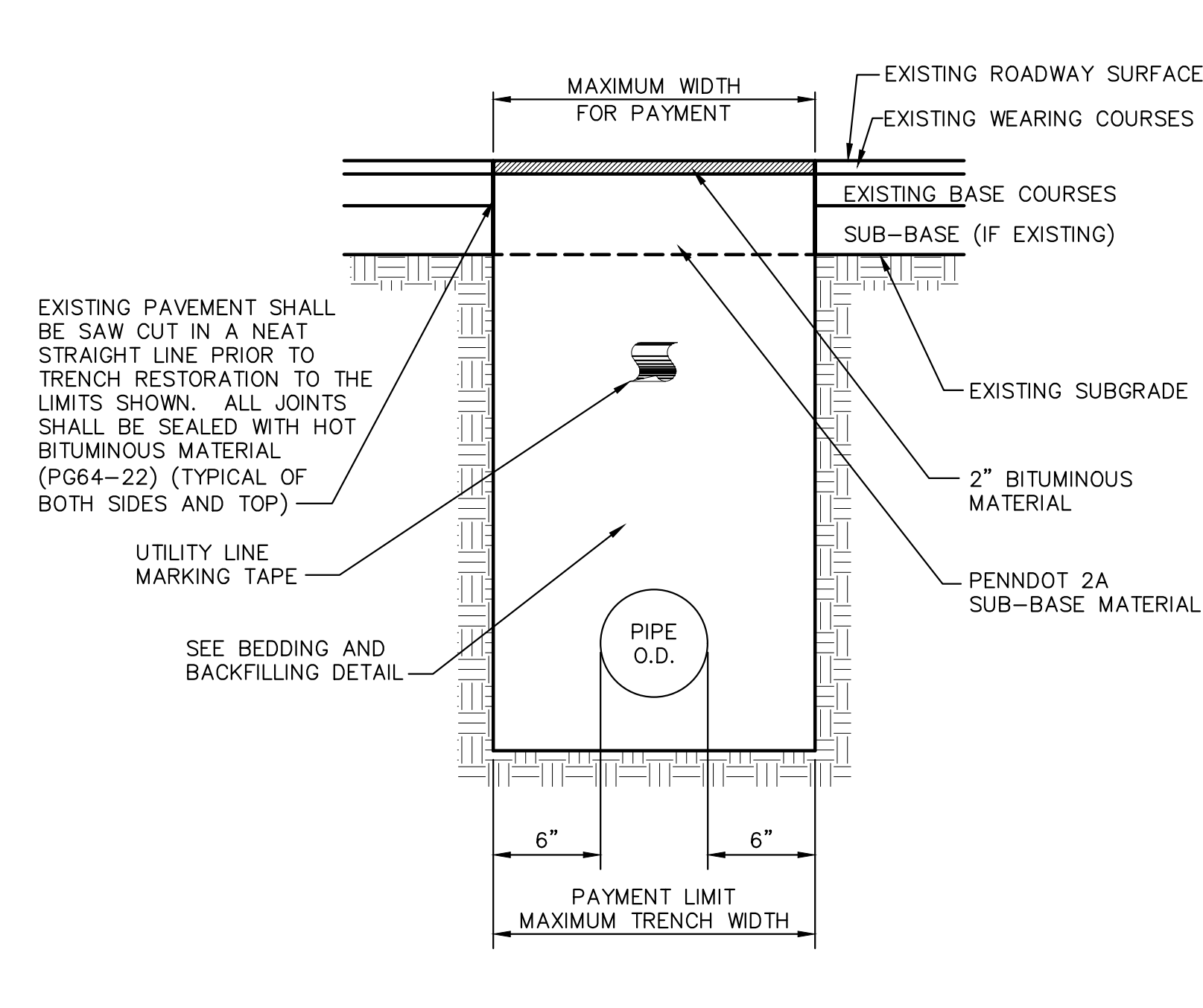
PIPE BEDDING AND TRENCH BACKFILLING
NO SCALE



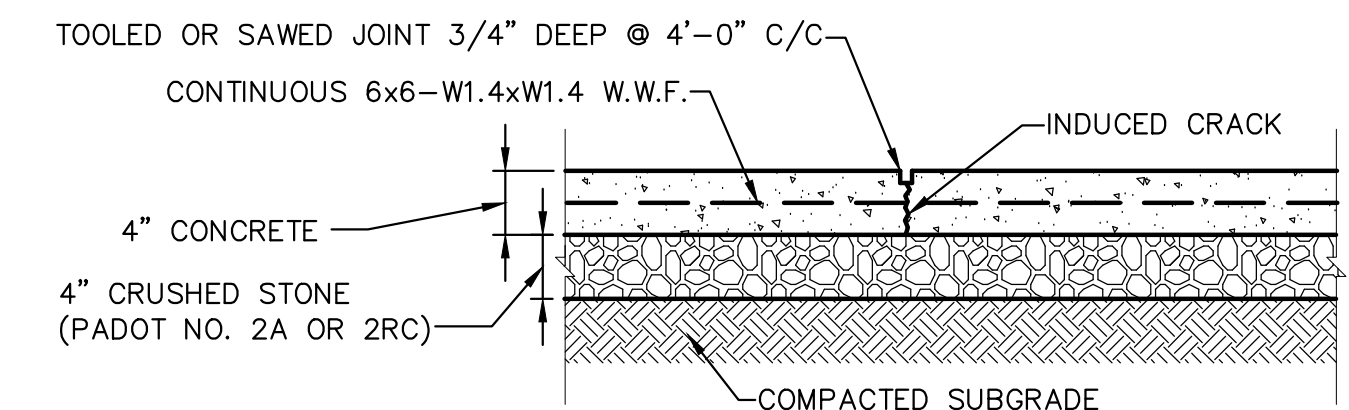
MULTIPLE PIPE TRENCH DETAIL
NO SCALE



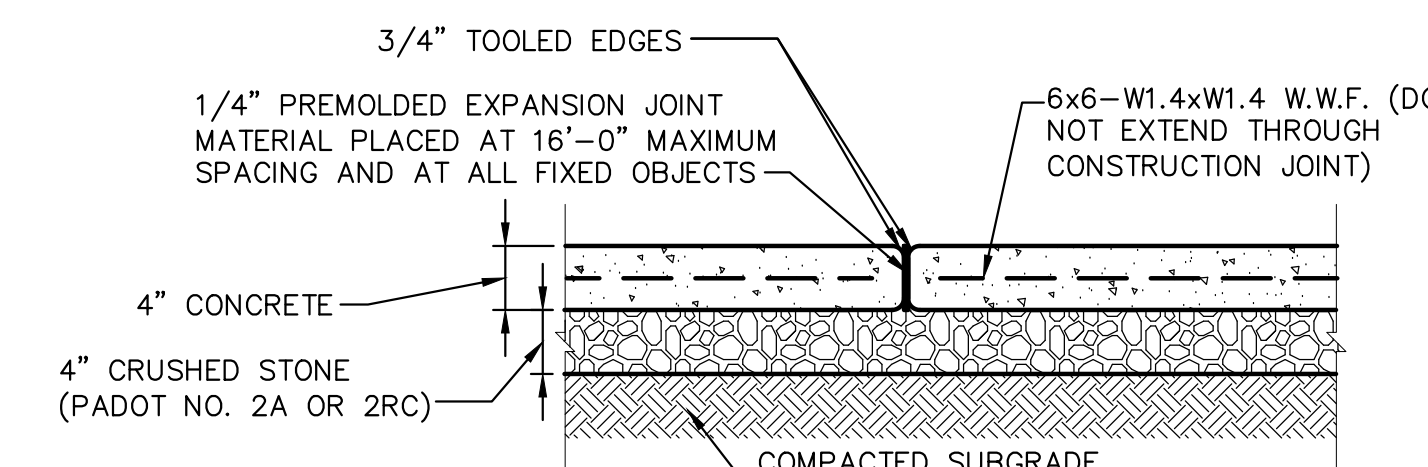
MULTIPLE PIPE TRENCH BENCH DETAIL
NO SCALE



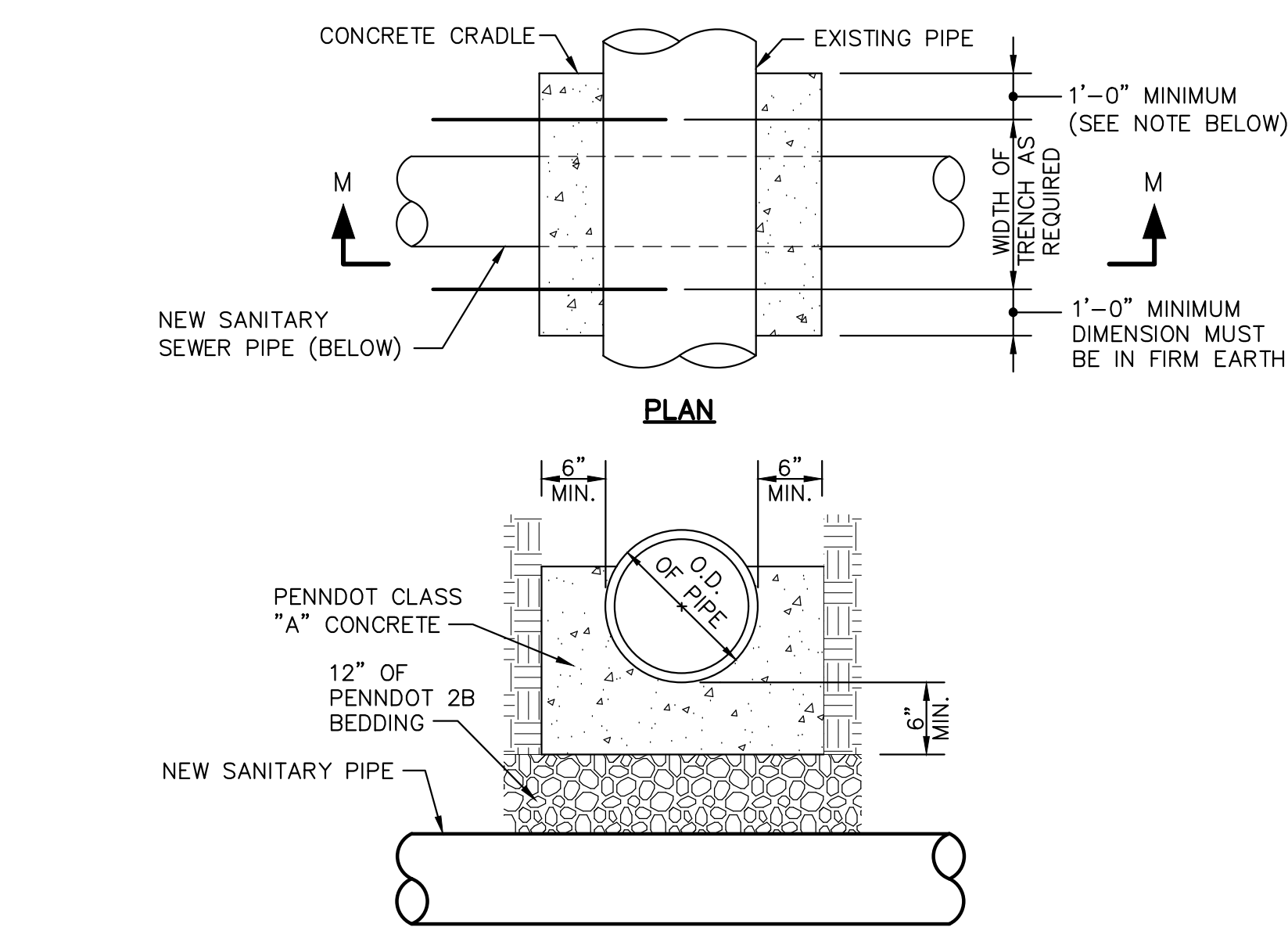
TEMPORARY RESTORATION
(AS REQUIRED)
NO SCALE



SIDEWALK SCORE JOINT (S.J.)
NO SCALE

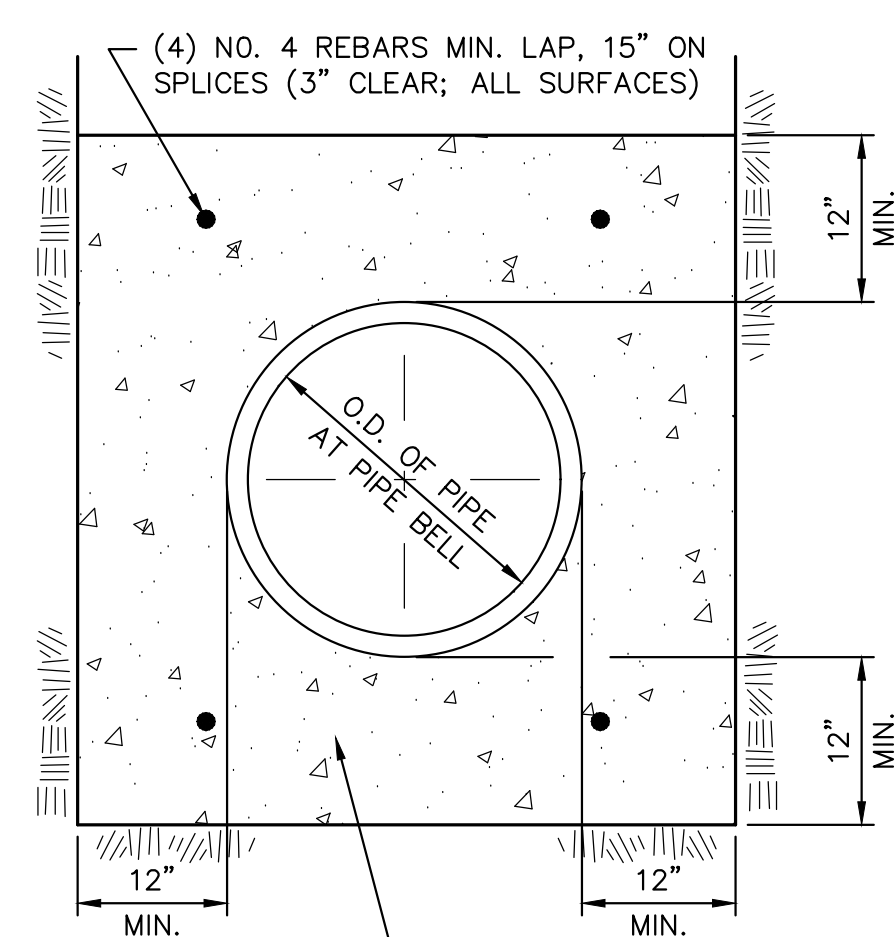


SIDEWALK CONSTRUCTION JOINT (C.J.)
NO SCALE

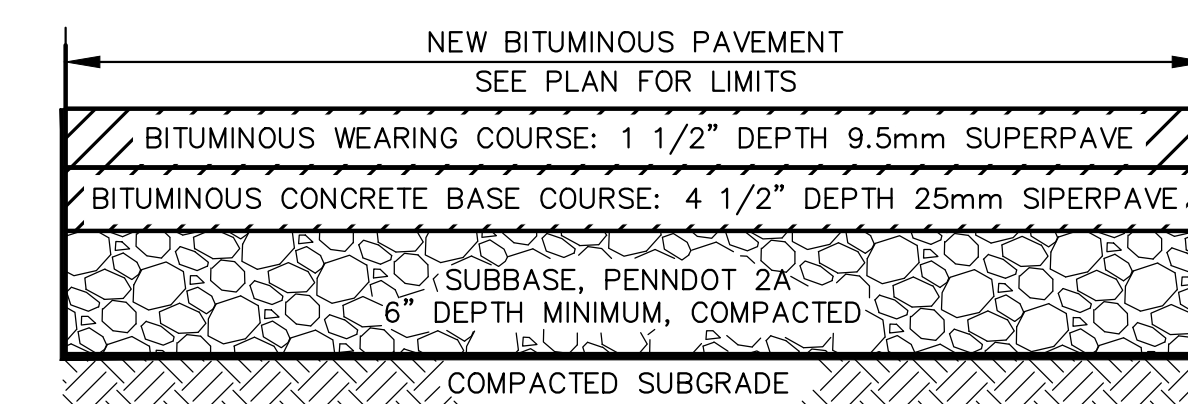


NOTE:
CONCRETE CRADLE SHALL BE PROVIDED TO SUPPORT EXISTING STORM SEWER, SANITARY SEWER AND WATERLINE PIPING AT ALL CROSSINGS WHERE THE NEW SANITARY MAIN IS BELOW AND WITHIN 18" OF THESE EXISTING UTILITIES.

CONCRETE CRADLE DETAIL
NO SCALE

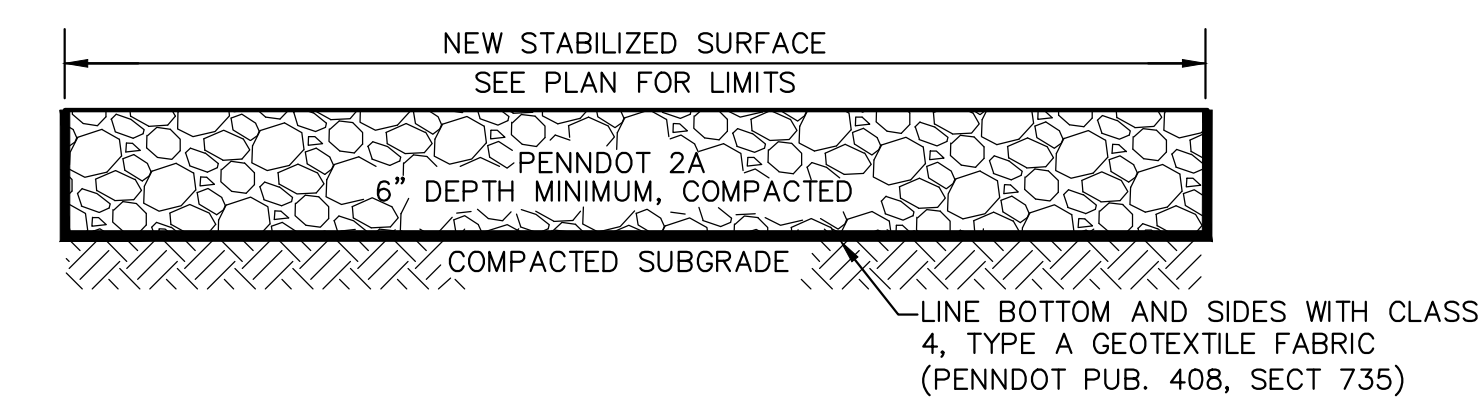


CONCRETE ENCASEMENT DETAIL
NO SCALE



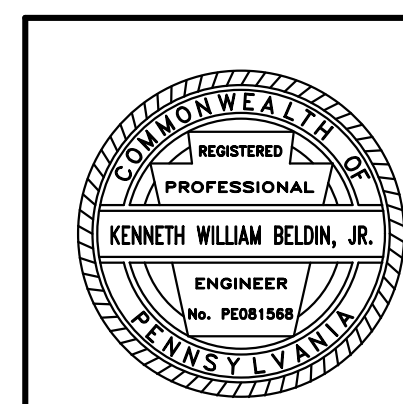
NOTE:
PROVIDE SUBGRADE PREPARATION AND ELEVATION AS NEEDED TO MATCH THE EXISTING AND/OR PROPOSED GRADES. REFER TO SPECIFICATIONS.

ACCESS ROAD DRIVEWAY/PARKING
TYPICAL SECTION
NO SCALE



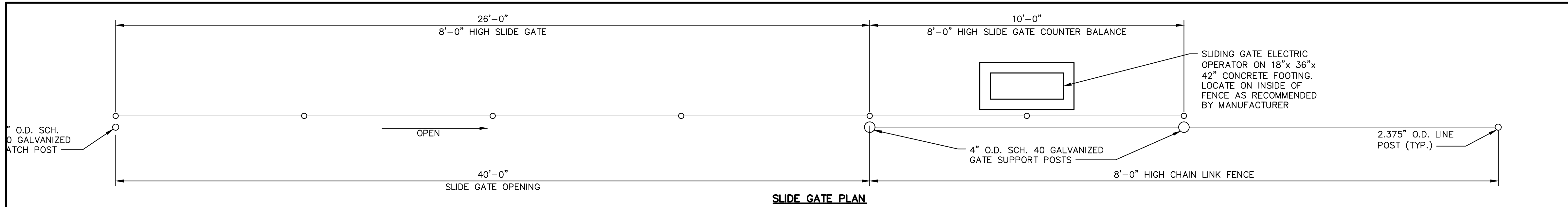
NOTE:
PROVIDE SUBGRADE PREPARATION AND ELEVATION AS NEEDED TO MATCH TO MATCH THE SELECTED SECTION. REFER TO SPECIFICATIONS.

STABILIZED SURFACE AREA
TYPICAL SECTION
NO SCALE



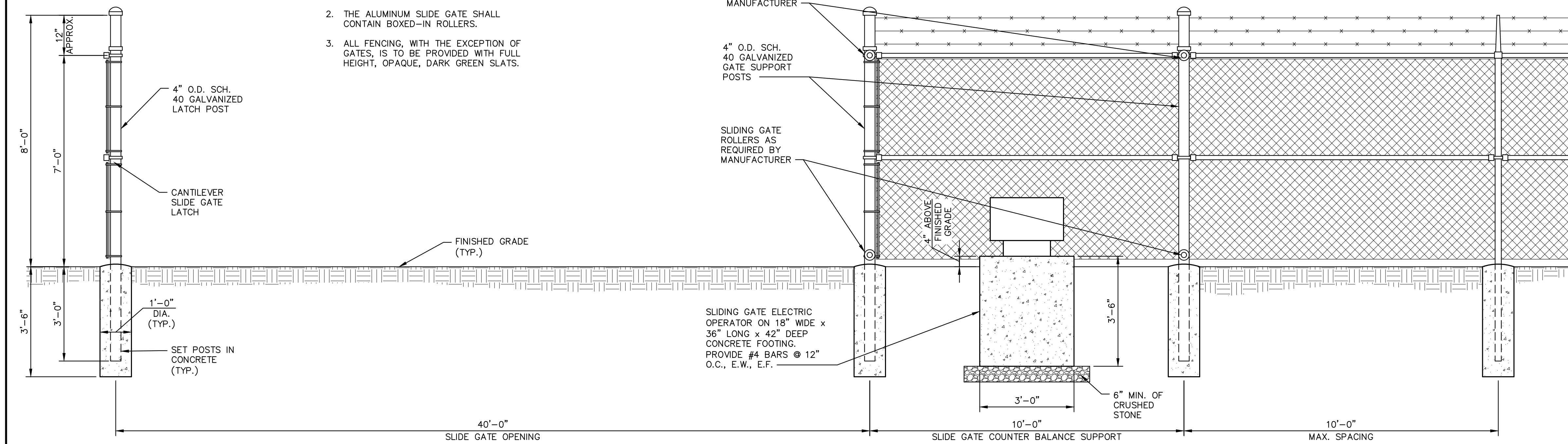
NO.	DATE	DESCRIPTION
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REVISIONS		
SITE DETAILS		
STATE COLLEGE BOROUGH WATER AUTHORITY		
NIXON-KOCHER WATER TREATMENT FACILITY		
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA		
DATE: 8/12/19	JOB: 16049	SCALE: AS SHOWN
FILE: 16049_LD_014	DRAWN BY: AJL	CHECKED BY: WAA
SHEET NO:		14

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GWIN DOBSON & FOREMAN
ENGINEERS
3121 Fairway Drive
Allison, PA 16802
814.943.9214
gdfengineers.com

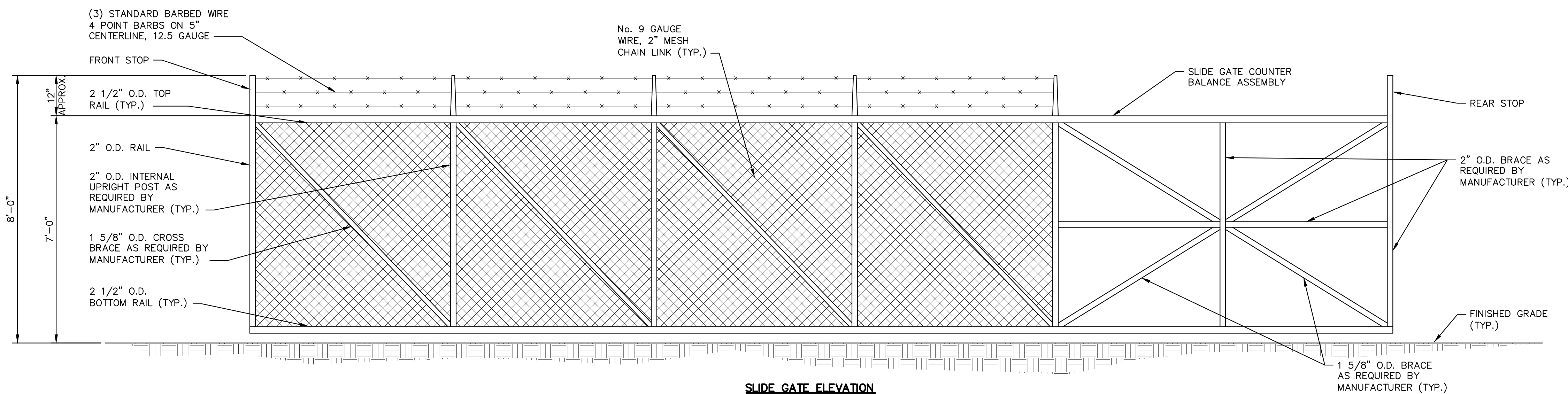


NOTES:

- SEE SPECIFICATIONS FOR MOTORIZED SLIDE GATE REQUIREMENTS.
- THE ALUMINUM SLIDE GATE SHALL CONTAIN BOXED-IN ROLLERS.
- ALL FENCING, WITH THE EXCEPTION OF GATES, IS TO BE PROVIDED WITH FULL HEIGHT, OPAQUE, DARK GREEN SLATS.

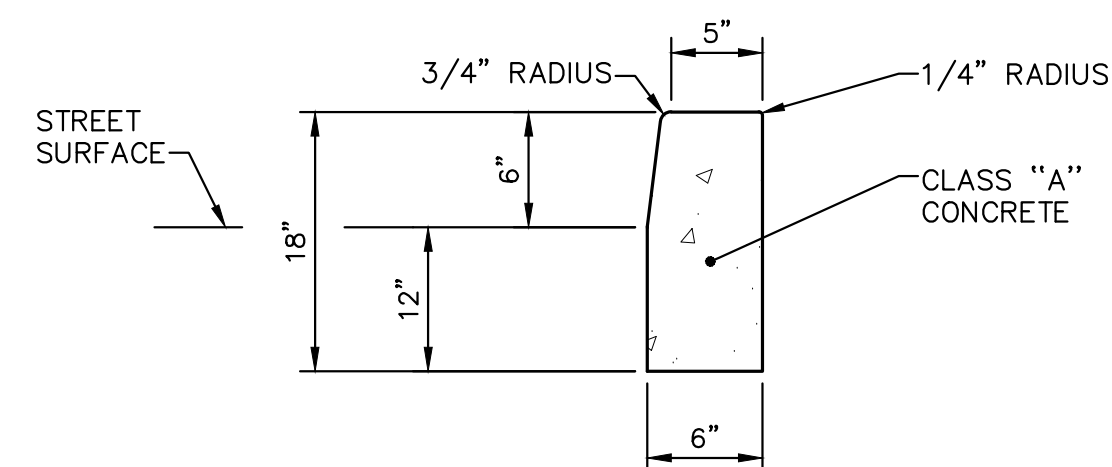


CHAIN LINK FENCE ELEVATION (SLIDE GATE NOT SHOWN)



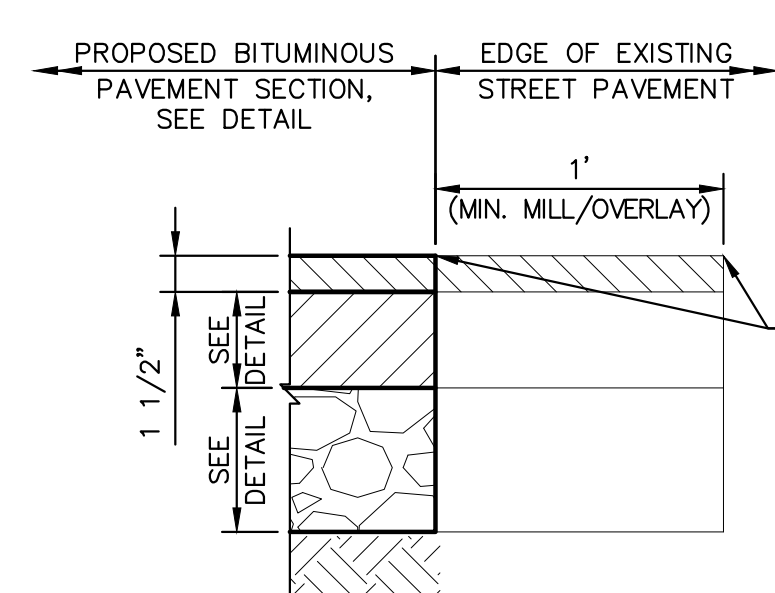
CHAIN LINK FENCE / SLIDE GATE DETAIL

NO SCALE



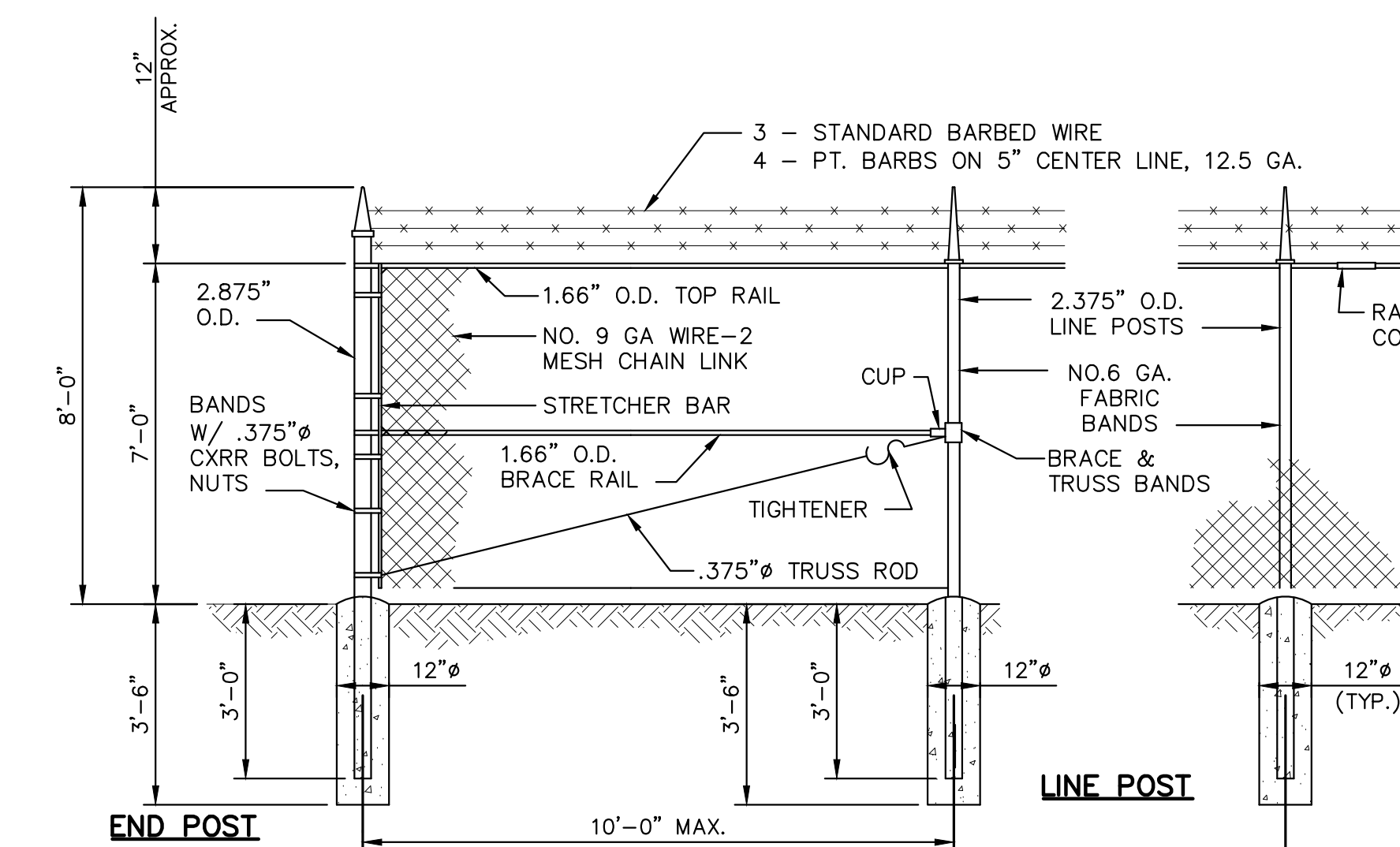
CONCRETE CURB DETAIL

NO SCALE

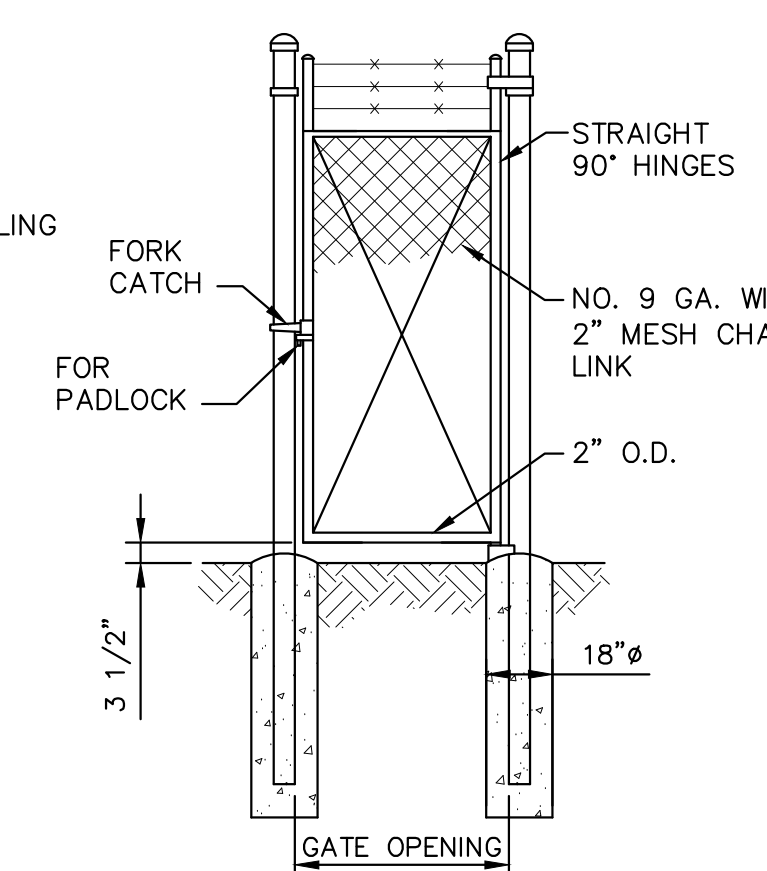


BITUMINOUS PAVEMENT SAWCUT DETAIL

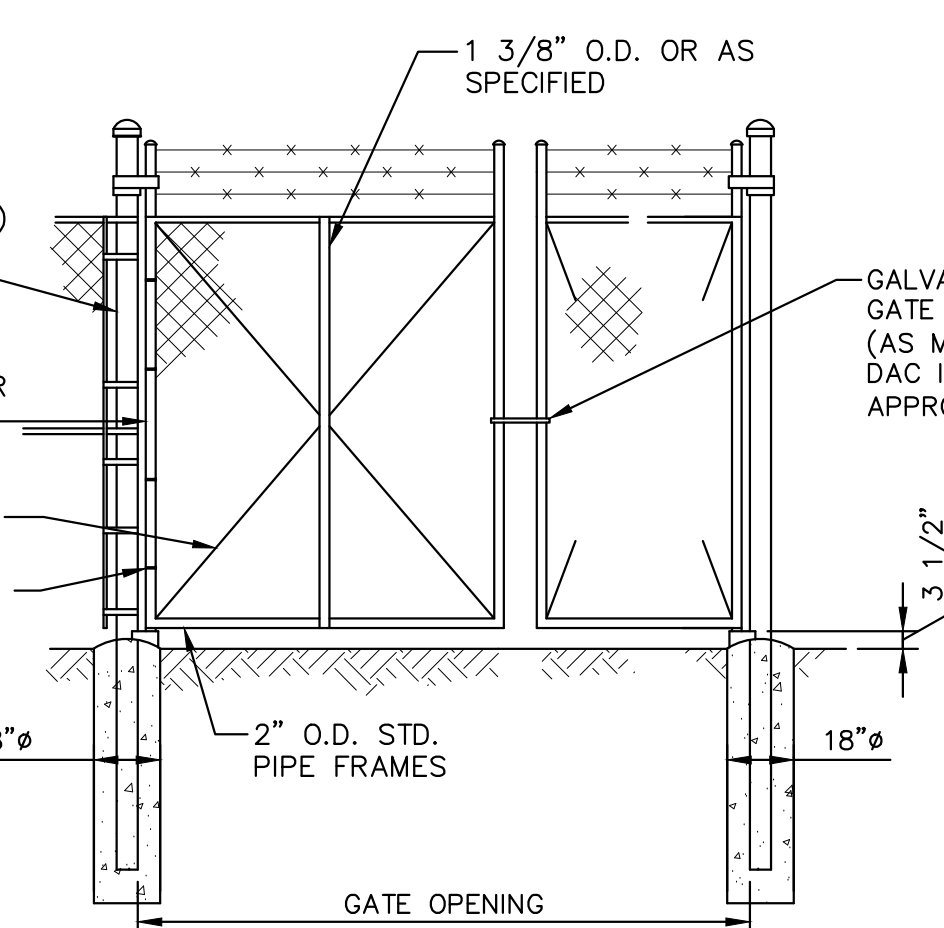
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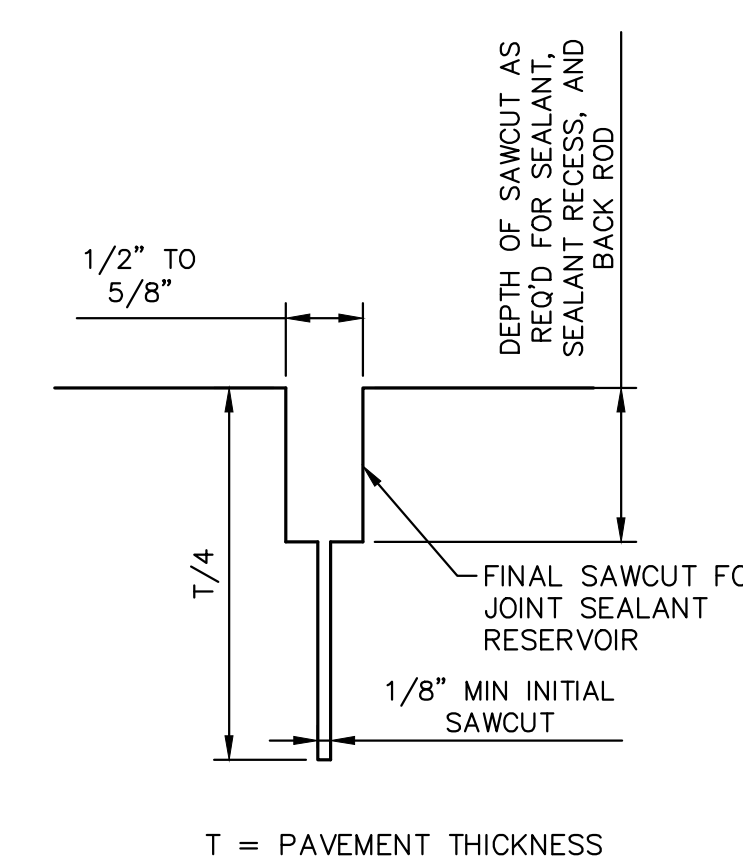
TYPICAL FENCE ELEVATION



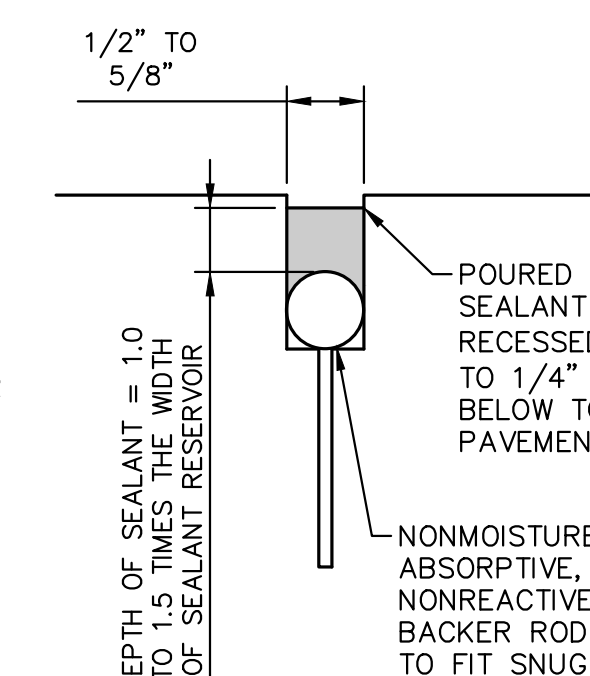
TYPICAL SINGLE SWING GATE ELEVATION



TYPICAL DOUBLE SWING GATE ELEVATION



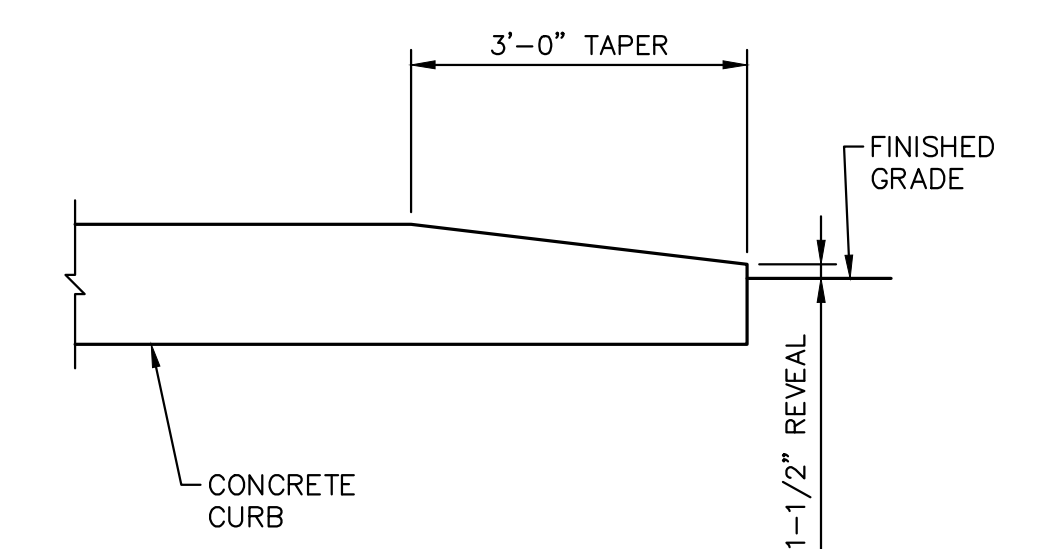
SAWCUT



COMPLETED SAWCUT JOINT

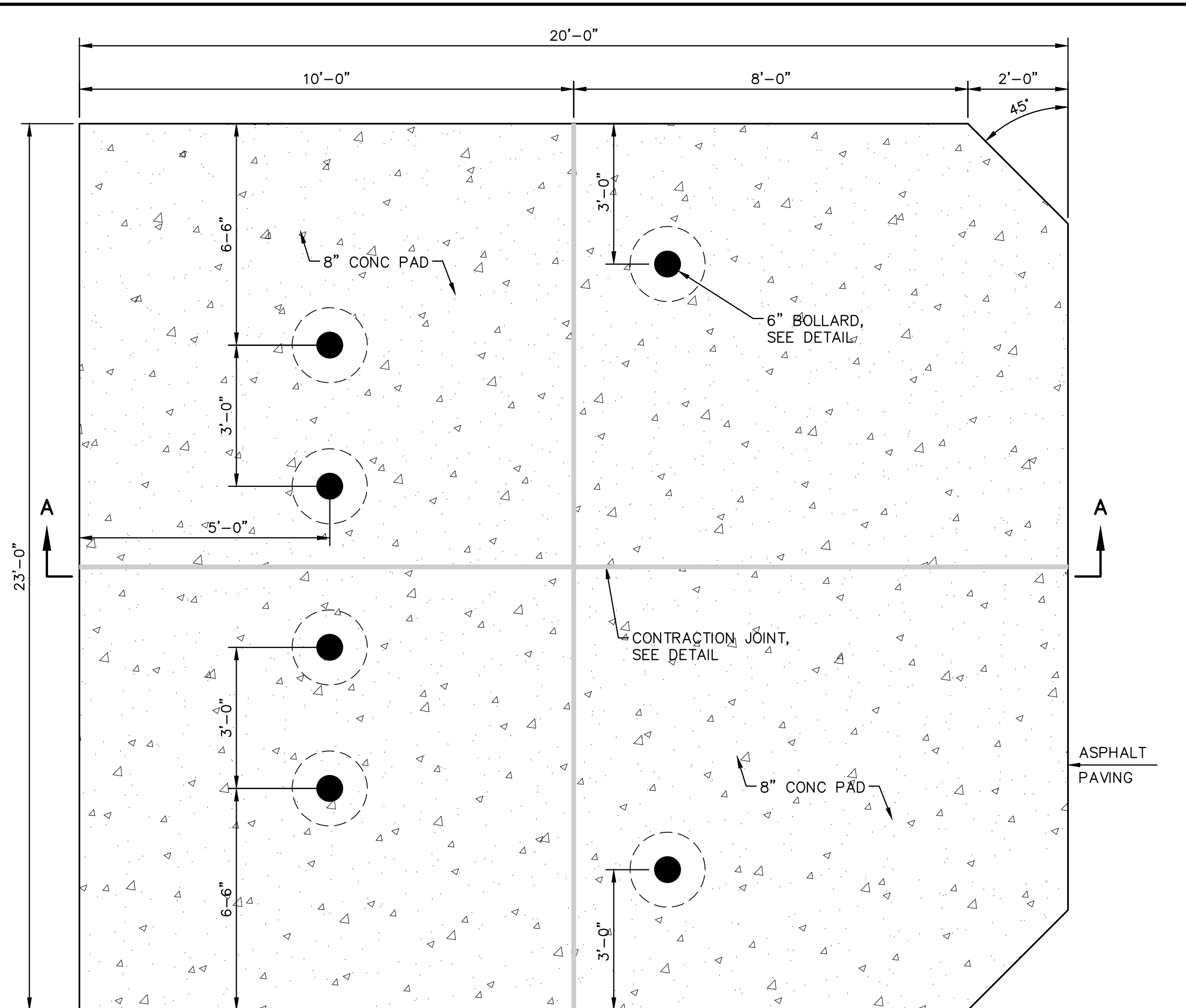
DUMPSTER PAD CONTRACTION JOINT DETAIL

NO SCALE

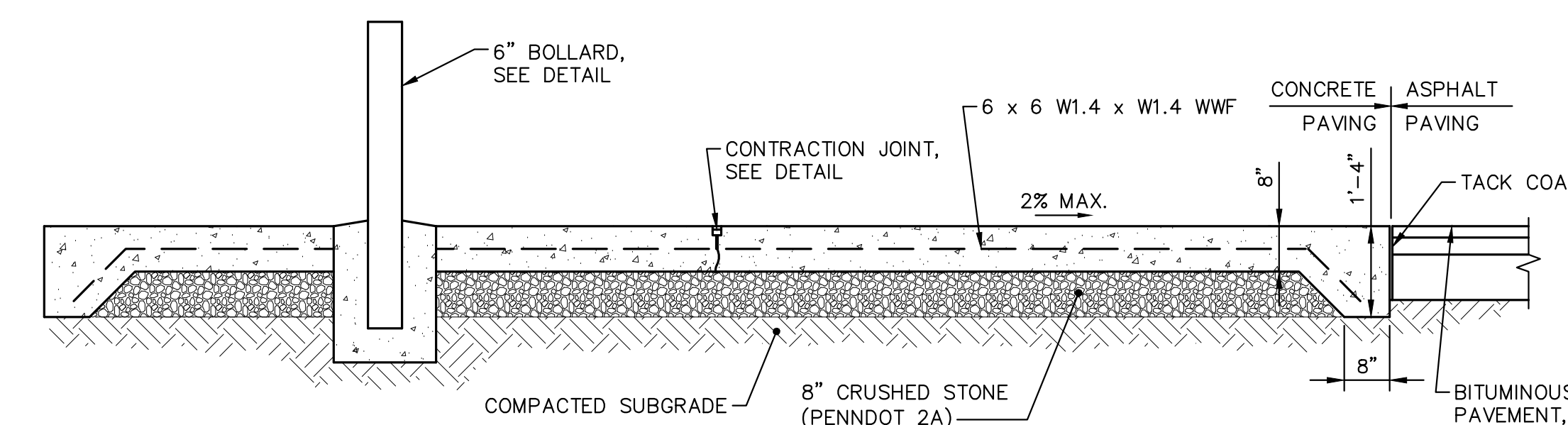


TYPICAL CURB TERMINAL SECTION

NO SCALE



PLAN VIEW



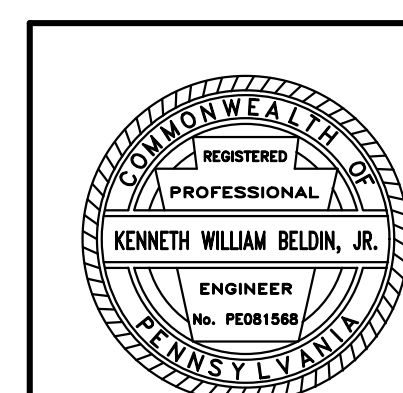
DUMPSTER PAD DETAIL

NO SCALE

NOTES:

- DUMPSTER ENCLOSURE FENCING SHALL HAVE A MINIMUM HEIGHT OF 6'-0".
- SEE FENCE DETAILS AND PLAN VIEW FOR LOCATION.

NO.	DATE	DESCRIPTION
1	8/12/19	REVISED PER TOWNSHIP COMMENTS
REVISIONS		
SITE DETAILS		
STATE COLLEGE BOROUGH WATER AUTHORITY		
NIXON-KOCHER WATER TREATMENT FACILITY		
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA		
DATE: 8/12/19	JOB: 16049	SCALE: AS SHOWN
FILE: 16049_LD_015	DRAWN BY: AJL	CHECKED BY: KWB



SEAL

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GWIN DOBSON & FOREMAN
ENGINEERS

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Allentown, PA 18602
610.943.5214
gdfengineers.com

SHEET NO:

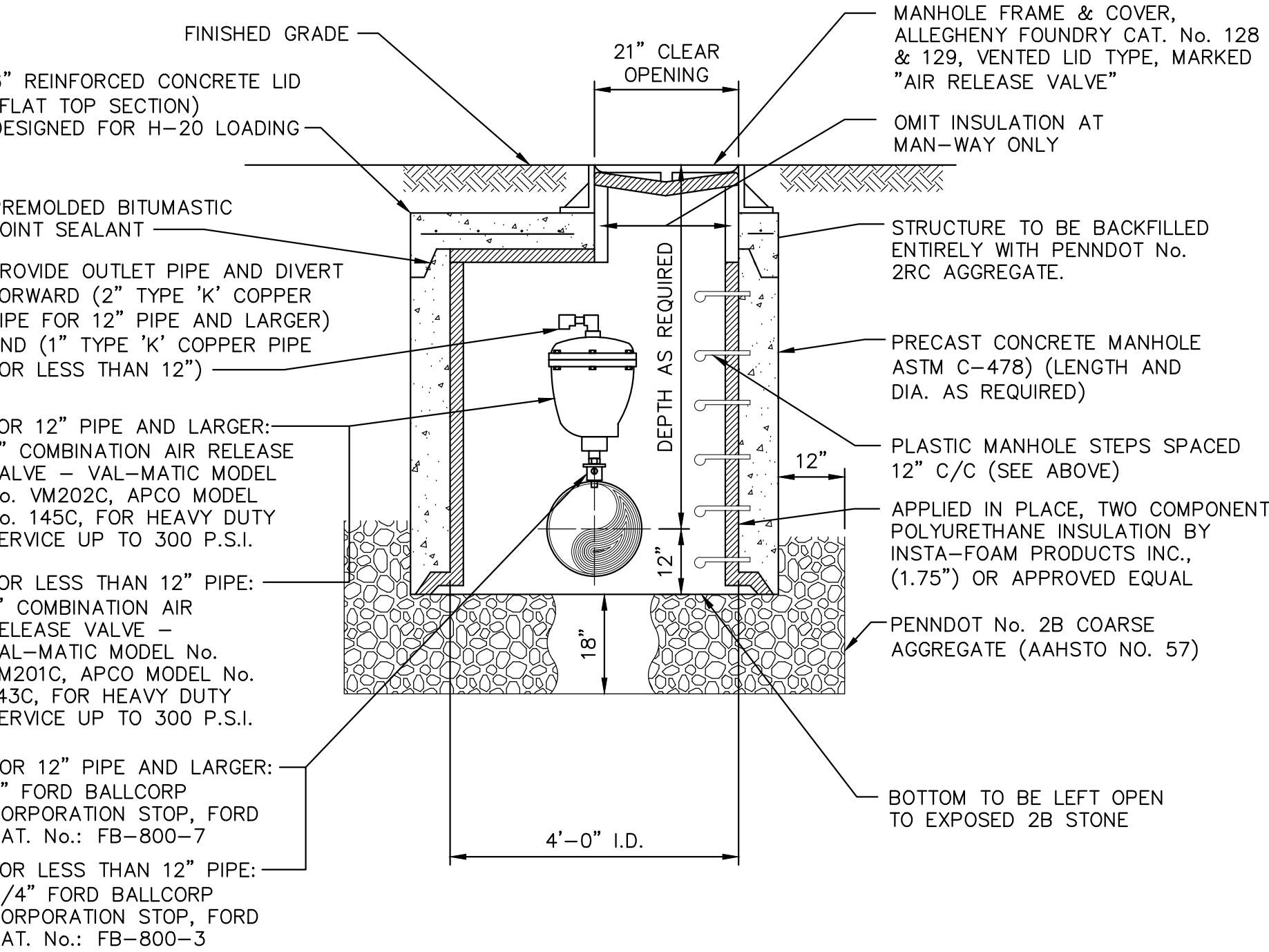
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NOTE:

ALL FERROUS METAL COMPONENTS OF VALVE VAULT TO BE COATED WITH BITUMASTIC COATING SYSTEM AS DIRECTED BY THE ENGINEER.

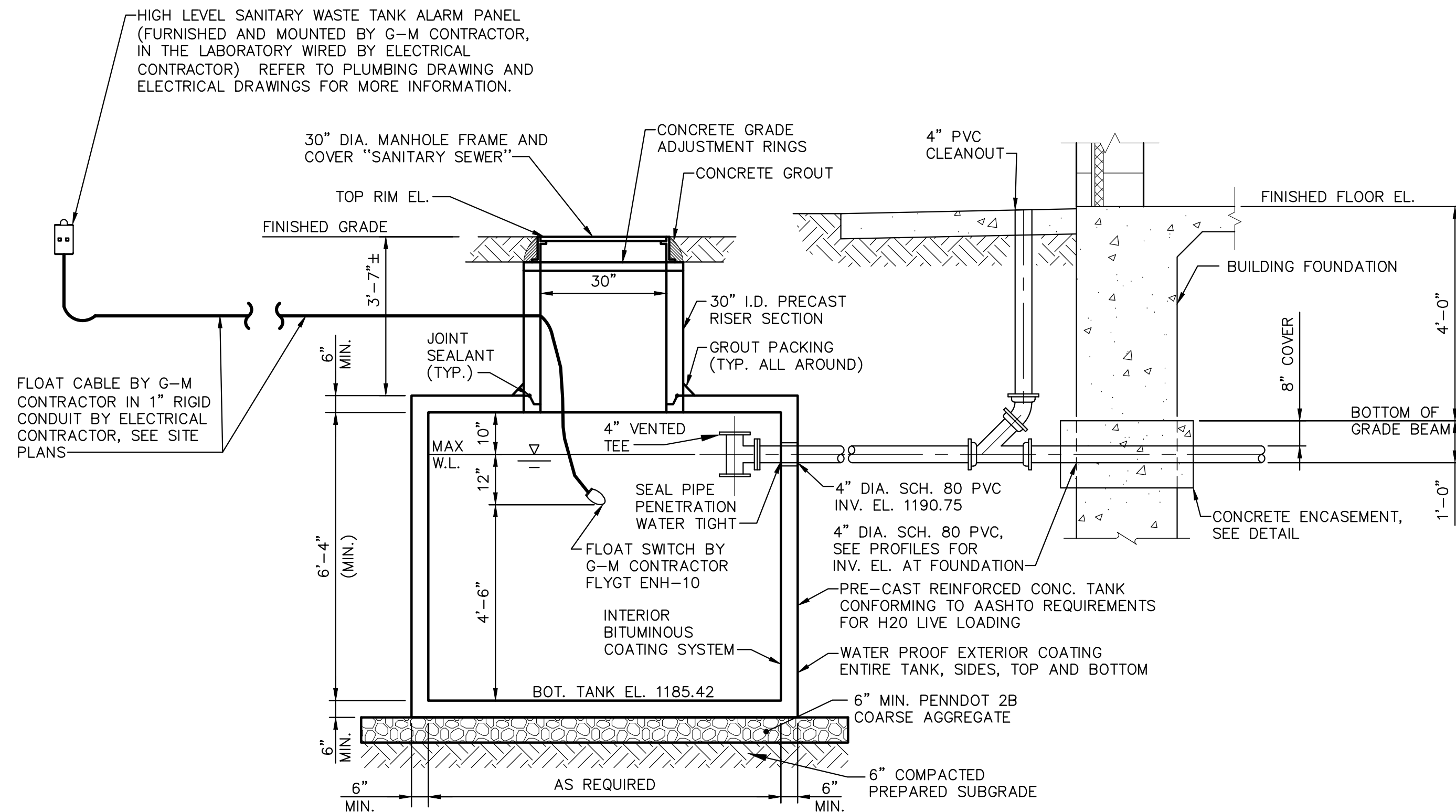
COMBINATION AIR RELEASE/VACUUM VALVE (SEE BELOW)

PROVIDE NEAT HOLE IN MANHOLE WALL TO ACCOMMODATE WATERLINE PIPE (SIZE AS REQUIRED) ANNULAR SPACE BETWEEN PIPE AND MANHOLE WALL TO BE FILLED WITH SUITABLE NON-SHRINK GROUT (TYPICAL)



ELEVATION

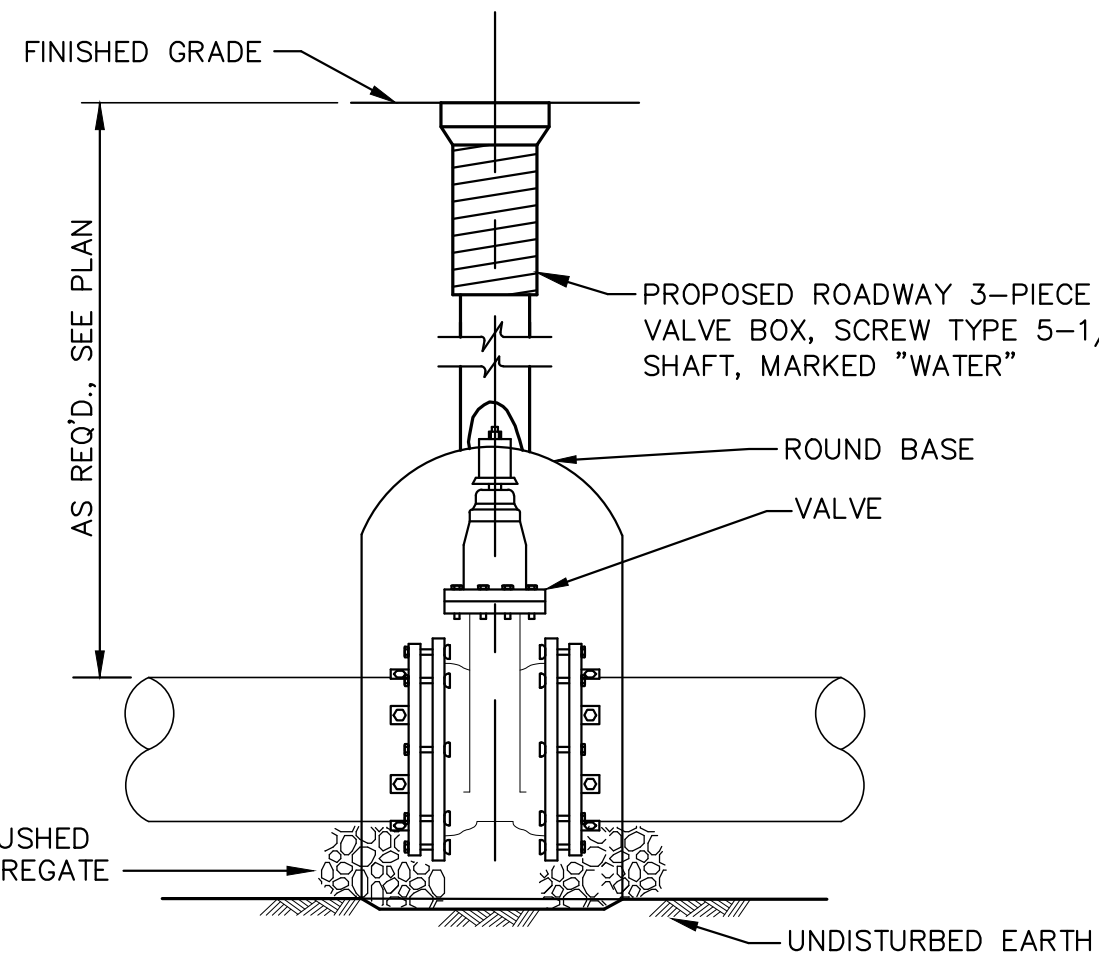
COMBINATION AIR VALVE — ON WATER MAIN
NO SCALE



NOTES:

- DIMENSIONS MAY VARY TO SUIT MANUFACTURER'S STANDARDS FOR A 5,000 GALLON CAPACITY.
- ENTIRE TANK MUST BE WATER TIGHT.
- SEE SITE PLAN FOR LOCATION.
- PROVIDE MANUFACTURER'S STANDARD INTERIOR PROTECTIVE COATING FOR SEWAGE EXPOSURE AND EXTERIOR COATING FOR WATERPROOFING AS NOTED. CONFIRM WITH ENGINEER BEFORE FABRICATION.
- G-M CONTRACTOR SHALL FURNISH/MOUNT FLOAT, ALARM PANEL, FLOAT CABLE, ELECTRICAL CONTRACTOR SHALL WIRE ALARM PANEL TO FLOAT. NORMALLY OPEN CONTACT FOR FLOAT SHALL CLOSE UPON A HIGH LEVEL CONDITION.

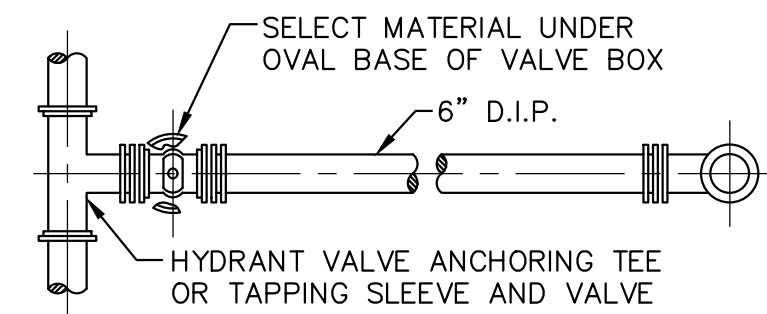
5,000 GALLON CAPACITY SANITARY WASTEWATER HOLDING TANK
NO SCALE



NOTES:

- VALVE BOX NOT TO REST OR COME IN CONTACT WITH VALVE.
- TYPICAL FOR ALL CORPORATION AND CURB STOPS, EXCEPT FIRE SERVICE ENTRANCE.

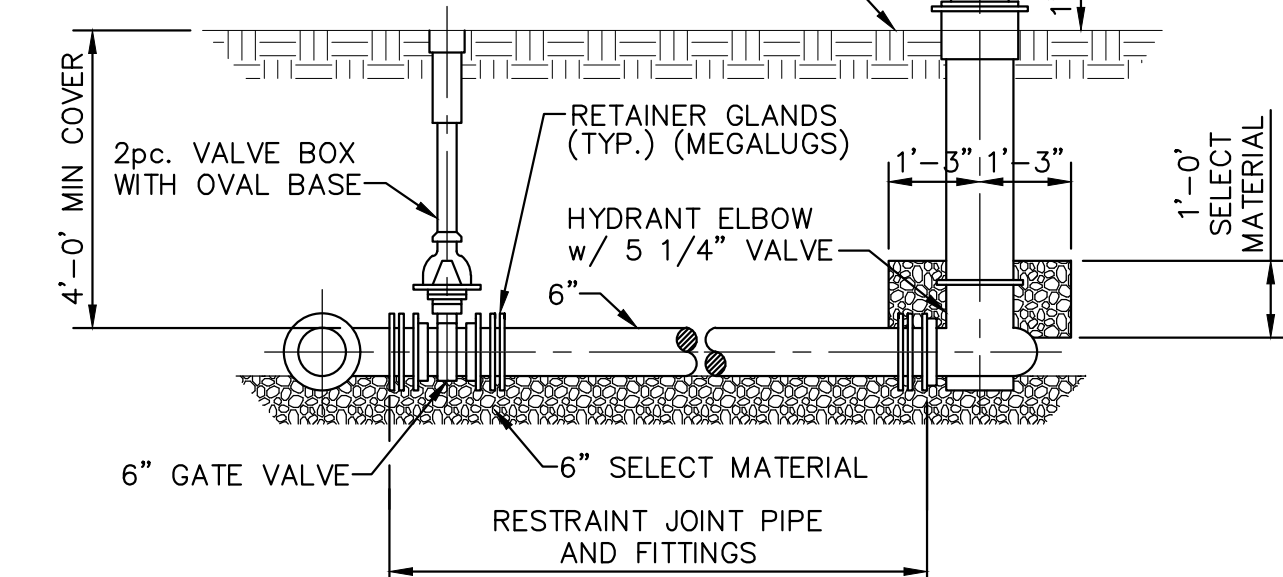
TYPICAL ROADWAY VALVE BOX (RVB) DETAIL
NO SCALE



PLAN

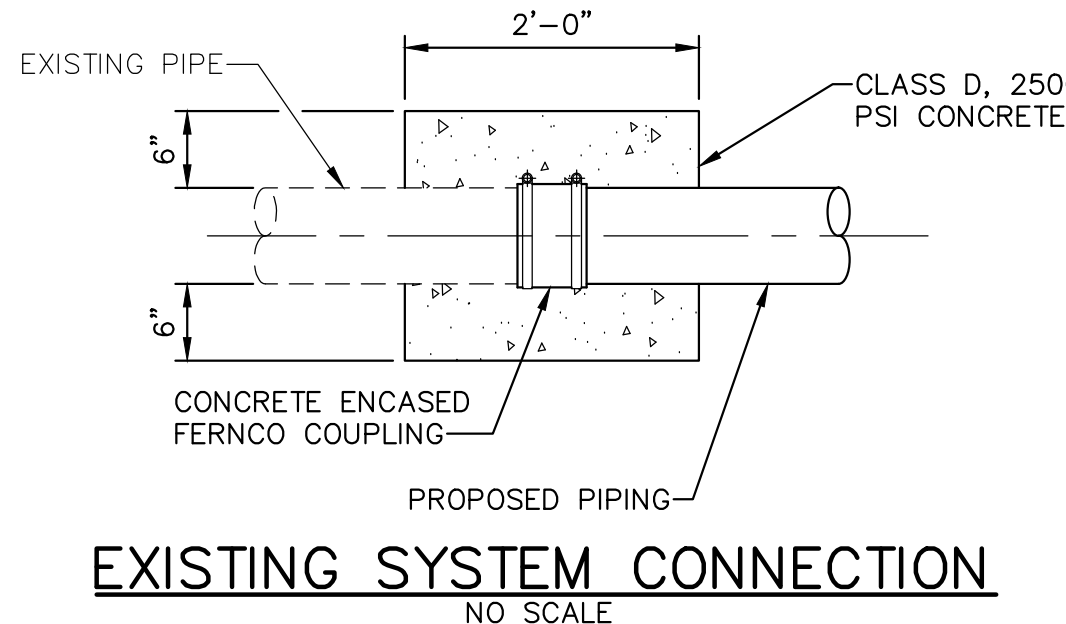
NOTE:

DRAIN HOLE IN HYDRANT MUST NOT BE OBSTRUCTED WITH CONCRETE.

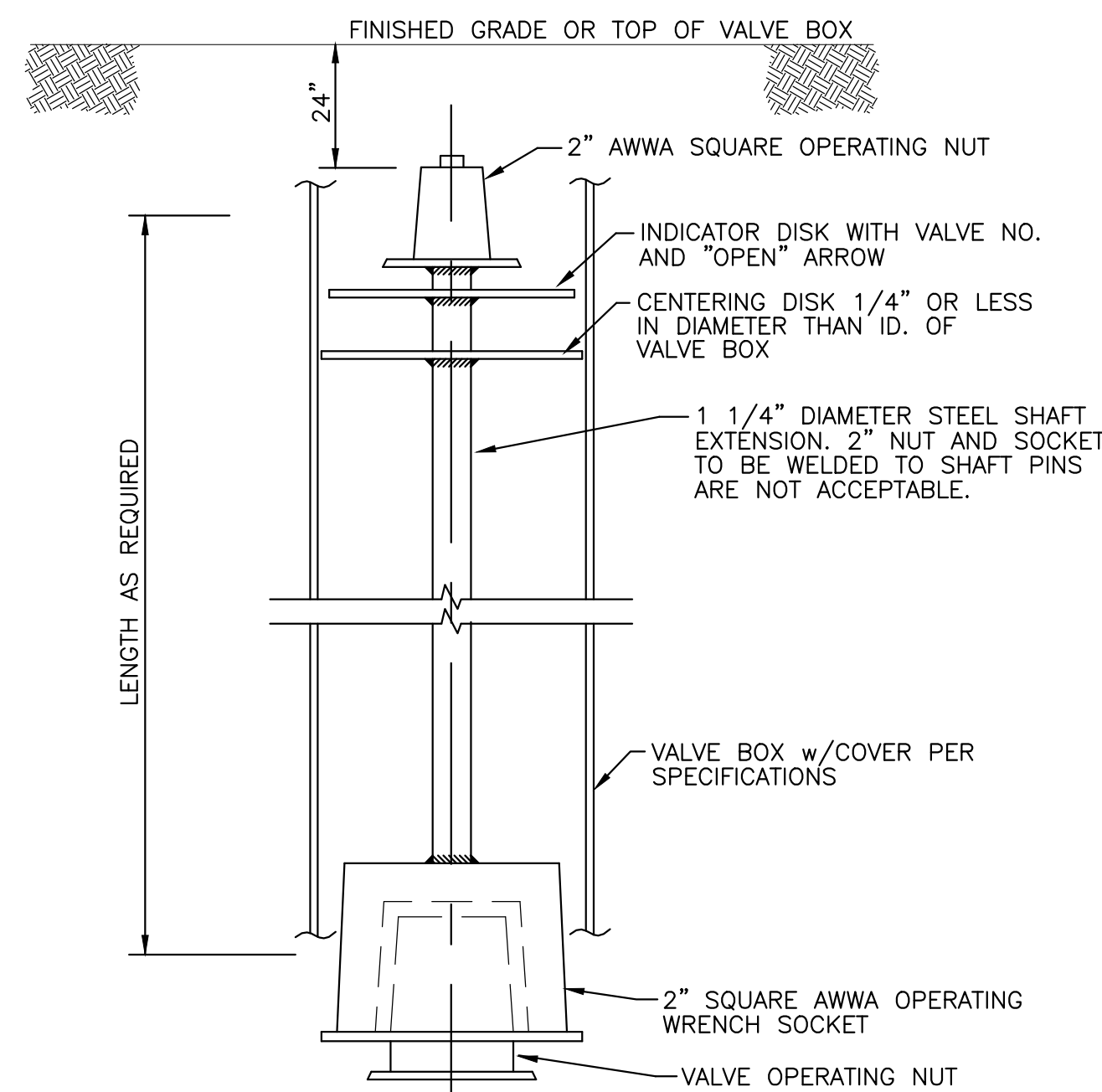


ELEVATION

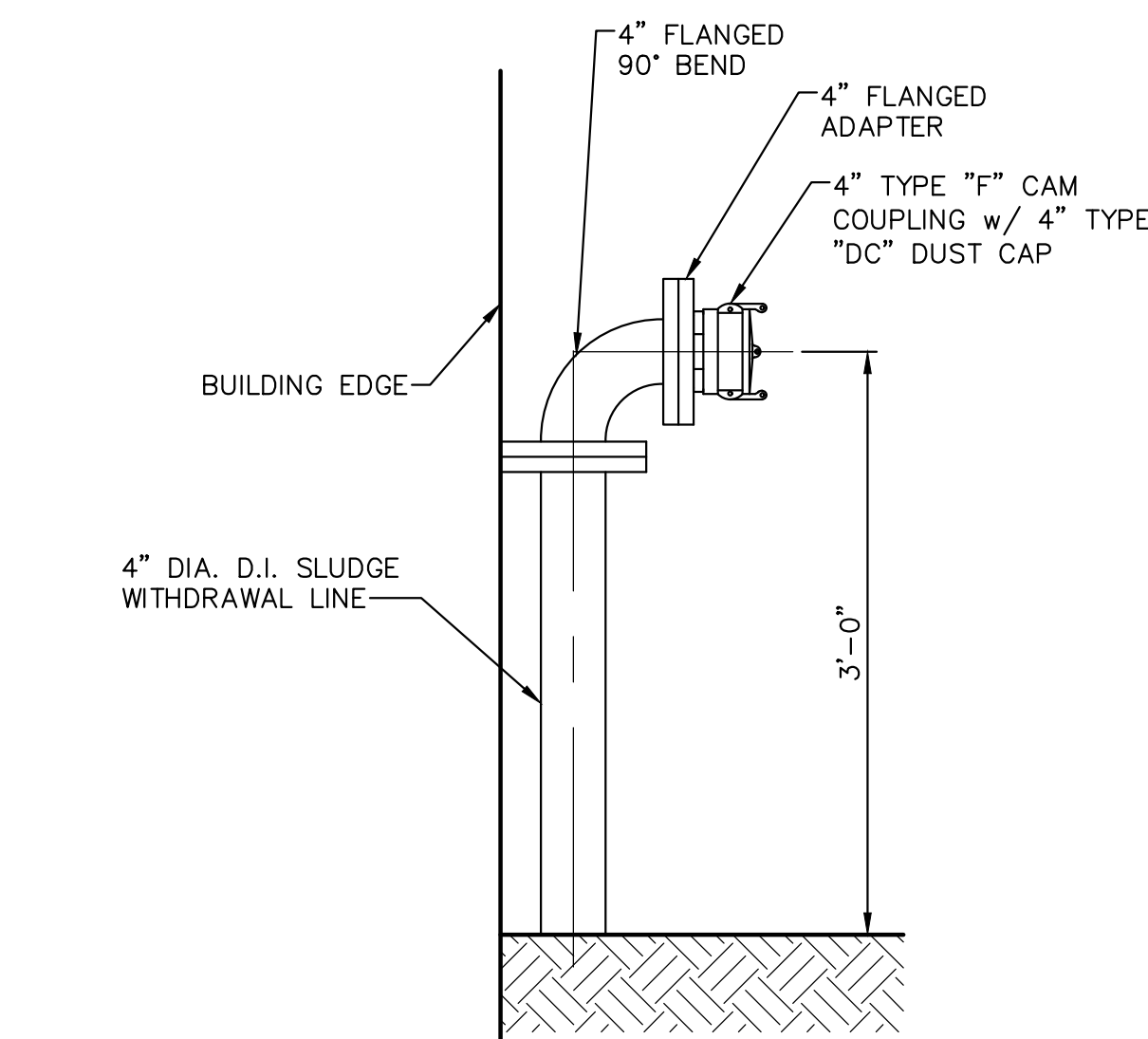
TYPICAL FIRE HYDRANT INSTALLATION DETAIL
NO SCALE



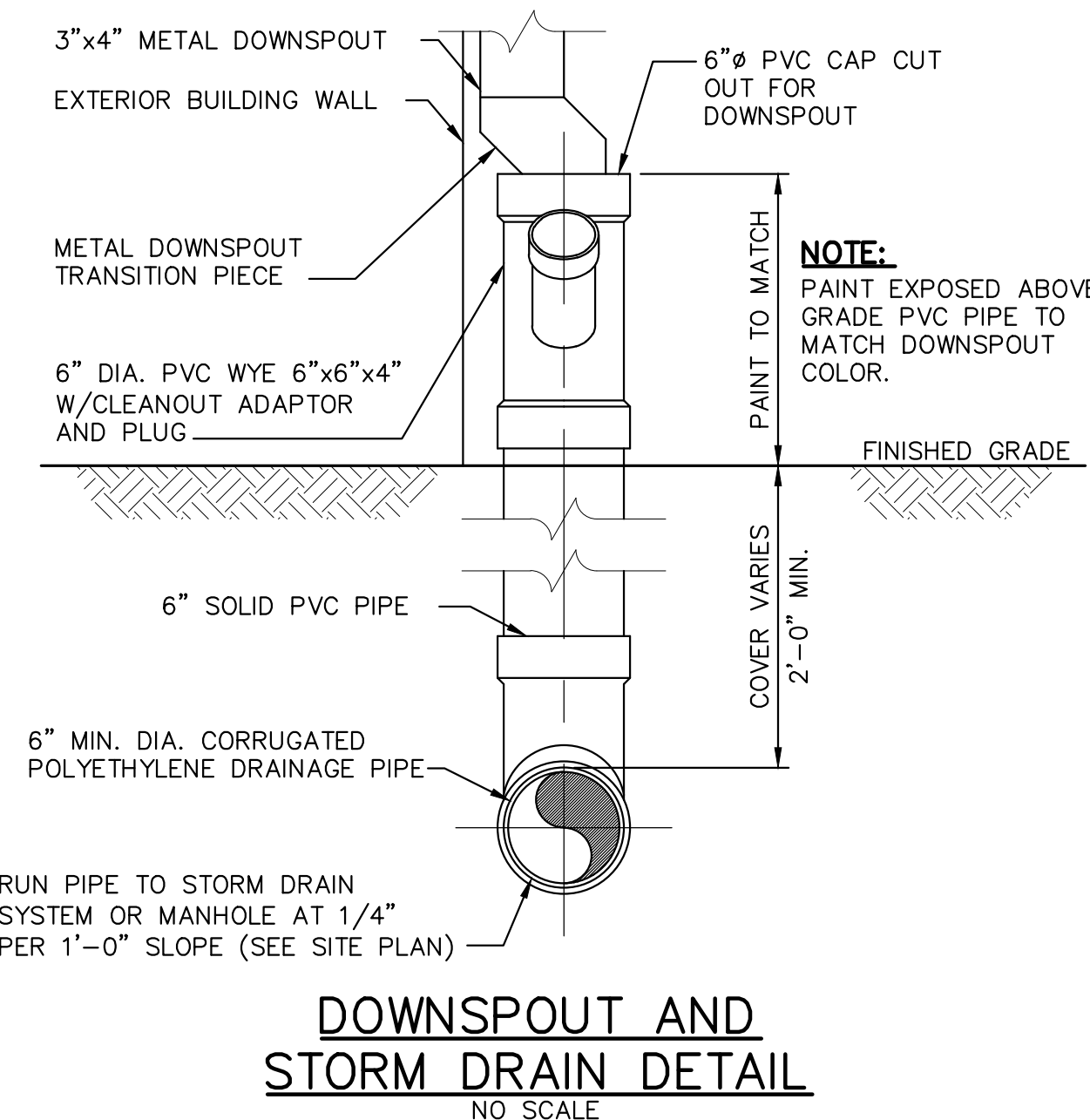
EXISTING SYSTEM CONNECTION
NO SCALE



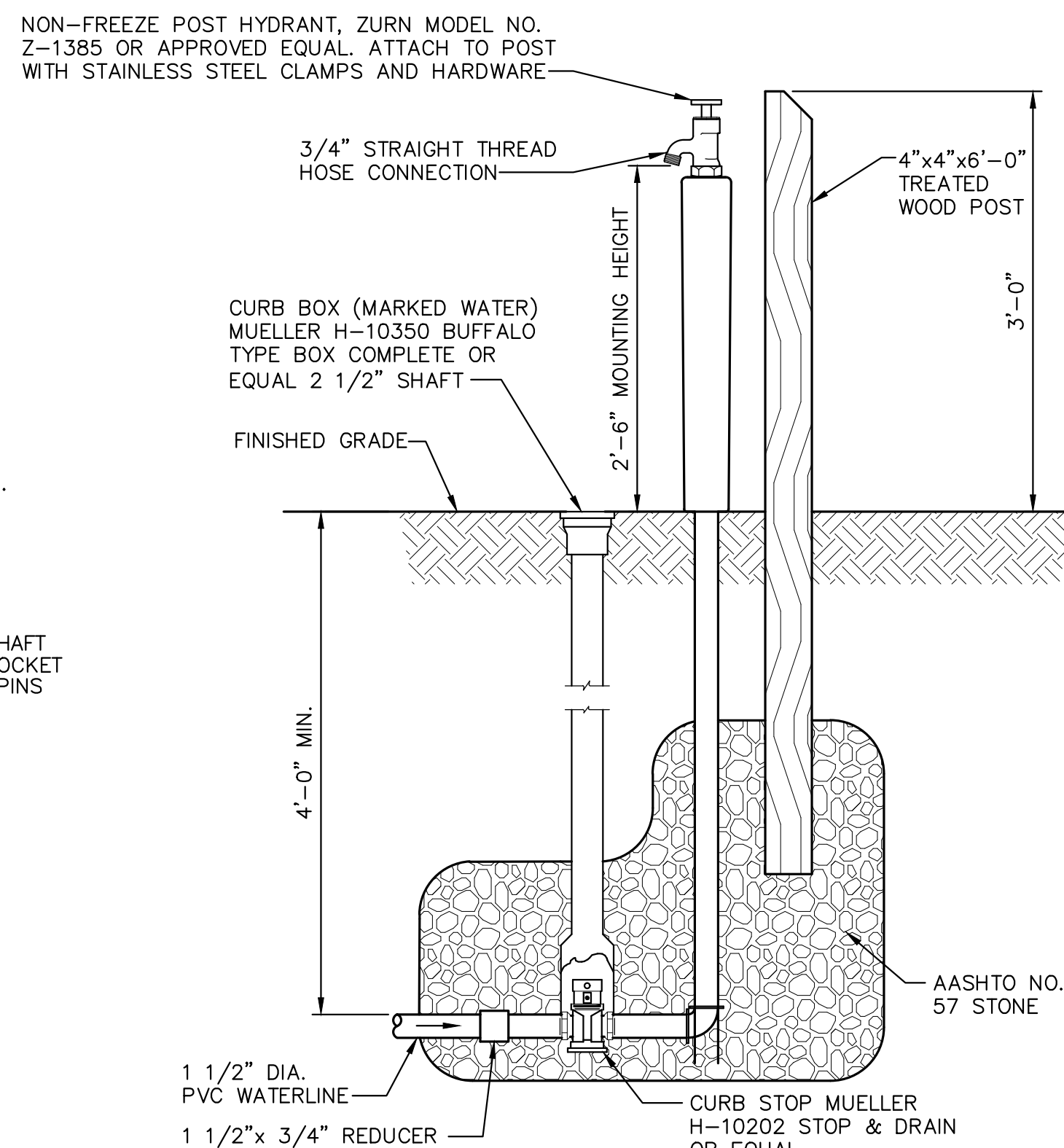
EXTENDED VALVE OPERATOR
NO SCALE



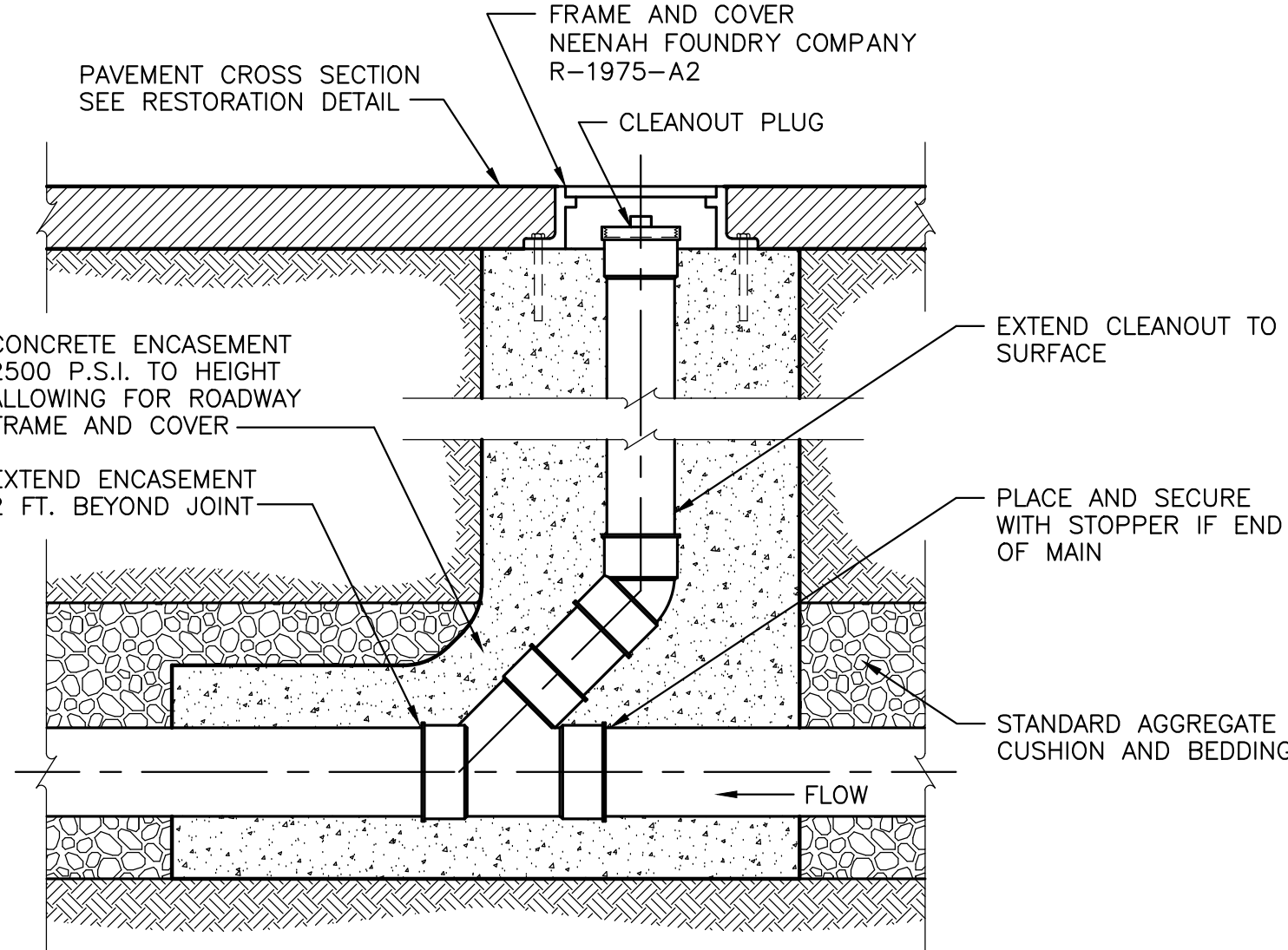
SLUDGE WITHDRAWAL TRUCK CONNECTION DETAIL
NO SCALE





DOWNSPOUT AND STORM DRAIN DETAIL
NO SCALE

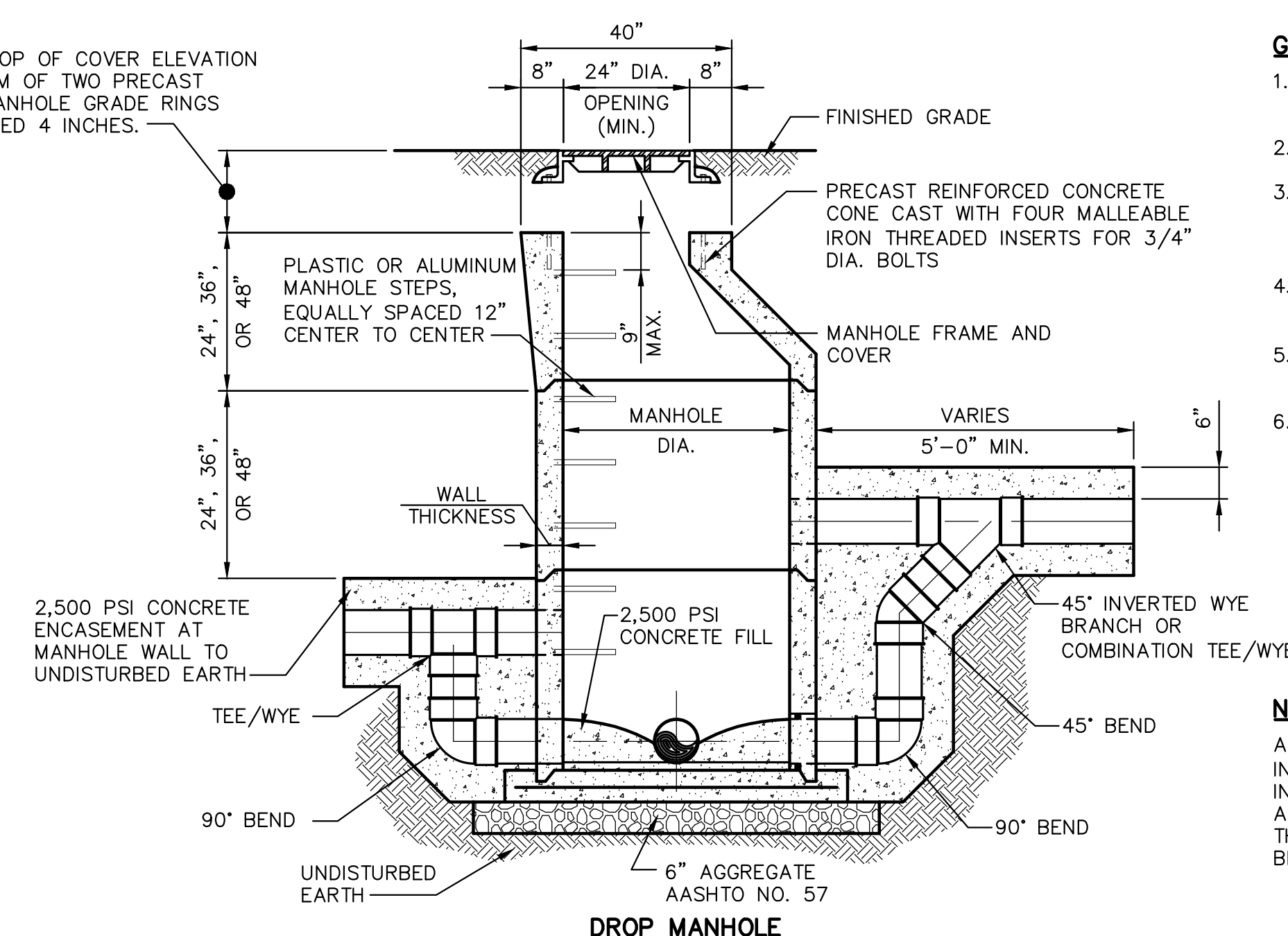


NON-FREEZE YARD (POST) HYDRANT DETAIL
NO SCALE



CLEANOUT CONSTRUCTION DETAIL
NO SCALE

	SITE DETAILS				 GWIN DOEBSON & FOREMAN ENGINEERS 3121 Fairview Drive Allison, PA 16802 814-943-3214 gdengineers.com
	STATE COLLEGE BOROUGH WATER AUTHORITY				
	NIXON-KOCHER WATER TREATMENT FACILITY				
	FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA				
SEAL	DATE: 8/12/19	JOB: 16049	SCALE: AS SHOWN	SHEET NO: 16	
	FILE: 16049_LD_016	DRAWN BY: AJL	CHECKED BY: WAA		



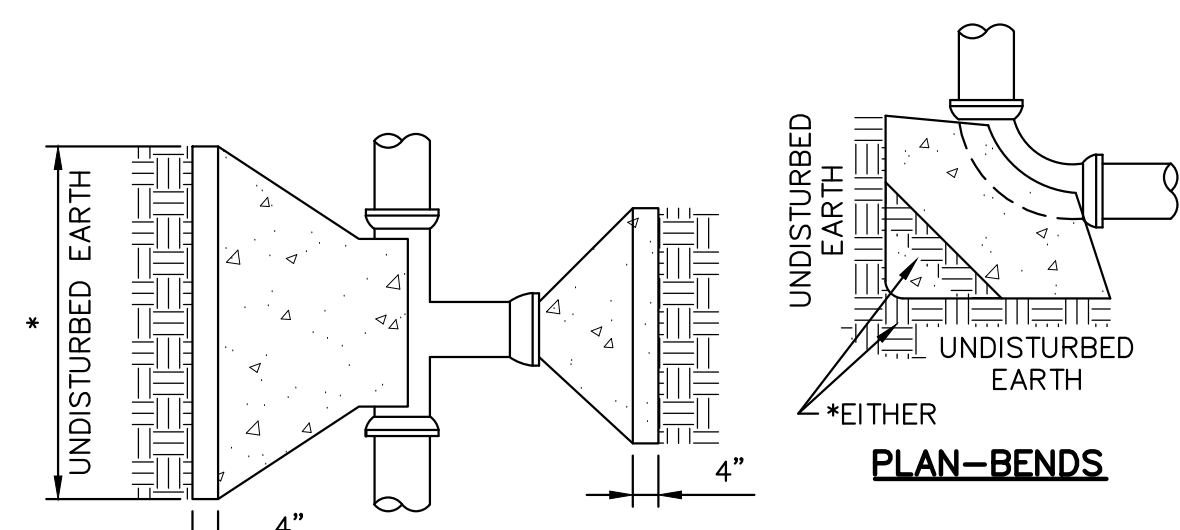
MANHOLE DIAMETER	WALL THICKNESS
4'-0"	5"
5'-0"	6"
6'-0"	7"
7'-0"	8"
8'-0"	9"

GENERAL NOTES:

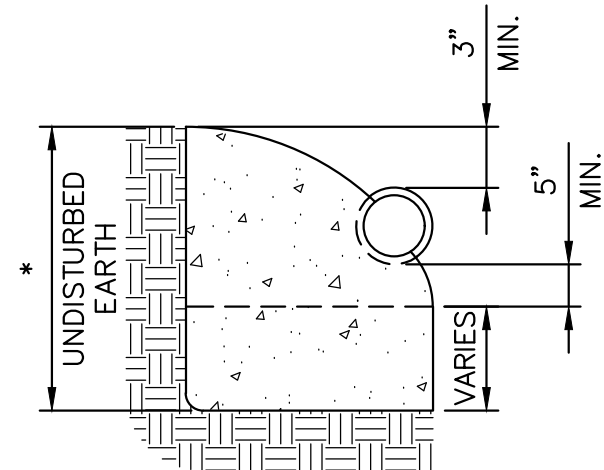
1. CONCRETE MANHOLES AND BASES SHALL CONFORM TO ASTM C-478.
2. REINFORCING STEEL SHALL CONFORM TO ASTM A-185.
3. THE EXTERIOR SURFACE OF THE MANHOLE SHALL BE COATED WITH TWO COATS SHERMAN WILLIAMS HI-MIL SHER-TAR EPOXY (DFT 16 MILS) OR APPROVED EQUAL.
4. DISTANCE FROM RIM OF MANHOLE TO TOP OF STEP SHALL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

NOTE:

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 ENCASUREMENT AROUND THE MANHOLE AND THE CONNECTIONS SHALL BE COATED WITH TWO COATS OF BITUMASTIC.



PLAN-TEES, WYES AND PLUGS



ELEVATION—TEES, WYES AND BENDS

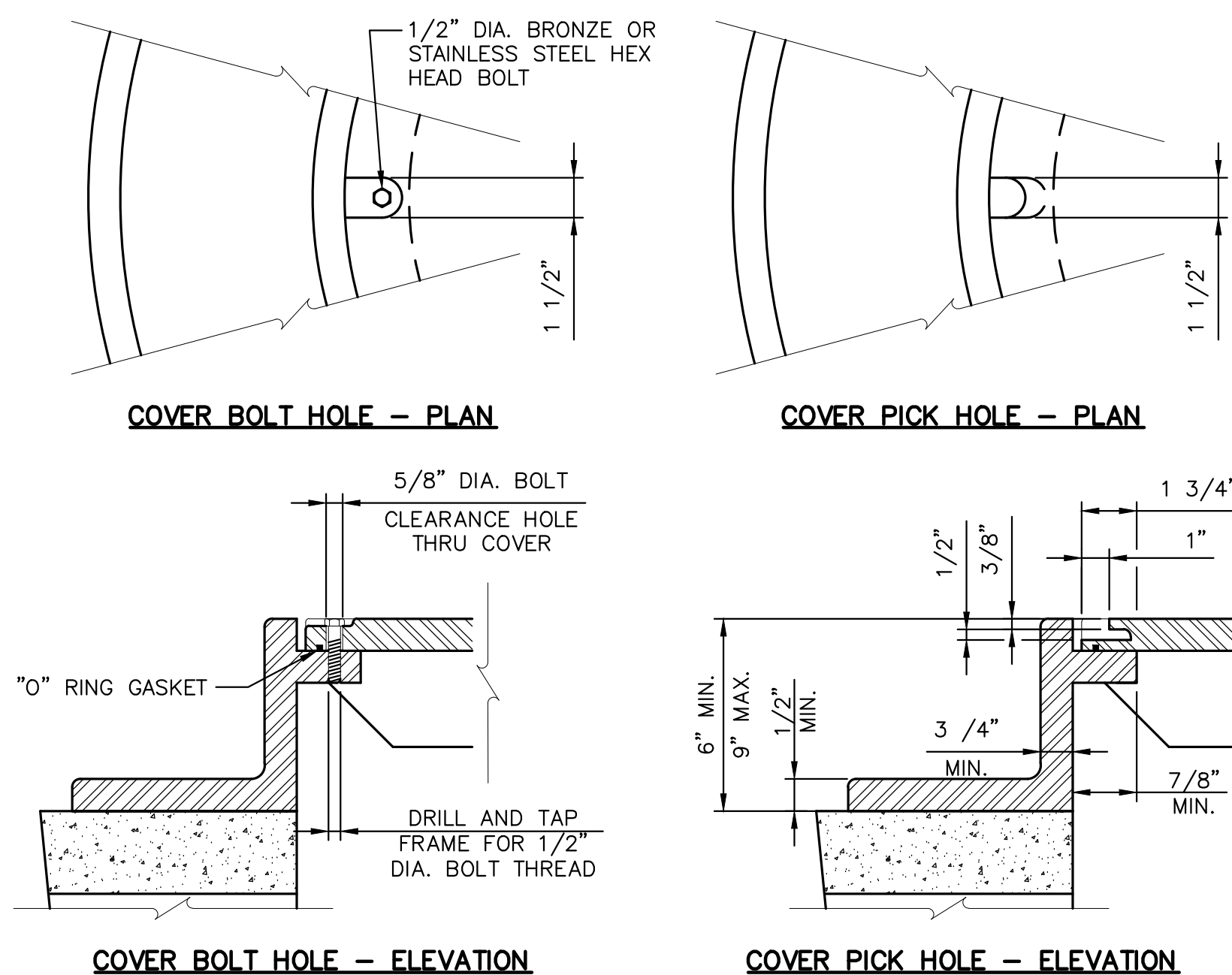
NOTES:

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

PIPE SIZE (IN.)	AREA (SQ. IN.)	TOTAL FORCE (LBS.)	AREA OF BLOCK IN SQ. FT.				
			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

NO SCALE



COVER PICK HOLE —
2 REQUIRED
EQUALLY SPACED

FRAME BOLT HOLE:
DRILL FOUR 1" DIA.
HOLES ON A 33" DIA.
BOLT CIRCLE

COVER BOLT HOLE:
WATER TIGHT ONLY 2

15"

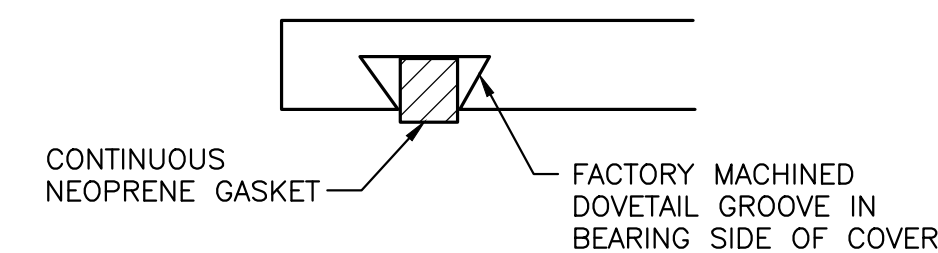
MANHOLE COVER

NOTES:

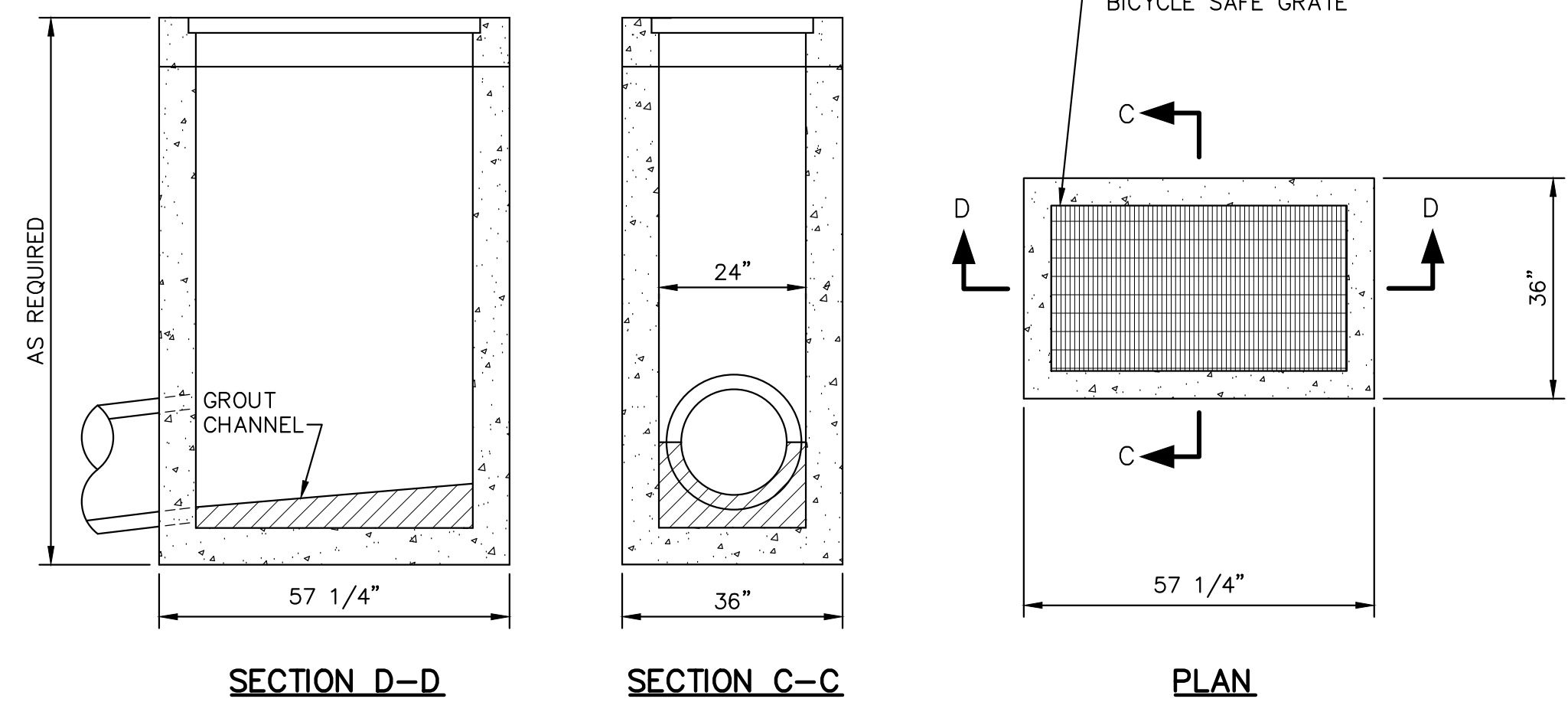
1. MANHOLE COVER MUST BE MARKED "SANITARY".
2. MANHOLE FRAMES AND COVERS SHALL BE FOR ASHTO HIGHWAY LOADING CLASS HS-20.
3. PRECAST CONCRETE RINGS ARE REQUIRED ONLY WHERE MANHOLE FRAME AND COVER MUST CONFORM TO GRADE OF STREET. MAXIMUM HEIGHT ADJUSTMENT W/ RINGS IS 4".
4. FOR STORMWATER MANHOLES PROVIDE 24" GRATE, H-20 HEAVY DUTY RATING, DUCTILE IRON, ASTM A536 GRADE 70-50-05 MINIMUM DRAIN AREA — 160 SQ. IN., NYLOPLAST AMERICAN INC. OR APPROVED EQUAL.

NOTE:

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



WATERTIGHT FRAME AND COVER

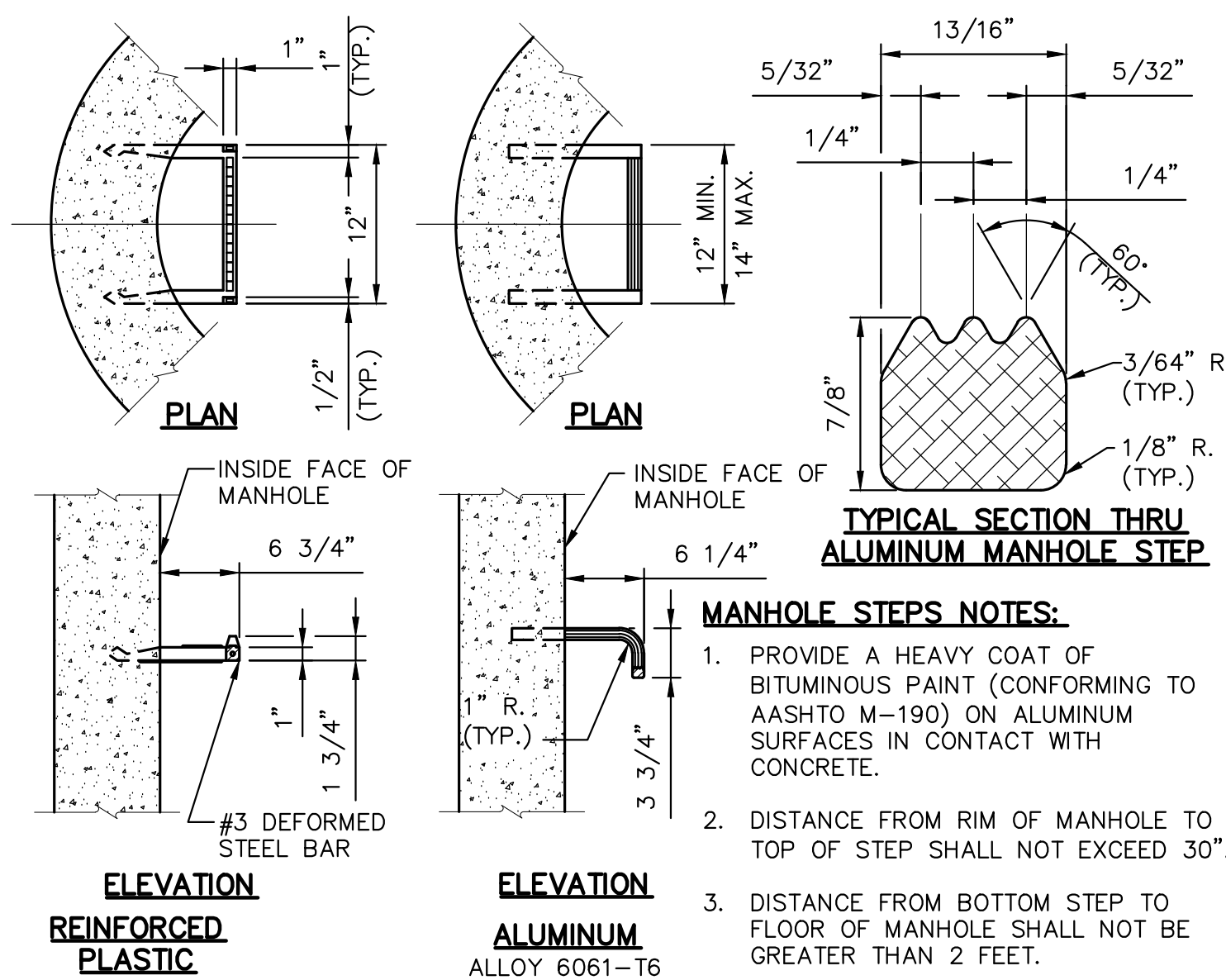


NOTES:

1. INLETS SHALL CONFORM TO PennDOT RC-34.
2. CONTRACTOR IS RESPONSIBLE FOR DETERMINING INLET BOX AND COVER ADJUSTMENT SLAB TYPE AS REQUIRED.

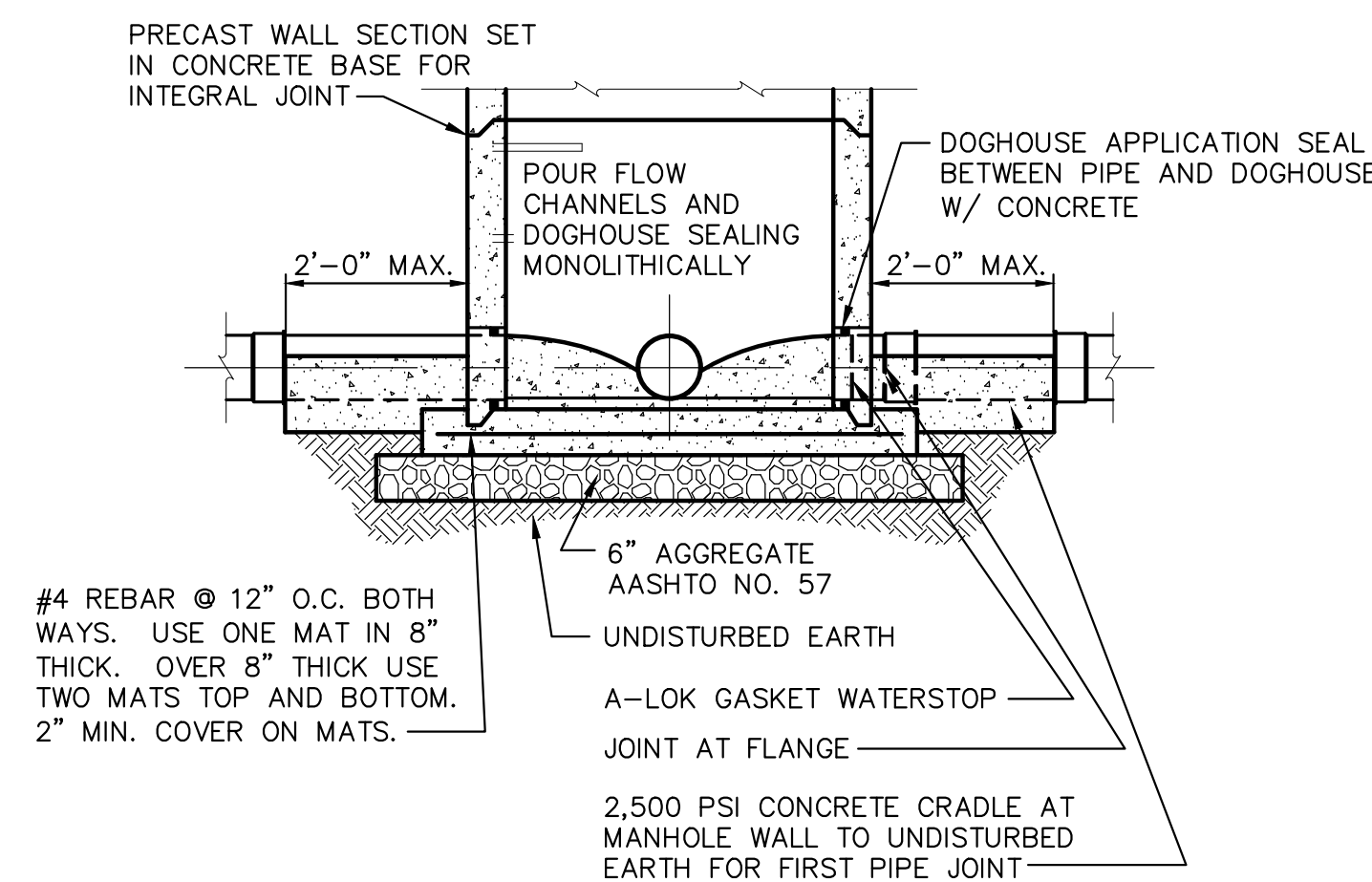
TYPICAL TYPE M INLET

NO SCALE



MANHOLE STEP DETAILS

NO SCALE

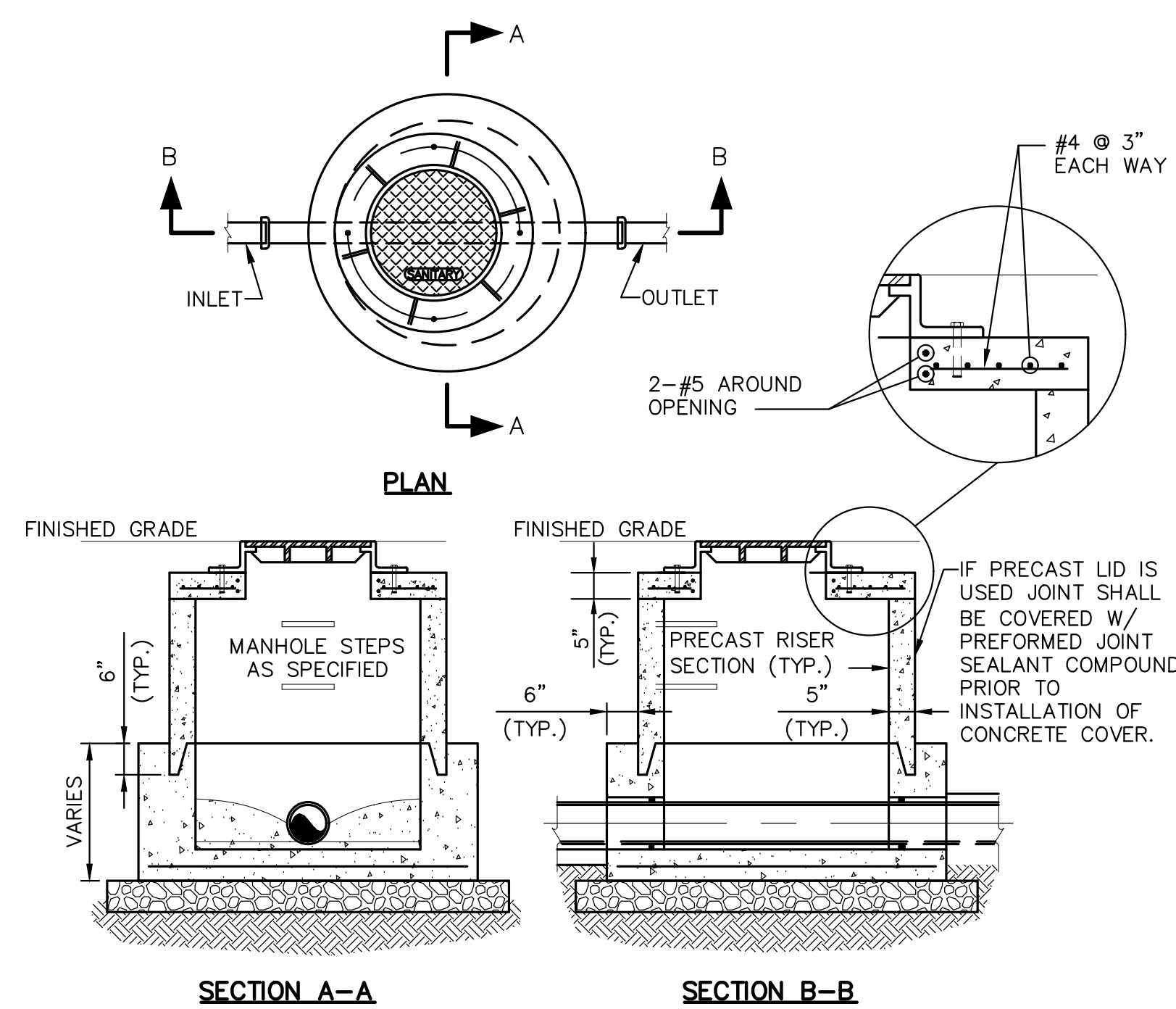


NOTES:

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

NO SCALE



STANDARD SHALLOW PRECAST MANHOLE

NO SCALE

STATE COLLEGE BOROUGH
WATER AUTHORITY

**NIXON-KOCHER
WATER TREATMENT FACILITY**

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

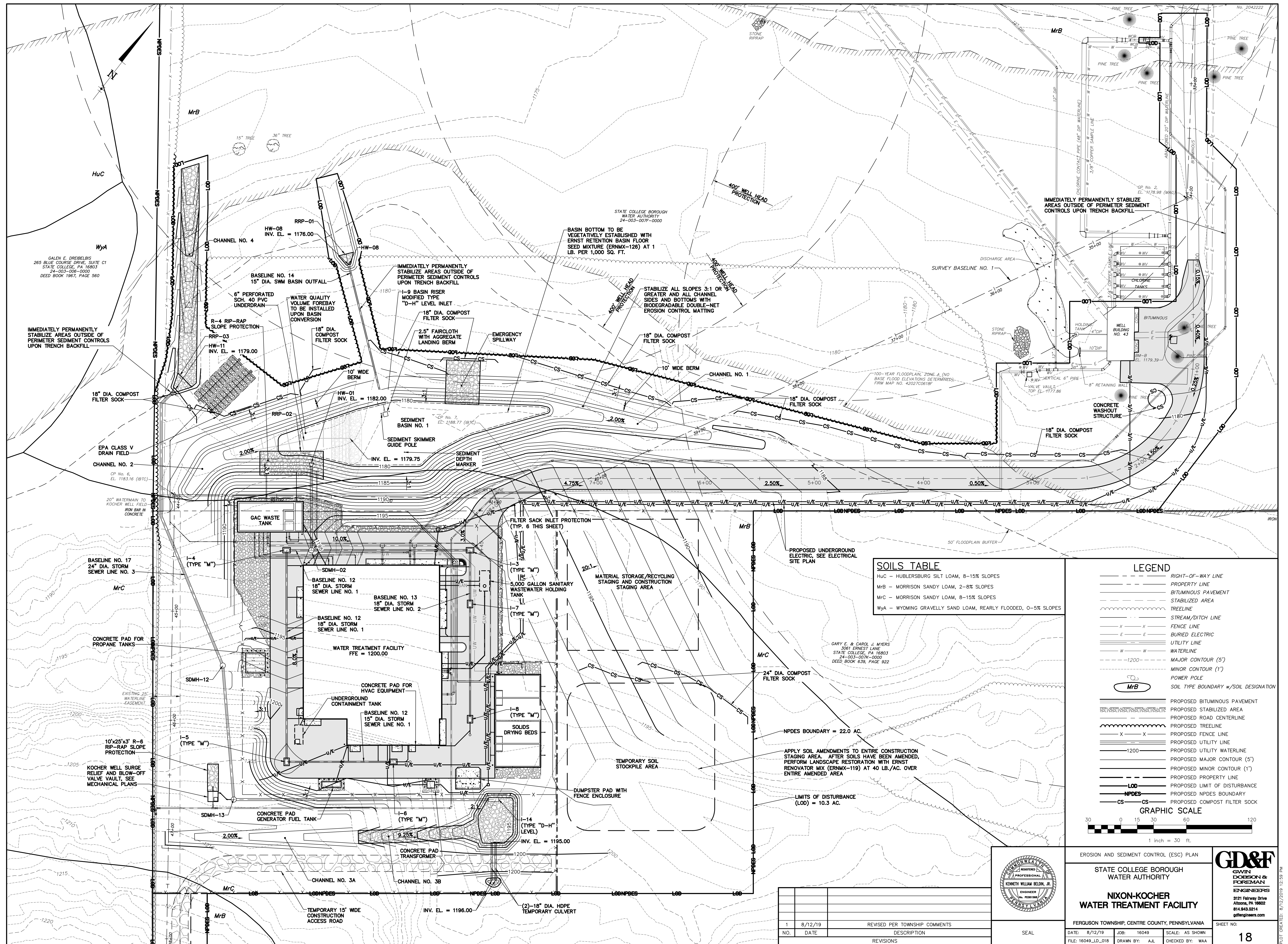
DATE: 8/12/19	JOB: 16049	SCALE: AS SHOWN
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SHEET NO.

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1. ALL EARTH DISTURBANCE ACTIVITIES, 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 INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
3. AT LEAST THREE (3) BUSINESS DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
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.

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 SHALL BE 2H:1V OR FLATTER.
8. 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.
9. 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, REGROUING, 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 ON 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 SWEEPED 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 SCARPED 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 CODES.
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.
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. SEEDS 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 BMPs.
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 MATRESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.
35. BIODEGRADABLE DOUBLE NET EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES GREATER THAN 3H:1V. ALL CHANNEL SIDES AND BOTTOMS AND IN ALL DISTURBED AREAS WITHIN 50 FEET OF WATER OF THE COMMONWEALTH.
36. MULCH APPLIED TO PERMANENTLY STABILIZED AREAS IS TO BE MECHANICALLY CRIMPED TO PREVENT BLOW OFF AND LOSS OF MULCH FROM RAINFALL. IN THE EVENT THAT MECHANICAL CRIMPING IS INEFFECTIVE, THE MULCH SHALL BE ANCHORED BY A NON-TOXIC BINDING EMULSION 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 WEDDY, BRUSHY OR WOODY GROWTH.
38. ANY UNDERGROUND UTILITIES RUNNING ACROSS/ THROUGH THE CHANNEL(S) SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL(S) REPAIRED AND STABILIZED PER THE CHANNEL CROSS-SECTION DETAIL.
39. VEGETATED CHANNELS SHALL BE CONSTRUCTED FREE OF ROCKS, TREE ROOTS, STUMPS OR OTHER PROJECTIONS THAT WILL IMPEDE NORMAL CHANNEL FLOW AND/OR PREVENT GOOD LINING TO SOIL CONTACT. THE CHANNEL SHALL BE INITIALLY OVER-EXCAVATED TO ALLOW FOR THE PLACEMENT OF TOPSOIL.
40. SEDIMENT BASINS/TRAPS SHALL BE KEPT FREE OF ALL TRASH, CONCRETE WASH WATER AND OTHER DEBRIS THAT POSE THE POTENTIAL FOR CLOGGING THE BASIN/TRAP OUTLET STRUCTURES AND/OR POSE THE POTENTIAL FOR POLLUTION TO WATERS OF THE COMMONWEALTH. WHEN SEDIMENT HAS ACCUMULATED TO THE CLEAN OUT ELEVATION ON ANY STAKE, ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE ENTIRE TRAP/BASIN BOTTOM. ANY SEDIMENT REMOVED FROM TRAPS, BASINS OR THE BMP'S SHALL BE RETURNED TO UPSLOPE AREAS AND INCORPORATED INTO THE SITE GRADING.
41. APPROVAL OF THE USE OF SKIMMER(S) DOES NOT APPROVE USE OF ANY SKIMMER(S) IN VIOLATION OF ANY PATENT, PATENT RIGHTS, AND/OR PATENT LAWS.
42. SEDIMENT BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
43. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE 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.

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 SHALL BE REPLACED.

2. 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.

3. 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.

4. 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.

5. 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.

6. 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 IS NOT ACCEPTABLE.

7. THE CONTRACTOR SHALL IMPLEMENT THIS PLAN, INCLUDING CONSTRUCTION AND MAINTENANCE.

8. THE OWNER IS RESPONSIBLE TO INSURE THAT THE CONTRACTOR IS PERFORMING THE WORK AS DETAILED IN THIS PLAN.

9. 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.

10. 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.

1. 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:

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

2. 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.

3. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

4. ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS FOR REPLACING COMPOST FILTER SOCK DUE TO WEATHERING.

C. ROCK FILTER MAINTENANCE

1. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

2. 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

1. BLANKET AREAS SHALL BE INSPECTED WEEKLY OR AFTER ANY RAINFALL EVENT UNTIL A MINIMUM UNIFORM 70% COVERAGE OF EROSION RESISTANT PERENNIAL VEGETATION IS ESTABLISHED.

2. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN FOUR (4) CALENDAR DAYS.

E. CONCRETE WASHOUT STRUCTURES MAINTENANCE

1. CONCRETE WASHOUT STRUCTURES SHALL BE INSPECTED DAILY.

2. DAMAGED OR LEAKING STRUCTURES SHALL BE DE-ACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.

3. ACCUMULATED MATERIALS SHALL BE REMOVED WHEN THEY REACH 50% CAPACITY.

4. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

F. INLET PROTECTION MAINTENANCE

1. THE INLET PROTECTION SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT. DAMAGE OR CLOGGED BAGS SHALL BE REPLACED IMMEDIATELY.

2. ANY DAMAGED / CLOGGED FILTER BAG OR THE SEDIMENT REMOVED FROM THE BAG SHALL BE PROPERLY DISPOSED.

3. 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.

5. 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

1. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED.

2. 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.

3. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

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

H. SEDIMENT BASIN MAINTENANCE

1. 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 PLAN.

2. EMBANKMENTS SHOULD BE MAINTAINED WITH A GRASSY VEGETATIVE COVER, FREE OF BRUSH AND TREES.

3. BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE INSPECTED FOR EROSION, PIPING AND SETTLEMENT. ANY NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY.

4. CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER AS NECESSARY.

5. THE DEWATERING SKIMMER SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.

6. ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION.

7. 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:

"I, _____ DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 P.A.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."

A. ALL EARTH DISTURBANCE AND CONSTRUCTION ACTIVITIES SHALL BE PROCEEDED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE DRAWINGS. DEVIATION FROM THIS SEQUENCE MUST BE APPROVED BY THE ENGINEER, OWNER AND 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 BLANKETTING 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 VEGETATELY 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 SINKHOLE/S 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 SINKHOLDS 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.

I. 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 ACTIVE CARBON (GAC) WASTE TANK, SEPTIC HOLDING TANK, SITE PIPING AND DISTRIBUTION SYSTEM INTERCONNECTIONS, ELECTRICAL CONDUTIS 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 TOP OF CONSTRUCTION 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.

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 DESIGNATED 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 FIRE 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 PIPE ABOVE AND GRAB ON TOP OF CONSTRUCTION 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

- THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINE THAT ALL FILL IMPORTED MEETS PA DEP'S DEFINITION OF CLEAN FILL.
- 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 PROCESSED FOR RE-USE.)
- 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, SANDBORN 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.
- PERENNIAL WEEDS MAY REQUIRE YEAR LONG SMOOTHERING, REPEATED SPRAYINGS WITH HERBICIDES, OR REPEATED TILLAGE WITH EQUIPMENT THAT CAN UPROOT AND KILL PERENNIAL WEEDS.
- PLANTING IN JULY AND AUGUST IS GENERALLY NOT RECOMMENDED DUE TO THE FREQUENCY OF DROUGHT DURING THIS TIME.
- 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.
- SEED QUALITY IS CRITICAL AND A SEED MIX SHOULD BE USED WITH A MINIMUM PERCENTAGE OF NON-SEED PLANT PARTS.

MAINTENANCE

- 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 CHIZMATOUS WEEDS SHOULD BE HAND TREATED WITH HERBICIDE.
- 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.
- 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.
-

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



STATE COLLEGE BOROUGH
WATER AUTHORITY

NIXON-KOCHER
WATER TREATMENT FACILITY

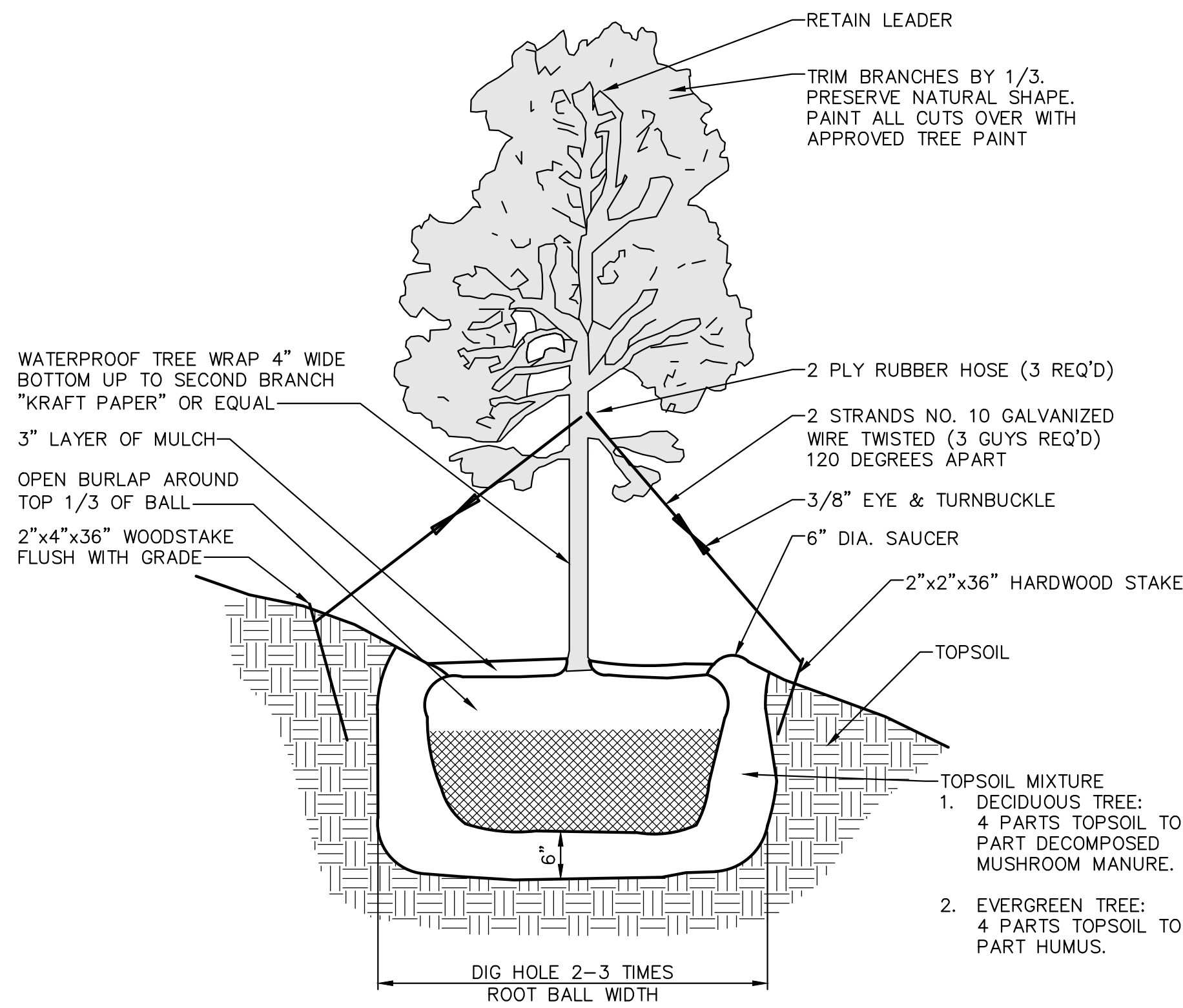
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA



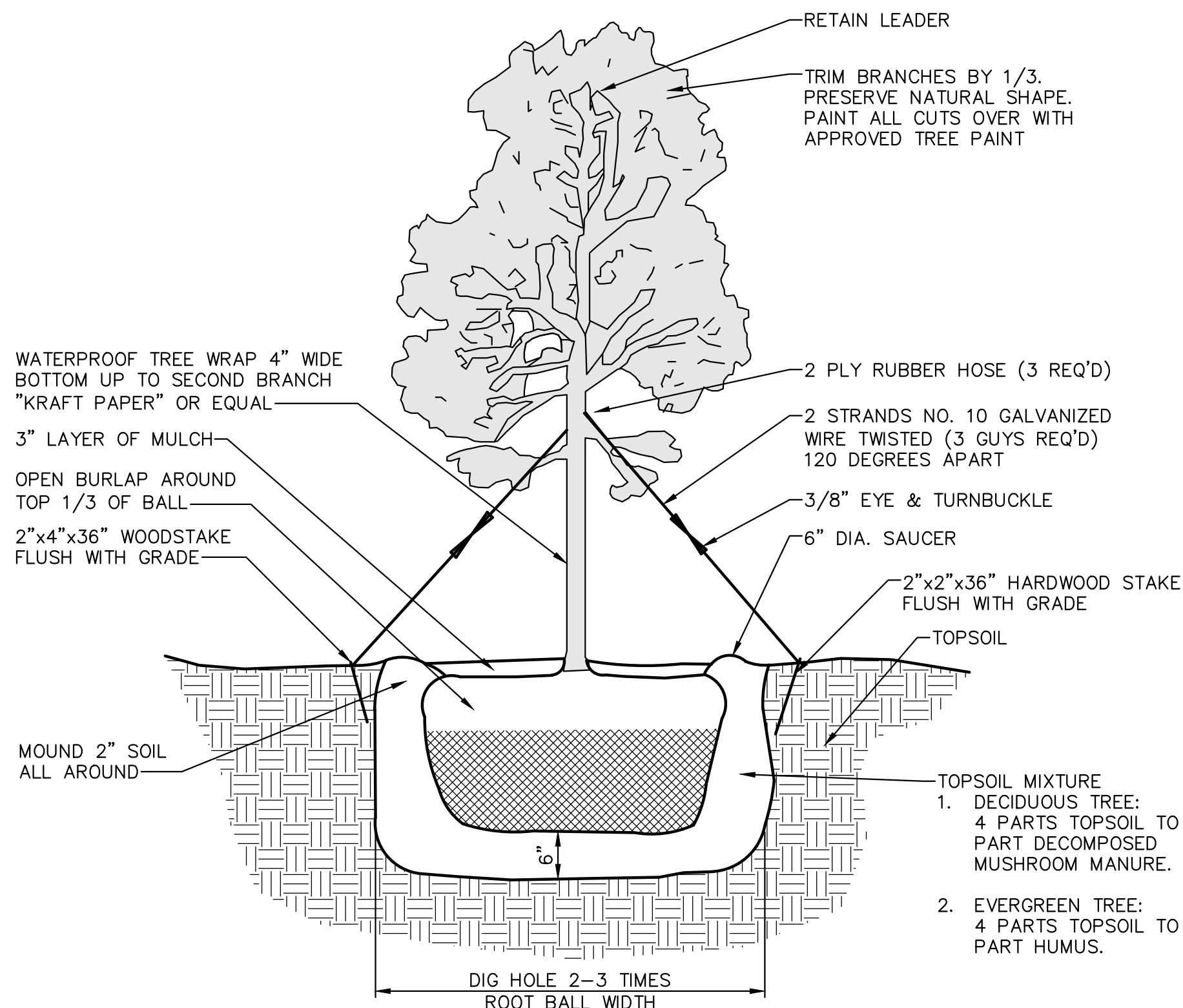
DATE: 8/12/19 JOB: 16049 SCALE: AS SHOWN
SHEET NO:

LANDSCAPING GENERAL NOTES:

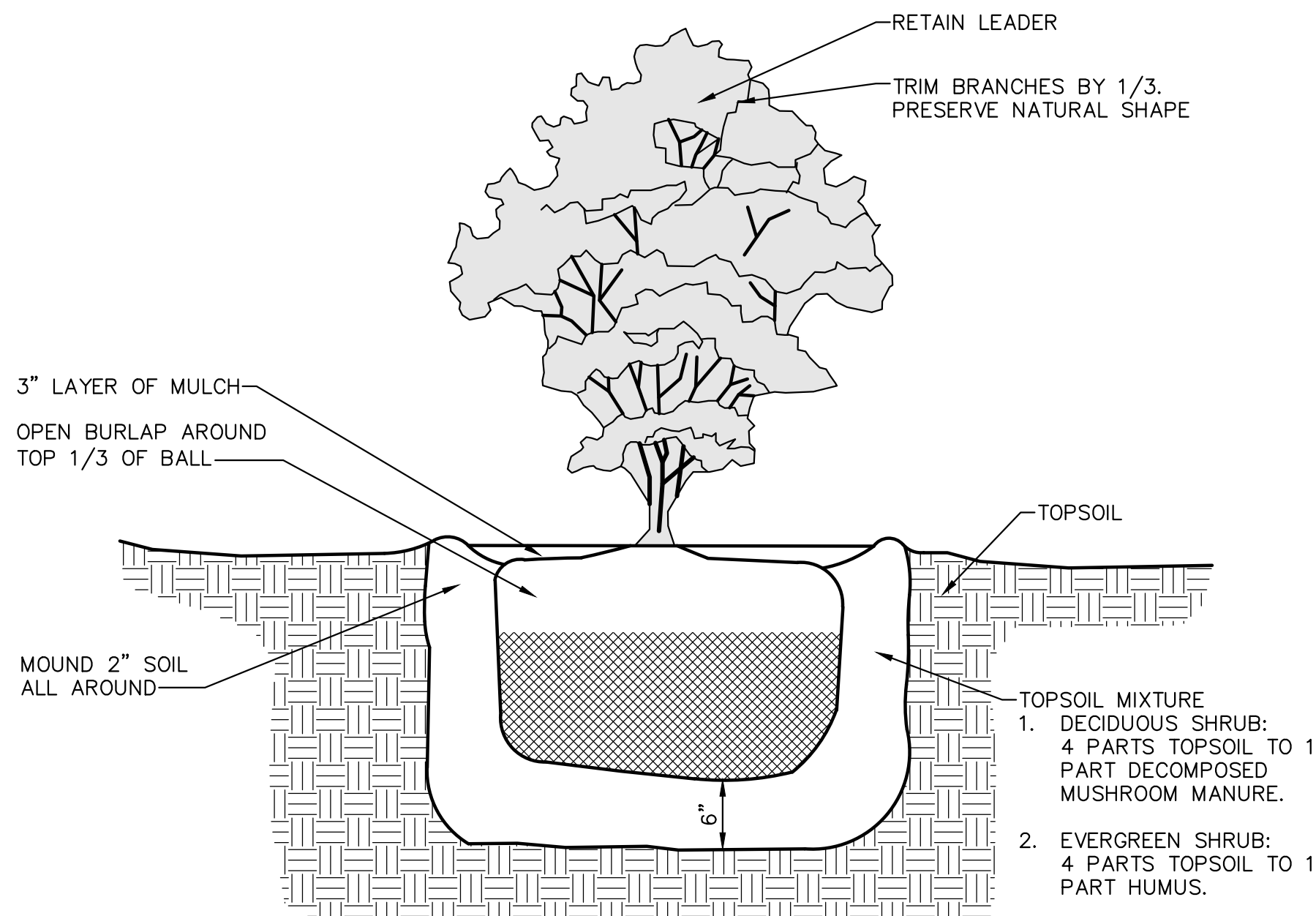
1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL REFER TO THE PLANT LIST FOR SEASONAL REQUIREMENTS AND OTHER RESTRICTIONS RELATED TO THE TIME OF PLANTING.
3. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT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



TREE PLANTING DETAIL
ON SLOPED GRADE
NO SCALE

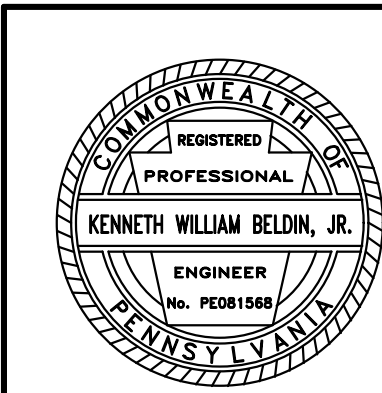


TREE PLANTING DETAIL
ON LEVEL GRADE
NO SCALE



SHRUB PLANTING DETAIL
NO SCALE

1	8/12/19	REVISED PER TOWNSHIP COMMENTS
NO.	DATE	DESCRIPTION
REVISIONS		
PROPOSED LANDSCAPING DETAILS AND NOTES		
STATE COLLEGE BOROUGH WATER AUTHORITY		
NIXON-KOCHER WATER TREATMENT FACILITY		
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA		
DATE: 8/12/19	JOB: 16049	SCALE: AS SHOWN
FILE: 16049_LD_023	DRAWN BY: AJL	CHECKED BY: WAA
SHEET NO:		23



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