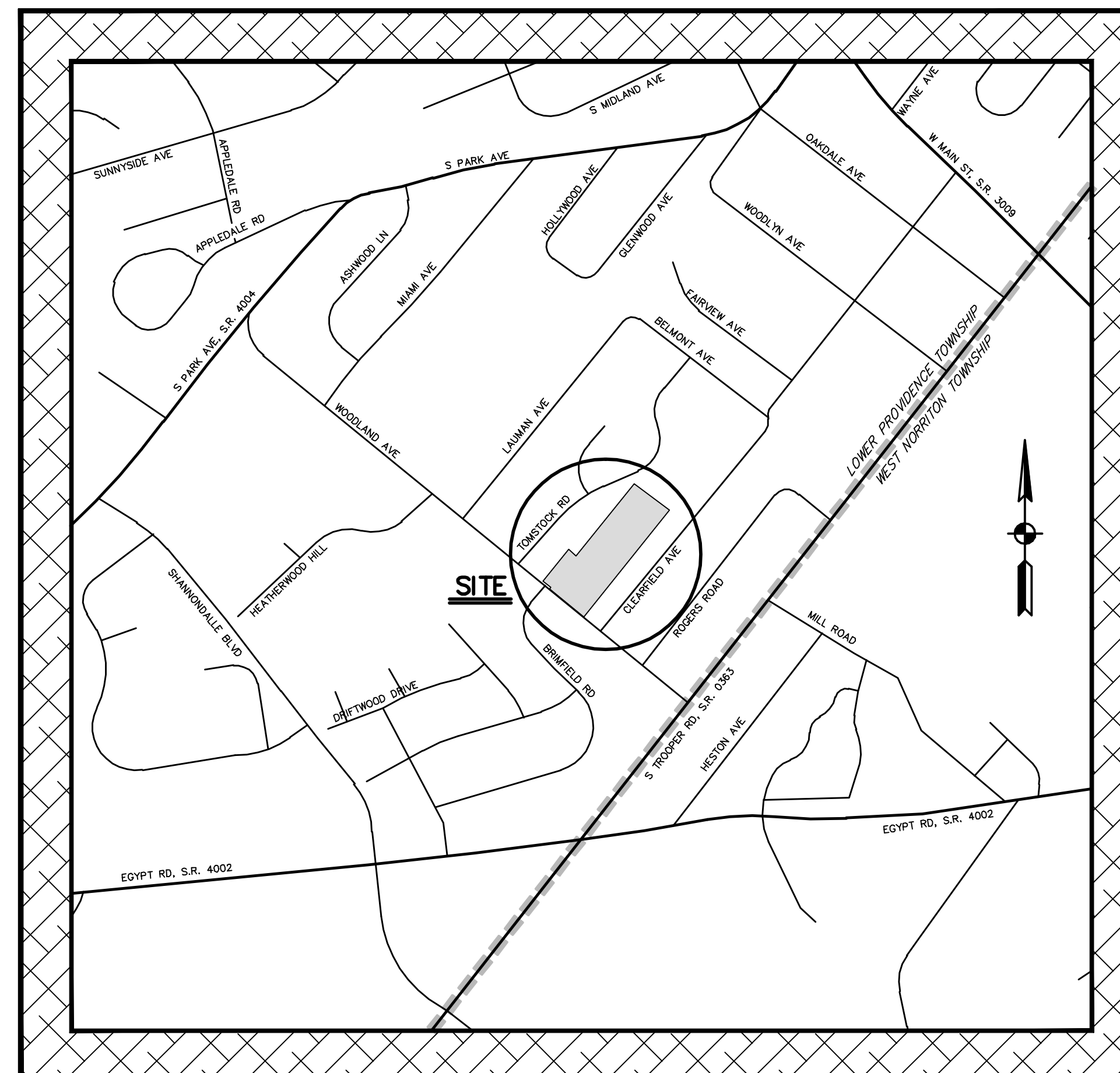


WOODLAND AVENUE "GAMBONE" (S.T.A. ENGINEERING #3973)

SITE STATISTICS

SUPPORTING DOCUMENTATION SUBMITTED TO LOWER PROVIDENCE TOWNSHIP AS PART OF THIS APPLICATION:

1. POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN NARRATIVE REPORT	JANUARY 9, 2017
2. EROSION & SEDIMENT CONTROL PLAN NARRATIVE REPORT	JANUARY 9, 2017
3. STORMWATER INFILTRATION TEST REPORT BY PENNSTRAIL ENVIRONMENTAL, LLC	DECEMBER 16, 2016



SITE LOCATION MAP 1" = 800'

PREPARED FOR

THE GAMBONE FAMILY

2711 WOODLAND AVENUE
EAGLEVILLE, PA. 19403

1. SUBJECT TRACTS MAY BE IDENTIFIED BY MONTGOMERY COUNTY TAX
ASSESSMENT INFORMATION AS FOLLOWS:
- LOWER PROVIDENCE TOWNSHIP
- A. PARCEL NO. 43--00-16081--00-4
B. PARCEL NO. 43--00-16084--00-1
2. RECORDED DEED DATA IS AS FOLLOWS:
- AS RECORDED IN THE OFFICE FOR THE RECORDING
OF DEEDS, ETC., IN AND FOR THE COUNTY OF
MONTGOMERY AT NORRISTOWN, PENNSYLVANIA.
- A. DEED BOOK 5720, PAGE 1382
B. DEED BOOK 5504, PAGE 1599
3. NAME AND ADDRESS OF THE OWNER OF THE SUBJECT TRACTS:
- A. SUSAN GAMBONE
2711 WOODLAND AVENUE
EAGLEVILLE, PA 19403
- B. RALPH V. & THERESA L. GAMBONE
P.O. BOX 186
FAIRVIEW VILLAGE, PA 19409
4. AREA STATISTICS:
- A. GROSS TRACT AREA = 7.0297 Ac. (TO DEED TITLE LINES)
B. GROSS TRACT AREA = 0.4744 Ac. (TO DEED TITLE LINES)
C. TOTAL GROSS TRACT AREA = 7.5040 Ac. (TO DEED TITLE LINES)

ACT 121 UTILITY NOTE

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDER-GROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 121 AS PER THE AMENDMENT OF PA ACT 287 OF 1974, EFFECTIVE OCTOBER 9, 2008 CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK. REFERENCE UTILITY CASE NUMBER: 20162453241.

PENNSYLVANIA AMERICAN WATER
4 WELLINGTON BLVD
WYOMISSING, PA. 19610
AL ROSSI
alfonso.rossi@amwater.com

AT&T ATLANTA
360 GEES MILL
BUSINESS PKWY NE
CONYERS, GA. 30013
NANCY SPENCE
ns2821@att.com

COMCAST CABLEVISION
1 APOLLO RD
PLYMOUTH MEETING, PA. 19462
TCM.DENSY.

COMCAST
4400 WAYNE AVENUE
PHILADELPHIA, PA. 19140
BOB HARVEY
bob_harvey@cable.comcast.com

PECO ENERGY C/O USIC
450 S HENDERSON RD SUITE B
KING OF PRUSSIA, PA. 19406
NIKKIA SIMPKINS
nikkiasimpkins@usicllc.com

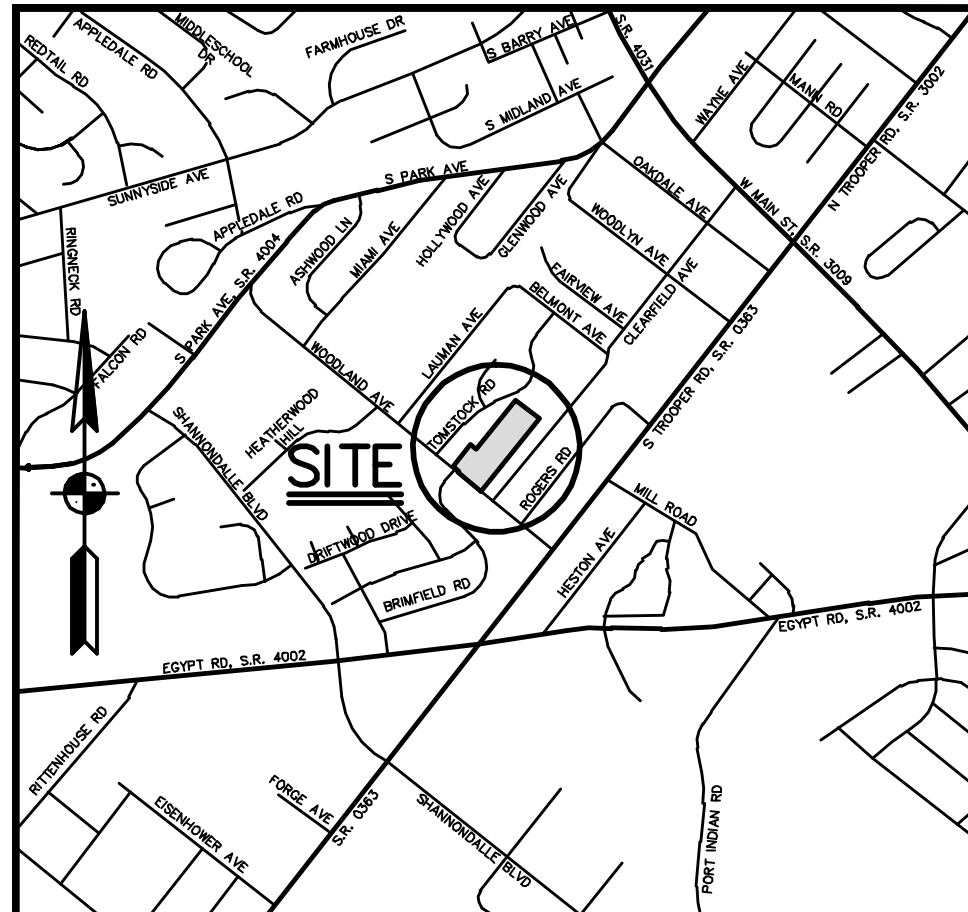
LOWER PROVIDENCE TOWNSHIP
101 PARKLANE DR
EAGLEVIEW, PA. 19403
JOSEPH CHILLANO
jchillano@lowerprovidence.org

LOWER PROVIDENCE TOWNSHIP
SEWER AUTHORITY
20 PARKLANE DRIVE
EAGLEVILLE, PA. 19403
THOMAS CICCIPPO JR
tcicippo@lpta.org

VERIZON PENNSYLVANIA LLC
15 MONTGOMERY AVENUE, FLOOR 2
PITTSBURGH, PA. 15212
DEBORAH BARUM
deborah.d.dello@verizon.com

AUDUBON WATER COMPANY
2650 EISENHOWER AVE
PO BOX 7337
NORTH TOWN, PA. 19403
J RUSSELL
jr@audubonwater.com





SITE LOCATION MAP 1"=2000'

ACT 121 UTILITY NOTE	
ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 121 AS PER THE AMENDMENT OF PA ACT 287 OF 1974, EFFECTIVE OCTOBER 9, 2008 CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK. REFERENCE UTILITY CASE NUMBER: 2016453241.	
PLAN SHEET INDEX	
SHEET NO.	PLAN TITLE
1 OF 14	COVER SHEET
2 OF 14	RECORD PLAN OF SUBDIVISION
3 OF 14	EXISTING FEATURES PLAN/DEMOLITION PLAN
4 OF 14	GRAZING AND DRAINAGE PLAN
5 OF 14	UTILITY PLAN
6 OF 14	EROSION AND SEDIMENT CONTROL PLAN
7 OF 14	EROSION AND SEDIMENT CONTROL DETAIL SHEET
8 OF 14	PCSM PLAN
9 OF 14	PCSM DETAIL SHEET
10 OF 14	PCSM LANDSCAPE PLAN
11 OF 14	PLAN AND PROFILE OF ROAD 'A'
12 OF 14	PROFILES - STORM SEWER
13 OF 14	CONSTRUCTION DETAIL SHEET - STORM SEWER
14 OF 14	CONSTRUCTION DETAIL SHEET - SITE IMPROVEMENTS
15 OF 14	CONSTRUCTION DETAIL SHEET - SANITARY SEWER & WATER FACILITIES

- ### NOTES
- TITLE LINE INFORMATION TAKEN FROM EXISTING DEEDS, PLANS OF RECORD, AND VERIFIED BY ACTUAL FIELD MEASUREMENTS TAKEN BY THIS OFFICE IN SEPTEMBER AND OCTOBER 2016.
 - CONTOUR DATA AS SHOWN HEREON IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988.
BENCHMARK DESCRIPTIONS:
A. SANITARY SEWER MH LOCATED ON WOODLAND AVENUE 388± FT. NW FROM THE CLEARFIELD AVENUE E INTERSECTION, OFFSET 2.7 FT. LT. OF WOODLAND AVENUE. E.
B. TOP OF CURB AT DOUBLE "C" INLET LOCATED 443± FT. NW FROM THE CLEARFIELD AVENUE E INTERSECTION, OFFSET 16.4 FT. LT. OF WOODLAND AVENUE. E.
3. TOPOGRAPHIC DATA AS SHOWN HEREON GATHERED FROM A CURRENT FIELD SURVEY PERFORMED BY THIS OFFICE IN SEPTEMBER AND OCTOBER, 2016.
 - NO PART OF THIS PROPERTY LIES WITHIN A FLOODPLAIN AREA AS DESCRIBED ON PANEL 245 OF 451 OF THE FEMA FLOOD INSURANCE RATE MAP NUMBER 4209102450, AS REVISED MARCH 2, 2016.
 - ANY SCALED DIMENSIONS FROM THE PLAN SHALL NOT BE USED FOR CONSTRUCTION WITHOUT CONFIRMATION BY S.T.A. ENGINEERING, INC.
 - AREA WITHIN ULTIMATE RIGHT OF WAY OF WOODLAND AVENUE IS HEREBY OFFERED FOR DEDICATION TO THE GOVERNMENTAL AGENCY HAVING JURISDICTION AT THE TIME OF DEDICATION. AREA = 10,430 S.F.
 - THE APPROVED IMPROVEMENT CONSTRUCTION PLAN, A COPY OF WHICH MAY BE INSPECTED AT THE OFFICE OF LOWER PROVIDENCE TOWNSHIP, HAS BEEN MADE A PART OF THE APPROVED FINAL PLAN.

8. ■ DENOTES CONCRETE MONUMENTS TO BE SET. ALL LOT CORNERS TO BE MARKED WITH IRON PINS.
- EXISTING DWELLING, DRIVEWAY, AND ASSOCIATED UTILITIES TO BE REMOVED IN ACCORDANCE WITH ALL APPLICABLE RULES AND REGULATIONS.
- NO TOPSOIL SHALL BE REMOVED FROM THE SITE WITHOUT PRIOR APPROVAL FROM THE TOWNSHIP.
- BUILDING FOOTPRINTS ARE FOR GRADING PURPOSES ONLY. FINAL FOOTPRINTS TO BE PROVIDED WITH THE BUILDING PERMIT PLAN.
- ALL PUBLIC IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOWER PROVIDENCE TOWNSHIP STANDARDS AND SPECIFICATIONS AND CURRENT PENNDOT STANDARDS AND SPECIFICATIONS.
- ALL LOTS TO BE SERVED BY PUBLIC WATER AND SEWER.
- NOTHING SHALL BE PERMITTED TO BE PLACED, PLANTED, SET OR PUT WITHIN THE AREAS OF AN EASEMENT UNLESS IT IS AN OBJECT EASILY MOVED BY ONE PERSON. THE AREA SHALL BE KEPT AS LAWN.

- ### SITE STATISTICS
- SUBJECT TRACTS MAY BE IDENTIFIED BY MONTGOMERY COUNTY TAX ASSESSMENT INFORMATION AS FOLLOWS:
LOWER PROVIDENCE TOWNSHIP
A. PARCEL NO. 43-00-16081-00-4
B. PARCEL NO. 43-00-16084-00-1
 - RECORDED DEED DATA IS AS FOLLOWS:
AS RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC., IN AND FOR THE COUNTY OF MONTGOMERY AT NORRISTOWN, PENNSYLVANIA.
A. DEED BOOK 5720, PAGE 1362
B. DEED BOOK 5504, PAGE 1599
 - NAME AND ADDRESS OF THE OWNER OF THE SUBJECT TRACTS:
A. SUSAN GAMBONE
2711 WOODLAND AVENUE
EAGLEVILLE, PA 19403
B. RALPH V. & THERESA L. GAMBONE
P.O. BOX 186
FAIRVIEW VILLAGE, PA 19409
 - AREA STATISTICS:
A. GROSS TRACT AREA = 7.0297 Ac. (TO DEED TITLE LINES)
B. GROSS TRACT AREA = 0.4744 Ac. (TO DEED TITLE LINES)
C. TOTAL GROSS TRACT AREA = 7.5040 Ac. (TO DEED TITLE LINES)
D. TOTAL NET TRACT AREA = 6.0645 Ac. (TO ULT. R/W LINE)

ENGINEER'S CERTIFICATION

I, SUSAN A. RICE, DO HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA; THAT THIS PLAN WAS PREPARED BY MYSELF OR UNDER MY SUPERVISION AND THAT SAID PLAN OF IMPROVEMENTS IS TRUE AND CORRECT.

SUSAN A. RICE, P.E.
LICENSE NO. PE074508

DATE _____

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN REPRESENTS A FIELD SURVEY MADE BY ME OR UNDER MY SUPERVISION, THAT ALL MONUMENTS SHOWN HEREON EXIST AS LOCATED AND AND THAT ALL GEOMETRIC DETAILS AS SHOWN ARE CORRECT.

CLIFFORD T. STOUT, P.L.S.
LICENSE NO. 282-A

DATE _____

RECORDING ACKNOWLEDGEMENTS

COMMONWEALTH OF PENNSYLVANIA } SS
COUNTY OF MONTGOMERY

ON THIS _____ DAY OF _____, 2017, BEFORE ME, A NOTARY PUBLIC, THE UNDERSIGNED OFFICER, PERSONALLY APPEARED SUSAN GAMBONE, WHO ACKNOWLEDGED HERSELF TO BE THE OWNER OF THE LAND BEING SUBDIVIDED AND THAT SHE, AS SUCH, BEING AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED.

SUSAN GAMBONE

IN WITNESS WHEREOF, I HERETO SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA } SS
COUNTY OF MONTGOMERY

ON THIS _____ DAY OF _____, 2017, BEFORE ME, A NOTARY PUBLIC, THE UNDERSIGNED OFFICER, PERSONALLY APPEARED RALPH V. AND THERESA L. GAMBONE, WHO ACKNOWLEDGED THEMSELVES TO BE THE OWNERS OF THE LAND BEING SUBDIVIDED AND THAT THEY, AS SUCH, BEING AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED.

RALPH V. GAMBONE THERESA L. GAMBONE

IN WITNESS WHEREOF, I HERETO SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC

APPROVED BY THE TOWNSHIP OF LOWER PROVIDENCE PLANNING COMMISSION THIS _____ DAY OF _____, 2017.

CHAIRMAN _____ SECRETARY _____

APPROVED BY THE TOWNSHIP OF LOWER PROVIDENCE BOARD OF SUPERVISORS THIS _____ DAY OF _____, 2017.

CHAIRMAN _____ SECRETARY _____

APPROVED BY THE TOWNSHIP ENGINEER OF LOWER PROVIDENCE THIS _____ DAY OF _____, 2017.

ENGINEER _____

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC. IN AND FOR THE COUNTY OF MONTGOMERY, AT NORRISTOWN, PENNSYLVANIA IN PLAN BOOK _____ PAGE _____ ON _____, 2017.

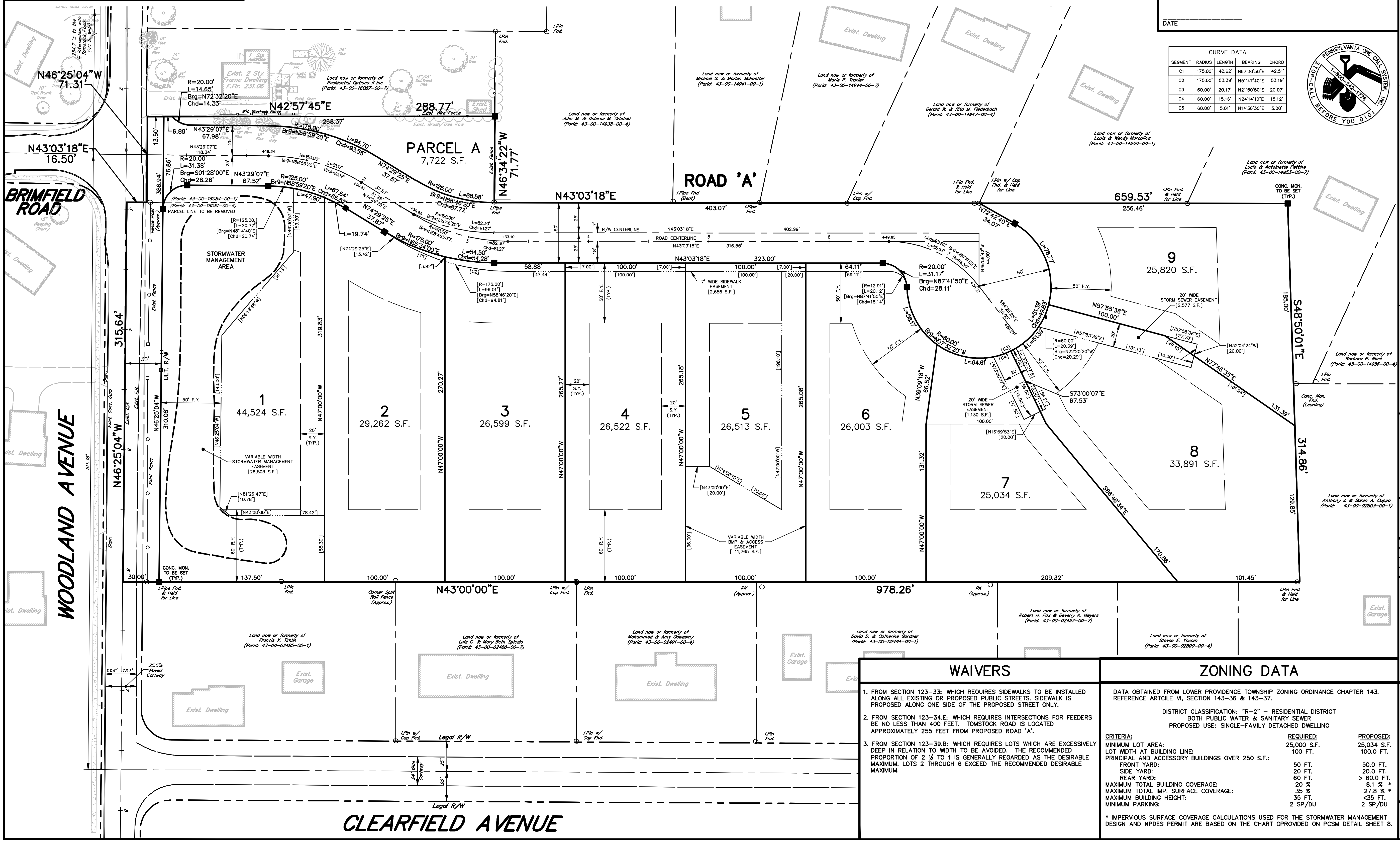
RECORDER OF DEEDS _____

MCPC No. _____

PROCESSED AND REVIEWED. A REPORT HAS BEEN PREPARED BY THE MONTGOMERY COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE.

CERTIFIED THIS DATE _____

FOR THE DIRECTOR
MONTGOMERY COUNTY PLANNING COMMISSION



CURVE DATA				
SEGMENT	RADIUS	LENGTH	BEARING	CHORD
C1	175.00'	42.62'	N67°30'50"E	42.51'
C2	175.00'	53.39'	N51°47'40"E	53.19'
C3	60.00'	20.17'	N21°50'50"E	20.07'
C4	60.00'	15.16'	N24°14'10"E	15.12'
C5	60.00'	5.01'	N14°36'30"E	5.00'



No.	INT.	REVISIONS	DATE

RECORD PLAN OF SUBDIVISION

OF THE
WOODLAND AVENUE TRACTS

PREPARED FOR
THE GAMBONE FAMILY

SITE SITUATE IN
LOWER PROVIDENCE TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

S T A

Engineering, Inc.

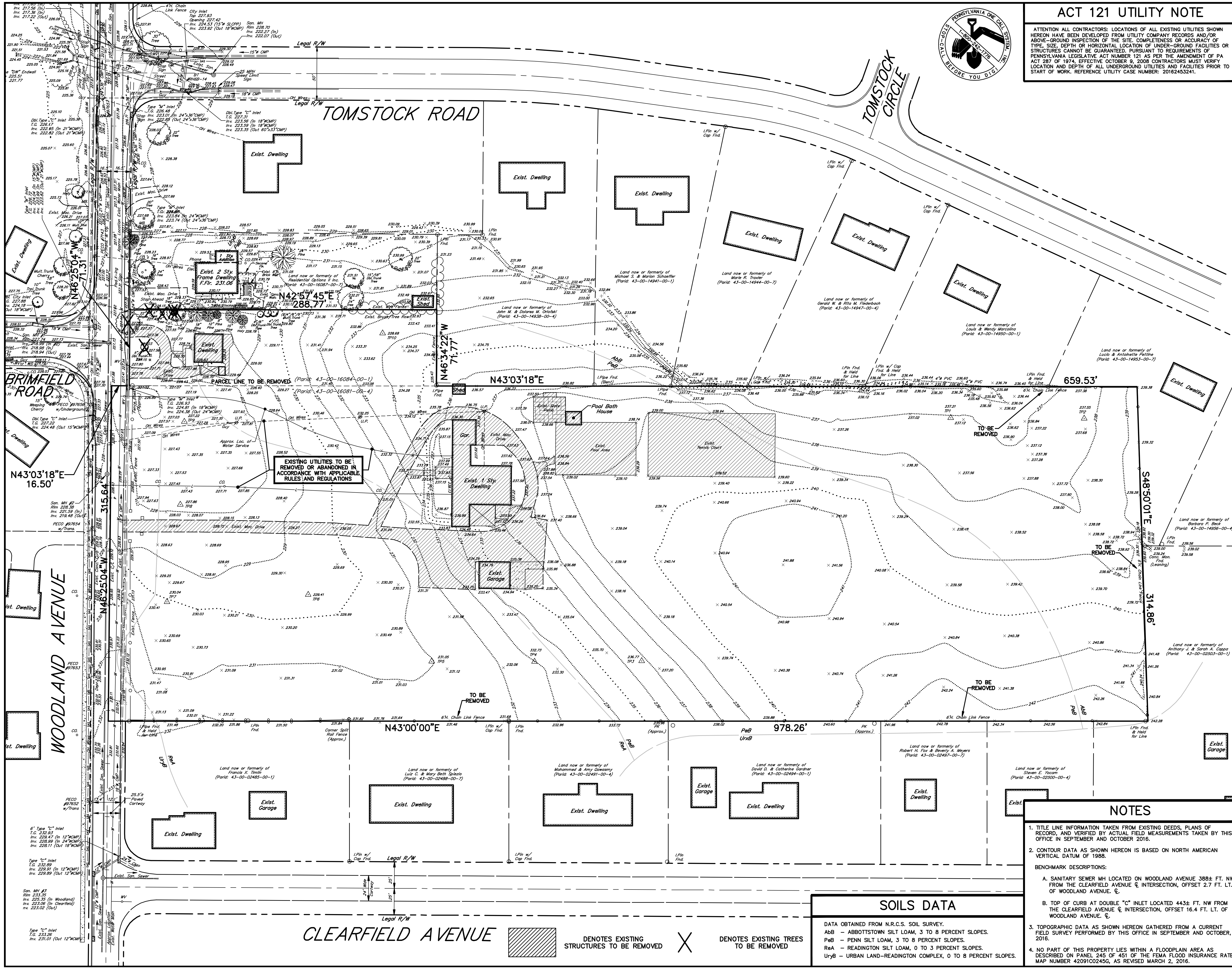
Civil Engineers • Land Surveyors

2499 KNIGHT ROAD, PENNSBURG, PA 18073
MAILING: P.O. BOX 87, RED HILL, PA 18076
PH: (215) 679-0200; www.stotac.com

PLAN SCALE	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
HORIZONTAL:	J.A.C.	M.E.T.	
1"=40'	PROJECT NUMBER	DRAWING FILE NUMBER	1 OF 14
	3973	3973SUB	

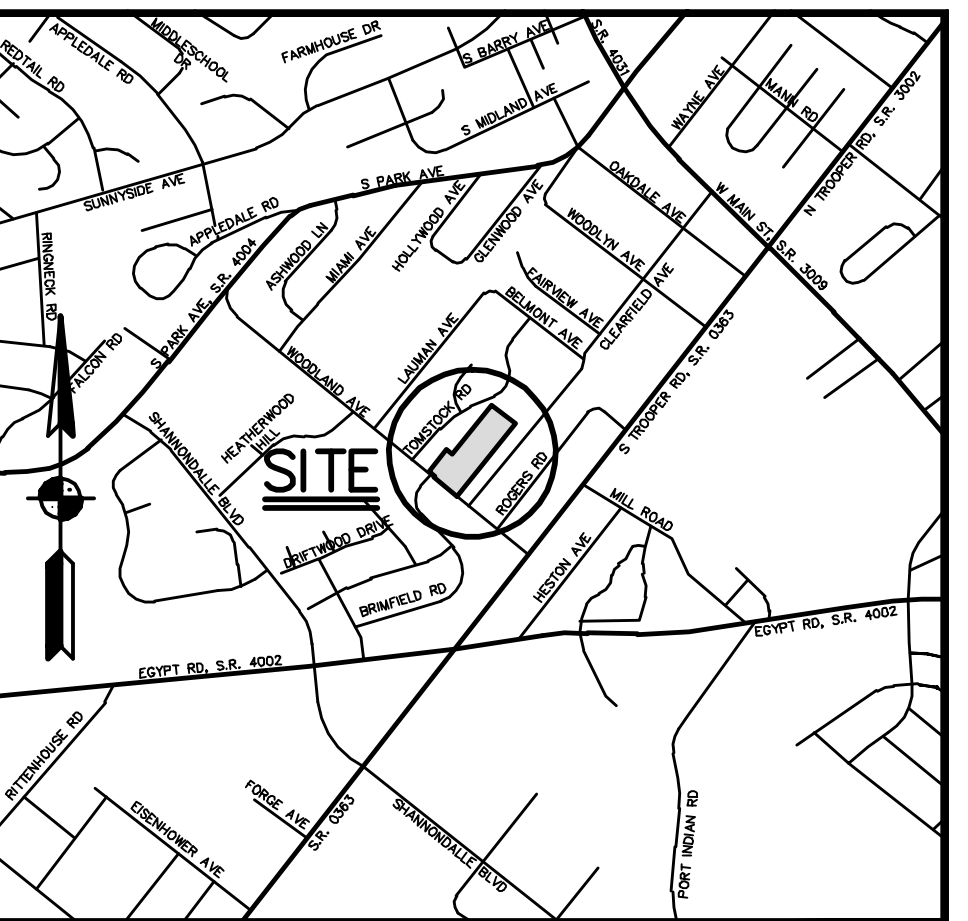
- ### WAIVERS
- FROM SECTION 123-33, WHICH REQUIRES SIDEWALKS TO BE INSTALLED ALONG ALL EXISTING OR PROPOSED PUBLIC STREETS, SIDEWALK IS PROPOSED ALONG ONE SIDE OF THE PROPOSED STREET ONLY.
 - FROM SECTION 123-34.E, WHICH REQUIRES INTERSECTIONS FOR FEEDERS BE NO LESS THAN 400 FEET. TOMSTOCK ROAD IS LOCATED APPROXIMATELY 255 FEET FROM PROPOSED ROAD 'A'.
 - FROM SECTION 123-39.B, WHICH REQUIRES LOTS WHICH ARE EXCESSIVELY DEEP IN RELATION TO WIDTH TO BE AVOIDED. THE RECOMMENDED PROPORTION OF 2 1/2 TO 1 IS GENERALLY REGARDED AS THE DESIRABLE MAXIMUM. LOTS 2 THROUGH 6 EXCEED THE RECOMMENDED DESIRABLE MAXIMUM.

ZONING DATA		
DATA OBTAINED FROM LOWER PROVIDENCE TOWNSHIP ZONING ORDINANCE CHAPTER 143. REFERENCE ARTICLE VI, SECTION 143-36 & 143-37.		
DISTRICT CLASSIFICATION: "R-2" - RESIDENTIAL DISTRICT		
BOTH PUBLIC WATER & SANITARY SEWER		
PROPOSED USE: SINGLE-FAMILY DETACHED DWELLING		
CRITERIA:	REQUIRED:	PROPOSED:
MINIMUM LOT AREA:	25,000 S.F.	25,034 S.F.
LOT WIDTH AT BUILDING LINE:	100 FT.	100.0 FT.
PRINCIPAL AND ACCESSORY BUILDINGS OVER 250 S.F.:		
FRONT YARD:	50 FT.	50.0 FT.
SIDE YARD:	20 FT.	20.0 FT.
REAR YARD:	60 FT.	> 60.0 FT.
MAXIMUM TOTAL BUILDING COVERAGE:	20 %	8.1 % *
MAXIMUM TOTAL IMP. SURFACE COVERAGE:	35 %	27.8 % *
MAXIMUM BUILDING HEIGHT:	35 FT.	<35 FT.
MINIMUM PARKING:	2 SP/DU	2 SP/DU
* IMPERVIOUS SURFACE COVERAGE CALCULATIONS USED FOR THE STORMWATER MANAGEMENT DESIGN AND NPDES PERMIT ARE BASED ON THE CHART OPRVIDED ON PCSM DETAIL SHEET 8.		



ACT 121 UTILITY NOTE

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SITE LOCATION MAP 1"=2000'

SITE STATISTICS

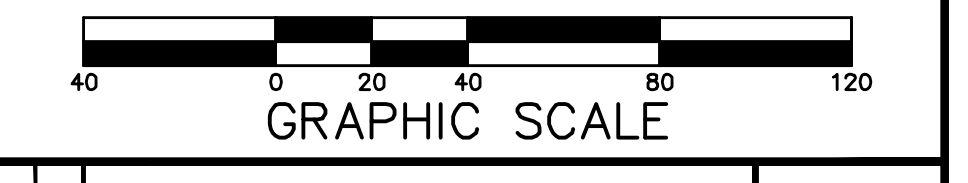
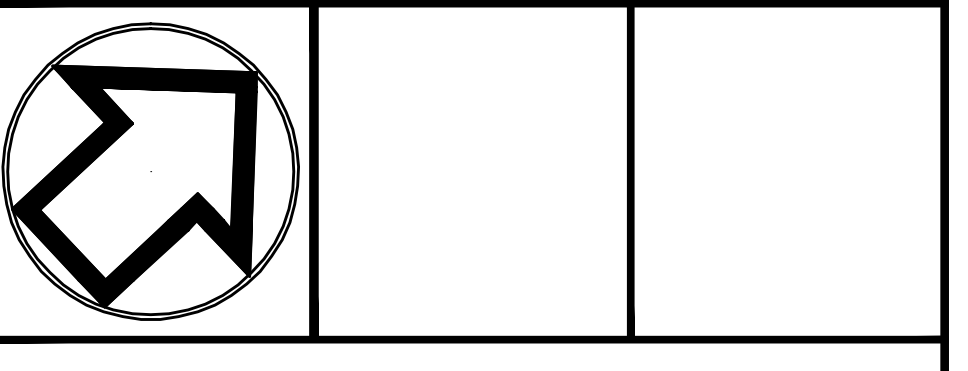
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B. GROSS TRACT AREA = 0.4744 Ac. (TO DEED TITLE LINES)
C. TOTAL GROSS TRACT AREA = 7.5040 Ac. (TO DEED TITLE LINES)

ZONING DATA

DATA OBTAINED FROM LOWER PROVIDENCE TOWNSHIP ZONING ORDINANCE CHAPTER 143. REFERENCE ARTICLE VI, SECTION 143-36 & 143-37.

DISTRICT CLASSIFICATION: "R-2" - RESIDENTIAL DISTRICT
BOTH PUBLIC WATER & SANITARY SEWER
PROPOSED USE: SINGLE-FAMILY DETACHED DWELLING

CRITERIA:	REQUIRED:
MINIMUM LOT AREA:	25,000 S.F.
MINIMUM LOT WIDTH @ BUILDING LINE:	100 FT.
FRONT YARD SETBACK:	50 FT.
SIDE YARD RESTRICTION:	20 FT.
REAR YARD RESTRICTION:	60 FT.
MAXIMUM TOTAL BUILDING COVERAGE:	20 %
MAXIMUM TOTAL IMP. SURFACE COVERAGE:	35 %
MAXIMUM BUILDING HEIGHT:	35 FT.
MINIMUM PARKING:	2 SP/OU



NO.	INT.	REVISIONS		DATE
		PLAN ORIGINATOR	DATE	
				JAN. 9, 2017

EXISTING FEATURES/DEMOLITION PLAN
OF THE
WOODLAND AVENUE TRACTS
PREPARED FOR
THE GAMBONE FAMILY
SITE SITUATE IN
LOWER PROVIDENCE TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

S T A
Engineering, Inc.

Civil Engineers • Land Surveyors
2499 KNIGHT ROAD, PENNSBURG, PA 18073
MAILING: P.O. BOX 87, RED HILL, PA 18076
PH: (215) 679-0200; www.stotac.com

PLAN SCALE HORIZONTAL:	DRAFTED BY J.A.C.	PROJECT MANAGER M.E.T.	PLAN SHEET NUMBER
1"=40'	PROJECT NUMBER 3973	DRAWING FILE NUMBER 3973EF	2 OF 14

NOTES

- TITLE LINE INFORMATION TAKEN FROM EXISTING DEEDS, PLANS OF RECORD, AND VERIFIED BY ACTUAL FIELD MEASUREMENTS TAKEN BY THIS OFFICE IN SEPTEMBER AND OCTOBER 2016.
- CONTOUR DATA AS SHOWN HEREON IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988.
BENCHMARK DESCRIPTIONS:
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B. TOP OF CURB AT DOUBLE "C" INLET LOCATED 443± FT. NW FROM THE CLEARFIELD AVENUE & INTERSECTION, OFFSET 16.4 FT. LT. OF WOODLAND AVENUE. &
C. TOP OF CURB AT DOUBLE "C" INLET LOCATED 443± FT. NW FROM THE CLEARFIELD AVENUE & INTERSECTION, OFFSET 16.4 FT. LT. OF WOODLAND AVENUE. &
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- NO PART OF THIS PROPERTY LIES WITHIN A FLOODPLAIN AREA AS DESCRIBED ON PANEL 245 OF 451 OF THE FEMA FLOOD INSURANCE RATE MAP NUMBER 42091C0245G, AS REVISED MARCH 2, 2016.

SOILS DATA

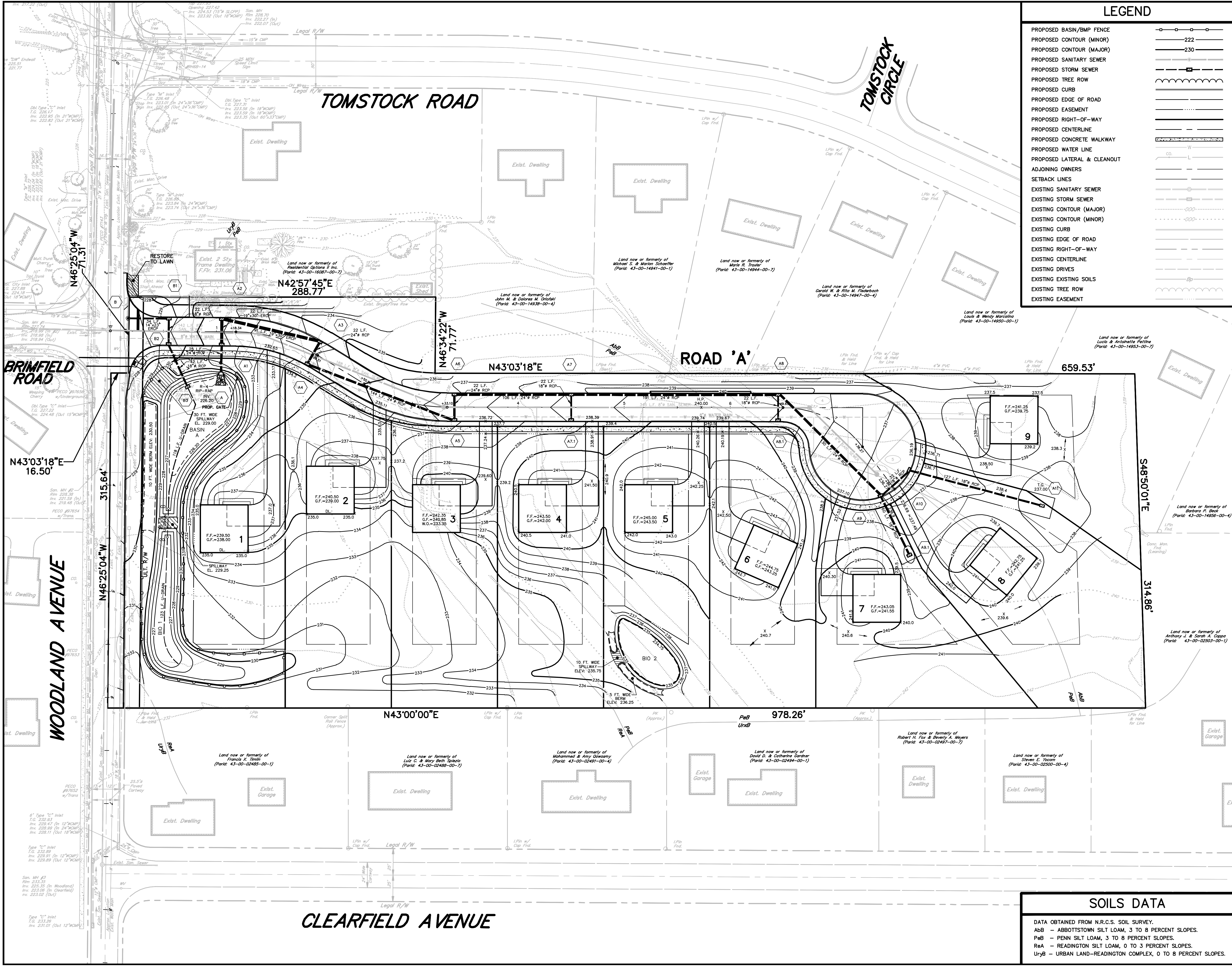
DATA OBTAINED FROM N.R.C.S. SOIL SURVEY.

A_{BB} - ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES.
P_{aB} - PENN SILT LOAM, 3 TO 8 PERCENT SLOPES.
R_{eA} - READINGTON SILT LOAM, 0 TO 3 PERCENT SLOPES.
U_{ryB} - URBAN LAND-READINGTON COMPLEX, 0 TO 8 PERCENT SLOPES.

DENOTES EXISTING STRUCTURES TO BE REMOVED

DENOTES EXISTING TREES TO BE REMOVED

CLEARFIELD AVENUE



LEGEND	
PROPOSED BASIN/BMP FENCE	
PROPOSED CONTOUR (MINOR)	
PROPOSED CONTOUR (MAJOR)	
PROPOSED SANITARY SEWER	
PROPOSED STORM SEWER	
PROPOSED TREE ROW	
PROPOSED CURB	
PROPOSED EDGE OF ROAD	
PROPOSED EASEMENT	
PROPOSED RIGHT-OF-WAY	
PROPOSED CENTERLINE	
PROPOSED CONCRETE WALKWAY	
PROPOSED WATER LINE	
PROPOSED LATERAL & CLEANOUT	
ADJOINING OWNERS	
SETBACK LINES	
EXISTING SANITARY SEWER	
EXISTING STORM SEWER	
EXISTING CONTOUR (MAJOR)	
EXISTING CONTOUR (MINOR)	
EXISTING CURB	
EXISTING EDGE OF ROAD	
EXISTING RIGHT-OF-WAY	
EXISTING CENTERLINE	
EXISTING DRIVES	
EXISTING EXISTING SOILS	
EXISTING TREE ROW	
EXISTING EASEMENT	

- ### CONSTRUCTION NOTES
- THIS PLAN CONTAINS INFORMATION PERTAINING TO UNDERGROUND UTILITIES WHICH IS FOR GENERAL INFORMATION ONLY, AND MAY NOT BE BASED ON AN ACTUAL SUBSURFACE LOCATION SURVEY. ALL SUBSURFACE INFORMATION SHOWN ON THESE PLANS NEEDS TO BE VERIFIED BY THE PLAN USER. THE PREPARER OF THIS PLAN ASSUMES NO RESPONSIBILITY FOR AND MAKES NO REPRESENTATION OR WARRANTIES AS TO THE ACCURACY OF THE LOCATION OF UNDERGROUND UTILITIES OR OTHER UNDERGROUND FEATURES. THE PLAN USER SHALL EXECUTE A PA ONE CALL PRIOR TO ANY EXCAVATION ON THE SITE.
 - A MINIMUM VERTICAL CLEARANCE OF 18 INCHES SHALL BE PROVIDED AT ALL UTILITY CROSSINGS. WHERE 18 INCHES OF CLEARANCE CAN NOT BE OBTAINED, THE LOWER UTILITY LINE SHALL BE CONCRETE ENCASED FOR A LENGTH OF 20 FEET, CENTERED ABOUT THE CROSSING.
 - ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF LOWER PROVIDENCE TOWNSHIP AND CURRENT PENNDOT STANDARDS AND SPECIFICATIONS.
 - GAS, ELECTRIC AND COMMUNICATION FACILITIES FOR ALL LOTS SHALL BE PROVIDED BY UNDERGROUND SERVICE.
 - ALL WATER MAIN CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE LATEST REVISION OF THE STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE PENNSYLVANIA AMERICAN WATER COMPANY.
 - ALL SANITARY SEWER CONSTRUCTION TO BE IN ACCORDANCE WITH LOWER PROVIDENCE TOWNSHIP SEWER AUTHORITY STANDARDS AND SPECIFICATIONS.
 - AN 18-INCH VERTICAL CLEARANCE OR A 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL SANITARY SEWER AND WATER MAINS. WHERE IMPOSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL CLEARANCE, AN 18-INCH VERTICAL CLEARANCE MUST BE MAINTAINED.
 - ALL STORM SEWER INLETS SHALL BE EITHER PENNDOT TYPE "C" OR TYPE "M" AND SHALL CONFORM TO FORM 408 (LATEST EDITION) SECTION 605.
 - ALL CONCRETE "DW" ENDWALLS SHALL CONFORM TO PENNDOT FORM 408 (LATEST EDITION), SECTION 605. THE TOP OF WALL ELEVATION FOR ALL ENDWALLS SHALL CONFORM TO THESE STANDARDS FOR THE ASSOCIATED PIPE SIZE IN THE EVENT THAT A HIGHER TOP OF WALL ELEVATION IS NECESSARY FOR GRADING, THE "SPECIAL" TOP OF WALL ELEVATION SHALL BE NOTED ON THE PLANS.
 - THE TOP OF GRATE ELEVATION FOR ALL CURBSIDE STORM SEWER INLETS IS FOR THE CENTER OF THE INLET AT THE FACE OF CURB. THE CONTRACTOR SHALL PROJECT THE ROADWAY GRADE ALONG THE LENGTH OF THE INLET.
 - ALL LOTS SHALL BE PROPERLY GRADED TO ENSURE PROPER DRAINAGE AWAY FROM HOUSES TO THE NEAREST INLET OR WATERCOURSE WITHOUT PONDING OR OBSTRUCTION. A MINIMUM OF 2% SLOPE SHALL BE PROVIDED ON ALL GRASSED AREAS.
 - ANY SPRINGS ENCOUNTERED DURING ROADWAY CONSTRUCTION SHALL BE OUTLETTED BY U-DRAIN TO NEAREST STORM SEWER FACILITY OR WATERCOURSE. U-DRAIN PLACEMENT TO BE BY THE DIRECTION OF TOWNSHIP ENGINEER.
 - ALL INLET GRATES IN PAVED SURFACES SHALL BE HS-25 BICYCLE SAFE.
 - ROOF DRAINS SHALL DISCHARGE TO RAIN GARDENS OR VEGETATED AREAS TO THE MAXIMUM EXTENT POSSIBLE. SUMP PUMPS SHALL NOT DISCHARGE ONTO DRIVEWAYS, SIDEWALKS OR STREETS. ROOF DRAIN AND SUMP PUMP DISCHARGE LOCATIONS TO BE PROVIDED ON THE BUILDING PERMIT PLANS.
 - THE EDGE OF ANY CUT OR FILL SLOPE SHALL BE A MINIMUM OF 5 FEET FROM PROPERTY OR RIGHT-OF-WAY LINES.
 - TOPSOIL SHOULD BE REMOVED FROM ALL AREAS OF CONSTRUCTION AND STOCKPILED SEPARATELY. A MINIMUM OF 8-INCHES OF TOPSOIL SHALL BE REDISTRIBUTED ON THE SITE UPON COMPLETION OF CONSTRUCTION. NO TOPSOIL MAY BE REMOVED FROM THE SITE WITHOUT APPROVAL FROM THE TOWNSHIP.

ACT 121 UTILITY NOTE

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 121 AS PER THE AMENDMENT OF PA ACT 287 OF 1974, EFFECTIVE OCTOBER 9, 2008 CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK. REFERENCE UTILITY CASE NUMBER: 20162453241.

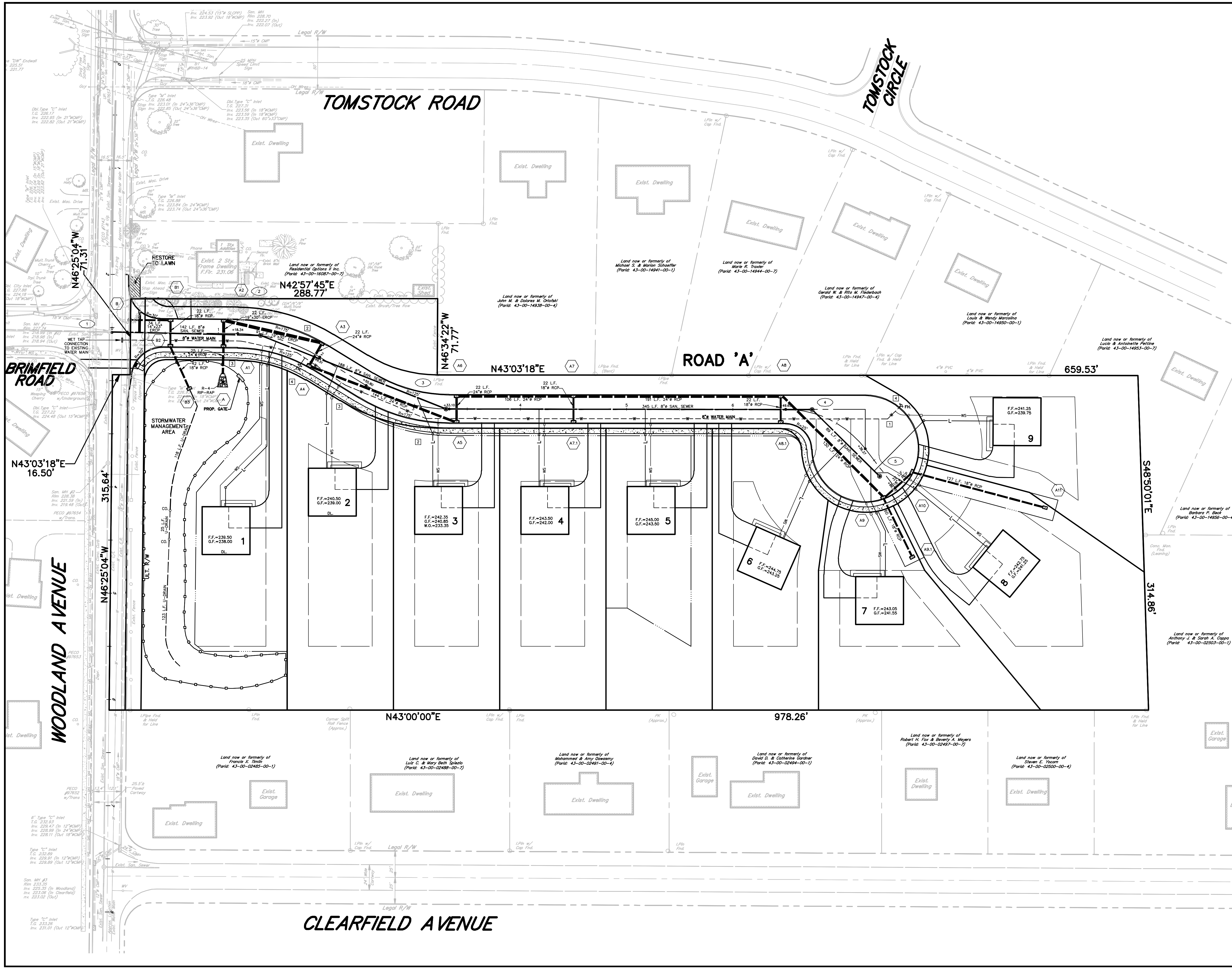
No.	INT.	REVISIONS	DATE
		PLAN ORIGINATION DATE	JAN. 9, 2017

GRADING AND DRAINAGE PLAN
OF THE
WOODLAND AVENUE TRACTS
PREPARED FOR
THE GAMBONE FAMILY
SITE SITUATE IN
LOWER PROVIDENCE TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

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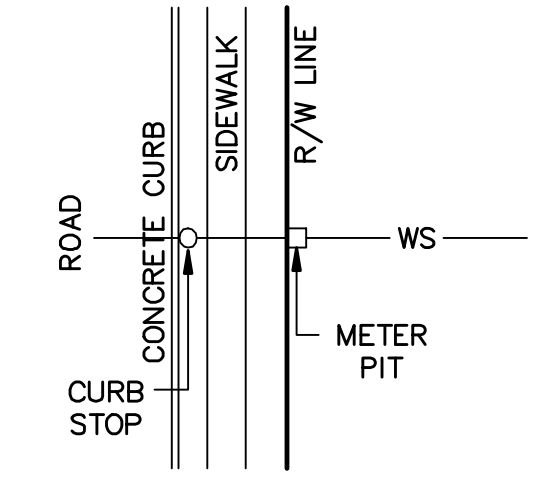
PLAN SCALE	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
1"=40'	J.A.C.	M.E.T.	3 OF 14
	PROJECT NUMBER	DRAWING FILE NUMBER	
	3973	3973CI	

SOILS DATA	
DATA OBTAINED FROM N.R.C.S. SOIL SURVEY.	
Abb	- ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES.
PaB	- PENN SILT LOAM, 3 TO 8 PERCENT SLOPES.
ReA	- READINGTON SILT LOAM, 0 TO 3 PERCENT SLOPES.
UrB	- URBAN LAND-READINGTON COMPLEX, 0 TO 8 PERCENT SLOPES.



LEGEND

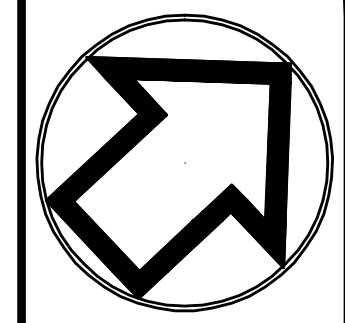
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED CURB
- PROPOSED EDGE OF ROAD
- PROPOSED EASEMENT
- PROPOSED RIGHT-OF-WAY
- PROPOSED CENTERLINE
- PROPOSED CONCRETE WALKWAY
- PROPOSED WATER LINE
- PROPOSED LATERAL & CLEANOUT
- PROPOSED BASIN/BMP FENCE
- ADJOINING OWNERS
- SETBACK LINES
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING CURB
- EXISTING EDGE OF ROAD
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE
- EXISTING DRIVES
- EXISTING EASEMENT



CURB STOP & METER PIT

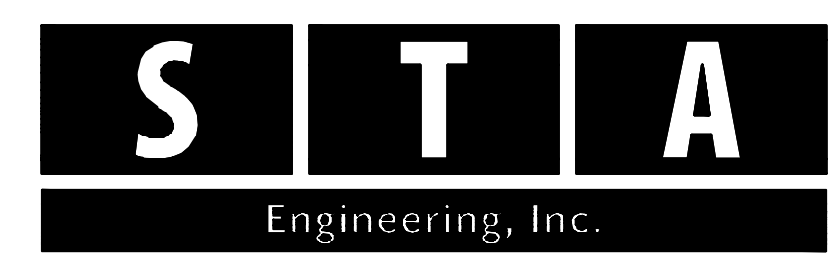
WATER SYMBOL LEGEND

- 1 45° BEND
- 2 22½° BEND
- 3 11¼° BEND
- 4 FIRE HYDRANT w/6" VALVE



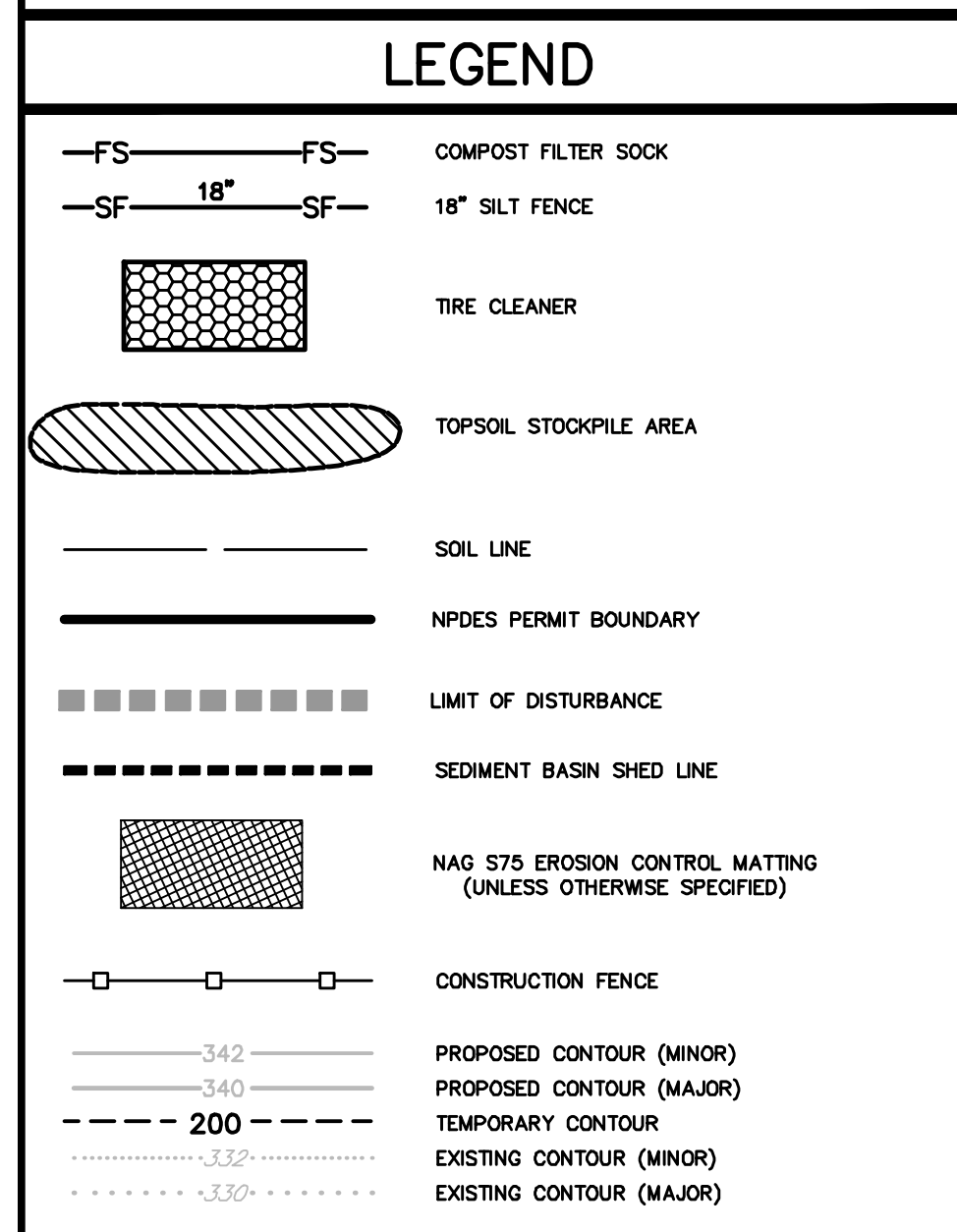
NO.		INT.	REVISIONS	DATE
1			PLAN ORIGINATION DATE	JAN. 9, 2017

UTILITY PLAN
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SITE SITUATE IN
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PLAN SCALE	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
HORIZONTAL:	J.A.C.	M.E.T.	
1"=40'	PROJECT NUMBER	DRAWING FILE NUMBER	4 OF 14
	3973	3973UT	



ACT 121 UTILITY NOTE

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COMMONWEALTH OF PENNSYLVANIA
CALL BEFORE YOU DIG
1-800-486-1176

SOL NAME	SOL SYMBOL	DEPTH TO SEASONAL HIGH WATER TABLE	DEPTH TO BEDROCK	REACTION (pH)	CONTAINS CAVE	CONFORMS TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED HIGH WATER TABLE	EMERY HYDRA INCLUSIONS	LOW STRENGTH/ UNSATURATED FLOW	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	PAST ACTION	SINKS - SWELL	POTENTIAL HAZARDOUS	PONDING	WETNESS
Abbotstown	AB8	1/2-1 1/2	3.3 - 5.0	6.1	X	C/S		X		X	X	X	X	X	X	X				X
Pann	Pa8	3+	1 1/2-3	6.0 - 7.0 5.0 - 6.0 4.5 - 5.5	X	C/S		X		X	X	X	X	X	X	X	X	X		X
Readington	ReA	1 1/2-3	3.3-5.8	6.1	X	C/S		X		X	X	X	X	X	X	X				X
Urban Land Readington	Ur8B	1 1/2-3	3.3-5.8	-	X	C/S		X		X	X	X	X	X	X	X				X

[illegible]

SOILS DATA

DATA OBTAINED FROM N.R.C.S. SOIL SURVEY.

AbB - ABBOTTSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES.

PeB - PENN SILT LOAM, 3 TO 8 PERCENT SLOPES.

ReA - READINGTON SILT LOAM, 0 TO 3 PERCENT SLOPES.

UryB - URBAN LAND-READINGTON COMPLEX, 0 TO 8 PERCENT SLOPES.



No.	INT.	REVISIONS	DATE
		PLAN ORIGINATION DATE	JAN. 9,

EROSION AND SEDIMENT CONTROL PLAN
OF THE
WOODLAND AVENUE TRACTS
PREPARED FOR
THE GAMBONE FAMILY
SITE SITUATE IN
LOWER PROVIDENCE TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

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PLAN SCALE HORIZONTAL:	DRAFTED BY J.A.C.	PROJECT MANAGER M.E.T.	PLAN SHEET
1"=40'	PROJECT NUMBER 3973	DRAWING FILE NUMBER 3973ES	5 OF

- SECTION NTB**

2' x 2' x 36' WOODEN STAKES PLACED @ O.C.

MAXIMUM DEPTH OF CONTAMINATED WATER IS 80% OF CONCRETE WASHOUT HEIGHT

24" DIAMETER COMPOST FILTER SOCK

12' MIN

PLAN NTB

2' x 2' x 36' WOODEN STAKES PLACED @ O.C.

DIRECT CONCRETE WASHOUT WATER INTO FILTER RING

24" COMPOST FILTER SOCK OVERLAP ON UPLOPE SIDE OF FILTER RING

NOTE:

 1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
 2. 24' DIAMETER FILTER SOCK MAY BE BACKED ONTO DOUBLE 24' DIAMETER SOCKS IN PYRAMID CONFIGURATION FOR ADDED HEIGHT
 3. A SUITABLE SUPERVISOR'S SIGNATURE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS

SILT SOCK CONCRETE WASHOUT

PLAN VIEW

5' (MAX.)
2:1 (MAX.)

SECTION Y-Y

0% SLOPE

GEOTEXTILE

ELEVATION VIEW

0% SLOPE

GEOTEXTILE

OUTLET NO.	PIPE DIA Pd (IN)	SIZE (R-)	THICK RT (IN)	LENGTH Ai (FT)	APRON	
					INITIAL WIDTH Atr (FT)	TERMINAL WIDTH Atr (FT)
A	24	4	18	10	6.0	10.0

NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

STANDARD CONSTRUCTION DETAIL #9-1

RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL

NOT TO SCALE

NO.		INT.		REVISIONS		DATE	
				PLAN ORIGINATOR DATE		JAN. 9, 2017	

EROSION AND SEDIMENT CONTROL DETAIL SHEET

OF THE

WOODLAND AVENUE TRACTS

PREPARED FOR

THE GAMBONE FAMILY

SITE SITUATE IN

LOWER PROVIDENCE TOWNSHIP

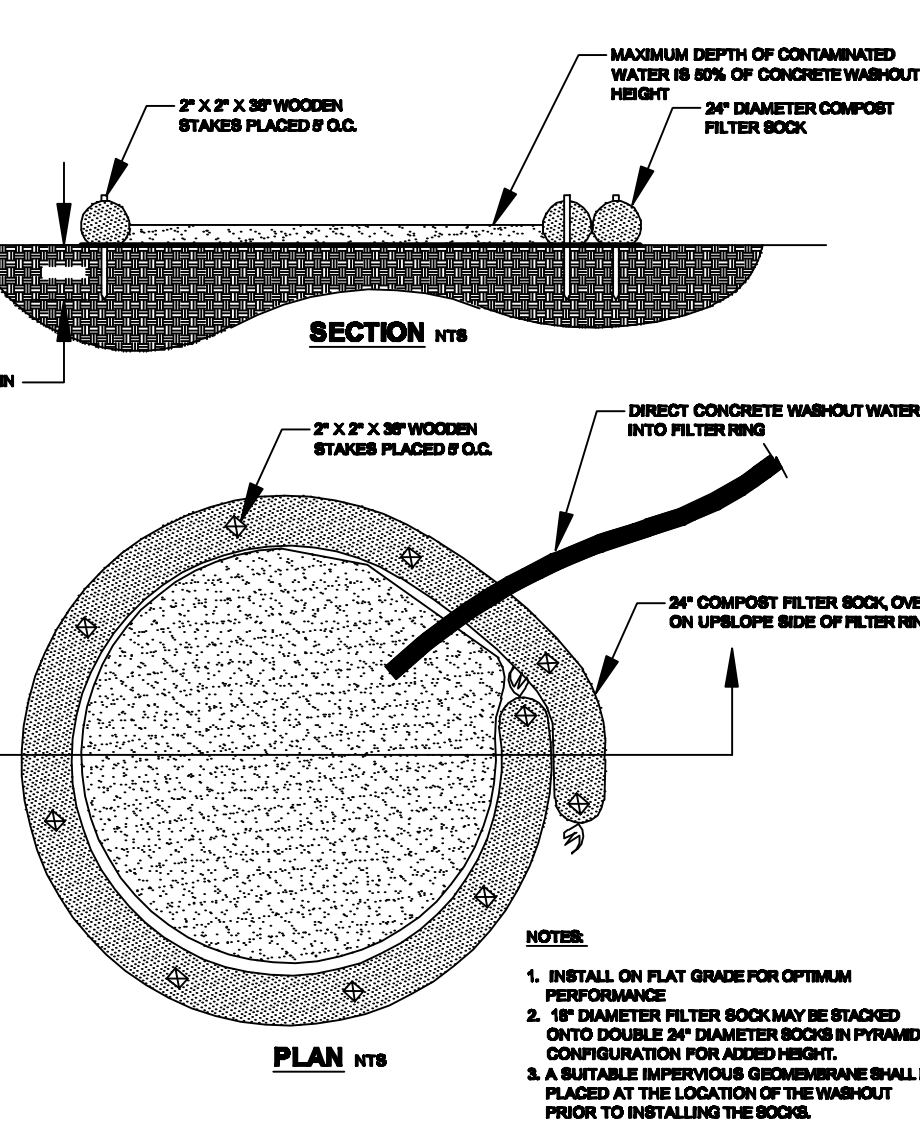
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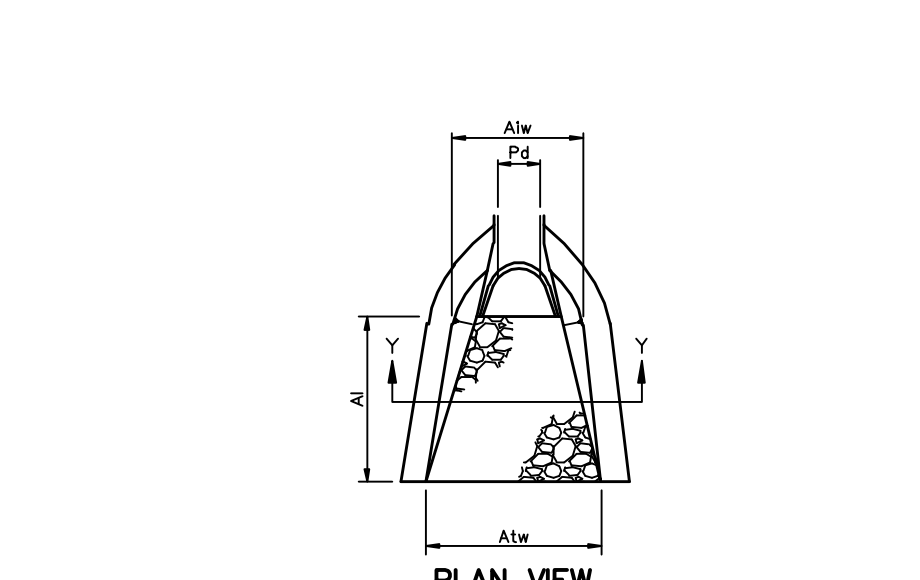


PLAN

NOTE:

1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2. 16" DIAMETER FILTER SOCK MAY BE STAKED ONTO DOUBLE 36" DIAMETER BODIES IN PYRAMID ARRANGEMENT FOR EASED WORK.
3. A BUTYLENE IMPERVIOUS GEOMEMBRANE SHALL BE LAYED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.

SILT SOCK CONCRETE WASHOUT



SECTION Y-Y

ELEVATION VIEW

	RIP-RAP	APPRON
--	---------	--------


OUTLET NO.	PIPE DIA Pd (IN)	SIZE (R—)	THICK Rt (IN)	LENGTH At (FT)	INITIAL WIDTH Aiw (FT)	TERMINAL WIDTH Atw (FT)
A	24	4	18	10	6.0	10.0

NOTES:

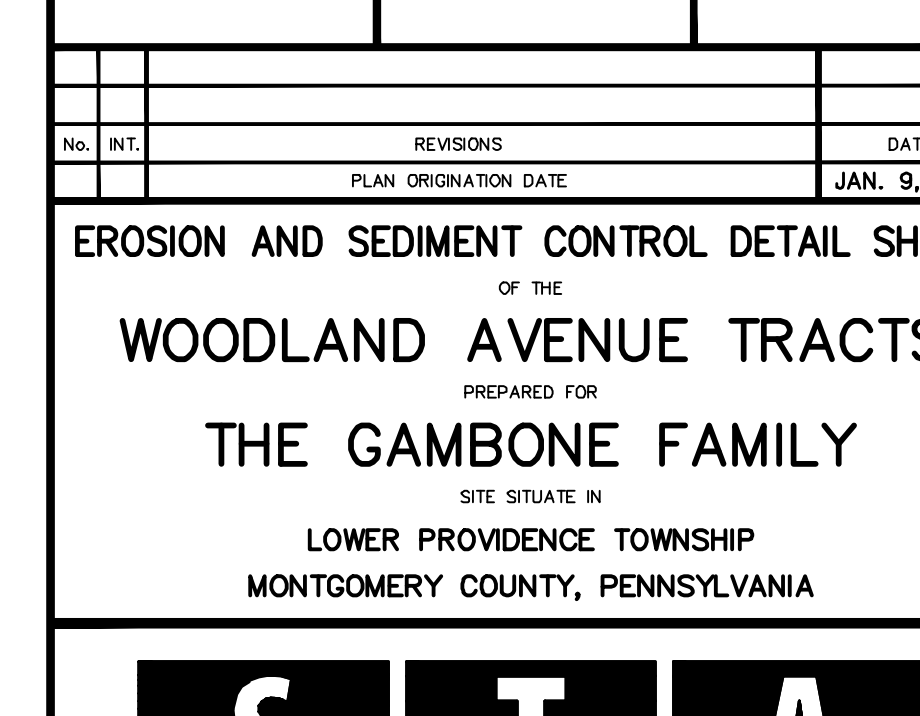
ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

**STANDARD CONSTRUCTION DETAIL #9 -
RIPRAP APRON AT PIPE OUTLET WITH
FLARED END SECTION OR ENDWALL
NOT TO SCALE**

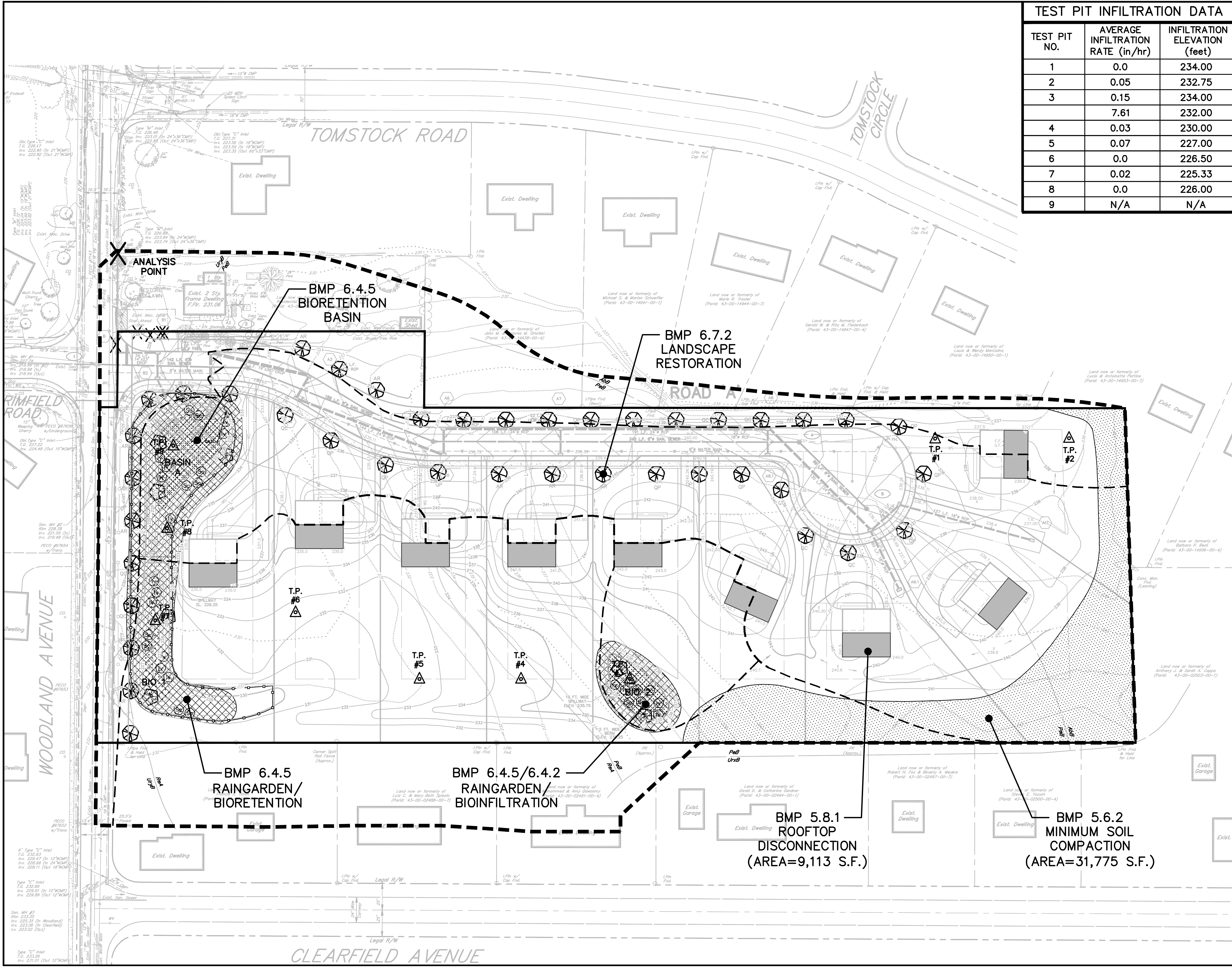


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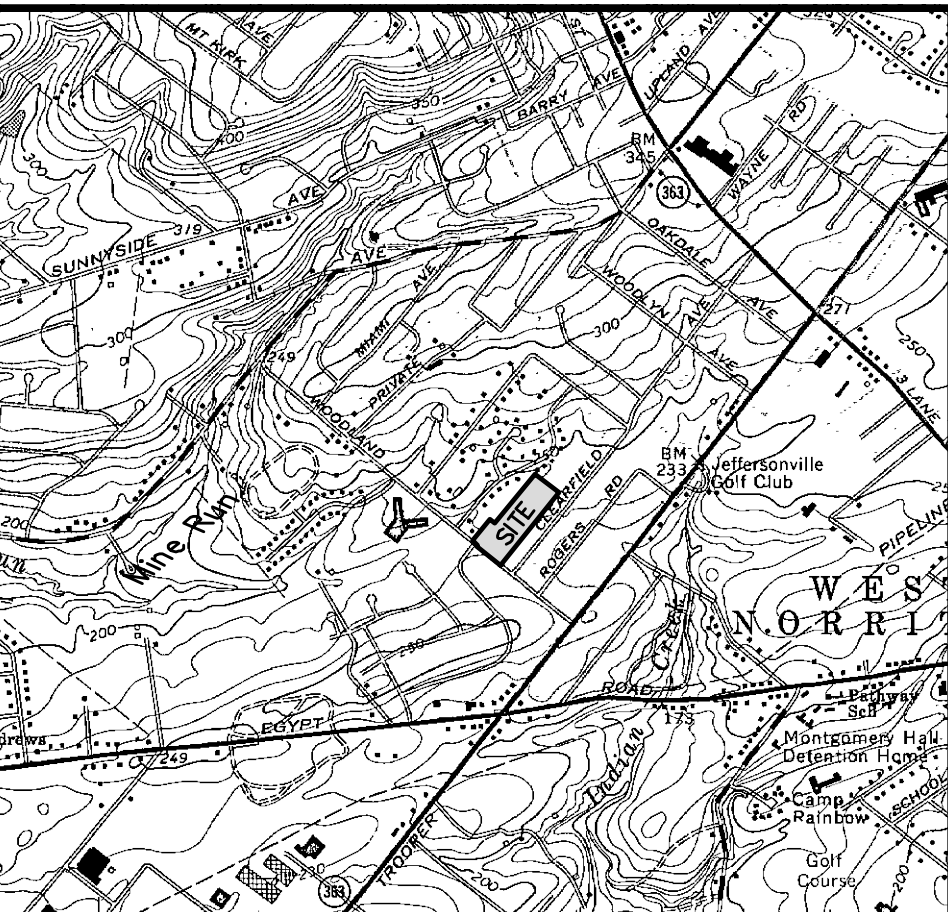
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PLAN SCALE HORIZONTAL:	DRAFTED BY J.A.C.	PROJECT MANAGER M.E.T.	PLAN SHEET
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TEST PIT INFILTRATION DATA

TEST PIT NO.	AVERAGE INFILTRATION RATE (in/hr)	INFILTRATION ELEVATION (feet)
1	0.0	234.00
2	0.05	232.75
3	0.15	234.00
4	7.61	232.00
5	0.03	230.00
6	0.07	227.00
7	0.02	225.33
8	0.0	226.00
9	N/A	N/A



AN UNT TO MINE RUN IS THE RECEIVING WATERCOURSE IN THE PERKIOMEN WATERSHED. THE CHAPTER 93 CLASSIFICATION FOR THE UNT TO MINE RUN IS TSF, WF.

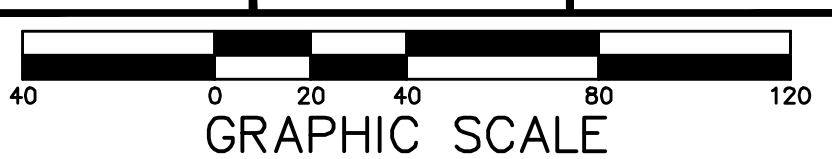
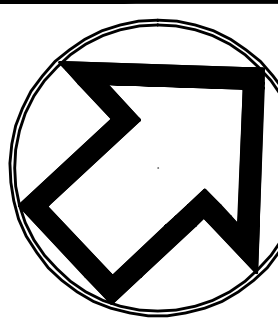
SCALE: 1"=2000'

LEGEND

- NPDES PERMIT BOUNDARY/LIMIT OF DISTURBANCE
- POST-DEVELOPMENT WATERSHED BOUNDARY
- BMP SHED BOUNDARY
- ERNMX-178 RIPARIAN BUFFER MIX (OR APPROVED EQUAL)
- INFILTRATION TEST PIT LOCATION
- AMENDED SOILS
- DISCONNECTED ROOF AREA
- LIMITS OF MINIMUM SOIL COMPACTION AREA

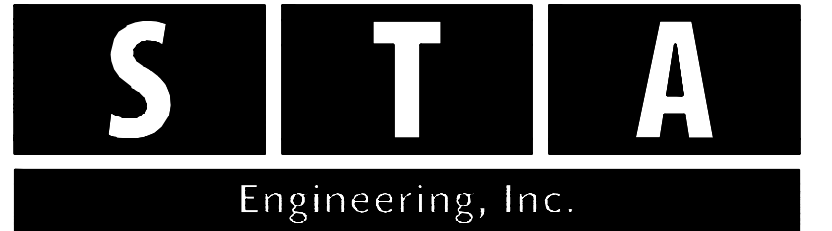
SOILS DATA

DATA OBTAINED FROM N.R.C.S. SOIL SURVEY.
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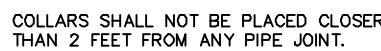
PCSM PLAN
OF THE
WOODLAND AVENUE TRACTS
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THE GAMBONE FAMILY
SITE SITUATE IN
LOWER PROVIDENCE TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA



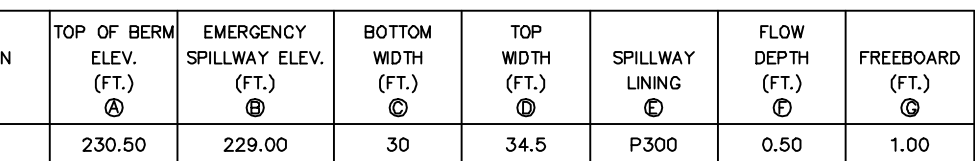
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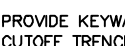
PLAN SCALE HORIZONTAL: 1"=40'	DRAFTED BY J.A.C.	PROJECT MANAGER M.E.T.	PLAN SHEET NUMBER 7 OF 14
	PROJECT NUMBER 3973	DRAWING FILE NUMBER 3973PCSM	



REINFORCED CAST-IN-PLACE ANTI-SEEP COLLAR



BASIN EMERGENCY SPILLWAY CROSS-SECTION



CONSTRUCTION NOTES:

1. SITE PREPARATION – Areas under the embankment and any structural works shall be cleared, topsoil stripped to remove the trees, vegetation, roots, or objectionable material. In order to facilitate clean-cut and other restoration, the restoration area shall be cleared to a minimum of 10 feet from the embankment.

2. CUT-OUT TRENCH – A cut-out trench will be excavated along the centerline down the earth fill embankment. The minimum depth shall be 3 feet. The cut-out trench shall extend up both abutments to the clear crest elevation. The minimum bottom width shall be 8 feet. The trench shall be excavated to a maximum of 1:1 slopes. The slope shall be no steeper than 1:1. Compaction shall be done on the sides of the trench. The trench shall be kept free from standing water during backfilling operations.

3. EMBANKMENT – The fill material shall be taken from selected borrow areas. It shall be placed in 6 to 8 inch layers and compacted by hand or machine. The trench shall be filled with the same material. Areas on which fill is to be placed shall be scarified prior to placement.

The fill material should contain sufficient moisture so that it can be formed into a ball without crumbling. If water can be squeezed out of the ball, it is too wet for proper compaction.

Fill material shall be placed in 6 to 8 inch layers and shall be continuous over the entire length of the embankment. Compaction will be obtained by routing engineering equipment and vibratory roller compactors over the fill so that the entire surface is compacted. The surface of the embankment shall be compacted to a minimum of 95% higher than the design specification for the fill material.

BASIN BERM CONSTRUCTION DETAIL



BIO-RETENTION BASIN A AND BIO-RETENTION
BIO-1 CROSS-SECTION DETAIL



BASIN 'A' OUTLET STRUCTURE

WOODLAND AVENUE TRACTS - IMPERVIOUS COVER CHART
1/9/2017

TOTAL OVER THE LOTS	264,168							52,025	19.7%
---------------------------	---------	--	--	--	--	--	--	--------	-------

[illegible]

* This chart is used to document the impervious surface used in the design calculations for stormwater management. Actual building footprint, porch/service walk, patio/deck and driveway areas submitted as part of the building permit plan may deviate from

PCSM DETAIL SHEET
OF THE

PCSM DETAIL SHEET

OF THE

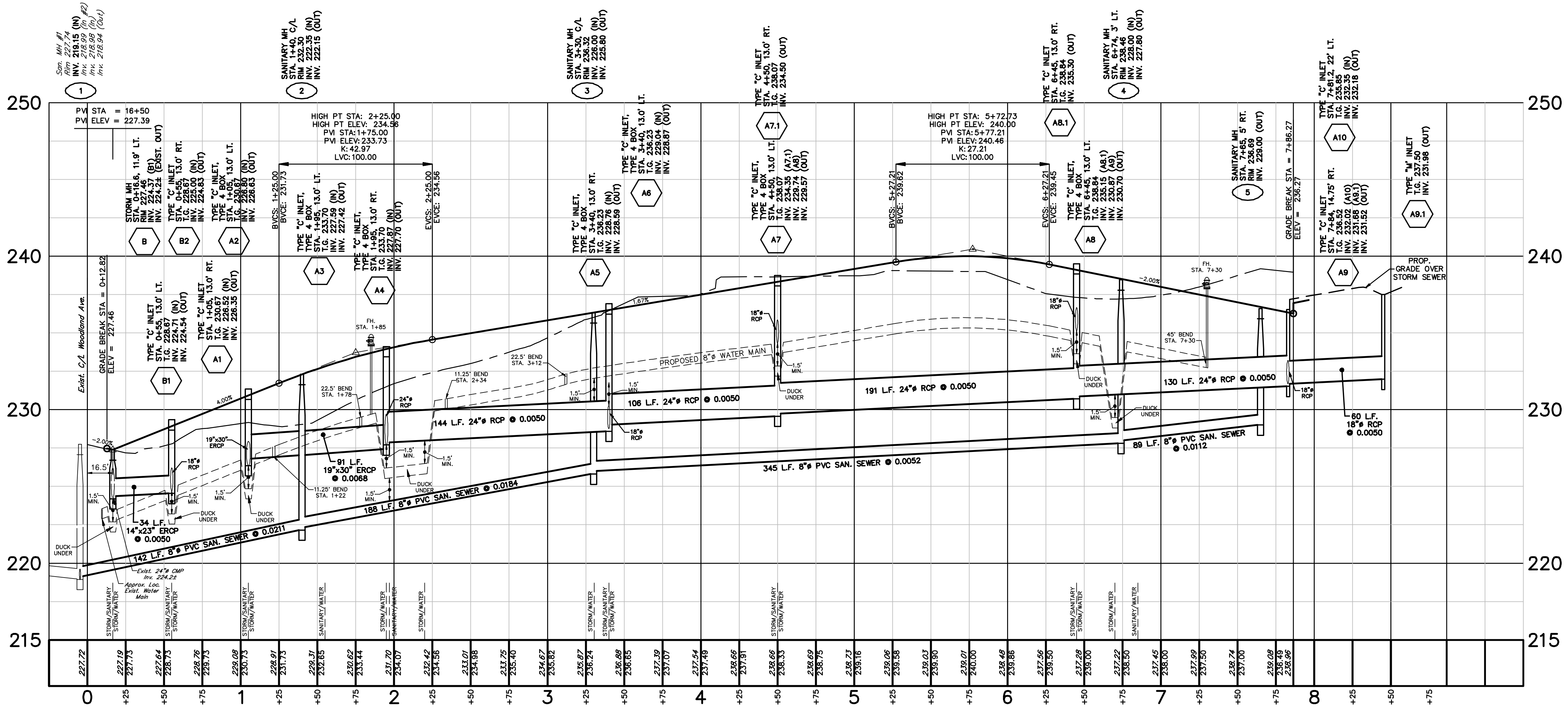
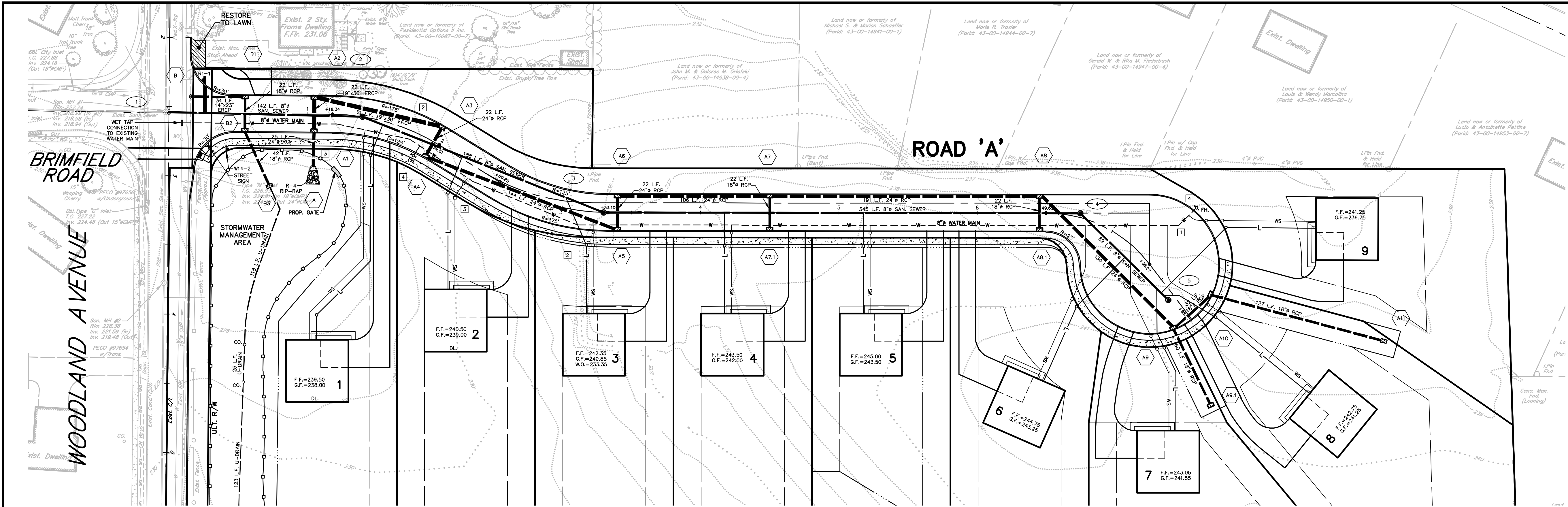
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N.T.S.	PROJECT NUMBER 3973	DRAWING FILE NUMBER 3973DET	8 OF 14
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DESIGNATED TREES TO BE REMOVED



No.	INT.	REVISIONS	DATE
		PLAN ORIGINATION DATE	JAN. 9, 2017

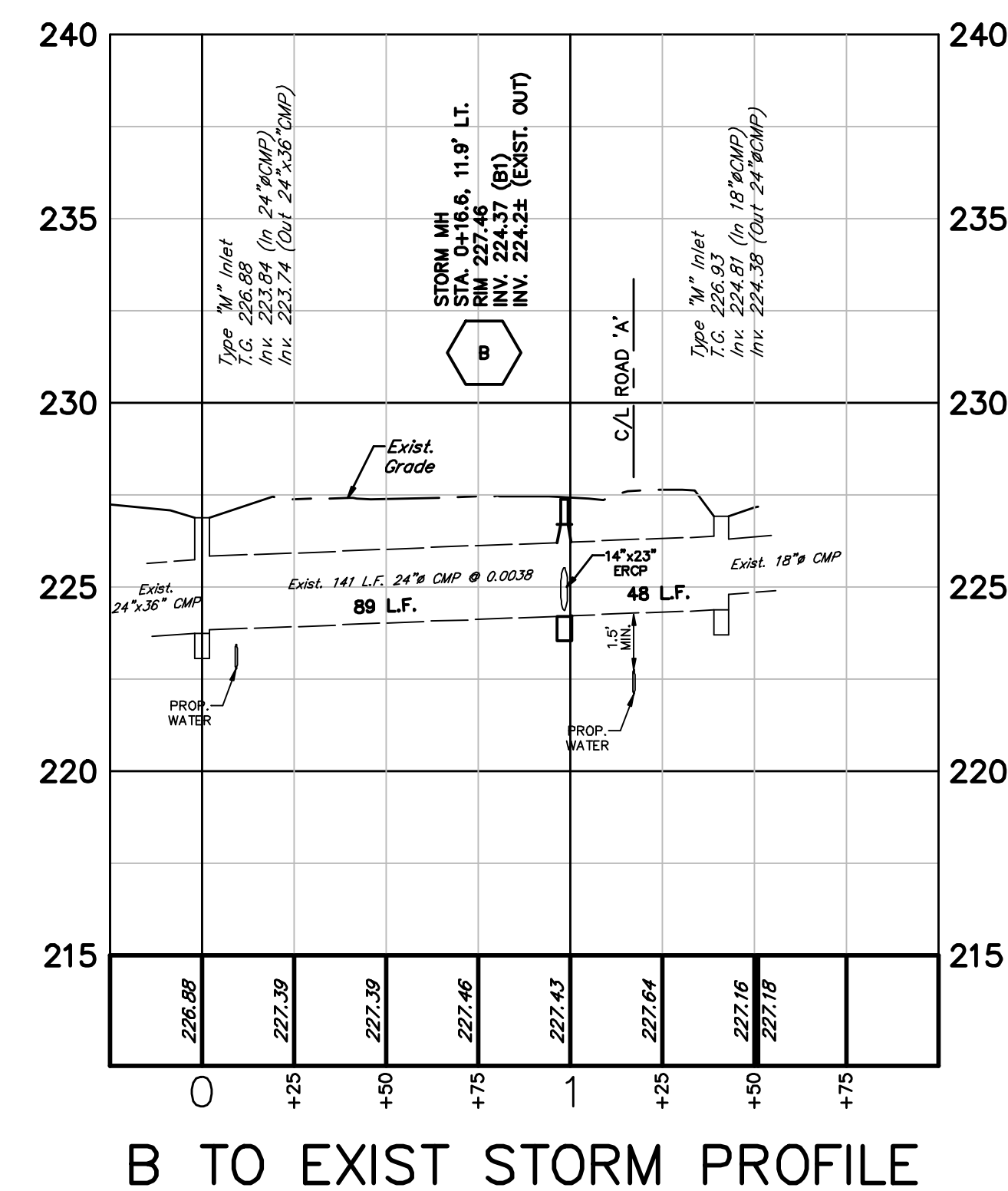
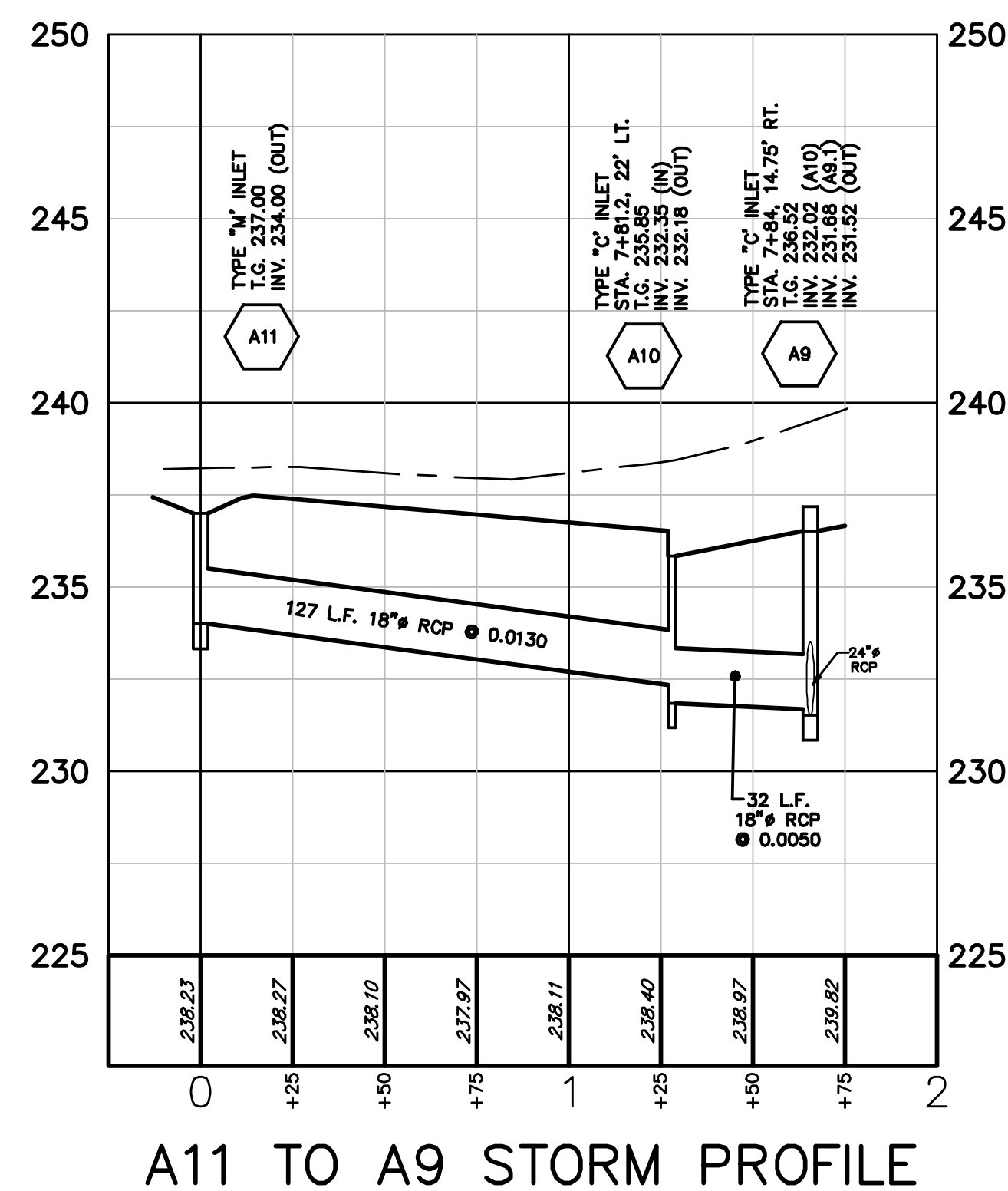
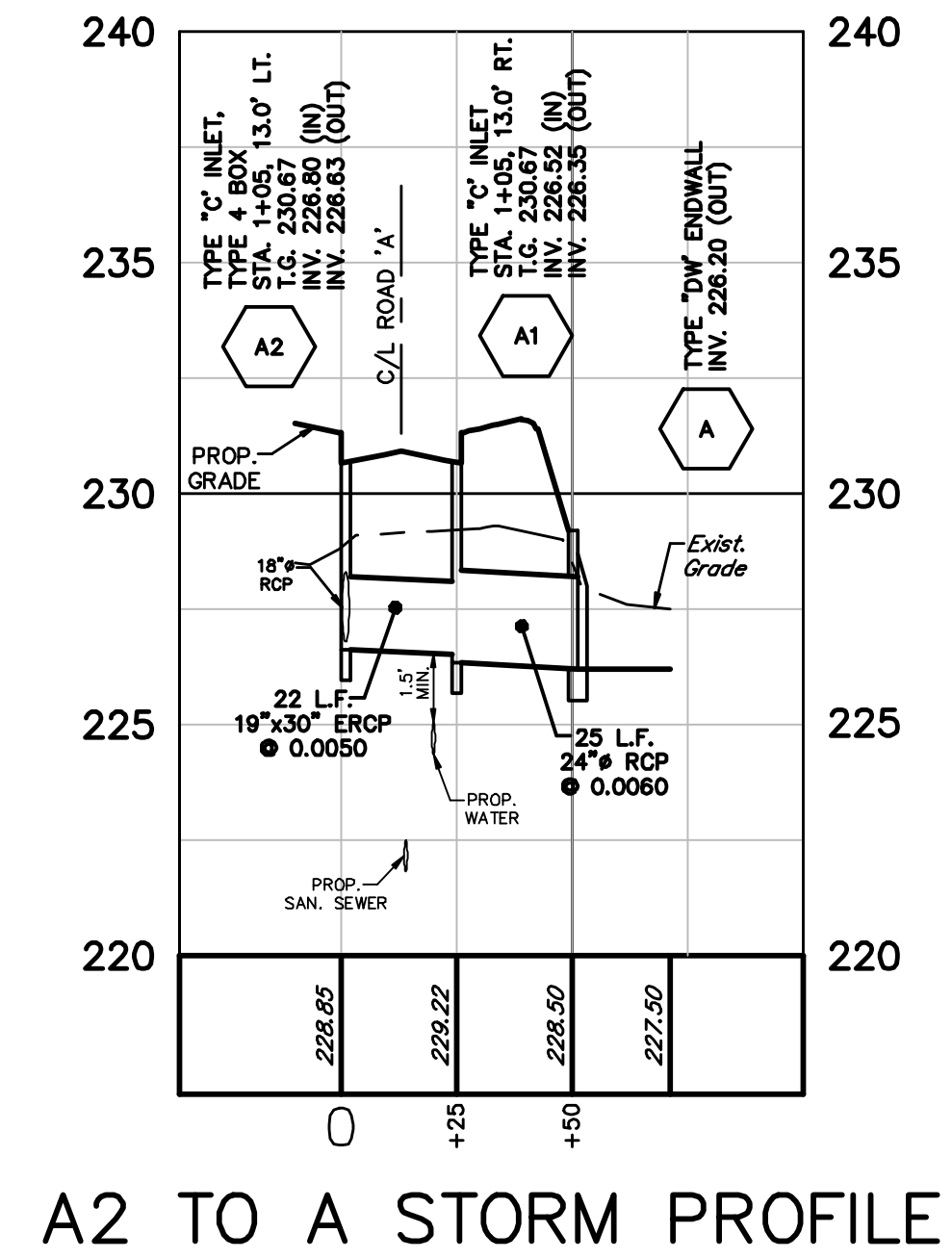
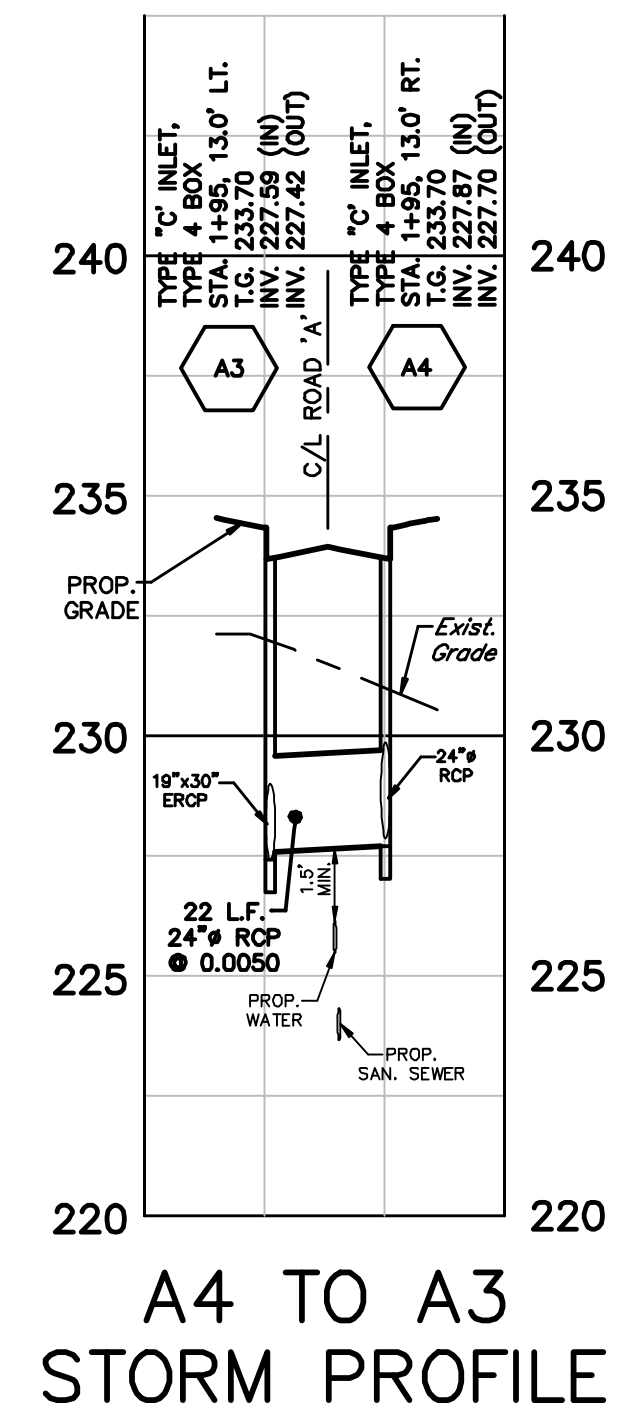
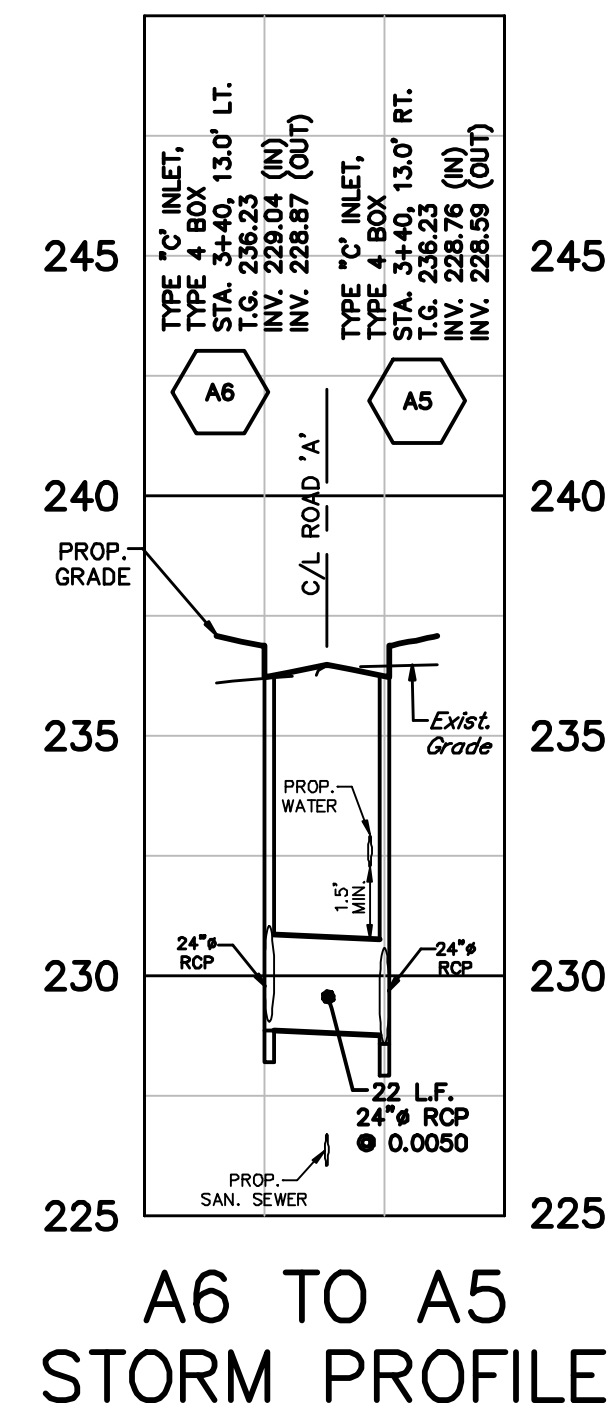
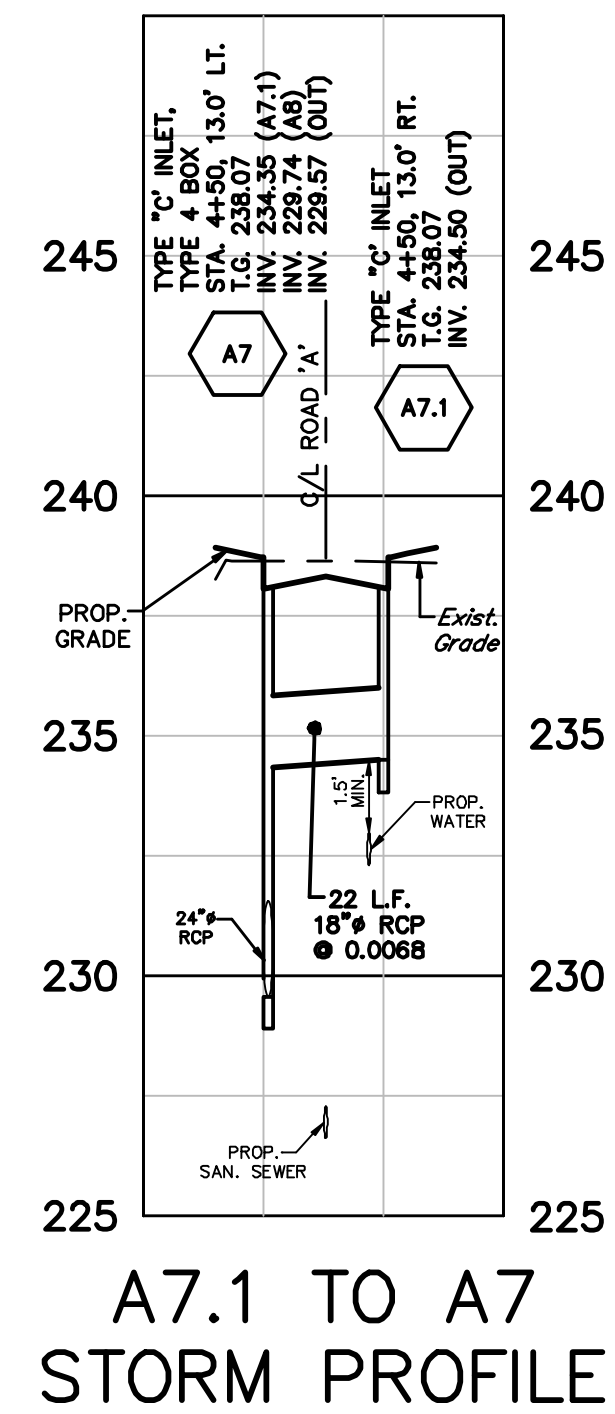
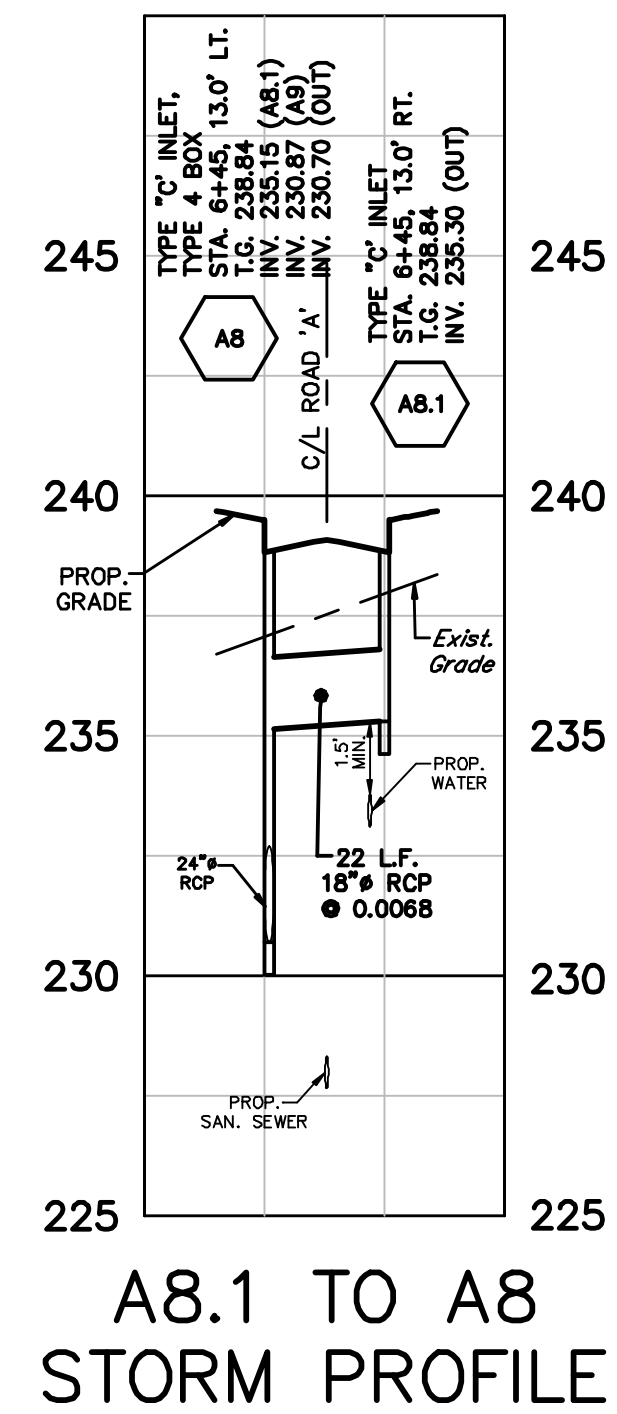
PLAN AND PROFILE
OF
ROAD 'A'
AS PART OF THE
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THE GAMBONE FAMILY
SITE SITUATE IN
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PLAN SCALE	DRAFTED BY	PROJECT MANAGER	PLAN SHEET NUMBER
HORIZONTAL: 1" = 40'	J.A.C.	M.E.T.	
VERTICAL: 1" = 4'	PROJECT NUMBER 3973	DRAWING FILE NUMBER 3973PRD	10 OF 14



GRAPHIC SCALE

40 0 20 40 80 120

No.	INT.	REVISIONS	DATE
		PLAN ORIGIN DATE	JAN. 9, 2017

PROFILES
OF
STORM SEWER
AS PART OF THE
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THE GAMBONE FAMILY
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VERTICAL: 1" = 4'	PROJECT NUMBER 3973	DRAWING FILE NUMBER 3973PSTM	11 OF 14

