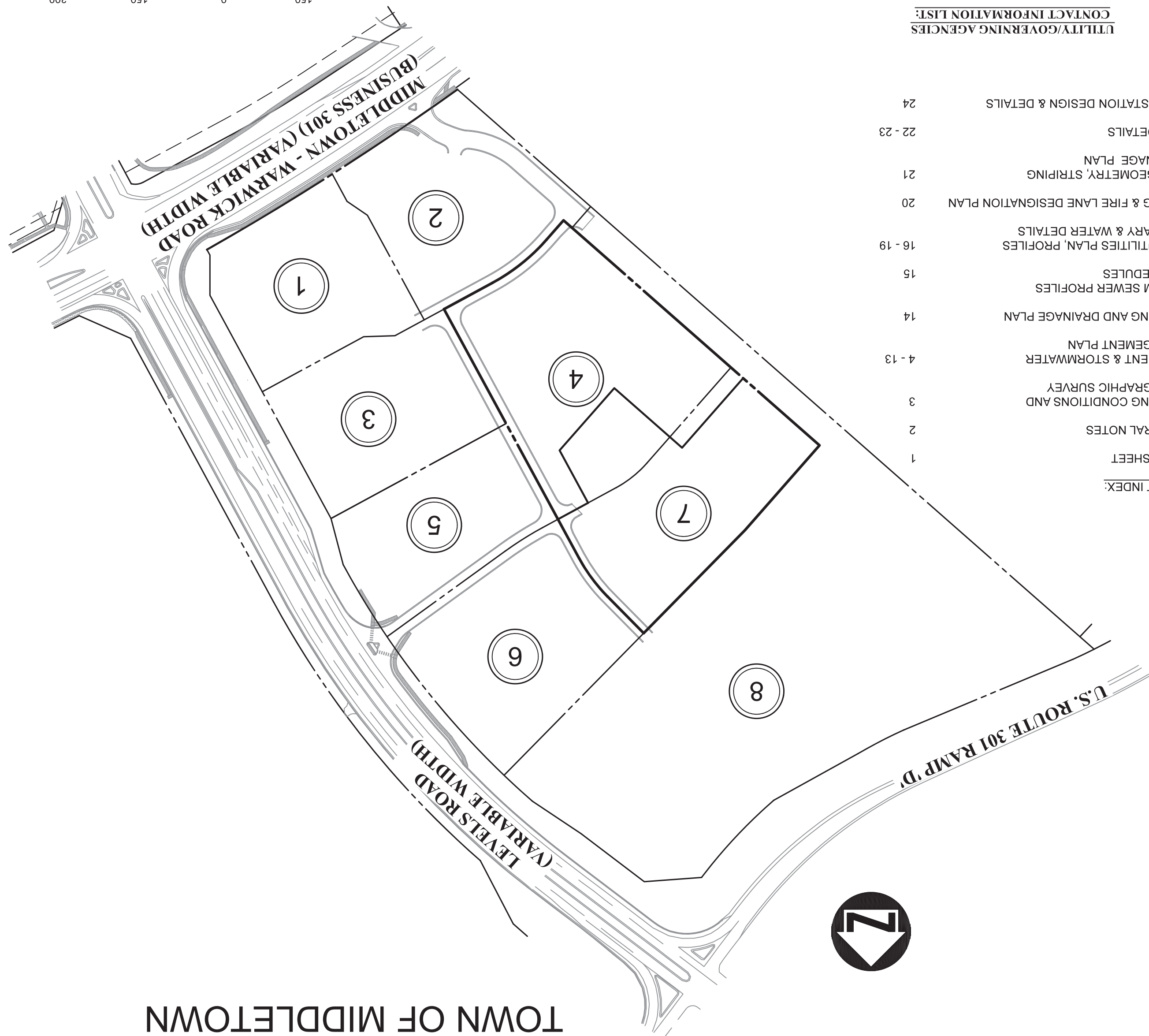
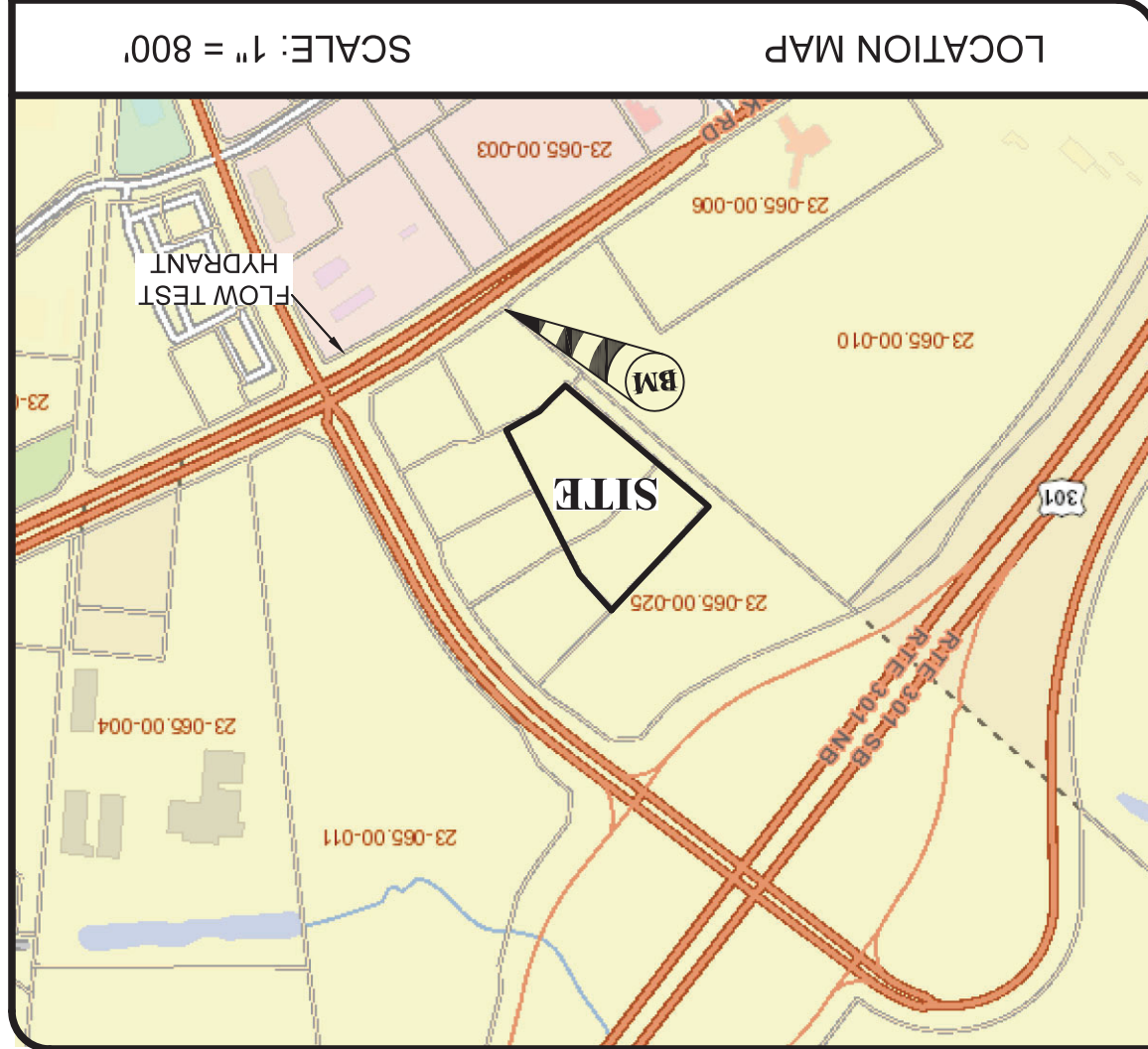
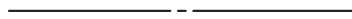


CONSTRUCTION PLANS PARCEL 4 & 7 - LEVELS CROSSING



	FIRE HYDRANT	
	SIGN	
	LIGHT POLE	
	UTILITY POLE	
	CAPED REBAR	
	MONUMENTS	
		
	EDGE OF PAVEMENT/DRIVEWAY	
	CENTERLINE	
	BUILDING	
	BUILDING RESTRICTION LINE	
	EASEMENT	
	TIE LINE	
	LOT LINE	
	RIGHT-OF-WAY	

Labels	BEARING/DISTANCE	FLOWPATH	SUBAREA	SOILS DESCRIPTION	SOILS LINE	STEP SLOPE	DEWRAINAGEWAY CENTRELINE	RRPARLAN BUFFR	STREAM	WRPA	WETLANDS	STONE/RRPAR	CONCRETE RETAINING WALL	CONCRETE SIDEWALK/PATIO	SANITARY SEWER	STORM SEWER	COMMUNICATION LINE	OVERHEAD ELECTRIC	UNDERGROUND ELECTRIC	GAS MAIN	FENCE	MAINTENANCE
DRAINAGE PIPE	0.00 50.00 90.00 00.00 0.00																					

Item	Quantity	Unit	Material	Remarks
1	1	m	PIPE	1" DIA. GALV. STEEL
2	2	m	PIPE	1" DIA. GALV. STEEL
3	3	m	PIPE	1" DIA. GALV. STEEL
4	13	m	PIPE	1" DIA. GALV. STEEL
14	14	m	PIPE	1" DIA. GALV. STEEL
15	15	m	PIPE	1" DIA. GALV. STEEL
16 - 19	16 - 19	m	PIPE	1" DIA. GALV. STEEL
20	20	m	PIPE	1" DIA. GALV. STEEL
21	21	m	PIPE	1" DIA. GALV. STEEL
22 - 23	22 - 23	m	PIPE	1" DIA. GALV. STEEL
24	24	m	PIPE	1" DIA. GALV. STEEL

302-323-5565
 CONTACT: STEVEN CALLAWAY
 NEW CASTLE, DE 19720
 DELAWARE STATE FIRE MARSHAL
 302-388-7714
 PROJECT MANAGER
 CONTACT: TODD FRY
 MIDDLETON, DE 19901
 19 W. QUEEN STREET
 TOWN OF MIDDLETOWN
 WATER
 ARTESIAN WATER COMPANY
 CONTACT:
 KATHLEEN GARRISON
 302-275-2368
 KCARLISON@ARTESIANWATER.COM
 WATER
 302-361-7998
 CONTACT: VINCENT ROBEILL
 TOWN OF MIDDLETOWN
 100 ENERGY LANE, SUITE 000
 CHEFSPEAKE UTILITIES
 GAS
 610-223-2546
 CONTACT: CARL BOWMAN
 WILMINGTON, DE 19808
 VERIZON COMMUNICATIONS
 TELEPHONE & FIBER OPTIC
 302-388-2771
 CONTACT: EVAN LANE
 MIDDLETOWN, DE 19709
 41 HAVES ROAD
 TOWN OF MIDDLETOWN
 ELECTRIC
 302-378-2211
 CONTACT: WYNNE KENSEY
 MIDDLETOWN, DE 19709
 TOWN OF MIDDLETOWN
 SANITARY SEWER

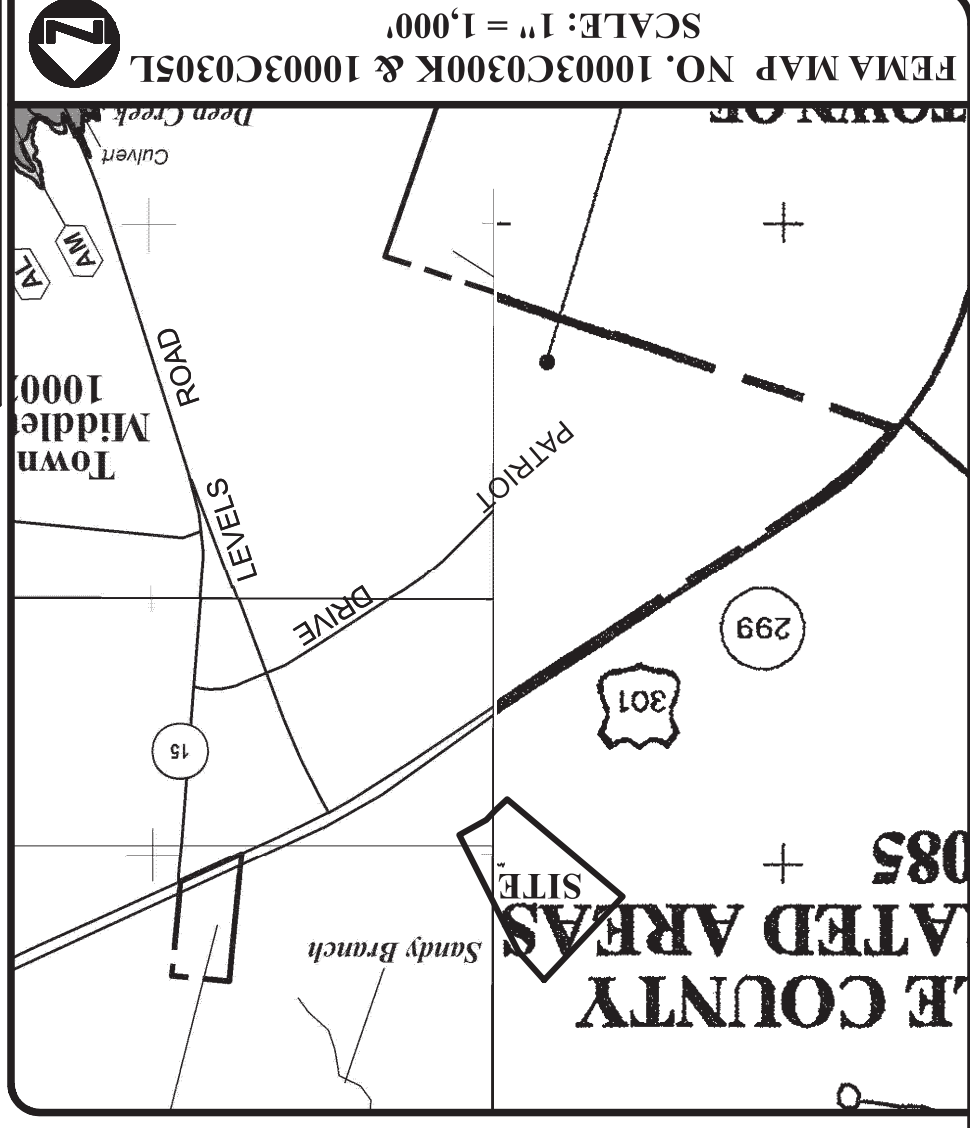


THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APURTENANT.

PARKING RATIONALE:											
Parking Standards per Town of Middletown Zoning Code Section 5.B.(3) Use Standards (a) Retail Stores and Shops: 1 parking space per 200 SF used/designated for sales on ground floor plus 1 parking space per 50 SF used/designated for sales on all other floors plus 1 per 2 employees	Lot Number	Parking Space Calculations	Parking Spaces Provided	98	91	8	99	99	Uses permitted in a C-2 District Subject to the Area Regulations of the C-2 District Zoning: C-2 District AREA AND SETBACK REQUIREMENTS:	Minimum lot area: 3,000 S.F. 4.H.(1)(a) 80% 20' 4.H.(3)(c) 4.H.(3)(d) 4.H.(3)(e) 10'	Minimum rear yard building setback: 15' Minimum building/parking setback from street ROW: 4.H.(3)(f)
			Parking Spaces Required	98	91	8	99			Maximum lot coverage: Maximum building height: Maximum rear yard building height:	Minimum lot coverage: Maximum building height: Maximum rear yard building height:
			Handicap Spaces Provided	5	4	4	1 (van)			Minimum lot area: Maximum lot coverage: Maximum building height:	Minimum lot area: Maximum lot coverage: Maximum building height:
			Handicap Spaces Required	5	4	4	1 (van)			Minimum lot area: Maximum lot coverage: Maximum building height:	Minimum lot area: Maximum lot coverage: Maximum building height:
LOADING RATIONALE (PER LOT): Loading Standards per Town of Middletown Zoning Code Section 5.C.(1) Loading Spaces Required Loading Spaces Provided											
FLOW RESULTS (08/23): 1. 840 Middlebrook Warwick Rd ANT OUTLET: 2.5 INCHES SURF: 59 PSI W/ 1.091 GPM SURF: 62 PSI PRESSURE: 52 PSI PSI: 2.759 GPM											

SANITARY SEWER DATA:									
Per Middlesex Code Section 136-8-B									
Peak Flow (C.F.S.)	Peak Flow (G.P.D.)	Average Daily Flow (G.P.D.)	Building GFA per Unit (S.F.)	Proposed Use	Lot Number	4	7	Total	
0.003	1.950	0.025 = 488	19,500 x	Retail				37,700	Total
0.003	1.820	0.025 = 488	18,200 x	Retail				7	
0.010	8.956	2.199 x	37,700						

CERTIFICATION OF OWNERSHIP:	I, _____ AUTHORIZED PERSON, HEREBY CERTIFY THAT I AM AN OWNER OF THE PROPERTY SHOWN WHICH IS THE SUBJECT OF THIS PLAN AND THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHALL BE PURSUANT TO THE APPROVED PLANS AND IN ACCORDANCE WITH THE TOWN OF MIDDLETOWN SUBDIVISION REGULATIONS AND ZONING CODE.
CERTIFICATION OF ACCURACY:	I, JAMES BAER, PE, LICENSE #171753, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF DELAWARE, AND THAT ALL OF THE INFORMATION SHOWN ON THESE PLANS IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY ACCEPTED SURVEYING STANDARDS AND PRACTICES AND IN ACCORDANCE WITH THE TOWN OF MIDDLETOWN SUBDIVISION REGULATIONS AND ZONING CODE.
DATE:	JAMES BAER, PE, (LICENSE #171753)
DATE:	PROFESSIONAL ENGINEER WITH A BACKGROUND IN CIVIL ENGINEERING



THIS DRAWING, THE DESIGN AND DIGITAL FILE ARE ASSOCIATED TO WOODIN + PARTNERS LLP AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION		DATE	APPROVED	DRAWN	DESIGN
SCALE	05/09/25	DDH	JLB	JLB	JLB
		SHEET			
		OF			
24		1			

[illegible]

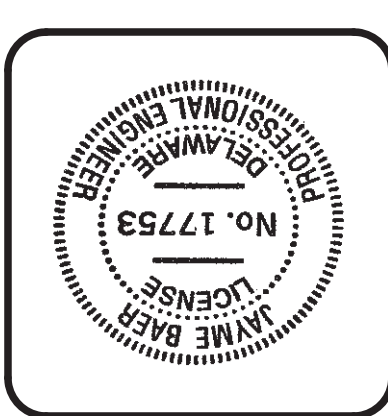
TITLE SHEET
CONSTRUCTION PLANS
FOR PROJECT KNOWN AS
PARCEL 4 & 7
LEVELS CROSSING



WOODIN & ASSOCIATES
Civil & Geotechnical Engineers
Land Planners & Land Surveyors

Lewistown Business Park
1111 Perlick Drive
Suite D
Middletown, DE 19709

Tel: 302-378-7200
Fax: 302-378-1134

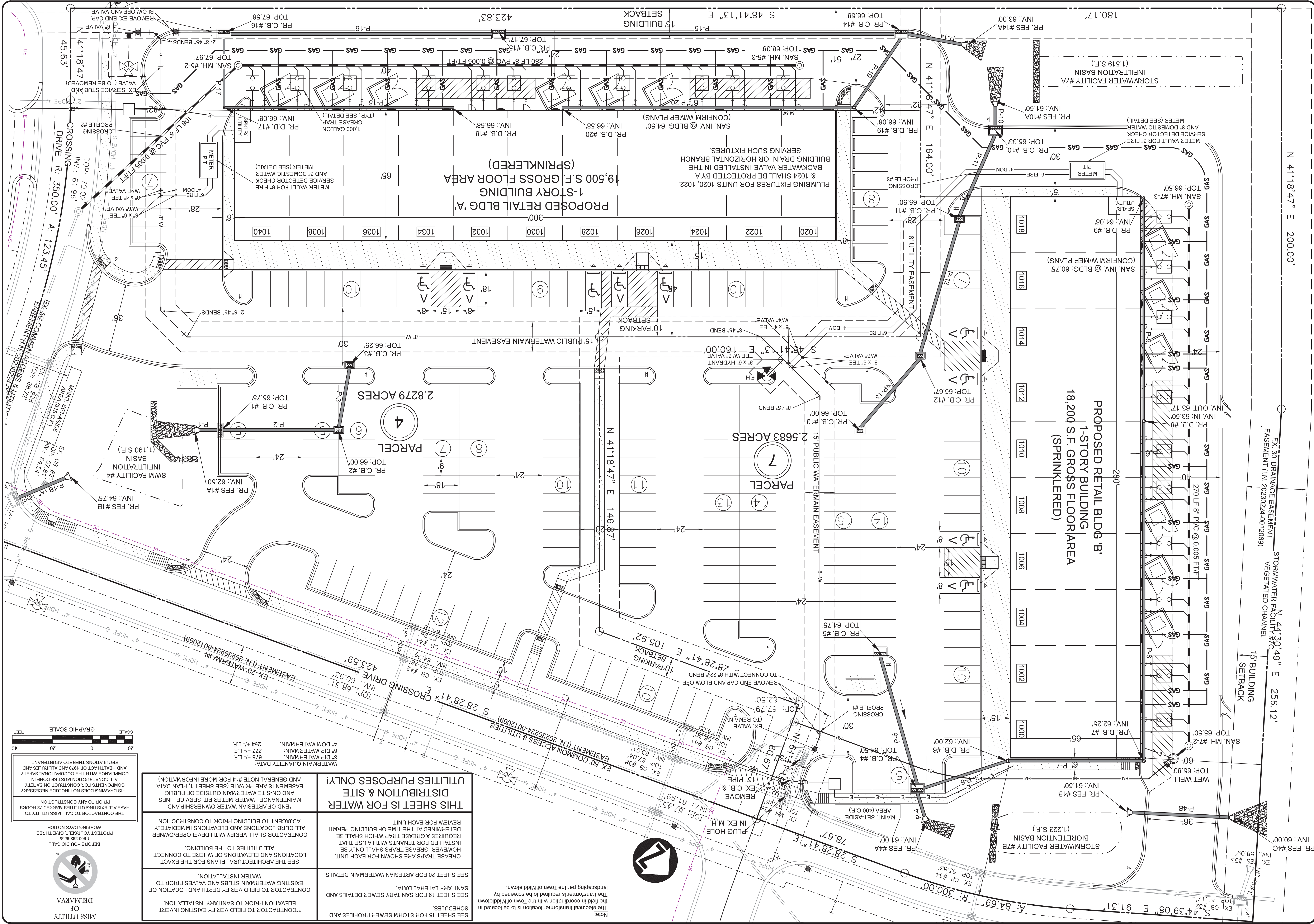
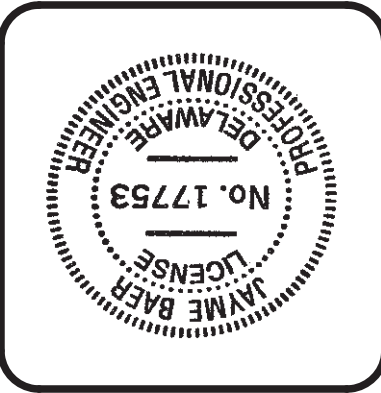


16	DESIGN	JLB
24	DRAFT	JLB
	APPROVED	DDH
	DATE	05/09/25
	SCALE	1" = 20'

DATE	REVISION	BY

WATER DISTRIBUTION & SITE UTILITIES PLAN CONSTRUCTION PLANS FOR PROJECT KNOWN AS **PARCEL 4 & 7** LEVELS CROSSING CHESAPEAKE BAY WATERSHED - TOWN OF MIDDLETOWN - NEW CASTLE COUNTY - STATE OF DELAWARE

WOODEN + ASSOCIATES
Civil & Geotechnical Engineers
Land Planners & Land Surveyors
Lewes Business Park
111 Parrott Drive
Middletown, DE 19709
Tel: 302-379-2300
Fax: 302-378-1134



THIS SHEET IS FOR WATER DISTRIBUTION & SITE UTILITIES PURPOSES ONLY!

SEE SHEET 15 FOR STORM SEWER PROFILES AND SCHEDULES.
SEE SHEET 19 FOR SANITARY SEWER DETAILS AND SANITARY LATERAL DATA.
GREASE TRAPS ARE SHOWN FOR EACH UNIT. INSTALLED FOR TENANTS WITH A USE THAT DETERMINED AT THE TIME OF BUILDING PERMIT REVIEW FOR EACH UNIT.

CONTRACTOR SHALL VERIFY WITH DEVELOPER/OWNER ALL CURB LOCATIONS AND ELEVATIONS IMMEDIATELY ADJACENT TO BUILDING PRIOR TO CONSTRUCTION. SEE THE ARCHITECTURAL PLANS FOR THE EXACT LOCATIONS AND ELEVATIONS OF WHERE TO CONNECT MAINTENANCE, WATER METER PIT, SERVICE LINES AND ON-SITE WATERMAIN OUTSIDE OF PUBLIC EASEMENTS ARE PRIVATE (SEE SHEET 1, PLAN DATA AND GENERAL NOTE #14 FOR MORE INFORMATION).

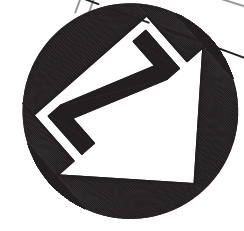
THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 72 HOURS PRIOR TO ANY CONSTRUCTION. THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPLICANT.

SCALE: GRAPHIC SCALE
0 20 40 FEET

BEFORE YOU DIG CALL
1-800-882-6868
PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

MISS UTILITY
DELMARVA

Note:
The electrical transformer location is to be located in the field in coordination with the Town of Middletown. The transformer is required to be screened by landscaping per the Town of Middletown.





MISS UTILITY
OF
DELAWARE

BEFORE YOU DIG CALL
1-800-282-8655
PROJECT YOURSELF GIVE THREE
WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY
REGULATIONS THEREO APURTEINANT.
AND HEALTH ACT OF 1970 AND ALL RULES AND
COMPLIANCE WITH THE OCCUPATIONAL SAFETY
ALL CONSTRUCTION MUST BE DONE IN
PRIOR TO ANY CONSTRUCTION.
HAVE ALL EXISTING UTILITIES MARKED 72 HOURS
THE CONTRACTOR TO TALK MISS UTILITY TO

C.O. #	Lateral Invert at to Sanitary Sewer Main (feet)	Plumbing Fixture Elevation (5' plus lateral invert)	Minimum Elevation of Upstream MH Number and Rim Elevation (feet)	Upstream MH Number and Rim Elevation (feet)	Downstream MH Number	Distance of Lateral Connection from Upstream Manhole (feet)	Backwater Required Valve
1020	64.08	69.08	68.75	68.38	MH 5-2	4	Y
1020GT	64.05	69.05	68.75	68.38	MH 5-2	10	Y
1022	66.95	68.95	68.75	68.38	MH 5-2	29	Y
1022GT	68.92	68.75	68.75	68.38	MH 5-2	35	Y
1024GT	68.85	68.85	68.75	68.38	MH 5-2	51	Y
1024	68.82	68.82	68.75	68.38	MH 5-2	57	Y
1026	68.68	68.68	68.75	68.38	MH 5-2	84	N
1026GT	68.65	68.65	68.75	68.38	MH 5-2	90	N
1028	68.54	68.54	68.75	68.38	MH 5-2	111	N
1028GT	68.51	68.51	68.75	68.38	MH 5-2	117	N
1030	68.41	68.41	68.75	68.38	MH 5-2	138	N
1030GT	68.38	68.38	68.75	68.38	MH 5-2	144	N
1032GT	68.30	68.30	68.75	68.38	MH 5-2	160	N
1032	68.27	68.27	68.75	68.38	MH 5-2	166	N
1034GT	68.16	68.16	68.75	68.38	MH 5-2	187	N
1034	68.13	68.13	68.75	68.38	MH 5-2	193	N
1036	68.00	68.00	68.75	68.38	MH 5-2	220	N
1036GT	67.97	67.97	68.75	68.38	MH 5-2	226	N
1038	67.87	67.87	68.75	68.38	MH 5-2	247	N
1038GT	67.84	67.84	68.75	68.38	MH 5-2	253	N
1040	67.76	67.76	68.75	68.38	MH 5-2	269	N
1040GT	67.73	67.73	68.75	68.38	MH 5-2	275	N

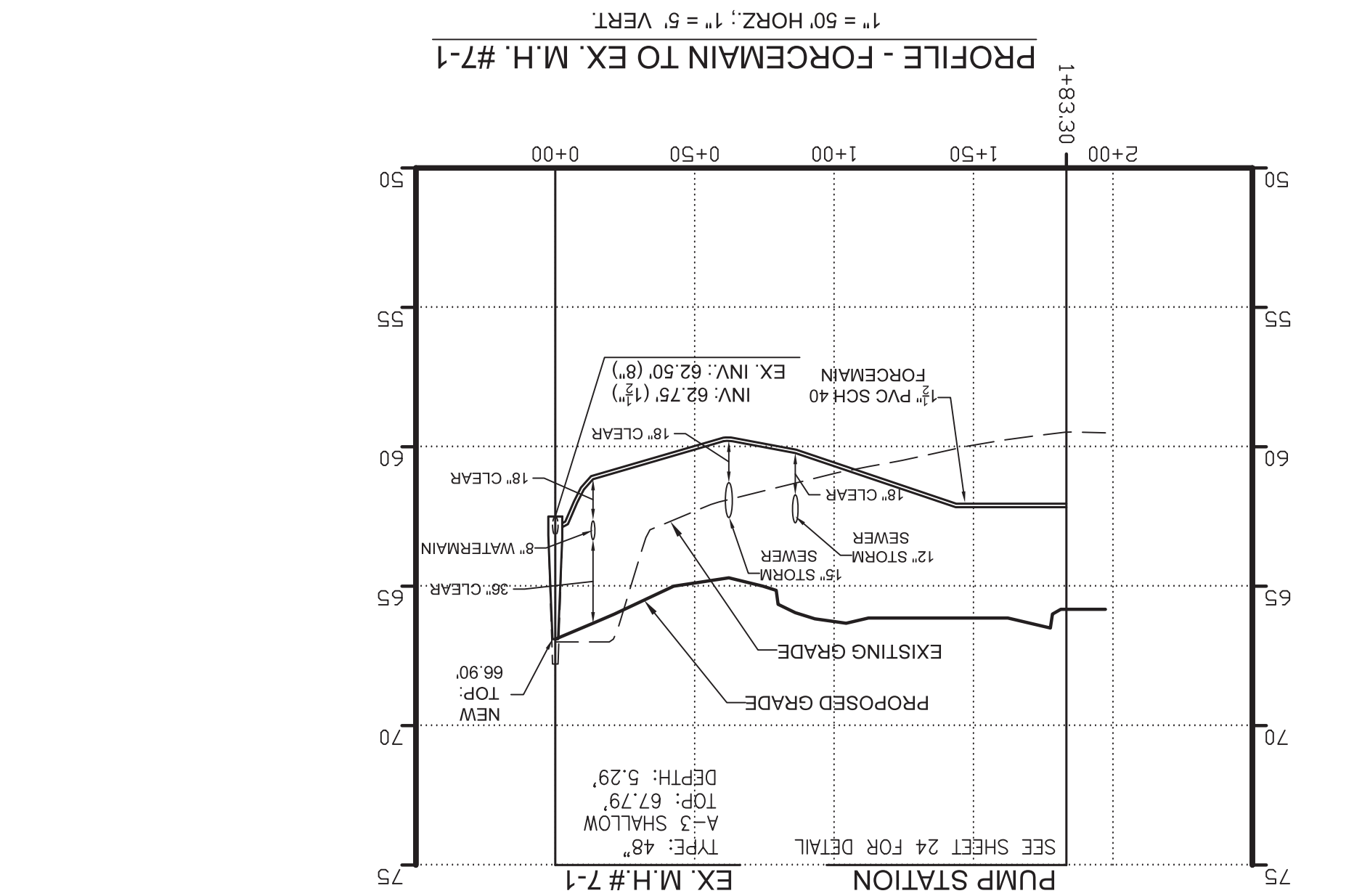
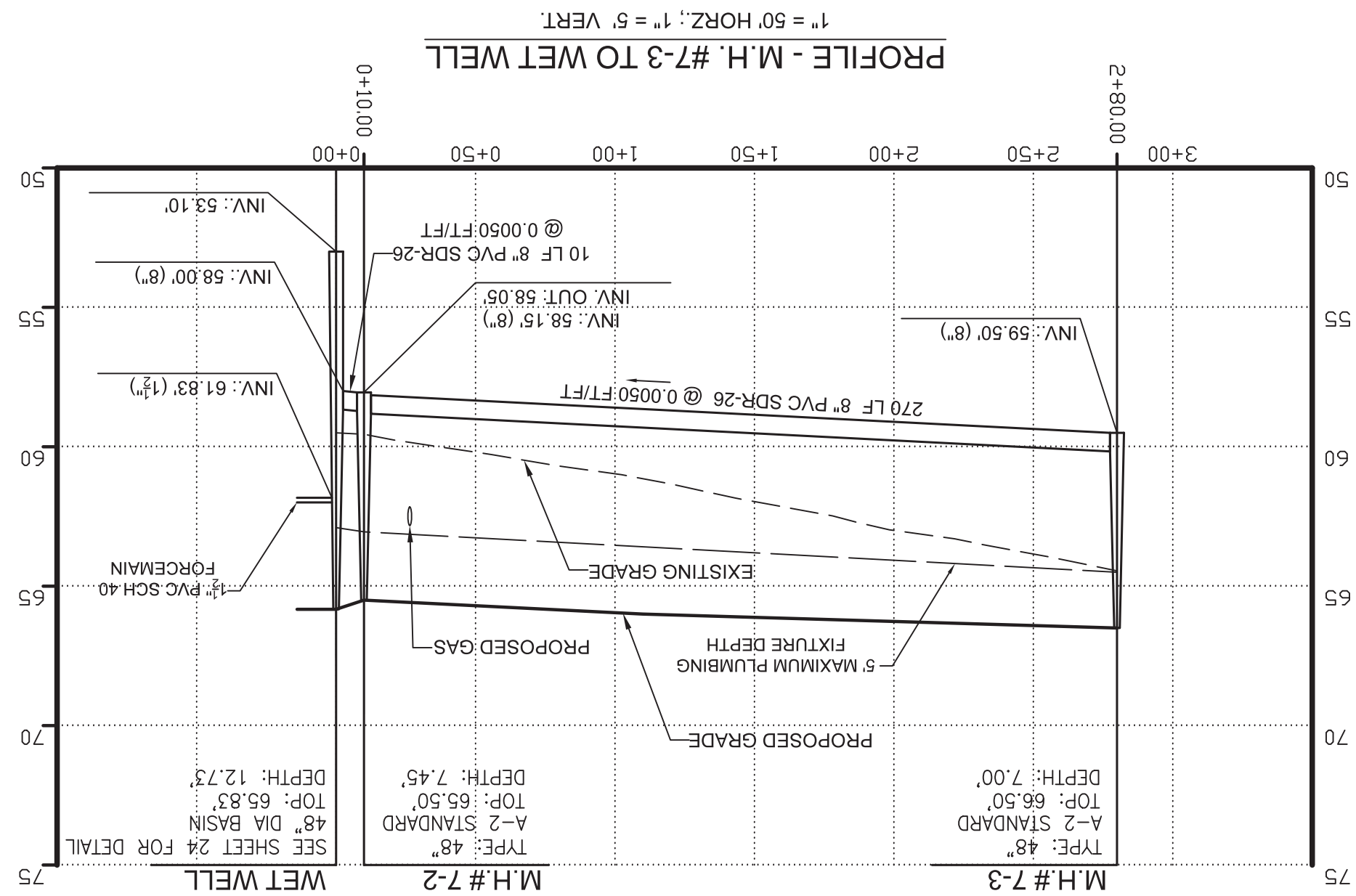
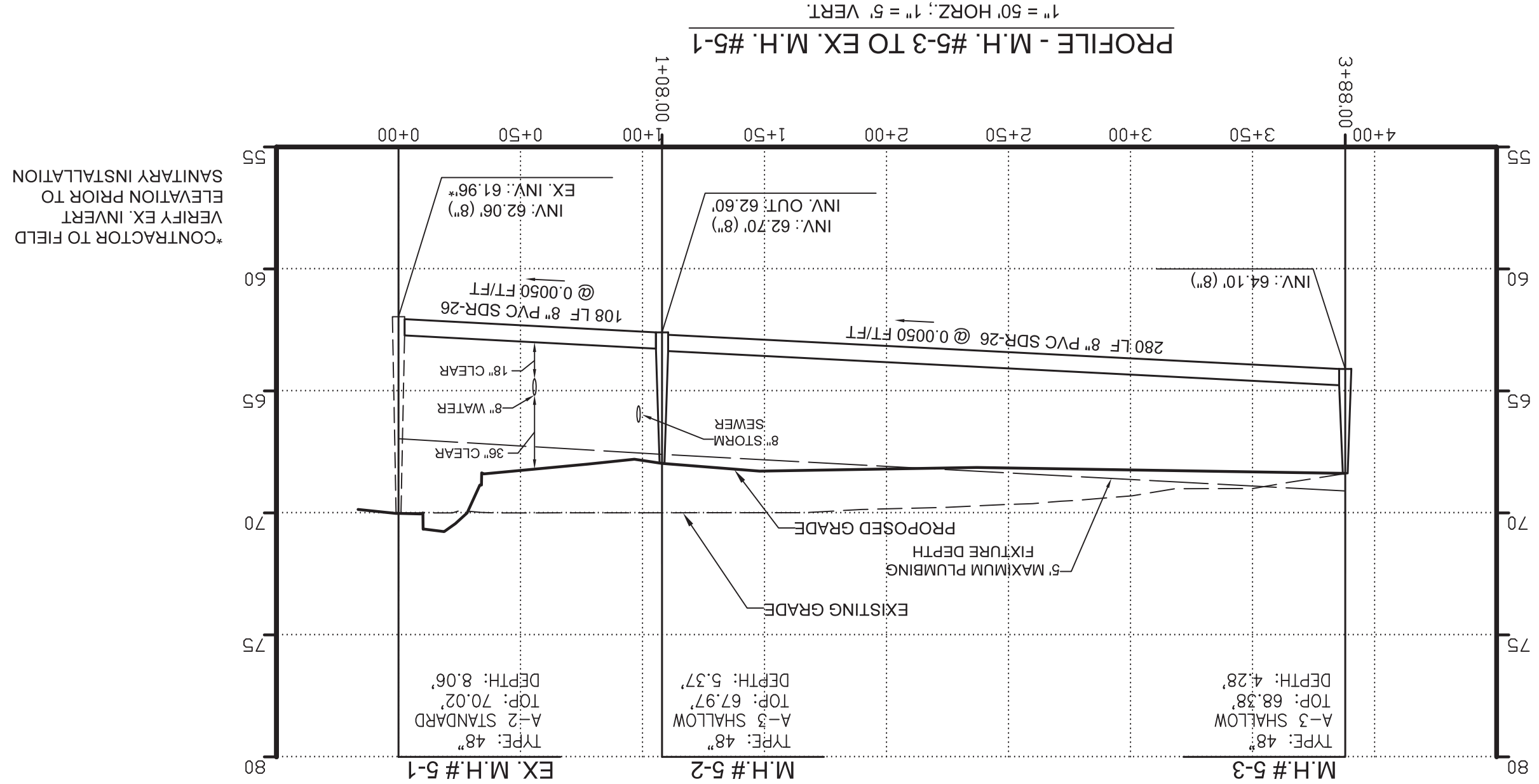
Sewer Lateral Table - Building 'A'

FROM	TO	UPSTREAM	DOWNSTREAM	INVERT ELEVATION	LENGTH (LF)	SLOPE	SIZE & TYPE
C.O. #1020	INV @ MAIN	64.44	64.08	17.8	2.0%	6" PVC SDR-26	2.2% 6" PVC SDR-26
C.O. #1020GT	GREASE TRAP IN	64.33	64.05	5.5	2.1%	6" PVC SDR-26	2.1% 6" PVC SDR-26
C.O. #1022	INV @ MAIN	64.33	63.95	17.8	2.1%	6" PVC SDR-26	2.1% 6" PVC SDR-26
C.O. #1022GT	GREASE TRAP IN	64.33	64.23	5.0	2.0%	6" PVC SDR-26	2.0% 6" PVC SDR-26
C.O. #1024GT	GREASE TRAP IN	64.33	64.17	5.5	3.2%	6" PVC SDR-26	3.2% 6" PVC SDR-26
C.O. #1024	INV @ MAIN	64.33	63.82	17.8	2.9%	6" PVC SDR-26	2.9% 6" PVC SDR-26
C.O. #1026GT	GREASE TRAP IN	64.33	63.68	17.8	3.6%	6" PVC SDR-26	3.6% 6" PVC SDR-26
C.O. #1026	INV @ MAIN	64.33	63.47	5.0	3.2%	6" PVC SDR-26	3.2% 6" PVC SDR-26
C.O. #1028GT	GREASE TRAP IN	64.33	63.54	17.8	4.4%	6" PVC SDR-26	4.4% 6" PVC SDR-26
C.O. #1028	INV @ MAIN	64.33	63.16	5.5	15.2%	6" PVC SDR-26	15.2% 6" PVC SDR-26
C.O. #1030GT	GREASE TRAP IN	64.33	63.41	17.8	5.2%	6" PVC SDR-26	5.2% 6" PVC SDR-26
C.O. #1030	INV @ MAIN	64.33	63.17	5.5	3.2%	6" PVC SDR-26	3.2% 6" PVC SDR-26
C.O. #1032GT	GREASE TRAP IN	64.33	63.27	17.8	5.9%	6" PVC SDR-26	5.9% 6" PVC SDR-26
C.O. #1032	INV @ MAIN	64.33	63.00	17.8	7.5%	6" PVC SDR-26	7.5% 6" PVC SDR-26
C.O. #1036GT	GREASE TRAP IN	64.33	62.97	5.0	3.2%	6" PVC SDR-26	3.2% 6" PVC SDR-26
C.O. #1036	INV @ MAIN	64.33	62.97	5.5	18.8%	6" PVC SDR-26	18.8% 6" PVC SDR-26
C.O. #1038GT	GREASE TRAP IN	64.33	62.87	17.8	8.2%	6" PVC SDR-26	8.2% 6" PVC SDR-26
C.O. #1038	INV @ MAIN	64.33	62.87	17.8	8.2%	6" PVC SDR-26	8.2% 6" PVC SDR-26
C.O. #1038GT	GREASE TRAP IN	64.33	64.17	5.0	3.2%	6" PVC SDR-26	3.2% 6" PVC SDR-26
C.O. #1040GT	GREASE TRAP OUT	64.33	64.33	5.0	3.2%	6" PVC SDR-26	3.2% 6" PVC SDR-26
C.O. #1040	INV @ MAIN	64.33	62.76	17.8	8.8%	6" PVC SDR-26	8.8% 6" PVC SDR-26
C.O. #1040GT	GREASE TRAP OUT	64.33	64.33	5.0	3.2%	6" PVC SDR-26	3.2% 6" PVC SDR-26
GREASE TRAP OUT	INV @ MAIN	64.00	62.84	5.5	21.2%	6" PVC SDR-26	21.2% 6" PVC SDR-26
Total number of proposed cleanouts:	22						
Total length of 6" PVC SDR-26:	311.3						

FROM	TO	UPSTREAM	DOWNSTREAM	INVERT ELEVATION	LENGTH (LF)	SLOPE	SIZE & TYPE
C.O. #1018GT	GREASE TRAP IN	60.50	60.33	60.33	5.6%	6" PVC SDR-26	5.6% 6" PVC SDR-26
C.O. #1018	INV @ MAIN	60.50	59.46	9.0	7.9%	6" PVC SDR-26	7.9% 6" PVC SDR-26
C.O. #1016GT	GREASE TRAP IN	60.50	59.43	19.3	5.5%	6" PVC SDR-26	5.5% 6" PVC SDR-26
C.O. #1016	INV @ MAIN	60.50	59.34	9.0	9.2%	6" PVC SDR-26	9.2% 6" PVC SDR-26
C.O. #1014GT	GREASE TRAP IN	60.50	59.31	19.3	6.2%	6" PVC SDR-26	6.2% 6" PVC SDR-26
C.O. #1014	INV @ MAIN	60.50	59.21	9.0	10.6%	6" PVC SDR-26	10.6% 6" PVC SDR-26
C.O. #1012GT	GREASE TRAP IN	60.50	59.18	19.3	7.6%	6" PVC SDR-26	7.6% 6" PVC SDR-26
C.O. #1012	INV @ MAIN	60.50	59.04	19.3	7.6%	6" PVC SDR-26	7.6% 6" PVC SDR-26
C.O. #1010GT	GREASE TRAP IN	60.50	59.01	9.0	12.9%	6" PVC SDR-26	12.9% 6" PVC SDR-26
C.O. #1010	INV @ MAIN	60.50	58.91	19.3	8.3%	6" PVC SDR-26	8.3% 6" PVC SDR-26
C.O. #1008GT	GREASE TRAP IN	60.50	58.88	9.0	14.4%	6" PVC SDR-26	14.4% 6" PVC SDR-26
C.O. #1008	INV @ MAIN	60.50	58.79	3.0	5.6%	6" PVC SDR-26	5.6% 6" PVC SDR-26
C.O. #1006GT	GREASE TRAP IN	60.50	58.76	19.3	9.0%	6" PVC SDR-26	9.0% 6" PVC SDR-26
C.O. #1006	INV @ MAIN	60.50	58.65	3.0	5.6%	6" PVC SDR-26	5.6% 6" PVC SDR-26
C.O. #1004GT	GREASE TRAP IN	60.50	58.62	19.3	9.8%	6" PVC SDR-26	9.8% 6" PVC SDR-26
C.O. #1004	INV @ MAIN	60.50	58.51	9.0	18.5%	6" PVC SDR-26	18.5% 6" PVC SDR-26
C.O. #1002GT	GREASE TRAP IN	60.50	58.35	19.3	11.2%	6" PVC SDR-26	11.2% 6" PVC SDR-26
C.O. #1002	INV @ MAIN	60.50	58.33	3.0	5.6%	6" PVC SDR-26	5.6% 6" PVC SDR-26
C.O. #1000GT	GREASE TRAP OUT	60.50	58.33	3.0	5.6%	6" PVC SDR-26	5.6% 6" PVC SDR-26
C.O. #1000	INV @ MAIN	60.50	58.21	9.0	21.8%	6" PVC SDR-26	21.8% 6" PVC SDR-26
GREASE TRAP OUT	INV @ MAIN	60.50	58.18	19.3	12.0%	6" PVC SDR-26	12.0% 6" PVC SDR-26
Total number of proposed cleanouts:	20						
Total length of 6" PVC SDR-26:	313.0						

C.O. #	Lateral Invert at to Sanitary Sewer Main (feet)	Plumbing Fixture Elevation (5' plus lateral invert)	Minimum Elevation of Upstream MH Number and Rim Elevation (feet)	Upstream MH Number and Rim Elevation (feet)	Downstream MH Number	Distance of Lateral Connection from Upstream Manhole (feet)	Backwater Required Valve
1018GT	59.46	64.46	66.75	66.75	MH 7-3	66.50	8
1018	59.43	64.43	66.75	66.75	MH 7-3	66.50	14
1016GT	59.34	64.34	66.75	66.75	MH 7-3	66.50	33
1016	59.31	64.31	66.75	66.75	MH 7-2	66.50	39
1014GT	59.21	64.21	66.75	66.75	MH 7-3	66.50	58
1014	59.18	64.18	66.75	66.75	MH 7-2	66.50	64
1012GT	59.04	64.04	66.75	66.75	MH 7-3	66.50	92
1012	59.01	64.01	66.75	66.75	MH 7-3	66.50	98
1010GT	58.88	63.88	66.75	66.75	MH 7-3	66.50	119
1010	58.91	63.91	66.75	66.75	MH 7-3	66.50	125
1008GT	58.79	63.79	66.75	66.75	MH 7-3	66.50	143
1008	58.76	63.76	66.75	66.75	MH 7-3	66.50	149
1006GT	58.65	63.65	66.75	66.75	MH 7-3	66.50	171
1006	58.62	63.62	66.75	66.75	MH 7-3	66.50	177
1004GT	58.51	63.51	66.75	66.75	MH 7-3	66.50	199
1004	58.48	63.48	66.75	66.75	MH 7-3	66.50	205
1002GT	58.35	63.35	66.75	66.75	MH 7-3	66.50	231
1002	58.32	63.32	66.75	66.75	MH 7-3	66.50	237
1000GT	58.21	63.21	66.75	66.75	MH 7-2	66.50	259
1000	58.18	63.18	66.75	66.75	MH 7-2	66.50	265

Sewer Lateral Table - Building 'B'



DESIGN	JLB
DRAFT	JLB
APPROVED	DDH
DATE	05/09/25
SCALE	AS SHOWN

DATE	REVISION	BY

SANITARY SEWER PROFILES & WATER CROSSINGS
FOR PROJECT KNOWN AS
PARCEL 4 & 7
LEVELS CROSSING
CHESAPEAKE BAY WATERSHED - TOWN OF MIDDLETOWN - NEW CASTLE COUNTY - STATE OF DELAWARE

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