

GENERAL NOTES

PART I

- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON JUNE 2017 BY ROBERT H. VOGEL ENGINEERING, INC.
- HORIZONTAL AND VERTICAL SURVEY CONTROLS:
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 508A AND 508B. ALL VERTICAL CONTROLS ARE BASED ON NAVD 88 VERTICAL CONTROLS PROVIDED ON DRAWINGS ARE:
GEODETIC SURVEY CONTROL 476C (N 528939.75 E 1354223.59)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT.
GEODETIC SURVEY CONTROL 47H2 (N 529706.44 E 1355445.38)
BRASS DISC SET ON TOP OF A CONCRETE MONUMENT.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWING, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATIONS OF THE TEST PITS. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN THESE PLANS:
AT&T 1-800-252-1133
BGE (CONSTRUCTION SERVICES) 410-637-8713
BGE (EMERGENCY) 410-685-0123
BUREAU OF UTILITIES 410-313-4900
COLONIAL PIPELINE CO 410-795-1390
MISS UTILITY 1-800-257-7777
STATE HIGHWAY ADMINISTRATION 410-531-5533
VERIZON 1-800-743-0033
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR. THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(c) OF THE HOWARD COUNTY CODE.

PART II - WATER:

- ALL WATER MAINS SHALL BE C900 PVC-DR-18 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL DIP AND PVC WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
- FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AWWA STANDARD C900 FOR PIPE PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF THE PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
- UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION SEVENTEEN (17) POUND MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSES. TWELVE (12) POUND ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL "TEES" USED WITH PVC MAINS SHALL BE DUCTILE IRON.
- PROPER ASSEMBLY OF GASKETED PVC PIPE JOINTS: THE MANUFACTURER'S INSERTION LINE OF GASKETED PVC PIPE JOINTS INDICATES THE MAXIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. AFTER ASSEMBLY OF THE JOINT, THE INSERTION LINE SHALL REMAIN VISIBLE. DUAL INSERTION LINES ON GASKETED PVC PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. THE CONTRACTOR SHALL NOT OVER INSERT OR OVER HOME THE SPIGOT INTO THE BELL OF PVC PIPE.
- ALL CHANGES IN HORIZONTAL OR VERTICAL DIRECTION OF PVC WATER PIPE SHALL BE MADE WITH STANDARD BENDS, 5-DEGREE SWEEPS OR HIGH DEFLECTION (HD) COUPLINGS. NO BENDING OF THE PIPE OR DEFLECTING OF PVC PIPE JOINTS IS PERMITTED. WHERE HIGH DEFLECTION COUPLINGS OR 5-DEGREE SWEEPS ARE PERMITTED, THE CONTRACTOR SHALL PROVIDE ONE FULL PIPE LENGTH (20-FOOT LONG) ON EITHER SIDE OF THE HIGH DEFLECTION COUPLING OR 5-DEGREE SWEEP. THE CONTRACTOR SHALL USE A VIBRATORY PLATE COMPACTOR OR OTHER APPROVED MEANS TO THOROUGHLY COMPACT THE #57 STONE ON BOTH SIDES OF THE HIGH DEFLECTION COUPLINGS OR 5-DEGREE SWEEP, TAKING CARE NOT TO USE COMPACTOR EQUIPMENT DIRECTLY OVER THE FITTING.
PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL DEFLECTION OF 3-DEGREES 1-1/2-DEGREE ON EITHER END OF THE COUPLING. SHALL BE RATED FOR A MINIMUM 200 PSI MEETING THE REQUIREMENTS OF AWWA C900. SHALL HAVE A MINIMUM LAY LENGTH OF 5-INCHES AND SHALL HAVE CENTER STOPS. PVC HIGH DEFLECTION COUPLINGS SHALL BE CERTAINTED PVC HIGH DEFLECTION (HD) STOP COUPLINGS OR EQUAL. FIVE DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 225 PSI, DR18 MEETING THE REQUIREMENTS OF AWWA C900 AND SHALL BE MULTI FITTINGS (PEX) BLUE BRUTE DR18 OR EQUAL.
- WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 5-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF AWWA C-900 PVC PIPELINES, THE CONTRACTOR SHALL INSTALL DEVICES FOR THE PREVENTION OF OVER-INSERTION OF THE PVC PIPE INTO OR PLAIN ENDS INTO THE PUSH ON BELL JOINT ON BOTH SIDES OF THE HIGH DEFLECTION COUPLINGS AND 5 DEGREE SWEEPS. BELL STOPS SHALL BE PLACED AT THE PROPER INSERTION LINE FOR THE FITTING. THE BELL STOP SHALL BE MANUFACTURED OF DUCTILE IRON AND INCORPORATE AN EXPANSION RETENTION SPRING TO ALLOW FOR PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 MEGA-STOP, AS MANUFACTURED BY EBAA IRON INC. OR APPROVED EQUAL.
- SPRINKLER SYSTEM FOR SINGLE RESIDENTIAL DWELLING UNITS SHALL HAVE WATER HOUSE CONNECTIONS AND WATER METERS THAT ARE SIZED IN ACCORDANCE WITH THE DESIGN OF THE SPRINKLER SYSTEMS. SPRINKLER SYSTEMS FOR SINGLE RESIDENTIAL DWELLINGS SHALL HAVE A MINIMUM OF 1.5" SERVICE CONNECTION WITH A 1" OUTSIDE METER SETTING.

PART III - SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL 05.22. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 5.03 OF THE SPECIFICATIONS AND WITH FINAL ROAD CONSTRUCTION F-19-031.

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John P. Reuter
SOIL CONSERVATION DISTRICT
DATE: 10/21/19

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
Chad Eubank
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 10.23.19

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Andrew...
CHIEF, BUREAU OF UTILITIES
DATE: 9-27-19

DMV2-18-009 NOTE:
DESIGN MANUAL WAIVER DMV2-18-009 WAS FORMALLY DENIED THROUGH WRITTEN NOTIFICATION IN A LETTER DATED MARCH 5, 2018. THE WAIVER SOUGHT TO CONSTRUCT THE WATER AND SEWER HOUSE CONNECTIONS SUCH THAT THE EDGE OF THE PUBLIC WATER, SEWER, AND UTILITY EASEMENT WOULD BE APPROXIMATELY 5' FROM THE PROPOSED TOWNHOUSE UNITS. A WAIVER TO SECTION 4.4.8.5 OF THE HOWARD COUNTY DESIGN MANUAL VOLUME II - WATER AND SEWER. ADDITIONALLY, THE REQUESTED PROPOSED DEPTH OF THE SEWER MAIN WOULD ONLY BE ABLE TO SERVE THE FIRST FLOOR WITH GRAVITY SEWER SERVICE. A WAIVER TO SECTION 4.3.3.b OF DESIGN MANUAL VOLUME II, BECAUSE THE SEWER MAIN IS ABLE TO BE CONSTRUCTED TO A DEPTH THAT WOULD ALSO BE ABLE TO SERVE THE BASEMENTS WITH GRAVITY SEWER SERVICE AND THE WATER AND SEWER HOUSE CONNECTIONS COULD BE RELOCATED SUCH THAT A REDUCTION IN THE PUBLIC EASEMENT'S STRUCTURE SETBACK WOULD NOT BE REQUIRED, THE COUNTY DENIED BOTH REQUESTS IN THE WAIVER.

TYPE OF BUILDING :	RESIDENTIAL
NO. OF UNITS :	10 SINGLE FAMILY ATTACHED
NO. OF SINGLE WATER HOUSE CONNECTIONS :	2
NO. OF TWIN WATER HOUSE CONNECTIONS :	4
NO. OF SINGLE SEWER HOUSE CONNECTIONS :	10
NO. OF TWIN SEWER HOUSE CONNECTIONS :	0
DRAINAGE AREA :	LITTLE PATUXENT RIVER
TREATMENT PLANT :	LITTLE PATUXENT WRP

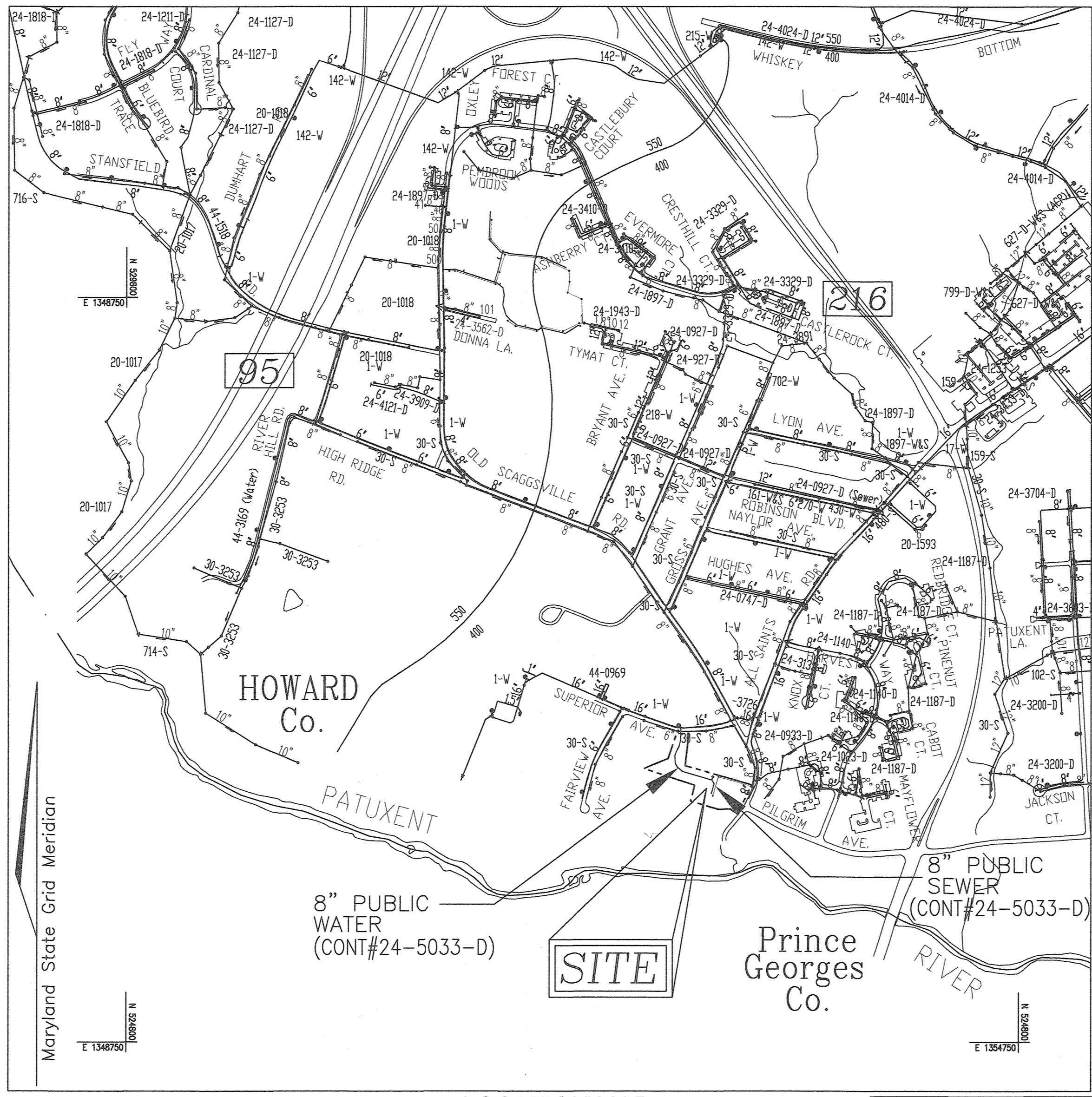
FINAL WATER AND SEWER CONSTRUCTION PLAN

FALCON PLACE

LOTS 1-10 & OPEN SPACE LOTS 11-12

CONT# 24-5033-D

HOWARD COUNTY, MARYLAND



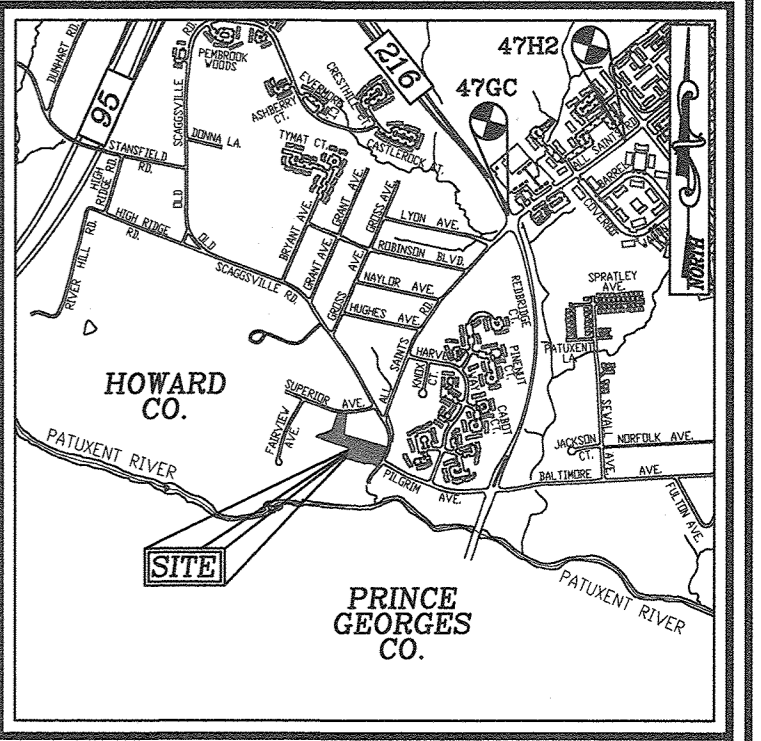
LOCATION MAP
SCALE: 1"=600'

WATER ZONE: 400
TEST PRESSURE: 198
TEST GRADIENT: 678

BENCHMARKS

HOWARD COUNTY BENCHMARK 476C (CONC. MON.)
N 528939.75 E 1354223.59 ELEV. 226.32
LOCATION: ISLE AT INTERSECTION OF RT. 216 AND ALL SAINTS RD.

HOWARD COUNTY BENCHMARK 47H2 (CONC. MON.)
N 529706.44 E 1355445.38 ELEV. 256.12
LOCATION: ALL SAINTS RD. 0.4 MI. SOUTH OF WHISKEY BOTTOM RD.



VICINITY MAP
SCALE: 1"=2,000'
ADC MAP COORDINATE: PAGE: 40, GRID: A8

LEGEND

- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING WATER MAIN
- PROPOSED SEWER MAIN
- PROPOSED TERMINAL SEWER MANHOLE
- PROPOSED WATER MAIN
- FIRE HYDRANT
- PROPOSED VALVE
- PROPOSED TEE
- PROPOSED STORM DRAIN
- EXISTING STORM DRAIN
- EXISTING SEWER
- EXISTING SEWER MANHOLE
- PRIVATE WATER HOUSE CONNECTION
- PRIVATE SEWER HOUSE CONNECTION
- PROPOSED SIGN
- PROPOSED LIGHT

QUANTITIES

NAME OF UTILITY CONTRACTOR : Highland Turf Inc. (HTI)				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE :				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
WATER				
8" WATER (PVC C-900)	629 LF	629 LF	C900 DR18	NATIONAL PIPE & PLASTICS NORTH
8" WATER (HD) PVC	23 LF	23 LF	C900 DR18	NATIONAL PIPE & PLASTICS NORTH
16" X 8" TAPPING SLEEVE & V.	1 EA	1 EA	TAPPING GRY	SMITH BLAIR / MUELLER CO.
8" X 8" TEE	1 EA	1 EA	EPOXY	TYLER/UNION FOUNDRY
8" VALVE	1 EA	1 EA	GATE	MUELLER CO.
FIRE HYDRANT & TEST STATION	1 EA	1 EA	FIRE HYDRANT	MUELLER CO.
8" - 1/8" HORIZ. BEND	2 EA	2 EA	EPOXY	TYLER/UNION FOUNDRY
8" - 1/16" HORIZ. BEND	4 EA	4 EA	EPOXY	TYLER/UNION FOUNDRY
8" - 1/32" HORIZ. BEND	3 EA	3 EA	EPOXY	TYLER/UNION FOUNDRY
8" - 5" VERT. SWEEP	1 EA	1 EA	PVC	MULTI FITTINGS
8" - 2" VERT. COUPLING	2 EA	2 EA	PVC	MULTI FITTINGS
1 1/2" WHC	180 LF	180 LF	COPPER	MUELLER/LEERO
8" CAP + BUTTRISS	1 EA	1 EA	EPOXY	TYLER/UNION FOUNDRY
8" - 1/8" VERT. BEND	4 EA	4 EA	EPOXY	TYLER/UNION FOUNDRY
SEWER				
STANDARD MANHOLE	8 EA	8 EA	PRECAST	ATLANTIC CONCRETE
8" PVC SEWER	367 LF	367 LF	PVC 50836	NATIONAL PIPE & PLASTICS NORTH
4" SHW	330 LF	330 LF	PVC 50836	NATIONAL PIPE & PLASTICS NORTH

OWNER (P. 428 LOT 10)

IRMA M. HARDING
JOAN B. HARDING
10029 SUPERIOR AVE.
LAUREL, MD 20723
(410) 480-0023

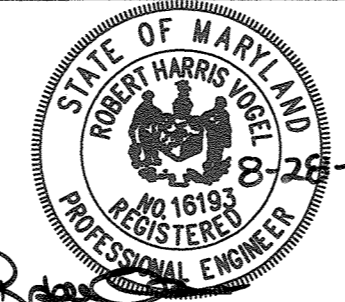
OWNER (P. 100)

NORMAN E. GIDDINGS
JANET E. GIDDINGS
9063 OLD SCARSDALE RD.
LAUREL, MD 20723
(410) 480-0023

DEVELOPER

TRINITY HOMES MARYLAND, LLC
3675 PARK AVE., SUITE 301
ELICOTT CITY, MD 21043
(410) 480-0023

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS & SURVEYORS PLANNERS
3300 NORTH RIDGE ROAD, SUITE 110
ELICOTT CITY, MD 21043
TEL: 410.461.7866 FAX: 410.461.8961



PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2020

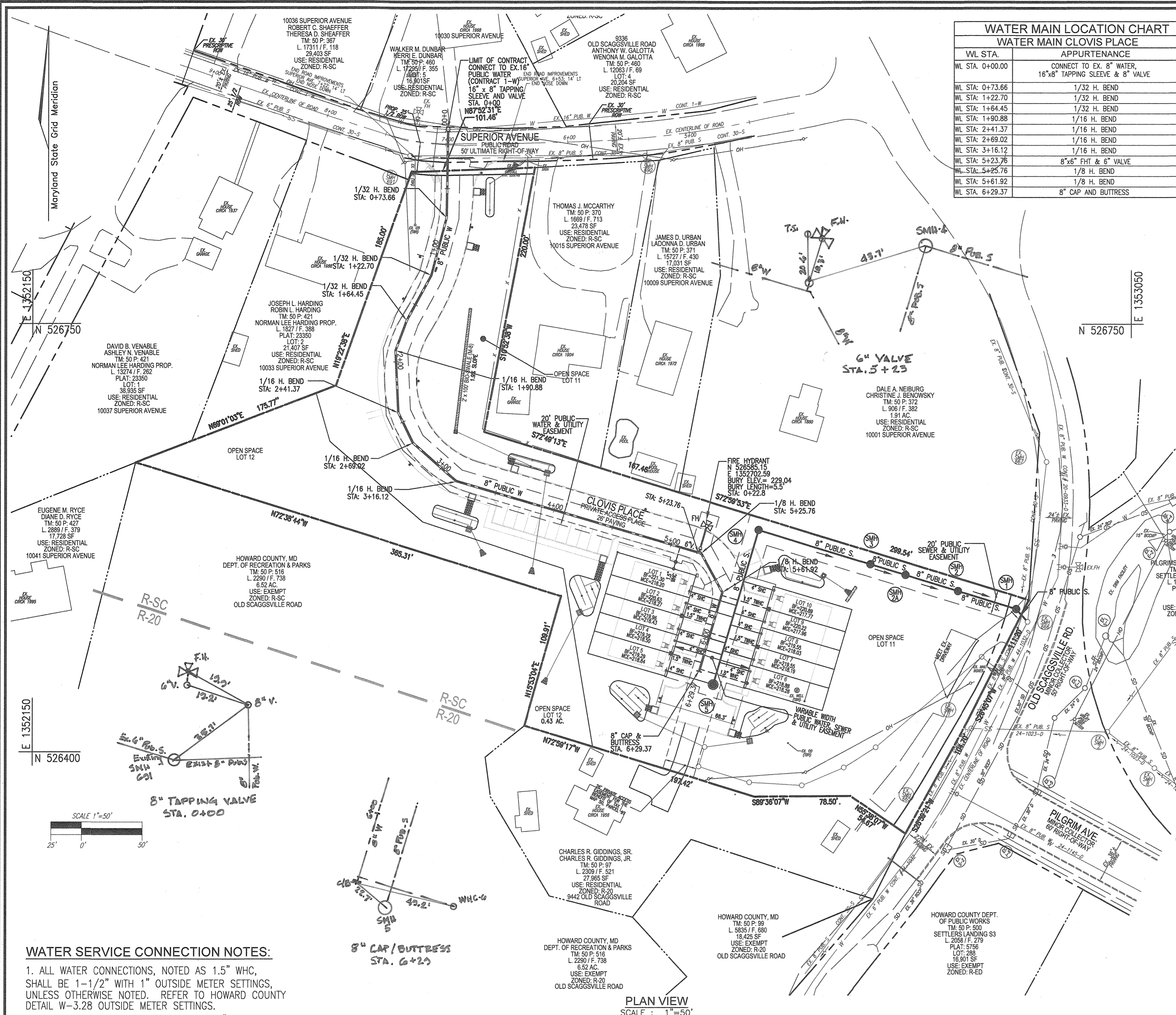
DES:	RHV
DRN:	LG
CHK:	RHV
DATE:	SEPTEMBER 2019
NO.	
REVISION	
DATE	

FINAL WATER & SEWER PLAN
CONT. 24-5033-D

FALCON PLACE
LOTS 1-10 & OPEN SPACE LOTS 11-12

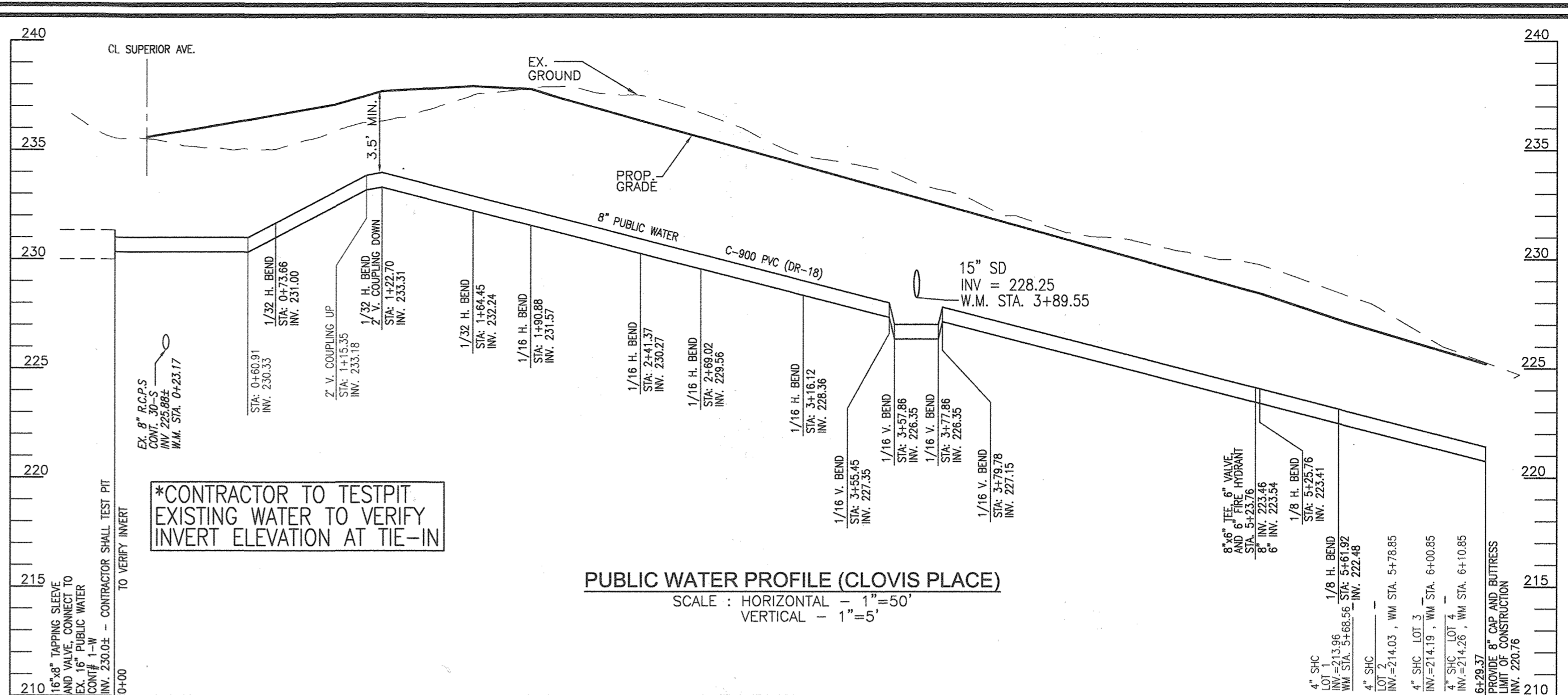
TAX MAP 50, GRID 02
6TH ELECTION DISTRICT
ZONED: R-SC
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 2



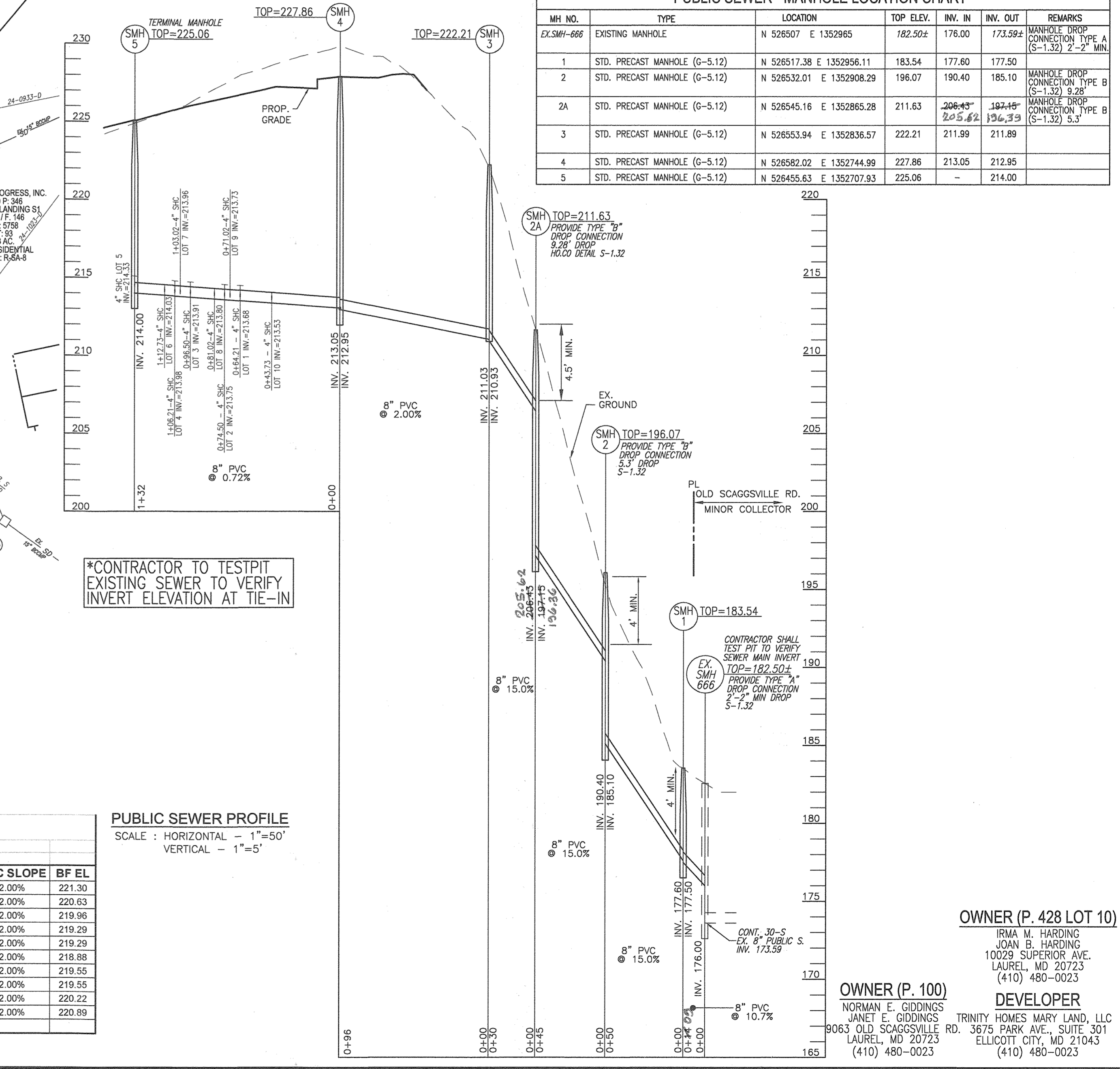
WATER MAIN LOCATION CHART
WATER MAIN CLOVIS PLACE

WL STA.	APPURTENANCE
WL STA. 0+00.00	CONNECT TO EX. 8" WATER 16"x8" TAPPING SLEEVE & 8" VALVE
WL STA. 0+73.66	1/32 H. BEND
WL STA. 1+22.70	1/32 H. BEND
WL STA. 1+64.45	1/32 H. BEND
WL STA. 1+90.88	1/16 H. BEND
WL STA. 2+41.37	1/16 H. BEND
WL STA. 2+69.02	1/16 H. BEND
WL STA. 3+16.12	1/16 H. BEND
WL STA. 5+23.76	8"x6" FHT & 6" VALVE
WL STA. 5+25.76	1/8 H. BEND
WL STA. 5+61.92	1/8 H. BEND
WL STA. 6+29.37	8" CAP AND BUTTRESS



PUBLIC SEWER - MANHOLE LOCATION CHART

MH NO.	TYPE	LOCATION	TOP ELEV.	INV. IN.	INV. OUT.	REMARKS
EX. SMH-666	EXISTING MANHOLE	N 526507 E 1352965	182.50±	176.00	173.59±	MANHOLE DROP CONNECTION TYPE A (S-1.32) 2'-2" MIN.
1	STD. PRECAST MANHOLE (0-512)	N 526517.38 E 1352956.11	183.54	177.60	177.50	MANHOLE DROP CONNECTION TYPE B (S-1.32) 3'-0" MIN.
2	STD. PRECAST MANHOLE (0-512)	N 526532.01 E 1352908.29	196.07	190.40	185.10	MANHOLE DROP CONNECTION TYPE B (S-1.32) 3'-0" MIN.
2A	STD. PRECAST MANHOLE (0-512)	N 526545.16 E 1352865.28	211.63	206.45±	196.39±	MANHOLE DROP CONNECTION TYPE B (S-1.32) 5'-3" MIN.
3	STD. PRECAST MANHOLE (0-512)	N 526553.94 E 1352836.57	222.21	211.99	211.89	
4	STD. PRECAST MANHOLE (0-512)	N 526582.02 E 1352744.99	227.86	213.05	212.95	
5	STD. PRECAST MANHOLE (0-512)	N 526455.63 E 1352707.93	225.06	213.00	214.00	



MINIMUM CELLAR ELEVATION CHART

LOT #	EL @ MAIN	SHC/DSHC	DIST TO ESMT	EL @ R/W	DIST ON LOT	EL @ HOUSE	MCE*	SHC SLOPE	BF EL
1	213.68	SHC	40.17	214.49	67	215.70	218.20	2.00%	221.30
2	213.75	SHC	40.17	214.56	67	215.77	218.27	2.00%	220.63
3	213.91	SHC	40.17	214.72	67	215.93	218.43	2.00%	219.96
4	213.99	SHC	40.17	214.79	67	216.00	218.50	2.00%	219.29
5	214.33	SHC	40.17	215.13	67	216.34	218.84	2.00%	219.29
6	214.03	SHC	26.17	214.55	67	215.76	218.26	2.00%	218.88
7	213.96	SHC	26.17	214.48	67	215.69	218.19	2.00%	219.55
8	213.80	SHC	26.17	214.32	67	215.53	218.03	2.00%	219.55
9	213.73	SHC	26.17	214.25	67	215.46	217.96	2.00%	220.22
10	213.53	SHC	26.17	214.06	67	215.27	217.77	2.00%	220.89

WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE

UNIT	STREET ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
UNIT 1	XXXX CLOVIS PLACE	6" VALVE @ 10.0'	1" FHT @ 49.9'
UNIT 2	XXXX CLOVIS PLACE	SHC @ 11.5'	SHC @ 12.3'
UNIT 3	XXXX CLOVIS PLACE	SHC @ 11.5'	SHC @ 12.3'
UNIT 4	XXXX CLOVIS PLACE	SHC @ 10.0'	SHC @ 14.9'
UNIT 5	XXXX CLOVIS PLACE	SHC @ 10.0'	SHC @ 14.9'
UNIT 6	XXXX CLOVIS PLACE	SHC @ 10.0'	SHC @ 10.6'
UNIT 7	XXXX CLOVIS PLACE	SHC @ 10.0'	SHC @ 10.6'
UNIT 8	XXXX CLOVIS PLACE	SHC @ 12.0'	SHC @ 10.9'
UNIT 9	XXXX CLOVIS PLACE	SHC @ 12.0'	SHC @ 11.2'
UNIT 10	XXXX CLOVIS PLACE	SHC @ 11.0'	SHC @ 15.2'

SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE

UNIT	STREET ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
UNIT 1	XXXX CLOVIS PLACE	SHC @ 10.6'	6" VALVE @ 35.0'
UNIT 2	XXXX CLOVIS PLACE	WHC @ 10.6'	WHC @ 11.1'
UNIT 3	XXXX CLOVIS PLACE	WHC @ 12.3'	SHC @ 10.2'
UNIT 4	XXXX CLOVIS PLACE	SHC @ 10.0'	WHC @ 10.0'
UNIT 5	XXXX CLOVIS PLACE	WHC @ 14.9'	SHC @ 40.6'
UNIT 6	XXXX CLOVIS PLACE	WHC @ 10.9'	SHC @ 9.6'
UNIT 7	XXXX CLOVIS PLACE	SHC @ 9.6'	WHC @ 12.6'
UNIT 8	XXXX CLOVIS PLACE	WHC @ 10.9'	SHC @ 10.9'
UNIT 9	XXXX CLOVIS PLACE	SHC @ 12.6'	WHC @ 11.6'
UNIT 10	XXXX CLOVIS PLACE	WHC @ 15.2'	SHC @ 51.6'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

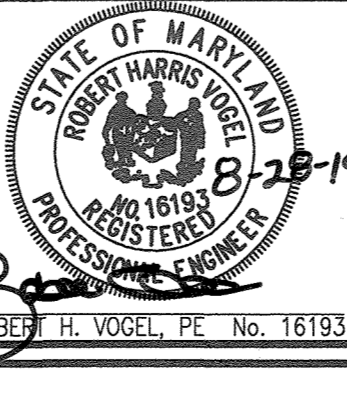
[Signature]
CHIEF, BUREAU OF UTILITIES
9-27-19

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
10-23-19

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS - SURVEYORS - PLANNERS
300 N. HETH RIDGE ROAD, SUITE 1110
ELICOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961

STATE OF MARYLAND
ROBERT H. VOGEL, PE No. 16193
PROFESSIONAL ENGINEER



PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 08-27-2020

DES: RHV
DRN: LG
CHK: RHV
DATE: SEPTEMBER 2019

FINAL WATER & SEWER PLAN
CONT. 24-5033-D
LAYOUT AND PROFILES

60' SCALE MAP NO. 50
BLOCK NO. 02

FALCON PLACE
LOTS 1-10 & OPEN SPACE LOTS 11-12

OWNER (P. 428 LOT 10)
IRMA W. HARDING
JOAN B. HARDING
10029 SUPERIOR AVE.
LAUREL, MD 20723
(410) 480-0023

OWNER (P. 100)
NORMAN E. GIDDINGS
JANET E. GIDDINGS
9063 OLD SCAGGSVILLE RD.
3675 PARK AVE., SUITE 301
LAUREL, MD 20723
(410) 480-0023

DEVELOPER
TRINITY HOMES MARYLAND, LLC
3675 PARK AVE., SUITE 301
ELICOTT CITY, MD 21043
(410) 480-0023

SCALE AS SHOWN
SHEET 2 OF 2

ZONED: R-SC
HOWARD COUNTY, MARYLAND