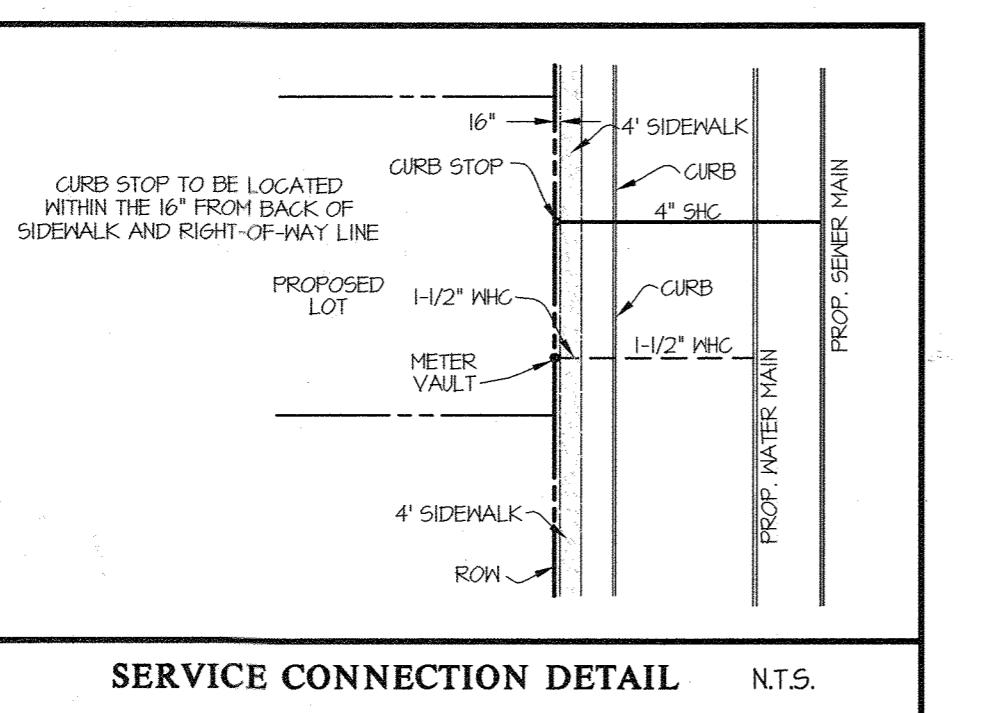
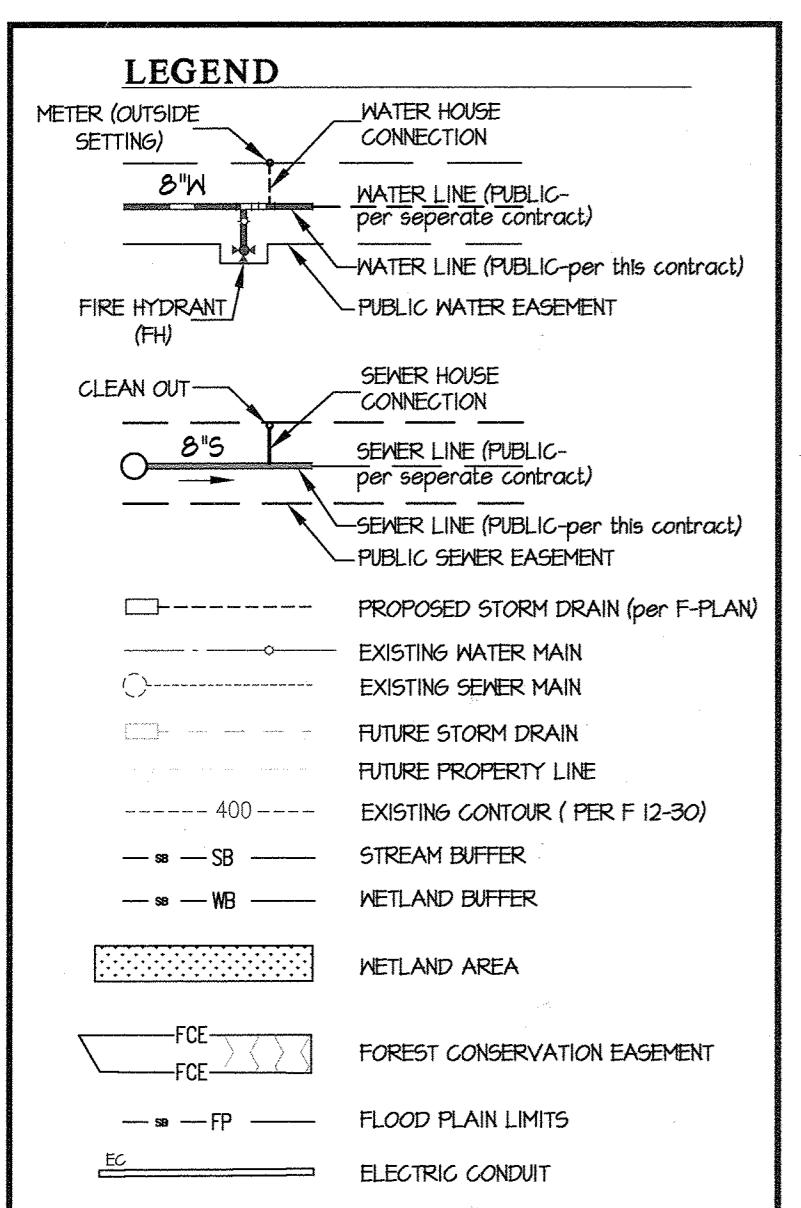


QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER
6" DIP WATER MAIN (CL. 54 DIP)	54 L.F.			
8" PVC WATER MAIN (G-900 DR-10)	1814 L.F.			
1-1/2" WHC	884 L.F.			
1" METER VAULT	39 EA.			
8"x8" TEE	3 EA.			
8"x6" FHT	4 EA.			
FIRE HYDRANTS	4 EA.			
8" 1/2" BEND	13 EA.			
8" 1" HDG	1 EA.			
8" 1.5" HDG	1 EA.			
8" 2" HDG	2 EA.			
8" 2.5" HDG	2 EA.			
8" 3" HDG	4 EA.			
8" VALVE	6 EA.			
8" 0.5" HDG	1 ea.			
8" PVC SEWER MAIN (SDR 35 PVC)	1142 L.F.			
8" DIP SEWER MAIN (CL. 54 DIP)	318 L.F.			
4" MANHOLES	20 EA.			
4" SHC	844 L.F.			
4" CLEANOUT	38 EA.			

NAME OF UTILITY CONTRACTOR:

SURVEY AND
DRAFTING DIV. CHECKBOX:
AS-BUILT DATE:.....



SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH F-17-001, SECTION 308 OF THE SPECIFICATIONS AT FINAL ROAD PLAN STAGE.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

SIGNATURE _____ DATE
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

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

APPROVED:
Alexander Bratchie 03/01/2021
HOWARD S.C.D.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
John R. L. 2/17/2020
CHIEF, BUREAU OF UTILITIES DATE

OWNER/DEVELOPER
WESTMOUNT DEVELOPMENT CORP.
301 INTERNATIONAL CIRCLE
SUITE 130
HUNT VALLEY, MD 21030
410-494-4494
ATTN: ROBERT GOODIER

3/19/21
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



DESIGNED BY JRD/AWL DATE FEB., 2021
DRAWN BY AWL
CHECKED BY G.L.W. No. 13013
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS 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. 12975 EXP. DATE: MAY 26, 2022
2/17/21
BY NO
REVISION
DATE 12/21/21
CLB
updated aty. table per plan changes

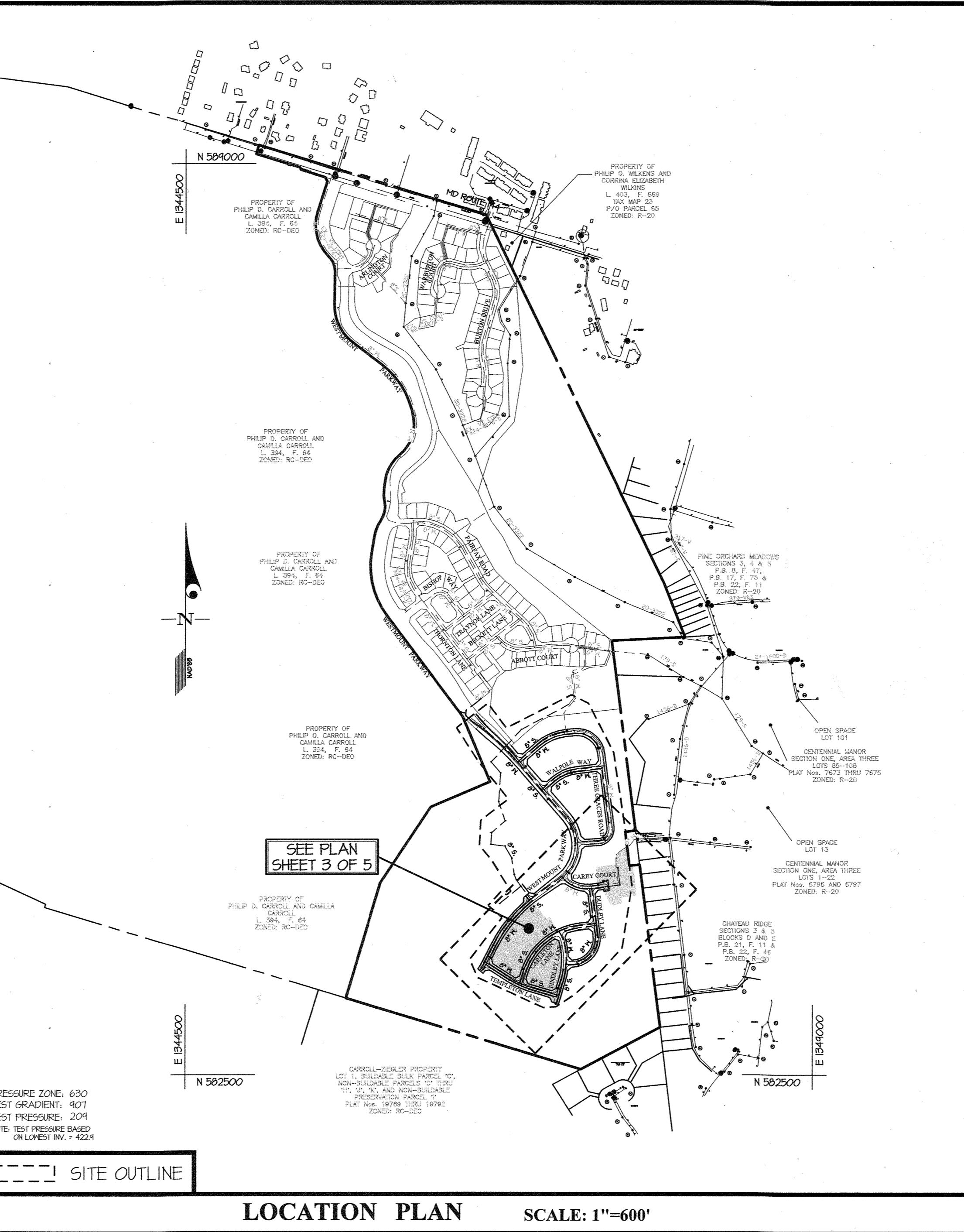
STATE OF MARYLAND
PROFESSIONAL ENGINEER'S
LICENSE

12975

2/17/21

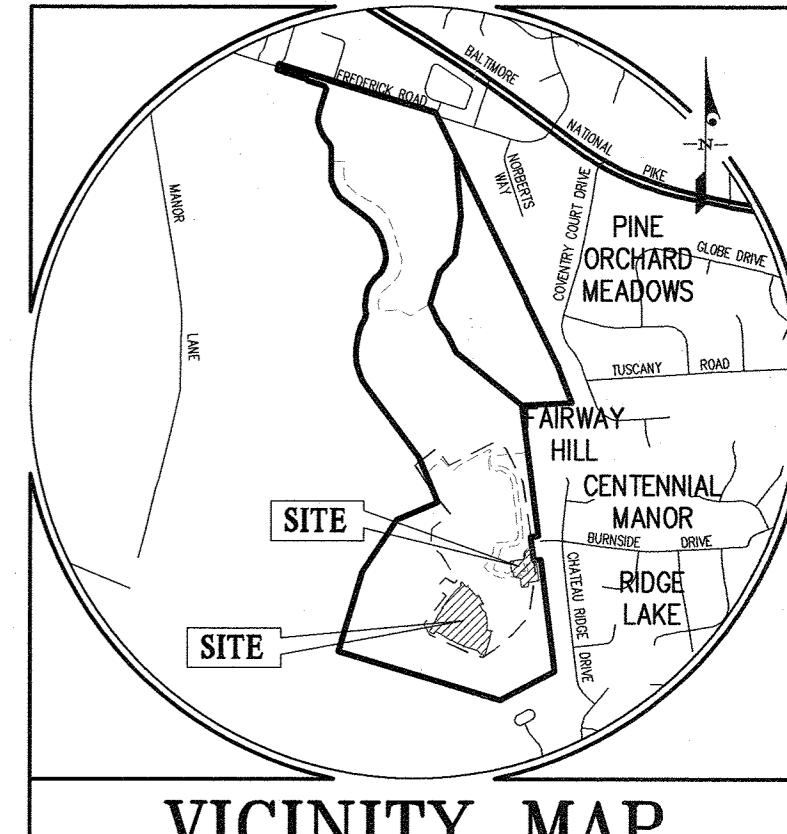
CLB

2/17/21



TYPE OF BUILDING	RESIDENTIAL
NUMBER OF UNITS	1639
NUMBER OF S.H.C.'s	38
NUMBER OF W.H.C.'s	34 SINGLE
AREA OF COMMERCIAL LOT/PARCEL	0.0 AC.
SEWER WATERSHED	MIDDLE PATUXENT
PUMPING STATION	N/A

NOTE: THE ADDITIONAL 20 S.H.C.'S AND 22 W.H.C.'S ARE BEING CONSTRUCTED UNDER THIS CONTRACT TO SERVE FUTURE LOTS.



BENCHMARKS
16HC: NORTHING: 584180.908 EASTING: 1341530.147
16HD: NORTHING: 584181.171 EASTING: 1340433.506
ADC MAP COORDINATES: MAP 4014 GRID J5 THRU JB GRID K5 THRU K8

GENERAL NOTES

Part I
1. 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.

2. Topographic field surveys were performed on March, 1997 by 3DI and then updated by grade checks performed by Gutschick, Little & Weber, PA and based on F-13-008. The boundary information is based upon a field survey prepared by Gutschick, Little & Weber, PA or about June, 2001.

3. Horizontal and Vertical Survey Controls
The coordinate system and vertical reference are based on Maryland State Reference System NAD 83/91 as projected by Howard County Geodetic Control Station No. 4680 and No. 416A. All vertical controls are based on NAVD 88. Vertical controls provided on the drawings are standard discs on concrete monuments.

4. All pipe elevations shown are invert elevations unless otherwise noted on the plans.

5. Clear all utility poles by a minimum of 12 inches. Clear all poles by 1'-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 the 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.

6. For details not shown on the drawing, and for materials and construction methods, see 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.

7. 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.

8. The contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:

AT&T: 1-800-252-1123
BGE (Construction Services): 410-637-8113
BGE (Emergency): 410-635-0123
Borinquen: 410-735-1000
Colonial Pipeline Co.: 410-745-1340
Miss Utility: 410-731-7777
State Highway Administration: 410-531-5533
Verizon: 1-800-149-0233

9. 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.

10. 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.

11. The contractor shall notify the Bureau of Highways, Howard County, at (410)-313-1450 at least five working days before open cutting or boring/digging of any County road for laying water/sewer main or house connections. The approval of these drawings will constitute compliance with DPN requirements per Section 10.14(a) of the Howard County Code.

Part II WATER

1. All water mains shall be D.P. Class 54 unless otherwise noted.

2. Tops of all water mains shall have a minimum of 3'-6" of cover unless otherwise noted.

3. Valves adjacent to tees shall be strapped to tees.

4. All fittings shall be buttressed or anchored with concrete in accordance with Standard Details unless otherwise provided for on the drawings.

5. 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.

6. The contractor shall not operate any water main valves on the existing water system.

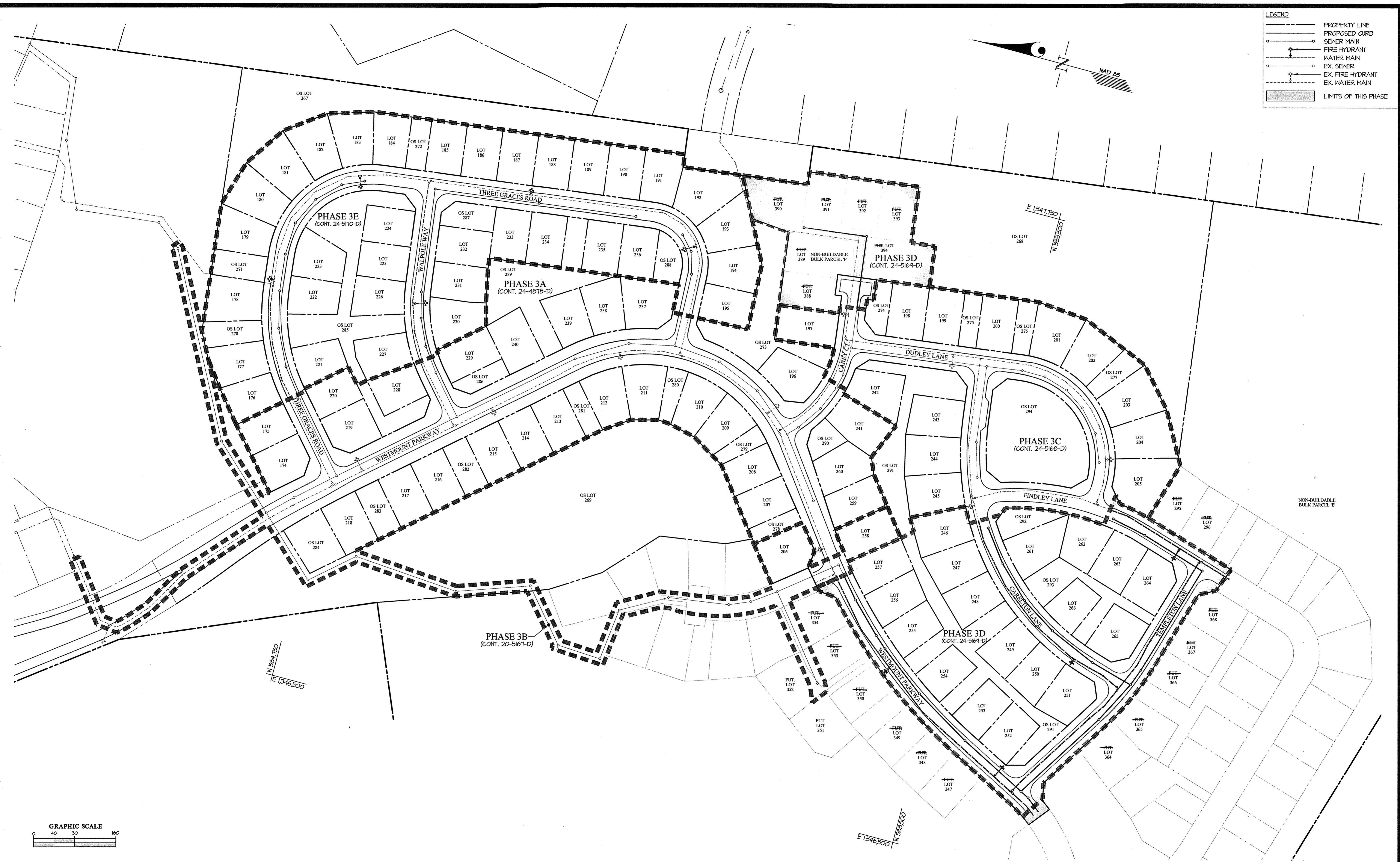
7. Traction wires and continuity test stations shall be installed on all DIP and PVC water mains in accordance with the Howard County Design Manual.

8. For PVC water mains, all records for the Quality Control and Qualification Test Requirements noted in Section 5.1 of the ANNA Standard C400 for PVC 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.

9. 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 stainless steel fittings and saddles used with PVC material. All "tees" used with PVC mains shall be ductile iron.

10. 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 insert or over home the spigot into the bell of the pipe.

11. All changes in horizontal or vertical alignment 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 cou



L:\CADD\DRAWINGS\13013\PLANS BY GLW\WS\FINALS\PHASE 3\PHASE 3D\13013-PH3D-FINALS-WS-KEY MAP.dwg,
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DEPARTMENT OF
PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF
PLANNING AND ZONING
HOWARD COUNTY, MARYLAND



The logo for GLW consists of a large, stylized, textured monogram where the letters G, L, and W are interconnected. To the left of the monogram is a vertical bar containing a smaller, solid black rectangle.

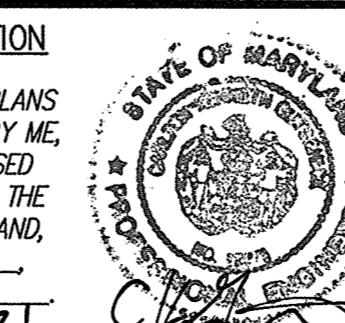
E, MD 20866 | GLWPA.CC
989-2524 | FAX: 301-421-41

DESIGNED BY
JRD/AWL
DRAWN BY:
AWL
CHECKED BY
DEV

D
F
2

G.L.
13

STATE B., 021 / No. 013	<p><u>PROFESSIONAL CERTIFICATE</u></p> <p>I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER LAWS OF THE STATE OF MARYLAND LICENSE NO. 12975 EXP. DATE: MAY 26, 2022</p> <p style="text-align: right;">2/21/</p>
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BY

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REVISION

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DATE

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0' SCAL

E MAP

NO. 23

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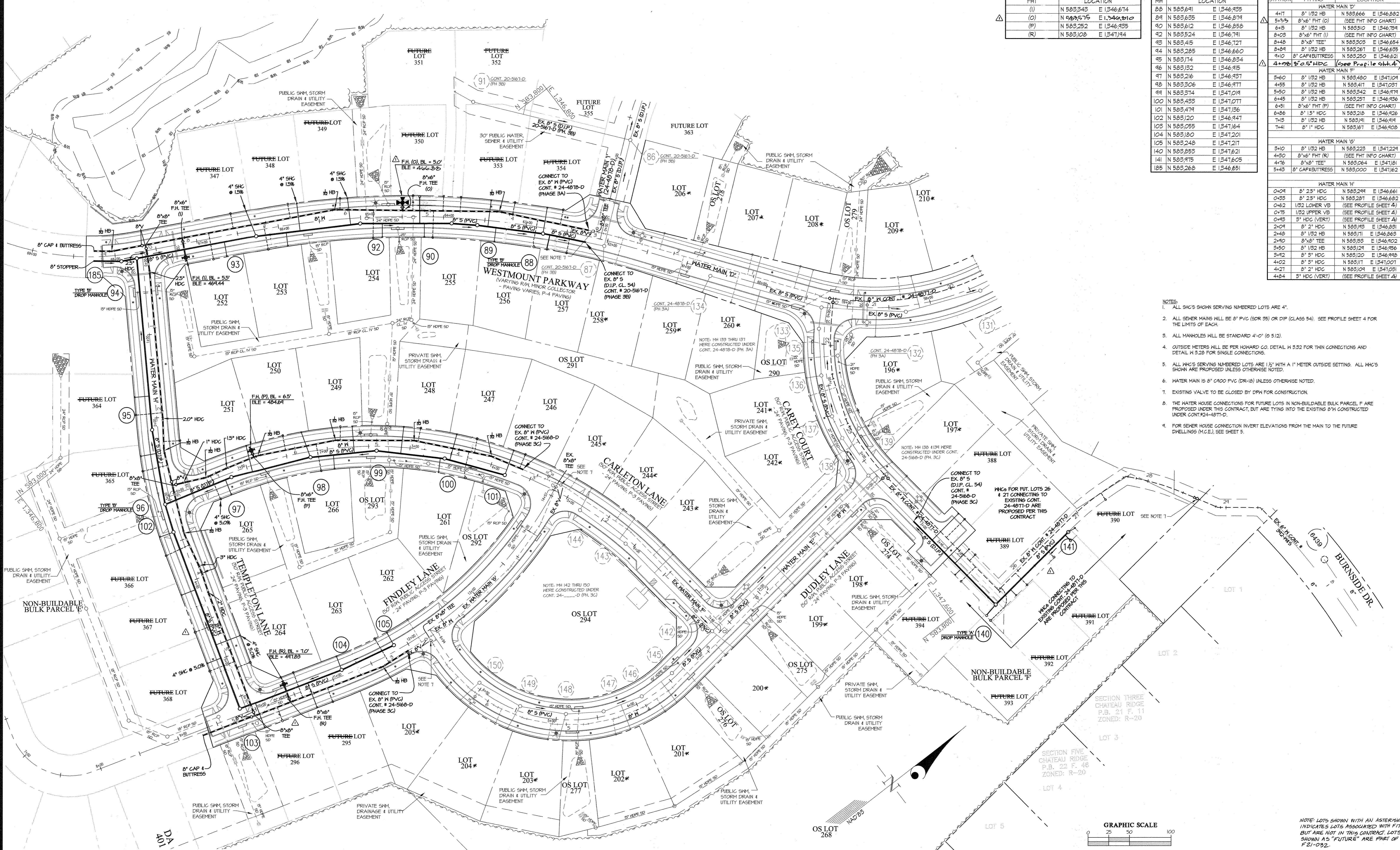
BLOCK

NO. 6

PHASING KEY MAP

WESTMOUNT
CONTRACT No. 24-5169-D
PHASE 3D

SCALE
1"=80'
SHEET
2 OF 5



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DEPARTMENT OF
PUBLIC WORKS

**DEPARTMENT OF
PLANNING AND ZONING
HOWARD COUNTY, MARYLAND**



DESIGNED BY: JRD	DATE FEB., 2021	<u>PROFESSIONAL CERTIFICATION</u>
DRAWN BY: AWL	G.L.W. No. 13013	I HEREBY CERTIFY THAT THESE PLANS 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. <u>12975</u> EXP. DATE: <u>MAY 26, 2022</u> <u>2/9/21</u>
CHECKED BY: DEV		

The seal of the State of Maryland, featuring a central shield with a plow, a sheaf of wheat, and a scroll, surrounded by a circular border with the words "THE STATE OF MARYLAND" and "1776".

kip	⚠
BY	NO

Rev. location FH 'O',
fittings chart

REVISION

locations & 12

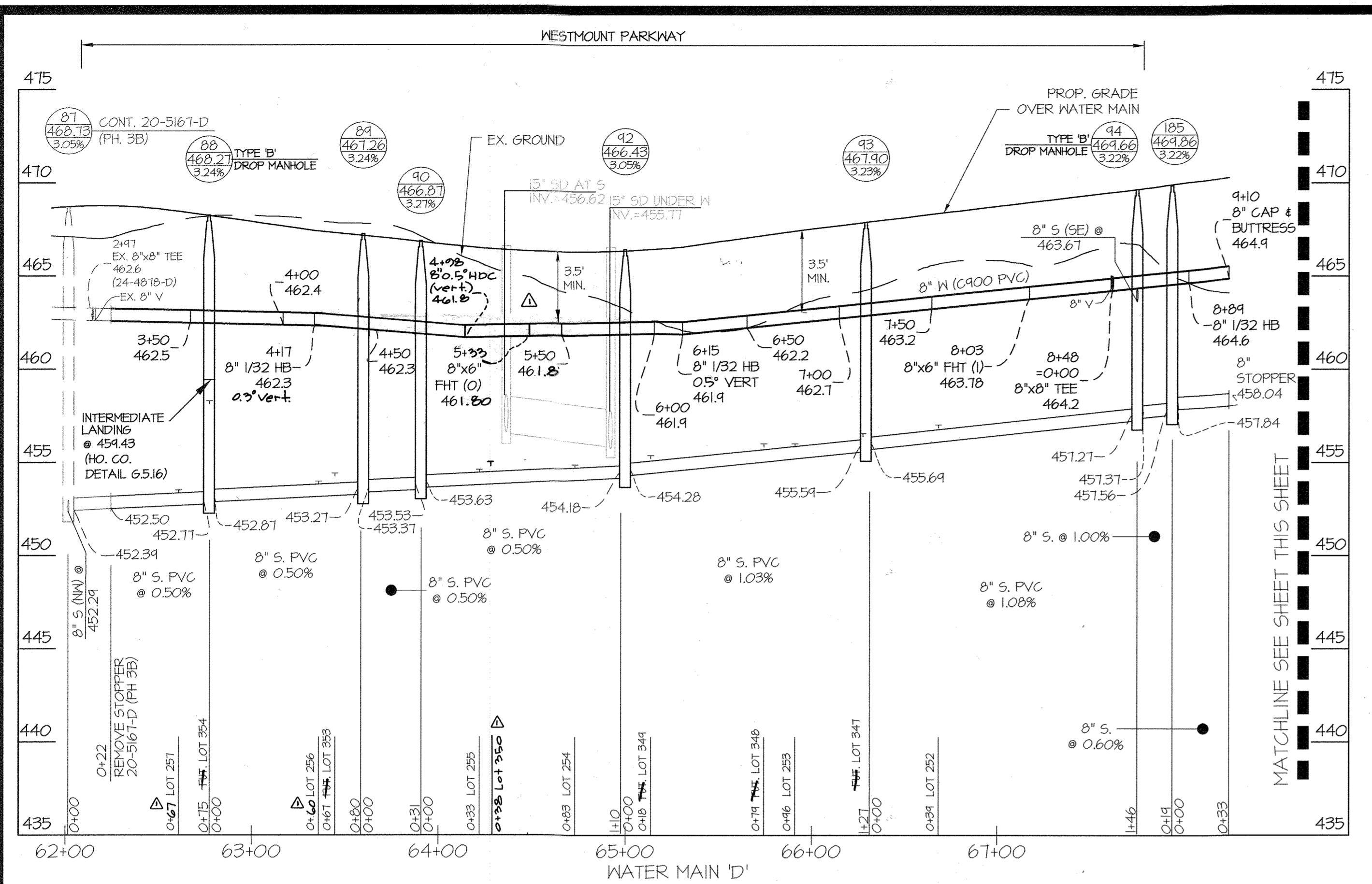
/21/21

WATER and SEWER PLAN

WESTMOUNT
CONTRACT No. 24-5169-I
PHASE 3D

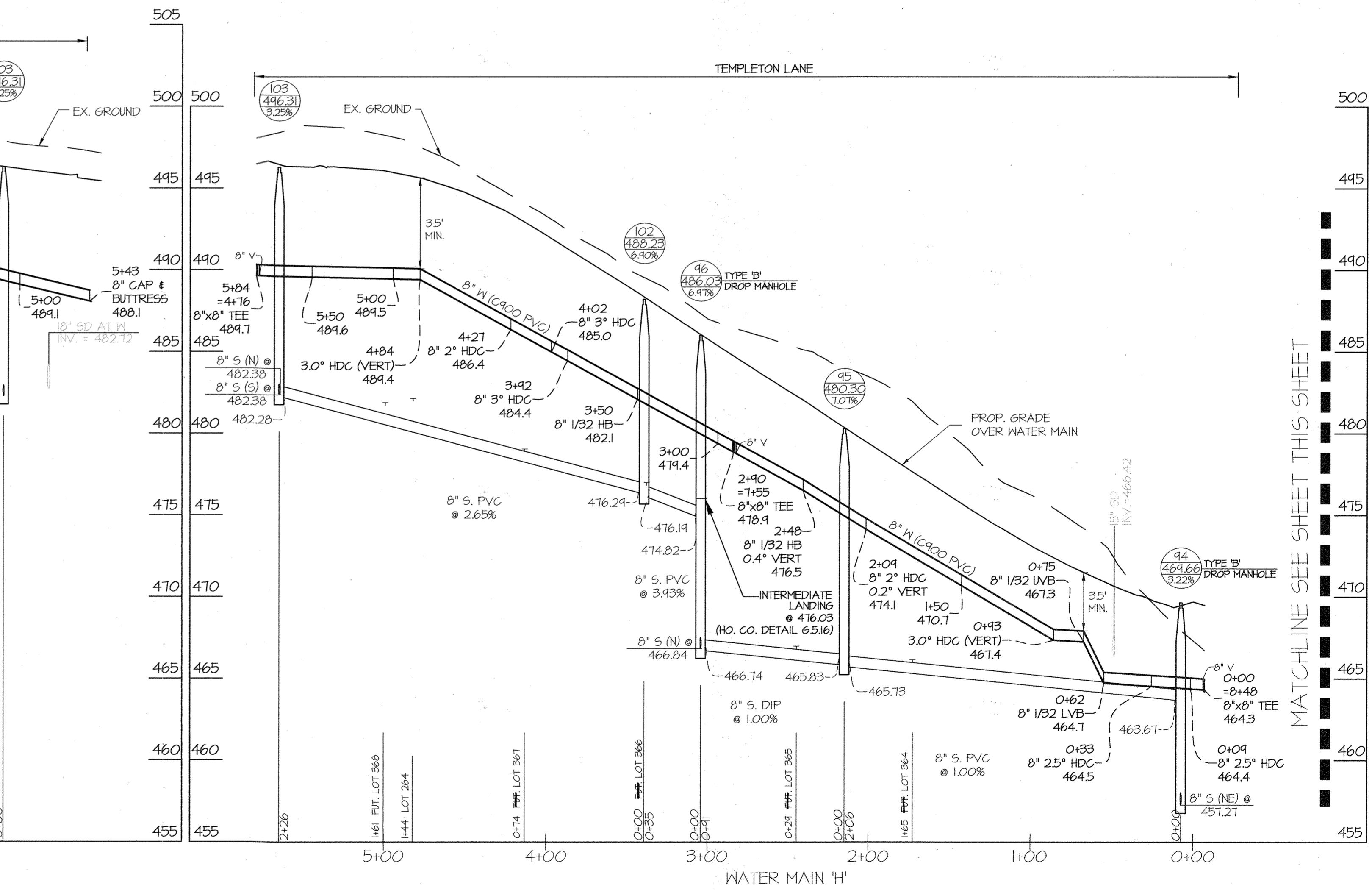
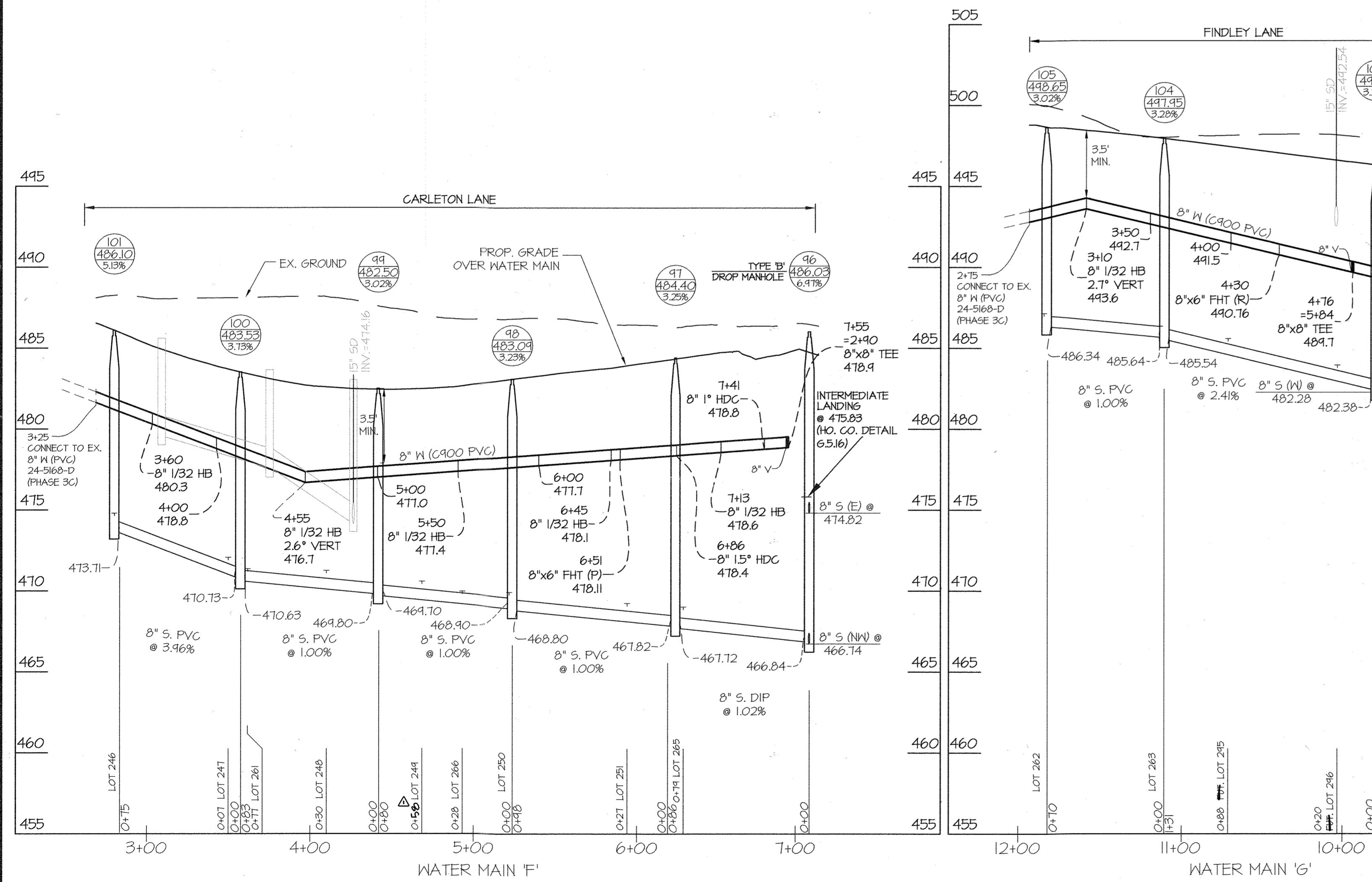
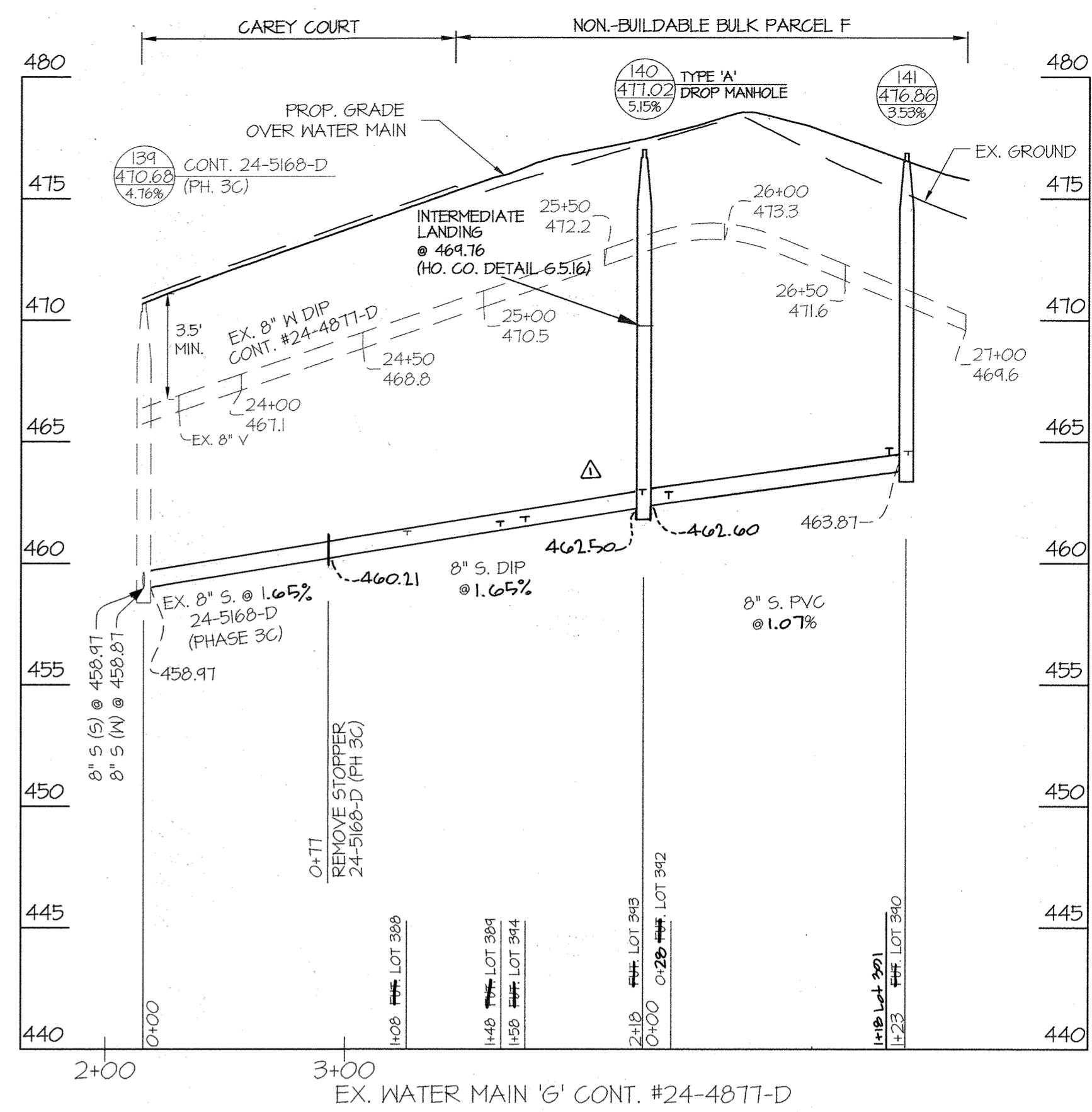
TS 291-293
68, & 388-394
ND

SCALE
1"=50'
SHEET
3 OF 5



NOTES:

- THE SYMBOL THAT REPRESENTS THE LOCATION OF A SEWER HOUSE CONNECTION IS SHOWN AT THE ELEVATION OF THE CONNECTION AT EITHER THE EDGE OF THE RIGHT-OF-WAY LINE OR EASEMENT LINE.
- FOR SEWER HOUSE CONNECTION INVERTS AT POINTS BETWEEN THE MAIN AND FUTURE DWELLING, SEE SHEET 5.
- FOR MINIMUM CELLAR ELEVATIONS (M.C.E.), SEE SHEET 5.
- OTHER THAN SEWER HOUSE CONNECTIONS AT MANHOLES, ALL CONNECTIONS WILL TIE INTO THE MAIN MATCHING CENTERLINES.
- ALL D.I.P. WATER MAINS ARE CLASS 54 UNLESS OTHERWISE NOTED.
- ALL P.V.C. WATER MAINS ARE C900 DR-10 UNLESS OTHERWISE NOTED.
- ALL P.V.C. SEWER MAINS ARE SDR 35 UNLESS OTHERWISE NOTED.
- ALL D.I.P. SEWER MAINS ARE CLASS 54 UNLESS OTHERWISE NOTED. SEE PROFILES THIS SHEET FOR LIMITS OF D.I.P.



SEWER HOUSE CONNECTION INFORMATION AND MINIMUM CELLAR ELEVATIONS (M.C.E.)						
LOT	SLOPE OF SHC	INV. @ MAIN/MH	INV. @ R/W SEE NOTE 1	M.C.E. SEE NOTE 2		
FHT 308	2.00%	460.21	461.13	461.03		
FHT 309	2.00%	460.61	461.04	461.24		
FHT 310	2.00%	464.20	464.44	468.04		
FHT 311	5.00%	463.11	463.61	464.12		
FHT 312	5.00%	461.93	462.43	468.68		
FHT 313	2.00%	464.66	465.12	466.92		
FHT 314	2.00%	460.71	460.83	461.13		
246	2.00%	474.04	474.64	478.54		
247	2.00%	471.26	471.40	475.10		
248	2.00%	470.41	471.44	475.14		
249	2.00%	464.74	471.42	474.62		
250	2.00%	461.15	464.15	473.15		
251	2.00%	472.40	469.08	473.18		
252	2.00%	458.42	456.78	460.78		
253	2.00%	455.32	455.84	454.94		
254	2.00%	454.3	454.71	458.71		
255	2.00%	454.12	454.44	458.64		
256	2.00%	453.48	453.82	451.92		
257	2.00%	453.02	453.34	451.44		
261	2.00%	470.58	471.20	475.20		
262	2.00%	469.67	466.99	491.19		
263	2.00%	455.87	466.19	490.19		
264	5.00%	480.34	481.99	494.24		
265	5.00%	467.96	468.06	475.36		
266	2.00%	464.44	464.71	473.71		
FHT 245	2.00%	484.71	485.43	484.53		
FHT 246	2.00%	483.15	483.79	481.84		
FHT 341	15.0%	455.92	456.34	454.96		
FHT 348	15.0%	455.34	455.82	454.41		
FHT 349	15.0%	454.72	455.18	458.76		
FHT 350	2.00%	454.25	454.91	458.81		
FHT 351	2.00%	453.60	454.24	458.64		
FHT 352	2.00%	451.53	458.13	471.93		
FHT 353	2.00%	465.63	465.99	468.99		
FHT 354	2.00%	466.43	466.83	471.13		
FHT 355	2.00%	476.52	476.84	481.04		
FHT 356	2.00%	478.53	478.84	482.84		
FHT 357	5.00%	480.84	481.74	487.99		

(SEE CONTRACT 24-5168-D (PH. 3C))

(SEE CONTRACT 20-5167-D (PH. 3B))

(SEE CONTRACT 20-5167-D (PH. 3B))

LOT	inv. @ Main/MH	slope of SHC see note 1	inv. @ R/W see note 1	M.C.E. see note 2	F.F.E. see note 3	B.E. see note 4
388	460.80	2.00%	461.79	465.09	476.79	467.2
389	461.55	2.00%	462.03	466.23	480.09	471.2
390	464.10	2.00%	464.44	468.04	480.39	470.6
391	464.00	2.00%	464.20	467.90	481.7	470.0
392	463.05	2.00%	463.25	466.95	482.7	470.2
393	462.03	2.00%	463.15	467.05	482.1	471.5
394	461.71	2.00%	461.91	466.21	481.7	472.0
246	474.04	2.00%	474.64	478.04	480.0	480.9
247	471.16	2.00%	471.90	475.90	488.7	479.0
248	470.41	2.00%	471.09	475.10	486.6	476.0
249	469.03	2.00%	470.71	474.71	487.0	478.1
250	469.13	2.00%	469.75	473.75	481.9	478.2
251	468.40	2.00%	469.08	472.18	488.2	478.6
252	456.42	2.00%	456.78	460.78	470.4	469.7
253	455.52	2.00%	455.84	459.94	471.7	469.0
254	454.37	2.00%	454.71	458.71	472.1	462.4
255	454.12	2.00%	454.44	458.64	471.0	462.3
256	453.33	2.00%	453.83	457.93	473.0	462.3
257	452.89	2.00%	453.39	457.49	473.8	464.1
261	470.88	2.00%	471.20	475.70	480.0	480.3
262	486.67	2.00%	486.99	491.19	502.1	492.5
263	485.37	2.00%	486.19	492.19	501.2	492.5
264	480.39	5.00%	481.09	489.14	501.3	491.6
265	461.96	5.00%	462.86	475.36	480.3	470.6
266	469.40	2.00%	469.81	473.71	488.3	478.6
267	484.79	2.00%	485.53	490.29	501.1	491.1
268	483.15	2.00%	483.79	489.29	500.2	490.5
269	455.92	1.50%	456.30	459.96	471.4	461.7
270	455.34	1.50%	455.82	459.47	470.5	460.8
271	454.71	1.50%	455.18	458.70	469.8	460.1
272	453.97	2.00%	454.63	458.53	469.1	459.4
273	453.60	2.00%	454.24	458.04	470.5	460.8
274	465.63	2.00%	466.99	471.11	481.1	472.1
275	466.43	2.00%	466.83	471.3	481.1	472.4
276	476.52	2.00%	476.84	481.04	482.7	484.0
277	478.53	2.00%	478.89	481.89	487.5	487.8
278	480.84	5.00%	481.74	487.99	490.0	480.3

Lot	inv. @ Main/MH	slope of SHC see note 1	inv. @ R/W see note 1	M.C.E. see note 2	F.F.E. see note 3	B.E. see note 4
388	460.80	2.00%	461.79	465.09	476.79	467.2
389	461.55	2.00%	462.03	466.23	480.09	471.2
390	464.10	2.00%	464.44	468.04	480.39	470.6
391	464.00	2.00%	464.20	467.90	481.7	470.0
392	463.05	2.00%	463.25	466.95	482.7	470.2
393	462.03	2.00%	463.15	467.05	482.1	471.5
394	461.71	2.00%	461.91	466.21	481.7	472.0
246	474.04	2.00%	474.64	478.04	480.0	480.9
247	471.16	2.00%	471.90	475.90	488.7	479.0
248	470.41	2.00%	471.09	475.10	486.6	476.0
249	469.03	2.00%	470.71	474.71	487.0	478.1
250	469.13	2.00%	469.75	473.75	481.9	478.2
251	468.40	2.00%	469.08	472.18	488.2	478.6
252	456.42	2.00%	456.78	460.78	470.4	469.7
253	455.52	2.00%	455.84	459.94	471.7	469.0
254	454.37	2.00%	454.71	458.71	472.1	462.4
255	454.12	2.00%	454.44	458.64	471.0	462.3
256	453.33	2.00%	453.83	457.93	473.0	462.3
261	470.88	2.00%	471.20	475.70	480.0	480.3
262	486.67	2.00%	486.99	491.19	502.1	492.5
263	485.37	2.00%	486.19	492.19	501.2	