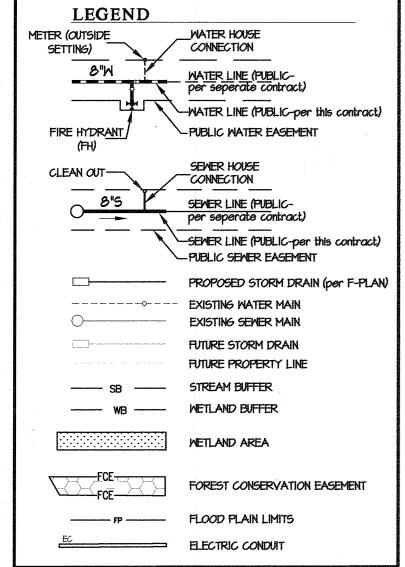
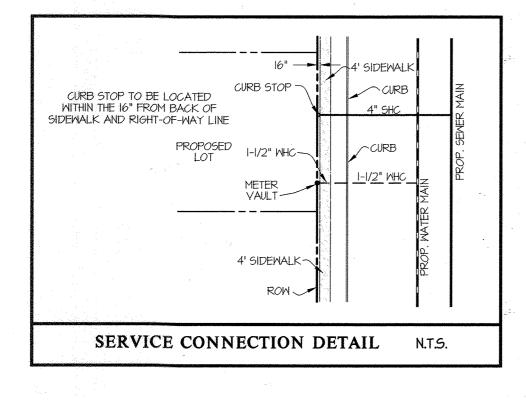
| | OHANTITIES | | AS-BUILT | | | |
|---|-------------------------|------------|----------|---------------------------|--|--|
| ITEMS | QUANTITIES ESTIMATED | QUANTITIES | TYPE | MANUFACTURER, SUPPLIER | | |
| 6" DIP WATER MAIN (FH LEADS) | 20 LF. | | | | | |
| 8" PVC WATER MAIN (C-900 DR-18) | 1196 L.F. | | • | | | |
| 1-1/2" WHC | 381 L.F. | | | | | |
| I" METER VAULT | 18 EA. | | 3 | | | |
| 8"x8" TEE | I EA. | | | | | |
| 8"x6" FHT | 2 EA. | | ··· | , | | |
| FIRE HYDRANTS | 2 EA. | | | | | |
| 8" I/32 BEND | 7 EA. | | | | | |
| 8" I/I6 BEND | 4 EA. | | | | | |
| 8" I° HDC | 2 EA. | | | | | |
| 8" 1.5° HDC | I EA. | | | | | |
| 8" VALVE | 2 EA. | | | | | |
| 8" 2.0° HDC | I EA | | | | | |
| 8" PVC SEWER MAIN (SDR 35 PVC) | 1030 L.F. | | | | | |
| 4' MANHOLES | 14 EA. | | | | | |
| 4" SHC | 459 L.F. | | .,,, | | | |
| 4" CLEANOUT | Ið EA. | | | | | |
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| : | | | | | | |
| | <u> </u> | | | | | |
| NAME OF UTILITY CONTRACTO | R: | | | | | |





SHEET INDEX

COVER SHEET

DEPARTMENT OF

PLANNING AND ZONING

HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

3. WATER AND SEWER PLAN (I"=50')

PHASING KEY MAP

4. WATER AND SEWER PROFILES

5. MINIMUM CELLAR ELEVATIONS AND AS-BUILT INFORMATION

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH F-21-032, SECTION 308 OF THE SPECIFICATIONS AT FINAL ROAD PLAN STAGE.



DEPARTMENT OF

PUBLIC WORKS

HOWARD QOUNTY, MARYLAND

8/10.25-21

OWNER/DEVELOPER WESTMOUNT DEVELOPMENT CORP. 307 INTERNATIONAL CIRCLE SUITE 130 HUNT VALLEY, MD 21030 410-489-4489 ATTN: ROBERT GOODIER

LOCATION PLAN **GRAPHIC SCALE** DEPARTMENT OF PUBLIC WORKS

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

HKJ

DRAWN BY

HKJ

CHECKED BY

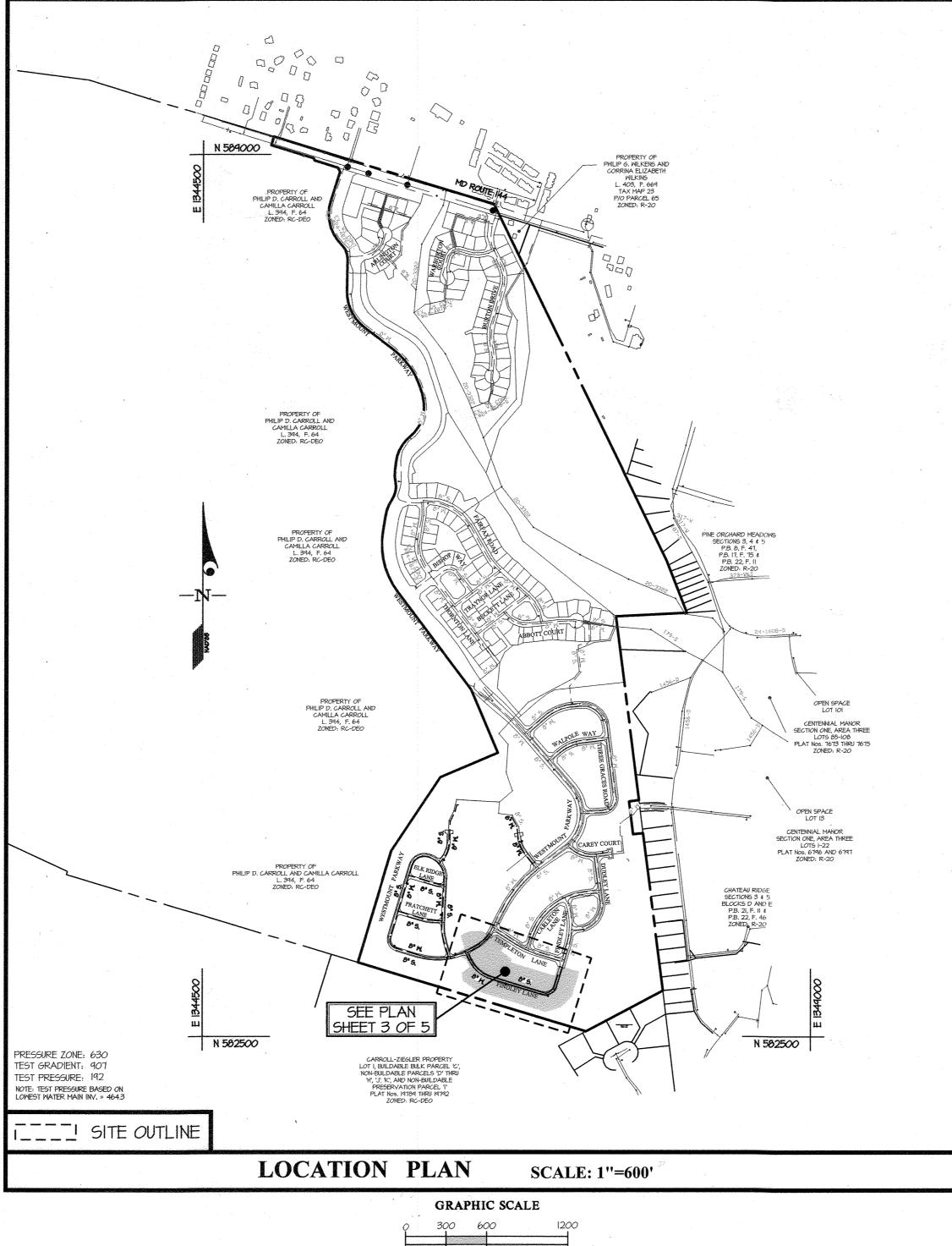
3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM DEV

PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

OCT.

2021

13013



CONTRACT No. 24-5176-D

WESTMOUNT

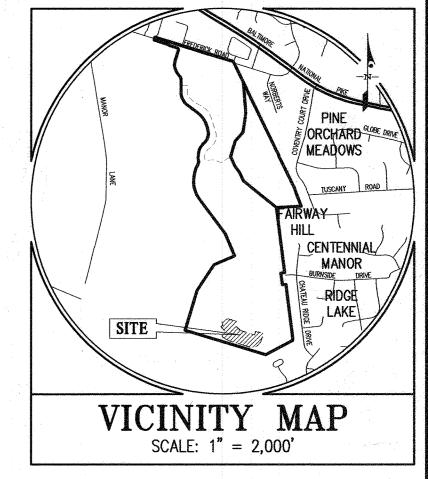
PHASE 4B LOTS 297-307, 346 & 369-374, OPEN SPACE LOTS 396-399,408, 411 & 412 HOWARD COUNTY, MARYLAND

HKJ IN REVISED OTY. PERPROFILE CHANGES

BY NO

REVISION

RESIDENTIAL TYPE OF BUILDING NUMBER OF UNITS NUMBER OF S.H.C.'s NUMBER OF W.H.C.'s AREA OF COMMERCIAL LOT/PARCEL OO AC. SEWER SHED LITTLE PATUXENT WATER RECLAMATION PLANT TREATMENT PLANT



BENCHMARKS

EASTING: 1,341,530.147

16HC: NORTHING: 589,780.908 16HD: NORTHING: 590,674.171 EASTING: 1,340,043,586

ADC MAP COORDINATES: MAP 4814 GRID J5 THRU J8 GRID K5 THRU K8

GENERAL NOTES

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

- 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 on or about June,
- 3. 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 No. 46BC and No. 41EA. 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 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 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, use Howard County Design Manual, Volume IV, Standard Specifications and Details for Construction (Latest Edition). The contractor shall have a copy of Yolume 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: 1-800-252-1133

BGE (Construction Services). . 410-637-8713 . 410-685-0123 BGE (Emergency) .. 410-313-4900 Bureau of Ütilitles Colonial Pipeline Co... 410-795-1390 1-800-257-7777 Miss Utilitu.410-531-5533 State Highway Administration...

- .1-800-743-0033 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
- 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.
- I. The contractor shall notify the Bureau of Highways, Howard County, at (410)-313-7450 at least five working days before open cutting o 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(a) of the Howard County Code.

Part II WATER I. All water mains shall be D.I.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. Tracer 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 AWWA Standard C900 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 (IT) 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.
- 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 over insert or over home the spigot II. 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 defection 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 defection coupling or 5-degree sweep, taking care not to use compaction equipment directly over the fitting.
- PVC high deflection couplings shall be limited to a total defection of 3-degrees (1½-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 9-inches and shall have center stops. PVC High deflection couplings shall be CertainTeed 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 (Ipex) Blue Brute DR18 or equal.
- 12. When PVC high defection 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 spigots or plain ends into the push on bell joint on both sides of the high defection 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.

13. Per the Fire Sprinkler Code all residential single family dwellings will have a minimum 1-1/2" WHC with 1" meter, outside setting.

BLOCK NO. 6 & 12

Part III SEWER 1. All sewer mains shall be D.I.P. or P.V.C. unless otherwise noted.

- 2. All manholes shall be 4'-0" inside diameter unless otherwise noted.
- 3. Force mains shall be D.I.P. only.

DATE 600' SCALE MAP NO. 23

02/21/23

4. Manholes shown with 12" and 16" walls are for brick manholes only.

COVER SHEET

5. Manholes designated W.T. in plan and profile shall have watertight frame and cover, Standard Detail G5.52. Where watertight manhole frames and covers are used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.

6. House(s) with the symbol "C.N.S." indicates that the cellar cannot be served.

NOTE: CONTRACT 24-5169-D (WESTMOUNT - PHASE 3D) MUST BE PLACED IN-SERVICE TO ALLOW THIS CONTRACT TO BE PLACED IN-SERVICE

WESTMOUNT

CONTRACT No. 24-5176-D PHASE 4B LOTS 297-307, 346 & 369-374, OPEN SPACE LOTS 396-399,408,411 & 412 HOWARD COUNTY, MARYLAND

ELECTION DISTRICT No. 2

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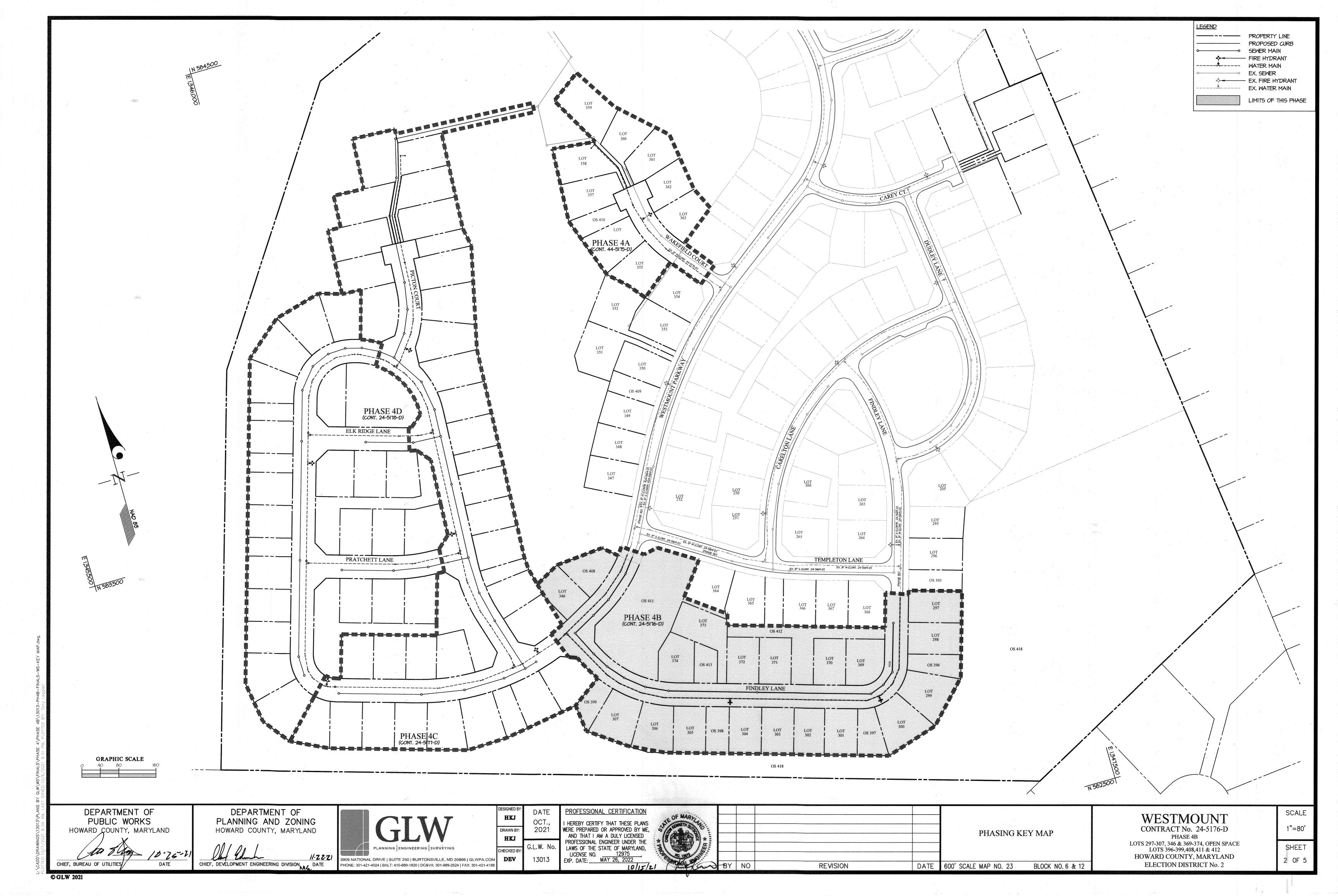
CHIEF, BUREAU OF UTILITIES

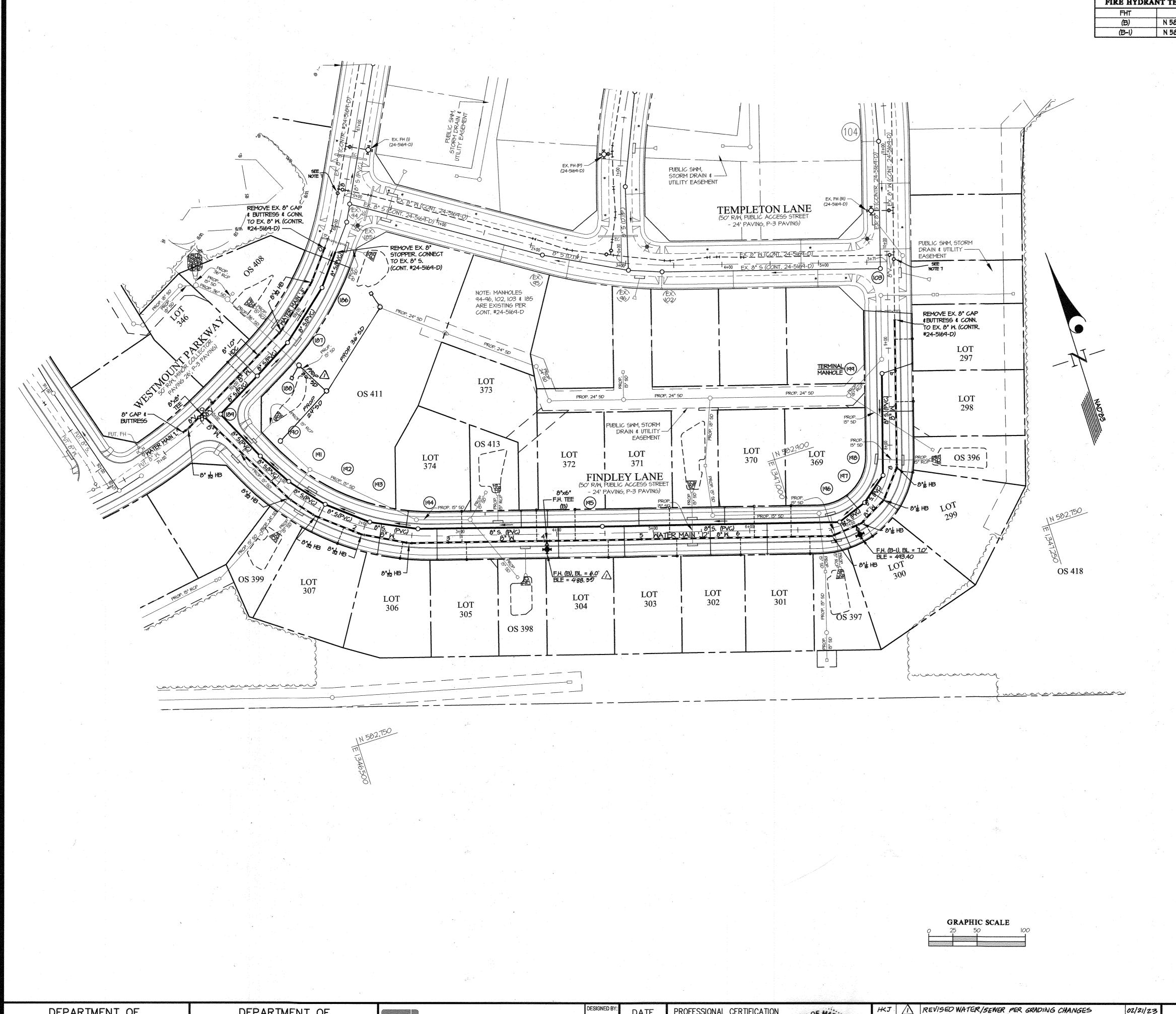
1 OF 5

SCALE

AS SHOWN

SHEET





FIRE HYDRANT TEE INFORMATION LOCATION N 582,883 E 1,346,747 N 582800 E 1347,061

| SEWER MANHOLE INFORMATION | | | | |
|---------------------------|-----------------------|--|--|--|
| MH | LOCATION | | | |
| 186 | N 583,211 E 1,346,607 | | | |
| 187 | N 583,168 E 1,346,555 | | | |
| 188 | N 583,144 E 1,346,515 | | | |
| 189 | N 583,118 E 1,346,467 | | | |
| 190 | N 583,065 E 1,346,493 | | | |
| 191 | N 583,031 E 1,346,513 | | | |
| 192 | N 582,997 E 1,346,542 | | | |
| 193 | N 582,966 E 1,346,581 | | | |
| 194 | N 582,944 E 1,346,626 | | | |
| 195 | N 582,889 E 1,346,809 | | | |
| 196 | N 582818 E 1347,045 | | | |
| 197 | N 582,831 E 1,347,073 | | | |
| 198 | N 582,850 E 1,347,102 | | | |
| 199 | N 582,951 E 1,347,133 | | | |

| | FITTING | CHART | |
|---------|--|-------------------|-------------|
| STATION | FITTING | LOCA | ATION |
| | WATE | 'IL' NIAM S | |
| 0+38 | 8" 1/32 HB | N 583,220 | E 1,346,598 |
| 0+98 | 8" 1/32 HB | N 583,181 | E 1,346,553 |
| 1+32 | 8" 1.0° HDC (HORZ.) | N 583,164 | E 1346,523 |
| 2+16 | 8"x 8" T. | N 583,124 | E 1,346,449 |
| | WATER | R MAIN 'J2' | |
| l+25 | 8" 1/32 HB | N 583/014 | E 1,346,508 |
| 1+58 | 8" 1/32 HB | | E 1,346,529 |
| 2+09 | 8" 1/32 HB | | E 1,346,569 |
| 2+59 | 8" 1/32 HB | N 582,933 | E 1,346,613 |
| 3+90 | 8" 15° HDC (VERT.) | SEE PROFIL | E SHEET 4 |
| 4+02 | 8"x6" FHT (B) | N 582 <i>8</i> 92 | E 1,346,750 |
| 6+97 | 8" I/I6 HB | n 582 <i>80</i> 7 | E 1,347,033 |
| 7+25 | 8"x6" FHT (B-I) | N 582810 | E 1,347,060 |
| 7+31 | 8" 1/16 HB | N 582810 | E 1,347,066 |
| 7+64 | 8" 1/16 HB | N 582,829 | E 1,347,095 |
| 8+00 | 8" I/I6 HB | N 582 <i>8</i> 54 | E 1,347,118 |
| 9+33 | 8" I" HDC (VERT.) | SEE PROFIL | E SHEET 4 |
| | WATE | R MAIN 'L' | |
| 0+2 | 8" 1/32 HB | N 583,14 | E 1,346,430 |
| 0+21 | 8' CAP&BUTTRESS | N 583,112 | E 1,346,424 |
| | | | |
| | and the second s | R MAIN 'JZ' | : |
| | 8" 1.5" HDC (VERT) | | |
| 0+65 | 8" Z.O" HDC (VERT) | SEE PROPIL | E SHEET 4 |

I. ALL SHC'S SHOWN SERVING NUMBERED LOTS ARE 4".

2. ALL SEWER MAINS WILL BE 8" PVC (SDR 35).

3. ALL MANHOLES WILL BE STANDARD 4'-0" (G 5.12).

4. OUTSIDE METERS WILL BE PER HOWARD CO. DETAIL W 3.28.

5. ALL WHC'S SERVING NUMBERED LOTS ARE 1 ½" WITH A 1" METER OUTSIDE SETTING. ALL WHC'S SHOWN ARE PROPOSED UNLESS OTHERWISE NOTED.

6. WATER MAIN IS 8" C900 PVC (DR-18) UNLESS OTHERWISE NOTED.

7. EXISTING VALVE TO BE CLOSED BY DPW FOR CONSTRUCTION.

8. FOR SEMER HOUSE CONNECTION INVERT ELEVATIONS FROM THE MAIN TO THE FUTURE DWELLINGS (M.C.E.), SEE SHEET 5.

9. ALL STORM DRAIN TO BE HOPE UNLESS OTHERWISE NOTED.

IO. ALL FIRE HYDRANTS TO BE INSTALLED PER HOCO DETAIL W-I.II. CONTINUITY TEST STATIONS TO BE INSTALLED AT ALL FIRE HYDRANTS PER W-I.I5.

NOTE: CONTRACT 24-5169-D (WESTMOUNT - PHASE 3D) MUST BE PLACED IN-SERVICE TO ALLOW THIS CONTRACT TO BE PLACED IN-SERVICE

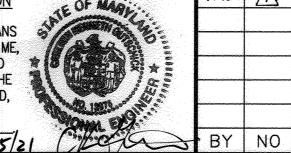
DEPARTMENT OF PUBLIC WORKS HOWARD QOUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND 3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM

WsJ OCT., 2021 DRAWN BY: WsJ CHECKED BY: 13013 DEV PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

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



02/21/23 **REVISION** DATE 600' SCALE MAP NO. 23

WATER and SEWER **PLAN**

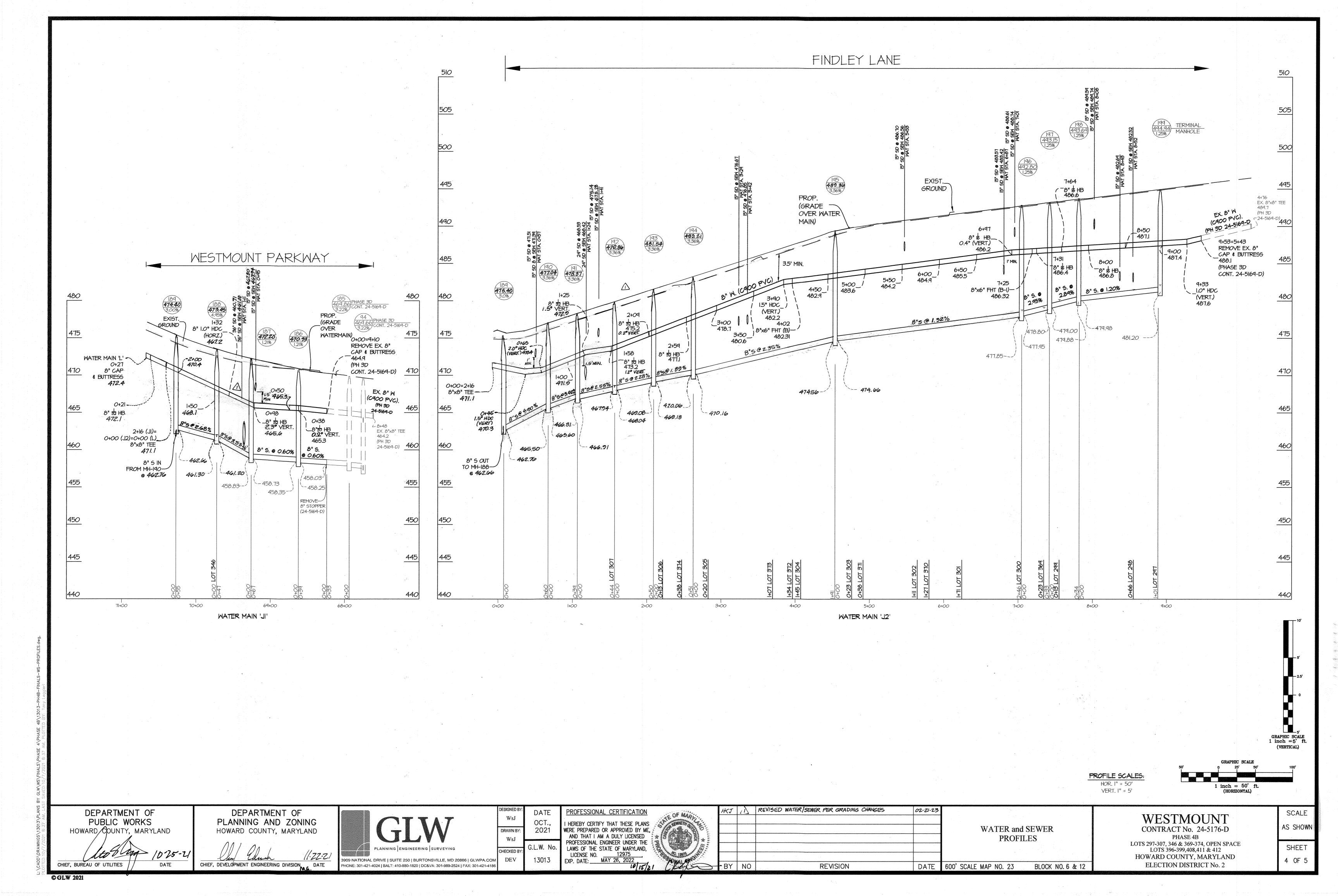
BLOCK NO. 6 & 12

WESTMOUNT CONTRACT No. 24-5176-D PHASE 4B

LOTS 297-307, 346 & 369-374, OPEN SPACE LOTS 396-399,408,411 & 412 HOWARD COUNTY, MARYLAND ELECTION DISTRICT No. 2

1"=50" SHEET 3 OF 5

SCALE



SEWER HOUSE CONNECTION INFORMATION AND MINIMUM CELLAR ELEVATIONS (M.C.E.) SLOPE | INV. @ R/W LOT INV. @ MAIN/MH OF SHC | SEE NOTE 1 SEE NOTE 2 | SEE NOTE 3 | SEE NOTE 4 481.53 2.00% 482.17 486.37 499.3 489.5 499:0 2.00% 481.55 485.39 499.2 2.00% 498.3 488.5 480.14 300 478.90 482.92 497.8 488.0 2.00% 301 477.06 481.70 2.00% 477.70 486.60 302 2.00% 476.91 480.91 495.8 4860 476.27 475.10 2.00% 475.74 479.74 495.1 485.3 304 473.60 2.00% 474.33 478.65 493.6 483.8 305 471.39 475.49 489.5 479.7 2.00% 306 470.19 478.0 460.55 474.51 487.8 2.00% 307 473.15 486.0 468.27 468.87 476.2 2.00% 466.00 478.5 468.7 461.53 2.00% 462.13 478.74 493.08 497.4 2.00% 479.06 487.6 370 476.84 2.00% 496.4 371 485.2 475.30 2.00% 475.66 372 473.43 473.79 477.87 493.4 493.6 2.00% 480.4 373 472.79 473.15 479.19 490.2 2.00% 470.03 474.25 470.35 472.0 2.00% 488.8

1. THIS VALUE IS THE INVERT OF THE S.H.C. AT EITHER THE EDGE OF THE RIGHT-OF-WAY OR EASEMENT LINE.

2. IT WILL BE THE RESPONSIBILITY OF THE ENGINEER PREPARING THE SITE DEVELOPMENT PLAN TO ENSURE THE FINAL BASEMENT ELEVATION IS ABOVE THE MINIMUM CELLAR ELEVATION (M.C.E.) SHOWN IN THIS TABLE.

3. THE FIRST FLOOR ELEVATION (F.F.E.) IS THE ELEVATION OF THE DRIVEWAY AT THE RIGHT-OF-WAY LINE PLUS AN ADJUSTMENT FOR THE DRIVEWAY AND A SINGLE RISER INSIDE THE GARAGE.

4. THE BASEMENT ELEVATION (B.E.) IS THE FIRST FLOOR ELEVATION MINUS 9.84

| AS-BUILT INFORMATION | | | | | | | |
|----------------------|------------------------|---------------------------------------|-----------------|---------------------------------------|-----------------|--|--|
| | | WATER HOUSE CONNECTION AS BUILT | | SEWER HOUSE CONNECTION AS BUILT | | | |
| LOT # | ADDRESS | LOCATION DIM. 1 | LOCATION DIM. 2 | LOCATION DIM. 1 | LOCATION DIM. 2 | | |
| 297 | 4217 FINDLEY LANE | | | | | | |
| 298 | 4221 FINDLEY LANE | | | | | | |
| 299 | 4229 FINDLEY LANE | | | | | | |
| 300 | 4233 FINDLEY LANE | | | | | | |
| 301 | 424I FINDLEY LANE | | | | | | |
| 302 | 4245 FINDLEY LANE | | | | | | |
| 303 | 4249 FINDLEY LANE | | | | | | |
| 304 | 4253 FINDLEY LANE | | | | | | |
| 305 | 4261 FINDLEY LANE | | | | | | |
| 306 | 4265 FINDLEY LANE | | | | | | |
| 301 | 4269 FINDLEY LANE | | | | | | |
| 346 | 3724 WESTMOUNT PARKWAY | | | | | | |
| 369 | 4230 FINDLEY LANE | · | | | | | |
| 370 | 4240 FINDLEY LANE | | | | | | |
| 371 | 4250 FINDLEY LANE | | | | | | |
| 372 | 4254 FINDLEY LANE | | | | -: | | |
| 373 | 4258 FINDLEY LANE | | j | | | | |
| | | T | | | | | |

4266 FINDLEY LANE

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

CHIEF, BUREAU OF UTILITIES

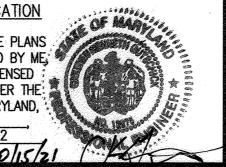
DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION M. DATE

3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

DRAWN BY: WsJ CHECKED BY:

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



| , | HKJ A RE | | REVISED SEWER HOUSE CONNECTION INFORMATION DUE TO | | 02-21-23 | |
|--|----------|----|---|--|----------|-----------------------|
| | | | PROFILE CHANGES | | | |
| • | | | | | | MINIMUM CELLAI |
| | | | | | | AND AS-BUILT IN |
| ## ## ## ## ## ## ## ## ## ## ## ## ## | | · | | | | • |
| | | | | | | |
| | BY | NO | REVISION | | DATE | 600' SCALE MAP NO. 23 |

MINIMUM CELLAR ELEVATIONS AND AS-BUILT INFORMATION

WESTMOUNT CONTRACT No. 24-5176-D PHASE 4B LOTS 297-307, 346 & 369-374, OPEN SPACE LOTS 396-399,408,411 & 412

HOWARD COUNTY, MARYLAND

ELECTION DISTRICT No. 2

SHEET 5 OF 5

SCALE

BLOCK NO. 6 & 12