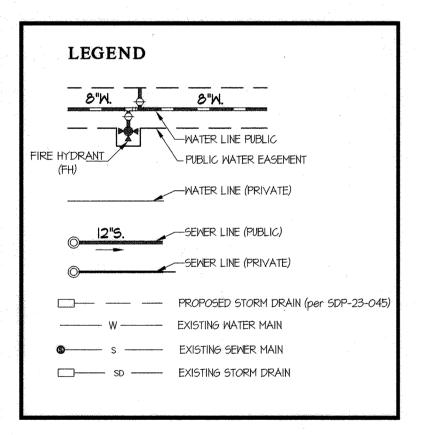
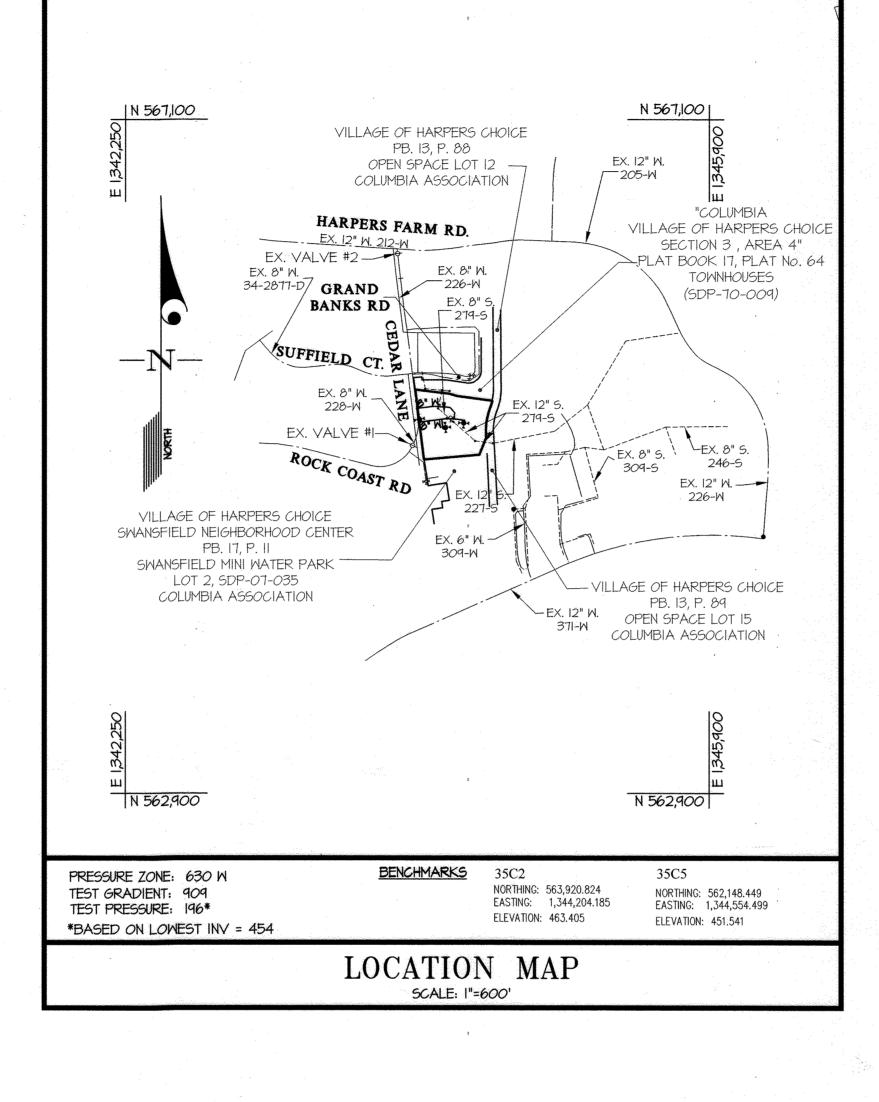
	QU	ANTITIES		
· · · · · · · · · · · · · · · · · · ·	QUANTITIES ESTIMATED	AS-BUILT		
ITEMS		QUANTITIES	TYPE	MANUFACTURER/ SUPPLIER
6" SHC (PVC)	18 LF			
8" WATER MAIN C-900 DR 18	668 LF			
" WATER MAIN (DIP) FH LEADS	52 LF			
8"x 6" F.H.T.	3 EA			
8"x 8" T. 8" √.	4 EA			
6" V.	II EA 3 EA.			
<u> </u>	2 EA.			
8" CAP	Z EA.			_
		Amaria a sur a		
8" % H.B.	2 EA.			
8" /32 H.B.	2 EA.			
7.52	din dany 14			
8" HDC	4 EA			
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· · · · · · · · · · · · · · · · · · ·				
				Section Section 1997
FIRE HYDRANT	3 EA.			
CONTINUITY TEST STATION	3 EA.	- Commence		
CLEANOREM ANDUOLE				
CLEANOUT/LAMPHOLE	2 EA.			
			<u></u>	the second desired and the second
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NAME OF UTILITY CO	NTRACTOR:	Andrew Control of the	kan mengangan kecamatan dari dan digunah di	Beginning a nitromongle over the design of the second section of the second section of the second second second
			SURVEY AND	CHECKBOX:
			DRAFTING DIV.	AS-BUILT DATE:



SHEET INDEX

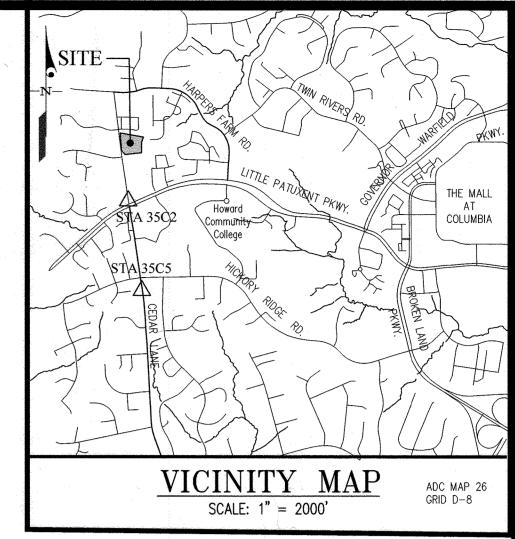
- COVER SHEET - WATER & SEWER PLAN & PROFILES - WATER & SEWER DEMOLITION PLAN



CONTRACT No. 24-5230-D WAVERLY WINDS APARTMENTS LOT 3A, SECTION 3, AREA 4 VILLAGE OF HARPER'S CHOICE PLAT NO. 26412

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

**APARTMENTS** TYPE OF BUILDING 123 NUMBER OF UNITS NUMBER OF S.H.C.'s NUMBER OF W.H.C.'s \_ AREA OF COMMERCIAL LOT/PARCEL 3.71 ACRES LITTLE PATUXENT TREATMENT PLANT SEWER SHED PUMPING STATION



HC CONTROL STATIONS

NORTHING: 563,920.824

(LATEST ADJ. FEB. 2014)

NORTHING: 562,148.449

EASTING: 1,344,554.499

(LATEST ADJ. FEB. 2014)

ELEVATION: 451.541

ELEVATION: 463.405

35C5

EASTING: 1,344,204.185

## 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 expense.
- 2. The existing topography performed by Gutschick Little \$ Meber, P.A. 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. 30GA and No. 36AA. All vertical controls are based on NAVD '88. 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 (2017). The contractor shall have a copy of Volume
- 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 duq 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	
BGE (Construction Services)	410-637-8713
BGE (Emergency )	
Bureau of Utilities	410-313-4900
Colonial Pipeline Co	410-795-1390
Miss Htilitu	1-800-257-777
State Highway Administration	410-531-5533
Verizon	1-800-743-00

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)-313-7450 at least five working days before open cutting or boring/jacking of any County roads 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 P.V.C. unless otherwise noted. . 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 orovided 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 wire and continuity test stations shall be installed on all DIP and PVC water mains in accordance with the Howard 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 (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. 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 into the bell of PVC pipe.

  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

Five degree sweeps shall be bell by spigot, rated for a minimum 225 psi, DR 18 meeting the requirements of AWWA C900 and shall be Multi Fittings (Ipex) Blue Brute DR 18 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 incorporates 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.

- I. All sewer mains shall be D.I.P. or P.V.C. unless otherwise noted. 2. All manholes shall be 4'-O" inside diameter unless otherwise noted.
- 3. Force mains shall be D.I.P. only. 4. Manholes shown with 12" and 16" walls are for brick manholes only.
- 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

**COVER SHEET** 

BLOCK NO. 23

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

PREPARED FOR: **Enterprise** Enterprise ™ Enterprise Community Homes Housing LLC (Owner) Enterprise Community Development, Inc. (Developer) 875 Hollin Street, Suite 202, Baltimore, MD 21201 410-332-7400

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN

ACCORDANCE WITH SDP-23-045, SECTION 308 OF THE

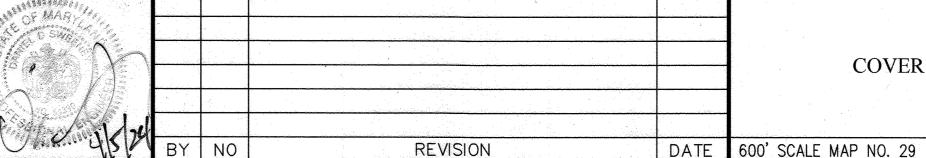
SPECIFICATIONS AT SITE DEVELOPMENT PLAN STAGE.

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

WsJ APRIL, 2024 DRAWN BY WsJ 22017

PROFESSIONAL CERTIFICATION 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. 54390 EXP. DATE: MAY 14, 2025



Waverly Winds Apartments CONTRACT No. 24-5230-D LOT 3A, SECTION 3, AREA 4 Village of Harper's Choice, Plat No. 26412

Howard County, Maryland

Election District No. 5

SCALE AS SHOWN SHEET

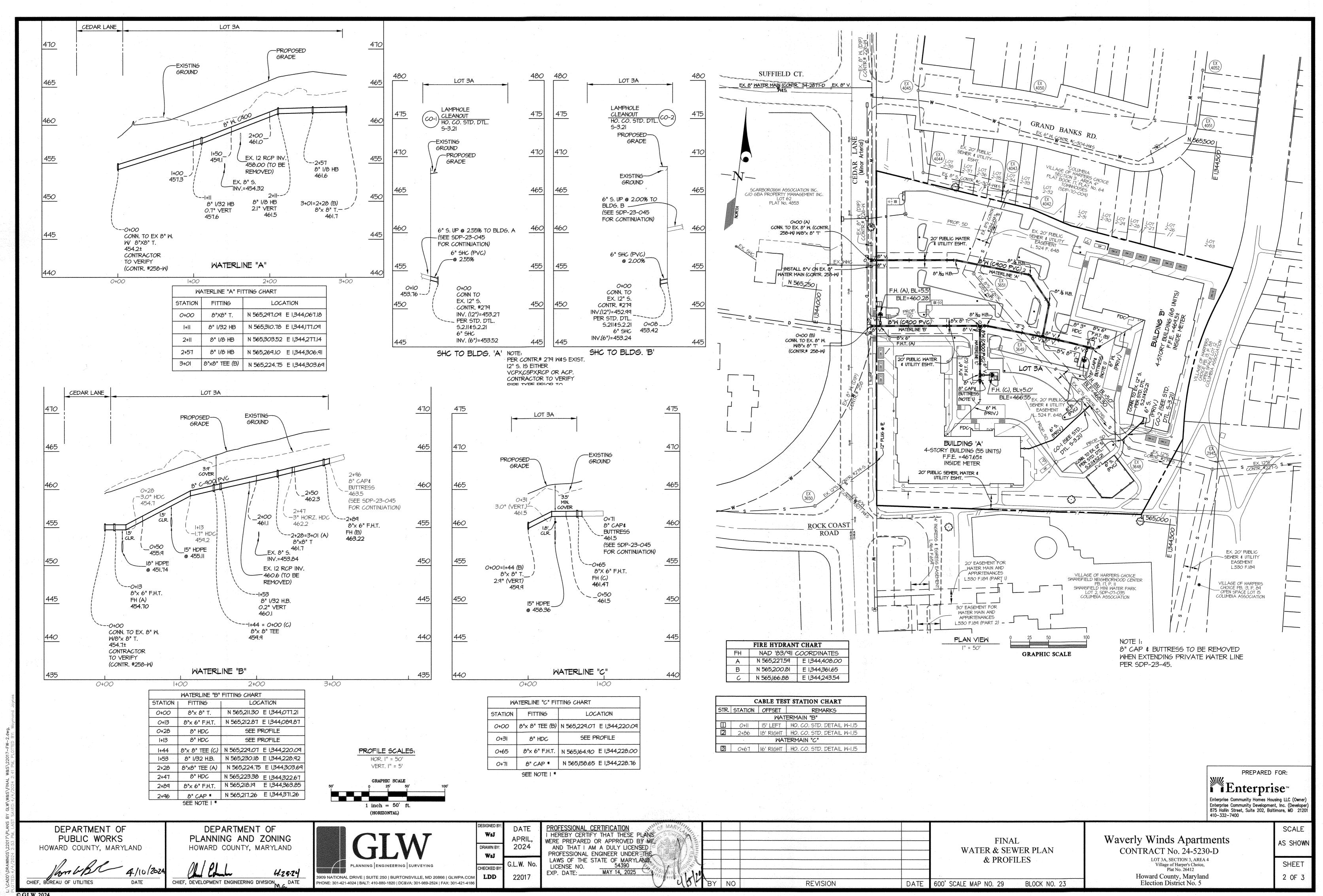
1 OF 3

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

SOIL CONSERVATION DISTRICT.

3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-418

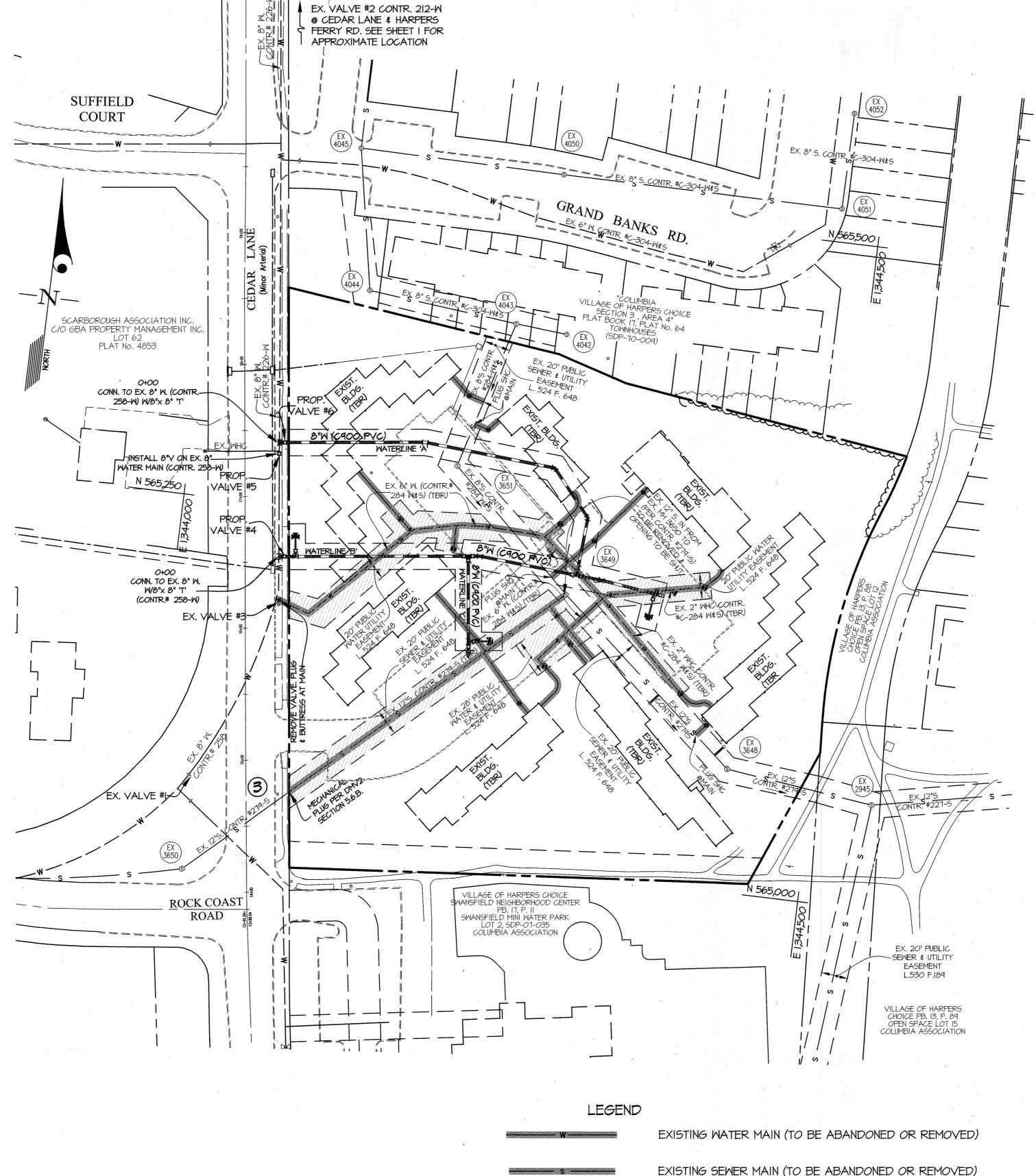
CHECKED B LDD



## SEQUENCE OF CONSTRUCTION:

(SEE SDP-23-045 FOR ADDITIONAL INFORMATION)

- DISCONNECT ALL EXISTING ON SITE STRUCTURES FROM PUBLIC WATER AND SEWER MAINS.
- 2. CLOSE EX. VALVE #3 & ABANDON EX. WATER MAIN, SEWER MAIN, SHC's, WHC'S, AS SHOWN ON THIS PLAN.
- 3. INSTALLATION MAY BEGIN FOR ALL PROPOSED WATER AND SEWER.
- 4. WHEN INSTALLING WATER CONNECTIONS AT CEDAR LANE: a. PROVIDE NOTICE TO ALL IMPACTED PROPERTIES IN ACCORDANCE WITH HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS REQUIREMENTS.
- b. CLOSE EX. VALVES #1 & #2 DRAIN EXISTING WATER MAIN. INSTALL 8"X8" 'T' AT WATERLINE 'A' STATION 0+00 AND INSTALL PROPOSED
- VALVES 5 \$ 6. d. ONCE INSTALLATION COMPLETE AND TESTED, ENSURE PROPOSED VALVES 5 & 6 ARE CLOSED AND OPEN EX. VALVE #2. RESTORE SERVICE TO IMPACTED PROPERTIES.
- INSTALL 8"X8" 'T' AT WATERLINE 'B' STATION 0+00 AND INSTALL PROPOSED VALVE #4.
- REMOVE EX. VALVE #3 AND PLUG AND BUTTRESS AT
- ONCE INSTALLATION COMPLETE AND TESTED, ENSURE PROPOSED VALVE 7 IS CLOSED AND OPEN EX. VALVE
- 5. INSTALL REMAINING WATER AND SEWER.



SEE SDP-23-045 FOR ALL MAINTENANCE OF TRAFFIC PLANS

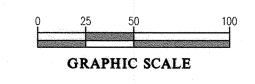
EXISTING SEMER MAIN (TO BE ABANDONED OR REMOVED)

VOLUME 2, SECTION 5.6.B, WHICH STATES "ALL SEWERS 15-INCHES AND SMALLER SHALL BE ABANDONED BY INSERTING A MECHANICAL PLUG A MINIMUM OF 12-INCHES INTO THE ABANDONED PIPELINE. ALL SPACE AROUND THE PIPELINE BEHIND THE PLUG SHALL BE FILLED/SURROUNDED BY NON-SHRINK GROUT OR 2,500 PSI CONCRETE. FOR SEWERS LARGER THAN 15-INCHES, A

EXISTING PUBLIC SEWER THAT IS NOT REMOVED SHALL

BE ABANDONED PER HOWARD COUNTY DEIGN MANUAL,

MASONRY PLUG SHALL BE INSTALLED IN LIEU OF A MECHANICAL PLUG AND THE PIPELINE ABANDONED, AS PREVIOUSLY DESCRIBED."



PREPARED FOR: **Enterprise**™ Enterprise Community Homes Housing LLC (Owner)
Enterprise Community Development, Inc. (Developer)
875 Hollin Street, Suite 202, Baltimore, MD 21201
410-332-7400

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

4/10/2024

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY, MARYLAND

4.25.24 CHIEF, DEVELOPMENT ENGINEERING DIVISION 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

WsJ DRAWN BY: WsJ CHECKED BY

LDD

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. 54390
EXP. DATE: MAY 14, 2025

BY NO REVISION DATE 600' SCALE MAP NO. 29

EASEMENTS (TO BE ABANDONED)

FINAL WATER & SEWER

DEMOLITION PLAN BLOCK NO. 23

ABANDONMENT NOTE:

Waverly Winds Apartments CONTRACT No. 24-5230-D LOT 3A, SECTION 3, AREA 4 Village of Harper's Choice, Plat No. 26412

Howard County, Maryland Election District No. 5

SHEET 3 OF 3

SCALE

1" = 50'