

QUANTITIES				
ITEM	ESTIMATED	QUANTITIES	AS-BUILT	SUPPLIER
8" PVC SDR-35	525 L.F.	517	9 DR-35	JMEAGLE/LB WATER
8" PVC SDR-35	281 L.F.	273	SDR-26	JMEAGLE/LB WATER
CLEAN-OUTS	20 EACH	20	PRECAST WYE/45°	PRISM/...
MANHOLE	5 EACH	5	PRECAST 48"	CONTRACTOR PRECAST CORR
8" W. C900 PVC DR-18	325 L.F.	321	C900 PVC DR-18	NORTH AMERICAN/LB WATER
8" W. C900 PVC DR-18	249 L.F.	247
1-1/2" W.H.C.	204 L.F.	204	TYPE K COPPER	CAMBRIDGE LBS/LB WATER
1/32" H.B.	2 EACH	2	MJ	STAR PIPE/LB WATER
1" V.D.C.	1 EACH	1
12" TAPPING SLUICE	1 EACH	1	FAST-1920 - 8	FORD METER/LB WATER
8" TAPPING VALVE	1 EACH	1	2500 MJ	AMERICAN FC/LB WATER
8" X 8" TEE	1 EACH	1	MJ	STAR PIPE/LB WATER
8" X 8" F.H. TEE	1 EACH	1	MJ	...
8" VALVE	2 EACH	2	2500 MJ RW	AMERICAN FC/LB WATER
8" VALVE	1 EACH	1	2500 MJ RW	...
8" X 8" REDUCER	1 EACH	1	MJ	STAR PIPE/LB WATER
8" PLUG & BUTTRESS	1 EACH	1	MJ	...
8" PLUG & BUTTRESS	1 EACH	1	MJ	...
FIRE HYDRANT	1 EACH	1	B24-B	AMERICAN DWS/LB WATER
CONTINUITY TEST STATION	1 EACH	1	74 M55AT	A.Y. McDONALD/...
TWIN OUTSIDE METER SETTING	9 EACH	9	CUSTOM DOUBLE METER SETTER	7146.21/W/100667300
SINGLE OUTSIDE METER SETTING	2 EACH	2	CUSTOM SINGLE METER SETTER	7146.21/W/100667300

BENCHMARK INFORMATION

B.M.#1 - HOWARD COUNTY CONTROL STATION #42FA - HORIZONTAL - (NAD'83)
 (LOCATED ALONG GUILFORD RD. WITHIN THE GRASS SPACE BETWEEN LAMBETH CT. & STIRLING BRIDGE. APPROX. 63' EAST OF G&E POLE #68930)
 N 5444.12.796
 E 1362.179.428
 ELEVATION = 341.82 - VERTICAL - (NAVD '88)

B.M.#2 - HOWARD COUNTY CONTROL STATION #42EC - HORIZONTAL - (NAD '83)
 (LOCATED ALONG GUILFORD RD., WEST OF OAKLAND HILLS RD., APPROX. 21' EAST OF G&E POLE #544040)
 N 5454.16.990
 E 1360.140.442
 ELEVATION = 365.383 - VERTICAL - (NAVD '88)

DEVELOPER'S CERTIFICATION

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Paul W. Kiebel, FOR:
 GLEN OAKS DEVELOPMENT COMPANY, LLC 05-19-21
 SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Paul W. Kiebel, FOR:
 GLEN OAKS DEVELOPMENT COMPANY, LLC 05-19-21
 SIGNATURE OF DEVELOPER DATE

F-21-017

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

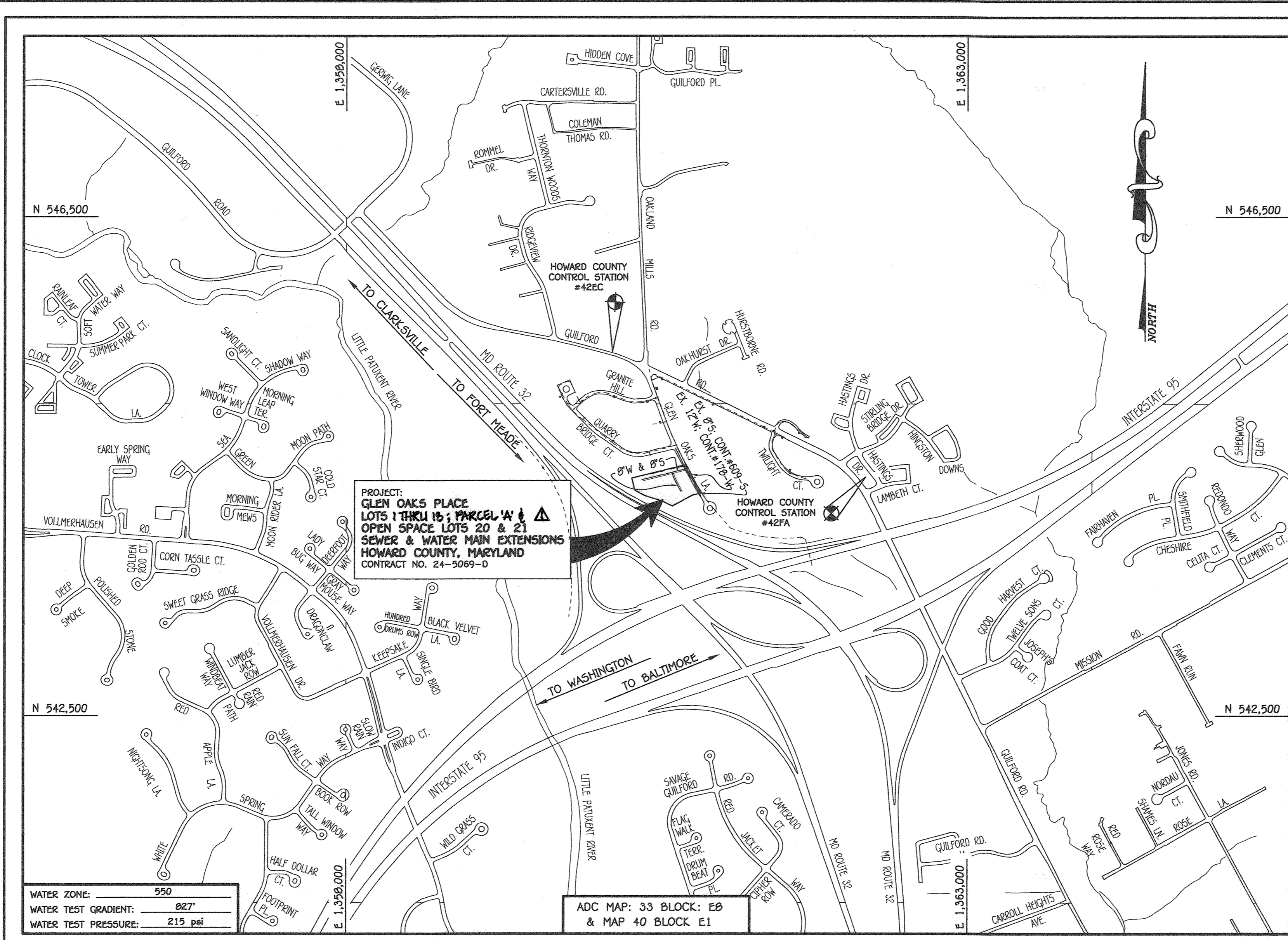
APPROVED:
 Alexander Butcher, 06/07/21
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND

6-21-21

6-21-21



TYPE OF BUILDING: RESIDENTIAL TOWNHOUSES *	
NO. OF WATER HOUSE CONNECTIONS:	21 (2 OPEN SPACES)
NO. OF SEWER HOUSE CONNECTIONS:	20 (SINKS-2, TUBS-5)
SEWER SHED:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER RECLAMATION PLANT SAVAGE, MARYLAND

LOCATION MAP
 SCALE: 1" = 600'

* THE PROPOSED RESIDENTIAL TOWNHOUSES WILL BE SLABS ON GRADE UNITS WITH NO BASEMENTS

WAIVER NOTE: DMV-22-021
 BY LETTER DATED APRIL 4, 2022, MR. DANIAL DAVIS, CHIEF UTILITY PROGRAM MANAGER, APPROVED WAIVER (DMV-21-021) ALLOWING THE INSTALLATION OF ROCKS ON THE TOWNHOUSES OF LOTS 1 THRU 6 WHICH WOULD EXCEED A MAXIMUM OF THREE (3) FEET INTO THE 10 FOOT STRUCTURE SETBACK FROM THE ADJACENT 32 FOOT WIDE PUBLIC SEWER, WATER & UTILITY EASEMENT.

CONTRACT NO. 24-5069-D

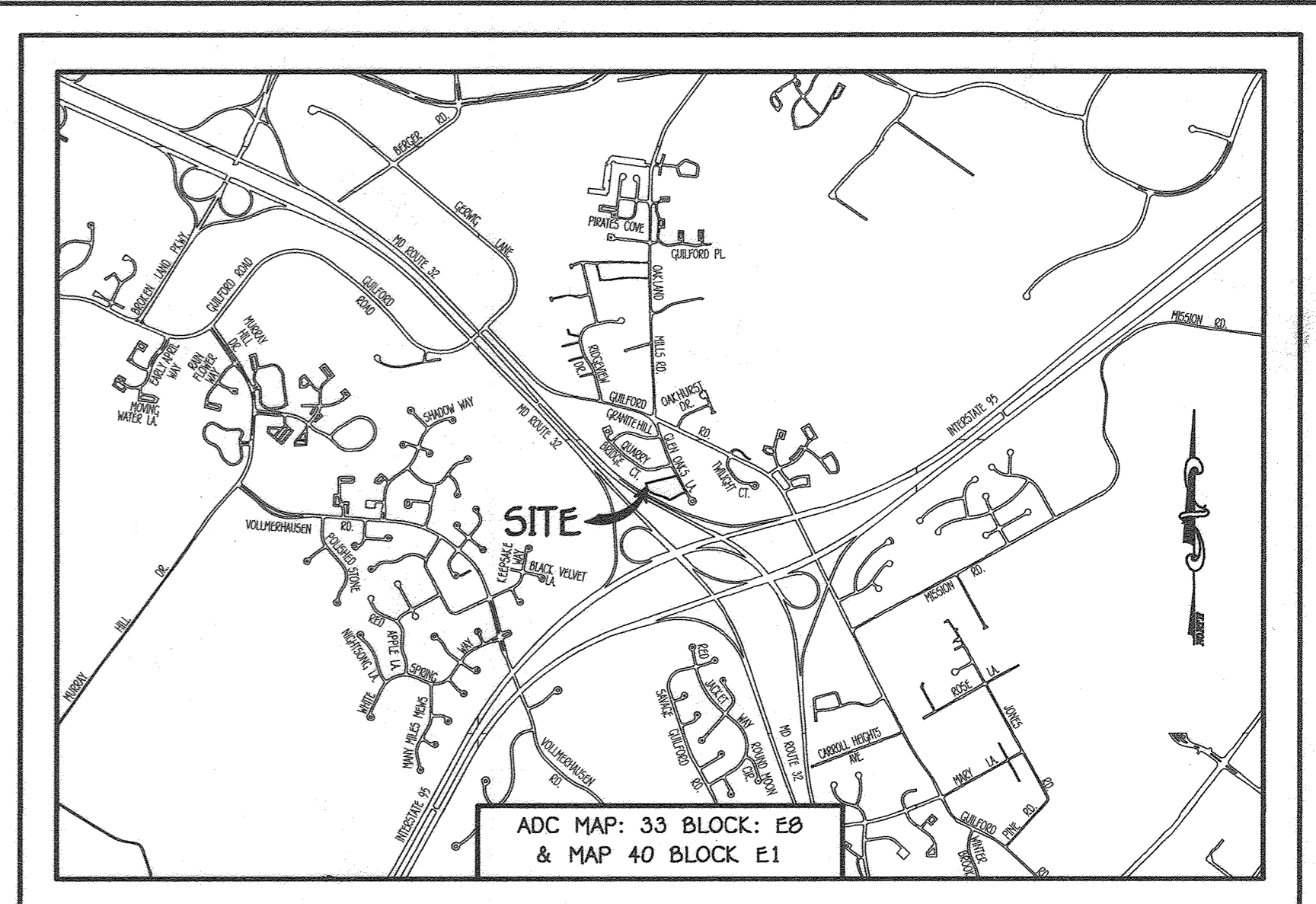
GLEN OAKS PLACE

LOTS 1 THRU 18; PARCEL 'A' & OPEN SPACE LOTS 20 & 21

SEWER & WATER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

OWNER & DEVELOPER
 GLEN OAKS DEVELOPMENT COMPANY, LLC
 2318 FOREST STREET SUITE 200
 ELLICOTT CITY, MARYLAND 21043
 ATTN: MR DONALD R. REUWER, JR.



GENERAL NOTES
 SCALE: 1" = 2000'

- PART A:**
- 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 AND PHOTOLOGS ON OR ABOUT OCTOBER, 2019 BY FISHER, COLLINS & CARTER, 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 NO. 42FA & NO. 42EC.
 - ALL VERTICAL CONTROLS ARE BASED ON NAVD 88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
 - IF ANY UTILITIES BY A MINIMUM OF 24 INCHES DEPTH ARE FOUND BY 5" 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 BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF THE 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 DRAWINGS, 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 SITE.
 - WHERE TEST FITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL (C) AT THE LOCATIONS OF THE TEST FITS. TEST FITS CONTAINING THE RESULTS OF THE TEST FIT OR FITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST FITS HAVE NOT BEEN OUG 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 ON THESE PLANS:
- | | | |
|------------------------------|-----------------------|-------------------------------|
| AT&T | (CONTRACTOR SERVICES) | 1-800-252-1133 |
| BGE | (CONTRACTOR SERVICES) | 410-837-8713 |
| BGE | (EMERGENCY) | 410-689-0123 |
| BUREAU OF UTILITIES | | 410-313-4900 |
| COLONIAL PIPELINE CO | | 410-795-1390 |
| MISS UTILITY | | 1-800-257-7777 |
| STATE HIGHWAY ADMINISTRATION | | 410-531-3533 |
| VERIZON | | 1-800-743-0033 / 410-224-9210 |
- 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 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 THE 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 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 B: WATER MAIN GENERAL NOTES**
- ALL WATER MAINS SHALL BE AMCA C900 PVC, DR-18.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TREES SHALL BE STAPPED TO TREES.
 - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
 - FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AMCA 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.
 - UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, SEVENTEEN (17) POUND SODIUM 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. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HANGERS. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL TESTS 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 JOINTS SHALL BE 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 BONDS, 5-DEGREE SWEEPS OR HIGH DEFLECTION COUPLINGS. COUPLINGS OR HIGH DEFLECTION COUPLINGS 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, TAKING CARE NOT TO USE COMPACTION EQUIPMENT DIRECTLY OVER THE FITTING.
- PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL OF 3-DEGREES (1 1/2-DEGREE ON EITHER END OF THE COUPLING). THESE SHALL BE RATED FOR A MINIMUM PSI MEETING THE REQUIREMENTS OF AMCA C900. SHALL HAVE A MINIMUM LAY LENGTH OF 9-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, DR-18 MEETING THE REQUIREMENTS OF AMCA C900 AND SHALL BE MULTI FITTINGS (PEX) BLUE BRUTE DR-18 OR EQUAL.
- WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 5-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF AMCA C900 PVC PIPELINES, THE CONTRACTOR SHALL INSERT DEVICES FOR THE PREVENTION OF OVER-INSERTION OF THE PVC PIPE SPIGOTS OR PLUG 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 ESHA IRON, INC. OR APPROVED EQUAL.
 - TO ACCOMMODATE A SPRINKLER SYSTEM, ALL RESIDENTIAL DWELLING UNITS SHALL HAVE A 1-1/2" WATER HOUSE CONNECTION WITH A 1" OUTSIDE METER SETTING; STD. DET. W-3.28.

PART C: SEWER MAIN GENERAL NOTES

- 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 18" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERIGHT FRAME AND COVER, STANDARD DETAIL G5.52. WHERE WATERIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSES (H) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

CONTRACT NO. 24-5069-D
 GLEN OAKS PLACE
 LOTS 1 THRU 18; PARCEL 'A' & OPEN SPACE LOTS 20 & 21
 SEWER & WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 50'

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. 12043 EXPIRATION DATE IS 7/16/22.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2995

DESIGNED BY: T.C.R.
 DRAWN BY: T.C.R.
 CHECKED BY: P.M.K.
 DATE: MAY, 2021

SEWER & WATER MAIN EXTENSIONS
 TITLE SHEET

600' SCALE MAP NO. 42 BLOCK NO. 17
 F.C.C. WORK ORDER NO. 17059-3001

FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

SCALE: AS SHOWN

SHEET 1 OF 3



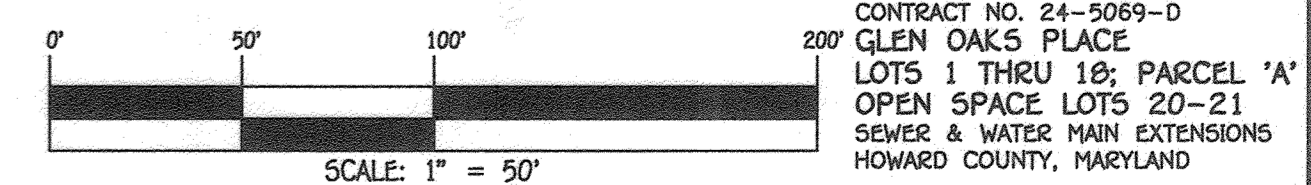
ABANDONMENT PLAN: EX. 8" S & EX. 5HCs
SCALE: 1" = 50'

PLAN
SCALE: 1" = 50'

NOTE: SEDIMENT & EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE ASSOCIATED PUBLIC ROAD IMPROVEMENT PLAN; F-21-017

REPLACEMENT SHEET

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 2 OF 3, SUPERSEDES THE SEWER AND WATER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON JUNE 21, 2021.



CONTRACT NO. 24-5069-D
GLEN OAKS PLACE
LOTS 1 THRU 18; PARCEL 'A'
OPEN SPACE LOTS 20-21
SEWER & WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, BUREAU OF UTILITIES

5/9/22
DATE

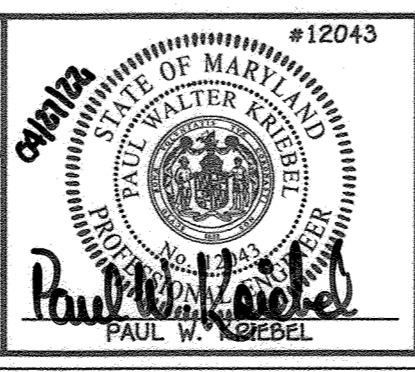
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION

5/11/22
DATE

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. 12245 EXPIRATION DATE 9/7/16/22.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL FEE
ELICOTT CITY, MARYLAND 21042
(410) 461-2895



DESIGNED BY:	T.C.R.	
DRAWN BY:	T.C.R.	
CHECKED BY:	P.W.K.	
DATE:	APRIL, 2022	
PKW	REVISED LOT LABEL, WHC & SHC, DECKS, STORM DRAIN AND SWM.	03-2022
BY	NO.	REVISION

SEWER & WATER MAIN EXTENSIONS PLAN	
600' SCALE MAP NO. 42	BLOCK NO. 17
F.C.C. WORK ORDER NO. 17059-3001	
DATE	FILE NAME
	SEWER & WATER MAIN EXTENSION PLAN

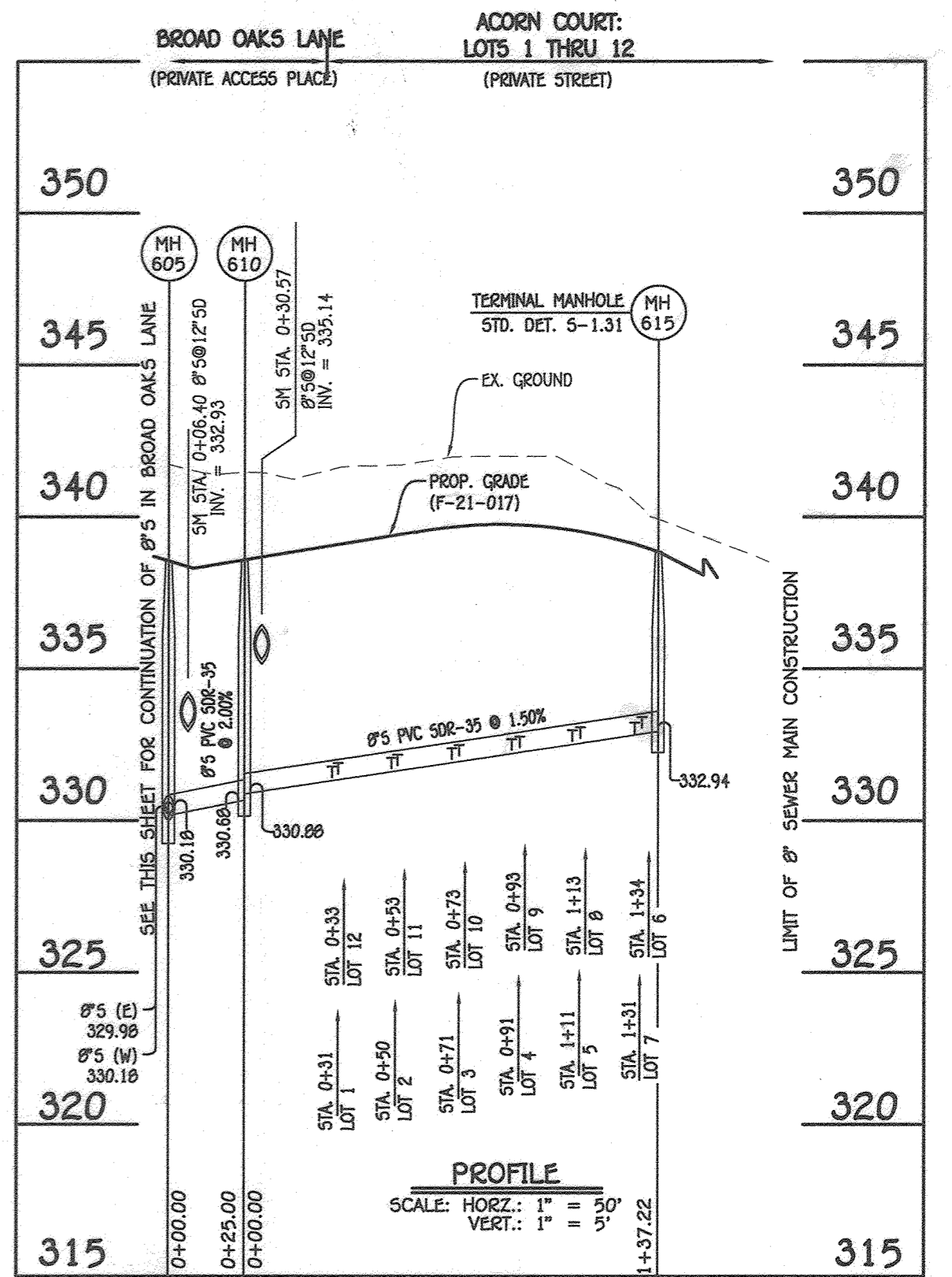
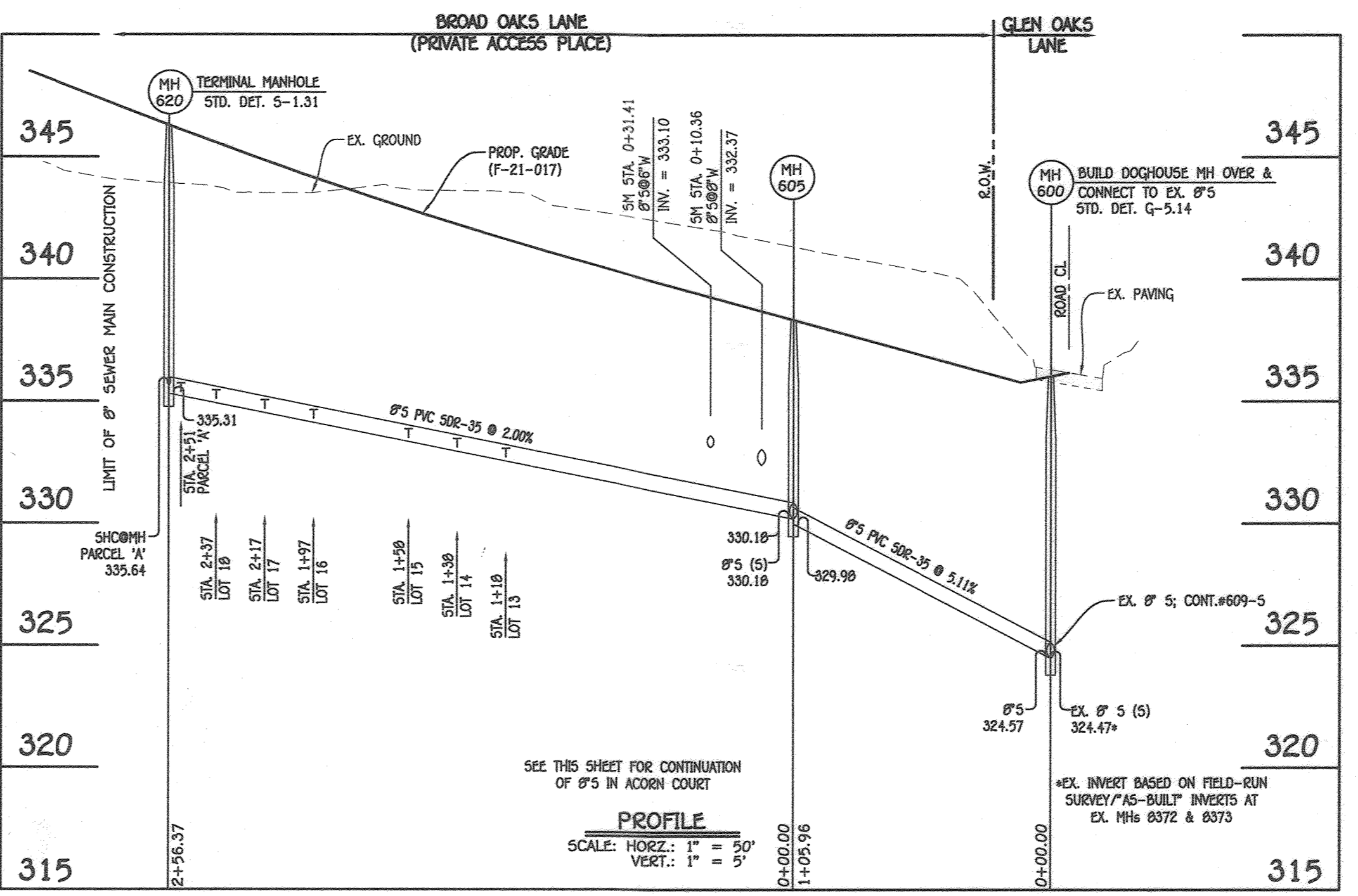
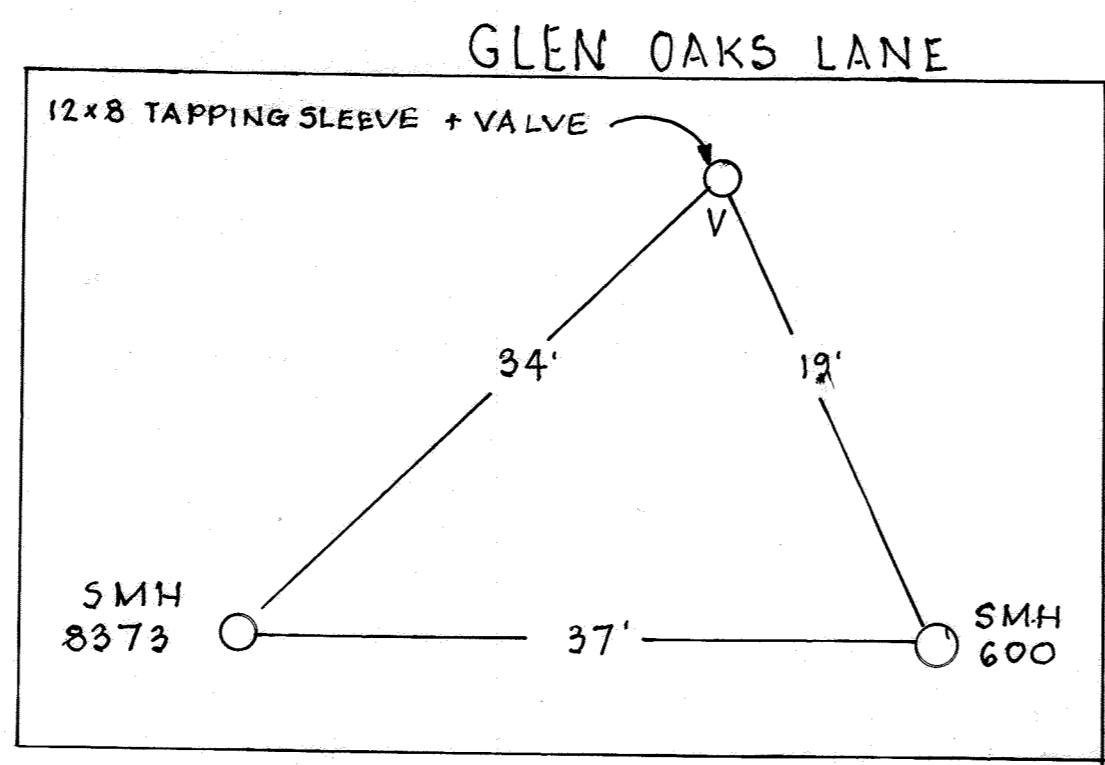
GLEN OAKS PLACE
LOTS 1 THRU 18; PARCEL 'A'
& OPEN SPACE LOTS 20 & 21
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 24-5069-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE:
AS
SHOWN

SHEET
2 OF 3

WATER HOUSE CONNECTION AS-BUILT LOCATION TABLE

LOT NUMBER	M TO MS COFFER	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1				
2	22'		WHC TO SMH-G10-44'	WHC TO SHC-C-2-0'
3				
4	22'		WHC TO SHC-2-34'	WHC TO SHC-4-7'
5				
6	23'		WHC TO SMH-G15-19'	WHC TO SHC-5-12'
7				
8	10'		WHC TO SMH-G15-24'	WHC TO SHC-7-8'
9				
10	10'		WHC TO SHC-10-10'	WHC TO SHC-9-11'
11				
12	11'		WHC TO SMH-G10-45'	WHC TO SHC-12-10'
13	21'		WHC TO I-3-10'	WHC TO SHC-13-11'
14				
15	20'		WHC TO SHC-14-10'	WHC TO SHC-13-40'
16				
17	19'		WHC TO SMH-G20-51'	WHC TO SHC-17-11'
18				
PARCEL 'A'	22'		WHC TO SMH-G20-10'	WHC TO SHC PARCELA-11'



WATER MAIN TABULATION CHART

W.M. STA.	APPURTENANCE	NORTHING	EASTING
0+00.00=1+29.56	8" WATER MAIN: ACORN COURT, LOTS 1 THRU 12		
0+03.00	8" VALVE	544,450.53	1,360,623.46
0+41.64	1/32 H.B.	544,447.82	1,360,624.17
1+67.53	8" PLUG & BUTTRISS	544,298.92	1,360,633.39
			1,360,691.91

- ### WATER MAIN NOTES:
1. ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE, DR-18.
 2. ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.
 3. DEFLECTION COUPLINGS SHALL BE CERTAIN-TIED PVC HIGH DEFLECTION COUPLINGS.
 4. ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

WATER MAIN TABULATION CHART

W.M. STA.	APPURTENANCE	NORTHING	EASTING
0+00.00	12"x8" TAPPING SLEEVE	544,463.66	1,360,740.41
0+03.00	8" TAPPING VALVE	544,462.22	1,360,745.79
0+09.14	1/32 H.B.	544,479.26	1,360,740.40
0+86.60	2" V.D.C. (UP)	544,460.78	1,360,665.18
1+29.56	8"x8" TEE	544,450.53	1,360,623.46
1+35.56	8" VALVE	544,436.15	1,360,607.17
1+50.61	8"x8" F.H. TEE	544,445.51	1,360,603.02
1+56.61	8"x8" REDUCER	544,444.08	1,360,597.19
3+80.35	8" PLUG & BUTTRISS	544,390.72	1,360,379.91
1+43.09	1" V.D.C. (UP)	544,447.91	1,360,610.32

MANHOLE TABULATION CHART

NO.	NORTHING	EASTING	RIM ELEVATION
600	544,468.43	1,360,738.04	336.02
605	544,443.20	1,360,635.93	336.33
620	544,382.13	1,360,386.84	346.28

NOTE: SET MH RIM FLUSH W/ PROPOSED GRADE.

SEWER HOUSE CONNECTION CHART

STATION	LOT	ELEVATION AT MAIN	ELEVATION AT EDGE OF FASHMENT	M.C.E.	SLAB
MH 605 TO EX. MH 620					
1+18 LT.	13	332.71	332.93	336.87	343.41
1+38 LT.	14	333.11	333.33	337.27	344.07
1+58 LT.	15	333.51	333.73	337.67	344.73
1+77 LT.	16	334.29	334.51	338.45	345.79
2+17 LT.	17	334.69	334.91	338.85	346.45
2+37 LT.	18	337.09	335.31	339.25	347.11
2+51 LT.	PARCEL 'A'	335.37	335.59	335.71	347.77
3+80 LT.	PARCEL 'A'	335.64	335.86	339.98	347.77

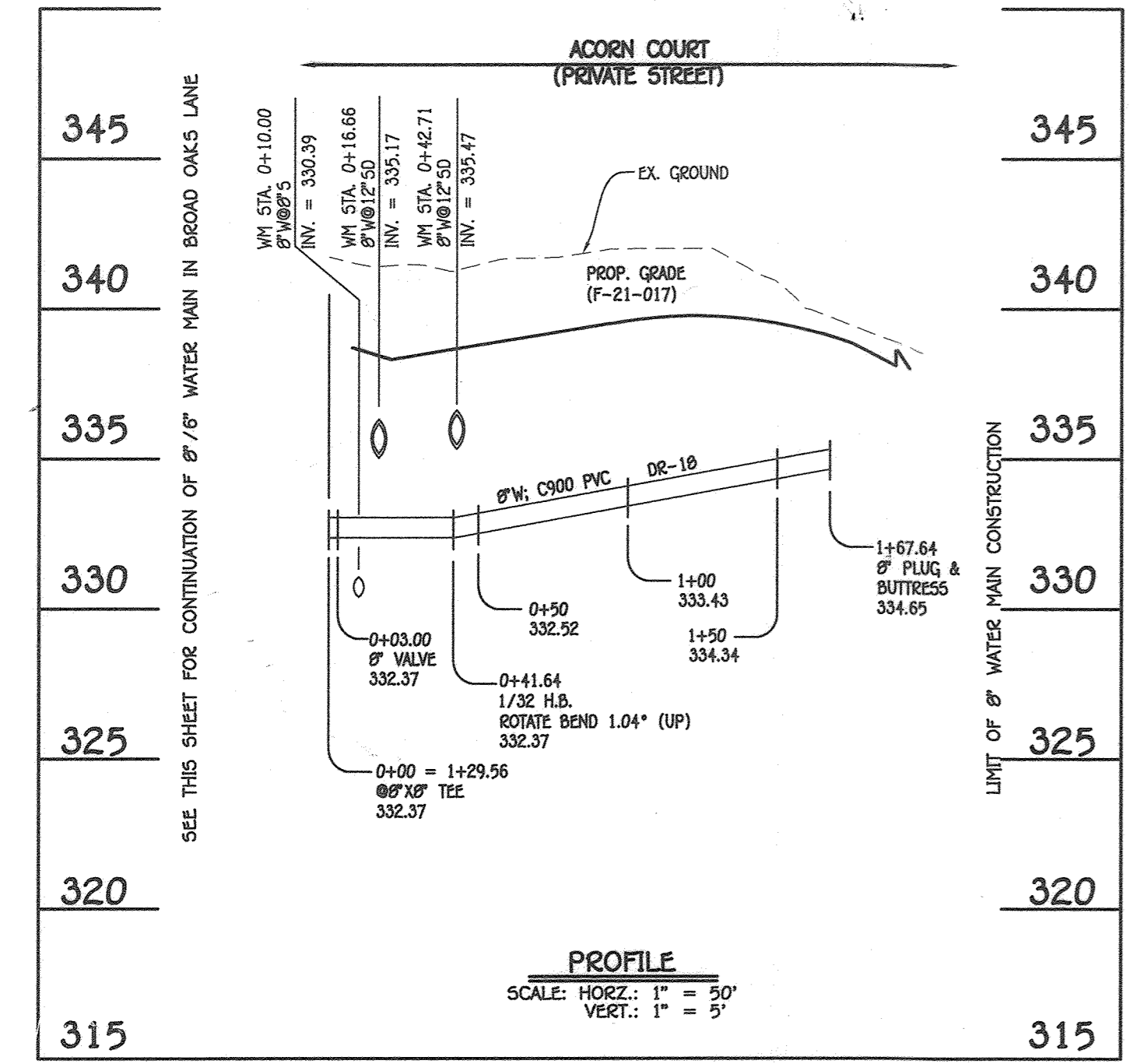
MANHOLE TABULATION CHART

NO.	NORTHING	EASTING	RIM ELEVATION
610	544,418.97	1,360,641.50	338.59
615 (TERMINAL)	544,296.84	1,360,704.09	338.86

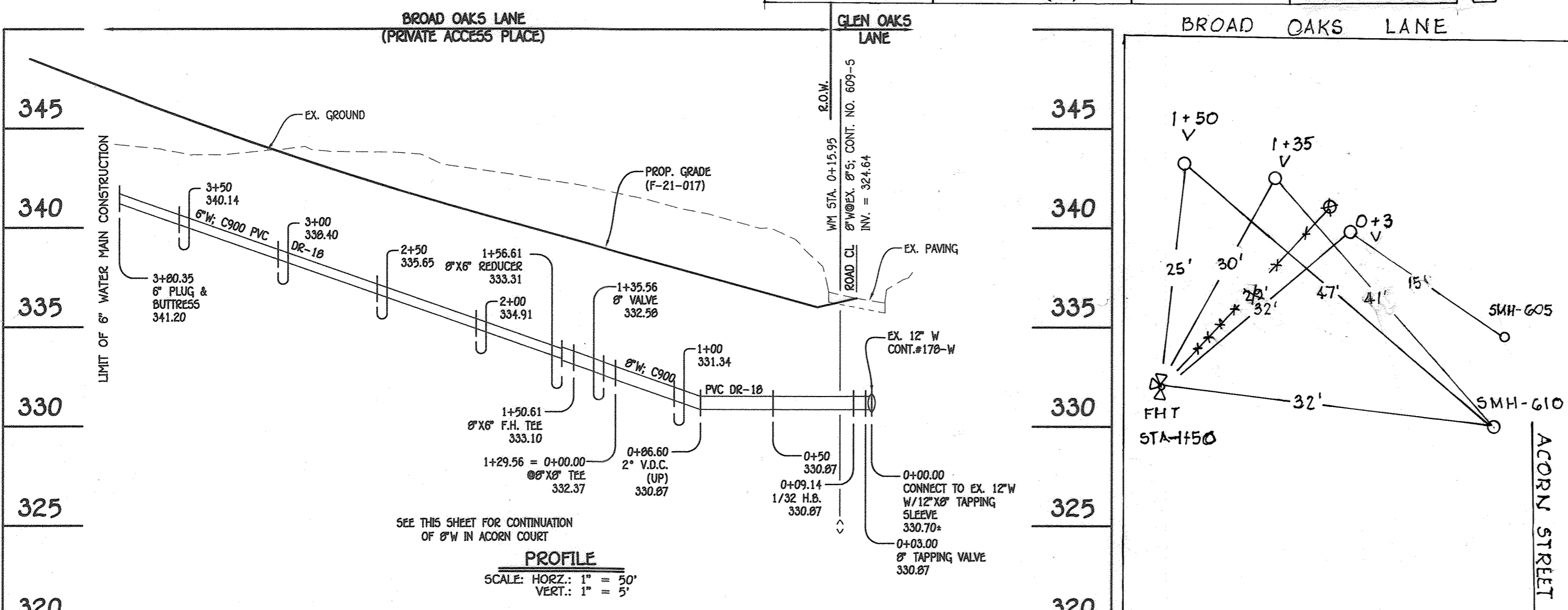
NOTE: SET MH RIM FLUSH W/ PROPOSED GRADE.

SEWER HOUSE CONNECTION CHART

STATION	LOT	ELEVATION AT MAIN	ELEVATION AT EDGE OF FASHMENT	M.C.E.	SLAB
MH 610 TO MH 615					
0+31 LT.	1	331.52	331.72	335.66	341.83
0+33 RT.	12	331.55	331.99	335.93	342.60
0+50 LT.	2	331.80	332.00	335.94	341.83
0+53 RT.	11	331.89	332.29	336.23	343.26
0+71 LT.	3	332.12	332.32	336.26	341.83
0+73 RT.	10	332.15	332.59	336.53	343.26
0+91 LT.	4	332.42	332.62	336.56	341.83
0+93 RT.	9	332.45	332.89	336.83	343.26
1+11 LT.	5	332.72	332.92	336.86	341.83
1+13 RT.	8	332.75	333.19	337.13	343.26
1+31 RT.	7	333.02	333.46	337.40	342.60
1+34 LT.	6	333.06	333.26	337.20	341.83



8" WATER MAIN: ACORN COURT; LOTS 1 THRU 12

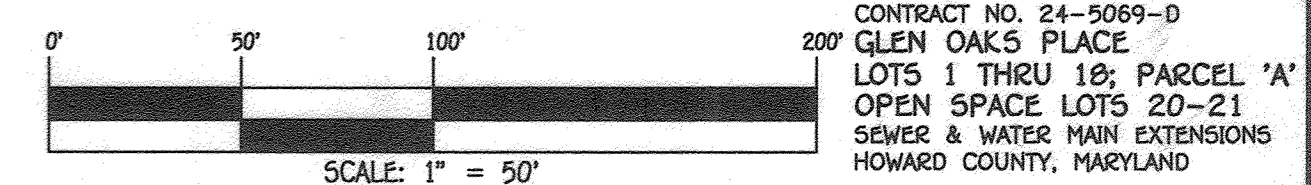


8" & 6" WATER MAIN: BROAD OAKS LANE; LOTS 13 THRU 18 & PARCEL 'A'

SEWER HOUSE CONNECTION AS-BUILT LOCATION TABLE

LOT NUMBER	M TO CO	ADDRESS	LOCATION DIMENSION 1	LOCATION DIMENSION 2
1	10'		SHC TO SMH-G10-30'	SHC TO WHC-1+2-14'
2	10'		SHC TO SMH-G10-49'	SHC TO WHC-1+2-6'
3	10'		SHC TO SHC-2-21'	SHC TO WHC-3+4-13'
4	10'		SHC TO SMH-G15-48'	SHC TO WHC-3+4-7'
5	10'		SHC TO SMH-G15-29'	SHC TO WHC-5+6-12'
6	10'		SHC TO SMH-G15-15'	SHC TO WHC-5+6-11'
7	20'		SHC TO SMH-G15-20'	SHC TO WHC-7+8-8'
8	20'		SHC TO SMH-G15-33'	SHC TO WHC-7+8-11'
9	20'		SHC TO SMH-G15-46'	SHC TO WHC-9+10-11'
10	20'		SHC TO WHC-1+12-31'	SHC TO WHC-9+10-18'
11	20'		SHC TO SMH-G10-54'	SHC TO WHC-11+12-10'
12	20'		SHC TO SMH-G10-37'	SHC TO WHC-11+12-10'
13	10'		SHC TO I-3-20'	SHC TO WHC-13-11'
14	10'		SHC TO SHC-13-21'	SHC TO WHC-14+15-10'
15	10'		SHC TO SHC-14-20'	SHC TO WHC-14+15-10'
16	10'		SHC TO SHC-15-39'	SHC TO WHC-16+17-10'
17	10'		SHC TO SMH-G20-40'	SHC TO WHC-18+19-21'
18	10'		SHC TO SMH-G20-12'	SHC TO WHC-18+17-31'
PARCEL 'A'	10'		SHC TO SMH-G20-14'	SHC TO WHC-18+17-19'

NOTE: THIS ORIGINAL CONSTRUCTION PLAN, SHEET 3 OF 3, SUPERSEDES THE SEWER AND WATER MAIN CONSTRUCTION PLAN PREVIOUSLY APPROVED AND SIGNED BY THE DEPARTMENT OF PLANNING AND ZONING ON JUNE 21, 2021.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

5/19/22

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. 12245 EXPIRATION DATE 5/7/16/22.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 10222 BALTIMORE NATIONAL PKWY
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2895

DESIGNED BY: T.C.R.
DRAWN BY: T.C.R.
CHECKED BY: P.W.K.
DATE: APRIL, 2022

WRA: WHC & SHC "AS BUILT" TABLES ADDED 5/26/22
PKW: REVISED PROFILES AND CHARTS. 01-2022
BY: NO. REVISION

SEWER & WATER MAIN EXTENSIONS
PROFILES, CHARTS, "AS-BUILT" TABLES & NOTES

600' SCALE MAP NO. 42 BLOCK NO. 17
F.C.C. WORK ORDER NO. 17059-3001
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

CONTRACT NO. 24-5069-D
GLEN OAKS PLACE
LOTS 1 THRU 18; PARCEL 'A'
& OPEN SPACE LOTS 20-21
SEWER & WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN
SHEET 3 OF 3