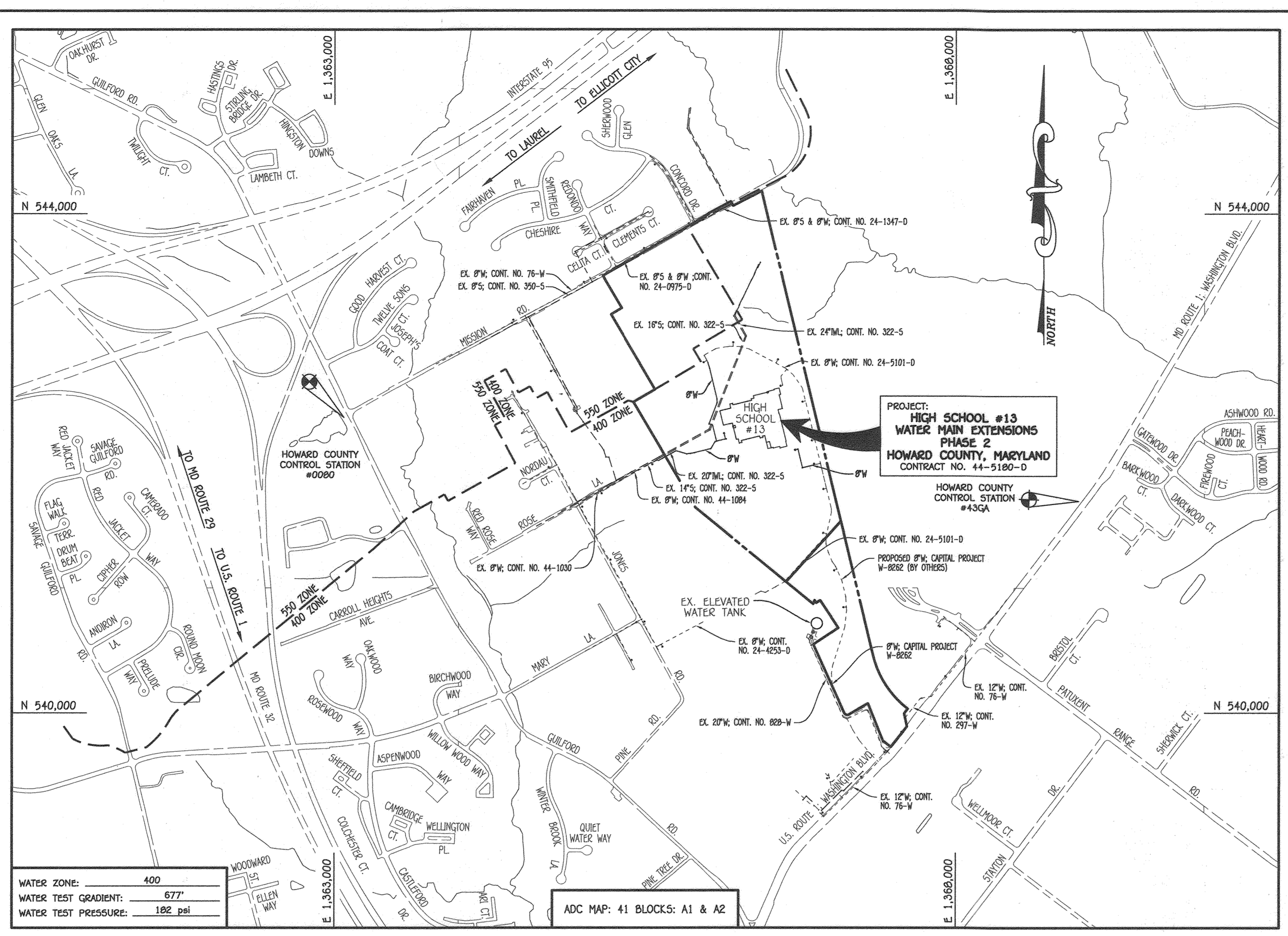


ITEM	ESTIMATED QUANTITIES	AS-BUILT		SUPPLIER
		QUANTITIES	TYPE	
8" PVC 90° DR-18	1,584 LF.	1590	C-900	NORTH AMERICAN PIPE
6" PVC 90° DR-18	72 LF.	75	C-900	NORTH AMERICAN PIPE
2" WVC	24 LF.	2B	TYPE X	CAMBRIDGE I&E
8" SADDLE SERVICE	1 EACH	1		FORD METER BOX
8" TEE	3 EACH	3	C-153	STAR PIPE
8" F.H. TEE	2 EACH	2	C-153	STAR PIPE
8" VALVE	5 EACH	5	C-515	AMERICAN FLOW CONTROL
8" VALVE	2 EACH	2	C-515	AMERICAN FLOW CONTROL
8" PLUG & BUTTRESS	2 EACH	2	C-153	STAR PIPE
1/8" BEND	6 EACH	6	C-153	TYLER/UNION
1/16" BEND	2 EACH	2	C-153	TYLER/UNION
1/32" BEND	4 EACH	4	C-153	TYLER/UNION
1" DEFLECTION COUPLING	2 EACH	2		NORTH AMERICAN PIPE
2" DEFLECTION COUPLING	3 EACH	3		TYLER/UNION
3" DEFLECTION COUPLING	7 EACH	7		HORNE CONCRETE
CONTINUITY TEST STATION	2 EACH	2		HORNE CONCRETE
FIRE HYDRANTS	2 EACH	2	C-502	AMERICAN DARLING
2" SINGLE OUTSIDE METER SETTING	1 EACH	1	C-500	FORD METER BOX

**BENCHMARK INFORMATION**  
 B.M.#1 - HOWARD COUNTY CONTROL STATION #0080 - HORIZONTAL - (NAD'83)  
 (LOCATED ALONG THE WEST SIDE OF GUILFORD ROAD, APPROX. 19.5' SOUTHWEST OF POLE NUMBER 271362)  
 N 542,366.884  
 E 1,363,076.043  
 ELEVATION = 282.408 - VERTICAL - (NAVD '86)

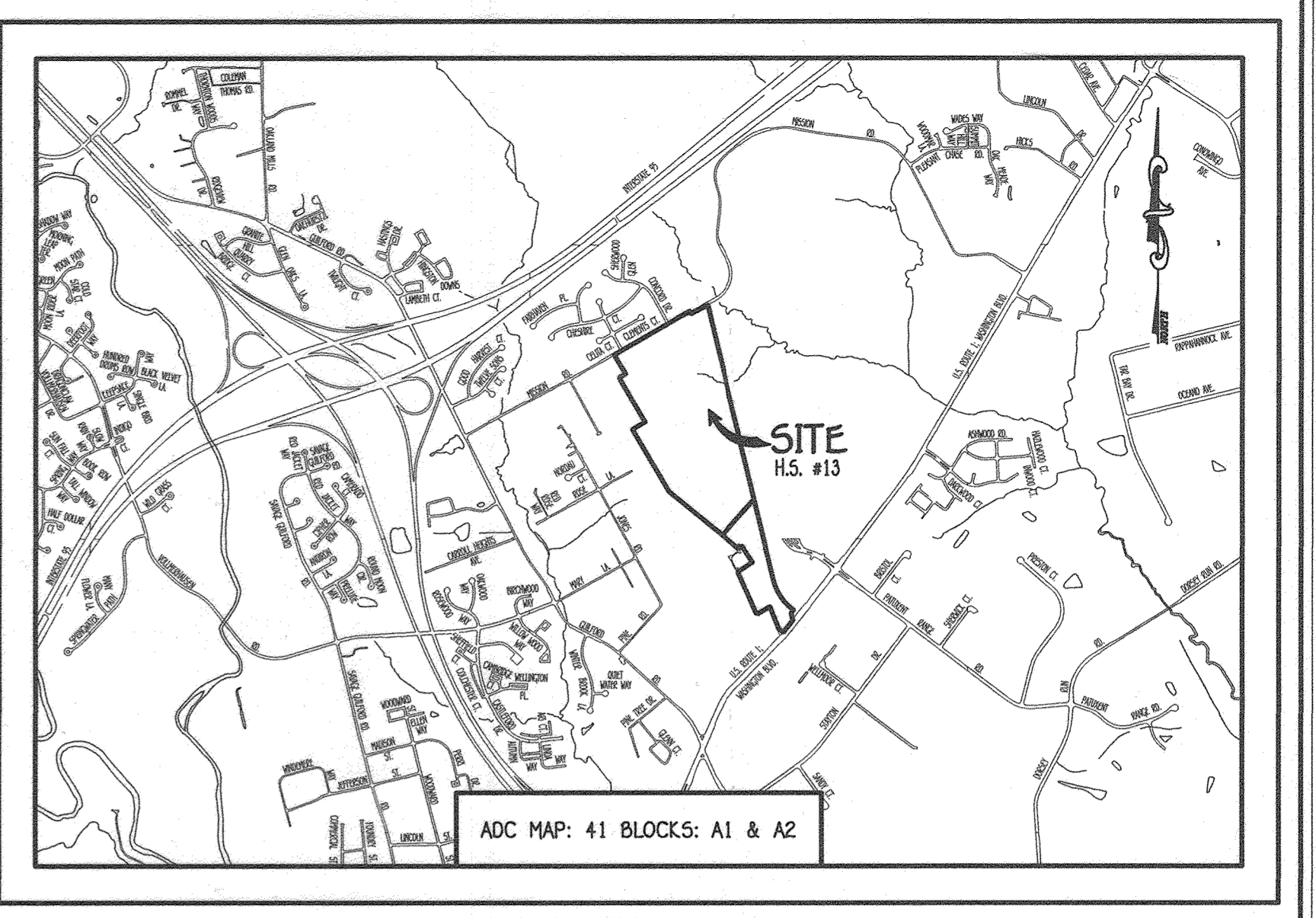
B.M.#2 - HOWARD COUNTY CONTROL STATION #43GA - HORIZONTAL - (NAD '83)  
 (LOCATED ALONG WASHINGTON BLVD., APPROX. 61.2' EAST OF POLE NO. 334747)  
 N 541,797.033  
 E 1,369,199.568  
 ELEVATION = 240.967 - VERTICAL - (NAVD '86)



TYPE OF BUILDING:	NEW HIGH SCHOOL
NUMBER OF PARCELS:	1
SEWER SHED:	LITTLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT RECLAMATION PLANT SAVAGE, MARYLAND

**LOCATION MAP**  
 SCALE: 1" = 600'

PLAN REFERENCE NUMBERS:	F-19-086 (ROAD & RECORD PLAN)
	SOP-19-066
	ECP-19-026



**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 HAZARDOUS UTILITIES. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
  - TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON OR ABOUT OCTOBER, 2010 BY FISHER, COLLINS & CARTER, INC.
  - HORIZONTAL AND VERTICAL SURVEY CONTROLS ARE SHOWN ON THE DRAWINGS. 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. 0080 & NO. 43GA.
  - ALL VERTICAL CONTROLS ARE BASED ON HANDED VERTICAL CONTROL STATIONS PROVIDED ON THE DRAWINGS.
  - 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 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  $\odot$  AT THE LOCATIONS OF THE TEST FITS. A NOTE OR NOTES 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 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 ON THESE PLANS:
 

AT&T	1-800-292-1133
CONTRACTOR SERVICES	410-537-5713
BOE (EMERGENCY)	410-695-0123
BUREAU OF UTILITIES	410-313-4900
COLUMBIAN PIPELINE CO.	410-761-1990
MISS UTILITY	1-800-257-1777
STATE HIGHWAY ADMINISTRATION	410-531-5533
VERIZON	1-800-743-0033 / 410-224-9210
  - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION SITE ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
  - 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.
  - THE CONTRACTOR SHALL NOTIFY THE BUREAU OF PUBLIC WORKS, 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 18.11(a) OF THE HOWARD COUNTY CODE.
- PART B: WATER MAIN GENERAL NOTES**
- ALL WATER MAINS SHALL BE AMMA C900 PVC, DR-18.
  - 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 D.I.P. AND PVC WATER MAINS IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL.
  - FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 3.1 OF THE AMMA 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 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. 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 "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, TAKING CARE NOT TO USE COMPACTION EQUIPMENT DIRECTLY OVER THE FITTING.
  - PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL OF 3-DEGREE (1 1/2-DEGREE ON EITHER END OF THE COUPLING), SHALL BE RATED FOR A MINIMUM 200 PSI MEETING THE REQUIREMENTS OF AMMA 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 AMMA C900 AND SHALL BE MULTI FITTINGS (PVC) BLUE BRUTE DR-18 OR EQUAL.
  - WHEN PVC HIGH DEFLECTION COUPLINGS OR 5-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF AMMA C900 PVC PIPELINES, THE CONTRACTOR SHALL INSERT 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 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 RESTRICTION 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.

**DEVELOPER'S CERTIFICATION**  
 I/WE 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 SEDIMENT AND EROSION 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. Koebel, For:  
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM 04-29-21  
 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. Koebel, For:  
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM 04-29-21  
 SIGNATURE OF ENGINEER DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE HOWARD COUNTY DESIGN MANUAL - VOLUME IV: STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AND AS SHOWN ON THE SITE DEVELOPMENT PLAN, SOP-19-066, GP-20-096. Paul W. Koebel, For:  
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM 04-29-21  
 SIGNATURE OF DEVELOPER DATE

SDP-19-066  
 GP-20-096

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

APPROVED:  
 HOWARD SOIL CONSERVATION DISTRICT DATE

SYMBOL	DESCRIPTION
---	EX. WATER MAIN
---	EX. SEWER MAIN
○	EX. SEWER MANHOLE
---	EX. SEWER, WATER & UTILITY EASEMENT
○	EX. FIRE HYDRANT
○	EX. VALVE
---	PROP. WATER MAIN
---	PROP. SEWER, WATER & UTILITY EASEMENT
○	PROP. FIRE HYDRANT
○	PROP. VALVE

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

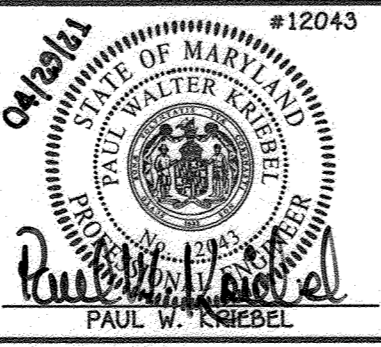
5/12/2021  
 DATE

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND

6-2-21  
 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. 12043 EXPIRATION DATE IS 7/16/22.

FISHER, COLLINS & CARTER, INC.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALFOUR NATIONAL Pkz  
 ELICOTT CITY, MARYLAND 21043  
 (410) 461-2299



DESIGNED BY:	D.T.A.	
DRAWN BY:	D.T.A.	
CHECKED BY:	P.W.K.	
DATE:	APRIL, 2021	
BY NO.	AS BUILT-QUANTITIES	8/31/23
REVISION		

**CONTRACT PURCHASER**  
 HOWARD COUNTY MARYLAND  
 3430 COURT HOUSE DRIVE  
 GEORGE HOWARD BUILDING  
 ELLICOTT CITY, MARYLAND 21043  
 ATTN: MR. THOMAS MEUNIER  
 410-313-3300

**DEVELOPER**  
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM  
 9020 HENDERHALL COURT  
 SUITE 'C'  
 COLUMBIA, MARYLAND 21045  
 ATTN: MR. DAN LUBELLY  
 410-313-6805

WATER MAIN EXTENSIONS  
 TITLE SHEET

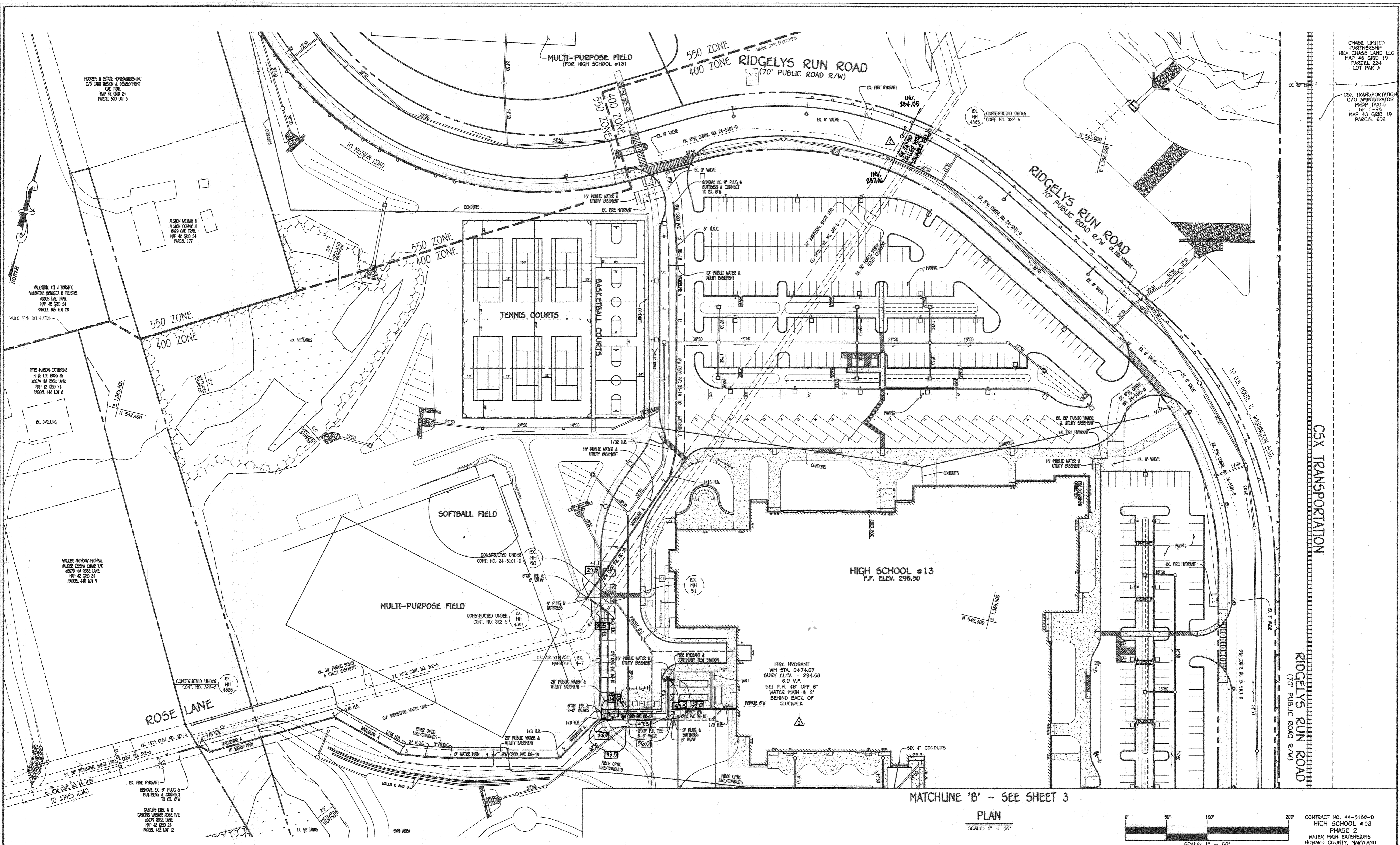
600' SCALE MAP NO. 42743 BLOCK NO. 24/19  
 F.C.C. WORK ORDER NO. 10027

FILE NAME: WATER MAIN EXTENSION PLAN

CONTRACT NO. 44-5180-D  
 HIGH SCHOOL #13  
 PHASE 2  
 WATER MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 50'

SHEET 1 OF 5



CHASE LIMITED PARTNERSHIP  
 N/A CHASE LAND LLC  
 MAP 43 GRID 19  
 PARCEL 234  
 LOT PAR A

CSX TRANSPORTATION  
 C/O ADMINISTRATOR  
 PROF. TAXES  
 DE 1-95  
 MAP 43 GRID 19  
 PARCEL 602

MOORE'S II ESTATE, HOMEOWNERS INC  
 C/O LAND DESIGN & DEVELOPMENT  
 ONE TRAIL  
 MAP 42 GRID 24  
 PARCEL 500 LOT 5

ALSTON WILLIAM H  
 ALSTON CORINE H  
 6829 ONE TRAIL  
 MAP 42 GRID 24  
 PARCEL 177

VALENTINE KIT J TRUSTEE  
 VALENTINE ROSCOE A TRUSTEE  
 MOORE ONE TRAIL  
 MAP 42 GRID 24  
 PARCEL 105 LOT 28

FITTS MARION CATHERINE  
 FITTS LEE ROSE JR  
 46574 NW ROSE LANE  
 MAP 42 GRID 24  
 PARCEL 446 LOT 8

WALKER ANTHONY MICHAEL  
 WALKER KESSA LINDA T/C  
 46570 NW ROSE LANE  
 MAP 42 GRID 24  
 PARCEL 446 LOT 9

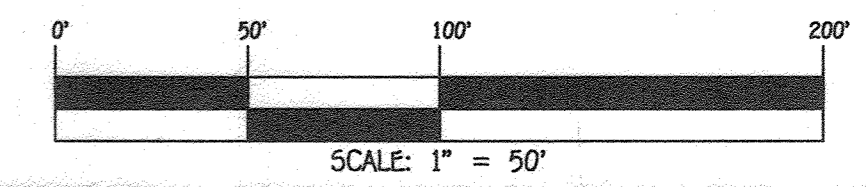
CONSTRUCTED UNDER  
 CONT. NO. 322-5  
 EX. MH 4383

CONSTRUCTED UNDER  
 CONT. NO. 322-5  
 EX. MH 4383

GASKINS CORE II II  
 GASKINS MARJOR ROSE T/C  
 46575 ROSE LANE  
 MAP 42 GRID 24  
 PARCEL 442 LOT 12

MATCHLINE 'B' - SEE SHEET 3

PLAN  
 SCALE: 1" = 50'



CONTRACT NO. 44-5180-D  
 HIGH SCHOOL #13  
 PHASE 2  
 WATER MAIN EXTENSIONS  
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*[Signature]*  
 CHIEF, BUREAU OF UTILITIES

5/12/2021  
 DATE

DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY, MARYLAND

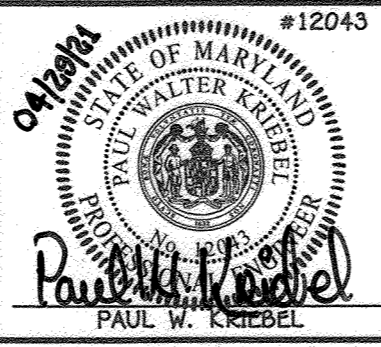
*[Signature]*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

6/2/21  
 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. 12043 EXPIRATION DATE IS 7/16/22.

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS

CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PARK  
 ELLSWORTH CITY, MARYLAND 21042  
 (410) 461-2895



DESIGNED BY:	D.T.A.	DATE:	
DRAWN BY:	D.T.A.	DATE:	
CHECKED BY:	WRA	DATE:	8/31/21
DATE:	APRIL, 2021	BY:	NO.
REVISION:	AS BUILT	DATE:	10/21/21
REVISION:	ADDED EXISTING 24\"/>		

WATER MAIN EXTENSIONS PLAN	
60' SCALE MAP NO. 42/43	BLOCK NO. 24/19
F.C.C. WORK ORDER NO. 10027	
FILE NAME: WATER MAIN EXTENSION PLAN	

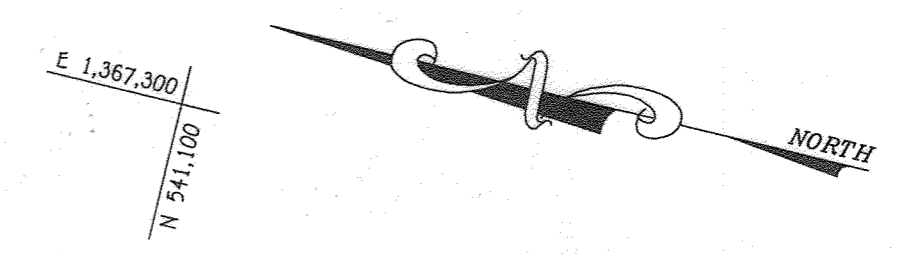
SCALE AS SHOWN

SHEET 2 OF 5

HIGH SCHOOL #13  
 PHASE 2  
 WATER MAIN EXTENSIONS  
 CONTRACT NO. 44-5180-D  
 SIXTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

CHASE LIMITED PARTNERSHIP  
NKA CHASE LAND LLC  
MAP 43 GRID 19  
PARCEL 234  
LOT PAR A

CSX TRANSPORTATION  
C/O ADMINISTRATOR  
PROF TAXES  
SE 1-95  
MAP 43 GRID 19  
PARCEL 602



RIDGELYS RUN ROAD  
(70' PUBLIC ROAD R/W)

RIDGELYS RUN ROAD  
(70' PUBLIC ROAD R/W)

TO U.S. ROUTE 1; WASHINGTON BLVD.

MATCHLINE 'B' - SEE SHEET 2

HIGH SCHOOL #13

RUBBER SURFACE TRACK

TRACK AND ARTIFICIAL TURF FIELD

HIGH JUMP AREA

RUBBER SURFACE TRACK

BLEACHERS

DISCUS AND SHOTPUT AREA

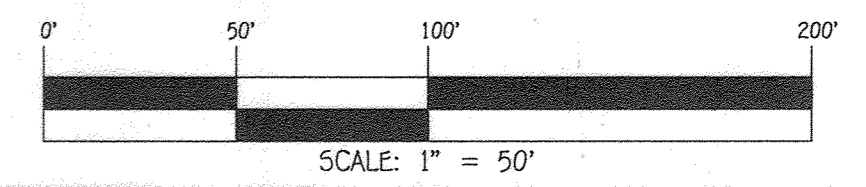
FIELD HOCKEY FIELD

BASEBALL FIELD

EX. WATER TOWER

PINE ROAD  
(PAVED STREET)

PLAN  
SCALE: 1" = 50'



CONTRACT NO. 44-5180-D  
HIGH SCHOOL #13  
PHASE 2  
WATER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

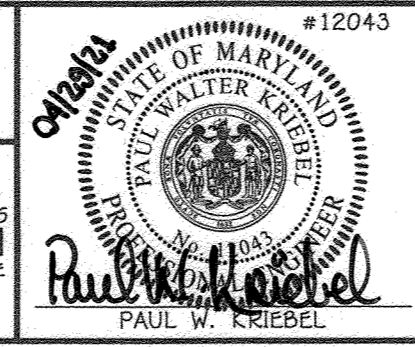
*[Signature]*  
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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.

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CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21046  
(410) 461-2299



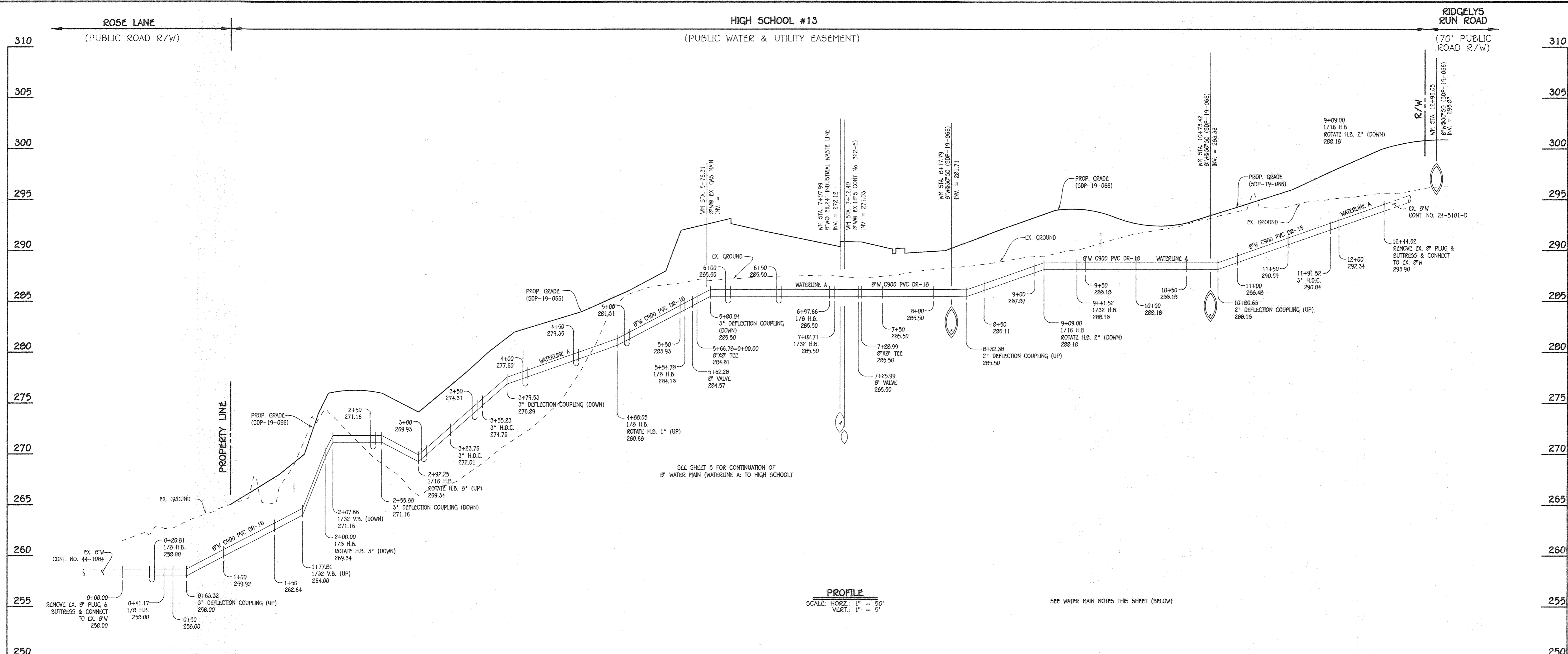
DESIGNED BY:	D.T.A.	DATE:	APRIL, 2021
DRAWN BY:	D.T.A.	BY NO.:	
CHECKED BY:	P.W.K.	REVISION:	
DATE:		DATE:	

WATER MAIN EXTENSIONS PLAN

600' SCALE MAP NO. 42/43 BLOCK NO. 24/19  
F.C.C. WORK ORDER NO. 10027  
FILE NAME: WATER MAIN EXTENSION PLAN

HIGH SCHOOL #13  
PHASE 2  
WATER MAIN EXTENSIONS  
CONTRACT NO. 44-5180-D  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 3 OF 5



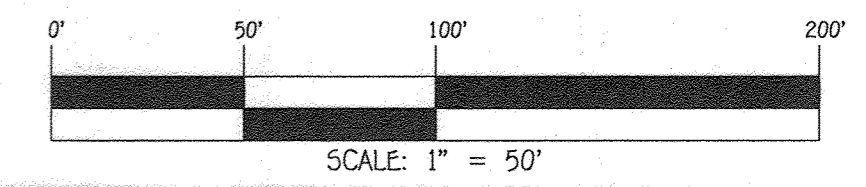
**PROFILE**  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

SEE WATER MAIN NOTES THIS SHEET (BELOW)

**8" WATER MAIN (WATERLINE A) : ROSE LANE**

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (WATERLINE A) : ROSE LANE			
0+00.00	CONNECT TO EX. 8" W	542,009.20	1,365,572.27
0+26.01	1/8 H.B.	542,022.44	1,365,595.58
0+41.17	1/8 H.B.	542,018.60	1,365,609.42
0+63.32	3" DEFLECTION COUPLING (UP)	542,029.42	1,365,628.75
1+77.01	1/32 V.B. (UP)	542,085.31	1,365,728.67
2+00.00	1/8 H.B. (ROTATE 3" DOWN)	542,096.14	1,365,748.04
2+07.66	1/32 V.B. (DOWN)	542,094.06	1,365,755.41
2+55.00	3" DEFLECTION COUPLING (DOWN)	542,080.95	1,365,801.81
2+92.25	1/16 H.B. (ROTATE 0" UP)	542,071.06	1,365,836.81
3+23.76	3" HOR. DEFLECTION COUPLING	542,075.24	1,365,860.05
3+55.23	3" HOR. DEFLECTION COUPLING	542,081.03	1,365,898.97
3+79.53	3" DEFLECTION COUPLING (DOWN)	542,086.76	1,365,922.59
4+00.05	1/8 H.B. (ROTATE 1" DOWN)	542,112.31	1,366,028.06
5+54.78	1/8 H.B.	542,169.28	1,366,062.80
5+62.28	8" VALVE	542,171.04	1,366,070.09
5+66.78	8" X 8" TEE	542,172.10	1,366,074.47
5+80.04	3" DEFLECTION COUPLING (DOWN)	542,175.23	1,366,087.35
6+97.66	1/8 H.B.	542,299.31	1,366,043.65
7+02.71	1/32 H.B.	542,301.94	1,366,039.34
7+25.99	8" VALVE	542,310.22	1,366,017.57
7+28.99	8" X 8" TEE	542,311.29	1,366,014.77
8+32.38	2" DEFLECTION COUPLING (UP)	542,407.90	1,366,051.54
9+09.00	1/16 H.B.	542,479.52	1,366,078.80
9+41.52	1/32 H.B.	542,512.03	1,366,078.50
10+00.63	2" DEFLECTION COUPLING (UP)	542,647.46	1,366,045.69
11+91.52	3" HOR. DEFLECTION COUPLING	542,755.01	1,366,019.64
12+44.52	CONNECT TO EX. 8" W	542,805.42	1,366,003.29

- 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-TREE HIGH DEFLECTION COUPLINGS.
  4. ALL WATER HOSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

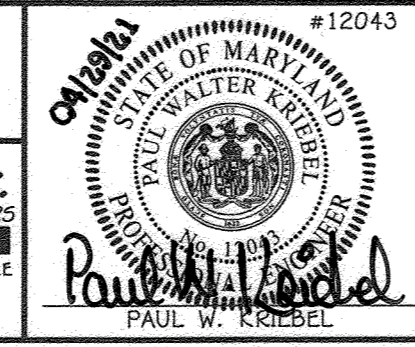


CONTRACT NO. 44-5180-D  
HIGH SCHOOL #13  
PHASE 2  
WATER MAIN EXTENSIONS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*[Signature]*  
CHIEF, BUREAU OF UTILITIES  
DATE: 5/12/2021

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND  
*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 6-2-21

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  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21042  
(410) 461-2895

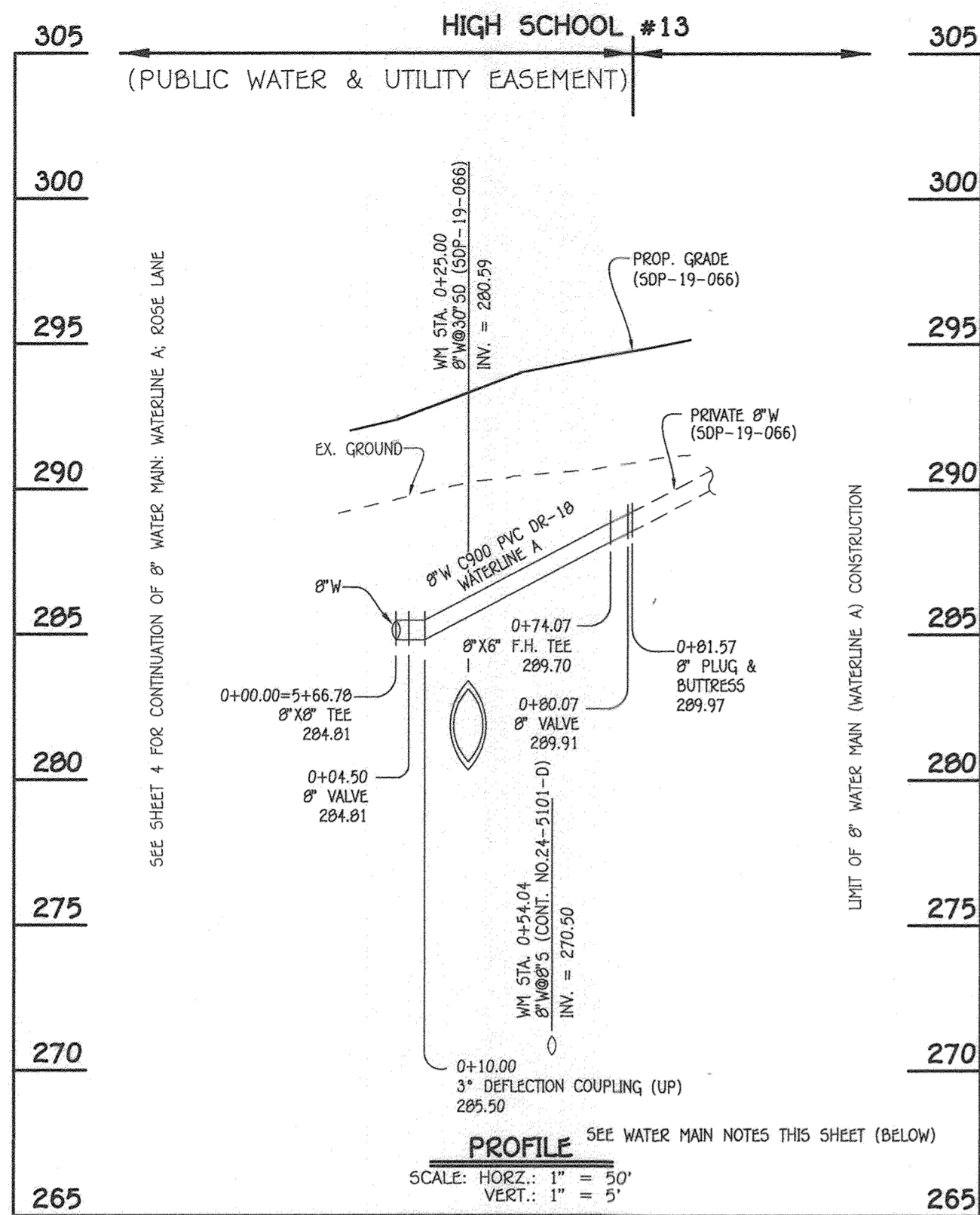


DESIGNED BY : D.T.A.  
DRAWN BY : D.T.A.  
CHECKED BY : P.W.K.  
DATE : APRIL, 2021  
BY NO. \_\_\_\_\_ REVISION \_\_\_\_\_ DATE \_\_\_\_\_

**WATER MAIN EXTENSIONS  
PROFILE, CHART & NOTES**  
600' SCALE MAP NO. 42/43 BLOCK NO. 24/19  
P.W.K.  
F.C.C. WORK ORDER NO. 10027  
FILE NAME : WATER MAIN EXTENSION PLAN

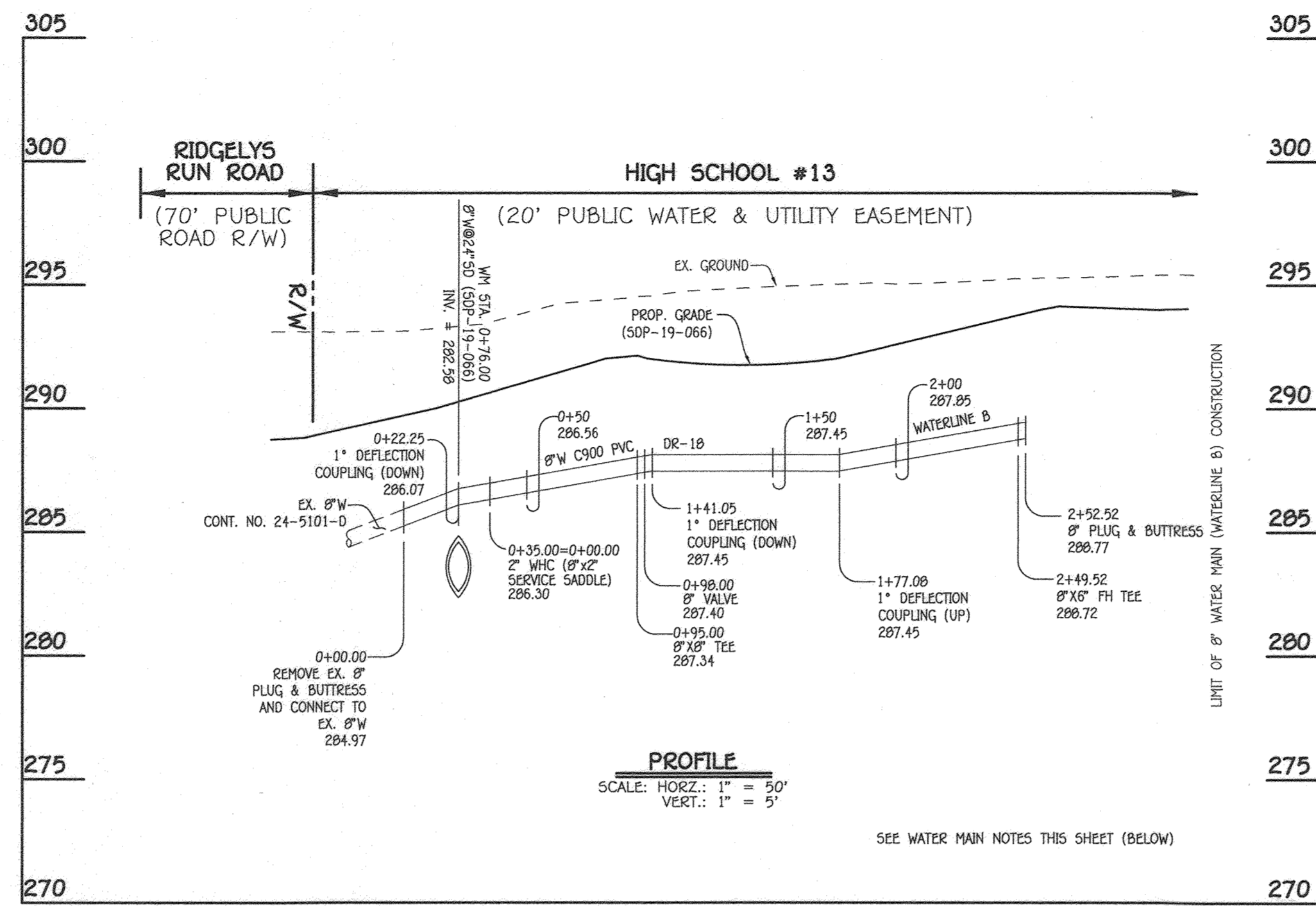
**HIGH SCHOOL #13  
PHASE 2**  
WATER MAIN EXTENSIONS  
CONTRACT NO. 44-5180-D  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 4 OF 5



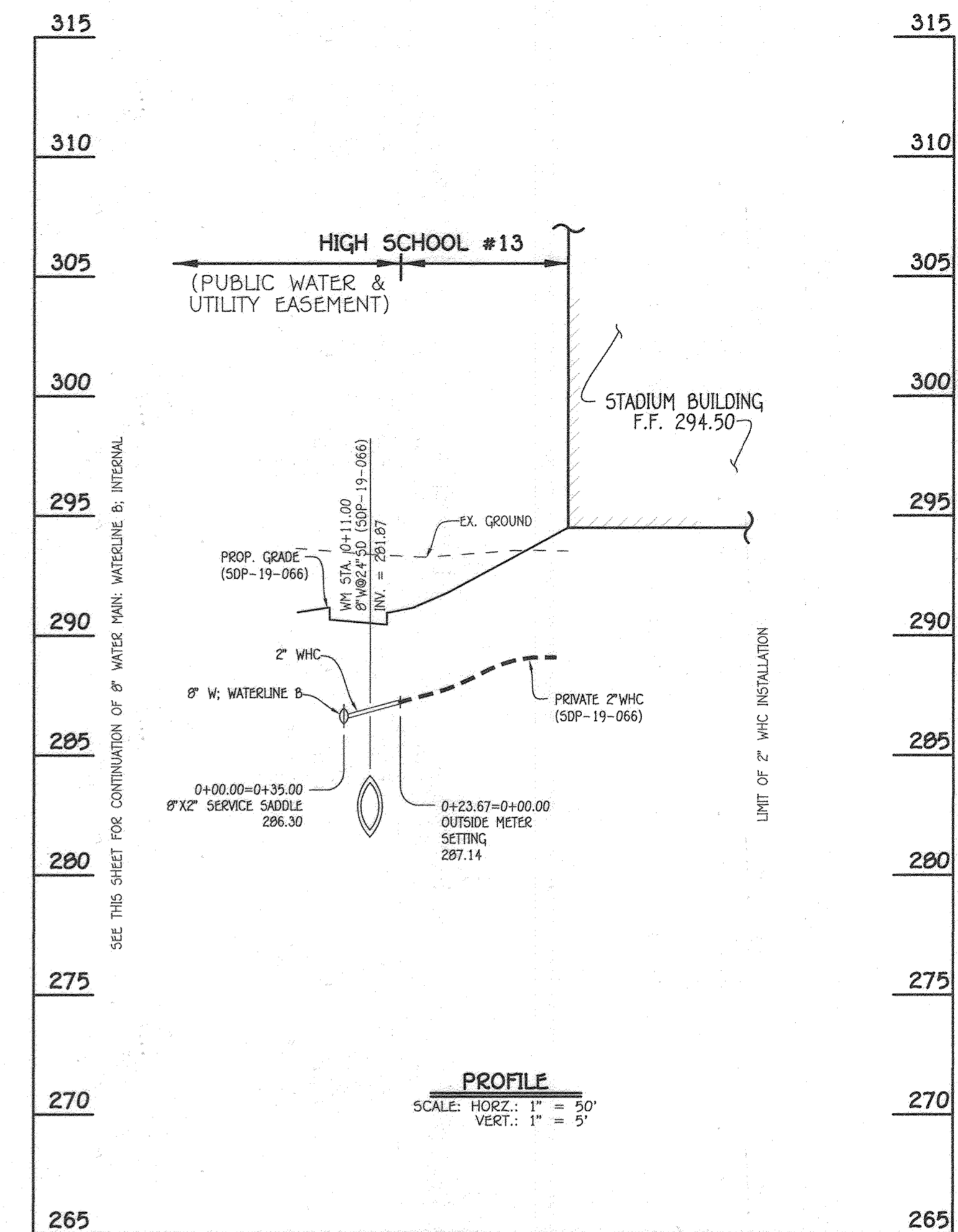
8" WATER MAIN (WATERLINE A) : TO HIGH SCHOOL

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (WATERLINE A) : TO HIGH SCHOOL			
0+00.00=5+66.78	8"X8" TEE	542,172.10	1,366,074.47
0+04.50	8" VALVE	542,173.17	1,366,078.04
0+10.00	3" DEFLECTION COUPLING (UP)	542,174.46	1,366,084.19
0+74.07	8"X6" F.H. TEE	542,189.56	1,366,146.45
0+80.07	8" VALVE	542,190.96	1,366,152.28
0+81.57	8" PLUG & BUTTRESS	542,191.31	1,366,153.74



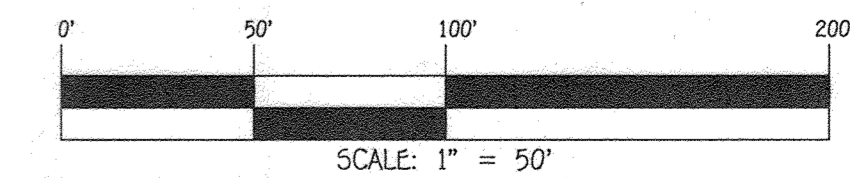
8" WATER MAIN (WATERLINE B) : INTERNAL

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (WATERLINE B) : INTERNAL			
0+00.00	CONNECT TO EX. 8" W	541,982.80	1,366,862.59
0+22.25	1" DEFLECTION COUPLING (DOWN)	541,976.85	1,366,838.04
0+35.00	2" WHC (8"X2" SERVICE SADDLE)	541,973.85	1,366,825.66
0+95.00	8"X8" TEE	541,959.72	1,366,767.34
0+98.00	8" VALVE	541,962.64	1,366,766.64
1+41.05	1" DEFLECTION COUPLING (DOWN)	541,965.95	1,366,765.93
1+77.08	1" DEFLECTION COUPLING (UP)	542,039.44	1,366,748.03
2+49.52	8"X6" F.H. TEE	542,109.90	1,366,730.96
2+52.52	8" PLUG & BUTTRESS	542,112.82	1,366,730.25



2" WHC : TO STADIUM BUILDING

- WATER MAIN NOTES:**
- ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-18.
  - 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.
  - DEFLECTION COUPLINGS SHALL BE CERTAIN-TEED PVC HIGH DEFLECTION COUPLINGS.
  - ALL WATER HOUSE CONNECTIONS AND TAPS SHALL BE PERFORMED USING A SADDLE.

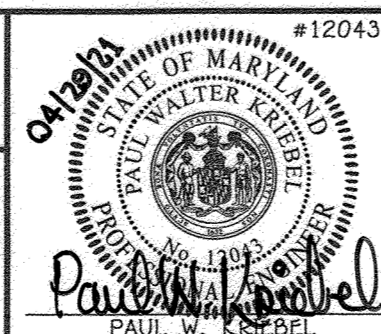


DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY, MARYLAND

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 6/7/16/22.

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DESIGNED BY :	D.T.A.
DRAWN BY :	D.T.A.
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DATE :	APRIL, 2021
BY NO.	
REVISION	
DATE	

WATER MAIN EXTENSIONS  
PROFILES, CHARTS & NOTES

60' SCALE MAP NO. 42/43 BLOCK NO. 24/19  
F.C.C. WORK ORDER NO. 10027  
FILE NAME : WATER MAIN EXTENSION PLAN

HIGH SCHOOL #13  
PHASE 2  
WATER MAIN EXTENSIONS  
CONTRACT NO. 44-5180-D  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE  
AS  
SHOWN

SHEET  
5 OF 5