

QUANTITIES					
ITEM	ESTIMATED	AS-BUILT	QUANTITIES	TYPE	SUPPLIER
8" PVC 502-95	14 LF.	14	SDR-35	GP	GP
MANHOLES	2 EACH	2			
8" PVC 502-95	230 LF	230	C-900		NORTH AMERICAN PIPE
8" PVC 502-95	230 LF	230	C-900		NORTH AMERICAN PIPE
8" PVC 502-95	4 EACH	4	C-153		STAR PIPE
8" PVC 502-95	9 EACH	9	C-153		STAR PIPE
8" VALVE	7 EACH	7	C-515		AMERICAN FLOW CONTROL
8" VALVE	9 EACH	9	C-515		AMERICAN FLOW CONTROL
8" PLUG & BUTTRESS	4 EACH	4	C-153		STAR PIPE
1/8 BEND	3 EACH	3	C-153		TYLER/UNION
1/16 BEND	3 EACH	3	C-153		TYLER/UNION
1/32 BEND	12 EACH	12	C-153		TYLER/UNION
1" DEFLECTION COUPLING	6 EACH	6			NORTH AMERICAN PIPE
2" DEFLECTION COUPLING	6 EACH	6			TYLER UNION
3" DEFLECTION COUPLING	6 EACH	6			HORNE CONCRETE
CONTINUITY TEST STATION	9 EACH	9			HORNE CONCRETE
FIRE HYDRANTS	9 EACH	9	C-502		AMERICAN FLOW CONTROL

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 542,366.804
 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 1,369,159.568
 ELEVATION = 240.967 - VERTICAL - (NAVD '86)

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.

[Signature]
 SIGNATURE OF DEVELOPER
 DATE: 7/10/20

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.

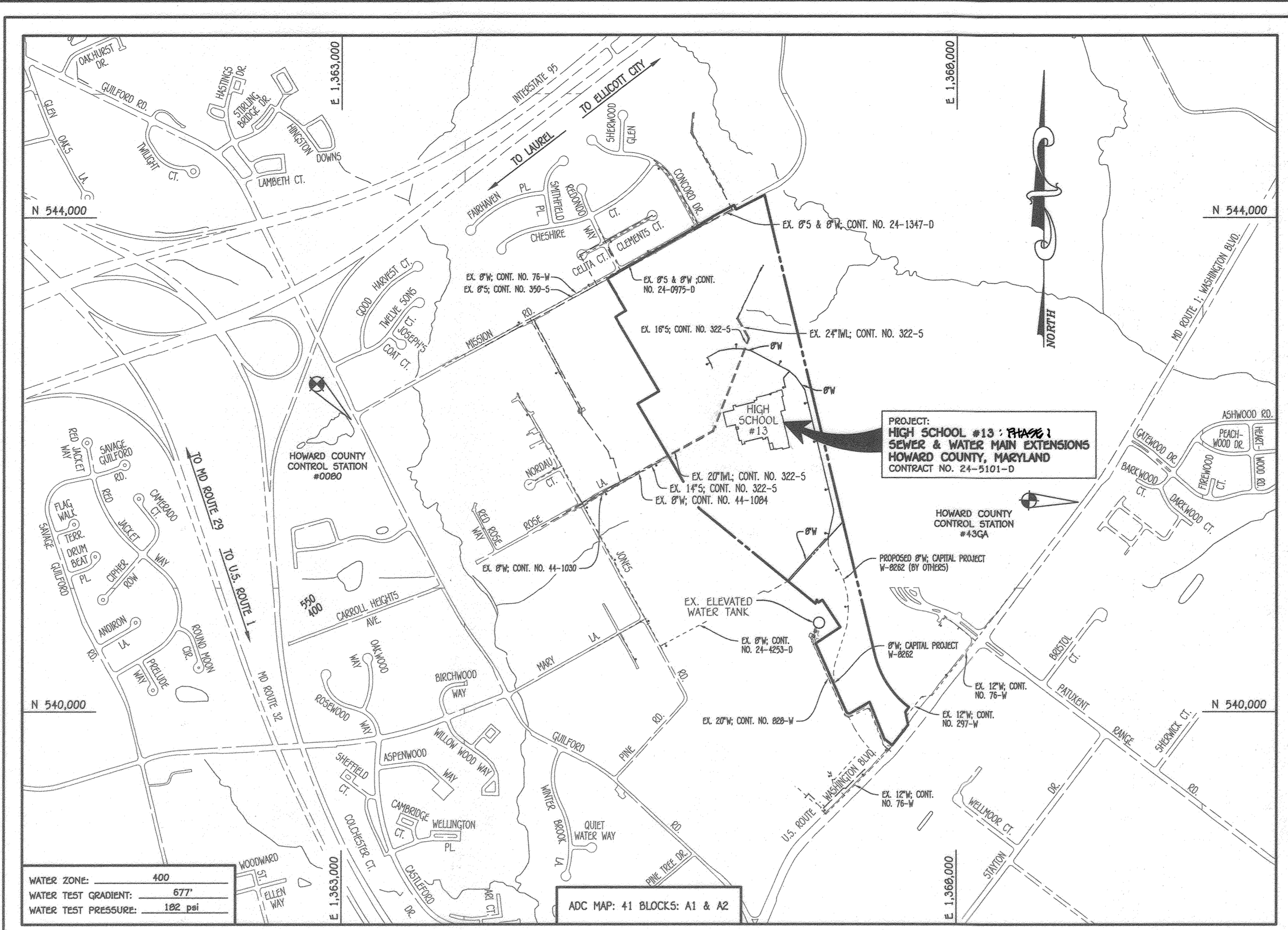
[Signature]
 SIGNATURE OF ENGINEER
 DATE: 07-15-20

[Signature]
 SIGNATURE OF DEVELOPER
 DATE: 7/16/20

SDP-19-066
 THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *[Signature]*
 DATE: 7/16/20

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 2-30-2020
 CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY, MARYLAND
 8-26-20
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



LOCATION MAP
 SCALE: 1" = 600'

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

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

CONTRACT NO. 24-5101-D
HIGH SCHOOL #13: PHASE 1
SEWER & WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

CONTRACT PURCHASER
 HOWARD COUNTY MARYLAND
 3430 COURT HOUSE DRIVE
 GEORGE HOWARD BUILDING
 ELLICOTT CITY, MARYLAND 21043
 ATTN: MR. JAMES IRVIN
 410-313-3500

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

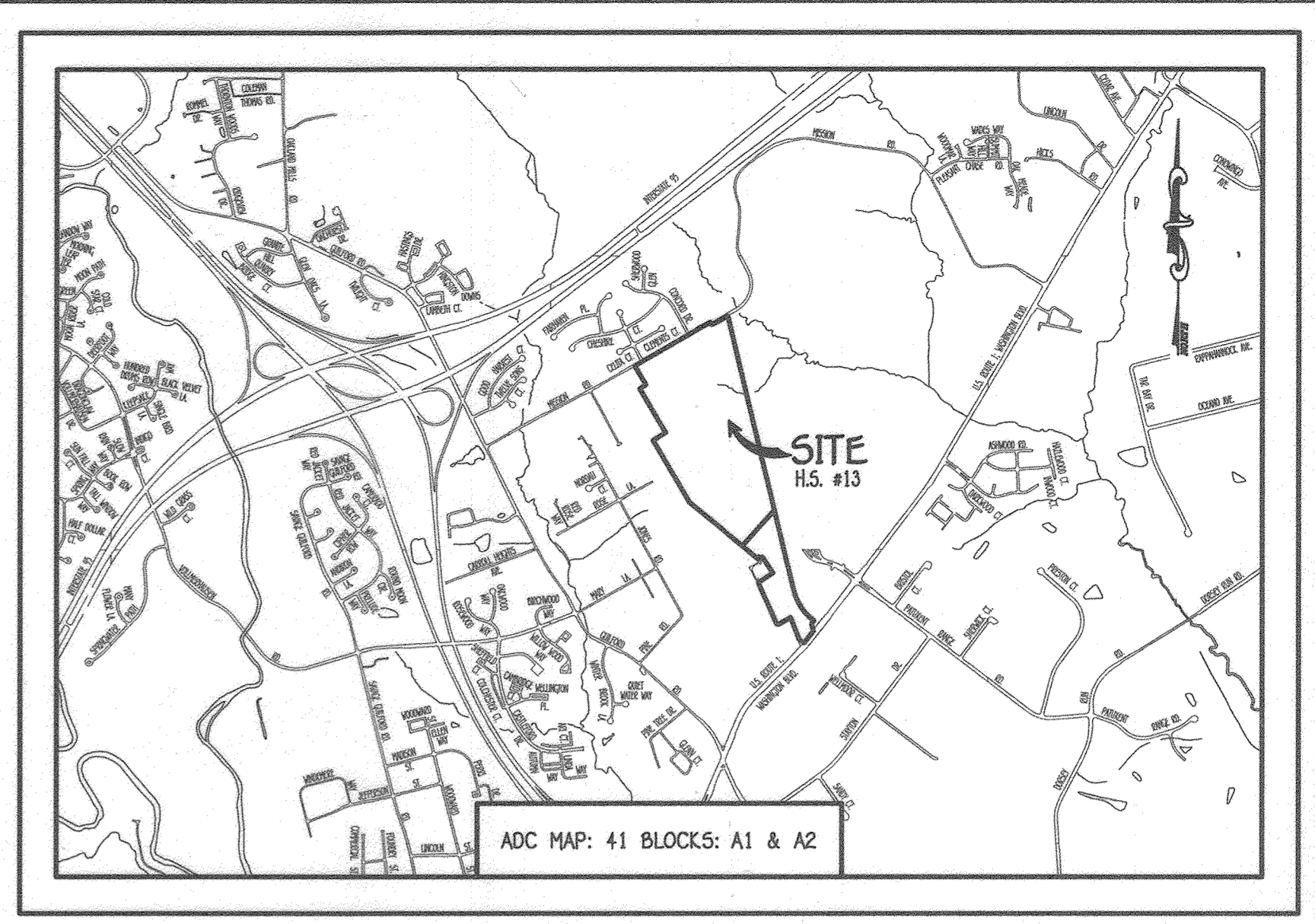
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 12043 EXPIRATION DATE IS 7/16/20.

[Signature]
 PAUL W. KRIBEL

DESIGNED BY: D.T.A./J.G.J.
 DRAWN BY: D.T.A./J.G.J.
 CHECKED BY: D.T.A./J.G.J.
 DATE: JULY, 2020

WRA AS-BUILT FINAL QUANTITIES 9/5/23
 PCC REVISED QUANTITIES CHART & LOCATION MAP 8/9/21
 PCC REVISED PART B WATER MAIN GENERAL NOTES NO. 1 & QUANTITIES CHART 3/1/21

SEWER & WATER MAIN EXTENSIONS TITLE SHEET
 600' SCALE MAP NO. 42743 BLOCK NO. 24/19
 F.C.C. WORK ORDER NO. 10027
 FILE NAME: SEWER & WATER MAIN EXTENSION PLAN



VICINITY MAP
 SCALE: 1" = 2000'

- GENERAL NOTES**
- 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 WERE PERFORMED ON OR ABOUT OCTOBER, 2016 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. 0080 & NO. 43GA.
 - 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" OF 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 PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL (S) 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.
 - 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
 - ICE (CONTRACTOR SERVICES) 410-637-8713
 - DE (EMERGENCY) 410-686-0123
 - BUREAU OF UTILITIES 410-313-4900
 - COLUMBIA PIPELINE CO 410-795-1390
 - MES UTILITY 1-800-257-7777
 - 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 STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
 - CONTRACTOR SHALL REMOVE TRUNKS 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 HIGHWAYS, HOWARD COUNTY, AT (410)-313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/CUTTING ANY ROAD OR HIGHWAY. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 10.114(a) OF THE HOWARD COUNTY CODE.

- PART B: WATER MAIN GENERAL NOTES**
- ALL WATER MAINS SHALL BE AWMA C900 PVC 8" OR 10" OF COVER UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TREES SHALL BE STRAPPED TO TREES.
 - 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 5.1 OF THE AWMA 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 HARNESSES. 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-DEGREES (1 1/2-DEGREE ON EITHER END OF THE COUPLING). SHALL BE RATED FOR A MINIMUM 220 PSI MEETING THE REQUIREMENTS OF AWMA C900. SHALL HAVE A MINIMUM 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-10 MEETING THE REQUIREMENTS OF AWMA C900 AND SHALL BE MULTI FITTINGS (IPEX) BLUE BRUTE DR-10 OR EQUAL.
 - WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 5-DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF AWMA C900 PVC PIPELINES, THE CONTRACTOR SHALL INSERT DEVICES FOR THE PREVENTION OF OVER-INSERTION OF THE PVC PIPE ENDS 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 HEAR-STOP, AS MANUFACTURED BY ERM IRON, INC. OR APPROVED EQUAL.

PART C: SEWER MAIN GENERAL NOTES

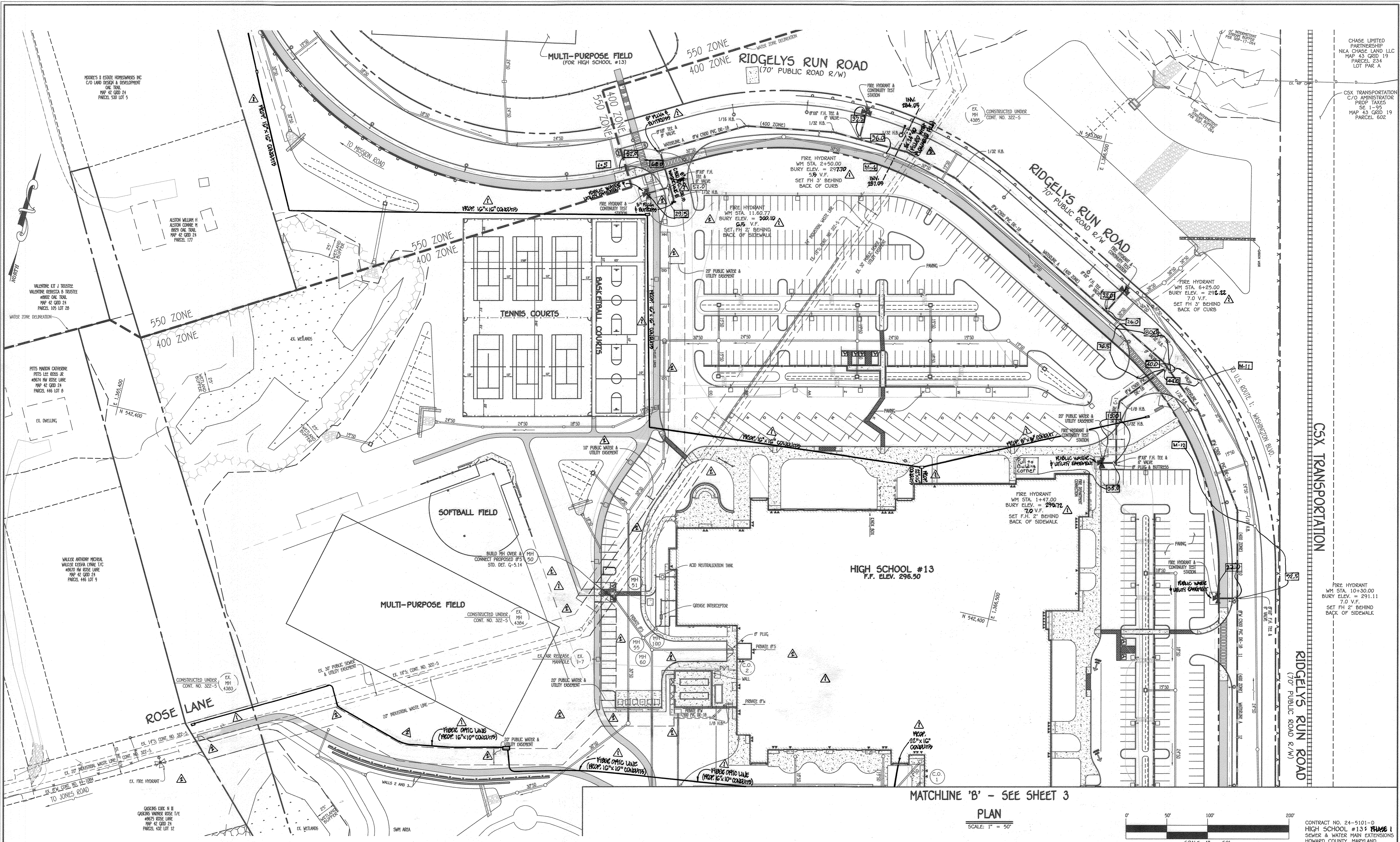
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- FORCE MAINS SHALL BE D.I.P. ONLY.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.I.T. IN PLAN AND PROFILE SHALL HAVE WATERIGHT FRAME AND COVER, STANDARD DETAIL 05.52. WHERE WATERIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

CONTRACT NO. 24-5101-D
 HIGH SCHOOL #13: PHASE 1
 SEWER & WATER MAIN EXTENSIONS
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 50'

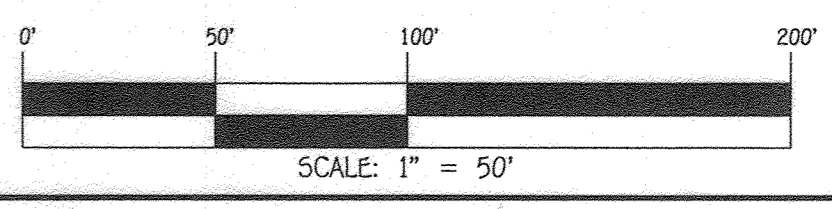
SCALE AS SHOWN
 SHEET 1 OF 7

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MATCHLINE 'B' - SEE SHEET 3

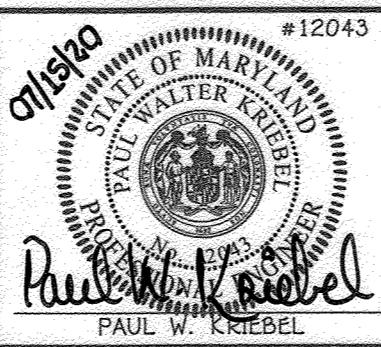
PLAN
SCALE: 1" = 50'



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
John Hoff
7-30-2020
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
Al Edmund
8-26-20
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 7/16/20.
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PkE
ELICOTT CITY, MARYLAND 21042
(410) 461-2999

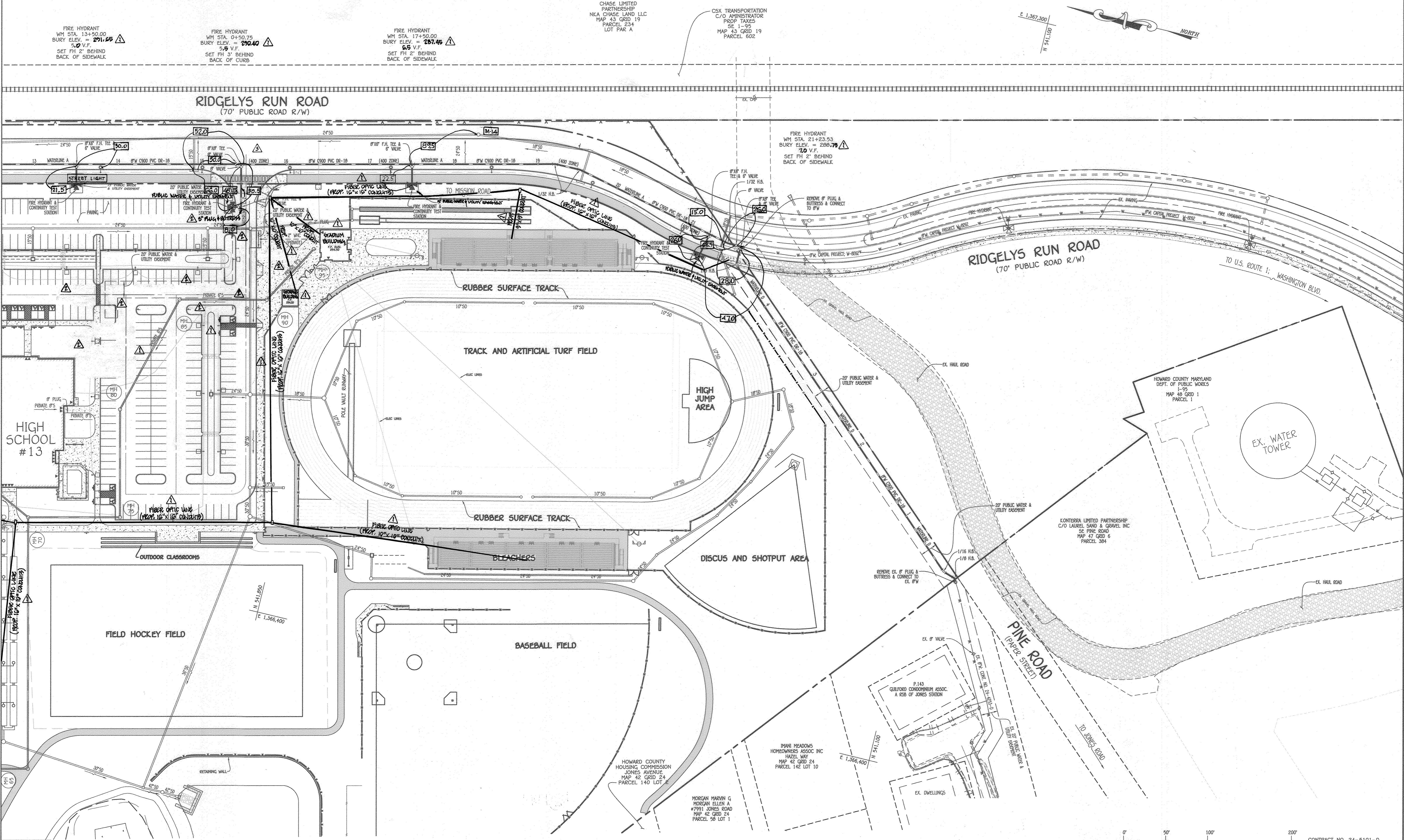
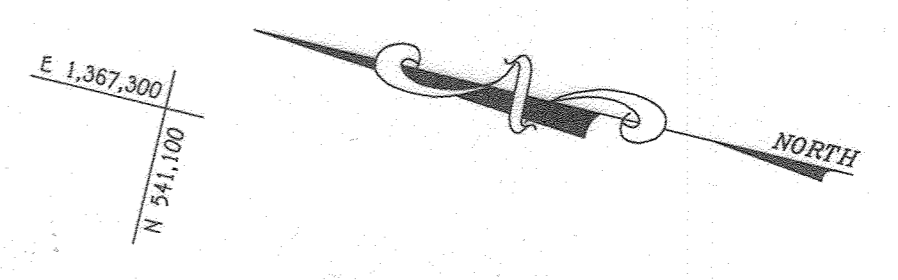


DESIGNED BY:	D.T.A./J.G.J.
DRAWN BY:	D.T.A./J.G.J.
CHECKED BY:	D.T.A./J.G.J.
DATE:	JULY, 2020
BY:	NO.
NO.	

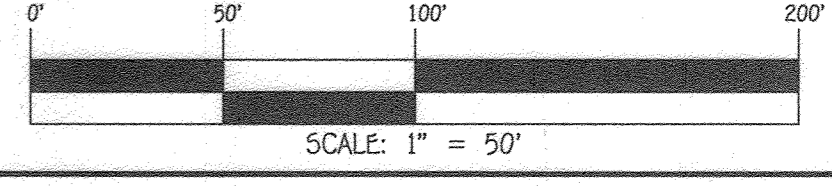
SEWER & WATER MAIN EXTENSIONS PLAN	
60' SCALE MAP NO. 42/43	BLOCK NO. 24/19
F.C.C. WORK ORDER NO. 10027	
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN	

CONTRACT NO. 24-5101-D
HIGH SCHOOL #13: PHASE I
SEWER & WATER MAIN EXTENSIONS
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 2 OF 7

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PLAN
SCALE: 1" = 50'

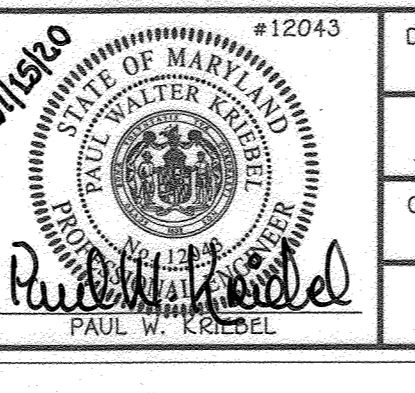


CONTRACT NO. 24-5101-D
HIGH SCHOOL #13: PHASE 1
SEWER & WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
[Signature]
7-30-2020
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
[Signature]
8/26/20
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 7/16/20.
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTONAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 481-2929



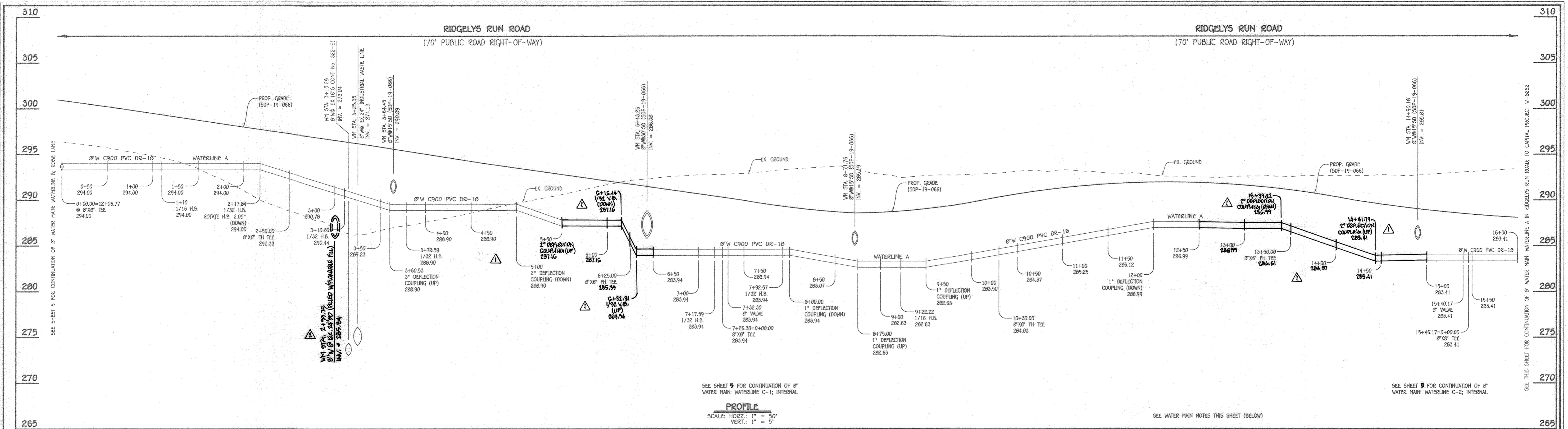
DESIGNED BY:	D.T.A./J.G.J.	DATE:	JULY, 2020
DRAWN BY:	D.T.A./J.G.J.	DATE:	JULY, 2020
CHECKED BY:	D.T.A./J.G.J.	DATE:	JULY, 2020
BY NO.		DATE:	

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

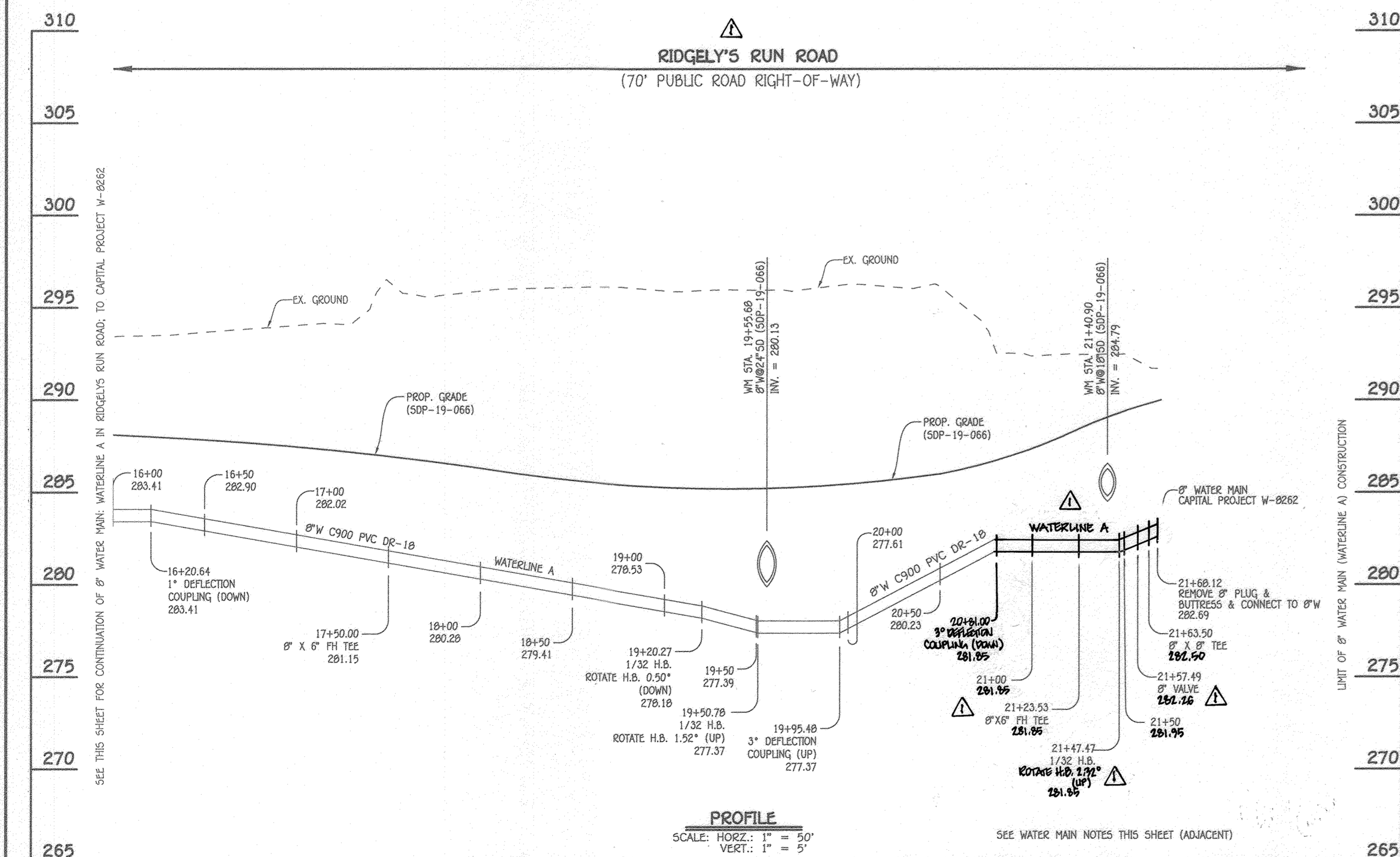
HIGH SCHOOL #13: PHASE 1
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 24-5101-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 7

I:\2010\10027\Engineering\Drawings\10027-4003 Sewer & Water Contract Plan.dwg, Plan Sheet 3



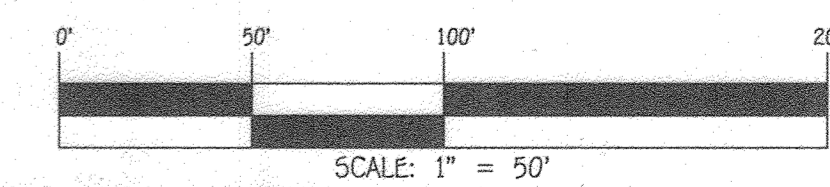
8" WATER MAIN (WATERLINE A) : RIDGELYS RUN ROAD; TO CAPITAL PROJECT W-8262



8" WATER MAIN (WATERLINE A) : RIDGELYS RUN ROAD; TO CAPITAL PROJECT W-8262

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (WATERLINE A) : RIDGELYS RUN ROAD; TO CAPITAL PROJECT W-8262			
0+00.00	8" X 8" TEE	542,860.79	1,365,972.56
1+10.00	1/16 H.B.	542,915.07	1,366,068.24
2+17.84	1/32 H.B. (ROTATE H.B. 2.05" DOWN)	542,932.95	1,366,174.59
2+50.00	8" X 6" FH TEE	542,932.22	1,366,206.74
3+10.80	1/32 H.B.	542,930.84	1,366,267.52
3+60.53	3" DEFLECTION COUPLING (UP)	542,918.19	1,366,315.61
3+78.59	1/32 H.B.	542,913.59	1,366,333.08
5+00.00	2" DEFLECTION COUPLING (DOWN)	542,857.11	1,366,440.55
6+25.00	8" X 6" FH TEE	542,798.97	1,366,551.20
6+40.00	3" DEFLECTION COUPLING (UP)	542,798.97	1,366,551.20
7+17.59	1/32 H.B.	542,755.89	1,366,633.16
7+26.30	8" X 6" TEE	542,750.19	1,366,639.75
7+32.30	8" VALVE	542,746.26	1,366,644.29
7+92.57	1/32 H.B.	542,706.82	1,366,689.86
8+00.00	1" DEFLECTION COUPLING (DOWN)	542,700.77	1,366,694.17
8+75.00	1" DEFLECTION COUPLING (UP)	542,639.64	1,366,737.62
9+22.22	1/16 H.B.	542,601.16	1,366,764.98
9+50.00	1" DEFLECTION COUPLING (UP)	542,574.16	1,366,771.52
10+30.00	8" X 6" FH TEE	542,496.41	1,366,790.36
12+00.00	1" DEFLECTION COUPLING (DOWN)	542,331.19	1,366,830.39
12+00.00	3" DEFLECTION COUPLING (DOWN)	542,331.19	1,366,830.39
13+50.00	8" X 6" FH TEE	542,185.41	1,366,865.71
13+50.00	3" DEFLECTION COUPLING (UP)	542,185.41	1,366,865.71
15+40.17	8" VALVE	542,000.58	1,366,910.49
15+46.17	8" X 6" TEE	541,994.75	1,366,911.91
16+20.84	1" DEFLECTION COUPLING (DOWN)	541,922.33	1,366,929.45
17+50.00	8" X 6" FH TEE	541,796.65	1,366,959.90
19+20.27	1/32 H.B. (ROTATE H.B. 0.50" DOWN)	541,631.17	1,367,000.00
19+50.78	1/32 H.B. (ROTATE BEND 1.52" UP)	541,600.66	1,367,000.34
19+95.48	3" DEFLECTION COUPLING (UP)	541,557.07	1,366,990.45
20+01.00	3" DEFLECTION COUPLING (DOWN)	541,473.87	1,366,971.93
21+23.53	8" X 6" FH TEE	541,432.19	1,366,962.12
21+47.47	1/2 H.B. (ROTATE BEND 2.92" UP)	541,408.85	1,366,956.83
21+57.49	8" VALVE	541,398.82	1,366,956.61
21+63.50	8" X 6" TEE	541,392.82	1,366,956.80
21+68.12	CONNECT TO 8" W	541,388.20	1,366,956.79
6+50.00	2" DEFLECTION COUPLING (UP)	542,833.85	1,366,484.81
6+16.14	1/2 H.B. (DOWN)	542,803.09	1,366,513.30
6+32.31	1/2 H.B. (UP)	542,795.90	1,366,557.67
13+39.22	2" DEFLECTION COUPLING (DOWN)	542,195.88	1,366,865.17
14+41.73	2" DEFLECTION COUPLING (UP)	542,092.25	1,366,867.31

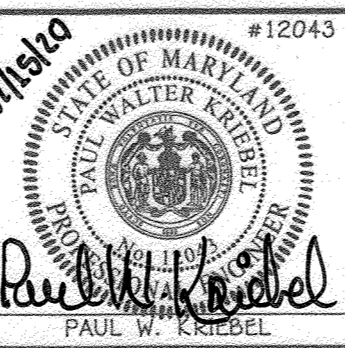
- WATER MAIN NOTES:**
- ALL WATER MAINS SHALL BE AWWA C900 PVC PIPE; DR-18.
 - ALL PIPE BEDDING, TRACER WIRE, LOCATING TAPE AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV - WATER AND SEWER STANDARDS FOR AWWA C900 PVC WATER PIPE INSTALLATION.
 - DEFLECTION 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
[Signature]
7-30-2020
DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
[Signature]
8-26-20
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 7/16/2020.
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 481-2899

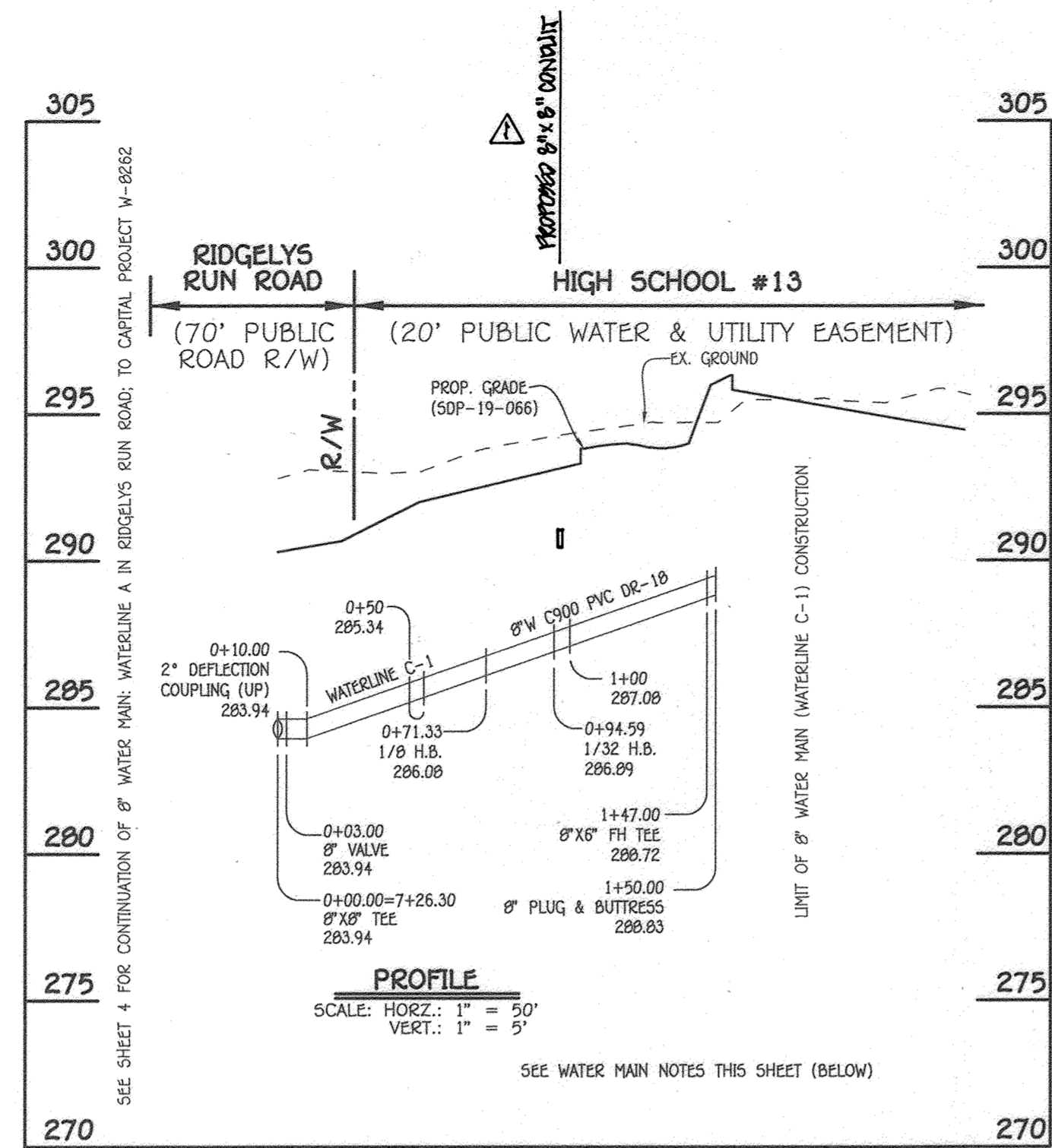


DESIGNED BY:
D.T.A./J.G.J.
DRAWN BY:
D.T.A./J.G.J.
CHECKED BY:
D.T.A./J.G.J.
DATE:
JULY, 2020

BY	NO.	REVISION	DATE
PCG	1	REVISED EXISTING 14" TO 8" TO PROFILE	10/24/21
PCG	2	REVISED PROFILE & CHART AND ADDED "13+39.22"	3/1/22

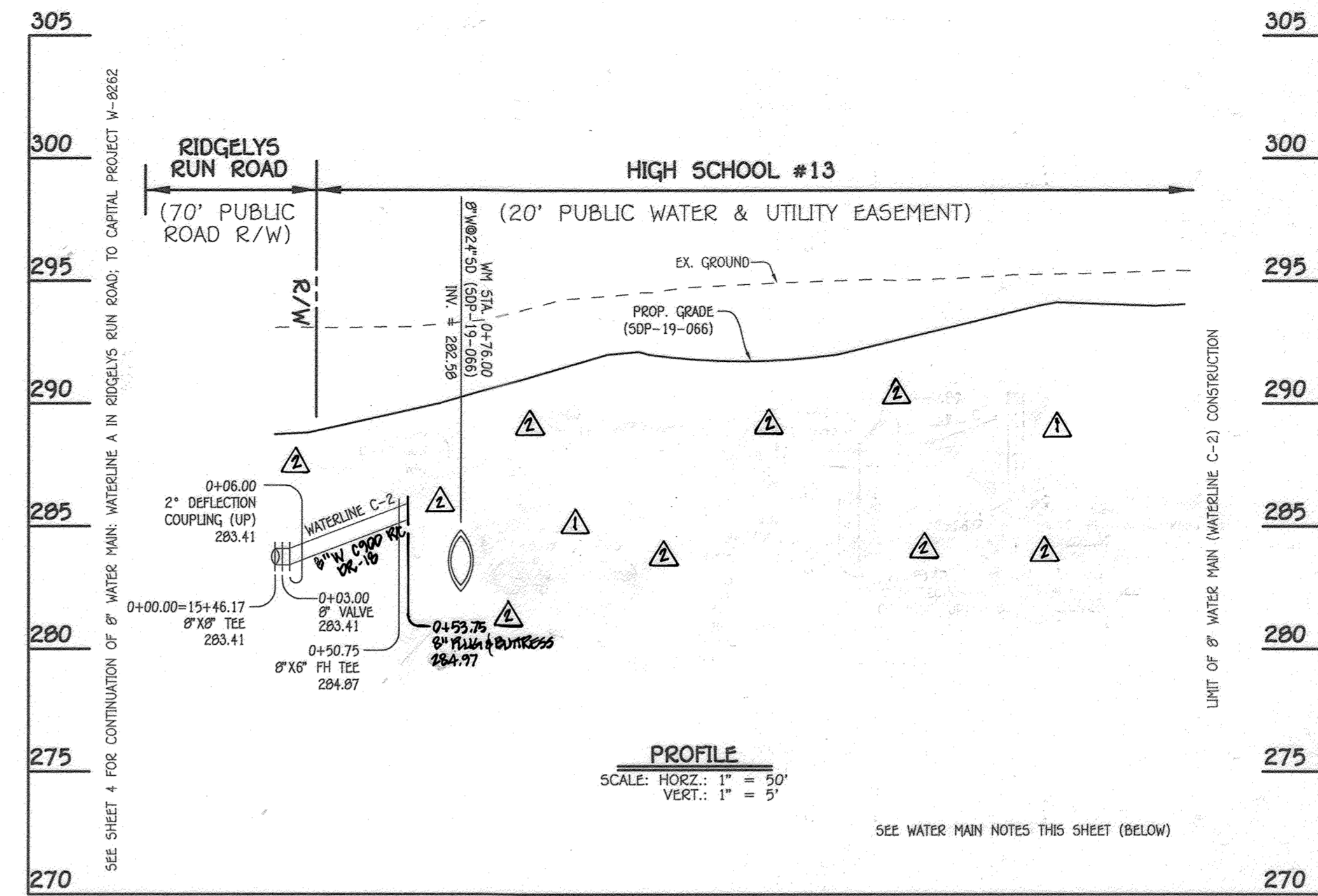
**WATER MAIN EXTENSIONS
PROFILES, CHARTS & NOTES**
600' SCALE MAP NO. 42/43 BLOCK NO. 24/19
F.C.C. WORK ORDER NO. 10027
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

HIGH SCHOOL #13 : PHASE 1
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 24-5101-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 4 OF 7



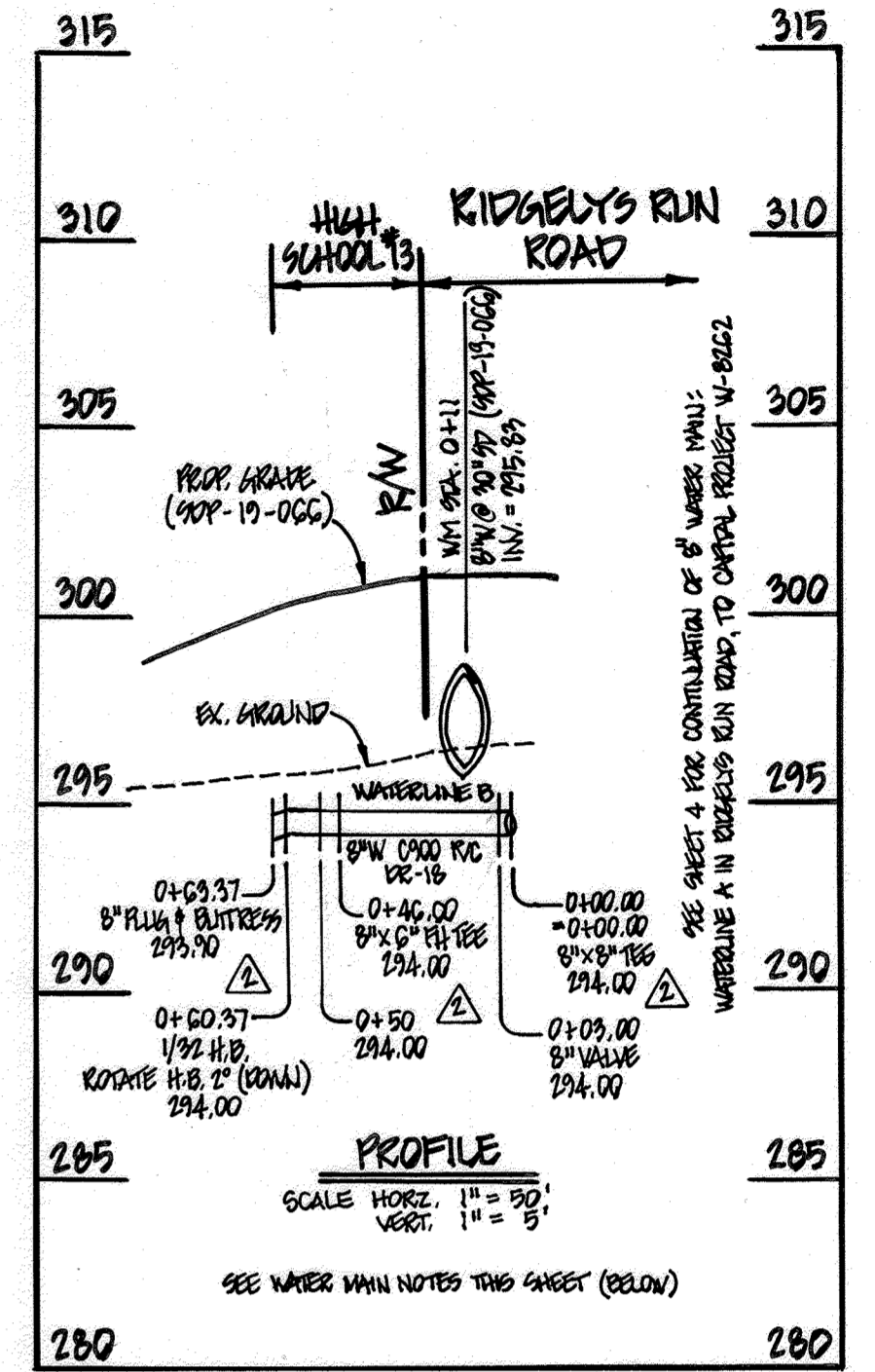
8" WATER MAIN (WATERLINE C-1) : INTERNAL

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (WATERLINE C-1) : INTERNAL			
0+00.00	8" X 8" TEE	542,750.19	1,366,639.75
0+03.00	8" VALVE	542,747.92	1,366,637.79
0+10.00	2" DEFLECTION COUPLING (UP)	542,742.63	1,366,633.21
0+71.33	1/2 H.B.	542,696.26	1,366,593.08
0+94.59	1/32 H.B.	542,673.04	1,366,594.51
1+47.00	8" X 8" F.H. TEE	542,622.10	1,366,606.86
1+50.00	8" PLUG & BUTTRESS	542,619.19	1,366,607.56



8" WATER MAIN (WATERLINE C-2) : INTERNAL

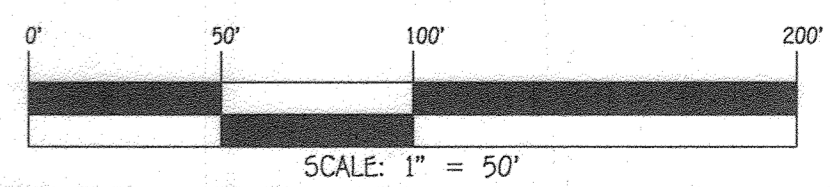
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (WATERLINE C-2) : INTERNAL			
0+00.00	8" X 8" TEE	541,994.75	1,366,911.91
0+03.00	8" VALVE	541,994.04	1,366,908.99
0+06.00	2" DEFLECTION COUPLING (UP)	541,993.34	1,366,906.08
0+50.75	8" X 8" F.H. TEE	541,982.80	1,366,862.59
0+59.75	8" PLUG & BUTTRESS	541,982.09	1,366,859.67



8" WATER MAIN (WATERLINE B) : TO ROSS LANE

W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (WATERLINE B) : TO ROSS LANE			
0+00.00	1/2 H.B.	542,808.27	1,366,002.36
0+03.37	8" X 8" F.H. TEE	542,810.76	1,366,995.26
0+09.00	8" VALVE	542,808.78	1,366,974.04
0+00.00	8" X 8" TEE	542,800.79	1,366,972.56
0+03.37	8" PLUG & BUTTRESS	542,805.42	1,366,003.29

- 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.

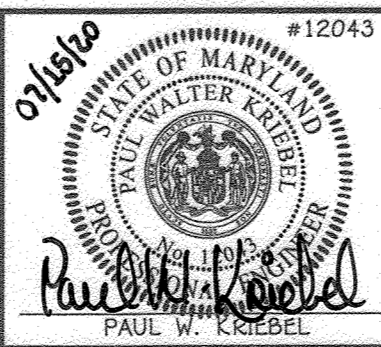


CONTRACT NO. 24-5101-D
HIGH SCHOOL #13 : PHASE 1
SEWER & WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
7-30-2020

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND
8-26-20

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LICENSE NO. 12043 EXPIRATION DATE IS 7/16/20.
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CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-3999

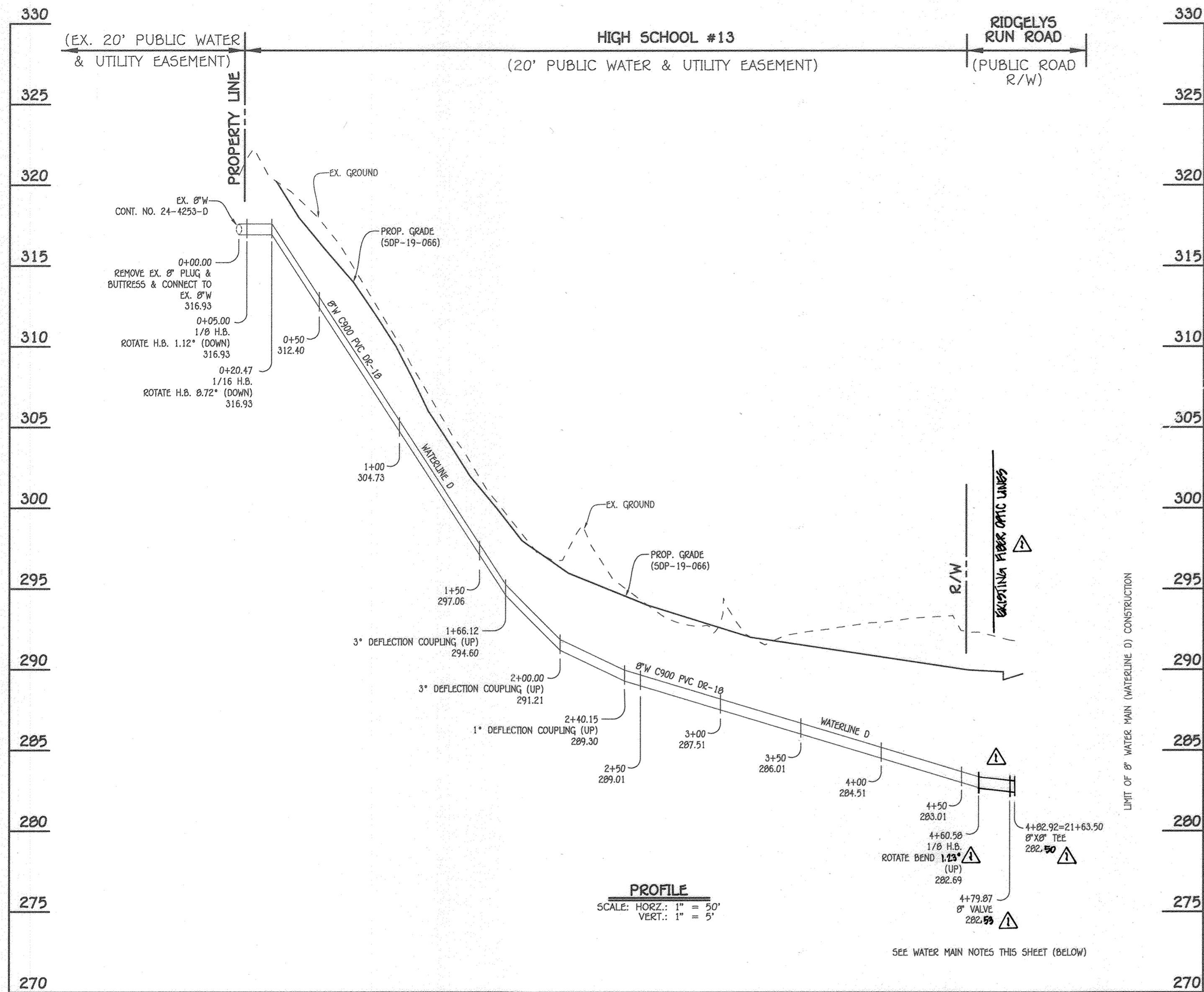


DESIGNED BY : D.T.A./J.G.J.
DRAWN BY : D.T.A./J.G.J.
CHECKED BY : D.T.A./J.G.J.
DATE : JULY, 2020
REVISION
4/9/21
3/1/21

WATER MAIN EXTENSIONS
PROFILES, CHARTS & NOTES
600' SCALE MAP NO. 42/43 BLOCK NO. 24/19
F.C.C. WORK ORDER NO. 10027
FILE NAME : SEWER & WATER MAIN EXTENSION PLAN

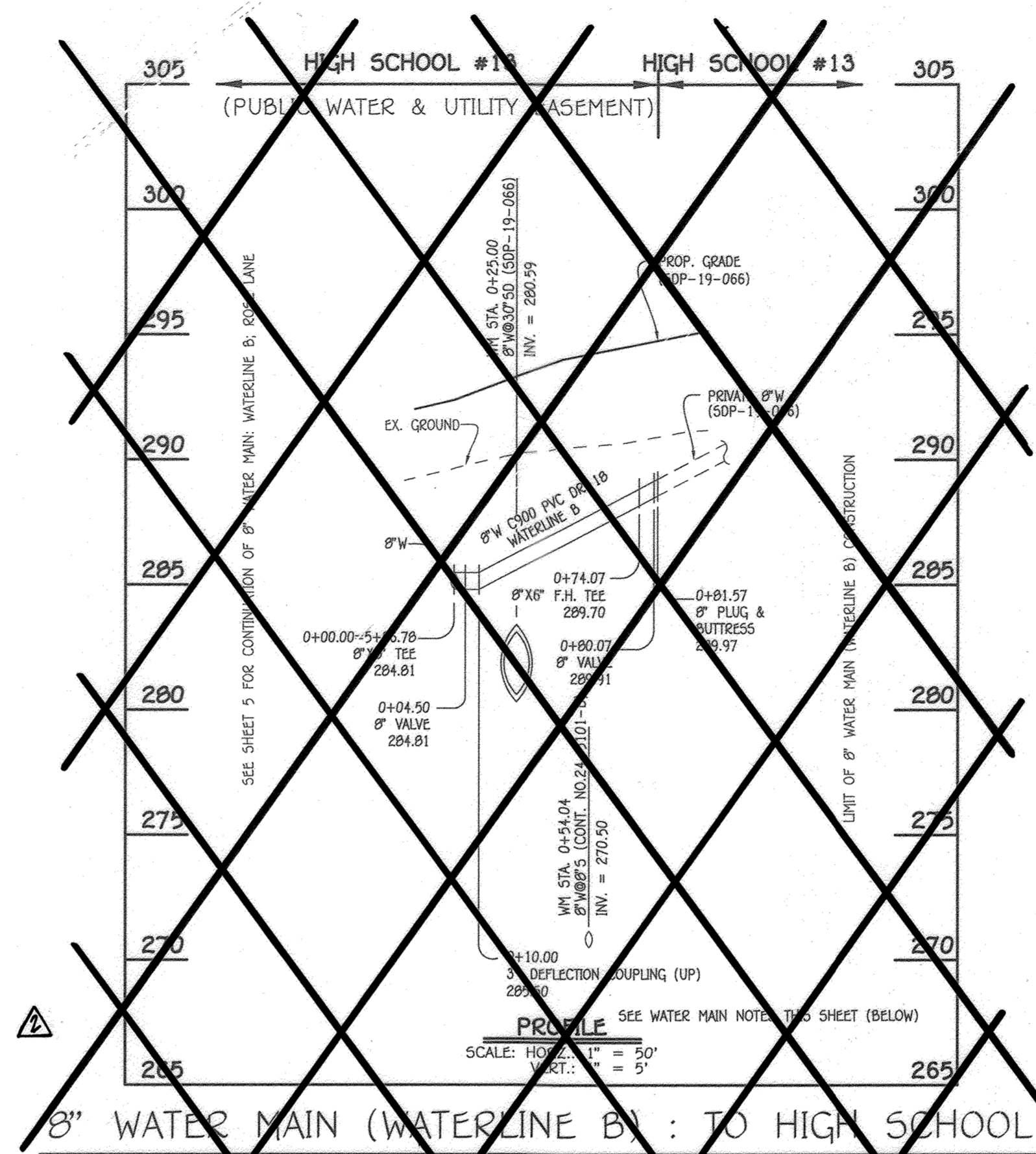
HIGH SCHOOL #13 : PHASE 1
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 24-5101-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN
SHEET
5 OF 7



8" WATER MAIN (WATERLINE D) : PINE ROAD

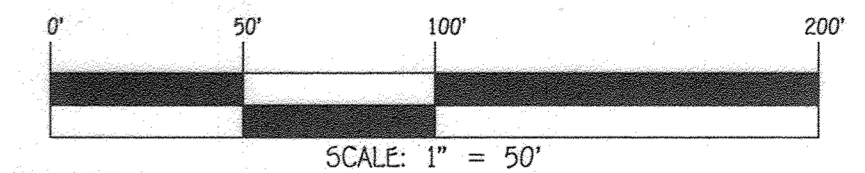
WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (WATERLINE D) : PINE ROAD			
0+00.00	CONNECT TO EX. 8" W	541,049.71	1,366,629.60
0+05.00	1/8 H.B.	541,052.13	1,366,634.05
0+20.47	1/16 H.B.	541,066.06	1,366,630.79
1+66.12	3" DEFLECTION COUPLING (UP)	541,174.74	1,366,736.64
2+00.00	3" DEFLECTION COUPLING (UP)	541,199.04	1,366,759.40
2+40.15	1" DEFLECTION COUPLING (UP)	541,229.57	1,366,706.37
4+60.50	1/8 H.B. (ROTATE H.B. 1.23° UP)	541,392.05	1,366,934.46
4+79.92	8" VALVE	541,392.02	1,366,953.80
4+82.92	8" X 8" TEE	541,392.02	1,366,956.80



W.M. STA.	APPURTENANCE	NORTHING	EASTING
8" WATER MAIN (WATERLINE B) : TO HIGH SCHOOL			
0+00.00=5+66.70	8" WATER MAIN (WATERLINE B) : TO HIGH SCHOOL	542,172.10	1,366,074.47
0+04.50	8" X 8" TEE	542,173.17	1,366,070.04
0+10.00	3" DEFLECTION COUPLING (UP)	542,174.46	1,366,004.19
0+74.07	8" X 8" FH TEE	542,109.56	1,366,146.44
0+80.07	8" VALVE	542,190.91	1,366,152.20
0+81.57	8" PLUG & BUTTRESS	542,191.11	1,366,116.74

DELETED FROM CONTRACT

- 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.
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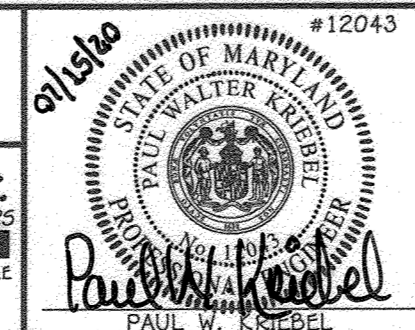
CONTRACT NO. 24-5101-D
HIGH SCHOOL #13: **PHASE I**
SEWER & WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

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LICENSE NO. 12043 EXPIRATION DATE IS 7/16/20.

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CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
410) 461 - 2995



DESIGNED BY:
D.T.A./J.G.J.
DRAWN BY:
D.T.A./J.G.J.
CHECKED BY:
D.T.A./J.G.J.
DATE:
JULY, 2020

BY	NO.	REVISION	DATE
PCC		REMOVED 8" WATER MAIN PROFILE & CHART	1/9/21
PCC		REMOVED PROFILE & CHART	3/1/22

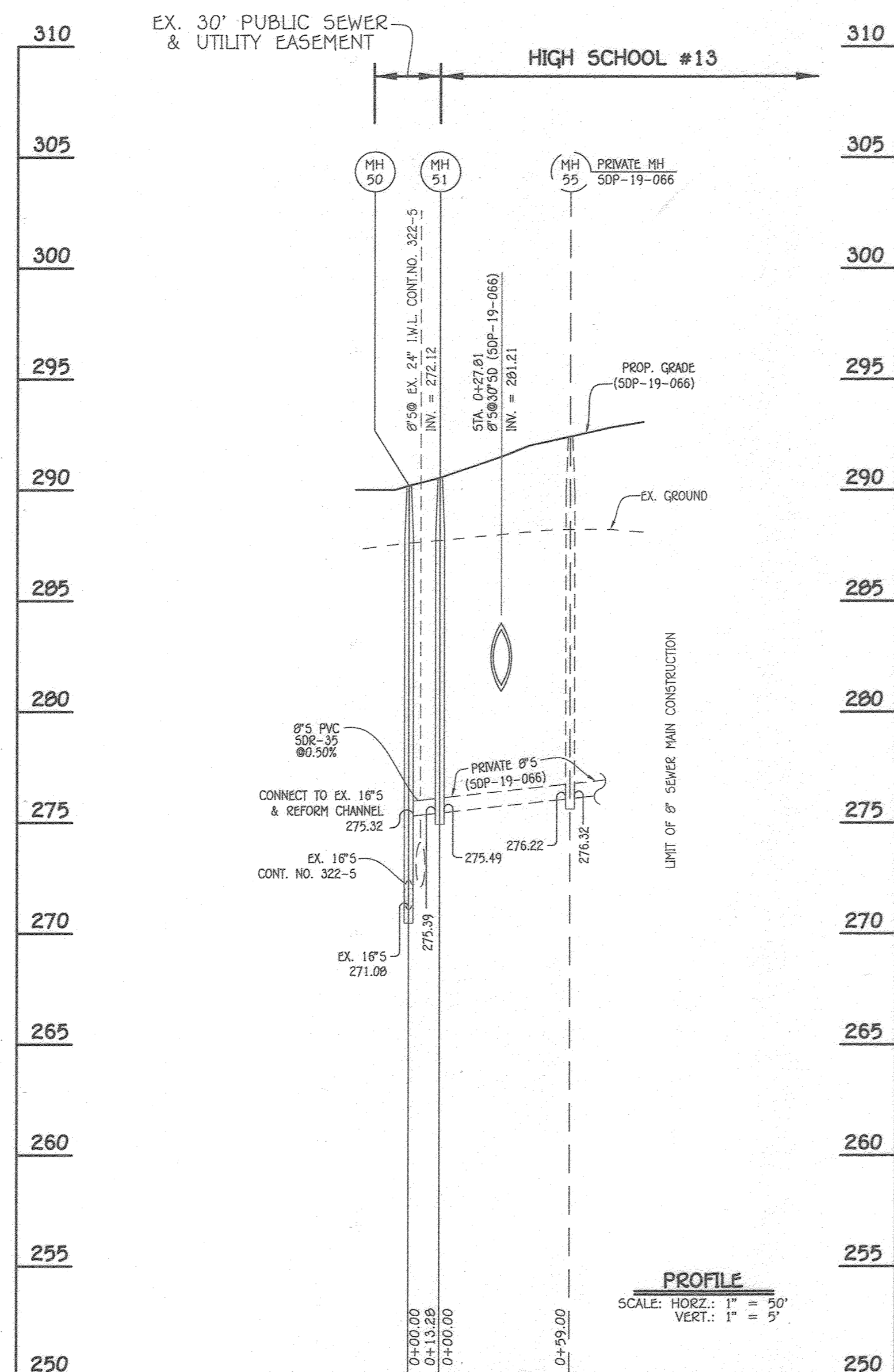
**WATER MAIN EXTENSIONS
PROFILE, CHART & NOTES**

600' SCALE MAP NO. 42/743 BLOCK NO. 24/19
F.C.C. WORK ORDER NO. 10027
FILE NAME: SEWER & WATER MAIN EXTENSION PLAN

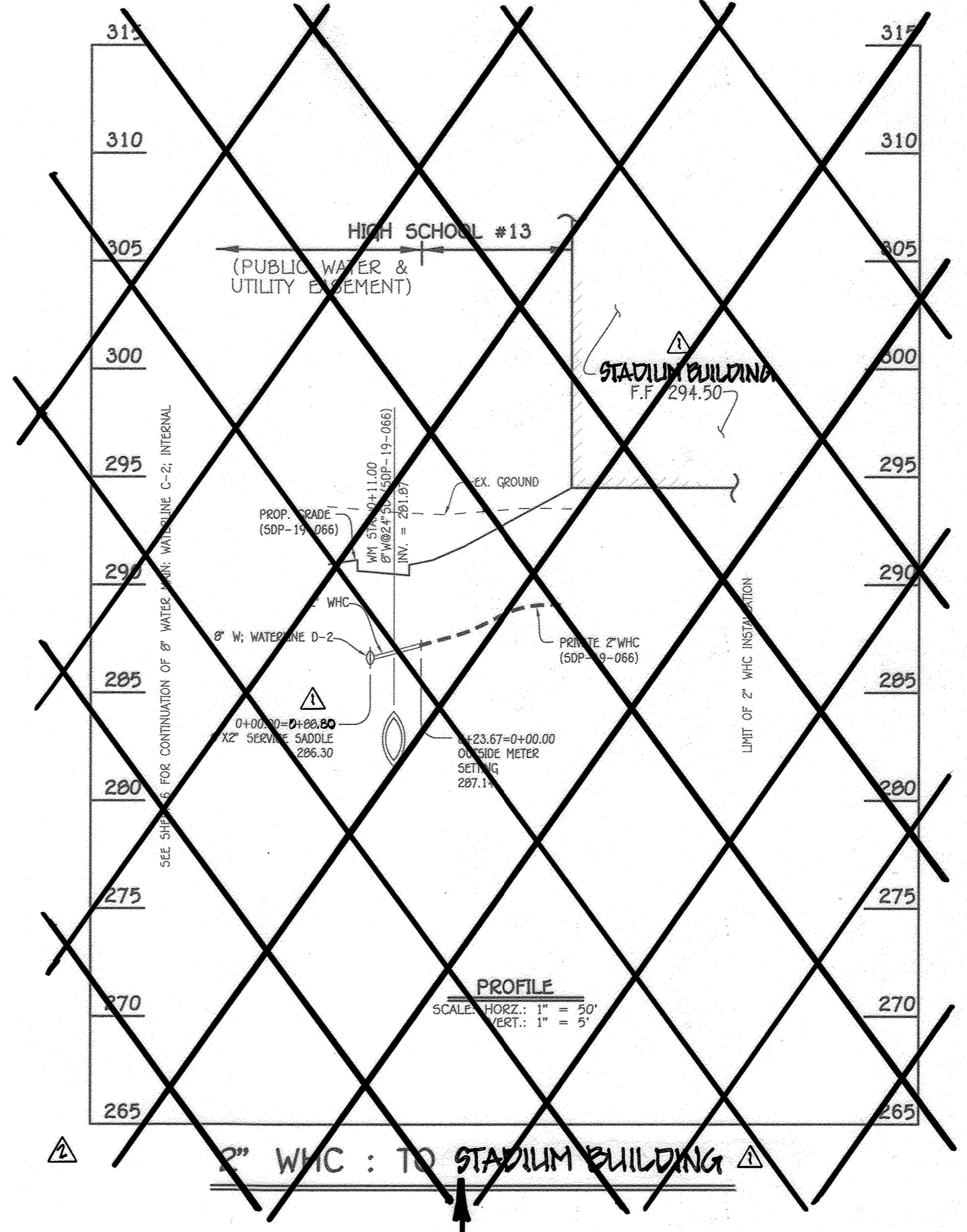
HIGH SCHOOL #13: PHASE I
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 24-5101-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN

SHEET
6 OF **7**



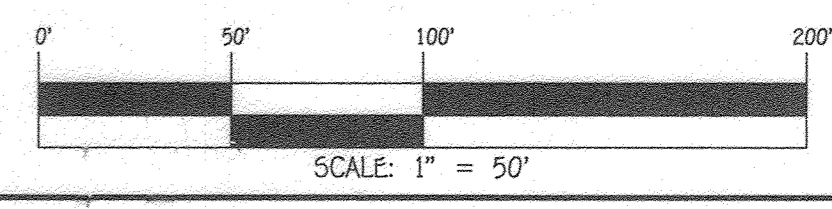
8" SEWER MAIN: TO HIGH SCHOOL BUILDING



DELETED FROM CONTRACT

NO.	NORTHING	EASTING	RIM ELEVATION
50	542,320.52	1,366,036.14	290.20
51	542,315.70	1,366,048.52	290.56

NOTE: SET MH RIMS FLUSH W/PROPOSED GRADE.

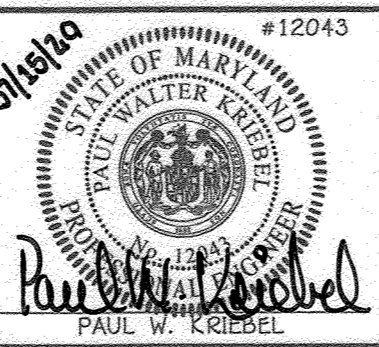


CONTRACT NO. 24-5101-D
HIGH SCHOOL #13: ~~PHASE 1~~
SEWER & WATER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

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CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
4100 463 - 2999

DESIGNED BY :
D.T.A./J.G.J.
DRAWN BY :
D.T.A./J.G.J.
CHECKED BY :
D.T.A./J.G.J.
DATE :
JULY, 2020

REV.	DESCRIPTION	DATE
1	REMOVED 2" WMC TO STADIUM BUILDING PROFILE & REVISED TITLE	4/9/21
2	CHANGED NAME OF THE PROPOSED BUILDING	3/1/21

8" SEWER MAIN EXTENSION

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

HIGH SCHOOL #13: PHASE 1
SEWER & WATER MAIN EXTENSIONS
CONTRACT NO. 24-5101-D
SIXTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 7 OF 7

7-30-2020
DATE

DATE