

SHEET INDEX

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# WATER AND SEWER EXTENSIONS

## PARCEL A and B

# DORSEY RUN INDUSTRIAL CENTER

### 1st ELECTION DISTRICT

## HOWARD COUNTY, MARYLAND

### CONTRACT NO. 14-4193-D

**GENERAL NOTES**

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES, NAD 83/91
- ALL VERTICAL CONTROLS ARE BASED ON NAVD 88.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS, UNLESS OTHERWISE NOTED ON THE PLANS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". 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 MONEY 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 DETAIL FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. 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 (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 

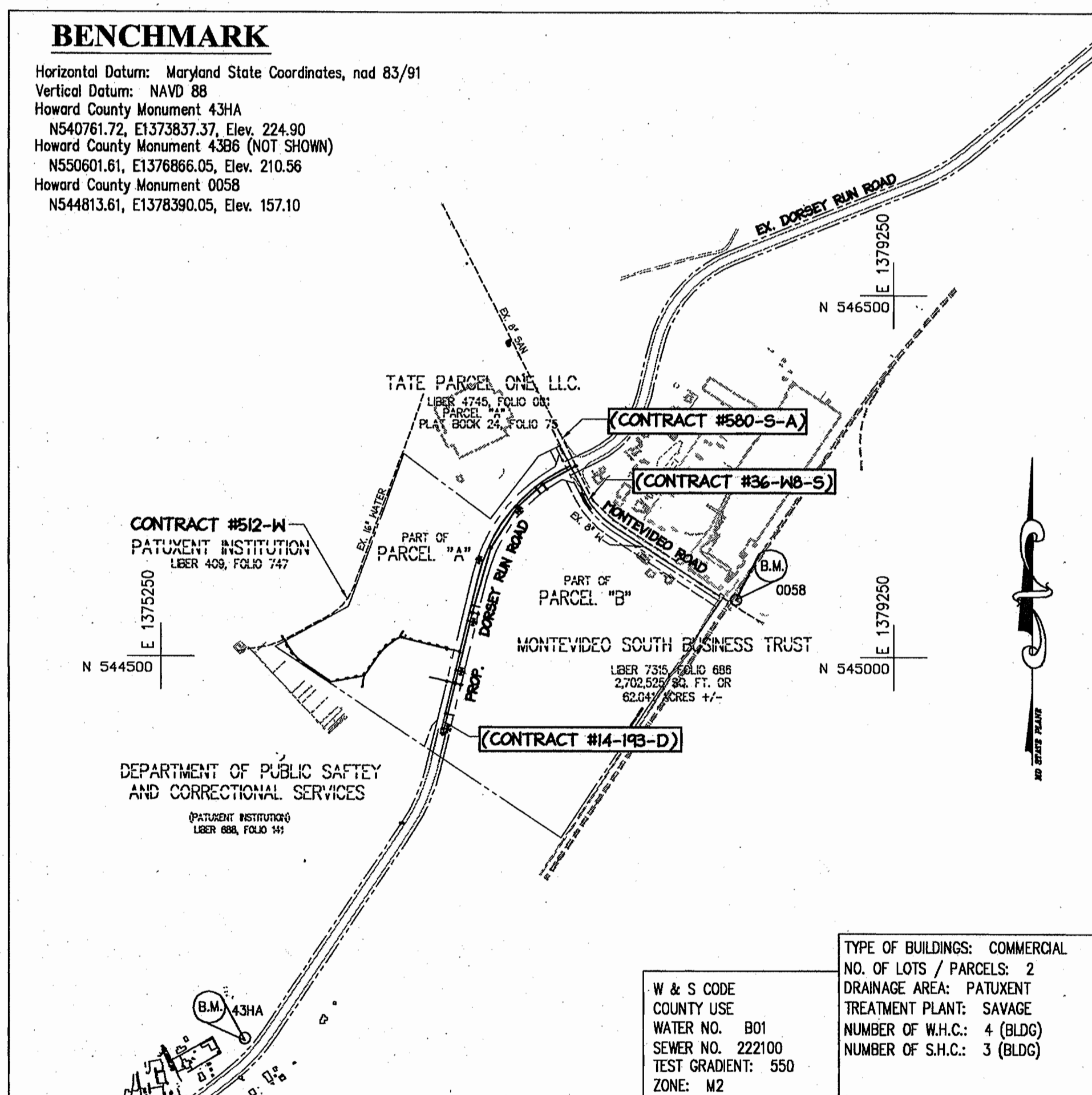
STATE HIGHWAY ADMINISTRATION	410-531-5533
BGE (CONTRACTOR SERVICES)	410-850-4620
BGE (UNDER GROUND DAMAGE CONTROL)	410-787-8068
MISS UTILITY	1-800-257-7777
COLONIAL PIPELINE CO.	410-795-1390
AT & T	1-800-252-1133
BUREAU OF UTILITIES	410-313-4900
VERIZON	1-800-743-0033
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE (5) 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.
- ALL WATER MAINS SHALL BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" 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 THE 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 AND BUTTRESSED WITH CONCRETE 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.
- 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.T. IN PLAN AND PROFILES SHALL HAVE WAERTIGHT FRAME AND COVER, STANDARD DETAIL 65.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVER 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 THE CELLAR CANNOT BE SERVED.
- EXISTING 4" GAS LINE AND 8" WATER LINE IN MONTEVIDEO ROAD AT WATER CONNECTION WERE FIELD LOCATED ON JUNE 11, 2004 BY INFRAMAP CORP. HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES HAVE BEEN SHOWN ON THIS PLAN AND PROFILE. COMPLETE RESULTS WILL BE MADE AVAILABLE TO THE CONTRACTOR AS REQUESTED.

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		MANUFACTURER/SUPPLIER
		QUANTITIES	TYPE	
12" WATER	1975 LF			
6" WATER	142 LF			
12" VALVES	6			
6" VALVES	5			
12"x 6" TEES	5			
12"x 12" TEES	4			
FIRE HYDRANT-4.0	1			
FIRE HYDRANT-4.5	2			
FIRE HYDRANT-5.5	1			
FIRE HYDRANT-6.0	1			
12" 8" I.S.&V.	1			
8" SEWER	1722 LF			
MANHOLES	7			
8" SHC	145 LF			
12" WHC	228 LF			
CHECKBOX				
AS-BUILT DATE				
SURVEY AND DRAFTING DIVISION				

**BENCHMARK**

Horizontal Datum: Maryland State Coordinates, nad 83/91  
 Vertical Datum: NAVD 88  
 Howard County Monument 43HA  
 NS40761.72, E1373837.37, Elev. 224.90  
 Howard County Monument 438B (NOT SHOWN)  
 NS50601.61, E1376866.05, Elev. 210.56  
 Howard County Monument 0058  
 NS44813.61, E1378390.05, Elev. 157.10



VICINITY MAP  
SCALE: 1"=600'

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND AS SHOWN ON GP-04-55

REVIEW FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*Jim Meyer* 7/1/04  
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*John A. Kautz* 7/1/04  
HOWARD SOIL CONSERVATION DISTRICT DATE

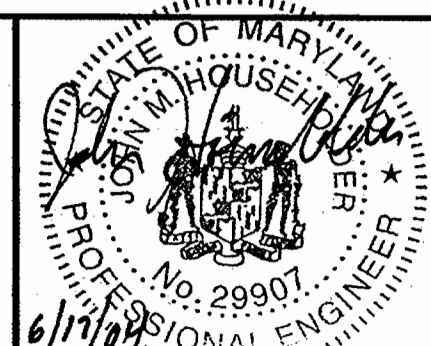
DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Rita Deason* 6-25-04  
CHIEF, BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND

*John Deason* 7/12/04  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**christopher consultants**  
engineering - surveying - land planning  
christopher consultants, inc.  
7712 centerville gateway drive suite 100 columbiana, md 21046-2890  
410.852.8880 - fax: 410.381.6146 - cell: 410.872.2850



DES:	BAM			
DRN:	BAM			
CHK:	JMH			
DATE:	6/17/04			
BY:		NO.		REVISION
DATE:				

TITLE SHEET

600 SCALE MAP NO. 43 BLOCK NO. 16/17

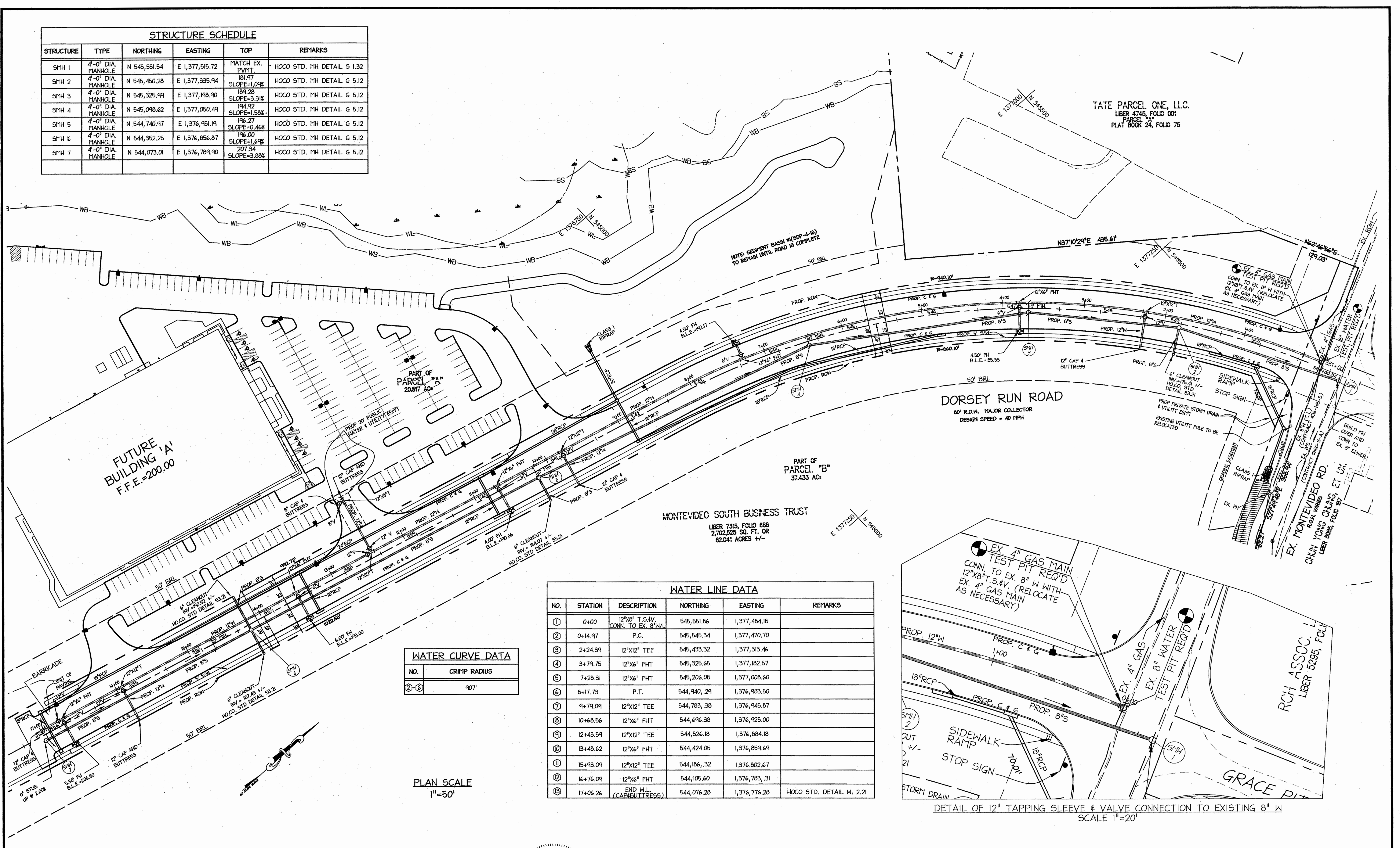
WATER and SEWER EXTENSIONS  
PARCEL A and B  
**DORSEY RUN INDUSTRIAL CENTER**  
CONTRACT NO. 14-4193-D

TAX MAP 43 PARCELS 100, 325, 372, 572 AND 574 ZONE: M2  
1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET
1 OF 3

**OWNER / DEVELOPER**  
MONTEVIDEO SOUTH BUSINESS TRUST  
C/O TRAMMELL CROW COMPANY  
7315 WISCONSIN AVENUE  
SUITE 300 W  
BETHESDA, MARYLAND 20814  
TEL. (301) 530-6200  
FAX (301) 530-6131

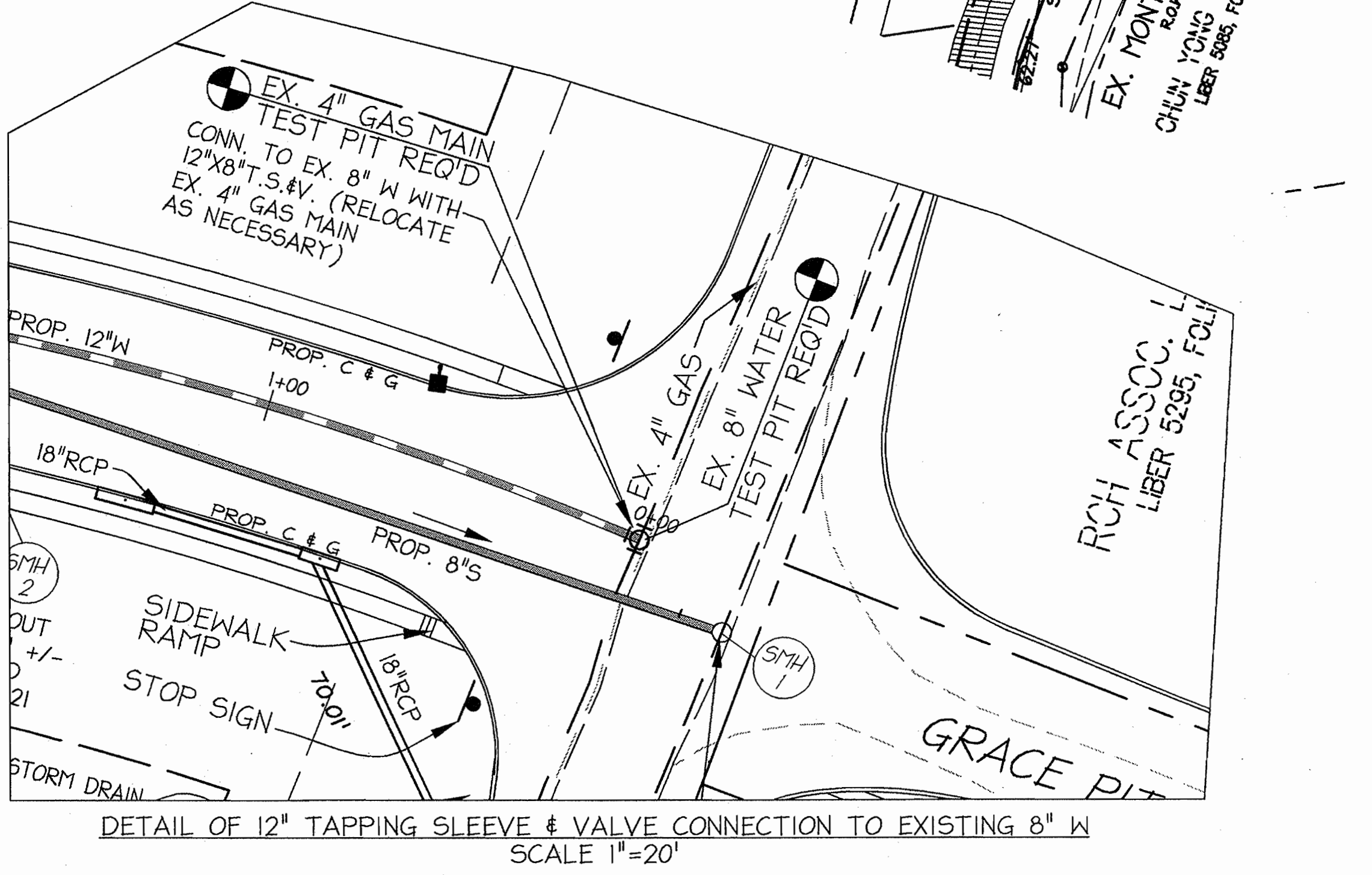
STRUCTURE SCHEDULE					
STRUCTURE	TYPE	NORTHING	EASTING	TOP	REMARKS
SMH 1	4'-0" DIA. MANHOLE	N 545,551.54	E 1,377,515.72	MATCH EX. P.V.M.T.	HOCO STD. MH DETAIL 5 1.32
SMH 2	4'-0" DIA. MANHOLE	N 545,450.28	E 1,377,335.94	181.97 SLOPE=1.09%	HOCO STD. MH DETAIL G 5.12
SMH 3	4'-0" DIA. MANHOLE	N 545,325.99	E 1,377,198.90	189.28 SLOPE=3.31%	HOCO STD. MH DETAIL G 5.12
SMH 4	4'-0" DIA. MANHOLE	N 545,098.62	E 1,377,050.49	194.92 SLOPE=1.58%	HOCO STD. MH DETAIL G 5.12
SMH 5	4'-0" DIA. MANHOLE	N 544,740.97	E 1,376,951.19	196.27 SLOPE=0.46%	HOCO STD. MH DETAIL G 5.12
SMH 6	4'-0" DIA. MANHOLE	N 544,352.25	E 1,376,856.87	196.00 SLOPE=1.69%	HOCO STD. MH DETAIL G 5.12
SMH 7	4'-0" DIA. MANHOLE	N 544,073.01	E 1,376,789.90	207.34 SLOPE=3.88%	HOCO STD. MH DETAIL G 5.12



WATER LINE DATA					
NO.	STATION	DESCRIPTION	NORTHING	EASTING	REMARKS
①	0+00	12"X8" T.S.&V. CONN. TO EX. 8"W	545,551.86	1,377,484.18	
②	0+14.97	P.C.	545,545.34	1,377,470.70	
③	2+24.39	12"X12" TEE	545,433.32	1,377,313.46	
④	3+79.75	12"X6" FHT	545,325.65	1,377,182.57	
⑤	7+28.31	12"X6" FHT	545,206.08	1,377,008.60	
⑥	8+17.73	P.T.	544,940.29	1,376,983.50	
⑦	9+79.09	12"X12" TEE	544,783.38	1,376,945.87	
⑧	10+68.56	12"X6" FHT	544,696.38	1,376,925.00	
⑨	12+43.59	12"X12" TEE	544,526.18	1,376,884.18	
⑩	13+48.62	12"X6" FHT	544,424.05	1,376,859.69	
⑪	15+93.09	12"X12" TEE	544,186.32	1,376,802.67	
⑫	16+76.09	12"X6" FHT	544,105.60	1,376,783.31	
⑬	17+06.26	END W.L. (CAP & BUTTRESS)	544,076.28	1,376,776.28	HOCO STD. DETAIL W. 2.21

WATER CURVE DATA	
NO.	CRIMP RADIUS
②-⑬	90'

PLAN SCALE  
1"=50'

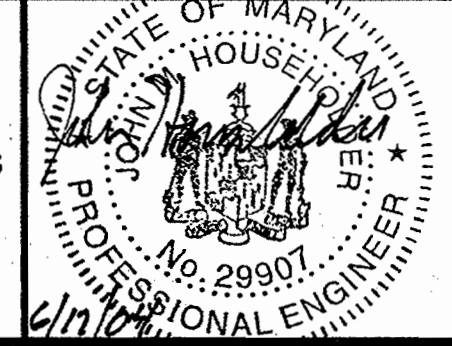


DETAIL OF 12" TAPPING SLEEVE & VALVE CONNECTION TO EXISTING 8" W  
SCALE 1"=20'

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
6-25-04  
DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
7/12/04  
DATE

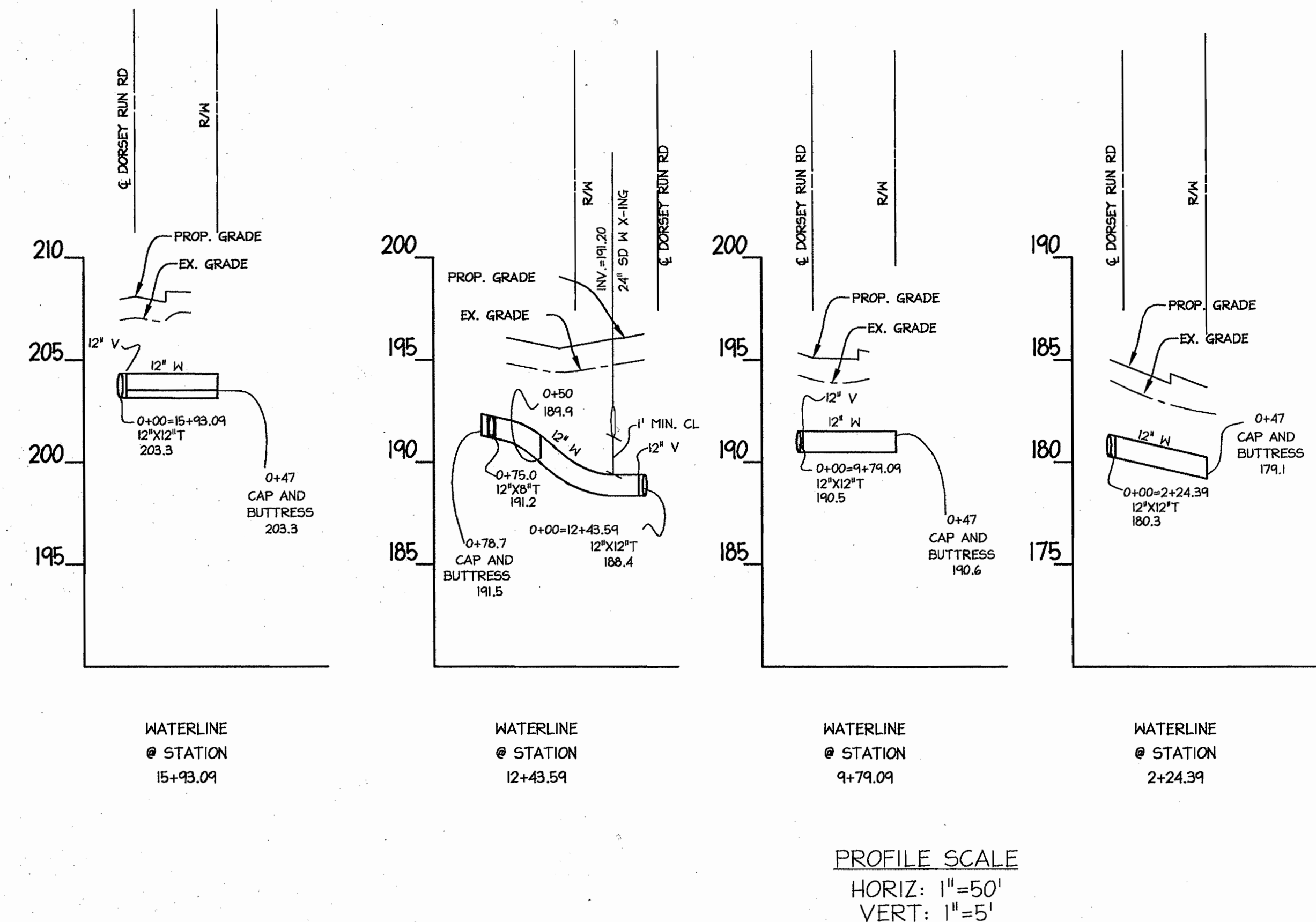
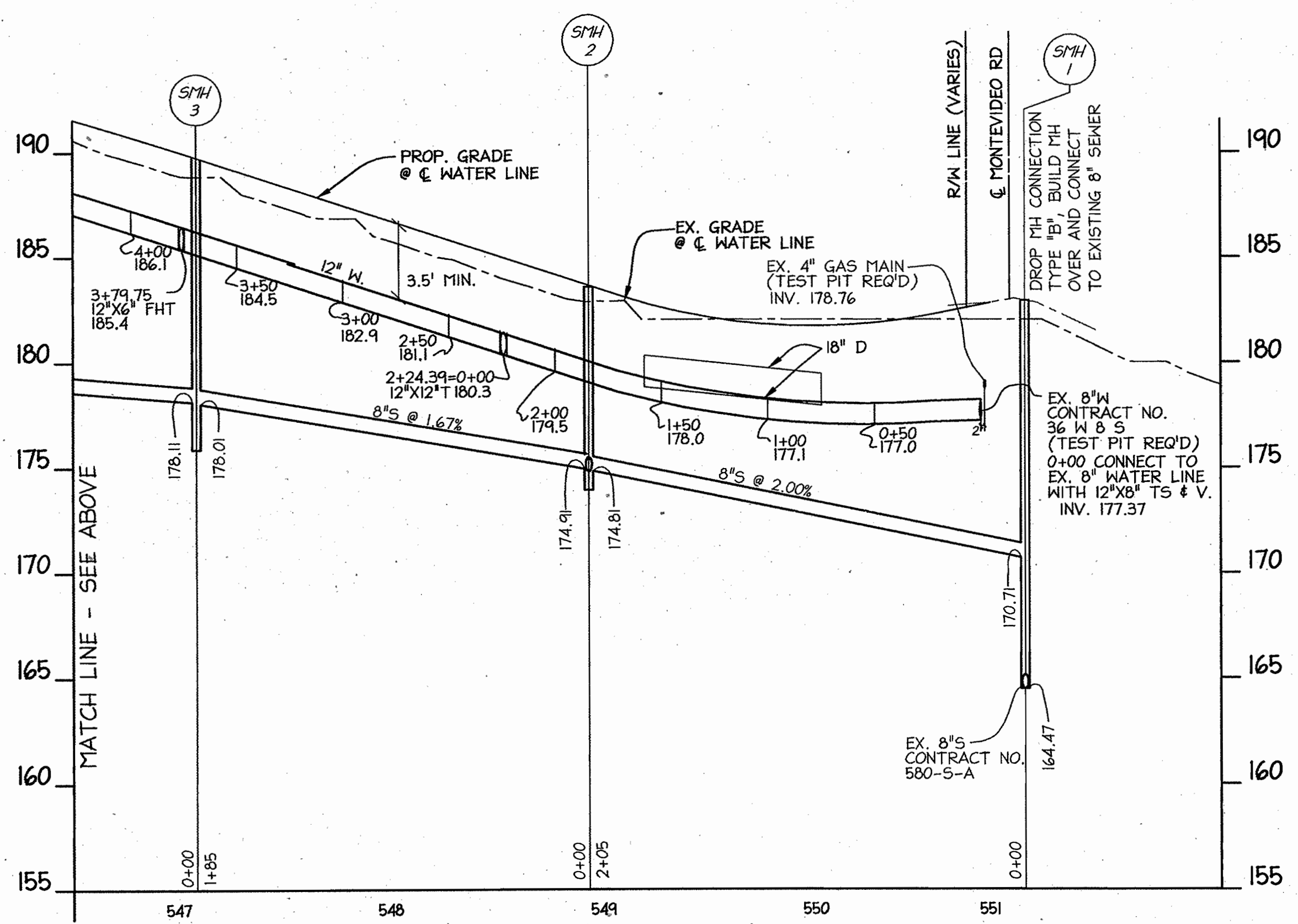
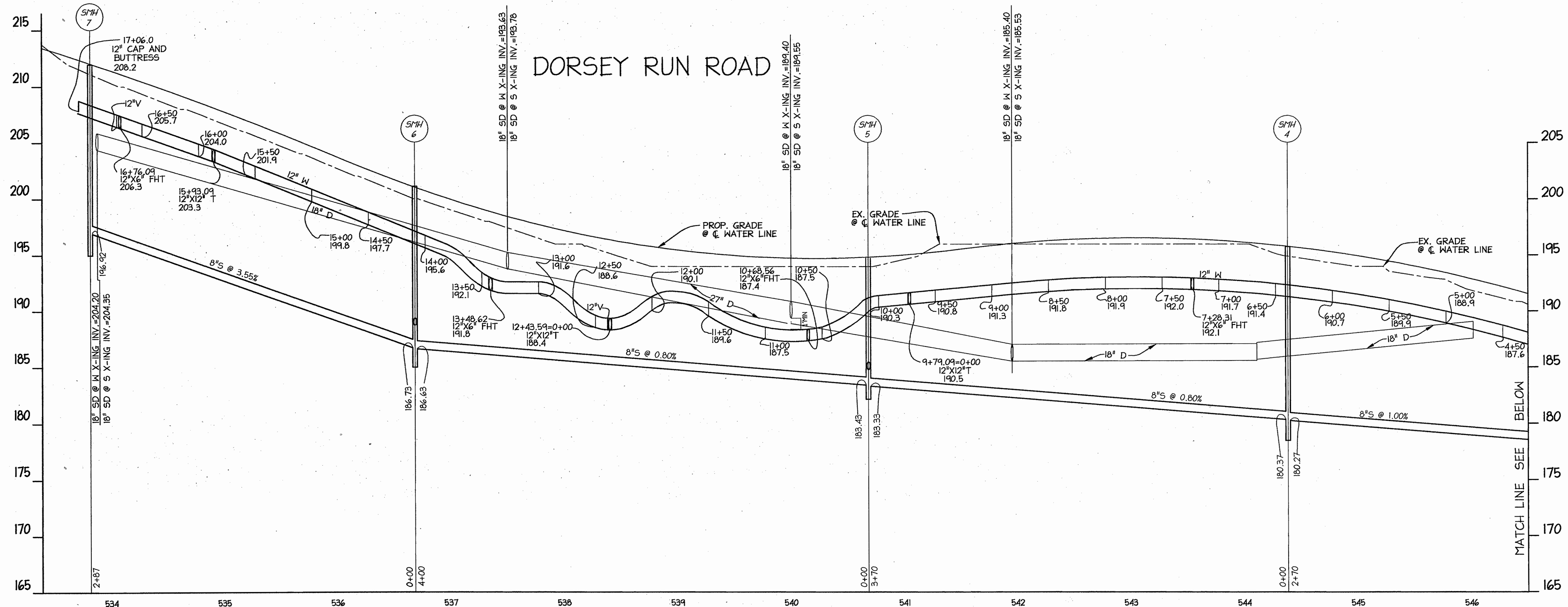
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PLAN OF  
WATER and SEWER EXTENSIONS  
600 SCALE MAP NO. 43 BLOCK NO. 16/17

WATER and SEWER EXTENSIONS  
PARCEL A and B  
**DORSEY RUN INDUSTRIAL CENTER**  
CONTRACT NO. 14-4193-D  
TAX MAP 43 PARCELS 100, 325, 372, 572 AND 574 ZONE: M2  
1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE 1"=50'  
SHEET 2 OF 3



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 6-25-09 CHIEF, BUREAU OF UTILITIES	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND 7/12/04 CHIEF, DEVELOPMENT ENGINEERING DIVISION	<b>christopher consultants</b> engineering - surveying - land planning 712 columbian gateway drive (suite 102) - columbia, md 21048-2990 410.325.5800 fax 410.325.2880		DES: BAM DRN: BAM CHK: JMH DATE: 6/17/04	BY: NO. REVISION DATE	<b>PROFILES OF WATER and SEWER EXTENSIONS</b> 600 SCALE MAP NO. 43 BLOCK NO. 16/17	WATER and SEWER EXTENSIONS PARCEL A and B <b>DORSEY RUN INDUSTRIAL CENTER</b> CONTRACT NO. 14-4193-D TAX MAP 43 PARCELS 100, 325, 372, 572 AND 574 ZONE: M2 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 3 OF 3
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