
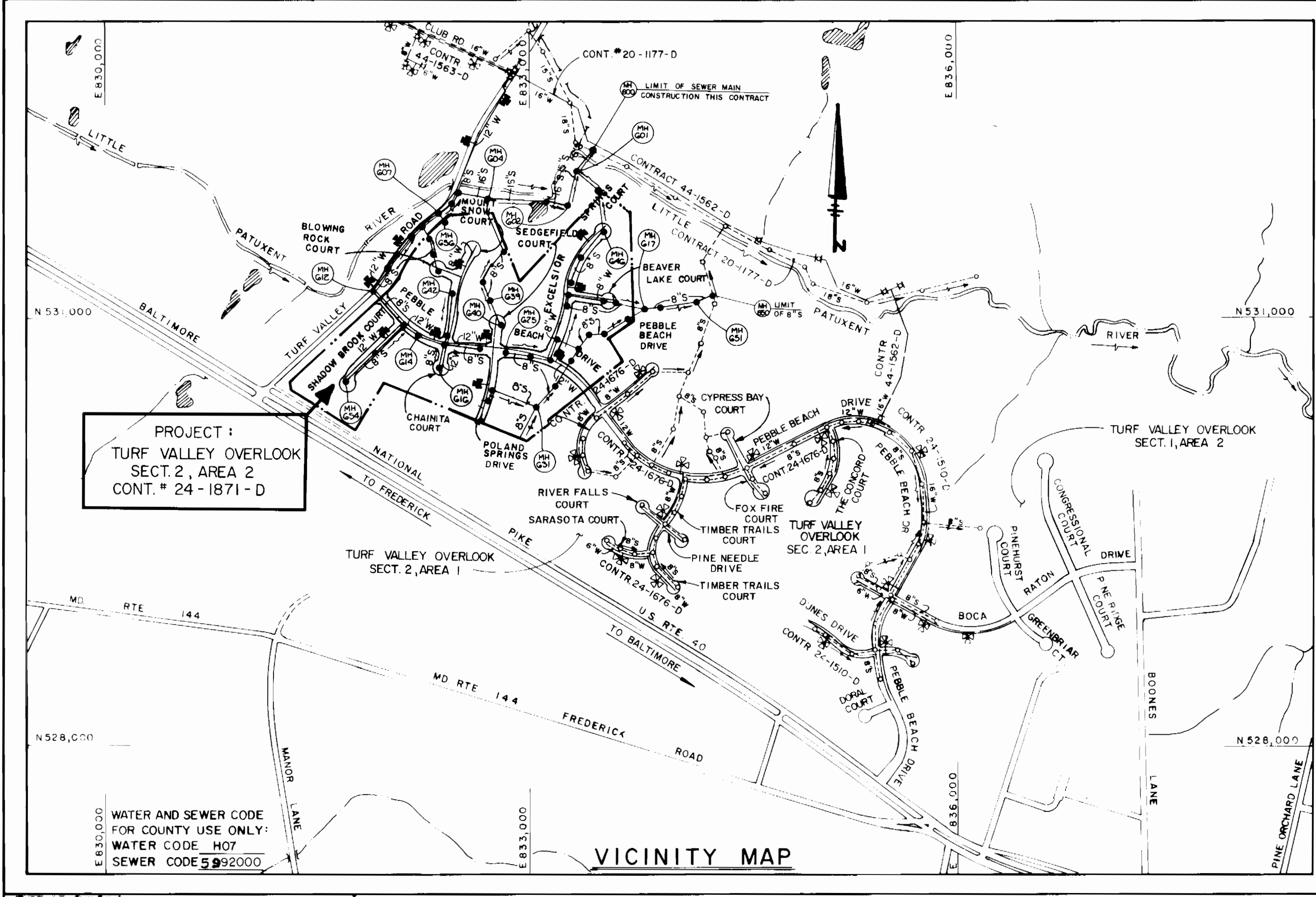


GENERAL NOTES

- 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.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6".
- 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, AMENDED 1989, 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 VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 STATE HIGHWAY ADMINISTRATION : 531-5533
 BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES : 850-4620
 BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL : 859-9004
 BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING : 298-9013
 MISS UTILITY : 1-559-0100
 COLONIAL PIPELINE COMPANY : 795-1390
 BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 992-2366
 C & P TELEPHONE COMPANY : 1-800-257-7777
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- 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.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2" 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 STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS. (STD. DETAIL W.3.21).
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVERS STANDARD DETAIL G5.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., OR P.V.C. UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL G5.51.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATION C-153: DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.



SCALE : 1" = 600'

TYPE OF BUILDING	RESIDENTIAL
NUMBER OF LOTS	106 (100% SINGLE) (6)
NO OF WATER HOUSE CONNECTIONS	100
NO OF SEWER HOUSE CONNECTIONS	100
DRAINAGE AREA	LITTLE PATUXENT

TREATMENT PLANT: PATAPSCO WASTEWATER TREATMENT PLANT VIA THE ROUTE 108 PUMPING STATION.

CONTRACT NO. 24-1871-D

TURF VALLEY OVERLOOK

SECTION 2 AREA 2

WATER AND SEWER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

QUANTITIES			
ITEM	EST'D	AS-BUILT	SUPPLIER
8" SEWER	7104 L.F.		
4" SEWER	3521 L.F.		
MANHOLES	50 EACH		
12" WATER	3045 L.F.		
8" WATER	2092 L.F.		
6" WATER	1703 L.F.		
4" WATER	63 L.F.		
FIRE HYDRANTS	12 EACH		
1" W.H.C.	775 L.F.		
3/4" W.H.C.	1732 L.F.		
8" VALVES	5 EACH		
6" VALVES	17 EACH		
BLOW-OFFS	3 EACH		
8"x6" REDUCERS	5 EACH		
4" SEWER D.I.P.	63 L.F.		
AIR RELEASE M.I.	2 EACH		
8" SEWER, D.I.P.	1210 L.F.		
60" STEEL CASING	104 L.F.		
16" SEWER, D.I.P.	1217 L.F.		
12" VALVES	5 EACH		
OUTSIDE METER SETTINGS	1 EACH		

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F80-01.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND METS TECHNICAL REQUIREMENTS
Janet M. Helm / JRC 6/7/90
 DISTRICT SOIL CONSERVATION DISTRICT

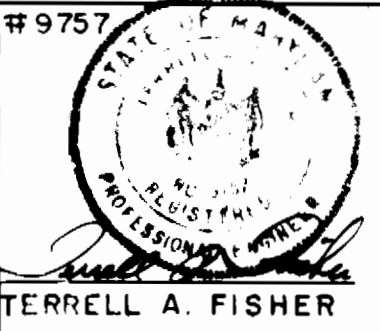
PLAN REFERENCE NUMBERS:
 P - 88-44
 F - 90-01

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

APPROVED:
John R. Blanton 6/7/90
 HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *Robert M. Bringer* 7/12/90
 Chief, Bureau of Engineering: *Robert M. Bringer* 7/12/90
 Chief, Bureau of Utilities: *Robert M. Bringer* 6-5-90
 Chief, and Development Division: *Robert M. Bringer* 7/12/90

FISHER, COLLINS, AND CARTER, INC. #9757
 CONSULTING ENGINEERS AND LAND SURVEYORS
 9171 BALTIMORE NATIONAL PIKE - SUITE 100
 ELLKOTT CITY, MARYLAND 21043
 TERRELL A. FISHER



DES: MM					
DRN: SH					
CHK: P.W.K.					
DATE: 6/2/90	HY	NO	REVISION	DATE	600' SCALE MAP NO 16/17 BLOCK NO.

TITLE SHEET AS BUILT
 L. R. BATES

TURF VALLEY OVERLOOK
 SECTION TWO AREA TWO
 CONTRACT NO. 24-1871-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 1 OF 14

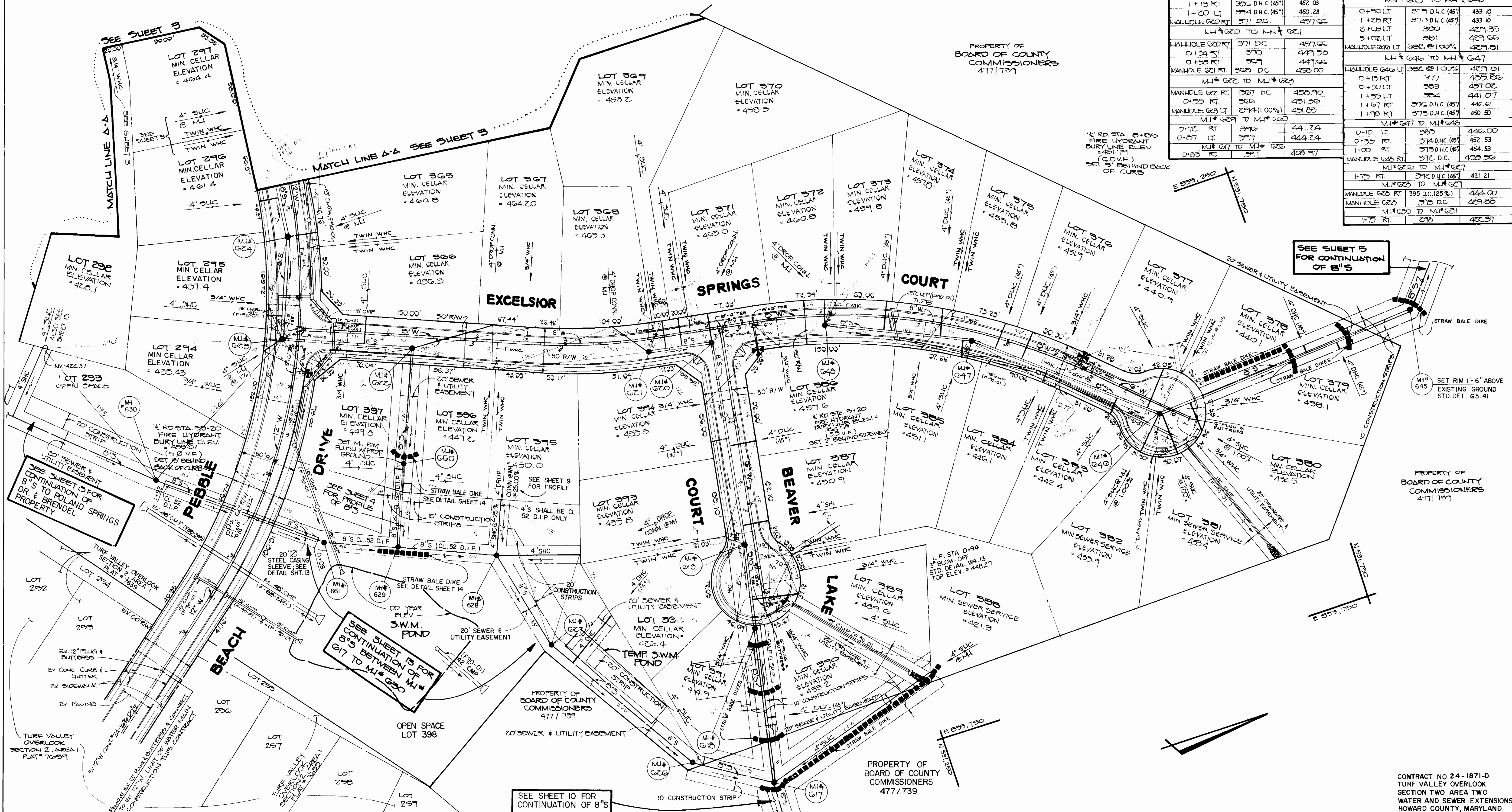
CONTRACT NO. 24-1871-D
 TURF VALLEY OVERLOOK
 SECTION TWO AREA TWO
 WATER AND SEWER EXTENSIONS
 HOWARD COUNTY, MARYLAND

MANHOLE TABULATION				
NO.	E. ROAD STATION	DISTANCE	SLOPE	RIM ELEV.
623	55+55	10' L	+4.0%	439.18
624	56+70	3' L	+4.0%	464.04
618	SET RIM FLUSH W/ PROPOSED GRADE			446.74
619	IN CUL-DE-SAC			450.94
620	4+70	8' R	-2.0%	465.00
621	3+78	8' R	-2.0%	466.50
646	IN CUL-DE-SAC			444.00
647	7+63	4' R	-4.5%	458.47
648	5+98	3' R	-2.0%	452.59
622	1+35	7' R	+4.0%	464.83

FOR PROFILES, SEE FOLLOWING SHEETS :

PEBBLE BEACH DRIVE : SHEET 7
 EXCELSIOR SPRING COURT : SHEET 4, 8 AND 10
 BEAVER LAKE COURT : SHEET 9
 MH # 629 TO MH # 622 : SHEET 4
 MH # 617 TO POLAND SPRINGS DRIVE : SHEET 13
 MH # 645 TO MH # 646 : SHEET 8 AND 10
 MH # 617 TO MH # 619 : SHEET 12

INVERT OF SEWER HOUSE CONNECTIONS AT PROPERTY LINE					
STATION	LOT	INVERT	STATION	LOT	INVERT
MH # 617 TO MH # 618			MH # 623 TO MH # 624		
MANHOLE 617 RT	388	411.15	MANHOLE 623 LT	294 (E. 1%)	451.58
0+73 RT	370 D.L.C. (45')	422.11	0+25 LT	295	452.09
MH # 618 TO MH # 619			MH # 624 TO MH # 625		
0+55 RT	391	450.00	MANHOLE 624 RT	305	455.51
			0+45 LT	296	452.23
			0+78 RT	304	457.60
MH # 619 TO MH # 620			MANHOLE 625 RT	303	459.47
0+20 LT	387 D.L.C.	449.54	MANHOLE 625 LT	297	459.13
1+13 RT	306 D.H.C. (45')	452.08	MH # 645 TO MH # 646		
1+20 LT	314 D.H.C. (45')	450.28	0+90 LT	379 D.H.C. (45')	433.10
MANHOLE 620 RT	371 D.C.	457.56	1+25 RT	371 D.H.C. (45')	433.10
MH # 620 TO MH # 621			2+02 LT	300	429.35
MANHOLE 620 RT	371 D.C.	457.56	3+02 LT	300	429.35
0+54 RT	370	449.50	MANHOLE 646 LT	302 @ 1.00%	429.01
0+53 RT	369	449.50	MH # 646 TO MH # 647		
MANHOLE 621 RT	365 D.C.	458.00	0+15 RT	377	429.00
MH # 622 TO MH # 623			0+50 LT	303	429.02
MANHOLE 622 RT	367 D.C.	458.90	1+55 LT	304	441.07
0+55 RT	366	451.36	1+07 RT	375 D.H.C. (45')	446.61
MANHOLE 623 LT	294 (1.00%)	451.83	1+98 RT	375 D.H.C. (45')	450.50
MH # 623 TO MH # 624			MH # 647 TO MH # 648		
0+72 RT	390	441.24	0+10 LT	385	446.00
0+07 LT	397	444.24	0+35 RT	374 D.H.C. (45')	452.53
MH # 627 TO MH # 628			1+00 RT	379 D.H.C. (45')	454.53
0+83 RT	391	428.97	MANHOLE 648 RT	372 D.C.	455.56
			MH # 628 TO MH # 627		
			1+75 RT	376 D.H.C. (45')	421.21
			MH # 628 TO MH # 629		
			MANHOLE 628 RT	395 D.C. (25%)	444.00
			MANHOLE 628	378 D.C.	429.85
			MH # 630 TO MH # 631		
			1+75 RT	296	422.57



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: [Signature] 2/15/20
 Chief, Bureau of Engineering: [Signature] 2/15/20
 Chief, Bureau of Utilities: [Signature] 2/5/20
 Chief, Land Development Division: [Signature]

FISHER, COLLINS AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 9171 BALTIMORE NATIONAL PIKE - SUITE 100
 ELLICOTT CITY, MARYLAND 21043
 Terrell A. Fisher

DES:	MM
DRN:	MM
CHK:	PKW
DATE:	2/2/20
BY:	NO.
REVISION:	DATE

PLAN
 WATER AND SEWER MAINS
 600' SCALE MAP NO. 16/17 BLOCK NO.

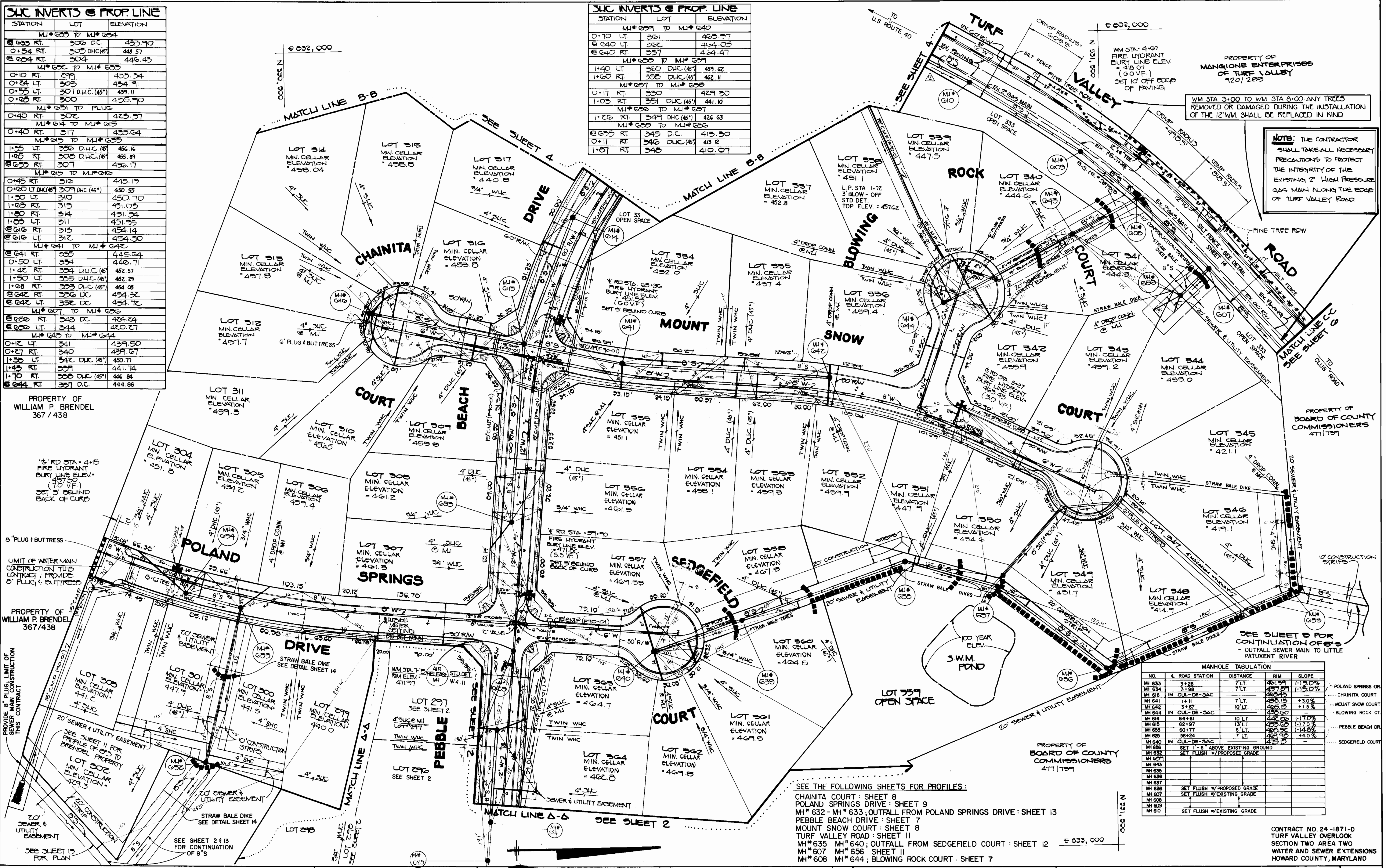
TURF VALLEY OVERLOOK
 SECTION TWO AREA TWO
 CONTRACT NO. 24-1871-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 2 OF 14

SIC INVERTS @ PROP. LINE

STATION	LOT	ELEVATION
MI# 633 TO MI# 634		
0+33 RT.	302 D.C.	453.90
0+54 RT.	303 D.H.C. (6')	448.57
0+64 RT.	304	446.43
MI# 634 TO MI# 635		
0+10 RT.	299	433.34
0+24 LT.	303	434.91
0+35 LT.	301 D.H.C. (45')	439.11
0+65 RT.	300	433.90
MI# 635 TO PLUG		
0+40 RT.	302	423.57
MI# 634 TO MI# 635		
0+40 RT.	317	435.64
MI# 635 TO MI# 636		
1+35 LT.	306 D.H.C. (6')	456.16
1+65 RT.	308 D.H.C. (6')	465.89
0+65 RT.	307	456.17
MI# 636 TO MI# 637		
0+45 RT.	316	445.19
0+60 LT. D.H.C. (6')	309 D.H.C. (45')	450.55
1+50 LT.	310	450.70
1+65 RT.	315	451.05
1+80 RT.	314	431.34
1+85 LT.	311	451.95
0+616 RT.	315	454.14
0+616 LT.	312	454.50
MI# 641 TO MI# 642		
0+41 RT.	355	445.64
0+50 LT.	354	446.71
1+42 RT.	354 D.H.C. (6')	452.57
1+50 LT.	355 D.H.C. (45')	452.29
1+68 RT.	353 D.H.C. (45')	454.05
0+642 RT.	352 D.C.	454.32
0+642 LT.	352 D.C.	454.72
MI# 643 TO MI# 644		
0+12 LT.	341	439.50
0+27 RT.	340	439.67
1+58 LT.	342 D.H.C. (6')	450.77
1+45 RT.	339	441.74
1+70 RT.	353 D.H.C. (45')	446.84
0+644 RT.	357 D.C.	444.86

SIC INVERTS @ PROP. LINE

STATION	LOT	ELEVATION
MI# 639 TO MI# 640		
0+70 LT.	361	465.97
0+40 LT.	362	464.05
0+40 RT.	357	464.47
MI# 639 TO MI# 637		
1+40 LT.	360 D.H.C. (6')	459.62
1+60 RT.	358 D.H.C. (45')	462.11
MI# 637 TO MI# 638		
0+17 RT.	350	429.30
1+03 RT.	351 D.H.C. (45')	441.10
MI# 638 TO MI# 637		
1+26 RT.	349 D.H.C. (45')	426.63
MI# 635 TO MI# 626		
0+635 RT.	345 D.C.	413.30
0+11 RT.	346 D.H.C. (45')	413.12
1+67 RT.	348	410.07



MANHOLE TABULATION

NO.	R.O. STATION	DISTANCE	RIM	SLOPE
MH 633	3+28	7' LT.	461.91	(1) 3.0%
MH 634	3+58	7' LT.	457.01	(1) 2.0%
MH 635	IN CUL-DE-SAC		460.43	
MH 641	1+11	7' LT.	460.15	+3.0%
MH 642	3+67	10' LT.	465.15	+1.5%
MH 644	IN CUL-DE-SAC		465.60	
MH 614	6+48	10' LT.	442.60	(1) 7.0%
MH 615	62+97	13' LT.	450.60	(1) 7.0%
MH 655	60+77	6' LT.	460.30	(1) 4.5%
MH 656	58+24	7' LT.	461.10	+4.0%
MH 640	IN CUL-DE-SAC		461.10	
MH 656	SET 1'-6" ABOVE EXISTING GROUND			
MH 632	SET FLUSH W/PROPOSED GRADE			
MH 627	SET FLUSH W/PROPOSED GRADE			
MH 643	SET FLUSH W/EXISTING GRADE			
MH 639	SET FLUSH W/EXISTING GRADE			
MH 638	SET FLUSH W/PROPOSED GRADE			
MH 607	SET FLUSH W/EXISTING GRADE			
MH 608	SET FLUSH W/EXISTING GRADE			
MH 609	SET FLUSH W/EXISTING GRADE			
MH 610	SET FLUSH W/EXISTING GRADE			

SEE THE FOLLOWING SHEETS FOR PROFILES:
 CHAINITA COURT : SHEET 8
 POLAND SPRINGS DRIVE : SHEET 9
 MI# 632 - MI# 633; OUTFALL FROM POLAND SPRINGS DRIVE : SHEET 13
 PEBBLE BEACH DRIVE : SHEET 7
 MOUNT SNOW COURT : SHEET 8
 TURF VALLEY ROAD : SHEET 11
 MI# 635 MI# 640; OUTFALL FROM SEDGEFIELD COURT : SHEET 12
 MI# 607 MI# 656 SHEET 11
 MI# 608 MI# 644; BLOWING ROCK COURT : SHEET 7

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *[Signature]* 7/19/60
 Chief, Bureau of Engineering: *[Signature]*
 Chief, Bureau of Utilities: *[Signature]* 6-5-60
 Chief, Land Development Division: *[Signature]*

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 9171 BALTIMORE NATIONAL PIKE - SUITE 100
 ELLICOTT CITY, MARYLAND 21043
 Terrell A. Fisher

DES: M.M.	
DRN: M.M.	
CHK: P.W.K.	
M.J.M.	MOVE 0'S BEHIND CURB (UTTER) (MI 610 TO MATCH LINE) 10/25/61
S.F.H.	CHANGE 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000
DATE: 8/1/60	BY NO.
REVISION	DATE

PLAN AS-BUILT
 10-11-61
 L. DATES
 WATER AND SEWER MAINS
 600' SCALE MAP NO. 16/17 BLOCK NO.

TURF VALLEY OVERLOOK
 SECTION TWO AREA TWO
 CONTRACT NO. 24-1871-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 3 OF 14

69130

SEE FOLLOWING FOR
WATER & SEWER PROFILES:

SHEET 7: PEBBLE BEACH DRIVE
SHEET 9: SHADOWBROOK COURT
SHEET 11: TURF VALLEY ROAD

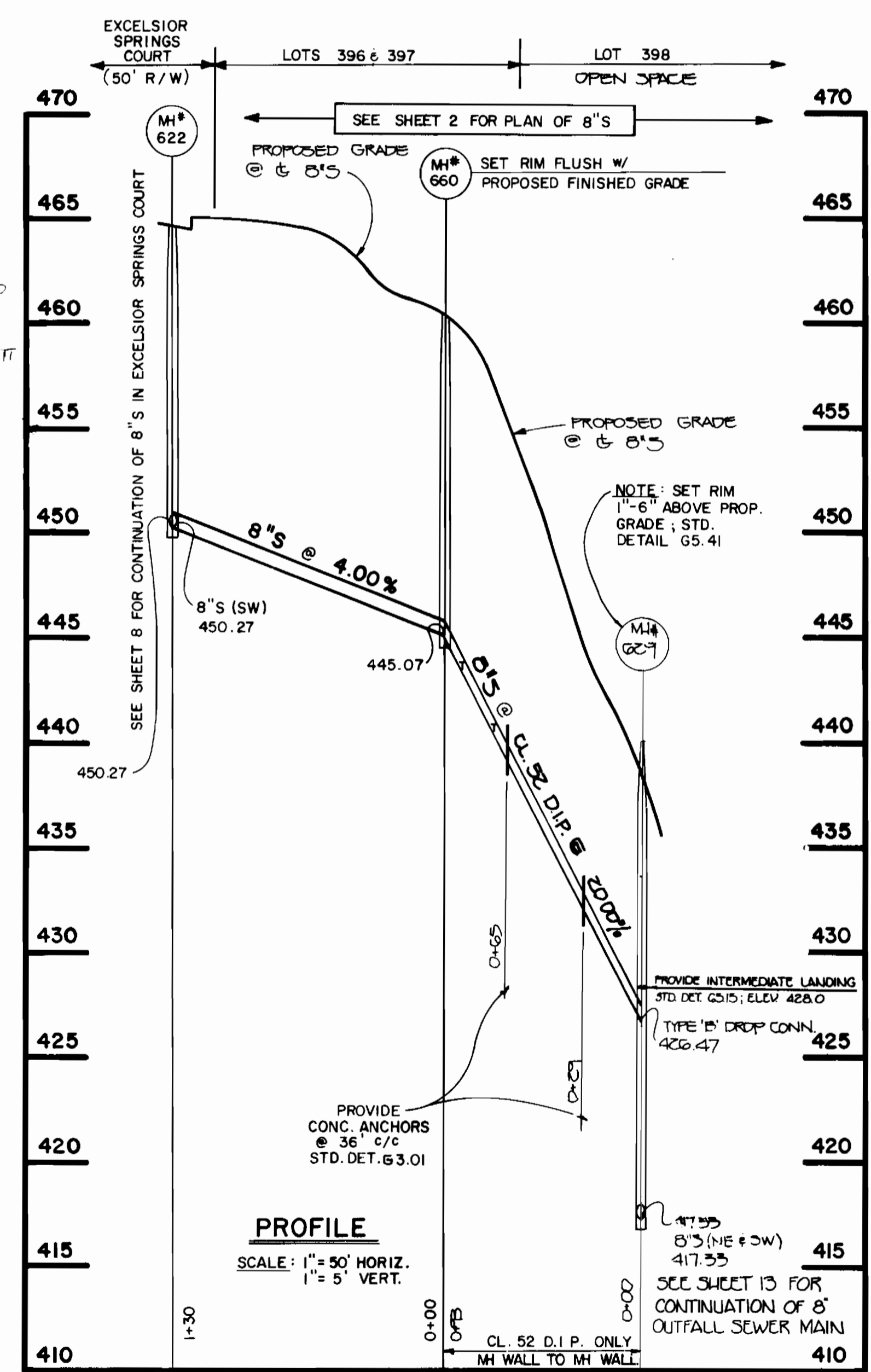
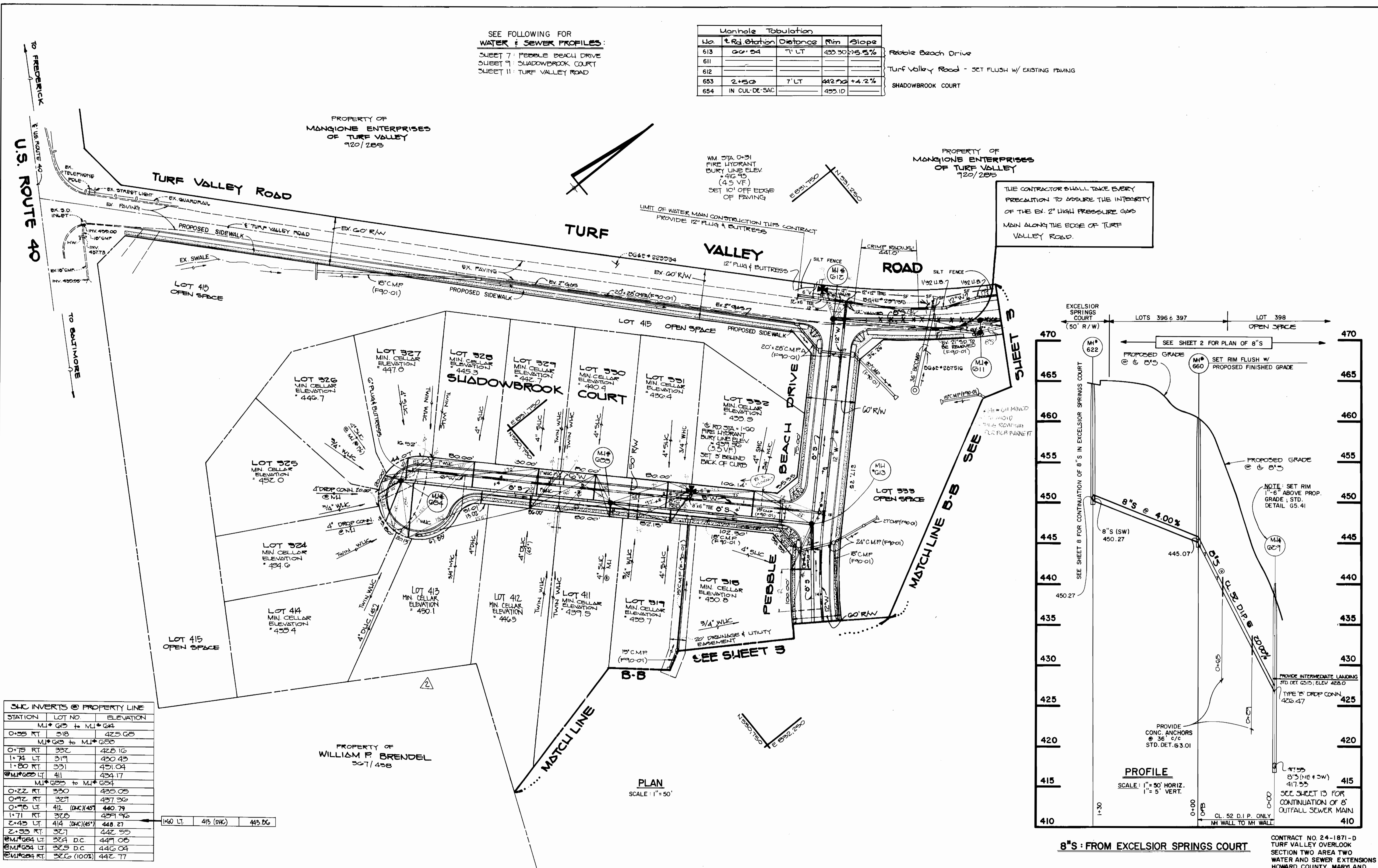
No.	ℓ. Rd. Station	Distance	Rim	Slope
613	0+01.54	7' LT	433.30	+5.5%
611				
612				
653	2+50	7' LT	442.92	+4.2%
654	IN CUL-DE-SAC		433.10	

Pebble Beach Drive
Turf Valley Road - SET FLUSH W/ EXISTING PAVING
SHADOWBROOK COURT

PROPERTY OF
MANGIONE ENTERPRISES
OF TURF VALLEY
920/285

PROPERTY OF
MANGIONE ENTERPRISES
OF TURF VALLEY
920/285

THE CONTRACTOR SHALL TAKE EVERY
PRECAUTION TO ASSURE THE INTEGRITY
OF THE EX. 2" HIGH PRESSURE GAS
MAIN ALONG THE EDGE OF TURF
VALLEY ROAD.



STATION	LOT NO	ELEVATION
MJ# 615 to MJ# 614		
0+55 RT	318	425.05
MJ# 615 to MJ# 614		
0+75 RT	327	428.10
1+74 LT	319	430.43
1+80 RT	331	431.04
MJ# 622 LT	411	434.17
MJ# 622 to MJ# 624		
0+22 RT	330	433.05
0+72 RT	329	437.30
0+70 LT	412 (DNC) 407	440.79
1+71 RT	328	439.96
2+45 LT	414 (DNC) 407	448.27
2+55 RT	327	442.55
MJ# 624 LT	329 D.C.	449.00
MJ# 624 LT	328 D.C.	446.04
MJ# 624 RT	326 (100%)	442.77

PROPERTY OF
WILLIAM F. BRENDAL
307/438

PLAN
SCALE: 1" = 50'

8" S : FROM EXCELSIOR SPRINGS COURT

CONTRACT NO. 24-1871-D
TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
WATER AND SEWER EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. ... 7/19/90
DIRECTOR OF PUBLIC WORKS DATE

Robert W. ... 6-5-90
CHIEF, BUREAU OF UTILITIES DATE

... 7/19/90
CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS AND CARTER, INC. #9757

CONSULTING ENGINEERS AND LAND SURVEYORS
9171 BALTIMORE NATIONAL PIKE - SUITE 100
ELLICOTT CITY, MARYLAND 21043

TERRELL A. FISHER

DES: MM
DRN: MM
CHK: PWK

MJM
S.F.H.
DATE: 6/21/90

CHANGE LOT'S TO REFLECT RESUB. PLAT; ADD WMC/SNC LOTS
CHANGE LOTS 321 & 323 TO 45' & 4" DNC.

REVISION

PLAN & PROFILES
WATER AND SEWER MAINS

DATE: 6/21/90

TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
CONTRACT NO. 24-1871-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 14

MJ# 600 THRU MJ# 605: WITHIN THESE LIMITS, THE CONTRACTOR SHALL INSTALL A FENCE ALONG THE OUTSIDE EDGE OF THE CONSTRUCTION STRIP ON THE SOUTH SIDE AND ALONG THE OUTSIDE EDGE OF THE SEWER & UTILITY EASEMENT ON THE NORTH SIDE. THE FENCE SHALL BE FOUR (4) FOOT HIGH ORANGE MESH CONSTRUCTION FENCE & SHALL BE STAKED TO METAL POSTS AT TEN (10) FOOT INTERVALS. THE FENCE SHALL NOT BE ATTACHED TO ANY TREES & SHALL BE REMOVED AFTER COMPLETION OF SEWER MAIN CONSTRUCTION ACTIVITIES. FROM MJ# 601 TO MJ# 645 & MJ# 604 TO MJ# 635, THE CONSTRUCTION FENCE, AS ABOVE DESCRIBED, SHALL BE INSTALLED ALONG THE OUTSIDE EDGES OF THE CONSTRUCTION STRIPS.

SEE THE FOLLOWING FOR THE WATER & SEWER PROFILES:

MJ# 600 TO 605; SHEET # 10: 16" S, CL 52 D.I.P.
 MJ# 601 TO 645; SHEET # 10: FROM EXCELSIOR SPRINGS COURT
 MJ# 604 TO 635; SHEET # 11: FROM MOUNT SNOW COURT

NOTE: PROVIDE MJ# 600 TO 605 WITH WATERTIGHT FRAME & COVERS. STANDARD DETAIL G5.52, DESIGNATED W.T. FOR WATERTIGHT

NOTE: SET RIMS OF MJ# 600 TO 604 1'-6" ABOVE EXISTING GROUND; STANDARD DETAIL G5.14

REFERENCE SECTION 5.14 OF THE CONTRACT SPECIAL PROVISIONS FOR THE TREE PLANTING & LANDSCAPING REQUIREMENTS WITHIN THE DEPARTMENT OF RECREATION & PARKS PROPERTY, MH# 600 TO MH# 605

PROPERTY OF MANGIONE ENTERPRISES OF TURF VALLEY 920/250

WATER RESOURCES ADMINISTRATION PERMIT REQUIRED FOR CROSSING OF THE LITTLE PATUXENT RIVER; SEE SHEET 14 FOR DETAILS, NOTES & REQUIRED SEDIMENT CONTROL MEASURES.

SEE SHEET 6 FOR CONTINUATION OF 12' W ALONG TURF VALLEY ROAD TO CLUB ROAD.

PROPERTY OF MANGIONE ENTERPRISES OF TURF VALLEY 920/250

INSTALLATION OF THE SEWER MAIN FROM MJ# 600 TO MJ# 605 REQUIRES A WATER RESOURCES ADMINISTRATION PERMIT FOR CONSTRUCTION WITHIN THE 100 YEAR FLOODPLAIN OF THE LITTLE PATUXENT RIVER; SEE SHEET 14 FOR NOTES, DETAILS & SEDIMENT CONTROL MEASURES.

NOTE: THE 16" S, OUTFALL SEWER SEWER MAIN FROM MH 600 TO MH 605 SHALL BE CL 52 D.I.P. ONLY

NOTE RE RIP-RAP: LOOSE-LAID RIP RAP AT STREAM CROSSING SHALL BE BROWN STONE, CLASS II SIZE. COLOR MAY RANGE FROM LIGHT TAN TO DARK BROWN. WHITE STONE IS NOT ACCEPTABLE. ALSO SEE SPECIAL PROVISIONS.

PROPERTY OF BOARD OF COUNTY COMMISSIONERS 477/739

EXISTING BERM SHALL BE RESTORED TO ITS ORIGINAL HEIGHT, GRADE & COUNTOURS, AFTER INSTALLATION OF 16" S

THE EXISTING FOOT BRIDGES, IF DISTURBED, SHALL BE RESTORED TO THEIR ORIGINAL CONDITION & RETURNED TO THEIR ORIGINAL LOCATIONS.

PROPERTY OF BOARD OF COUNTY COMMISSIONERS 477/739

THROUGH-OUT THE CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF THE EXISTING BERM BETWEEN THE MARSH & THE LITTLE PATUXENT RIVER; SEE SECTION THIS SHEET.

BETWEEN MH# 602 - MH# 605, THE CONTRACTOR SHALL INSTALL SILT FENCE ALONG BOTH SIDES OF THE SEWER MAIN TRENCH.

SEE SHEET 2 FOR CONTINUATION OF 8'S IN EXCELSIOR SPRINGS COURT

MAINTAIN INTEGRITY OF EXISTING BERM THROUGH-OUT CONSTRUCTION ACTIVITIES

SECTION NO SCALE

@ 16" S: BETWEEN MH# 602 TO MH# 603

CONTRACT NO. 24-1871-D
 TURF VALLEY OVERLOOK SECTION TWO AREA TWO WATER AND SEWER MAIN EXTENSIONS HOWARD COUNTY, MARYLAND

PROPERTY OF MANGIONE ENTERPRISES OF TURF VALLEY 920/250

TURF VALLEY ROAD (60' RW)
 7'L.F. OF 16" S UP @ 0.40%
 LIMIT OF SEWER MAIN CONSTRUCTION PROVIDE 16" S PLUG

THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT THE INTEGRITY OF THE EXISTING UNDERGROUND GAS MAIN IN THE AREA OF THE PROP SEWER MAIN CONSTRUCTION.

SEE SHEET 6 FOR CONTINUATION OF 8'S

SEE SHEET 5 FOR CONTINUATION OF 8'S

TURF VALLEY OVERLOOK SECTION TWO AREA TWO PLAT TO BE RECORDED

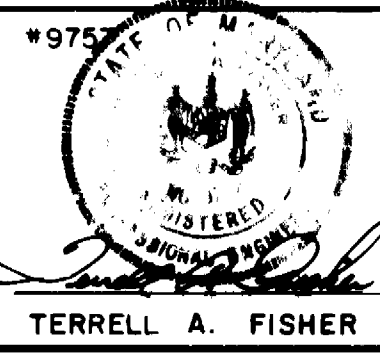
PLAN SCALE: 1" = 20'

MOUNT SNOW COURT

EXCELSIOR SPRINGS COURT

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

FISHER, COLLINS, AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 971 BALTIMORE NATIONAL PIKE - SUITE 100
 ELLICOTT CITY, MARYLAND 21043

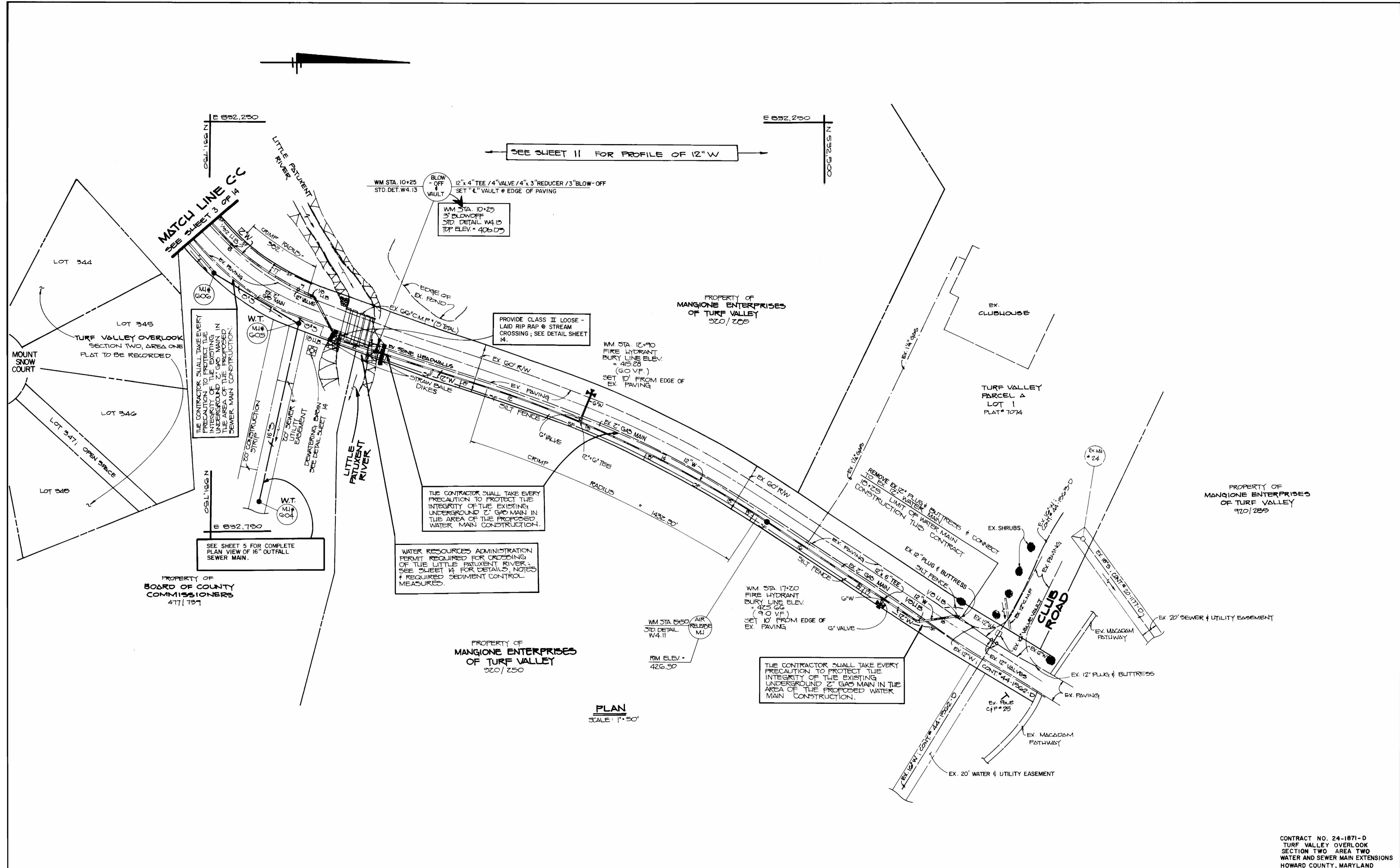


DES: MM					
DRN: MM					
CHK: PWK					
DATE: 6/21/90	BY: NO.	REVISION	DATE	600' SCALE MAP NO. 16/17	BLOCK NO.

PLAN
 WATER AND SEWER MAINS

TURF VALLEY OVERLOOK SECTION TWO AREA TWO CONTRACT NO. 24-1871-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 5 OF 14



SEE SHEET 11 FOR PROFILE OF 12" W

MATCH LINE C-C
SEE SUBJECT 3 OF 14

WM STA. 10+25
STD. DET. W4.13
BLOW OFF VAULT
12" x 4" TEE / 4" VALVE / 4" x 3" REDUCER / 3" BLOW-OFF
SET "L" VAULT @ EDGE OF PAVING
WM STA. 10+25
3" BLOWOFF
STD. DETAIL W4.13
TOP ELEV. = 406.05

PROVIDE CLASS II LOOSE-LAID RIP RAP @ STREAM CROSSING; SEE DETAIL SHEET 14.

WM STA. 12+90
FIRE HYDRANT BURY LINE ELEV. = 415.28
(90 V.F.)
SET 10' FROM EDGE OF EX. PAVING

THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT THE INTEGRITY OF THE EXISTING UNDERGROUND 2" GAS MAIN IN THE AREA OF THE PROPOSED WATER MAIN CONSTRUCTION.

WATER RESOURCES ADMINISTRATION PERMIT REQUIRED FOR CROSSING OF THE LITTLE PATUXENT RIVER. SEE SHEET 14 FOR DETAILS, NOTES & REQUIRED SEDIMENT CONTROL MEASURES.

WM STA. 17+20
FIRE HYDRANT BURY LINE ELEV. = 425.66
(90 V.F.)
SET 10' FROM EDGE OF EX. PAVING

THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT THE INTEGRITY OF THE EXISTING UNDERGROUND 2" GAS MAIN IN THE AREA OF THE PROPOSED WATER MAIN CONSTRUCTION.

THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT THE INTEGRITY OF THE EXISTING UNDERGROUND 2" GAS MAIN IN THE AREA OF THE PROPOSED WATER MAIN CONSTRUCTION.

SEE SHEET 5 FOR COMPLETE PLAN VIEW OF 16" OUTFALL SEWER MAIN.

PROPERTY OF BOARD OF COUNTY COMMISSIONERS
477/737

PROPERTY OF MANGIONE ENTERPRISES OF TURF VALLEY
920/250

PLAN
SCALE: 1" = 50'

CONTRACT NO. 24-1871-D
TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works
DATE: 6/5/90
Chief, Bureau of Engineering
DATE: 6/14/90
Chief, Land Development Division

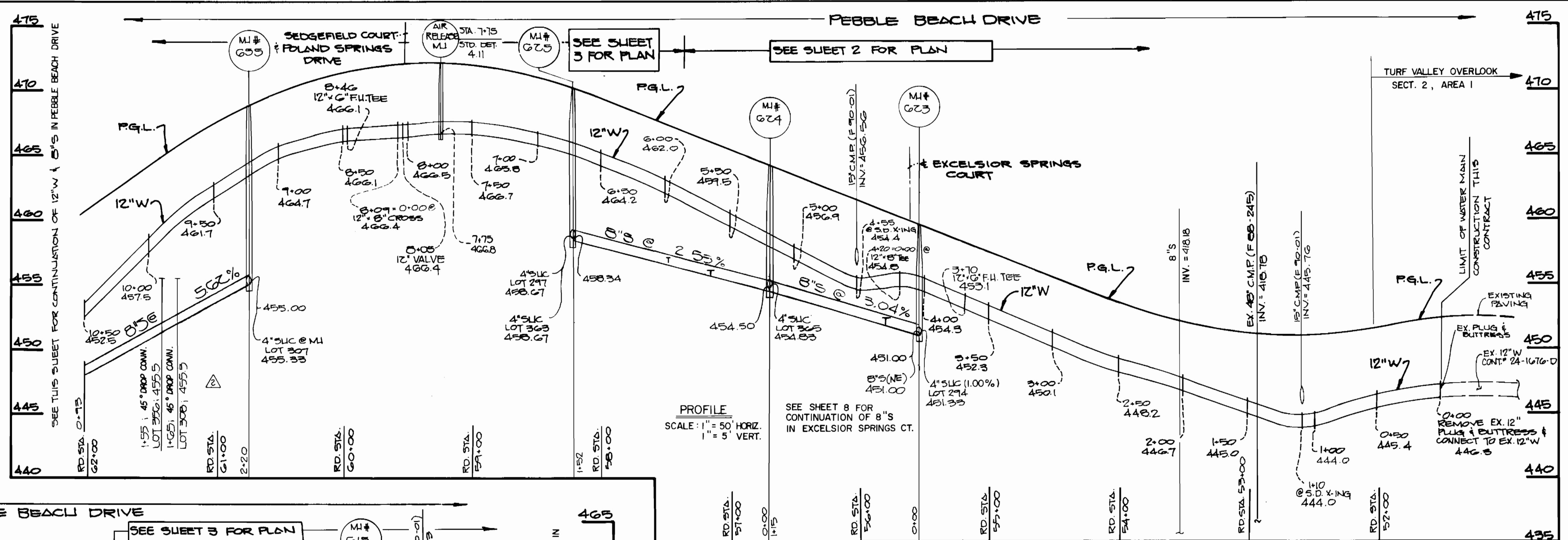
FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
9171 BALTIMORE NATIONAL PIKE - SUITE 100
ELLICOTT CITY, MARYLAND 21043
TERRELL A. FISHER

DES: MM					
DRN: MM					
CHK: PWK					
DATE: 6/1/90	BY:	NO.	REVISION	DATE	

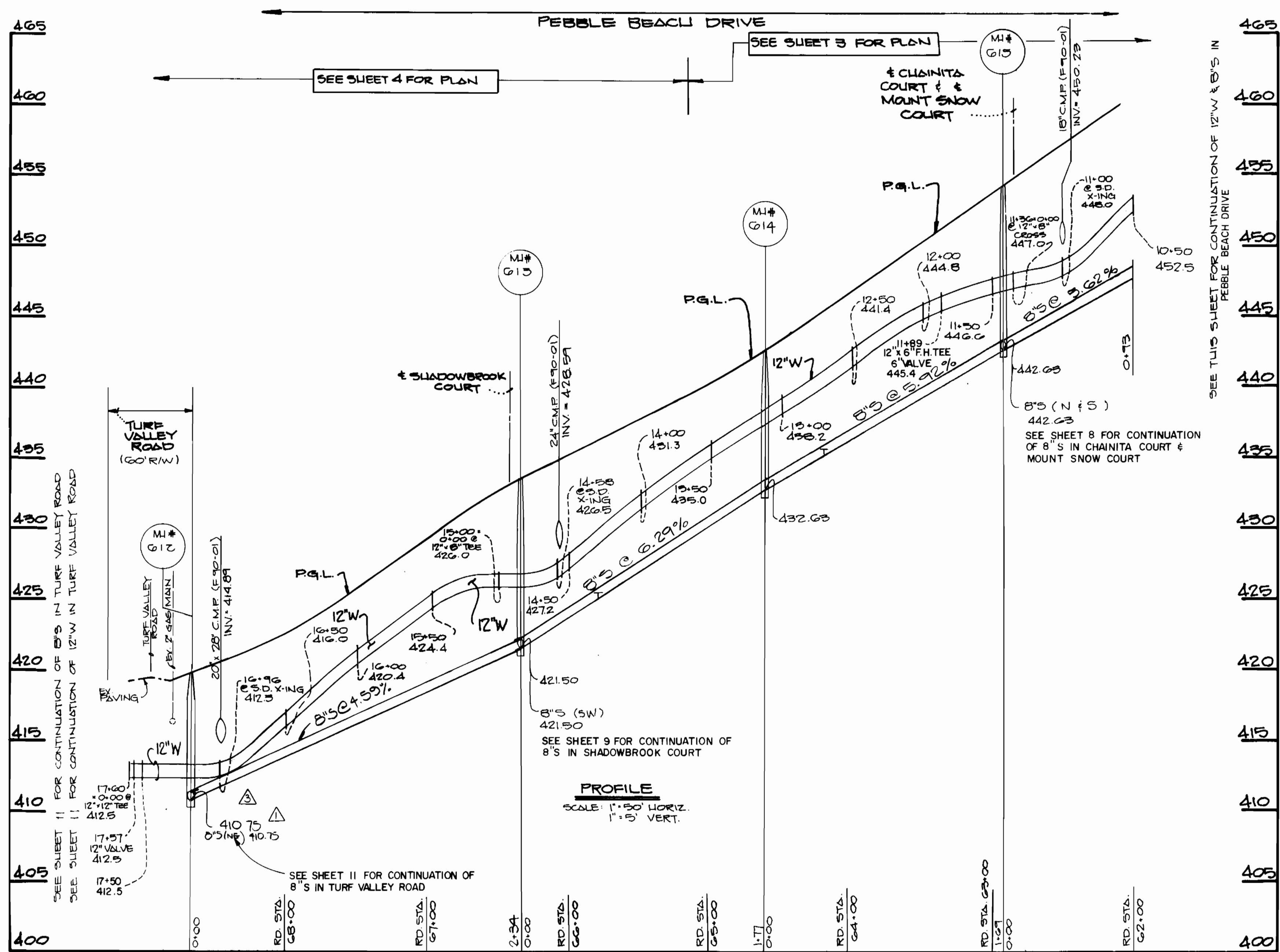
PLAN
WATER AND SEWER MAINS
600' SCALE MAP NO. 16/17 BLOCK NO.

TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
CONTRACT NO. 24-1871-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

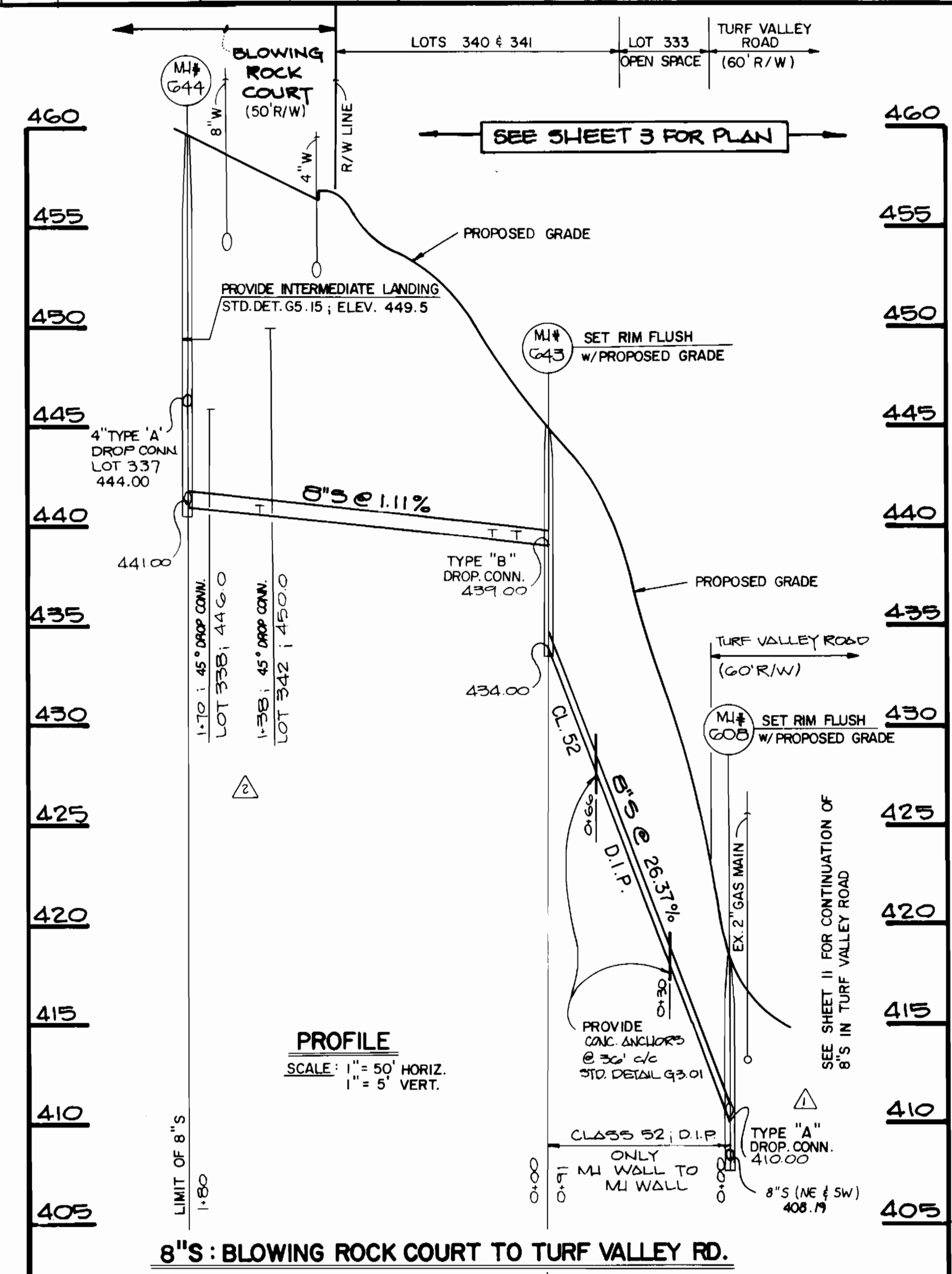
SCALE AS SHOWN
SHEET 6 OF 14



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



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



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

8" S : BLOWING ROCK COURT TO TURF VALLEY RD.

CONTRACT NO. 24-1871-D
TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

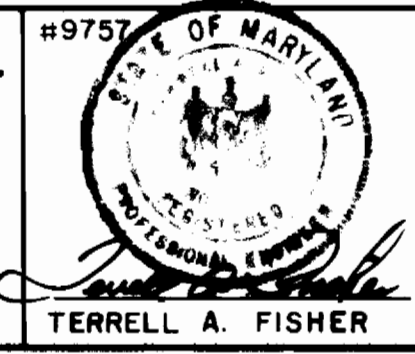
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Bennett
DIRECTOR OF PUBLIC WORKS
DATE: 6-5-90

Robert M. Bennett
CHIEF, BUREAU OF UTILITIES
DATE: 6-5-90

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
7171 BALTIMORE NATIONAL PIKE - SUITE 100
ELLICOTT CITY, MARYLAND 21043

Terrell A. Fisher
TERRELL A. FISHER

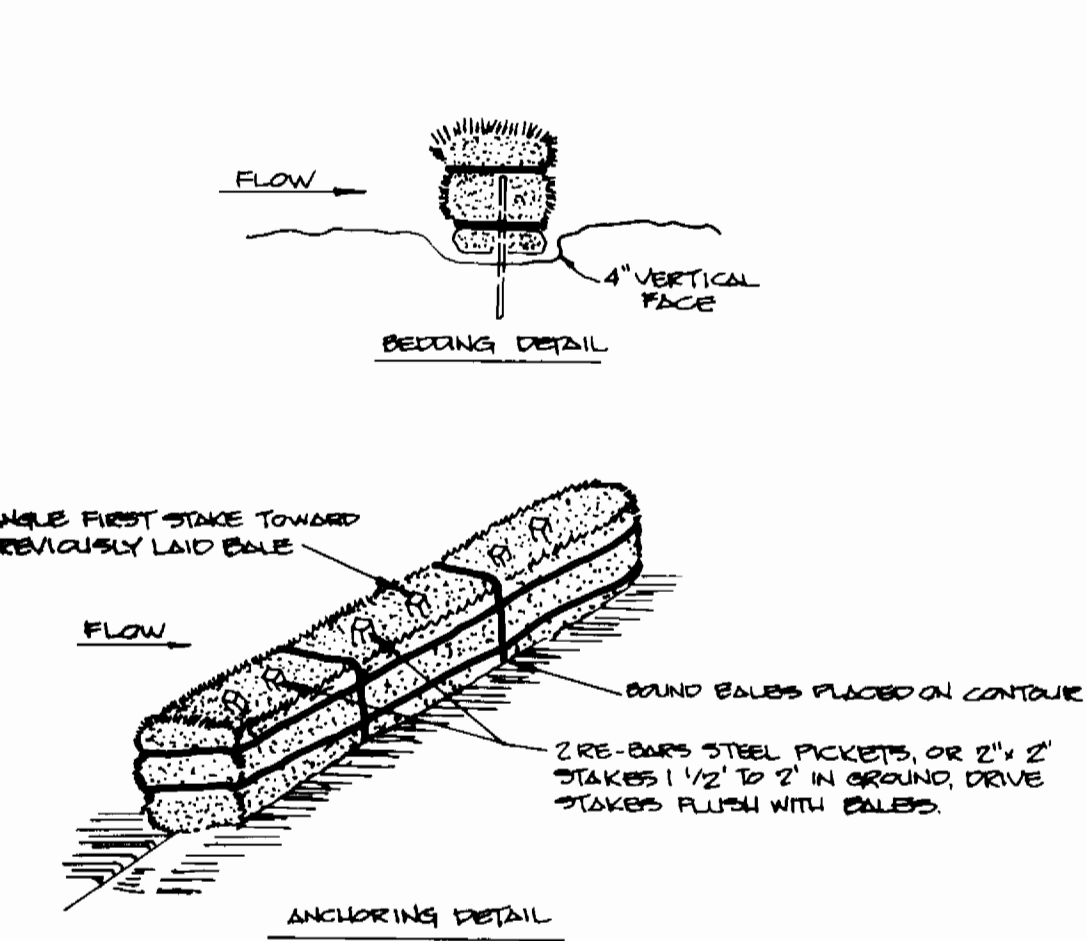
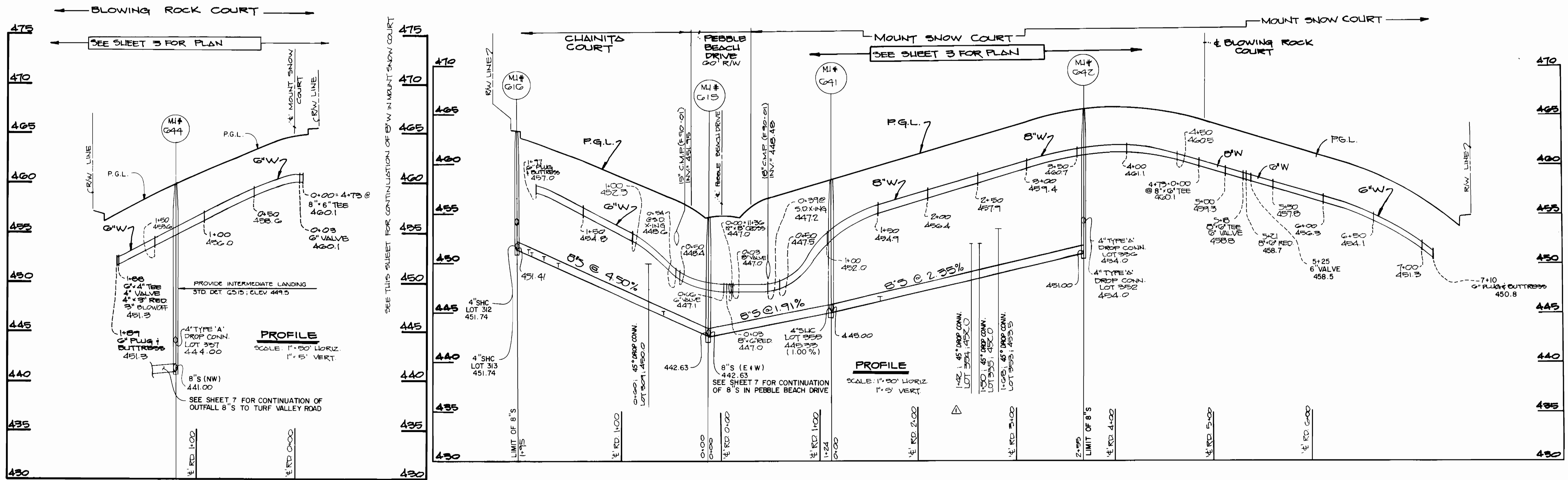


DES: MM					
DRN: MM					
CHK: PWK	NJM	△	ADJUST INVERT ELEVATION @ MI# 612 & ADJUST SLOPE	10/23/91	
	S.F.H.	△	CHANGE LOTS 308, 338, 342 & 356 TO 45' DROP CONN.	6/11/91	
	S.F.H.	△	REVISE 8" S FROM MI 612 TO MI 613 & INTO MI 608	6/11/91	
DATE: 5/4/90	BY NO.		REVISION	DATE	

PROFILES
WATER AND SEWER MAINS
600' SCALE MAP NO. 16/17 BLOCK NO.

TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
CONTRACT NO. 24-1871-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

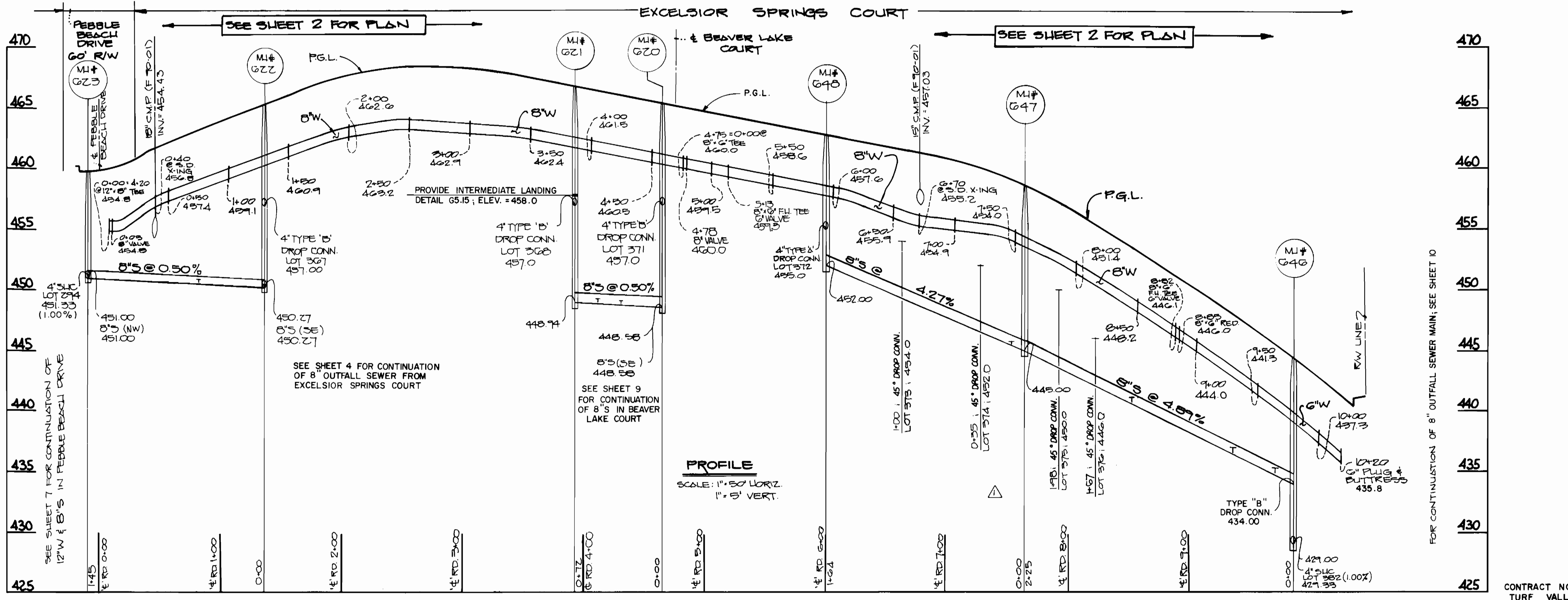
SCALE AS SHOWN
SHEET 7 OF 14



STRAW BALE DIKE

- BALES SHALL BE PLACED AT THE TOP OF A SLOPE OR ON THE CONTIGUOUS END IN A ROW WITH ENDS TIGHTLY ADJUTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER 2x2 PICKETS OR 2x2 STAKES DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALE TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
- INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS TO AS NOT TO BLOCK OR IMPERE STORM FLOW OR DRAINAGE.

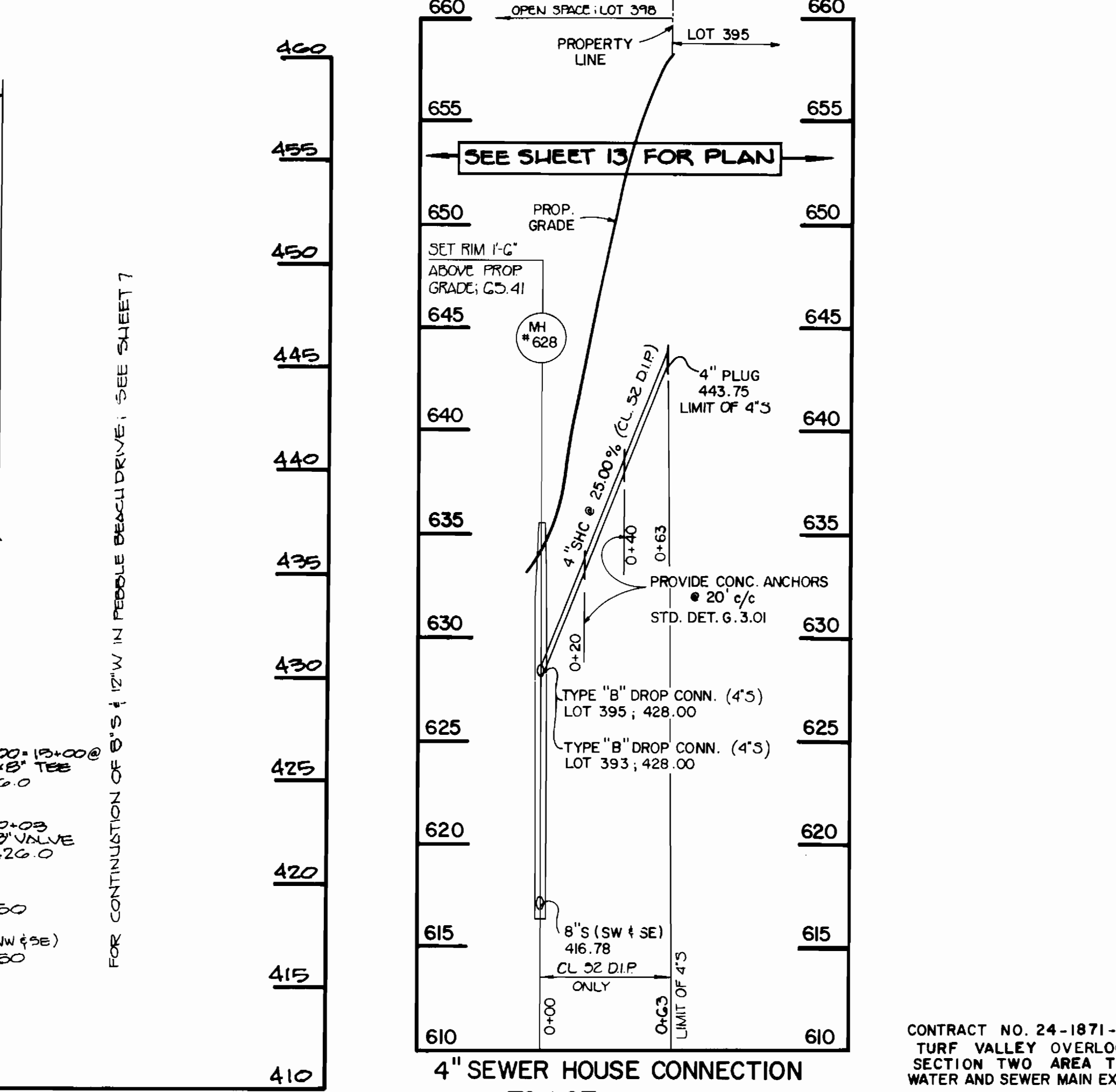
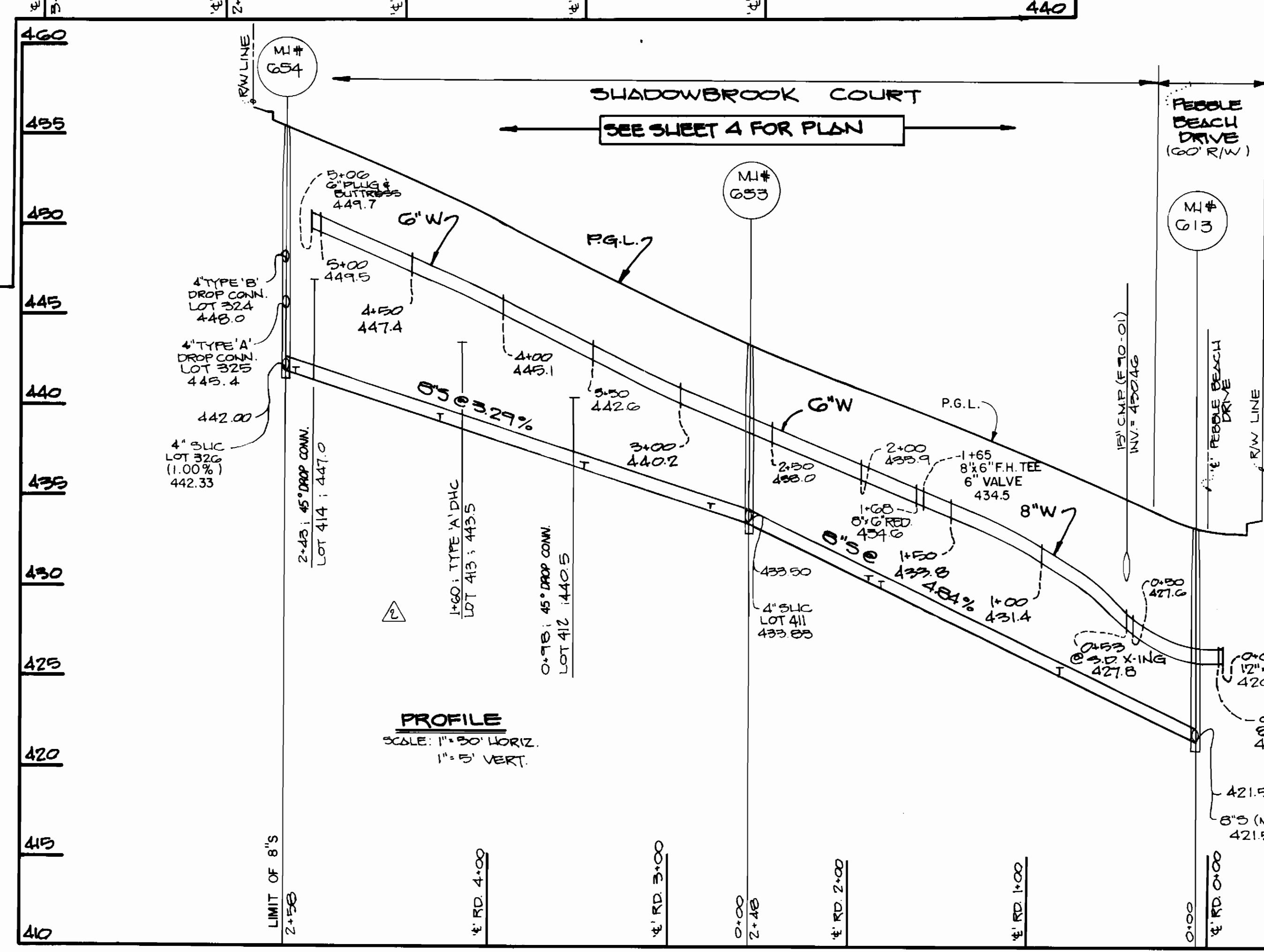
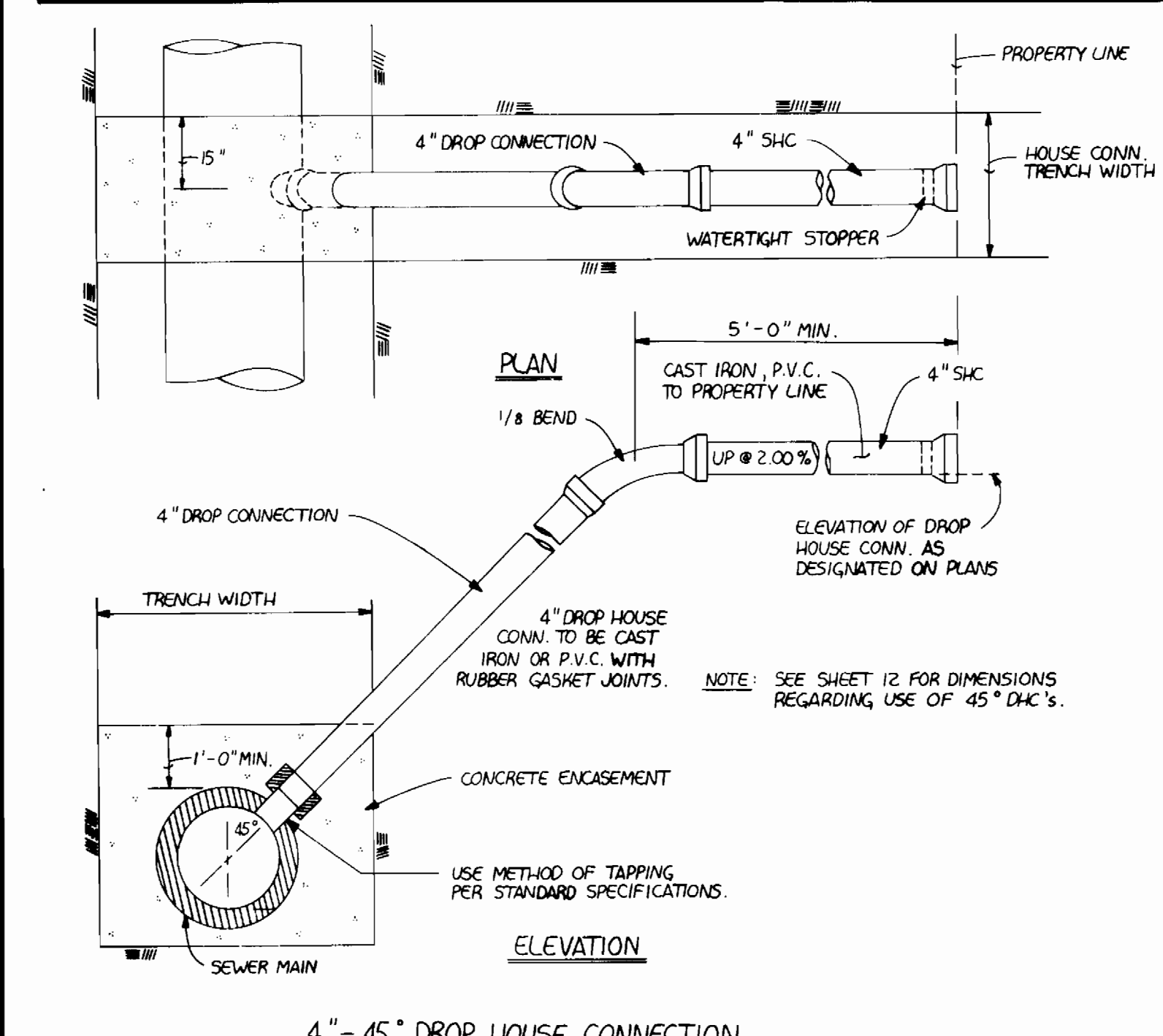
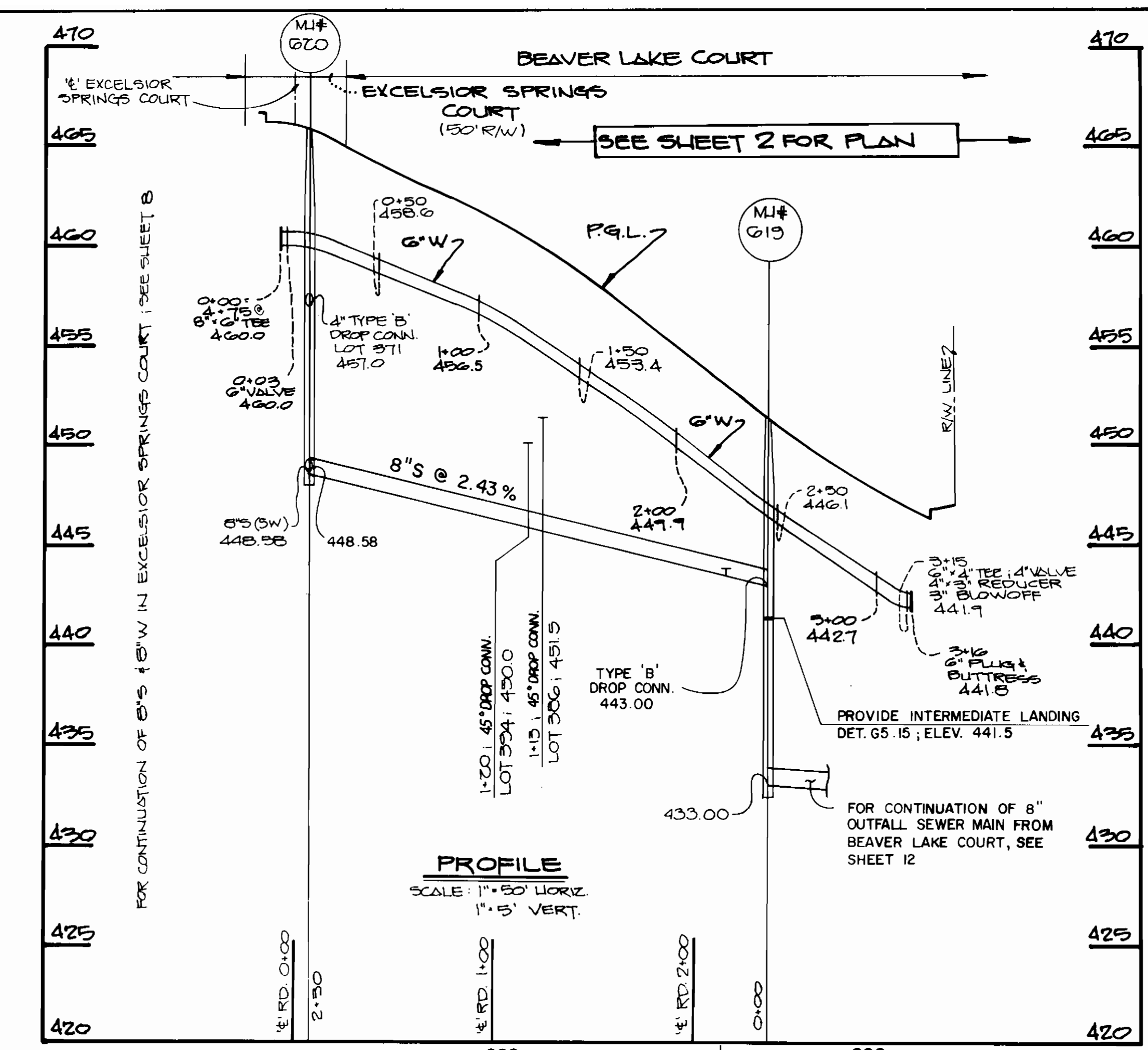
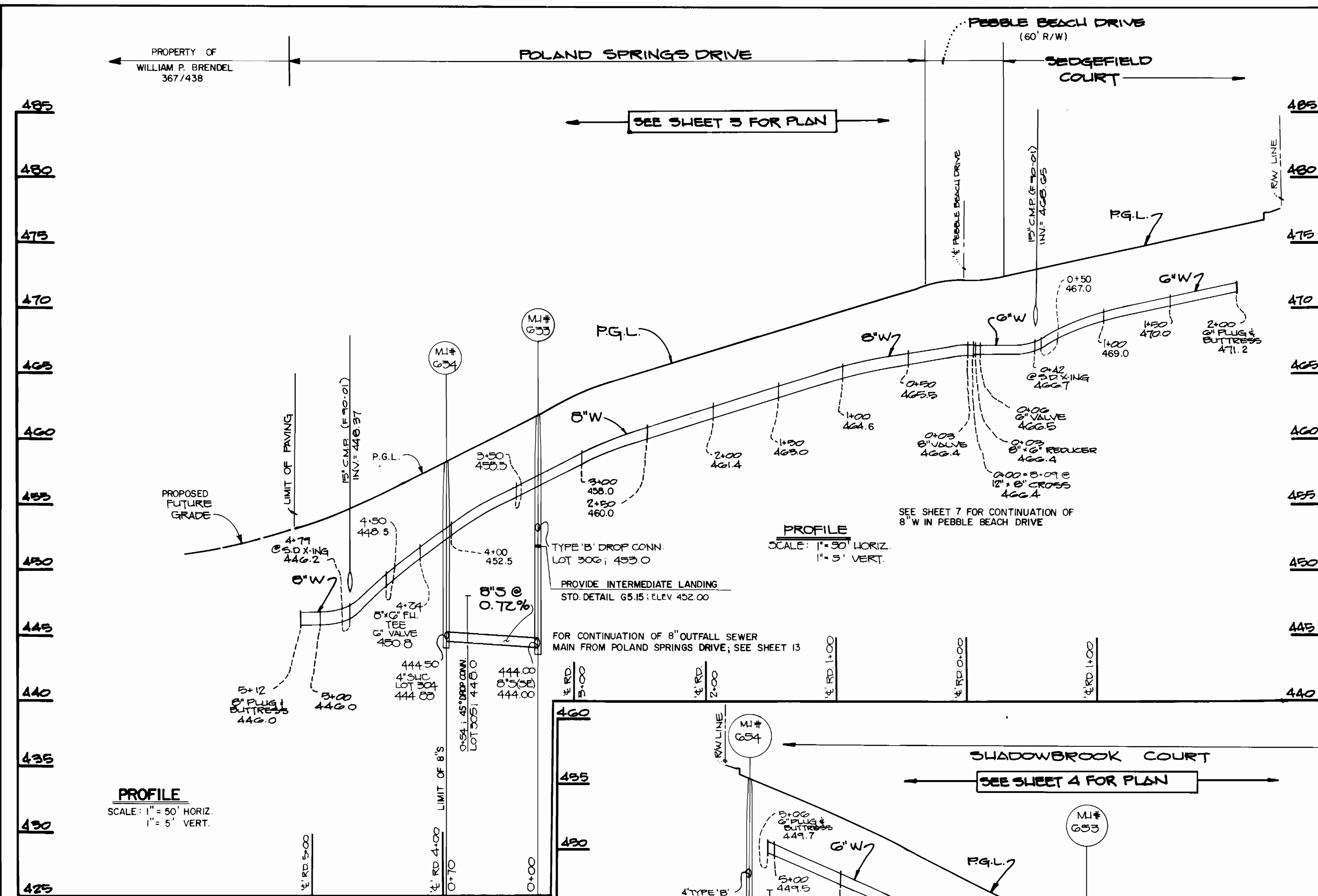
SEE PLAN SHEETS 2, 3, 4, 5, 6, 10, 13 & 14 FOR LOCATIONS OF STRAW BALE DIKES



FOR CONTINUATION OF 8" OUTFALL SEWER MAIN; SEE SHEET D

CONTRACT NO. 24-1871-D
TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
WATER AND SEWER MAIN EXTENSIONS
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS: <i>[Signature]</i> DATE: 7/12/92 CHIEF, BUREAU OF UTILITIES: <i>[Signature]</i> DATE: 6-5-92		FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 9171 BALTIMORE NATIONAL PIKE - SUITE 100 ELLICOTT CITY, MARYLAND 21043 TERRELL A. FISHER		DES: MM DRN: MM CHK: PWK DATE: 5/2/90		PROFILES WATER AND SEWER MAINS S.F.H. CHANGE LOTS 309, 335, 353, 354, 373, 374, 375 & 376 TO 45724 6/11/91 BY NO. REVISION DATE 600' SCALE MAP NO. 16/17 BLOCK NO.		TURF VALLEY OVERLOOK SECTION TWO AREA TWO CONTRACT NO. 24-1871-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND		SCALE AS SHOWN SHEET 8 OF 14
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DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *Robert M. ...* 7/14/90
Chief, Bureau of Engineering: *...* 7/14/90
Chief, Bureau of Utilities: *...* 6-5-90
Chief, Land Development Division: *...* 7/14/90

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
9171 BALTIMORE NATIONAL PIKE - SUITE 100
ELLCOTT CITY, MARYLAND 21043

TERRELL A. FISHER

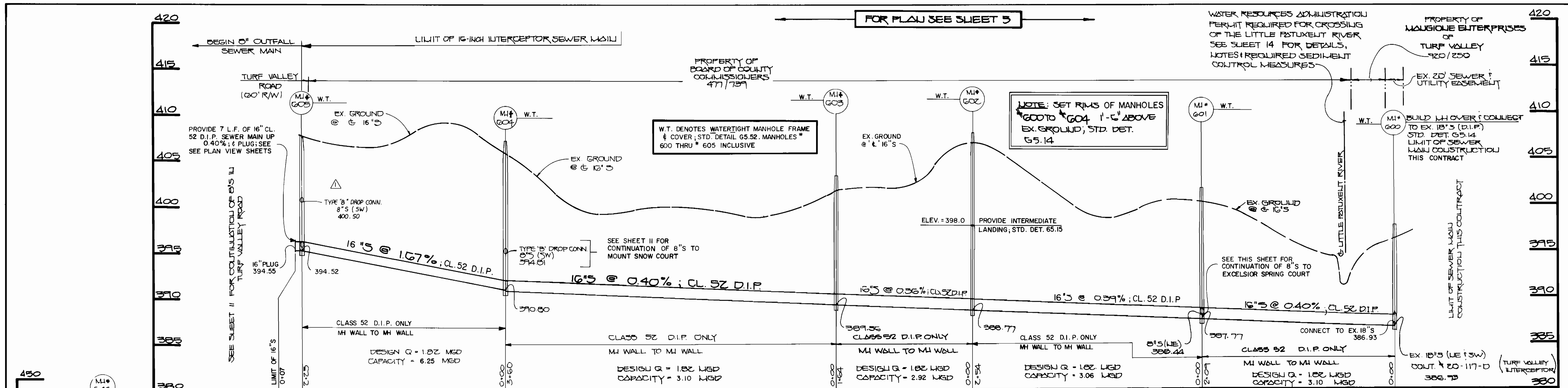
DES: MM			
DRN: MM			
CHK: PWK	MJM	CHANGE LOT#S TO REFLECT RESUB PLAT: ADD CONN. FOR LOT 413	11/30/93
DATE: 6/2/90	S.F.H.	ADD DETAIL AND CHANGE LOTS 305, 303, 301, 394 & 386 TO 45' WIDE	6/12/91
BY NO.		REVISION	DATE

PROFILES
WATER AND SEWER MAINS

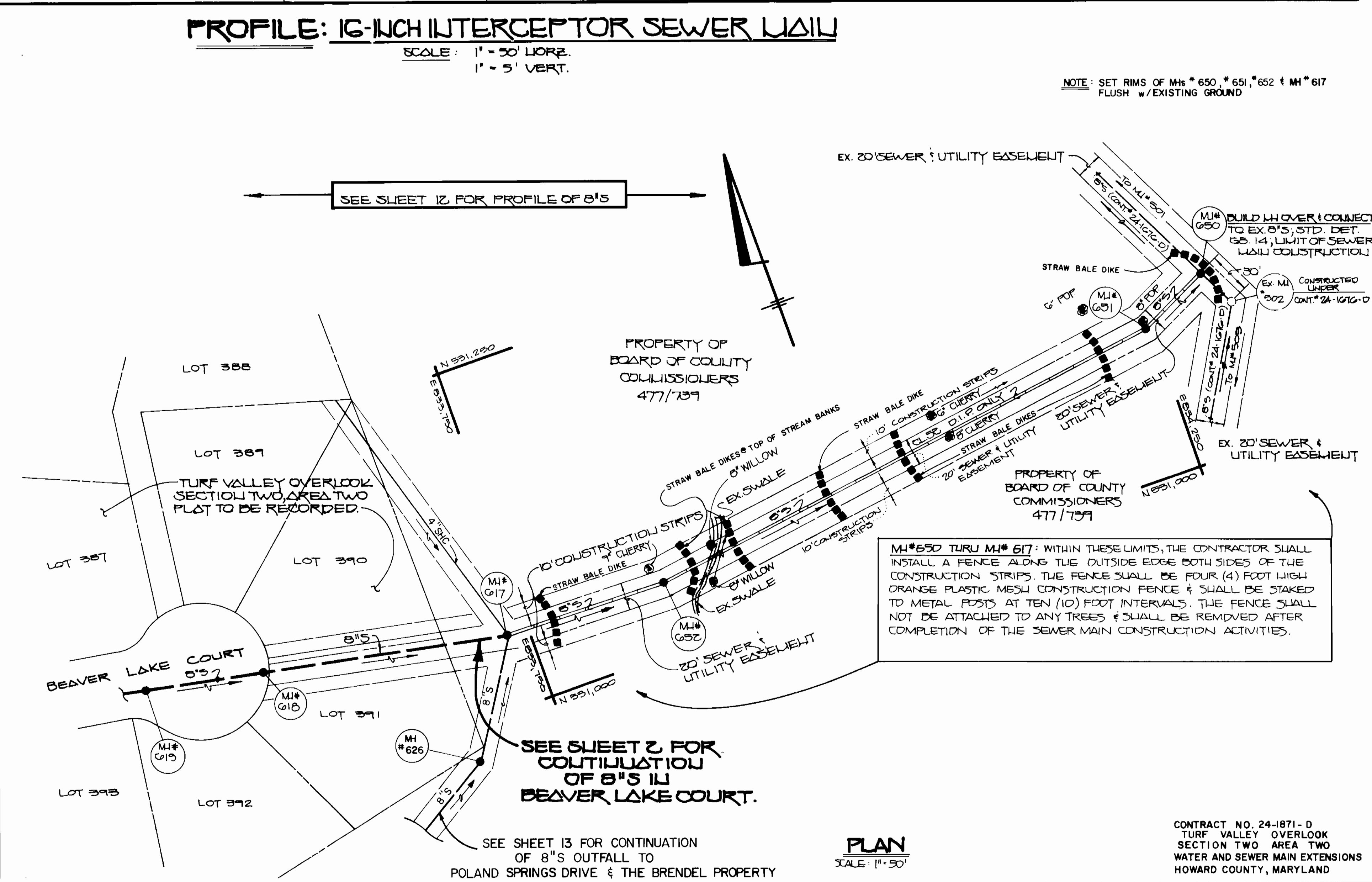
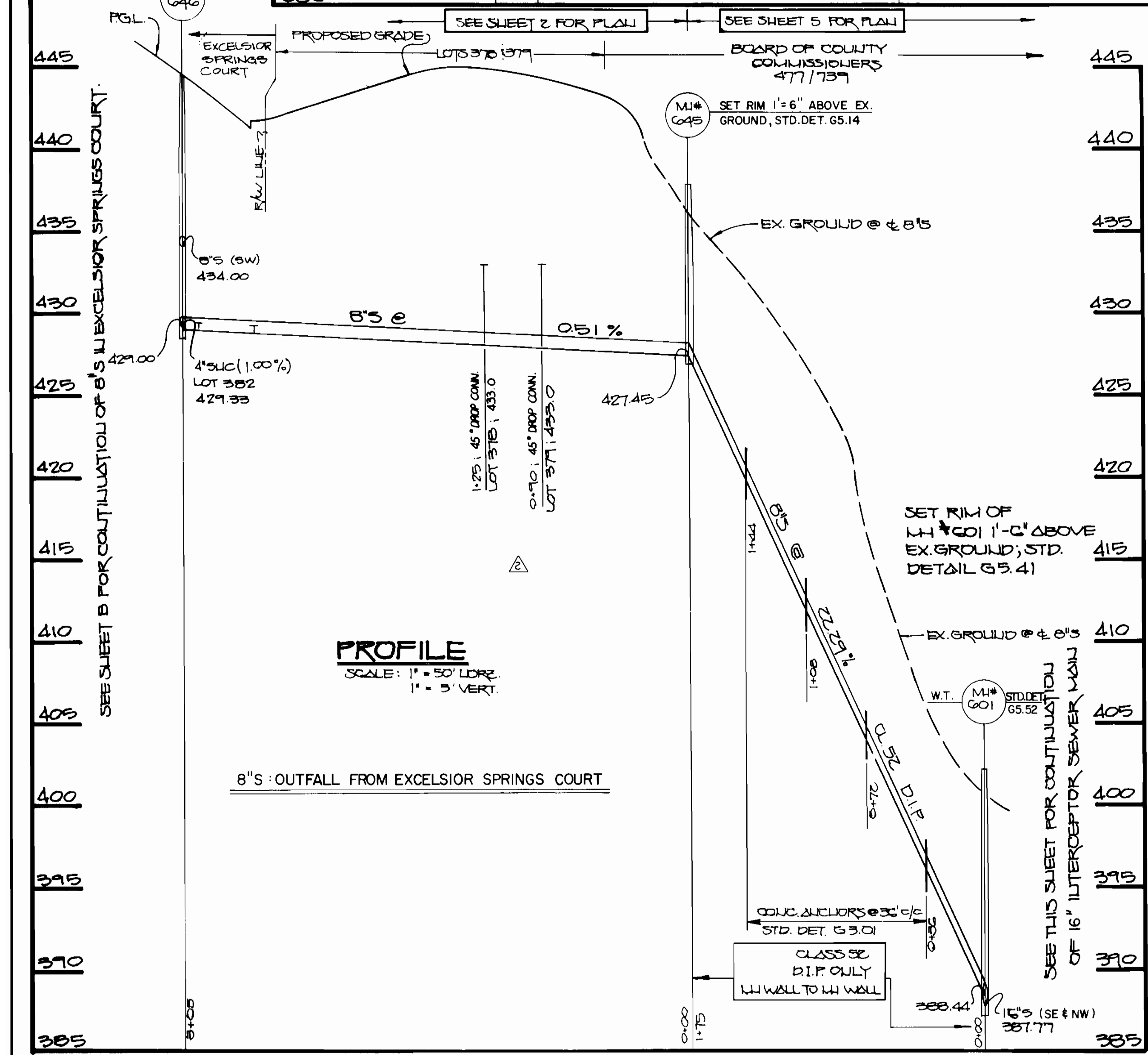
600' SCALE MAP NO. 16/17 BLOCK NO.

TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
CONTRACT NO. 24-1871-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 9 OF 14



PROFILE: 16-INCH INTERCEPTOR SEWER MAIN
 SCALE: 1" = 50' HORIZ.
 1" = 5' VERT.



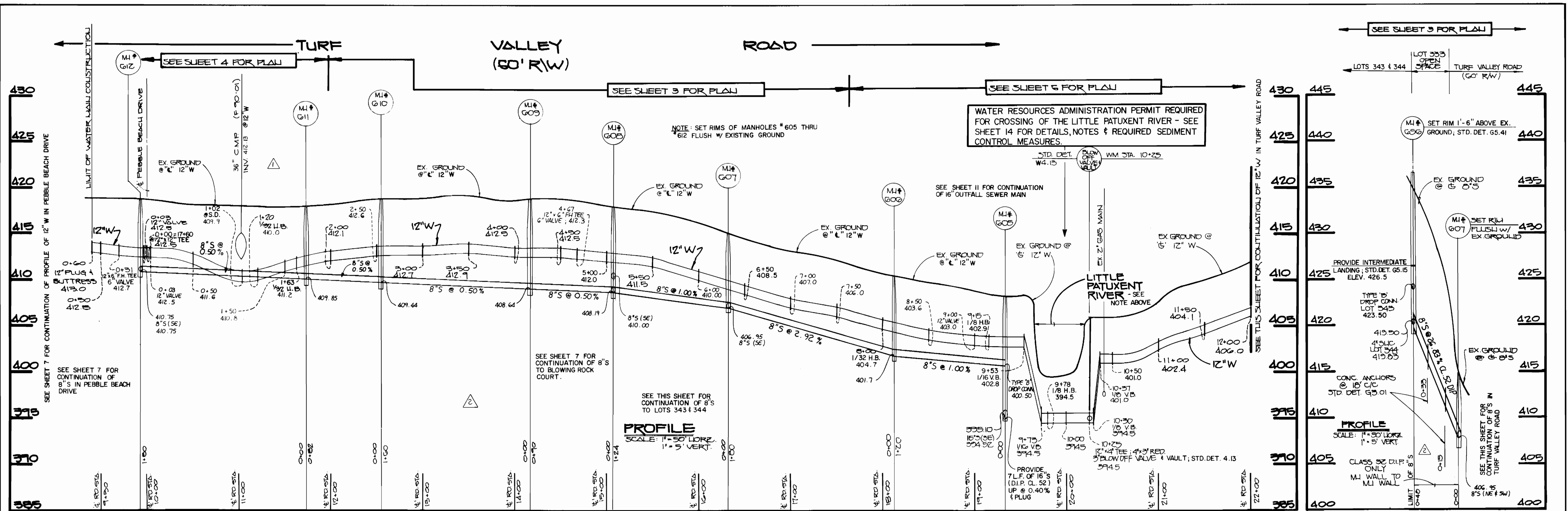
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: [Signature] DATE: 7/14/90
 Chief, Bureau of Engineering: [Signature] DATE: 7/14/90
 Chief, Bureau of Utilities: [Signature] DATE: 6-5-90
 Chief, Land Development Division: [Signature] DATE: 7/14/90

FISHER, COLLINS, AND CARTER, INC.
 # 9757
 CONSULTING ENGINEERS AND LAND SURVEYORS
 971 BALTIMORE NATIONAL PIKE - SUITE 200
 ELLICOTT CITY, MARYLAND 21043
 [Signature] DATE: 6/1/90
 TERRELL A. FISHER

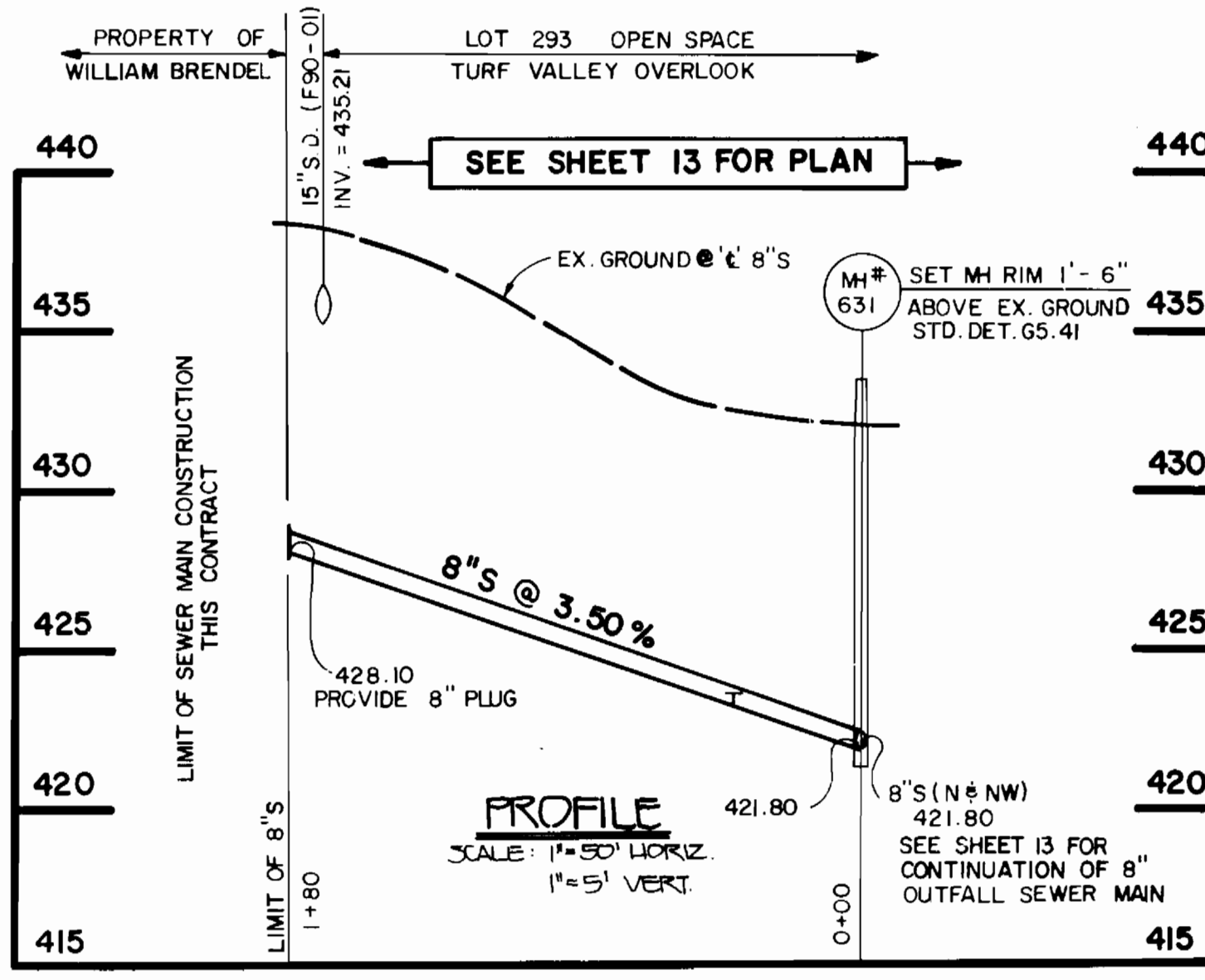
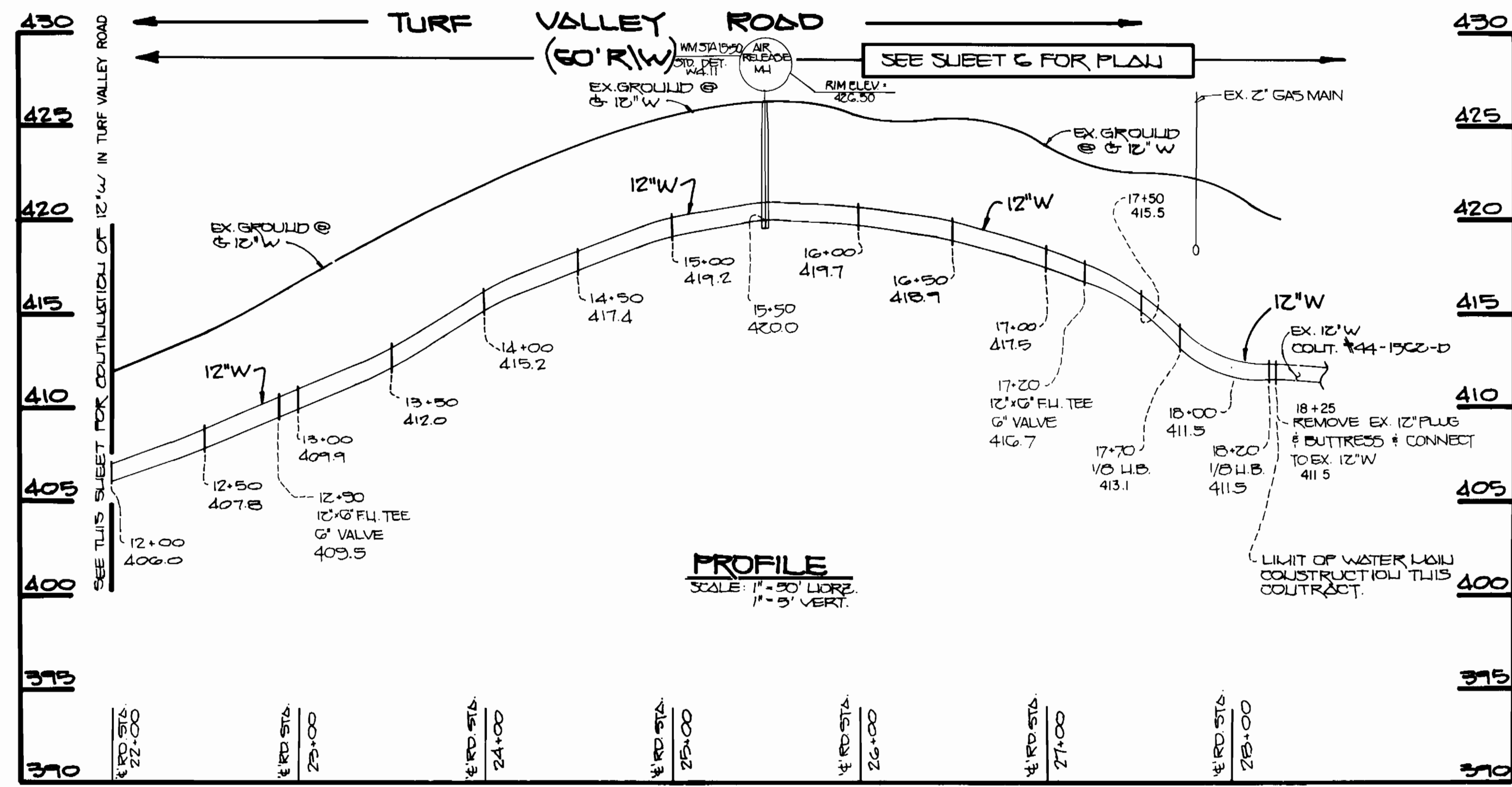
DES: MM					
DRN: MM					
CHK: PWK	S.F.H.	△	CHANGE LOTS 378 & 379 TO 45\"/>		
DATE: 6/1/90	S.F.H.	△	ADD TYPE \"B\" DROP CONN. TO MH 605	6/11/90	
BY NO.			REVISION	DATE	

PLAN AND PROFILES
 WATER AND SEWER MAINS
 600 SCALE MAP NO. 16/17 BLOCK NO.

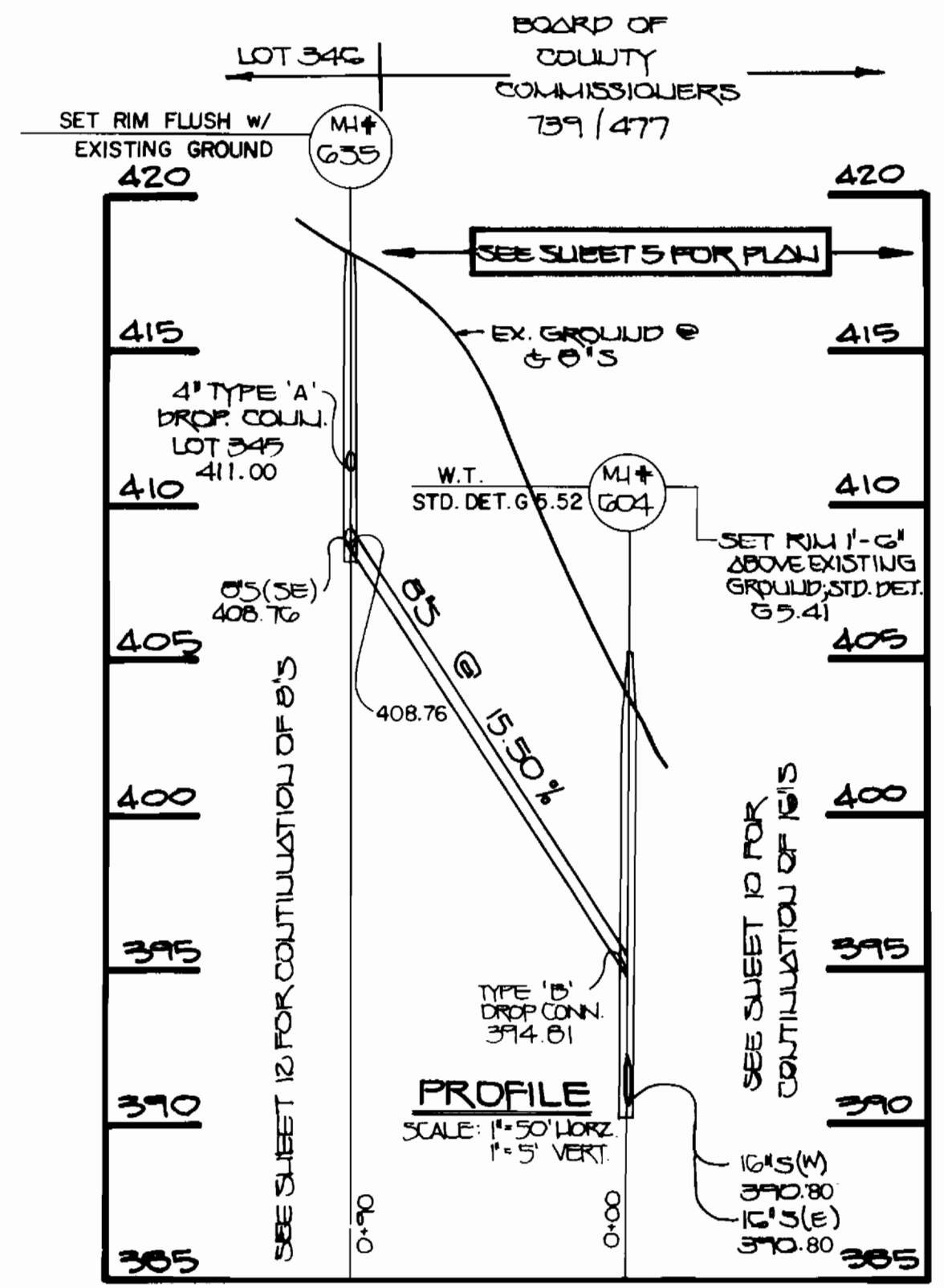
TURF VALLEY OVERLOOK
 SECTION TWO AREA TWO
 CONTRACT NO. 24-1871-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 10 OF 14



8" S: OUTFALL FROM LOTS 343 & 344



8" SEWER MAIN: TO WILLIAM BRENDEL PROPERTY



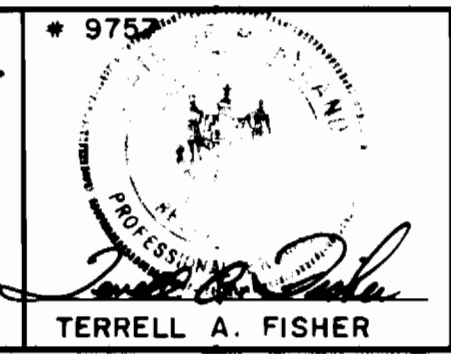
8" S: FROM BACK OF MOUNT SNOW COURT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: [Signature] DATE: 6-5-92
Chief, Bureau of Utilities: [Signature] DATE: 6-5-92

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
9171 BALTIMORE NATIONAL PIKE - SUITE 100
ELLICOTT CITY, MARYLAND 21043

TERRELL A. FISHER



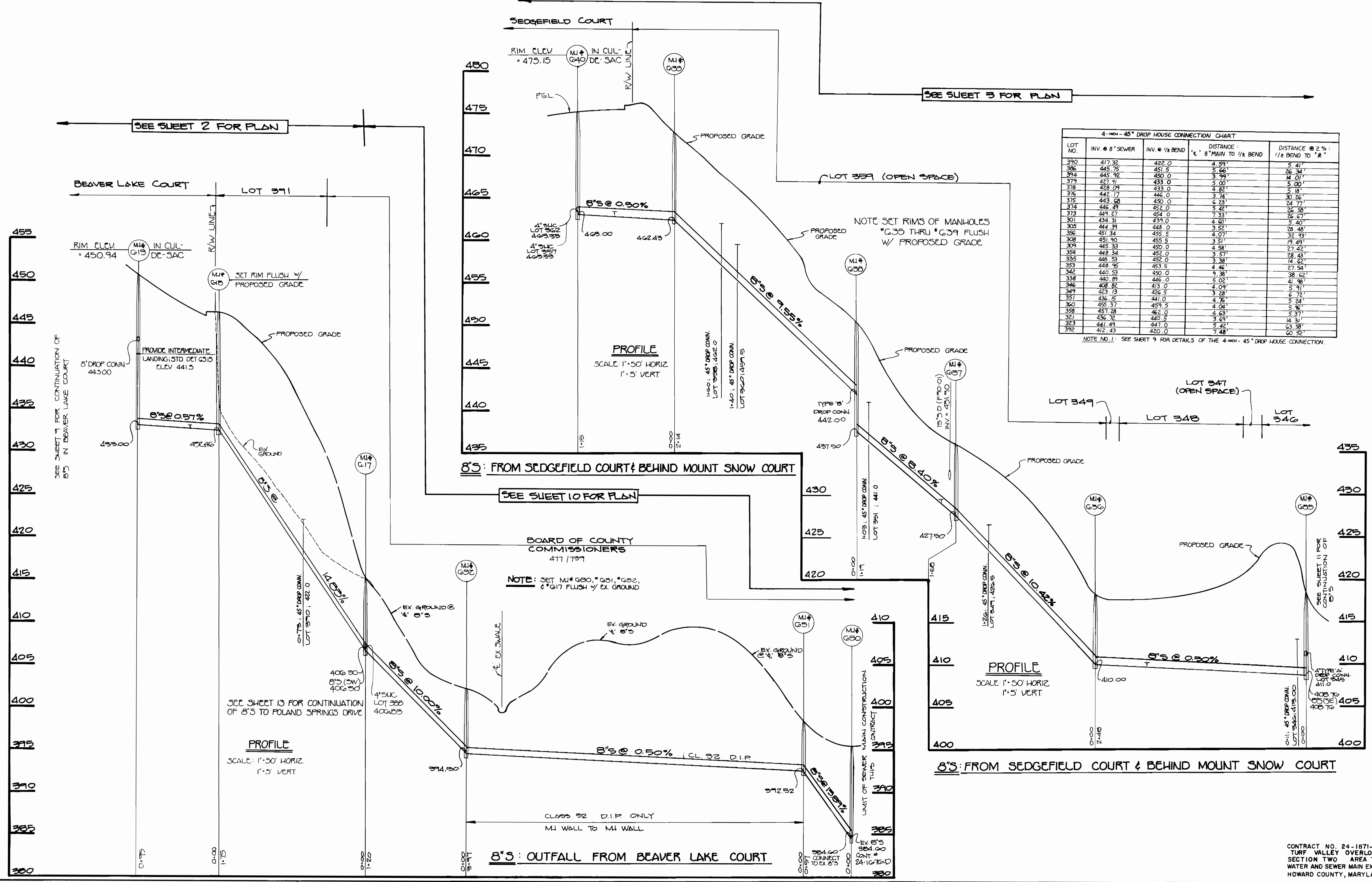
DES:	MM				
DRN:	MM				
CHK:	PWK	S.F.H.	REVISE 8" S FROM MH G05 TO MH G12 & MH G07 TO MH G56	6/11/91	
DATE:	6/1/90	S.F.H.	REVISE WATER MAIN, RETAIN MH #1, MH #4, MH #10	3/23/91	
BY:	NO.	REVISION		DATE	

PROFILES
WATER AND SEWER MAINS

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

TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
CONTRACT NO. 24-1871-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 11 OF 14

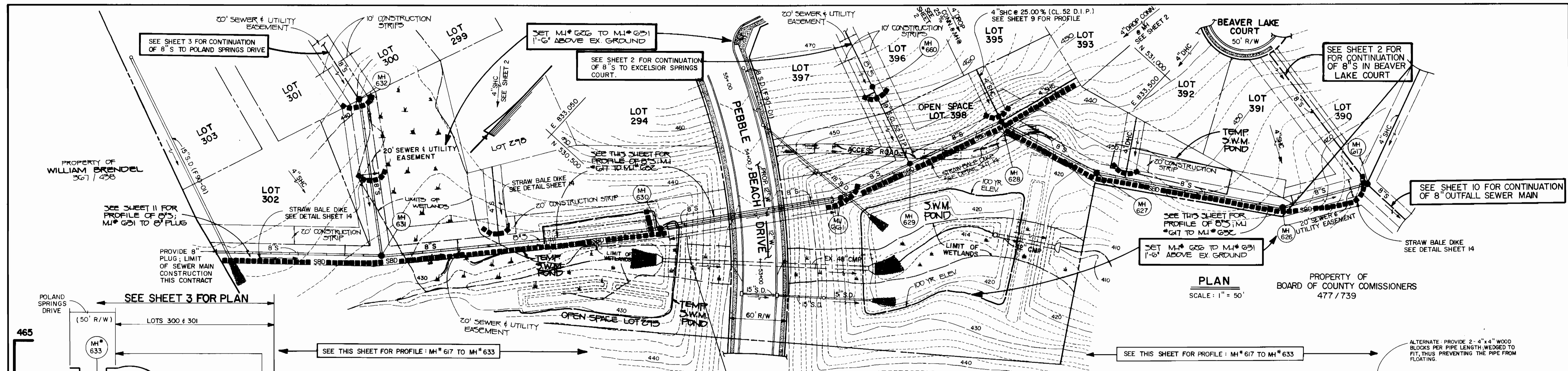


4-INCH - 45° DROP HOUSE CONNECTION CHART

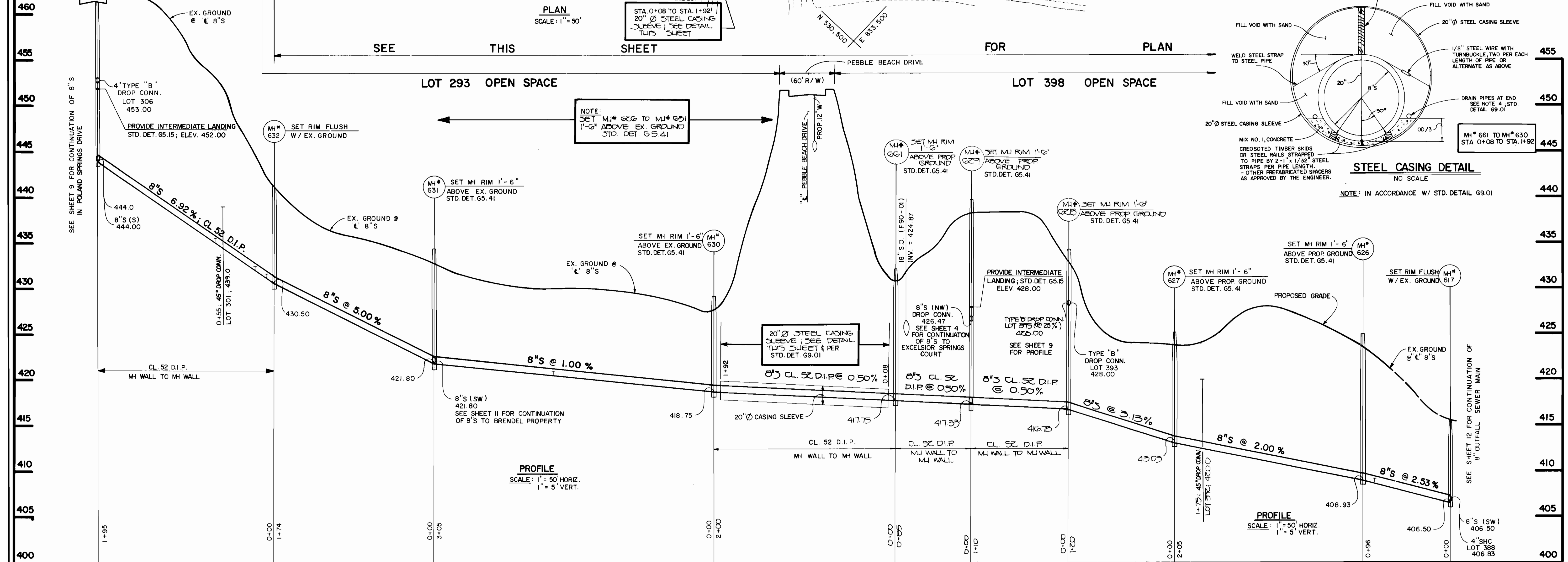
LOT NO.	INV. @ 8" SEWER	INV. @ 1/8 BEND	DISTANCE @ 8" MAIN TO 1/8 BEND	DISTANCE @ 2 1/2" 1/8 BEND TO "R"
390	417.32	422.0	4.69'	5.41'
396	445.75	451.5	5.66'	26.34'
394	445.92	450.0	3.99'	14.01'
379	427.91	433.0	5.00'	5.00'
378	428.09	433.0	4.82'	5.18'
376	442.17	446.0	3.74'	30.26'
375	443.68	450.0	6.23'	24.77'
374	446.49	452.0	5.42'	26.59'
373	449.27	454.0	7.33'	26.67'
301	434.31	439.0	4.60'	5.40'
305	444.39	448.0	3.52'	28.46'
356	451.34	455.5	4.07'	32.93'
308	451.90	455.5	3.57'	19.49'
309	445.33	450.0	4.58'	27.42'
354	448.34	452.0	3.57'	28.43'
355	448.95	453.5	4.46'	27.54'
353	449.53	450.0	9.38'	38.62'
342	440.53	450.0	5.02'	41.98'
338	440.89	446.0	4.09'	5.91'
346	408.82	413.0	4.09'	6.72'
349	423.13	426.5	3.28'	5.24'
351	436.75	441.0	4.76'	5.96'
350	455.37	459.5	4.04'	5.37'
358	451.28	462.0	4.63'	14.31'
321	436.72	440.5	3.69'	63.58'
323	441.49	447.0	5.42'	60.52'
392	412.43	420.0	7.48'	

NOTE NO. 1: SEE SHEET 9 FOR DETAILS OF THE 4-INCH - 45° DROP HOUSE CONNECTION.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>James P. ...</i> DATE: 7/1/90 Chief, Bureau of Utilities: <i>Robert ...</i> DATE: 6-5-90		FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 9171 BALTIMORE NATIONAL PIKE - SUITE 100 ELLICOTT CITY, MARYLAND 21043 Terrell A. Fisher: <i>Terrell A. Fisher</i> DATE: 6/11/90		STATE OF MARYLAND TERRELL A. FISHER LICENSE NO. 9757		DES: MM DRN: MM CHK: PWK DATE: 6/11/90		PROFILES WATER AND SEWER MAINS DATE: 6/11/90		TURF VALLEY OVERLOOK SECTION TWO AREA TWO CONTRACT NO. 24-1871-D SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND		SCALE AS SHOWN SHEET 12 OF 14
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PLAN
SCALE: 1" = 50'



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

STEEL CASING DETAIL
NO SCALE

NOTE: IN ACCORDANCE W/ STD. DETAIL G9.01

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. ... 7/19/90
DIRECTOR OF PUBLIC WORKS DATE

John ... 6-5-90
CHIEF, BUREAU OF UTILITIES DATE

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
9171 BALTIMORE NATIONAL PIKE - SUITE 100
ELLICOTT CITY, MARYLAND 21043

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
TERRELL A. FISHER

DES: MM			
DRN: SH			
CHK: PWK			
DATE: 5/1/90			
BY			
NO.			
REVISION			
DATE			

PLAN & PROFILE
SEWER MAINS

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

TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
CONTRACT NO. 24-1871-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 13 OF 14

STABILIZATION NOTES

- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
- 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, SMALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
 - 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

PERMANENT STABILIZATION AND SEEDING NOTES

- REFERENCE SECTION 701 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS FOR COMPLETE REQUIREMENTS REGARDING PERMANENT STABILIZATION AND SEEDING OF ALL DISTURBED AREAS.
- REFERENCE SUBSECTION 701.05 FOR CONSTRUCTION REQUIREMENTS REGARDING PERMANENT SEEDING.
- LIME: APPLY LIME AT THE RATE OF 15 TONS PER ACRE ON SANDY AND SILTY SOILS AND 2.3 TONS PER ACRE ON CLAY OR CLAY LOAM SOILS.
- FERTILIZER: APPLY FERTILIZER AT THE RATE OF 600 POUNDS OF 0-20-20 PER ACRE WITH LIME APPLICATION (SEE ABOVE). IMMEDIATELY PRIOR TO SEEDING, APPLY 400 POUNDS OF 38-0-0 UREAFORM AND 500 POUNDS OF 10-20-20 PER ACRE.
- PERMANENT SEED SHALL CONFORM TO THE REQUIREMENTS, MIXTURES AND APPLICATION RATES AS SPECIFIED IN SUBSECTION 701.05.
- MULCH SHALL BE CLEAN, WEED FREE, UNKILLED STRAW APPLIED AT THE RATE OF NOT LESS THAN 15 TONS PER ACRE OR WOOD CHIPS WITH A COVERAGE OF 15 INCHES IN DEPTH.
- MULCH SHALL BE ANCHORED WITH COI BACK AND IMBEDDED ASPHALT APPLIED AT A RATE OF 5 GALLONS PER 1000 SQUARE FEET. REFERENCE SUBSECTION 701.05.05 FOR MULCH ANCHORING ALTERNATIVES.

EROSION AND SEDIMENT CONTROL NOTES

- ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS FOR SEDIMENT CONTROL IN DEVELOPING AREAS.
- ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF BUSINESS.
- ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE SEWER MAIN TRENCH.
- IMMEDIATELY FOLLOWING BACKFILL OF THE SEWER MAIN TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN ON THIS SHEET.
- THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN OPERATIVE CONDITION.
- ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. SEE WATER AND SEWER MAIN CONSTRUCTION SEQUENCE THIS SHEET.
- SEE STREAM CROSSING DETAIL AND CONSTRUCTION REQUIREMENTS AND SPECIFICATIONS FOR WATER & SEWER MAIN INSTALLATION AND ACCESS ACROSS THE LITTLE PATUXENT RIVER.
- SEE SEDIMENT CONTROL MAP (SCALE 1"=200') ON THIS SHEET FOR SEDIMENT CONTROL DEVICES ALONG THE WATER AND SEWER MAIN INSTALLATIONS.

CONSTRUCTION REQUIREMENTS & SPECIFICATIONS FOR STREAM CROSSING

- INSTALLATION OF ALL REQUIRED EROSION & SEDIMENT CONTROL DEVICES SHALL BE THE FIRST ORDER OF BUSINESS.
- THE FLOW DIVERSION CULVERTS MUST BE SIZED TO ACCOMMODATE NORMAL STREAM FLOW. SIZE OF PIPES SPECIFIED IN DETAIL THIS SHEET.
- THE FLOW BARRIER SHALL BE CONSTRUCTED OF IMPERVIOUS SANDBAGS, WASHED RIP-RAP OR OTHER APPROVED MATERIAL IN ACCORDANCE WITH WPD 2.3. THE MATERIALS SHALL BE SIZED TO WITHSTAND NORMAL STREAM FLOW VELOCITIES.
- ALL DEWATERING OF THE CONSTRUCTION AREAS SHALL BE PUMPED TO A DEWATERING BASIN (WPD 1.1) PRIOR TO RE-ENTERING THE STREAM. SEE DETAILS OF THE DEWATERING BASIN THIS SHEET.
- THE TEMPORARY CULVERT CROSSING SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL TAG 1 OF THE 1981 MARYLAND STANDARDS AND SPECIFICATIONS FOR SEDIMENT AND EROSION CONTROL.
- ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN SEEDED, MULCHED & STABILIZED IN ACCORDANCE WITH THE APPROVED SEDIMENT & EROSION CONTROL PLAN AND ALSO UNTIL THE INSPECTING AUTHORITY APPROVES THEIR REMOVAL.

SEE THIS SHEET FOR STREAM CROSSING DETAIL OF 12" W @ LITTLE PATUXENT RIVER

SEWER MANHOLES *G00 THRU *G05 INCLUSIVE LIE WITHIN THE 100 YEAR FLOODPLAIN & SHALL BE EQUIPPED WITH WATERTIGHT MANHOLE FRAMES & COVERS, STD DET. G 52

WATER & SEWER MAIN CONSTRUCTION SEQUENCE

- Implement conditions & requirements of the temporary waterway construction permit - see contract specifications.
- Install required sediment & erosion control devices - see plan this sheet.
- Clear & grub as necessary - WITHIN THE LIMITS OF THE sewer main right of way only - within the EX 60' ROAD RIGHT-OF-WAY FOR THE WATER MAIN.
- Excavate trench & place excavated material on the upgrade side of the utility trench.
- Install UTILITIES in accordance with the contract specifications.
- For installation of the UTILITIES at the Little Patuxent River, see the stream crossing detail this sheet.
- Stabilize, seed and mulch all disturbed areas in accordance with the permanent stabilization and seeding notes shown on this sheet.
- Place rip rap at the Little Patuxent River and at the swale crossings as shown in plan & in accordance with the detail this sheet.
- Following successful stabilization of all disturbed areas and upon approval of the Soil Conservation District Inspector, remove the erosion & sediment control devices.

SEE SHEET 5 FOR 16" SEWER MAIN @ CROSSING
SEE SHEET 6 FOR 12" WATER MAIN @ CROSSING

SEDIMENT CONTROL MAP

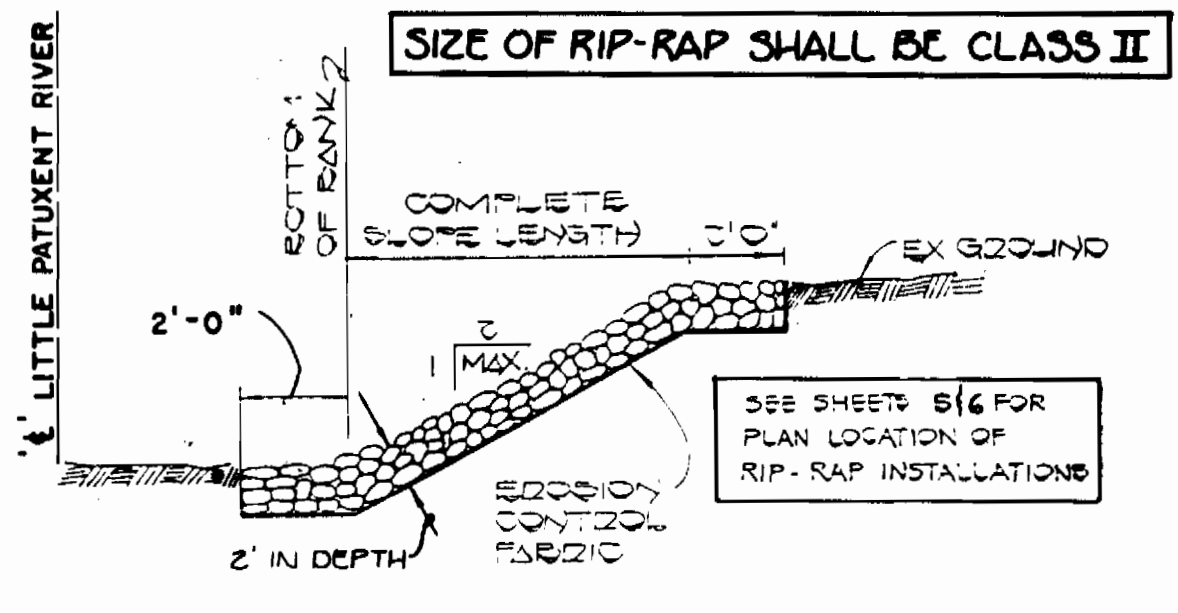
SCALE: 1"=200'

- NOTES:
- AT THE CONTRACTOR'S OPTION, SILT FENCE MAY BE USED IN LIEU OF STRAW BALE DIKE. SEE DETAILS & CONSTRUCTION SPECIFICATIONS THIS SHEET.
 - SEDIMENT CONTROL FOR UTILITY CONSTRUCTION WITHIN THE LIMITS OF THE SUBDIVISION SHALL BE AS SHOWN ON THE STREET TREE, GRADING & SEDIMENT CONTROL PLAN; SHEETS 10, 11 & 12 OF THE ROADS & STORM DRAIN CONSTRUCTION PLANS, F 90-01.

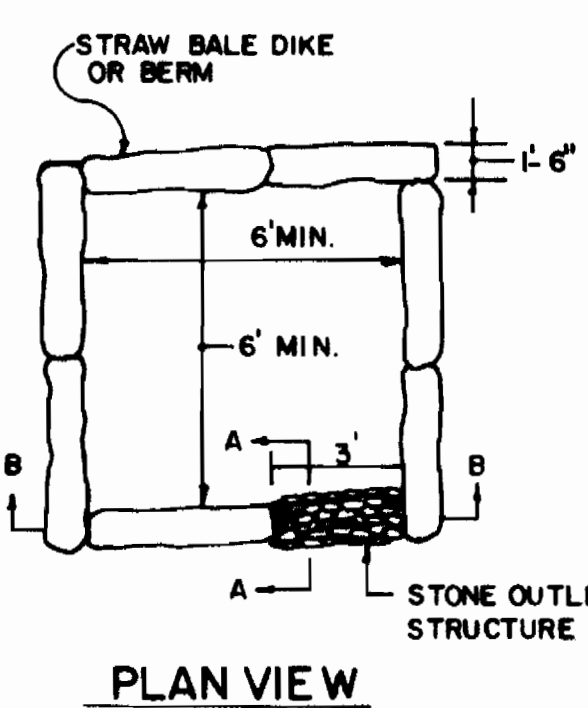
RIP RAP NOTES

- 2 1/2" DIA STAKE SHALL BE PLACED OVER ALL DISTURBED AREAS WITHIN THE 100' W OF THE RIGHT OF WAY AT THOSE LOCATIONS INDICATED ON THE DRAWINGS.
- 2 1/2" DIA STAKE FOR PLACEMENT ALONG THE STREAM BANK AT THE WATER AND SEWER MAIN CROSSINGS SHALL CONFORM TO THE SIZE SPECIFIED FOR CLASS II STONE AND THE THICKNESS OF THE RIP RAP LAYER SHALL BE 3'-0".
- EROSION CONTROL FABRIC SHALL BE POLY FILTED X 45 MANUFACTURED BY CLOTHES MULLING OR PERMIAL NEZ M-105 MANUFACTURED BY STAFF INDUSTRIES INC OR EQUAL.
- RIP RAP AT THE 16" SEWER MAIN CROSSING SHALL CONSIST OF BROWN STONE COLOR OF STONE MAY VARY FROM LIGHT TAN TO DARK BROWN. WHITE STONE IS NOT ACCEPTABLE.

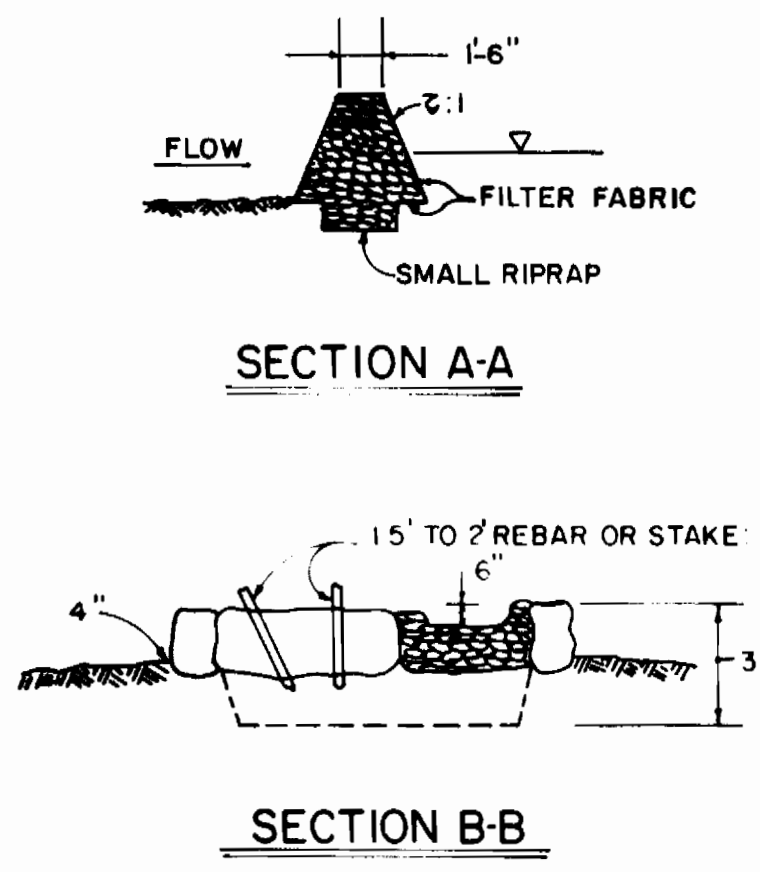
LOOSE LAID RIP RAP DETAIL



NOTE: SEE RIP-RAP NOTE #4 REGARDING USE OF BROWN STONE AT 16" SEWER MAIN CROSSING.



PLAN VIEW

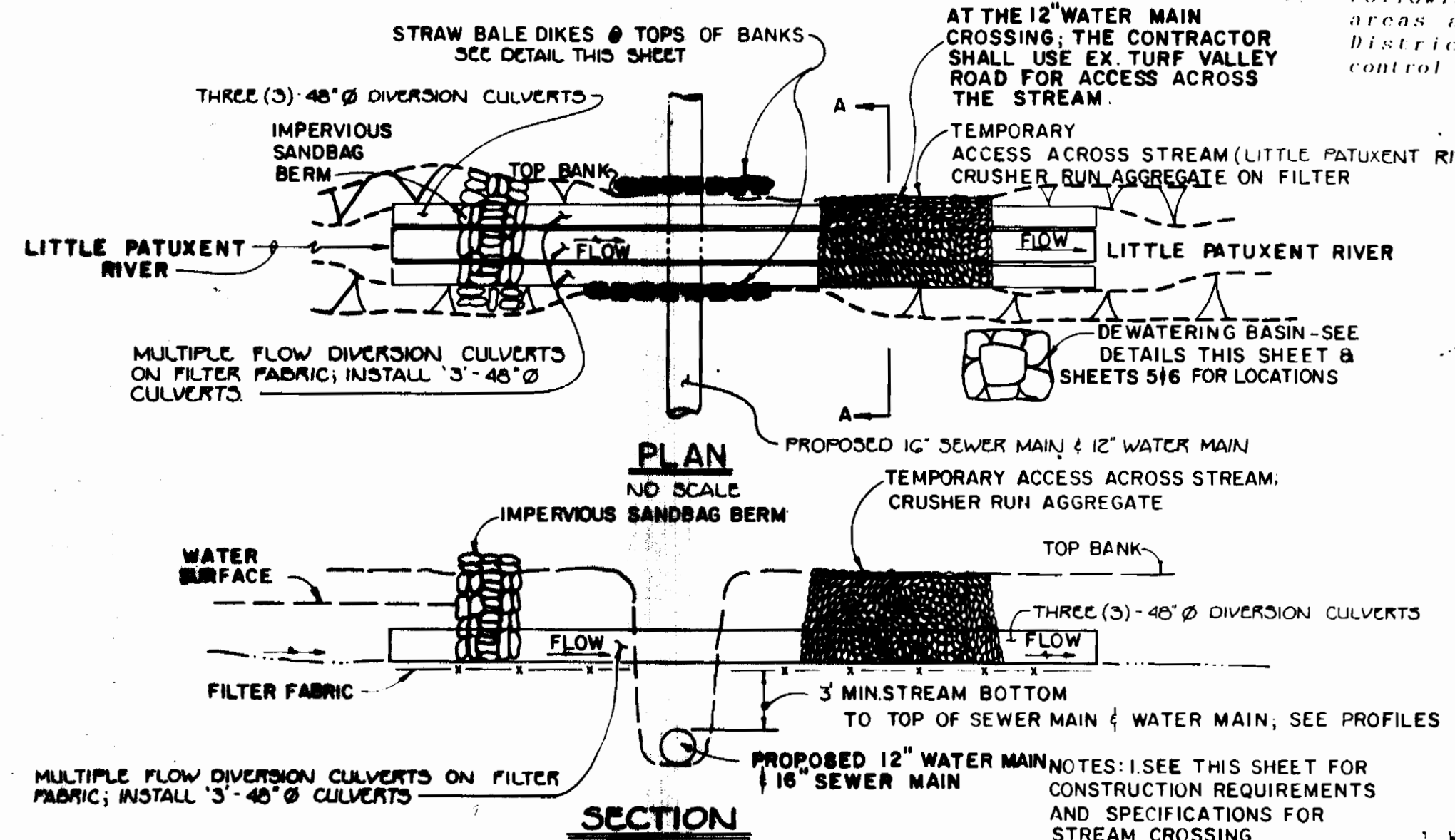


SECTION A-A

SECTION B-B

- NOTES:
- ALL DEWATERING OF THE CONSTRUCTION AREA DURING THE WATER & SEWER INSTALLATION SHALL BE PUMPED TO A DEWATERING BASIN (WPD 1.1) AS SHOWN ABOVE) PRIOR TO RE-ENTERING THE STREAM.
 - SEE PLAN SHEET NO. 6 FOR LOCATION OF DEWATERING BASIN @ 12" W CROSSING.
 - SEE PLAN SHEET NO. 5 FOR LOCATION OF DEWATERING BASIN @ 16" S CROSSING.

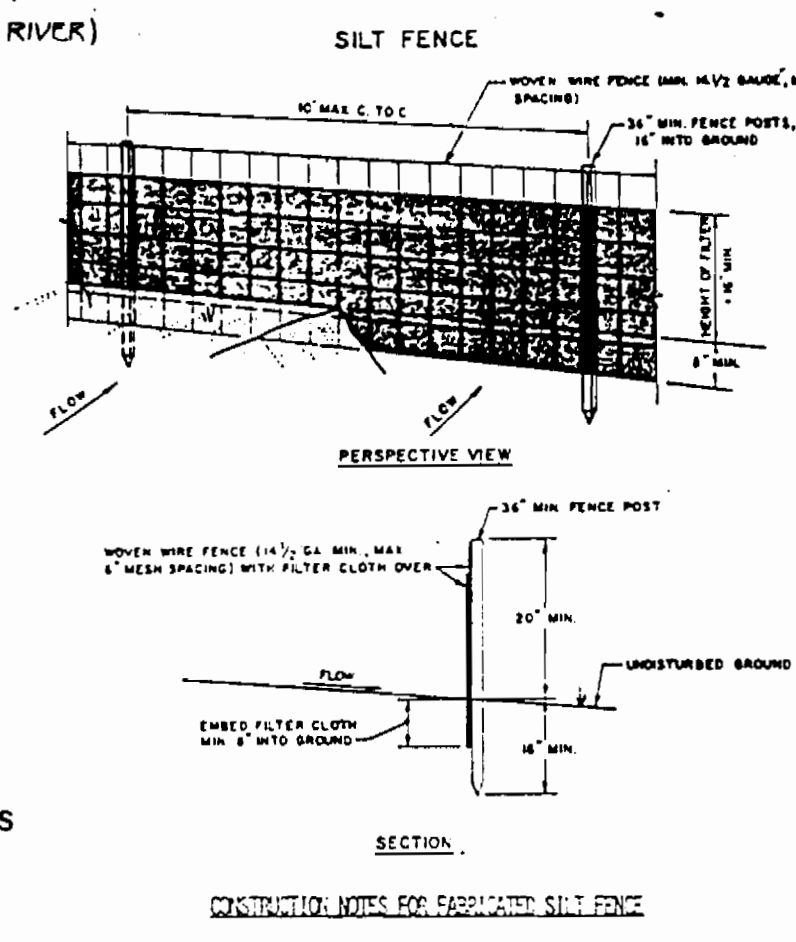
DETAILS: DEWATERING BASIN



STREAM CROSSING DETAIL

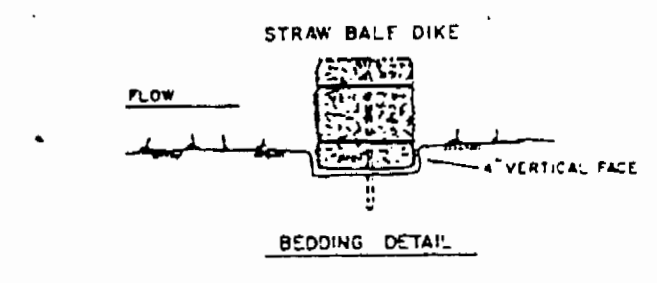
NO SCALE

16" S CROSSING: SHEET 5
12" W CROSSING: SHEET 6

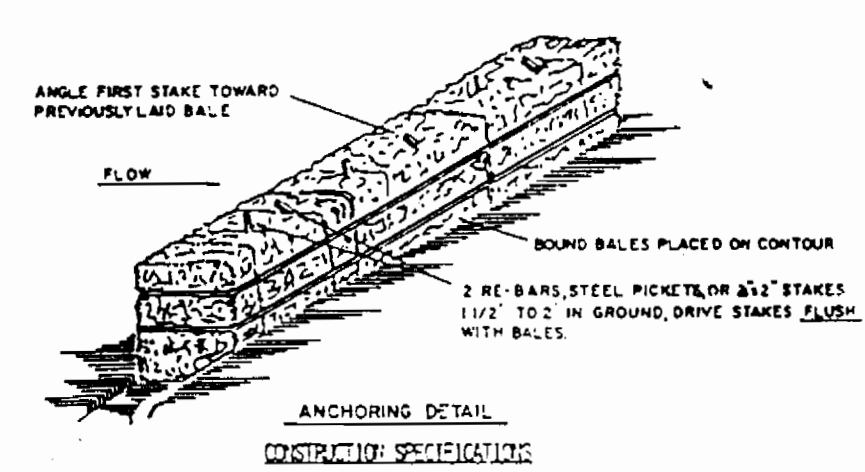


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- NOVER WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH NAILS OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO NOVER WIRE FENCE WITH TIES PLACED OVER 2' AT TOP AND MID SECTION.
- WHEN THE SECTIONS OF FILTER CLOTH MEET EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND POLICED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL ALLOWED TO BALANCE DEVELOP IN THE SILT FENCE.



BEDDING DETAIL



ANCHORING DETAIL

- BALES SHALL BE PLACED AT THE TOP OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH DOCS TIGHTLY ADJUTING THE ADJACENT BALES.
- EACH BALE SHALL BE ENDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BUNDLES ARE HORIZONTAL.
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR REBARS DRIVEN THROUGH THE BALE. THE FIRST STAKE OR REBAR SHALL BE DRIVEN TOWARD THE PREVIOUSLY Laid BALE AT AN ANGLE TO FORCE THE BALE TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
- INSPECTION SHALL BE PRESENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPED STORM FLOW OR DRAINAGE.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: [Signature]
Date: 6-5-92

Chief, Bureau of Engineering: [Signature]
Date: 2/14/92

Chief, Land Development Division: [Signature]
Date: [Signature]

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
9171 BALTIMORE NATIONAL PIKE - SUITE 100
ELLICOTT CITY, MARYLAND 21043

Professional Engineer: [Signature]
Terrell A. Fisher

STATE OF MARYLAND
Professional Engineer
No. 9317
Terrell A. Fisher

DES: PWK					
DRN: S.B./SH					
CHK: P.W.K.					
DATE: 4/25/92	BY: NO	REVISION:	DATE:	600' SCALE MAP NO. 16 & 17	BLOCK NO.:

SEDIMENT CONTROL
PLAN & DETAILS

TURF VALLEY OVERLOOK
SECTION TWO AREA TWO
CONTRACT NO. 24-1871-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 14 OF 14