AS BUILT 6/7/95

3358 WS/1 Worthington Reserve (sect. 2, ph. 1)

PUBLIC WATER AND SEWER EXTENSIONS

WORTHINGTON RESERVE
SECTION TWO PHASE ONE
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT No. 14-3358-D

LEGEND

- EXIST. WATER MAIN
- EXIST. SEWER MAIN
- EXIST. SEWER MANHOLE
- PROP. WATER MAIN
- PROP. SEWER MAIN
- PROP. STORM DRAIN (BY OTHERS)
- PROP. SEWER MANHOLE
- PROP. SEWER HOUSE CONNECTION
- PROP. WATER HOUSE CONNECTION (DOUBLE – 1")
- PROP. WATER HOUSE CONNECTION (SINGLE – 3/4")
- PROP. FIRE HYDRANT
- PROP. VALVE
- PROP. PLUG & BUTTRESS

WORTHINGTON RESERVE AS-BUILT VALVE LOCATIONS

DONCASTER DRIVE:
8"x8" TAPPING SLEEVE & VALVE
8" VALVE – TO ℄ INLET FRAME & COVER 20.4'
TO ℄ FIRE HYDRANT 67.2'
TO 6" F.H. VALVE 57.0'±
TO ℄ C&P BOX @ ℞ 4527/4533 34.0'

6" VALVE @ FIRE HYDRANT @ STA. 3+12.38 DONCASTER DRIVE
TO ℄ FIRE HYDRANT 8.0'
TO ℄ INLET COVER (NORTH) 14.4'
TO 8"V CHEWS VINEYARD 44.1'
TO ℄ INLET COVER (SOUTH) 26.8'

8" VALVE – DONCASTER DRIVE @ CHEWS VINEYARD STA 3+59 8x8 TEE
TO 8"V CHEWS VINYARD 4.0'
TO SMH 5 21.6'
TO ℄ F.H. 48.4'

6" F.H. VALVE LOCATION @ W.L. STA. 8+05.02
TO ℄ FRAME & COVER 69.9'
TO ℄ FIRE HYDRANT 9.0'
TO ℄ S.MH 3 87.3'

6" F.H. VALVE LOCATION @ W.L. STA 12+55.97
TO 8" IN LINE VALVE 3.1'
TO ℄ F.H. 30.3'
TO S.MH#2 23.7'
TO ℄ S.D.MH 22.4'

8" IN LINE VALVE @ STA 12+60±
TO ℄ F.H. 31.5'±
TO SMH#2 26.8'
TO ℄ S.D.MH 19.3'

CHEWS VINEYARD:
8" VALVE @ 8"x8" T W.L. STA 0+05±
TO ℄ S.D. MH 38.1'
TO ℄ S.MH#5 25.7'
TO ℄ F.H. 45.4'
TO 8"V (DONCASTER) 4.0'

8" VALVE @ TEE STA 2+74.35
TO ℄ S.D. MH 9.1'
TO S.MH#9 21.1'
TO 8"V SAMMUAL CT. 3.5'

6" F.H. VALVE W.L. STA. 3+56.20
TO ℄ F.H. 22.6'
TO 3/4" W.H.C. LOT 114
TO 3/4" W.H.C. LOT 113
TO S.D. MH @ SAMMUAL CT 75.7'

SAMMUAL CT.:
6" F.H. VALVE @ STA. 2+27.40
TO ℄ F.H. 10.0'
TO S.MH 14 27.3'

8" VALVE IN CULDESAC
TO S.MH 15 21.8'
TO 3/4 W.H.C. LOT 66
TO 3/4 W.H.C. LOT 67

8" VALVE @ CHEWS VINEYARD 8"x8" T
TO S.D. MH 9.1'
TO SMH#9 20.7'
TO ℄ INLET COVER (NORTH SIDE OF SAMMUAL COURT) 40.0'±

BENCH MARKS (NAD 27)

HO. CO. #2944001 — ELEV. 528.211

CONC. MONUMENT AT SURFACE, ON THE EAST SIDE OF DONCASTER DRIVE SOUTH OF ROUNDHILL ROAD.
N 513669.929 — E 858664.268

HO. CO. #2944002 — ELEV. 535.366

CONC. MONUMENT 0.1' ABOVE SURFACE, NEAR NE COR. OF LOT, HOUSE #4587 ROUNDHILL RD. 220' ± NORTH OF ROUNDHILL RD. CENTERLINE.
N 514196.358 — E 858596.389

WATER HOUSE CONNECTION CHART

LOT No.	℄ STATION @ R/W	ROAD	LOT No.	℄ STATION @ R/W	ROAD
57–58	14+35.6	DONCASTER DRIVE	62–63	1+41.1	SAMMUAL COURT
59–60	16+51.4		64–65	L.P. STA. 3+55.7	
61	17+96.9		66	L.P. STA. 3+99.8	
116–117	22+34.4		67	L.P. STA. 4+30.0	
118	23+51.5		68–69	3+23.3	
119	24+69.8		70–71	1+31.3	
120–121	27+07.5				
122–123	28+74.1				
124	30+39.7				
125–126	30+18.7				
127–128	28+54.0				
129–130	26+89.3				
131	25+55.8				
132	24+67.2				
133–134	23+42.2				
135–136	21+75.3				
138–139	18+20.7				
140–141	17+00.4				
142	15+34.0				
113	3+70.0	CHEWS VINEYARD			
114	3+50.0				
115	1+75.8				

NOTE : SEE PROFILES FOR SEWER HOUSE CONNECTION STATIONS.

QUANTITIES

ITEMS	QUANTITIES ESTIMATED	AS-BUILT QUANTITIES	AS-BUILT TYPE	AS-BUILT MANUF./SUPPLIER
8" WATER	2,871 L.F.	2871 L.F.	CL.52 D.I.P.	GRIFFIN PIPE
3/4" METER VAULT	1 EA.	1 EA.		VESTAL MFG & ATLANTIC CONC.
8" VALVES	7 EA.	7 EA.		MUELLER/WATER PRO.
FIRE HYDRANTS	5 EA.	5 EA.		CENTURION/WATER PRO.
1" WHC	387 L.F.	387 L.F.		CAMBRIDGE LEE/WATER PRO.
3/4" WHC	484 L.F.	484 L.F.		" "
* 8" SEWER	2,680 L.F.	2680 L.F.		SEE BELOW *
MANHOLES	12 EA.	12 EA.		ATLATIC CONC
** 4" SHC	1,177 L.F.	1177 L.F.		SEE BELOW **
NAME OF UTILITY CONTRACTOR: CONSOLIDATED CONSTRUCTION SERVICES				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE ______				
6" VALVES	5 EA.	5 EA.		MUELLER/WATER PRO
6" WATER			CL52 D.I.P.	GRIFFIN

*8" SEWER 1,865 L.F. CL52 D.I.P. GRIFFIN PIPE / 815 L.F. P.V.C. J.M.-MFG. WATER PRO

**4" SHC 557'± CL52 D.I.P. GRIFFIN PIPE / 602'± P.V.C. J.M.-MFG. WATER PRO

SHEET INDEX

No.	DESCRIPTION
1	TITLE SHEET
2	PLAN OF WATER AND SEWER MAINS
3	PLAN OF WATER AND SEWER MAINS
4	PROFILES OF WATER AND SEWER MAINS
5	PROFILES OF WATER AND SEWER MAINS
6	PROFILES OF WATER AND SEWER MAINS

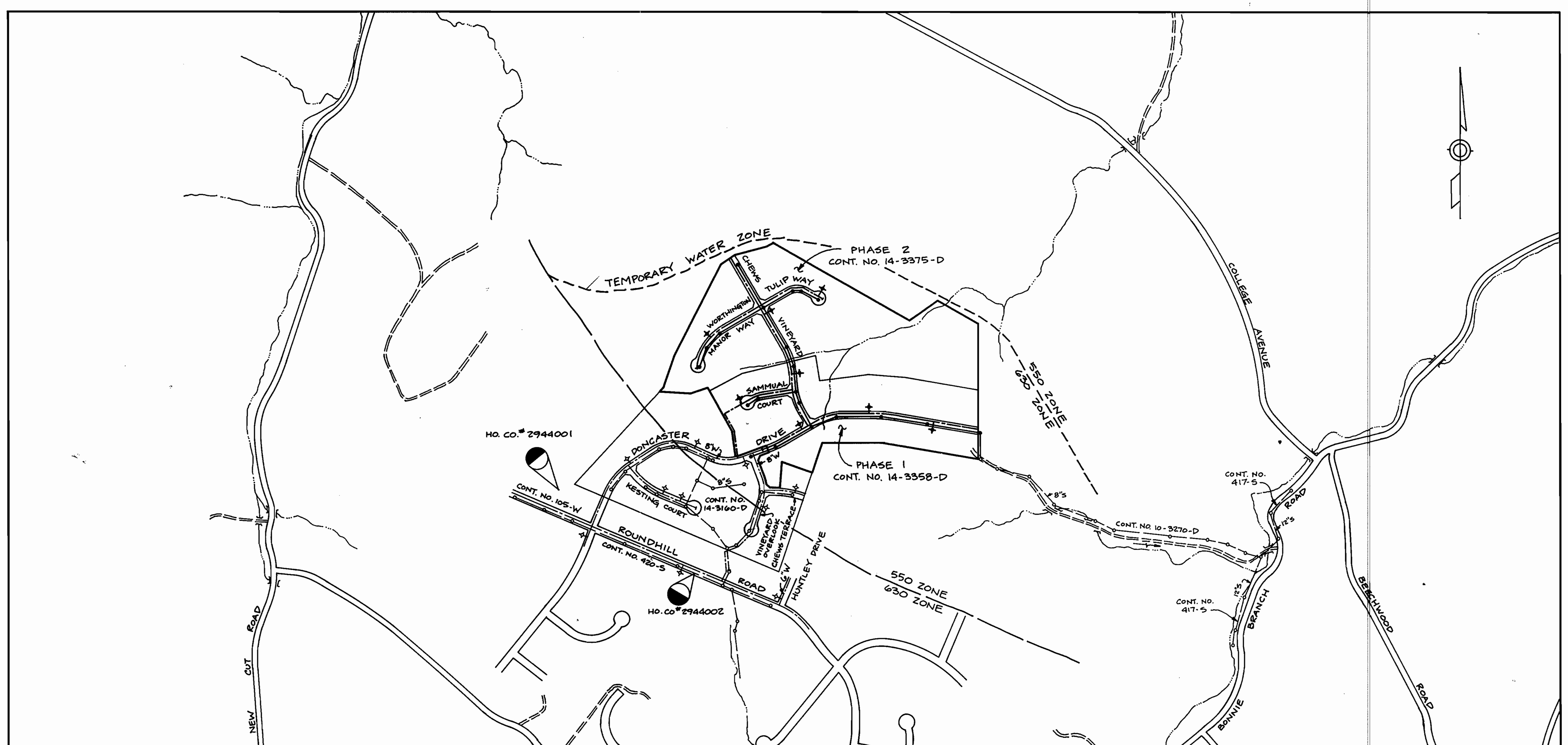
HOWARD SOIL CONSERVATION DISTRICT:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Patricia Engler — 8/8/94
U.S. SOIL CONSERVATION SERVICE — DATE

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

John R Robertson — 8/5/94
HOWARD SOIL CONSERVATION DISTRICT — DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS F-94-102



WATER AND SEWER COUNTY CODE	
WATER CODE	G01
SEWER CODE	1253400
TEST GRADIENT	780

TYPE OF BUILDINGS – SINGLE FAMILY DETACHED
NUMBER OF BUILDABLE LOTS....45
NUMBER OF NON-BUILDABLE LOTS....1
NUMBER OF WHC'S....44 (1 EX.)
NUMBER OF SHC'S....44 (1 EX.)
DRAINAGE AREA – PATAPSCO
TREATMENT PLANT – PATAPSCO WASTEWATER

VICINITY MAP
SCALE : 1" = 600'

AIR TESTING (7)
4" OUT OF MANHOLES
@ MH 2 TO MH 3
MH 3 - MH 3
MH 5 - 1
MH 6 - 1
MH 7 - 1
MH 14 - 1
MH 15 - 3
ALL PASSED SEE FILE

NOTES:

1. CLASS 52 D.I.P. TO BE USED BETWEEN MH#5 AND EXISTING MH#209, BETWEEN MH#10 AND MH#5, AND BETWEEN MH#12 AND MH#21.
2. PRESSURE REDUCING VALVES TO BE PROVIDED ON ALL WATER HOUSE CONNECTIONS.

GENERAL NOTES

PART 1 – GENERAL

1. 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.
2. ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
3. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'–0" MINIMUM OR TUNNEL AS REQUIRED. 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 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.
6. 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.
7. 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.
8. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES 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..............787–9068
   MISS UTILITY..1–800–257–7777
   COLONIAL PIPELINE CO................................795–1390
   HOWARD CO. DEPT. OF PUBLIC WORKS
   BUREAU OF UTILITIES...................................313–4900
9. 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.
10. 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.
11. PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY MAINTENANCE OPERATIONS.
12. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313–2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

PART 2 – WATER

1. ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
2. TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3–1/2' COVER UNLESS OTHERWISE NOTED.
3. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
4. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
5. FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED 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.
6. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
7. ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS.

PART 3 – SEWER

1. ALL SEWER MAINS SHALL BE DIP, RCP, VCPX, CSPX, RCCP AND P.V.C. UNLESS OTHERWISE NOTED.
2. ALL MANHOLES SHALL BE 4' – 0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
3. FORCE MAINS SHALL BE D.I.P. ONLY.
4. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
5. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT 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.
6. HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Irvin — DIRECTOR OF PUBLIC WORKS	8/15/94 DATE	Ronald Lepson — CHIEF, BUREAU OF ENGINEERING	8/15/94 DATE
Robert N. Beringer — CHIEF, BUREAU OF UTILITIES	8-2-94 DATE	for — CHIEF, LAND DEVELOPMENT DIVISION	8/15/94 DATE

TSA GROUP, INC.
planning • engineering • surveying
8480 Baltimore National Pike • Suite 418
Ellicott City, Maryland 21043

DES: JME, DRK					
DRN: DRK, DBT					
CHK: JME					
DATE: 5-6-94 / 7-27-94	BY	NO.	REVISIONS	DATE	

TITLE SHEET

600 SCALE MAP NO. 31 — BLOCK No. 2

WORTHINGTON RESERVE
SECTION 2 - PHASE 1
LOTS 57-72 & 112-143
ELECTION DISTRICT NO. 2
CONTRACT NO. 14-3358-D

SCALE AS SHOWN

SHEET 1 OF 6

AS-BUILT 6/7/95

AS - BUILT

AS-BUILT

3358 ws/2 Worthington Reserve (sect.2, Ph.1)

AS-BUILT VALVE LOCATIONS		
FROM	TO	DISTANCE
DONCASTER DRIVE		
8"x8" TAPPING SLEEVE & V.	℄ OF INLET FRAME & COVER	20.4'
	℄ OF F.H.	67.2'
	6" F.H.V.	57'±
	℄ C&PBOX 4523/4533	34'
6"V. @ F.H. STA. 3+12.38	℄ OF F.H.	8'
	℄ INLET COVER(N)	14.4'
	8"V.(CHEWS VINYARD)	44.1'
	℄ INLET COVER(S)	26.8'
CHEWS VINEYARD	& DONCASTER	DR.
STA. 3+59 8"x8" TEE	8"V.(CHEWS VINYARD)	4.0'
	S.M.H.-5	21.6'
	℄ F.H.	48.4'
6"F.H. V. LOCATION	℄ INLET FRAME & COVER	69.9'
@ W.L. STA. 8+05.02	℄ F.H.	9.0'
	℄ S.M.H. 3	87.3'
6" F.H.V. LOCATION @	8" INLINE V.	3.1'
W.L. STA. 12+55.97	℄ F.H.	30.3'
	S.M.H. #2	23.7'
	℄ S.D. MH	22.4'
8" INLINE V. @ STA.		
12+60±	℄ F.H.	31.5'
	S.M.H. #2	26.8'
	℄ S.D.M.H.	19.3'
CHEWS	VINEYARD	
8" V. @ 8"x8" TEE W.L.	℄ S.D. M.H.	38.1'
STA. 0+05±	℄ S.M.H. 5	25.7'
	℄ F.H.	45.4'
	8"V.(DONCASTER)	4.0'
8" V. @ TEE STA. 2+74.35	℄ S.D. M.H.	9.1'
	S.M.H. 9	21.1'
	8"V. (SAMMUAL COURT)	3.5'
6" F.H. VALVE W.L. STA.		
3+56.20	℄ F.H.	22.6'
	S.D. MH @ SAMMUAL CT.	75.7'
SAMMUAL	COURT	
6" F.H. V. @ STA. 2+27.40	℄ F.H.	10'
	S.M.H.-14	27.3'
8" V. IN CUL-DE-SAC	" -15	21.8'
8" V. @ CHEWS VINYARD	S.D.M.H.	9.1'
8" x 8" TEE	S.M.H. 9	20.7'
	℄ INLET COVER N. SIDE OF SAMMUAL	40'±

AS-BUILTS WATER HOUSE CONNECTIONS		
FROM	TO	DISTANCE
LOT 135	SHC LOT 135	50'
	" " 116	55'
	℄ INLET FRAME & COVER	79.5'
LOT 134	SHC LOT 134	30'
	WHC " 133	5.7'
	℄ 6" F.H.V.	38'
	℄ F.H.	46.5'
LOT 133	℄ F.H. @ STA. 8+05	48.6'
	6" F.H.V.	40.5'
	SHC LOT 133	52.8'
	℄ SMH 3	68.1'
LOT 132	" "	62.6'
	SHC LOT 133	69'
	WHC METER VAULT LOT 119	47.8'
LOT 131	℄ I-18 FRAME & COVER	34.2'
	SHC LOT 131	16.3'
LOT 130	WHC LOT 129	4.5'
	SHC " 120	52'
	WHC " "	51.6'
	℄ SMH 2	63.5'
LOT 129	SHC LOT 129	45.5'
	℄ SMH 2	59.8'
	SHC LOT 120	51.0'
	WHC " 130	4.5'
LOT 128	" " 127	5'
	℄ F.H.	80'
	℄ S.D. MH	74.8'
LOT 127	SHC LOT 127	46'
	℄ S.D. M.	78.9'
	WHC LOT 122	57.6'
	WHC LOT 128	5'
LOT 126	" " 125	4.3'
	℄ INLET	54.3
	℄ SMH 1	80.4'

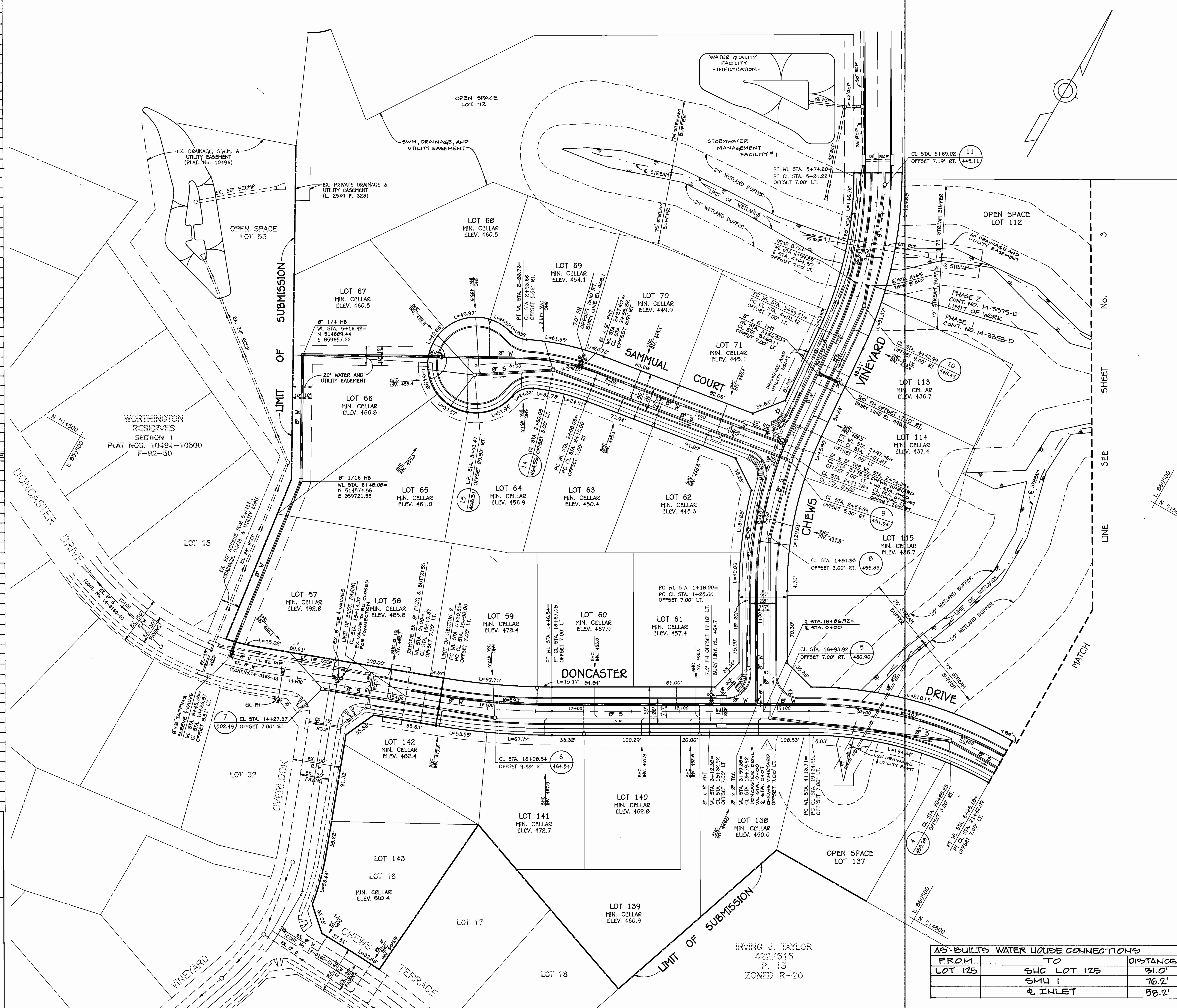
HOWARD SOIL CONSERVATION DISTRICT:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT
AND MEETS TECHNICAL REQUIREMENTS

Patricia Engle 8/8/94
U.S. SOIL CONSERVATION SERVICE DATE

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

John R. Robinson/CS 8/8/94
HOWARD SOIL CONSERVATION DISTRICT DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS F-94-102



AS-BUILTS WATER HOUSE CONNECTIONS		
FROM	TO	DISTANCE
LOT 125	SHC LOT 125	31.0'
	SMH 1	76.2'
	℄ INLET	58.2'

AS-BUILTS WATER HOUSE CONNECT.		
FROM	TO	DISTANCE
LOT 124	S.M.H. 1	26.3'
	SHC.-LOT 124	11'±
	℄ I-15 FRAME & COVER	70'±
LOT 123	W.H.C.-LOT 122	5.3'
	S.H.C.-LOT 123	49'±
LOT 122	" - " 122	28'±
	℄ S.D.MH	83.2'
	WHC.-LOT 123	5.3'
LOT 121	" - " 120	4.2'
	6" F.H.V.	62.4'
	℄ F.H	79'
	S.M.H. #2	48.6'
LOT 120	SMH #2	52.2'
	SHC-LOT 120	31.1'
LOT 119	℄ I-17 FRAME & COVER	61'
	SMH-3	66'
	SHC LOT 118	99.4'
LOT 118	℄ F.H. (STA. 8+05)	31.5'
	6" F.H. V.	34.5'
	SHC.-LOT 117	62.3'
	SMH 3	63.6'
LOT 117	WHC-LOT 116	5.5'
	℄ F.H. (STA. 8+05)	86.1'
	℄ INLET FRAME & COVER	47.2'
LOT 116	℄ F.H. (STA. 8+05)	91.5'±
	SHC-LOT 116	31'
	℄ INLET FRAME & COVER	49.8'
	SHC-LOT 135	52'
LOT 115	℄ SMH-8	25.4'
	℄ S.D. MH	45.6'
LOT 114	℄ F.H.	14.6'
	SHC LOT 114	31.6'
	F.H. V.	32.9'
LOT 113	℄ F.H.	13.3'
	WHC LOT 114	19.6'
	℄ F.H.V.	32.9'
LOT 70	WHC LOT 71	5.7'
	WHC LOT 63	52.9'
LOT 71	SHC " 71	49.2'
	WHC " 62	52.7'
LOT 69	SHC " 69	60'
	℄ SMH 15	61.2'
	℄ 8" V.	49.8'
LOT 68	WHC LOT 69	5'
	℄ SMH 15	61'
	℄ 8" V.	48.3'
LOT 67	SHC LOT 67	11.3'
	8" V.	34.4'
	℄ S.MH 15	53.6'
LOT 66	SHC LOT 66	12.2'
	8" V.	42.3'
	℄ SMH 15	46.2'
LOT 65	SHC LOT 65	17.6'
	SMH 15	40.8'
	8" V	58.3'
LOT 64	℄ SMH 15	40.2'
	WHC LOT 65	6.0'
	8" V. IN CUL-DE-SAC	59.1'
LOT 63	WHC LOT 70	52.9'
	SHC LOT 63	36.5'
LOT 62	WHC " "	5.7'
	℄ I-7 FRAME & COVER	63'
	WHC LOT 71	52.7'
LOT 61	℄ 6" F.H. V.	39.8'
	℄ F.H.	37.2'
	WHC LOT 139	55.3'
LOT 60	SHC " 60	58'
	℄ SMH 6	59'
LOT 59	WHC LOT 60	7'
	℄ SMH 6	53.6'
LOT 58	SHC LOT 58	58'
	℄ MH 7	35'
LOT 57	WHC LOT 58	4.5'
	℄ EX. F.H.	71.4'
	℄ SMH 7	33.1'
LOT 141	SHC LOT 141	39'
	" " 60	52.9'
	WHC " "	65'
LOT 140	SHC LOT 60	52.9'
	WHC " "	70'
	" " 141	6'
LOT 142	8" V. DONCASTER DR.	98.2'
	℄ SMH 6	75.8'
LOT 139	SHC LOT 139	8'
	℄ F.H. V.	37.9'
	℄ INLET FRAME & COVER	27.5'
LOT 138	WHC LOT 139	5.8'
	6" F.H. V.	36.8'
	℄ SMH 5	75'±
LOT 136	WHC LOT 135	5.3'
	SHC " 116	56.8'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Irvin 8/15/94 — DIRECTOR OF PUBLIC WORKS, DATE
8/15/94 — CHIEF, BUREAU OF ENGINEERING, DATE
Robert M. Beuninger 8-2-94 — CHIEF, BUREAU OF UTILITIES, DATE
8/15/94 — CHIEF, LAND DEVELOPMENT DIVISION, DATE

TSA GROUP, INC.
planning • engineering • surveying
8480 Baltimore National Pike • Suite 418
Ellicott City, Maryland 21043

DES: JME, DRK
DRN: DRK, DBT
CHK: JME
DATE: 5-6-94 / 7-27-94

BY	NO.	REVISIONS	DATE
	△1	REVISE LOT 138 SHC	10/31/94

PLAN OF WATER AND SEWER MAINS

600 SCALE MAP NO. 31 — BLOCK No. 2

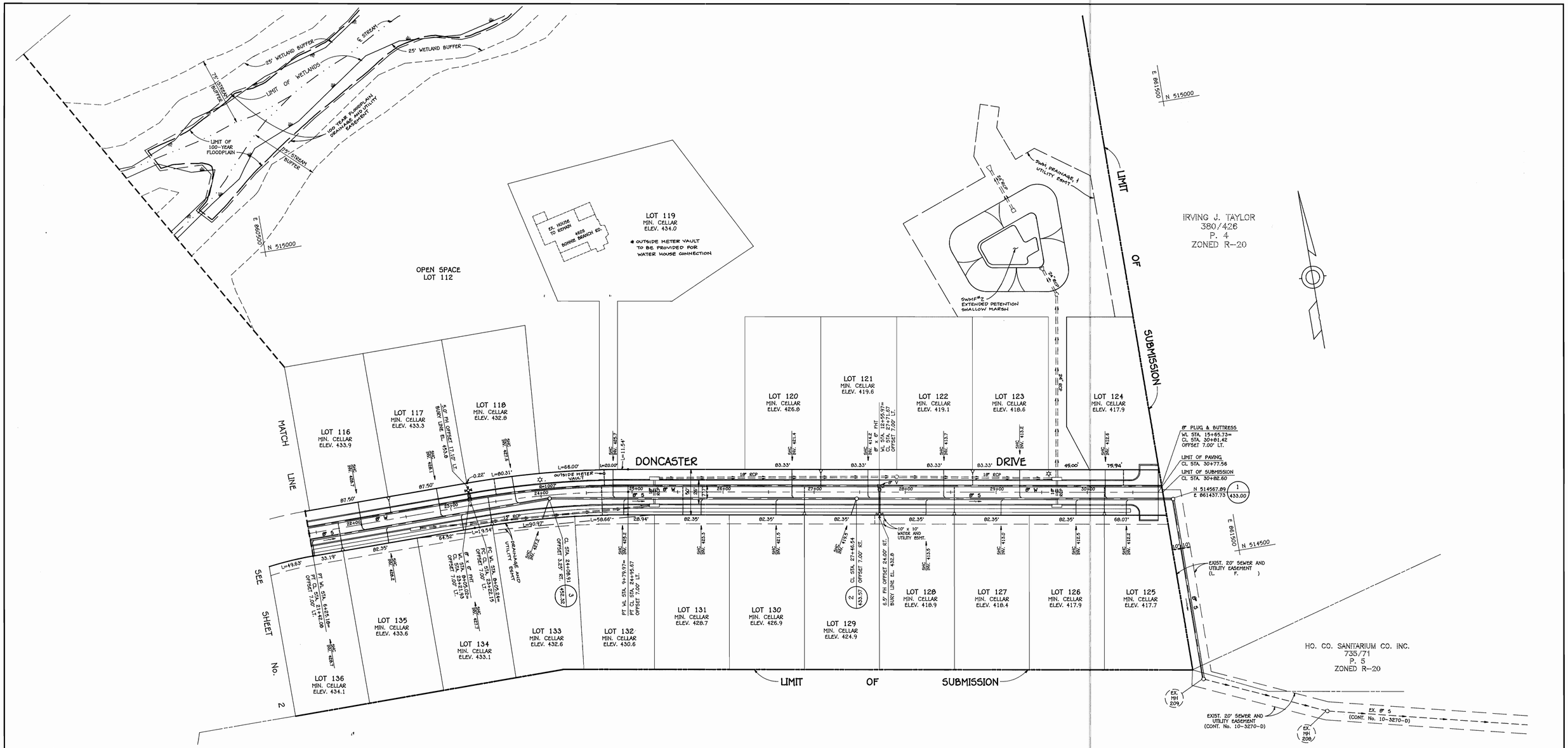
WORTHINGTON RESERVE
SECTION 2 - PHASE 1
LOTS 57-72 AND 112-143
ELECTION DISTRICT NO. 2
CONTRACT NO. 14-3358-D

SCALE 1" = 50'

SHEET 2 OF 6

AS-BUILT

3358 ws/3 Worthington Reserve (sect. 2, ph. 1)



HOWARD SOIL CONSERVATION DISTRICT:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Patricia Engler — 8/8/94
U.S. SOIL CONSERVATION SERVICE — DATE

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

J. R. Robertson — 8/8/94
HOWARD SOIL CONSERVATION DISTRICT — DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS AND AS PER ROAD CONSTRUCTION PLANS F-94-102

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 8/15/94
CHIEF, BUREAU OF ENGINEERING — DATE 8/15/94
CHIEF, BUREAU OF UTILITIES — DATE 8-2-94
CHIEF, LAND DEVELOPMENT DIVISION — DATE 8/15/94

TSA GROUP, INC.
planning • engineering • surveying
8480 Baltimore National Pike • Suite 418
Ellicott City, Maryland 21043

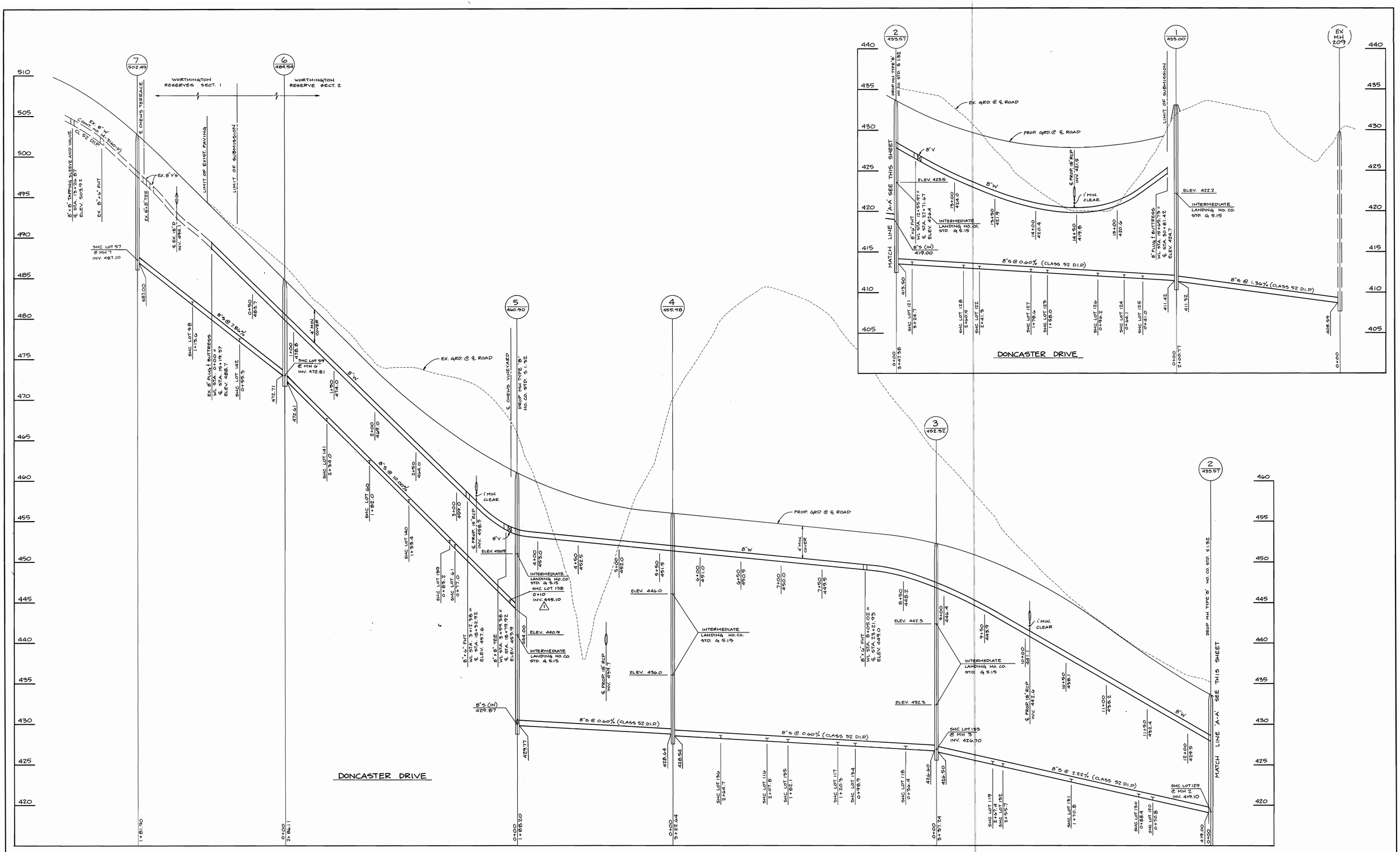
DES: JME, DRK				
DRN: DRK, DBT				
CHK: JME				
DATE: 5-6-94 / 7-27-94	BY	NO.	REVISIONS	DATE

PLAN OF WATER AND SEWER MAINS
600 SCALE MAP NO. 31 — BLOCK No. 2

WORTHINGTON RESERVE
SECTION 2 - PHASE 1
LOTS 57-72 AND 112-143
ELECTION DISTRICT NO. 2
CONTRACT NO. 14-3358-D

SCALE 1" = 50'
SHEET 3 OF 6

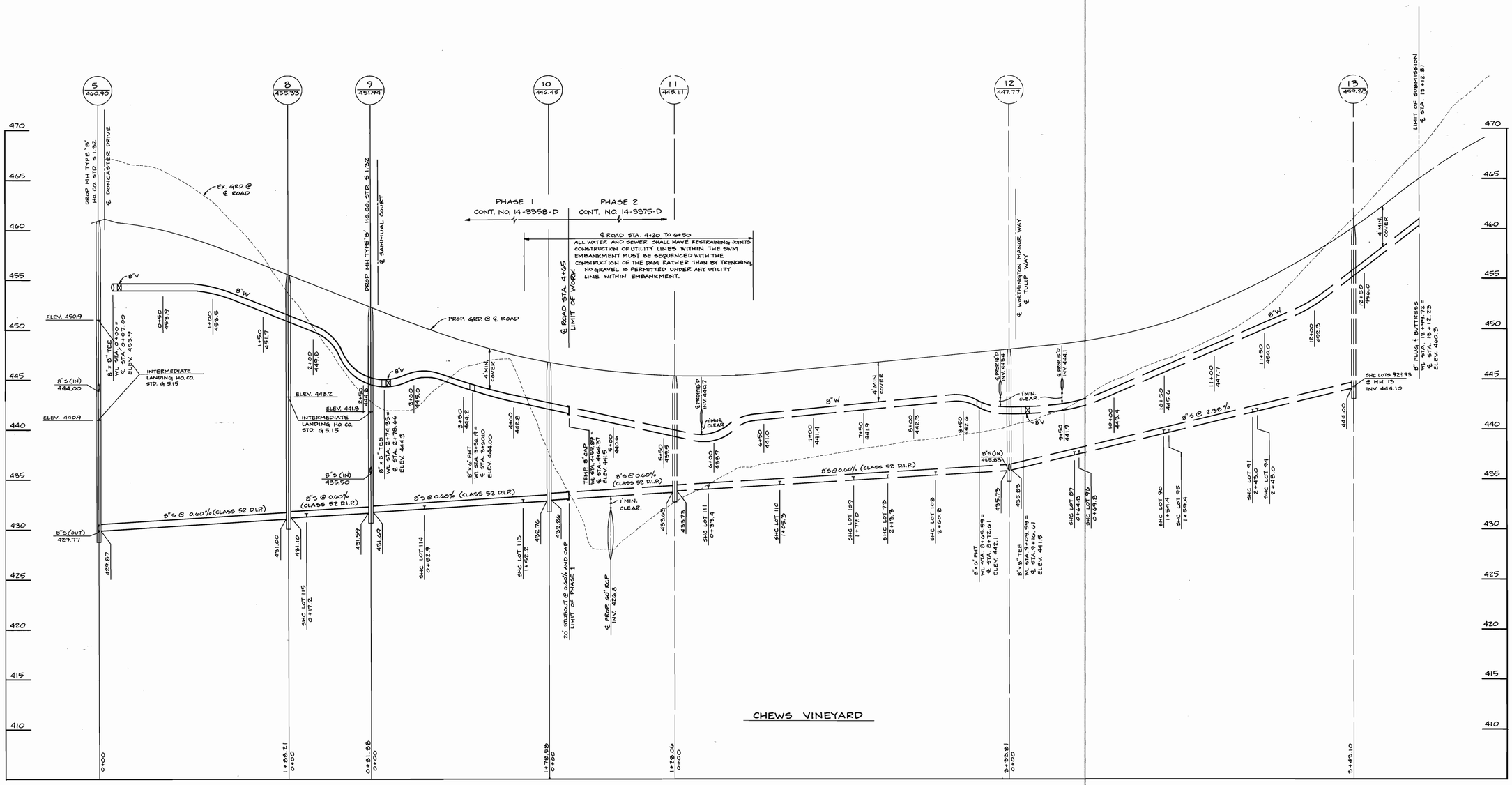
3358 ws/4 Worthington Reserve (Sect. 2, ph. 1)



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS — DATE 8/15/94 CHIEF, BUREAU OF ENGINEERING — DATE 8/15/94 CHIEF, BUREAU OF UTILITIES — DATE 8-2-94 CHIEF, LAND DEVELOPMENT DIVISION — DATE 8/15/94	TSA GROUP, INC. planning• engineering• surveying 8480 Baltimore National Pike• Suite 418 Ellicott City, Maryland 21043	DES: JME, DRK DRN: DBT CHK: JME DATE: 5-6-94 / 7-27-94	BY / NO. / REVISIONS / DATE 1 — REVISE LOT 138 SHC — 10/31/94	PROFILES OF WATER & SEWER MAINS 600 SCALE MAP NO. 31 — BLOCK NO. 2	WORTHINGTON RESERVE SECTION 2-PHASE 1 LOTS 57-72 AND 112-143 ELECTION DISTRICT NO. 2 CONTRACT NO. 14-3358-D	SCALE 1" = 50' HORIZ. 1" = 5' VERT. SHEET 4 OF 6

AS-BUILT

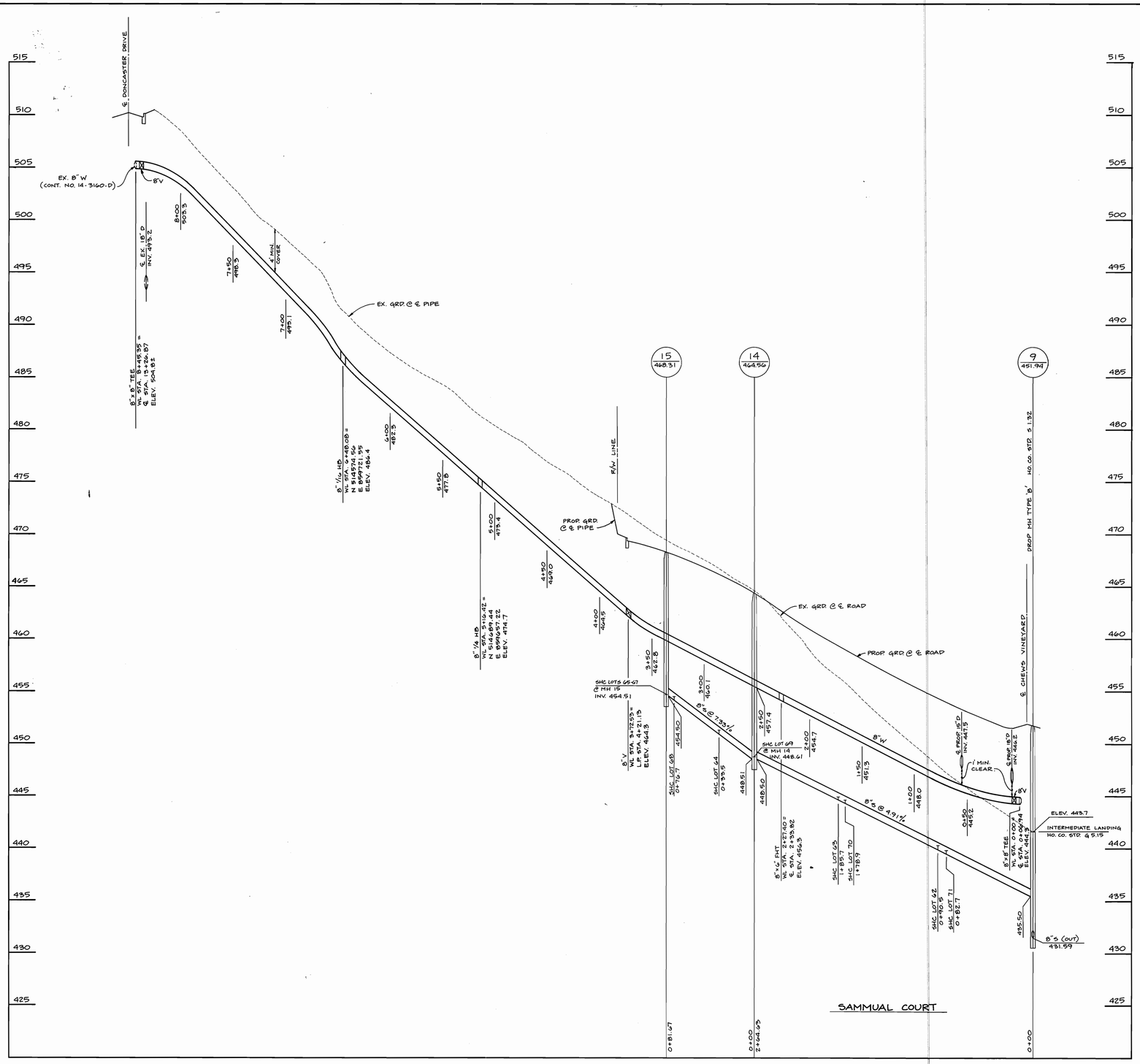
3358 ws/5 Worthington Reserve (sect. 2, ph. 1)



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	TSA GROUP, INC. planning• engineering• surveying 8480 Baltimore National Pike• Suite 418 Ellicott City, Maryland 21043	DES: JME, DRK DRN: DBT CHK: JME DATE: 5-6-94 / 7-27-94	PROFILES OF WATER & SEWER MAINS	WORTHINGTON RESERVE SECTION 2 - PHASE 1 LOTS 57-72 AND 112-143 ELECTION DISTRICT NO. 2 CONTRACT NO. 14-3358-D	SCALE 1" = 50' HORIZ. 1" = 5' VERT. SHEET 5 OF 6
DIRECTOR OF PUBLIC WORKS — DATE 8/15/94 CHIEF, BUREAU OF ENGINEERING — DATE 8/15/94 CHIEF, BUREAU OF UTILITIES — DATE 8-2-94 CHIEF, LAND DEVELOPMENT DIVISION — DATE 8/15/94		BY / NO. / REVISIONS / DATE	600 SCALE MAP NO. 31	BLOCK NO. 2	

AS-BUILT

AS - BUILTS SEWER HOUSE CONNECTIONS		
FROM	TO	DISTANCE
LOT 58	WHC LOT 142	67'
	℄ MH 7	79.9'
LOT 59	℄ SMH 6	37.7'
	WHC LOT 59	44.6'
LOT 60	" " 61	85'
	" " 140	83'
LOT 61	℄ F.H.	17.6'
	℄ F.H. V.	22.6'
	WHC LOT 139	49.6'
LOT 62	℄ I-7 FRAME & COVER	14'
	WHC LOT 62	53'
LOT 63	SHC " 70	49.8'
	WHC " "	69.5'
	℄ F.H. V.	61.5'
LOT 64	℄ SMH 14	37.6'
	℄ " 15	60'
LOT 65	WHC LOT 66	33.5'
	8" V.	54.5'
	℄ SMH 15	42.8'
LOT 66	WHC LOT 67	25.8'
	8" V.	38.7'
	℄ SMH 15	48.3'
LOT 67	SHC LOT 68	46.7'
	8" V.	33.9'
	℄ SMH 15	55.2'
LOT 68	WHC LOT 68	11.6'
	8" V.	47'
	℄ SMH 15	63.2'
LOT 69	℄ " 14	30.7'
	℄ F.H.	42.8'
LOT 70	℄ "	63.8'
	WHC LOT 70	39.2'
	" " 63	57.7'
LOT 71	℄ I-6 FRAME & COVER IN SIDE OF ROAD	33.4'
	℄ S.D. MH.	66'
	8" V. - SAMMUAL CT.	73'
LOT 113	℄ SMH 10	34.3'
	℄ F.H. V.	68'
	℄ F.H.	69.9'
LOT 114	℄ "	42.6'
	℄ SMH 9	59'
	8" V. - CHEWS VINYARD	50.7'
LOT 115	℄ SMH 8	27.2'
	WHC LOT 115	21.6'
	℄ SMH 9	64.4'
LOT 116	℄ SMH 4	124.5'±
	WHC LOT 135	55'
	SHC LOT "	57.3'
LOT 117	℄ F.H. (STA. 8+05)	33'±
	℄ F.H. V.	31.5'±
	WHC LOT 17	54'
LOT 118	℄ SMH 3	46.2'
	WHC LOT 119 (METER VAULT)	99.4'
	(STA. 8+05.02) ℄ F.H.	52'
	WHC LOT 118	21'±
LOT 119	℄ I-17 FRAME & COVER	50'
	℄ SMH 3	76.4'±
	WHC LOT 119	11.3'
LOT 120	℄ SMH 2	80.2'
	WHC LOT 130	52.4'
	" " 129	54.4'
LOT 121	℄ S.D. MH	33.8'
	WHC LOT 121	50.6'
	8" IN LINE V.	27.9'
	℄ SMH 2	39.0'
LOT 122	℄ S.D. M.H.	57'
	SHC LOT 121	84'
	8" IN LINE V.	76.2'
LOT 123	SHC LOT 124	83'
	℄ INLET FRAME & COVER	43.3'
	SHC LOT 122	82'
LOT 124	℄ SMH 1	39'
	SHC LOT 123	83'
	℄ I-15 FRAME & COVER	59.4'±
LOT 125	℄ SMH 1	46'
	WHC LOT 124	54.4'
	℄ I-16 FRAME & COVER	88.7'
LOT 126	℄ INLET	25.4'
	WHC LOT 126	30.3'
LOT 127	SHC " "	85.4'
	℄ I-16 FRAME & COVER	64'±
	WHC LOT 123	64'
LOT 128	℄ F.H.	47.6'
	WHC LOT 128	32.4'
	℄ S.D. MH	52.0'
LOT 129	℄ SMH 2	22.3'
	℄ FH @ STA. 12+58.97	35'±
	WHC LOT 121	56.4'
	SHC " 128	82.6'
LOT 130	WHC " 130	28.8'
	SHC " 120	49.6'
	WHC " 120	64.6'
	℄ SMH 2	90.6'



AS - BUILTS SEWER HOUSE CONNECTIONS		
FROM	TO	DISTANCE
LOT 131	℄ I-18	80.4'
	SHC LOT 131	87.4'
LOT 132	℄ INLET FRAME & COVER	34.6'
	℄ SMH 3	85.5'
	WHC LOT 131	87.4'
LOT 133	FH V.	83.8'
	℄ SMH 3	28.4'
	WHC LOT 132	21.6'±
	℄ FH	88.6'
LOT 134	℄ INLET FRAME & COVER	53.4'
	℄ FH V.	38.2'
	℄ FH @ STA. 8+05	46.6'
LOT 135	SHC LOT 134	81'
	WHC " 116	52'
	℄ INLET FRAME & COVER	30.6'
LOT 136	℄ SMH 4	66.3'
	WHC LOT 136	30.3'
	SHC LOT 116	76.8'
LOT 138	℄ SMH 5	22.6'
	IN LINE V. DONCASTER DRIVE	32.3'
	WHC LOT 138	59.9'
LOT 139	SHC LOT 140	49.1'
	℄ INLET FRAME & COVER	34.8'
	℄ F.H.	48.0'
LOT 140	F.H. V.	84.2'
	WHC LOT 140	57.7'
	" " 161	62.3'
LOT 141	℄ MH 6	55.5'
	WHC LOT 60	50.8'
LOT 142	℄ SMH 6	56.6'
	WHC LOT 142	20.2'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 8/15/94
CHIEF, BUREAU OF ENGINEERING — DATE 8/15/94
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PROFILES OF WATER & SEWER MAINS

600 SCALE MAP NO. 31 — BLOCK NO. 2

WORTHINGTON RESERVE
SECTION 2 - PHASE 1
LOTS 57-72 AND 112-143
ELECTION DISTRICT NO. 2
CONTRACT NO. 14-3358-D

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

SHEET 6 OF 6

3358 ws/6 Worthington Reserve (Sect. 2, ph. 1)