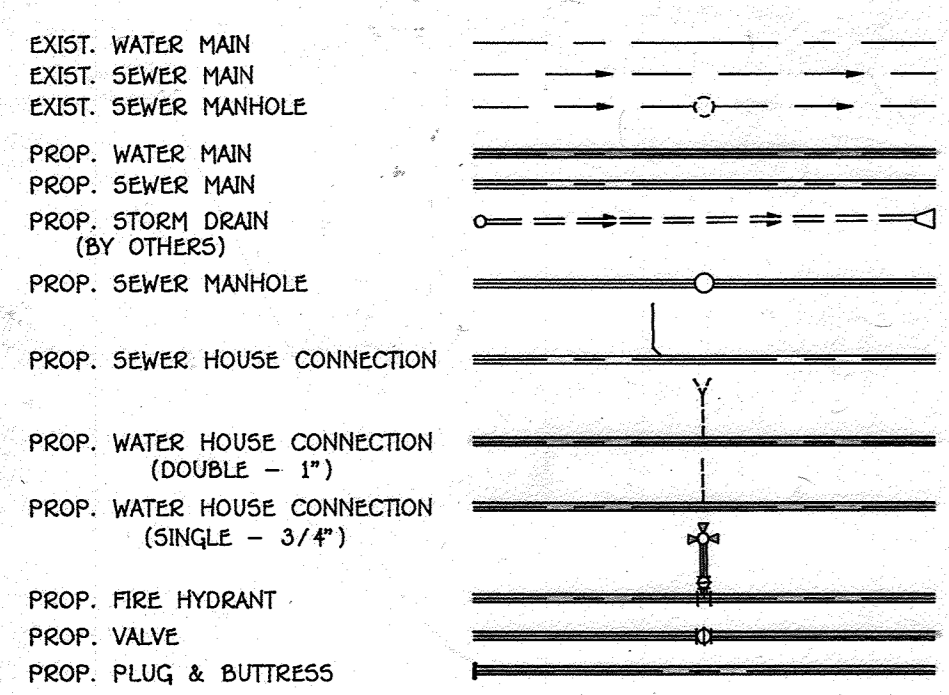


AS-BUILT 6/17/95

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

3358

LEGEND



WORTHINGTON RESERVE AS-BUILT VALVE LOCATIONS

- List of valve locations with details: DONCASTER DRIVE, CHEWS VINEYARD, SAMMUAL CT., etc.

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

WATER HOUSE CONNECTION CHART table with columns for LOT No., STATION, ROAD, and SAMMUAL COURT.

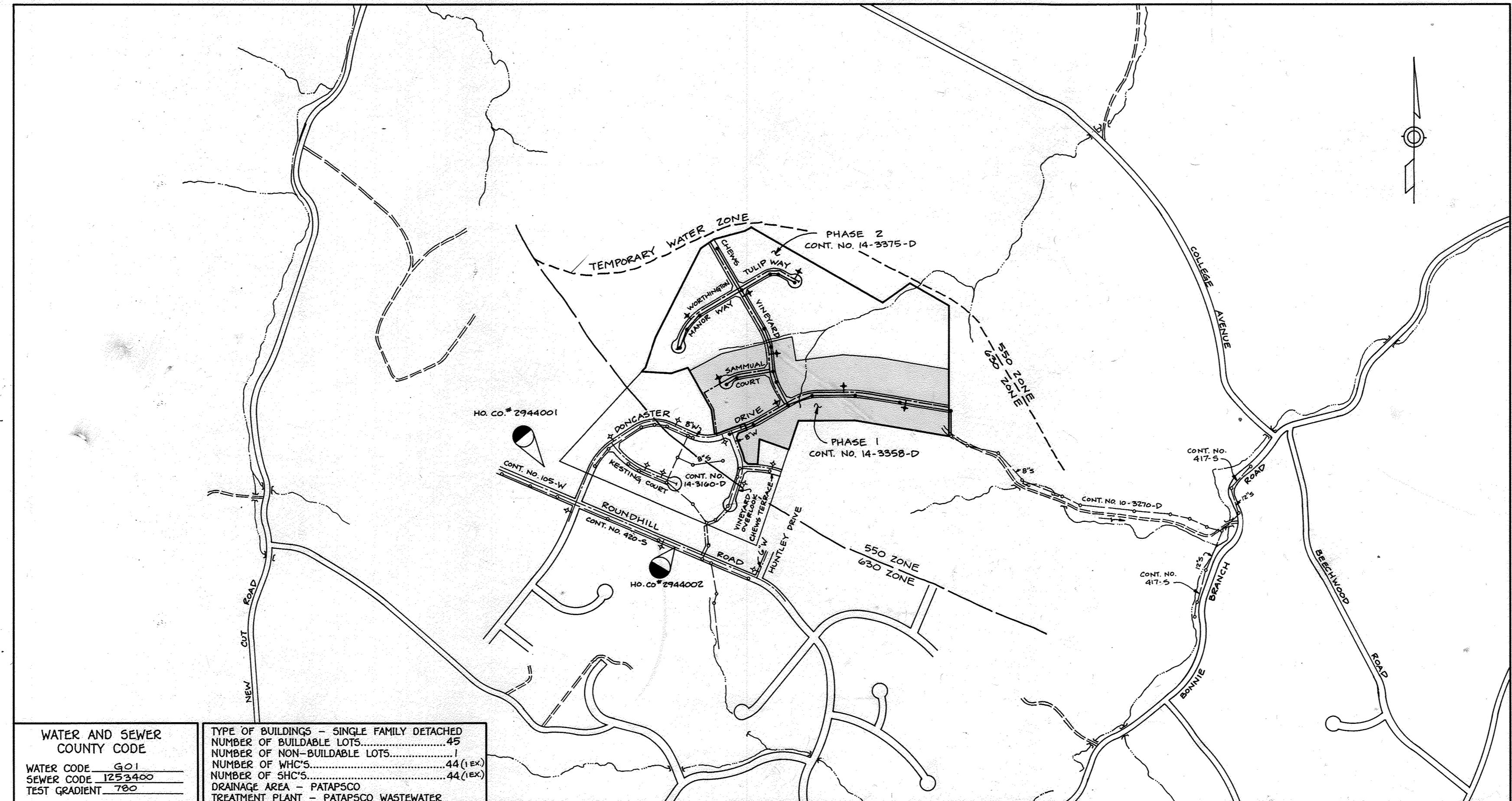
GENERAL NOTES

- GENERAL NOTES PART 1 - GENERAL, PART 2 - WATER, PART 3 - SEWER. Includes details on construction standards, materials, and safety.

NOTE: SEE PROFILES FOR SEWER HOUSE CONNECTION STATIONS.

QUANTITIES table listing items like 8" WATER, 3/4" METER VAULT, 8" VALVES, etc., with estimated and AS-BUILT quantities.

SHEET INDEX table listing sheet numbers and descriptions like TITLE SHEET, PLAN OF WATER AND SEWER MAINS, etc.



VICINITY MAP SCALE: 1" = 600'

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

Signature of Patricia Emley, U.S. SOIL CONSERVATION SERVICE, dated 8/5/94

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

Signature of John R. Robertson, HOWARD SOIL CONSERVATION DISTRICT, dated 8/5/94

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 table with fields for WATER CODE, SEWER CODE, TEST GRADIENT, etc.

TYPE OF BUILDINGS - SINGLE FAMILY DETACHED table with fields for NUMBER OF BUILDABLE LOTS, NUMBER OF NON-BUILDABLE LOTS, etc.

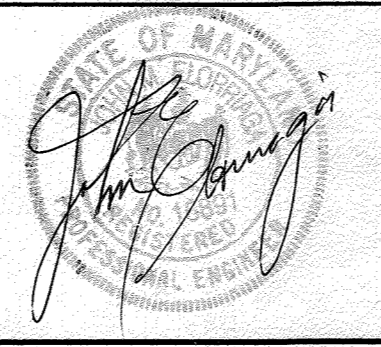
AIR TESTING (7) 4" OUT OF MANHOLES @ M#2 to M#5 M#3 - M#5 M#6 - 1 ALL PASSED M#7 - 1 SEE FILE M#14 - 1 FILE M#15 - 3

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.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND. Includes signatures of James P. Lewis and Robert J. Brown, dated 8/15/94.

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



Revision table with columns for DES, DRN, CHK, DATE, 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 6/17/95

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

AS-BUILT VALVE LOCATIONS		
FROM	TO	DISTANCE
DONCASTER DRIVE		
8" x 8" TAPPING SLEEVE & V. OF INLET FRAME	OF F.H.	20.4'
	OF F.H.	67.2'
	6" F.U.V.	57.1'
	6" F.U.V.	34'
	OF F.H.	8'
	INLET COVER (W)	14.4'
	8" V. (SAMMUAL)	44.1'
	INLET COVER (S)	26.8'
CHEWS VINEYARD & DONCASTER DR.		
	8" V. (SAMMUAL)	4.0'
	SMH-5	21.6'
	OF F.H.	48.4'
6" F.H. V. LOCATION @ W.L. STA. 8+05.02		
	INLET FRAME & COVER	69.3'
	OF F.H.	9.0'
	OF SMH-5	87.5'
6" F.U.V. LOCATION @ W.L. STA. 12+08.97		
	8" INLINE V.	3.1'
	OF F.H.	30.3'
	SMH-#2	25.7'
	OF S.D.M.H.	22.4'
8" INLINE V. @ STA. 12+60±		
	OF F.H.	31.5'
	SMH-#2	28.8'
	OF S.D.M.H.	19.3'
CHEWS VINEYARD		
	8" V. @ 8" x 8" TEE W.L. STA. 0+08±	38.1'
	OF S.D.M.H.	28.7'
	OF S.M.H. 5	45.4'
	OF F.H.	4.0'
	8" V. (DONCASTER)	4.0'
	OF S.D.M.H.	9.1'
	OF S.M.H. 9	21.1'
	8" V. (SAMMUAL)	3.5'
6" F.H. VALVE W.L. STA. 3+56.20		
	OF F.H.	22.6'
	OF S.D.M.H. (SAMMUAL)	75.7'
SAMMUAL COURT		
	6" F.H. V. @ STA. 2+21.40	10'
	OF SMH-14	27.3'
	" -15	21.8'
	8" V. @ CHEWS VINEYARD	9.1'
	OF S.M.H. 9	20.7'
	8" x 8" TEE	40'±

AS-BUILTS WATER HOUSE CONNECTIONS		
FROM	TO	DISTANCE
LOT 135	SHC LOT 135	50'
	" " 110	55'
	INLET FRAME & COVER	74.5'
LOT 134	SHC LOT 134	30'
	WLC " 133	5.7'
	6" F.U.V.	36'
	OF F.H.	40.5'
LOT 133	6" F.U. @ STA. 8+05	48.6'
	6" F.H.V.	40.8'
	SHC LOT 133	52.8'
	OF SMH 3	60.1'
LOT 132	" "	62.0'
	SHC LOT 133	69'
LOT 131	WLC METER VAULT LOT 119	47.8'
	INLET FRAME & COVER	94.2'
LOT 130	SHC LOT 131	10.3'
	WLC LOT 129	4.8'
	SHC " 120	52'
	WLC " "	51.8'
	OF SMH 2	85.5'
LOT 129	SHC LOT 129	45.5'
	OF SMH 2	59.8'
	SHC LOT 120	51.0'
	WLC " 120	4.5'
LOT 128	" " 127	6'
	OF F.H.	50'
	OF S.D.M.H.	74.8'
LOT 127	SHC LOT 127	40'
	OF S.D.M.H.	78.9'
	WLC LOT 122	51.6'
	WLC LOT 128	5'
LOT 126	" " 125	4.3'
	INLET	84.3'
	OF SMH 1	80.4'

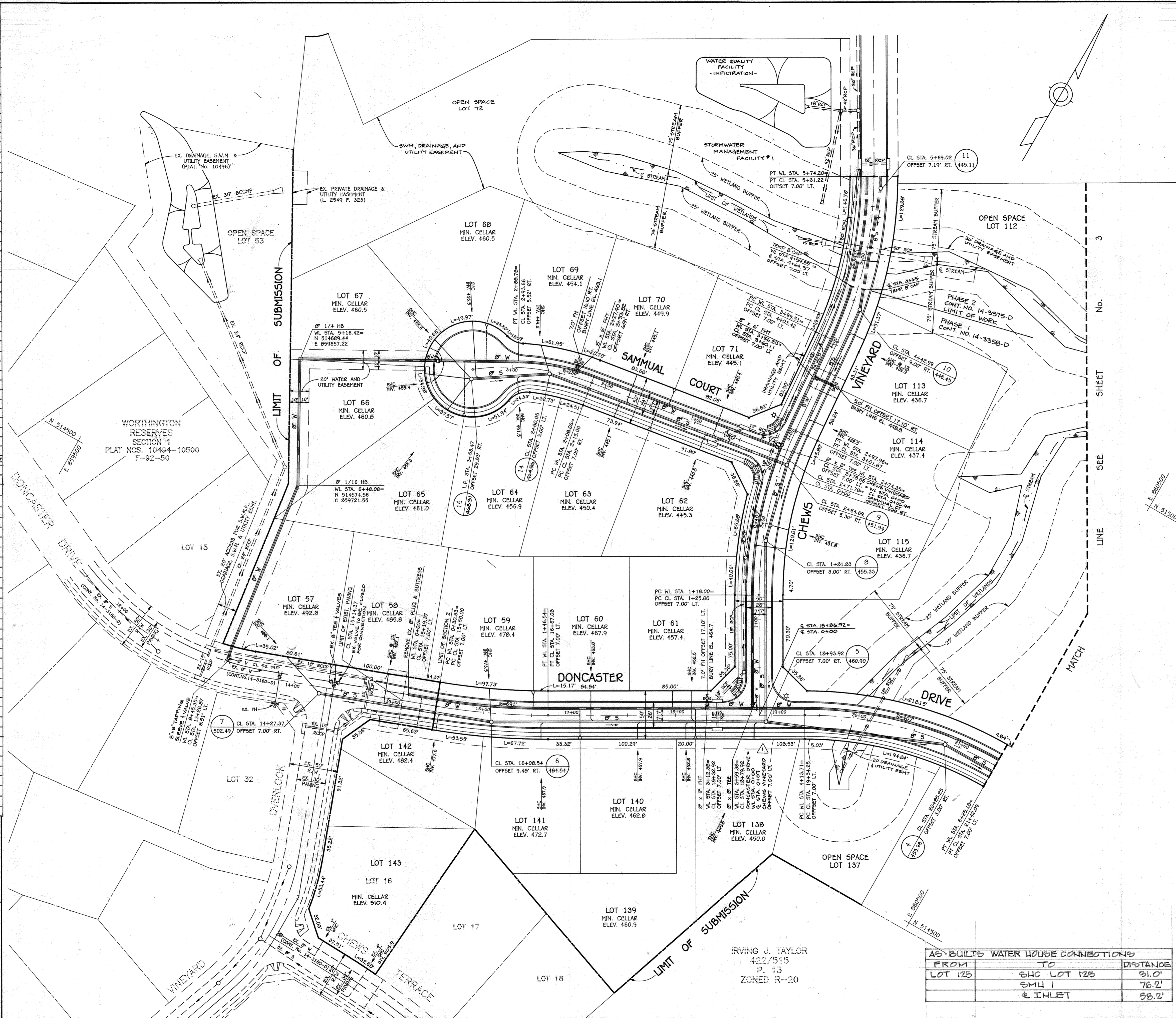
HOWARD SOIL CONSERVATION DISTRICT:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT
AND MEETS TECHNICAL REQUIREMENTS

Peterson 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 P. Robinson 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 124	S.M.H. 1	66.3'
	SHC LOT 124	11'±
	INLET FRAME & COVER	70'±
LOT 123	WLC LOT 122	8.3'
	SHC LOT 123	49'±
LOT 122	" " 122	28'±
	OF S.D.M.H.	83.2'
	WLC LOT 123	5.3'
LOT 121	" " 120	4.2'
	OF F.H.V.	62.4'
	OF F.H.	71'
	SMH-#2	48.6'
LOT 120	SMH-#2	52.2'
	SHC LOT 120	81.1'
LOT 119	INLET FRAME & COVER	61'
	SMH-3	66'
	SHC LOT 118	79.4'
LOT 118	OF F.H. (STA. 8+05)	31.5'
	6" F.H.V.	34.5'
	SHC LOT 117	62.3'
	SMH 3	63.6'
LOT 117	WLC LOT 116	5.5'
	OF F.H. (STA. 8+05)	86.1'
	INLET FRAME & COVER	47.2'
LOT 116	OF F.H. (STA. 8+05)	91.5'±
	SHC LOT 116	31'
	INLET FRAME & COVER	49.8'
	SHC LOT 135	52'
LOT 115	OF SMH-8	25.4'
	OF S.D.M.H.	45.6'
LOT 114	OF F.H.	14.6'
	SHC LOT 114	31.6'
	F.H.V.	32.9'
LOT 113	OF F.H.	13.3'
	WLC LOT 114	19.6'
	OF F.H.V.	32.4'
LOT 70	WLC LOT 71	5.7'
	WLC LOT 63	52.9'
LOT 71	SHC " 71	49.2'
	WLC " 62	52.7'
LOT 69	SHC " 69	60'
	OF SMH 15	61.2'
	OF S.V.	49.8'
LOT 68	WLC LOT 69	5'
	OF SMH 15	61'
	OF S.V.	48.5'
LOT 67	SHC LOT 67	11.3'
	OF S.V.	34.4'
	OF SMH 15	53.6'
LOT 66	SHC LOT 66	12.2'
	OF S.V.	42.3'
	OF SMH 15	46.2'
LOT 65	SHC LOT 65	17.0'
	SMH 15	40.8'
	OF S.V.	58.3'
LOT 64	OF SMH 15	40.2'
	WLC LOT 65	6.0'
LOT 63	8" V. IN CUL-DE-SAC	59.1'
	WLC LOT 70	52.9'
	SHC LOT 63	36.5'
LOT 62	WLC " "	5.7'
	INLET FRAME & COVER	63'
	WLC LOT 71	52.7'
LOT 61	OF 6" F.H.V.	39.8'
	OF F.H.	37.2'
	WLC LOT 139	55.3'
LOT 60	SHC " 60	58'
	OF SMH 6	59'
LOT 59	WLC LOT 60	7'
	OF SMH 6	53.6'
LOT 58	OF SMH 6	58'
	OF M.H. 7	38'
LOT 57	WLC LOT 58	4.5'
	OF EX. F.U.	71.4'
	OF SMH 7	53.1'
LOT 141	SHC LOT 141	39'
	" " 60	52.9'
	WLC " "	65'
LOT 140	SHC LOT 60	52.9'
	WLC " "	70'
	" " 141	6'
LOT 142	8" V. DONCASTER DR.	98.2'
	OF SMH 6	75.8'
LOT 139	SHC LOT 139	8'
	OF F.H.V.	37.9'
	INLET FRAME & COVER	27.3'
LOT 138	WLC LOT 139	5.8'
	6" F.U.V.	36.8'
	OF SMH 5	78'±
LOT 136	WLC LOT 135	5.3'
	SHC " 118	56.8'

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Lance P. Shaw 8/15/94
DIRECTOR OF PUBLIC WORKS DATE

Robert J. Seaman 8/15/94
CHIEF, BUREAU OF ENGINEERING DATE

Robert J. Seaman 8/15/94
CHIEF, BUREAU OF UTILITIES DATE

John P. Robinson 8/15/94
CHIEF, LAND DEVELOPMENT DIVISION DATE

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

[Signature]
REGISTERED PROFESSIONAL ENGINEER

DES: JME, DRK	REVISE LOT 108 SHC	10/31/94
DRN: DRK, DBT		
CHK: JME		
DATE: 5-6-94	BY: NO.	REVISIONS
DATE: 7-27-94	BY: NO.	REVISIONS

IRVING J. TAYLOR
422/515
P. 13
ZONED R-20

600 SCALE MAP NO. 31

PLAN OF WATER AND SEWER MAINS

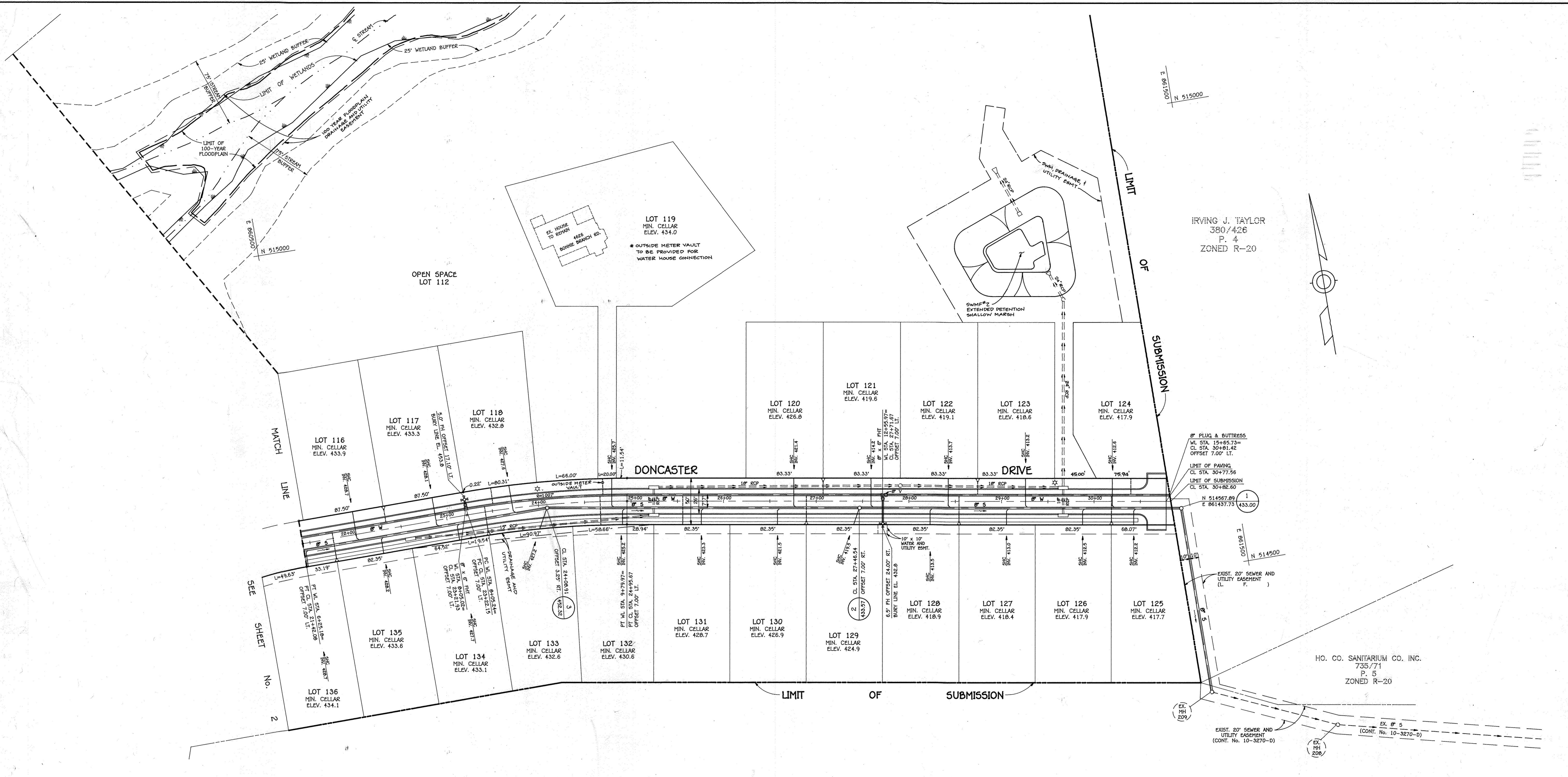
WORTHINGTON RESERVE
SECTION 2 - PHASE 1
LOTS 57-72 AND 112-143
ELECTION DISTRICT NO. 2

CONTRACT NO. 14-3358-D

SCALE
1" = 50'

SHEET
2 OF 6

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



IRVING J. TAYLOR
422/515
P. 13
ZONED R-20

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

Patricia Engle 8/15/94
U.S. SOIL CONSERVATION SERVICE DATE

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

J.P. Robinson 8/15/94
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

James J. Shaw 8/15/94
DIRECTOR OF PUBLIC WORKS DATE

Robert J. Brown 8/15/94
CHIEF, BUREAU OF UTILITIES DATE

Paul J. Seaman 8/15/94
CHIEF, BUREAU OF ENGINEERING DATE

John J. ... 8/15/94
CHIEF, LAND DEVELOPMENT DIVISION DATE

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

[Signature]
REGISTERED PROFESSIONAL ENGINEER

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

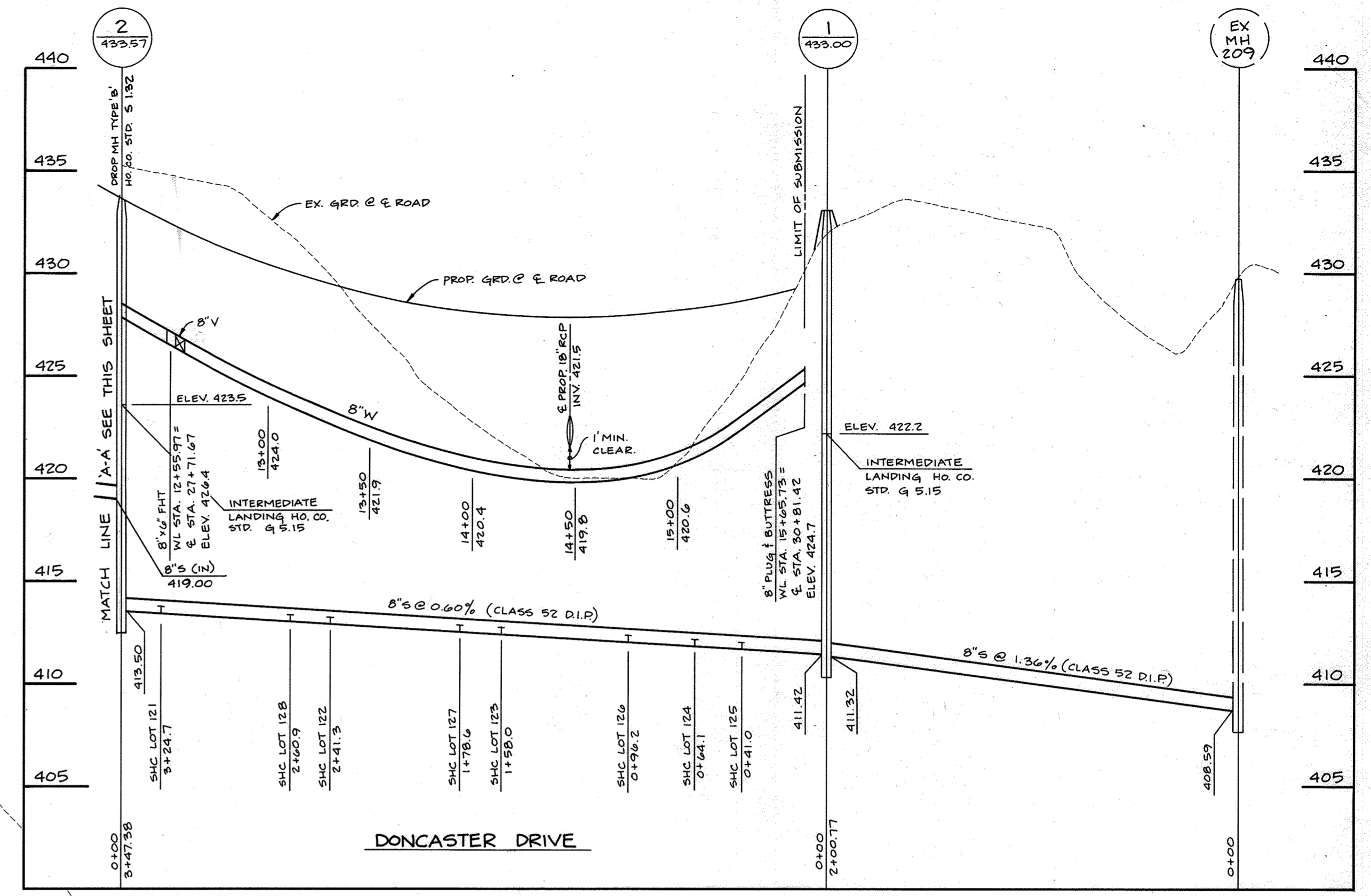
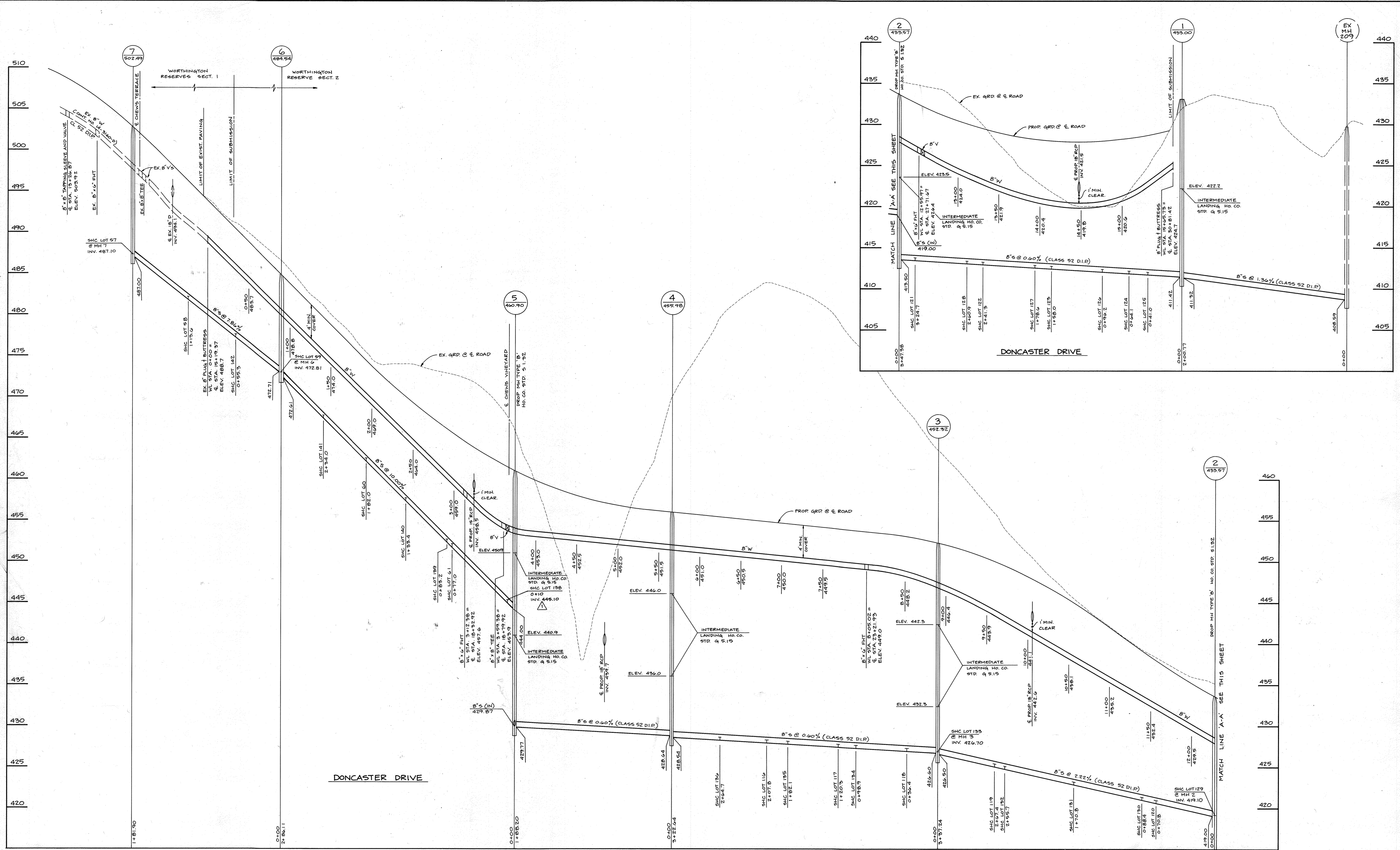
WORTHINGTON RESERVE
SECTION 2 - PHASE 1
LOTS 57-72 AND 112-143
ELECTION DISTRICT NO. 2

CONTRACT NO. 14-3358-D

SCALE
1" = 50'

SHEET
3 OF 6

3358 ws/4 Northington Reserve (Sect. 2, Ph. A)



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

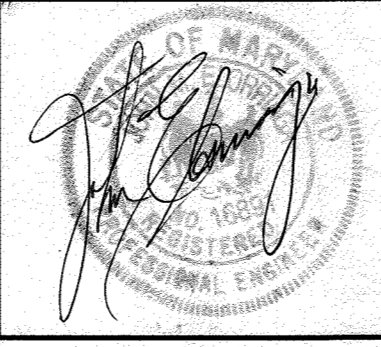
James P. Lewis 8/15/94
DIRECTOR OF PUBLIC WORKS DATE

Richard Eppom 8/15/94
CHIEF, BUREAU OF ENGINEERING DATE

Robert W. Bauman 8/15/94
CHIEF, BUREAU OF UTILITIES DATE

Michael J. ... 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	REVISE LOT 138 SHC	10/5/94
DRN: DBT		
CHK: JME		
DATE: 5-6-94		
DATE: 7-27-94	BY NO.	REVISIONS

PROFILES OF
WATER & SEWER MAINS

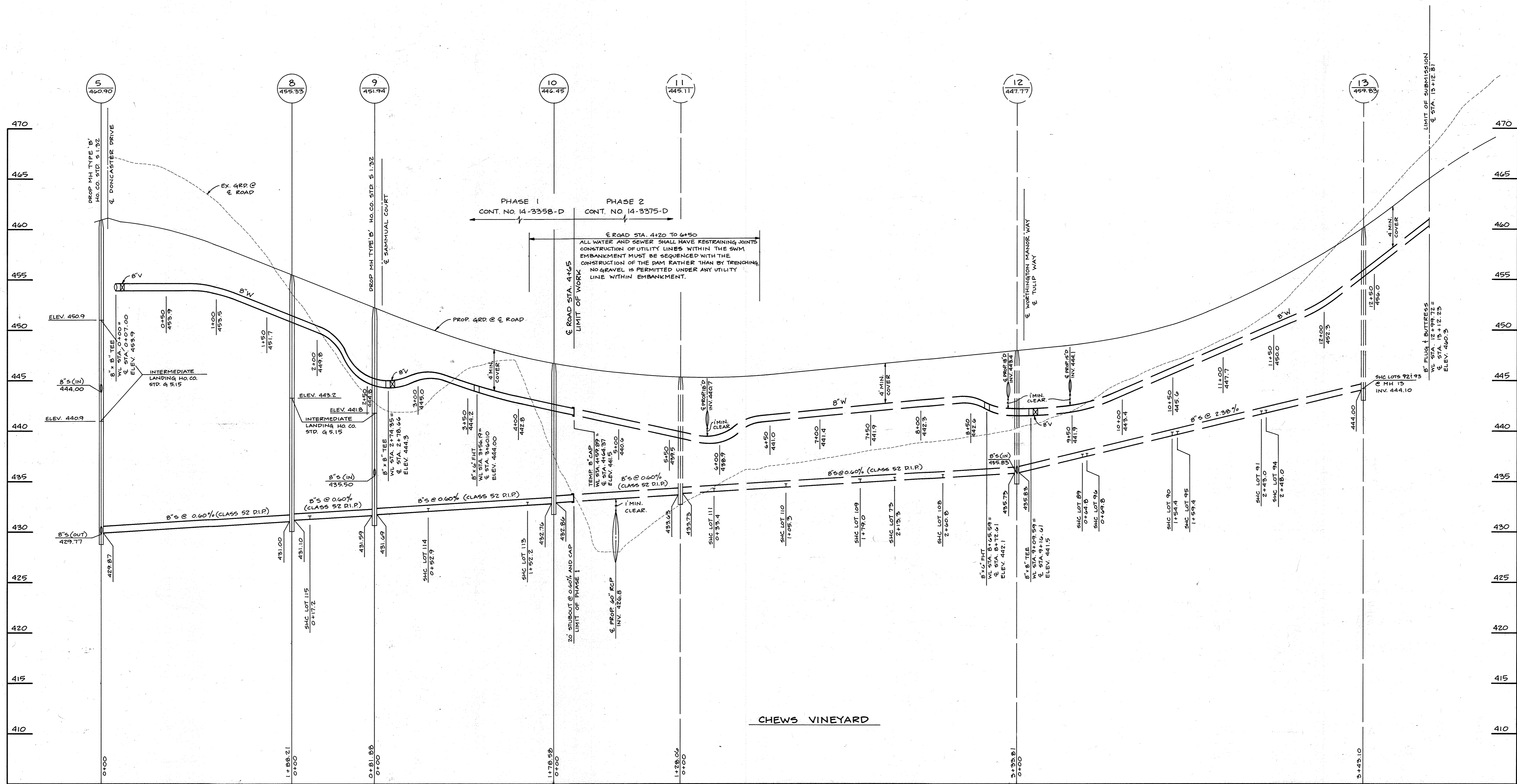
DATE: 600 SCALE MAP NO. 31 BLOCK NO. 2

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.

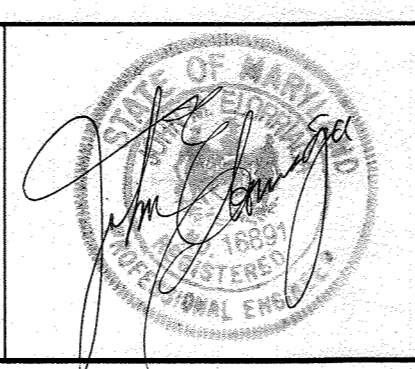
SHEET
4 OF 6

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



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *dis/aa* Date: 9/15/94
 Chief, Bureau of Engineering: *Robert E. Brown* Date: 9/15/94
 Chief, Bureau of Utilities: *Robert E. Brown* Date: 9/15/94
 Chief, Land Development Division: *Robert E. Brown* Date: 9/15/94

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
DATE:	7-27-94
BY:	NO.
REVISIONS:	
DATE:	

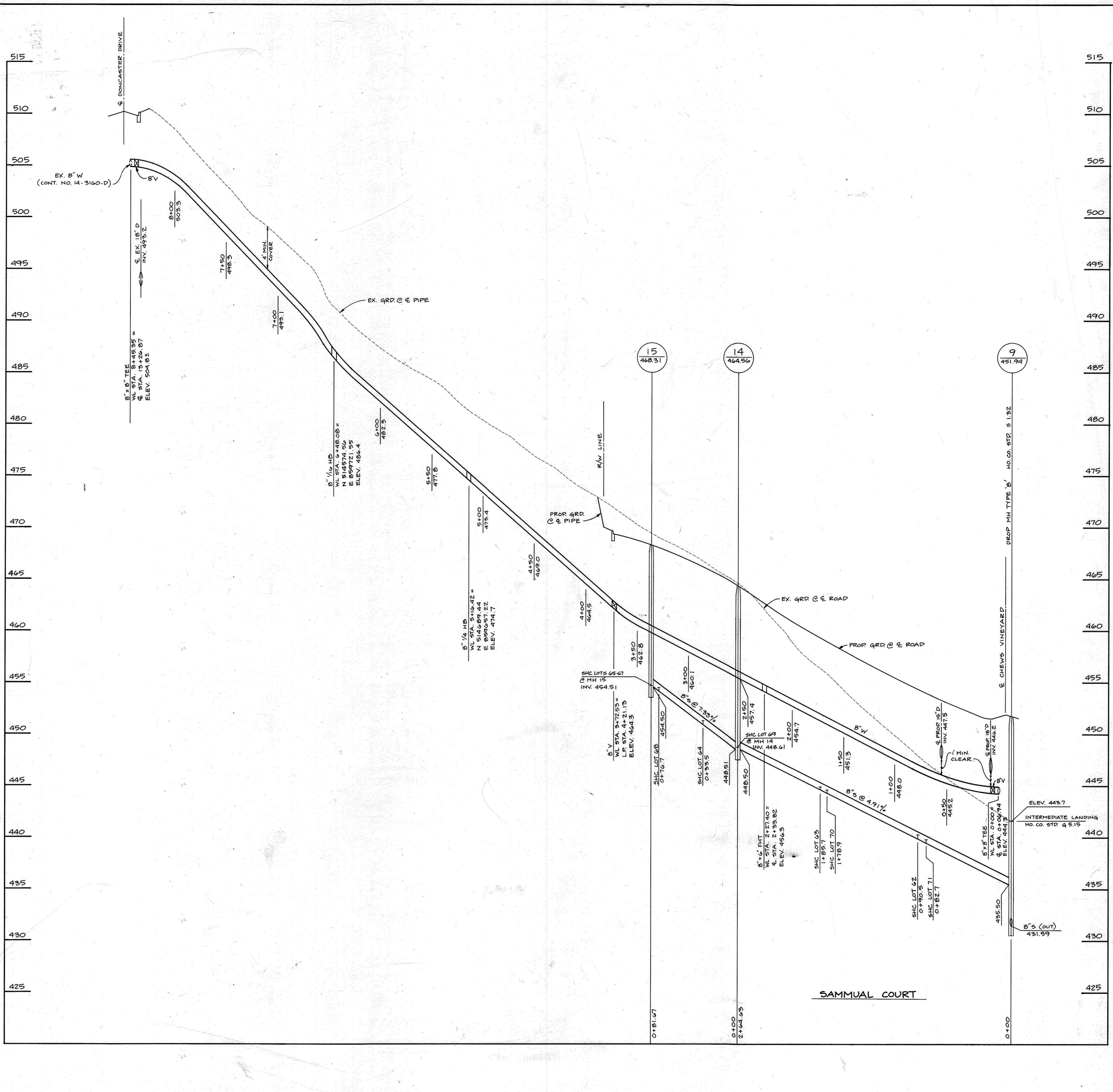
PROFILES OF
 WATER & SEWER MAINS
 600 SCALE MAP NO. 31
 BLOCK NO. 2

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 5 OF 6

AS-BUILT

RESERVE (Sect. 2, Ph. 1)

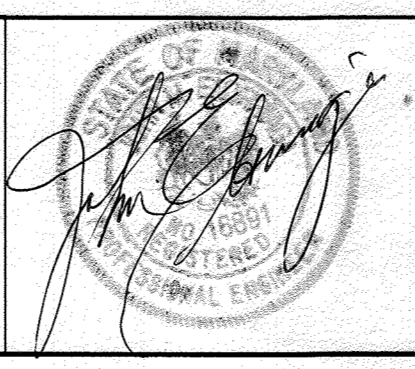
AS-BUILT FROM	SEWER HOUSE CONNECTIONS TO	DISTANCE
LOT 88	WLC LOT 142 & MH 7	67'
LOT 89	& SMH 6	71.9'
LOT 60	WLC LOT 89	57.7'
"	" " 61	44.6'
"	" " 140	85'
LOT 61	& F.H. V.	17.6'
"	& F.H. V.	22.6'
LOT 62	WLC LOT 139	49.6'
& I-7 FRAME & COVER		14'
LOT 63	WLC LOT 62	53'
"	SHC " 70	49.8'
"	WLC " "	69.5'
LOT 64	& F.H. V.	61.5'
"	& SMH 14	57.6'
"	" " 15	60'
LOT 65	WLC LOT 66	33.5'
"	& S.V.	54.5'
"	& SMH 15	42.8'
LOT 66	WLC LOT 67	25.8'
"	& S.V.	38.7'
"	& SMH 15	48.3'
LOT 67	SHC LOT 68	46.7'
"	& S.V.	33.9'
"	& SMH 15	53.2'
LOT 68	WLC LOT 68	11.6'
"	& S.V.	47'
"	& SMH 15	63.2'
LOT 69	" " 14	30.7'
"	& F.H.	42.8'
LOT 70	" " "	63.8'
"	WLC LOT 70	34.2'
"	" " 63	57.7'
LOT 71	& I-6 FRAME & COVER	33.4'
"	& S.D. MH.	66'
"	& S.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'
LOT 115	& S.V. - CHEWS VINYARD	50.7'
"	& SMH 8	21.2'
"	WLC LOT 116	21.6'
"	& SMH 9	64.4'
LOT 116	& SMH 4	124.5'±
"	WLC LOT 135	55'
"	SHC LOT "	57.3'
LOT 117	& F.H. (STA. 8+05)	33'±
"	& F.H. V.	31.5'±
LOT 118	WLC LOT 17	54'
"	& SMH 3	46.2'
"	WLC LOT 119 (METER VAULT)	99.4'
"	(STA. 8+05.02) & F.H.	52'
LOT 119	WLC LOT 118	21'±
& I-17 FRAME & COVER		30'
"	& SMH 3	76.4'±
LOT 120	WLC LOT 119	11.3'
"	& SMH 2	20.2'
LOT 121	WLC LOT 120	52.4'
"	" " 129	54.4'
"	& S.D. MH	33.8'
LOT 121	WLC 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		45.3'
"	SHC LOT 122	82'
LOT 124	& SMH 1	39'
"	SHC LOT 123	83'
& I-15 FRAME & COVER		59.4'±
LOT 125	& SMH 1	46'
"	WLC LOT 124	54.4'
& I-16 FRAME & COVER		88.7'
LOT 126	& INLET	25.4'
"	WLC LOT 126	30.3'
LOT 127	SHC " "	85.4'
& I-16 FRAME & COVER		64'±
LOT 128	WLC LOT 123	64'
"	& F.H.	47.6'
"	WLC LOT 128	32.4'
"	& S.D. MH	52.0'
LOT 129	& SMH 2	22.3'
& F.H. @ STA. 12+55.97		35'±
"	WLC LOT 121	56.4'
"	SHC " 128	82.6'
"	WLC " 130	28.8'
"	SHC " 120	49.6'
"	WLC " 120	64.6'
"	& SMH 2	90.6'



AS-BUILT FROM	SEWER HOUSE CONNECTIONS TO	DISTANCE
LOT 131	& I-18	80.4'
"	SHC LOT 131	87.4'
LOT 132	& INLET FRAME & COVER	34.6'
"	& SMH 3	83.5'
"	WLC LOT 131	87.4'
LOT 133	F.H. V.	83.8'
"	& SMH 3	28.4'
"	WLC LOT 132	21.6'±
"	& F.H.	88.6'
LOT 134	& INLET FRAME & COVER	53.4'
"	& F.H. V.	38.2'
"	& F.H. @ STA. 8+05	46.6'
LOT 135	SHC LOT 134	81'
"	WLC " 116	52'
"	& INLET FRAME & COVER	30.6'
LOT 136	& SMH 4	66.3'
"	WLC LOT 136	30.3'
"	SHC LOT 116	76.8'
LOT 138	& SMH 5	22.6'
"	IN LINE V. DONCASTER DRIVE	32.3'
"	WLC 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'
"	WLC LOT 140	57.7'
"	" " 161	62.3'
LOT 141	& MH 6	55.3'
"	WLC LOT 60	50.8'
LOT 142	& SMH 6	56.6'
"	WLC LOT 142	20.2'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 TOR OF PUBLIC WORKS: [Signature] DATE: 8/15/04
 CHIEF, BUREAU OF ENGINEERING: [Signature] DATE: 8/15/04
 CHIEF, LAND DEVELOPMENT DIVISION: [Signature] DATE: 8/15/04

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
DATE:	7-27-94
BY:	NO.
REVISIONS:	

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
 6 OF 6