

CONTRACT No.34-3655-D

VILLAGE OF RIVER HILL

SECTION 4 AREA 6

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	WATER AND SEWER PLAN
3	WATER AND SEWER PROFILES
4	WATER AND SEWER PROFILES

QUANTITIES				
ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER/SUPPLIER
8" SEWER	2567 L.F.			
4" SEWER	1530 L.F.			
MANHOLES	18 EA.			
VERT. FT. MANHOLES	209 L.F.			
6" WATER	880 L.F.			
8" WATER	1370 L.F.			
1" W.C. WHC	150 L.F.			
3/4" W.C. WHC	1435 L.F.			
FIRE HYDRANTS	5			
6" VALVE	7			
8" VALVE	2			
1 1/2" DIAPHR.	2			
NAME OF UTILITY CONTRACTOR :				
SURVEY AND DRAFTING DIVISION AS-BUILT DATE:				

TYPE OF BUILDING:	SINGLE FAMILY
NUMBER OF LOTS / PARCELS:	64
NUMBER OF WATER HOUSE CONNECTIONS:	64 (9 EX. CONN. SECTION 4, AREA 5)
NUMBER OF SEWER HOUSE CONNECTIONS:	64
DRAINAGE AREA:	MIDDLE PATUXENT
TREATMENT PLANT:	LITTLE PATUXENT WATER RECLAMATION PLANT SAVAGE, HOWARD COUNTY

HOWARD CO. MONUMENT 2964 IS AT INTERSECTION OF MD. RTE. 108 AND TROTTER RD. MONUMENT 2965 IS AN ADDITIONAL 2544± ALONG MD. RTE. 108 AWAY FROM SITE.

BENCHMARKS

BM#1 RAILROAD SPIKE IN POLE #525680
TROTTER ROAD ELEV. 393.27
N 496697.02 E 822026.81

BM#2 RAILROAD SPIKE IN POPLAR
ELEV. 438.92
N 495551.90 E 820727.80

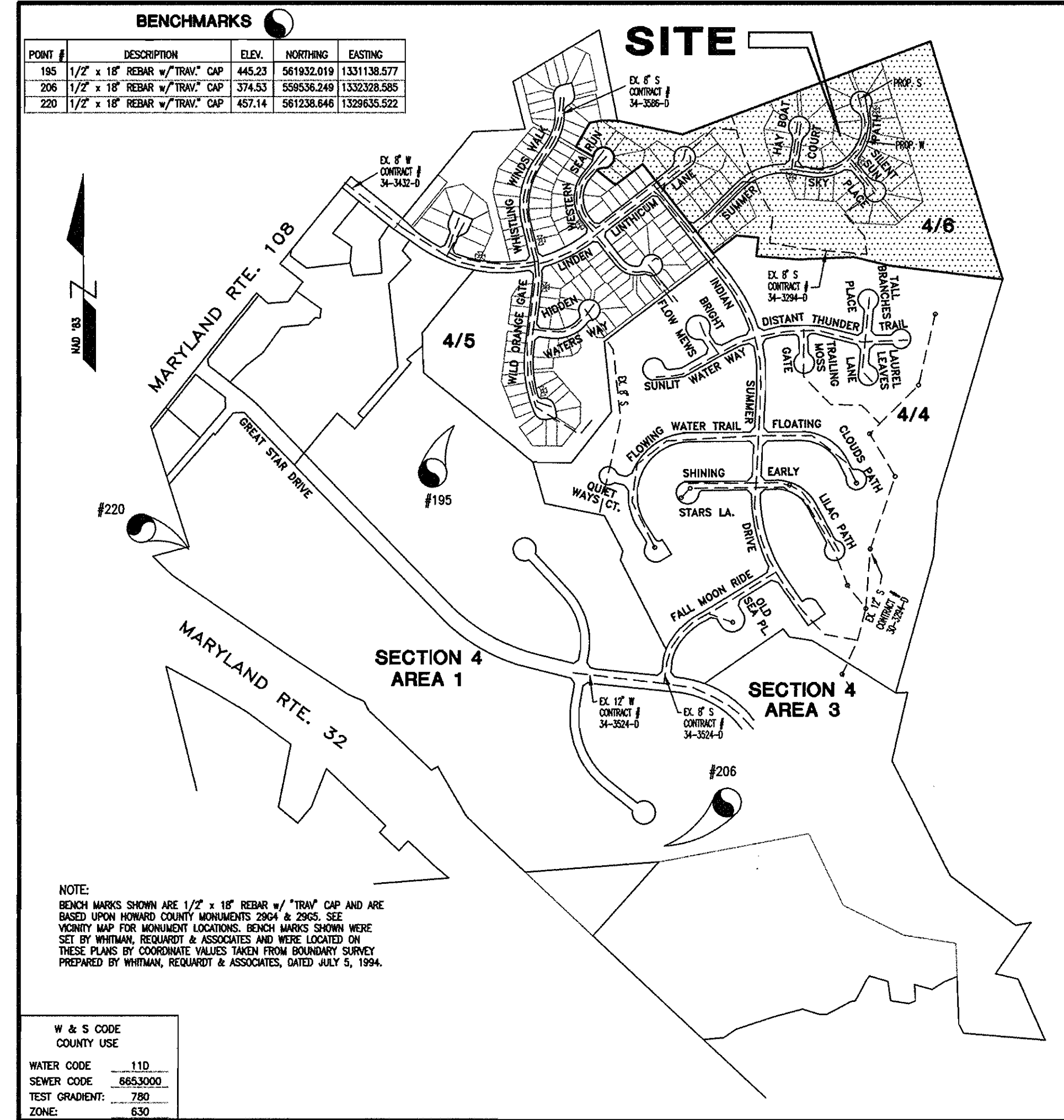
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND METEOROLOGICAL SERVICE

John E. Robinson 5/29/98
SIGNATURE DATE

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

David Simmons 5/29/98
HOWARD SOIL CONSERVATION DISTRICT

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND ROAD CONSTRUCTION PLANS *P-08-97*



W & S CODE
COUNTY USE

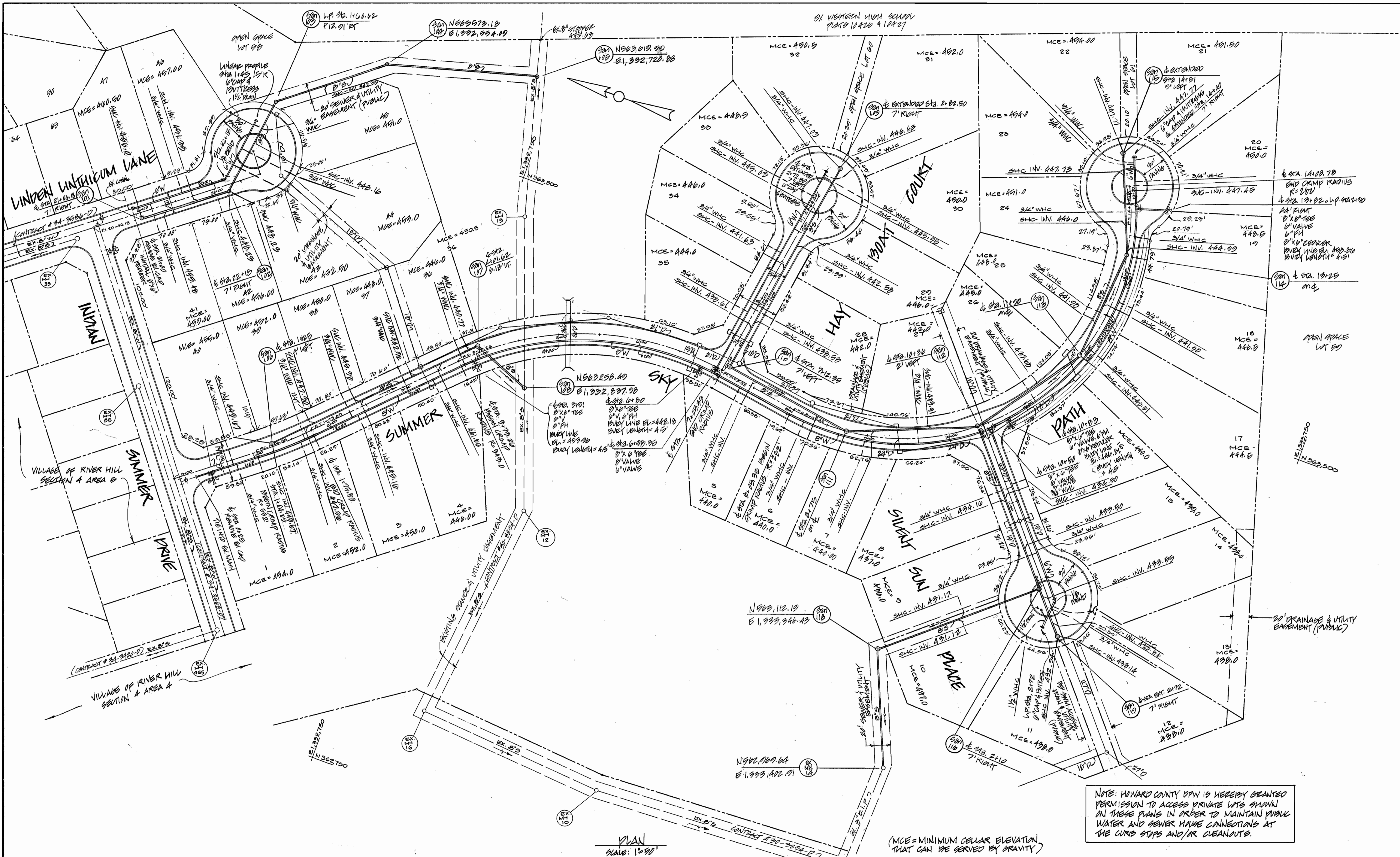
WATER CODE: 110
SEWER CODE: 6653000
TEST GRADIENT: 7.90
ZONE: 630

VICINITY MAP
SCALE: 1" = 600'

- #### GENERAL NOTES
- PART I
- 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. NORTH AMERICAN DATUM OF 1983 (NAD 83)
 - ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - 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 ARRANGEMENT FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRED 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.
 - FOR DETAILS NOT SHOWN ON THE DRAWINGS AND FOR MATERIALS AND CONSTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
 - 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.
 - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

STATE HIGHWAY ADMINISTRATION	1-410-531-5533
BG&E CO. CONTRACTOR SERVICES	1-410-850-4620
BG&E CO. UNDER GROUND DAMAGE CONTROL	1-410-787-9068
MISS UTILITY	1-800-257-7777
COLONIAL PIPELINE CO.	1-410-795-1390
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
BUREAU OF UTILITIES	1-410-313-4900
 - 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.
 - 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 LAINING 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 II - WATER
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS TO 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 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.
 - 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 PLANS OR IN SPECIFICATIONS.
 - SPRINKLER SYSTEM FOR ALL TOWNHOUSES OR MULTI-FAMILY DWELLING UNITS SHOULD HAVE A MINIMUM OF 1" CONNECTION WITH A 3/4" METER.
- PART III - SEWER
- ALL SEWER MAINS SHALL BE D.I.P. AND 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 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, AND SHALL BE SET IN ACCORDANCE WITH DETAIL G 5.41.
 - HOUSES(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.
- VILLAGE OF RIVER HILL**
- SECTION 4, AREA 6
5th ELECTION DISTRICT
- WTS 1-98*
- CONTRACT NO.34-3655-D

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Robert M. Deinger</i> 5-22-98 CHIEF, BUREAU OF UTILITIES DATE	DEPARTMENT OF PLANNING & ZONING HOWARD COUNTY, MARYLAND <i>David Simmons</i> 5/29/98 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE	MRA ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 110 WEST ROAD SUITE 105 TOWSON, MARYLAND 21204 (410) 821-1690 FAX (410) 821-1748		DES: K.D. DRN: E.J. & K.D. CHK: D.M. DATE: 9/25/97	BY: _____ NO. _____ REVISION _____ DATE _____	VICINITY MAP AND GENERAL NOTES 600' SCALE MAP NO. 35 BLOCK NO. 14
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NOTE: HOWARD COUNTY DPW IS HEREBY GRANTED PERMISSION TO ACCESS PRIVATE LOTS SHOWN ON THESE PLANS IN ORDER TO MAINTAIN PUBLIC WATER AND SEWER MAIN CONNECTIONS AT THE CURB STOPS AND/OR CLEANOUTS.

(MCE = MINIMUM CELLAR ELEVATION THAT CAN BE SERVED BY GRAVITY)

PLAN
SCALE: 1"=90'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert J. Dennis 5-22-98
CHIEF - BUREAU OF UTILITIES DATE

DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY, MARYLAND

H. J. [Signature] 6/16/98
CHIEF - DEVELOPMENT ENGINEERING DIVISION DATE

MRA MORRIS & RITCHE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
110 WEST ROAD SUITE 105
TOWSON, MARYLAND 21284
(410) 821-1600
FAX (410) 821-1748

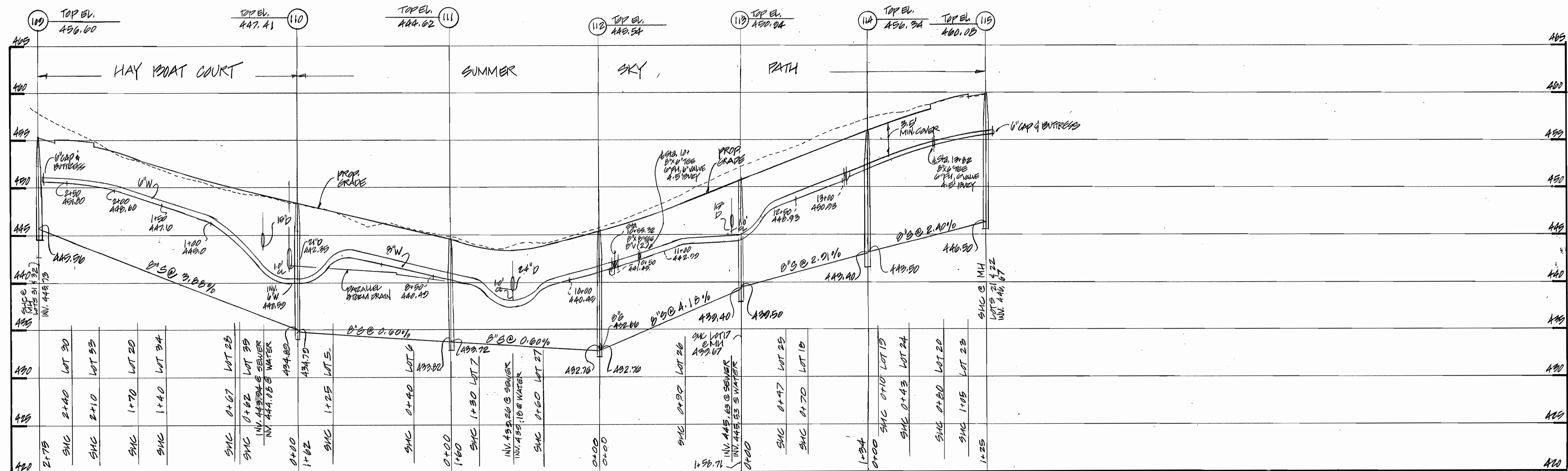
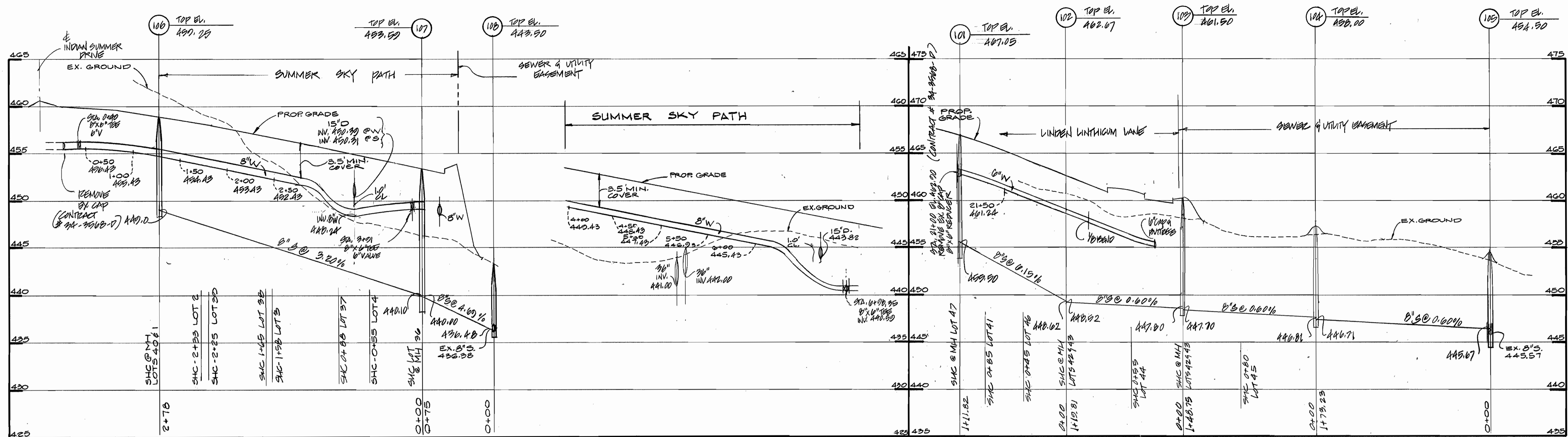


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CHK:	
DATE:	
BY:	
NO.:	
REVISION:	
DATE:	

WATER & SEWER PLAN
600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL
SECTION 4 AREA 6
LOTS 1 THRU 50
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CONTRACT NO. 94-3055-D

SCALE AS SHOWN
SHEET 2 OF 4



PROFILES
SCALE: 1/8" = 1' (HORIZ.)
1/8" = 1' (VERT.)

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

5-22-98
CHIEF, BUREAU OF UTILITIES

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

CHIEF, DEVELOPMENT ENGINEERING DIVISION

MRA
MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS
AND LANDSCAPE ARCHITECTS

110 WEST ROAD SUITE 105
TOWSON, MARYLAND 21284
(410) 821-1690
FAX (410) 821-1748



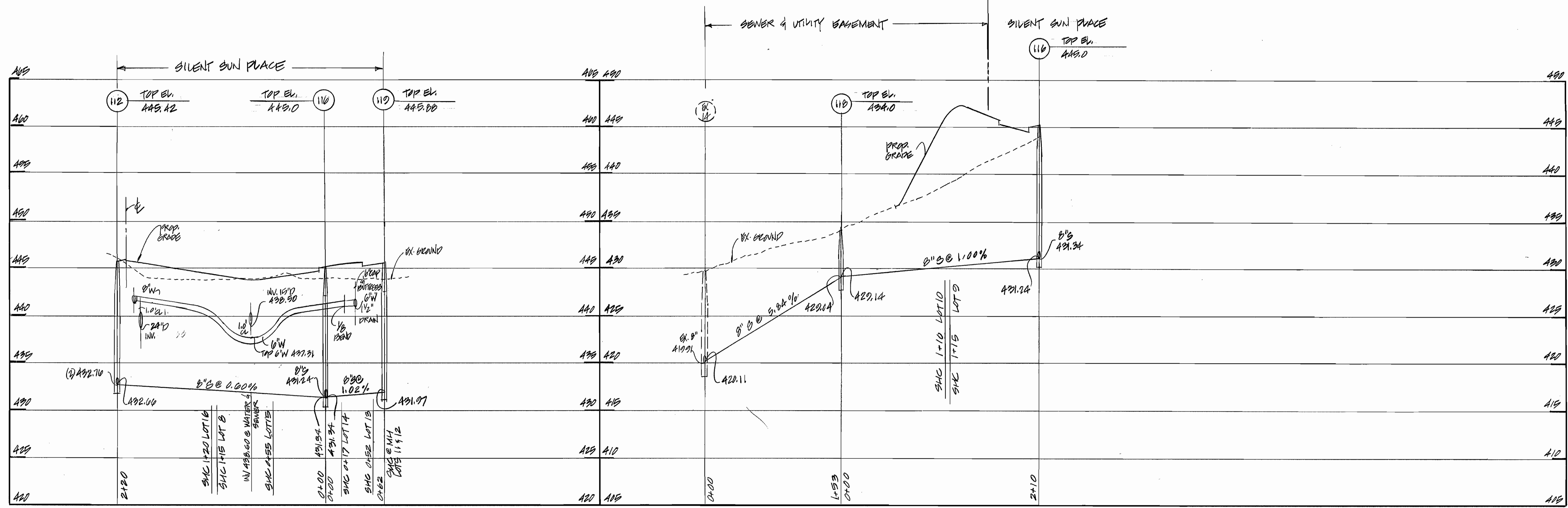
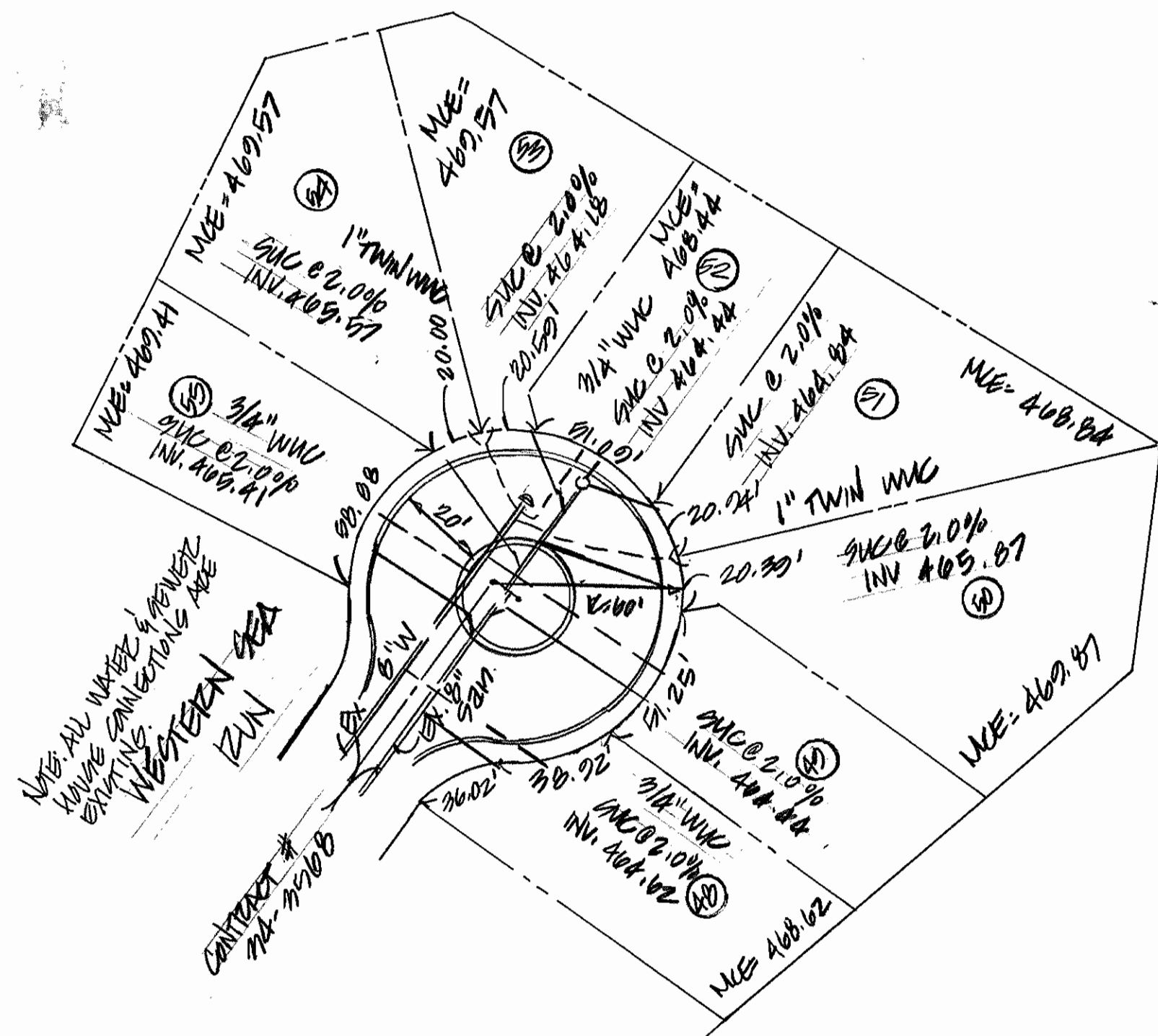
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CHK:	
DATE:	
BY:	
NO.:	
REVISION:	
DATE:	

WATER & SEWER PROFILES

600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL
SECTION 4, AREA 6
5th ELECTION DISTRICT
W/S 1-90
CONTRACT NO. 94-3059-D

SCALE AS SHOWN
SHEET 2 OF 4

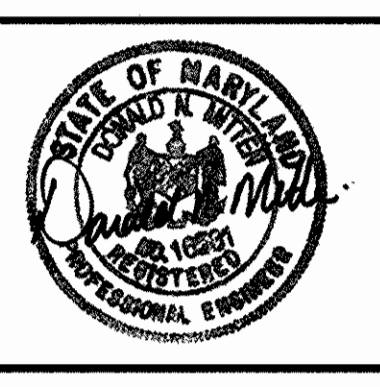


PROFILES
SCALE: 1"=50' (HORIZ.)
1"=5' (VERT.)

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Robert B. ...
CHIEF, BUREAU OF UTILITIES
5-22-98
DATE

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

MRA
MORRIS & RITCHE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS
AND LANDSCAPE ARCHITECTS
110 WEST ROAD SUITE 105
TOWSON, MARYLAND 21204
(410) 821-1690
FAX (410) 821-1748



DES:	
DRN:	
CHK:	
DATE:	
BY:	
NO.:	
REVISION:	
DATE:	

WATER & SEWER PROFILES
600' SCALE MAP NO. 35 BLOCK NO. 14

VILLAGE OF RIVER HILL
SECTION 4, AREA 6
5th ELECTION DISTRICT
LWS 1-89
CONTRACT NO. 9A-3655-D
SCALE AS SHOWN
SHEET 4 OF 4