

STORM DRAIN IMPROVEMENTS AT VISTA ROAD

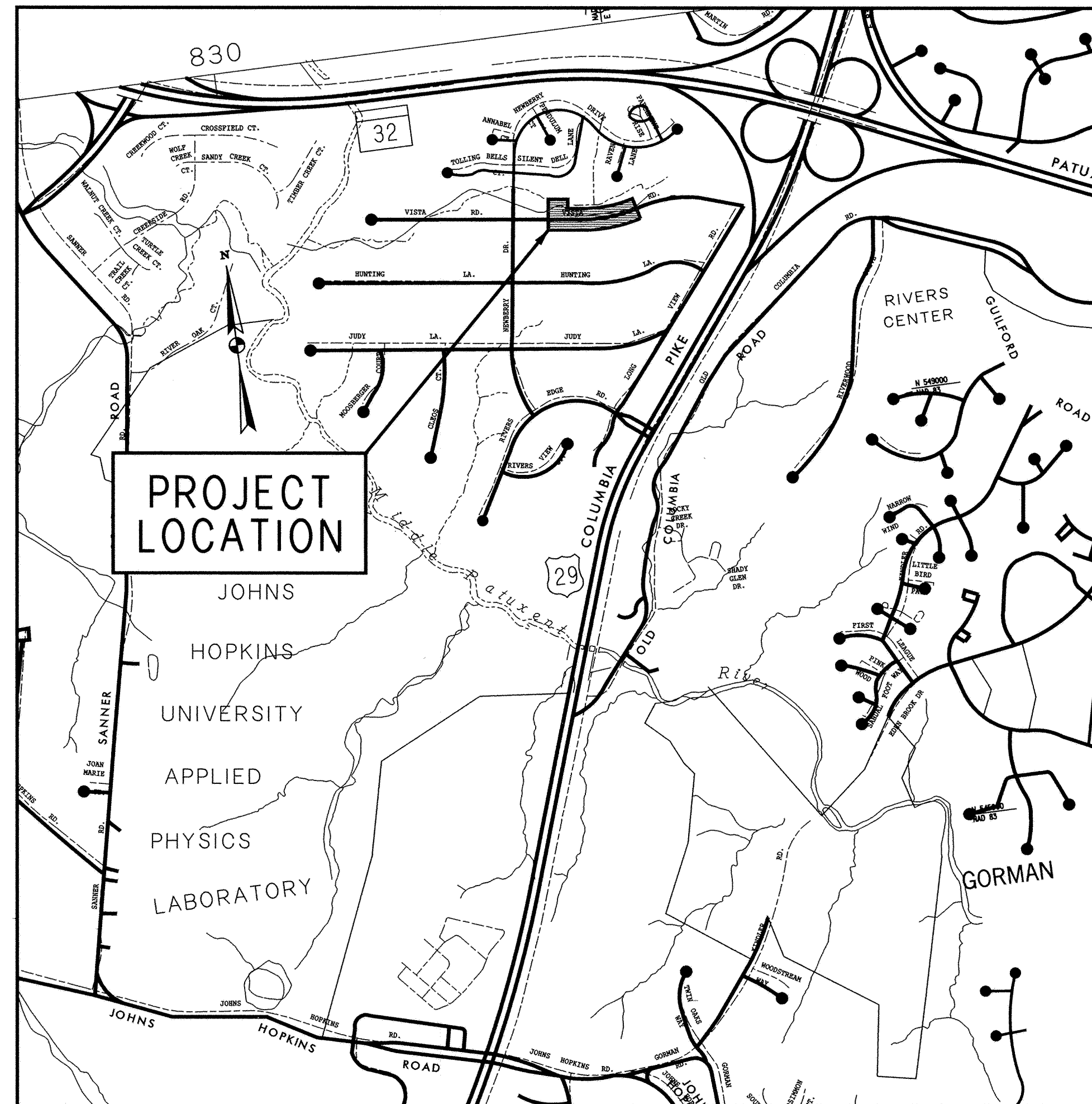
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6. EROSION AND SEDIMENT CONTROL DETAILS

5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND CAPITAL PROJECT NO. D-1108

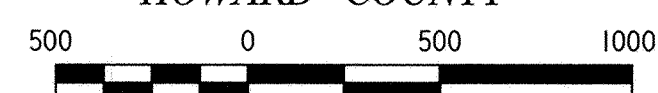
GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AND MISS UTILITY AT 1-800-257-7777 AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK.
2. THE HORIZONTAL AND VERTICAL CONTROL FOR THESE PLANS ARE BASED ON THE MARYLAND STATE SYSTEM OF PLANE COORDINATES AS ESTABLISHED FROM HOWARD COUNTY CONTROL STATION NO. 0057 (ELEVATION 399.583), N 550,835.213, E 1,347,017.689 BEING A MONUMENT SET ON THE WEST SIDE OF RTE 29 AT VISTA AND LONGVIEW ROADS. CONTROL STATION NO. 41C2 (ELEVATION 395.851), N 551,616.404, E 1,348,104.227 BEING A MONUMENT SET IN THE MEDIAN OF RTE 32, 100± FEET EAST OF RTE 29.
3. ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY.
5. ALL WORK SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," ISSUED BY THE WATER RESOURCES ADMINISTRATION AND THE NATURAL RESOURCES CONSERVATION SERVICE.
6. TOPOGRAPHIC SURVEYS WERE PERFORMED BY URS CORPORATION IN 1999.
7. THE PROPERTY LINES WERE TAKEN FROM UTILITY PLANS, PROPERTY PLATES AND TAX MAPS AND CAN NOT BE CONSIDERED ACCURATE.
8. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND THE FIELD CONDITIONS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THEN THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
9. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHOD, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
10. APPROXIMATE UTILITIES ARE SHOWN FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
11. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
12. TWO WAY TRAFFIC SHALL BE MAINTAINED ALONG VISTA ROAD AT ALL TIMES. ACCESS TO PRIVATE DRIVEWAYS SHALL ALSO BE MAINTAINED AT ALL TIMES. REFER TO HOWARD COUNTY STANDARD TE-11 FOR TRAFFIC CONTROL PLAN.
13. ALL PIPE TRENCHES SHALL BE PROPERLY SUPPORTED TO PROTECT PRIVATE PROPERTY.
14. PAVEMENT AND CURBING REMOVED DURING THE INSTALLATION OF THE STORM DRAIN SHALL BE REPLACED IN KIND. THE COST SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PIPE. REFER TO HOWARD COUNTY STANDARD G4.01.
15. MAILBOXES REMOVED TO ACCOMMODATE THE CONSTRUCTION SHALL BE RESET AT THEIR ORIGINAL LOCATION. THIS EFFORT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PIPE.



LOCATION MAP

HOWARD COUNTY



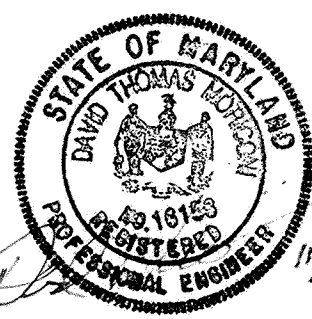
SCALE: 1" = 500'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Janet J. ... 11/25/03
DIRECTOR OF PUBLIC WORKS DATE
Evelyn E. ... 11/24/03
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS DATE

Robert J. ... 11/24/03
CHIEF, BUREAU OF ENGINEERING DATE
William F. ... 11-24-03
CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220



DES: DCD					
DRN: SYC					
CHK: DTM					
DATE: 10/03	BY	NO.	REVISION	DATE	

TITLE SHEET

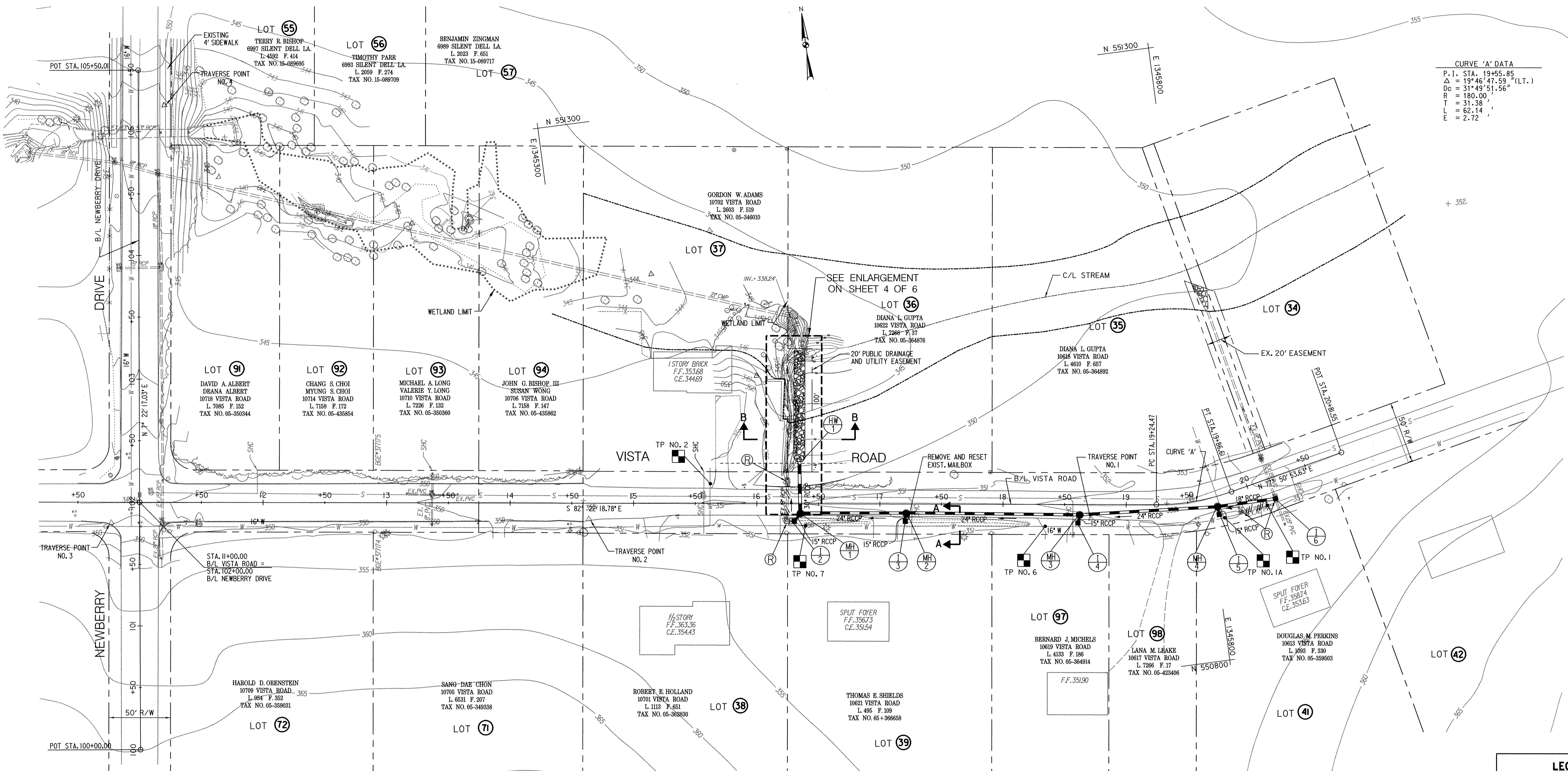
SCALE MAP NO. _____ BLOCK NO. _____

STORM DRAIN IMPROVEMENTS
AT VISTA ROAD

5TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

SCALE
AS SHOWN

SHEET
1 OF 6



CURVE 'A' DATA
 P.I. STA. 19+55.85
 $\Delta = 19^\circ 46' 47.59''$ (LT.)
 $D_c = 31^\circ 43' 51.56''$
 $R = 180.00'$
 $T = 31.38'$
 $L = 62.14'$
 $E = 2.72'$

TEST PIT INFORMATION

TEST PIT NO.	UTILITY	TEST DATE	COVER	TOP ELEV.
1	1"	1-31-2001	4.64	347.80
1A	16"W/1"W	2-2-2001	4.00	348.04
2	3/4"W	1-30-2001	3.56	347.20
6	16"W	1-31-2001	4.92	346.04
7	16"W	1-30-2001	4.16	346.40

TEST PIT NOS. 3 & 4 WERE OUTSIDE THE LIMIT OF WORK.
 TEST PIT NO. 5 WAS NOT PERFORMED.

COORDINATE TABLE

STATION	BASELINE	NORTH	EAST
POT 10+50	VISTA	551,055.2580	1,344,841.2230
PC 19+24.47	VISTA	550,932.5418	1,345,757.5077
PT 19+86.61	VISTA	550,934.9821	1,345,819.2917
POT 20+81.55	VISTA	550,954.9690	1,345,912.1130
POT 100+00.00	NEWBERRY	550,843.6340	1,344,914.6780
POT 102+00.00	NEWBERRY	551,041.9837	1,344,940.3384
POT 105+50.01	NEWBERRY	551,389.0940	1,344,985.2440

TRAVERSE DATA

POINT	NORTH	EAST	ELEVATION	REMARK
1	550,928.5463	1,345,703.4136	351.99	
2	550,981.0390	1,345,299.3020	350.56	
3	551,028.6230	1,344,915.5390	348.84	
4	551,357.9450	1,345,002.4715	347.90	

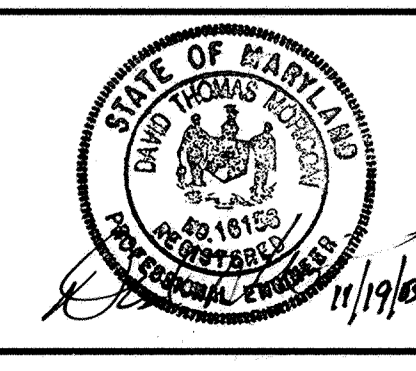
LEGEND

- EXISTING WETLANDS
- 350- EXISTING CONTOURS
- PROPOSED STORM DRAIN
- SHC EXISTING SANITARY HOUSE CONNECTION
- PIN OR IRON PIPE
- △ TRAVERSE POINT
- ABANDON PIPE
- REMOVE PIPE
- Ⓡ REMOVE EXISTING STRUCTURE
- APPROX. 100-YR FLOODPLAIN

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Langdon* 11/24/03
 Evelyn E. Jones 11/24/03
 Chief, Bureau of Engineering
 Chief, Bureau of Highways

PREPARED BY
URS
 4 NORTH PARK DRIVE
 HUNT VALLEY, MARYLAND
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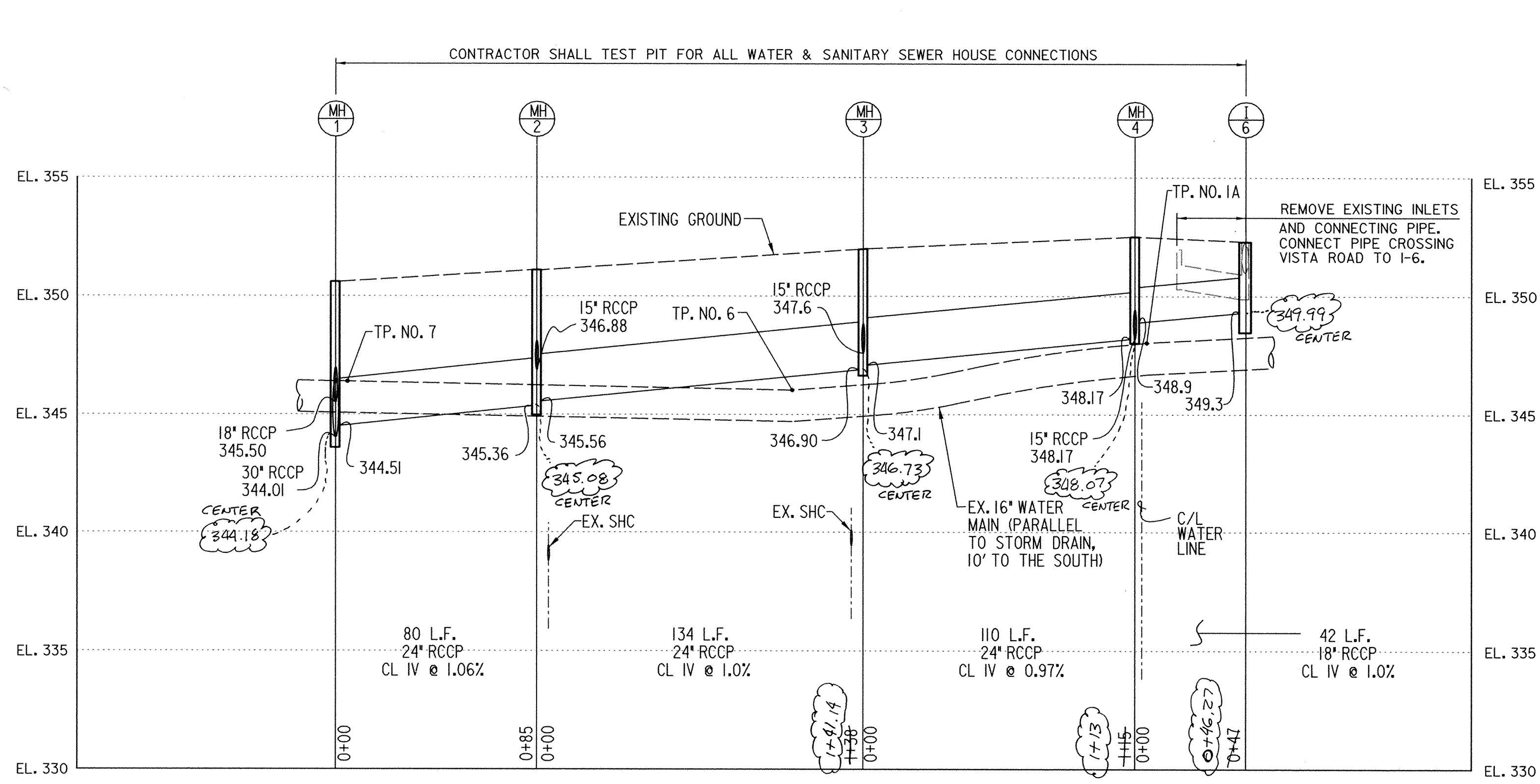
BY	NO.	REVISION	DATE

STORM DRAIN PLAN

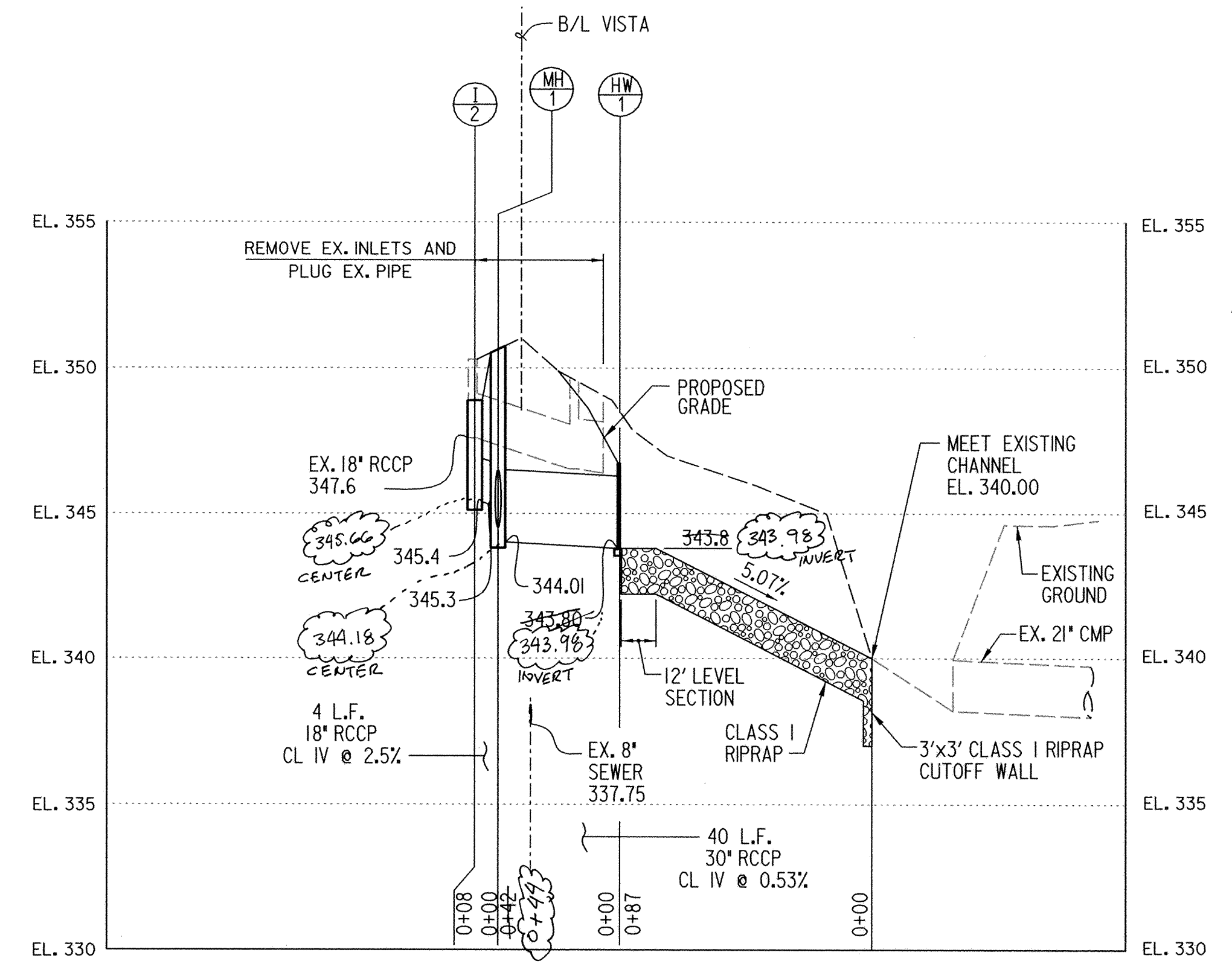
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 5TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

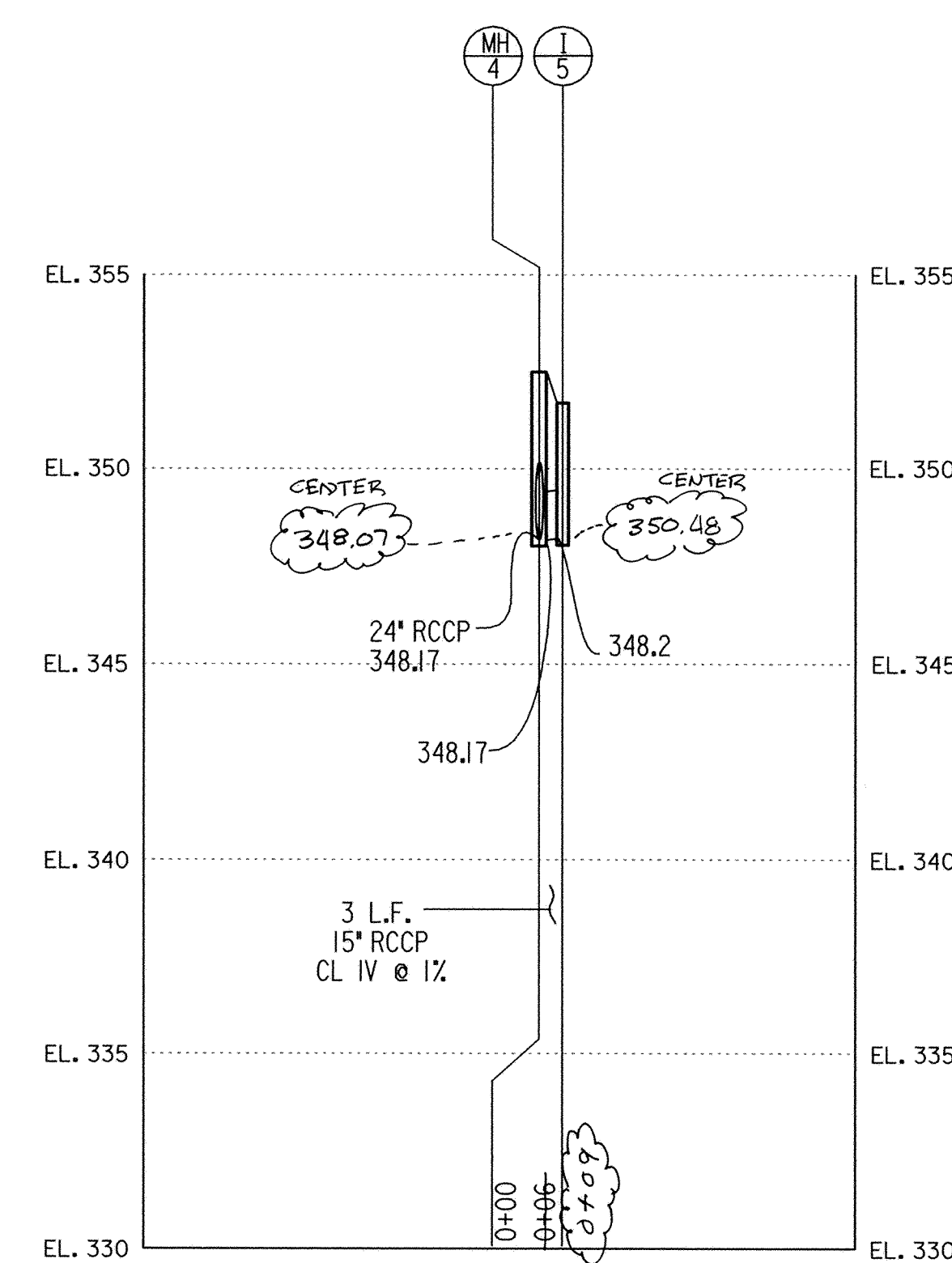
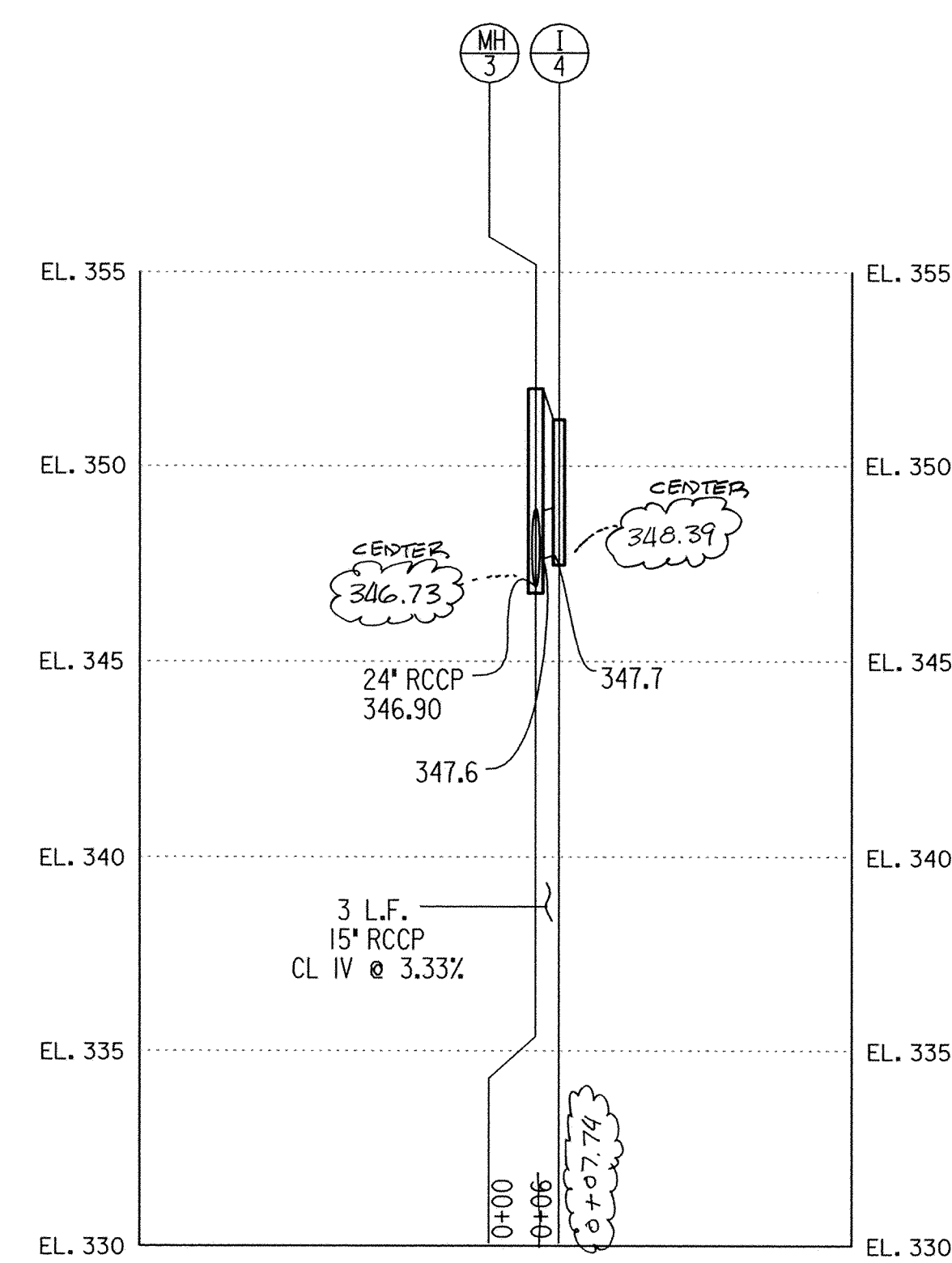
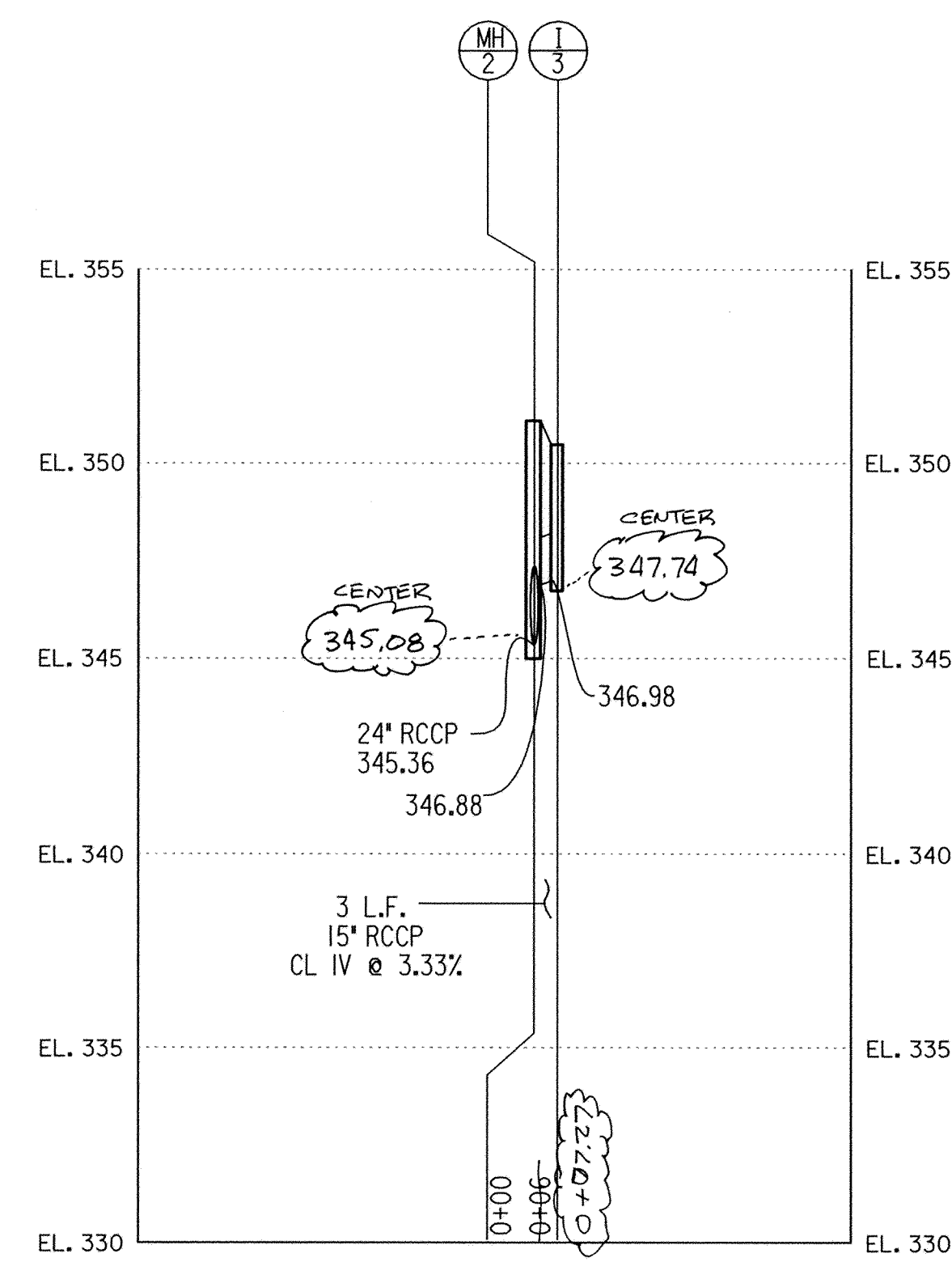
SCALE 1" = 40'
 SHEET 2 OF 6



STORM DRAIN PROFILE
SCALE: HORIZ 1"=40'
VERT 1"=4'

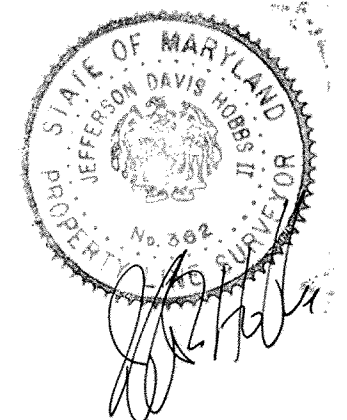


STORM DRAIN PROFILE
SCALE: HORIZ 1"=40'
VERT 1"=4'



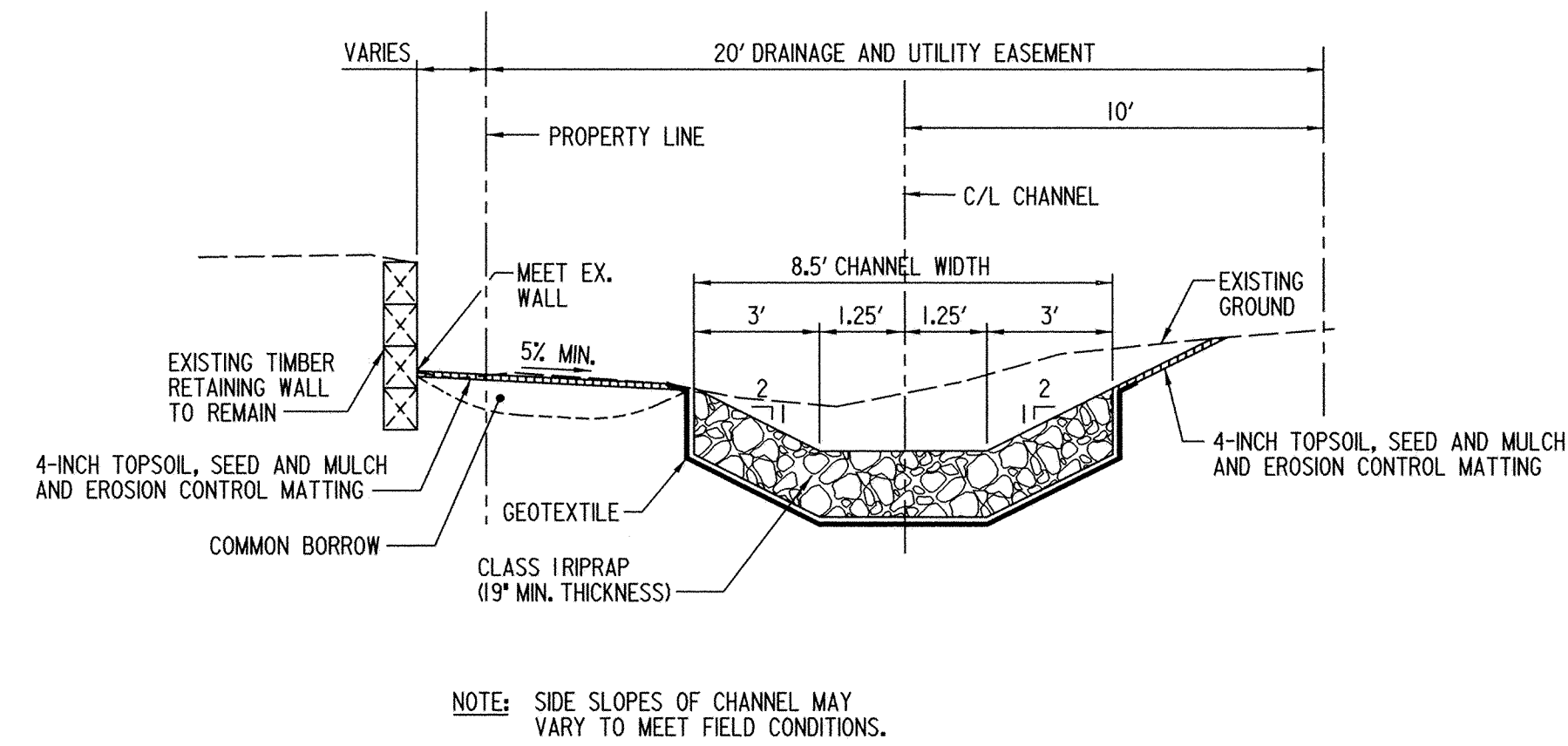
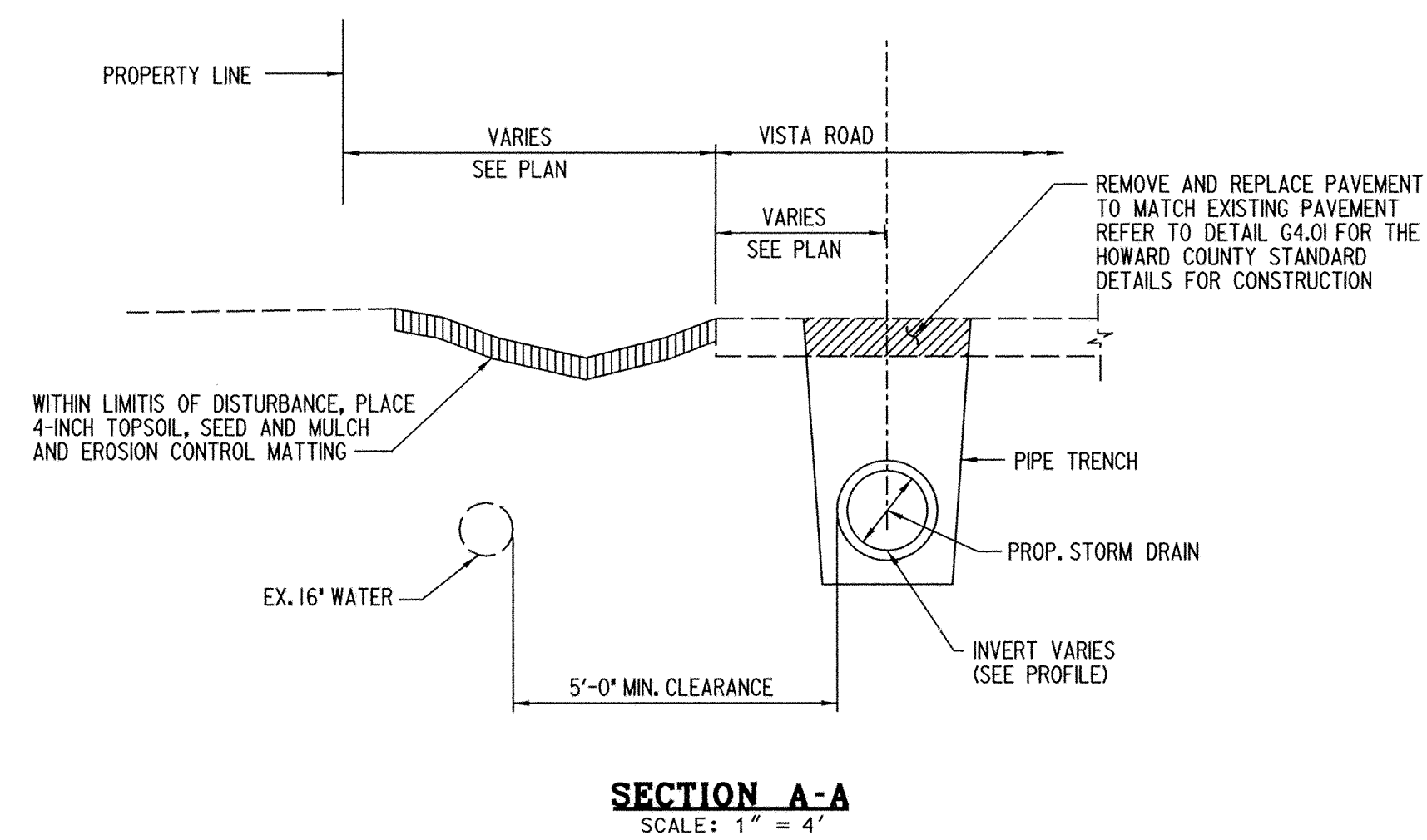
NOTE: AS-BUILT ELEVATIONS ARE SHOWN INSIDE CLOUDS.

I CERTIFY THAT AN AS-BUILT SURVEY WAS PERFORMED ON 11-17-04



NOTICE TO CONTRACTOR
CONTRACTOR SHALL FIELD LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INITIATING ANY GRADING

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 11/25/03 DATE: 11/24/03	PREPARED BY URS 4 NORTH PARK DRIVE HUNT VALLEY, MARYLAND TEL: (410) 785-7220	DES: DCD DRN: SYC CHK: DTM DATE: 10/03	JDH 1 AS-BUILT 11-17-04 BY NO. REVISION DATE	SCALE MAP NO. BLOCK NO.	STORM DRAIN IMPROVEMENTS AT VISTA ROAD 5TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 3 OF 6

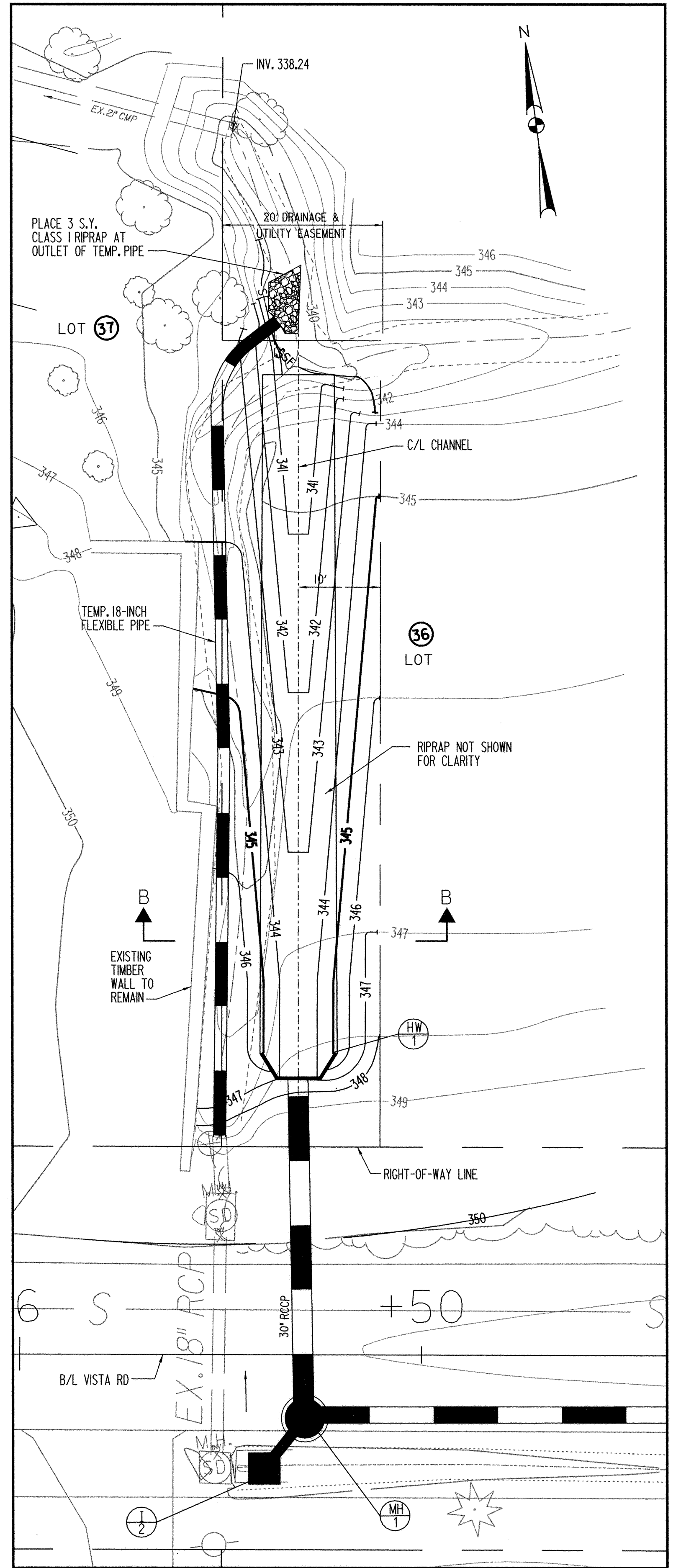


SECTION B-B
SCALE: NONE

STRUCTURE SCHEDULE

STRUCTURE NO.	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	REMARKS
I-2	'S' INLET	STA. 16+30.45, 14.04' RT.	-- --	345.40 (18')	348.0	HOCO STD. DETAIL SD 4.22
I-3	'S' INLET	STA. 17+20.69, 13.93' RT.	-- --	346.98 (15')	350.48	HOCO STD. DETAIL SD 4.22
I-4	'S' INLET	STA. 18+60.87, 14.90' RT.	-- --	347.70 (15')	351.2	HOCO STD. DETAIL SD 4.22
I-5	'S' INLET	STA. 19+72.26, 14+52' RT.	-- --	348.20 (15')	351.65	HOCO STD. DETAIL SD 4.22
I-6	'S' INLET	STA. 20+81.59, 17.21' RT.	-- --	348.8 (24')	352.3	HOCO STD. DETAIL SD 4.22
HW-1	TYPE 'A' HEADWALL	STA. 16+34.50, 34.50' LT.	-- --	343.8 (30')	--	HOCO STD. DETAIL SD 5.11
MH-1	SHALLOW BRICK MANHOLE	STA. 16+35.49, 7.83' RT.	344.51 (30')	344.01 (30')	350.6	HOCO STD. DETAIL C5.05
MH-2	SHALLOW BRICK MANHOLE	STA. 17+21.32, 7.44' RT.	345.56 (24')	345.36 (24')	351.1	HOCO STD. DETAIL C5.05
MH-3	SHALLOW BRICK MANHOLE	STA. 18+62.32, 8.44' RT.	347.10 (24')	346.90 (24')	352.0	HOCO STD. DETAIL C5.05
MH-4	SHALLOW BRICK MANHOLE	STA. 19+72.58, 8.10' RT.	348.40 (24')	348.17 (24')	352.5	HOCO STD. DETAIL C5.05

• ALL TOP AND INVERT ELEVATIONS SHALL BE FIELD VERIFIED



PART PLAN
SCALE: 1" = 10'

HORIZ 1" = 40'
VERT 1" = 4'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *Janet...* 11/25/03
 Chief, Bureau of Engineering: *Robert...* 11/24/03

Chief, Division of Transportation and Special Projects: *Evelyn...* 11/24/03
 Chief, Bureau of Highways: *William...* 11-24-03

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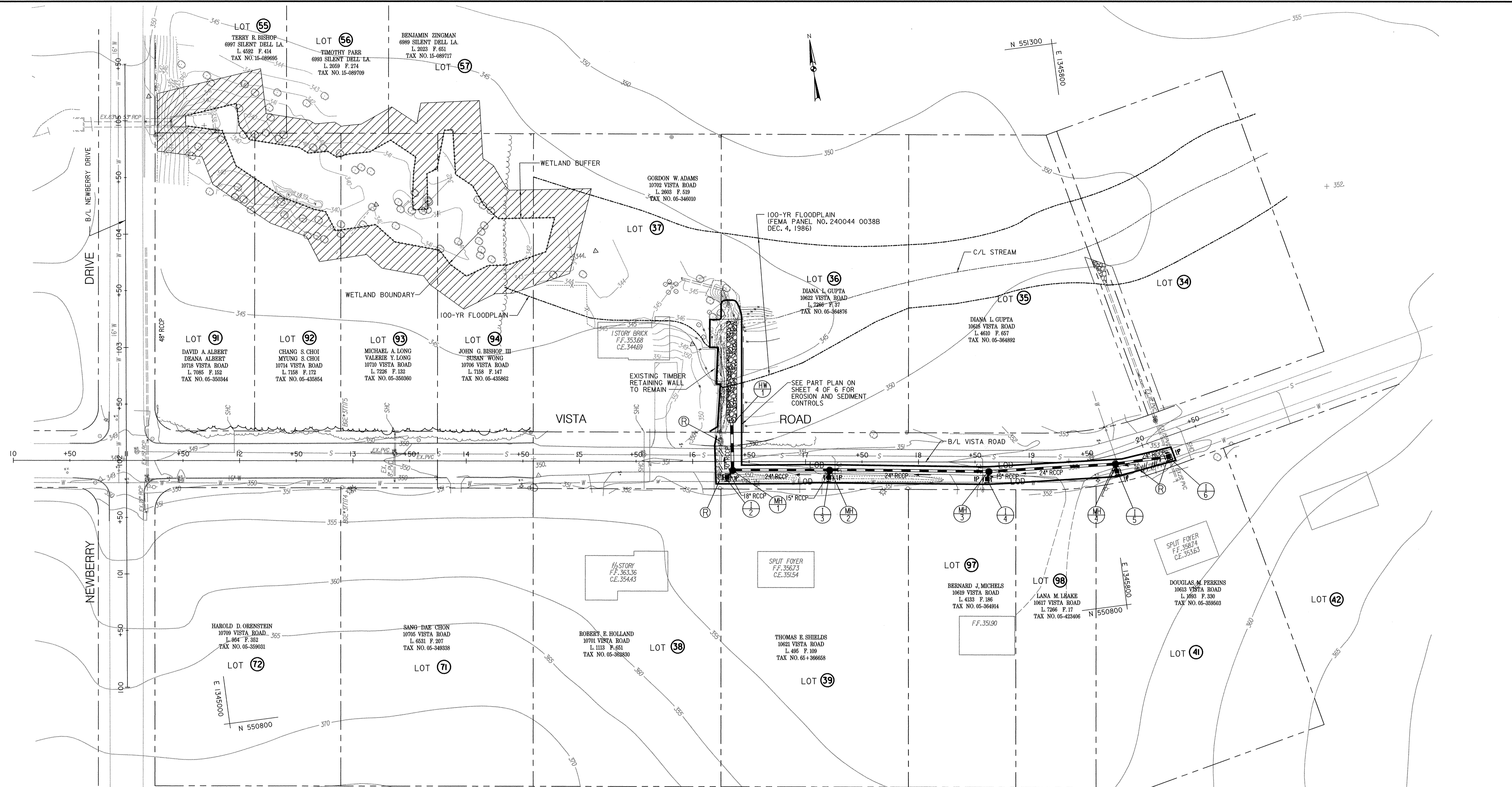
EROSION AND SEDIMENT CONTROL DETAILS

SCALE MAP NO. _____ BLOCK NO. _____

STORM DRAIN IMPROVEMENTS AT VISTA ROAD

5TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 6



STAGING OF MATERIALS MAY TAKE PLACE WITHIN THE LIMIT OF DISTURBANCE. ALL MATERIALS SHALL BE SECURED AND PROTECTED FROM THE PUBLIC AT ALL TIMES. LAWNS AND PAVEMENT DISTURBED BY CONSTRUCTION SHALL BE REPAIRED TO ITS PREDEVELOPMENT CONDITION.

LEGEND	
	SILT FENCE
	INLET PROTECTION
	LIMIT OF DISTURBANCE
	PROP. STORM DRAIN
	ABANDON PIPE
	REMOVE PIPE
	REMOVE EXIST. STRUCTURES
	WETLAND BUFFER

BY THE DEVELOPER:
 I / WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT

Evelyn E. Jones 11/24/03
 DEVELOPER DATE

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT

William J. Anderson 11/19/03
 ENGINEER DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Juan Moya 11/26/03
 USDA NATURAL RESOURCES CONSERVATION SERVICE DATE

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

William J. Anderson 11/26/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

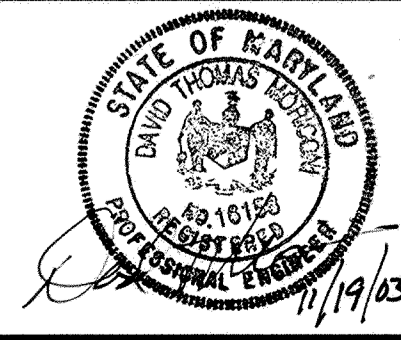
Evelyn E. Jones 11/25/03
 DIRECTOR OF PUBLIC WORKS DATE

William J. Anderson 11/24/03
 CHIEF, BUREAU OF ENGINEERING DATE

William J. Anderson 11/24/03
 CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS DATE

William J. Anderson 11/24/03
 CHIEF, BUREAU OF HIGHWAYS DATE

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EROSION AND SEDIMENT CONTROL PLAN

SCALE MAP NO. _____ BLOCK NO. _____

STORM DRAIN IMPROVEMENTS AT VISTA ROAD

5TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

SCALE 1" = 40'

SHEET 5 OF 6

