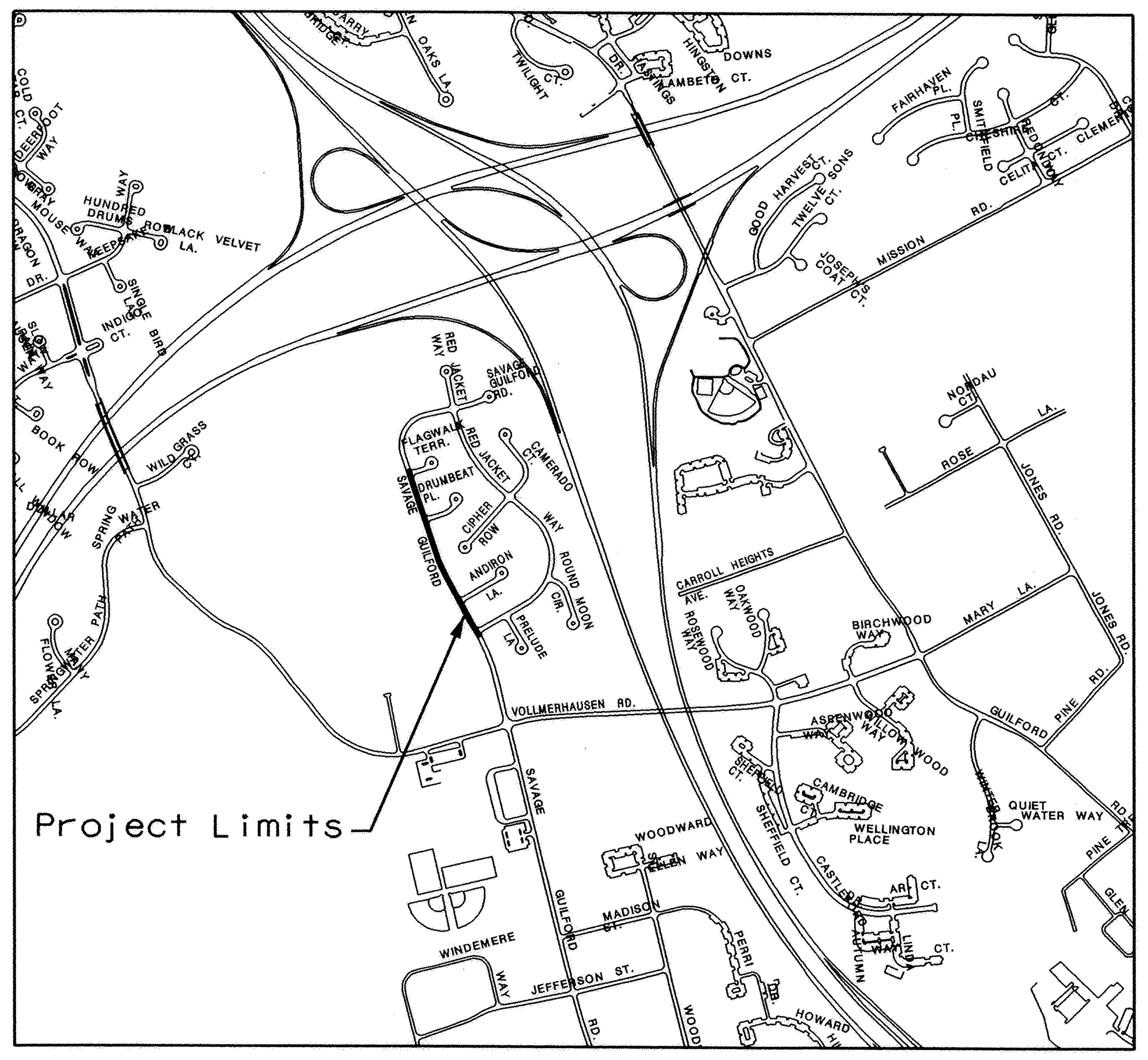
FINAL DESIGN

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT D – 1109
SAVAGE GUILFORD ROAD DRAINAGE IMPROVEMENTS

SHEET INDEX.



VICINITY MAP
SCALE 1" = 1000'

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Approved Howard S.C.D. Date 10/30/03

Reviewed for HOWARD S.C.D. and meets Technical Requirements Date 10-30-03
Signature
USDA, NATURAL RESOURCES CONSERVATION SERVICE

GENERAL NOTES.

1. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGES OR ADJUSTMENTS TO ANY RESIDENTIAL DRIVEWAYS, APRONS, DOWN SPOUTS, ROOF DRAIN LEADERS, OR UNDERDRAINS WHILE RECONSTRUCTING PROPOSED CURB AND DRIVEWAY APRONS.

2. THE CONTRACTOR IS RESPONSIBLE FOR THE RELOCATION AND/OR REPLACEMENT OF ANY MAIL BOXES OR LETTER BOXES, FENCES, LANDSCAPING OF ANY SIGNS REMOVED OR DAMAGED DURING THE COURSE OF CONSTRUCTION.

3. THE CONTRACTOR SHALL REPLACE OR REPAIR ANY ROAD PAVEMENT DAMAGED DURING THE COURSE OF CONSTRUCTION AS DIRECTED BY THE HOWARD COUNTY INSPECTOR.

4. ALL RESIDENTIAL DRIVEWAYS, APRONS, AND PUBLIC ROADWAYS SHALL BE KEPT CLEAN AND FREE OF ALL CONSTRUCTION RELATED DEBRIS.

5. AT NO TIME SHALL ANY RESIDENTIAL DRIVEWAYS BE BLOCKED BY CONSTRUCTION VEHICLES AND/OR MATERIALS.

6. UNDER THE DIRECTION OF HOWARD COUNTY INSPECTORS, ONE TRAVEL LANE MAY BE CLOSED DURING NON-RUSH HOUR PERIODS. THIS TEMPORARY CLOSURE MUST NOT INHIBIT EMERGENCY VEHICLE INGRESS/EGRESS

7. AT NO TIME SHALL CONTRACTOR ENTER PRIVATE PROPERTY WITH CONSTRUCTION VEHICLES, EQUIPMENT, MATERIALS AND/OR WORK CREWS.

8. BENCHMARKS
BENCHMARK #1 - TRAV. PT. # 114 PK NAIL.
BENCHMARK #2 - TRAV. PT. # 106 REBAR WITH CAP.
BENCHMARK #3 - TRAV. PT. # 103 PK NAIL.

9. TOP ELEVATIONS FOR THE PROPOSED INLETS AND MANHOLES ARE PROVIDED ON THE PLANS AND/OR PROFILES. CONTRACTOR SHALL ADJUST FINAL ELEVATIONS TO FINISHED GRADE AS NECESSARY.

10. MARYLAND STATE REFERENCE SYSTEM NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STA. NO. 47-C1 & 47-C4

11. CONTRACTOR TO ADJUST GRADE AS REQUIRED TO MEET FIELD CONDITIONS, TO ENSURE ADEQUATE DRAINAGE TO EXISTING AND PROPOSED STORM DRAIN STRUCTURES.

12. COORDINATES ARE BASED ON THE MARYLAND STATE GRID SYSTEM.

13. THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ON THE PLANS ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR BEFORE STARTING CONSTRUCTION. NEITHER THE ENGINEER NOR THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS WARRANT OR GUARANTEE THE COMPLETENESS OR CORRECTNESS OF THE INFORMATION SHOWN.

14. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES. ANY DAMAGE DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. IF CLEARANCES OF UTILITY CROSSINGS ARE LESS THAN SPECIFIED ON THIS PLAN OR LESS THAN 12" WHEN NOT SPECIFIED. THE CONTRACTOR MUST CONTACT THE COUNTY'S INSPECTOR AND THE APPROPRIATE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION.

15. TEST PITS SHALL BE DUG AT ALL UTILITY CROSSINGS TO DETERMINE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF UTILITIES. TEST PITS SHALL BE DUG A SUFFICIENT AMOUNT OF TIME IN ADVANCE OF CONSTRUCTION OR TRENCHING OPERATION, IN ORDER TO ALLOW FOR NECESSARY ADJUSTMENTS.

16. ALL UTILITY POLES MUST BE CLEARED BY 5 FEET. IF THE STORM DRAIN PIPING OR STRUCTURE WORK IS WITHIN FIVE FEET OF A UTILITY POLE. THE POLE MUST BRACED OR THE PROPOSED STORM DRAIN SHALL BE PLACED BY TUNNELING. ALL COST FOR TUNNELING AND/OR BRACING ARE TO BE INCLUDED IN THE UNIT PRICE BID FOR FURNISHING AND LYING THE STORM DRAIN PIPE.

17. ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS.

18. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE COUNTY INSPECTOR. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE FOR FURNISHING AND LAYING STORM DRAIN PIPE.

19. PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS, AND THE LATEST EDITION OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND ALL SUBSEQUENT ADDENDUMS.

20. EXISTING WATER HOUSE SERVICES, THAT ARE IN CONFLICT WITH THE PROPOSED STORM DRAINAGE FACILITIES SHALL BE RELOCATED PER COUNTY STANDARDS WITH 36" MINIMUM COVER AND 12" MINIMUM CLEARANCE TO STORM DRAIN PIPE.

21. FOR DETAILS NOT SHOWN ON DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, THE CONTRACTOR SHALL ABIDE BY THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION".

22. ALL SLOPES AND/OR DISTURBED AREAS SHALL RECEIVE 2-INCH DEPTH OF TOPSOIL BEFORE SEEDING AND MULCHING.

23. LOCATION POINTS FOR INLETS, MANHOLES AND STRUCTURES

ITEMS:	HORIZONTAL LOC:	VERTICAL LOC:
CURB TYPE INLETS	CENTER FACE OF CURB	TOP OF CURB
MANHOLES	CENTER OF COVER	TOP OR COVER

24. THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN VICINITY OF NEW STORM DRAIN. COST SHALL BE INCLUDED IN THE UNITS PRICES BID FOR STORM DRAIN ITEMS. SOME TEST PITS WERE EXCAVATED DURING DESIGN. REFERENCE SPECIFICATIONS FOR RESULTS.

25. STANDARD DETAILS FOR THIS CONTRACT SHALL BE THE HOWARD COUNTY STANDARD DETAILS AS SUPPLEMENTED BY THE MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD DETAILS.

26. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN HEREON:
MISS UTILITY 1-800-257-7777
BALTIMORE GAS & ELECTRIC CO., UNDERGROUND ELECTRICAL DISTRIBUTION ENGINEERING DAMAGE CONTROL 234-6313
BALTIMORE GAS & ELECTRIC CO., UNDERGROUND GAS DISTRIBUTION ENGINEERING 234-5533
VERIZON TELEPHONE CO., 725-9976
COLONIAL PIPELINE COMPANY 781-4641
COMCAST COMMUNICATION 461-1152
HOWARD COUNTY BUREAU OF UTILITIES 313-4900
HOWARD COUNTY TRAFFIC DIVISION 313-2430
HOWARD COUNTY SURVEYING AND DRAFTING DIVISION 313-2417
HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION 313-1880

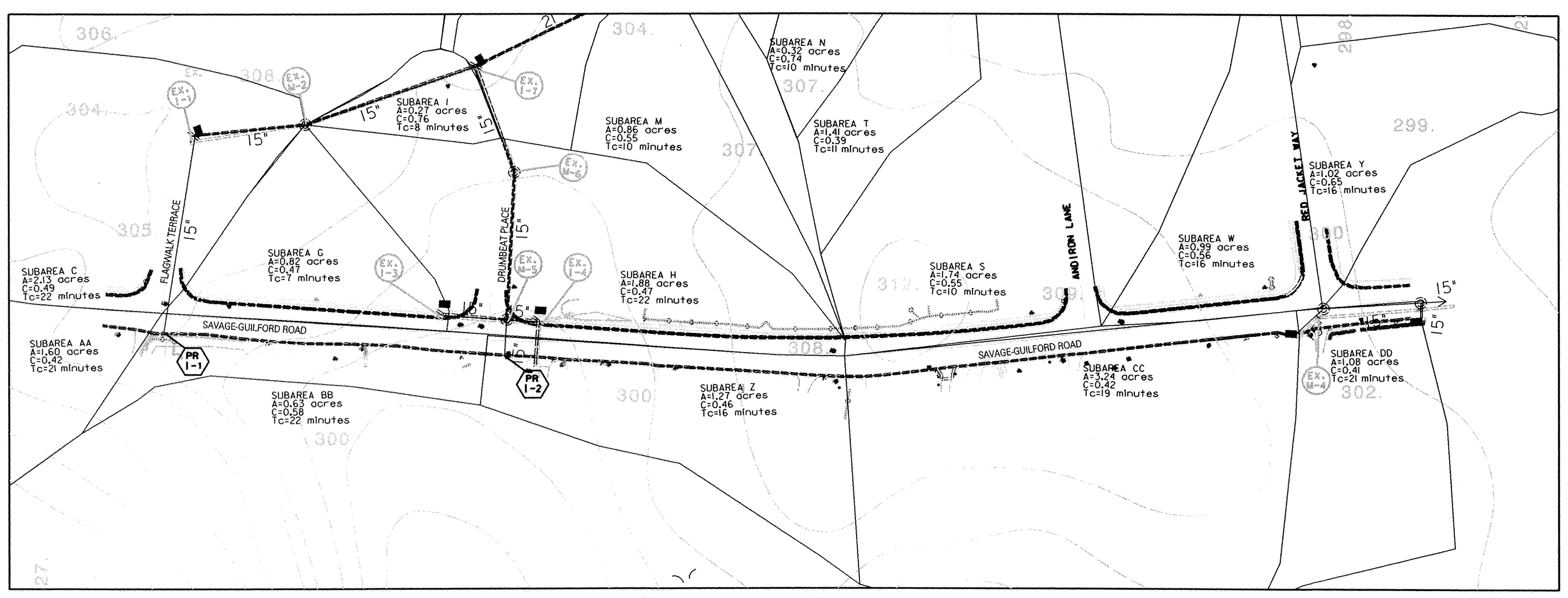
27. THE CONTRACTOR SHALL REPLACE ALL STEPS AND LEAD WALKS IN KIND DISTURBED IN CONSTRUCTION. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENT AS REQUIRED BY THE HOWARD COUNTY INSPECTOR.

28. IF COBBLESTONES ARE ENCOUNTERED, CONTRACTOR SHALL MAKE FIELD BUREAU OF HIGHWAYS MAINTENANCE YARD FOR STOCKPILING.

29. THE CONTRACTOR TO ADJUST ALL APPURTENANCES LOCATED IN THE PAVEMENT TO MATCH FINAL PAVEMENT ELEVATION.

30. THE CONTRACTOR SHALL RESTORE ALL SIDEWALKS AND CURBING DISTURBED IN CONSTRUCTION. THE CONTRACTOR SHALL PROVIDED TEMPORARY ACCESS AS REQUIRED.

31. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.



DRAINAGE AREA
SCALE 1" = 100'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 10/30/03	CHIEF, BUREAU OF ENGINEERING — DATE 10/30/03
CHIEF, BUREAU OF HIGHWAYS — DATE 10-30-03	CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION — DATE 10/30/03

Baker
Michael Baker Jr., Inc.

MICHAEL BAKER JR. INC.
Consulting Engineers
801 Cromwell Park Drive
Suite 110
Glen Burnie, Maryland 21061
(410) 424-2210

DES: M.A.F.
DRN: J.O.T.
CHK: JVB
DATE: 10/28/03

BY	NO.		DATE

DRAINAGE IMPROVEMENTS
PROJECT NO.
D-1109

TITLE SHEET
SAVAGE-GUILFORD ROAD
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

EXISTING BUILDING/HOUSE No
1294X EXISTING SPOT ELEVATION
305 FT EXISTING CONTOURS
EXISTING GUARD RAIL
EXISTING WALL
C — T — EXISTING CABLE AND TV LINE
EXISTING ELECTRIC LINE
EXISTING FENCE
EXISTING TREE
EXISTING TREELINE
EXISTING EDGE OF PAVEMENT
EXISTING CURB
EXISTING SIDEWALK
M.H. (SD) EXISTING STORM DRAIN MANHOLE
M.H. (SS) EXISTING SANITARY SEWER MANHOLE
S EXISTING SANITARY SEWER
W EXISTING WATER LINE
W.M. EXISTING WATER METER/WHC
G.V. EXISTING WATER VALVE/FIRE HYDRANT
EXISTING GAS VALVE/METER/GHC
G EXISTING GAS LINE
TEL EXISTING OVERHEAD TELEPHONE
TEL EXISTING OVERHEAD ELECTRIC
EXISTING PHONE/POWER POLE
EXISTING SIGN
F/C FACE OF CURB
E/L EDGE OF LANE
E/P EDGE OF PAVEMENT
℄ CENTER LINE
EXISTING RIGHT OF WAY LINE (LOCATION APPROXIMATE)
PROPOSED CONCRETE APRON WITH SIDEWALK (SEE DETAIL SHEET 7)
PROPOSED ASPHALT APRON (SEE DETAIL SHEET 7)
PROPOSED CURB INLET (SUMP)
PROPOSED CURB INLET (GRADE)
PROPOSED STANDARD 7" COMBINATION CURB AND GUTTER (SEE SHEET 7)
PROPOSED STORM DRAIN
PR I-1 PROP. STORM DRAIN STRUCTURE #
AREA TO BE REGRADED
REMOVED & REPLACED ASPHALT PAVEMENT (SEE DETAIL SHEET 7)
1 TEST PIT (SEE SPECIFICATIONS)

REPLACE SOD
REMOVE & REPLACE EX. SIDEWALK
CURB REMOVAL & REPLACEMENT (SEE DETAIL SHEET 7)
AS NECESARY. MILL AND RESURFACE (1" MIN. SURFACE COARSE) OVER TACK COAT TO PROVIDE POSITIVE DRAINAGE (1% MIN. CROSS- SLOPE)
X 300.22 PROPOSED SPOT ELEVATIONS

LOT 132 LOT 131 LOT 130 LOT 134 LOT 135 LOT 136 LOT 140 LOT 138 LOT 137 LOT 146 LOT 147 LOT

EASEMENT DRAINAGE

FLAGWALK TERRACE

DRUMBEAT PLACE

SAVAGE-GUILFORD ROAD

MATCH LINE STA. 4+39.00

BM #1
N=541374.54
E=1360697.27
ELV.=304.69'

BM #2
N=541248.56
E=1361006.71
ELV.=304.90'

N=541438.70
E=1360662.17

MATCH EXISTING SIDEWALK, PROVIDE EXPANSION JOINT
REMOVE & REPLACE EX. SIDEWALK (USE HOWARD COUNTY STD R-3.05)
CURB REMOVAL, REPLACE WITH STANDARD CURB (SEE DETAIL SHEET 7) MATCH TOP AND BACK OF EXISTING CURB
REPLACE WITH SOD
REMOVE AND REPLACE THE EXISTING TREE IN KIND (SEE NOTE 13)
REMOVE AND REPLACE EX. MAILBOX
REMOVE AND REPLACE THE EXISTING TREE IN KIND (SEE NOTE 13)
MATCH EXISTING SIDEWALK PROVIDE EXPANSION JOINT
REPLACE WITH SOD
REMOVE AND REPLACE
ADD CURB CUT AT EXISTING WALKWAY
CURB REMOVAL, REPLACE WITH STANDARD CURB (SEE DETAIL SHEET 7) MATCH TOP AND BACK OF EXISTING CURB
CUT TRENCH AROUND EXISTING FIRE HYDRANT, MAINTAINING MIN. 1' HORIZONTAL CLEARANCE. CLOSE EX. VALVE TO HYDRANT AND DEPRESSURIZE HYDRANT BEFORE CUTTING TRENCH.
HYDRANT MAY HAVE TO BE RESTRAINED REFERENCE HOWARD COUNTY STANDARD DETAILS W2.11 AND W2.13 ON SHEET 4
REPLACE EX. 15" RCP WITH 18" RCP
NEW DRIVEWAY ENTRANCE (LOCATION IS APPROXIMATE) MATCH EXISTING DRIVEWAY WIDTH. (TYP.)
WATERLINE RELOCATION (IF NECESARY) BY OTHERS
WOODEN FENCE
MATCH EXISTING PAVEMENT
BEGIN PR CURB AND GUTTER AT END OF EXISTING STA. -1+70.00 +/- OFFSET = 20.00 R BACK OF CURB
STA. 0+00 OFFSET = 17.00 R BACK OF CURB

18" RCP (CLASS IV)
15" RCP (CLASS IV)
EX. 15" RCP
EX. 18" RCP
EX. 15" RCP (CLASS V)
CONC. SIDEWALK
CONCRETE DRIVEWAY
SIGN
TOC 300.00
TOC 299.75
TOC 299.30
TOC 300.05
FLOWLINE 300.10
FLOWLINE 300.07
FLOWLINE 300.01
FLOWLINE 300.11
FLOWLINE 300.22
PR I-1
PR I-2
C ROSS RAINBURG E.T. UX L. 359 F. 395
RAYMOND EARP L. 154 F. 186
FRANK VOLLEMERHAUSEN ET. UX. L. 680 F. 238
FRANK VOLLEMERHAUSEN ET. UX. L. 242 F. 45
FRANK VOLLEMERHAUSEN ET. L. 377 F. 423
COLONY SQUARE INVESTMENTS L. 710 F. 125
0+00 1+00 2+00 3+00 4+00 5+00

CONSTRUCTION NOTES:

1. CONTRACTOR SHALL ADJUST ALL APPURTENANCES WITH THE LIMITS OF WORK TO FINAL GRADE.
2. PROVIDE POSITIVE GRADE IN ALL NEWLY REGARDED AREAS.
3. CONTRACTOR SHALL RESET ANY FENCES AND MAILBOXES IMPACTED BY REGRADING. NEW FENCE SHALL NOT BE CLOSER TO THE PROPOSED CURB THEN 3 FEET.
4. CONCRETE DRIVEWAY APRONS SHALL BE PROVIDED WHERE INDICATED ON THE PLANS. AT ALL OTHER DRIVEWAY LOCATIONS, CONTRACTOR SHALL SAW CUT EXISTING CONCRETE OR ASPHALT APRONS 1" MINIMUM OUTSIDE OF THE NEW PAVEMENT LIMITS, OR AS NECESSARY TO PROVIDED SMOOTH BITUMINOUS PAVEMENT TRANSITION FROM PROPOSED PAVEMENT ELEVATIONS TO EXISTING DRIVEWAY.
5. CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ANY SIDEWALKS, LEADWALKS OR STEPS IMPACTED BY GRADING OPERATIONS AND EXTEND EXISTING LEADWALK TO THE NEW PROPOSED CURB LOCATIONS.
6. CONTRACTOR SHALL CLEAR ANY BRUSH OR OVERHANG BRANCHES WITHING 3 FEET OF PROPOSED CURB.
7. UNLESS OTHERWISE INDICATED ON THE PLANS, CONTRACTOR SHALL MAINTAIN EXISTING RETAINING WALLS AND PROVIDE BRACING AS NECESSARY TO PROTECT WALLS DURING CONSTRUCTION OPERATIONS IN CLOSEE VICINITY OF EXISTING WALLS.
8. ALL LOCATIONS WHERE NEW PROPOSED PAVEMENT ABUTS RETAINING WALLS, CONTRACTOR SHALLL ENSURE PROPER TRANSITION IN ELEVATION FROM PROPOSED PAVEMENT TO THE EXISTING STEPS. THE MAXIMUM DIFFERENCE IN ELEVATION SHALL NOT BE LARGER THAN EXISTING STEP RISER.
9. TIE ANY EXISTING ROOF DRAIN INTO PROPOSED STORM DRAIN SYSTEM.
10. ALL UTILITIES TRENCHES ARE TO BE PERMANENTLY COMPACTED IN ACCORDANCE WITH AASHTO T-180 BEFORE PAVEMENT IS RESTORED.
11. TRENCHING OPERATIONS IS TO BE LIMITED TO THE LENGTHS WHICH WILL BE BACKFILLED AND STABILIZED IN ANY WORKING DAY.
12. SPOIL FROM TRENCHING OPERATIONS IS TO BE PLACED ON THE UPHILL SIDE OF CONSTRUCTION WHERE POSSIBLE.
13. CONTRACTOR SHALL CONTACT BUREAU OF HIGHWAY FOR NEW LOCATION.
14. PROPERTY BOUNDERIES SHOWN ARE APPROXIMATE FROM INFORMATION PROVIDED BY HOWARD COUNTY. NO BOUNDARY SURVEY WAS CONDUCTED. CONTRACTOR SHALL VERIFY PROPERTY BOUNDARIES AND OBTAIN ANY TEMPORARY CONSTRUCTION EASEMENTS REQUIRED TO COMPLETE THE WORK AS NEEDED.

N MARYLAND STATE PLANE NAD 83/91

-40 -20 0 20 40
SCALE 1" = 20'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR, OF PUBLIC WORKS — DATE 10/30/03
CHIEF, BUREAU OF ENGINEERING — DATE 10/30/03
CHIEF, BUREAU OF HIGHWAYS — DATE 10-30-03
CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION — DATE 10/30/03

Baker
Michael Baker Jr., Inc.
MICHAEL BAKER JR. INC.
Consulting Engineers
801 Cromwell Park Drive
Suite 110
Glen Burnie, Maryland 21061
(410) 424-2210

STATE OF MARYLAND — JOSEPH V. BRADLEY — No. 22822 — REGISTERED PROFESSIONAL ENGINEER

DES: M.A.F.
DRN: J.O.T.
CHK: JVB
DATE: 10/28/03

BY	NO.		DATE

DRAINAGE IMPROVEMENTS
PROJECT NO. D-1109

STORM DRAIN PLAN
SAVAGE-GUILFORD ROAD
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 2 OF 12

EXISTING BUILDING/HOUSE No

1294X EXISTING SPOT ELEVATION

305 FT EXISTING CONTOURS

EXISTING GUARD RAIL

EXISTING WALL

C — T EXISTING CABLE AND TV LINE

EXISTING ELECTRIC LINE

EXISTING FENCE

EXISTING TREE

EXISTING TREELINE

EXISTING EDGE OF PAVEMENT

EXISTING CURB

EXISTING SIDEWALK

M.H. S EXISTING STORM DRAIN MANHOLE

M.H. SS EXISTING SANITARY SEWER MANHOLE

S EXISTING SANITARY SEWER

W EXISTING WATER LINE

W.M. EXISTING WATER METER/WHC

EXISTING WATER VALVE/FIRE HYDRANT

G.V. EXISTING GAS VALVE/METER/GHC

G EXISTING GAS LINE

TEL. EXISTING OVERHEAD TELEPHONE

TEL. EXISTING OVERHEAD ELECTRIC

EXISTING PHONE/POWER POLE

EXISTING SIGN

F/C FACE OF CURB

E/L EDGE OF LANE

E/P EDGE OF PAVEMENT

℄ CENTER LINE

RIGHT OF WAY LINE (LOCATION APPROXIMATE)

PROPOSED ASPHALT APRON

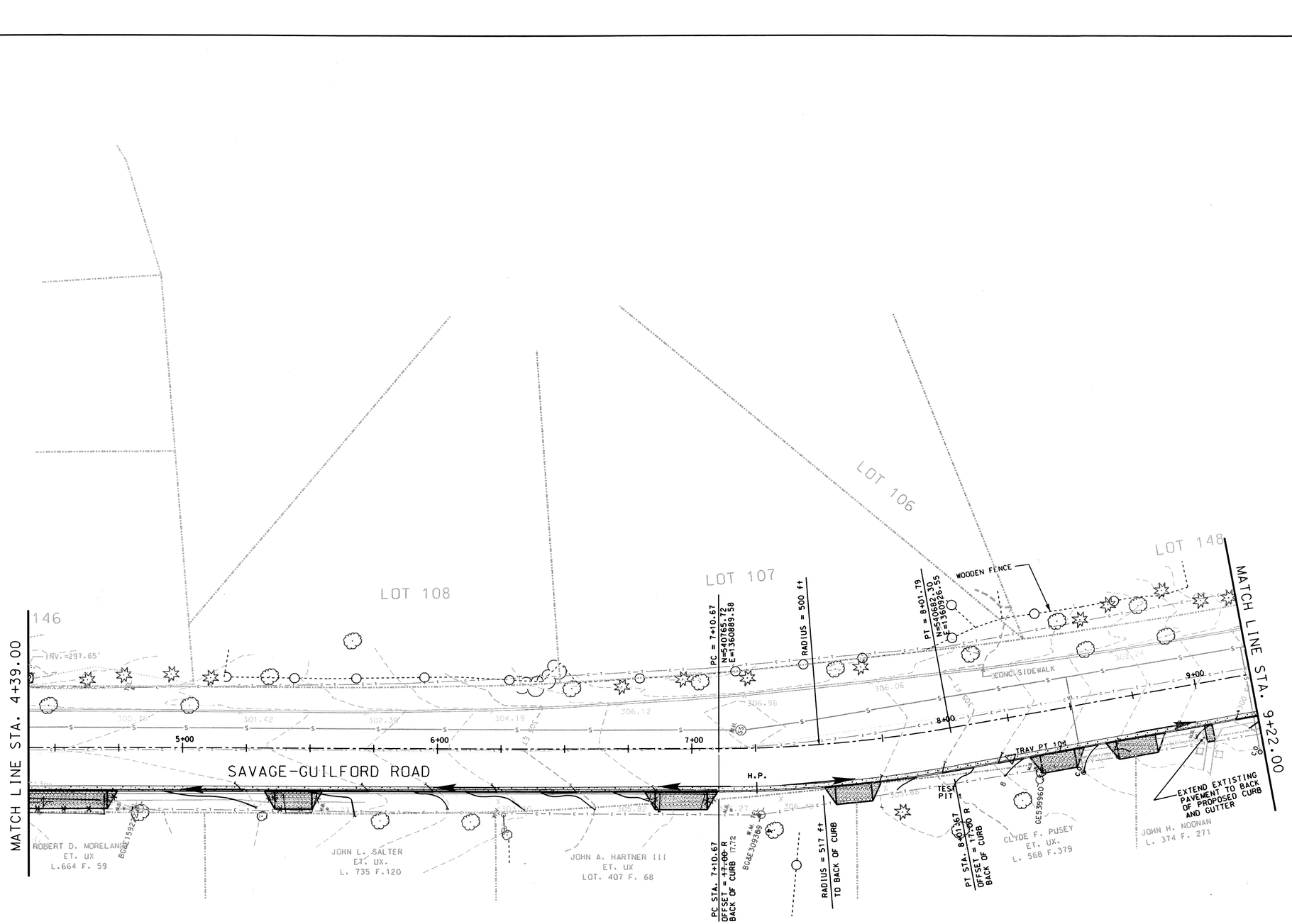
PROPOSED CURB INLET

PROPOSED STANDARD 7" COMBINATION CURB AND GUTTER

PROPOSED STORM DRAIN

PR I-1 PROP. STORM DRAIN STRUCTURE #

2 TEST PIT (SEE SPECIFICATIONS)



N MARYLAND STATE PLANE NAD 83/91

-40 -20 0 20 40
SCALE 1" = 20'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

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CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION — DATE 10/30/03

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Consulting Engineers
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Glen Burnie, Maryland 21061
(410) 424-2210
Michael Baker Jr., Inc.

STATE OF MARYLAND — MICHAEL ANTHONY FRIEDMAN — REGISTERED PROFESSIONAL ENGINEER — 10/28/03

DES: M.A.F.				
DRN: J.O.T.				
CHK: JVB				
DATE:10/28/03	BY	NO.		DATE

DRAINAGE IMPROVEMENTS
PROJECT NO.
D-1109

STORM DRAIN PLAN
SAVAGE-GUILFORD ROAD
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 3 OF 12

EXISTING BUILDING/HOUSE No
1294X EXISTING SPOT ELEVATION
305 FT EXISTING CONTOURS
EXISTING GUARD RAIL
EXISTING WALL
C T EXISTING CABLE AND TV LINE
EXISTING ELECTRIC LINE
EXISTING FENCE
EXISTING TREE
EXISTING TREELINE
EXISTING EDGE OF PAVEMENT
EXISTING CURB
EXISTING SIDEWALK
M.H. SD EXISTING STORM DRAIN MANHOLE
M.H. SS EXISTING SANITARY SEWER MANHOLE
S EXISTING SANITARY SEWER
W EXISTING WATER LINE
W.M. EXISTING WATER METER/WHC
EXISTING WATER VALVE/FIRE HYDRANT
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EXISTING SIGN
F/C FACE OF CURB
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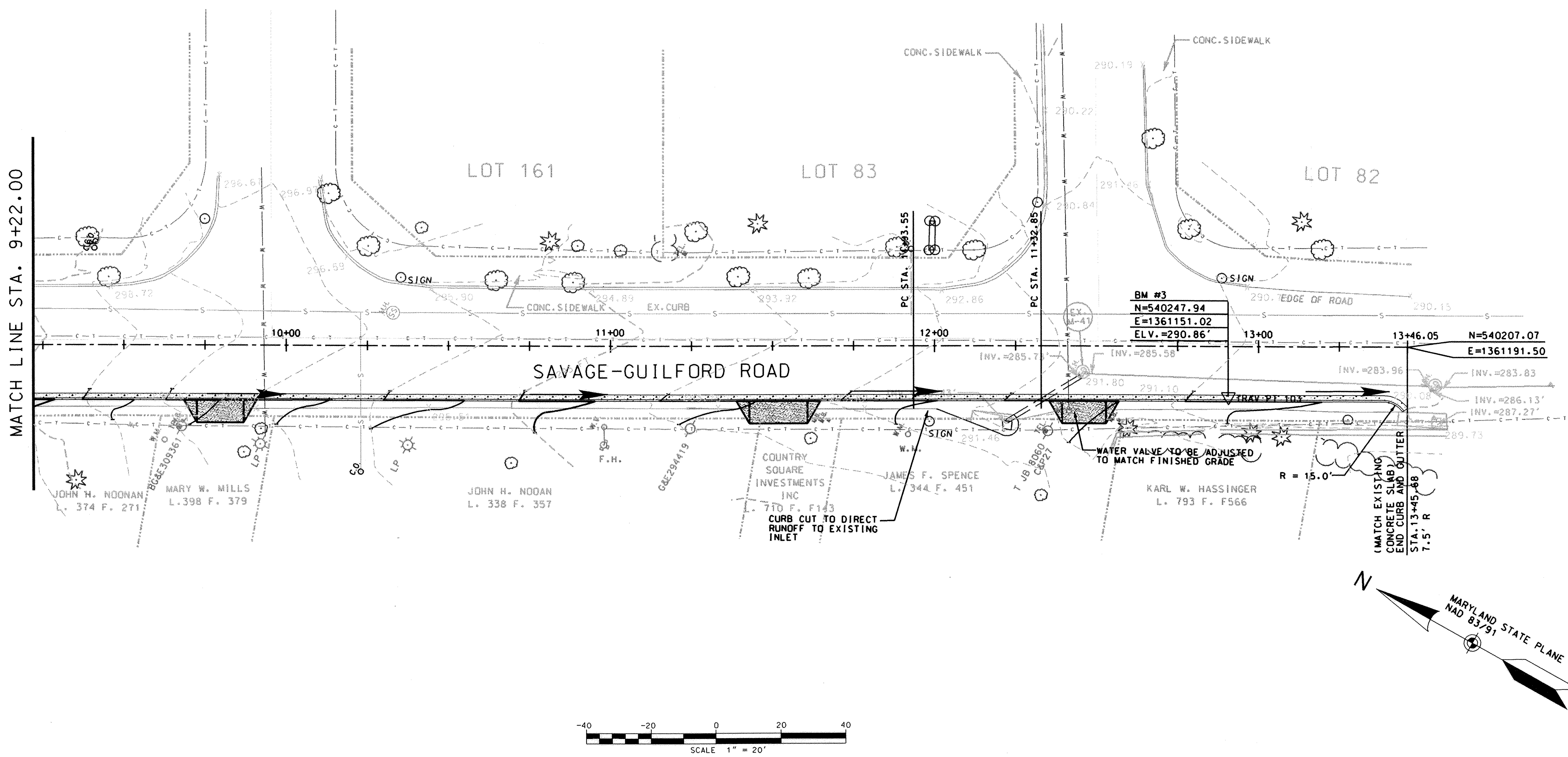
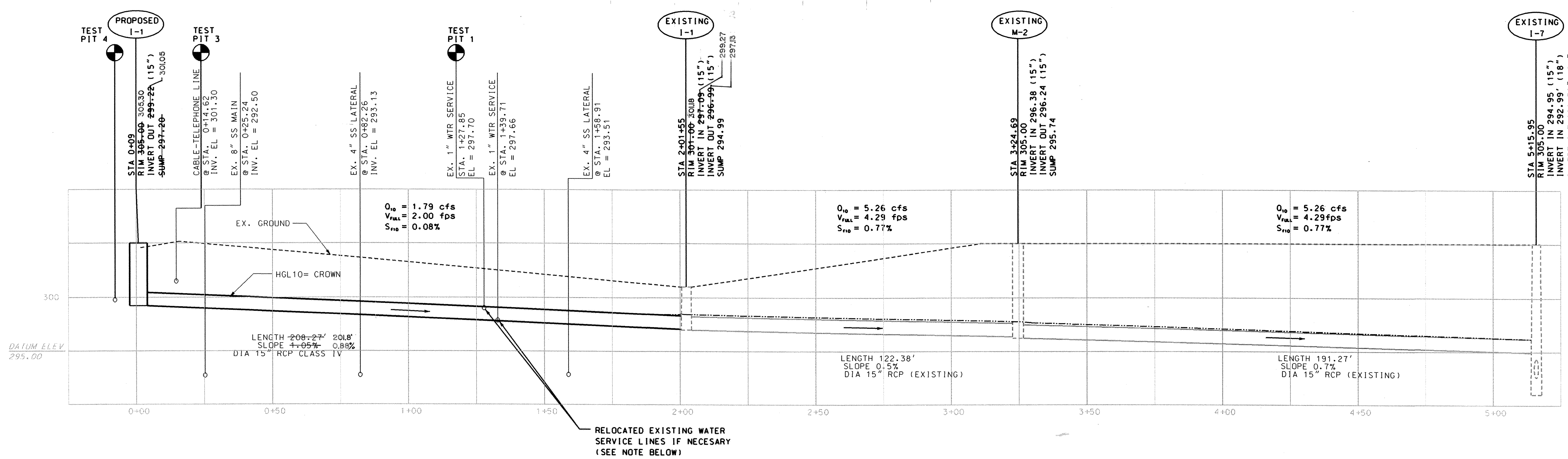
E/P EDGE OF PAVEMENT
℄ CENTER LINE
RIGHT OF WAY LINE
PROPOSED ASPHALT APRON
PROPOSED CURB INLET
PROPOSED STANDARD 7" COMBINATION CURB AND GUTTER
PROPOSED STORM DRAIN
PR I-1 PROP. STORM DRAIN STRUCTURE #
3 TEST PIT (SEE SPECIFICATIONS)



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS 10/30/03 DATE CHIEF, BUREAU OF ENGINEERING 10/30/03 DATE CHIEF, BUREAU OF HIGHWAYS 10-30-03 DATE CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION 10/30/03 DATE	Baker MICHAEL BAKER JR. INC. Consulting Engineers 801 Cromwell Park Drive Suite 110 Glen Burnie, Maryland 21061 (410) 424-2210 Michael Baker Jr., Inc.	DES: M.A.F. DRN: J.O.T. CHK: JVB DATE: 10/28/03 BY NO. DATE	DRAINAGE IMPROVEMENTS PROJECT NO. D-1109
STORM DRAIN PLAN SAVAGE-GUILFORD ROAD HOWARD COUNTY, MARYLAND	SCALE AS SHOWN	SHEET 4 OF 12	



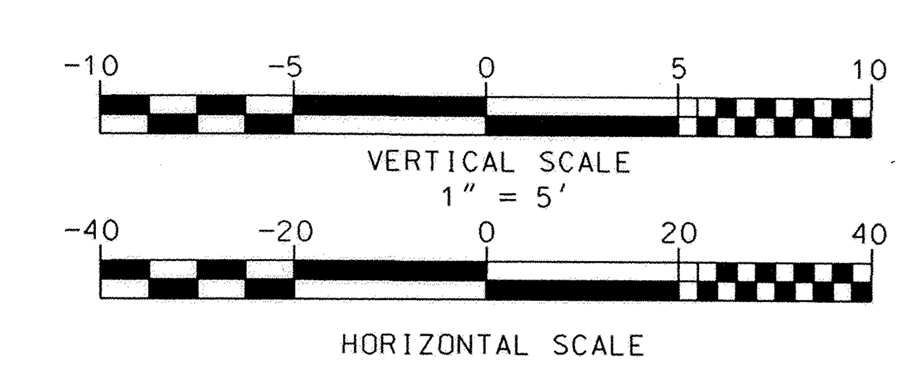
NOTES:

1. PIPE LENGTHS SHOWN ARE FROM CENTER OF THE STRUCTURE TO CENTER OF THE STRUCTURE.

2. THE HORIZONTAL AND VERTICAL LOCATIONS AND SIZE OF THE WATER MAIN AND SERVICE LINES ARE APPROXIMATE. INVERT ELEVATIONS SHOWN WERE OBTAINED FROM WATER MAIN PROFILES ON THE ORIGINAL DESIGN PLANS CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF CROSSINGS PRIOR TO INSTALLATIONS OF STORM DRAIN PIPE. A MINIMUM 12 INCH VERTICAL CLEARANCE MUST BE MAINTAINED AT CROSSING POINT. IF THE MINIMUM CLEARANCE REQUIREMENT IS NOT SATISFIED. WATER SERVICE LINE SHALL BE VERTICALLY RELOCATED TO MAINTAIN MINIMUM CLEARANCE AND MINIMUM COVER OF 3'-6".

3. THE HORIZONTAL AND VERTICAL LOCATION AND SIZE OF SANITARY SEWER LATERALS ARE APPROXIMATE. THE INVERT ELEVATION OF THE LATERAL AT THE CROSSING POINT WAS COMPUTED USING THE INVERT ELEVATION OF THE MAIN LINE (OBTAINED FROM PROFILES ON THE ORIGINAL DESIGN PLANS) AND ASSUMING A 2% SLOPE ALONG THE LATERAL.

4. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING BURIED ELECTRICAL, CABLE, AND TV LINES ARE APPROXIMATE. VERTICAL LOCATIONS SHOWN ON PROFILES ASSUME 2' OF COVER (UNLESS TEST PITS WERE EXCAVATED).



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS	10/30/03 DATE	CHIEF, BUREAU OF ENGINEERING	10/30/03 DATE
CHIEF, BUREAU OF HIGHWAYS	10-30-03 DATE	CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION	10/30/03 DATE

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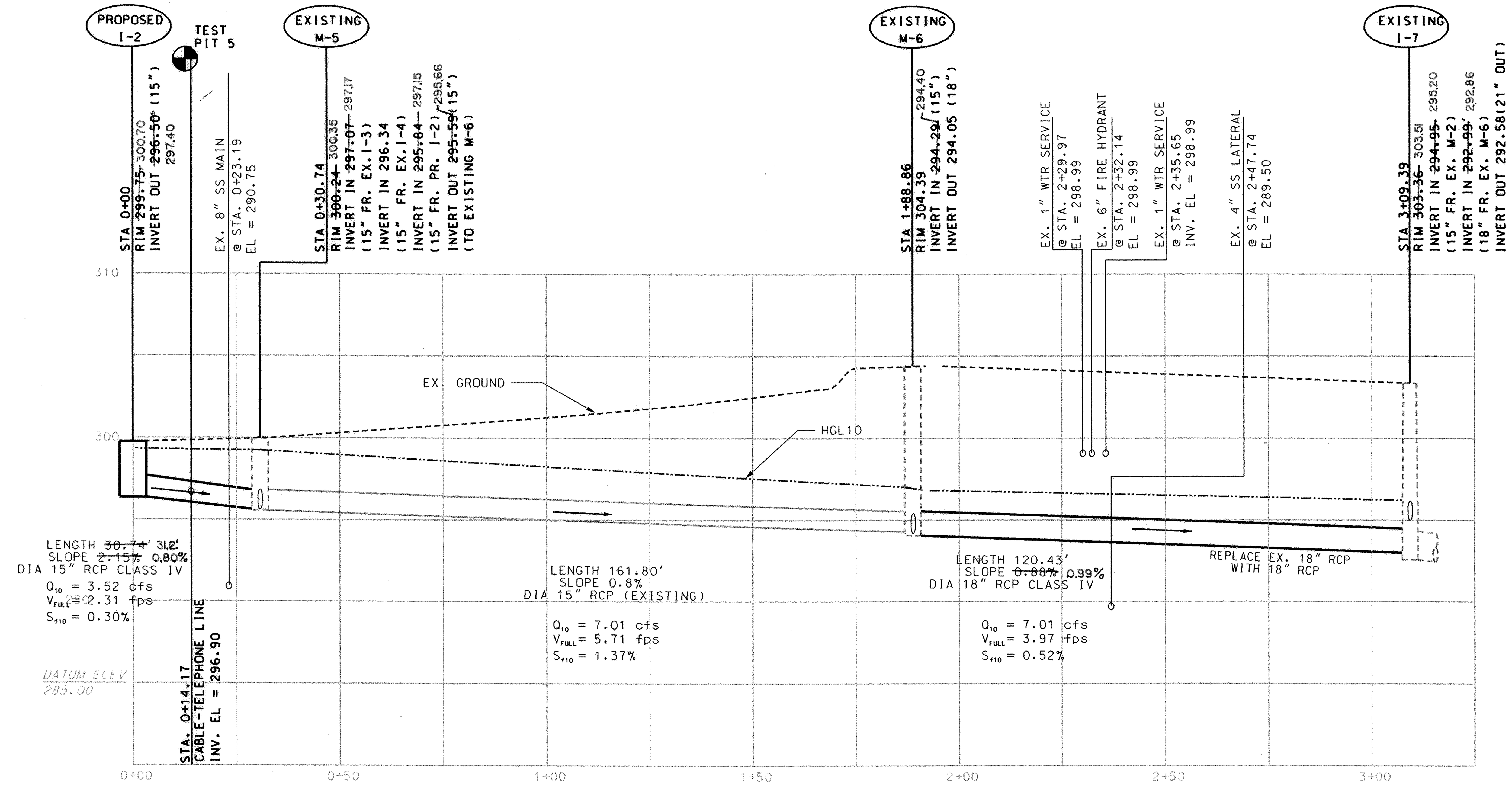
DRAINAGE IMPROVEMENTS
PROJECT NO.
D-1109

STORM DRAIN PROFILES
SAVAGE-GUILFORD ROAD
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 5 OF 12



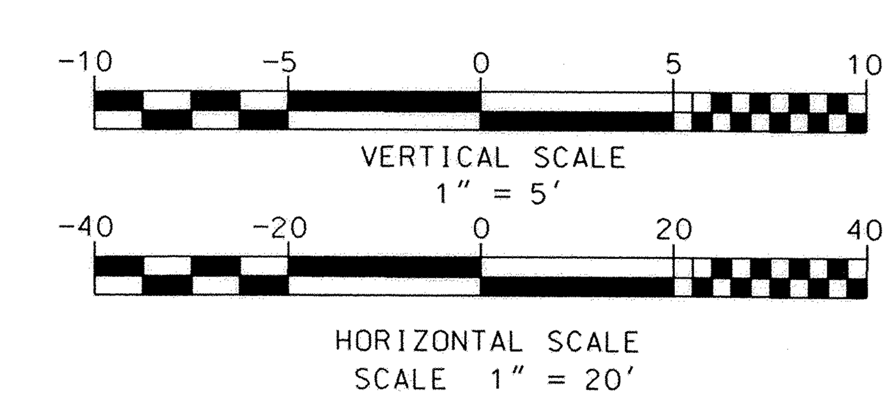
NOTES:

1. PIPE LENGTHS SHOWN ARE FROM CENTER OF THE STRUCTURE TO CENTER OF THE STRUCTURE.

2. THE HORIZONTAL AND VERTICAL LOCATIONS AND SIZE OF THE WATER MAIN AND SERVICE LINES ARE APPROXIMATE INVERT ELEVATIONS SHOWN WERE OBTAINED FROM WATER MAIN PROFILES ON THE ORIGINAL DESIGN PLANS CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF CROSSINGS PRIOR TO INSTALLATIONS OF STORM DRAIN PIPE. A MINIMUM 12 INCH VERTICAL CLEARANCE MUST BE MAINTAINED AT CROSSING POINT. IF THE MINIMUM CLEARANCE REQUIREMENT IS NOT SATISFIED, WATER SERVICE LINE SHALL BE VERTICALLY RELOCATED TO MAINTAIN MINIMUM CLEARANCE AND MINIMUM COVER OF 3'-6".

3. THE HORIZONTAL AND VERTICAL LOCATION AND SIZE OF SANITARY SEWER LATERALS ARE APPROXIMATE. THE INVERT ELEVATION OF THE LATERAL AT THE CROSSING POINT WAS COMPUTED USING THE INVERT ELEVATION OF THE MAIN LINE (OBTAINED FROM PROFILES ON THE ORIGINAL DESIGN PLANS) AND ASSUMING A 2% SLOPE ALONG THE LATERAL.

4. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING BURIED ELECTRICAL, CABLE, AND TV LINES ARE APPROXIMATE. VERTICAL LOCATIONS SHOWN ON PROFILES ASSUME 2' OF COVER (UNLESS TEST PITS WERE EXCAVATED).



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS	10/30/03 DATE	CHIEF, BUREAU OF ENGINEERING	10/30/03 DATE
CHIEF, BUREAU OF HIGHWAYS	10-30-03 DATE	CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION	10/30/03 DATE

Baker
Michael Baker Jr., Inc.

MICHAEL BAKER JR. INC.
Consulting Engineers
801 Cromwell Park Drive
Suite 110
Glen Burnie, Maryland 21061
(410) 424-2210

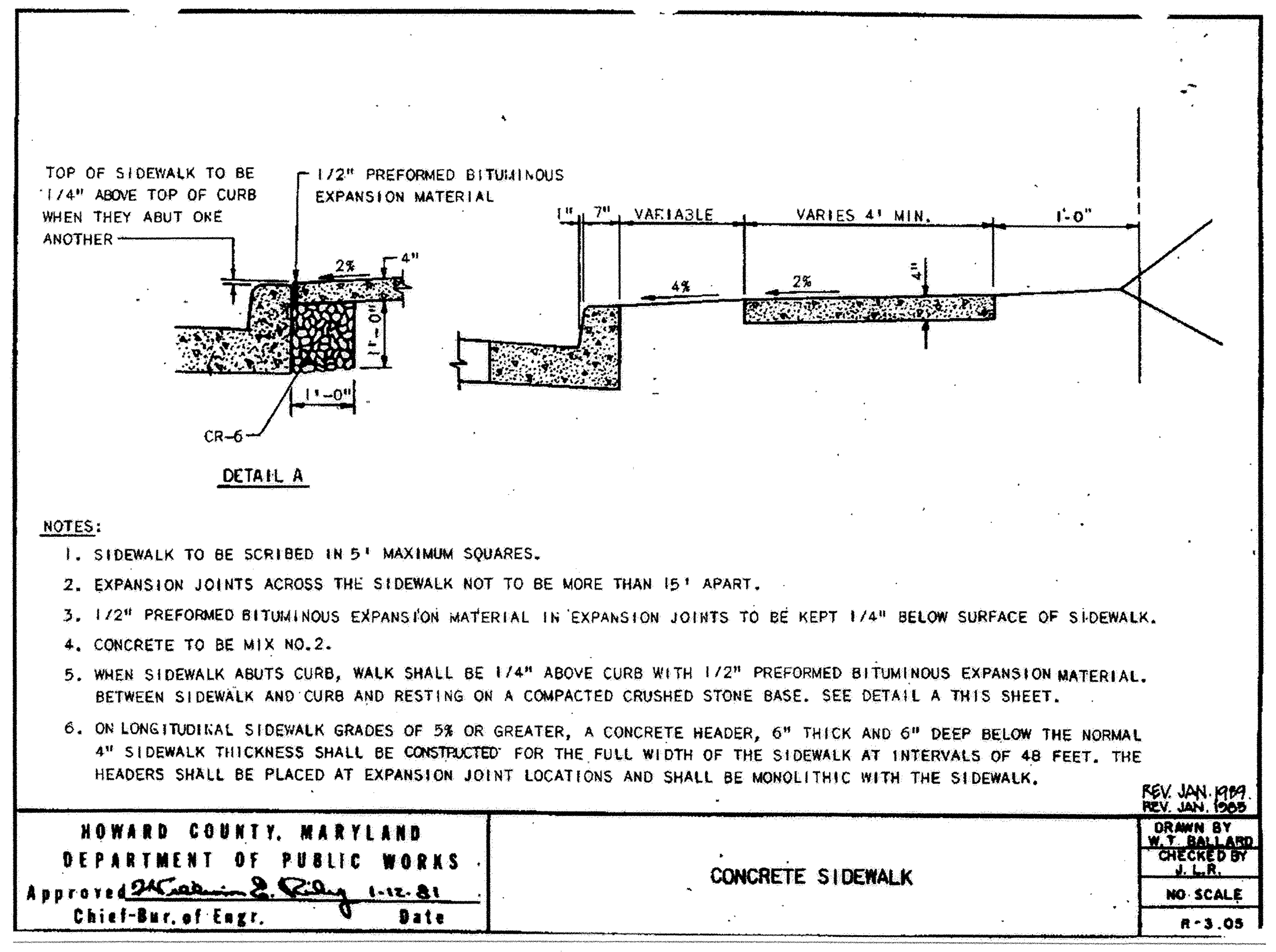
DES: M.A.F.				
DRN: J.O.T.				
CHK: JVB				
DATE: 10/28/03	BY	NO.		DATE

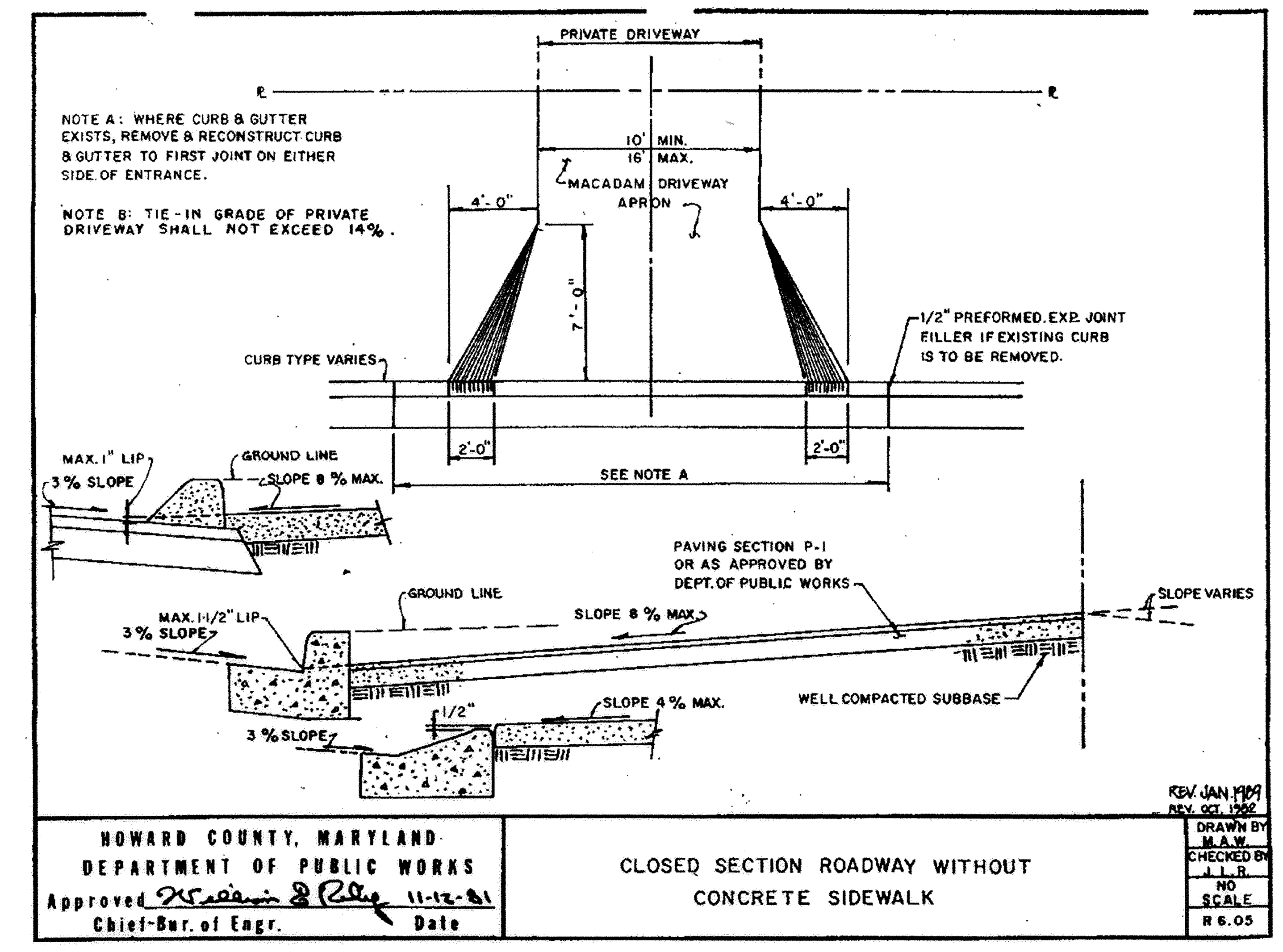
DRAINAGE IMPROVEMENTS
PROJECT NO.
D-1109

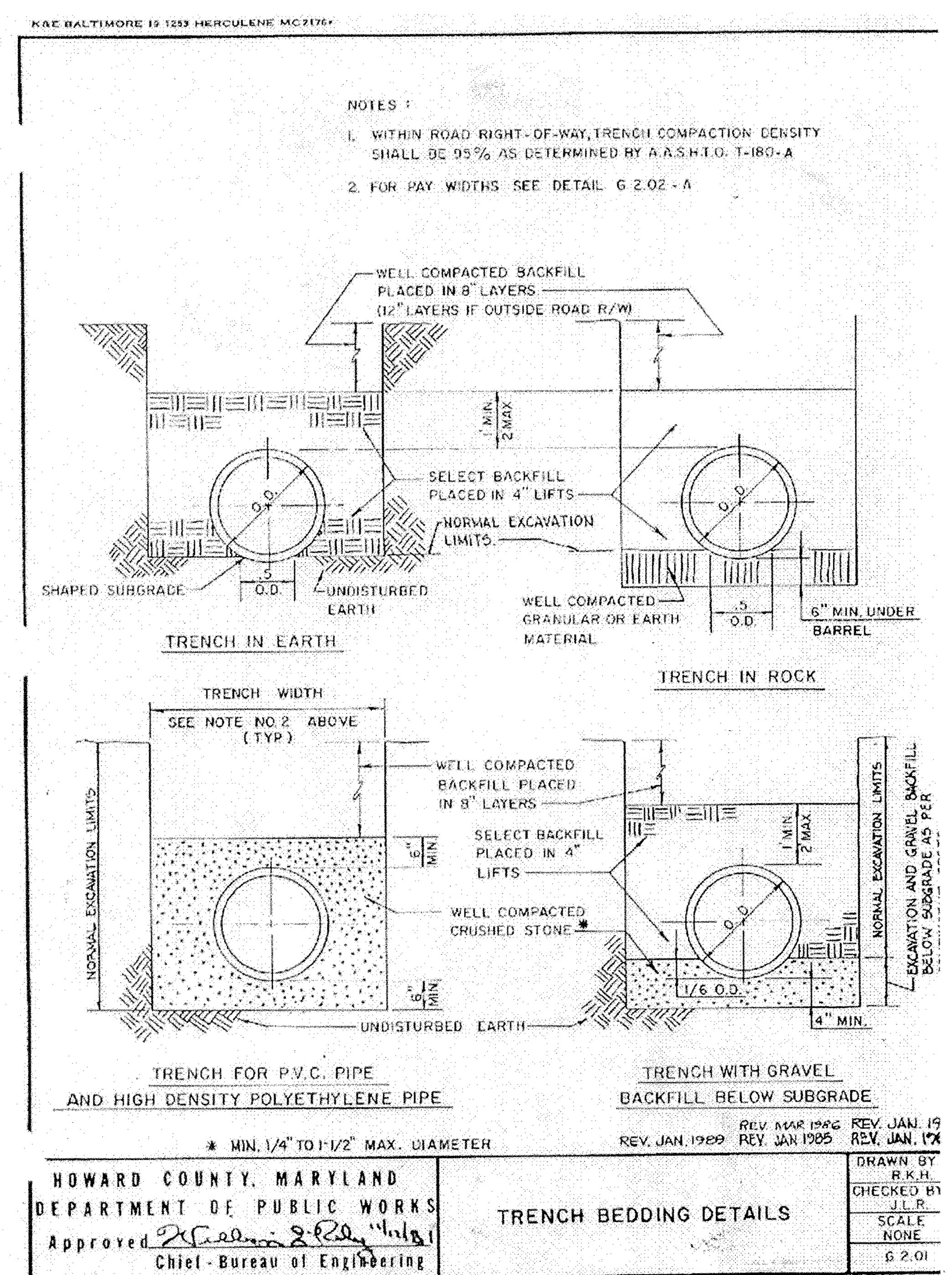
STORM DRAIN PROFILES
SAVAGE-GUILFORD ROAD
HOWARD COUNTY, MARYLAND

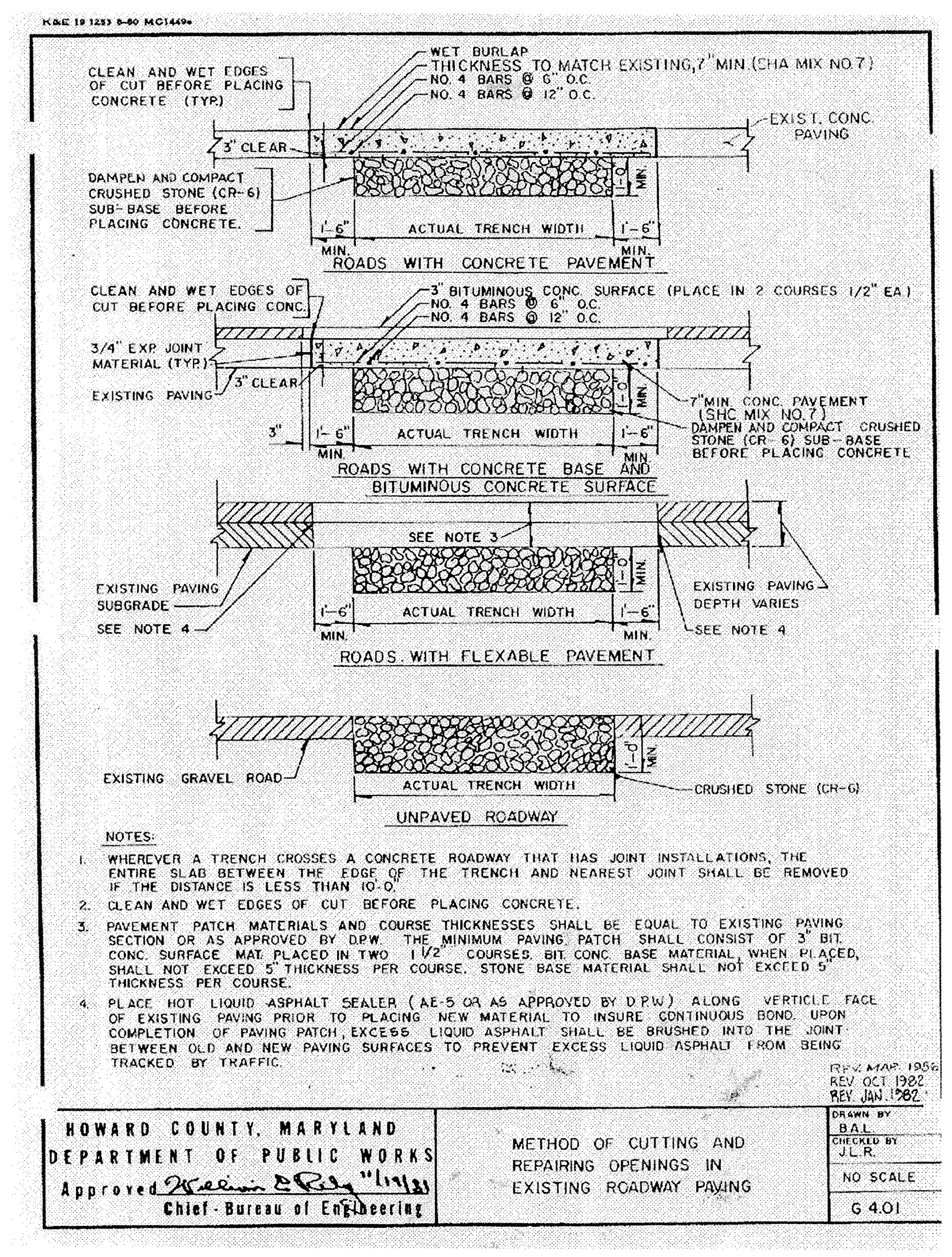
SCALE
AS SHOWN

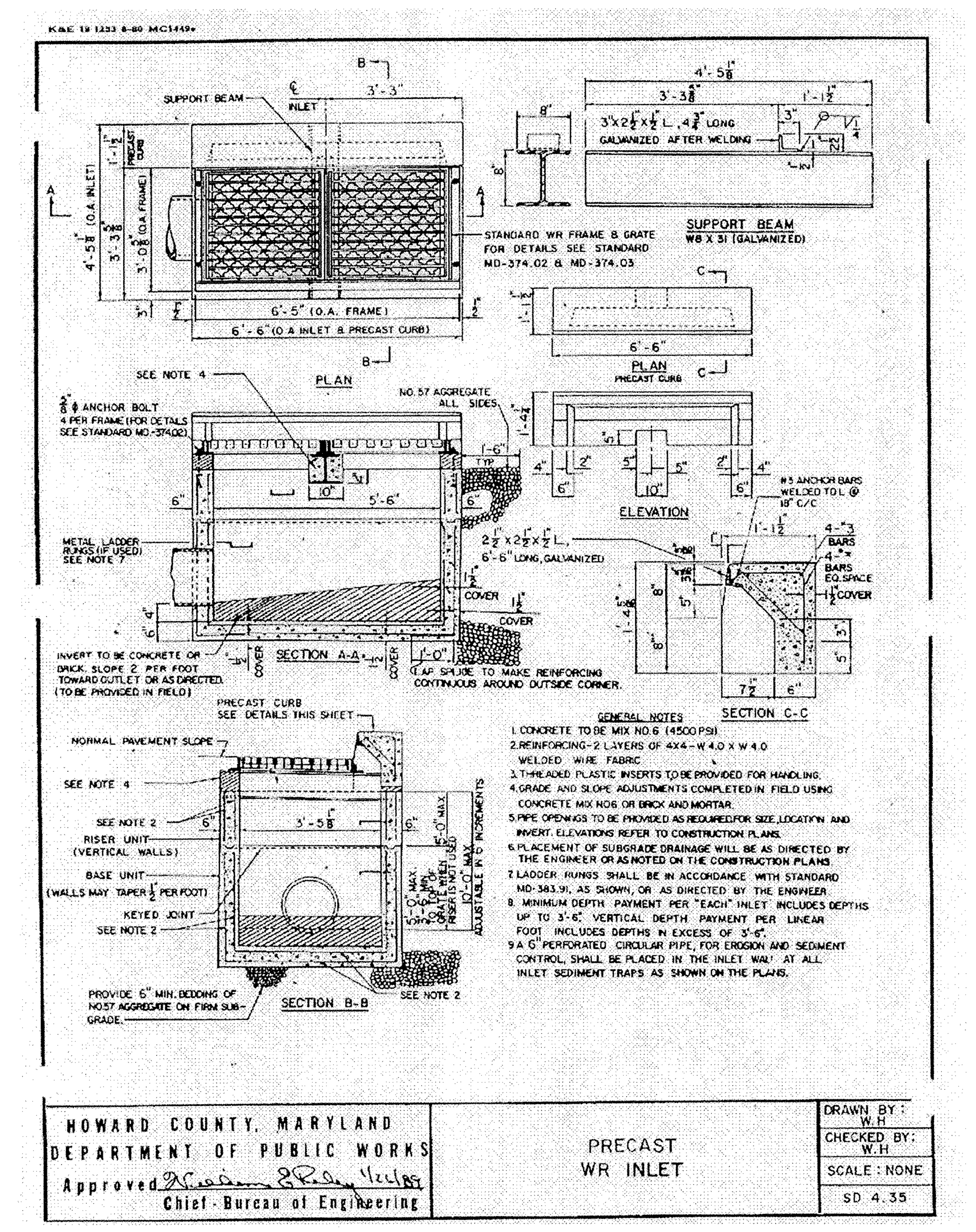
SHEET
6 OF 12

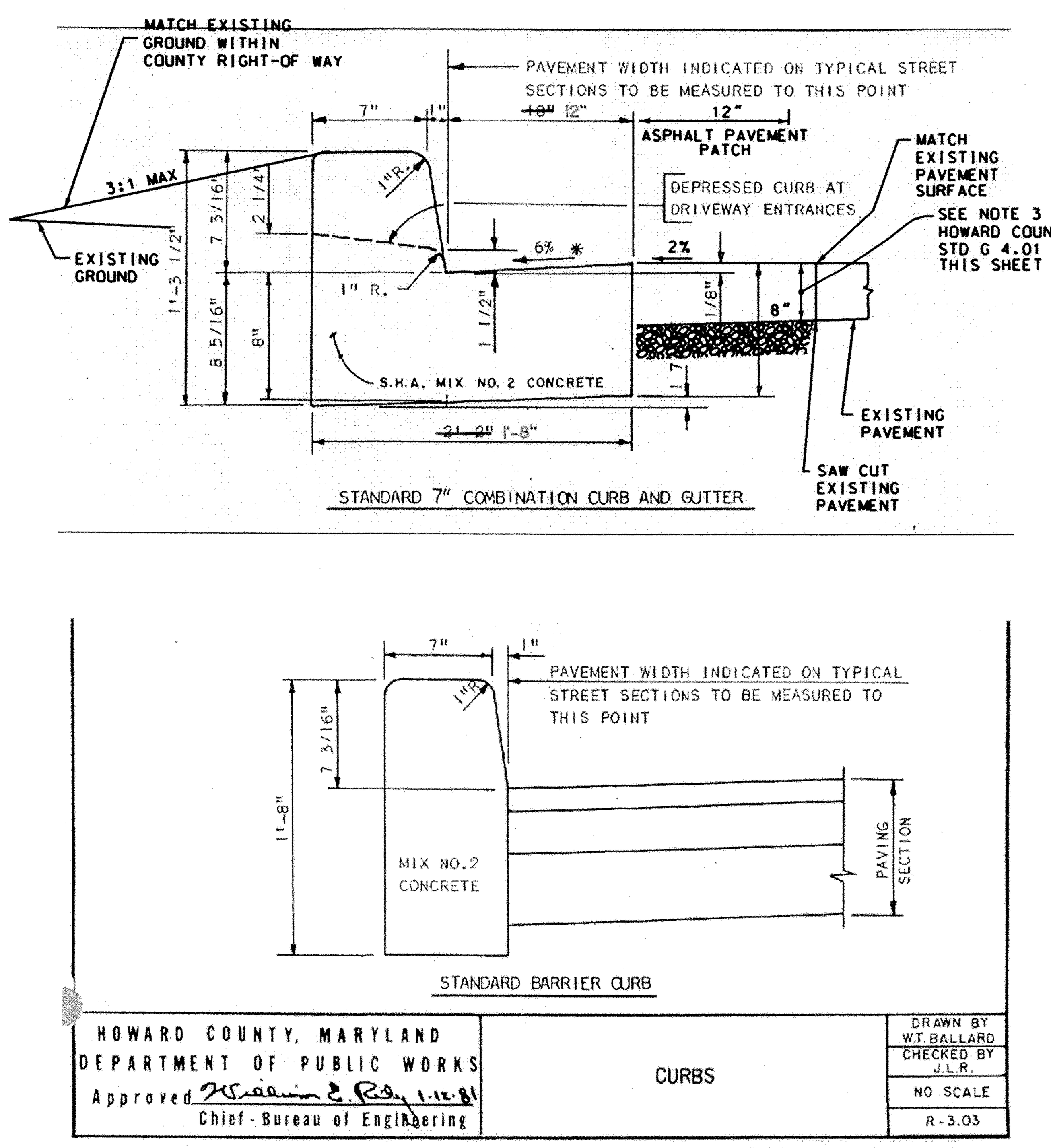

TOP OF SIDEWALK TO BE 1/4" ABOVE TOP OF CURB WHEN THEY ABUT ONE ANOTHER
1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL
VARIABLE
VARIES 4' MIN.
1'-0"
CR-6
DETAIL A
NOTES:
1. SIDEWALK TO BE SCRIBED IN 5' MAXIMUM SQUARES.
2. EXPANSION JOINTS ACROSS THE SIDEWALK NOT TO BE MORE THAN 15' APART.
3. 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK.
4. CONCRETE TO BE MIX NO.2.
5. WHEN SIDEWALK ABUTS CURB, WALK SHALL BE 1/4" ABOVE CURB WITH 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL. BETWEEN SIDEWALK AND CURB AND RESTING ON A COMPACTED CRUSHED STONE BASE. SEE DETAIL A THIS SHEET.
6. ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 48 FEET. THE HEADERS SHALL BE PLACED AT EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved 1-12-81
Chief-Bur. of Engr. Date
CONCRETE SIDEWALK
NO SCALE
R-3.05


PRIVATE DRIVEWAY
NOTE A: WHERE CURB & GUTTER EXISTS, REMOVE & RECONSTRUCT CURB & GUTTER TO FIRST JOINT ON EITHER SIDE OF ENTRANCE.
NOTE B: TIE-IN GRADE OF PRIVATE DRIVEWAY SHALL NOT EXCEED 14%.
MACADAM DRIVEWAY APRON
1/2" PREFORMED EXP. JOINT FILLER IF EXISTING CURB IS TO BE REMOVED.
CURB TYPE VARIES
SEE NOTE A
PAVING SECTION P-1 OR AS APPROVED BY DEPT. OF PUBLIC WORKS
WELL COMPACTED SUBBASE
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved 1-12-81
Chief-Bur. of Engr. Date
CLOSED SECTION ROADWAY WITHOUT CONCRETE SIDEWALK
R 6.05




ROADS WITH CONCRETE PAVEMENT
ROADS WITH CONCRETE BASE AND BITUMINOUS CONCRETE SURFACE
ROADS WITH FLEXABLE PAVEMENT
UNPAVED ROADWAY
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Chief - Bureau of Engineering
METHOD OF CUTTING AND REPAIRING OPENINGS IN EXISTING ROADWAY PAVING
NO SCALE
G 4.01





STORM DRAIN PIPE SCHEDULE

SIZE	TYPE	CLASS	LENGTH
15"	RCP	IV	244'
18"	RCP	IV	120'

STRUCTURE SCHEDULE *

NO.	TYPE	STATION	OFFSET	TOP	INV. IN	INV. OUT	REMARKS
I-1	HO. COUNTY WR	0+23.3 ~~0+20.4~~	16.2' ~~17'~~ RT	305.30' ~~305.00'~~	—	301.05' ~~299.22'~~	~~10'~~
I-2	HO. COUNTY WR	3+69.7 ~~3+69.6~~	17.3' ~~17'~~ RT	300.70' ~~299.75'~~	—	297.40' ~~296.50'~~	~~10'~~

* STATION AND OFFSET ARE MEASURED TO THE CENTER OF THE INLET ~~STRUCTURE MANHOLE COVER AT THE INSIDE FACE OF WALL~~ AT THE TOP BACK OF CURB. TOP ELEVATION IS THE TOP ~~OF THE INLET SLAB.~~ BACK OF CURB

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MARYLAND			
DIRECTOR OF PUBLIC WORKS	10/30/03	CHIEF, BUREAU OF ENGINEERING	10/30/03
CHIEF, BUREAU OF HIGHWAYS	10-30-03	CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION	10/30/03

Baker
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Consulting Engineers
801 Cromwell Park Drive
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Glen Burnie, Maryland 21061
(410) 424-2210

DES: M.A.F.
DRN: J.O.T.
CHK: JVB
DATE: 10/28/03
BY | NO. | DATE

DRAINAGE IMPROVEMENTS
PROJECT NO. D-1109

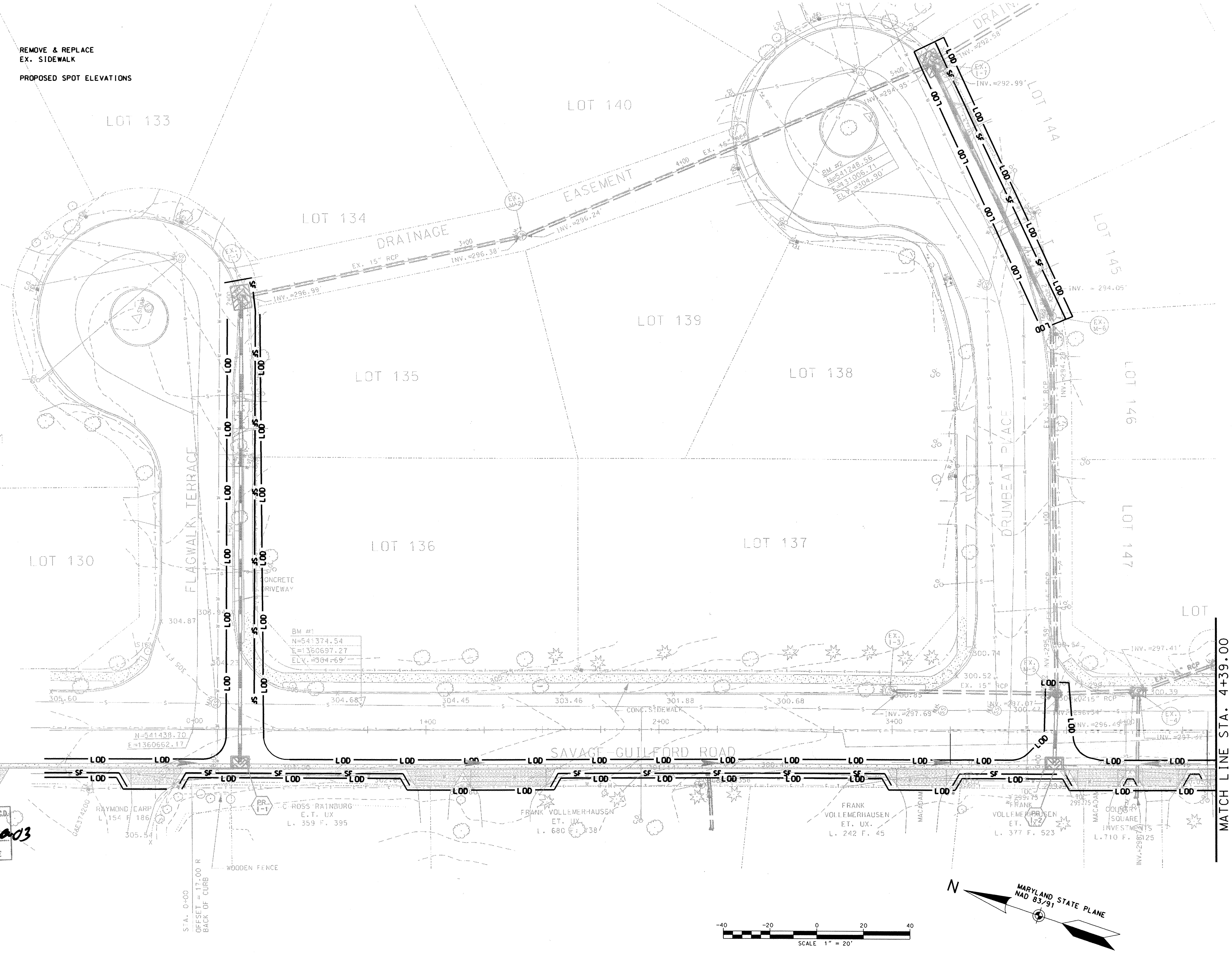
DRAINAGE AREA MAP, STANDARD DETAILS, STRUCTURE, AND PIPE SCHEDULE
SAVAGE-GUILFORD ROAD
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 7 OF 12

EXISTING BUILDING/HOUSE No
1294X EXISTING SPOT ELEVATION
305 FT EXISTING CONTOURS
EXISTING GUARD RAIL
EXISTING WALL
C T EXISTING CABLE AND TV LINE
EXISTING ELECTRIC LINE
EXISTING FENCE
EXISTING TREE
EXISTING TREELINE
EXISTING EDGE OF PAVEMENT
EXISTING CURB
EXISTING SIDEWALK
M.H. SD EXISTING STORM DRAIN MANHOLE
M.H. SS EXISTING SANITARY SEWER MANHOLE
S EXISTING SANITARY SEWER
W EXISTING WATER LINE
PROPOSED CONCRETE APRON
W.M. EXISTING WATER METER/WHC
EXISTING WATER VALVE/FIRE HYDRANT
G.V. EXISTING GAS VALVE/METER/GHC
G EXISTING GAS LINE
TEL. EXISTING OVERHEAD TELEPHONE
ELEC. EXISTING OVERHEAD ELECTRIC
EXISTING PHONE/POWER POLE
EXISTING SIGN
F/C FACE OF CURB
E/L EDGE OF LANE
E/P EDGE OF PAVEMENT
℄ CENTER LINE
EXISTING RIGHT OF WAY LINE (LOCATION APPROXIMATE)
PROPOSED CONCRETE APRON WITH SIDEWALK (SEE DETAIL SHEET 7)
PROPOSED ASPHALT APRON WITHOUT SIDEWALK (SEE DETAIL SHEET 7)
PROPOSED CURB INLET (SUMP)
PROPOSED CURB INLET (GRADE)
PROPOSED STANDARD 7" COMBINATION CURB AND GUTTER (SEE SHEET 7)
PROPOSED STORM DRAIN
PR I-1 PROP. STORM DRAIN STRUCTURE #
AREA TO BE REGRADED
TEST PIT (SEE SPECIFICATIONS)
—LOD— LIMIT OF DISTURBANCE
INLET PROTECTION
—SF— SILK FENCE

REMOVE & REPLACE EX. SIDEWALK
X300.22 PROPOSED SPOT ELEVATIONS



Reviewed for HOWARD S.C.D. and meets Technical Requirements
Signature Date 10-30-03
USDA, NATURAL RESOURCES CONSERVATION SERVICE

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

APPROVED HOWARD S.C.D. — DATE 10/30/03

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS	10/30/03 DATE	CHIEF, BUREAU OF ENGINEERING	10/30/03 DATE
CHIEF, BUREAU OF HIGHWAYS	10-30-03 DATE	CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION	10/30/03 DATE

Baker
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MICHAEL BAKER JR. INC.
Consulting Engineers
801 Cromwell Park Drive
Suite 110
Glen Burnie, Maryland 21061
(410) 424-2210

STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER

DES: M.A.F.
DRN: J.O.T.
CHK: JVB
DATE: 10/28/03

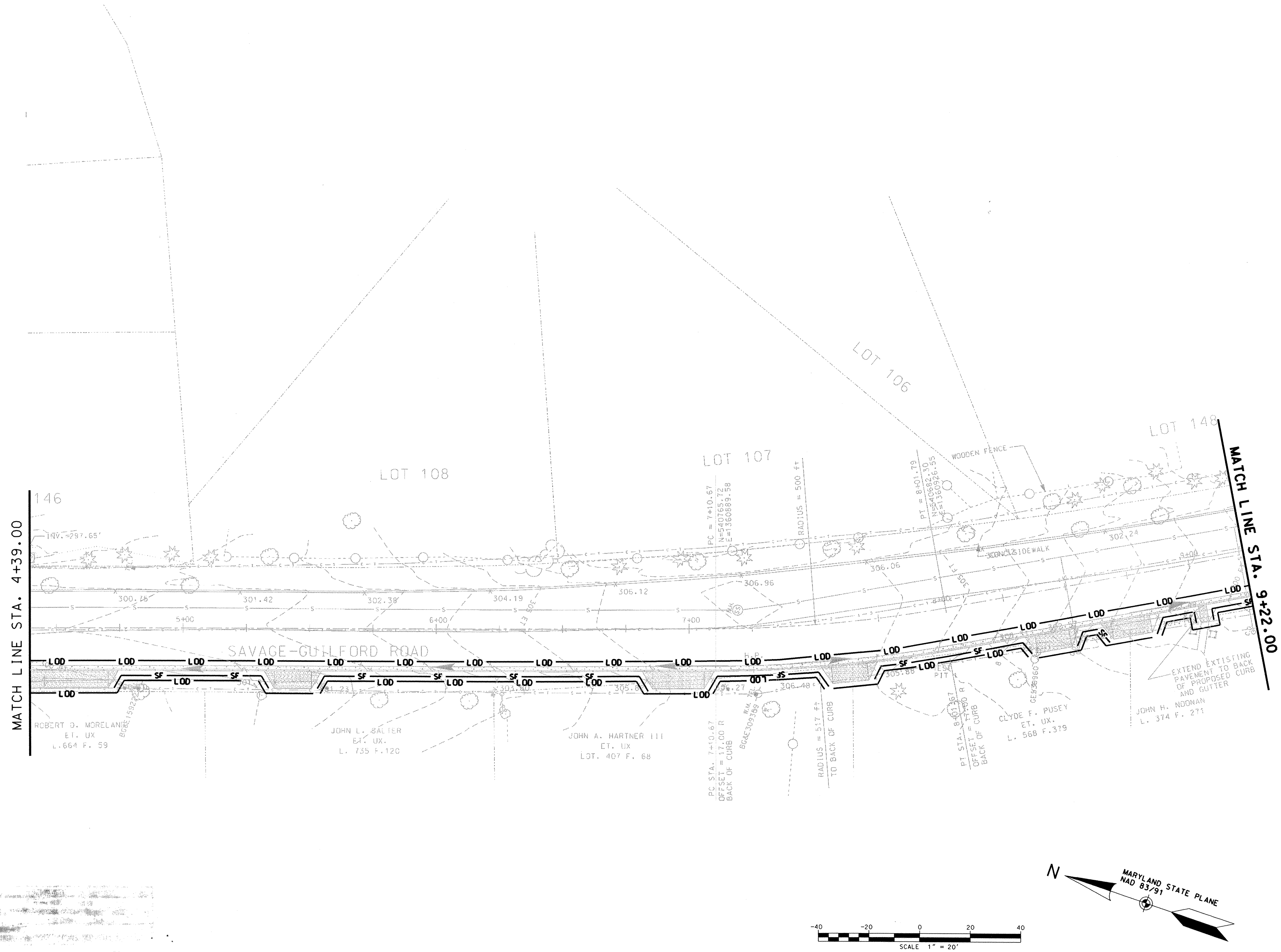
BY	NO.		DATE

DRAINAGE IMPROVEMENTS
PROJECT NO. D-1109

EROSION AND SEDIMENT CONTROL PLAN
SAVAGE-GUILFORD ROAD
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

EXISTING BUILDING/HOUSE No
1294X EXISTING SPOT ELEVATION
305 FT EXISTING CONTOURS
EXISTING GUARD RAIL
EXISTING WALL
EXISTING CABLE AND TV LINE
EXISTING ELECTRIC LINE
EXISTING FENCE
EXISTING TREE
EXISTING TREELINE
EXISTING EDGE OF PAVEMENT
EXISTING CURB
EXISTING SIDEWALK
EXISTING STORM DRAIN MANHOLE
EXISTING SANITARY SEWER MANHOLE
EXISTING SANITARY SEWER
EXISTING WATER LINE
EXISTING WATER METER/WHC
EXISTING WATER VALVE/FIRE HYDRANT
EXISTING GAS VALVE/METER/GHC
EXISTING GAS LINE
EXISTING OVERHEAD TELEPHONE
EXISTING OVERHEAD ELECTRIC
EXISTING PHONE/POWER POLE
EXISTING SIGN
F/C FACE OF CURB
E/L EDGE OF LANE
E/P EDGE OF PAVEMENT
CENTER LINE
PROPOSED ASPHALT APRON
PROPOSED CURB INLET
PROPOSED STANDARD 7" COMBINATION CURB AND GUTTER
PROPOSED STORM DRAIN
PROP. STORM DRAIN STRUCTURE #
RIGHT OF WAY LINE
AREA TO BE REGRADED
LOD LIMIT OF DISTURBANCE
INLET PROTECTION
SF SILK FENCE



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Approved Howard S.C.D. 10/30/03 Date

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APPROVED HOWARD S.C.D. 10/30/03 DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS 10/30/03 DATE
CHIEF, BUREAU OF ENGINEERING 10/30/03 DATE
CHIEF, BUREAU OF HIGHWAYS 10-30-03 DATE
CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION 10/30/03 DATE

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DATE: 10/28/03
BY NO. DATE

DRAINAGE IMPROVEMENTS
PROJECT NO. D-1109

EROSION AND SEDIMENT CONTROL PLAN
SAVAGE-GUILFORD ROAD
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 9 OF 12

- EXISTING BUILDING/HOUSE No
- 1294X EXISTING SPOT ELEVATION
- 305 FT EXISTING CONTOURS
- EXISTING GUARD RAIL
- EXISTING WALL
- C — T EXISTING CABLE AND TV LINE
- EXISTING ELECTRIC LINE
- EXISTING FENCE
- EXISTING TREE
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- M.H. SD EXISTING STORM DRAIN MANHOLE
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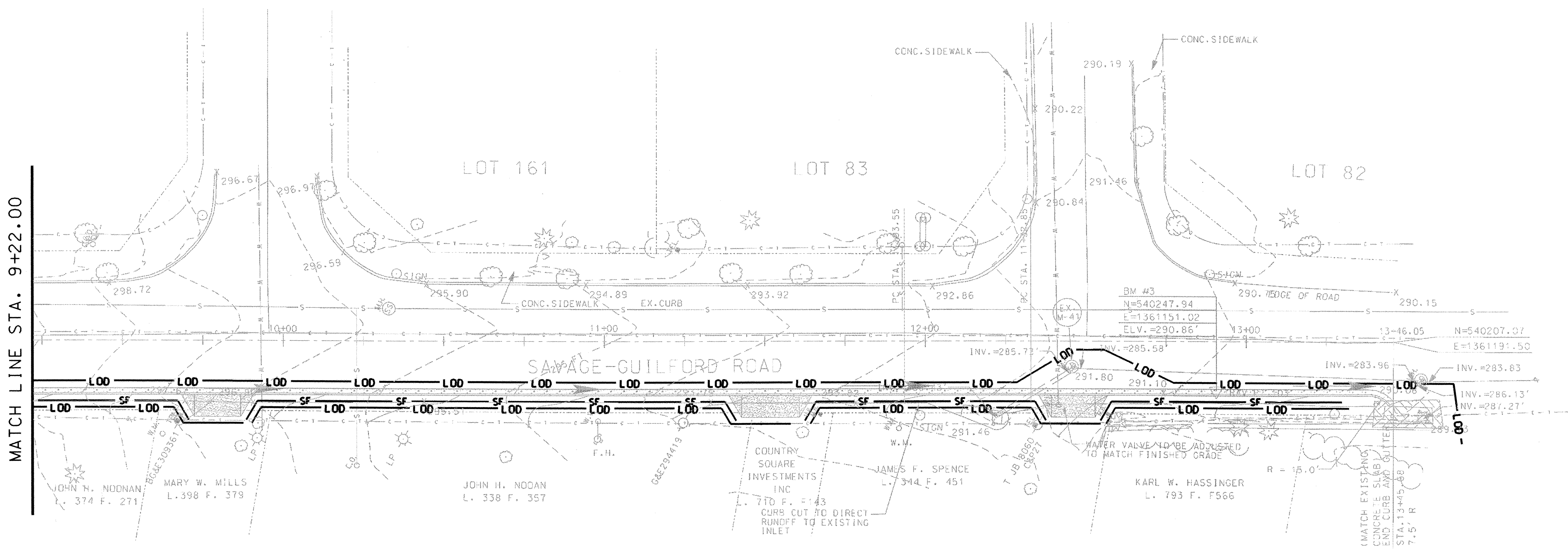
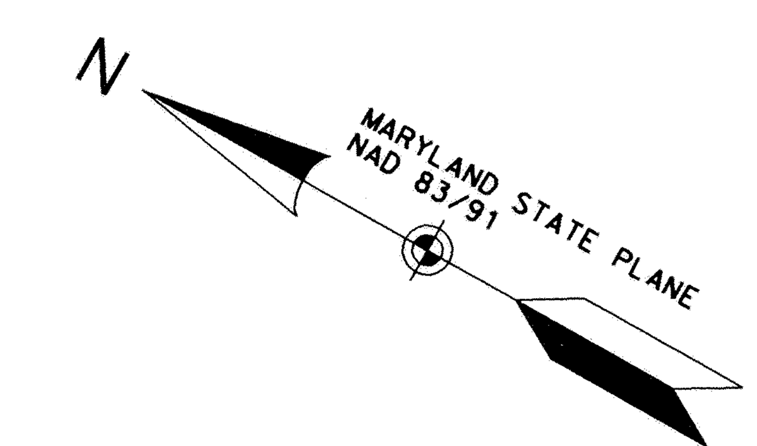
- EXISTING PHONE/POWER POLE
- EXISTING SIGN
- F/C FACE OF CURB
- E/L EDGE OF LANE
- E/P EDGE OF PAVEMENT
- CENTER LINE
- PROPOSED CONCRETE APRON
- PROPOSED CURB INLET
- PROPOSED STANDARD 7" COMBINATION CURB AND GUTTER
- PROPOSED STORM DRAIN
- PR I-1 PROP. STORM DRAIN STRUCTURE #
- RIGHT OF WAY LINE
- AREA TO BE REGRADED
- —LOD— LIMIT OF DISTURBANCE
- INLET PROTECTION
- —SF— SILT FENCE





SCALE 1" = 20'

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

APPROVED HOWARD S.C.D. 10/30/03 DATE

Reviewed for S.C.D. — USDA, NATURAL RESOURCES CONSERVATION SERVICE 10-30-03

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	
DIRECTOR OF PUBLIC WORKS 10/30/03 DATE	CHIEF, BUREAU OF ENGINEERING 10/30/03 DATE
CHIEF, BUREAU OF HIGHWAYS 10-30-03 DATE	CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION 10/30/03 DATE

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DES: M.A.F.
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DATE: 10/28/03

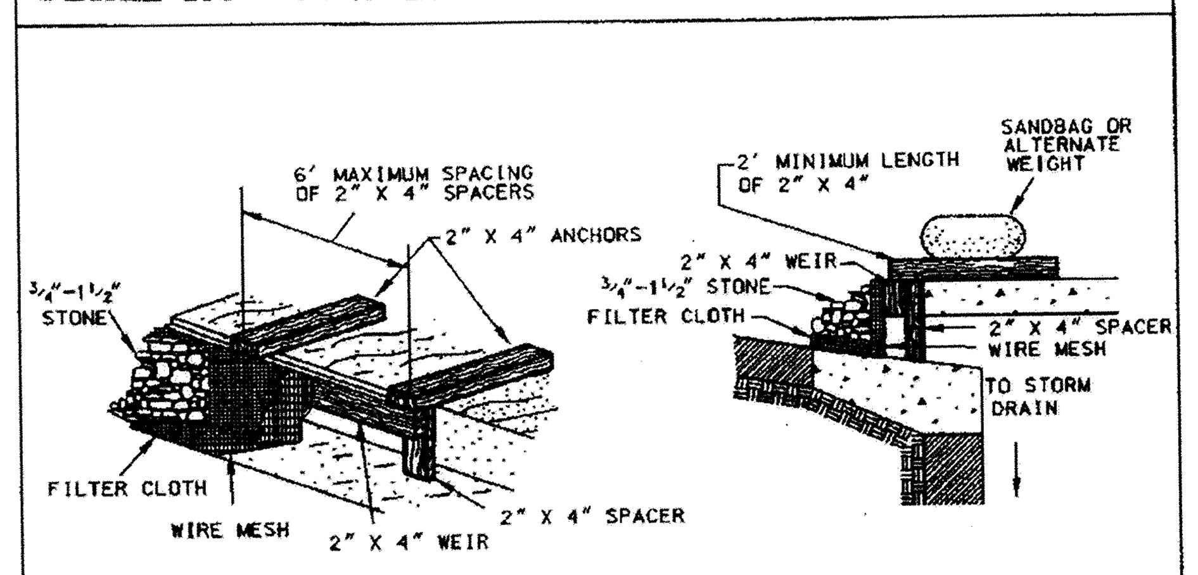
BY	NO.		DATE

DRAINAGE IMPROVEMENTS
PROJECT NO. D-1109

EROSION AND SEDIMENT CONTROL PLAN
SAVAGE-GUILFORD ROAD
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

DETAIL 23C - CURB INLET PROTECTION (COG OR COS INLETS)



MAX. DRAINAGE AREA = 1/4 ACRE

STANDARD SYMBOL CIP

Construction Specifications

1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.

2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.

3. Securely nail the 2" X 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4' apart).

4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.

6. Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.

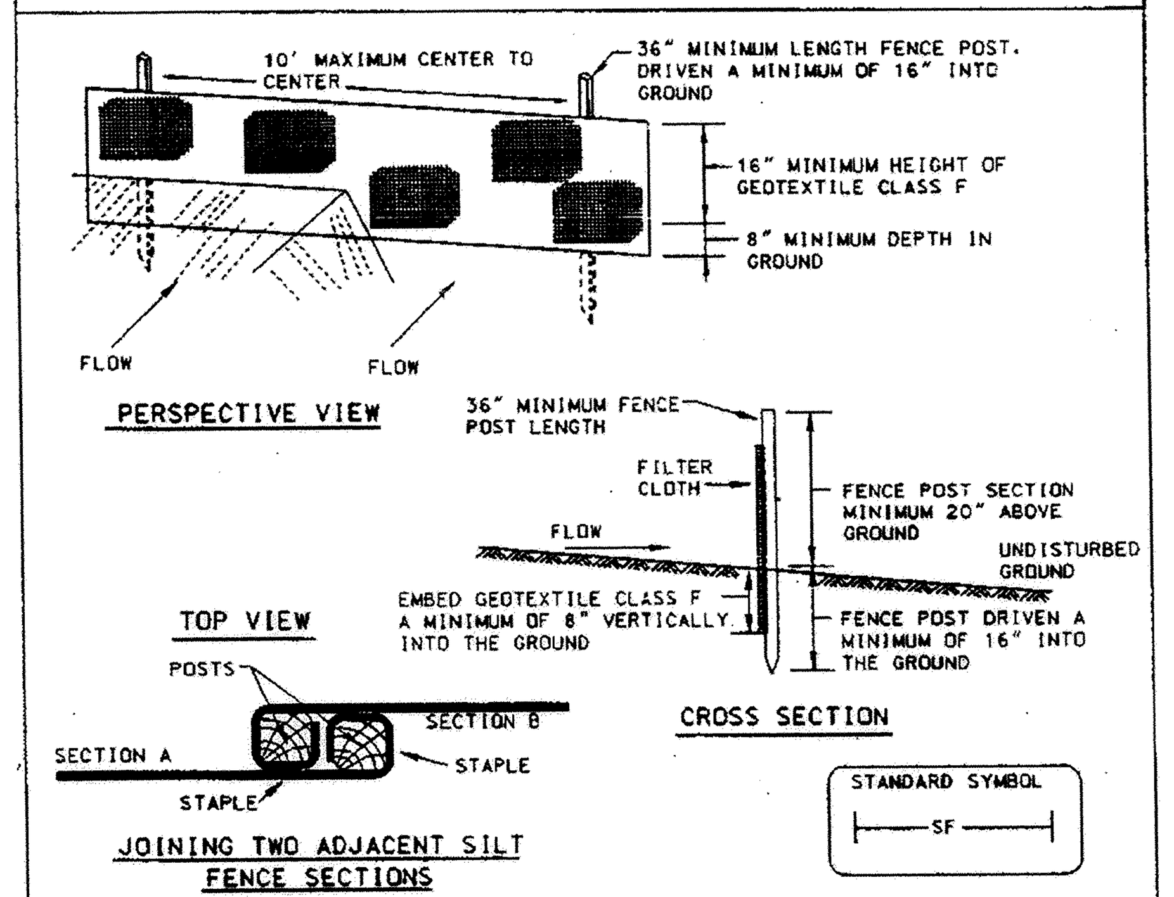
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5B	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

1994

DETAIL 22 - SILT FENCE



STANDARD SYMBOL SF

Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

1994

I. MATERIALS

A. WOODEN FRAME IS TO BE CONSTRUCTED OF 2" x 4" CONSTRUCTION GRADE LUMBER.
B. WIRE MESH MUST BE OF SUFFICIENT STRENGHT TO SUPPORT FILTER FABRIC, AND STONE FOR CURB INLETS, WITH WATER FULLY IMPOUNDED AGAINST IT.
C. FILTER CLOTH MUST BE OF A TYPE APPROVED FOR THIS PURPOSE; RESISTANT TO SUNLIGHT WITH A SEIVE SIZE, EOS, 40-85, TO ALLOW SUFFICIENT PASSAGE OF WATER AND REMOVAL OF SEDIMENT.
D. STONE IS TO BE 2" IN SIZE AND CLEAN, SINCE FINES WOULD CLOG THE CLOTH.

II. PROCEDURE

A. A SWALE, DITCHLINE OR YARD INLET PROTECTION.

1. EXCAVATE COMPLETELY AROUND INLET TO A DEPTH OF 18" BELOW NOTCH ELEVATION.
2. DRIVE 2" X 4" POST 1' INTO GROUND AT FOUR CORNERS OF INLET. PLACE NAIL STRIPS OVERLAP BETWEEN POSTS ON ENDS OF INLET. ASSEMBLE TOP PORTION OF 2" x 4" FRAME JOINT SHOWN. TOP OF FRAME (WEIR) MUST BE 6" BELOW EDGE OF ROADWAY ADJACENT TO INLET.
3. STRETCH WIRE MESH TIGHTLY AROUND FRAME AND FASTEN SECURELY. ENDS MUST MEET AT POST.
4. STRETCH FILTER CLOTH TIGHTLY OVER WIRE MESH, THE CLOTH MUST EXTEND FROM TOP OF FRAME. TO 18" BELOW INLET NOTCH ELEVATION. FASTEN SECURELY TO FRAME. ENDS MUST MEET AT POST, BE OVERLAPPED AND FOLDED, THEN FASTENED DOWN.
5. BACKFILL AROUND INLET IN COMPACTED 6" LAYERS UNTIL LAYER OF EARTH IS EVEN WITH NORTH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
6. IF THE INLET IS NOT AT A LOW POINT, CONSTRUCT A COMPACTED EARTH DIKE IN THE DITCHLINE BELOW IT. THE TOP OF THIS DIKE IS TO BE AT LEAST 6" HIGHER THE TOP OF FRAME (WEIR).
7. THIS STRUCTURE MUST BE INSPECTED FREOUENTLY AND THE FILTER FABRIC REPLACED WHEN CLOGGED.

B. CURB INLET PROTECTION.

1. ATTACH A CONTINUOUS PIECE OF WIRE MESH (30" MINIMUM WIDTH BY THROAT LENGTH PLUS 4') TO THE 2" x 4" WEIR (MEASUREING THROAT LENGTH PLUS 2') AS SHOWN ON THE STANDARD DRAWING.
2. PLACE A PIECE OF APPROVED FILTER CLOTH (40-85 SIEVE) OF THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH TO THE 2" x 4" WIER.
3. SECURLEY NAIL THE 2" x 4" WEIR TO 9" LONG SPACERES TO BE LOCATED BETWEEN THE WEIR AND THE INLET FACE (MAXIMUM 6' APART).
4. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2' LENGTHS OF 2' x 4") TO THE TOP OF THE WEIR AT SPACER LOCATIONS. THESE 2" x 4" SANDBAGS ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY OR ALTERNATE WEIGHT.
5. THE ASSEMBLE SHALL BE PLACED SO THAT THE END SPACERS ARE A MINIMUM 1' BEYOND BOTH ENDS OF THE THROAT OPENING.
6. FORM THE WIRE MESH AND FILTER CLOTH TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 2" STONE OVER THE WIRE MESH AND FILTER FABRIC IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE FILTER CLOTH.
7. THIS TYPE OF PROTECTION MUST BE INSPECTED FREOUENTLY AND THE FILTER CLOTH AND STONE REPLACE WHEN CLOGGED WITH SEDIMENT.
8. ASSURE THAT STORM FLOW DOES NOT BYPASS THE INLET BY INSTALLING TEMPORARY EARTH OR ASPHALT DIKES DIRECTING FLOW INTO INLET.

CONSTRUCTION SPECIFICATIONS.

1. THE SUBGRADE FOR THE FILTER, RIPRAP OR GABION SHALL BE PREPARED TO THE REOUIRED LINES AND GRADES. ANY FILL REOUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
2. ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIPRAP OR FILTER.
3. FILTER CLOTH SHALL BE PROTECTED FROM PUNCHING, CUTTING OR TEARING. ANY DAMAGE OTHER THAN THE OCCATIONAL SMALL HOLE SHALL BE REPARED BY PLACING ANOTHER PIECE OF CLOTH OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE CLOTH. ALL OVERLAPS WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES OF CLOTH SHALL BE A MINIMUM OF ONE FOOT.
4. STONE OR RIPRAP OR GABION OUTLETS MAY BE PLACED BY EOUIPMENT. BOTH SHALL BE CONSTRUCTED TO THE COURSE THICKNESS IN ONE OPERATION IN SUCH A MANNER TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR RIPRAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THAT IT IS REASON.

PROPOSED SEOUENCE OF CONSTRUCTION

A. STAGING AND MOBILIZATION.
B. INSTALL EROSION AND SEDIMENT CONTROL MEASURES.
C. INSTALL NEW STORM DRAIN PIPES AND STRUCTURES.
D. INSTALL NEW DRIVEWAY APRONS, SIDEWALKS AND CURB AND GUTTER.
E. REPLACE ANY REMOVED TREES, AND SEED DISTURBED AREAS.
F. REMOVE EROSION AND SEDIMENT CONTROL MEASURES.
G. DEMOBILIZATION.

STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE ADMINISTRATION (WMA) AT (410) 631-3510 SEVEN (7) DAYS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, UNLESS WAIVED BY THE ADMINISTRATION, SHALL BE REOUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN PROJECT REPRESENTATIVES AND A REPRESENTATIVE OF WMA.
2. THE CONTRACTOR MUST NOTIFY WMA IN WRITING AND BY TELEPHONE AT THE FOLLOWING POINTS:
   A. THE REOUIRED PRE-CONSTRUCTION MEETING.
   B. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.
   C. DURING THE INSTALLATION OF SEDIMENT BASINS (TO BE CONVERTED INTO PERMANENT STORMWATER MANAGEMENT STRUCTURES) AT THE REOUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION OF EACH STEP IS MANDATORY.
   D. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S). CONDITIONS ALLOW.
   E. PRIOR TO REMOVAL OF ALL SEDIMENT CONTROL DEVICES.
   F. PRIOR TO FINAL ACCEPTANCE.
3. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEOUENCE AND SHALL RESPONSIBLE FOR PROJECT. HAVE THEM INSPECTED AND APPROVED BY THE AGENCY INSPECTOR OR WMA INSPECTOR PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES. MINOR SEDIMENT CONTROL DEVICE LOCATION ADJUSTMENTS MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE WMA INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM WMA INSPECTOR AND AGENCY INSPECTOR. THE CONTRACTOR MUST OBTAIN PRIOR AGENCY AND WMA APPROVAL FOR CHANGES TO THE SEDIMENT CONTROL PLAN AND/OR SEOUENCE OF CONSTRUCTION. EROSION IS LIKELY TO OCCUR.
4. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY.
5. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN AN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM WMA INSPECTOR AND AGENCY INSPECTOR.
6. ALL SEDIMENT BASINS, TRAP EMBANKMENTS AND SLOPES, PERIMETER DIKES, CONFIGURATION WITHIN THIS TIME PERIOD AS WELL. SWALES, AND ALL DISTURBED SLOPES STEEPER OR EOUAL TO 3:1 SHALL BE STABILIZED WITH SOD OR SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES, AS SOON AS POSSIBLE BUT NO LATER THAN SEVEN (7) CALENDAR DAYS AFTER ESTABLISHMENT. ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. (REOUIREMENT FOR STABILIZATION MAY BE REDUCED TO THREE (3) DAYS FOR SENSITIVE AREAS.) STABILIZATION.
7. THE CONTRACTOR SHALL APPLY SOD OR SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS AND STOCKPILES WITHIN FOURTEEN (14) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED IN THE AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. (REOUIREMENT MAY BE REDUCED TO SEVEN (7) DAYS FOR SENSITIVE AREAS.)
8. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE CONTRACTOR SHALL STABILIZE AND HAVE ESTABLISHED PERMANENT STABILIZATION FOR ALL CONTRIBUTORY DISTURBED AREAS USING SOD OR AN APPROVED PERMANENT SEED MIXTURE WITH REOUIRED SOIL AMENDMENT AND AN APPROVED ANCHOR MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHERE THE SLOPE DOES NOT EXCEED 10 PERCENT AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED AS SOON AS POSSIBLE, BUT NO LATER THAN FOURTEEN (14) CALENDAR DAYS AFTER ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, TEMPORARY SEED AND ANCHORED STRAW MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE APPLIED BY MARCH 15 OR EARLIER IF GROUND AND WEATHER
9. THE SITE'S APPROVAL LETTER, APPROVED EROSION AND SEDIMENT CONTROL PLANS, DAILY LOG BOOKS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF WMA AND AGENCY
10. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING PROTECTIVE DEVICES TO LOWER THE WATER DOWNSLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. PROTECTIVE METHODS MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE
11. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING, RIPRAP OR OTHER APPROVED STABILIZATION MEASURES.
12. TEMPORARY SEDIMENT CONTROL DEVICES MAY BE REMOVED, WITH PERMISSION OF WMA INSPECTOR AND AGENCY INSPECTORS, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT THE START OF WORK.
13. NO PERMANENT CUT OR FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS. A SLOPE GRADIENT OF UP TO 2:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE TRENCH.
14. FOR FINISHED GRADING, THE CONTRACTOR SHALL PROVIDE ADEOUATE GRADIENTS SO AS TO PREVENT WATER FROM STANDING ON THE SURFACE MORE THAN OTHERWISE DIRECTED. TWENTY-FOUR (24) HOURS AFTER THE END OF A RAINFALL EXCEPT IN DESIGNATED DRAINAGE COURSES AND SWALE FLOW AREAS, WHICH MAY DRAIN AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL. AREAS DESIGNED TO ONE DAY. HAVE STANDING WATER SHALL NOT BE REOUIRED TO MEET THIS REOUIREMENT.
15. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A FOUNDATION WHICH IS EXISTING OR UNDER CONSTRUCTION. NO STRUCTURE MAY BE CONSTRUCTED WITHIN 20 FEET OF AN ACTIVE SEDIMENT TRAP OR BASIN.
16. THE WMA INSPECTOR HAS THE OPTION OF REOUIRING ADDITIONAL SAFETY OR SEDIMENT CONTROL MEASURES, IF DEEMED NECESSARY.
17. ALL TRAP DEPTH DIMENSIONS ARE RELATIVE TO THE OUTLET ELEVATION. ALL TRAPS MUST HAVE A STABLE OUTFALL. ALL TRAPS AND BASINS SHALL HAVE STABLE INFLOW POINTS.
18. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. REFER TO APPROPRIATE SPECIFICATIONS FOR TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SODDING, AND GROUND COVERS.
19. TEMPORARY SEDIMENT TRAP(S) SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A POINT ONE-HALF (1/2) THE DEPTH BETWEEN THE OUTLET CREST AND THE BOTTOM OF THE TRAP. SEDIMENT BASINS SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO ONE-HALF (1/2) THE DEPTH BETWEEN THE DEWATERING ELEVATION AND THE BOTTOM OF THE BASIN.
20. SEDIMENT REMOVED FROM TRAPS (AND BASINS) SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN, WETLAND OR TREE-SAVE AREA. WHEN PUMPING SEDIMENT LADEN WATER, THE DISCHARGE MUST BE DIRECTED TO A SEDIMENT TRAPPING DEVICE PRIOR TO RELEASE FROM THE SITE.
21. WHERE DEEMED APPROPRIATE BY THE ENGINEER OR INSPECTOR, SEDIMENT BASINS AND TRAPS MAY NEED TO BE SURROUNDED WITH AN APPROVED SAFETY FENCE. THE FENCE MUST CONFORM TO LOCAL ORDINANCES AND REGULATIONS. THE DEVELOPER OR OWNER SHALL CHECK WITH LOCAL BUILDING OFFICIALS ON APPLICABLE SAFETY REOUIREMENTS. WHERE SAFETY FENCE IS DEEMED APPROPRIATE AND LOCAL ORDINANCES DO NOT SPECIFY FENCING SIZES AND TYPES, THE FOLLOWING SHALL BE USED AS A MINIMUM STANDARD: THE SAFETY FENCE MUST BE MADE OF WELDED WIRE AND AT LEAST FORTY-TWO (42) INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN EIGHT (8) FEET, HAVE MESH OPENINGS NO GREATER THAN TWO (2) INCHES IN WIDTH AND FOUR (4) INCHES IN HEIGHT WITH A MINIMUM OF FOURTEEN (14) GAUGE WIRE. FENCE MUST BE MAINTAINED AND IN GOOD CONDITION AT ALL TIMES.
22. SEDIMENT CONTROL FOR UTILITY CONSTRUCTION FOR AREAS OUTSIDE OF DESIGNED CONTROLS OR AS DIRECTED BY ENGINEER OR WMA INSPECTOR:
   A. CALL "MISS UTILITY" AT 1-800-257-7777 FORTY-EIGHT (48) HOURS PRIOR TO
   B. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE INSPECTORS.
   C. TRENCHES FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCH SHALL BE OPENED THAN CAN BE COMPLETED THE SAME DAY, UNLESS
   D. TEMPORARY SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED FOR MORE THAN
23. OFF-SITE SPOIL OR BORROW AREAS ON STATE OR FEDERAL PROPERTY MUST HAVE PRIOR APPROVAL BY WMA; OTHERWISE, APPROVAL MUST BE GRANTED BY THE LOCAL AUTHORITIES. ALL WASTE AND BORROW AREAS OFF-SITE MUST BE WAYS. PROTECTED BY SEDIMENT CONTROL MEASURES AND STABILIZED.
24. SITES WHERE INFILTRATION DEVICES ARE USED FOR THE CONTROL OF STORMWATER, EXTREME CARE MUST BE TAKEN TO PREVENT RUNOFF FROM UNSTABILIZED AREAS FROM ENTERING THE STRUCTURE DURING CONSTRUCTION. SEDIMENT CONTROL DEVICES PLACED IN INFILTRATION AREAS MUST HAVE BOTTOM ELEVATIONS AT LEAST TWO (2) FEET HIGHER THAN THE FINISH GRADE BOTTOM ELEVATION OF THE INFILTRATION PRACTICE. WHEN CONVERTING A SEDIMENT TRAP TO AN INFILTRATION DEVICE, ALL ACCUMULATED SEDIMENT MUST BE REMOVED AND DISPOSED OF PRIOR TO FINAL GRADING OF INFILTRATION DEVICE.
25. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS IN UNPAVED AREAS SHALL BE STABILIZED AND PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC
26. WHEN A STORM DRAIN SYSTEM OUTFALL IS DIRECTED TO A SEDIMENT TRAP OR SEDIMENT BASIN AND THE SYSTEM IS TO BE USED FOR TEMPORARILY CONVEYING SEDIMENT LADEN WATER, ALL STORM DRAIN INLETS IN NON-SUMP AREAS SHALL HAVE TEMPORARY ASPHALT BERMS CONSTRUCTED AT THE TIME OF BASE PAVING TO DIRECT GUTTER FLOW INTO THE INLETS TO AVOID SURCHARGING AND OVERFLOW OF INLETS IN SUMP AREAS.
26. SITE ANALYSIS
    TOTAL AREA OF SITE.....................SITE IS DEFINED AS AREAS INVOLVING ANY IMPROVEMENTS.
    AREA TO BE DISTURBED...................0.46 ACRES.
    AREA TO BE ROOFED OR PAVED.............0.14 ACRES. (NEW PAVEMENT 0.14 ACRES)
    AREA TO BE VEGETATIVELY STABILIZED.....0.32 ACRES.
    TOTAL CUT..............................0 CY.
    TOTAL FILL.............................91 CY.
    OFFSITE WASTE/BORROW AREA LOCATION.......TO BE APPROVED BY SEDIMENT CONTROL INSPECTOR.

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

APPROVED HOWARD S.C.D. 10/30/03 DATE

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

Approved Howard S.C.D. Date 10/30/03

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS	10/30/03 DATE	CHIEF, BUREAU OF ENGINEERING	10/30/03 DATE
CHIEF, BUREAU OF HIGHWAYS	10-30-03 DATE	CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION	10/30/03 DATE

Baker
Michael Baker Jr., Inc.

MICHAEL BAKER JR. INC.
Consulting Engineers
801 Cromwell Park Drive
Suite 110
Glen Burnie, Maryland 21061
(410) 424-2210

STATE OF MARYLAND REGISTERED PROFESSIONAL ENGINEER 10/29/03

DES: M.A.F.			
DRN: J.O.T.			
CHK: JVB			
DATE: 10/28/03	BY	NO.	DATE

DRAINAGE IMPROVEMENTS
PROJECT NO. D-1109

EROSION CONTROL STANDARD NOTES AND DETAILS
SAVAGE-GUILFORD ROAD
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

GENERAL NOTES

1. HOWARD COUNTY TRAFFIC ENGINEERING AND SHA SHALL REVIEW PROPOSED SIGN LOCATIONS IN THE FIELD PRIOR TO ANY SIGN INSTALLATIONS.
2. ALL SIGN SHALL BE MOUNTED ON 4" x 4" WOODEN POSTS.
3. ALL SIGN DISTANCES MAY BE ADJUSTED TO FIT FIELD CONDITIONS WITH THE ENGINEERS APPROVAL.
4. THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES. MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTIONS AND AT ALL OTHER TIMES IN ACCORDANCE WITH THE METHODS INDICATED ON TRAFFIC CONTROL DEVICES. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MARYLAND SHA SPECIFICATIONS STANDARD NO. MD -107.002. THE MD MUTCD AND OR AS DIRECTED.
5. SIGNS LARGER THAN 10 SQUARE FEET IN TOTAL AREA SHALL BE INSTALLED ON TWO 4" x 4" WOODEN POSTS.
6. ALL SIGNS NOT IN USE SHALL BE EITHER COVERED WITH AN OPAQUE MATERIAL APPROVED BY THE COUNTY OR REMOVED FROM THE SITE IMMEDIATELY UPON COMPLETION OF USE.
7. THE POSSIBILITY EXIST THAT ONE OR MORE SIGNS MAY HAVE TO BE MOUNTED ON WOODEN STANDS.
8. THE CONTRACTOR SHALL MEET WITH THE ENGINEER, LOCAL POLICE AND RESIDENTS OF SAVAGE-GUILFORD, FLAG WALK PLACE AND DRUMBEAT PLACE, WITHIN THE LIMIT TO ADVISE THE MOF THIS WORK SCHEDULE. THE CONTRACTOR SHALL THEN ADVISE THE RESIDENCES BI-WEEKLY ON PROGRESS.
9. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS ON SAVAGE-GUILFORD FLAG WALK PLACE AND DRUMBEAT PLACE WITHIN THE WORK ZONE.
10. THE CONTRACTOR SHALL SCHEDULE THE WORK SUCH THAT THE DETOUR SYSTEM SHALL BE EFFECT FOR THE SHORTEST TIME PRACTICAL. THE CONTRACTOR SHALL PRESENT A SCHEDULE OF WORK TO THE COUNTY PRIOR TO THE START OF THE WORK. THAT SCHEDULE WILL BE REVIEWED TO MINIMIZE THE DETOUR TIME.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		Baker Michael Baker Jr., Inc. MICHAEL BAKER JR. INC. Consulting Engineers 801 Cromwell Park Drive Suite 110 Glen Burnie, Maryland 21061 (410) 424-2210	DES: M.A.F. DRN: J.O.T. CHK: JVB DATE: 10/28/03	DRAINAGE IMPROVEMENTS PROJECT NO. D-1109	TRAFFIC CONTROL PLAN SAVAGE-GUILFORD ROAD HOWARD COUNTY, MARYLAND	SCALE AS SHOWN
DIRECTOR OF PUBLIC WORKS — DATE 10/30/03	CHIEF, BUREAU OF ENGINEERING — DATE 10/30/03					
CHIEF, BUREAU OF HIGHWAYS — DATE 10-30-03	CHIEF, TRANSPORTATION AND SPECIAL PROJECTS DIVISION — DATE 10/30/03		BY / NO. / DATE			SHEET 12 OF 12