

# MD 108 AT DAVIDGE DRIVE SEWER EXTENSION CAPITAL PROJECT S-6231 CONTRACT NO. 20-4022

ITEM	QUANTITIES $\Delta$		TYPE MATERIAL	SUPPLIER
	ESTIMATED	AS BUILT		
8" P.V.C. SEWER	264.5 L.F.	264 L.F.	P.V.C.	HUGHES / ETI
8" D.I.P. SEWER	247.3 L.F.	237 L.F.	D.I.P.	HUGHES / US PIPE
4" SHC	27 L.F.	27 L.F.		HUGHES / GPK
SEWER MANHOLES	4 EA.	4 EA.		FREDERICK PRECAST
MANHOLES-DEPTH > 6'	25 V.F.	25 V.F.		" "
DROP MANHOLE TYPE "B"	1 EA.	1 EA.		" "
DROP MANHOLE-DEPTH > 6'	9 V.F.	7 V.F.		" "
42" O.D. CASING FOR 8" SEWER-TRENCHLESS	60 L.F.	60 L.F.	STEEL	OPS
42" O.D. CASING	83 L.F.	83 L.F.	STEEL	OPS

NOTE:  
"SEDIMENT CONTROL TO BE IMPLEMENTED IN ACCORDANCE WITH VOLUME 4, ARTICLE 15 OF THE HOWARD COUNTY DESIGN MANUAL AND THESE PLANS."

## GENERAL NOTES:

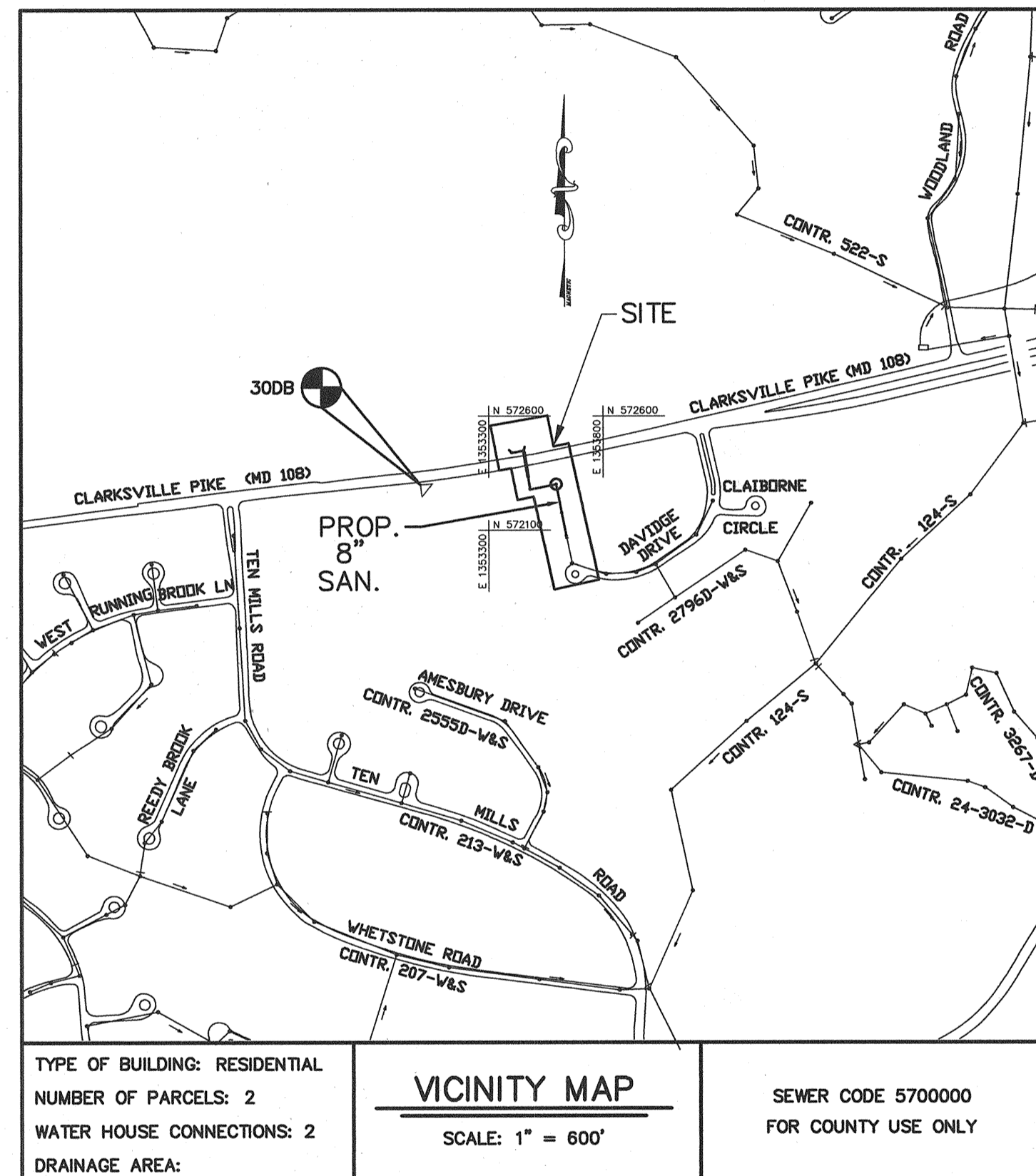
### PART I

- APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. 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, NAD 83/91.
- ALL VERTICAL CONTROLS ARE BASED ON NGVD 29.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES 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 LOCATIONS OF THE TEST PITS. 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.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 

AT&T.....	1-800-526-2000
BGE(CONTRACTOR SERVICES).....	410-850-4620
BGE(UNDERGROUND DAMAGE CONTROL).....	410-787-9068
BUREAU OF UTILITIES.....	410-313-4900
VERIZON.....	1-800-743-0033
COLONIAL PIPELINE CO.....	410-795-1390
MISS UTILITY.....	1-800-257-7777
STATE HIGHWAY ADMINISTRATION.....	410-531-5533
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE 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 THE 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)313-7450 AT LEAST TEN WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.

### PART II SEWER

- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER, UNLESS OTHERWISE NOTED.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER, STANDARD DETAIL G5.52.
- ALL SEWER TRENCH BEDDING SHALL BE IN ACCORDANCE WITH STANDARD DETAIL G 2.01
- TEN DAYS PRIOR TO TIE-IN CONNECTIONS, CONTACT THE HOWARD COUNTY BUREAU OF UTILITIES, 410-313-4900, TO COORDINATE WORK.



DEVELOPER'S CERTIFICATION

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 COUNTY SOIL CONSERVATION DISTRICT."

*Paul S. Egan* 7/21/03  
SIGNATURE OF DEVELOPER DATE  
PRINT NAME BELOW SIGNATURE

ENGINEER'S CERTIFICATION

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 HOWARD COUNTY SOIL CONSERVATION DISTRICT.

*M. Marks* DATE 7/7/03  
WALLACE, MONTGOMERY & ASSOCIATES, LLP  
110 WEST ROAD - SUITE 300  
TOWSON, MARYLAND 21204  
(410) 494-9093

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

*Jim Murray* 7/29/03  
S.D.A.-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*John P. Roberts* 7/29/03  
APPROVED DATE  
HOWARD SOIL CONSERVATION DISTRICT

INDEX OF SHEETS	
SHEET	DESCRIPTION
1	TITLE SHEET
2	PLAN & PROFILE SHEET
3	TRAFFIC & SEDIMENT CONTROL NOTES
4	SEDIMENT CONTROL NOTES & DETAILS

BENCHMARKS $\oplus$				
NO.	ELEV.	NORTHING	EASTING	DESCRIPTION
30BA	397.899	573149.047	1357083.21	STANDARD CONCRETE MONUMENT ON SOUTH EAST CORNER OF OLD RTE. 108, 40.4' SOUTH END OF GUARD RAIL, 47.4' SOUTH WEST OF GUY WIRE, AND 37.1 WEST OF BG&E POLE # 268713.
300B	409.894	572298.134	1353001.79	STANDARD CONCRETE MONUMENT LOCATED 27' E OF HOUSE # 9944 D/W ON MD RTE. 108. THREE PK NAILS ARE LOCATED 4 FT. NORTH OF EASTBOUND SHOULDER AT DISTANCES OF 18' N, 16.4' N & 23.1' N OF MONUMENT.

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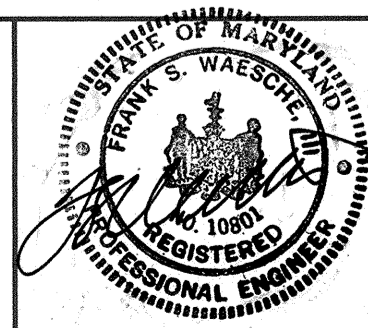
DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*John P. Roberts* 7/21/03  
DIRECTOR OF PUBLIC WORKS DATE

*Paul S. Egan* 7/21/03  
CHIEF, BUREAU OF UTILITIES DATE

*John P. Roberts* 7-23-03  
CHIEF, BUREAU OF UTILITIES DATE

**WALLACE, MONTGOMERY & ASSOCIATES, LLP**  
CIVIL AND STRUCTURAL ENGINEERS  
110 WEST ROAD  
TOWSON, MARYLAND 21204



DES: WCW	RD	$\Delta$	AS-BUILTS	12/04
DRN: SDH				
CHK: LAF				
DATE: APRIL 2003	BY	NO.	REVISION	DATE

TITLE SHEET

600' SCALE MAP NO. 30 BLOCK NO. 8

MD. 108 AT DAVIDGE DRIVE  
SEWER EXTENSION  
CAPITAL PROJECT S-6231  
CONTRACT No. 20-4022  
ELECTION DISTRICT No. 6  
HOWARD COUNTY, MARYLAND

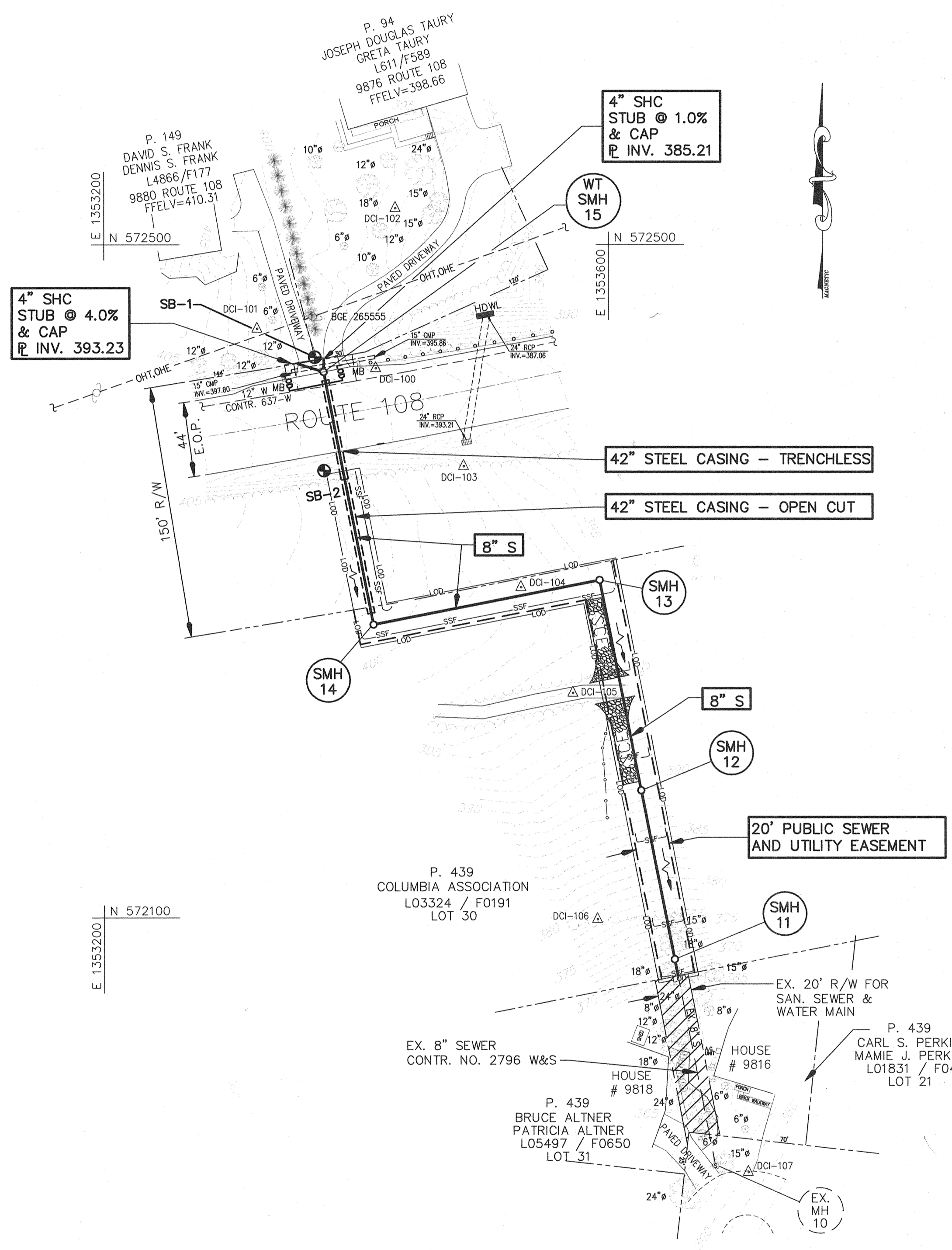
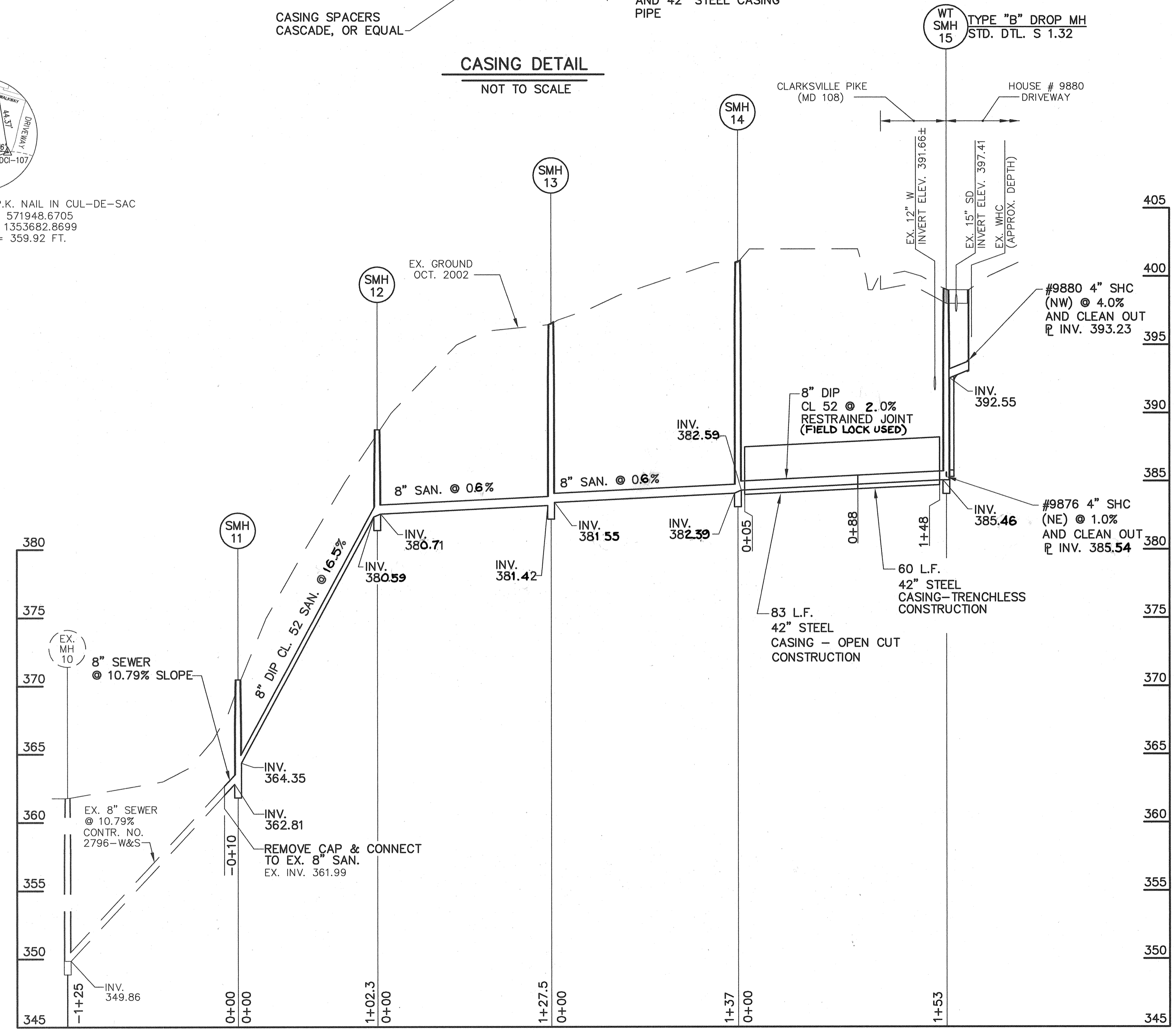
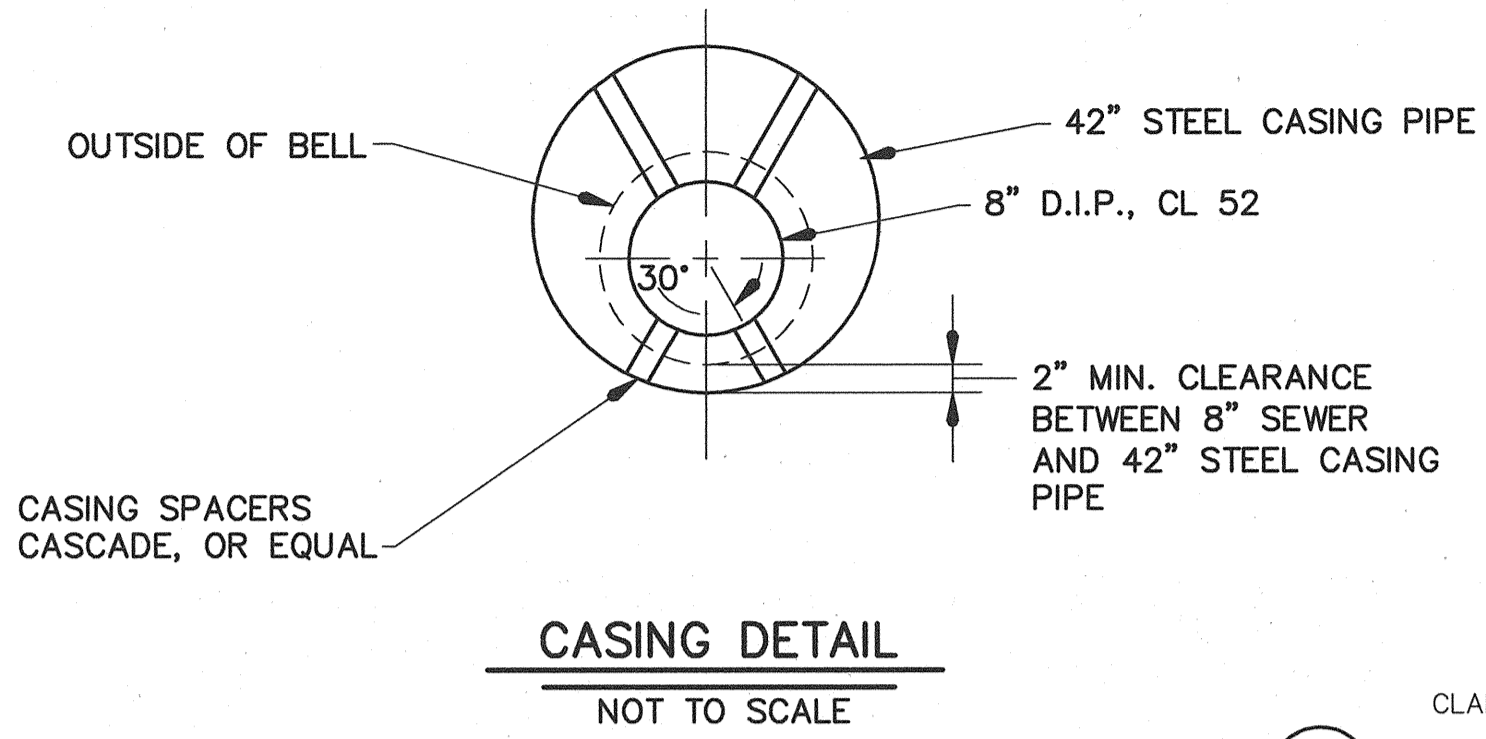
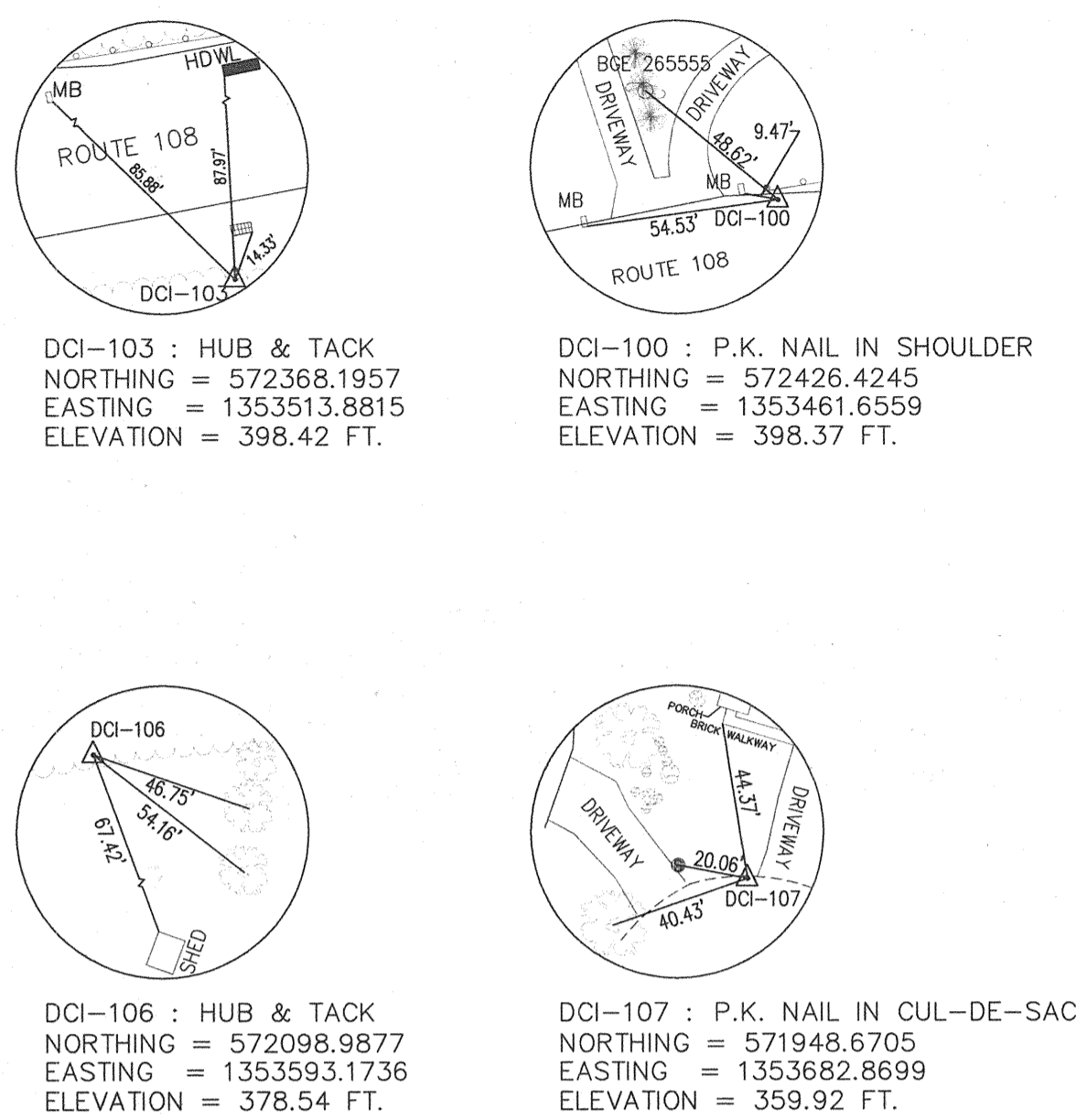
SCALE AS SHOWN  
SHEET 1 OF 4

As-Built

- NOTES:
1. PROVIDE BRICK BULKHEAD AND JOINT AT END OF CASING AS SHOWN ON HOWARD CO. STD. DETAIL G 9.01.
  2. 42" MIN. STEEL CASING PIPE, 3/8" MIN. WALL THICKNESS, A.W.W.A. C-200 WITH COAL TAR ENAMEL COATING, A.W.W.A. C-203 OR C-210. JOINTS TO BE WELDED FULL CIRCUMFERENCE.
  3. THE ANNULAR SPACE BETWEEN 8" DIP & STEEL CASING PIPE SHALL BE LEFT EMPTY.
  4. SEWER MAIN WITHIN CASING SLEEVE SHALL BE RESTRAINED JOINT DIP.
  5. CASING SPACERS SHALL BE PROVIDED TO SUPPORT THE SEWER MAIN THROUGHOUT THE SLEEVE.

STAKEOUT TABLE SEWER MAIN		
DESCRIPTION	NORTH	EAST
EXIST. MH.	571952.45	1353663.17
SMH 11	572075.09	1353639.01
SMH 12	572175.46	1353619.24
SMH 13	572300.62	1353594.58
SMH 14	572278.29	1353481.21
SMH 15	572424.26	1353430.57

SOIL BORINGS	
NO.	DEPTH
SB-1	16'
SB-2	18'



- LEGEND**
- FIRE HYDRANT
  - WATER VALVE
  - WATER METER
  - GAS VALVE
  - CLEAN OUT
  - SANITARY/SEWER MANHOLE
  - STORM DRAIN MANHOLE
  - TREE LINE/WOODS
  - EXISTING TREE
  - EXISTING BUSH/BRUSH
  - TRVERSE POINT
  - EXISTING CONTOUR
  - EXISTING SIGN
  - METAL FENCE
  - WOOD FENCE
  - GUARD RAIL
  - LIMIT OF DISTURBANCE
  - SILT FENCE

**PROFILE**  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5' (NTS)

**PLAN**  
SCALE: 1" = 50'

**As-Built**

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DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Robert M. Rainey* 7/21/03  
DIRECTOR OF PUBLIC WORKS DATE

*Robert M. Rainey* 7-23-03  
CHIEF, BUREAU OF UTILITIES DATE

*Robert M. Rainey* 7/21/03  
CHIEF, BUREAU OF ENGINEERING DATE

*Robert M. Rainey* 7-21-03  
CHIEF, UTILITY DESIGN DIVISION DATE

**WALLACE, MONTGOMERY & ASSOCIATES, LLP**  
CIVIL AND STRUCTURAL ENGINEERS  
110 WEST ROAD  
TOWSON, MARYLAND 21204



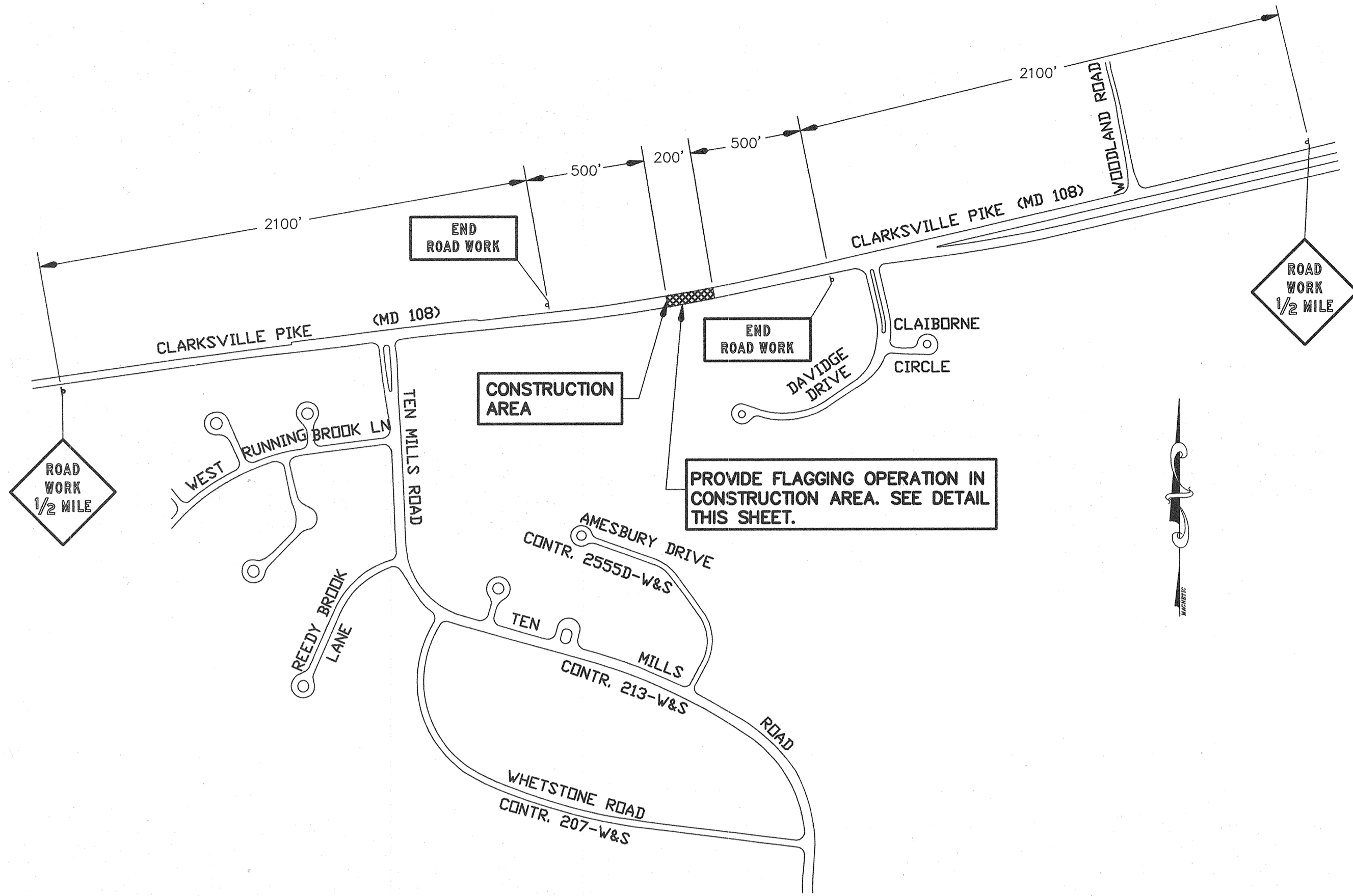
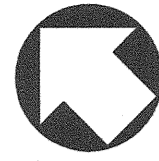
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DRN: SDH			
CHK: LAF			
DATE: APRIL 2003	BY	NO.	REVISION

PLAN AND PROFILE

600' SCALE MAP NO. 30 BLOCK NO. 8

MD. 108 AT DAVIDGE DRIVE  
SEWER EXTENSION  
CAPITAL PROJECT S-6231  
CONTRACT No. 20-4022  
ELECTION DISTRICT No. 6  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 2 OF 4

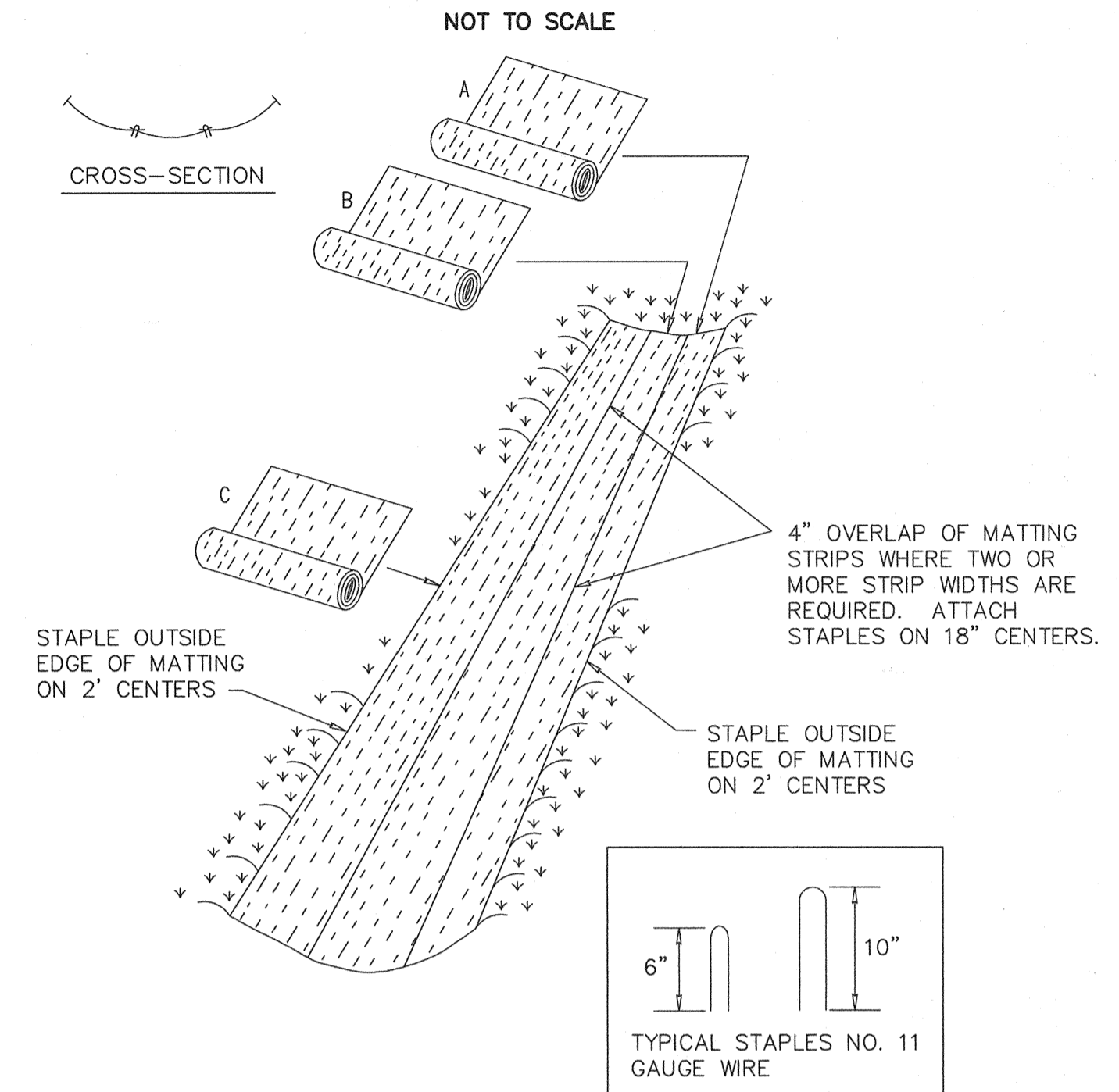


**TRAFFIC CONTROL PLAN**  
SCALE: 1" = 500'

**TRAFFIC CONTROL NOTES:**

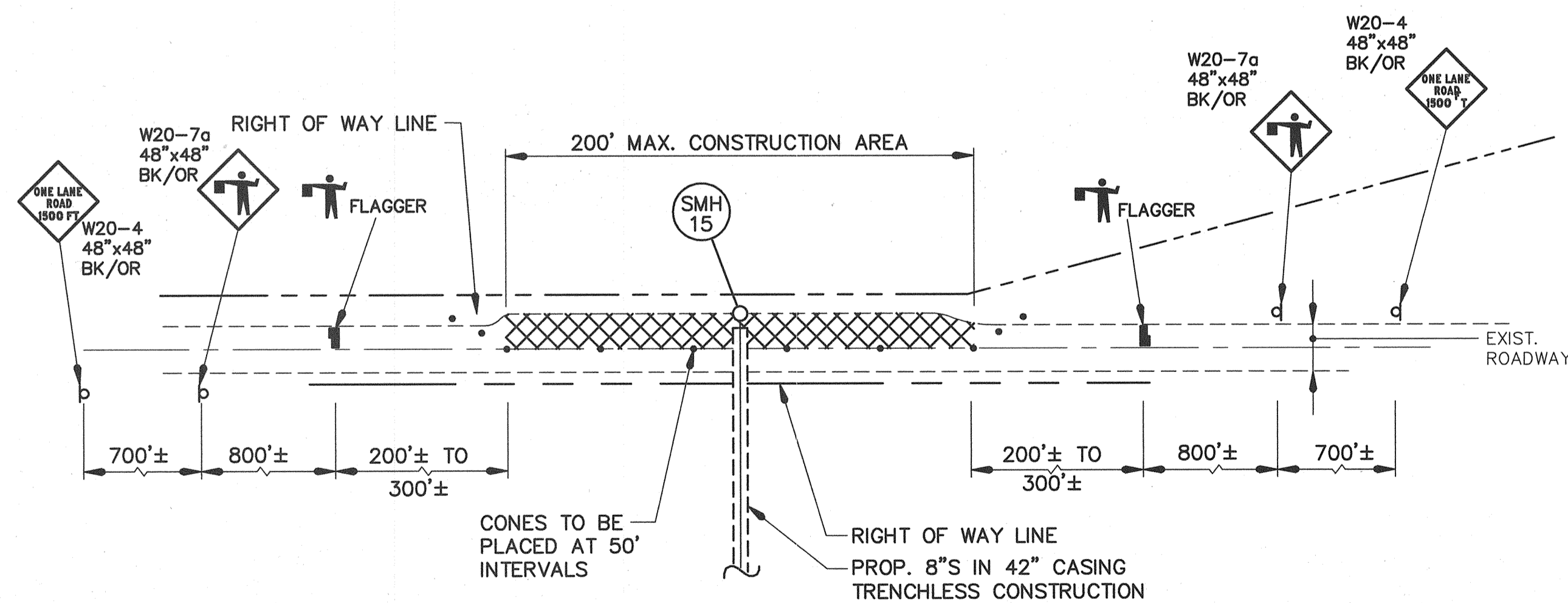
1. THE M.S.H.A. AND HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS (410-313-2430) SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO BEGINNING ANY WORK IN ORDER TO SCHEDULE A FIELD INSPECTION OF TRAFFIC CONTROL DEVICES
2. ALL WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS CONTAINED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE MARYLAND STATE HIGHWAY ADMINISTRATION.
3. NO WORK SHALL BE PERFORMED IN THE ROADWAY FROM 6 AM TO 9 AM & 4 PM TO 7 PM.
4. TRAVEL LANES SHALL BE A MINIMUM OF TEN FEET IN WIDTH. WHEN ONLY ONE LANE IS OPEN, A FLAG PERSON(S) PROPERLY TRAINED AND ATTIRED WITH THE APPROPRIATE SIGNING SHALL BE PROVIDED. THE ROADWAY SHOULD BE REOPENED TO TWO LANES IN ACCORDANCE WITH WORK HOUR RESTRICTIONS.
5. ALL OPEN TRENCHES SHALL BE CLOSED AT THE END OF EACH DAY. IF STEEL PLATES ARE TO BE USED, APPROPRIATE SIGNING WILL BE REQUIRED.
6. PLACE STEEL PLATES FLUSH WITH ROAD SURFACE OR WEDGED IN A MANNER TO PREVENT ROCKING OR SHIFTING. EACH OF THE FOUR (4) CORNERS WILL BE PINNED OR SPIKED DOWN, SUFFICIENTLY TO PREVENT PLATE MOVEMENT, COLD MIX WILL BE PLACED AROUND ALL SIDES OF THE PLATE TO ALLOW MOTOR VEHICLES TO CROSS WITHOUT MOVING THE PLATE OR DAMAGING THE VEHICLE. THE PLATE(S) WHILE IN PLACE WILL BE MONITORED TWICE A DAY, SEVEN (7) DAYS A WEEK, UNTIL THEY CAN BE REMOVED. NO STEEL PLATES SHALL REMAIN ON THE TRAVELED PORTION OF THE ROADWAY IN EXCESS OF TEN (10) DAYS. ANY WORK REQUIRING ADDITIONAL TIME MUST BE APPROVED IN WRITING BY HOWARD COUNTY AND THE STATE HIGHWAY ADMINISTRATION.
7. EXISTING REGULATORY WARNING AND GUIDE SIGNS THAT DO NOT APPLY DUE TO TEMPORARY TRAFFIC CONDITIONS WILL BE COVERED AS DIRECTED BY THE ENGINEER.
8. ACCESS SHALL BE PROVIDED TO ALL EXISTING DRIVEWAYS AT ALL TIMES. DURING ONE LANE FLAGGING OPERATIONS ENSURE THAT NO VEHICLES EXIT FROM ANY DRIVEWAYS, BETWEEN BOTH FLAG PERSONS, IN THE INCORRECT DIRECTION.
9. ALL CONES AND FLAG PERSON(S) SHALL BE MOVED ACCORDINGLY AS CONSTRUCTION PROGRESSES. ALL WORK ZONE SIGNING SHALL BE IN ACCORDANCE WITH THE TYPICAL SIGN PLACEMENT SHOWN ON THE TRAFFIC CONTROL PLAN, TYPICAL FLAGGING OPERATION DETAIL, AND SHALL NOT OBSTRUCT EXISTING TRAFFIC CONTROL DEVICES.
10. IF TEMPORARY PARKING RESTRICTIONS WILL BE REQUIRED, INSTALL SIGNS AND NOTIFY AT LEAST ONE DAY IN ADVANCE ALL AFFECTED RESIDENTS. CONTACT S.H.A. AND HOWARD COUNTY TRAFFIC ENGINEERING BEFORE ANY PARKING RESTRICTIONS ARE ENACTED.
11. CONSTRUCTION VEHICLES SHALL NOT BE PARKED IN A MANNER THAT WILL IMPEDE TRAFFIC OR IMPAIR SIGHT DISTANCE.
12. DURING BORE AND JACK CROSSING OF MD ROUTE 108, PROVIDE 150 LF OF PORTABLE CONCRETE BARRIER AT THE EDGE OF THE SHOULDER. COORDINATE LOCATION AND ORIENTATION WITH THE STATE HIGHWAY ADMINISTRATION.

**ECM - EROSION CONTROL MATTING**

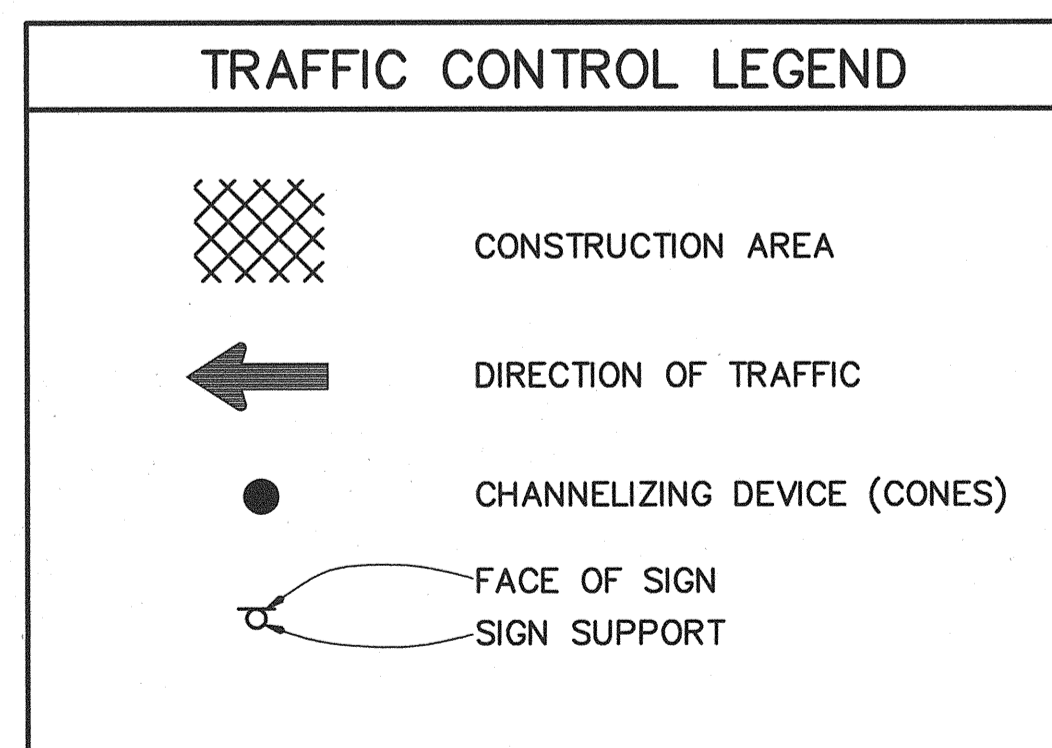


**CONSTRUCTION SPECIFICATIONS**

1. Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6".
  2. Staple the 4" overlap in the channel center using an 18" spacing between staples.
  3. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
  4. Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.
  5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.
  6. The discharge end of the matting liner should be similarly secured with 2 double rows of staples.
- Note: If flow will enter from the edge of the matting then the area effected by the flow must be key-in.



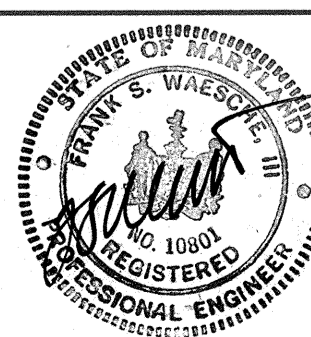
**TYPICAL FLAGGING OPERATION DETAIL**  
NOT TO SCALE



**As-Built**

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
 Director of Public Works: Robert A. Beisinger 7-23-03  
 Chief, Bureau of Utilities: [Signature]  
 Chief, Bureau of Engineering: [Signature] 7/21/03  
 Chief, Quality Design Division: [Signature] 7-21-03

WALLACE, MONTGOMERY & ASSOCIATES, LLP  
 CIVIL AND STRUCTURAL ENGINEERS  
 110 WEST ROAD  
 TOWSON, MARYLAND 21204

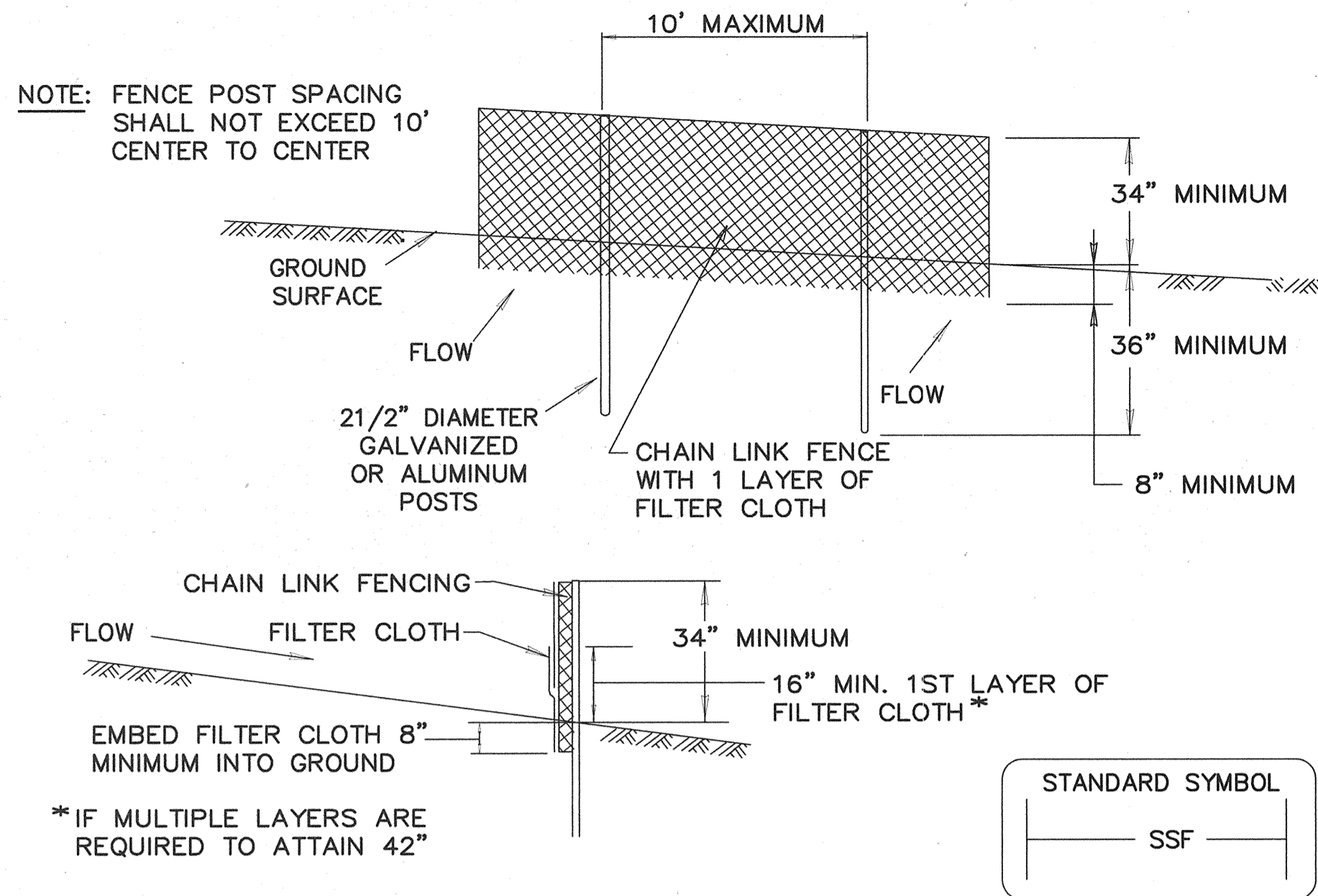


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DRN:	SOH			
CHK:	LAF			
DATE:	APRIL 2003	BY	NO.	REVISION

TRAFFIC & SEDIMENT CONTROL DETAILS  
 600' SCALE MAP NO. 30 BLOCK NO. 8

MD. 108 AT DAVIDGE DRIVE  
 SEWER EXTENSION  
 CAPITAL PROJECT S-6231  
 CONTRACT No. 20-4022  
 ELECTION DISTRICT No. 6  
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 3 OF 4



**CONSTRUCTION SPECIFICATIONS**

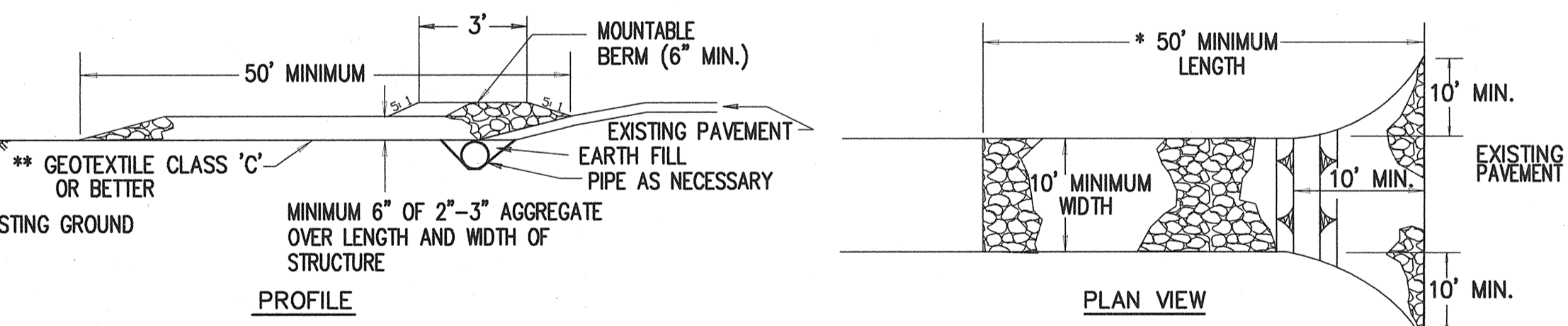
- FENCING SHALL BE 42" IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY DETAILS FOR CHAIN LINK FENCING. THE SPECIFICATION FOR A 6' FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 6' LENGTH POSTS.
- CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE.
- FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
- FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8" INTO THE GROUND. BY THE END OF THE SECTION OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT BUILDUPS REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE, OR WHEN SILT REACHES 50% OF FENCE HEIGHT
- FILTER CLOTH SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR GEOTEXTILE TIES AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR

TENSILE STRENGTH	50 LBS/IN (MIN.)	TEST: MSMT 509
TENSILE MODULUS	20 LBS/IN (MIN.)	TEST: MSMT 509
FLOW RATE	0.3 GAL/FT <sup>2</sup> /MINUTE (MAX.)	TEST: MSMT 322
FILTERING EFFICIENCY	75% (MIN.)	TEST: MSMT 322

**SUPER SILT FENCE**  
NOT TO SCALE

**SEQUENCE OF CONSTRUCTION**

- CONTACT HOWARD COUNTY BUREAU OF ENGINEERING, CONSTRUCTION INSPECTION DIVISION (410-313-1880) PRIOR TO STARTING DATE. (4 DAYS)
- INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS PER SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL VOL. IV. (1 DAY)
- EXCAVATE AND INSTALL PROPOSED 8" SEWER MAIN. (35 DAYS)
- FOR DISTURBED AREAS THAT DO NOT DRAIN TO A SEDIMENT CONTROL DEVICE, STABILIZE AREAS TO BE PAVED WITH GRADED AGGREGATE BASE COURSE AND GRASS AREAS WITH TOPSOIL, SEED, AND MULCH BY THE END OF EACH WORKING DAY.
- RESTORE TRENCHES TO THEIR ORIGINAL CONDITION AS PER HOWARD COUNTY STANDARDS WITH TEMPORARY PAVING HOWARD COUNTY STANDARD SPECIFICATION. (3 DAYS)
- UPON PERMISSION FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTION, REMOVE SEDIMENT CONTROL DEVICES. (1 DAY)
- INSTALL PERMANENT PAVING PATCH OVER TRENCH. (1 DAY)



**CONSTRUCTION SPECIFICATIONS**

- Length - minimum of 50' (\*30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. \*\*The plan approval authority may not require single family residences to use geotextile.
- Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
- Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
- Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

**STABILIZED CONSTRUCTION ENTRANCE**  
NOT TO SCALE

**TEMPORARY SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

**SEEDBED PREPARATION** - LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

**SOIL AMENDMENTS** - APPLY 60 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.).

**SEEDING** - FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ. FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (0.07 LBS/1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

**MULCHING** - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

REFER TO THE "1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR RATE AND METHODS NOT COVERED.

**PERMANENT SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

**SEEDBED PREPARATION:** LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

**SOIL AMENDMENTS:** IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED** - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ. FT.)
- ACCEPTABLE** - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

**SEEDING** - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (0.05 LBS/1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

**MULCHING** - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

**MAINTENANCE** - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

**STANDARD SEDIMENT CONTROL NOTES**

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY BUREAU OF ENGINEERING, CONSTRUCTION INSPECTION DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A.) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, B.) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, TEMPORARY SEEDING AND MULCHING (SEC. G). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 

TOTAL AREA OF SITE	=	0.296	ACRES
AREA DISTURBED	=	0.222	ACRES
AREA TO BE ROOFED OR PAVED	=	0.007	ACRES
AREA TO BE VEGETATIVELY STABILIZED	=	0.215	ACRES
TOTAL CUT	=	N/A	CU. YDS.
TOTAL FILL	=	N/A	CU. YDS.

 OFF SITE WASTE/BORROW AREA LOCATION: SITE WITH AN ACTIVE GRADING PERMIT AS APPROVED BY ENGINEERING.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- PLACE EXCAVATED SOIL ON THE UPHILL SIDE OF THE TRENCHES.

**RESTORATION NOTES:**

- SAW CUT THE EXISTING BITUMINOUS PAVING, CURB AND GUTTER, AND SIDEWALK.
- REPAIR BITUMINOUS PAVING IN ACCORDANCE WITH STANDARD DETAIL G4.01.
- REPAIR CURB AND GUTTER IN ACCORDANCE WITH STANDARD DETAIL R 3.01 AND MATCH EXISTING CONDITIONS.
- REPAIR CONCRETE SIDEWALK IN ACCORDANCE WITH STANDARD DETAIL R 3.05 AND MATCH EXISTING CONDITIONS.

**RESTORATION SCHEDULE**

STATION	TO STATION	DISTANCE	MATERIAL
(-) 0+10	SMH 11	10.0 FT.	SEED & MULCH
SMH 11	SMH 12	102.3 FT.	SEED & MULCH
SMH 12	SMH 13	127.5 FT.	SEED & MULCH
SMH 13	SMH 14	137.0 FT.	SEED & MULCH
SMH 14	0+88	5.0 FT.	SEED & MULCH
1+48	SMH 15	5.0 FT.	ASPHALT
SHC (HOUSE # 9880)			
SMH 15	0+15	15.0 FT.	IN KIND REPLACEMENT (D/W PARKING)
0+15	0+19	4.0 FT.	SEED & MULCH
SHC (HOUSE # 9876)			
SMH 15	0+08	8.0 FT.	IN KIND REPLACEMENT (D/W PARKING)

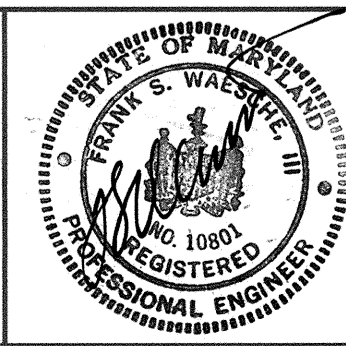
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DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*[Signatures]*  
DIRECTOR OF PUBLIC WORKS DATE 7/21/03  
CHIEF, BUREAU OF UTILITIES DATE 7-23-03  
CHIEF, UTILITY DESIGN DIVISION DATE 7-21-03

**WALLACE, MONTGOMERY & ASSOCIATES, LLP**  
CIVIL AND STRUCTURAL ENGINEERS  
110 WEST ROAD  
TOWSON, MARYLAND 21204



DES:	WCW				
DRN:	SDH				
CHK:	LAF				
DATE:	APRIL 2003	BY:	NO.	REVISION	DATE

**SEDIMENT CONTROL NOTES & DETAILS**

600' SCALE MAP NO. 30 BLOCK NO. 8

MD. 108 AT DAVIDGE DRIVE  
SEWER EXTENSION  
CAPITAL PROJECT S-6231  
CONTRACT No. 20-4022  
ELECTION DISTRICT No. 6  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 4 OF 4