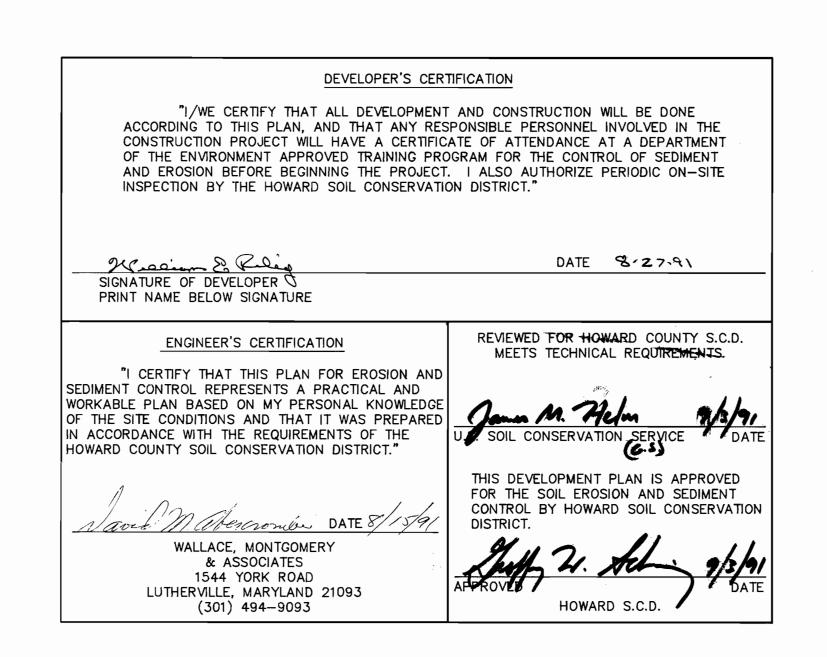
CLEOS COURT WATER MAIN EXTENSION HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

QUANTITIES						
ITEM	QUA	NTITIES	TYPE	SUPPLIER/ MANUFACTURER		
IIEM	ESTIM.	AS BUILT	MATERIAL			
8" WATER	1,245 LF	1,245 LF	0.1.6	BELAIR ROAD SUPPLY U.S. PIPE CO.,		
8" VALVE (RSGV)	2 EA	2 EΔ.	M.J. MUELLER	BELAIR ROAD SUPPLY		
6" FIRE HYDRANT	3 EA	3 E.A.	AMERICAN DARLIN	BELAIR ROAD SUPPLY US. PIPE CO.,		
8" X 8" TEE	1 EA	IEA.	M.J.	BELAIR ROAD SUPPLY GRIFFIN PIPE SUPPLY		
8" X 6" TEE	3 EA	3EA.	M. J.	GRIFFIN PIPE SUPPLY		
8" CAP & BUTTRESS	2 EA	2 Es.	т.Б.	BELAIR ROAD SUPPLY GRIFFIN PIPE SUPPLY		
6" VALVE	3 EA	3E∆.	M. J.	BELAIR ROAD SUPPLY MUELLER CO.		
3/4" WATER HOUSE CONNECTION	430 LF	425 LF:	K- COPPER	BELAIR ROAD SUPPLY MUELLER CO.		
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NOTE:
"SEDIMENT CONTROL TO BE IMPLEMENTED IN ACCORDANCE WITH VOLUME 4, ARTICLE 15 OF THE HOWARD COUNTY DESIGN MANUAL AND THESE PLANS,"



NER ROAD	JUDY BM BM EX. 8" WV CONT. 34-1180 EDGE EDGE	ANE 29 30 30 30 30 30 30 30 30 30 30 30 30 30
TYPE OF BUILDING: RESIDENTIAL NUMBER OF PARCELS: 14 WATER HOUSE CONNECTIONS: 14 DRAINAGE AREA: MIDDLE PATUXENT RIVER	VICINITY MAP SCALE: 1" = 600'	WATER CODE FOR COUNTY USE ONLY: WATER NO. 103

	INDEX OF SHEETS				
SHEET NO.	SHEET NO. DESCRIPTION				
2	PLAN & PROFILE JUDY LANE				
3	PLAN & PROFILE CLEOS COURT				
4	SEDIMENT CONTROL MEASURES & TRAVERSE INFO.				

GENERAL NOTES:

- 1. APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS, SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- 2. ALL HORIZONTAL CONTROLS BASED ON MARYLAND STATE COORDINATES.
- 3. ALL VERTICAL CONTROLS BASED ON U.S.G.S. DATUM.
- 4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- 5. CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE 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 MONEY OWED THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- 6. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONTRUCTION METHODS USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- 7. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TESTS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- 8. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORK DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

BALTO. GAS & ELECTRIC CO.— CONTRACTOR SERVICE 850—4620
BALTO. GAS & ELECTRIC CO.— UNDERGROUND DAMAGE CONTROL 859—9004
BALTO. GAS & ELECTRIC CO.— TROUBLE SHOOTING 298—9001
MISS UTILITY— 1—800—257—7777

BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS— 313—4900 CHESAPEAKE AND POTOMAC TELEPHONE CO.— 597—8585 COLONIAL PIPELINE CO.— 795—1390

- 9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- 10. 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.
- 11. ALL WATER MAINS SHALL BE CLASS 52 DUCTILE IRON PIPE. TOPS OF ALL WATER MAINS ARE TO HAVE A MINIMUM COVER OF 3.5' UNLESS OTHERWISE NOTED.
- 12. WATER VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- 13. FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 FROM THE STANDARD SPECS.
- 14. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM. CALL HOWARD COUNTY BUREAU OF UTILITIES AT 313-4900. COORDINATE TIE-IN TO THE EXISTING 8" WATER AT LEAST FIVE WORKING DAYS PRIOR TO SCHEDULING. ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- 15. EXCAVATED TRENCH LENGTH WILL BE LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED IN ONE DAY, WHICHEVER IS SHORTER.
- 16. THE CONTRACTOR SHALL IMPLEMENT THE EROSION AND SEDIMENT CONTROL MEASURES ON SHEET 4.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS

DATE

CHIEF, BUREAU OF ENGINEERING

CHIEF, BUREAU OF ENGINEERING

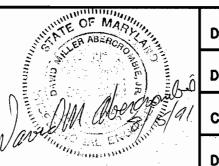
DATE

CHIEF, UTILITY DESIGN DIVISION

DATE

WALLACE, MONTGOMERY & ASSOCIATES 1544 YORK ROAD

1544 YORK ROAD LUTHERVILLE, MARYLAND 21093 (301) 494-9093



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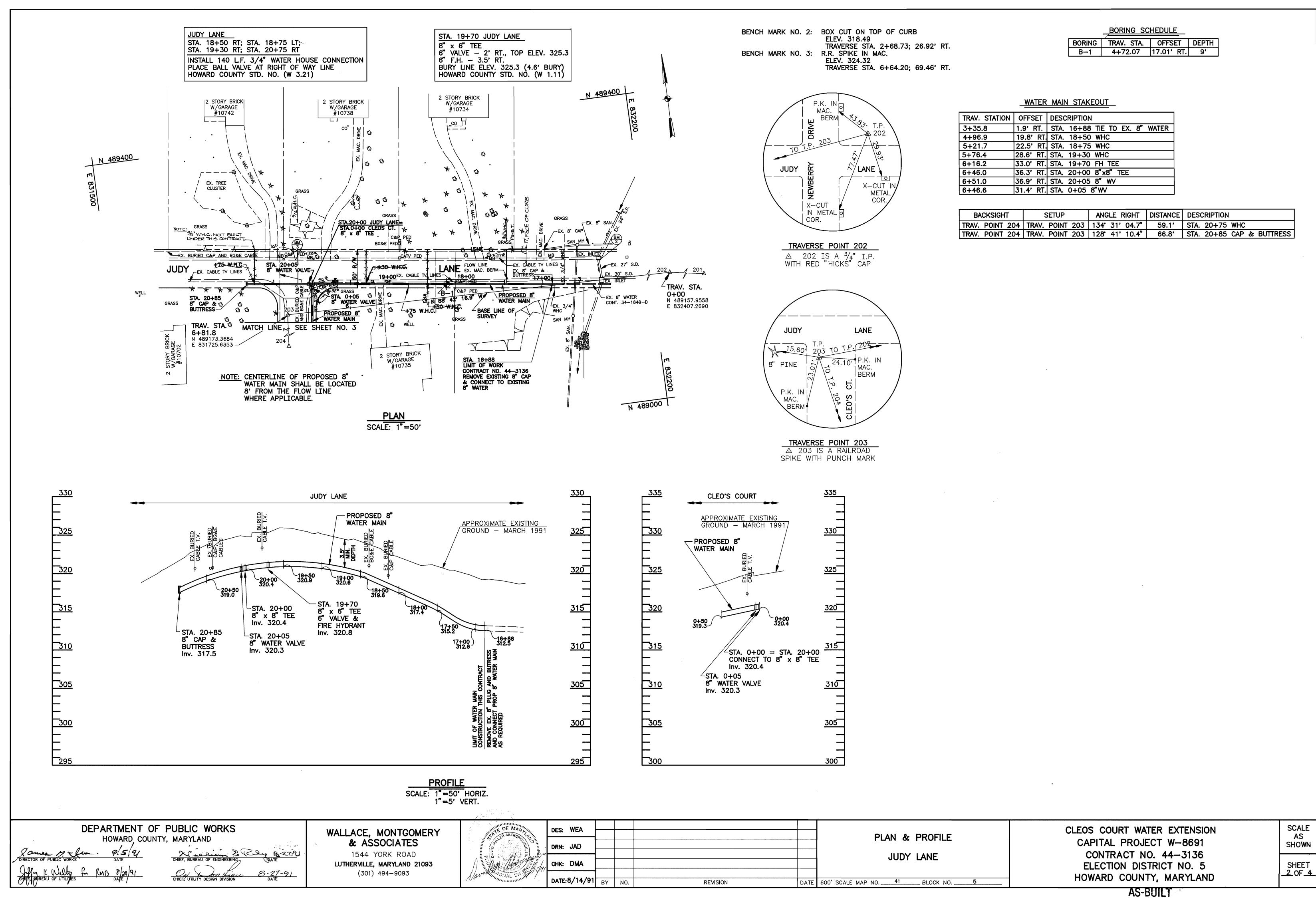
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INDEX OF DRAWINGS
GENERAL NOTES

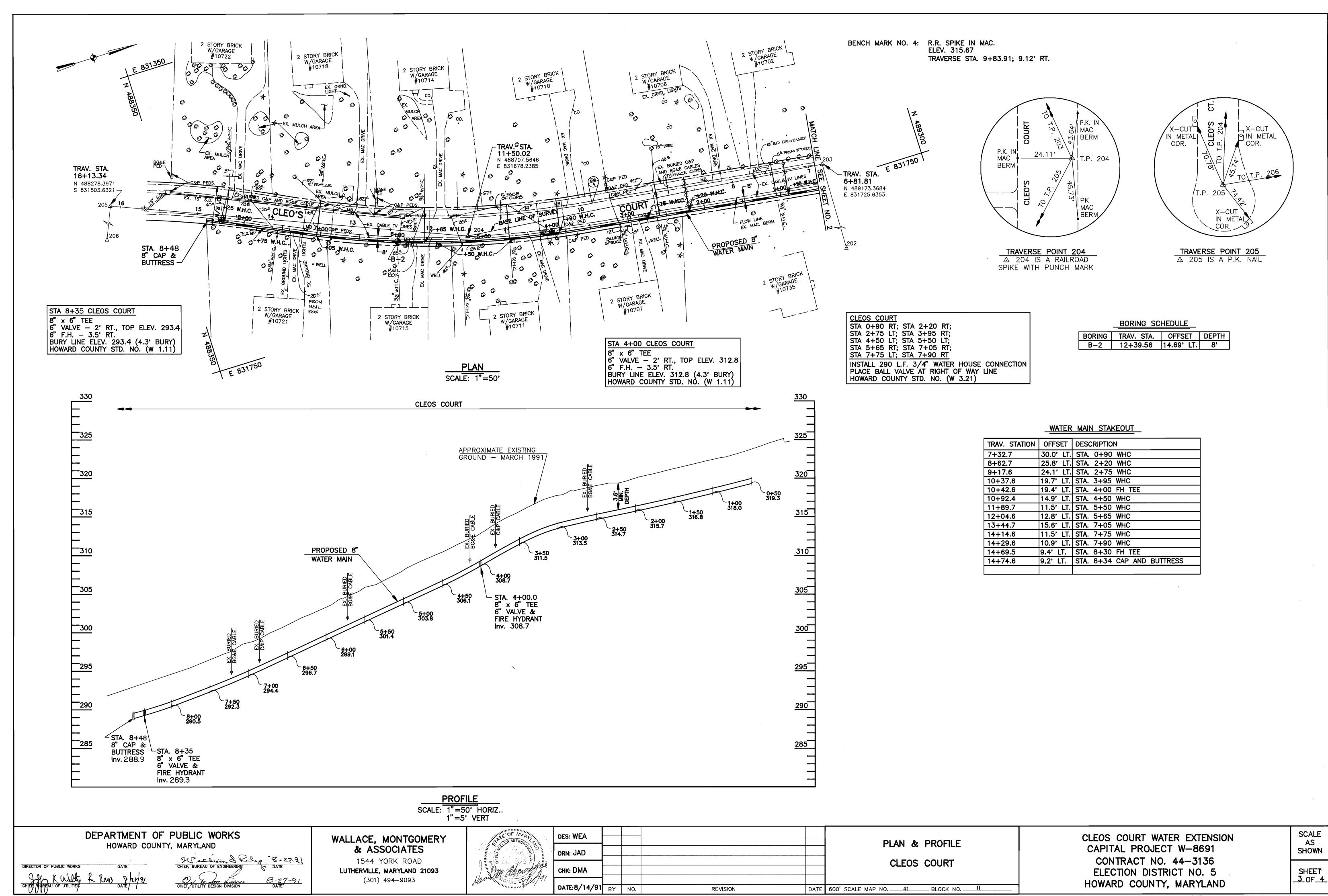
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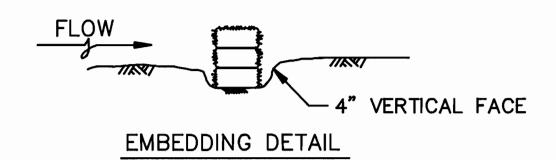
CLEOS COURT WATER EXTENSION
CAPITAL PROJECT W-8691
CONTRACT NO. 44-3136
ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND

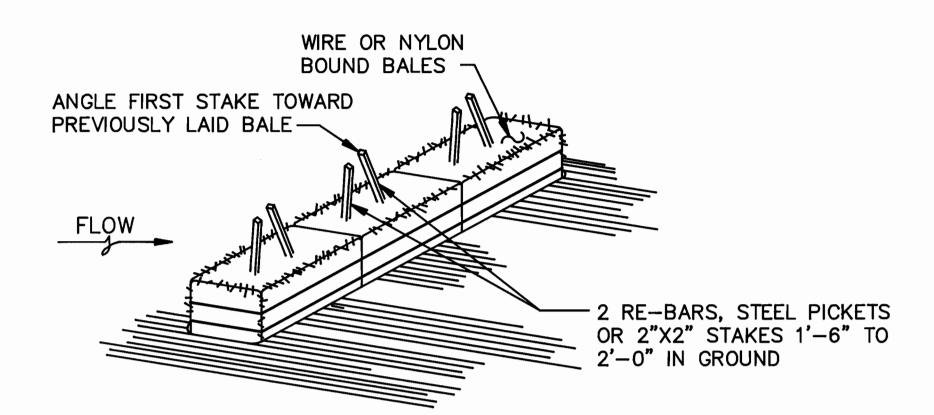
SCALE AS SHOWN SHEET

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ANCHORING DETAIL

CONSTRUCTION SPECIFICATIONS

- 1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- 2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
- 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THRU THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
- 4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- 5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STANDARD	SYMBOL	_	S.E

STRAW BALE DIKE DETAIL

NOT TO SCALE

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT.
- 2. LAYOUT ALIGNMENT AT SITE.
- 3. INSTALL SEDIMENT CONTROL DEVICE (STRAW BALES) PERPENDICULAR TO THE CURB ON THE DOWN-SLOPE SIDE OF CONSTRUCTION.
- 4. EXCAVATE DITCH TO THE GRADE SPECIFIED ON THE PROFILE.
- 5. INSTALL WATER MAIN.
- 6. BACKFILL TRENCH AND RESURFACE WITH TEMPORARY BITUMINOUS PAVING WHERE NEEDED.
- 7. CLEAN UP CONSTRUCTION SITE.
- 8. REMOVE SEDIMENT CONTROL DEVICES AFTER PERMISSION IS GRANTED BY THE SEDIMENT CONTROL INSPECTOR.

RESTORATION SCHEDULE						
LOCATION	LENGTH	MATERIAL				
STA. 16+88 TO STA. 19+89	301'	SOD AND PAVEMENT				
STA. 19+89 TO STA. 20+46	57'	PAVEMENT				
STA. 20+46 TO STA. 20+85	39'	SOD				
STA. 0+00 TO STA. 0+07	7*	PAVEMENT				
STA. 0+07 TO-STA. 8+35	828'	SOD AND PAVEMENT				

TRAVERSE DESCRIPTION							
POINT NO.	NORTH	EAST	BEARING	DISTANCE			
201	489040.5157	833094.0355					
			N 80° 17′ 45.72″ W	696.74			
202	489157.9558	832407.2690					
			N 88° 42′ 16.89″ W	681.81			
203	489173.3684	831725.6353					
			S 05' 48' 36.02" W	468.21			
204	488707.5646	831678.2385					
			S 22° 08′ 20.06″ W	463.33			
205	488278.3971	831503.6321					
			S 67° 00′ 58.08″ E	637.23			
206	488029.5758	832090.2776					
			N 39° 44′ 12.88″ E	660.00			
207	488537.1091	832512.1925					
			N 79° 44′ 36:41″ E	376.34			
208	488604.1195	832882.5230					

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.

<u>SOIL AMENDMENTS</u>: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- 1) PREFERED 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.)
- 2) 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

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

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 PREVIOSLY 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 OT THE "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR RATE AND METHODS NOT COVERED.

SEDIMENT CONTROL NOTES

- 1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (880-3450)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH SEC. 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1. CHAPER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN 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 ACRES 0.0889 ACRES AREA DISTURBED AREA TO BE ROOFED OR PAVED 0.00592 ACRES
 AREA TO BE VEGETATIVELY STABILIZED 0.0830 ACRES
 TOTAL CUT 667.6 CU. YDS.
 TOTAL FILL 667.6 CU. YDS.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

OFFSITE WASTE/BORROW AREA LOCATION

- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- 10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PARIMETER 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.
- 11. ALL TRENCH MATERIAL SHOULD BE PLACED ON THE HIGHER SIDE OF THE TRENCH, ABOVE THE TOP-OF-CURB.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

> Wealian & Rolls 8-27-90 CHIEF, BUREAU OF ENGINEERING

WALLACE, MONTGOMERY & ASSOCIATES

1544 YORK ROAD LUTHERVILLE, MARYLAND 21093 (301) 494-9093

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5/91	DATE:8/14/91	BY	NO.	REVISION	DATE	600' SCALE MAP NO. 41 BLOCK NO. 5811

SEDIMENT CONTROL MEASURES & TRAVERSE INFORMATION

CLEOS COURT WATER EXTENSION CAPITAL PROJECT W-8691 CONTRACT NO. 44-3136 ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND

SCALE SHOWN

SHEET <u>4</u> OF <u>4</u>