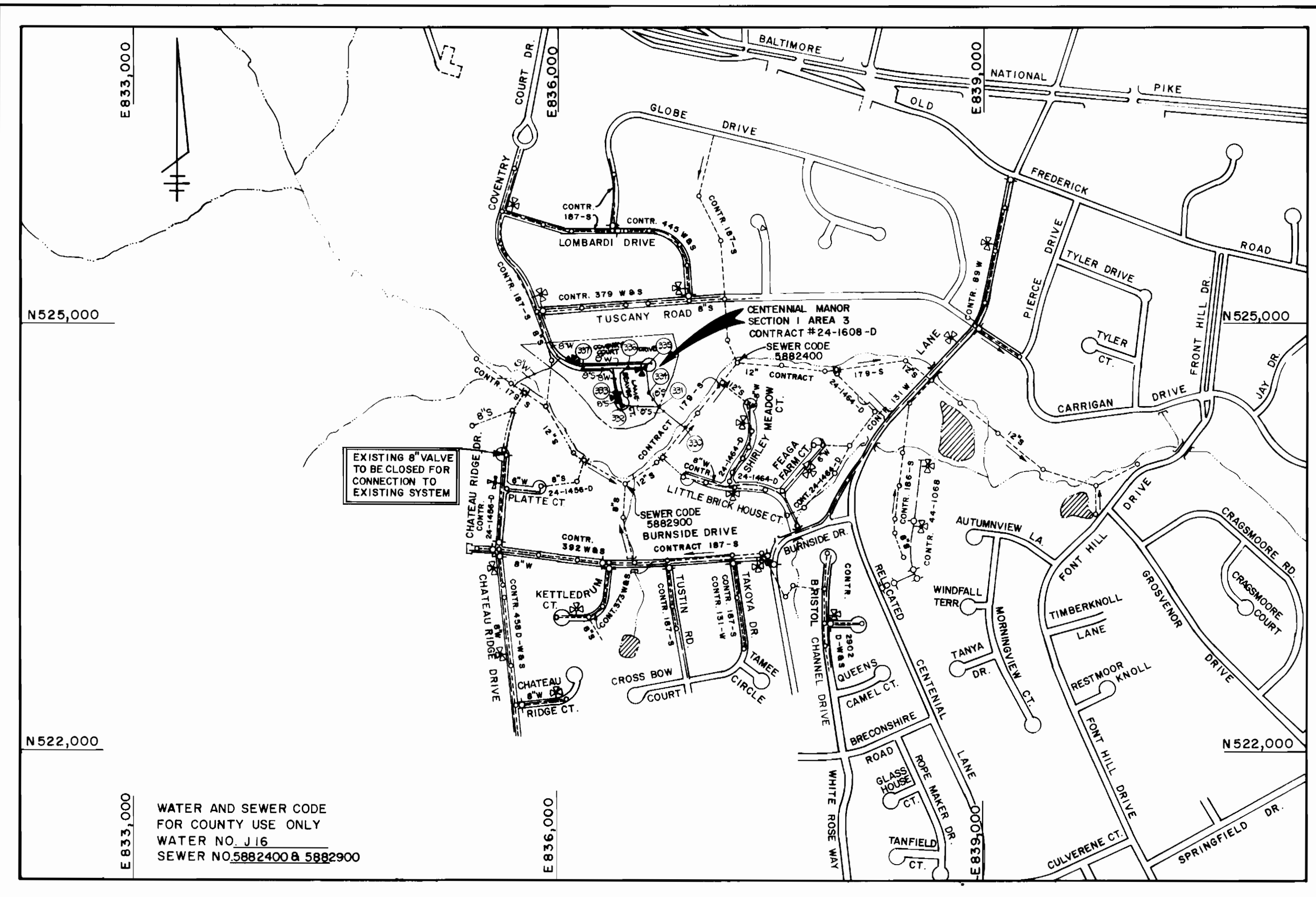


QUANTITIES				MANUFACTURER
ITEM	ESTIMATED	AS BUILT	SUPPLIER	
8" WATER	1072 LF	1081 LF	A+P WATER+SEWER SUPPLIES	ATLANTIC STATES
6" WATER	75 LF	53 LF	A+P WATER+SEWER SUPPLIES	ATLANTIC STATES
3" WATER	75 LF	68 LF	A+P WATER+SEWER SUPPLIES	ATLANTIC STATES
1" WATER HOUSE CONN.	100 LF	218 LF	A+P WATER+SEWER SUPPLIES	VINCENT BRASS/HANSTEAD INC
3/4" WATER HOUSE CONN.	301 LF	425 LF	A+P WATER+SEWER SUPPLIES	VINCENT BRASS/HANSTEAD INC
8" VALVE	4 EACH	1 EA	BEAIRE RD SUPPLIES	MUELLER CO.
6" VALVE	1 EACH	1 EA	BEAIRE RD SUPPLIES	MUELLER CO.
FLOW OFF ASSEMBLY	2 EACH	1 EA	A+P WATER+SEWER SUPPLIES	MUELLER CO.
8" SEWER	1300 LF	1310 LF	WATER WORKS INC	NATIONAL PIPE CO.
6" SEWER	600 LF	669 LF	WATER WORKS INC	NATIONAL PIPE CO.
8" x 6" SEWER SADDLE	1 EACH	1 EA	A+P WATER+SEWER SUPPLIES	UNION FOUNDRY
SEWER MANHOLES	3 EACH	3 EA	BEAIRE RD SUPPLIES	MUELLER CO.
FIRE HYDRANTS	3 EACH	2 EA	BEAIRE RD SUPPLIES	MUELLER CO.
8" x 6" REDUCERS	1 EACH	1 EA	A+P WATER+SEWER SUPPLIES	UNION FOUNDRY

MANHOLE TABLE				
NO.	ROAD STATION	DISTANCE	RIM	SLOPE
330				
331				
332	IN COURT		354.25	
333	1+70.00 LAME BEAVER COURT	7' LEFT	350.00	-5.50%
334				
335	IN COURT		357.20	
336	15+86.00 COVENTRY COURT DR.	7' RIGHT	404.35	-5.00%
337	12+66.50 COVENTRY COURT DR.	7' RIGHT	408.07	+5.50%

SHC: INVERT ELEVATIONS @ PROPERTY LINE				
STATION	LOT NO.	ELEVATION @	#	
1+06	LEFT	100	375.71	
1+16	RIGHT	25	375.32	
@ NH# 332	LEFT	102 @ 103	377.53	
NH# 332 TO NH# 333				
0+20	LEFT	104	359.20	
0+25	LEFT	05	358.75	
@ NH# 333	LEFT	01 @ 02	359.64	
NH# 334 TO NH# 335				
0+50	RIGHT	15	376.25 @ 2.6	
0+55	LEFT	15	354.20	
1+10	LEFT	05	357.70	
1+75	RIGHT (1.00%)	24 @ 25 (1.00%)	375.10 (1.00%)	
@ NH# 335	RIGHT	05	375.23	
NH# 335 TO NH# 336				
0+11	RIGHT	05 @ 06	358.20	
1+00	RIGHT	05 @ 06	357.64	
NH# 336 TO NH# 337				
1+37	RIGHT	05 @ 06	402.14	
1+47	LEFT	07	385.86	
1+66	RIGHT	05 @ 06	357.24	
2+12	RIGHT	07	351.00	
2+23	LEFT	08	351.00	
@ NH# 337	RIGHT (1.00%)	06 (1.00%)	351.47 (1.00%)	
EX. NH# 337 TO EX. NH# 335 @				
0+75	RIGHT	05	350.50	



TYPE OF BUILDING	RESIDENTIAL
NUMBER OF LOTS	24 (23 BUILDABLE)
NO. OF WATER HOUSE CONNECTIONS	23
NO. OF SEWER HOUSE CONNECTIONS	23
DRAINAGE AREA	LITTLE PATUXENT

WASTE WATER TREATMENT PLANT PATAPUSCO VIA ROUTE 108 PUMPING STATION

VICINITY MAP
SCALE: 1" = 600'

CONTRACT NO. 24-1608-D

CENTENNIAL MANOR

SECTION 1 AREA 3

WATER AND SEWER MAIN EXTENSIONS

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

- ### GENERAL NOTES
- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
 - ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
 - ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - CLEAR ALL UTILITIES BY A MINIMUM OF 6".
 - 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. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
 - WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL [] AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION. ANY DAMAGE TO EXISTING FACILITIES DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION : 531-5533
 - BALTIMORE GAS & ELECTRIC CO.-CONTRACTOR SERVICES: 850-4620
 - CBP TELEPHONE CO.: 1-800-257-7777
 - BALTIMORE GAS & ELECTRIC CO. UNDERGROUND DAMAGE CONTROL: 859-9004
 - BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING: 298-9001
 - MISS UTILITY: 1-559-0100
 - COLONIAL PIPELINE COMPANY: 795-1390
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS: 992-2366
 - TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
 - CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
 - ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
 - TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3-1/2' COVER UNLESS OTHERWISE NOTED.
 - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
 - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
 - FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 AND 1008 OF THE STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
 - ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS. (STD. DETAIL W.3.21).
 - WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED SO AS TO HAVE AT LEAST ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
 - MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATER-TIGHT FRAME AND COVERS STANDARD DETAIL 65.52 WHERE WATER-TIGHT MANHOLE FRAME AND COVER IS USED. SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - ALL SEWER MAINS SHALL BE C.S.P.X., R.C.S.P., V.C.P.X., A.C.P. CLASS 2400 OR P.V.C. UNLESS OTHERWISE NOTED.
 - THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
 - ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
 - MANHOLES LOCATED WITHIN PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAME AND COVER, STANDARD DETAIL 65.51.

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AND ALSO AS SHOWN ON THE GRADING AND SEDIMENT CONTROL PLAN F86-03

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

James M. Nelson 1-14-88
SOIL CONSERVATION SERVICE DATE

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

APPROVED:
Stephen J. Fisher 1/14/88
HOWARD SOIL CONSERVATION DISTRICT DATE

PLAN REFERENCE NUMBER: F86-03

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

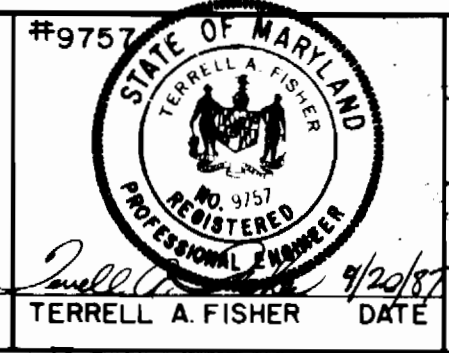
James M. Nelson 1-22-88
DIRECTOR OF PUBLIC WORKS DATE

Robert B. Brown 1-22-88
CHIEF, BUREAU OF UTILITIES DATE

Robert B. Brown 1-22-88
CHIEF, BUREAU OF ENGINEERING DATE

Robert B. Brown 1-22-88
CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043



DES: D.E.V.			
DRN: J.O.			
CHK: T.A.F.			
DATE:	BY:	NO:	REVISION:

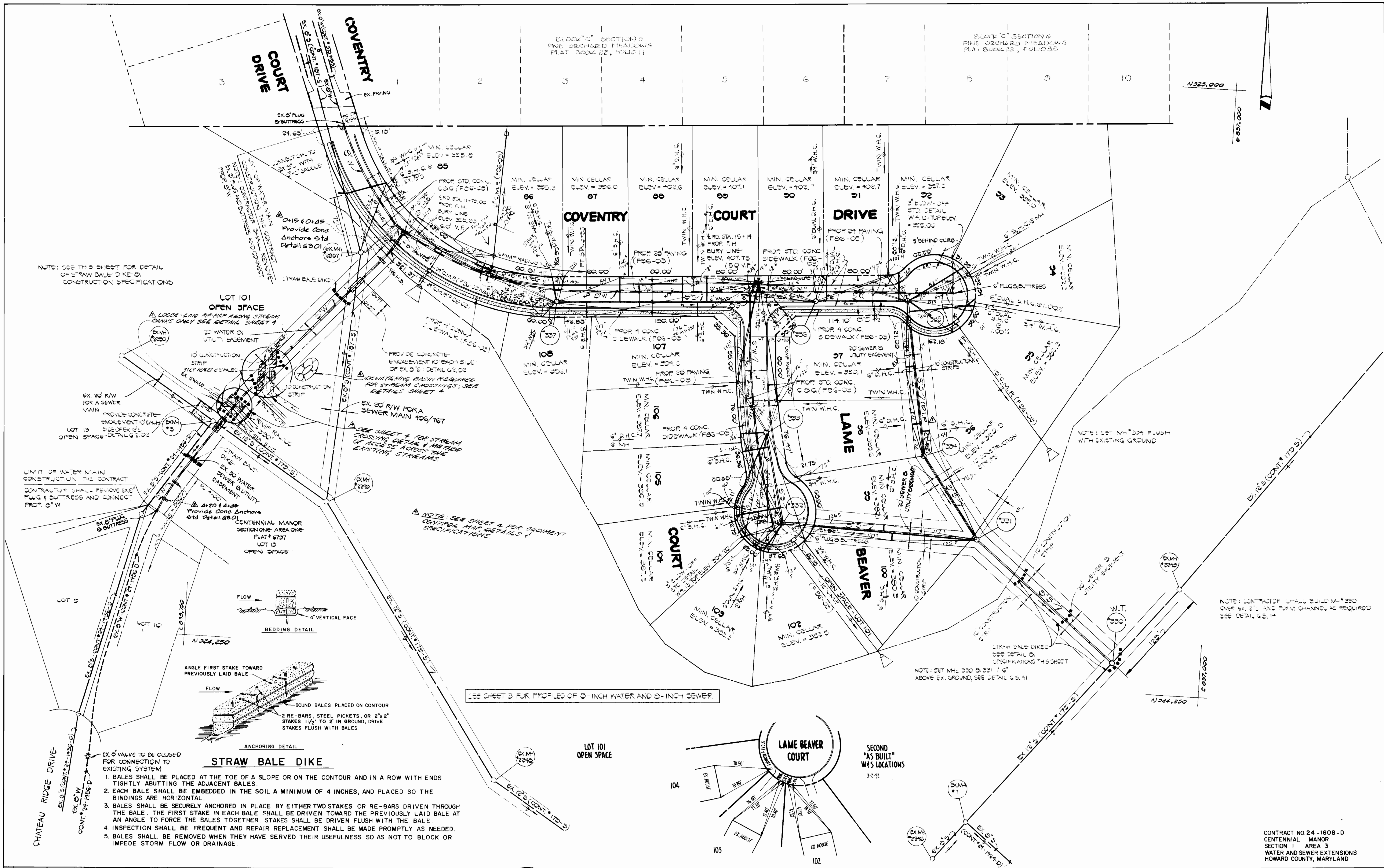
TITLE SHEET

600 SCALE MAP NO. 23 & 24 BLOCK NO. _____

CENTENNIAL MANOR
SECTION 1 AREA 3
CONTRACT NO. 24-1608-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 1 OF 4



NOTE: SEE THIS SHEET FOR DETAIL OF STRAW BALE DIKE & CONSTRUCTION SPECIFICATIONS

LOT 101 OPEN SPACE

LOOSE-LAID RIP-RAP ALONG STREAM BANKS ONLY SEE DETAIL SHEET 4

20" WATER & UTILITY EASEMENT

10' CONSTRUCTION STRIP

EX. 20" R/W FOR A SEWER MAIN

PROVIDE CONCRETE ENGAGEMENT OF EACH SIDE OF EX. 20" SIDE OF EX. 20" R/W

LOT 13 OPEN SPACE DETAIL G.9.0

EX. 20" R/W FOR A SEWER MAIN

PROVIDE CONCRETE ENGAGEMENT OF EACH SIDE OF EX. 20" SIDE OF EX. 20" R/W

LOT 13 OPEN SPACE DETAIL G.9.0

EX. 20" R/W FOR A SEWER MAIN

PROVIDE CONCRETE ENGAGEMENT OF EACH SIDE OF EX. 20" SIDE OF EX. 20" R/W

LOT 13 OPEN SPACE DETAIL G.9.0

EX. 20" R/W FOR A SEWER MAIN

PROVIDE CONCRETE ENGAGEMENT OF EACH SIDE OF EX. 20" SIDE OF EX. 20" R/W

LOT 13 OPEN SPACE DETAIL G.9.0

EX. 20" R/W FOR A SEWER MAIN

PROVIDE CONCRETE ENGAGEMENT OF EACH SIDE OF EX. 20" SIDE OF EX. 20" R/W

LOT 13 OPEN SPACE DETAIL G.9.0

EX. 20" R/W FOR A SEWER MAIN

PROVIDE CONCRETE ENGAGEMENT OF EACH SIDE OF EX. 20" SIDE OF EX. 20" R/W

LOT 13 OPEN SPACE DETAIL G.9.0

EX. 20" R/W FOR A SEWER MAIN

PROVIDE CONCRETE ENGAGEMENT OF EACH SIDE OF EX. 20" SIDE OF EX. 20" R/W

LOT 13 OPEN SPACE DETAIL G.9.0

EX. 20" R/W FOR A SEWER MAIN

PROVIDE CONCRETE ENGAGEMENT OF EACH SIDE OF EX. 20" SIDE OF EX. 20" R/W

LOT 13 OPEN SPACE DETAIL G.9.0

EX. 20" R/W FOR A SEWER MAIN

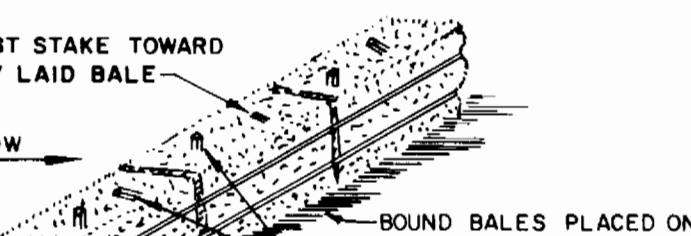
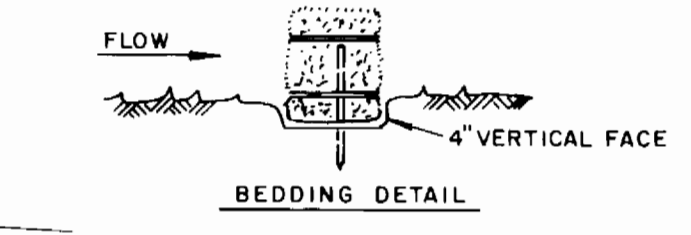
PROVIDE CONCRETE ENGAGEMENT OF EACH SIDE OF EX. 20" SIDE OF EX. 20" R/W

LOT 13 OPEN SPACE DETAIL G.9.0

EX. 20" R/W FOR A SEWER MAIN

PROVIDE CONCRETE ENGAGEMENT OF EACH SIDE OF EX. 20" SIDE OF EX. 20" R/W

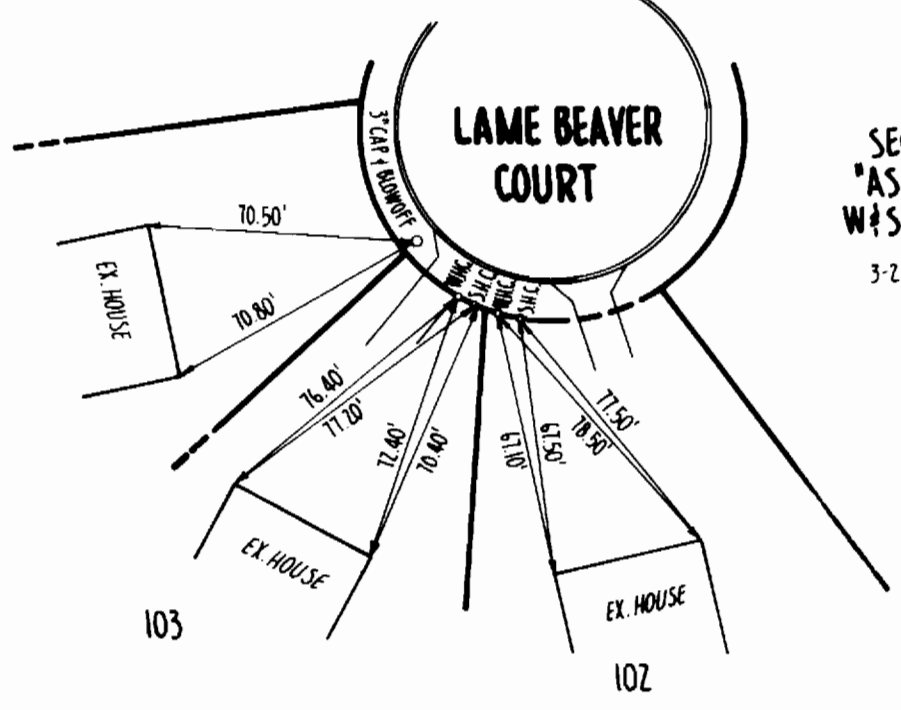
LOT 13 OPEN SPACE DETAIL G.9.0



STRAW BALE DIKE

- BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
- INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

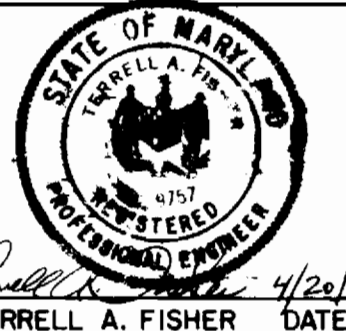
SEE SHEET 3 FOR PROFILES OF 8-INCH WATER AND 8-INCH SEWER



SECOND "AS BUILT" W.T. LOCATIONS 3-2-92

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS

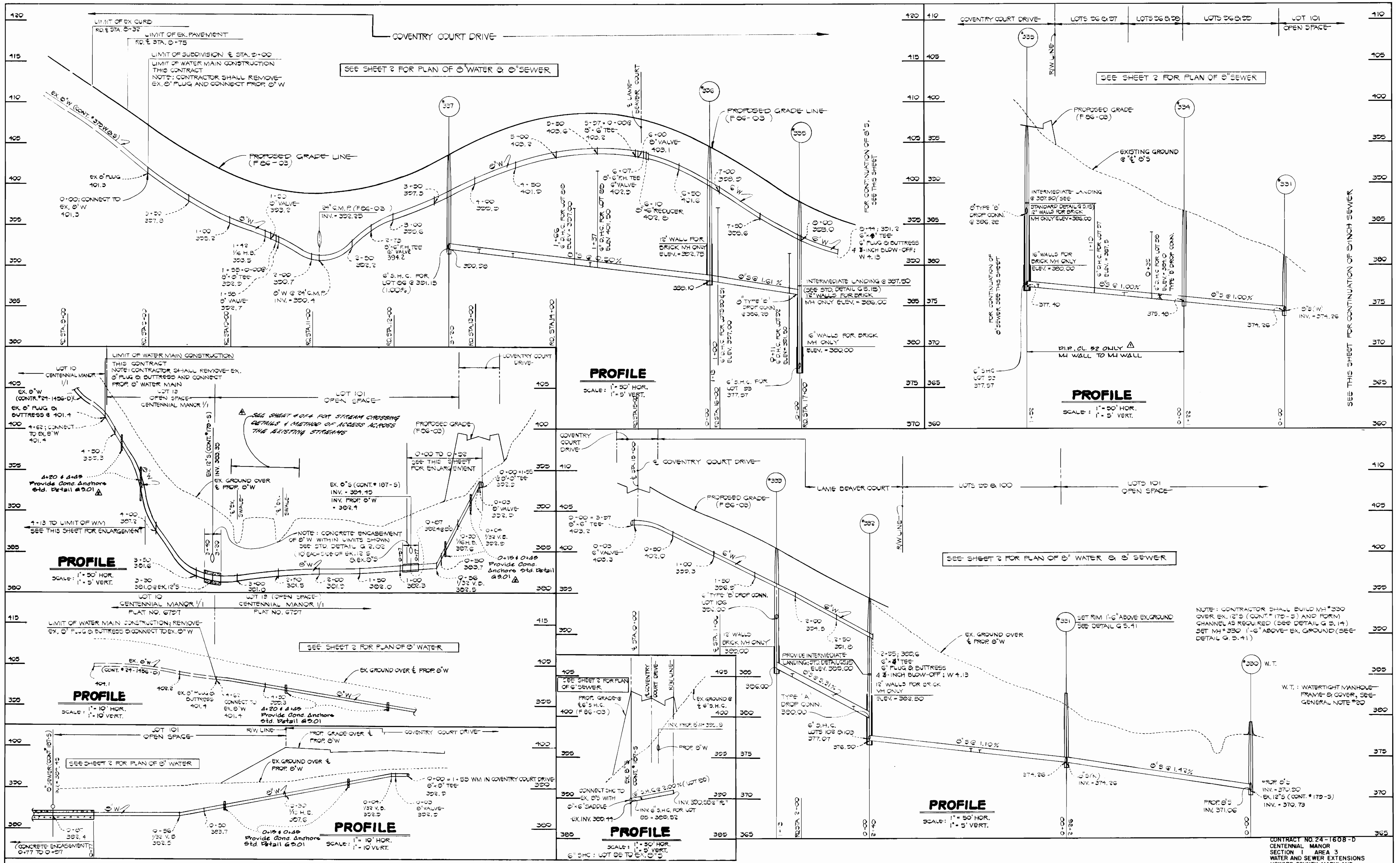


DES: D.E.V.			
DRN: J.O.	DA.N.	DA.N.	DA.N.
CHK: T.A.F.			
DATE:	BY:	NO.	REVISION

PLAN
WATER AND SEWER MAINS

CENTENNIAL MANOR
SECTION 1 AREA 3
CONTRACT NO.
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 4



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 11-25-88
DIRECTOR OF PUBLIC WORKS DATE

[Signature] 11-22-88
CHIEF, BUREAU OF UTILITIES DATE

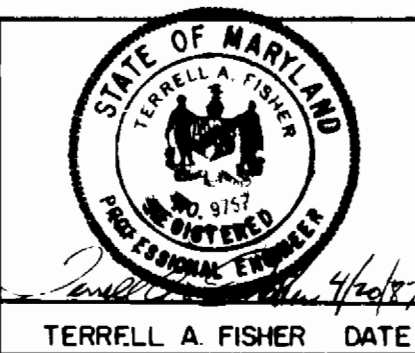
[Signature] 11-22-88
CHIEF, BUREAU OF ENGINEERING DATE

[Signature] 11-22-88
CHIEF, LAND DEVELOPMENT DIVISION DATE

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS

8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043

[Signature]
TERRELL A. FISHER DATE



DES: D.E.V.				
DRN: J.O.	D.A.N.	ADD REFERENCE FOR STREAM CROSSING	5/31/88	
CHK: T.A.F.	D.A.N.	CHANGE SHEET NUMBER	5/31/88	
	W.C.B.	Add Cond. Anchors to 8" W		
	W.C.B.	M-024 to M-025 stipulate 8" S.A. D.I.P., D.L. 02 Only	5/16/88	
DATE:	BY: NO.	REVISION	DATE	

PROFILES
WATER AND SEWER MAINS

600' SCALE MAP NO. 23 & 24 BLOCK NO. _____

CENTENNIAL MANOR
SECTION 1 AREA 3
CONTRACT NO. 24-1608-D
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 3 OF 4

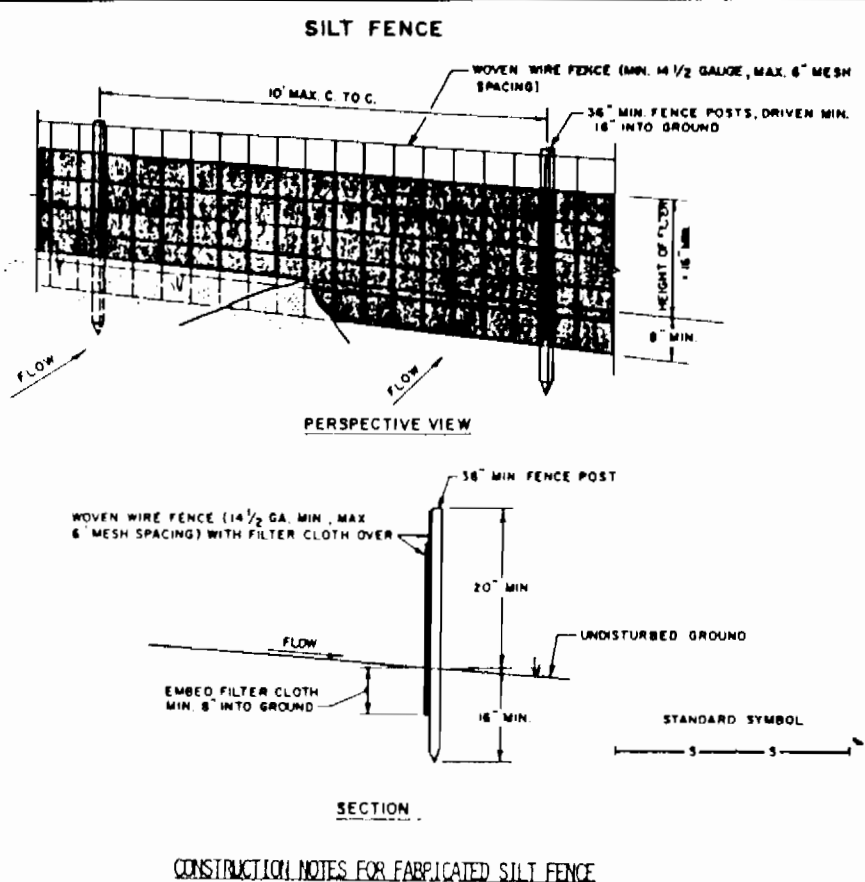
AS BUILT SEWER + WATER 11-22-88 M.E.H.

EROSION AND SEDIMENT CONTROL NOTES:

- ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS FOR SEDIMENT CONTROL IN DEVELOPING AREAS.
- ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF BUSINESS.
- ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE SEWER MAIN TRENCH.
- IMMEDIATELY FOLLOWING BACKFILL OF THE SEWER MAIN TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN ON THIS SHEET.
- THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN OPERATIVE CONDITION.
- ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
- SEE SEWER MAIN CONSTRUCTION SEQUENCE THIS SHEET.
- SEE STREAM CROSSING DETAIL AND CONSTRUCTION REQUIREMENTS AND SPECIFICATIONS THIS SHEET FOR SEWER MAIN INSTALLATION AND ACCESS ACROSS THE LITTLE PATUXENT RIVER.
- SEE SEDIMENT CONTROL MAP (SCALE 1"=200') ON THIS SHEET FOR SEDIMENT CONTROL DEVICES ALONG THE SEWER MAIN INSTALLATION.

CONSTRUCTION REQUIREMENTS & SPECIFICATIONS FOR STREAM CROSSING

- INSTALLATION OF ALL REQUIRED EROSION & SEDIMENT CONTROL DEVICES SHALL BE THE FIRST ORDER OF BUSINESS.
- THE FLOW DIVERSION CULVERTS MUST BE SIZED TO ACCOMMODATE NORMAL STREAM FLOW.
- THE FLOW BARRIER SHALL BE CONSTRUCTED OF IMPERVIOUS SANDBAGS, WASHED RIP-RAP OR OTHER APPROVED MATERIAL IN ACCORDANCE WITH WPD 2.3. THE MATERIALS SHALL BE SIZED TO WITHSTAND NORMAL STREAM FLOW VELOCITIES.
- ALL DEWATERING OF THE CONSTRUCTION AREAS SHALL BE PUMPED TO A DEWATERING BASIN (WPD 1.1) PRIOR TO RE-ENTERING THE STREAM. SEE DETAILS OF THE DEWATERING BASIN THIS SHEET.
- THE TEMPORARY CULVERT CROSSING SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL TAC-1 OF THE 1983 MARYLAND STANDARDS & SPECIFICATIONS FOR SEDIMENT AND EROSION CONTROL.
- ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN SEEDDED, MULCHED & STABILIZED IN ACCORDANCE WITH THE APPROVED SEDIMENT & EROSION CONTROL PLAN AND ALSO UNTIL THE INSPECTING AUTHORITY APPROVES THEIR RENEWAL.



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE:**
- MOVIE WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 - FILTER CLOTH TO BE FASTENED SECURELY TO MOVIE WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
 - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
 - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "RADES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EIFFER T OR U TYPE OR 2" WALNUTOOD
 FENCE: MOVIE WIRE, 14 GA. 6" MAX. PESH OPENING
 FILTER CLOTH: FILTER X PERMA LON, STABIL LINA (LON) OR APPROVED EQUAL
 PRE-FABRICATED UNIT: GEOMER EROSION CONTROL OR APPROVED EQUAL

PERMANENT STABILIZATION AND SEEDING NOTES

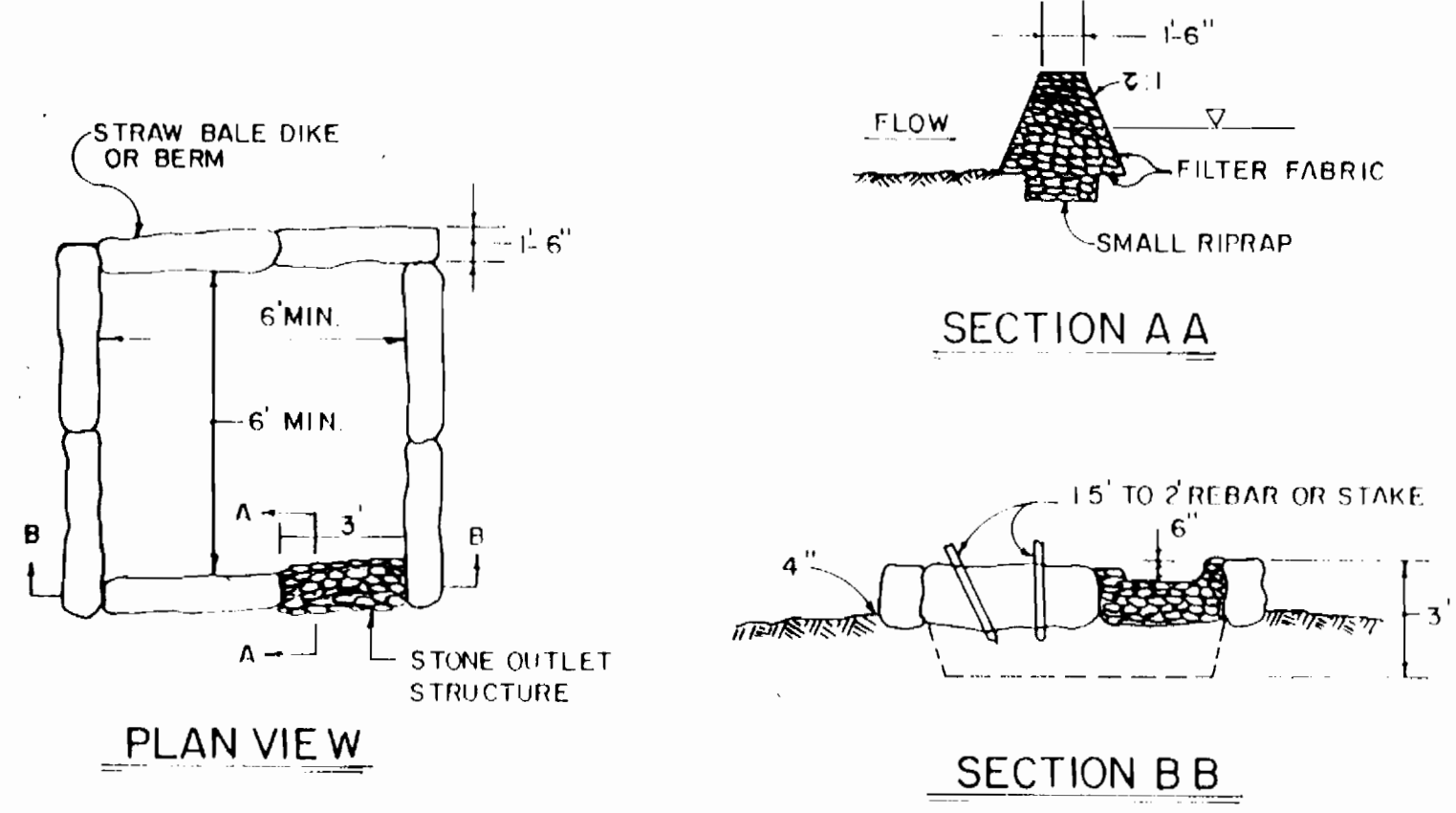
- REFERENCE SECTION 219 OF THE HOWARD COUNTY STANDARD SPECIFICATIONS FOR COMPLETE REQUIREMENTS REGARDING PERMANENT STABILIZATION AND SEEDING OF ALL DISTURBED AREAS.
- REFERENCE PARAGRAPH 219.11 FOR EXECUTION REQUIREMENTS REGARDING PERMANENT SEEDING.
- LIMESTONE: APPLY LIMESTONE AT THE RATE OF 1 1/2 TONS PER ACRE ON SANDY AND SILTY SOILS AND 2.3 TONS PER ACRE ON CLAY OR CLAY LOAM SOILS.
- FERTILIZER: APPLY FERTILIZER AT THE RATE OF 600 POUNDS OF 0-20-20 PER ACRE WITH LIMESTONE APPLICATION (SEE ABOVE); IMMEDIATELY PRIOR TO SEEDING, APPLY 400 POUNDS OF 38-0-0 UREAFORM AND 600 POUNDS OF 10-20-20 PER ACRE.
- PERMANENT SEED SHALL CONFORM TO THE REQUIREMENTS, MIXTURES AND APPLICATION RATES AS SPECIFIED IN SUBPARAGRAPH 219.10-2.
- MULCH SHALL BE CLEAN, WEED-FREE, UNROTTED STRAW APPLIED AT THE RATE OF NOT LESS THAN 1 1/2 TONS PER ACRE OR WOOD CHIPS WITH A COVERAGE OF 1 1/2 INCHES IN DEPTH.
- MULCH SHALL BE ANCHORED WITH CUT BACK AND EMULSIFIED ASPHALT APPLIED AT A RATE OF 5 GALLONS PER 1000 SQUARE FEET. REFERENCE SUBPARAGRAPH 219.10-6 FOR MULCH ANCHORING ALTERNATIVES.

STABILIZATION NOTES

- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
- 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURE DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1
 - 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE

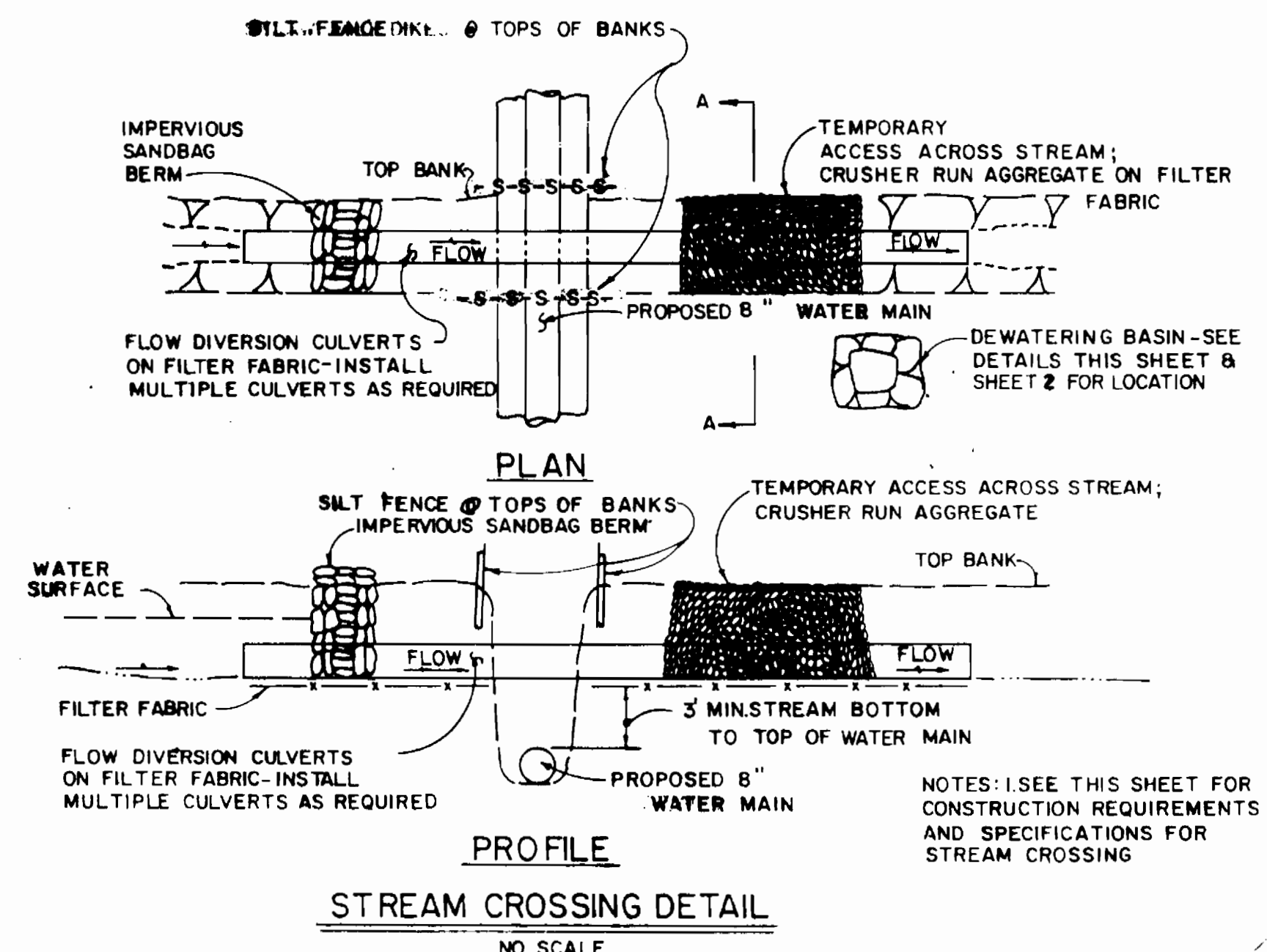
WATER MAIN CONSTRUCTION SEQUENCE

- IMPLEMENT CONDITIONS & REQUIREMENTS OF THE TEMPORARY WATERWAY CONSTRUCTION PERMIT - SEE CONTRACT SPECIFICATIONS.
- INSTALL REQUIRED SEDIMENT & EROSION CONTROL DEVICES - SEE PLAN THIS SHEET & PLAN SHEETS FOR LOCATIONS.
- CLEAR AND GRUB AS NECESSARY - WITHIN THE LIMITS OF THE WATER MAIN RIGHT-OF-WAY ONLY.
- EXCAVATE TRENCH; PLACE EXCAVATED MATERIAL ON THE UPGRADE SIDE OF THE WATER MAIN TRENCH.
- INSTALL WATER MAIN, BACKFILL & COMPACT TRENCH IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
- FOR INSTALLATION OF THE WATER MAIN AT THE EXISTING STREAMS, SEE THE STREAM CROSSING DETAIL THIS SHEET.
- STABILIZE, SEED AND MULCH ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN ON THIS SHEET.
- FOLLOWING SUCCESSFUL STABILIZATION OF ALL DISTURBED AREAS AND REMOVE THE EROSION & SEDIMENT CONTROL DEVICES.



- NOTES:**
- ALL DEWATERING OF THE CONSTRUCTION AREA DURING THE WATER MAIN INSTALLATION SHALL BE PUMPED TO A DEWATERING BASIN (WPD 1.1 AS SHOWN ABOVE) PRIOR TO RE-ENTERING THE STREAM.
 - SEE PLAN SHEET NO. 2 FOR LOCATION OF DEWATERING BASIN.

DETAILS: DEWATERING BASIN



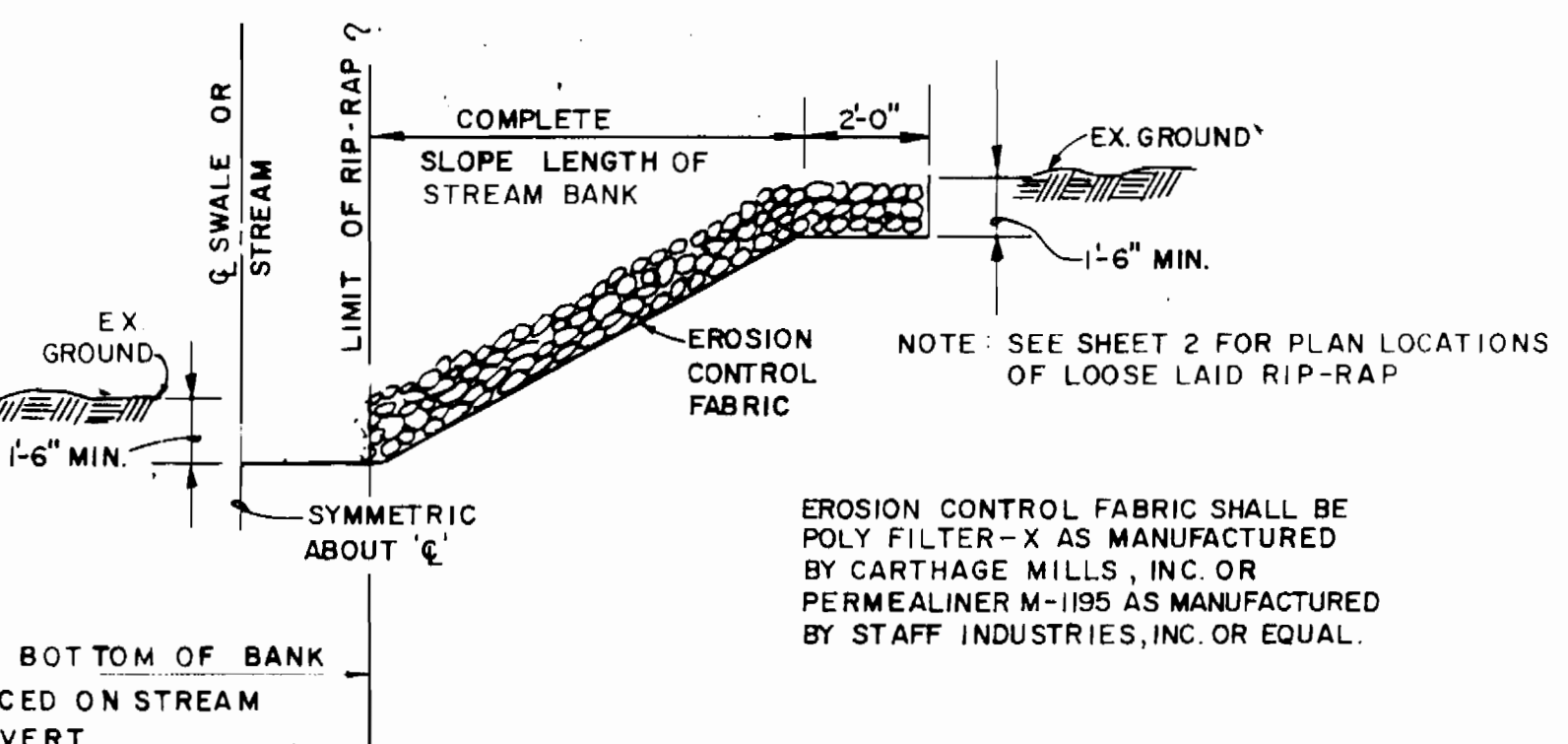
NOTES: 1. SEE THIS SHEET FOR CONSTRUCTION REQUIREMENTS AND SPECIFICATIONS FOR STREAM CROSSING

SEDIMENT CONTROL MAP
 SCALE 1"=200'



- NOTES:**
- SEE SHEET 2 FOR DETAIL OF STRAW BALE DIKE
 - SEE THIS SHEET FOR STREAM CROSSING DETAIL & CONSTRUCTION REQUIREMENTS & SPECIFICATIONS FOR STREAM CROSSING DETAIL.
 - SEDIMENT CONTROL FOR UTILITY CONSTRUCTION WITHIN THE LIMITS OF THE SUBDIVISION SHALL BE AS SHOWN ON THE STREET TREE, GRADING & SEDIMENT CONTROL PLAN OF THE ROADS & STORM DRAIN CONSTRUCTION PLANS, F 6-03
 - SEE SHEET 2 OF 3 FOR 50' SCALE PLAN LOCATION OF THE 8" WATER MAIN CROSSINGS
 - SEE THIS SHEET FOR DETAILS OF THE REQUIRED DEWATERING BASIN - SEE SHEET 2 OF 3 FOR PLAN LOCATION.

LOOSE-LAID RIP RAP DETAIL
 NO SCALE



EROSION CONTROL FABRIC SHALL BE POLY FILTER-X AS MANUFACTURED BY CARTHAGE MILLS, INC. OR PERMEALINER M-1195 AS MANUFACTURED BY STAFF INDUSTRIES, INC. OR EQUAL.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DIRECTOR OF PUBLIC WORKS DATE
 CHIEF, BUREAU OF UTILITIES DATE

FISHER, COLLINS, AND CARTER, INC. #9757
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043
 TERRELL A. FISHER DATE

DES: P.W.K.	
DRN: S.B.	
CHK: T.A.F.	
DATE:	
BY NO.	
REVISION	
DATE	

SEDIMENT CONTROL
 DETAILS AND
 STREAM CROSSING
 DETAILS
 600' SCALE MAP NO. _____ BLOCK NO. _____

CENTENNIAL MANOR
 SECTION 1 AREA 3
 CONTRACT NO. 24-1608-D
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 4 OF 4

BRUNING 44 132 891 150