
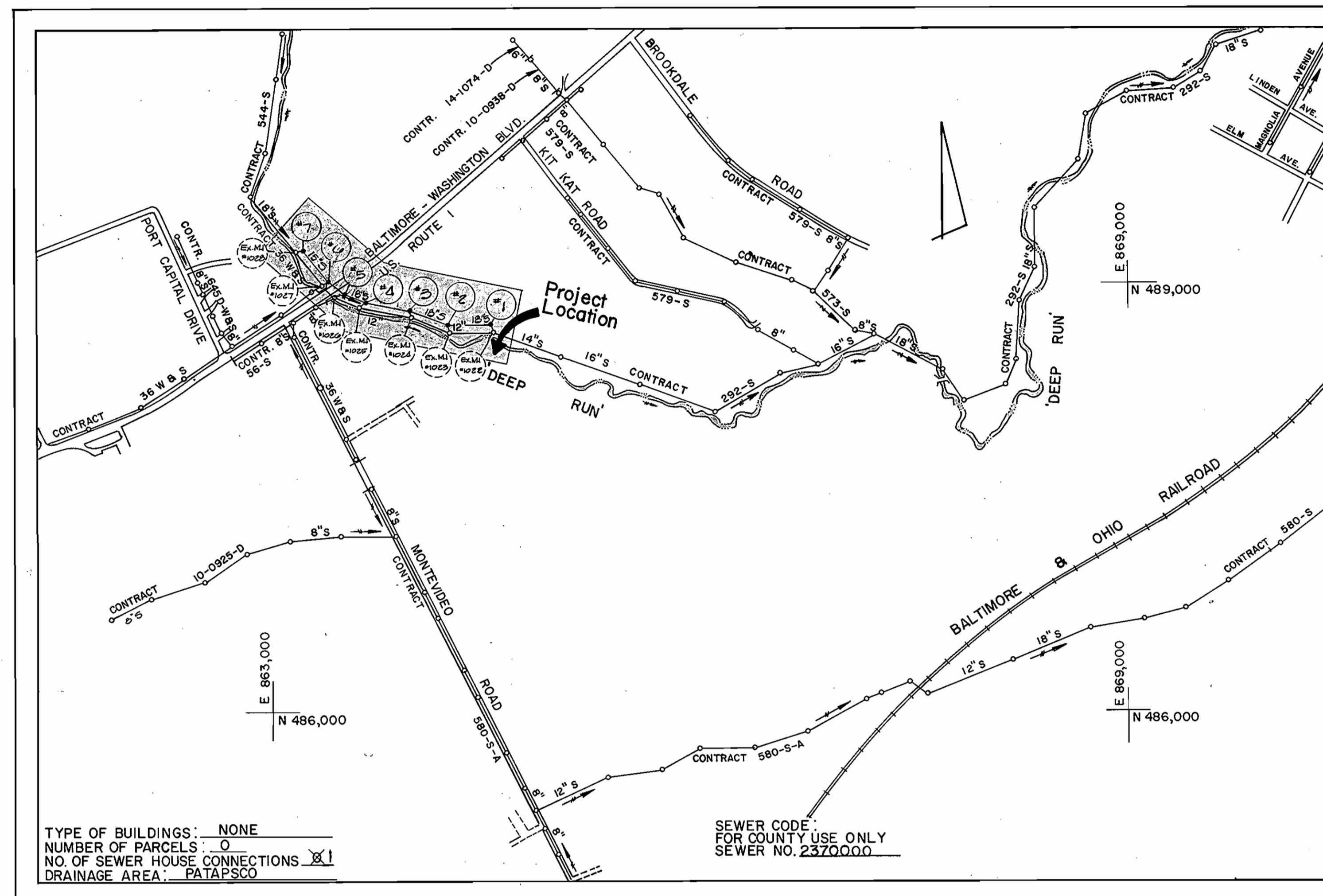


GENERAL NOTES

- 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-561-2585
 - BALTIMORE GAS & ELECTRIC CO.-UNDERGROUND DAMAGE CONTROL-234-5621
 - BALTIMORE GAS & ELECTRIC CO.-TROUBLE SHOOTING-298-9013
 - MISS UTILITY-1-559-0100
 - C & P TELEPHONE-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 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 DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS. STANDARD DETAIL 65.52 WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED. SET TOP FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT CELLAR CANNOT BE SERVED.

QUANTITIES			
ITEM	EST'D	AS BUILT	SUPPLIER
12" Sewer	106 L.F.	73.9 L.F.	J.M. MANUFACTURING CORP.
15" Sewer	341 L.F.	330.7 L.F.	J.M. MANUFACTURING CORP.
16" Sewer	124 L.F.	45.1 L.F.	U.S. PIPE & FOUNDRY
18" Sewer	1138 L.F.	1119.8 L.F.	CONCRETE PIPE AND PRODUCTS
Manholes	7 EA.	7 EA.	ATLANTIC CONCRETE PRODUCTS
Bore & Jack 42" Steel Sleeve 20" DIA. 10 GA. STEEL LINER PLATE TUNNEL	39 L.F.	74.5 L.F.	COMMERCIAL SHEARING, INC.



SCALE: 1" = 600'

DEEP RUN/ROUTE 1 PARALLEL INTERCEPTOR

CAPITAL PROJECT S-6133

CONTRACT NO. 10-1300

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH ARTICLE 15 OF THE HOWARD COUNTY DESIGN MANUAL AND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS.

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

U.S. SOIL CONSERVATION SERVICE DATE: 4/17/85

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

APPROVED: Stephen L. Fisher DATE: 4/17/85
 HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS DATE: 4-3-85 CHIEF, BUREAU OF UTILITIES DATE: 4-1-85	FISHER, COLLINS, AND CARTER, INC. CONSULTING ENGINEERS AND LAND SURVEYORS 8388 COURT AVENUE ELLICOTT CITY, MARYLAND 21043 DATE: 3/28/85	DES: T.A.F. DRN: D.E.V. CHK: T.A.F. DATE: 7/24/84	TITLE SHEET 600' SCALE MAP NO. 43 BLOCK NO. 10	DEEP RUN/ROUTE 1 PARALLEL INTERCEPTOR CAPITAL PROJECT NO. S-6133 CONTRACT NO. 10-1300 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 1 OF 2
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AS-BUILT 7/3/86

3/21/85

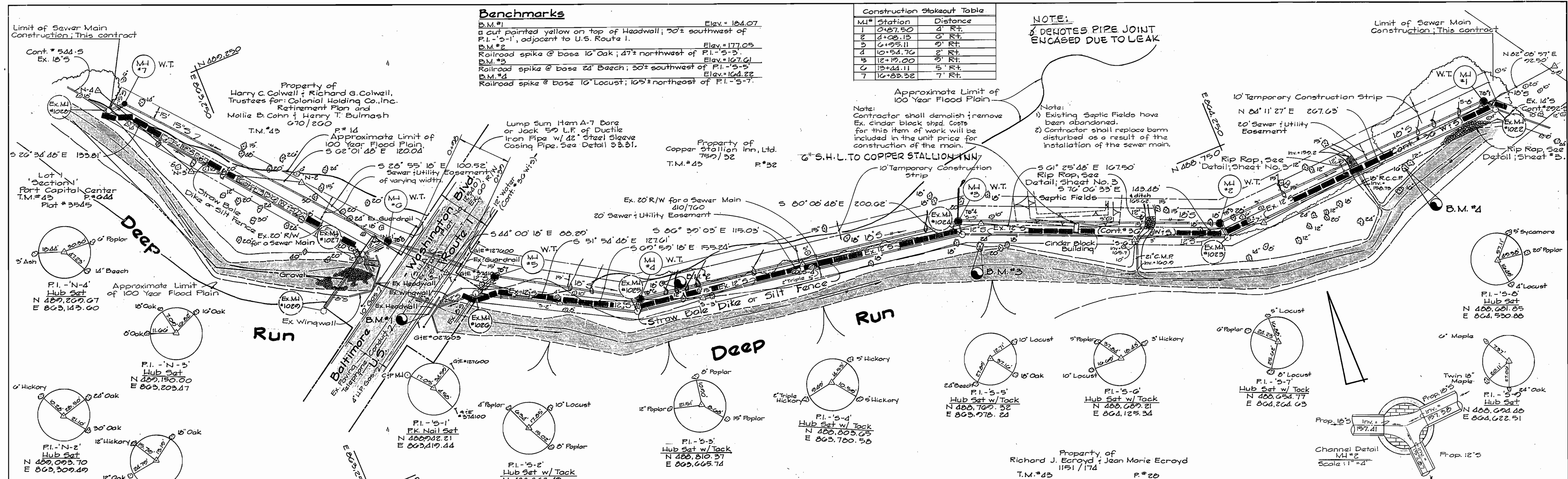
Benchmarks

B.M.#1	Elv. = 164.07
a cut painted yellow on top of Headwall; 30' southwest of P.I. -5-1, adjacent to U.S. Route 1.	
B.M.#2	Elv. = 177.05
Railroad spike @ base 10' Oak; 47' northwest of P.I. -5-3.	
B.M.#3	Elv. = 167.61
Railroad spike @ base 24' Beach; 30' southwest of P.I. -5-5.	
B.M.#4	Elv. = 164.22
Railroad spike @ base 10' Locust; 10' northeast of P.I. -5-7.	

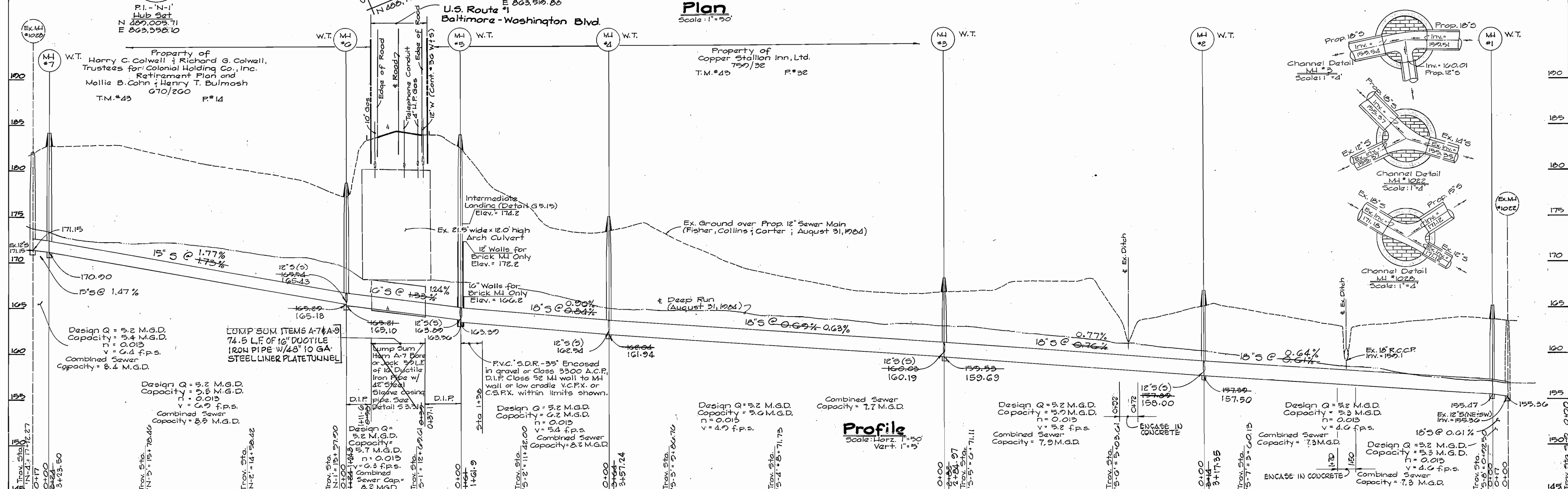
Construction Stakeout Table

MI #	Station	Distance
1	0+27.50	4' RT.
2	4+26.15	0' RT.
3	6+09.11	0' RT.
4	10+54.76	2' RT.
5	12+19.00	0' RT.
6	13+44.11	5' RT.
7	16+29.32	7' RT.

NOTE:
 ⚡ DENOTES PIPE JOINT ENCASED DUE TO LEAK



Plan
 Scale: 1" = 50'



Profile
 Scale: Horiz. 1" = 50'
 Vert. 1" = 5'

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *John F. Nearing* 4-3-85
 Chief, Bureau of Engineering: *William D. Egan* 3/22/85
 Chief, Bureau of Utilities: *Charles M. ...* 4-1-85
 Chief, Utility Design Division: *...* 3/28/85

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

DES: T.A.F.
 DRN: D.E.V.
 CHK: T.A.F.
 DATE: 9/24/84

REVISION	DATE	BY	NO.

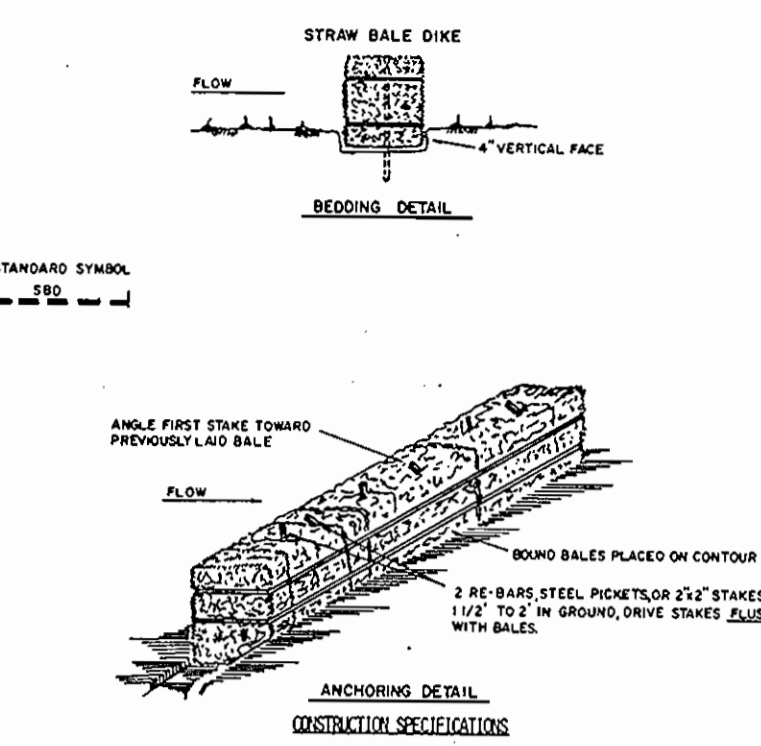
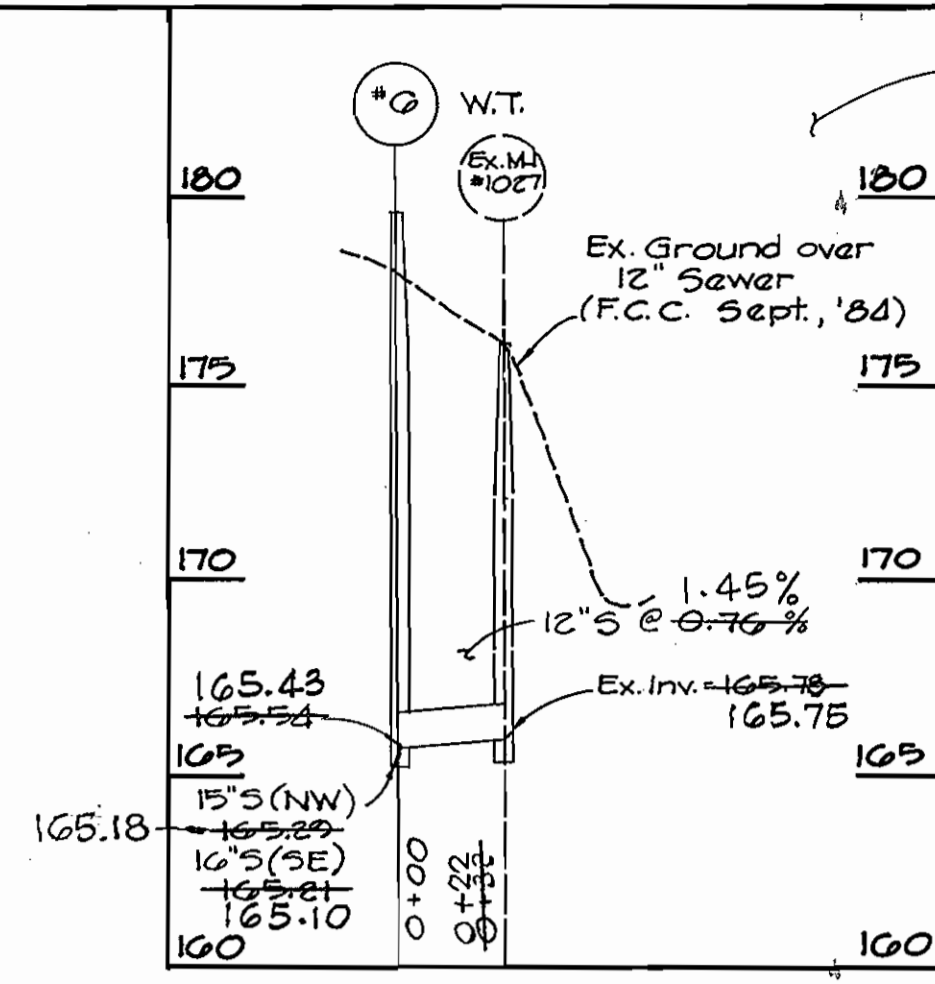
PLAN & PROFILE
 SEWER MAIN

600' SCALE MAP NO. 43 BLOCK NO. 10

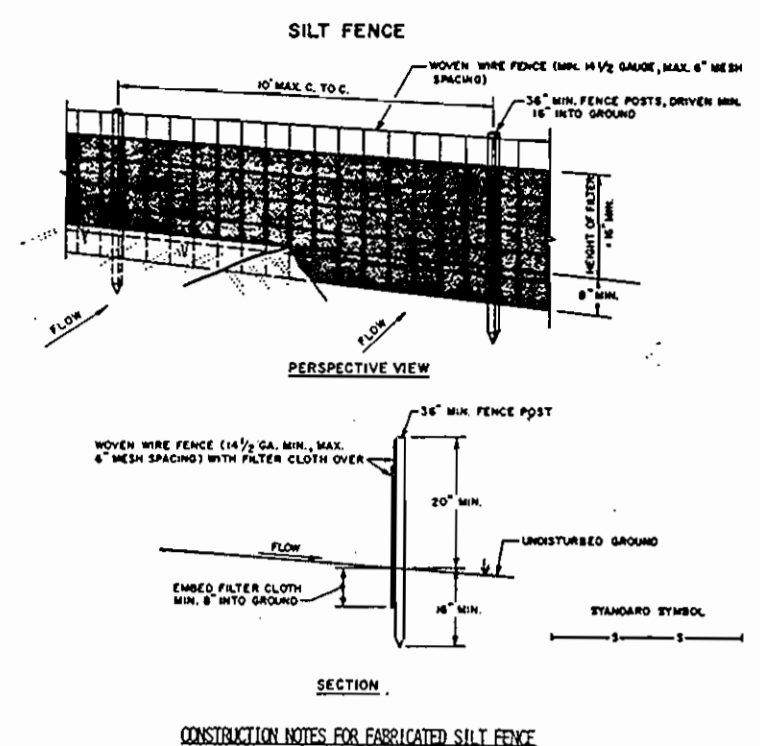
DEEP RUN/ROUTE 1 PARALLEL INTERCEPTOR
 CAPITAL PROJECT NO. S-6133
 CONTRACT NO. 10-1300
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 2 OF 3

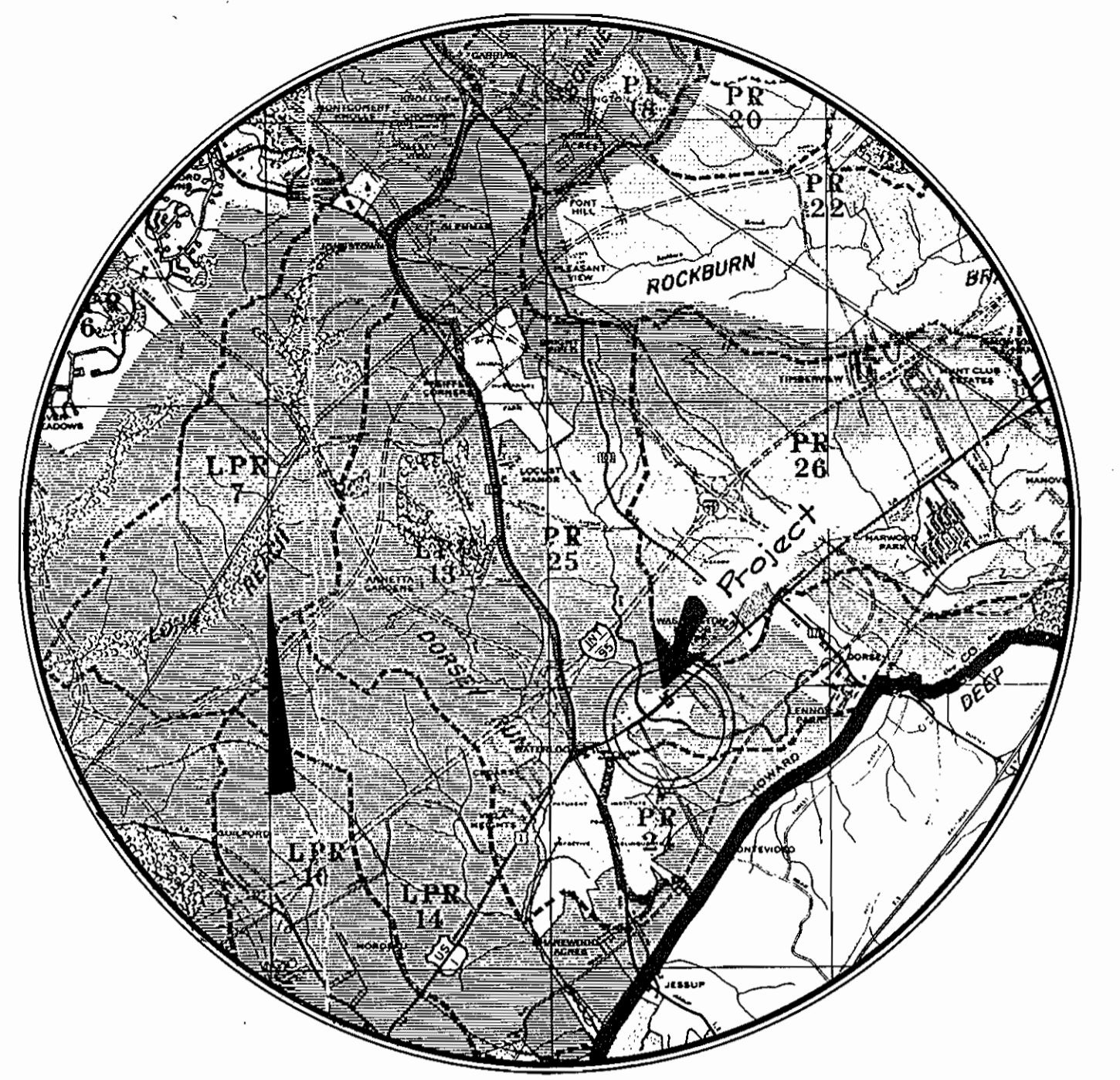
Property of
Harry C. Colwall & Richard C. Colwall
Trustees for Colonial Holding Co. Inc.
Retirement Plan and
Mollie B. Cohn & Henry T. Bulmash
T.M.#43 P#14



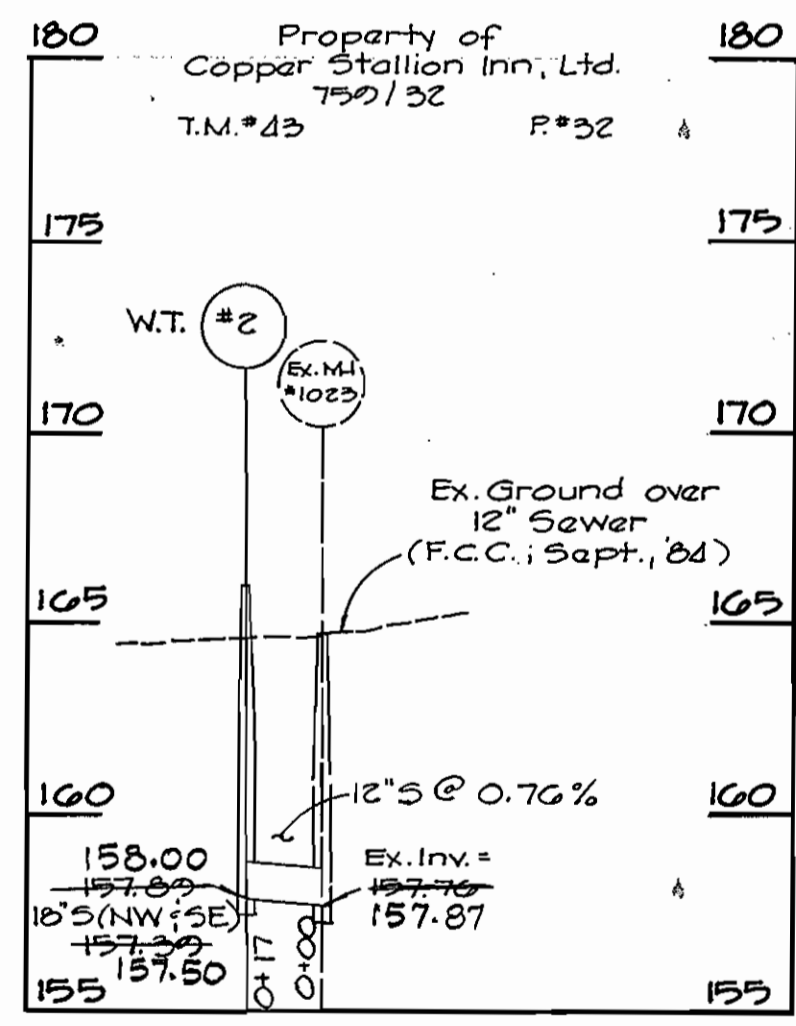
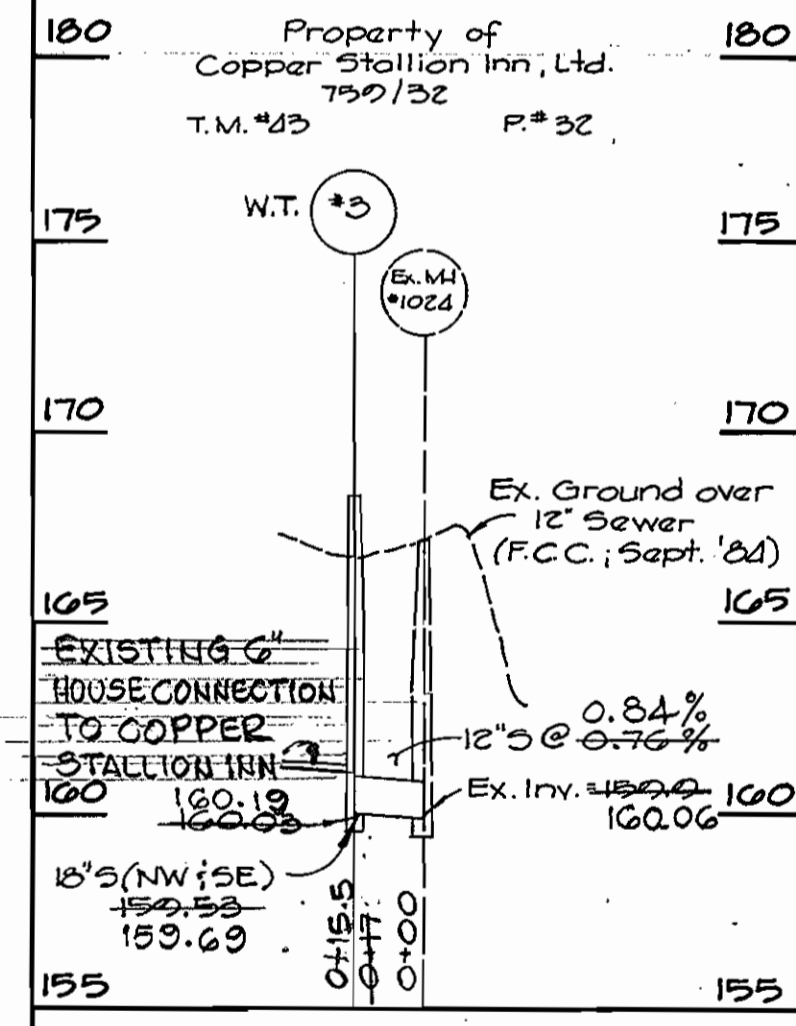
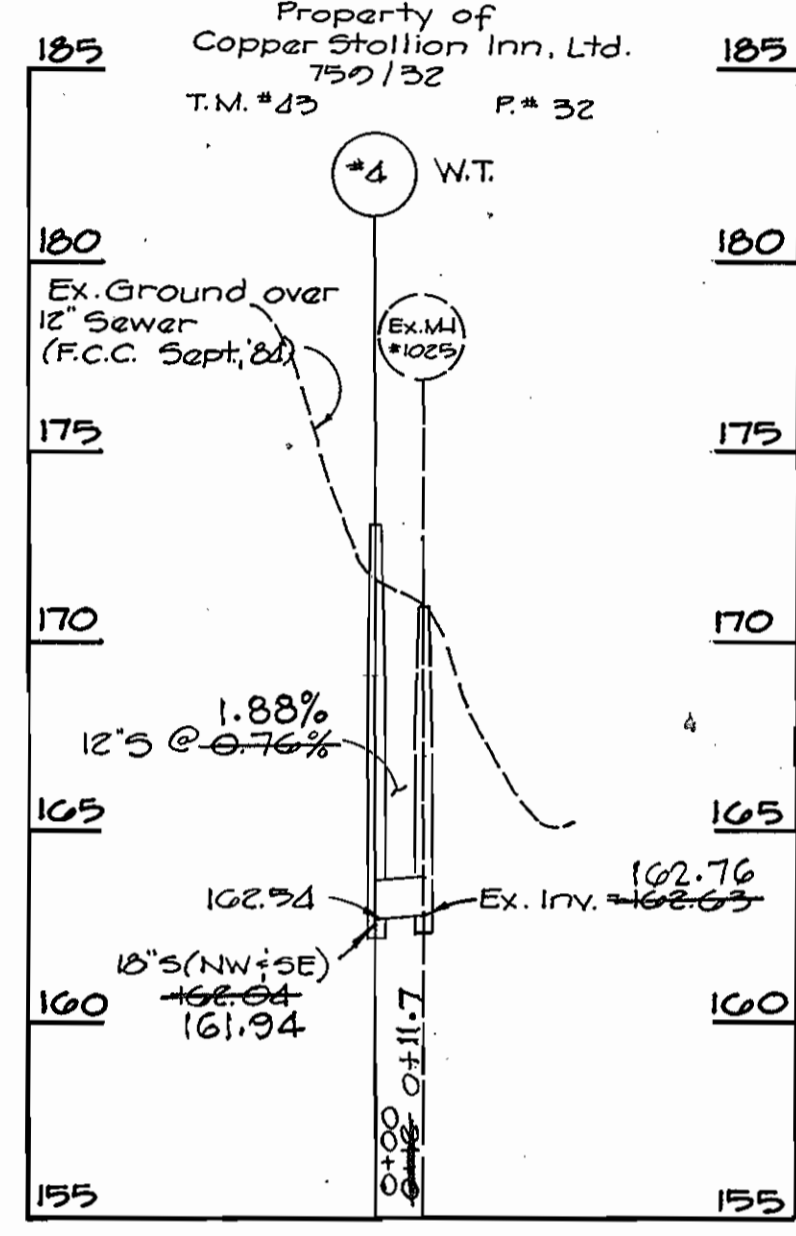
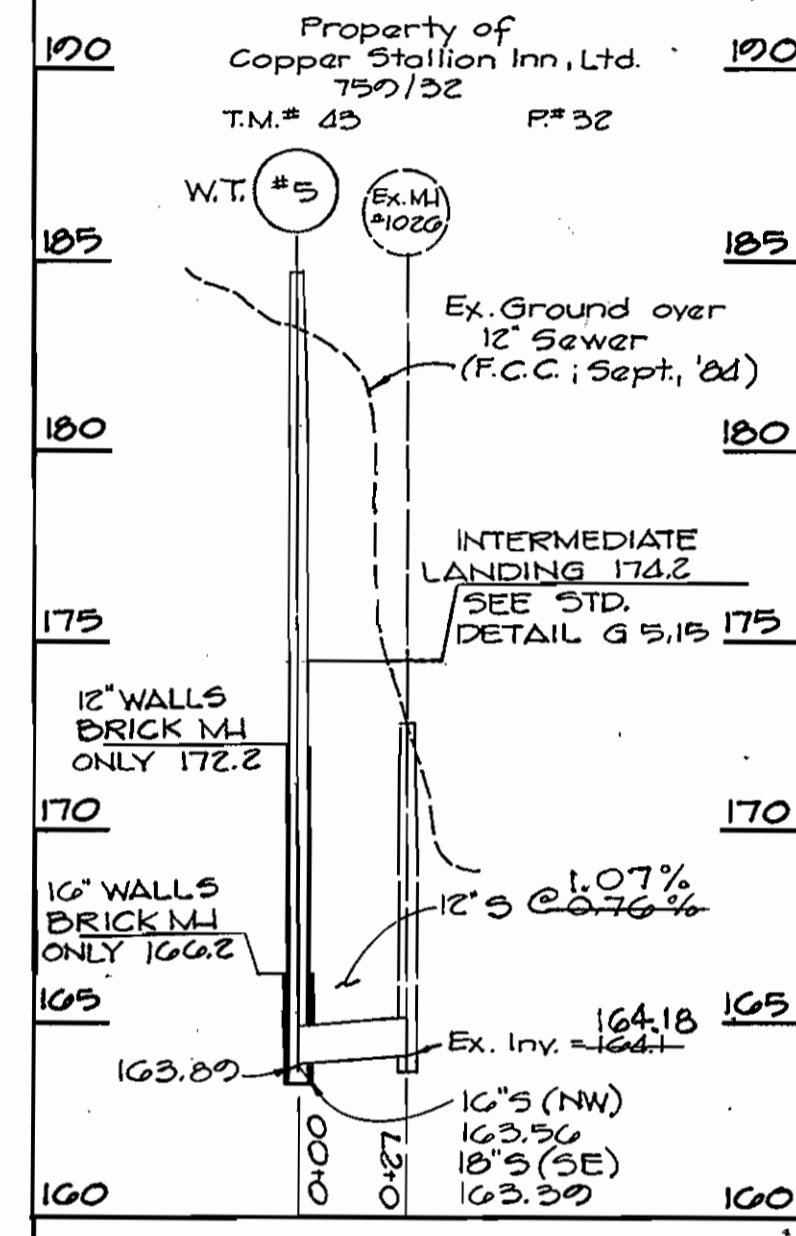
- BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE OUTSLOPE AND IN A ROW WITH GAPS FORMERLY LEFT BY THE HARROWING.
- EACH BALE SHALL BE EXPOSED IN THE SOIL A MINIMUM OF (6) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR REBAR DRIVEN PROFOUNDLY INTO SOIL BY 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 INTERFERE WITH FLOW OR DRAINAGE.



- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES OR STAPLES. DO NOT STAPLE TO TOP AND SIDES.
- 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 PARTIAL REMOVAL MUST BE MADE TO DEVELOP IN THE SILT FENCE.



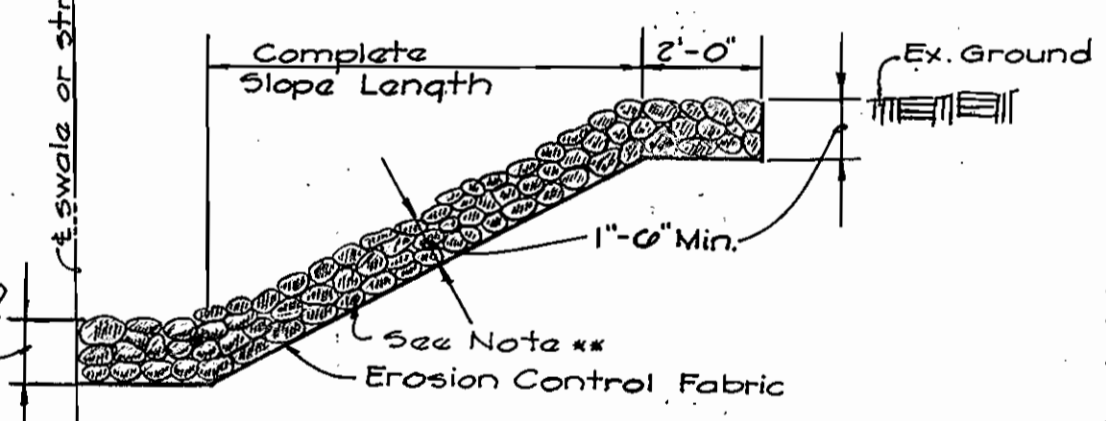
- All graded areas not to be sodded shall be stabilized by seeding and mulching in accordance with the following:
- Site Preparation:
 - Harrow or disc in areas proposed to be seeded the following materials:
 - Pulverized limestone at 2 tons/acre.
 - Commercial fertilizer 10-10-10 at 1/4 ton/acre.
 - Super Phosphate at 600 lb/acre.
 - Seeding:
 - Sow the following seed mixture at the rate of 200 lb/acre with a mechanical spreader:
 - Temporary: Italian or Perennial Rye Grass.
 - Permanent: 40% Marion Blue Grass, 40% Dakota Blue Grass, and 20% Penn Lawn Creeping Fescue.
 - The seeded area shall then be raked with a York rake (a minimum of 2 passes) covered and compacted with Cultipacker or other approved method.
 - Mulching:
 - Seeded areas shall be uniformly mulched immediately after seeding with unweathered small grain straw at the rate of 1 1/2 - 2 tons/acre.
 - Tie mulch down with liquid asphalt at 0.1 gal/s.y. or emulsified asphalt at 0.4 gal/s.y. or mulch netting.



Profiles

Scale: Horiz.: 1" = 50'
Vert.: 1" = 5'

**Note:
Rip Rap shall be placed along Ex. Deep Run stream bank in vicinity of M.I.#1. Limits of rip rap shall be in accordance with detail but shall not extend beyond bottom of bank into Deep Run stream.
Rip Rap to consist of dense rocks of random shape & sizes, resistant to the action of air & water and suitable for bank protection. All rocks to weigh a minimum of 75 pounds.



Ungrouted Rip Rap Detail

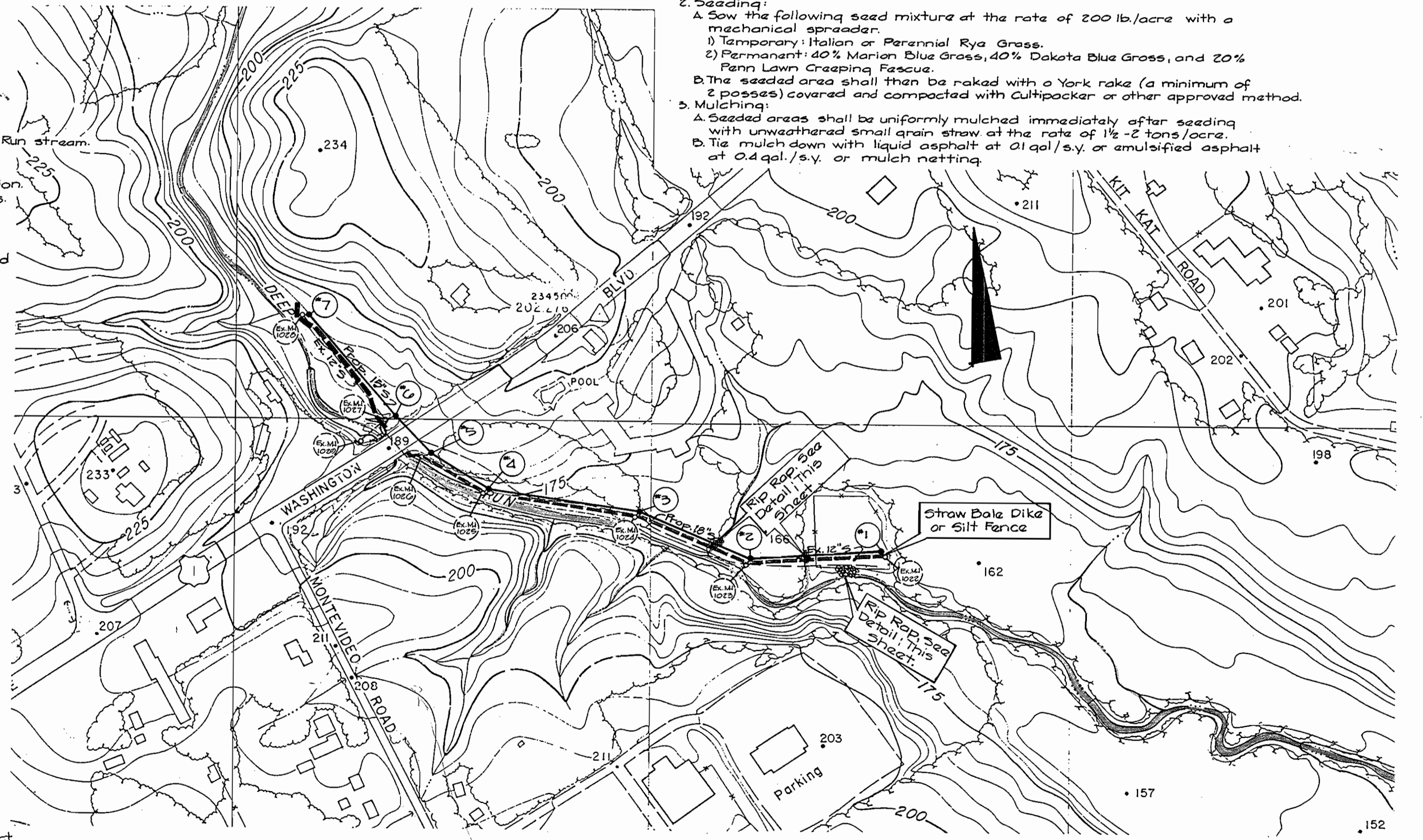
No Scale
Along pipeline from M.I.#1 to M.I.#2 & M.I.#2 to M.I.#3.

STABILIZATION NOTES

Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: 1) 7 calendar days for all perimeter sediment control structures, dikes, swales, ditches, perimeter slopes (all slopes greater than 3:1); 2) 14 days as to all other disturbed or graded areas on the project site.

Construction Sequence

- Obtain Water Resources Permit.
- Install Silt Fence and/or Straw Bale Dike.
- Clear proposed Sewer Right-of-Way.
- Construct Sanitary Sewer System.
- During construction; after each rainfall, the contractor shall inspect and provide necessary maintenance on the sediment control devices.
- Provide stabilization of disturbed areas in accordance with vegetative stabilization notes shown hereinabove.
- Install Rip Rap at the location shown on the drawings.
- Remove Silt Fence and/or Straw Bale Dike.



SEDIMENT & EROSION CONTROL PLAN
SCALE: 1" = 200'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works: *David F. Neamy* 4-3-88
Chief, Bureau of Engineering: *James E. Ray* 3/28/85
Chief, Bureau of Utilities: *James E. Ray* 3/28/85

FISHER, COLLINS, AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043
461-2855
TERRELL A. FISHER

DES: T.A.F.	DATE: 01/24/84
DRN: D.E.V.	BY: NO.
CHK: T.A.F.	REVISION
DATE: 01/24/84	DATE

SEWER PROFILES & DETAILS
600' SCALE MAP NO. 43 BLOCK NO. 10

DEEP RUN/ROUTE 1 PARALLEL INTERCEPTOR
CAPITAL PROJECT NO. S-6133
CONTRACT NO. 10-1300
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 3 OF 3

AS-BUILT 7/3/86

3/21/85