

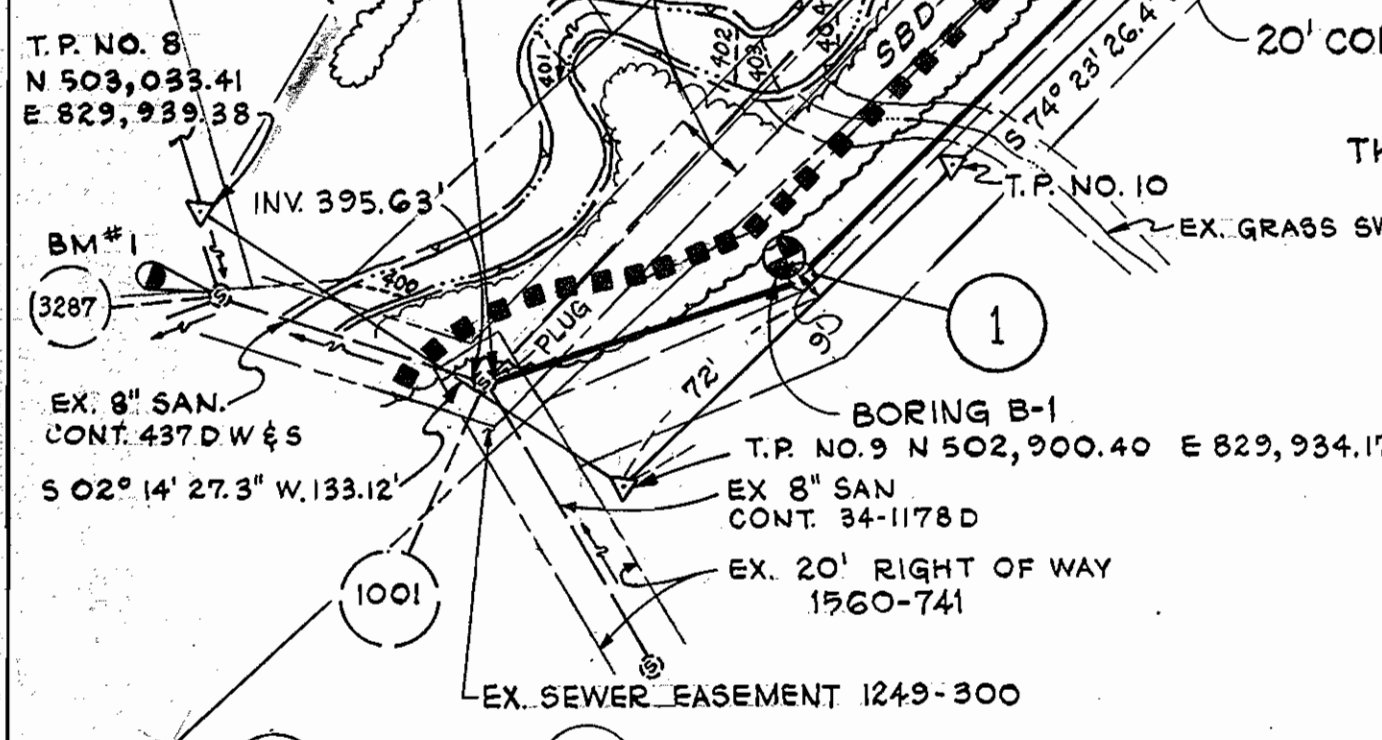
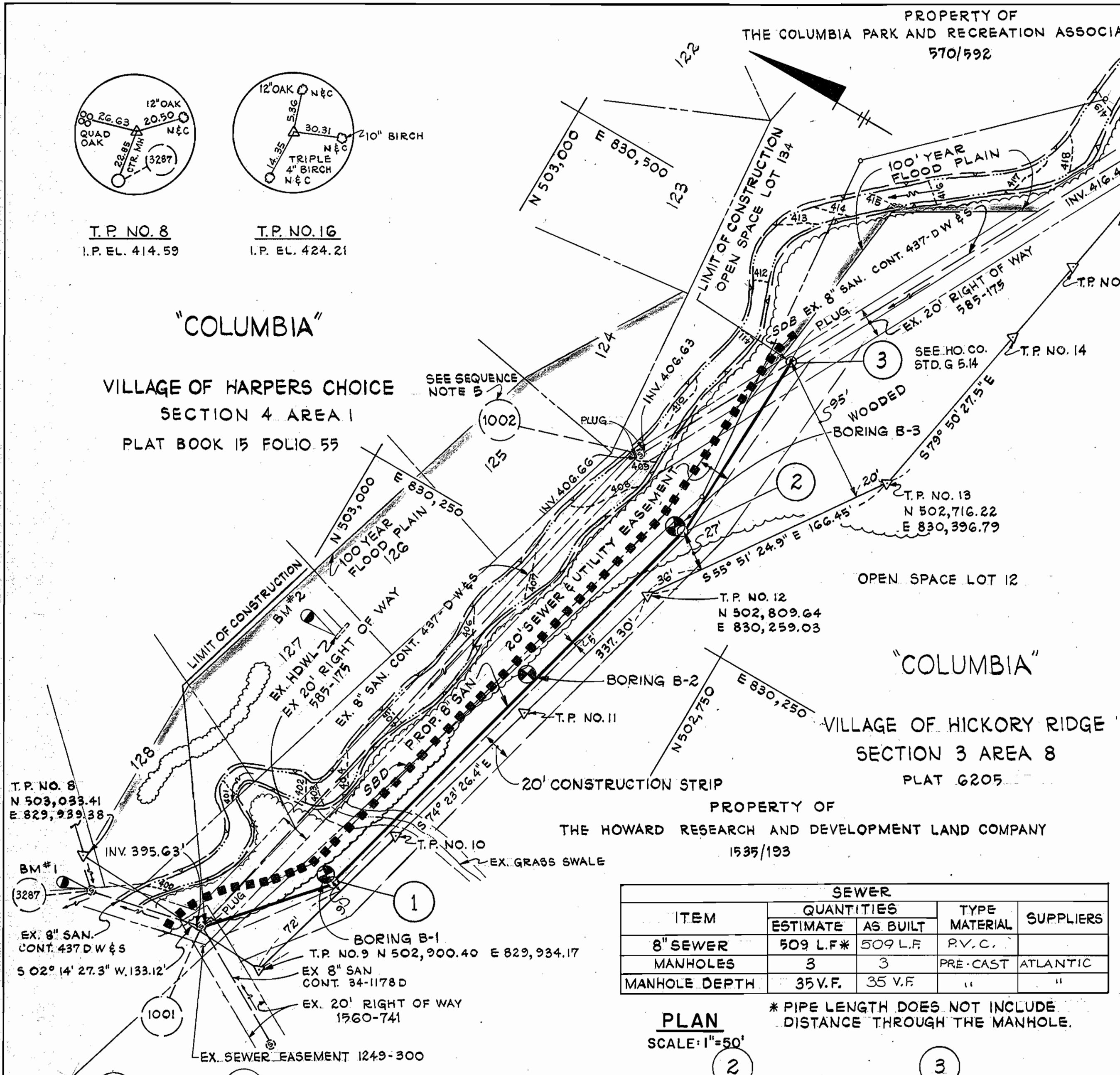
T.P. NO. 8
I.P. EL. 414.59

T.P. NO. 16
I.P. EL. 424.21

"COLUMBIA"

VILLAGE OF HARPERS CHOICE
SECTION 4 AREA 1
PLAT BOOK 15 FOLIO 55

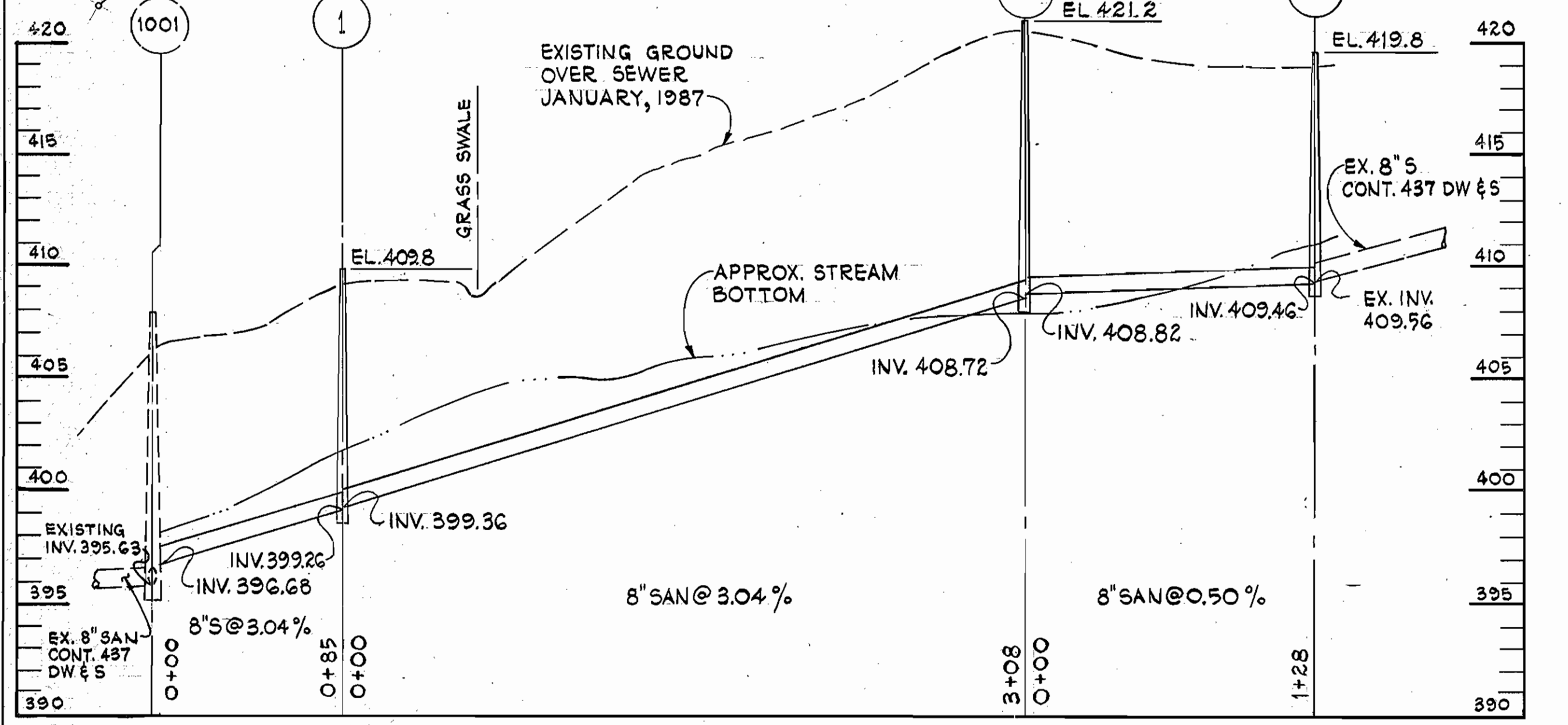
PROPERTY OF
THE COLUMBIA PARK AND RECREATION ASSOCIATION, INC.
570/592



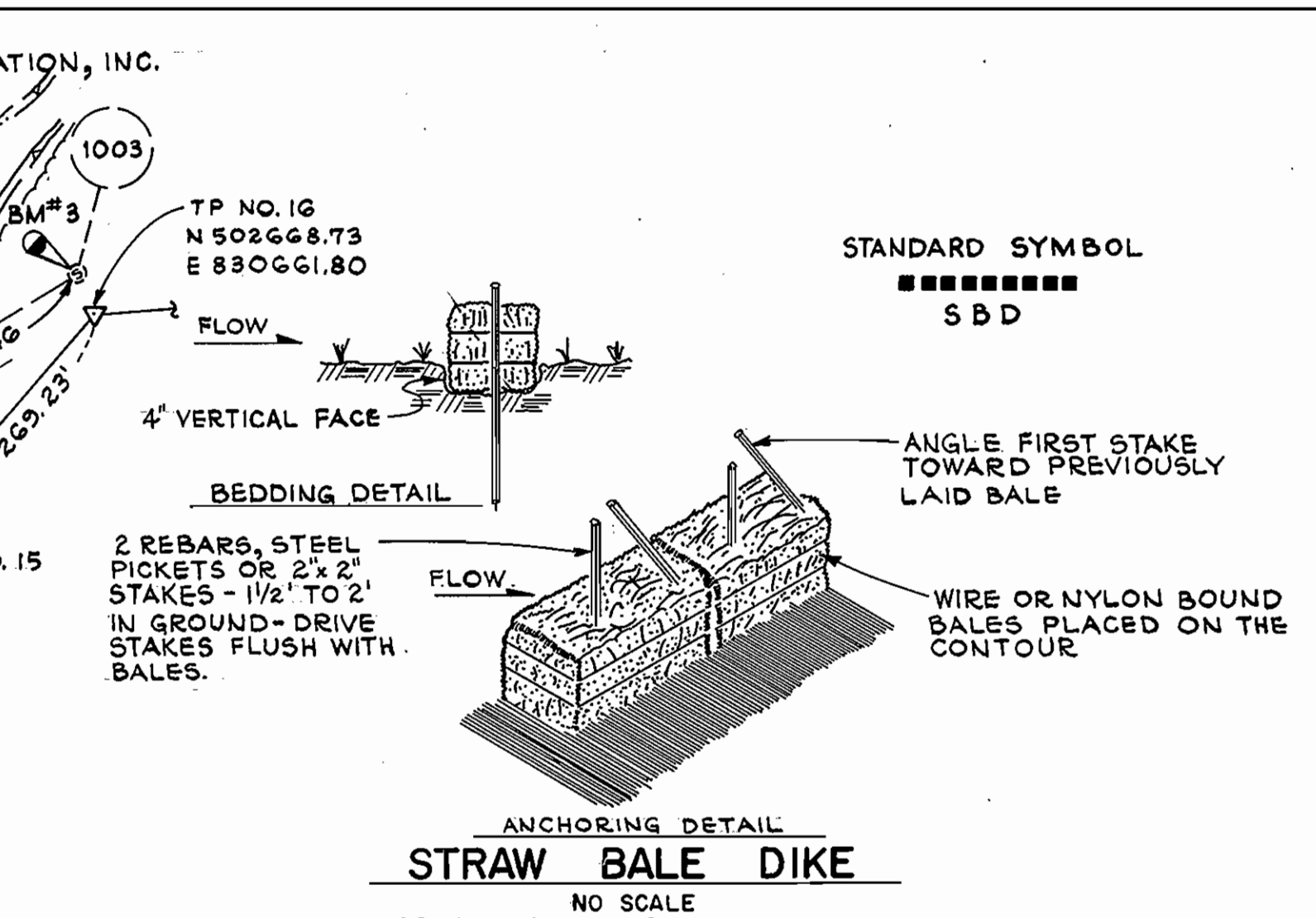
ITEM	QUANTITIES		TYPE MATERIAL	SUPPLIERS
	ESTIMATE	AS BUILT		
8" SEWER	509 L.F.*	509 L.F.	P.V.C.	
MANHOLES	3	3	PRE-CAST	ATLANTIC
MANHOLE DEPTH	35 V.F.	35 V.F.	"	"

* PIPE LENGTH DOES NOT INCLUDE DISTANCE THROUGH THE MANHOLE.

PLAN
SCALE: 1"=50'



PROFILE
SCALE: HORIZ. 1"=50'
VERT. 1"=5'



- STANDARD SYMBOL
S B D
- ANCHORING DETAIL
STRAW BALE DIKE
NO SCALE
CONSTRUCTION SPECIFICATIONS
- 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 REBAR DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD 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.

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

Reviewed for Howard County S.C.D. and meets technical requirements.
James M. Nelson Date: 8-27-87
U.S. SOIL CONSERVATION SERVICE
This development plan is approved for soil erosion and sediment control by The Howard County Soil Conservation District.
Approved: *Stephen J. Adams* Date: 9/23/87
HOWARD COUNTY S.C.D.

MANHOLE	DISTANCE		OFFSET
	FROM TP 9 TOWARDS TP 10	FROM TP 12 TOWARDS TP 13	
1	72'	9'	9' LEFT
2	36'	27'	LEFT
3	20'	95'	RIGHT

LOCATION	DISTANCE	TYPE
MH 1 TO O+40	40'	SEED
O+40 TO O+60	20'	SOD
O+60 TO MH 2	250'	SEED
MH 2 TO MH 3	126'	SEED

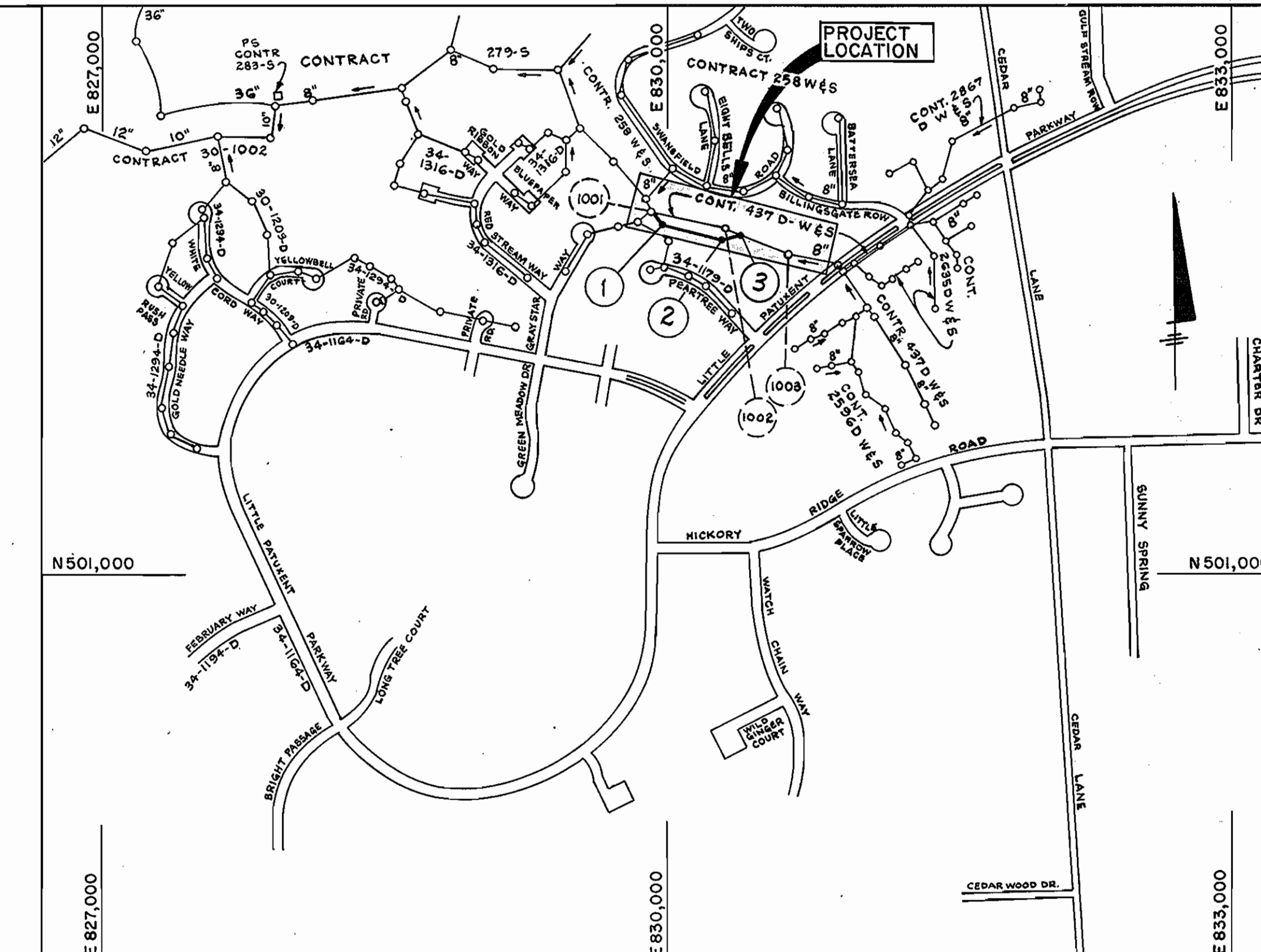
- BENCH MARKS FOR CONSTRUCTION
- BM#1 X-CUT ON WEST RIM OF MH ELEV. 407.83
 - BM#2 □-CUT ON WEST END OF HEADWALL ELEV. 409.61
 - BM#3 X-CUT ON S.W. RIM OF MH ELEV. 424.70

- SUGGESTED SEQUENCE OF CONSTRUCTION
- BREAK OUT EXISTING MANHOLE 1001 AT THE TOP OF EXISTING BENCH, MAKE CONNECTION AND GROUT ANNULAR SPACE AS REQUIRED. (MAINTAIN FLOW).
 - CONSTRUCT SEWERS AND MANHOLES 1 & 2 TO MANHOLE 3.
 - BUILD MANHOLE 3 OVER EXISTING 8" SEWER. FORM CHANNEL TO NEW 8" SEWER. TEST PIPE BETWEEN MANHOLES 1001 AND 3. BREAK OUT TOP OF EXISTING 8" SEWER AS REQUIRED. DIVERT FLOW TO NEW SYSTEM. PROVIDE PERMANENT PLUG FOR DOWNSTREAM ABANDONED 8" SEWER.
 - PROVIDE PERMANENT PLUG FOR UPSTREAM ABANDONED 8" SEWER IN MANHOLE 1001.
 - SALVAGE EXISTING MANHOLE 1002 FRAME AND COVER. REMOVE EXISTING MANHOLE STACK TO 1 FOOT BELOW GRADE. PLUG UPSTREAM AND DOWNSTREAM PIPES WITH MORTAR AND BACKFILL WITH 1/2" TO 2" STONE.

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 requirements of the Howard County Soil Conservation District.

James L. Bailey Date: 3/26/88
WHITNEY, BAILEY, COX & MAGNANI
CONSULTING ENGINEERS
1850 YORK ROAD
TIMONIUM, MD. 21093



VICINITY MAP
SCALE: 1"=600'

SEWER CODE FOR COUNTY USE ONLY:	SEWER NO. 5585300
TYPE OF BUILDINGS	N/A
NUMBER OF LOTS	N/A
NUMBER OF SEWER HOUSE CONNECTIONS	N/A
DRAINAGE AREA	MIDDLE PATUXENT

- 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. DATA.
 - 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 PUG 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
UNDERGROUND DAMAGE CONTROL 850-2004, TROUBLE SHOOTING 298-2001
MISS UTILITY 1-550-0100 COLONIAL PIPELINE CO. 795-1320
BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 992-2306
C/P 1-800-257-1777.
 - 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.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Nelson 9/3-87
DIRECTOR OF PUBLIC WORKS DATE

Michael J. Adams 9-2-87
CHIEF, BUREAU OF UTILITIES DATE

James L. Bailey 9/1/87
CHIEF, UTILITY DESIGN DIVISION DATE

WHITNEY
BAILEY
COX
MAGNANI

CONSULTING ENGINEERS
1850 York Road
Timonium, Md. 21093
301-252-6060

DES: R.J.H.	
DRN: R.D.H.	
CHK: J.P.	
DATE: 11-6-87	

VICINITY MAP
PLAN & PROFILE

600' SCALE MAP NO. S-35 BLOCK NO. 485

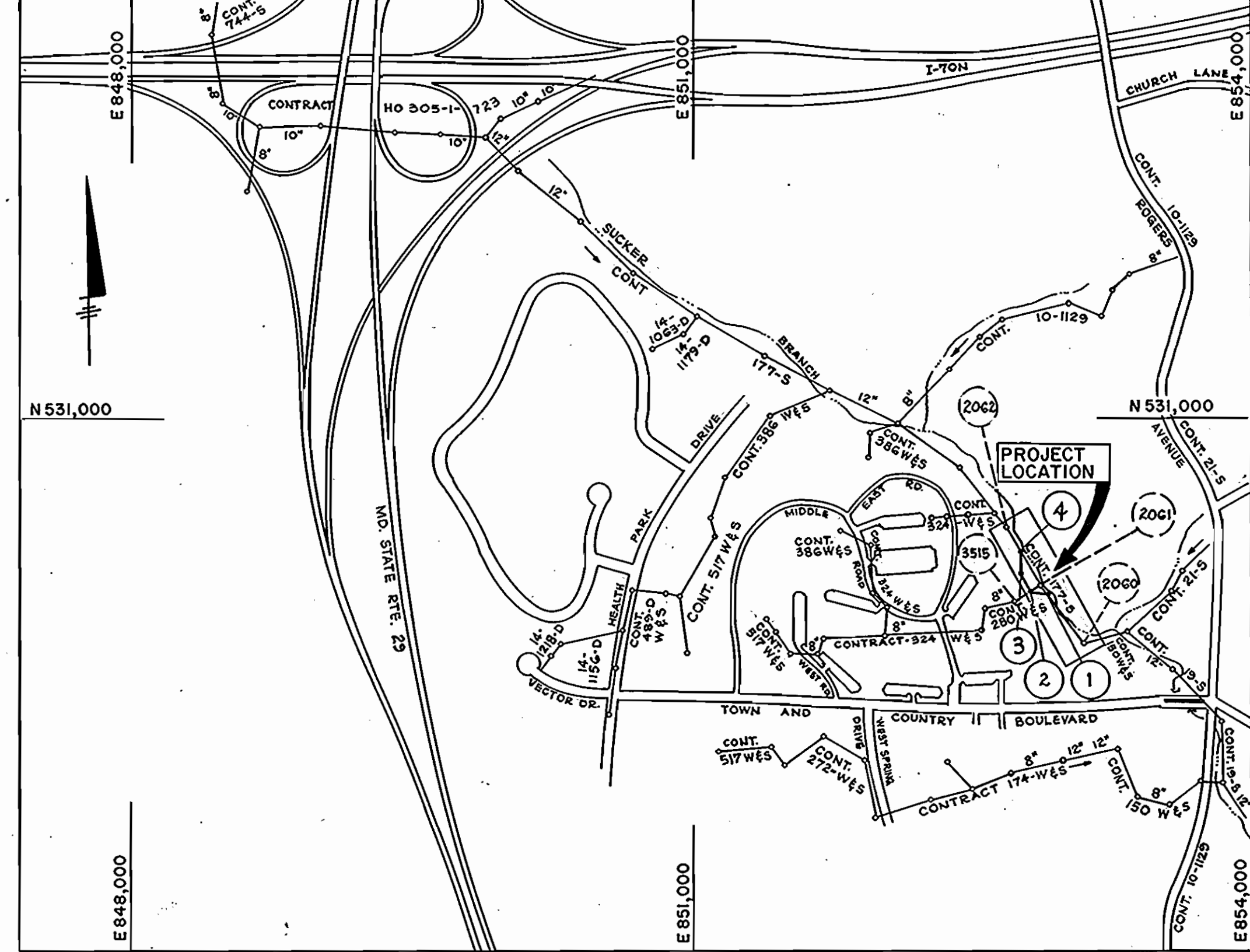
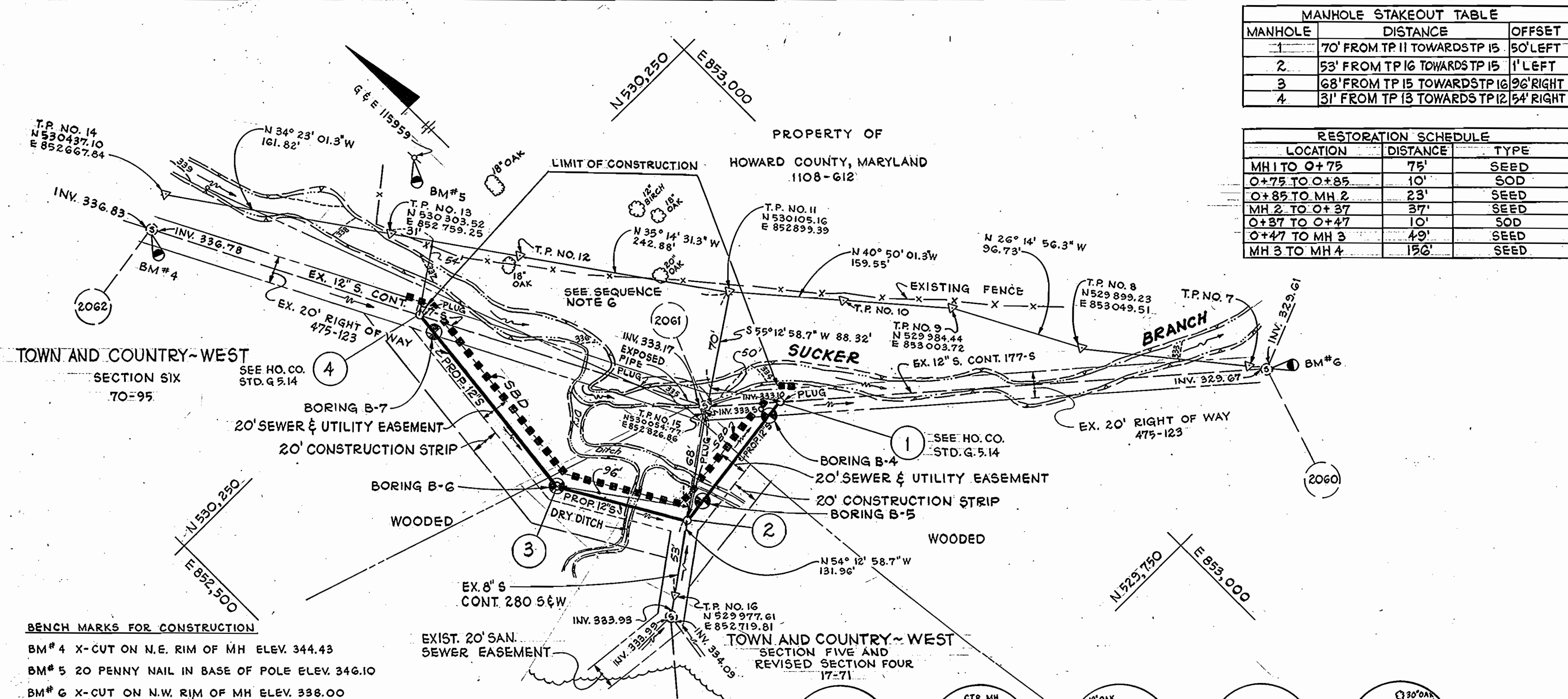
HICKORY RIDGE INTERCEPTOR RELOCATION
CAPITAL PROJECT S-6148
CONTRACT NO. 30-1603
ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 1 OF 2

MANHOLE	DISTANCE	OFFSET
1	70' FROM TP 11 TOWARDSTP 15	50' LEFT
2	53' FROM TP 16 TOWARDSTP 15	1' LEFT
3	68' FROM TP 15 TOWARDSTP 16	96' RIGHT
4	31' FROM TP 13 TOWARDSTP 12	54' RIGHT

LOCATION	DISTANCE	TYPE
MH 1 TO Q+75	75'	SEED
Q+75 TO Q+85	10'	SOD
Q+85 TO MH 2	23'	SEED
MH 2 TO Q+37	37'	SEED
Q+37 TO Q+47	10'	SOD
Q+47 TO MH 3	49'	SEED
MH 3 TO MH 4	156'	SEED

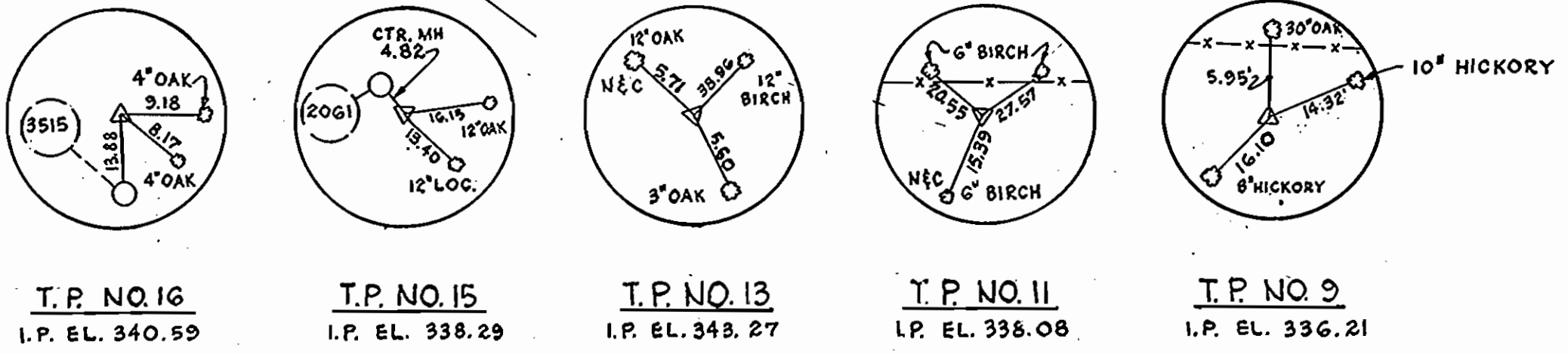


SEWER CODE FOR COUNTY USE ONLY: SEWER NO. 1453000	VICINITY MAP SCALE: 1" = 600'	TYPE OF BUILDINGS: N/A	NUMBER OF LOTS: N/A	NUMBER OF SEWER HOUSE CONNECTIONS: N/A	DRAINAGE AREA: PATAPSCO
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BENCH MARKS FOR CONSTRUCTION
 BM# 4 X-CUT ON N.E. RIM OF MH ELEV. 344.43
 BM# 5 20 PENNY NAIL IN BASE OF POLE ELEV. 346.10
 BM# 6 X-CUT ON N.W. RIM OF MH ELEV. 338.00

ITEM	SEWER QUANTITIES		TYPE MATERIAL	SUPPLIERS
	ESTIMATE	AS BUILT		
12" SEWER	348 L.F.	348 L.F.	P.V.C.	
MANHOLES	4	4	PRE CAST	ATLANTIC
MANHOLE DEPTH	24 V.F.	24 V.F.	"	"

*PIPE LENGTH DOES NOT INCLUDE DISTANCE THROUGH THE MANHOLE.



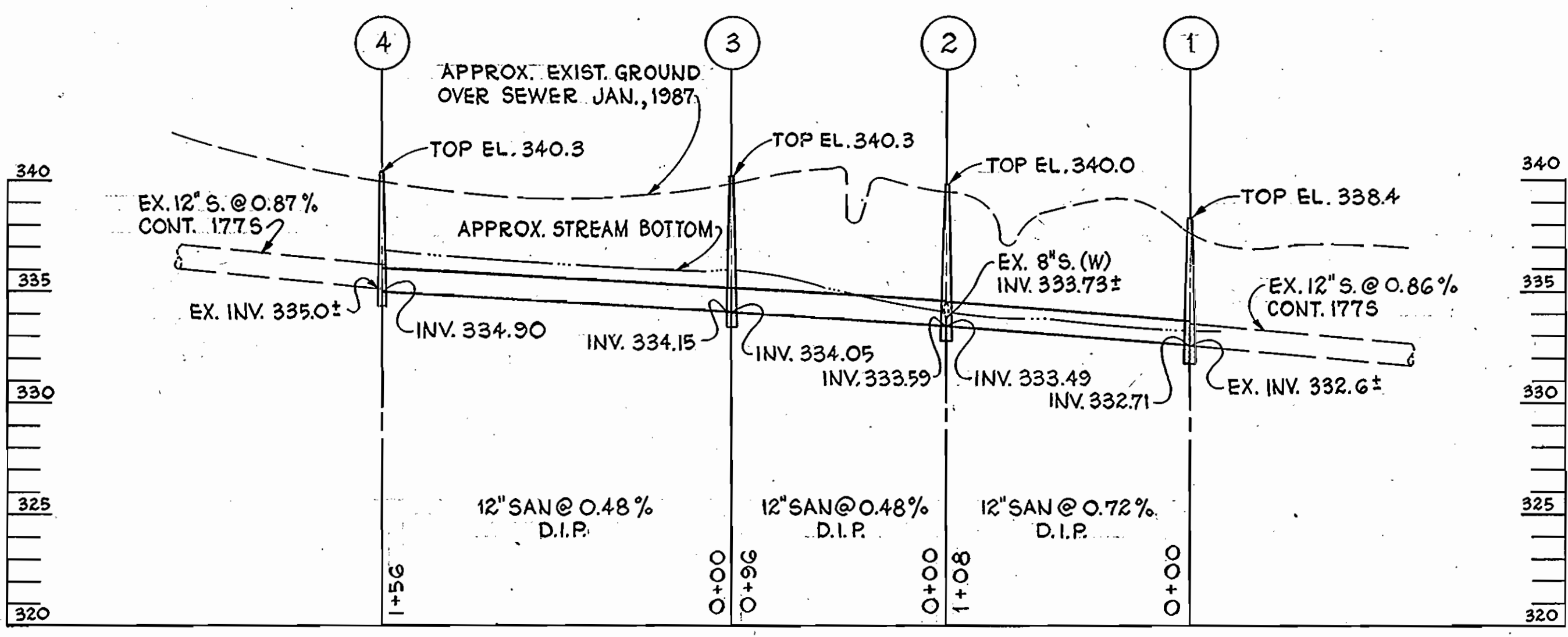
SEDIMENT CONTROL NOTES

- 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. (992-2437)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 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 GRADE 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 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD 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	N/A	ACRES
AREA TO BE ROOFED OR PAVED	N/A	ACRES
AREA TO BE VEGETATIVELY STABILIZED	N/A	ACRES
TOTAL CUT	N/A	CU. YDS.
TOTAL FILL	N/A	CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	N/A	
- 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 CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF 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.

SUGGESTED SEQUENCE OF CONSTRUCTION

- BUILD MANHOLE 1 OVER EXISTING 12" SEWER. FORM CHANNEL FOR NEW 12" SEWER. TEMPORARILY PLUG NEW 12" SEWER AND BREAK-OUT TOP OF EXISTING 12" SEWER AS REQUIRED. (MAINTAIN FLOW)
- CONSTRUCT NEW SEWER TO MANHOLE 2.
- BUILD MANHOLE 2 OVER EXISTING 8" SEWER. FORM CHANNELS FOR NEW 12" SEWER AND REROUTED 8" CONNECTION. TEST PIPE BETWEEN MANHOLES 1 AND 2. REMOVE PLUG IN MANHOLE 1. TEMPORARILY PLUG THE 12" SEWER UPSTREAM FROM MH 2. BREAK OUT TOP OF EXISTING 8" SEWER AS REQUIRED. DIVERT FLOW TO NEW SYSTEM. PROVIDE PERMANENT PLUG FOR DOWNSTREAM 8" SEWER.
- CONSTRUCT NEW SEWER AND MANHOLE 3 TO MANHOLE 4.
- BUILD MANHOLE 4 OVER EXISTING 12" SEWER. FORM CHANNEL FOR NEW 12" SEWER. TEST PIPE BETWEEN MANHOLES 2 AND 4. REMOVE PLUG AT MANHOLE 2. BREAK OUT TOP OF EXISTING 12" AS REQUIRED. DIVERT FLOW TO NEW SYSTEM. PROVIDE PERMANENT PLUGS DOWNSTREAM IN MANHOLE 4 AND UPSTREAM IN MANHOLE 1.
- SALVAGE EXISTING MANHOLE 2061 FRAME AND COVER. REMOVE EXISTING MANHOLE AND EXPOSED PIPE IN THE STREAM; BACKFILL WITH 1/2" TO 2" STONE TO GRADE AND PLUG ABANDONED PIPES WITH MORTAR AS REQUIRED.



PROFILE
 SCALE: HORIZ. 1" = 50'
 VERT. 1" = 5'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: James M. ... 9/14/87 Chief, Bureau of Utilities: Michael A. ... 9-2-87	WHITNEY BAILEY FOX MAGNANI CONSULTING ENGINEERS 1850 York Road Timonium, Md. 21093 301-252-6060	DES: R.J.H. DRN: R.D.H. CHK: J.P. DATE: 9-14-87	VICINITY MAP PLAN & PROFILE	SUCKER BRANCH INTERCEPTOR RELOCATION CAPITAL PROJECT S-6148 CONTRACT NO. 30-1603 ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 2 OF 2
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