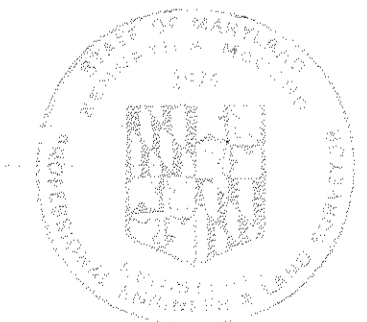


CONTRACT NO. C- 2533 S
VILLAGE OF OWEN BROWN
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

QUANTITIES	
ITEM	QUANTITY
8" Sewer	5780 L.F.
12" Sewer	1390 L.F.
15" Sewer	5030 L.F.

Stakeout FB# 5421
Diary FB# 5421 & 5419



Thomas H. Mink
 Columbia
 Village of Owen Brown
 Section 2 Areas 1&3
 Outfall Sewer
 Contract No. C-2533-6.

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 6-11-73 DATE <i>W. O. Pulbert</i> CHIEF - BUREAU OF ENGINEERING	CONTRACT NO. <u>C-2533 S</u>	LOCATION MAP OF SEWER MAIN EXTENSIONS	COLUMBIA VILLAGE OF OWEN BROWN - SECTION 2 AREAS 1&3 OUTFALL SEWER ELECTION DISTRICT GUILFORD No. 6	DRAWING NO. <u>1</u> OF <u>10</u>	SCALE 1"=800'
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W. O. 6023-2

August 15 1974 AS BUILT

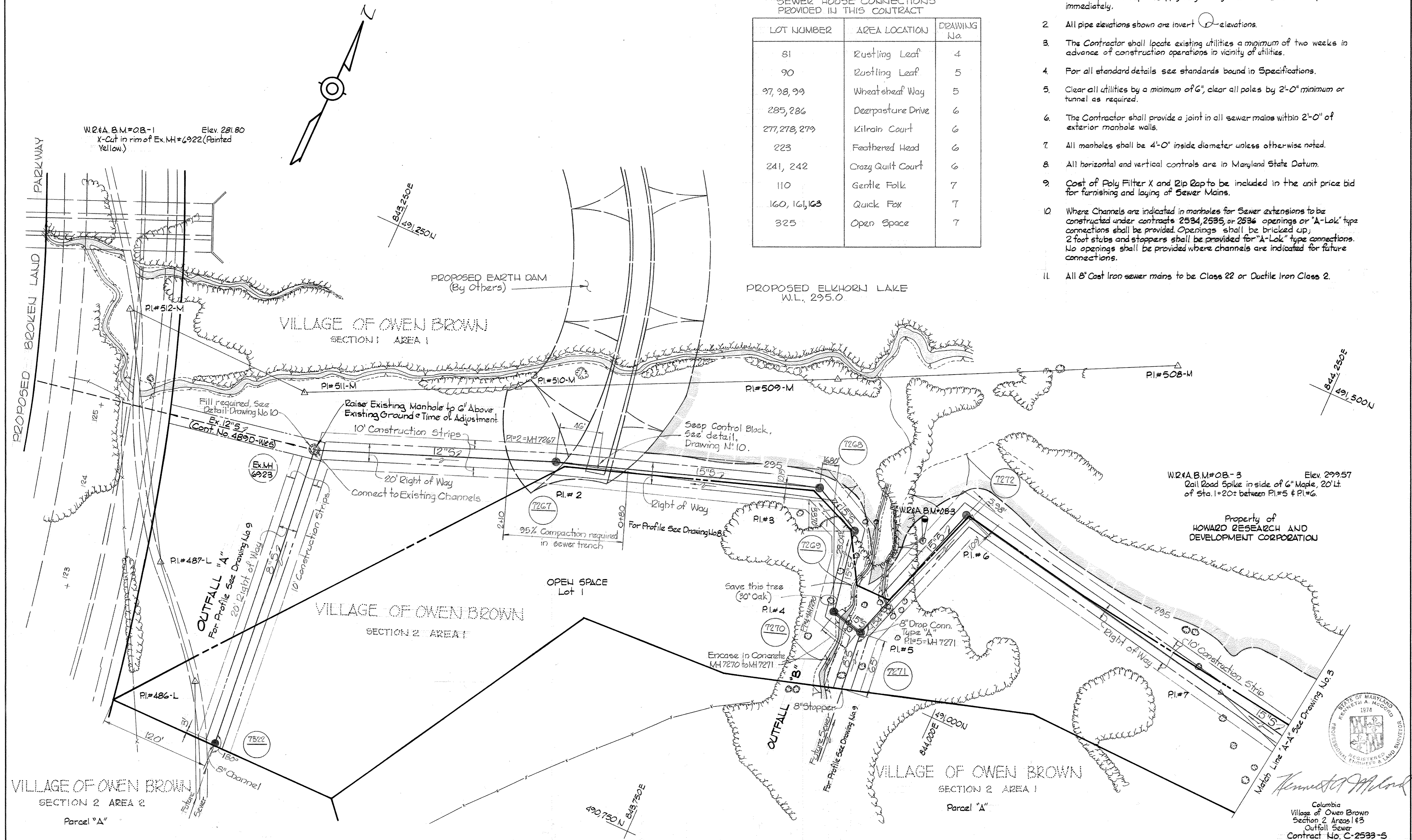
533-5/1

GENERAL NOTES

1. 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.
2. All pipe elevations shown are invert ϕ elevations.
3. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities.
4. For all standard details see standards bound in Specifications.
5. Clear all utilities by a minimum of 6', clear all poles by 2'-0" minimum or tunnel as required.
6. The Contractor shall provide a joint in all sewer mains within 2'-0" of exterior manhole walls.
7. All manholes shall be 4'-0" inside diameter unless otherwise noted.
8. All horizontal and vertical controls are in Maryland State Datum.
9. Cost of Poly Filter X and Rip Rap to be included in the unit price bid for furnishing and laying of Sewer Mains.
10. Where Channels are indicated in manholes for Sewer extensions to be constructed under contracts 2534, 2535, or 2536 openings or "A-Lok" type connections shall be provided. Openings shall be bricked up; 2 foot stubs and stoppers shall be provided for "A-Lok" type connections. No openings shall be provided where channels are indicated for future connections.
11. All 8" Cast Iron sewer mains to be Class 22 or Ductile Iron Class 2.

SEWER HOUSE CONNECTIONS PROVIDED IN THIS CONTRACT

LOT NUMBER	AREA LOCATION	DRAWING No.
81	Rustling Leaf	4
90	Rustling Leaf	5
97, 98, 99	Wheat sheaf Way	5
285, 286	Deerpasture Drive	6
277, 278, 279	Kilrain Court	6
223	Feathered Head	6
241, 242	Crazy Quilt Court	6
110	Gentle Folk	7
160, 161, 163	Quick Fox	7
325	Open Space	7



WS 533-5/2

BRUNING 44-510 1477R

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: <u>6-11-73</u> CHIEF-BUREAU OF ENGINEERING	CONTRACT NO. <u>C-2533 S</u>	PLAN OF SEWER MAINS
COLUMBIA Village of Owen Brown Section 2 Areas 1&3 Outfall Sewer Contract No. C-2533-S		ELECTION DISTRICT GUILFORD No. 6	DRAWING NO. <u>2</u> OF <u>10</u> SCALE 1"=50'

W. O. 6023-2

August 5, 1974 AS BUILT



VILLAGE OF OWEN BROWN

SECTION 1 AREA 1

PROPOSED ELKHORN LAKE
W.L. 295.0

W2&A BM#OB-4 Elev. 294.28
Rail Road Spike in side of 20' Poplar,
30' Lt. of Sta 3+25 Between PI#9 & PI#10.

W2&A BM#OB-4

Property of
HOWARD RESEARCH AND
DEVELOPMENT CORPORATION

W2&A BM#OB-5 Elev. 297.78
Rail Road Spike in side of 22'
Poplar 25' Lt. of Sta 0+10, between
PI#17 & PI#18.

Parcel "B"
Section 2 Area 3

VILLAGE OF OWEN BROWN

SECTION 2 AREA 1
OPEN SPACE
Lot 1

PI#13=MH 7280

Note:
The Contractor shall notify the Baltimore Gas &
Electric Co. of Maryland prior to any construction
activities in the vicinity of Gas and/or Electric
Facilities by calling 234-5691, in Baltimore,
Maryland.

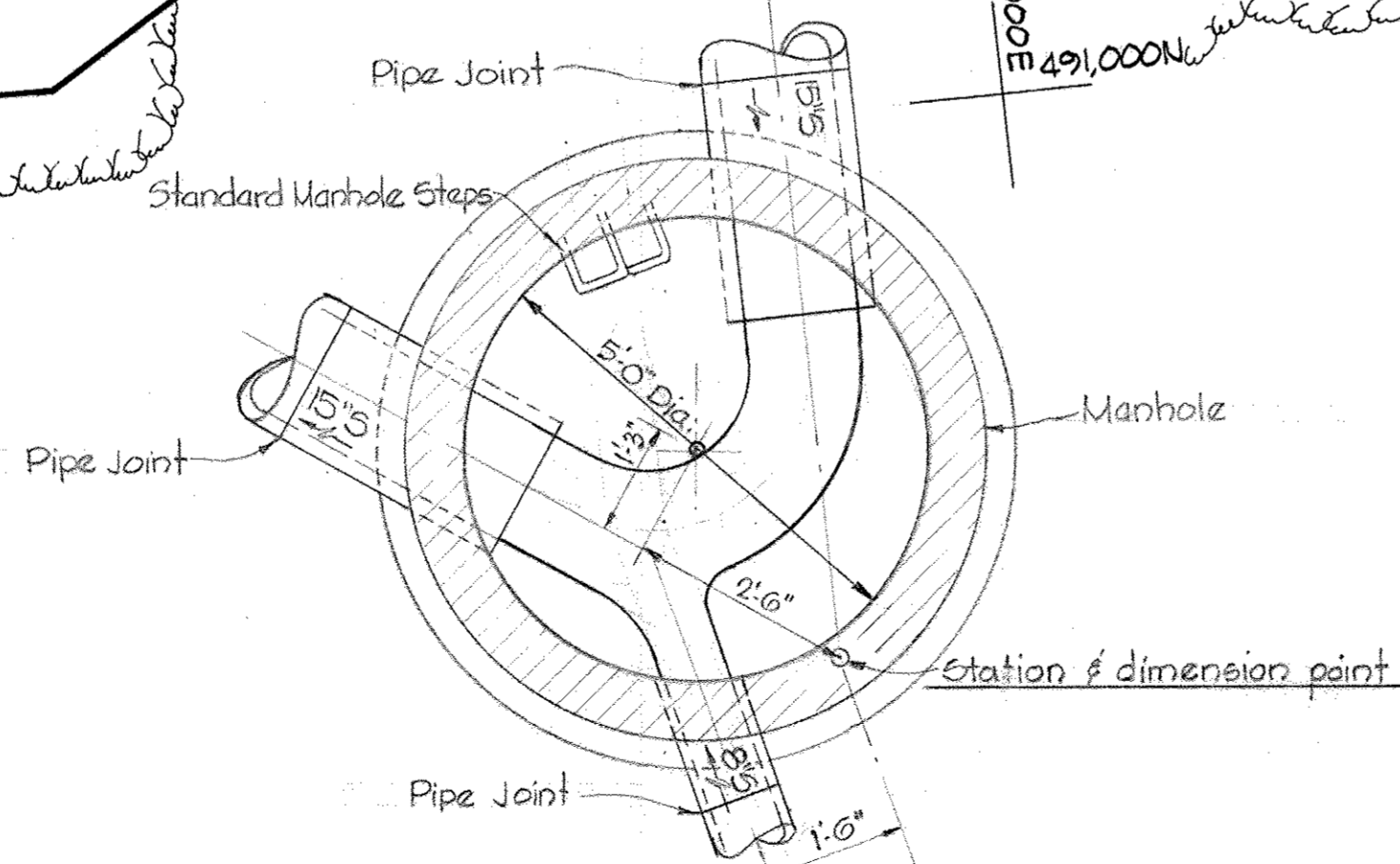
VILLAGE OF OWEN BROWN

SECTION 2 AREA 1

Parcel "A"

PLAN INVERT OF MH 7274

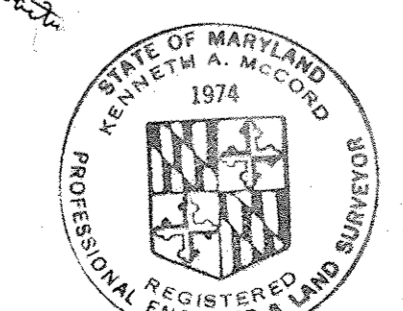
Scale: 1/2" = 1'-0"



Match Line "A-A" See Drawing No. 2

Special Concrete
Encasement - Sta 0+79
to 0+98 See Detail
Drawing No. 8.

OUTLET
For Profile See
Drawing No. 9



Kenneth A. McLeod

Match Line "G-G" See Drawing No. 7
Columbia
Village of Owen Brown
Section 2 Areas 1&3
Outfall Sewer
Contract No. C-2533-S

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
6-13-73
W. O. Gilbert
CHIEF - BUREAU OF ENGINEERING

CONTRACT NO. C-2533 S

PLAN OF
SEWER MAINS

COLUMBIA
VILLAGE OF OWEN BROWN - SECTION 2 AREAS 1&3
OUTFALL SEWER
ELECTION DISTRICT GUILFORD No. 6

DRAWING
NO. 3
OF 10
SCALE
1" = 50'

WS 533-S/3

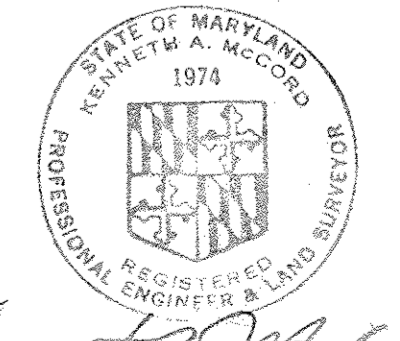
BRUNING 44-510 14778



Note:
The Contractor shall notify the C&P Telephone Co. of Maryland prior to any construction activities in the vicinity of Telephone Cables by calling collect 393-3553, in Baltimore, Maryland.

Note:
The Contractor shall notify the Baltimore Gas & Electric Co. of Maryland prior to any construction activities in the vicinity of Gas and/or Electric Facilities, by calling 294-5691, in Baltimore, Maryland.

VILLAGE OF OWEN BROWN
SECTION 2 AREAS 1&3



Kenneth M. Wood
Columbia
Village of Owen Brown
Section 2 Areas 1&3
Outfall Sewer
Contract No. C-2533 S

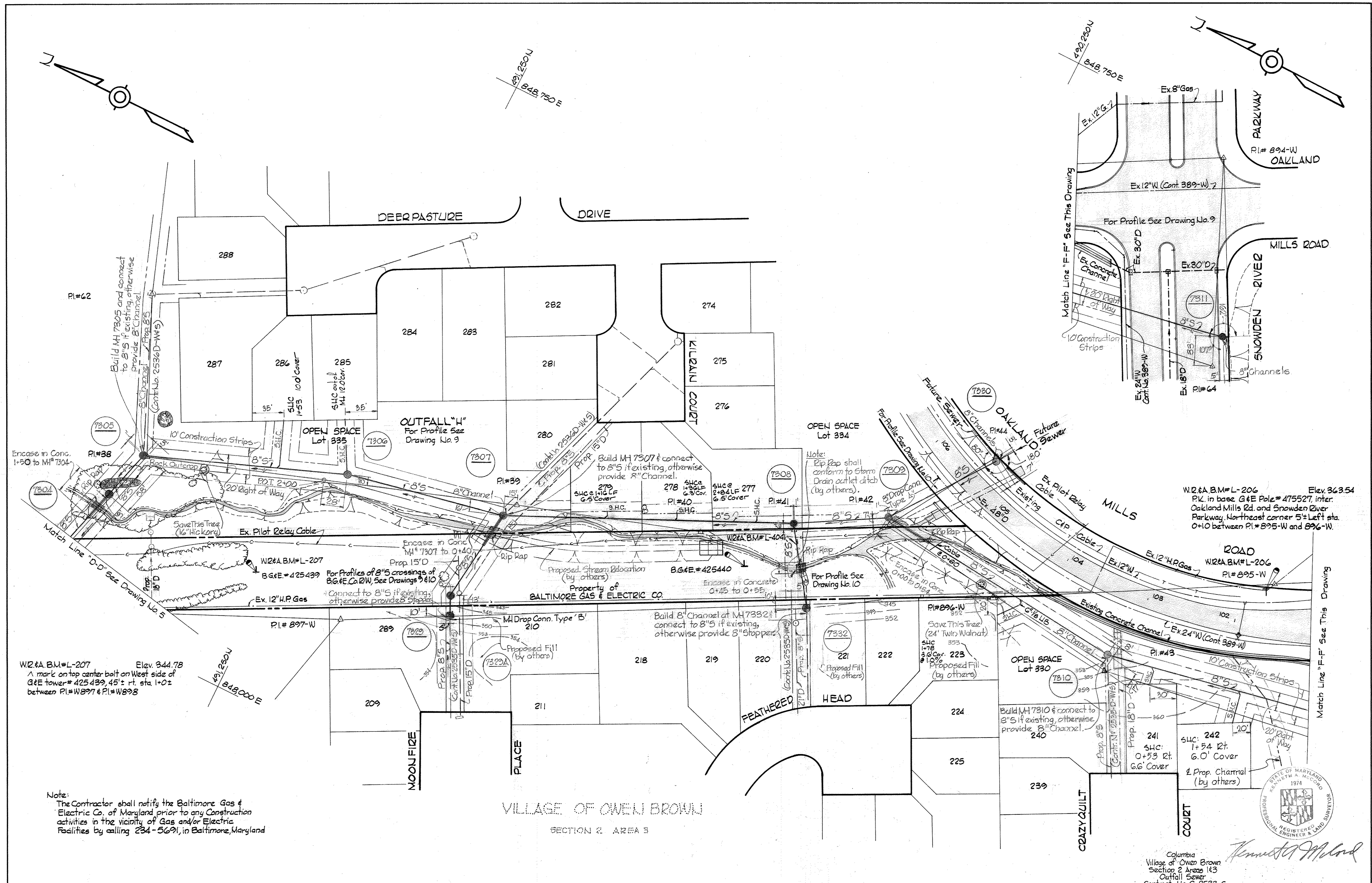
WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 6-11-73 DATE <i>W. O. Palbat</i> CHIEF-BUREAU OF ENGINEERING	CONTRACT NO. C-2533 S	PLAN OF SEWER MAINS	COLUMBIA VILLAGE OF OWEN BROWN-SECTION 2 AREAS 1&3 OUTFALL SEWER ELECTION DISTRICT GUILFORD No. 6	DRAWING NO. 5 OF 10 SCALE 1"=50'
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W. O. 6023-2

AS BUILT August 5, 1974

WS 533-S/S

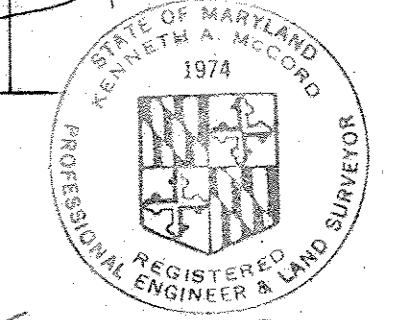
BRUNING 44-510 1B992



Note:
 The Contractor shall notify the Baltimore Gas & Electric Co. of Maryland prior to any Construction activities in the vicinity of Gas and/or Electric Facilities by calling 234-5691, in Baltimore, Maryland

W2&A.B.M.#L-207
 Elv. 344.78
 A mark on top center bolt on West side of G&E tower #425439, 45' ± rt. sta. 1+02 ± between PI#W897 & PI#W898

W2&A.B.M.#L-206
 Elv. 363.54
 P.K. in base G&E Pole #475527, Inter. Oakland Mills Rd. and Snowden River Parkway, Northeast corner 5' ± Left sta. 0+10 between PI#B95-W and B96-W.



WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 6-11-73 DATE <i>W. O. Pellett</i> CHIEF-BUREAU OF ENGINEERING	CONTRACT NO. C-2533 S	PLAN OF SEWER MAINS	COLUMBIA VILLAGE OF OWEN BROWN - SECTION 2 AREAS 183 ELECTION DISTRICT GUILFORD No. 6	DRAWING NO. 6 OF 10 SCALE 1"=50'
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W. O. 6023-2

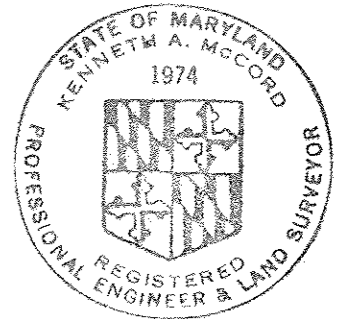
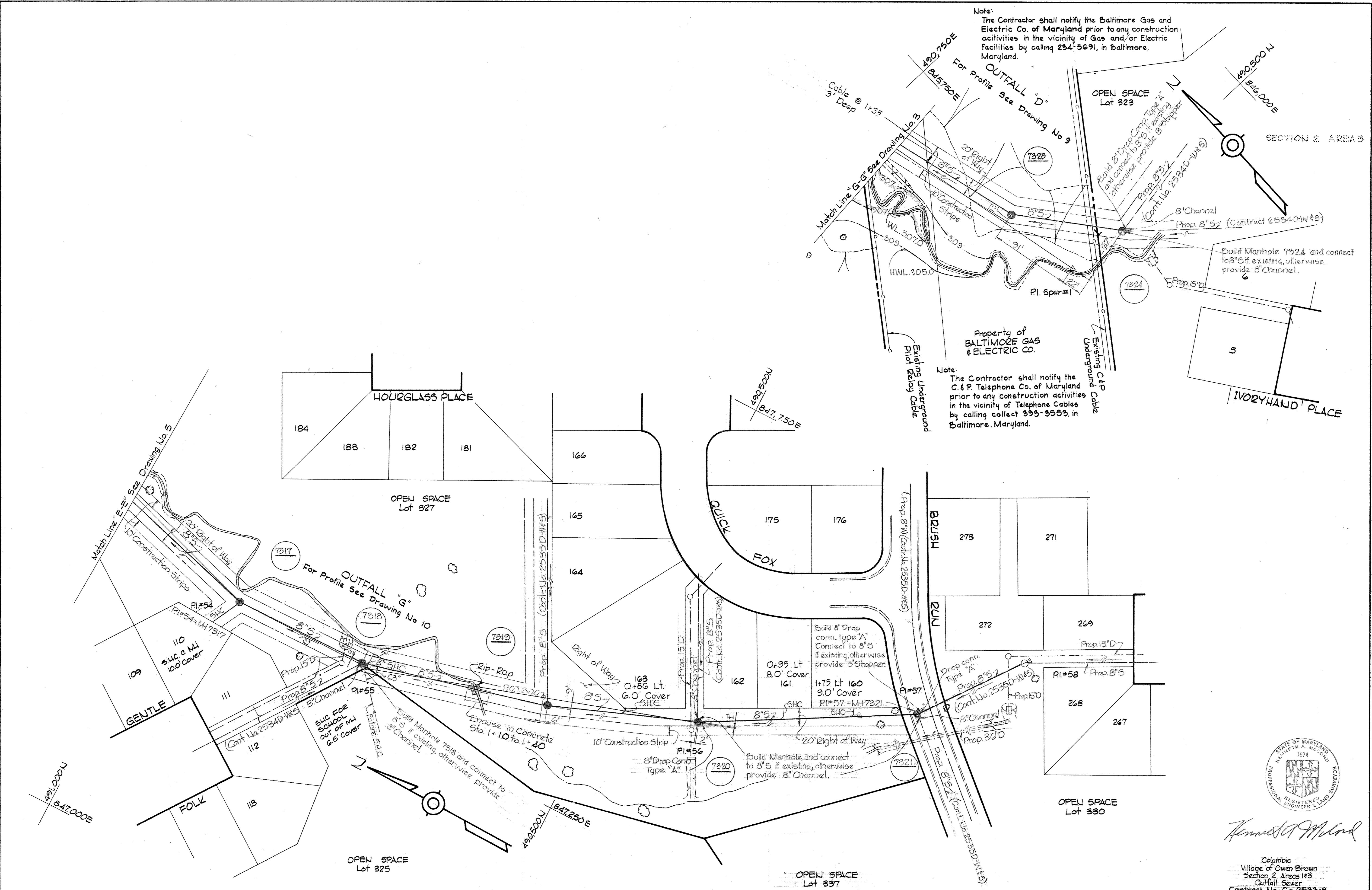
August 5, 1974 AS BUILT

WS 533-5/6

BRUNING 44-510 18392

Note:
The Contractor shall notify the Baltimore Gas and Electric Co. of Maryland prior to any construction activities in the vicinity of Gas and/or Electric facilities by calling 234-5691, in Baltimore, Maryland.

Note:
The Contractor shall notify the C. & P. Telephone Co. of Maryland prior to any construction activities in the vicinity of Telephone Cables by calling collect 393-3553, in Baltimore, Maryland.



Kenneth A. McLeod

Columbia
Village of Owen Brown
Section 2 Areas 183
Outfall Sewer
Contract No. C-2533-S

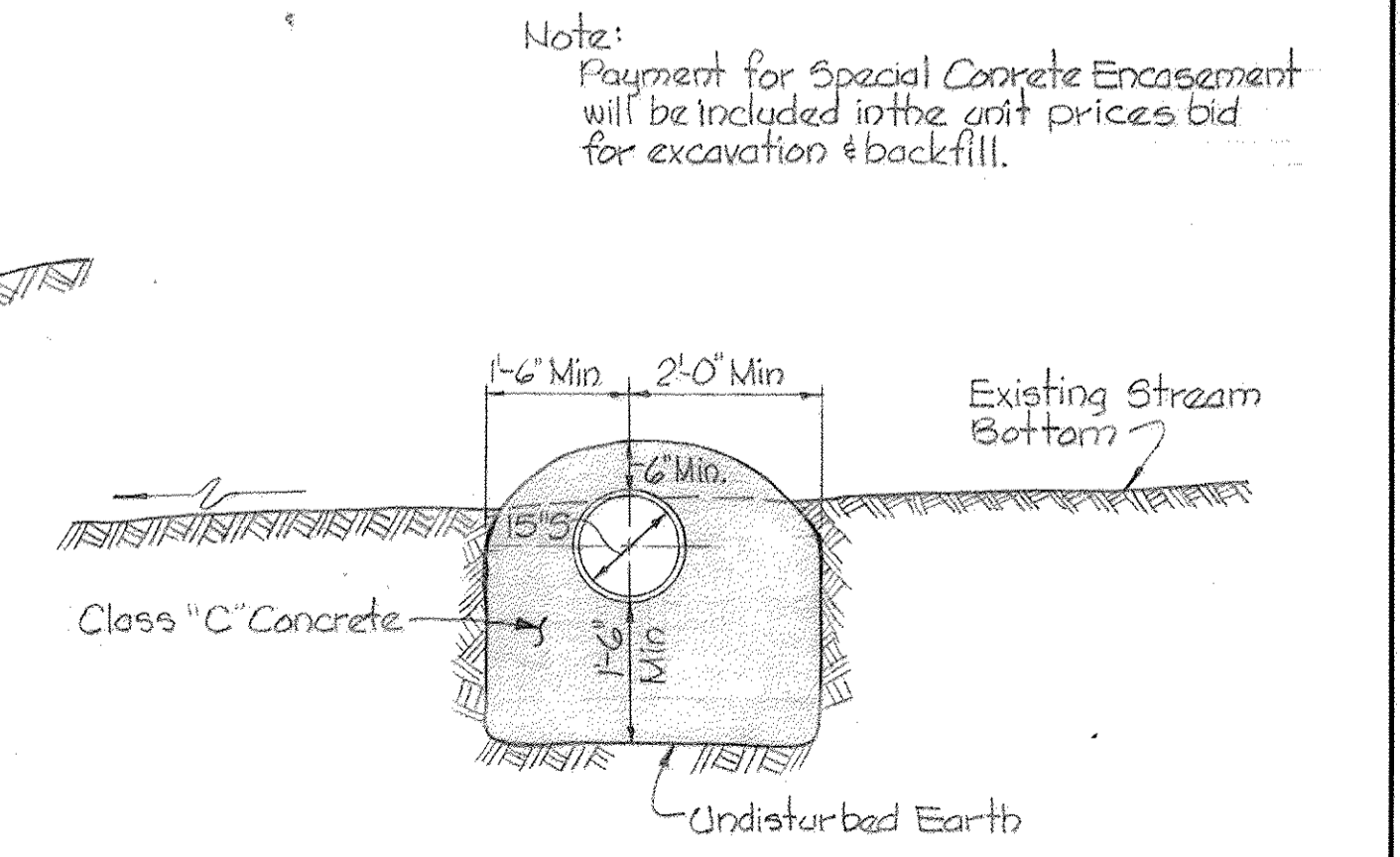
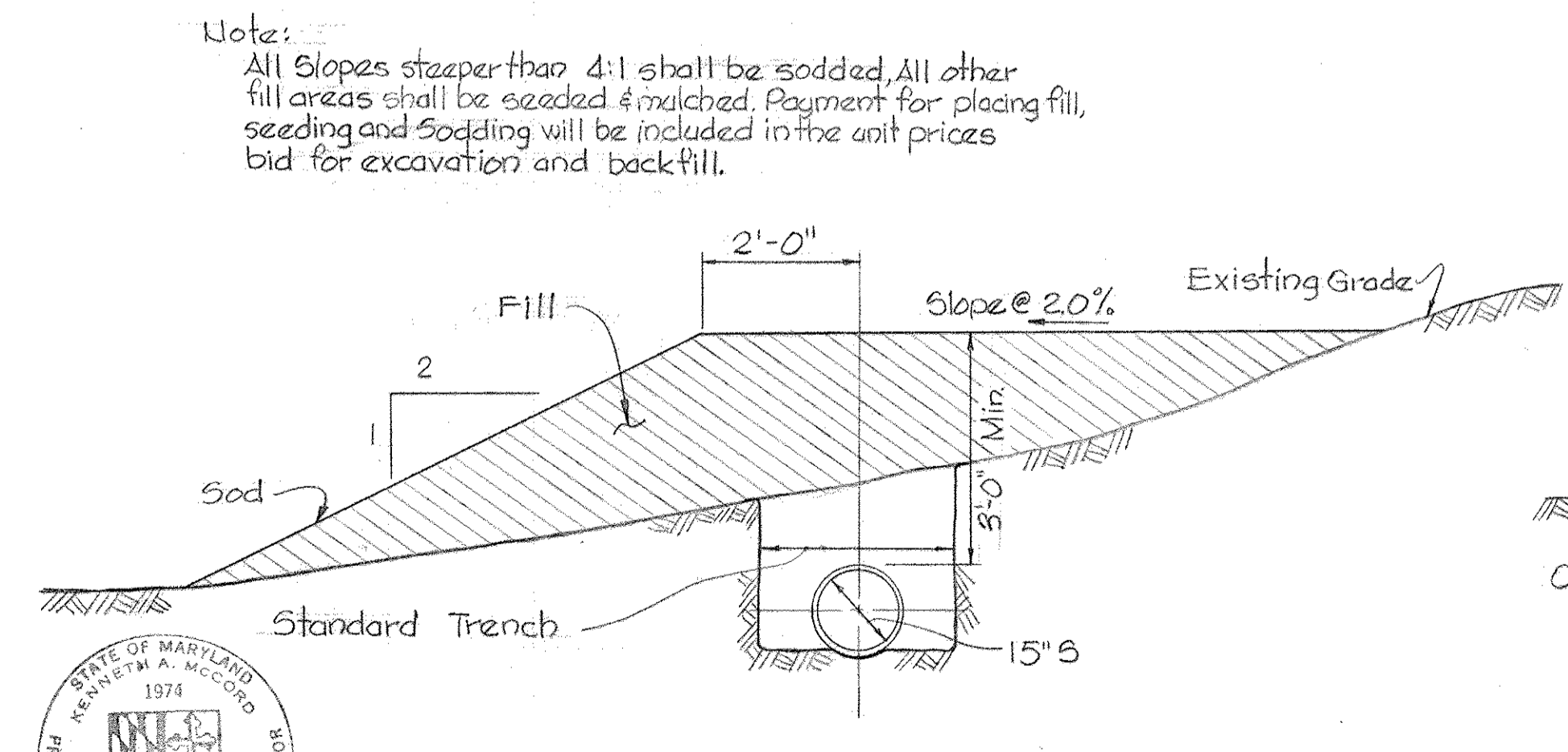
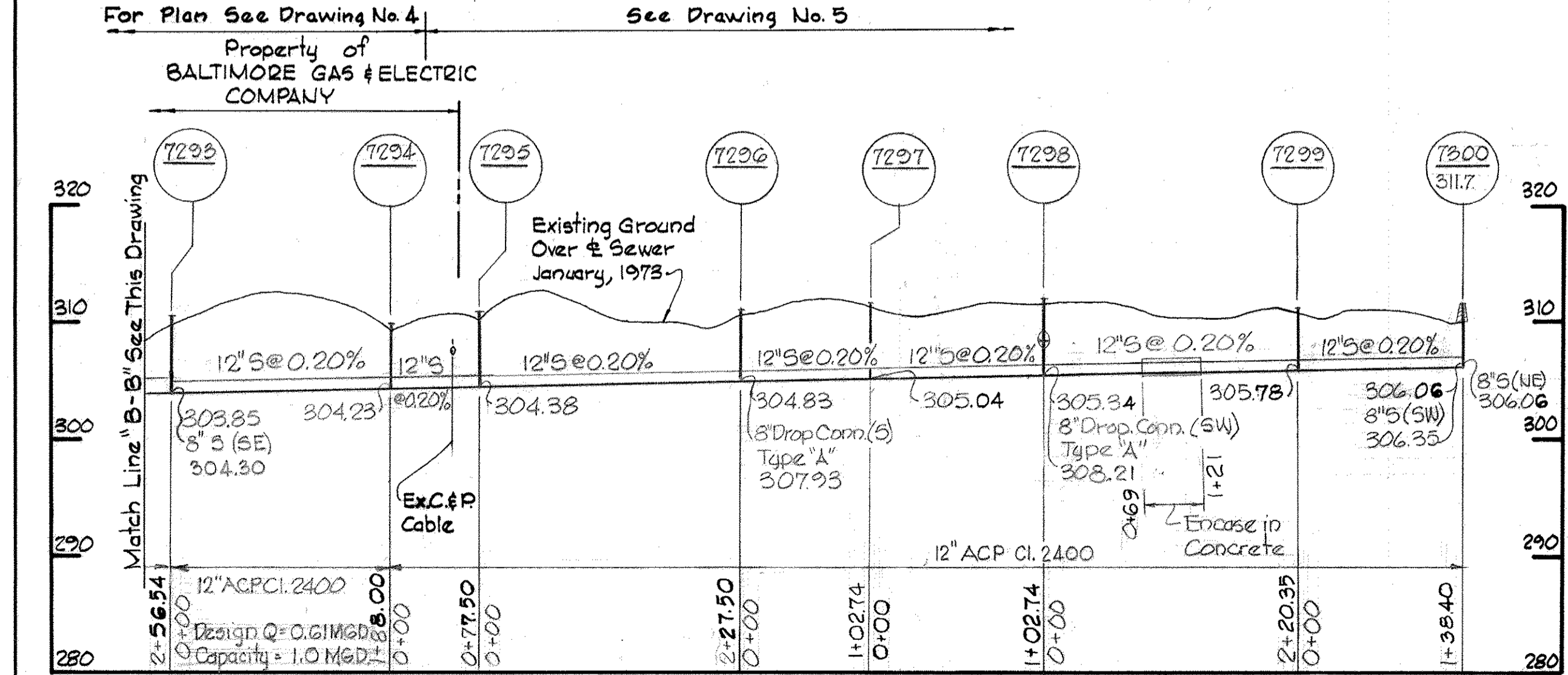
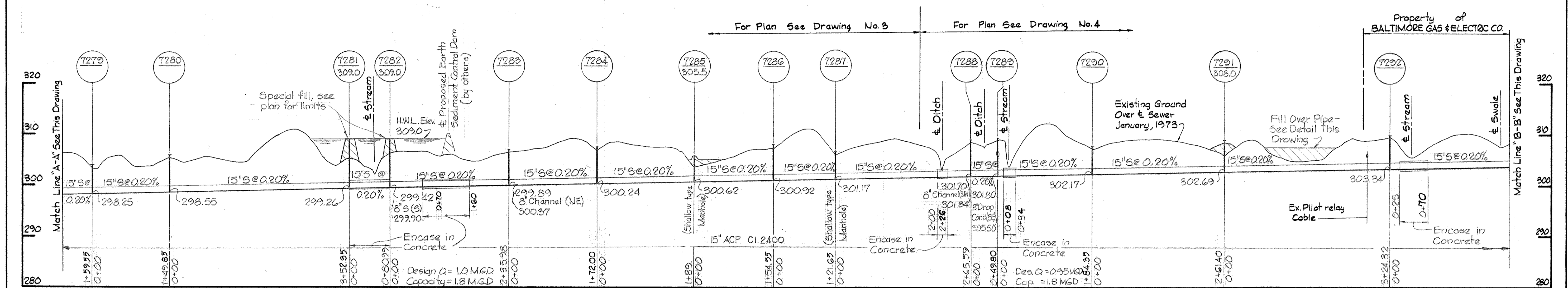
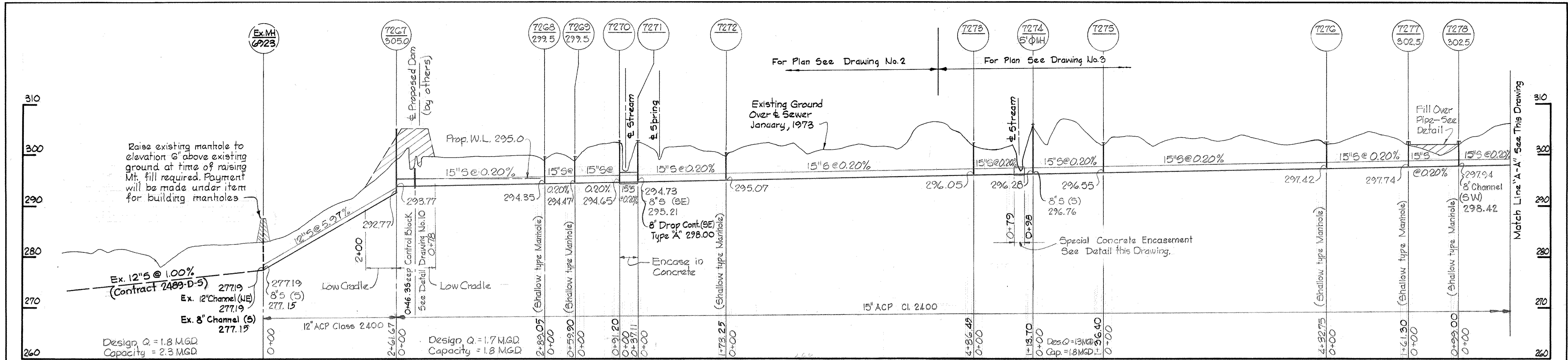
WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 6-11-73 <i>W. O. Falbert</i> CHIEF BUREAU OF ENGINEERING	CONTRACT NO. C-2533 S	PLAN OF SEWER MAINS	COLUMBIA VILLAGE OF OWEN BROWN - SECTION 2 AREAS 183 ELECTION DISTRICT GUILFORD No. 6	DRAWING NO. 7 OF 10	SCALE 1"=50' AS BUILT
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W. O. 6023-2

August 3, 1974 AS BUILT

WS 533-5/7

BRIDGING 14-510 18392

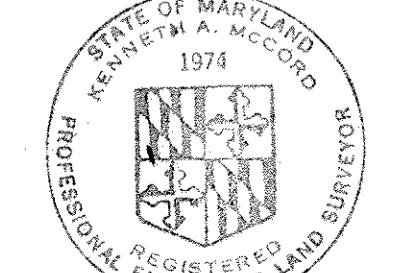


Note: All slopes steeper than 4:1 shall be sodded. All other fill areas shall be seeded & mulched. Payment for placing fill, seeding and sodding will be included in the unit prices bid for excavation and backfill.

Note: Payment for Special Concrete Encasement will be included in the unit prices bid for excavation & backfill.

PROFILES

Scale: Horiz. 1"=100'
Vert. 1"=10'



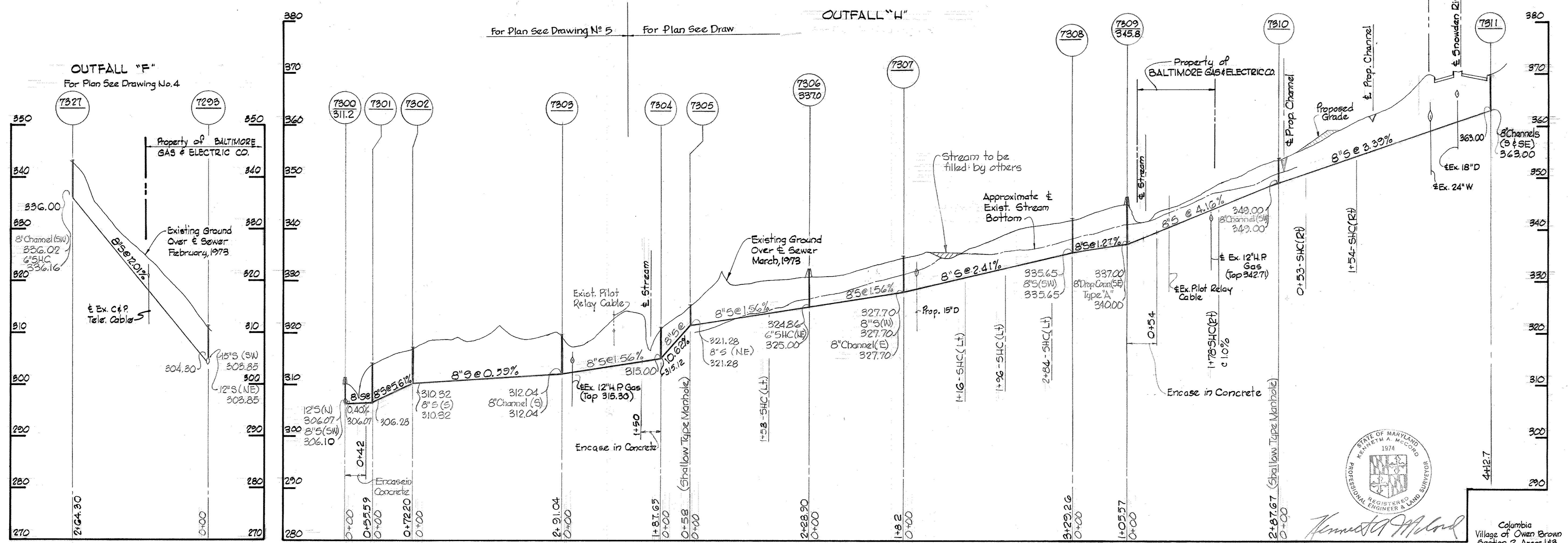
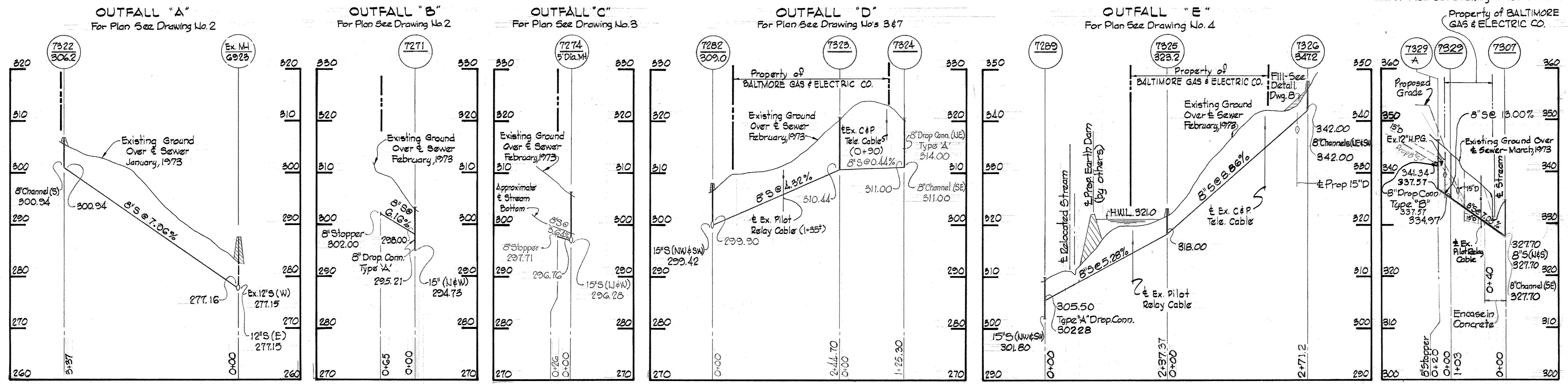
Howard County, Maryland

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 6-11-73 DATE	CONTRACT NO. C-2533 S	PROFILES AND DETAILS OF SEWER MAINS	COLUMBIA VILLAGE OF OWEN BROWN - SECTION 2 AREAS 1&3 OUTFALL SEWER ELECTION DISTRICT GUILFORD No. 6	DRAWING NO. 8 OF 10	SCALE AS SHOWN
					August 5, 1974 AS BUILT	

W. O. 6023-2

WS 533-5/8

BRUNING 44-810 19322



WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 1304 ST. PAUL ST.
 BALTIMORE, MARYLAND

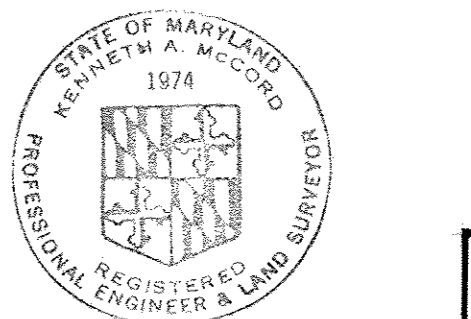
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 6-11-73
 DATE

CONTRACT NO. C-2533 S

PROFILES OF SEWER MAINS

COLUMBIA VILLAGE OF OWEN BROWN - SECTION 2 AREAS 1 & 3
 ELECTION DISTRICT GUILFORD No. 6

DRAWING NO. 9 OF 10
 SCALE H:1"=100' V:1"=10'

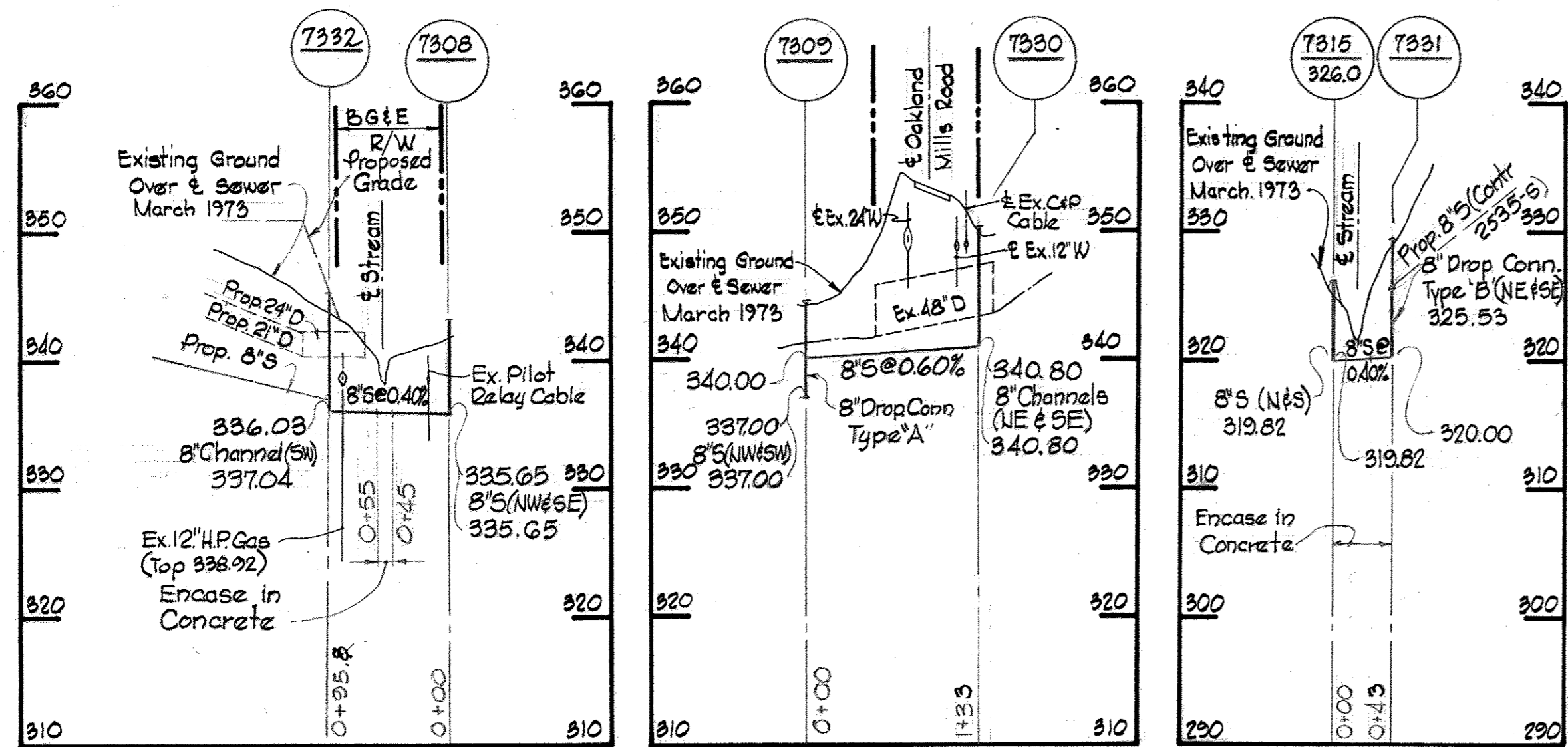


Handwritten signature of the engineer.

For Plan See Drawing No 6

For Plan See Drawing No 6

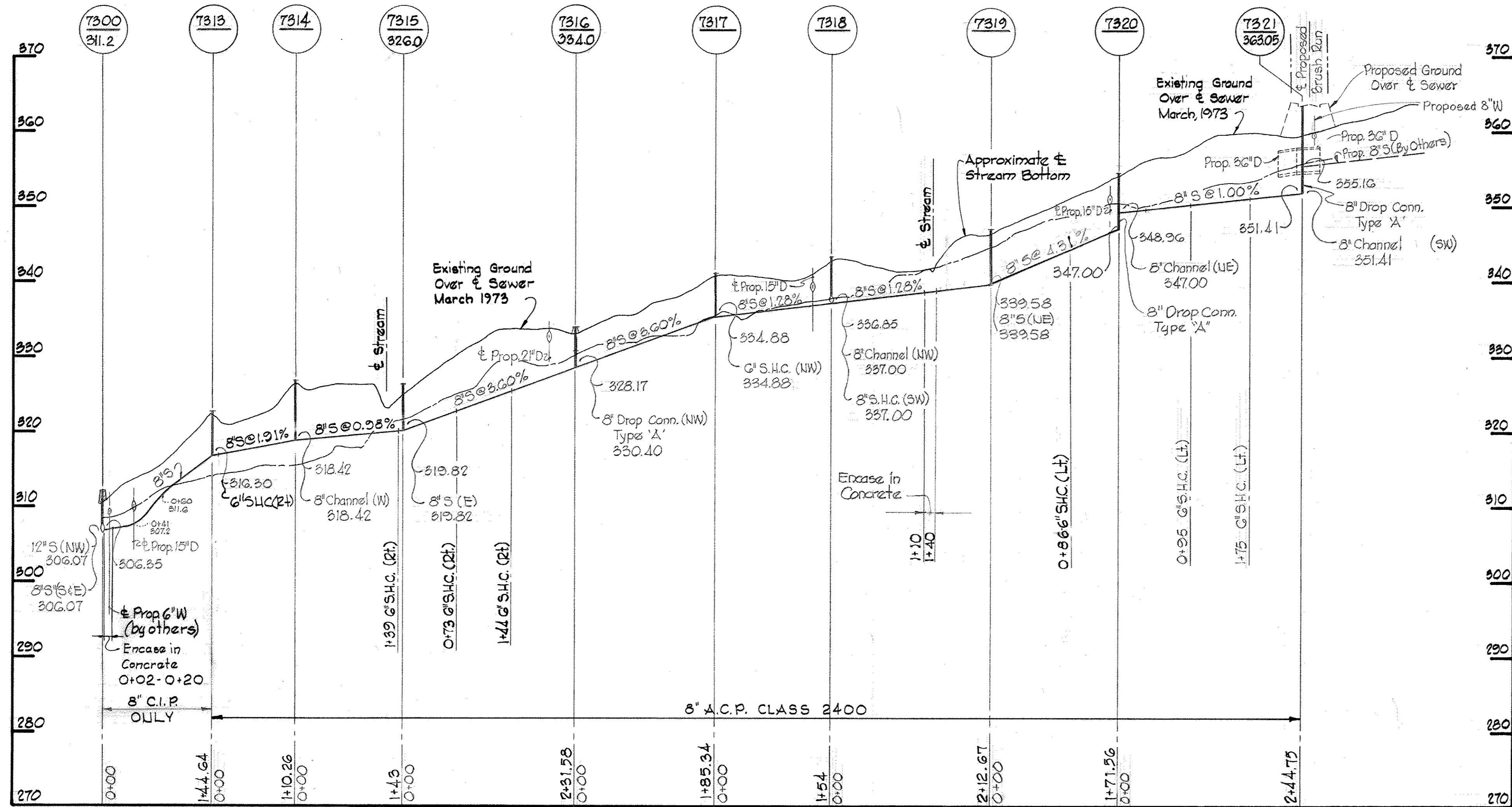
For Plan See Drawing No.5



8" A.C.P. CLASS 2400

OUTFALL "G"

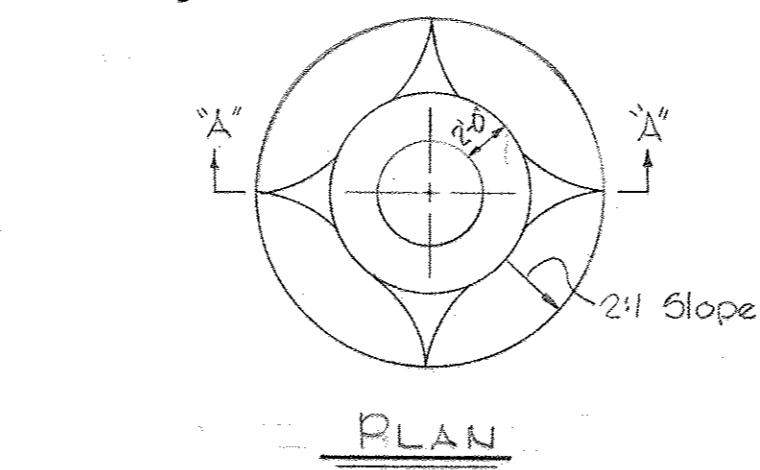
For Profile See Drawing No. 5 & 7



PROFILES

Scale: Horiz: 1"=100'
Vert: 1"=10'

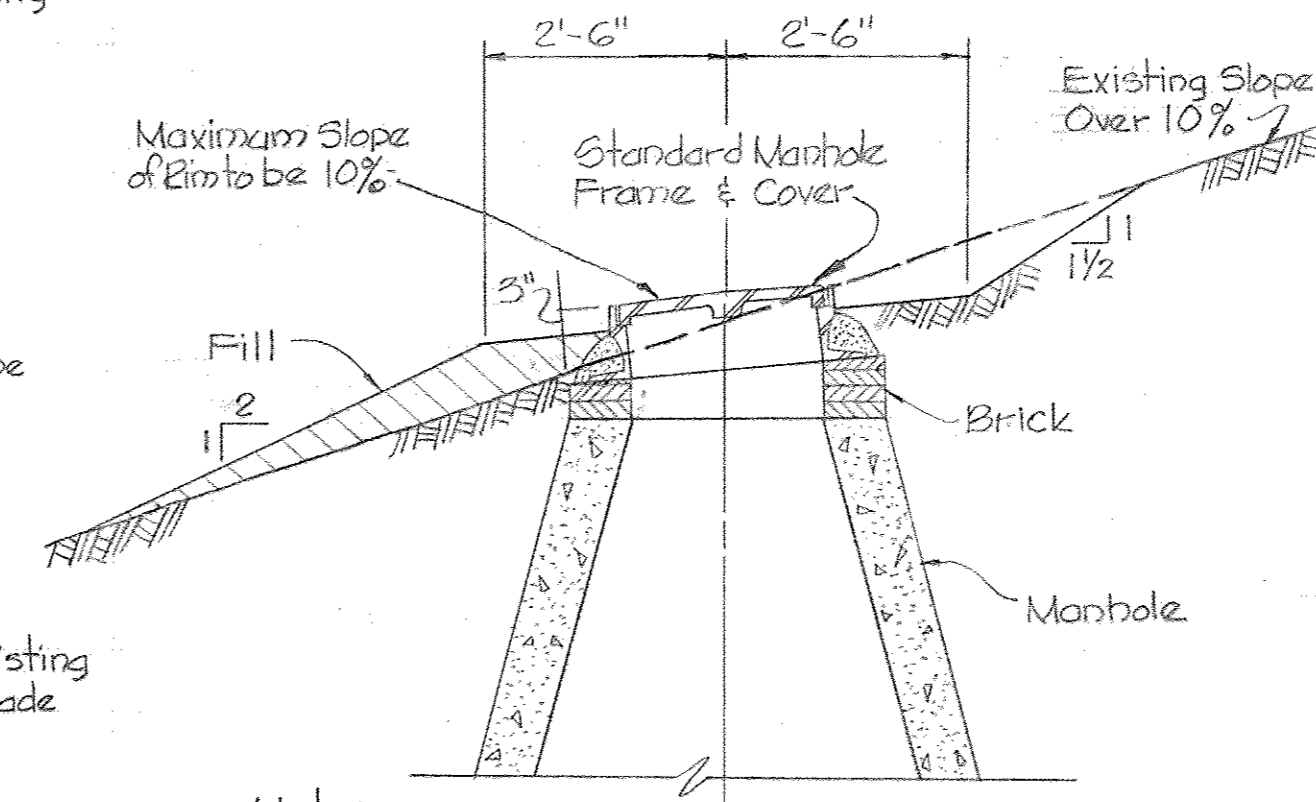
Note:
Fill around Manholes required at manholes where rim elevations are to be more than 8" above existing grade, see profiles.



SECTION "A-A"

FILL AT MANHOLES

Scale: 1/8"=1'-0"

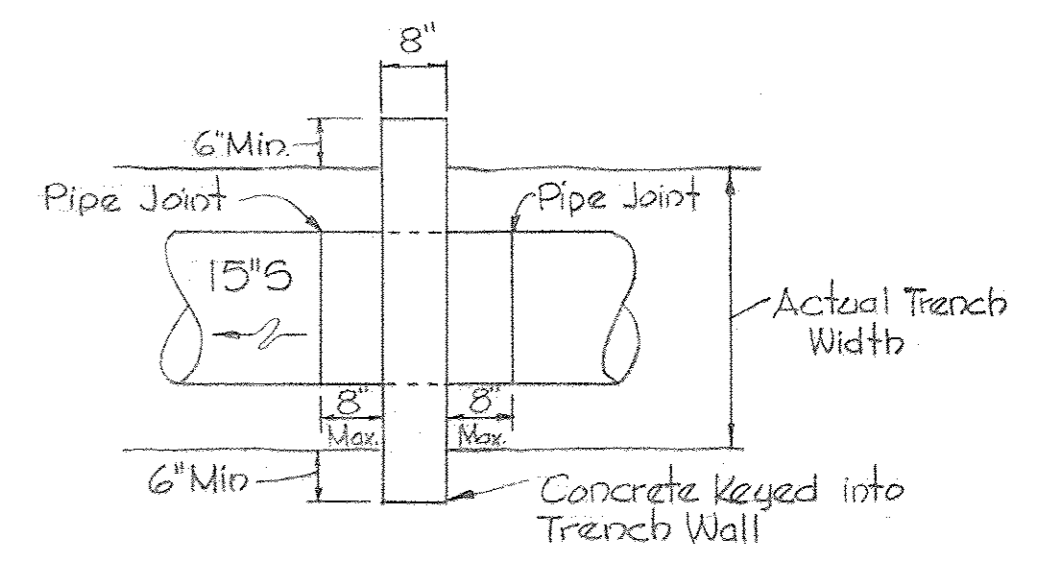


Note:
1. All manhole rims to be set 3" above existing grade unless otherwise noted.

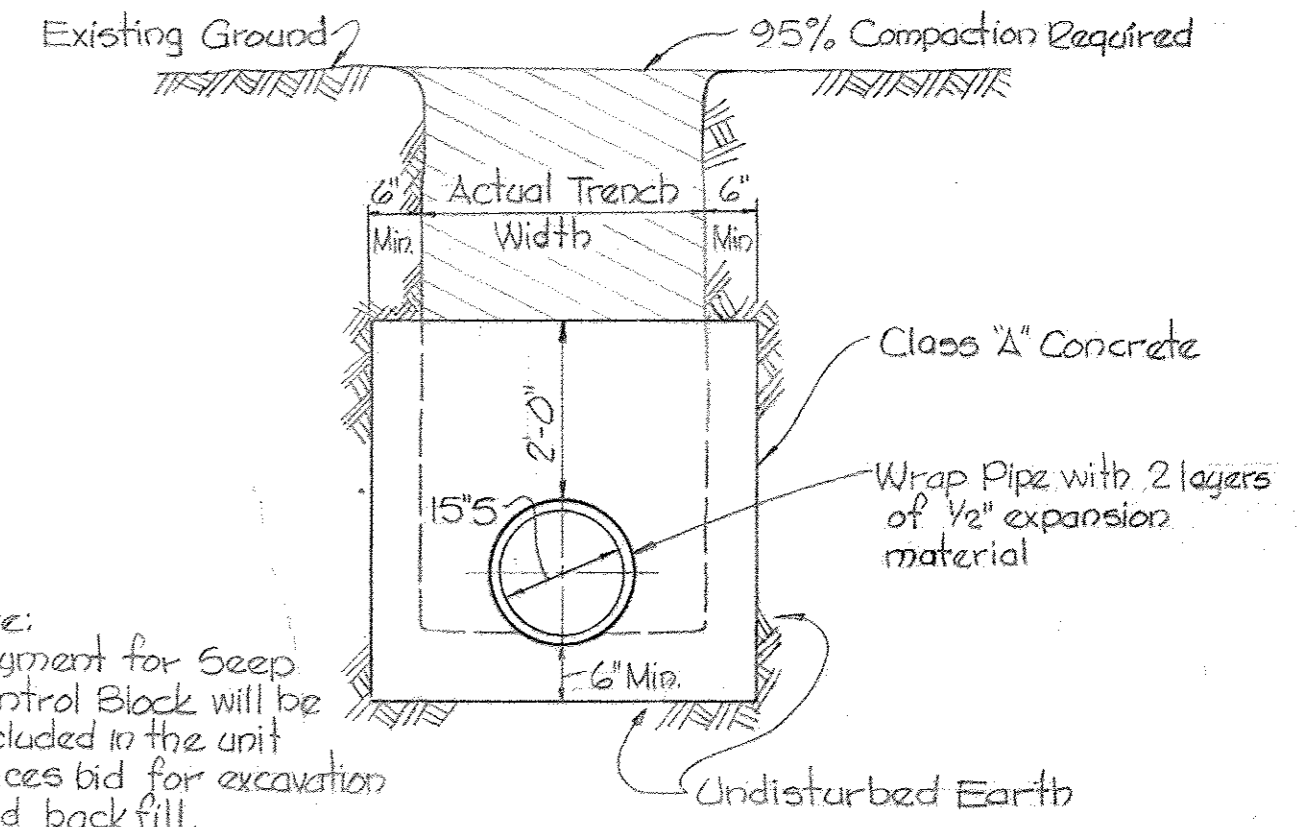
SECTION

TYPICAL MANHOLE SETTING

Scale: 1/2"=1'-0"



PLAN



SECTION

DETAIL OF SEEP CONTROL BLOCK

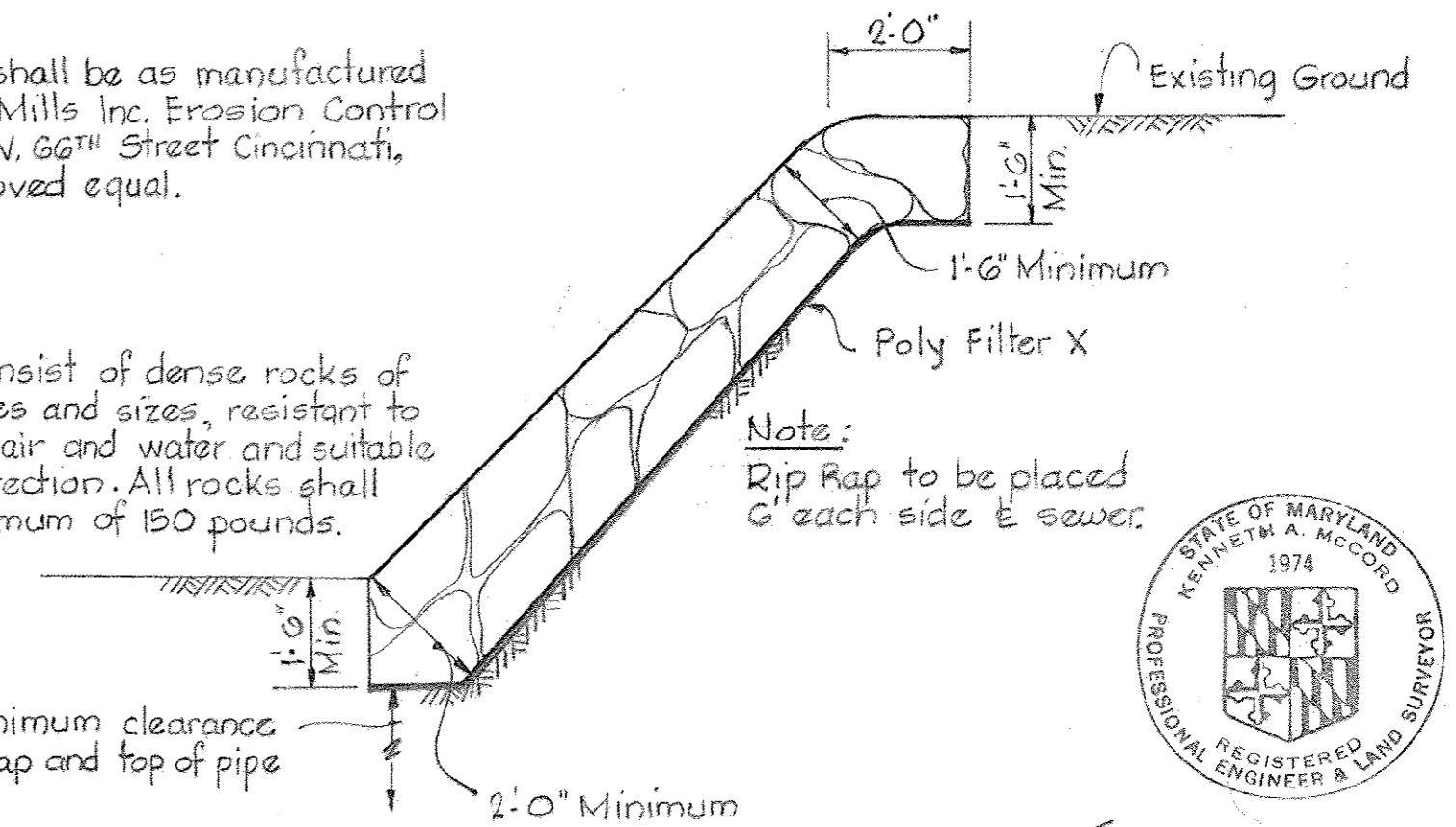
Scale 1/2"=1'-0"

(For Plan See Drawing No 2)

Note:
Poly Filter X shall be as manufactured by Carthage Mills Inc, Erosion Control Division, 124 W. 66th Street Cincinnati, Ohio or approved equal.

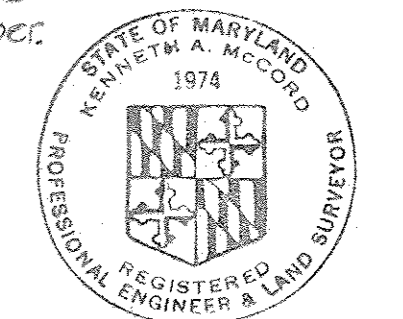
Rip Rap to consist of dense rocks of random shapes and sizes, resistant to the action of air and water and suitable for bank protection. All rocks shall weigh a minimum of 150 pounds.

Maintain 1' minimum clearance between Rip Rap and top of pipe



RIP RAP DETAIL

Scale: 3/8"=1'-0"



Kenneth A. McCord

Columbia
Village of Owen Brown
Section 2 Areas 1&3
Outfall Sewer
Contract No. C-2533 S

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

6-11-73
DATE

W. O. Filled
CHIEF-BUREAU OF ENGINEERING

CONTRACT NO. C-2533 S

PROFILES AND DETAILS
OF SEWER MAINS

COLUMBIA
VILLAGE OF OWEN BROWN - SECTION 2 AREAS 1&3
OUTFALL SEWER
ELECTION DISTRICT GUILFORD No. 6

DRAWING NO. 10
OF 10
SCALE AS SHOWN

W. O. 6023-2

August 5, 1974 AS BUILT

WS 533-S/10