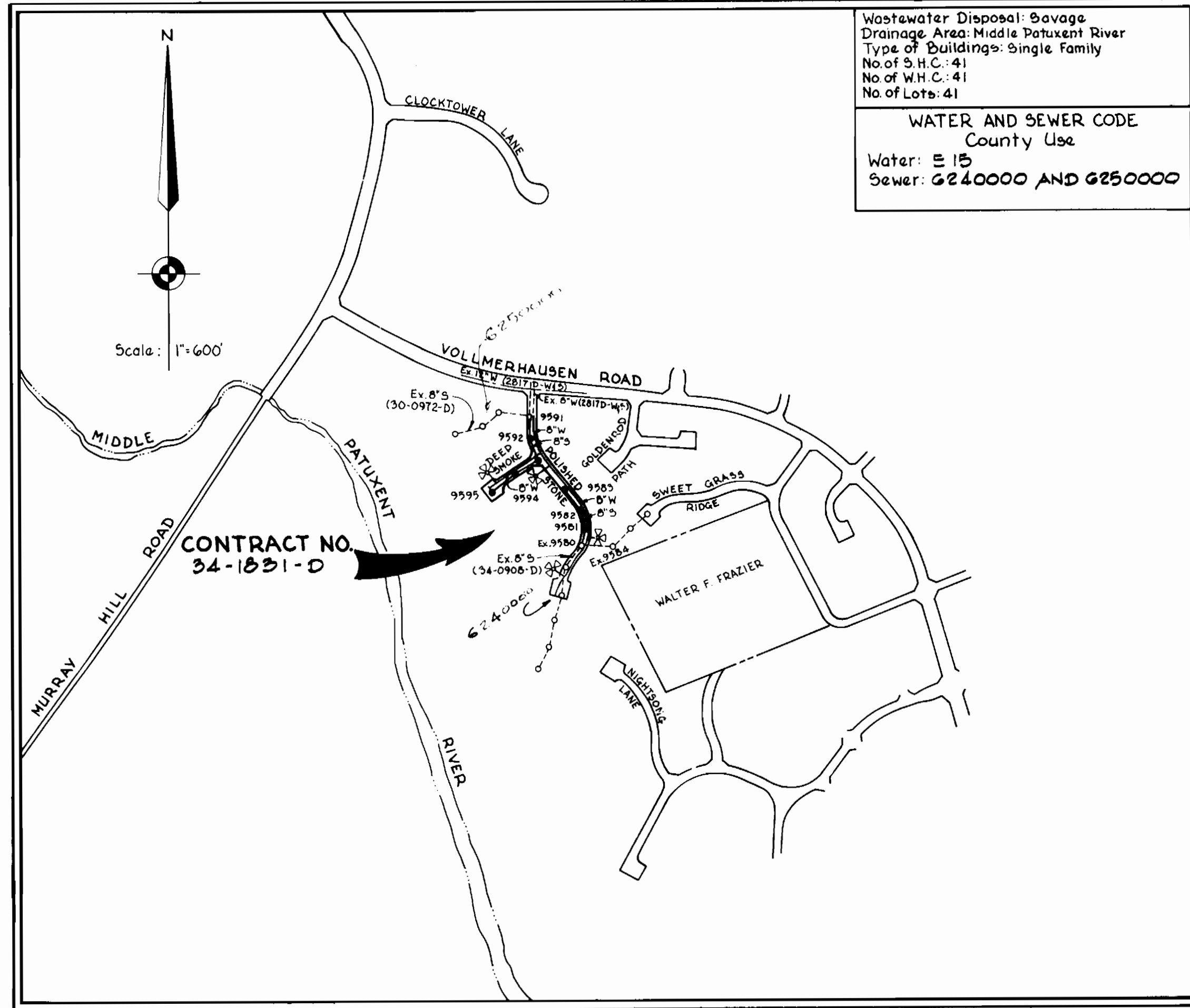


GENERAL NOTES

- 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". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED.
- 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 AND GAS ELECTRIC CO. - CONTRACTOR SERVICES 850-4620
 - BALTIMORE GAS AND ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 859-9004
 - BALTIMORE GAS AND ELECTRIC CO. - TROUBLE SHOOTING - 298 9001
 - MISS UTILITY - 1 - 559-0100
 - COLONIAL PIPELINE CO. - 795-1390/C&P TELEPHONE CO. 1-800-257-7777
 - 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.
- 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 1/2" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TREES SHALL BE STRAPPED TO TREES.
- 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 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 SETTINGS, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- ALL W.H.C.'S. SHALL BE 3/4" UNLESS OTHERWISE NOTED.
- ALL SEWER MAINS SHALL BE C.S.P.X., D.I.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 DETAILS G5.52. WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED. SET TOP OF FRAME 1.5' ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- STRAW BALE DIKE AND SILT FENCE ARE INTERCHANGEABLE.
- FOR MANHOLES IN OPEN SPACE OR OUTFALL, SET TOP OF FRAME 1.5' ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATIONS C-153 DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12 INCH FOR WATER AND OTHER LIQUIDS.

Wastewater Disposal: Savage
 Drainage Area: Middle Patuxent River
 Type of Buildings: Single Family
 No. of S.H.C.: 41
 No. of W.H.C.: 41
 No. of Lots: 41

WATER AND SEWER CODE
 County Use
 Water: E 15
 Sewer: G240000 AND G250000



QUANTITIES			
ITEM	BID	AS BUILT	MATERIAL/SUPPLIER
8" Water L.F.	1660	1663	GRIFIN PIPE
1" W.H.C. L.F.	140		K. SOFT HOWELL METALS/BEA...
8" Valve Ea.	2	2	MURPHY CO./B.A.R. CO. CO...
Fire Hydrants Ea.	4	4	MURPHY CO./B.A.R. CO. CO...
8" Sewer L.F.	1060	1063	J.M. MANUFACTURING CO.
Manholes Ea.	7	7	ATLANTIC CONCRETE CON...
6" S.H.C. L.F.	904	913	J.M. MANUFACTURING CO.
3/4" W.H.C. L.F.	1020		K. SOFT HOWELL METALS/BEA...
1 1/2" W.D. Ea.	2		
1" W.H.C.		153	

CONTRACT NO. 34-1831-D
 VILLAGE OF KINGS CONTRIVANCE
 HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 SIGNATURE: *James M. ...* DATE: 7-22-88
 U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard County Conservation District.
 APPROVED: *Stephen ...* DATE: *7/25/88*
 HOWARD S.C.D.

Sediment Control Measures for this Contract will be implemented in accordance with Article 15 of the Standard Specifications, and Road Construction Drawings F-88 - 256

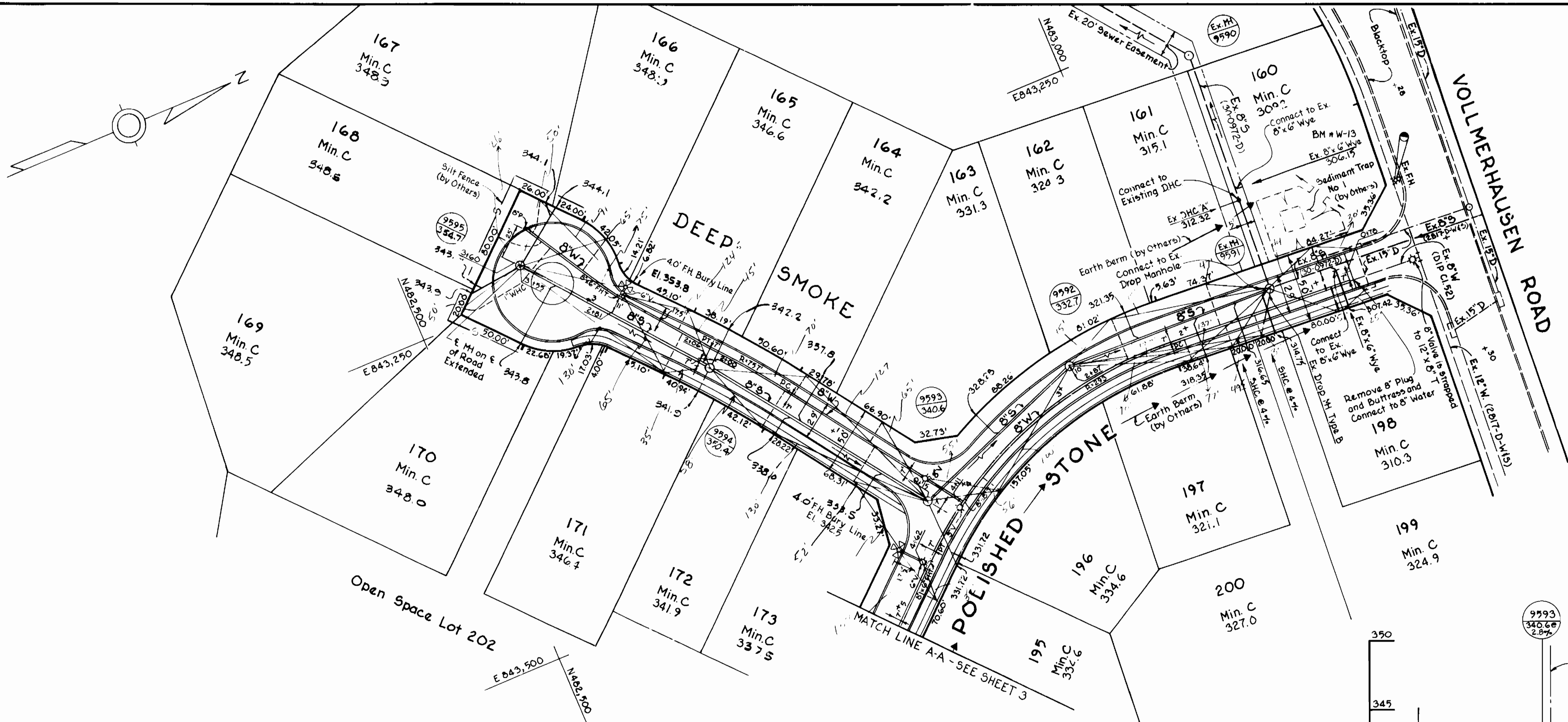
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
James M. ... 7/22/88 DIRECTOR OF PUBLIC WORKS - DATE
Robert H. ... 7-19-88 CHIEF - BUREAU OF UTILITIES - DATE
William ... 7-25-88 CHIEF - BUREAU OF ENGINEERING - DATE
Donald ... 7-15-88 CHIEF - LAND DEVELOPMENT DIVISION - DATE

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 2315 ST PAUL ST
 BALTIMORE, MARYLAND

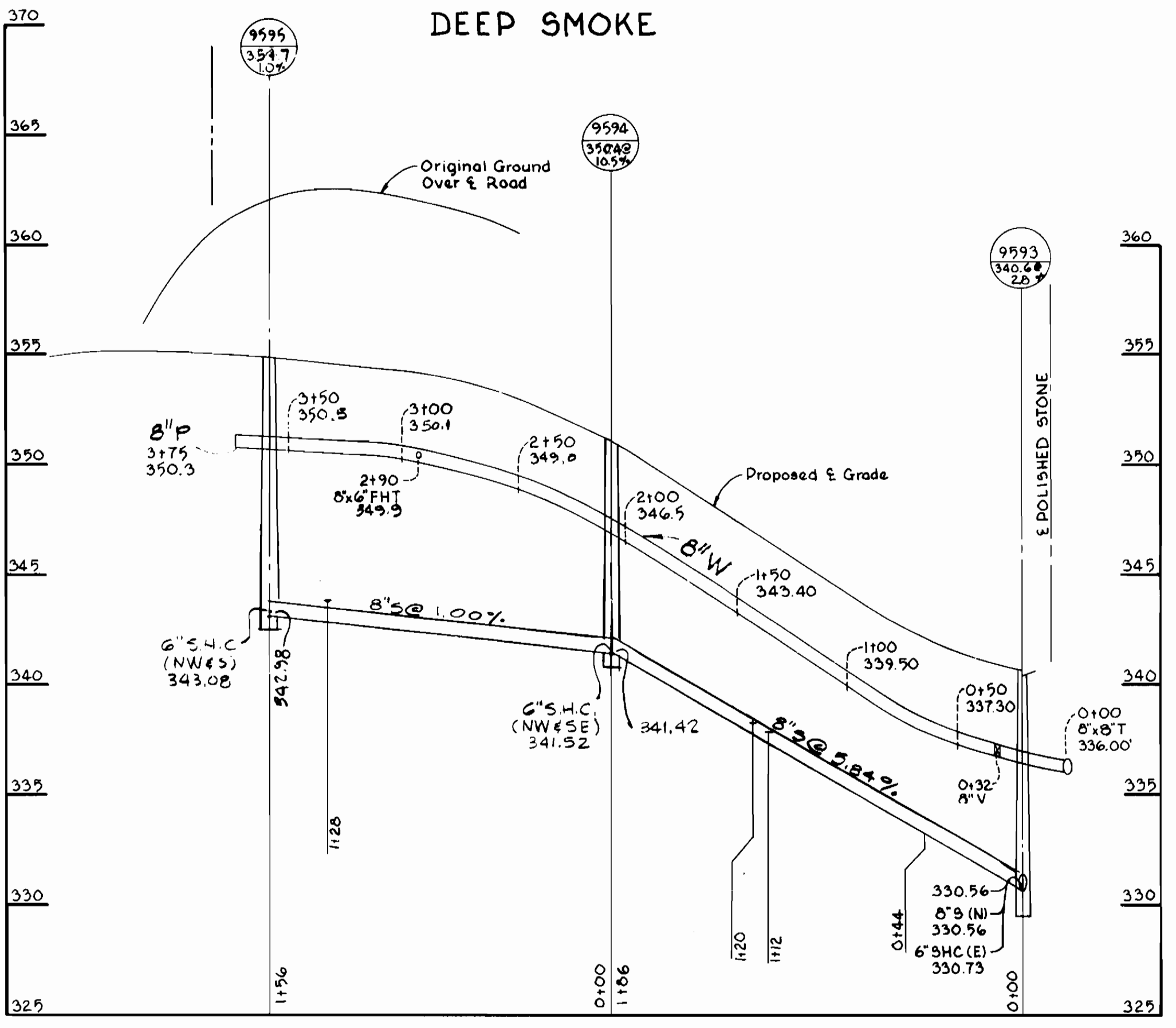
DES. T.P.	
DRN. B.G.	
CHK. S.J.	
DATE 5-27-88	

VICINITY MAP AND GENERAL NOTES
 SCALE 600' SCALE MAP NO. 42 BLOCK NO.

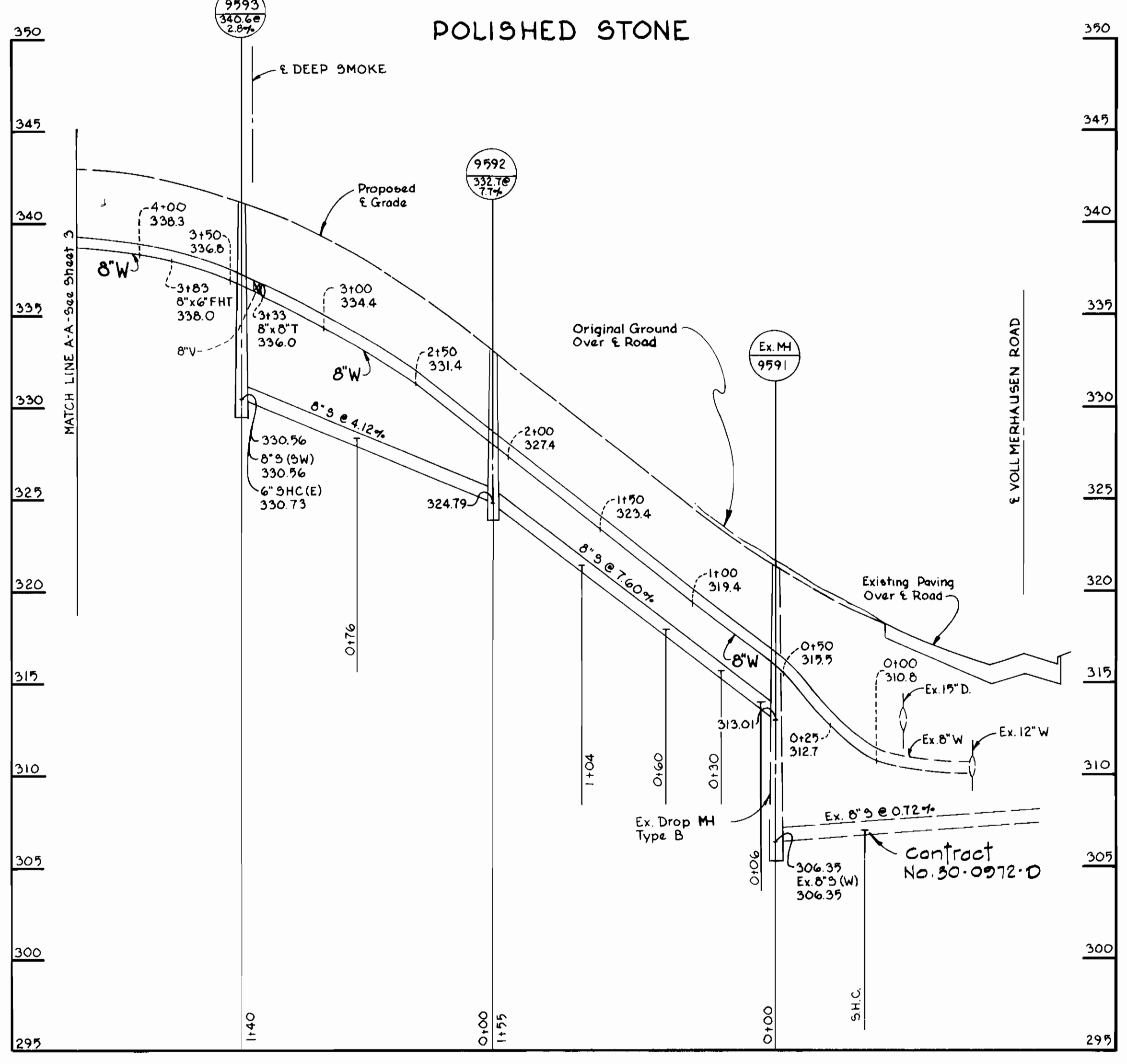
VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2
 ELECTION DISTRICT NO. 6
 CONTRACT NO. 34-1831-D
 SCALE 1"=600'
 SHEET 1 OF 3



PLAN
Scale: 1" = 50'



PROFILES
Scale: Horz: 1" = 50'
Vert: 1" = 5'



BENCH MARKS
 WR (A) B.M. # W-13 El. 317.30
 X-Cut in Flange Bolt of Fire Hydrant at Intersection of Vollmerhausen Road and Polished Stone
 WR (A) B.M. # W-14 El. 355.09
 RR Spike in Side of Power Pole C (P #21) G (E #174494, South Side of Vollmerhausen Drive 600' (±) Intersection Vollmerhausen Road and Keepsake Way.

NOTE:
 Existing sewer pipe Contract No. 30-0972-D is "CLAY-LOGAN".
 Extend same pipe material to property line of Lots 160, 161 and 198 or provide adapters as required.

42-483-843.5 42-483-845
 42-482-843.5 42-482-845

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works - DATE
 Chief - Bureau of Engineering - DATE
 Chief - Bureau of Utilities - DATE
 Chief - Land Development Division - DATE

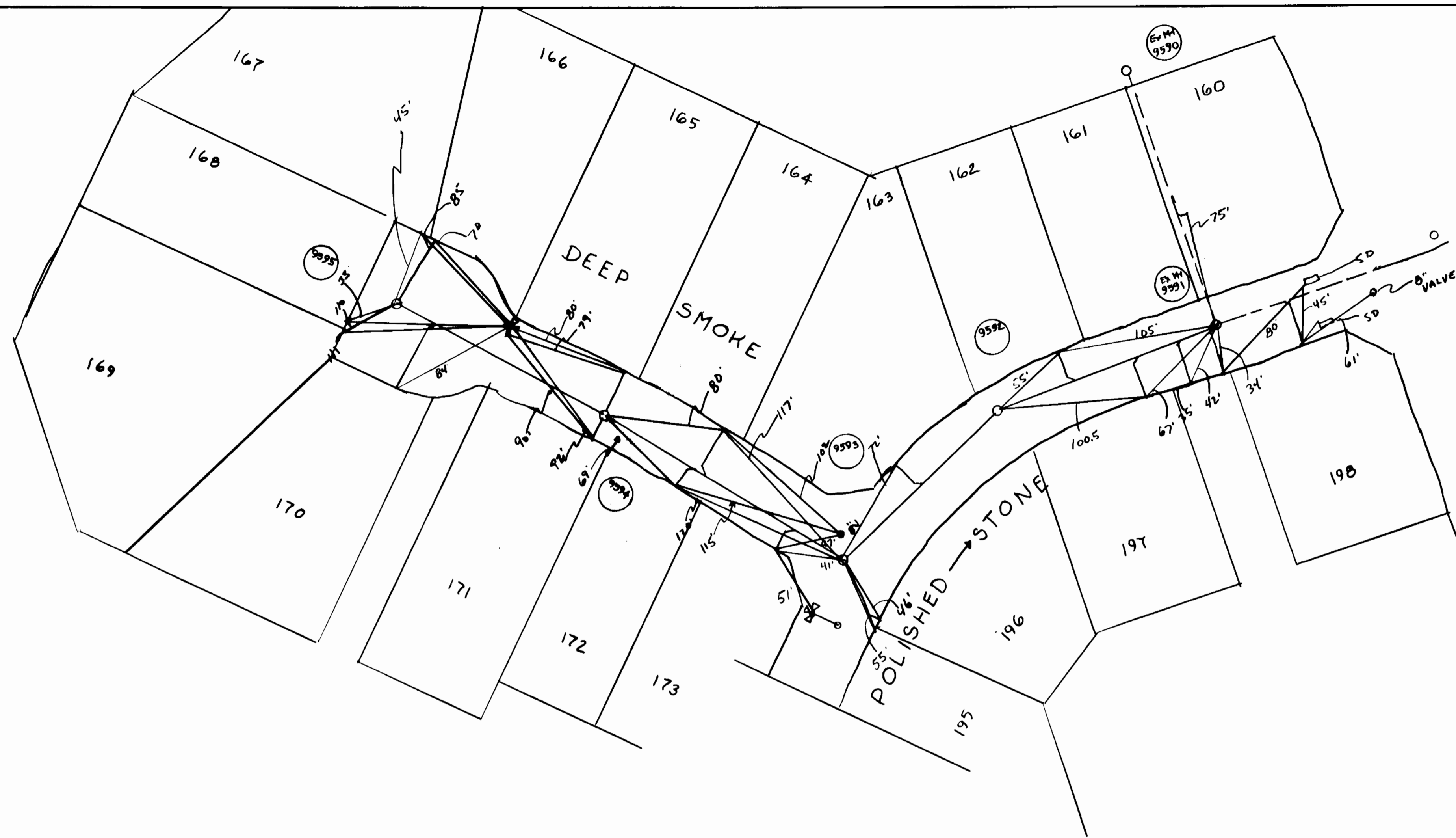
WHITMAN, REQUARDT
 AND ASSOCIATES
 ENGINEERS
 2315 ST PAUL ST
 BALTIMORE, MARYLAND

DES T.P.	
DRN B.G.	
CHK S.J.	
DATE 6/27/88	
BY NO.	
REVISION	
DATE	

PLANS AND PROFILES OF
 WATER AND SEWER MAINS

VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2
 ELECTION DISTRICT NO. 6
 CONTRACT NO. 34-1831-D

SCALE AS SHOWN
 SHEET 2 OF 3



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS _____ DATE _____
CHIEF, BUREAU OF ENGINEERING _____ DATE _____

DES:					
DRN:					
CHK:					
DATE:					
BY	NO.	REVISION	DATE	600' SCALE MAP NO.	BLOCK NO.

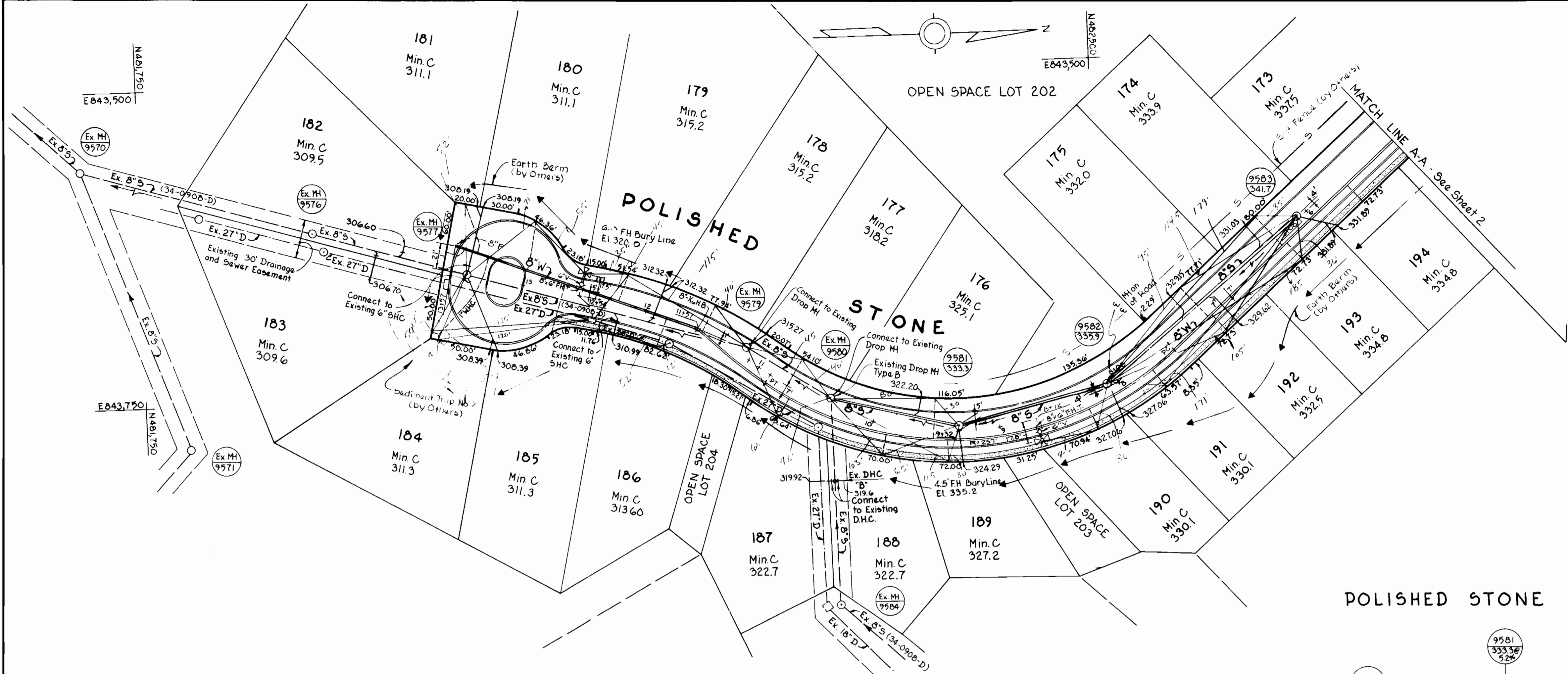
VILLAGE OF KINGS CONTRIVANCE
SECTION 3 AREA 2

CONTRACT NO 34-1831-D

SCALE
AS
SHOWN

SHEET
2 OF 3

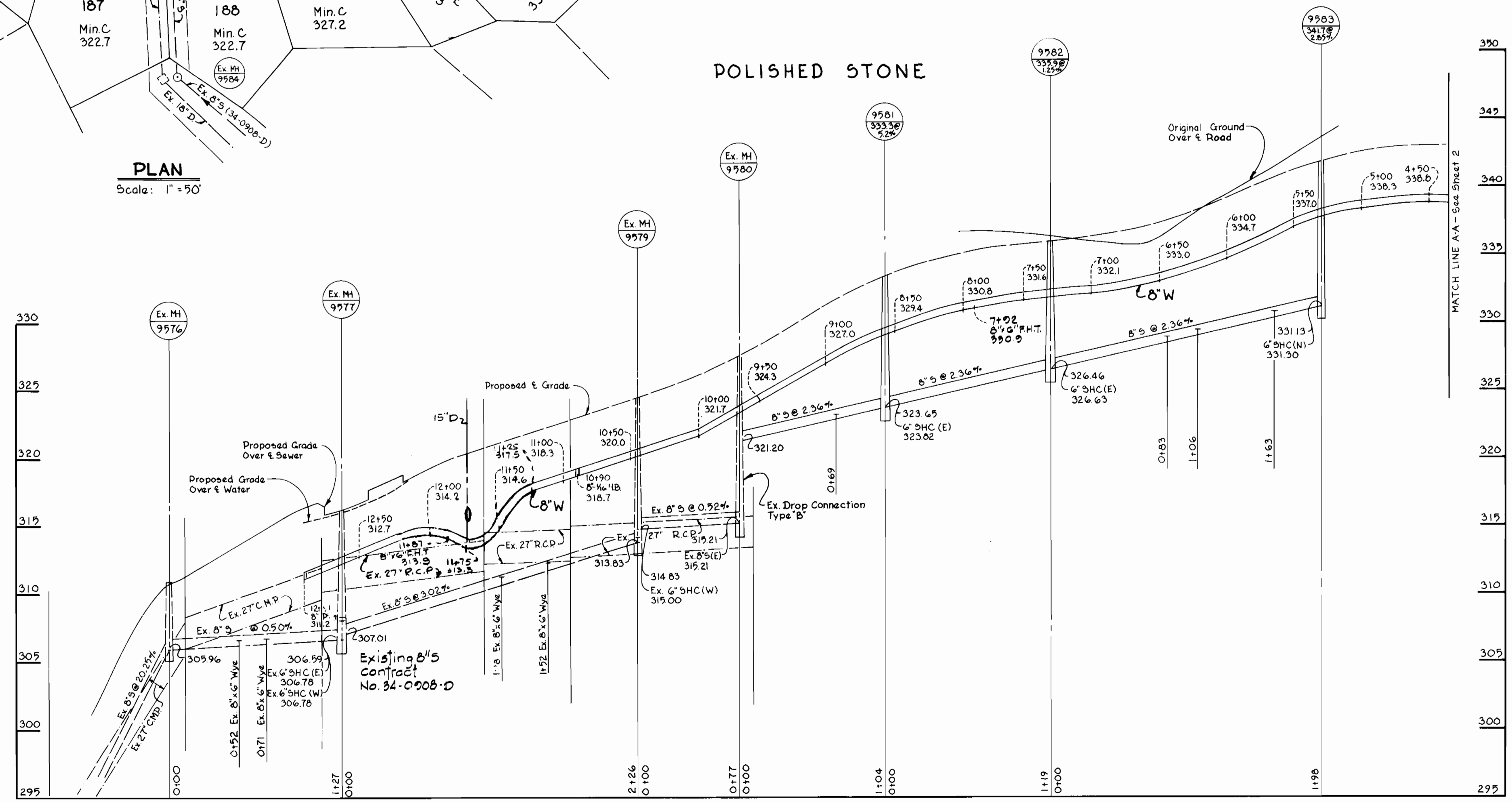
SEWER AS BUILTS 11-21-88 M.E.H.



BENCH MARKS
 WRIA B.M. # W-13 El. 317.30
 X-Cut in Flange Bolt of Fire Hydrant at Intersection of Vollmerhausen Road and Polished Stone
 WRIA B.M. # W-14 El. 355.09
 R.R. Spike in Side of Power Pole C/P #21 G/E #174494, South Side of Vollmerhausen Drive 600'(±) Intersection Vollmerhausen Road and Keapsake Way.

NOTE:
 Existing sewer pipe, Contract No. 34-0908-D, is "CERTAIN-TEED". Extend same pipe material to property line of Lots 177 through 188 or provide adapters as required.

PLAN
 Scale: 1" = 50'



PROFILE
 Scale: Horz: 1" = 50'
 Vert: 1" = 5'

42-481-843.5
 42-481-845
 42-482-843.5
 42-482-845
 42-483-843.5
 42-483-845

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 James J. ... 7/25/88
 Director of Public Works - DATE
 Robert ... 7-19-89
 Chief - Bureau of Utilities - DATE

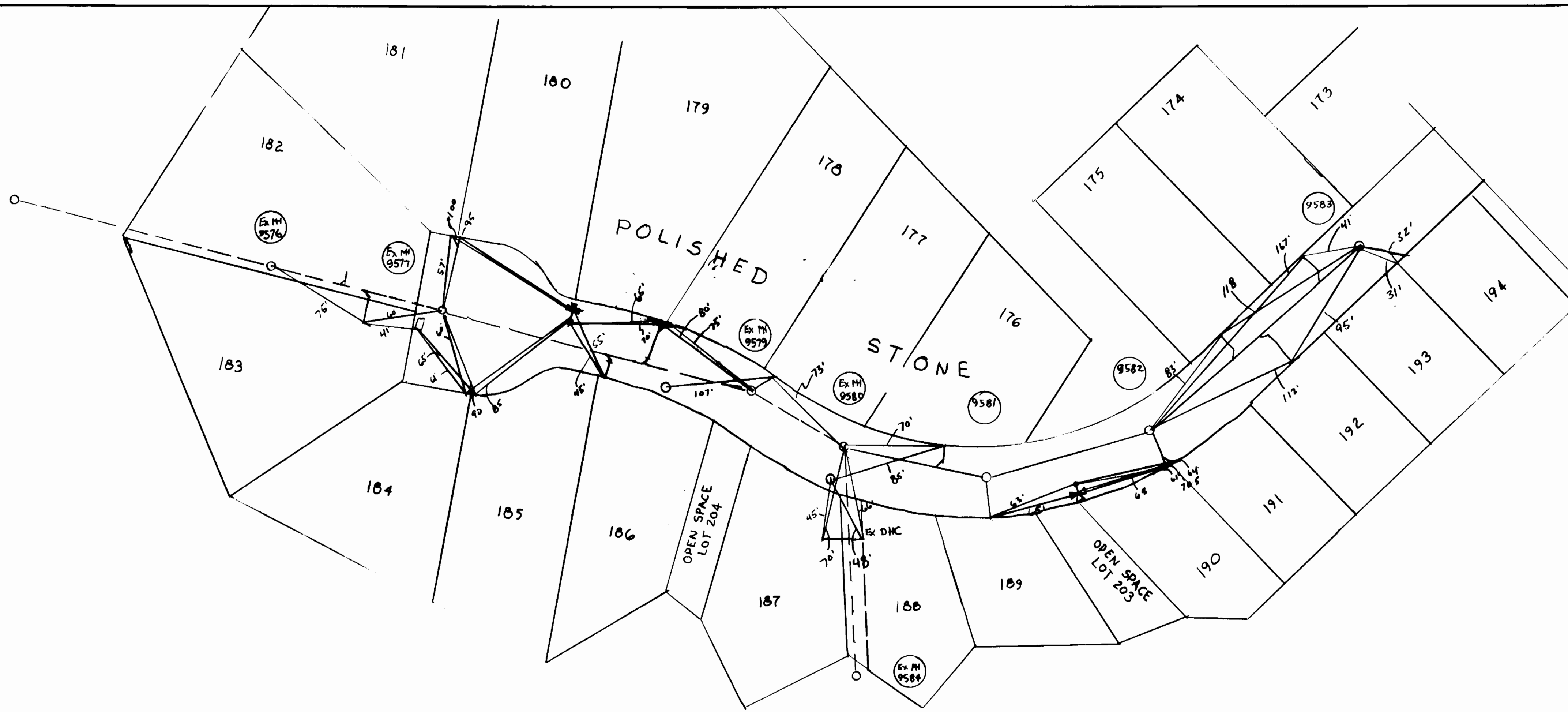
WHITMAN, REQUARDT
 AND ASSOCIATES
 ENGINEERS
 2315 ST PAUL ST
 BALTIMORE, MARYLAND
 ... 7-25-88
 Chief - Bureau of Engineering - DATE
 ... 1/25/89
 Chief - Land Development Division - DATE

DES. T.P.	
DRN. B.G.	
CHK. S.J.	T.P. 2 Revised Sewer Manhole 9582 2/21/88
DATE 5-27-88	T.P. 1 Revised B'W Profile between 11+25.4 12+00 2/21/88
BY NO.	
REVISION	
DATE	

PLANS AND PROFILES OF
 WATER AND SEWER MAINS
 600' SCALE MAP NO. 42 BLOCK NO.

VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2
 ELECTION DISTRICT NO. 6
 CONTRACT NO. 34-1831-D

SCALE
 AS
 SHOWN
 SHEET
 3 OF 3



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE

DES:			
DRN:			
CHK:			
DATE:	BY	NO.	REVISION

DATE 600' SCALE MAP NO. BLOCK NO.

VILLAGE OF KINGS CONTRIVANCE
SECTION 3 AREA 2

CONTRACT NO 34-1831-D

SCALE
AS
SHOWN

SHEET
3 OF 3

SEWER AS BUILTS 11-21-08 MEH.