

CONTRACT NO. 34-1960 D

VILLAGE OF HARPERS CHOICE

SANITARY SEWER AND WATER MAIN

HOWARD COUNTY, MARYLAND

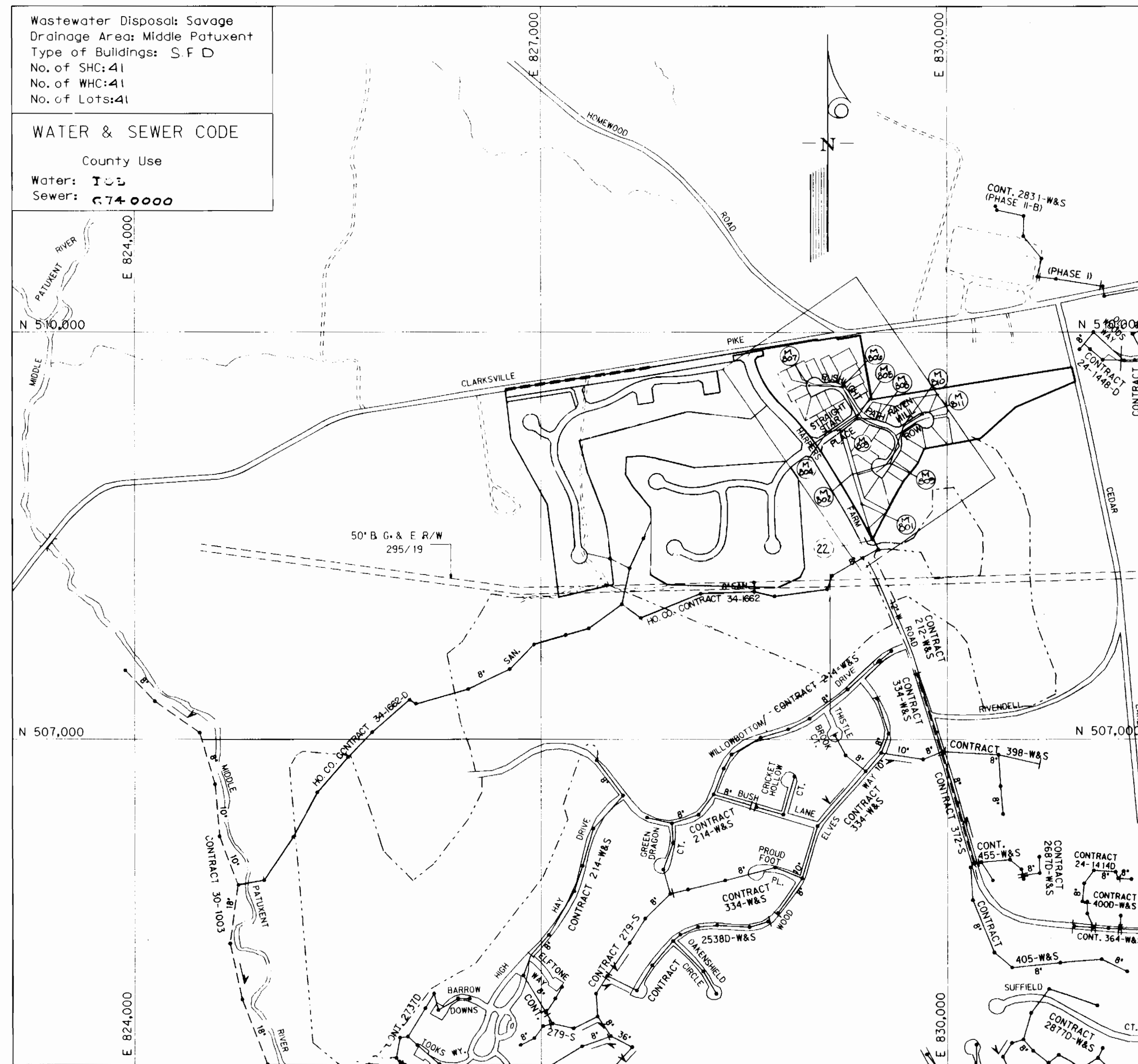
DEPT. OF PUBLIC WORKS

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 TO THE SATISFACTION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
2. ALL HORIZONTAL CONTROLS ARE BASED ON THE MARYLAND STATE PLANE COORDINATES SYSTEM REFERENCE HOWARD COUNTY CONTROL POINTS 2739002 & 2739003.
3. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 12'. CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED.
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. (* 1989 AMENDMENTS)
7. 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. -	850-4620
CONTRACTOR SERVICES -	859-9004
UNDERGROUND DAMAGE CONTROL -	298-9001
TRouble SHOOTING -	1-800-257-7777
C & P TELEPHONE -	1-559-0100
MISS UTILITY -	795-1390
COLONIAL PIPELINE CO. -	992-2366
BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS -	992-2366
8. TREES AND SHRUBS ARE TO PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR. THE CONTRACTOR SHALL ONLY REMOVE THOSE TREES, STUMPS, AND ROOTS WHICH ARE ALONG THE LINE OF EXCAVATION.
9. ALL SEWER MAINS SHALL BE C.S.P.X., D.I.P., V.C.P.X., OR P.V.C. UNLESS OTHERWISE NOTED.
10. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALL.
11. ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
12. MANHOLES SHOWN WITH 12" AND 16" WALLS ARE FOR BRICK MANHOLES ONLY.
13. ALL MANHOLES HAVING A DEPTH OF 18 FT. OR GREATER SHALL BE CONSTRUCTED WITH AN INTERMEDIATE LANDING AS SHOWN ON HOWARD COUNTY STANDARD DETAIL G-5.15.
14. MANHOLES DESIGNATED W.T. IN PLAN AND/OR PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL 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.
15. "FULL TRENCH COMPACTION" REQUIRED FOR ENTIRE LIMITS OF THIS PROJECT.
16. ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
17. TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3 1/2' COVER UNLESS OTHERWISE NOTED.
18. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
19. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
20. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
21. FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWING. 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.
22. ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTINGS, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE STANDARD SPECIFICATIONS.
23. ALL W.H.C.'S SHALL BE 3/4" UNLESS OTHERWISE NOTED.
24. ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH A.W.W.A SPECIFICATION C-153 DUCTILE IRON COMPACT FITTINGS 3"-12" FOR WATER AND OTHER LIQUIDS.

QUANTITIES			
ITEM	BID	AS-BUILT	MATERIAL/SUPPLIER
8" SANITARY SEWER	2677 LF	2551 LF	
SANITARY MANHOLES	104 VF	104 VF	ATLANTIC CONCRETE
4" S.H.C.	1325 LF	1265 LF	J-M MANUFACTURING
6" S.H.C.	110 LF	120 LF	J-M MANUFACTURING
6" WATER	5623 LF	360 LF	ATLANTIC STATES / WATER SEWER
8" WATER	1300 LF	1495 LF	ATLANTIC STATES / WATER SEWER
6" VALVE	5 EA	5	MUELLER
8" VALVE	4 EA	4	MUELLER
6" CAP	3 EA	3	MUELLER
6" FIRE HYDRANT	5 EA	5	MUELLER
8" x 6" REDUCER	3 EA	3	GRIFFIN PIPE
8" 1/8 BEND	2 EA	2	GRIFFIN PIPE
8" 1/4 BEND	1 EA	1	GRIFFIN PIPE
8" x 6" TEE	5 EA	5	GRIFFIN PIPE
8" x 8" TEE	2 EA	2	GRIFFIN PIPE
3/4" W.H.C.	0 EA	751 LF	HOWELL METALS
1" W.H.C.	2555 LF	390 LF	HOWELL METALS
1 1/2" WATER DRAIN	0 EA	0	
8" CAP	0 EA	0	
3" S&I PLUG	1 EA	1	



Wastewater Disposal: Savage
 Drainage Area: Middle Patuxent
 Type of Buildings: S F D
 No. of SHC: 41
 No. of WHC: 41
 No. of Lots: 41

WATER & SEWER CODE
 County Use
 Water: T U S
 Sewer: C 74 0000

SCALE: 1" = 600'

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT

James M. Helon / *JMH* 12/15/89
 SIGNATURE DATE
 U.S. SOIL CONSERVATION SERVICE

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

John R. Robertson 12/15/89
 HOWARD S.C.D. DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARD SPECIFICATIONS F-1-1-1

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James M. Helon 12/18/89 DATE
 DIRECTOR - BUREAU OF PUBLIC WORKS

Robert M. Dunbar 12-11-89 DATE
 CHIEF - BUREAU OF UTILITIES

William J. Ryan 12-11-89 DATE
 CHIEF - BUREAU OF ENGINEERING

Paul W. Spear 12/18/89 DATE
 CHIEF - LAND DEVELOPMENT DIVISION

KIDDE CONSULTANTS, INC.
 ENGINEERS SURVEYORS PLANNERS
 1020 CROWMELL BRIDGE ROAD
 BALTIMORE, MARYLAND 21204
 (301) 321-5500

William J. Ryan

DES: J.J.D.	MOD	QUANTITIES CHECK	2/15/90
DRN:			
CHK:			
DATE:	BY	NO.	REVISION

VICINITY MAP
 AND
 GENERAL NOTES

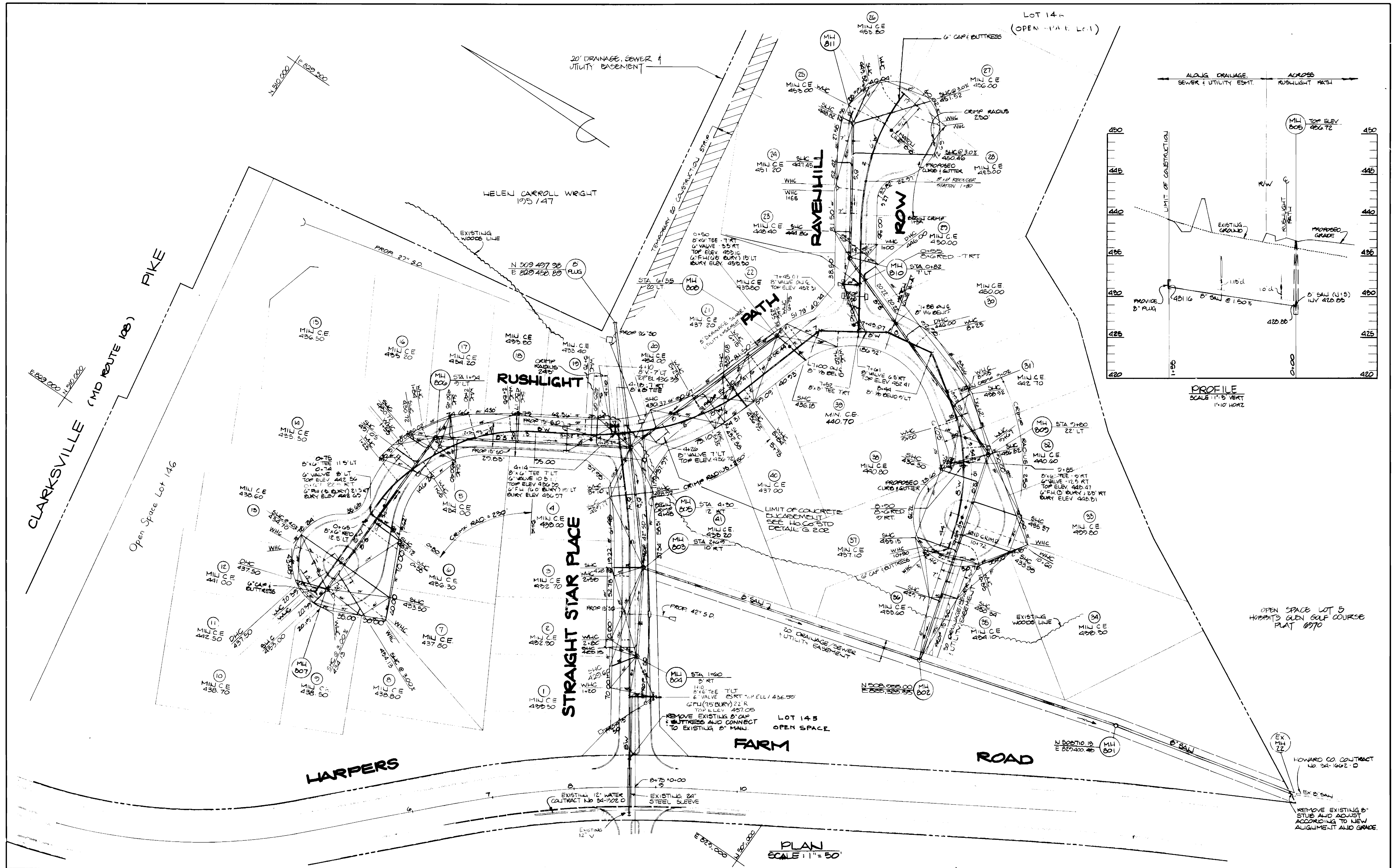
600' SCALE MAP NO. 29 BLOCK NO. 15, 16 & 17

COLUMBIA
 VILLAGE OF HARPERS CHOICE
 SECTION 7 AREA 4
 5TH. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

CONTRACT NO. 34-1960 D

SCALE AS SHOWN
 SHEET 1 OF 3

AS-BUILT MAY 1, 1990



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

KIDDE CONSULTANTS, INC.
ENGINEERS SURVEYORS PLANNERS
1020 CROMWELL BRIDGE ROAD
TOWSON, MARYLAND 21204
(301) 321-5500

DATE:	12/10/89	BY:	NO.	REVISION:	DATE:
DATE:	12/11/89	BY:	NO.	REVISION:	DATE:

PLAN OF
WATER AND SEWER MAINS

COLUMBIA
VILLAGE OF HARPERS CHOICE
SECTION 7 AREA 4
ELECTION DISTRICT NO. 5
CONTRACT NO. 34-1060 D

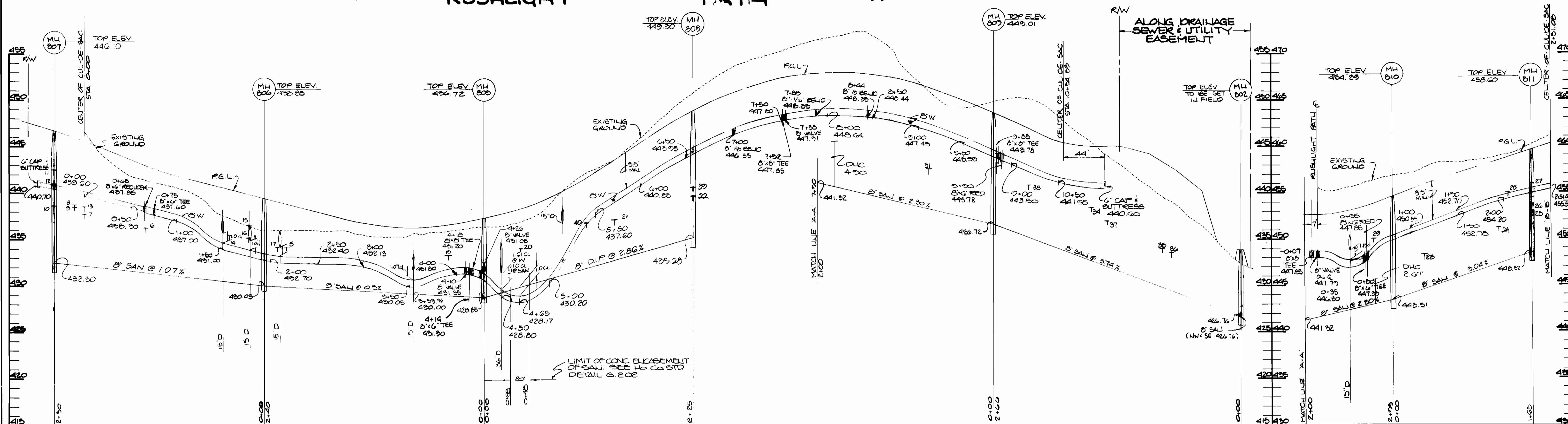
SCALE AS SHOWN
SHEET 2 OF 3

AS-BUILT MAY 1, 1992

RUSHLIGHT

PATH

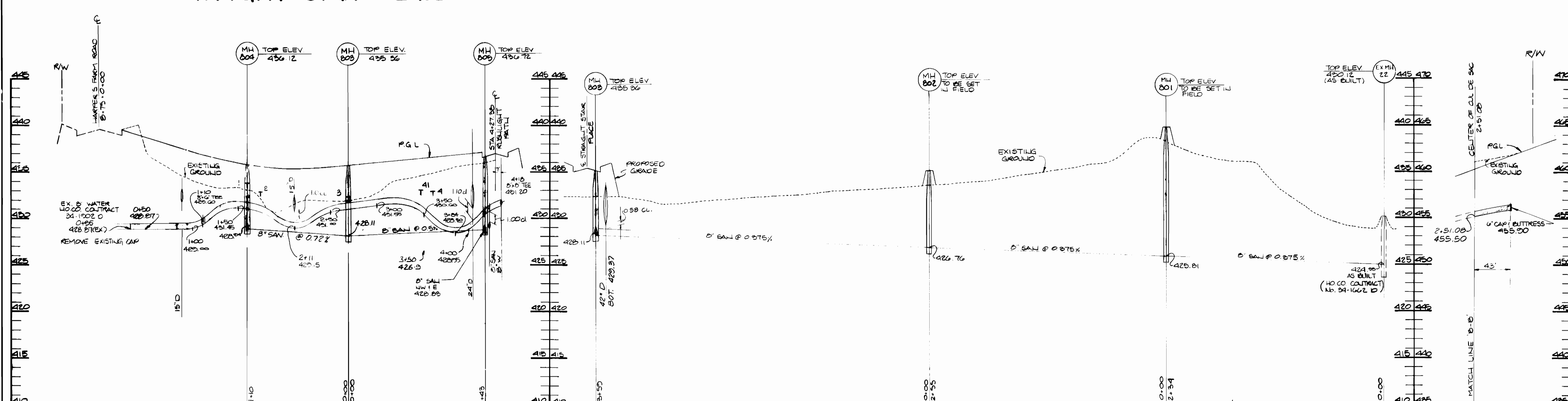
RAVENHILL ROW



STRAIGHT STAR PLACE

ALONG 20' DRAINAGE & UTILITY EASEMENT

RAVENHILL ROW



PROFILES
SCALE: 1" = 50' HORIZ
1" = 5' VERT

<p>DEPARTMENT OF PUBLIC WORKS HARPER COUNTY, MARYLAND</p> <p><i>James J. [Signature]</i> 12/10/89 <i>Rodney [Signature]</i> 12-11-89</p>	<p>KIDDE CONSULTANTS, INC. ENGINEERS SURVEYORS PLANNERS 1020 CROMWELL BRIDGE ROAD TOWSON, MARYLAND 21284 (301) 521-5500</p> <p><i>[Signature]</i></p>	<p>MD PROFILE 21514</p>	<p>PROFILES OF WATER AND SEWER MAINS</p>	<p>COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 7 AREA 4 ELECTION DISTRICT NO. CONTRACT NO. 34-1060 D</p>	<p>SCALE AS SHOWN</p> <p>SHEET 3 OF 3</p>
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