

MD. ROUTE 99 WATER MAIN RELOCATION AT MOUNT HEBRON DRIVE & MAPLE ROCK DRIVE

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS

CAPITAL PROJECT W-8212

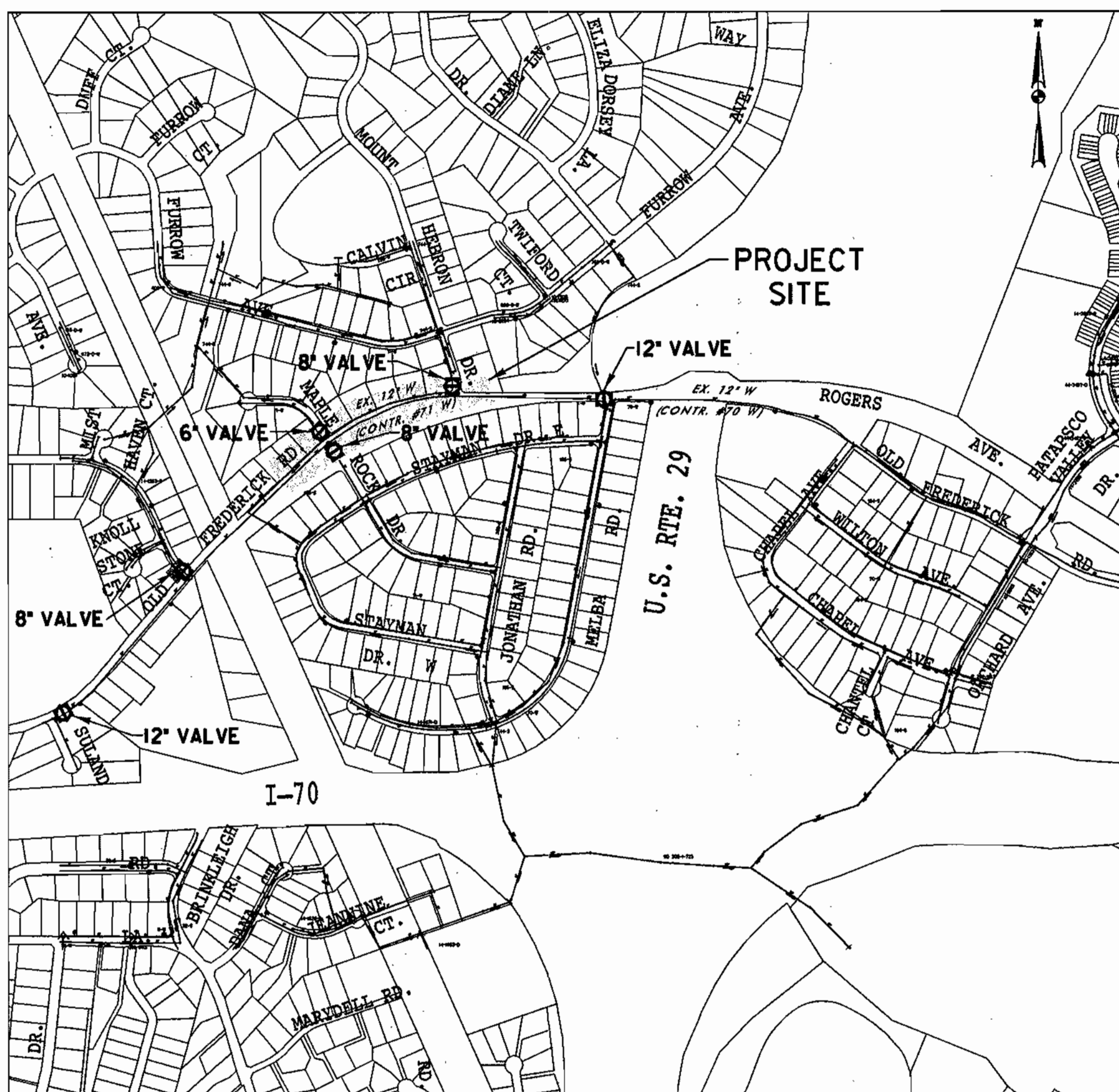
CONTRACT NO. 40-4036

GENERAL NOTES

1. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR EXPENSE.
2. ALL TOPOGRAPHIC INFORMATION, HORIZONTAL AND VERTICAL CONTROLS AS PROVIDED MARYLAND STATE HIGHWAY ADMINISTRATION FOR SHA CONTRACT # H08285176.
3. DELETED
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 12". CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
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 (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
7. 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 LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
8. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 AT&T.....410-865-3803
 BG&E (CONTRACTOR SERVICES).....410-850-4620
 BG&E - UNDERGROUND DAMAGE CONTROL.....410-787-9068
 BUREAU OF UTILITIES (DPW).....410-313-4900
 VERIZON.....410-393-4499
 COLONIAL PIPELINE CO.....410-795-1390
 MISS UTILITY.....1-800-257-7777
 STATE HIGHWAY ADMINISTRATION.....410-531-5533
9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
10. 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.
11. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410)313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER MAINS, SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(a) OF THE HOWARD COUNTY CODE.
12. ALL WATER MAINS SHALL BE D.I.P CLASS 52 UNLESS OTHERWISE NOTED.
13. TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
14. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
15. ALL FITTINGS SHALL BE RESTRAINED AND BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
16. FIRE HYDRANTS SHALL BE SET TO BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
17. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
18. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE VARIOUS PROPERTY OWNERS COORDINATING HIS WORK ACTIVITIES SO AS NOT TO NEGATIVELY IMPACT CONNECTED CUSTOMERS. THE INSTALLATION OF WATER MAIN SHALL CAUSE A MINIMUM DISTURBANCE TO THE EXISTING PROPERTY OWNERS AND NOTIFICATION TO THE PROPERTY OWNERS OF ANY "INTERRUPTION OF SERVICE" SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COUNTY REQUIRES THAT THE CONTRACTOR NOTIFY EACH PROPERTY OWNER AFFECTED BY LETTER OR DOOR TAGS OF THE IMPENDING SERVICE INTERRUPTION AT LEAST 48 HOURS IN ADVANCE OF THE PLANNED INTERRUPTION.
19. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF UTILITIES, HOWARD COUNTY, AT LEAST 15 DAYS PRIOR TO SHUT DOWN OF WATER MAIN.
20. THE CONTRACTOR SHALL PROVIDE SURVEY CONSTRUCTION STAKE OUT FOR ALL NECESSARY LINES, GRADES AND ELEVATION OF THE PROPOSED FACILITIES. CUT SHEETS SHALL BE PREPARED BASED ON THE LINES AND GRADES SHOWN ON THE CONTRACT DRAWINGS.
21. THE CONTRACTOR SHALL RETURN ALL EXISTING FIRE HYDRANTS TO THE BUREAU OF UTILITIES AT 8250 OLD MONTGOMERY RD., COLUMBIA, MD 21045.

LEGEND

- | | | |
|-----------------------|---------------------------------|-----------------------------------|
| DECIDUOUS TREE | PROPOSED WATER HOUSE CONNECTION | EXISTING WATER MAIN TO BE REMOVED |
| CONIFEROUS TREE | EXISTING WATER MAIN | EXISTING STORM DRAIN |
| TRAVERSE POINT | EXISTING SEWER | |
| PROPOSED WATER MAIN | EXISTING GAS MAIN | |
| PROPOSED FIRE HYDRANT | LIMIT OF DISTURBANCE | |



TYPE OF BUILDING: RESIDENTIAL
NUMBER OF PARCELS: N/A

WATER CODE FOR COUNTY USE ONLY:
WATER HOUSE CONNECTIONS: N/A
DRAINAGE AREA: PATAPSCO

HO. CO. SURVEY CONTROL

BENCH MARK

SEE "GENERAL NOTE" 2
THIS SHEET

SEE "GENERAL NOTE" 2
THIS SHEET

LOCATION MAP

SCALE: 1" = 800'

INDEX OF SHEETS

SHEET No. DESCRIPTION

- | | |
|---|---|
| 1 | TITLE SHEET |
| 2 | WATERMAIN AND HYDRANT RELOCATION PLAN & PROFILE |
| 3 | WATERMAIN RELOCATION PLANS & PROFILE |

SEQUENCE OF CONSTRUCTION

1. LAYOUT ALIGNMENT AT SITE.
2. EXCAVATE AND INSTALL IN-LINE THRUST BLOCKS.
3. EXCAVATE TRENCH TO THE GRADE SPECIFIED ON THE PROFILE AND INSTALL RELOCATED WATER MAIN. REMOVE ABANDONED WATER MAIN BACKFILL TRENCH AND RESTORE TO EXISTING CONDITIONS REPEAT AT EACH LOCATION.
4. ALL WATER MAIN SHUT DOWNS AND TIE-IN SHALL BE SCHEDULED FOR NIGHT TIME BETWEEN 11:00 P.M. TO 5:00 A.M.

NOTE:
1. CONTRACTOR TO TEST PIT ALL TIE-IN LOCATIONS TO EX 12" AND 8" W AND PROVIDE ENGINEER WITH HORIZONTAL AND VERTICAL LOCATION OF EXISTING 12" AND 8" W PRIOR TO PROCEEDING WITH ANY WORK.

2. REFER TO SEQUENCE OF CONSTRUCTION FOR MSHA HWY CONTRACT NO. H08285130.

QUANTITIES

ITEM	UNIT	ESTIMATE	AS-BUILT	MATERIAL	SUPPLIER
12" W	L.F.	70			
8" W	L.F.	35			
6" W	L.F.	30			
FIRE HYDRANT	EA.	1			
6" VALVE	EA.	1			

NAME OF UTILITY CONTRACTOR:

CHECKBOX

AS-BUILT DATE:

SURVEY AND DRAFTING DIVISION

TRAVERSE DATA

CONTROL POINT	NORTHING	EASTING
PK 58	N 595,429.22	E 1,359,732.71
PK 13	N 595,765.50	E 1,360,197.47
PK 91	N 596,048.44	E 1,360,628.64

STAKEOUT SCHEDULE

ITEM	COORDINATES	
	NORTHING	EASTING
12" WATER LINE @ 10+75 MD RTE. 99		
STA 10+66.40 12" 45"HB	N 595144.57	E 1359438.75
STA 10+68.40 12" 45"HB	N 595145.99	E 1359440.21
STA 10+83.40 12" 45"HB	N 595156.41	E 1359451.05
STA 10+85.50 12" 45"HB	N 595157.82	E 1359452.52
8" WATER LINE @ 100+65 MAPLE ROCK DR.		
STA 100+56.30 8" 45"HB	N 595555.85	E 1359970.58
STA 100+57.00 8" 45"HB	N 595555.25	E 1359970.94
STA 100+72.00 8" 45"HB	N 595542.38	E 1359978.64
STA 100+72.80 8" 45"HB	N 595541.77	E 1359979.00
6" WATER LINE @ F.H. RELOCATION 19+16.5 MD RTE. 99		
STA 19+16.55 6" VALVE	N 595701.61	E 1360079.05
STA 19+16.55 6" 45"VB	N 595699.89	E 1360080.09
STA 19+16.55 6" 45"VB	N 595696.91	E 1360081.93
STA 19+16.55 F.H.	N 595676.93	E 1360094.09
12" WATER LINE @ 27+20 MD RTE. 99		
STA 27+10.40 12" 45"HB	N 595864.40	E 1360839.96
STA 27+11.60 12" 45"HB	N 595864.39	E 1360841.18
STA 27+26.60 12" 45"HB	N 595864.09	E 1360856.19
STA 27+27.8 12" 45"HB	N 595864.08	E 1360857.42

As-Built

AS BUILT 6/9/05

SHA CONTRACT #H08285130

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

John Miller 10/29/02
DIRECTOR OF PUBLIC WORKS DATE

Robert J. Sporn 10/29/02
CHIEF, BUREAU OF ENGINEERING DATE



10 NORTH PARK DRIVE
HUNT VALLEY, MD 21030
PHONE: (410) 316-7800
FAX: (410) 316-7817
www.kci.com



DES: CB			
DRN: KJ			
CHK: TW			
DATE: 10/02	LN	AS BUILT	6/05
	BY	NO.	REVISION

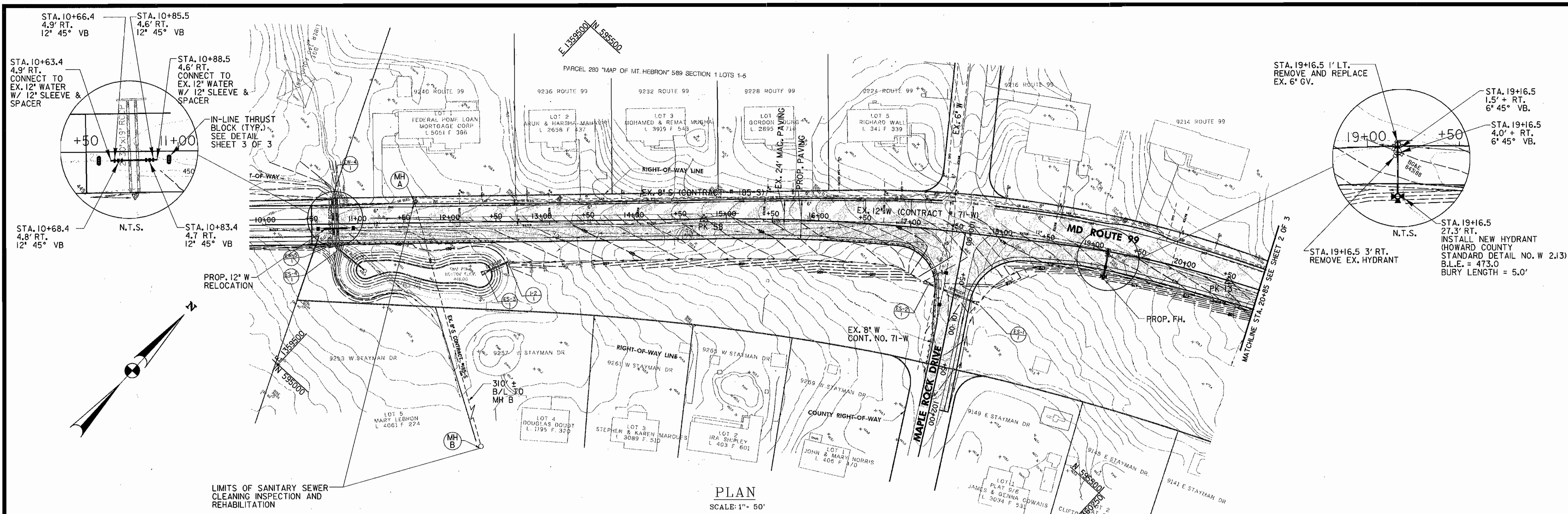
TITLE SHEET

600' SCALE MAP NO. 17 BLOCK NO. X

MD. ROUTE 99 WATER MAIN RELOCATION
AT MOUNT HEBRON DRIVE & MAPLE ROCK DRIVE

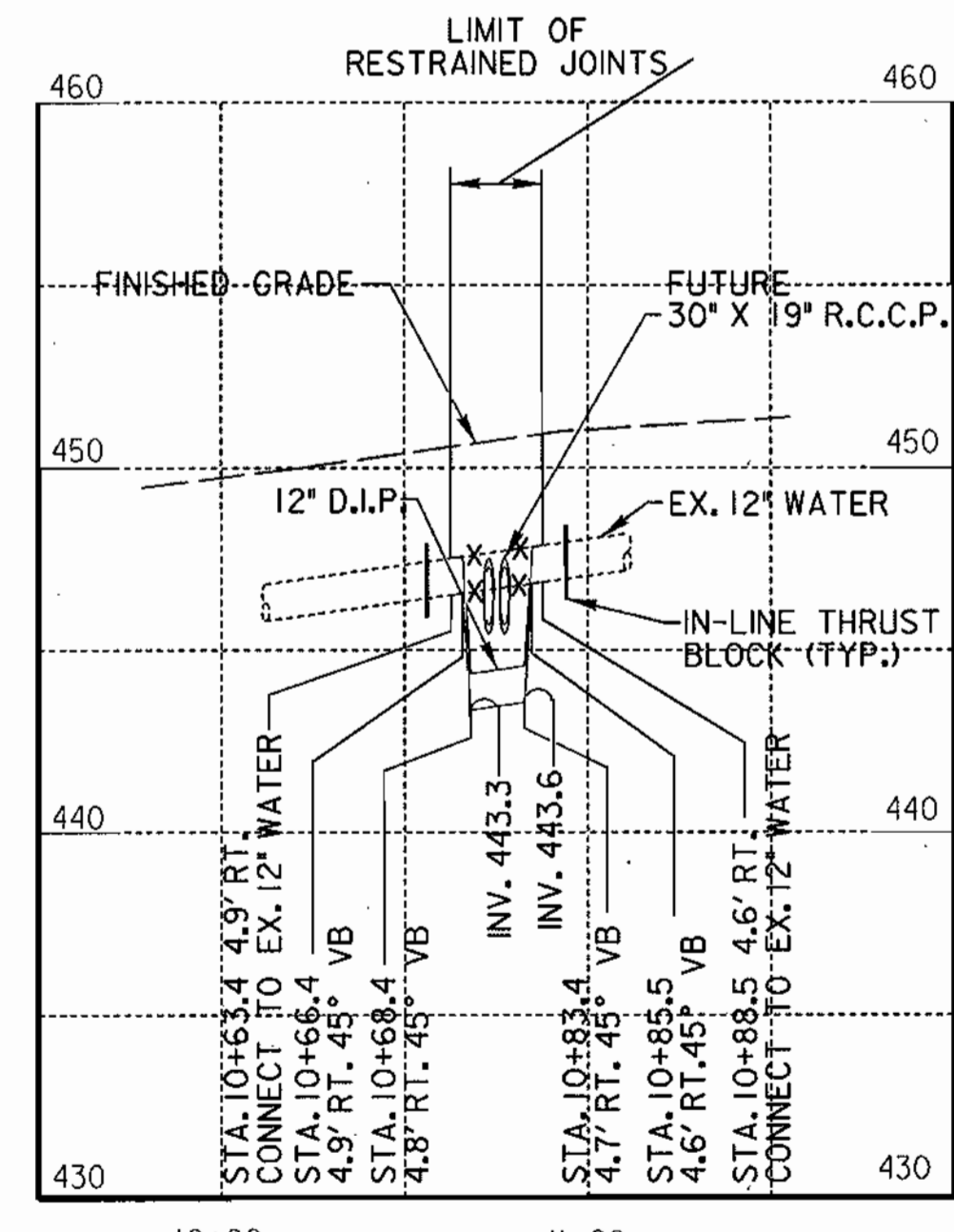
CAPITAL PROJECT NO. W-8212
CONTRACT NO. 40-4036
ELECTION DISTRICT NO. 3 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 3



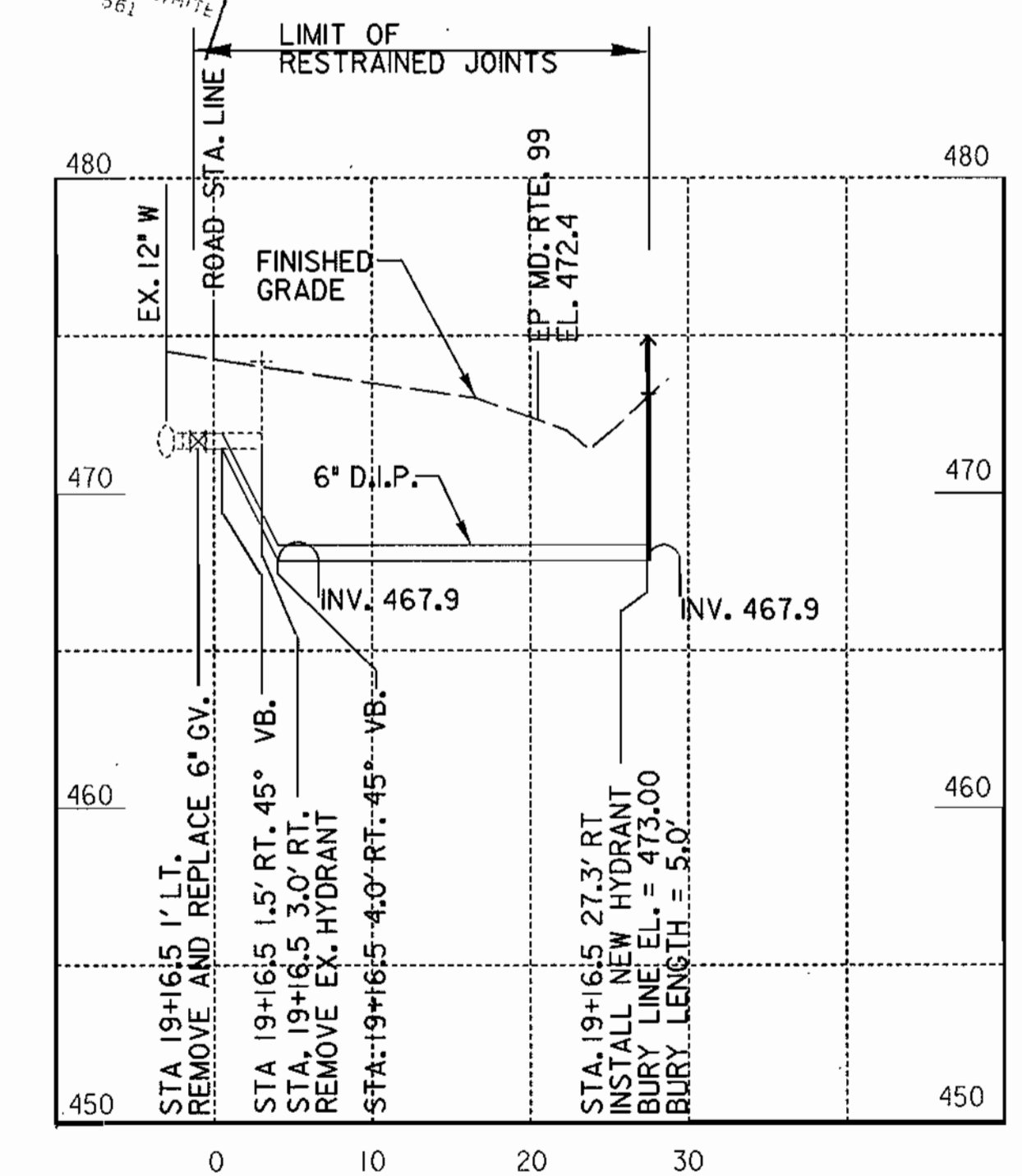
LIMITS OF SANITARY SEWER CLEANING INSPECTION AND REHABILITATION

PLAN
SCALE: 1" = 50'



PROFILE WATER LINE
STATION 10+75 MD RTE. 99
SCALE: HORIZONTAL 1" = 50'
VERTICAL 1" = 5'

NOTE: PROVIDE 12" MIN. CLEAR BETWEEN WATER AND STORM DRAIN



PROFILE FIRE HYDRANT RELOCATION
STATION 19+16.5 MD RTE. 99
SCALE: HORIZONTAL 1" = 10'
VERTICAL 1" = 5'

- NOTE:
1. ALL FITTINGS AND APPURTENANCES SHALL BE RESTRAINED.
 2. ALL WATER MAINS TO BACKFILLED WITH CR6 FULL DEPTH.
 3. SEE FIRE HYDRANT SETTINGS HO. CO. WI-II

As-Built

AS BUILT- 6/9/05 SHA CONTRACT #H08285130

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Randy Lee 10/31/02
DIRECTOR OF PUBLIC WORKS DATE

Robert Brown 10-31-02
CHIEF, BUREAU OF UTILITIES DATE

Paul S. Brown 10/29/02
CHIEF, BUREAU OF ENGINEERING DATE

Clayton 10-29-02
CHIEF, UTILITY DESIGN DIVISION DATE

KCI
TECHNOLOGIES

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DES:	CB		
DRN:	KJ		
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DATE:	10/02		
LN	AS BUILT	6/05	
BY	NO.	REVISION	DATE

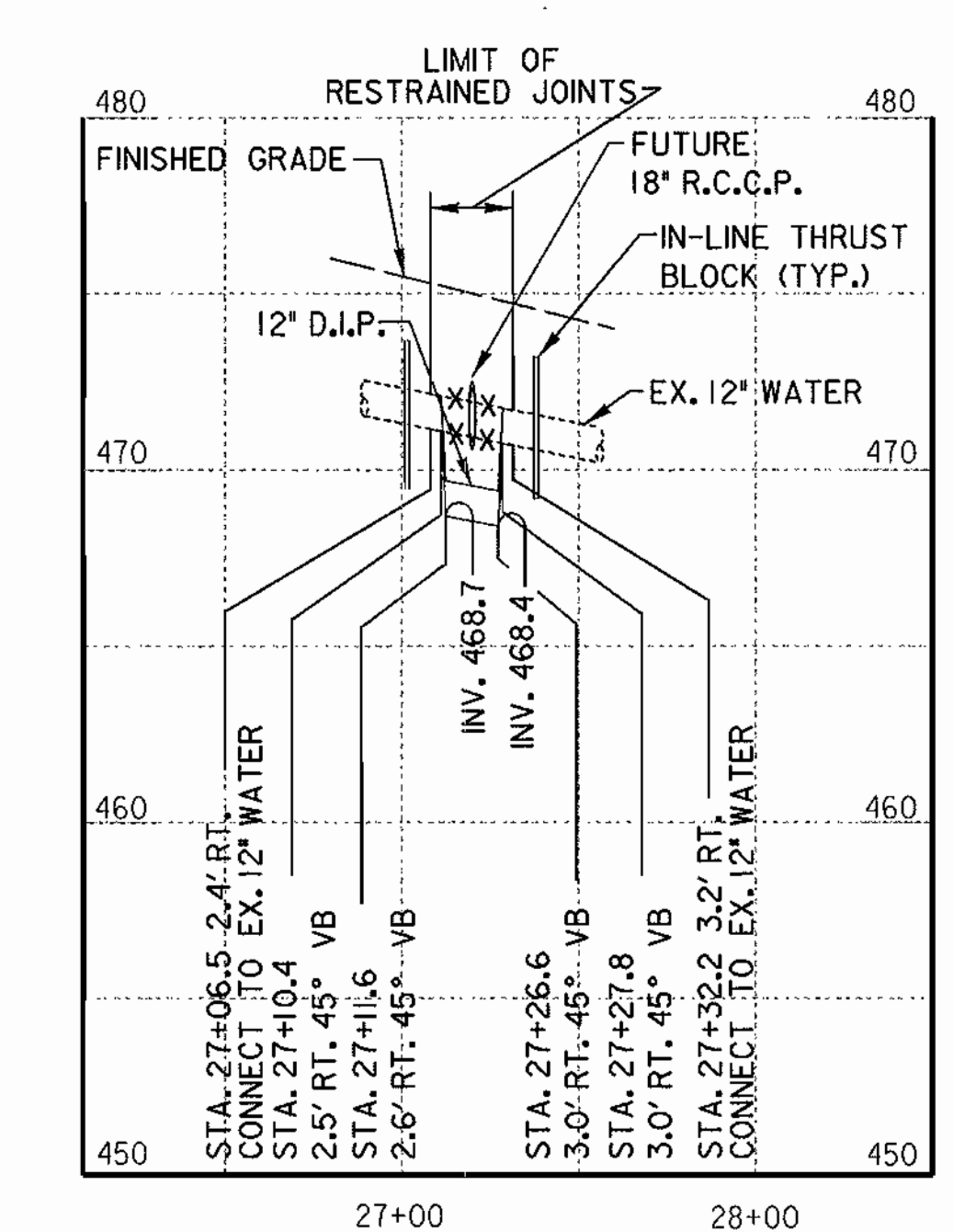
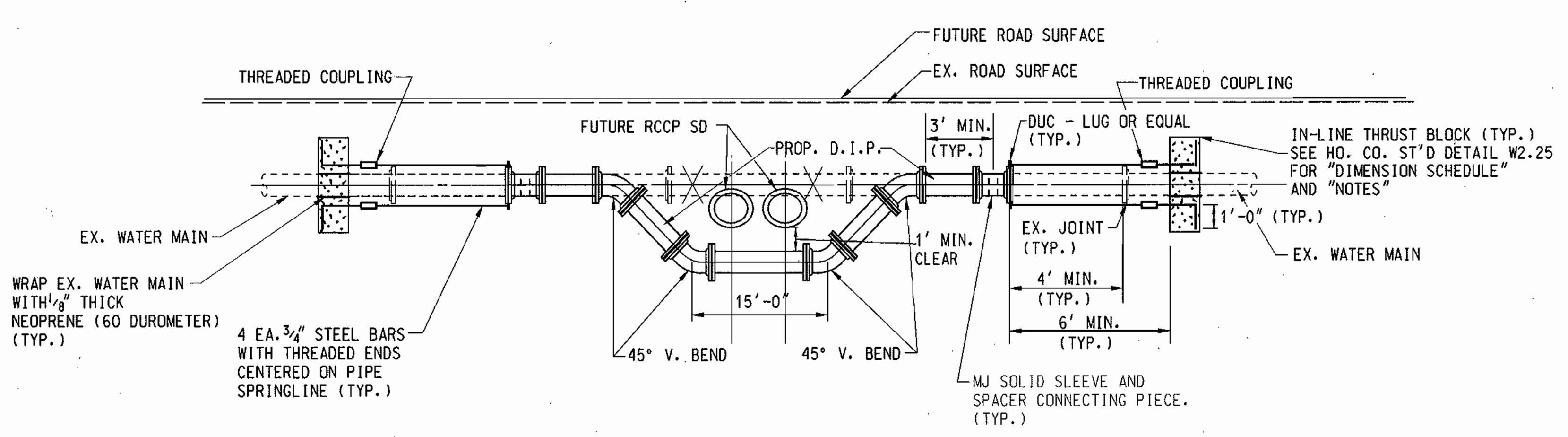
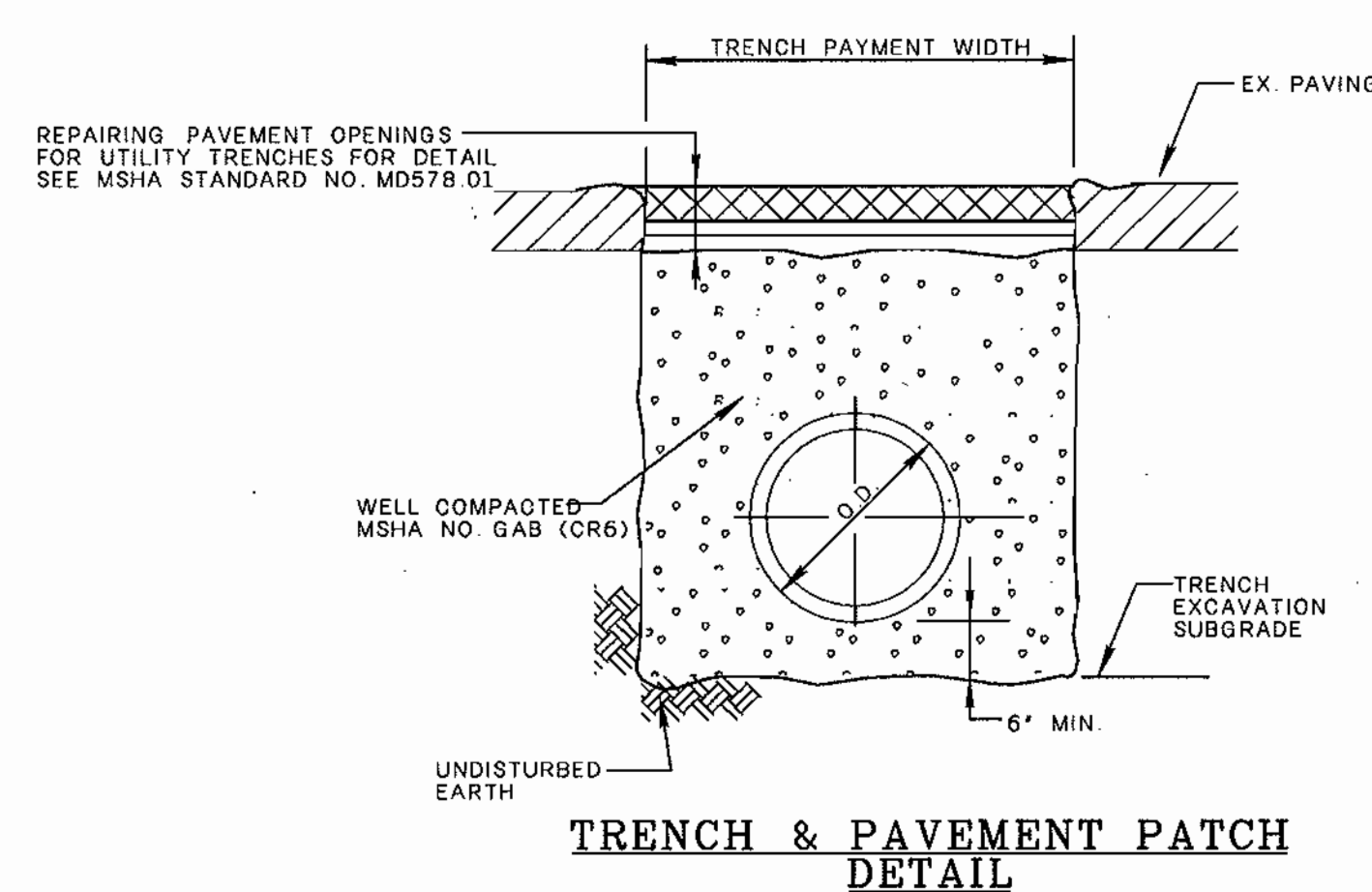
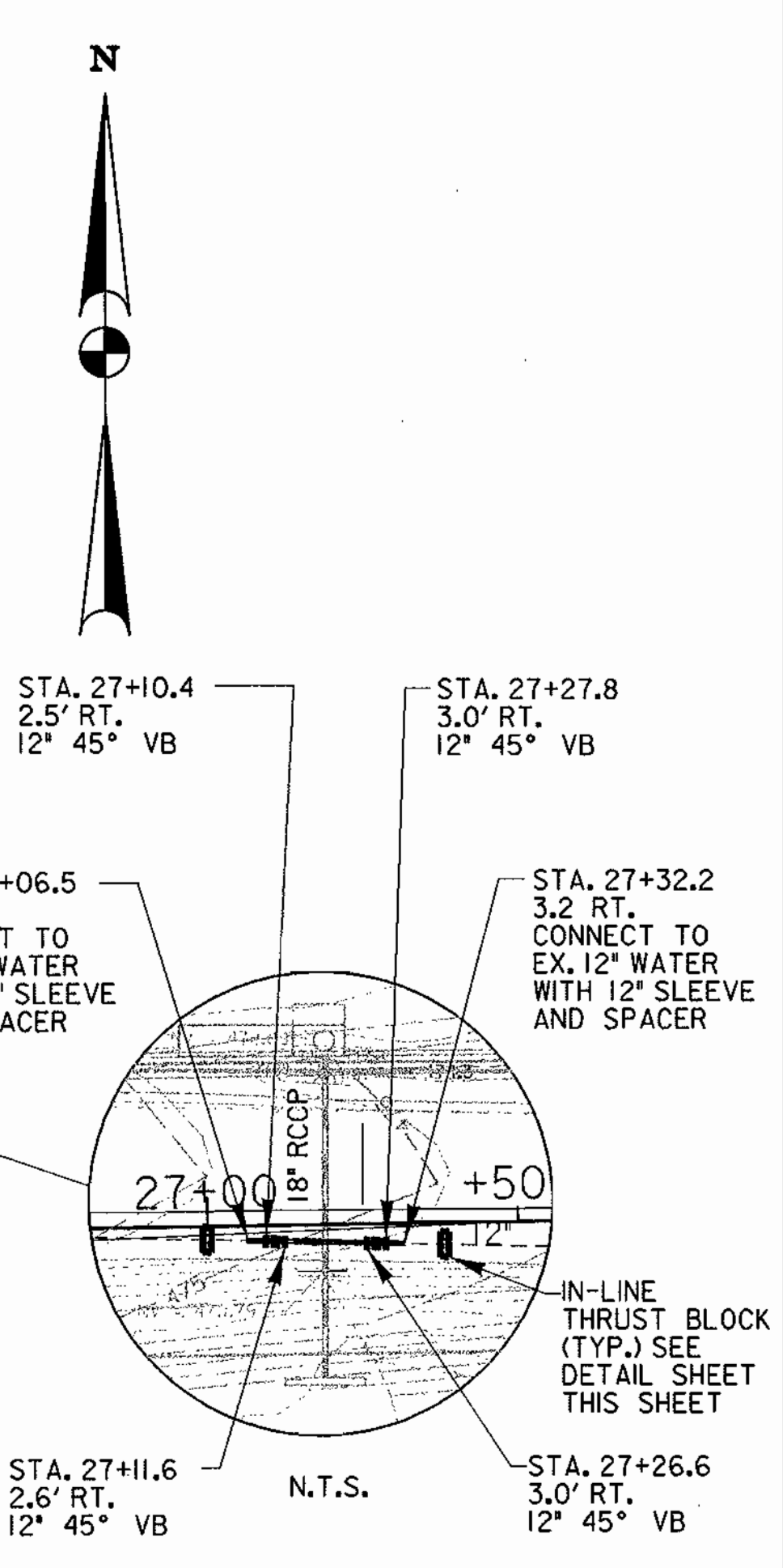
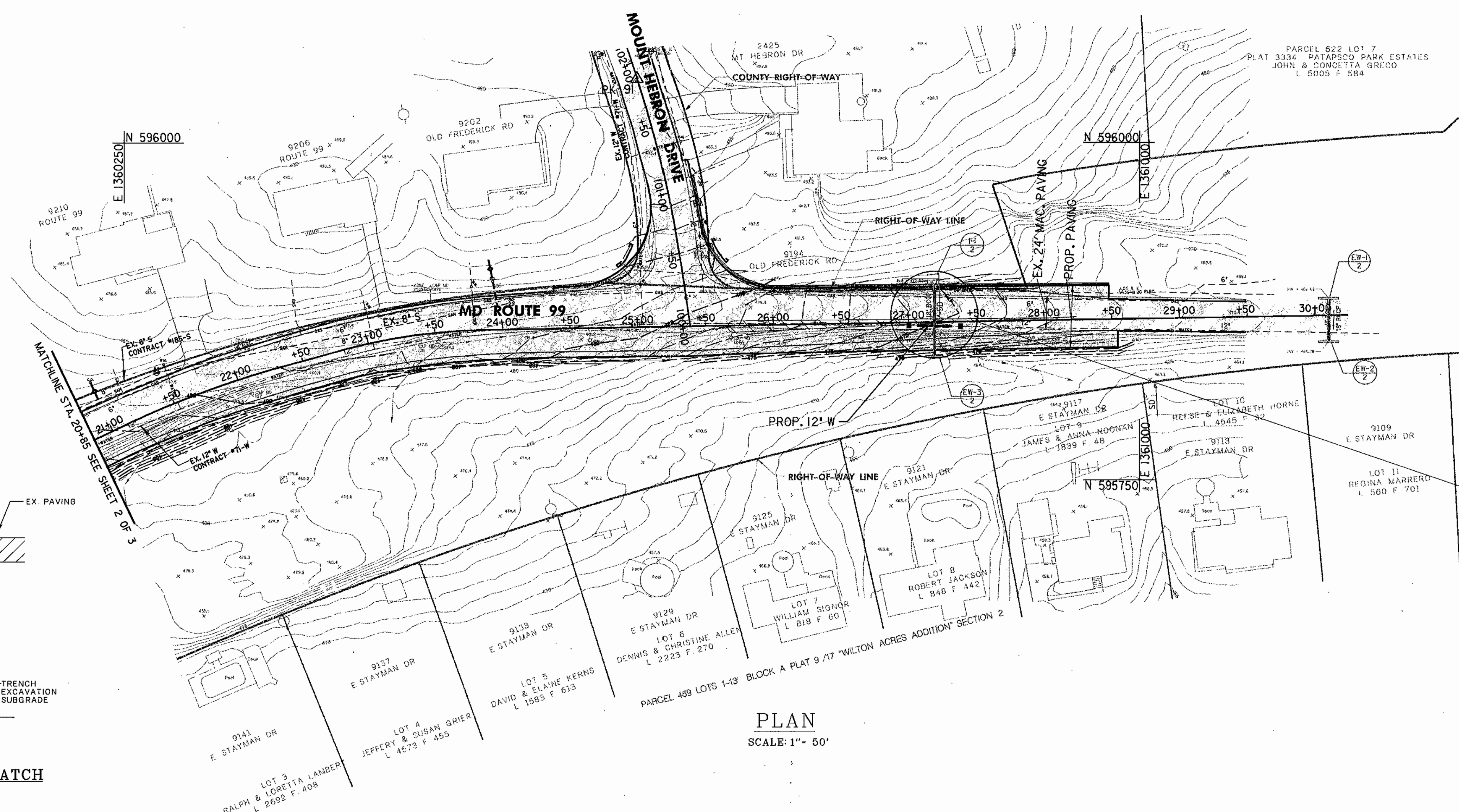
WATER MAIN AND HYDRANT RELOCATION
PLAN AND PROFILE

600' SCALE MAP NO. 17 BLOCK NO. X

MD. ROUTE 99 WATER MAIN RELOCATION
AT MOUNT HEBRON DRIVE & MAPLE ROCK DRIVE

CAPITAL PROJECT NO. W-8212
CONTRACT NO. 40-4036
ELECTION DISTRICT NO.3 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2 OF 3



NOTE: 1. ALL JOINTS ON PROP. 8" AND 12" WATER SHALL BE RESTRAINED JOINTS.

NOTE: PROVIDE 12" MIN CLEAR BETWEEN WATER AND STORM DRAIN

SHA CONTRACT *H08285130

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
10/29/02
10/29/02

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WATER MAIN RELOCATION
PLAN AND PROFILE
600' SCALE MAP NO 17 BLOCK NO. X

MD. ROUTE 99 WATER MAIN RELOCATION
AT MOUNT HEBRON DRIVE & MAPLE ROCK DRIVE
CAPITAL PROJECT NO. W-8212
CONTRACT NO. 40-4036
ELECTION DISTRICT NO. 3 HOWARD COUNTY, MARYLAND
SCALE AS SHOWN
SHEET 3 OF 3

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