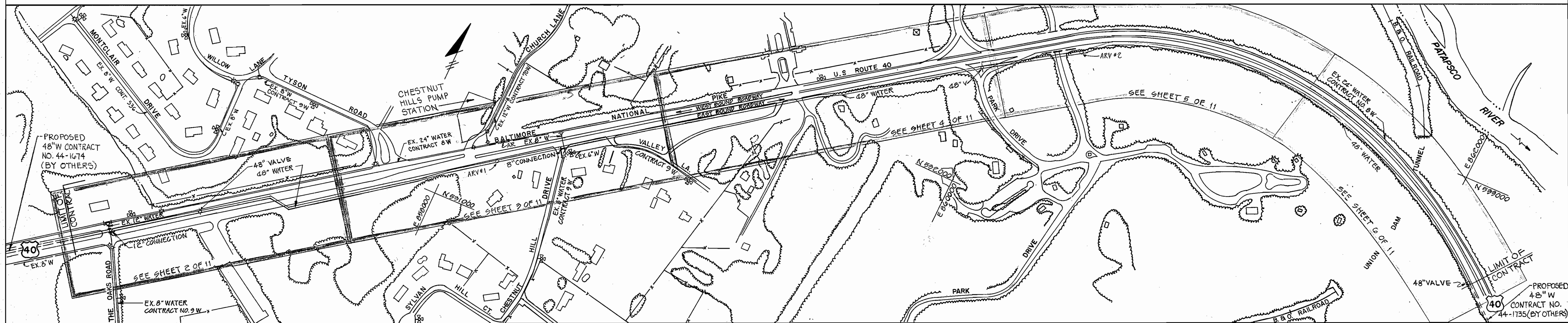


US ROUTE 40 WATER TRANSMISSION MAIN

SECTION 2

CAPITAL PROJECT W-8052

CONTRACT NO. 44-1673



LOCATION MAP

SCALE: 1" = 200'

INDEX OF DRAWINGS

SHEET NO	DESCRIPTION
1	TITLE SHEET
2	PLAN AND PROFILE
3	PLAN AND PROFILE
4	PLAN AND PROFILE
5	PLAN AND PROFILE
6	PLAN AND PROFILE
7	DETAILS
8	TRAFFIC CONTROL PLAN
9	TRAFFIC CONTROL PLAN
10	TRAFFIC CONTROL PLAN
11	SEDIMENT AND EROSION CONTROL

ITEM	QUANTITIES		MATERIAL TYPE	SUPPLIER
	ESTIMATE	AS BUILT		
48" PIPE & FITTINGS	6640 LF	6640 LF	TR. FLEX	U.S. PIPE & FOUNDRY
48" BUTTERFLY VALVE & ACCESS MANHOLE	3 EA	3 EA	STREAMLINE	A.L. VALVE INC.
4" AIR RELEASE VALVE	2 EA	2 EA	TR. FLEX	U.S. PIPE & FOUNDRY
84" TUNNEL LINER	64 LF	64 LF	GALVANIZED COMMERCIAL INTERTECH	COMMERCIAL INTERTECH
12" GATE VALVE	2 EA	2 EA	DUCTILE - CAST IRON	U.S. PIPE & FOUNDRY
12" D. I. P.	5 LF	5 LF	DUCTILE	U.S. PIPE & FOUNDRY
8" X 8" T&V	1 EA	1 EA	DUCTILE	U.S. PIPE & FOUNDRY
8" GATE VALVE	1 EA	1 EA	DUCTILE	U.S. PIPE & FOUNDRY
8" D. I. P.	40 LF	40 LF	DUCTILE	U.S. PIPE & FOUNDRY
6" D. I. P.	40 LF	40 LF	DUCTILE	U.S. PIPE & FOUNDRY

WATER CODE FOR COUNTY USE ONLY:
WATER CODE NO. FO1

NUMBER OF WATER HOUSE CONNECTIONS 0

1. DEVELOPER'S CERTIFICATION:

I (WE) CERTIFY THAT:

A) ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN, AND FURTHER, AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT SEDIMENT AND STORMWATER PROGRAM INSPECTORS.

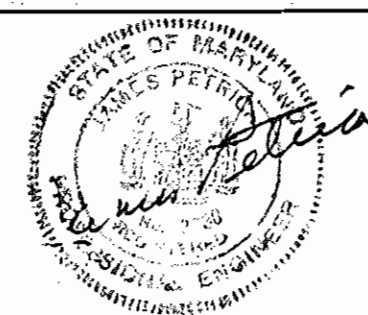
B) ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

[Signature] 5-20-88
DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* 4-8-88
 Chief, Bureau of Engineering: *[Signature]* 4-8-88
 Chief, Bureau of Utilities: *[Signature]* 4-8-88
 Chief, Utility Design Division: *[Signature]* 4/8/88

WR WHITNEY
 BAILLEY
 COX
 MAGNANI
 CONSULTING ENGINEERS
 1850 YORK ROAD
 TIMONIUM, MD 21093
 301-252-6060



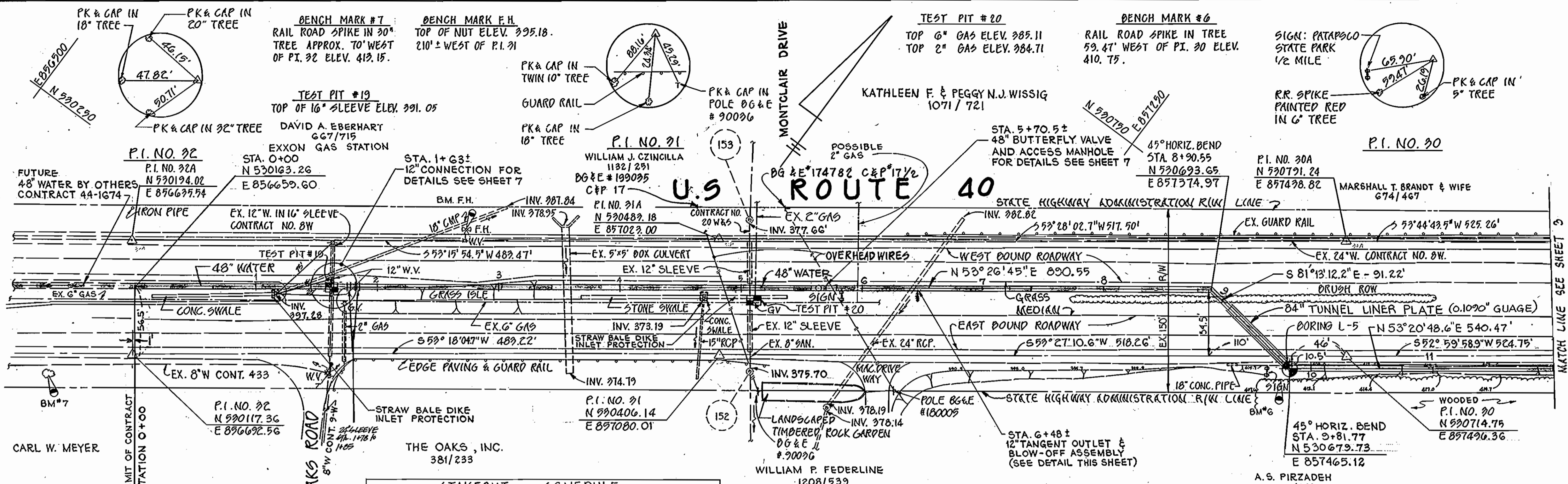
DES: R.J.H.
 DRN: S.R.B.
 CHK: J.P.
 DATE: 7/21/88

TITLE SHEET
LOCATION MAP
INDEX OF DRAWINGS

U.S. ROUTE 40 WATER TRANSMISSION MAIN
 CAPITAL PROJECT W-8052
 CONTRACT NO. 44-1673
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 1 OF 11

WATER - AS BUILT 12/10/00

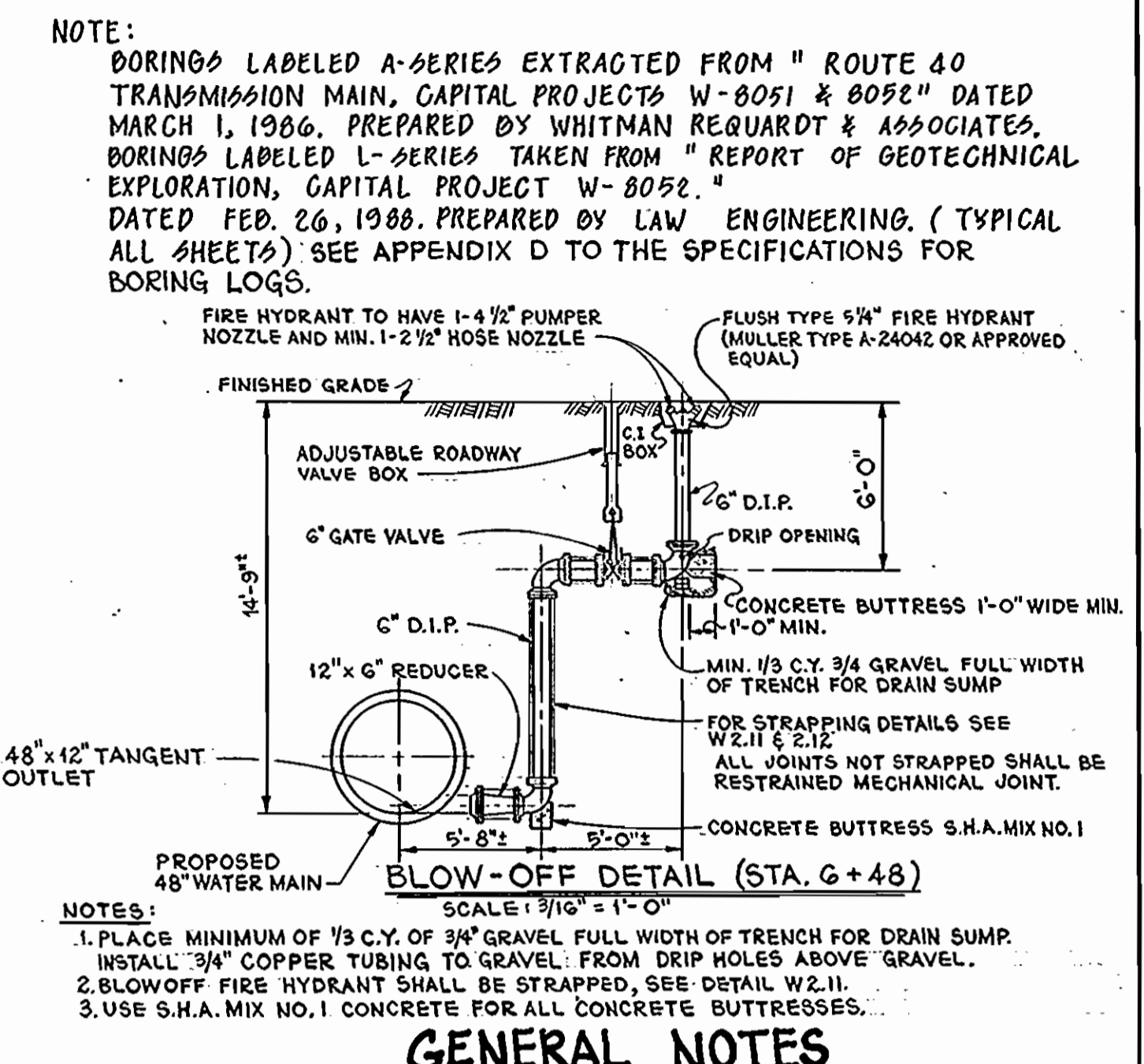
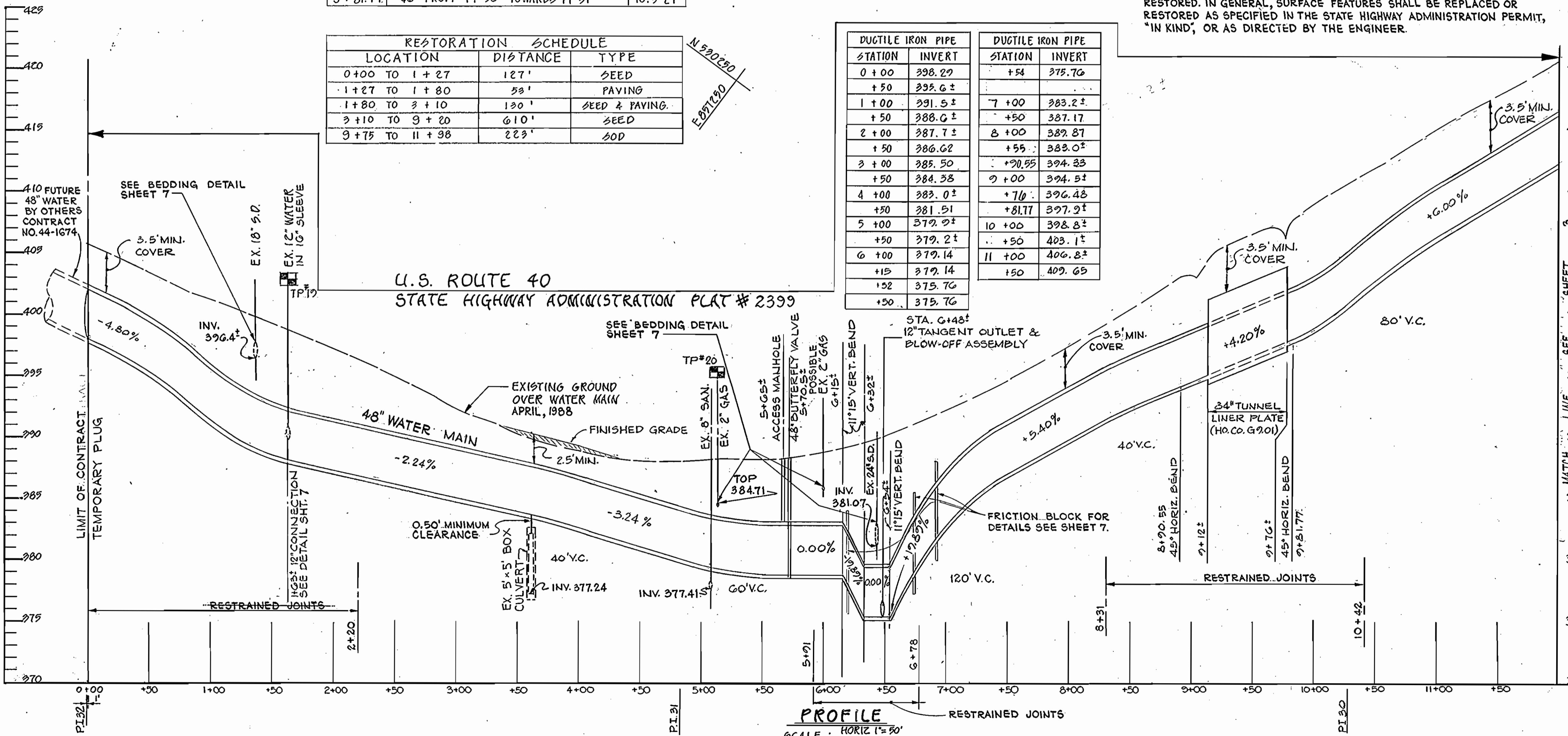


RESTORATION SCHEDULE

LOCATION	DISTANCE	TYPE
0+00 TO 1+27	127'	SEED
1+27 TO 1+80	53'	PAVING
1+80 TO 3+10	130'	SEED & PAVING
3+10 TO 9+20	610'	SEED
9+75 TO 11+38	223'	SOD

DUCTILE IRON PIPE

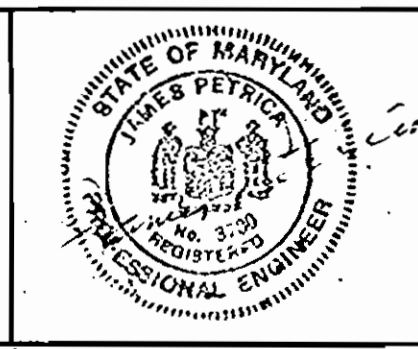
STATION	INVERT	STATION	INVERT
0+00	398.29	+54	375.76
+50	393.6±	7+00	383.2±
1+00	391.5±	+50	387.17
+50	388.6±	8+00	389.87
2+00	387.7±	+55	383.0±
+50	386.6±	+70.55	394.33
3+00	385.50	9+00	394.5±
+50	384.38	+70	396.43
4+00	383.0±	+81.77	397.9±
+90	381.51	10+00	395.8±
5+00	379.2±	+50	403.1±
+50	379.2±	+50	409.65
6+00	379.14		
+15	379.14		
+50	375.76		
+50	375.76		



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* DATE: 4-8-88
Chief, Bureau of Engineering: *[Signature]* DATE: 4/13/88
Chief, Bureau of Utilities: *[Signature]* DATE: 4-8-88

WHITNEY BAILEY CONSULTING ENGINEERS
1850 YORK ROAD
TIMONIUM, MD 21093
301-252-6060



DES: R.J.H.					
DRN: K.S.M.					
CHK: J.P.					
DATE: 7/21/88	BY:	NO:	REVISION	DATE	600' SCALE MAP NO. 18 BLOCK NO. 19, 20

U.S. ROUTE 40 WATER TRANSMISSION MAIN
CAPITAL PROJECT W-8052
CONTRACT NO. 44-1673
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

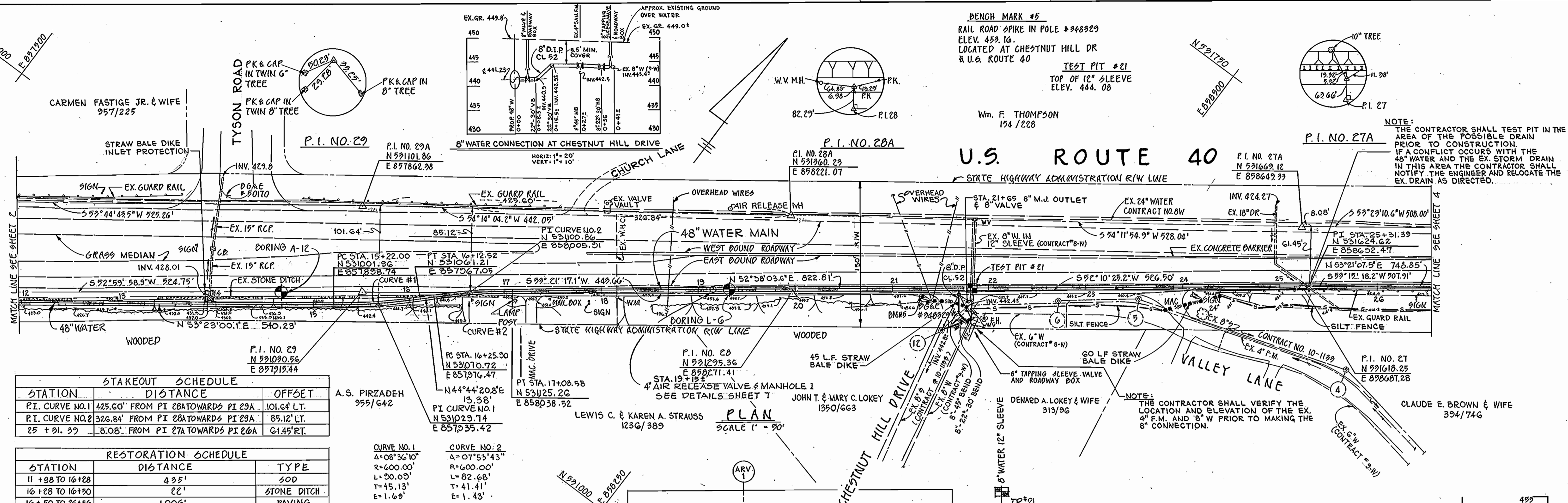
SCALE AS SHOWN
SHEET 2 OF 11

BENCH MARK #5
RAIL ROAD SPIKE IN POLE #948329
ELEV. 453.16
LOCATED AT CHESTNUT HILL DR
& U.S. ROUTE 40

Wm. F. THOMPSON
154/228

U.S. ROUTE 40

NOTE:
THE CONTRACTOR SHALL TEST PIT IN THE AREA OF THE POSSIBLE DRAIN PRIOR TO CONSTRUCTION. IF A CONFLICT OCCURS WITH THE 48" WATER AND THE EX. STORM DRAIN IN THIS AREA THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND RELOCATE THE EX. DRAIN AS DIRECTED.



STATION	DISTANCE	OFFSET
P.I. CURVE NO. 1	425.60' FROM PI 28A TOWARDS PI 29A	101.64' LT.
P.I. CURVE NO. 2	326.84' FROM PI 28A TOWARDS PI 29A	85.12' LT.
25 + 21.37	8.08' FROM PI 27A TOWARDS PI 28A	61.45' RT.

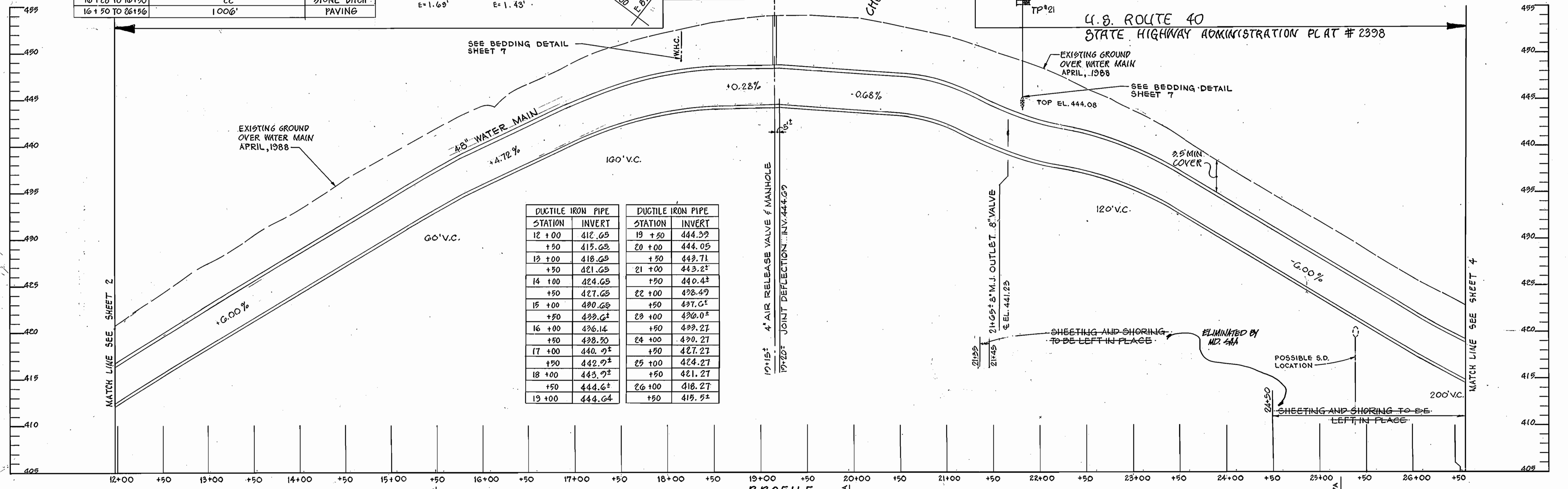
STATION	DISTANCE	TYPE
11 + 98 TO 16 + 28	435'	SOD
16 + 28 TO 16 + 50	22'	STONE DITCH
16 + 50 TO 26 + 50	1006'	PAVING

CURVE NO. 1
Δ=08°36'10"
R=600.00'
L=20.00'
T=15.13'
E=1.69'

CURVE NO. 2
Δ=07°53'43"
R=600.00'
L=82.68'
T=41.41'
E=1.43'

PLAN

SCALE 1" = 90'



DUCTILE IRON PIPE		DUCTILE IRON PIPE	
STATION	INVERT	STATION	INVERT
12 + 00	412.65	19 + 50	444.39
+50	415.65	20 + 00	444.05
13 + 00	418.65	+50	443.71
+50	421.65	21 + 00	443.22
14 + 00	424.65	+50	440.42
+50	427.65	22 + 00	438.49
15 + 00	430.65	+50	437.02
+50	433.65	23 + 00	436.02
16 + 00	436.14	+50	433.27
+50	438.50	24 + 00	430.27
17 + 00	440.72	+50	427.27
+50	442.72	25 + 00	424.27
18 + 00	443.72	+50	421.27
+50	444.62	26 + 00	418.27
19 + 00	444.64	+50	415.52

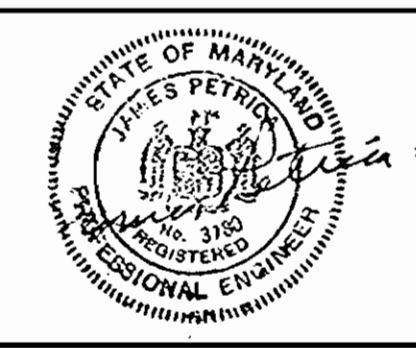
PROFILE

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* 4-8-88
 Chief, Bureau of Engineering: *[Signature]* 4-8-88
 Chief, Bureau of Utilities: *[Signature]* 4-8-88
 Chief, Utility Design Division: *[Signature]* 4/8/88

WHITNEY CONSULTING ENGINEERS
 BAILEY COX MAGNANI
 1850 YORK ROAD
 TIMONIUM, MD 21093
 301-252-6060



DES: R.J.H.	
DRN: K.S.M.	
CHK: J.P.	
DATE: 7/21/88	
BY: _____	NO. _____
REVISION: _____	DATE: _____

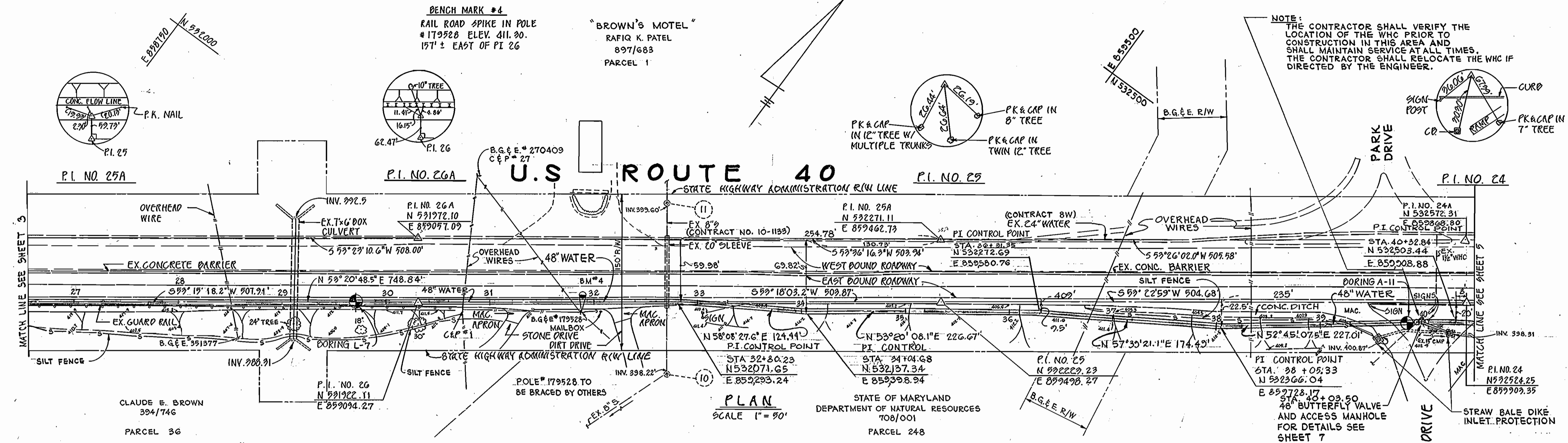
PLAN AND PROFILE

600' SCALE MAP NO. 18 BLOCK NO. 14, 20

U.S. ROUTE 40 WATER TRANSMISSION MAIN
 CAPITAL PROJECT W-8052
 CONTRACT NO. 44-1673
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND

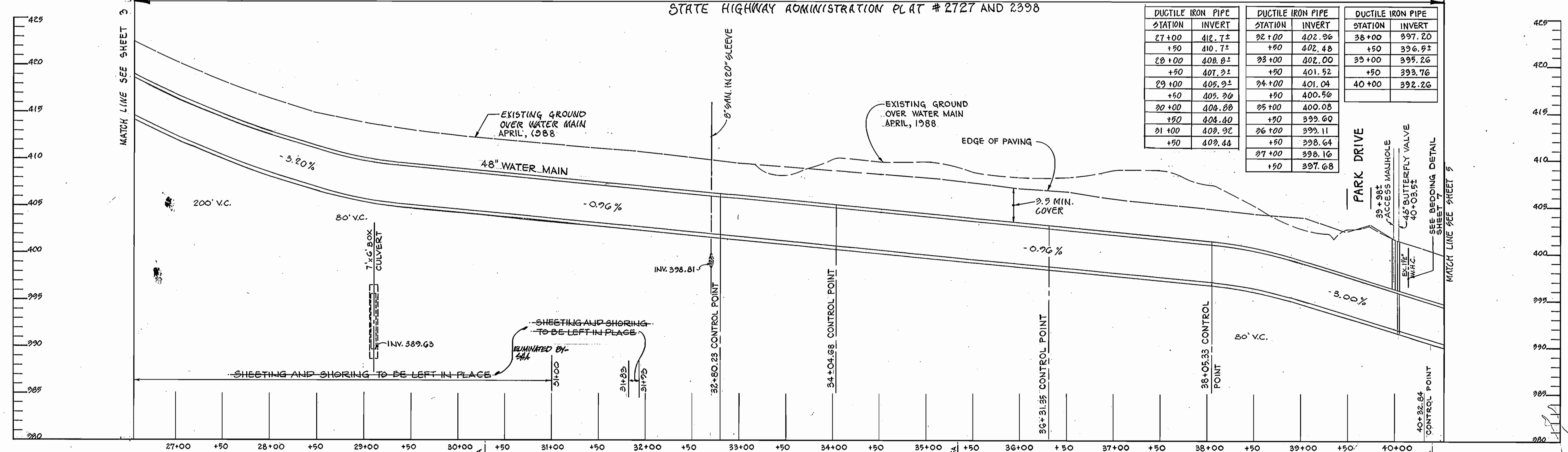
SCALE AS SHOWN
 SHEET 3 OF 11

DATE: 12/10/90

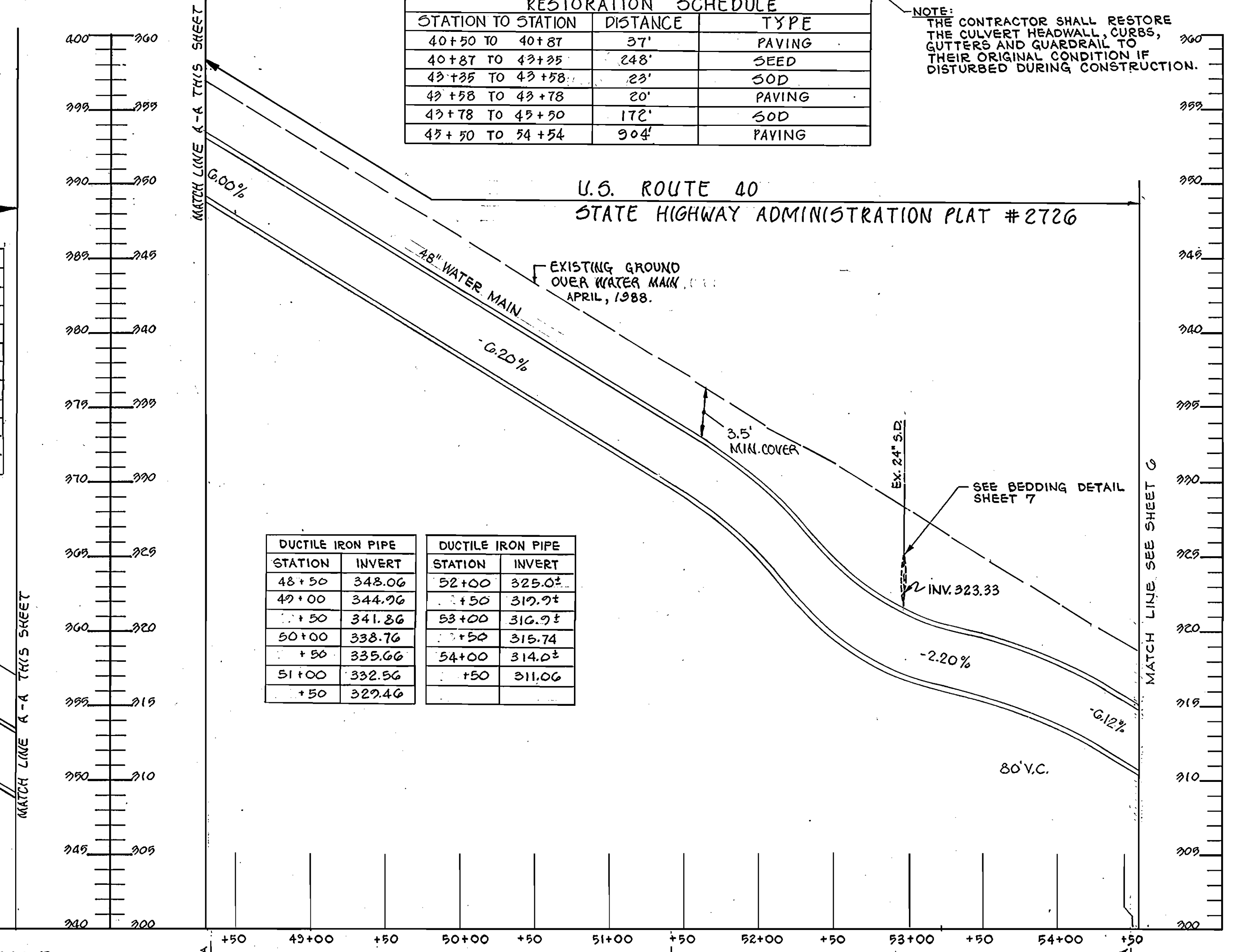
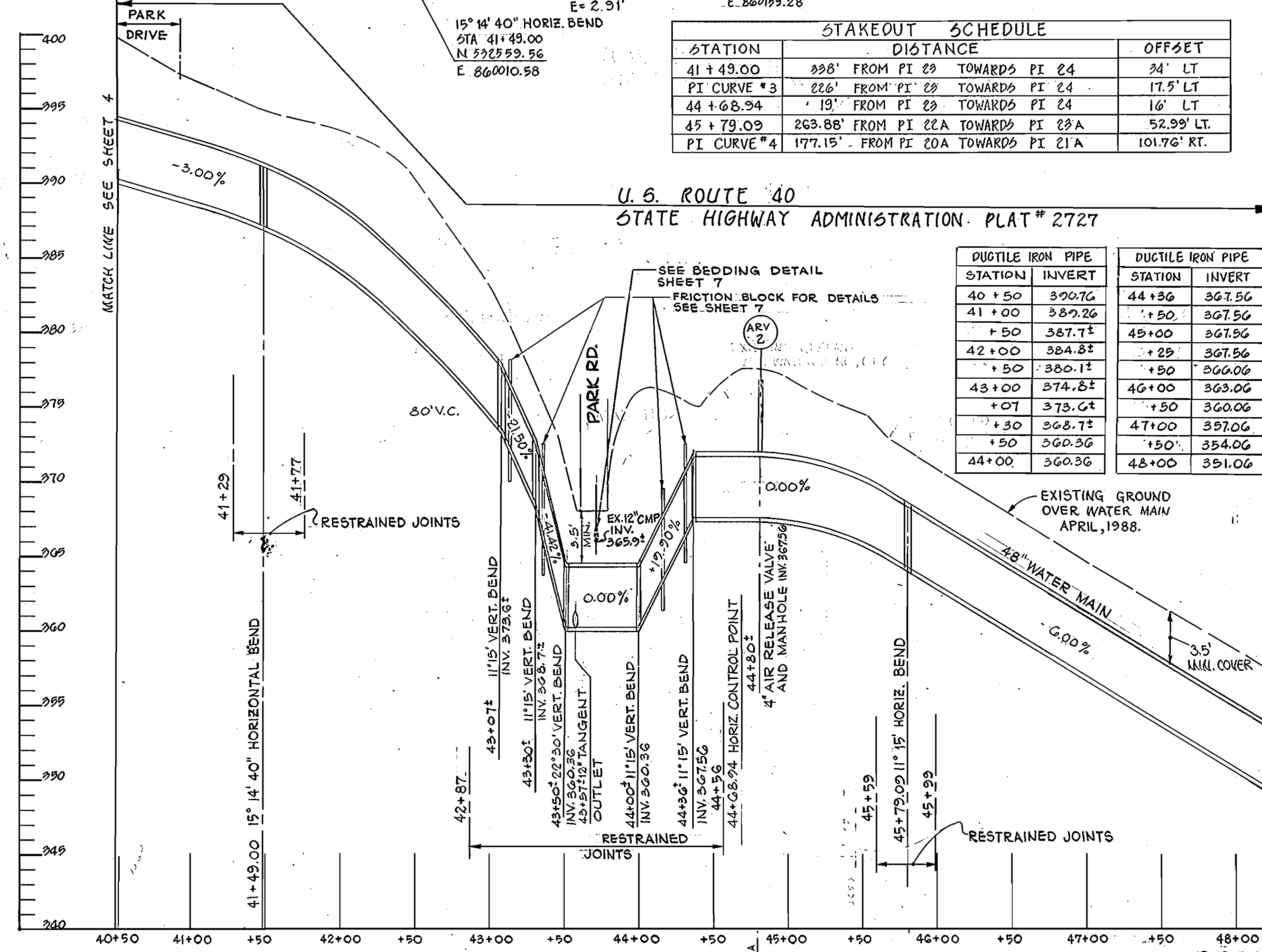
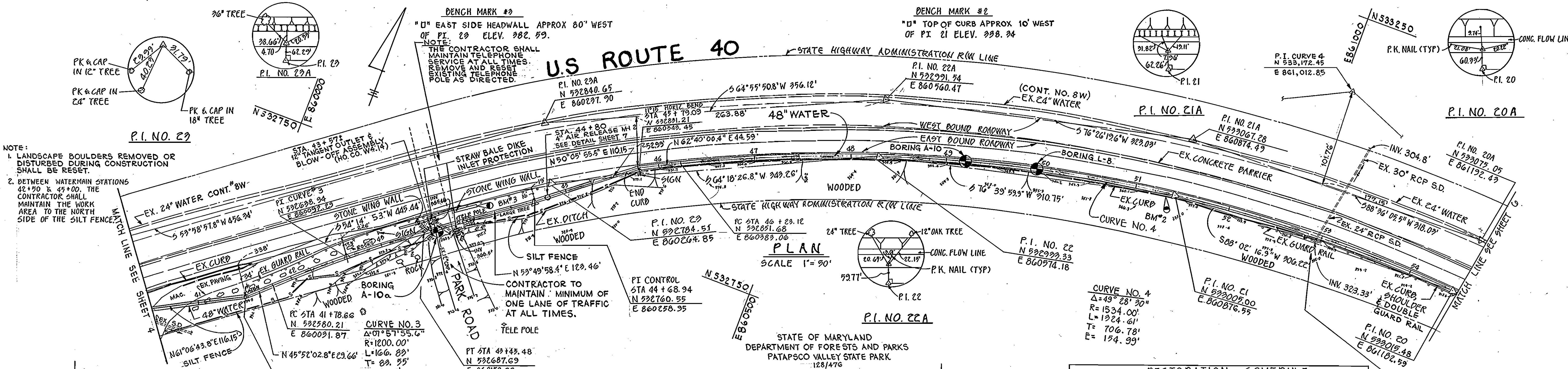


STAKEOUT SCHEDULE			
STATION	DISTANCE	TO	OFFSET
22 + 80.29	254.78' FROM PI 25A TOWARDS PI 26A	PI 26A	59.98' LT
24 + 04.68	130.73' FROM PI 25A TOWARDS PI 26A	PI 26A	69.82' LT
26 + 31.35	409' FROM PI 24 TOWARDS PI 25	PI 25	9.5' LT
28 + 05.39	235' FROM PI 24 TOWARDS PI 25	PI 25	22.5' LT
40 + 32.84	8' FROM PI 24 TOWARDS PI 25	PI 25	20' LT

RESTORATION SCHEDULE		
STATION TO STATION	DISTANCE	TYPE
26 + 56 TO 33 + 20 ±	664'	PAVING
33 + 20 TO 39 + 30 ±	610'	SOD
39 + 30 TO 39 + 42	12'	CONC. DITCH
39 + 42 TO 39 + 70	28'	PAVING
39 + 70 TO 40 + 48	78'	SEED



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DATE: 4-8-88 DATE: 4-8-88		WHITNEY BAILEY COX MAGNANI CONSULTING ENGINEERS 1850 YORK ROAD TIMONHUM, MD 21093 301-252-6060		DES: R.J.H. DRN: K.S.M. CHK: J.P. DATE: 7/21/88		PLAN AND PROFILE		U.S. ROUTE 40 WATER TRANSMISSION MAIN CAPITAL PROJECT W-8052 CONTRACT NO. 44-1673 ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND		SCALE AS SHOWN SHEET 4 OF 11
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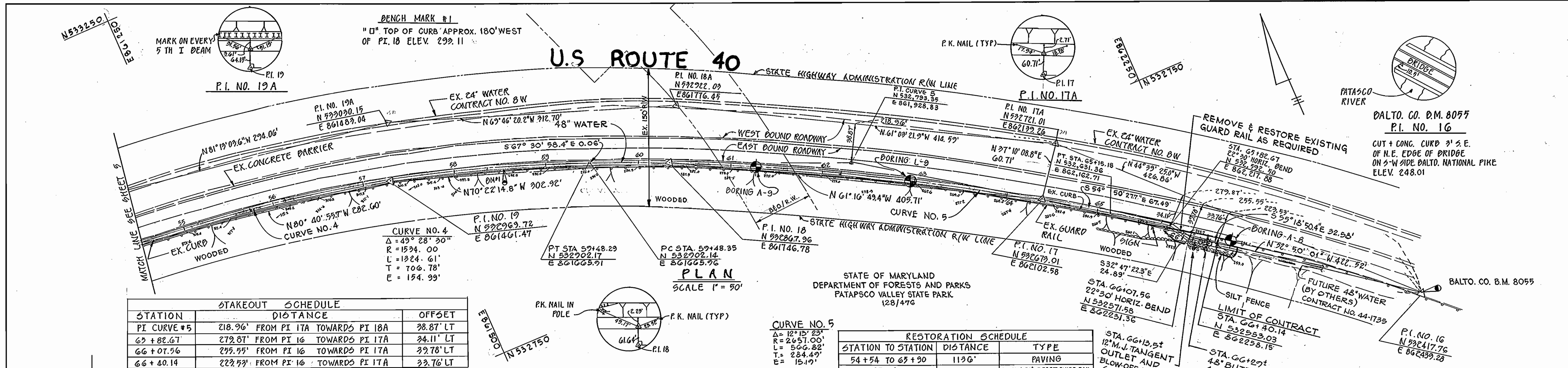
STATION	DISTANCE	OFFSET
41 + 49.00	398' FROM PI 23 TOWARDS PI 24	34' LT
PI CURVE #3	226' FROM PI 23 TOWARDS PI 24	17.5' LT
44 + 68.94	19' FROM PI 23 TOWARDS PI 24	16' LT
45 + 79.09	263.88' FROM PI 22A TOWARDS PI 23A	52.99' LT
PI CURVE #4	177.15' FROM PI 20A TOWARDS PI 21A	101.76' RT.

STATION TO STATION	DISTANCE	TYPE
40+50 TO 40+87	37'	PAVING
40+87 TO 43+35	248'	SEED
43+35 TO 43+58	23'	SOD
43+58 TO 43+78	20'	PAVING
43+78 TO 43+50	172'	SOD
43+50 TO 54+54	904'	PAVING

DUCTILE IRON PIPE		DUCTILE IRON PIPE	
STATION	INVERT	STATION	INVERT
40+50	390.76	44+50	367.56
41+00	389.26	+50	367.56
+50	387.72	45+00	367.56
42+00	384.82	+25	367.56
+50	380.12	+50	366.06
43+00	374.82	46+00	363.06
+07	373.62	+50	360.06
+30	368.72	47+00	357.06
+50	360.36	+50	354.06
44+00	360.36	48+00	351.06

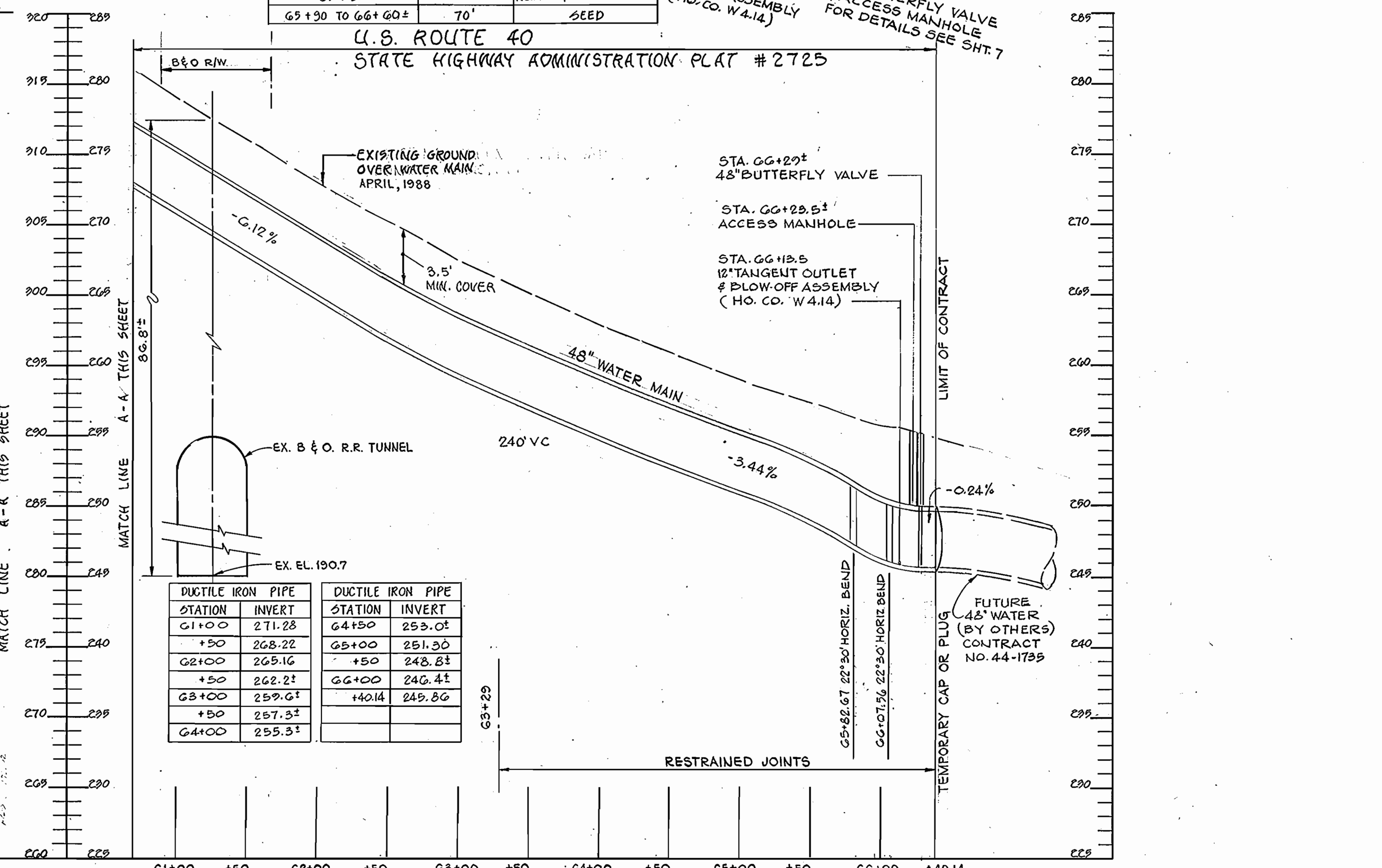
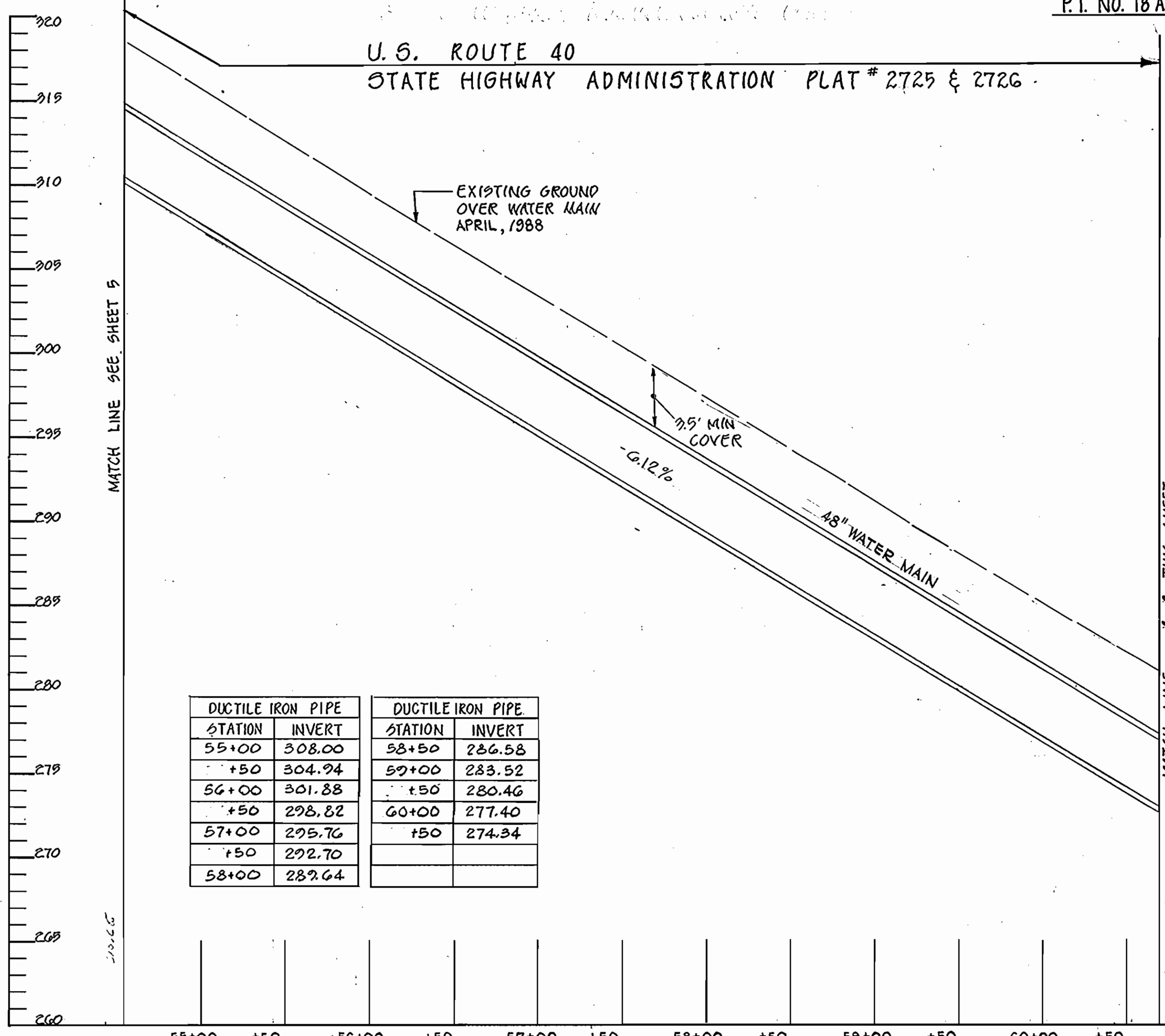
DUCTILE IRON PIPE		DUCTILE IRON PIPE	
STATION	INVERT	STATION	INVERT
48+50	343.06	52+00	325.02
49+00	344.96	+50	319.92
+50	341.86	53+00	316.92
50+00	338.76	+50	315.74
+50	335.66	54+00	314.02
51+00	332.56	+50	311.06
+50	329.46		

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director: <i>Laura M. ...</i> 4/8/88 Chief, Bureau of Engineering: <i>William ...</i> 4/8/88 Chief, Bureau of Utilities: <i>James ...</i> 4/8/88 Chief, Utility Design Division: <i>...</i> 4/8/88		WHITNEY CONSULTING ENGINEERS BAILEY COX MAGNANI 1850 YORK ROAD TIMONUM, MD 21093 301-252-6060		DES: R.J.H. DRN: K.S.M. CHK: J.P. DATE: 7/21/88		U.S. ROUTE 40 WATER TRANSMISSION MAIN CAPITAL PROJECT W-8052 CONTRACT NO. 44-1673 ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND		SCALE AS SHOWN SHEET 5 OF 11	
--	--	---	--	--	--	---	--	---------------------------------	--



STAKEOUT SCHEDULE

STATION	DISTANCE	OFFSET
PI CURVE #5	218.96' FROM PI 17A TOWARDS PI 18A	38.87' LT
63+82.67	279.87' FROM PI 16 TOWARDS PI 17A	34.11' LT
66+07.56	299.99' FROM PI 16 TOWARDS PI 17A	33.78' LT
66+40.14	223.99' FROM PI 16 TOWARDS PI 17A	33.76' LT



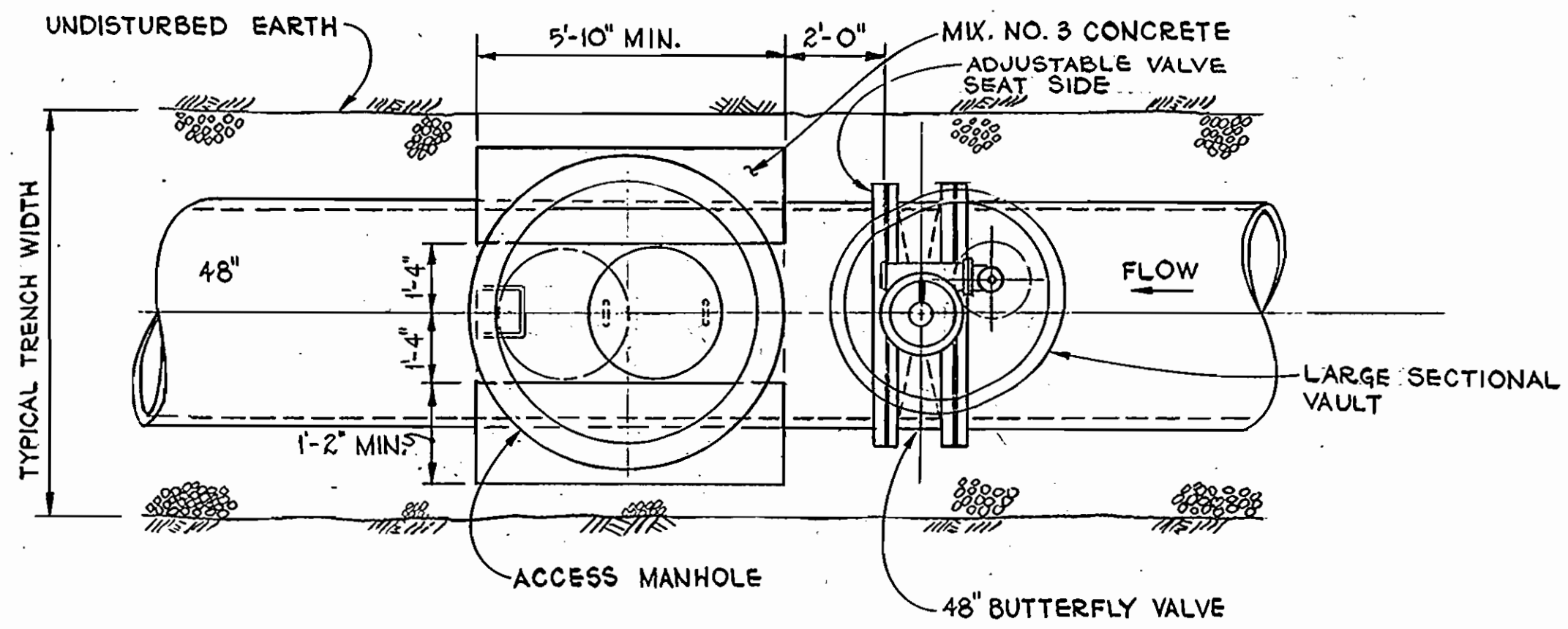
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

WHITNEY BAILEY COX MAGNANI
CONSULTING ENGINEERS
1850 YORK ROAD
TIMONIUM, MD 21093
301-252-6060

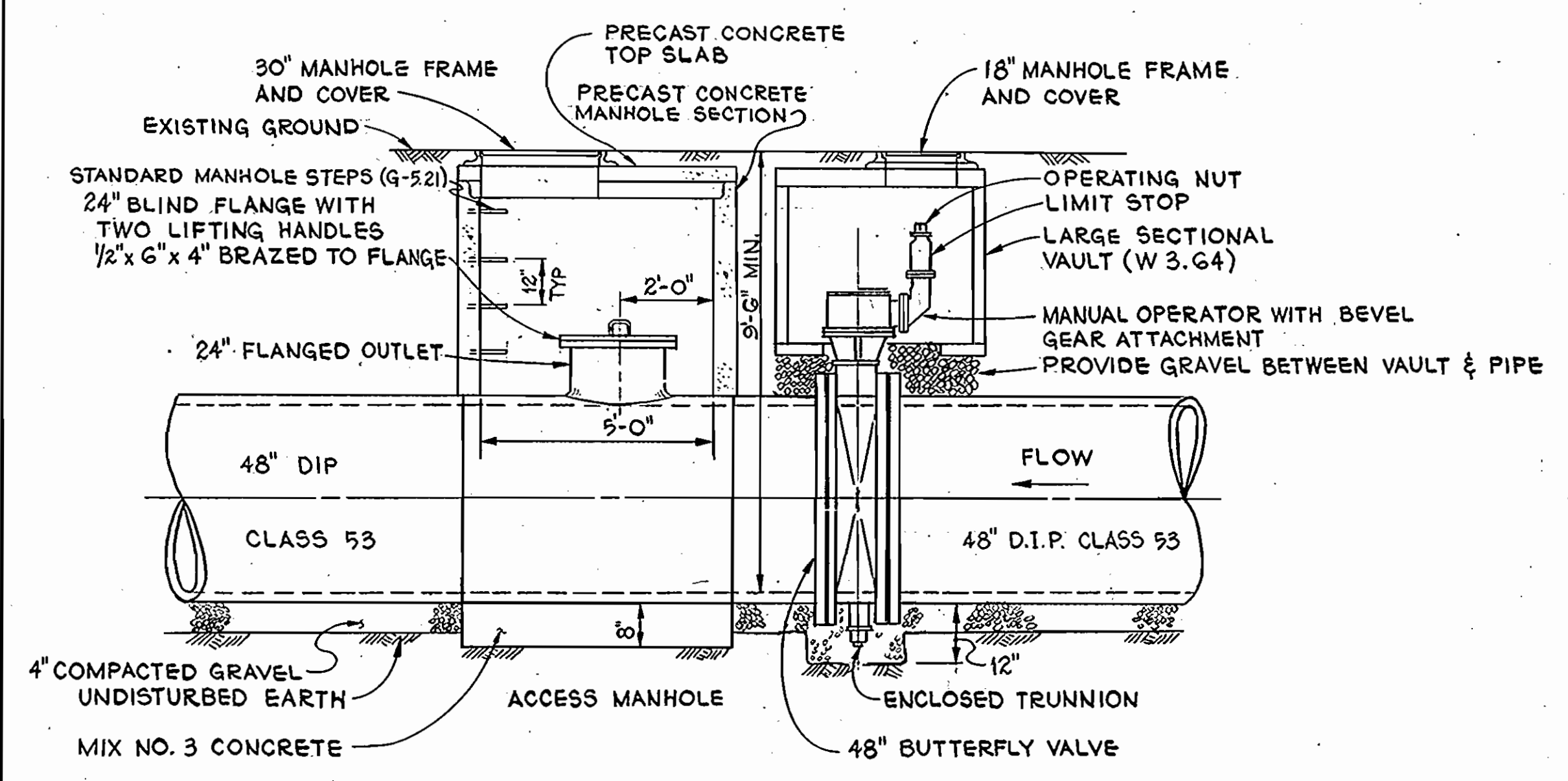
DES: R.J.H.
DRN: K.S.M.
CHK: J.P.
DATE: 7/21/88

U.S. ROUTE 40 WATER TRANSMISSION MAIN
CAPITAL PROJECT W-8052
CONTRACT NO. 44-1673
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 6 OF 11

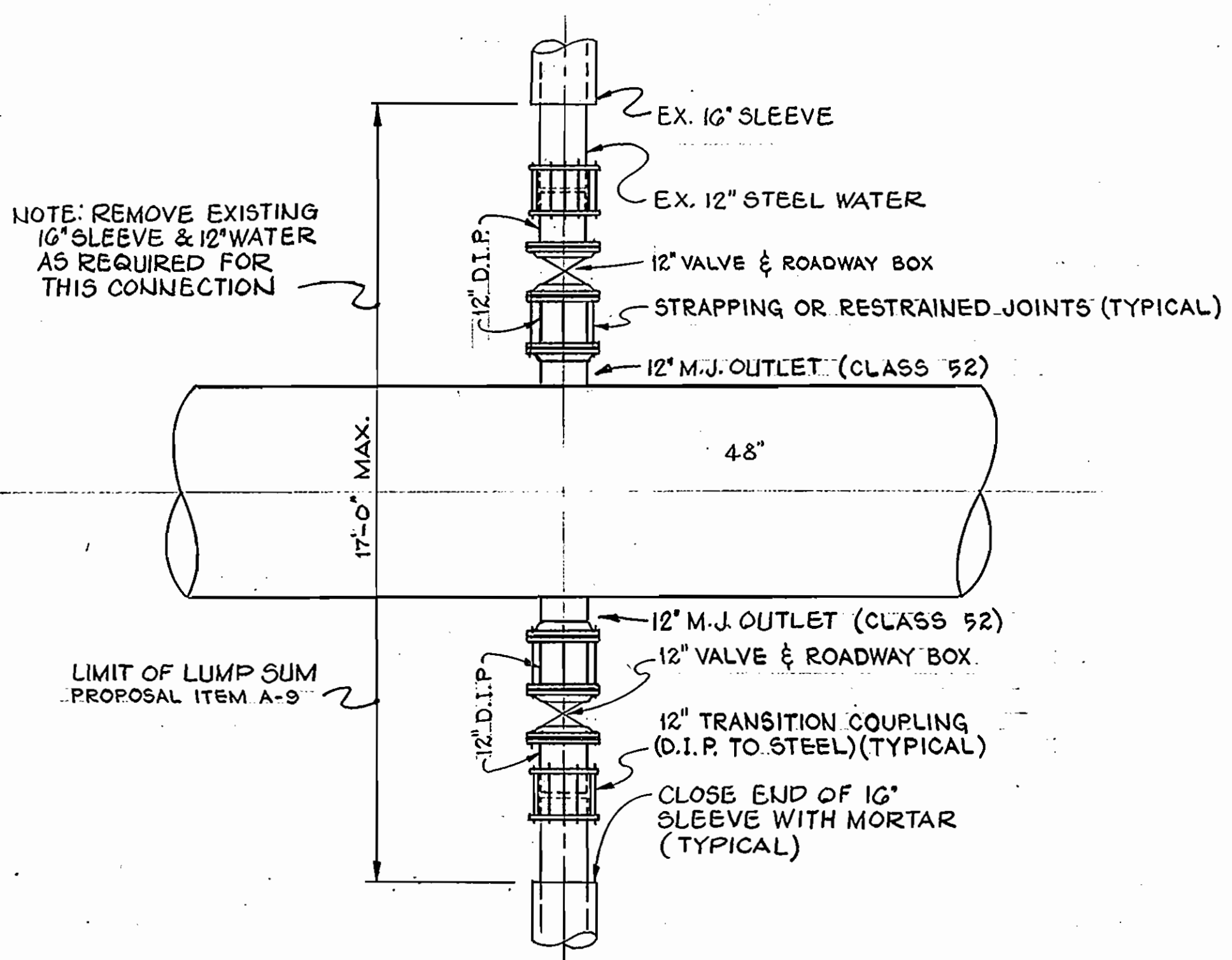


PLAN



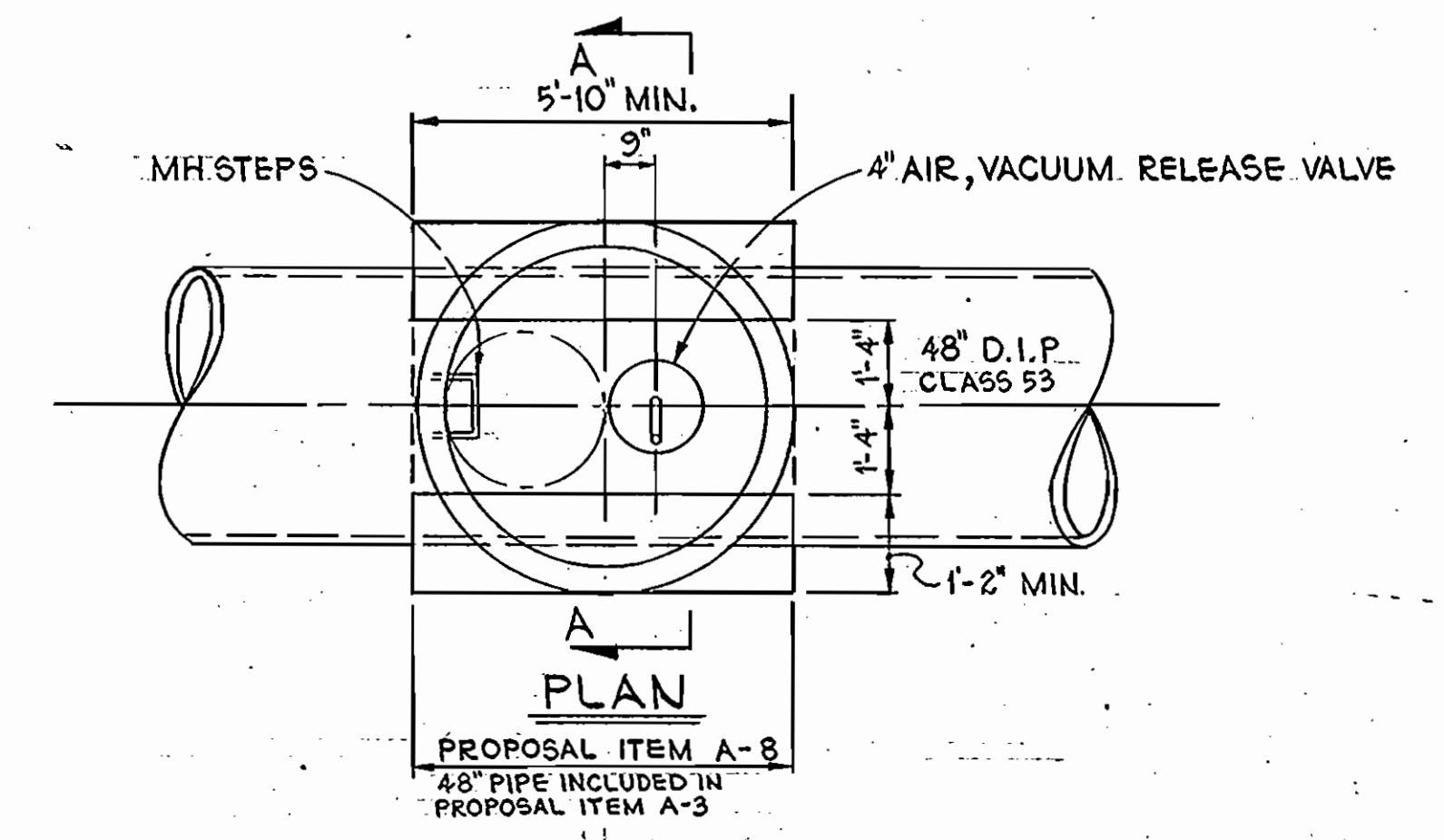
ELEVATION

48" PIPE COSTS TO BE INCLUDED IN PROPOSAL ITEM A-3.
48" BUTTERFLY VALVE AND ACCESS MANHOLE
 SCALE: 3/8"=1'-0"
 STATION 5+70.5 SEE SHEET 2
 STATION 40+03.9 SEE SHEET 4
 STATION 66+29± SEE SHEET 6



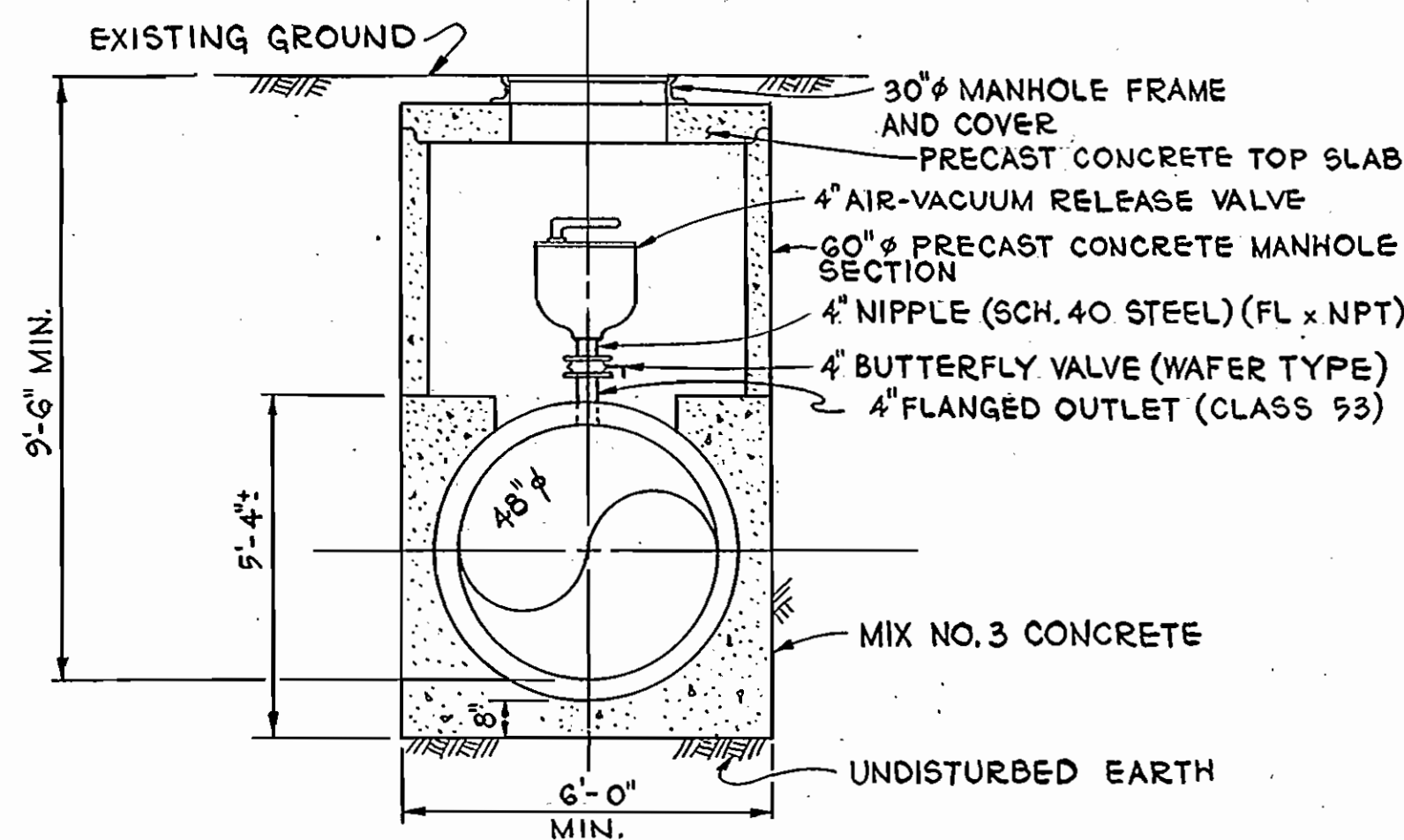
PLAN

12" CONNECTION AT THE OAKS ROAD
 SCALE: 3/8"=1'-0"



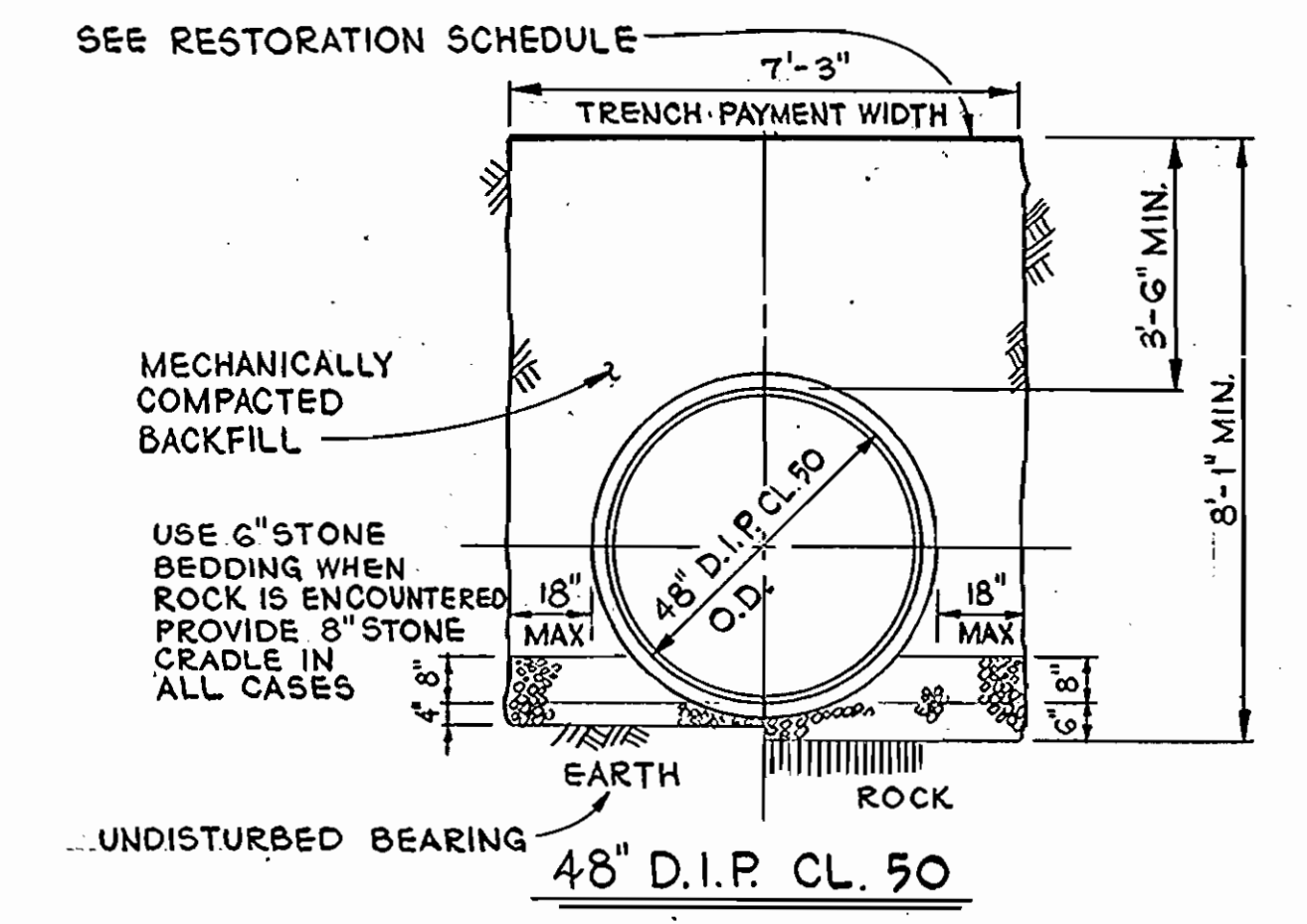
PLAN

PROPOSAL ITEM A-8
 48" PIPE INCLUDED IN PROPOSAL ITEM A-3

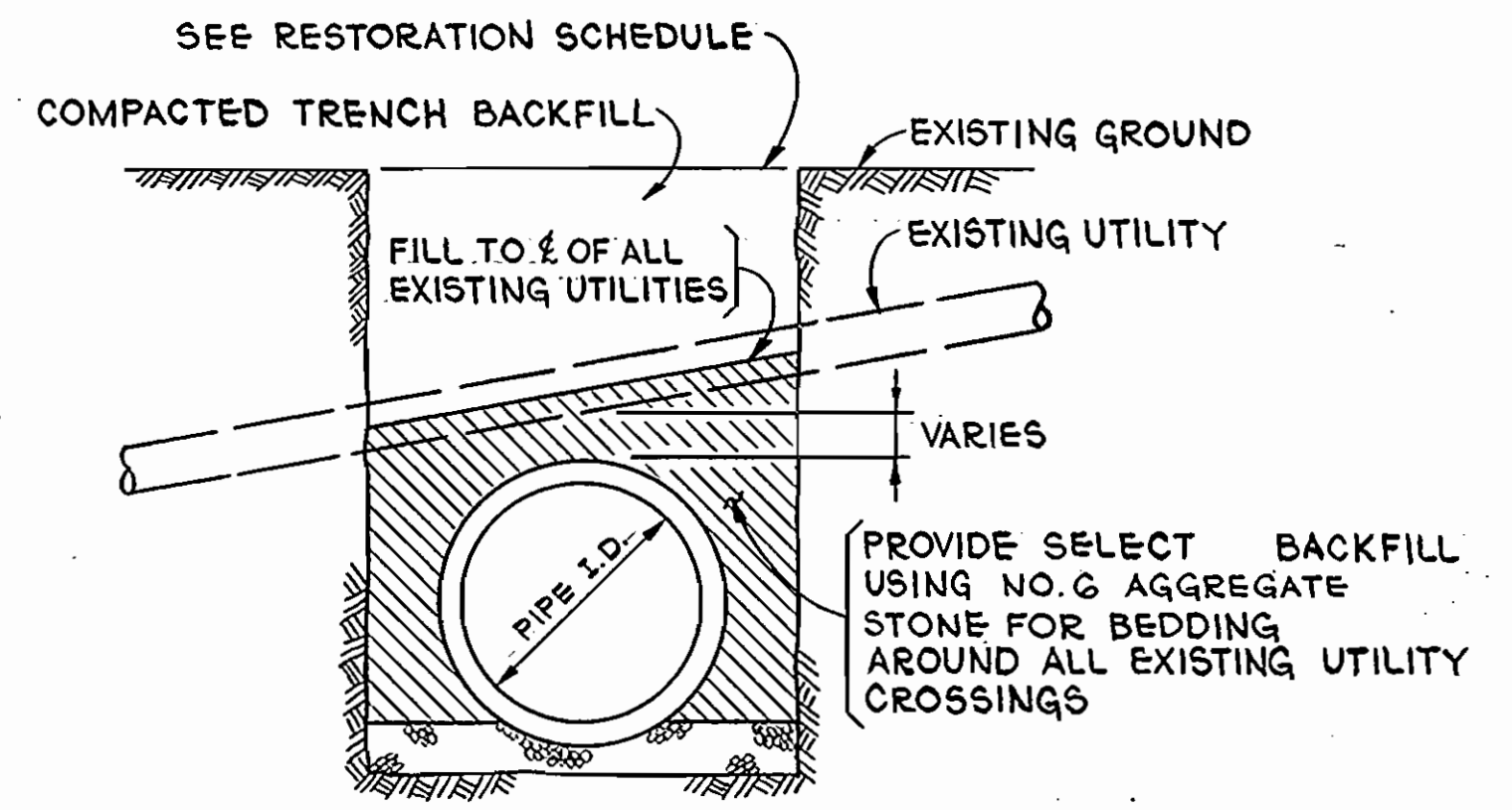


SECTION A-A

AIR RELEASE VALVE & MANHOLE
 SCALE: 3/8"=1'-0"
 STATION 19+15 SEE SHEET 3
 STATION 44+80 SEE SHEET 5

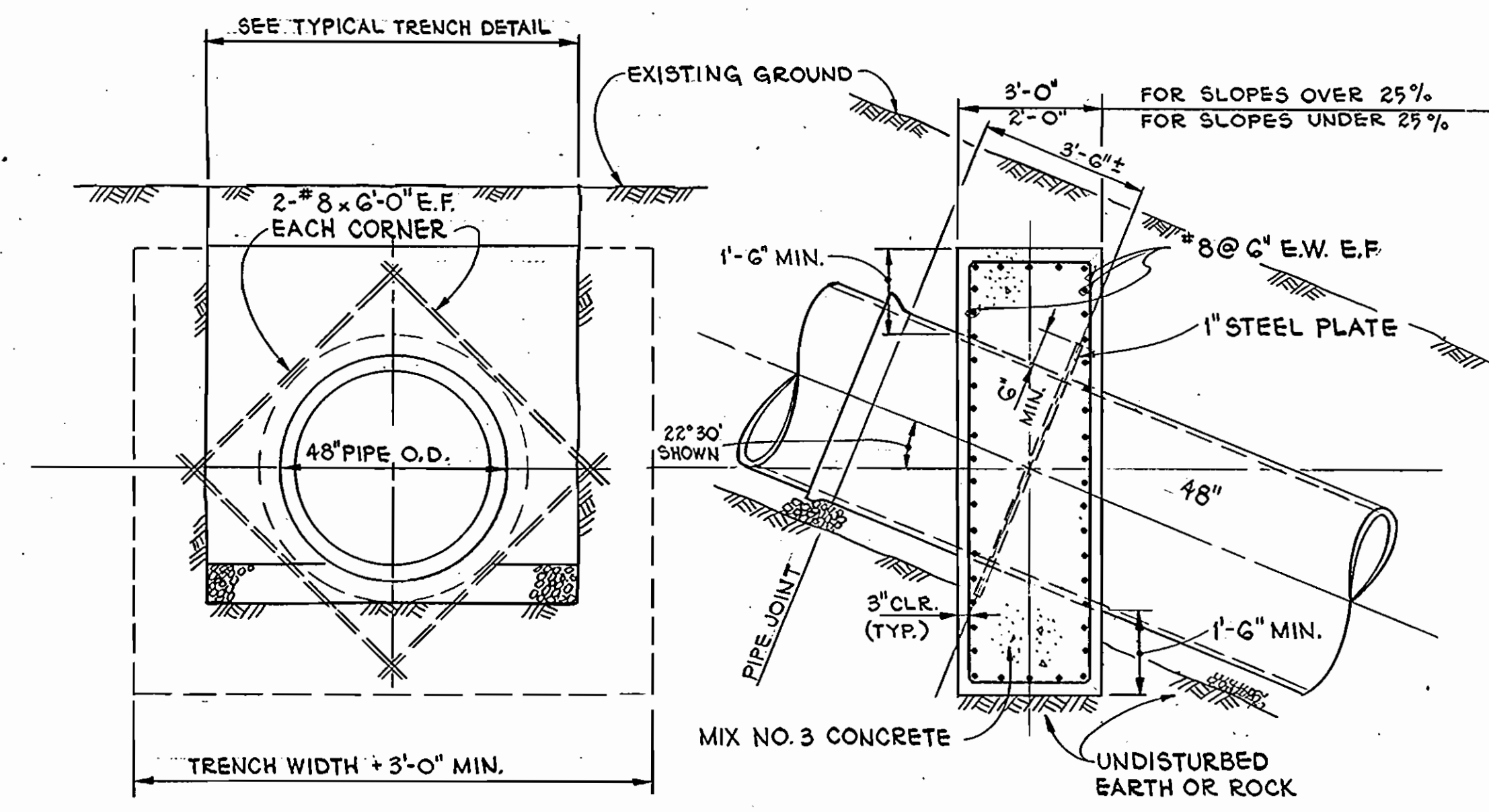


TYPICAL TRENCH DETAIL
 SCALE: 3/8"=1'-0"



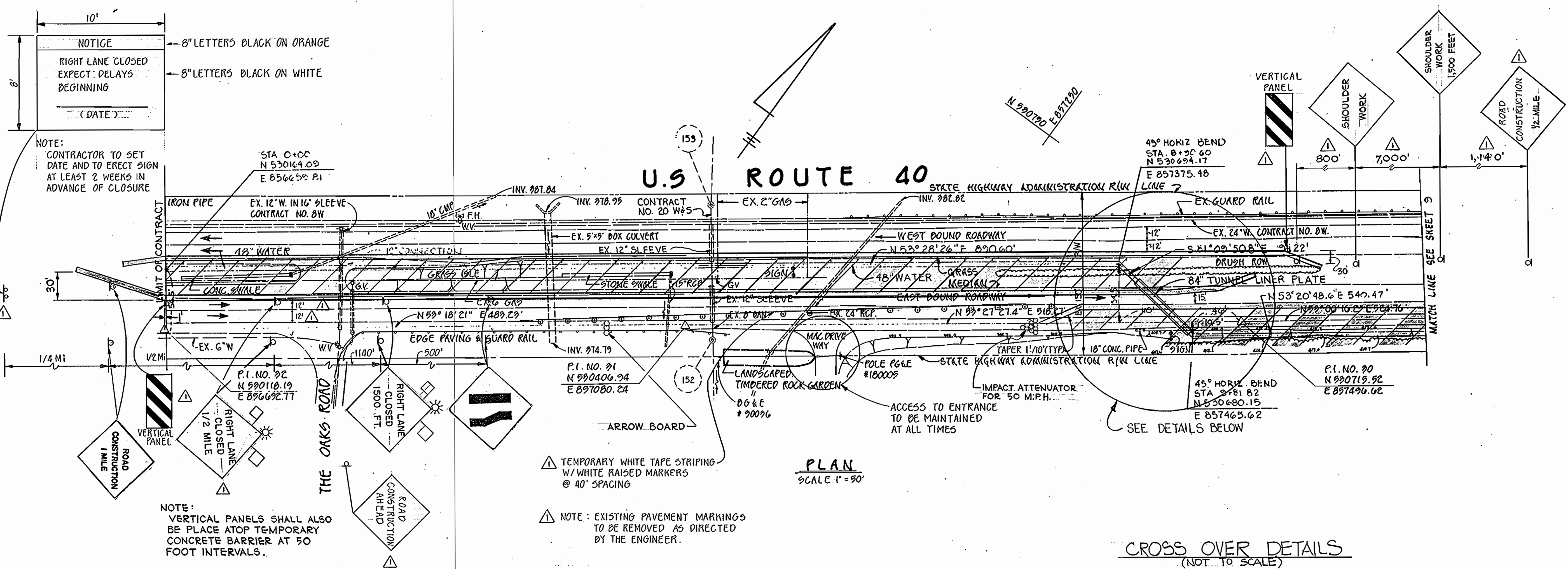
BACKFILL TO EXTEND ALONG NEW PIPE 2 FEET BOTH SIDES OF EXISTING UTILITY TO BE REBEDDED. COSTS FOR SPECIAL BACKFILL TO BE INCLUDED IN PROPOSAL ITEM A-3.

BEDDING FOR EXISTING UTILITY CROSSING
 NOT TO SCALE



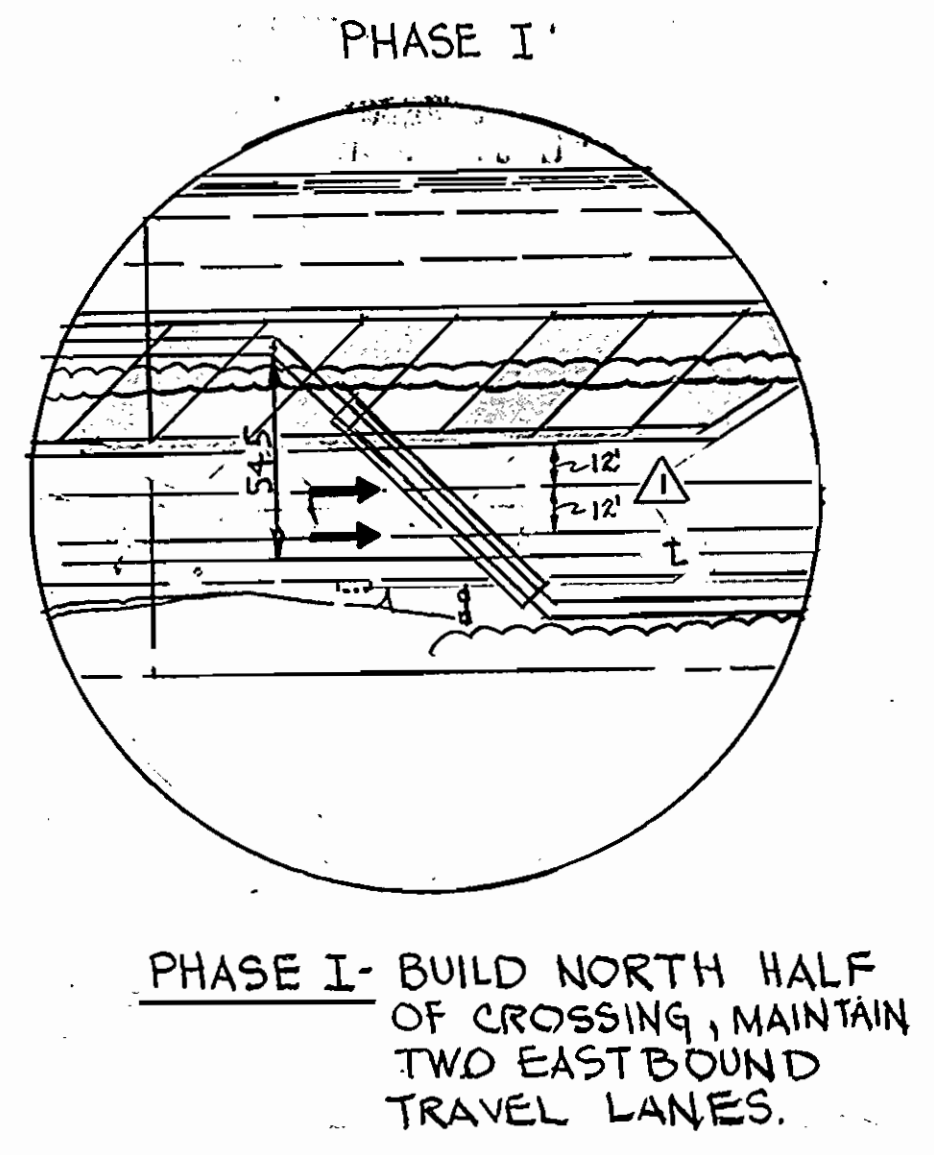
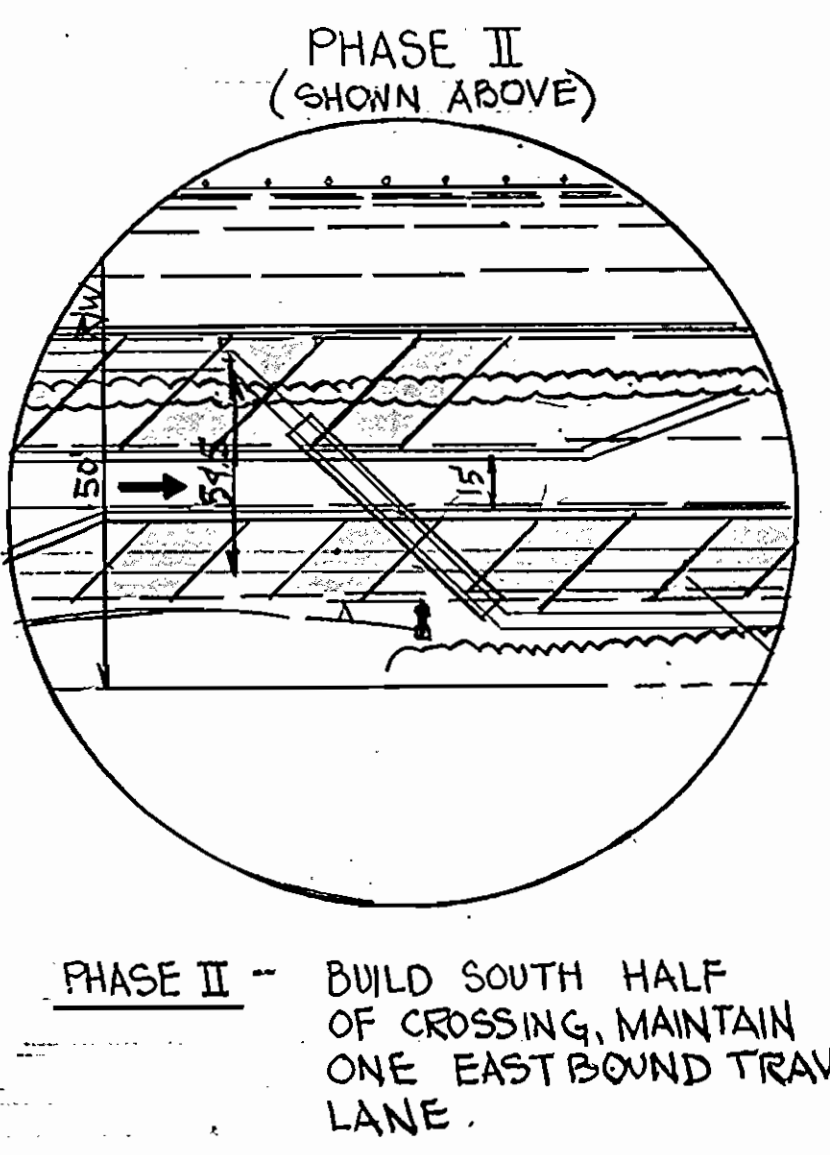
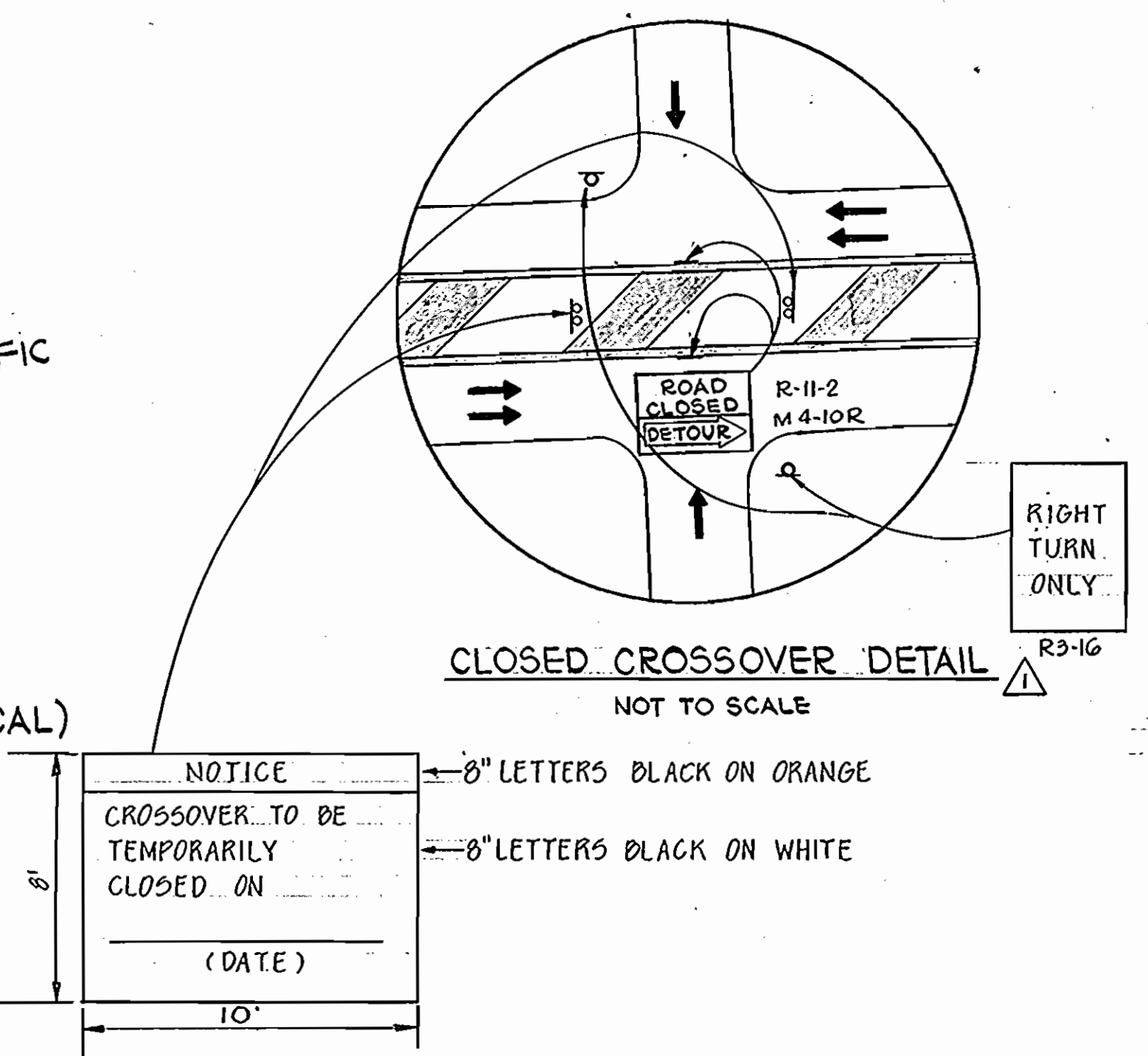
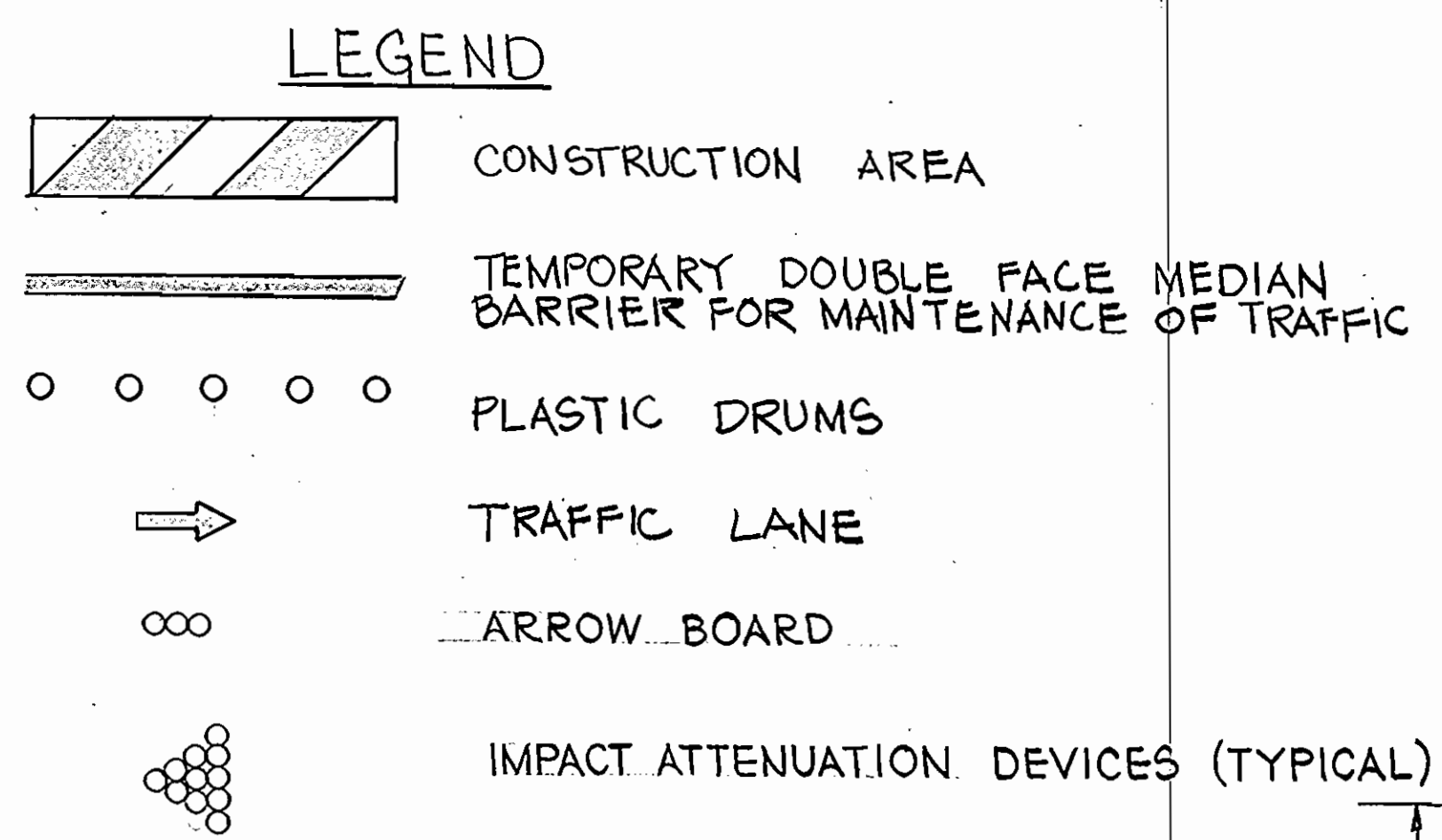
FRICTION BLOCK DETAIL

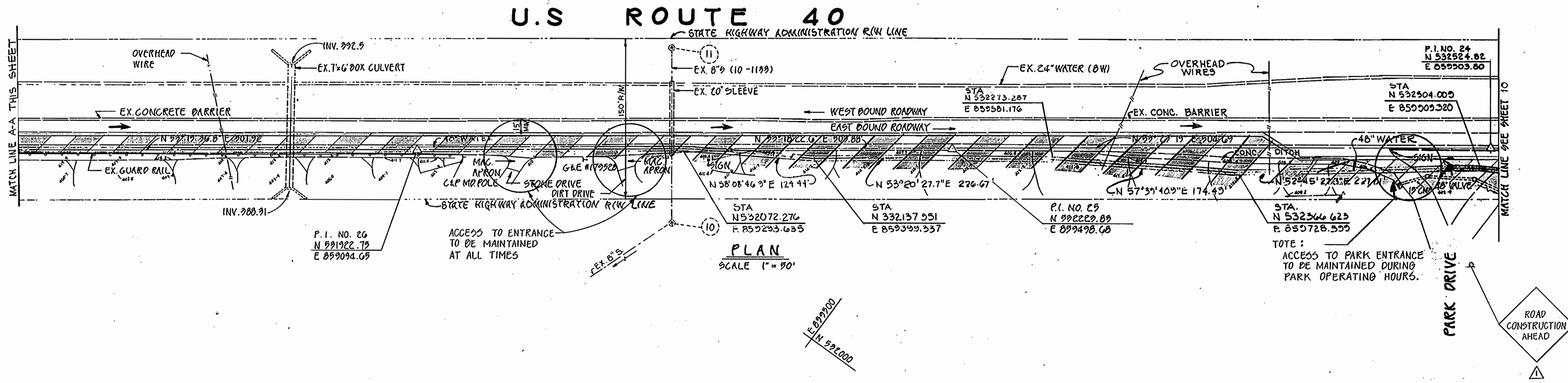
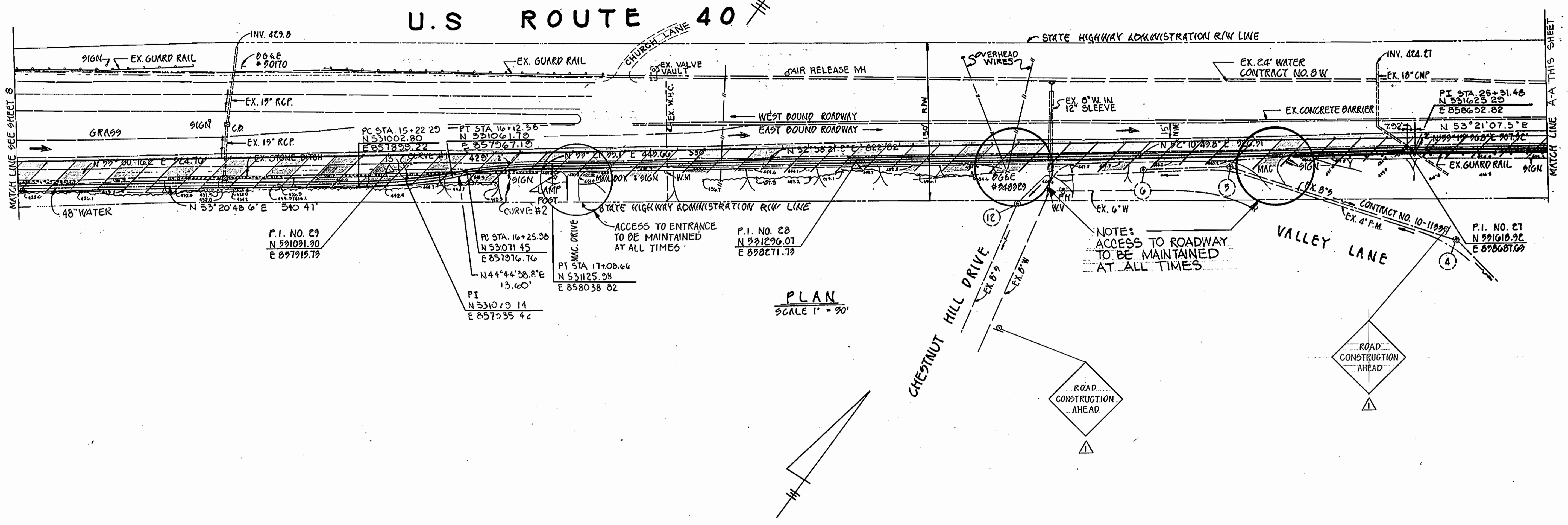
SCALE: 3/8"=1'-0"
 FOR LOCATIONS OF FRICTION BLOCKS SEE SHEETS 2 AND 5.
 NOTE: THE COST OF FRICTION BLOCKS IS TO BE INCLUDED IN THE PRICE BID PER LINEAL FEET OF PIPE.



PLAN
SCALE 1" = 90'

CROSS OVER DETAILS
(NOT TO SCALE)

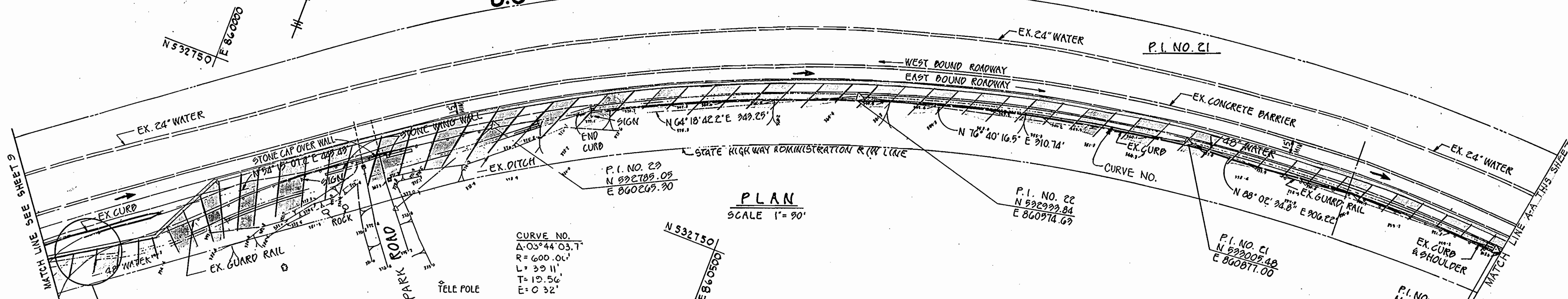




DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works Chief, Bureau of Utilities	Whitney Bailey Consulting Engineers 1850 YORK ROAD TIMONIUM, MD 21093 301-252-6060		DES: M. W. D.			U.S. ROUTE 40 WATER TRANSMISSION MAIN CAPITAL PROJECT W-8052 CONTRACT NO. 44-1673 ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN
			DRN: N. S.				TRAFFIC CONTROL PLAN
DATE: 4-8-88 Chief, Bureau of Utilities	DATE: 4-8-88 Chief, Bureau of Engineering	DATE: 7/21/88 Professional Engineer	CHK: M. W. D. DATE: 7/21/88	HH BY NO.	REVISION GENERAL REVISION PER DIRECTIVE ISSUED AT PRE-BID MEETING ON 6/2/88	DATE: 6/13/88	600' SCALE MAP NO. _____ BLOCK NO. _____

U.S. ROUTE 40

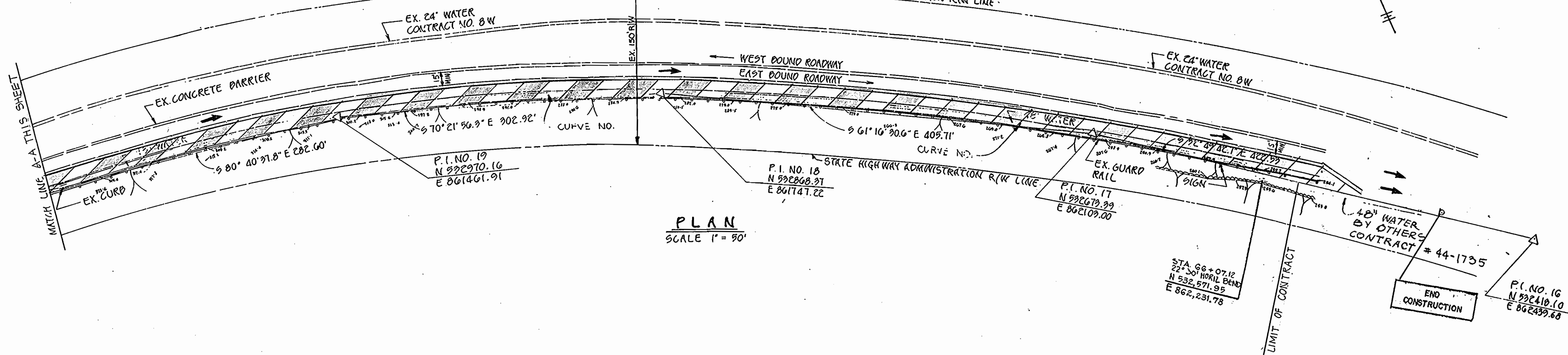
STATE HIGHWAY ADMINISTRATION R/W LINE



NOTE:
EXIT FROM PARK TO
BE MAINTAINED
DURING PARK
OPERATING HOURS

U.S. ROUTE 40

STATE HIGHWAY ADMINISTRATION R/W LINE



STA 66+07.12
22' 30" HORIL BEND
N 93.571.95
E 862,231.78

END
CONSTRUCTION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. ...
DIRECTOR OF PUBLIC WORKS
DATE 4-8-88
CHIEF, BUREAU OF UTILITIES

Richard B. ...
CHIEF, BUREAU OF ENGINEERING
DATE 4/8/88
CHIEF, UTILITY DESIGN DIVISION



WHITNEY
BAILEY
COX
MAGNANI
CONSULTING
ENGINEERS
1850 YORK ROAD
TIMONIUM, MD 21093
301-252-6060



DES: M. W. D.			
DRN: N. Z.			
CHK: M. W. D.			
DATE: 7/21/88	BY	NO.	REVISION

TRAFFIC CONTROL PLAN

DATE 600' SCALE MAP NO. BLOCK NO.

U.S. ROUTE 40 WATER TRANSMISSION MAIN
CAPITAL PROJECT W-8052
CONTRACT NO. 44-1673
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE
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10 OF 11

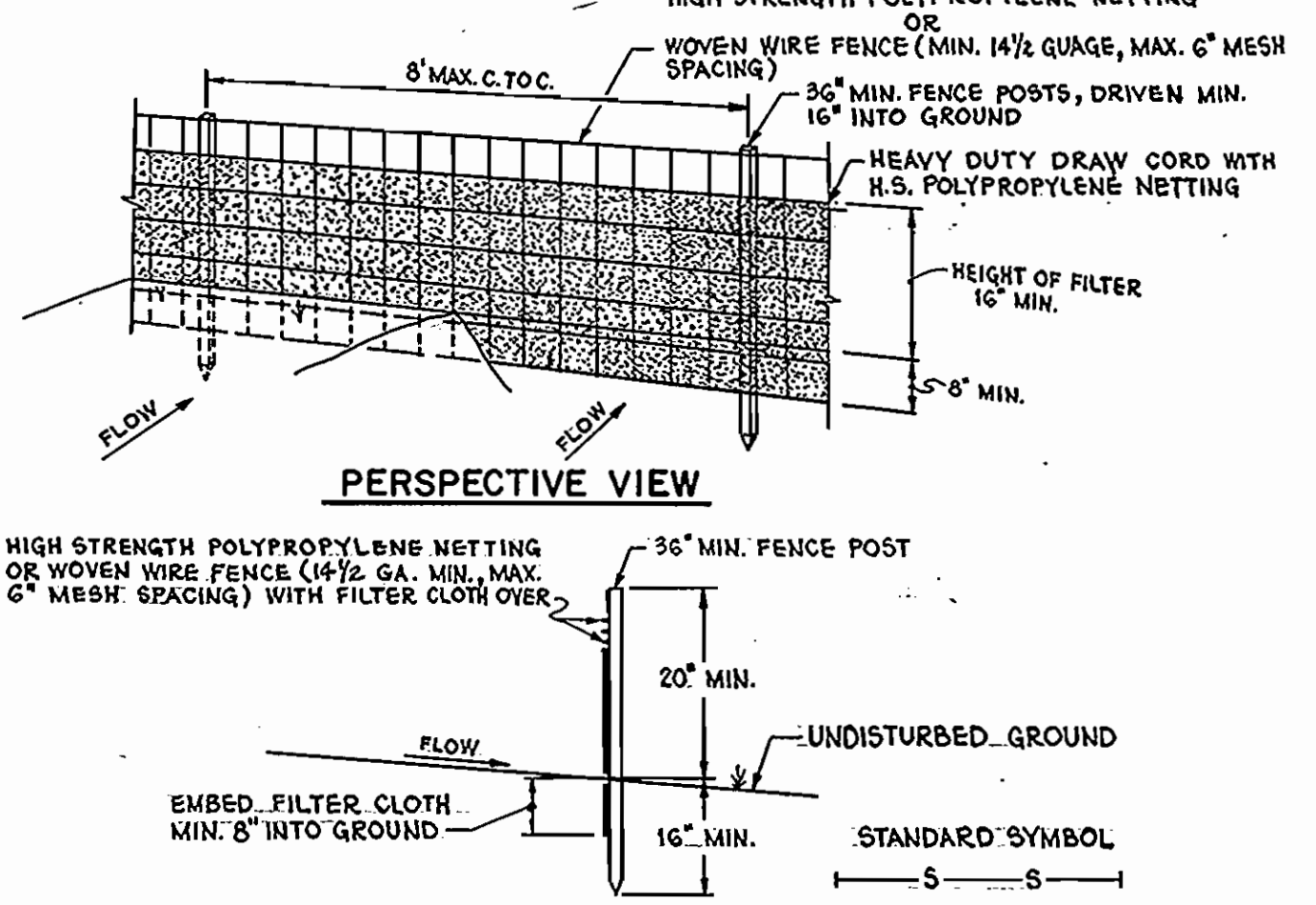
SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN THE AREA OF THE PROPOSED WORK PRIOR TO ANY CONSTRUCTION.
2. 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 GRADED AREAS ON THE PROJECT SITE.

SEDIMENT CONTROL GENERAL NOTES

1. NOTIFICATION OF WRA ENFORCEMENT DIVISION (301) 269-3951, AT LEAST 5 DAYS PRIOR TO THE START OF WORK.
2. PRIOR TO THE START OF WORK, THE CONTRACTOR IS TO OBTAIN WRA APPROVAL OF ANY PROPOSED PLAN CHANGES AND SEQUENCE OF CONSTRUCTION, SPECIFICALLY RELATING TO INSTALLATION, INSPECTION, MAINTENANCE AND REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES.
3. SEDIMENT CONTROL MEASURES ARE NOT TO BE REMOVED UNTIL THE AREAS SERVED HAVE ESTABLISHED VEGETATIVE COVER, WITH THE PERMISSION OF THE WRA ENFORCEMENT INSPECTOR.
4. WHEN PUMPING SEDIMENT-LADEN WATER, THE DISCHARGE MUST BE DIRECTED TO APPROVED SEDIMENT TRAPPING MEASURE PRIOR TO RELEASE FROM THE SITE.
5. ALL TEMPORARY STOCKPILES ARE TO BE LOCATED WITHIN AREAS PROTECTED BY SEDIMENT CONTROL MEASURES, AND ARE TO BE TEMPORARILY STABILIZED.
6. ALL SEDIMENT CONTROL DIKES, SWALES, BASINS AND FLOW LINES TO BASINS WILL BE TEMPORARILY SEEDED IMMEDIATELY UPON INSTALLATION TO REDUCE THE CONTRIBUTION TO SEDIMENT LOADING.
7. DISPOSAL OF EXCESS EARTH MATERIALS ON STATE OR FEDERAL PROPERTY REQUIRES WRA APPROVAL, OTHERWISE MATERIALS ARE TO BE DISPOSED OF AT A LOCATION APPROVED BY THE LOCAL AUTHORITY.
8. TEMPORARY SOIL EROSION CONTROL AND SEDIMENT CONTROL MEASURES ARE TO BE PROVIDED AS PER THE APPROVED PLAN PRIOR TO GRADING OPERATIONS. LOCATION ADJUSTMENTS ARE TO BE MADE IN THE FIELD AS NECESSARY. THE MINIMUM AREA PRACTICAL SHALL BE DISTURBED FOR THE MINIMUM POSSIBLE TIME.
9. IF GRADING IS COMPLETED OUT OF A SEEDING SEASON, GRADED AREAS ARE TO BE TEMPORARILY STABILIZED BY MULCH AND MULCH ANCHORING. MULCH MATERIAL SHALL BE UNWEATHERED, UNCHOPPED SMALL GRAIN STRAW SPREAD AT THE RATE OF 1 1/2 TO 2 TONS PER ACRES MULCH ANCHORING TO BE ACCOMPLISHED BY AN APPROVED METHOD, USE OF A MULCH ANCHORING TOOL IS RECOMMENDED WHERE POSSIBLE.
10. PERMANENT SEEDING SPECIFICATIONS:
 - (a) SEED BED PREPARATION
 - (b) LIME, FERTILIZER AND SEED
 - (c) MULCH AND ANCHORING METHOD
 - (d) TIME FRAME TO ACCOMPLISH
11. TEMPORARY SEEDING SPECIFICATIONS:
 - (a) SURFACE PREPARATION
 - (b) LIME, FERTILIZER AND SEED
 - (c) MULCH AND ANCHORING METHOD
 - (d) TIME FRAME TO ACCOMPLISH
12. PERMANENT SODDING SPECIFICATIONS:
 - (a) SOD TYPE
 - (b) SURFACE PREPARATION
 - (c) LIME AND FERTILIZER AS NECESSARY
 - (d) WATERING AND ROLLING
 - (e) TIME FRAME TO ACCOMPLISH
13. IMPLEMENTATION OF THE SEDIMENT CONTROL PLAN SHALL BE IN ACCORDANCE WITH THE "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", OF THE DEPARTMENT OF NATURAL RESOURCES.
14. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF THE APPROVAL PLAN, AND ALL OTHER MEASURES NECESSARY TO CONTROL, FILTER, OR PREVENT SEDIMENT FROM LEAVING THE SITE.
15. SEDIMENT CONTROL MEASURES FOR THE CONTRACTOR'S OFFICES, STAGING AND STOCKPILE AREAS, IF LOCATED OUTSIDE OF THE DESIGNED SEDIMENT CONTROL MEASURES MUST BE SUBMITTED TO WRA FOR APPROVAL.
16. ROADBEDS ARE TO BE STABILIZED BY INSTALLATION OF AGGREGATE SUB-BASE WITHIN 5 DAYS OF REACHING GRADE, OR WATER BREAKS SHALL BE CUT INTO THE ROADBED TO DIRECT DRAINAGE ONTO STABLE AREAS OR INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
17. SEDIMENT CONTROL FOR UTILITY CONSTRUCTION IN AREAS OUTSIDE OF DESIGNED CONTROLS:
 - (a) EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH.
 - (b) IMMEDIATELY FOLLOWING PIPE INSTALLATION THE TRENCH SHALL BE BACKFILLED, COMPACTED AND STABILIZED AT THE END OF EACH WORKING DAY.
 - (c) TEMPORARY SILT FENCE OF STRAW BALE DIKES SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE WORKING DAY.

SILT FENCE

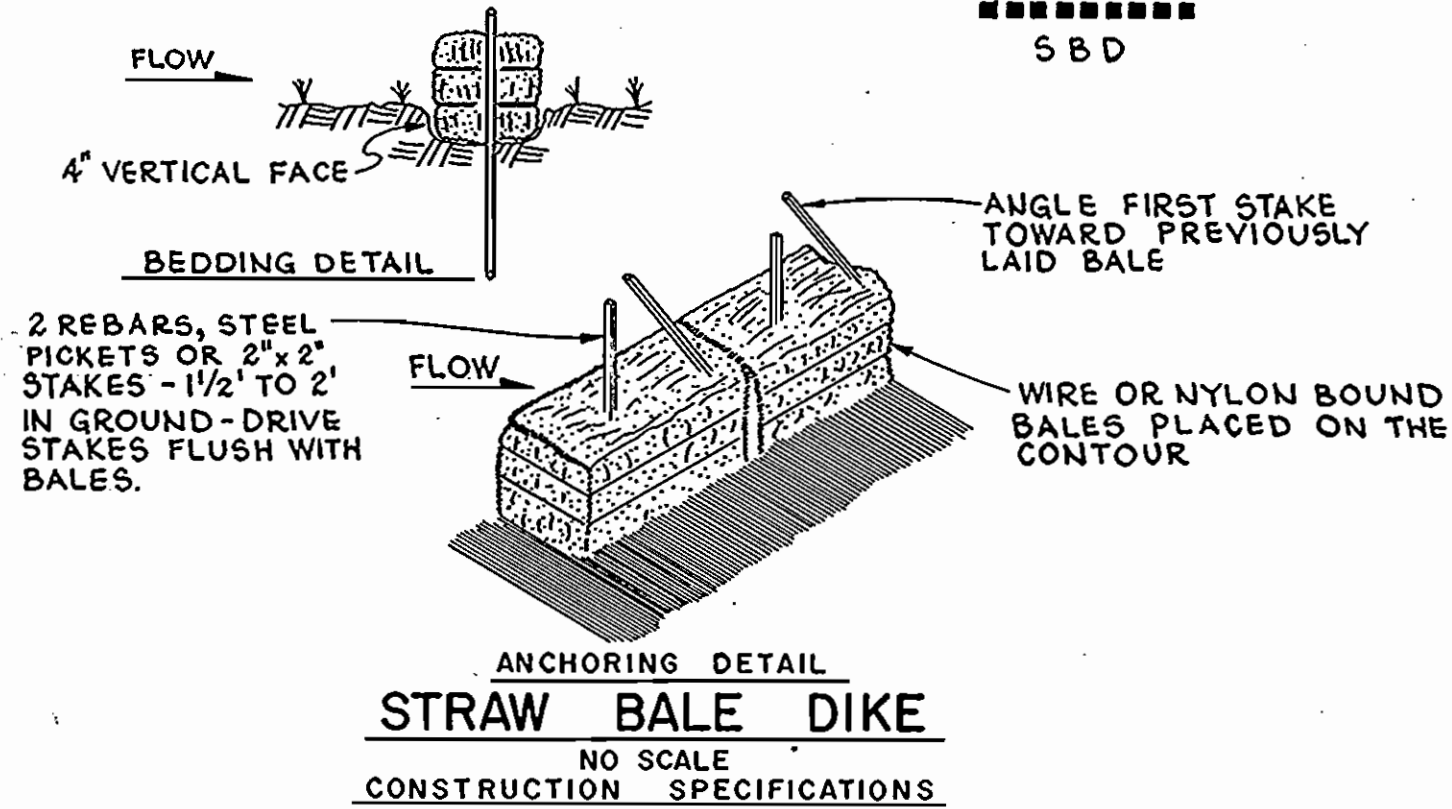


SECTION
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CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. HIGH STRENGTH POLYPROPYLENE NETTING OR WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
 3. WHEN TWO SECTION OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- POSTS: STEEL EITHER T OR U TYPE OR 1 1/4" x 1 1/4" MIN. (ACTUAL) HARDWOOD
 FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING OR HIGH STRENGTH POLYPROPYLENE NETTING
 FILTER CLOTH: FILTER X, MIRAFI 100X, STABLINKA T140N OR APPROVED EQUAL
 PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

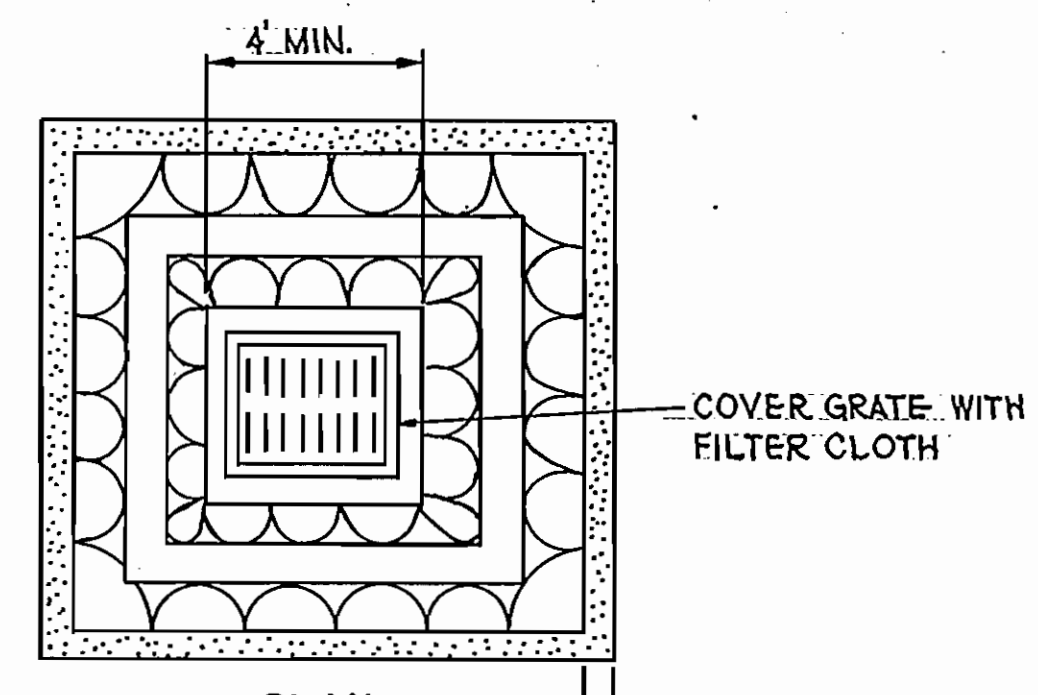
STANDARD SYMBOL
S B D



STRAW BALE DIKE

CONSTRUCTION SPECIFICATIONS
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1. 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.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR REBARS 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.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.



INLET PROTECTION DETAIL

CONSTRUCTION SPECIFICATIONS
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1. STONE FOR THE DIKE SHALL BE CRUSHED STONE. GRAVEL MAY BE USED IF CRUSHED STONE IS NOT AVAILABLE. THE STONE SHALL MEET MSHA SIZE NO. 2 OF AASHTO DESIGNATION M49 SIZE NO. 2 OR 24. CRUSHER RUN IS NOT ACCEPTABLE.
2. FILTER CLOTH SHALL BE POLY-FILTER X OR APPROVED EQUAL.
3. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

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DRN: R.D.H.			
CHK: J.R.			
DATE: 7/21/88	BY	NO.	REVISION

SEDIMENT AND EROSION CONTROL

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