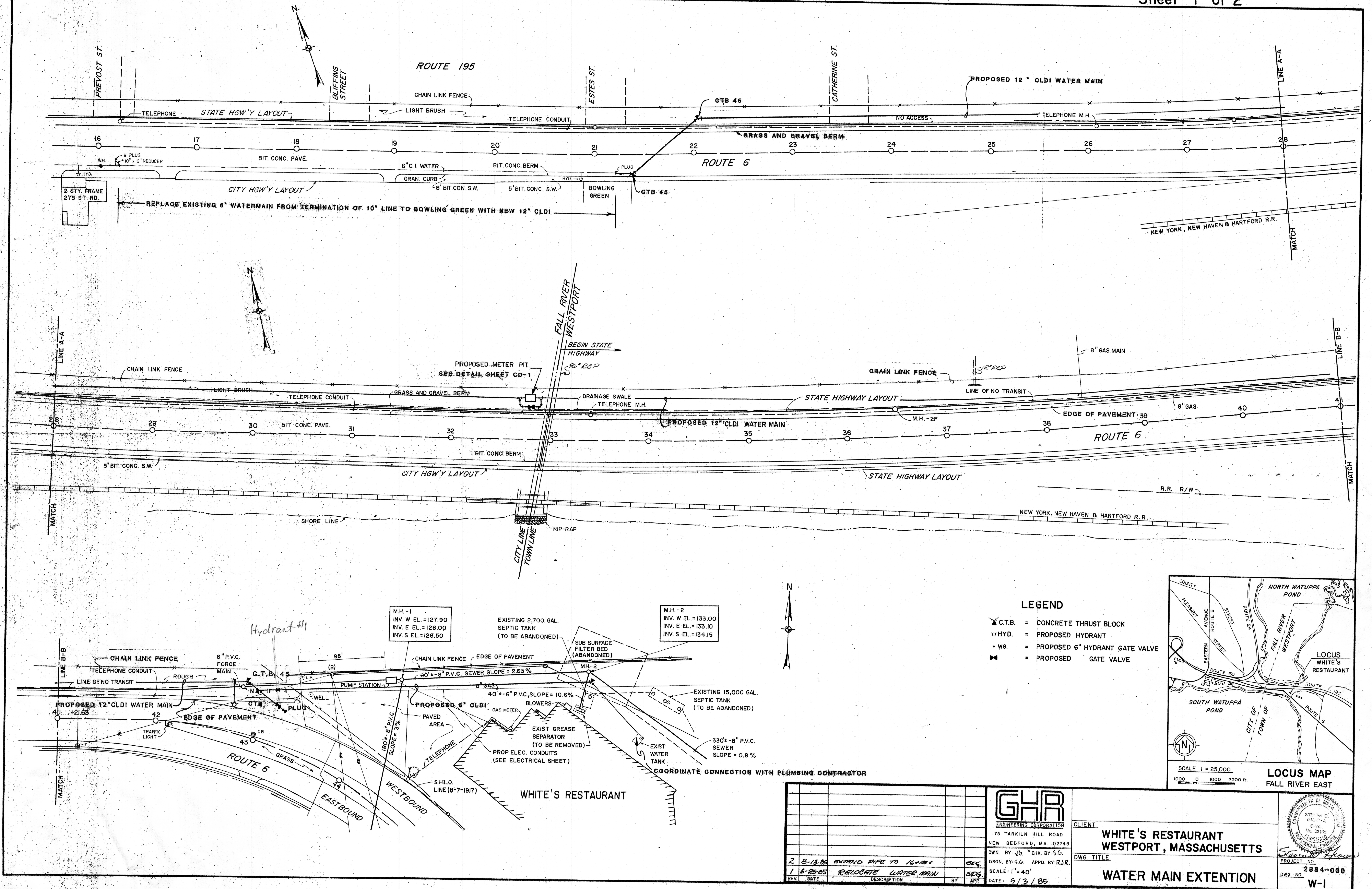


# **APPENDICES**

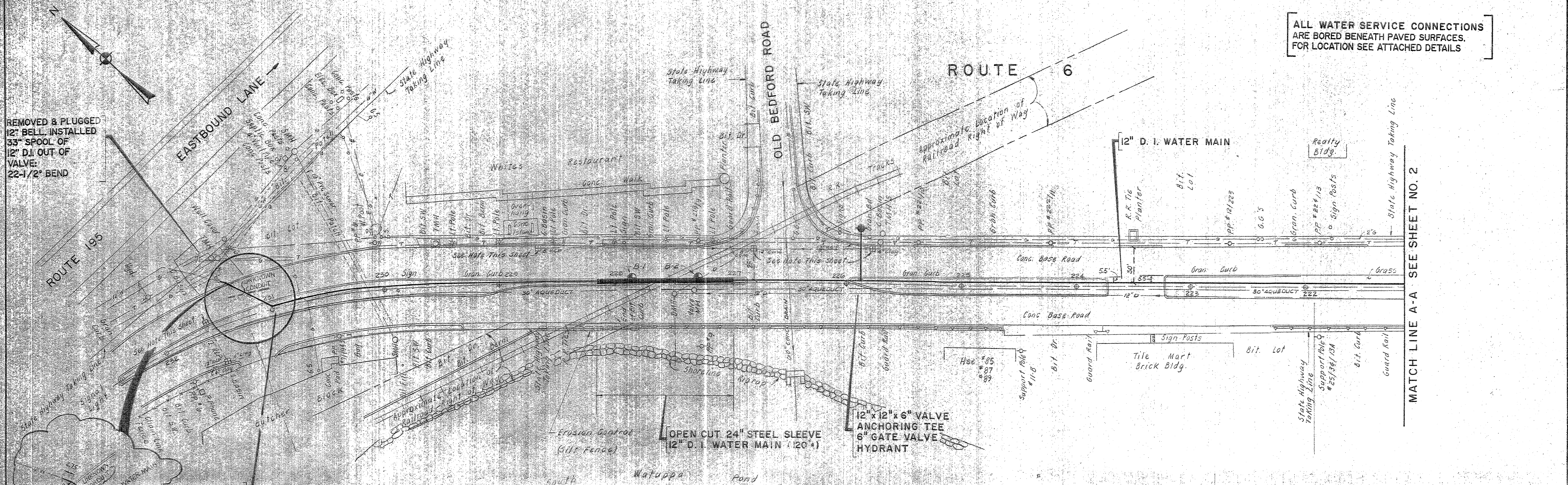
**APPENDIX A:**

**RECORD DRAWINGS**



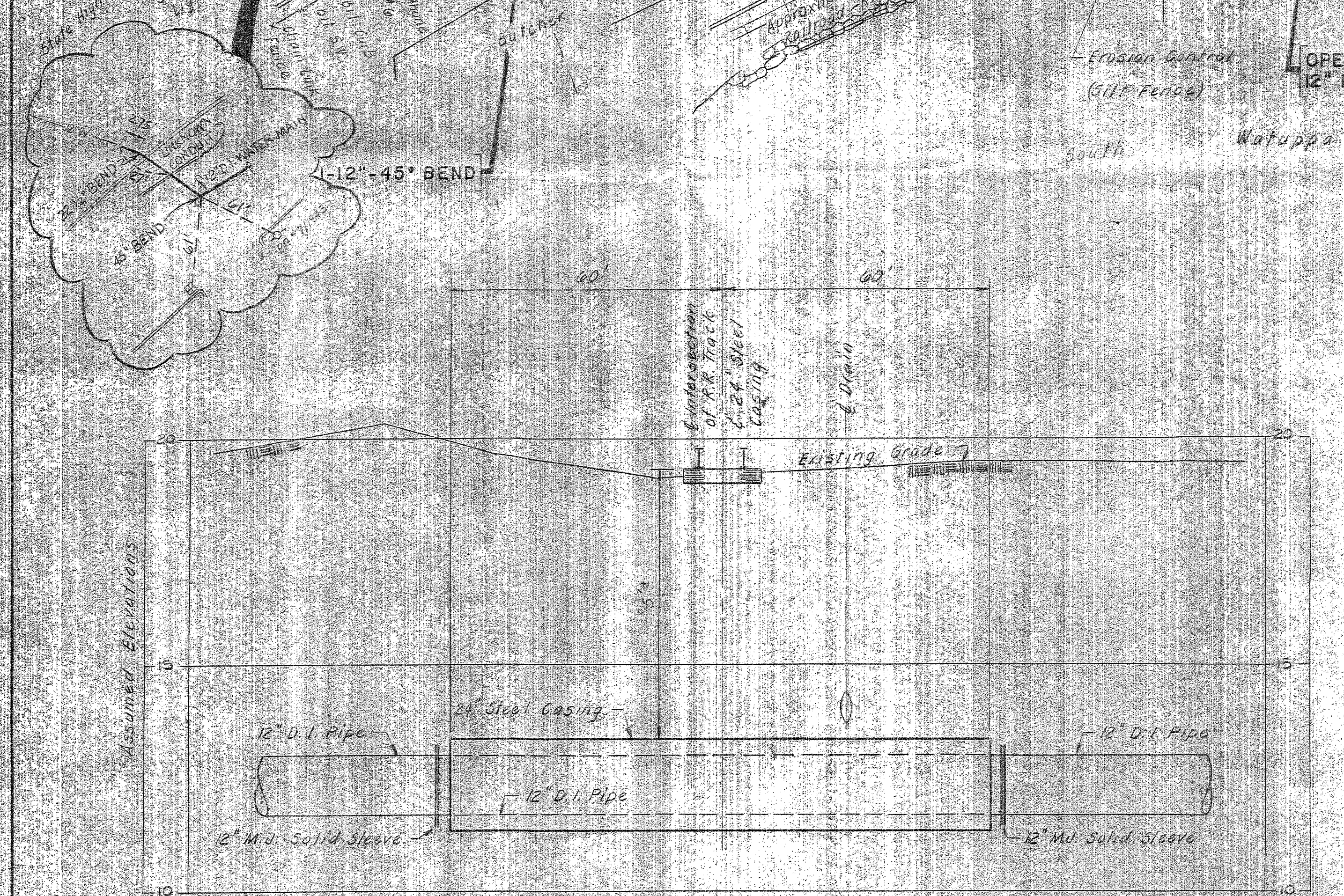






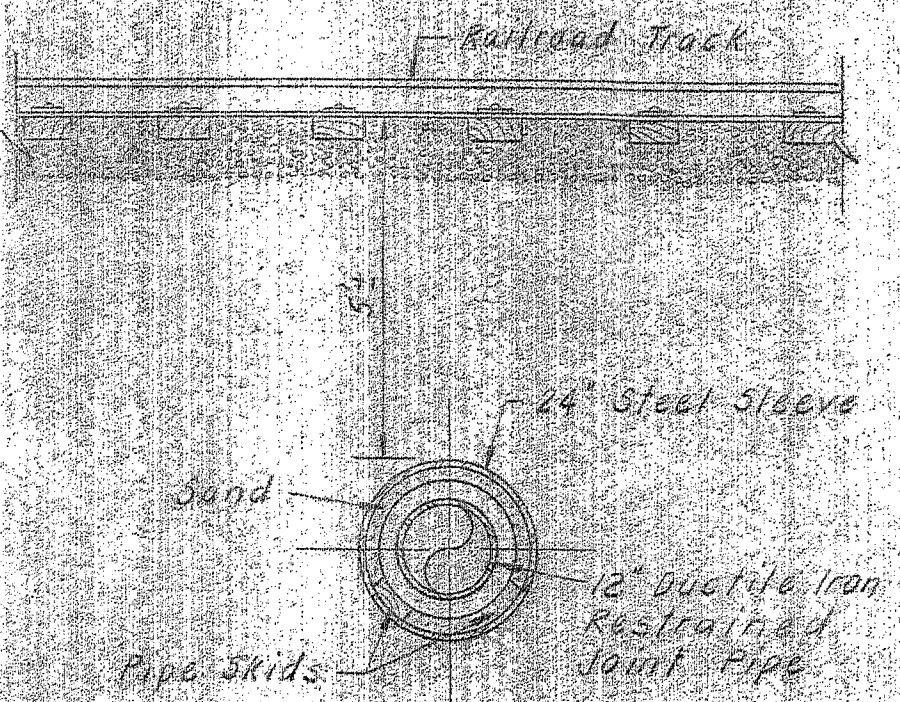
ALL WATER SERVICE CONNECTIONS ARE BORED BENEATH PAVED SURFACES. FOR LOCATION SEE ATTACHED DETAILS

MATCH LINE A-A SEE SHEET NO. 2

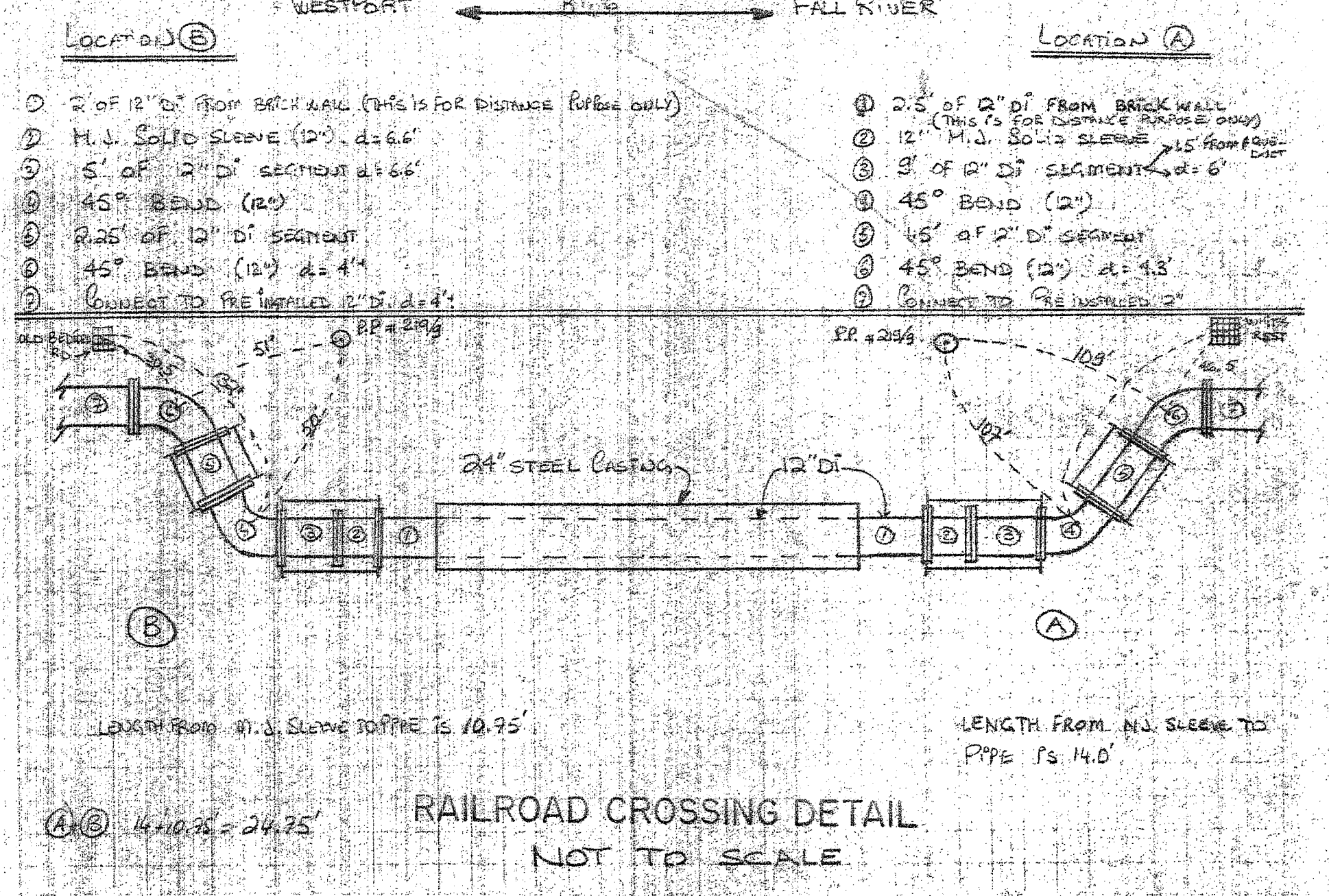


PROFILE

SCALE: 1" = 20' Horiz.  
1" = 2' Vert.



END VIEW OF PIPE CROSSING  
Not to Scale

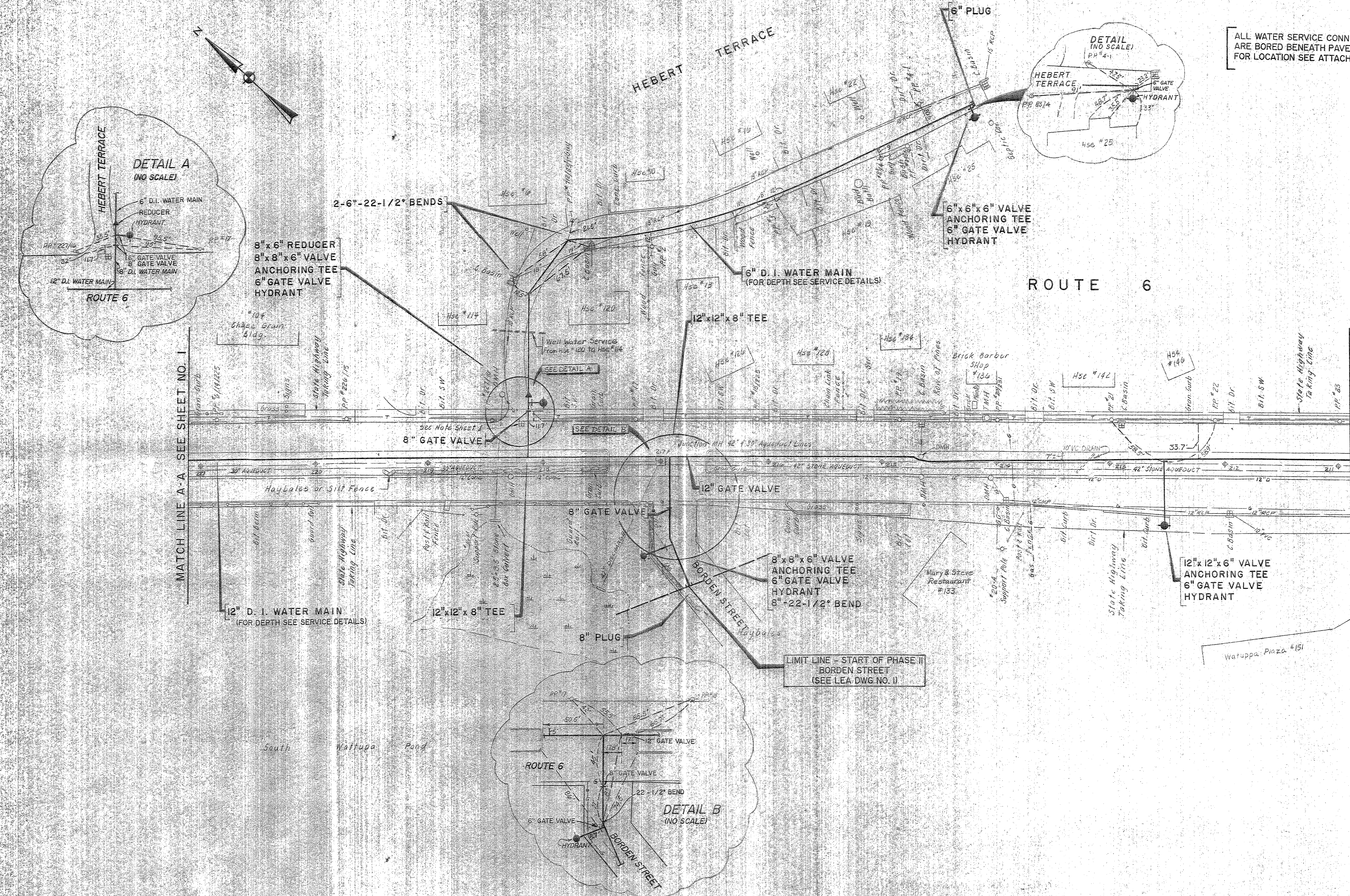


RAILROAD CROSSING DETAIL  
NOT TO SCALE

CONSTRUCTION SERVICES BY: <b>LEA GROUP, INC.</b> 75 KNEELAND STREET, BOSTON, MA		DESIGNED BY: <b>WHITMAN &amp; HOWARD, INC.</b> 45 WILLIAM STREET, WELLESLEY, MASS.				ORIGINAL FULL SIZE DRAWING = 4" REPRODUCTIONS MAY BE REDUCED SIZE APPROVED: <i>Robert V. Harris</i> DESIGNED/DRAWN: <i>J.M. 9/93</i> CHECKED/SCALE: <i>D.B.</i> DATE: JULY, 1969		DRAWING NO.: JOB NO.: 88-364 CONTRACT NO.: 88-1 SHEET 1 OF 4 SHEETS		WATER MAINS AND APPURTENANCES <b>WESTPORT, MASSACHUSETTS</b> ROUTE 6	
REVISED FOR RECORD DRAWING 7/2/91											
NO. DESCRIPTION DATE REVISIONS											



ALL WATER SERVICE CONNECTIONS  
ARE BORED BENEATH PAVED SURFACES.  
FOR LOCATION SEE ATTACHED DETAILS



RECORD  
DRAWING

CONSTRUCTION SERVICES BY:  
LEA GROUP, INC.  
75 KNEELAND STREET, BOSTON, MA

NO.	DESCRIPTION	DATE
1	REVISED FOR RECORD DRAWING	7/2/91
2		
3		
4		
5		
6		
7		
8		
9		
10		

DESIGNED BY:  
WHITMAN & HOWARD, INC.  
45 WILLIAM STREET, WELLESLEY, MASS.



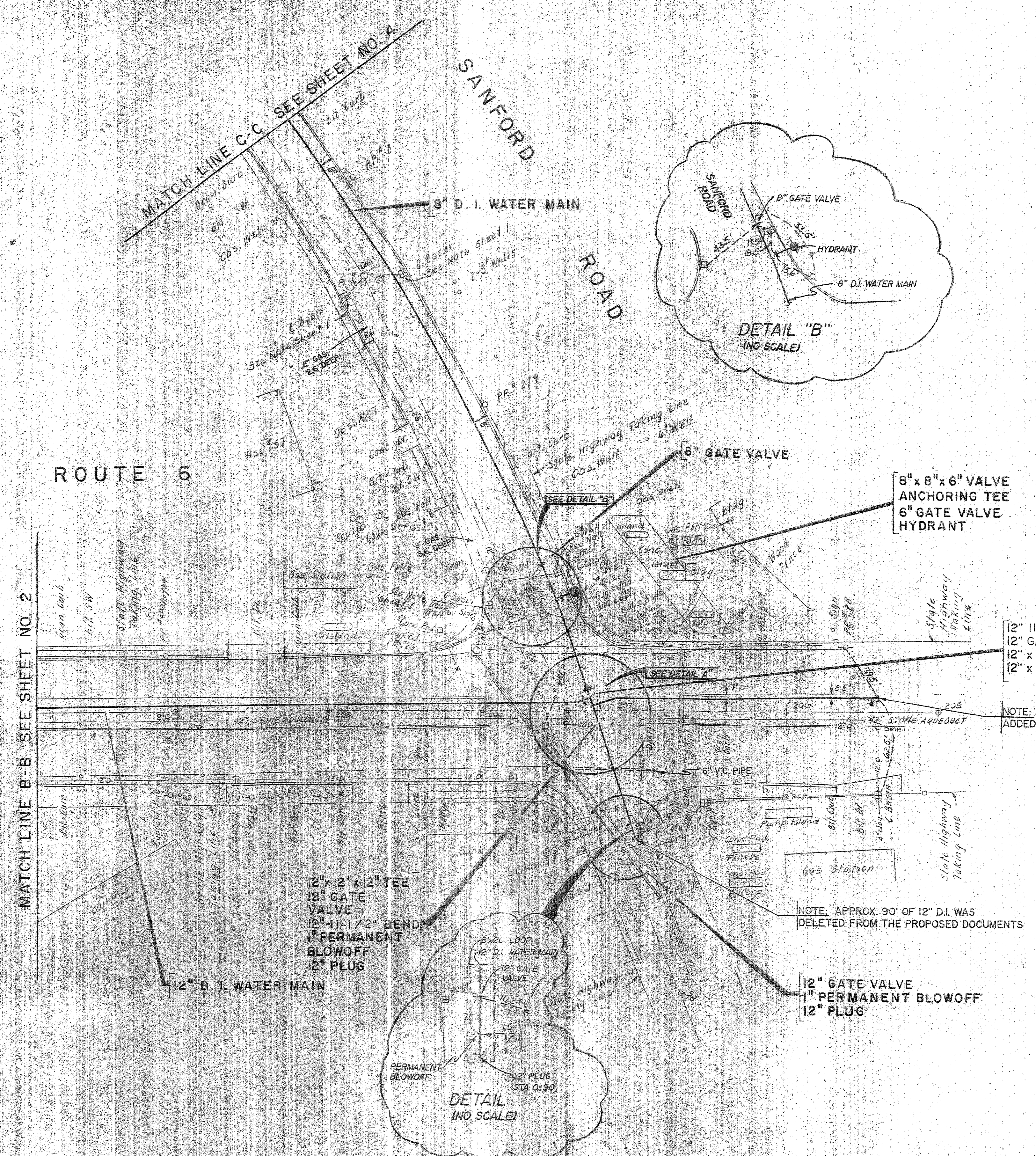
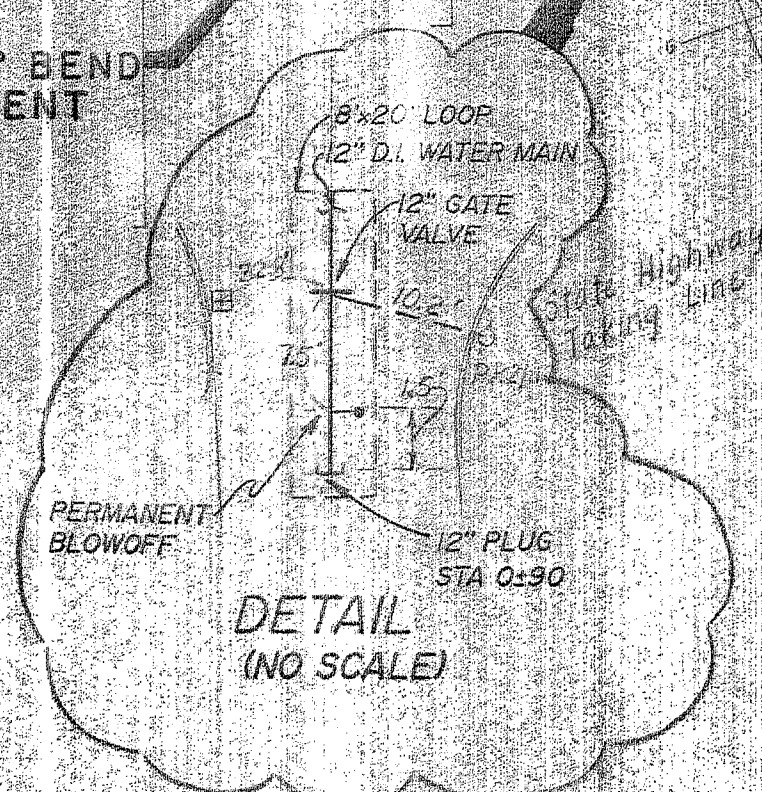
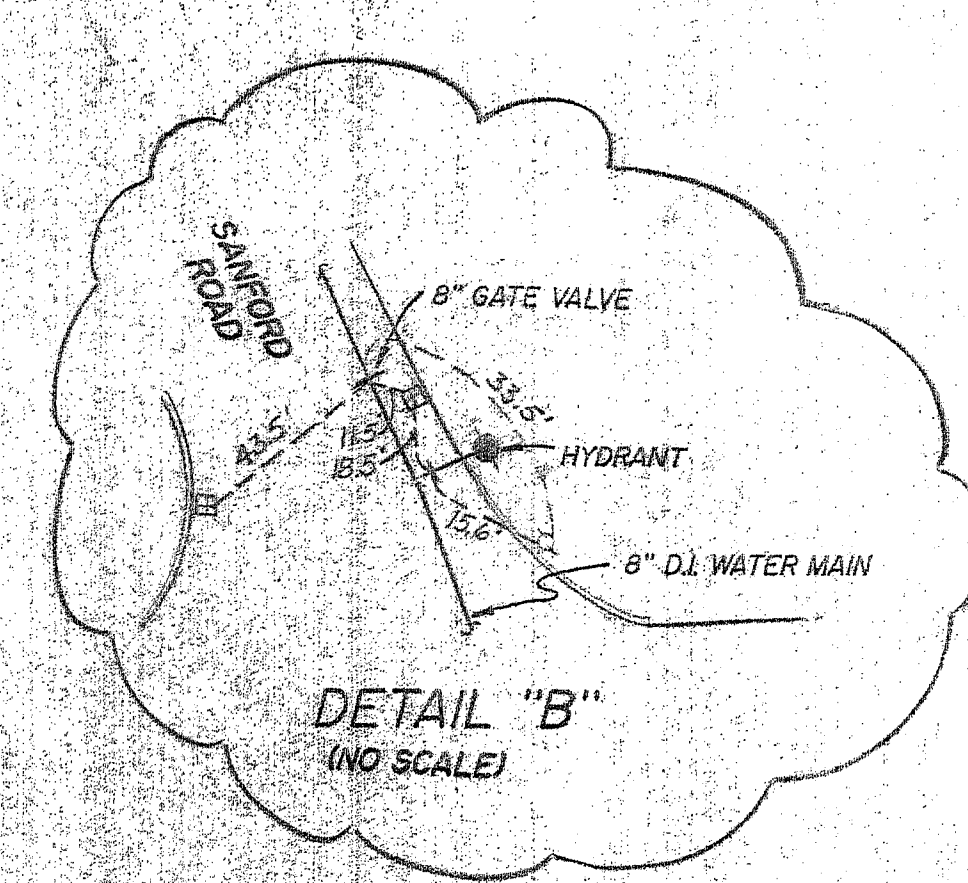
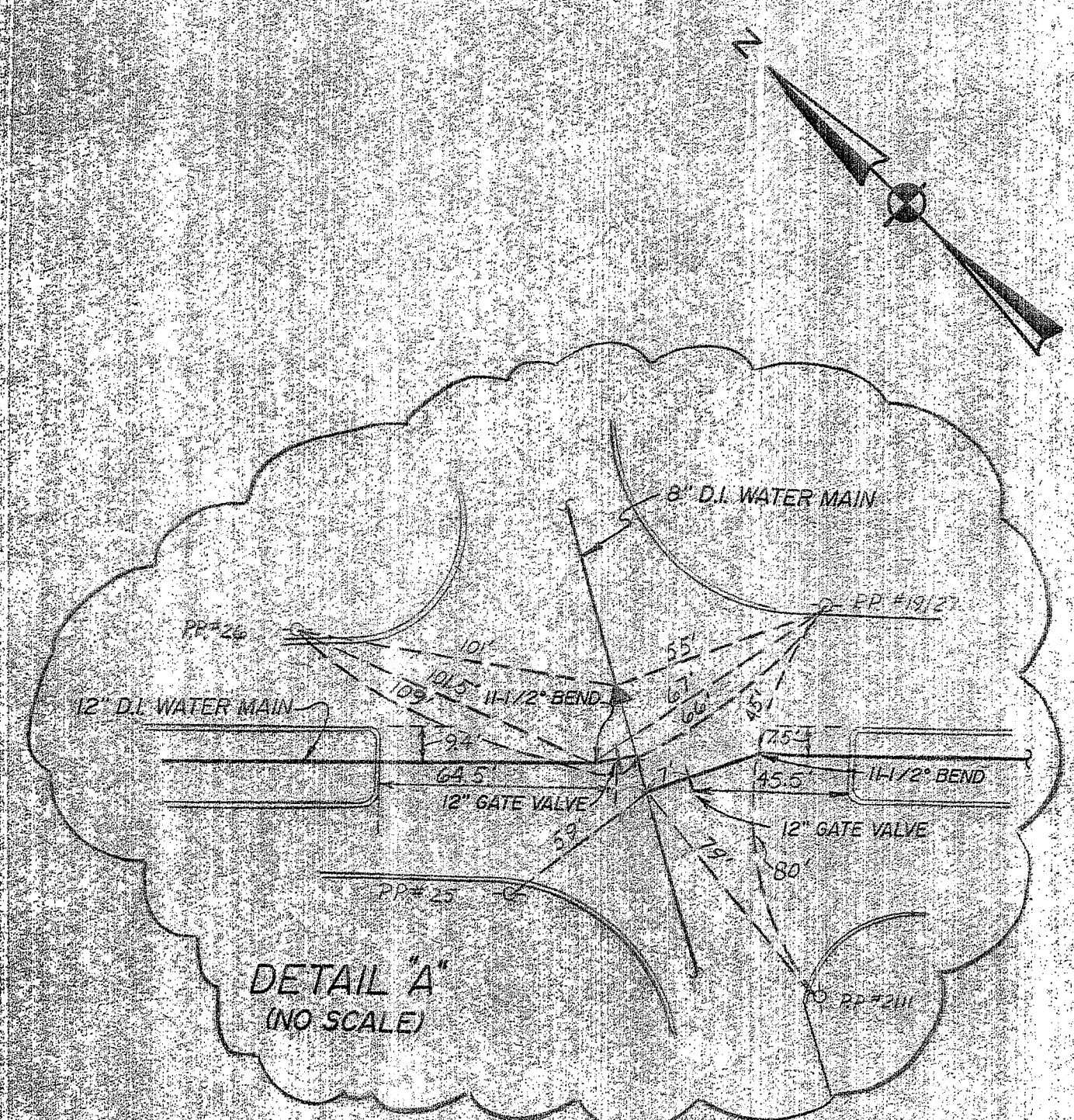
ORIGINAL FULL SIZE DRAWING = 4"  
REPRODUCTIONS MAY BE REDUCED SIZE

APPROVED: *Robert A. Yarbites*  
DESIGNED: J.M. 903  
CHECKED: J.B.  
SCALE: 1" = 40'  
DATE: JULY, 1989

DRAWING NO.  
JOB NO. 88-364  
CONTRACT NO. 88-1  
SHEET 2 OF 4 SHEETS

WATER MAINS AND APPURTENANCES  
WESTPORT, MASSACHUSETTS  
ROUTE 6, HEBERT TERRACE  
AND BORDEN STREET





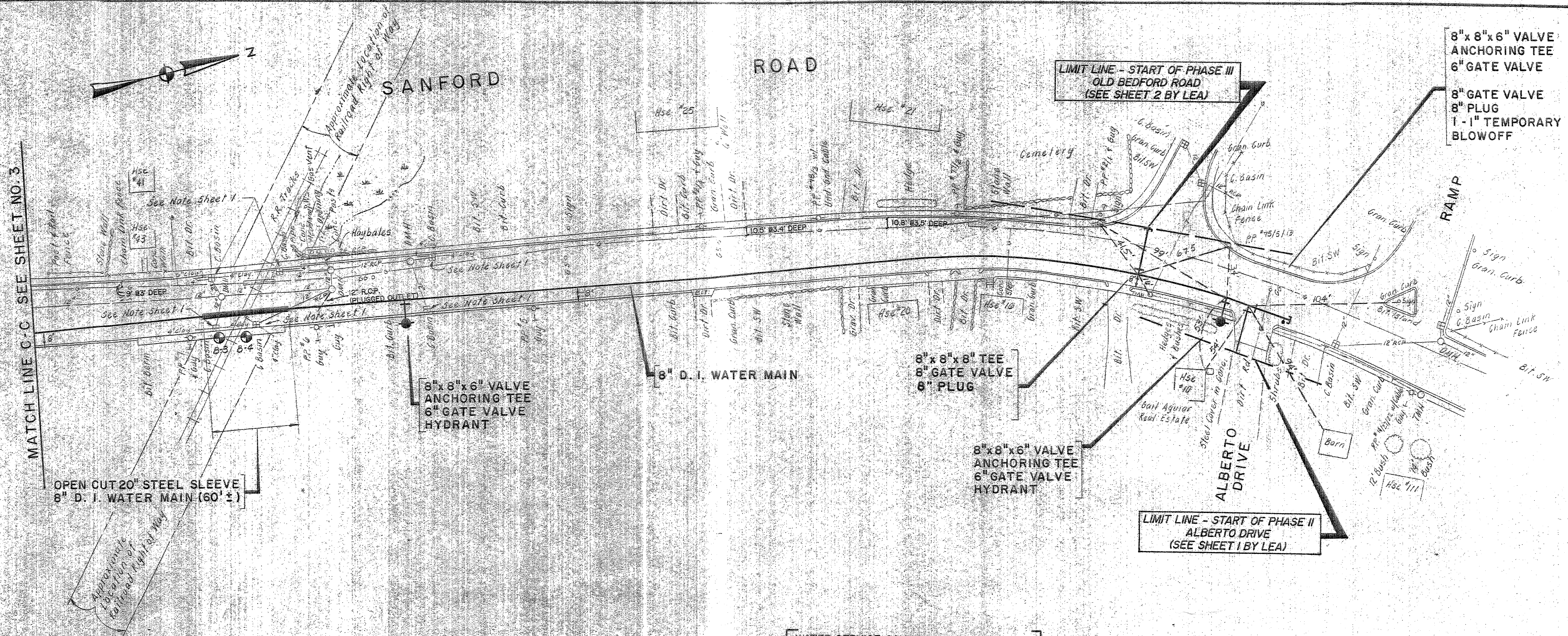
NOTE: APPROX. 90' OF 12" D.I. WAS  
ADDED TO THE PROPOSED DOCUMENTS

NOTE: APPROX. 90' OF 12" D.I. WAS  
DELETED FROM THE PROPOSED DOCUMENTS

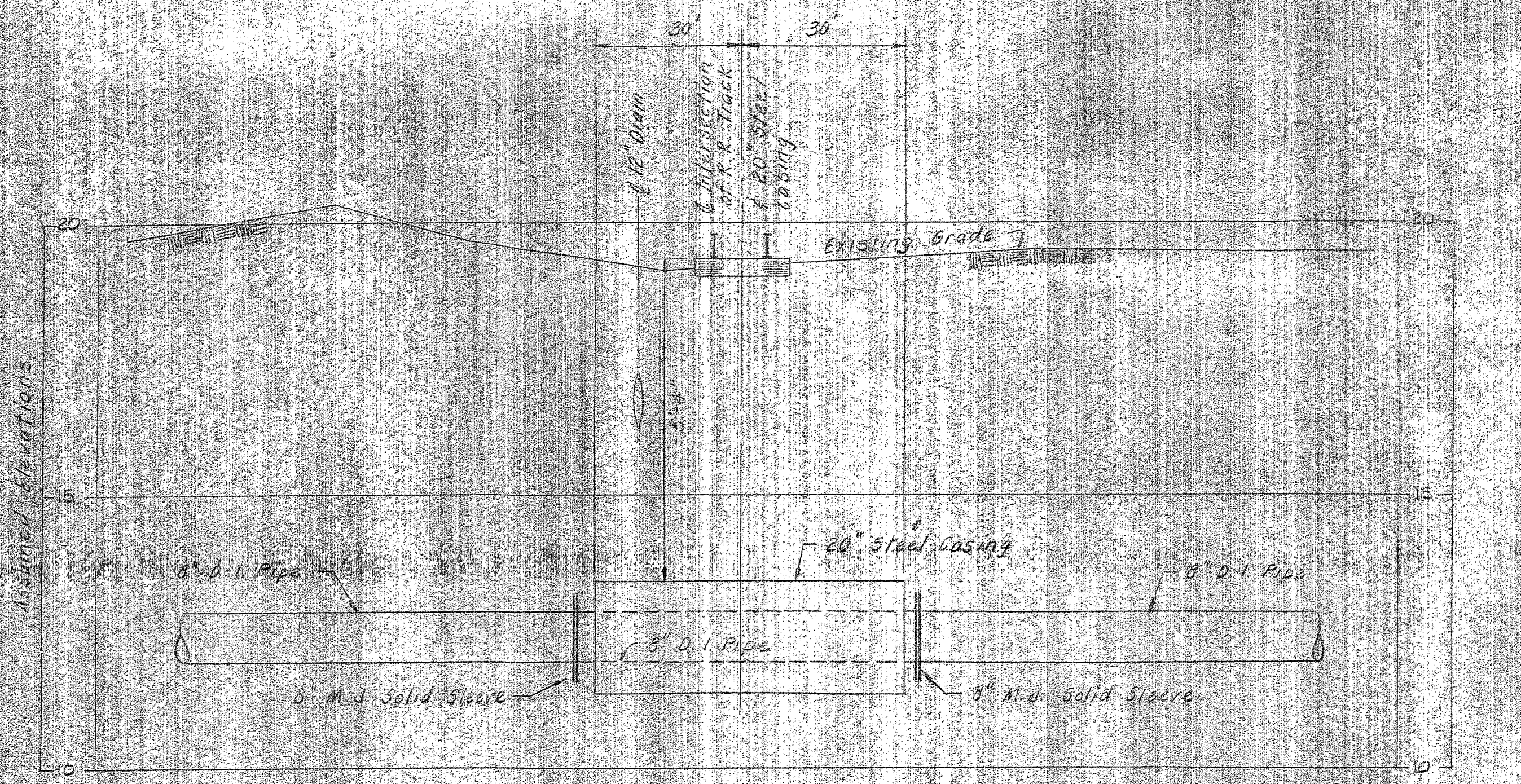
**RECORD  
DRAWING**

CONSTRUCTION SERVICES BY: <b>LEA GROUP, INC.</b> 75 KNEELAND STREET, BOSTON, MA			DESIGNED BY: <b>WHITMAN &amp; HOWARD, INC.</b> 45 WILLIAM STREET, WELLESLEY, MASS.			DRAWING NO. JOB NO. <b>88-364</b> CONTRACT NO. <b>88-1</b>			WATER MAINS AND APPURTENANCES <b>WESTPORT, MASSACHUSETTS</b> ROUTE 6 AND SANFORD ROAD		
NO. DESCRIPTION DATE			DESIGNED DRAWN <i>J.M. 9.23.88</i> CHECKED SCALE 1"=40' DATE JULY, 1989			SHEET 3 OF 4 SHEETS					
REVISIONS			APPROVED <i>Robert A. Howard</i>								
REVISED FOR RECORD DRAWINGS 7/2/91			ORIGINAL FULL SIZE DRAWING - 4"								
			REPRODUCTIONS MAY BE REDUCED SIZE								

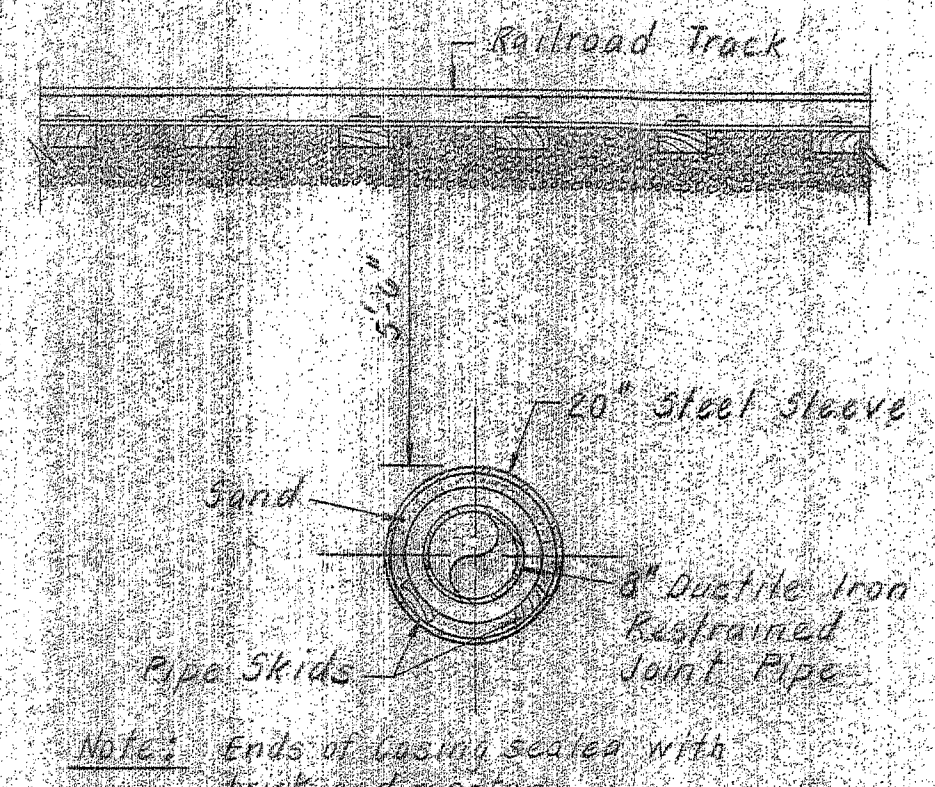




WATER SERVICE CONNECTIONS WERE BORED ON THE LEFT SIDE AND OPEN CUT ON THE RIGHT SIDE OF THE 8" WATER MAIN



**PROFILE**  
SCALE: 1" = 20' Horiz  
1" = 2' Vert



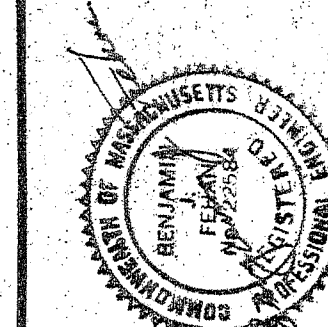
**END VIEW OF PIPE CROSSING**  
Not to Scale

PIPE DATA		
	CARRIER PIPE	CASING PIPE
Contents to be handled	Water	N/A
Normal Operating Press.	100	N/A
Nominal Size of Pipe	8"	20"
O.S. Diameter	PIPE BARREL	9.05
	BELL	10.82
I.S. Diameter	8"	18.44"
Wall Thickness	0.33"	0.531"
Weight Per Foot	N/A	N/A
Material	Ductile Iron	Steel
Process of Manufacture	Centrifugally Cast in Molds	Straight Seam Or Seamless Carbon Steel
Specification	ANSI A21.51 AWWA C151	ASTM A139
Grade or Class	52	Grade B
Test Pressure	150 psi	N/A
Type of Joint	Restrained joint	Welded
Type of Coating	Outside Bituminous Coating Inside Cement Lined	Bituminous Coated
Details of Cathodic Protection	N/A	N/A
Details of Seal or Protection at End of Casing	N/A	Ends Filled With Brick and Mortar
Method of Installation	Pipe Inserted in Casing	Open Cut

**RECORD  
DRAWING**

CONSTRUCTION SERVICES BY: <b>LEA GROUP, INC.</b> 75 KNEELAND STREET, BOSTON, MA		DESIGNED BY: <b>WHITMAN &amp; HOWARD, INC.</b> 45 WILLIAM STREET, WELLESLEY, MASS.			ORIGINAL FULL SIZE DRAWING - 4" REPRODUCTIONS MAY BE REDUCED SIZE		DRAWING NO.	WATER MAINS AND APPURTENANCES	
NO. DESCRIPTION DATE REVISIONS		APPROVED: <i>Robert A. Yarbites</i> DESIGNED: J.M. 9.03 D.B. CHECKED: SCALE: 1" = 40' DATE: JULY, 1989			JOB NO. 88-364	CONTRACT NO. 88-1		WESTPORT, MASSACHUSETTS	
					SHEET 4 OF 4 SHEETS		SANFORD ROAD		

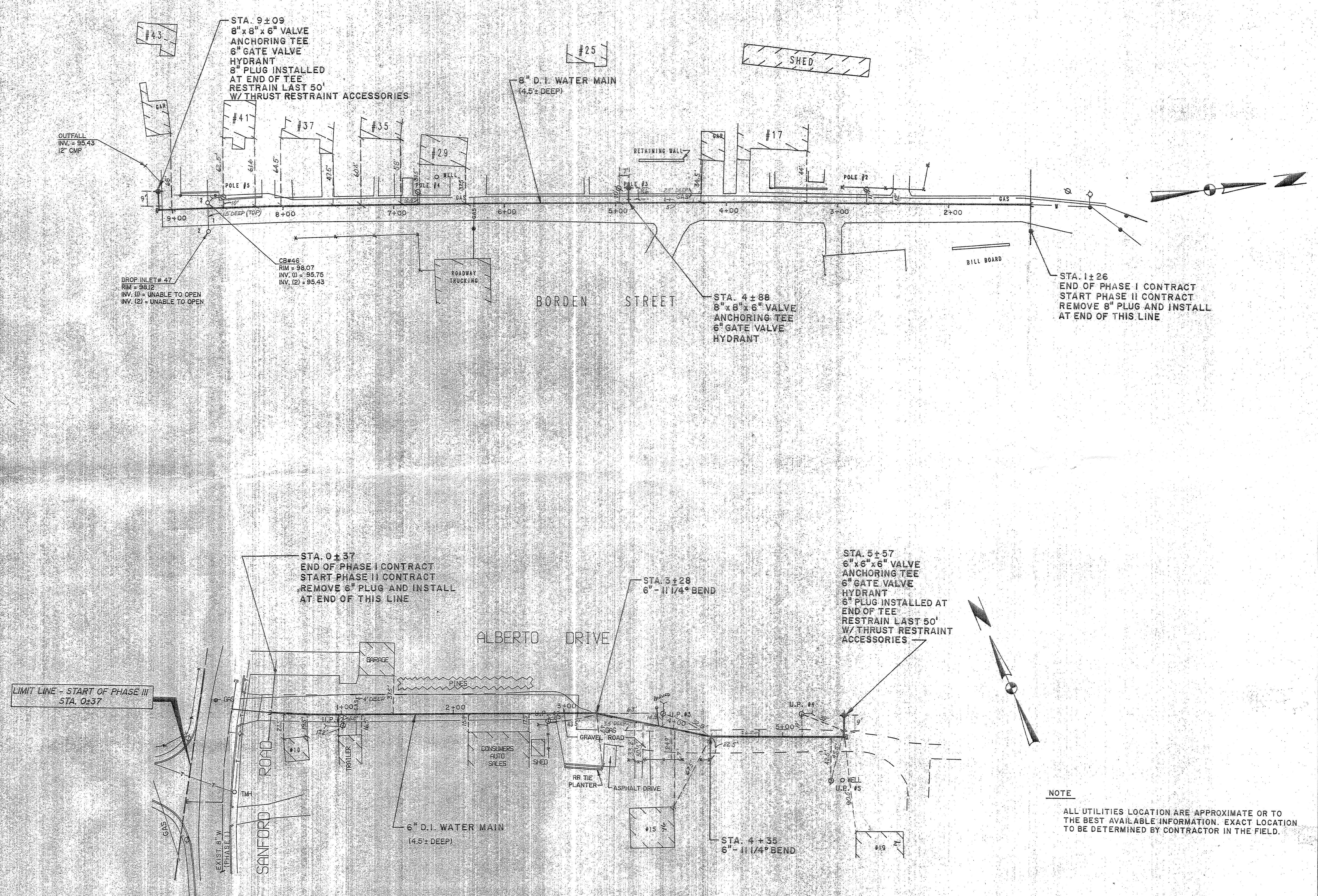




REVISIONS		DESCRIPTION
NO.	DATE	REVISED FOR RECORD DRAWING
1	7/2/91	
PROJECT NO. 50026.00		DATE APRIL 1991
SCALE 1" = 40'		DRAWN BY / CHECKED BY

**LEA GROUP**  
INCORPORATED  
Architects/Engineers/Planners  
75 Kneeland Street, Boston, MA 02111

**TOWN OF WESTPORT, MA**  
**WATER MAIN AND APPURTENANCES**

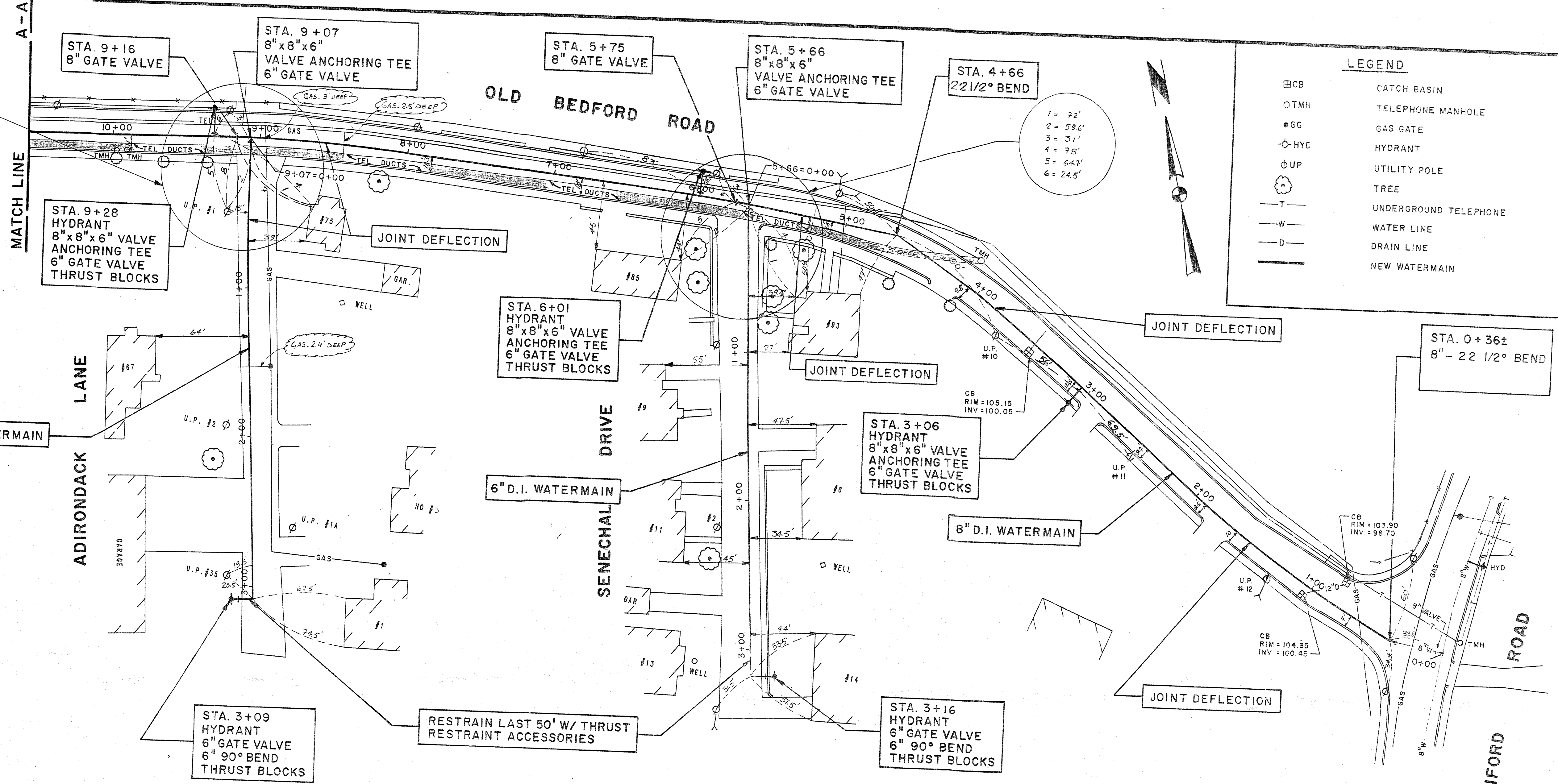


**NOTE**  
ALL UTILITIES LOCATION ARE APPROXIMATE OR TO THE BEST AVAILABLE INFORMATION. EXACT LOCATION TO BE DETERMINED BY CONTRACTOR IN THE FIELD.

**RECORD  
DRAWING**



1 = 60'  
2 = 48'  
3 = 18'  
4 = 79'  
5 = 49'  
6 = 23'  
7 = 65.6'  
8 = 50.6'

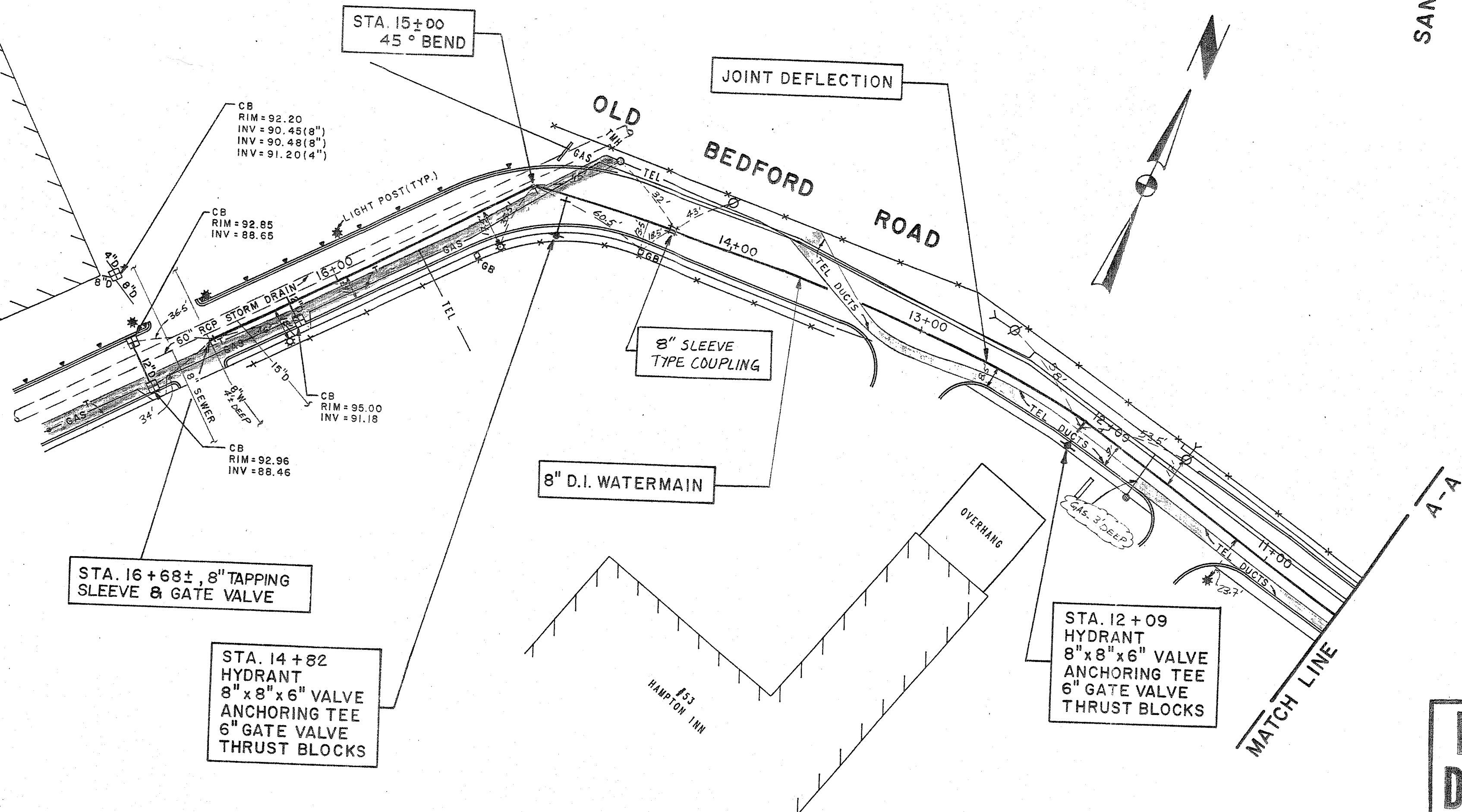


**LEGEND**

CB	CATCH BASIN
OTMH	TELEPHONE MANHOLE
GG	GAS GATE
HYC	HYDRANT
UP	UTILITY POLE
T	TREE
UT	UNDERGROUND TELEPHONE
W	WATER LINE
D	DRAIN LINE
---	NEW WATERMAIN

**GENERAL NOTES**

- TRENCHES excavated wider than the "LINE OF NARROW TRENCH LIMIT" SHALL BE DONE AT THE CONTRACTOR'S OWN EXPENSE AND SHALL NOT BE MEASURED FOR PAYMENT.
- BELOW THE "LINE OF NARROW TRENCH LIMIT" THE TRENCH SHALL NOT BE EXCAVATED BEYOND THE TRENCH WIDTH W<sub>S</sub>/W<sub>L</sub>.
- IF EXCAVATION AND BACKFILL BELOW NORMAL DEPTH IS REQUIRED, SHEETING MAY BE ORDERED BY THE ENGINEER.
- IN ADDITION TO COMPLIANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS, THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES, AND SHALL PROVIDE ALL NECESSARY CONTINUOUS BARRIERS OF SUFFICIENT TYPE, SIZE, AND STRENGTH TO PREVENT ACCESS TO ALL OPEN EXCAVATIONS AT THE COMPLETION OF EACH DAY'S WORK. BARRIERS AND EQUIPMENT SHALL BE PROVIDED WITH ALL LIGHTING NECESSARY TO PROTECT THE PUBLIC DURING WORKING AND NON-WORKING HOURS.
- THE ACTUAL NUMBER AND LOCATIONS OF TEST PITS TO BE EXCAVATED BY THE CONTRACTOR WILL BE DETERMINED IN THE FIELD BY THE ENGINEER, UNLESS OTHERWISE INDICATED OR SPECIFIED.
- EXISTING UTILITIES INTERFERING WITH THE WORK SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER IN THE FIELD, UNLESS OTHERWISE INDICATED OR SPECIFIED.
- LOCATION OF UTILITIES AND PROPERTY LINES ARE FROM THE BEST INFORMATION AVAILABLE. EXACT LOCATION AND COMPLETENESS IS NOT GUARANTEED.
- EXCAVATED MATERIALS SHALL NOT BE PLACED OR STORED WITHIN 100 FT. OF A WETLAND.
- GROUNDWATER REMOVED FROM TRENCHES DURING CONSTRUCTION MAY BE DISCHARGED TO STORM DRAINS OR LOCAL SURFACE WATER BODIES, PROVIDED THAT ADEQUATE PRECAUTIONS HAVE BEEN TAKEN TO REMOVE ALL FINES AND SILT BEFORE DISCHARGE, AND TO PREVENT SURCHARGING OF THE DRAIN SYSTEM. SEE SPECIFICATIONS.
- DAMAGE TO ANY UTILITY WILL BE REPAIRED BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, IN A TIMELY MANNER SO THAT DISRUPTION OF SERVICE TO ANY UTILITY WILL NOT BE LONGER THAN PRACTICALLY NECESSARY TO REPAIR THE DAMAGE. THE CONTRACTOR SHALL COORDINATE REPAIR WITH THE APPROPRIATE UTILITY.
- THE CONTRACTOR SHALL CONDUCT HIS CONSTRUCTION OPERATIONS SUCH THAT A MINIMUM OF ONE LANE OF TRAFFIC REMAINS OPEN AT ALL TIMES ON TRAVELED WAYS. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION, TRAFFIC CONTROL, AND DETOURS WITH THE APPROPRIATE POLICE DEPARTMENT TO MINIMIZE OBSTRUCTION OF TRAFFIC.
- WALLS, SIGNS, LIGHT POSTS, AND GUARD RAILS AND ANY OTHER OBJECT DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. SEE SPECIFICATIONS.
- APPROVED ADAPTERS SHALL BE PROVIDED TO JOIN PIPING OF DIFFERENT CLASSES OR MATERIAL. PAYMENT FOR THE WORK SHALL BE INCLUDED UNDER THE APPROPRIATE BID ITEM FOR CONSTRUCTING WATER MAINS.
- THE TOPOGRAPHIC SURVEY WAS PREPARED FROM EXISTING TOWN OF WESTPORT BASE MAPS, WITH A FIELD EDIT PERFORMED BY LEA GROUP USING THE TOWN OF WESTPORT DATUM.
- FOR TYPICAL DETAILS, SUBSURFACE PROBE DEPTHS, AND RESTRAINED JOINT AND THRUST BLOCK SCHEDULES, SEE SPECIFICATIONS.



**RECORD  
DRAWING**

**TOWN OF WESTPORT, MA**  
**OLD BEDFORD ROAD WATER MAIN**  
**OLD BEDFORD ROAD, SENECHAL DRIVE & ADIRONDACK LANE**

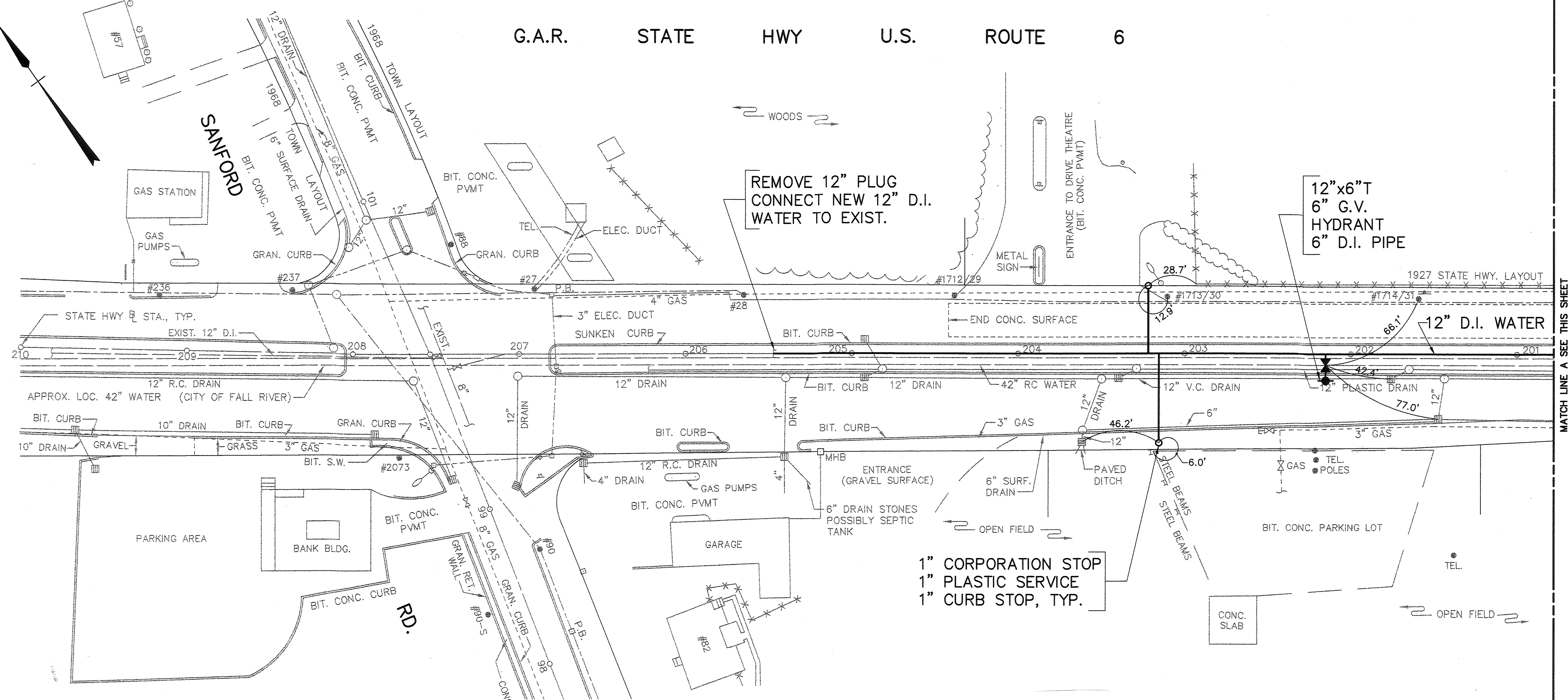
**LEA GROUP**  
INCORPORATED  
Architects/Engineers/Planners  
75 Kipling Street, Boston, MA 02111  
Telephone (617) 425-6400

PROJECT NO. 50026.00  
DATE SEPT 1991  
SCALE 1" = 40'  
DRAWN BY / CHECKED BY P.J.F. EZM-BJF

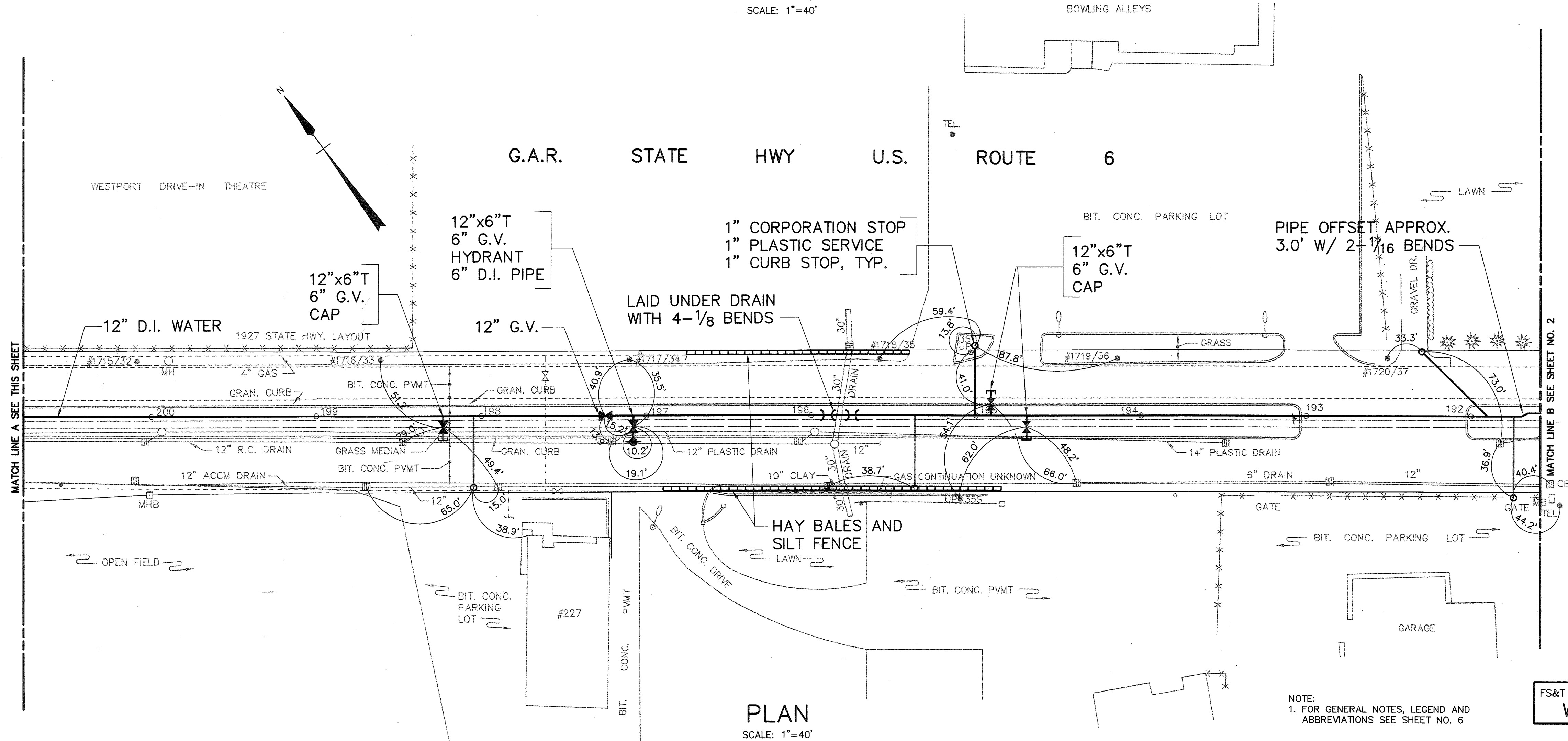
REVISIONS  
NO. DATE DESCRIPTION  
1 JAN. 92 RECORD DRAWING

CONTRACT NO. 91-1



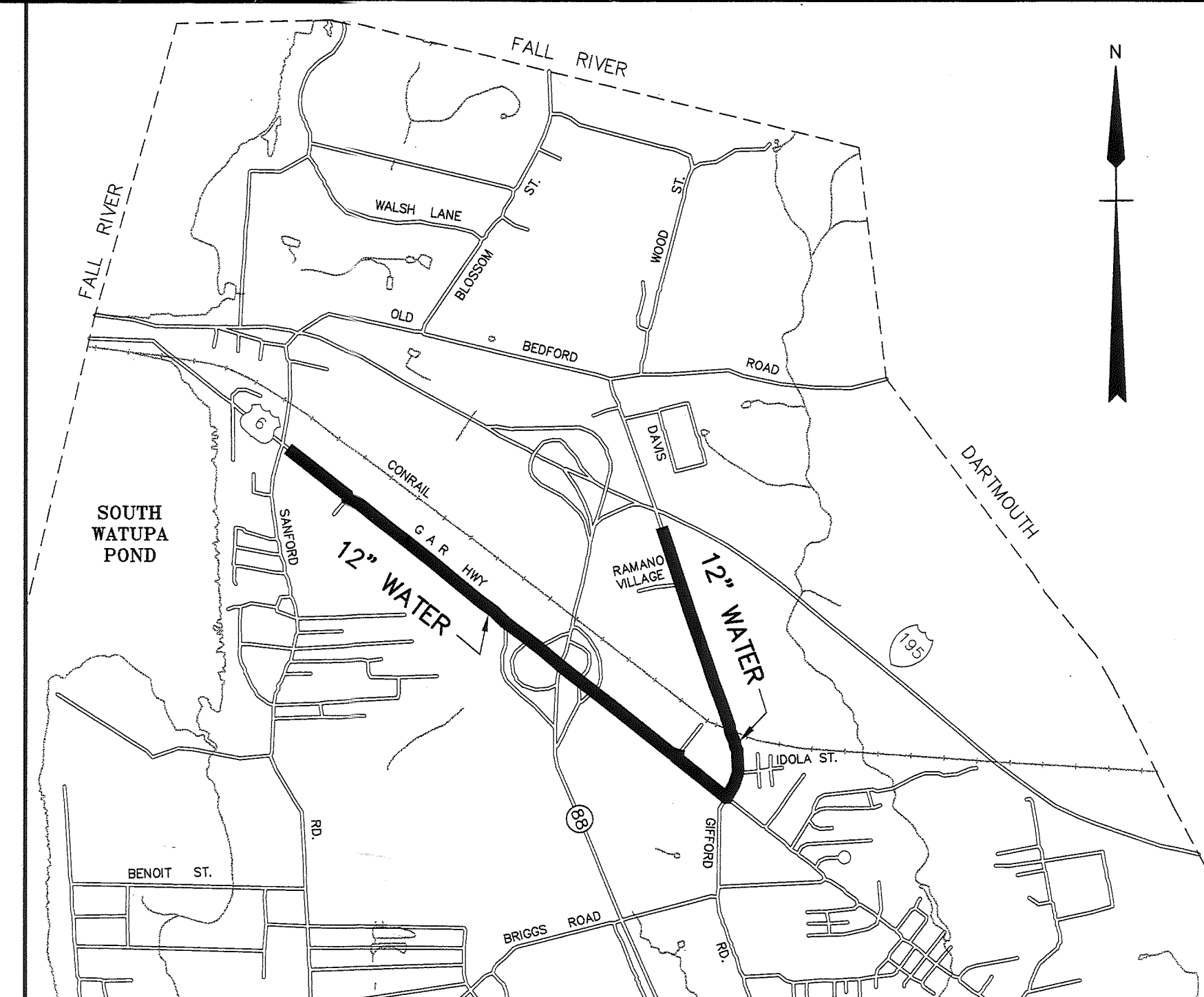


PLAN  
SCALE: 1"=40'



PLAN  
SCALE: 1"=40'

NOTE:  
1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE SHEET NO. 6



LOCATION PLAN  
SCALE: 1"=2000'

## INDEX TO DRAWINGS

SHEET NO.	TITLE
1	LOCATION PLAN INDEX TO DRAWINGS G.A.R. HWY (VICINITY OF SANFORD RD. TO MATCH LINE B)
2	G.A.R. HWY (MATCH LINE B TO MATCH LINE D)
3	G.A.R. HWY (MATCH LINE D TO MATCH LINE F)
4	G.A.R. HWY (MATCH LINE F TO DAVIS RD.)
5	DAVIS RD. (G.A.R. HWY TO MATCH LINE I)
6	DAVIS RD. (MATCH LINE I TO VICINITY OF RAMANO VILLAGE)

CONTRACTING PARTIES	
OWNER:	TOWN OF WESTPORT, MA. BOARD OF SELECTMEN
CONTRACTOR:	CARDI CORP. WARWICK, R.I. 02888

NOTE:  
DUCTILE IRON PIPES AS MANUFACTURED  
BY "GRIFFIN PIPE PRODUCTS" WAS USED.

REV.	DATE	DESCRIPTION	BY	CHK.	APP'D.
1/98		RECORD PLAN	J.C.	SC	JTK

## RECORD PLAN

TOWN OF WESTPORT, MASSACHUSETTS  
BOARD OF SELECTMEN

### WATER SYSTEM IMPROVEMENTS

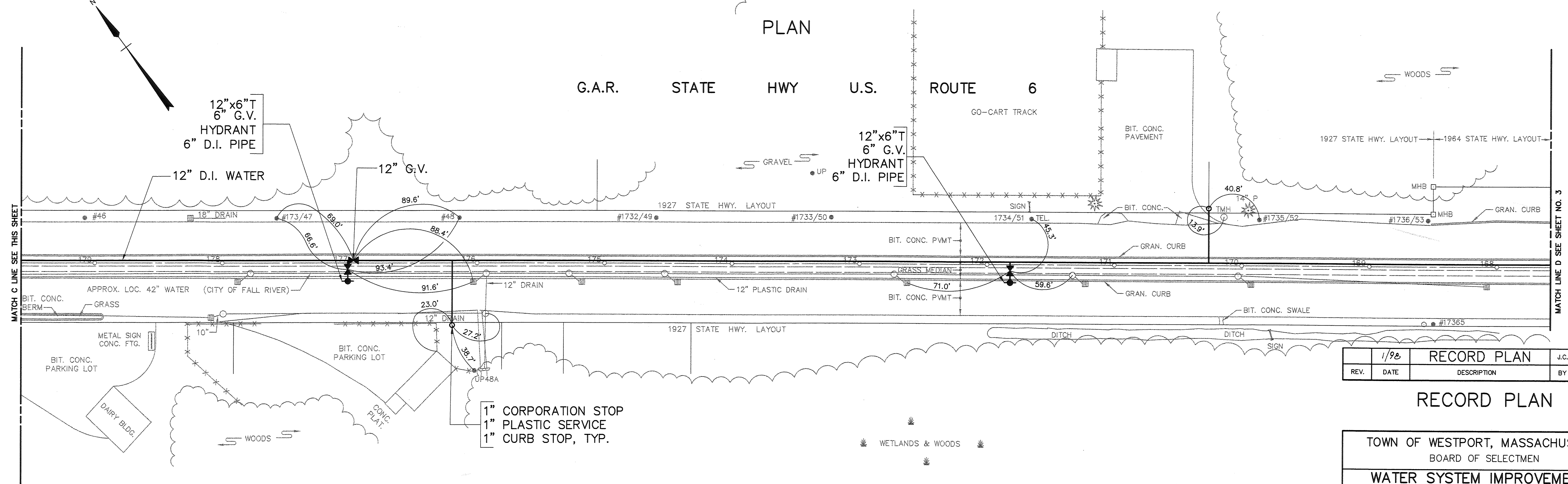
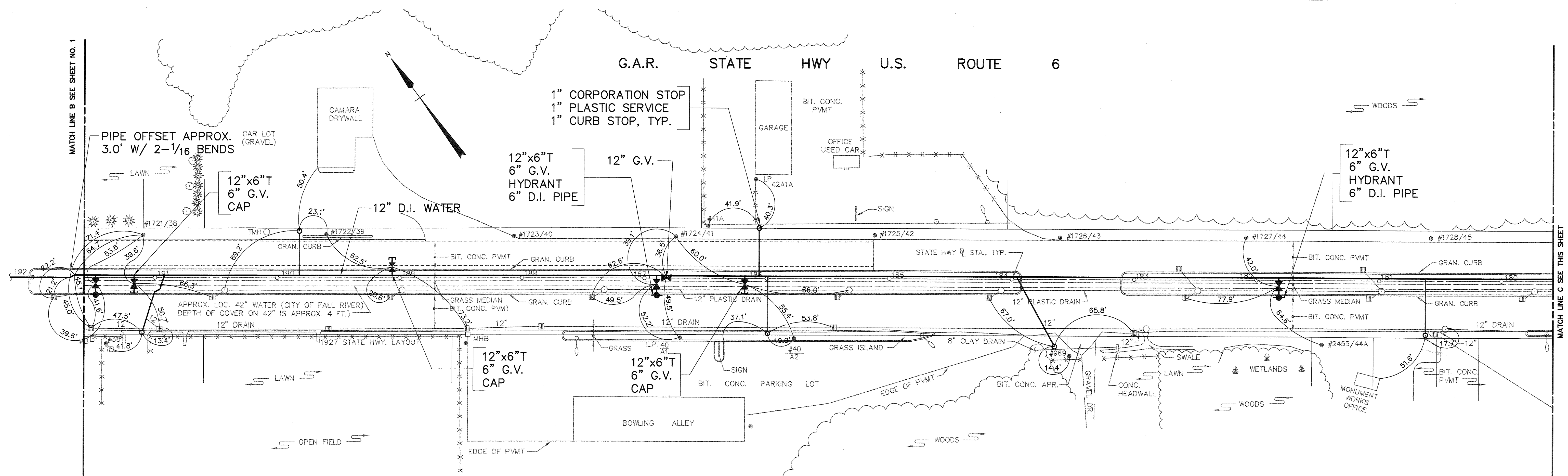
LOCATION PLAN-INDEX TO DRAWINGS  
G.A.R. HWY (VICINITY OF SANFORD RD.  
TO MATCH LINE B)



FAY, SPOFFORD & THORNDIKE, INC.  
ENGINEERS • PLANNERS • SCIENTISTS  
BURLINGTON, MA

FS&T PROJECT NUMBER <b>WW-132</b>	SCALE: AS NOTED DATE: MARCH 1997	DES. BPK DR. YK	CHK. BPK, JJA, RST PROJ. ENGR. JTK	APPROVED <i>[Signature]</i>
--------------------------------------	-------------------------------------	--------------------	---------------------------------------	--------------------------------





	1/98	RECORD PLAN	J.C.	SDC	JVR
REV.	DATE	DESCRIPTION	BY	CHK.	APP'D.

## RECORD PLAN

TOWN OF WESTPORT, MASSACHUSETTS  
BOARD OF SELECTMEN

BOARD OF SELECTMEN

## WATER SYSTEM IMPROVEMENTS

G.A.R. HWY (MATCH LINE B TO MATCH LINE D)

**FAY, SPOFFORD & THORNDIKE, INC.**  
ENGINEERS • PLANNERS • SCIENTISTS  
BURLINGTON, MA

ENGINEERS • PLANNERS • SCIENTISTS  
BURLINGTON, MA

BURLINGTON, MA

FS&T PROJECT NUMBER  
WW-132

WW-132

ER	SCALE:	1"=40'
	DATE:	MARCH 1997

DATE: MARCH 1997

DES.	BPK
DR.	YK

DR.	YK
-----	----

DR.	YK
-----	----

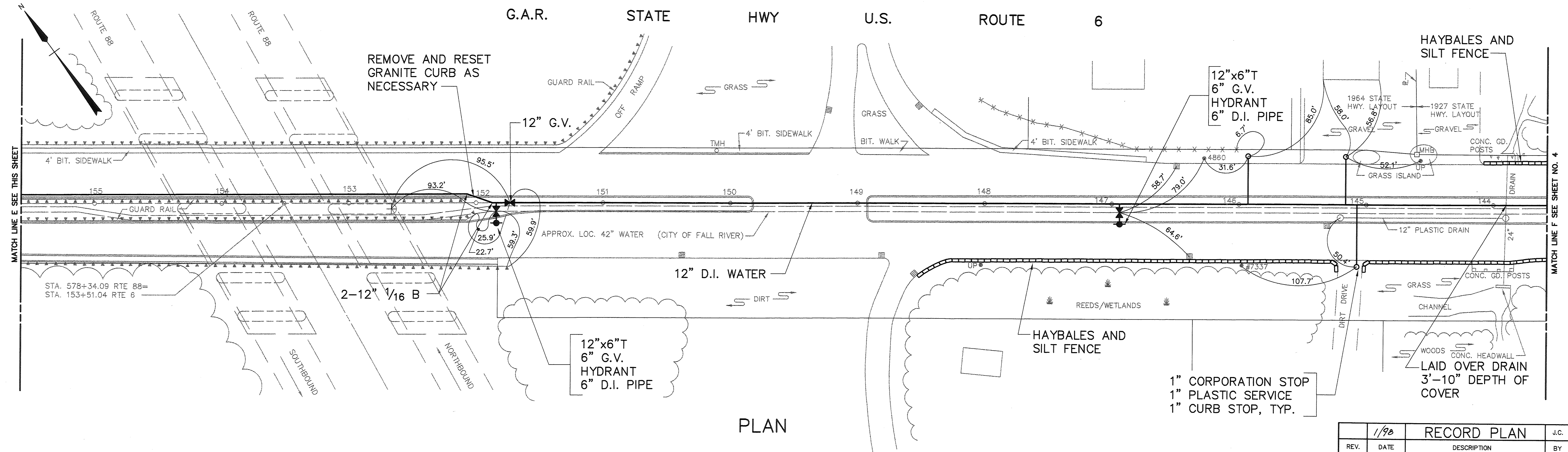
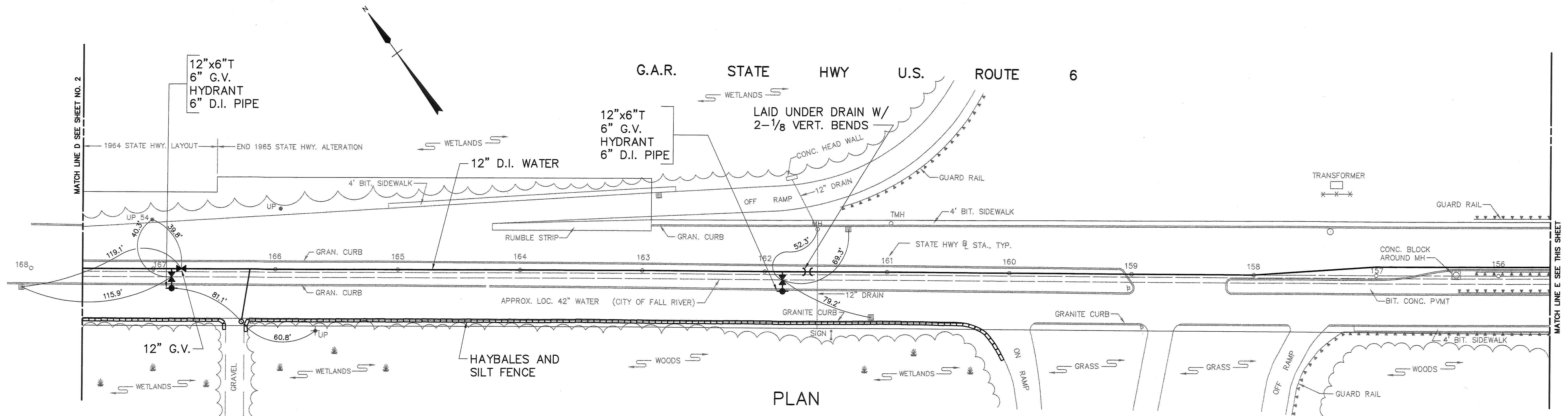
CHK.	BPK, JJA, RST
PROJ. ENCR.	JJR

PROJ. ENGR.	JJR
-------------	-----

SHEET NO. 2 OF 6

NOTE:  
1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE SHEET NO. 6

C:\WW-132.PRJ\HWRT6-2 01/09/98 06:36 [6.68]



	1/98	RECORD PLAN	J.C.	SD	JTR
REV.	DATE	DESCRIPTION	BY	CHK.	APP'D.

## RECORD PLAN

TOWN OF WESTPORT, MASSACHUSETTS  
BOARD OF SELECTMEN

## WATER SYSTEM IMPROVEMENTS

G.A.R. HWY (MATCH LINE D TO MATCH LINE F)



FAY, SPOFFORD & THORNDIKE, INC.  
ENGINEERS • PLANNERS • SCIENTISTS  
BURLINGTON, MA

FS&T PROJECT NUMBER  
WW-132

R	SCALE: 1"=40'
	DATE: MARCH 1999

	DES. BPK
	DR. YK

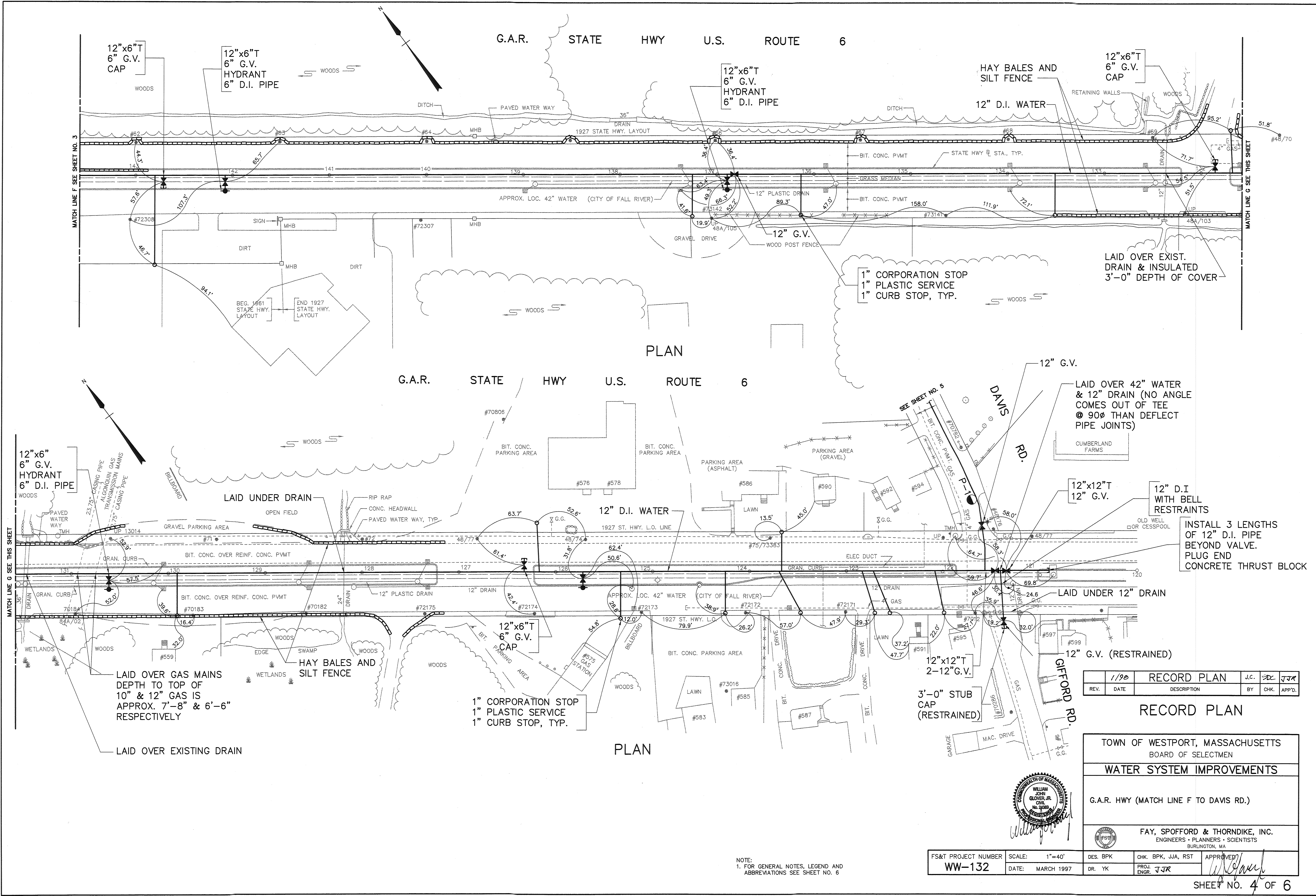
CHK.	BPK, JJA, RST
PROJ.	778

APPROVED

NOTE:  
1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE SHEET NO. 6

SHEET NO. 3 OF 6





1/98	RECORD PLAN	J.C.	J.C.	JJK
REV.	DATE	DESCRIPTION	BY	CHK.

RECORD PLAN

TOWN OF WESTPORT, MASSACHUSETTS BOARD OF SELECTMEN			
WATER SYSTEM IMPROVEMENTS			
G.A.R. HWY (MATCH LINE F TO DAVIS RD.)			
FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS • PLANNERS • SCIENTISTS BURLINGTON, MA			
DES. BPK	CHK. BPK, JJA, RST	APPROVED	
DR. YK	PROJ. ENGR. JJK	[Signature]	

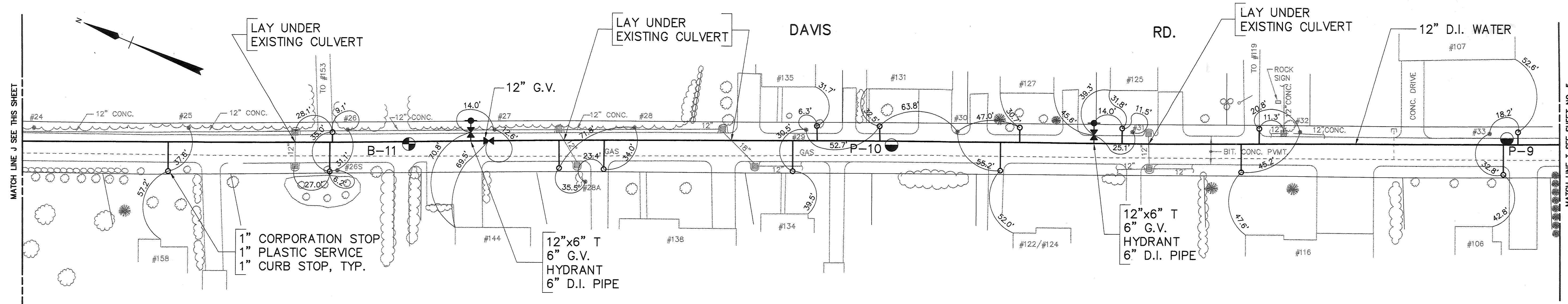
FS&T PROJECT NUMBER	SCALE: 1"=40'
WW-132	DATE: MARCH 1997

NOTE:  
1. FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS SEE SHEET NO. 6

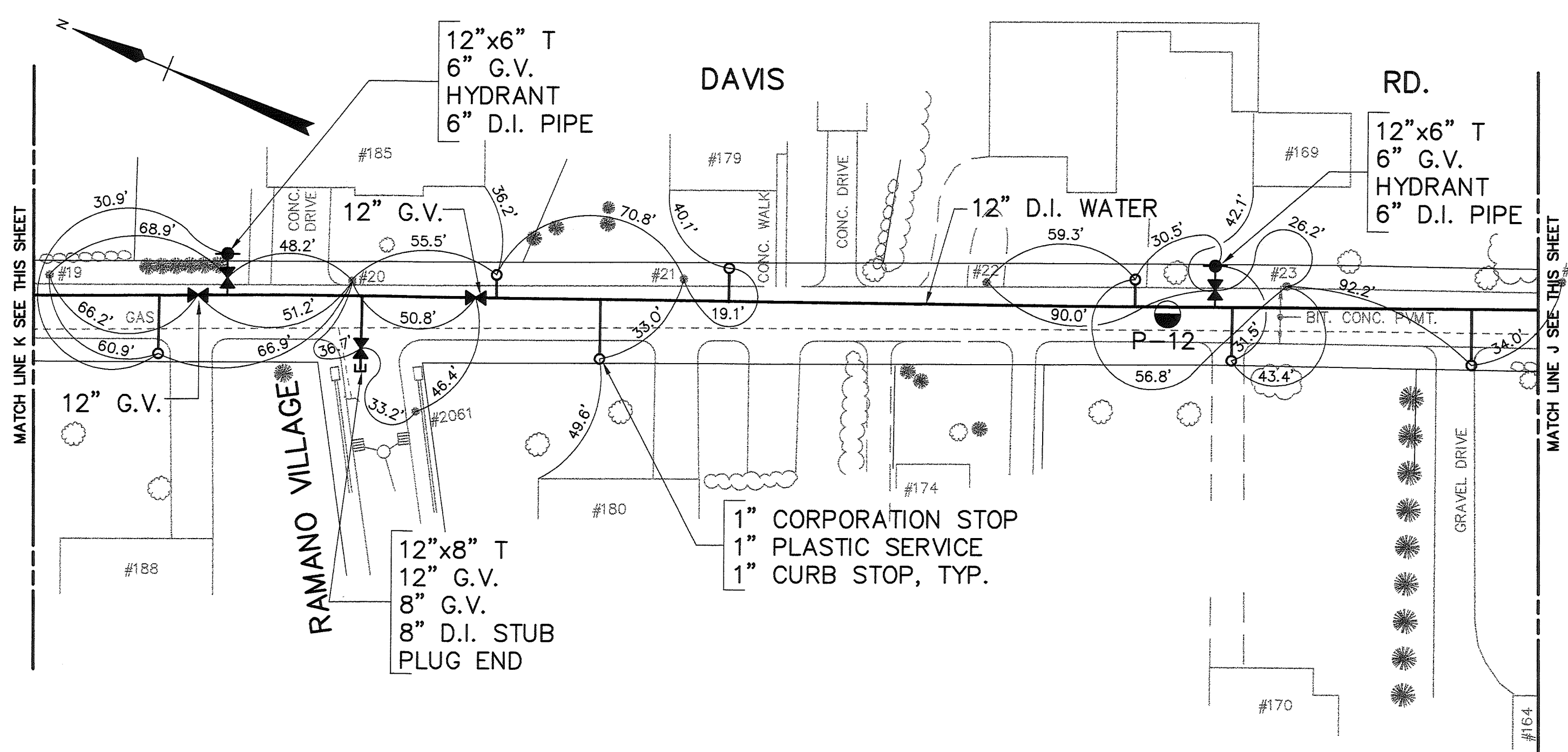




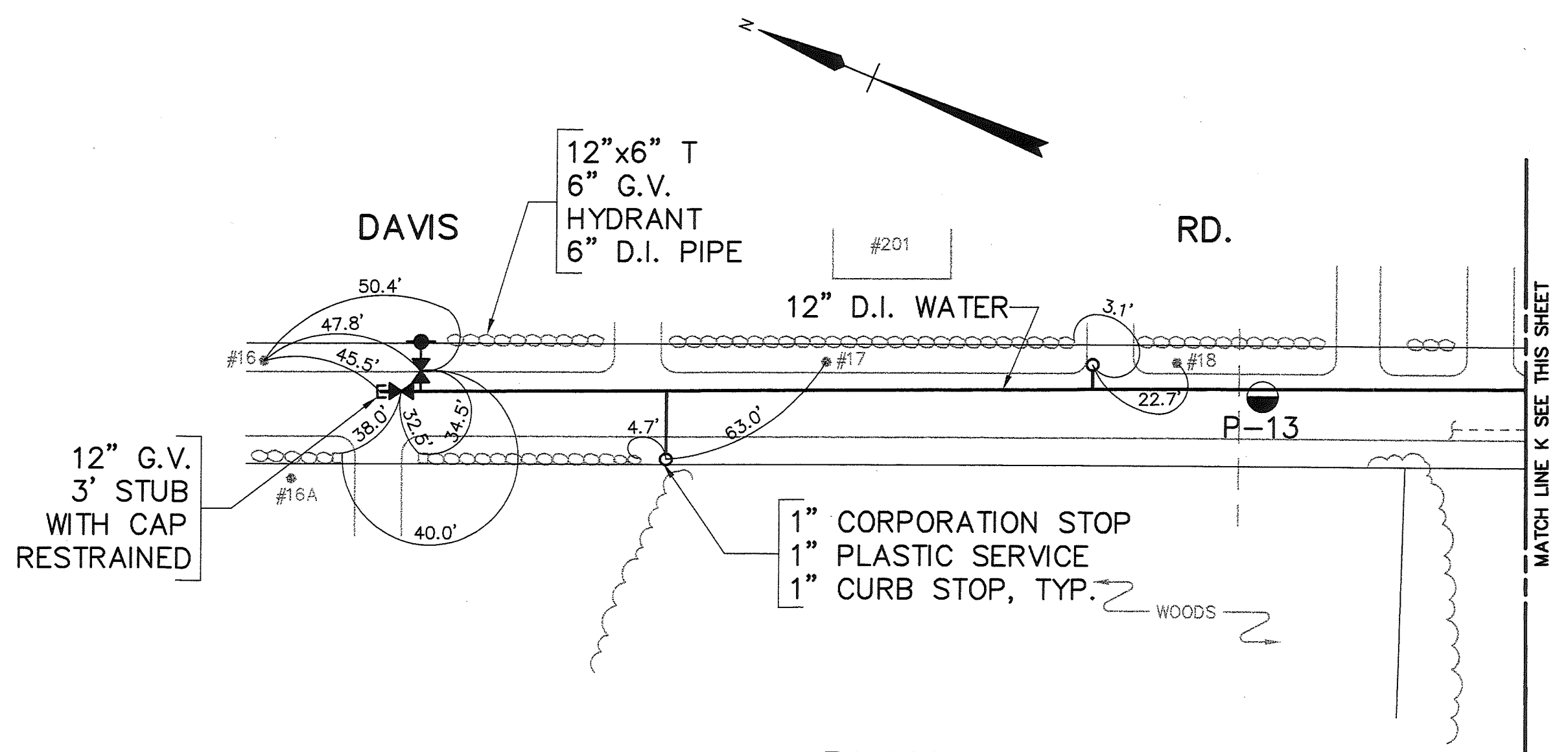




PLAN



PLAN



PLAN

LEGEND

EXISTING	NEW
DRAIN OR SEWER MANHOLE	NEW WATER MAIN
CATCH BASIN	HYDRANT
LIGHT POLE	GATE VALVE
UTILITY POLE	CURB STOP
GATE VALVE	TEE
STORM DRAIN	PLUG
WATER MAIN	HAY BALES WITH OR WITHOUT SILT FENCE
GAS MAIN	BORING
TELEPHONE	PROBE
ELECTRIC	WETLAND FLAG
CONIFEROUS TREE	
DECIDUOUS TREE	
TREE LINE	
STONE WALL	
RETAINING WALL	
SIGN	
BITUMINOUS CONCRETE PAVEMENT	
FENCE	
GUARD RAIL	
WETLAND	
PROPERTY LINE	

ABBREVIATIONS

D.I.	DUCTILE IRON	B	BEND
G.V.	GATE VALVE	E.O.P.	EDGE OF PAVEMENT
T	TEE	P.V.M.T.	PAVEMENT TYPICAL
TEL	TELEPHONE	TYP.	

GENERAL NOTES

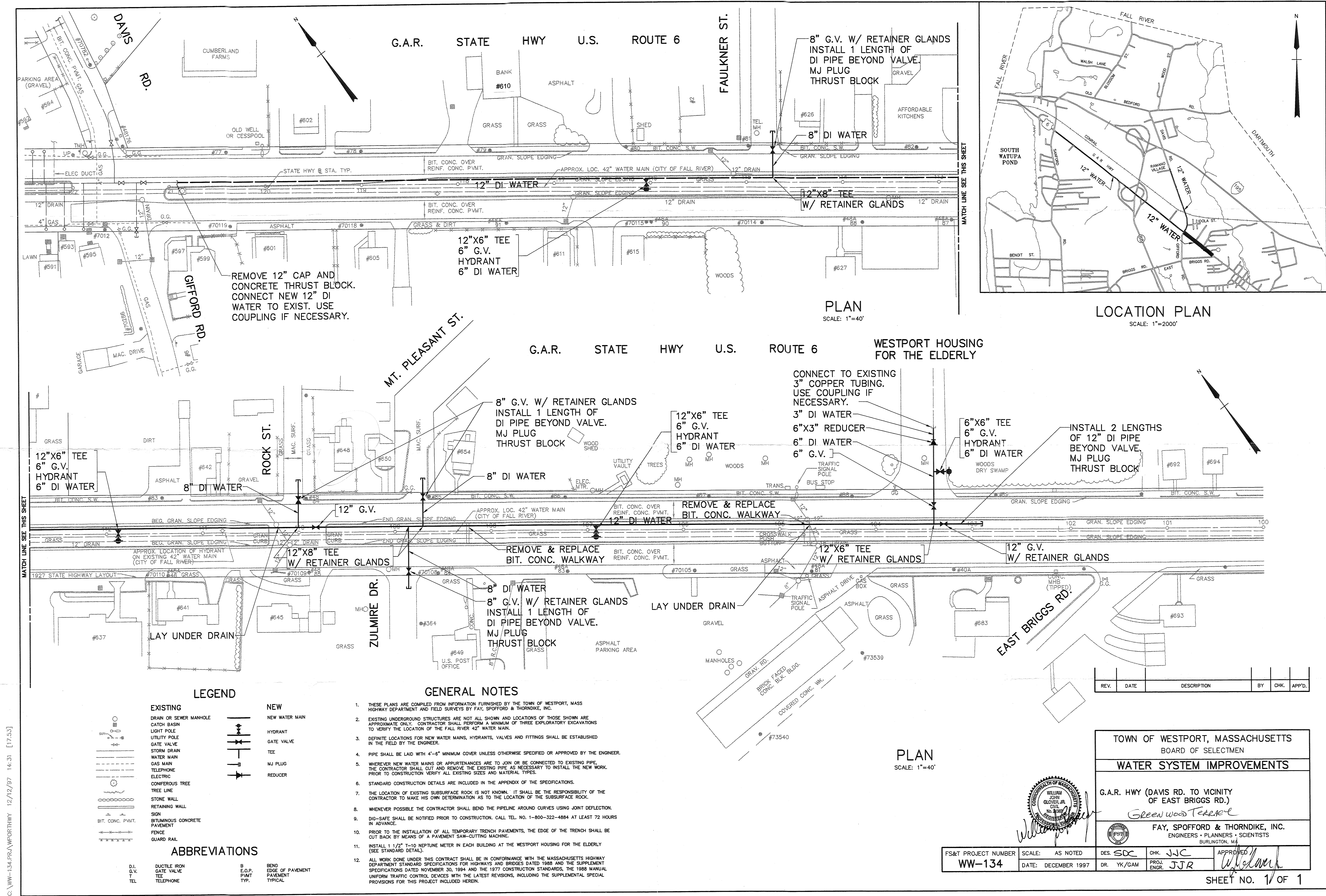
- THESE PLANS ARE COMPILED FROM INFORMATION FURNISHED BY THE TOWN OF WESTPORT, MASS HIGHWAY DEPARTMENT AND FIELD SURVEYS BY FAY, SPOFFORD & THORNDIKE, INC.
- EXISTING UNDERGROUND STRUCTURES ARE NOT ALL SHOWN AND LOCATIONS OF THOSE SHOWN ARE APPROXIMATE ONLY.
- DEFINITE LOCATIONS FOR NEW WATER MAINS, HYDRANTS, VALVES AND FITTINGS SHALL BE ESTABLISHED IN THE FIELD BY THE ENGINEER.
- PIPE SHALL BE LAID WITH 4'-6" MINIMUM COVER UNLESS OTHERWISE SPECIFIED OR APPROVED BY THE ENGINEER.
- WHEREVER NEW WATER MAINS OR APPURTENANCES ARE TO JOIN OR BE CONNECTED TO EXISTING PIPE, THE CONTRACTOR SHALL CUT AND REMOVE THE EXISTING PIPE AS NECESSARY TO INSTALL THE NEW WORK. PRIOR TO CONSTRUCTION VERIFY ALL EXISTING SIZES AND MATERIAL TYPES.
- STANDARD CONSTRUCTION DETAILS ARE INCLUDED IN THE APPENDIX OF THE SPECIFICATIONS.
- THE LOCATION OF EXISTING SUBSURFACE ROCK IS NOT KNOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN DETERMINATION AS TO THE LOCATION OF THE SUBSURFACE ROCK. BORING LOGS ARE INCLUDED.
- WHENEVER POSSIBLE THE CONTRACTOR SHALL BEND THE PIPELINE AROUND CURVES USING JOINT DEFLECTION.
- DIG-SAFE SHALL BE NOTIFIED PRIOR TO CONSTRUCTION. CALL TEL. NO. 1-800-322-4884 AT LEAST 72 HOURS IN ADVANCE.
- PRIOR TO THE INSTALLATION OF ALL TEMPORARY TRENCH PAVEMENTS, THE EDGE OF THE TRENCH SHALL BE CUT BACK BY MEANS OF A PAVEMENT SAW-CUTTING MACHINE.
- RESURFACING SHALL CONSIST OF TEMPORARY TRENCH PAVEMENT FOLLOWED IN NOT LESS THAN 90 DAYS BY FULL WIDTH PAVING AS DESCRIBED IN THE SPECIFICATIONS.
- BORINGS AND PROBES TAKEN BY B. & J. DRILLING, SUDBURY, MA. IN OCTOBER 1996 ARE SHOWN ON THE DRAWING THUS: B-15
- ALL SERVICES ON ROUTE 6 SHALL BE BORED BENEATH PAVEMENT.
- PROPERTY LINES SHOWN ARE APPROXIMATE ONLY.
- INSTALL PIPE APPROXIMATELY 14 FEET FROM EAST PROPERTY LINE ON DAVIS ROAD.

REV.	1/98	RECORD PLAN	YK	SD	JJR
DATE		DESCRIPTION	BY	CHK.	APP'D.

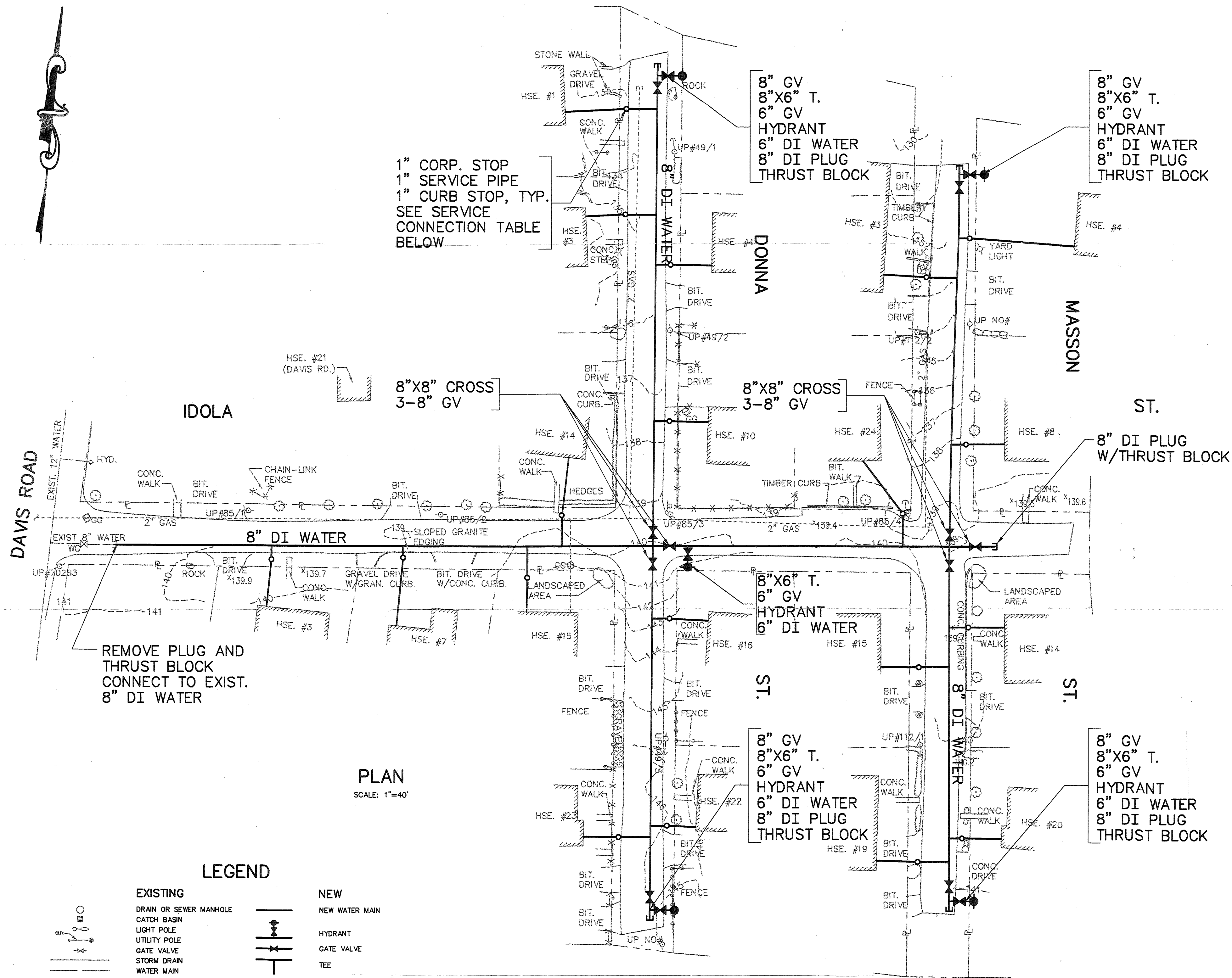
RECORD PLAN

TOWN OF WESTPORT, MASSACHUSETTS BOARD OF SELECTMEN	
WATER SYSTEM IMPROVEMENTS	
DAVIS RD. (MATCH LINE I TO VICINITY OF RAMANO VILLAGE)	
FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS • PLANNERS • SCIENTISTS BURLINGTON, MA	
FS&T PROJECT NUMBER WW-132	SCALE: 1"=40' DATE: MARCH 1997 DES. BPK CHK. BPK, JJA, RST PROJ. ENGR. YK









1" CORP. STOP  
1" SERVICE PIPE  
1" CURB STOP, TYP.  
SEE SERVICE  
CONNECTION TABLE  
BELOW

8" GV  
8"x6" T.  
6" GV  
HYDRANT  
6" DI WATER  
8" DI PLUG  
THRUST BLOCK

8" GV  
8"x6" T.  
6" GV  
HYDRANT  
6" DI WATER  
8" DI PLUG  
THRUST BLOCK

8"x6" T.  
6" GV  
HYDRANT  
6" DI WATER  
8" DI PLUG  
THRUST BLOCK

8" GV  
8"x6" T.  
6" GV  
HYDRANT  
6" DI WATER  
8" DI PLUG  
THRUST BLOCK

REMOVE PLUG AND  
THRUST BLOCK  
CONNECT TO EXIST.  
8" DI WATER

PLAN  
SCALE: 1"=40'

LEGEND

EXISTING	NEW
DRAIN OR SEWER MANHOLE	NEW WATER MAIN
CATCH BASIN	HYDRANT
LIGHT POLE	GATE VALVE
UTILITY POLE	TEE
GATE VALVE	MJ PLUG
STORM DRAIN	REDUCER
WATER MAIN	
GAS MAIN	
TELEPHONE	
ELECTRIC	
CONIFEROUS TREE	
TREE LINE	
STONE WALL	
RETAINING WALL	
SIGN	
BITUMINOUS CONCRETE	
PAVEMENT	
FENCE	
GUARD RAIL	

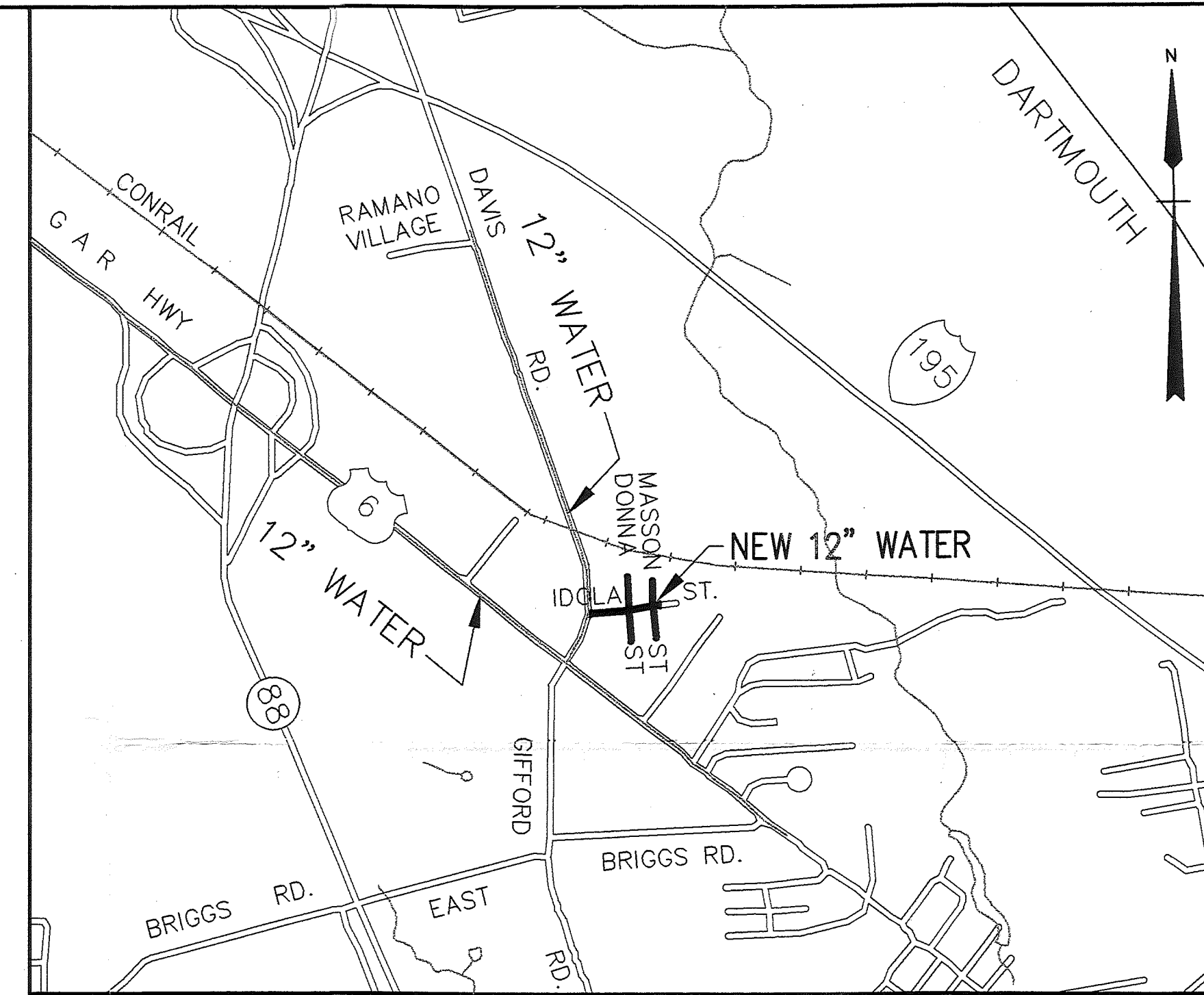
ABBREVIATIONS

D.I.	DUCTILE IRON	B	BEND
G.V.	GATE VALVE	E.O.P.	EDGE OF PAVEMENT
T	TEE	P.W.T.	PAVEMENT TYPICAL
TEL	TELEPHONE		

SERVICE CONNECTIONS

1 DONNA STREET	24 IDOLA STREET
3 DONNA STREET	3 MASSON STREET
4 DONNA STREET	4 MASSON STREET
10 DONNA STREET	8 MASSON STREET
16 DONNA STREET	14 MASSON STREET
22 DONNA STREET	15 MASSON STREET
23 DONNA STREET	19 MASSON STREET
3 IDOLA STREET	20 MASSON STREET
7 IDOLA STREET	119 DAVIS ROAD*
14 IDOLA STREET	144 DAVIS ROAD*
15 IDOLA STREET	202 DAVIS ROAD*

\* SEE NOTE 11



LOCATION PLAN  
SCALE: 1"=1000'

GENERAL NOTES

- THESE PLANS ARE COMPILED FROM INFORMATION FURNISHED BY THE TOWN OF WESTPORT, MASS HIGHWAY DEPARTMENT AND FIELD SURVEYS BY MAUK, BOUCHER & HEUREUX, INC.
- EXISTING UNDERGROUND STRUCTURES ARE NOT ALL SHOWN AND LOCATIONS OF THOSE SHOWN ARE APPROXIMATE ONLY.
- DEFINITE LOCATIONS FOR NEW WATER MAINS, HYDRANTS, VALVES AND FITTINGS SHALL BE ESTABLISHED IN THE FIELD BY THE ENGINEER.
- WHEREVER NEW WATER MAINS OR APPURTENANCES ARE TO JOIN OR BE CONNECTED TO EXISTING PIPE, THE CONTRACTOR SHALL CUT AND REMOVE THE EXISTING PIPE AS NECESSARY TO INSTALL THE NEW WORK. PRIOR TO CONSTRUCTION VERIFY ALL EXISTING SIZES AND MATERIAL TYPES.
- STANDARD CONSTRUCTION DETAILS ARE INCLUDED IN THE APPENDIX OF THE SPECIFICATIONS.
- THE LOCATION OF EXISTING SUBSURFACE ROCK IS NOT KNOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN DETERMINATION AS TO THE LOCATION OF THE SUBSURFACE ROCK.
- WHENEVER POSSIBLE THE CONTRACTOR SHALL BEND THE PIPELINE AROUND CURVES USING JOINT DEFLECTION.
- DIG-SAFE SHALL BE NOTIFIED PRIOR TO CONSTRUCTION. CALL TEL. NO. 1-800-322-4884 AT LEAST 72 HOURS IN ADVANCE.
- PRIOR TO THE INSTALLATION OF ALL TEMPORARY TRENCH PAVEMENTS, THE EDGE OF THE TRENCH SHALL BE CUT BACK BY MEANS OF A PAVEMENT SAW-CUTTING MACHINE.
- SERVICE CONNECTIONS TO HOMES ON IDOLA STREET, DONNA STREET, AND MASSON STREET ARE ALL TO BE PLASTIC PIPING BETWEEN THE MAIN AND THE HOUSE FOUNDATION. INTERIOR PIPING IS TO BE COPPER TO BE INSTALLED BY A MASTER PLUMBER. EXACT LOCATIONS TO BE DETERMINED IN THE FIELD.
- SERVICE CONNECTIONS TO #119, 144, AND 202 DAVIS ROAD ARE NOT SHOWN ON THIS PLAN. CONNECTION WILL BE MADE AT THE EXISTING CURB STOP. PIPING BETWEEN THE CURB STOP AND THE HOUSE FOUNDATION IS TO BE PLASTIC; INTERIOR PIPING IS TO BE COPPER AND INSTALLED BY A MASTER PLUMBER. EXACT LOCATIONS TO BE DETERMINED IN THE FIELD. EXTERIOR SERVICE PIPING FROM THE CURB STOP TO HOUSE #119 SHALL BE 2-INCH DIAMETER. THE CONTRACTOR SHALL ALSO INSTALL ALL FITTINGS NECESSARY TO CONNECT THE 2-INCH SERVICE PIPE TO THE CURB STOP AND INTERIOR PLUMBING.

REV.	DATE	DESCRIPTION	BY	CHK.	APP'D.
------	------	-------------	----	------	--------

TOWN OF WESTPORT, MASSACHUSETTS  
BOARD OF SELECTMEN

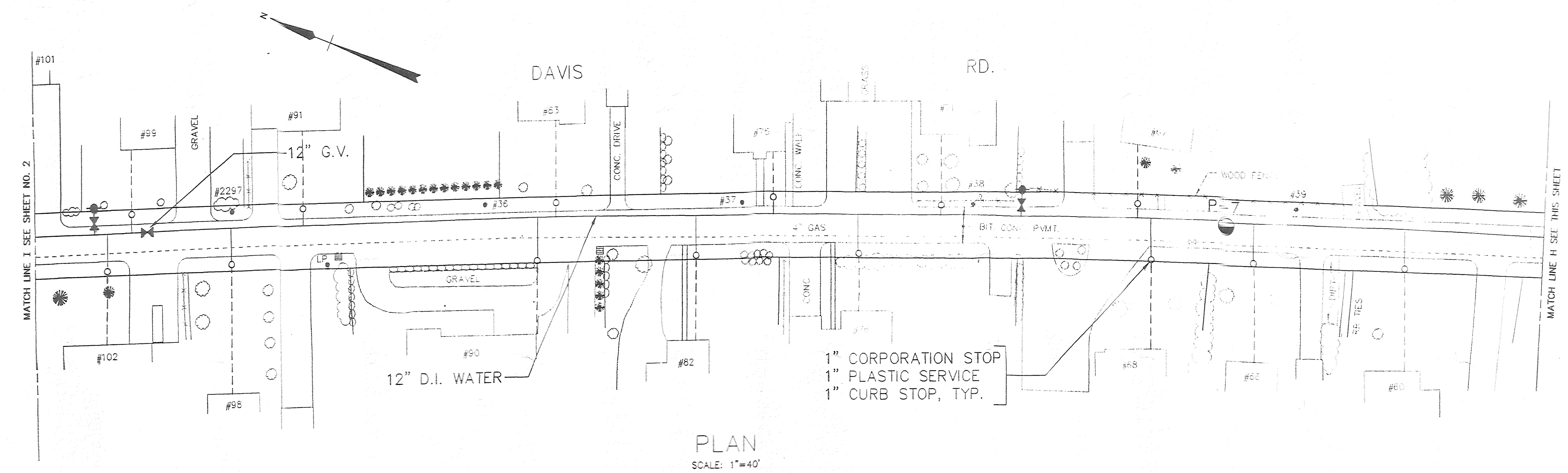
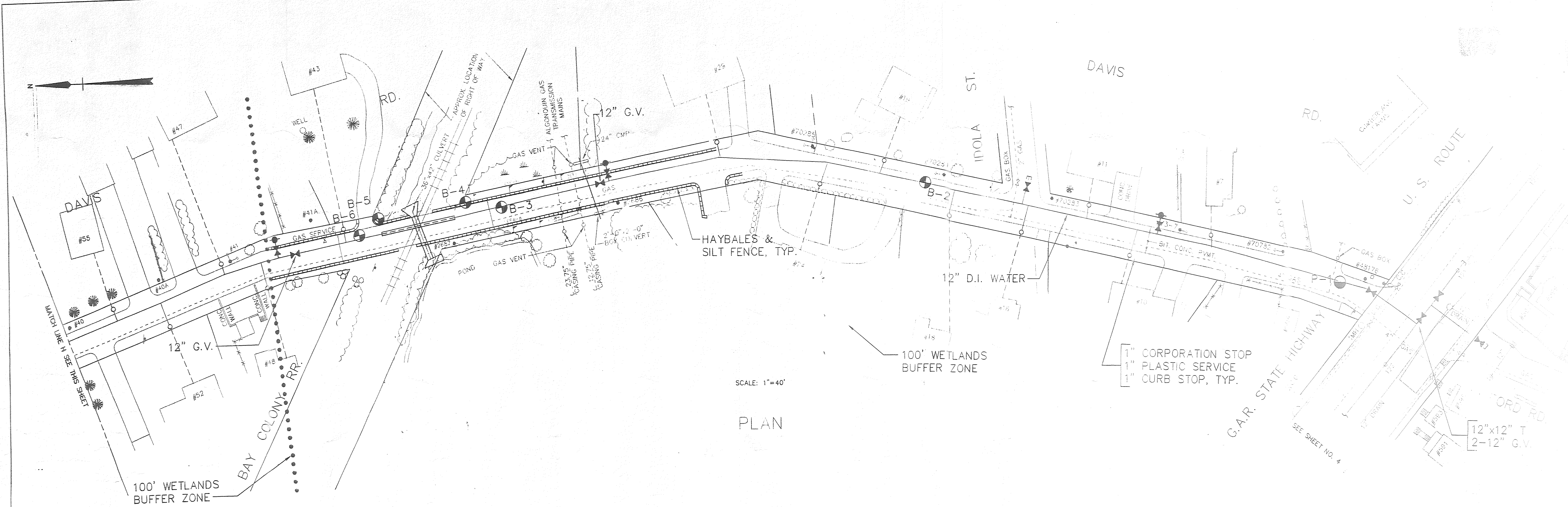
WATER SYSTEM IMPROVEMENTS

IDOLA ST., DONNA ST. & MASSON ST.

FAY, SPOFFORD & THORNDIKE, INC.  
ENGINEERS • PLANNERS • SCIENTISTS  
BURLINGTON, MA

FS&T PROJECT NUMBER	SCALE: 1"=40'	DES. GAB	CHK. JJC	APPROVED
WW-138	DATE: AUGUST 1998	DR. GAB	PROJ. ENGR. JUR	

D:\VW-132\PRJ\RT6-DAYS 03/08/97 13:11 [11.89]

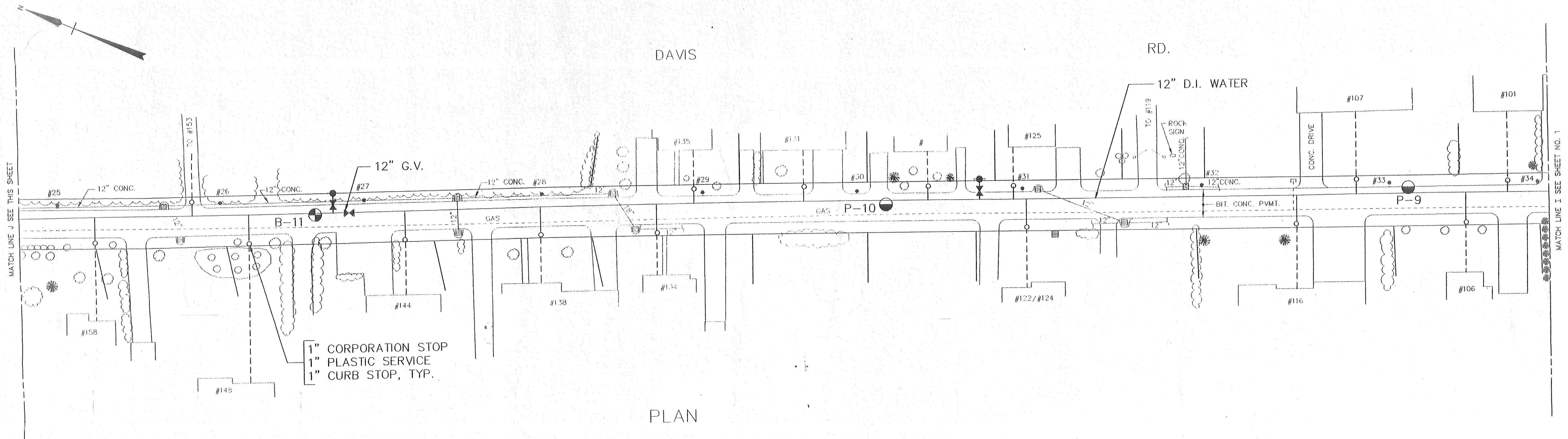


REV.	DATE	DESCRIPTION	BY	CHK.	APPD.
------	------	-------------	----	------	-------

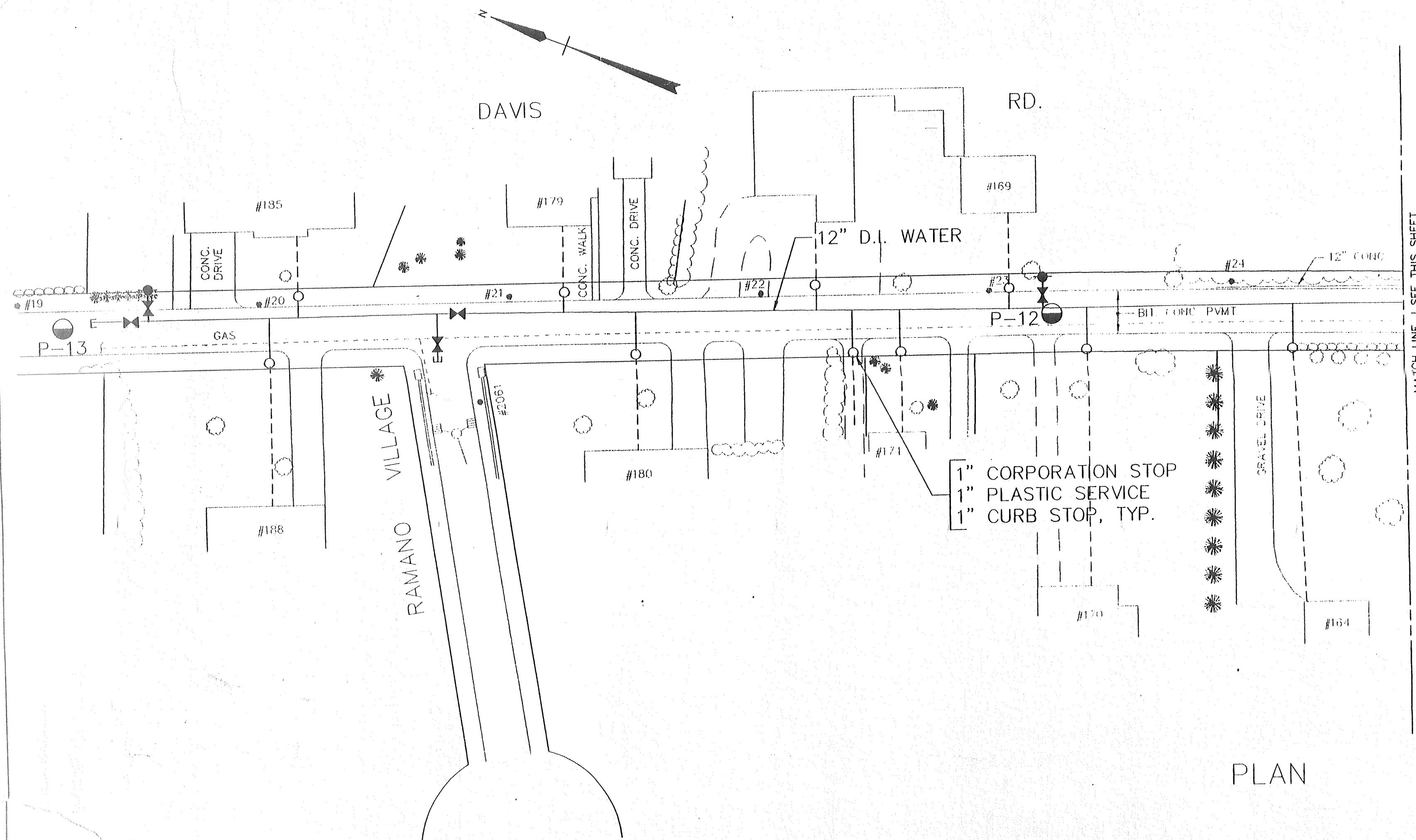
TOWN OF WESTPORT, MASSACHUSETTS BOARD OF SELECTMEN	
WATER SYSTEM IMPROVEMENTS	
DAVIS RD. SERVICE CONNECTIONS (G.R.A. HWY TO MATCH LINE I)	
FAY, SPOFFORD & THORNDIKE, INC. ENGINEERS • PLANNERS • SCIENTISTS BURLINGTON, MA	
APPROVED	

SCALE: AS NOTED	DES.	CHK.
DATE: JUNE 1997	DR. GZ	PROJ. ENGR.





PLAN



PLAN

### LEGEND

#### EXISTING

DRAIN OR SEWER MANHOLE  
 CATCH BASIN  
 LIGHT POLE  
 UTILITY POLE  
 GATE VALVE  
 STORM DRAIN  
 WATER MAIN  
 GAS MAIN  
 TELEPHONE  
 ELECTRIC  
 CONIFEROUS TREE  
 DECIDUOUS TREE  
 TREE LINE  
 STONE WALL  
 RETAINING WALL  
 SIGN  
 BITUMINOUS CONCRETE PAVEMENT  
 FENCE  
 GUARD RAIL  
 WETLAND  
 PROPERTY LINE

#### EXISTING

NEW WATER MAIN  
 HYDRANT  
 GATE VALVE  
 CURB STOP  
 TEE  
 PLUG  
 HAY BALES WITH OR WITHOUT SILT FENCE  
 BORING  
 PROBE  
 WETLAND FLAG  
 NEW  
 WATER SERVICES

### ABBREVIATIONS

D.I. DUCTILE IRON  
 G.V. GATE VALVE  
 T TEE  
 TEL TELEPHONE  
 B BEND  
 E.O.P. EDGE OF PAVEMENT  
 P.V.M.T. PAVEMENT TYPICAL

### GENERAL NOTES

- THESE PLANS ARE COMPILED FROM INFORMATION FURNISHED BY THE TOWN OF WESTPORT, MASS HIGHWAY DEPARTMENT AND FIELD SURVEYS BY FAY, SPOFFORD & THORNDIKE, INC.
- EXISTING UNDERGROUND STRUCTURES ARE NOT ALL SHOWN AND LOCATIONS OF THOSE SHOWN ARE APPROXIMATE ONLY.
- PIPE SHALL BE LAID WITH 4'-6" MINIMUM COVER UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
- PROPERTY LINES SHOWN ARE APPROXIMATE ONLY.
- WATER MAIN, CORPORATION STOPS, 1" SERVICES AND CURB STOPS WILL BE INSTALLED BY OTHERS UNDER A SEPARATE CONTRACT. LOCATIONS SHOWN ARE APPROXIMATE ONLY. AS-BUILT INFORMATION WILL BE AVAILABLE UPON COMPLETION.
- LOCATION OF WATER SERVICE ENTERING RESIDENCY ARE APPROXIMATE, EXACT LOCATION TO BE DETERMINED IN THE FIELD.

REV.	DATE	DESCRIPTION	BY	CHK.	APP'D.

TOWN OF WESTPORT, MASSACHUSETTS  
 BOARD OF SELECTMEN  
 WATER SYSTEM IMPROVEMENTS

DAVIS RD. SERVICE CONNECTIONS  
 (MATCH LINE I TO VICINITY OF RAMANO VILLAGE)

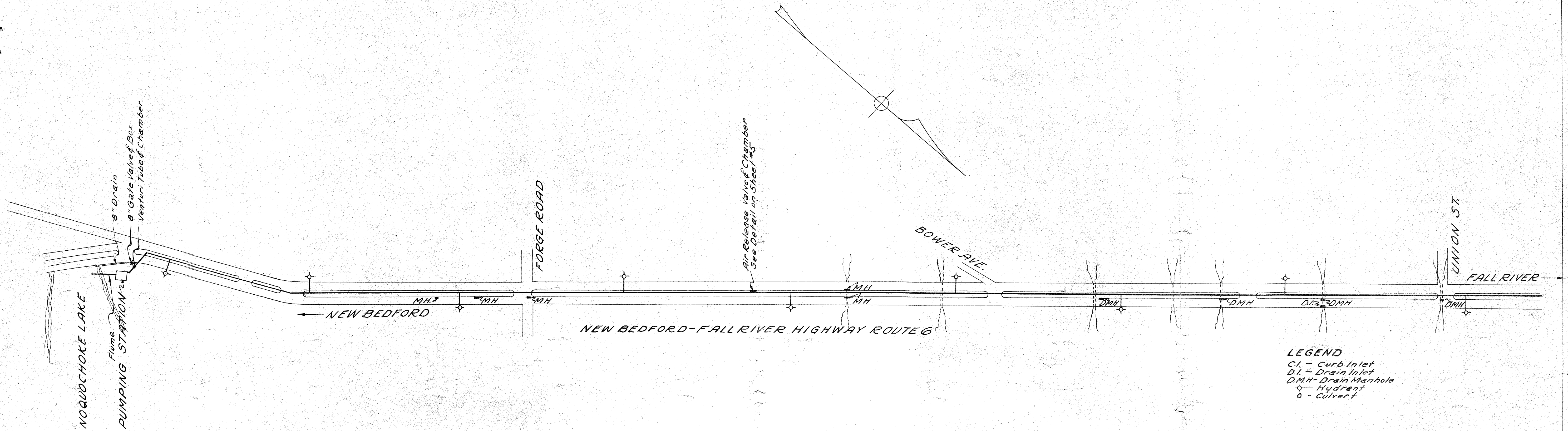


FAY, SPOFFORD & THORNDIKE, INC.  
 ENGINEERS • PLANNERS • SCIENTISTS  
 BURLINGTON, MA

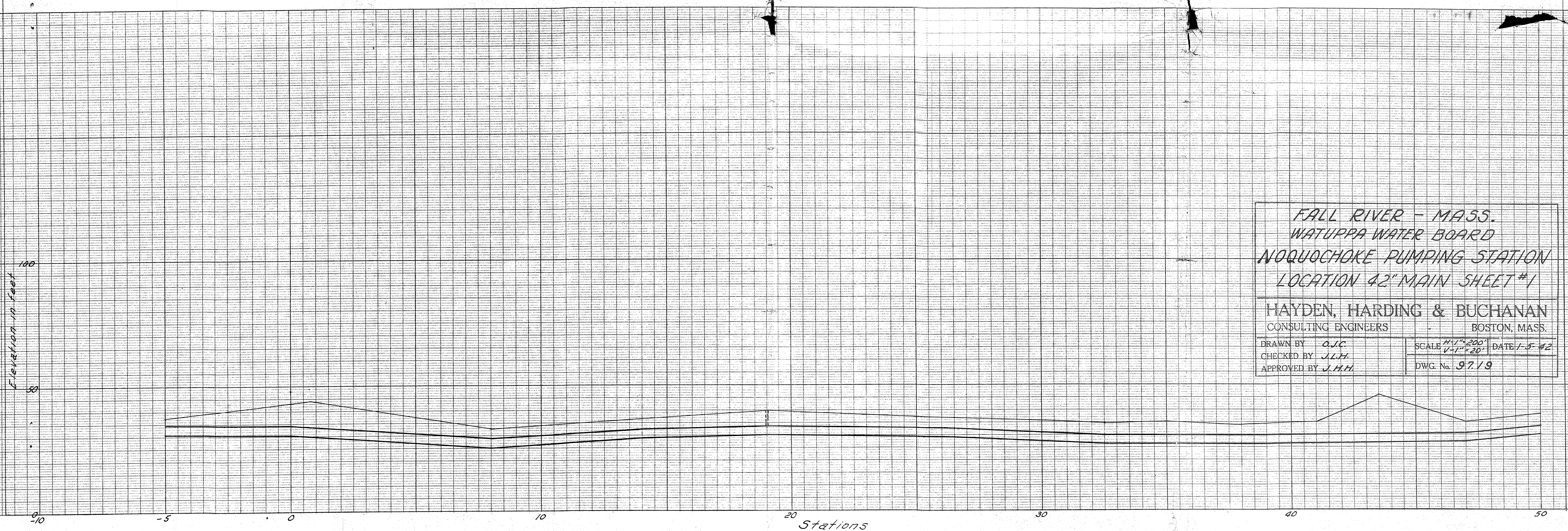
SCALE: 1"=40'	DES.	CHK.	APPROVED
DATE: JUNE 1997	DR. QZ	PROJ. ENGR.	

SHEET NO. 2 OF 2



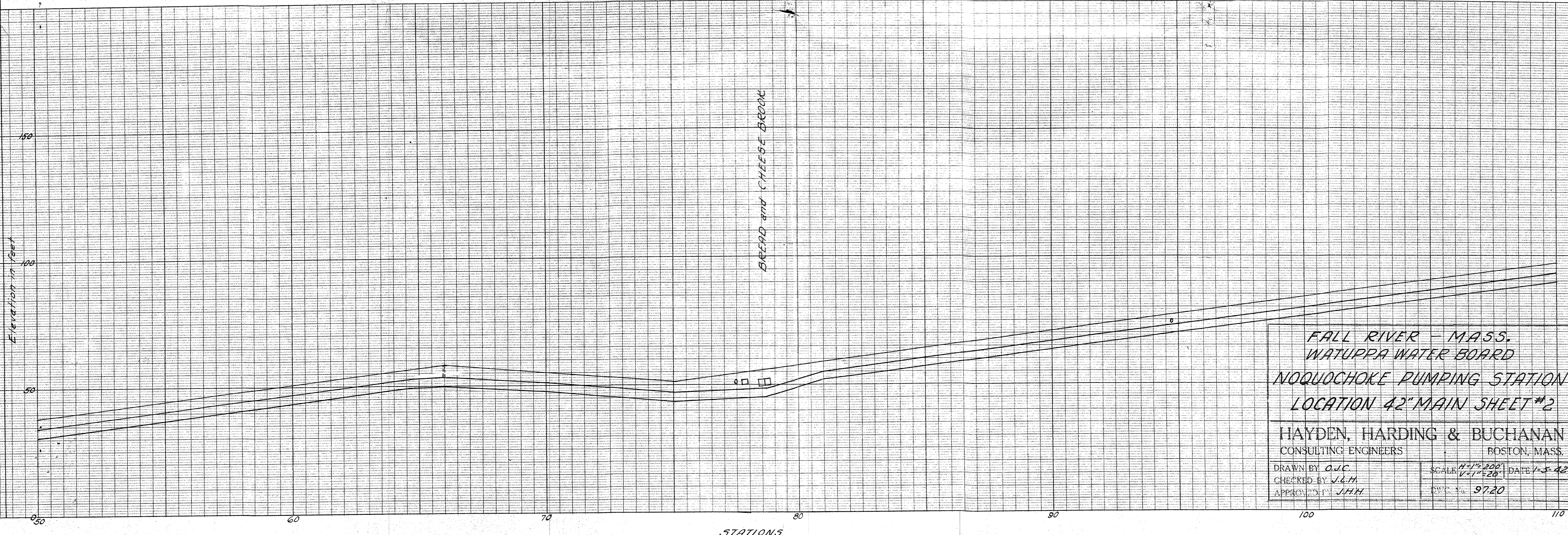
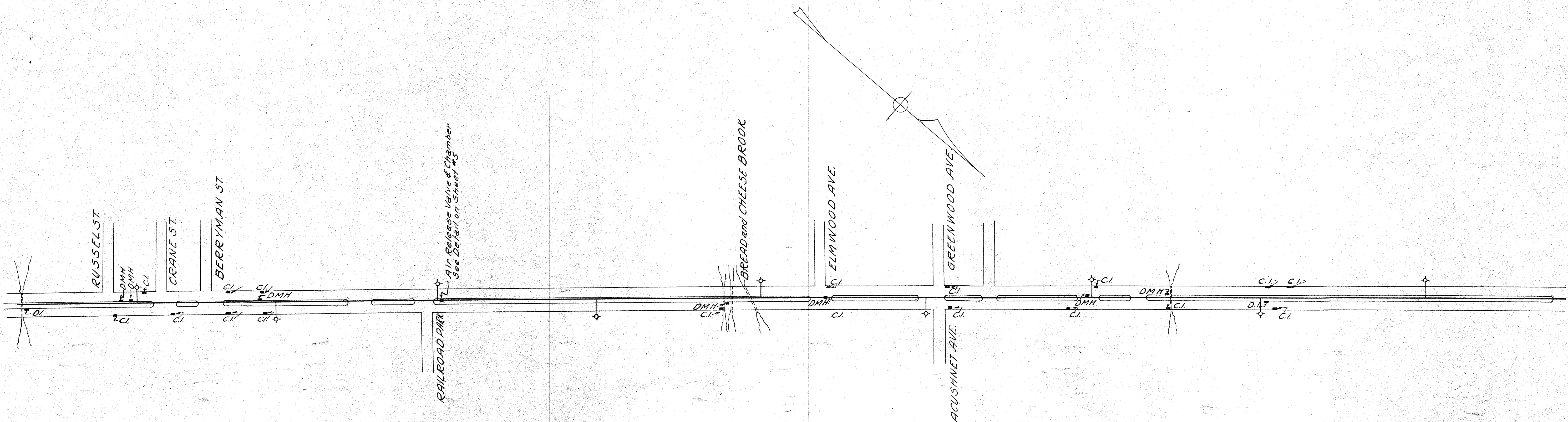


Note: Crossovers Surfaced with Macadam



FALL RIVER - MASS.	
WATUPPA WATER BOARD	
NOQUOCHOKE PUMPING STATION	
LOCATION 42" MAIN SHEET #1	
HAYDEN, HARDING & BUCHANAN	
CONSULTING ENGINEERS	BOSTON, MASS.
DRAWN BY O.J.C.	SCALE $\frac{1}{4}" = 20'$ DATE 1-5-42
CHECKED BY J.L.H.	DWG. No. 97/9
APPROVED BY J.H.H.	





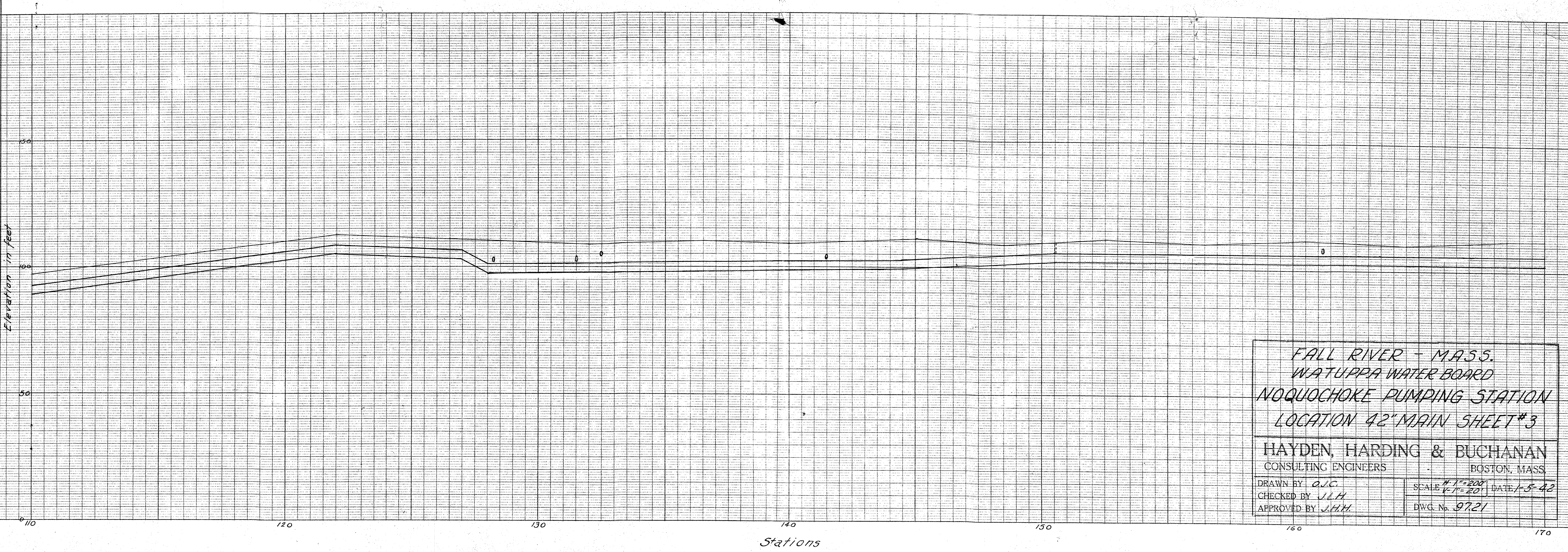
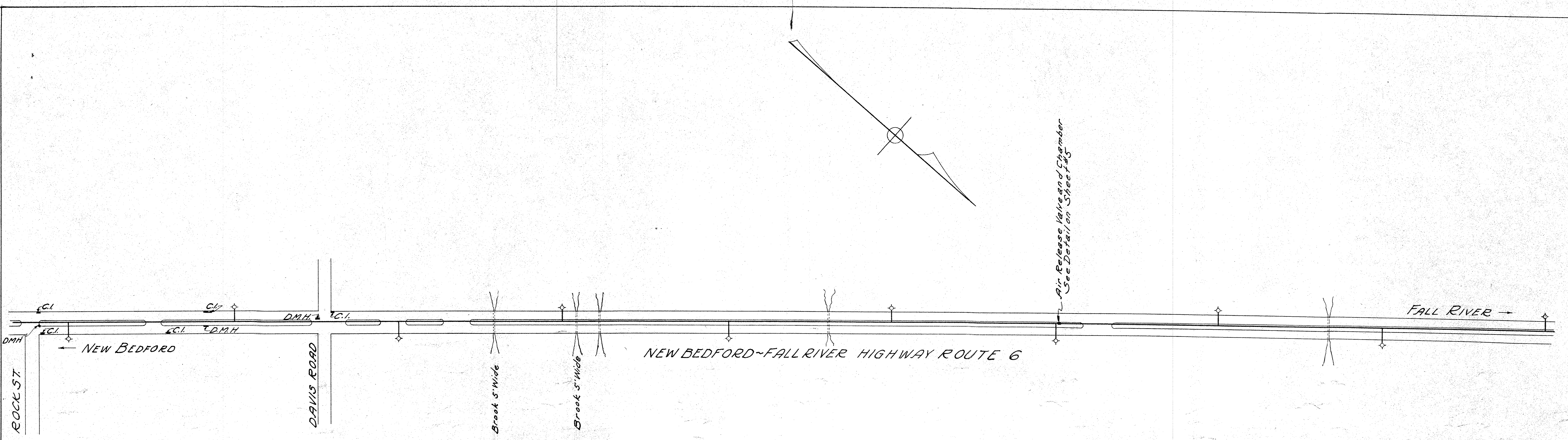
FALL RIVER - MASS.  
 WATUPPA WATER BOARD  
 NOQUOCHOKE PUMPING STATION  
 LOCATION 42" MAIN SHEET #2

HAYDEN, HARDING & BUCHANAN  
 CONSULTING ENGINEERS BOSTON, MASS.

DRAWN BY *D.J.C.*  
 CHECKED BY *J.L.H.*  
 APPROVED BY *J.H.H.*

SCALE:  $H=1"=200'$   
 $V=1"=20'$   
 DATE 1-5-42  
 C.W.C. No. 9720





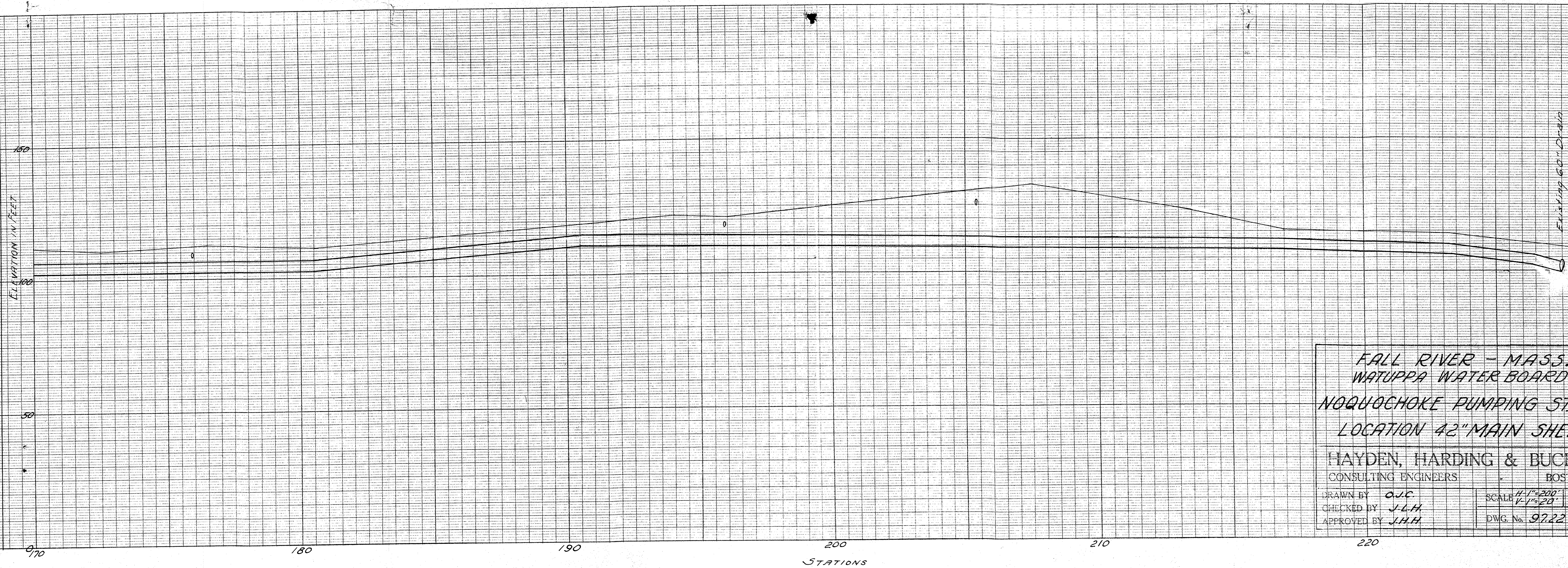
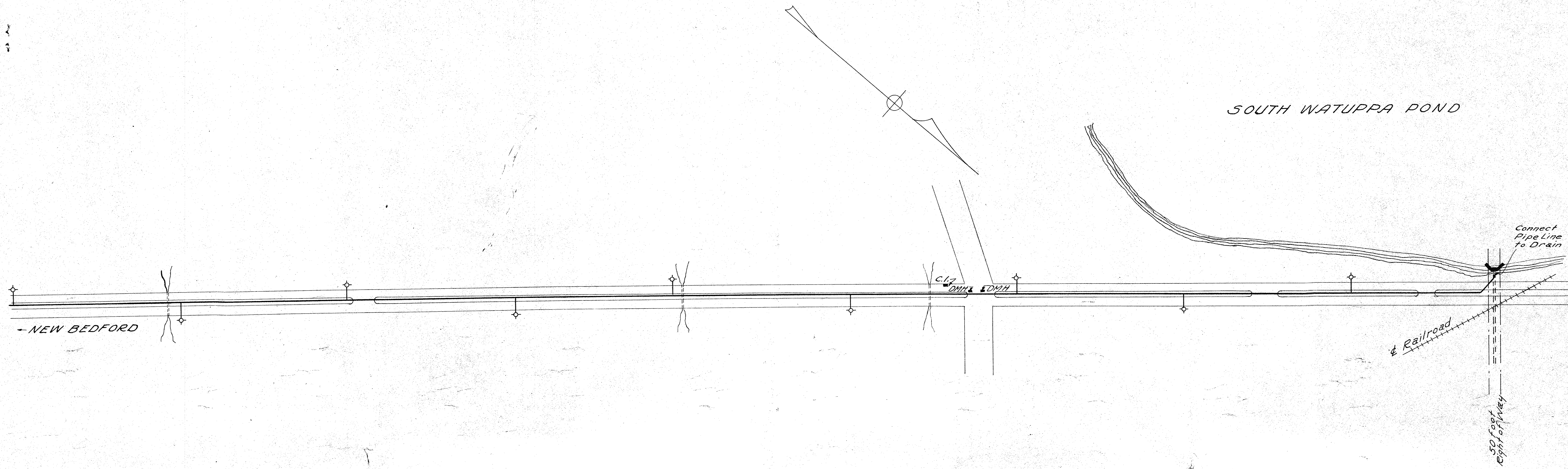
FALL RIVER - MASS.  
 WATUPPA WATER BOARD  
 NOQUOCHOKE PUMPING STATION  
 LOCATION 42" MAIN SHEET #3

HAYDEN, HARDING & BUCHANAN  
 CONSULTING ENGINEERS BOSTON, MASS.

DRAWN BY *AJC*  
 CHECKED BY *JLH*  
 APPROVED BY *JLH*

SCALE  $\frac{1"}{200'}$  DATE 1-5-42  
 DWG. No. 9721



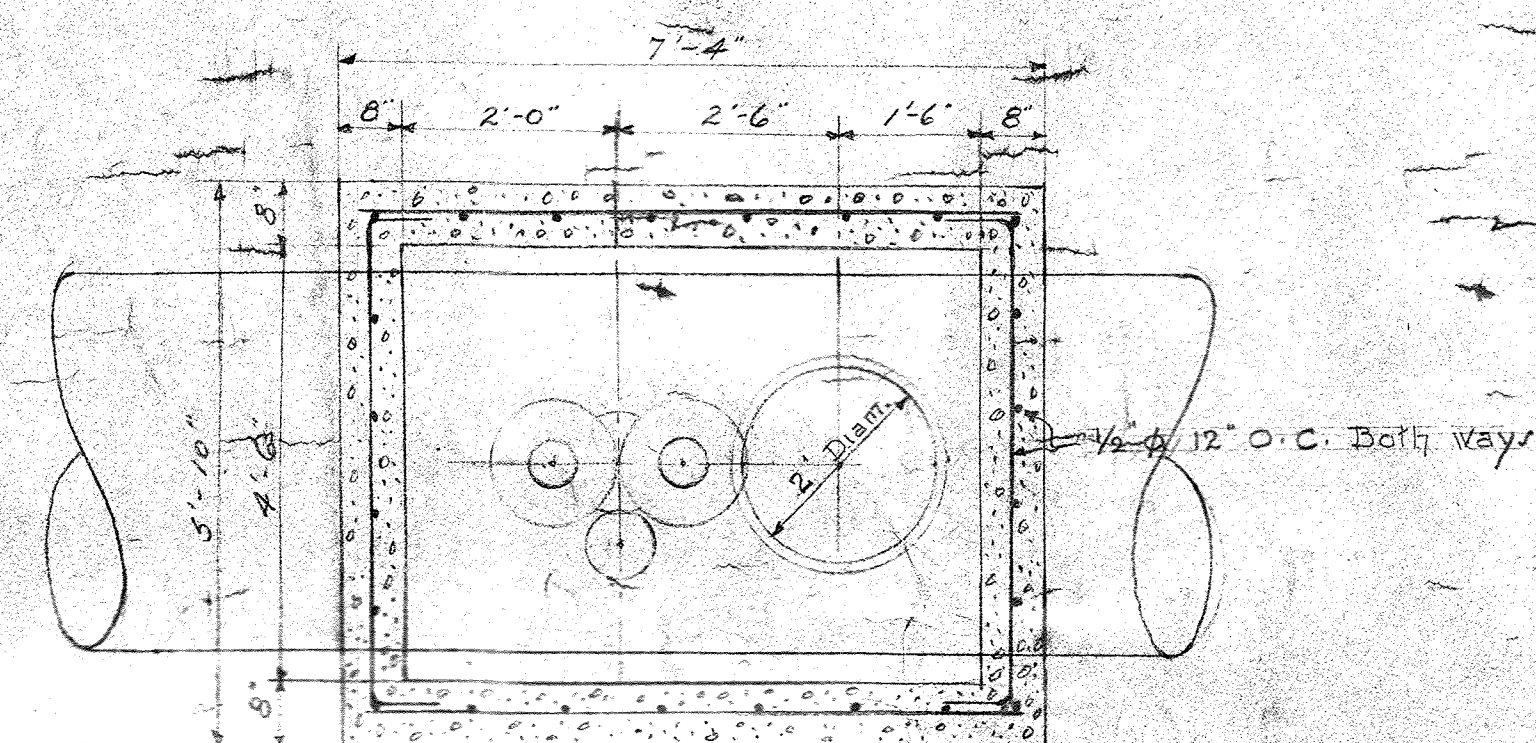


FALL RIVER - MASS.  
 WATUPPA WATER BOARD  
 NOQUOCHOKE PUMPING STATION  
 LOCATION 42" MAIN SHEET #4

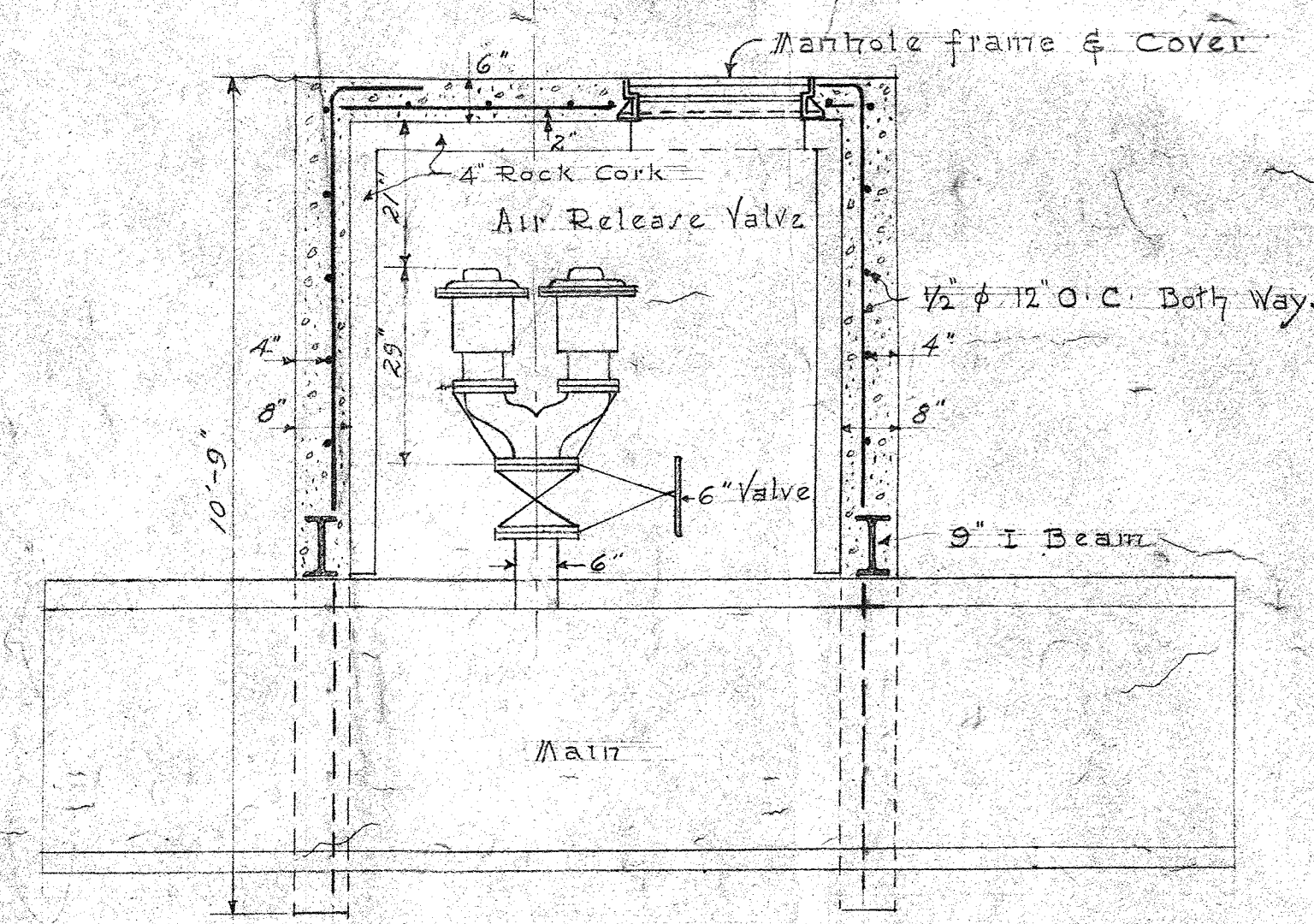
HAYDEN, HARDING & BUCHANAN  
 CONSULTING ENGINEERS BOSTON, MASS.

DRAWN BY O.J.C.	SCALE H. 1"=200'	DATE 7-5-42
CHECKED BY J.L.H.		
APPROVED BY J.H.H.	DWG. No. 9222	



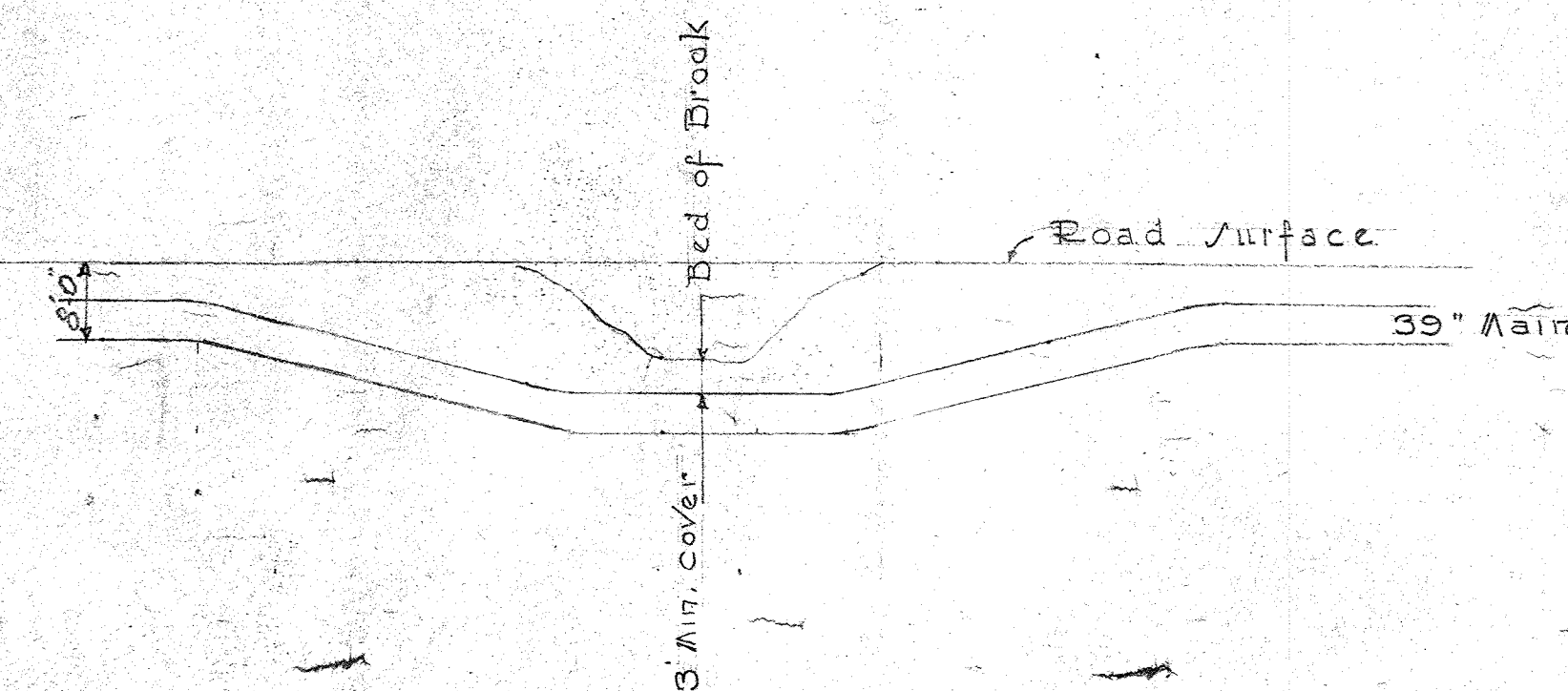


PLAN

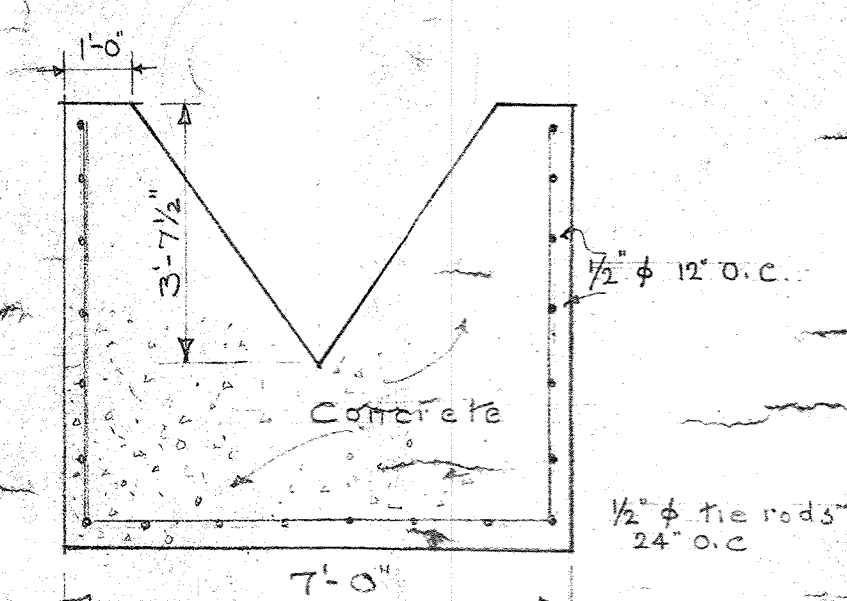


ELEVATION

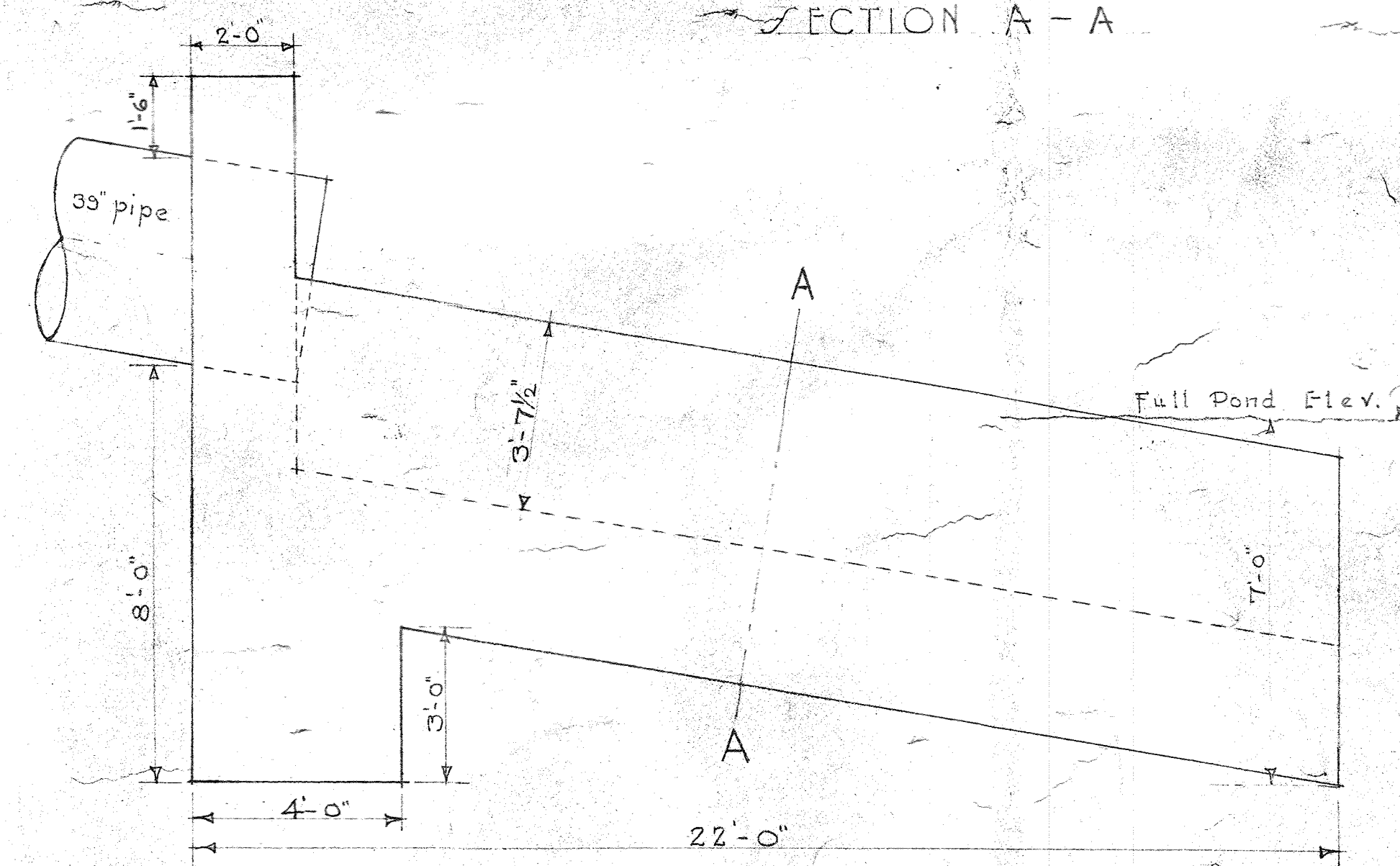
MANHOLE & AIR RELEASE VALVE  
Scale 1/2" = 1'-0"



TYPICAL BROOK CROSSING  
Scale 1" = 20'-0"

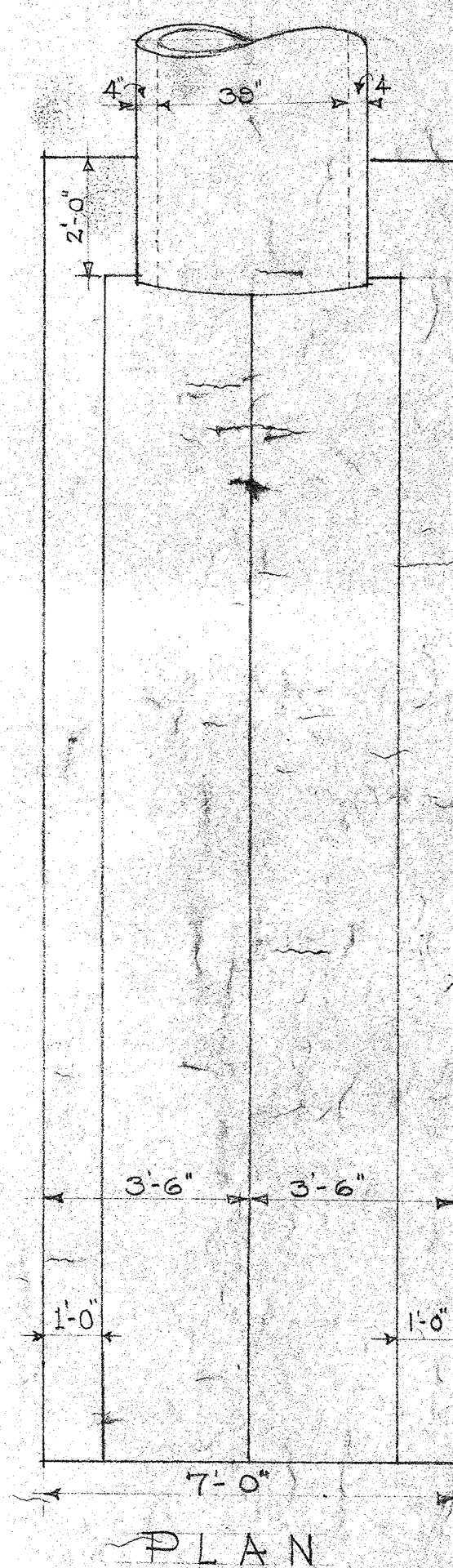


SECTION A-A



SIDE ELEVATION

OUTLET SUPPORT  
Scale 3/4" = 1'-0"



PLAN

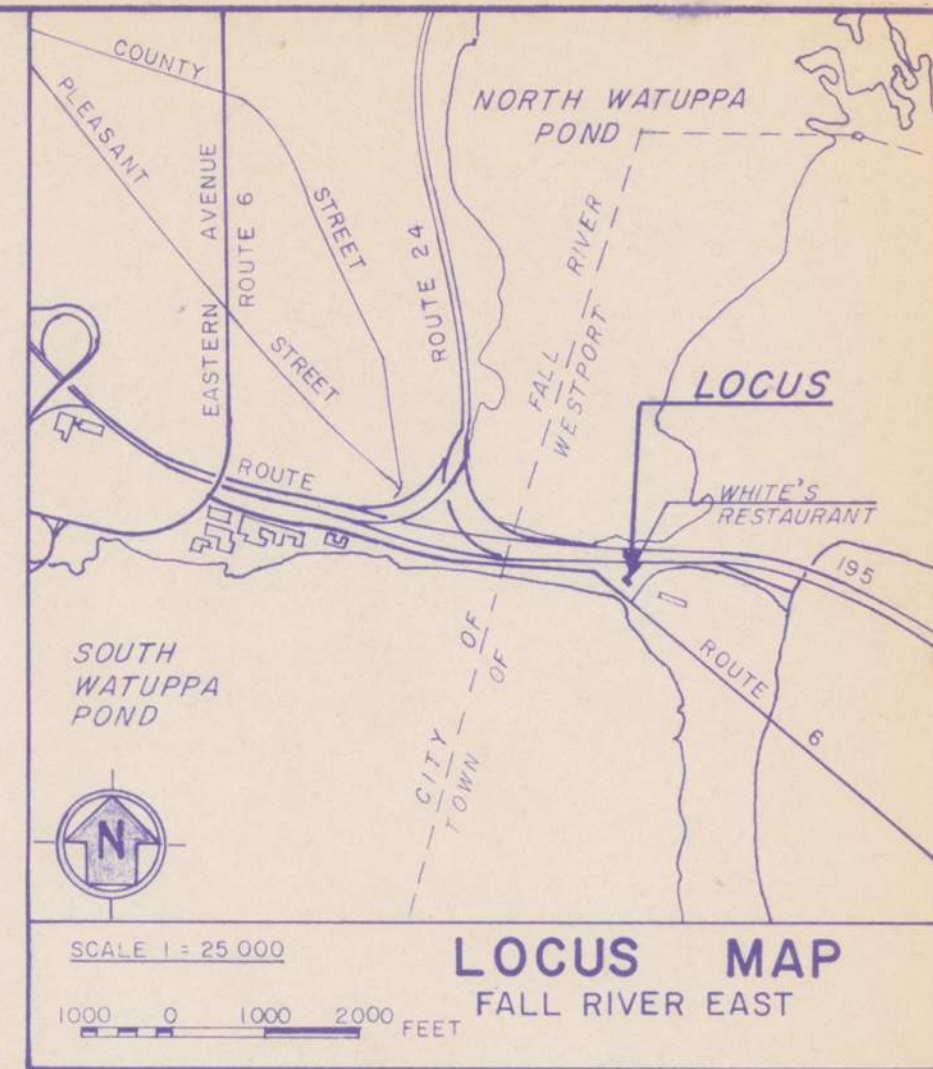
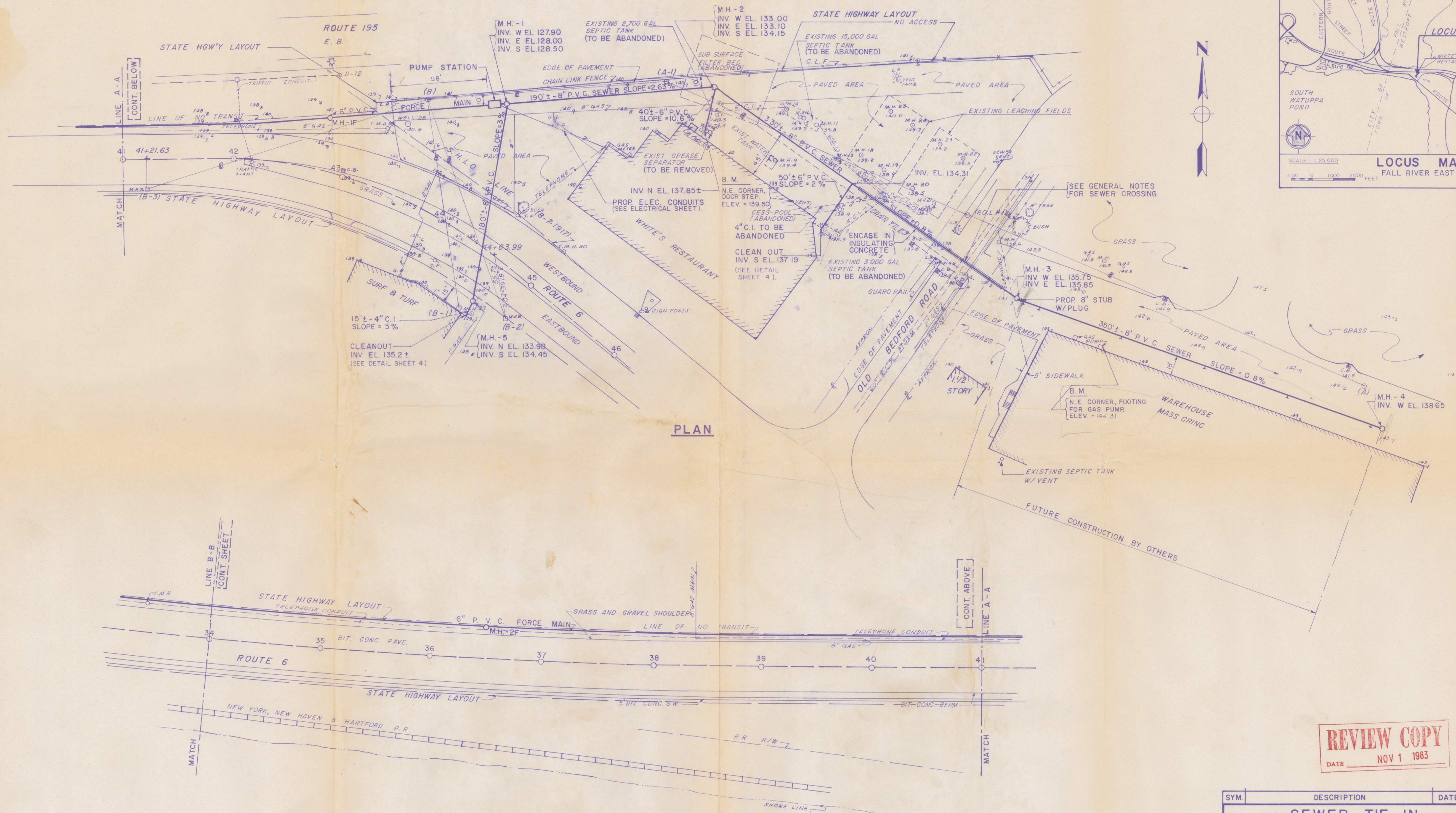
FALL RIVER, MASSACHUSETTS  
WATUPPA WATER BOARD  
NOQUOCHOKE PUMPING STATION  
MANHOLE AND DETAILS

HAYDEN, HARDING & BUCHANAN  
CONSULTING ENGINEERS  
BOSTON, MASS.

DRAWN BY J.H.H.  
CHECKED BY O.V.C.  
APPROVED BY W.H.F.



SCALE 1/2" = 1'-0" DATE 1-15-42  
DWG. No. 97.23



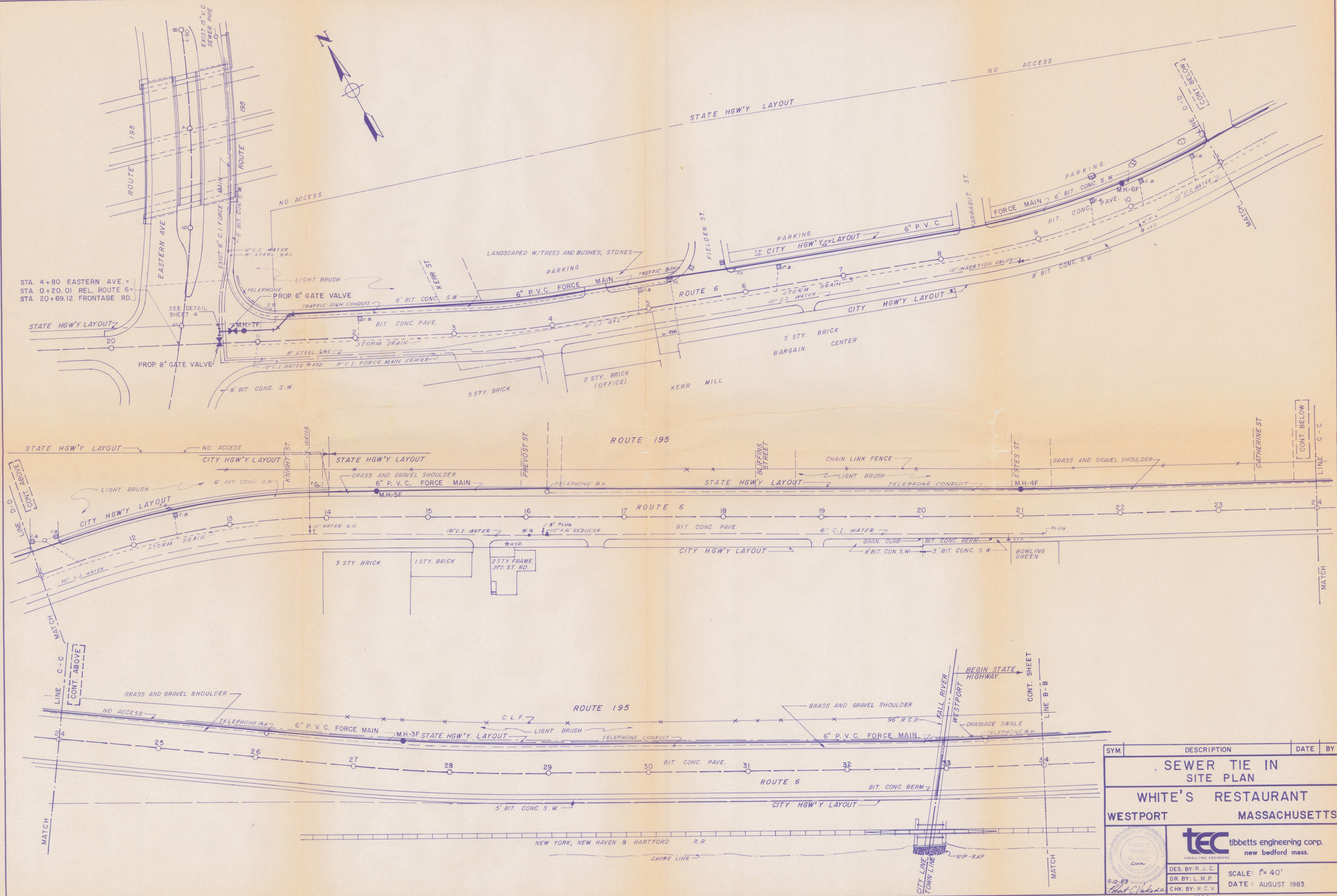


PLAN

**REVIEW COPY**  
DATE NOV 1 1983

SYM.	DESCRIPTION	DATE	BY
SEWER TIE IN SITE PLAN			
WHITE'S RESTAURANT WESTPORT MASSACHUSETTS			
 9-12-83 <i>Robert J. J. C.</i>	 tibbetts engineering corp. new bedford mass. CONSULTING ENGINEERS	DES. BY: R. J. C. SCALE: 1"= 40' DR. BY: L. M. P. DATE: AUGUST 1983 CHK. BY: R. C. V.	
Job No. 5326		SHEET 1 OF 5	



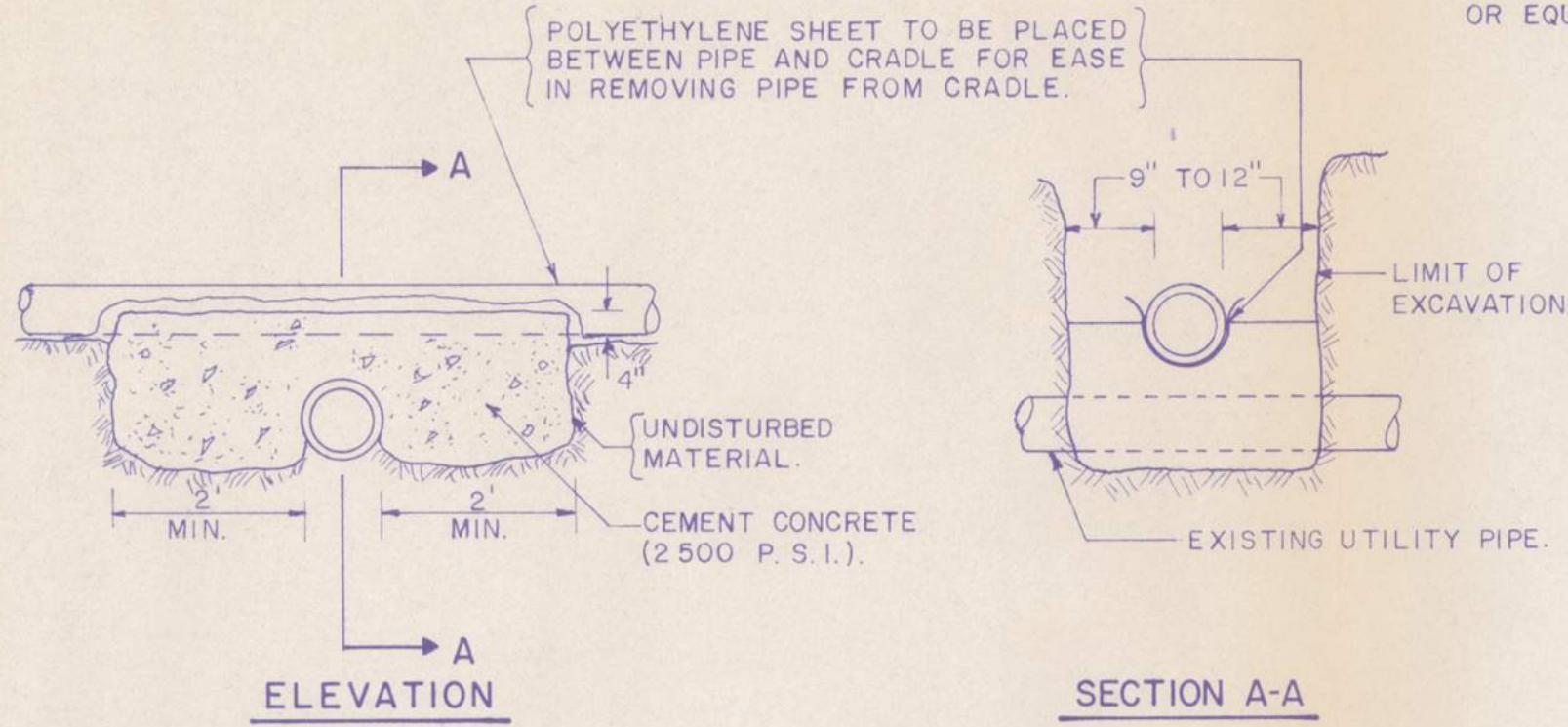


SYM.	DESCRIPTION	DATE	BY
SEWER TIE IN SITE PLAN			
WHITE'S RESTAURANT WESTPORT MASSACHUSETTS			
		tibbetts engineering corp. new bedford mass.	
DES. BY: R. J. C.		SCALE: 1" = 40'	
DR. BY: L. M. P.		DATE: AUGUST 1983	
CHK. BY: R. C. V.		Job No. 5326	
SHEET 2 OF 5			



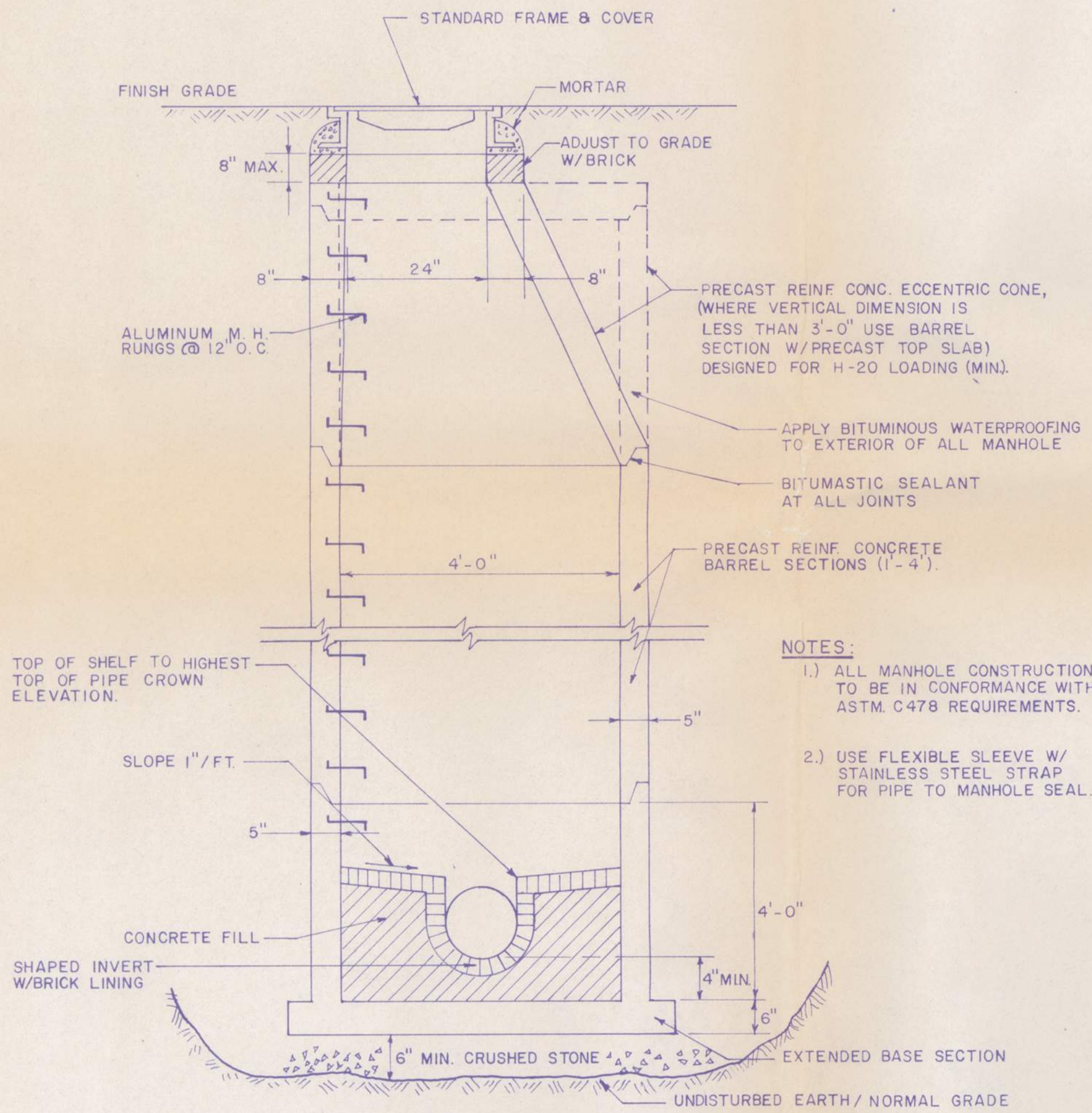
NOTE:

CONCRETE CRADLE REQUIRED WHERE VERTICAL CLEARANCE IS LESS THAN OR EQUAL TO 6" (SEE DETAIL).



CONCRETE CRADLE

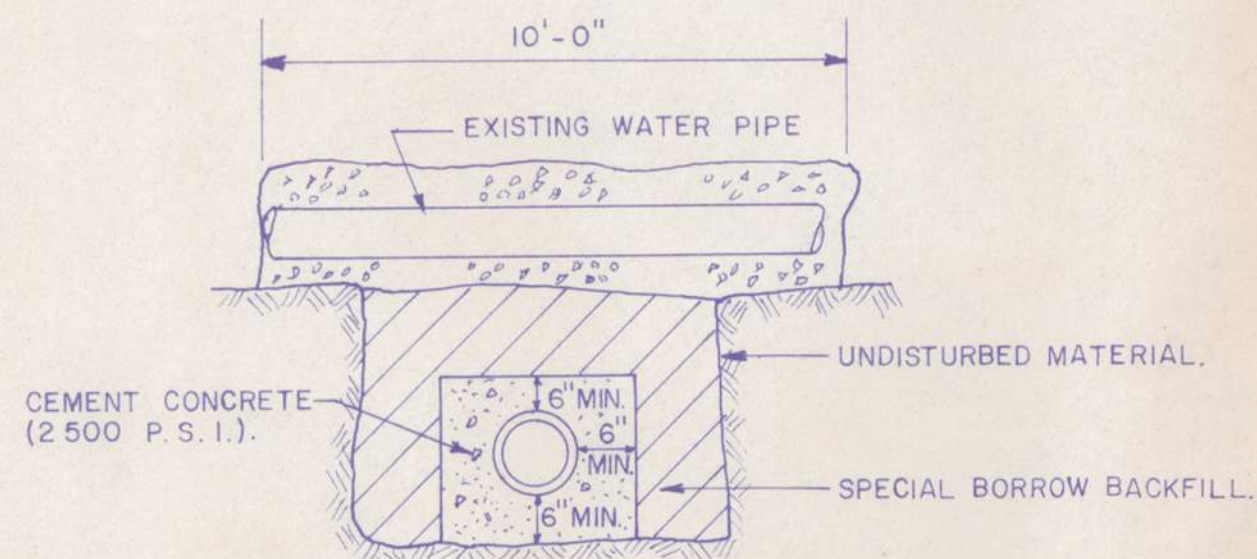
NOT TO SCALE



SECTION

TYPICAL GRAVITY SEWER MANHOLE

NOT TO SCALE



CONCRETE ENCASEMENT

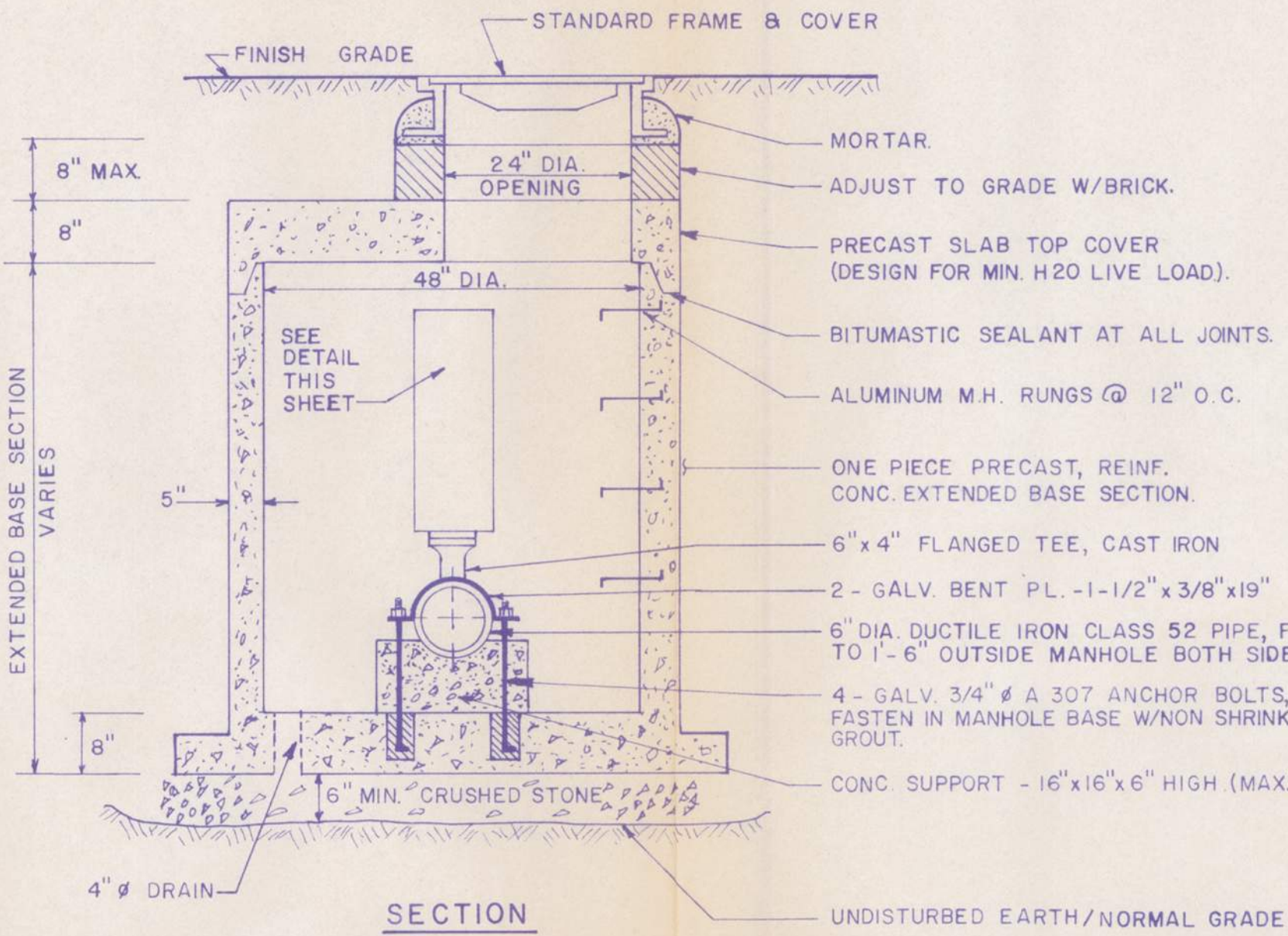
NOT TO SCALE

NOTES:

- 1.) ALL MANHOLE CONSTRUCTION TO BE IN CONFORMANCE WITH ASTM C478 REQUIREMENTS.
- 2.) USE FLEXIBLE SLEEVE W/ STAINLESS STEEL STRAP FOR PIPE TO MANHOLE SEAL.

NOTES:

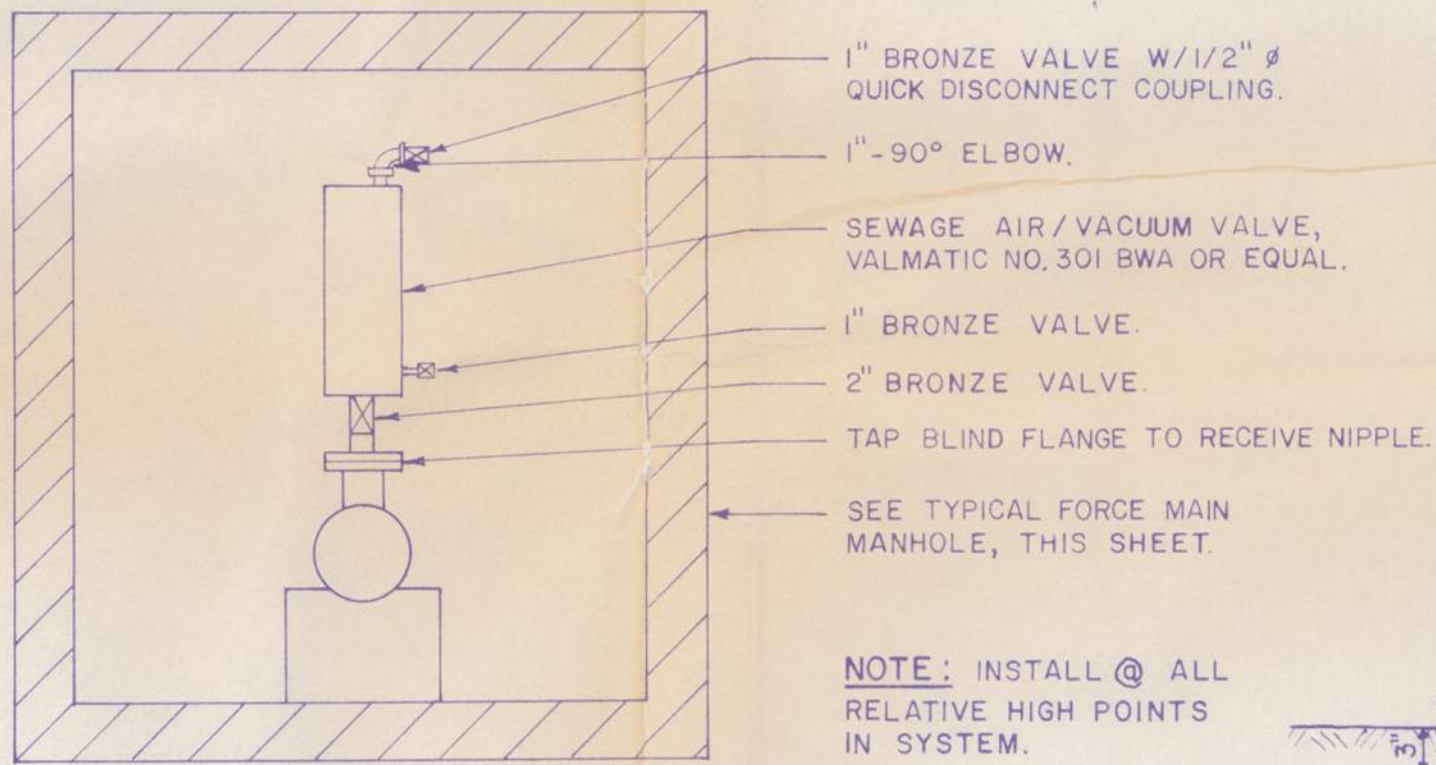
- 1) CONCRETE ENCASEMENT REQUIRED FOR ALL CROSSINGS WHERE THE SEWER PIPE PASSES ABOVE, OR BELOW THE WATER WITH A VERTICAL CLEARANCE OF LESS THAN 18".
- 2) CONCRETE ENCASEMENT SHALL BE INSTALLED ON BOTH THE WATER AND SEWER LINES FOR A DISTANCE OF 5 FEET ON EACH SIDE OF THE CROSSING.
- 3) CONCRETE ENCASEMENT FOR INSULATION SHALL BE INSTALLED WHERE DEPTH OF COVER ON SEWER PIPE IS LESS THAN 4'-0". SEE INSULATION SPECIFICATION.



SECTION

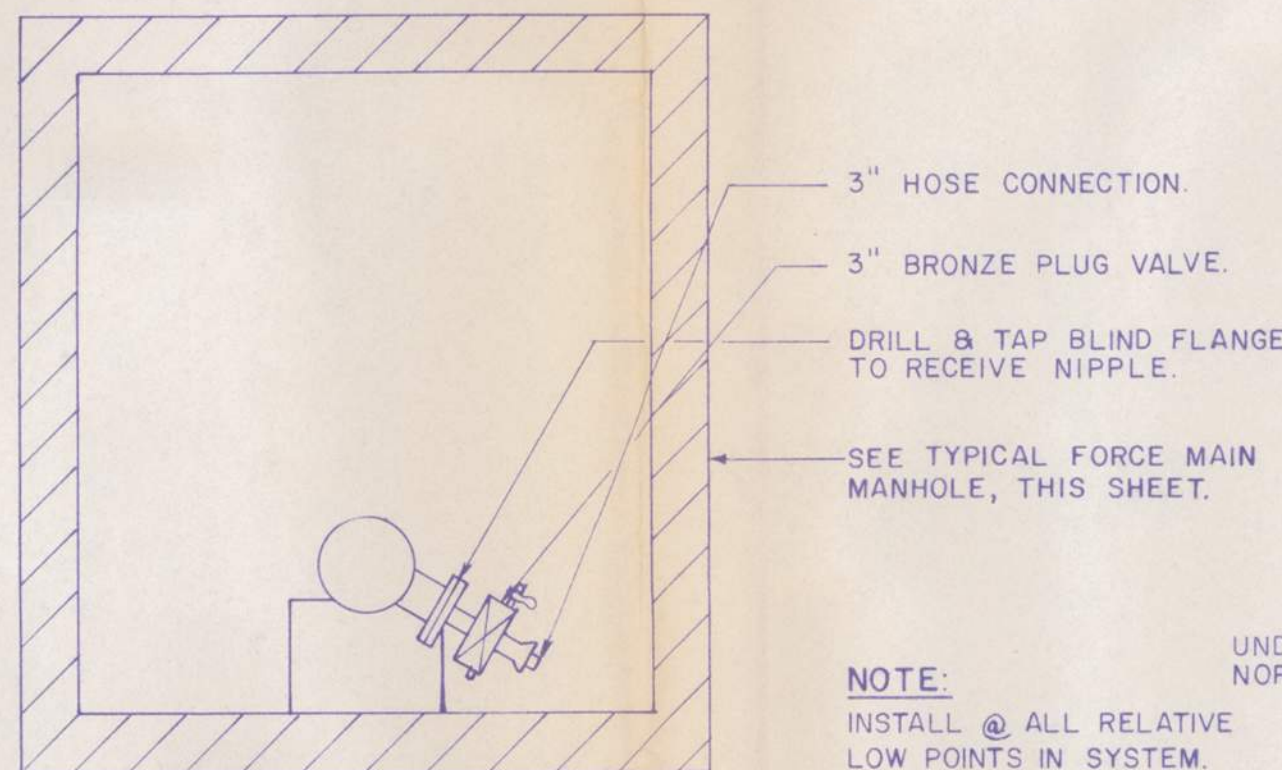
TYPICAL FORCE MAIN MANHOLE

NOT TO SCALE



F.M.M.H. AIR / VACUUM VALVE

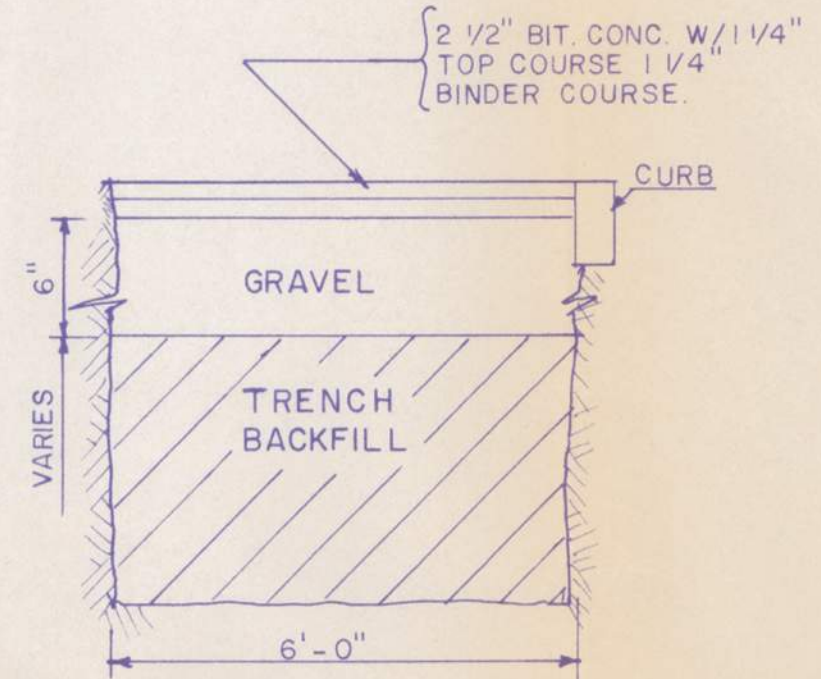
NOT TO SCALE



F.M.M.H. CLEANOUT DETAILS

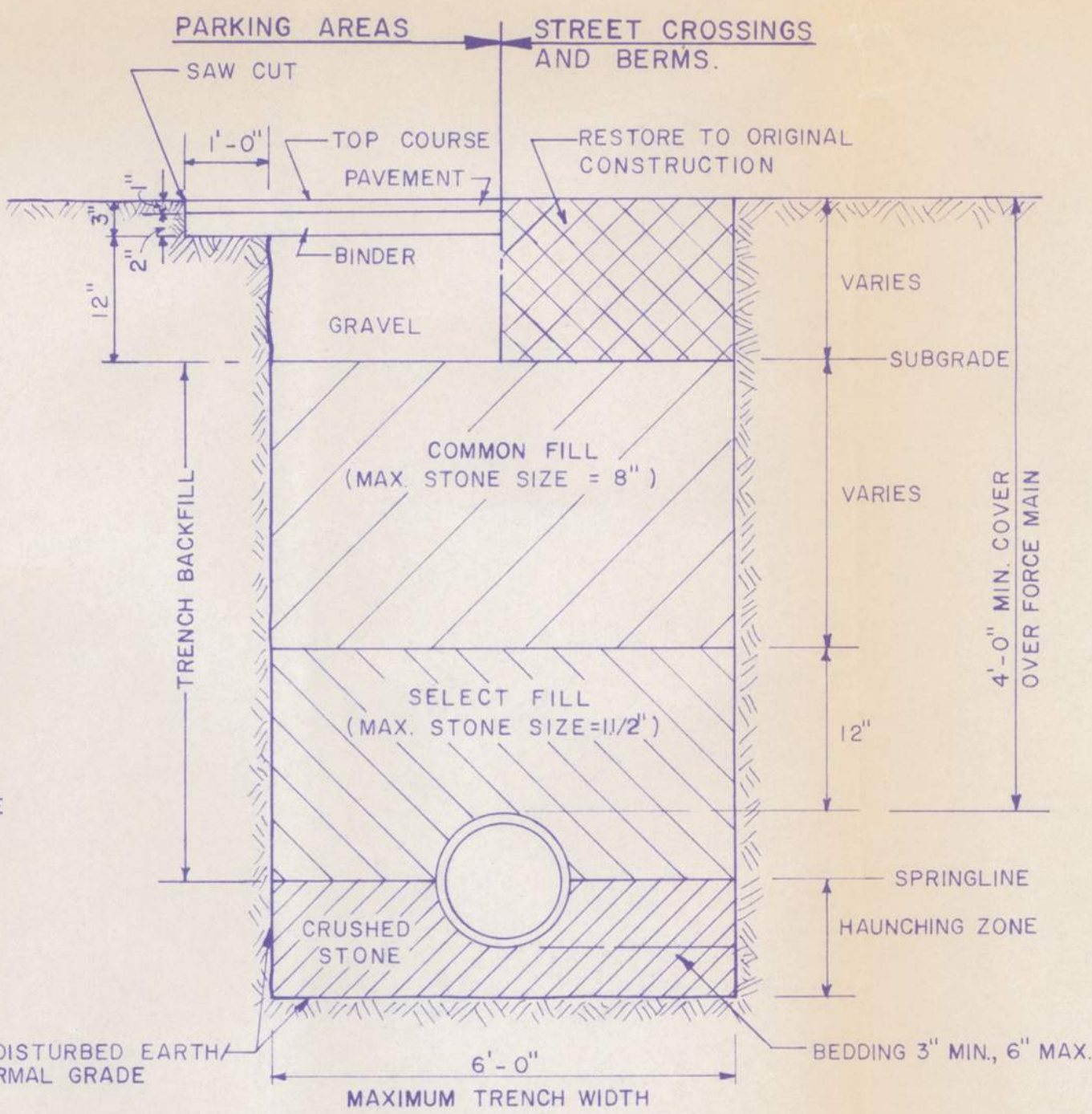
NOT TO SCALE

FORCE MAIN MANHOLE SCHEDULE		
STATION	DESCRIPTION	TYPE
42 + 77	M.H.-F1	AIR/VACUUM VALVE
36 + 50	M.H.-F2	CLEANOUT
27 + 50	M.H.-F3	AIR/VACUUM VALVE
21 + 00	M.H.-F4	CLEANOUT
14 + 50	M.H.-F5	AIR/VACUUM VALVE
10 + 00	M.H.-F6	CLEANOUT
0 + 85	M.H.-F7	CLEANOUT



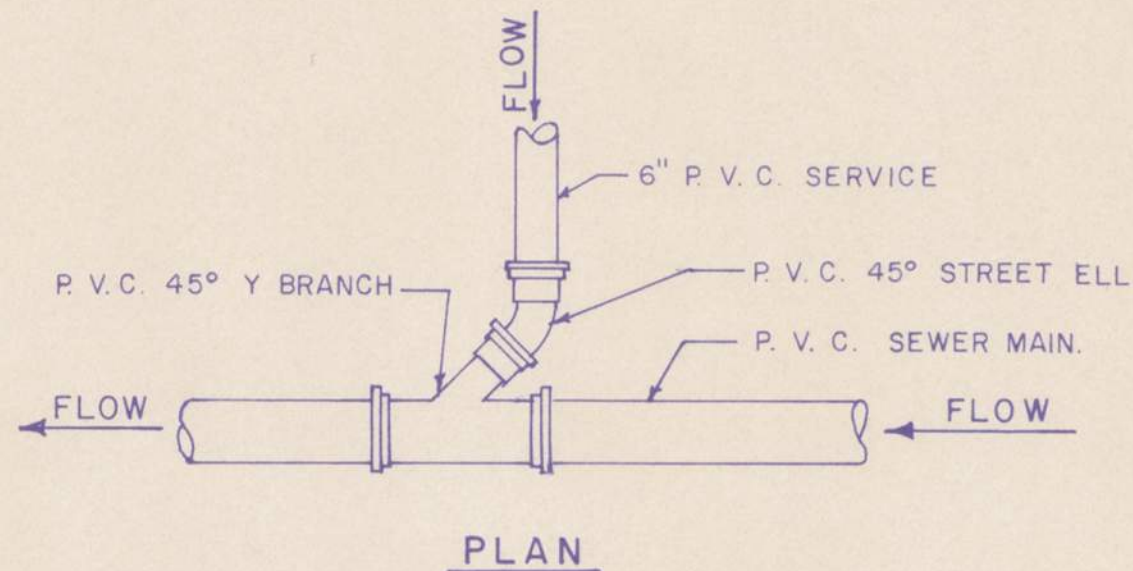
TYPICAL BITUMINOUS SIDEWALK REPLACEMENT

NOT TO SCALE



TYPICAL PIPE TRENCH

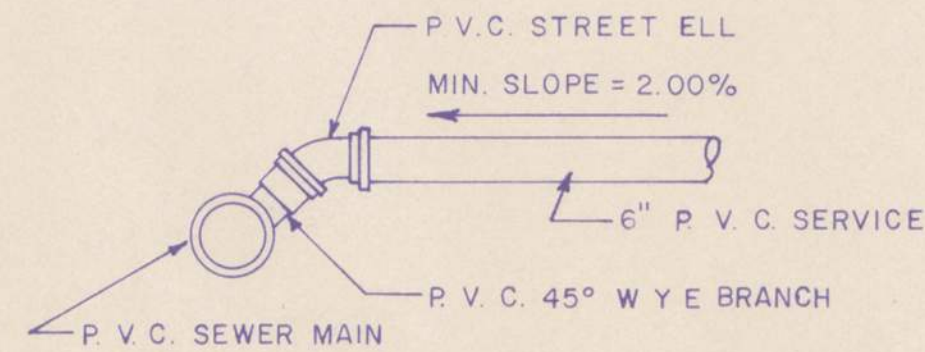
NOT TO SCALE



PLAN

NOTE:-

MINIMUM INVERT OF THE SERVICE SEWER TO BE THE INVERT OF THE MAIN SEWER PLUS THE SEWER MAIN I. D.



SECTION

TYPICAL SERVICE CONNECTION

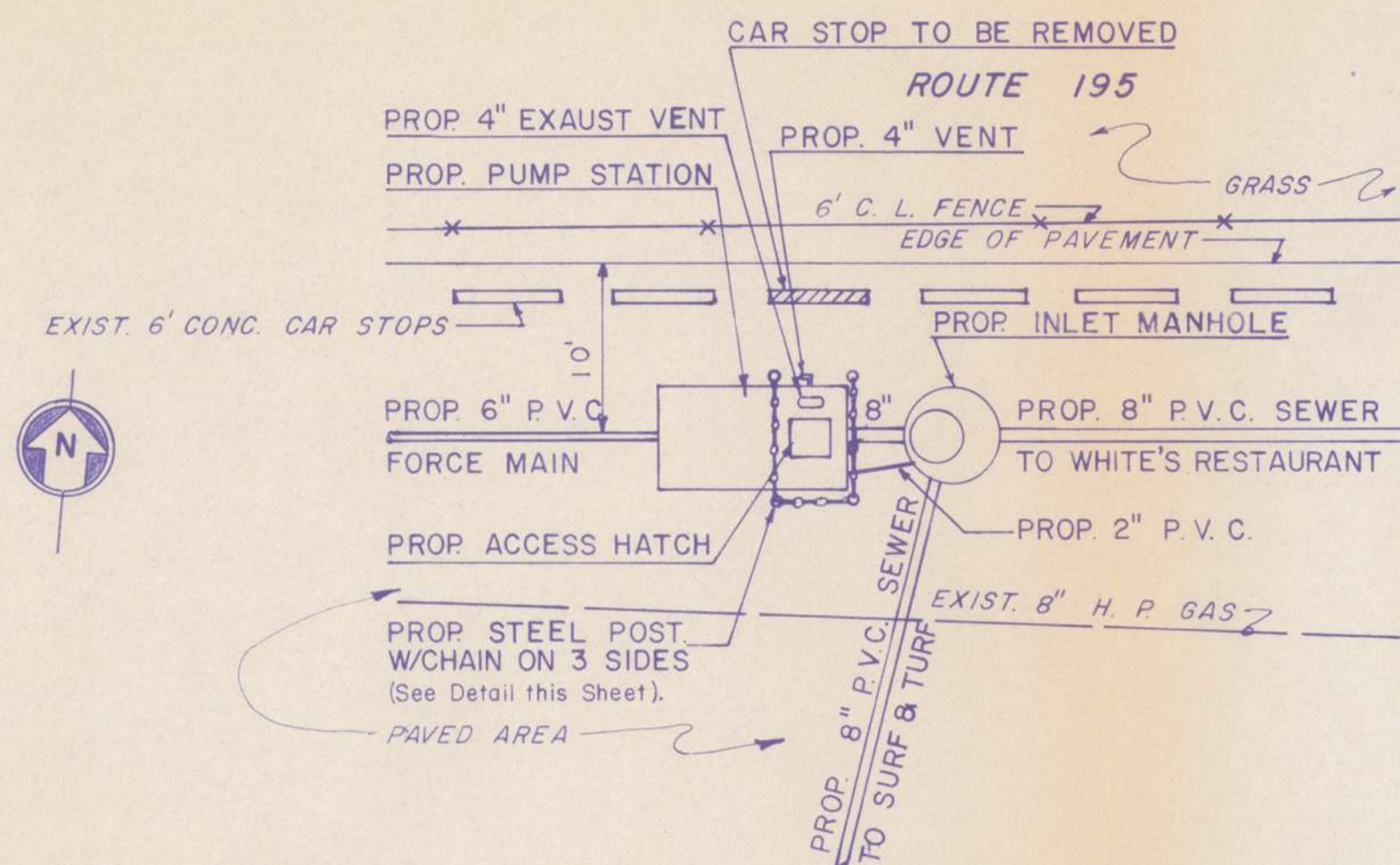
NOT TO SCALE

NOTES:

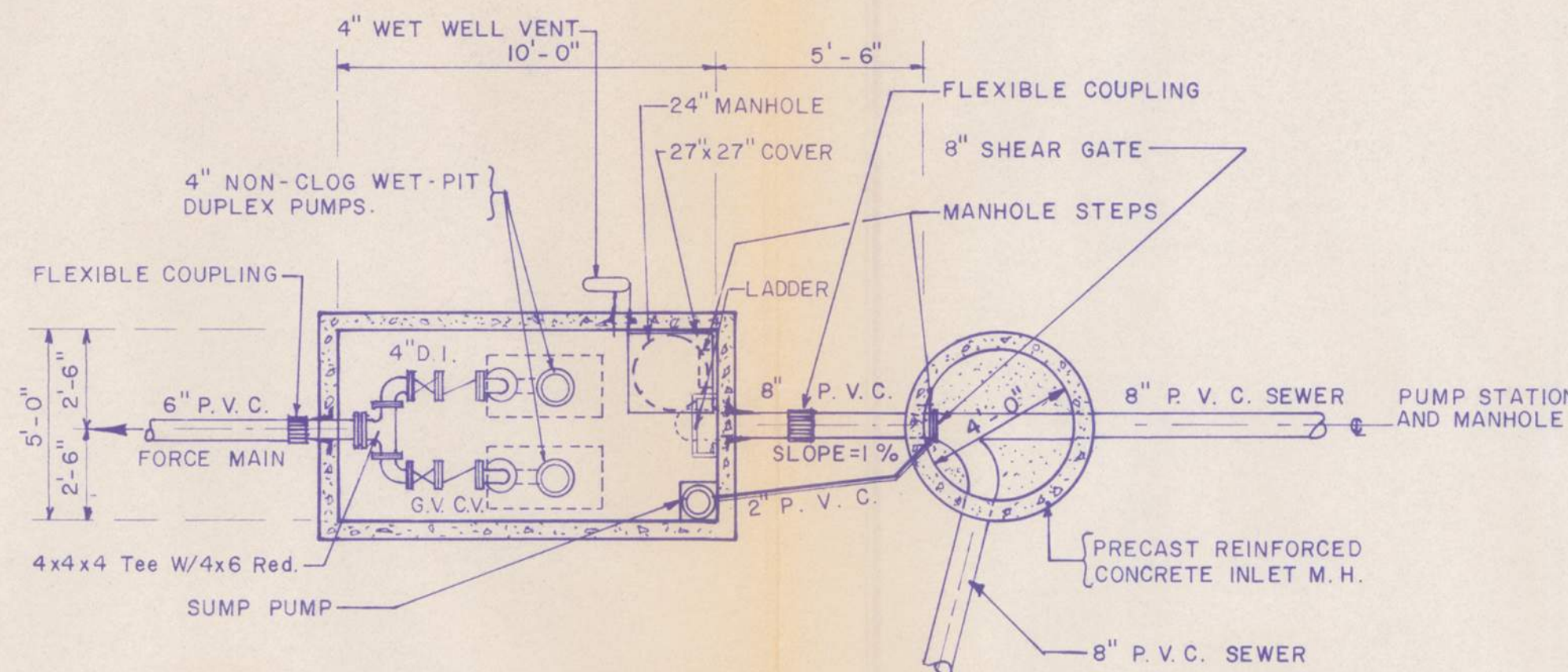
- 1) BEDDING MATERIAL TO BE PLACED AGAINST UNDISTURBED EARTH.
- 2) TRENCH BACKFILL SHALL BE OBTAINED ON SITE UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 3) SELECT FILL, COMMON FILL, AND ALL OTHER BACKFILL MATERIALS TO BE COMPACTED TO 95% OF MAX. DRY DENSITY.
- 4) MINIMUM CLEARANCE BETWEEN PIPE AND LEDGE = 12".
- 5) FOUNDATION TO BE ACCEPTABLE TO THE OWNER.
- 6) TEMPORARY HOT MIX BITUMINOUS CONCRETE PAVEMENT 1" DEPTH IS REQUIRED ON ALL CUTS IN EXISTING PAVEMENTS.

SYM.	DESCRIPTION	DATE	BY
SEWER TIE IN DETAILS			
WHITE'S RESTAURANT			
WESTPORT MASSACHUSETTS			
tibbetts engineering corp. new bedford mass.			
DES. BY: R. J. C. DR. BY: L. M. P.		SCALE: AS NOTED DATE: AUGUST 1983	
CHK. BY: R. C. V.		Job No. 5326	





**PUMP STATION SITE PLAN**  
SCALE: 1" = 10'-0"



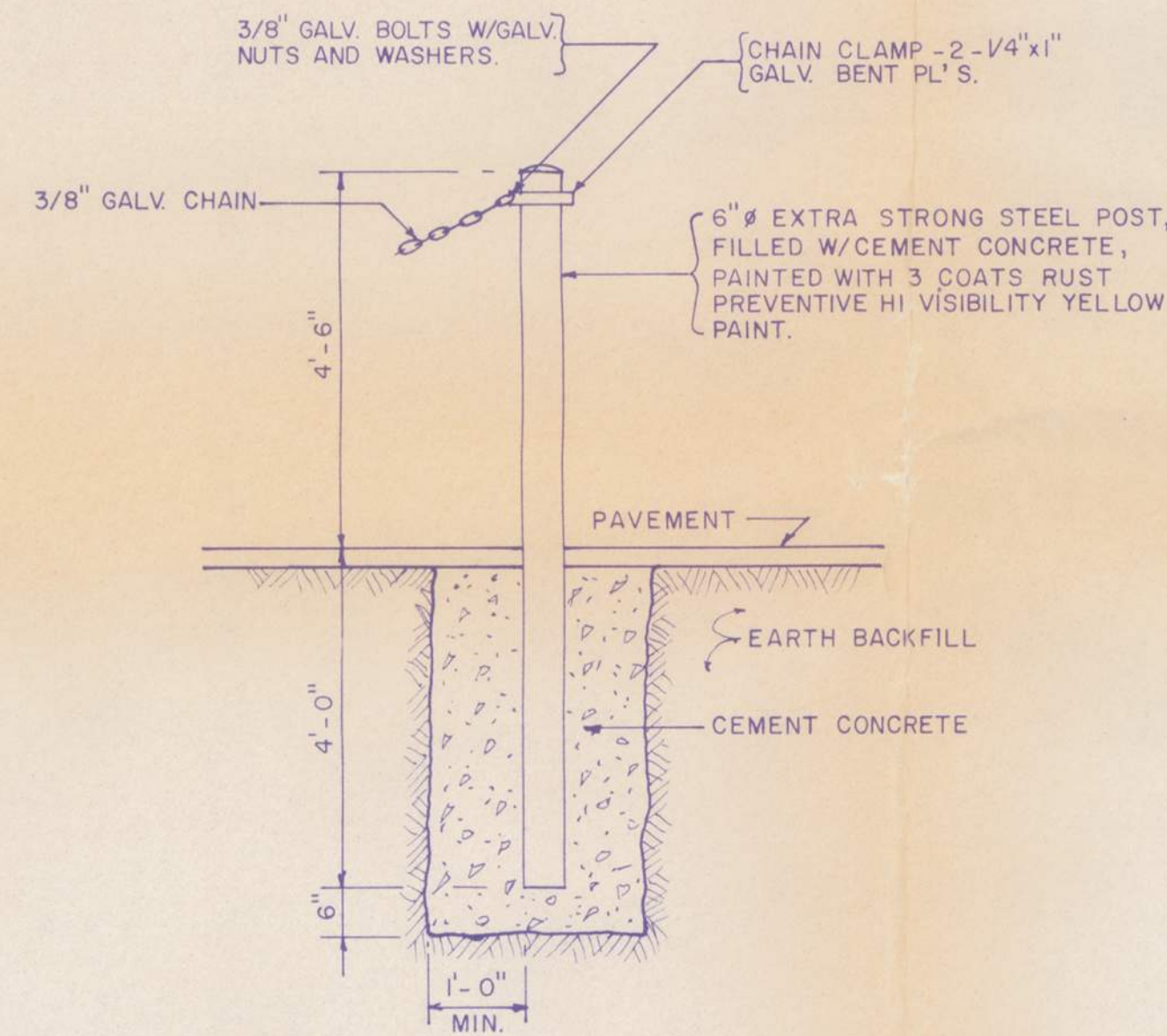
**PLAN**

**GENERAL NOTES**

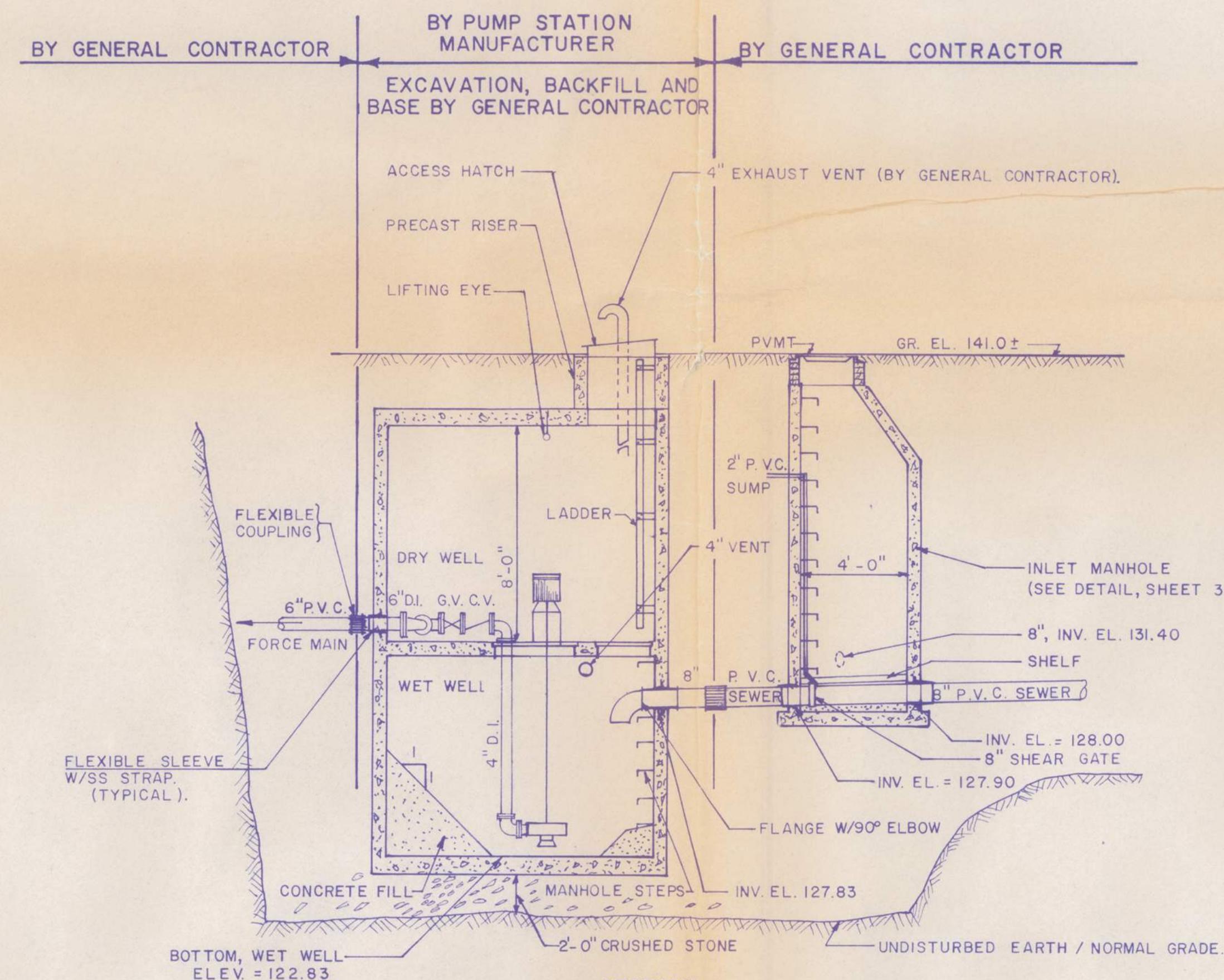
- Existing Conditions Survey conducted by Tibbetts Engineering Corp., July 8, 1983.
- All Elevations refer to Mean Sea Level Datum of 1929.
- The location of all underground pipes and structures were obtained from field surveys and available existing plans, but are not to be construed as being exact locations. Furthermore, it is not guaranteed that all underground pipes and structures are shown.
- Contractor shall check with all utility companies for assistance in locating underground utilities before beginning excavation work.
- Contractor shall determine inverts of all existing services at the proposed tie-in locations prior to the start of construction. The Engineer will then determine if adjustments to proposed inverts are required.
- Contractor shall determine elevation of 60" RCP Storm Drain at proposed sewer crossing prior to start of construction. Conflicts with grade of proposed sewer shall be identified and brought to attention of the Owner.
- Contractor shall obtain and pay for all required construction permits.

**P.S. NOTES**

- The pump station details are intended to show configuration of pumps & piping, pump station, and inlet manhole. Auxiliary equipment has not been shown. Location and installation of auxiliary equipment is left to discretion of pump station manufacturer. See specification for list and description of auxiliary equipment.
- Pump Station and Inlet Manhole shall be designed for H-20 loading. Openings in pump station floor for pumps, piping and wet well access must be securely covered. Covers shall be watertight against a hydrostatic pressure of 500 psf due to surcharged wet well.
- Pump Station and Inlet Manhole shall be designed and constructed to be stable and resist floating, with ground water level at grade.
- The Pump Station, including pump chamber and wet well, shall be designed to support their own weight, plus the minimum superimposed loads, including soil loads, traffic loads, and buoyancy. The station manufacturer shall account for all additional equipment operating weights in the design and construction of the pump station.
- Pump Station Manufacturer shall provide and install piping to exterior of pump station. Piping shall be provided a minimum of 2'-0" from exterior of pump station. Flexible couplings shall be provided for service connections.

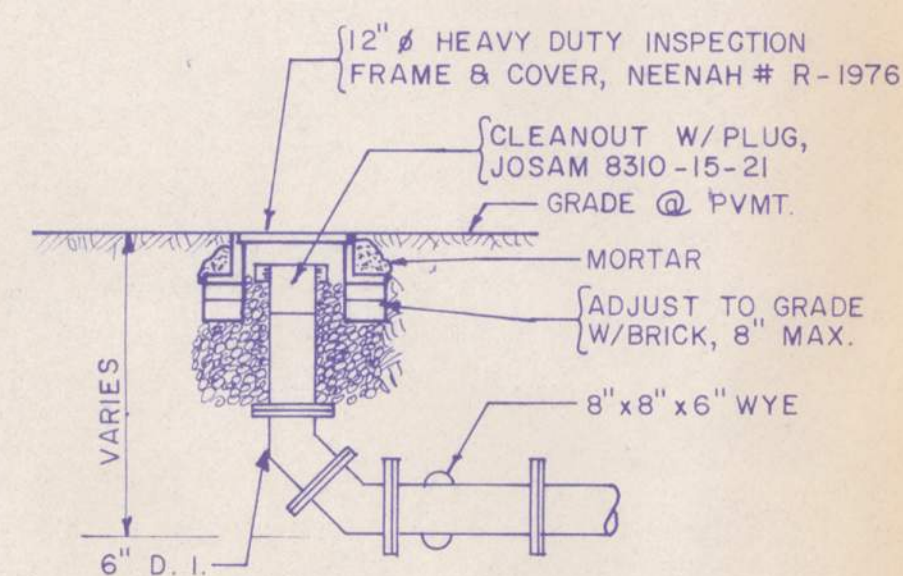


**STEEL POST DETAIL**  
(TYPICAL)  
SCALE: 1/2" = 1'-0"

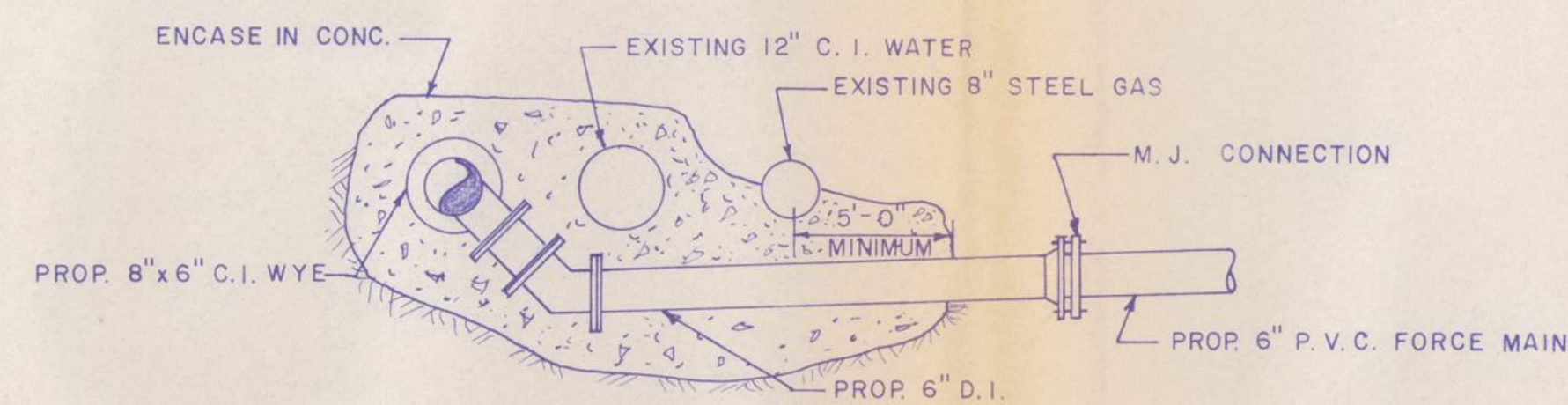


**PRECAST REINFORCED CONCRETE PUMP STATION**



SCALE: 1/4" = 1'-0"



**TYPICAL CLEANOUT DETAIL**  
NOT TO SCALE

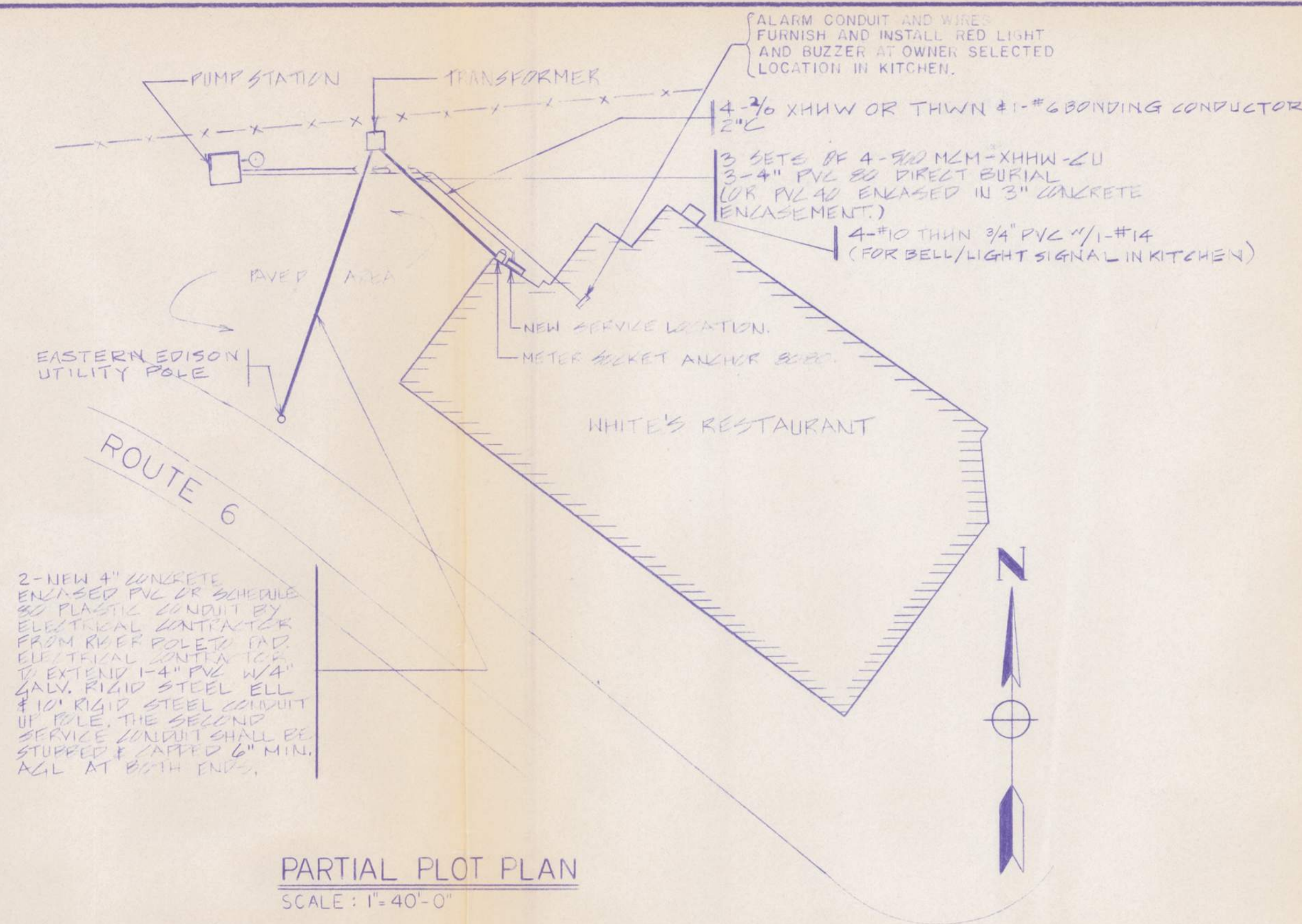


**FORCE MAIN TIE-IN DETAIL**  
NOT TO SCALE

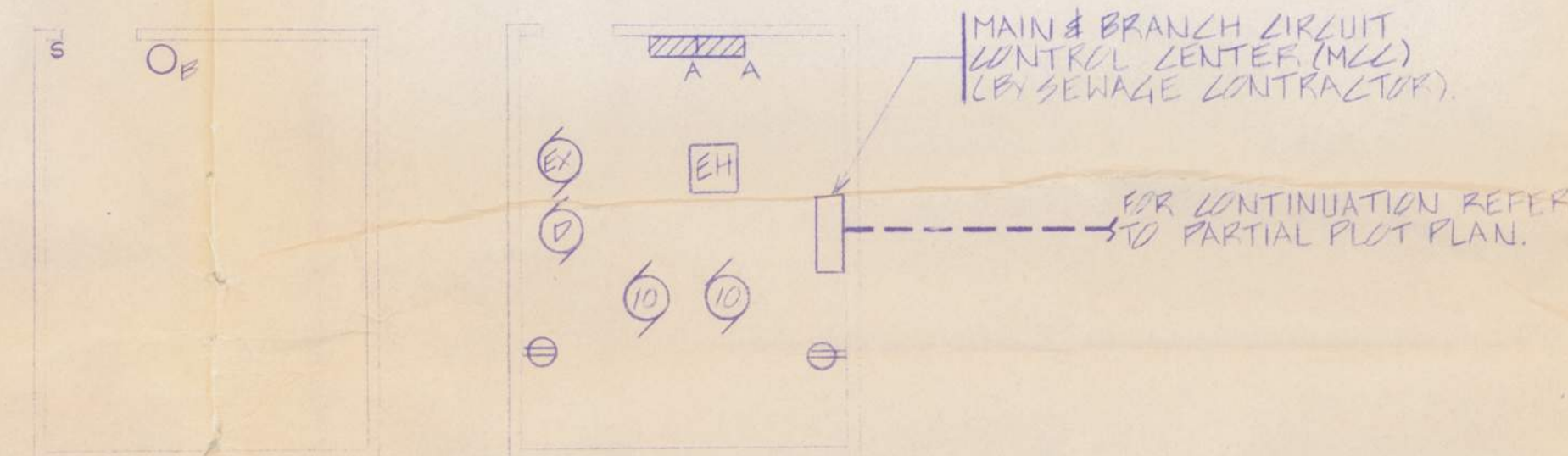
SYM.	DESCRIPTION	DATE	BY
	SEWER TIE IN PUMP STATION		
	WHITE'S RESTAURANT		
	WESTPORT MASSACHUSETTS		
<div><div><div>tibbetts engineering corp. new bedford mass.</div></div></div>			
DES. BY: R. J. C.		SCALE: AS NOTED	
DR. BY: L. M. P.		DATE: AUGUST 1983	
CHK. BY: R. C. V.			
Job No. 5326			



MDP 1200 A. 120/208 V. MAIN LUGS ONLY							
DESIGNATION	POLES	AMPS	CIRCUIT	CIRCUIT	AMPS	POLES	DESIGNATION
MAIN TO PANELBOARD	3	225	1	2	225	3	NEW AIR CONDITIONER
			3	4			
			5	6			
	3	225	7	8	225	3	
			9	10			
			11	12			
PUMP	3	20	13	14	100	3	WASHROOM
			15	16			
			17	18			
PHASE LINER	3	20	19	20	30	2	LOUNGE A/C
			21	22			
			23	24			
SPACE			25	26	20	1	POST LIGHT
SPACE			27	28	20	1	SPACE
SPACE			29	30	20	1	SPACE
PUMP STATION						175	3
MAIN TO PANELBOARD						600	3
							32
							34
							36
							38
							40
							42

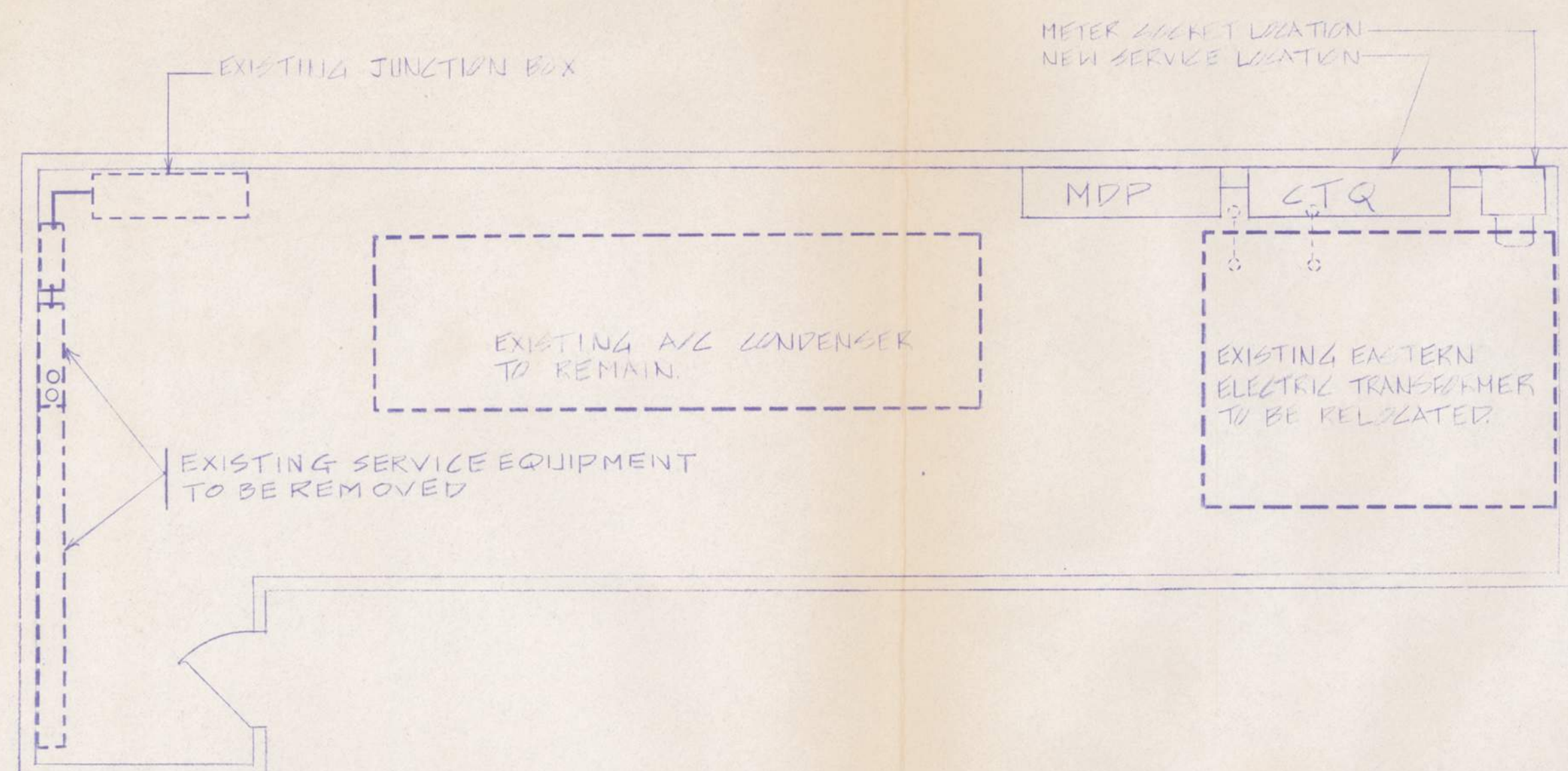


PARTIAL PLOT PLAN  
SCALE: 1"=40'-0"

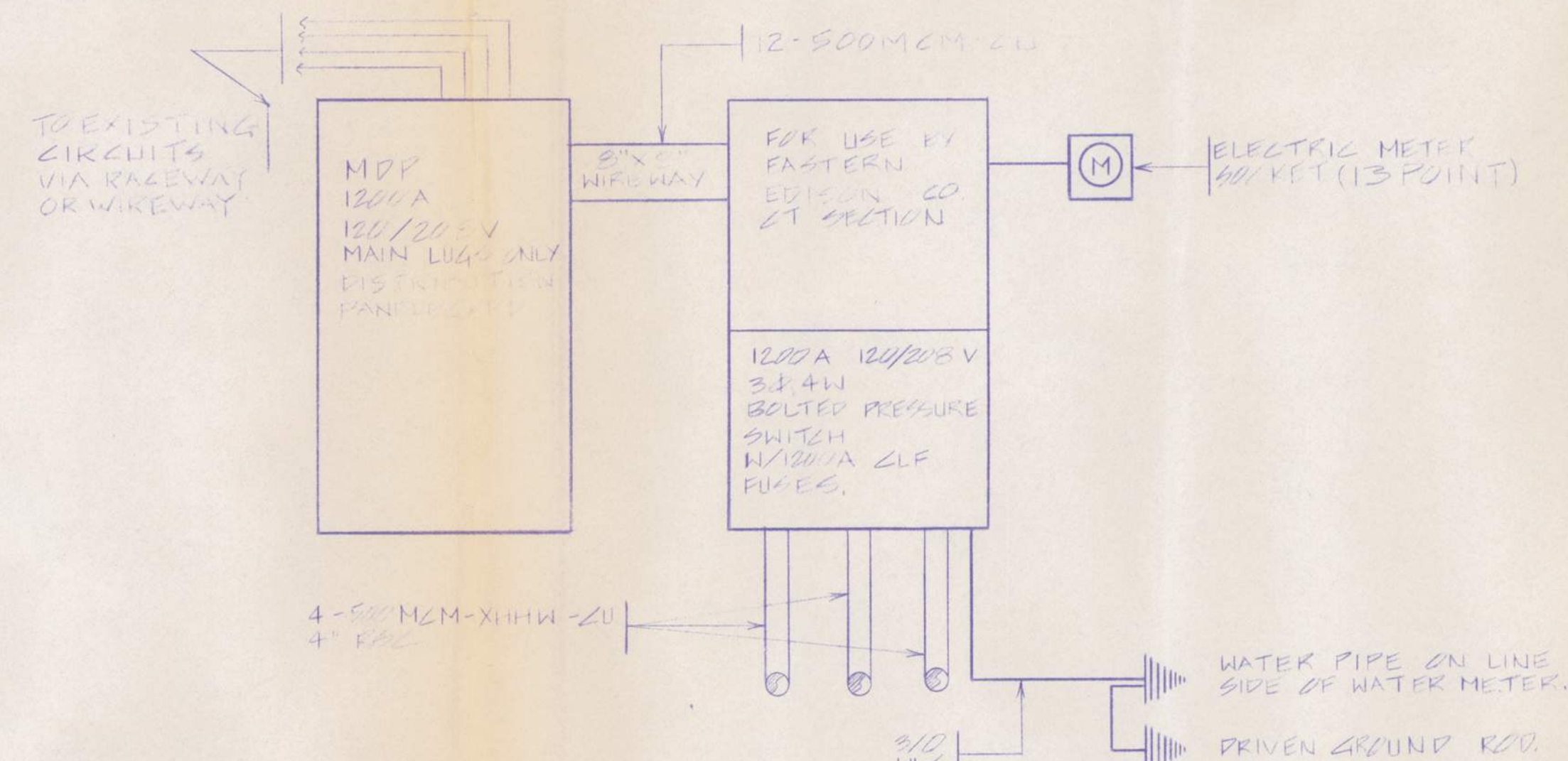


PUMP STATION  
NO SCALE

NOTE:  
PUMPING STATION IS PRE-WIRED. ELECTRICAL CONTRACTOR SHALL INSTALL FEEDERS TO MAIN DISCONNECTING MEANS.



ELECTRIC ROOM  
SCALE: 1/2"=1'-0"




ELECTRIC SERVICE DETAIL  
NO SCALE

## SYMBOLS

- ① DEHUMIDIFIER
- EX EXHAUST FAN
- MCC MOTOR CONTROL CENTER
- EH ELECTRIC HEATER
- VAPORPROOF FLUORESCENT FIXTURE
- VAPORPROOF INCANDESCENT FIXTURE
- S SINGLE POLE SWITCH
- ⊕ DUPLEX RECEPTACLE
- ① MOTOR, NUMBER DENOTES HORSEPOWER
- ▨ PANELBOARD
- HOMERUN TO PANELBOARD
- CONDUIT RISE
- CONDUIT DROP
- TO SHOW EXISTING

1. SCOPE OF WORK
  - A. THE WORK COVERED ON THIS DRAWING SHALL INCLUDE FURNISHING ALL LABOR, MATERIAL, EQUIPMENT AND SERVICES TO CONSTRUCT AND INSTALL THE COMPLETE ELECTRICAL SERVICE.
  - B. PRIMARY AND SECONDARY SERVICES.
  - C. REROUTING EXISTING CIRCUITS TO NEW DISTRIBUTION PANELBOARD.
  - D. REMOVAL OF EXISTING SERVICE AND DISTRIBUTION.
  - E. COORDINATION OF WORK WITH EASTERN EDISON CO.
  - F. ANY WORK OR MATERIAL TO MAKE THIS A COMPLETE WORKING SYSTEM.
  - G. INSTALL FEEDER TO NEW PUMP STATION.
2. CONDUIT
  - A. RIGID METAL CONDUIT SHALL BE USED FOR ALL RISERS.
  - B. RIGID METAL CONDUIT, PVC80 AND PVC40 MAY BE USED FOR ALL UNDERGROUND SYSTEMS.
  - C. IF PVC 40 IS USED, IT SHALL BE INSTALLED IN 3" OF CONCRETE ENCASUREMENT.
  - D. ALL CONDUITS SHALL BE INSTALLED AT A DEPTH OF 3 FEET MINIMUM.
  - E. THIN WALL TUBING (EMT) MAY BE USED FOR REROUTING EXISTING CIRCUITS TO NEW MDP PANELBOARD.
3. WIRE AND CABLE
  - A. TYPE XHHW SHALL BE USED FOR THE SERVICE.
  - B. TYPES XHHW OR THHN MAY BE USED FOR DISTRIBUTION.
  - C. SECONDARY CABLES SHALL BE MEASURED AND CUT SO THAT ALL CONDUCTORS ARE OF THE SAME LENGTH BEFORE AND AFTER INSTALLATION.
4. SWITCHES AND PANELBOARDS
  - A. MAIN SWITCH SHALL CONSIST OF A 1200 AMP, MAIN BOLTED PRESSURE SWITCH, 3-1200 AMP, 208V, CURRENT LIMITING FUSES, AND A CURRENT TRANSFORMER COMPARTMENT IN ONE ENCLOSURE.
  - B. MAIN SWITCH SHALL BE NATIONAL SWITCHBOARD CORP. NCTQ/S.
  - C. PANELBOARD SHALL CONSIST OF CIRCUIT BREAKER TYPES EHB 18000 AIC, FB18000 AIC, VB25000 AIC AND LC42000 AIC. PANELBOARD SHALL BE NATIONAL SWITCHBOARD CORP.
5. FUSES
  - A. FUSES SHALL BE GOULD SHAWMUT FORM 480 1200 AMP, 208 V, CLASS 1 CURRENT LIMITING TYPE, FOR USE IN MAIN SERVICE SWITCH.
6. TRANSFORMER PAD
  - A. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE TRANSFORMER PAD AND BUMPER GUARDS AS PER SPECIFICATION OF EASTERN EDISON CO.
7. WORK COORDINATION
  - A. PARTICULAR ATTENTION SHALL BE DIRECTED TO THE COORDINATION OF THE OWNER, EASTERN EDISON, AND THE ELECTRICAL CONTRACTOR.
  - B. FURNISH TO THE OWNER, GENERAL CONTRACTOR AND ALL OTHER SUB-CONTRACTORS ALL INFORMATION RELATIVE TO THE PORTION OF THE ELECTRICAL SYSTEM THAT WILL AFFECT THEM, SUFFICIENTLY IN ADVANCE SO THEY MAY PLAN THEIR WORK ACCORDINGLY.
  - C. OBTAIN ALL INFORMATION RELATIVE TO ELECTRICAL WORK WHICH THE ELECTRICAL CONTRACTOR IS TO EXECUTE IN CONJUNCTION WITH THE INSTALLATION OF THEIR WORK.
8. DEMOLITION AND REMOVAL
  - A. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF THE REMOVAL OF THE APPLICABLE WIRING SYSTEM.
  - B. ALL EQUIPMENT REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STOCKPILED AT A LOCATION AS DESIGNATED BY THE OWNER.
9. GENERAL
  - A. ANY DEVIATION FROM THE PLAN WITHOUT THE EXPRESS CONSENT OF THE ENGINEER SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
10. ALL WORK TO BE ACCORDING TO THE MASSACHUSETTS ELECTRICAL CODE, 1981.

SYM.	DESCRIPTION	DATE	BY
SEWER TIE IN ELECTRICAL SERVICE			
WHITE'S RESTAURANT			
WESTPORT		MASSACHUSETTS	
 <b>tibbets engineering corp.</b> consulting engineers new bedford mass.			
DES. BY:		SCALE: AS NOTED	
DR. BY:		DATE: SEPTEMBER 1983	
CHK. BY:			



## **APPENDIX B:**

## **BORING LOGS**

SAMPLE/SAMPLER TYPE GRAPHICS



STANDARD PENETRATION SPLIT SPOON SAMPLER  
(2 in. (50.8 mm.) outer diameter and 1-3/8 in. (34.9 mm.) inner diameter)

GROUND WATER GRAPHICS

- WATER LEVEL (level where first observed)
- WATER LEVEL (level after exploration completion)
- WATER LEVEL (additional levels after exploration)
- OBSERVED SEEPAGE

NOTES

- The report and graphics key are an integral part of these logs. All data and interpretations in this log are subject to the explanations and limitations stated in the report.
- Lines separating strata on the logs represent approximate boundaries only. Actual transitions may be gradual or differ from those shown.
- No warranty is provided as to the continuity of soil or rock conditions between individual sample locations.
- Logs represent general soil or rock conditions observed at the point of exploration on the date indicated.
- In general, Unified Soil Classification System designations presented on the logs were based on visual classification in the field and were modified where appropriate based on gradation and index property testing.
- Fine grained soils that plot within the hatched area on the Plasticity Chart, and coarse grained soils with between 5% and 12% passing the No. 200 sieve require dual USCS symbols, ie., GW-GM, GP-GM, GW-GC, GP-GC, GC-GM, SW-SM, SP-SM, SW-SC, SP-SC, SC-SM.
- If sampler is not able to be driven at least 6 inches then 50/X indicates number of blows required to drive the identified sampler X inches with a 140 pound hammer falling 30 inches.

ABBREVIATIONS

WOH - Weight of Hammer  
WOR - Weight of Rod

UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487)

COARSE GRAINED SOILS (More than half of material is larger than the #200 sieve)						
GRAVELS (More than half of coarse fraction is larger than the #4 sieve)						
CLEAN GRAVEL WITH <5% FINES	Cu ≥4 and 1 ≤ Cc ≤ 3		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES		
			GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES		
	GRAVELS WITH 5% TO 12% FINES	Cu ≥4 and 1 ≤ Cc ≤ 3		GW-GM	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES	
				GW-GC	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES	
		Cu <4 and/or 1 > Cc > 3		GP-GM	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE FINES	
				GP-GC	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE CLAY FINES	
	GRAVELS WITH > 12% FINES		GM	SILTY GRAVELS, GRAVEL-SILT-SAND MIXTURES		
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES		
			GC-GM	CLAYEY GRAVELS, GRAVEL-SAND-CLAY-SILT MIXTURES		
SANDS (Half or more of coarse fraction is smaller than the #4 sieve)						
CLEAN SANDS WITH <5% FINES	Cu ≥6 and 1 ≤ Cc ≤ 3		SW	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES		
	Cu <6 and/or 1 > Cc > 3		SP	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES		
SANDS WITH 5% TO 12% FINES	Cu ≥6 and 1 ≤ Cc ≤ 3		SW-SM	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES		
			SW-SC	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES		
	Cu <6 and/or 1 > Cc > 3		SP-SM	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE FINES		
			SP-SC	POORLY GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE CLAY FINES		
SANDS WITH > 12% FINES		SM	SILTY SANDS, SAND-GRAVEL-SILT MIXTURES			
		SC	CLAYEY SANDS, SAND-GRAVEL-CLAY MIXTURES			
		SC-SM	CLAYEY SANDS, SAND-SILT-CLAY MIXTURES			
FINE GRAINED SOILS (Half or more of material is smaller than the #200 sieve)						
SILTS AND CLAYS (Liquid Limit less than 50)		ML	INORGANIC SILTS AND VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, SILTS WITH SLIGHT PLASTICITY			
		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS			
		CL-ML	INORGANIC CLAYS-SILTS OF LOW PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS			
SILTS AND CLAYS (Liquid Limit 50 or greater)		OL	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY			
		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILT			
		CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS			
		OH	ORGANIC CLAYS & ORGANIC SILTS OF MEDIUM-TO-HIGH PLASTICITY			

NOTE: USE MATERIAL DESCRIPTION ON THE LOG TO DEFINE A GRAPHIC THAT MAY NOT BE PROVIDED ON THIS LEGEND.



PROJECT NO.:  
20225081.001A

DRAWN BY: MC

CHECKED BY: MR

DATE: 4/14/2022

GRAPHICS KEY

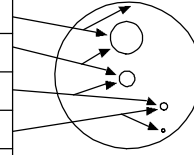
Route 6 Phase 1A Sewer Construction  
Westport, MA

ATTACHMENT

1

**GRAIN SIZE**

DESCRIPTION	SIEVE SIZE	GRAIN SIZE	APPROXIMATE SIZE
Boulders	>12 in. (304.8 mm.)	>12 in. (304.8 mm.)	Larger than basketball-sized
Cobbles	3 - 12 in. (76.2 - 304.8 mm.)	3 - 12 in. (76.2 - 304.8 mm.)	Fist-sized to basketball-sized
Gravel	coarse 3/4 - 3 in. (19 - 76.2 mm.)	3/4 - 3 in. (19 - 76.2 mm.)	Thumb-sized to fist-sized
	fine #4 - 3/4 in. (#4 - 19 mm.)	0.19 - 0.75 in. (4.8 - 19 mm.)	Pea-sized to thumb-sized
Sand	coarse #10 - #4	0.075 - 0.19 in. (2 - 4.9 mm.)	Rock salt-sized to pea-sized
	medium #40 - #10	0.017 - 0.075 in. (0.43 - 2 mm.)	Sugar-sized to rock salt-sized
	fine #200 - #40	0.0029 - 0.017 in. (0.07 - 0.43 mm.)	Flour-sized to sugar-sized
Fines	Passing #200	<0.0029 in. (<0.07 mm.)	Flour-sized and smaller

**SECONDARY CONSTITUENT**

	AMOUNT	
Term of Use	Secondary Constituent is Fine Grained	Secondary Constituent is Coarse Grained
Trace	<5%	<15%
With	≥5 to <15%	≥15 to <30%
Modifier	≥15%	≥30%

**MOISTURE CONTENT**

DESCRIPTION	FIELD TEST
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

**CEMENTATION**

DESCRIPTION	FIELD TEST
Weakly	Crumbles or breaks with handling or slight finger pressure
Moderately	Crumbles or breaks with considerable finger pressure
Strongly	Will not crumble or break with finger pressure

**CONSISTENCY - FINE-GRAINED SOIL**

CONSISTENCY	SPT - N <sub>60</sub> (# blows / ft)	Pocket Pen (tsf)	UNCONFINED COMPRESSIVE STRENGTH (Q <sub>u</sub> )(psf)	VISUAL / MANUAL CRITERIA
Very Soft	<2	PP < 0.25	<500	Thumb will penetrate more than 1 inch (25 mm). Extrudes between fingers when squeezed.
Soft	2 - 4	0.25 ≤ PP < 0.5	500 - 1000	Thumb will penetrate soil about 1 inch (25 mm). Remolded by light finger pressure.
Medium Stiff	4 - 8	0.5 ≤ PP < 1	1000 - 2000	Thumb will penetrate soil about 1/4 inch (6 mm). Remolded by strong finger pressure.
Stiff	8 - 15	1 ≤ PP < 2	2000 - 4000	Can be imprinted with considerable pressure from thumb.
Very Stiff	15 - 30	2 ≤ PP < 4	4000 - 8000	Thumb will not indent soil but readily indented with thumbnail.
Hard	>30	4 ≤ PP	>8000	Thumbnail will not indent soil.

**REACTION WITH HYDROCHLORIC ACID**

DESCRIPTION	FIELD TEST
None	No visible reaction
Weak	Some reaction, with bubbles forming slowly
Strong	Violent reaction, with bubbles forming immediately

**APPARENT / RELATIVE DENSITY - COARSE-GRAINED SOIL**

APPARENT DENSITY	SPT-N <sub>60</sub> (# blows/ft)	MODIFIED CA SAMPLER (# blows/ft)	CALIFORNIA SAMPLER (# blows/ft)	RELATIVE DENSITY (%)
Very Loose	<4	<4	<5	0 - 15
Loose	4 - 10	5 - 12	5 - 15	15 - 35
Medium Dense	10 - 30	12 - 35	15 - 40	35 - 65
Dense	30 - 50	35 - 60	40 - 70	65 - 85
Very Dense	>50	>60	>70	85 - 100

FROM TERZAGHI AND PECK, 1948

**PLASTICITY**

DESCRIPTION	LL	PI
Non-Plastic	NP	NP
Low	< 30	< 15
Medium	30 - 50	15 - 25
High	> 50	> 25

LL is from Casagrande, 1948. PI is from Holtz, 1959.

**STRUCTURE**

DESCRIPTION	CRITERIA
Stratified	Alternating layers of varying material or color with layers at least 1/4-in. thick, note thickness.
Laminated	Alternating layers of varying material or color with the layer less than 1/4-in. thick, note thickness.
Fissured	Breaks along definite planes of fracture with little resistance to fracturing.
Slickensided	Fracture planes appear polished or glossy, sometimes striated.
Blocky	Cohesive soil that can be broken down into small angular lumps which resist further breakdown.
Lensed	Inclusion of small pockets of different soils, such as small lenses of sand scattered through a mass of clay; note thickness.

**ANGULARITY**

DESCRIPTION	CRITERIA
Angular	Particles have sharp edges and relatively plane sides with unpolished surfaces.
Subangular	Particles are similar to angular description but have rounded edges.
Subrounded	Particles have nearly plane sides but have well-rounded corners and edges.
Rounded	Particles have smoothly curved sides and no edges.

PROJECT NO.:  
20225081.001A

DRAWN BY: MC

CHECKED BY: MR

DATE: 4/14/2022


**SOIL DESCRIPTION KEY**Route 6 Phase 1A Sewer Construction  
Westport, MA

ATTACHMENT

2

<b>Date Begin - End:</b> 2/21/2022	<b>Drilling Company:</b> New England Boring Contractors	<b>BORING LOG B-19</b>
<b>Logged By:</b> M. Chea	<b>Drill Crew:</b> M. Matarozzo	
<b>Hor.-Vert. Datum:</b> NAD83 - NAVD88	<b>Drilling Equipment:</b> Mobile Drill B47 Truck Rig	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> Drive and wash with casing	
<b>Weather:</b> Clear, 47°F	<b>Casing Diameter:</b> 4.25 in. O.D.	
		<b>Hammer Type - Drop:</b> 140 lb. Auto - 30 in.

		FIELD EXPLORATION					LABORATORY RESULTS								
Elevation (feet)	Depth (feet)	Graphical Log	Latitude: 41.67058° Longitude: -71.10076° Ground Surface Elevation (ft.): 143.00 Surface Condition: Grass	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			Lithologic Description												
140  															

	PROJECT NO.: 20225081.001A	<b>BORING LOG B-19</b>	<b>BORING</b>
	DRAWN BY: MC CHECKED BY: MR DATE: 4/14/2022		
			<b>B-19</b>

<b>Date Begin - End:</b> 2/22/2022	<b>Drilling Company:</b> New England Boring Contractors	<b>BORING LOG B-20</b>
<b>Logged By:</b> M. Chea	<b>Drill Crew:</b> M. Matarozzo	
<b>Hor.-Vert. Datum:</b> NAD83 - NAVD88	<b>Drilling Equipment:</b> Mobile Drill B47 Truck Rig	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> Drive and wash with casing	
<b>Weather:</b> Clear, 38°F	<b>Casing Diameter:</b> 4.25 in. O.D.	
<b>Hammer Type - Drop:</b> 140 lb. Auto - 30 in.		


Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS								Additional Tests/Remarks
			Latitude: 41.67153° Longitude: -71.10203° Ground Surface Elevation (ft.): 144.50 Surface Condition: Bituminous Pavement	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	
			<b>BITUMINOUS PAVEMENT: ~6"</b>												
			<b>S-1: FILL: Poorly Graded SAND with Silt (SP-SM):</b> fine to medium-grained sand, trace fine-grained subangular gravel, light brown to brown, moist, medium dense, PID = 0.4	S-1	BC=11 10 14		9"								
			<b>S-2: FILL: Silty SAND with Gravel (SM):</b> fine to medium-grained sand, fine to coarse-grained angular gravel, yellowish brown, moist, dense, PID = 0.1	S-2	BC=14 19 18 14		15"	SM			75	32			
140	5		<b>S-3:</b> No Recovery, gravel fragment at tip of spoon	S-3	BC=2 1 4 50/0"		NR								
			<b>S-4: Silty SAND (SM):</b> fine to medium-grained sand, trace fine-grained subangular gravel, gray, wet, medium dense, PID = 0.1	S-4	BC=6 7 14 16		15"	SM			98	35			
			<b>S-5: Silty SAND (SM):</b> fine-grained sand, trace fine-grained subrounded gravel, light gray, wet, very dense, PID = 0.2	S-5	BC=14 26 32 35		16"								
			<b>S-6:</b> Similar to S-5 except fine to coarse-grained subrounded to subangular gravel	S-6	BC=27 40 31 26		11"								
			<p>The boring was terminated at approximately 21 ft. below ground surface.</p> <p><b>GROUNDWATER LEVEL INFORMATION:</b>            Groundwater was observed at approximately 4 ft. below ground surface at the end of drilling.</p> <p><b>GENERAL NOTES:</b>            1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021.            2. A PID (ppmv) was used for environmental field screening of soil samples.            3. The boring was backfilled with cuttings and cold patch at the ground surface.</p>												
135	10														
130	15														
125	20														
120	25														
115	30														
110															

	PROJECT NO.: 20225081.001A	BORING LOG B-20	BORING
	DRAWN BY: MC		
	CHECKED BY: MR	Route 6 Phase 1A Sewer Construction Westport, MA	B-20
DATE: 4/14/2022			PAGE: 1 of 1










<b>Date Begin - End:</b>	<u>2/23/2022</u>	<b>Drilling Company:</b>	<u>New England Boring Contractors</u>	<b>BORING LOG B-21</b>
<b>Logged By:</b>	<u>M. Chea</u>	<b>Drill Crew:</b>	<u>M. Matarozzo</u>	
<b>Hor.-Vert. Datum:</b>	<u>NAD83 - NAVD88</u>	<b>Drilling Equipment:</b>	<u>Mobile Drill B47 Truck Rig</u>	
<b>Plunge:</b>	<u>-90 degrees</u>	<b>Drilling Method:</b>	<u>Drive and wash with casing</u>	
<b>Weather:</b>	<u>Cloudy, 60°F</u>	<b>Casing Diameter:</b>	<u>4.25 in. O.D.</u>	
		<b>Hammer Type - Drop:</b>	<u>140 lb. Auto - 30 in.</u>	

Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS							
			Latitude: 41.67213° Longitude: -71.10305° Ground Surface Elevation (ft.): 147.00 Surface Condition: Bituminous Pavement	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			Lithologic Description												
			BITUMINOUS PAVEMENT: ~5"												
			S-1: FILL: Silty SAND (SM): fine to medium-grained sand, trace fine-grained subangular gravel, brown, moist, medium dense, PID = 0.1	S-1		BC=8 5 6	10"								
			S-2: FILL: Silty SAND (SM): fine-grained sand, gray to yellowish brown, moist, medium dense, PID = 0.2	S-2		BC=12 14 13 16	18"								
			S-3: Silty SAND with Gravel (SM): fine-grained sand, gray to yellowish brown, moist, medium dense, PID = 0.2	S-3		BC=29 18 14 36	6"								
			S-3: Silty SAND with Gravel (SM): fine-grained sand, fine to coarse-grained subrounded to angular gravel, yellowish brown, wet, dense, PID = 0.2												
			S-4: Silty SAND (SM): fine to coarse-grained sand, trace fine-grained subrounded gravel, grayish brown, wet, dense, PID = 0.2	S-4		BC=28 24 10 14	2"								
			S-5: Silty SAND (SM): fine to coarse-grained sand, trace fine-grained subrounded gravel, grayish brown, wet, medium dense, PID = 0.1	S-5		BC=16 15 12 14	6"	SM			89	29			
			The boring was terminated at approximately 13 ft. below ground surface.												
			<div>GROUNDWATER LEVEL INFORMATION: Groundwater was observed at approximately 2.5 ft. below ground surface at the end of drilling.</div> <div>GENERAL NOTES: 1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021. 2. A PID (ppmv) was used for environmental field screening of soil samples. 3. The boring was backfilled with cuttings and 1.5 bags of sand and cold patch at the ground surface.</div>												

	PROJECT NO.: 20225081.001A	BORING LOG B-21	BORING  B-21
	DRAWN BY: MC CHECKED BY: MR DATE: 4/14/2022		
	PAGE: 1 of 1		



<b>Date Begin - End:</b> 2/24/2022	<b>Drilling Company:</b> New England Boring Contractors	<b>BORING LOG B-22</b>
<b>Logged By:</b> M. Chea	<b>Drill Crew:</b> M. Matarozzo	
<b>Hor.-Vert. Datum:</b> NAD83 - NAVD88	<b>Drilling Equipment:</b> Mobile Drill B47 Truck Rig	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> Drive and wash with casing	
<b>Weather:</b> Cloudy, 28°F	<b>Casing Diameter:</b> 4.25 in. O.D.	
<b>Hammer Type - Drop:</b> 140 lb. Auto - 30 in.		

Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS							
			Latitude: 41.67286° Longitude: -71.10430° Ground Surface Elevation (ft.): 150.50 Surface Condition: Bituminous Pavement	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
150			<b>BITUMINOUS PAVEMENT: ~5"</b>	S-1		BC=9 10 13	6"	ML			98	56			Drill chattered from 8 to 9 ft.
		<b>S-1: FILL: Silty SAND with Gravel (SM):</b> fine to medium-grained sand, fine-grained subangular gravel, yellowish brown, moist, medium dense, PID = 0.2	S-2		BC=8 13 18 17	15"									
		<b>S-2: FILL: Sandy SILT (ML):</b> low plasticity, fineto medium-grained sand, trace fine-grained subangular gravel, yellowish brown to brown, moist, hard, PID = 0.3	S-3		BC=9 8 15 13	15"									
145	5	<b>S-3: Silty SAND (SM):</b> fine-grained sand, grayish brown, wet, medium dense, PID = 0.1													
		<b>S-4:</b> Similar to S-3 except trace fine-grained subrounded gravel, dense, PID = 0.4	S-4		BC=12 13 35 45	9"									
140	10	<b>S-5: Silty SAND with Gravel (SM):</b> fine to coarse-grained sand, fine-grained subrounded gravel, grayish brown, wet, dense, PID = 0.4	S-5		BC=24 28 14 16	10"									
135	15	The boring was terminated at approximately 13 ft. below ground surface.													
130	20	<div><div><b>GROUNDWATER LEVEL INFORMATION:</b> Groundwater was observed at approximately 3 ft. below ground surface at the end of drilling.</div><div><b>GENERAL NOTES:</b> 1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021. 2. A PID (ppmv) was used for environmental field screening of soil samples. 3. The boring was backfilled with cuttings and 1 bag of sand and cold patch at the ground surface.</div></div>													
125	25														
120	30														

PROJECT NO.:  
20225081.001A

DRAWN BY: MC

CHECKED BY: MR

DATE: 4/14/2022

## BORING LOG B-22

Route 6 Phase 1A Sewer Construction  
Westport, MA

BORING

B-22


PAGE: 1 of 1



PLOTTED: 04/15/2022 10:01 AM BY: MChen

<b>Date Begin - End:</b>	2/24/2022	<b>Drilling Company:</b>	New England Boring Contractors	<b>BORING LOG B-23</b>
<b>Logged By:</b>	M. Chea	<b>Drill Crew:</b>	M. Matarozzo	
<b>Hor.-Vert. Datum:</b>	NAD83 - NAVD88	<b>Drilling Equipment:</b>	Mobile Drill B47 Truck Rig	
<b>Plunge:</b>	-90 degrees	<b>Drilling Method:</b>	Drive and wash with casing	
<b>Weather:</b>	Cloudy, 30°F	<b>Casing Diameter:</b>	4.25 in. O.D.	
		<b>Hammer Type - Drop:</b>		140 lb. Auto - 30 in.

Elevation (feet) Depth (feet)		Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS											
			Latitude: 41.67364° Longitude: -71.10556° Ground Surface Elevation (ft.): 151.50 Surface Condition: Bituminous Pavement		Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks			
			Lithologic Description																
			<b>BITUMINOUS PAVEMENT: ~5"</b>																
			<b>S-1: FILL: Poorly Graded SAND with Silt and Gravel (SP-SM):</b> fine to coarse-grained sand, fine to coarse-grained angular gravel, yellowish brown, moist, medium dense, PID = 0.2		S-1		BC=9 11 7	7"											
					S-2		BC=8 4 5 8	2"											
			<b>S-2: FILL: Silty SAND with Gravel (SM):</b> fine to medium-grained sand, fine-grained angular gravel, dark brown, moist, loose, PID = 0.2		S-3		BC=7 20 19 17	14"											
			<b>S-3: Silty SAND (SM):</b> fine-grained sand, trace fine-grained subrounded gravel, gray, wet, dense, PID = 0.1																
			<b>S-4:</b> Encountered spoon refusal at 10 ft.		S-4		BC=50/0"	NR											
			The boring was terminated at approximately 10 ft. below ground surface.														Drill rig chattered heavily at 8.5 ft. Advanced roller bit from 8.5 to 10 ft into boulder/possible bedrock. Drive a spoon at 10 ft, but encountered split spoon refusal.		
			<b>GROUNDWATER LEVEL INFORMATION:</b> ▼ Groundwater was observed at approximately 2 ft. below ground surface at the end of drilling.																
			<b>GENERAL NOTES:</b> 1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021. 2. A PID (ppmv) was used for environmental field screening of soil samples. 3. The boring was backfilled with cuttings and 1.5 bags of sand and cold patch at the ground surface.																











	PROJECT NO.: 20225081.001A	BORING LOG B-23		BORING
	DRAWN BY: MC	Route 6 Phase 1A Sewer Construction Westport, MA		B-23
	CHECKED BY: MR			
	DATE: 4/14/2022			PAGE: 1 of 1

GINT FILE: KLF\_gint\_master\_2022  
 GINT TEMPLATE: E:KLF\_STANDARD\_GINT\_LIBRARY\_2022.GLB [ KLF\_BORING/TEST PIT SOIL LOG]  
 PROJECT NUMBER: 20225081.001A  
 OFFICE FILTER: BOSTON



PLOTTED: 04/15/2022 10:01 AM BY: MChen

<b>Date Begin - End:</b> <u>2/24/2022</u>	<b>Drilling Company:</b> <u>New England Boring Contractors</u>	<b>BORING LOG B-24</b>
<b>Logged By:</b> <u>M. Chea</u>	<b>Drill Crew:</b> <u>M. Matarozzo</u>	
<b>Hor.-Vert. Datum:</b> <u>NAD83 - NAVD88</u>	<b>Drilling Equipment:</b> <u>Mobile Drill B47 Truck Rig</u>	<b>Hammer Type - Drop:</b> <u>140 lb. Auto - 30 in.</u>
<b>Plunge:</b> <u>-90 degrees</u>	<b>Drilling Method:</b> <u>Drive and wash with casing</u>	
<b>Weather:</b> <u>Cloudy, 30°F</u>	<b>Casing Diameter:</b> <u>4.25 in. O.D.</u>	

Elevation (feet) Depth (feet)		Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS								
			Latitude: 41.67419° Longitude: -71.10649° Ground Surface Elevation (ft.): 152.50 Surface Condition: Bituminous Pavement	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/Remarks	
																Lithologic Description
			<b>BITUMINOUS PAVEMENT: ~5"</b>	S-1		BC=8 10 12	6"	SM								Drill rig chattered from 8 to 9 ft.
150			<b>S-1: FILL: Poorly Graded SAND with Silt and Gravel (SP-SM):</b> fine to coarse-grained sand, fine-grained angular gravel, brown, moist, medium dense, PID = 0.1 <b>S-2:</b> Similar to S-1, PID = 0.1	S-2		BC=11 7 4 11	5"									
5			<b>S-3: Silty SAND (SM):</b> fine to coarse-grained sand, trace fine to coarse-grained subrounded gravel, gray, wet, dense, PID = 0.1	S-3		BC=11 15 16 20	15"									
145																
10			<b>S-4: Silty SAND with Gravel (SM):</b> fine to coarse-grained sand, fine-grained subrounded gravel, grayish brown, wet, medium dense, PID = 0.2	S-4		BC=15 15 11 15	9"									
140			<b>S-5: Silty SAND (SM):</b> fine to medium-grained sand, grayish brown, wet, medium dense, PID = 0.3	S-5		BC=10 14 14 17	10"									
15		The boring was terminated at approximately 13 ft. below ground surface.			<div><u>GROUNDWATER LEVEL INFORMATION:</u> ▼ Groundwater was observed at approximately 2.5 ft. below ground surface at the end of drilling.</div> <div><u>GENERAL NOTES:</u> 1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021. 2. A PID (ppmv) was used for environmental field screening of soil samples. 3. The boring was backfilled with cuttings and 1.5 bags of sand and cold patch at the ground surface.</div>											

**GROUNDWATER LEVEL INFORMATION:**  
 ▼ Groundwater was observed at approximately 2.5 ft. below ground surface at the end of drilling.

**GENERAL NOTES:**  
 1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021.  
 2. A PID (ppmv) was used for environmental field screening of soil samples.  
 3. The boring was backfilled with cuttings and 1.5 bags of sand and cold patch at the ground surface.

PROJECT NUMBER: 20225081.001A  
 OFFICE FILTER: BOSTON  
 GINT FILE: KLF\_gint\_master\_2022  
 GINT TEMPLATE: E:KLF\_STANDARD\_GINT\_LIBRARY\_2022.GLB [ KLF\_BORING/TEST PIT SOIL LOG ]

	PROJECT NO.: 20225081.001A	BORING LOG B-24		BORING
	DRAWN BY: MC CHECKED BY: MR DATE: 4/14/2022	Route 6 Phase 1A Sewer Construction Westport, MA		B-24
				PAGE: 1 of 1



<b>Date Begin - End:</b>	<u>2/28/2022</u>	<b>Drilling Company:</b>	<u>New England Boring Contractors</u>	<b>BORING LOG B-25</b>
<b>Logged By:</b>	<u>M. Chea</u>	<b>Drill Crew:</b>	<u>M. Matarozzo</u>	
<b>Hor.-Vert. Datum:</b>	<u>NAD83 - NAVD88</u>	<b>Drilling Equipment:</b>	<u>Mobile Drill B47 Truck Rig</u>	
<b>Plunge:</b>	<u>-90 degrees</u>	<b>Drilling Method:</b>	<u>Drive and wash with casing</u>	
<b>Weather:</b>	<u>Clear, 26°F</u>	<b>Casing Diameter:</b>	<u>4.25 in. O.D.</u>	
		<b>Hammer Type - Drop:</b>	<u>140 lb. Auto - 30 in.</u>	

Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS								Additional Tests/ Remarks
			Latitude: 41.67565° Longitude: -71.10927° Ground Surface Elevation (ft.): 161.00 Surface Condition: Grass	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	
			Lithologic Description												
160			<b>S-1: TOPSOIL: ~4"</b>	S-1		BC=2 3	15"								
			Bottom 11": <b>FILL: Silty SAND with Gravel (SM):</b> fine-grained sand, fine-grained angular gravel, dark brown to gray, moist, medium dense, PID = 1.1	S-2		BC=34 21 25 19	11"								Drill chattered slightly from 2 to 4 ft.
			<b>S-2:</b> Similar to Bottom 11" of S-1 except dense, gray, PID = 1.1	S-3		BC=21 32 20 23	14"								
			<b>S-3: Silty SAND with Gravel (SM):</b> fine-grained sand, fine-grained subrounded gravel, gray, wet, very dense, PID = 1.2												
155															
			<b>S-4: Silty SAND with Gravel (SM):</b> fine to medium-grained sand, fine to coarse-grained subrounded gravel, gray, wet, very dense, PID = 0.8	S-4		BC=12 15 43 57	18"	SM			77	39			Drill chattered from 11 to 12 ft.
150															
			<b>S-5:</b> Similar to S-4	S-5		BC=100/3"	3"								Drill chattered from 14 to 15 ft.
145															Drill chattered heavily at 17 feet. Advanced roller bit from 17 to 17.5 ft. Encountered roller bit refusal at 17.5 ft.

The boring was terminated at approximately 17.5 ft. below ground surface.

**GROUNDWATER LEVEL INFORMATION:**  
 ▼ Groundwater was observed at approximately 4 ft. below ground surface at the end of drilling.

**GENERAL NOTES:**  
 1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021.  
 2. A PID (ppmv) was used for environmental field screening of soil samples.  
 3. The boring was backfilled with cuttings and 4 bags of sand and cold patch at the ground surface.

	PROJECT NO.: 20225081.001A	BORING LOG B-25	BORING  B-25
	DRAWN BY: MC CHECKED BY: MR DATE: 4/14/2022		
	PAGE: 1 of 1		



<b>Date Begin - End:</b>	<u>2/28/2022</u>	<b>Drilling Company:</b>	<u>New England Boring Contractors</u>	<b>BORING LOG B-26</b>
<b>Logged By:</b>	<u>M. Chea</u>	<b>Drill Crew:</b>	<u>M. Matarozzo</u>	
<b>Hor.-Vert. Datum:</b>	<u>NAD83 - NAVD88</u>	<b>Drilling Equipment:</b>	<u>Mobile Drill B47 Truck Rig</u>	<b>Hammer Type - Drop:</b> <u>140 lb. Auto - 30 in.</u>
<b>Plunge:</b>	<u>-90 degrees</u>	<b>Drilling Method:</b>	<u>Drive and wash with casing</u>	
<b>Weather:</b>	<u>Clear, 26°F</u>	<b>Casing Diameter:</b>	<u>4.25 in. O.D.</u>	

Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION				LABORATORY RESULTS								Additional Tests/ Remarks
			Latitude: 41.67608° Longitude: -71.11002° Ground Surface Elevation (ft.): 156.00 Surface Condition: Bituminous Pavement	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	
			<b>S-1: TOPSOIL: ~4"</b>	S-1	BC=1 2 6 12	14"									
			<b>FILL: Silty SAND (SM):</b> fine-grained sand, trace fine-grained subangular gravel, orangish brown to gray, moist, loose, PID = 0.4	S-2	BC=16 34 32 47	18"									
			<b>S-2: FILL: Silty SAND with Gravel (SM):</b> fine to medium-grained sand, fine to coarse-grained angular gravel, gray, moist, very dense, PID = 0.4	S-3	BC=30 51 41 47	16"		SM			73	24			
			<b>S-3: Silty SAND with Gravel (SM):</b> fine to medium-grained sand, fine-grained subrounded gravel, grayish brown, wet, very dense, PID = 0.5												
			<b>S-4: Similar to S-3, PID = 0.4</b>	S-4	BC=32 49 61/4"	13"									
			<b>S-5: Silty SAND with Gravel (SM):</b> fine to coarse-grained sand, fine-grained subrounded gravel, grayish brown, wet, very dense, PID = 0.3	S-5	BC=22 45 80 105	16"		SM			78	23			
			<b>S-6: Silty SAND (SM):</b> fine to medium-grained sand, trace fine-grained subrounded gravel, grayish brown, wet, very dense, PID = 0.2	S-6	BC=21 45 70/2"	10"									Hammer bouncing at 20.2 ft.
			<p>The boring was terminated at approximately 20.2 ft. below ground surface.</p> <p><b>GROUNDWATER LEVEL INFORMATION:</b>            ▼ Groundwater was observed at approximately 5 ft. below ground surface at the end of drilling.</p> <p><b>GENERAL NOTES:</b>            1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021.            2. A PID (ppmv) was used for environmental field screening of soil samples.            3. The boring was backfilled with cuttings and 4 bags of sand and cold patch at the ground surface.</p>												

PROJECT NO.:  
20225081.001A

DRAWN BY: MC

CHECKED BY: MR

DATE: 4/14/2022

## BORING LOG B-26

Route 6 Phase 1A Sewer Construction  
Westport, MA

BORING

B-26

PAGE: 1 of 1



<b>Date Begin - End:</b> 3/01/2022		<b>Drilling Company:</b> New England Boring Contractors		<b>BORING LOG B-27</b>	
<b>Logged By:</b> M. Chea		<b>Drill Crew:</b> M. Matarozzo			
<b>Hor.-Vert. Datum:</b> NAD83 - NAVD88		<b>Drilling Equipment:</b> Mobile Drill B47 Truck Rig		<b>Hammer Type - Drop:</b> 140 lb. Auto - 30 in.	
<b>Plunge:</b> -90 degrees		<b>Drilling Method:</b> Drive and wash with casing			
<b>Weather:</b> Clear, 27°F		<b>Casing Diameter:</b> 4.25 in. O.D.			


Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS							
			Latitude: 41.67713° Longitude: -71.11129° Ground Surface Elevation (ft.): 147.00 Surface Condition: Bituminous Pavement	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			<b>BITUMINOUS PAVEMENT: ~6"</b>												
145			<b>S-1: FILL: Silty SAND (SM):</b> fine-grained sand, trace fine-grained gravel, brown, moist, medium dense, PID = 0.2	S-1		BC=12 10 9	6"								
			<b>S-2: FILL: Silty SAND (SM):</b> fine-grained sand, brown, moist, loose, PID = 0.1	S-2		BC=5 3 3 3	5"								
5			<b>S-3: FILL: Silty SAND (SM):</b> fine to medium-grained sand, trace fine-grained subangular gravel, dark brown to brown, wet, very loose, PID = 0.2	S-3		BC=3 1 1 1	13"	SM			92	41			Drill rig chattered slightly from 3 to 4 ft.
140			<b>S-4: Silty SAND (SM):</b> fine to medium-grained sand, yellowish brown, wet, dense, PID = 0.2	S-4		BC=8 16 18 18	16"								
10			<b>S-5: Silty SAND (SM):</b> fine to medium-grained sand, trace fine-grained subrounded gravel, yellowish brown, wet, dense, PID = 0.4	S-5		BC=16 22 22 50/2"	12"								Drill rig chattered heavily from 10.5 to 11 ft. Encountered roller bit and spoon refusal at 11 ft.
135			The boring was terminated at approximately 11 ft. below ground surface.												
15															
130															
20															
125															
25															
120															
30															
115															

**GROUNDWATER LEVEL INFORMATION:**

Groundwater was observed at approximately 2 ft. below ground surface at the end of drilling.

**GENERAL NOTES:**








- Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021.
- A PID (ppmv) was used for environmental field screening of soil samples.
- The boring was backfilled with cuttings and 3 bags of sand and cold patch at the ground surface.

	PROJECT NO.: 20225081.001A	<b>BORING LOG B-27</b>  Route 6 Phase 1A Sewer Construction Westport, MA	BORING
	DRAWN BY: MC CHECKED BY: MR DATE: 4/14/2022		<b>B-27</b>

PAGE: 1 of 1



<b>Date Begin - End:</b>	3/01/2022	<b>Drilling Company:</b>	New England Boring Contractors	<b>BORING LOG B-28</b>
<b>Logged By:</b>	M. Chea	<b>Drill Crew:</b>	M. Matarozzo	
<b>Hor.-Vert. Datum:</b>	NAD83 - NAVD88	<b>Drilling Equipment:</b>	Mobile Drill B47 Truck Rig	<b>Hammer Type - Drop:</b> 140 lb. Auto - 30 in.
<b>Plunge:</b>	-90 degrees	<b>Drilling Method:</b>	Drive and wash with casing	
<b>Weather:</b>	Cloudy, 36°F	<b>Casing Diameter:</b>	4.25 in. O.D.	

Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS								
			Latitude: 41.67763° Longitude: -71.11212° Ground Surface Elevation (ft.): 145.50 Surface Condition: Bituminous Pavement	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks	
			Lithologic Description													
145			<b>BITUMINOUS PAVEMENT: ~6"</b>	S-1		BC=11 9 16	6"	SM			100	19				
			<b>S-1: FILL: Silty SAND with Gravel (SM):</b> fine to medium-grained sand, fine-grained subrounded gravel, dark brown, moist, medium dense, PID = 0.7	S-2		BC=18 22 10 6	6"									
	5		<b>S-2: FILL: Silty SAND with Gravel (SM):</b> fine-grained sand, fine to coarse-grained angular gravel, brown, moist, dense, PID = 0.4	S-3		BC=4 3 2 3	6"									
140			<b>S-3: Silty SAND with Gravel (SM):</b> fine to medium-grained sand, fine-grained subrounded gravel, brown, wet, loose, PID = 0.5	S-4		BC=2 2 2 1	1"									
	10		<b>S-4:</b> Similar to S-3, loose, PID = 0.3													
135			<b>S-5: Silty SAND (SM):</b> fine-grained sand, trace medium to coarse-grained sand, brown, wet, medium dense, PID = 0.3	S-5		BC=3 5 6 6	10"									
			<b>S-6: Silty SAND (SM):</b> fine-grained sand, light brown, wet, medium dense, PID = 0.6	S-6		BC=8 10 10 13	18"									
130	15		The boring was terminated at approximately 13 ft. below ground surface.													
125	20		<div><div><div>GROUNDWATER LEVEL INFORMATION:</div><div>Groundwater was observed at approximately 4 ft. below ground surface at the end of drilling.</div></div><div><div>GENERAL NOTES:</div><div>1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021.</div><div>2. A PID (ppmv) was used for environmental field screening of soil samples.</div><div>3. The boring was backfilled with cuttings and cold patch at the ground surface.</div></div></div>													
120	25															
115	30															

PROJECT NO.:  
20225081.001A

DRAWN BY: MC

CHECKED BY: MR

DATE: 4/14/2022

## BORING LOG B-28

Route 6 Phase 1A Sewer Construction  
Westport, MA

BORING

B-28








PAGE: 1 of 1



PLOTTED: 04/15/2022 10:02 AM BY: MChen

PROJECT NUMBER: 20225081.001A  
 OFFICE FILTER: BOSTON  
 GINT FILE: KLF\_gint\_master\_2022  
 GINT TEMPLATE: E:KLF\_STANDARD\_GINT\_LIBRARY\_2022.GLB [ KLF\_BORING/TEST PIT SOIL LOG ]

<b>Date Begin - End:</b> 3/01/2022	<b>Drilling Company:</b> New England Boring Contractors	<b>BORING LOG B-29</b>
<b>Logged By:</b> M. Chea	<b>Drill Crew:</b> M. Matarozzo	
<b>Hor.-Vert. Datum:</b> NAD83 - NAVD88	<b>Drilling Equipment:</b> Mobile Drill B47 Truck Rig	
<b>Plunge:</b> -90 degrees	<b>Drilling Method:</b> Drive and wash with casing	
<b>Weather:</b> Cloudy, 38°F	<b>Casing Diameter:</b> 4.25 in. O.D.	
<b>Hammer Type - Drop:</b> 140 lb. Auto - 30 in.		

		FIELD EXPLORATION					LABORATORY RESULTS								
Elevation (feet)	Depth (feet)	Graphical Log	Latitude: 41.67829° Longitude: -71.11314° Ground Surface Elevation (ft.): 144.50 Surface Condition: Bituminous Pavement	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks
			Lithologic Description												
			<b>BITUMINOUS PAVEMENT: ~5"</b>	S-1		BC=6 7	13"	SM							
			<b>S-1: FILL: Poorly Graded SAND with Silt (SP-SM):</b> fine to medium-grained sand, brown, moist, medium dense, PID = 0.1	S-2		BC=10 8 8 7	10"								
140	5		<b>S-2: FILL: Poorly Graded SAND with Silt and Gravel (SP-SM):</b> fine to medium-grained sand, fine-grained subrounded gravel, brown, moist, medium dense, PID = 0.1	S-3		BC=3 5 6 10	12"								
			<b>S-3: FILL: Silty SAND (SM):</b> fine to medium-grained sand, brown, moist, medium dense, PID = 0.3	S-4 (split)		BC=10 8 8 11	16"								
			<b>S-4: Top 6": Silty SAND (SM):</b> fine to medium-grained sand, grayish brown, moist, medium dense, PID = 0.2												
135	10		<b>Bottom 10": Poorly Graded SAND with Silt (SP-SM):</b> fine to medium-grained sand, grayish brown, moist, PID = 0.3	S-5		BC=3 5 4 6	10"	SM			100	18			
			<b>S-5: Similar to Bottom 10" of S-4 except loose, PID = 0.2</b>	S-6		BC=5 5 5 7	13"								
			<b>S-6: Silty SAND (SM):</b> fine to medium-grained sand, grayish brown, wet, medium dense												
130	15	The boring was terminated at approximately 13 ft. below ground surface.													
125	20														
120	25														
115	30														
110															

**GROUNDWATER LEVEL INFORMATION:**


Groundwater was observed at approximately 6 ft. below ground surface at the end of drilling.

**GENERAL NOTES:**

1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021.

2. A PID (ppmv) was used for environmental field screening of soil samples.

3. The boring was backfilled with cuttings and 1 bag of sand and cold patch at the ground surface.

	PROJECT NO.: 20225081.001A	<b>BORING LOG B-29</b>  Route 6 Phase 1A Sewer Construction Westport, MA	BORING
	DRAWN BY: MC CHECKED BY: MR DATE: 4/14/2022		<b>B-29</b>
			PAGE: 1 of 1



PLOTTED: 04/15/2022 10:02 AM BY: MChen

GINT FILE: KLF\_gint\_master\_2022  
 GINT TEMPLATE: E:KLF\_STANDARD\_GINT\_LIBRARY\_2022.GLB [ KLF\_BORING/TEST PIT SOIL LOG]  
 PROJECT NUMBER: 20225081.001A  
 OFFICE FILTER: BOSTON

<b>Date Begin - End:</b> 3/02/2022		<b>Drilling Company:</b> New England Boring Contractors		<b>BORING LOG B-30</b>									
<b>Logged By:</b> M. Chea		<b>Drill Crew:</b> M. Matarozzo											
<b>Hor.-Vert. Datum:</b> NAD83 - NAVD88		<b>Drilling Equipment:</b> Mobile Drill B47 Truck Rig		<b>Hammer Type - Drop:</b> 140 lb. Auto - 30 in.									
<b>Plunge:</b> -90 degrees		<b>Drilling Method:</b> Drive and wash with casing											
<b>Weather:</b> Cloudy, 41°F		<b>Casing Diameter:</b> 4.25 in. O.D.											

Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS																		
			Latitude: 41.67871° Longitude: -71.11390° Ground Surface Elevation (ft.): 141.50 Surface Condition: Bituminous Pavement		Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/Remarks										
			Lithologic Description																							
140	5		<b>BITUMINOUS PAVEMENT: ~6"</b>		S-1		BC=14 12 9	1"	SM								Drill chattered slightly from 1 to 4 ft.									
			<b>S-1: FILL: Poorly Graded GRAVEL (GP):</b> fine to coarse-grained, angular, brown, moist, medium dense, PID = 0.0		S-2			BC=3 3 4 3										5"								
			<b>S-2: FILL: Silty SAND (SM):</b> fine to medium-grained, trace fine-grained subrounded gravel, brown, moist, loose, PID = 0.2		S-3			BC=3 3 1 3										6"								
			<b>S-3:</b> Similar to S-2, PID = 0.1																							
135			<b>S-4: Silty SAND with Gravel (SM):</b> fine to medium-grained, fine-grained subrounded gravel, grayish brown, wet, medium dense, PID = 0.1		S-4		BC=2 1 15 13	10"										SM								Drill chattered from 7 to 9 ft.
	10	<b>S-5: Silty SAND with Gravel (SM):</b> fine-grained sand, coarse-grained subangular gravel, brown, wet, medium dense, PID = 0.2		S-5		BC=5 5 5 7	3"	SM																		
130																										
	15	<b>S-6:</b> Similar to S-5 PID = 0.2		S-6		BC=3 3 8 4	2"																			
125		The boring was terminated at approximately 16 ft. below ground surface.																								
	20	<b>GROUNDWATER LEVEL INFORMATION:</b> Groundwater was observed at approximately 4 ft. below ground surface at the end of drilling.																								
	120	<b>GENERAL NOTES:</b> 1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021. 2. A PID (ppmv) was used for environmental field screening of soil samples. 3. The boring was backfilled with cuttings and 1.5 bags of sand and cold patch at the ground surface.																								
	25																									
	115																									
	30																									
	110																									

	PROJECT NO.: 20225081.001A		BORING LOG B-30		BORING  B-30
	DRAWN BY: MC		Route 6 Phase 1A Sewer Construction Westport, MA		
	CHECKED BY: MR				
	DATE: 4/14/2022				PAGE: 1 of 1



PLOTTED: 04/15/2022 10:02 AM BY: MChen


GINT FILE: KLF\_gint\_master\_2022  
 GINT TEMPLATE: E:KLF\_STANDARD\_GINT\_LIBRARY\_2022.GLB [ KLF\_BORING/TEST PIT SOIL LOG]  
 PROJECT NUMBER: 20225081.001A  
 OFFICE FILTER: BOSTON

<b>Date Begin - End:</b> 3/02/2022		<b>Drilling Company:</b> New England Boring Contractors		<b>BORING LOG B-31</b>	
<b>Logged By:</b> M. Chea		<b>Drill Crew:</b> M. Matarozzo			
<b>Hor.-Vert. Datum:</b> NAD83 - NAVD88		<b>Drilling Equipment:</b> Mobile Drill B47 Truck Rig		<b>Hammer Type - Drop:</b> 140 lb. Auto - 30 in.	
<b>Plunge:</b> -90 degrees		<b>Drilling Method:</b> Drive and wash with casing			
<b>Weather:</b> Clear, 41°F		<b>Casing Diameter:</b> 4.25 in. O.D.			

Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS								
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)	Additional Tests/ Remarks	
			<b>BITUMINOUS PAVEMENT: ~6"</b>  <b>S-1: FILL: Silty SAND with Gravel (SM):</b> fine to medium-grained sand, fine-grained subangular gravel, brown, moist, medium dense, PID = 0.3  <b>S-2: Top 6": FILL: Silty SAND (SM):</b> fine to medium-grained sand, trace fine-grained subrounded gravel, brown, moist, medium dense, PID = 0.4  <b>Bottom 9": Silty SAND (SM):</b> fine to medium-grained sand, trace fine-grained subrounded gravel, grayish brown, moist, PID = 0.2  <b>S-3:</b> Similar to Bottom 9" of S-2 except loose, brown, moist PID = 0.6  <b>S-4: Silty SAND with Gravel (SM):</b> fine to medium-grained sand, fine-grained subrounded gravel, light brown, wet, medium dense, PID = 0.3  <b>S-5: SILT (ML):</b> low to medium plasticity, gray, wet, medium stiff, PID = 0.2  <b>S-6:</b> Similar to S-5 except stiff, PID = 0.2	S-1		BC=5 9 12	5"									
				S-2 (split)		BC=12 7 6 7	15"									
135	5			S-3		BC=4 4 4 5	8"									
				S-4		BC=7 6 7 15	10"									
130	10			S-5		BC=6 4 4 6	13"	ML			100	97				
				S-6		BC=7 6 4 5	15"									
125	15		The boring was terminated at approximately 13 ft. below ground surface.													
120	20															
115	25															
110	30															
105																



**KLEINFELDER**  
Bright People. Right Solutions.

PROJECT NO.: 20225081.001A

DRAWN BY: MC

CHECKED BY: MR

DATE: 4/14/2022

**BORING LOG B-31**

Route 6 Phase 1A Sewer Construction  
Westport, MA

**BORING**

**B-31**

PAGE: 1 of 1

**GROUNDWATER LEVEL INFORMATION:**  
Groundwater was not observed during drilling or after completion.

**GENERAL NOTES:**  
 1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021.  
 2. A PID (ppmv) was used for environmental field screening of soil samples.  
 3. The boring was backfilled with cuttings and 1.5 bags of sand and cold patch at the ground surface.



PLOTTED: 04/15/2022 12:15 PM BY: MChen


PROJECT NUMBER: 20225081.001A  
 OFFICE FILTER: BOSTON  
 GINT FILE: KLF\_gint\_master\_2022  
 GINT TEMPLATE: E:\KLF\_STANDARD\_GINT\_LIBRARY\_2022.GLB [ KLF\_BORING/TEST PIT SOIL LOG ]

<b>Date Begin - End:</b> 3/03/2022		<b>Drilling Company:</b> New England Boring Contractors		<b>BORING LOG B-32-OW</b>									
<b>Logged By:</b> M. Chea		<b>Drill Crew:</b> M. Matarozzo											
<b>Hor.-Vert. Datum:</b> NAD83 - NAVD88		<b>Drilling Equipment:</b> Mobile Drill B47 Truck Rig		<b>Hammer Type - Drop:</b> 140 lb. Auto - 30 in.									
<b>Plunge:</b> -90 degrees		<b>Drilling Method:</b> Drive and wash with casing											
<b>Weather:</b> Clear, 38°F		<b>Casing Diameter:</b> 4.25 in. O.D.											

Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS							MONITORING WELL CONSTRUCTION*		
			Lithologic Description	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)			
			Latitude: 41.67972° Longitude: -71.11515° Ground Surface Elevation (ft.): 140.00 Surface Condition: Bituminous Pavement														
			<b>BITUMINOUS PAVEMENT: ~6"</b>  <b>S-1: FILL: Silty SAND (SM):</b> fine-grained sand, brownish gray, moist, medium dense, PID = 0.4  <b>S-2: Silty SAND (SM):</b> fine-grained sand, gray, moist, medium dense, PID = 0.1  <b>S-3:</b> Similar to S-2 except loose, wet PID = 0.1	S-1	BC=6 9 11	12"											Concrete
				S-2	BC=8 10 8 10	14"											20/40 Sand Pack
				S-3	BC=2 4 5 6	10"											2" SCH 40 Solid PVC Riser
																	Bentonite Chips
			<b>S-4: Sandy SILT (ML):</b> non-plastic, fine-grained sand, gray, wet, medium stiff, PID = 0.2    <b>S-5:</b> Similar to S-5 except soft PID = 0.1	S-4	BC=2 3 3 4	15"	ML				100	67					2" SCH 40 Slotted 0.010 PVC Screen
				S-5	BC=3 2 1 1	18"											20/40 Sand Pack
			<b>S-6: Silty SAND (SM):</b> fine-grained sand, gray, wet, loose, PID = 0.0	S-6	BC=2 2 2 3	16"											
			<b>S-7: SILT (ML):</b> low plasticity, trace fine-grained sand, light brown, wet, medium stiff, PID = 0.0    <b>S-8:</b> Similar to S-7 PID = 0.2	S-7	BC=4 4 3 3	15"	ML				100	89					20/40 Sand Pack
				S-8	BC=3 2 2 1	21"											
				S-9	BC=WOH 2	9"	ML				100	100					


  

	PROJECT NO.: 20225081.001A	BORING LOG B-32-OW		BORING  <b>B-32-OW</b>
	DRAWN BY: MC	Route 6 Phase 1A Sewer Construction Westport, MA		
	CHECKED BY: MR			
	DATE: 4/14/2022			PAGE: 1 of 2



<b>Date Begin - End:</b> 3/03/2022		<b>Drilling Company:</b> New England Boring Contractors		<b>BORING LOG B-32-OW</b>	
<b>Logged By:</b> M. Chea		<b>Drill Crew:</b> M. Matarozzo			
<b>Hor.-Vert. Datum:</b> NAD83 - NAVD88		<b>Drilling Equipment:</b> Mobile Drill B47 Truck Rig		<b>Hammer Type - Drop:</b> 140 lb. Auto - 30 in.	
<b>Plunge:</b> -90 degrees		<b>Drilling Method:</b> Drive and wash with casing			
<b>Weather:</b> Clear, 38°F		<b>Casing Diameter:</b> 4.25 in. O.D.			

Elevation (feet)	Depth (feet)	Graphical Log	FIELD EXPLORATION					LABORATORY RESULTS							MONITORING WELL CONSTRUCTION*  Completion Method: Flush mount cap in concrete		
			Latitude: 41.67972° Longitude: -71.11515° Ground Surface Elevation (ft.): 140.00 Surface Condition: Bituminous Pavement	Sample Number	Sample Type	Blow Counts(BC)= Uncorr. Blows/6 in. RQD=%	Recovery (NR=No Recovery)	USCS Symbol	Water Content (%)	Dry Unit Wt. (pcf)	Passing #4 (%)	Passing #200 (%)	Liquid Limit	Plasticity Index (NP=NonPlastic)			
			<b>S-9: SILT (ML):</b> low plasticity, gray, wet, soft, PID = 0.0	S-9 (cont.)		1 1	9" (cont.)										
	100 40		<b>S-10: SILT (ML):</b> low plasticity, gray, wet, stiff, PID = 0.0	S-10		BC=WOH 3 6 7	1"										
	95 45		<b>S-11: SILT (ML):</b> non-plastic, gray, wet, stiff, PID = 0.0	S-11		BC=5 7 6 5	14"	ML						NP	NP		
			<b>WEATHERED BEDROCK</b>														
	90 50	The boring was terminated at approximately 49 ft. below ground surface.															
	85 55	<b>GROUNDWATER LEVEL INFORMATION:</b> ▼ Groundwater was observed at approximately 9.5 ft. below ground surface at the end of drilling. ▼ Groundwater was measured at approximately 8 ft. below ground surface on 4/13/2022. <b>GENERAL NOTES:</b> 1. Ground Surface Elevation is based on a drawing set titled "Massachusetts Department of Transportation Plan of Topographic Survey of Route 6 in Town of Westport" prepared by Greenman-Pedersen, Inc dated June 14, 2021. 2. A PID (ppmv) was used for environmental field screening of soil samples. 3. Encountered top of possible rock at 48.5 ft. Advanced roller bit from 48.5 to 49 ft. 4. A monitoring well was installed to a depth of 20 ft. below ground surface after drilling completion.															
	80 60																
	75 65																

 <b>Bright People. Right Solutions.</b>	PROJECT NO.: 20225081.001A	BORING LOG B-32-OW		BORING
	DRAWN BY: MC	Route 6 Phase 1A Sewer Construction Westport, MA		B-32-OW
	CHECKED BY: MR			
	DATE: 4/14/2022			PAGE: 2 of 2



**APPENDIX C:**

**STATE PREVAILING WAGE RATES  
(TO BE PROVIDED)**



**APPENDIX D:**

**SRF PLANS AND SPECIFICATIONS  
(TO BE PROVIDED)**



**APPENDIX E:**

**THE COMMONWEALTH OF MASSACHUSETTS  
SUPPLEMENTAL EQUAL EMPLOYMENT  
OPPORTUNITY, ANTI-DISCRIMINATION AND  
AFFIRMATIVE ACTION PROGRAM CONTRACT  
COMPLIANCE PROCEDURE (EEO-DEP-E PAGE 1-9)  
(TO BE PROVIDED)**



**APPENDIX E**  
**CONSTRUCTION BID SPECIFICATIONS**  
**SPECIAL PROVISIONS FOR DISADVANTAGED BUSINESS ENTERPRISES**  
**MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**DIVISION OF MUNICIPAL SERVICES**

**DISADVANTAGED BUSINESS ENTERPRISE PROGRAM BACKGROUND**

In May 2008 a United States Environmental Protection Agency (EPA) rule became effective that changed the Minority Business Enterprise (MBE) and Women Business Enterprise (WBE) Program to a Disadvantaged Business Enterprise (DBE) Program.

For firms to qualify under the old MBE/WBE program they needed to be socially disadvantaged and had to be certified by the Supplier Diversity Office (SDO). Under the new DBE rule, the firms must be both **socially** and **economically** disadvantaged, **citizens of the United States**, and certified as a DBE. Women and certain minorities are presumed to be socially disadvantaged. The economic disadvantage is measured by the owner's initial and continuing personal net worth of less than \$1,320,000.

Because the Clean Water Act requires the use of MBEs and WBEs, these firms will still be utilized in the State Revolving Fund (SRF) Loan Program, but they must also be certified as DBEs.

SDO will continue to be the certifying agency for the SRF program. SDO certifies firms under the federal Department of Transportation program, which is acceptable for use in the SRF program. An additional form has been added to the DBE package to verify that DBEs are owned or controlled by United States citizens.

**BID SPECIFICATIONS**

**I.** In this contract, the percentage of business activity to be performed by disadvantaged business enterprise(s) (DBE) shall not be less than the following percentages of the total contract price or the percentage submitted by the contractor in the Schedule of Participation, whichever is greater:

Disadvantaged MBE (D/MBE) 4.2%

Disadvantaged WBE (D/WBE) 4.5%



## II. DEFINITIONS

For the purpose of these provisions, the following terms are defined as follows:

- A. Awarding Authority – Entity that awards a prime contract under a State Revolving Fund loan.
- B. Bidder - Any individual, partnership, joint venture, corporation, or firm submitting a price, directly or through an authorized representative, for the purpose of performing construction or construction related activities under a Contract.
- C. Certified DBE – A DBE certified by the United States Small Business Administration, under its 8(a) Business Development Program (13 CFR part 124, subpart A) or its Small Disadvantaged Business Program (13 CFR part 124, subpart B); The United States Department of Transportation (DOT), under its regulations for Participation by DBEs in DOT programs (49 CFR parts 23 and 26); or SDO in accordance with 40 CFR part 33; provided that the certification meets the U.S. citizenship requirement under 40 CFR §33.202 or §33.203.
- D. Compliance Unit - A subdivision of MassDEP's Affirmative Action Office designated to ensure compliance under these provisions.
- E. Contractor - Any business that contracts or subcontracts for construction, demolition, renovation, survey, or maintenance work in the various classifications customarily used in work and that is acting in this capacity under the subject contract.
- F. Construction Related Services - Those services performed at the work site ancillary to, and/or in support of, the construction work, such as hauling, trucking, equipment operation, surveying or other technical services, etc. For the purposes hereof, supply and delivery of materials (e.g. pre-cast concrete elements) to the site by a supplier who has manufactured those goods, or substantially altered them before re-sales shall be considered as "construction related services"
- G. Construction Work - The activities at the work site, or labor and use of materials in the performance of constructing, reconstructing, erecting, demolishing, altering, installing, disassembling, excavating, etc, all or part of the work required by the Contract Documents.
- H. Disadvantaged Business Enterprise (DBE) - An entity owned or controlled by a socially and economically disadvantaged individual as described by Public Law 102-389 (42 U.S.C. 4370d) or an entity owned and controlled by a socially and economically disadvantaged individual as described by Title X of the Clean Air Act Amendments of 1990 (42 U.S.C. 7601 note); a Small Business Enterprise (SBE); a Small Business in a Rural Area (SBRA); or a Labor Surplus Area Firm (LAF), a Historically Underutilized Business (HUB) Zone Small Business Concern, or a concern under a successor program.



### **III. REQUIREMENTS FOR CONTRACT AWARD**

DBE packages must be submitted by the two lowest bidders on the project. Following bid opening, the LGU shall notify the two lowest bidders to submit DBE packages to the LGU or the LGUs consultant, as directed. By the close of business on the third business day after notification, the two lowest bidders, including a bidder who is a MBE, WBE or DBE, shall submit the following information:

- A. A Schedule of Participation (Form EEO-DEP-190). The Schedule of Participation shall list those certified DBEs the bidder intends to use in fulfilling the contract obligations, the nature of the work to be performed by each certified DBE subcontractor and the total price they are to be paid.
  - 1. A listing of bona-fide services such as a professional, technical, consultant or managerial services, assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for performance of the contract, and reasonable fees or commissions charged.
  - 2. A listing of haulers, truckers, or delivery services, not the contractors, including reasonable fees for delivery of said materials or supplies to be included on the project.
- B. A Letter of Intent (Form EEO-DEP-191) for each DBE the bidder intends to use on the project. The Letter of Intent shall include, among other things, a reasonable description of the work the certified DBE is proposing to perform and the prices the certified DBE proposes to charge for the work. A Letter of Intent shall be jointly signed by the certified DBE and the General Contractor who proposes to use them in the performance of the Contract.
- C. Each DBE must also sign and return the DBE Certification of United States Citizenship form to verify that the firm is owned or controlled by a United States citizen.
- D. The SDO "DBE Certification" as prepared by each certified DBE.
- E. A completed Request for Waiver form and backup documentation should the goals not be achieved (See IV below).

### **IV. REQUIREMENTS FOR MODIFICATION OR WAIVERS.**

The bidder shall make every possible effort to meet the minimum requirements of certified DBE participation. If the percentage of DBE participation submitted by the bidder on its Schedule of Participation (EEO-DEP-190) does not meet the minimum requirements, the bid may be rejected by the Awarding Authority and found not to be eligible for award of the contract.



## **V. DISADVANTAGED BUSINESS ENTERPRISES PARTICIPATION**

### **A. Reporting Requirements**

1. The Contractor's utilization of certified DBEs will be documented based upon submittal of the LGU's monthly Payment Requisitions as reported on Form-2000. The Form-2000 form will show all certified DBEs performing work on the project regardless of any billing activity for that month. For auditing and accounting purposes, the Contractor periodically may be required to submit copies of canceled checks verifying that payments have been made to the certified DBE as listed on the schedule. The Contractor may also be required to submit current schedules on utilization of all DBEs to indicate when their services will commence and be billed for.
2. During the life of the Contract, the Contractor's fulfillment of the percentage requirements in Part I shall be determined with reference to the Contract price as follows:
  - A. If the price in the Contract executed exceeds the base bid price (e.g., because an alternate was selected or because unit prices were used in awarding the Contract), the Contractor shall submit for approval by MassDEP a revised Schedule of Participation by certified DBEs satisfying the percentage requirements and such other information concerning additional DBE participation as may be requested by MassDEP.
  - B. If the Contract price increases after execution due to change orders or other adjustments, MassDEP may require the Contractor to subcontract additional work or to purchase additional goods and services from certified DBEs up to the percentages stated in Part I.

## **VI. COMPLIANCE**

- A. If the Schedule or any of the Letters of Intent are materially incomplete or not submitted in a timely manner, the LGU may rescind its vote of award; treat the bid informal as to substance and reject the bid. If the bid is incomplete in any other respect than the Schedule the LGU with the approval of MassDEP may waive the informalities upon satisfactory completion of the required information by the Contractor and the certified DBE as applicable.
- B. If the LGU finds that the percentage of certified DBE participation submitted by the contractor on its Schedule does not meet the percentage requirement in Part I, it shall rescind its vote of award and find such contractor not to be eligible for award of the contract.



- C. The Contractor shall not perform with its own organization, or subcontract to any other primary or subcontractor any work designated for the named certified DBEs on the schedule submitted by the Contractor under Part III without the approval of MassDEP.
- D. A Contractor's compliance with the percentage requirement in Part I shall continue to be determined by reference to the required percentage of the total contract price as stated in Section I even though the total of actual contract payments may be greater or less than the bid price.
- E. If the Contractor for reasons beyond its control cannot comply with Part III in accordance with the Schedule submitted under Part III, Section B, the contractor must submit to MassDEP as soon as they are aware of the deficiency, the reason for its inability to comply. Proposed revisions to the Schedule stating how the contractor intends to meet its obligations under these conditions must be submitted within ten (10) working days of notification.
- F. If the Contractor becomes aware by any means that that DBE is no longer certified, the Contractor shall immediately notify MassDEP. The Contractor shall use good faith efforts to retain a substitute certified DBE.
- G. If a certified DBE listed by the bidder in its Schedule of M/WBE contractors fails to obtain a performance or payment bond requested by the bidder, said failure shall not entitle the bidder to avoid the requirements of Part III (A). After a bidder has been awarded the contract, he shall not change the certified DBE listed in its Schedule at the time of the award or make any other such substitutions without the written approval of MassDEP.

## **VII. SANCTIONS**

- A. If the Contractor does not comply with the terms of these Special Provisions, the Awarding Authority may (1) suspend any payment for the work that should have been performed by a certified DBE pursuant to the schedule, or (2) require specific performance of the Contractor's obligation by requiring the Contractor to subcontract with a DBE for any contract or specialty item at the contract price established for that item in the proposal submitted by the Contractor.
- B. To the extent that the Contractor has not complied with the terms of these Special Provisions, the Awarding Authority may retain in connection with Estimates and Payments an amount determined by multiplying the bid price of this contract by the percentage in Section I, less the amount paid to DBE's for work performed under the contract and any payments already suspended under VII A.
- C. The Awarding Authority may suspend, terminate or cancel this contract, in whole or in part, or may call upon the Contractor's surety to perform all terms and conditions in the contract, unless the contractor is able to demonstrate his compliance with the terms



DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION  
MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF MUNICIPAL SERVICES

**SCHEDULE OF PARTICIPATION FOR SRF CONSTRUCTION**

**Project Title:** \_\_\_\_\_ **Project Location:** \_\_\_\_\_

**Disadvantaged Minority Business Enterprise Participation in the SRF Loan Work**

Name & Address of D/MBE	Nature of Participation	Dollar Value of Participation
1.		
2.		
3.		

**Total D/MBE Commitment: \$** \_\_\_\_\_

**Percentage D/MBE Participation = (Total D/MBE Commitment) / (Bid Price) =** \_\_\_\_\_

**%**

**Disadvantaged Women Business Enterprise Participation in the SRF Loan Work**

Name & Address of D/WBE	Nature of Participation	Dollar Value of Participation
1.		
2.		
3.		

**Total D/WBE Commitment: \$** \_\_\_\_\_

**Percentage D/WBE Participation = (Total D/WBE Commitment) / ( Bid Price) =** \_\_\_\_\_

**%**

The Bidder agrees to furnish implementation reports as required by MassDEP to indicate the D/MBEs and D/WBE(s) which it has used or intends to use. Breach of this commitment constitutes a breach of the contract.

**Name of Bidder:** \_\_\_\_\_

**Date:** \_\_\_\_\_ **By:** \_\_\_\_\_

**Signature**

NOTE: Participation of a DBE may be counted in only their certified category; the same dollar participation cannot be used in computing the percentage of D/MBE participation and again of D/WBE participation.

EEO-DEP-190C

EEO-DEP-E Page 10 of 16



## **LETTER OF INTENT FOR SRF CONSTRUCTION**

This form is to be completed by the D/MBE and D/WBE and must be submitted by the Bidder no later than close of business on the third business day after notification by the LGU. A separate form must be completed for each D/MBE and D/WBE involved in the project.

Project Title: \_\_\_\_\_ Project Location: \_\_\_\_\_

**TO:** \_\_\_\_\_  
(Name of Bidder)

**FROM:** \_\_\_\_\_  
(Please Indicate Status ☐ D/MBE or ☐ D/WBE)

° I/we intend to perform work in connection with the above project as (check one):

<input type="checkbox"/> An individual <input type="checkbox"/> A corporation <input type="checkbox"/> Other (explain): _____	<input type="checkbox"/> A partnership <input type="checkbox"/> A joint venture with: _____
---	--

° It is understood that if you are awarded the contract, you intend to enter into an agreement to perform the activity described below for the prices indicated.

### **DBE PARTICIPATION**

Description of Activity	Date of Project Commencement	\$ Amount	% Bid Price
		\$	%

° The undersigned certify that they will enter into a formal agreement upon execution of the contract for the above referenced project.

<b>BIDDER</b>		<b>DBE</b>	
(Authorized Original Signature)	Date	(Authorized Original Signature)	Date
ADDRESS:		ADDRESS:	
TELEPHONE #:		TELEPHONE #:	
FEIN:		FEIN:	
EMAIL ADDRESS:		EMAIL ADDRESS:	

### **ORIGINALS:**

- ° Compliance Mgr. City/Town Project Location
- ° DEP Program Manager for DEP's AAO Director

**\* Attach a copy of current (within 2 years) DBE Certification**

EEO-DEP-191C

EEO-DEP-E Page 11 of 16



### **DBE CERTIFICATION OF UNITED STATES CITIZENSHIP**

For the SRF program, under the EPA Disadvantage Business Enterprise (DBE) Rule, a DBE must be owned or controlled by a socially and economically disadvantaged person that is also a **citizen of the United States** (See 40 CFR 33.202). “Ownership” is defined at 13 CFR 124.105 and “control” is defined at 13 CFR 124.106.

DBEs are certified for the SRF program through the Supplier Diversity Office using the federal Department of Transportation (DOT) DBE rules. EPA allows the use of DBEs certified under the DOT rules as long as they are also United States citizens. To ensure compliance with the EPA rule, MassDEP must verify United States citizenship through the completion of the following form for each DBE used on the project.

SRF Project Number \_\_\_\_\_

Contract Number \_\_\_\_\_

Contract Title \_\_\_\_\_

DBE Subcontractor \_\_\_\_\_

The undersigned, on behalf of the above named DBE subcontractor, hereby certifies that the DBE firm is either owned or controlled by a person or persons that are citizens of the United States.

\_\_\_\_\_  
Printed Name and Title of DBE Signatory

\_\_\_\_\_  
DBE Signature

\_\_\_\_\_  
Date



**DISADVANTAGED BUSINESS ENTERPRISE**  
**PROGRAM DBE SUBCONTRACTOR PARTICIPATION**  
**FORM**

The United States Environmental Protection Agency (EPA) requires that this form be provided to all subcontractors on the project. At the option of the subcontractor, this form may be filled out and submitted directly to the EPA DBE Coordinator.

NAME OF SUBCONTRACTOR	PROJECT NAME
ADDRESS	CONTRACT NO.
TELEPHONE NO.	E-MAIL ADDRESS
PRIME CONTRACTOR NAME:	

Please use the space below to report any concerns regarding the above EPA-funded project (e.g., reason for termination by prime contractor, late payment, etc.).

---

---

---

---

---

CONTRACT ITEM NO.	ITEM OF WORK OR DESCRIPTION OF SERVICES RECEIVED FROM THE PRIME CONTRACTOR	AMOUNT SUBCONTRACTOR WAS PAID BY PRIME CONTRACTOR
<hr/> Subcontractor Signature <span style="float: right;"><hr/>Title/Date</span>		



### **REQUEST FOR WAIVER FOR SRF CONSTRUCTION**

Upon exhausting all known sources and making every possible effort to meet the minimum requirements for DBE participation, the Bidder may seek relief either partially or entirely from these requirements by submitting a completed waiver package by the close of business on the third business day after notification by the LGU. Failure to comply with this process shall be cause to reject the bid thereby rendering the Bidder not eligible for award of the contract.

#### **General Information**

Project Title: \_\_\_\_\_ Project Location: \_\_\_\_\_  
Bid Opening (time/date) \_\_\_\_\_  
Bidder: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
Contact Person: \_\_\_\_\_ Telephone No. \_\_\_\_\_

#### **Minimum Requirements**

The bidder must demonstrate that good faith efforts were undertaken to comply with the percentage goals as specified. The firm seeking relief must show that such efforts were taken appropriately in advance of the time set for opening bid proposals to allow adequate time for response(s) by submitting the following:

- A. A detailed record of the effort made to contact and negotiate with disadvantaged minority and/or woman owned businesses, including:
1. names, addresses, telephone numbers and contact dates of all such companies contacted;
  2. copies of written notice(s) which were sent to DBE potential subcontractors prior to bid opening;
  3. a detailed statement as to why each subcontractor contacted (i) was not willing to do the job or (ii) was not qualified to perform the work as solicited; and
  4. in the case(s) where a negotiated price could not be reached the bidder should detail what efforts were made to reach an agreement on a competitive price.
  5. copies of advertisements, dated not less than ten (10) days prior to bid opening, as appearing in general publications, trade-oriented publications, and applicable minority/women-focused media detailing the opportunities for participation;



## STATE REVOLVING FUND LOAN PROGRAM – SCHEDULE OF SUBCONTRACTOR PARTICIPATION

Contract Value

This form must be completed and returned to MassDEP within 90 days of award of the contract.

[illegible]



**APPENDIX F:**

**EXCERPTS FROM MASSACHUSETTS GENERAL LAWS  
REGULATING CONSTRUCTION CONTRACTS FOR  
PUBLIC WORKS PROJECTS**



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE III. LAWS RELATING TO STATE OFFICERS**

#### **CHAPTER 30. GENERAL PROVISIONS RELATIVE TO STATE DEPARTMENTS, COMMISSIONS, OFFICERS AND EMPLOYEES**

##### **Chapter 30: Section 39F. Construction contracts; assignment and subrogation; subcontractor defined; enforcement of claim for direct payment; deposit, reduction of disputed amounts**

Section 39F. (1) Every contract awarded pursuant to sections forty-four A to L, inclusive, of chapter one hundred and forty-nine shall contain the following subparagraphs (a) through (i) and every contract awarded pursuant to section thirty-nine M of chapter thirty shall contain the following subparagraphs (a) through (h) and in each case those subparagraphs shall be binding between the general contractor and each subcontractor.

(a) Forthwith after the general contractor receives payment on account of a periodic estimate, the general contractor shall pay to each subcontractor the amount paid for the labor performed and the materials furnished by that subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.

(b) Not later than the sixty-fifth day after each subcontractor substantially completes his work in accordance with the plans and specifications, the entire balance due under the subcontract less amounts retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, shall be due the subcontractor; and the awarding authority shall pay that amount to the general contractor. The general contractor shall forthwith pay to the subcontractor the full amount received from the awarding authority less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.

(c) Each payment made by the awarding authority to the general contractor pursuant to subparagraphs (a) and (b) of this paragraph for the labor performed and the materials furnished by a subcontractor shall be made to the general contractor for the account of that subcontractor; and the awarding authority shall take reasonable steps to compel the general contractor to make each such payment to each such subcontractor. If the awarding authority has received a demand for direct payment from a subcontractor for any amount which has already been included in a payment to the general contractor or which is to be included in a payment to the general contractor for payment to the subcontractor as provided in subparagraphs (a) and (b), the awarding authority shall act upon the demand as provided in this section.

(d) If, within seventy days after the subcontractor has substantially completed the subcontract work, the subcontractor has not received from the general contractor the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, the subcontractor may demand direct payment of that balance from the awarding authority. The demand shall be by a sworn statement delivered to or sent by certified mail to the awarding authority, and a copy shall be delivered to or sent by certified mail to the general contractor at the same time. The demand shall



contain a detailed breakdown of the balance due under the subcontract and also a statement of the status of completion of the subcontract work. Any demand made after substantial completion of the subcontract work shall be valid even if delivered or mailed prior to the seventieth day after the subcontractor has substantially completed the subcontract work. Within ten days after the subcontractor has delivered or so mailed the demand to the awarding authority and delivered or so mailed a copy to the general contractor, the general contractor may reply to the demand. The reply shall be by a sworn statement delivered to or sent by certified mail to the awarding authority and a copy shall be delivered to or sent by certified mail to the subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor and of the amount due for each claim made by the general contractor against the subcontractor.

(e) Within fifteen days after receipt of the demand by the awarding authority, but in no event prior to the seventieth day after substantial completion of the subcontract work, the awarding authority shall make direct payment to the subcontractor of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount (i) retained by the awarding authority as the estimated cost of completing the incomplete or unsatisfactory items of work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the general contractor in the sworn reply; provided, that the awarding authority shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by subparagraph (d). The awarding authority shall make further direct payments to the subcontractor forthwith after the removal of the basis for deductions from direct payments made as provided in parts (i) and (ii) of this subparagraph.

(f) The awarding authority shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of subparagraph (e) in an interest-bearing joint account in the names of the general contractor and the subcontractor in a bank in Massachusetts selected by the awarding authority or agreed upon by the general contractor and the subcontractor and shall notify the general contractor and the subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the general contractor and the subcontractor or as determined by decree of a court of competent jurisdiction.

(g) All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to subparagraph (f) shall be made out of amounts payable to the general contractor at the time of receipt of a demand for direct payment from a subcontractor and out of amounts which later become payable to the general contractor and in the order of receipt of such demands from subcontractors. All direct payments shall discharge the obligation of the awarding authority to the general contractor to the extent of such payment.

(h) The awarding authority shall deduct from payments to a general contractor amounts which, together with the deposits in interest-bearing accounts pursuant to subparagraph (f), are sufficient to satisfy all unpaid balances of demands for direct payment received from subcontractors. All such amounts shall be earmarked for such direct payments, and the subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the general contractor.



(i) If the subcontractor does not receive payment as provided in subparagraph (a) or if the general contractor does not submit a periodic estimate for the value of the labor or materials performed or furnished by the subcontractor and the subcontractor does not receive payment for same when due less the deductions provided for in subparagraph (a), the subcontractor may demand direct payment by following the procedure in subparagraph (d) and the general contractor may file a sworn reply as provided in that same subparagraph. A demand made after the first day of the month following that for which the subcontractor performed or furnished the labor and materials for which the subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the general contractor. Thereafter the awarding authority shall proceed as provided in subparagraph (e), (f), (g) and (h).

(2) Any assignment by a subcontractor of the rights under this section to a surety company furnishing a bond under the provisions of section twenty-nine of chapter one hundred forty-nine shall be invalid. The assignment and subrogation rights of the surety to amounts included in a demand for direct payment which are in the possession of the awarding authority or which are on deposit pursuant to subparagraph (f) of paragraph (1) shall be subordinate to the rights of all subcontractors who are entitled to be paid under this section and who have not been paid in full.

(3) "Subcontractor" as used in this section (i) for contracts awarded as provided in sections forty-four A to forty-four H, inclusive, of chapter one hundred forty-nine shall mean a person who files a sub-bid and receives a subcontract as a result of that filed sub-bid or who is approved by the awarding authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the general contractor, (ii) for contracts awarded as provided in paragraph (a) of section thirty-nine M of chapter thirty shall mean a person approved by the awarding authority in writing as a person performing labor or both performing labor and furnishing materials pursuant to a contract with the general contractor, and (iii) for contracts with the commonwealth not awarded as provided in forty-four A to forty-four H, inclusive, of chapter one hundred forty-nine shall also mean a person contracting with the general contractor to supply materials used or employed in a public works project for a price in excess of five thousand dollars.

(4) A general contractor or a subcontractor shall enforce a claim to any portion of the amount of a demand for direct payment deposited as provided in subparagraph (f) of paragraph 1 by a petition in equity in the superior court against the other and the bank shall not be a necessary party. A subcontractor shall enforce a claim for direct payment or a right to require a deposit as provided in subparagraph (f) of paragraph 1 by a petition in equity in the superior court against the awarding authority and the general contractor shall not be a necessary party. Upon motion of any party the court shall advance for speedy trial any petition filed as provided in this paragraph. Sections fifty-nine and fifty-nine B of chapter two hundred thirty-one shall apply to such petitions. The court shall enter an interlocutory decree upon which execution shall issue for any part of a claim found due pursuant to sections fifty-nine and fifty-nine B and, upon motion of any party, shall advance for speedy trial the petition to collect the remainder of the claim. Any party aggrieved by such interlocutory decree shall have the right to appeal therefrom as from a final decree. The court shall not consolidate for trial the petition of any subcontractor with the petition of one or more subcontractors or the same general contract unless the court finds that a substantial portion of the evidence of the same events during the course of construction (other than the fact that the claims sought to be consolidated arise under the same general contract) is applicable to the petitions sought to be consolidated and that such consolidation will prevent unnecessary duplication of evidence. A decree in any such proceeding shall not include interest on the disputed amount deposited in excess of the interest earned for the period of any such deposit. No



person except a subcontractor filing a demand for direct payment for which no funds due the general contractor are available for direct payment shall have a right to file a petition in court of equity against the awarding authority claiming a demand for direct payment is premature and such subcontractor must file the petition before the awarding authority has made a direct payment to the subcontractor and has made a deposit of the disputed portion as provided in part (iii) of subparagraph (e) and in subparagraph (f) of paragraph (1).

(5) In any petition to collect any claim for which a subcontractor has filed a demand for direct payment the court shall, upon motion of the general contractor, reduce by the amount of any deposit of a disputed amount by the awarding authority as provided in part (iii) of subparagraph (e) and in subparagraph (f) of paragraph (1) any amount held under a trustee writ or pursuant to a restraining order or injunction.



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE III. LAWS RELATING TO STATE OFFICERS**

#### **CHAPTER 30. GENERAL PROVISIONS RELATIVE TO STATE DEPARTMENTS, COMMISSIONS, OFFICERS AND EMPLOYEES**

##### **Chapter 30: Section 39I. Deviations from plans and specifications**

Section 39I. Every contractor having a contract for the construction, alteration, maintenance, repair or demolition of, or addition to, any public building or public works for the commonwealth, or of any political subdivision thereof, shall perform all the work required by such contract in conformity with the plans and specifications contained therein. No wilful and substantial deviation from said plans and specifications shall be made unless authorized in writing by the awarding authority or by the engineer or architect in charge of the work who is duly authorized by the awarding authority to approve such deviations. In order to avoid delays in the prosecution of the work required by such contract such deviation from the plans or specifications may be authorized by a written order of the awarding authority or such engineer or architect so authorized to approve such deviation. Within thirty days thereafter, such written order shall be confirmed by a certificate of the awarding authority stating: (1) If such deviation involves any substitution or elimination of materials, fixtures or equipment, the reasons why such materials, fixtures or equipment were included in the first instance and the reasons for substitution or elimination, and, if the deviation is of any other nature, the reasons for such deviation, giving justification therefor; (2) that the specified deviation does not materially injure the project as a whole; (3) that either the work substituted for the work specified is of the same cost and quality, or that an equitable adjustment has been agreed upon between the contracting agency and the contractor and the amount in dollars of said adjustment; and (4) that the deviation is in the best interest of the contracting authority.

Such certificate shall be signed under the penalties of perjury and shall be a permanent part of the file record of the work contracted for.

Whoever violates any provision of this section wilfully and with intent to defraud shall be punished by a fine of not more than five thousand dollars or by imprisonment for not more than six months, or both.



**PART I. ADMINISTRATION OF THE GOVERNMENT**

**TITLE III. LAWS RELATING TO STATE OFFICERS**

**CHAPTER 30. GENERAL PROVISIONS RELATIVE TO STATE DEPARTMENTS,  
COMMISSIONS, OFFICERS AND EMPLOYEES**

**Chapter 30: Section 39J. Public construction contracts; effect of decisions of contracting  
body or administrative board**

Section 39J. Notwithstanding any contrary provision of any contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public works by the commonwealth, or by any county, city, town, district, board, commission or other public body, when the amount of the contract is more than five thousand dollars in the case of the commonwealth and more than two thousand dollars in the case of any county, city, town, district, board, commission or other public body, a decision, by the contracting body or by any administrative board, official or agency, or by any architect or engineer, on a dispute, whether of fact or of law, arising under said contract shall not be final or conclusive if such decision is made in bad faith, fraudulently, capriciously, or arbitrarily is unsupported by substantial evidence, or is based upon error of law.



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE III. LAWS RELATING TO STATE OFFICERS**

#### **CHAPTER 30. GENERAL PROVISIONS RELATIVE TO STATE DEPARTMENTS, COMMISSIONS, OFFICERS AND EMPLOYEES**

##### **Chapter 30: Section 39L. Public construction work by foreign corporations; restrictions and reports**

Section 39L. The commonwealth and every county, city, town, district, board, commission or other public body which, as the awarding authority, requests proposals, bids or sub-bids for any work in the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or other public works (1) shall not enter into a contract for the work with, and shall not approve as a subcontractor furnishing labor and materials for a part of the work, a foreign corporation which has not filed with the awarding authority a certificate of the state secretary stating that the corporation has complied with requirements of section 15.03 of subdivision A of Part 15 of chapter 156D and the date of compliance, and further has filed all annual reports required by section 16.22 of subdivision B of Part 16 of said chapter 156D, and (2) shall report to the state secretary and to the department of corporations and taxation any foreign corporation performing work under such contract or subcontract, and any person, other than a corporation, performing work under such contract or subcontract, and residing or having a principal place of business outside the commonwealth.



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE III. LAWS RELATING TO STATE OFFICERS**

#### **CHAPTER 30. GENERAL PROVISIONS RELATIVE TO STATE DEPARTMENTS, COMMISSIONS, OFFICERS AND EMPLOYEES**

##### **Chapter 30: Section 39M (b). Contracts for construction and materials; manner of awarding**

(b) Specifications for such contracts, and specifications for contracts awarded pursuant to the provisions of said sections forty-four A to forty-four L of said chapter one hundred and forty-nine, shall be written to provide for full competition for each item of material to be furnished under the contract; except, however, that said specifications may be otherwise written for sound reasons in the public interest stated in writing in the public records of the awarding authority or promptly given in writing by the awarding authority to anyone making a written request therefor, in either instance such writing to be prepared after reasonable investigation. Every such contract shall provide that an item equal to that named or described in the said specifications may be furnished; and an item shall be considered equal to the item so named or described if, in the opinion of the awarding authority: (1) it is at least equal in quality, durability, appearance, strength and design, (2) it will perform at least equally the function imposed by the general design for the public work being contracted for or the material being purchased, and (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the said specifications. For each item of material the specifications shall provide for either a minimum of three named brands of material or a description of material which can be met by a minimum of three manufacturers or producers, and for the equal of any one of said name or described materials.



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE III. LAWS RELATING TO STATE OFFICERS**

#### **CHAPTER 30. GENERAL PROVISIONS RELATIVE TO STATE DEPARTMENTS, COMMISSIONS, OFFICERS AND EMPLOYEES**

##### **Chapter 30: Section 39N. Construction contracts; equitable adjustment in contract price for differing subsurface or latent physical conditions**

Section 39N. Every contract subject to section forty-four A of chapter one hundred and forty-nine or subject to section thirty-nine M of chapter thirty shall contain the following paragraph in its entirety and an awarding authority may adopt reasonable rules or regulations in conformity with that paragraph concerning the filing, investigation and settlement of such claims:

If, during the progress of the work, the contractor or the awarding authority discovers that the actual subsurface or latent physical conditions encountered at the site differ substantially or materially from those shown on the plans or indicated in the contract documents either the contractor or the contracting authority may request an equitable adjustment in the contract price of the contract applying to work affected by the differing site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from a contractor, or upon its own initiative, the contracting authority shall make an investigation of such physical conditions, and, if they differ substantially or materially from those shown on the plans or indicated in the contract documents or from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the plans and contract documents and are of such a nature as to cause an increase or decrease in the cost of performance of the work or a change in the construction methods required for the performance of the work which results in an increase or decrease in the cost of the work, the contracting authority shall make an equitable adjustment in the contract price and the contract shall be modified in writing accordingly.



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE III. LAWS RELATING TO STATE OFFICERS**

#### **CHAPTER 30. GENERAL PROVISIONS RELATIVE TO STATE DEPARTMENTS, COMMISSIONS, OFFICERS AND EMPLOYEES**

##### **Chapter 30: Section 39O. Contracts for construction and materials; suspension, delay or interruption due to order of awarding authority; adjustment in contract price; written claim**

Section 39O. Every contract subject to the provisions of section thirty-nine M of this chapter or subject to section forty-four A of chapter one hundred forty-nine shall contain the following provisions (a) and (b) in their entirety and, in the event a suspension, delay, interruption or failure to act of the awarding authority increases the cost of performance to any subcontractor, that subcontractor shall have the same rights against the general contractor for payment for an increase in the cost of his performance as provisions (a) and (b) give the general contractor against the awarding authority, but nothing in provisions (a) and (b) shall in any way change, modify or alter any other rights which the general contractor or the subcontractor may have against each other.

(a) The awarding authority may order the general contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as it may determine to be appropriate for the convenience of the awarding authority; provided however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the awarding authority to act within the time specified in this contract, the awarding authority shall make an adjustment in the contract price for any increase in the cost of performance of this contract but shall not include any profit to the general contractor on such increase; and provided further, that the awarding authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions.

(b) The general contractor must submit the amount of a claim under provision (a) to the awarding authority in writing as soon as practicable after the end of the suspension, delay, interruption or failure to act and, in any event, not later than the date of final payment under this contract and, except for costs due to a suspension order, the awarding authority shall not approve any costs in the claim incurred more than twenty days before the general contractor notified the awarding authority in writing of the act or failure to act involved in the claim.



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE III. LAWS RELATING TO STATE OFFICERS**

#### **CHAPTER 30. GENERAL PROVISIONS RELATIVE TO STATE DEPARTMENTS, COMMISSIONS, OFFICERS AND EMPLOYEES**

##### **Chapter 30: Section 39P. Contracts for construction and materials; awarding authority's decisions on interpretation of specifications, etc.; time limit; notice**

Section 39P. Every contract subject to section thirty-nine M of this chapter or section forty-four A of chapter one hundred forty-nine which requires the awarding authority, any official, its architect or engineer to make a decision on interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work, shall require that the decision be made promptly and, in any event, no later than thirty days after the written submission for decision; but if such decision requires extended investigation and study, the awarding authority, the official, architect or engineer shall, within thirty days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty day period and the date by which the decision will be made.



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE III. LAWS RELATING TO STATE OFFICERS**

#### **CHAPTER 30. GENERAL PROVISIONS RELATIVE TO STATE DEPARTMENTS, COMMISSIONS, OFFICERS AND EMPLOYEES**

##### **Chapter 30: Section 39R. Definitions; contract provisions; management and financial statements; enforcement**

Section 39R. (a) The words defined herein shall have the meaning stated below whenever they appear in this section:

(1) “Contractor” means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to sections thirty-eight A 1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A to forty-four H, inclusive, of chapter one hundred and forty-nine, which is for an amount or estimated amount greater than one hundred thousand dollars.

(2) “Contract” means any contract awarded or executed pursuant to sections thirty-eight A 1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A through forty-four H, inclusive, of chapter one hundred and forty-nine, which is for amount or estimated amount greater than one hundred thousand dollars.

(3) “Records” means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.

(4) “Independent Certified Public Accountant” means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his residence or principal office and who is in fact independent. In determining whether an accountant is independent with respect to a particular person, appropriate consideration should be given to all relationships between the accountant and that person or any affiliate thereof. Determination of an accountant’s independence shall not be confined to the relationships existing in connection with the filing of reports with the awarding authority.

(5) “Audit”, when used in regard to financial statements, means an examination of records by an independent certified public accountant in accordance with generally accepted accounting principles and auditing standards for the purpose of expressing a *certified* opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons.

(6) “Accountant’s Report”, when used in regard to financial statements, means a document in which an independent certified public accountant indicates the scope of the audit which he has made and sets forth his opinion regarding the financial statements taken as a whole with a listing of noted exceptions and qualifications, or an assertion to the effect that an overall opinion cannot be expressed. When an overall opinion cannot be expressed the reason therefor shall be stated. An



accountant's report shall include as a part thereof a signed statement by the responsible corporate officer attesting that management has fully disclosed all material facts to the independent certified public accountant, and that the audited financial statement is a true and complete statement of the financial condition of the contractor.

(7) "Management", when used herein, means the chief executive officers, partners, principals or other person or persons primarily responsible for the financial and operational policies and practices of the contractor.

(8) Accounting terms, unless otherwise defined herein, shall have a meaning in accordance with generally accepted accounting principles and auditing standards.

(b) Subsection (a)(2) hereof notwithstanding, every agreement or contract awarded or executed pursuant to sections thirty-eight A 1/2 to thirty-eight O, inclusive, of chapter seven, or eleven C of chapter twenty-five A, and pursuant to section thirty-nine M of chapter thirty or to section forty-four A through H, inclusive, of chapter one hundred and forty-nine, shall provide that:

(1) The contractor shall make, and keep for at least six years after final payment, books, records, and accounts which in reasonable detail accurately and fairly reflect the transactions and dispositions of the contractor, and

(2) until the expiration of six years after final payment, the office of inspector general, and the commissioner of capital asset management and maintenance shall have the right to examine any books, documents, papers or records of the contractor or of his subcontractors that directly pertain to, and involve transactions relating to, the contractor or his subcontractors, and

(3) if the agreement is a contract as defined herein, the contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the awarding authority, including in his description the date of the change and reasons therefor, and shall accompany said description with a letter from the contractor's independent certified public accountant approving or otherwise commenting on the changes, and

(4) if the agreement is a contract as defined herein, the contractor has filed a statement of management on internal accounting controls as set forth in paragraph (c) below prior to the execution of the contract, and

(5) if the agreement is a contract as defined herein, the contractor has filed prior to the execution of the contracts and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in paragraph (d) below.

(c) Every contractor awarded a contract shall file with the awarding authority a statement of management as to whether the system of internal accounting controls of the contractor and its subsidiaries reasonably assures that:

(1) transactions are executed in accordance with management's general and specific authorization;

(2) transactions are recorded as necessary



i. to permit preparation of financial statements in conformity with generally accepted accounting principles, and

ii. to maintain accountability for assets;

(3) access to assets is permitted only in accordance with management's general or specific authorization; and

(4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

Every contractor awarded a contract shall also file with the awarding authority a statement prepared and signed by an independent certified public accountant, stating that he has examined the statement of management on internal accounting controls, and expressing an opinion as to

(1) whether the representations of management in response to this paragraph and paragraph (b) above are consistent with the result of management's evaluation of the system of internal accounting controls; and

(2) whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statements.

(d) Every contractor awarded a contract by the commonwealth or by any political subdivision thereof shall annually file with the commissioner of capital asset management and maintenance during the term of the contract a financial statement prepared by an independent certified public accountant on the basis of an audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant's report. Such statements shall be made available to the awarding authority upon request.

(e) The office of inspector general, the commissioner of capital asset management and maintenance and any other awarding authority shall enforce the provisions of this section. The commissioner of capital asset management and maintenance may after providing an opportunity for the inspector general and other interested parties to comment, promulgate pursuant to the provisions of chapter thirty A such rules, regulations and guidelines as are necessary to effectuate the purposes of this section. Such rules, regulations and guidelines may be applicable to all awarding authorities. A contractor's failure to satisfy any of the requirements of this section may be grounds for debarment pursuant to section forty-four C of chapter one hundred and forty-nine.

(f) Records and statements required to be made, kept or filed under the provisions of this section shall not be public records as defined in section seven of chapter four and shall not be open to public inspection; provided, however, that such records and statements shall be made available pursuant to the provisions of clause (2) of paragraph (b).



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE XXI. LABOR AND INDUSTRIES**

#### **CHAPTER 149. LABOR AND INDUSTRIES**

##### **PUBLIC EMPLOYMENT**

##### **Chapter 149: Section 34. Public contracts; stipulation as to hours and days of work; void contracts**

Section 34. Every contract, except for the purchase of material or supplies, involving the employment of laborers, workmen, mechanics, foremen or inspectors, to which the commonwealth or any county or any town, subject to section thirty, is a party, shall contain a stipulation that no laborer, workman, mechanic, foreman or inspector working within the commonwealth, in the employ of the contractor, sub-contractor or other person doing or contracting to do the whole or a part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in cases of emergency, or, in case any town subject to section thirty-one is a party to such a contract, more than eight hours in any one day, except as aforesaid; provided, that in contracts entered into by the department of highways for the construction or reconstruction of highways there may be inserted in said stipulation a provision that said department, or any contractor or sub-contractor for said department, may employ laborers, workmen, mechanics, foremen and inspectors for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the commissioner of labor and industries, public necessity so requires. Every such contract not containing the aforesaid stipulation shall be null and void.



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE XXI. LABOR AND INDUSTRIES**

#### **CHAPTER 149. LABOR AND INDUSTRIES**

##### **FAIR COMPETITION FOR BIDDERS ON CONSTRUCTION, ETC., OF PUBLIC WORKS**

##### **Chapter 149: Section 44J. Invitations to bid; notice; contents; violations; penalty**

Section 44J. (1) No public agency or authority of the commonwealth or any political subdivision thereof shall award any contract for which competitive bids are required pursuant to section forty-four A of this chapter or section thirty-nine M of chapter thirty, or for which competitive proposals are required pursuant to subsection (4) of section forty-four E of this chapter or section eleven C of chapter twenty-five A, unless a notice inviting bids or proposals therefor shall have been posted no less than one week prior to the time specified in such notice for the receipt of said bids or proposals in a conspicuous place in or near the offices of the awarding authority, and shall have remained posted until the time so specified, and unless such notice shall also have been published at least once not less than two weeks prior to the time so specified in the central register published by the secretary of state pursuant to section twenty A of chapter nine and in a newspaper of general circulation in the locality of the proposed project. Said notice shall also be published at such other times and in such other newspapers or trade periodicals as the commissioner of capital asset management and maintenance may require, having regard to the locality of the work involved.

(2) Said notice shall specify the time and place where plans and specifications of the proposed work may be had; the time and place of submission of general bids; and the time and place for opening of the general bids. For contracts subject to the provisions of sections forty-four A to H, inclusive, of this chapter, said notice shall also specify the time and place for submission of filed sub-bids, where required pursuant to section forty-four F; and the time and place for opening of said filed sub-bids.

Said notice shall also provide sufficient facts concerning the nature and scope of such project, the type and elements of construction, and such other information as will assist applicants in deciding to bid on such contract.

(3) No contract or preliminary plans and specifications shall be split or divided for the purpose of evading the provisions of this section.

(4) General bids and filed sub-bids for any contract subject to this section shall be in writing and shall be opened in public at the time and place specified in the posted or published notice, and after being so opened shall be open to public inspection.

(5) The provisions of this section shall not apply to any transaction between the commonwealth and any public service corporation.

(6) The provisions of this section may be waived in cases of extreme emergency involving the health and safety of the people and their property, upon the written approval of said commissioner. The written approval shall contain a description of the circumstances and the reasons for the commissioner's determination.



(7) Whoever violates any provision of this section shall be punished by a fine of not more than ten thousand dollars or by imprisonment in the state prison for not more than three years or in a jail or house of correction for not more than two and one-half years, or by both said fine and imprisonment; and in the event of final conviction, said person shall be incapable of holding any office of honor, trust or profit under the commonwealth or under any county, district of municipal agency.

Each and every person who shall cause or conspire to cause any contract or preliminary plans and specifications to be split or divided for the purpose of evading the provisions of this section shall forfeit and pay to the commonwealth, a political subdivision thereof or other awarding authority subject to this section, the sum of not more than five thousand dollars and, in addition, such person or persons shall pay, apportioned among them, double the amount of damages which the commonwealth or political subdivision thereof or other awarding authority may have sustained by reason of the doing of such act, together with the costs of the action.

(8) If an awarding authority rejects all general bids or does not receive any general bids, and advertises for a second opening of general bids with the original filed sub-bids as set forth in subsection (1) of section forty-four E the notice for receipt of such general bids may be published in the central register and elsewhere as required not less than one week prior to the time specified for such second opening of general bids.



## **PART I. ADMINISTRATION OF THE GOVERNMENT**

### **TITLE XIV. PUBLIC WAYS AND WORKS**

#### **CHAPTER 82. THE LAYING OUT, ALTERATION, RELOCATION AND DISCONTINUANCE OF PUBLIC WAYS, AND SPECIFIC REPAIRS THEREON**

##### **FILING OF PETITIONS**

##### **Chapter 82: Section 40. Definitions**

Section 40. The following words, as used in this section and sections 40A to 40E, inclusive, shall have the following meanings:—

“Company”, natural gas pipeline company, petroleum or petroleum products pipeline company, public utility company, cable television company, and municipal utility company or department that supply gas, electricity, telephone, communication or cable television services or private water companies within the city or town where such excavation is to be made.

“Description of excavation location”, such description shall include the name of the city or town, street, way, or route number where appropriate, the name of the streets at the nearest intersection to the excavation, the number of the buildings closest to the excavation or any other description, including landmarks, utility pole numbers or other information which will accurately define the location of the excavation.

“Emergency”, a condition in which the safety of the public is in imminent danger, such as a threat to life or health or where immediate correction is required to maintain or restore essential public utility service.

“Excavation”, an operation for the purpose of movement or removal of earth, rock or the materials in the ground including, but not limited to, digging, blasting, augering, backfilling, test boring, drilling, pile driving, grading, plowing in, hammering, pulling in, jacking in, trenching, tunneling and demolition of structures, excluding excavation by tools manipulated only by human power for gardening purposes and use of blasting for quarrying purposes.

“Excavator”, any entity including, but not limited to, a person, partnership, joint venture, trust, corporation, association, public utility, company or state or local government body which performs excavation operations.

“Premark”, to delineate the general scope of the excavation or boring on the paved surface of the ground using white paint, or stakes or other suitable white markings on nonpaved surfaces. No premarking shall be acceptable if such marks can reasonably interfere with traffic or pedestrian control or are misleading to the general public. Premarking shall not be required of any continuous excavation that is over 500 feet in length.

“Safety zone”, a zone designated on the surface by the use of standard color-coded markings which contains the width of the facilities plus not more than 18 inches on each side.

“Standard color-coded markings”, red - electric power lines, cables, conduit or light cables; yellow - gas, oil, street petroleum, or other gaseous materials; orange - communications cables or



conduit, alarm or signal lines; blue - water, irrigation and slurry lines; green - sewer and drain lines; white - premark of proposed excavation.

“System”, the underground plant damage prevention system as defined in section 76D of chapter 164.



## **APPENDIX G:**

### **SRF ATTACHMENTS**

- a. Schedule of Participation for SRF Construction (EEO-DEP-190C) (included)
- b. Letter of Intent for SRF Construction (EEO-DEP-191C) (to be provided)
- c. DBE Certification of United States Citizenship (to be provided)
- d. DBE Participation Form (to be provided)
- e. Request for Waiver for SRF Construction (EEO-DEP-490C) (to be provided)
- f. MA Diesel Retrofit Program – Statement of Intent to Comply (to be provided)
- g. Diesel Retrofit Program Contractor Certification (to be provided)
- h. DWS Policy 88-02 – Policy for Review of Sewer Line/Water Supply Protection  
(to be provided)
- i. AIS Compliance Sample Certification Letter (to be provided)
- j. USEPA Sign Guidance (to be provided)
- k. DMS Policy Memorandum (to be provided)



DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION  
MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF MUNICIPAL SERVICES

**SCHEDULE OF PARTICIPATION FOR SRF CONSTRUCTION**

**Project Title:** \_\_\_\_\_ **Project Location:** \_\_\_\_\_

**Disadvantaged Minority Business Enterprise Participation in the SRF Loan Work**

Name & Address of D/MBE	Nature of Participation	Dollar Value of Participation
1.		
2.		
3.		

**Total D/MBE Commitment: \$**

**Percentage D/MBE Participation = (Total D/MBE Commitment) / (Bid Price) =**

**%**

**Disadvantaged Women Business Enterprise Participation in the SRF Loan Work**

Name & Address of D/WBE	Nature of Participation	Dollar Value of Participation
1.		
2.		
3.		

**Total D/WBE Commitment: \$**

**Percentage D/WBE Participation = (Total D/WBE Commitment) / ( Bid Price) =**

**%**

The Bidder agrees to furnish implementation reports as required by MassDEP to indicate the D/MBEs and D/WBE(s) which it has used or intends to use. Breach of this commitment constitutes a breach of the contract.

**Name of Bidder:** \_\_\_\_\_

**Date:** \_\_\_\_\_ **By:** \_\_\_\_\_

Signature

NOTE: Participation of a DBE may be counted in only their certified category; the same dollar participation cannot be used in computing the percentage of D/MBE participation and again of D/WBE participation.



## **APPENDIX H:**

### **PERMITS**

- a. MassDOT (included)
- b. Conservation Commission Order of Conditions (to be provided)
- c. Request for Determination of Insignificance (to be provided)
- d. WS 32 Distribution Modifications Permit (to be provided)





Maura Healey, Governor  
Kimberley Driscoll, Lieutenant Governor  
Gina Flandaca, Secretary & CEO  
Jonathan L. Gulliver, Highway Administrator



5-2022-0596

## **PERMIT - WESTPORT**

Subject to all terms, conditions, and restrictions printed or written below, permission is hereby granted to the **TOWN OF WESTPORT**, Jim Hartnett, 816 Main Road, Westport, MA 02790 to enter upon State Highway in the Town of **WESTPORT** on Auto Route 6, locally known as State Road, for the purpose of performing sewer main improvements within the State Highway Layout (SHLO). The proposed project will take place between #287 State Road and the existing wastewater pumping station located at the Whites of Westport at #66 State Road. The work will involve installing approximately 4,800 linear feet of sewer service, which includes 2,000 linear feet of 18" (inch) gravity main, 2,400 linear of 8" (inch) gravity main, and 4" (inch) and 12" (inch) force mains. Work within the SHLO will occur between approximate Stations 0+00 and 53+50.

### **GRAVITY SEWER MAINS**

A lateral 8" (inch) gravity sewer main will enter the SHLO on the southerly side of State Road (Route 6) from a proposed pump station to be located in the vicinity of #287 State Road, at approximate Station 0+69, will continue northerly within an open cut trench across State Road (Route 6) to a proposed 4' (foot) sewer manhole to be located in the westbound travel lane at approximate Station 0+69. A longitudinal 8" (inch) gravity sewer main installation will begin from a proposed capped 8" (inch) PVC pipe stub to be located in the western travel lane, at approximate Station 0+50, will then proceed westerly within an open cut trench through several proposed sewer manholes along Route 6 westbound, as shown on the approved plans, to end at a proposed sewer manhole, at approximate Station 23+21.

A longitudinal 15" (inch) PVC sewer pipe will begin at a proposed 5' (foot) discharge manhole at the intersection of State Road (Route 6) and Sanford Road, at approximate Station 25+47, will proceed westerly within an open cut trench through several proposed sewer manholes along Route 6 westbound, as shown on the approved plans, to end at a proposed sewer manhole to be installed in the vicinity of #126 State Road, at approximate Station 34+75.

A longitudinal 18" (inch) gravity sewer will begin at the newly installed sewer manhole, at approximate Station 34+75, will proceed westerly within an open cut trench through several proposed sewer manholes along Route 6 westbound, to a proposed manhole at approximate Station 50+94, will then proceed southerly within an open cut trench across State Road (Route 6) and will continue out of the SHLO.

### **LATERAL SEWER MAINS**

#### **SANFORD ROAD**

A proposed 12" (inch) lateral sewer main will extend southerly from the proposed 5' (foot) discharge manhole at the intersection with Sanford Road, at approximate Station 25+47, to a proposed capped 8" (inch) PVC stub to be located just outside of the SHLO, and a proposed 8" (inch) lateral sewer main will extend northerly from that same proposed 5' (foot) discharge manhole at the intersection with Sanford, to a proposed capped 8" (inch) PVC stub to be located just outside of the SHLO.

District 5, 1000 County Street Taunton, MA 02780  
Tel: (857) 368-5000, FAX: (508) 880-6102  
[www.mass.gov/orgs/highway-division](http://www.mass.gov/orgs/highway-division)



**BORDEN STREET**

A proposed 8" (inch) PVC sewer main will begin at a proposed 4' (foot) sewer manhole on the northerly side of Route 6, at approximate Station 34+75, will extend southerly across Route 6 within an open cut trench to tie to a proposed capped 8" (inch) PVC stub at the intersection with Borden Street.

**HEBERT TERRACE**

A proposed 12" (inch) PVC gravity sewer will begin at a proposed 4' (foot) sewer manhole on the northerly side of Route 6, at approximate Station 36+22, will extend northerly within an open cut trench to tie to a proposed capped 12" (inch) PVC gravity sewer pipe stub at the intersection with Hebert Terrace.

Additionally, a proposed 4' (foot) barrel block drain manhole will be installed in the middle of the roadway, at approximate Station 100+68. The surface water from that structure will flow through a proposed 24" (inch) reinforced concrete pipe (RCP) to another proposed 4' (foot) drain manhole, at approximate Station 100+49, and will proceed southerly along Hebert Terrace and out of the SHLO.

**OLD BEDFORD ROAD**

A proposed 8" (inch) PVC gravity sewer pipe will begin at a proposed 4' (foot) sewer manhole on the northerly side of Route 6, at the intersection with Old Bedford Road, at approximate Station 44+45, will extend northerly to end at a proposed 8" (inch) PVC gravity sewer pipe stub out of the SHLO.

**SEWER SERVICE CONNECTIONS**

Approximately 4,800' (feet) of sewer service connections will be tied to the newly installed sewer main and will extend northerly or southerly and out of the SHLO, from #287 State Road to the wastewater pumping station located at the Whites of Westport #66 State Road, as shown on the approved plans.

**SEWER FORCE MAINS**

A 12" (inch) force main will begin from a proposed capped 12" (inch) PVC force main stub on the southerly side of Route 6, at approximate Station 0+50, will continue diagonally to approximate Station 1+00. A 4" (inch) force main installation will enter the SHLO on the southerly side of State Road (Route 6) from a proposed Pump Station, at approximate Station 0+68, will continue diagonally, will proceed within an open cut trench across Route 6. The dual 12" (inch) and 4" (inch) force mains will then proceed westerly within an open cut trench along Route 6 to end at a proposed 5' (foot) discharge manhole to be located at the intersection of Route 6 and Sanford Road, at approximate Station 25+47.

**SEWER MANHOLES**

Sewer manholes will be installed along the paved travel lane as shown on the approved plans.

**WATER SERVICE CONNECTIONS**

In connection with this work, the Grantee will install water service connections to nine (9) parcels within the limits of this work, as shown on the approved plans.



**THE PROPOSED WORK FALLS WITHIN THE AREA OF A SIGNALIZED INTERSECTION, the Grantee(s) must therefore contact the District Traffic Maintenance Engineer at (857) 368-5261 at least two (2) weeks prior to the commencement of said work to locate the existing traffic signal conduit/detectors and to coordinate this work so as not to disturb the traffic signals.** The Grantee(s) shall provide the District Traffic Maintenance Engineer with the Permit number, the approximate Stations where the work will take place, and the limits of the work. The Grantee(s) will be responsible for marking the limits of the work in the field so that MassDOT, Highway Division, can mark the locations of all existing traffic signal conduit/detectors within those limits. **The Grantee(s) will be responsible to repair/replace all damaged items immediately and will be billed for any cost incurred to restore normal operation to MassDOT, Highway Division, signal equipment to the satisfaction of the Engineer.**

MASSDOT, HIGHWAY DIVISION, DISTRICT 5 RESERVES THE RIGHT TO REQUIRE THE TOWN OF WESTPORT TO PERFORM NECESSARY REPAIRS TO THE EXISTING MASSDOT-OWNED DRAINAGE SYSTEM PIPES AND STRUCTURES IN THE EVENT THAT THERE IS DAMAGE DUE TO THE PROPOSED WORK.

**This Permit is being granted with the following conditions:**

- 1. Test pits must be performed around any existing utilities and drainage structures to determine the elevation of conflicting utilities/structures.**
- 2. The Grantee(s) must adjust drainage and all other utility structures as part of the final milling and paving of the impacted travel lane(s).**

The Grantee(s) will be responsible for future corrective actions resulting from defective work under the subject permit. Any damage to roadway and/or shoulder as a result of the permitted work is the Grantee's responsibility and shall be repaired at his/her expense.

**A three (3) year Performance Bond for the amount of \$6,160,000.00 is required before construction starts, the life of the Performance Bond shall continue for three (3) years beyond the date MassDOT-Highway Division signs off on the Permit.**

THIS PERMIT IS BEING ISSUED FOR WORK WITHIN THE SHLO ONLY. AUTHORIZATION TO PERFORM ASSOCIATED WORK OUTSIDE OF SHLO MUST BE GRANTED BY IMPACTED PROPERTY OWNERS.

**This work must be done in coordination with MassDOT, Highway Division's Westport – Corridor Improvements on Route 6, Project #610799. Please contact MassDOT, Highway Division's Construction Section at (857) 368-5099 for the Resident Engineer's contact information to coordinate this work.**

All work, including the traffic management plan, is to be done as described herein and as shown on the approved plans entitled "Town of Westport, MA – Route 6 Phase 1A Gravity Sewer, Pump Station and Force Main" as drafted by Kleinfelder, One Beacon Street, Suite 8100, Boston, MA 02108, tel.: (617) 497-7800, and dated May 2023.



IT IS NOTED THAT THE LONGITUDINAL MAIN IS WITHIN THE TRAVEL LANE AND IMPACTS THE TRAVEL PATH OF MOTORISTS. THE PAVEMENT REPAIR FOR WORK ON ROUTE 6 WILL REQUIRE MILLING AND OVERLAYING WITH 2" (INCHES) OF SURFACE COURSE THE ENTIRE WIDTH OF TRAVEL LANE(S) IMPACTED BY THIS WORK. THE PERMANENT REPAIR OF THE TRENCH, INCLUDING THE MILLING AND OVERLAYING, MUST BE DONE AFTER COMPLETION OF THE 90-DAY SETTLEMENT PERIOD AS DESCRIBED IN THIS PERMIT. FOR THE LATERAL MAINS AND/ OR SEWER SERVICES, THE PAVEMENT REPAIR WILL REQUIRE MILLING AND OVERLAYING WITH 2" (INCHES) OF SURFACE COURSE A MINIMUM OF 1' (FOOT) ON EITHER SIDE OF THE TRENCH. HOWEVER, IF THE LATERALS ARE IN CLOSE PROXIMITY, THE PAVEMENT REPAIR WILL REQUIRE A SINGLE REPAIR THAT WILL ENCOMPASS SAID LATERAL TRENCHES.

FINAL PAVEMENT REPAIR JOINTS MUST BE SQUARE AND PERPENDICULAR TO THE DIRECTION OF TRAVEL.

The permanent trench repair shall be done as indicated below. Please note that the final trench repair must include a minimum of 7" (inches) of Hot Mix Asphalt or match the existing thickness of the Hot Mix Asphalt for the roadway, whichever is larger.

1. 8" (inches) of gravel plus 4" (inches) Dense Graded Crushed Stone (DGCS) over it.
2. 3" (inch) Intermediate or Base Course
3. 2" (inch) Intermediate Course
4. 2" (inch) Surface Course
5. Asphalt emulsion tack coat (RS-1H) must be placed between each course.
6. All vertical edges must be coated with hot poured joint sealer.
7. **All damaged pavement markings shall be restriped in kind.**

All pavement compositions must meet MassDOT's latest Standards and Specifications for Highways and Bridges.

**All openings in paved surfaces must be backfilled and paved with a temporary patch consisting of 3" (inches) of hot mix asphalt at the end of every workday. Exposed gravel will not be permitted within the State Highway Layout.**

PLEASE BE ADVISED THAT MASSDOT, DISTRICT 5 RESERVES THE RIGHT TO REQUEST ADDITIONAL REPAIR IF THE REQUIRED REPAIR AREA IS FOUND TO BE LARGER THAN ANTICIPATED.

### States of Emergencies and Executive Orders

**In addition to the conditions and restrictions herein contained, the Grantee is responsible for complying with any relevant Executive Orders or States of Emergencies that may be issued by the Governor's Office while this permit is active. The Governor may declare a State of Emergency in the event or imminent threat of natural or man-made disasters. A State of Emergency can cover a specific municipality, multiple communities, or the entire Commonwealth.**

Detailed Information on States of Emergencies and Executive Orders can be found on the Mass.GOV website.

<https://www.mass.gov/service-details/state-of-emergency-information> and

<https://www.mass.gov/massachusetts-executive-orders>.



Prior to any work being done within the SHLO, the Grantee(s) must upload/submit a Work Request in State Highway Access Permit System (SHAPS) to obtain approval for the proposed work schedule. Said form to be completed/uploaded can be found under the Forms and Sample Submission Documents tab and is entitled "Work Request Form D1 - D5". One (1) of these forms must be uploaded by the close of business every Thursday for the entire duration of the project in order to request approval for the following week's work schedule.

The Grantee(s) must adhere to 520 CMR 14.00: Excavation and Trench Safety as promulgated by the Department of Public Safety in conjunction with the Division of Occupational Safety pursuant to authority granted by M.G.L. c. 82a § 1. If not already approved, a Trench Permit Rider must be completed and uploaded to SHAPS before any trench work is performed under this Permit.

**PRIOR TO THE COMMENCEMENT OF SAID WORK, THE GRANTEE(S) SHALL CONTACT THE DISTRICT PERMITS ENGINEER AT (857) 368-5230 TO SET UP AT PRECONSTRUCTION CONFERENCE. THE CONFERENCE MUST BE HELD AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO PERFORMING WORK WITHIN THE SHLO.**

The Grantee(s) must submit a soft copy of the "as-built" plans of the project in the AutoCAD Program currently in use by the District. A copy of the "as-built" plans must also be submitted/uploaded in SHAPS prior to submitting the Completion of Work Form/Requesting Permit Sign-off.

Request for changes to the terms and conditions described within this Permit must be submitted in writing and approved by MassDOT, Highway Division, by way of an amendment to this Permit or via correspondence to the Grantee(s) prior to the commencement of any proposed changes.

The Grantee(s) may retain the services of a qualified engineering firm to provide for the continuous inspection of the work to be performed under this Permit by a full-time Resident Engineer or a qualified on-site Supervisor. The Grantee(s) shall notify MassDOT, Highway Division in writing as to what consulting firm/Supervisor will be used. Included in this notification, a list of 24-hour emergency contact names and numbers of all pertinent parties responsible for the project, The Resident Engineer/on-site Supervisor must coordinate any design changes and/or problems with the District Highway Director who will assign the proper personnel to expedite these issues.

When the work required under this Permit has been completed, the Grantee(s)/Supervisor shall conduct their own inspection prior to contacting MassDOT, Highway Division to schedule a Final Inspection. Once this pre-inspection is performed, the Grantee(s) will contact the Permits Section at (857) 368-5230 in order for a Final Inspection to be performed by MassDOT, Highway Division.

The Grantee(s) shall be responsible for all litter and debris generated from their property during the work as described herein and/or from all prospective residents, visitors, or patrons of all existing or proposed facilities mentioned herein. This responsibility shall remain in effect for the entirety of all current or future owners of said property. The Grantee(s) shall perform routine inspections and upkeep within the State Highway Layout. If conditions warrant an individual to enter in or within the proximity of a travelled way, the Grantee(s) shall assume all liability and responsibility for the removal of all litter and debris or the hiring of an appropriate party to perform such duties. Significant work within the travelled way may require a police detail. In consideration to all abutters, the Grantee(s) must take notice to the drifting of debris and the removal thereof. If it is found that this requirement is not being fulfilled in a satisfactory manner, MassDOT, Highway Division may decide to clean the area at the Grantee's expense.



## PAVEMENT MILLING AND OVERLAY

This work will be performed as indicated on the approved plans. **All pavement must meet the latest MassDOT Superpave specifications. Pavement Mix design specifications to be discussed/approved by MassDOT prior to being utilized.**

**No milling shall take place sooner than seventy-two (72) hours prior to the scheduled final paving operations. The Grantee/Resident shall ensure that the Permits Office is notified of this scheduled work at least five (5) days prior to the commencement of all milling.**

All raised structures located within the roadway must be ramped with hot mix asphalt immediately after milling operations.

The Grantee/Resident/Contractor shall make every effort to protect the structural integrity of all edging and structures and prevent all cold planning material from entering the State Highway's drainage structures and inspect all structures and grates for damage and clogging.

All proposed work must transition to match the existing roadway conditions.

All proposed pavement markings must match existing conditions.

If existing pavement markings are so disturbed during construction or altered according to the Traffic Management Plan, the Grantee(s) shall restore said markings in conformance to MassDOT, Highway Division Standards and as per the final Traffic Markings Plan.

Before scheduling this work, the Grantee must provide the following information to the Permits Section:

- I) Schedule of paving work with proposed work hours for review by the District.
- II) The Town, Fire, and Police Department must be notified about this work
- III) Information of the Qualified Contractor that will perform paving and the Plant that will be providing the mix.
- IV) Specifications of the Superpave Mix and quantification (Tons) that will be used for the project.
- V) Traffic Management Plan to be used during the milling/paving work.
- VI) Advance notification should be provided to residents and businesses that may be affected by the work.

## CONTROLLED DENSITY FILL (CDF) WAIVER

At the written request of the Grantee(s) and approval from MassDOT, Highway Division, CDF is NOT required on this project for trenches greater than 48" (inches) in depth. The Grantee(s) shall perform the work for conventional backfill methods as follows:

1. All methods used to determine and verify the proper compaction of backfill shall be in accordance with AASHTO Standard Specifications of Density of Soil and Soil-Aggregate In-Place by Nuclear Methods (Shallow Depth) (Designation T238-86 Method B - Direct Transmission shall be used to determine in-place density) and Moisture Content of Soil and Soil-Aggregate In-Place by Nuclear Methods (Shallow Depth) (Designation T239-91). Backfill material shall be in accordance with MassDOT, Highway Division Standard Specifications, Section 150.64, Subsection C.



All methods and work shall be performed by a technician on location certified in "soils" by the New England Transportation Technician Certification Program (NETTCP). All data and results shall be submitted to the appropriate District Highway Director for its review and acceptance.

Soil compaction needs to be performed every 6" (inches). Nuclear Gauge Density Testing shall be performed every 1' (foot) of depth and at least twice a week. Proctor/Sieve Analysis testing shall be performed once a week per source of material.

**2. A Performance Bond in the (approximate) amount of \$6,160,000.00 is required by the Grantee(s) to warranty the work described in this waiver. The Performance Bond must be submitted before any work commences on State Property.**

The life of the Performance Bond shall continue for three (3) additional years from the date MassDOT, Highway Division signs off on the permit.

The Performance Bond shall be in a form satisfactory to MassDOT, Highway Division, furnished by a surety company incorporated pursuant to M.G.L. chapter 175, section 105 or authorized to do business in the Commonwealth under M.G.L. Chapter 175, section 106 and satisfactory to the awarding authority. The name of the agency or agent writing these bonds shall be identified within the bond.

3. The Completion of Work Form shall be electronically uploaded, via the State Highway Access Permit System (SHAPS), as soon as possible after the completion of the physical work to begin the sign-off process. MassDOT, Highway Division will hold the Permit on file for a period of not less than three (3) years.

4. The Grantee(s) shall assume full responsibility for the structural integrity of any trench described in this Permit. This responsibility shall remain in place for a period of three (3) years after the completion of work which time starts with MassDOT, Highway Division, receiving the Completion of Work Form.

The Grantee(s) shall immediately respond to trench maintenance requests by the District Highway Director. The Grantee(s) must respond within two (2) working days for non-emergency situations. Non-response within the specified time will result in the required maintenance work being done by MassDOT, Highway Division, with all expenses charged to the Grantee(s).

5. Supplying, positioning, adjusting, and re-positioning of all required signs and traffic warning devices shall be the responsibility of the Grantee(s). All signs and devices shall be in accordance with the current Manual on Uniform Traffic Control Devices. The number and location of all signs and devices shall be as deemed necessary by the District Highway Director for the safe and efficient performance of the work and safety of the travelling public. Care must be exercised so as not to disturb any existing State Highway Drainage or Traffic Duct/wiring Systems or any underground structures that exist. If said system is disturbed, it shall be restored immediately to its original condition. All expenses for restoring conditions shall be the responsibility of the Grantee(s).

6. Uniformed Police Officers or Certified Flaggers shall be provided and compensated by the Grantee(s) and shall be in attendance at all times until completion of the physical work.

**"WORK WITHIN THE HARDENED SURFACE WITH CDF WAIVER APPROVED"**

The pavement shall be saw-cut in neat, true lines along the length of the trench. The trench shall then be excavated, the utility installed, and backfilled. The backfill material shall consist of gravel or other suitable material conforming to MassDOT Specifications throughout, to a compacted depth of three inches below the existing surface.



The material shall be selected from excavation free from large lumps, clods, or rock placed between the pipe and the walls of the trench in layers not exceeding 6" (inches) in depth and thoroughly compacted. Each layer, if dry, shall be moistened and then compacted by rolling or by tamping with mechanical rammers. Special care shall be taken to thoroughly compact the fill under the haunches of the pipe or conduit. This method of filling and compacting shall be continued until the material is level with the top of the pipe or conduit. The remainder of the filling shall consist of suitable material placed in successive layers not more than 6" (inches) in depth. The top layer shall be thoroughly compacted to within 3" (inches) of the existing surface.

The trench will then be patched temporarily with a minimum of 3" (inches) of Surface Course placed in one layer to the finished grade of the roadway surface. Be advised that a temporary patch with a minimum of 4" (inches) of Surface Course is required on high traffic volume roadways.

In the cases where the trench needs to include the repair of the entire travel lane/paved shoulder/curb-to-curb, the Grantee may patch the temporary trench with a minimum of 7" (inches) of Hot Mix Asphalt pavement or match existing thickness of this for the roadway, whichever is larger. Pavement composition must meet MassDOT's latest standards. Then after the 90-day settlement period (SOP HMD-75-03-1-000), the Grantee will have to mill 2" (inches) of the existing pavement and overlay the travel lane/paved shoulder/curb-to-curb with two 2" (inches) of Surface Course. If required, steel plates may be utilized for the safety of overnight motorists. However, steel plates create a slippery surface and should only be used when necessary. The plates may need to be recessed to the finished grade of the roadway as directed by the Engineer. **No plates may be left over the weekend.** Therefore, the Grantee(s) shall schedule the work accordingly.

Temporary patches shall remain in place for ninety (90) days before being replaced with permanent patch or until in the Engineer's judgment that final compaction and settlement of the trench area has taken place.

The Grantee(s) must then excavate the temporary patching and material to a depth of 7" (inches) below the existing surface and replace with the permanent patch which shall consist of 3" (inches) of Intermediate or Base Course, 2" (inches) of Intermediate Course, and 2" (inches) of Surface Course.

All abutting edges of the existing pavement shall be coated with Bitumen for Tack Coat RS-1 Emulsion immediately prior to the placement of the permanent patch.

## SIDEWALK RECONSTRUCTION

The sidewalk shall match the existing conditions and shall be reconstructed with 4" (inches) dense graded crushed stone with a 3" (inch) hot mix asphalt top course laid in two (2) lifts of 1.75" (inches) and 1.25" (inches), respectively, or 4" (inches) of cement concrete. If the cement concrete sidewalk crosses a driveway, the driveway apron shall be constructed with 6" (inches) cement concrete.

The reconstructed sidewalk must be compacted and graded in such a manner that no ponding of water occurs within the Highway Layout. If such ponding results, the Grantee(s) shall be responsible for its correction.

Sidewalks and concrete wheelchair ramps shall be in conformance with the Architectural Access Board (AAB) Regulations within all sidewalk areas located at drives or roadway intersections that may be included in this project.

The Grantee(s) shall be responsible for the maintenance and repair of the portion of the proposed sidewalk located within the SHLO and shall routinely inspect the sidewalk for deficiencies such as settling, heaving, cracks, etc. This responsibility shall remain in effect until MassDOT, Highway Division or the Town reconstructs the sidewalk.



**Upon completion of the work, the Grantee or Agent must upload into SHAPS, a letter from the local building inspector or governing authority, indicating the installed ramps and sidewalks are in conformance with AAB and ADA regulations.**

**THE BACKFILLING METHOD FOR WORK WITHIN THE SHOULDER AREA WILL BE AS FOLLOWS:**

Backfill for conduit or pipe shall be selected from excavation free from large lumps, clods or rock placed between the pipe and the walls of the trench in layers not exceeding 6" (inches) in depth and thoroughly compacted. Each layer, if dry, shall be moistened and then compacted by rolling or by tamping with mechanical rammers. Special care should be taken to thoroughly compact the fill under the haunches of the pipe or conduit. This method of filling and compacting shall be continued until the material is level with the top of the pipe or conduit. The remainder of the filling shall consist of suitable material placed in successive layers not more than 6-inch in depth. Each layer shall be thoroughly compacted as specified above.

If the work is to be performed within the soft shoulder, the excavation might be performed within the immediate area along the edge of road and may diminish the integrity of the hardened surface. Therefore, if the excavation directly abuts or tapers under the hardened surface of the roadway, the opening must be backfilled with Controlled Density Fill (CDF) to prevent undermining and preserve the roadway.

The Grantee(s) shall be responsible for the shoulder and roadway areas affected by the proposed work to be performed as described herein and shall routinely inspect said areas for deficiencies such as settling, heaving, cracks, etc. This responsibility shall remain until work is performed at the subject location by MassDOT, Highway Division.

**UTILITY WORK IN DRIVE**

Whereas the proposed work is to be performed within the apron of an existing drive, the Grantee(s) shall restore the drive with an 8" (inch) gravel base that has been machine compacted then paved with 4" (inches) of hot mix asphalt laid in two (2) courses consisting of a 2-1/2" (inch) intermediate course and a 1-1/2" (inch) surface course. Any hot mix asphalt berm or granite edging that exists in the driveway area must be sawcut and removed. The new pavement must butt into and not overlap the edge of the hardened surface of the roadway.

All abutting edges of the existing pavement shall be coated with hot poured joint sealer immediately prior to the placement of the permanent bituminous concrete.

The Grantee(s) shall be responsible for this portion of the drive and shall routinely inspect it for deficiencies such as settling, heaving, cracks etc. Such deficiencies shall be corrected at the cost of the Grantee(s) and to the satisfaction of the Engineer.

**TIME RESTRICTIONS AND NOTIFICATIONS**

No work shall be performed in the hardened surface of the roadway between November 15th and April 1st of any year without prior written approval from the District Highway Director.

No pavement shall be laid between November 15th and April 1st of any year without prior written approval from the District Highway Director.

No work shall be performed on this project on Saturdays, Sundays, and Holidays, or on the Friday after a Thursday Holiday. Work is also restricted on the day before and the day after a long Holiday weekend without prior written approval by the District Highway Director.



No equipment, trucks, etc., shall occupy any part of the travelled way except between the hours of **9:00 a.m. and 3:00 p.m., Monday - Friday**. In no case will operations exceed the specified hours. This includes the placement of traffic control devices, equipment, or anything that restricts the flow of traffic through the construction zone. Any change in work hours will require prior written approval by the District Highway Director. The 12-minute rule will remain in effect for the duration of the permit.

All other work, off the pavement, on this project is restricted to a normal 8-hour day, Monday - Friday, with the prime Contractor and all subcontractors working on the same shift. Any change in work hours will require prior written approval by the District Highway Director.

### **GENERAL TRAFFIC MANAGEMENT AND SAFETY REQUIREMENTS**

If required by MassDOT, Highway Division District 5, variable message boards (VMBs) shall be utilized as part of the approved traffic management plan under this Permit which must be properly secured with regards to hacking and unauthorized tampering prevention. The Grantee(s) shall adhere to all appropriate security specifications and take all necessary precautions to mitigate the risk of the boards being hacked. All VMBs shall be stored in a secured area and shall have a lockable, weatherproof enclosure for the operator interface, removable local keyboards which shall be removed whenever possible, and a password protected controller with local administrative passwords changed on a regular basis.

If any portion of the roadway will be blocked with equipment to facilitate the proposed work, the Grantee(s) will be required to submit a Traffic Management Plan (TMP) to MassDOT, Highway Division, to be reviewed and approved by the District Traffic Maintenance Engineer prior to working within or impacting the roadway. The plan must include information relating to proper signing, traffic control device placement and police details.

It is imperative to maintain two-way traffic at all times and these operations are managed so that motorists travel "delay" is minimized. At any time during the operation when a traffic delay of over 12 minutes occurs and the situation is worsening, the Resident Engineer, Contractor, or Police Detail will begin to suspend operations. Continuously increasing "delays" of over 12 minutes are not to be permitted.

If traffic must be "stopped", the duration shall not be more than five (5) minutes.

Uniformed State/Local Police Officer(s) and their official vehicle(s) may be necessary to provide protection for those installing and removing all temporary traffic warning signs and devices and to perform all traffic management as required.

The Grantee(s) will monitor the flow of traffic during peak traffic volumes and if necessary, shall suspend all operations. Work will resume at the discretion of the Police detail officer and/or to the satisfaction of the supervising MassDOT, Highway Division, and Engineer.

In the event of inclement weather or dense fog, which lessens the visibility of advance warning signs, vehicles and workers, the Grantee(s) will suspend all operations so as not to interfere with the safety of the motoring public and the operations of work. In the event of snow or icing conditions, all vehicles and equipment must be removed from the roadway and/or shoulder area so as not to interfere with Snow and Ice Operations.

The Grantee(s) shall provide safe and ready means of access and egress to all public and private roads and drives 24 hours per day. Every effort must be made as not to interfere with or inconvenience all abutters throughout the duration of this project.

Signs and traffic control devices are required for advance notice of the work and within the work area.



The Grantee(s) or Applicant will supply all required signs and traffic warning devices and shall be in accordance with the Massachusetts Manual on Uniform Traffic Control Devices. The number and location of all signs and devices shall be as deemed necessary by the Engineer for the safe and efficient performance of the work and the safety of the travelling public.

All warning devices shall be subject to removal, replacement, and/or repositioning by the applicant as often as deemed necessary by the Engineer.

Cones or non-reflectorized warning devices shall not be left in operating position on the highway when the daytime operations have ceased. If it becomes necessary for MassDOT, Highway Division, to remove the construction warning devices or their appurtenances from the project due to negligence by the applicant, all costs for this work will be charged to the Grantee(s).

All vehicles, except passenger's cars, which are assigned to the permitted project, and which operate on the site at speeds of 25 MPH or less, shall have an official SLOW-MOVING VEHICLE emblem displayed. All vehicles and equipment on this project must be equipped with back-up alarms.

All personnel who are working on the travelled way or breakdown lanes shall wear approved safety vests and hard hats.

### **GENERAL CONDITIONS AND APPROVED PROCEDURES**

The Grantee(s) must contact the "Dig Safe" Center at 811 to obtain a "Dig Safe" number prior to starting the proposed excavation for the purpose of identifying the location of underground utilities.

Unless otherwise stated, no hardened surface of the State Highway may be disturbed.

When an opening in the roadway is required and permitted herein, the opening must be as small as possible to perform the proposed work.

If the integrity of any existing sidewalks, catch basins, manholes, or any other underground structures or equipment is compromised, the Grantee(s) will reconstruct and/or replace all items according to MassDOT, Highway Division, Standards at the cost of the Grantee(s) and to the satisfaction of the Engineer.

The Grantee(s) must not disturb or remove any MassDOT, Highway Division, bound(s) (MHB) associated with this project. If so disturbed or missing, the bound(s) must be reset/replaced by a Registered Land Surveyor. All procedures and materials must be in compliance with Massachusetts Design and Construction Standards. A copy of the paid bill must be submitted to this office upon completion of said work.

All traffic safety lines if disturbed shall be replaced in kind.

All disturbed areas within the State Highway Layout must be graded, loamed, and seeded to the Engineer's satisfaction.

All debris and litter remaining from the proposed construction shall be removed by the Grantee(s) and the area left clean daily.



### **DRAINAGE IMPACTS**

Note that existing drainage lines are not located/marked out by Dig-Safe, therefore, care should be taken during excavation operations to ensure that drainage components located within the limit(s) of work are not impacted during work to be performed under this Permit. The Grantee may request drainage plans in anticipation of the work with the Highway Maintenance Section at (857) 368-5240. Be advised that if additional information is needed, the Grantee will require to perform survey work of the drainage structures to identify the location of the drainage components.

If the work under this Permit includes the installation or relocation of drainage structures or work alters the existing State drainage system, the Grantee shall be responsible to clean the drainage system, including any other structure/drainage line/outfall within the project limits to ensure the drainage system works adequately.

The Grantee(s) shall be responsible for any damage that occurs to said drainage components as a result of the work.

### **DRAINAGE AND UTILITY CASTINGS**

"The use of risers to adjust drainage and utility structures will not be allowed. All adjustment work done to existing or new drainage structures shall conform to Section 220 of MassDOT, Highway Division, Standard Specifications and according to Plates 201.3.0 and 202.9.0 of MassDOT, Highway Division, Construction Standards."

### **ENVIRONMENTAL LIABILITY AND COMPLIANCE**

The Grantee(s) assumes all risk associated with any environmental condition within the subject property and shall be solely responsible for all costs associated with evaluating, assessing, and remediating, in accordance with all applicable laws, any environmental contamination (1) discovered during Grantee's work or activities under this Permit to the extent such evaluation, assessment or remediation is required for Grantee's work, or (2) resulting from the Grantee's work or activities under this Permit. The Grantee(s) shall notify MassDOT, Highway Division, of any such assessment and remediation activities.

The Grantee(s) is hereby held solely responsible for obtaining and maintaining any and all environmental compliance permits required by local, state, and federal laws and regulations when regular or emergency work is proposed within, or in close proximity to, any wetland area. These environmental compliance requirements include, but are not limited to, a Negative Determination of Applicability or Order of Conditions from the local Conservation Commission, a Water Quality Certificate from the Department of Environmental Protection, and a Programmatic General Permit from the U.S. Army Corps of Engineers. The Grantee(s) shall forward to MassDOT, Highway Division, a copy of each such environmental compliance permit.



**CLOSING CONDITIONS**

**ALL OF SAID WORK SHALL COMPLY WITH THE TERMS AND CONDITIONS HEREIN, AND MUST BE DONE AS DIRECTED BY AND TO THE SATISFACTION OF THE ENGINEER.**

All work done under this contract shall be in conformance with the Massachusetts Highway Department "Standard Specifications for Highways and Bridges" 2023 Edition and any subsequent "Supplemental Specifications". All construction shall conform to the June 2017 edition of the Massachusetts Department of Transportation, Highway Division "Construction Standard Details (English Edition)"; the latest Manual on Uniform Traffic Control Devices with Massachusetts Amendments; the latest edition to the following: the 1996 Construction and Traffic Standard Details (as related to Traffic Standard details only); the 1990 Standard Drawings for Traffic Signs and Supports; the 1968 Standard Drawings for Traffic Signals and Highway Lighting; the latest edition of American Standard for Nursery Stock; the Plans and these Special Provisions. These publications can be accessed from the SHAPS dashboard or from the following link: <https://www.mass.gov/lists/miscellaneous-publications>.

The Grantee(s) shall indemnify and save harmless the Commonwealth and MassDOT, Highway Division, against all suits, claims or liability of every name and nature arising at the time out of or in consequence of the acts of the Grantee(s) in the performance of the work covered by this Permit and/or failure to comply with the terms and conditions of this Permit whether by themselves or their employees or subcontractors.

It is noted that the Grantee(s) will be responsible for future corrective actions resulting from defective work under the subject permit. Any damage to roadway and/or shoulder as a result of the permitted work is the Grantee's responsibility and shall be repaired at his/her expense.

**THE GRANTEE(S) SHALL SUBMIT A COMPLETION OF WORK FORM, BY REQUESTING A SIGN-OFF USING THE ACTION LINK IN THE SHAPS DASHBOARD, WHEN THE WORK REQUIRED UNDER THIS PERMIT HAS BEEN COMPLETED IN ORDER FOR A FINAL INSPECTION TO BE PERFORMED BY MASSDOT, HIGHWAY DIVISION. THE LIABILITY ASSUMED UNDER THIS PERMIT WILL CONTINUE UNTIL THE WORK HAS BEEN SIGNED OFF AS COMPLETE.**

**A COPY OF THIS PERMIT MUST BE ON THE JOB SITE AT ALL TIMES FOR INSPECTION. FAILURE TO HAVE THIS PERMIT AVAILABLE AT THE SITE WILL RESULT IN SUSPENSION OF THE RIGHTS GRANTED BY THE PERMIT.**

**"FOLLOWING CONDITIONS APPLY TO PERMITS"**

**Conditions Relating Particularly to Permits for the Laying of Pipes, Conduits, etc.**

After any pipes, conduits, drains or other underground structures are laid, or any excavation is made in the roadway, the trenches or openings shall be properly backfilled with suitable material, the backfilling shall be thoroughly tamped, and the surface of the road over said structures shall be left even with the adjoining ground. If the work is done in cold weather no frozen material shall be used for backfilling.

Wherever the hardened surface of the roadway, gutters, or any part of the surface of the highway is disturbed it shall be replaced in as good condition as before it was disturbed, and if new materials are required, they shall correspond with those already in place on the road.



Where service pipes are to cross the highway, the connections shall be made without disturbing the hardened surface of the roadway, by driving the pipes under the roadway, or the service pipes shall be carried under and across the road in a larger pipe, unless otherwise ordered by the Director.

The Grantee shall maintain the surface of the roadway over said structures as long as MassDOT may deem necessary, until all signs of the trenches shall have been eliminated.

### **Conditions Relating Particularly to Permits for the Erection of Poles, Wires, and Overhead Structures, and the Cutting and Trimming of Trees**

In the erection of pole lines, unless otherwise herein provided, no trees located within the limits of the State Highway shall be cut or trimmed. No guy wires shall be attached to trees without a special Permit from MassDOT, and in no event shall they be so attached as to girdle the trees or in any way interfere with their growth. The wires shall be so protected at all time and places that they shall not interfere with or injure the trees either inside or outside the location of the highway.

Where the cutting or trimming of trees is authorized by this Permit, only such cutting, and trimming shall be done as may be designated by the Director.

In the construction or reconstruction of pole lines no guy wires shall be erected nearer to the surface of the ground than 6' (feet); provided, however, that the owners of such lines may maintain such guy wires at a lower elevation than 6' (feet) from the ground until such time as MassDOT shall notify them to remove said wires or to the elevation first stated.

In order to protect the trees through which any wires may pass, said wires shall be insulated and such other tree guards used as may be directed by the Director.

Where high tension wires are erected under this Permit, they shall be so located that, under conditions of maximum severity as regards a coating of ice or snow, there shall be a space of at least 8' (feet) between such high-tension wires and other wires.

The Grantee shall, within sixty (60) days from the date of completion of the work, file in the office of MassDOT a plan showing the location of each pole erected in accordance with the Permit, said plan to be of such size and in such form as MassDOT may direct.

### **General and Additional Conditions**

Whenever the word "MassDOT" is used herein it shall mean the Massachusetts Department of Transportation of the Commonwealth of Massachusetts.

Whenever the word "Director" is used herein it shall mean the District Highway Director or other authorized representative of MassDOT.

Whenever the word "Grantee" is used herein it shall mean the person or persons, corporation, or municipality to whom this Permit is granted, or their legal representatives.

During the progress of the work all structures underground and above ground shall be properly protected from damage or injury; such barriers shall be erected and maintained as may be necessary for the protection of the traveling public; the same shall be properly lighted at night; and the Grantee shall be responsible for the damages to persons or property due to or resulting from any work done under this Permit.



Except as herein authorized, no excavation shall be made, or obstacle placed within the limits of the State highways in such a manner as to interfere unnecessarily with the travel over said road.

If any grading of sidewalk work done under this Permit interferes with the drainage of the State highway in any way, such catch basins and outlets shall be constructed as may be necessary, in the opinion of the Director, to take proper care of such drainage.

Wherever the hardened surface of the roadway is disturbed and the Director may consider it necessary or advisable to do so, said surface will be restored by the employees of MassDOT, at such time as MassDOT may direct, and the expense thereof shall be borne by the Grantee, who shall purchase and deliver on the road the materials necessary for said work if and when directed by the Director. All payments to the supplier and to laborers, inspectors, etc., employed by MassDOT for or on account of the work herein contemplated shall be made by said Grantee forthwith on receipt of written orders, pay rolls, or vouchers approved by MassDOT.

IF THE GRANTEE DOES ANY WORK CONTRARY TO THE ORDERS OF THE DIRECTOR, AND, AFTER DUE NOTICE, FAILS TO CORRECT SUCH WORK OR TO REMOVE STRUCTURES OR MATERIALS ORDERED TO BE REMOVED, OR FAILS TO COMPLETE WITHIN THE SPECIFIED TIME THE WORK AUTHORIZED BY THIS PERMIT, MASSDOT MAY, WITH OR WITHOUT NOTICE, CORRECT OR COMPLETE SUCH WORK IN WHOLE OR IN PART, OR REMOVE SUCH STRUCTURES OR MATERIALS, AND THE GRANTEE SHALL REIMBURSE MASSDOT FOR ANY EXPENSE INCURRED IN CORRECTING AND/OR COMPLETING THE WORK OR REMOVING THE STRUCTURES OR MATERIALS.

ALL OF THE WORK HEREIN CONTEMPLATED SHALL BE DONE UNDER THE SUPERVISION AND TO THE SATISFACTION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, AND THE ENTIRE EXPENSE THEREOF SHALL BE BORNE BY THE GRANTEE.

On the completion of the work herein contemplated all rubbish and debris shall be removed and the roadway and roadsides shall be left neat and presentable and satisfactory to the Director.

MassDOT hereby reserves the right to order the change of location or the removal of any structure or structures authorized by this Permit at any time, said change or removal to be made by and at the expense of the Grantee or its / their successors or assigns.

This Permit may be modified or revoked at any time by MassDOT without rendering said MassDOT or the Commonwealth of Massachusetts liable in any way.

The Grantee shall pay the salary, subsistence, and travel expenses of any inspector appointed by MassDOT to supervise the work herein contemplated.

All of the above conditions shall be applicable to the work herein authorized, unless the same are inconsistent with the conditions on the face of the Permit, in which case the conditions written or printed on the face of the Permit shall apply.

The acceptance of this Permit or the doing of any work thereunder shall constitute an agreement by the Grantee to comply with all of the conditions and restrictions printed or written herein.





Maura Healey, Governor  
Kimberley Driscoll, Lieutenant Governor  
Gina Fiandaca, Secretary & CEO  
Jonathan L. Gulliver, Highway Administrator



5-2022-0596

## Approved Signature

A handwritten signature in black ink, appearing to read "Mary-Joe Perry", written over a horizontal line.

Mary-Joe Perry by B.T.  
District Highway Director

Date of Issue: June 23, 2023

Permit Expiration: Wednesday, June 26, 2024



**APPENDIX I:**

**REQUIREMENTS FOR CONSTRUCTION NEAR GAS  
TRANSMISSION MAINS**



Guideline Name: <b><i>Requirements for Construction Near Company Pipelines</i></b>	Guideline Number: TG-010	
	Date: 10/03/2019	Page: 1 of 9

## 1.0 PURPOSE

This guideline presents the requirements for construction activities in the vicinity of Company pipeline(s) or pipeline right-of-way and the movement of vehicles or mobile equipment within or across the right-of-way by parties other than the Company's. These requirements are general in nature whereby specific circumstances may necessitate special considerations.

The following areas are addressed.

- 1.0 Purpose
- 2.0 Pre-Construction Approvals and Notifications
- 3.0 Site Visits To Locate Facilities
- 4.0 Items to be Provided for Review Process
- 5.0 General Requirements
- 6.0 Excavation
- 7.0 Blasting
- 8.0 Facility Crossings

If any of the conditions stated in this document can not be satisfied, the Company representative shall be advised immediately.

## 2.0 RE-CONSTRUCTION APPROVALS AND NOTIFICATIONS

### 2.1 Activities Requiring Company Approval

Prior to commencing work, the encroaching party shall obtain the Company's permission for any proposed excavation, construction or temporary crossing upon, along, over, under or across the Company's pipeline(s) or pipeline right-of-way as described below.

- Crossings with anything larger than a standard passenger vehicle or mobile equipment outside the traveled portion of a highway or public road.
- Construction of a facility such as:
  - New permanent buried facilities – water, gas, oil, sewer, electrical, fiber optic, drains, etc.
  - New permanent aboveground facilities – power, telecommunication, cable tv, etc.
  - New road or railroad installations or improvements to existing road or railroad.
  - New developments, grade changes, structures, parking areas, ditches, ponds or water improvements, etc.
  - Minor excavation activities – fences, trees, facility maintenance, etc.
- Excavation using explosives or power-operated (mechanical) equipment within the Company's pipeline right-of-way.



Guideline Name: <b><i>Requirements for Construction Near Company Pipelines</i></b>	Guideline Number: TG-010	
	Date: 10/03/2019	Page: 2 of 9

- Blasting activities (including seismic survey activities) in the vicinity of the Company's pipeline right-of-way (see Section 7.0)

If the encroaching party is considering an activity which is not listed above, they should contact the Company representative to determine if their activity requires permission and subsequent approval.

## 2.2 Request for Encroachment

The encroaching party shall contact the Company to discuss details of the proposed construction or crossing activity and the information required for the Company's review.

Copies of any proposed plans, plats, and/or drawings may be required for certain construction or encroachment activities within or directly affecting the Company's pipeline right-of-way and shall be submitted to the Company for review and approval at least 30 days prior to the commencement of work.

Additional time for technical analysis may be needed for certain construction projects affecting the integrity of the Company's pipeline(s).

The Company representative will make a determination of the complexity of the proposed activity and the level of Company approval required.

## 2.3 Company Response to Encroachment Requests

The Company shall be given at least three (3) working days advance notice prior to the actual commencement of any approved construction, excavation or crossing activities over or near its pipeline right-of-way so that the Company may locate its pipeline(s) and have a field representative present during these activities.

Additional time for technical analysis may be needed for certain construction projects affecting the integrity of the Company's pipeline(s).

The Company representative will make a determination of the complexity of the proposed activity and the level of Company approval required.

## 3.0 SITE VISITS TO LOCATE FACILITIES

3.1 The Company considers it essential that landowners, builders, utility companies, developers and contractors know the location and depth of the Company's pipeline(s) and requires that the pipeline(s) be shown on any plans or drawings to be submitted for review.

3.2 The Company will field locate and mark its pipeline(s) at selected points in accordance with federal, state and/or local requirements at no cost to the encroaching party. However, if the Company representative requires the pipeline be located by excavation, the cost to excavate the pipeline and restore surface improvements (e.g., pavement, landscaping, and sidewalks) shall be the responsibility of the encroaching party. Note: A Company representative must be present during any excavation to expose the pipeline. During this period, accurate survey data of the Company's pipeline(s) may be requested by the Company. This data shall be obtained by a qualified surveyor provided



Guideline Name: <b><i>Requirements for Construction Near Company Pipelines</i></b>	Guideline Number: TG-010	
	Date: 10/03/2019	Page: 3 of 9

by the encroaching party for the preparation of plan, section and profile drawings.

- 3.3 In addition to complying with the above requirements, the encroaching party shall comply with the provisions of all federal, state and/or local one-call regulations relating to excavation and demolition work in the vicinity of underground facilities.

#### 4.0 ITEMS TO BE PROVIDED FOR REVIEW PROCESS

Simple residential driveways or utility crossings of the Company's pipeline right-of-way may not be subject to all of the requirements of this section. The Company will determine what information is required to be submitted for review on a case by case basis.

At a minimum the following information shall be provided with a request to the Company to determine if equipment/vehicle crossings and associated construction activity can be approved.

- drawings and/or sketches showing the pipeline in relation to the proposed construction activity
- excavation plan including the method of installation of all facility crossings
- equipment description with weights and track/tire dimensions of any equipment/vehicles that may cross the Company's pipeline(s) during construction activity

In addition, any construction activity that requires the submission of drawings to a permitting agency for construction adjacent to or encroaching on the Company's pipeline(s) or pipeline right-of-way must include the information regarding Company facilities and pipeline right-of-way specified in this section.

- 4.1 Upon review of this specification and the incorporation of all applicable requirements, a complete set of design drawings showing existing conditions and proposed alterations shall be submitted to the Company for review.
- 4.2 Upon final approval from the Company, two (2) sets of the final (definitive) design drawings and an electronic copy shall be provided to the Company.
- 4.3 The Company's pipeline(s) and pipeline right-of-way limits shall be accurately shown on all drawings. Upon 72 hours advance notice, Company personnel will locate and mark the location of the Company's pipeline(s). The encroaching party's survey crew can then accurately locate the facility by a field survey.
- 4.4 The encroaching party's survey crew will be responsible for laying out the proposed facility in the field and locating the Company's facility horizontally and vertically, accurately representing it in the plan and profile views on the drawing(s). The Company's Region Technical Staff will evaluate field data to determine whether additional design requirements are necessary for areas of proposed equipment/vehicular travel.

#### 5.0 GENERAL REQUIREMENTS

- 5.1 No buildings, structures or other obstructions may be erected within, above or below the Company's pipeline right-of-way. If requested, the Company will furnish pipeline easement information which describes the pipeline right-of-way width.



Guideline Name: <b><i>Requirements for Construction Near Company Pipelines</i></b>	Guideline Number: TG-010	
	Date: 10/03/2019	Page: 4 of 9

- 5.2 Wire type, stockade, decorative and similar type fencing that can be easily removed and replaced may cross the Company's pipeline right-of-way at or near right angles. Fences crossing the Company's pipeline right-of-way must have a minimum 10 foot wide gate for access. No fence shall be allowed within the Company's pipeline right-of-way parallel to the Company's pipeline(s).
- 5.3 Planting of trees is not permitted on the Company's pipeline right-of-way. The Company may side trim trees that overhang across the Company's pipeline right-of-way to eliminate obstruction of right-of-way visibility from the ground or air.
- 5.4 Planting of shrubs, bushes or other plants associated with landscaping on the Company's pipeline right-of-way is subject to Company approval and shall not exceed 4 feet in height at maturity. Shrubs, bushes or other plants shall not be installed within 10 feet of the Company's pipeline(s). The Company will not be responsible for the cost of replacing any landscaping damaged, destroyed or disturbed due to maintenance activities on the Company's pipeline right-of-way.
- 5.5 No drainage swales and no reductions in grade are permitted on the Company's pipeline right-of-way. Limited additional fill may be deposited with prior written approval from the Company.

Proposed landscaping grades shall provide for 3 foot minimum cover over the Company's pipeline(s). The Company shall determine the maximum cover allowed over a Company pipeline(s) based on pipeline specifications and local conditions, including such issues as soil types. Proposed landscaping grades shall not exceed the Company's maximum allowable slope of 4:1 longitudinal with the pipeline and/or 8:1 cross-slope.

The Company reserves the right to modify these cover/grade requirements if deemed necessary. Proposed grades shall not restrict Company access to its right-of-way or cause ponding of surface water on the Company's pipeline right-of-way. Proposed grades shall not redirect the flow of water on to the Company's pipeline right-of-way or generate any amount of erosion on or near the Company's pipeline right-of-way.

- 5.6 A Company representative shall give prior approval for equipment/vehicles to cross the Company's pipeline(s) at any location.

Maximum and minimum depths of cover for all areas of equipment/vehicular travel (e.g., highways, roads, railroads, construction access, driveways, parking lots, etc.) will be determined by the Company and federal, state and/or local requirements. For this purpose, cover can be defined as the distance from the top of the pipeline to the finished grade. Mitigative methods where the cover is insufficient will be determined on a case by case basis.

Additional cover, construction mats, or temporary structural spans shall be installed for the protection of the Company's pipeline(s) at the point where equipment/vehicles will be crossing unless approval to cross without protection is specifically granted by the Company. Installation and maintenance of the crossing shall be the responsibility of the encroaching party. The Company will provide specifications for the crossing of pipeline facilities.



Guideline Name: <b><i>Requirements for Construction Near Company Pipelines</i></b>	Guideline Number: TG-010	
	Date: 10/03/2019	Page: 5 of 9

- 5.7 Test pits are used to supply the encroaching party with accurate elevations of the Company's pipeline(s) and to determine the quality of the fill material around the pipeline(s). At the discretion of the Company, test pits may be required in areas where equipment/vehicle crossings and/or facility crossings are proposed. For additional information on test pits reference Sections 6.2 and 6.3.
- 5.8 Parking areas should be planned so as to avoid covering the Company's pipeline right-of-way if possible.
- 5.9 No roads, pipelines, cables or utilities may be installed parallel to the Company's pipeline(s) within the Company's pipeline right-of-way.
- 5.10 All pipelines, roads, electrical cables and other utilities shall cross the Company's pipeline right-of-way at an angle at or near right angles, if practical.
- 5.11 If, in the judgment of the Company, the proposed facility necessitates the installation of casing pipe and/or other alterations to protect the Company's pipeline(s), the encroaching party will be required to execute a reimbursement agreement. The encroaching party will be required to pay the Company all or a percentage of the estimated cost of these alterations prior to the Company beginning any construction activity. Once the actual costs have been incurred and tabulated by the Company, cost variances shall be settled.
- 5.12 At the discretion of the Company, concrete slabs or other protective devices may be installed over the Company's pipeline(s) to provide protection. Design and installation drawings for the concrete slab/device will be provided to the encroaching party upon request.
- 5.13 All design standards mandated by federal, state and/or local government agencies shall be satisfied and a letter stating such shall be submitted to the Company prior to receiving final approval of the encroaching party's project.

## 6.0 EXCAVATION

Excavation operations shall be performed in accordance with the guidelines set forth below.

- 6.1 **No excavation, crossing, backfilling or construction operations near the Company's pipeline(s) or pipeline right-of-way shall be performed unless the Company representative is on site. The Company representative shall have full authority to stop the work if it is determined that the work is being performed in an unsafe manner or if a foreign object is spotted.**
- 6.2 Encroaching Party shall submit a schedule of proposed construction activities. During the period from November 1 to April 15, excavation on the Right-of-Way may be limited and is dependent upon restrictions and approval from Region Management.
- 6.3 For Bored Crossings, ensure crossings are made under pipelines with a minimum clearance 60 in. across the entire pipeline right-of-way. The minimum clearance may be reduced to 36 in. if inspection ditches are utilized and approval by Region Technical Management is obtained.



Guideline Name: <b><i>Requirements for Construction Near Company Pipelines</i></b>	Guideline Number: <b>TG-010</b>	
	Date: <b>10/03/2019</b>	Page: <b>6 of 9</b>

- 6.4 If inspection ditches are required, dig inspection ditches on the approaching side of each pipeline to allow for monitoring of the line bore progress. Make the inspection ditch excavations at least 6 ft. long and within 6 ft. of the pipelines. Confirm that the ditches are at least 3 ft. deeper than the bottom of the pipelines.
- 6.5 Excavation shall not be permitted within the Company's pipeline right-of-way until an excavation plan has been reviewed and approved by the Company representative. The excavation plan may be a written document or a verbal discussion with the Company representative. At a minimum, the excavation plan shall include but not be limited to the following:
- Backhoe set-up position in relationship to the pipeline
  - Need for benching to level backhoe
  - Required excavation depth and length
  - Sloping and shoring requirements
  - Ingress/egress ramp locations
  - Minimum clearance requirements for mechanical equipment
  - Pipeline location and depth
  - Verify bar has been welded onto backhoe bucket teeth and side cutters have been removed
  - Spoil pile location
  - Compliance with applicable OSHA regulations
- 6.6 The use of mechanical equipment in the vicinity of the Company's pipeline(s) shall be directed by the Company representative in accordance with Company procedures and applicable one-call regulations. The tolerance zone for excavations using mechanical equipment is 18 inches (unless otherwise required by state law) until the pipeline is visually located. Hand tools or soft dig equipment shall be used to complete the final excavation of the pipeline inside the "restricted" mechanical equipment limits of the excavation.
- 6.7 When using mechanical equipment to uncover or excavate a Company pipeline, the encroaching party shall designate a spotter to be exclusively dedicated for oversight of excavation activities. This includes watching for unmarked foreign facilities, insuring equipment does not excavate in tolerance zone, monitoring the mobilization and movement of equipment.
- 6.8 The use of a trenchless excavation method (i.e., bored crossings) shall be employed in such a way as to ensure a minimum radial clearance required by applicable standards is obtained between the new facility and the Company's pipeline(s).
- 6.9 Federal regulations require that the Company's pipeline(s) be inspected whenever it is exposed. Applicable OSHA regulations pertaining to excavations must therefore be met to ensure the safety of the Company representative who must enter the excavation.



Guideline Name: <b><i>Requirements for Construction Near Company Pipelines</i></b>	Guideline Number: TG-010	
	Date: 10/03/2019	Page: 7 of 9

Furthermore ample time should be provided to allow the Company to perform relevant inspections prior to proceeding with backfill operations.

## 7.0 BLASTING

Blasting operations shall be performed in accordance with the minimum guidelines set forth below.

- 7.1 The Company shall be advised of any blasting proposed within 200 feet of the Company's pipeline(s) and 500 feet for large scale quarry-type blasting. No blasting is permitted within the Company's pipeline right-of-way, and no blasting shall occur outside the Company's pipeline right-of-way if the Company determines that such blasting may be detrimental to its facilities.
- 7.2 The Company reserves the right to require that the party responsible for blasting furnish a detailed blasting plan at least three (3) working days prior to blasting to allow for evaluation and to make arrangements for a Company representative to witness the blasting operation, including drilling and loading holes. Applicable blasting codes shall be followed in all cases.

## 8.0 FACILITY CROSSINGS

All buried facilities shall be installed as noted below and as stated in Sections 5.9 and 5.10, as appropriate.

- 8.1 Buried facilities shall be installed below the Company's pipeline(s). Where the Company has multiple lines, the deepest line shall be used as reference to the foreign line crossing. The Company requires a minimum of 24 inches of clearance however in some situations this may need to be increased (e.g., bored crossings). Additional separation may be required in marshy areas or other areas where insufficient clearance would have a potential to cause future problems.
- 8.2 If the normal crossing requirements present undue difficulties as determined by the Company, buried facilities may be installed above the Company's pipeline(s) with prior approval from the Company representative. All such facilities shall be installed with a minimum of 24 inches of clearance from the shallowest line. The Company will not be responsible for any damage or required repairs which are caused by the Company's operating and maintenance activities when facilities are installed above the pipeline(s). Protective measures such as a concrete encasement, ditch marking tape, and/ or above ground markers may be required as deemed necessary by the Company representative.
- 8.3 Suitable backfill shall be placed between the facility and the Company's pipeline(s). Suitable backfill is backfill free of rocks, refuse and any foreign material including, but not limited to, skids, welding rods, pipe rings, trash, tree and shrubbery limbs. In the case of anticipated crossing by equipment/vehicles the encroaching party shall provide specific material and compaction specifications (AASHTO or equivalent) for review by the Company.
- 8.4 The installation of test leads (two No. 10 THWN insulated copper wires) attached at the point of crossing for corrosion control monitoring may be required for metallic lines as



Guideline Name: <b><i>Requirements for Construction Near Company Pipelines</i></b>	Guideline Number: TG-010	
	Date: 10/03/2019	Page: 8 of 9

directed by the Company representative. Test wires shall be routed underground and terminated at a point specified by the Company.

- 8.5 The following requirements shall be met for fiber optic cables which encroach upon the Company's pipeline right-of-way.
- 8.5.1 High capacity fiber optic cable shall be installed in a rigid non-metallic conduit or covered in 6-8 inches of concrete which has been colored with an orange dye extending across the entire pipeline right-of-way. Other protective measures may be considered for non-high capacity cables.
- 8.5.2 The fiber optic cable shall be installed a minimum of 24 inches below the Company's pipeline(s) across the entire width of the pipeline right-of-way, unless approved by the Company representative.
- 8.5.3 Orange warning tape shall be buried a minimum of 18 inches directly above the fiber optic cable across the entire width of the Company's pipeline right-of-way, where practical.
- 8.5.4 The fiber optic cable crossing shall be clearly and permanently marked with identification signs on both sides of the Company's pipeline right-of-way. Markings shall be maintained by the encroaching party for the lifetime of the facility.
- 8.6 The information listed below shall be furnished to the Company for all proposed electrical cables which will encroach upon the Company's pipeline right-of-way.
- Number, spacing and voltage of cables
  - Line loading and phase relationship of cables
  - Grounding system
  - Position of cables and load facilities relative to pipeline(s)
- 8.7 Specific installation requirements for cables carrying less than 600 volts shall be determined by the Company on a case by case basis.
- 8.8 The following installation requirements shall be met for buried electrical cables carrying over 600 volts but less than 7,600 volts.
- 8.8.1 The electrical cable shall be installed in a rigid non-metallic conduit covered in a minimum thickness of 2 inches of concrete (unless crossing is bored, then we will not require concrete) which has been colored with a red dye extending across the entire width of the Company's pipeline right-of-way.
- 8.8.2 The electrical cable shall be installed a minimum of 24 inches below the Company's pipeline(s) across the entire width of the Company's pipeline right-of-way, unless approved by the Company representative.
- 8.8.3 Each phase conductor should be surrounded with a spirally wound, concentric neutral conductor. The neutral may be within the outer cable jacket.
- 8.8.4 Red warning tape shall be buried a minimum of 18 inches directly above the



Guideline Name: <b><i>Requirements for Construction Near Company Pipelines</i></b>	Guideline Number: TG-010	
	Date: 10/03/2019	Page: 9 of 9

electric cable across the entire width of the Company's pipeline right-of-way, where practical.

8.8.5 The electric cable crossing shall be clearly and permanently marked with identification signs on both sides of the Company's pipeline right-of-way.

8.9 Buried Electrical Cables greater than 7,600 volts

8.9.1 All the conditions of Section 8.8 shall apply for any approved crossings.

8.9.2 Any test stations at the crossing location shall either be dead front test stations or have the appropriate grounding mats. Existing test stations that do not meet this requirement will need to be modified.

8.9.3 If either of the following conditions exist then Region Tech Staff should be contacted and modeling should be considered to make a definitive determination as to whether fault current presents a threat to the Company Pipeline and if additional measures are needed to mitigate the risk.

8.9.3.1. If there is a location (substation, vault, tower, etc.) where a fault may occur within 500 feet of the crossing. For such a facility, the power company shall provide the details on the grounding system and a study as to the adequacy of the system.

8.9.3.2. If the steady stateload current capacity of the HVAC line is equal to or greater than 100 amps.

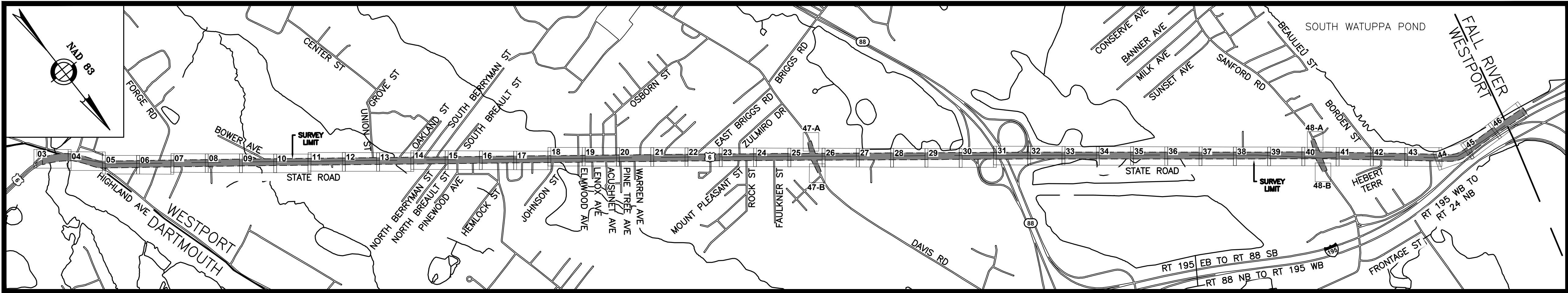
8.10 Overhead power line, telephone line and telecommunication installations shall be reviewed by the Company on an individual basis.

8.10.1 Overhead lines shall be installed with a minimum clearance of 25 feet above the grade of the Company's pipeline right-of-way. The installation of poles and guys will not be permitted on the Company's pipeline right-of-way, and not within 25 feet from a Company appurtenance, unless assurances are made that the encroachment will not affect the Company appurtenance as a result of a fault or failure.



**APPENDIX J:**  
**ROUTE 6 SURVEY**





### ABBREVIATIONS

AC	ASBESTOS CEMENT	GRL	GUARDRAIL
BD	BOUND	HMA	HOT MIX ASPHALT
BL	BASELINE	HMA DW	HMA DRWAY
BFZN	BUFFER ZONE	HYD	HYDRANT
BLDG	BUILDING	IP	IRON PIPE
BVW	BORDERING VEGETATED WETLAND	LSA	LANDSCAPED AREA
CB	CATCH BASIN	MAG	MAG NAIL
CI	CAST IRON	MH	MANHOLE
CL	CENTER LINE	MP CS	MEDIUM PRESSURE COATED STEEL
CLF	CHAIN LINK FENCE	NDZ	NO DISTURB ZONE (LOCAL)
CMH	CABLE MANHOLE	PL	PROPERTY LINE
CO BD	COUNTY BOUND	RCP	REINFORCED CONC. PIPE
COMM	COMMUNICATION CONDUIT	REC	RECORD
CONC	CONCRETE	RET WALL	RETAINING WALL
CW	CROSSWALK	RFA	RIVERFRONT AREA
DMH	DRAIN MANHOLE	RPN	RIPARIAN
DBYL	DOUBLE YELLOW LINE	SGC	SLOPED GRANITE CURB
EL	ELEVATION	SWL	SOLID WHITE LINE
EM	ELECTRIC METER	SYL	SOLID YELLOW LINE
EMH	ELECTRIC MANHOLE	SBDH	STONE BOUND WITH DRILL HOLE
EP	EDGE OF PAVEMENT	TYP	TYPICAL
FCOT	FENCE - OTHER MATERIAL	WDF	WOOD FENCE
GC	GRANITE CURB	WP	WARNING PANEL
GRAV	GRAVEL	WRA	WETLAND RESOURCE AREA

### LINETYPE LEGEND

---	150	CONTOUR MAJOR
---	149	CONTOUR MINOR
---		EXISTING STATE HIGHWAY LAYOUT
---		EXISTING TOWN LAYOUT
---		EXISTING TOWN LINE
---		PROPERTY LINE
---		COMMON OWNER PROPERTY LINE
---		EXISTING EASEMENT
---		EXISTING RAILRD SIDELINE
---		SURVEY TRAVERSE LINE
---	CA/TV	UNDERGROUND CABLE TV
---	D	UNDERGROUND DRAIN LINE
---	E	UNDERGROUND ELECTRIC
---	OHW	OVERHEAD WIRE
---	G	UNDERGROUND GAS LINE
---	S	UNDERGROUND SEWER LINE
---	T	UNDERGROUND TELE. LINE
---	W	UNDERGROUND WATER LINE
---		TREELINE

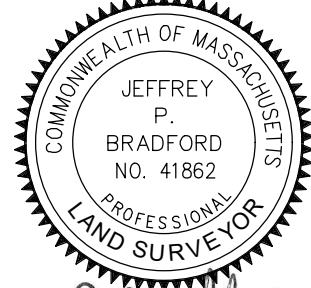
### SHEET INDEX

1	TITLE SHEET & INDEX
2	SURVEY CONTROL AND BOUND TIES
3-48	SURVEY BASEPLAN

### LEGEND

● BHL #	BORE HOLE	● PK	PK NAIL
○	BUSH	○ PM	PARKING METER
● BM #	BENCHMARK	○ POST	CIRCULAR POST
BLDR	BOULDER	□ POST	SQUARE POST
□	BOUND (CONC, STONE, LAND COURT, ETC.)	● RB	REBAR/IRON PIN
⊙	CABLE MANHOLE	● RRS	RAILRD SPIKE
■ CB	CATCH BASIN - SQUARE	■ RRSW	RAILRD SIGNAL
■ CB	CATCH BASIN - D-FRAME	■ RRSW	RAILRD SWITCH
⊕ CB	CATCH BASIN - ROUND	● #	RESOURCE AREA DELINEATION FLAG
● DSK	DISK (CA/T, USC&GS, LAND COURT, ETC.)	SPR	SPRINKLER HEAD
● DH	DRILL HOLE	▽ SN	STAKE AND NAIL
⊙	DRAIN MANHOLE	○ SP	STAND PIPE
□ EHH	ELECTRIC HANDHOLE	⊙	SEWER MANHOLE
⊙	ELECTRIC MANHOLE	⊙	STEAM MANHOLE
⊙ EM	ELECTRIC METER	○	STUMP
● EPLP	ESCUTCHEON PIN IN LEAD PLUG	■ TB	TOWN LINE BOUND (CORNER)
FA	FIRE ALARM PEDESTAL	■ TCB	TRAFFIC SIGNAL CONTROL CABINET
⊠ FB	FLASHING BEACON	①	TELEPHONE MANHOLE
△ FES	FLARED END SECTION	T-BOX	TELEPHONE PULL BOX
⊙ FP	FLAG POLE	■ TFMR	TRANSFORMER
○ GF	GAS FILL	□ TLRS	TOWN LINE RD STONE
○ GG	GAS GATE	■ TPIT #	TEST PIT
⊙ GM	GAS METER	○ TPL	TROLLEY POLE
⊙ GP	GAS PUMP	△	TRAVERSE POINT
⊙	GAS MANHOLE	● 22"	TREE
○ GPL	GUY POLE	○ TS	TRAFFIC SIGNAL
♿	HANDICAP SYMBOL	○ TS	TRAFFIC SIGNAL MAST ARM/SPAN WIRE POLE
←	GUY WIRE ANCHOR	○	SIGN
○ HTP	HIGH TENSION POWER POLE	○	SIGN - DOUBLE POST
⚡	FIRE HYDRANT	○ UFB#	UTILITY POLE W/FIRE PULL BOX
○ IP	IRON PIPE	○ ULT#	UTILITY POLE W/LIGHT
⚡	LIGHT POLE	○ UPDL#	UTILITY POLE W/DOUBLE LIGHT
○ LPL	LIGHT POLE DOUBLE LIGHT	○ UPL#	UTILITY POLE
● MAG	MAG NAIL	○ VP	VENT PIPE
□ MB	MAIL BOX	⊙	WATER MANHOLE
■ MHB	MASSACHUSETTS HIGHWAY BOUND	○ WG	WATER GATE
⊕ MW	MONITORING WELL	⊙ WM	WATER METER
○ OIL	OIL FILL	○ WSO	WATER SHUTOFF
⊙	OTHER MANHOLE	⊕ WELL	WELL (POTABLE)
□ PB	PULL BOX		
♿ PED	PEDESTRIAN SYMBOL		
△	PHOTO CONTROL - H&V		
○	PHOTO CONTROL - V ONLY		

### CERTIFICATION:



JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.

### PLAN REFERENCES:

PLEASE REFER TO SURVEY BASEPLANS. ALL PLAN REFERENCES, WHERE USED, HAVE BEEN ADDED TO BUTTER LABELS, LAYOUT LINES, EASEMENTS, BASELINES AND ANY OTHER PERTINENT LOCATION.

### SURVEY NOTES

- THE BASEPLAN WAS COMPILED FROM MOBILE LIDAR DATA COLLECTED BY GPI GEOSPATIAL, INC. ON NOVEMBER 17, 2020 AND SUPPLEMENTED BY GREENMAN-PEDERSEN, INC. (GPI) VIA CONVENTIONAL TOTAL STATION TOPOGRAPHIC SURVEY BETWEEN JANUARY AND APRIL 2021.
- THE MOBILE LIDAR SURVEY DATA USED HEREIN EXCEEDS THE REQUIREMENTS AS SET FORTH IN THE FEDERAL GEOGRAPHIC DATA COMMITTEE'S (FGDC) GEOSPATIAL POSITIONING ACCURACY STANDARDS, PART 3: NATIONAL STANDARD FOR SPATIAL DATA ACCURACY (NSSDA). PLEASE REFER TO THE MOBILE LIDAR PROCESSING REPORT PREPARED BY GPI GEOSPATIAL, INC DATED DECEMBER 10, 2020 FOR MORE DETAILED INFORMATION INCLUDING THE LIDAR CONTROL REPORTING.
- THE SURVEY CONTROL NETWORK WAS SET BY AN INSTRUMENT FIELD SURVEY PERFORMED BY GPI IN NOVEMBER-DECEMBER, 2020. THE MASSDOT ESTABLISHED PRIMARY SURVEY CONTROL WAS HELD AS THE BASIS FOR THE SURVEY TRAVERSE NETWORK. GPI EXTENDED THE TRAVERSE NETWORK VIA TRADITIONAL TRAVERSING AND DIGITAL DIFFERENTIAL LEVELING. PLEASE REFER TO SHEET 2 FOR A LISTING OF THE PRIMARY CONTROL PROVIDED BY MASSDOT, THE TRAVERSE POINTS AND BENCHMARK INFORMATION.
- THE HORIZONTAL DATUM SHOWN HEREON IS BASED UPON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM - MAINLAND ZONE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) (2011), EPOCH 2010.00, ESTABLISHED BY MASSDOT IN OCTOBER 2020.
- THE VERTICAL DATUM SHOWN HEREON REFERENCES THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS ESTABLISHED BY MASSDOT IN OCTOBER 2020 APPLYING THE GEOID 18 MODEL.
- THE UNITS SHOWN HEREIN ARE US SURVEY FEET.
- CONTOUR INTERVAL: 1 FOOT
- THE STATE, COUNTY AND TOWN RIGHTS-OF-WAY WERE ESTABLISHED BY A CADASTRAL SURVEY AND FOUND MONUMENTATION.
- PROPERTY LINES SHOWN HERON ARE APPROXIMATE ONLY AND ARE BASED UPON RECORD DEEDS, PLANS AND ASSESSORS INFORMATION OBTAINED AT THE BRISTOL COUNTY REGISTRY OF DEEDS AND TOWN ASSESSOR'S AND ENGINEERING DEPARTMENTS.
- FLOOD ZONE: PORTIONS OF THE PROJECT FALL WITHIN AREAS DESIGNATED AS 100-YEAR FLOOD ZONES (ZONE A - NO BASE FLOOD ELEVATIONS DETERMINED) AS SHOWN ON FEMA FIRMS 25005C0361F & 25005C0368F, BOTH HAVING AN EFFECTIVE DATE OF JULY 7, 2009. THE LIMITS OF THE FLOOD ZONES HAVE BEEN ADDED TO THE PLANS BASED UPON THEIR GIS LOCATIONS.
- RESOURCE AREA DELINEATION WAS NOT INCLUDED AS PART OF THIS SURVEY. WETLAND RESOURCE AREAS HAVE BEEN ADDED TO THE PLANS BASED UPON GIS LOCATIONS. TYPES OF WETLAND RESOURCE AREAS HAVE NOT BEEN DETERMINED AND HAVE BEEN GENERICALLY LABELED "LIMIT OF WRA (GIS)".
- SUBSURFACE UTILITY INFORMATION SHOWN HEREON IS APPROXIMATE ONLY AND WAS COMPILED FROM SURFACE EVIDENCE AND SUPPLEMENTED WITH RECORD UTILITY INFORMATION WHERE AVAILABLE. ANY INFORMATION DEPICTED ON RECORD PLANS THAT WAS NOT OBSERVED IN THE FIELD AND BEEN SHOWN ON THESE PLANS BASED UPON RECORD LOCATION AND "(REC)" HAS BEEN ADDED TO THE DESCRIPTION. UTILITY INFORMATION IS IN COMPLIANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION UTILITY DATA QUALITY LEVEL C. GPI ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. COORDINATION WITH THE APPROPRIATE UTILITIES BEFORE AND DURING DESIGN OF FUTURE CONNECTIONS IS REQUIRED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- VERIZON DIRECT BURIED CABLE EXIST WITHIN THE PROJECT LIMITS, HOWEVER, THE LOCATIONS OF SUCH CABLES HAVE NOT BEEN PROVIDED BY VERIZON NOR LOCATED IN THE FIELD.
- CONTACT "DIG SAFE" AT 1 (888) 344-7233 PRIOR TO CONSTRUCTION.
- FOR TRAVERSE TIE INFORMATION, REFER TO MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS FIELD BOOK NO. 41499 (WESTPORT).



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers&Inspectors  
181 Ballardvale ST, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH

FILE NAME:	610799_SV (CS).DWG
FIELD BOOK NO:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

SHEET 1 OF 48

MAIN TRAVERSE				
Point #	Northing	Easting	Elevation	Description
1	2708514.736	761205.647	139.75	SPIKE
2	2708267.364	761554.367	140.00	REBAR
3	2707970.660	761892.884	145.67	REBAR
4	2707685.404	762254.919	146.65	REBAR
5	2707426.883	762572.628	153.74	REBAR
6	2707104.012	763031.532	161.87	MAG
7	2706049.739	764276.814	151.37	REBAR
8	2705741.223	764672.002	147.05	REBAR
9	2705428.737	765067.322	144.35	REBAR
10	2705126.077	765442.797	142.62	REBAR
11	2704842.768	765803.357	143.17	REBAR
12	2704506.160	766228.146	143.39	REBAR
13	2704169.292	766657.762	142.33	REBAR
14	2703148.547	767953.995	141.33	MAG
15	2702902.739	768268.895	142.40	REBAR
16	2702588.031	768674.916	140.97	REBAR
17	2702286.877	769056.255	140.20	REBAR
18	2701967.864	769464.306	141.96	REBAR
19	2701647.826	769869.171	142.63	REBAR
20	2701331.137	770280.344	135.90	MAG
21	2701014.655	770681.045	127.80	REBAR
22	2700183.941	771747.216	104.90	REBAR
23	2699860.234	772167.159	97.82	REBAR
24	2699468.033	772673.606	89.52	REBAR
25	2699083.182	773169.178	82.99	REBAR
26	2698792.674	773549.380	81.87	REBAR
27	2698496.061	773926.886	87.36	REBAR
28	2698202.521	774304.463	88.23	REBAR
29	2697908.977	774684.256	81.55	REBAR
30	2697586.923	775099.161	72.14	REBAR
31	2697237.634	775549.368	66.77	REBAR
32	2696344.656	776704.062	65.49	REBAR
33	2696025.616	777116.297	65.96	REBAR
34	2695731.875	777495.407	66.98	REBAR
35	2695408.048	777916.777	70.41	REBAR
36	2695098.088	778320.460	67.73	REBAR
37	2694804.714	778701.638	63.44	REBAR
38	2694564.380	779014.913	65.01	REBAR
200	2708516.432	760133.091	136.87	REBAR
201	2707696.017	762176.503	145.26	REBAR
202	2708586.841	759932.591	138.68	MAG
203	2707551.715	762111.650	131.50	REBAR
205	2704204.530	766790.788	142.92	REBAR
206	2693764.918	779773.229	68.54	MAG
207	2693540.246	780015.019	69.56	MAG

MOBILE LIDAR TARGETS				
Point #	Northing	Easting	Elevation	Description
301	2708613.587	759792.828	138.91	MAG
302	2708646.269	759799.607	138.92	MAG
303	2708542.227	760361.119	136.39	MAG
304	2708569.424	761009.761	137.98	MAG
305	2708358.440	761382.703	138.04	MAG
306	2708054.500	761859.978	144.86	MAG
307	2707621.189	762273.127	145.38	MAG
308	2707424.665	762624.172	153.88	MAG
309	2707138.010	762969.202	160.69	MAG
310	2706940.030	763094.623	162.17	MAG
311	2706678.271	763549.490	154.06	MAG
312	2706173.995	764069.098	151.82	MAG
313	2705948.471	764468.916	148.77	MAG
314	2705583.897	764816.365	144.43	MAG
315	2705222.359	765271.935	142.81	MAG
316	2704891.881	765806.674	142.12	MAG
317	2704479.998	766213.340	142.57	MAG
318	2704240.876	766632.137	140.78	MAG
319	2703930.447	766902.110	141.55	MAG
320	2703552.306	767511.322	140.87	MAG
321	2703293.731	767860.541	140.47	MAG
322	2702941.524	768164.310	141.29	MAG
323	2702573.229	768636.993	140.44	MAG
324	2702352.954	769038.050	138.76	MAG
325	2701943.076	769443.952	141.11	MAG
326	2701818.573	769724.748	142.26	MAG
327	2701621.343	769852.476	142.21	MAG
328	2701342.662	770331.933	135.04	MAG
329	2700966.271	770690.638	125.94	MAG
330	2700716.512	771132.780	117.86	MAG
331	2700317.570	771521.096	108.47	MAG
332	2700076.092	771958.444	100.62	MAG
333	2699754.997	772248.662	94.90	MAG

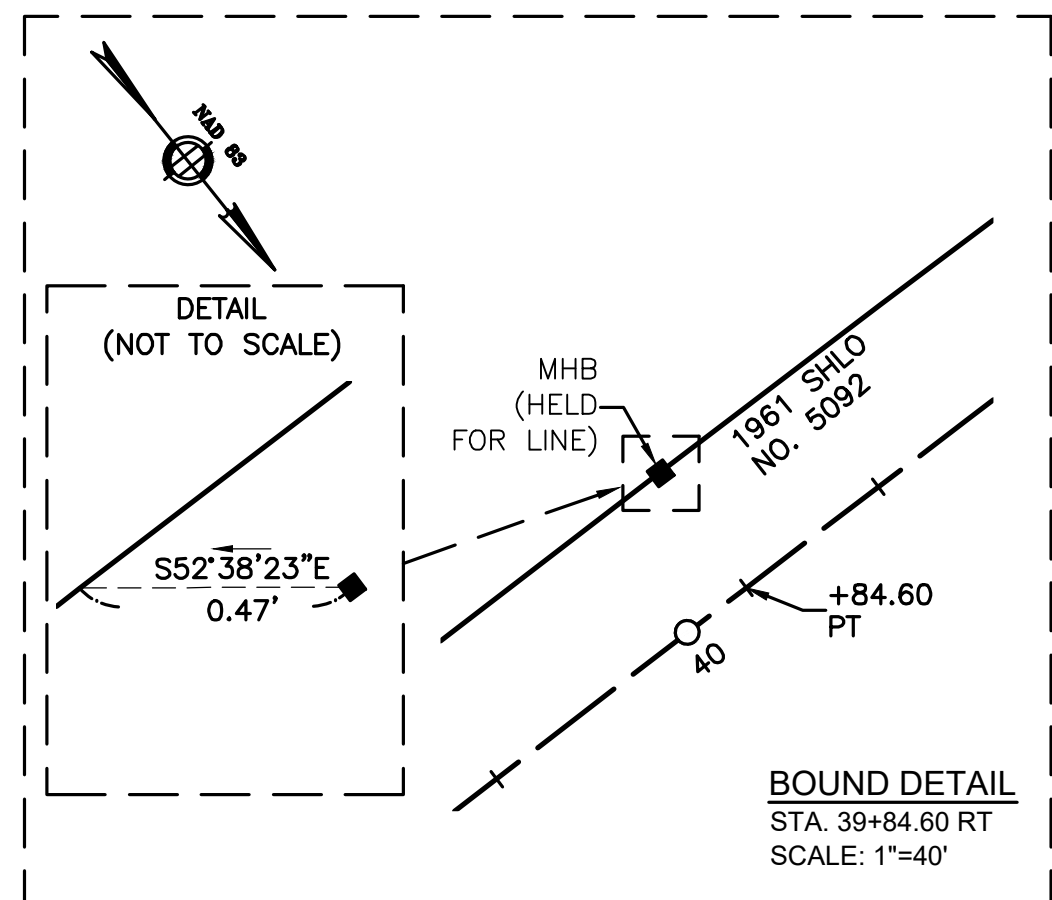
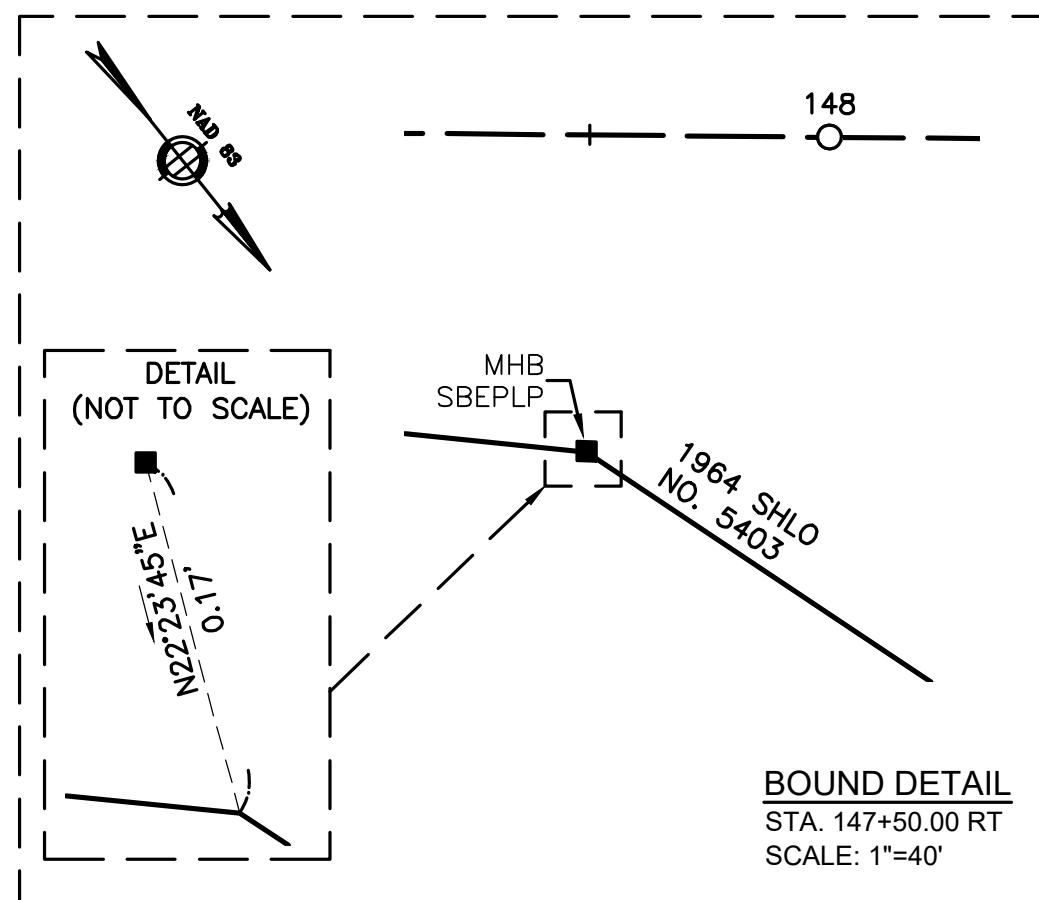
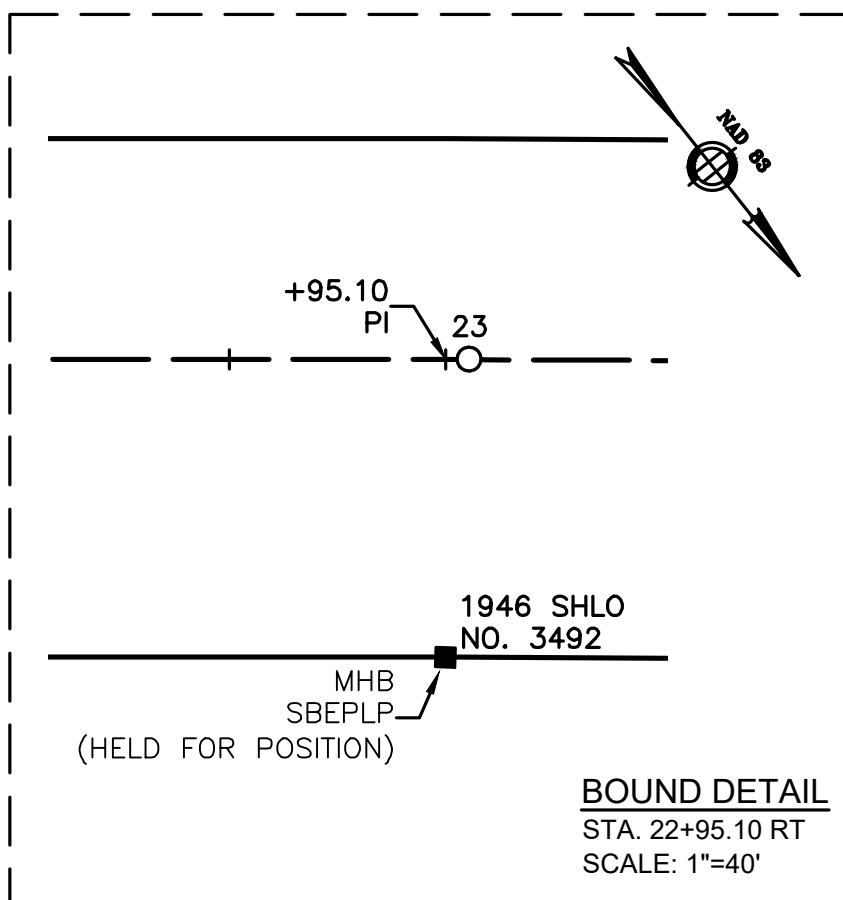
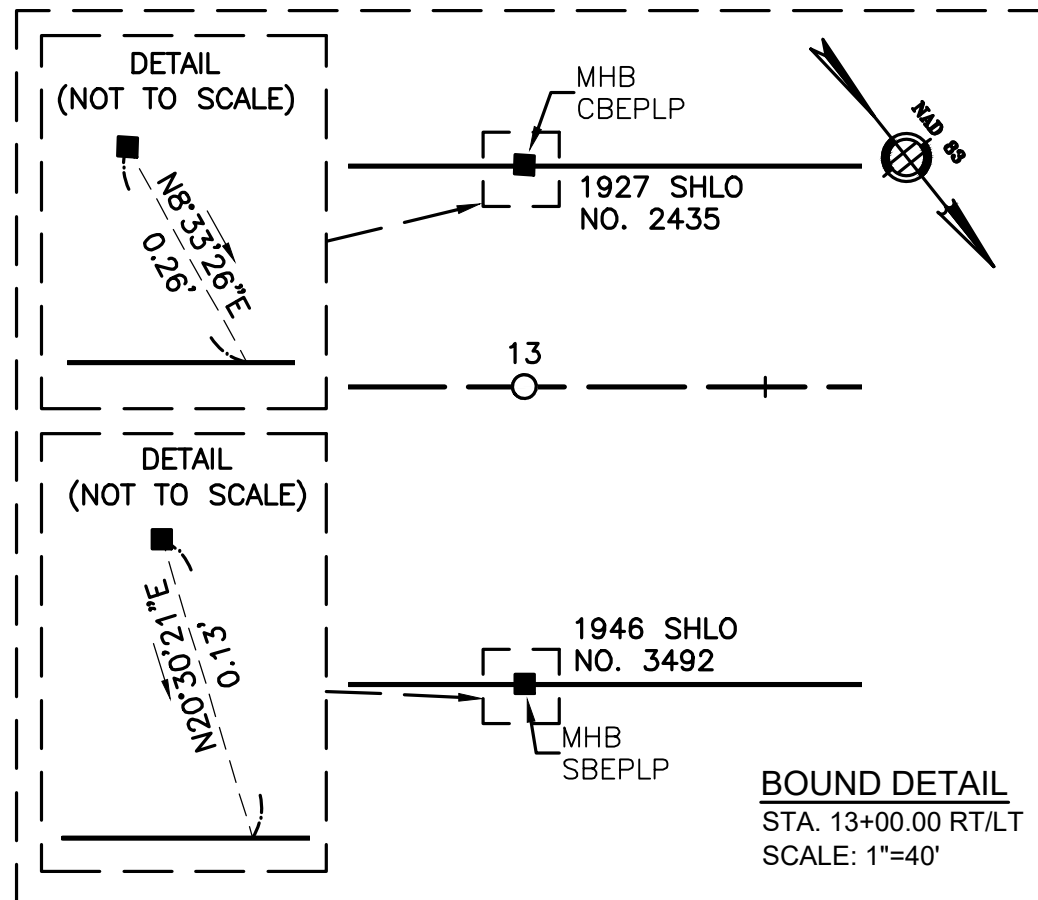
MOBILE LIDAR TARGETS				
Point #	Northing	Easting	Elevation	Description
334	2699472.333	772737.215	87.81	MAG
335	2699058.578	773145.914	82.26	MAG
336	2698775.604	773635.931	81.63	MAG
337	2698417.146	773976.232	87.09	MAG
338	2698139.167	774458.158	85.40	MAG
339	2697743.646	774845.417	76.24	MAG
340	2697529.713	775249.031	70.26	MAG
341	2697059.224	775730.696	64.52	MAG
342	2696833.666	776150.606	66.19	MAG
343	2696196.034	776849.670	64.08	MAG
344	2696237.596	776921.524	64.77	MAG
345	2695757.388	777416.389	65.89	MAG
346	2695495.845	777883.783	70.04	MAG
347	2695149.062	778202.957	68.08	MAG
348	2694866.834	778702.675	64.11	MAG
349	2694481.272	779070.679	65.25	MAG
350	2694255.223	779482.922	74.88	MAG
351	2693832.405	779698.516	68.58	MAG
352	2693646.824	780159.113	67.49	MAG
353	2693579.493	780144.358	69.50	MAG
354	2706731.909	762945.688	185.57	MAG
355	2706780.101	762989.959	180.70	MAG
356	2706923.808	763005.139	169.49	MAG
357	2707102.210	763110.727	159.80	MAG
358	2707485.538	763134.076	147.48	MAG
359	2707459.950	763162.540	147.84	MAG
360	2701360.297	769685.845	149.49	MAG
361	2701427.267	769677.832	148.69	MAG
362	2701607.126	769754.268	144.37	MAG
363	2701802.423	769864.898	143.63	MAG
364	2702010.952	769895.788	141.98	MAG
365	2702020.689	769920.177	141.34	MAG

MASSDOT GPS CONTROL				
Point #	Northing	Easting	Elevation	Description
2647	2708603.892	760243.090	136.171	PUNCHMARK
2648	2708576.290	760702.589	135.702	REBAR
2649	2706672.011	763494.282	155.656	PUNCHMARK
2650	2706381.477	763860.569	152.526	PUNCHMARK
2651	2700760.056	770945.897	120.800	MAG
2652	2700502.993	771332.519	113.648	TRAVERSE DISK
2653	2696885.983	776004.909	66.614	REBAR
2654	2696633.646	776330.153	64.468	PUNCHMARK
2655	2694337.930	779306.713	71.424	TRAVERSE DISK
2656	2693869.303	779717.012	68.898	PUNCHMARK
2657	2703922.119	767050.790	141.840	MAG
2658	2703502.781	767590.152	141.141	MAG

BENCHMARK TABLE				
Point #	Northing	Easting	Elevation	Raw Description
900	2703838	767247	168.92	ID#7297 BRASS RIVET IN END POST
901	2694338	779307	71.42	(MASSDOT GPS #2655) TRAVERSE DISK M6AE
902	2697047	775736	63.46	ID#7490 BRASS RIVET IN CONC HEADWALL
903	2699022	773326	81.75	ID#7491 BRASS RIVET IN CONC HEADWALL
904	2700503	771333	113.65	(MASSDOT GPS #2652) TRAVERSE DISK M6AD
1000	2701639	769826	142.96	ID#7492 BRASS RIVET IN CONC BASE

WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	2	48
PROJECT FILE NO.		610799	

SURVEY CONTROL AND BOUND TIES



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



REVISIONS		
REV.	COMMENTS	DATE

**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers&Inspectors  
181 Ballardvale St, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

PREPARED BY:

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

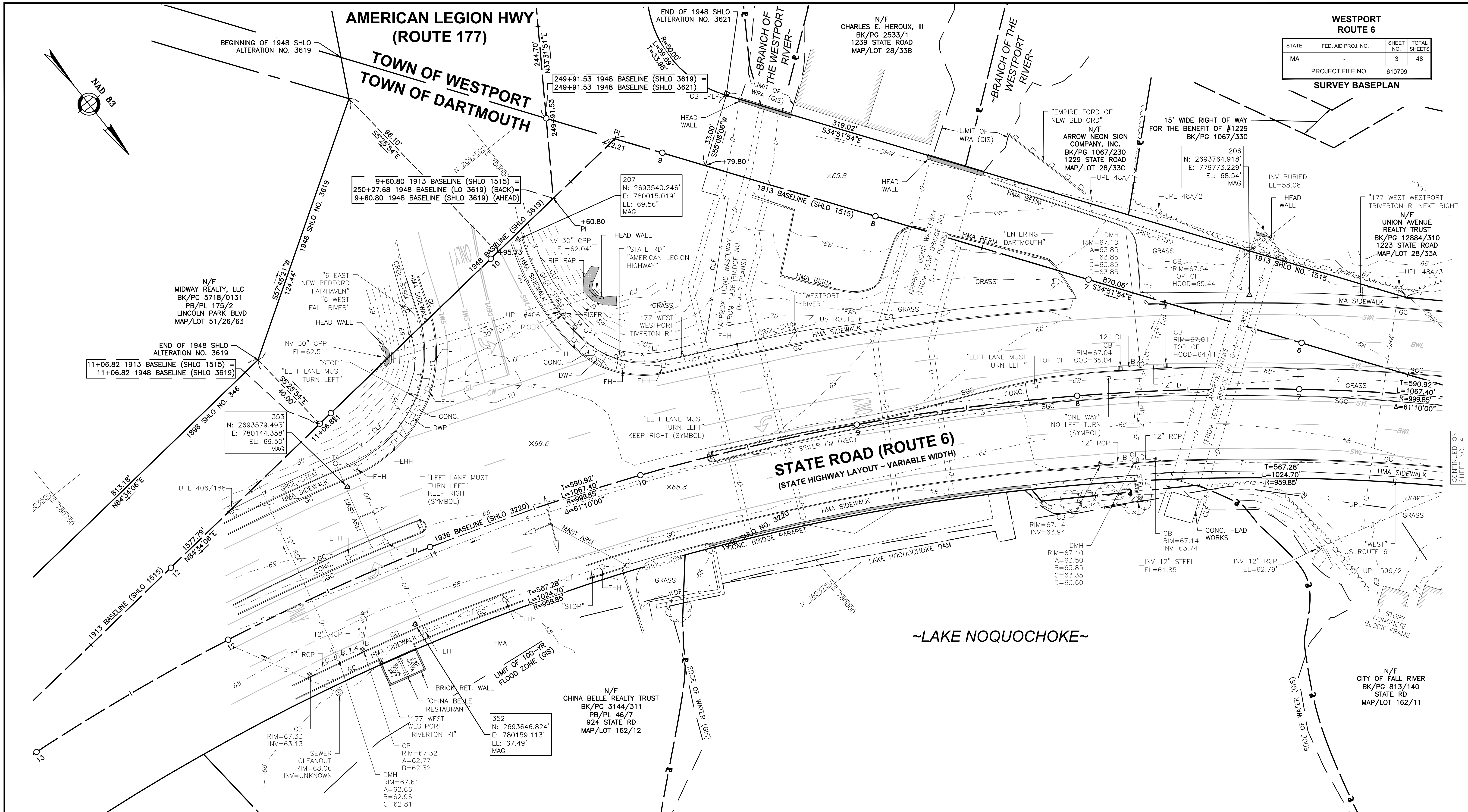
AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

SHEET 2 OF 48





WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	3	48
PROJECT FILE NO. 610799			
SURVEY BASEPLAN			

**MASSDOT**  
Massachusetts Department of Transportation  
Highway Division

PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK NO: WESTPORT-41499	
			DRAWN BY: FDR/JD	CHECKED BY: JPB
			FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021	SHEET 3 OF 48
---------------------	---------------

CERTIFICATION:

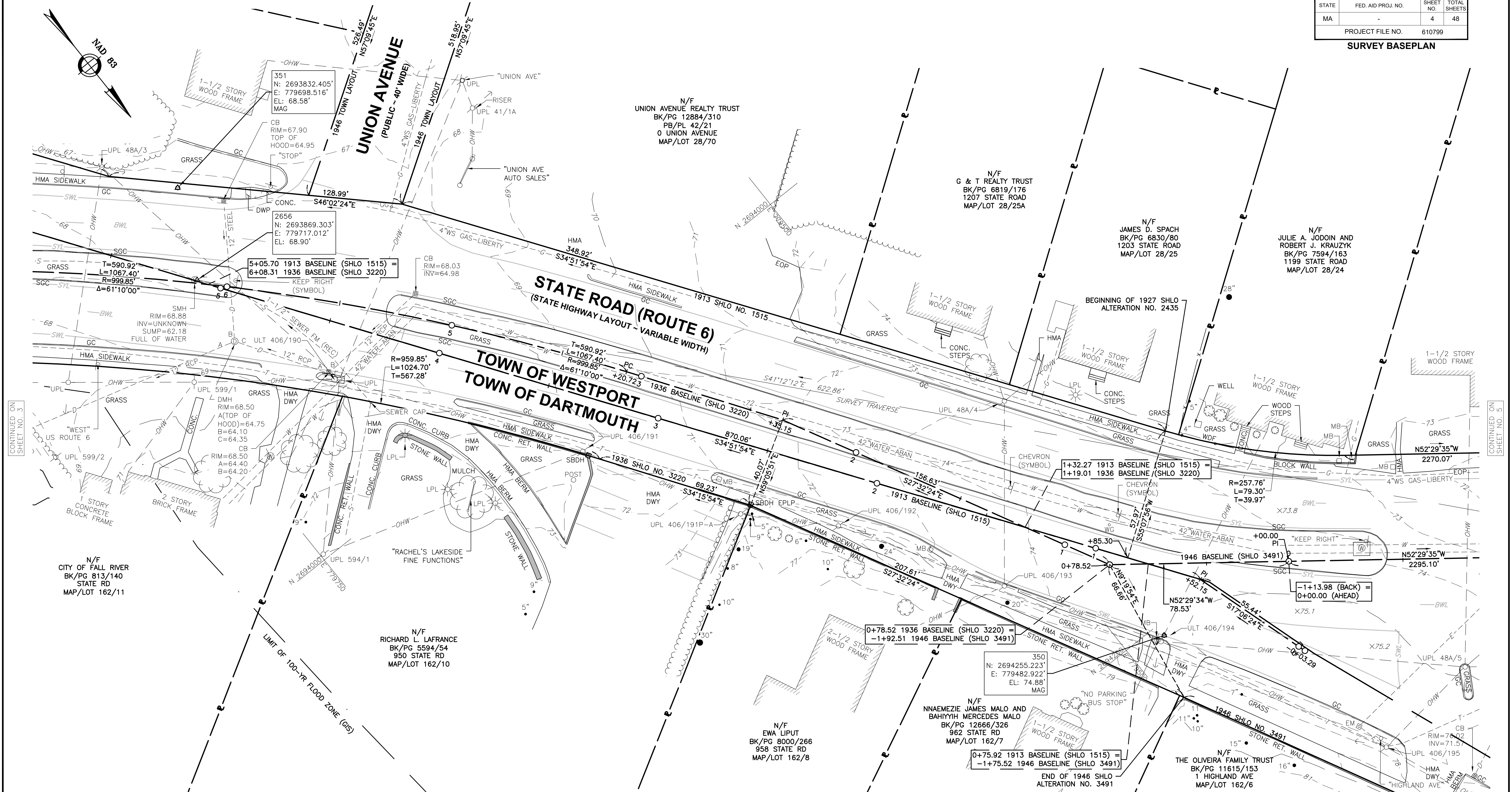


Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.

WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	4	48
PROJECT FILE NO. 610799			

SURVEY BASEPLAN



CONTINUED ON  
SHEET NO. 3

CONTINUED ON  
SHEET NO. 5



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH

FILE NAME: 610799_SV (ROUTE 6).DWG
FIELD BOOK NO: WESTPORT-41499
DRAWN BY: FDR/JD
CHECKED BY: JPB
FIELD CHIEF: MCS/BJB
PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

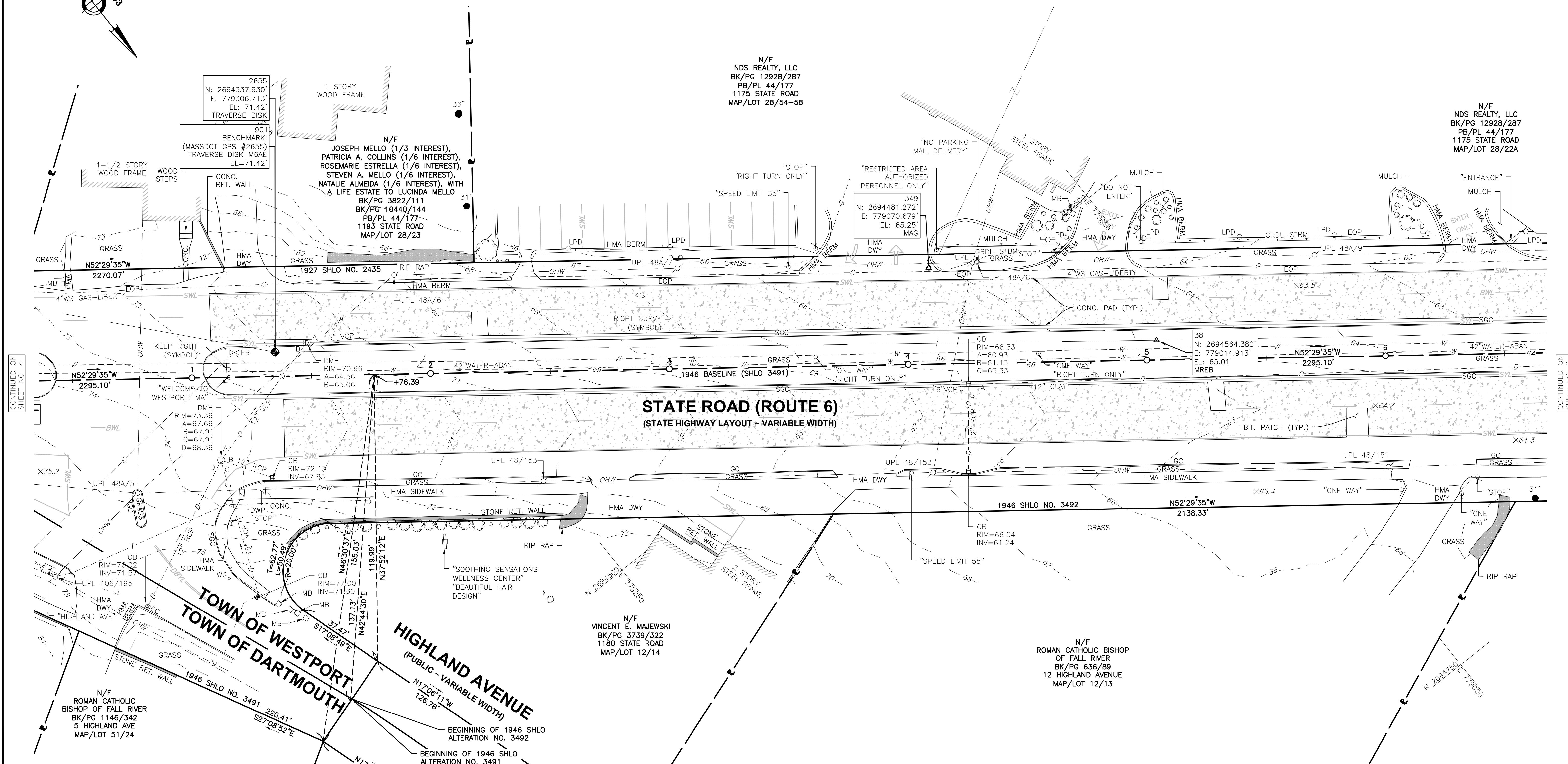
SHEET 4 OF 48



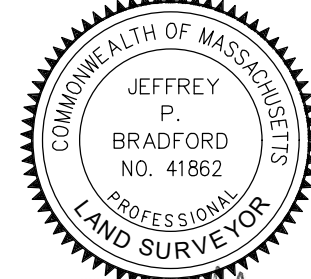
**WESTPORT  
ROUTE 6**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	5	48
PROJECT FILE NO. 610799		610799	

**SURVEY BASEPLAN**



**CERTIFICATION:**



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

PREPARED BY:

**GPI** Greenman-Pedersen, Inc.

Engineers, Architects, Planners, Construction Engineers & Inspectors

181 Ballardvale Street, Suite 202, Wilmington, MA 01887

Tel: (978) 570-2999 Fax: (978) 658-3044

http://www.gpinet.com

SCALE: 20 FEET TO THE INCH

FILE NAME: 610799\_SV (ROUTE 6).DWG

FIELD BOOK NO: WESTPORT-41499

DRAWN BY: FDR/JD CHECKED BY: JPB

FIELD CHIEF: MCS/BJB PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

**ROUTE 6**

IN THE TOWN OF

**WESTPORT**

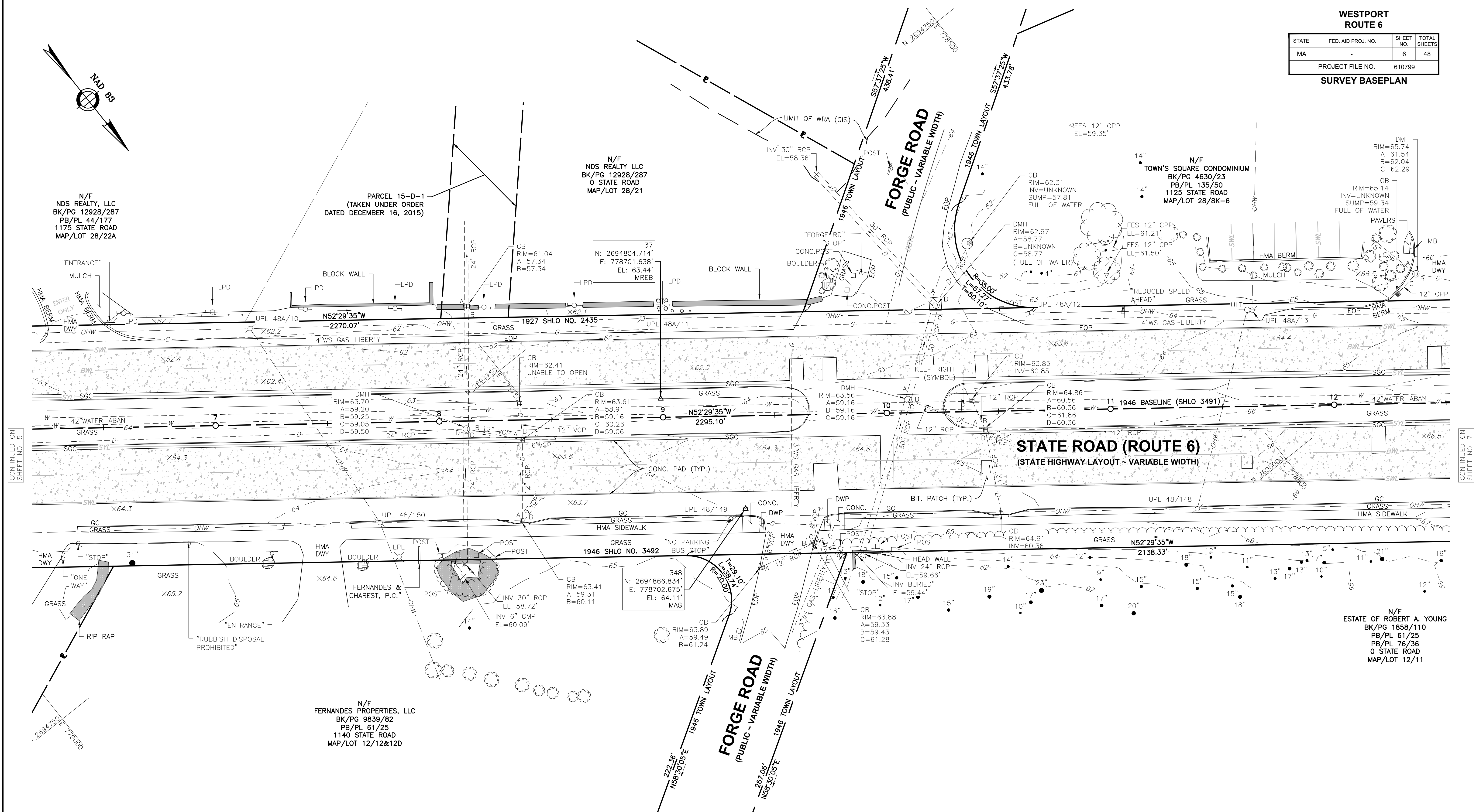
AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

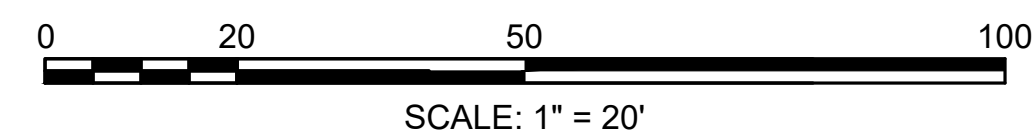
SHEET 5 OF 48

WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	6	48
PROJECT FILE NO. 610799			
SURVEY BASEPLAN			



CONTINUED ON  
SHEET NO. 5

CONTINUED ON  
SHEET NO. 7



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH	
FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

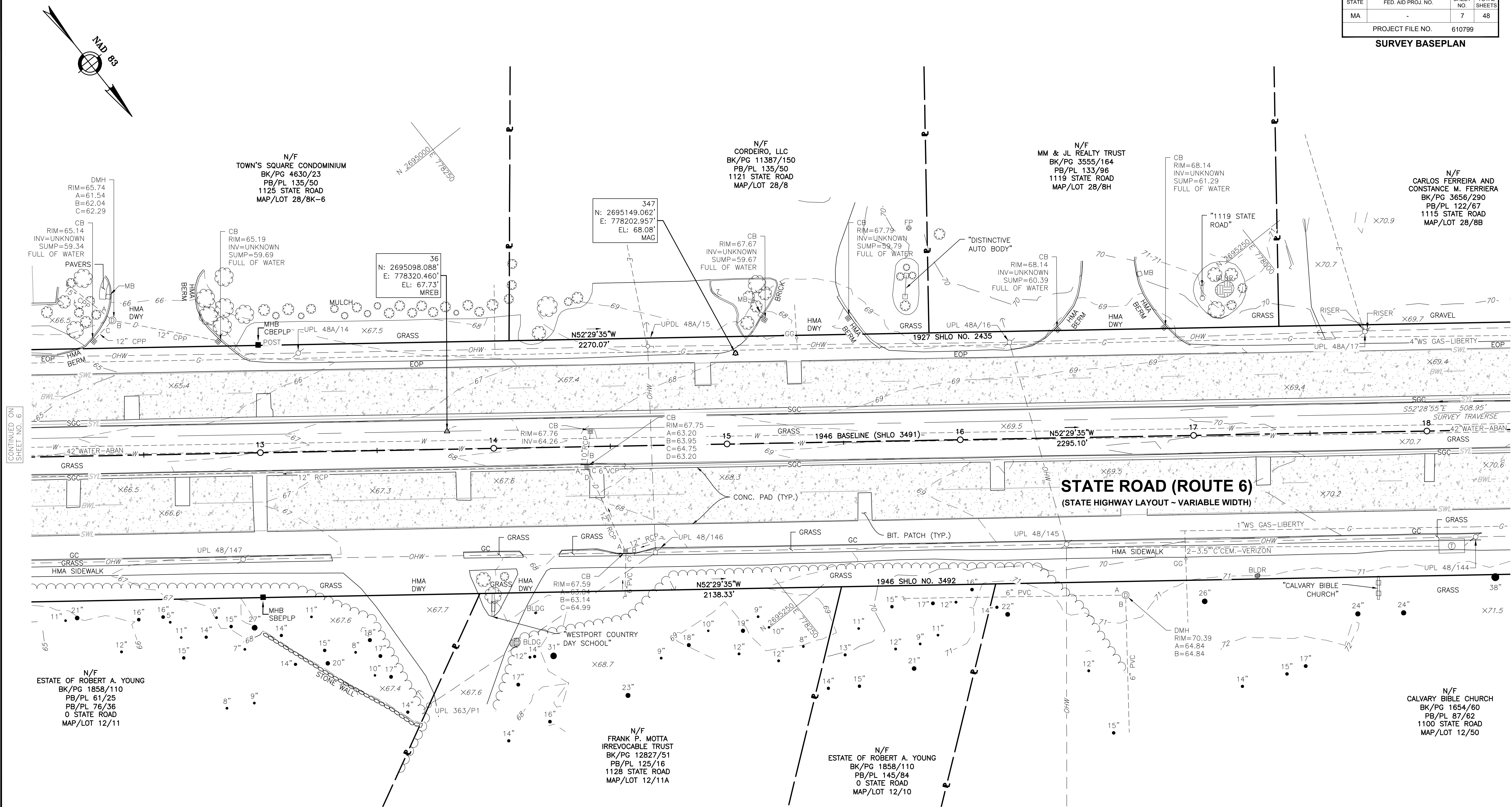
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF  
**ROUTE 6**  
IN THE TOWN OF  
**WESTPORT**  
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION  
DATE: JUNE 14, 2021  
SHEET 6 OF 48



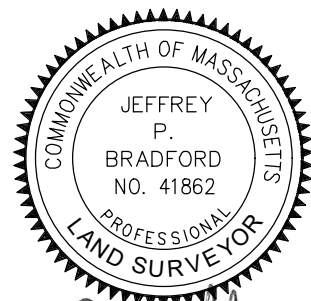
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	7	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK NO: WESTPORT-41499	
			DRAWN BY: FDR/JD	CHECKED BY: JPB
			FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 7 OF 48



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK NO: WESTPORT-41499	
			DRAWN BY: FD/RJD	
			CHECKED BY: JPB	
			FIELD CHIEF: MCS/BJB	
			PASS NO: P610799-P1	

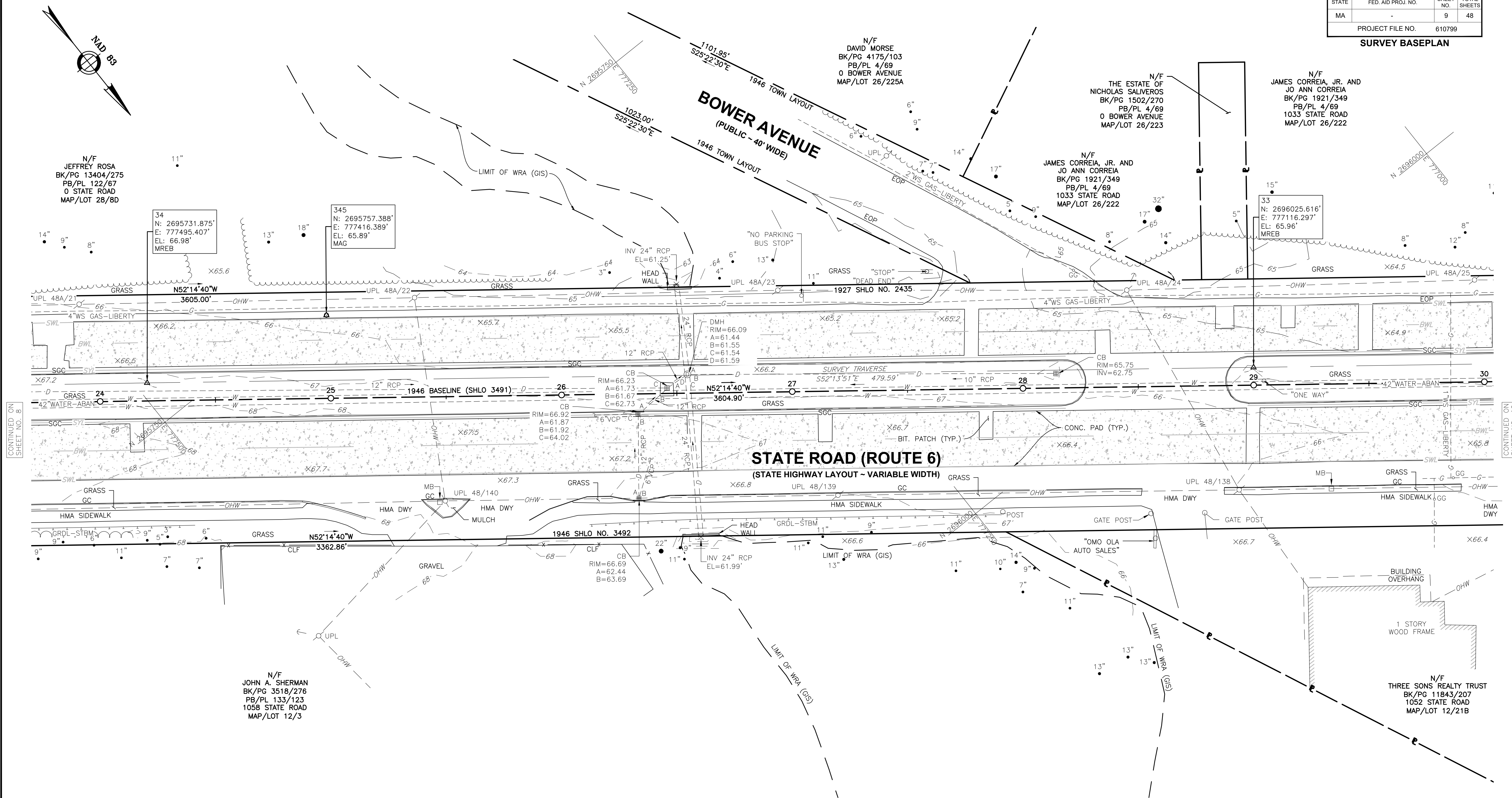
DATE: JUNE 14, 2021	SHEET 8 OF 48
---------------------	---------------



WESTPORT  
ROUTE 6

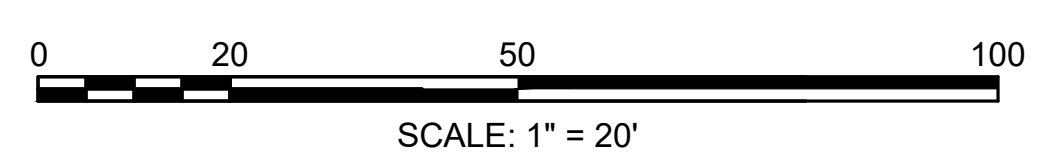
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	9	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN

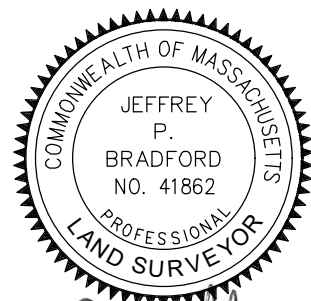


CONTINUED ON  
SHEET NO. 8

CONTINUED ON  
SHEET NO. 10



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



REVISIONS		
REV.	COMMENTS	DATE

**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

SCALE: 20 FEET TO THE INCH	
FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK NO: WESTPORT-41499	
DRAWN BY: FDR/JD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF  
  
ROUTE 6  
  
IN THE TOWN OF  
  
WESTPORT  
  
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

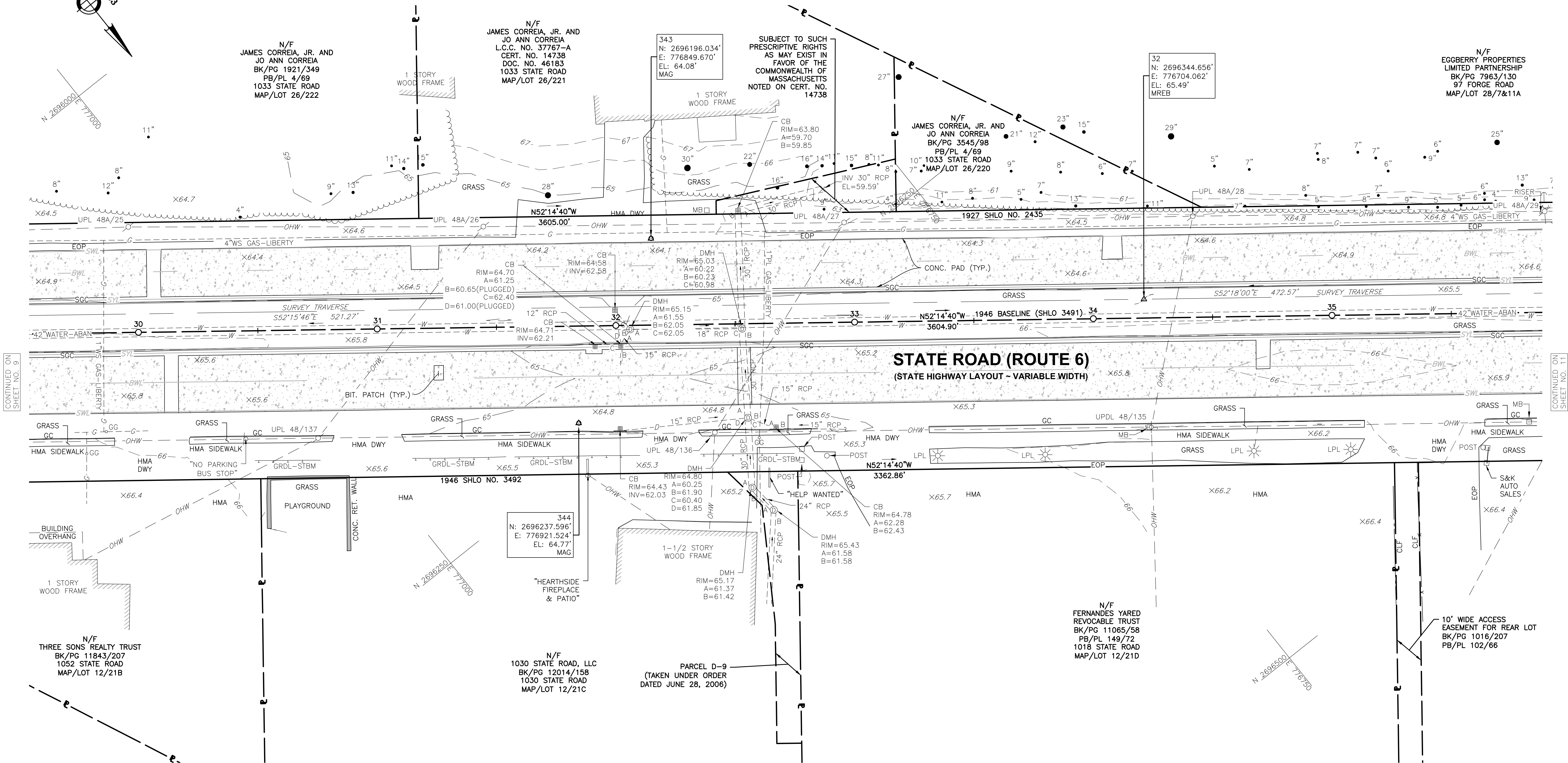
DATE: JUNE 14, 2021	SHEET 9 OF 48
---------------------	---------------

WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	10	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN

N/F  
EGGBERRY PROPERTIES  
LIMITED PARTNERSHIP  
BK/PG 7963/130  
97 FORGE ROAD  
MAP/LOT 28/7&11A



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH	
FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK NO: WESTPORT-41499	
DRAWN BY: FDR/JD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

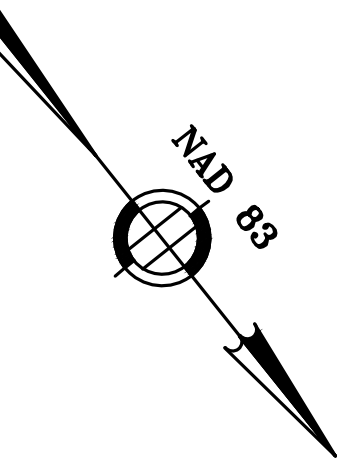
WESTPORT

AS ORDERED BY

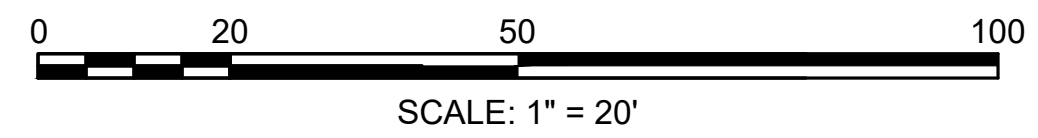
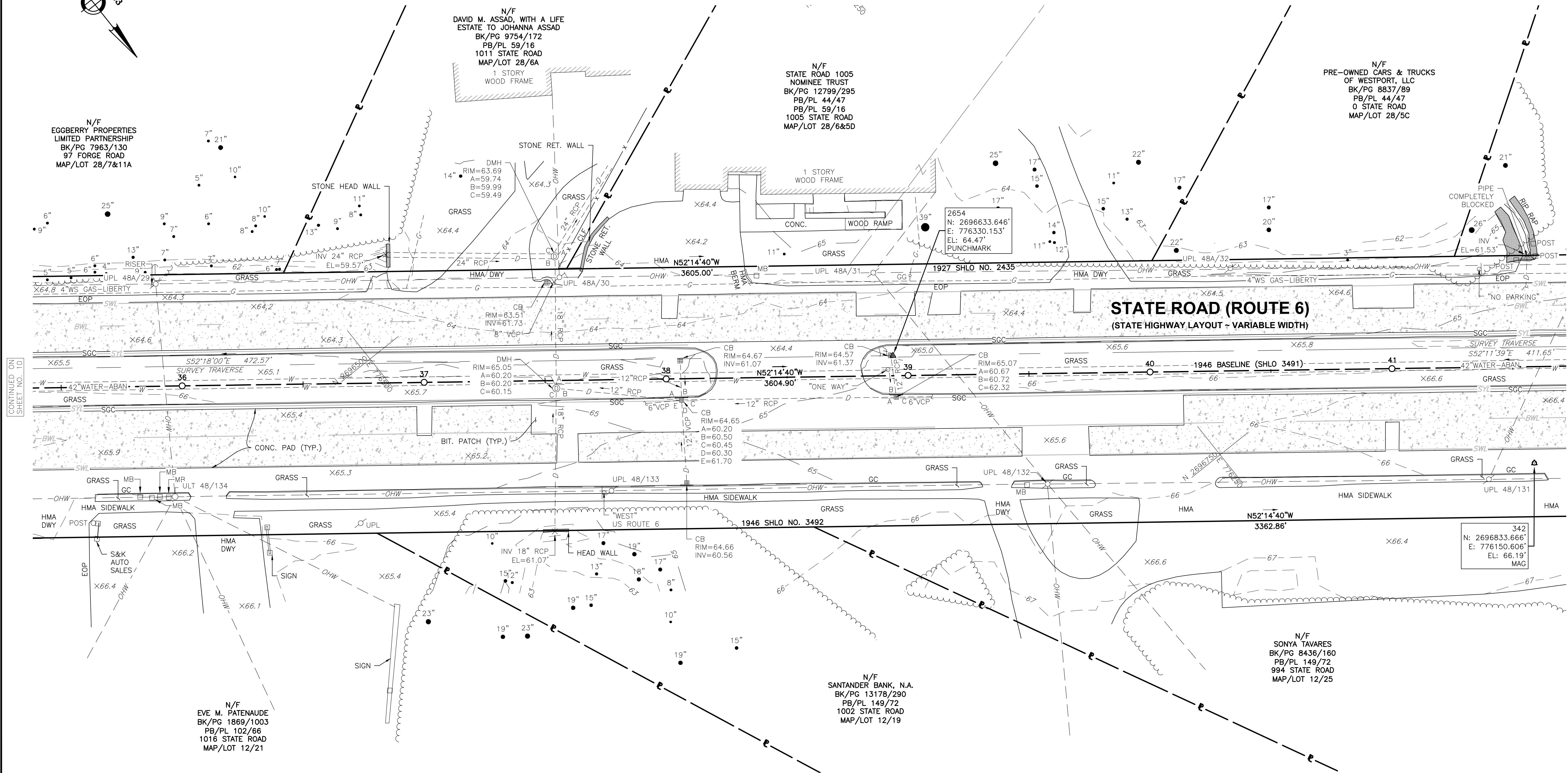
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 10 OF 48





WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	11	48
PROJECT FILE NO.		610799	
SURVEY BASEPLAN			



CERTIFICATION:

JEFFREY P. BRADFORD  
P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.

6/11/2021

**massDOT**  
Massachusetts Department of Transportation  
Highway Division

REVISIONS		
REV.	COMMENTS	DATE

**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

PREPARED BY:

SCALE: 20 FEET TO THE INCH	
FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

**ROUTE 6**

IN THE TOWN OF

**WESTPORT**

AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION

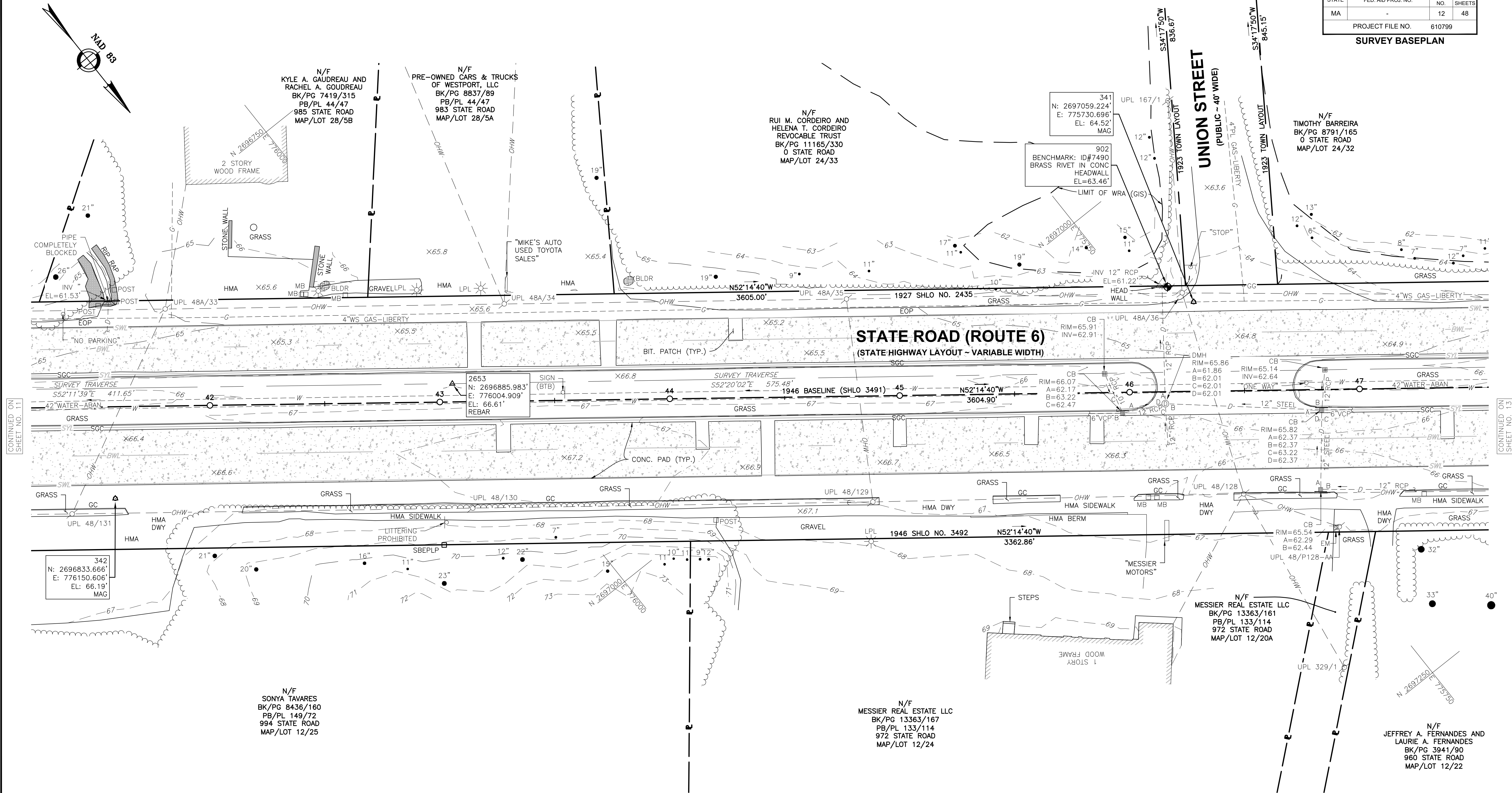
DATE:	JUNE 14, 2021	SHEET	11	OF	48
-------	---------------	-------	----	----	----

610799\_SV (ROUTE 6).DWG Plotted on 14-Jun-2021 4:57 PM

WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	12	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CONTINUED ON  
SHEET NO. 11

CONTINUED ON  
SHEET NO. 13



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



REVISIONS		
REV.	COMMENTS	DATE

**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

PREPARED BY:

Greenman-Pedersen, Inc.

Engineers, Architects, Planners, Construction Engineers & Inspectors

181 Ballardvale Street, Suite 202, Wilmington, MA 01887

Tel: (978) 570-2999

Fax: (978) 658-3044

http://www.gpinet.com

SCALE: 20 FEET TO THE INCH

FILE NAME: 610799\_SV (ROUTE 6).DWG

FIELD BOOK NO: WESTPORT-41499

DRAWN BY: FDR/JD

CHECKED BY: JPB

FIELD CHIEF: MCS/BJB

PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

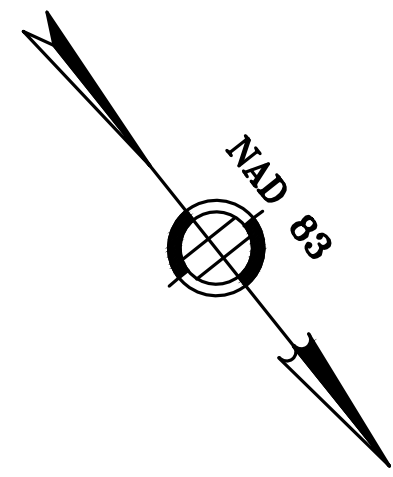
AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

SHEET 12 OF 48





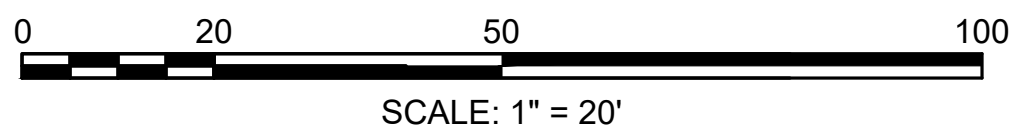
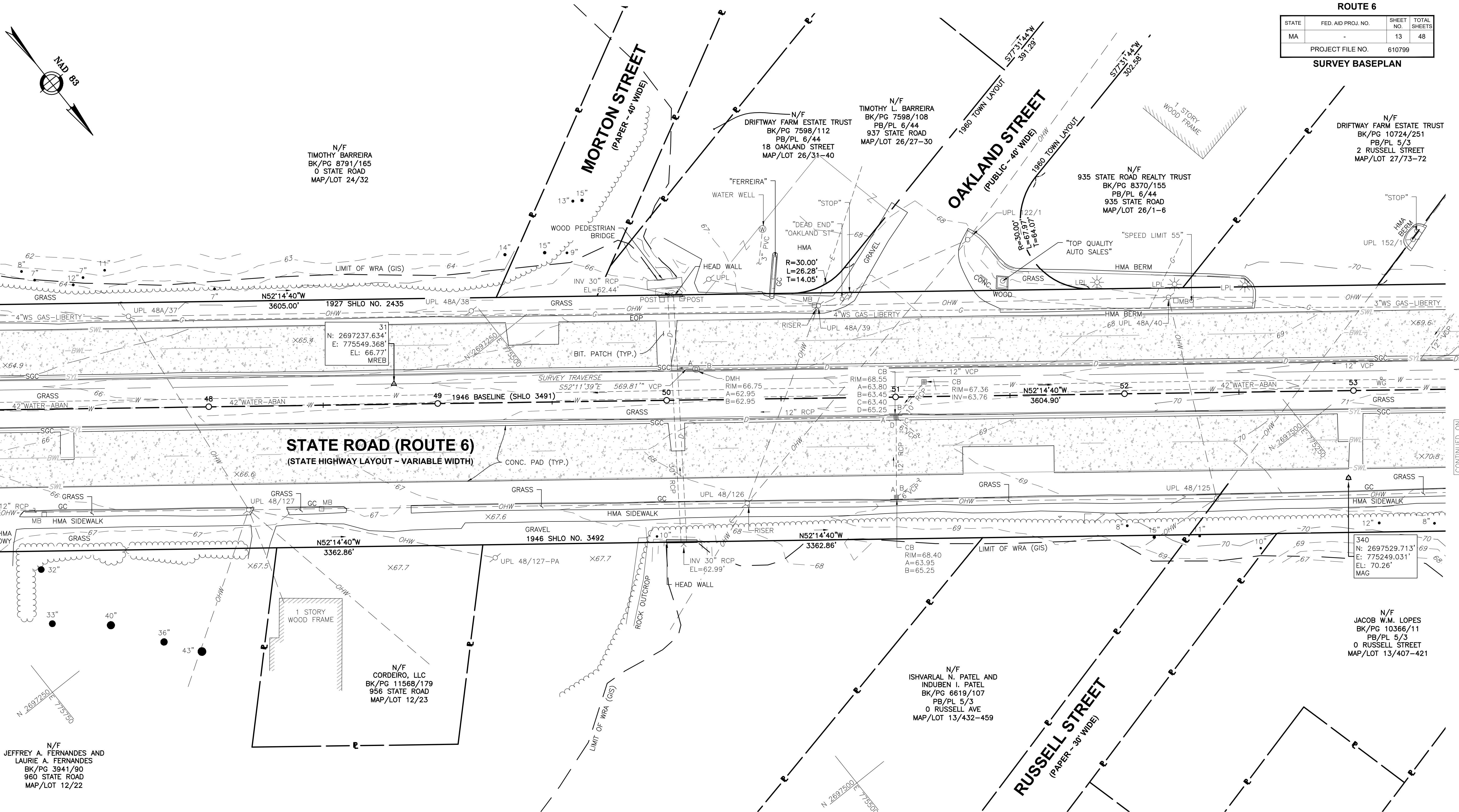
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	13	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN

CONTINUED ON  
SHEET NO. 12

CONTINUED ON  
SHEET NO. 14



CERTIFICATION:



*Jeffrey P. Bradford* 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

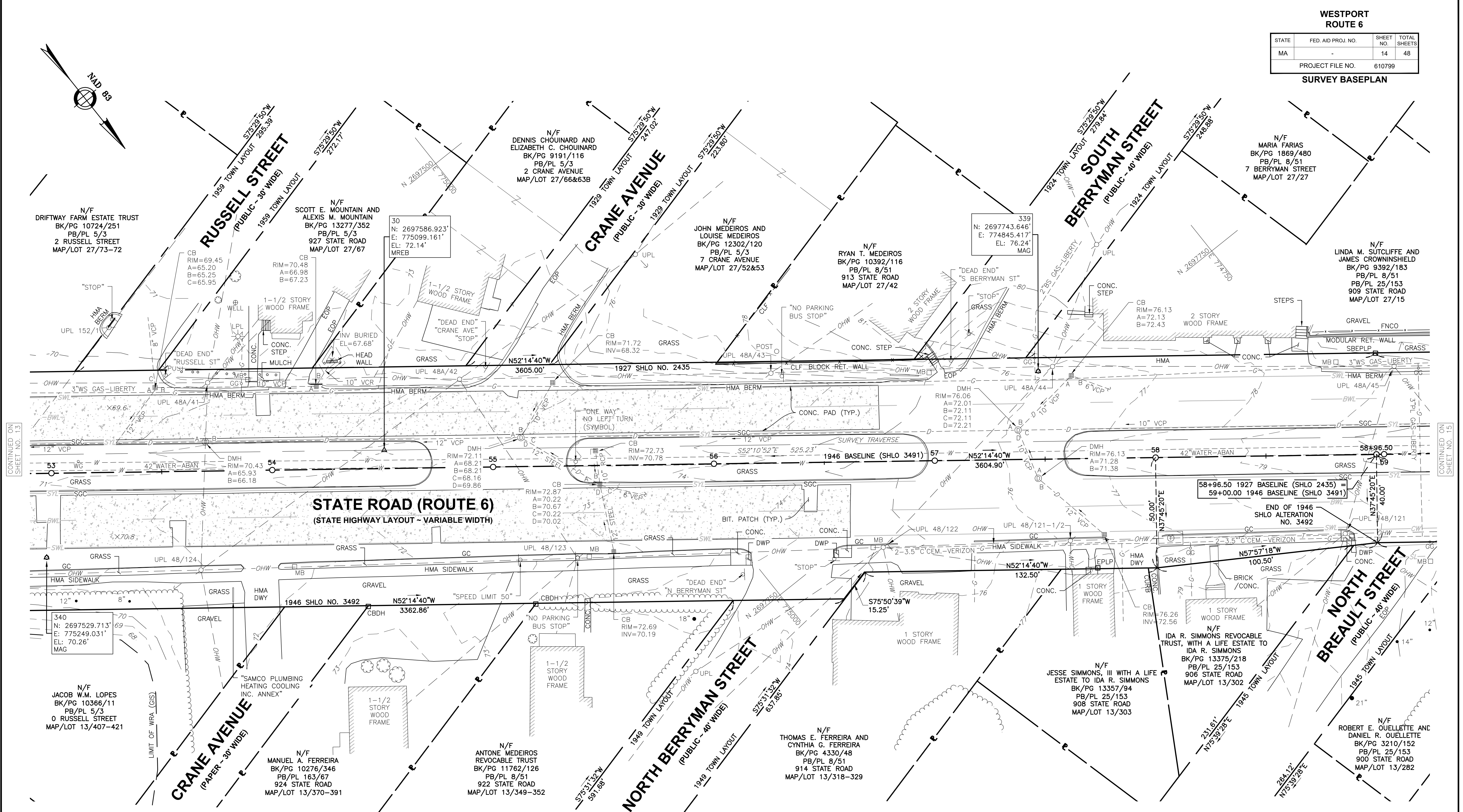
SCALE: 20 FEET TO THE INCH	
FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK NO: WESTPORT-41499	
DRAWN BY: FDR/JD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF  
  
ROUTE 6  
  
IN THE TOWN OF  
  
WESTPORT  
  
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION  
  
DATE: JUNE 14, 2021  
SHEET 13 OF 48

WESTPORT  
ROUTE 6

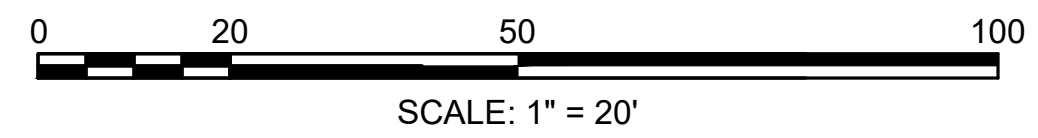
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	14	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CONTINUED ON  
SHEET NO. 13

CONTINUED ON  
SHEET NO. 15



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK NO: WESTPORT-41499	
			DRAWN BY: FDR/JD	CHECKED BY: JPB
			FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY

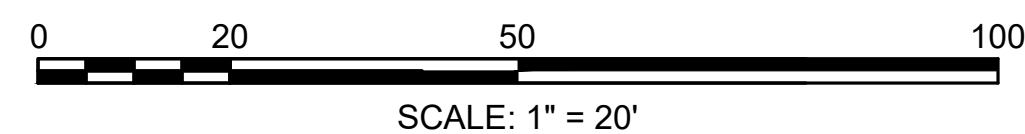
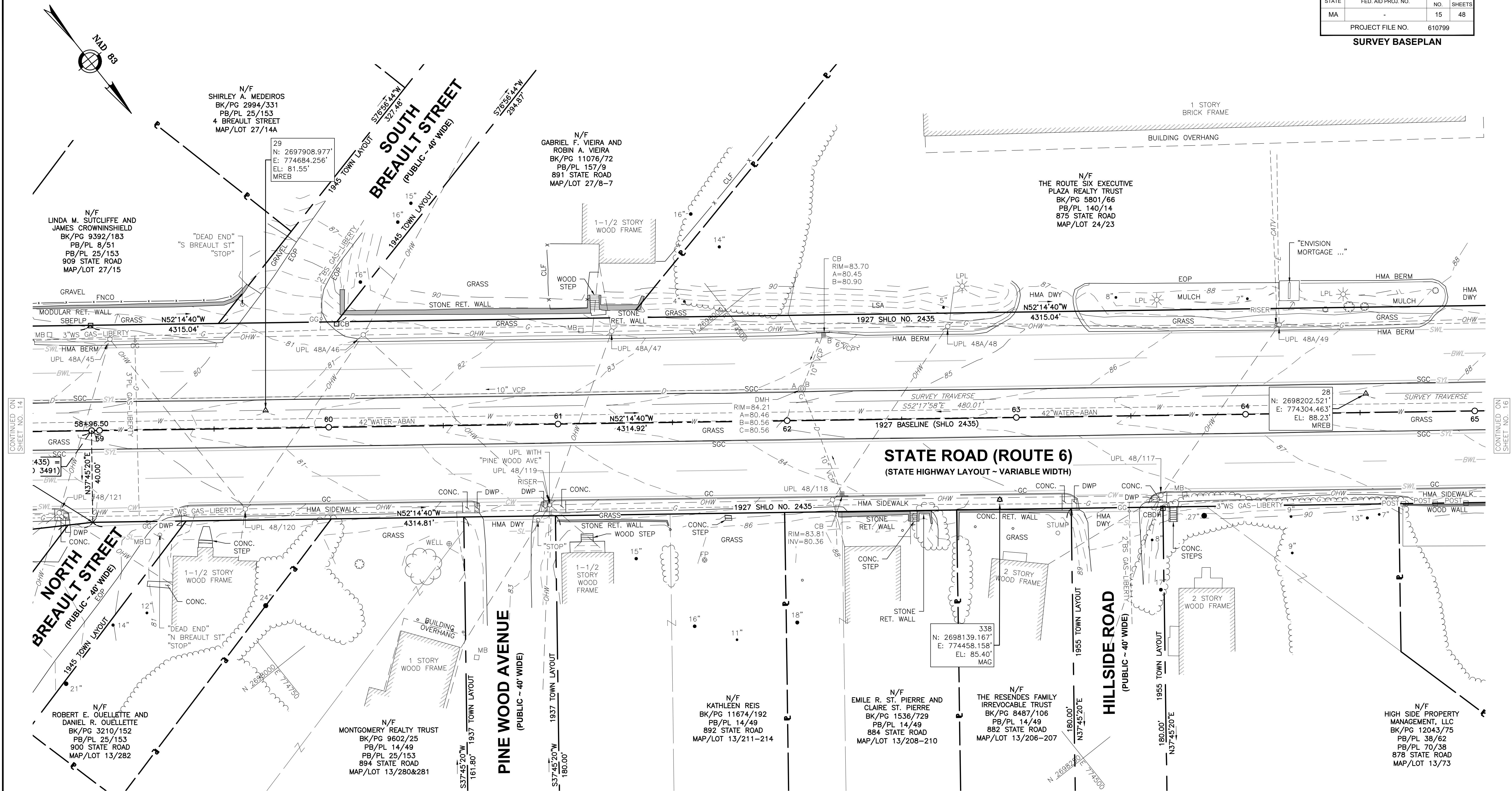
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION



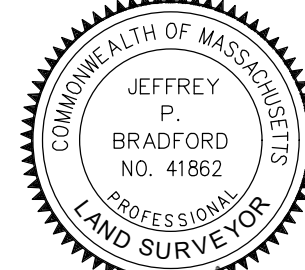
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	15	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



REVISIONS		
REV.	COMMENTS	DATE

PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

SCALE: 20 FEET TO THE INCH

FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK NO: WESTPORT-41499	
DRAWN BY: FD/RJD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY

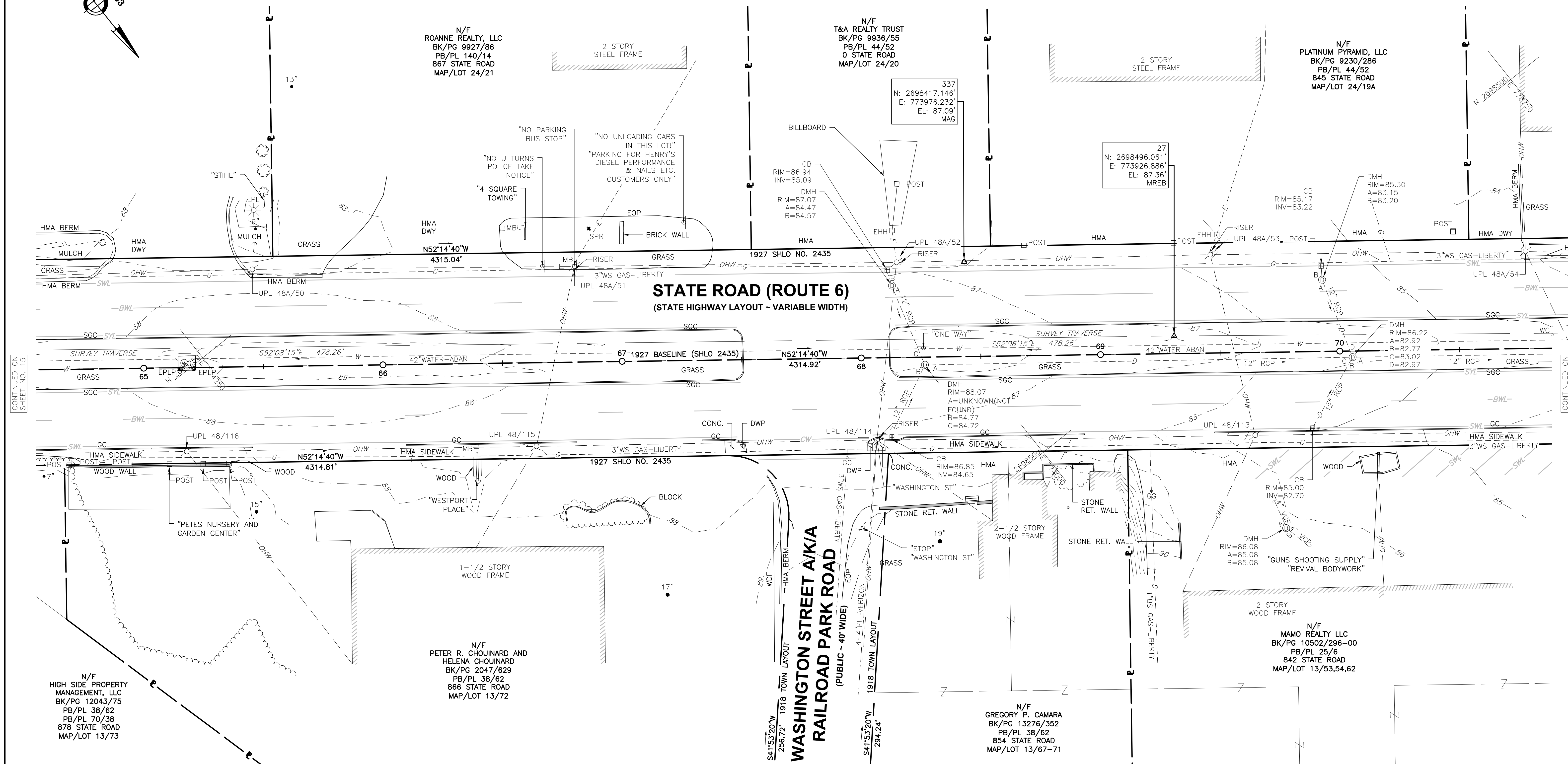
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

SHEET 15 OF 48

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	16	4
PROJECT FILE NO.		610799	

## SURVEY BASEPLAN

CONTINUED ON  
SHEET NO. 15CONTINUED ON  
SHEET NO. 17

S10700 CV/BOITE 6) DW/C Plotted on 14 Jun 2024 4:59 PM

CERTIFICATION:



JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** PREPARED BY:  
Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors

**181 Ballardvale Street, Suite 202, Wilmington, MA 01887**  
Tel: (978) 570-2999 Fax: (978) 658-3044  
<http://www.gpinet.com>

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK. NO: WESTPORT-41499	
			DRAWN BY: FD/RJD	CHECKED BY: JPB
			FIELD CHIEF: MCS/RJB	PARS. NO: P610799.P1

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

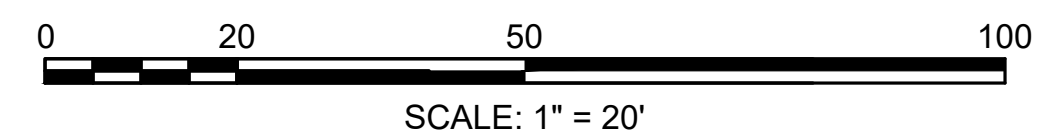
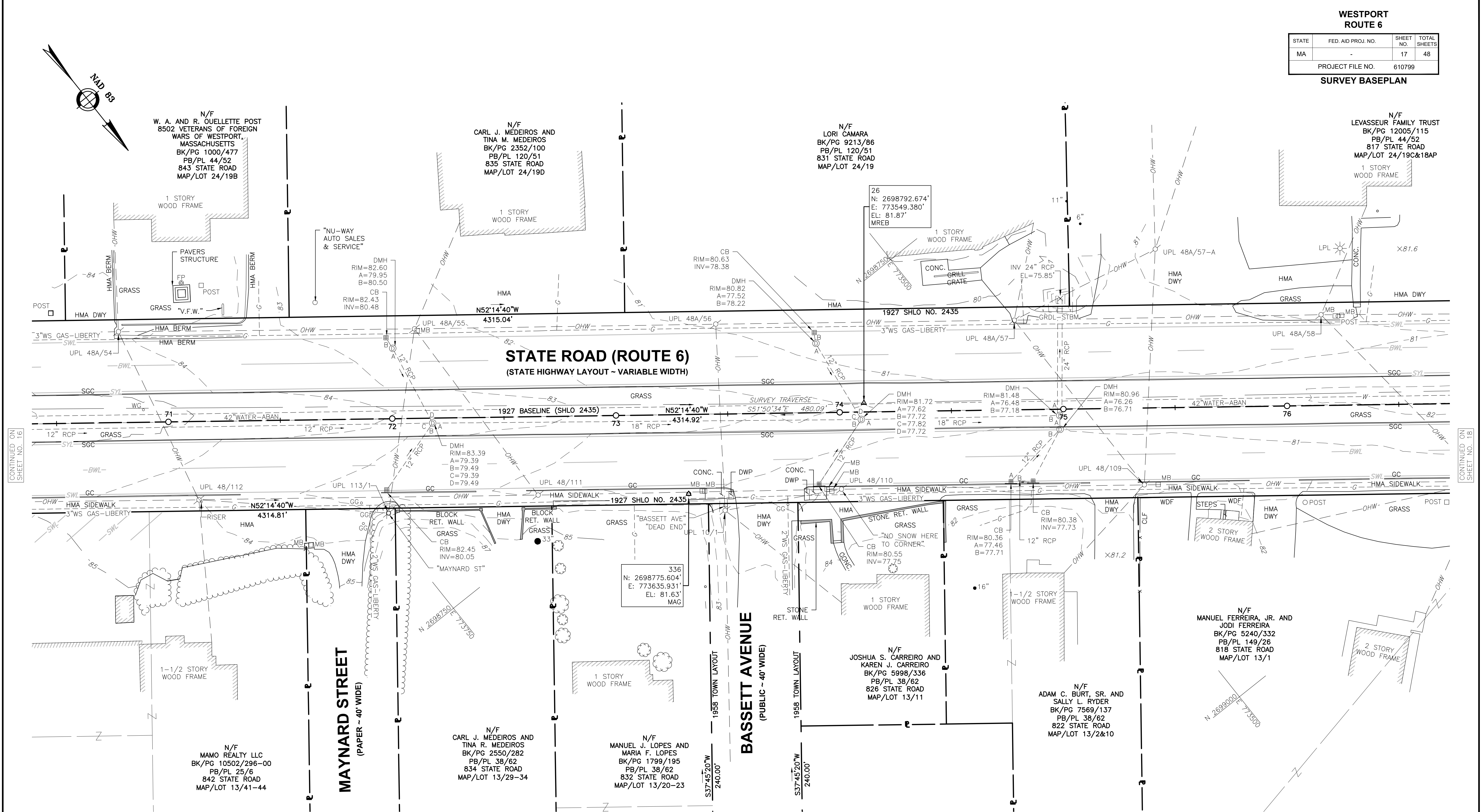
DATE: JUNE 14, 2021	SHEET 16 OF 48
---------------------	----------------



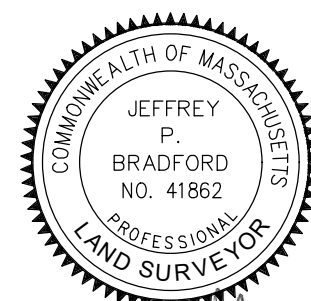
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	17	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



REVISIONS		
REV.	COMMENTS	DATE

PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

SCALE: 20 FEET TO THE INCH

FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK. NO: WESTPORT-41499	
DRAWN BY: FD/RJD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

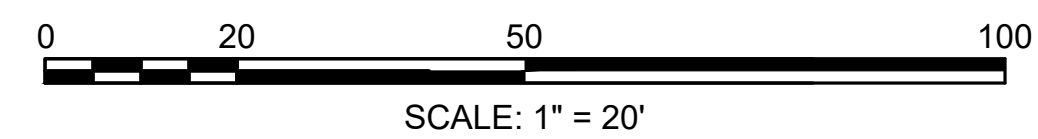
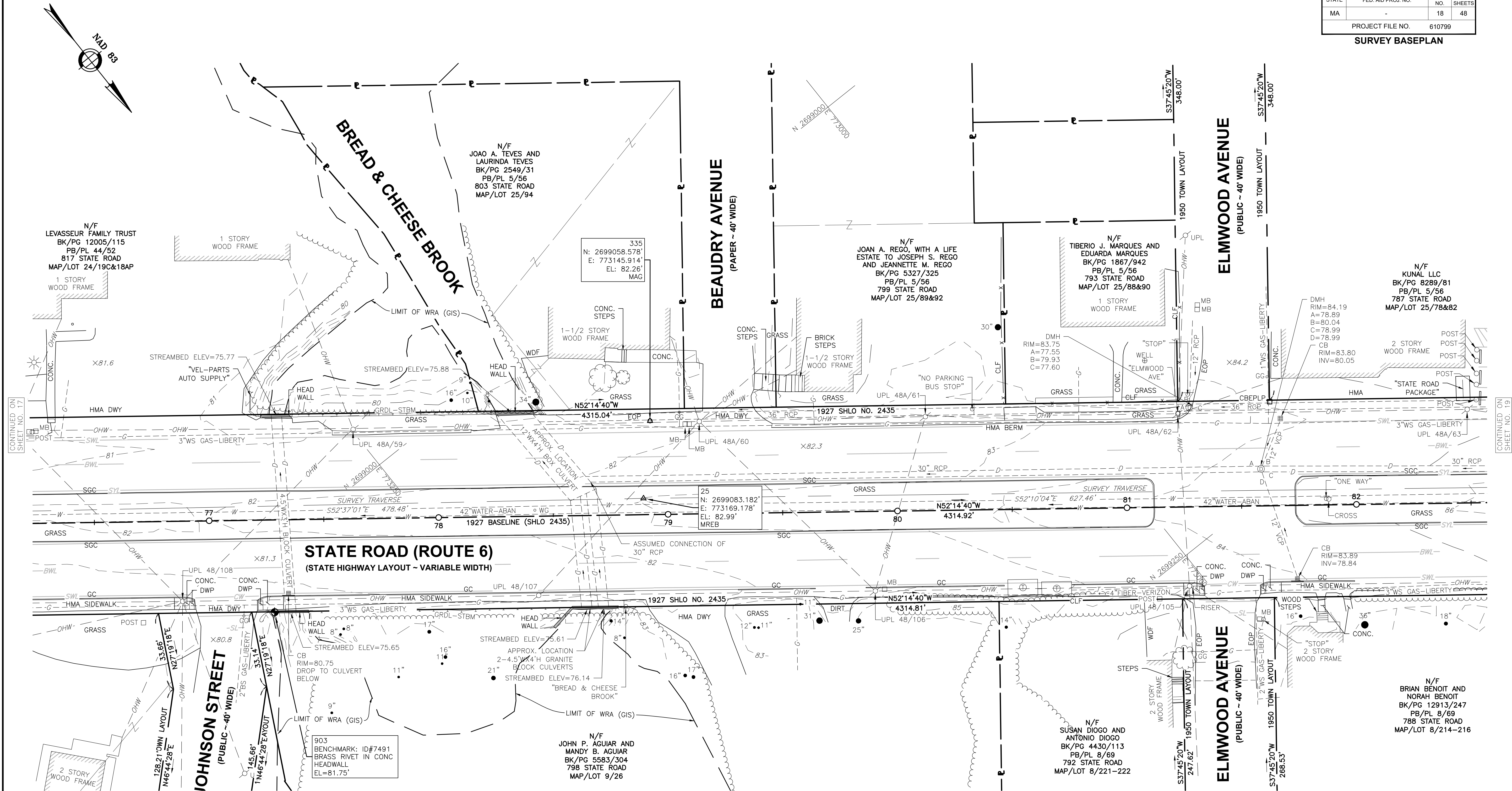
WESTPORT

AS ORDERED BY

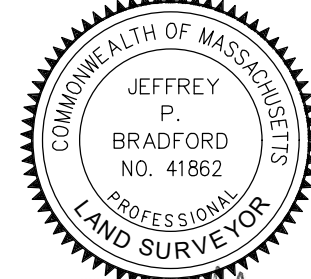
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 17 OF 48

WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	18	48
PROJECT FILE NO.		610799	
SURVEY BASEPLAN			



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



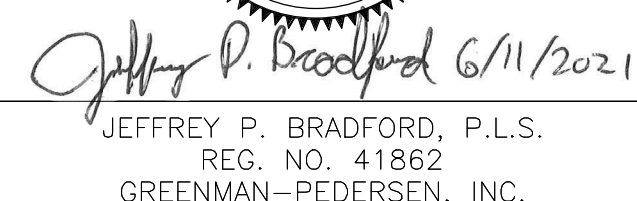
PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK NO.: WESTPORT-41499	
			DRAWN BY: FDR/JD	CHECKED BY: JPB
			FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF  
**ROUTE 6**  
IN THE TOWN OF  
**WESTPORT**  
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 18 OF 48





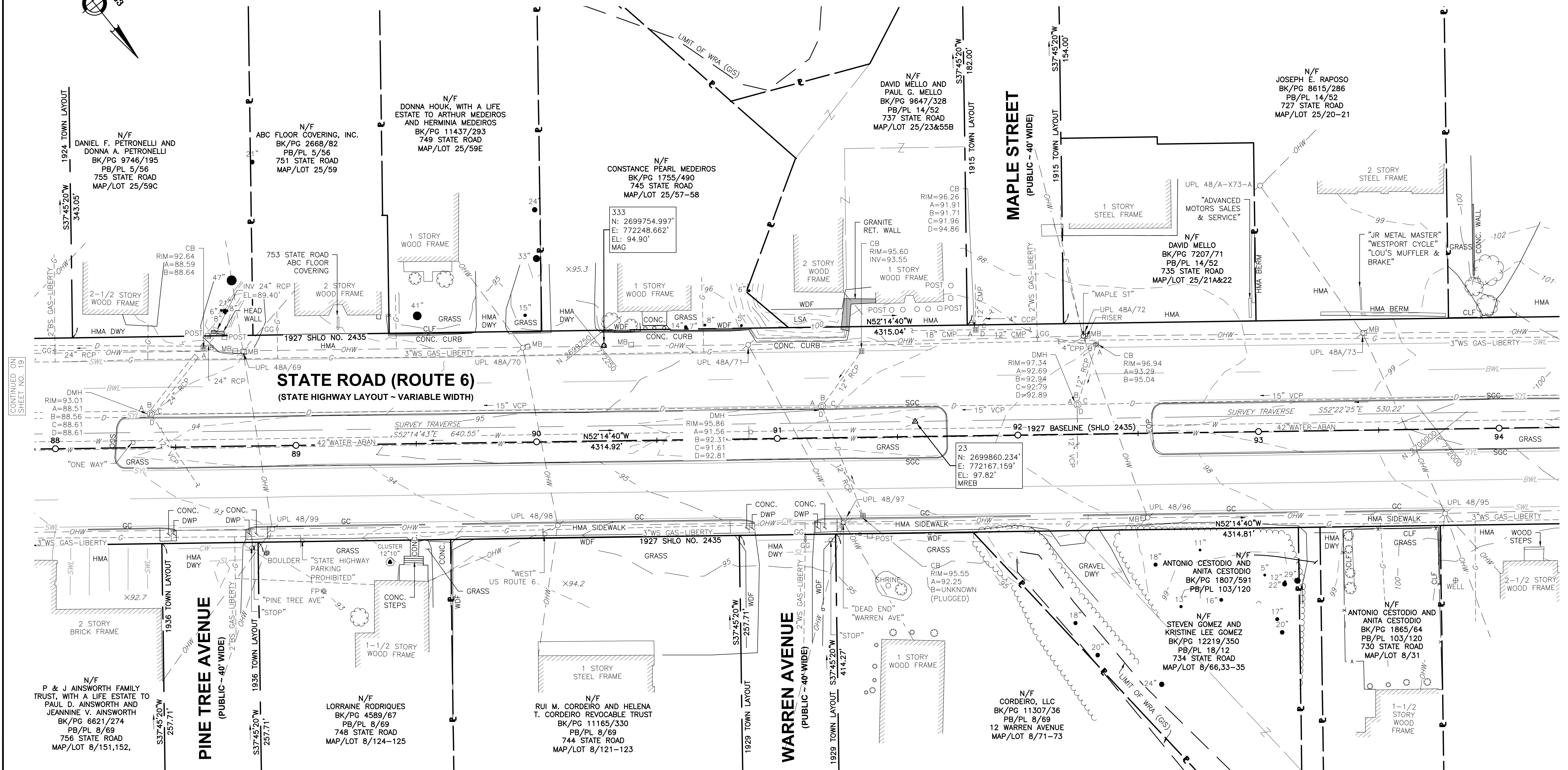
SCALE: 20 FEET TO THE INCH	
FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK. NO: WESTPORT-41499	
DRAWN BY: FD/RJD	CHECKED BY: JPB
FIELD CHIEF: MCS/RJB	PARS. NO: P610799-P1

SHEET 19 OF 48

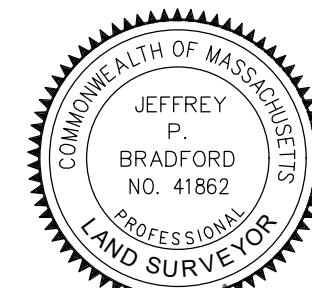
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	20	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH	
FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 20 OF 48



WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	21	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN

N/F  
TIGER LILY LANE  
ASSOCIATES, LLC  
BK/PG 12504/148  
PB/PL 38/40  
699 STATE ROAD  
MAP/LOT 24/3

N/F  
GREGORY R. CHAUNT AND  
MELISSA M. CHAUNT  
BK/PG 11816/243  
PB/PL 38/40  
705 STATE ROAD  
MAP/LOT 24/71

N/F  
ROSEMARY BLANCHETTE AND  
LAURIE ANN LEBEAU, WITH A LIFE  
ESTATE IN ANTOINE REZENDES,  
JR. AND IRENE J. REZENDES  
BK/PG 10790/326  
PB/PL 41/15  
713 STATE ROAD  
MAP/LOT 25/11

N/F  
MARK D. PIETRZYK  
L.C.C. NO. 22013-A  
CERT. NO. 17349  
DOC. NO. 65337  
719 STATE ROAD  
MAP/LOT 25/15

N/F  
JOSE M. MATOS  
BK/PG 8107/2  
PB/PL  
725 STATE ROAD  
MAP/LOT 25/16-19

PLEASANT STREET  
(PUBLIC - 40' WIDE)

STATE ROAD (ROUTE 6)  
(STATE HIGHWAY LAYOUT - VARIABLE WIDTH)

1927 SHLO NO. 2435

1927 BASELINE (SHLO 2435)

N/F  
712-714, LLC  
BK/PG 10282/347  
PB/PL 18/12  
712-714 STATE ROAD  
MAP/LOT 8/17-21

N/F  
ROBERT J. OUELLETTE AND  
MARIE R. OUELLETTE  
BK/PG 9271/137  
PB/PL 18/12  
706 STATE ROAD  
MAP/LOT 8/12-16

N/F  
EDWARD P. LECLAIR AND  
SUZANNE OLIVEIRA  
BK/PG 2138/331  
PB/PL 18/12  
702 STATE ROAD  
MAP/LOT 8/11

N/F  
STEVEN ABRANTES, JR. WITH A LIFE  
ESTATE TO JUANITA ABRANTES  
BK/PG 9491/199  
PB/PL 18/12  
692 STATE ROAD  
MAP/LOT 8/1-7

N/F  
PERRY REALTY LLC  
BK/PG 8820/231  
PB/PL 18/12  
718-726 STATE ROAD  
MAP/LOT 8/22-30

"WESTPORT TIRE CENTER  
FRONT END ALIGNMENT"

"ACDELCO ROGERS  
AUTOMOTIVE"

"NO PARKING"

"LECLAIR'S  
AUTO SALES"

332  
N: 2700076.092'  
E: 771958.444'  
EL: 100.62'  
MAG

22  
N: 2700183.941'  
E: 771747.216'  
EL: 104.90'  
MREB

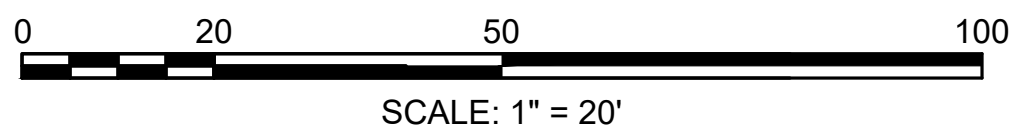
331  
N: 2700317.570'  
E: 771521.096'  
EL: 108.47'  
MAG

"JOSE M. MATOS  
ADVANCED FINANCIAL  
GROUP"

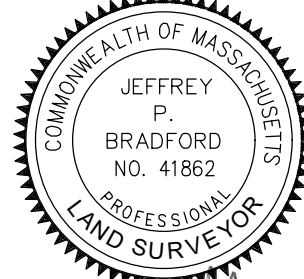
"LICKETY  
SPLITS"

"CAUTION  
CHILDREN"

"SAMCO  
PLUMBING &  
HEATING"



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK NO: WESTPORT-41499	
			DRAWN BY: FDR/JD	CHECKED BY: JPB
			FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY

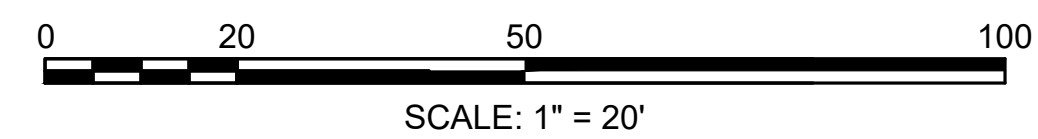
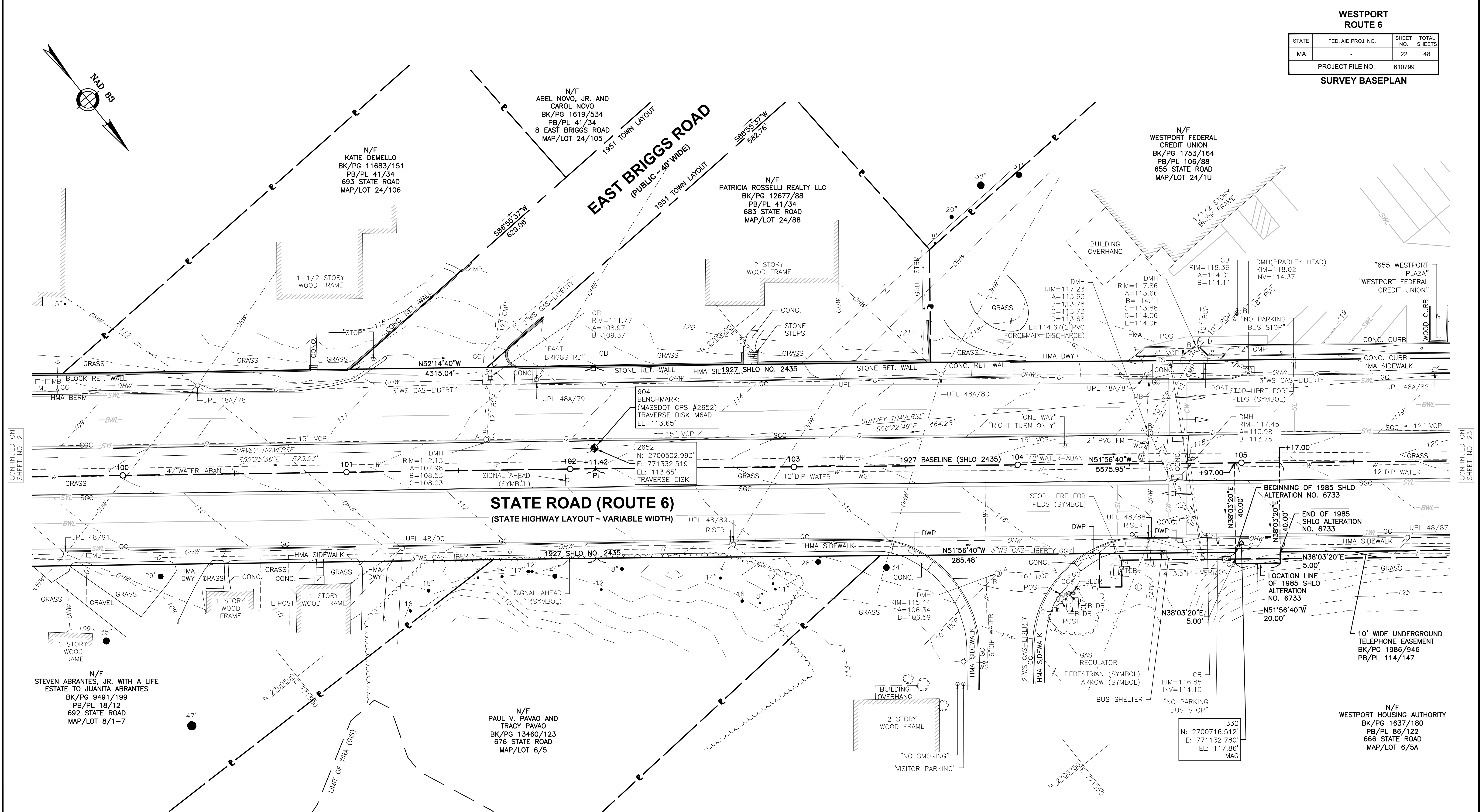
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 21 OF 48

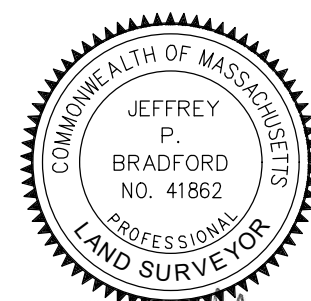
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	22	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH	
FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

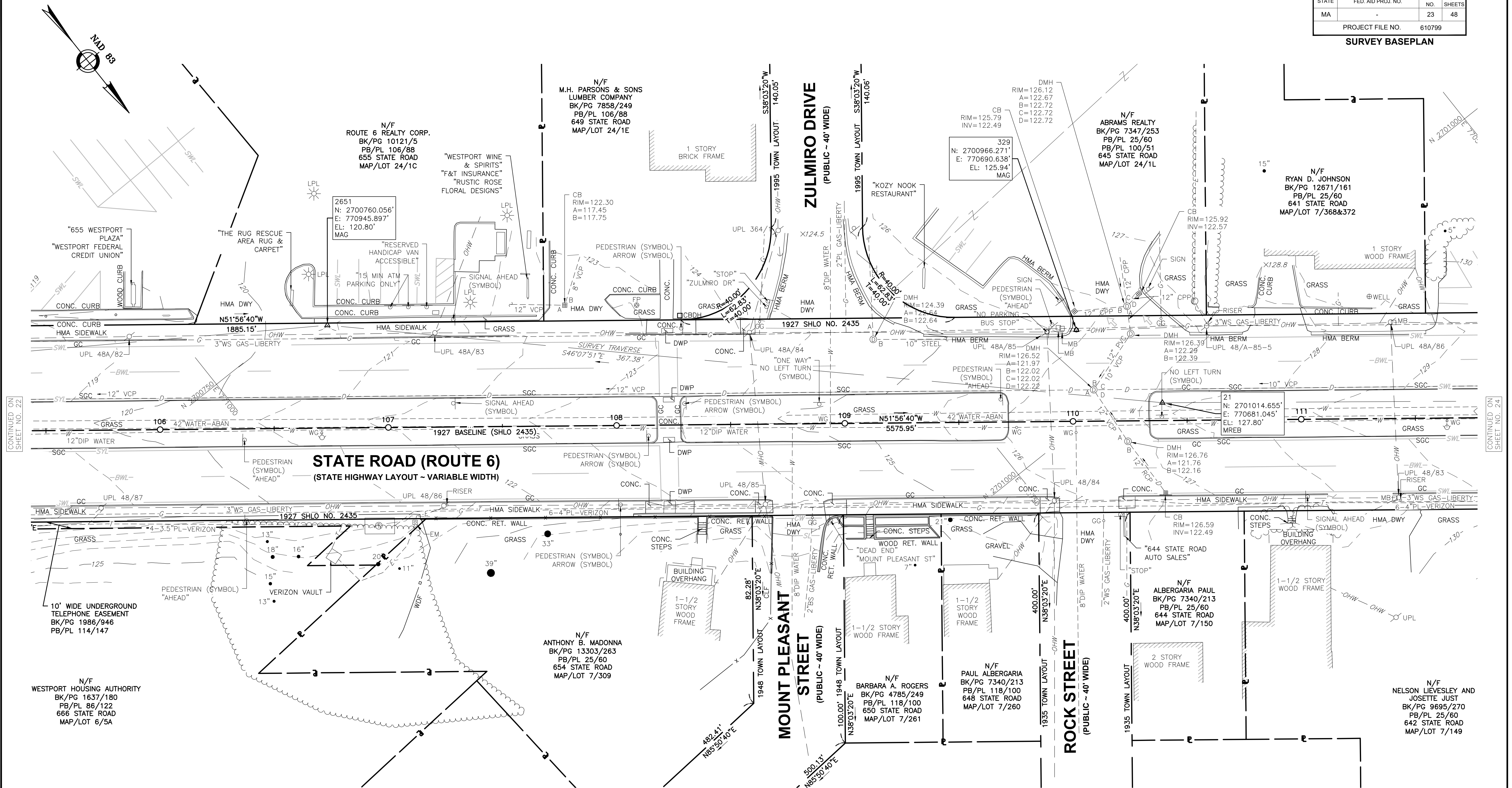
DATE:	JUNE 14, 2021	SHEET	22	OF	48
-------	---------------	-------	----	----	----



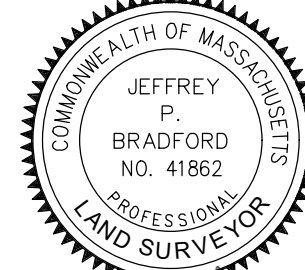
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	23	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH	
FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

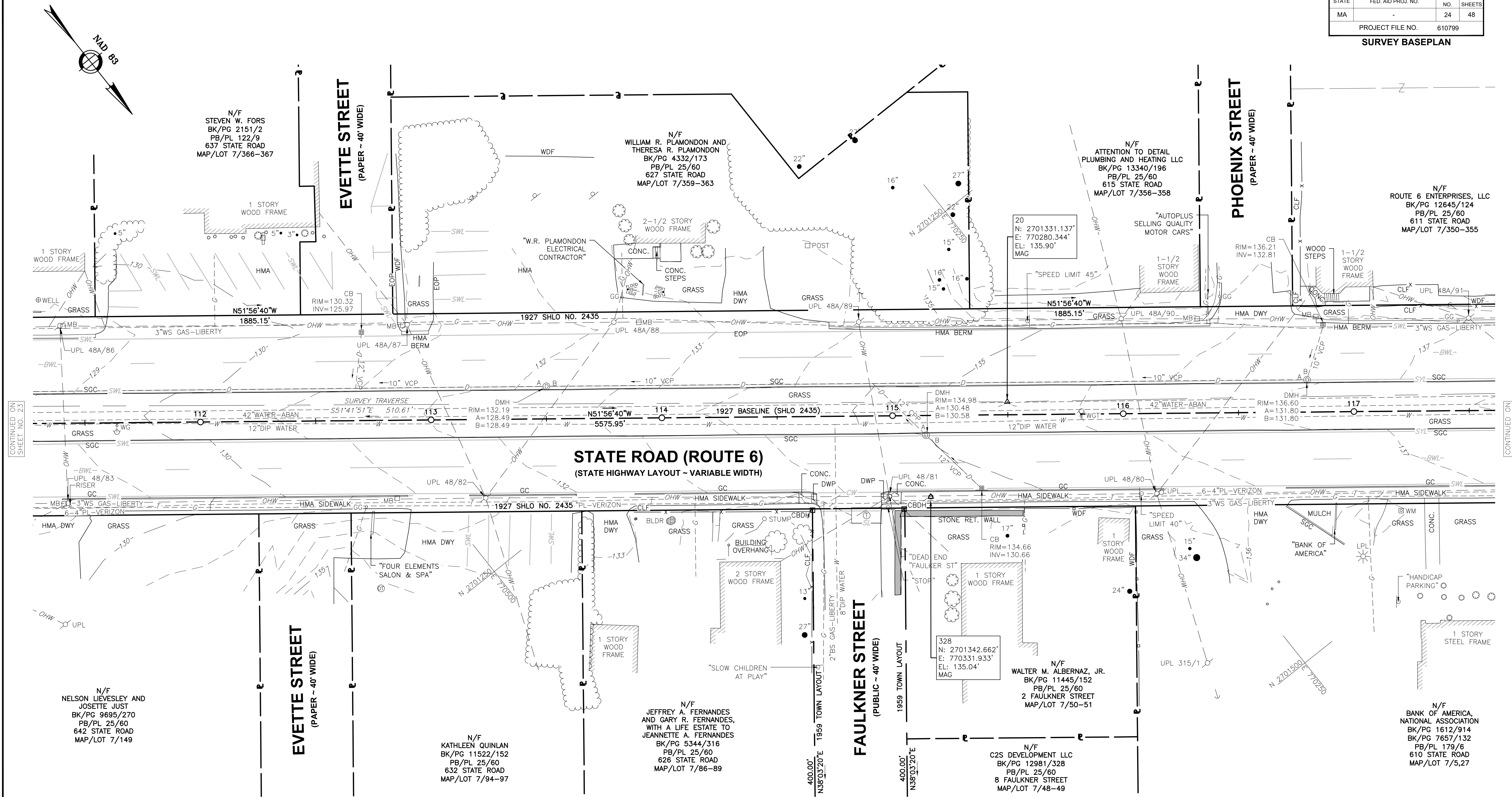
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 23 OF 48

WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	24	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

PREPARED BY:

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK NO: WESTPORT-41499	
			DRAWN BY: FDR/JD CHECKED BY: JPB	
			FIELD CHIEF: MCS/BJB PARS. NO: P610799-P11	

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

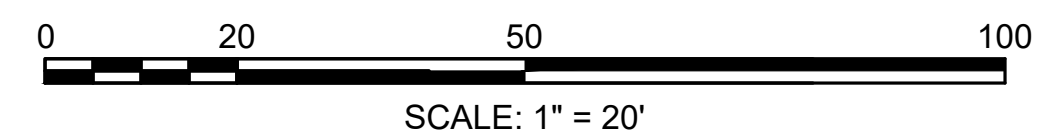
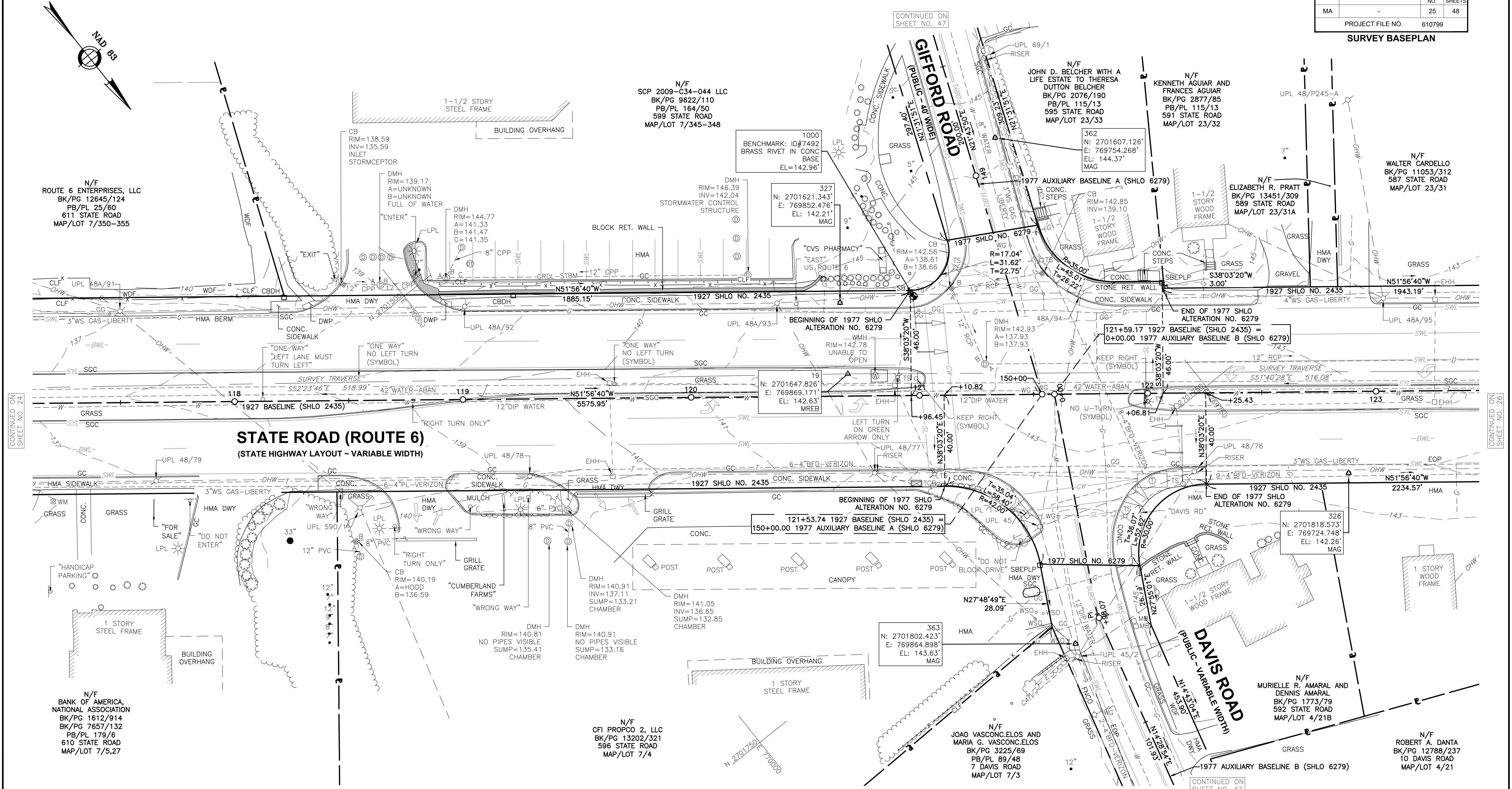
DATE: JUNE 14, 2021 SHEET 24 OF 48



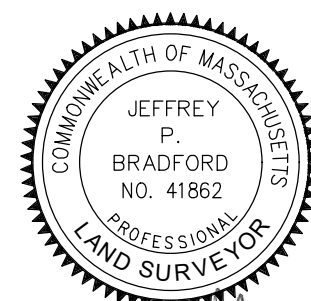
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	25	48
PROJECT FILE NO. 610799		SURVEY BASEPLAN	

SURVEY BASEPLAN



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH	
FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

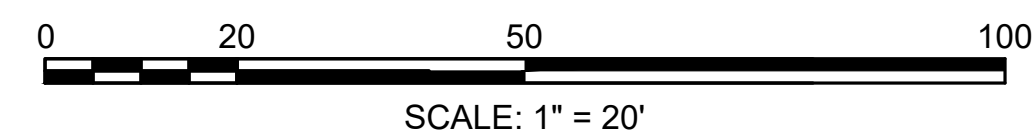
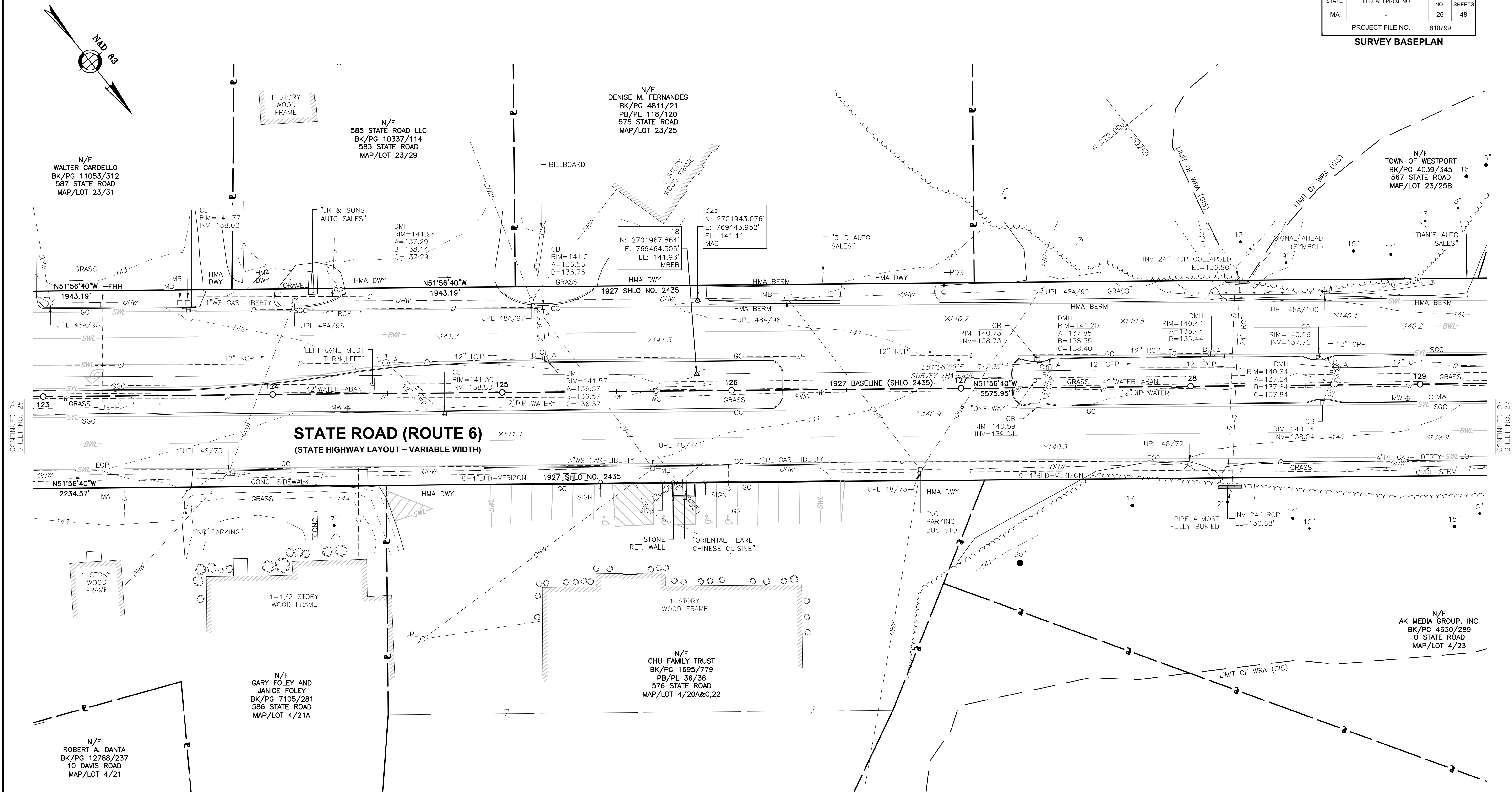
IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 25 OF 48

WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	26	48
PROJECT FILE NO.		610799	
SURVEY BASEPLAN			



CERTIFICATION:



*Jeffrey P. Bradford 6/11/2021*  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH	
FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK NO: WESTPORT-41499	
DRAWN BY: FDR/JD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

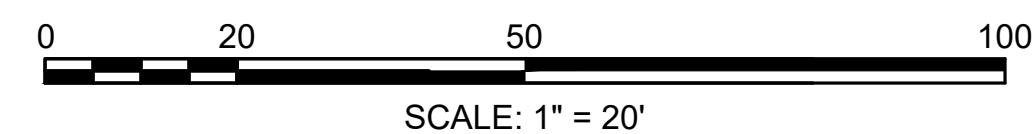
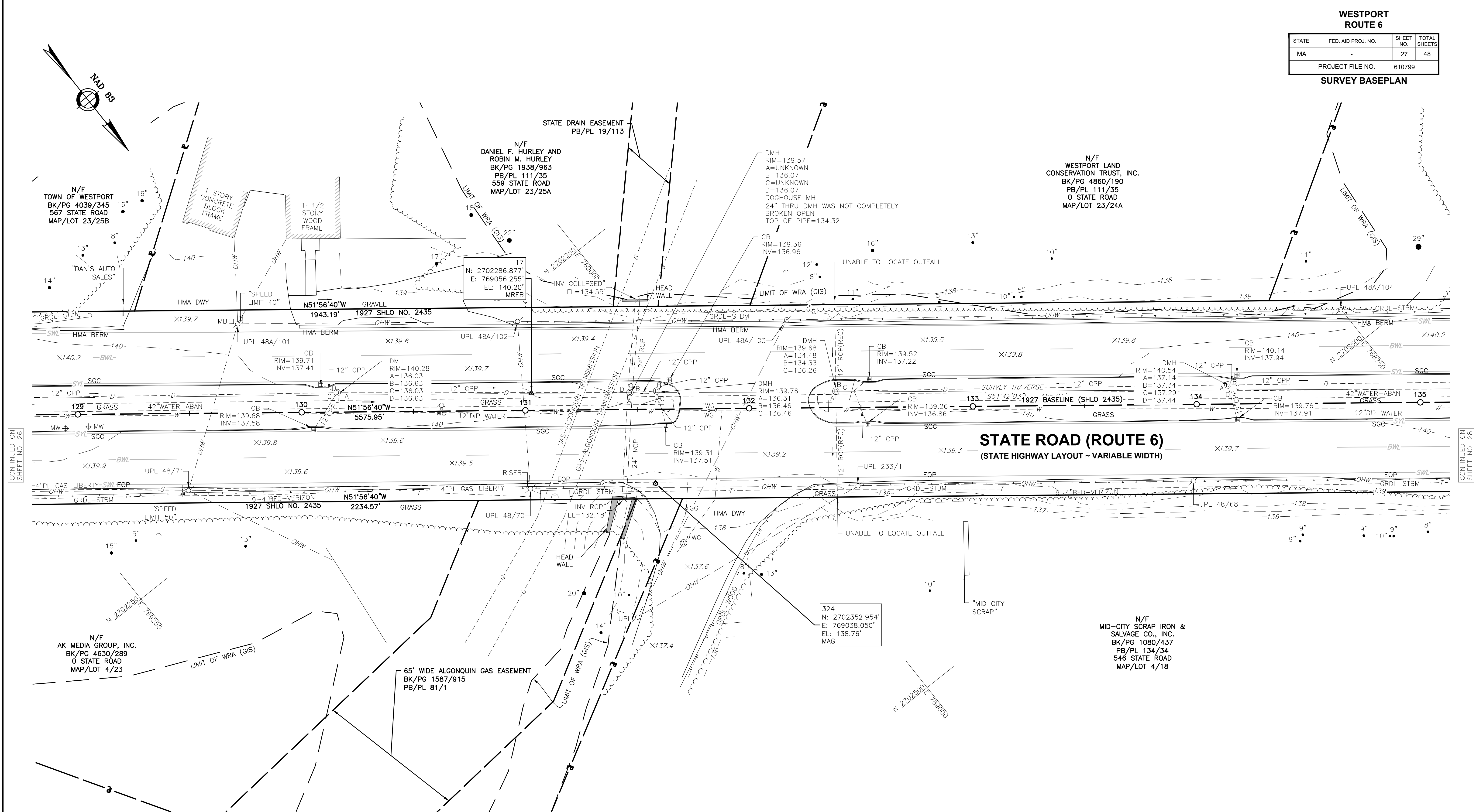
WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

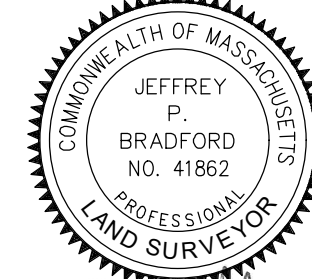
DATE: JUNE 14, 2021 SHEET 26 OF 48



WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	27	48
PROJECT FILE NO.		610799	
SURVEY BASEPLAN			



CERTIFICATION:



*Jeffrey P. Bradford* 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



REVISIONS		
REV.	COMMENTS	DATE

**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

SCALE: 20 FEET TO THE INCH

FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK NO: WESTPORT-41499	
DRAWN BY: FD/RJD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

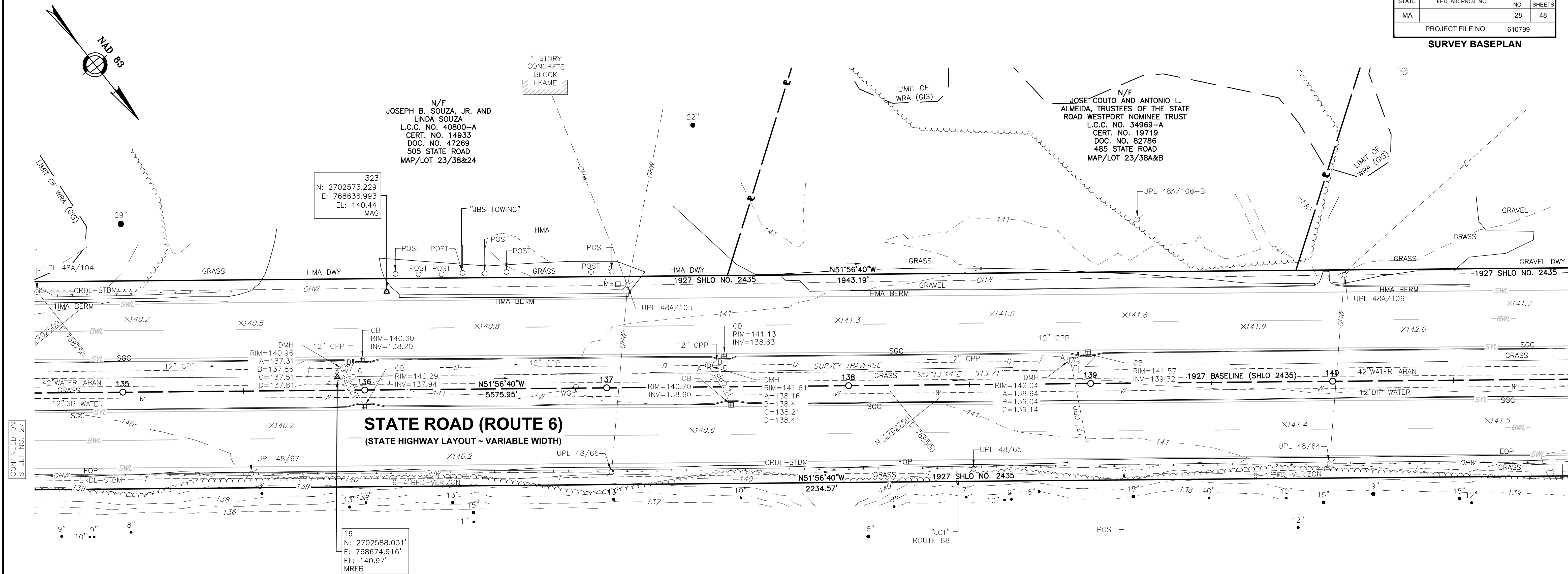
AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

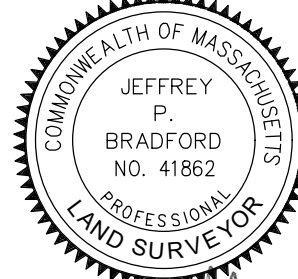
SHEET 27 OF 48

WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	28	48
PROJECT FILE NO.		610799	
SURVEY BASEPLAN			



N/F  
MID-CITY SCRAP IRON &  
SALVAGE CO., INC.  
BK/PG 1080/437  
PB/PL 134/34  
546 STATE ROAD  
MAP/LOT 4/18

CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH

FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

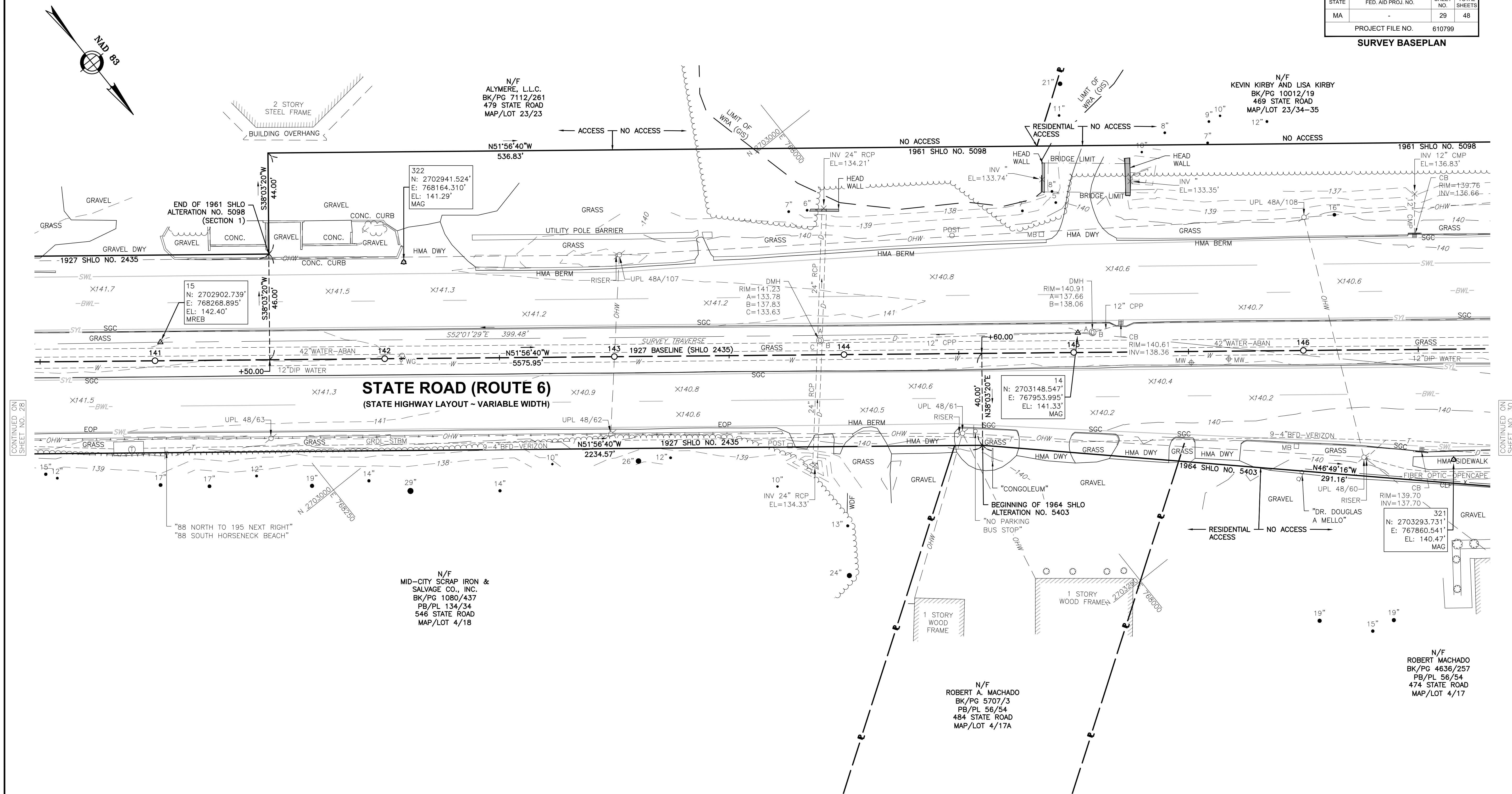
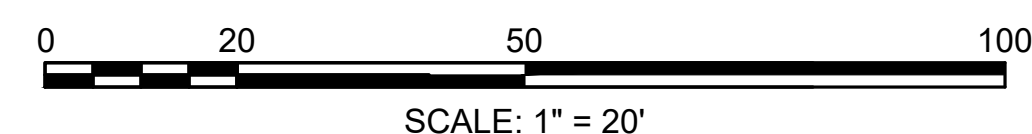
SHEET 28 OF 48

0 20 50 100  
SCALE: 1" = 20'

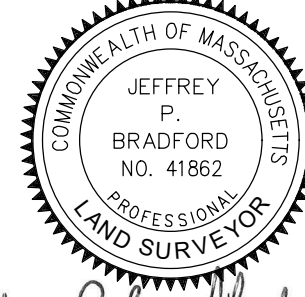


STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	29	4
PROJECT FILE NO.		610799	

## SURVEY BASEPLAN

CONTINUED ON  
SHEET NO. 28CONTINUED ON  
SHEET NO. 30

CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** PREPARED BY:  
Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors

**181 Ballardvale Street, Suite 202, Wilmington, MA 01887**  
Tel: (978) 570-2999 Fax: (978) 658-3044  
<http://www.gpinet.com>

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK NO: WESTPORT-41499	
			DRAWN BY: FD/RJD	CHECKED BY: JPB
			FIELD CHIEF: MCS/BJB	PASS NO: P610799-P1

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

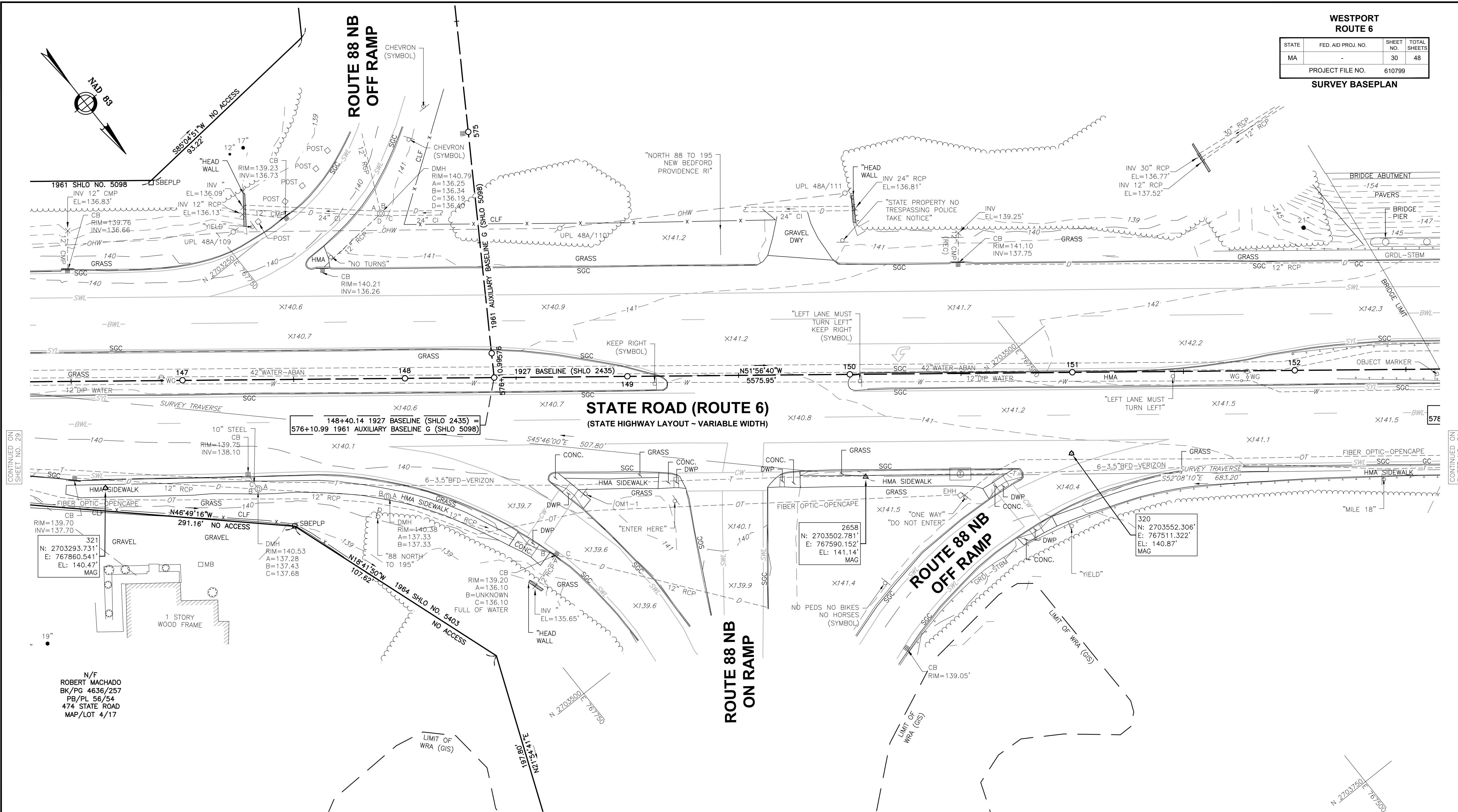
WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE:	JUNE 14, 2021
-------	---------------

SHEET 29 OF 48

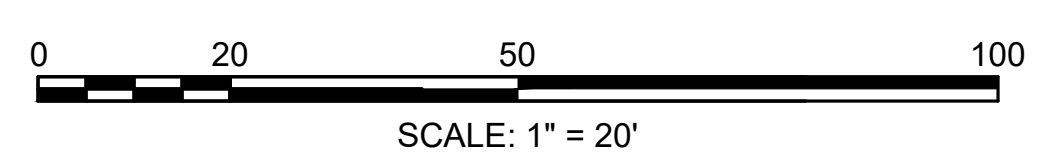
WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	30	48
PROJECT FILE NO.		610799	
SURVEY BASEPLAN			



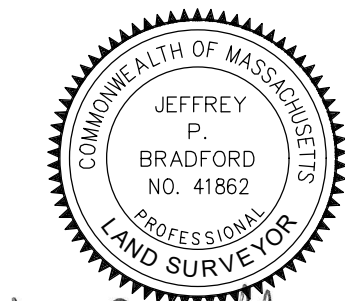
CONTINUED ON  
SHEET NO. 29

CONTINUED ON  
SHEET NO. 31

N/F  
ROBERT MACHADO  
BK/PG 4636/257  
PB/PL 56/54  
474 STATE ROAD  
MAP/LOT 4/17



CERTIFICATION:



*Jeffrey P. Bradford* 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



REVISIONS		
REV.	COMMENTS	DATE

**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

SCALE: 20 FEET TO THE INCH

FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

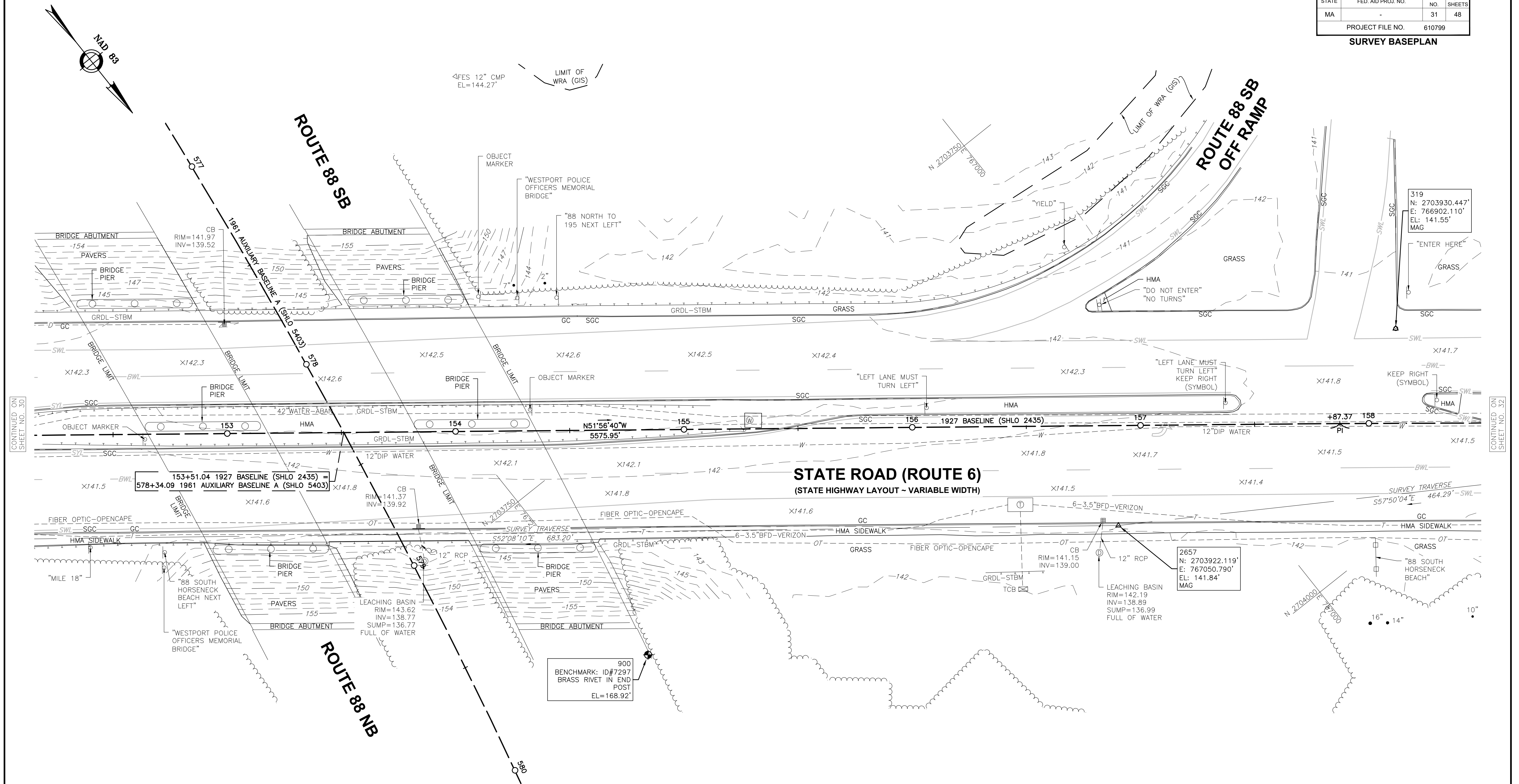
MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF  
**ROUTE 6**  
IN THE TOWN OF  
**WESTPORT**  
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION  
DATE: JUNE 14, 2021  
SHEET 30 OF 48



WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	31	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN

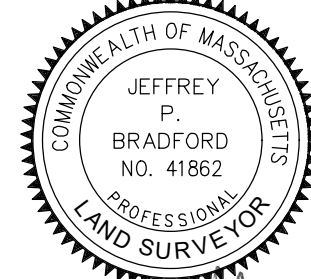


CONTINUED ON  
SHEET NO. 30

CONTINUED ON  
SHEET NO. 32

0 20 50 100  
SCALE: 1" = 20'

CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



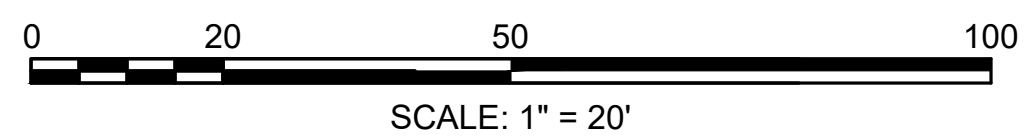
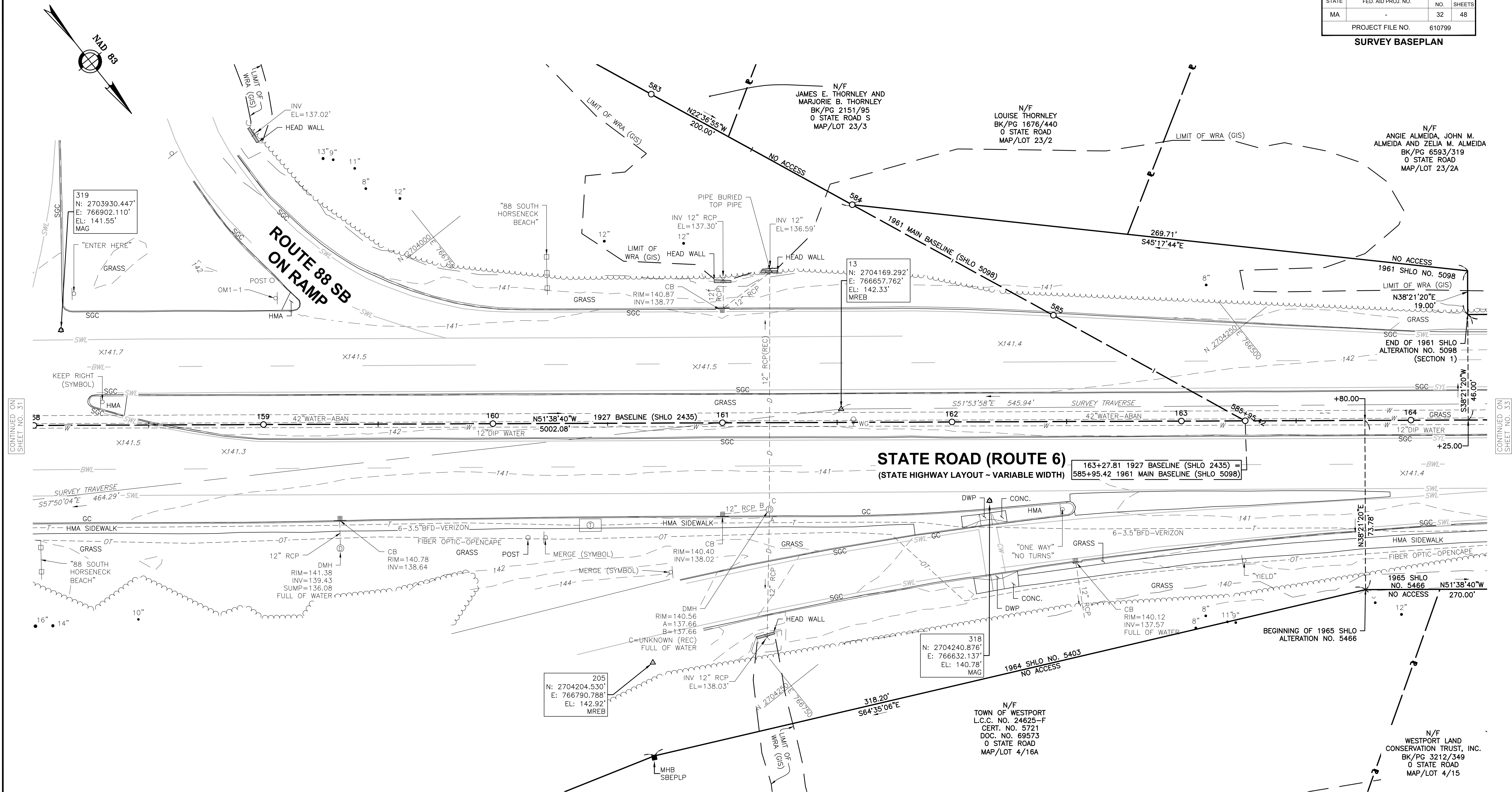
**GPI** PREPARED BY:  
Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

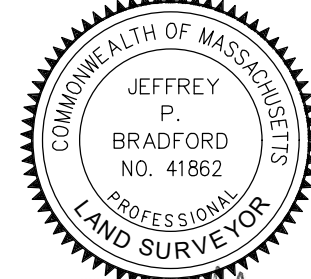
SCALE: 20 FEET TO THE INCH	
FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK NO: WESTPORT-41499	
DRAWN BY: FDI/RJD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF  
**ROUTE 6**  
IN THE TOWN OF  
**WESTPORT**  
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION  
DATE: JUNE 14, 2021  
SHEET 31 OF 48

WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	32	48
PROJECT FILE NO.		610799	
SURVEY BASEPLAN			



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



REVISIONS		
REV.	COMMENTS	DATE

**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

PREPARED BY:

SCALE: 20 FEET TO THE INCH	
FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF  
  
ROUTE 6  
  
IN THE TOWN OF  
  
WESTPORT  
  
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

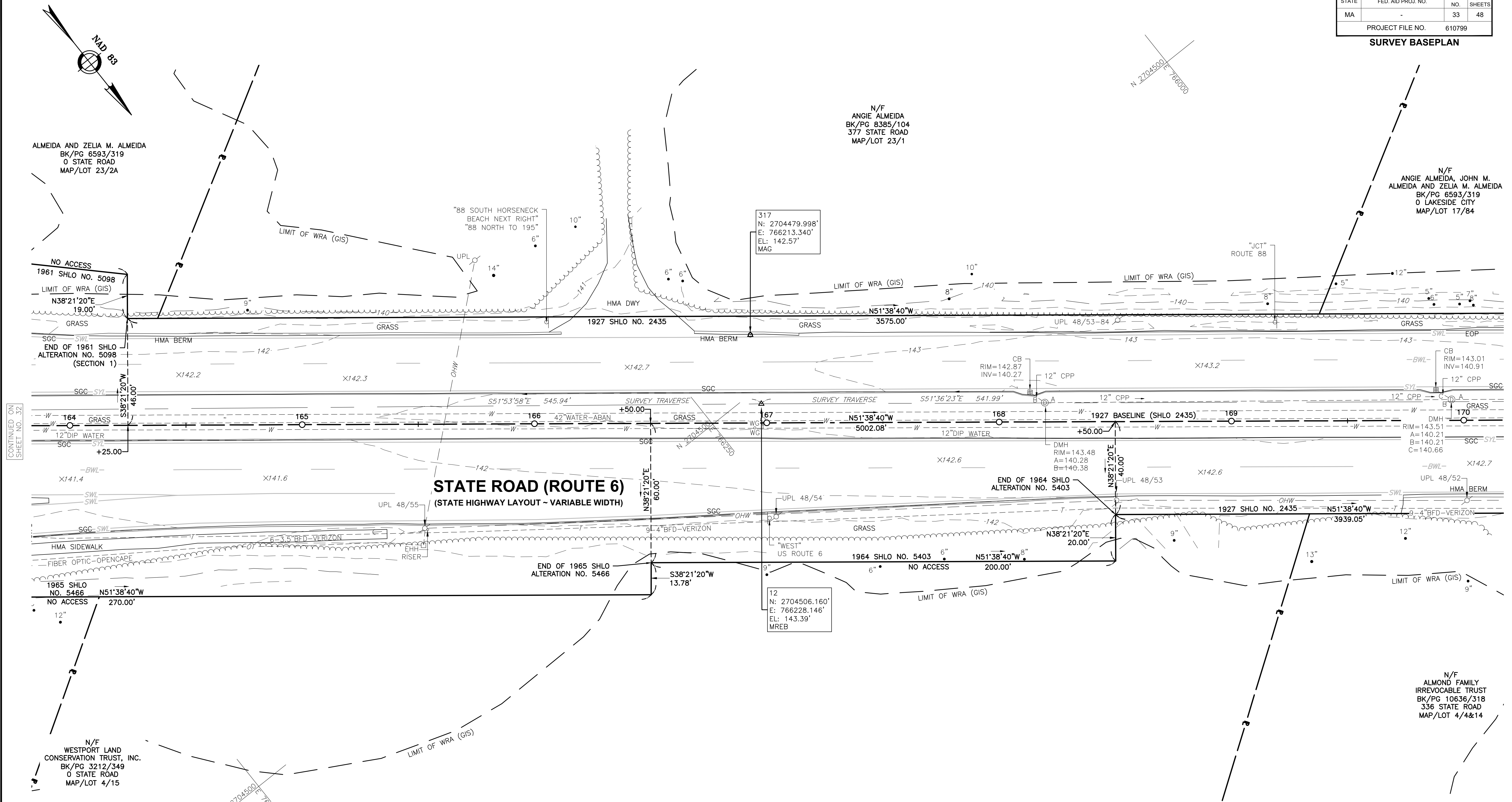
SHEET 32 OF 48



WESTPORT  
ROUTE 6

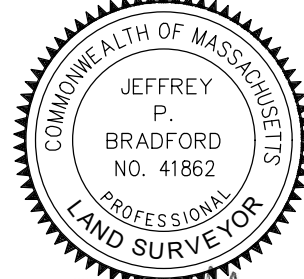
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	33	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



STATE ROAD (ROUTE 6)  
(STATE HIGHWAY LAYOUT - VARIABLE WIDTH)

CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK: NO. WESTPORT-41499	
			DRAWN BY: FDR/JD	CHECKED BY: JPB
			FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

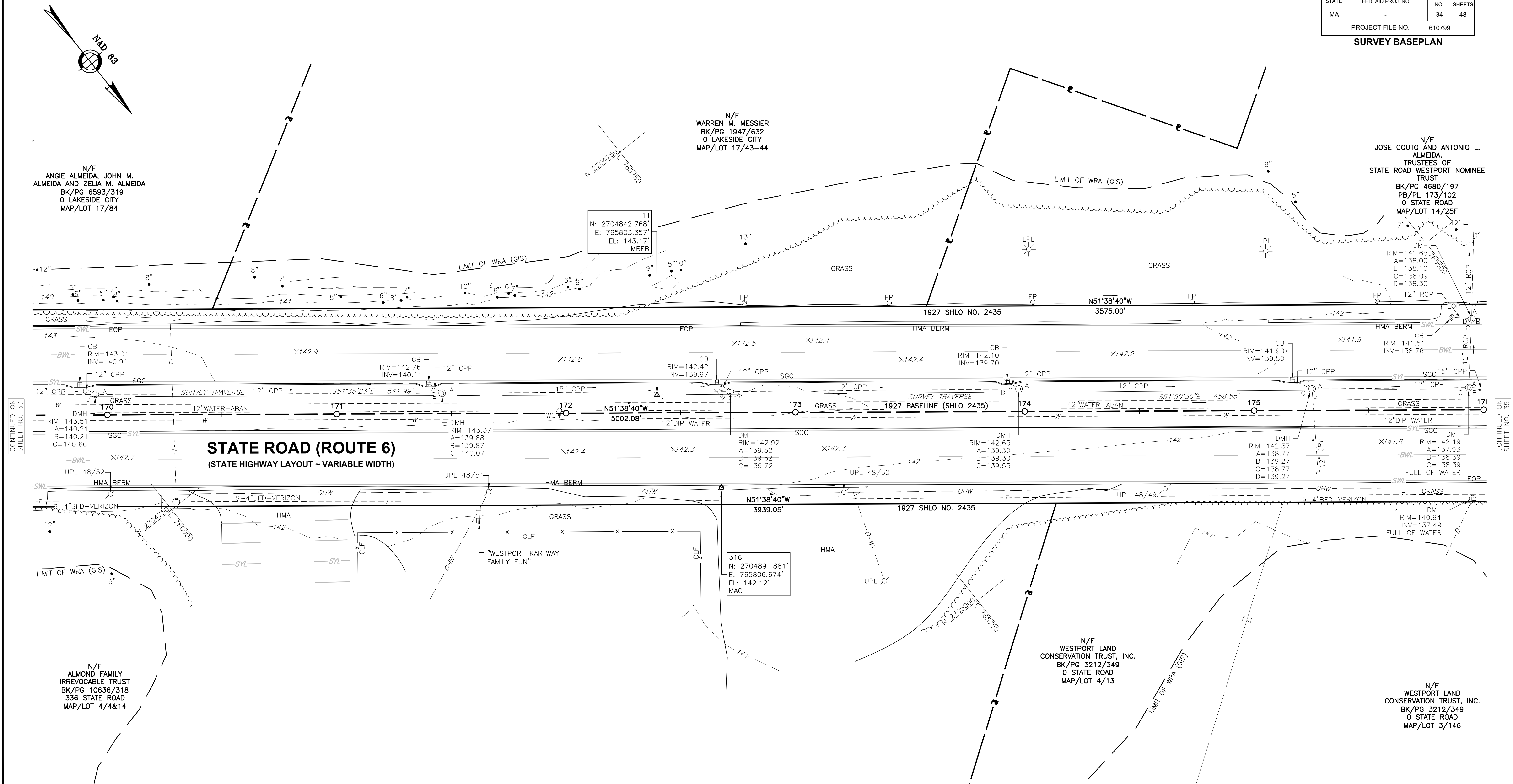
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 33 OF 48

WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	34	48
PROJECT FILE NO.		610799	

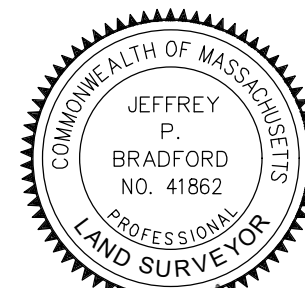
SURVEY BASEPLAN



STATE ROAD (ROUTE 6)  
(STATE HIGHWAY LAYOUT - VARIABLE WIDTH)



CERTIFICATION:



*Jeffrey P. Bradford* 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** PREPARED BY:  
Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK NO: WESTPORT-41499	
			DRAWN BY: FDR/JD	CHECKED BY: JPB
			FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

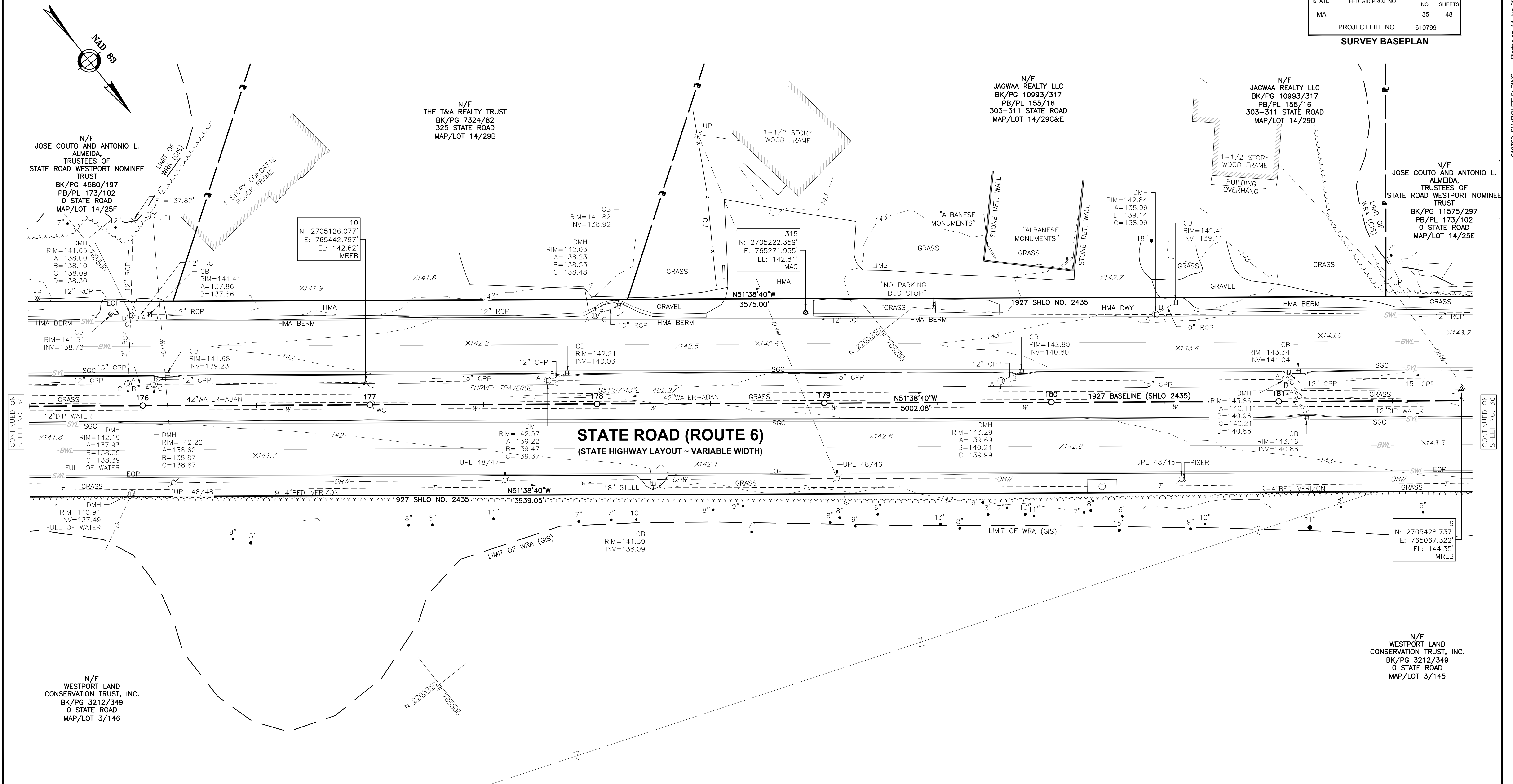
DATE: JUNE 14, 2021 SHEET 34 OF 48



WESTPORT  
ROUTE 6

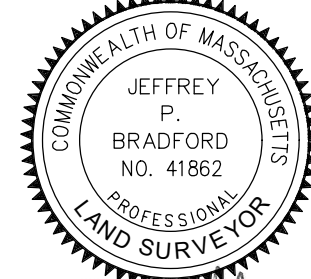
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	35	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



STATE ROAD (ROUTE 6)  
(STATE HIGHWAY LAYOUT - VARIABLE WIDTH)

CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH	
FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

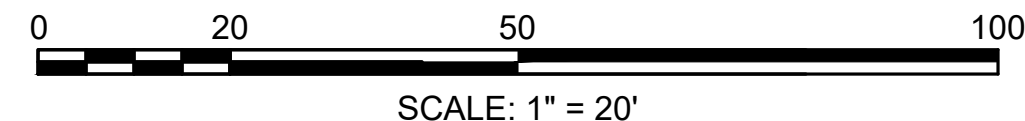
IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 35 OF 48

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	36	48
PROJECT FILE NO.		610799	



JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** PREPARED BY:  
Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors

**181 Ballardvale Street, Suite 202, Wilmington, MA 01887**  
Tel: (978) 570-2999 Fax: (978) 658-3044  
<http://www.gpinet.com>

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK. NO: WESTPORT-41499	
			DRAWN BY: FD/RJD	CHECKED BY: JPB
			FIELD CHIEF: MCS/RJB	PASS. NO: P610799-P1

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

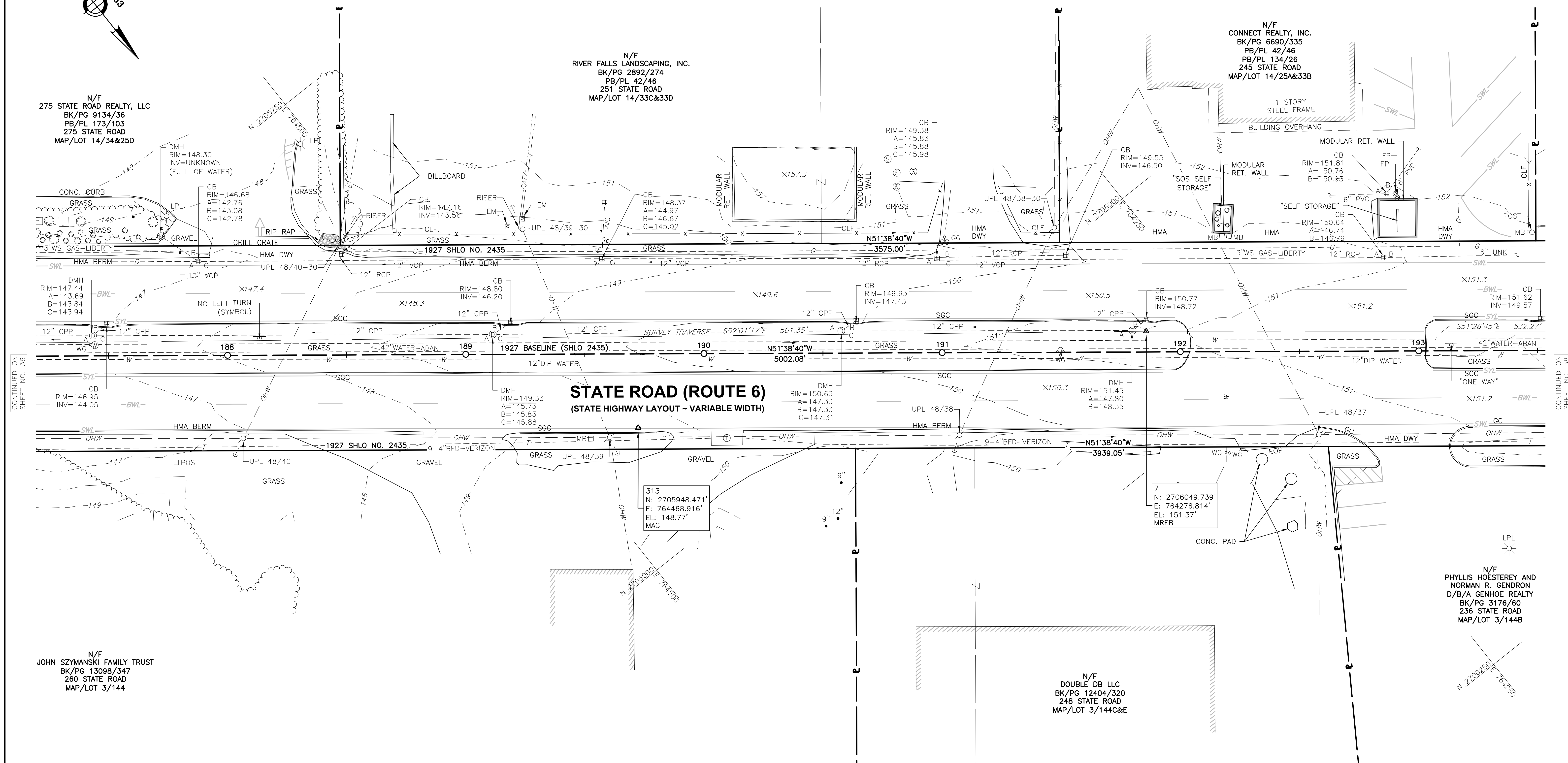
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE:	JUNE 14, 2021
-------	---------------

SHEET 36 OF 48



WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	37	48
PROJECT FILE NO.		610799	
SURVEY BASEPLAN			



N/F  
JOHN SZYMANSKI FAMILY TRUST  
BK/PG 13098/347  
260 STATE ROAD  
MAP/LOT 3/144

N/F  
RIVER FALLS LANDSCAPING, INC.  
BK/PG 2892/274  
PB/PL 42/46  
251 STATE ROAD  
MAP/LOT 14/33C&33D

N/F  
CONNECT REALTY, INC.  
BK/PG 6690/335  
PB/PL 42/46  
PB/PL 134/26  
245 STATE ROAD  
MAP/LOT 14/25A&33B

N/F  
PHYLLIS HOESTEREY AND  
NORMAN R. GENDRON  
D/B/A GENHOE REALTY  
BK/PG 3176/60  
236 STATE ROAD  
MAP/LOT 3/144B

N/F  
DOUBLE DB LLC  
BK/PG 12404/320  
248 STATE ROAD  
MAP/LOT 3/144C&E

0 20 50 100  
SCALE: 1" = 20'

CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH

FILE NAME: 610799_SV (ROUTE 6).DWG
FIELD BOOK NO: WESTPORT-41499
DRAWN BY: FDR/JD
CHECKED BY: JPB
FIELD CHIEF: MCS/BJB
PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

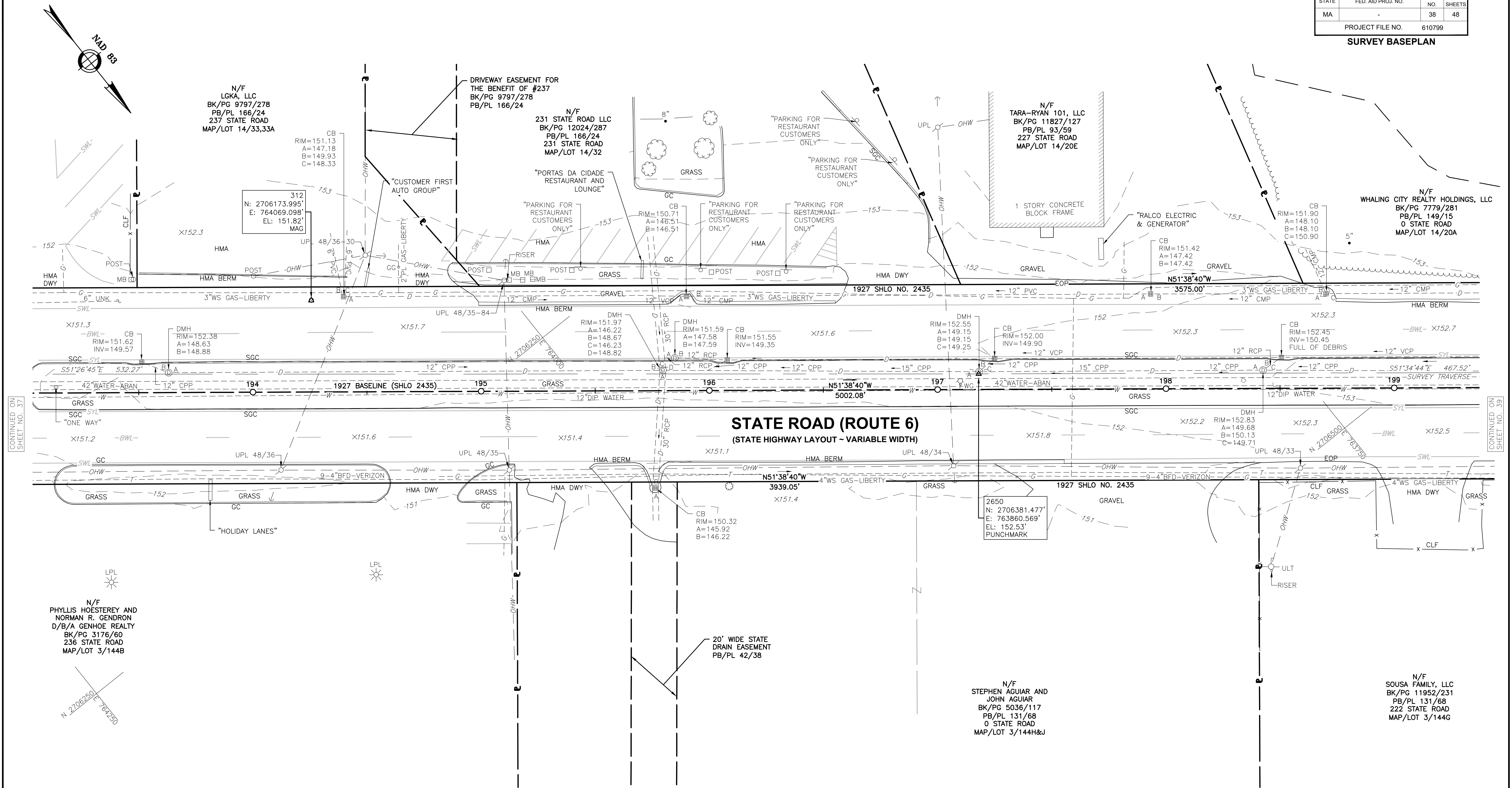
DATE: JUNE 14, 2021

SHEET 37 OF 48

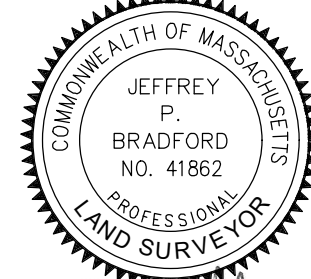
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	38	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS			SCALE: 20 FEET TO THE INCH	
REV.	COMMENTS	DATE		
			FILE NAME: 610799_SV (ROUTE 6).DWG	
			FIELD BOOK NO: WESTPORT-41499	
			DRAWN BY: FDR/JD CHECKED BY: JPB	
			FIELD CHIEF: MCS/BJB PARS. NO: P610799-P11	

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

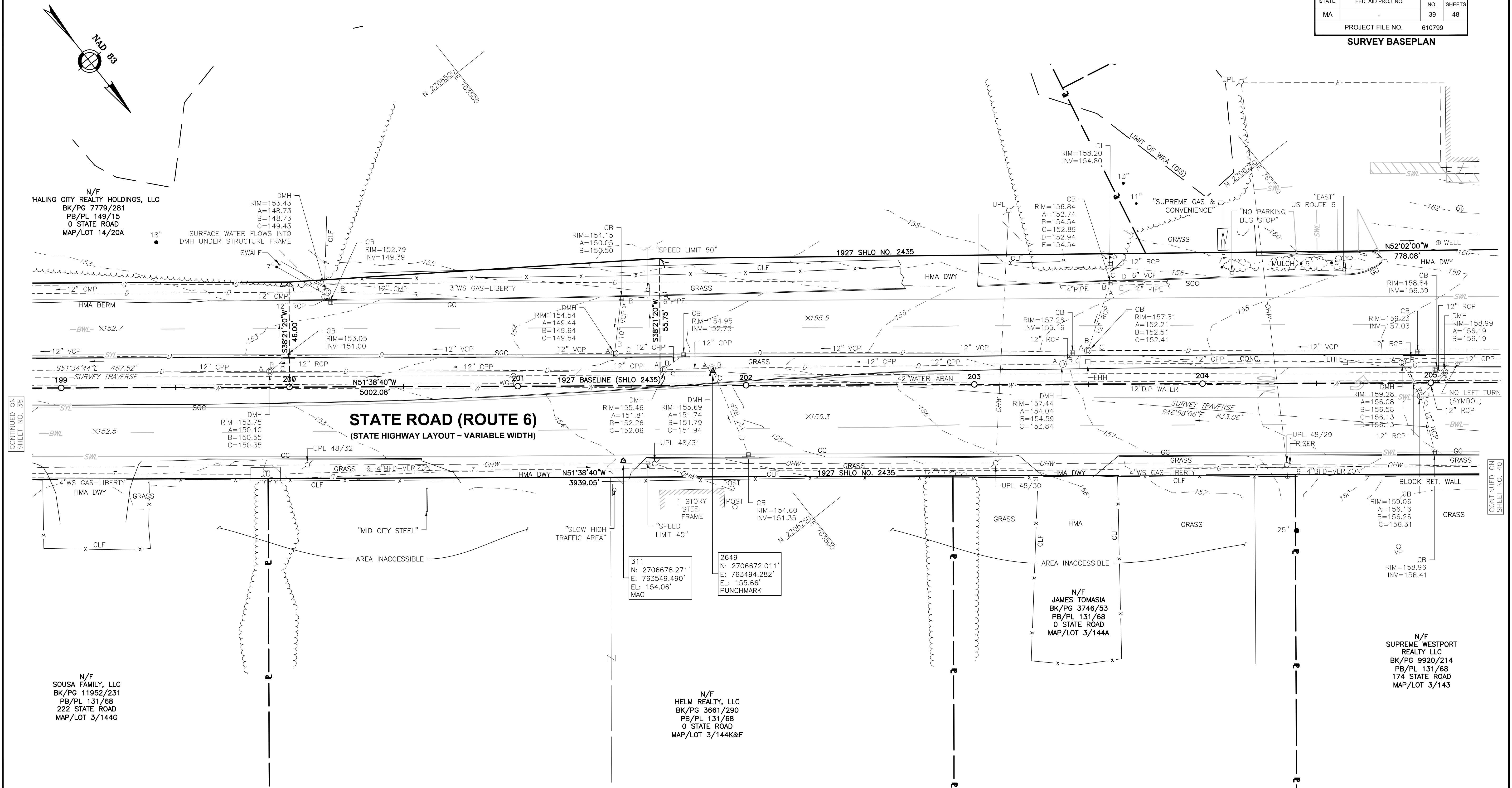
DATE: JUNE 14, 2021 SHEET 38 OF 48



WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	39	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CONTINUED ON  
SHEET NO. 38

CONTINUED ON  
SHEET NO. 40

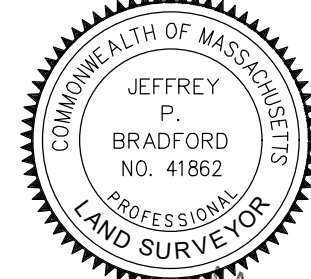
N/F  
SOUSA FAMILY, LLC  
BK/PG 11952/231  
PB/PL 131/68  
222 STATE ROAD  
MAP/LOT 3/144G

N/F  
HELM REALTY, LLC  
BK/PG 3661/290  
PB/PL 131/68  
0 STATE ROAD  
MAP/LOT 3/144K&F

N/F  
JAMES TOMASIA  
BK/PG 3746/53  
PB/PL 131/68  
0 STATE ROAD  
MAP/LOT 3/144A

N/F  
SUPREME WESTPORT  
REALTY LLC  
BK/PG 9920/214  
PB/PL 131/68  
174 STATE ROAD  
MAP/LOT 3/143

CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

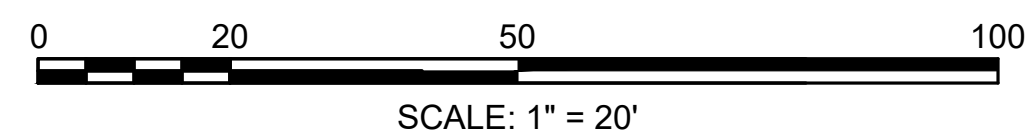
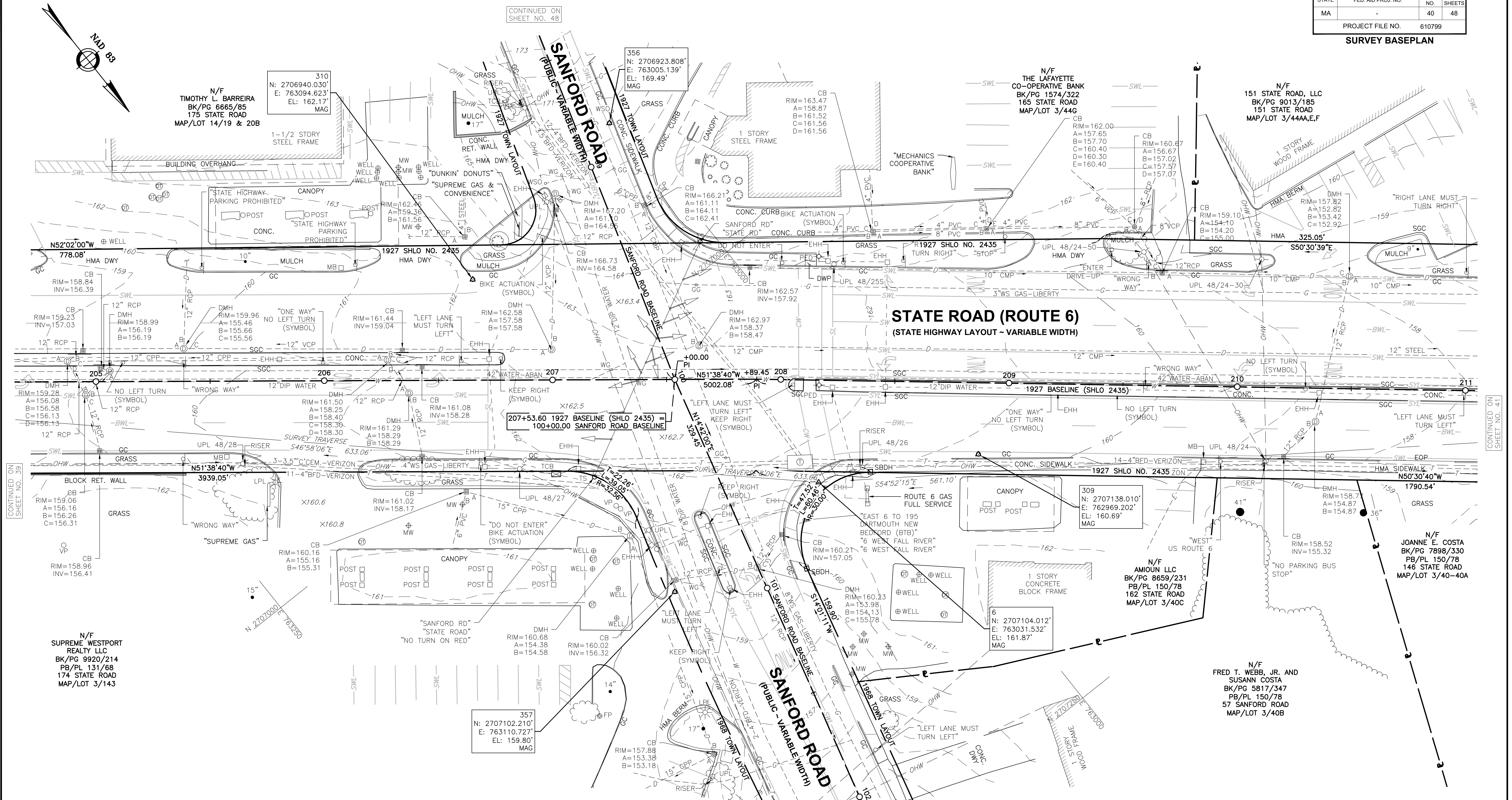
SCALE: 20 FEET TO THE INCH	
FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF  
**ROUTE 6**  
IN THE TOWN OF  
**WESTPORT**  
AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION  
DATE: JUNE 14, 2021  
SHEET 39 OF 48

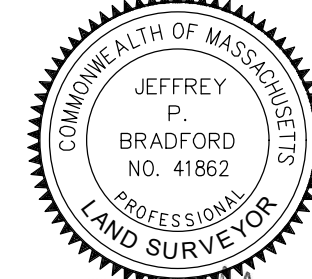
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	40	48
PROJECT FILE NO. 610799		610799	

SURVEY BASEPLAN



CERTIFICATION:



Jeffrey P. Bradford 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



REVISIONS		
REV.	COMMENTS	DATE

PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

SCALE: 20 FEET TO THE INCH

FILE NAME: 610799_SV (ROUTE 6).DWG
FIELD BOOK NO: WESTPORT-41499
DRAWN BY: FDR/JD
CHECKED BY: JPB
FIELD CHIEF: MCS/BJB
PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

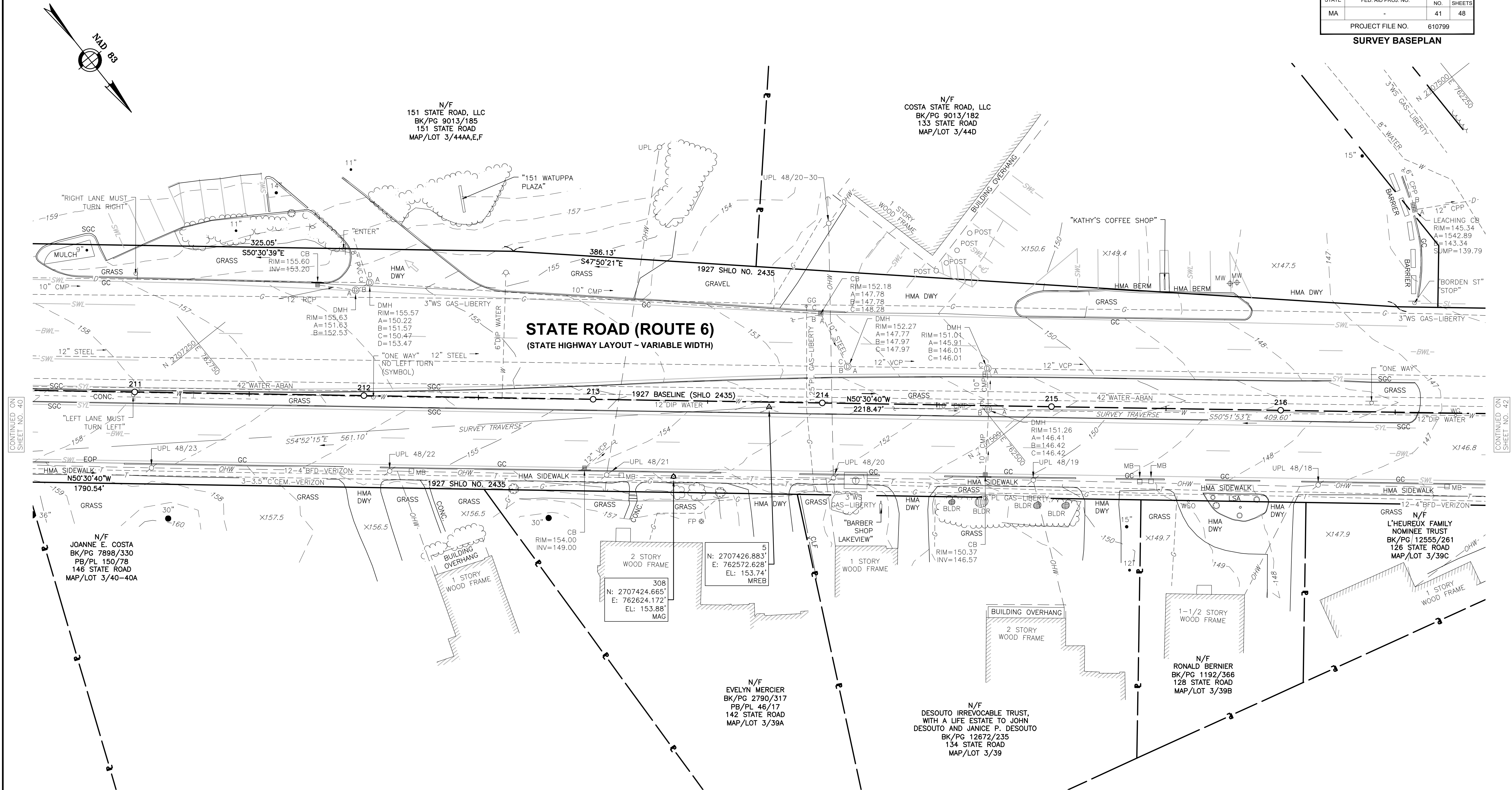
WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021 SHEET 40 OF 48

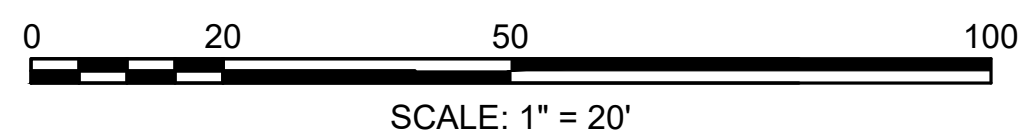


WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	41	48
PROJECT FILE NO.		610799	
SURVEY BASEPLAN			



CONTINUED ON  
SHEET NO. 40

CONTINUED ON  
SHEET NO. 42



CERTIFICATION:



*Jeffrey P. Bradford* 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

PREPARED BY:

SCALE: 20 FEET TO THE INCH

FILE NAME:	610799_SV (ROUTE 6).DWG
FIELD BOOK NO.:	WESTPORT-41499
DRAWN BY:	FD/RJD
CHECKED BY:	JPB
FIELD CHIEF:	MCS/BJB
PARS. NO.:	P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

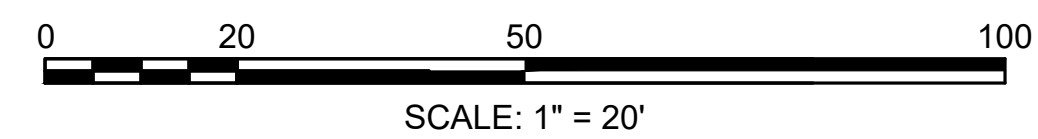
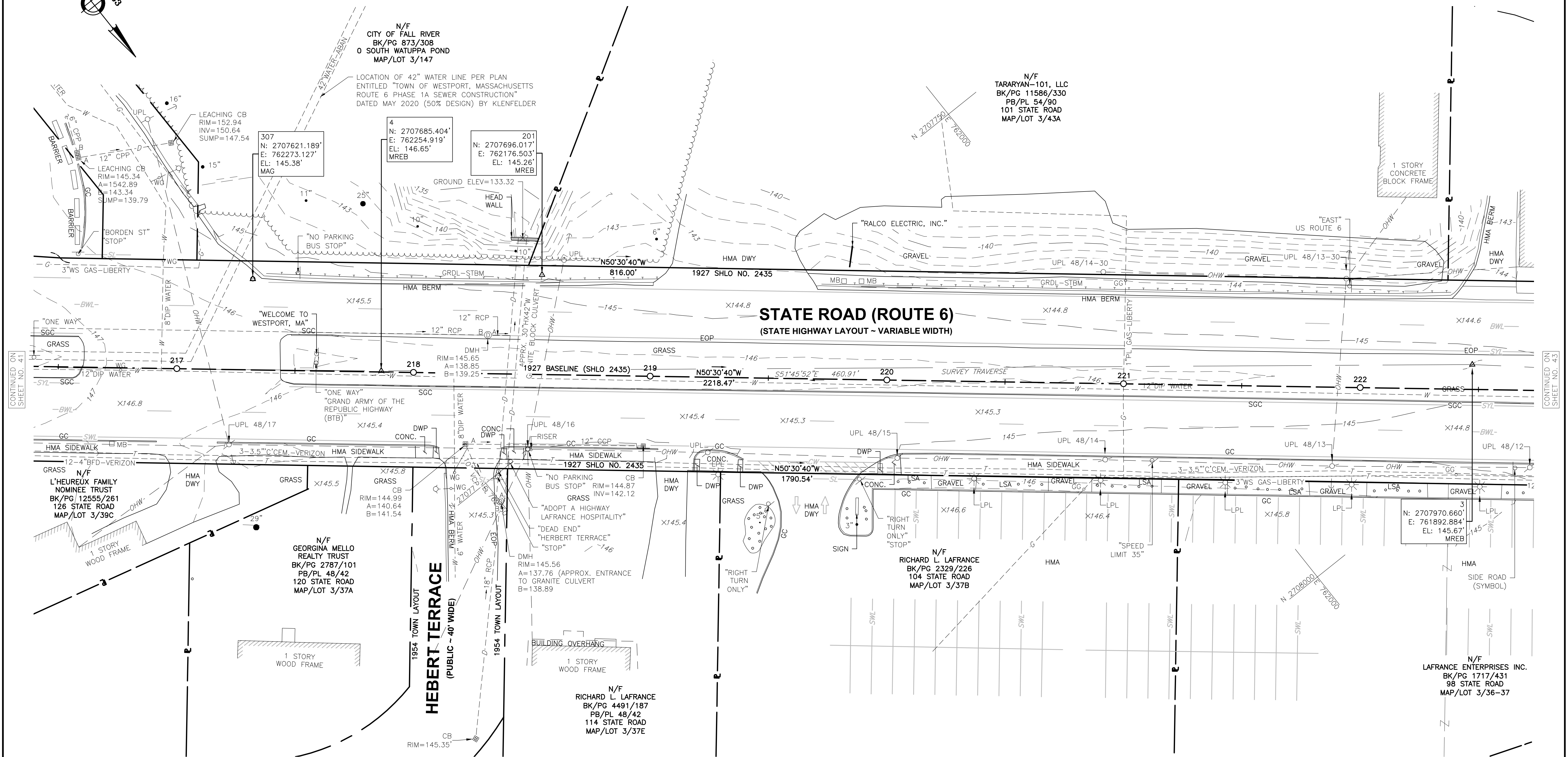
DATE: JUNE 14, 2021

SHEET 41 OF 48

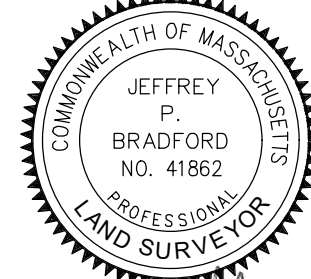
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	42	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



*Jeffrey P. Bradford* 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH	
FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK NO: WESTPORT-41499	
DRAWN BY: FDR/JD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

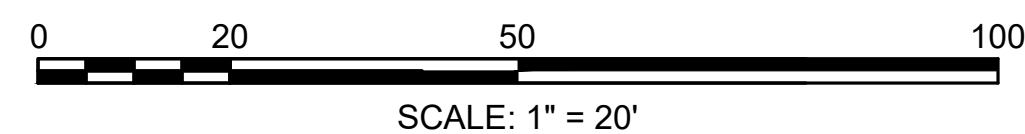
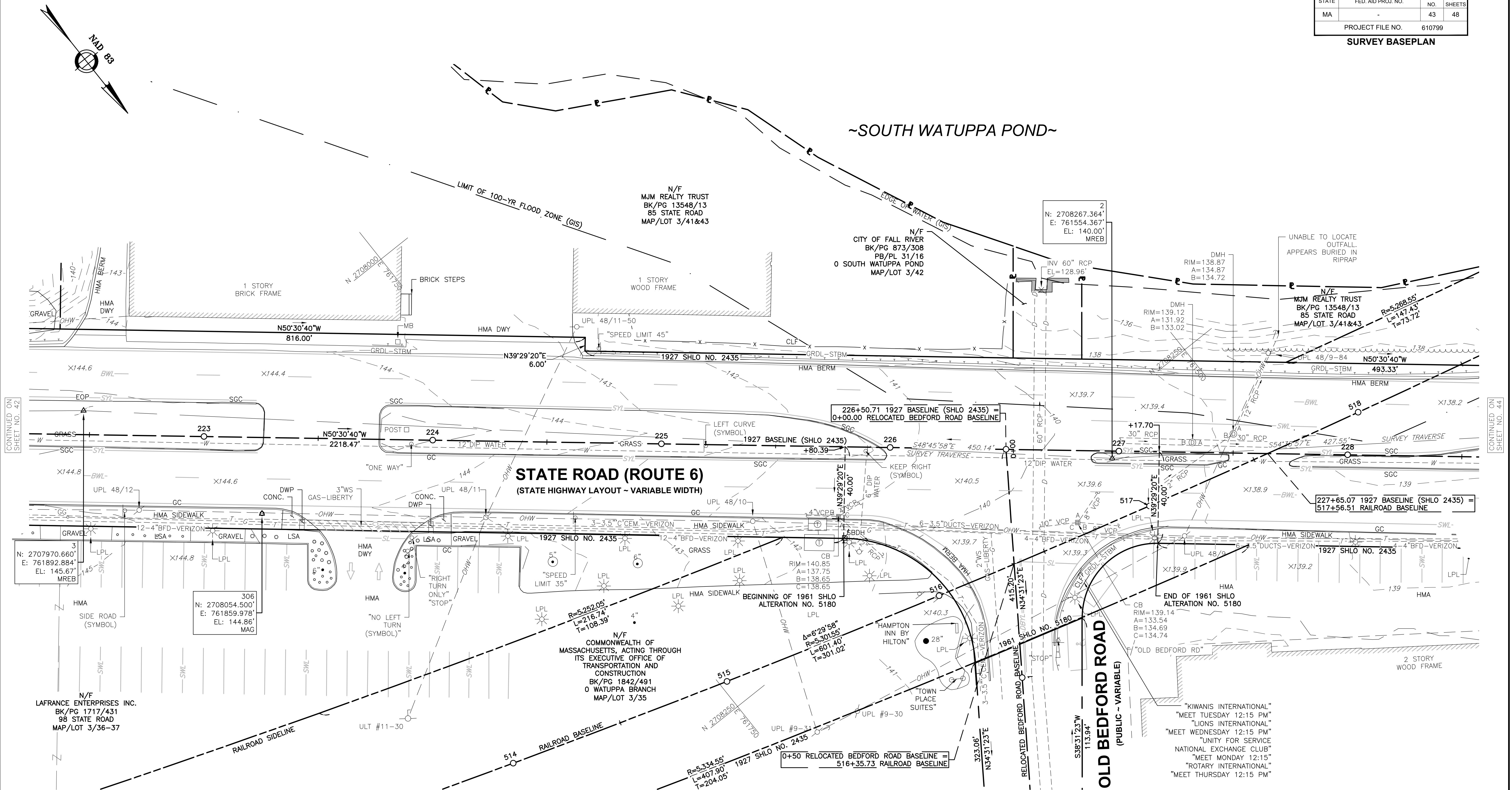
DATE: JUNE 14, 2021	SHEET 42 OF 48
---------------------	----------------



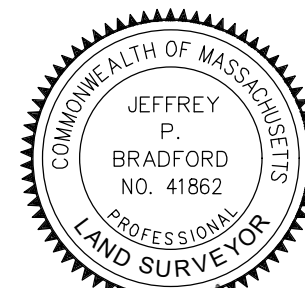
WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	43	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



*Jeffrey P. Bradford* 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



PREPARED BY:  
**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH

FILE NAME: 610799_SV (ROUTE 6).DWG
FIELD BOOK NO: WESTPORT-41499
DRAWN BY: FDR/JD
CHECKED BY: JPB
FIELD CHIEF: MCS/BJB
PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

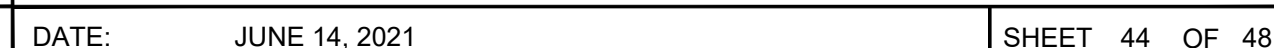
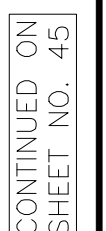
WESTPORT

AS ORDERED BY

THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

SHEET 43 OF 48

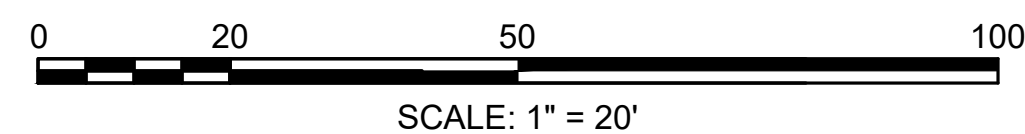
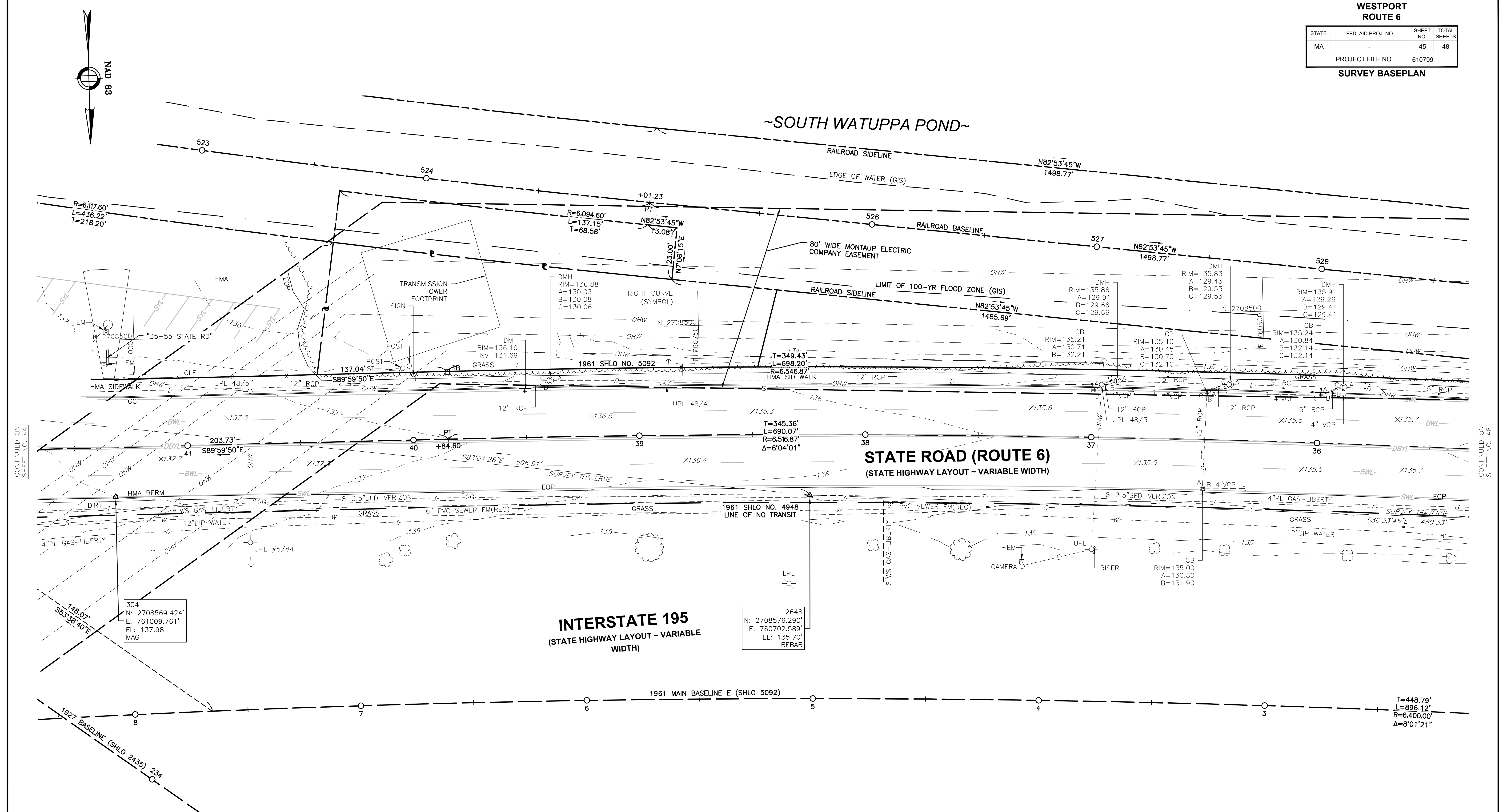




WESTPORT  
ROUTE 6

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	45	48
PROJECT FILE NO.		610799	

SURVEY BASEPLAN



CERTIFICATION:



*Jeffrey P. Bradford* 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** PREPARED BY:  
Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

SCALE: 20 FEET TO THE INCH	
FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK NO: WESTPORT-41499	
DRAWN BY: FDR/JD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P11

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

SHEET 45 OF 48



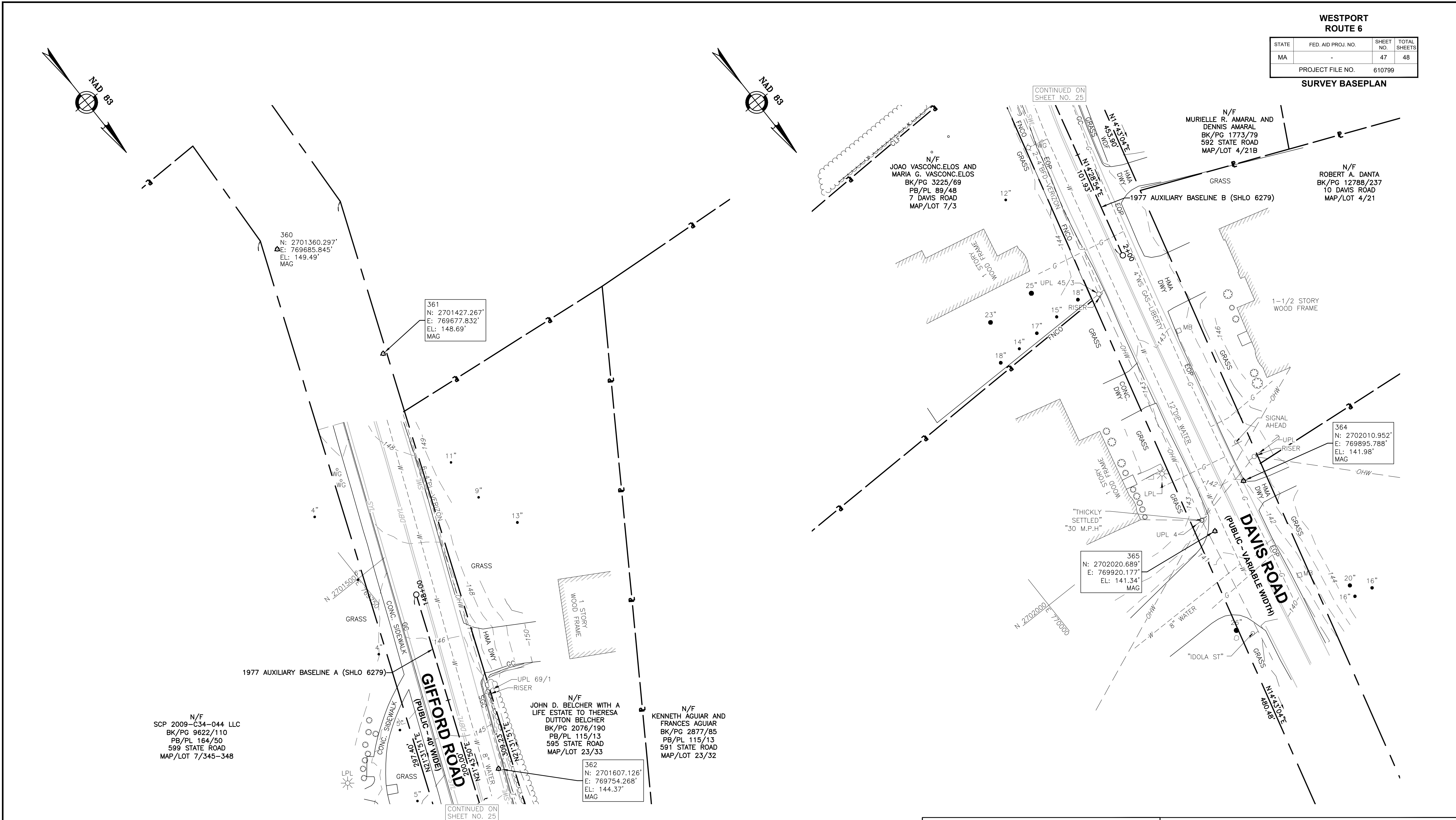
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



DATE: JUNE 14, 2021	SHEET 46 OF 48
---------------------	----------------

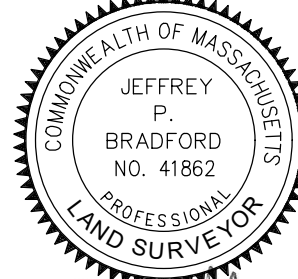


WESTPORT ROUTE 6			
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	47	48
PROJECT FILE NO. 610799			
SURVEY BASEPLAN			



0 20 50 100  
SCALE: 1" = 20'

CERTIFICATION:



*Jeffrey P. Bradford* 6/11/2021  
JEFFREY P. BRADFORD, P.L.S.  
REG. NO. 41862  
GREENMAN-PEDERSEN, INC.



**GPI** Greenman-Pedersen, Inc.  
Engineers, Architects, Planners, Construction Engineers & Inspectors  
181 Ballardvale Street, Suite 202, Wilmington, MA 01887  
Tel: (978) 570-2999 Fax: (978) 658-3044  
http://www.gpinet.com

REVISIONS		
REV.	COMMENTS	DATE

PREPARED BY:

SCALE: 20 FEET TO THE INCH

Architects, Planners, Construction Engineers & Inspectors	
999 99999	
Faxe Street, Suite 202, Wilmington, MA 01887	
Fax: (978) 658-3044	
t.com	
SCALE: 20 FEET TO THE INCH	
FILE NAME: 610799_SV (ROUTE 6).DWG	
FIELD BOOK NO: WESTPORT-41499	
DRAWN BY: FD/RJD	CHECKED BY: JPB
FIELD CHIEF: MCS/BJB	PARS. NO: P610799-P1

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION  
PLAN OF TOPOGRAPHIC SURVEY OF

ROUTE 6

IN THE TOWN OF

WESTPORT

AS ORDERED BY  
THE MASSACHUSETTS DEPARTMENT OF  
TRANSPORTATION, HIGHWAY DIVISION

DATE: JUNE 14, 2021

SHEET 47 OF 48



COMMONWEALTH OF MASSACHUSETTS  
JEFFREY  
P.  
BRADFORD  
NO. 41862  
PROFESSIONAL  
LAND SURVEYOR



**MassDOT**  
Massachusetts Department of Transportation  
Highway Division

REVISIONS		
REV.	COMMENTS	DATE

Greenman-Pedersen, Inc.

<http://www.gpinet.com>

DATE:	JUNE 14, 2021
-------	---------------

SHEET 48 OF 48