

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		JERSEY BARRIER
		CATCH BASIN
		CATCH BASIN CURB INLET
		FLAG POLE
		GAS PUMP
		MAIL BOX
		POST SQUARE
		POST CIRCULAR
		WELL
		ELECTRIC HANDHOLE
		FENCE GATE POST
		GAS GATE
		BORING HOLE
		MONITORING WELL
		TEST PIT
		HYDRANT
		LIGHT POLE
		COUNTY BOUND
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		MASSACHUSETTS HIGHWAY BOUND
		MONUMENT
		STONE BOUND
		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
		TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W / 1 LIGHT
		UTILITY POLE
		BUSH
		TREE
		STUMP
		SWAMP / MARSH
		WATER GATE
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		SEDIMENT CONTROL BARRIER
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
		EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
		RAILROAD SIGNAL
		SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
		MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
		MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
		LEGEND "ONLY" - WHITE
		STOP LINE
		CROSSWALK
		SOLID WHITE LINE
		SOLID YELLOW LINE
		BROKEN WHITE LINE
		BROKEN YELLOW LINE
		DOTTED WHITE LINE
		DOTTED YELLOW LINE
		DOTTED WHITE LINE EXTENSION
		DOTTED YELLOW LINE EXTENSION
		DOUBLE WHITE LINE
		DOUBLE YELLOW LINE

PROJECT DESCRIPTION:

THE PROPOSED IMPROVEMENTS UNDER THIS CONTRACT CONSIST OF PRESERVING THE EXIST 30' SIMPLE SPAN BRIDGE BY REPLACING THE EXISTING STONE ARCH BRIDGE (BR #W-26-002) CARRYING STONY BROOK ROAD OVER STONY BROOK. THE STONE PARAPET RAILING WILL BE REPLACED WITH A NEW PRECAST CONCRETE BARRIER WITH AN ARTIFICIAL STONE FACADE. IN ADDITION THERE WILL BE A PROPOSED 8" CONCRETE DECK AS THE EXISTING ARCH STRUCTURE AND SUBSTRUCTURE ARE MAINTAINED. THE ROADWAY CROSS SECTION WILL BE SLIGHTLY MODIFIED TO PROVIDE AN APPROACH RANGING FROM 18'-24' BEFORE THE ONE LANE BRIDGE.

THE IMPROVEMENTS INCLUDE STRIPING OF NEW PAVEMENT MARKINGS AND INSTALLATION OF MUTCD COMPLIANT REGULATORY AND WARNING SIGNS THROUGHOUT THE PROJECT LIMITS. THE IMPROVEMENTS ALSO INCLUDE PAVEMENT RESURFACING WITHIN THE PROJECT LIMITS.

THE WORK INCLUDES DEMOLITION OF THE EXISTING BRIDGE DECK AND RAILINGS, EARTH EXCAVATION, PAVEMENT FINE MILLING, SUPERPAVE ASPHALT PAVEMENT, FULL DEPTH PAVEMENT, BRIDGE RAIL AND HIGHWAY GUARDRAIL, UTILITY MODIFICATIONS, TREE PROTECTION, MODIFIED ROCKFILL, AND OTHER INCIDENTAL WORK.

ABBREVIATIONS

GENERAL	
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IN PLACE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NIC	NOT IN CONTRACT
NO.	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY

ABBREVIATIONS (cont.)

GENERAL	
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

TRAFFIC SIGNAL ABBREVIATIONS

CAB	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
DW	STEADY UPRAISED HAND
FDW	FLASHING UPRAISED HAND
FR	FLASHING CIRCULAR RED
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
FYL	FLASHING YELLOW LEFT ARROW
FYR	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
R	STEADY CIRCULAR RED
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
W	STEADY WALKING PERSON
Y	STEADY CIRCULAR YELLOW
YL	STEADY YELLOW LEFT ARROW

WESTFORD
STONY BROOK ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	2	8

PRELIMINARY RIGHT OF WAY

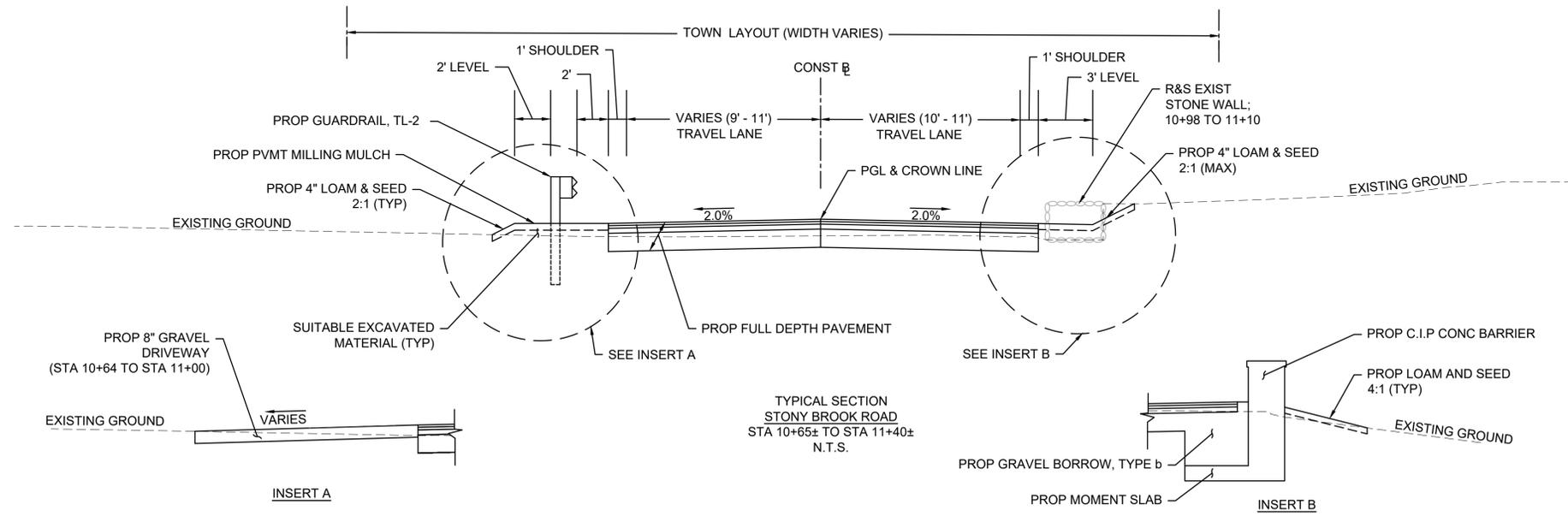
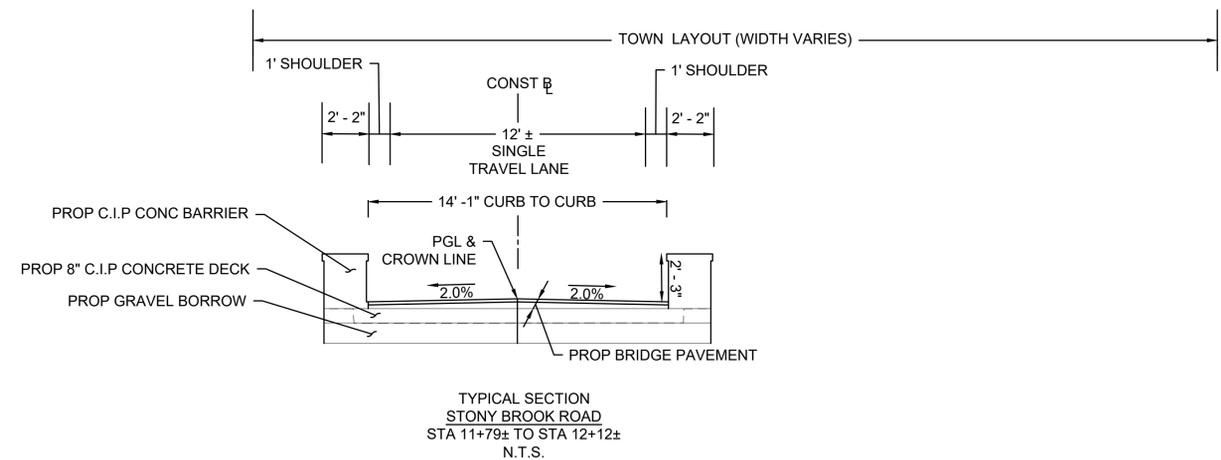
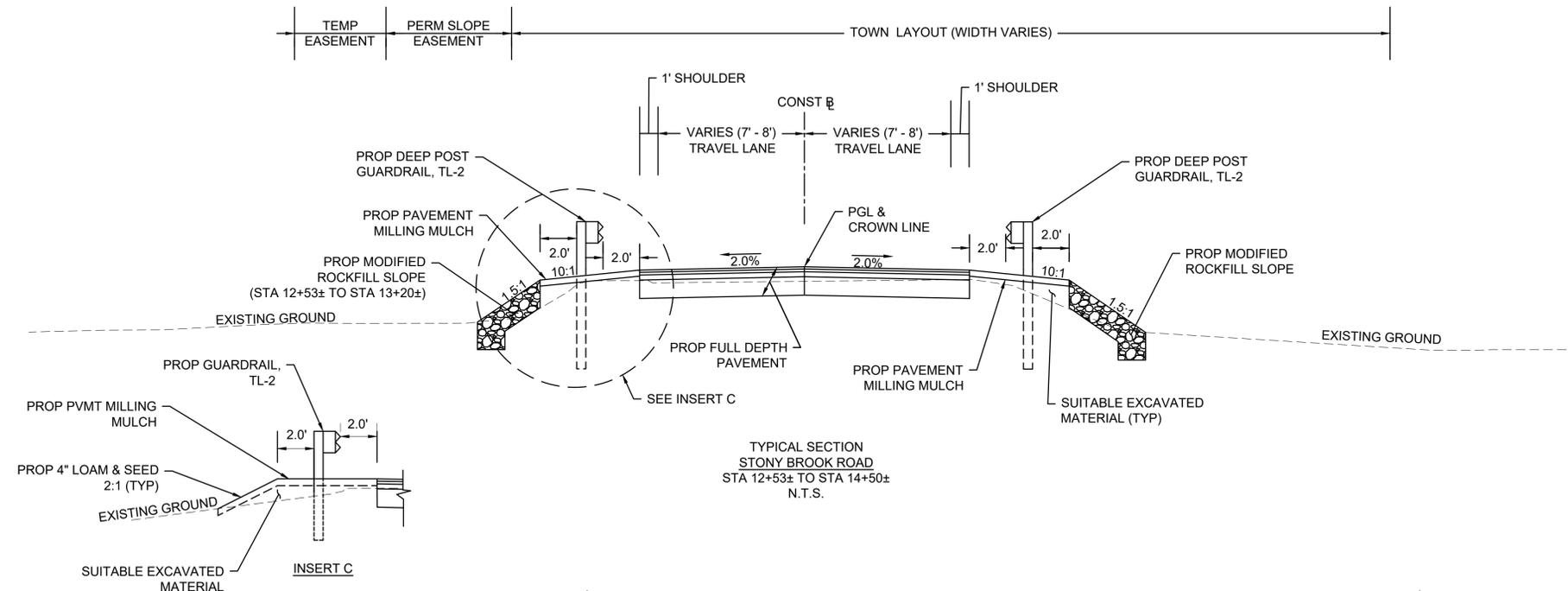
LEGEND, ABBREVIATIONS & PROJECT DESCRIPTION

PROJECT FILE NO. 608861

WESTFORD
STONY BROOK ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	3	8

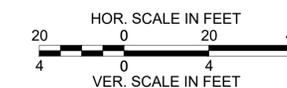
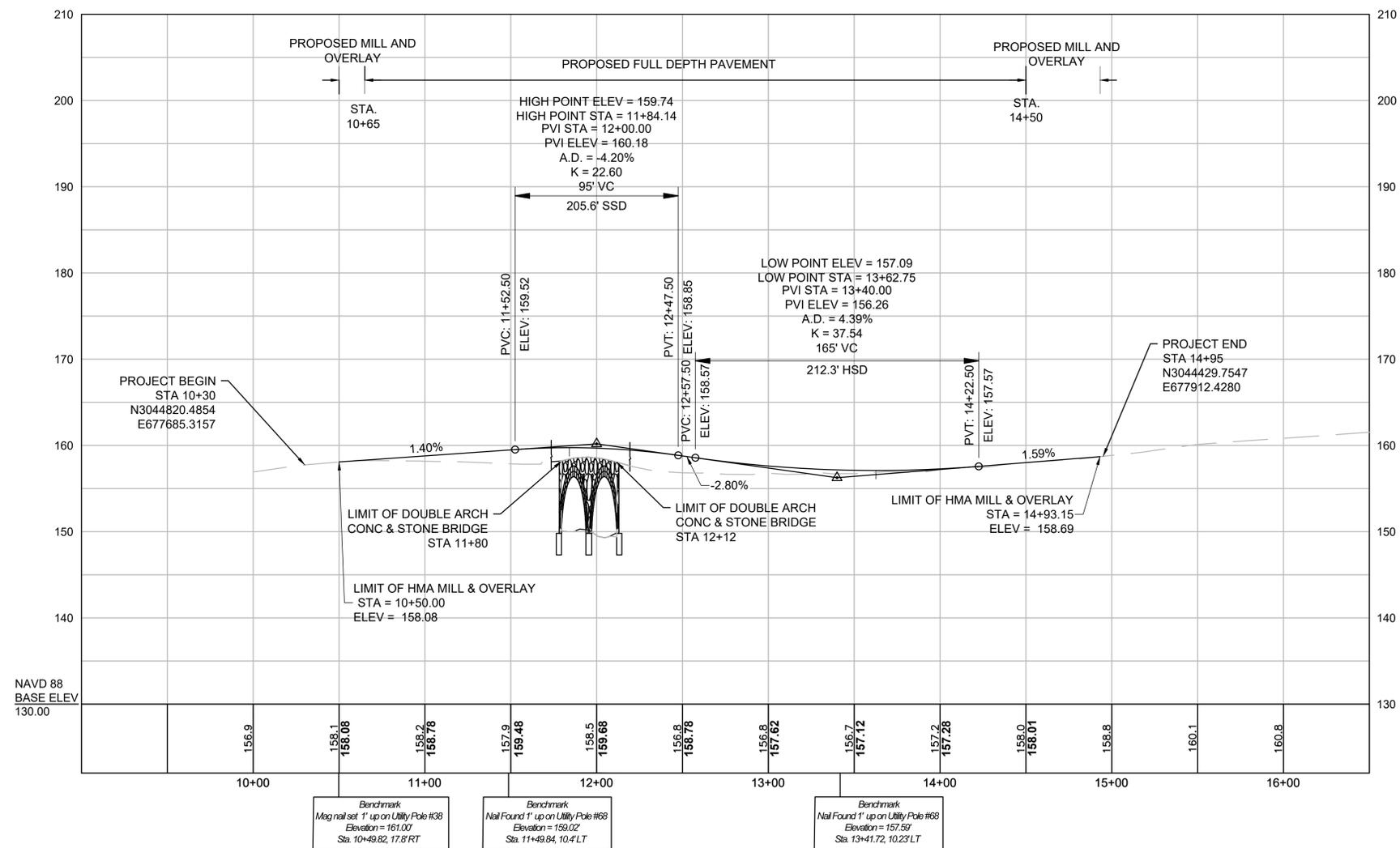
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PRELIMINARY RIGHT OF WAY
TYPICAL SECTIONS



WESTFORD
STONY BROOK ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	4	8
PROJECT FILE NO. 608861			

PRELIMINARY RIGHT OF WAY
CRITICAL PROFILE



FOR PROPERTY PLANS:
SEE SHEET NO. 7

**WESTFORD
STONY BROOK ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	5	8
PROJECT FILE NO.		608861	

**PRELIMINARY RIGHT OF WAY
PARCEL SUMMARY SHEET**

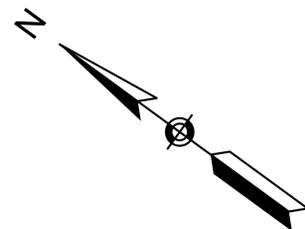
PROJECT TOTALS			
AFFECTED PROPERTIES	FEE TAKINGS	PERMANENT EASEMENTS	TEMPORARY EASEMENTS
5	0	3	4

PARCEL NO.	PLAN SHEET NO.	TITLEHOLDER	TITLE REFERENCE				ROW PARCEL		PROPERTY TOTALS (S.F.)			FRONTAGE ON ROW PLAN (FT.)	PROPERTY ADDRESS	ZONING DISTRICT	REMARKS	LAND RESTRICTION FROM THE DEED
			DEED BOOK	DEED PAGE	LCC NO.	CERT NO.	INTEREST ACQUIRED	AREA (S.F. +/-)	TOTAL TAKEN	REMAINING	TOTAL PROPERTY AREA (RECORD)					
GR-1	7	AIMEE B. LYNCH	36907	276			PERM	49			174,240	108	58 STONY BROOK ROAD	RA	CONCRETE GUARDRAIL END POST	
TE-3	7	AIMEE B. LYNCH	36907	276			TEMP	6,687							DRIVEWAY CONSTRUCTION, FENCE REMOVAL, SEDIMENT CONTROL BARRIER, TREE REMOVAL, SITE GRADING (MAX 2:1)	
PUE-S-1	7	FREDRIC BAUMERT AND DONNA J. DIGIOVINE	23364	240			PERM	1,455			164,003	221	51 STONY BROOK ROAD	RA	OVERHEAD WIRES, MODIFIED ROCKFILL SLOPE	
TE-4	7	FREDRIC BAUMERT AND DONNA J. DIGIOVINE	23364	240			TEMP	2,658							CLEARING AND GRUBBING, TREE REMOVAL, SEDIMENT CONTROL BARRIER, CONTROL OF WATER, DRIVEWAY RECONSTRUCTION, SITE GRADING (MAX 2:1).	
PUE-3	7	DAVID F. FANTINI AND KIMBERLY C. FANTINI	17382	88			PERM	194			44,796	200	49 STONY BROOK ROAD	RA	OVERHEAD WIRES AND UTILITY POLE	
TCA-1	7	TOWN OF WESTFORD (CONSERVATION COMMISSION)	18348	279			TEMP	1,797				124	51 STONY BROOK ROAD	RA	SEDIMENT CONTROL BARRIER, CONTROL OF WATER, CLEARING AND GRUBBING, DRIVEWAY RECONSTRUCTION, SITE GRADING (MAX 2:1)	ARTICLE 97
TWLR-1	7	BURGER INVESTMENT TRUST	33068	282			TEMP	1,509				395	54 STONY BROOK ROAD	RA	WETLAND REPLICATION, SEDIMENT CONTROL BARRIER, TREE PROTECTION, TEMPORARY GRADING FOR HEADWALL, CLEARING AND GRUBBING, DRIVEWAY RECONSTRUCTION, SITE GRADING (MAX 2:1) (TEN-YEAR TERM FOR WETLAND REPLICATION)	

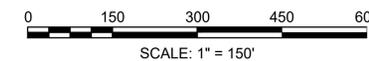
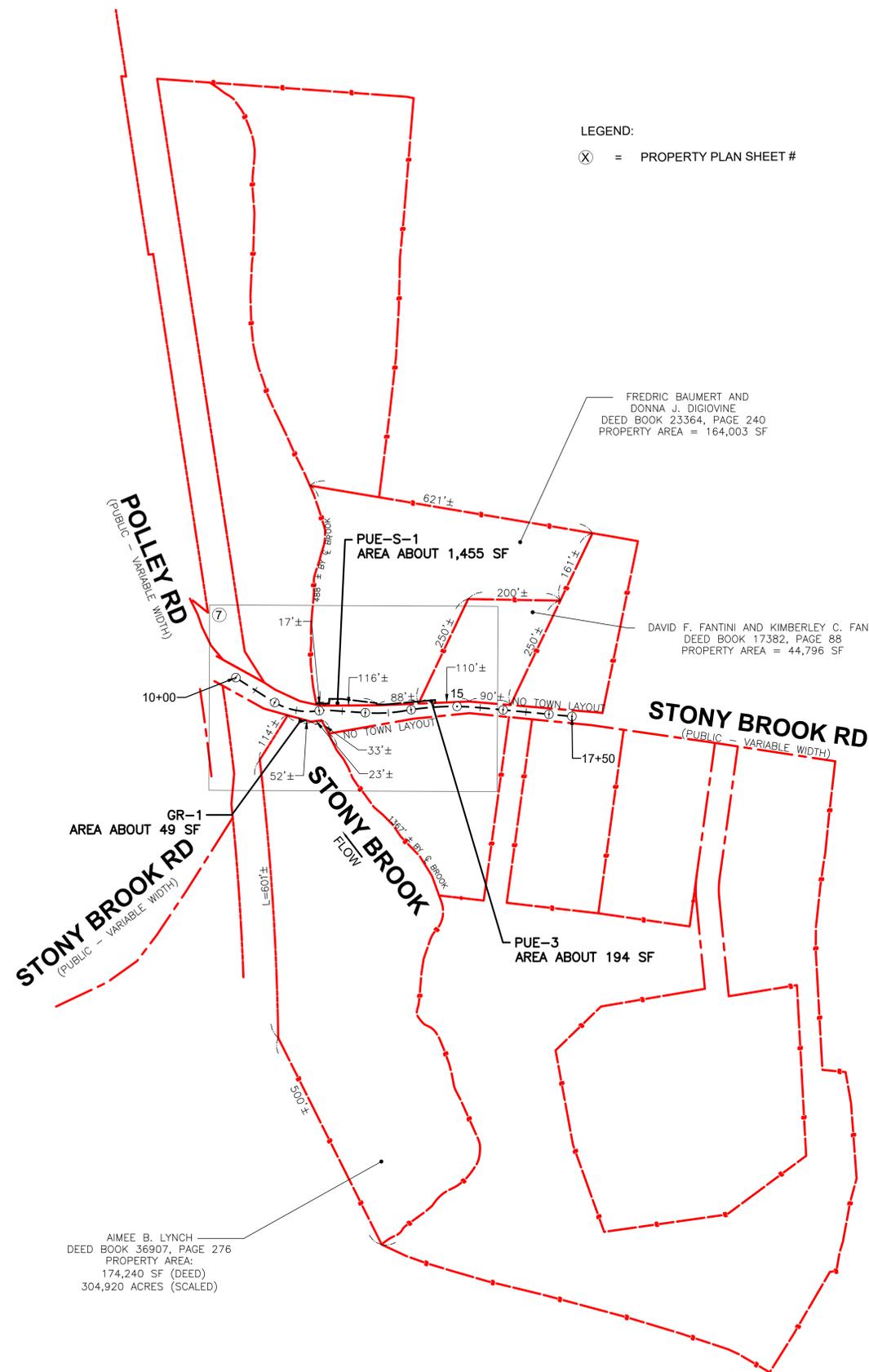
WESTFORD
STONY BROOK ROAD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	6	8
PROJECT FILE NO.		608861	

PRELIMINARY RIGHT OF WAY
LOCATION PLAN



LEGEND:
⊗ = PROPERTY PLAN SHEET #



**WESTFORD
STONY BROOK ROAD**

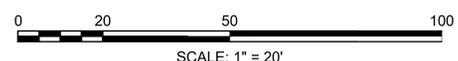
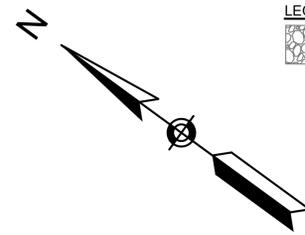
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MA	-	7	8

**PRELIMINARY RIGHT OF WAY
PROPERTY PLAN**

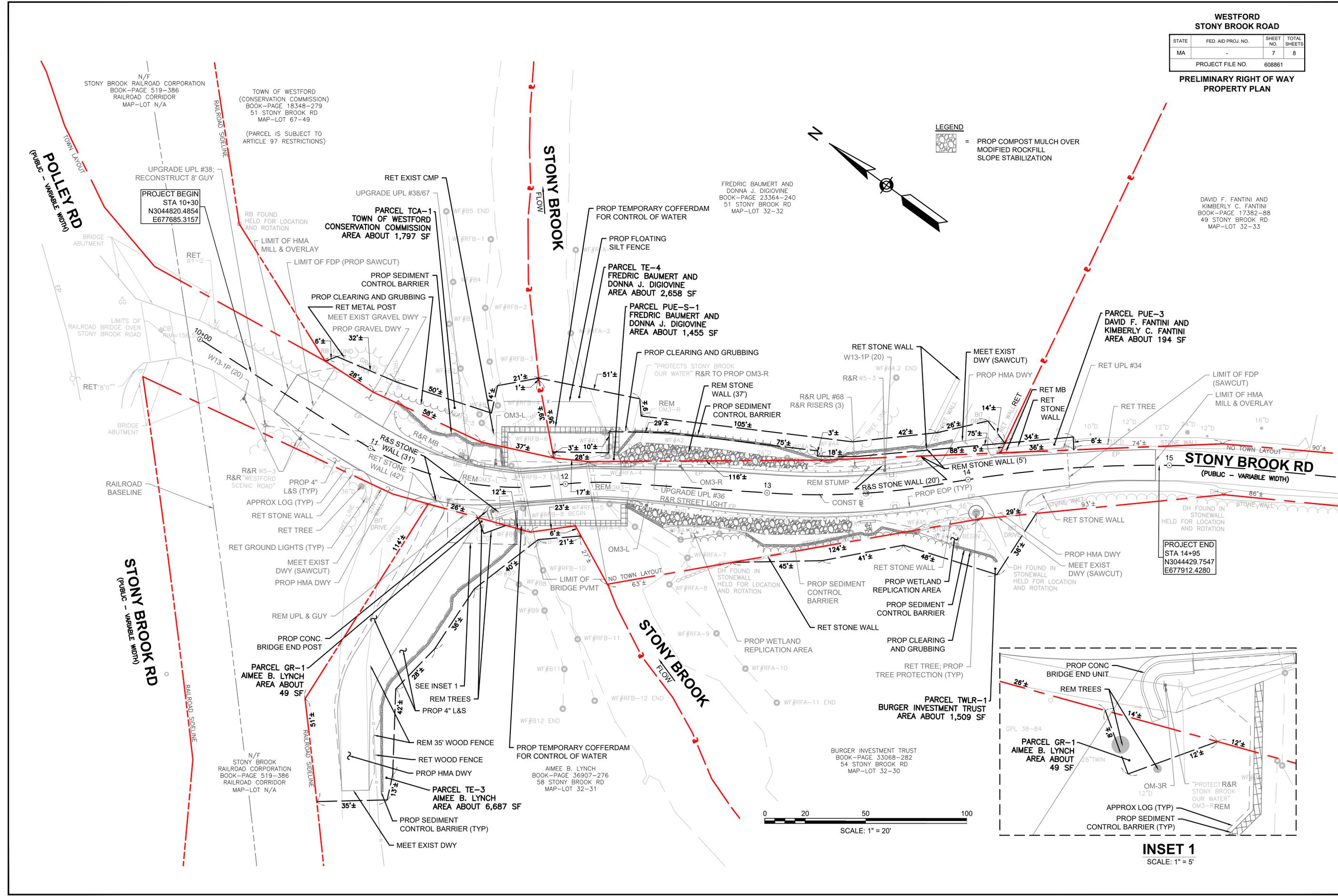
DAVID F. FANTINI AND
KIMBERLY C. FANTINI
BOOK-PAGE 17382-88
49 STONY BROOK RD
MAP-LOT 32-33

LEGEND

= PROP COMPOST MULCH OVER
MODIFIED ROCKFILL
SLOPE STABILIZATION



INSET 1
SCALE: 1" = 5'



PROJECT BEGIN
STA 10+30
N3044820.4854
E677685.3157

PROJECT END
STA 14+95
N3044429.7547
E677912.4280

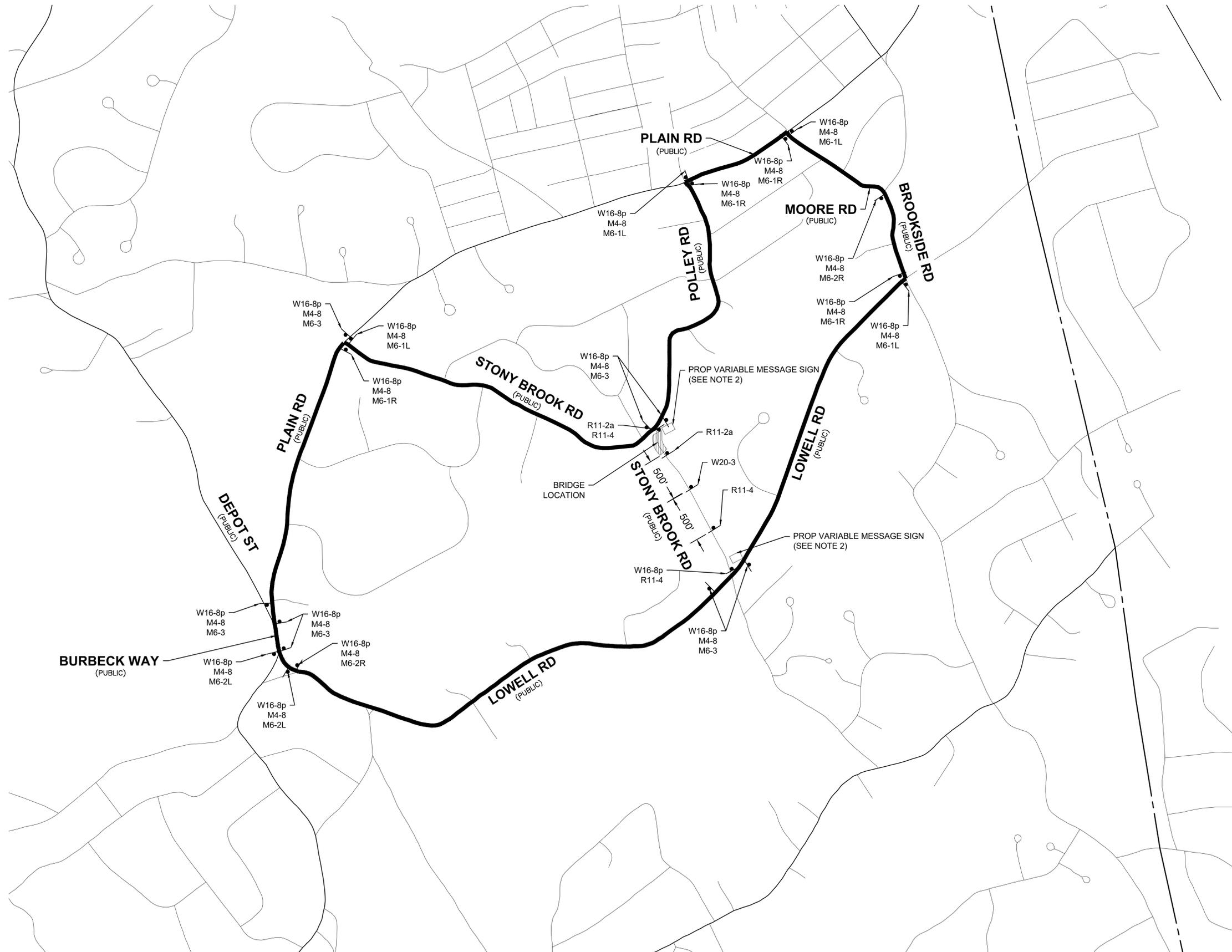
**WESTFORD
STONY BROOK ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	8	8
PROJECT FILE NO.		608861	

**PRELIMINARY RIGHT OF WAY
DETOUR PLAN**

NOTES:

1. ALL DETOUR SIGNS SHALL BE INSTALLED WITHIN THE RIGHT OF WAY LIMITS.
2. VARIABLE MESSAGE SIGNS TO BE SET UP 2 WEEKS PRIOR TO ROAD CLOSURE. MESSAGE TO READ:
"STONY BROOK RD
CLOSED X/X/XX
SEEK ALT ROUTE"



PROPOSED BRIDGE CLOSURE DETOUR
NOT TO SCALE