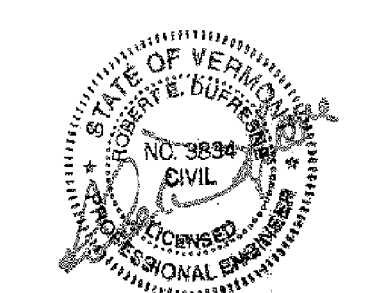


Project #	416006
Project Mgr.	RAW
Design	RNG
Drawn	EAE
Checked by	R.E. DUFRESNE
Date	December 09
Scale	AS SHOWN
Approved by	RED

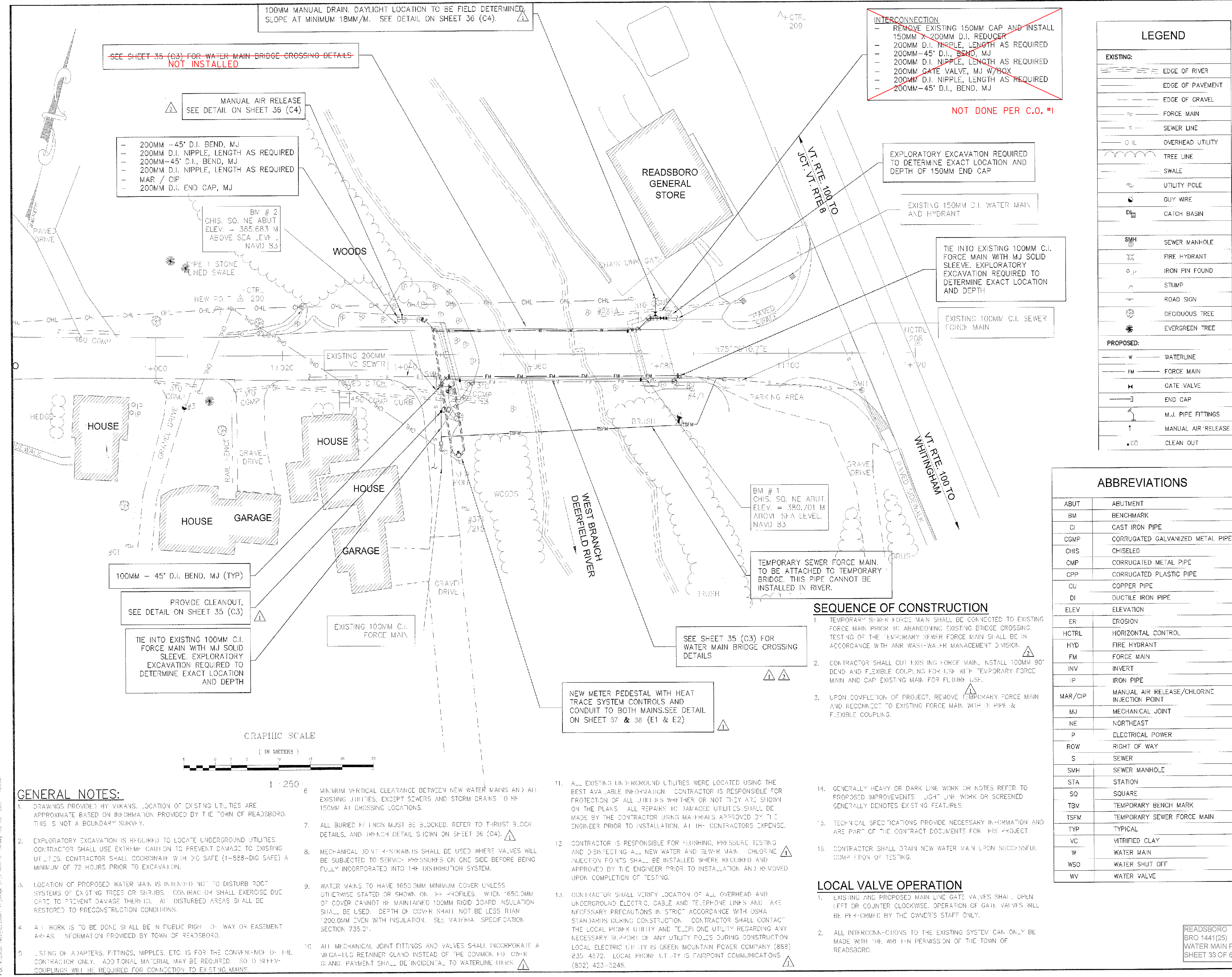
Revisions:
 10-27-09 : REVISIONS PER VTRANS COMMENTS
 12-23-09 : REVISIONS PER VTRANS COMMENTS

NOTES FOR THIS PROJECT SHALL NOT BE DELETED OR CHANGED IN ANY MANNER WITHOUT THE WRITTEN APPROVAL AND AUTHORITY OF DUFRESNE & ASSOCIATES, P.C. ANY REVISIONS SHALL BE MADE BY THE DRAWING.



12-29-09

BRIDGE #31
WATER MAIN AND FORCE MAIN PLAN
LEGEND, ABBREVIATIONS,
AND GENERAL NOTES
READSBORO, VERMONT



LEGEND

EXISTING:

- EDGE OF RIVER
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- FORCE MAIN
- SEWER LINE
- OVERHEAD UTILITY
- TREE LINE
- SWALE
- UTILITY POLE
- GUY WIRE
- CATCH BASIN

PROPOSED:

- WATERLINE
- FORCE MAIN
- GATE VALVE
- END CAP
- M.J. PIPE FITTINGS
- MANUAL AIR RELEASE
- CLEAN OUT

ABBREVIATIONS

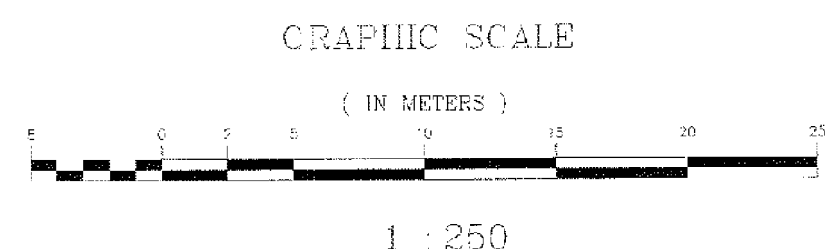
ABUT	ABUTMENT
BM	BENCHMARK
CI	CAST IRON PIPE
CGMP	CORRUGATED GALVANIZED METAL PIPE
CHIS	CHISELED
COMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
CU	COPPER PIPE
DI	DUCTILE IRON PIPE
ELEV	ELEVATION
ER	EROSION
HCTRL	HORIZONTAL CONTROL
HYD	FIRE HYDRANT
FM	FORCE MAIN
INV	INVERT
IP	IRON PIPE
MAR/CIP	MANUAL AIR RELEASE/CHLORINE INJECTION POINT
MJ	MECHANICAL JOINT
NE	NORTHEAST
P	ELECTRICAL POWER
ROW	RIGHT OF WAY
S	SEWER
SMH	SEWER MANHOLE
STA	STATION
SQ	SQUARE
TBM	TEMPORARY BENCH MARK
TSM	TEMPORARY SEWER FORCE MAIN
TYP	TYPICAL
VC	VITRIFIED CLAY
W	WATER MAIN
WSO	WATER SHUT OFF
WV	WATER VALVE

- ### SEQUENCE OF CONSTRUCTION
- TEMPORARY SEWER FORCE MAIN SHALL BE CONNECTED TO EXISTING FORCE MAIN PRIOR TO ABANDONING EXISTING BRIDGE CROSSING. TESTING OF THE TEMPORARY SEWER FORCE MAIN SHALL BE IN ACCORDANCE WITH ANR WASH-WAHR MANAGEMENT DIVISION.
 - CONTRACTOR SHALL CUT EXISTING FORCE MAIN, INSTALL 100MM 90' BEND AND FLEXIBLE COUPLING FOR USE WITH TEMPORARY FORCE MAIN AND CAP EXISTING MAIN FOR FUTURE USE.
 - UPON COMPLETION OF PROJECT, REMOVE TEMPORARY FORCE MAIN AND RECONNECT TO EXISTING FORCE MAIN WITH 1" PIPE & FLEXIBLE COUPLING.

- ### LOCAL VALVE OPERATION
- EXISTING AND PROPOSED MAIN LINE GATE VALVES SHALL OPEN LEFT OR COUNTER CLOCKWISE. OPERATION OF GATE VALVES WILL BE PERFORMED BY THE OWNER'S STAFF ONLY.
 - ALL INTERCONNECTIONS TO THE EXISTING SYSTEM CAN ONLY BE MADE WITH THE WRITTEN PERMISSION OF THE TOWN OF READSBORO.

- ### GENERAL NOTES:
- DRAWINGS PROVIDED BY VTRANS. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE BASED ON INFORMATION PROVIDED BY THE TOWN OF READSBORO. THIS IS NOT A BOUNDARY SURVEY.
 - EXPLORATORY EXCAVATION IS REQUIRED TO LOCATE UNDERGROUND UTILITIES. CONTRACTOR SHALL USE EXTREME CAUTION TO PREVENT DAMAGE TO EXISTING UTILITIES. CONTRACTOR SHALL COORDINATE WITH 311 (888-DIG SAFE) A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION.
 - LOCATION OF PROPOSED WATER MAIN IS INTENDED NOT TO DISTURB ROOT SYSTEMS OF EXISTING TREES OR SHRUBS. CONTRACTOR SHALL EXERCISE DUE CARE TO PREVENT DAMAGE THERE TO. ALL DISTURBED AREAS SHALL BE RESTORED TO PRECONSTRUCTION CONDITIONS.
 - ALL WORK IS TO BE DONE SHALL BE IN PUBLIC RIGHT OF WAY OR EASEMENT AREAS. INFORMATION PROVIDED BY TOWN OF READSBORO.
 - LOCATING OF ADAPTERS, FITTINGS, NIPPLES, ETC. IS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. ADDITIONAL MATERIAL MAY BE REQUIRED. SOFFIT COUPLINGS WILL BE REQUIRED FOR CONNECTION TO EXISTING MAINS.

- MINIMUM VERTICAL CLEARANCE BETWEEN NEW WATER MAINS AND ALL EXISTING UTILITIES, EXCEPT SEWERS AND STORM DRAINS TO BE 150MM AT CROSSING LOCATIONS.
- ALL BURIED FITTINGS MUST BE BLOCKED. REFER TO THRUST BLOCK DETAILS, AND INKNOT DETAIL SHOWN ON SHEET 36 (C4).
- MECHANICAL JOINT FITTINGS SHALL BE USED WHERE VALVES WILL BE SUBJECTED TO SERVICE PRESSURES ON ONE SIDE BEFORE BEING FULLY INCORPORATED INTO THE DISTRIBUTION SYSTEM.
- WATER MAINS TO HAVE 1650MM MINIMUM COVER UNLESS OTHERWISE STATED OR SHOWN ON PP PROFILES. WHEN 1650MM OF COVER CANNOT BE MAINTAINED 100MM RIGID BOARD INSULATION SHALL BE USED. DEPTH OF COVER SHALL NOT BE LESS THAN 200.0MM EVEN WITH INSULATION. SEE MATERIAL SPECIFICATION SECTION 735.01.
- ALL MECHANICAL JOINT FITTINGS AND VALVES SHALL INCORPORATE AN ANTI-LOG RETAINER GLAND INSTEAD OF THE COMMON FO GEAR GLAND. PAYMENT SHALL BE INCIDENTAL TO WATERLINE ITEMS.
- ALL EXISTING UNDERGROUND UTILITIES WERE LOCATED USING THE BEST AVAILABLE INFORMATION. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL UTILITIES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. ALL REPAIRS TO DAMAGED UTILITIES SHALL BE MADE BY THE CONTRACTOR USING MATERIALS APPROVED BY THE ENGINEER PRIOR TO INSTALLATION, AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR FLUSHING, PRESSURE TESTING AND DISINECTING ALL NEW WATER AND SEWER MAIN. CHLORINE INJECTION POINTS SHALL BE INSTALLED WHERE REQUIRED AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION AND REMOVED UPON COMPLETION OF TESTING.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND ELECTRIC, CABLE AND TELEPHONE LINES AND TAKE NECESSARY PRECAUTIONS IN STRICT ACCORDANCE WITH OSHA STANDARDS DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE LOCAL POWER UTILITY AND TELEPHONE UTILITY REGARDING ANY NECESSARY SHUTDOWN OF ANY UTILITY POLS DURING CONSTRUCTION. LOCAL ELECTRIC UTILITY IS GREEN MOUNTAIN POWER COMPANY (888) 835 4572. LOCAL PHONE UTILITY IS FAIRPOINT COMMUNICATIONS (802) 423-5245.



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