

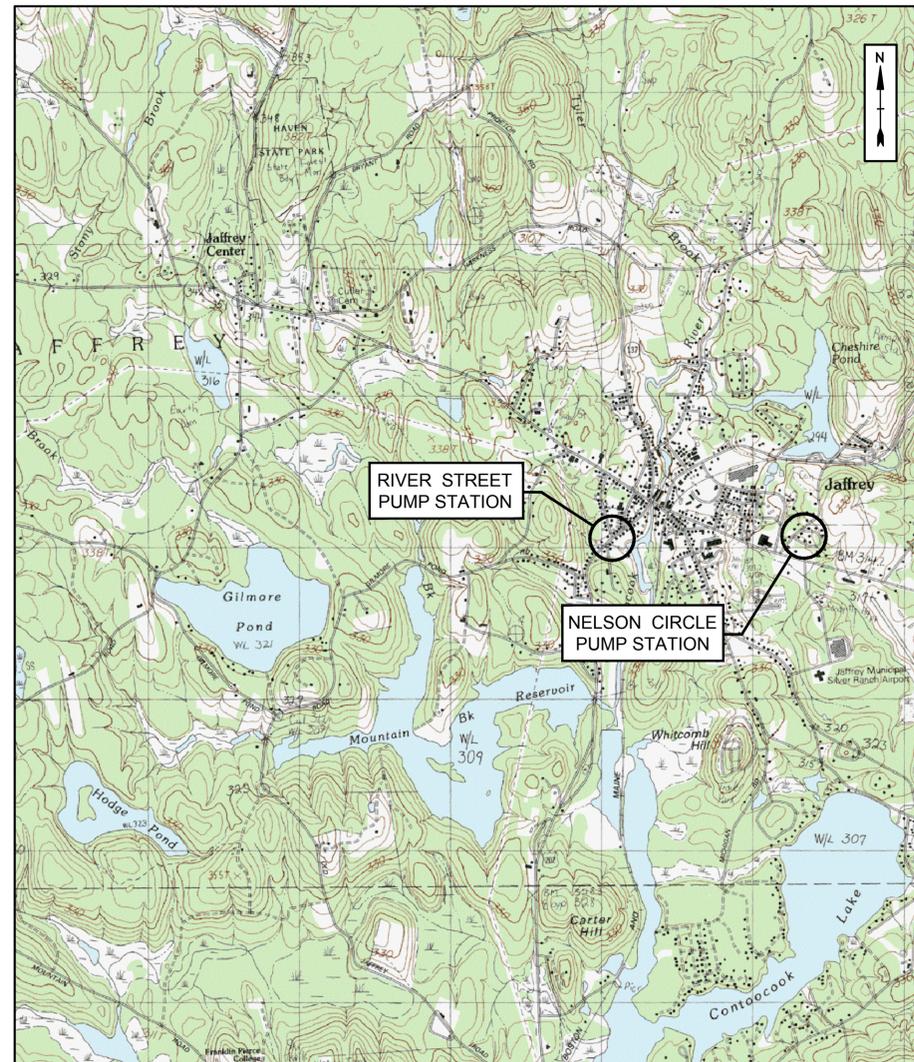
RIVER STREET AND NELSON CIRCLE PUMP STATION REPLACEMENT

TOWN OF JAFFREY
JAFFREY, NEW HAMPSHIRE

NOVEMBER 2015

SRF NO. CS-330238-09

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LOCATION PLAN

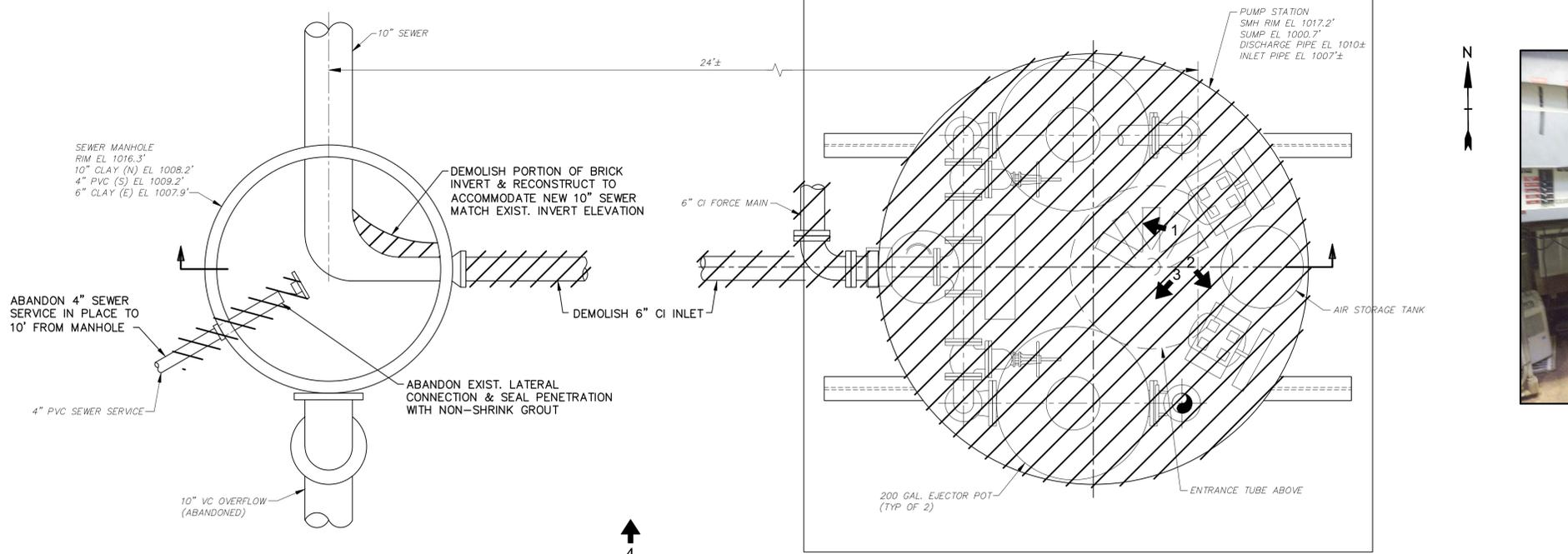
DEPARTMENT OF PUBLIC WORKS

RANDALL W. HEGLIN,
DIRECTOR OF PUBLIC WORKS

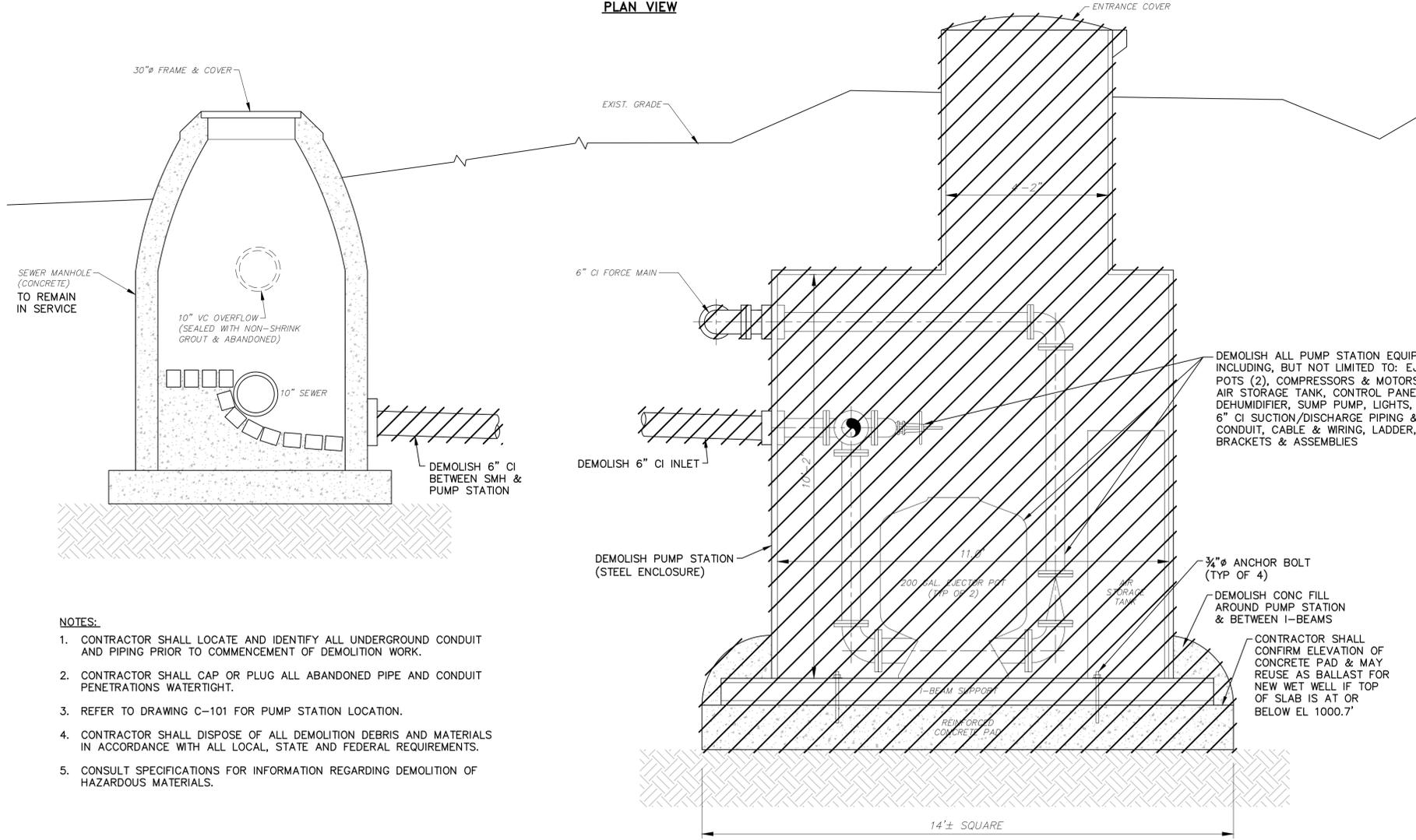
DOUGLAS H. STARR P.E.,
TOWN ENGINEER

Tighe&Bond
Consulting Engineers

BID SET
COMPLETE SET 17 SHEETS



PLAN VIEW



SECTION VIEW

RIVER STREET PUMP STATION DEMOLITION
 NO SCALE

PHOTO #1



PHOTO #2



PHOTO #3



PHOTO #4



EXIST. SANITARY MANHOLE TO BE MODIFIED
 EXIST. PUMP STATION TO BE DEMOLISHED

LEGEND:

- # PHOTOGRAPH
- STRUCTURE, EQUIPMENT, PIPING, AND CONDUIT TO BE REMOVED AND PROPERLY DISPOSED OF. EQUIPMENT TO BE REMOVED AND DISPOSED OF OR RELOCATED AS DIRECTED BY THE OWNER.

- NOTES:**
1. CONTRACTOR SHALL LOCATE AND IDENTIFY ALL UNDERGROUND CONDUIT AND PIPING PRIOR TO COMMENCEMENT OF DEMOLITION WORK.
 2. CONTRACTOR SHALL CAP OR PLUG ALL ABANDONED PIPE AND CONDUIT PENETRATIONS WATERTIGHT.
 3. REFER TO DRAWING C-101 FOR PUMP STATION LOCATION.
 4. CONTRACTOR SHALL DISPOSE OF ALL DEMOLITION DEBRIS AND MATERIALS IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
 5. CONSULT SPECIFICATIONS FOR INFORMATION REGARDING DEMOLITION OF HAZARDOUS MATERIALS.

Town of Jaffrey

River Street and Nelson Circle Pump Station Replacement

Jaffrey, New Hampshire

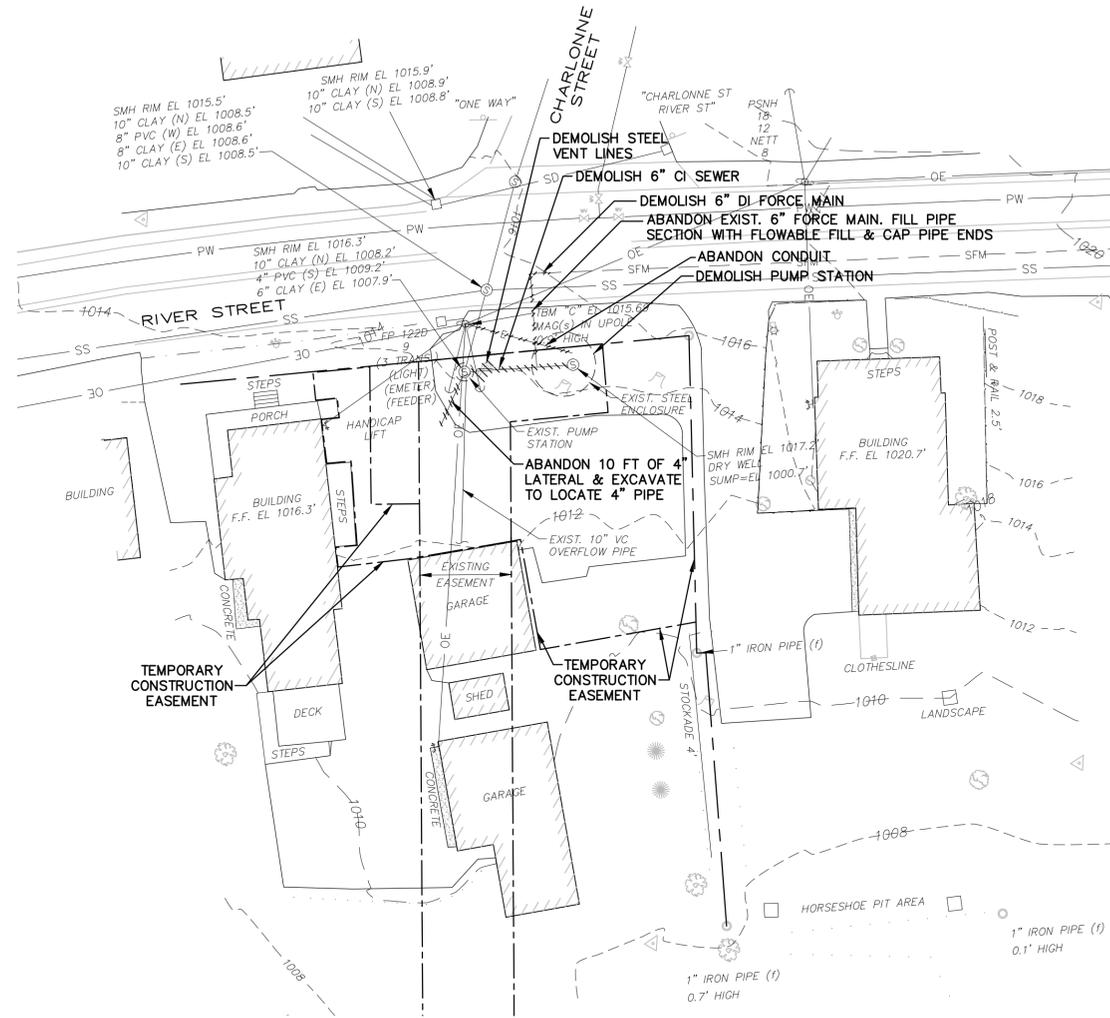
November 2015

Mark	Date	Description
A	7/15	NHDES REVIEW SET
PROJECT NO: J0097		
FILE: D-001		
DRAWN BY: RWK		
CHECKED: PAM		
APPROVED BY: IBC, DEP		

RIVER STREET PUMP STATION DEMOLITION

SCALE: AS SHOWN

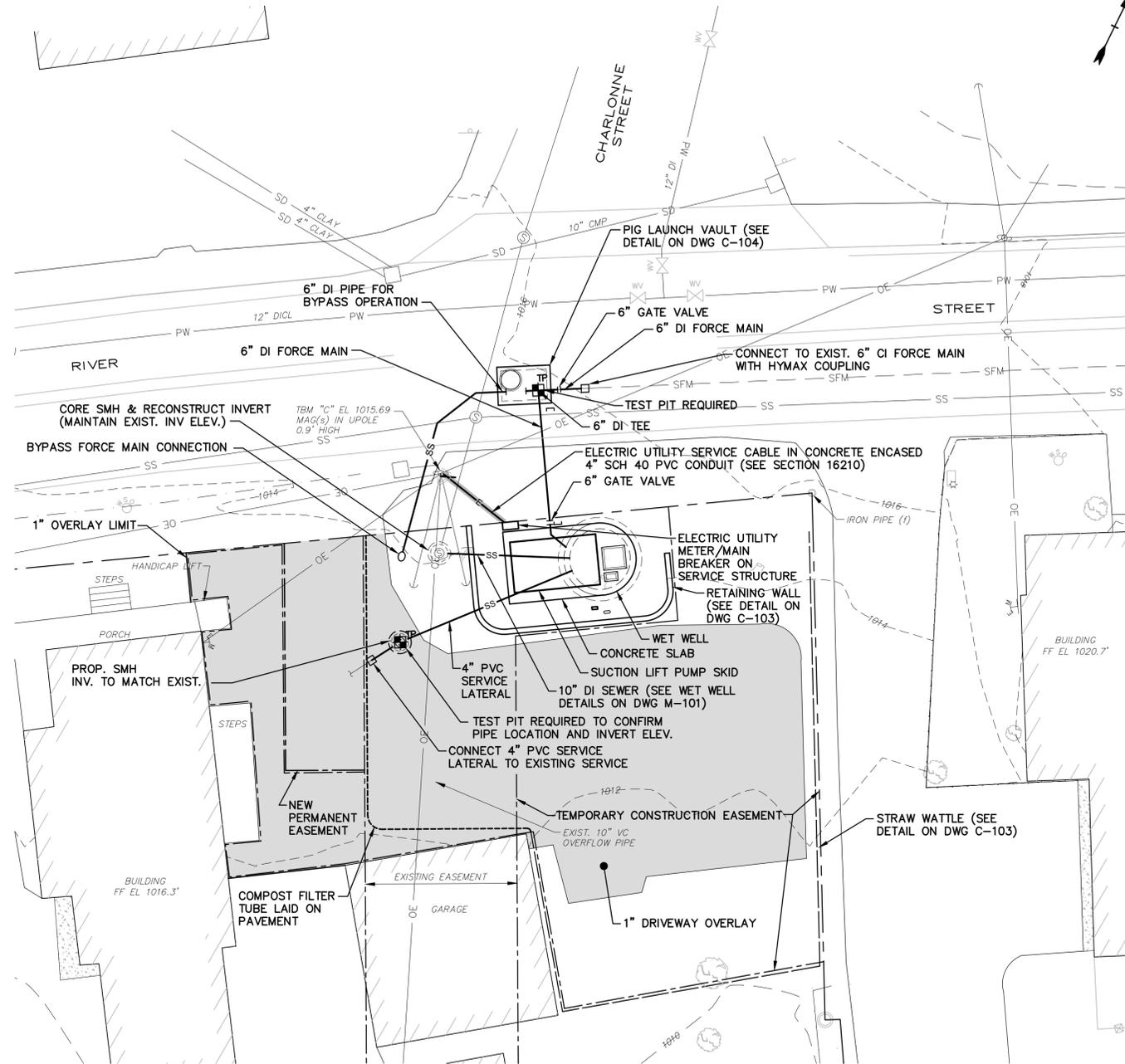
D-101
 SHEET 3 OF 17



EXISTING CONDITIONS AND DEMOLITION PLAN
 1"=20'

NOTES:

1. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES IN PLACE DURING CONSTRUCTION.
2. SEE SPECIFICATIONS FOR DEMOLITION AND WASTE DISPOSAL REQUIREMENTS.



PROPOSED CONDITIONS PLAN
 1"=10'

NOTES:

1. 100 YEAR FLOOD ELEVATION IS 1014 FEET IN VICINITY OF PUMP STATION.

Town of Jaffrey

River Street and Nelson Circle Pump Station Replacement

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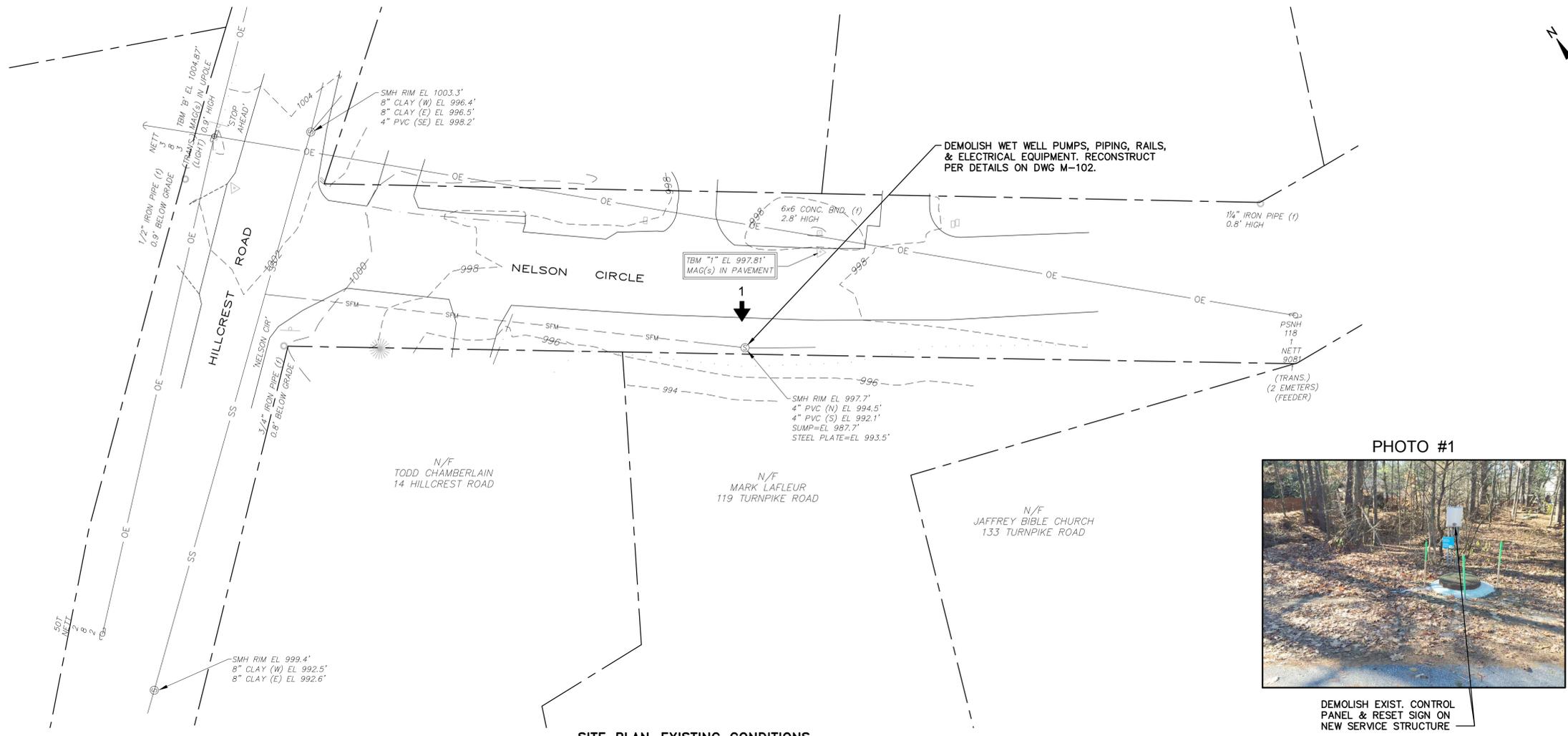
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A	7/15	NHDES REVIEW SET

PROJECT NO: J0097
 FILE: C-101
 DRAWN BY: RWK
 CHECKED BY: PAM, MJR
 APPROVED BY: IBC, DEP

RIVER STREET EXISTING AND PROPOSED CONDITIONS PLANS

SCALE: AS SHOWN

C-101
 SHEET 4 OF 17



DEMOLISH EXIST. CONTROL PANEL & RESET SIGN ON NEW SERVICE STRUCTURE

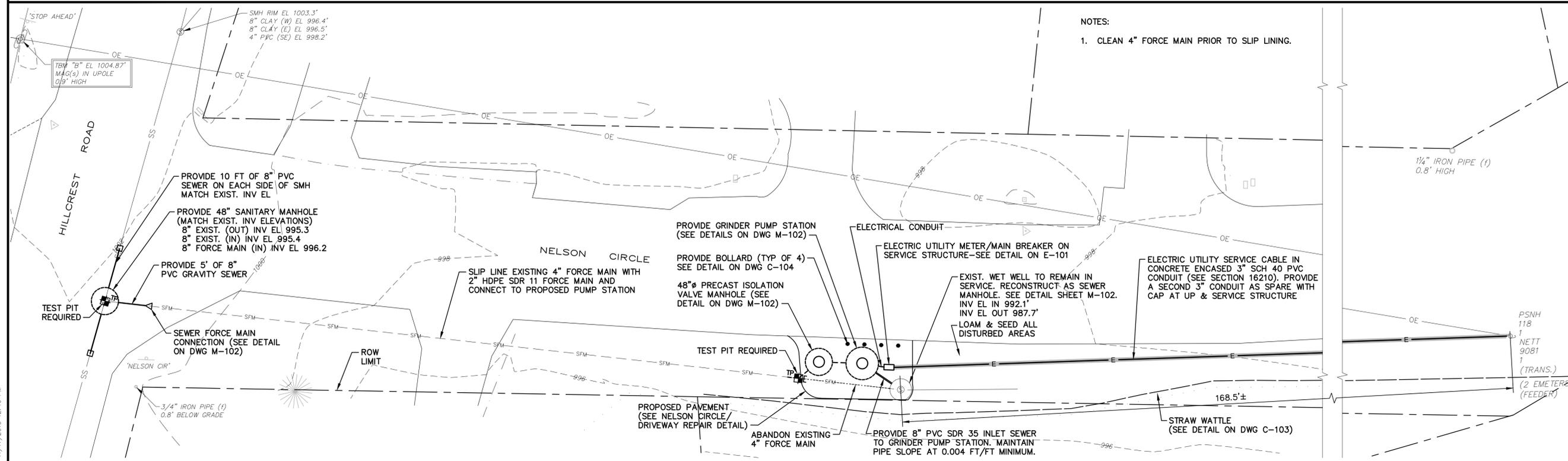
SITE PLAN-EXISTING CONDITIONS
 1"=20'

Town of Jaffrey

River Street and Nelson Circle Pump Station Replacement

Jaffrey, New Hampshire

November 2015



- NOTES:**
- CLEAN 4" FORCE MAIN PRIOR TO SLIP LINING.

SITE PLAN-PROPOSED CONDITIONS
 1"=10'

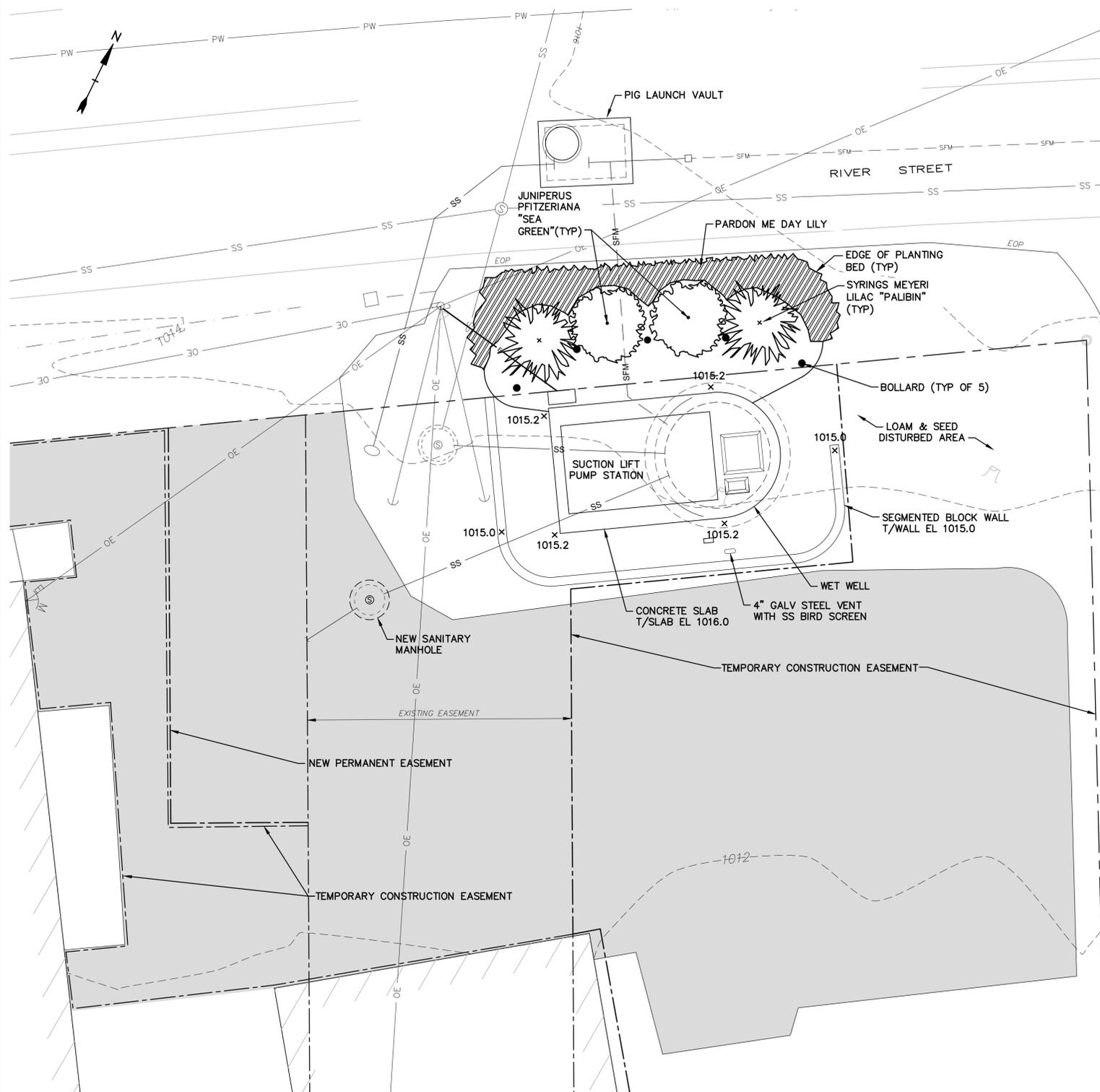
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PROJECT NO: J0097		
FILE: C-102		
DRAWN BY: RWK		
CHECKED: PAM, MUR		
APPROVED BY: IBC, DEP		

NELSON CIRCLE EXISTING AND PROPOSED CONDITIONS PLANS

SCALE: AS SHOWN

C-102
 SHEET 5 OF 17

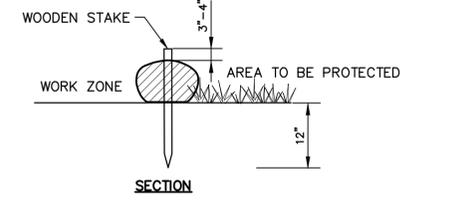
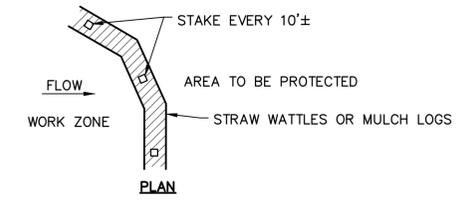
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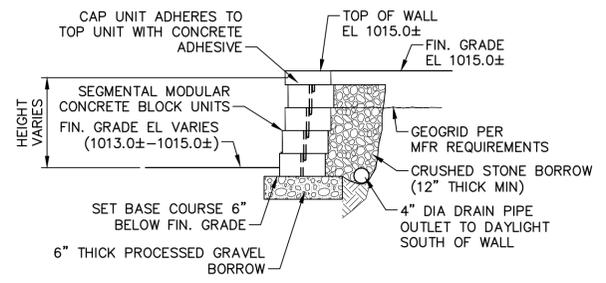
RIVER STREET SITE RESTORATION PLAN
 1" = 5'

QTY	BOTANICAL NAME	COMMON NAME	ZONE	HABIT OF HEIGHT	GROWTH SPREAD	INSTALLED SIZE	TYPE
2	SYRINGS MEYERI	LILAC "PALIBIN"	3	4'	4'-5'	2'-3' HEIGHT	B&B
2	JUNIPERUS PFITZERIANA	"SEA GREEN"	4	4'-6'	6'-8'	2'-3' HEIGHT	B&B
12	HEMEROCALLIS	"PARDON ME" DAY LILY	3	18"	-	12" HEIGHT	1 GAL

- NOTES:
1. ALL PLANTING BEDS SHALL BE MULCHED WITH A MINIMUM OF 3 INCHES OF SHREDDED BLAC PINE BARK MULCH.
 2. ALL MASS PLANTED BEDS SHALL RECEIVE A MINIMUM 18 INCH DEEP TOPSOIL BLANKET. LOAM SHALL BE AS SPECIFIED IN SECTION 02922.
 3. ALL PLANT MATERIAL TO CONFORM TO CURRENT, AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60 1-2004.

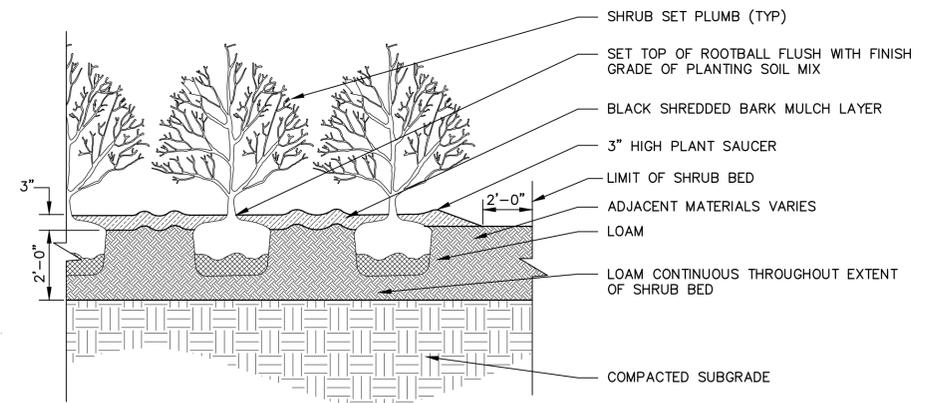


STRAW WATTLE EROSION CONTROL BARRIER
 NO SCALE

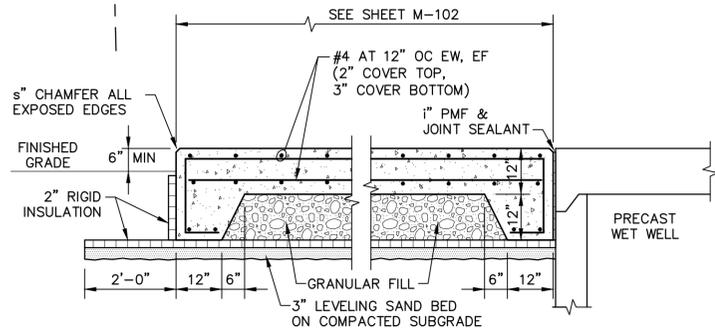


NOTE:
 SEGMENTAL BLOCK COLOR AND CUT SHALL BE APPROVED BY THE TOWN ENGINEER BEFORE ORDERING.

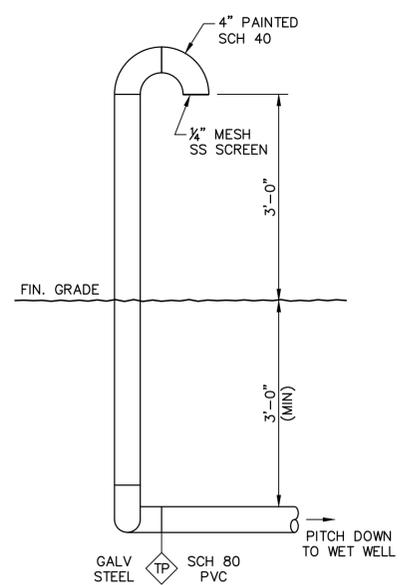
SEGMENTAL BLOCK RETAINING WALL
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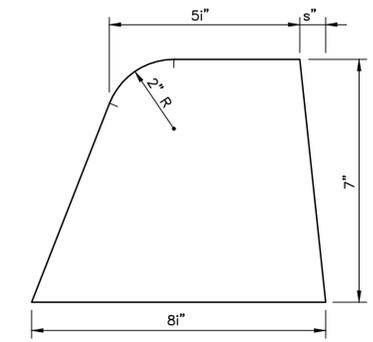
SHRUB PLANTING
 NO SCALE



CONCRETE PAD
 NO SCALE



WET WELL VENT DETAIL
 NO SCALE



TYPE 'A' BERM
 NO SCALE

Town of Jaffrey

River Street and Nelson Circle Pump Station Replacement

Jaffrey, New Hampshire

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A	7/15	NHDES REVIEW SET

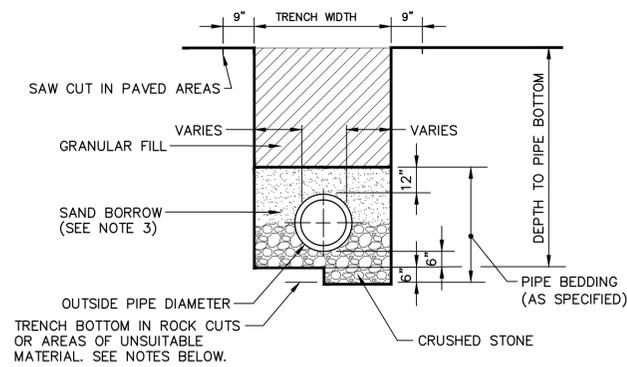
PROJECT NO: J0097
 FILE: C-103
 DRAWN BY: RWK
 CHECKED BY: PAM
 APPROVED BY: IBC, DEP

SITE DETAILS

SCALE: AS SHOWN

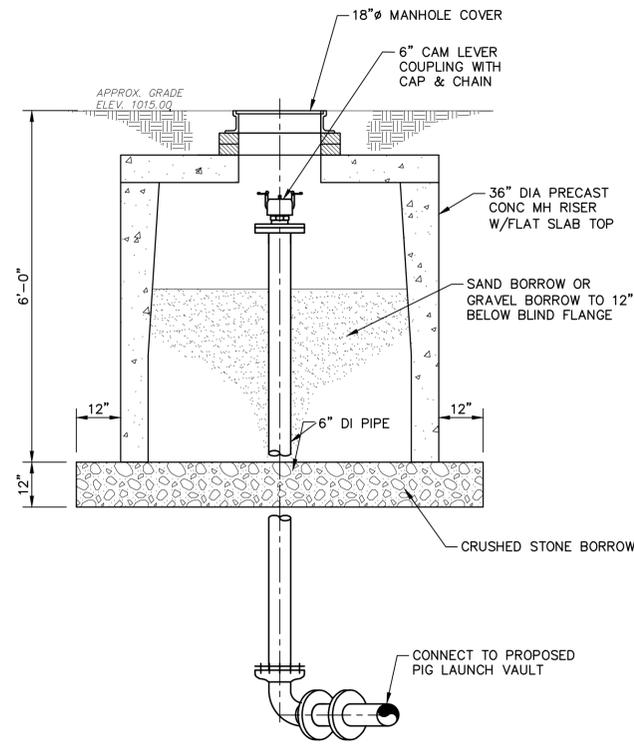
C-103
 SHEET 6 OF 17

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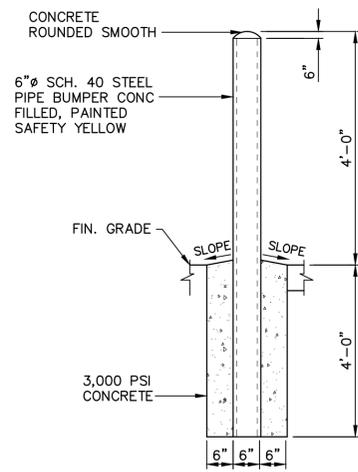


- NOTES:**
- CROSS COUNTRY AREAS:** USE SUITABLE EXCAVATED MATERIAL PLACED IN 12-IN. MAXIMUM LOOSE LAYERS, COMPACTED TO 95% MAXIMUM DRY DENSITY.
 - PAVED AREAS AND SHOULDERS:** USE SUITABLE EXCAVATED MATERIAL TO BOTTOM OF ROADWAY BASE COURSE, PLACED IN 12-INCH LIFTS AND COMPACTED TO 95% MAXIMUM DRY DENSITY.
 - SUITABLE EXCAVATED MATERIAL SHALL BE FREE OF DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUDS, PEAT OR CLAY, EXCAVATED LEDGE MATERIALS, ROCKS OVER 6" IN LARGEST DIMENSION, OR ANY MATERIAL NOT APPROVED BY THE ENGINEER.
 - GROUNDWATER LEVELS SHALL BE MAINTAINED TO ALLOW EXCAVATION AND SUBGRADE PREPARATION TO BE PERFORMED IN THE DRY, AND MAINTAINED STABILITY OF THE EXCAVATION AND PROHIBITED MOVEMENT OR SETTLEMENT OF THE EXISTING PIPE RELATED TO GROUNDWATER.
 - IN LIEU OF SAND BORROW, A 3/4" CRUSHED STONE ENVELOPE 6" THICK COMPLETELY AROUND THE PIPE MAY BE USED.
 - EXCAVATION FOR TRENCHES IN LEDGE SHALL EXTEND AT LEAST 12 INCHES BELOW THE BOTTOM OF THE SEWER PIPE.

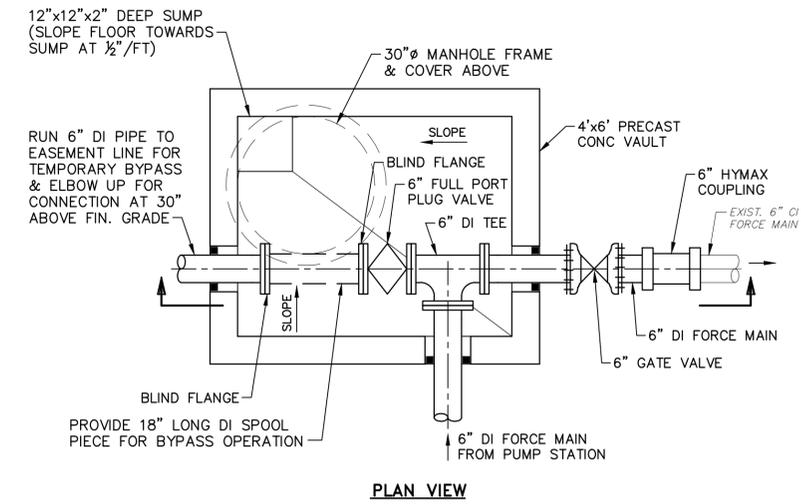
SEWER TRENCH SECTION
NO SCALE



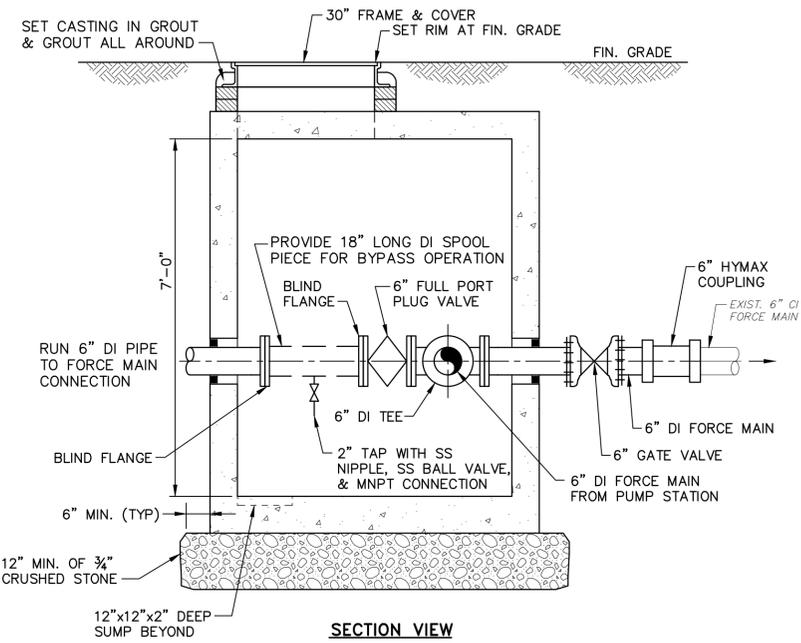
**RIVER STREET PUMP STATION
 TEMPORARY BYPASS FORCEMAIN CONNECTION DETAIL**
NO SCALE



BOLLARD DETAIL
NO SCALE

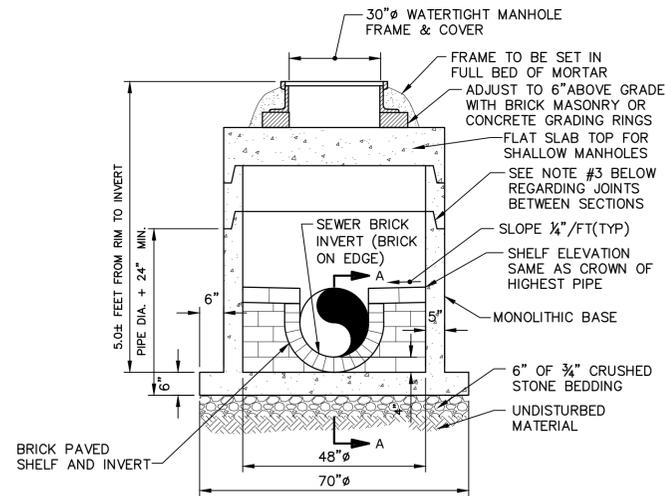


PLAN VIEW



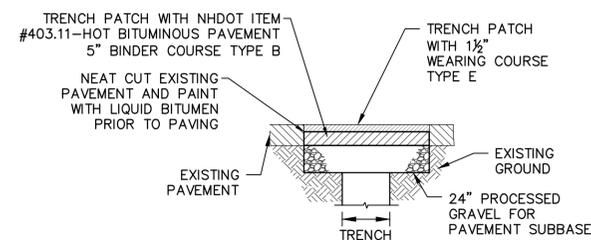
SECTION VIEW

PIG LAUNCH MANHOLE DETAIL
NO SCALE

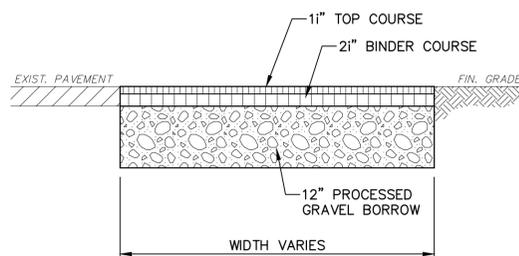


- NOTES**
- CONTRACTOR TO MATCH EXISTING INVERT ELEVATION OF SEWER SERVICE LATERAL.
 - CONTRACTOR TO FIELD VERIFY MANHOLE DEPTH AND DIMENSIONS AS REQUIRED.
 - HORIZONTAL JOINTS BETWEEN PRECAST SECTIONS SHALL BE AN OVERLAPPING TYPE, SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.
 - PRECAST MANHOLE SECTIONS AND BASES SHALL BE COATED WITH EXTERIOR DAMPROOFING.

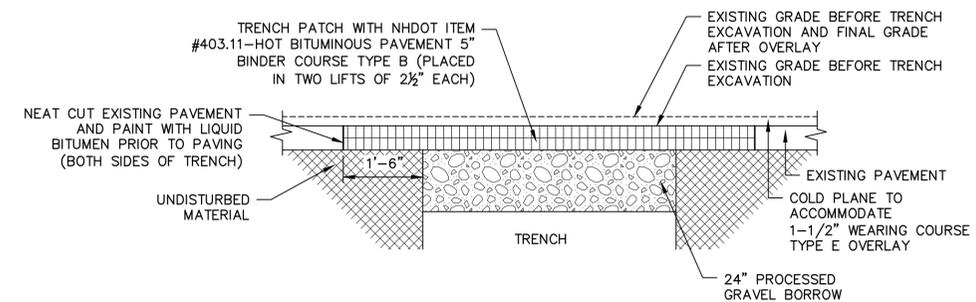
48" PRECAST SANITARY SEWER MANHOLE
NO SCALE



GUTTER PAVEMENT REPAIR
NO SCALE



NELSON CIRCLE/DRIVEWAY REPAIR
NO SCALE



PAVEMENT REPAIR WITHIN FULL WIDTH PAVEMENT OVERLAY
NO SCALE

- NOTES:**
- ALL BITUMINOUS CONCRETE, AGGREGATE, STABILIZED COURSE, SUBBASE AND LIQUID BITUMEN SHALL CONFORM TO THE MATERIALS EQUIPMENT AND CONSTRUCTION REQUIREMENTS AS PER STATE SPECIFICATIONS.
 - MAINTAIN A MINIMUM 12" WIDE TRAVEL WAY AT ROAD CROSSINGS AT ALL TIMES DURING CONSTRUCTION. THE USE OF STEEL PLATES IS PERMITTED.
 - PLACE A TACK COAT ON TOP OF BINDER COURSE PAVEMENT PRIOR TO PLACING WEARING COURSE.
 - REFER TO SPECIFICATIONS SECTION 02740 FOR COMPLETE PAVEMENT REPAIR REQUIREMENTS.

Town of Jaffrey

**River Street and
 Nelson Circle
 Pump Station
 Replacement**

Jaffrey, New Hampshire

November 2015

Mark	Date	Description
A	7/15	NHDES REVIEW SET
PROJECT NO: J0097		
FILE: C-104		
DRAWN BY: RWK		
CHECKED: PAM		
APPROVED BY: IBC, DEP		

SITE DETAILS

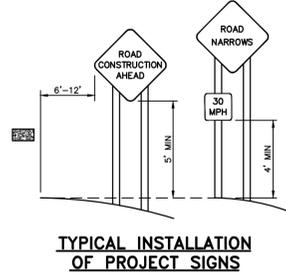
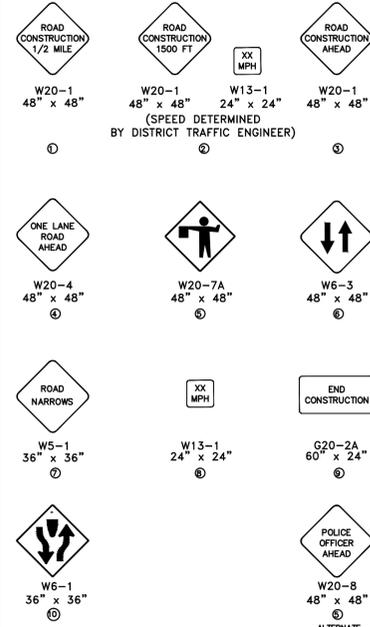
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C-104
SHEET 7 OF 17

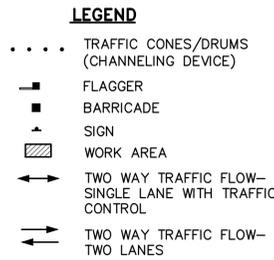
TRAFFIC MANAGEMENT PLAN

GENERAL NOTES

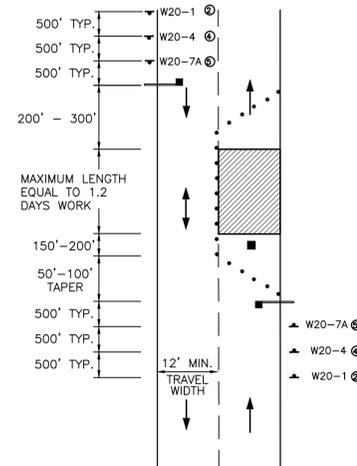
1. FLAGS SHALL BE AT LEAST 16"x16".
2. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN FIELD BY OWNER.
3. * = CHANNELIZING DEVICE
4. MAXIMUM SPACING OF CHANNELIZING DEVICES IS EQUAL IN FEET TO SPEED LIMIT.
5. NO TRAFFIC CONTROL DEVICES SHALL REMAIN ON THE ROADWAY AT THE END OF EACH WORK DAY.
6. SIGNS MUST BE COVERED OR REMOVED AT THE END OF EACH WORK DAY, OR WHENEVER BOTH LANES ARE OPEN TO TRAFFIC.
7. ALL WARNING SIGNS SHALL BE BLACK LEGEND ON A REFLECTIVE ORANGE BACKGROUND.
8. ADVISORY SPEED PLATES (W13-1) TO BE USED WHERE APPROPRIATE.
9. ALL TRAFFIC CONTROL DEVICES USED SHALL CONFORM TO THE LATEST EDITION OF THE "FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (MUTCD) IN BOTH SPECIFICATION AND APPLICATION.
10. TYPICAL LAYOUTS:
 TYPICAL LAYOUT "B" SHALL BE USED WHEN THE TRAVEL WIDTH FROM THE CHANNELIZING DEVICES TO THE EDGE OF PAVEMENT IS LESS THAN 22 FEET.
11. FOR TYPICAL LAYOUT B, THE CONTRACTOR SHALL MAINTAIN ONE OPEN TRAVEL LANE OF NOT LESS THAN 12 FEET AT ALL TIMES.
12. THE WORK ZONE AS SHOWN ON THESE PLANS IS REPRESENTATIVE ONLY AND MAY VARY IN BOTH LENGTH AND LOCATION AS CONSTRUCTION PROGRESSES. REGARDLESS OF THESE VARIATIONS, THE OFFSET DISTANCES TO THE TRAFFIC CONTROL DEVICES SHOWN SHALL BE MAINTAINED.
13. NO CONSTRUCTION EQUIPMENT OR MATERIALS (EXCEPT THOSE IN USE) SHALL BE STORED CLOSER THAN 8 FEET TO THE EDGE OF TRAVELED LANES.
14. ALL OPERATIONS SHALL BE CONDUCTED SO AS NOT TO INTERFERE WITH, INTERRUPT, OR ENDANGER THE GENERAL PUBLIC OR THE TRAFFIC FLOW.
15. THE NUMBER AND LOCATION OF ALL SIGNS AND DEVICES SHALL BE AS NECESSARY FOR THE SAFE AND EFFICIENT PERFORMANCE OF THE WORK AND THE SAFETY OF THE TRAVELING PUBLIC. ALL WARNING DEVICES SHALL BE SUBJECT TO REMOVAL, REPLACEMENT AND/OR REPOSITIONING BY THE CONTRACTOR AS OFTEN AS DEEMED NECESSARY.
16. ALL PERSONNEL WHO ARE WORKING ON THE TRAVELED WAY OR BREAKDOWN LANES SHALL WEAR SAFETY VESTS.
17. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT, UNLESS COVERED WITH STEEL PLATES.



TYPICAL INSTALLATION OF PROJECT SIGNS



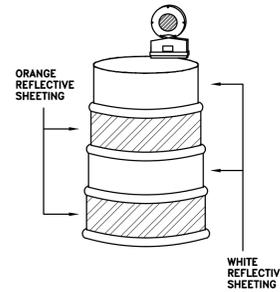
**TYPICAL LAYOUT "B"
 TWO LANE ROADWAY WITH ONE LANE CLOSED**



WORK AREA SIGNS

PLASTIC DRUMS

ITEM NO.	DESCRIPTION
859	REFLECTORIZED DRUM
859.1	REFLECTORIZED DRUM WITH FLASHER (TYPE A) - USED TO CONTINUALLY WARN DRIVERS THAT THEY ARE APPROACHING OR PROCEEDING IN A HAZARDOUS AREA (SEE MUTCD SECT. 6E4.6E5)



NOTES

1. DRUM DESIGN AND APPLICATION SHALL BE AS PER THE CURRENT EDITION OF THE MUTCD.
2. DRUMS SHALL BE APPROXIMATELY 36" IN HEIGHT, HAVING A MINIMUM WALL THICKNESS OF 3/32" AND A MINIMUM DIAMETER OF 18" REGARDLESS OF ORIENTATION.
3. DRUM MATERIAL MUST BE APPROVED U.V. RESISTANT, LOW DENSITY, IMPACT RESISTANT, LINEAR POLYETHYLENE (OR APPROVED EQUIVALENT). METAL DRUMS ARE PROHIBITED FROM USE ON ALL STATE HIGHWAY PROJECTS.
4. SHEETING SHALL BE APPROVED ORANGE AND WHITE TYPE IV REFLECTORIZED SHEETING CONFORMING TO M.9.30.0.
5. ALL DRUMS SHALL BE WELL MAINTAINED INCLUDING REMOVAL OF DUST OR ROAD FILM, SO AS NOT TO REDUCE REFLECTIVE EFFICIENCY. WHEN A DRUM LOSES TARGET VALUE IT SHALL BE REPLACED.
6. WHEN A DRUM IS NO LONGER NEEDED IT SHALL BE STORED IN A DRUM STORAGE AREA, UNLESS IT IS REQUIRED FOR FUTURE USE WITHIN A FIVE DAY PERIOD, IN WHICH CASE IT MAY BE STORED ON LOCATION.

Town of Jaffrey

River Street and Nelson Circle Pump Station Replacement

Jaffrey, New Hampshire

November 2015

Mark	Date	Description
A	7/15	NHDES REVIEW SET

PROJECT NO: J0097
 FILE: C-105
 DRAWN BY: RWK
 CHECKED: MJR
 APPROVED BY: MJR, DEP

TRAFFIC MANAGEMENT PLAN

SCALE: NO SCALE

C-105
 SHEET 8 OF 17

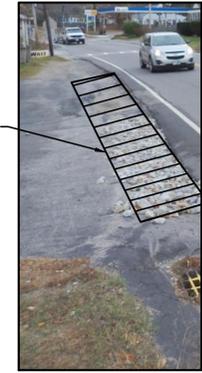
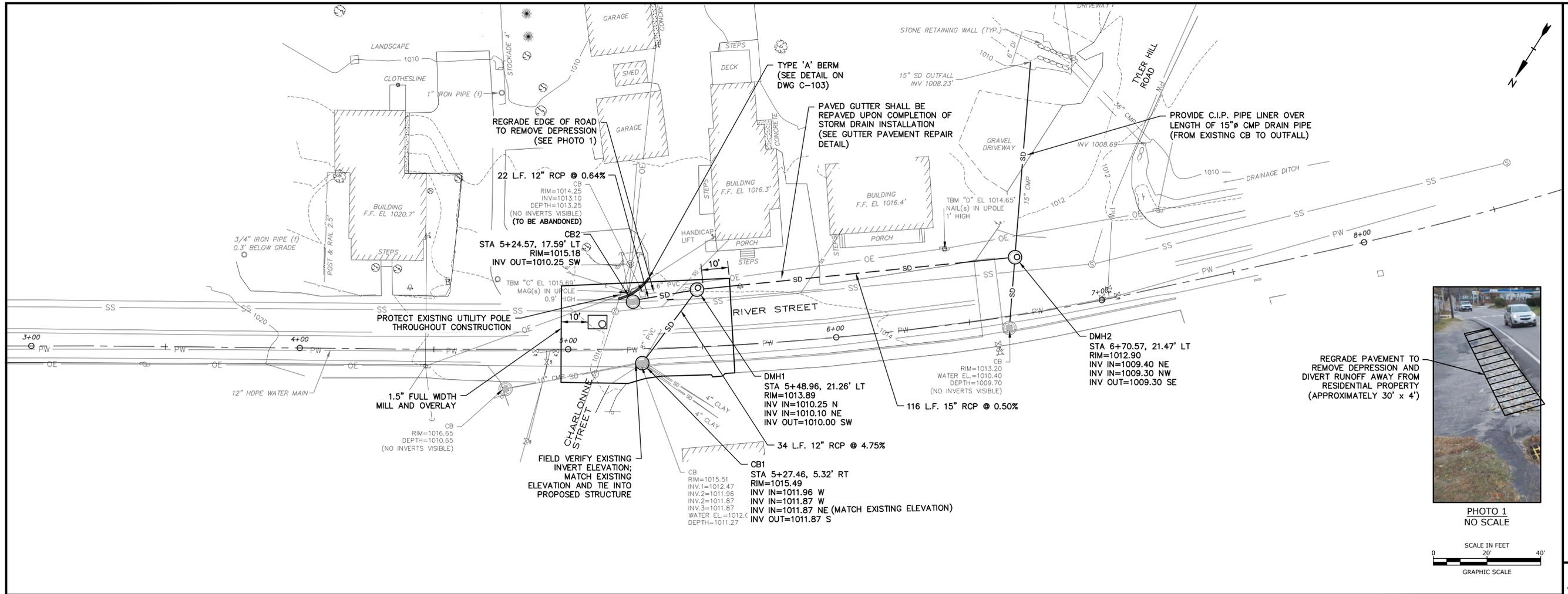
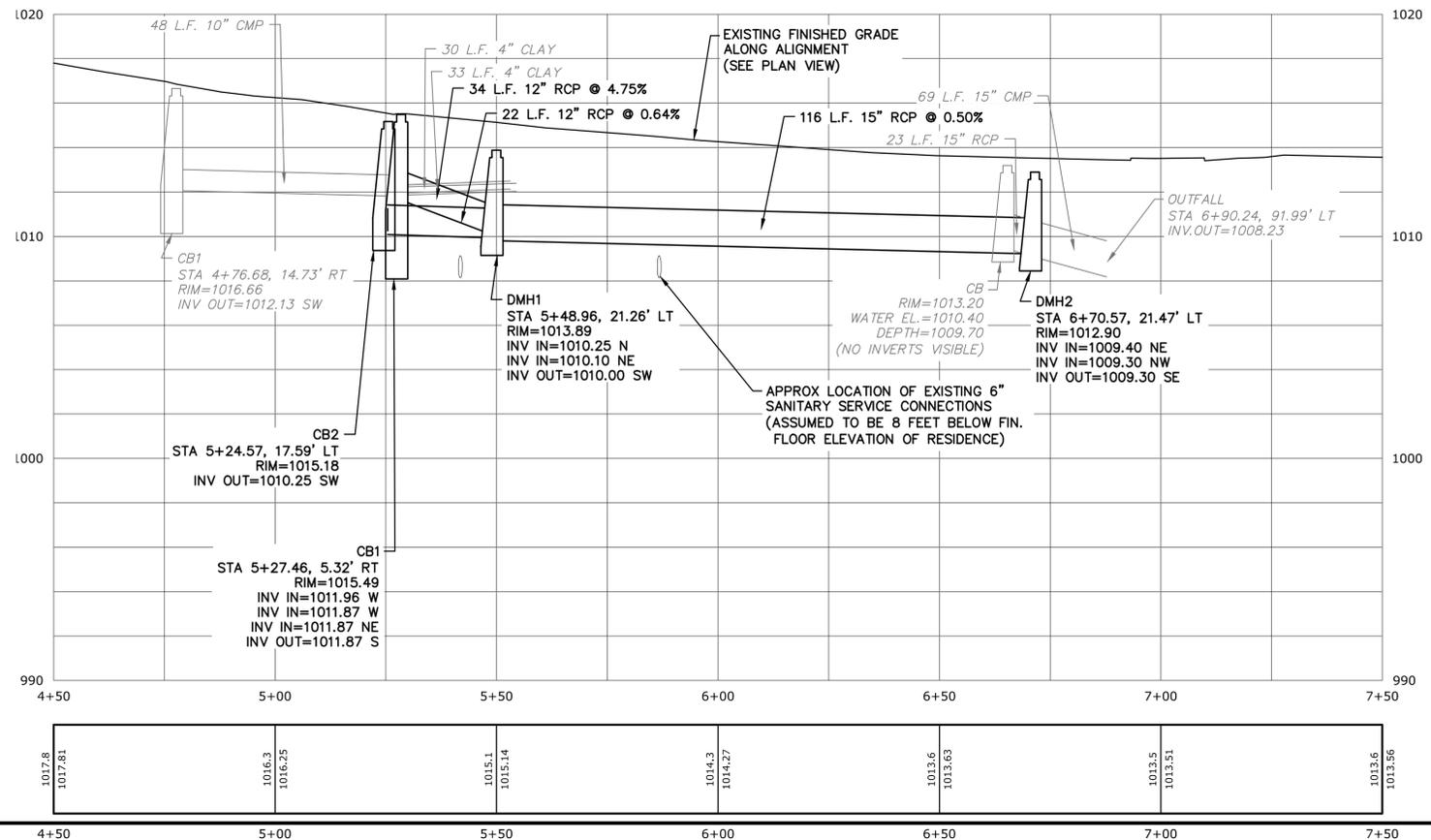
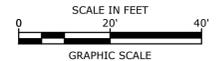


PHOTO 1
NO SCALE



Town of Jaffrey

River Street and Nelson Circle Pump Station Replacement

Jaffrey, New Hampshire

November 2015

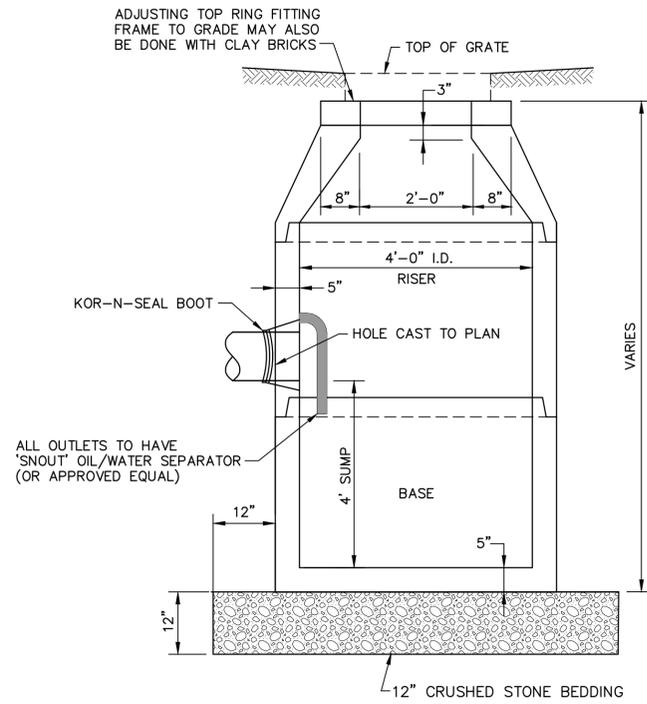
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PROJECT NO: J0097		
FILE: C-106		
DRAWN BY: SLR		
CHECKED: CNT		
APPROVED BY: IBC, DEP		

RIVER STREET DRAINAGE PLAN AND PROFILE

SCALE: AS SHOWN

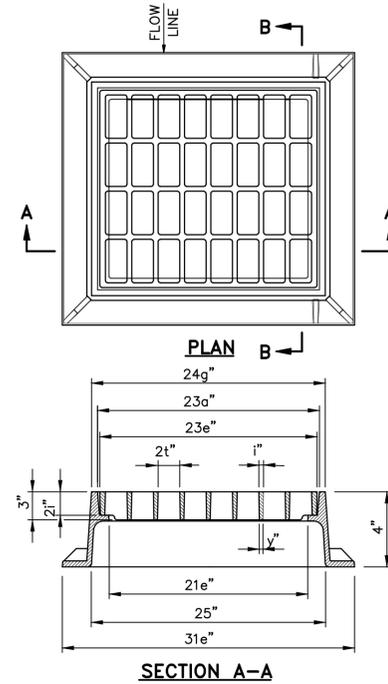
C-106
SHEET 9 OF 17

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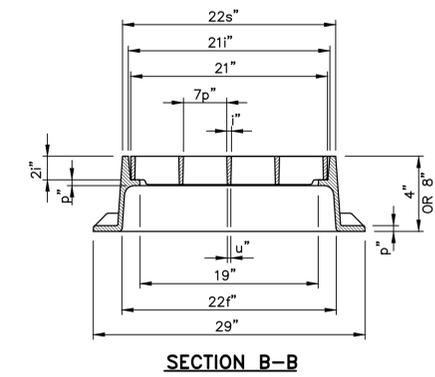


- NOTES:**
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
 2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
 3. THE TONGUE AND GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
 4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
 5. THE STRUCTURES SHALL BE DESIGNED FOR H2O LOADING.
 6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.

4' DIAMETER PRECAST CATCH BASIN
 NO SCALE



TYPE 'B' CATCH BASIN GRATE
 NO SCALE



- GENERAL NOTES:**
1. ALL DIMENSIONS ARE NOMINAL.
 2. FRAME AVAILABLE IN 4" OR 8" HEIGHTS.
 3. FREE OPEN AREA = 2.55 S.F.
 4. USE 3-FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB.

Town of Jaffrey

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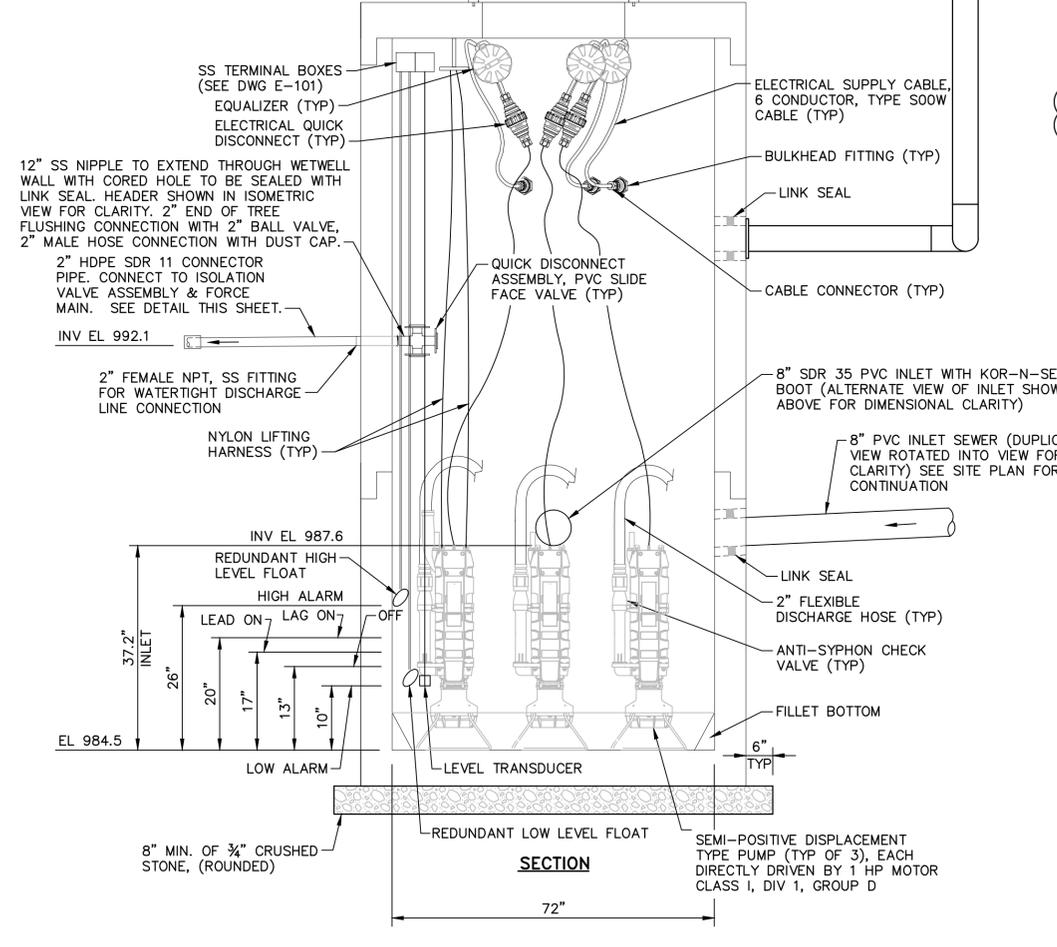
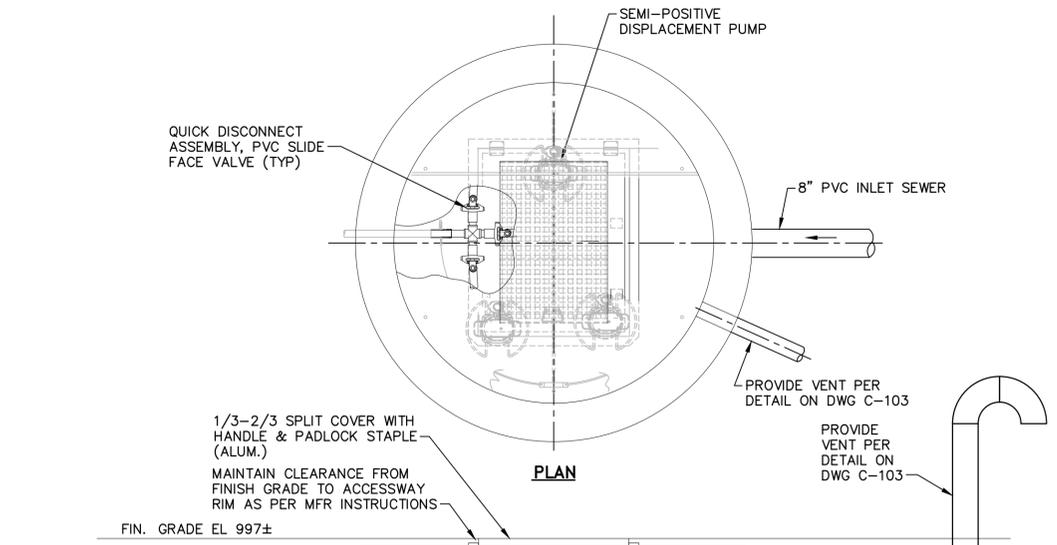
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PROJECT NO:	J0097
FILE:	C-107
DRAWN BY:	RWK
CHECKED BY:	PAM
APPROVED BY:	IBC, DEP

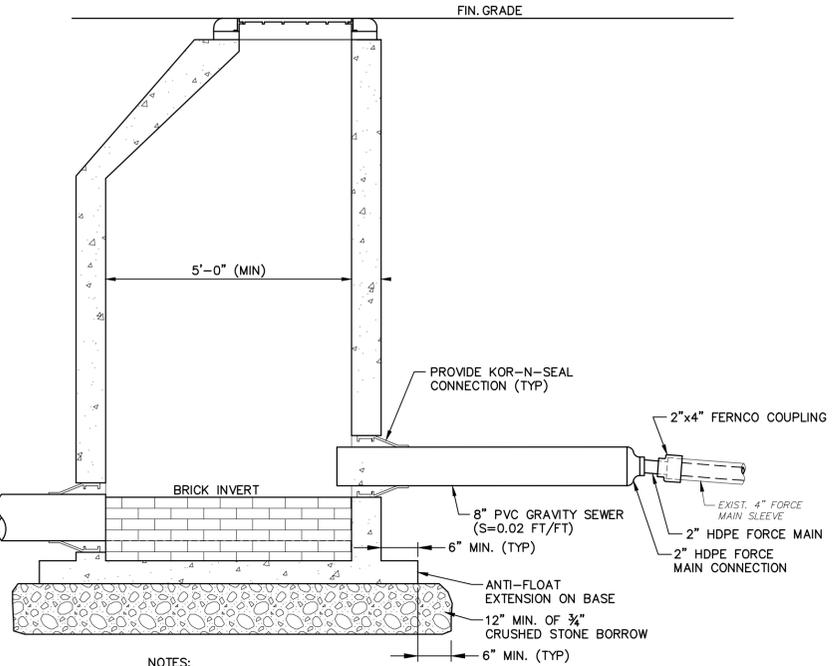
DRAINAGE DETAILS

SCALE: AS SHOWN

C-107
 SHEET 10 OF 17

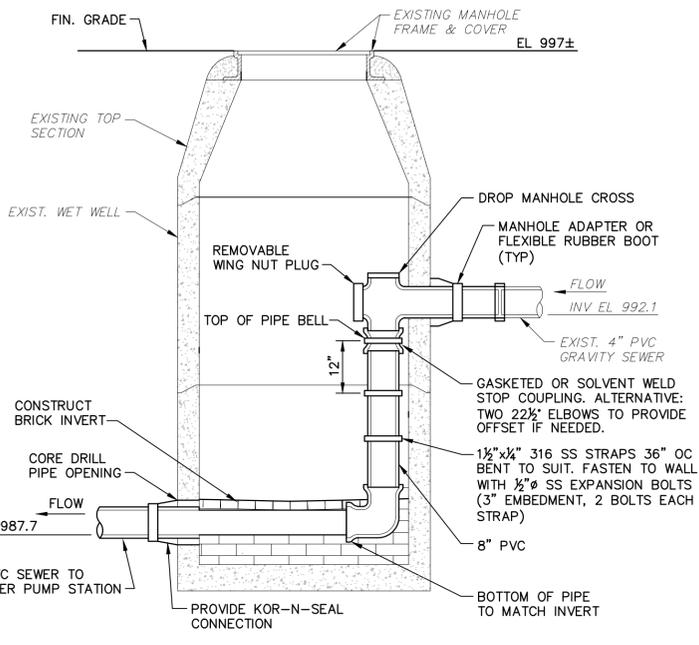
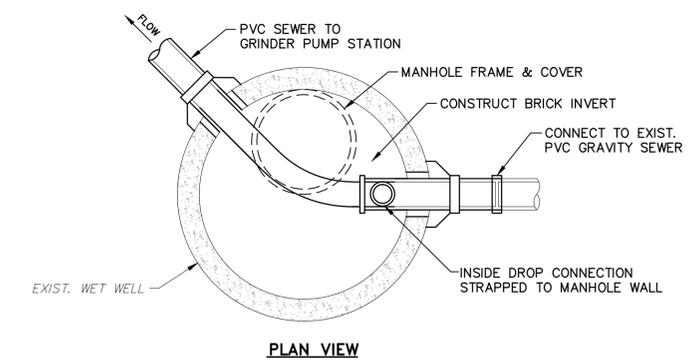


GRINDER PUMP STATION DETAIL
 NO SCALE



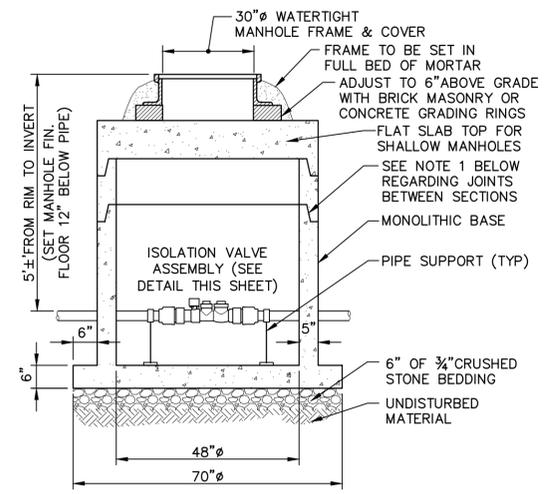
SEWER FORCE MAIN CONNECTION FOR NELSON CIRCLE
 NO SCALE

NOTES:
 1. SEE SEPARATE DETAIL ON DRAWING C-104 FOR MANHOLE CONSTRUCTION.
 2. MAIN LINE INLET PIPE OMITTED FOR GRAPHICAL CLARITY. SEE DRAWING C-102 FOR INVERT INFORMATION.



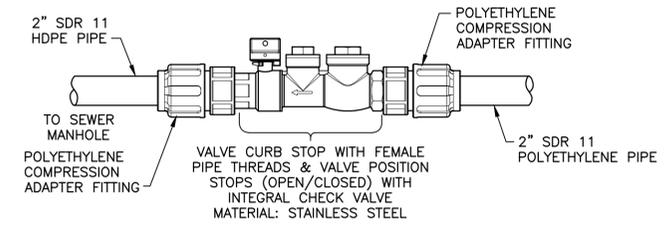
WET WELL RECONSTRUCTION DETAIL
 NO SCALE

NOTES:
 1. REMOVE ALL EQUIPMENT AND WASTE MATERIAL AND CLEAN AND REPAIR STRUCTURE AS REQUIRED TO MAKE WATERTIGHT.



48" PRECAST ISOLATION VALVE MANHOLE
 NO SCALE

NOTES:
 1. HORIZONTAL JOINTS BETWEEN PRECAST SECTIONS SHALL BE AN OVERLAPPING TYPE, SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.
 2. PRECAST MANHOLE SECTIONS AND BASES SHALL BE COATED WITH EXTERIOR DAMPROOFING.



ISOLATION VALVE ASSEMBLY DETAIL (INSIDE ISOLATION VALVE MANHOLE)
 NO SCALE

NOTES:
 1. INSTALL COMPLETE ASSEMBLY PER THE MANUFACTURER'S INSTRUCTIONS.
 2. ASSEMBLY IS TO BE PRESSURE TESTED.

Town of Jaffrey

River Street and Nelson Circle Pump Station Replacement

Jaffrey, New Hampshire

November 2015

Mark	Date	Description
A	7/15	NHDES REVIEW SET
PROJECT NO: J0097		
FILE: M-102		
DRAWN BY: RWK		
CHECKED: PAM		
APPROVED BY: IBC, DEP		

NELSON CIRCLE MECHANICAL PLAN AND DETAILS

SCALE: AS SHOWN

M-102
 SHEET 12 OF 17

VALVE SYMBOLS	
	GATE VALVE
	BALL VALVE
	PLUG VALVE (NORMALLY OPEN)
	PLUG VALVE (NORMALLY CLOSED)
	3-WAY VALVE VALVE TYPE VARIES
	CHECK VALVE

PIPING SYMBOLS	
	BLIND FLANGE
	THREADED CAP
	CONCENTRIC REDUCER
	QUICK CONNECT ASSEMBLY & INTEGRAL SLIDE FACE VALVE
	EXPANSION JOINT
	SUBMERSIBLE PRESSURE SENSOR

LINE SYMBOLS	
	EXISTING PROCESS LINE
	MAJOR PROCESS LINE
	MINOR PROCESS LINE
	ELECTRICAL
	PLC TO SCADA COMMUNICATION

GENERAL INSTRUMENT OR FUNCTION SYMBOLS					
	FIELD MOUNTED	PRIMARY LOCATION ACCESSIBLE TO OPERATOR	PRIMARY LOCATION INACCESSIBLE TO OPERATOR	AUXILIARY LOCATION ACCESSIBLE TO OPERATOR	HARDWARE INTERLOCK
DISCRETE INSTRUMENTS					
SHARED DISPLAY SHARED CONTROL					
COMPUTER FUNCTION					
PROGRAMMABLE LOGIC CONTROL					

PIPE MATERIAL ABBREVIATION	
BR	BRONZE
CI	CAST IRON
CPVC	CHLORINATED POLYVINYL CHLORIDE
CS	CARBON STEEL (BLACK STEEL)
CU	COPPER
DI	DUCTILE IRON
FRP	FIBERGLASS
GS	GALVANIZED STEEL
PP	POLYPROPYLENE
PVC	POLYVINYL CHLORIDE
RH	RUBBER HOSE
SS	STAINLESS STEEL

MECHANICAL EQUIPMENT	
	PUMP

TYPICAL VARIABLE LETTER COMBINATIONS																							
FIRST LETTERS	INITIATING OR MEASURED VARIABLE	CONTROLLERS				READOUT DEVICES		SWITCHES AND ALARM DEVICES			TRANSMITTERS			SOLENOIDS, RELAYS, COMPUTING DEVICES	PRIMARY ELEMENT	TEST POINT	WELL OR PROBE	VIEWING DEVICE, GLASS	SAFETY DEVICE	FINAL ELEMENT	SUCCEEDING LETTERS		
		RECORDING	INDICATING	BLIND	SELF-ACTUATED CONTROL VALVES	RECORDING	INDICATING	HIGH	LOW	COMB	RECORDING	INDICATING	BLIND								VALUE	DESCRIPTION	
A	ANALYSIS	ARC	AIC	AC	-	AR	AI	ASH	ASL	ASHL	ART	AIT	AT	AY	AE	AP	AW	-	-	AZ	A	ALARM	
B	BURNER/COMBUSTION	BRC	BIC	BC	-	BR	BI	BSH	BSL	BSHL	BRT	BIT	BT	BY	BE	-	BW	BG	-	BZ	B	-	
C	USER'S CHOICE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	CLOSED	
D	USER'S CHOICE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	-	
E	VOLTAGE	ERC	EIC	EC	-	ER	EI	ESH	ESL	ESHL	ERT	EIT	ET	EY	EE	-	-	-	-	EZ	E	-	
F	FLOW RATE	FRC	FIC	FC	FCV	FR	FI	FSH	FSL	FSHL	FRT	FIT	FT	FY	FE	FP	-	FG	-	FZ	F	-	
FQ	FLOW QUANTITY	FQRC	FQIC	-	-	FQR	FQI	FQSH	FQSL	FQSHL	-	FQIT	FQT	FQY	FQE	-	-	-	-	FQZ	-	-	
FF	FLOW RATIO	FFRC	FFIC	FFC	-	FFR	FFI	FFSH	FFSL	FFSHL	-	-	-	-	-	-	-	-	-	FFZ	-	-	
G	USER'S CHOICE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	G	-	
H	HAND	-	HIC	HC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H	HIGH	
I	CURRENT	IRC	IIC	-	-	IR	II	ISH	ISL	ISHL	IRT	IIT	IT	IY	IE	-	-	-	-	IZ	HH	HIGH HIGH	
J	POWER	JRC	JIC	-	-	JR	JI	JSH	JSL	JSHL	JRT	JIT	JT	JY	JE	-	-	-	-	JZ	I	-	
K	TIME	KRC	KIC	KC	KCV	KR	KI	KSH	KSL	KSHL	KRT	KIT	KT	KY	KE	-	-	-	-	KZ	J	-	
L	LEVEL	LRC	LIC	LC	LCV	LR	LI	LSH	LSL	LSHL	LRT	LIT	LT	LY	LE	-	LW	LG	-	LZ	K	-	
M	MOISTURE	-	-	-	-	-	-	MS	-	-	-	-	-	-	ME	-	-	-	-	-	L	LOW	
N	USER'S CHOICE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LL	LOW LOW	
O	USER'S CHOICE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M	MIDDLE	
P	PRESSURE/VACUUM	PRC	PIC	PC	PCV	PR	PI	PSH	PSL	PSHL	PRT	PIT	PT	PY	PE	PP	-	-	PSE	PZ	N	-	
PD	PRESSURE DIFFERENTIAL	PDRC	PDIC	PDC	PDCV	PDR	PDI	PDSH	PDSL	PDSHL	PDRT	PDIT	PDIT	PDY	PDE	PDP	-	-	-	PDZ	O	OPEN	
Q	QUANTITY	QRC	QIC	-	-	QR	QI	QSH	QSL	QSHL	QRT	QIT	QT	QY	QE	-	RW	-	-	-	P	-	
R	RADIATION	RRC	RIC	RC	-	RR	RI	RSH	RSL	RSHL	RRT	RIT	RT	RY	RE	-	-	-	-	-	Q	-	
S	SPEED/FREQUENCY	SRC	SIC	SC	SCV	SR	SI	SSH	SSL	SSHL	SRT	SIT	ST	SY	SE	-	-	-	-	-	R	-	
T	TEMPERATURE	TRC	TIC	TC	TCV	TR	TI	TSH	TSL	TSHL	TRT	TIT	TT	TY	TE	TP	TPW	-	TSE	TZ	S	-	
TD	TEMPERATURE DIFFERENTIAL	TDRC	TDIC	TDC	TDCV	TDR	TDI	TDSH	TDSL	TDSHL	TDRT	TDIT	TDIT	TDY	TDE	TDP	TDPW	-	-	-	TDZ	T	-
U	MULTIVARIABLE	-	-	-	-	UR	UI	-	-	-	-	-	-	-	-	-	-	-	-	-	U	-	
V	VIBRATION/MACHINERY ANALYSIS	-	-	-	-	VR	VI	VSH	VSL	VSHL	VRT	VIT	VT	VY	VE	-	-	-	-	-	VZ	V	-
W	WEIGHT/FORCE	WRC	WIC	WC	WCV	WR	WI	WSH	WSL	WSHL	WRT	WIT	WT	WY	WE	-	-	-	-	-	WZ	W	-
WD	WEIGHT/FORCE DIFFERENTIAL	WDRC	WDIC	WDC	WDCV	WDR	WDI	WDSH	WDSL	WDSHL	WDRT	WDIT	WDT	WDY	WDE	-	-	-	-	-	WDZ	-	-
X	UNCLASSIFIED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	
Y	EVENT/STATE/PRESENCE	-	YIC	YC	-	YR	YI	YSH	YSL	YSHL	YRT	YIT	YT	YY	YE	-	-	-	-	-	YZ	Y	-
Z	POSITION/DIMENSION	ZRC	ZIC	ZC	ZCV	ZR	ZI	ZSH	ZSL	ZSHL	ZRT	ZIT	ZT	ZY	ZE	-	-	-	-	-	ZZ	Z	-
ZD	GAUGING/DEVIATION	ZDRC	ZDIC	ZDC	ZDCV	ZDR	ZDI	ZDSH	ZDSL	ZDSHL	ZDRT	ZDIT	ZDT	ZDY	ZDE	-	-	-	-	-	ZDZ	-	-

NOTE: THIS TABLE IS NOT ALL-INCLUSIVE.

Town of Jaffrey

River Street and
 Nelson Circle
 Pump Station
 Replacement

Jaffrey, New Hampshire

November 2015

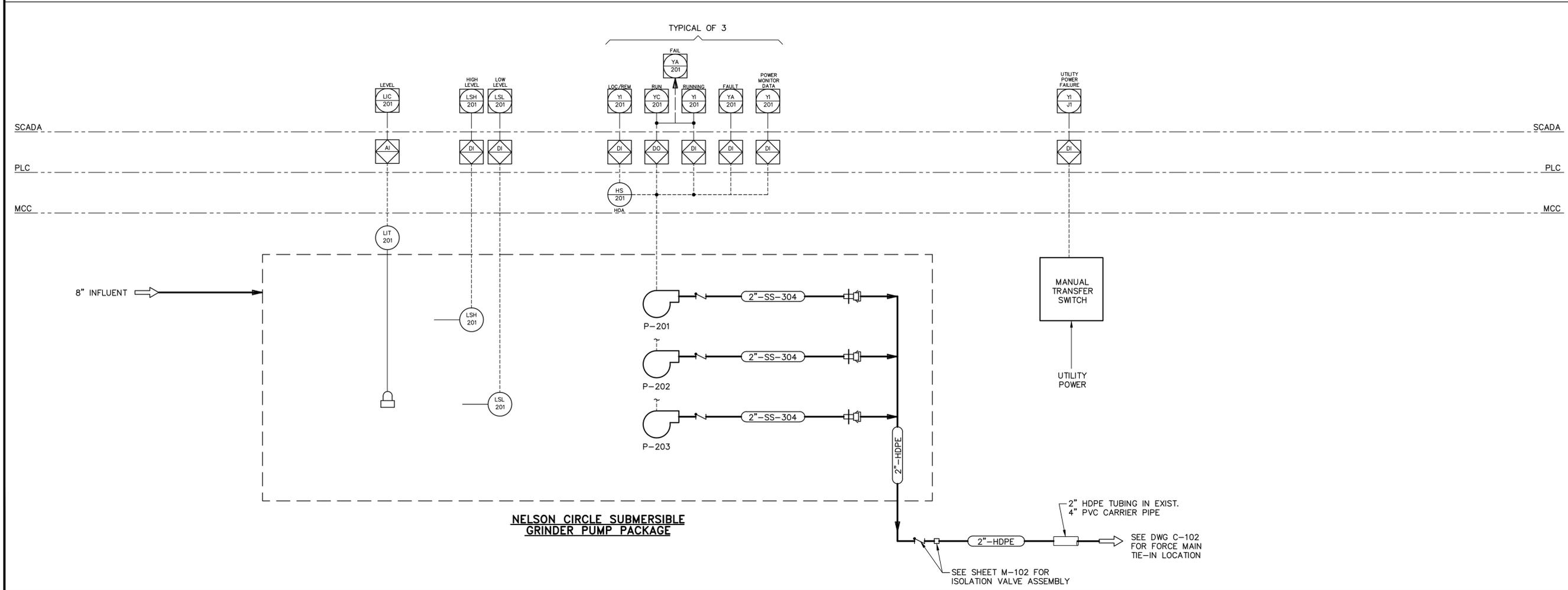
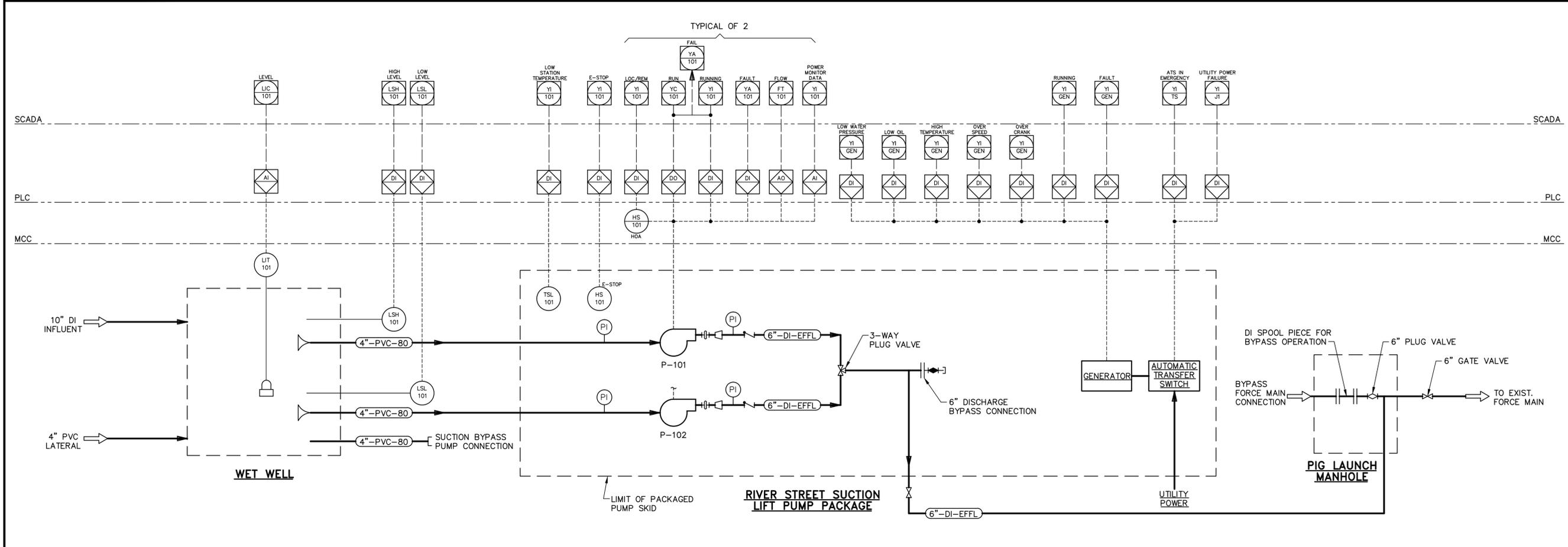
Mark	Date	Description
A	7/15	NHDES REVIEW SET

PROJECT NO:	J0097
FILE:	PI-001
DRAWN BY:	RWK
CHECKED:	PAM
APPROVED BY:	IBC, DEP

PIPING & INSTRUMENTATION
 LEGEND - SYMBOLS

SCALE: NO SCALE

PI-001
 SHEET 13 OF 17



Town of Jaffrey

River Street and Nelson Circle Pump Station Replacement

Jaffrey, New Hampshire

November 2015

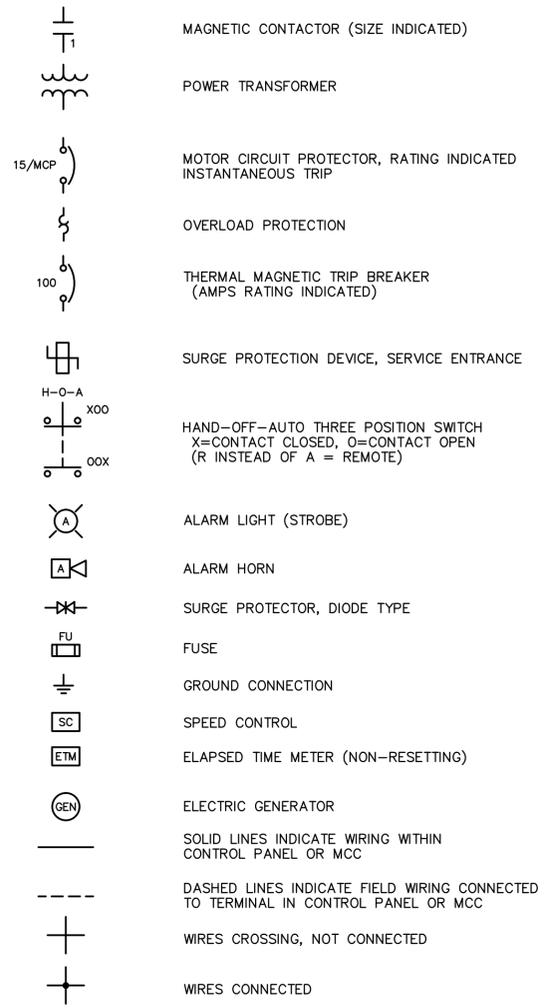
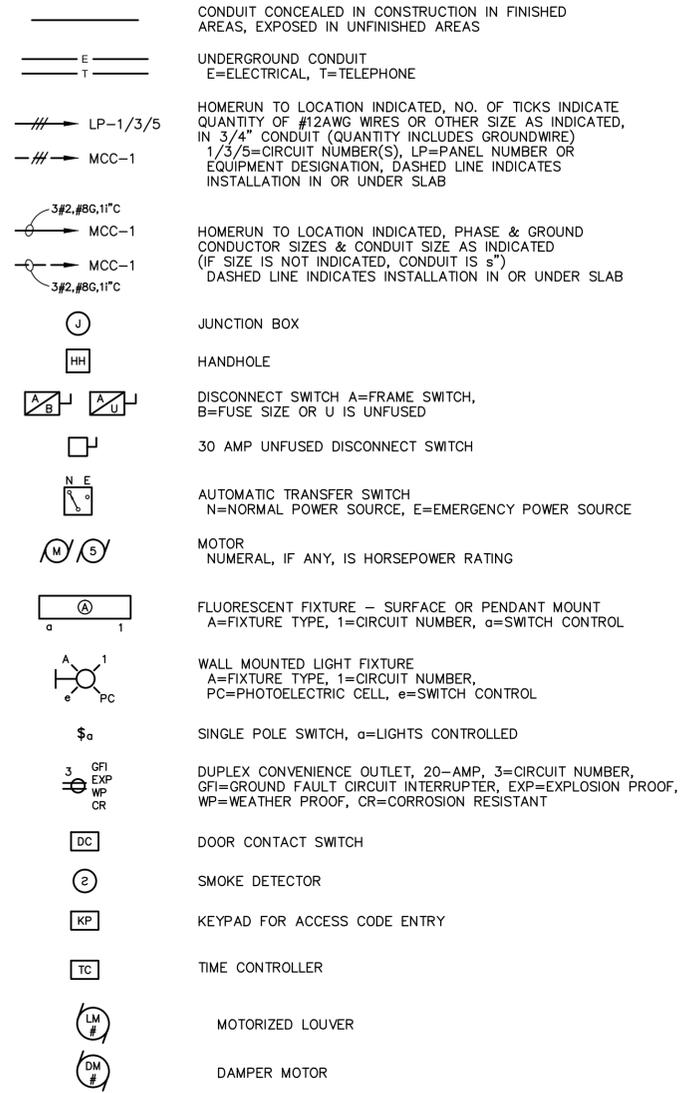
Mark	Date	Description
A	7/15	NHDES REVIEW SET
PROJECT NO: J0097		
FILE: PI-101		
DRAWN BY: RWK		
CHECKED BY: PAM		
APPROVED BY: IBC, DEP		

PIPING & INSTRUMENTATION DIAGRAM

SCALE: NO SCALE

PI-101
SHEET 14 OF 17

ELECTRICAL / HVAC LEGEND:



ABBREVIATIONS:

AFD	ADJUSTABLE FREQUENCY DRIVE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
ATS	AUTOMATIC TRANSFER SWITCH
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER 480 VOLTS - 120/240 VOLTS, UNLESS OTHERWISE INDICATED
DISC SW	DISCONNECT SWITCH
DM	DAMPER MOTOR
DWG	DRAWING
EF	EXHAUST FAN
G	GROUND
GALV	GALVANIZED STEEL
GFI	GROUND FAULT CIRCUIT INTERRUPTER
L	LOUVER
LM	LOUVER MOTOR
MCC	MOTOR CONTROL CENTER
MFR	MANUFACTURER
NEUT	NEUTRAL
OL	OVERLOAD
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL CONDUIT
RTU	RADIO TELEMETRY UNIT
SS	STAINLESS STEEL
TB	TERMINAL BOX (NEMA 4X STAINLESS STEEL)
TSP	TWISTED, SHIELDED PAIR
TYP	TYPICAL
UG	UNDERGROUND
WP	WEATHERPROOF

Town of Jaffrey

**River Street and
 Nelson Circle
 Pump Station
 Replacement**

Jaffrey, New Hampshire

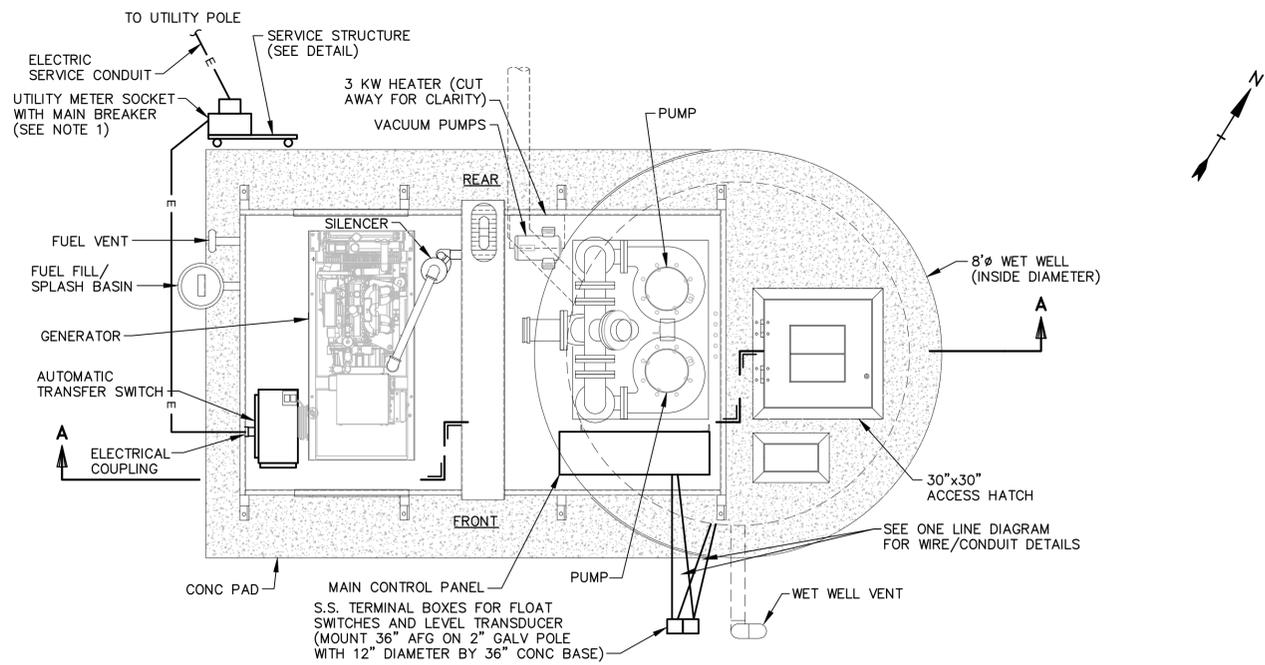
November 2015

Mark	Date	Description
A	7/15	NHDES REVIEW SET
PROJECT NO: J0097		
FILE: E-001		
DRAWN BY: RWK		
CHECKED: MJR		
APPROVED BY: MJR, DEP		

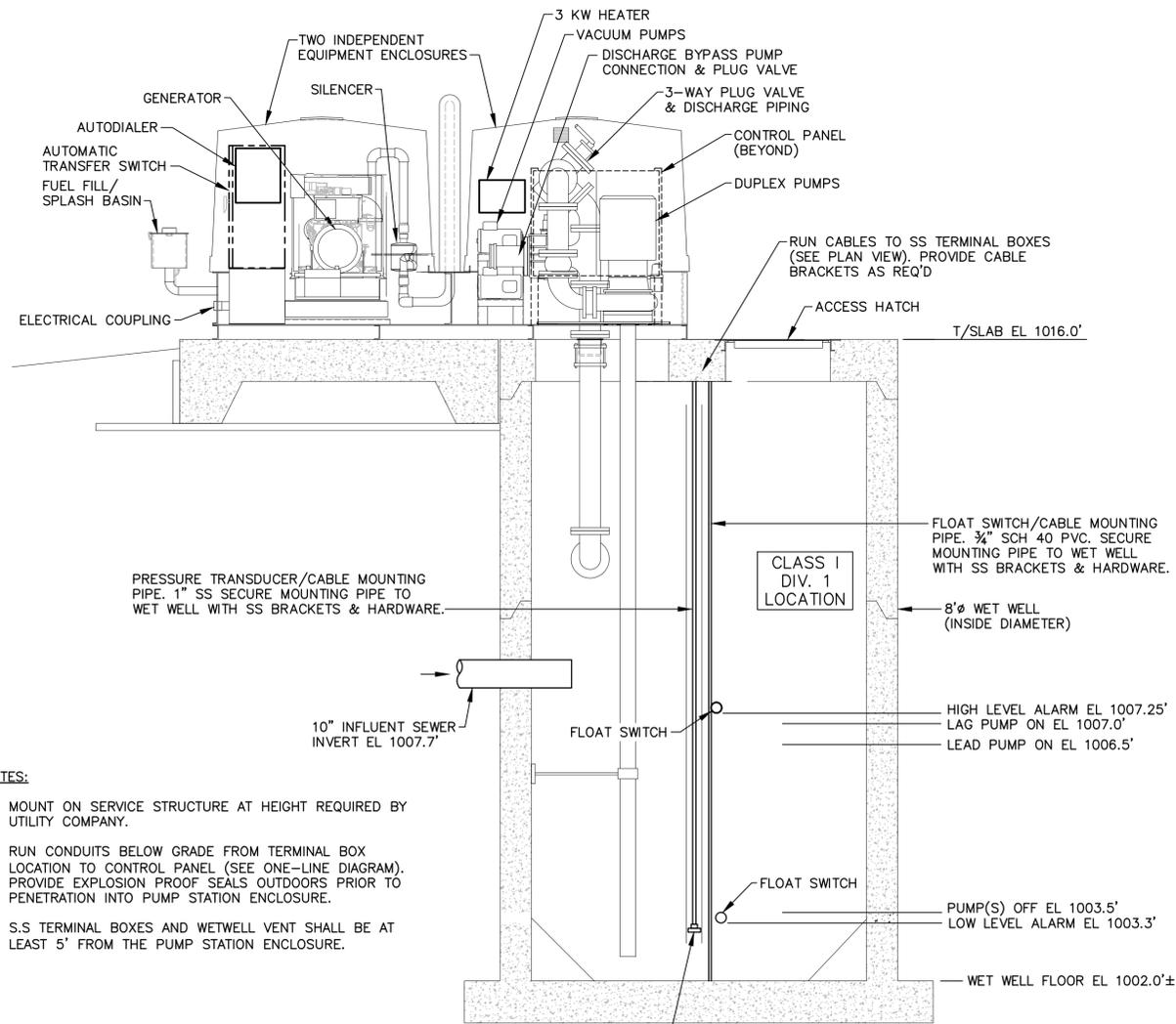
**ELECTRICAL LEGEND
 AND ABBREVIATIONS**

SCALE: NO SCALE

E-001
 SHEET 15 OF 17

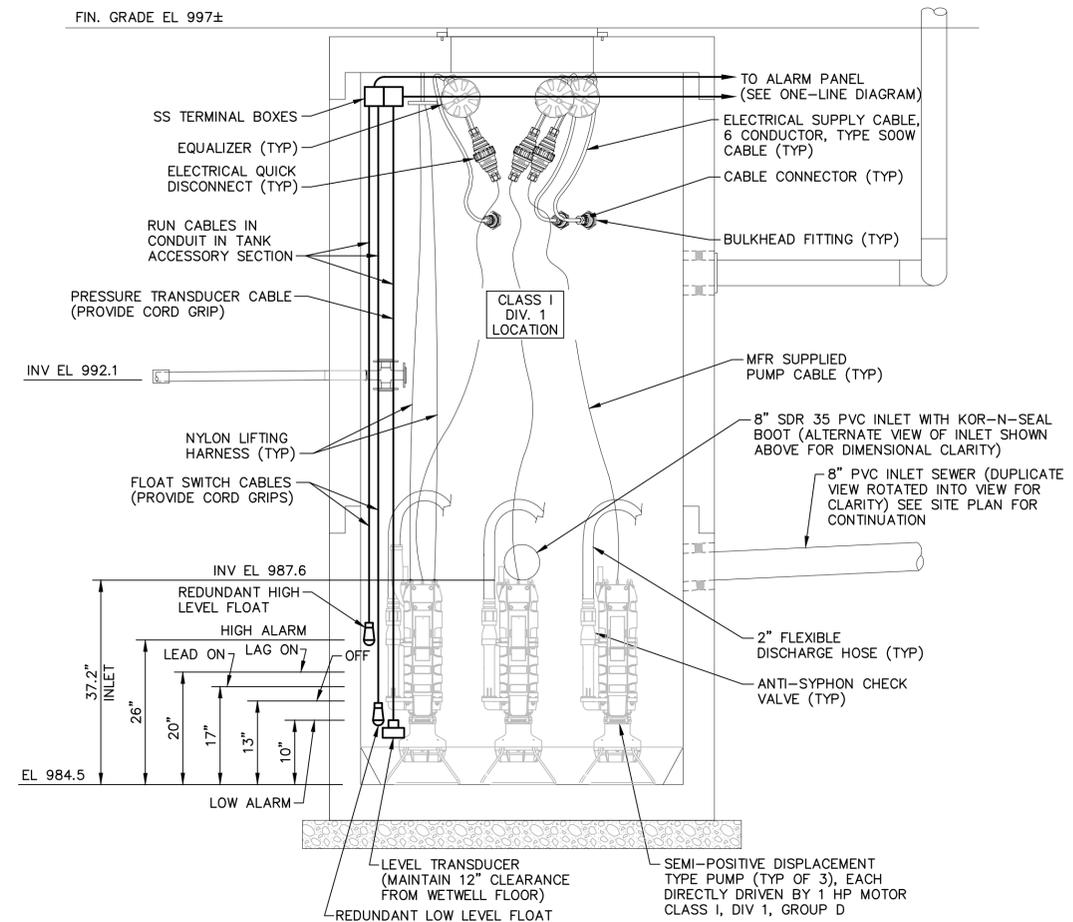


RIVER STREET PLAN VIEW
 NO SCALE

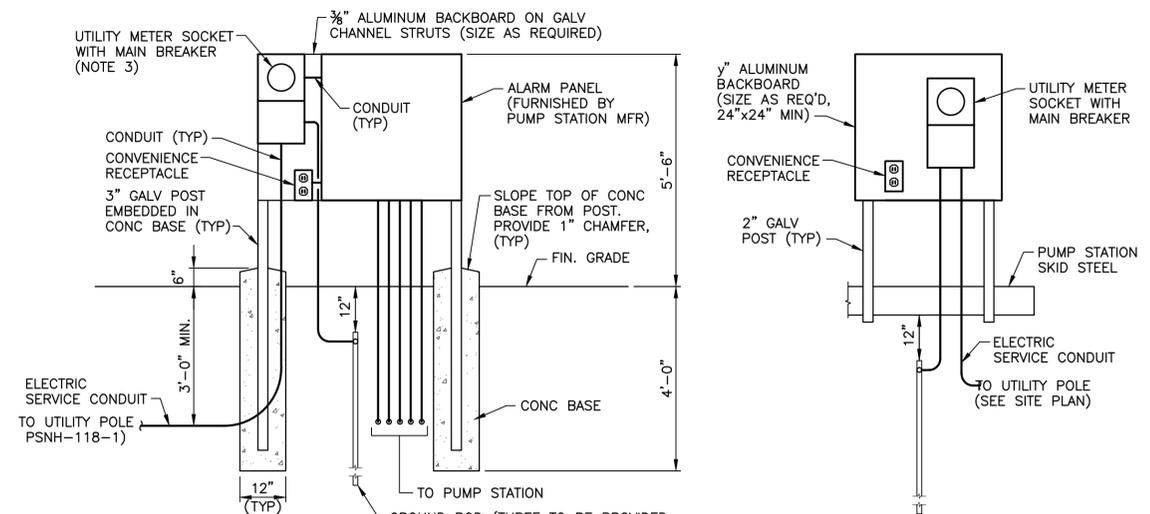


RIVER STREET SECTION A-A
 NO SCALE

- NOTES:**
1. MOUNT ON SERVICE STRUCTURE AT HEIGHT REQUIRED BY UTILITY COMPANY.
 2. RUN CONDUITS BELOW GRADE FROM TERMINAL BOX LOCATION TO CONTROL PANEL (SEE ONE-LINE DIAGRAM). PROVIDE EXPLOSION PROOF SEALS OUTDOORS PRIOR TO PENETRATION INTO PUMP STATION ENCLOSURE.
 3. S.S. TERMINAL BOXES AND WETWELL VENT SHALL BE AT LEAST 5' FROM THE PUMP STATION ENCLOSURE.



NELSON CIRCLE GRINDER PUMP STATION DETAIL
 NO SCALE



- NOTES:**
1. EQUIPMENT AND MATERIAL REQUIREMENTS AND CONFIGURATION SHALL BE AS SPECIFIED AND SHALL BE INSTALLED AS PER MANUFACTURER RECOMMENDATIONS AND INSTRUCTIONS.
 2. SPACE STRUCTURE POSTS AS REQUIRED TO PROPERLY MOUNT EQUIPMENT.
 3. MOUNT ON SERVICE STRUCTURE AT HEIGHT REQUIRED BY UTILITY COMPANY.

NELSON CIRCLE SERVICE STRUCTURE DETAIL
 NO SCALE

RIVER STREET SERVICE STRUCTURE DETAIL
 NO SCALE

Town of Jaffrey

River Street and Nelson Circle Pump Station Replacement

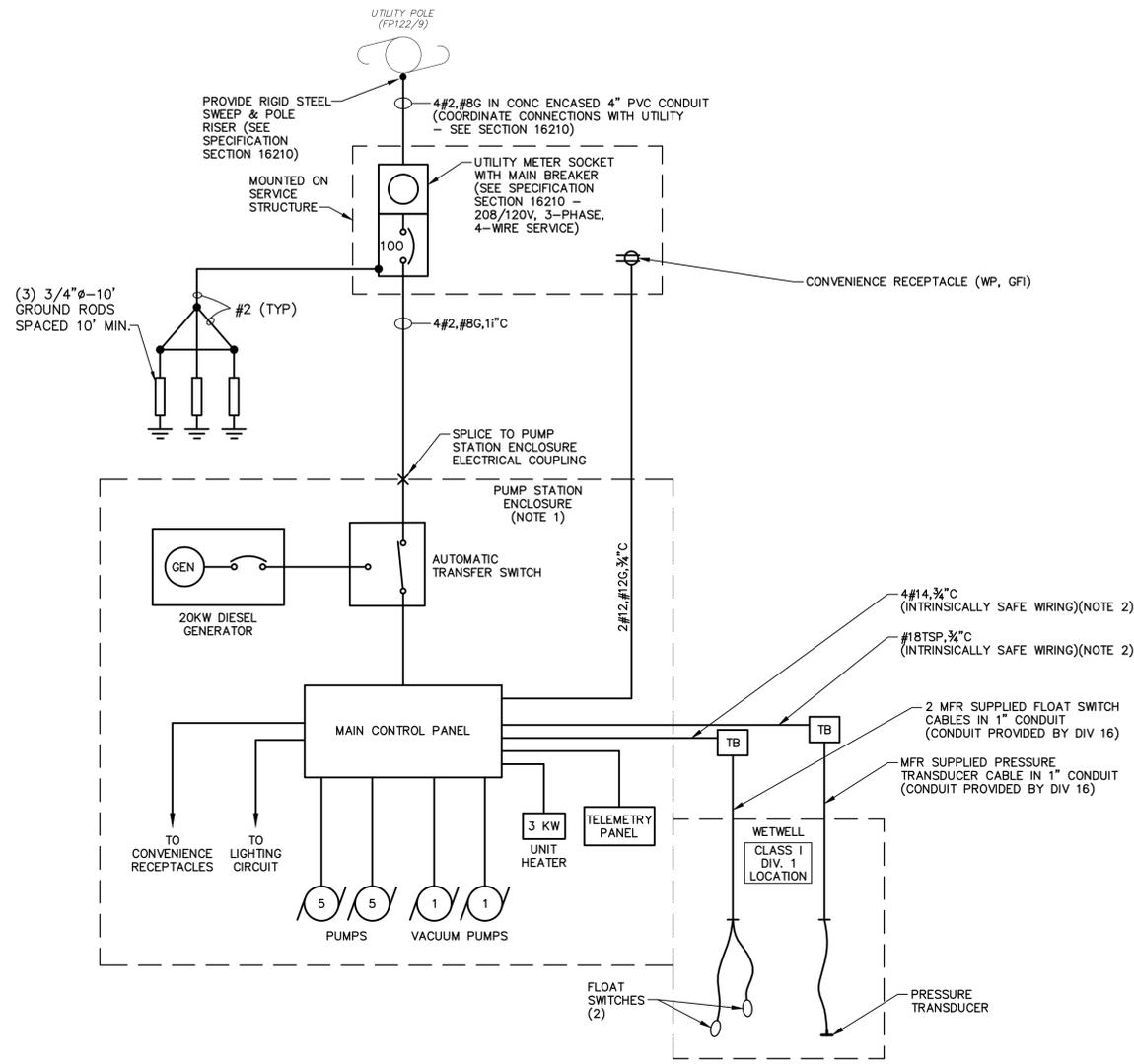
Jaffrey, New Hampshire

November 2015

Mark	Date	Description
A	7/15	NHDES REVIEW SET
PROJECT NO: J0097		
FILE: E-101		
DRAWN BY: RWK		
CHECKED: MJR		
APPROVED BY: MJR, DEP		

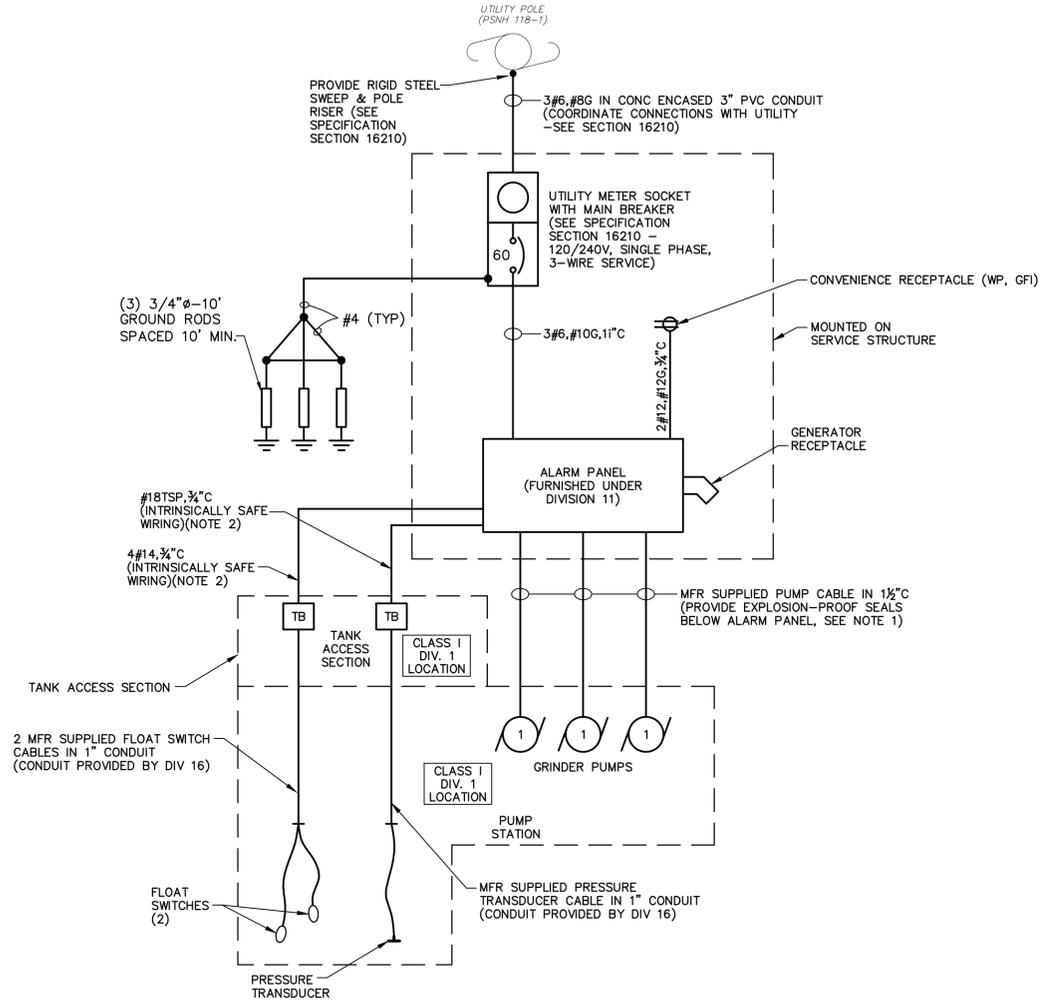
RIVER STREET AND NELSON CIRCLE ELECTRICAL PLANS

SCALE: AS SHOWN



**RIVER STREET
 ONE-LINE DIAGRAM**
 NO SCALE

- NOTES:**
1. ALL EQUIPMENT, WIRING, AND CONDUIT INSIDE THE PUMP STATION ENCLOSURE WILL BE FURNISHED AND INSTALLED BY THE PUMP STATION SUPPLIER UNLESS OTHERWISE STATED.
 2. PROVIDE EXPLOSION-PROOF SEALS BETWEEN TERMINAL BOX AND PUMP STATION ENCLOSURE.



**NELSON CIRCLE
 ONE-LINE DIAGRAM**
 NO SCALE

- NOTES:**
1. PROVIDE 5 FEET OF COILED CABLE FASTENED TO THE PUMP STATION WALL.
 2. PROVIDE EXPLOSION-PROOF SEALS BETWEEN TERMINAL BOX AND ALARM PANEL.

Town of Jaffrey

**River Street and
 Nelson Circle
 Pump Station
 Replacement**

Jaffrey, New Hampshire

November 2015

Mark	Date	Description
A	7/15	NHDES REVIEW SET
PROJECT NO: J0097		
FILE: E-102		
DRAWN BY: RWK		
CHECKED BY: MJR		
APPROVED BY: MJR, DEP		

ELECTRICAL WIRING AND
 ONE-LINE DIAGRAMS

SCALE: NO SCALE