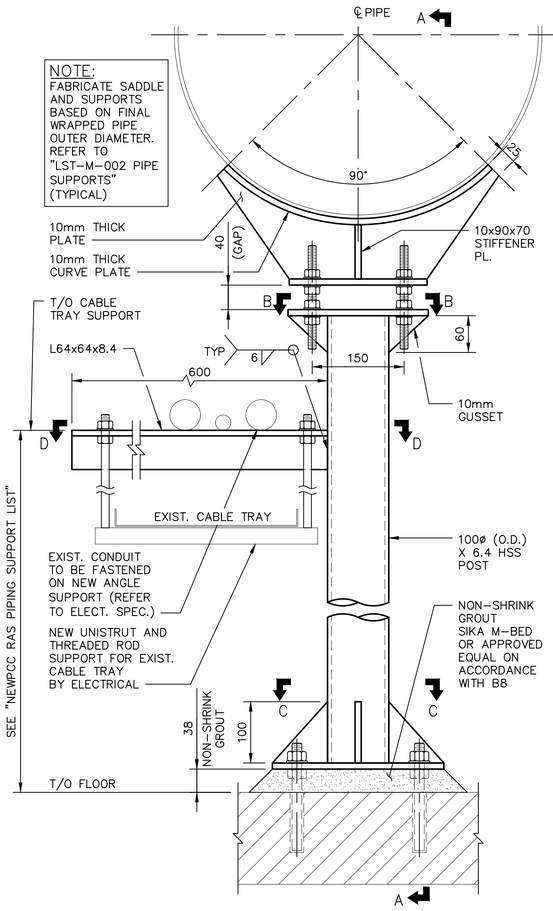
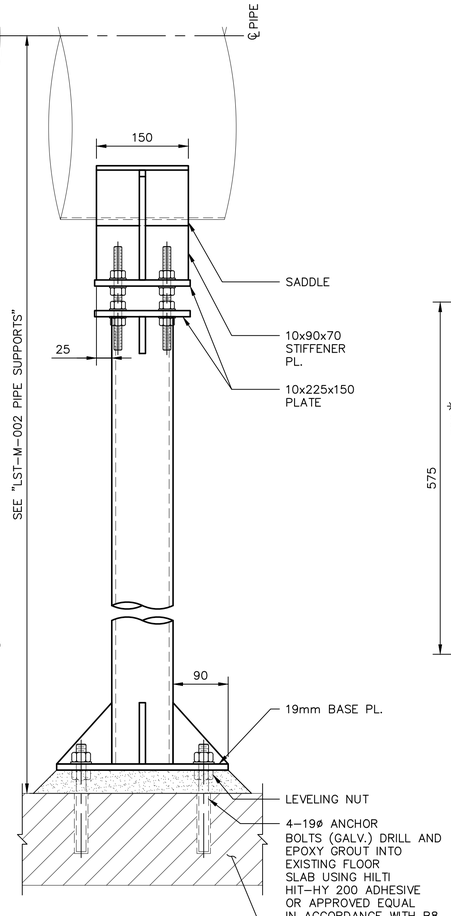


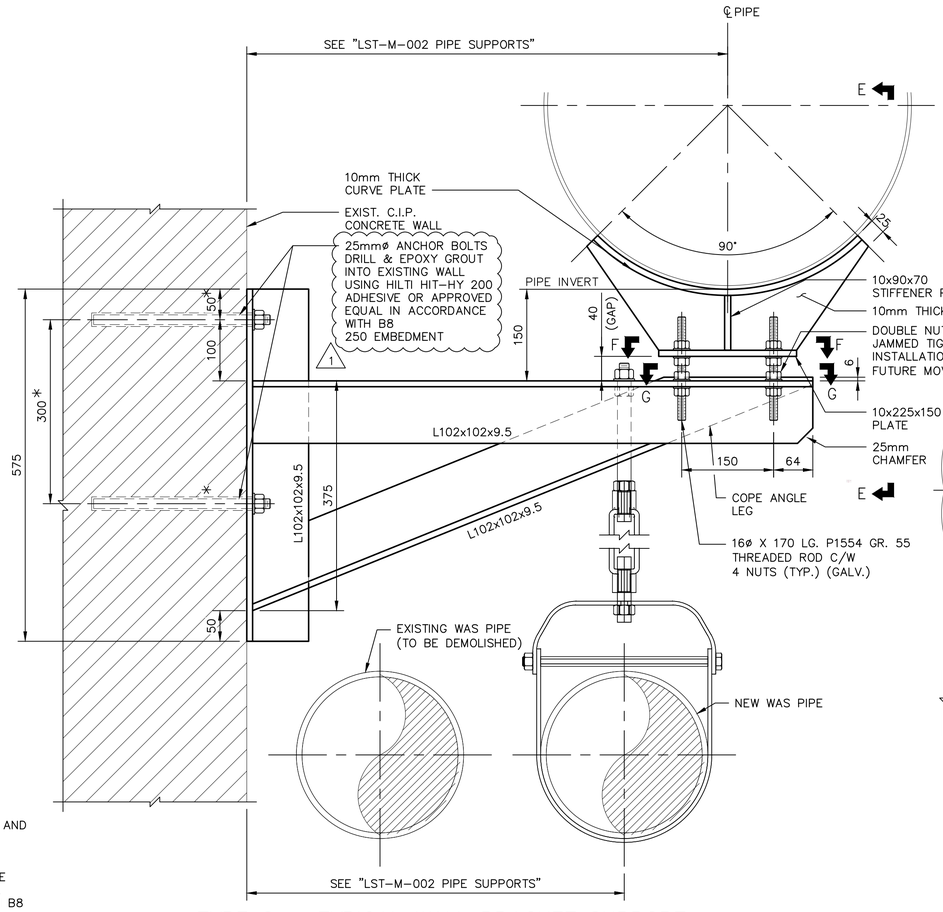
TYPE 1 – TYPICAL STANDPIPE SUPPORT

SCALE: 1:5



SECTION A–A

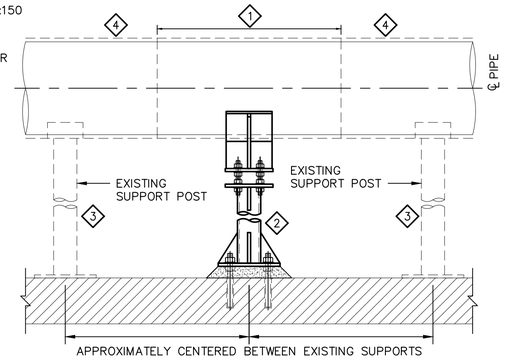
SCALE: 1:5



TYPE 2 – TYPICAL WALL BRACKET SUPPORT

SCALE: 1:5

* – SCAN AND LOCATE WALL REBAR PRIOR TO DRILLING HOLES.
– RELOCATE HOLES AS REQUIRED HOLE. HOLE OFFSET NOT TO EXCEED ±20mm FROM LOCATION SHOWN.
– FIELD DRILL HOLES IN L102x102x9.5 TO SUIT HOLES DRILLED IN WALL.



(REFER TO MECHANICAL 3D MODEL FOR POST LOCATIONS)

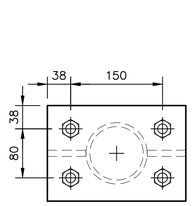
POST/WALL BRACKET REPLACEMENT – CONSTRUCTION SEQUENCE

SCALE: 1:10

CONSTRUCTION SEQUENCE:

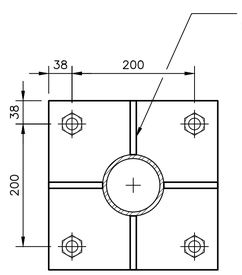
SCHEMATIC SHOWN IS FOR STANDPIPE SUPPORTS BUT OUTLINED CONSTRUCTION SEQUENCE ALSO APPLIES TO WALL BRACKET SUPPORTS.

1. INSTALL CARBON FIBER COMPOSITE WRAP ON PIPE SEGMENTS BETWEEN EXISTING PIPE SUPPORTS.
2. INSTALL NEW PIPE SUPPORTS ON EACH SIDE OF EXISTING SUPPORTS AT THE DISTANCES SHOWN. FOLLOW THESE INSTRUCTIONS FOR EACH STANDPIPE:
   - INSTALL STANDPIPE ANCHOR BOLTS AND LEVELING NUTS. PLACE STANDPIPE ON LEVELING NUTS.
   - PLACE PIPE SADDLE TO UNDERSIDE OF PIPE, OFFSET FROM STANDPIPE, AND SLIDE SADDLE LONGITUDINALLY ALONG PIPE UNTIL DIRECTLY ABOVE STANDPIPE.
   - INSTALL THREADED RODS AND NUTS AS SHOWN. ENSURE TOP OF SADDLE MAKES CONTACT WITH PIPE INVERT BY TURNING NUT USING "FINGER TIGHT" METHOD.
   - ONCE TOP OF SADDLE CONTACTS THE PIPE INVERT. TURN NUTS AN ADDITIONAL 1/4 TURN. TO ENSURE PIPE IS IN FULL CONTACT WITH SADDLE. DO NOT OVER-TIGHTEN BOLTS.
3. REMOVE EXISTING PIPE SUPPORTS. DEMOLISH EXISTING BASEPLATE GROUT AND CUT EXISTING ANCHORS FLUSH WITH FLOOR. REPAIR DAMAGED FLOOR SURFACE IF REQUIRED FOLLOWING 03 30 00 "CAST-IN-PLACE CONCRETE".
4. COMPLETE INSTALLATION OF CARBON FIBER COMPOSITE WRAP IN THE AREAS OF REMOVED PIPE SUPPORTS. TRANSITION TO PREVIOUSLY INSTALLED WRAP TO FORM CONTINUOUS ENCAPSULATION OF EXISTING PIPE.



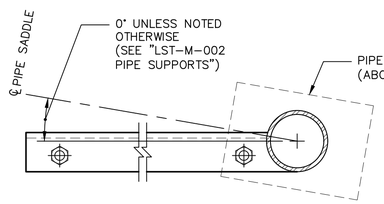
SECTION B–B

SCALE:1:5



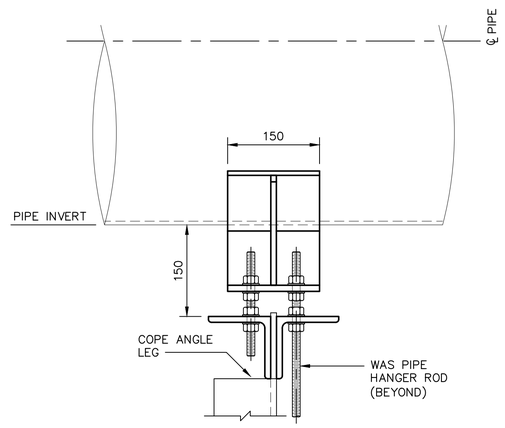
SECTION C–C

SCALE:1:5



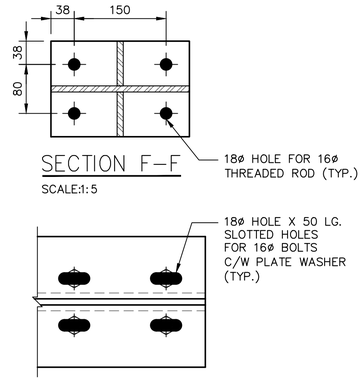
SECTION D–D

SCALE:1:5



SECTION E–E

SCALE:1:5



SECTION F–F

SCALE:1:5

SECTION G–G

SCALE:1:5

NOTE:
ALL THREADED RODS, ANCHORS AND BOLTS GALVANIZED.

NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE

REFERENCE DRAWINGS

THIS CONTRACT DRAWING IS INTENDED TO DEFINE THE EXTENTS OF WORK FOR THE COMPOSITE PIPE WRAP REPAIR, AND REPLACEMENT OF SPECIFIED PIPING. THE DESIGN OF THE COMPOSITE PIPE WRAP REPAIR SYSTEM, AND THE INTEGRITY OF THE NEWLY REPAIRED RAS PIPING IS THE RESPONSIBILITY OF THE CFRP DESIGN ENGINEER AS DEFINED IN THE TENDER DOCUMENTS.

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
KGS Group
No. 245

B.M.
ELEV.

CONSTRUCTION COMPLETION DATE: YYYY MM DD

NO.	REVISIONS	DATE	BY
1	RE-ISSUED FOR TENDER	2021 10 22	JMW
0	ISSUED FOR TENDER	2021 09 16	JMW

KGS GROUP

DESIGNED BY	J. WALTER	CHECKED BY	C. SIEPMAN
DRAWN BY	F. VALENCIA	APPROVED BY	CMS
SCALE:	AS SHOWN	RELEASED FOR CONSTRUCTION	
DATE	21 05 03	DATE	

PLOT DATE: 2021 10 22

ENGINEER'S SEAL
PROVINCE OF MANITOBA
J.M. WALTER
Member 24941
REGISTERED PROFESSIONAL ENGINEER
2021-10-22

CONSULTANT DRAWING NUMBER
21-0107-001_S01

BID OPPORTUNITY: 538-2021
CONTRACT NUMBER:

Winnipeg

THE CITY OF WINNIPEG

WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

NORTH END SEWAGE TREATMENT PLANT (NEWPCC)
RETURN ACTIVATED SLUDGE (RAS)
PIPING REFURBISHMENT

PIPING GALLERY EAST-WEST SECTION AND DETAILS

CITY DRAWING NUMBER: 1-0101S-S0020-001

SHEET 1 OF 3

FILE PATH: U:\FMS\21-0107-001\
FILE NAME: 1-0101S-S0020-001.dwg