

DRAWING NAME	SCAL
MECHANICAL LEGEND, DRAWING LIST & GAS LEGEND	N.T.S
MECHANICAL FOUNDATION PLAN	1:75
MAIN FLOOR - PLUMBING & FIRE PROTECTION PLAN	1:75
MAIN FLOOR - HEATING & VENTILATION PLAN	1:75
MECHANICAL ROOF PLAN	1:75
MECHANICAL DETAILS	N.T.S.
MECHANICAL SCHEDULES	N.T.S.
MECHANICAL SCHEDULES	N.T.S.
	MECHANICAL LEGEND, DRAWING LIST & GAS LEGEND MECHANICAL FOUNDATION PLAN MAIN FLOOR - PLUMBING & FIRE PROTECTION PLAN MAIN FLOOR - HEATING & VENTILATION PLAN MECHANICAL ROOF PLAN MECHANICAL DETAILS MECHANICAL DETAILS

DESCRIPTION	kW
DOMESTIC WATER HEATER <u>DWH-1</u>	58.6
MAKE-UP AIR UNIT <u>MUA-1</u>	102.6
ROOFTOP UNIT <u>RTU-1</u>	146.5
UNIT HEATER <u>UH-1</u>	30.8
UNIT HEATER <u>UH-2</u>	30.8
UNIT HEATER <u>UH-3</u>	8.8
TOTAL	378.

ABBREVIATIONS MECHANICAL EQUIPMENT AIR CONDITIONING UNIT ACU-* CONDENSING UNIT DOMESTIC WATER HEATER EXHAUST FAN ELECTRIC HEATER METER PUMP RETURN FAN ROOFTOP UNIT RTU-* SF-* SUPPLY FAN TK-* TANK UNIT HEATER PLUMBING FIXTURES COMBINATION LAVATORY/TOILET EMERGENCY EYEWASH DRINKING FOUNTAIN LAVATORY NON-FREEZE HOSE BIBB MOP SINK SHOWER SINK

URINAL

WATER CLOSET

AREA DRAIN

FLOOR DRAIN

FFD FUNNEL FLOOR DRAIN HUB DRAIN RD ROOF DRAIN COMMON ABOVE FINISHED FLOOR A.F.F. C/W COMPLETE WITH DN. DOWN ELEV. ELEVATION INVERT INV.

> SANITARY STORM



STANTEC CONSULTING LTD.
325 - 25 ST SE
CALGARY, AB T2A 7H8
Tel: (403) 716.8000 / Fax: (403) 716.8049
www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

Notes

Revision

By Appd YYYY,MM.DD

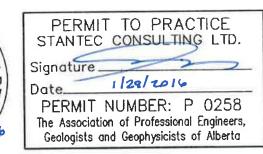
SSUED FOR TENDER

JPH GTH 2016.01.29

Permit-Seal

Issued





By Appd YYYY.MM.DD

Client/Project
GOVERNMENT OF

CANADA ELK POINT - NEW BUILDING

54 STREET AND RAILWAY AVENUE ELK POINT, ALBERTA

Title

MECHANICAL LEGEND, DRAWING LIST

& GAS LEGEND

Project No. Scale

144202690 Revision

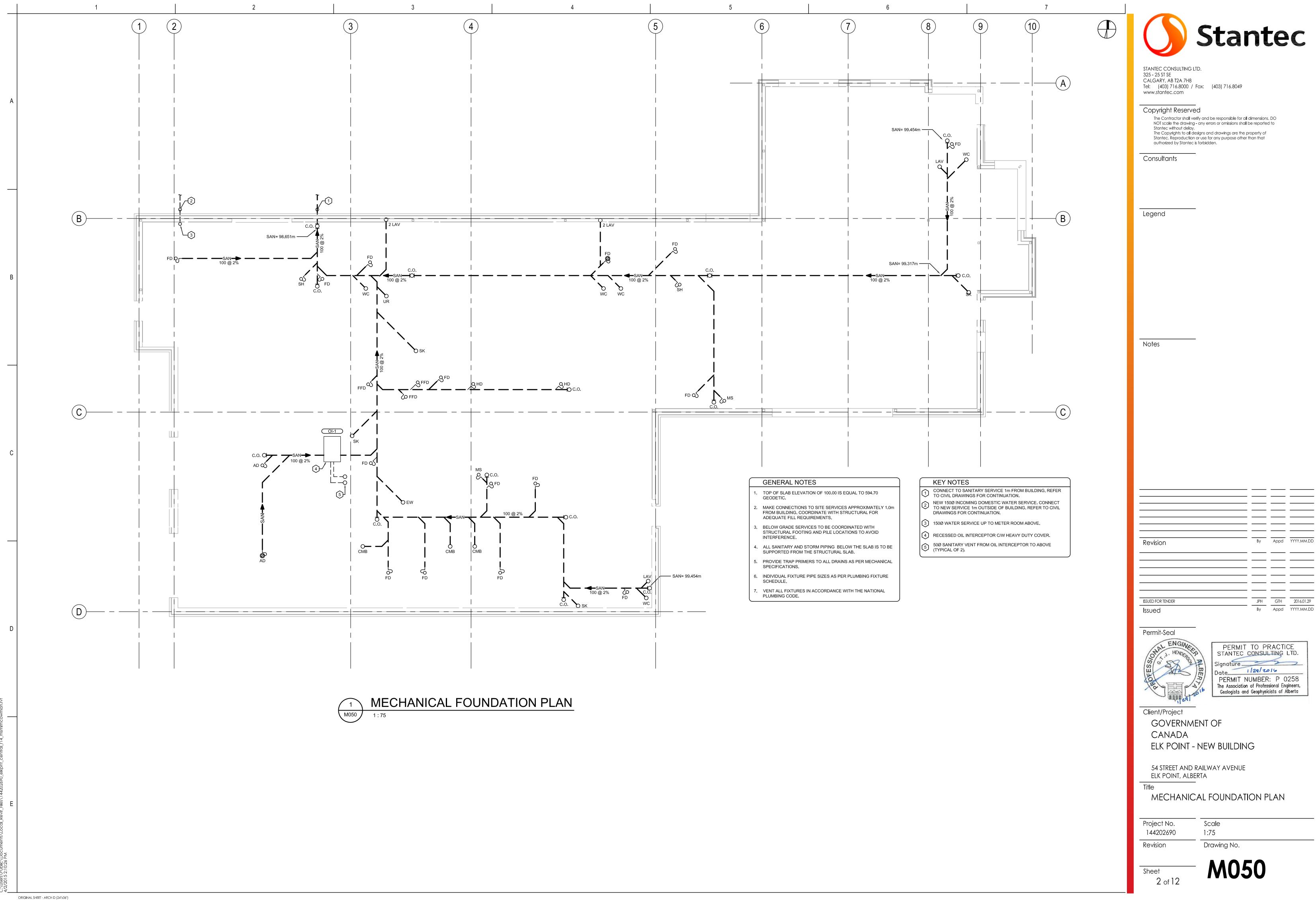
N.T.S.

Drawing No.

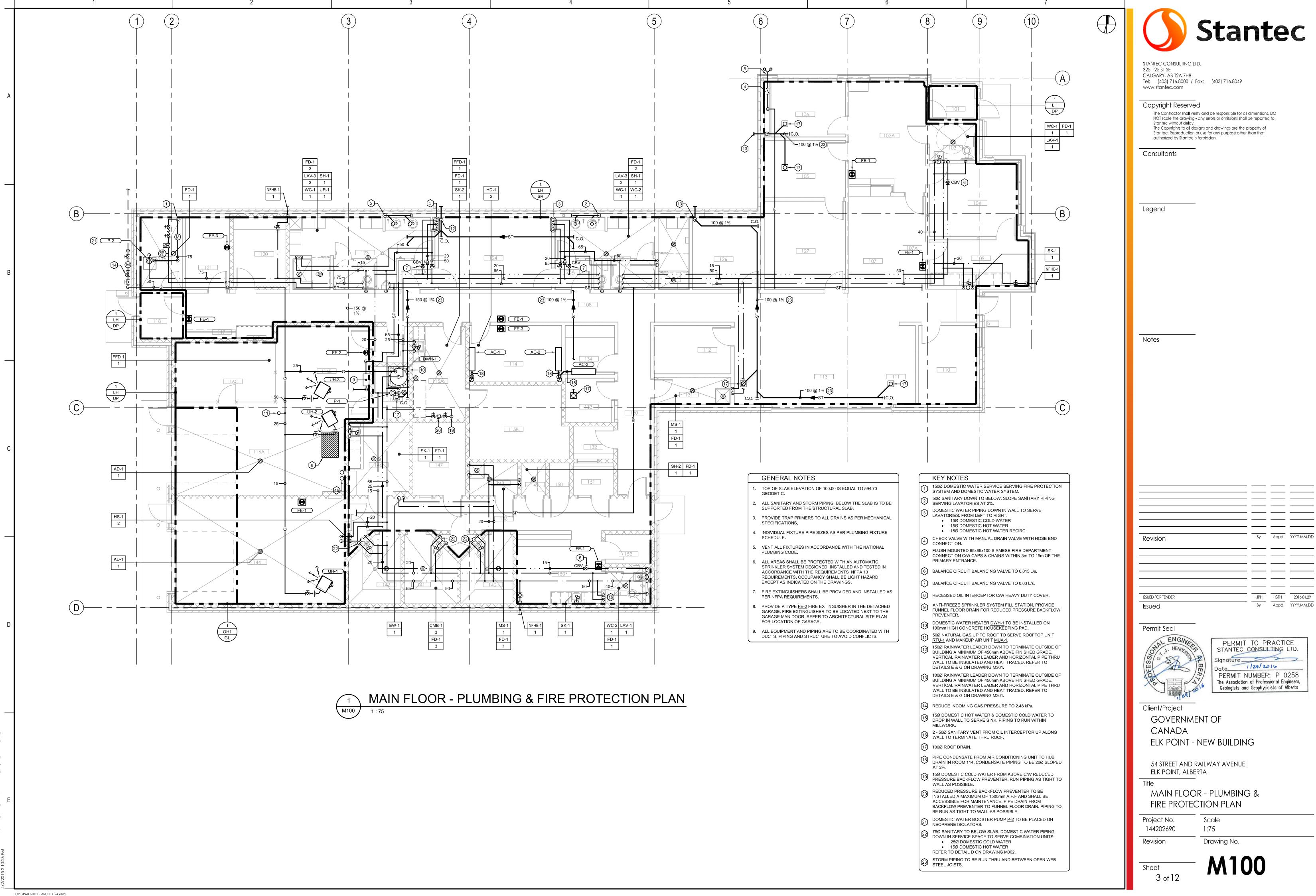
M00

ORIGINAL SHEET - ARCH D (24'x36")

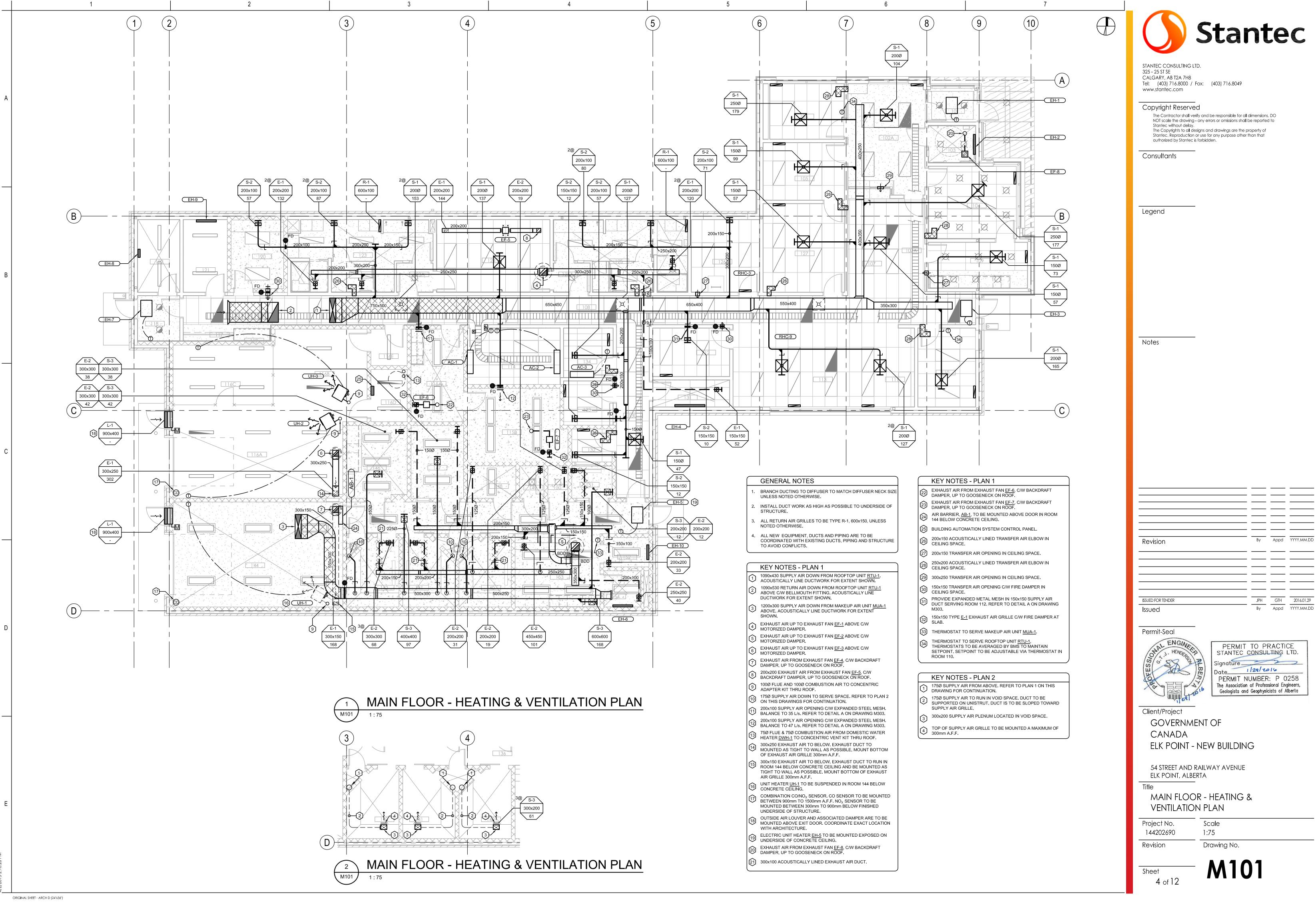
1 of 10



JPH GTH 2016.01.29



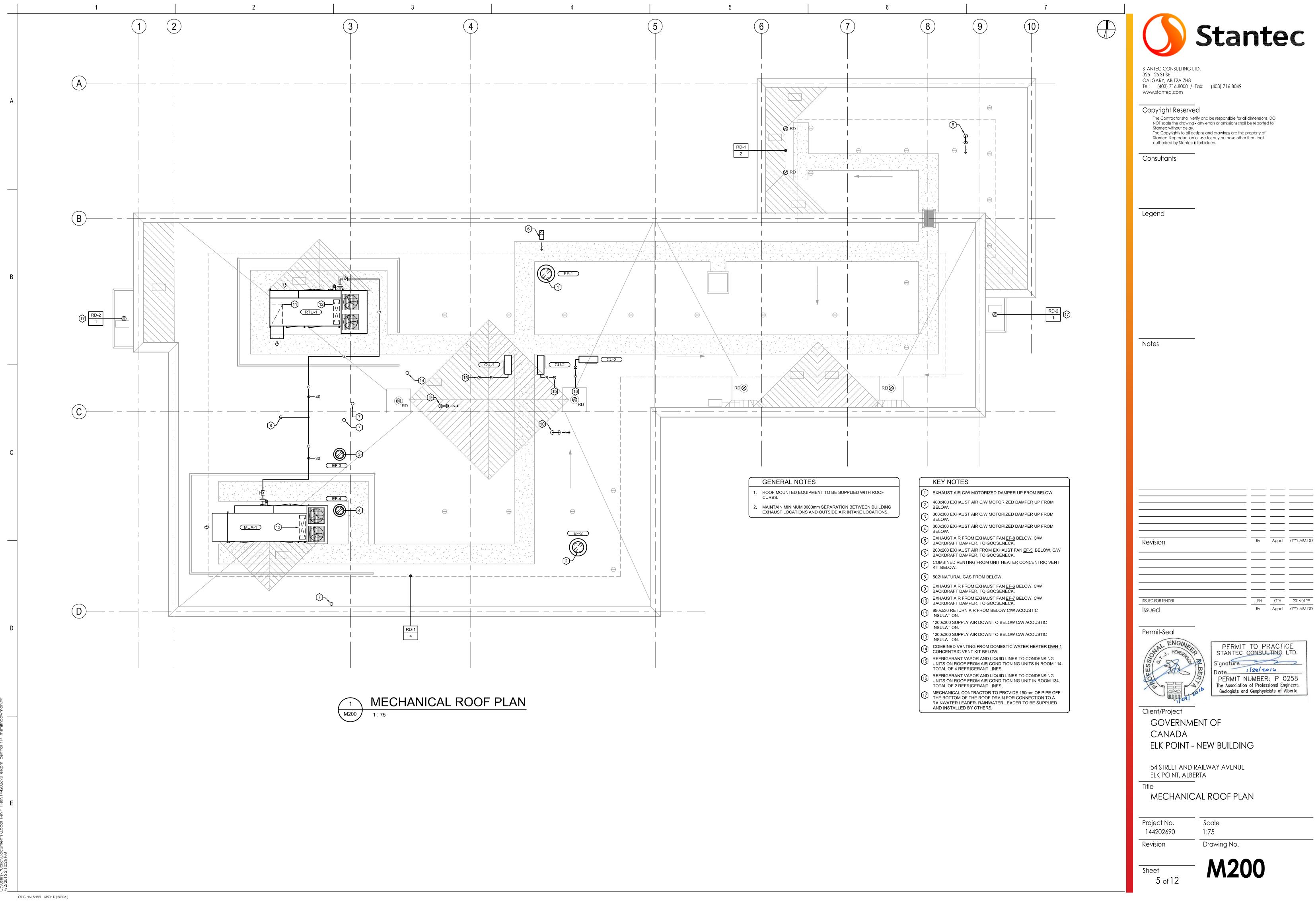
GTH 2016.01.29



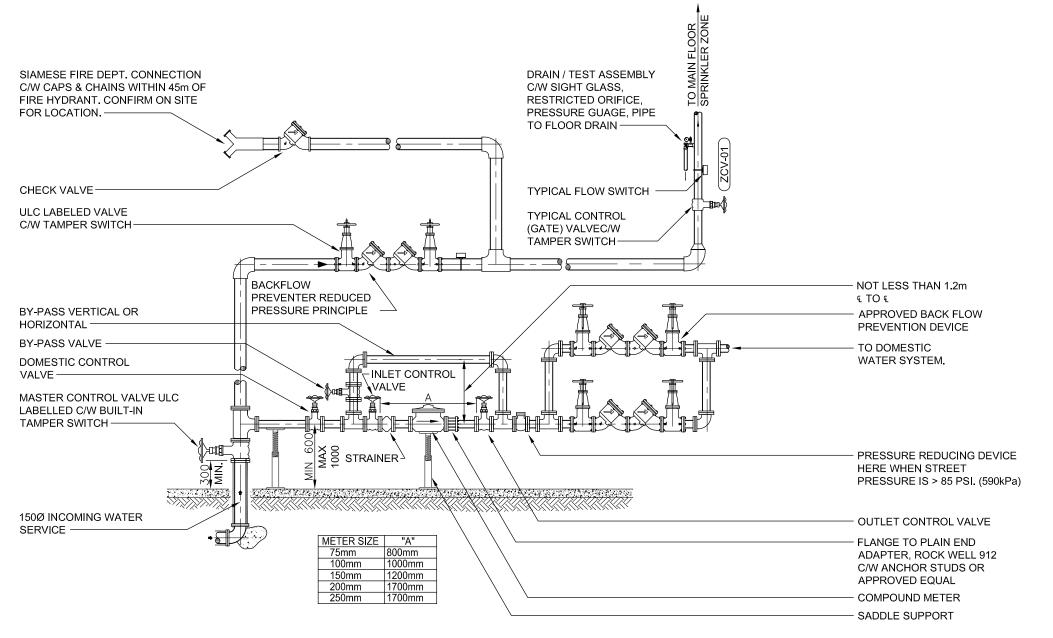
Stantec

GTH 2016.01.29

STANTEC CONSULTING LTD. PERMIT NUMBER: P 0258 The Association of Professional Engineers, Geologists and Geophysicists of Alberta



Appd YYYY.MM.DD JPH GTH 2016.01.29



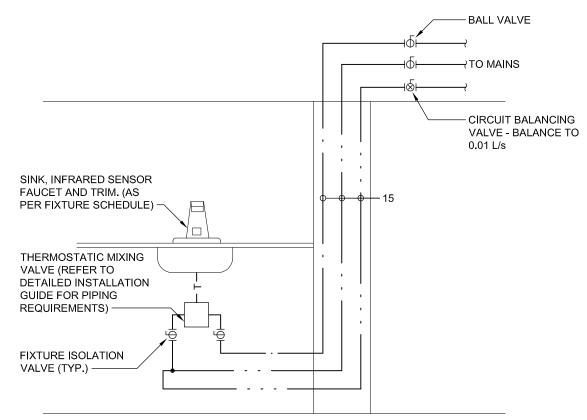
NOTES 1. THE SPACE ABOVE, 600mm BEHIND, AND THE ACCESS IN FRONT OF THE METER SETTING SHALL BE CLEAR AND FREE OF OBSTRUCTION. 2m HEADROOM MUST BE PROVIDED IN THIS AREA. PROVIDE ADEQUATE PIPE SUPPORT.

- THE BY-PASS, INLET AND OUTLET VALVES SHALL BE A RESILIENT SEATED RISING
- THE BY-PASS, INLET AND OUTLET VALVES SHALL BE A RESILIENT SEATED RISING SPINDLE (OS & Y) FLANGED GATE VALVE, CSA APPROVED.
 THE MASTER CONTROL VALVE SHALL BE ONE OF THE FOLLOWING:
- A) RESILIENT SEATED RISING SPINDLE (OS & Y) FLANGED GATE VALVE (UL OR ULC LISTED) FOR FIRE LINES AND CSA APPROVED FOR DOMESTIC LINES.
 B) SHORT-BODY, RUBBER SEATED FLANGED OR LUG WATER TUPE BUTTERFLY VALVE C/W HAND WHEEL, REDUCTION GEAR OPERATOR, POSITION INDICATOR (UL OR ULC LISTED) PROVIDED THEY ARE NOT IN A SUCTION LINE

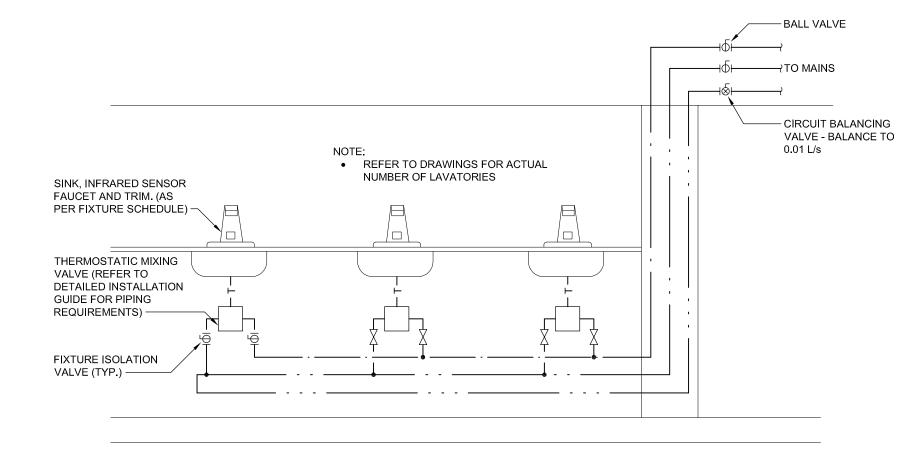
FOR FIRE PUMP(S).

- I. ENTRANCE PIPE MATERIAL THROUGH THE OUTSIDE WALL AND THROUGH THE FLOOR SHALL BE DUCTILE IRON PIPE AWWA C151 (LATEST EDITION) CLASS 52 OR APPROVED EQUAL. SERVICE ENTRIES THROUGH THE FLOOR (INCLUDING ANCHOR DETAILS) SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER AND DETAILED ON THE MECHANICAL SITE PLAN. (ANCHOR RODS SHALL BE 18-8 STAINLESS STEEL, WHERE A STANDARD 3m LENGTH OF ROD REQUIRES EXTENSION, AN APPROVED STAINLESS HEXAGON NUT COUPLING SHALL BE INSTALLED AT THE UPPER END OF
- 6. PIPING MATERIAL FOR THE METER AND BY-PASS ASSEMBLY SHALL BE COPPER OR GALVAINZED STEEL CONFORMING TO THE PLUMBING CODE.
- AN APPROVED CROSS CONNECTION DEVICE SHALL BE INSTALLED IMMEDIATELY AFTER THE WATER METER SETTING.
- 8. THE BY-PASS VALVE SHALL BE INSTALLED ON THE VERTICAL PIPE SECTION AS
- O. NO DRAIN DOWN VALVE OR HOSE BIBB SHALL BE PERMITTED BEFORE THE APPROVED CROSS CONNECTION CONTROL DEVICE.

WATER METER & SPRINKLER TREE DETAIL N.T.S.

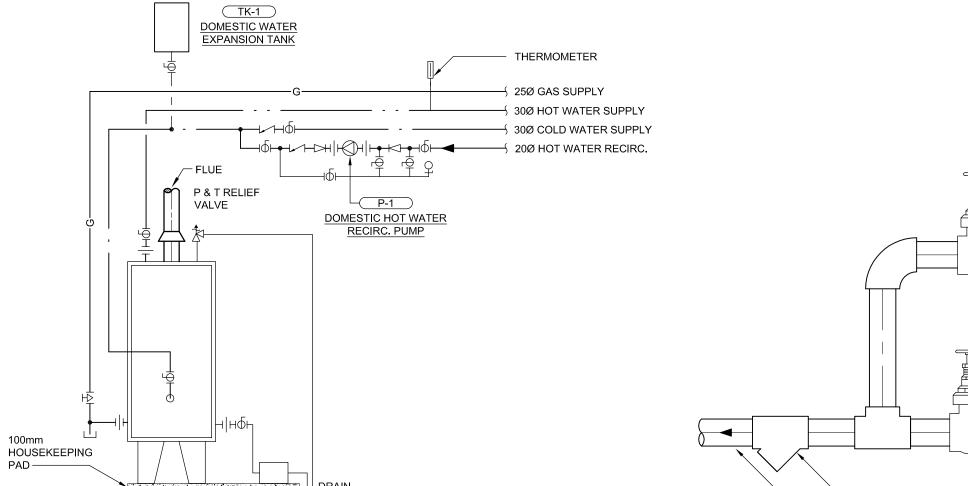


SINGLE INFRARED LAVATORY PIPING DETAIL



C INFRARED LAVATORY PIPING DETAIL

M300 N.T.S.



- ACID NEUTRALIZATION

TANK (SUPPLIED WITH

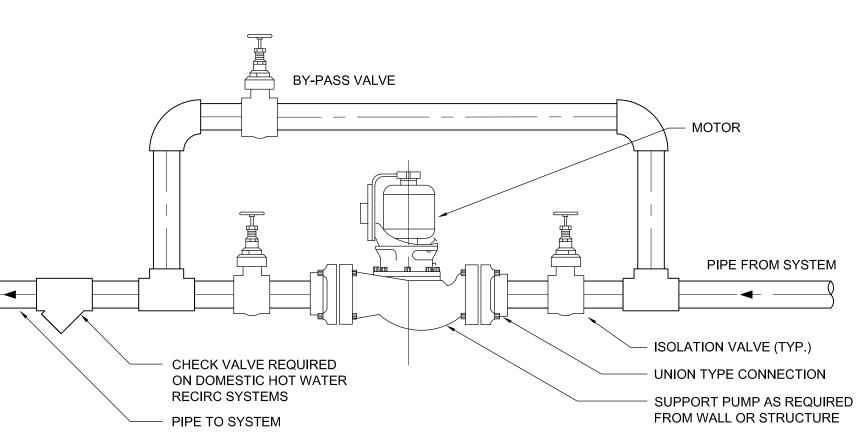
DOMESTIC WATER

HEATER)

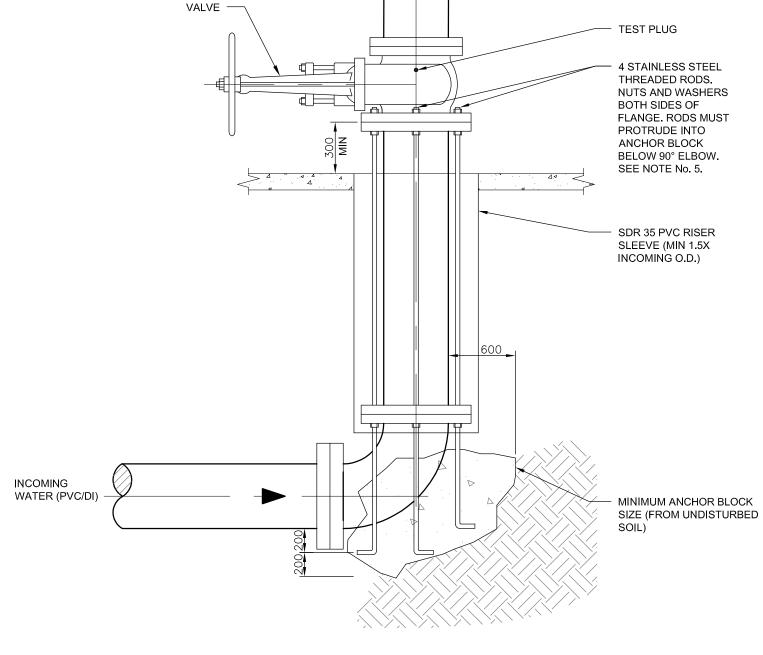
B DOMESTIC WATER HEATER DETAIL N.T.S.

DWH-1

DOMESTIC WATER



F INLINE CIRCULATOR DETAIL N.T.S.



NOTES:

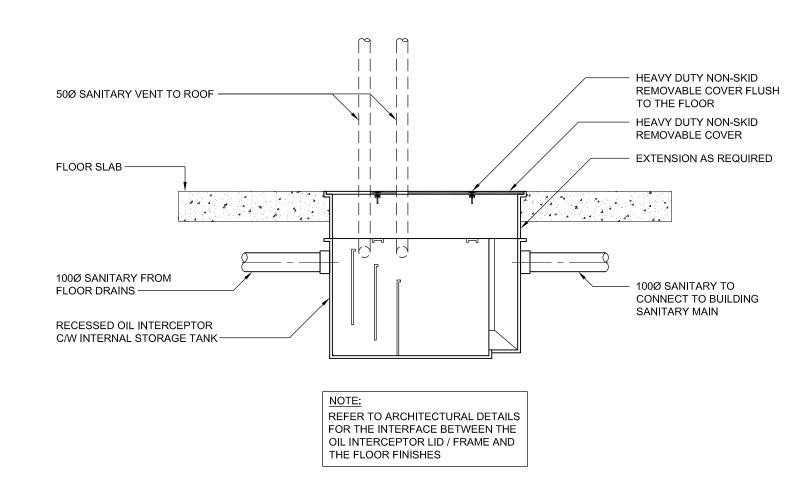
1. THE MASTER CONTROL VALVE SHALL BE ONE OF THE FOLLOWING:

SERVICE AND 25mm (1") FOR 350mm - 400mm SERVICE.

MASTER CONTROL

- 1.1 RESILIENT SEATED RISING SPINDLE (OS & Y) FLANGED GATE VALVE (UL OR ULC LISTED) FOR FIRE LINES
 AND CSA APPROVED FOR DOMESTIC LINES.
 1.2 SHORT-BODY, RUBBER SEATED FLANGED OR LUG WATER TYPE BUTTERFLY VALVE C/W HAND WHEEL.
- 1.2 SHORT-BODY, RUBBER SEATED FLANGED OR LUG WATER TYPE BUTTERFLY VALVE C/W HAND WHEEL, REDUCTION GEAR OPERATOR, POSITION INDICATOR (UL OR ULC LISTED) PROVIDED THEY ARE NOT IN A SUCTION LINE FOR FIRE PUMP(S).
- 2. ENTRANCE PIPE MATERIAL THROUGH THE OUTSIDE WALL SHALL BE DUCTILE IRON PIPE AWWA C151 (LATEST EDITION) CLASS 53 OR APPROVED EQUAL. BURIED FITTINGS SHALL BE CAST OR DUCTILE IRON CONFORMING TO AWWA C110 OR APPROVED EQUAL. (ANCHOR RODS SHALL BE 18-8 STAINLESS STEEL. WHERE A STANDARD 3m LENGTH OF ROD REQUIRES EXTENSION. AN APPROVED STAINLESS HEXAGON NUT COUPLING SHALL BE INSTALLED AT THE UPPER END OF ROD).
- 3. PROVIDE ADEQUATE PIPE SUPPORT.
- 4. INTERNAL PLUMBING STUB TO TERMINATE A MINIMUM OF 2.0m (6'-6") OUT FROM EXTERIOR WALL OR FOOTING. ENTRANCE OF PIPE THROUGH WALL SHALL BE PERPENDICULAR (90°) TO WALL.
- 5. ANCHOR RODS SHALL BE 18-8 STAINLESS STEEL. WHERE A STANDARD 3m (10'-0") LENGTH OF ROD REQUIRES EXTENSION. AN APPROVED STAINLESS HEXAGON NUT COUPLING SHALL BE INSTALLED AT THE UPPER END OF THE ROD. ANCHOR RODS SHALL BE 75mm ($\frac{3}{4}$ ") FOR 100mm 200mm SERVICE, 87.5mm ($\frac{7}{6}$ ") FOR 250mm 300mm

UNDERGROUND WATER SERVICE ENTRY DETAIL
N.T.S.



G RECESSED OIL INTERCEPTOR DETAIL N.T.S.



STANTEC CONSULTING LTD.
325 - 25 ST SE
CALGARY, AB T2A 7H8
Tel: (403) 716.8000 / Fax: (403) 716.8049
www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

Notes

Revision

By Appd YYYY.MM.DE

Permit-Seal

Issued



PERMIT TO PRACTICE STANTEC CONSULTING LTD.

Signature

Date

1/28/2016

PERMIT NUMBER: P 0258
The Association of Professional Engineers,
Geologists and Geophysicists of Alberta

By Appd YYYY.MM.DD

Client/Project

GOVERNMENT OF CANADA ELK POINT - NEW BUILDING

54 STREET AND RAILWAY AVENUE ELK POINT, ALBERTA

MECHANICAL DETAILS

Project No. 144202690 Revision Scale
N.T.S.

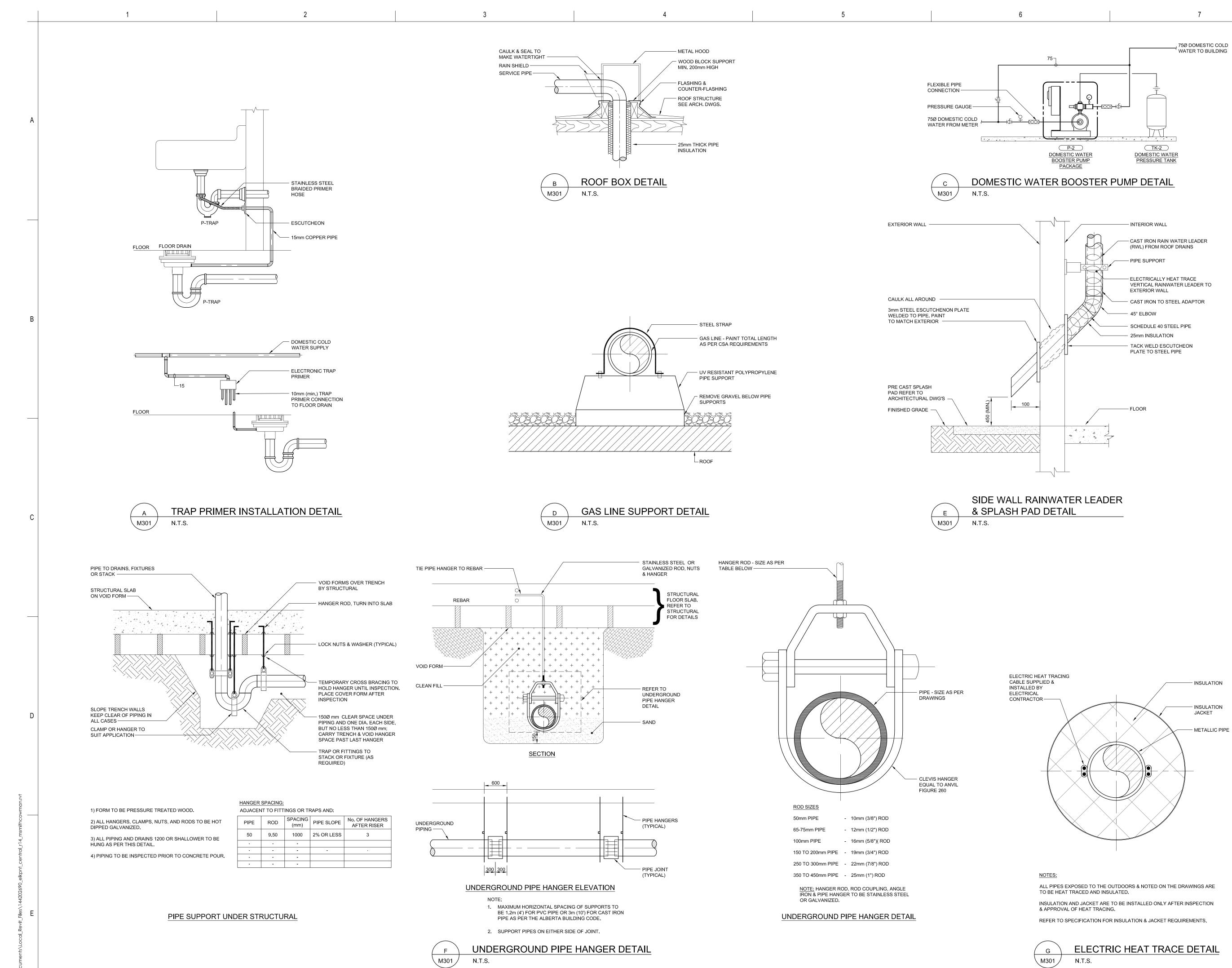
Drawing No.

AA20

M3U

ORIGINAL SHEET - ARCH D (24"x36")

√ M300 /



Stanted

STANTEC CONSULTING LTD.
325 - 25 ST SE
CALGARY, AB T2A 7H8
Tel: (403) 716.8000 / Fax: (403) 716.8049
www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

Notes

Revision By Appd YYYY.MM.DD

Permit-Seal

ISSUED FOR TENDER

Issued



PERMIT TO PRACTICE STANTEC CONSULTING LTD.

Signature

Date

PERMIT NUMBER: P 0258
The Association of Professional Engineers,
Geologists and Geophysicists of Alberta

JPH GTH 2016.01.29

By Appd YYYY.MM.DD

Client/Project

GOVERNMENT OF CANADA ELK POINT - NEW BUILDING

54 STREET AND RAILWAY AVENUE ELK POINT, ALBERTA

MECHANICAL DETAILS

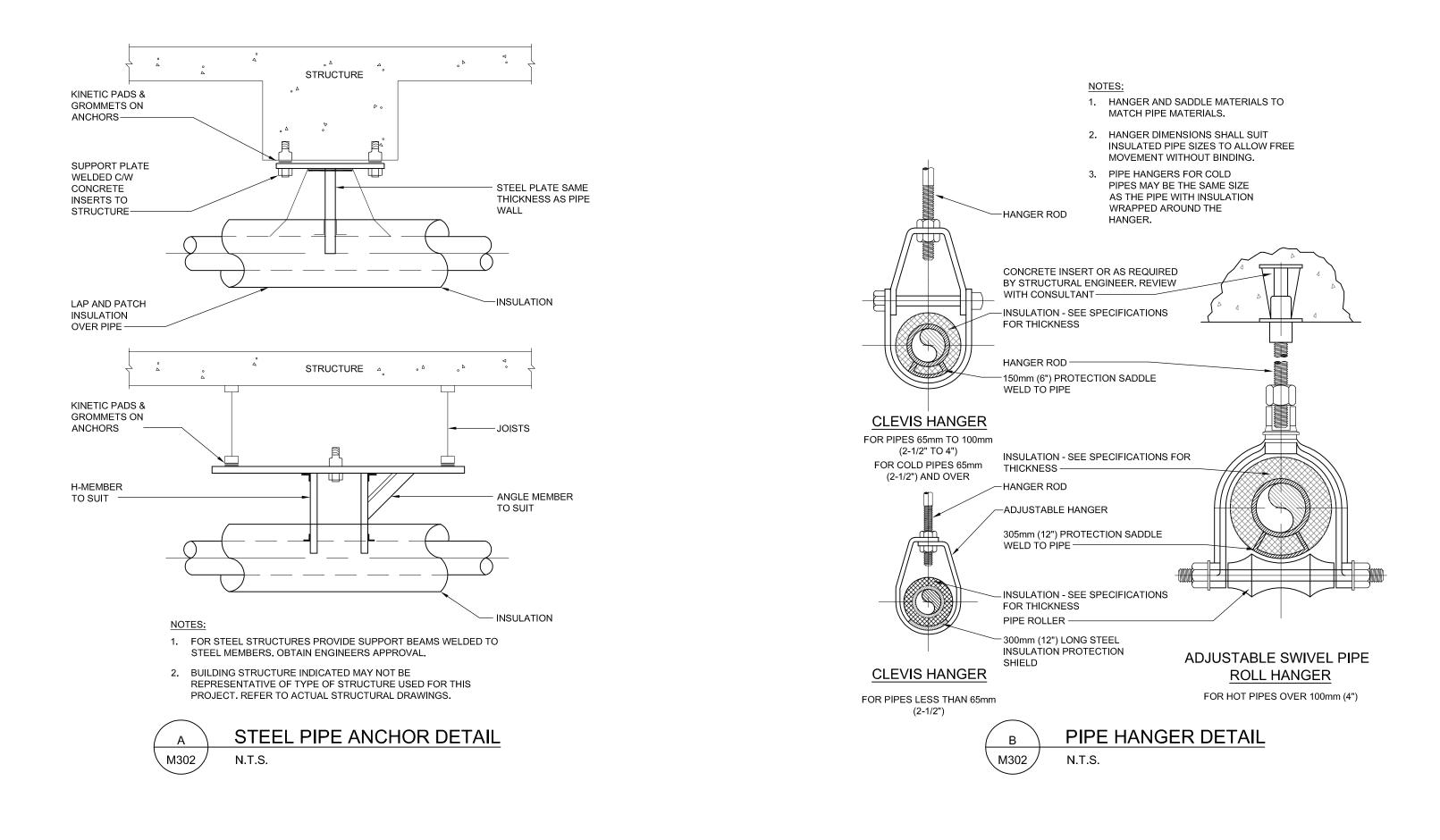
WECH WINCH DEIMIES

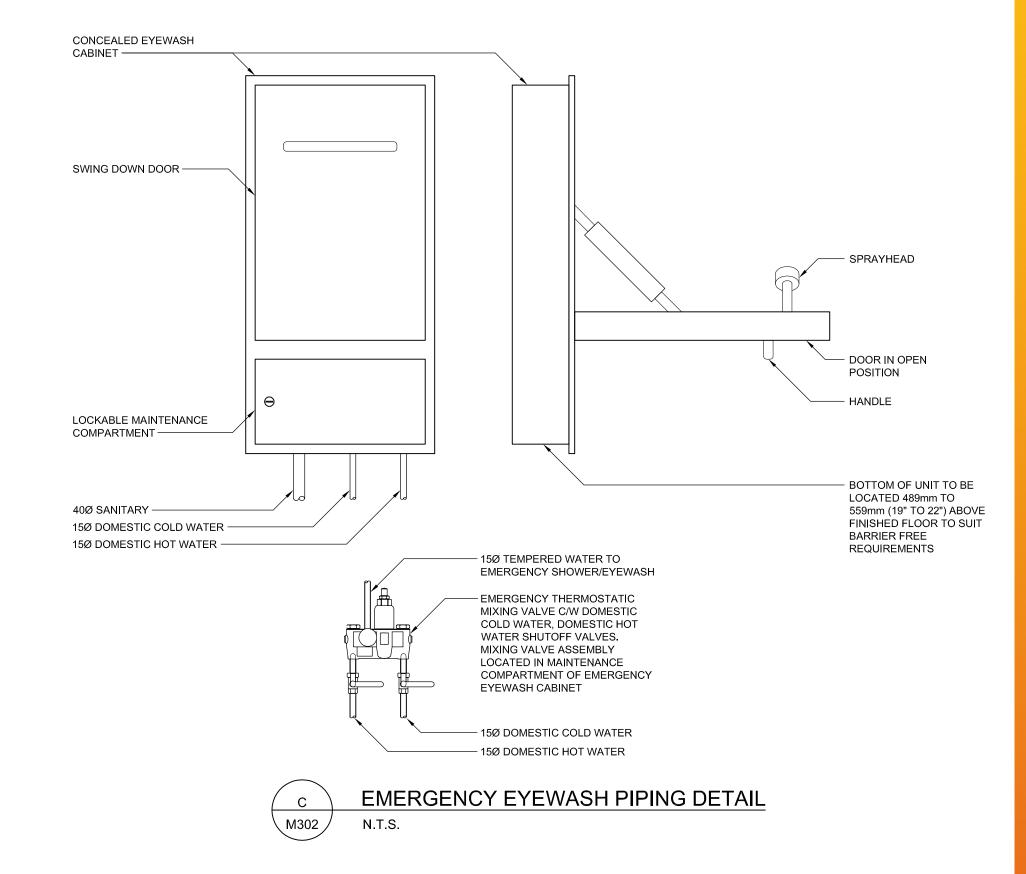
Project No. 144202690 Revision Scale
N.T.S.

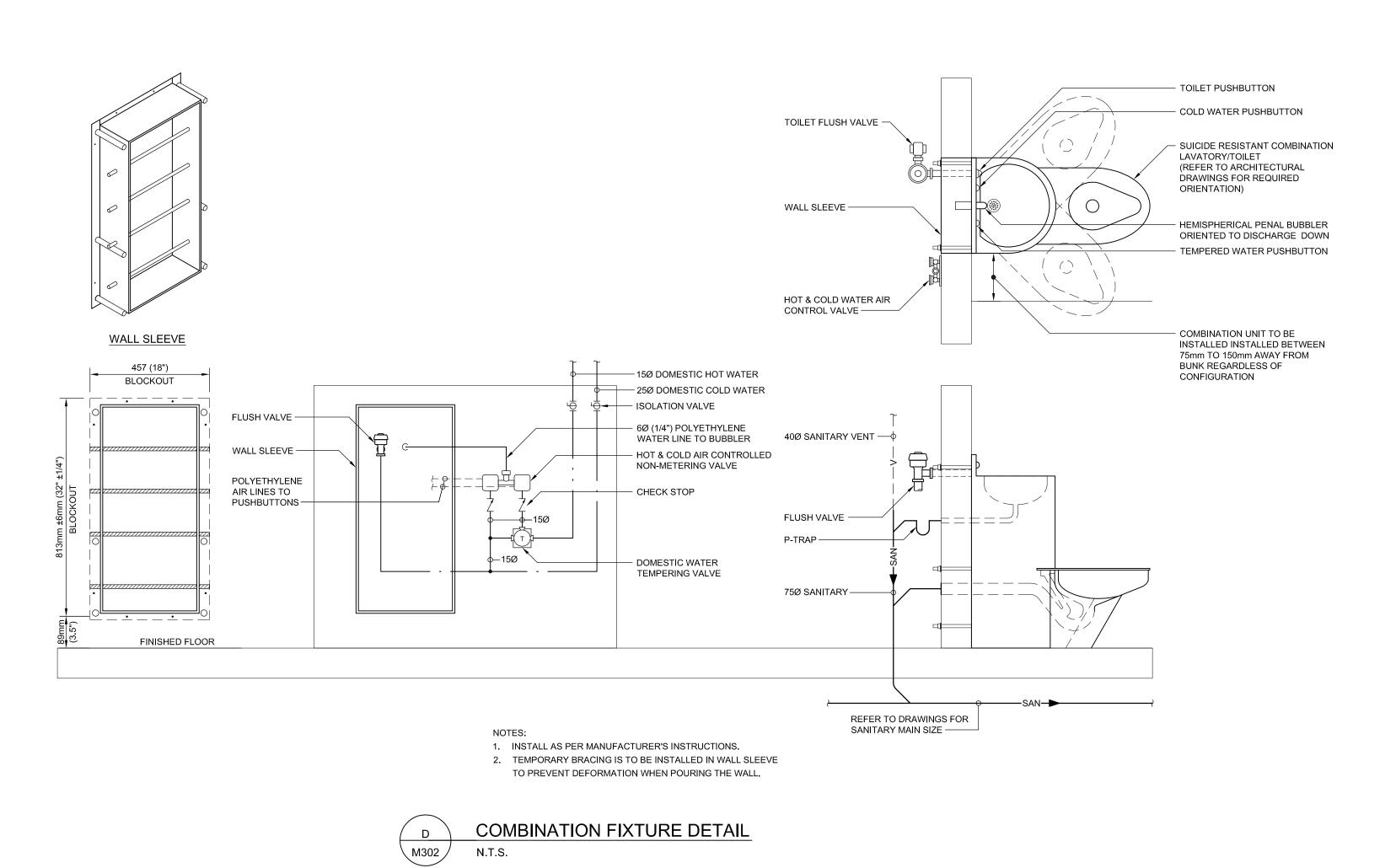
Drawing No.

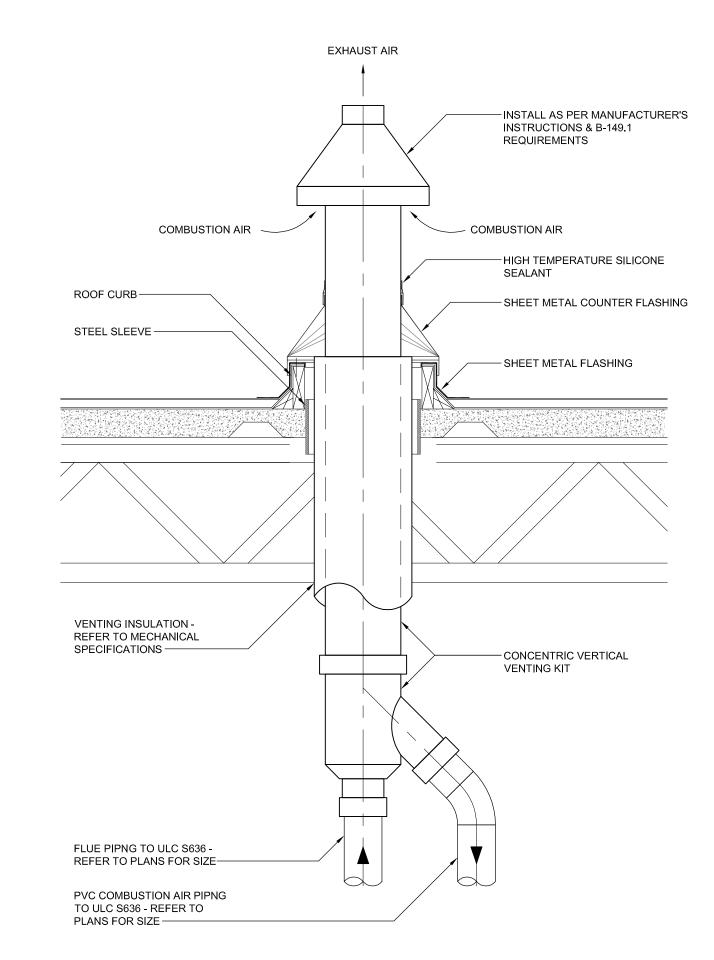
Drawing No.

neet 7 of 12 M30 I









DOMESTIC WATER HEATER VENTING THRU ROOF DETAIL √ M302



325 - 25 ST SE CALGARY, AB T2A 7H8 Tel: (403) 716.8000 / Fax: (403) 716.8049 www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

Notes

Appd YYYY.MM.DD Revision ISSUED FOR TENDER JPH GTH 2016.01.29 By Appd YYYY.MM.DD Issued

Permit-Seal



PERMIT TO PRACTICE STANTEC CONSULTING LTD. lignature____ 1/29/2016 PERMIT NUMBER: P 0258 The Association of Professional Engineers, Geologists and Geophysicists of Alberta

Client/Project **GOVERNMENT OF**

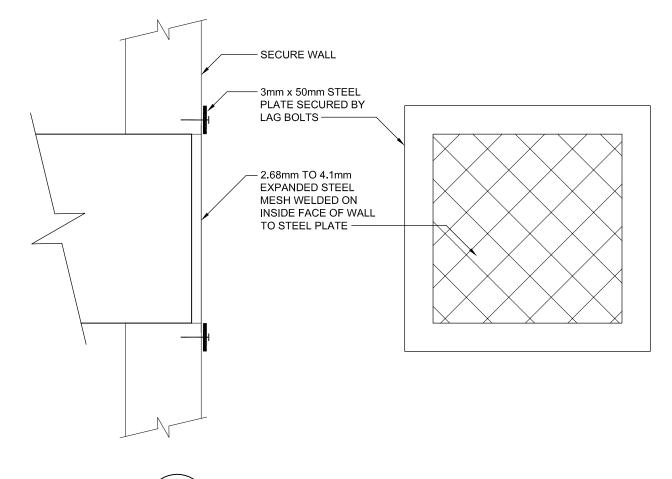
CANADA ELK POINT - NEW BUILDING

54 STREET AND RAILWAY AVENUE ELK POINT, ALBERTA

MECHANICAL DETAILS

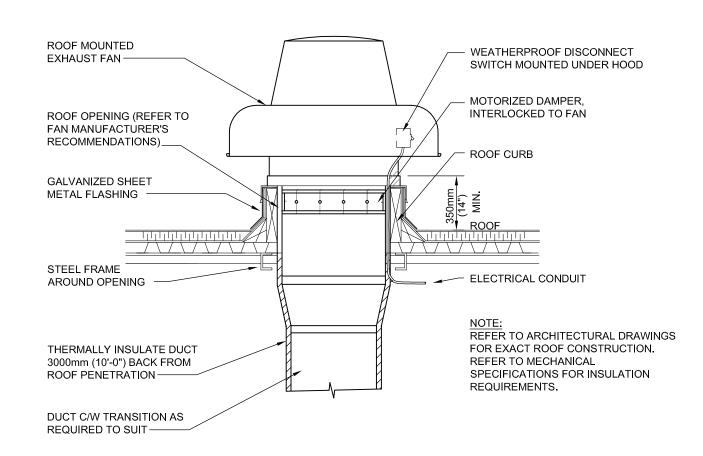
Project No. 144202690 Revision

Scale N.T.S. Drawing No.

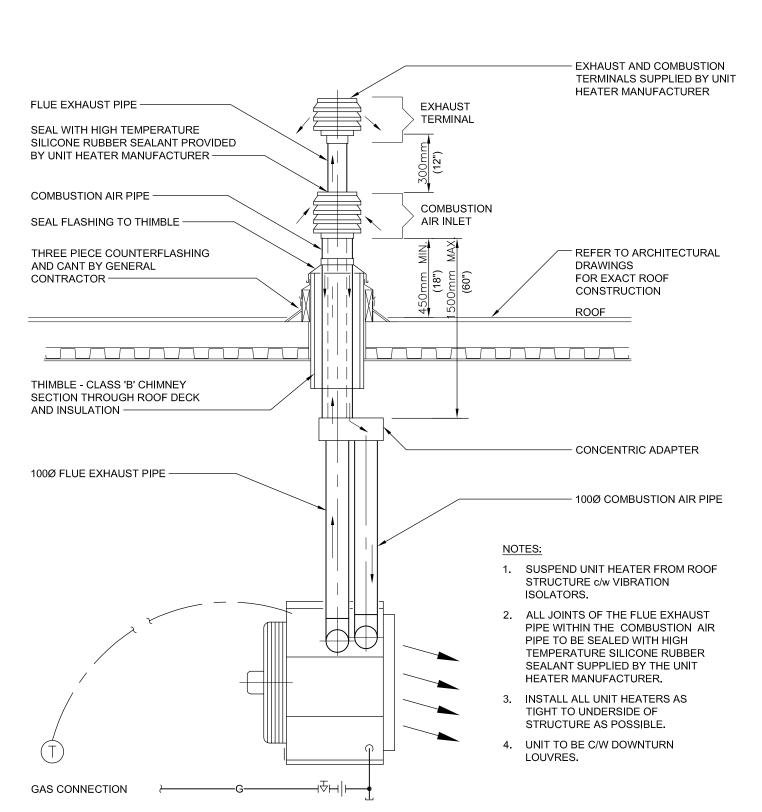


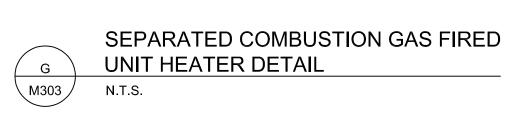
A SECURE DUCT OPENING DETAIL

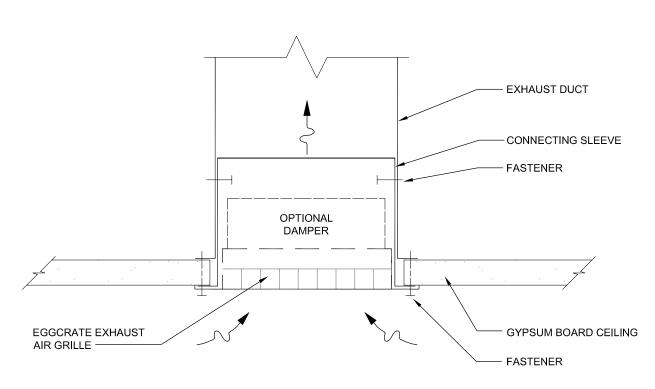
N.T.S.



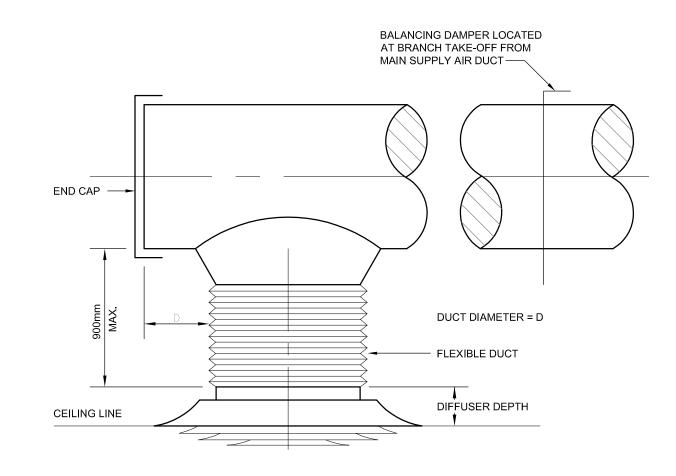
ROOF MOUNTED EXHAUST FAN DETAIL
N.T.S.



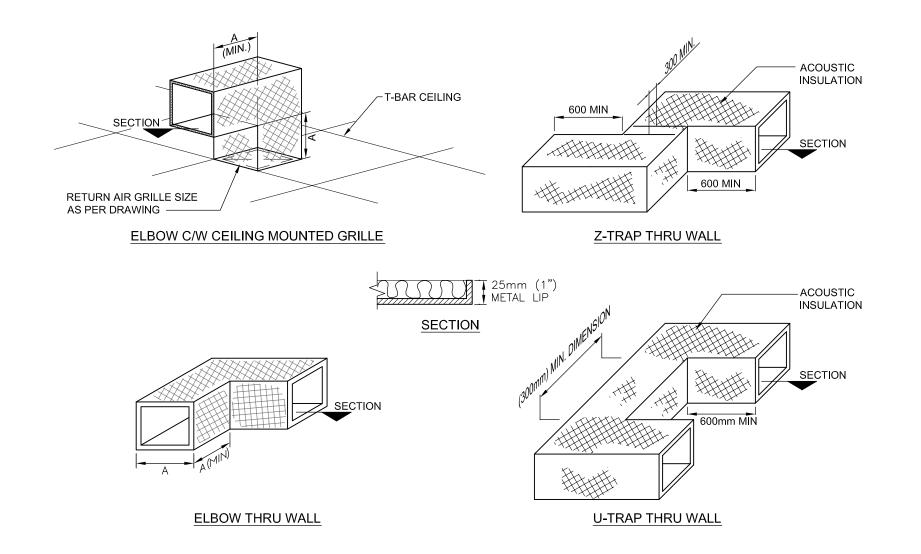




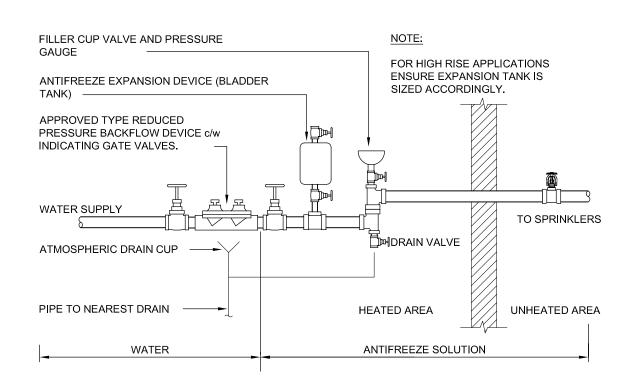
B EXHAUST AIR GRILLE DETAIL
M303 N.T.S.



DIFFUSER CONNECTION DETAIL
N.T.S.

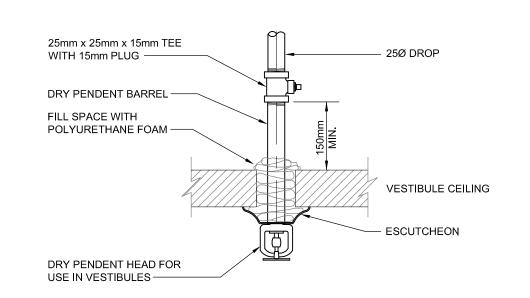


H TRANSFER AIR ELBOW DETAIL
M303 N.T.S.



WITH BACKFLOW PREVENTER





DRY SPRINKLER HEAD DETAIL
N.T.S.



STANTEC CONSULTING LTD.
325 - 25 ST SE
CALGARY, AB T2A 7H8
Tel: (403) 716.8000 / Fax: (403) 716.8049
www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

Notes

Revision

By Appd YYYY.MM.DD

ISSUED FOR TENDER

JPH GTH 2016.01.29

ISSUED By Appd YYYY.MM.DD

Permit-Seal



PERMIT TO PRACTICE STANTEC CONSULTING LTD.

Signature

Date

1/29/2016

PERMIT NUMBER: P 0258
The Association of Professional Engineers,
Geologists and Geophysicists of Alberta

Client/Project
GOVERNMENT OF
CANADA
ELK POINT - NEW BUILDING

54 STREET AND RAILWAY AVENUE ELK POINT, ALBERTA

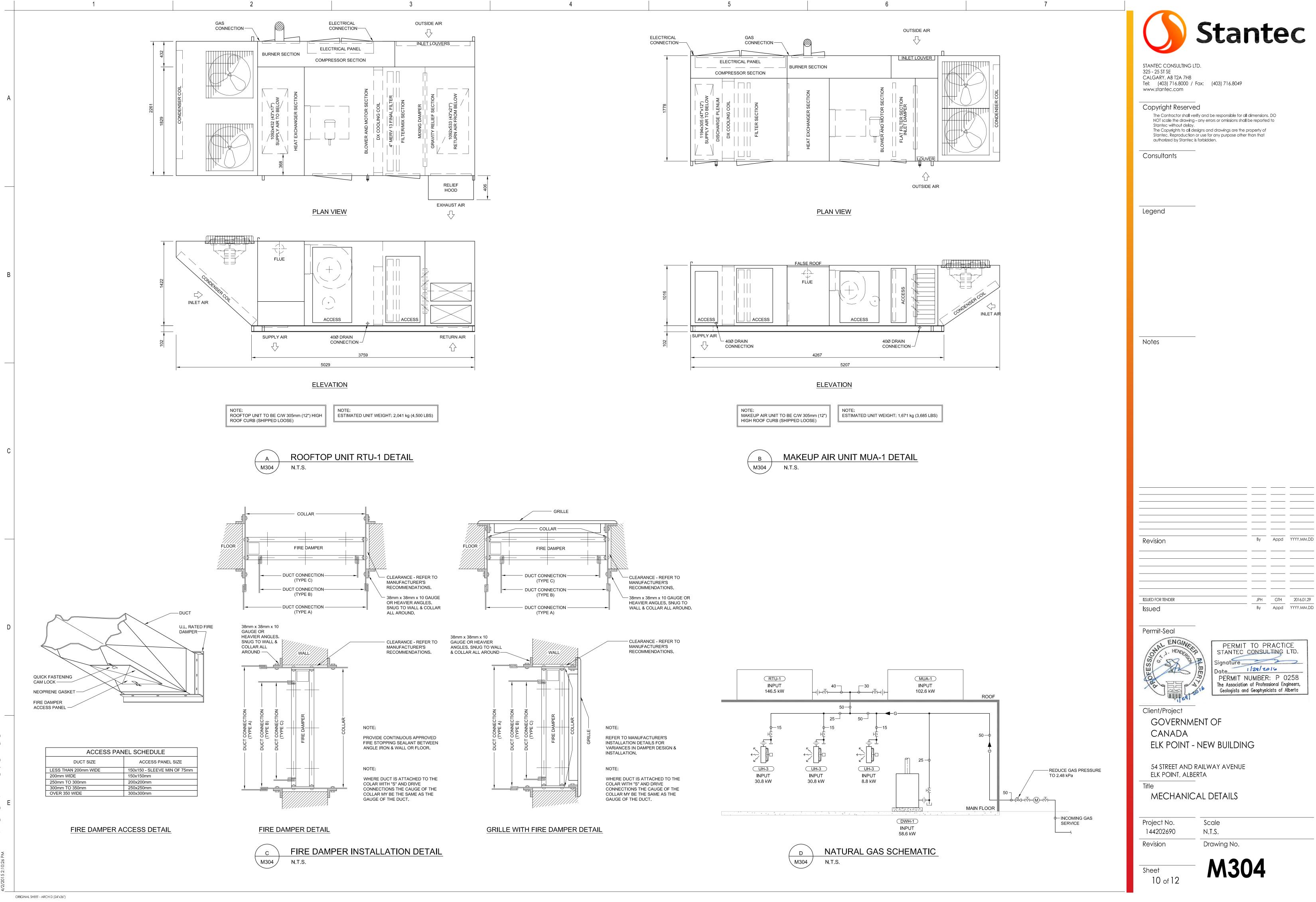
le

MECHANICAL DETAILS

Project No. 144202690 Revision Scale N.T.S. Drawing No.

- M303

9 of 12



By Appd YYYY.MM.DD

							PLUMBING FIXTURE SCHEDULE
FIXTURE		FIX	TURE C	ONNEC	TIONS A	'mm)	LOWDING FIXTORE SOFIEDOLE
TAG	TYPE	DCW	DHW	DTHW		VENT	DESCRIPTION
WC 1	BARRIER FREE FLOOR MOUNTED FLUSH VALVE WATER CLOSET	25			100	50	AMERICAN STANDARD MADERA FLOWISE RIGHT HEIGHT ELONGATED #3461.001.020 HET TOILET, 419mm (16.5") HIGH, WHITE VITREOUS CHINA WITH ANTIMICROBIAL SURFACE, FLOOR MOUNTED, SIPHON JET FLUSH ACTION, OPERATES IN THE RANGE OF 4.2 L TO 6 L (1.1 US GAL TO 1.6 US GAL) PER FLUSH, CONDENSATE CHANNEL, 305mm X 254mm (12" X 10") WATER SURFACE, ELONGATED BOWL, 54 MM (2-1/8") FULLY GLAZED INTERNAL TRAPWAY, FLOOR OUTLET, BOLT CAPS, 38mm (1-1/2") DIA. TOP SPUD. CENTOCO #500STSCC.001 TOILET SEAT, HEAVY DUTY, FOR ELONGATED BOWL, OPEN FRONT, WHITE SOLID PLASTIC, LESS COVER, STAINLESS STEEL CHECK HINGES, METAL FLAT WASHERS STAINLESS STEEL POSTS AND NUTS. TOTO MODEL TET6GNC-32 AUTOMATIC INFRARED SENSOR ACTIVATED FLUSH VALVE, HEAVY-DUTY ZINC DIE CAST COVER WITH POLISHED CHROME FINISH, VANDAL RESISTANT HEX HEAD SCREWS, HYDROPOWER SELF-GENERATING SYSTEM, 6 LPF (1.6 GPF), MANUAL OVERRIDE BUTTON, PISTON VALVE WITH SELF-CLEANING MECHANISM, ANGLE STOP AND VACUUM BREAKER INCLUDED WITH ACCESSORIES. FRANKE COMMERCIAL MIDLAND #CM16104, BACK REST, SATIN FINISH TYPE 304 18 GA. (1.2mm) STAINLESS STEEL BAR 32mm (1-1/4") TUBING DIAMETER, ANTIQUE WHITE SOLID CORE PLASTIC LAMINATE PANEL. PROVIDE FLOOR FLANGE (SAME MATERIAL AS THE CONNECTING PIPE DRAIN), WITH ALL BRASS BOLTS AND WITH RUBBER GASKET.
WC-2	FLOOR MOUNTED FLUSH VALVE WATER CLOSET	25			100	50	AMERICAN STANDARD MADERA FLOWISE ELONGATED #3451.001.020 HET TOILET, 381mm (15") HIGH, WHITE VITREOUS CHINA WITH ANTIMICROBIAL SURFACE, FLOOR MOUNTED, SIPHON JET FLUSH ACTION, OPERATES IN THE RANGE OF 4.2 L TO 6 L (1.1 US GAL TO 1.6 US GAL) PER FLUSH, CONDENSATE CHANNEL, 305mm X 254mm (12" X 10") WATER SURFACE, ELONGATED BOWL, 54mm (2-1/8") FULLY GLAZED INTERNAL TRAPWAY, FLOOR OUTLET, BOLT CAPS, 38mm (1-1/2") DIA. TOP SPUD. CENTOCO #500STSCC.001 TOILET SEAT, HEAVY DUTY, FOR ELONGATED BOWL, OPEN FRONT, WHITE SOLID PLASTIC, LESS COVER, STAINLESS STEEL CHECK HINGES, METAL FLAT WASHERS STAINLESS STEEL POSTS AND NUTS. TOTO MODEL TET6GNC-32 AUTOMATIC INFRARED SENSOR ACTIVATED FLUSH VALVE, HEAVY-DUTY ZINC DIE CAST COVER WITH POLISHED CHROME FINISH, VANDAL RESISTANT HEX HEAD SCREWS, HYDROPOWER SELF-GENERATING SYSTEM, 6 LPF (1.6 GPF), MANUAL OVERRIDE BUTTON, PISTON VALVE WITH SELF-CLEANING MECHANISM, ANGLE STOP AND VACUUM BREAKER INCLUDED WITH ACCESSORIES. SLOAN #EL-451, BOX MOUNT HARD WIRED TRANSFORMER, 120 VAC INPUT/ 6 VAC OUTPUT, 50/60 HZ (25 VA). PROVIDE FLOOR FLANGE (SAME MATERIAL AS THE CONNECTING PIPE DRAIN), WITH ALL BRASS BOLTS AND WITH RUBBER GASKET.
URINAL	 S						
UR-1	WALL MOUNTED FLUSH VALVE URINAL	20			50	30	AMERICAN STANDARD WASHBROOK FLOWISE #6590.001/7301242-100 URINAL, VITREOUS CHINA, OPERATES IN THE RANGE OF 0.5 L TO 3.8 L (0.125 US GAL TO 1.0 US GAL) PER FLUSH, WALL HUNG, EXTENDED SIDES FOR PRIVACY, WASHDOWN ACTION, FLUSHING RIM, 19mm (3/4") DIA. TOP SPUD, ELONGATED RIM, INTEGRAL P-TRAP, OUTLET CONNECTION 51mm (2"), 2 WALL HANGERS, #7301242-100 CHROME PLATED, NON-METALLIC STRAINER. TOTO MODEL TEU1UN12#CP, AUTOMATIC INFRARED SENSOR ACTIVATED URINAL FLUSH VALVE, HEAVY-DUTY ZINC DIE CAST COVER WITH NICKEL CHROME FINISH, VANDAL RESISTANT HEX HEAD SCREWS, HYROPOWER SELF-GENERATING SYSTEM, 0.5 L (0.125 GAL) PER FLUSH, MANUAL OVERRIDE BUTTON, SOLENOID WITH SELF-CLEANING MECHANISM, ANGLE STOP AND VACUUM BREAKER INCLUDED WITH ACCESSORIES. WATTS #CA-321, FIXTURE CARRIER, MOUNTED ON CONCRETE FLOOR, EPOXY COATED TOP AND BOTTOM UNIVERSAL STEEL HANGER PLATES, HEAVY GAUGE EPOXY COATED STEEL OFFSET UPRIGHTS WITH WELDED FEET SUPPORTS. FOR ONE UNIT: 102mm (4") FOR TWO TO SIX UNITS IN A ROW: 152mm (6") FINISHED METAL STUD WALL TO BACK OF PIPE SPACE. WATTS #WUCO URINAL WALL ACCESS CLEANOUT, TWO PIECE EXPANDABLE PLUG WITH 102mm(4") DIAMETER STAINLESS STEEL ACCESS COVER, SECURED WITH VANDAL PROOF STAINLESS STEEL SCREW.
LAVATO	DRIES						
LAV-1	BARRIER FREE WALL MOUNTED LAVATORY	15	15		30	30	AMERICAN STANDARD MURRO WITH EVERCLEAN #0955.001EC/0059.020EC BASIN, 540mm X 520mm X 165mm (21-1/4" X 20-1/2" X 6-1/2") HIGH, VITREOUS CHINA, FOR CARRIER WITH CONCEALED ARMS, REAR OVERFLOW, RECESSED SELF-DRAINING FAUCET LEDGE, SEMI-PEDESTAL P-TRAP COVER. TOTO MODEL TEL105-C20ET, ELECTRONIC FAUCET, HYDROPOWER SELF-GENERATING SYSTEM, VANDAL RESISTANT AERATOR HOUSING, CHROME PLATED SPOUT BODY, KIT INCLUDES CONTROLLER BOX AND MOUNTING HARDWARE, 0.03 L/s (0.5 GPM) FLOW RATE, TOTO MODEL TLT10 THERMOSTATIC MIXING VALVE. MCGUIRE #155AC OPEN GRID DRAIN, CHROME PLATED CAST BRASS ONE PIECE TOP, 17 GA. (1.5mm) TUBULAR 32mm (1-1/4") TAILPIECE. MCGUIRE #8872C P-TRAP, HEAVY CAST BRASS ADJUSTABLE BODY, WITH SLIP NUT, 32mm (1-1/4") SIZE, SHALLOW WALL FLANGE AND SEAMLESS TUBULAR WALL BEND. WATTS #WCA-411-CA-481, BASIN CARRIER, CONCEALED ARMS, WALL FLANGES TO ATTACH TO BACKING PLATE SECURED IN WALL WITH LOCKING DEVICE AND LEVELLING SCREWS, HEAVY GAUGE STEEL UPRIGHTS WITH INTEGRAL WELDED FEET. FOR ONE UNIT: 102mm (4") FOR TWO TO SIX UNITS IN A ROW: 152mm (6") FINISHED METAL STUD WALL TO BACK OF PIPE SPACE. FAUCET SUPPLIES, CHROME PLATED POLISHED BRASS, COMMERCIAL DUTY 1/4 TURN BALL VALVE ANGLE STOP, 13mm (1/2") I. D. INLET x 127mm (5") HORIZONTAL EXTENSION TUBES, COMBINATION V. P. LOOSE KEY HANDLE, ESCUTCHEON AND FLEXIBLE COPPER RISER. MCGUIRE PROWRAP #PW2000WC SANITARY COVERING VANDAL-RESISTANT, FLEXIBLE SEAMLESS MOULDED CLOSED-CELL PVC RESIN, FORMULATED WITH ANTI-MICROBIAL ADDITIVE TO LIMIT THE GROWTH OF FUNGUS AND BACTERIA, TO EXPOSED PIPING (TO PROTECT AGAINST HEAT/CONTUSIONS) AS PER LOCAL CODES.
	BARRIER FREE COUNTERTOP LAVATORY	15	15		30	30	AMERICAN STANDARD CADET #0236.001 BASIN, 622mm X 508mm X 203mm (24-1/2" X 20" X 8") HIGH, VITREOUS CHINA, FOR CARRIER WITH "U" BRACKET, REAR OVERFLOW, FAUCET LEDGE, GENEROUS SHELF AREA. TOTO MODEL TEL105-C20ET, ELECTRONIC FAUCET, HYDROPOWER SELF-GENERATING SYSTEM, VANDAL RESISTANT AERATOR HOUSING, CHROME PLATED SPOUT BODY, KIT INCLUDES CONTROLLER BOX AND MOUNTING HARDWARE, 0.03 L/s (0.5 GPM) FLOW RATE, TOTO MODEL TLT10 THERMOSTATIC MIXING VALVE. MCGUIRE #155AC OPEN GRID DRAIN, CHROME PLATED CAST BRASS ONE PIECE TOP, 17 GA. (1.5mm) TUBULAR 32mm (1-1/4") TAILPIECE. MCGUIRE #8872C P-TRAP, HEAVY CAST BRASS ADJUSTABLE BODY, WITH SLIP NUT, 32mm (1-1/4") SIZE, SHALLOW WALL FLANGE AND SEAMLESS TUBULAR WALL BEND. WATTS #CA-321, FIXTURE CARRIER, MOUNTED ON CONCRETE FLOOR, EPOXY COATED TOP AND BOTTOM UNIVERSAL STEEL HANGER PLATES, HEAVY GAUGE EPOXY COATED STEEL OFFSET UPRIGHTS WITH WELDED FEET SUPPORTS. FOR ONE UNIT: 102mm (4") FOR TWO TO SIX UNITS IN A ROW: 152mm (6") FINISHED METAL STUD WALL TO BACK OF PIPE SPACE. FAUCET SUPPLIES, CHROME PLATED POLISHED BRASS, COMMERCIAL DUTY 1/4 TURN BALL VALVE ANGLE STOP, 13mm (1/2") I. D. INLET x 127mm (5") HORIZONTAL EXTENSION TUBES, COMBINATION V. P. LOOSE KEY HANDLE, ESCUTCHEON AND FLEXIBLE COPPER RISER. MCGUIRE PROWRAP #PW2000WC SANITARY COVERING VANDAL-RESISTANT, FLEXIBLE SEAMLESS MOULDED CLOSED-CELL PVC RESIN, FORMULATED WITH ANTI-MICROBIAL ADDITIVE TO LIMIT THE GROWTH OF FUNGUS AND BACTERIA, TO EXPOSED PIPING (TO PROTECT AGAINST HEAT/CONTUSIONS) AS PER LOCAL CODES.
	BARRIER FREE UNDERCOUNTER LAVATORY	15	15		30	30	AMERICAN STANDARD CADET UNIVERSAL ACCESS #9494.001 BASIN, 533mm X 445mm X 175mm (21" X 17-1/2" X 6-7/8") HIGH, OVAL, VITREOUS CHINA, SELF-RIMMING - DROP-IN, SIDE REAR OVERFLOW, FAUCET LEDGE. TOTO MODEL TLT10 THERMOSTATIC MIXING VALVE. MCGUIRE #155AC OPEN GRID DRAIN, CHROME PLATED CAST BRASS ONE PIECE TOP, 17 GA. (1.5mm) TUBULAR 32mm (1-1/4") TAILPIECE. MCGUIRE #8872C P-TRAP, HEAVY CAST BRASS ADJUSTABLE BODY, WITH SLIP NUT, 32mm (1-1/4") SIZE, SHALLOW WALL FLANGE AND SEAMLESS TUBULAR WALL BEND. MCGUIRE #155WCC OFFSET OPEN GRID DRAIN, CHROME PLATED CAST BRASS ONE PIECE TOP, 17 GA. (1.5mm) TUBULAR 32mm (1-1/4") TAILPIECE. MCGUIRE #8872C P-TRAP, HEAVY CAST BRASS ADJUSTABLE BODY, WITH SLIP NUT, 32mm (1-1/4") SIZE, SHALLOW WALL FLANGE AND SEAMLESS TUBULAR WALL BEND. FAUCET SUPPLIES, CHROME PLATED POLISHED BRASS, COMMERCIAL DUTY 1/4 TURN BALL VALVE ANGLE STOP, 13mm (1/2") I. D. INLET x 127mm (5") HORIZONTAL EXTENSION TUBES, COMBINATION V. P. LOOSE KEY HANDLE, ESCUTCHEON AND FLEXIBLE COPPER RISER. MCGUIRE PROWRAP #PW2000WC SANITARY COVERING VANDAL-RESISTANT, FLEXIBLE SEAMLESS MOULDED CLOSED-CELL PVC RESIN, FORMULATED WITH ANTI-MICROBIAL ADDITIVE TO LIMIT THE GROWTH OF FUNGUS AND BACTERIA, TO EXPOSED PIPING (TO PROTECT AGAINST HEAT/CONTUSIONS) AS PER LOCAL CODES.
COMBIN	NATION FIXTUR	I RE					
	STAINLESS STEEL SUICIDE RESISTANT LAVATORY/TOILET COMBY						ACORN PENAL-WARE SERIES #1440-DMB-BPH-2-04-M-1.6GPF-FVH-GW-PT-PBH-SW 14 GA. (1.9 mm) TYPE 304 STAINLESS STEEL SEAMLESS WELD CONSTRUCTION, COMBINATION FIXTURE SATIN FINISH ON THE OUTSIDE AS WELL AS INSIDE THE TOILET BOWL, D SHAPE LAVATORY BOWL, 14 GA. (1.9 mm), BLOWOUT JET FLUSHING ACTION, FIRE-RESISTANT AND SOUND-DEADENED CABINET, TOILET WASTE OUTLET IS 60mm (2-3/8") OD PLAIN END EXTENDING 76mm (3") BEYOND THE FEATURE FOR WALL OUTLET, UNIT INTENDED TO REDUCE ANY POSSIBLE RISK OF THE FIXTURE BEING USED AS A SUICIDE DEVICE, STANDARD ELBOW WASTE OUTLET WITH 38mm (1-1/2") OD PLAIN END, ANGLED AS SHOWN ON DRAWINGS, ON-FLOOR, WALL OUTLET, HOT & COLD TEMPERATURE AIR-CONTROL METERING VALVE, HYDRAULIC FLUSH VALVE, 6.0 LPF (1.6 GPF), INTEGRAL CONTOURED SEAT, HEMISPHERICAL PUSHBUTTON PENAL BUBBLER LAV, BUBBLER TO POINT DOWN TOWARD LAVATORY. P-TRAP WASTE GASKETED TOILET WASTE, IT IS MANUFACTURED WITH NO ACCESSIBLE VOIDS OR CREVICES WHERE CONTRABAND CAN BE CONCEALED, INCLUDES MOUNTING HARDWARE FOR WALL UP TO 203mm (8") THICK; WALL SLEEVE. LEONARD MODEL 170-LF THERMOSTATIC MIXING VALVE, BRONZE BODY, LOCKING ADJUSTMENT TEMPERATURE KNOW, INTEGRAL CHECK VALVES. NOTE: COMBO UNITS TO BE STAMPED WITH MANUFACTURER AND MODEL NUMBER ON THE FACE OF THE UNIT.
		I	I	I	<u>I</u>	<u> </u>	
							AIR BARRIER SCHEDULE

						AIR BA	RRIER	SCHE	DULE	
						AIR		ELE	CTRICAL	
T	AG No.	MANUFACTURER	MODEL No.	MAX. AIR FLOW (L/s)	MIN. AIR FLOW (L/s)	MAX. VELOCITY (m/s)	MIN. VELOCITY (m/s)	kW	V/Ph/Hz	REMARKS
	AB-1	ENERSHIELD	MCS-36	519	425	16	13		120/1/60	C/W AUTOMATIC ACTIVATION - AIR BARRIER TO ACTIVATE UPON DOOR OPENING AND DEACTIVATE UPON DOOR CLOSING, COLOR - WHITE

OIL INTERCEPTOR SCHEDULE

LENGTH

1264

COMBINED

242

VOLUME OUTLET SIZE

100

FLOW

(L/s)

2.21

MODEL No.

OI-735-HDC-X

					PL	IMP SCH	HEDUI	LE						
						FLUID OPERATING	FLOW	HEAD	SUCTION	TRIPLE DUTY		ELECTRIC	AL	
TAG No.	MANUFACTURER	MODEL No.	SERVICE	TYPE	FLUID	TEMP (°C)	RATE (L/s)	(kPag)	GUIDE (Y/N)	VALVE (Y/N)	MOTOR (kW)	MOTOR RPM	V/Ph/Hz	REMARKS
P-1	BELL & GOSSETT	LHB08100112	DOMESTIC HOT WATER RECIRC	CIRCULATOR	WATER	49	0.09	48.3	N	N	0.02		120/1/60	SUITABLE FOR DOMESTIC WATER APPLICATIONS
P-2	BELL & GOSSETT	1B305B-VS 2ST 1-1/4 x 1-1/2 - 6	DOMESTIC WATER BOOSTER	END SUCTION	WATER	4	2.52	344.7	N	N	3.73	3500	208/3/60	C/W SKID MOUNTED PIPING & CONTROLS; PUMPS TO BE SUITABLE FOR DOMESTIC WATER APPLICATIONS

DIMENSIONS (mm)

WIDTH

835

HEIGHT

521

VATER		
& SUITABLE PLICATIONS		

REMARKS	TAG No.	N
C/W INTERNAL STORAGE TANK, HEAVY DUTY NON-SKID REMOVABLE COVER; EXTENSION AS REQUIRED TO SUIT INVERT	TK-1	

	TANK SCHEDULE												
S No.	MANUFACTURER	MODEL No.	SERVICE	TYPE	FLUID	TOTAL	MAX. ACCEPTANCE	WORKING PRESS.	MAX. PRESS.	DIMENSIO	ONS (mm)	REMARKS	
J NO.	WANTER	WOBEL No.	GERVIOE	11112	1 LOID	VOLUME (L)	VOLUME (L)	(kPag)	/ n n	DIAMETER	HEIGHT	TALIVIATA	
<-1	AMTROL	ST-12	DOMESTIC HOT WATER	DIAPHRAGM	WATER	16.7	12.1	310	1034	279	381	DIAPHRAGM MATERIAL TO BE SUITABLE FOR USE WITH DOMESTIC WATER	
<-2	AMTROL	ST-200V	DOMESTIC WATER PRESSURE TANK	DIAPHRAGM	WATER	129	129	620	1034	559	762	DIAPHRAGM MATERIAL TO BE SUITABLE FOR USE WITH DOMESTIC WATER	

STORAGE

CAPACITY

379

INPUT

58.6

MODEL No.

BTH 199A

PLUMBING FIXTURE SCHEDULE

P-TRAP, SAME MATERIAL AS THE CONNECTING PIPE DRAIN.

PROVIDE P-TRAP, SAME MATERIAL AS THE CONNECTING PIPE DRAIN.

REMOTELY LOCATED UP TO 10 FEET FROM OPERATING PUSH BUTTON.

HDHR HEAVY DUTY HOSE RACK, STAINLESS STEEL WELDED CONSTRUCTION.

VALVE TO BE INSTALLED IN MAINTENANCE COMPARTMENT OF THE EYEWASH UNIT.

THREAD LOCKERS, SERIES 262, MIL-SPEC S-46163A, TYPE II, GRADE 0.

GALVANIZED WALL CASING, AND HYDRANT KEY.

ADJUSTABLE ROUND STRAINER.

VANDAL PROOF, TRAP PRIMER TAPPING.

DESCRIPTION

FRANKE COMMERCIAL #ALBS4606P-1/2 SINGLE BOWL COUNTERTOP MOUNT SINK, 2 HOLES, 102mm (4") CENTER, 478mm (18-13/16") X 460mm

(18-1/8") X 152mm (6") DEEP, COUNTER MOUNTED, BACKLEDGE, GRADE 18-10, 18 GA. (1.2mm) TYPE 304 STAINLESS STEEL, SELF-RIMMING, SATIN

FINISH RIM AND BOWLS, MOUNTING KIT PROVIDED, FULLY UNDERCOATED TO REDUCE CONDENSATION AND RESONANCE, FACTORY APPLIED

RIM SEAL, 89mm (3-1/2") CRUMB CUP WASTE ASSEMBLY WITH 38mm (1-1/2") TAILPIECE. CHICAGO FAUCETS #895-317-GN2A-E2805-5ABCP TWO

RIGID/SWING GOOSENECK SPOUT, 102mm (4") METAL VANDAL PROOF WRISTBLADE HANDLES WITH BLUE AND RED INDEX BUTTONS. MCGUIRE

RIGID HORIZONTAL NIPPLES, V.P. LOOSE KEYS, ESCUTCHEON AND FLEXIBLE COPPER RISER. MCGUIRE #8912CB P-TRAP, HEAVY CAST BRASS

#LFH165LKN3, FAUCET SUPPLIES, CHROME PLATED POLISHED BRASS, HEAVY DUTY ANGLE STOPS, 10mm (3/8") I.P.S. INLET X 76mm (3") LONG

ADJUSTABLE BODY, WITH SLIP NUT, 38MM (1-1/2") SIZE, BOX FLANGE AND SEAMLESS TUBULAR WALL BEND. MCGUIRE PROWRAP #PW2000

SANITARY COVERING VANDAL-RESISTANT, FLEXIBLE SEAMLESS MOULDED CLOSED-CELL PVC RESIN, FORMULATED WITH ANTI-MICROBIAL

ADDITIVE TO LIMIT THE GROWTH OF FUNGUS AND BACTERIA, TO EXPOSED PIPING (TO PROTECT AGAINST HEAT/CONTUSIONS) AS PER LOCAL

FRANKE COMMERCIAL LBS6108P-1 SINGLE COMPARTMENT, SELF-RIMMIN DROP-IN SINK WITH FAUCET LEDGE, 18 GAUGE TYPE 304 STAINLESS

LPM (1.5 GPM) PRESSURE COMPÉNSATING AERATOR. 102mm (4") METAL, VANDAL-PROOF, WRISTBLADE HANDLES SECURED BLUE AND RED

INDEX BUTTONS, REBUILDABLE COMPRESSION CARTRIDGE, OPENS AND CLOSES 90°, 15mm (1/2") NPSM SUPPLY INLETS AND COUPLING NUT FOR 10mm (3/8") OR 15mm (1/2") FLEXIBLE RISER, MOUNTING HARDWARE INCLUDED. MCGUIRE #LFH165LKN3, FAUCET SUPPLIES, CHROME PLATED POLISHED BRASS, HEAVY DUTY ANGLE STOPS, 10mm (3/8") I.P.S. INLET X 76mm (3") LONG RIGID HORIZONTAL NIPPLES, V.P. LOOSE KEYS, ESCUTCHEON AND FLEXIBLE COPPER RISER. MCGUIRE #8912CB P-TRAP, HEAVY CAST BRASS ADJUSTABLE BODY, WITH SLIP NUT, 38MM (1-1/2") SIZE, BOX FLANGE AND SEAMLESS TUBULAR WALL BEND.

STERN WILLIAMS #MTB-2424 SQUARE SERVICE / MOP SINK, 610mm (24") X 610mm (24") X 254mm (10") DEEP, FLOOR MOUNTED, TERRAZZO COMPOSED OF PEARL GRAY MARBLE CHIPS AND PORTLAND CEMENT GROUND SMOOTH, SEALED TO RESIST STAIN, CAST BRASS DRAIN WITH STAINLESS STEEL STRAINER, 75mm (3") OUTLET. CHICAGO FAUCETS #897-RCF WALL MOUNTED TWO HANDLE FAUCET, ROUGH CHROME

HOSE END OUTLET, 203mm (8") PROJECTION SPOUT WITH ATMOSPHERIC VACUUM BREAKER AND BUCKET HOOK, 60mm (2-3/8") METAL VANDAL PROOF LEVER HANDLES WITH BLUE AND RED INDEX BUTTONS. <u>STERN WILLIAMS T-35</u> HOSE AND WALL HOOK 914mm (36") LONG HOSE WITH 19mm (3/4") CHROME COUPLING, STAINLESS STEEL WALL BRACKET. <u>STERN WILLIAMS T-40</u> MOP HANGER STAINLESS STEEL #4 FINISH, 610mm (24") LONG WITH 3 RUBBER SPRING LOADED CLIPS. <u>STERN WILLIAMS BP BACK SPLASH PANEL</u> 20 GAUGE TYPE 304 STAINLESS STEEL. PROVIDE

AMERICAN STANDARD RELIANT 3 #T385.500/R120SS SHOWER, PRESSURE BALANCING MIXING VALVE, BRASS BODY, WASHERLESS CERAMIC DRIP-FREE DISC VALVE CARTRIDGE, INTEGRAL HOT WATER LIMIT STOP, SCREWDRIVER STOPS WITH SEPARATE CHECKS. METAL WALL ESCUTCHEON, PRESSURE BALANCING MIXING VALVE, METAL LEVER HANDLE. <u>AMERICAN STANDARD #1662.604</u> WATER-SAVING SOFT SPRAY HANDSHOWER, 5.7 LPM (1.5 GPM) MAXIMUM FLOW RATE, SPRAY PATTERN ADJUST FROM CONVENTIONAL SPRAY TO GENTLE FLOW TO

MASSAGE, EASY CLEAN RUBBER NOZZLES, 610mm (24") SLIDE BAR. AMERICAN STANDARD #1660.400 HANDSHOWER VACUUM BREAKER, BETWEEN SUPPLY OUTLET AND PERSONAL SHOWER HOSE. WATTS #FD-100-C-A FLOOR DRAIN, EPOXY COATED CAST IRON, ANCHOR FLANGE, 127mm (5") ADJUSTABLE ROUND NICKEL BRONZE STRAINER, REVERSIBLE CLAMPING COLLAR WITH PRIMARY & SECONDARY WEEPHOLES.

ACORN PENAL WARE 1741FA-03-M-BRS-PBH-CSH-F2.0 PENAL PAK - WALL SHOWER - FRONT ACCESS , BRASS BODY VALVE HEMISPHERICAL PUSH BUTTON, 14 GAGE, TYPE 304 STAINLESS STEEL, SATIN FINISH PANEL, INSTALLED ON A FINISHED WALL AND SERVICED THROUGH

REMOVABLE FRONT PANEL, CONICAL SHOWER HEAD, SINGLE TEMPERATURE AIR-CONTROL, METERING, 7.6 LPM (2.0 GPM), MOUNTING FRAME

IS PROVIDED, STAINLESS STEEL OR CHROME PLATED BRASS TRIM, VALVE TIMING IS ADJUSTABLE FROM 5 TO 60 SECONDS AND CAN BE

LEONARD MODEL THS-25-VBD THERMOSTATIC WATER MIXER, 20mm (3/4") DOMESTIC HOT WATER AND COLD WATER INLETS, 20mm (3/4") OUTLET, TWO STOP AND CHECK VALVES WITH COLOR CODED HEAT RESISTANT HANDLES ON INLETS JEONARD MODEL THE 25 F, TWO STOP AND CHECK VALVES WITH COLOR CODED HEAT RESISTANT HANDLES ON INLETS. LEONARD MODEL THS-25

THERMOSTATIC MIXING VALVE, SOLID BIMETAL THERMOSTAT DIRECTLY LINKED TO VALVE PORTING, COLOR CODED SCALE, HEAT RESISTANT

TEMPERATURE ADJUSTING LEVER, INTEGRAL WALL SUPPORT, OUTLET DIAL THERMOMETER (-5 TO 115°C [20 TO 240°F]), VACUUM BREAKER, HOSE CONNECTION, CHORME PLATED FINISH. <u>LEONARD MODLE 75 HDH</u> HEAVY DUTY HOSE, 20mm (3/4") EPDM COVER, HIGH TEMPERATURE RESISTANCE, COUPLINGS, 23m (75 ft) LONG. <u>LEONDARD MODEL N-2</u> STANDARD HOSE NOSSLE, 15mm (1/2") NPT CONNECTION. <u>LEONARD MODEL</u>

WATTS HY-725, CONCEALED NON-FREEZE KEY OPERATED WALL HYDRANT WITH NICKEL BRONZE BOX AND DOOR, CHROME PLATED HYDRANT

FACE, INTEGRAL VACUUM BREAKER, 19mm (3/4") HOSE CONNECTION, ALL BRONZE HEAD, SEAT CASTING AND INTERNAL WORKING PARTS,

BRADLEY S19-282PT, BARRIER FREE CABINET-CONCEALED SWING-DOWN EYEWASH UNIT, CHROME PLATED BRASS SPRAYHEAD ASSEMBLY WITH TWIN EYEWASH HEADS, INTEGRAL FLOW CONTROL, STAINLESS STEEL CABINET & DOORS, TOP DOOR TO HAVE A PLASTIC MOLDED WIDE GRIP HANDLE, THE BOTTOM DOOR SHALL BE LOCKABLE, CHROME PLATED 13mm (1/2") STAY-OPEN VALVE ACTIVATED BY OPENING TOP DOOR, 32mm (1-1/4") DRAIN WITH TAILPIECE AND P-TRAP. BRADLEY S19-2000, EMERGENCY THERMOSTATIC MIXING VALVE FOR EYEWASH OR

EYE/FACE WASH, MODULAR BRASS DESIGN WITH ONE PIECE CASTING, 13mm (1/2") N.P.T. OUTLET, BUILT-IN COLD WATER BYPASS, LIQUID FILLED THERMOSTAT, DIAL THERMOMETER, FACTORY SETPOINT OF 29°C (85°F), STANDARD 18°C (65°F) TO 32°C (90°F) TEMPERATURE RANGE, 33.5 LPM (9.0 GPM) FLOW CAPACITY AT 207 kPa (30 PSI) PRESSURE DROP ACROSS THE VALVE, ASSE 1071 CERTIFIED. EMERGENCY MIXING

WATTS FD-334-Y-10-4 FLOOR DRAIN - EPOXY COATED, CAST IRON BODY, SECURED TOP C/W PHILIPS SCREW, ANCHOR FLANGE AND

WEEPHOLES, 102mm (4"Ø), NO HUB OUTLET, 200mm x 200mm (7-7/8" X 7-7/8"), EPOXY COATED DUCTILE IRON, HEEL-PROOF, SQUARE GRATE.

WATTS FD-103-C-7-6-A5-1 FLOOR DRAIN - EPOXY COATED, CAST IRON BODY, REVERSIBLE FLASHING CLAMP WITH PRIMARY AND SECONDARY WEEPHOLES, TRAP PRIMER CONNECTION WITH PLUG, VANDAL PROOF, 75mm (3), NO HUB OUTLET, 127mm (5") DIAMETER, NICKEL BRONZE,

WATTS FD-100-NH-6-7-B8 FLOOR DRAIN, EPOXY CAST IRON BODY, ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR WITH PRIMARY AND ECONDARY WEEPHOLES, ADJUSTABLE STRAINER, NO HUB , VANDAL PROOF, TRAP PRIMER TAPPING, 203mm (8") DIAMETER, HEAVY DUTY

WATTS FD-100-A-NH-G-1-6-7 FLOOR DRAIN, EPOXY COATED CAST IRON BODY, ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR WITH

EPHOLES, TRAP PRIMER CONNECTION WITH PLUG, NO HUB OUTLET, 127mm (5") DIAMETER, CAST IRON, HUB FUNNEL.

DOMESTIC WATER HEATER SCHEDULE

RECOVERY

55.6°C RISE

871

RATE @ FLUE Ø

100

NICKEL BRONZE STRAINER, STRAINER TO HAVE MAXIMUM 12mm (1/2") OPENINGS. SECURITY SCREWS TO BE MOUNTED WITH LOCTITE LIQUID

PRIMARY AND SECONDARY WEEPHOLES, ADJUSTABLE STRAINER, NO HUB OUTLET, 102mm X 229mm (4" X 9") OVAL NICKEL BRONZE FUNNEL,

<u>/ATTS FD-100-C-7-DD-50</u> FLOOR DRAIN - EPOXY COATED, CAST IRON BODY, REVERSIBLE FLASHING CLAMP WITH PRIMARY AND SECONDARY

<u>/ATTS RD-104-D-E</u> ROOF DRAIN - EPOXY COATED, 359mm (14-1/8") DIAMETER, CAST IRON BODY, FLASHING CLAMP AND INTEGRAL GRAVEL STOP, WITH SELF LOCKING 314mm (12-3/8") DIAMETER POLYETHYLENE DOME, UNDER DECK CLAMP, ADJUSTABLE EXTENSION, 102mm (4"Ø), NO

WATTS RD-240-83 ROOF DRAIN - EPOXY COATED CAST IRON ROOF DRAIN WITH CAST NICKEL BRONZE DOME STRAINER, CAST IRON CLAMP RING, CAST IRON BODY AND THREADED OUTLET.

COMBUSTION

AIR Ø

(mm)

100

FLUE &

COMBUSTION

AIR MATERIAL

REMARKS

ULC S636 PVC ASME RATED; C/W ACID NEUTRALIZATION

OR CPVC KIT & CONCENTRIC VENT KIT

FINISH, 203mm (8") CENTERSET, SOLID BRASS EXPOSED BODY, QUARTER TURN COMPRESSION OPERATING CARTRIDGES, UNRESTRICTED

TEEL WITH #4 SATIN FINISH ON EXPOSED SURFACES, UNDERCOATED, CENTER BACK WASTE LOCATION INCLUDES 89mm (3-1/2") CRUMB CUP STRAINER WITH 38mm (1-1/2") BRASS TAILPIECE. CHICAGO FAUCETS NO. 1100-GN8AE35-317AB, SINK FAUCET FOR HOT AND COLD WATER, DECK-MOUNTED WITH 203mm (8") FIXED CENTERS, CHROME PLATED. RIGID/SWING GOOSENECK SPOUT, 203mm (8") CENTER-TO-CENTER. 5.7

HANDLE FAUCET, CHROME PLATED, 102mm (4") CENTERSET, LEAD FREE CAST BRASS BODY, 1/4 TURN CERAMIC DISC VALVE CARTRIDGES,

VANDAL RESISTANT 1.9 LPM (0.5 GPM) PRESSURE COMPENSATING ECONO-FLO NON-AERATING SPRAY OUTLET, 305mm (12") PROJECTION

FIXTURE CONNECTIONS (mm)

DCW DHW DTHW DRAIN VENT

FIXTURE

TAG

SINKS

SK-1

ISINGLE

COMPARTMENT

STAINLESS STEEL

LOOR MOUNTED

SK-2 STAINLESS STEEL

MS-1 MOP SINK

ADA COMPLIANT

STAINLESS STEEL SH-2 SURFACE MOUNTED

HOSE STATION

MIXING VALVE

HOSE BIBB

EMERGENCY EYEWASH

MERGENCY

SHOWER

SHOWER

HOSE STATION

HOSE BIBB

DRAINS

AD-1 AREA DRAIN

FD-1 FLOOR DRAIN

FD-2 DRAIN

HD-1 HUB DRAIN

RD-2 ROOF DRAIN

FFD-1

RD-1

SECURE FLOOR

FUNNEL FLOOR

ROOF DRAIN

TAG No.

DWH-1

MANUFACTURER

AO SMITH

NFHB-1 NON-FREEZE

HS-1 THERMOSTATIC

SHOWERS

SH-1

325 - 25 ST SE CALGARY, AB T2A 7H8 Tel: (403) 716.8000 / Fax: (403) 716.8049 www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

Appd Revision ISSUED FOR TENDER GTH 2016.01.29 By Appd YYYY.MM.DD Issued

Permit-Seal



PERMIT TO PRACTICE STANTEC CONSULTING LTD. Signature _____ 1/29/2016 PERMIT NUMBER: P 0258 The Association of Professional Engineers, Geologists and Geophysicists of Alberta

Client/Project

GOVERNMENT OF CANADA ELK POINT - NEW BUILDING

54 STREET AND RAILWAY AVENUE ELK POINT, ALBERTA

MECHANICAL SCHEDULES

Project No. 144202690 Revision

Scale N.T.S. Drawing No.

TAG No.

OI-1

MANUFACTURER

WATTS

	GRILLE & DIFFUSER SCHEDULE
GRILLE TYPE	DESCRIPTION
SUPPL	YAIR
S-1	E.H. PRICE MODEL SPD STEEL SQUARE CEILING DIFFUSER; DIFFUSERS TO BE SUITABLE FOR SURFACE MOUNTING OR T-BAR LAY-IN (FRAME TYPE 31); 600x600 MODULE SIZE; FINISH SHALL BE B12 WHITE POWDER COAT; REFER TO DRAWINGS FOR NECK SIZES AND CAPACITIES.
S-2	E.H. PRICE MODEL 520 STEEL DOUBLE DEFLECTION GRILLE; 19mm (¾") BLADE SPACING; FRONT BLADES TO BE PARALLEL TO LONG DIMENSION; GRILLES TO BE SUITABLE FOR SURFACE MOUNTING (BORDER STYLE F); FINISH SHALL BE B12 WHITE POWDER COAT; REFER TO DRAWINGS FOR GRILLE SIZES & CAPACITIES.
S-3	GUNNEBO MODEL OP20V SECURITY GRILLE; MANUFACTURER'S MARK AND MODEL NUMBER TO BE STAMPED ON FRONT OF GRILLE; REFER TO DRAWINGS FOR GRILLE SIZES & CAPACITIES.

RETURN AIR

E.H. PRICE SERIES 80 ALUMINUM EGG CRATE EXHAUST GRILLE; 13mm (1/2") CORE;
GRILLES TO BE SUITABLE FOR SURFACING MOUNTING (BORDER STYLE F); FINISH SHALL
BE B12 WHITE POWDER COAT; REFER TO DRAWINGS FOR SIZES & CAPACITIES.

EXHAUST AIR

- E.H. PRICE SERIES 80 ALUMINUM EGG CRATE EXHAUST GRILLE; 13mm (1/2") CORE; GRILLES TO BE SUITABLE FOR SURFACING MOUNTING (BORDER STYLE F); FINISH SHALL BE B12 WHITE POWDER COAT, REFER TO DRAWINGS FOR SIZES & CAPACITIES.
- GUNNEBO MODEL OP20V SECURITY GRILLE; MANUFACTURER'S MARK AND MODEL E-2 NUMBER TO BE STAMPED ON FRONT OF GRILLE; REFER TO DRAWINGS FOR GRILLE SIZES & CAPACITIES.

TRANSFER AIR

E.H. PRICE SERIES 80 ALUMINUM EGG CRATE EXHAUST GRILLE; 13mm (1/2") CORE; T-1 GRILLES TO BE SUITABLE FOR SURFACING MOUNTING (BORDER STYLE F); FINISH SHALL BE B12 WHITE POWDER COAT; REFER TO DRAWINGS FOR SIZES & CAPACITIES.

- COLORS AS SELECTED BY THE ARCHITECT. CONFIRM COLOR SELECTIONS PRIOR TO
- GRILLES, DIFFUSERS AND REGISTERS PROVIDED SHALL CONFORM TO ARCHITECTURAL AND STRUCTURAL DETAILING. CONFIRM THE FOLLOWING:
- a) ARCHITECTURAL CEILING GRID MEASUREMENTS
- b) STRUCTURAL ROUGH OPENING SIZES RELATIVE TO GRILLE SIZES
- ALL GRILLES, DIFFUSERS AND REGISTERS CONNECTED TO DUCTS ARE TO BE PROVIDED
 3) WITH MANUAL DAMPERS AT DUCT CONNECTIONS EXCEPT WHERE MANUAL DAMPERS ARE SPECIFIED INTEGRAL TO GRILLES.

											RC	OFTO	P UNIT	SCHEDU	ILE											
						SUPPLY	,			HEATING				Co	OOLING							FILT	ERS			
	TAG No.	MANUFACTURER	MODEL No.	AIR	EXT.		M	OTOR	INPUT	OUTPUT	TEMP	TOTAL	SENSIBLE		DESIGN	ENT.	ENT.	LVG.	LVG.		PF	RE		FIN	lal.	REMARKS
				FLOW (L/s)	STATIC PRESS. (Pa)	FAN RPM	kW	V/Ph/Hz	CAPACITY (kW)		RISE (°C)	CAPACITY (kW)	CAPACITY (kW)	REFRIGERANT	AMBIENT (°C)	TEMP	AIR WB. TEMP (°C)	TEMP	TEMP	(Y/N)	MERV	TYPE	(Y/N)	MERV	TYPE	
	RTU-1	ENGINEERED AIR	FWE143/DJS60/O	2549	250	2376	5.6	208/3/60	146.5	117.2	37.8	51.7	35.8	R-410A	35.0	25.6	18.3	12.8	12.3	Υ	8		Υ	13		C/W VFD
Γ																										

									GAS	FIRED	MAKE-U	P AIR	UNI	ΓSCI	HEDU	JLE									
				AIR			HEATING				cc	OOLING							FILI	TERS			ELEC1	TRICAL	
TAG No.	MANUFACTURER	MODEL No.	AIR FLOW	EXT. STATIC	EANI DDM	INPUT	OUTPUT CAPACITY		TOTAL CAPACITY	SENSIBLE	REFRIGERANT	DESIGN	ENT. AIR DB.	AIR WB.	AIR DB.	AIR WB.		PF	RE		FIN	IAL	MCA	V/Ph/Hz	REMARKS
			(L/s)	PRESS. (Pa)	FAN KEW	(kW)	(kW)	(°C)	(kW)	(kW)	REFRIGERAIN	(°C)	TEMP (°C)	TEMP (°C)	TEMP (°C)	TEMP (°C)	(Y/N)	MERV	TYPE	(Y/N)	MERV	TYPE	WOA	V/F11/112	
MUA-1	ENGINEERED AIR	FW51/DJS40/O/MV	918	186	3360	102.6	82.1	73.9	17.4	12.9	R-410A	35.0	27.8	17.8	12.8	12.4	Y	8		Υ	13		40.1	208/3/60	C/W VFD & DIGITAL SCROLL COMPRESSOR

	FAN SCHEDULE														
TAG No.	MANUFACTURER	JRER MODEL No. SERVICE TYPE MOUNTING FLOW BRESS										SONES	REMARKS		
1710110.	Winder Action	MODEL NO.	OLIVIOE .	"""	ARRANGEMENT	(L/s)	PRESS. (kPa)	MOTOR (kW)	MOTOR RPM	V/Ph/Hz	VFD (Y/N)	CONEO	TALIMITA (CO		
EF-1	GREENHECK	G-103-VG	WASHROOM EXHAUST	CENTRIFUGAL DIRECT DRIVE	ROOF DOWN BLAST	566	100	0.19	1725	120/1/60	N	10.4	C/W EC MOTOR WITH MOUNTED POTENTIOMETER DIAL; 450mm HIGH ROOF CURB		
EF-2	GREENHECK	GB-141-4	GENERAL EXHAUST	CENTRIFUGAL DIRECT DRIVE	ROOF DOWN BLAST	590	125	0.19	1725	120/1/60	N		C/W EC MOTOR WITH MOUNTED POTENTIOMETER DIAL; 450mm HIGH ROOF CURB		
EF-3	GREENHECK	G-098-VG	ROOM 116A EXHAUST	CENTRIFUGAL DIRECT DRIVE	ROOF DOWN BLAST	302	187	0.19	1725	120/1/60	N	11.0	C/W EC MOTOR WITH MOUNTED POTENTIOMETER DIAL; 450mm HIGH ROOF CURB		
EF-4	GREENHECK	G-098-VG	ROOM 144 EXHAUST	CENTRIFUGAL DIRECT DRIVE	ROOF DOWN BLAST	168	187	0.19	1725	120/1/60	N	N 2 3	C/W EC MOTOR WITH MOUNTED POTENTIOMETER DIAL; 450mm HIGH ROOF CURB		
EF-5	GREENHECK	SQ-80-VG	ROOM 124 EXHAUST	CENTRIFUGAL DIRECT DRIVE	INLINE CABINET	135	87	0.13	1725	120/1/60	N		C/W EC MOTOR WITH MOUNTED POTENTIOMETER DIAL; MOTOR COVER		
EF-6	GREENHECK	SQ-70-VG	ROOM 115A EXHAUST	CENTRIFUGAL DIRECT DRIVE	CEILING CABINET	33	50	0.12	1203	120/1/60	N	2.1	C/W EC MOTOR WITH MOUNTED POTENTIOMETER DIAL		
EF-7	GREENHECK	SQ-70-VG	ROOM 115B EXHAUST	CENTRIFUGAL DIRECT DRIVE	CEILING CABINET	47	100	0.12	1703	120/1/60	N	5.4	C/W EC MOTOR WITH MOUNTED POTENTIOMETER DIAL		
EF-8	GREENHECK	SP-B110	ROOM 103 EXHAUST	CENTRIFUGAL DIRECT DRIVE	CEILING CABINET	47	87	0.10	950	120/1/60	N	2.0			

	GAS UNIT HEATER SCHEDULE												
	MANUFACTURER	MODELN		GAS OUTPUT CAPACITY (kW)	AIR FLOW (L/s)	EXT. STATIC PRESS. (Pa)	ELECTRICAL				FLUE Ø	COMBUSTION	
TAG No.		MODEL No.	CAPACITY (kW)				WATTS	FLA	МОСР	V/Ph/Hz	(mm)	AIR INLET Ø (mm)	REMARKS
UH-1	REZNOR	UDAS 100	30.8	25.5	635	-	276	3.9	15	120/1/60	100	100	C/W REZNOR OPTION CC6 HORIZONTAL VENT TERMINAL/COMBUSTION AIR INLET ASSEMBLY
UH-2	REZNOR	UDAS 100	30.8	25.5	635	-	276	3.9	15	120/1/60	100	100	C/W REZNOR OPTION CC2 VERTICAL VENT TERMINAL/COMBUSTION AIR INLET ASSEMBLY
UH-3	REZNOR	UDAS 30	8.8	7.2	215	-	109	1.9	15	120/1/60	100	100	C/W REZNOR OPTION CC2 VERTICAL VENT TERMINAL/COMBUSTION AIR INLET ASSEMBLY

	ELECTRIC HEATER SCHEDULE											
TAG No.	MANUFACTURER	MODEL No.	TYPE	CAPACITY (W)	LENGTH (mm)	ELECTRICAL (V/Ph/Hz)	REMARKS					
EH-1	OUELLET	OAC06038	CABINET UNIT HEATER	6.0		208/3/60	C/W THERMOSTAT FOR REMOTE MOUNTING & TAMPERPROOF GUARD					
EH-2	OUELLET	ODI0758	BASEBOARD	0.75	992	208/1/60	C/W INTEGRAL TAMPERPROOF THERMOSTAT					
EH-3	OUELLET	OAC06038	CABINET UNIT HEATER	6.0		208/3/60	C/W THERMOSTAT FOR REMOTE MOUNTING & TAMPERPROOF GUARD					
EH-4	OUELLET	ODI1258	BASEBOARD	1.25	1494	208/1/60	C/W INTEGRAL TAMPERPROOF THERMOSTAT					
EH-5	OUELLET	OAC06038	CABINET UNIT HEATER	6.0		208/3/60	C/W THERMOSTAT FOR REMOTE MOUNTING & TAMPERPROOF GUARD					
EH-6	OUELLET	ODI0758	BASEBOARD	0.75	992	208/1/60	C/W INTEGRAL TAMPERPROOF THERMOSTAT					
EH-7	OUELLET	OAC06038	CABINET UNIT HEATER	6.0		208/3/60	C/W THERMOSTAT FOR REMOTE MOUNTING & TAMPERPROOF GUARD					
EH-8	OUELLET	OAC06038	CABINET UNIT HEATER	6.0		208/3/60	C/W INTEGRAL TAMPERPROOF THERMOSTAT					
EH-9	OUELLET	ODI1002	BASEBOARD	1.0	1253	208/1/60	C/W INTEGRAL TAMPERPROOF THERMOSTAT					
EH-10	OUELLET	ODI0502	BASEBOARD	0.5	738	120/1/60	C/W INTEGRAL TAMPERPROOF THERMOSTAT					
	_											

							SPLI	1 515		AIR CONDIT	IONING SCHE	JULE								
EVAPORATOR CONDENSER																				
TAG No.	MANUFACTURER	MODEL No.					COOLI	NG (kW)	AIR	ELECTRICAL				AMBIENT	TOTAL	ELECTRICAL			REFRIGERANT	REMARKS
			SENSIBLE	TOTAL	FLOW (L/s)	V/Ph/Hz	MCA	EMERG. POWER (Y/N)	TAG No.	.G No. MANUFACTURER	MODEL No.	OUTDOOR TEMP (°C)	COOLING CAPACITY (kW)	V/Ph/Hz	MCA	EMERG. POWER (Y/N)				
AC-1	MITSUBISHI	PKA-A36KA6.TH	10.0	10.0	434	208/1/60	1.00	N	CU-1	MITSUBISHI	PUY-A36NHA6	95	10.0	208/1/60	25	N	R-410A	CONDENSER TO BE C/W ULTRA LOW AMBIENT KIT; WIRELESS WALL MOUNTED CONTROLS		
AC-1	MITSUBISHI	PKA-A36KA6.TH	10.0	10.0	434	208/1/60	1.00	N	CU-1	MITSUBISHI	PUY-A36NHA6	95	10.0	208/1/60	25	N	R-410A	CONDENSER TO BE C/W ULTRA LOW AMBIENT KIT; WIRELESS WALL MOUNTED CONTROLS		
AC-3	MITSUBISHI	PKA-A12HA6	3.5	3.5	200	208/1/60	0.81	N	CU-3	MITSUBISHI	PUY-A12NHA6	95	3.5	208/1/60	13	N	R-410A	CONDENSER TO BE C/W ULTRA LOW AMBIENT KIT; WIRELESS WALL MOUNTED CONTROLS		

	FIRE EXTINGUISHER SCHEDULE												
TAG No. N	MANUEACTURER	MODEL No.	TYPE	CAPACITY	ULC RATING	CLASSIFICATION	DESCRIPTION	MOUNTING					
TAG NO.	MANUFACTURER	MODEL No.	TYPE	(kg)	ULC RATING	CLASSIFICATION	DESCRIPTION	TYPE	DESCRIPTION	STANDARD OF ACCEPTANCE			
FE-1	NATIONAL	ABC-100WWD	MULTI PURPOSE DRY CHEMICAL - PRESSURE TYPE	4.5	4A:60B:C	CLASS A, B & C	AMMONIUM PHOSPHATE, POWDER TYPE, HEAVY DUTY STEEL CYLINDER, BAKED ENAMEL FINISH, SQUEEZE GRIP HANDLE WITH POSITIVE ON/OFF VALVE, HOSE AND NOZZLE, MOUNTING BRACKETS	WALL HUNG IN FULLY EXPOSED CABINET	FIRE EXTINGUISHER CABINET SHALL BE 1.2mm (18 GAUGE) BAKED WHITE ENAMEL STEEL; PLEXI GLASS PANEL; CYLINDER LOCK.	NATIONAL FIRE EQUIPMENT MODEL ESC-999			
FE-2	NATIONAL	ABC-100WWD	MULTI PURPOSE DRY CHEMICAL - PRESSURE TYPE	4.5	4A:60B:C	CLASS A, B & C	AMMONIUM PHOSPHATE, POWDER TYPE, HEAVY DUTY STEEL CYLINDER, BAKED ENAMEL FINISH, SQUEEZE GRIP HANDLE WITH POSITIVE ON/OFF VALVE, HOSE AND NOZZLE, MOUNTING BRACKETS	WALL HUNG ON BRACKET					
FE-3	NATIONAL	B10V-1	CO ₂ - PRESSURE TYPE	4.5	10B:C	CLASS B & C	CARBON DIOXIDE CHARGED, ALUMINUM CYLINDER, BAKED ENAMEL FINISH, SQUEEZE GRIP HANDLE WITH POSITIVE ON/OFF VALVE, IMPACT RESISTANT DISCHARGE HORN, MOUNTING BRACKETS.	WALL HUNG ON BRACKET					
FE-3	NATIONAL	B10V-1		4.5	10B:C	CLASS B & C	FINISH, SQUEEZE GRIP HANDLE WITH POSITIVE ON/OFF VALVE,						



STANTEC CONSULTING LTD. 325 - 25 ST SE CALGARY, AB T2A 7H8 Tel: (403) 716.8000 / Fax: (403) 716.8049 www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

Legend

ISSUED FOR TENDER JPH GTH 2016.01.29 By Appd YYYY.MM.DD Issued

Permit-Seal



PERMIT TO PRACTICE STANTEC CONSULTING LTD. PERMIT NUMBER: P 0258 The Association of Professional Engineers, Geologists and Geophysicists of Alberta

Client/Project **GOVERNMENT OF** CANADA

54 STREET AND RAILWAY AVENUE

ELK POINT - NEW BUILDING

ELK POINT, ALBERTA

MECHANICAL SCHEDULES

Project No. 144202690 Scale N.T.S. Drawing No.

ORIGINAL SHEET - ARCH D (24'x36")