Northwest Territories

PUBLIC WORKS AND SERVICES

PETROLEUM PRODUCTS DIVISION

STANDARD DETAILED DRAWINGS FOR NORTHERN FUEL STORAGE AND DISTRIBUTION FACILITIES

3rd EDITION - 01/2006

Prepared by:

Petroleum Products Division and
Asset Management Division (Technical Support Services)
Public Works and Services, Government of the Northwest Territories

Foreword

This publication, together with the Specifications for Fuel Storage Facilities and the Design Rationale for Fuel Storage Facilities, documents performance criteria, preferred materials or methods, and logistical considerations for the design and construction of GNWT fuel storage facilities. Over time, certain products or approaches to construction have proven successful and have been adopted by the GNWT, private consultants, and contractors working in the NWT. It is expected and hoped that comments, discussion, and further research will lead to revisions and additions that will keep the document current and relevant.

1.0 Criteria for Standard Drawings

The Standard Detail Drawings for Fuel Storage Facilities contained herein do not supplant any mandatory Codes or Regulations. Rather, they cover the following areas:

1) Where the GNWT believes that more stringent requirements should apply than the National Fire Code of Canada or local municipal requirements;
2) Where the GNWT believes that there is a need to augment or clarify a Code requirement;
3) Where the GNWT experience has shown that conditions particular to remote northern communities require an approach different from typical Canadian construction industry practice;
4) Where the GNWT has developed preferences for specific products, systems, or methods.

2.0 Application of Standards

The Specifications and Drawings have been prepared specifically for construction of publicly funded, northern fuel storage and distribution facilities.

The drawings contained in this document relate directly to and should be used in conjunction with:

1) Specifications for Northern Fuel Storage Facilities;
2) Design Rationale for Northern Fuel Storage Facilities.

It is intended that specific Drawings and application sections of the Specifications be copied and included in the Contract Documents for new, or upgraded fuel storage and distribution facilities.

3.0 Alternatives

Consultants are encouraged to present, for consideration by PW&S, alternatives to any design requirements or standard included here or to present new or innovative ways to resolve problems or reduce costs.

4.0 Development of Standards

The Drawings included in this edition of the Standard Detail Drawings for Northern Fuel Storage Facilities have developed from design and construction of similar facilities in the Northwest Territories. Document users are encouraged to comment or submit suggested changes to the GNWT, PW&S Asset Management Division, throughout the year. Based on the comments received, revisions will be proposed and broadly distributed for review each year. It is anticipated that a review and revision process will be carried out each year in an effort to ensure this document remains relevant and reflects the collective knowledge of all parties involved in construction projects in the NWT.

The proposed revisions to this edition of the Standard Detail Drawings for Northern Fuel Storage Facilities were received and compiled by members of the Public Works and Services, Asset Management Division, Technical Support Services.

Public Works & Services
Standard Detail Drawings for Northern Fuel Storage and Distribution Facilities
3rd Edition, 01/2006

Revisions

Periodic reviews will be undertaken to reconfirm, revise, or update design standards or guidelines. Your comments and suggestions are invited. Proposed changes or additions should be submitted to:

Asset Management Division, Department of Public Works and Services, Government of the Northwest Territories, Box 1320, Yellowknife, NT, X1A 2L9, Facsimile (867) 873-0226.

_____

(attach additional pages if necessary)

Brief description of the changes or additions you propose:

_____

_____

_____

_____

Rationale (relate experiences which have led you to make this recommendation):

_____

_____

_____

_____

Name: _____

Title: _____

Company: _____

Address: _____

Telephone: _____

Facsimile: _____

Public Works & Services
Standard Detail Drawings for Northern Fuel Storage and Distribution Facilities
3rd Edition, 01/2006

LIST OF STANDARD DRAWINGS

DRAWING #	DATE	DRAWING TITLE
		"S"
NT-S01	04/04/01	TYPICAL BACKFILL PROFILES FOR VERTICAL TANKS
NT-S02	04/04/01	TYPICAL GRANULAR BASE FOR VERTICAL TANKS
NT-S03	04/04/02	TYPICAL SECTION THROUGH DIKE WALL & DRAIN SUMP
NT-S04	04/04/02	TYPICAL SLEEVE AT PIPE THROUGH DIKE MEMBRANE DETAIL
NT-S05	04/08/31	TYPICAL SECTION THROUGH UNDERGROUND AND BURIED PIPELINE
NT-S06	04/08/31	TYPICAL TRENCHES FOR UNDERGROUND ELECTRICAL CONDUITS OR TECK CABLE
NT-S07	04/04/02	CHAIN LINK FENCING DETAILS
NT-S07A	04/04/02	CHAIN LINK FENCING ON A CONCRETE DYKE DETAILS
NT-S08	04/04/02	SIGNS AT FENCES & GATES DETAILS
NT-S09	04/04/02	BOLLARD DETAILS
NT-S10	04/09/07	SPILL BASIN AT TRUCK UNLOADING POINT DETAIL
NT-S11	04/09/07	MARINE SPILL BASIN DETAILS
NT-S11A	04/10/05	SEA HOSE VALVE COVET AT SPILL BASIN, PLAN & SECTION
NT-S12	04/04/02	PIPE SUPPORT & HOSE REST AT SPILL BASIN DETAILS
NT-S13	04/09/07	SEA HOSE ANCHOR DETAIL
NT-S14	04/04/02	CONCRETE ANCHOR BLOCK DETAIL
NT-S15	04/04/02	FIXED ANCHOR BRACKET DETAIL
NT-S16	04/04/02	SLEEVED ANCHOR BRACKET DETAIL
NT-S17	04/05/07	SIGN AT SPILL BASIN DETAIL
NT-S18	04/05/11	FIRE EXTINGUISHER CABINET DETAILS
NT-S19	04/05/11	MARKER SIGN AT BURIED PIPELINES
NT-S20	04/05/11	DIKE AREA LIGHT POLE FOUNDATION, PLAN, ELEVATION, SECTION & DETAILS
NT-S21	04/05/11	CONCRETE ISLAND & APRON, PLAN & SECTIONS
NT-S22	04/05/14	CONCRETE ISLAND & APRON, PLAN, SECTIONS AND DETAILS
NT-S23	04/05/14	OPERATOR'S SHELTER BUILDING, CONCRETE SIDEWALK, GRAVEL PAD & BOLLARDS ARRANGEMENT, PLAN & SECTIONS
NT-S24	04/05/14	JET A-1 AVIATION FUEL DISPENSER BUILDING CONCRETE SIDEWALK, LINER GRAVEL PAD & BOLLARDS
NT-S25	04/05/14	GASOLINE/LSDL FUEL DISPENSER BUILDING CONCRETE SIDEWALK, LINER GRAVEL PAD & BOLLARDS ARRANGEMENT PLAN & SECTIONS
NT-S27	04/05/14	PIPE SUPPORT – TYPE 1 (PIPES SAME DIAMETER AND SAME BOTTOM OF PIPE ELEVATION)
NT-S28	04/05/14	PIPE SUPPORT – TYPE 2 (PIPES DIFFERENT DIAMETER AND SAME BOTTOM OF PIPE ELEVATION)
NT-S29	04/05/14	PIPE SUPPORT – TYPE 3 (PIPES DIFFERENT DIAMETER AND SAME CENTRE OF PIPE ELEVATION)
NT-S30	04/05/14	PIPE SUPPORT – TYPE 4 (PIPES SAME DIAMETER AND DIFFERENT CENTRE OF PIPE ELEVATION)
NT-S31	04/09/07	PIPE SUPPORT – TYPE 5,6,7,8 (FOR ABOVEGROUND PIPELINES ONLY)
NT-S32	04/09/07	TYPE 1 STILE (OVER DIKE WALLS) PLAN & SECTION
NT-S32A	04/09/07	TYPE 1 STILE (OVER CONCRETE DIKE WALLS) PLAN & SECTION
NT-S33	04/09/07	TYPE 2 STILE (OVER PRODUCT PIPING) PLAN & SECTIONS
NT-S34	04/09/07	TYPE 1 & TYPE 2 STILES SECTIONS & DETAILS
NT-S34A	04/06/08	TYPE 1 STILE AT CONCRETE DIKE SECTIONS AND DETAILS
NT-S35	04/09/07	TYPICAL CATWALK & STAIRWAY ARRANGEMENT FOR TWO 91 cu. m. HORIZONTAL TANKS, PLAN, ELEVATION
NT-S36	04/09/07	TYPICAL CATWALK & STAIRWAY ARRANGEMENT FOR THREE 91 cu. m. HORIZONTAL TANKS, PLAN, ELEVATION
NT-S37	04/09/07	TYPICAL CATWALK & STAIRWAY ARRANGEMENT FOR FOUR OR MORE 91 cu. m. HORIZONTAL TANKS, PLAN, ELEVATION
NT-S38	04/09/07	TYPICAL CATWALK & STAIRWAY ARRANGEMENT FOR TWO 23 cu. m. HORIZONTAL TANKS, PLAN, ELEVATION
NT-S39	04/09/07	SINGLE SECTION FOR TWO 91 cu. m. HORIZONTAL TANKS, PLAN, VIEW, SECTIONS & DETAILS
NT-S40	04/09/07	BEGINNING SECTION FOR THREE OR MORE 91 cu. m. HORIZONTAL TANKS, PLAN, VIEW, SECTIONS & DETAILS
NT-S41	04/09/07	END SECTION FOR THREE OR MORE 91 cu. m. HORIZONTAL TANKS, PLAN, VIEW, SECTIONS & DETAILS
NT-S42	04/09/07	ADD-ON SECTION FOR FOUR OR MORE 91 cu. m. HORIZONTAL TANKS, PLAN, VIEW, SECTIONS & DETAILS
NT-S43	04/09/07	STAIRWAY FOR TWO 91 cu. m. HORIZONTAL TANKS, PLAN, VIEW, SECTIONS & DETAILS
NT-S44	04/09/07	SINGLE SECTION FOR TWO 23 cu. m. HORIZONTAL TANKS, PLAN, VIEW, SECTIONS & DETAILS
NT-S45	04/09/07	STAIRWAY FOR TWO 23 cu. m. HORIZONTAL TANKS, PLAN, VIEW, SECTIONS & DETAILS
NT-S46	04/09/07	CATWALKS & STAIRWAY FOR HORIZONTAL TANKS, MISCELLANEOUS DETAILS
NT-S47	04/09/07	CATWALKS & STAIRWAY FOR HORIZONTAL TANKS, MISCELLANEOUS DETAILS
NT-S48	04/09/07	TYPE I AND TYPE II SUPPORTS FOR ELECTRICAL CONDUITS AT VERTICAL TANK STAIRWAY DETAILS
NT-S49	04/09/07	GROUND LUG PLATE & HOOKS AT BOLLARD AT TRUCK UNLOADING POINT DETAIL

LIST OF STANDARD DRAWINGS

DRAWING #	DATE	DRAWING TITLE
		"P"
NT-P01	04/09/07	DIKE DRAIN PUMP ASSEMBLY, PLAN & DETAILS
NT-P01A	04/09/07	DIKE DRAIN PUMP ASSEMBLY FOR CONCRETE DIKE, PLAN & DETAILS
NT-P01B	04/09/07	ELECTRIC DIKE DRAIN PUMP ASSEMBLY, PLAN & DETAILS
NT-P02	04/09/07	SEA HOSE CONNECTION PIPING AT SPILL BASIN, PLAN, SECTIONS
NT-P02A	04/08/31	FUEL TRUCK CONNECTION PIPING AT SPILL BASIN, PLAN, SECTIONS
NT-P03	04/05/16	PIPELINE EXPANSION LOOP, TYPE 1 DETAIL
NT-P04	04/05/16	PIPELINE EXPANSION LOOP, TYPE 2 DETAIL
NT-P05	04/05/16	TYPICAL INSTALLATION OF TYPE 1 PRESSURE RELIEF BY-PASS (ACROSS VALVES AT EXTERIOR PIPING)
NT-P06	04/05/16	TYPICAL INSTALLATION OF TYPE 2 PRESSURE RELIEF BY-PASS (ACROSS VALVES AT EXTERIOR PIPING)
NT-P07	04/05/16	PIPE DRAIN VALVE, DRAIN AND LOCKABLE PLUG DETAIL
NT-P08	04/05/16	BRACKET FOR TYPE "PB1", FOR ELECTRICAL CONDUITS
NT-P09	04/09/07	BASIC ARRANGEMENT OF TANK OPENINGS & APPURTENANCES FOR 9 754 HIGH VERTICAL TANK
NT-P10	04/05/16	WATER DRAIN VALVE CONNECTION "SN3" & INTERNAL PIPING AT VERTICAL TANKS DETAIL
NT-P11	04/05/16	INSTALLATION OF AUTOMATIC TANK LEVEL GAUGE ROOF NOZZLE "RN3" & SHELL BRACKET "SB1" AT VERTICAL TANKS DETAIL
NT-P12	04/09/07	ROOF INSPECTION FRAME "RIF" FOR AUTOMATIC TANK LEVEL GAUGE AT VERTICAL TANKS DETAIL
NT-P13	04/09/07	ROOF NOZZLE "RN5" FOR FUTURE
NT-P14	04/09/07	STAIRWAY & LANDING AT 9 754 HIGH VERTICAL TANKS
NT-P15	04/09/07	ROOF HANDRAIL "RH" AT VERTICAL TANKS DETAILS
NT-P16	04/09/07	LIGHT FIXTURE BRACKET "SB2" AT STAIRWAYS OF VERTICAL TANKS DETAIL
NT-P17	04/09/07	SHELL BRACKET "SB3" FOR ELECTRICAL CONDUITS AT VERTICAL TANKS DETAIL
NT-P18	04/09/07	ROOF COUPLING "RC1" FOR LIGHT FIXTURE POST AT VERTICAL TANKS DETAIL
NT-P19	04/09/07	HORIZONTAL ABOVE GROUND TANK, 91 cu. m. NOMINAL CAPACITY, ELEVATIONS AND DETAIL
NT-P20	04/09/07	TANK SKID FOR 91 cu. m. HORIZONTAL TANKS, PLAN, SECTION & AND DETAILS
NT-P21	04/09/07	HORIZONTAL, EPOXY LINED, ABOVEGROUND TANK, 23 cu. m. NOMINAL CAPACITY, ELEVATIONS AND DETAIL
NT-P22	04/09/07	TANK SKID FOR 23 cu. m. HORIZONTAL TANKS, PLAN, SECTION & DETAILS
NT-P23	04/09/07	WATER DRAW-OFF VALVE FOR HORIZONTAL TANKS DETAIL
NT-P24	04/09/07	75 cu. m. FUEL STORAGE TANK, HORIZONTAL, DOUBLE WALL, VACUUM MONITORED, SKID MOUNTED TANK DETAILS
NT-P24A	04/09/07	9 cu. m. EPOXY LINED FUEL STORAGE TANK, HORIZONTAL, DOUBLE WALL, VACUUM MONITORED, SKID MOUNTED TANK DETAILS
NT-P25	04/09/07	94 cu. m. FUEL STORAGE TANK, HORIZONTAL, DOUBLE WALL, VACUUM MONITORED, SKID MOUNTED TANK DETAILS
NT-P26	04/09/07	VALVE TAG DETAILS
		"E"
NT-E01	04/09/30	SERVICE ENTRANCE POLE, TYPE 1 AND 2 ARRANGEMENTS
NT-E02	04/09/30	FLOOD LIGHT POLE FOR YARD AREA LIGHTING DETAIL
NT-E03	04/09/30	HINGED FLOOD LIGHT POLE & BRACKETS FOR DIKE AREA LIGHTING DETAILS
NT-E04	04/06/18	ELECTRICAL & GROUNDING INSTALLATION AT BASE OF FLOODLIGHT POLE
NT-E05	04/09/30	TYPICAL LIGHTING ARRANGEMENT AT VERTICAL TANKS, ALTERNATIVE 1, PLAN, DEVELOPED ELEVATION SECTIONS AND DETAILS
NT-E06	04/09/30	TYPICAL LIGHTING ARRANGEMENT AT VERTICAL TANKS, ALTERNATIVE 2, PLAN, DEVELOPED ELEVATION SECTIONS AND DETAILS
NT-E07	04/09/30	TYPICAL LIGHTING ARRANGEMENT AT VERTICAL TANKS, ALTERNATIVE 3, PLAN, DEVELOPED ELEVATION SECTIONS AND DETAILS
NT-E08	04/09/30	TYPICAL ELECTRICAL CONDUIT ARRANGEMENT AT VERTICAL TANK VALVES, DETAIL - 3 (ALTERNATIVES 1,2 & 3)
NT-E09	04/09/30	TYPICAL LIGHT AND CONDUIT ARRANGEMENT AT ROOF OF VERTICAL TANKS, DETAIL -4 (ALTERNATIVE 1)
NT-E10	04/09/30	TYPICAL LIGHT AND CONDUIT ARRANGEMENT AT ROOF OF VERTICAL TANKS, DETAIL -4 (ALTERNATIVE 2)
NT-E11	04/09/30	TYPICAL LIGHT AND CONDUIT ARRANGEMENT AT ROOF OF VERTICAL TANKS, DETAIL -4 (ALTERNATIVE 3)
NT-E12	04/09/30	LIGHTING AT HORIZONTAL TANKS, AT HANDRAIL OF CATWALK & STAIRWAY PLAN & DETAILS
NT-E13	04/09/30	LIGHTING AT HORIZONTAL TANKS, LIGHT POST & FIXTURE AT CATWALK DETAIL

LIST OF STANDARD DRAWINGS

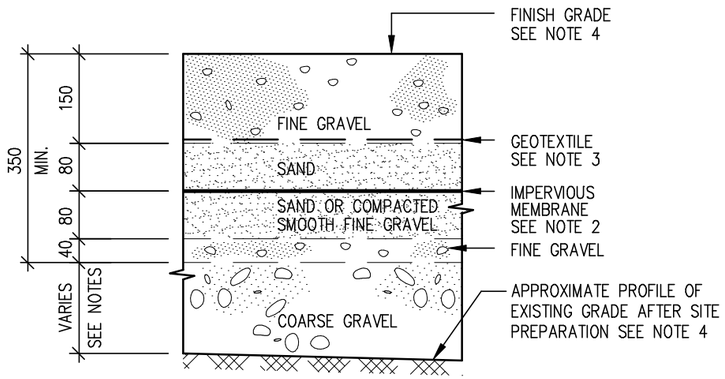
DRAWING #	DATE	DRAWING TITLE
NT-E14	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS AT SPILL BASIN AT SEA HOSE CONNECTION POINTS
NT-E15	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS ACROSS TANK VALVES, SPOOL PIECES & FLEXIBLE CONNECTORS
NT-E16	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS ACROSS GATE AND CHECK VALVES
NT-E17	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS ACROSS GATE OR CHECK VALVES
NT-E18	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS AT FLANGED CONNECTIONS
NT-E19	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS AT VERTICAL TANKS
NT-E20	04/09/30	STATIC ELECTRICITY GROUND WIRE CONNECTION AT HORIZONTAL TANKS
NT-E21	04/09/30	STATIC ELECTRICITY GROUND WIRE INSTALLATION OVER DIKE WALL
NT-E22	04/09/30	ELECTRICAL CONDUIT OR TECK CABLE INSTALLATION OVER DIKE WALL
NT-E23	04/09/30	STATIC ELECTRICITY GROUND WIRE CONNECTION AT FENCE OR GATE POSTS
NT-E24	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS AT GROUND ROD
NT-E25	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS AT TRUCK UNLOADING POINT
NT-E26	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS AT DISPENSER BUILDING FOR TRUCK GROUNDING CABLE
NT-E27	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS OF GROUND LUG AND WIRE AT DISPENSER BUILDING
NT-E28	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS ACROSS FLEXIBLE CONNECTOR AT DISPENSER BUILDING
NT-E29	04/09/30	STATIC ELECTRICITY GROUNDING CONNECTIONS ACROSS FLEXIBLE CONNECTOR, STRAINER & VALVE BEHIND DISPENSER BUILDING
NT-E30	04/09/30	STATIC ELECTRICITY GROUNDING REEL AT JET A-1 DISPENSER BUILDING
NT-E31	04/09/30	ELECTRICAL CONDUIT ARRANGEMENT AT ENTRY OF BUILDING
NT-E32	04/09/30	HAZARDOUS AREA CLASSIFICATIONS FOR ELECTRICAL INSTALLATIONS
NT-E33	04/09/30	HAZARDOUS AREA CLASSIFICATIONS FOR ELECTRICAL INSTALLATIONS
NT-E34	04/10/05	CATHODIC PROTECTION DETAILS

DRAWING #	DATE	DRAWING TITLE **"AVA"**
A-AVA-01	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL FLOOR PLAN AND ELEVATIONS
A-AVA-02	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL SECTIONS AND DETAILS
S-AVA-01	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL SKID ASSEMBLY, PLAN, SECTIONS & DETAILS
S-AVA-02	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL DRIP PAN & METER SUPPORT, ANCHOR PLATE FOR HOSE REEL & PUMP BASE SECTIONS & DETAILS
S-AVA-03	94/02/21	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL FILTER/SEPARATOR, SAMPLE BARRIER AND RELAXATION CHAMBER SECTIONS & DETAILS
S-AVA-04	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL PIPE SUPPORTS SECTIONS & DETAILS
P-AVA-01	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT PIPING PLAN, SECTIONS &DETAILS
P-AVA-01A	04/10/07	DISPENSER BUILDING FOR JET A-1 / LSDL AT TANK FARM PIPING PLAN, SECTIONS &DETAILS
P-AVA-02	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT PIPING ISOMETRIC
P-AVA-02A	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT BILL OF MATERIALS
P-AVA-03	04/10/07	DISPENSER BUILDING FOR JET A-1 / LSDL AT TANK FARM PIPING ISOMETRIC
P-AVA-03A	04/10/07	DISPENSER BUILDING FOR JET A-1 / LSDL AT TANK FARM BILL OF MATERIALS
M-AVA-01	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL VENTILATION PLAN, SECTIONS & DETAILS
E-AVA-01	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT ELECTRICAL PLAN, SECTIONS & DETAILS
E-AVA-01A	04/10/07	DISPENSER BUILDING FOR JET A-1 / LSDL AT TANK FARM ELECTRICAL PLAN, SECTIONS & DETAILS
E-AVA-02	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT ELECTRICAL DIAGRAMS & TERMINAL BLOCKS
E-AVA-02A	04/10/07	DISPENSER BUILDING FOR JET A-1 / LSDL AT TANK FARM ELECTRICAL DIAGRAMS & TERMINAL BLOCKS
E-AVA-03	04/10/07	DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL REMOTE ELECTRICAL EQUIPMENT FOR DISPENSER AT AIRPORT

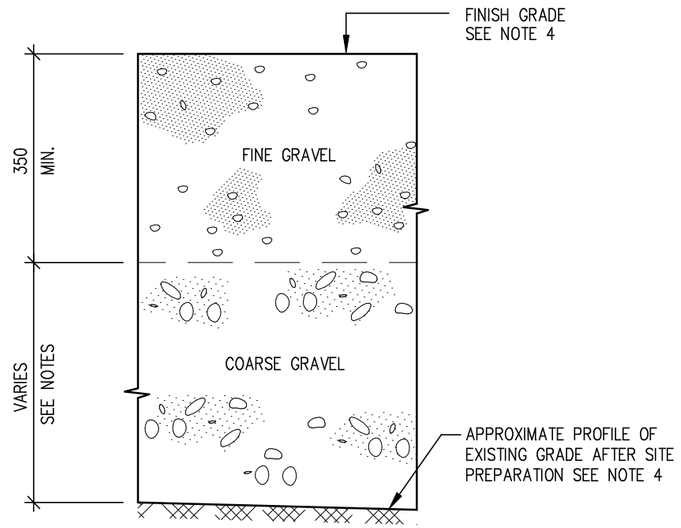
LIST OF STANDARD DRAWINGS

DRAWING #	DATE	DRAWING TITLE
		"SB"
A-SB-01	04/10/08	OPERATOR'S SHELTER BUILDING, FLOOR PLAN AND ELEVATION
A-SB-02	04/10/08	OPERATOR'S SHELTER BUILDING, SECTIONS AND DETAILS
A-SB-03	04/06/24	OPERATOR'S SHELTER BUILDING, DESK AND SHELVING DETAILS
S-SB-01	04/10/08	OPERATOR'S SHELTER BUILDING, SKID ASSEMBLY PLAN, SECTION & DETAILS
E-SB-01	04/10/08	OPERATOR'S SHELTER BUILDING, ELECTRICAL PLAN, ELEVATION, SCHEMATICS & DETAILS
E-SB-02	04/10/08	OPERATOR'S SHELTER BUILDING, ELECTRICAL PLAN, ELEVATION & SCHEMATICS

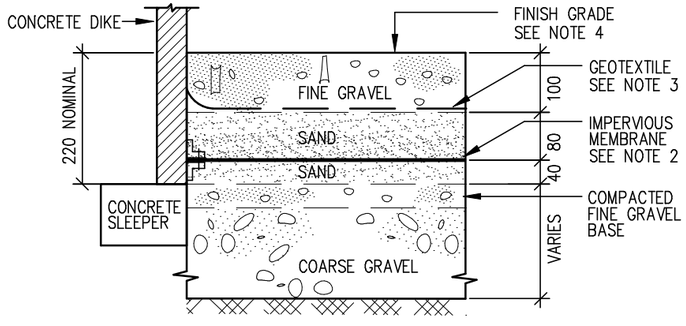
DRAWING #	DATE	DRAWING TITLE
		"GP"
A-GP-01	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL FLOOR PLAN & ELEVATIONS
A-GP-02	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL SECTIONS & DETAILS
S-GP-01	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL SKID ASSEMBLY PLAN, SECTIONS & DETAILS
S-GP-02	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL DRIP PAN & METER SUPPORT, ANCHOR PLATE FOR HOSE REEL & PUMP BASE SECTIONS & DETAILS
S-GP-03	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL SUPPORT & SAMPLE BARREL SECTIONS &DETAILS
P-GP-01	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL PIPING PLAN, SECTIONS & DETAILS
P-GP-02	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL PIPING ISOMETRIC
P-GP-02A	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL BILL OF MATERIALS
M-GP-01	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL VENTILATION PLAN, SECTIONS & DETAILS
E-GP-01	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL ELECTRICAL PLAN, SECTIONS & DETAILS
E-GP-02	04/10/05	DISPENSER BUILDING FOR GASOLINE / LSDL FUEL ELECTRICAL DIAGRAMS & TERMINAL BLOCKS



PROFILE 1 – INSIDE DIKE AREAS
(EXCEPT AT VERTICAL TANK BASES)



PROFILE 2 – OUTSIDE DIKE AREAS,
AT VEHICULAR TRAFFIC & SPILL BASIN AREAS



PROFILE 3 – INSIDE CONCRETE DIKE AREAS

NOTES:

1– FOR BACKFILL MATERIAL & SOIL CLASSIFICATION SEE SPECIFICATIONS, DIVISION 2, SECTION 02224.

2– FOR MEMBRANE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02592.

3– FOR GEOTEXTILE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02270.

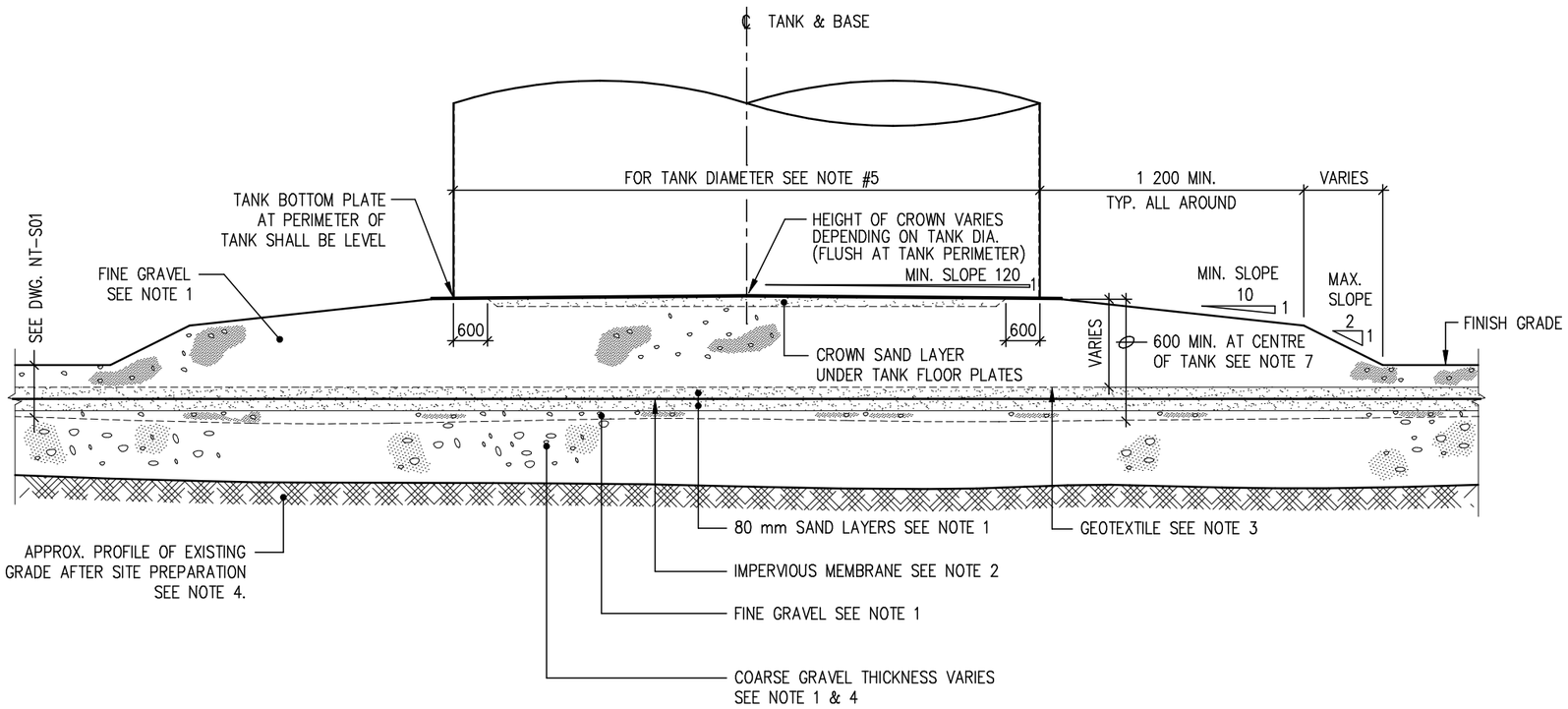
4– FOR EXISTING & FINISH GRADES SEE PARTICULAR PROJECT DRAWINGS.

Northwest Territories Public Works & Services

Drawing Title

TYPICAL BACKFILL PROFILES

Design	Ver.	Scale
EDZ	EDZ	1 : 10
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S01	
Revised On		
04/04/01		



TYPICAL SECTION

NOTES:

1– FOR BACKFILL MATERIAL & SOIL CLASSIFICATION SEE SPECIFICATIONS, DIVISION 2, SECTION 02224 AND DRAWING NT–S01.

2– FOR MEMBRANE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02592.

3– FOR GEOTEXTILE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02270.

4– FOR EXISTING & FINISH GRADES SEE PARTICULAR PROJECT DRAWINGS.

5– FOR VERTICAL TANK DIAMETER SEE PARTICULAR PROJECT DRAWINGS.

6– MIN. SLOPES AT EDGES OF GRANULAR BASE SHALL BE MAINTAINED AS SHOWN.

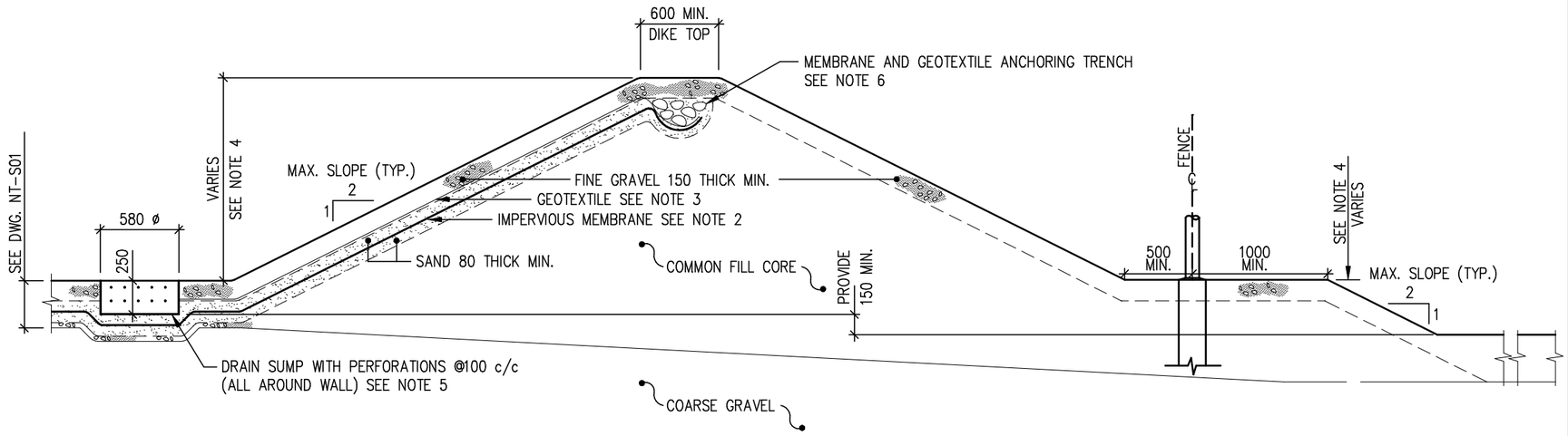
7– FOR ACTUAL THICKNESS OF TANK BASE FOUNDATION SEE PARTICULAR PROJECT DRAWING.

Northwest Territories Public Works & Services

Drawing Title

TYPICAL GRANULAR BASE
FOR VERTICAL TANKS

Design	Ver.	Scale
EDZ	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S02	
Revised On		
04/04/01		



SECTION

NOTES:

1– FOR BACKFILL MATERIAL & SOIL CLASSIFICATION SEE SPECIFICATIONS, DIVISION 2, SECTION 02224 AND DRAWING NT–S01.

2– FOR MEMBRANE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02592.

3– FOR GEOTEXTILE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02270.

4– FOR EXISTING & FINISH GRADES SEE PARTICULAR PROJECT DRAWINGS, DIVISION 2, SECTION 02224.

5– FOR DRAIN SUMP SEE SPECIFICATIONS, DIVISION 15, SECTION 15010.

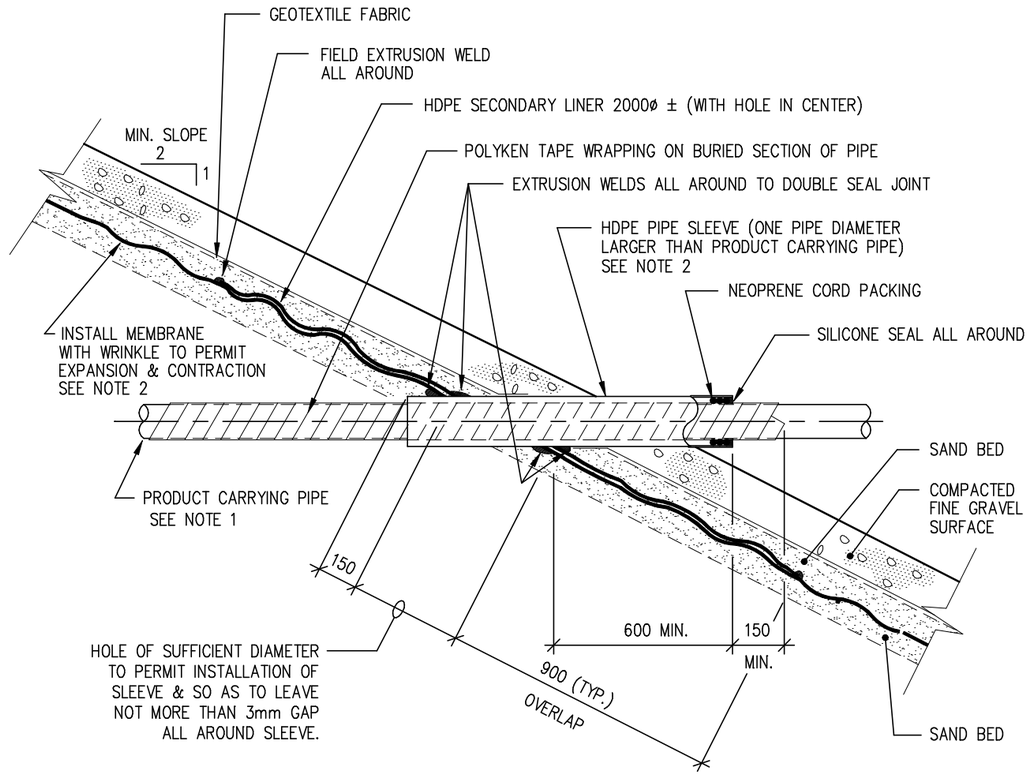
6– FOR ANCHORING TRENCH SEE SPECIFICATIONS, DIVISION 2, SECTION 02592.

Northwest Territories Public Works & Services

Drawing Title

TYPICAL SECTION THROUGH
DIKE WALL & DRAIN SUMP

Design	Ver.	Scale
EDZ	EDZ	N.T.S.
Drawn	Appr.	Date
CAD/SL		94/04/29
Revised By	Drawing No.	
REE	NT–S03	
Revised On		
04/04/02		



TYPICAL SECTION

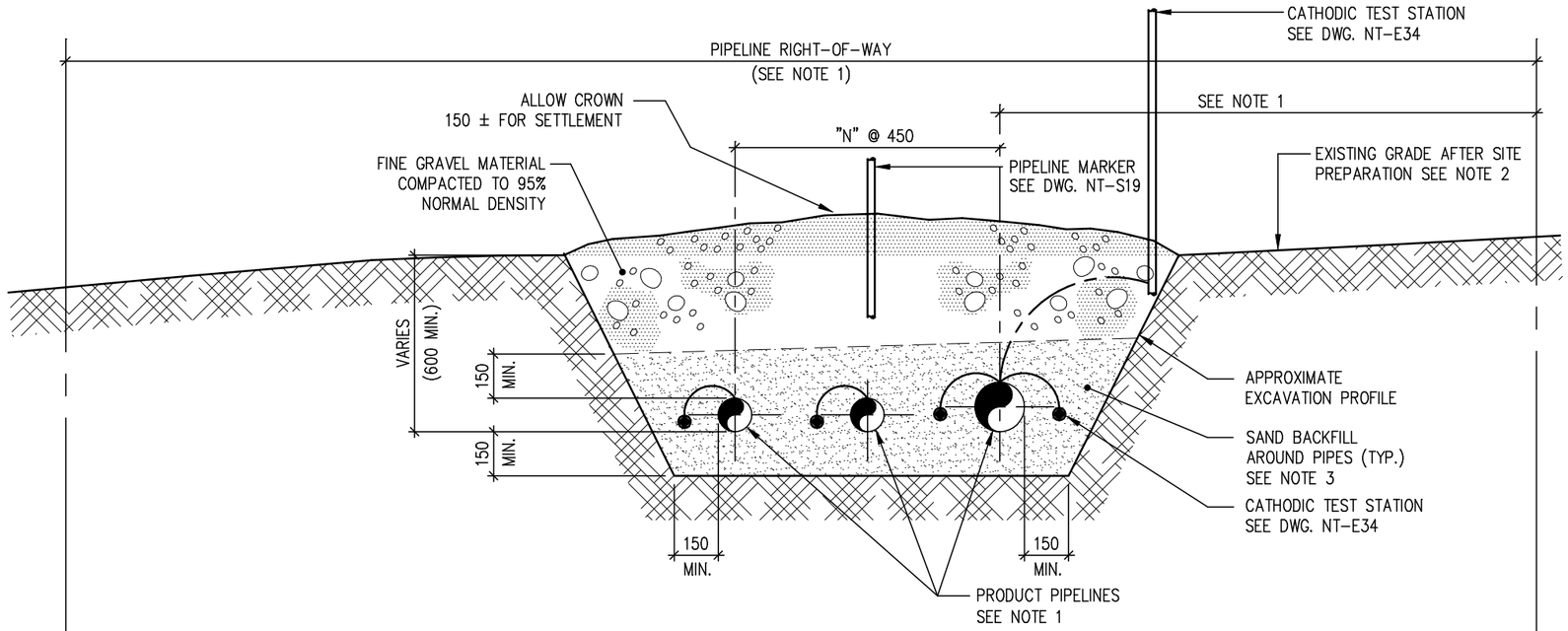
NOTES:

1– FOR SIZE OF PROJECT PIPING SEE PARTICULAR PROJECT DRAWINGS.
2– FOR MEMBRANE & SLEEVE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02592.

Northwest Territories Public Works & Services

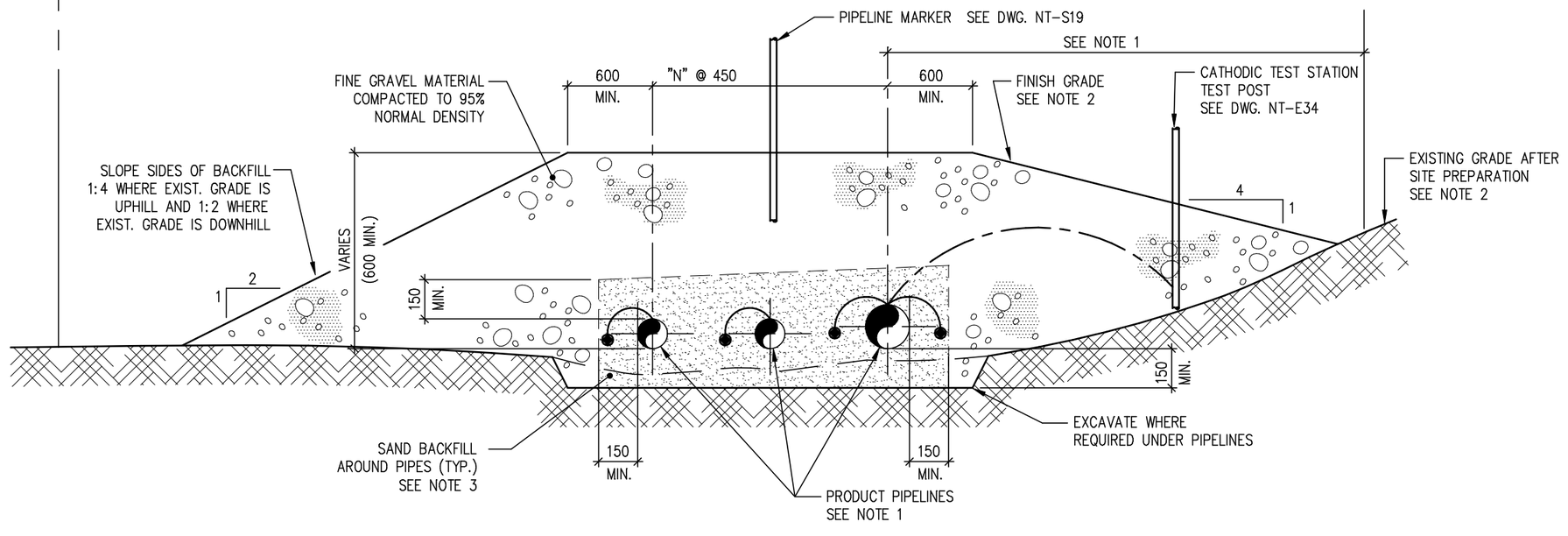
Drawing Title
TYPICAL SLEEVE AT PIPE THROUGH DIKE MEMBRANE DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	N.T.S.	REE	NT–S04
Drawn	Appr.	Date	Revised On	
CAD/SL		94/04/29	04/04/02	



AT EXCAVATED AND UNDERGROUND PORTIONS OF PIPELINES

(NON–TRAFFIC AREAS)



AT BURIED PORTIONS OF PIPELINES

(NON–TRAFFIC AREAS)

NOTES:

1– FOR WIDTH OF PIPELINE RIGHT–OF–WAY, NUMBER AND LOCATION OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.

2– FOR EXISTING AND FINISH GRADES SEE PARTICULAR PROJECT DRAWINGS.

3– FOR BACKFILL MATERIAL AND SOIL CLASSIFICATION SEE SPECIFICATIONS, DIVISION 2, SECTION 02224.

4– ENSURE THAT MINIMUM COVER AND CLEARANCES OF BACKFILL COMPLY WITH CAN/CSA Z662–03 OIL AND GAS PIPELINE SYSTEMS, TABLE 4.8

LEGEND:

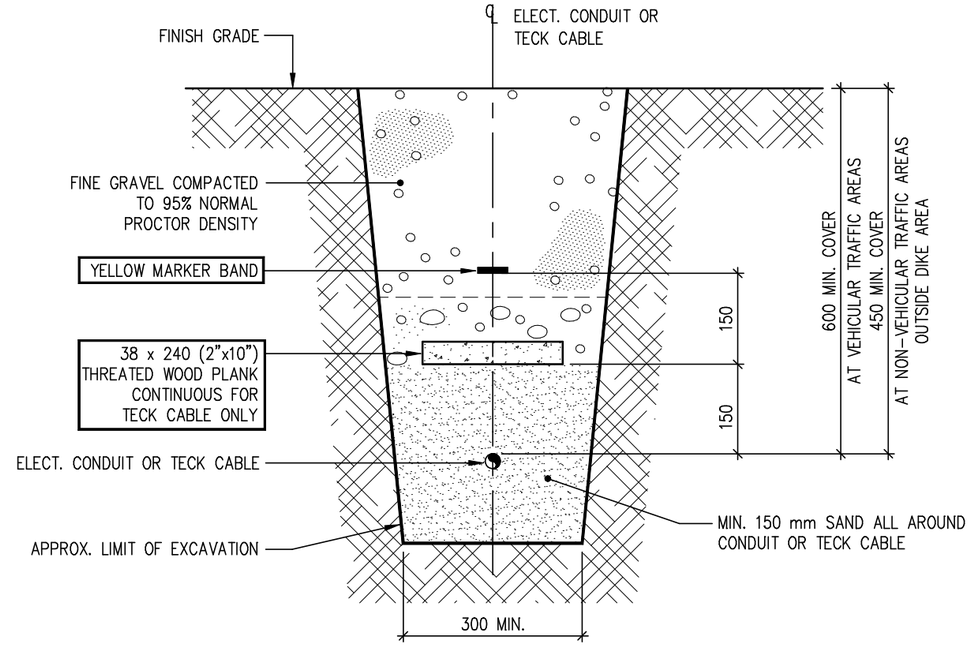
N = NUMBER OF SPACES (DEPENDS ON NUMBER OF PIPELINES), SEE NOTE 1

Northwest Territories Public Works & Services

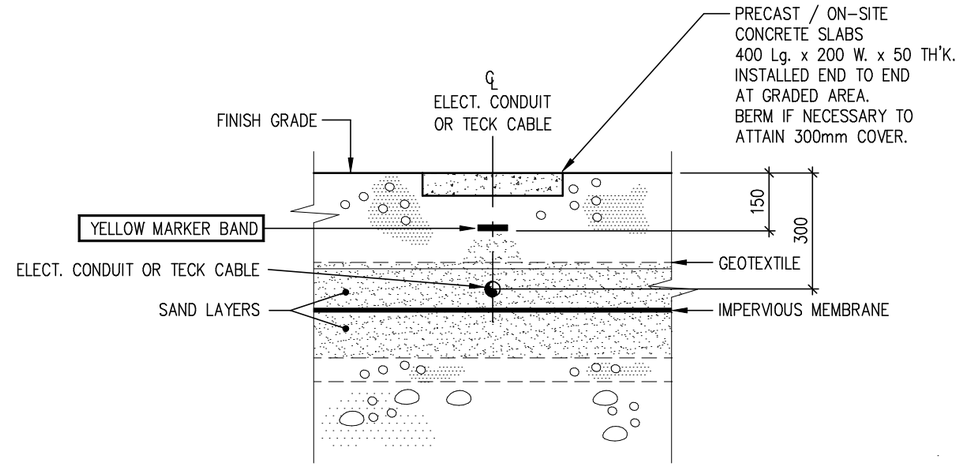
Drawing Title

TYPICAL SECTIONS THROUGH UNDERGROUND AND BURIED PIPELINE

Design	Ver.	Scale
EDZ	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S05	
Revised On		
04/08/31		



SECTION OUTSIDE OF DIKE AREA

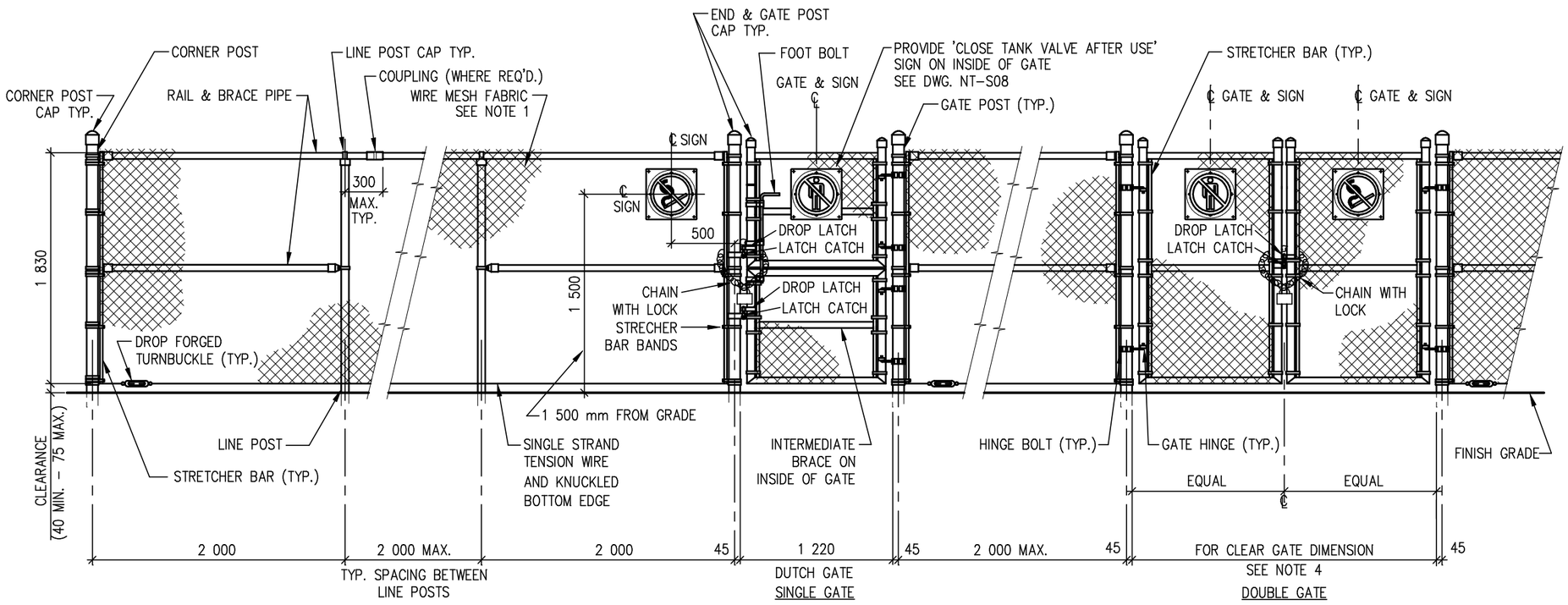


SECTION INSIDE OF DIKE AREA

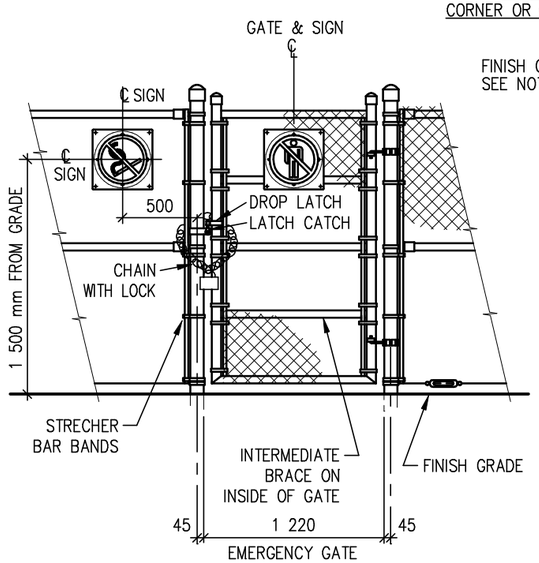
Northwest Territories
Public Works & Services

Drawing Title
TYPICAL TRENCHES FOR UNDERGROUND ELECTRICAL CONDUITS OR TECK CABLE

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	N.T.S.	REE	NT-S06
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/08/31	

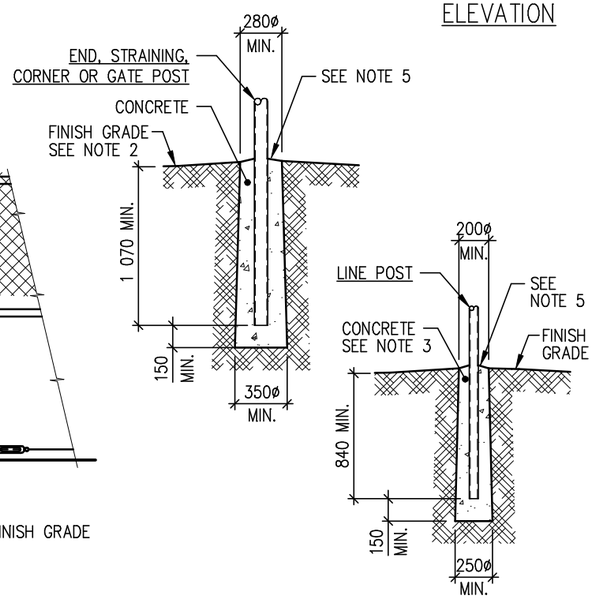


ELEVATION

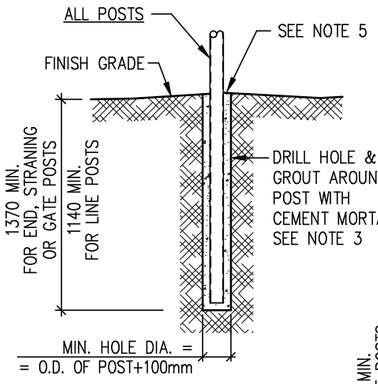


EMERGENCY GATE

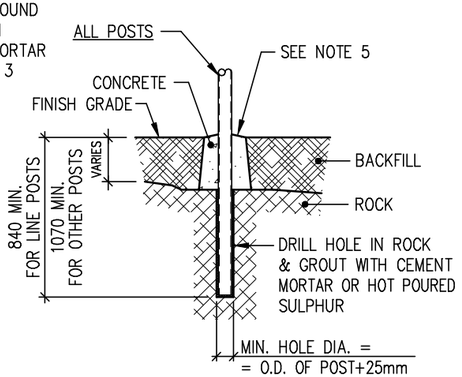
ELEVATION



TYPE I
IN BACKFILL OR EARTH (WITH CONCRETE FOOTINGS)



TYPE II
IN EARTH WITH LARGE BOLDERS
(DRILLED HOLE WITH GROUT)



TYPE III
IN SOLID ROCK

FOOTING SECTIONS

NOTES:

1- FOR FENCE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02831.

2- FOR BACKFILL MATERIALS & SOIL CLASSIFICATION SEE SPECIFICATIONS, DIVISION 2, SECTION 02224.

3- FOR CONCRETE MATERIAL SEE SPECIFICATIONS, DIVISION 3, SECTION 03500.

4- FOR TYPE AND DIMENSION OF GATE REFER TO PARTICULAR PROJECT DRAWINGS.

5- TOP OF FOOTING DOMED 20 mm HIGH (TO SHED AWAY SURFACE WATER) (TYP.)

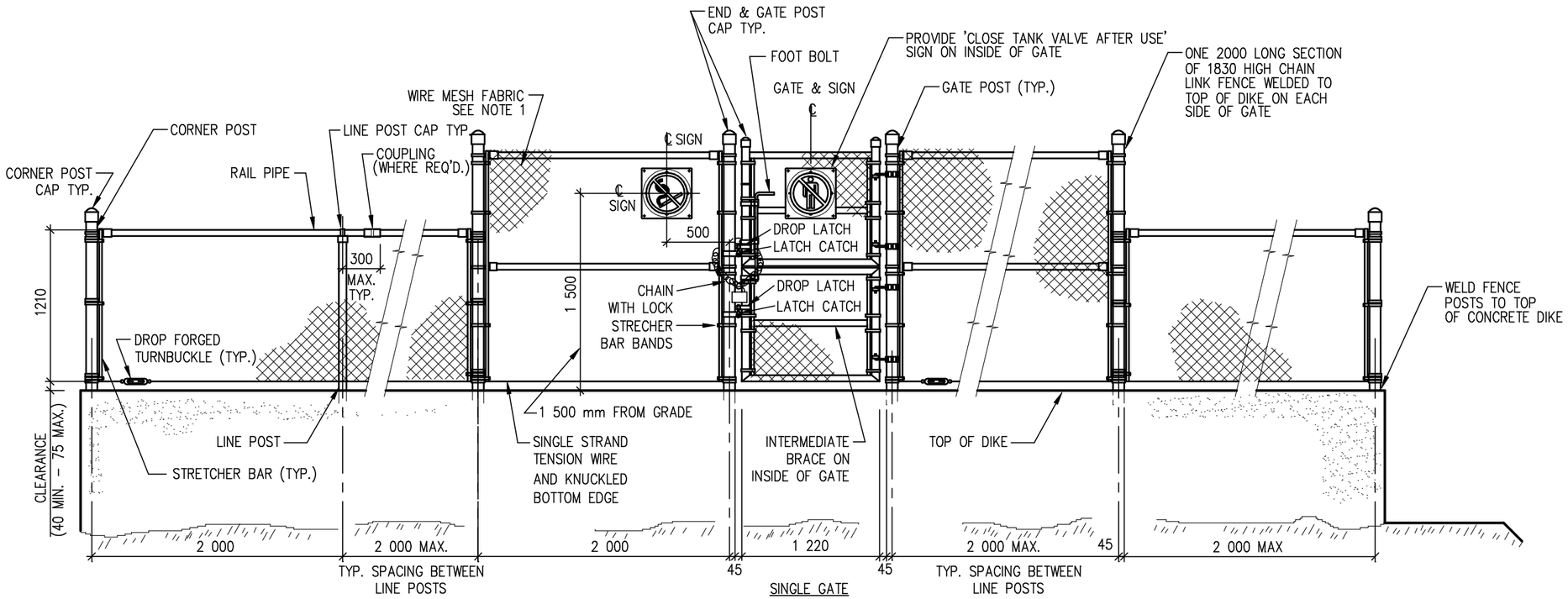
6- FENCE POSTS AND FENCING TO BE PLUMB AND STRAIGHT

Northwest Territories Public Works & Services

Drawing Title

CHAIN LINK FENCING DETAILS

Design	Ver.	Scale
EDZ	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S07	
Revised On		
04/04/02		



ELEVATION

NOTES:

1– FOR FENCE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02831.

2– FOR BACKFILL MATERIALS & SOIL CLASSIFICATION SEE SPECIFICATIONS, DIVISION 2, SECTION 02224.

3– FOR CONCRETE MATERIAL SEE MANUFACTURER'S SPECIFICATIONS.

4– FOR TYPE AND DIMENSION OF GATE REFER TO PARTICULAR PROJECT DRAWINGS.

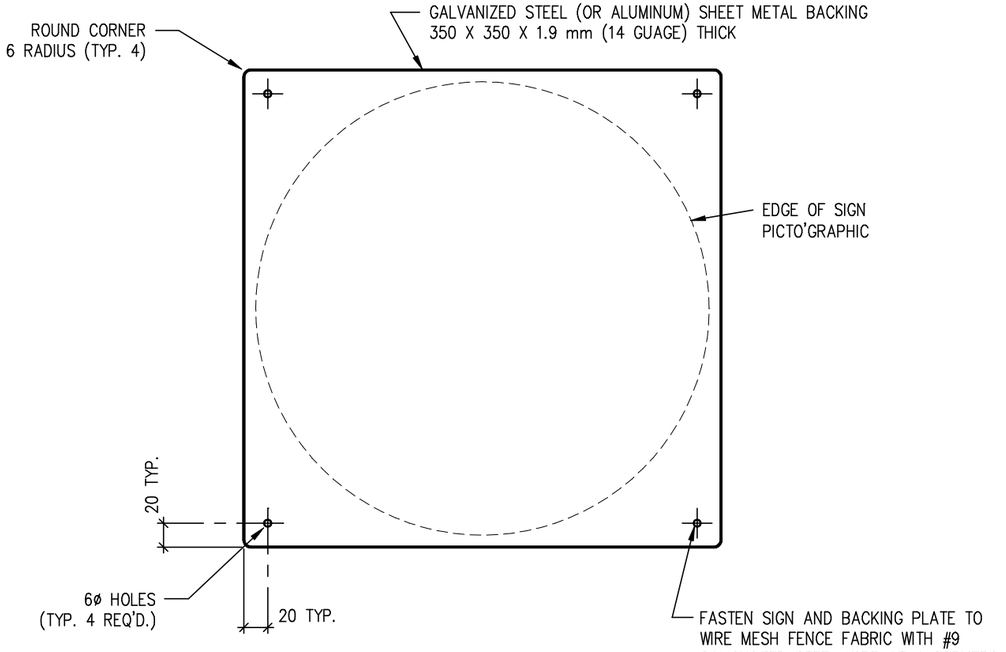
5– FENCE POSTS AND FENCING TO BE PLUMB AND STRAIGHT.

Northwest Territories Public Works & Services

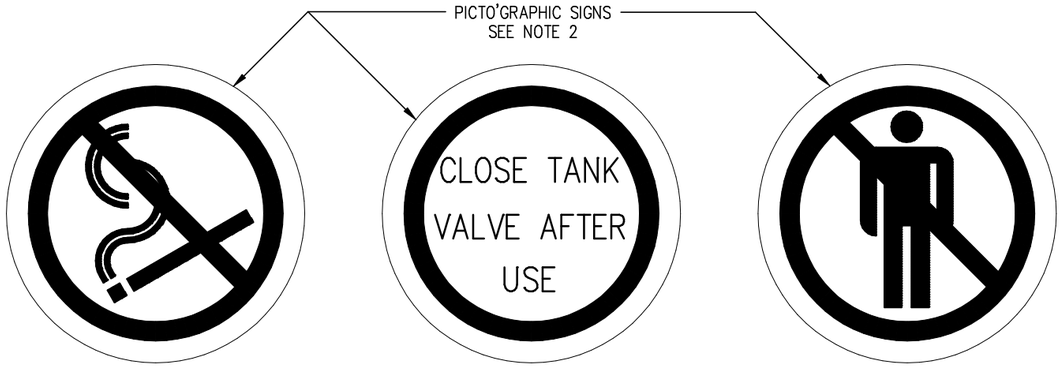
Drawing Title

CHAIN LINK FENCING ON A CONCRETE DIKE DETAILS

Design	Ver.	Scale
EDZ	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S07A	
Revised On		
04/04/02		



DETAIL OF SIGN PLATE



NO SMOKING SIGN | CLOSE VALVE SIGN | NO ADMITTANCE SIGN

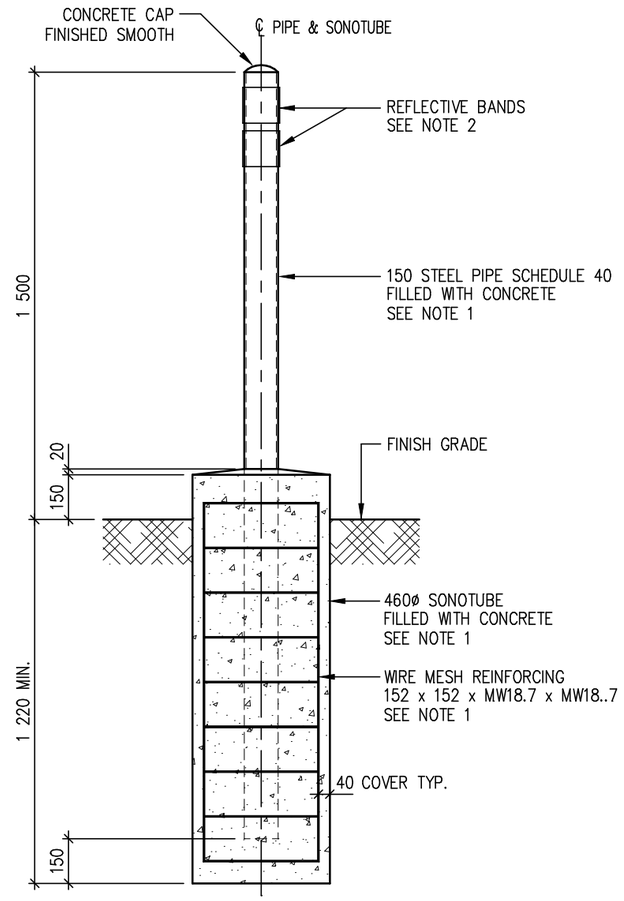
NOTES:

1- FOR SIGN MATERIAL & MODEL SEE SPECIFICATIONS, DIVISION 2, SECTION 02831.
2- THE FIBERGLASS REINFORCED PLASTIC, BRADY B-120, SHALL BE ATTACHED TO THE METAL BACKING PLATE FOR REINFORCING.

Northwest Territories Public Works & Services

Drawing Title: SIGNS AT FENCES & GATES DETAILS

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	1 : 5	REE	NT-S08
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/04/02	



ELEVATION

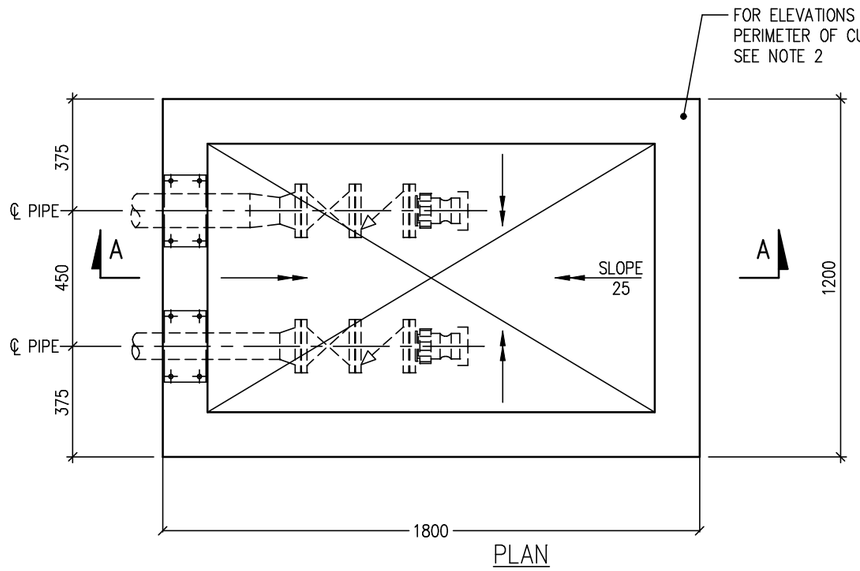
NOTES:

1- FOR CONCRETE AND WIRE MESH MATERIALS SEE SPECIFICATIONS, DIVISION 3, SECTION 03300.
2- BOLLARD TO BE PAINTED YELLOW WITH REFLECTIVE BANDS, SEE SPECIFICATIONS, DIV. 5, SEC. 05500 AND DIV. 9, SEC. 09900, TABLE 1.
3- FOR MOUNTING IN ROCK, SEE DRAWING NT-S07.

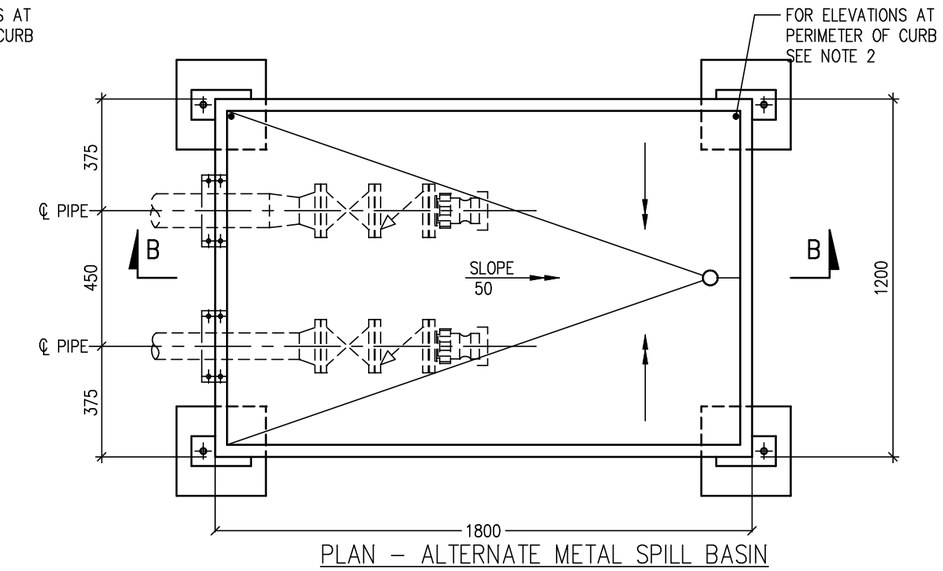
Northwest Territories Public Works & Services

Drawing Title: BOLLARD DETAIL

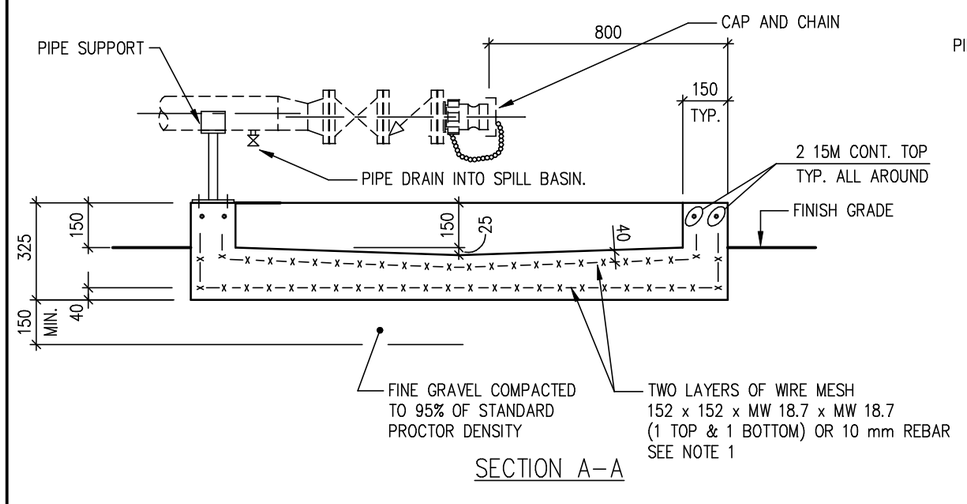
Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	N.T.S.	REE	NT-S09
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/04/02	



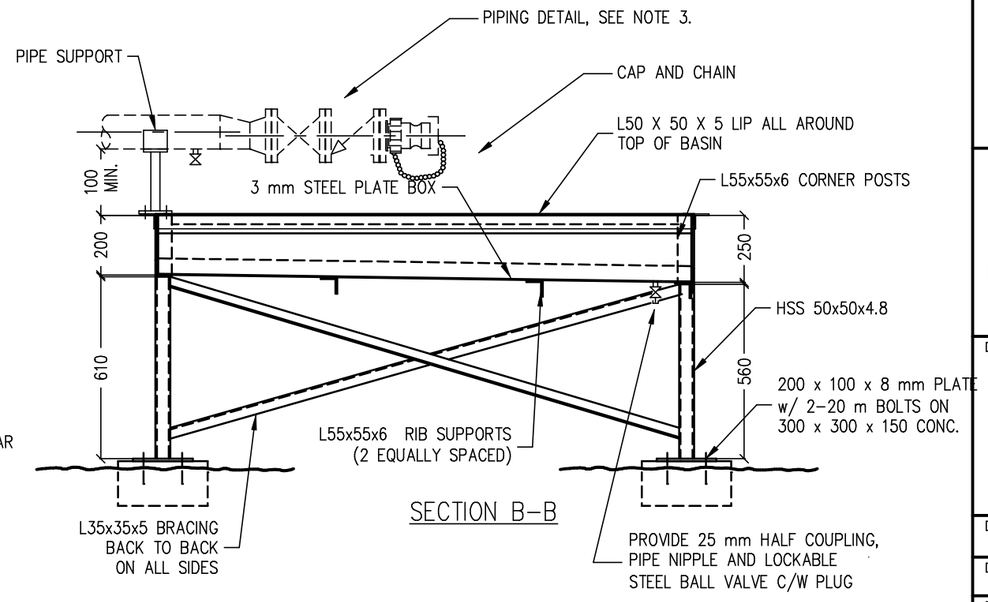
PLAN



PLAN – ALTERNATE METAL SPILL BASIN



SECTION A–A



SECTION B–B

NOTES:

1– FOR CONCRETE AND REINFORCING MATERIALS SEE SPECIFICATIONS, DIVISION 3.

2– FOR ELEVATIONS AT TOP OF CURB AT PERIMETER OF BASIN SEE PARTICULAR PROJECT DRAWINGS.

3– FOR TRUCK SPILL BASIN PIPING DETAIL DRAWING SEE DWG. NT–P02A.

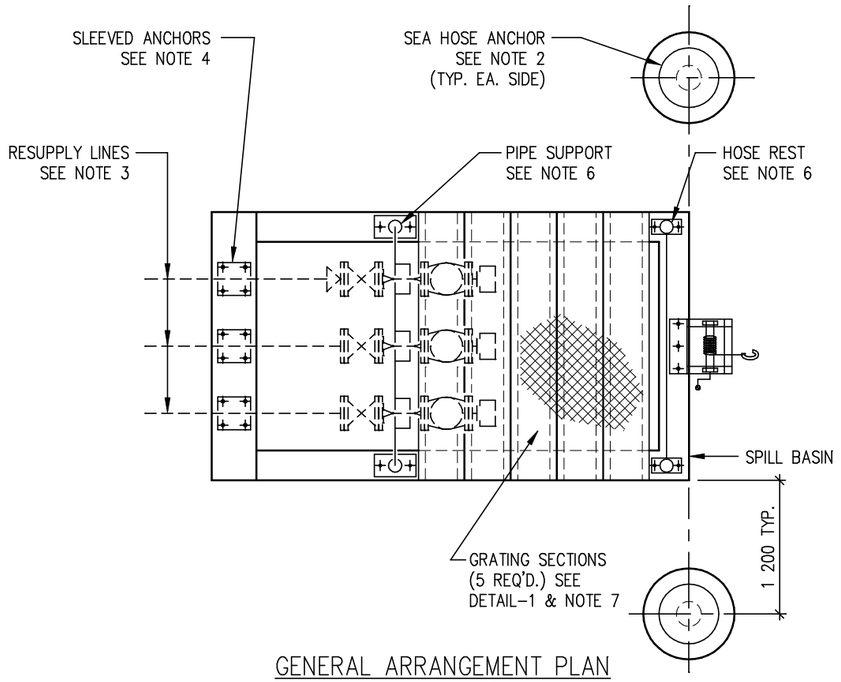
4– PAINT AS PER SPECIFICATIONS, DIV. 5, SEC. 05500 AND DIVISION 9 SECTION 09900, TABLE 1.

Northwest Territories Public Works & Services

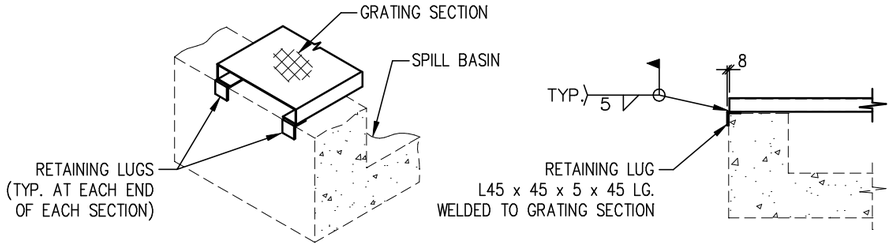
Drawing Title

SPILL BASIN AT TRUCK UNLOADING POINT DETAIL

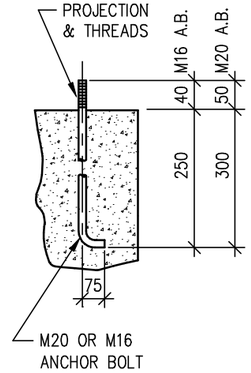
Design	Ver.	Scale
EDZ	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S10	
Revised On		
04/09/07		



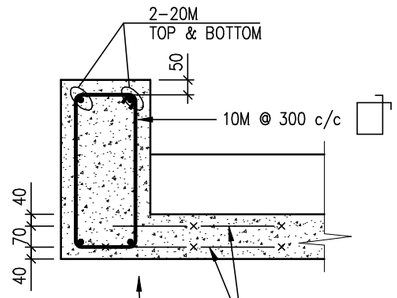
GENERAL ARRANGEMENT PLAN
(MAX 4 LINES)

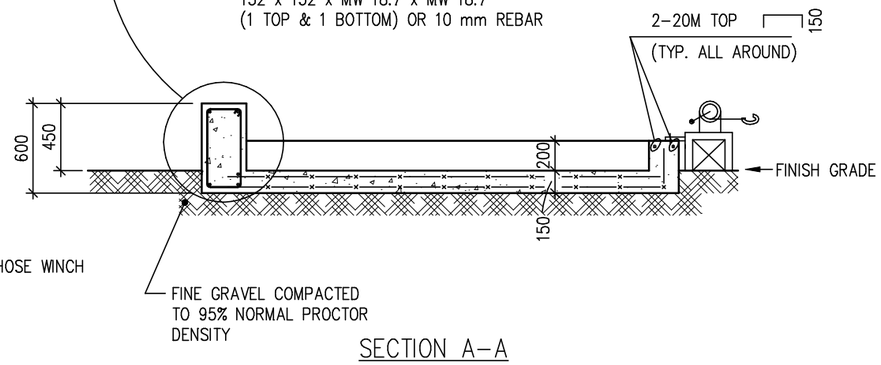


DETAIL – 1

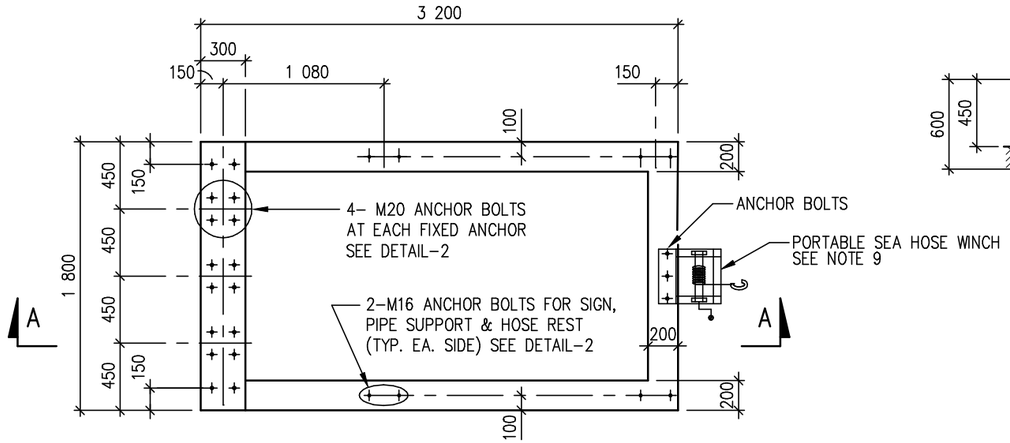


DETAIL – 2





SECTION A–A



SPILL BASIN PLAN

NOTES:

1– FOR CONCRETE & REINFORCING MATERIALS SEE SPECIFICATIONS, DIVISION 3.

2– FOR SEA HOSE ANCHORS SEE DWG. NT–S13.

3– FOR NUMBER & SIZE OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.

4– FOR DETAILS OF PIPE ANCHOR BRACKETS SEE DRAWING NT–S16.

5– FOR SIGN DETAILS SEE DRAWING NT–S17.

6– FOR PIPE SUPPORT & HOSE REST SEE DRAWING NT–S12.

7– FOR GRATING MATERIAL SEE SPECIFICATIONS, DIVISION 5, SECTION 05500.

8– FOR DETAILS OF PIPING SEE DWG. NT–P02.

9– FOR DETAILS OF PORTABLE SEA HOSE WINCH ASSEMBLY SEE SPECIFICATIONS, DIVISION 15, SECTION 15010.

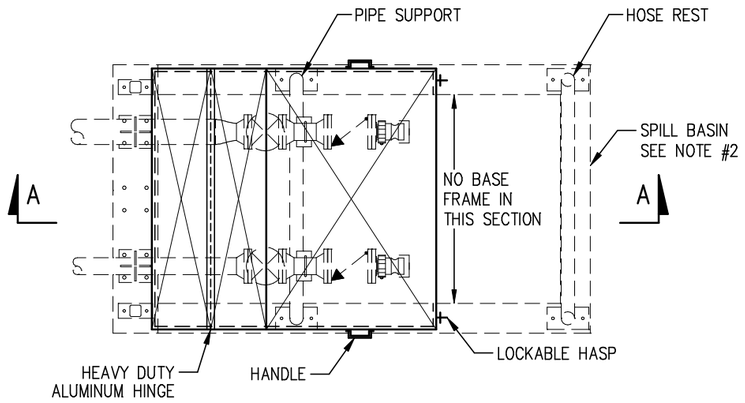
10– NOMINAL SPILL BASIN VOLUME IS 860 L.

Northwest Territories Public Works & Services

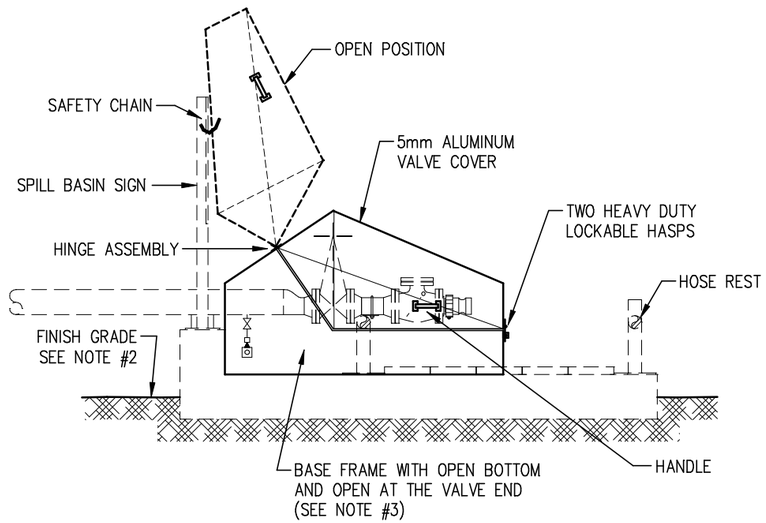
Drawing Title

MARINE SPILL BASIN
DETAILS

Design: EDZ	Ver.: EDZ	Scale: N.T.S.
Drawn: KJ	Appr.	Date: 94/04/29
Revised By: REE	Drawing No.	
Revised On: 04/09/07	NT–S11	



PLAN VIEW



SECTION A–A

NOTES:

1– FOR NUMBER, SIZE & ARRANGEMENT OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.

2– FOR SPILL BASIN SEE DWG. NT–S11

3– THE BASE FRAME SHALL BE ALL WELDED 5mm THICK ALUMINUM WITH REINFORCED EDGES AND SHALL BE BOLTED TO THE SPILL BASIN. THE VALVE END SHALL BE LEFT OPEN SO THAT A 250mm HIGH DRIP PAN CAN BE PLACED UNDER THE CAMLOCK FITTING.

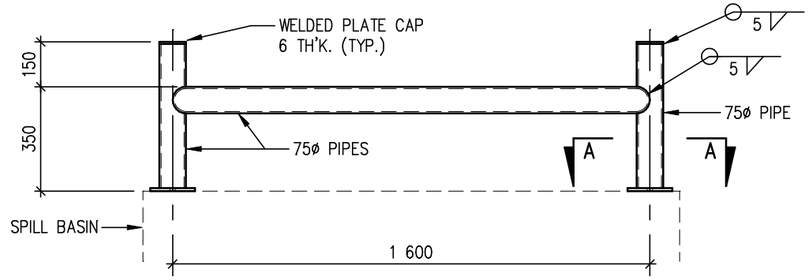
4– PROVIDE SAFETY CHAIN IN OPEN POSITION (FIELD INSTALLED).

5– HEAVY DUTY ALUMINUM HINGES AND HEAVY DUTY LOCKABLE HASPS SHALL BE USED. BOLTS AND RIVETS SHALL BE STAINLESS STEEL.

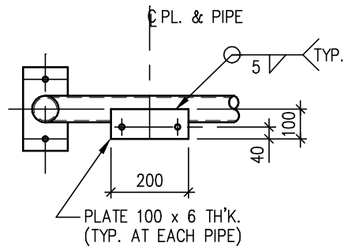
Northwest Territories Public Works & Services

Drawing Title
SEA HOSE VALVE COVER AT SPILL BASIN
PLAN & SECTION

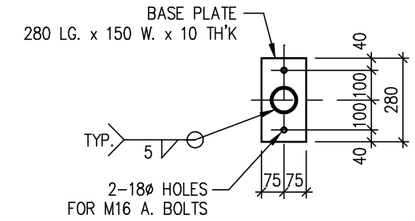
Design	Ver.	Scale	Revised By	Drawing No.
LR		1:40		NT–S11A
Drawn	Appr.	Date	Revised On	
KJ		04/10/05		



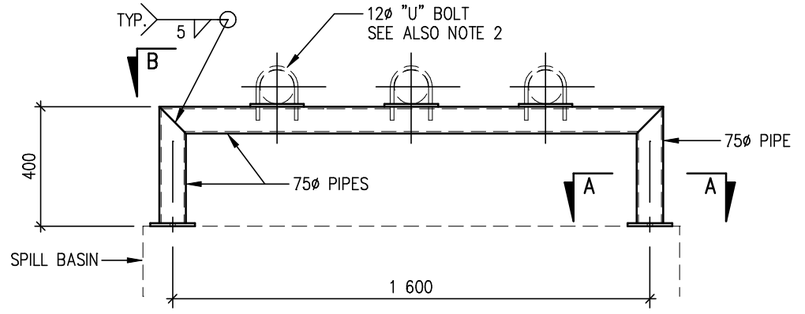
HOSE REST ELEVATION



VIEW B



SECTION A–A



PIPE SUPPORT ELEVATION

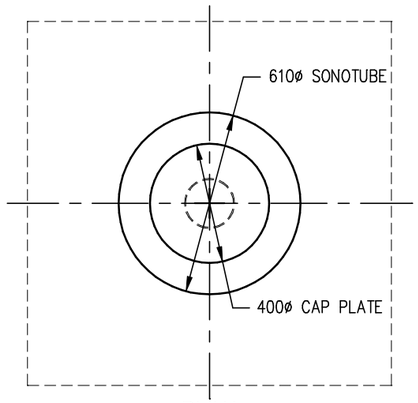
NOTES:

1– FOR PIPE SUPPORTS & HOSE REST MATERIALS SEE SPECIFICATIONS, DIVISION 15, SECTION 15010
2– FOR NUMBER OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.
3– FOR LOCATION OF ANCHOR BOLTS SEE DRAWING NT–S14.

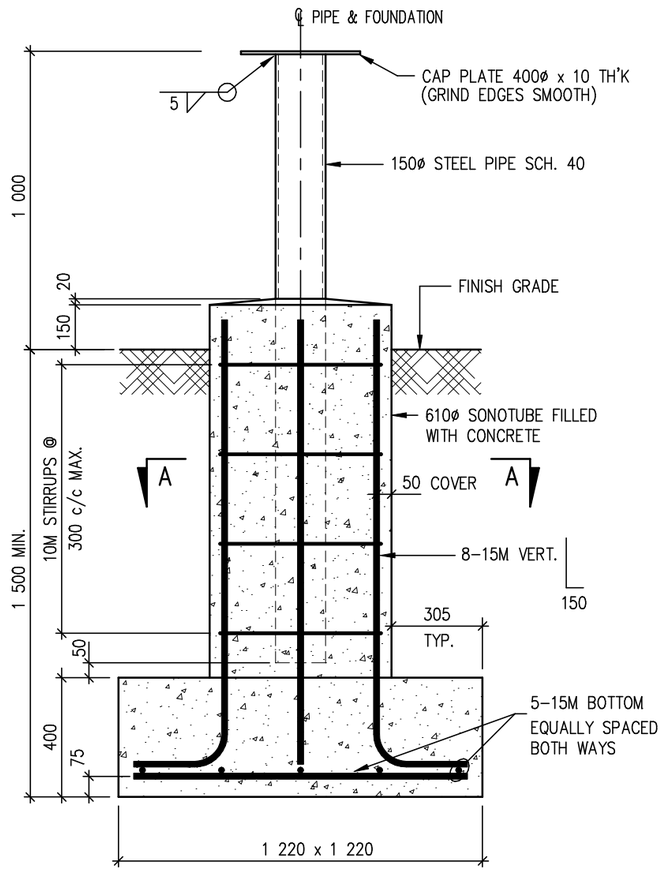
Northwest Territories Public Works & Services

Drawing Title
PIPE SUPPORT & HOSE REST AT SPILL BASIN DETAILS

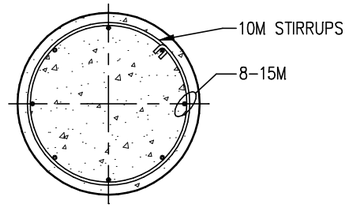
Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	N.T.S.	REE	NT–S12
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/04/02	



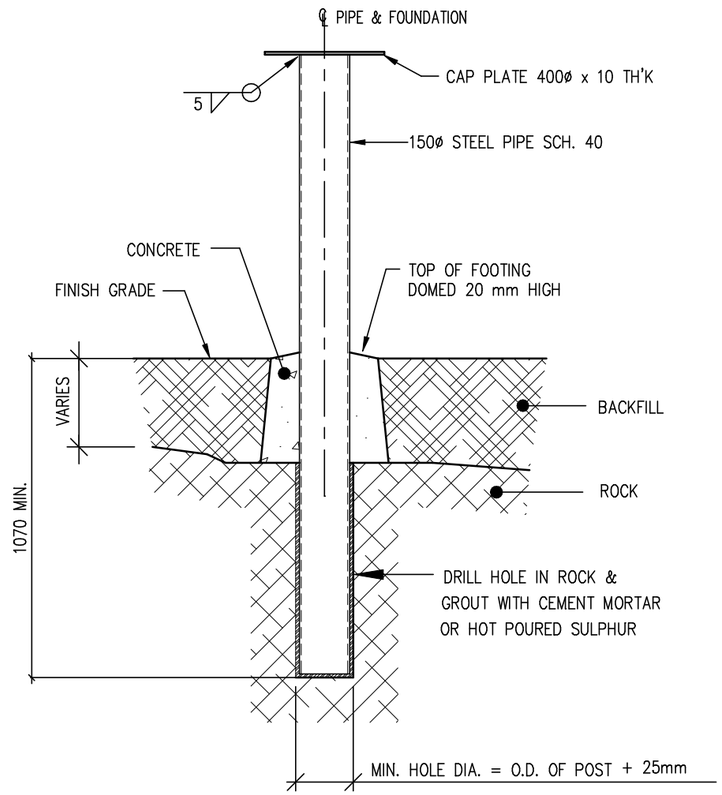
PLAN



ELEVATION



SECTION A–A



ALTERNATE ANCHOR
IN SOLID ROCK
N.T.S.

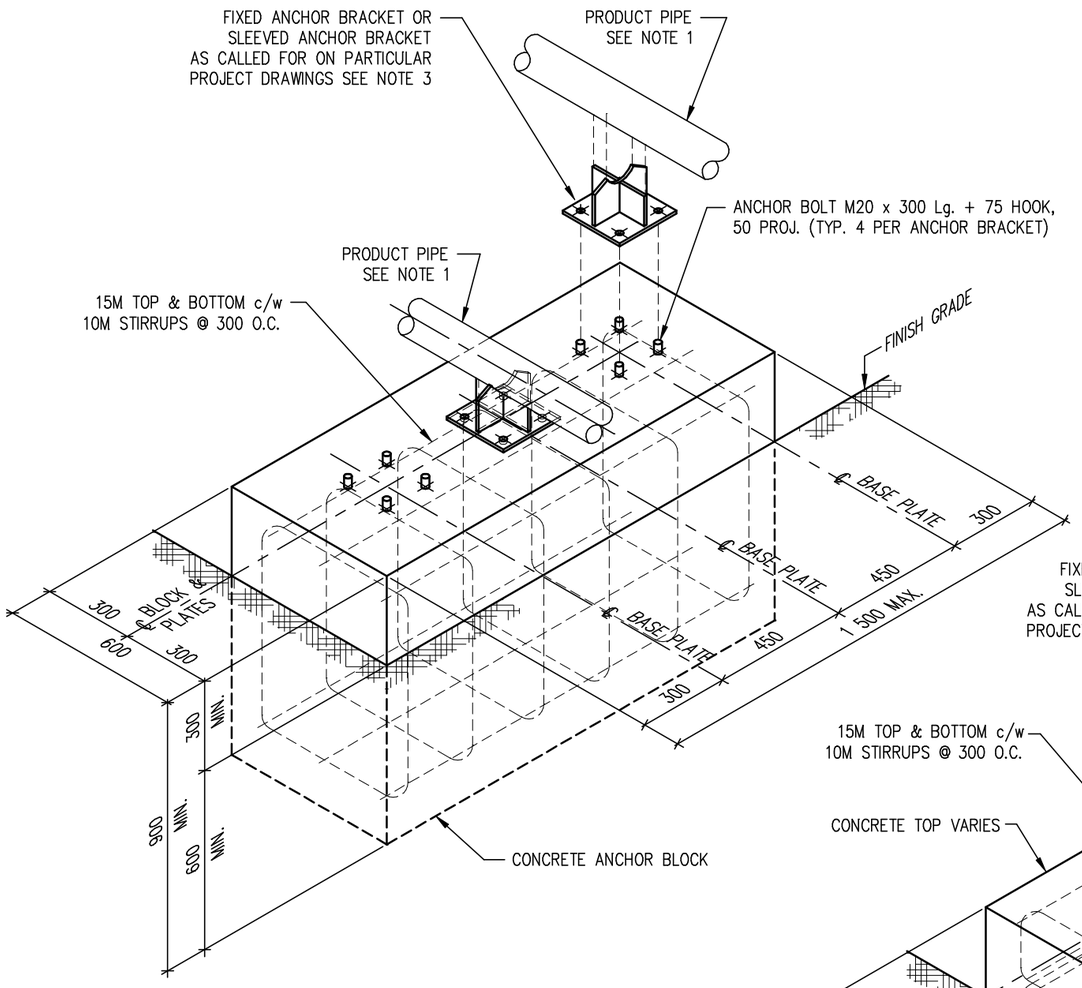
NOTES:

1– FOR CONCRETE AND REINFORCING MATERIALS SEE SPECIFICATIONS, DIV. 3, SECTION 03200 AND SECTION 03300.
2– FOR MISCELLANEOUS STEEL & PIPE MATERIALS SEE SPECIFICATIONS, DIVISION 5, SECTION 05120.

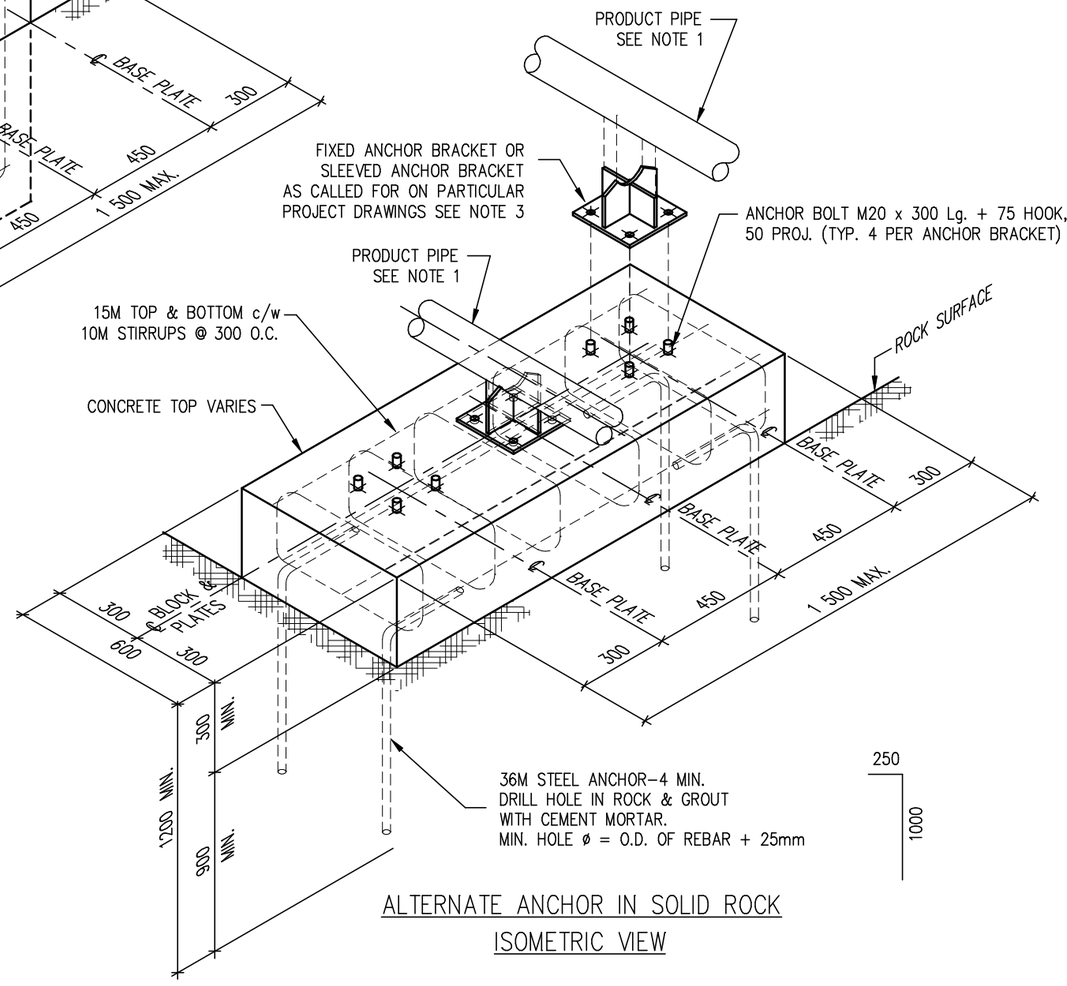
Northwest Territories Public Works & Services

Drawing Title
SEA HOSE ANCHOR DETAIL

Design	Ver.	Scale
EDZ	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S13	
Revised On		
04/09/07		



ISOMETRIC VIEW



ALTERNATE ANCHOR IN SOLID ROCK
ISOMETRIC VIEW

NOTES:

1– FOR NUMBER & SIZE OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.

2– FOR CONCRETE, BASE PLATE & ANCHOR BOLT MATERIALS SEE SPECIFICATIONS, DIVISION 5, SECTION 05120.

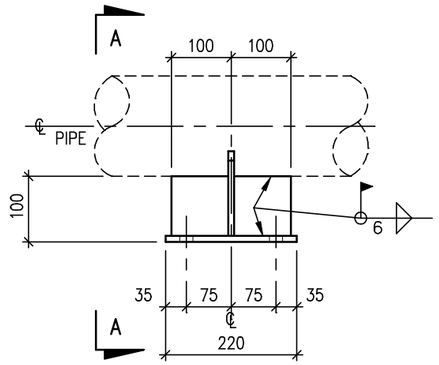
3– FOR TYPE OF ANCHOR BRACKET SEE PARTICULAR PROJECT DRAWINGS. FOR DETAILS OF FIXED ANCHOR BRACKET SEE DWG. NT–S15 AND SLEEVED ANCHOR BRACKET SEE DWG. NT–S16.

Northwest Territories Public Works & Services

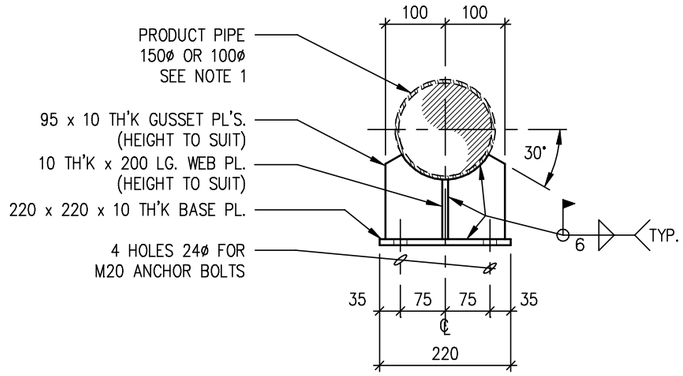
Drawing Title

CONCRETE ANCHOR BLOCK
DETAIL

Design	Ver.	Scale
EDZ	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S14	
Revised On		
04/04/02		



ELEVATION



SECTION A–A

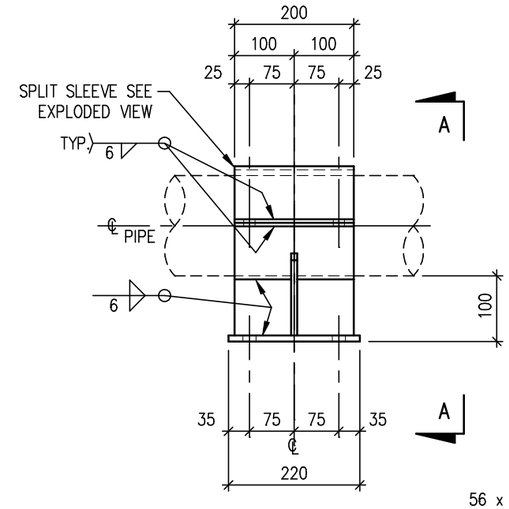
NOTES:

1– FOR SIZE OF PRODUCT PIPE SEE PARTICULAR PROJECT DRAWINGS.
2– FOR BRACKET & ANCHOR BOLT MATERIAL SEE SPECIFICATIONS, DIVISION 5, SECTION 05120.
3– FOR ASSEMBLY DETAILS SEE DRAWING NT–S14.

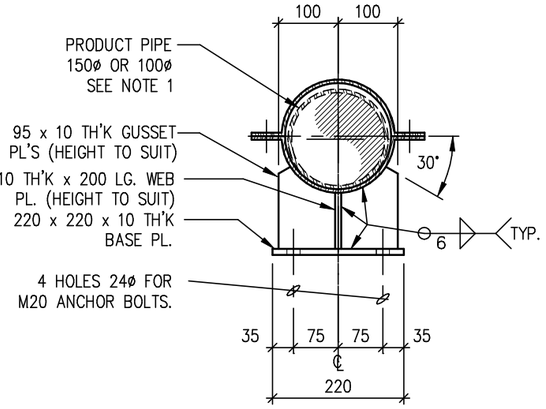
Northwest Territories Public Works & Services

Drawing Title
FIXED ANCHOR BRACKET DETAILS

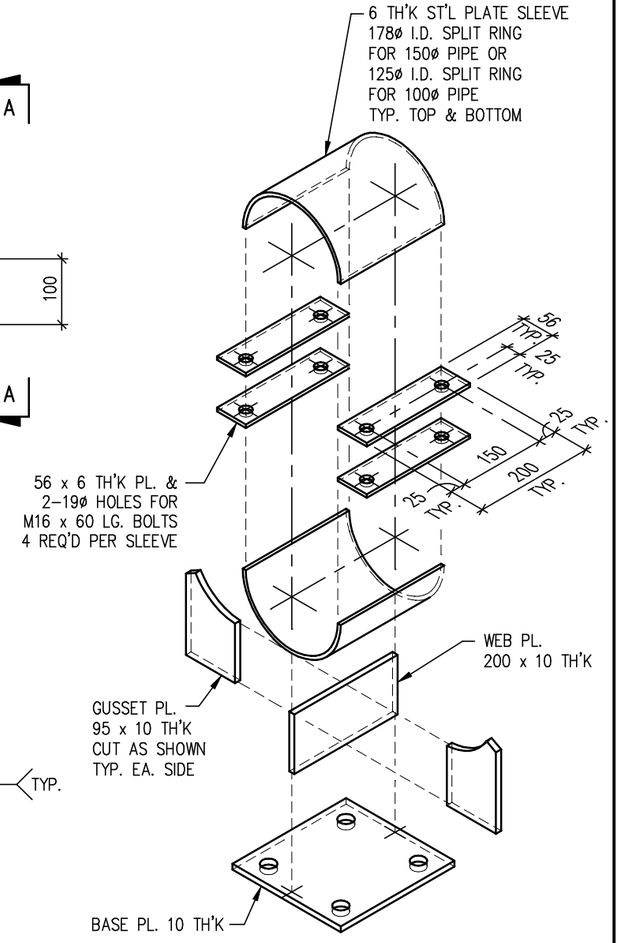
Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	N.T.S.	REE	NT–S15
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/04/02	



ELEVATION



SECTION A–A



SPLIT SLEEVE EXPLODED VIEW

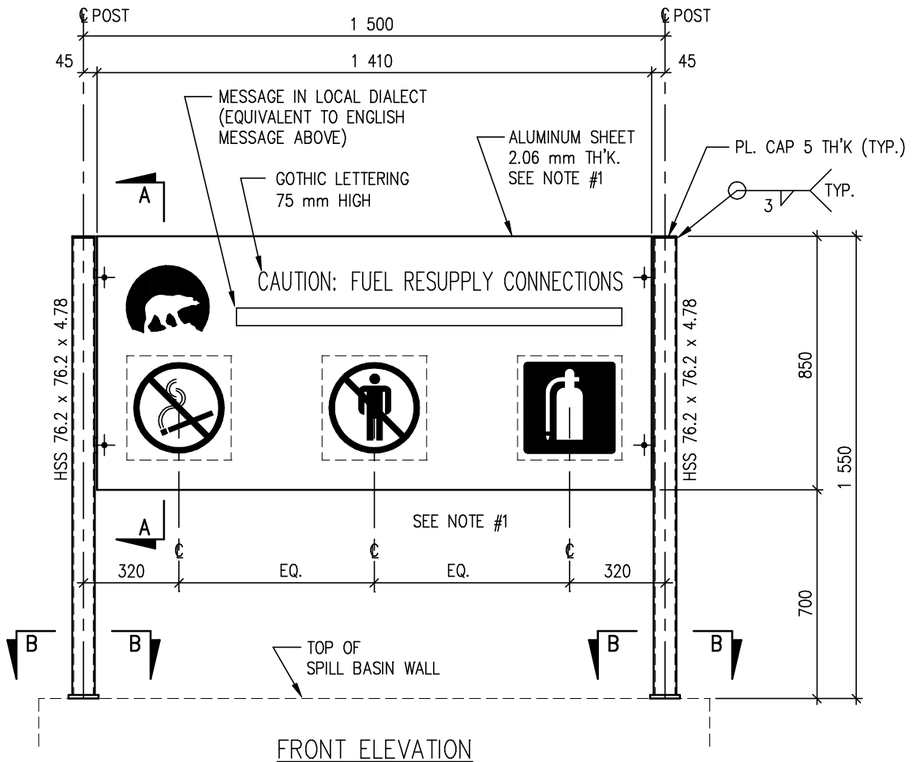
NOTES:

1– FOR SIZE OF PRODUCT PIPE SEE PARTICULAR PROJECT DRAWINGS.
2– FOR BRACKET & ANCHOR BOLT MATERIAL SEE SPECIFICATIONS, DIVISION 5, SECTION 05120.
3– FOR ASSEMBLY DETAILS SEE DRAWING NT–S14.

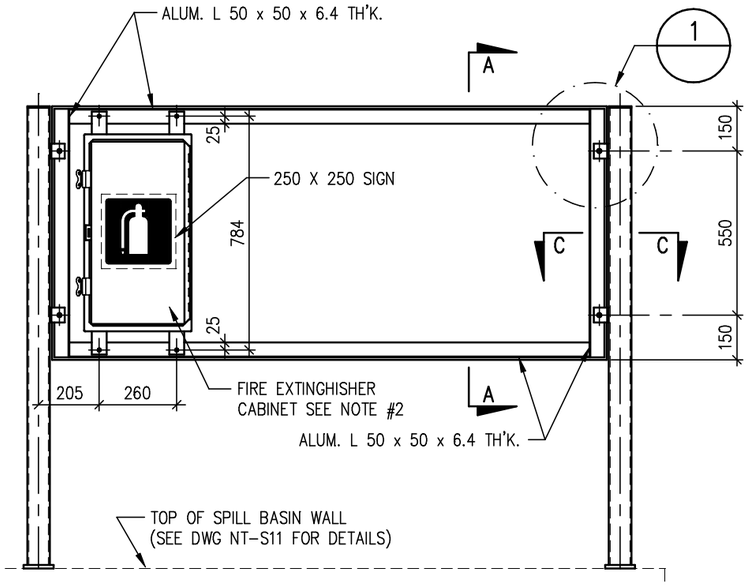
Northwest Territories Public Works & Services

Drawing Title
SLEEVED ANCHOR BRACKET DETAILS

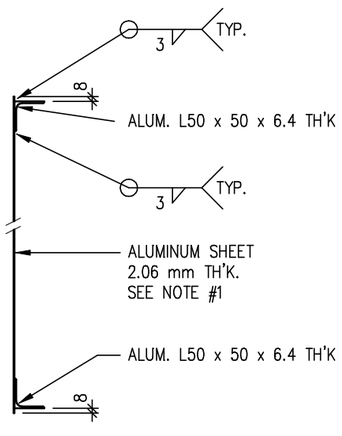
Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	N.T.S.	REE	NT–S16
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/04/02	



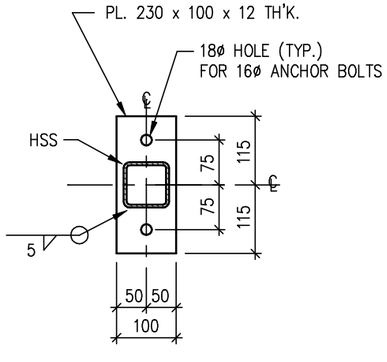
FRONT ELEVATION
(SAME SIDE AS SEA HOSE CONNECTION POINTS)
N.T.S.



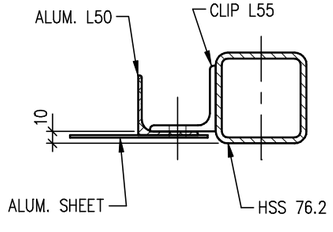
REAR ELEVATION
N.T.S.



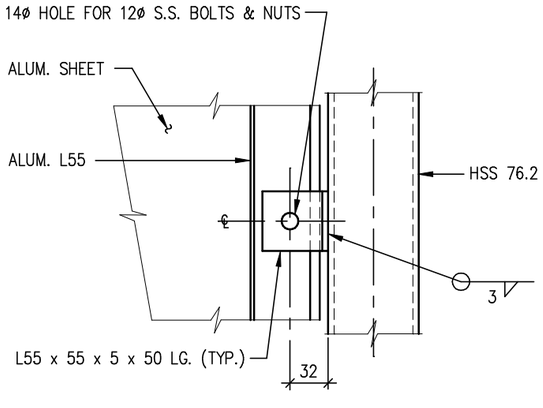
SECTION A-A
1 : 10



SECTION B-B
1 : 10



SECTION C-C
1 : 5



DETAIL – 1
(TYP. 4)
1 : 5

NOTES:

1- ALUMINUM SHEET, PICTOGRAPHIC SIGNS AND LETTERING SEE SPECIFICATIONS, DIVISION 2, SECTION 02831.

2- FOR DETAIL OF FIRE EXTINGUISHER CABINET SEE DRAWING NT-S18.

3- FOR STEEL POSTS & ANCHOR BOLTS SEE SPECIFICATIONS, DIV. 5, SECTION 05120.

4- FOR LOCATION OF ANCHOR BOLTS AND SPILL BASIN SEE DRAWING NT-S11.

Northwest Territories Public Works & Services

Drawing Title
SIGN AT SPILL BASIN DETAIL

Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S17	
Revised On		
04/05/11		

LEGEND:

(A) – BOX FORMED FROM 14 GAUGE STAINLESS STEEL (TYPE 304) SHEET, INCLUDING STAINLESS STEEL DOOR, PROVIDE CONTINUOUSLY WELDED SEAMS.

(B) – STAINLESS STEEL MOUNTING LUGS 50 W. x 5 TH'K. (4 PER BOX)

(C) – COUNTINUOUS STAINLESS STEEL PIANO HINGE ON RIGHT SIDE OF DOOR.

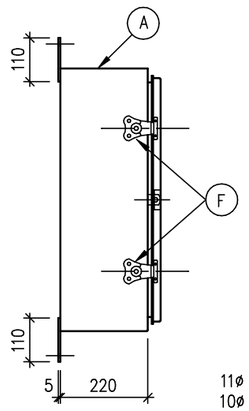
(D) – PROVIDE ROLLED LIP AROUND DOOR OPENING TO PREVENT WATER FROM DRIPPING INTO ENCLOSURE.

(E) – SOLID NEOPRENE GASKET WITH SEALED CORNERS PERMANENTLY SECURED BY WELDED STAINLESS STEEL RETAINING BRACKETS (2 TOP, 2 BOTTOM AND 3 EACH SIDE.)

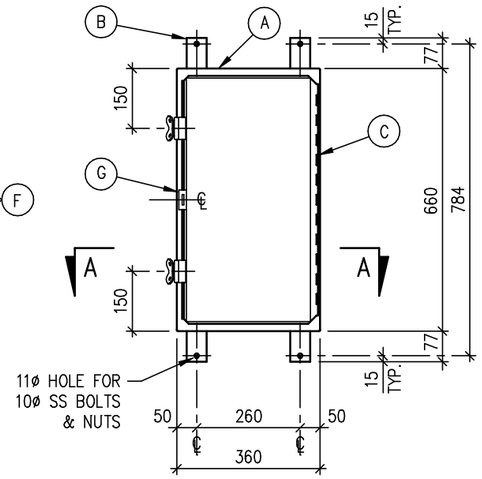
(F) – STAINLESS STEEL DOOR LATCH (2 PER DOOR PANEL)

(G) – PADLOCKING HASP (HOLE TO SUIT 10mm SHANK)

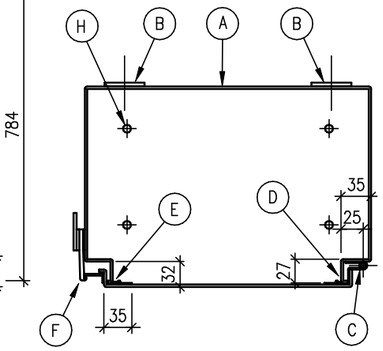
(H) – 4–10ø DRAIN HOLES IN BOTTOM PLATE



LEFT SIDE ELEVATION
1 : 15



FRONT ELEVATION
1 : 15



SECTION A–A
1 : 7.5

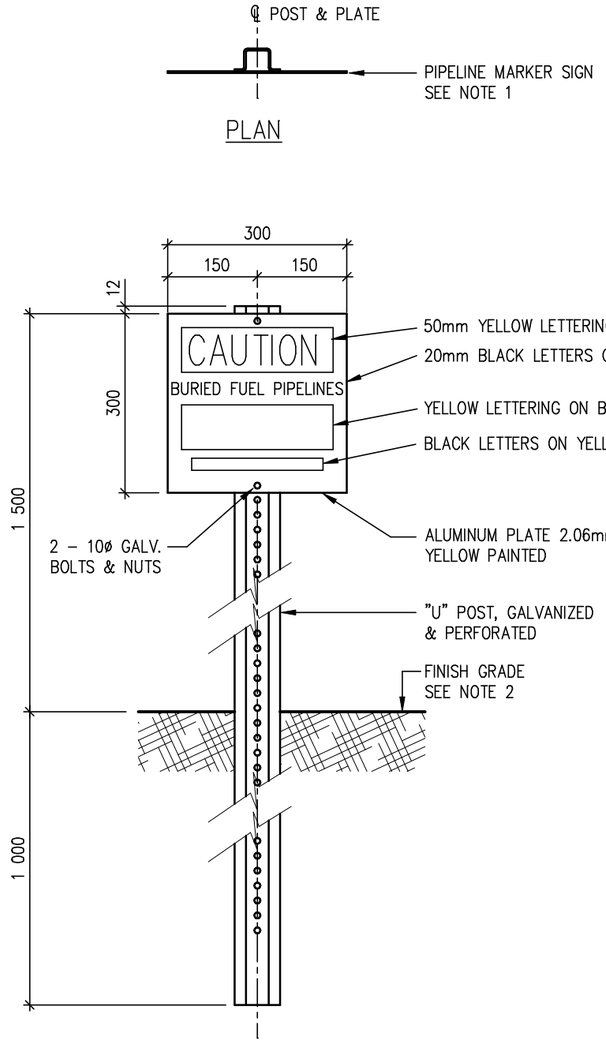
NOTES:

1– ALL STAINLESS STEEL MATERIAL SHALL BE TYPE 304, BOX & DOOR TO BE UNPAINTED, FRONT AND SIDE SURFACES TO BE DISK SMOOTH FINISH.
2– ARRANGEMENT AS SHOWN IS TYPICAL. CABINET SHALL BE WEATHERPROOF CONSTRUCTION
3– SHOP DRAWINGS SHALL BE PROVIDED FOR APPROVAL PRIOR TO FABRICATION

Northwest Territories Public Works & Services

Drawing Title
FIRE EXTINGUISHER CABINET DETAILS

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	AS SHOWN	REE	NT–S18
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/05/11	



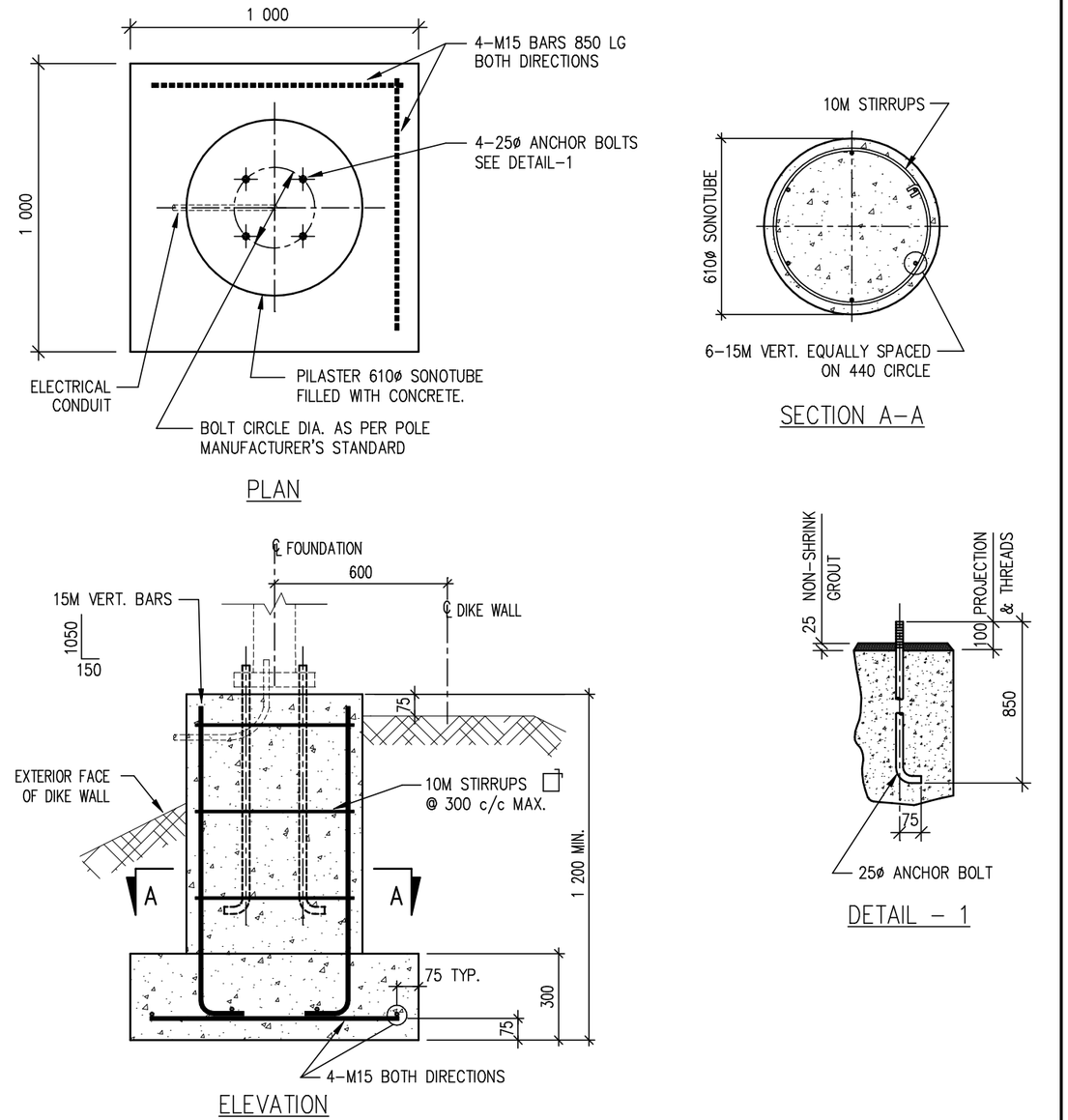
NOTES:

1– FOR LOCATION AND QUANTITY OF SIGNS SEE PARTICULAR PROJECT DRAWINGS.
2– FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

Northwest Territories Public Works & Services

Drawing Title: MARKER SIGN AT BURIED PIPELINES DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	NONE	REE	NT–S19
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/05/11	



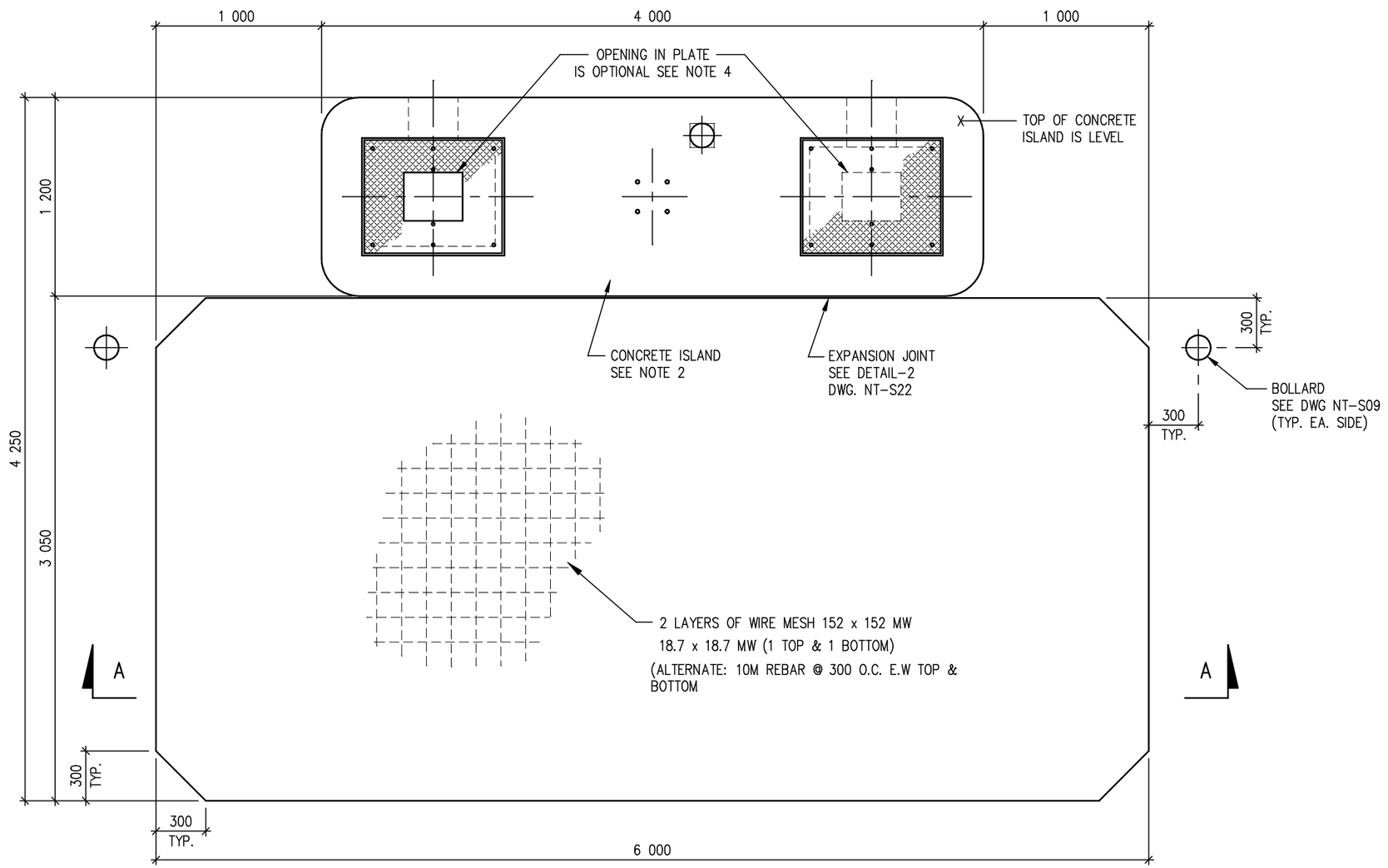
NOTES:

1– FOR CONCRETE & REINFORCING MATERIALS SEE SPECIFICATIONS.
2– ANCHOR BOLTS TO ASTM A307 SPEC.

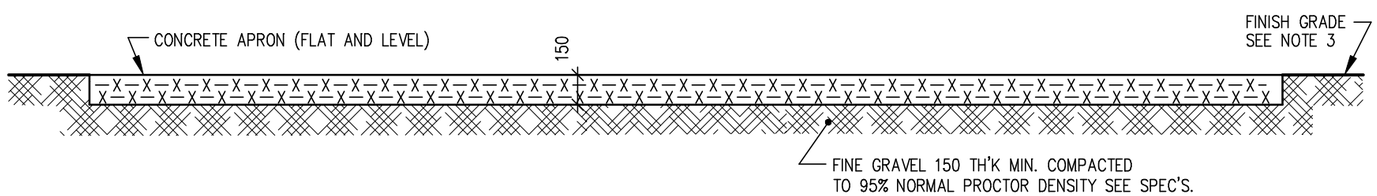
Northwest Territories Public Works & Services

Drawing Title: DIKE AREA LIGHT POLE FOUNDATION PLAN, ELEVATION, SECTION & DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	1:20	REE	NT–S20
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/05/11	



PLAN



SECTION A–A

NOTES:

1– FOR CONCRETE, REBAR, & WIRE MESH MATERIALS SEE SPECIFICATIONS, DIV. 3, SECTION 03200.

2– FOR ISLAND DETAILS SEE DWG. NT–S22.

3– FOR EXISTING & FINISH GRADES SEE PARTICULAR PROJECT DRAWINGS.

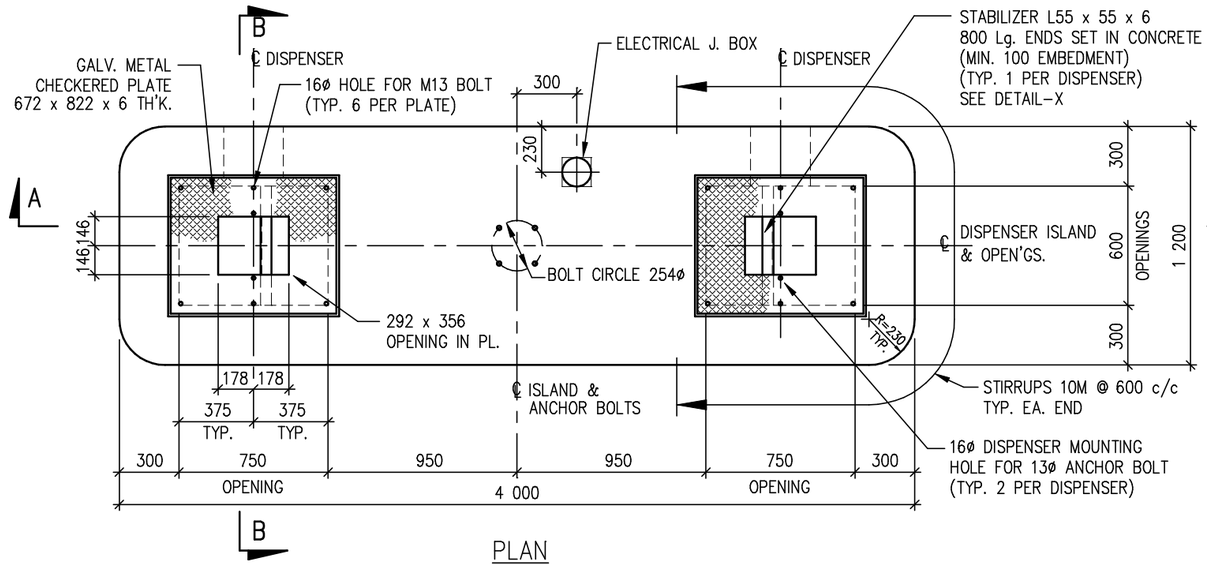
4– ONE OPENING IN PLATE IS REQUIRED FOR EACH DISPENSER PEDESTAL. FOR NUMBER OF DISPENSER PEDESTALS REFER TO PARTICULAR PROJECT DRAWINGS.

Northwest Territories Public Works & Services

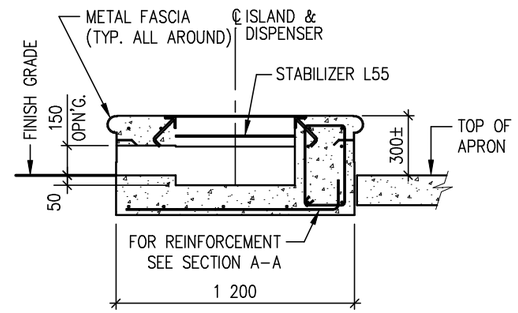
Drawing Title

CONCRETE ISLAND & APRON
PLAN & SECTION

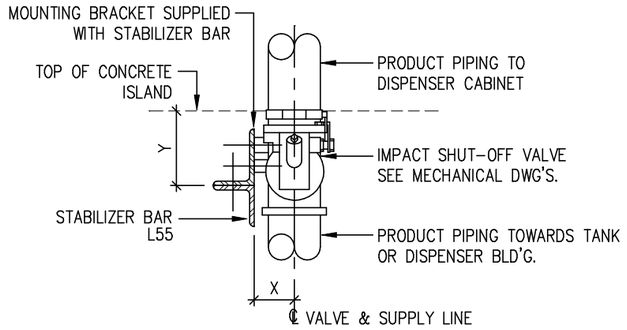
Design	Ver.	Scale
EDZ	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S21	
Revised On		
04/05/11		



PLAN
1 : 30

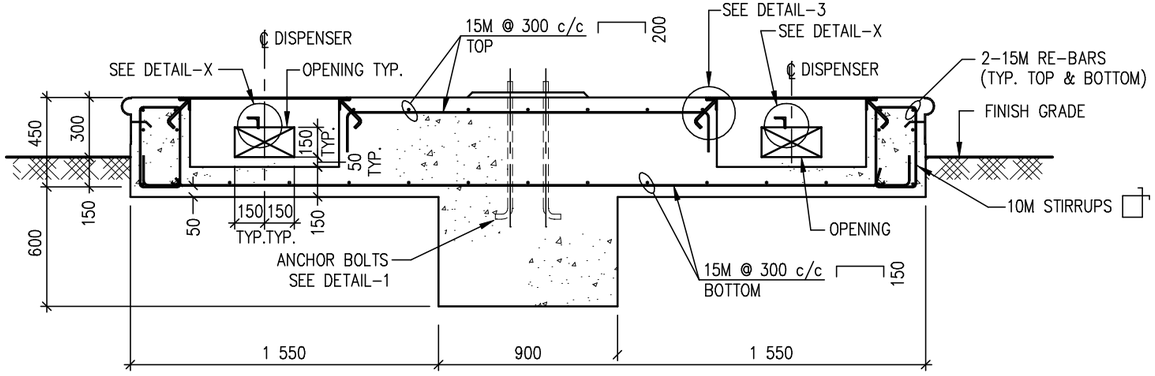


SECTION B–B
1 : 30

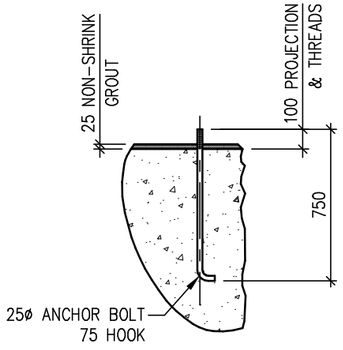


N.B.: DIMENSIONS "X" & "Y" TO SUIT IMPACT SHUT–OFF VALVE

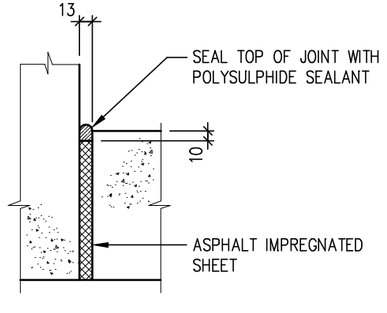
DETAIL – X
N.T.S.



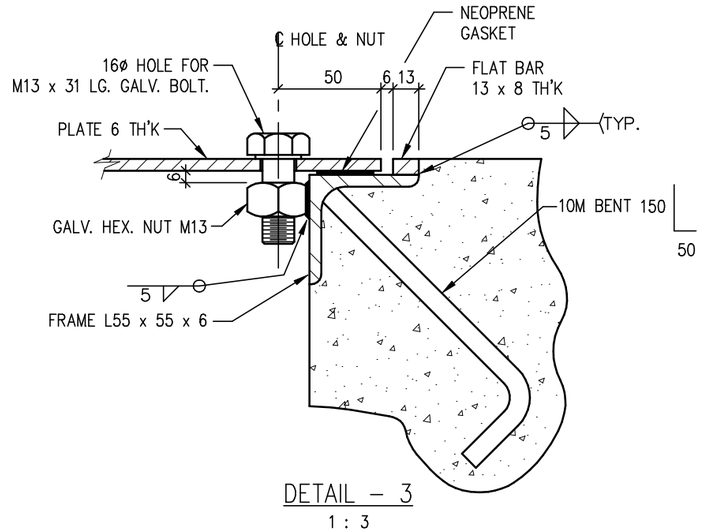
SECTION A–A
1 : 30



DETAIL – 1
1 : 30



DETAIL – 2
1 : 5



DETAIL – 3
1 : 3

NOTES:

1– FOR CONCRETE, REBAR, & WIRE MESH MATERIALS SEE SPECIFICATIONS, DIV. 3, SECTION 03200.

2– FOR APRON DETAILS SEE DWG NT–S21.

3– FOR EXISTING & FINISH GRADES SEE PARTICULAR PROJECT DRAWINGS.

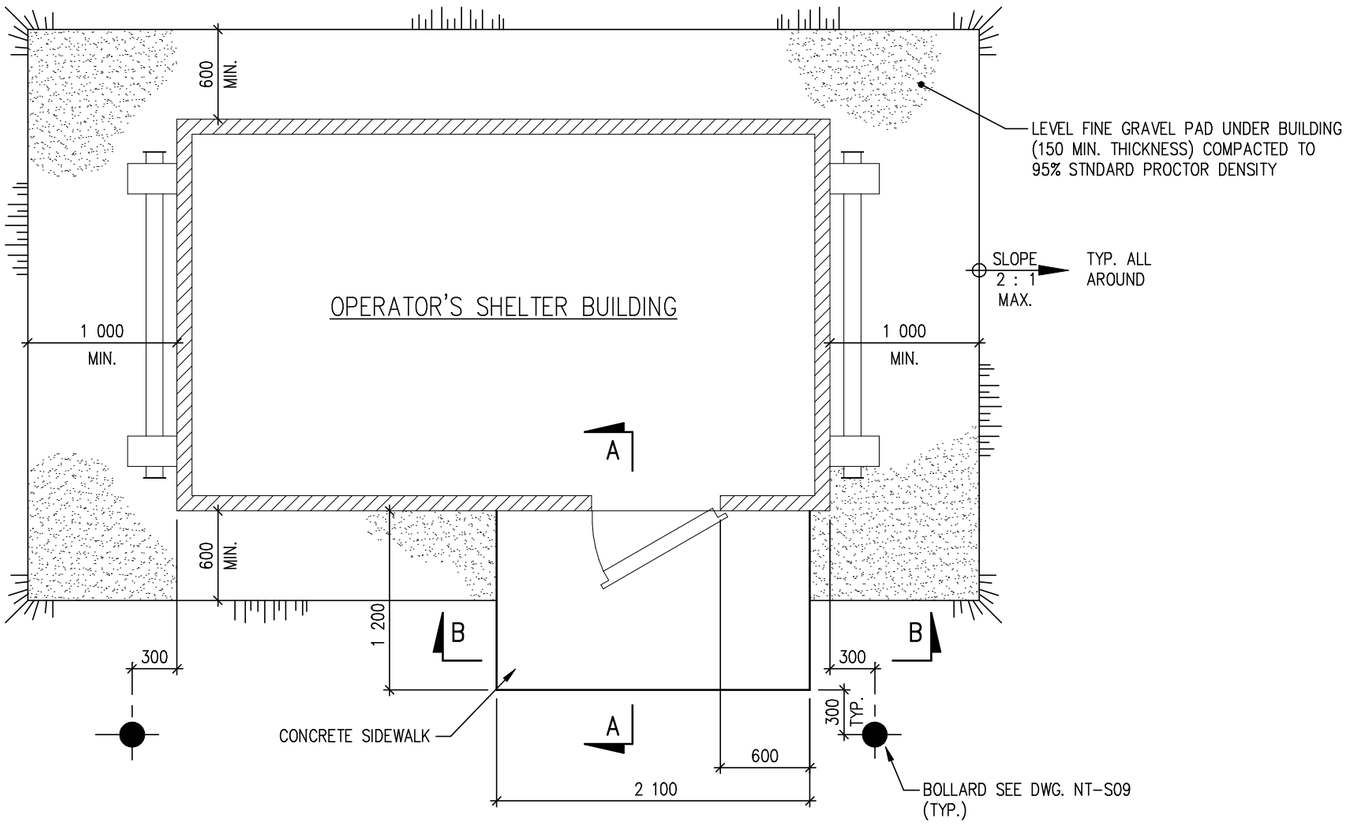
4– ONE OPENING IN PLATE IS REQUIRED FOR EACH DISPENSER PEDESTAL. FOR NUMBER OF DISPENSER PEDESTALS REFER TO PARTICULAR PROJECT DRAWINGS.

Northwest Territories Public Works & Services

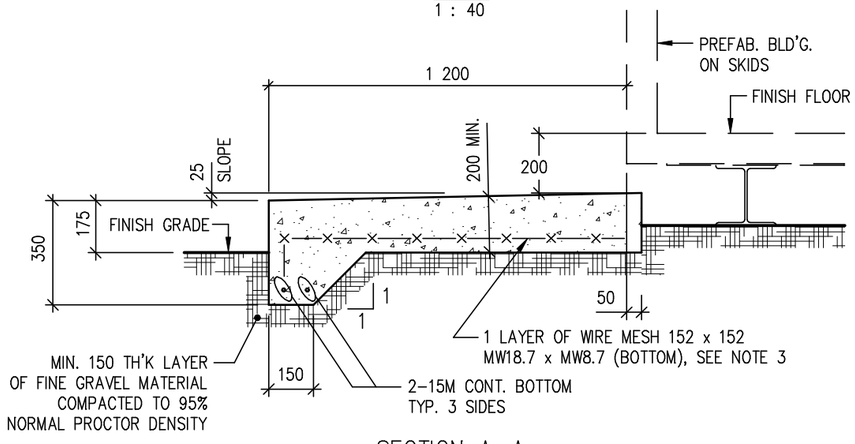
Drawing Title

CONCRETE ISLAND & APRON
PLAN, SECTIONS & DETAILS

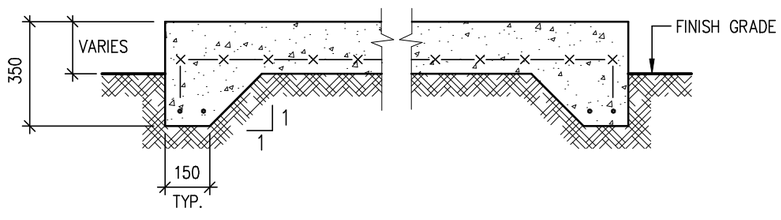
Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S22	
Revised On		
04/05/14		



PLAN
1 : 40



SECTION A-A
1 : 20



SECTION B-B
1 : 20

NOTES:

1- FOR CONCRETE & REINFORCING MATERIAL SEE SPECIFICATIONS, DIV. 3, SECTION 03200 AND 03300.

2- FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

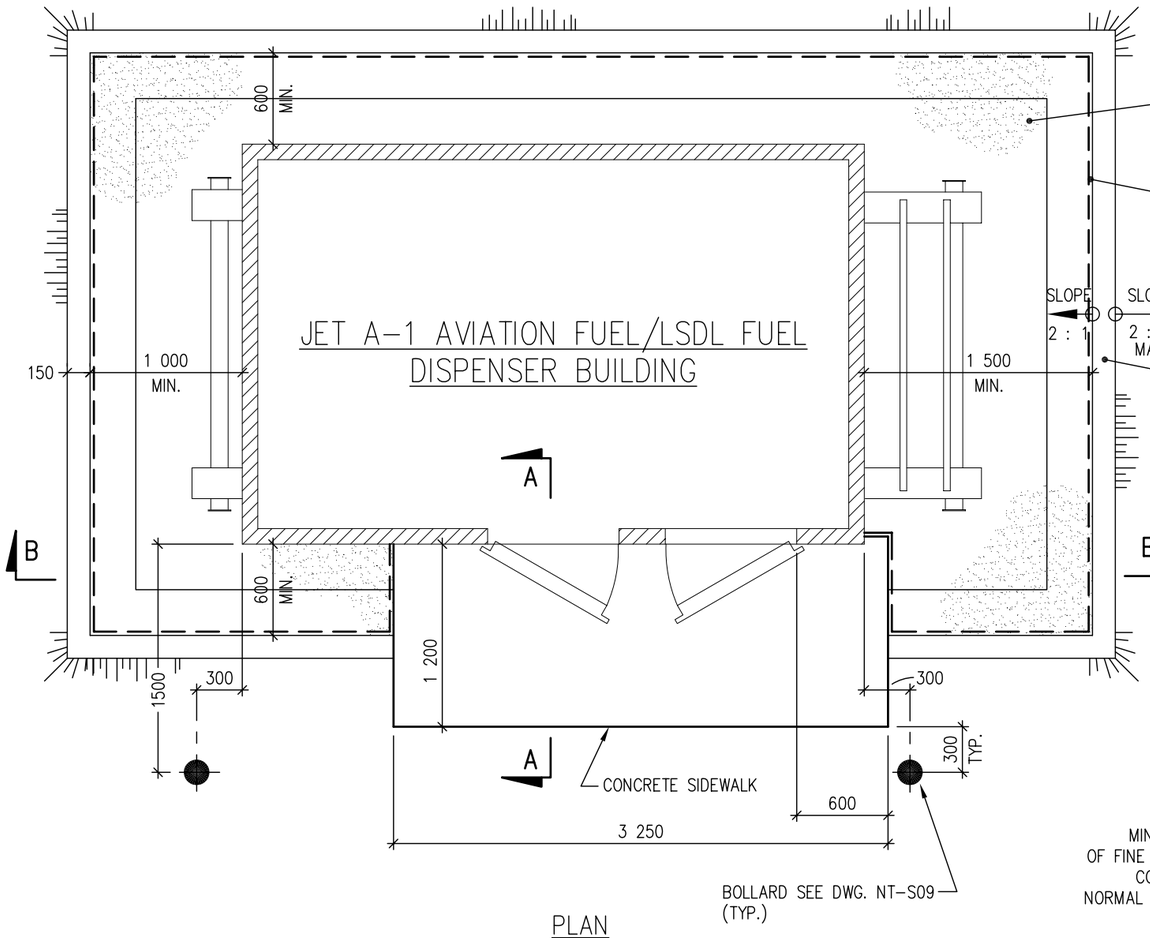
3- 10M @ 300 O.C. E.W. BOTTOM MAY BE USED IN PLACE OF WIRE MESH.

Northwest Territories Public Works & Services

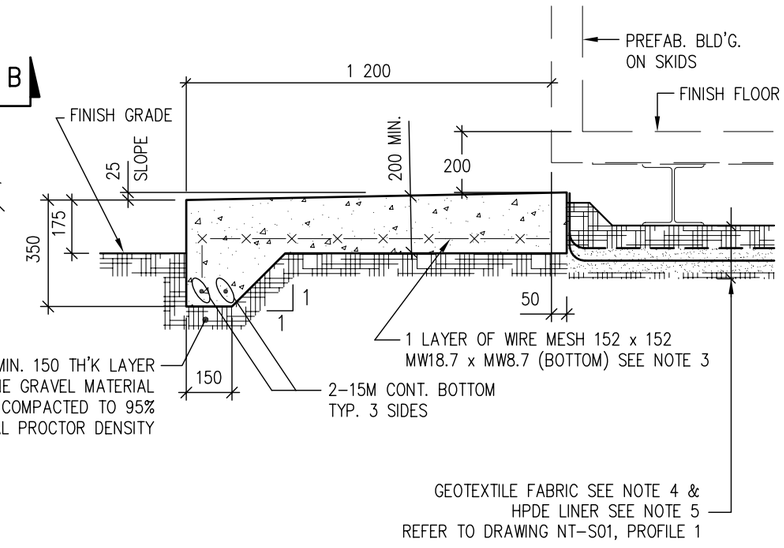
Drawing Title

OPERATOR'S SHELTER BUILDING
CONCRETE SIDEWALK, GRAVEL PAD &
BOLLARDS ARRANGEMENT
PLAN & SECTIONS

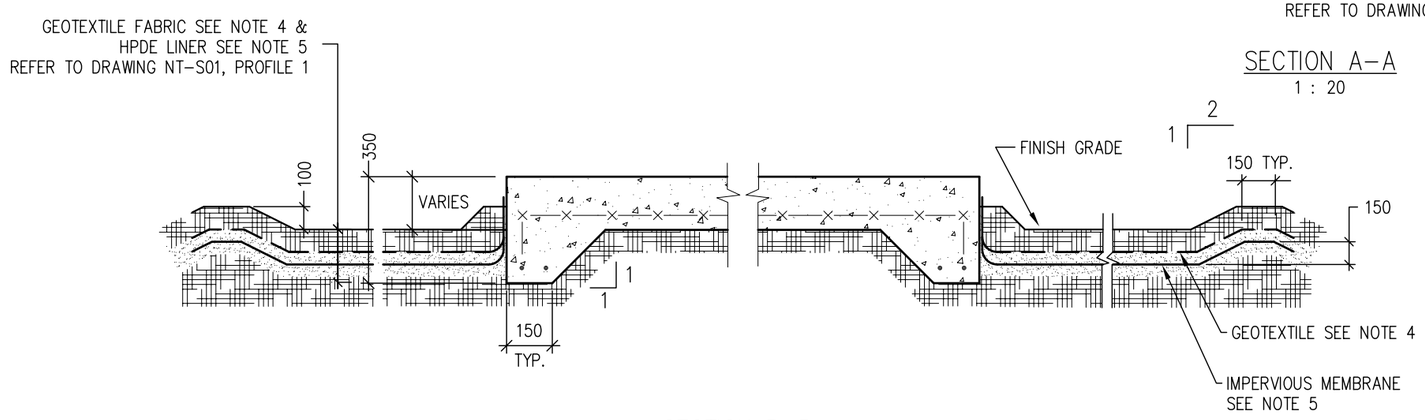
Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT-S23	
Revised On		
04/05/14		



PLAN
1 : 40



SECTION A-A
1 : 20



SECTION B-B
1 : 20

NOTES:

1- FOR CONCRETE & REINFORCING MATERIAL SEE SPECIFICATIONS, DIVISION 3, SECTION 03200 AND 03300.

2- FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- 10M @ 300 O.C. E.W. BOTTOM MAY BE USED IN PLACE OF WIRE MESH.

4- FOR GEOTEXTILE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02270.

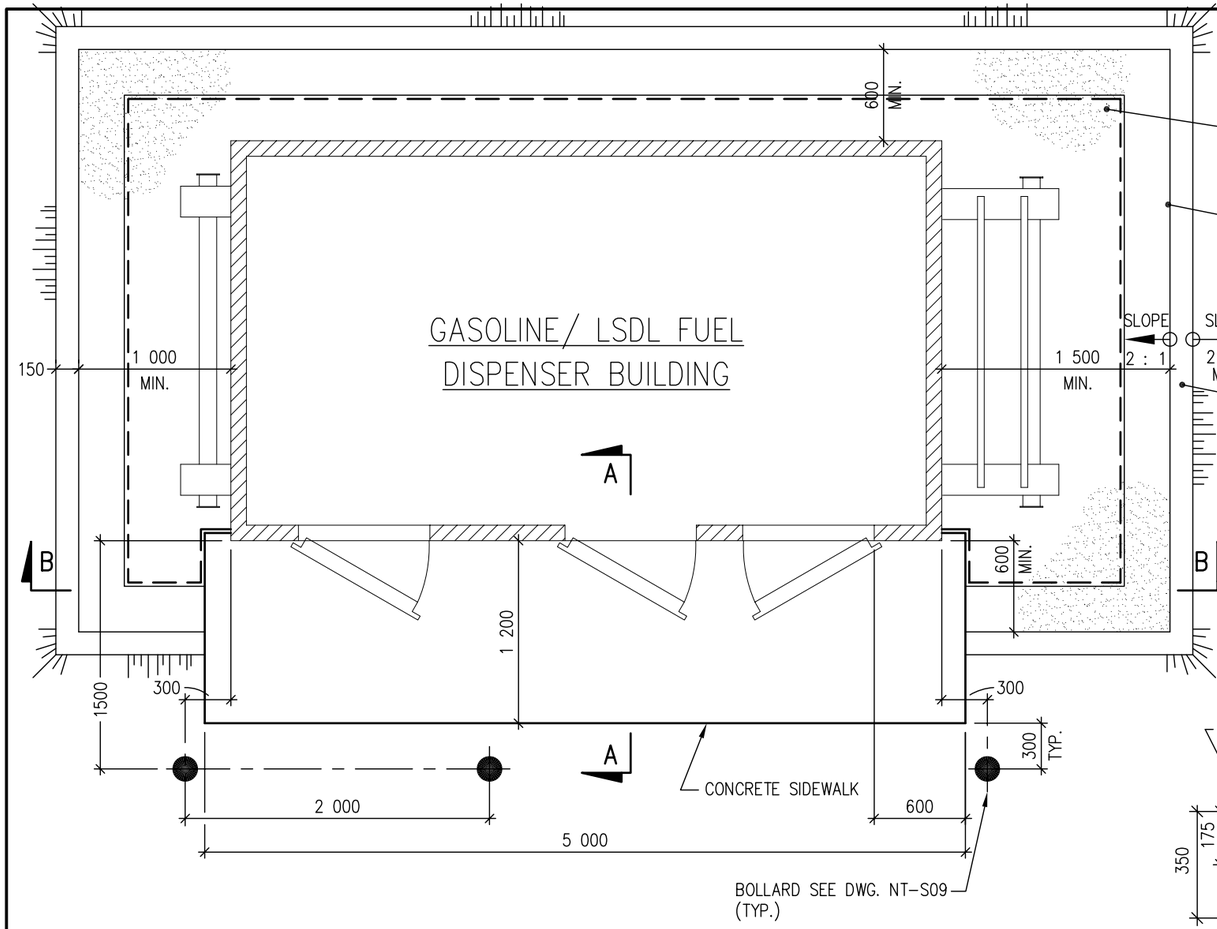
5- FOR MEMBRANE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02592.

Northwest Territories Public Works & Services

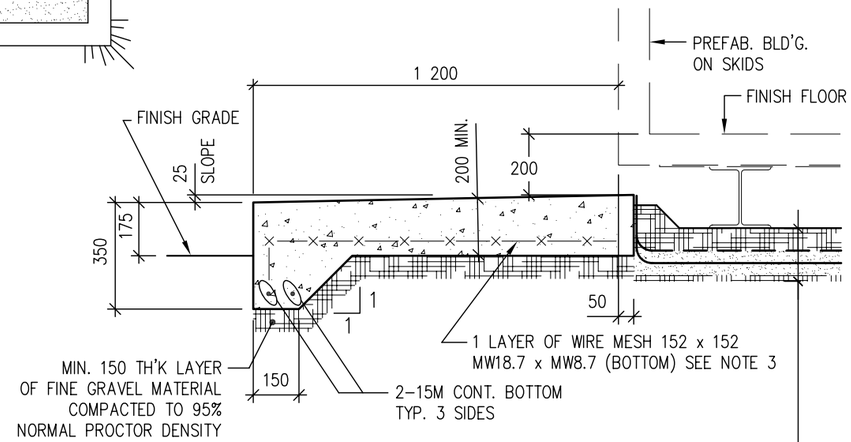
Drawing Title

JET A-1 AVIATION FUEL/LSDL FUEL DISPENSER BUILDING, CONCRETE SIDEWALK, LINER, GRAVEL PAD & BOLLARDS

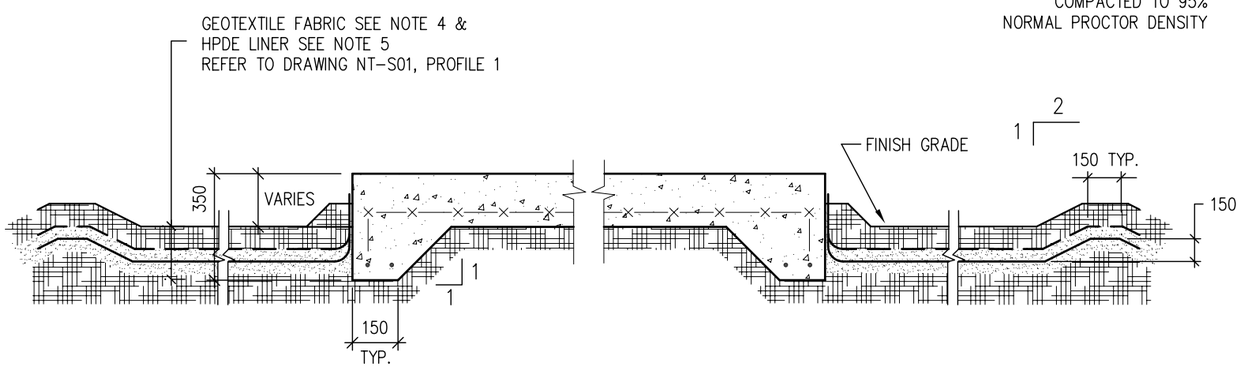
Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT-S24	
Revised On		
04/05/14		



PLAN
1 : 40



SECTION A-A
1 : 20



SECTION B-B
1 : 20

NOTES:

1- FOR CONCRETE & REINFORCING MATERIAL SEE SPECIFICATIONS, DIVISION 3, SECTION 03200 AND 03300.

2- FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- 10M @ 300 O.C. E.W. BOTTOM MAY BE USED IN PLACE OF WIRE MESH.

4- FOR GEOTEXTILE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02270.

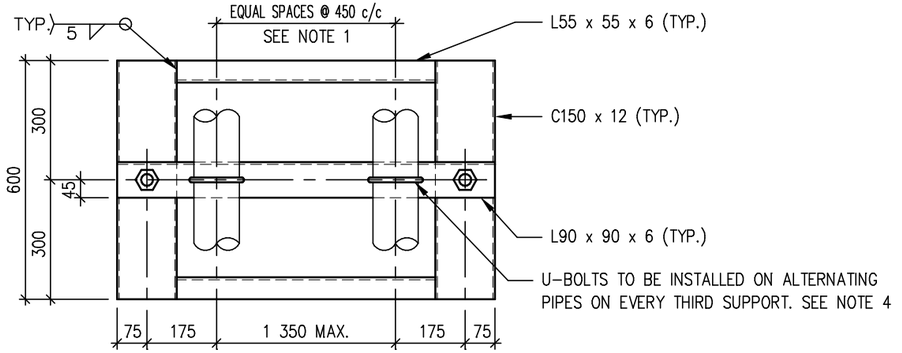
5- FOR MEMBRANE MATERIAL SEE SPECIFICATIONS, DIVISION 2, SECTION 02592.

Northwest Territories Public Works & Services

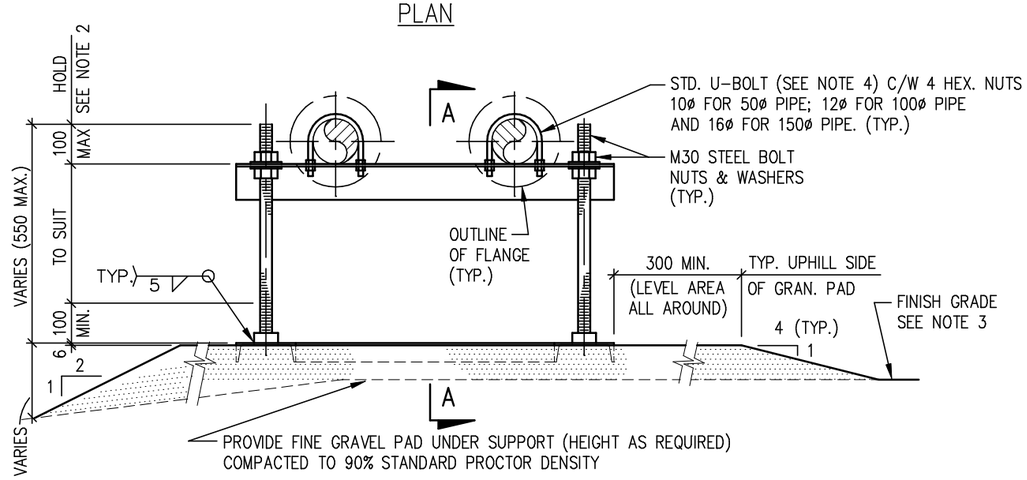
Drawing Title

GASOLINE / LSDL FUEL OIL
DISPENSER BUILDING
CONCRETE SIDEWALK, GRAVEL PAD, LINER
& BOLLARDS ARRANGEMENT
PLAN & SECTIONS

Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT-S25	
Revised On		
04/05/14		

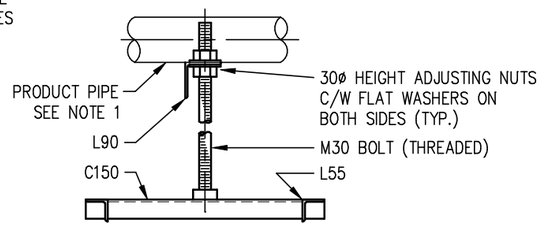


PLAN



ELEVATION

NOTE:
FOR SLOPING GROUND USE
2:1 FINISH SLOPE AT SIDES
OF GRAVEL PAD (TYP.)



SECTION A–A

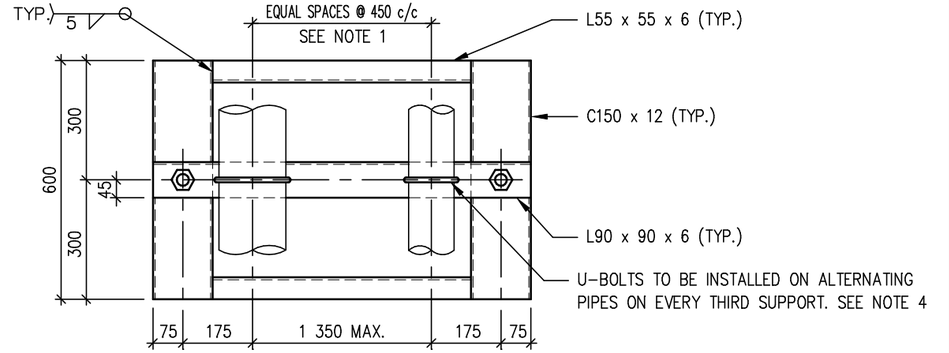
NOTES:

1– FOR NUMBER & SIZE OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.
2– BOLTS TO BE CUT AS SHOWN AFTER INSTALLATION AND FINAL ADJUSTMENT.
3– FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.
4– U–BOLTS TO BE 25 mm OVERSIZE TO ALLOW FREE EXPANSION OF THE PIPING.

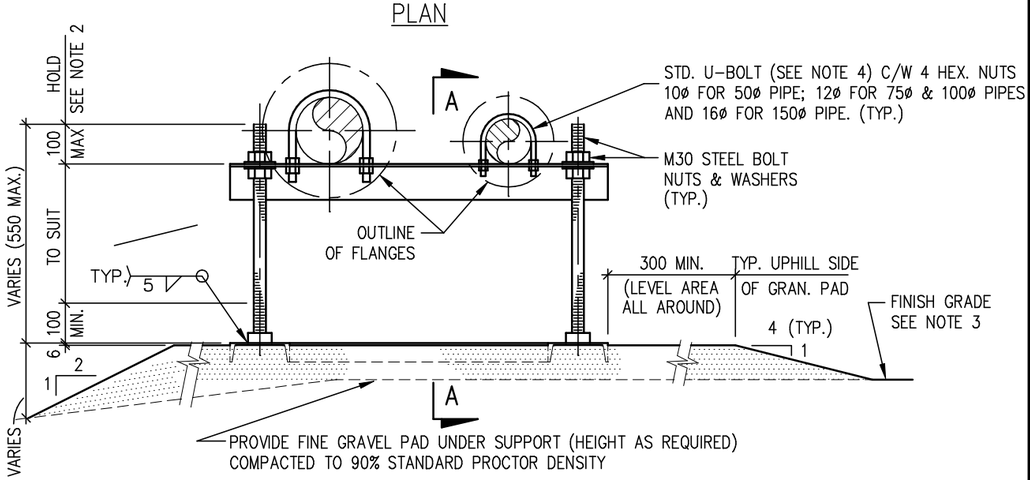
Northwest Territories Public Works & Services

Drawing Title
PIPE SUPPORT – TYPE 1
(PIPES SAME DIAMETER AND SAME BOTTOM OF PIPE ELEVATION)

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	1 : 15	REE	NT–S27
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/05/14	

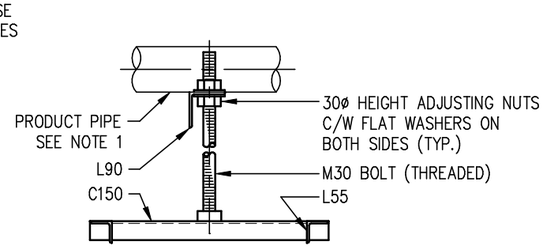


PLAN



ELEVATION

NOTE:
FOR SLOPING GROUND USE
2:1 FINISH SLOPE AT SIDES
OF GRAVEL PAD (TYP.)



SECTION A–A

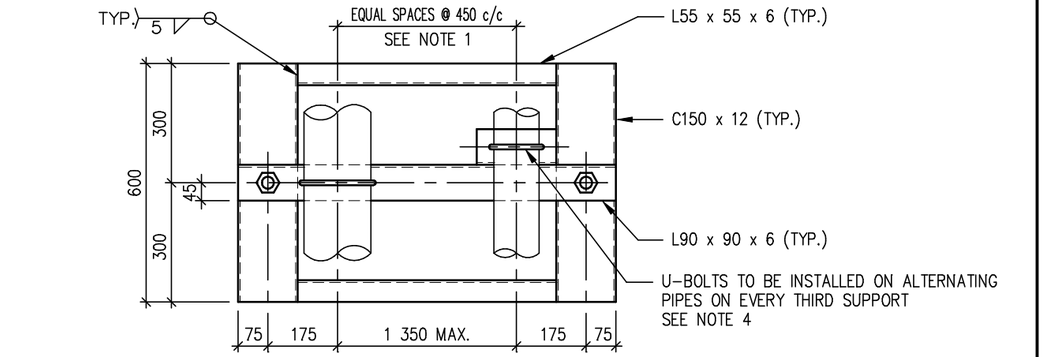
NOTES:

1– FOR NUMBER & SIZE OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.
2– BOLTS TO BE CUT AS SHOWN AFTER INSTALLATION AND FINAL ADJUSTMENT.
3– FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.
4– U–BOLTS TO BE 25 mm OVERSIZE TO ALLOW FREE EXPANSION OF THE PIPING.

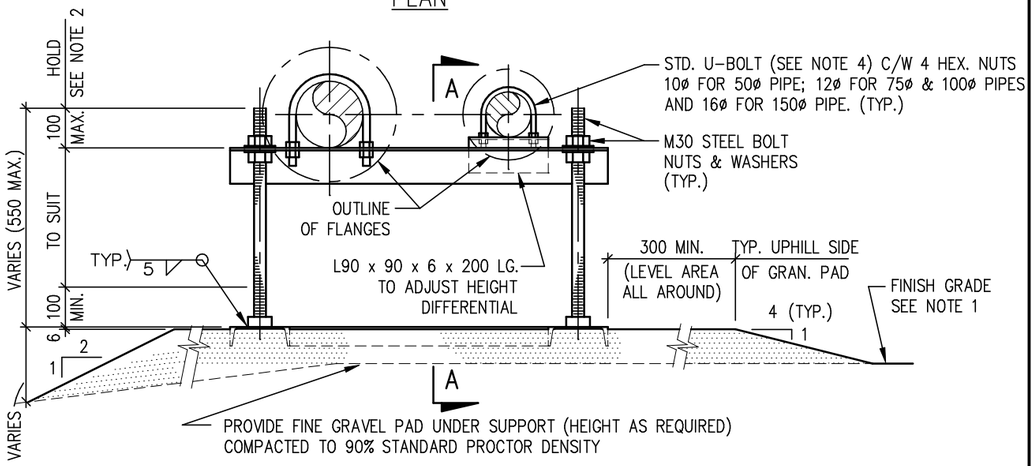
Northwest Territories Public Works & Services

Drawing Title
PIPE SUPPORT – TYPE 2
(PIPES DIFFERENT DIAMETER AND SAME BOTTOM OF PIPE ELEVATION)

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	1 : 15	REE	NT–S28
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/05/14	

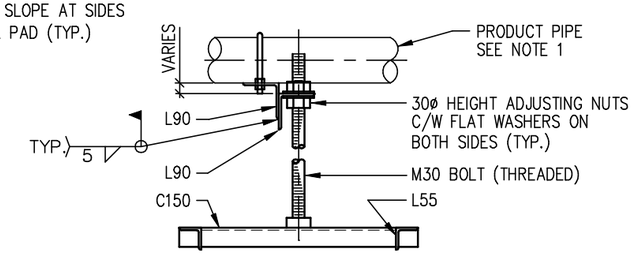


PLAN



ELEVATION

NOTE:
FOR SLOPING GROUND USE
2:1 FINISH SLOPE AT SIDES
OF GRAVEL PAD (TYP.)



SECTION A–A

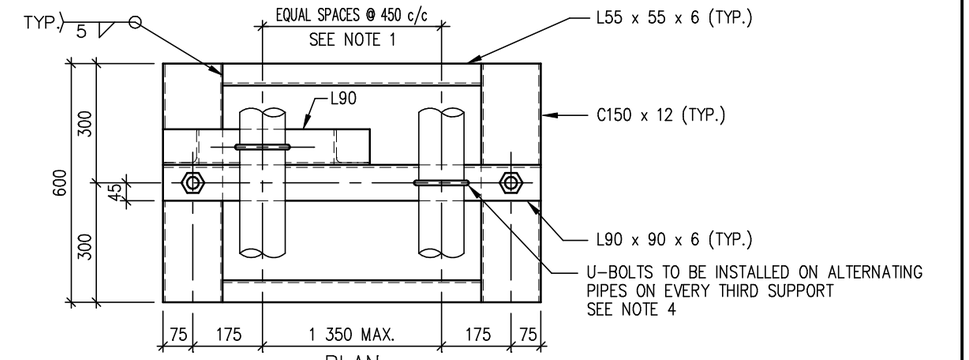
NOTES:

1– FOR NUMBER & SIZE OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.
2– BOLTS TO BE CUT AS SHOWN AFTER INSTALLATION AND FINAL ADJUSTMENT.
3– FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.
4– U–BOLTS TO BE 25 mm OVERSIZE TO ALLOW FREE EXPANSION OF THE PIPING.

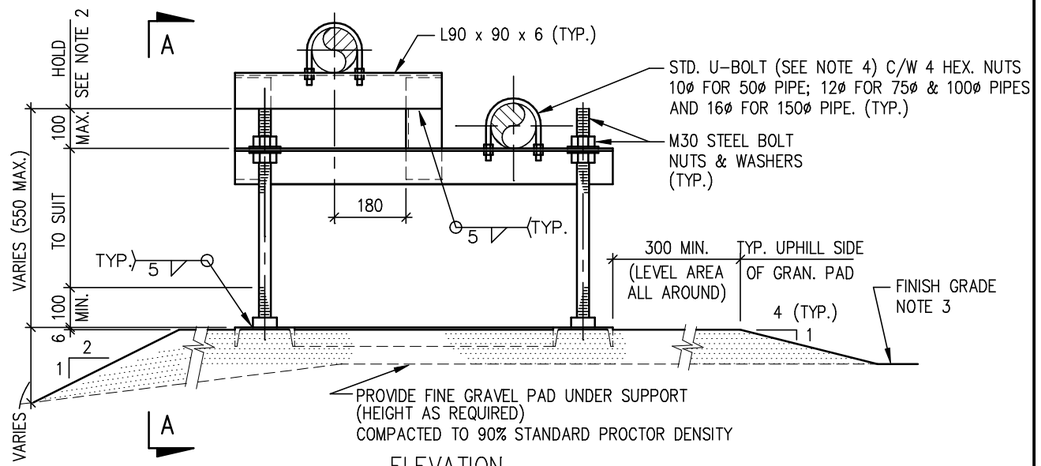
Northwest Territories Public Works & Services

Drawing Title
PIPE SUPPORT – TYPE 3
(PIPES DIFFERENT DIAMETER AND SAME CENTRE OF PIPE ELEVATION)

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	1 : 15	REE	NT–S29
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/05/14	

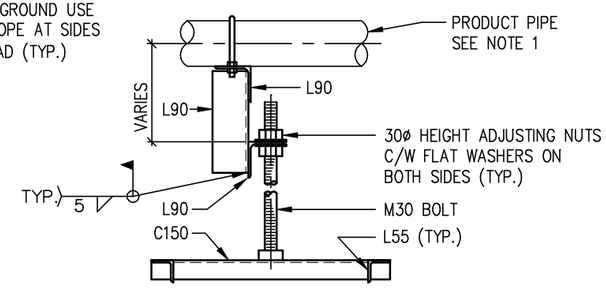


PLAN



ELEVATION

NOTE:
FOR SLOPING GROUND USE
2:1 FINISH SLOPE AT SIDES
OF GRAVEL PAD (TYP.)



SECTION A–A

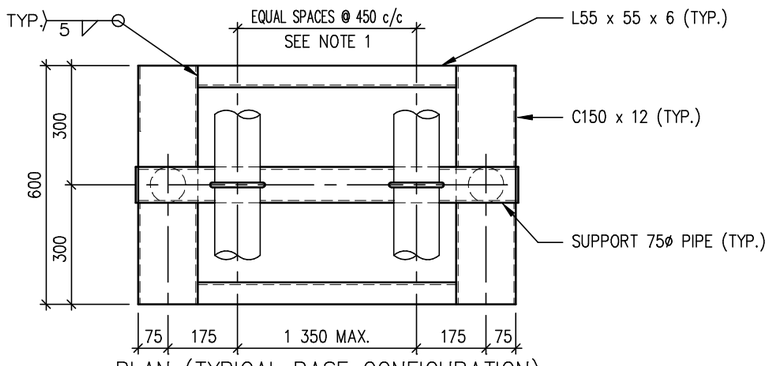
NOTES:

1– FOR NUMBER & SIZE OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.
2– BOLTS TO BE CUT AS SHOWN AFTER INSTALLATION AND FINAL ADJUSTMENT.
3– FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.
4– U–BOLTS TO BE 25 mm OVERSIZE TO ALLOW FREE EXPANSION OF THE PIPING.

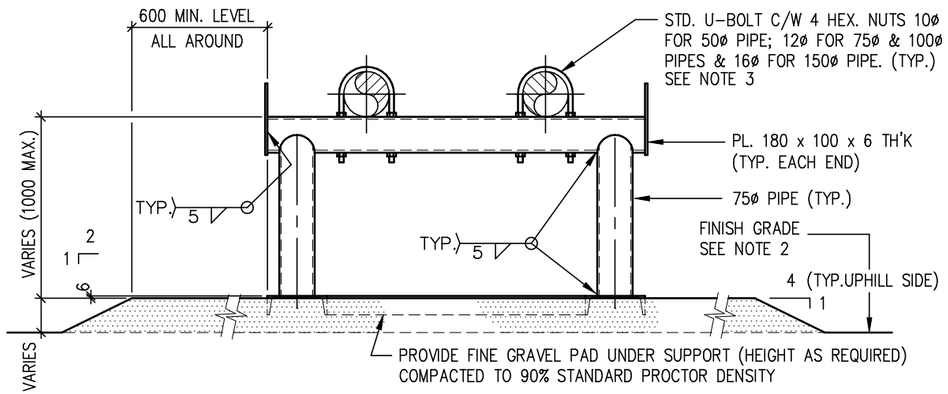
Northwest Territories Public Works & Services

Drawing Title
PIPE SUPPORT – TYPE 4
(PIPES SAME DIAMETER AND DIFFERENT CENTRE OF PIPE ELEVATION

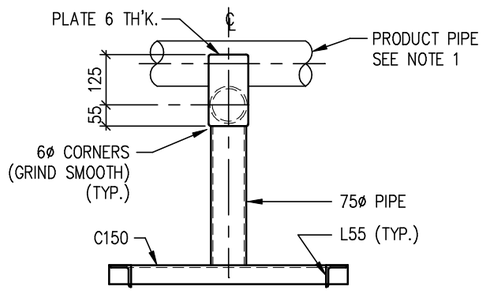
Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	1 : 15	REE	NT–S30
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/05/14	



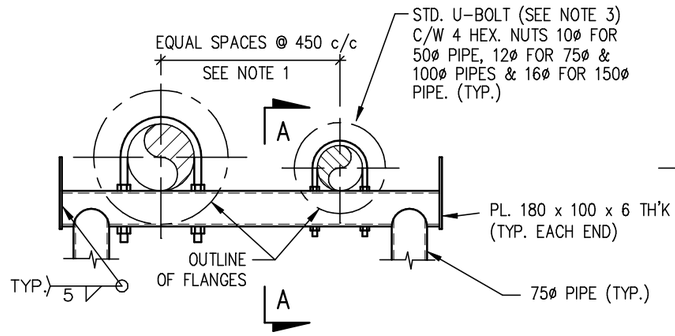
PLAN (TYPICAL BASE CONFIGURATION)



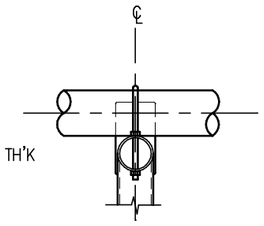
TYPE 5 SUPPORT (TYPICAL BASE ELEVATION)



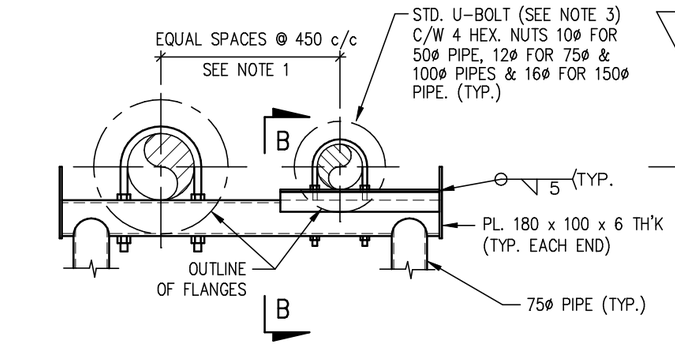
TYPE 5 SIDE ELEVATION (TYPICAL SIDE ELEVATION)



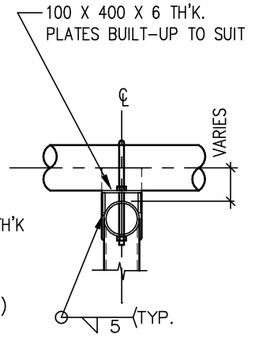
PIPE SUPPORT TYPE 6–ELEVATION
PIPES DIFFERENT DIAMETER AND
SAME BOTTOM OF PIPE ELEVATION



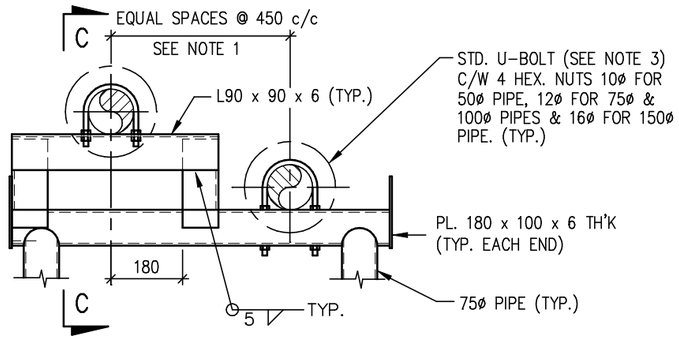
SECTION A–A



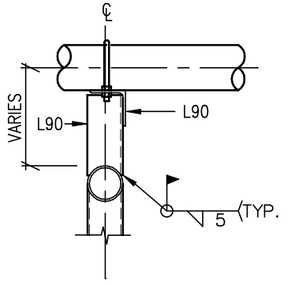
PIPE SUPPORT TYPE 7–ELEVATION
PIPES DIFFERENT DIAMETER AND
SAME CENTRE OF PIPE ELEVATION



SECTION B–B



PIPE SUPPORT TYPE 8–ELEVATION
PIPES SAME DIAMETER BUT DIFFERENT
CENTRE OF PIPE ELEVATION



SECTION C–C

NOTES:

1– FOR NUMBER & SIZE OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.

2– FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

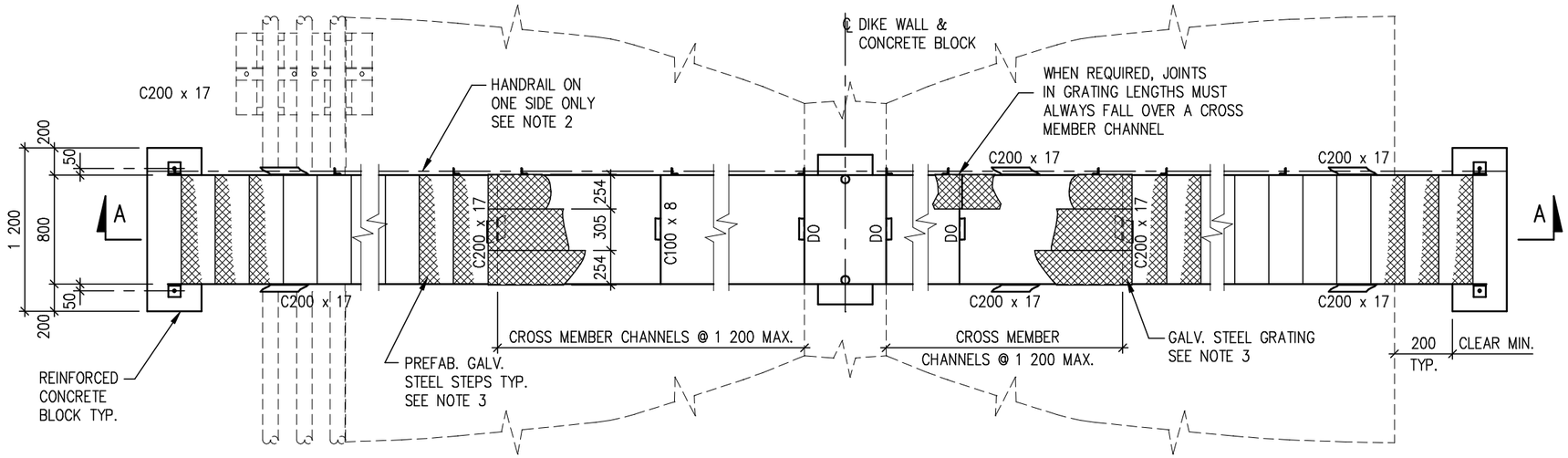
3– LOOSE 25mm OVERSIZE U–BOLT GUIDE PROVIDED ON ALTERNATE PIPELINES ON EVERY THIRD SUPPORT.

Northwest Territories Public Works & Services

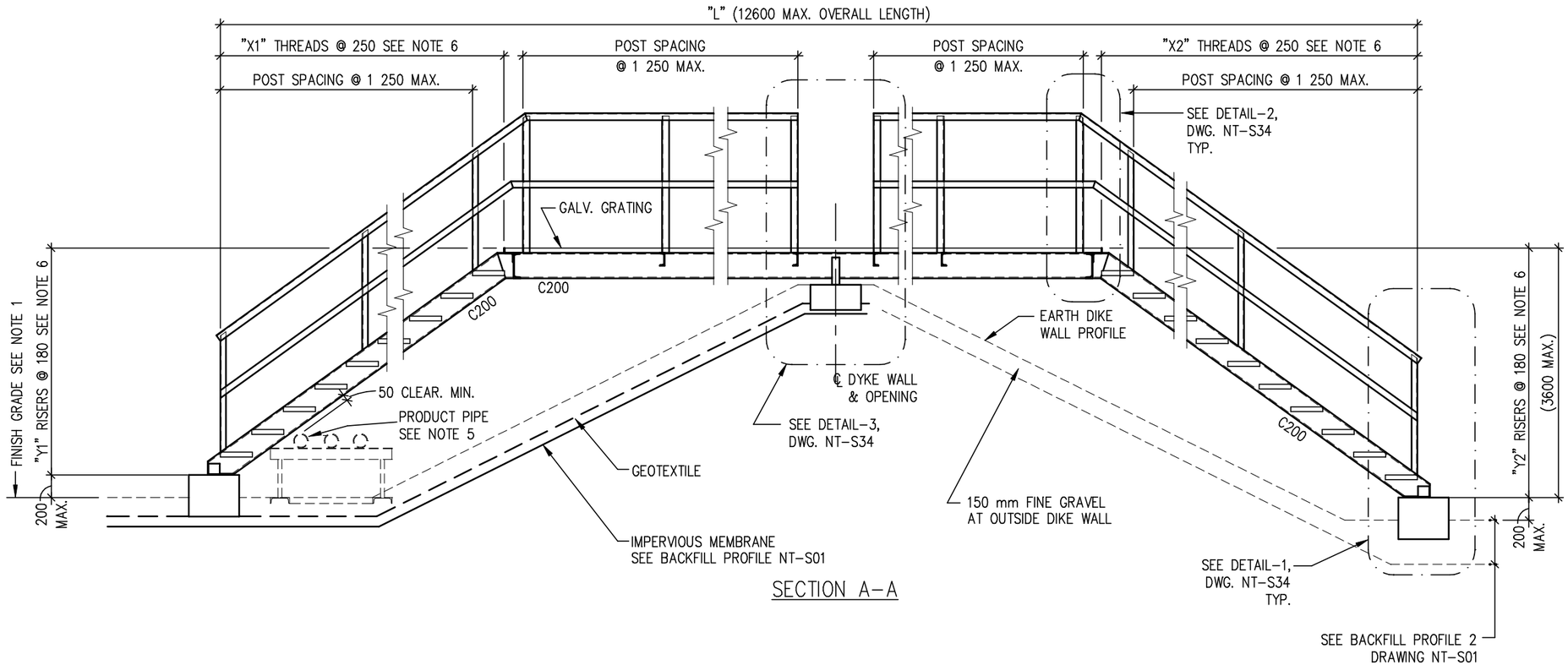
Drawing Title

PIPE SUPPORT–TYPE 5, 6, 7, 8
(FOR ABOVEGROUND PIPELINES ONLY)

Design	Ver.	Scale
EDZ	EDZ	1:15
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT–S31	
Revised On		
04/09/07		



PLAN



SECTION A-A

NOTES:

1- FOR EXISTING & FINISH GRADES SEE PARTICULAR PROJECT DRAWINGS.

2- FOR POSITION OF HANDRAIL SEE PARTICULAR PROJECT DRAWINGS.

3- FOR GRATING AND PREFABRICATED STEPS MATERIAL SEE SPECIFICATIONS, DIVISION 5, SECTION 05500.

4- FOR STEEL, CONCRETE AND REINFORCING MATERIALS SEE SPECIFICATIONS, DIVISION 3 AND DIVISION 5, SECTION 05120.

5- FOR NUMBER, SIZE AND LOCATION OF PRODUCT PIPING SEE PARTICULAR PROJECT DRAWINGS.

6- ACTUAL VALUES FOR "L", "X1", "X2", "Y1" AND "Y2" SHALL BE DETERMINED BY STILE FABRICATOR BASED ON REQUIREMENTS OF PARTICULAR PROJECT DRAWINGS.

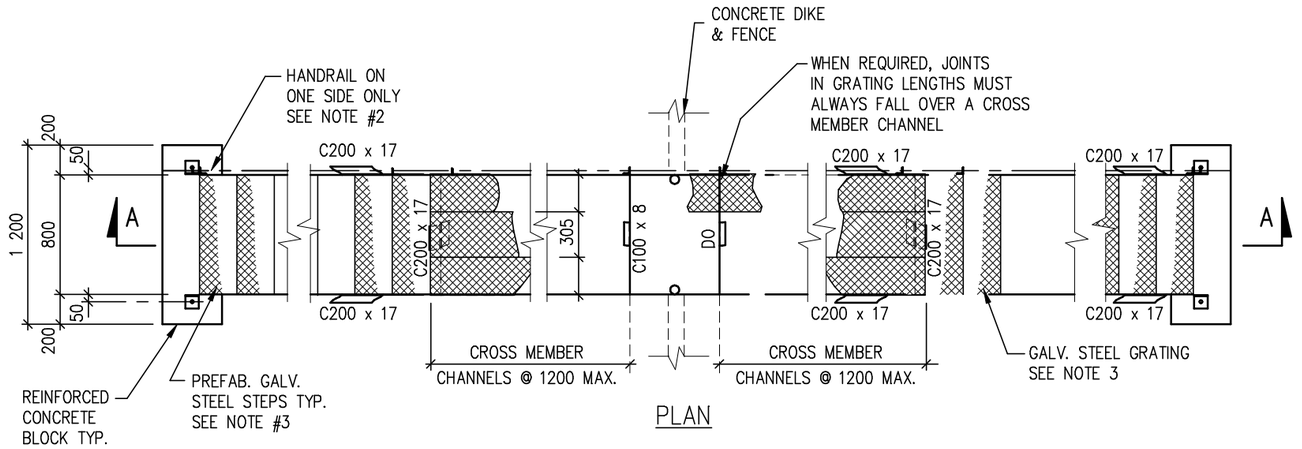
7- STILE FABRICATOR SHALL PROVIDE PROPER SHOP DRAWINGS OF STILES FOR APPROVAL PRIOR TO FABRICATION AS PER SPECIFICATIONS.

Northwest Territories Public Works & Services

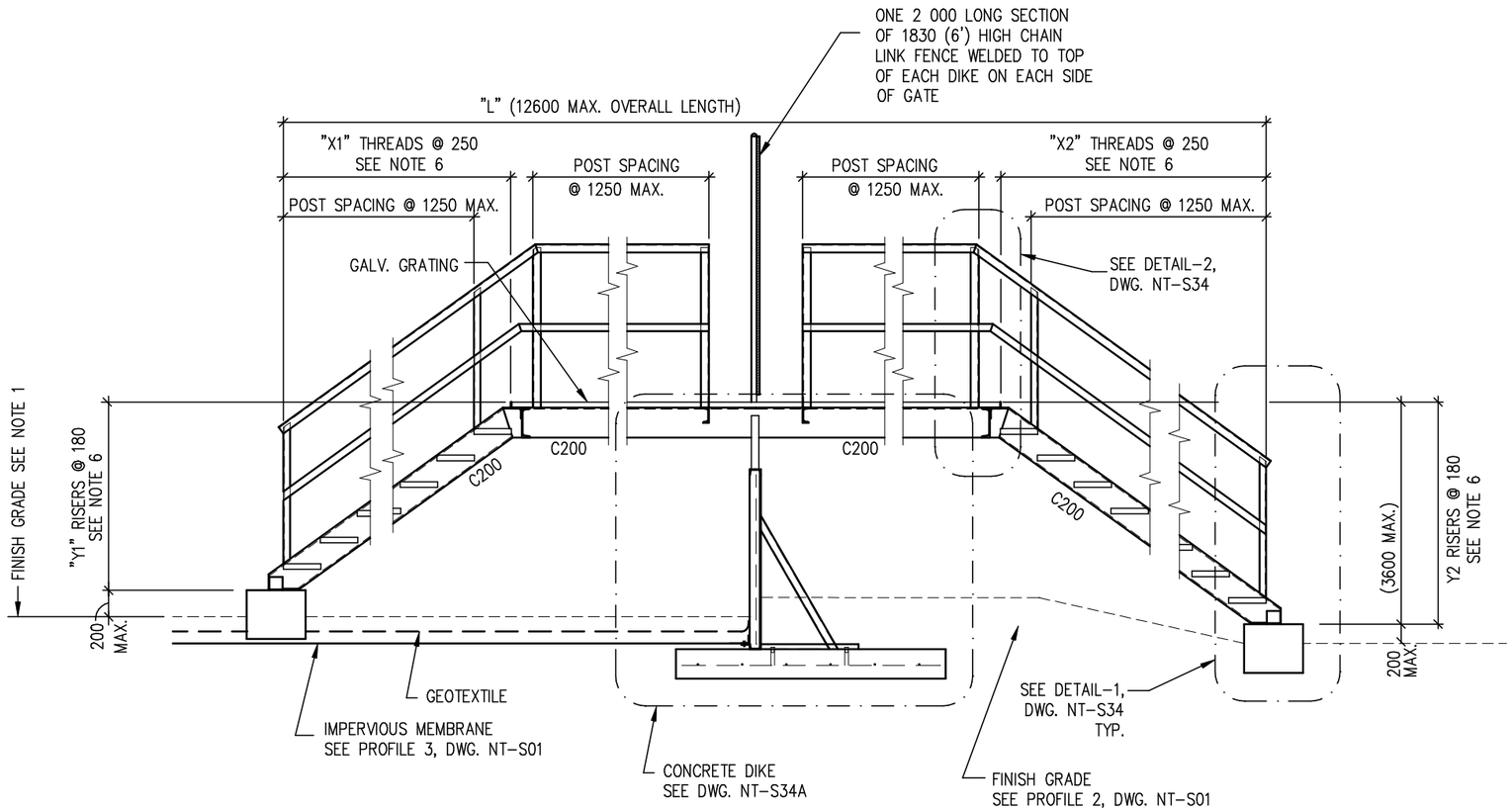
Drawing Title

TYPE 1 STILE
(OVER DIKE WALLS)
PLAN & SECTION

Design	Ver.	Scale
EDZ	EDZ	1 : 40
Drawn	Appr.	Date
CAD/SL		94/04/29
Revised By	Drawing No.	
REE	NT-S32	
Revised On		
04/09/07		



PLAN



SECTION A-A

NOTES:

1- FOR EXISTING & FINISH GRADES SEE PARTICULAR PROJECT DRAWINGS.

2- FOR POSITION OF HANDRAIL SEE PARTICULAR PROJECT DRAWINGS.

3- FOR GRATING AND PREFABRICATED STEPS MATERIAL SEE SPECIFICATIONS, DIVISION 5, SECTION 05500.

4- FOR STEEL, CONCRETE AND REINFORCING MATERIALS SEE SPECIFICATIONS, DIVISION 3 AND DIVISION 5, SECTION 05120.

5- FOR NUMBER, SIZE AND LOCATION OF PRODUCT PIPING SEE PARTICULAR PROJECT DRAWINGS.

6- ACTUAL VALUES FOR "L", "X1", "X2", "Y1" AND "Y2" SHALL BE DETERMINED BY STILE FABRICATOR BASED ON REQUIREMENTS OF PARTICULAR PROJECT DRAWINGS.

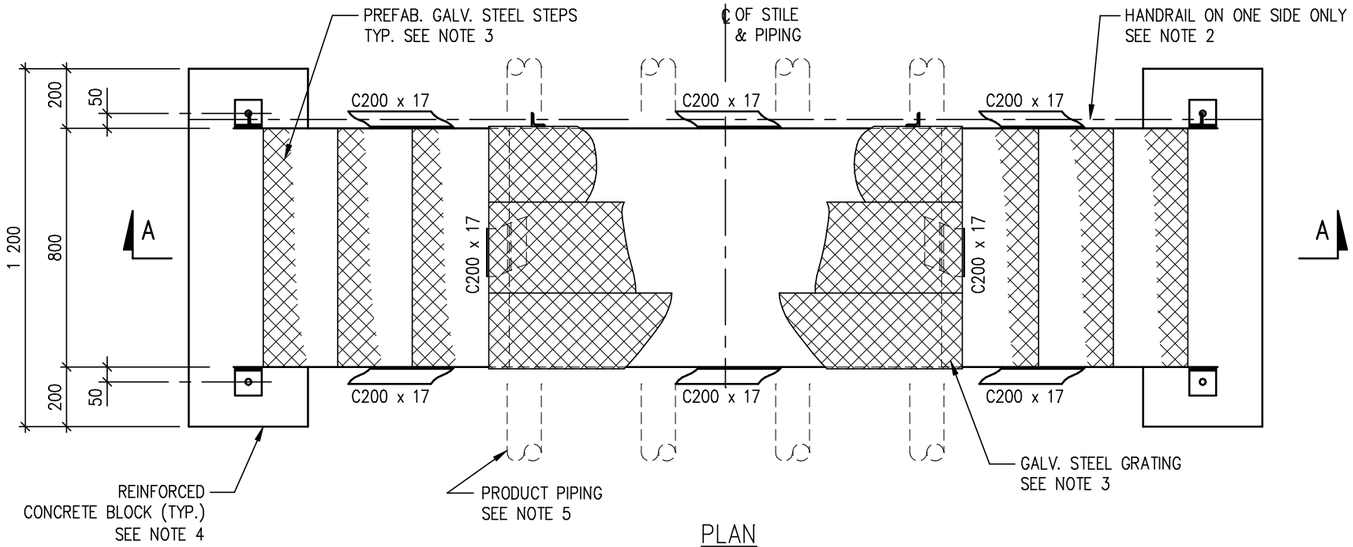
7- STILE FABRICATOR SHALL PROVIDE PROPER SHOP DRAWINGS OF STILES FOR APPROVAL PRIOR TO FABRICATION AS PER SPECIFICATIONS.

Northwest Territories Public Works & Services

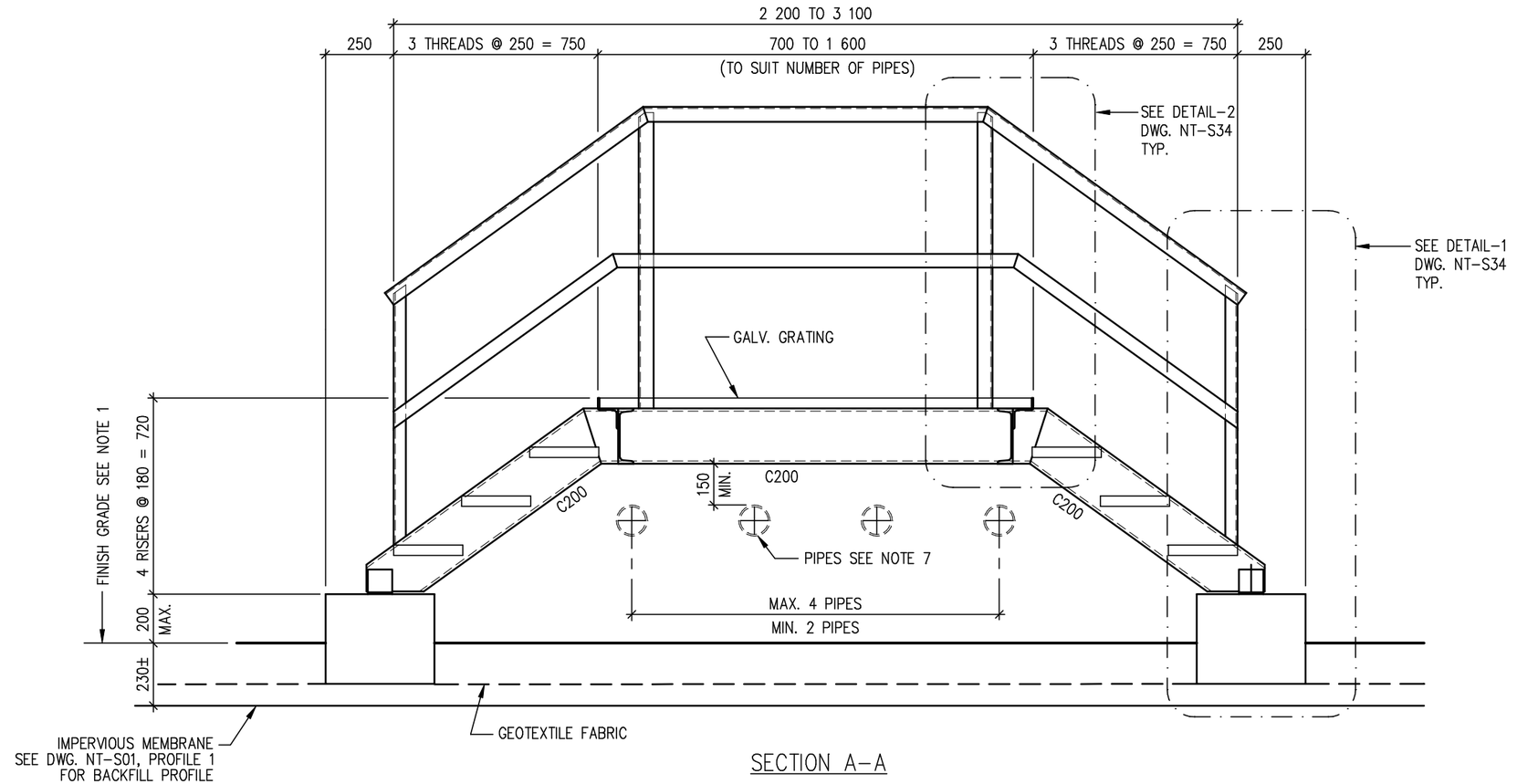
Drawing Title

TYPE 1 STILE
(OVER CONCRETE DIKE WALLS)
PLAN & SECTION

Design	Ver.	Scale
EDZ	EDZ	1 : 40
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S32A	
Revised On		
04/09/07		



PLAN



SECTION A-A

NOTES:

1- FOR EXISTING & FINISH GRADES SEE PARTICULAR PROJECT DRAWINGS.

2- FOR POSITION OF HANDRAIL SEE PARTICULAR PROJECT DRAWINGS.

3- FOR GRATING AND PREFABRICATED STEPS MATERIAL SEE SPECIFICATIONS, DIVISION 5, SECTION 05500.

4- FOR STEEL, CONCRETE AND REINFORCING MATERIALS SEE SPECIFICATIONS, DIVISION 3 AND DIVISION 5, SECTION 05120.

5- FOR NUMBER, SIZE AND LOCATION OF PRODUCT PIPING SEE PARTICULAR PROJECT DRAWINGS.

6- STILE FABRICATOR TO PROVIDE PROPER SHOP DRAWINGS OF STILE FOR APPROVAL PRIOR TO FABRICATION AS PER SPECIFICATIONS.

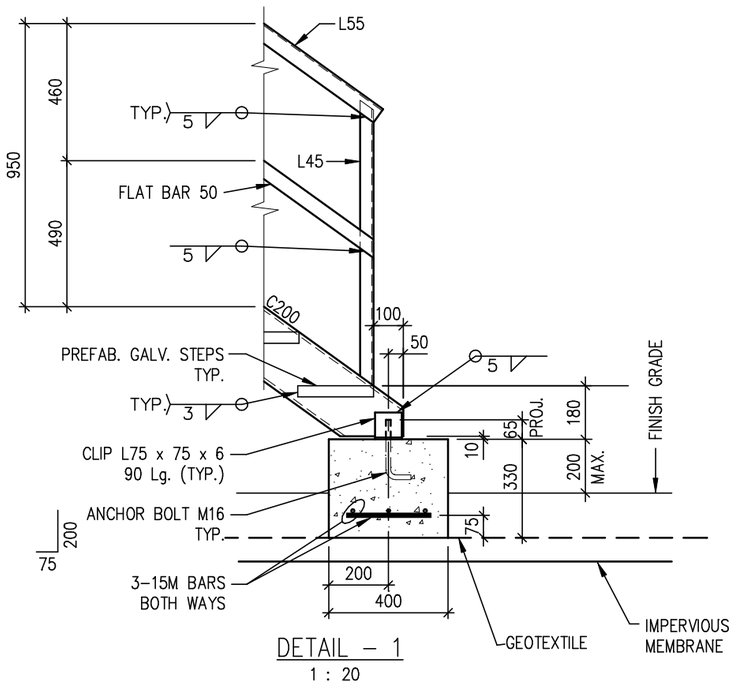
7- FOR PIPE SUPPORT DETAILS SEE DRAWINGS NT-S27 TO NT-S31.

Northwest Territories Public Works & Services

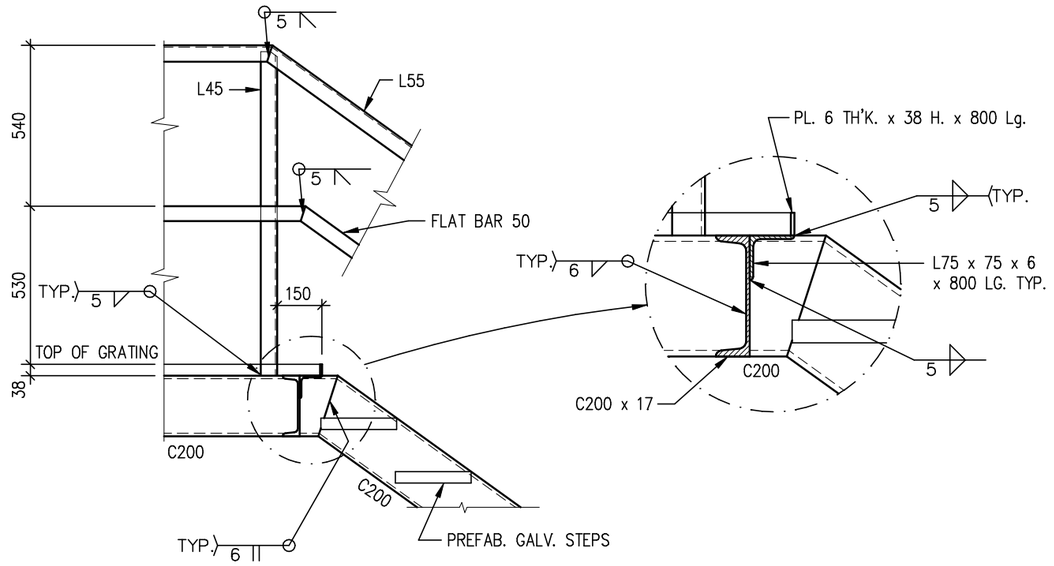
Drawing Title

TYPE 2 STILE
(OVER PRODUCT PIPING)
PLAN & SECTION

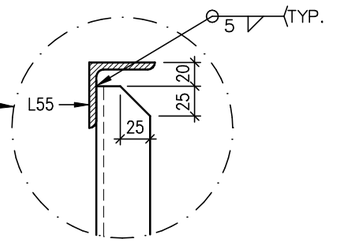
Design	Ver.	Scale
EDZ	EDZ	1 : 20
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S33	
Revised On		
04/09/07		

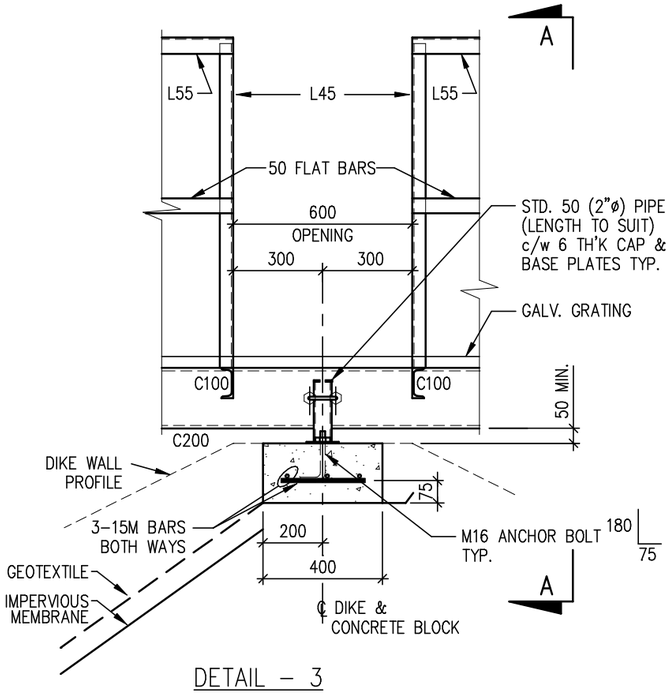


DETAIL – 1
1 : 20

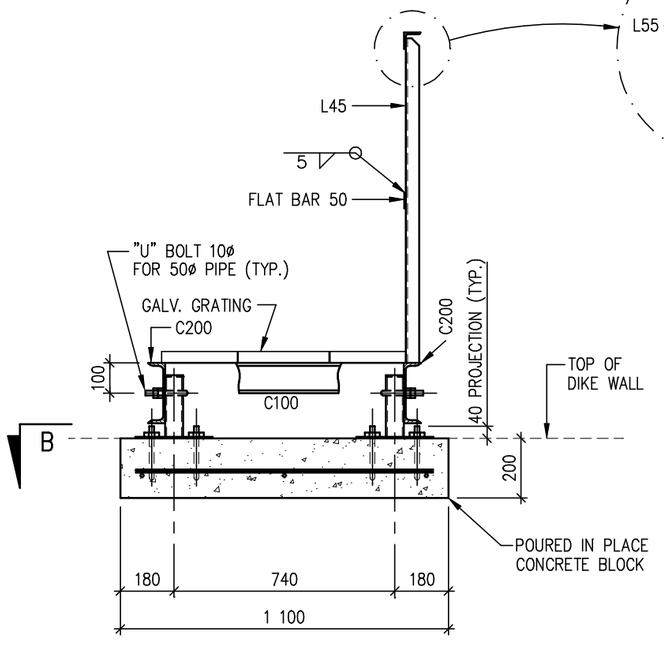


DETAIL – 2
1 : 20

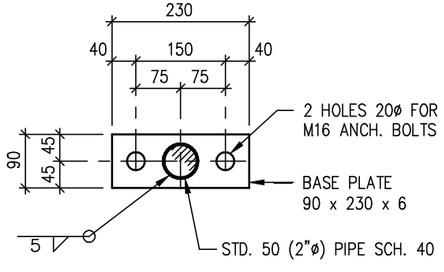




DETAIL – 3
1 : 20



SECTION A–A
1 : 20



SECTION B–B
1 : 10

NOTES:

1– FOR EXISTING & FINISH GRADES SEE PARTICULAR PROJECT DRAWINGS.

2– FOR POSITION OF HANDRAIL SEE PARTICULAR PROJECT DRAWINGS.

3– FOR GRATING AND PREFABRICATED STEPS MATERIAL SEE SPECIFICATIONS, DIVISION 5, SECTION 05500.

4– FOR STEEL, CONCRETE AND REINFORCING MATERIALS SEE SPECIFICATIONS, DIVISION 3, AND DIVISION 5, SECTION 05120.

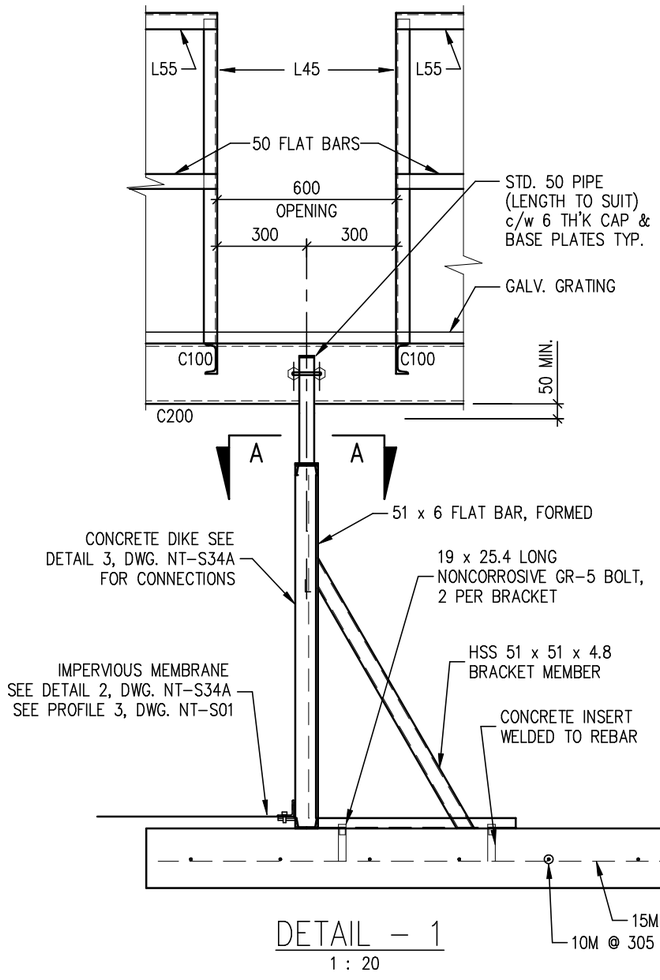
5– STILE FABRICATOR TO PROVIDE PROPER SHOP DRAWINGS OF STILE FOR APPROVAL PRIOR TO FABRICATION AS PER SPECIFICATIONS.

Northwest Territories Public Works & Services

Drawing Title

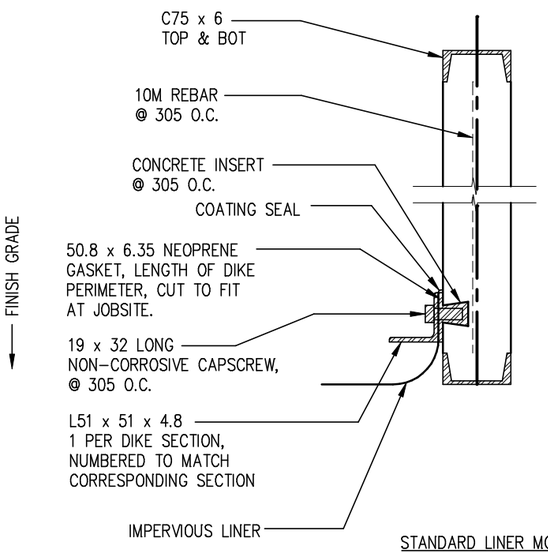
TYPE 1 & TYPE 2 STILES
SECTIONS AND DETAILS

Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S34	
Revised On		
04/09/07		

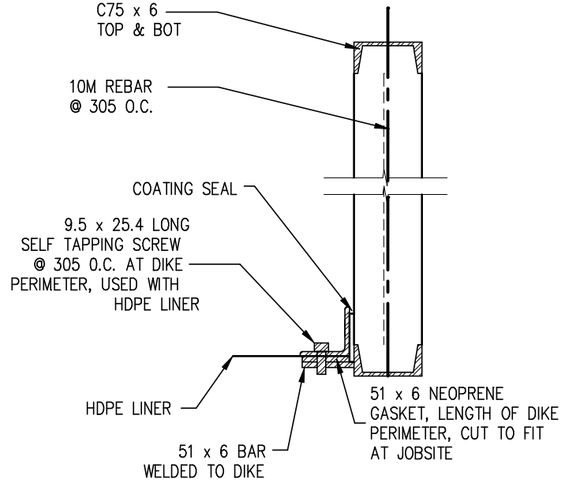


DETAIL – 1
1 : 20

SECTION A–A
1 : 10

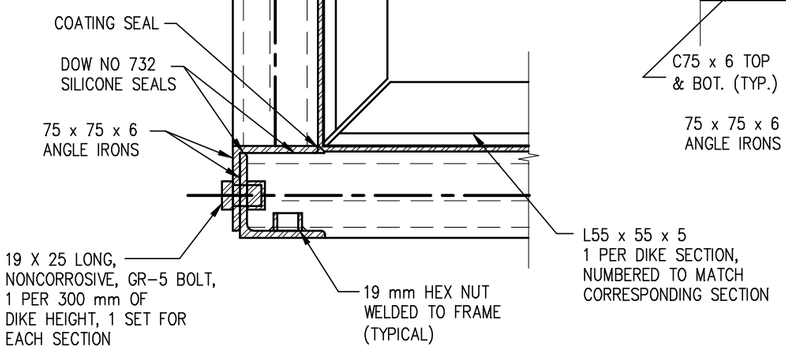


STANDARD LINER MOUNT



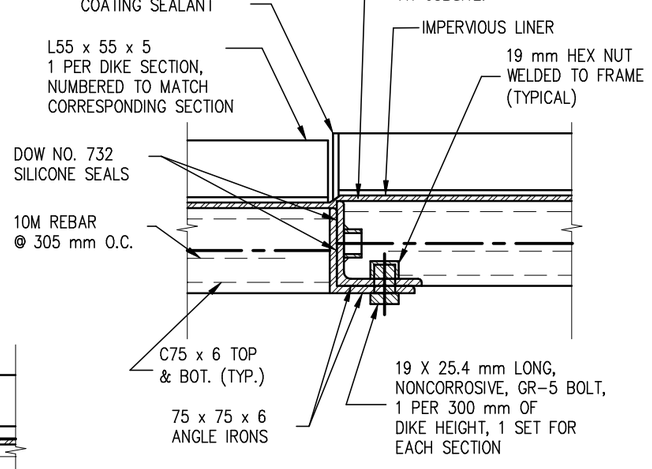
HDPE LINER MOUNT

DETAIL – 2
NTS



CORNER DETAIL

DETAIL – 3
NTS



JOINT DETAIL

DETAIL – 4
NTS

NOTES:

1) ALL DIKE SECTIONS EXCEPT CUSTOM CORNERS SHALL BE INTERCHANGABLE. SECTIONS CAN BE MANUFACTURED IN LENGTHS OF 610 TO 6100, HEIGHTS OF 915 & 1220 mm OR UP TO 2440 mm WITH DESIGN MODIFICATIONS.

2) SPECIALLY ANGLED JOINTS CAN BE MADE TO MEET JOBSITE REQUIREMENTS.

3) LINER ATTACHEMENT CAN BE MOVED TO ANY LEVEL.

4) ALL CONCRETE SHALL BE MIN 30 MPa AND SHALL BE POLYFIBER REINFORCED AT 1 KG/M3 TYPE 10 (NORMAL) OR TYPE 50 (SULPHATE RESIST) CEMENT SHALL BE USED.

5) ALL DIMENSIONS ARE IN mm.

6) A SILICONE BEAD SHALL BE APPLIED INSIDE WALL JOINT & ON JOINT SEAM AFTER BOLTING.

7) TOP OF SLEEPER SHALL BE FLUSH WITH FINISHED GRADE ON INSIDE DIKE WALL, OUTSIDE CAN BE BELOW GRADE. FOR EXISTING AND FINISH GRADE SEE PARTICULAR PROJECT DRAWINGS.

8) SLEEPER IS PLACED 100 mm FROM JOINT & AT 45° ON CORNERS.

9) ALL DIKE SECTIONS & ANGLE IRONS SHALL BE NUMBERED ACCORDINGLY (ANGLE IRONS SHALL BE FIT TO EACH SECTION AT PLANT).

10) ANGLE IRONS MAY BE CUT TO FIT CORNER AT JOBSITE.

11) GASKETS MAY BE CUT TO FIT AT JOBSITE.

12) ON CORNERS & JOINTS, USE SEALANT BETWEEN DIKE & GASKETS.

13) IF WRINKLES FORM IN LINER AT DIKE LINER MOUNT, USE SEALANT IN FOLDS.

14) A COATING SEALANT SHALL BE APPLIED OVER TOP OF GASKET TO INSURE SEAL.

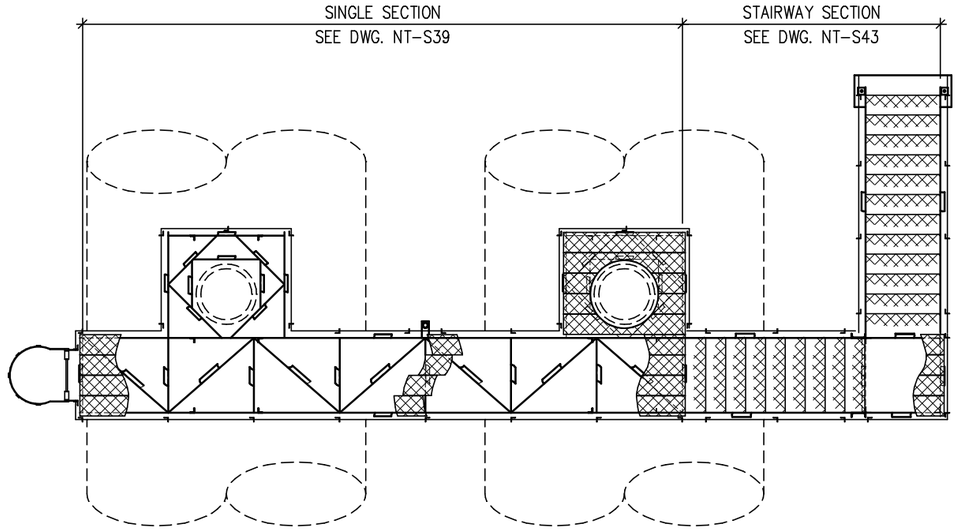
15) DIKE MANUFACTURER SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION AS PER SPECIFICATIONS.

Northwest Territories Public Works & Services

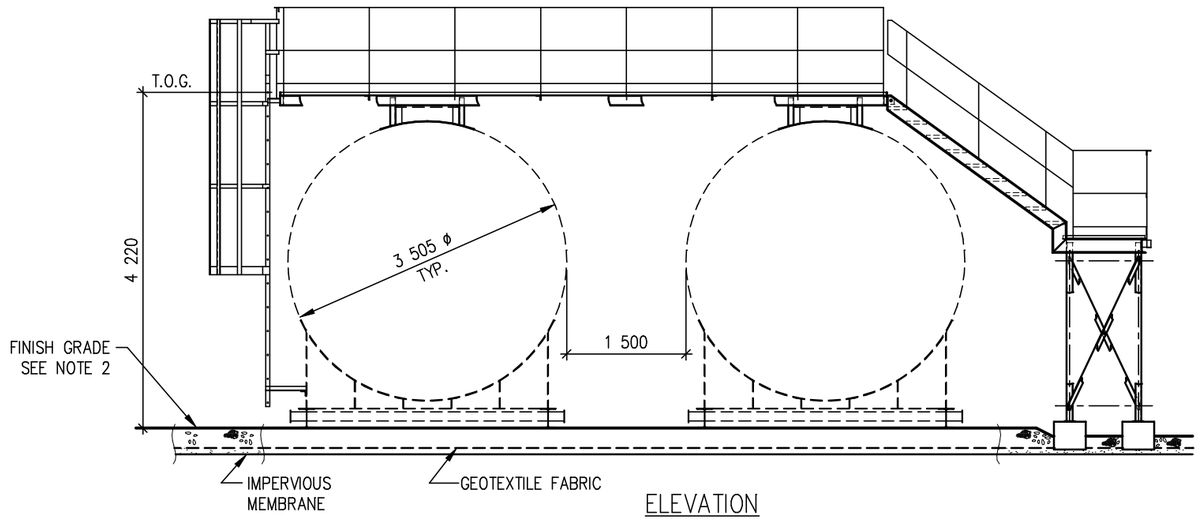
Drawing Title

TYPE 1 STILE AT CONCRETE DIKE SECTIONS AND DETAILS

Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S34A	
Revised On		
04/06/08		



PLAN



ELEVATION

NOTES:

1- FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2- FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4- FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5- FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.

LEGEND:

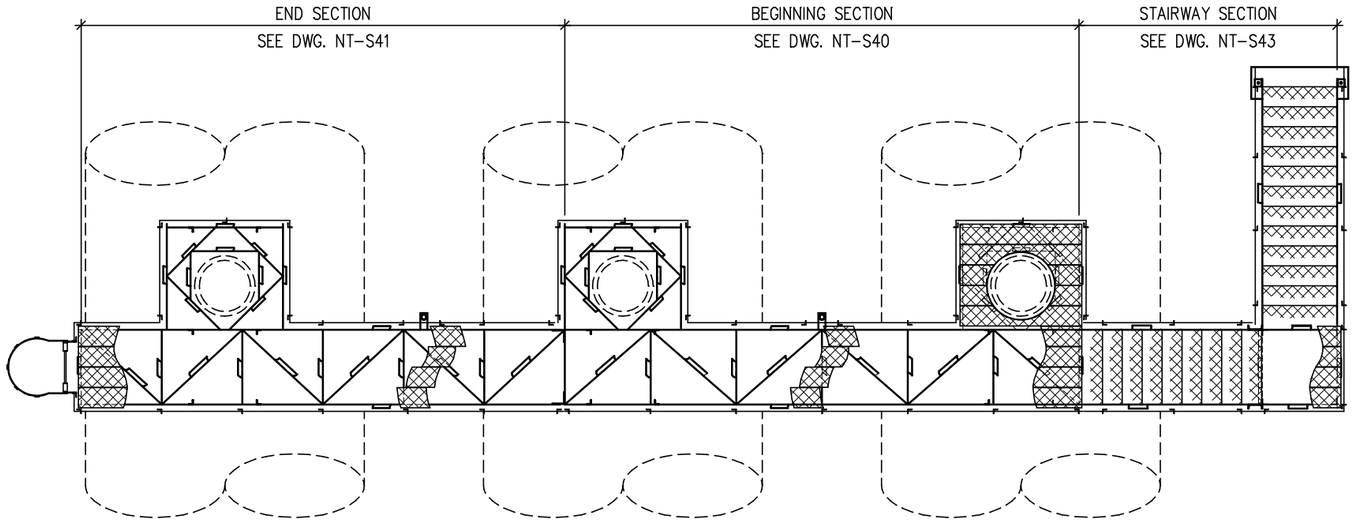
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

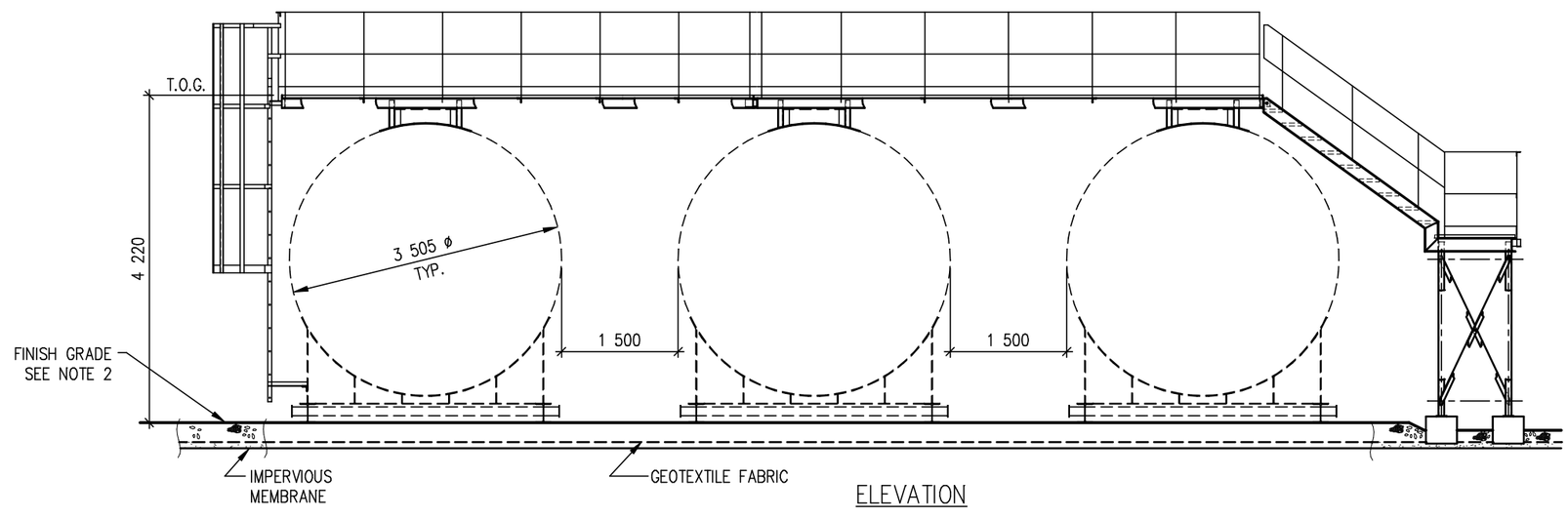
Drawing Title

TYPICAL CATWALK & STAIRWAY ARRANGEMENT FOR TWO 91 cu. m. HORIZONTAL TANKS
PLAN, ELEVATION

Design	Ver.	Scale
EDZ	EDZ	1 : 75
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S35	
Revise On		
04/09/07		



PLAN



ELEVATION

NOTES:

1- FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2- FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- PROVIDE SHOP DRAWINGS OF CATWALKS AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4- FOR MATERIAL FOR CATWALKS & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5- FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.

LEGEND:

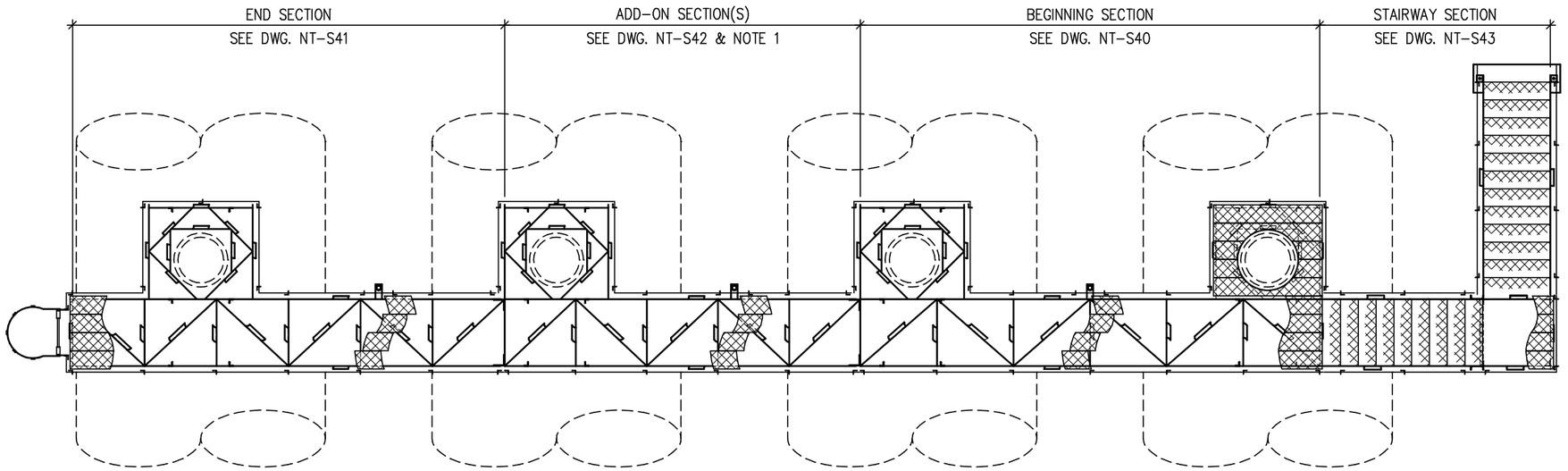
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

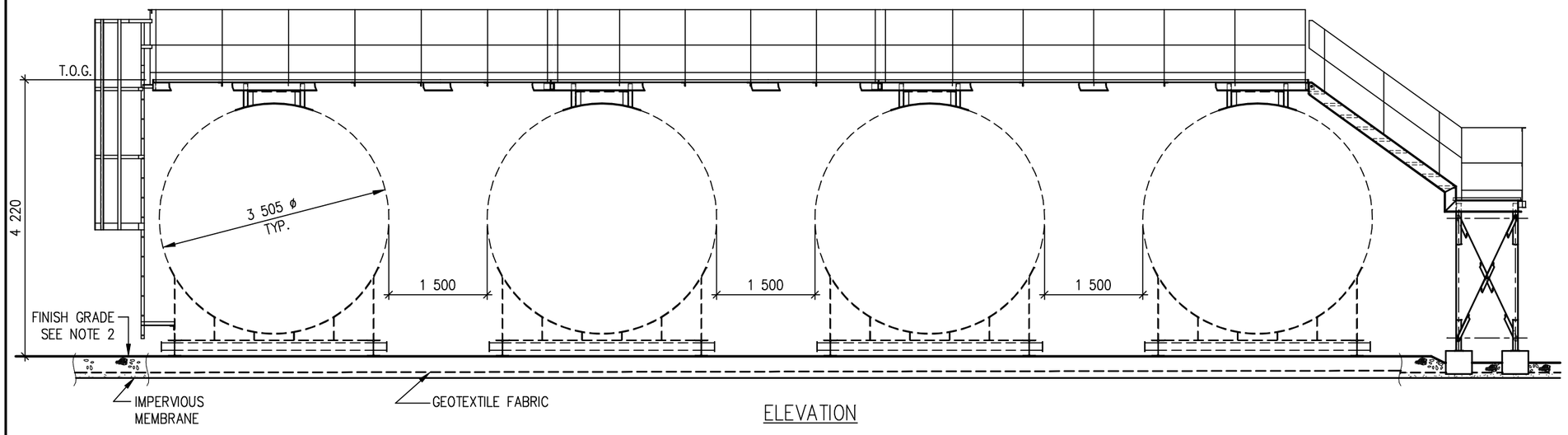
Drawing Title

TYPICAL CATWALK & STAIRWAY ARRANGEMENT FOR THREE 91 cu. m. HORIZONTAL TANKS
PLAN, ELEVATION

Design	Ver.	Scale
EDZ	EDZ	1 : 75
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S36	
Revised On		
04/09/07		



PLAN



ELEVATION

NOTES:

1- FOR NUMBER OF TANKS AND ARRANGEMENT OF CATWALKS REFER TO PARTICULAR PROJECT DRAWINGS. PROVIDE NUMBER OF ADD-ON SECTIONS TO SUIT ACTUAL NUMBER OF TANKS AT EACH PARTICULAR PROJECT.

2- FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- PROVIDE SHOP DRAWINGS OF CATWALKS AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4- FOR MATERIAL FOR CATWALKS & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5- FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.

LEGEND:

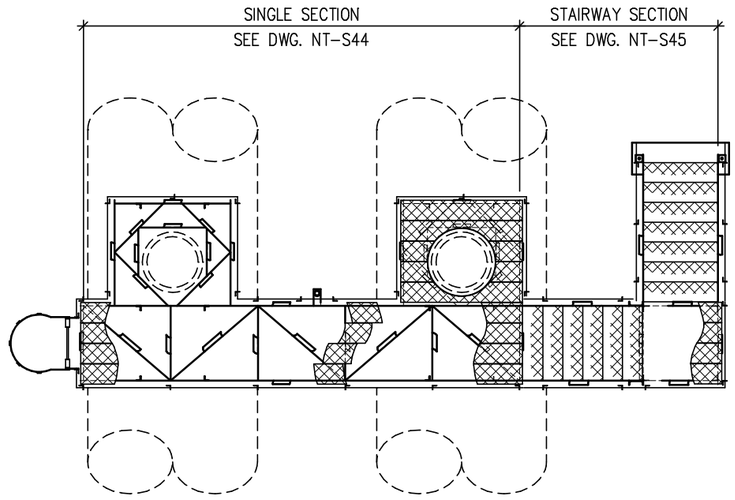
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

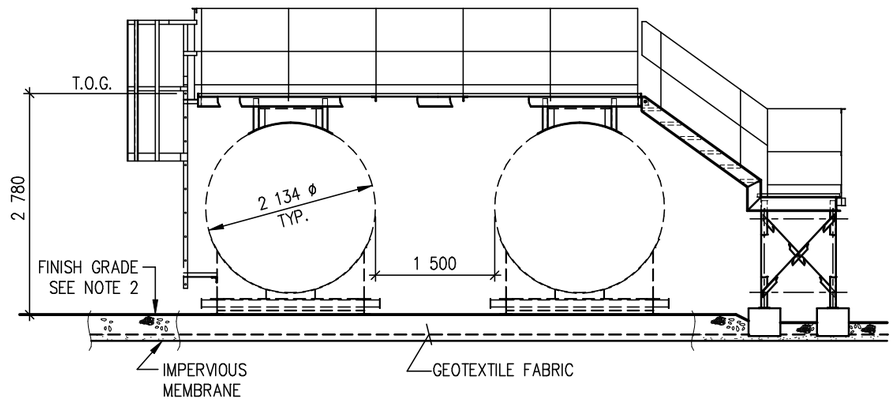
Drawing Title

TYPICAL CATWALK & STAIRWAY ARRANGEMENT FOR FOUR OR MORE 91 cu. m. HORIZONTAL TANKS PLAN, ELEVATION

Design	Ver.	Scale
EDZ	EDZ	1 : 75
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S37	
Revised On		
04/09/07		



PLAN



ELEVATION

NOTES:

1- FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2- FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4- FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5- FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.

LEGEND:

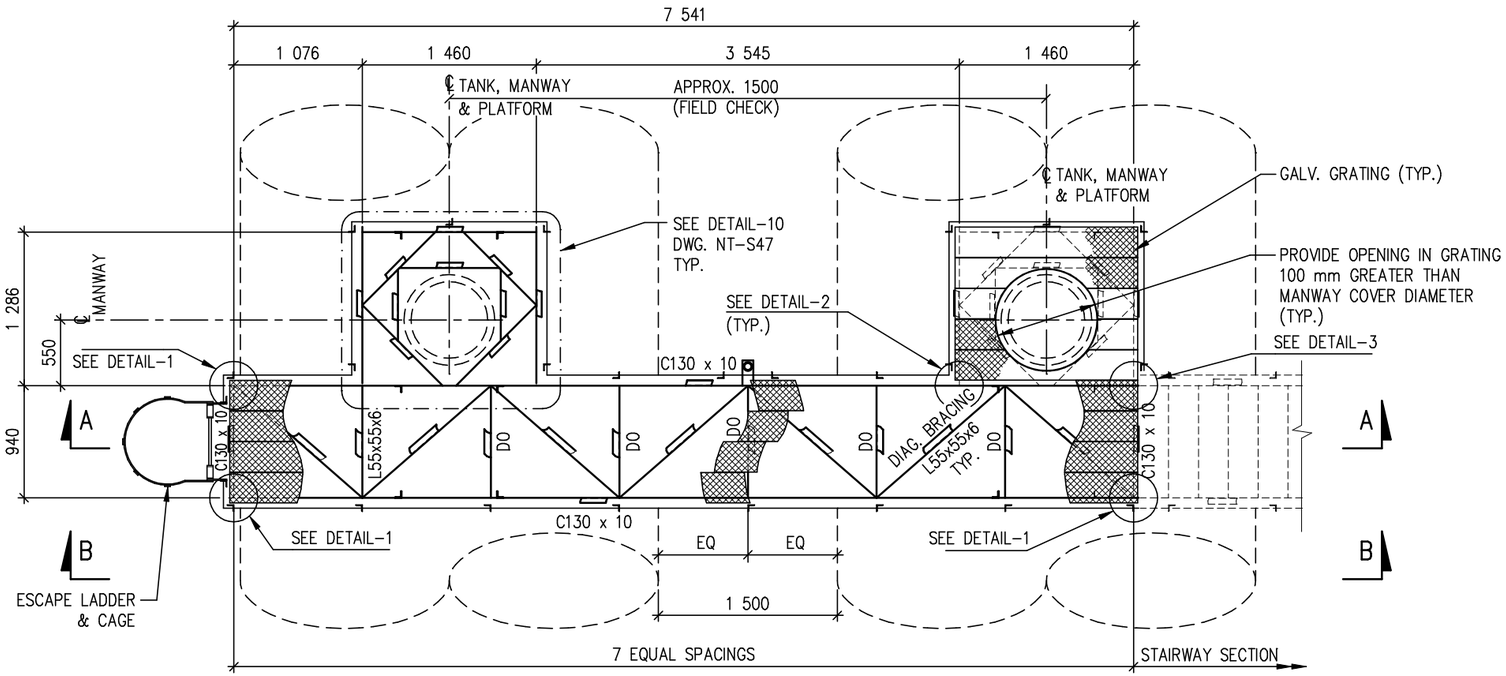
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

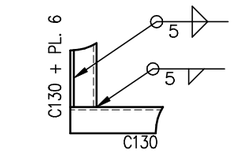
Drawing Title

TYPICAL CATWALK & STAIRWAY ARRANGEMENT FOR TWO 23 cu. m. HORIZONTAL TANKS
PLAN, ELEVATION

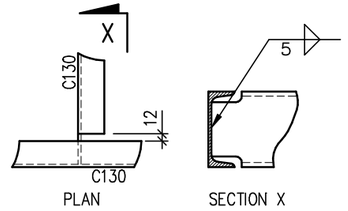
Design	Ver.	Scale
EDZ	EDZ	1 : 75
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S38	
Revised On		
04/09/07		



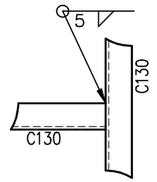
PLAN
1 : 50



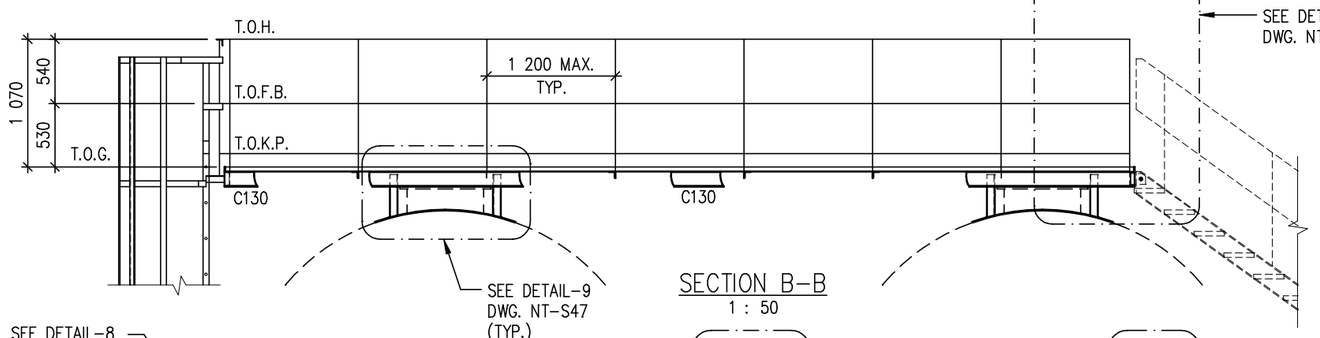
DETAIL–1
1 : 10



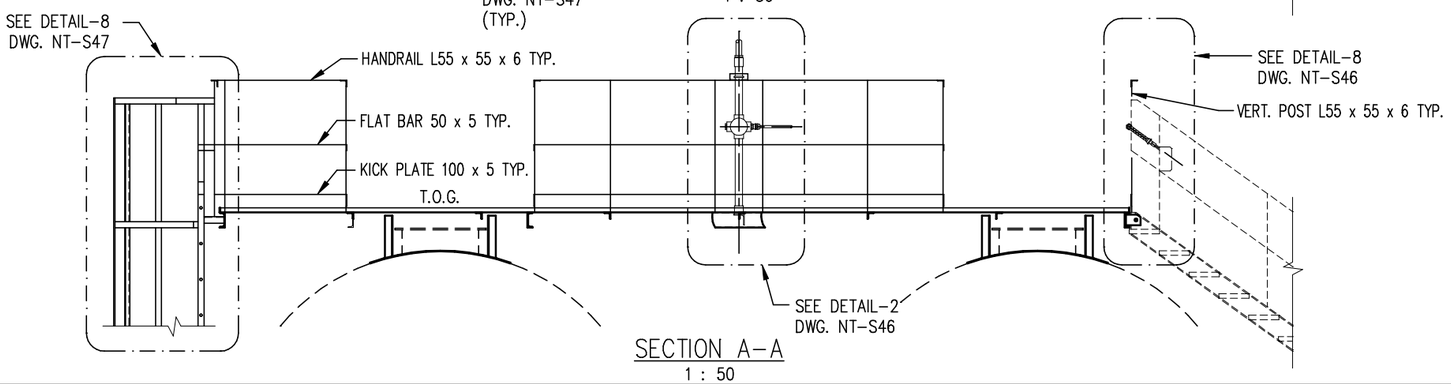
DETAIL–2
1 : 10



DETAIL–3
1 : 10



SECTION B–B
1 : 50



SECTION A–A
1 : 50

NOTES:

1– FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2– FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3– PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4– FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5– FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

LEGEND:

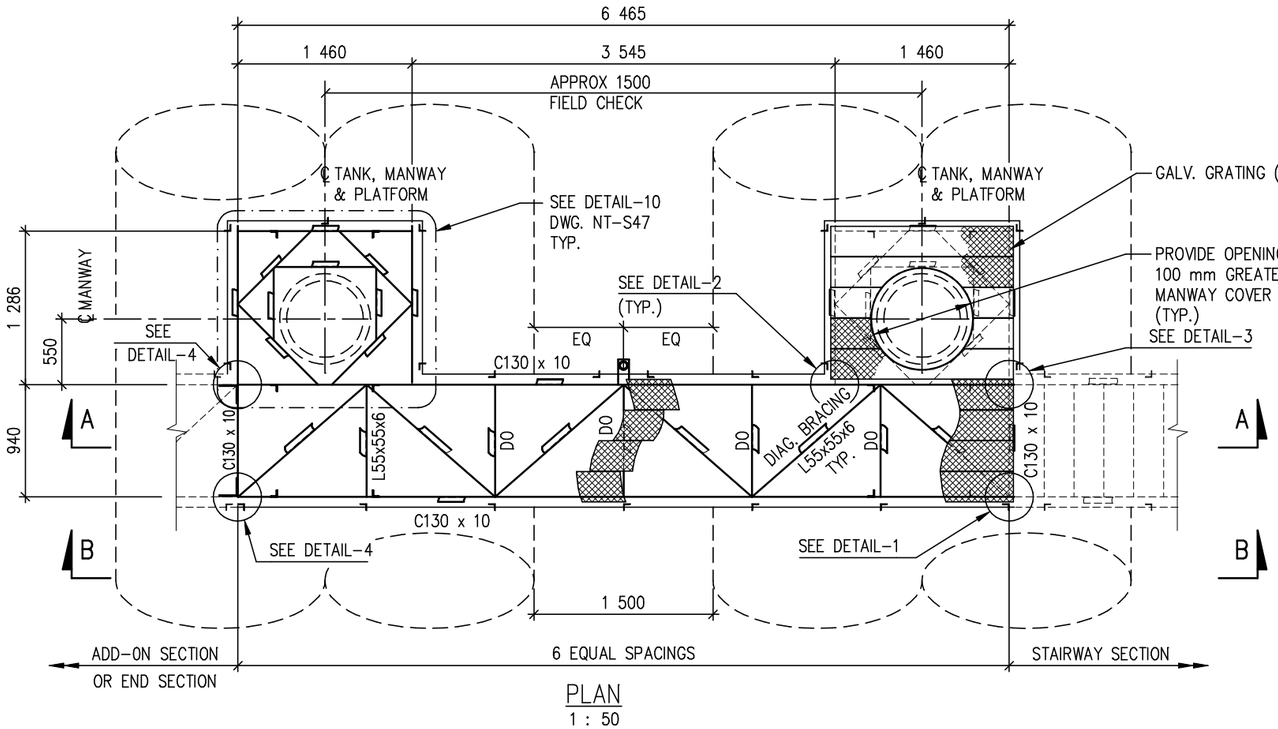
T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

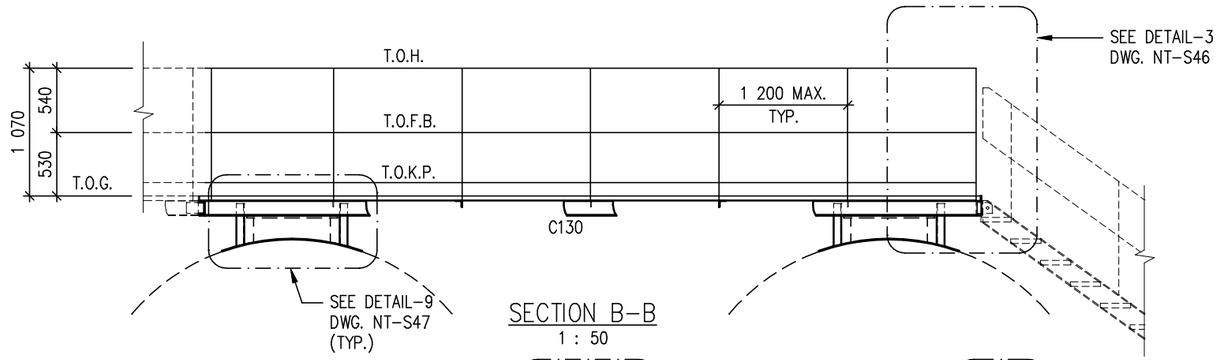
Drawing Title

SINGLE SECTION FOR
TWO 91 cu. m.
HORIZONTAL TANKS
PLAN, VIEW, SECTIONS & DETAILS

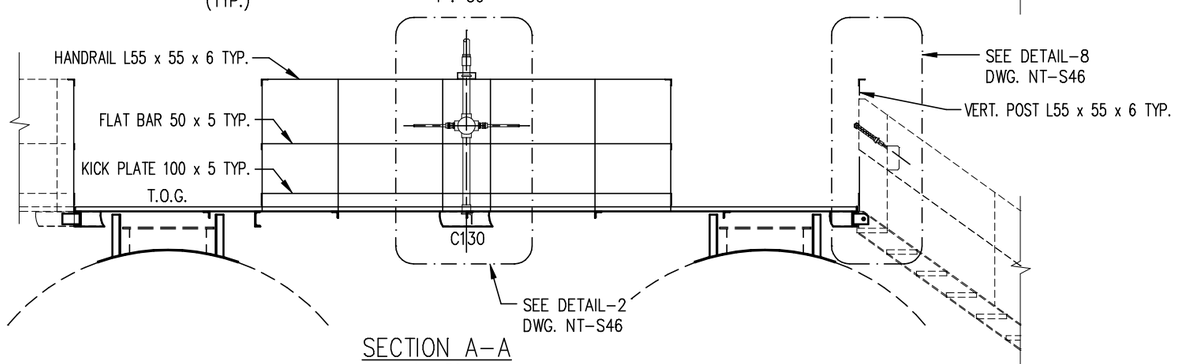
Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S39	
Revised On		
04/09/07		



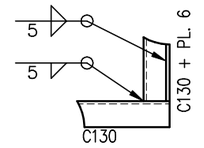
PLAN
1 : 50



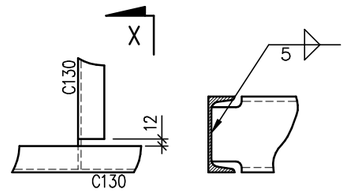
SECTION B–B
1 : 50



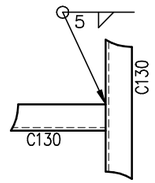
SECTION A–A
1 : 50



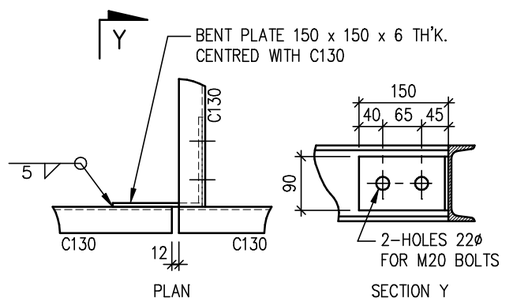
DETAIL–1
1 : 10



DETAIL–2
1 : 10



DETAIL–3
1 : 10



DETAIL–4
1 : 10

NOTES:

1– FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2– FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3– PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4– FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5– FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

LEGEND:

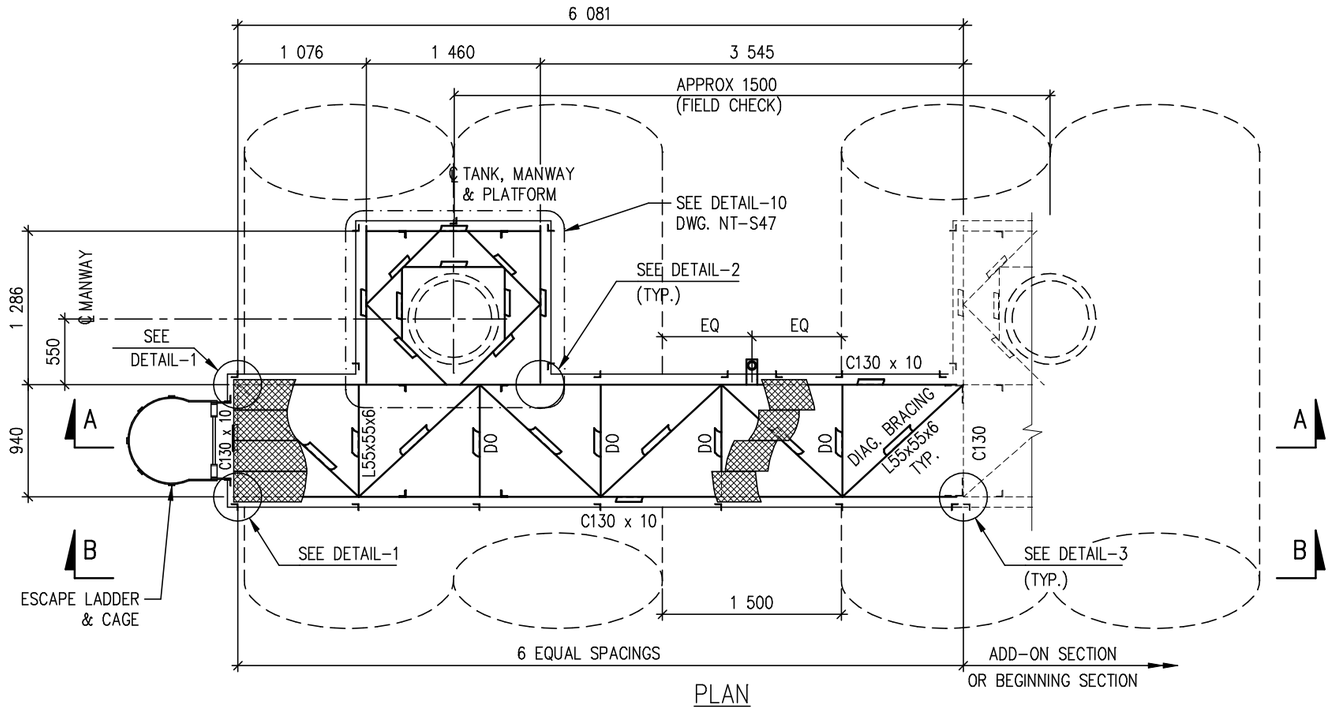
T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

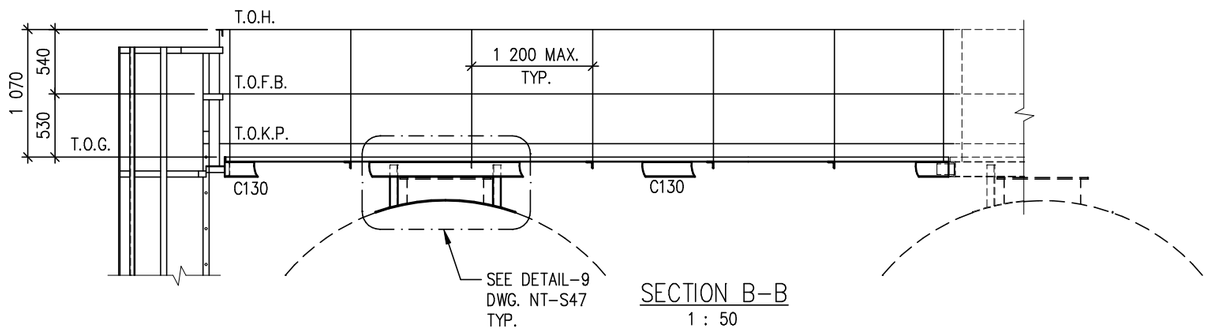
Drawing Title

BEGINNING SECTION
FOR THREE OR MORE 91 cu. m.
HORIZONTAL TANKS
PLAN, VIEW, SECTIONS & DETAILS

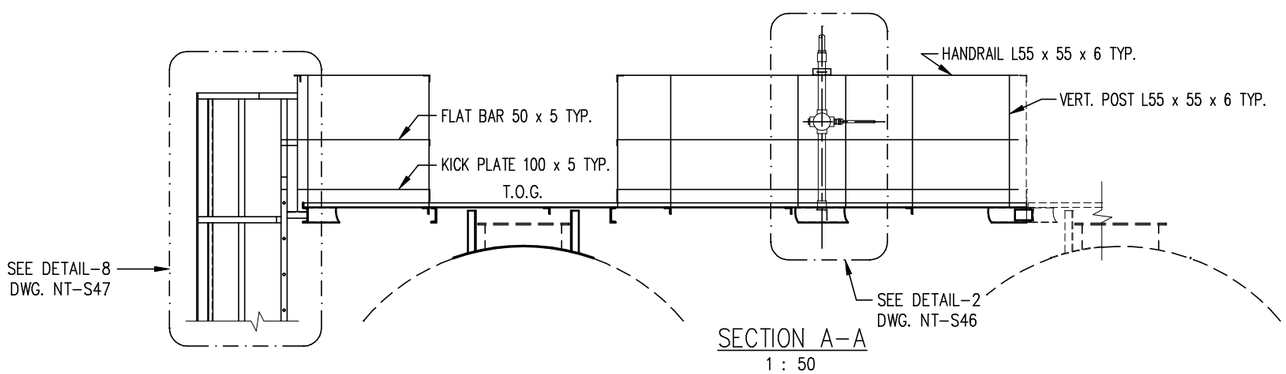
Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S40	
Revised On		
04/09/07		



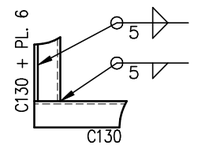
PLAN
1 : 50



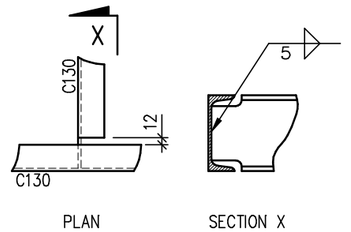
SECTION B–B
1 : 50



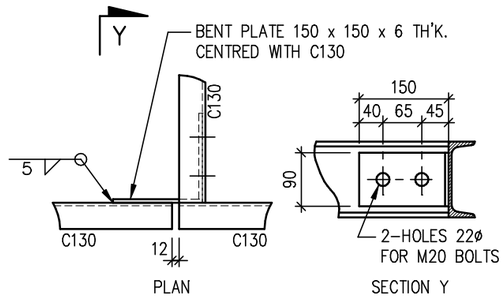
SECTION A–A
1 : 50



DETAIL–1
1 : 10



DETAIL–2
1 : 10



DETAIL–3
1 : 10

NOTES:

1– FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2– FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3– PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4– FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5– FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

LEGEND:

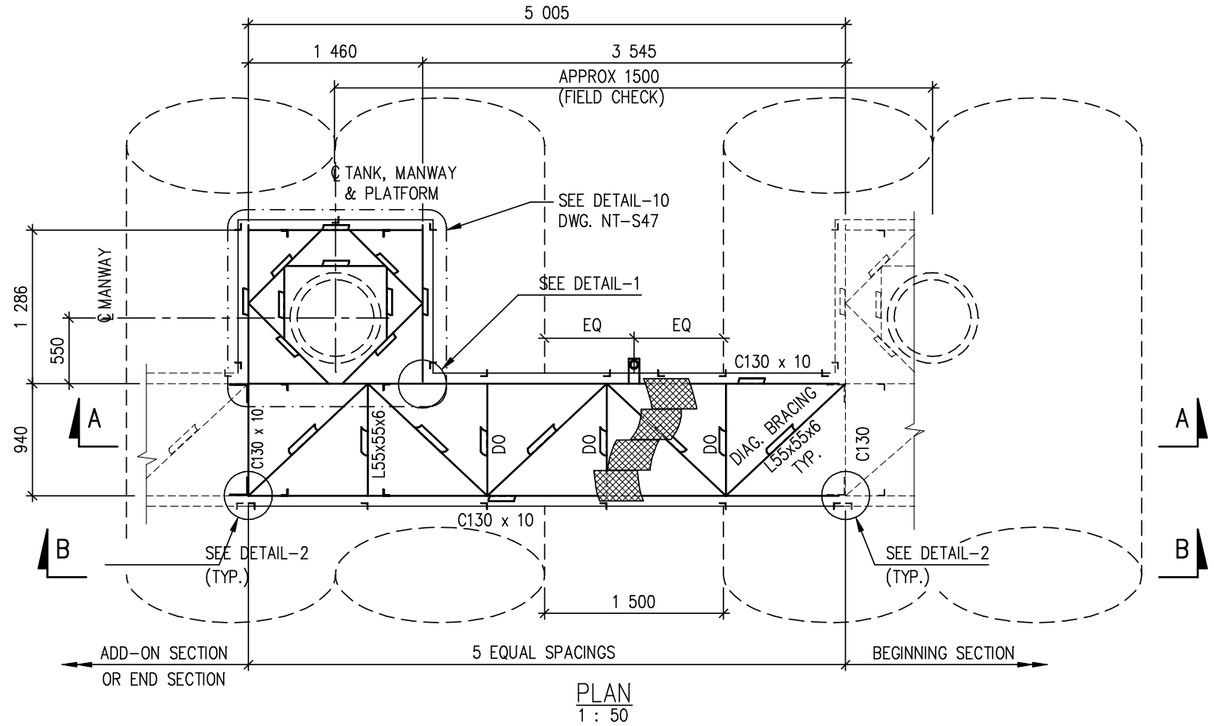
T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

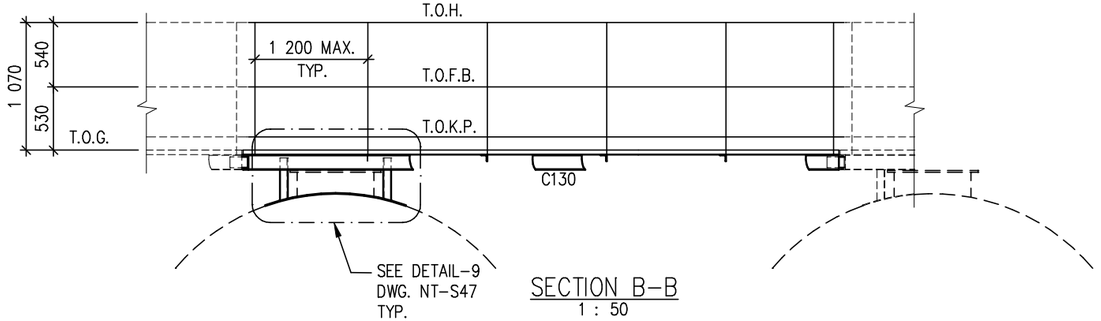
Drawing Title

END SECTION
FOR THREE OR MORE 91 cu. m.
HORIZONTAL TANKS
PLAN, VIEW, SECTIONS & DETAILS

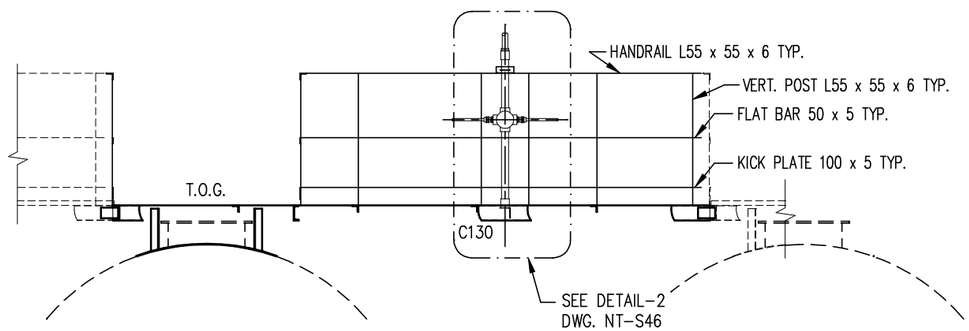
Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S41	
Revised On		
04/09/07		



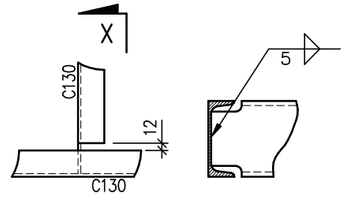
PLAN
1 : 50



SECTION B-B
1 : 50

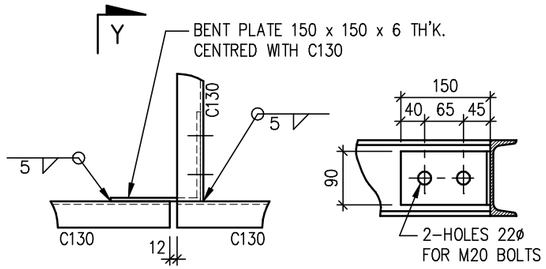


SECTION A-A
1 : 50



PLAN SECTION X

DETAIL-1
1 : 10



PLAN SECTION Y

DETAIL-2
1 : 10

NOTES:

1- FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2- FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4- FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5- FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

LEGEND:

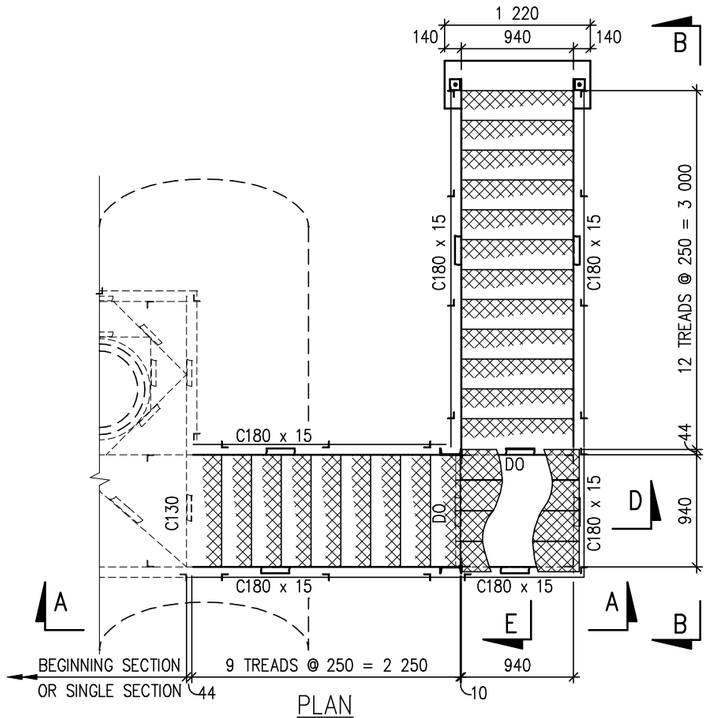
T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

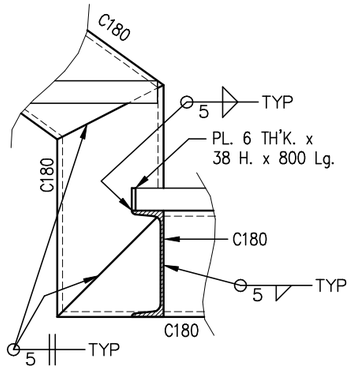
Drawing Title

ADD-ON SECTION
FOR FOUR OR MORE 91 cu. m.
HORIZONTAL TANKS
PLAN, VIEW, SECTIONS & DETAILS

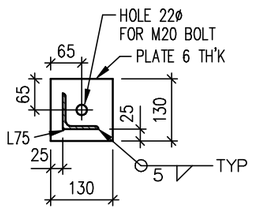
Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S42	
Revised On		
04/09/07		



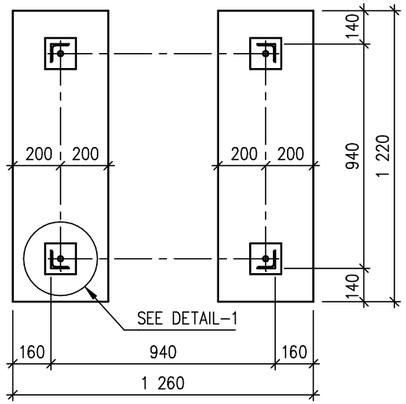
PLAN



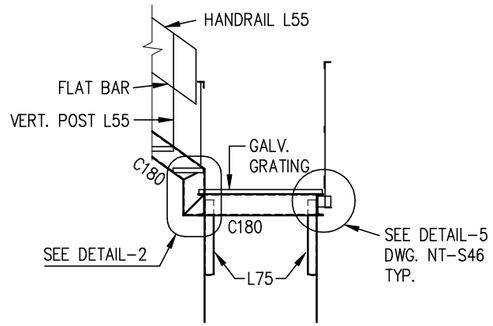
DETAIL-2
1 : 10



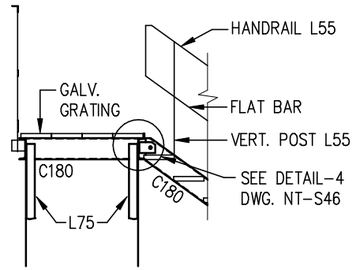
DETAIL-1
(TYP. 4)



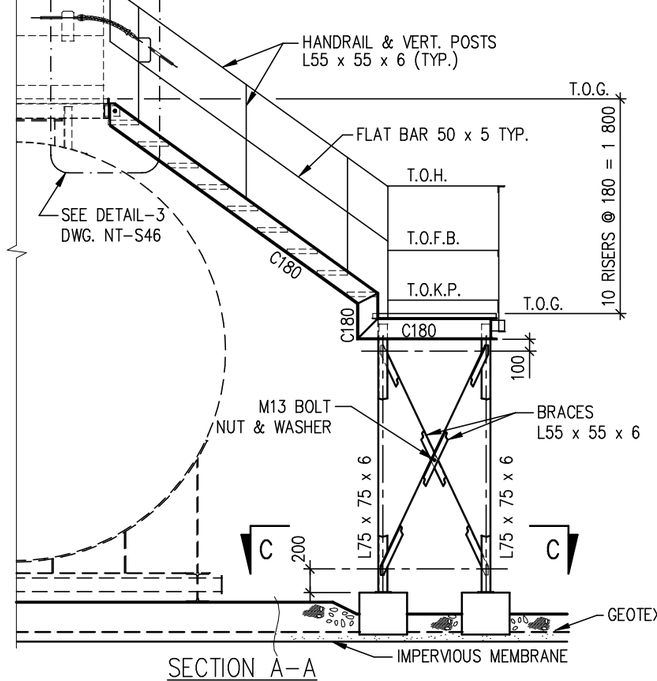
SECTION C-C



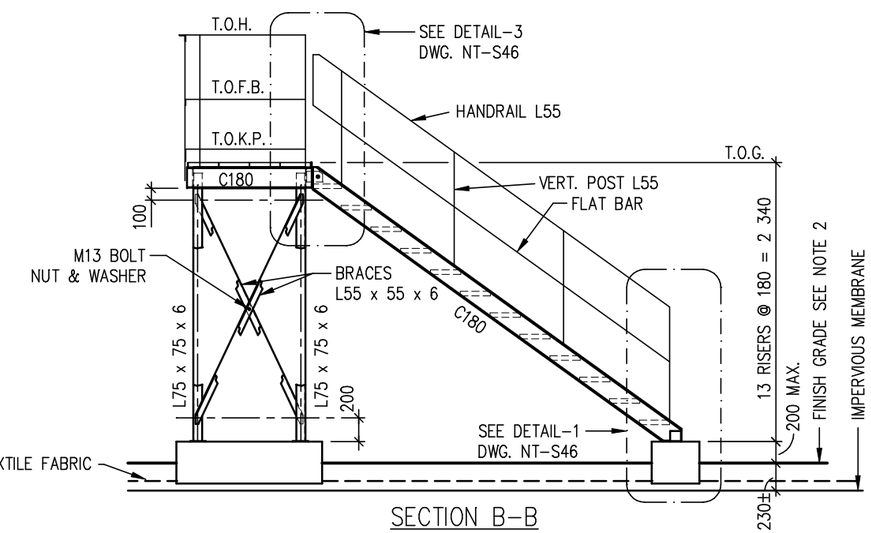
SECTION D-D



SECTION E-E



SECTION A-A



SECTION B-B

NOTES:

1- FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2- FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4- FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5- FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

LEGEND:

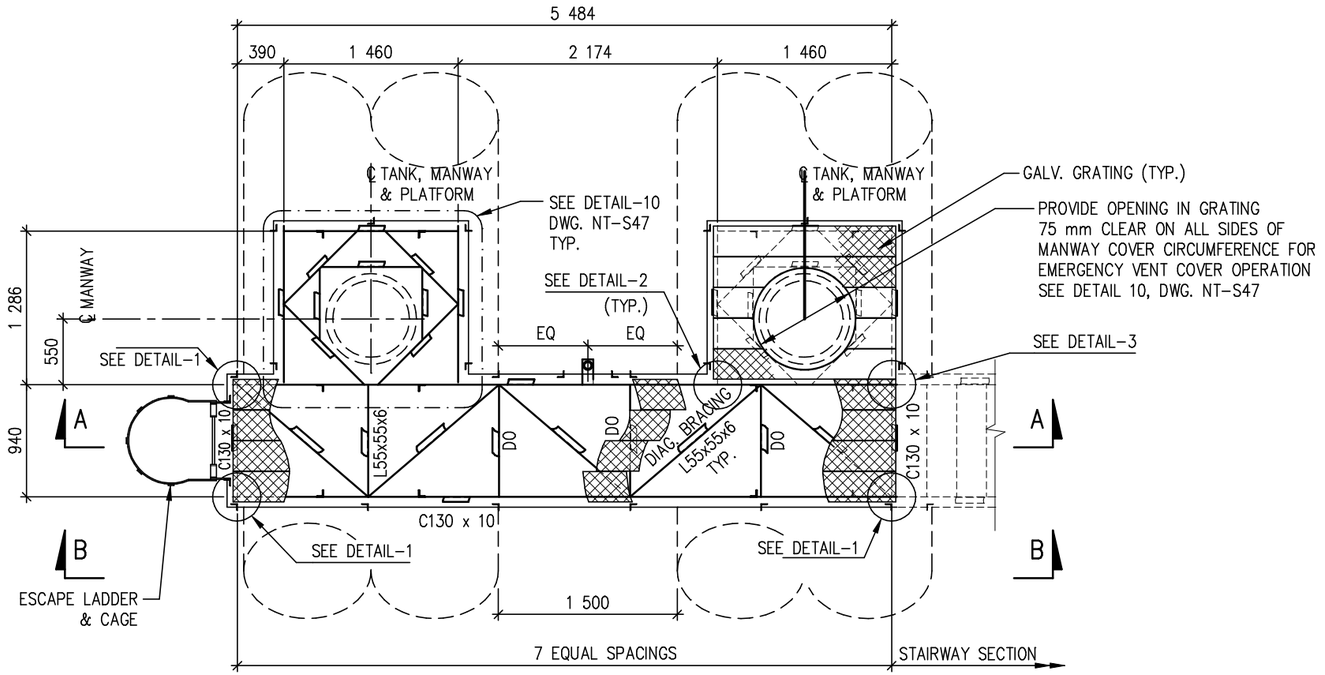
T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

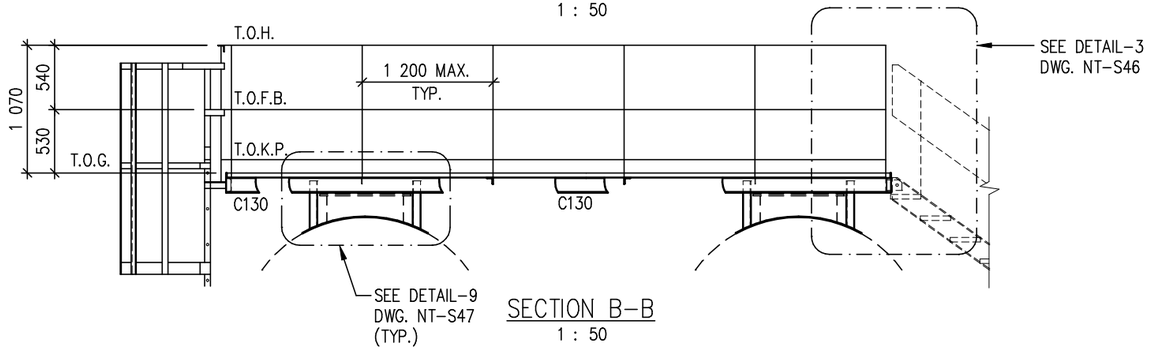
Drawing Title

STAIRWAY FOR TWO 91 cu. m.
HORIZONTAL TANKS
PLAN, VIEW, SECTIONS & DETAILS

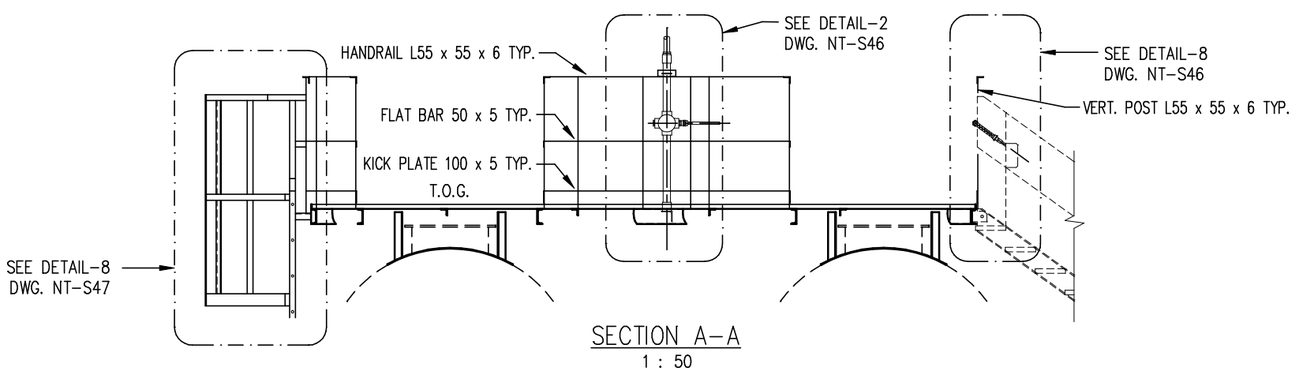
Design	Ver.	Scale
EDZ	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S43	
Revised On		
04/09/07		



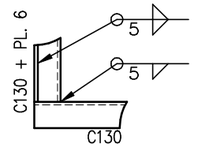
PLAN
1 : 50



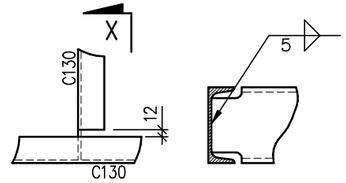
SECTION B-B
1 : 50



SECTION A-A
1 : 50

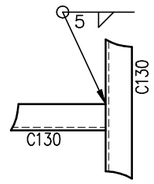


DETAIL-1
1 : 10



PLAN SECTION X

DETAIL-2
1 : 10



DETAIL-3
1 : 10

NOTES:

1- FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2- FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4- FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5- FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

LEGEND:

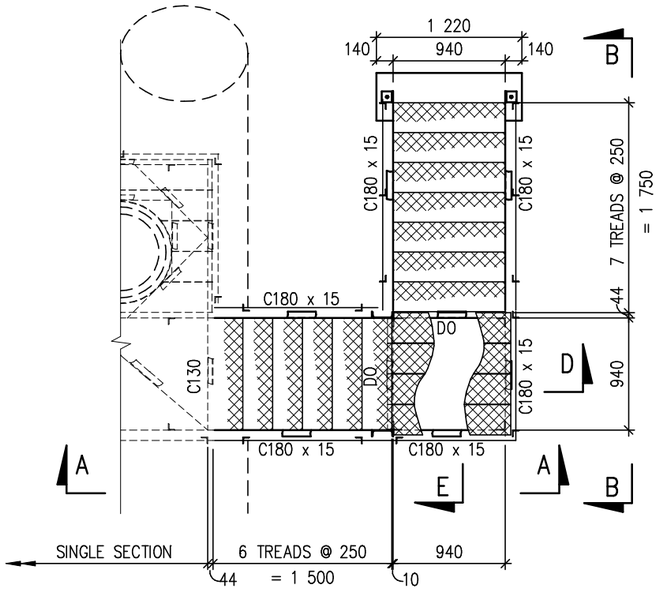
T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

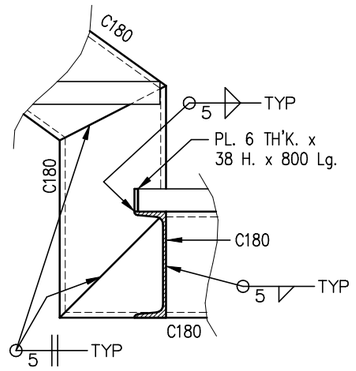
Drawing Title

SINGLE SECTION
FOR TWO 23 cu. m.
HORIZONTAL TANKS
PLAN, VIEW, SECTIONS & DETAILS

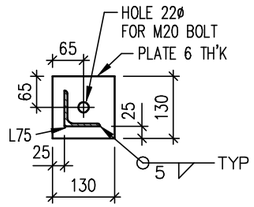
Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S44	
Revised On		
04/09/07		



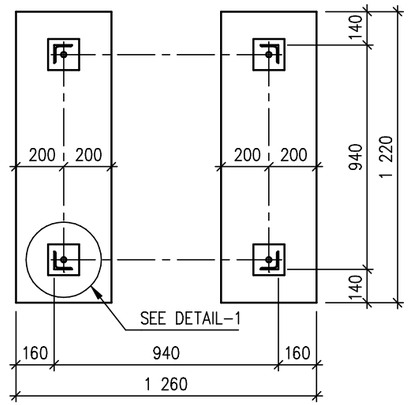
PLAN



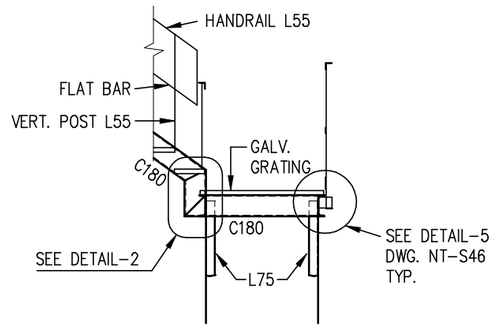
DETAIL-2
1 : 10



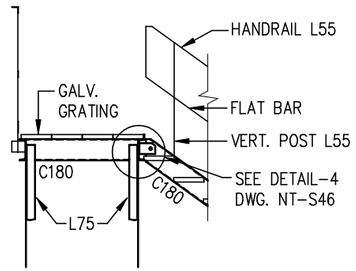
DETAIL-1
(TYP. 4)



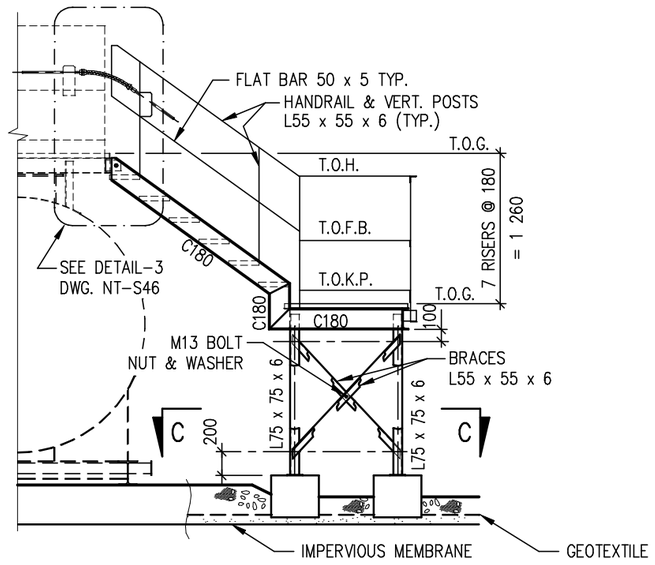
SECTION C-C



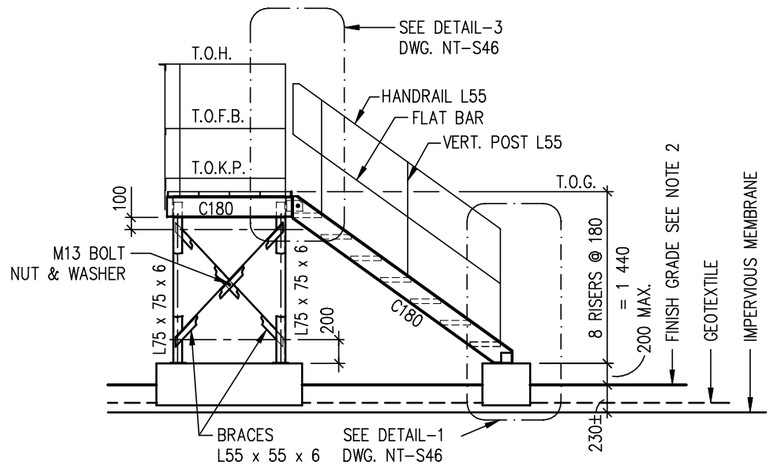
SECTION D-D



SECTION E-E



SECTION A-A



SECTION B-B

NOTES:

1- FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2- FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4- FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5- FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

LEGEND:

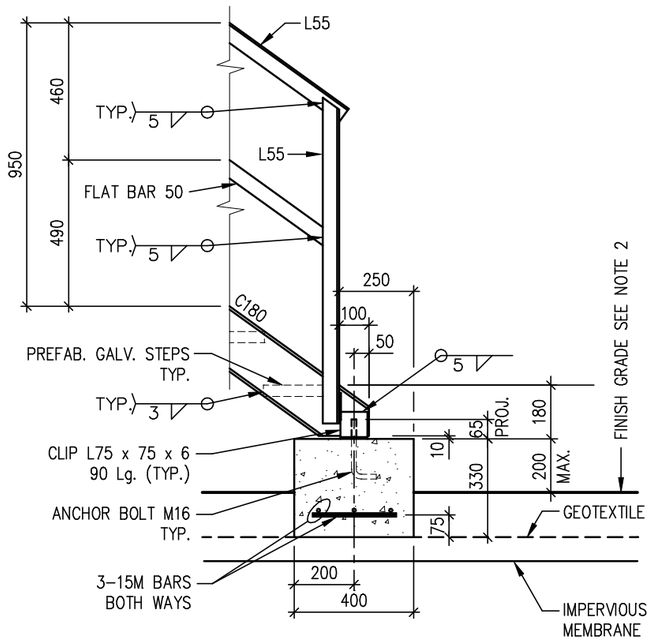
T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

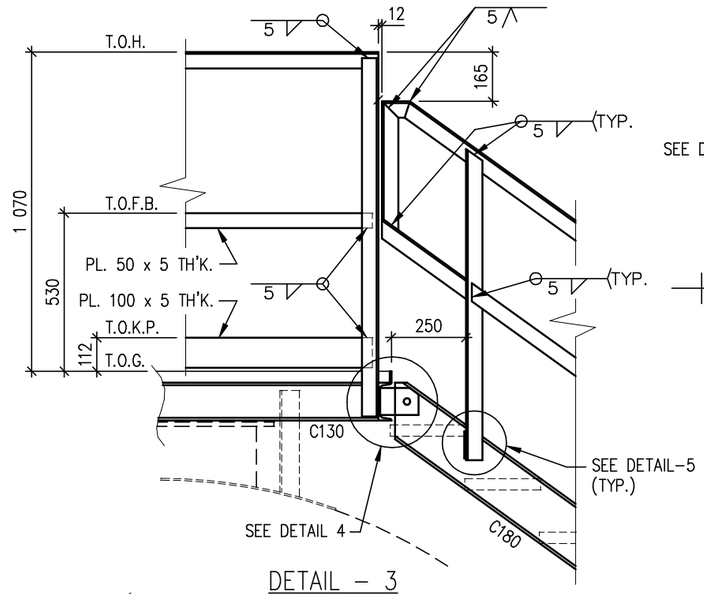
Drawing Title

STAIRWAY FOR 23 cu. m.
HORIZONTAL TANKS
PLAN, VIEW, SECTIONS & DETAILS

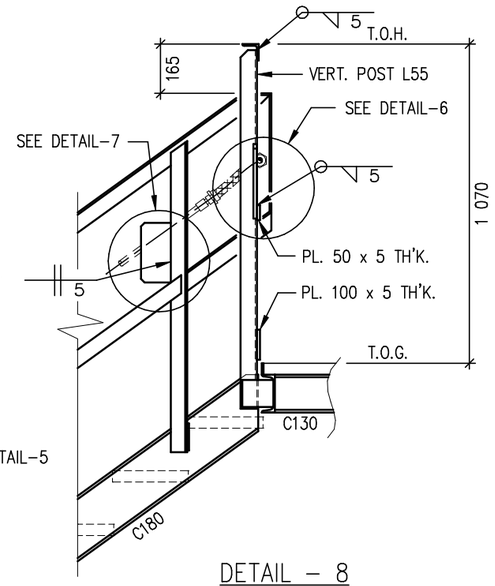
Design	Ver.	Scale
EDZ	EDZ	1:50
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S45	
Revised On		
04/09/07		



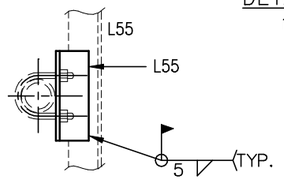
DETAIL – 1
1 : 20



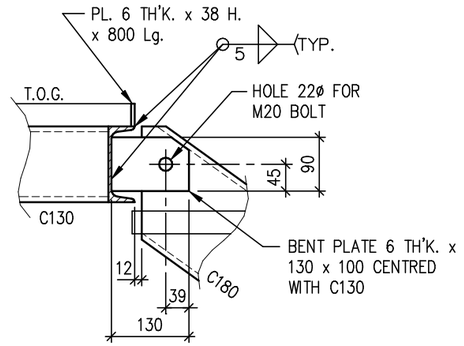
DETAIL – 3
1 : 20



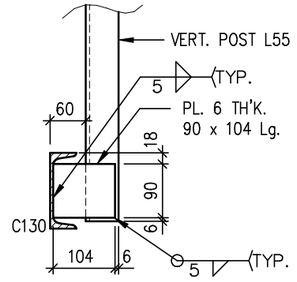
DETAIL – 8
1 : 20



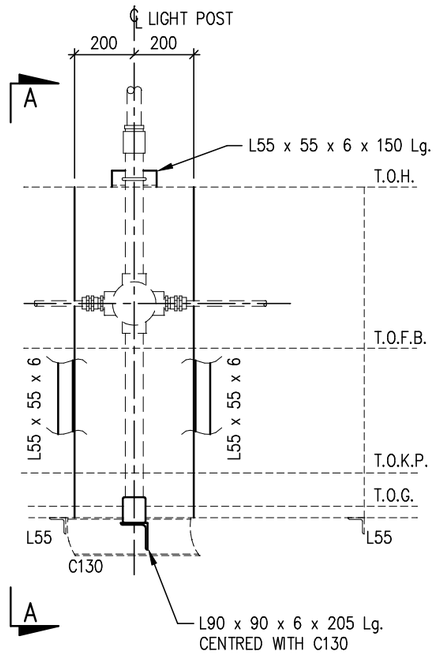
PLAN



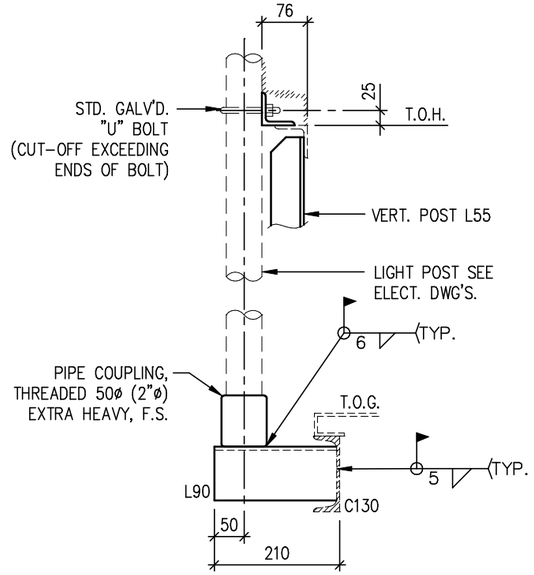
DETAIL – 4
1 : 10



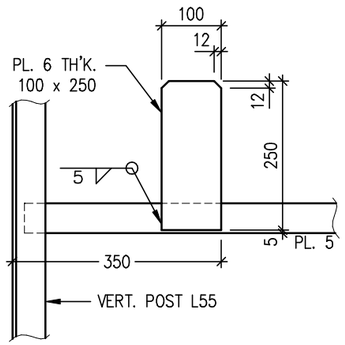
DETAIL – 5
1 : 10



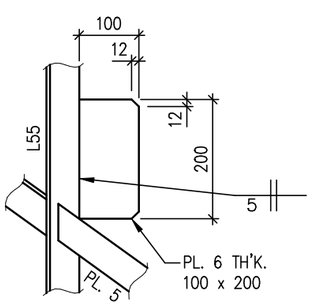
DETAIL – 2
1 : 20



SECTION A–A
1 : 10



DETAIL – 6
1 : 10



DETAIL – 7
1 : 10

NOTES:

1- FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2- FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3- PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4- FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5- FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

LEGEND:

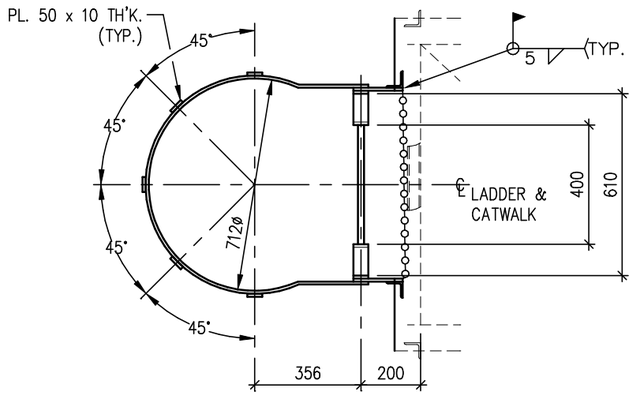
T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.G. = TOP OF GRATING

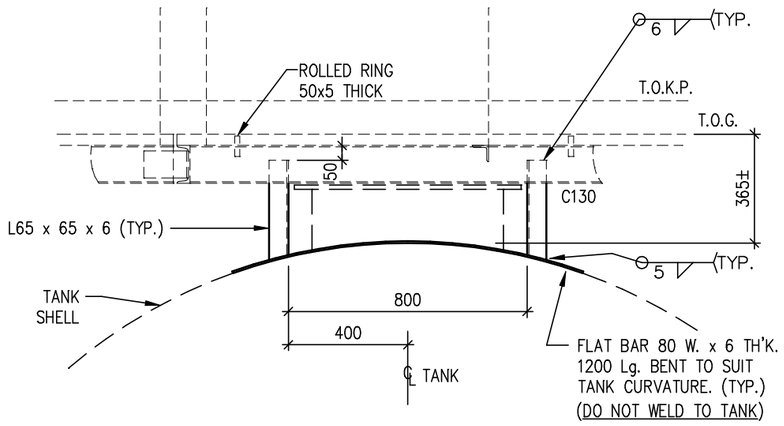
Northwest Territories Public Works & Services

Drawing Title

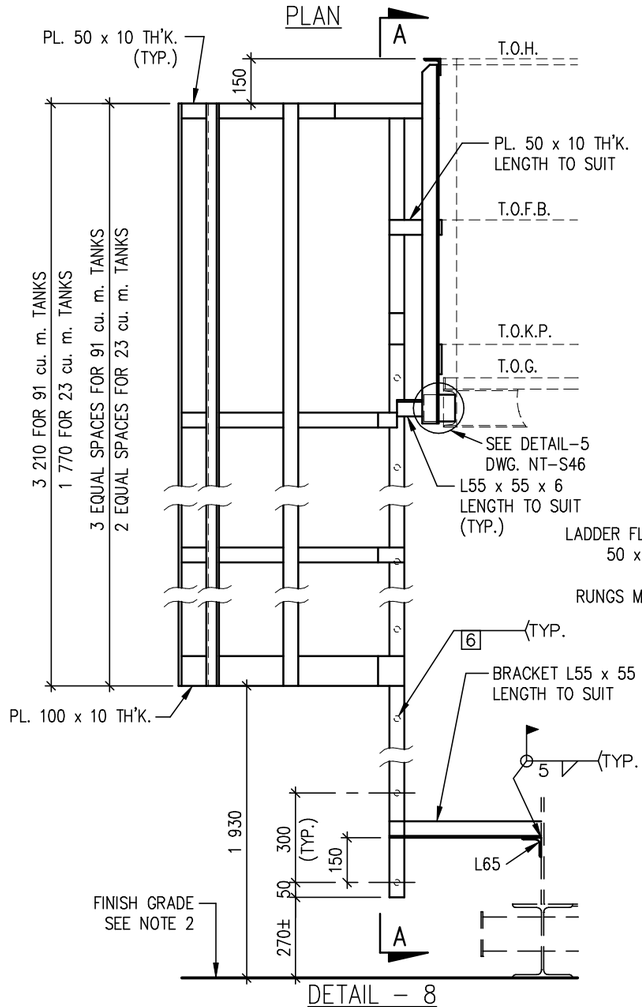
CATWALKS & STAIRWAY FOR HORIZONTAL TANKS MISCELLANEOUS DETAILS

Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-S46	
Revised On		
04/09/07		

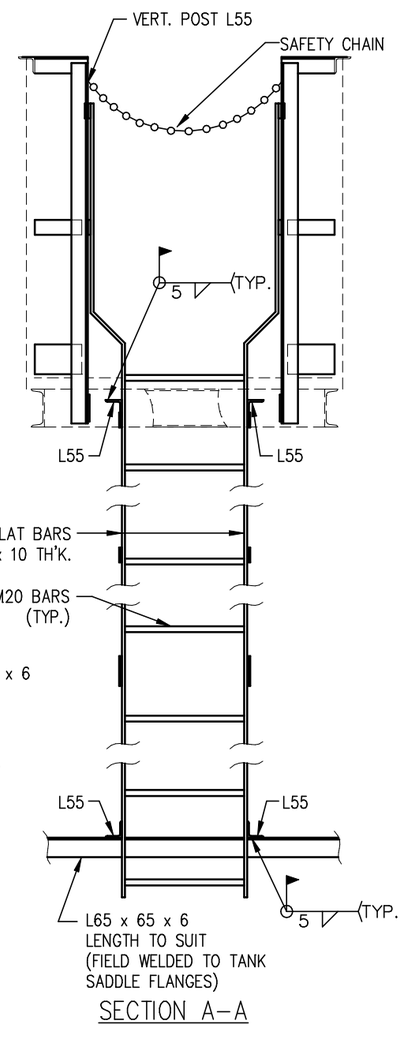




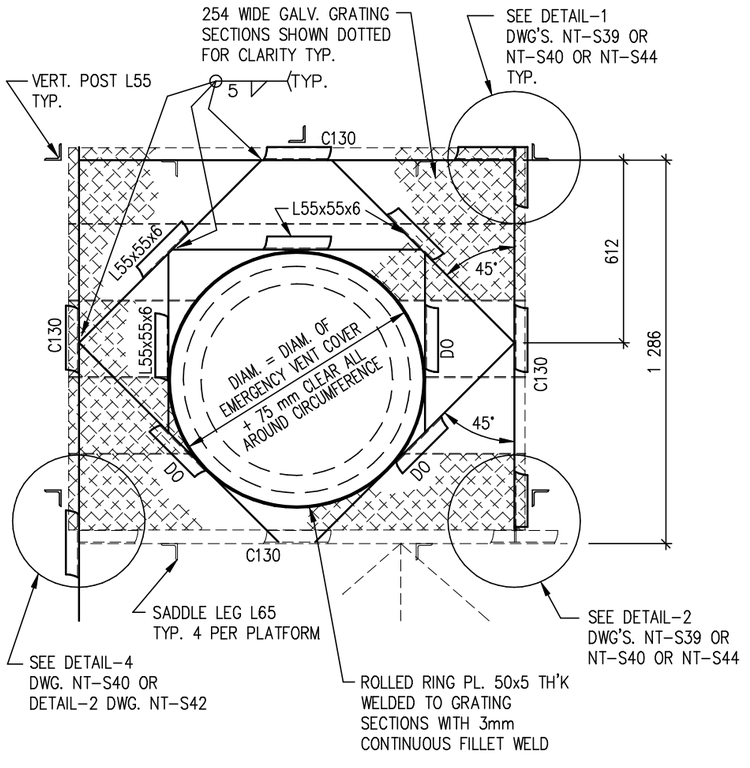
DETAIL – 9



DETAIL – 8
ELEVATION



SECTION A–A



DETAIL – 10

NOTES:

1– FOR TANK AND CATWALK ARRANGEMENT REFER TO PARTICULAR PROJECT DRAWINGS.

2– FOR FINISH GRADE ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3– PROVIDE SHOP DRAWINGS OF CATWALK AND STAIRWAY AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

4– FOR MATERIAL FOR CATWALK & STAIRWAY, GRATING & STEPS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

5– FOR ELECTRICAL REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

LEGEND:

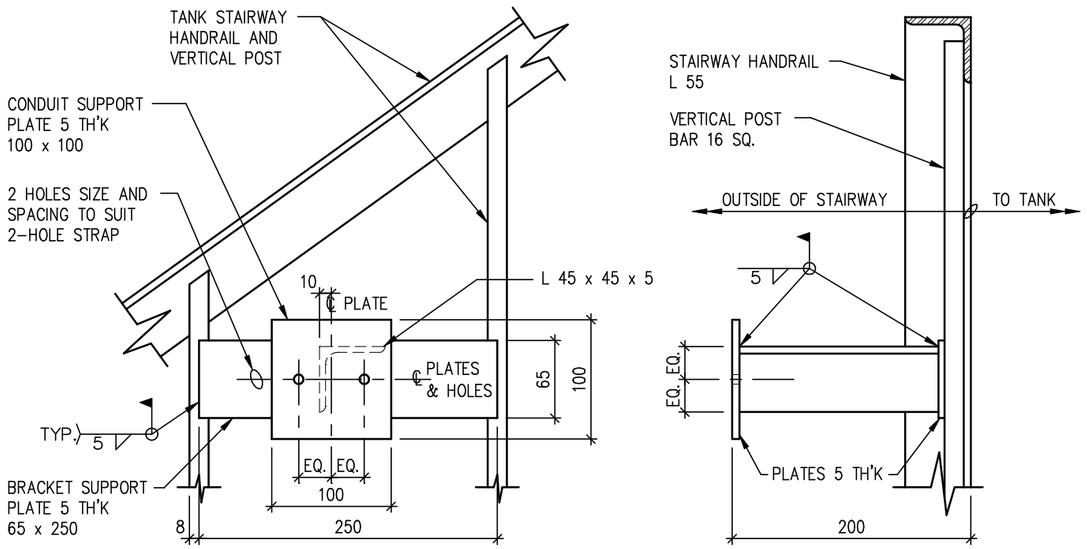
T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.G. = TOP OF GRATING

Northwest Territories Public Works & Services

Drawing Title

CATWALKS & STAIRWAY FOR HORIZONTAL TANKS MISCELLANEOUS DETAILS

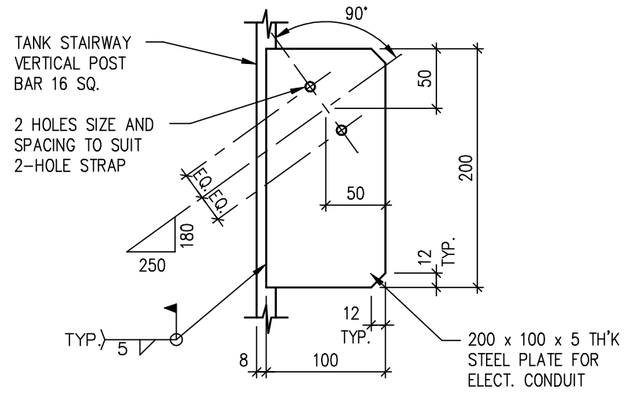
Design	Ver.	Scale
EDZ	EDZ	1 : 20
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–S47	
Revised On		
04/09/07		



FRONT VIEW

SIDE VIEW

TYPE II SUPPORT



TYPE I SUPPORT

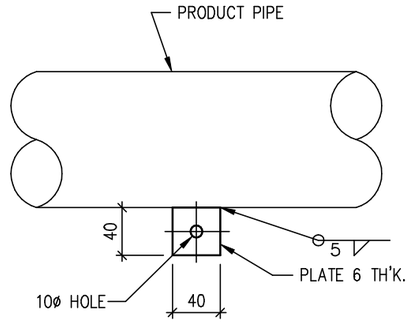
NOTES:

1- TYPE I SUPPORT PLATE IS SIZED TO SUPPORT TWO CONDUITS. WHEN ONLY ONE CONDUIT IS REQUIRED, SAME IS INSTALLED AT THE UPPER HALF OF SUPPORT PLATE.
2- FOR POSITION OF PLATES REFER TO DWG. NT-E04 OR NT-E05 OR NT-E06 AND TO PARTICULAR PROJECT DRAWINGS.
3- FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

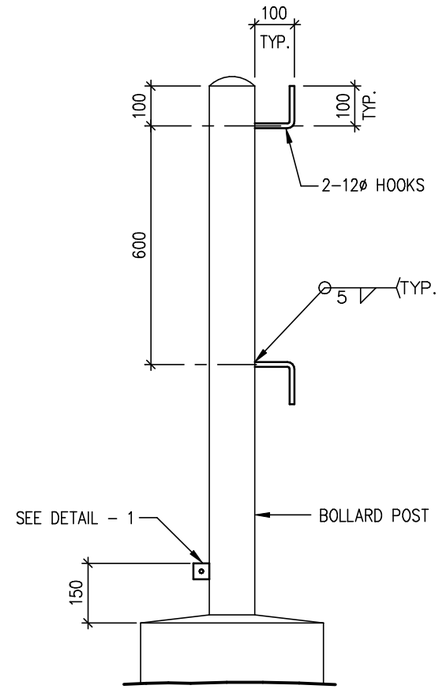
Northwest Territories Public Works & Services

Drawing Title
TYPE I AND TYPE II SUPPORTS
FOR ELECTRICAL CONDUITS AT VERTICAL TANK STAIRWAY DETAILS

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	1 : 5	REE	NT-S48
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/07	



DETAIL - 1
1 : 5



DETAIL - 2
1 : 15

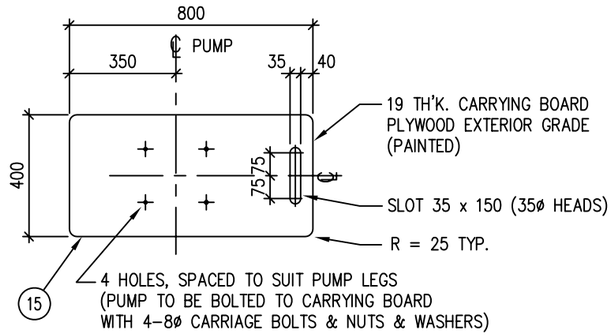
NOTE:

1- FOR MATERIAL REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

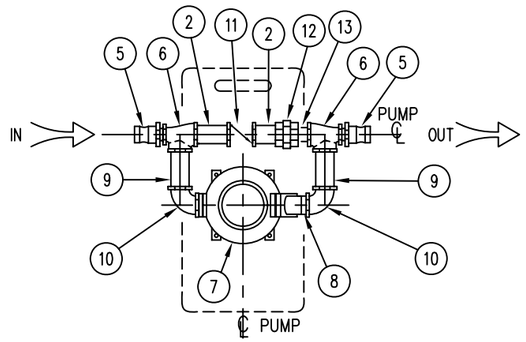
Northwest Territories Public Works & Services

Drawing Title
GROUND LUG PLATE & HOOKS
AT BOLLARD AT TRUCK UNLOADING POINT DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	AS SHOWN	REE	NT-S49
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/07	



DETAIL – 2 PUMP CARRYING BOARD

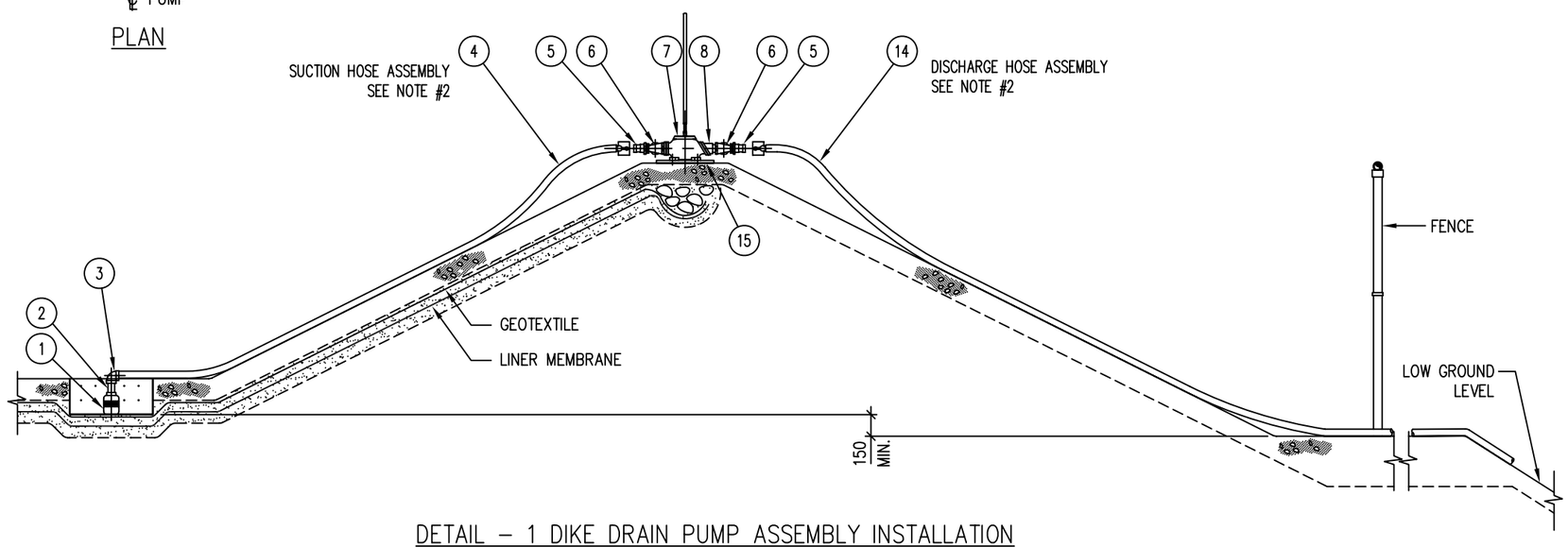


PLAN

LIST OF MATERIAL FOR DIKE DRAIN PUMP ASSEMBLY *

ITEM	SIZE (S.I.)	DESCRIPTION
1	50ø	SUCTION STUB STRAINER.
2	50ø x 100 LG.	GALVANIZED STEEL PIPE NIPPLE, THREADED ENDS.
3	50ø	ELBOW 90°, M. I. GALVANIZED, THREADED
4		SUCTION HOSE ASSEMBLY (SEE NOTE 2) & SPECIFICATIONS
5		OPW KAMLOK #633–F ADAPTER.
6	50ø x 38ø x 50ø	THREADED TEE, MALLABLE IRON, GALV'D
7	38ø x 38ø	DIAPHRAGM PUMP, GORMAN RUPP, MODEL 4790–97 (SEE SPECIFICATIONS).
8	38ø x 100 Lg.	GALVANIZED STEEL PIPE NIPPLE, THREADED ENDS.
9	38ø x 200 LG.	GALVANIZED STEEL PIPE NIPPLE, THREADED ENDS.
10	38ø	ELBOW 90°, MALLABLE IRON THREADED, GALVANIZED
11	50ø	CHECK VALVE, BRONZE, THREADED ENDS, FEMALE NPT
12	50ø	UNION, MALLABLE IRON, CLASS 300 THREADED. GALVANIZED
13	50ø x TO SUIT	PIPE, ERW, GALVANIZED, THREADED
14	50ø	DISCHARGE HOSE ASSEMBLY (SEE NOTE 2) & SPECIFICATIONS.
15	–	PUMP CARRYING BOARD, SEE DETAIL–2

* FOR DESCRIPTION OF ITEMS SEE SPECIFICATIONS, DIV. 15, SECTION 15010.



DETAIL – 1 DIKE DRAIN PUMP ASSEMBLY INSTALLATION

NOTES:

1– UNLESS OTHERWISE INDICATED ONE DIKE DRAIN PUMP ASSEMBLY TO BE PROVIDED FOR EACH SITE.

2– FOR LENGTH OF SUCTION & DISCHARGE HOSES REFER TO PARTICULAR PROJECT DRAWINGS. DISCHARGE HOSE SHALL EXTEND TO LOW GROUND LEVEL OUTSIDE OF FENCE.

3– FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 15, SECTION 15010.

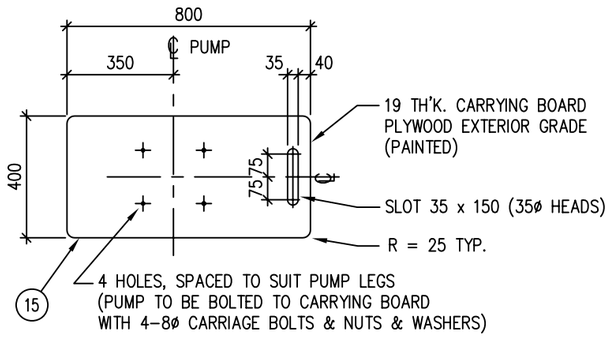
4– PUMP & HOSES TO BE STORED INDOORS WHEN NOT USED.

Northwest Territories Public Works & Services

Drawing Title

DIKE DRAIN PUMP ASSEMBLY
PLAN & DETAILS

Design	Ver.	Scale
EDZ	EDZ	1 : 40
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT–P01	
Revised On		
04/09/07		



DETAIL – 2 PUMP CARRYING BOARD

LIST OF MATERIAL FOR DIKE DRAIN PUMP ASSEMBLY *

ITEM	SIZE (S.I.)	DESCRIPTION
1	50ø	SUCTION STUB STRAINER.
2	50ø x 100 LG.	GALVANIZED STEEL PIPE NIPPLE, THREADED ENDS.
3	50ø	ELBOW 90°, M. I. GALVANIZED, THREADED
4		SUCTION HOSE ASSEMBLY (SEE NOTE 2) & SPECIFICATIONS
5		OPW KAMLOK #633–F ADAPTER.
6	50ø x 38ø x 50ø	THREADED TEE, MALLABLE IRON, GALV'D
7	38ø x 38ø	DIAPHRAGM PUMP, GORMAN RUPP, MODEL 4790–97 (SEE SPECIFICATIONS).
8	38ø x 100 Lg.	GALVANIZED STEEL PIPE NIPPLE, THREADED ENDS.
9	38ø x 200 LG.	GALVANIZED STEEL PIPE NIPPLE, THREADED ENDS.
10	38ø	ELBOW 90°, MALLABLE IRON THREADED, GALVANIZED
11	50ø	CHECK VALVE, BRONZE, THREADED ENDS, FEMALE NPT
12	50ø	UNION, MALLABLE IRON, CLASS 300 THREADED. GALVANIZED
13	50ø x TO SUIT	PIPE, ERW, GALVANIZED, THREADED
14	50ø	DISCHARGE HOSE ASSEMBLY (SEE NOTE 2) & SPECIFICATIONS.
15	–	PUMP CARRYING BOARD, SEE DETAIL–2

* FOR DESCRIPTION OF ITEMS SEE SPECIFICATIONS, DIV. 15, SECTION 15010.

NOTES:

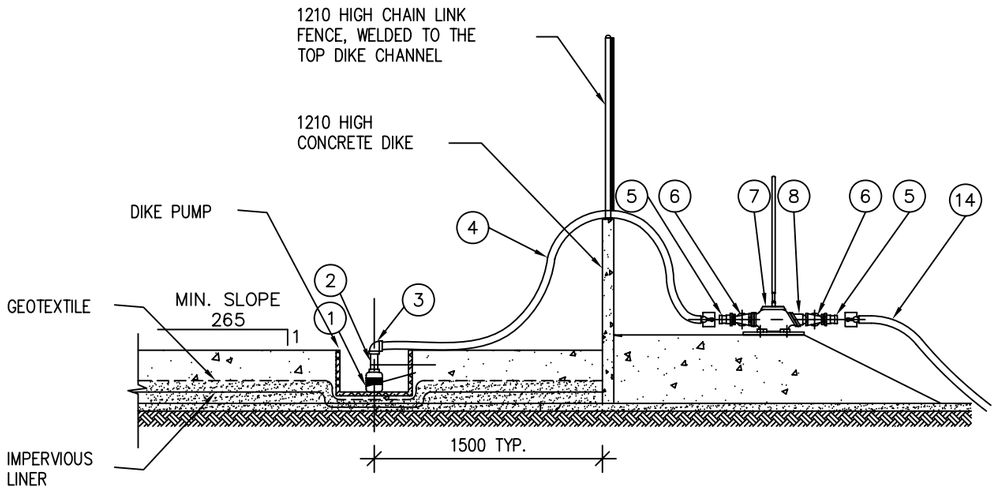
1– UNLESS OTHERWISE INDICATED ONE DIKE DRAIN PUMP ASSEMBLY TO BE PROVIDED FOR EACH SITE.

2– FOR LENGTH OF SUCTION & DISCHARGE HOSES REFER TO PARTICULAR PROJECT DRAWINGS. DISCHARGE HOSE SHALL EXTEND TO LOW GROUND LEVEL OUTSIDE OF FENCE.

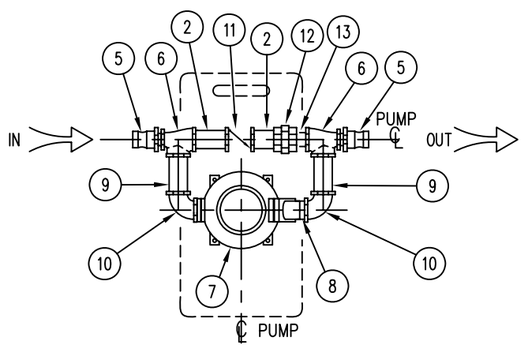
3– FOR MATERIALS REFER TO SPECIFICATIONS, DIV. 15, SECTION 15010.

4– PUMP & HOSES TO BE DRAINED AND STORED INDOORS WHEN NOT USED.

5– FOR CONCRETE DIKES THE PUMP WILL BE LOCATED OUTSIDE THE DIKE AND THE SUCTION HOSE WILL BE RUN OVER THE DIKE AND UNDER THE FENCE.



DETAIL – 1 DIKE DRAIN PUMP ASSEMBLY INSTALLATION



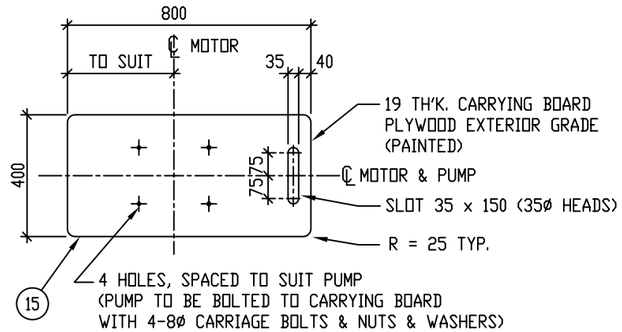
PLAN

Northwest Territories Public Works & Services

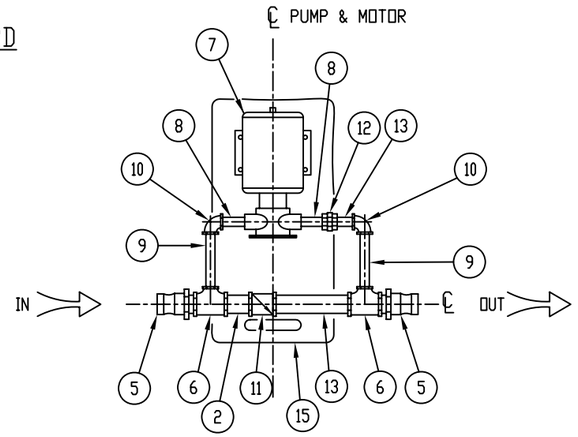
Drawing Title

DIKE DRAIN PUMP ASSEMBLY
FOR CONCRETE DIKE
PLAN & DETAILS

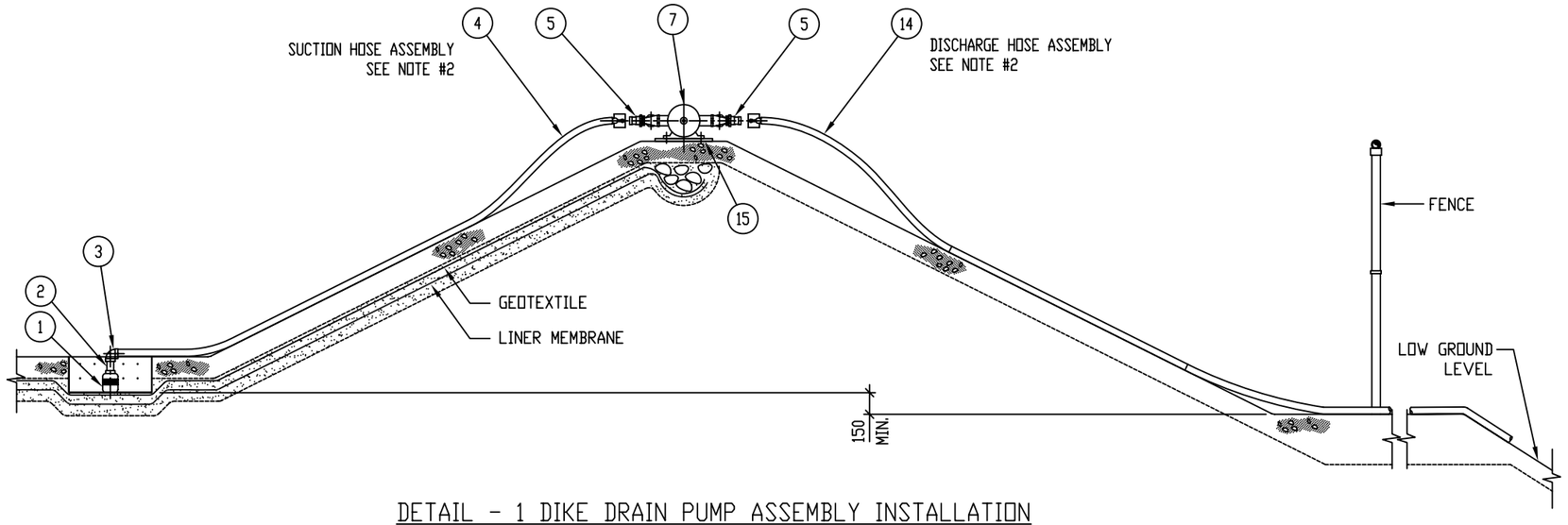
Design	Ver.	Scale
EDZ	EDZ	1 : 40
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT–P01A	
Revised On		
04/09/07		



DETAIL - 2 PUMP CARRYING BOARD



PLAN



DETAIL - 1 DIKE DRAIN PUMP ASSEMBLY INSTALLATION

LIST OF MATERIAL FOR DIKE DRAIN PUMP ASSEMBLY *

ITEM	SIZE (S.I.)	DESCRIPTION
1	50ø	SUCTION STUB STRAINER.
2	50ø x 100 LG.	GALVANIZED STEEL PIPE NIPPLE, THREADED ENDS.
3	50ø	ELBOW 90°, MALLABLE IRON, GALVANIZED, THREADED.
4		SUCTION HOSE ASSEMBLY (SEE NOTE #2) & SPEC'S.
5		OPW KAMLOK #633-F ADAPTER.
6	50ø x 25ø x 50ø	THREADED TEE, MALLABLE IRON, GALVANIZED.
7	25ø x 25ø	3/4 HP DIRECT DRIVE ELECTRIC PUMP, JABSCO, MODEL 6050-0013
8	25ø x 100 Lg.	GALVANIZED STEEL PIPE NIPPLE, THREADED ENDS.
9	25ø x 200 LG.	GALVANIZED STEEL PIPE NIPPLE, THREADED ENDS.
10	25ø	ELBOW 90°, MALLABLE IRON, GALVANIZED, THREADED.
11	50ø	CHECK VALVE, BRONZE, THREADED ENDS, FEMALE NPT.
12	25ø	UNION, M. I., CLASS 300 THREADED, GALVANIZED.
13	50ø x TO SUIT	PIPE, ERW, THREADED, GALVANIZED.
14	38ø	DISCHARGE HOSE ASSEMBLY (SEE NOTE #2) & SPEC'S.
15	-	PUMP CARRYING BOARD, SEE DETAIL-2.

* FOR DESCRIPTION OF ITEMS SEE SPECIFICATIONS, DIV. 15, SECTION 15010.

NOTES:

1- UNLESS OTHERWISE INDICATED ONE DIKE DRAIN PUMP ASSEMBLY TO BE PROVIDED FOR EACH SITE.

2- FOR LENGTH OF SUCTION & DISCHARGE HOSES REFER TO PARTICULAR PROJECT DRAWINGS. DISCHARGE HOSE SHALL EXTEND TO LOW GROUND LEVEL OUTSIDE OF FENCE.

3- FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 15, SECTION 15010.

4- PUMP & HOSES TO BE DRAINED AND STORED INDOORS WHEN NOT USED.

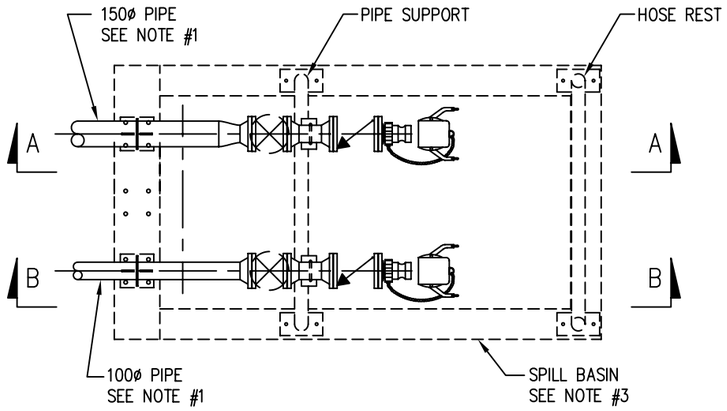
NOTE: THIS IS A WATER PUMP AND SHALL NOT BE USED FOR GASOLINE OR DIESEL FUEL.

Northwest Territories Public Works & Services

Drawing Title

ELECTRIC DIKE DRAIN PUMP ASSEMBLY PLAN & DETAILS

Design	Ver.	Scale
EDZ	EDZ	1 : 40
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT-P01B	
Revised On		
04/09/07		



PLAN VIEW

(ONLY 1–150ø & 1–100ø PIPES SHOWN MAX 3 LINES SEE NOTE #1)

LIST OF MATERIAL

ITEM	SIZE (S.I.)	DESCRIPTION
1	150ø	CARBON STEEL PIPE, ERW, SCH. 40, A53 GR. B
2	100ø	CARBON STEEL PIPE, ERW, SCH. 40, A53 GR. B
3		WELD NECK FLANGE, SCH. 40, A350, A350 GR. LF2
4		THREADED FLANGE, 150#, A350 GR LF2
5	150ø x 100ø	ECCENTRIC REDUCER, A234 GR. B
6	100ø	GATE VALVE, FLANGED, 150# A352 GR. LCB
7		CHECK VALVE, FLANGED, 150# A352 GR. LCB
8		KAMLOK ADAPTOR, OPW No. 633–F, STAINLESS STEEL
9		KAMLOK CAP, LOCKABLE TYPE, OPW # 634–BK, ALUM.
10	25ø	HALF COUPLING, THREADED, A350 GR. LF2
11		PIPE NIPPLE, TBE, SCH. 80, 100 LONG, A53 SMLS
12		600# STEEL THREADED GATE VALVE, 600#, A105N
13		LOCKABLE PLUG, SEE NOTE #6 (STEEL)
14	100ø	GASKET, JOHN CRANE STYLE 2160, NON–ASBESTUS
15	16ø x 89 Lg.	STUD BOLTS, A320 GR. L7
16	16ø	NUTS, A194 GR. 4

NOTES:

1– FOR NUMBER, SIZE & ARRANGEMENT OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.

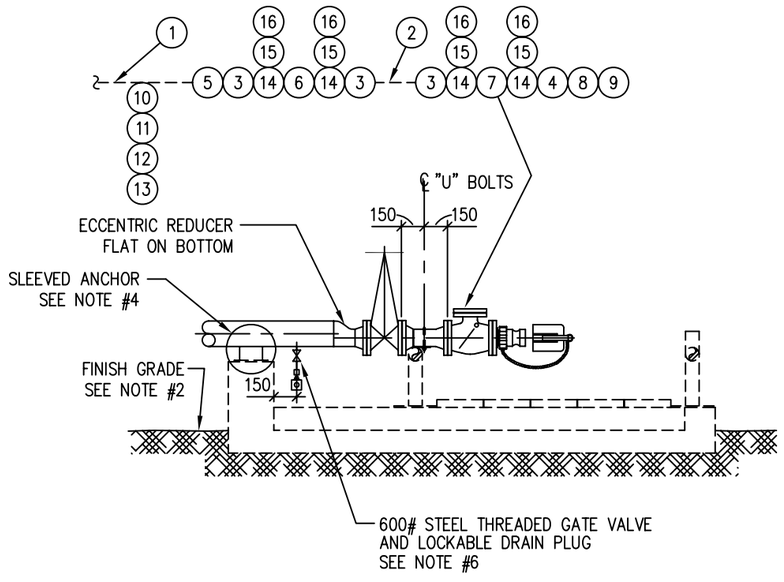
2– FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

3– FOR SPILL BASIN SEE DWG. NT–S11

4– FOR SLEEVED ANCHOR SEE DWG. NT–S16.

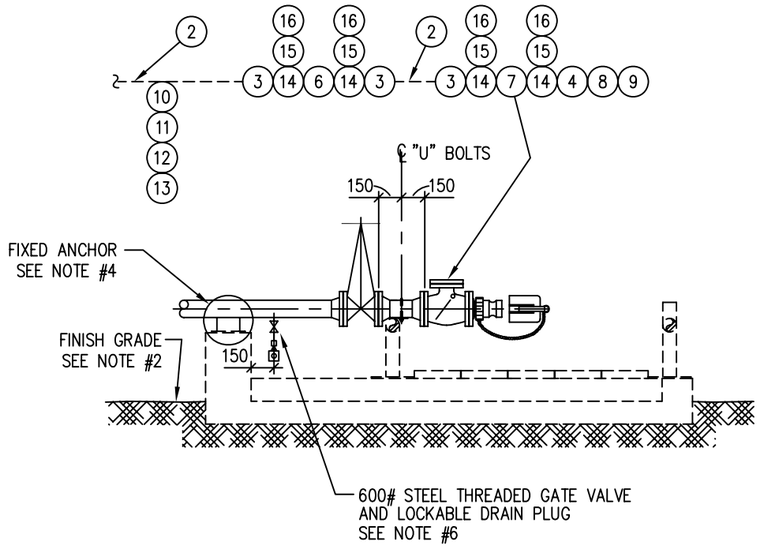
5– FOR PIPING, VALVES & FITTING MATERIALS DETAILS SEE SPECIFICATIONS, DIV.15, SEC. 15010.

6– FOR LOCKABLE DRAIN PLUG SEE DWG. NT–P07



SECTION A–A

(TYPICAL ARRANGEMENT FOR 1–150ø PIPE)



SECTION B–B

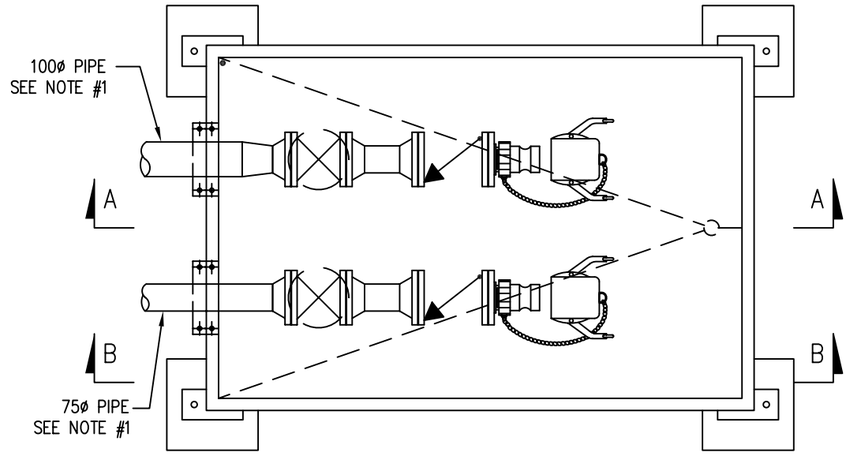
(TYPICAL ARRANGEMENT FOR 1–100ø PIPE)

Northwest Territories Public Works & Services

Drawing Title

SEA HOSE CONNECTION PIPING
AT SPILL BASIN
PLAN, SECTIONS

Design	Ver.	Scale
RVM/LR	EDZ	1 : 40
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT–P02	
Revised On		
04/09/07		



PLAN VIEW

(ONLY 1–100ø & 1–75ø PIPES SHOWN MAX 2 LINES SEE NOTE #1)

LIST OF MATERIAL

ITEM	SIZE (S.I.)	DESCRIPTION
1	100ø	CARBON STEEL PIPE, ERW, SCH. 80, A53 GR. B
2	75ø	CARBON STEEL PIPE, ERW, SCH. 80, A53 GR. B
3		WELD NECK FLANGE, SCH. 40, A350, A350 GR. LF2
4		THREADED FLANGE, 150#, A350 GR LF2
5	1000ø x 75ø	ECCENTRIC REDUCER, A234 GR. B
6	75ø	GATE VALVE, FLANGED, 150# A352 GR. LCB
7		CHECK VALVE, FLANGED, 150# A352 GR. LCB
8		KAMLOK ADAPTOR, OPW No. 633–F, STAINLESS STEEL
9		KAMLOK CAP, LOCKABLE TYPE, OPW # 634–BK, ALUM.
10	25ø	HALF COUPLING, THREADED, A350 GR. LF2
11		PIPE NIPLE, TBE, SCH. 80, 100 LONG, A53 SMLS
12		600# STEEL THREADED GATE VALVE, 600#, A105N
13	25ø	LOCKABLE PLUG, SEE NOTE #6 (STEEL)
14	75ø	GASKET, JOHN CRANE STYLE 2160, NON–ASBESTUS
15	16ø x 89 Lg.	STUD BOLTS, A320 GR. L7
16	16ø	NUTS, A194 GR. 4

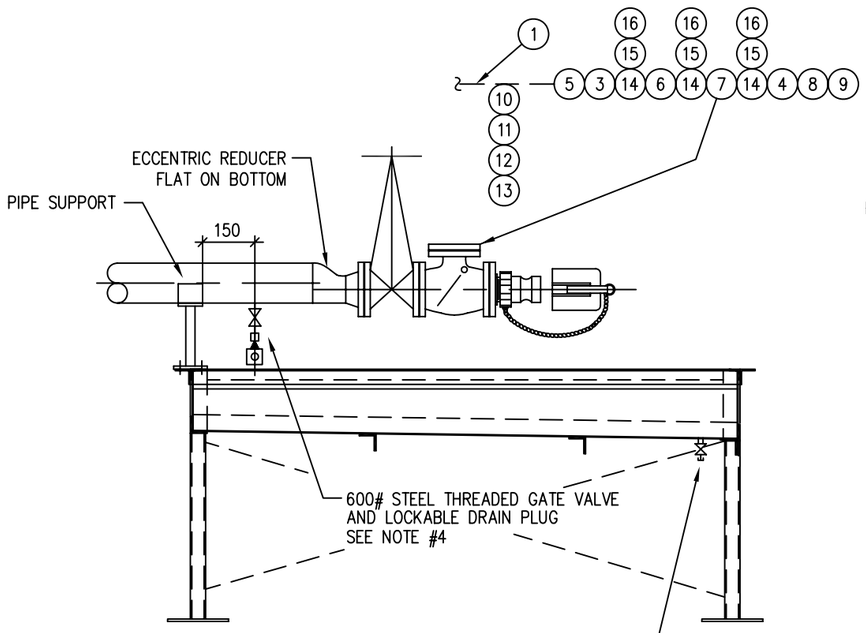
NOTES:

1– FOR NUMBER, SIZE & ARRANGEMENT OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.

2– FOR SPILL BASIN SEE DWG. NT–S11

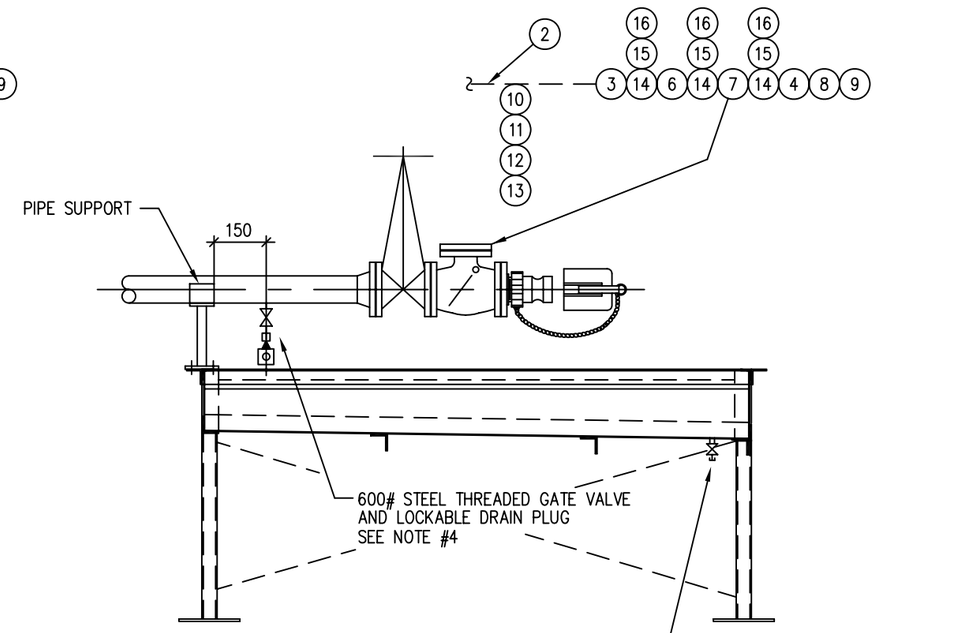
3– FOR PIPING, VALVES & FITTING MATERIALS DETAILS SEE SPECIFICATIONS, DIV.15, SEC. 15010.

4– FOR LOCKABLE DRAIN PLUG SEE DWG. NT–P07



SECTION A–A

(TYPICAL ARRANGEMENT FOR 1–100ø PIPE)



SECTION B–B

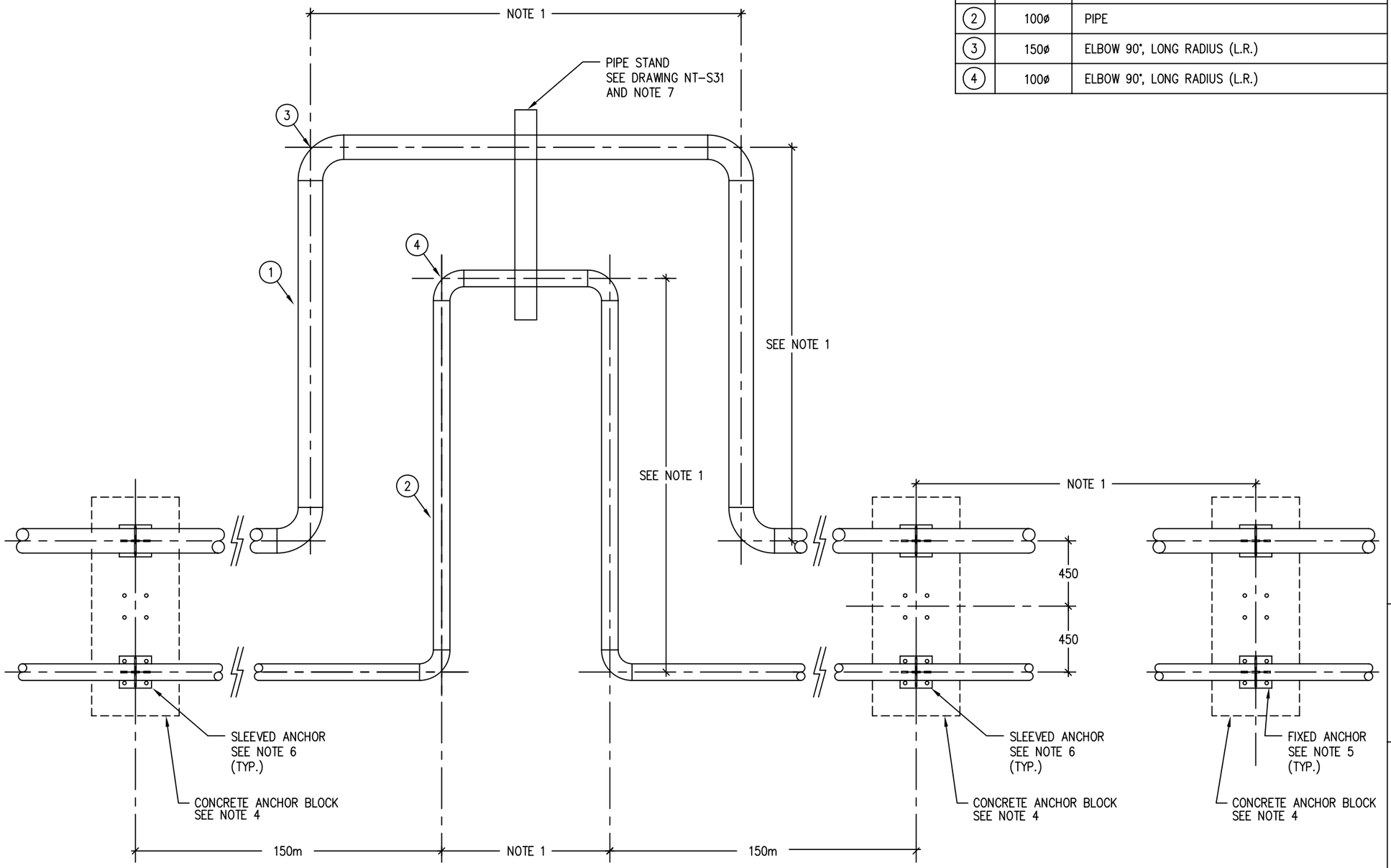
(TYPICAL ARRANGEMENT FOR 1–75ø PIPE)

Northwest Territories Public Works & Services

Drawing Title

FUEL TRUCK CONNECTION PIPING
AT SPILL BASIN
PLAN, SECTIONS

Design	Ver.	Scale
RVM/LR	EDZ	1 : 20
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT–P02A	
Revised On		
04/08/31		



PLAN VIEW

ONLY 1-150ø & 1-100ø PIPE ARE SHOWN (MAX. 3 LINES SEE NOTE 1)

LIST OF MATERIAL		
ITEM	SIZE (S.I.)	DESCRIPTION
1	150ø	PIPE
2	100ø	PIPE
3	150ø	ELBOW 90°, LONG RADIUS (L.R.)
4	100ø	ELBOW 90°, LONG RADIUS (L.R.)

NOTES:

1- NUMBER, TYPE, LOCATION & SPACING OF EXPANSION LOOPS AND MANNER OF INSTALLATION SHALL BE AS INDICATED ON PARTICULAR PROJECT DRAWINGS AND SPECIFICATIONS. ASSUME SUMMER INSTALLATION AND PROVIDE FOR MAXIMUM OFFSET MOTION OCCURING DURING LOCAL LOW WINTER TEMPERATURE AT THE TIME OF INSTALLATION.

2- FOR NUMBER, SIZE & ARRANGEMENT OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.

3- FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

4- FOR LOCATION OF ANCHOR BLOCKS SEE PARTICULAR PROJECT DRAWINGS AND FOR CONCRETE ANCHOR BLOCK DETAIL SEE DWG. NT-S14.

5- FOR FIXED ANCHOR SEE DWG. NT-S15.

6- FOR SLEEVED ANCHOR SEE DWG. NT-S16.

7- LOCATION OF PIPE STANDS TO BE AS SHOWN IN PARTICULAR PROJECT DRAWINGS.

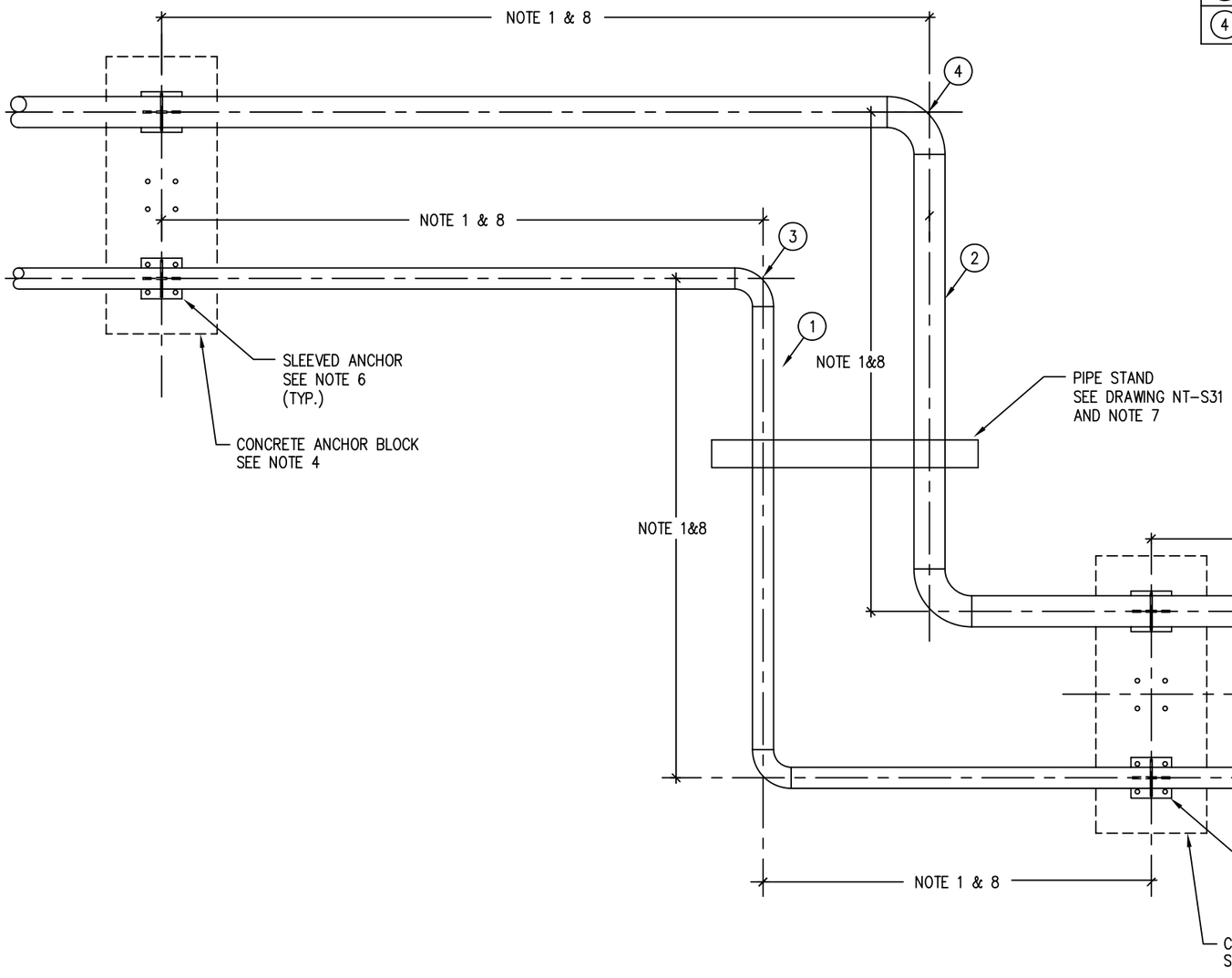
8- THIS DETAIL IS FOR GENERAL INFORMATION ONLY. EXPANSION LOOP DESIGN IS SITE SPECIFIC AND IS TO BE DESIGNED AND APPROVED BY THE ENGINEER FOR THE PARTICULAR INSTALLATION IN WHICH IT IS BEING USED.

Northwest Territories Public Works & Services

Drawing Title

PIPELINE EXPANSION LOOP
TYPE 1 DETAIL

Design	Ver.	Scale
RVM	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT-P03	
Revised On		
04/05/16		



PLAN VIEW

ONLY 1-150ø & 1-100ø PIPES SHOWN (MAX. 3 LINES SEE NOTE 1)

LIST OF MATERIAL

ITEM	SIZE (S.I.)	DESCRIPTION
1	150ø	PIPE
2	100ø	PIPE
3	150ø	ELBOW 90°, LONG RADIUS (L.R.)
4	100ø	ELBOW 90°, LONG RADIUS (L.R.)

NOTES:

1- NUMBER, TYPE, LOCATION & SPACING OF EXPANSION LOOPS AND MANNER OF INSTALLATION SHALL BE AS INDICATED ON PARTICULAR PROJECT DRAWINGS AND SPECIFICATIONS. ASSUME SUMMER INSTALLATION AND PROVIDE FOR MAXIMUM OFFSET MOTION OCCURING DURING LOCAL LOW WINTER TEMPERATURE AT THE TIME OF INSTALLATION.

2- FOR NUMBER, SIZE & ARRANGEMENT OF PRODUCT PIPES SEE PARTICULAR PROJECT DRAWINGS.

3- FOR FINISH ELEVATIONS SEE PARTICULAR PROJECT DRAWINGS.

4- FOR CONCRETE ANCHOR BLOCK SEE DWG. NT-S14

5- FOR FIXED ANCHOR SEE DWG. NT-S15

6- FOR SLEEVED ANCHOR SEE DWG. NT-S16

7- LOCATION OF PIPE STANDS TO BE AS SHOWN IN PARTICULAR PROJECT DRAWINGS.

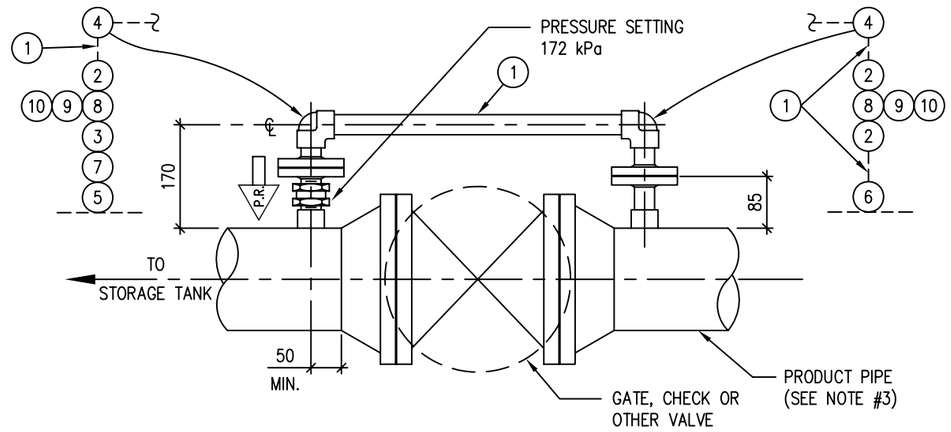
8- THIS DETAIL IS FOR GENERAL INFORMATION ONLY. EXPANSION LOOP DESIGN IS SITE SPECIFIC AND IS TO BE DESIGNED AND APPROVED BY THE ENGINEER FOR THE PARTICULAR INSTALLATION IN WHICH IT IS BEING USED.

Northwest Territories Public Works & Services

Drawing Title

PIPELINE EXPANSION LOOP
TYPE 2 DETAIL

Design	Ver.	Scale
RVM	EDZ	N.T.S.
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT-P04	
Revised On		
04/05/16		



PLAN VIEW

(BASIC ARRANGEMENT, RIGHT HAND SHOWN, LEFT HAND ON OPPOSITE SIDE)

LIST OF MATERIAL		
ITEM	SIZE (S.I.)	DESCRIPTION
1	25ø	PIPE
2		SLIP-ON FLANGE
3		THREADED FLANGE
4		ELBOW 90°, SOCKET WELD
5		HALF COUPLING, THREADED
6		HALF COUPLING, SOCKET WELD
7		THERMAL PRESSURE RELIEF VALVE (SEE NOTES #1, 2, & 3)
8		GASKET
9	12ø x 65 LG.	STUD BOLT
10	12ø	NUT (2 EACH BOLT)

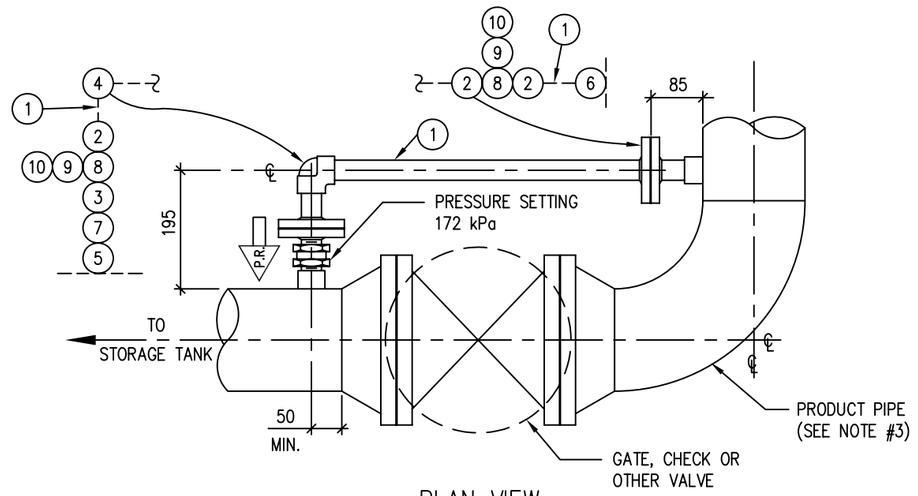
NOTES:

1- IN-LINE TYPE PRESSURE RELIEF VALVE WITH ENGRAVED ARROW ON ONE SIDE OF VALVE (TO INDICATE DIRECTION IN WHICH PRESSURE IS TO BE RELIEVED)
2- ENSURE THAT NAMEPLATE IS NOT DAMAGED OR PAINTED OVER.
3- BASIC ARRANGEMENT SHOWN IS APPLICABLE TO PRODUCT PIPE 50 mm THRU 150 mm DIAMETER.
4- HOLES AT FLANGES TO BE STRADDLED ABOUT HORIZONTAL & VERTICAL AXIS OF PIPE.
5- FOR MORE DESCRIPTION OF ITEMS REFER TO SPECIFICATIONS, DIVISION 15, SECTION 15010.
6- SEE SPECIFICATIONS, DIVISION 15, SECTION 15010, FOR ALTERNATIVE INSTALLATION ON VALVE BODY.

Northwest Territories Public Works & Services

Drawing Title: TYPICAL INSTALLATION OF TYPE 1 PRESSURE RELIEF BY-PASS (ACROSS VALVES AT EXTERIOR PIPING)

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1 : 10	REE	NT-P05
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/05/16	



PLAN VIEW

(BASIC ARRANGEMENT, RIGHT HAND SHOWN, LEFT HAND ON OPPOSITE SIDE)

LIST OF MATERIAL		
ITEM	SIZE (S.I.)	DESCRIPTION
1	25ø	PIPE
2		SLIP-ON FLANGE
3		THREADED FLANGE
4		ELBOW 90°, SOCKET WELD
5		HALF COUPLING, THREADED
6		HALF COUPLING, SOCKET WELD
7		THERMAL PRESSURE RELIEF VALVE (SEE NOTES #1, 2, & 3)
8		GASKET
9	12ø x 65 LG.	STUD BOLT
10	12ø	NUT (2 EACH BOLT)

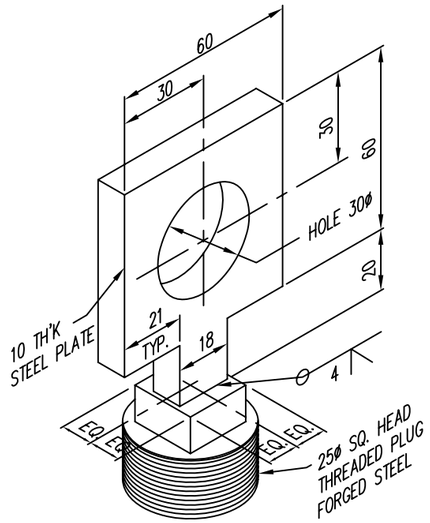
NOTES:

1- IN-LINE TYPE PRESSURE RELIEF VALVE WITH ENGRAVED ARROW ON ONE SIDE OF VALVE (TO INDICATE DIRECTION IN WHICH PRESSURE IS TO BE RELIEVED)
2- ENSURE THAT NAMEPLATE IS NOT DAMAGED OR PAINTED OVER.
3- BASIC ARRANGEMENT SHOWN IS APPLICABLE TO PRODUCT PIPE 50 mm THRU 150 mm DIAMETER.
4- HOLES AT FLANGES TO BE STRADDLED ABOUT HORIZONTAL & VERTICAL AXIS OF PIPE.
5- FOR MORE DESCRIPTION OF ITEMS REFER TO SPECIFICATIONS, DIVISION 15, SECTION 15010.
6- SEE SPECIFICATIONS, DIVISION 15, SECTION 15010, FOR ALTERNATIVE INSTALLATION ON VALVE BODY.

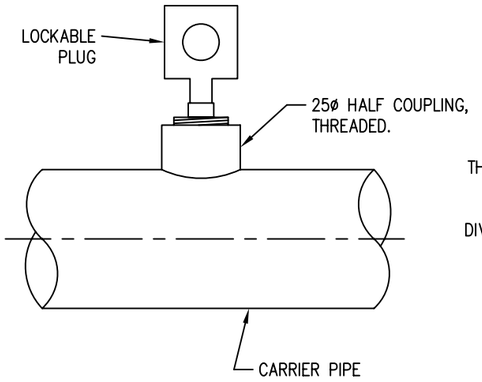
Northwest Territories Public Works & Services

Drawing Title: TYPICAL INSTALLATION OF TYPE 2 PRESSURE RELIEF BY-PASS (ACROSS VALVES AT EXTERIOR PIPING)

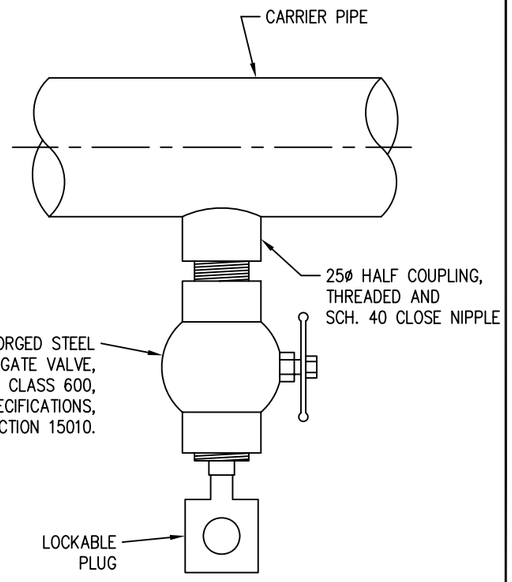
Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1 : 10	REE	NT-P06
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/05/16	



LOCKABLE PLUG DETAIL
SCALE: 1 : 2



VENT DETAIL
SCALE: 1 : 5



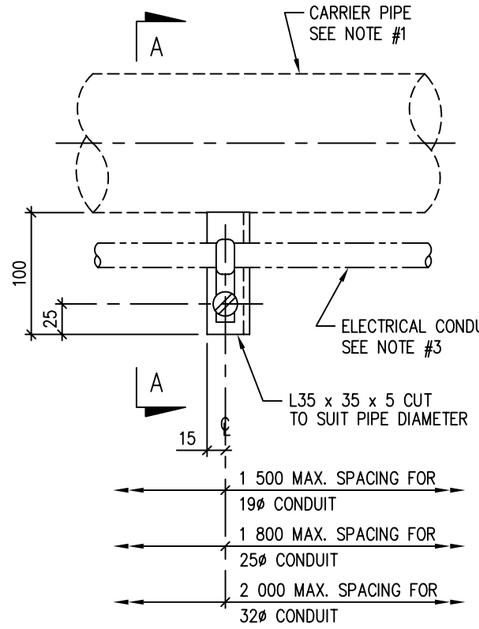
DRAIN VALVE DETAIL
SCALE: 1 : 5

NOTES:

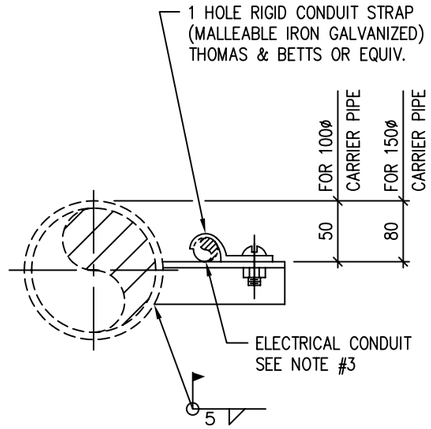
1- FOR LOCATION OF LOCKABLE PLUGS REFER TO PARTICULAR PROJECT DRAWINGS.
2- FOR MATERIAL REFER TO SPECIFICATIONS, DIV. 15, SECTION 15010.

Northwest Territories Public Works & Services

Drawing Title				
PIPE DRAIN VALVE, VENT AND LOCKABLE PLUG DETAILS				
Design: EDZ	Ver.: EDZ	Scale: AS SHOWN	Revised By: REE	Drawing No.: NT-P07
Drawn: KJ	Appr.:	Date: 94/04/29	Revised On: 04/05/16	



PLAN



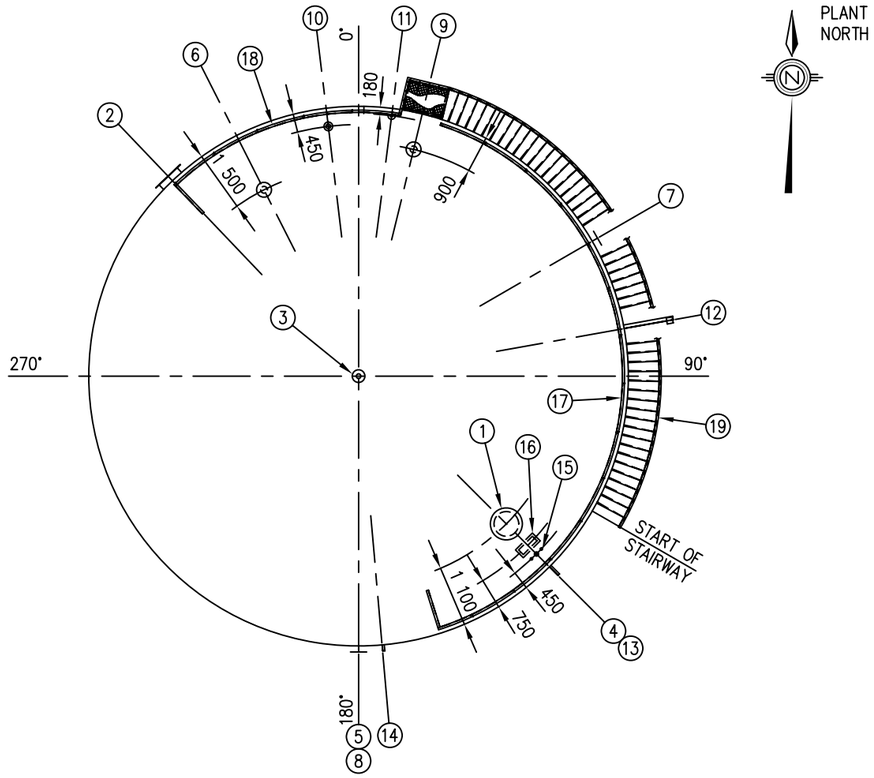
SECTION A-A

NOTES:

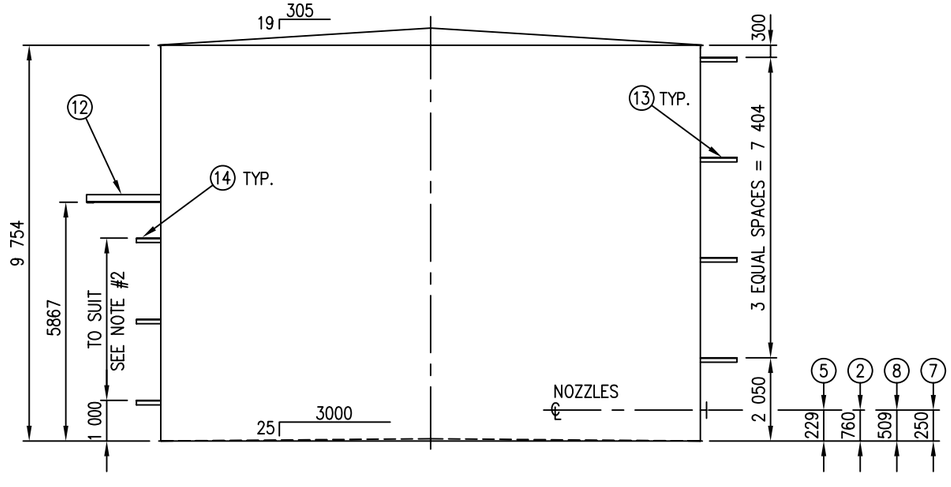
1- WELDING OF STEEL ANGLE TO PIPE ONLY TO BE DONE ON GAS FREE PIPE, SAFE FOR HOTWORK.
2- FOR SIZE OF CARRIER PIPE REFER TO PARTICULAR PROJECT DRAWINGS.
3- FOR SIZE OF RIGID CONDUIT REFER TO ELECTRICAL DRAWINGS FOR PARTICULAR PROJECT.

Northwest Territories Public Works & Services

Drawing Title				
BRACKET, TYPE "PB1" FOR ELECTRICAL CONDUITS DETAIL				
Design: EDZ	Ver.: EDZ	Scale: 1 : 5	Revised By: REE	Drawing No.: NT-P08
Drawn: KJ	Appr.:	Date: 95/02/28	Revised On: 04/05/16	



ORIENTATION PLAN
(TYPICAL)
(BASIC TANK ELEMENTS)



ELEVATION
(SHELL NOZZLES & BRACKETS)

LEGEND OF TANK APPURTENANCES

No.	DESCRIPTION	REMARKS
1	610ø mm ROOF MANHOLE	TO API 650 STANDARDS & NOTE #1
2	610ø mm SHELL MANHOLE	TO API 650 STANDARDS. & NOTE #2
3	100ø PAINTER SCAFFOLD CABLE SUPPORT	TO API 650 STANDARDS
4	AUTOMATIC TANK LEVEL GAUGE	SEE DWG. NT-P11 & NOTE #2
5	SHELL NOZZLE – INLET / OUTLET	TO API 650 STANDARDS & NOTE #2
6	PRESSURE / VACUUM VENT OPENING	
7	WATER DRAW-OFF	SEE DWG. NT-P12 & NOTE #2
8	PRESSURE RELIEF LINE CONNECTION	SEE DWG. NT-P05 & P06 AND NOTE #2
9	ROOF 150ø GAUGE HATCH	TO API 650 STANDARDS & NOTE #2
10	ROOF 75ø COUPLING c/w PLUG	SEE DWG. NT-P13 & NOTE #2
11	ROOF COUPLING "RC1" FOR LIGHT FIXTURE POST	SEE DWG. NT-P18 & NOTE #2
12	SHELL LIGHT FIXTURE BRACKET "SB2"	SEE DWG. NT-P16 & NOTE #2
13	SHELL BRACKET "SB1" FOR AUTOMATIC TANK LEVEL GAUGE	SEE DWG. NT-P11 & NOTE #2
14	SHELL BRACKET "SB3" FOR VERTICAL ELECTRICAL CONDUIT	SEE DWG. NT-P17 & NOTE #2
15	ROOF COUPLING "RN3" FOR AUTOMATIC TANK GAUGE	SEE DWG. NT-P11 & NOTE #2
16	ROOF INSPECTION FRAME "RIF"	SEE DWG. NT-P12 & NOTE #3
17	ROOF HANDRAIL RH (LEFT)	SEE DWG. NT-P15 & NOTE #2
18	ROOF HANDRAIL RH (RIGHT)	
19	SPIRAL STAIRWAY (53 TREADS)	SEE DWG. NT-P14 & NOTE #2

NOTES:

1- FOR NUMBER AND LOCATION OF ROOF MANHOLES REFER TO PARTICULAR PROJECT DRAWINGS.

2- FOR NUMBER, LOCATION AND SIZE OF TANK OPENINGS, APPURTENANCES AND BRACKETS REFER TO PARTICULAR PROJECT DRAWINGS.

3- ROOF INSPECTION FRAME "RIF" IS REQUIRED ONLY WHEN CALLED FOR IN PARTICULAR PROJECT DRAWINGS. (WHERE ROOF MANHOLE IS TOO FAR AWAY FROM ROOF COUPLINGS "RN3")

4- FOR TANK DIAMETER REFER TO PARTICULAR PROJECT DRAWINGS.

5- FOR MATERIAL REFER TO SPECIFICATIONS, DIV. 15, SECTION 15060.

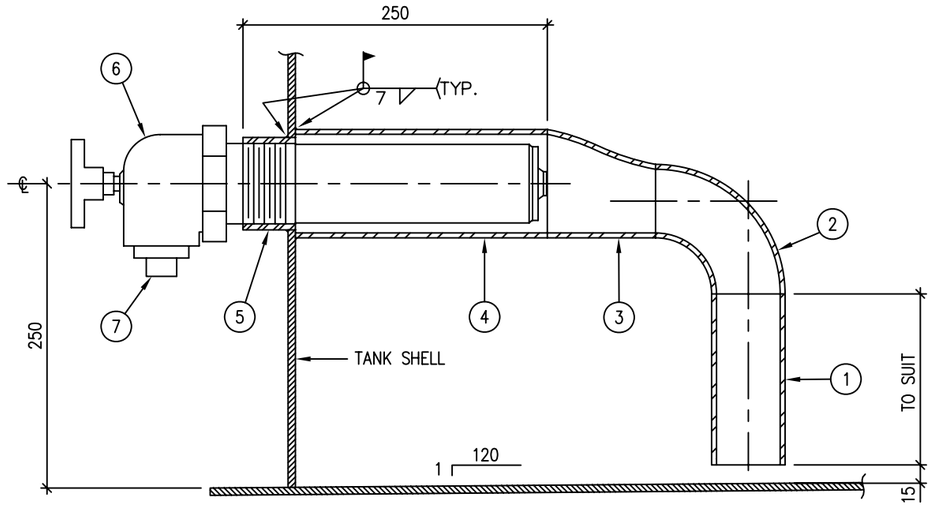
6- ROOF HANDRAIL SHALL ONLY EXTEND 1 000 mm BEYOND LAST ROOF CONNECTION TO ENSURE THAT THE ROOF TO SHELL JOINT IS FRANGIBLE OTHERWISE EMERGENCY VENTING IS REQUIRED.

Northwest Territories Public Works & Services

Drawing Title

BASIC ARRANGEMENT OF
TANK OPENINGS & APPURTENANCES
FOR 9 754 HIGH VERTICAL TANK

Design	Ver.	Scale
RVM	EDZ	1 : 150
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT-P09	
Revised On		
04/09/07		



LIST OF MATERIAL		
ITEM	SIZE (S.I.)	DESCRIPTION
1	50ø	PIPE, A53, GR. B.
2	50ø	ELBOW 90°, L.R., A234, GR. B.
3	75ø x 50ø	ECCENTRIC REDUCER, FLAT ON BOTTOM, A234, GR. B.
4	75ø	PIPE, A53, GR. B.
5	50ø	HALF COUPLING, THREADED, A350, GR. LF2, CLASS 3000.
6	50ø	WATER DRAIN VALVE (LOCKABLE) S&J MODEL 96181.
7	38ø	PLUG, THREADED, SQUARE HEAD, STEEL.

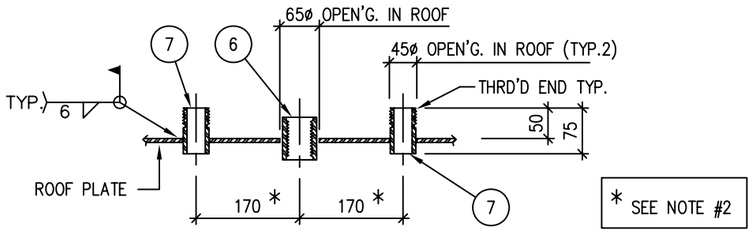
NOTES:

1- FOR LOCATION OF "SN3" SEE DWG. NT-P09
2- FOR MATERIAL SEE SPECIFICATIONS, DIV. 15, SECTION 15010.

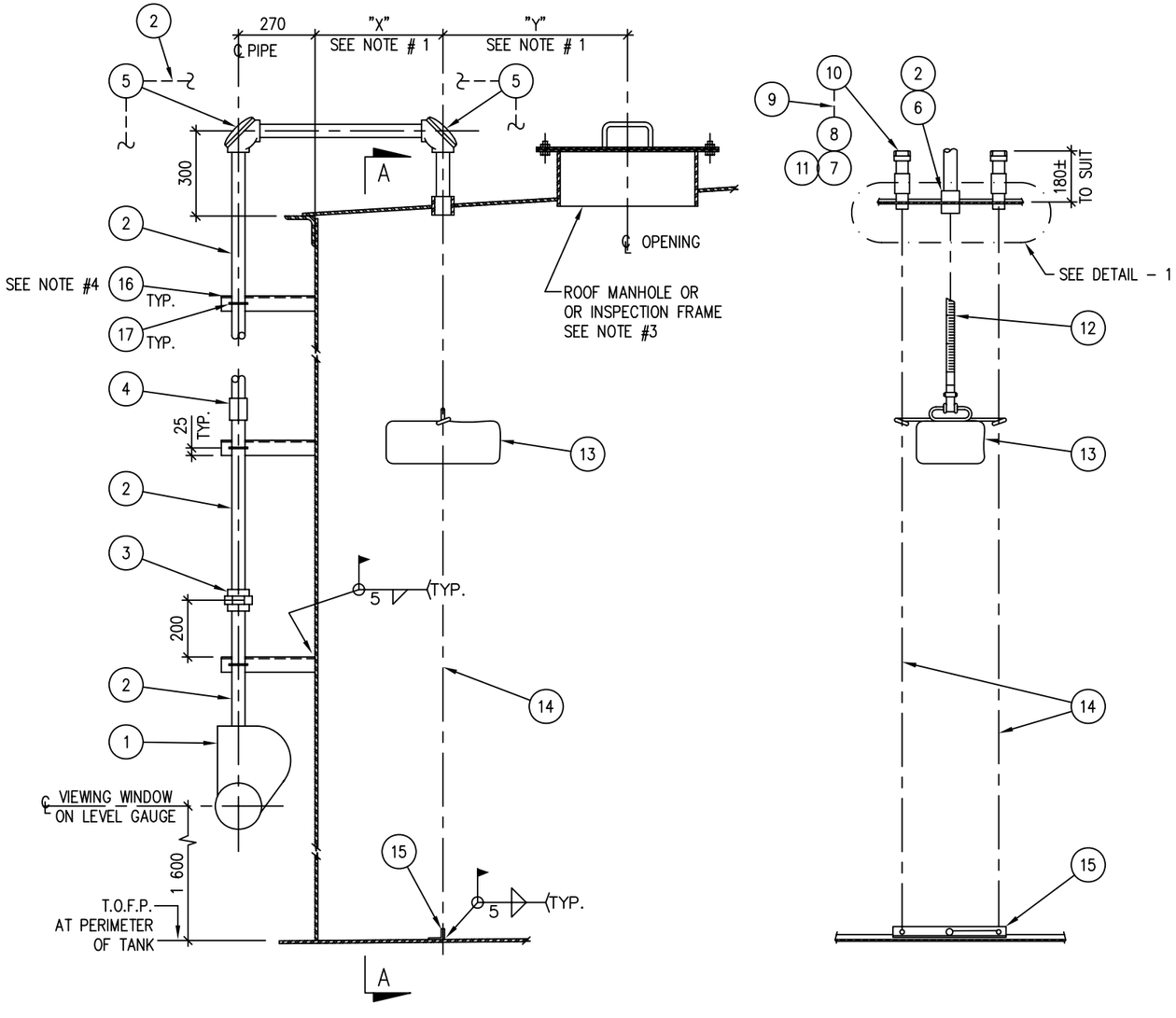
Northwest Territories Public Works & Services

Drawing Title
WATER DRAIN VALVE CONNECTION "SN3"
& INTERNAL PIPING AT VERTICAL TANKS DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1 : 5	REE	NT-P10
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/05/16	



DETAIL–1 : ROOF NOZZLE "RN3"



ELEVATION

SECTION A–A

LIST OF MATERIAL

No.	DESCRIPTION	SIZE OR REMARKS
1	AUTOMATIC LEVEL GAUGE HEAD	SEE NOTE #2
2	PIPE, GALVANIZED	38ø
3	UNION, MALLEABLE IRON, 300#, GALVANIZED	
4	COUPLING, MALLEABLE IRON, 150#, GALVANIZED	38ø
5	90° PULLEY ASSEMBLY	SEE NOTE #2
6	COUPLING, THREADED	38ø
7	PIPE NIPPLE, THREADED ONE END	32ø
8	COUPLING, THREADED	
9	PIPE	
10	CAP, MALLEABLE IRON, THREADED, 150#	
11	GUIDE WIRE SPRING ASSEMBLY	SEE NOTE #2
12	READING TAPE	
13	FLOAT	
14	GUIDE WIRES	
15	ANCHOR BAR	
16	PIPE BRACKET "SB1"	SEE NOTE #4
17	STANDARD "U" BOLT, GALVANIZED STEEL, 10ø ROD	38ø

NOTES:

1– FOR DIMENSIONS "X" AND "Y" REFER TO DWG. NT–P09.

2– DIMENSIONS SHOWN REFER TO SHAND & JURS TYPE AUTOMATIC LEVEL GAUGE. DIMENSIONS MAY VARY FOR OTHER MAKES OF LEVEL GAUGE. REFER TO SPECIFICATIONS AND MANUFACTURER'S DATA FOR ACTUAL DIMENSIONS & INSTALLATIONS.

3– REFER TO PARTICULAR PROJECT DRAWINGS FOR ACTUAL ROOF OPENING REQUIRED.

4– FOR NUMBER AND LOCATION OF SHELL BRACKETS "SB1" REFER TO DWG. NT–P09.

5– FOR MATERIALS REFER TO SPECIFICATIONS, DIV. 15, SECTION 15010.

LEGEND:

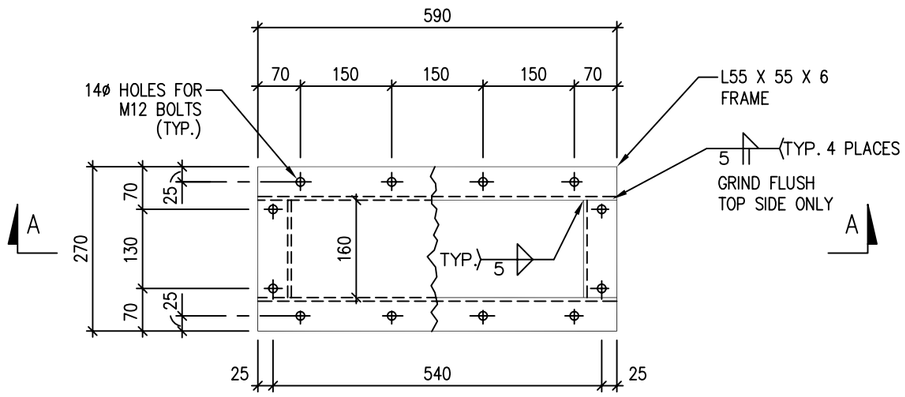
T.O.F.P. = TOP OF FLOOR PLATE

Northwest Territories Public Works & Services

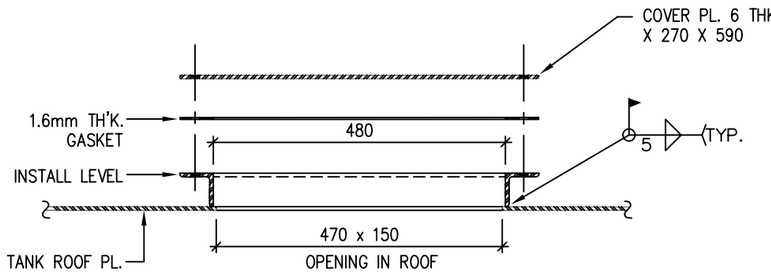
Drawing Title

INSTALLATION OF TANK
AUTOMATIC LEVEL GUAGE
ROOF NOZZLE "RN3" &
SHELL BRACKET "SB1"
AT VERTICAL TANKS DETAIL

Design	Ver.	Scale
RVM	EDZ	1 : 20
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT–P11	
Revised On		
04/05/16		



PLAN



SECTION A–A

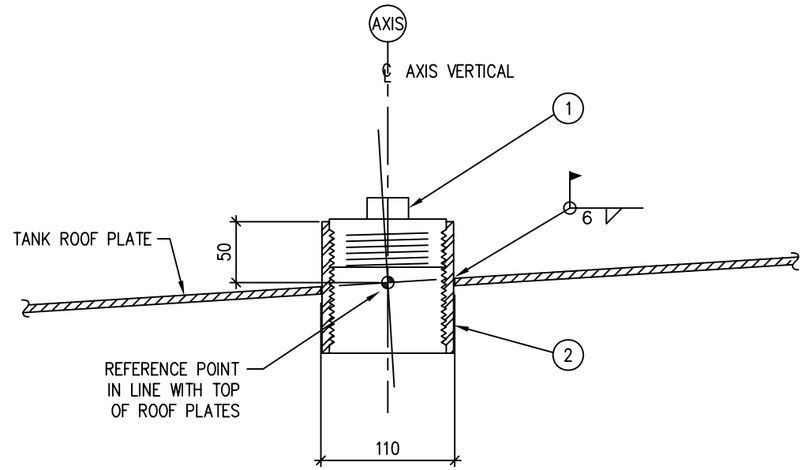
NOTES:

1– FOR LOCATION OF "RIF" ON TANK ROOF REFER TO PARTICULAR PROJECT DRAWINGS.
2– GRIND ALL SHARP EDGES SMOOTH.
3– FOR MATERIAL AND OTHER NOTES REFER TO SPECIFICATIONS, DIV 15, SECTION 15010.
4– "RIF" IS NOT REQUIRED IF ROOF MANHOLE IS PROVIDED.

Northwest Territories Public Works & Services

Drawing Title
ROOF INSPECTION FRAME "RIF"
FOR AUTOMATIC LEVEL GUAGE AT VERTICAL TANKS DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
RVM		1 : 10	REE	NT–P12
Drawn	Appr.	Date	Revised On	
KJ	EDZ	94/04/29	04/09/07	



SECTION THROUGH "RN5"

LIST OF MATERIAL

ITEM	SIZE (S.I.)	DESCRIPTION
1	75ø	PLUG, THREADED, SQUARE HEAD, STEEL
2		COUPLING, THREADED, A350, GR. LF2, CLASS 3000

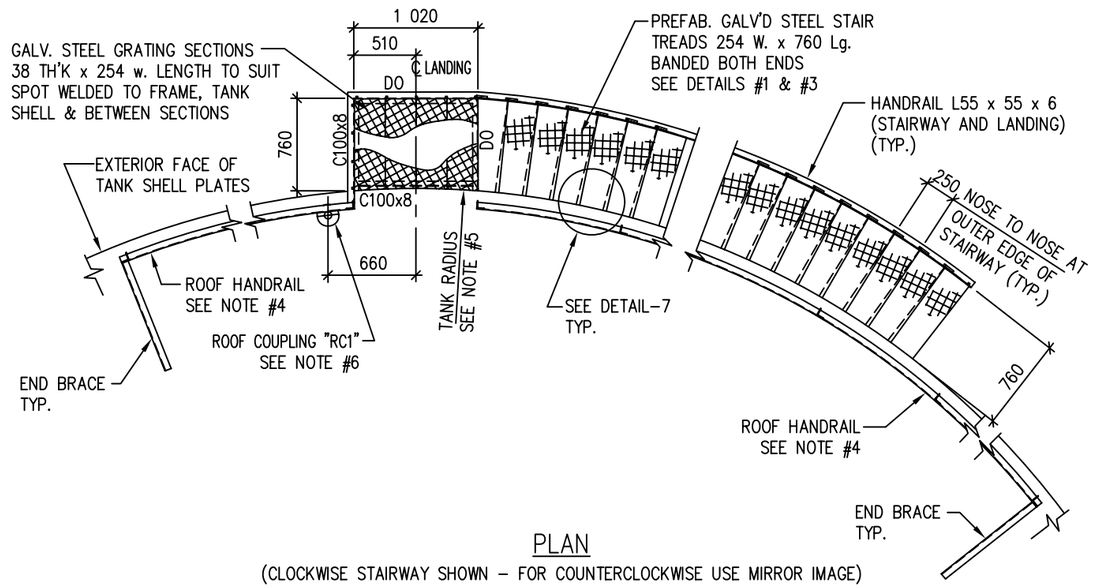
NOTES:

1– FOR LOCATION OF "RN5" ON TANK ROOF REFER TO DWG. NT–P09 AND PARTICULAR PROJECT DRAWINGS.
2– FOR MATERIAL AND NOTES REFER TO SPECIFICATIONS, DIV 15, SECTION 15010.

Northwest Territories Public Works & Services

Drawing Title
ROOF NOZZLE "RN5"
FOR FUTURE LEVEL GUAGE AT VERTICAL TANKS DETAIL

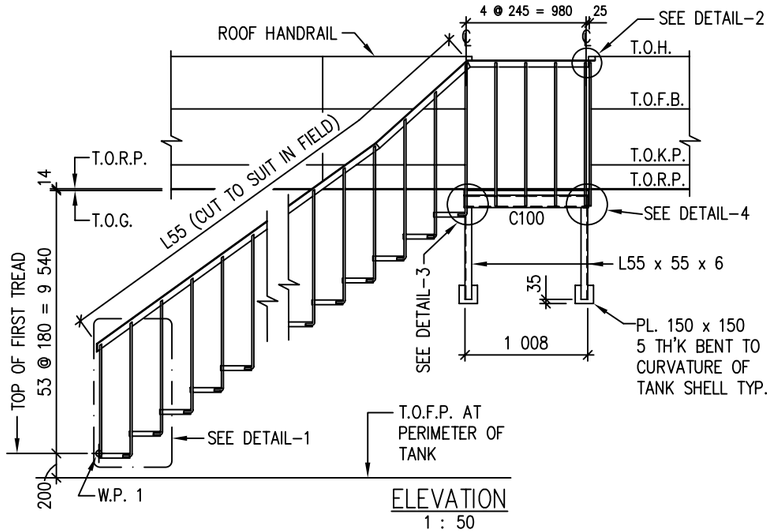
Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1 : 5	REE	NT–P13
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/07	



PLAN

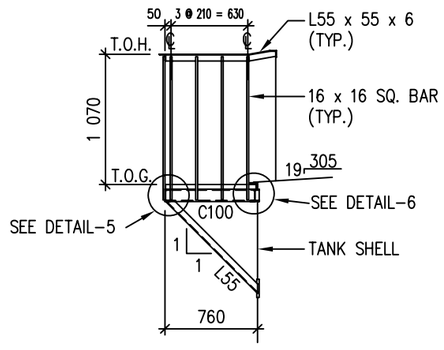
(CLOCKWISE STAIRWAY SHOWN – FOR COUNTERCLOCKWISE USE MIRROR IMAGE)

1 : 50

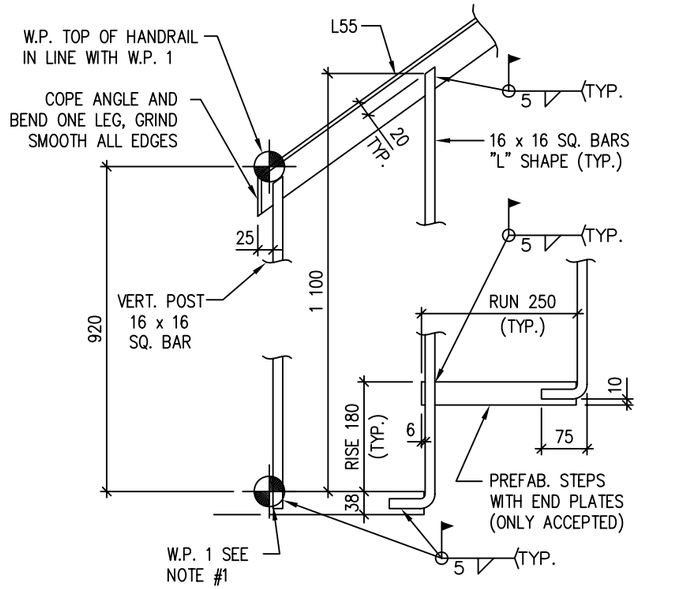


ELEVATION

1 : 50

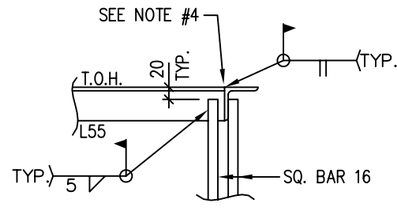


END VIEW



DETAIL – 1

1 : 10



DETAIL – 2

1 : 10

NOTES:

1– "W.P.1" IS THE START OF THE STAIRWAY AT TOP OF FIRST TREAD IN LINE WITH FRONT NOSING OF STAIR.

2– GRIND WELD FLUSH AT TOP & SIDE FACES OF HANDRAIL ANGLES. GRIND SMOOTH ALL EDGES AND SHARP CORNERS.

3– FOR DESCRIPTION OF STAIR TREADS AND LANDING GRATING REFER TO SPACIFICATIONS, DIVISION 5, SECTION 05500.

4– FOR DETAILS OF ROOF HANDRAILS "RH" SEE DWG. NT–P15.
FOR DEVELOPED LENGTHS OF ROOF HANDRAILS REFER TO PARTICULAR PROJECT DRAWINGS.

5– FOR TANK RADIUS AND LOCATION OF TANK APPURTENANCES REFER TO PARTICULAR PROJECT DRAWINGS.

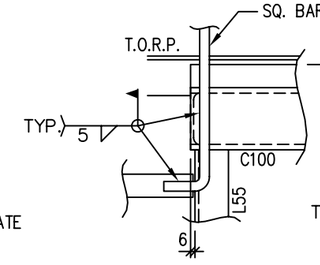
6– FOR DETAILS OF ROOF COUPLING "RC1" FOR LIGHT FIXTURE POST SEE DWG. NT–P18.

7– FOR WELDING, PAINTING & OTHER NOTES REFER TO SPECIFICATIONS, DIVISION 15, SECTION 15060 AND DIVISION 9.

8– CONTRACTOR TO PROVIDE PROPER SHOP DRAWINGS OF TANK APPURTENANCES, STAIRWAY AND LANDING FOR APPROVAL PRIOR TO FABRICATION AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

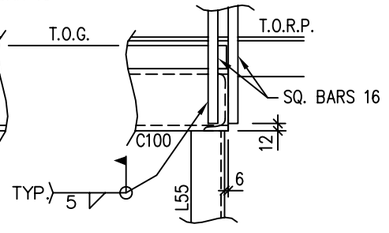
LEGEND:

T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.G. = TOP OF GRATING
T.O.R.P. = TOP OF ROOF PLATE
T.O.F.P. = TOP OF FLOOR PLATE



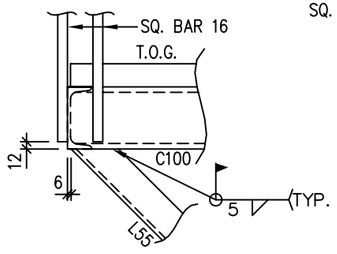
DETAIL – 3

1 : 10



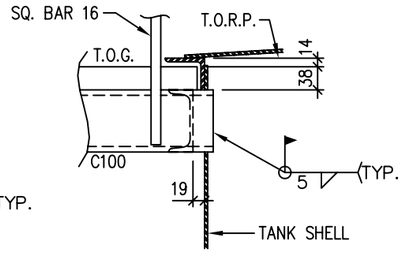
DETAIL – 4

1 : 10



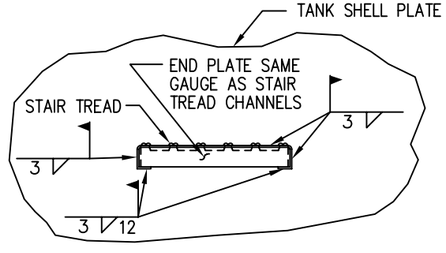
DETAIL – 5

1 : 10



DETAIL – 6

1 : 10



DETAIL – 7

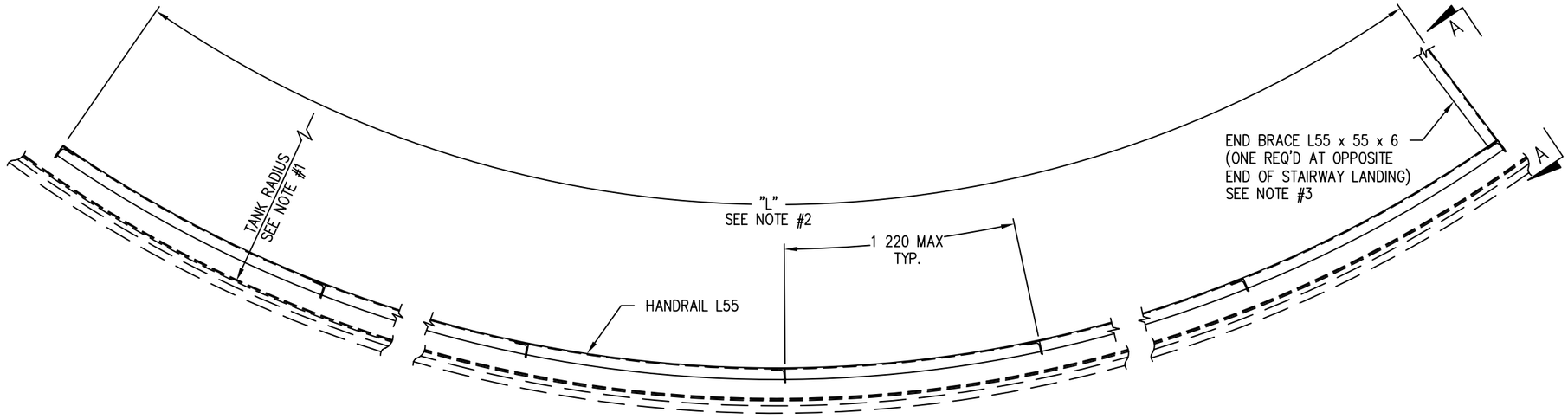
1 : 10

Northwest Territories Public Works & Services

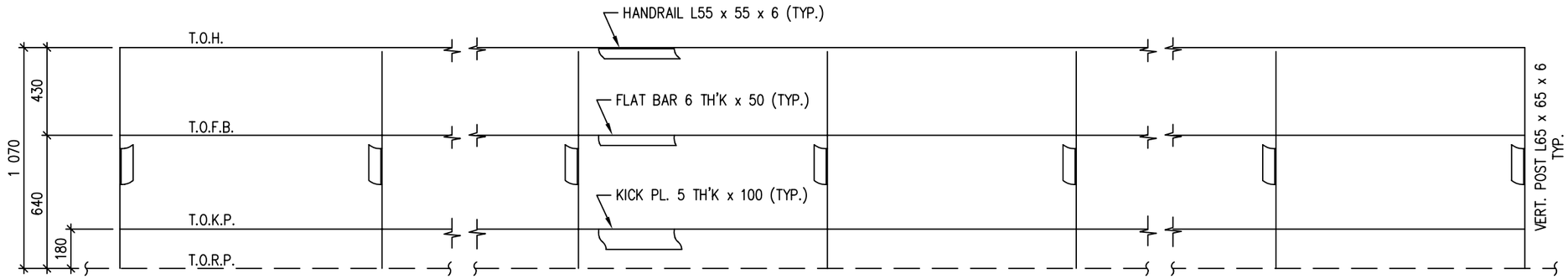
Drawing Title

STAIRWAY & LANDING
AT 9 754 HIGH VERTICAL TANKS DETAILS

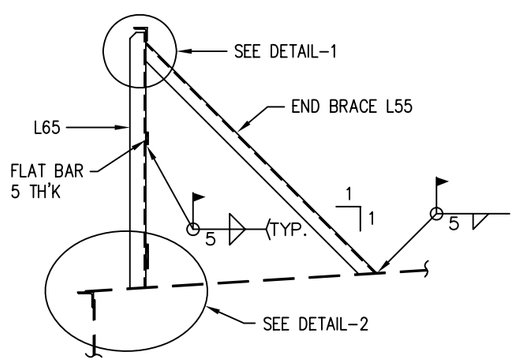
Design	Ver.	Scale
RVM	EDZ	AS SHOWN
Drawn	Appr.	Date
CAD/SL		95/02/28
Revised By	Drawing No.	
REE	NT–P14	
Revised On		
04/09/07		



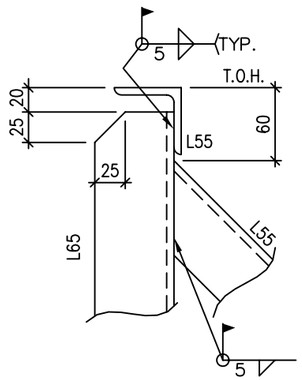
PLAN



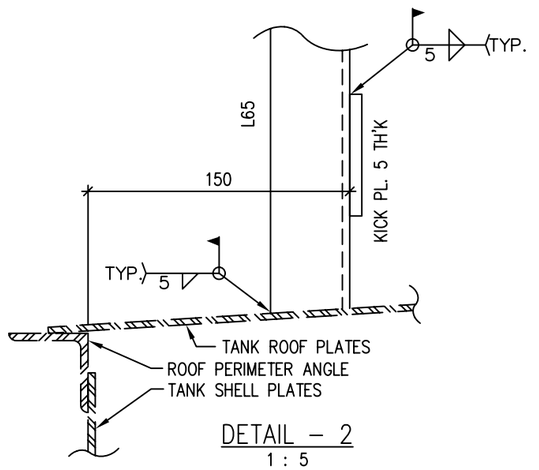
ELEVATION
1 : 25



SECTION A-A
1 : 25



DETAIL - 1
1 : 5



DETAIL - 2
1 : 5

NOTES:

1- FOR TANK RADIUS REFER TO PARTICULAR PROJECT DRAWINGS.

2- FOR DIMENSION "L" REFER TO PARTICULAR PROJECT DRAWINGS.

3- LOCATION OF END BRACE SHALL BE 1 000 BEYOND LAST ROOF FITTING.

4- GRIND ALL SHARP EDGES SMOOTH.

5- FOR MATERIAL AND OTHER NOTES REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

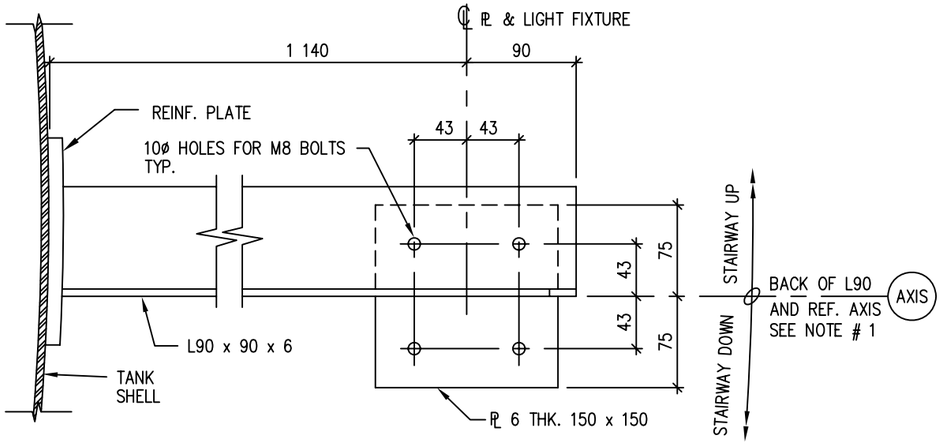
LEGEND:

T.O.H. = TOP OF HANDRAIL
T.O.F.B. = TOP OF FLAT BAR
T.O.K.P. = TOP OF KICK PLATE
T.O.R.P. = TOP OF ROOF PLATE

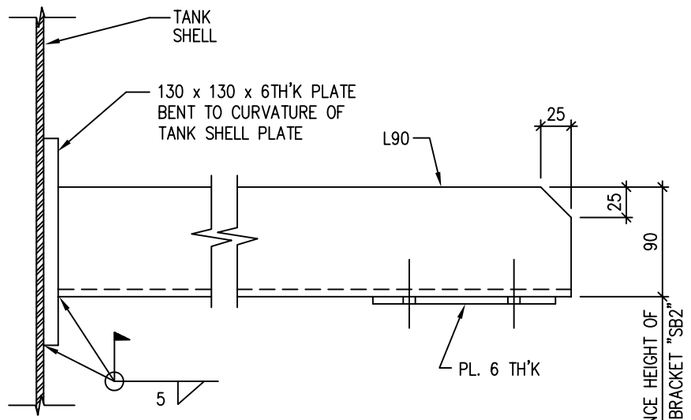
Northwest Territories Public Works & Services

Drawing Title
ROOF HANDRAIL "RH"
AT VERTICAL TANKS DETAIL

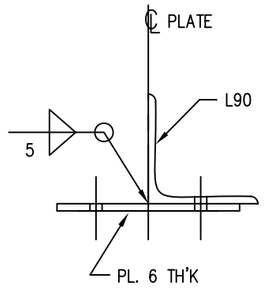
Design RVM	Ver. EDZ	Scale 1 : 25
Drawn CAD/SL	Appr.	Date 94/04/29
Revised By REE	Drawing No. NT-P15	
Revised On 04/09/07		



PLAN



ELEVATION



END VIEW

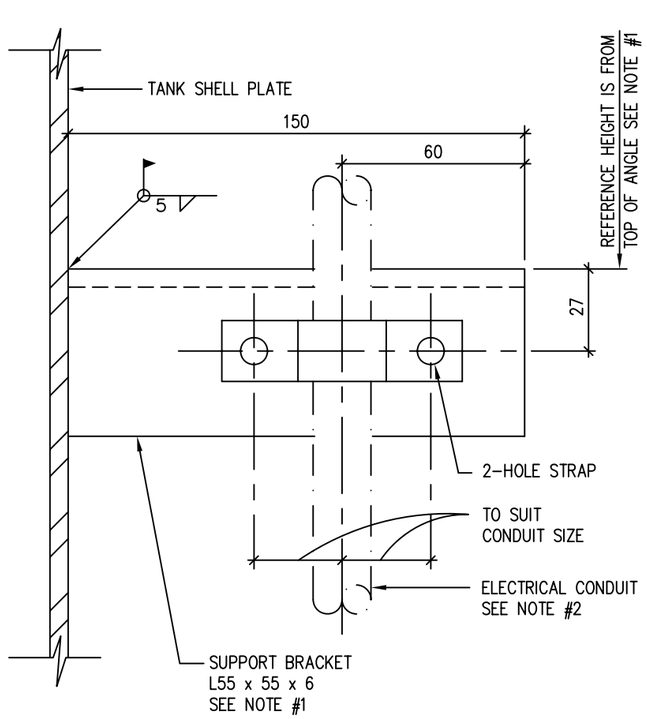
NOTES:

1– FOR REFERENCE AXIS POSITION AND HEIGHT OF BRACKET REFER TO DWG. NT–P09.
& PARTICULAR PROJECT DRAWINGS.
2– GRIND ALL SHARP EDGES SMOOTH.
3– FOR MATERIAL AND OTHER NOTES REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

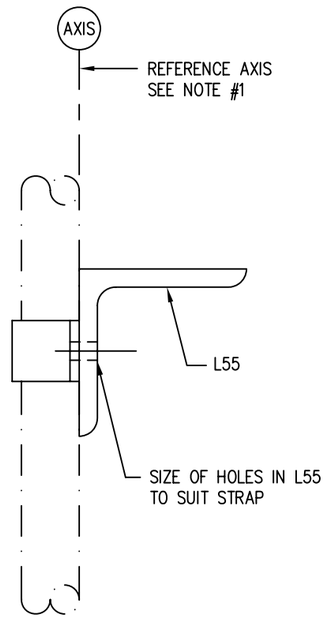
Northwest Territories Public Works & Services

Drawing Title
LIGHT FIXTURE BRACKET "SB2"
AT STAIRWAYS OF VERTICAL TANKS DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
EDZ	EDZ	1 : 5	REE	NT–P16
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/07	



SIDE ELEVATION



END VIEW

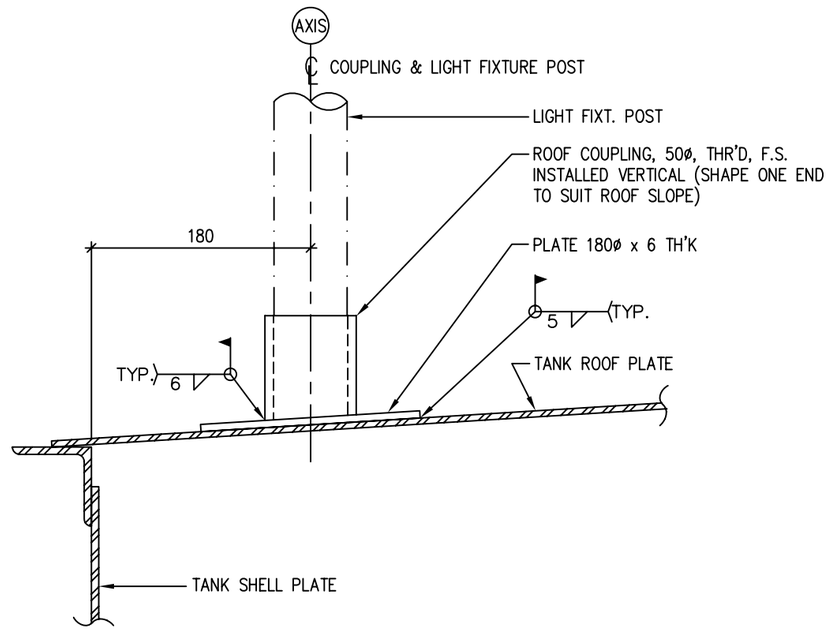
NOTES:

1– FOR REFERENCE AXIS POSITION, HEIGHT AND NUMBER OF BRACKETS REFER TO
DWG. NT–P09 AND PARTICULAR PROJECT DRAWINGS.
2– FOR SIZE OF RIGID CONDUIT REFER TO PARTICULAR PROJECT DRAWINGS.
3– MAXIMUM VERTICAL SPACING OF BRACKETS TO BE 1500mm FOR 13ø & 19ø CONDUITS
AND 2 000mm FOR 25ø & 32ø CONDUITS FOR ACTUAL SPACING REFER TO PARTICULAR PROJECT DRAWINGS.
4– FOR MATERIAL AND OTHER NOTES REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

Northwest Territories Public Works & Services

Drawing Title
SHELL BRACKET "SB3"
FOR ELECTRICAL CONDUITS AT VERTICAL TANKS DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1 : 2	REE	NT–P17
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/07	



ELEVATION ROOF COUPLING "RC1"

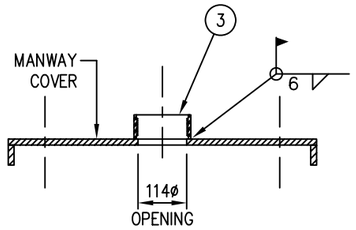
NOTES:

1- FOR POSITION OF ROOF COUPLING "RC1" REFER TO DWG. NT-P09 AND PARTICULAR PROJECT DRAWINGS.
2- FOR MATERIAL AND OTHER NOTES REFER TO SPECIFICATIONS, DIVISION 5, SECTION 05500.

Northwest Territories Public Works & Services

Drawing Title
ROOF COUPLING "RC1"
FOR LIGHT FIXTURE POST AT VERTICAL TANKS DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1 : 5	REE	NT-P18
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/07	



DETAIL – 1
1 : 15

LIST OF MATERIAL

No.	SERVICE	SIZE (S.I.)	SIZE (IMP.)	DESCRIPTION	REMARKS
1	FUEL STORAGE TANK	91,000 L	20,000 IGal.	91 cu. m. NOMINAL CAPACITY ABOVEGROUND HORIZONTAL TANK, STEEL	TO CAN4–S601–M SPEC.
2	MANWAY	610ø	24" ø	ULC MANHOLE DESIGN FIG. 9, COMPLETE WITH EMERGENCY VENT COVER PLATE	TO CAN4–S601–M SPEC. SEE DETAIL 1
3	GAUGE HATCH	100ø	4" ø	FORGED STEEL HALF COUPLING	SEE DETAIL–1 & NOTE 2
4	PRESSURE / VACUUM VENT	100ø	4" ø	FORGED STEEL THREADED FLANGE WITH PILOT	TO CAN4–S601–M SPEC.
5	SPARE	100ø	4" ø	FORGED STEEL THREADED FLANGE WITH PILOT	TO CAN4–S601–M SPEC. & NOTE 3, C/W PLUG
6	INLET / OUTLET	100ø	4" ø	1035 kPa FLANGED NOZZLE, C/W VALVE AND PRESSURE RELIEF	TO CAN4–S601–M SPEC., SEE DRAWING NT–P06
7	PRESSURE RELIEF BY–PASS	25ø	1" ø	HALF–COUPLING, THREADED FORGED STEEL	TO CAN4–S601–M SPEC., SEE DWG NT–P06.
8					
9	WATER DRAW–OFF	25ø	1" ø	HALF–COUPLING, THREADED FORGED STEEL	TO CAN4–S601–M SPEC. & NOTE 4
10	TANK SKID			TANK SKID ASSEMBLY	SEE NOTE 5

NOTES:

1– FOR LOCATION OF CATWALK REFER TO PARTICULAR PROJECT DRAWINGS.

2– LOCATE GAUGE HATCH IN CENTRE OF EMERGENCY COVER PLATE.

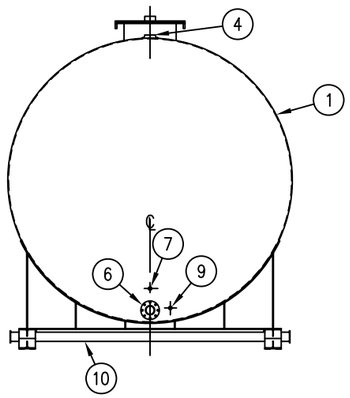
3– PROVIDE PLUG, THREADED, SQUARE HEAD, F.S. AT ALL NON–USED OPENINGS. PLUG TO BE SAME SIZE AS OPENING.

4– REFER TO DWG. NT–P23 FOR WATER DRAW–OFF VALVE AND INTERNAL PIPING AT WATER DRAW–OFF VALVE.

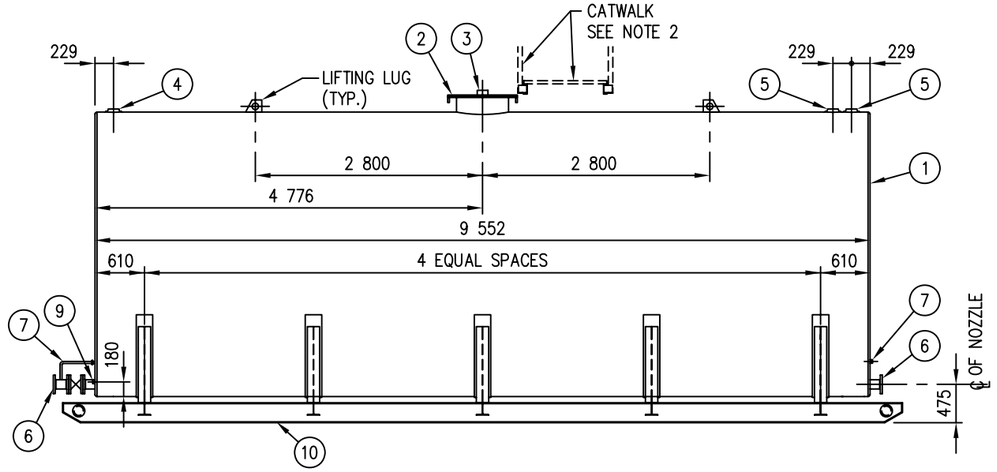
5– REFER TO DWG. NT–P20 FOR SKID ASSEMBLY DETAILS.

6– FOR MATERIAL REFER TO SPECIFICATIONS, DIVISION 15, SECTION 15060.

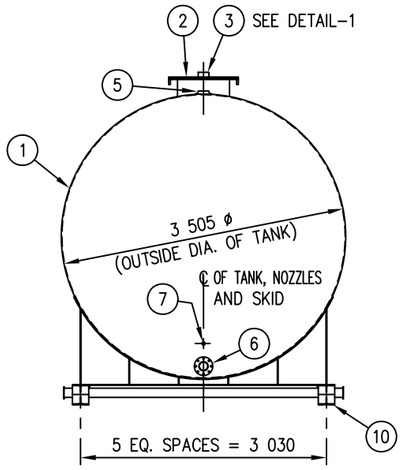
7– PROVIDE SHOP DRAWINGS OF TANK, APPURTENANCES AND SKID ASSEMBLY FOR APPROVAL PRIOR TO FABRICATION AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.



LEFT SIDE ELEVATION
1 : 75



SIDE ELEVATION
1 : 75



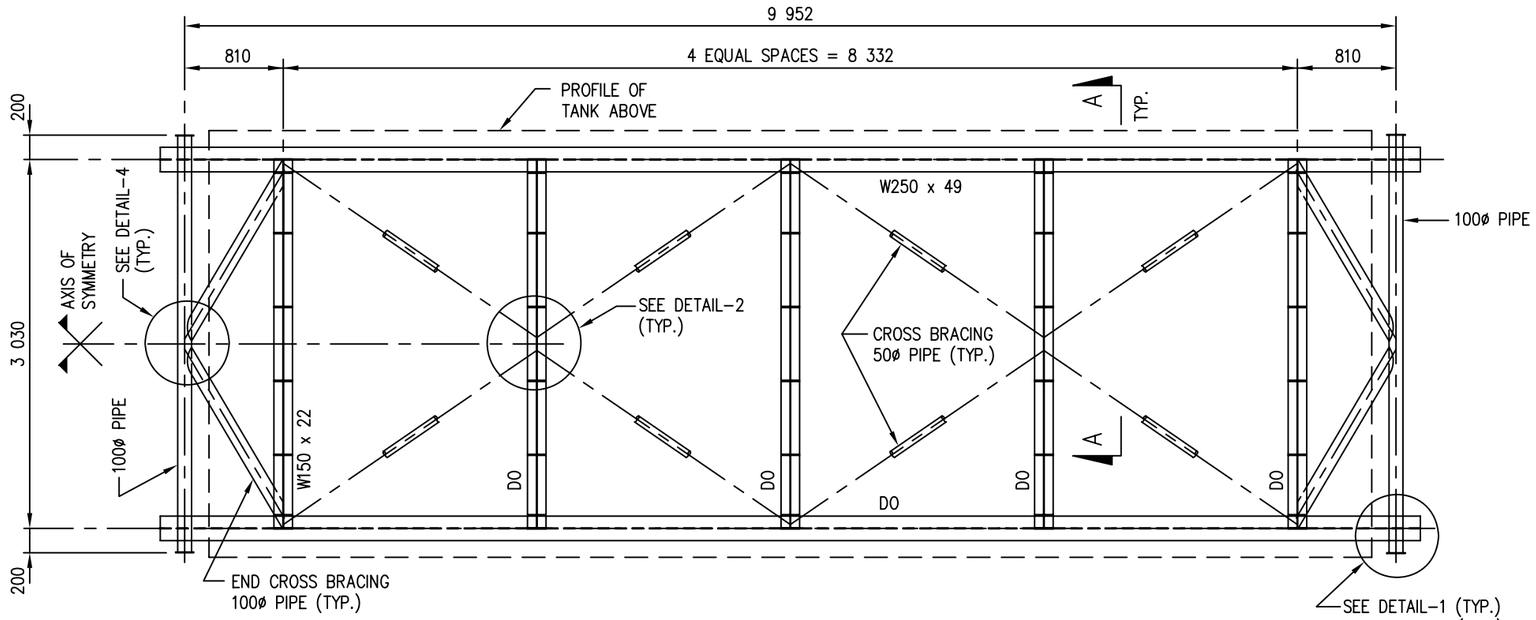
RIGHT SIDE ELEVATION
1 : 75

Northwest Territories Public Works & Services

Drawing Title

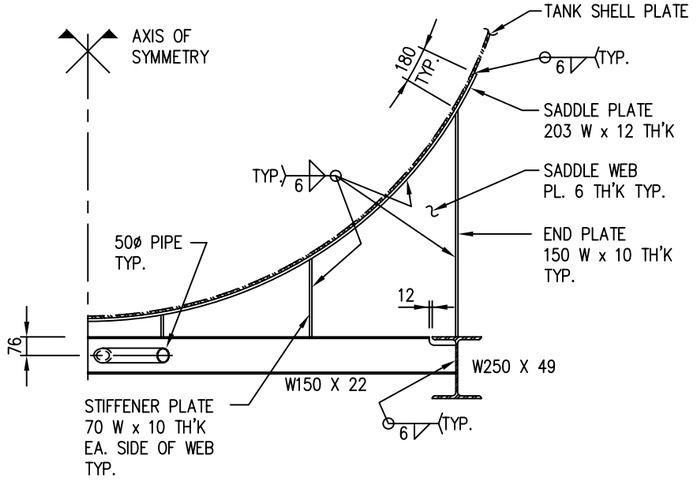
HORIZONTAL ABOVEGROUND TANK
91 cu. m. NOMINAL CAPACITY
ELEVATIONS AND DETAIL

Design	Ver.	Scale
RVM	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–P19	
Revised On		
04/09/07		



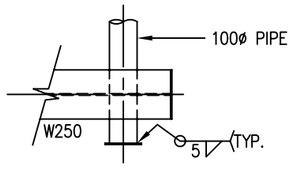
PLAN VIEW OF SKID ASSEMBLY

1 : 50



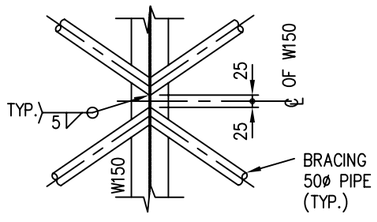
SECTION A–A

1 : 25



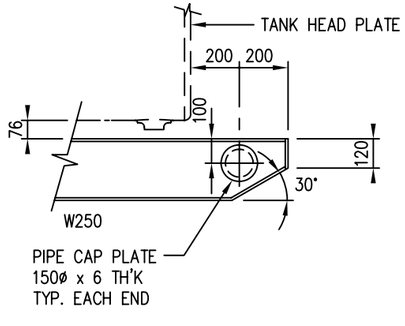
DETAIL – 1

1 : 25



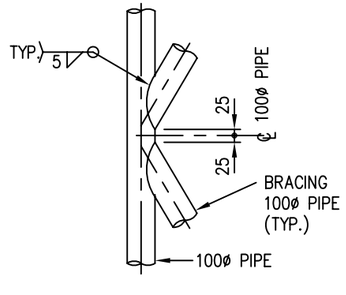
DETAIL – 2

1 : 25



DETAIL – 3

1 : 25



DETAIL – 4

1 : 25

NOTES:

1– FOR MATERIAL REFER TO SPECIFICATIONS, DIVISION 15, SECTION 15060.

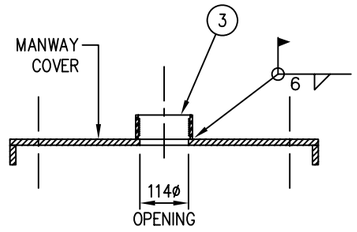
2– PROVIDE PROPER SHOP DRAWINGS OF SKID ASSEMBLY FOR APPROVAL PRIOR TO FABRICATION AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

Northwest Territories Public Works & Services

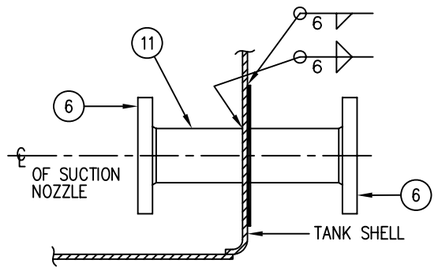
Drawing Title

TANK SKID FOR 91 cu. m.
HORIZONTAL TANKS
PLAN, SECTION & DETAILS

Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–P20	
Revised On		
04/09/07		



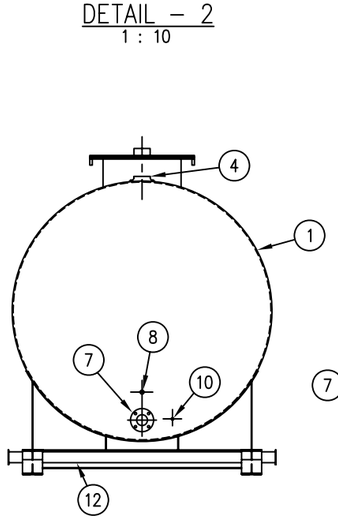
DETAIL – 1
1 : 10



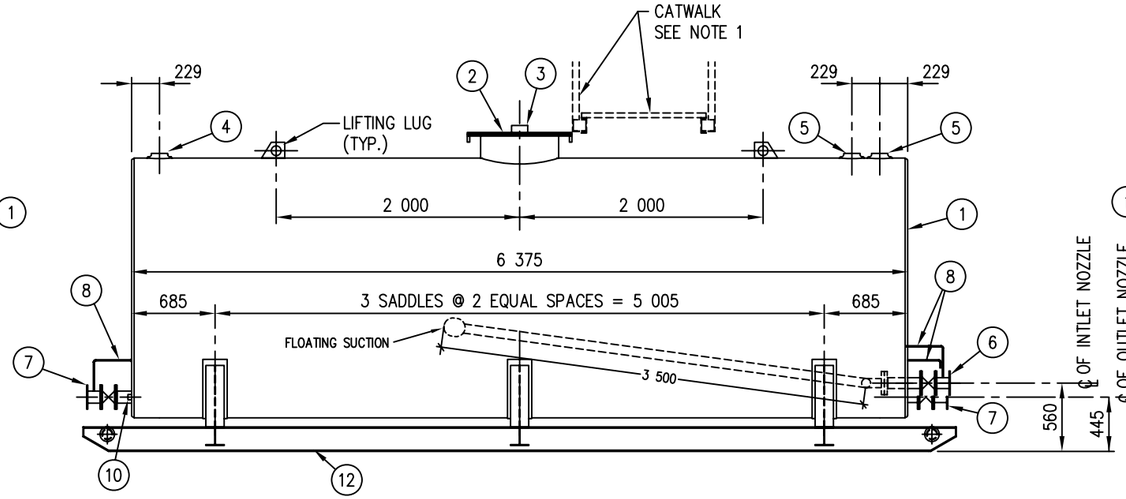
DETAIL – 2
1 : 10

LIST OF MATERIAL

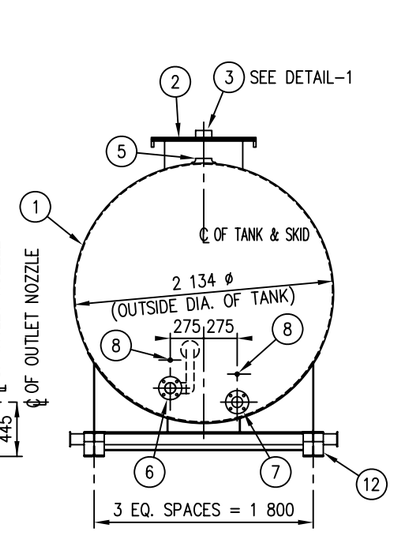
No.	SERVICE	SIZE (S.I.)	SIZE (IMP.)	DESCRIPTION	REMARKS
(1)	FUEL STORAGE TANK	23 000 L	5 000 IGal	23 cu. m. NOMINAL CAPACITY ABOVEGROUND HORIZONTAL TANK, STEEL	TO CAN4–S601–M SPEC.
(2)	MANWAY	610ø	24" ø	ULC MANHOLE DESIGN FIG. 9, COMPLETE WITH EMERGENCY VENT COVER	TO CAN4–S601–M SPEC. SEE DETAILS
(3)	GAUGE HATCH	100ø	4" ø	FORGED STEEL SCREWED WELDING FLANGE	ON MANWAY COVER SEE DETAIL–1 & NOTE 2
(4)	VENT	75ø	3" ø	SCRW'D WELDING FLANGE WITH PILOT	TO CAN4–S601–M SPEC.
(5)	SPARE	100ø	4" ø	SCRW'D WELDING FLANGE WITH PILOT	TO CAN4–S601–M SPEC. & NOTE 3
(6)	OUTLET VALVE ASSEMBLY C/W FLOATING SUCTION	75 ø	3" ø	ASA 1035 kPa (150#) FS RAISED FACE FLANGE C/W INTERNAL ASA 1035 kPa FS FLAT FACE FLANGE, VALVE AND PRESSURE BY–PASS	ST'D SPEC. SEC. 15010 CLAUSE 2.5.1 (ST'D DWG. NT–P06) FLOATING SUCTION, GAMMON, MODEL GTP–1644–3H
(7)	INLET VALVE ASSEMBLY	75 ø	3" ø	ASA 1035 kPa (150#) FS RAISED FACE FLANGE C/W VALVE AND PRESSURE BY–PASS	ST'D SPEC. SEC. 15010 CLAUSE 2.5.1 (STANDARD DRAWING NT–P06)
(8)	PRESSURE RELIEF BY–PASS	25ø	1" ø	HALF–COUPLING, THREADED FORGED STEEL	TO CAN4–S601–M SPEC.
(9)					
(10)	WATER DRAW–OFF	25ø	1" ø	HALF–COUPLING, THREADED FORGED STEEL	TO CAN4–S601–M SPEC. & NOTE 4
(11)	PIPE	75ø	3" ø	PIPE	SEE NOTE 6
(12)	TANK SKID			TANK SKID ASSEMBLY	SEE NOTE 5



LEFT SIDE ELEVATION
1 : 50



FRONT ELEVATION
1 : 50



RIGHT SIDE ELEVATION
1 : 50

NOTES:

1– FOR LOCATION OF CATWALK REFER TO PARTICULAR PROJECT DRAWINGS.

2– LOCATE LOCKABLE GAUGE HATCH IN CENTER OF EMERGENCY MANWAY COVER PLATE.

3– PROVIDE PLUG, THREADED, SQUARE HEAD, F.S. AT ALL NON–USED OPENINGS. PLUG TO BE SAME SIZE AS OPENING.

4– REFER TO DWG. NT–P23 FOR WATER DRAW–OFF AND INTERNAL PIPING AT WATER DRAW–OFF.

5– REFER TO DWG. NT–P22 FOR SKID ASSEMBLY DETAILS.

6– FOR MATERIAL REFER TO SPECIFICATIONS, DIVISION 15, SECTION 15060.

7– PROVIDE SHOP DRAWINGS OF TANK, APPURTENANCES AND SKID ASSEMBLY FOR APPROVAL PRIOR TO FABRICATION AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

8– ALL INTERIOR SURFACES TO BE LINED WITH EPOXY AS PER SECTION 9.0, PAINTING, OF THE SPECIFICATIONS.

9– TANK EXTERIOR TO BE GRIT BLASTED AND SHOP PAINTED AS PER SECTION 9.0, PAINTING.

10–ONE METER STRIP ALONG TOP OF TANK TO BE PAINTED WITH NON–SKID PAINT.

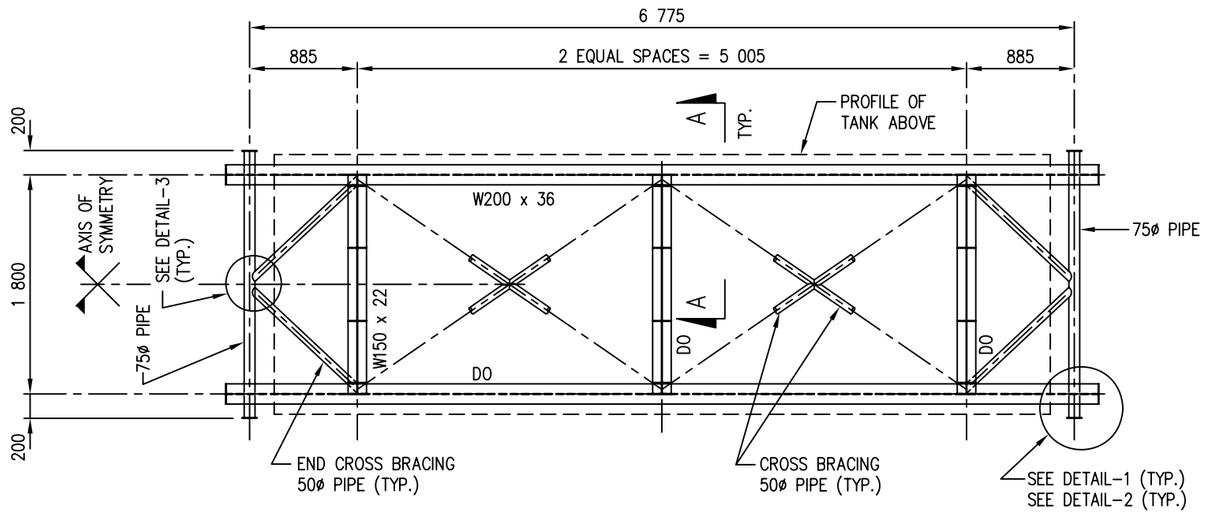
11– TANK SHALL BE FABRICATED CERTIFIED AND LABELED IN ACCORDANCE WITH ULC STANDARD CSA CAN4–S601.

Northwest Territories Public Works & Services

Drawing Title

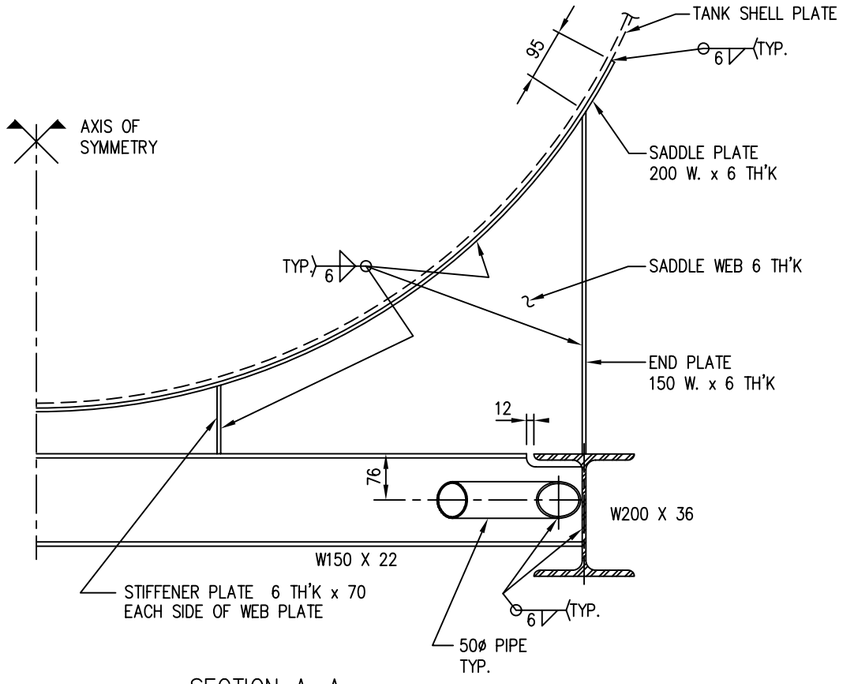
HORIZONTAL, EPOXY LINED, ABOVEGROUND TANK
23 cu. m. NOMINAL CAPACITY
ELEVATIONS AND DETAIL

Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–P21	
Revised On		
04/09/07		



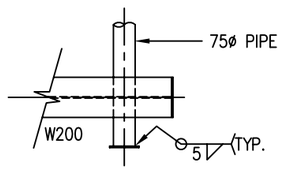
PLAN VIEW OF SKID ASSEMBLY

1 : 50



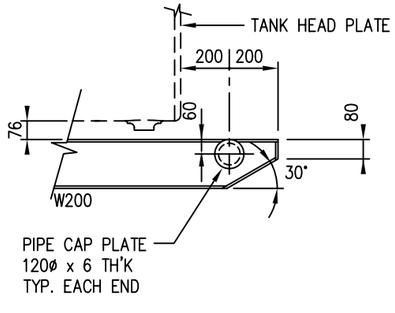
SECTION A–A

1 : 25



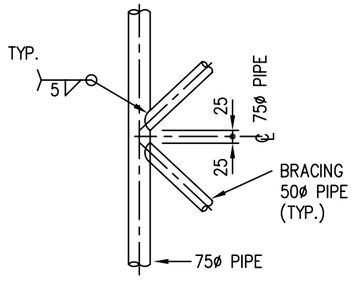
DETAIL – 1

1 : 25



DETAIL – 2

1 : 25



DETAIL – 3

1 : 25

NOTES:

1– FOR MATERIAL REFER TO SPECIFICATIONS, DIVISION 15, SECTION 15060.

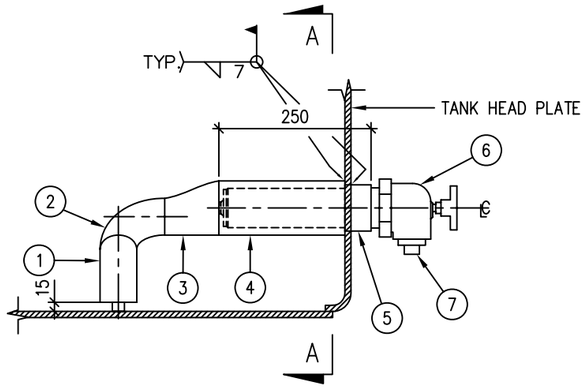
2– PROVIDE PROPER SHOP DRAWINGS OF TANK AND SKID ASSEMBLY FOR APPROVAL PRIOR TO FABRICATION AS PER SPECIFICATIONS, DIVISION 1, SECTION 01340.

Northwest Territories Public Works & Services

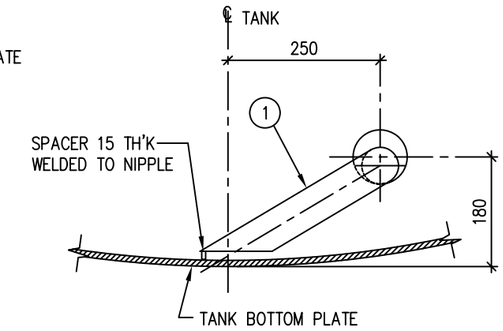
Drawing Title

TANK SKID FOR 23 cu. m.
HORIZONTAL TANKS
PLAN, SECTION & DETAILS

Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT–P22	
Revised On		
04/09/07		



SIDE ELEVATION



SECTION A–A

LIST OF MATERIAL

ITEM	SIZE (S.I.)	DESCRIPTION
1	50ø	PIPE, A53, GR. B.
2	50ø	ELBOW 90°, L.R., A234, GR. B.
3	75ø x 50ø	ECCENTRIC REDUCER, FLAT ON BOTTOM, A234, GR. B.
4	75ø	PIPE, A53, GR. B.
5	50ø	HALF COUPLING, THREADED, A350, GR. LF2, CLASS 3000.
6	50ø	WATER DRAIN VALVE (LOCKABLE) S&J MODEL 96181.
7	38ø	PLUG, THREADED, SQUARE HEAD, STEEL.

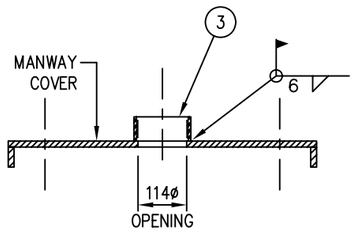
NOTES:

1– FOR LOCATION OF WATER DRAW–OFF VALVE REFER TO DWG. NT–P19, NT–P21, NT–P24 OR NT–P25.
2– FOR MATERIAL REFER TO SPECIFICATIONS, DIV. 15, SECT. 15010.

Northwest Territories Public Works & Services

Drawing Title
WATER DRAW–OFF VALVE
FOR HORIZONTAL TANKS DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:10	REE	NT–P23
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/07	



DETAIL – 1
1 : 15

LIST OF MATERIAL

No.	SERVICE	SIZE (S.I.)	SIZE (IMP.)	DESCRIPTION	EQUIPMENT
1	Manway	610 ø	24" ø	ULC Manhole Design Fig. 9	ULC EMERGENCY VENT FIG. 8
2	Gauge Hatch	100 ø	4" ø	Forged Steel Scrw'd Welding Flange c/w pilot fitting	OCECO, MODEL F–1 (St'd Spec. Sec. 15010 Clause 2.11)
3	Vent	100 ø	4" ø	ASA 1035 kPa (150#) FS Flat Face Flange	Shand & Jurs Model 94020 P/V Vent (St'd Spec. Sec. 15010 Clause 2.12)
4	Spill Containment	407ø	16" ø	Pipe Section c/w Lockable Cover	ULC/ORD–C142.2, Clause 3.2.2
5	Overfill Protection Valve	100 ø	4" ø	Forged Steel Scrw'd Welding Flange c/w pilot fitting	OPW 61f Stop Overfill Protection Valve c/w Bottom Fill Pipe Extension
6	Spill Drain Valve				
7	Spare Fittings	100 ø	4" ø	Forged Steel Scrw'd Welding Flange c/w Pilot fitting	c/w Plug
8	Lifting Lug			Lifting Lug c/w Reinforcing Plate	ULC Lifting Lug Figure 2, Type II
9	Interstice Vent	100 ø	4" ø	Inspection/Emergency Vent Fitting	Vacuum/Vent Cap
10	Vacuum Gauge	12 ø	1/2" ø	Half–coupling, Threaded Forged Steel	Vacuum Monitor Gauge
11	Pressure Relief By–pass	25 ø	1" ø	Half–coupling, Threaded Forged Steel	St'd Spec. Sec. 15010 Clause 2.6 (Standard Drawing, NT–P06)
12	Water Draw–off Valve Assembly	50 ø	2" ø	Half–coupling, Threaded Forged Steel	Shand & Jurs, Model 96181, Water Drain Valve
13	Inlet/Outlet Valve Assembly	100 ø	4" ø	ASA 1035 kPa (150#) FS Raised Face Flange c/w Valve and Presssure By–pass	St'd Spec. Sec. 15010 Clause 2.5.1 (Standard Drawing, NT–P06)
14	Stair & Platform Assembly			Access Stairs and Platform to Gauge Hatch	
15	Skid Base Plate	12 Thick	1/2" Thick	1/2" Thick x 300mm wide steel plate	Full Length
16	Pull Bar	100 ø	4" ø	Schedule 80 Pipe c/w cross bracing	c/w 10mm x 120mm ø end plates
17	Interstice Vent	50 ø	2" ø	Emergency Vent Fitting	Vacuum/Vent Cap
18	Fabricated Skids	6 Thick	1/4" plate	Formed Skid Assembly	

NOTES:

1– PRIMARY INTERNAL STORAGE TANK SHALL BE FABRICATED, CERTIFIED AND LABELLED IN STRICT ACCORDANCE WITH ULC STANDARD CAN4–S601–M LATEST EDITION, STANDARD FOR SHOP FABRICATED STEEL ABOVEGROUND HORIZONTAL TANKS FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS.

2– DOUBLE WALL, VACUUM MONITORED SECONDARY CONTAINMENT SHALL BE DESIGNED, FABRICATED AND LABELLED IN ACCORDANCE WITH ULC/ORD C142.3, LATEST EDITION, CONTAINED STEEL ABOVEGROUND TANK ASSEMBLIES FOR FLAMMABLE LIQUIDS.

3– ALL WELDING SHALL BE BY A WELDER WITH A VALID ARC–WELDING CERTIFICATE FOR THE TYPE OF WORK PREFORMED AND HOLDING A MINIMUM OF A VALID NWT CLASS B PRESSURE WELDERS CERTIFICATE.

4– BOLT HOLES SHALL STRADDLE CENTRELINES.

5– MINIMUM WALL THICKNESS OF THE PRIMARY TANK SHALL BE 6mm AND MINIMUM SECONDARY CONTAINMENT SHELL THICKNESS SHALL BE 4.75mm.

6– STRAPPING AND CALIBRATION OF THE TANK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 15060, CLAUSE 3.9, PRIOR TO SHIPPING.

7– HEADS SHALL BE FLAT FLANGED WITH A MINIMUM THICKNESS OF 6mm.

8– SECONDARY CONTAINMENT SHALL BE PROVIDED WITH A POSITIVE VACUUM LEAK DETECTION SYSTEM.

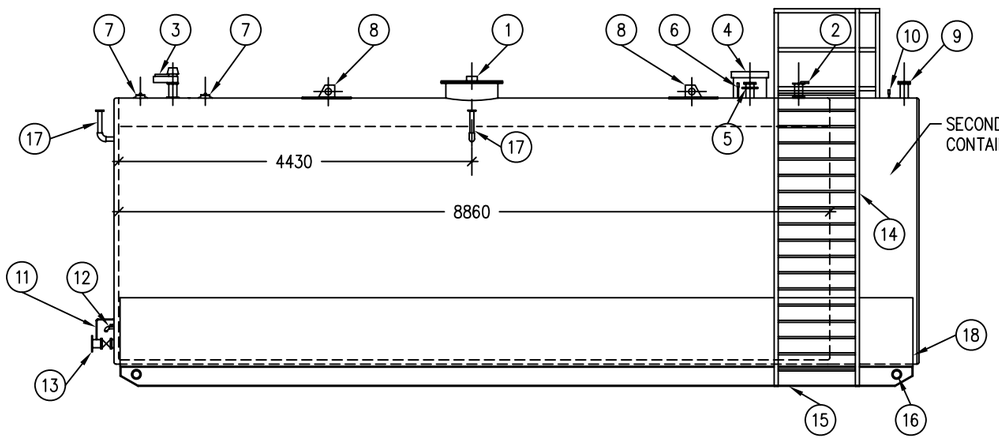
9– REMOVABLE PLATFORM AND STAIRS SHALL BE FABRICATED FOR ACCESS TO THE GAUGE HATCH.

10–GAUGE HATCHES SHALL BE LOCKABLE.

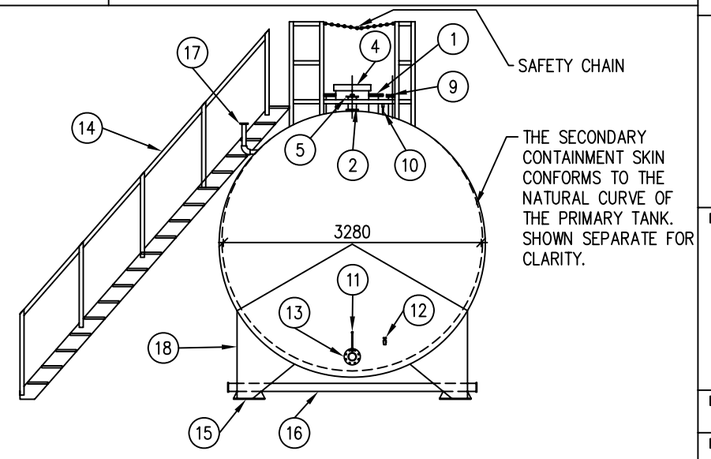
11– ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.

12–TANK EXTERIOR TO BE GRIT BLASTED AND SHOP PAINTED AS PER SECTION 9.0, PAINTING.

13–ONE METRE WIDE STRIP ALONG TOP OF TANK TO BE PAINTED WITH NON–SKID PAINT.



HORIZONTAL TANK – SIDE VIEW
SCALE:N.T.S.



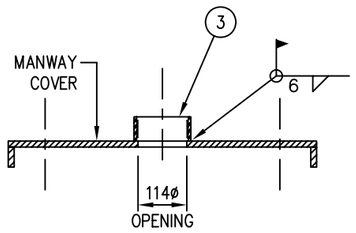
HORIZONTAL TANK – END VIEW
SCALE:N.T.S.

Northwest Territories Public Works & Services

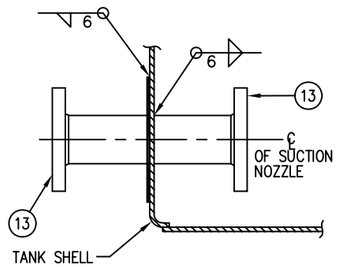
Drawing Title

75 m3 FUEL STORAGE TANK
HORIZONTAL, DOUBLE WALL,
VACUUM MONITORED, SKID MOUNTED
TANK DETAILS

Design	Ver.	Scale
LAJR	LAJR	AS SHOWN
Drawn	Appr.	Date
KJ		97/04/22
Revised By	Drawing No.	
REE	NT–P24	
Revised On		
04/09/07		



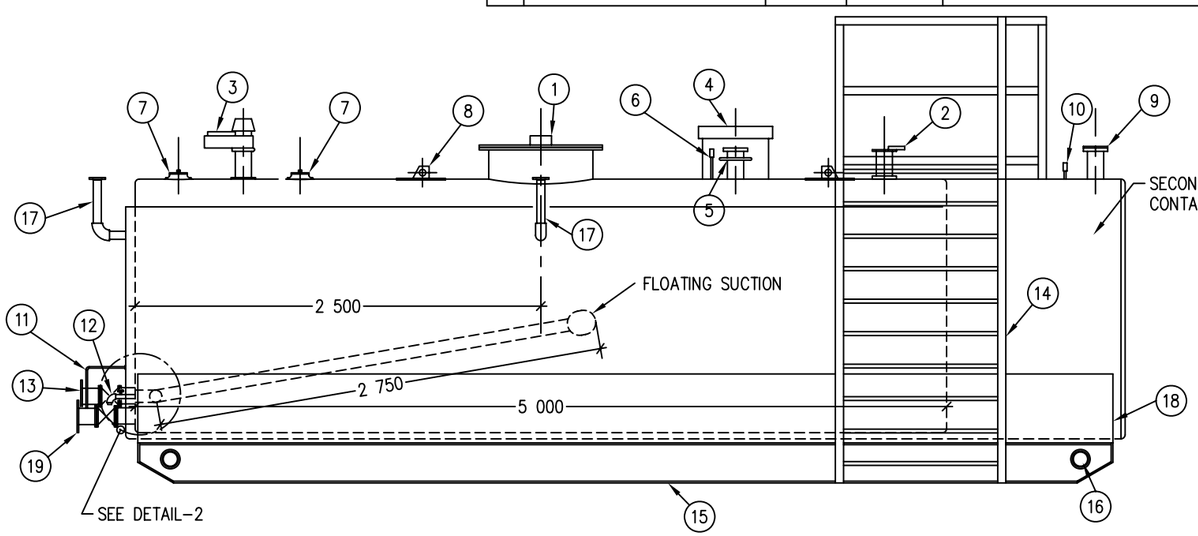
DETAIL – 1
1 : 15



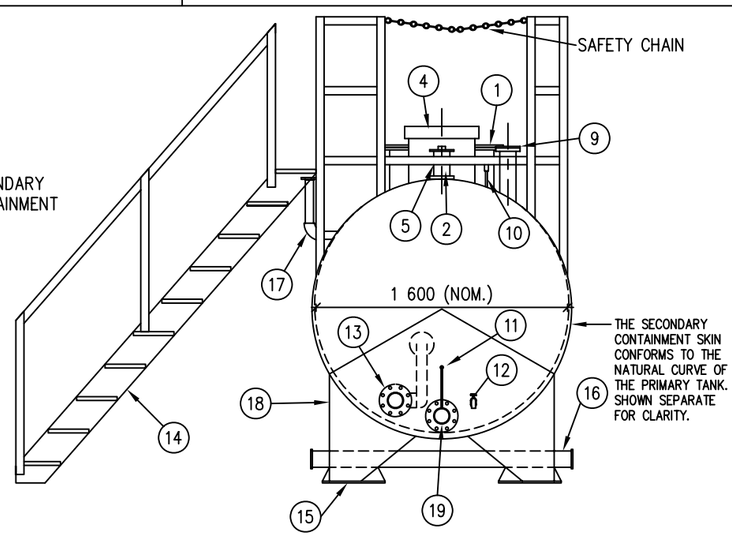
DETAIL – 2
1 : 15

LIST OF MATERIAL

No.	SERVICE	SIZE (S.I.)	SIZE (IMP.)	DESCRIPTION	EQUIPMENT
1	Manway	610 ø	24" ø	ULC Manhole Design Fig. 9	ULC EMERGENCY VENT FIG. 8
2	Gauge Hatch	150 ø	6" ø	Forged Steel Scrw'd Welding Flange c/w pilot	OCECO, MODEL F-1 (St'd Spec. Sec. 15010 Clause 2.11)
3	Vent	100 ø	4" ø	ASA 1035 kPa (150#) FS Flat Face Flange	Shand & Jurs Model 94020 P/V Vent (St'd Spec. Sec. 15010 Clause 2.12)
4	Spill Containment	407ø	16" ø	Pipe Section c/w Lockable Cover	ULC/ORD-C142.2, Clause 3.2.2
5	Overfill Protection Valve	100 ø	4" ø	Forged Steel Scrw'd Welding Flange c/w pilot	OPW 61f Stop Overfill Protection Valve c/w Bottom Fill Pipe Extension
6	Spill Drain Valve				
7	Spare Fittings	100 ø	4" ø	Forged Steel Scrw'd Welding Flange c/w Pilot	c/w Plug
8	Lifting Lug			Lifting Lug c/w Reinforcing Plate	ULC Lifting Lug Figure 2, Type II
9	Interstice Vent	100 ø	4" ø	Inspection/Emergency Vent Fitting	Vacuum/Vent Cap
10	Vacuum Gauge	12 ø	1/2" ø	Half-coupling, Threaded Forged Steel	Vacuum Monitor Gauge
11	Pressure Relief By-pass	25 ø	1" ø	Half-coupling, Threaded Forged Steel	St'd Spec. Sec. 15010 Clause 2.6 (Standard Drawing, NT-P06)
12	Water Draw-off Valve Assembly	50 ø	2" ø	Half-coupling, Threaded Forged Steel	Shand & Jurs, Model 96180, Water Drain Valve
13	Outlet Valve Assembly c/w Floating Suction	75 ø	3" ø	ASA 1035 kPa (150#) FS Raised Face Flange c/w Internal ASA 1035 kPa FS Flat Face Flange, Valve and Pressure By-pass	St'd Spec. Sec. 15010 Clause 2.5.1 (Standard Drawing, NT-P06) Floating Suction, Gammon, Model GTP-1644-3H
14	Stair & Platform Assembly			Access Stairs and Platform to Gauge Hatch	
15	Skid Base Plate	12 Thick	1/2" Thick	1/2" Thick x 300mm wide steel plate	Full Length
16	Pull Bar	100 ø	4" ø	Schedule 80 Pipe c/w cross bracing	c/w 10mm x 120mm ø end plates
17	Interstice Vent	50 ø	2" ø	Emergency Vent Fitting	Vacuum/Vent Cap
18	Fabricated Skids	6 Thick	1/4" plate	Formed Skid Assembly	
19	Inlet Valve Assembly	75 ø	3" ø	ASA 1035 kPa (150#) FS Raised Face Flange c/w Valve and Presssure By-pass	St'd Spec. Sec. 15010 Clause 2.5.1 (Standard Drawing, NT-P06)



HORIZONTAL TANK – SIDE VIEW
SCALE:N.T.S.



HORIZONTAL TANK – END VIEW
SCALE:N.T.S.

NOTES:

1- PRIMARY INTERNAL STORAGE TANK SHALL BE FABRICATED, CERTIFIED AND LABELLED IN STRICT ACCORDANCE WITH ULC STANDARD CAN4-S601-M LATEST EDITION, STANDARD FOR SHOP FABRICATED STEEL ABOVEGROUND HORIZONTAL TANKS FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS.

2- DOUBLE WALL, VACUUM MONITORED SECONDARY CONTAINMENT SHALL BE DESIGNED, FABRICATED AND LABELLED IN ACCORDANCE WITH ULC/ORD C142.3, LATEST EDITION, CONTAINED STEEL ABOVEGROUND TANK ASSEMBLIES FOR FLAMMABLE LIQUIDS.

3- ALL WELDING SHALL BE BY A WELDER WITH A VALID ARC-WELDING CERTIFICATE FOR THE TYPE OF WORK PREFORMED AND HOLDING A MINIMUM OF A VALID NWT CLASS B PRESSURE WELDERS CERTIFICATE.

4- BOLT HOLES SHALL STRADDLE CENTRELINES.

5- MINIMUM WALL THICKNESS OF THE PRIMARY TANK SHALL BE 6mm AND MINIMUM SECONDARY CONTAINMENT SHELL THICKNESS SHALL BE 4.75mm.

6- STRAPPING AND CALIBRATION OF THE TANK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 15060, CLAUSE 3.9, PRIOR TO SHIPPING.

7- HEADS SHALL BE FLAT FLANGED WITH A MINIMUM THICKNESS OF 6mm.

8- SECONDARY CONTAINMENT SHALL BE PROVIDED WITH A POSITIVE VACUUM LEAK DETECTION SYSTEM.

9- REMOVABLE PLATFORM AND STAIRS SHALL BE FABRICATED FOR ACCESS TO THE GAUGE HATCH.

10- GAUGE HATCHES SHALL BE LOCKABLE.

11- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.

12- ONE METRE WIDE STRIP ALONG TOP OF TANK TO BE PAINTED WITH NON-SKID PAINT.

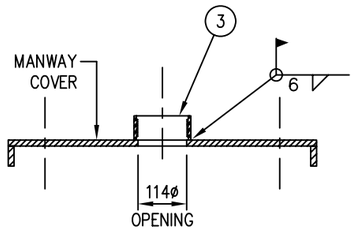
13- ALL INTERIOR SURFACES TO BE LINED WITH EPOXY AS PER SECTION 9.0, PAINTING OF THE SPECIFICATIONS.

Northwest Territories Public Works & Services

Drawing Title

94 m³ EPOXY LINED FUEL STORAGE TANK
HORIZONTAL, DOUBLE WALL,
VACUUM MONITORED, SKID MOUNTED
TANK DETAILS

Design	Ver.	Scale
LAJR	LAJR	AS SHOWN
Drawn	Appr.	Date
KJ		97/04/22
Revised By	Drawing No.	
REE	NT-P24A	
Revised On		
04/09/07		



DETAIL – 1
1 : 15

LIST OF MATERIAL

No.	SERVICE	SIZE (S.I.)	SIZE (IMP.)	DESCRIPTION	EQUIPMENT
(1)	Manway	610 ø	24" ø	ULC Manhole Design Fig. 9	ULC EMERGENCY VENT FIG. 8
(2)	Gauge Hatch	150 ø	6" ø	Forged Steel Scrw'd Welding Flange c/w pilot fitting	OCECO, MODEL F–1 (St'd Spec. Sec. 15010 Clause 2.11)
(3)	Vent	100 ø	4" ø	ASA 1035 kPa (150#) FS Flat Face Flange	Shand & Jurs Model 94020 P/V Vent (St'd Spec. Sec. 15010 Clause 2.12)
(4)	Spill Containment	407ø	16" ø	Pipe Section c/w Lockable Cover	ULC/ORD–C142.2, Clause 3.2.2
(5)	Overfill Protection Valve	100 ø	4" ø	Forged Steel Scrw'd Welding Flange c/w pilot fitting	OPW 61f Stop Overfill Protection Valve c/w Bottom Fill Pipe Extension
(6)	Spill Drain Valve				
(7)	Spare Fittings	100 ø	4" ø	Forged Steel Scrw'd Welding Flange c/w Pilot fitting	c/w Plug
(8)	Lifting Lug			Lifting Lug c/w Reinforcing Plate	ULC Lifting Lug Figure 2, Type II
(9)	Interstice Vent	100 ø	4" ø	Inspection/Emergency Vent Fitting	Vacuum/Vent Cap
(10)	Vacuum Gauge	12 ø	1/2" ø	Half–coupling, Threaded Forged Steel	Vacuum Monitor Gauge
(11)	Pressure Relief By–pass	25 ø	1" ø	Half–coupling, Threaded Forged Steel	St'd Spec. Sec. 15010 Clause 2.6 (Standard Drawing, NT–P06)
(12)	Water Draw–off Valve Assembly	50 ø	2" ø	Half–coupling, Threaded Forged Steel	Shand & Jurs, Model 96180, Water Drain Valve
(13)	Inlet/Outlet Valve Assembly	100 ø	4" ø	ASA 1035 kPa (150#) FS Raised Face Flange c/w Valve and Presssure By–pass	St'd Spec. Sec. 15010 Clause 2.5.1 (Standard Drawing, NT–P06)
(14)	Stair & Platform Assembly			Access Stairs and Platform to Gauge Hatch	
(15)	Skid Base Plate	12 Thick	1/2" Thick	1/2" Thick x 300mm wide steel plate	Full Length
(16)	Pull Bar	100 ø	4" ø	Schedule 80 Pipe c/w cross bracing	c/w 10mm x 120mm ø end plates
(17)	Interstice Vent	50 ø	2" ø	Emergency Vent Fitting	Vacuum/Vent Cap
(18)	Fabricated Skids	6 Thick	1/4" plate	Formed Skid Assembly	

NOTES:

1– PRIMARY INTERNAL STORAGE TANK SHALL BE FABRICATED, CERTIFIED AND LABELLED IN STRICT ACCORDANCE WITH ULC STANDARD CAN4–S601–M LATEST EDITION, STANDARD FOR SHOP FABRICATED STEEL ABOVEGROUND HORIZONTAL TANKS FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS.

2– DOUBLE WALL, VACUUM MONITORED SECONDARY CONTAINMENT SHALL BE DESIGNED, FABRICATED AND LABELLED IN ACCORDANCE WITH ULC/ORD C142.3, LATEST EDITION, CONTAINED STEEL ABOVEGROUND TANK ASSEMBLIES FOR FLAMMABLE LIQUIDS.

3– ALL WELDING SHALL BE BY A WELDER WITH A VALID ARC–WELDING CERTIFICATE FOR THE TYPE OF WORK PREFORMED AND HOLDING A MINIMUM OF A VALID NWT CLASS B PRESSURE WELDERS CERTIFICATE.

4– BOLT HOLES SHALL STRADDLE CENTRELINES.

5– MINIMUM WALL THICKNESS OF THE PRIMARY TANK SHALL BE 6mm AND MINIMUM SECONDARY CONTAINMENT SHELL THICKNESS SHALL BE 4.75mm.

6– STRAPPING AND CALIBRATION OF THE TANK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 15060, CLAUSE 3.9, PRIOR TO SHIPPING.

7– HEADS SHALL BE FLAT FLANGED WITH A MINIMUM THICKNESS OF 6mm.

8– SECONDARY CONTAINMENT SHALL BE PROVIDED WITH A POSITIVE VACUUM LEAK DETECTION SYSTEM.

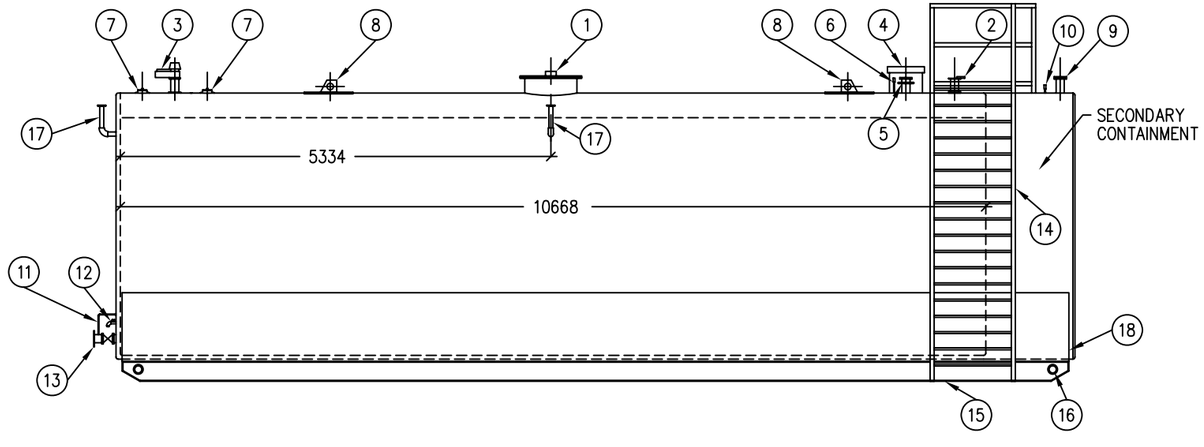
9– REMOVABLE PLATFORM AND STAIRS SHALL BE FABRICATED FOR ACCESS TO THE GAUGE HATCH.

10– GAUGE HATCHES SHALL BE LOCKABLE.

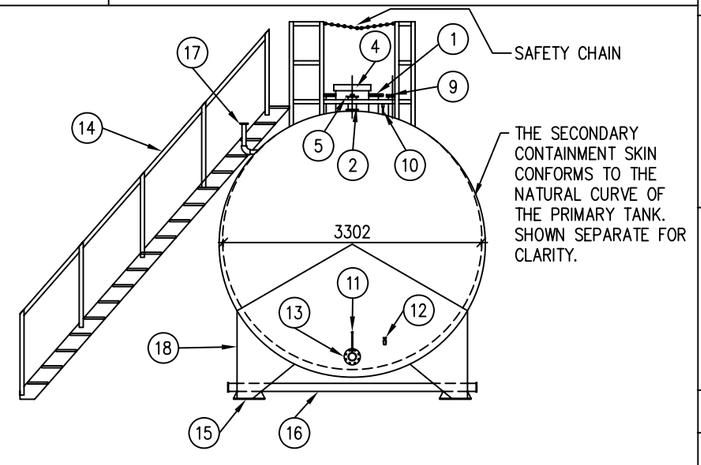
11– ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.

12– TANK EXTERIOR TO BE GRIT BLASTED AND SHOP PAINTED AS PER SECTION 9.0, PAINTING.

13– ONE METRE WIDE STRIP ALONG TOP OF TANK TO BE PAINTED WITH NON–SKID PAINT.



HORIZONTAL TANK – SIDE VIEW
SCALE:N.T.S.



HORIZONTAL TANK – END VIEW
SCALE:N.T.S.

Northwest Territories Public Works & Services

Drawing Title

94 m3 FUEL STORAGE TANK
HORIZONTAL, DOUBLE WALL,
VACUUM MONITORED, SKID MOUNTED
TANK DETAILS

Design	Ver.	Scale
LAJR	LAJR	AS SHOWN
Drawn	Appr.	Date
KJ		97/04/22
Revised By	Drawing No.	
REE	NT–P25	
Revised On		
04/09/07		

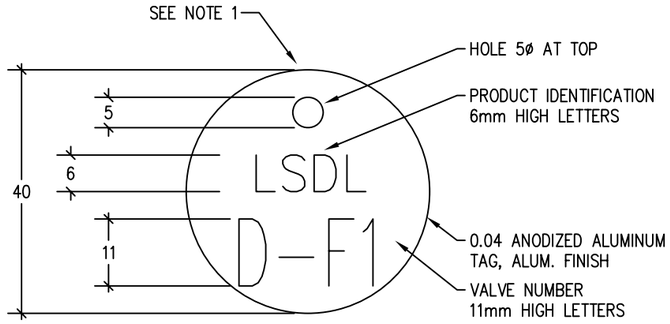


FIG. 1 – VALVE TAGS FOR DIESEL FUEL SYSTEM

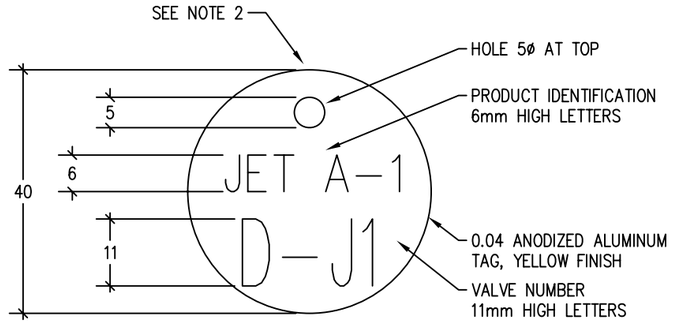


FIG. 2 – VALVE TAGS FOR JET A–1 AVIATION FUEL SYSTEM

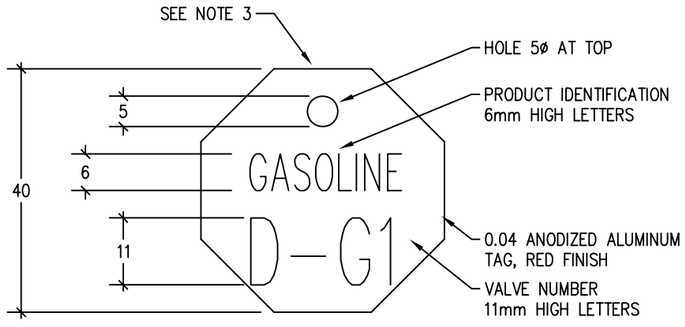


FIG. 3 – VALVE TAGS FOR GASOLINE SYSTEM

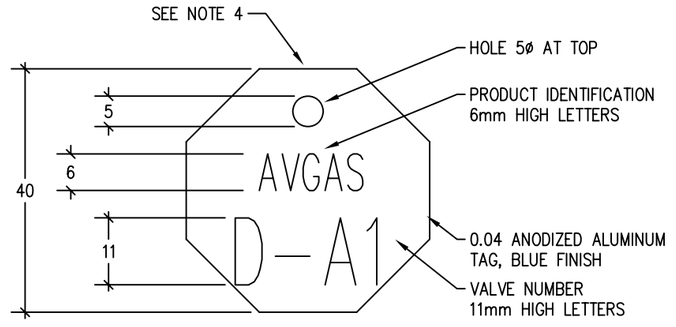


FIG. 3 – VALVE TAGS FOR AVGAS SYSTEM

NOTES:

1– VALVE TAGS ON THE DIESEL FUEL SYSTEM TO BE BRADY #49904 OR APPROVED EQUIVALENT.

2– VALVE TAGS ON THE JET A–1 AVIATION FUEL SYSTEM TO BE BRADY #49900 OR APPROVED EQUIVALENT.

3– VALVE TAGS ON THE GASOLINE SYSTEM TO BE BRADY #49901 OR APPROVED EQUIVALENT.

4– VALVE TAGS ON THE AVGAS SYSTEM TO BE BRADY #49901 OR APPROVED EQUIVALENT.

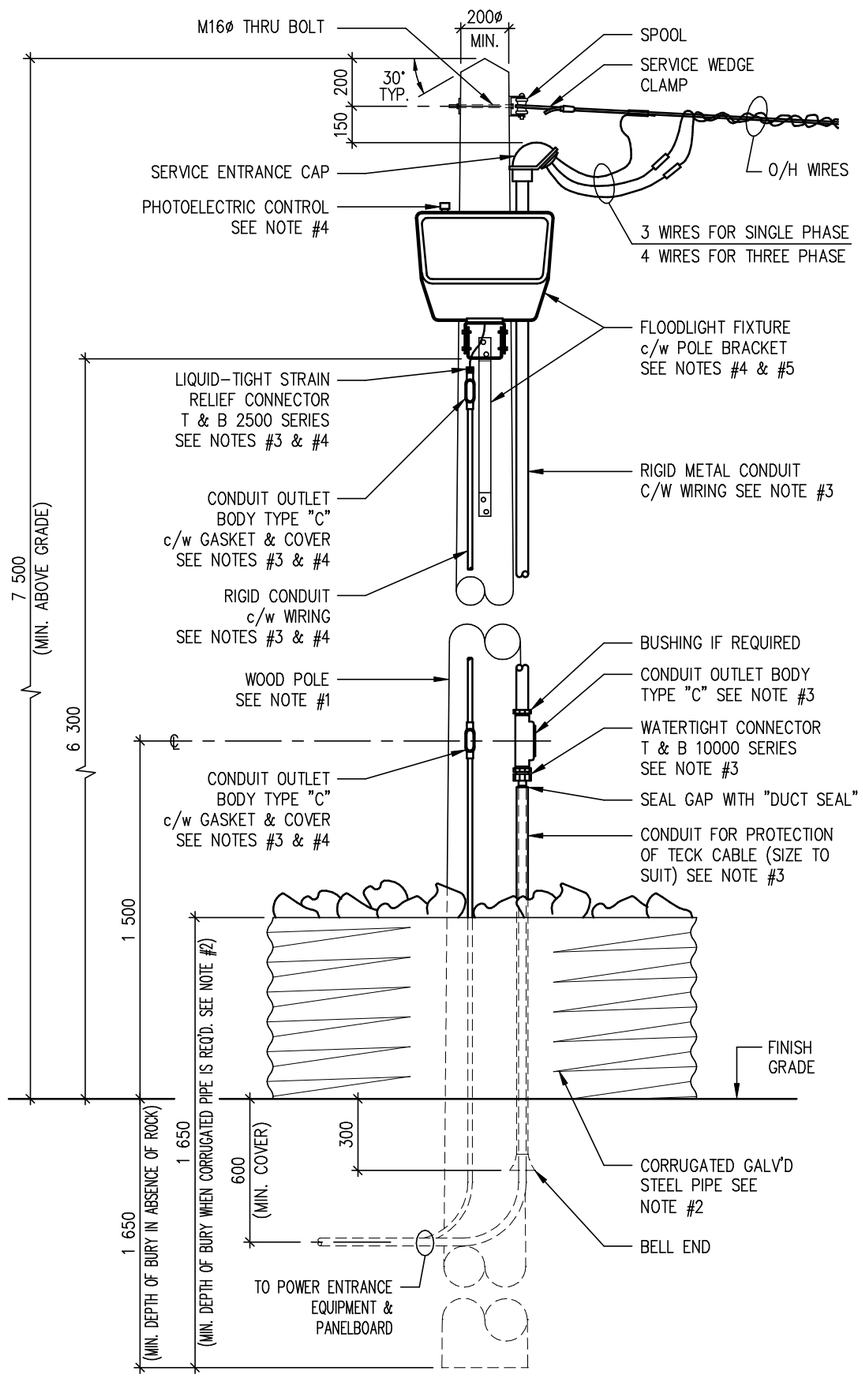
5– SEE SPECIFICATIONS SECTION 01080 FOR DETAILS.

Northwest Territories Public Works & Services

Drawing Title

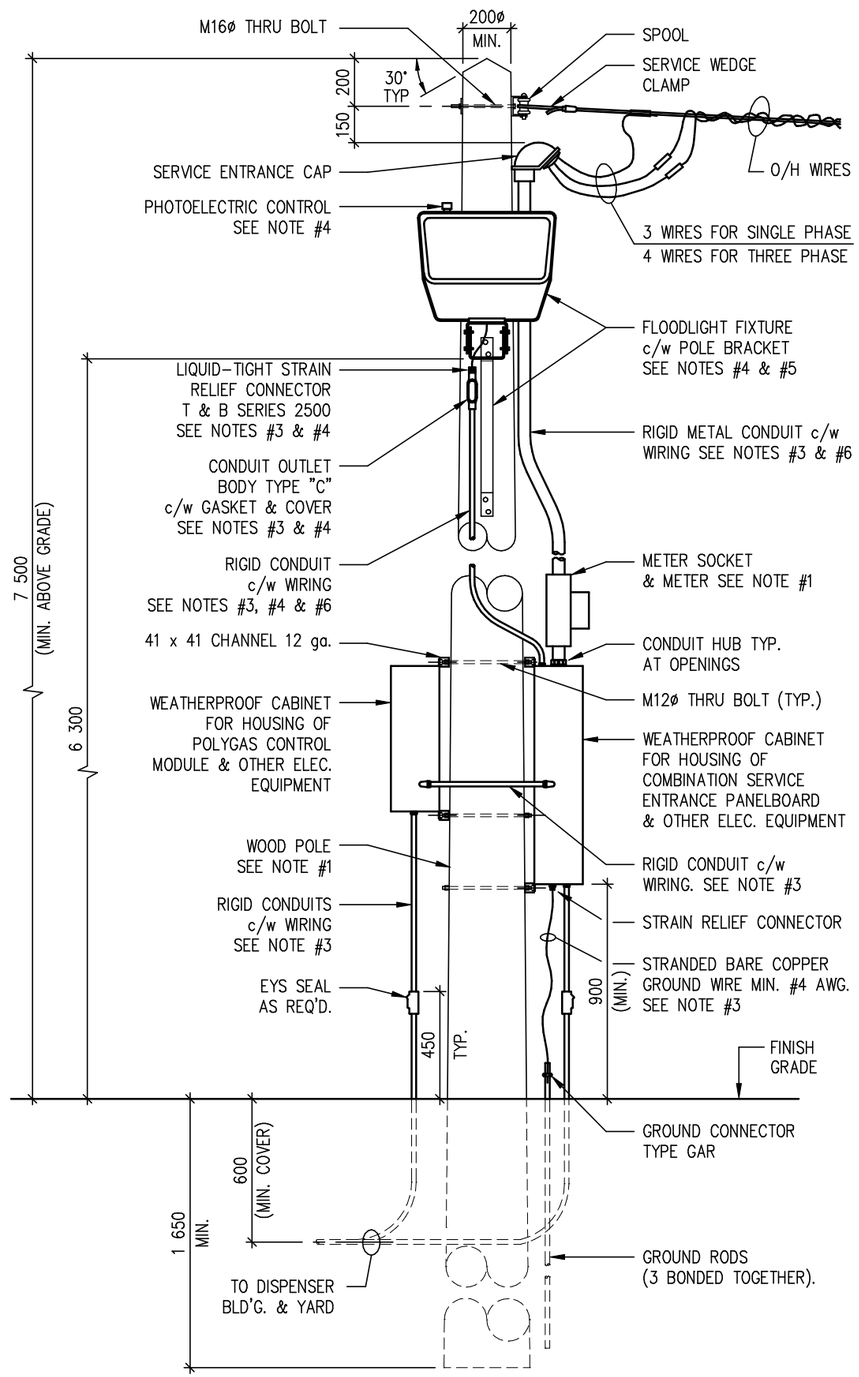
VALVE TAG DETAILS

Design	Ver.	Scale
BFG	BFG	1 : 1
Drawn	Appr.	Date
KJ		99.03.19
Revised By	Drawing No.	
REE	NT–P26	
Revised On		
04/09/07		



SERVICE ENTRANCE POLE TYPE 1 ARRANGEMENT

(AT LOCATIONS WITH AN ELECTRICAL ROOM)



SERVICE ENTRANCE POLE TYPE 2 ARRANGEMENT

(AT LOCATIONS WITHOUT AN ELECTRICAL ROOM)

NOTES:

1- SERVICE ENTRANCE POLE AND ELECTRICAL INSTALLATIONS AT POLE TO BE AS PER UTILITY COMPANY REQUIREMENTS.

2- CORRUGATED PIPE REQUIRED WHERE DEPTH OF BURY CANNOT BE OBTAINED DUE TO PRESENCE OF ROCK OR OTHER REASON. PIPE TO BE FILLED COMPLETELY ALL AROUND POLE WITH STONES (SIZE 300ø MAX.) AND WELL COMPACTED COARSE & FINE GRAVEL.

3- FOR SIZES OF CONDUITS AND SIZE, NUMBER AND TYPE OF WIRING REFER TO PARTICULAR PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

4- FLOODLIGHT, PHOTOELECTRIC CONTROL AND BRACKET, CONDUIT AND WIRING ARE REQ'D. ONLY IF CALLED FOR BY PARTICULAR PROJECT DRAWINGS. FOR DESCRIPTION REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.

5- POLE BRACKET TO BE FASTENED TO POLE WITH ONE M16ø THRU BOLT AT TOP HOLE & THREE 12ø x 100 Lg. LAG BOLTS AT OTHER HOLES.

6- CONDUITS TO BE FASTENED TO POLE WITH 2 HOLE GALV'D. STEEL STRAPS & LAG BOLTS, SIZES & NUMBER TO SUIT.

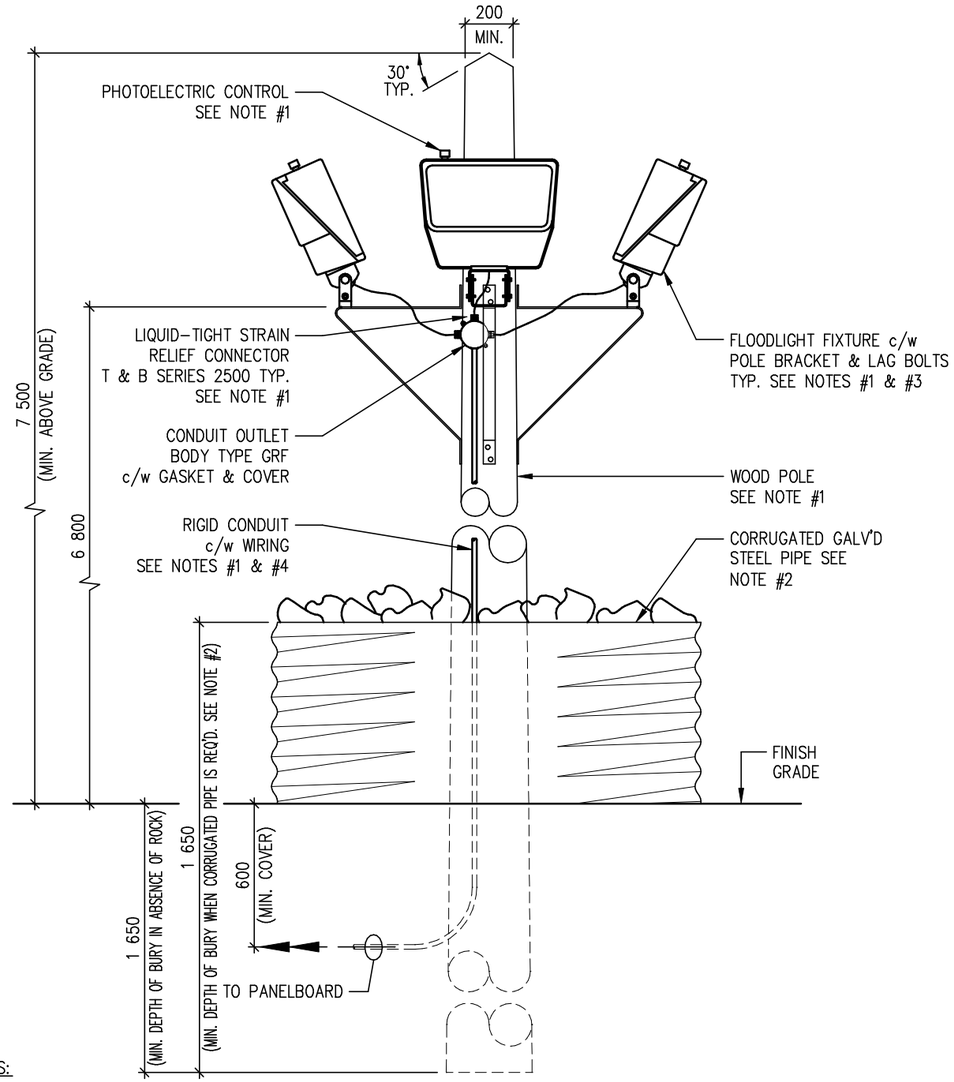
7- FOR OTHER NOTES REFER TO PARTICULAR PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title

SERVICE ENTRANCE POLE
TYPE 1 AND TYPE 2 ARRANGEMENTS

Design	Ver.	Scale
RVM	EDZ	1 : 25
Drawn	Appr.	Date
KJ		94/04/29
Revised By	Drawing No.	
REE	NT-E01	
Revised On		
04/09/30		



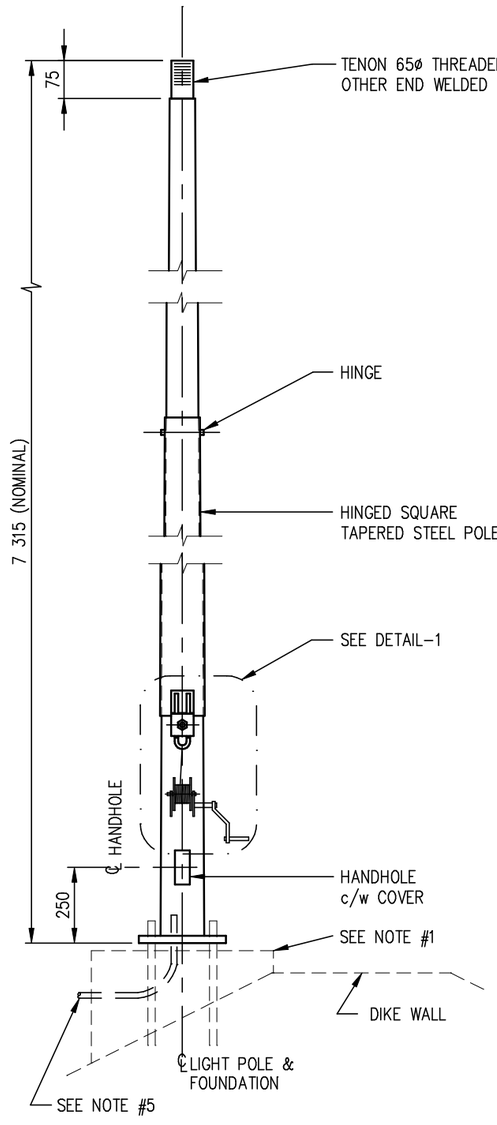
NOTES:

1– FOR NUMBER AND LOCATION OF FLOODLIGHT POLES, NUMBER AND TYPE OF LIGHTING FIXTURES, PHOTOELECTRIC CONTROL, CONNECTORS, SIZE OF CONDUITS AND SIZE, NUMBER AND TYPE OF WIRING REFER TO PARTICULAR PROJECT DRAWINGS & SPECIFICATIONS, DIVISION 16, SECTION 16010.
2– CORRUGATED PIPE REQUIRED WHERE DEPTH OF BURY CANNOT BE OBTAINED DUE TO PRESENCE OF BEDROCK OR OTHER REASON. PIPE TO BE FILLED COMPLETELY ALL AROUND POLE WITH STONES (SIZE 300ø MAX.) & WELL COMPACTED COARSE AND FINE GRAVEL.
3– POLE BRACKETS TO BE FASTENED TO POLE WITH ONE M16ø THRU BOLT AT TOP HOLE AND 12ø x 100 Lg. LAG BOLTS AT OTHER HOLES.
4– CONDUIT TO BE FASTENED TO POLE WITH 2–HOLE GAL'D. STEEL STAPS & LAG BOLTS, SIZE & NUMBER TO SUIT.
5– FOR OTHER NOTES REFER TO PARTICULAR PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 16, SECTION 16010.

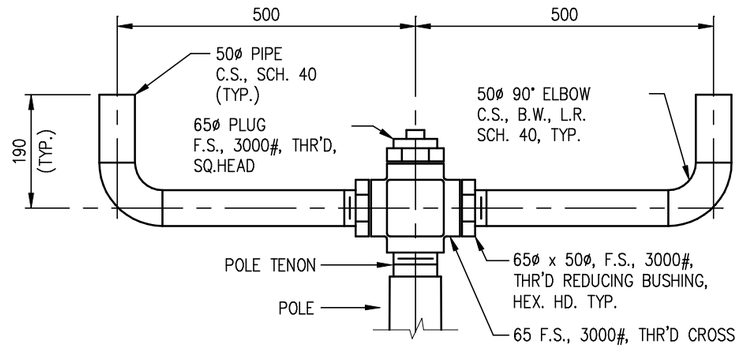
Northwest Territories Public Works & Services

Drawing Title
WOOD FLOODLIGHT POLE
FOR YARD AREA LIGHTING DETAIL

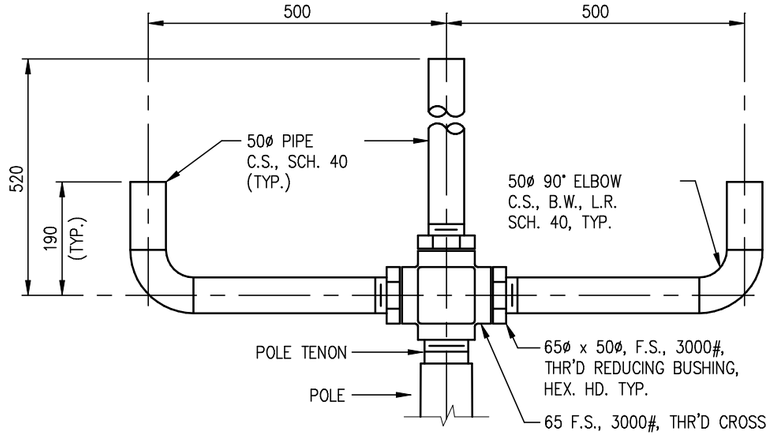
Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1 : 25	REE	NT–E02
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/30	



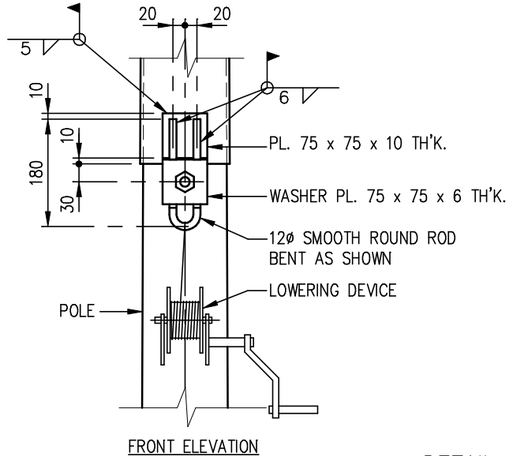
ELEVATION
1 : 20



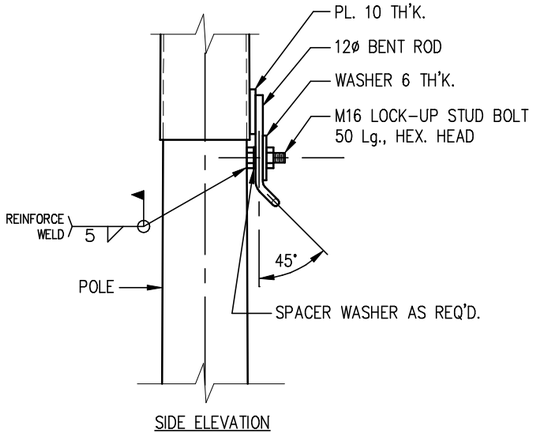
DETAIL – 2 BRACKET FOR 2 FLOODLIGHTS
1 : 10



DETAIL – 3 BRACKET FOR 3 FLOODLIGHTS
1 : 10



FRONT ELEVATION



SIDE ELEVATION

DETAIL – 1
1 : 10

NOTES:

1– FOR DETAILS OF CONCRETE FOUNDATION & ANCHOR BOLTS REFER TO DWG. NT–S20.

2– LOWERING DEVICE TO BE INSTALLED SUCH THAT HINGED PORTION OF POLE IS LOWERED PARALLEL TO THE DIKE WALL.

3– POLE & BRACKETS TO BE PAINTED AS PER SPECIFICATIONS, DIVISION 9, SECTION 09900.

4– FOR MATERIAL REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.

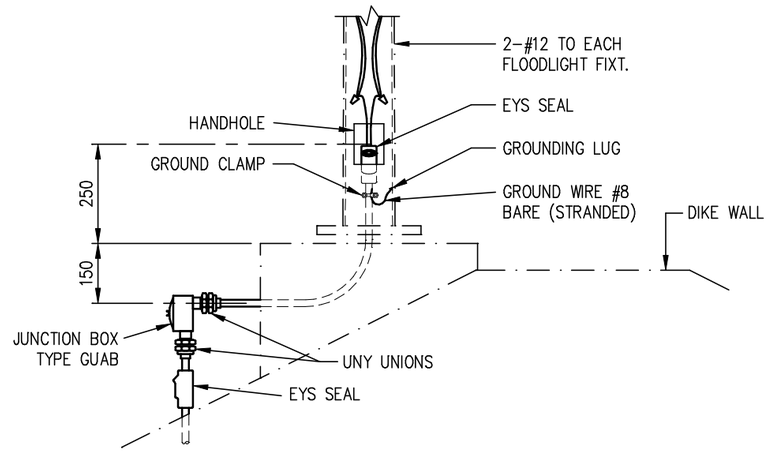
5– FOR DETAIL OF ELECTRICAL INSTALLATION SEE DWG. NT–E04

Northwest Territories Public Works & Services

Drawing Title

HINGED FLOODLIGHT POLE
& BRACKETS FOR
DIKE AREA LIGHTING DETAILS

Design	Ver.	Scale
EDZ	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT–E03	
Revised On		
04/09/30		

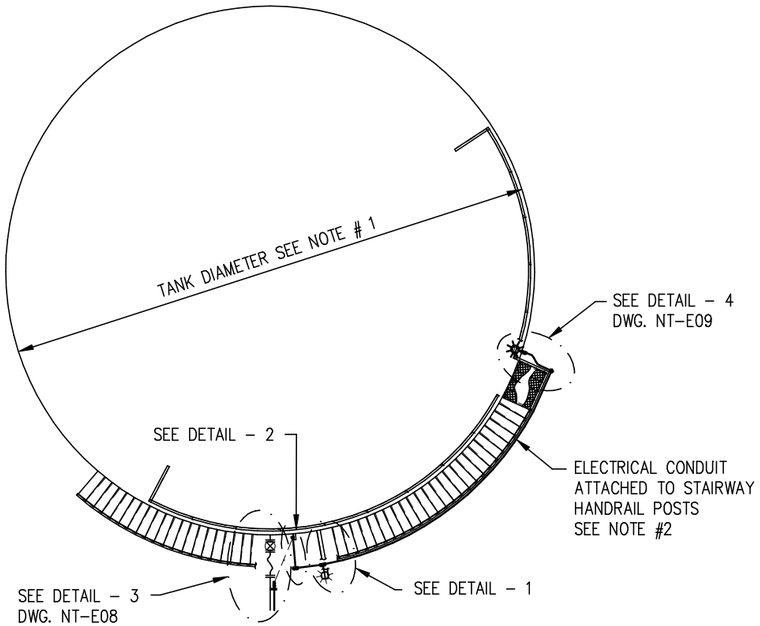


ELEVATION

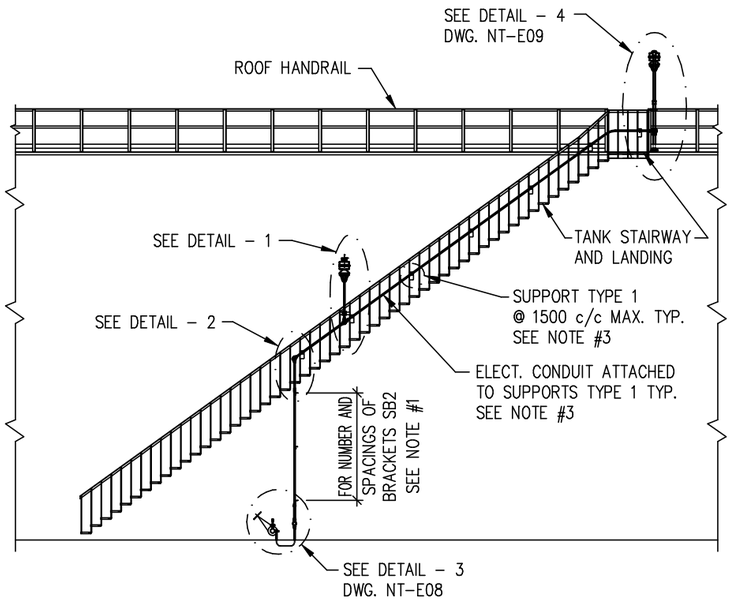
Northwest Territories
Public Works & Services

Drawing Title
ELECTRICAL & GROUNDING INSTALLATION
AT BASE OF FLOODLIGHT POLE

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E04
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/06/18	



PLAN
1 : 150



ELEVATION (DEVELOPED)
1 : 150

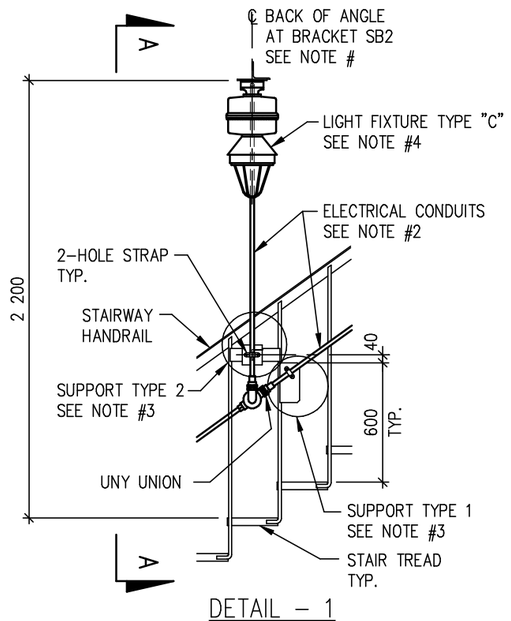
NOTES:

1– FOR SIZE OF TANK, ORIENTATION, NUMBER AND LOCATION OF BRACKETS SB2 AND SB3 REFER TO PARTICULAR PROJECT DRAWINGS.

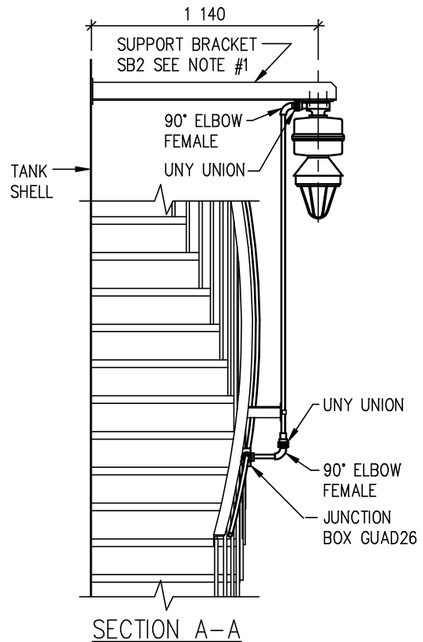
2– ALL CONDUITS TO BE RIGID METAL 19ø WITH 2–#12 WIRES, UNLESS OTHERWISE SPECIFIED ON PARTICULAR PROJECT DRAWINGS.

3– FOR DETAILS OF SUPPORTS TYPE 1 AND TYPE 11 REFER TO DWG. NT–S48.

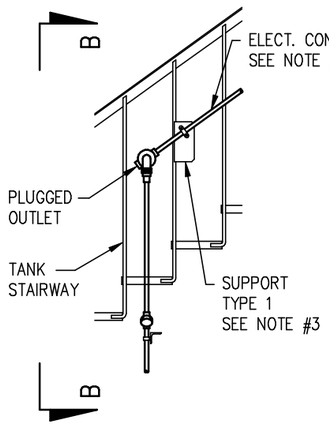
4– FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.



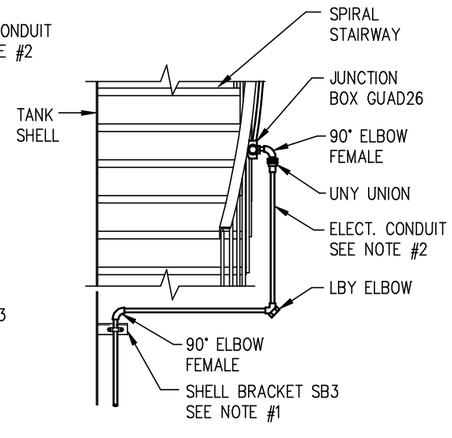
DETAIL – 1
1 : 30



SECTION A–A
1 : 30



DETAIL – 2
1 : 30



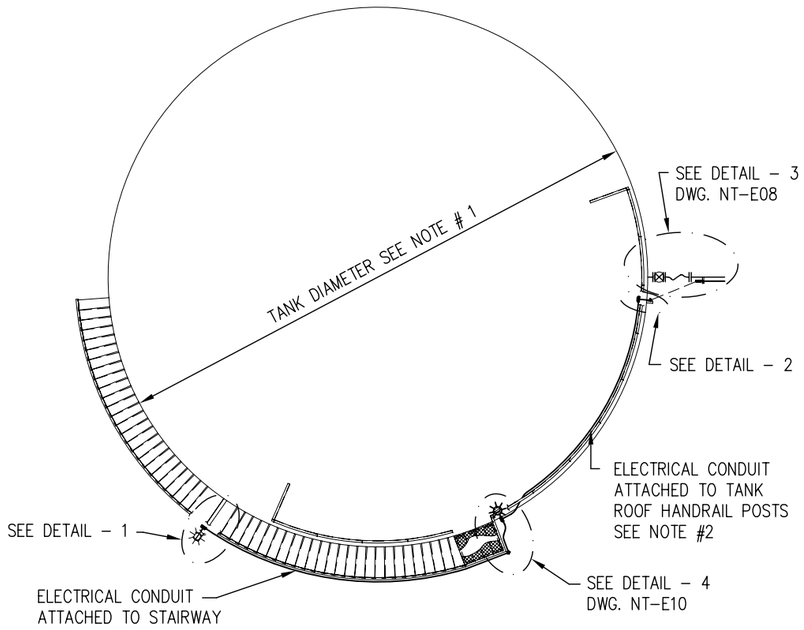
SECTION B–B
1 : 30

Northwest Territories Public Works & Services

Drawing Title

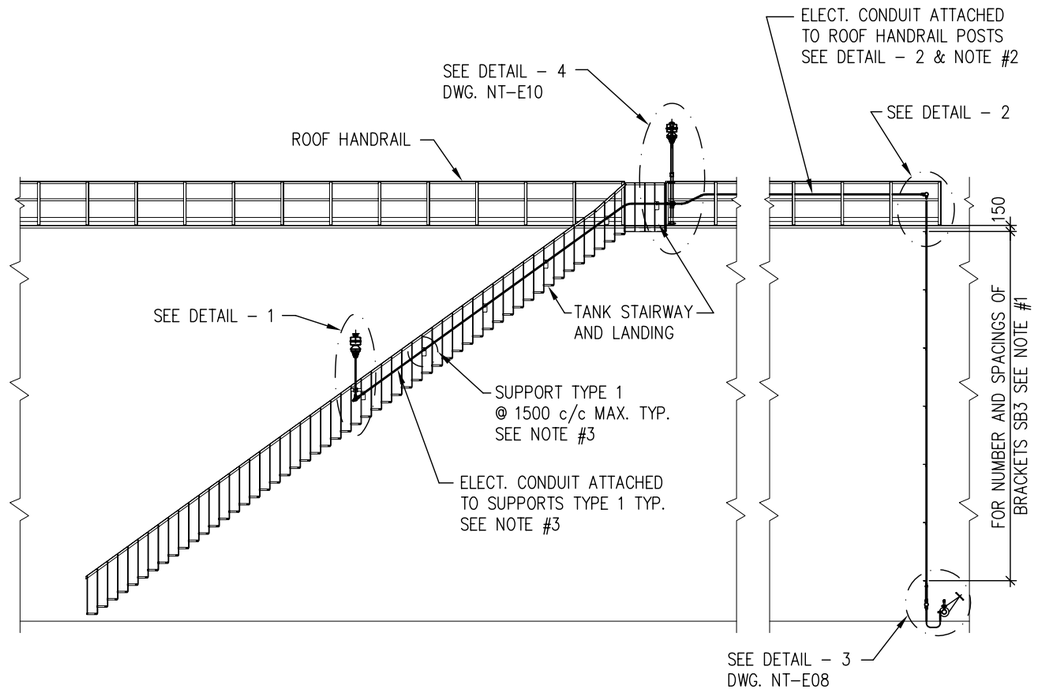
TYPICAL LIGHTING ARRANGEMENT
AT VERTICAL TANKS
ALTERNATIVE 1
PLAN, DEVELOPED ELEVATION
SECTIONS AND DETAILS

Design	Ver.	Scale
RVM	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT–E05	
Revised On		
04/09/30		



PLAN

1 : 150



ELEVATION (DEVELOPED)

1 : 150

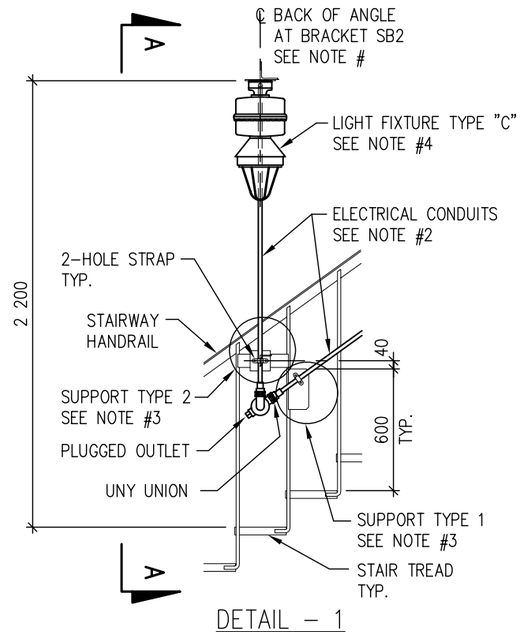
NOTES:

1– FOR SIZE OF TANK, ORIENTATION, NUMBER AND LOCATION OF BRACKETS SB2 AND SB3 REFER TO PARTICULAR PROJECT DRAWINGS.

2– ALL CONDUITS TO BE RIGID METAL 19ø WITH 2–#12 WIRES, UNLESS OTHERWISE SPECIFIED ON PARTICULAR PROJECT DRAWINGS.

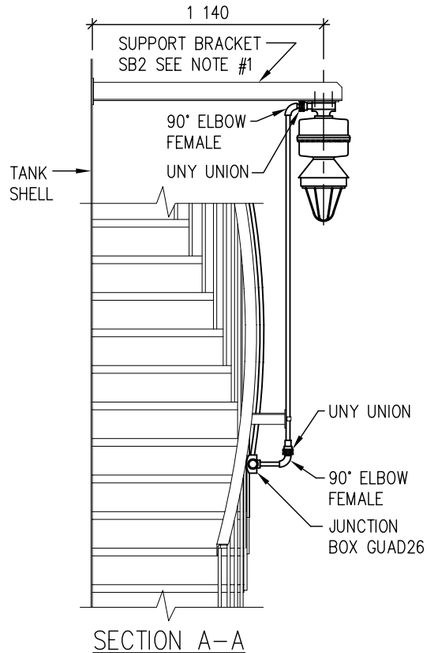
3– FOR DETAILS OF SUPPORTS TYPE 1 AND TYPE 11 REFER TO DWG. NT–S48.

4– FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.



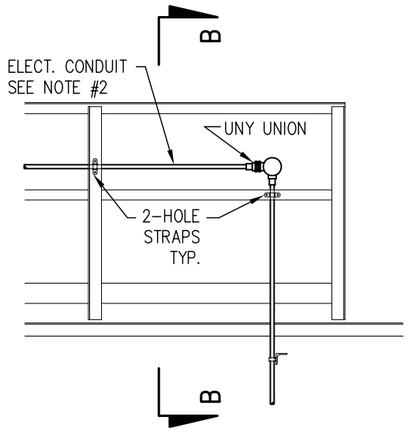
DETAIL – 1

1 : 30



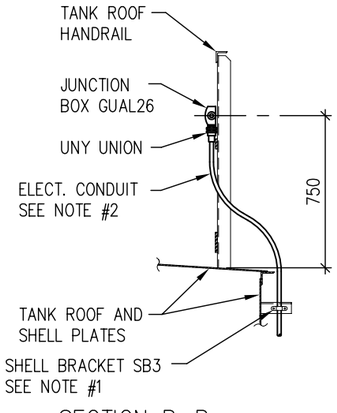
SECTION A–A

1 : 30



DETAIL – 2

1 : 30



SECTION B–B

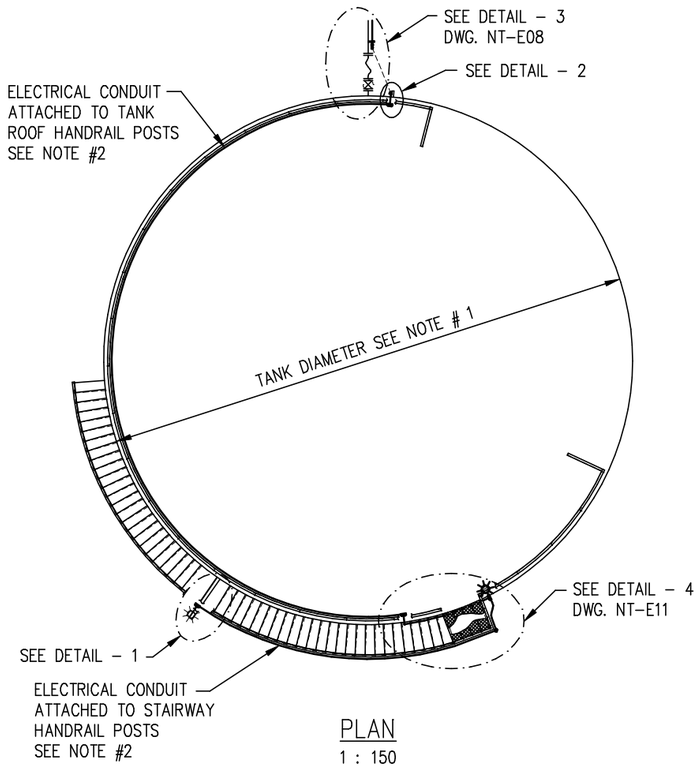
1 : 30

Northwest Territories Public Works & Services

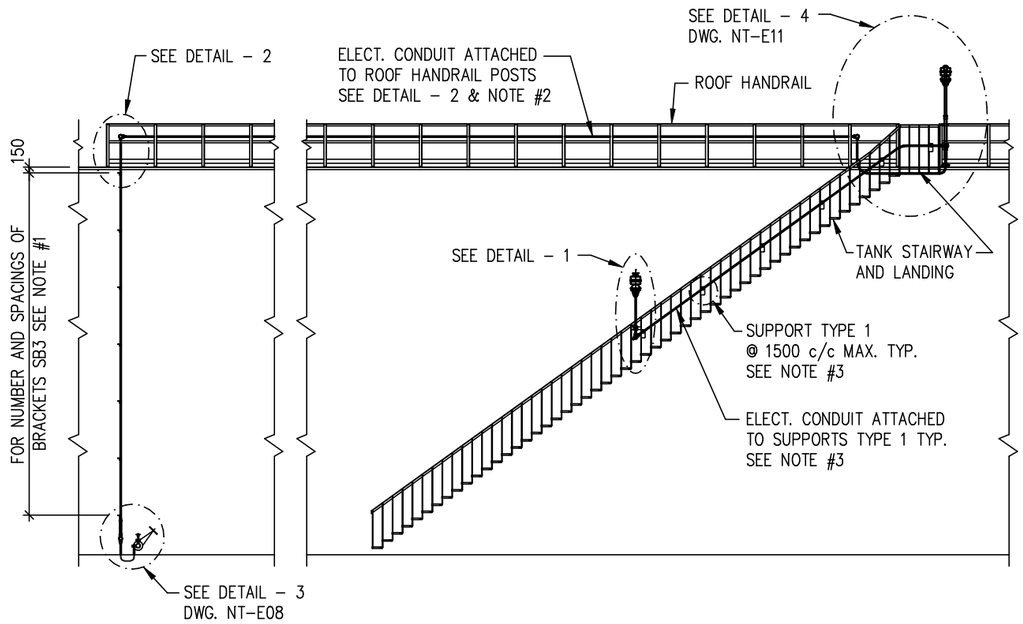
Drawing Title

TYPICAL LIGHTING ARRANGEMENT AT VERTICAL TANKS ALTERNATIVE 2 PLAN, DEVELOPED ELEVATION, SECTIONS AND DETAILS

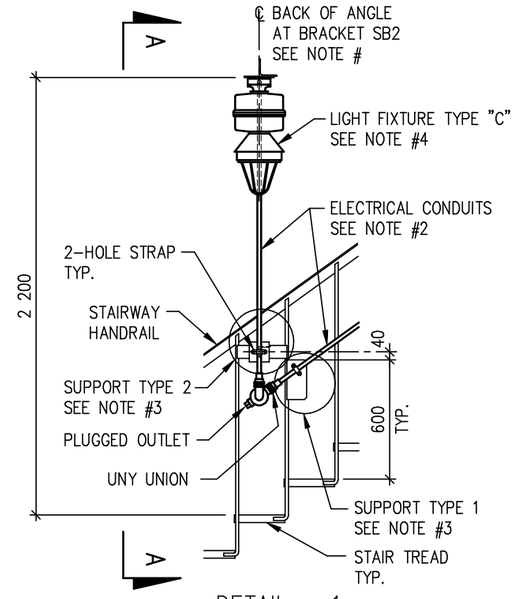
Design	Ver.	Scale
RVM	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		99/02/26
Revised By	Drawing No.	
REE	NT–E06	
Revised On		
04/09/30		



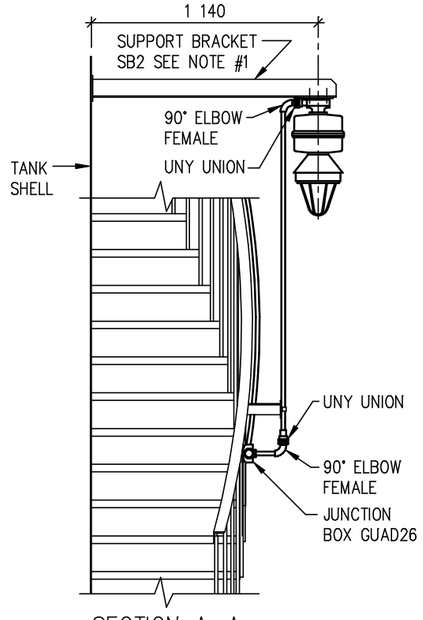
PLAN
1 : 150



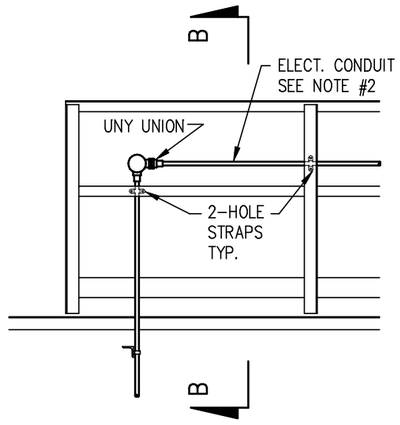
ELEVATION (DEVELOPED)
1 : 150



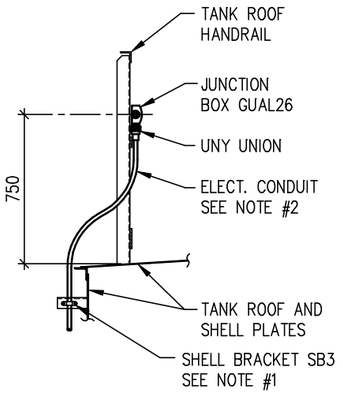
DETAIL – 1
1 : 30



SECTION A–A
1 : 30



DETAIL – 2
1 : 30



SECTION B–B
1 : 30

NOTES:

1– FOR SIZE OF TANK, ORIENTATION, NUMBER AND LOCATION OF BRACKETS SB2 AND SB3 REFER TO PARTICULAR PROJECT DRAWINGS.

2– ALL CONDUITS TO BE RIGID METAL 19ø WITH 2–#12 WIRES, UNLESS OTHERWISE SPECIFIED ON PARTICULAR PROJECT DRAWINGS.

3– FOR DETAILS OF SUPPORTS TYPE 1 AND TYPE 11 REFER TO DWG. NT–S48.

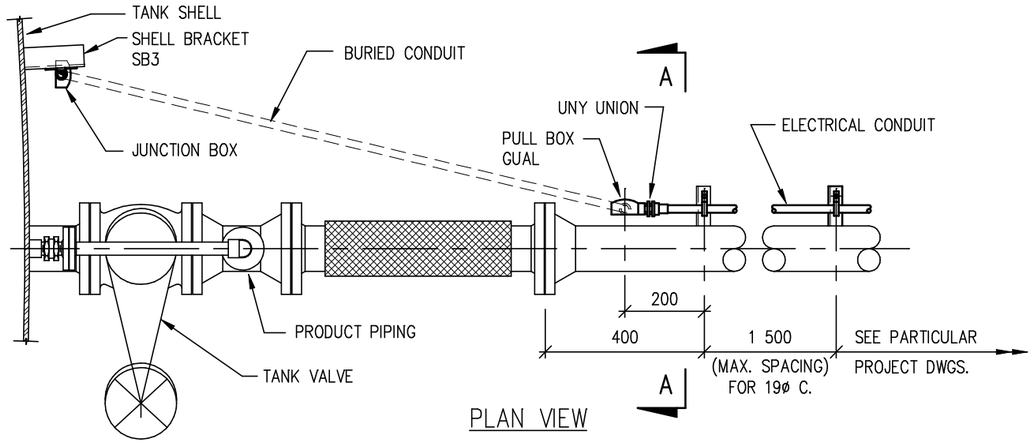
4– FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title

TYPICAL LIGHTING ARRANGEMENT
AT VERTICAL TANKS
ALTERNATIVE 3
PLAN, DEVELOPED ELEVATION,
SECTIONS AND DETAILS

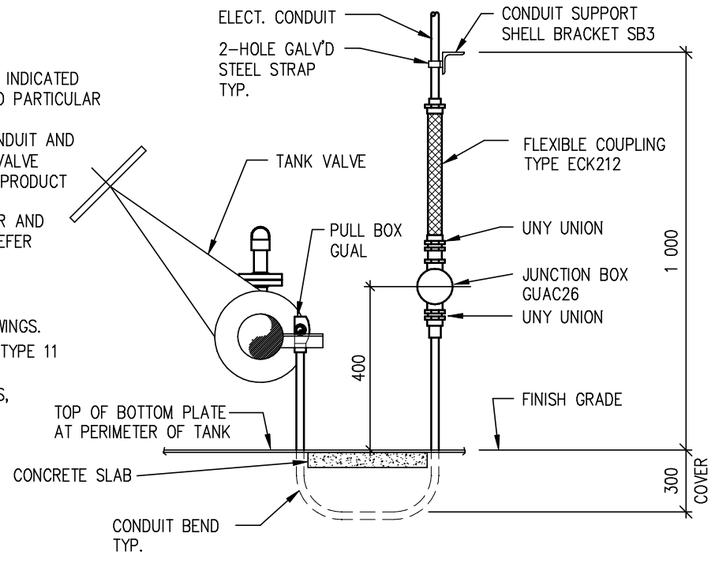
Design	Ver.	Scale
RVM	EDZ	AS SHOWN
Drawn	Appr.	Date
KJ		99/02/26
Revised By	Drawing No.	
REE	NT–E07	
Revised On		
04/09/30		



PLAN VIEW

NOTES:

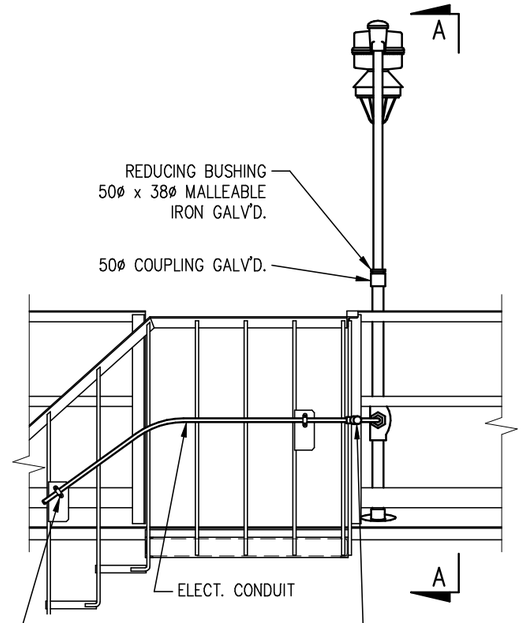
1– SIZES OF CONDUITS, BOXES & WIRING AS INDICATED ARE FOR AVERAGE CONDITIONS. REFER TO PARTICULAR PROJECT DRAWINGS FOR SPECIAL CASES.
2– FOR LEFT HAND INSTALLATION, RISER CONDUIT AND BRACKETS LOCATED ON OTHER SIDE OF VALVE (MIRROR IMAGE) ABOUT CENTER LINE OF PRODUCT PIPE.
3– FOR SIZE OF TANK, ORIENTATION, NUMBER AND LOCATION OF BRACKETS SB2 AND SB3 REFER TO PARTICULAR PROJECT DRAWINGS.
4– ALL CONDUITS TO BE RIGID METAL 19ø WITH 2–#12 WIRES, UNLESS OTHERWISE SPECIFIED ON PARTICULAR PROJECT DRAWINGS.
5– FOR DETAILS OF SUPPORTS TYPE 1 AND TYPE 11 REFER TO DWG. NT–S48.
6– FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.



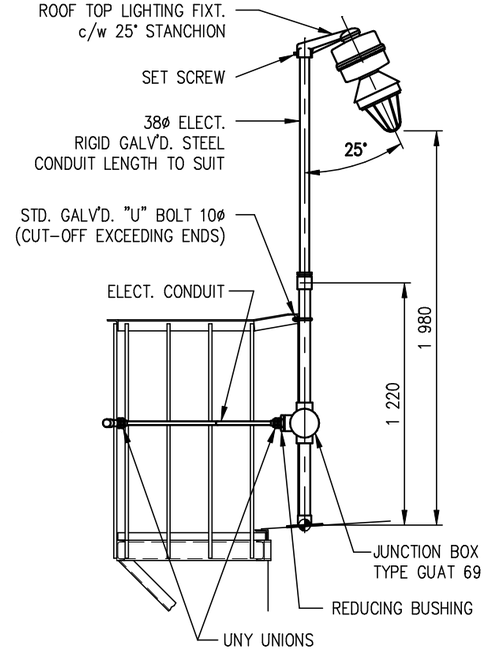
SECTION A–A
(RISER CONDUIT SHOWN RIGHT HAND SEE NOTE #2)

DETAIL – 3

Northwest Territories Public Works & Services	Drawing Title: TYPICAL ELECTRICAL CONDUIT ARRANGEMENT AT VERTICAL TANK VALVES DETAIL–3 (ALTERNATIVES 1, 2, & 3)			
Design: BC	Ver.: LR	Scale: 1:15	Revised By: REE	Drawing No.: NT–E08
Drawn: KJ	Appr.	Date: 99/02/26	Revised On: 04/09/30	



ELEVATION



SECTION A–A

DETAIL – 4

NOTES:

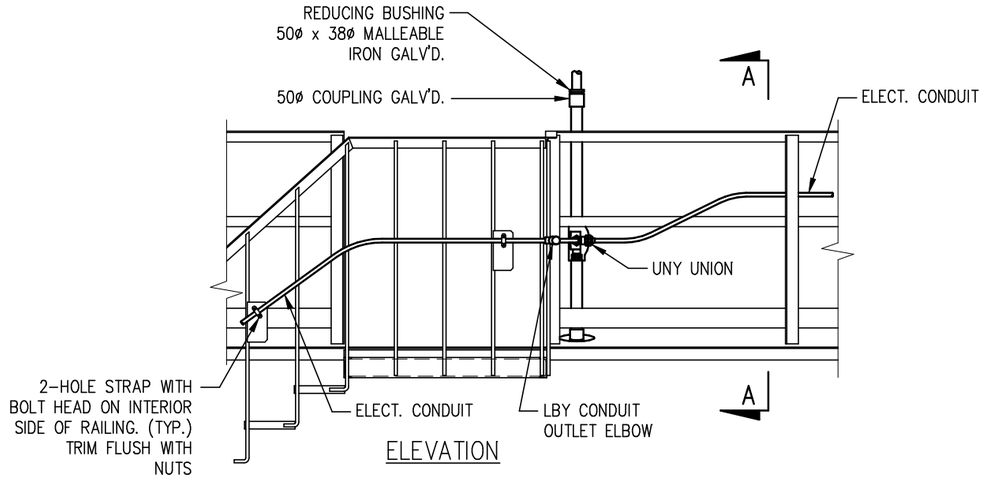
1– FOR SIZE OF TANK, ORIENTATION, NUMBER AND LOCATION OF BRACKETS SB2 AND SB3 REFER TO PARTICULAR PROJECT DRAWINGS.

2– ALL CONDUITS TO BE RIGID METAL 19ø WITH 2–#12 WIRES, UNLESS OTHERWISE SPECIFIED ON PARTICULAR PROJECT DRAWINGS.

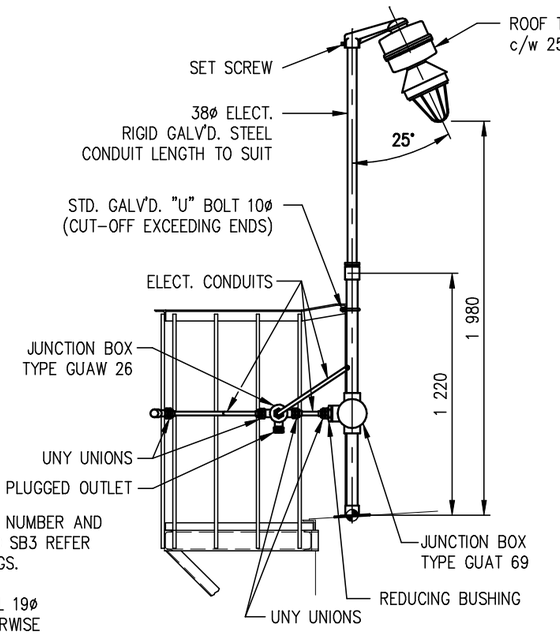
3– FOR DETAILS OF SUPPORTS TYPE 1 AND TYPE 11 REFER TO DWG. NT–S48.

4– FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services	Drawing Title: TYPICAL LIGHTING AND CONDUIT ARRANGEMENT AT ROOF OF VERTICAL TANKS DETAIL–4 (ALTERNATIVE 1)			
Design: RVM	Ver.: EDZ	Scale: 1:30	Revised By: REE	Drawing No.: NT–E09
Drawn: KJ	Appr.	Date: 95/02/28	Revised On: 04/09/30	



ELEVATION



SECTION A–A

DETAIL – 4

NOTES:

1– FOR SIZE OF TANK, ORIENTATION, NUMBER AND LOCATION OF BRACKETS SB2 AND SB3 REFER TO PARTICULAR PROJECT DRAWINGS.

2– ALL CONDUITS TO BE RIGID METAL 19ø WITH 2–#12 WIRES, UNLESS OTHERWISE SPECIFIED ON PARTICULAR PROJECT DRAWINGS.

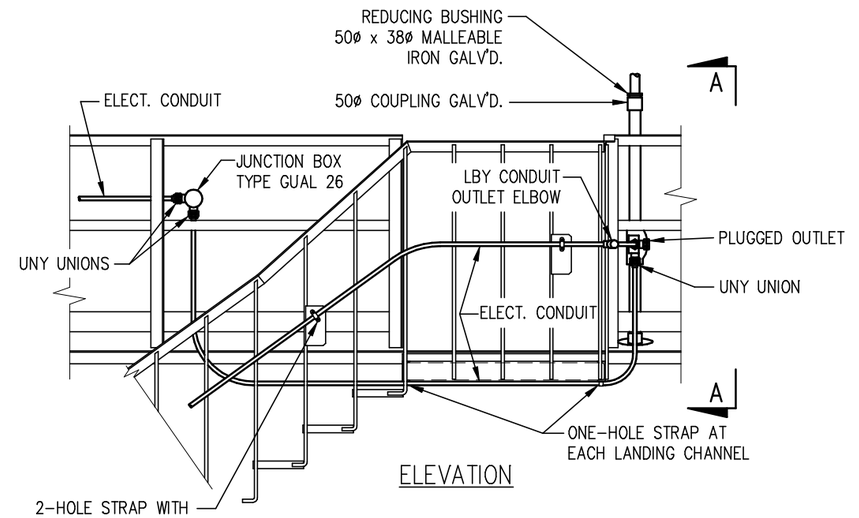
3– FOR DETAILS OF SUPPORTS TYPE I AND TYPE II REFER TO DWG. NT–S48.

4– FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.

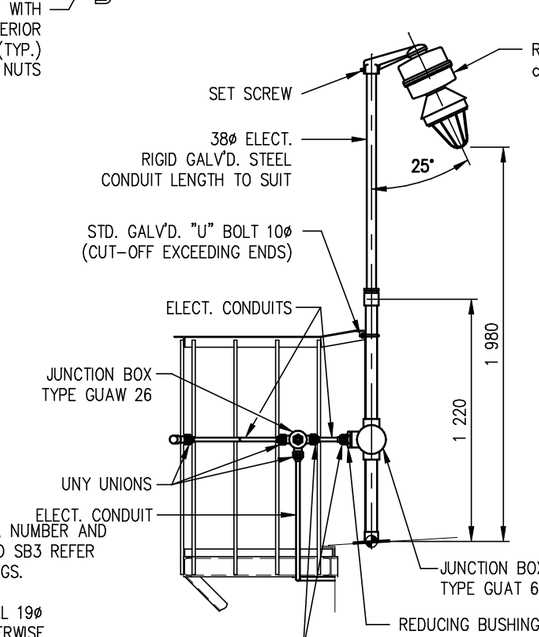
Northwest Territories Public Works & Services

Drawing Title
TYPICAL LIGHTING & CONDUIT ARRANGEMENT
AT ROOF OF VERTICAL TANKS
DETAIL–4 (ALTERNATIVE 2)

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:30	REE	NT–E10
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/30	



ELEVATION



SECTION A–A

DETAIL – 4

NOTES:

1– FOR SIZE OF TANK, ORIENTATION, NUMBER AND LOCATION OF BRACKETS SB2 AND SB3 REFER TO PARTICULAR PROJECT DRAWINGS.

2– ALL CONDUITS TO BE RIGID METAL 19ø WITH 2–#12 WIRES, UNLESS OTHERWISE SPECIFIED ON PARTICULAR PROJECT DRAWINGS.

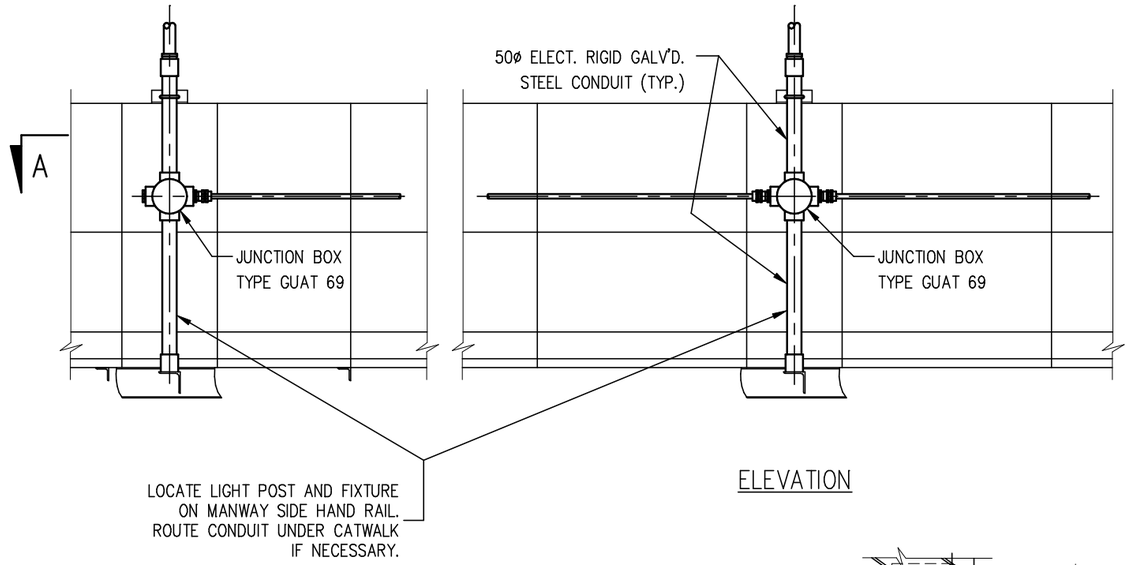
3– FOR DETAILS OF SUPPORTS TYPE I AND TYPE II REFER TO DWG. NT–S48.

4– FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.

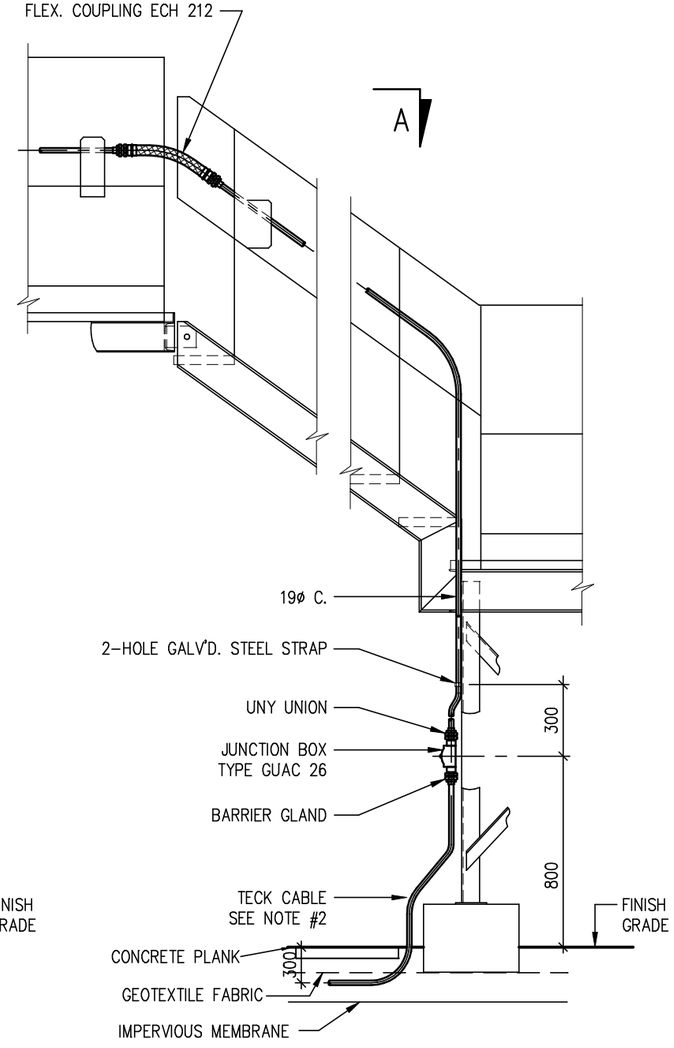
Northwest Territories Public Works & Services

Drawing Title
TYPICAL LIGHTING AND CONDUIT ARRANGEMENT
AT ROOF OF VERTICAL TANKS
DETAIL–4 (ALTERNATIVE 3)

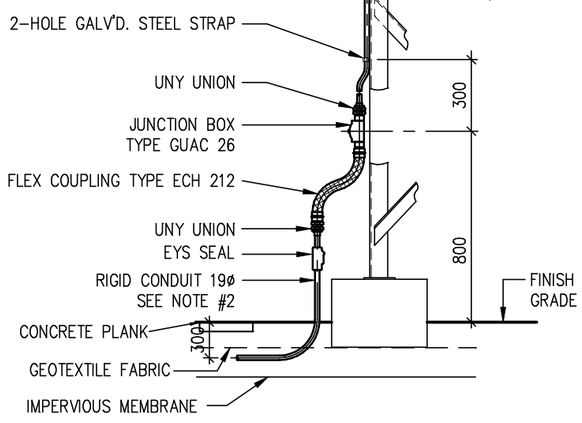
Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:30	REE	NT–E11
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/30	



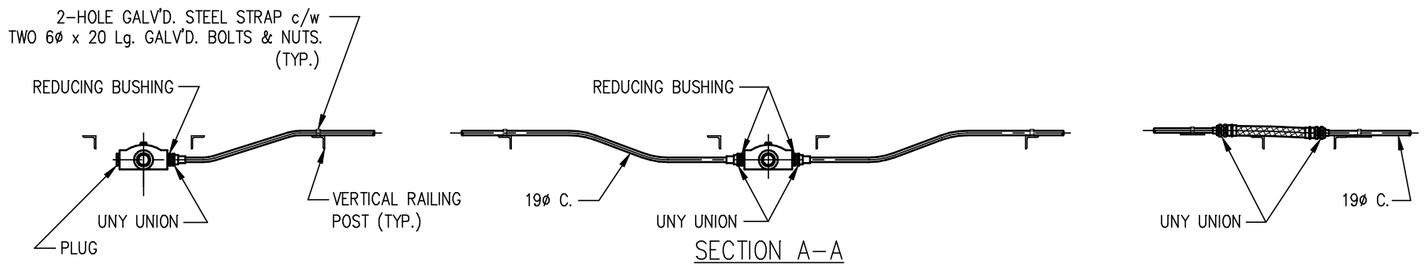
ELEVATION



WITH TECK CABLE



WITH RIGID CONDUIT



SECTION A-A

NOTES:

1- ALL CONDUITS TO BE RIGID METAL GALV'D. WITH 2 #12 WIRES, UNLESS OTHERWISE SPECIFIED ON PARTICULAR PROJECT DRAWINGS.

2- CONTRACTOR TO REFER TO PARTICULAR PROJECT DRAWING FOR INDICATION OF CONDUIT OR TECK CABLE INSTALLATION.

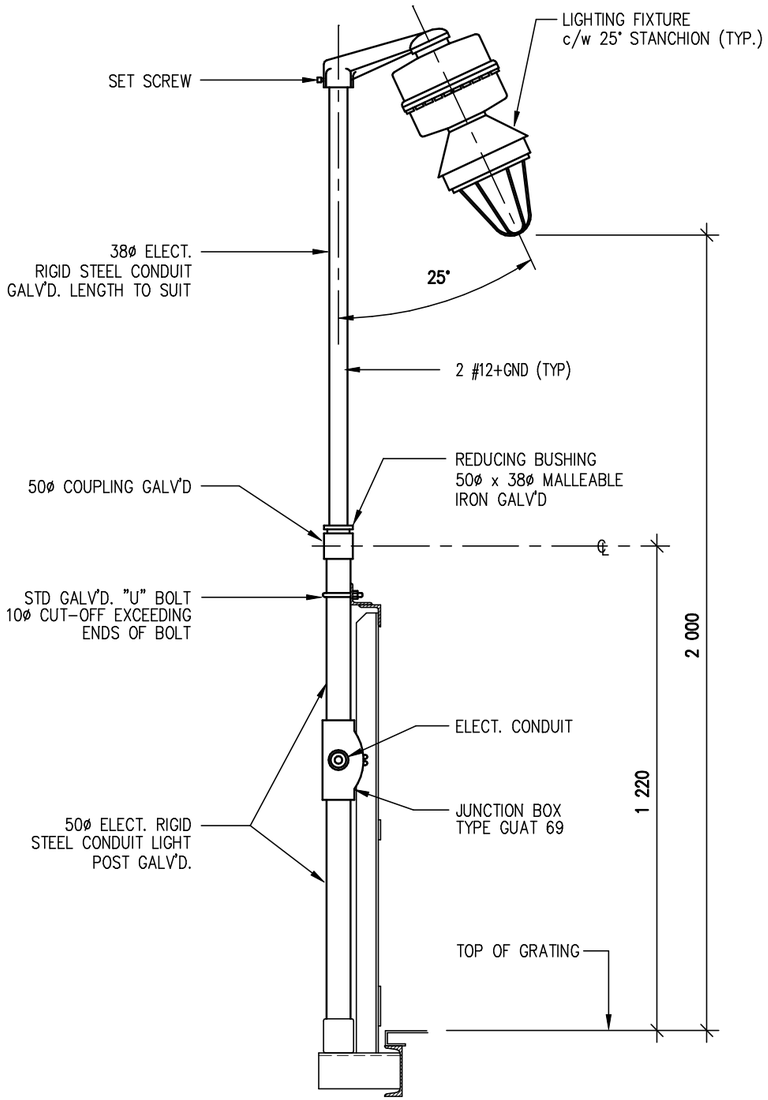
3- FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title

LIGHTING AT HORIZONTAL TANKS
AT HANDRAIL OF CATWALK & STAIRWAY
PLAN AND DETAILS

Design	Ver.	Scale
BC	LR	1:25
Drawn	Appr.	Date
KJ		95/02/28
Revised By	Drawing No.	
REE	NT-E12	
Revised On		
04/09/30		



NOTES:

1- FOR NUMBER AND LOCATION OF LIGHT POSTS SEE PARTICULAR PROJECT DRAWINGS.

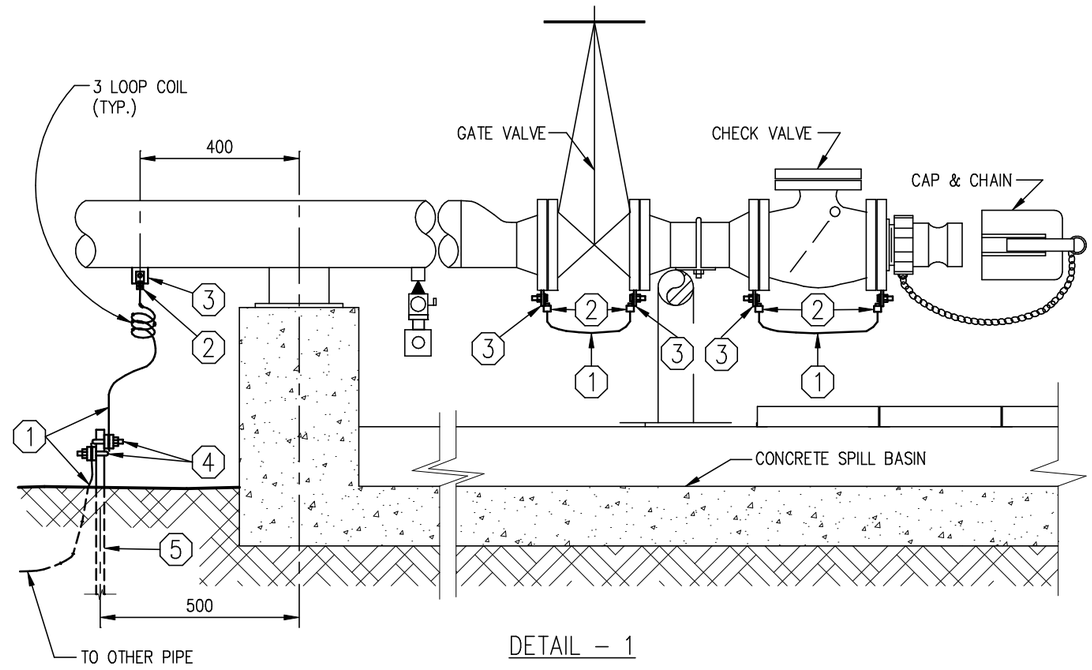
2- FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

3- LOCATE LIGHT POST AND FIXTURE BETWEEN MANWAYS ON THE MANWAY SIDE HANDRAIL.

Northwest Territories Public Works & Services

Drawing Title
LIGHTING AT HORIZONTAL TANKS
LIGHT POST & FIXTURE AT CATWALK DETAIL

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT-E13
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



DETAIL - 1

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49
4	BURNDY GROUND CONNECTOR TYPE GAR
5	GROUND ROD 19ø x 3 050 Lg. BLACKBURN #7510 COPPER-CLAD STEEL

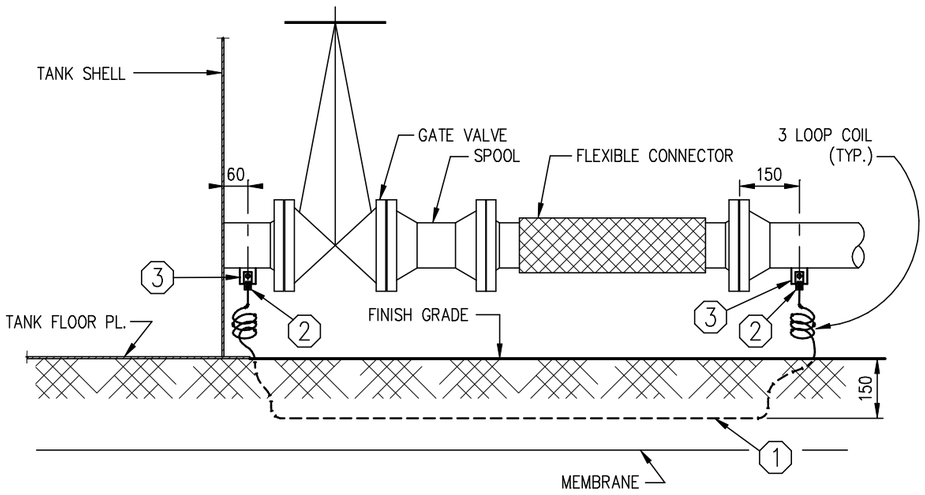
NOTE:

1- FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
AT SPILL BASIN AT SEA HOSE CONNECTION POINTS

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT-E14
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



DETAIL – 2

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49

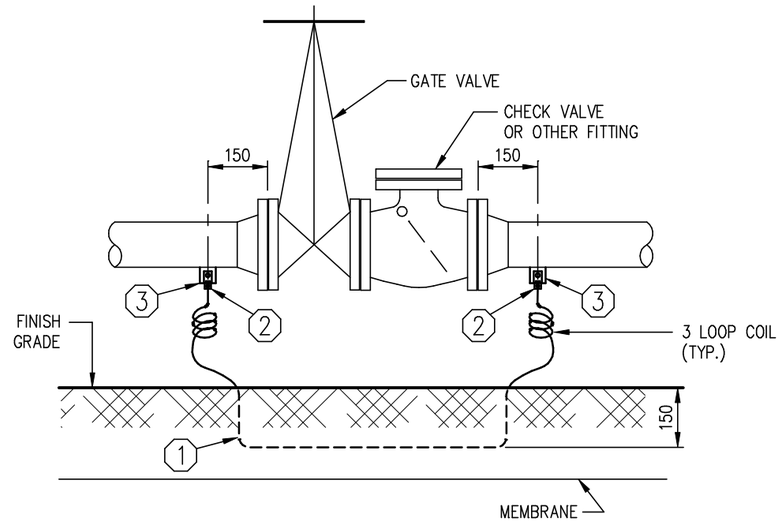
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
ACROSS TANK VALVES, SPOOL PIECES & FLEXIBLE CONNECTORS

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E15
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/30	



DETAIL – 3

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49

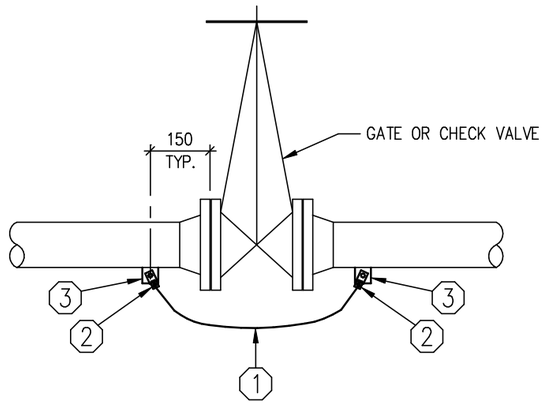
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
ACROSS GATE AND CHECK VALVES

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E16
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/30	



DETAIL – 4

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49

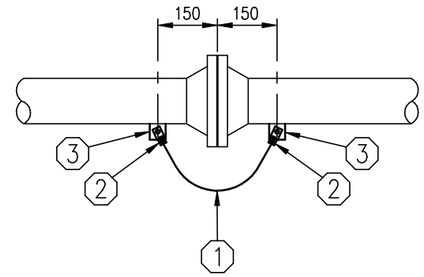
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
ACROSS GATE OR CHECK VALVES

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E17
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/30	



DETAIL – 5

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49

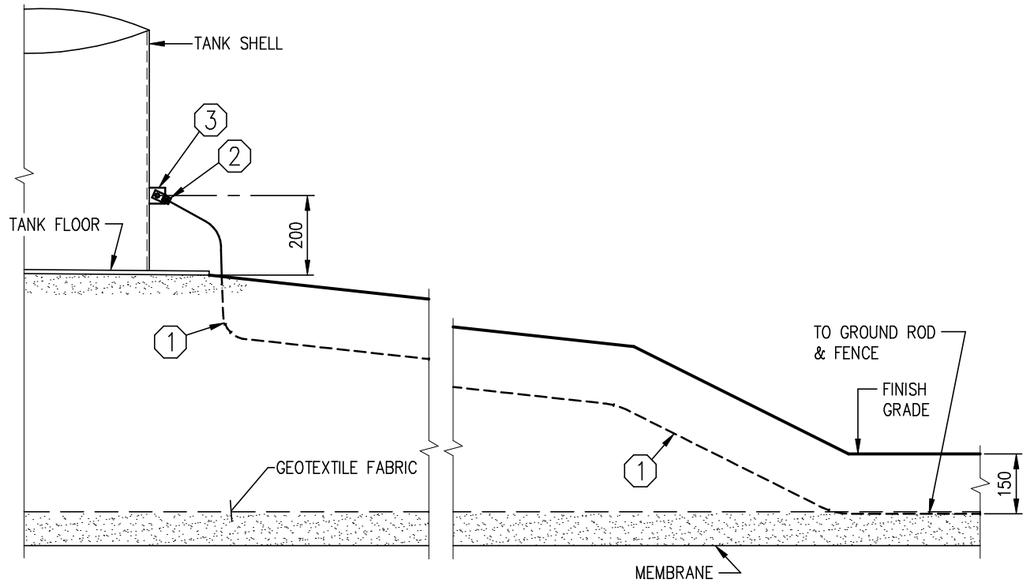
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
AT FLANGED CONNECTIONS

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E18
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/30	



DETAIL – 6

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49

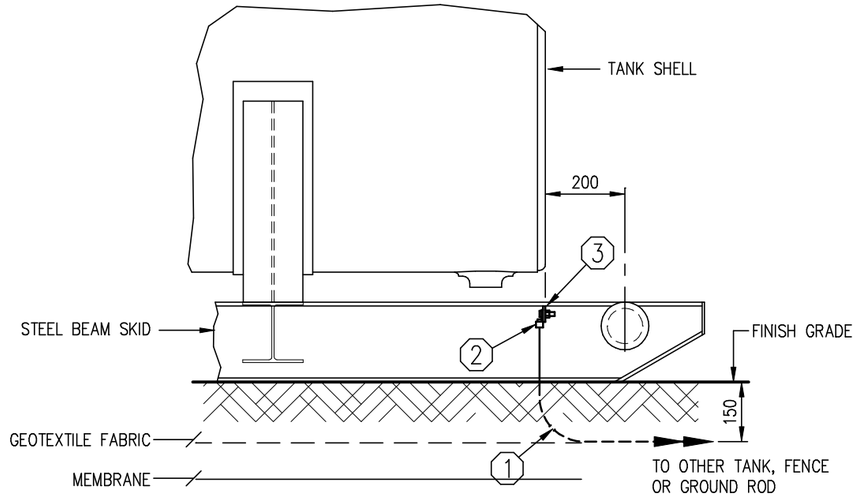
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
AT VERTICAL TANKS

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E19
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



DETAIL – 7

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49

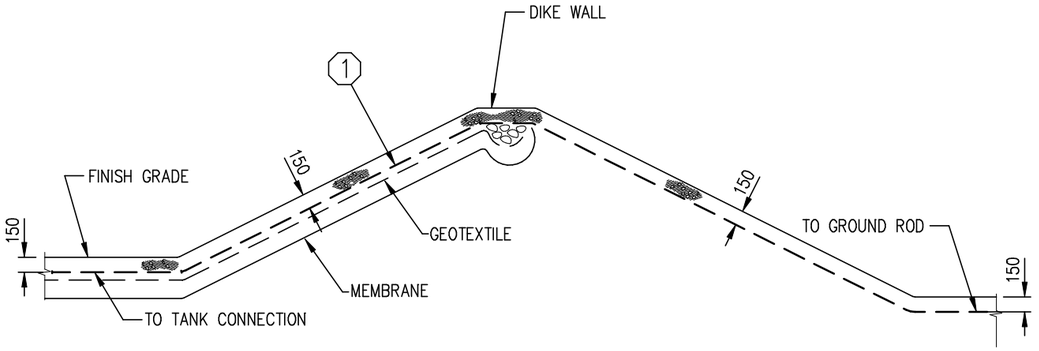
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUND
WIRE CONNECTION AT HORIZONTAL TANKS

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E20
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



DETAIL – 8

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE

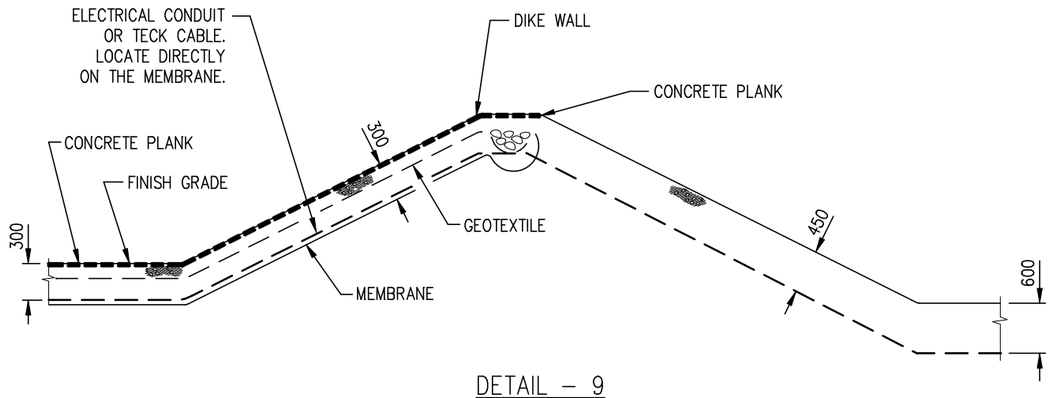
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUND
WIRE INSTALLATION OVER DIKE WALL

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	N.T.S.	REE	NT–E21
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



DETAIL – 9

NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

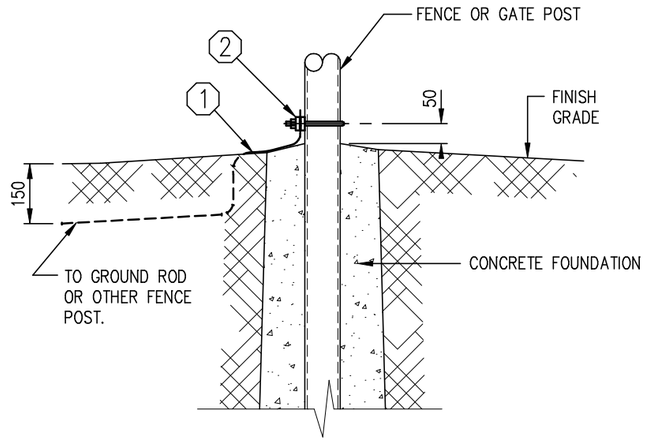
2– LOCATE THE TECK CABLE DIRECTLY ON THE MEMBRANE. CUT THROUGH THE GEOTEXTILE AND COVER THE SEAM WITH 300mm WIDE STRIP OF GEOTEXTILE AND YELLOW MARKING TAPE.

3– COVER WITH A MINIMUM 300mm DEPTH OF GRAVEL WITH A CONCRETE SLAB FLUSH WITH GROUND SURFACE

Northwest Territories Public Works & Services

Drawing Title
ELECTRICAL CONDUIT OR TECK CABLE
INSTALLATION OVER DIKE WALL

Design	Ver.	Scale	Revised By	Drawing No.
BC	LR	N.T.S.	REE	NT–E22
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



DETAIL – 10

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	THOMAS & BETTS HEAVY DUTY GROUND CLAMP #3903 FOR FENCE POST, #3904 FOR GATE POST

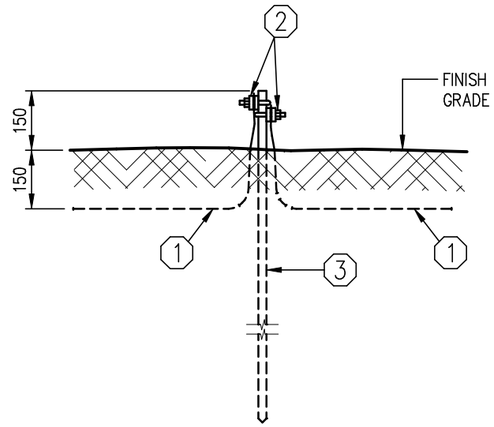
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUND WIRE CONNECTION
AT FENCE OR GATE POSTS

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E23
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



DETAIL – 11

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY GROUND CONNECTOR TYPE GAR
3	GROUND ROD 19ø x 3 050 Lg. BLACKBURN #7510 COPPER–CLAD STEEL

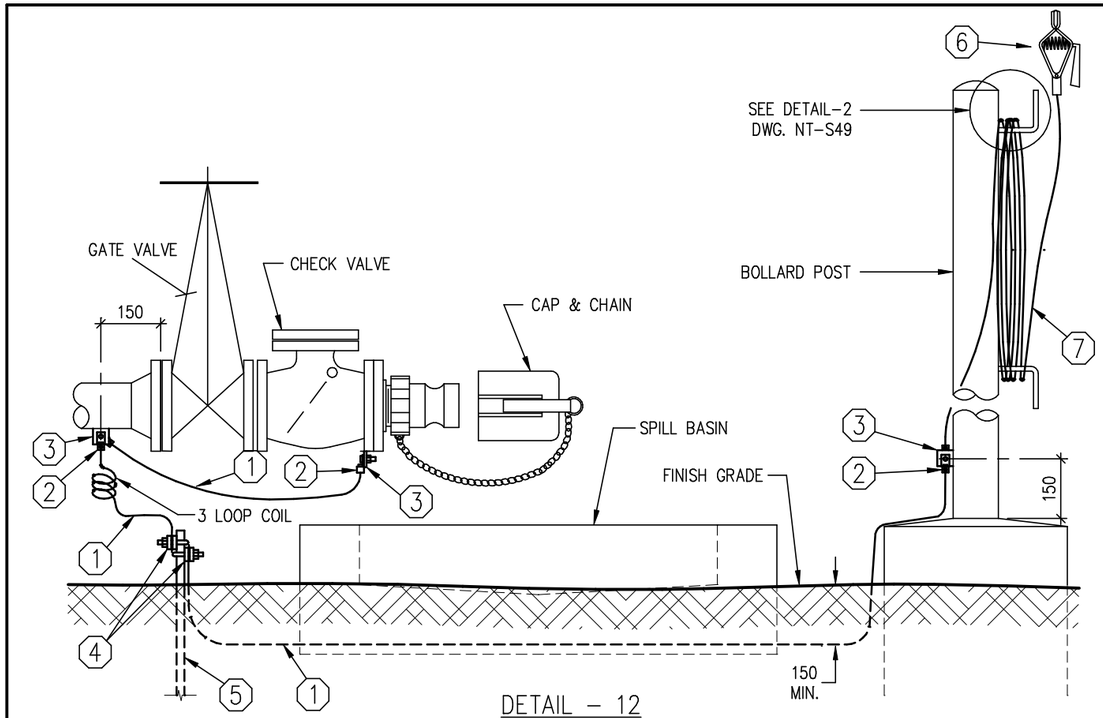
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
AT GROUND ROD

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E24
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/30	



DETAIL – 12

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49
4	BURNDY GROUND CONNECTOR TYPE GAR
5	GROUND ROD 19ø x 3 050 Lg. BLACKBURN #7510 COPPER-CLAD STEEL
6	GAMMON GTP-1102-VUD-100, GROUNDING CLAMP.
7	GROUND CABLE, #4 STRANDED, SUPER VU-TRON II, JACKETED WELDING CABLE-EXTRA FLEXIBLE 600 V. (-50° C. TO +90° C.) 3 000 mm. Lg.

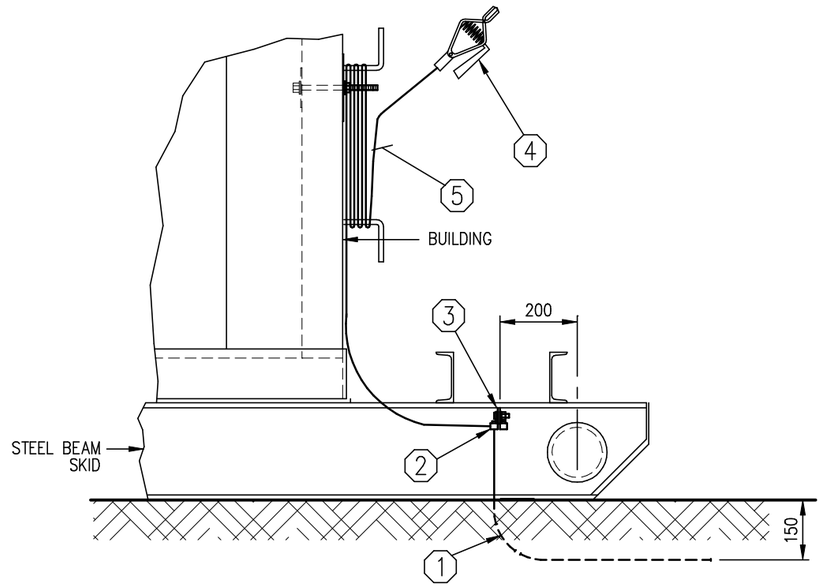
NOTE:

1- FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
AT TRUCK UNLOADING POINT

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT-E25
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/30	



DETAIL – 13

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49
4	GAMMON GTP-1102-VUD-100, GROUNDING CLAMP
5	GROUND CABLE, #4 STRANDED, SUPER VU-TRON II, JACKETED WELDING CABLE-EXTRA FLEXIBLE 600 V. (-50° C. TO +90° C.) 4 000 mm. Lg.

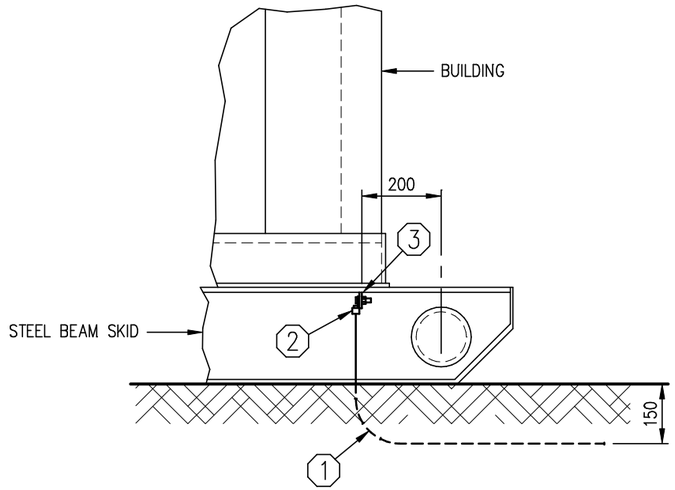
NOTE:

1- FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
AT DISPENSER BUILDING FOR TRUCK GROUNDING CABLE

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT-E26
Drawn	Appr.	Date	Revised On	
KJ		94/04/29	04/09/30	



DETAIL – 14

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49

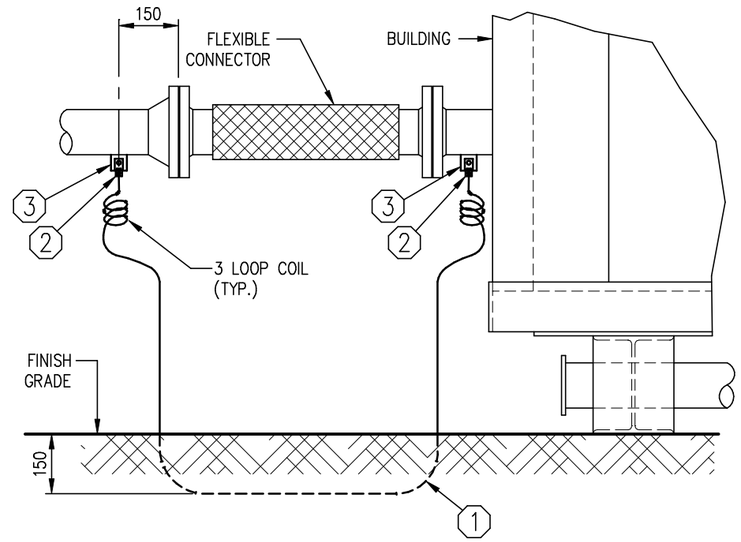
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
OF GROUND LUG AND WIRE AT DISPENSER BUILDING

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E27
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



DETAIL – 15

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49

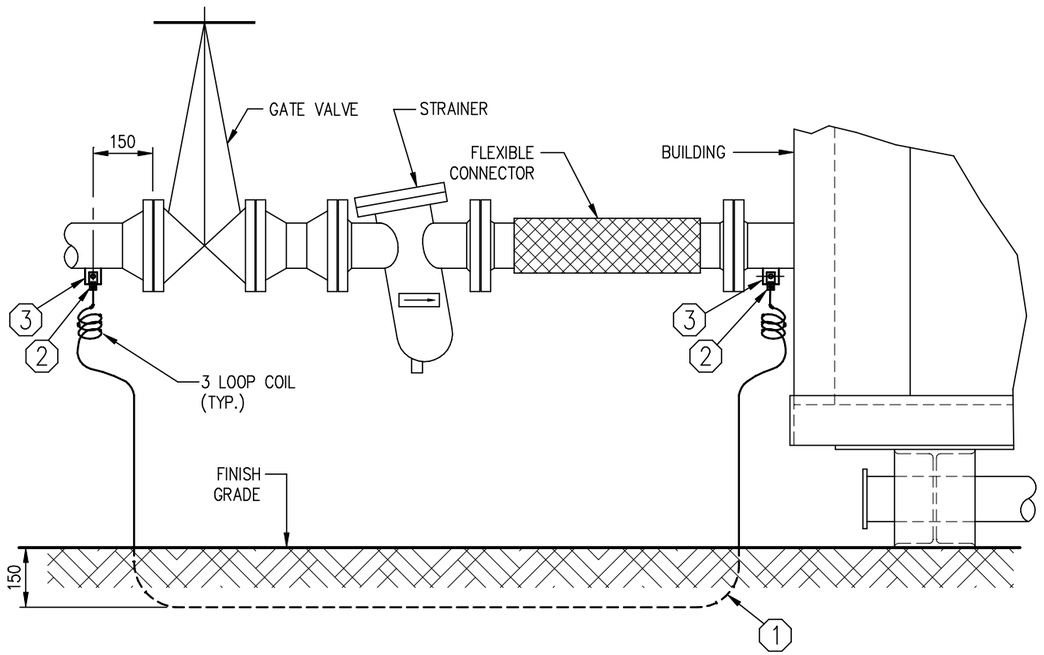
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS
ACROSS FLEXIBLE CONNECTOR AT DISPENSER BUILDING

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E28
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/06/30	



DETAIL – 16

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49

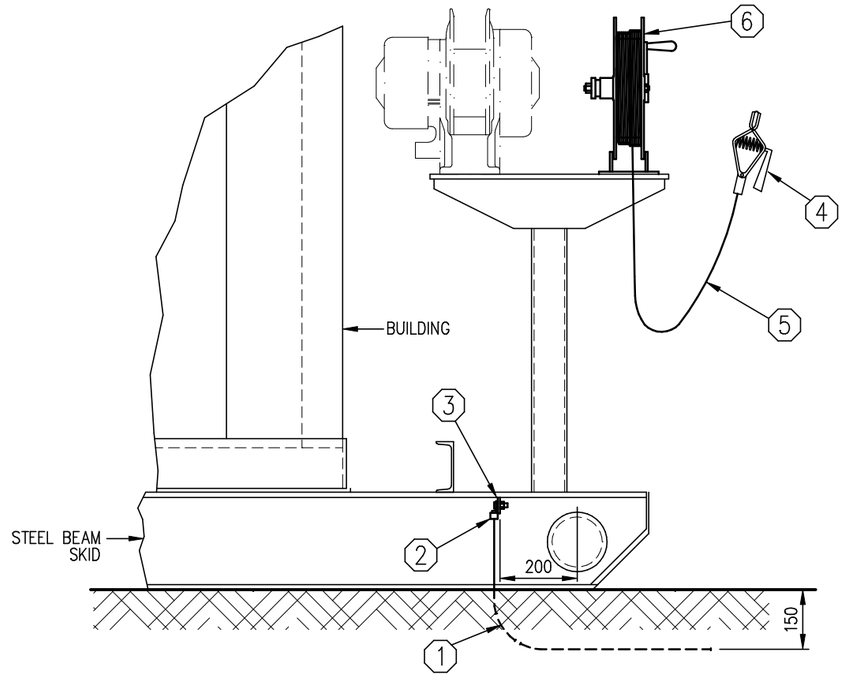
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING CONNECTIONS ACROSS FLEXIBLE CONNECTOR, STRAINER & VALVE BEHIND DISPENSER BUILDING

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E29
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



DETAIL – 17

LIST OF MATERIAL	
ITEM	DESCRIPTION
1	#4 STRANDED BARE COPPER GROUND WIRE
2	BURNDY CONNECTOR SCRULUGS TYPE KPA c/w BRASS BOLT & NUTS
3	GROUND LUG PLATE 40 x 40 x 6 TH'K. SEE DETAIL-1 DWG. NT-S49
4	GAMMON GTP-1102-VUD-100
5	KINK RESISTANT STATIC GROUNDING CABLE, STANLESS STEEL STRANDED (7 x7) 2.38 mm DIA. 30480 mm Lg. UNCOATED.
6	STATIC ELECTRICITY HAND REWIND GROUNDING REEL NORDIC MODEL No. 340405 OR GAMMON MODEL ML-3416-20

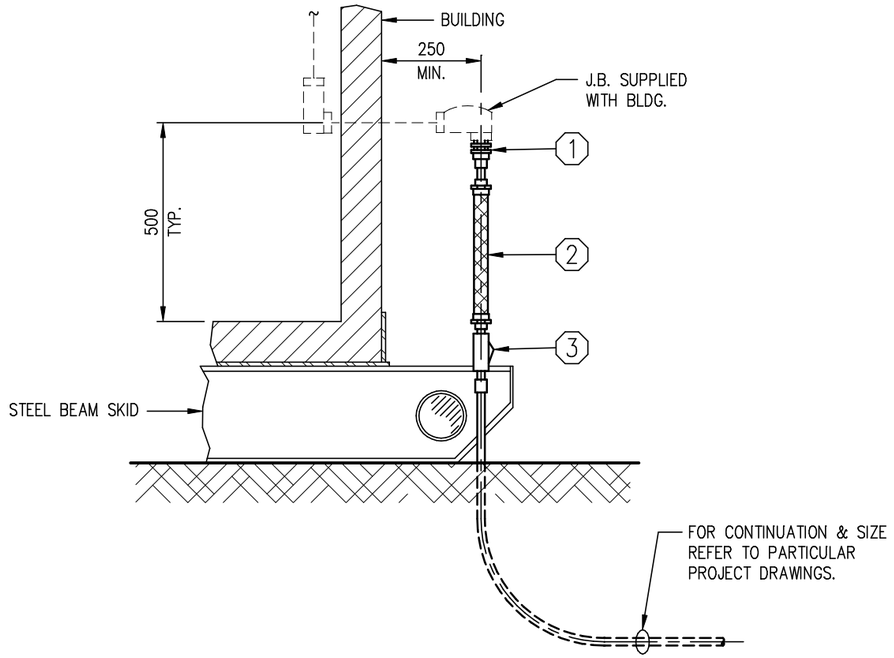
NOTE:

1– FOR MATERIAL SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
STATIC ELECTRICITY GROUNDING REEL AT JET A-1 DISPENSER BUILDING

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT–E30
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



LIST OF MATERIAL	
ITEM	DESCRIPTION
1	UNION TYPE CROUSE-HINDS "UNY" SERIES, SIZE TO SUIT
2	FLEXIBLE COUPLING 305 Lg. TYPE CROUSE-HINDS "ECH" SERIES, SIZE TO SUIT
3	SEAL TYPE CROUSE-HINDS "EYS" SERIES, SIZE TO SUIT

NOTE:

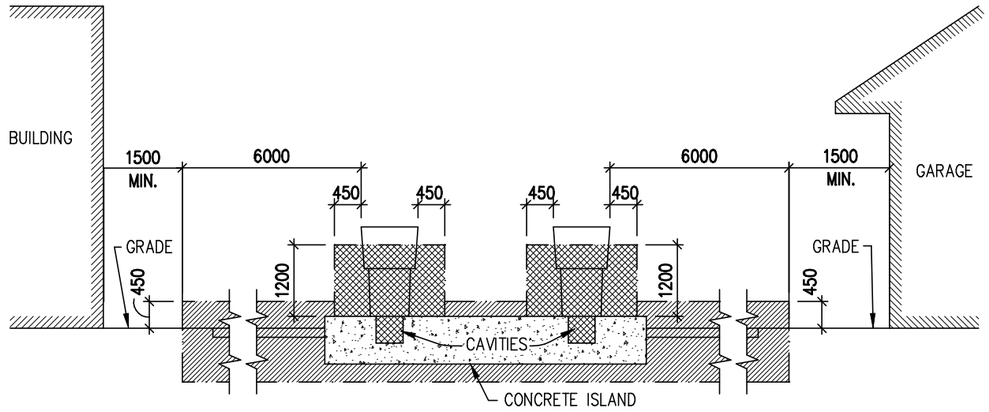
1- APPLICABLE TO OPERATOR'S SHELTER & DISPENSER BUILDINGS.

2- FOR OTHER NOTES SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
ELECTRICAL CONDUIT ARRANGEMENT AT ENTRY OF BUILDING

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:15	REE	NT-E31
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



GASOLINE DISPENSING STATION

(SECTION 20-004 (1), (2), (4) & (6))

HAZARDOUS AREA CLASSIFICATION:

CLASS I, DIVISION 1 (ZONE 1)

CLASS I, DIVISION 2 (ZONE 2)

NOTE:

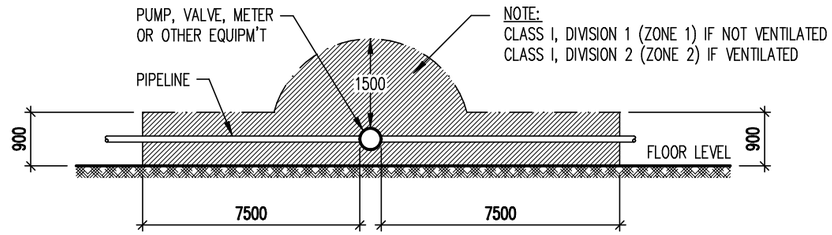
1- ALL DIMENSIONS ARE IN MILLIMETRES.

2- FOR OTHER NOTES SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

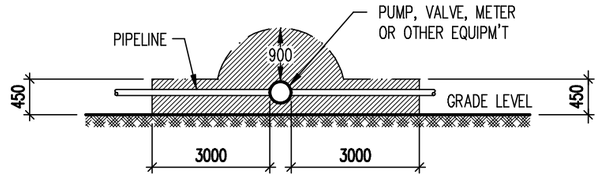
Northwest Territories Public Works & Services

Drawing Title
HAZARDOUS AREA CLASSIFICATIONS FOR ELECTRICAL INSTALLATIONS

Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:100	REE	NT-E32
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



INDOOR AREA

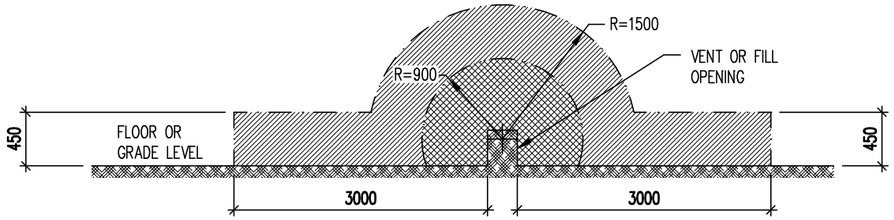


OUTDOOR AREA

BULK STORAGE

FLAMMABLE LIQUIDS AT BULK FUEL STORAGE FACILITIES

(RULE: 20–302 (1) OF CANADIAN ELECTRICAL CODE)



TRANSFER OF FLAMMABLE LIQUIDS

(OUTDOORS OR INDOORS WITH MECHANICAL VENTILATION)

(RULE: 20–302 (2) (a) OF CANADIAN ELECTRICAL CODE)

HAZARDOUS AREA CLASSIFICATION:

CLASS I, DIVISION 1 (ZONE 1)

CLASS I, DIVISION 2 (ZONE 2)

NOTE:

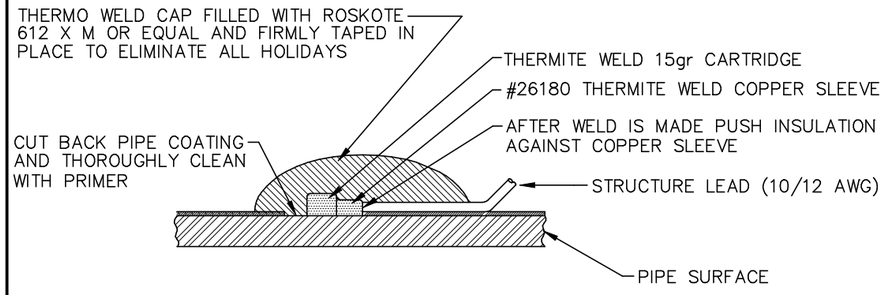
1– ALL DIMENSIONS ARE IN MILLIMETRES.

2– FOR OTHER NOTES SEE SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title
HAZARDOUS AREA CLASSIFICATIONS
FOR ELECTRICAL INSTALLATIONS

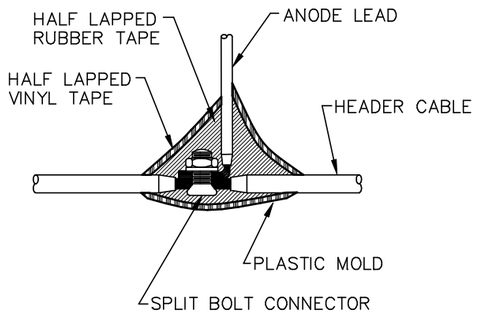
Design	Ver.	Scale	Revised By	Drawing No.
RVM	EDZ	1:100	REE	NT–E33
Drawn	Appr.	Date	Revised On	
KJ		95/02/28	04/09/30	



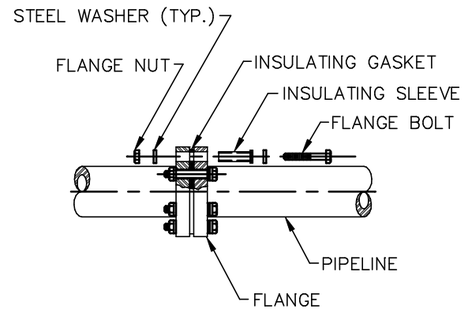
NOTES:

1. METAL SURFACE TO BE DRY AND FREE OF ALL FOREIGN MATERIAL.
2. CONNECTION AND EXPOSED METAL TO HAVE MIN. 12.7 mm INSULATION.

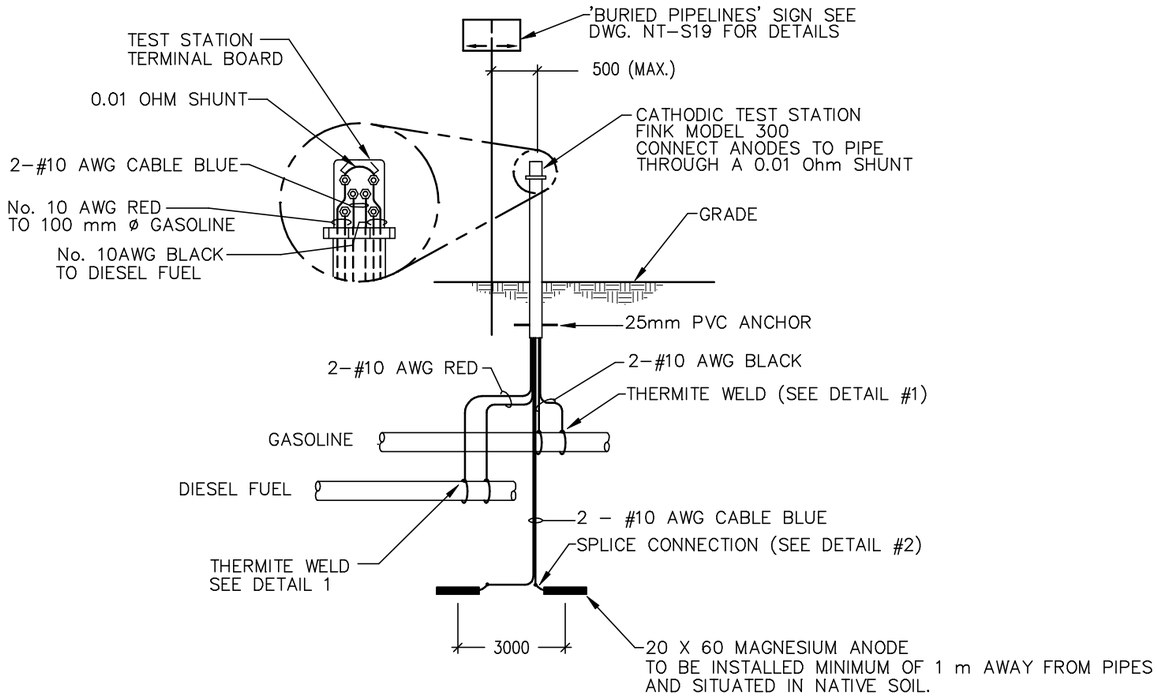
DETAIL 1: TYPICAL THERMITE WELD DETAIL



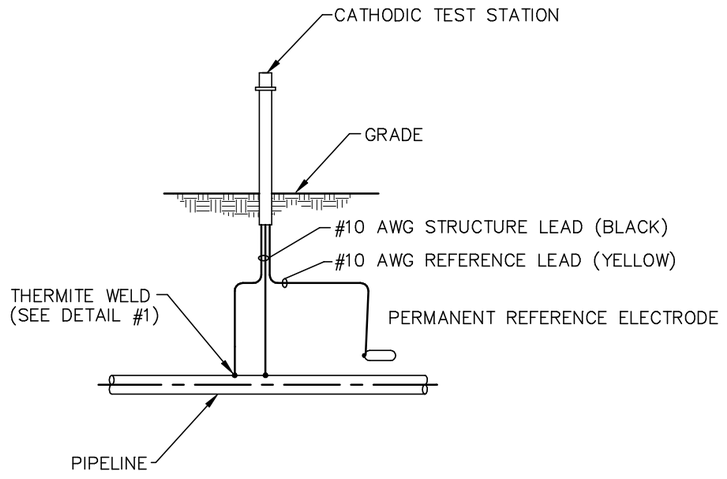
DETAIL 2: TYPICAL TWO TAPE CABLE SPLICE DETAIL



DETAIL 3: TYPICAL INSULATING FLANGE ASSEMBLY DETAIL



TYPICAL TEST/PROTECTION STATION AND ANODE INSTALLATION DETAIL



TYPICAL REFERENCE ELECTRODE INSTALLATION DETAIL

NOTES:

1– ALL CONDUITS TO BE RIGID METAL GALV'D. WITH 2 #12 WIRES, UNLESS OTHERWISE SPECIFIED ON PARTICULAR PROJECT DRAWINGS.

2– CONTRACTOR TO REFER TO PARTICULAR PROJECT DRAWING FOR INDICATION OF CONDUIT OR TECK CABLE INSTALLATION.

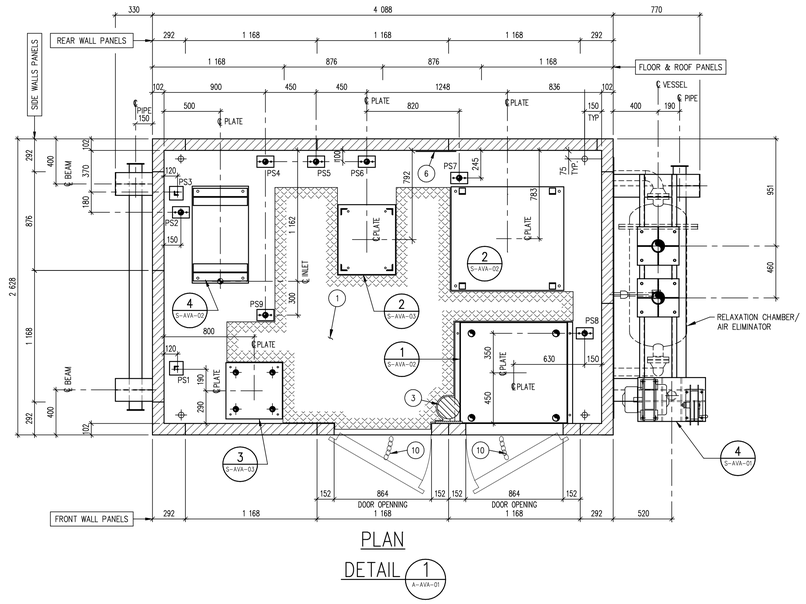
3– FOR MATERIALS REFER TO SPECIFICATIONS, DIVISION 16, SECTION 16010.

Northwest Territories Public Works & Services

Drawing Title

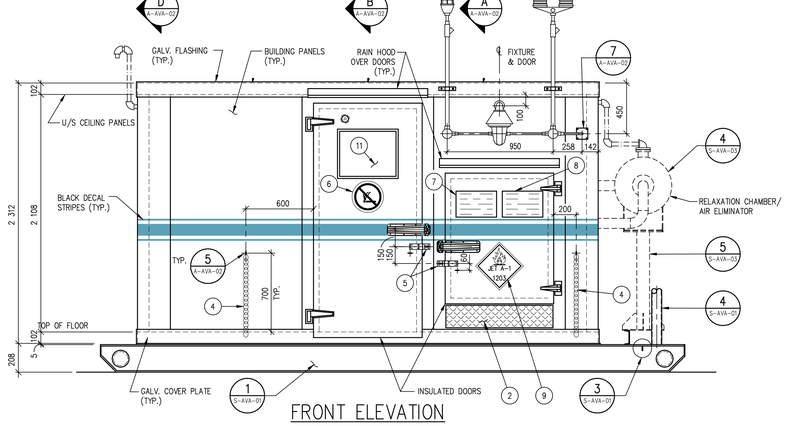
CATHODIC PROTECTION DETAILS

Design	Ver.	Scale
BFG	BFG	N.T.S.
Drawn	Appr.	Date
KJ		99/03/20
Revised By	Drawing No.	
REE	NT–E34	
Revised On		
04/10/05		

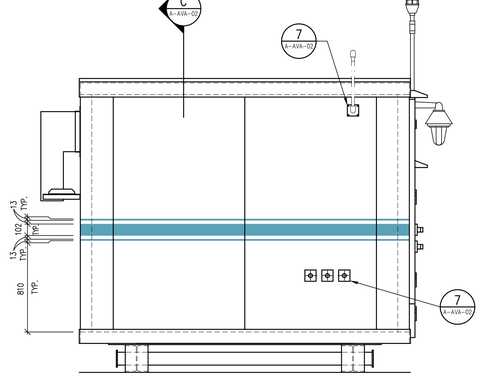


PLAN

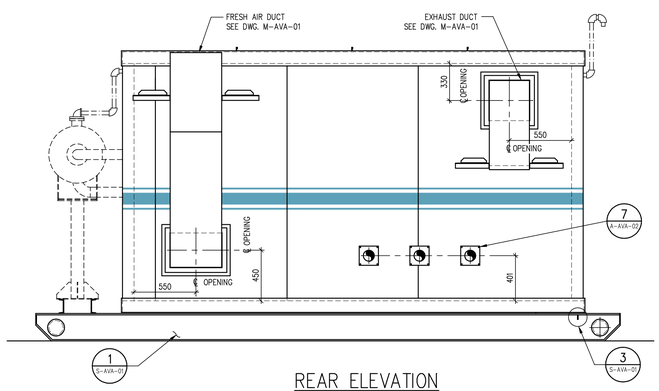
DETAIL 1 (A-AVA-01)



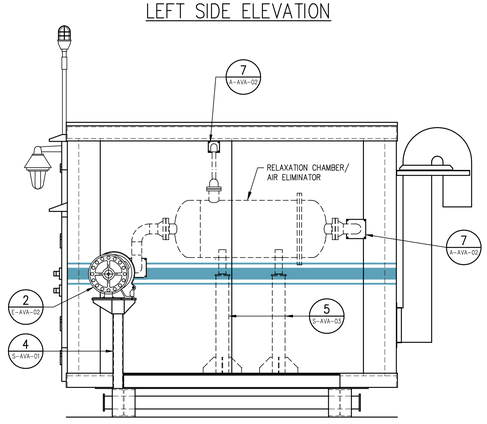
FRONT ELEVATION



LEFT SIDE ELEVATION



REAR ELEVATION



RIGHT SIDE ELEVATION

LEGEND:

1. NON-SKID ALUMINUM "SAFETY TREAD" FLOORING SHEETS, SEE SPEC'S (KEEP NUMBER OF PLATES TO A MINIMUM)
2. ALUMINUM CHECKERED PLATE, ALCOA CO. STYLE #C-102 OR EQUIV., 250W x 950LG. x 3 TH'K, POP RIVETTED TO WALL PANELS AT 150 c/c MAX. SPACING AT PERIPHERY
3. FIRE EXTINGUISHER c/w BRACKET – SEE SPEC'S
4. HEAVY DUTY CHAIN c/w HOOKS, TYPICAL AT DOORS, SEE SPEC'S
5. HASP AND CATCH – (2 REQ'D). SEE SPEC'S
6. "NO SMOKING" SIGN, SEE SPEC'S
7. "NO SMOKING/STOP YOUR MOTOR" SIGN (IN ENGLISH), SEE SPEC'S
8. "NO SMOKING/STOP YOUR MOTOR" SIGN (IN LOCAL TRANSLATION), SEE SPEC'S
9. UN NUMBER, 1203, JET A-1 SIGN, SEE SPEC'S
10. HEAVY DUTY SPRING BUMPER CHAIN ON ALL DOORS, SEE SPEC'S. (2 REQ'D)
11. DOUBLE INSULATED GLASS UNIT THERMOCLEAR POLYCARBONATE SHEET & ALUM. FRAME SEE SPEC'S.

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. FOR DETAILS OF FRESH AIR INTAKE & EXHAUST DUCTS SEE DWG. M-AVA-01
3. FOR OTHER NOTES AND DETAILS REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13230.
4. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN EDZ
DRAWN KJ
APPROVED

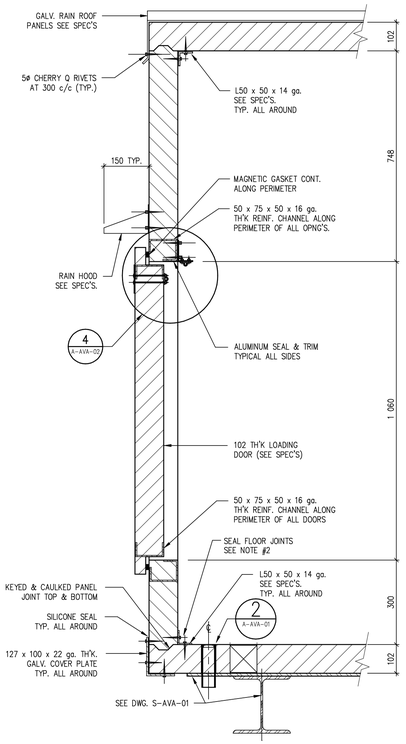
PROJECT TITLE

DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL FUEL

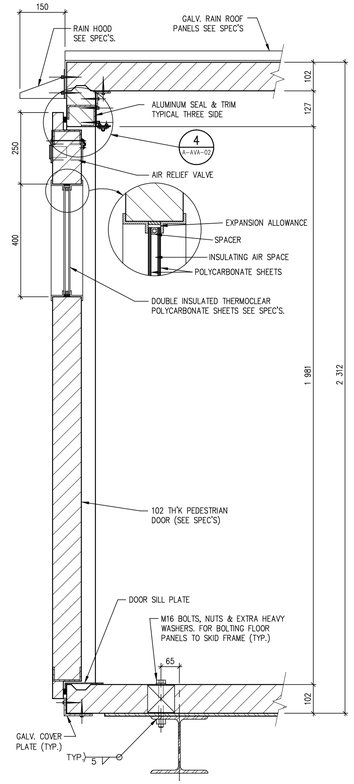
DRAWING TITLE

FLOOR PLAN & ELEVATIONS

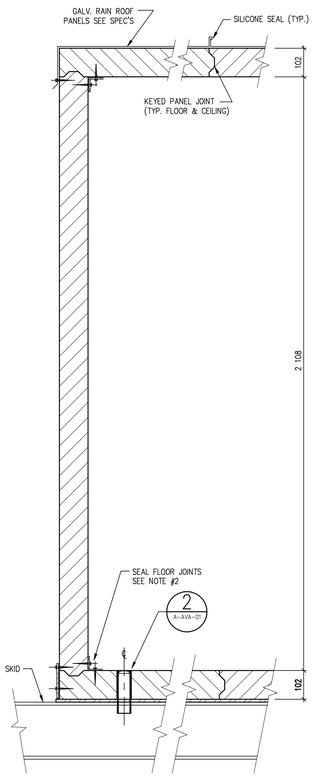
SCALE: 1 : 25
DATE 94/02/21
DRAWING No. A-AVA-01
REV. 1



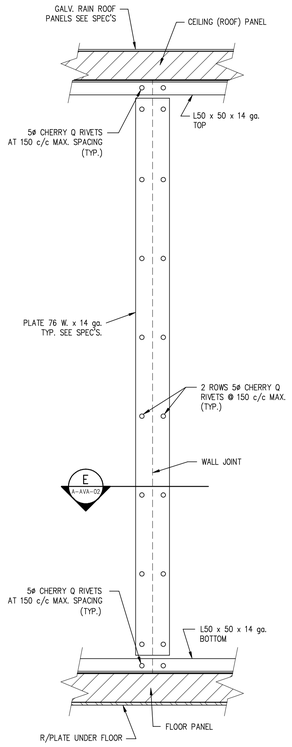
SECTION A
1 : 10 A-AVA-01



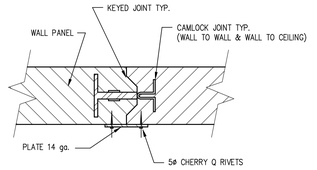
SECTION B
1 : 10 A-AVA-01



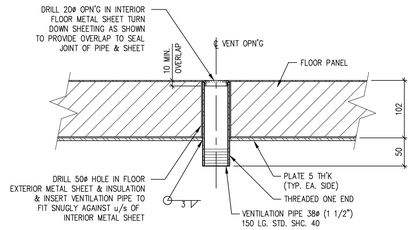
SECTION C
1 : 10 A-AVA-01



DETAIL 1
1 : 10



SECTION E
1 : 5 A-AVA-02

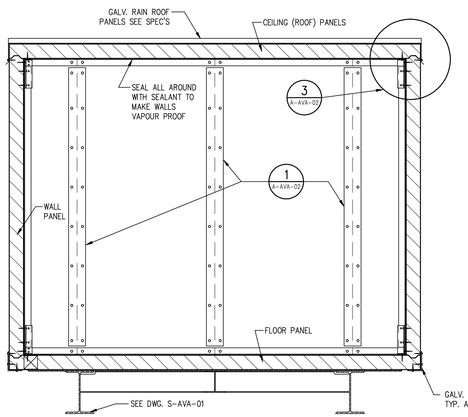


DETAIL 2
1 : 5 A-AVA-01

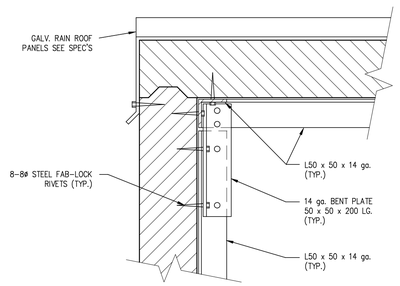
VENTILATION DRAIN THROUGH FLOOR

NOTES

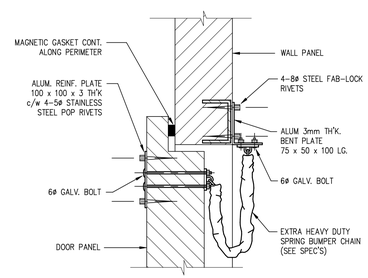
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. SEAL ALL FLOOR JOINTS WITH OIL RESISTANT CAULKING.
3. FOR OTHER NOTES AND DETAILS REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13230.
4. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.



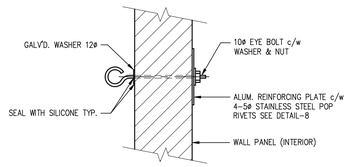
SECTION D
1 : 20 A-AVA-01



DETAIL 3
1 : 5 A-AVA-02

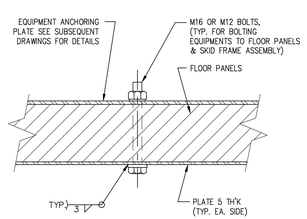


DETAIL 4
1 : 5 A-AVA-02



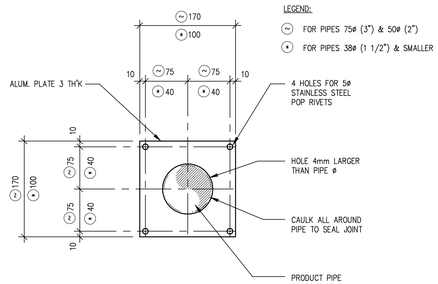
DETAIL 5
1 : 5 A-AVA-01

EYE BOLT TRHOUGH WALL & DOOR



DETAIL 6
1 : 5 A-AVA-02

TYPICAL BOLTING OF EQUIPMENT



DETAIL 7
1 : 5 A-AVA-01

REINFORCING PLATES AT WALL OPENINGS

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN EDZ
DRAWN CAD / SL
APPROVED

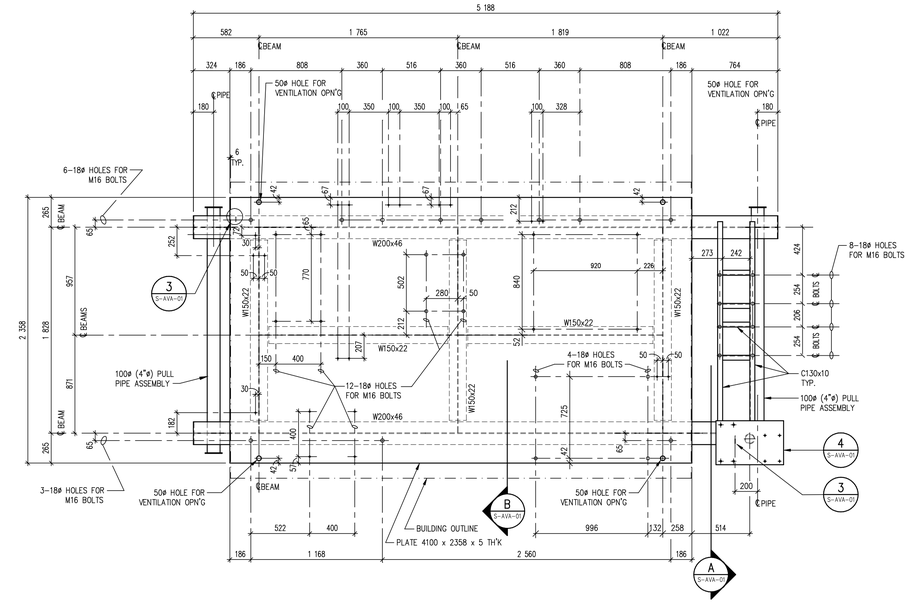
PROJECT TITLE

DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL FUEL

DRAWING TITLE

SECTIONS & DETAILS

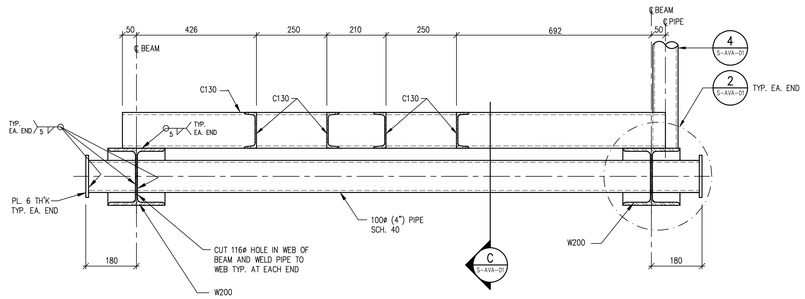
SCALE: 1 : 10 OR AS SHOWN
DATE 94/02/21
DRAWING No. A-AVA-02
REV. 1



DETAIL 1 — SKID ASSEMBLY

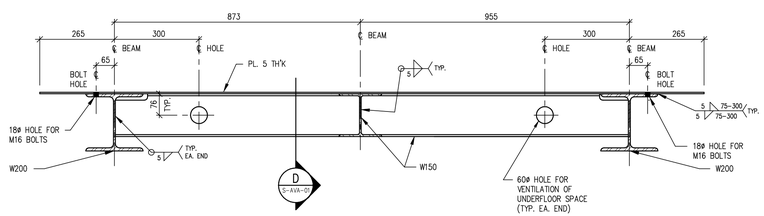
1 : 25 (A-OPA-01)

(N.B.: HOLES 14ø UNLESS NOTED OTHERWISE)



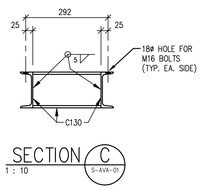
SECTION A

1 : 10 (S-AVA-01)



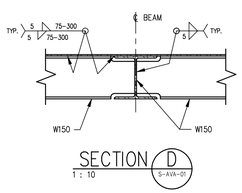
SECTION B

1 : 10 (S-AVA-01)



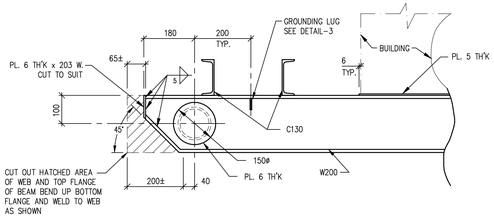
SECTION C

1 : 10 (S-AVA-01)



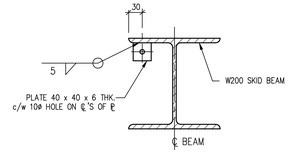
SECTION D

1 : 10 (S-AVA-01)



DETAIL 2

1 : 10 (S-AVA-01)



DETAIL 3 — GROUNDING LUG (2 REQ'D.)

1 : 5 (S-AVA-01)

SECTION E

(S-AVA-01)

SECTION F

(S-AVA-01)

DETAIL 4 — SUPPORT FOR GROUNDING AND DEAD REELS.

1 : 10 (S-AVA-01)

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. WELDING AT PLATES FLUSH TO U/S OF FLOOR PANELS SHALL BE GROUND SMOOTH TO PERMIT PROPER BEARING OF PANELS TO PLATES.
3. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
4. ALL BOLTING SHALL BE WITH MACHINE BOLTS TO ASTM A325 GALVANIZED HEX. HEADS AND NUTS. ALL SCREWS SHALL BE METAL SCREWS GALVANIZED, SIZES AS SHOWN LENGTHS AS REQUIRED.
5. NUMBER AND SPACINGS OF PANEL MOUNTING HOLES COULD VARY TO SUIT SIZE OF FLOOR PANELS. CONTRACTOR TO VERIFY WITH SHOP DRAWINGS OF PANEL MANUFACTURER FOR FINAL PANEL SIZES PRIOR TO FABRICATION OF SKID FRAME.
7. FOR OTHER NOTES AND DETAILS REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS.
8. 'NO SMOKING' SIGNS AS REQUIRED – SEE SPECIFICATIONS, DIVISION 13, SECTION 13230.
9. 'CLOSE TANK VALVE' SIGNS AS REQUIRED – SEE SPEC'S.
9. 'AIRCRAFT GROUNDING' SIGNS AS REQUIRED – SEE SPEC'S.
10. POST PROCESS FLOW SHEETS AND OPERATING INSTRUCTIONS.
11. SEAL ALL FLOOR JOINTS WITH OIL RESISTANT CAULKING.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN EDZ
DRAWN KJ
APPROVED

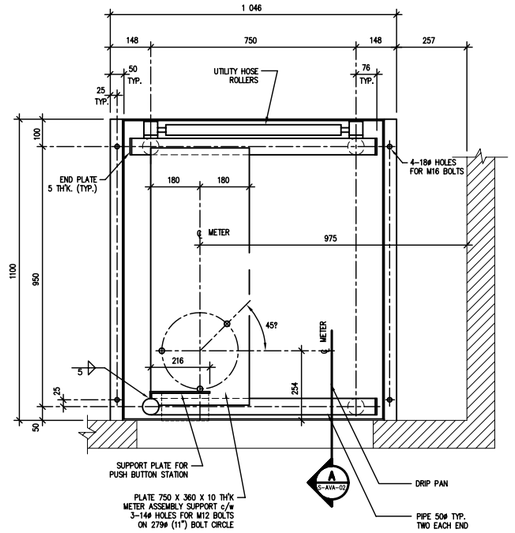
PROJECT TITLE

DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL FUEL

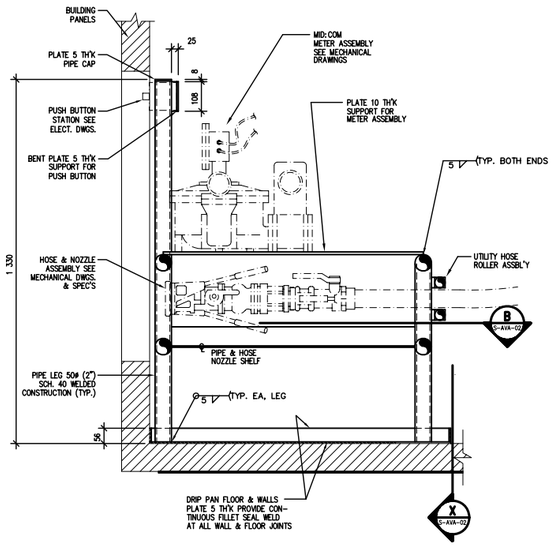
DRAWING TITLE

SKID ASSEMBLY PLAN, SECTIONS & DETAILS

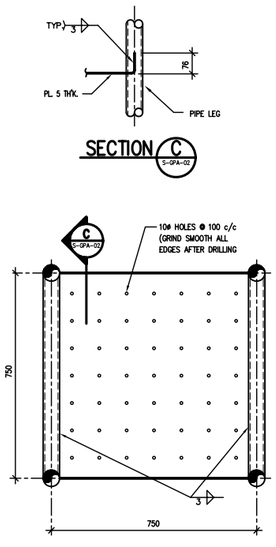
SCALE: 1 : 25 OR AS SHOWN
DATE 94/02/21
DRAWING No. S-AVA-01
REV. 1



DETAIL 1 S-GPA-02 DRIP PAN & METER SUPPORT FOR JET A-1

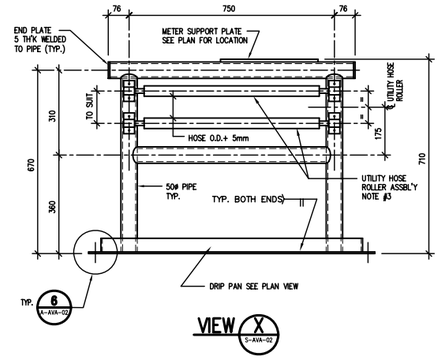


SECTION A S-AVA-02

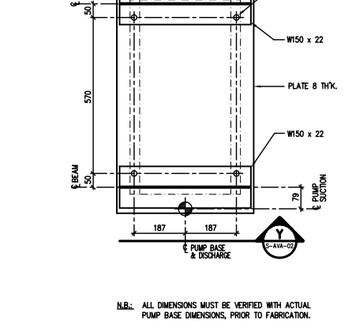


SECTION C S-GPA-02

SECTION B S-AVA-02

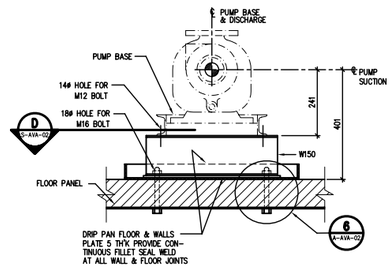


VIEW X S-AVA-02

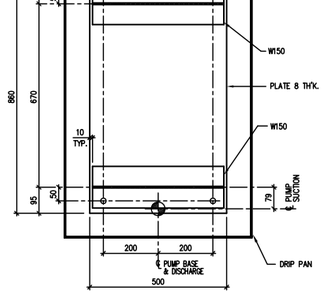


N.B.: ALL DIMENSIONS MUST BE VERIFIED WITH ACTUAL PUMP BASE DIMENSIONS, PRIOR TO FABRICATION.

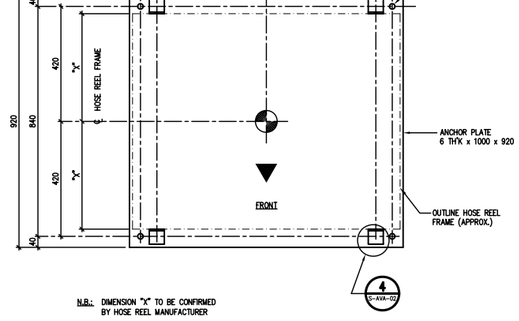
DETAIL 2 S-AVA-02 BASE FOR JET A-1 PUMP



VIEW Y S-AVA-02

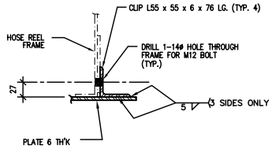


SECTION D S-AVA-02



N.B.: DIMENSION "X" TO BE CONFIRMED BY HOSE REEL MANUFACTURER

DETAIL 3 A-AVA-01 ANCHOR PLATE FOR HOSE REEL (FOR AIRPORT BUILDING ONLY)



DETAIL 4 S-AVA-02
1 : 5

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. FOR OTHER NOTES REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13230.
3. FOR DETAILS ON UTILITY ROLLERS AND END BRACKETS REFER TO SPECIFICATIONS ON HOSE REEL.
4. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
5. DELETE HOSE REEL AND UTILITY HOSE ROLLERS FOR TANK FARM JET A-1 / LSDL FUEL BUILDING.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

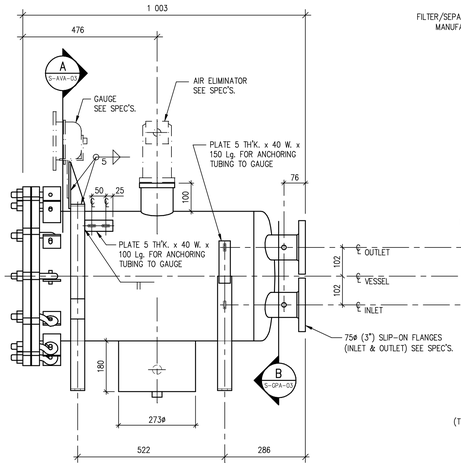
REVISIONS

DESIGN RVM
DRAWN CAD / SL
APPROVED

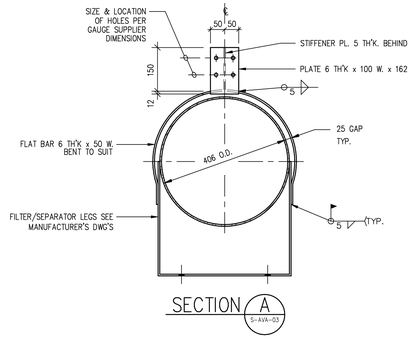
PROJECT TITLE
DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL FUEL

DRAWING TITLE
DRIP PAN & METER SUPPORT, ANCHOR PLATE FOR HOSE REEL & PUMP BASE SECTIONS & DETAILS

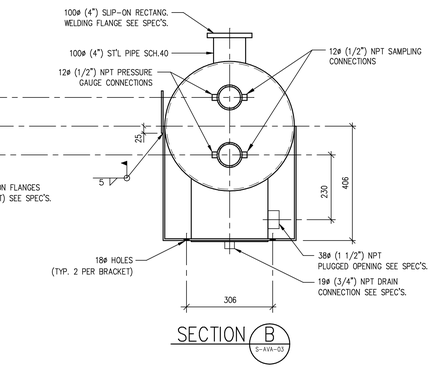
SCALE: 1 : 10 OR AS SHOWN
DATE 94/02/21
DRAWING No. S-AVA-02
REV. 1



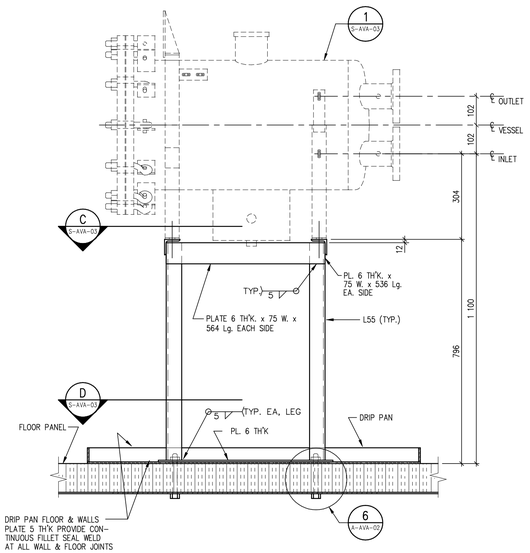
DETAIL 1 S-AVA-03 FILTER/SEPARATOR



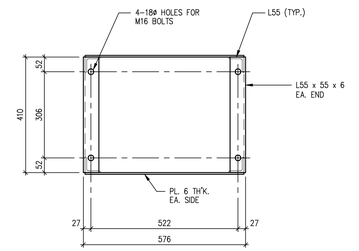
SECTION A S-AVA-03



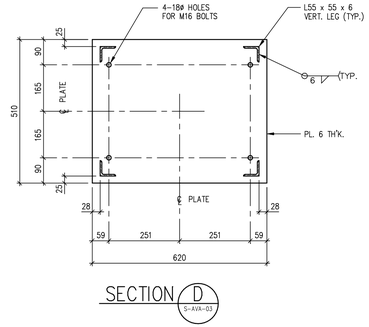
SECTION B S-AVA-03



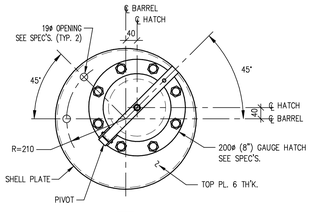
DETAIL 2 S-AVA-03 SUPPORT FOR FILTER/SEPARATOR



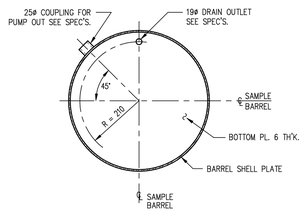
SECTION C S-AVA-03



SECTION D S-AVA-03

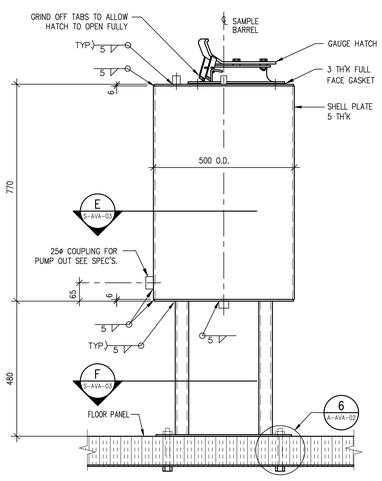


FRONT OF BUILDING
TOP VIEW

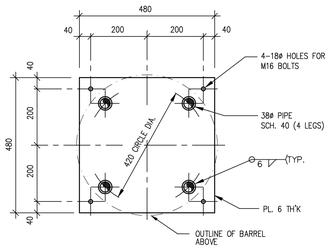


FRONT OF BUILDING

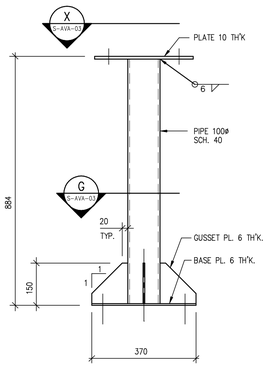
SECTION E S-AVA-03

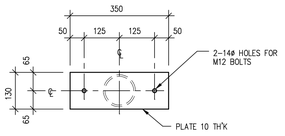


DETAIL 3 S-AVA-03 SAMPLE BARREL

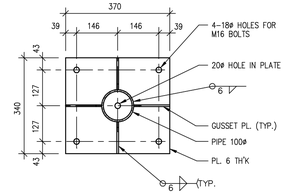


SECTION F S-AVA-03

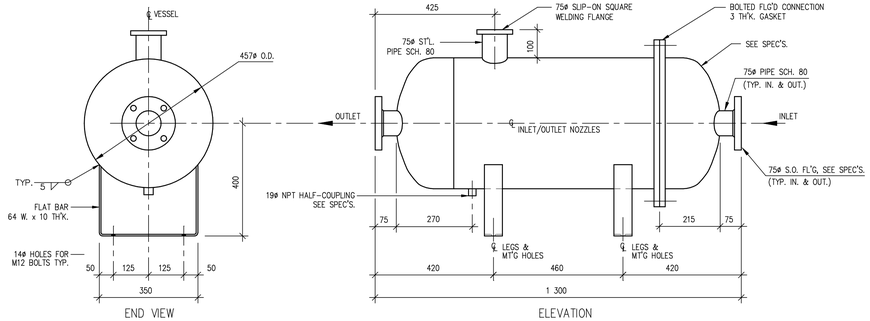




VIEW X S-AVA-03



SECTION G S-AVA-03



DETAIL 4 S-AVA-03 RELAXATION CHAMBER/AIR ELIMINATOR

DETAIL 5 S-AVA-03 SUPPORT FOR RELAXATION CHAMBER/AIR ELIMINATOR

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES.
2. STEEL PLATE MATERIAL: G40.21M (300 W)
3. FOR OTHER NOTES REFER TO SUBSEQUENT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13230.
4. FOR PARTICULARS ON FILTER/SEPARATOR & RELAXATION CHAMBER REFER TO SPECIFICATIONS, DIV. 13, SECTION 13230.
5. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON FILTER/SEPARATOR VESSEL OR NOZZLES WITH EPOXY COATED INTERIORS.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN CAD / SL
APPROVED

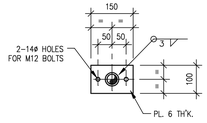
PROJECT TITLE

DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL FUEL

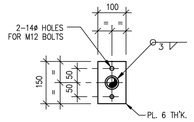
DRAWING TITLE

FILTER/SEPARATOR, SAMPLE BARREL AND RELAXATION CHAMBER SECTIONS & DETAILS

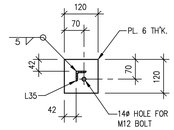
SCALE: 1 : 10
DATE 94/02/21
DRAWING No. S-AVA-03
REV. 1



SECTION 1 S-AVA-04

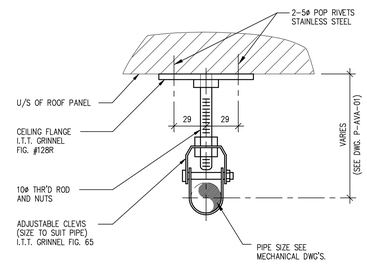


SECTION 2 S-AVA-04



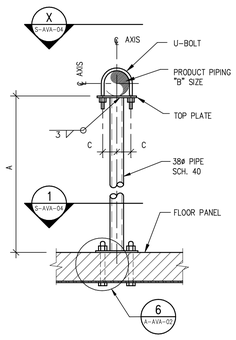
SECTION 3 S-AVA-04

TABLE FOR PIPE SUPPORTS						
NO.	TYPE	A	B	C	D	E
PS1	3	250	25ø	20	–	6ø
PS2	1	1 055	75ø	52	136	12ø
PS3	3	250	25ø	20	–	6ø
PS4	1	356	75ø	52	136	12ø
PS5	1	356	75ø	52	136	12ø
PS6	1	356	75ø	52	136	12ø
PS7	2	1 259	75ø	52	136	12ø
PS8	1	406	75ø	52	136	12ø
PS9	1	356	75ø	52	136	12ø

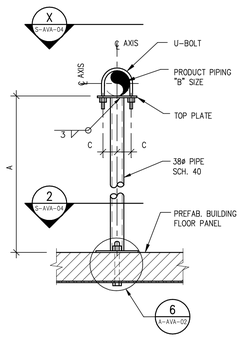


PIPE HANGERS (PH1 TO PH7)

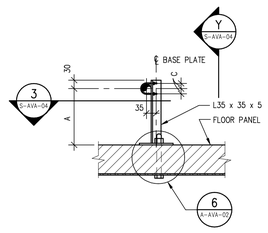
DETAIL 2 S-AVA-04
1 : 2.5



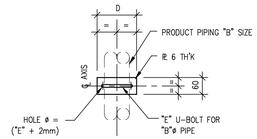
TYPE 1



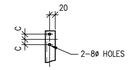
TYPE 2



TYPE 3



VIEW X S-AVA-04



VIEW Y S-AVA-04

DETAIL 1 S-GPA-04 PIPE SUPPORTS

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. FOR OTHER NOTES REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13230.
3. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
4. ALL HOLD DOWN BOLTS OR NUTS TO BE TACK WELDED TO UNDERSIDE OF FLOOR PLATES.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	CHK'D

REVISIONS

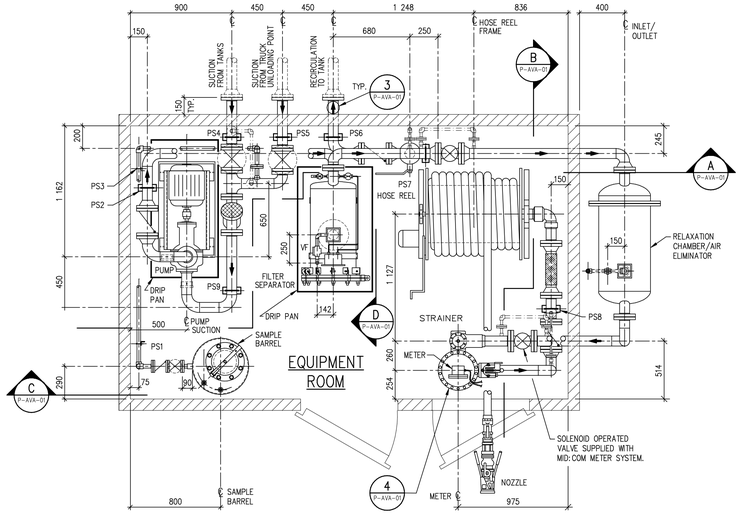
DESIGN EDZ
DRAWN KJ
APPROVED

PROJECT TITLE
DISPENSER BUILDING FOR
JET A-1 AVIATION FUEL
AT AIRPORT AND
JET A-1 / LSDL FUEL

DRAWING TITLE
PIPE SUPPORTS
SECTIONS & DETAILS

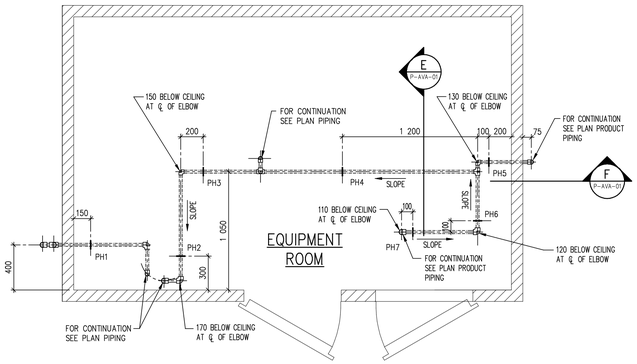
SCALE: 1 : 10 OR AS SHOWN
DATE 94/02/21

DRAWING No. S-AVA-04
REV. 1



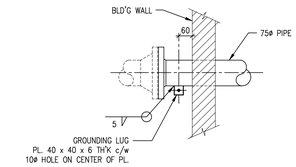
PLAN

DETAIL 1 P-AVA-01 PRODUCT PIPING



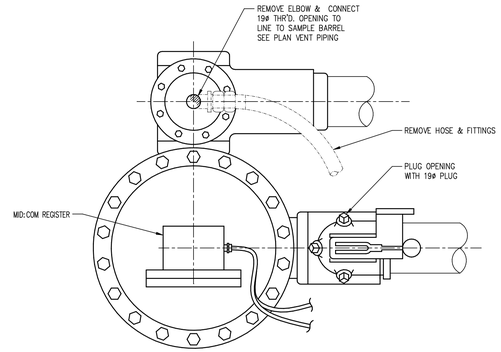
PLAN

DETAIL 2 P-AVA-01 VENT PIPING

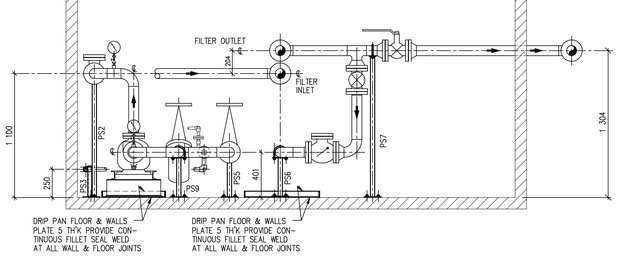


STATIC ELECTRICITY GROUNDING LUG
(3 REQ'D)

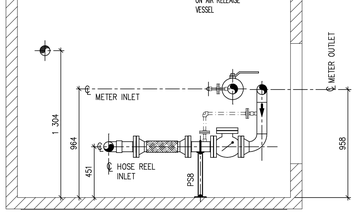
DETAIL 3 1 : 12.5 P-AVA-01



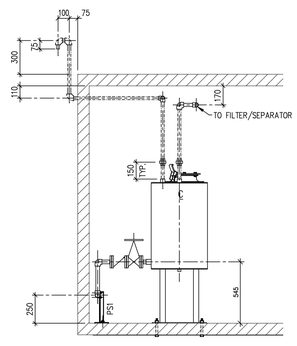
DETAIL 4 1 : 5 P-AVA-01



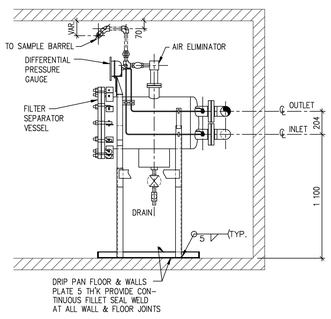
SECTION A P-AVA-01



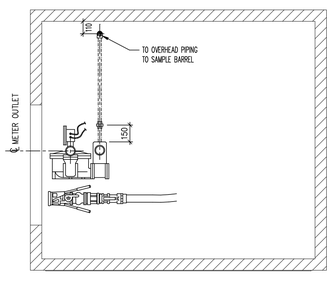
SECTION B P-AVA-01



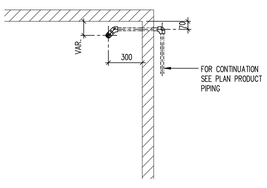
SECTION C P-AVA-01



SECTION D P-AVA-01



SECTION E P-AVA-01



SECTION F P-AVA-01

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES
2. WELDING TO CONFORM TO CAN/CSA-B51-M, BOILER, PRESSURE VESSEL AND PRESSURE PIPING CODE. ALL ELECTRODES TO BE E70XX. SEE SPECIFICATIONS, DIVISION 13, SECTION 13230.
3. FOR PAINTING, REFER TO SPECIFICATIONS, DIVISION 9, SECTION 09900.
4. SUPPLY AND INSTALL ARROWS ON PIPES SHOWING DIRECTION OF FLOW, REFER TO SPECIFICATIONS, DIVISION 13, SECTION 13230. (➡)

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN KJ
APPROVED

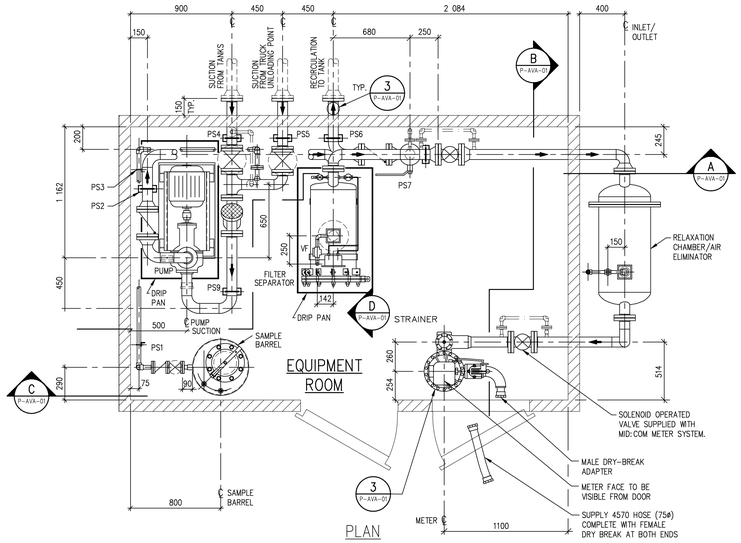
PROJECT TITLE

DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT

DRAWING TITLE

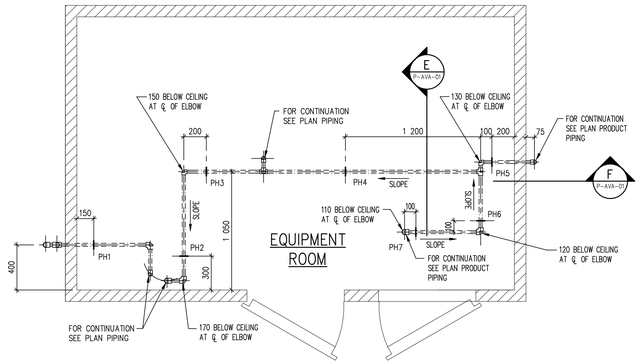
PIPING PLAN, SECTIONS & DETAILS

SCALE: 1 : 25 OR AS SHOWN
DATE 94/02/21
DRAWING No. P-AVA-01
REV. 1



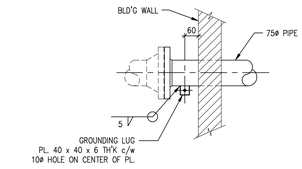
PLAN

DETAIL 1 P-AVA-01 PRODUCT PIPING



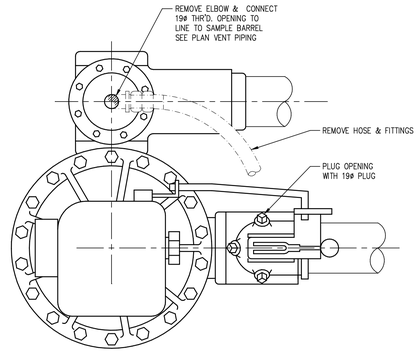
PLAN

DETAIL 2 P-AVA-01 VENT PIPING

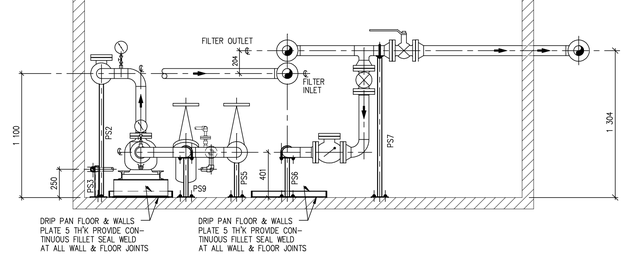


STATIC ELECTRICITY GROUNDING LUG
(3 REQ'D)

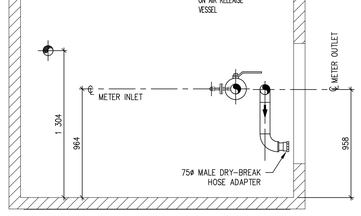
DETAIL 3 1 : 12.5 P-AVA-01



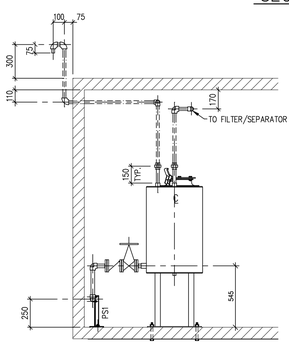
DETAIL 4 1 : 5 P-AVA-01



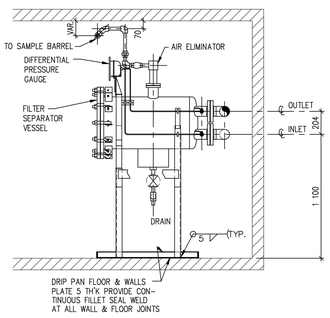
SECTION A P-AVA-01



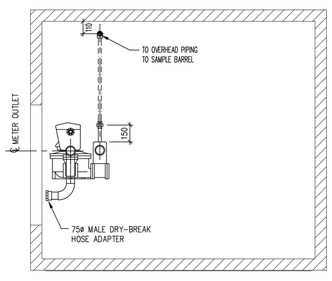
SECTION B P-AVA-01



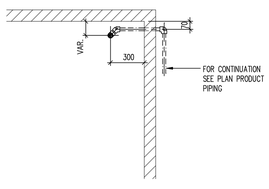
SECTION C P-AVA-01



SECTION D P-AVA-01



SECTION E P-AVA-01



SECTION F P-AVA-01

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES
2. WELDING TO CONFORM TO CAN/CSA-B51-M, BOILER, PRESSURE VESSEL AND PRESSURE PIPING CODE. ALL ELECTRODES TO BE E70XX. SEE SPECIFICATIONS, DIVISION 13, SECTION 13230.
3. FOR PAINTING, REFER TO SPECIFICATIONS, DIVISION 9, SECTION 09900.
4. SUPPLY AND INSTALL ARROWS ON PIPES SHOWING DIRECTION OF FLOW, REFER TO SPECIFICATIONS, DIVISION 13, SECTION 13230. (➡)

No	DATE	DESCRIPTION	CH'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN KJ
APPROVED

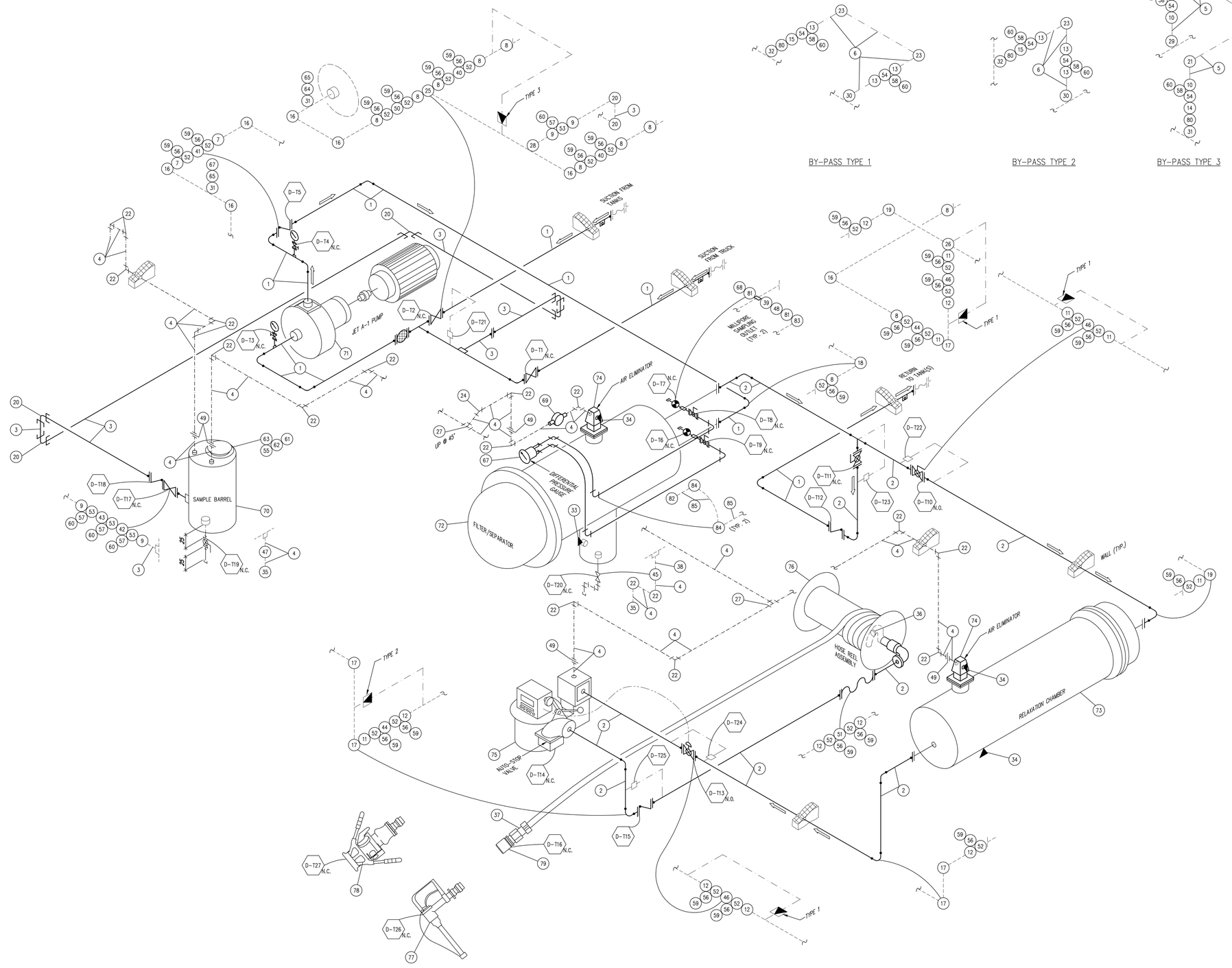
PROJECT TITLE

DISPENSER BUILDING FOR JET A-1 / LSDL FUEL AT TANK FARM

DRAWING TITLE

PIPING PLAN, SECTIONS & DETAILS

SCALE: 1 : 25 OR AS SHOWN
DATE 94/02/21
DRAWING No. P-AVA-01A
REV. 1



SCHEMATIC ISOMETRIC JET A-1 DISPENSING SYSTEM

(NO SCALE)

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR DESCRIPTION OF CIRCLED NUMBERS REFER TO DRAWING P-AVA-02A.
2. NOZZLES AND DRY-BREAK ADAPTER ASSEMBLIES TO BE REMOVED AFTER SHOP TESTING, SHIPPED WITH DISPENSER AND REINSTALLED IN FIELD AS DIRECTED.
3. THERMAL PRESSURE TO BE RELIEVED IN DIRECTION OF ARROW (TOWARDS STORAGE TANKS). FOR PRESSURE SETTINGS OF PRESSURE RELIEF VALVES REFER TO SPECIFICATIONS, DIVISION 13, SECTION 13230.
4. FOR OTHER NOTES SEE DWG. P-AVA-01.

LEGEND:

- : INDICATES DIRECTION OF PRESSURE RELIEF VALVE
- : ARROW INDICATES DIRECTION OF FLOW (SEE SPEC'S.)
- (D-F) : INDICATES VALVE NUMBER ON P-50 FUEL OIL SYSTEM
- (D-G) : INDICATES VALVE NUMBER ON GASOLINE SYSTEM
- N.C. : NORMALLY CLOSED
- N.O. : NORMALLY OPENED
- : INDICATES VENT PIPING LINE.
- : INDICATES PRESSURE RELIEF LINE.
- : INDICATES CONTROL WIRING.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN KJ
APPROVED

PROJECT TITLE

DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT

DRAWING TITLE

PIPING ISOMETRIC

SCALE: 1 : 1
DATE 94/02/21
DRAWING No. P-AVA-02
REV. 1

BILL OF MATERIALS FOR JET A-1 AVIATION FUEL DISPENSER BUILDING

(NO SCALE)

EQUIPMENT TAG	SIZE (mm)	DESCRIPTION
①	75 ø	PIPE, SCH. 40, SEAMLESS
②	75 ø	PIPE STAINLESS STEEL SEE SECTION 13230
③	25 ø	PIPE, SCH. 80, SEAMLESS
④	19 ø	PIPE, SCH. 80, SEAMLESS
⑤	12 ø	PIPE, SCH. 160, SEAMLESS
⑥	12 ø	PIPE STAINLESS STEEL SEE SECTION 13230
⑦	75 ø	WELDING NECK FLANGE, CLASS 150, FSRF
⑧	75 ø	SLIP-ON FLANGE, CLASS 150, FSRF
⑨	25 ø	SLIP-ON FLANGE, CLASS 150, FSRF
⑩	12 ø	SLIP-ON FLANGE, CLASS 150, FSRF
⑪	75 ø	WELDING NECK FLANGE STAINLESS STEEL SEE SECTION 13230, CLASS 150, FSRF
⑫	75 ø	SLIP-ON FLANGE STAINLESS STEEL SEE SECTION 13230, CLASS 150, FSRF
⑬	12 ø	SLIP-ON FLANGE STAINLESS STEEL SEE SECTION 13230, CLASS 150, FSRF
⑭	12 ø	THREADED FLANGE, CLASS 150, FSRF
⑮	12 ø	THREADED FLANGE STAINLESS STEEL SEE SECTION 13230, CLASS 150, FSRF
⑯	75 ø	ELBOW 90° L.R.
⑰	75 ø	ELBOW 90 ° L.R. STAINLESS STEEL SEE SECTION 13230
⑱	75 ø	ELBOW 90° S.R.
⑲	75 ø	ELBOW S.R. STAINLESS STEEL SEE SECTION 13230
⑳	25 ø	ELBOW 90° SOCKET WELD
㉑	12 ø	ELBOW 90° SOCKET WELD
㉒	19 ø	ELBOW 90° MALLEABLE IRON
㉓	12 ø	ELBOW 90° SOCKET WELD STAINLESS STEEL SEE SECTION 13230
㉔	19 ø	ELBOW 45 ° MALLEABLE IRON
㉕	75 ø	STRAIGHT TEE
㉖	75 ø	STRAIGHT TEE STAINLESS STEEL SEE SECTION 13230
㉗	19 ø	STRAIGHT TEE MALLEABLE IRON
㉘	25 ø	HALF-COUPLING SOCKET WELD
㉙	12 ø	HALF-COUPLING SOCKET WELD
㉚	12ø	HALF-COUPLING SOCKET WELD STAINLESS STEEL SEE SECTION 13230
㉛	12 ø	HALF-COUPLING THREADED
㉜	12 ø	HALF-COUPLING THREADED STAINLESS STEEL SEE SECTION 13230
㉝	38 ø	PLUG THREADED SQUARE HEAD STAINLESS STEEL SEE SECTION 13230
㉞	19 ø	PLUG THREADED SQUARE HEAD STAINLESS STEEL SEE SECTION 13230
㉟	19 ø	PIPE CAP MALLEABLE IRON
㊱	75 ø x 50 ø	REDUCING BUSHING MALE & FEMALE THREADED HEXAGONAL HEAD STAINLESS STEEL SEE SECTION 13230
㊲	65 ø x 50 ø	REDUCING BUSHING MALE & FEMALE THREADED HEXAGONAL HEAD ALUMINUM ALLOY 6061-T6 TO AINSI B16.14
㊳	19 ø x 75 Lg.	PIPE NIPPLE STAINLESS STEEL SEE SECTION 13230
㊴	12 ø x 50 Lg.	PIPE NIPPLE THREADED STAINLESS STEEL SEE SECTION 13230
㊵	75 ø	GATE VALVE CAST STEEL FLANGED, CLASS 150, WCB
㊶	75 ø	CHECK VALVE CAST STEEL FLANGED, CLASS 150, WCB
㊷	25 ø	GATE VALVE FORGED STEEL FLANGED, CLASS 150, WCB
㊸	25 ø	CHECK VALVE FORGED STEEL FLANGED, CLASS 150, WCB
㊹	75 ø	CHECK VALVE STAINLESS STEEL FLANGED SEE SECTION 13230, CLASS 150
㊺	19 ø	GATE VALVE FORGED STAINLESS STEEL THREADED SEE SECTION 13230, CLASS 150

EQUIPMENT TAG	SIZE (mm)	DESCRIPTION
㊻	75 ø	SOLENOID OPERATED VALVE SUPPLIED WITH MID:COM METER SYSTEM
㊼	19 ø	BALL VALVE CARBON STEEL THREADED
㊽	12 ø	BALL VALVE STAINLESS STEEL THREADED SEE SECTION 13230
㊾	19 ø	UNION MALLEABLE IRON CLASS 300 GROUND JOINT COPPER ALLOY TO IRON
㊿	75 ø	STRAINER SEE SECTION 13230
(51)	75 ø	FLEXIBLE CONNECTOR STAINLESS STEEL SEE SECTION 13230
(52)	75 ø x 150#	GASKET
(53)	25 ø x 150#	GASKET
(54)	12 ø x 150#	GASKET
(55)	200 ø	GASKET FULL FACE
(56)	16 ø x 89 Lg.	STUD BOLTS FOR CLASS 150, 75ø AND 100ø FLANGES
(57)	16 ø x 76 Lg.	STUD BOLTS FOR CLASS 150, 50ø FLANGES
(58)	12 ø x 65 Lg.	STUD BOLTS FOR CLASS 150, 25ø AND 12ø FLANGES
(59)	16 ø	NUTS
(60)	12 ø	NUTS
(61)	19 ø	NUTS
(62)	19 ø x 38 Lg.	MACHINE BOLT SEE SECTION 13230
(63)	200 ø	GAUGE HATCH SEE SECTION 13230
(64)		GAUGE VALVE SECTION 13230
(65)		COMPOUND PRESSURE/VACUUM GAUGE SEE SECTION 13230
(66)		PRESSURE GAUGE SEE SECTION 13230
(67)	6 ø x 150 ø	DIFFERENTIAL PRESSURE GAUGE SEE SECTION 13230
(68)		MILLIPORE TEST OUTLET & SAMPLING PROBE ASSEMBLY SEE SECTION 13230
(69)	19 ø	SIDE FLOW INDICATOR THREADED ENDS STAINLESS STEEL 316 OPW VISI-FLO MODEL NO. 1470
(70)	1	SAMPLE BARREL SEE SECTION 13230
(71)	1	JET A-1 AVIATION FUEL PUMP SEE SECTION 13230
(72)	1	FILTER/SEPARATOR SEE SECTION 13230
(73)	1	RELAXATION CHAMBER SEE SECTION 13230
(74)	1	AIR ELIMINATOR SEE SECTION 13230
(75)	1	JET A-1 AVIATION FUEL METERING ASS'Y SEE SECTION 13230, C/W AUTO. TEMP. COMPENSATION
(76)	1	HOSE AND REEL ASSEMBLY SEE SECTION 13230
(77)	1	OVERWING AIRCRAFT FUELING NOZZLE SEE SECTION 13230
(78)	1	UNDERWING AIRCRAFT FUELING NOZZLE SEE SECTION 13230
(79)	1	DRY-BREAK DISCONNECT SEE SECTION 13230
(80)	12 ø	PRESSURE RELIEF VALVE SEE SECTION 13230
(81)	12 ø x 6 ø	PIPE THREAD REDUCER MALE PIPE/FEMALE PIPE STAINLESS STEEL PARKER PART NO. 1/2 x 1/4-PTR-SS
(82)	6 o.d x 6 ø	MALE CONNECTOR FLARE LESS TUBE END/MALE PIPE END STAINLESS STEEL PARKER PART NO. 4-4-FBU-SS
(83)	6 o.d. x	ELBOW 90° LONG MALE FLARE LESS TUBE END/LONG MALE PIPE END STAINLESS STEEL PARKER PART NO. 4-4-CCBU-SS
(84)	6 o.d. x 6 o.d.	UNION ELBOW 90° FLARE LESS TUBE ENDS STAINLESS STEEL PARKER PART NO. 4-EBU-SS.
(85)	6 o.d.	TUBING STAINLESS STEEL 316 COLD DRAWN ANNEALED SEAMLESS 16 GAUGE (1.651 mm WALL)
		TO ASTM A-269

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR EQUIPMENT SCHEMATICS SEE DRAWING P-AVA-02.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN KJ
APPROVED

PROJECT TITLE

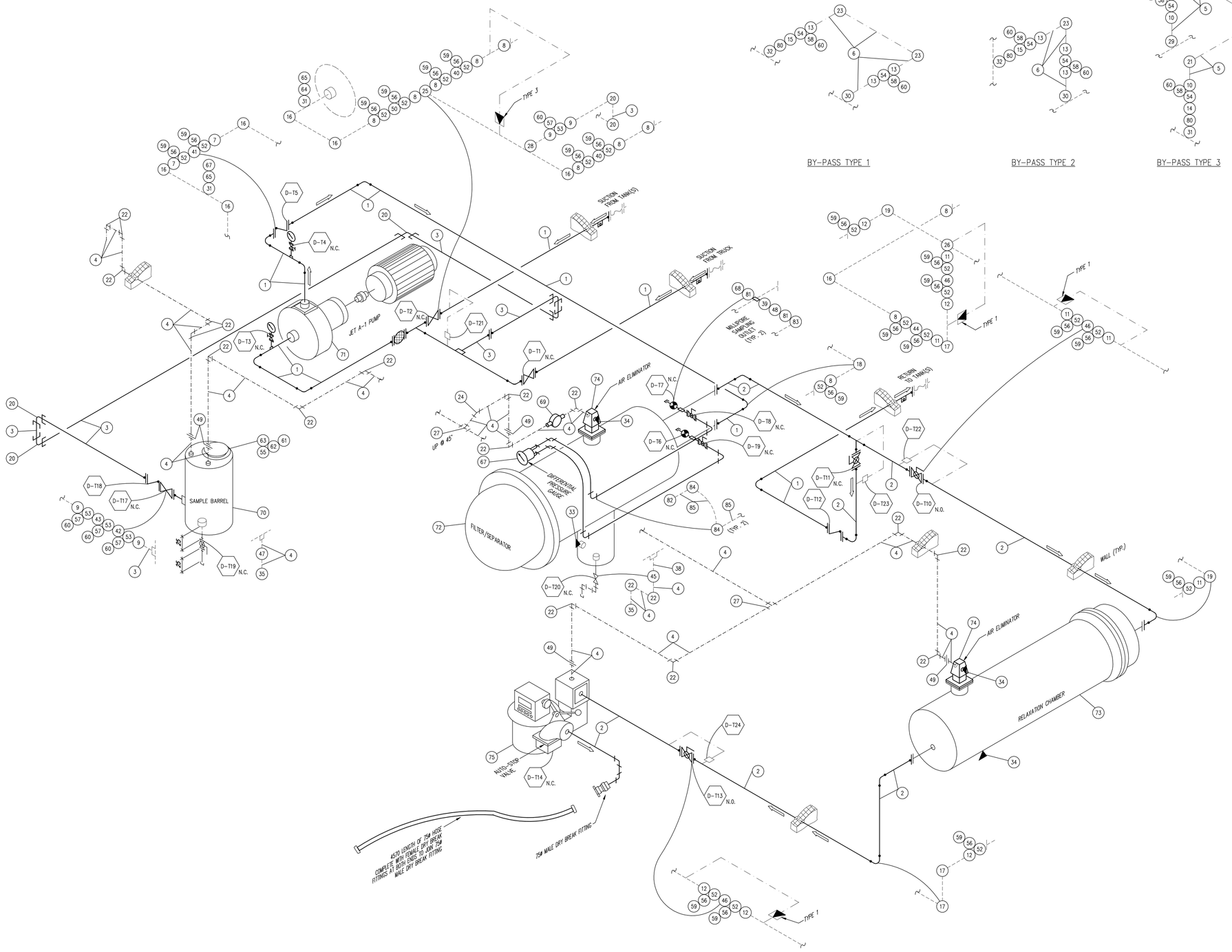
DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT

DRAWING TITLE

BILL OF MATERIALS

SCALE: N.T.S. DATE 94/02/21

DRAWING No. P-AVA-02A REV. 1



SCHEMATIC ISOMETRIC JET A-1 / LSDL DISPENSING SYSTEM

(NO SCALE)

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR DESCRIPTION OF CIRCLED NUMBERS REFER TO DRAWING P-AVA-02A.
2. NOZZLES AND DRY-BREAK ADAPTER ASSEMBLIES TO BE REMOVED AFTER SHOP TESTING, SHIPPED WITH DISPENSER AND REINSTALLED IN FIELD AS DIRECTED.
3. THERMAL PRESSURE TO BE RELIEVED IN DIRECTION OF ARROW (TOWARDS STORAGE TANKS). FOR PRESSURE SETTINGS OF PRESSURE RELIEF VALVES REFER TO SPECIFICATIONS, DIVISION 13, SECTION 13230.
4. FOR OTHER NOTES SEE DWG. P-AVA-01.

LEGEND:

- ◀▶ : INDICATES DIRECTION OF PRESSURE RELIEF VALVE
- : ARROW INDICATES DIRECTION OF FLOW (SEE SPEC'S.)
- (D-F1) : INDICATES VALVE NUMBER ON P-50 FUEL OIL SYSTEM
- (D-G1) : INDICATES VALVE NUMBER ON GASOLINE SYSTEM
- N.C. : NORMALLY CLOSED
- N.O. : NORMALLY OPENED
- ——·——·—— : INDICATES VENT PIPING LINE.
- — — — : INDICATES PRESSURE RELIEF LINE.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN KJ
APPROVED

PROJECT TITLE

DISPENSER BUILDING FOR JET A-1 / LSDL FUEL AT TANK FARM

DRAWING TITLE

PIPING ISOMETRIC

SCALE: 1 : 1
DATE 94/02/21
DRAWING No. P-AVA-03
REV. 1

BILL OF MATERIALS FOR JET A-1 AVIATION FUEL DISPENSER BUILDING

(NO SCALE)

EQUIPMENT TAG	SIZE (mm)	DESCRIPTION
①	75 ø	PIPE, SCH 40, SEAMLESS
②	75 ø	PIPE STAINLESS STEEL SEE SECTION 13230
③	25 ø	PIPE, SCH 80, SEAMLESS
④	19 ø	PIPE, SCH 80, SEAMLESS
⑤	12 ø	PIPE, SCH 160, SEAMLESS
⑥	12 ø	PIPE STAINLESS STEEL SEE SECTION 13230
⑦	75 ø	WELDING NECK FLANGE, CLASS 150, FSRF
⑧	75 ø	SLIP-ON FLANGE, CLASS 150, FSRF
⑨	25 ø	SLIP-ON FLANGE, CLASS 150, FSRF
⑩	12 ø	SLIP-ON FLANGE, CLASS 150, FSRF
⑪	75 ø	WELDING NECK FLANGE STAINLESS STEEL SEE SECTION 13230, CLASS 150, FSRF
⑫	75 ø	SLIP-ON FLANGE STAINLESS STEEL SEE SECTION 13230, CLASS 150, FSRF
⑬	12 ø	SLIP-ON FLANGE STAINLESS STEEL SEE SECTION 13230, CLASS 150, FSRF
⑭	12 ø	THREADED FLANGE, CLASS 150, FSRF
⑮	12 ø	THREADED FLANGE STAINLESS STEEL SEE SECTION 13230, CLASS 150, FSRF
⑯	75 ø	ELBOW 90° L.R.
⑰	75 ø	ELBOW 90 ° L.R. STAINLESS STEEL SEE SECTION 13230
⑱	75 ø	ELBOW 90° S.R.
⑲	75 ø	ELBOW S.R. STAINLESS STEEL SEE SECTION 13230
⑳	25 ø	ELBOW 90° SOCKET WELD
㉑	12 ø	ELBOW 90° SOCKET WELD
㉒	19 ø	ELBOW 90° MALLEABLE IRON
㉓	12 ø	ELBOW 90° SOCKET WELD STAINLESS STEEL SEE SECTION 13230
㉔	19 ø	ELBOW 45 ° MALLEABLE IRON
㉕	75 ø	STRAIGHT TEE
㉖	75 ø	STRAIGHT TEE STAINLESS STEEL SEE SECTION 13230
㉗	19 ø	STRAIGHT TEE MALLEABLE IRON
㉘	25 ø	HALF-COUPLING SOCKET WELD
㉙	12 ø	HALF-COUPLING SOCKET WELD
㉚	12ø	HALF-COUPLING SOCKET WELD STAINLESS STEEL SEE SECTION 13230
㉛	12 ø	HALF-COUPLING THREADED
㉜	12 ø	HALF-COUPLING THREADED STAINLESS STEEL SEE SECTION 13230
㉝	38 ø	PLUG THREADED SQUARE HEAD STAINLESS STEEL SEE SECTION 13230
㉞	19 ø	PLUG THREADED SQUARE HEAD STAINLESS STEEL SEE SECTION 13230
㉟	19 ø	PIPE CAP MALLEABLE IRON
㊱	75 ø x 50 ø	REDUCING BUSHING MALE & FEMALE THREADED HEXAGONAL HEAD STAINLESS STEEL SEE SECTION 13230
㊲	65 ø x 50 ø	REDUCING BUSHING MALE & FEMALE THREADED HEXAGONAL HEAD ALUMINUM ALLOY 6061-T6 TO AINSI B16.14
㊳	19 ø x 75 Lg.	PIPE NIPPLE STAINLESS STEEL SEE SECTION 13230
㊴	12 ø x 50 Lg.	PIPE NIPPLE THREADED STAINLESS STEEL SEE SECTION 13230
㊵	75 ø	GATE VALVE CAST STEEL FLANGED, CLASS 150, WCB
㊶	75 ø	CHECK VALVE CAST STEEL FLANGED, CLASS 150, WCB
㊷	25 ø	GATE VALVE FORGED STEEL FLANGED, CLASS 150, WCB
㊸	25 ø	CHECK VALVE FORGED STEEL FLANGED, CLASS 150, WCB
㊹	75 ø	CHECK VALVE STAINLESS STEEL FLANGED SEE SECTION 13230, CLASS 150
㊺	19 ø	GATE VALVE FORGED STAINLESS STEEL THREADED SEE SECTION 13230, CLASS 150

EQUIPMENT TAG	SIZE (mm)	DESCRIPTION
㊻	75 ø	BALL VALVE STAINLESS STEEL FLANGED SEE SECTION 13230
㊼	19 ø	BALL VALVE CARBON STEEL THREADED
㊽	12 ø	BALL VALVE STAINLESS STEEL THREADED SEE SECTION 13230
㊾	19 ø	UNION MALLEABLE IRON CLASS 300 GROUND JOINT COPPER ALLOY TO IRON
㊿	75 ø	STRAINER SEE SECTION 13230
(51)	75 ø	FLEXIBLE CONNECTOR STAINLESS STEEL SEE SECTION 13230
(52)	75 ø x 150#	GASKET
(53)	25 ø x 150#	GASKET
(54)	12 ø x 150#	GASKET
(55)	200 ø	GASKET FULL FACE
(56)	16 ø x 89 Lg.	STUD BOLTS FOR CLASS 150, 75ø AND 100ø FLANGES
(57)	16 ø x 76 Lg.	STUD BOLTS FOR CLASS 150, 50ø FLANGES
(58)	12 ø x 65 Lg.	STUD BOLTS FOR CLASS 150, 25ø AND 12ø FLANGES
(59)	16 ø	NUTS
(60)	12 ø	NUTS
(61)	19 ø	NUTS
(62)	19 ø x 38 Lg.	MACHINE BOLT SEE SECTION 13230
(63)	200 ø	GAUGE HATCH SEE SECTION 13230
(64)		GAUGE VALVE SECTION 13230
(65)		COMPOUND PRESSURE/VACUUM GAUGE SEE SECTION 13230
(66)		PRESSURE GAUGE SEE SECTION 13230
(67)	6 ø x 150 ø	DIFFERENTIAL PRESSURE GAUGE SEE SECTION 13230
(68)		MILLIPORE TEST OUTLET & SAMPLING PROBE ASSEMBLY SEE SECTION 13230
(69)	19 ø	SIDE FLOW INDICATOR THREADED ENDS STAINLESS STEEL 316 OPW VISI-FLO MODEL NO. 1470
(70)	1	SAMPLE BARREL SEE SECTION 13230
(71)	1	JET A-1 AVIATION FUEL PUMP SEE SECTION 13230
(72)	1	FILTER/SEPARATOR SEE SECTION 13230
(73)	1	RELAXATION CHAMBER SEE SECTION 13230
(74)	1	AIR ELIMINATOR SEE SECTION 13230
(75)	1	JET A-1 AVIATION FUEL METERING ASS'Y SEE SECTION 13230, C/W AUTO. TEMP. COMPENSATION
(79)	1	DRY-BREAK DISCONNECT SEE SECTION 13230
(80)	12 ø	PRESSURE RELIEF VALVE SEE SECTION 13230
(81)	12 ø x 6 ø	PIPE THREAD REDUCER MALE PIPE/FEMALE PIPE STAINLESS STEEL PARKER PART NO. 1/2 x 1/4-PTR-SS
(82)	6 o.d x 6 ø	MALE CONNECTOR FLARE LESS TUBE END/MALE PIPE END STAINLESS STEEL PARKER PART NO. 4-4-FBU-SS
(83)	6 o.d. x	ELBOW 90° LONG MALE FLARE LESS TUBE END/LONG MALE PIPE END STAINLESS STEEL PARKER PART NO. 4-4-CCBU-SS
(84)	6 o.d. x 6 o.d.	UNION ELBOW 90° FLARE LESS TUBE ENDS STAINLESS STEEL PARKER PART NO. 4-EBU-SS.
(85)	6 o.d.	TUBING STAINLESS STEEL 316 COLD DRAWN ANNEALED SEAMLESS 16 GAUGE (1.651 mm WALL)
		TO ASTM A-269

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR EQUIPMENT SCHEMATICS SEE DRAWING P-AVA-02B.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN KJ
APPROVED

PROJECT TITLE

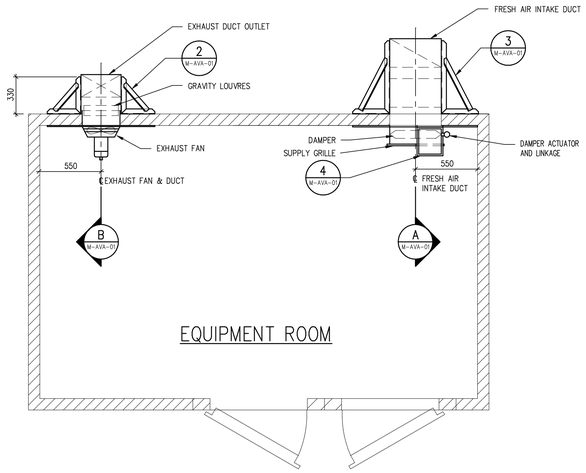
DISPENSER BUILDING FOR JET A-1 / LSDL FUEL AT TANK FARM

DRAWING TITLE

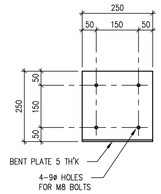
BILL OF MATERIALS

SCALE: N.T.S. DATE 94/02/21

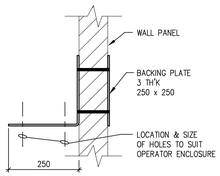
DRAWING No. P-AVA-03A REV. 1



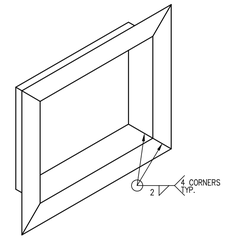
DETAIL 1 (M-AVA-01) — 1 : 25



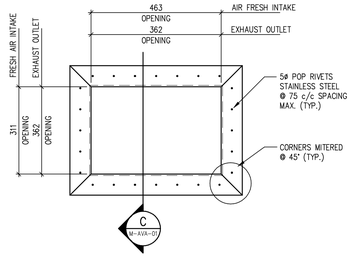
FRONT

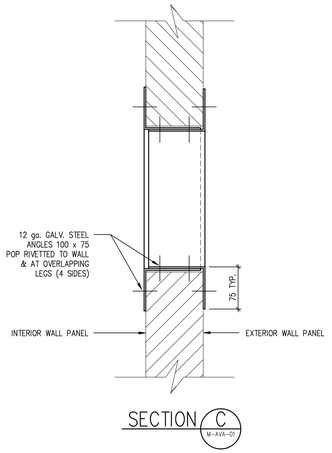


ELEVATION



SPLIT FRAME ISOMETRIC AT WALL
(TYPICAL AT INTAKE & EXHAUST DUCTS)

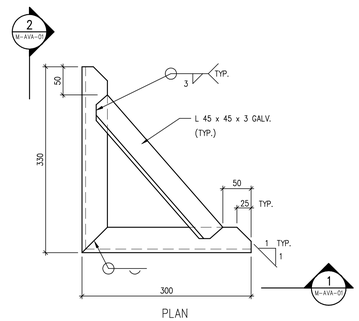




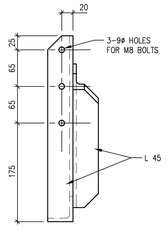
SECTION C (M-AVA-01)

DETAIL 4 (M-AVA-01) — 1 : 10 — BRACKET FOR DAMPER OPERATOR

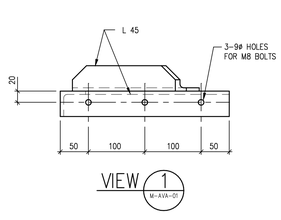
DETAIL 5 (M-AVA-01) — 1 : 10 — DUCT OPENINGS THROUGH WALL



PLAN



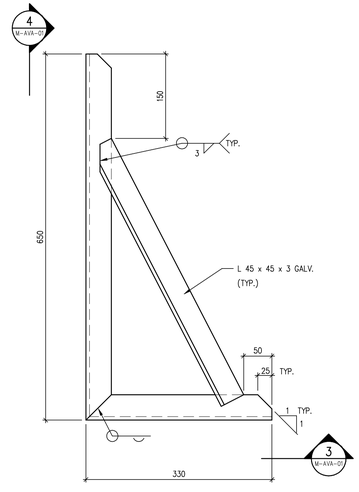
VIEW 2 (M-AVA-01)



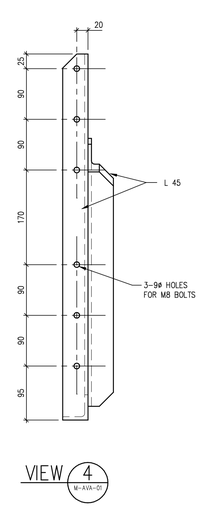
VIEW 1 (M-AVA-01)

DETAIL 2 (M-AVA-01) — 1 : 5 — BRACKET TYPE "A"

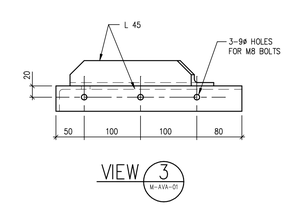
(RIGHT HAND SHOWN – ONE EACH HAND REQ'D)



PLAN



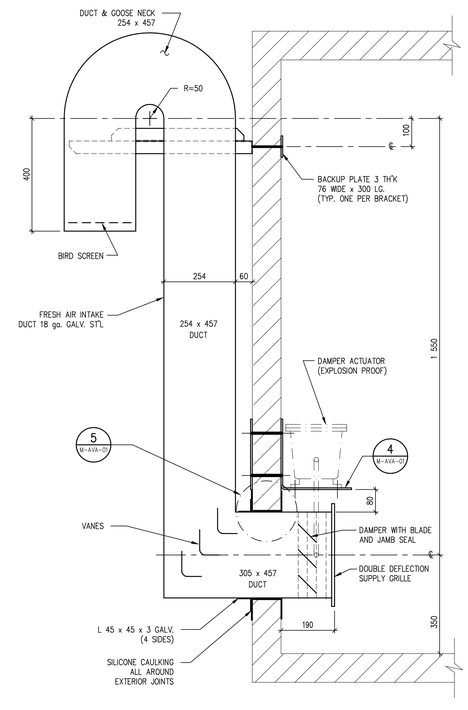
VIEW 4 (M-AVA-01)



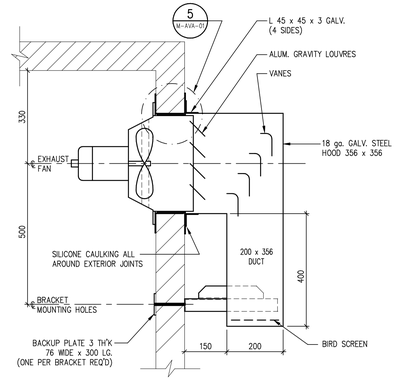
VIEW 3 (M-AVA-01)

DETAIL 3 (M-AVA-01) — 1 : 5 — BRACKET TYPE "B"

(RIGHT HAND SHOWN – ONE EACH HAND REQ'D)



SECTION A (M-AVA-01)



SECTION B (M-AVA-01)

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. DIMENSIONS ARE SHOWN IN MILLIMITRES.
2. FOR PARTICULARS ON DUCTWORK, EXHAUST FAN, DAMPER OPERATOR, DAMPER, REGISTER, GRILLE VANES & BIRD SCREENS REFER TO SPECIFICATIONS, DIV. 13, SECTION 13230.
3. FOR OTHER DETAILS SEE SUBSEQUENT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13230.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN CAD / SL
APPROVED

PROJECT TITLE

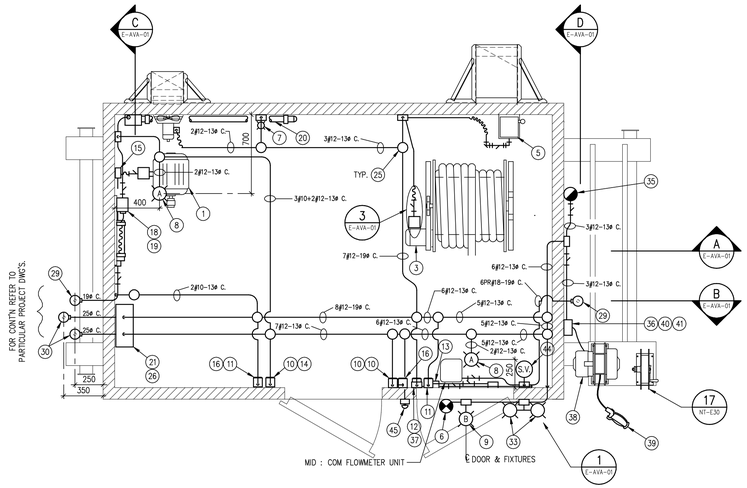
DISPENSER BUILDING FOR
JET A-1 AVIATION FUEL
AT AIRPORT AND
JET A-1 / LSDL FUEL

DRAWING TITLE

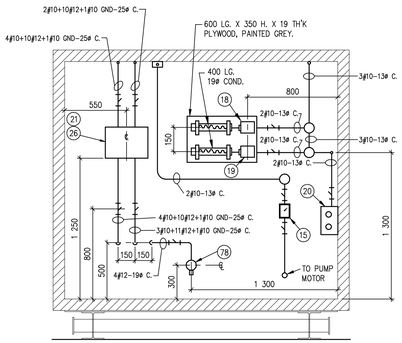
VENTILATION PLAN,
SECTIONS & DETAILS

SCALE: 1 : 10 OR AS SHOWN
DATE 94/02/21

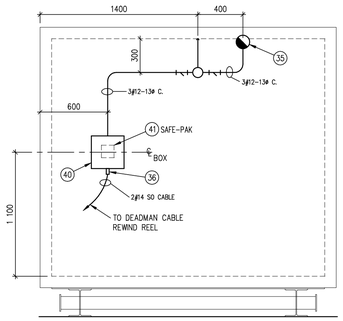
DRAWING No. M-AVA-01
REV. 1



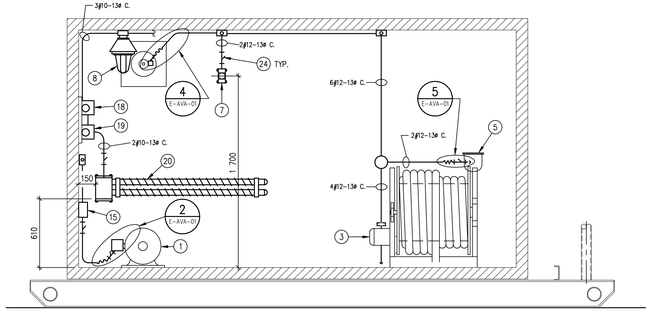
PLAN VIEW



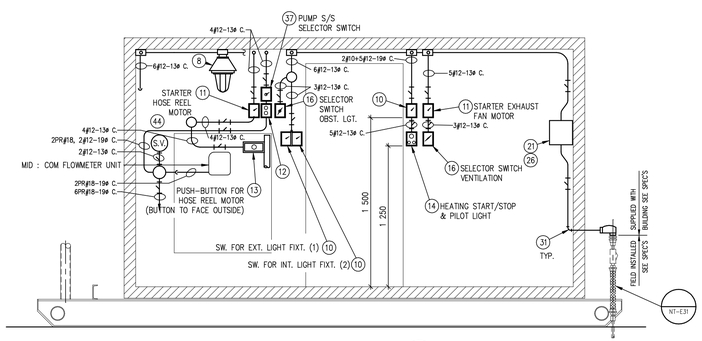
SECTION C E-AVA-01



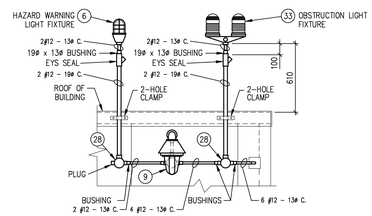
SECTION D E-AVA-01



SECTION A E-AVA-01

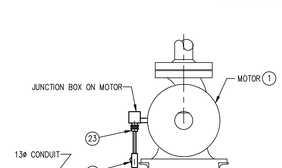


SECTION B E-AVA-01

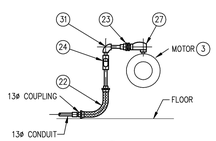


N.B.: FOR LOCATION OF EQUIPMENT SEE DWG. A-AVA-01

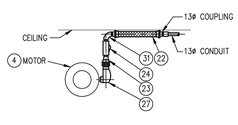
DETAIL 1 E-AVA-01 — ARRANGEMENT OF EXTERIOR LIGHT FIXTURES ABOVE SERVICE DOOR
1 : 25



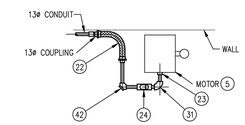
DETAIL 2 E-AVA-01 — CONNECTION AT TURBO A-1 PUMP MOTOR
1 : 12.5



DETAIL 3 E-AVA-01 — CONNECTION AT HOSE REEL MOTOR
1 : 12.5



DETAIL 4 E-AVA-01 — CONNECTION AT FAN MOTOR
1 : 12.5



DETAIL 5 E-AVA-01 — CONNECTION AT DAMPER MOTOR
1 : 12.5

LIST OF JET A-1 BUILDING ELECTRICAL EQUIPMENT

NO.	QTY.	DESCRIPTION
1	1	3 HP. PUMP MOTOR, 230 V., 1 ph., 60 Hz. (JET A-1) SEE SPEC'S.
2	–	NOT USED
3	1	1/2 HP. HOSE REWND REEL MOTOR, 115 V. 1 ph., 60 Hz. SEE SPEC'S.
4	1	1/3 HP. FAN MOTOR, 115 V. 1 Ph. 60 Hz., SEE SPEC'S.
5	1	DAMPER ACTUATOR MOTOR, SEE SPEC'S.
6	1	HAZARD WARNING LIGHT FIXTURE, SEE SPEC'S.
7	1	HAZARD WARNING RED PILOT LIGHT, SEE SPEC'S.
8	2	LIGHT FIXTURE TYPE "A", SEE SPEC'S.
9	1	LIGHT FIXTURE TYPE "B", SEE SPEC'S.
10	3	TUMBLER SWITCHES, SEE SPEC'S.
11	2	MANUAL MOTOR STARTER SWITCH, 2 POLES, 1 HP. RATING @ 115/230 VAC. 1 ph. c/w HEATER, ALLEN BRADLEY CAT.# 600-TEX5-12 (THRUFEED) SEE SPEC'S. & NOTE #8
12	1	MAINTAINED CONTACT START/STOP, PUSH BUTTON STATION FOR JET A-1 PUMP, ALLEN-BRADLEY CAT.# 800H-2HAM7.
13	1	ONE BUTTON PUSH-BUTTON STATION FORWARD ON HOLD AND STOP STOP ON RELEASE, D.P.S.T. ALLEN-BRADLEY CAT.# 800H-BP1A2
14	1	MOMENTARY PUSH BUTTONS START/STOP & RED PILOT LIGHT c/w ENCLOSURE, TYPE ALLEN-BRADLEY CAT.# 800H-2HAD1OR7
15	1	DISCONNECT THUMBLER SWITCHES, EEMAC TYPE 7 CD, 2 POLES, RATING 3 HP. @ 240 VAC. APPLETON CAT.# ECS-175 c/w ECSK-2MS
16	2	SELECTOR SWITCH HAND-AUTO, c/w ENCLOSURE,TYPE ALLEN-BRADLEY CAT.# 800H-R2HA7
17	1	NOT USED
18	1	THERMOSTAT, NON-ADJUSTABLE FROM EXTERIOR TYPE CHROMALOX CAT.# AR-0464-EP-2 SET AT 10° C., SEE SPEC'S.
19	1	THERMOSTAT, (LOW TEMPERATURE), SET AT -18° C., SEE SPEC'S.
20	1	HEATER, SEE SPEC'S.
21	–	TERMINAL BLOCKS c/w MOUNTING RAIL & END ANCHORS TYPE ALLEN-BRADLEY CAT.# 1492-STYLE "J" MOUNTED IN J.BOX (18 # 1492-U4 & 10 # 1492-U10)
22	4	FLEXIBLE COUPLING, CROUSE-HINDS CAT.# ECH112 (305 Lg.)
23	AS REQ'D.	UNION, TYPE CROUSE-HINDS "UNY" SERIES, SIZE TO SUIT.
24	AS REQ'D.	SEAL, TYPE CROUSE-HINDS "EYS", SIZE TO SUIT.
25	AS REQ'D.	JUNCTION BOX, TYPE CROUSE-HINDS "GUA" SERIES, SIZE TO SUIT.
26	1	JUNCTION BOX, CROUSE-HINDS CAT.# EJB 684-SA
27	3	JUNCTION BOX, CROUSE-HINDS CAT.# GUAB16
28	2	JUNCTION BOX, TYPE CROUSE-HINDS "GUF" CAT.# GUFT26
29	1	JUNCTION BOX, CROUSE-HINDS CAT.# GUJB-26
30	2	JUNCTION BOX, CROUSE-HINDS CAT.# GUJB-36
31	AS REQ'D.	ELBOW 90°, TYPE CROUSE-HINDS "EL" SERIES. SIZE TO SUIT
32	–	NOT USED
33	1	OBTRUCTION LIGHT FIXTURE, SEE SPEC'S.
34	1	JUNCTION BOX, TYPE CROUSE-HINDS "GUF" CAT.# GUFT16
35	1	PHOTOELECTRIC CONTROLLER, SEE SPEC'S.
36	1	CABLE ENTRY SEAL, THREADED, HUB SIZE 1/2", THOMAS & BETTS CAT.# 2922S
37	1	SELECTOR SWITCH 3-POSITION, c/w ENCLOSURE, TYPE ALLEN-BRADLEY CAT.# 800H-R3HA7 WITH LEGEND PLATE INSCRIPTION "HAND – OFF – AUTO"
38	1	SPRING REWND REEL FOR DEADMAN SWITCH, SEE SPEC'S.
39	1	DEADMAN SWITCH, SEE SPEC'S.
40	1	TWO GANG CAST DEVICE BOX, THREADED FOR RIGID CONDUIT & MOUNTING LUGS. CROUSE-HINDS CAT.# FDC 12 (DEEP ENCLOSURE), c/w 2 GANG BLANK COVER CROUSE-HINDS CAT.# S1002G (FERALOY) & GASKET CAT.# GASK 434
41	1	GEMS SOLID STATE SAFE-PAK APPROVED FOR CLASS I, GROUP D, 120 VAC. MAX. RATING 5 A. (LOAD)
42	AS REQ'D.	ELBOW 90°, TYPE CROUSE-HINDS "LBY" SERIES. SIZE TO SUIT
44	3	SOLENOID VALVE, TWO-WAY, NORMALLY CLOSED, 120 V., 60 CY., SUPPLIED & INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR (SEE NOTE #8)
45	1	JUMBO MUSHROOM HEAD EMERGENCY STOP BUTTON. ALLEN BRADLEY CAT # 800H-DP6D2 MOUNTED IN A ALLEN- BRADLEY CAT#800H-1HVX7M2 GANG BOX WITH A ALLEN-BRADLEY CAT# 800H-NP30 COVER.

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES.
2. CONDUITS SHALL BE RIGID, GALVANIZED STEEL.
3. TO ALL NUMBER OF WIRES SHOWN IN CONDUITS, CONTRACTOR SHALL ADD ONE GROUND WIRE AS PER CODE REQUIREMENTS.
4. MOUNT ALL ELECTRICAL EQUIPMENT SO THAT CONNECTIONS CAN BE EASILY EXPOSED FOR SERVICE
5. ALL SWITCHES, STARTERS, THERMOSTATS, RELAYS, CONTACTORS, TIMERS, ETC.... SHALL BE IDENTIFIED WITH LAMICOID LABELS FASTENED TO BOXES
6. FOR WIRING DIAGRAMS SEE DWG. E-AVA-02
7. AVAILABLE POWER SUPPLY TO THIS DISPENSER BUILDING SHALL BE 120/240V. 1 PHASE, 60 CY.
8. OVERLOAD HEATER ELEMENT NOT REQUIRED IN MANUAL STARTER ITEM 11 FOR FAN MOTOR.
9. THESE DRAWINGS HAVE BEEN DESIGNED AROUND THE DIVISION METHOD FOR HAZARDOUS LOCATIONS AS SPECIFIED WITHIN SECTION 18 OF THE CANADIAN ELECTRICAL CODE. THE CONTRACTOR HAS THE OPTION TO REDEFINE THE HAZARDOUS LOCATIONS TO SUITE THE ZONE CLASSIFICATION IF SO DESIRED. THE CONTRACTOR SHALL MAKE SUCH CHANGES ONLY WITH THE PERMISSION OF THE ENGINEER.
10. FOR MATERIAL SPECIFICATIONS, SEE SPECIFICATIONS, DIVISION 13, SECTION 13230.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

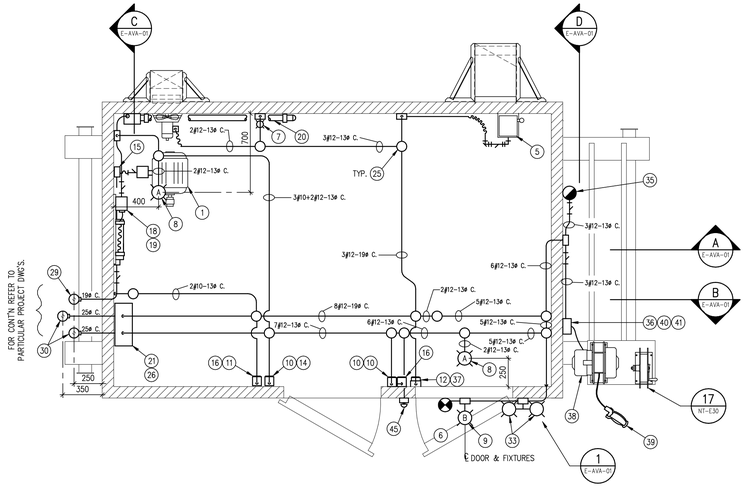
REVISIONS

DESIGN RVM
DRAWN CAD / SL
APPROVED

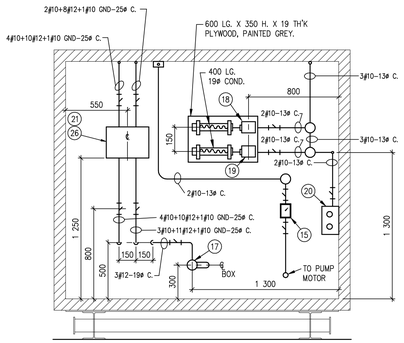
PROJECT TITLE
DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT

DRAWING TITLE
ELECTRICAL PLAN, SECTIONS & DETAILS

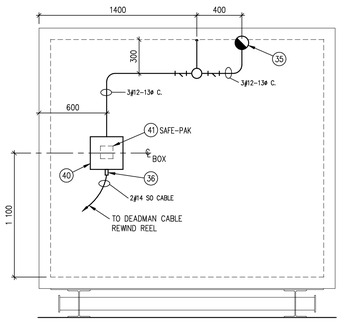
SCALE: 1 : 25 OR AS SHOWN
DATE 94/02/21
DRAWING No. E-AVA-01
REV. 1



PLAN VIEW



SECTION C
E-AVA-01



SECTION D
E-AVA-01

SECTION A
E-AVA-01

SECTION B
E-AVA-01

N.B.: FOR LOCATION OF EQUIPMENT SEE DWG. A-AVA-01

DETAIL 1 (E-AVA-01) 1 : 25 — ARRANGEMENT OF EXTERIOR LIGHT FIXTURES ABOVE SERVICE DOOR

DETAIL 2 (E-AVA-01) 1 : 12.5 — CONNECTION AT TURBO A-1 PUMP MOTOR

DETAIL 4 (E-AVA-01) 1 : 12.5 — CONNECTION AT FAN MOTOR

DETAIL 5 (E-AVA-01) 1 : 12.5 — CONNECTION AT DAMPER MOTOR

LIST OF JET A-1 BUILDING ELECTRICAL EQUIPMENT

NO.	QTY.	DESCRIPTION
1	1	3 HP. PUMP MOTOR, 230 V., 1 ph., 60 Hz. (JET A-1) SEE SPEC'S.
2	–	NOT USED
3	–	NOT USED
4	1	1/3 HP. FAN MOTOR, 115 V. 1 Ph. 60 Hz., SEE SPEC'S.
5	1	DAMPER ACTUATOR MOTOR, SEE SPEC'S.
6	1	HAZARD WARNING LIGHT FIXTURE, SEE SPEC'S.
7	1	HAZARD WARNING RED PILOT LIGHT, SEE SPEC'S.
8	2	LIGHT FIXTURE TYPE "A", SEE SPEC'S.
9	1	LIGHT FIXTURE TYPE "B", SEE SPEC'S.
10	3	TUMBLER SWITCHES, SEE SPEC'S.
11	1	MANUAL MOTOR STARTER SWITCH, 2 POLES, 1 HP. RATING @ 115/230 VAC. 1 ph. c/w HEATER, ALLEN BRADLEY CAT.# 600-TEX5-12 (THRUFEED) SEE SPEC'S. & NOTE #8
12	1	MAINTAINED CONTACT START/STOP, PUSH BUTTON STATION FOR JET A-1 PUMP, ALLEN-BRADLEY CAT.# 800H-2HAM7.
13	–	NOT USED
14	1	MOMENTARY PUSH BUTTONS START/STOP & RED PILOT LIGHT c/w ENCLOSURE, TYPE ALLEN-BRADLEY CAT.# 800H-2HAD10R7
15	1	DISCONNECT THUMBLER SWITCHES, EEMAC TYPE 7 CD, 2 POLES, RATING 3 HP. @ 240 VAC. APPLETON CAT.# ECS-175 c/w ECSK-2MS
16	2	SELECTOR SWITCH HAND-AUTO, c/w ENCLOSURE,TYPE ALLEN-BRADLEY CAT.# 800H-R2HA7
17	1	SENSOR & CROUSE-HINDS GUJT26 MOUNTING BOX, SEE SPEC'S.
18	1	THERMOSTAT, NON-ADJUSTABLE FROM EXTERIOR TYPE CHROMALOX CAT.# AR-0464-EP-2 SET AT 10° C., SEE SPEC'S.
19	1	THERMOSTAT, (LOW TEMPERATURE), SET AT -18° C., SEE SPEC'S.
20	1	HEATER, SEE SPEC'S.
21	–	TERMINAL BLOCKS c/w MOUNTING RAIL & END ANCHORS TYPE ALLEN-BRADLEY CAT.# 1492-STYLE "U" MOUNTED IN ⊥BOX (18 # 1492-U4 & 10 # 1492-U10)
22	4	FLEXIBLE COUPLING, CROUSE-HINDS CAT.# ECH112 (305 Lg.)
23	AS REQ'D.	UNION, TYPE CROUSE-HINDS "UNY" SERIES, SIZE TO SUIT.
24	AS REQ'D.	SEAL, TYPE CROUSE-HINDS "EYS", SIZE TO SUIT.
25	AS REQ'D.	JUNCTION BOX, TYPE CROUSE-HINDS "GUA" SERIES, SIZE TO SUIT.
26	1	JUNCTION BOX, CROUSE-HINDS CAT.# EJB 684-SA
27	3	JUNCTION BOX, CROUSE-HINDS CAT.# GUAB16
28	2	JUNCTION BOX, TYPE CROUSE-HINDS "GUF" CAT.# GUFT26
29	1	JUNCTION BOX, CROUSE-HINDS CAT.# GUJB-26
30	2	JUNCTION BOX, CROUSE-HINDS CAT.# GUJB-36
31	AS REQ'D.	ELBOW 90°, TYPE CROUSE-HINDS "EL" SERIES. SIZE TO SUIT
32	–	NOT USED
33	1	OBTRUCTION LIGHT FIXTURE, SEE SPEC'S.
34	1	JUNCTION BOX, TYPE CROUSE-HINDS "GUF" CAT.# GUFT16
35	1	PHOTOELECTRIC CONTROLLER, SEE SPEC'S.
36	1	CABLE ENTRY SEAL, THREADED, HUB SIZE 1/2", THOMAS & BETTS CAT.# 2922S
37	1	SELECTOR SWITCH 3-POSITION, c/w ENCLOSURE, TYPE ALLEN-BRADLEY CAT.# 800H-R3HA7 WITH LEGEND PLATE INSCRIPTION "HAND – OFF – AUTO"
38	1	SPRING REWIND REEL FOR DEADMAN SWITCH, SEE SPEC'S.
39	1	DEADMAN SWITCH, SEE SPEC'S.
40	1	TWO GANG CAST DEVICE BOX, THREADED FOR RIGID CONDUIT & MOUNTING LUGS. CROUSE-HINDS CAT.# FDC 12 (DEEP ENCLOSURE), c/w 2 GANG BLANK COVER CROUSE-HINDS CAT.# S10026 (FERALOY) & GASKET CAT.# GASK 434
41	1	GEMS SOLID STATE SAFE-PAK APPROVED FOR CLASS I, GROUP D, 120 VAC. MAX. RATING 5 A. (LOAD)
42	AS REQ'D.	ELBOW 90°, TYPE CROUSE-HINDS "LBY" SERIES. SIZE TO SUIT
45	1	JUMBO MUSHROOM HEAD EMERGENCY STOP BUTTON. ALLEN BRADLEY CAT # 800H-DP6D2 MOUNTED IN A ALLEN- BRADLEY CAT#800H-1HVX7M2 GANG BOX WITH A ALLEN-BRADLEY CAT# 800H-NP30 COVER.

NOTES

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES.
2. CONDUITS SHALL BE RIGID, GALVANIZED STEEL.
3. TO ALL NUMBER OF WIRES SHOWN IN CONDUITS, CONTRACTOR SHALL ADD ONE GROUND WIRE AS PER CODE REQUIREMENTS.
4. MOUNT ALL ELECTRICAL EQUIPMENT SO THAT CONNECTIONS CAN BE EASILY EXPOSED FOR SERVICE
5. ALL SWITCHES, STARTERS, THERMOSTATS, RELAYS, CONTACTORS, TIMERS, ETC... SHALL BE IDENTIFIED WITH LAMICOID LABELS FASTENED TO BOXES
6. FOR WIRING DIAGRAMS SEE DWG. E-AVA-02
7. AVAILABLE POWER SUPPLY TO THIS DISPENSER BUILDING SHALL BE 120/240V. 1 PHASE, 60 CY.
8. OVERLOAD HEATER ELEMENT NOT REQUIRED IN MANUAL STARTER ITEM 11 FOR FAN MOTOR.
9. THESE DRAWINGS HAVE BEEN DESIGNED AROUND THE DIVISION METHOD FOR HAZARDOUS LOCATIONS AS SPECIFIED WITHIN SECTION 18 OF THE CANADIAN ELECTRICAL CODE. THE CONTRACTOR HAS THE OPTION TO REDEFINE THE HAZARDOUS LOCATIONS TO SUITE THE ZONE CLASSIFICATION IF SO DESIRED. THE CONTRACTOR SHALL MAKE SUCH CHANGES ONLY WITH THE PERMISSION OF THE ENGINEER.
10. FOR MATERIAL SPECIFICATIONS, SEE SPECIFICATIONS, DIVISION 13, SECTION 13230.

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN CAD / SL
APPROVED

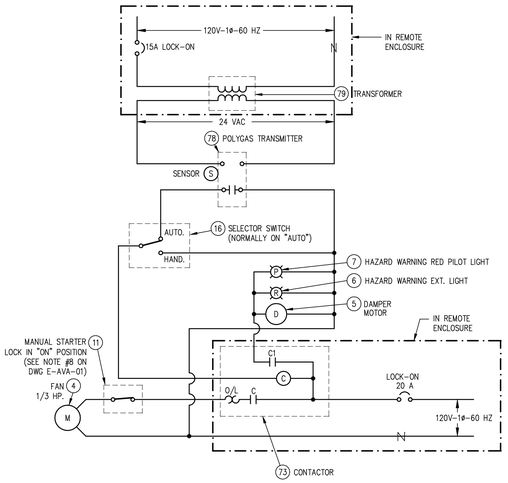
PROJECT TITLE

DISPENSER BUILDING FOR JET A-1 / LSDL FUEL AT TANK FARM

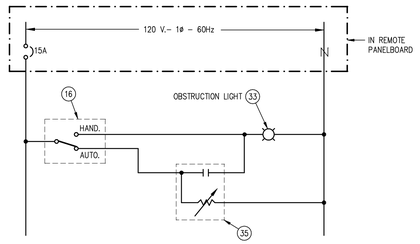
DRAWING TITLE

ELECTRICAL PLAN, SECTIONS & DETAILS

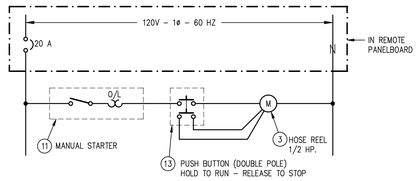
SCALE: 1 : 25 OR AS SHOWN
DATE 94/02/21
DRAWING No. E-AVA-01A
REV. 1



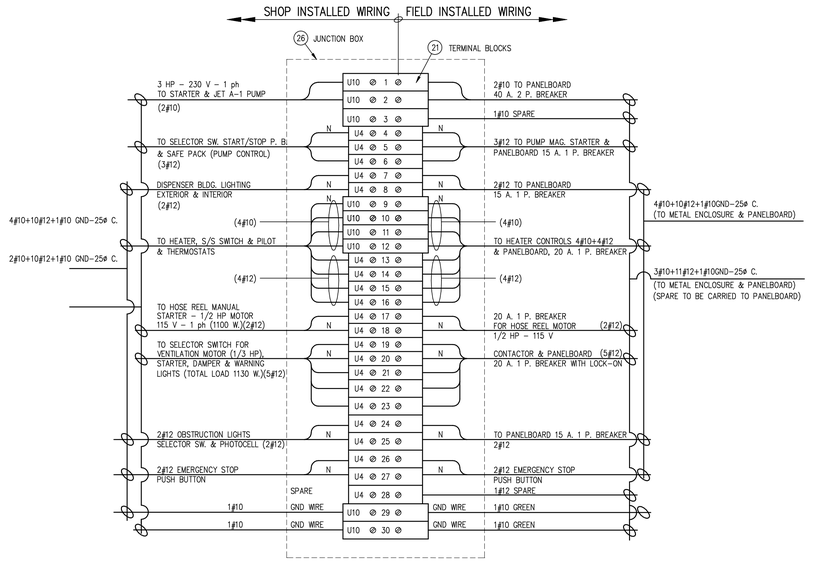
CONTROL WIRING DIAGRAM FOR
POLYGAS DETECTION & VENTILATION SYSTEMS



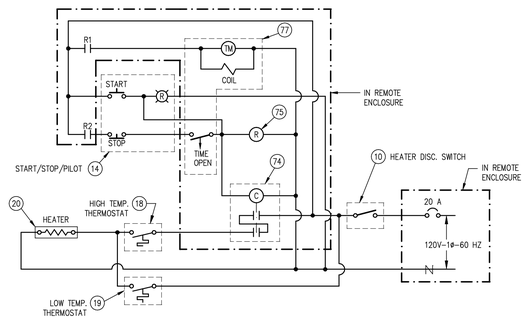
SCHEMATIC WIRING DIAGRAM
OBSTRUCTION LIGHTS



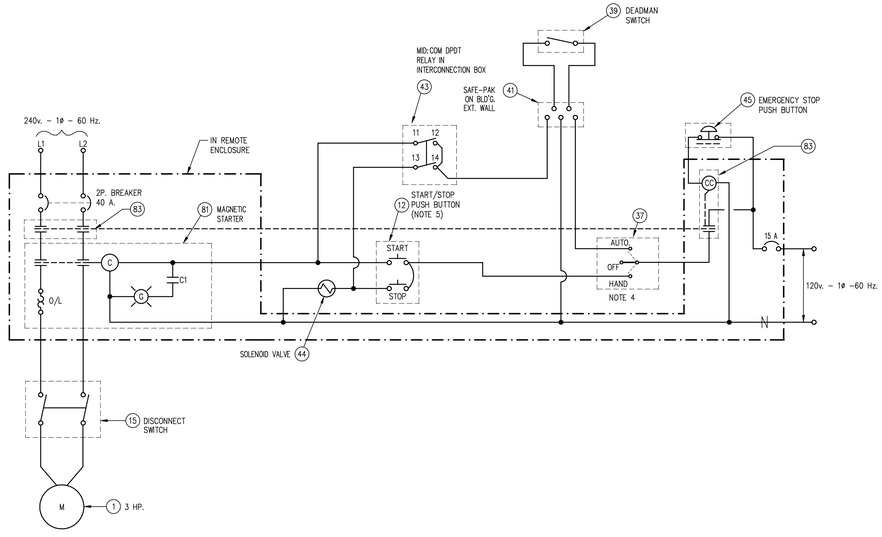
SCHEMATIC WIRING DIAGRAM
ELECTRICAL RE-WIND HOSE REEL



TERMINAL BLOCKS AT MAIN JUNCTION BOX
AT ENTRANCE TO BUILDING



CONTROL WIRING DIAGRAM FOR
HEATING IN DISPENSER BUILDING



WIRING DIAGRAM FOR JET A-1 DISPENSING SYSTEM AT AIRPORT

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR DESCRIPTION AND QUANTITY OF CIRCLED NUMBERS SHOWN THUS (99) SEE LISTS OF BUILDING ELECTRICAL EQUIPEMENT ON DWG'S. E-AVA-01 & E-SB-02
2. FOR OTHER NOTES REFER TO DWG. E-AVA-01
3. THESE DRAWINGS HAVE BEEN DESIGNED AROUND THE DIVISION METHOD FOR HAZARDOUS LOCATIONS AS SPECIFIED WITHIN SECTION 18 OF THE CANADIAN ELECTRICAL CODE. THE CONTRACTOR HAS THE OPTION TO REDEFINE THE HAZARDOUS LOCATIONS TO SUITE THE ZONE CLASSIFICATION IF SO DESIRED. THE CONTRACTOR SHALL MAKE SUCH CHANGES ONLY WITH THE PERMISSION OF THE ENGINEER.
4. THE HAND-OFF-AUTO SWITCH WILL SWITCH BETWEEN CONTROL BY THE STOP/START BUTTONS AND THE MID:COM COMPUTER. THE DEADMAN SWITCH MUST BE USED WHEN OPERATING IN DURING AIRCRAFT REFUELING. HAND OPERATION (NOT USING THE DEADMAN SWITCH) WILL BE USED DUTING TANK TRUCK UNLOADING AND FOR RECIRCULATION THROUGH THE FIBER FILTER. THE WIRING FROM THE MID:COM TO THIS CONTROL CIRCUIT WILL BE THROUGH THE 6PR#18 CABLE GOING TO THE TRUCK CONNECTOR BOX.
5. BOTH SUSTAINED CONTACTS ARE CLOSED WHEN THE START BUTTON IS PUSHED AND BOTH ARE OPEN WHEN THE STOP BUTTON IS PUSHED.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

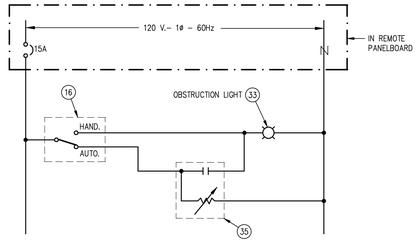
REVISIONS

DESIGN RVM
DRAWN KJ
APPROVED

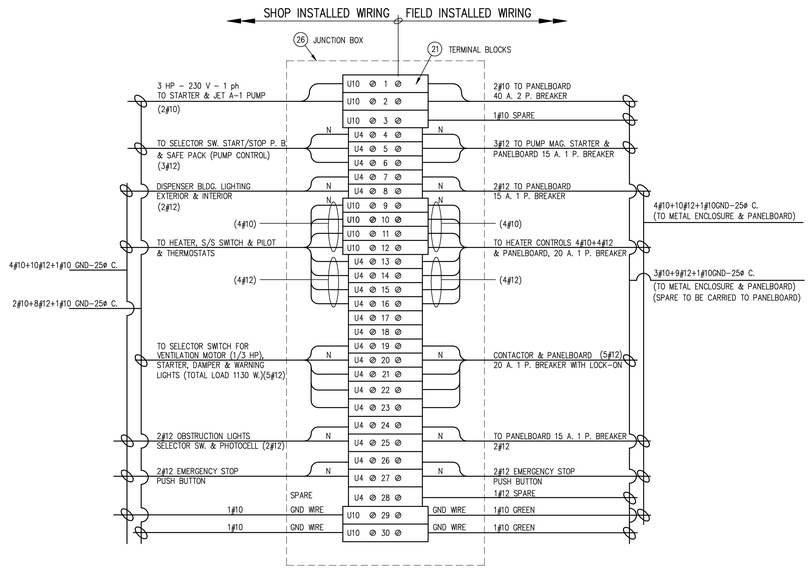
PROJECT TITLE
DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT

DRAWING TITLE
ELECTRICAL DIAGRAMS & TERMINAL BLOCKS

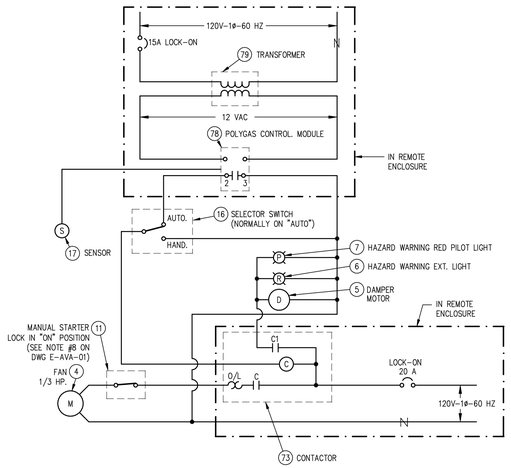
SCALE: 1 : 1
DATE 94/02/21
DRAWING No. E-AVA-02
REV. 1



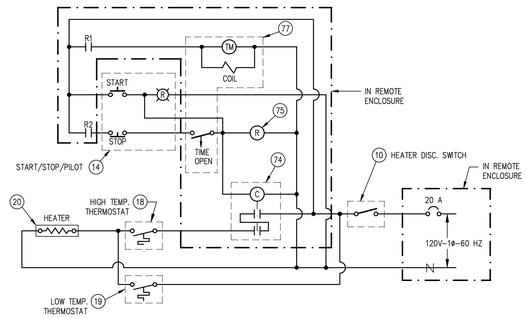
SCHEMATIC WIRING DIAGRAM
OBSTRUCTION LIGHTS



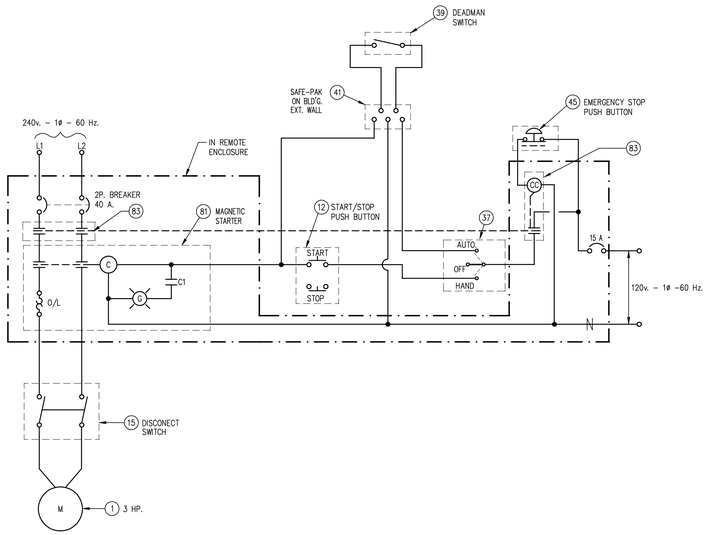
TERMINAL BLOCKS AT MAIN JUNCTION BOX
AT ENTRANCE TO BUILDING



CONTROL WIRING DIAGRAM FOR
POLYGAS DETECTION & VENTILATION SYSTEMS



CONTROL WIRING DIAGRAM FOR
HEATING IN DISPENSER BUILDING



WIRING DIAGRAM FOR JET A-1 DISPENSING SYSTEM AT AIRPORT

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR DESCRIPTION AND QUANTITY OF CIRCLED NUMBERS SHOWN THUS (99) SEE LISTS OF BUILDING ELECTRICAL EQUIPEMENT ON DWG'S. E-AVA-01 & E-SB-02
2. FOR OTHER NOTES REFER TO DWG. E-AVA-01
3. THESE DRAWINGS HAVE BEEN DESIGNED AROUND THE DIVISION METHOD FOR HAZARDOUS LOCATIONS AS SPECIFIED WITHIN SECTION 18 OF THE CANADIAN ELECTRICAL CODE. THE CONTRACTOR HAS THE OPTION TO REDEFINE THE HAZARDOUS LOCATIONS TO SUITE THE ZONE CLASSIFICATION IF SO DESIRED. THE CONTRACTOR SHALL MAKE SUCH CHANGES ONLY WITH THE PERMISSION OF THE ENGINEER.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

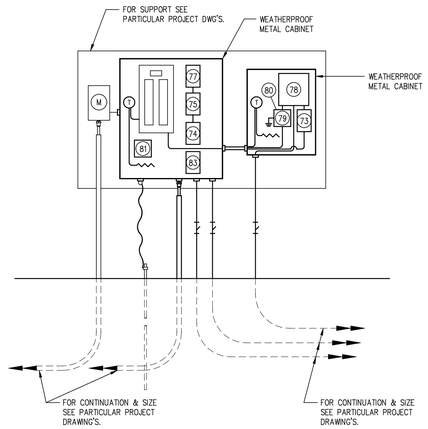
REVISIONS

DESIGN RVM
DRAWN CAD / SL
APPROVED

PROJECT TITLE
DISPENSER BUILDING FOR
JET A-1 / LSDL FUEL
AT TANK FARM

DRAWING TITLE
ELECTRICAL DIAGRAMS &
TERMINAL BLOCKS

SCALE: 1 : 1
DATE 94/02/21
DRAWING No. E-AVA-02A
REV. 1



FRONT VIEW

ARRANGEMENT OF EQUIPMENT IN METAL CABINETS

(SEE ALSO PARTICULAR PROJECT DRAWINGS FOR PARTICULARS)

2 P. MAIN BREAKER (AMPERAGE AS PER PARTICULAR PROJECT DWG'S.)

WATTS	DESCRIPTION	CCT	AMP	AMP	CCT	DESCRIPTION	WATTS	
138	BLD'G. OBSTRUCTION LIGHTS	1	15 A	15 A	2	SPARE		
450	BLD'G LIGHTING	3	15 A	15 A	4	BLD'G FAN 1/3 H.P.,DAMPER & WARNING LGT.	1130	LOCK-ON
3900	BLD'G TURBO A-1 PUMP 3 H.P.	5	40 A	20 A	6	BLD'G HEATING & CONTROLS	1500	
	" " "	7		20 A	8	POLYGAS CONTROL MODULE & TRANSF.	100	LOCK-ON
50	CONTROLS TURBO A-1 PUMP	9	15 A	20 A	10	SPARE		
		11			12			
		13			14			
		15			16			

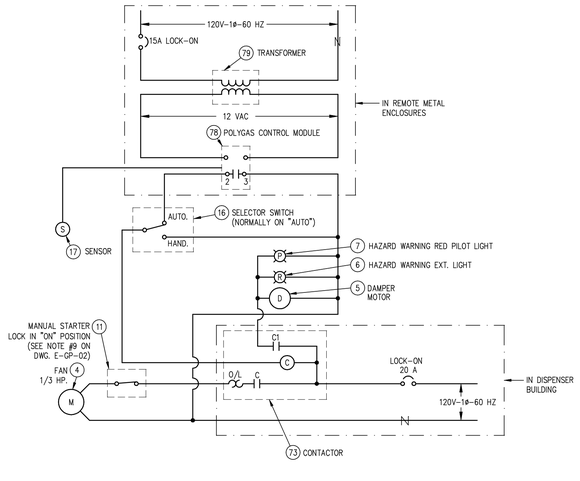
RESERVED SEE PARTICULAR PROJECT DRAWINGS

RESERVED SEE PARTICULAR PROJECT DRAWINGS

A B N

PANEL "B" AIRPORT

TOTAL LOAD : (SEE PARTICULAR PROJECT DRAWINGS)



CONTROL WIRING DIAGRAM FOR POLYGAS DETECTION & VENTILATION SYSTEMS

THIS SHEET TO BE USED AT LOCATIONS WHERE NO SHELTER BUILDING IS PROVIDED

LIST OF ITEMS FOR REMOTE ELECTRICAL EQUIPMENT

NO.	QTY.	DESCRIPTION
70	–	NOT REQUIRED AT AIRPORT LOCATIONS
71	–	" " " " "
72	–	" " " " "
73	1	AC. CONTACTOR FOR REMOTE VENTILATION SYSTEM c/w OVERLOAD HEATER 120 V., 1 ph., 2 POLES, SIZE 0, ELECTRICALLY HELD TYPE ALLEN-BRADLEY CAT.# 500-AAD920 c/w ONE N.O. AUXILIARY CONTACT
74	1	AC. CONTACTOR FOR REMOTE HEATER, 120 V., 1 ph., 2 POLES, 20 A., ELECTRICALLY HELD TYPE 1, GENERAL PURPOSE ENCLOSURE, ALLEN-BRADLEY CAT.# 500L-AAD92
75	1	CONTROL RELAY FOR REMOTE HEATER, ELECTRICALLY HELD AC., c/w 4 CONTACTS N.O. TYPE ALLEN-BRADLEY CAT.# 700-P400-A1 c/w EEMAC TYPE 1 ENCLOSURE CAT.# 700-N31S
76	–	NOT REQUIRED AT AIRPORT LOCATIONS
77	1	AUTOMATIC RESET TIMER FOR REMOTE HEATER, INTERVAL USE TYPE 500 SERIES, 120 VAC. RANGE 0 TO 5 HRS., 5 MIN. GRADUATION PARAGON ELECTRIC Co. MODEL # 501-142-00 c/w MOISTURE AND DUST RESISTANT CASE MODEL 500 AND EDP No. 41150 ENCLOSURE. TIMER SET AT 1 HR.
78	1	POLYGAS SURVEILLANCE & DETECTION SYSTEM WITH CONTROL MODULE, c/w CONNECTION BLOCKS, RELAY & DUSTPROOF CABINET, SEE SPEC'S.
79	1	CONTROL TRANSFORMER 120 V. / 12 VAC., SUPPLIED WITH ITEM 78
80	1	METAL ENCLOSURE, 150 Lg. x 150 H. x 100 D., CGE STANDARD TYPE "D"
81	1	FULL VOLTAGE MAGNETIC STARTER FOR REMOTE PUMP MOTOR, SIZE 1, 600 V. MAX. RATING, 1 ph., 60 Hz WITH 2 POLES WITH ONE TYPE W, OVERLOAD RELAY HEATER ELEMENT, COIL AT 120 V., c/w ONE N.O. AUXILIARY CONTACT. TYPE 1 GENERAL PURPOSE ENCLOSURE. ALLEN-BRADLEY CAT.# 509-BAAD WITH ACCESSORIES.
83	1	ALLEN-BRADLEY BULLETIN 500 AC CONTACTOR, HP RATED, 3 POLE, 240 VOLT, W/ AUXILLIARY CONTACT. TYPE 1 GENERAL ENCLOSURE. CAT#500-AAA930

* – EQUIPMENT TO BE INSTALLED INSIDE WEATHERPROOF METAL ENCLOSURE OUTSIDE THE HAZARDOUS AREA LIMITS.

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR NOTES REFER TO DWG. E-AVA-01
2. THESE DRAWINGS HAVE BEEN DESIGNED AROUND THE DIVISION METHOD FOR HAZARDOUS LOCATIONS AS SPECIFIED WITHIN SECTION 18 OF THE CANADIAN ELECTRICAL CODE. THE CONTRACTOR HAS THE OPTION TO REDEFINE THE HAZARDOUS LOCATIONS TO SUITE THE ZONE CLASSIFICATION IF SO DESIRED. THE CONTRACTOR SHALL MAKE SUCH CHANGES ONLY WITH THE PERMISSION OF THE ENGINEER.
10. FOR MATERIAL SPECIFICATIONS, SEE SPECIFICATIONS, DIVISION 13, SECTION 13230.

No	DATE	DESCRIPTION	CHK'D
1	04/10/07	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN KJ
APPROVED

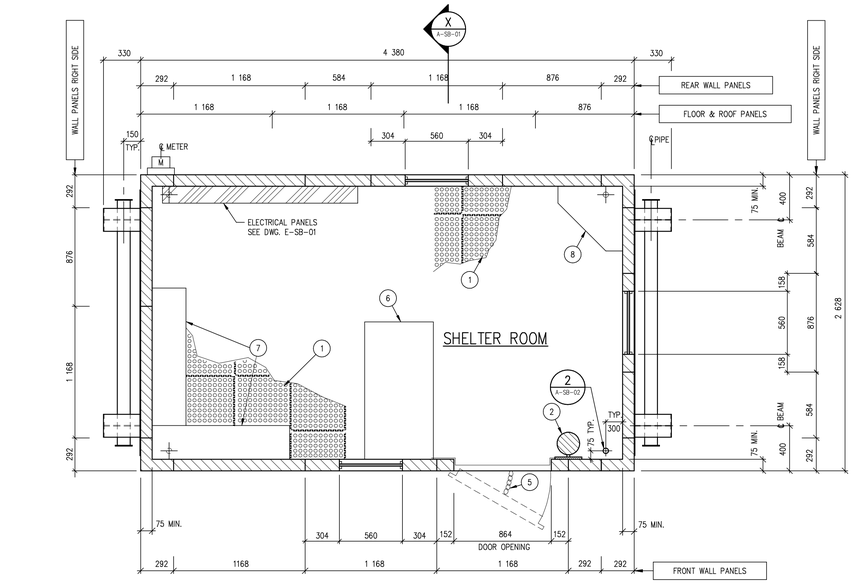
PROJECT TITLE

DISPENSER BUILDING FOR JET A-1 AVIATION FUEL AT AIRPORT AND JET A-1 / LSDL FUEL

DRAWING TITLE

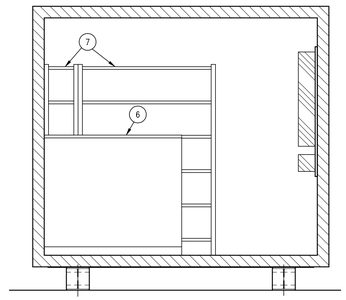
REMOTE ELECTRICAL EQUIPMENT FOR DISPENSER AT AIRPORT

SCALE: 1 : 25 OR AS SHOWN
DATE 94/02/18
DRAWING No. E-AVA-03
REV. 1



PLAN

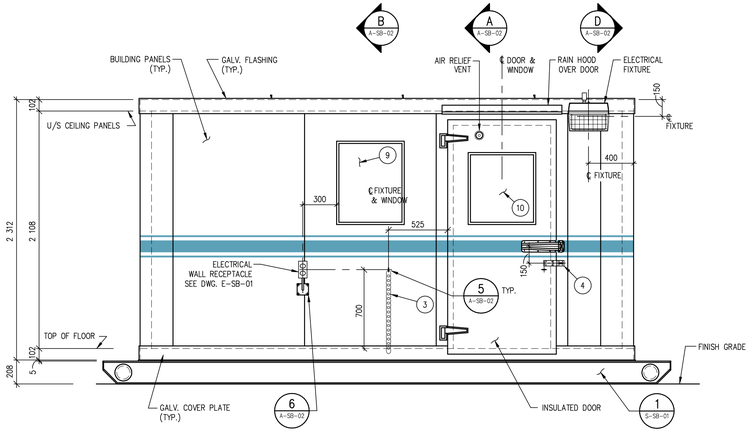
DETAIL 1 A-SB-01



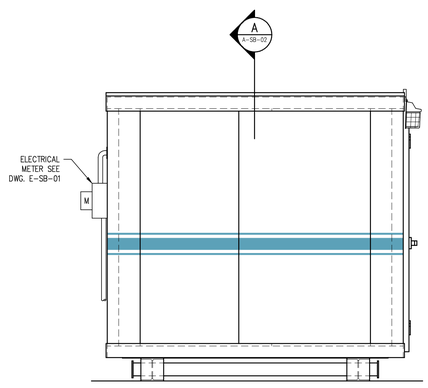
SECTION X A-SB-01

LEGEND:

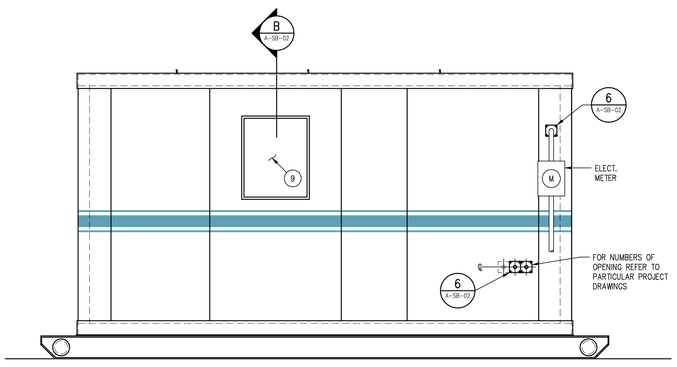
1. NON-SKID FLOOR SURFACNG SHEETS, SEE SPEC'S
2. FIRE EXTINGUISHER c/w BRACKET MOUNTED 100mm ABOVE FLOOR, SEE SPEC'S
3. CHAIN c/w HOOKS AT EXTERIOR DOOR, SEE SPEC'S
4. HASP, SEE SPEC'S
5. HEAVY DUTY SPRING BUMPER CHAIN ON DOOR, SEE SPEC'S
6. DESK, STAND-UP, SEE SPEC'S AND DWG A-SB-03
7. METAL SHELVING (2 SECTIONS), SEE SPEC'S AND DWG A-SB-03
8. METAL SHELVE FOR TV OR RADIO SEE DWG A-SB-03
9. DOUBLE INSULATED THERMOCLEAR POLYCARBONATE SHEETS & ALUM. FRAME, SEE SPEC'S.
10. DOUBLE INSULATED THERMOCLEAR POLYCARBONATE SHEETS & ALUM. FRAME, SEE SPEC'S.



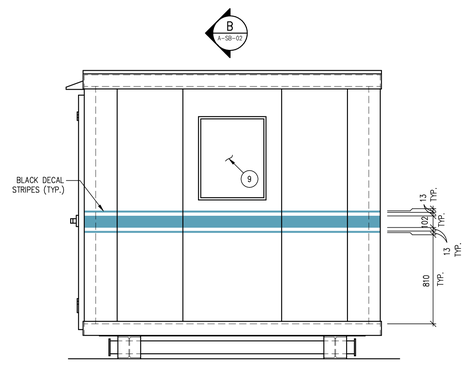
FRONT ELEVATION



LEFT SIDE ELEVATION



REAR ELEVATION



RIGHT SIDE ELEVATION

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
3. FOR OTHER NOTES AND DETAILS REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13229.
4. END WINDOW TO FACE DISPENSING AREA. MAY REQUIRE MIRROR IMAGE BUILDING LAYOUT.
5. WALL, ROOF AND FLOOR PANELS MAY BE 75mm THICK MINIMUM PROVIDED INSULATION IS ADEQUATE.

No	DATE	DESCRIPTION	CHK'D
1	04/10/08	UPDATED	REE

REVISIONS

DESIGN EDZ
DRAWN KJ
APPROVED

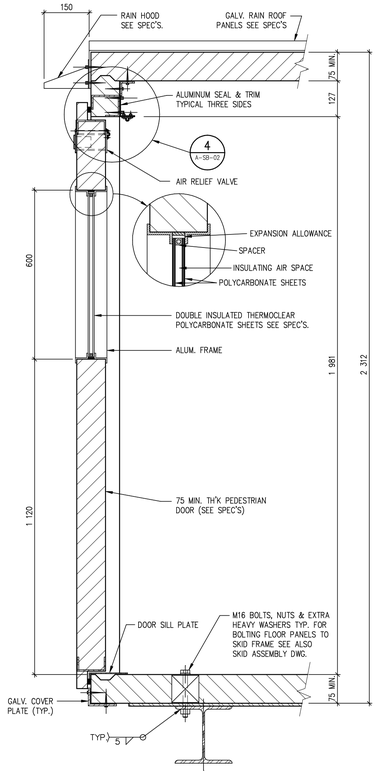
PROJECT TITLE

OPERATOR'S SHELTER BUILDING

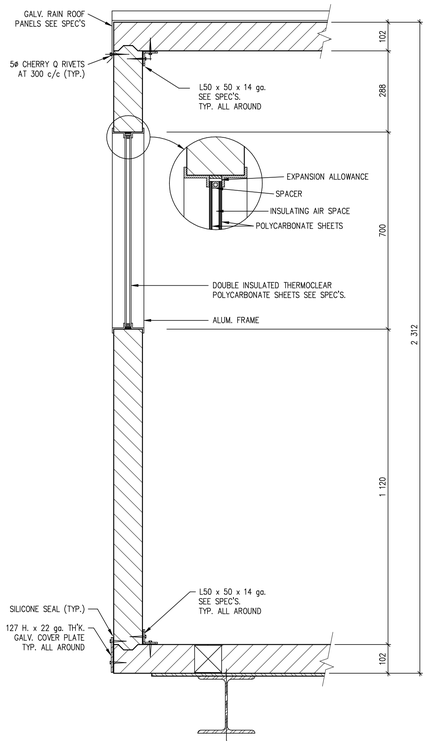
DRAWING TITLE

FLOOR PLAN & ELEVATIONS

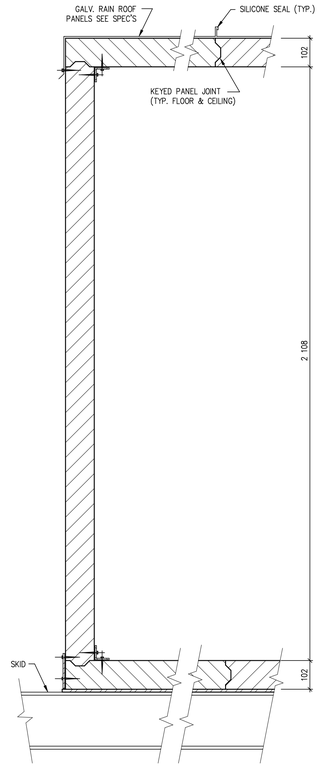
SCALE: 1 : 25
DATE 94/04/29
DRAWING No. A-SB-01
REV. 1



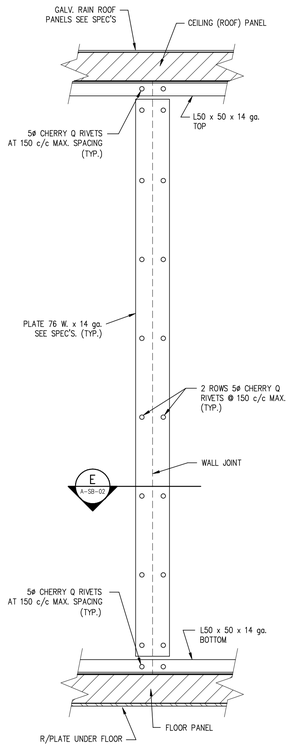
SECTION A
1 : 10 A-SB-02



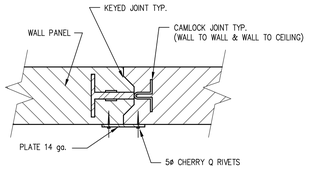
SECTION B
1 : 10 A-SB-02



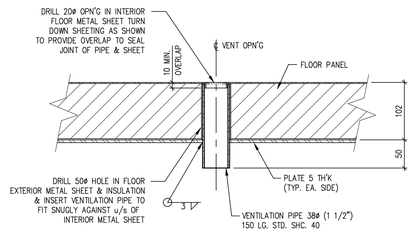
SECTION C
1 : 10 A-SB-02



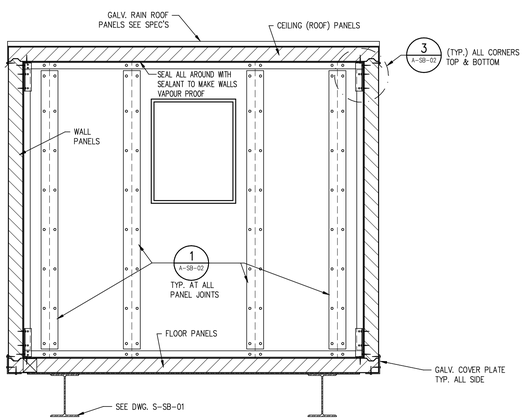
DETAIL 1
1 : 10 A-SB-02



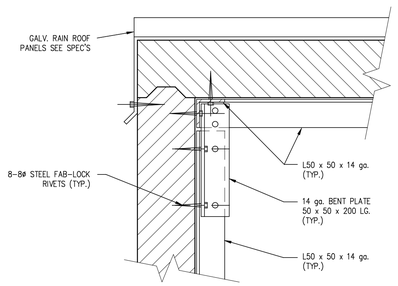
SECTION E
1 : 5 A-SB-02



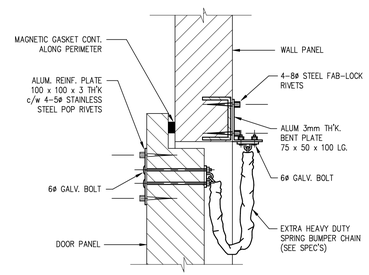
DETAIL 2
1 : 5 A-SB-02 VENTILATION TRHOUGH FLOOR



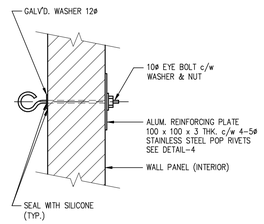
SECTION D
1 : 20 A-SB-02



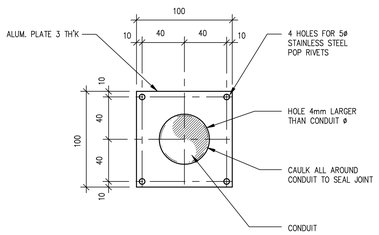
DETAIL 3
1 : 5 A-SB-02



DETAIL 4
1 : 5 A-SB-02



DETAIL 5
1 : 5 A-SB-02 EYE BOLT TRHOUGH WALL & DOOR



DETAIL 6
1 : 5 A-SB-02 REINFORCING PLATES AT CONDUITS THROUGH WALL

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
3. FOR OTHER NOTES AND DETAILS REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13229.
4. END WINDOW TO FACE DISPENSING AREA. MAY REQUIRE MIRROR IMAGE BUILDING LAYOUT.
5. WALL, ROOF AND FLOOR PANELS MAY BE 75mm THICK MINIMUM PROVIDED INSULATION IS ADEQUATE.
6. DEPENDING ON BUILDING FABRICATION THE REINFORCING STRIPS MAY NOT BE NECESSARY.

No	DATE	DESCRIPTION	CHK'D
1	04/10/08	UPDATED	REE

REVISIONS

DESIGN EDZ
DRAWN KJ
APPROVED

PROJECT TITLE
OPERATOR'S SHELTER BUILDING

DRAWING TITLE
SECTIONS & DETAILS

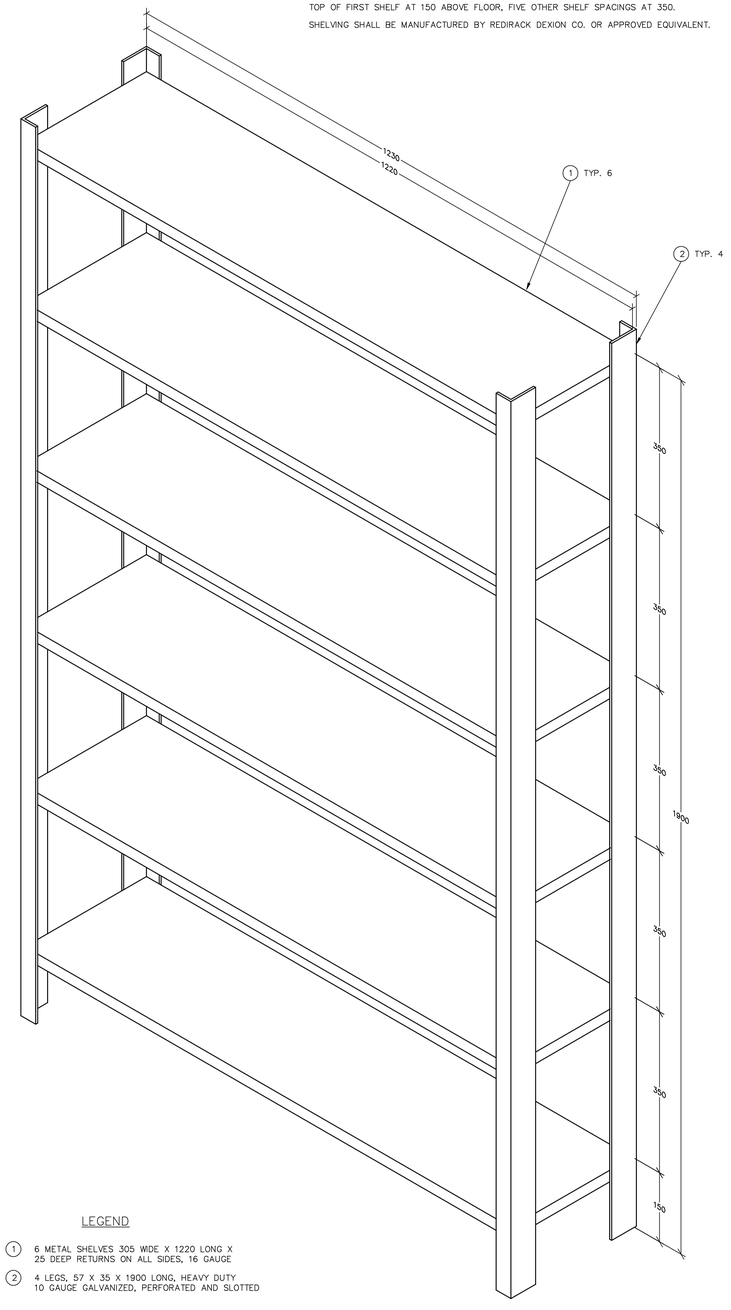
SCALE: 1 : 10 OR AS SHOWN
DATE 94/02/18
DRAWING No. A-SB-02
REV. 1

FIGURE 1: METAL SHELVING

ASSEMBLY

SHELVES TO BE BOLTED TO LEGS AT EACH CORNER WITH
10 DIA. X 19 LONG HEX. HEAD MACHINE BOLTS AND HEX. NUTS.
TOP OF FIRST SHELF AT 150 ABOVE FLOOR, FIVE OTHER SHELF SPACINGS AT 350.

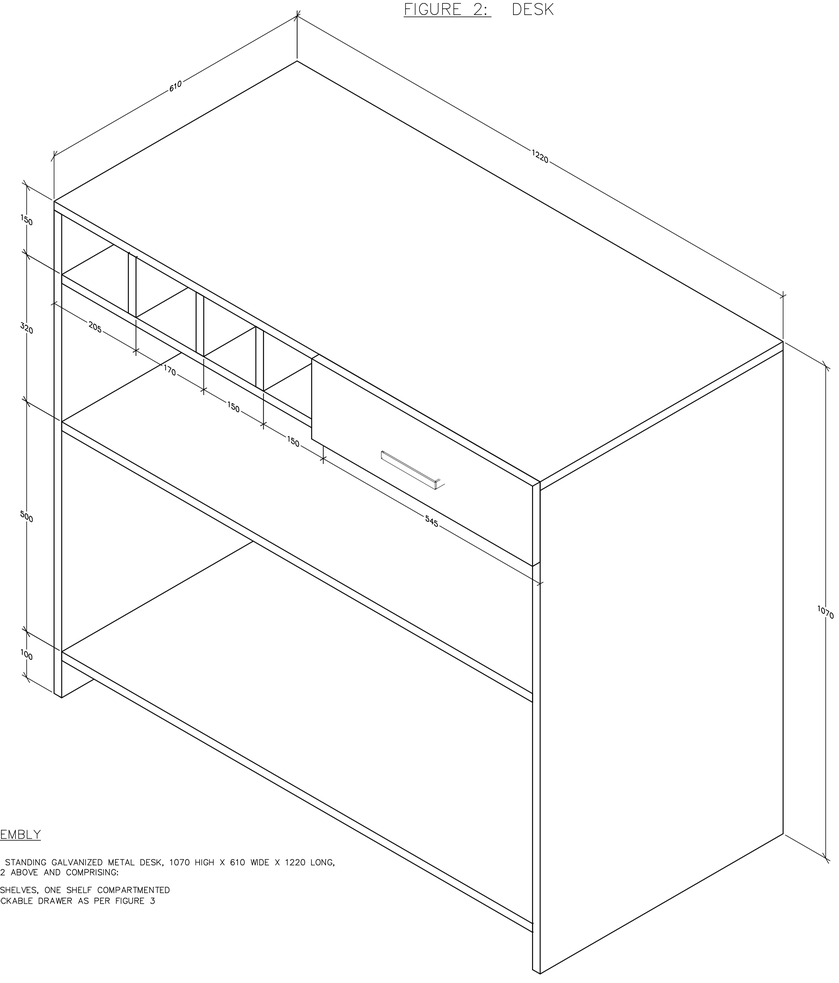
SHELVING SHALL BE MANUFACTURED BY REDIRACK DEXION CO. OR APPROVED EQUIVALENT.



LEGEND

1. 6 METAL SHELVES 305 WIDE X 1220 LONG X 25 DEEP RETURNS ON ALL SIDES, 16 GAUGE
2. 4 LEGS, 57 X 35 X 1900 LONG, HEAVY DUTY 10 GAUGE GALVANIZED, PERFORATED AND SLOTTED

FIGURE 2: DESK



ASSEMBLY

PROVIDE A FREE STANDING GALVANIZED METAL DESK, 1070 HIGH X 610 WIDE X 1220 LONG, AS PER FIGURE 2 ABOVE AND COMPRISING:

- THREE SHELVES, ONE SHELF COMPARTMENTED
- ONE LOCKABLE DRAWER AS PER FIGURE 3

FIGURE 3: DRAWER

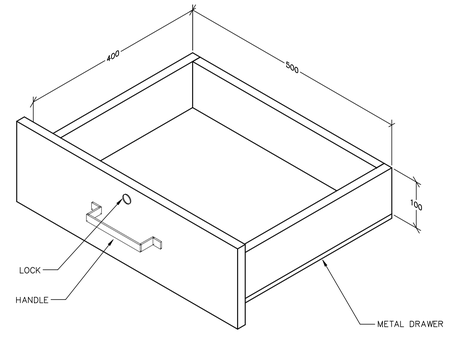
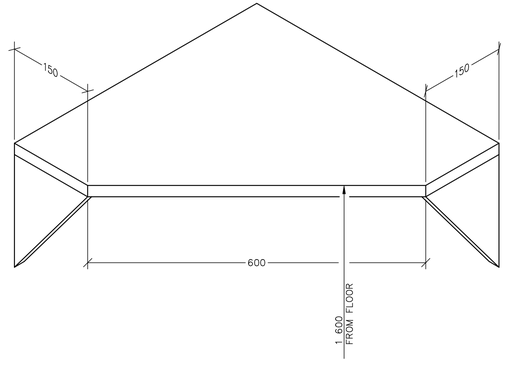


FIGURE 4: SHELVE



Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. SEE SPECIFICATIONS SECTION 13229 FOR ADDITIONAL DETAILS.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

No	DATE	DESCRIPTION	CHK'D
1	04/06/24	UPDATED	REE

REVISIONS

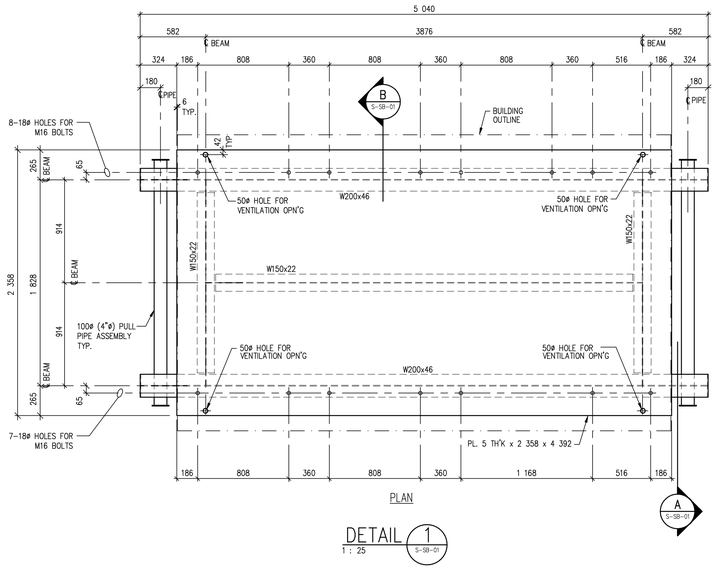
DESIGN AWM
DRAWN KJ
APPROVED

PROJECT TITLE
OPERATOR'S SHELTER BUILDING

DRAWING TITLE
DESK & SHELVING DETAILS

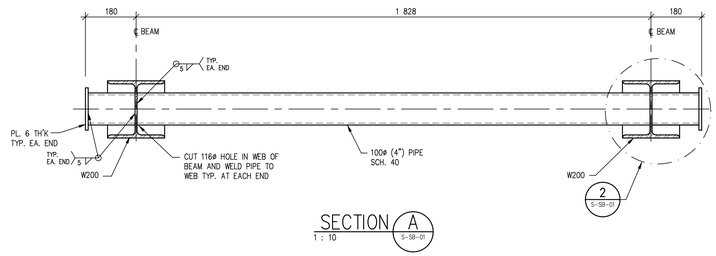
SCALE: 1 : 5 OR AS SHOWN
DATE 98/03/22

DRAWING No. A-SB-03
REV. 1

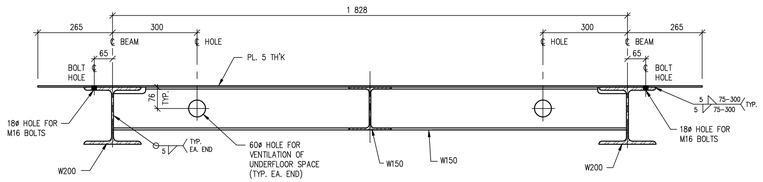


PLAN

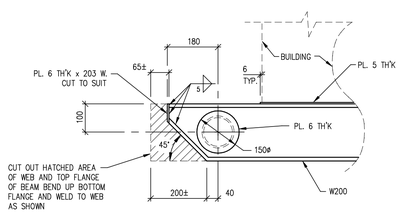
DETAIL 1
1 : 25
S-SB-01



SECTION A
1 : 10
S-SB-01



SECTION B
1 : 10
S-SB-01



DETAIL 2
1 : 10
S-SB-01

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. WELDING AT PLATES FLUSH TO U/S OF FLOOR PANELS SHALL BE GROUND SMOOTH TO PERMIT PROPER BEARING OF PANELS TO PLATES.
3. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
4. ALL BOLTING SHALL BE WITH MACHINE BOLTS TO ASTM A325 GALVANIZED HEX. HEADS AND NUTS. ALL SCREWS SHALL BE METAL SCREWS GALVANIZED, SIZES AS SHOWN LENGTHS AS REQUIRED.
5. NUMBER AND SPACINGS OF PANEL MOUNTING HOLES COULD VARY TO SUIT SIZE OF FLOOR PANELS. CONTRACTOR TO VERIFY WITH SHOP DRAWINGS OF PANEL MANUFACTURER FOR FINAL PANEL SIZES PRIOR TO FABRICATION OF SKID FRAME.
6. FOR OTHER NOTES AND DETAILS REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13229.

No	DATE	DESCRIPTION	CHK'D
1	04/10/08	UPDATED	REE

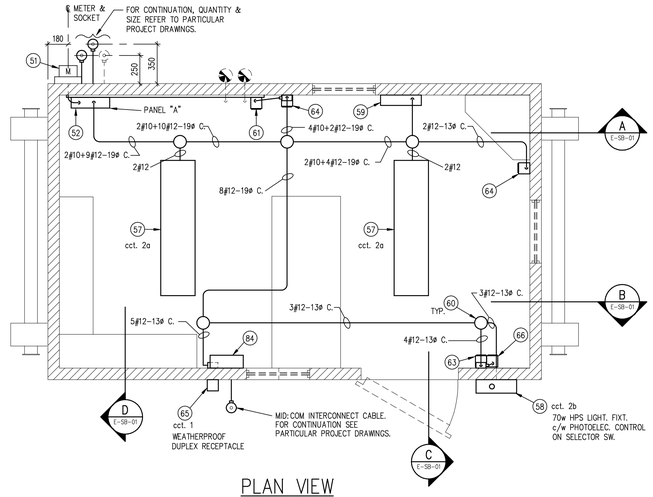
REVISIONS

DESIGN EDZ
DRAWN KJ
APPROVED

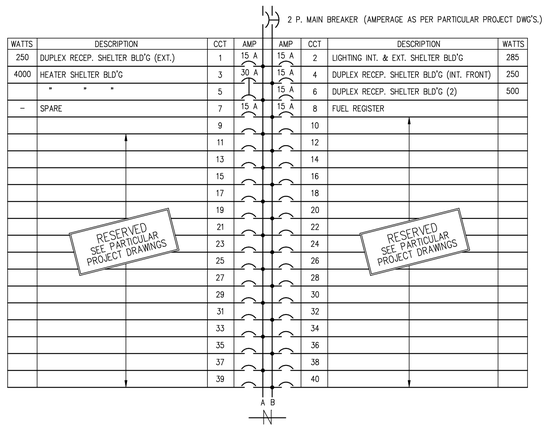
PROJECT TITLE
OPERATOR'S SHELTER BUILDING

DRAWING TITLE
SKID ASSEMBLY PLAN, SECTION & DETAILS

SCALE: 1 : 25 OR AS SHOWN
DATE 94/02/18
DRAWING No. S–SB–01
REV. 1



PLAN VIEW



WATTS	DESCRIPTION	CCT	AMP	AMP	CCT	DESCRIPTION	WATTS
250	DUPLEX RECEP. SHELTER BLD'G (EXT.)	1	15 A	15 A	2	LIGHTING INT. & EXT. SHELTER BLD'G	285
4000	HEATER SHELTER BLD'G	3	30 A	15 A	4	DUPLEX RECEP. SHELTER BLD'G (INT. FRONT)	250
	" " "	5		15 A	6	DUPLEX RECEP. SHELTER BLD'G (2)	500
–	SPARE	7	15 A	15 A	8	FUEL REGISTER	
		9			10		
		11			12		
		13			14		
		15			16		
		17			18		
		19			20		
		21			22		
		23			24		
		25			26		
		27			28		
		29			30		
		31			32		
		33			34		
		35			36		
		37			38		
		39			40		

PANEL "A"

120/240v – 1ø – 3W – S/N – 200A MAINS – 40 CCT'S

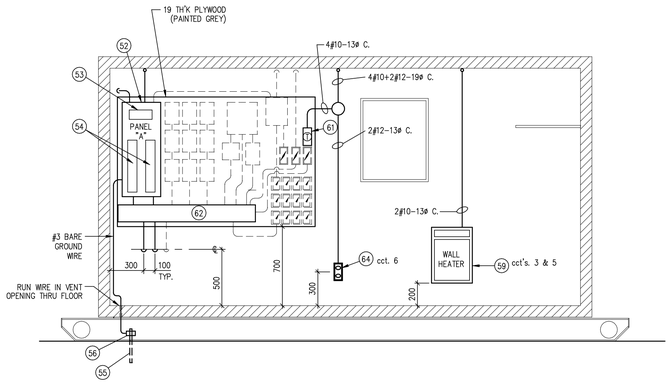
TOTAL LOAD : (SEE PARTICULAR PROJECT DRAWINGS)

LIST OF SHELTER BLDG ELECTRICAL & GROUNDING EQUIPMENT

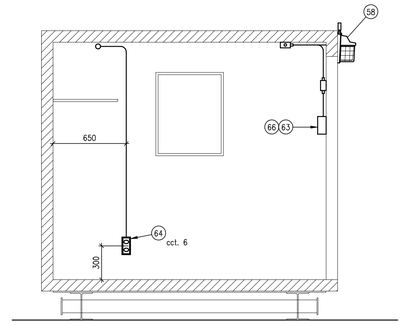
NO.	QTY.	DESCRIPTION
50	1	ENTRANCE CAP (AT ELECTRICAL POWER SERVICE POLE) SEE PARTICULAR PROJECT DWG'S.
51	1	METER SOCKET OUTDOOR TYPE KING SIZE 200 AMP, 120/240V, 1ph, 3 WIRE, UNDERGROUND SERVICE AND AS PER LOCAL REQUIREMENTS. METER BY UTILITY CO.
52	1	COMBINATION SERVICE ENTRANCE PANELBOARD AS SHOWN, CUTLER-HAMMER TYPE POW-R-LINE1, CAT.# P1B1A2-42ED, SURFACE MOUNT c/w DOOR
53	1	MAIN BREAKER BOLT-ON TYPE, 2 POLE, CUTLER-HAMMER CAT.# EDH2225 FOR ITEM 52 (AMPS. AS PER P.P.D.)
54	AS REQ'D.	DISTRIBUTION BREAKERS, 10,000 A.I.C., BOLT-ON TYPE, AMP. RATING AND No. OF POLES AS PER DISTRIBUTION PANEL DETAILS, CUTLER-HAMMER TYPE BAB FOR ITEM 52
55	1	GROUND ROD. 19ø X 3000 LG. C.L.M. KOPER – KLAD # 9960-K
56	1	BURNDY GROUND CONNECTOR, TYPE GAR
57	2	FLUORESCENT LIGHTING FIXTURE, ANTI-VANDALISM, POLYCARBONATE LENS FALE-SAFE CAT. No FSRC-644-120V c/w 2 x 32 WATT FLUORESCENT LAMPS, SURFACE MOUNTED
58	1	HIGH PRESSURE SODIUM EXTERIOR LIGHTING FIXTURE GREY, WALL PACKETTE, 70 W, 120 V c/w BALLAST, PHOTOELECTRIC CONTROL, POLYCARBONATE COVER AND PROTECTION GRILLE, HOLOPHANE MODEL WP2 WALL PACKETTE c/w 70 W, H.P.S. LAMP
59	1	WALL HEATER 4 KW SEE SPEC'S.
60	AS REQ'D.	CAST JUNCTION BOX, TYPE CROUSE-HINDS "VXF" SERIES, SIZE TO SUIT c/w COVER.
61	1	LINE VOLTAGE THERMOSTAT, SET AT 15° C., CL. AT 1500 mm ABOVE FLOOR, SEE SPEC'S.
62	1	TROUGH GENERAL PURPOSE 150 H. x 100 D. x 914 Lg., TYPE BEL CAT.# T373 (NO LUGS)
63	1	LIGHT SWITCH, FS BOX WITH SPECIFICATION GRADE QUIET A.C. SWITCH, SINGLE POLE, BROWN, 15 A., 120 V., SIDE WIRED, HUBBELL CAT. # 1201 AND FS TYPE COVER.
64	2	FS BOX WITH SPECIFICATION GRADE, 125 V., 2 POLES, 3 WIRES, 15 A., DUPLEX RECEPTACLE, BROWN, SIDE WIRED, HUBBELL CAT. # 5262 AND FS TYPE COVER.
65	1	FS BOX WITH SPECIFICATION GRADE, 125 V., 2 POLES, 3 WIRES, 15 A., DUPLEX RECEPTACLE, BROWN, SIDE WIRED, HUBBELL CAT.# 5262 AND WEATHERPROOF COVER WITH SPRING DOORS & GASKET, CROUSE-HINDS CAT.# DS70G
66	1	SELECTOR SWITCH, 3 POSITIONS, HAND-OFF-AUTO, TYPE 1, GENERAL PURPOSE ENCLOSURE, ALLEN-BRADLEY CAT. # 800S-R3SX
67	AS REQ'D	ELBOW TYPE CROUSE-HINDS "LB" SERIES SIZE TO SUIT
68	AS REQ'D	JUNCTION BOX TYPE CROUSE-HINDS "GUB" SERIES, SIZE TO SUIT
69	1	DOUBLE GANG FS BOX WITH SPECIFICATION GRADE, QUIET AC SWITCH, SINGLE POLE, BROWN, 15A, 120V, SIDE WIRED, HUBBLE CAT #1201; 125 V., 2 POLE, 3 WIRE, 15 A., DUPLEX RECEPTACLE, BROWN, SIDE WIRED, HUBBELL CAT. # 5262 AND FS TYPE COVER.
83	1	ALLEN-BRADLEY BULLETIN 500 AC CONTACTOR, HP RATED, 3 POLE, 240 VOLT, W/ AUXILLIARY CONTACT. TYPE 1 GENERAL ENCLOSURE. CAT#500-AAA930
84	1	MID:COM 8000 XP INTERCONNECT PANEL
85	1	MID:COM REGISTER PRINTER

NOTES

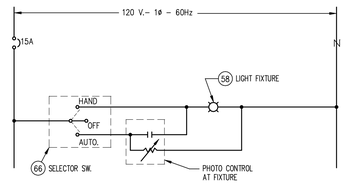
1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES.
2. SHELTER BLD'G TO BE CLASSIFIED ORDINARY LOCATION. ALL SURFACE WIRING TO BE INSTALLED IN EMT OR RIGID CONDUIT. WIRING TO BE RW90-XLPE, COPPER, 600 V. INSULATION, MIN. SIZE #12 OR AS INDICATED. CONDUCTORS #8 AND LARGER SHALL BE STRANDED.
3. MOUNT ALL ELECTRICAL EQUIPMENT SO THAT CONNECTIONS CAN BE EASILY EXPOSED FOR SERVICE.
4. PROVIDE UNIONS, COUPLINGS, PLUGS AND BUSHINGS AS REQUIRED.
5. ALL WIRES SHALL BE IDENTIFIED AT EQUIPMENT AND AT PANEL
6. ALL SWICTHES, STARTERS, THERMOSTAT, RELAYS, CONTACTORS TIMER, ETC.... SHALL BE IDENTIFIED WITH LAMICOID LABELS FASTENED TO BOXES.
7. FOR LAYOUT OF ELECTRICAL EQUIPMENT AT ENTRANCE REFER TO PARTICULAR PROJECT DRAWINGS. (P.P.D.)
8. BOXES & ACCESSORIES SHALL BE AS PER CROUSE-HINDS MANUFACTURE OR APPROVED EQUIVALENT
9. FOR OTHER NOTES AND DETAILS REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13229.
10. BUILDING SKID SHALL BE GROUNDED AT SITE SEPARATELY FROM THE ELECTRICAL NEUTRAL GROUNDING INSTALLATION.
11. TO ALL NUMBER OF WIRES SHOWN IN CONDUITS, CONTRACTOR SHALL ADD ONE GROUND WIRE AS PER CODE REQUIREMENTS.
12. FOR SIZES OF CONDUITS & SIZE, NUMBER & TYPE OF WIRING FOR SERVICE ENTRANCE, REFER TO PARTICULAR PROJECT DRAWINGS & SPECIFICATIONS, DIVISION 13, SECTION 13229.



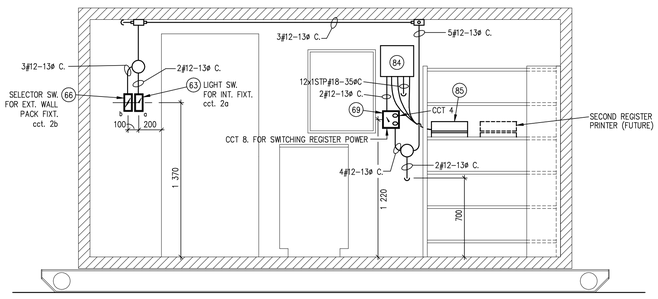
SECTION A E-SB-01



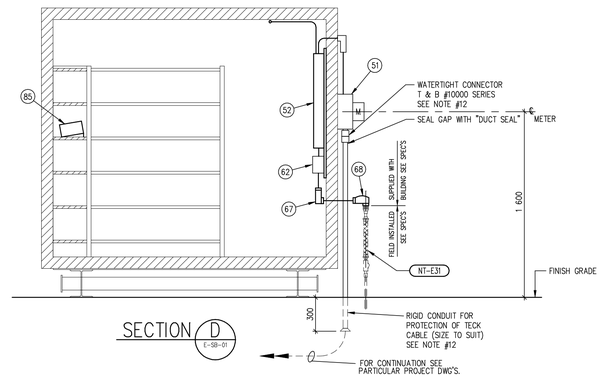
SECTION C E-SB-01



SCHEMATIC CONTROL DIAGRAM
EXTERIOR LIGHTING AT SHELTER BLDG.



SECTION B E-SB-01



SECTION D E-SB-01

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

No	DATE	DESCRIPTION	CHK'D
1	04/10/08	UPDATED	REE

REVISIONS

DESIGN RVM
DRAWN KJ
APPROVED

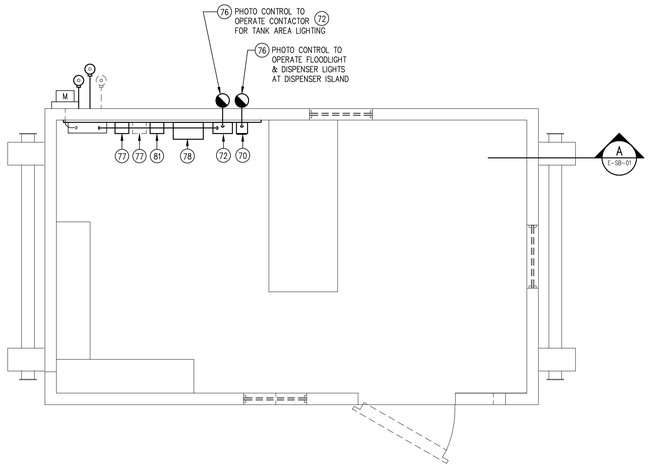
PROJECT TITLE

OPERATOR'S SHELTER BUILDING

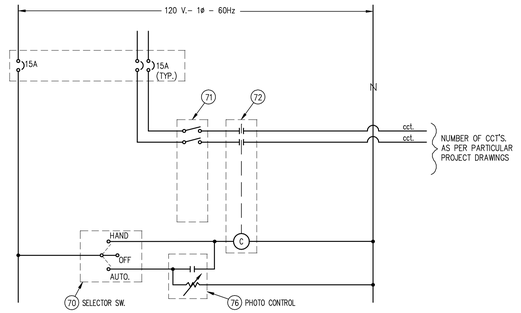
DRAWING TITLE

ELECTRICAL PLAN, ELEVATIONS, SCHEMATICS & DETAILS

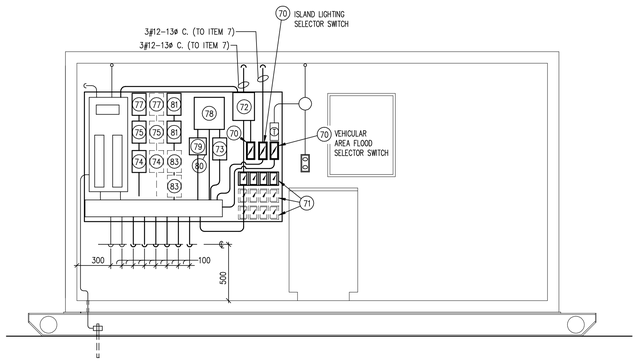
SCALE: 1 : 25 OR AS SHOWN
DATE 94/02/18
DRAWING No. E-SB-01
REV. 1



PLAN VIEW

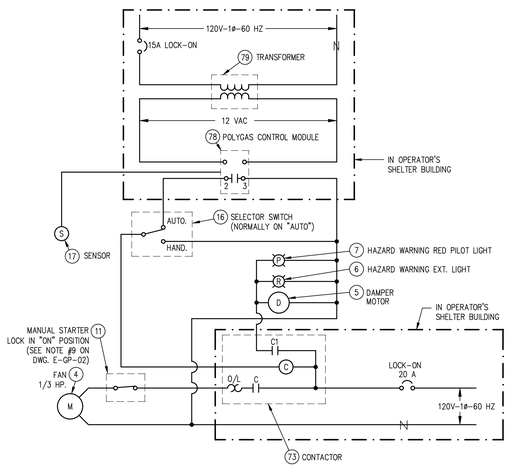


SCHEMATIC CONTROL DIAGRAM
LIGHTING IN TANK AREA
(SEE NOTE #2)



SECTION A
E-SB-01

SCHEMATIC CONTROL DIAGRAM
LIGHTING AT DISPENSER ISLAND
(SEE NOTE #2)



CONTROL WIRING DIAGRAM FOR
POLYGAS DETECTION & VENTILATION SYSTEMS
(SEE NOTE #3)

LIST OF ITEMS FOR REMOTE ELECTRICAL EQUIPMENT

	NO.	QTY.	DESCRIPTION
	4	1	1/3 HP. FAN MOTOR, 115 V. 1 Ph. 60 Hz., SEE SPEC'S.
	5	1	DAMPER ACTUATOR MOTOR, SEE SPEC'S.
	6	1	HAZARD WARNING LIGHT FIXTURE, SEE SPESC'S.
	7	1	HAZARD WARNING RED PILOT LIGHT, SEE SPEC'S.
	11	1	MANUAL STARTER SWITCH, FOR HOSE REEL & EXHAUST SEE SPEC'S. & NOTE #9
	16	1	SELECTOR SWITCH HAND-AUTO, c/w ENCLOSURE,TYPE ALLEN-BRADLEY CAT.# 800H-R2HA7
	17	1	SENSOR & CROUSE-HINDS GUJT26 MOUNTING BOX, SEE SPEC'S.
	70	* *	SELECTOR SWITCH, 3 POSITIONS, HAND – OFF – AUTO, TYPE 1, GENERAL PURPOSE ENCLOSURE, ALLEN-BRADLEY CAT. # 800S-R3SX
	71	* *	FOUR-GANG SWITCHES, FS BOX WITH SPECIFICATION GRADE, SINGLE POLE SWITCH, 15 A., 120 V., HUBBELL CAT.#1201 + FS BOX CROUSE-HINDS, CAT. #FD04 + COVER CAT. #DS32
	72	1	A.C. CONTACTOR FOR TANK AREA LIGHTING, 120 V, 20 A., ELECTRICALLY HELD, TYPE 1 GENERAL PURPOSE ENCLOSURE, ALLEN-BRADLEY BULLETIN 500L (NO. OF POLES AS PER PARTICULAR PROJECT DWG'S.
*	73	* *	AC. CONTACTOR FOR REMOTE VENTILATION SYSTEM c/w OVERLOAD HEATER 120 V., 1 ph., 2 POLES, SIZE 0, ELECTRICALLY HELD TYPE ALLEN-BRADLEY CAT.# 500-AAD920 c/w ONE N.O. AUXILIARY CONTACT
*	74	* *	AC. CONTACTOR FOR REMOTE HEATER, 120 V., 1 ph., 2 POLES, 20 A., ELECTRICALLY HELD TYPE 1, GENERAL PURPOSE ENCLOSURE, ALLEN-BRADLEY CAT.# 500L-AAD92
*	75	* *	CONTROL RELAY FOR REMOTE HEATER, ELECTRICALLY HELD AC., c/w 4 CONTACTS N.O. TYPE ALLEN-BRADLEY CAT.# 700-P400-A1 c/w EEMAC ENCLOSURE CAT.# 700-N31S
	76	* *	WEATHERPROOF PHOTO CONTROL, TURN LOCK, TYPE TORK CAT.# 2005, 120 V., 1000 W. c/w RECEPTACLE AND MOUNTING BRACKET MODEL # 2421
*	77	* *	AUTOMATIC RESET TIMER FOR REMOTE HEATER, INTERVAL USE TYPE 500 SERIES, 120 VAC. RANGE 0 TO 5 HRS., 5 MIN. GRADUATION PARAGON ELECTRIC CO. MODEL# 501-142-00 c/w MOISTURE AND DUST RESISTANT CASE MODEL 500 AND EDP.# 41150 ENCLOSURE TIMER SET AT 1 HR.
*	78	1	POLYGAS SURVEILLANCE & DETECTION SYSTEM WITH CONTROL MODULE, c/w CONNECTION BLOCKS, RELAY & DUSTPROOF CABINET. SEE SPEC'S. & NOTE #4
*	79	1	CONTROL TRANSFORMER 120 VAC. / 12 VAC., SUPPLIED WITH ITEM 78
*	80	1	METAL ENCLOSURE, 150 Lg. x 150 H. x 100 D., CGE STANDARD TYPE "D"
*	81	* *	FULL VOLTAGE MAGNETIC STARTER FOR REMOTE PUMP MOTOR, SIZE 1, 600 V. MAX. RATING, 1 ph., 60 Hz WITH 2 POLES WITH ONE TYPE W, OVERLOAD RELAY HEATER ELEMENT, COIL AT 120 V., c/w ONE N.O. AUXILIARY CONTACT & GREEN PILOT LIGHT IN DOOR OF ENCLOSURE, TYPE 1 GENERAL PURPOSE ENCLOSURE. ALLEN-BRADLEY CAT.# 509-BAXD WITH ACCESORIES.
	83	1	ALLEN-BRADLEY BULLETIN 500 AC CONTACTOR, HP RATED, 3 POLE, 240 VOLT, W/ AUXILLIARY CONTACT. TYPE 1 GENERAL ENCLOSURE. CAT#500-AAA830

* – ITEMS SUPPLIED WITH DISPENSER BUILDING(S) & INSTALLED BY CONTRACTOR IN OPERATOR'S SHELTER BUILDING.

* * – QTY. AS REQ'D. BY PARTICULAR PROJECT DRAWINGS. (P.P.D.) & NOTES #4 & 5

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR NOTES REFER TO E-SB-01
2. FOR NUMBER & TYPE OF LIGHTING FIXTURES AT DISPENSER ISLAND & TANK AREA REFER TO PARTICULAR PROJECT DWG'S.
3. ONE CONTACTOR 73 REQUIRED FOR EACH DISPENSER BLDG.
4. ONE POLYGAS CONTROL MODULE 78 REQUIRED FOR EACH DISPENSER. WHEN MORE THAN ONE DISPENSER BLDG. IS INSTALLED AT SAME SITE THE REQUIRED NUMBER OF CONTROL MODULES CAN BE PURCHASED WITH ALL MODULES IN SAME CABINET. ONLY ONE TRANSFORMER 79 AND BOX 80 REQUIRED PER SITE.
5. FOR OTHER NOTES AND DETAILS REFER TO PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13229.

No	DATE	DESCRIPTION	CHK'D
1	04/10/08	UPDATED	REE

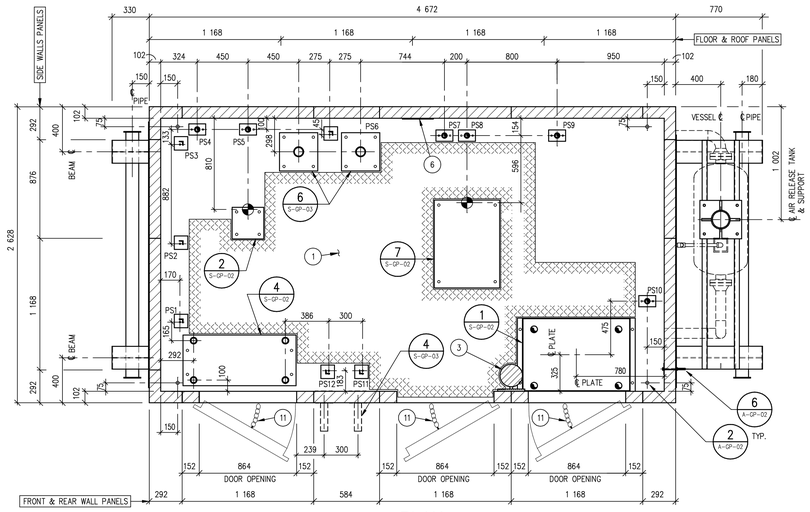
REVISIONS

DESIGN RVM
DRAWN KJ
APPROVED

PROJECT TITLE
OPERATOR'S SHELTER BUILDING

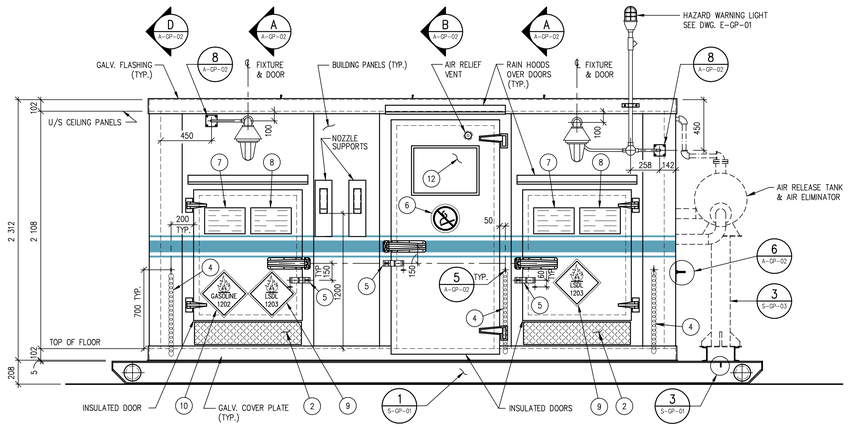
DRAWING TITLE
ELECTRICAL PLAN, ELEVATION & SCHEMATICS

SCALE: 1 : 25 OR AS SHOWN
DATE 94/02/18
DRAWING No. E-SB-02
REV. 1

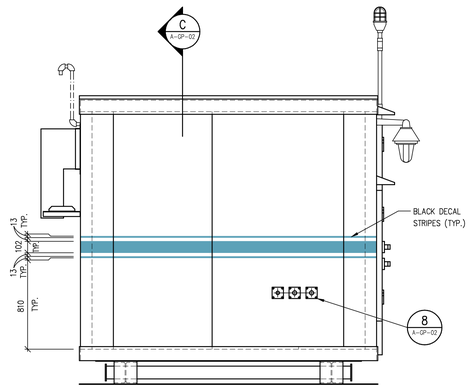


PLAN

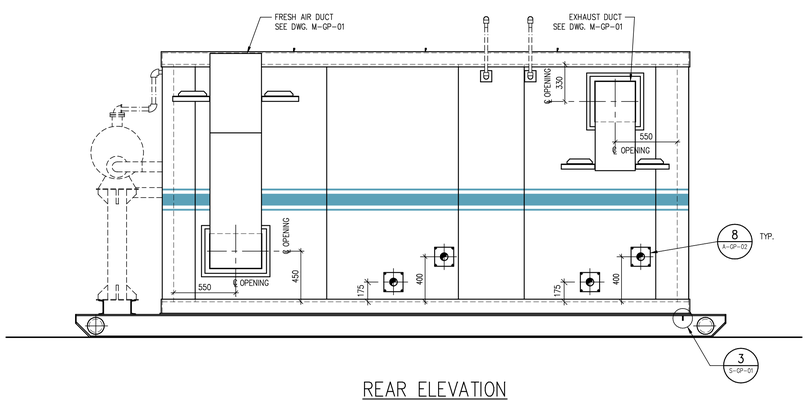
DETAIL 1 A-GP-01



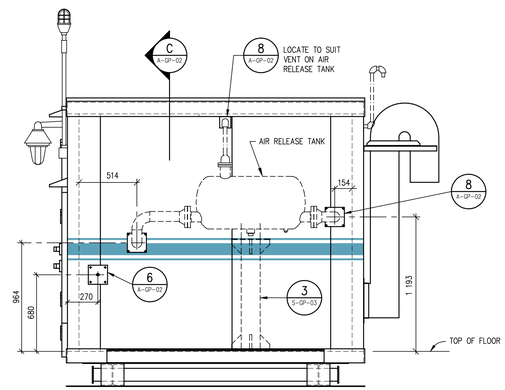
FRONT ELEVATION



LEFT SIDE ELEVATION



REAR ELEVATION



RIGHT SIDE ELEVATION

LEGEND:

1. NON-SKID ALUMINUM "SAFETY TREAD" FLOORING SHEETS, SEE SPEC'S. (KEEP NUMBER OF PLATES TO A MINIMUM)
2. ALUMINUM CHECKERED PLATE, ALCOA CO. STYLE #C-102 OR EQUIV., 250W x 950LG. x 3 THK, (2 REQ'D) POP RIVETTED TO WALL PANELS AT 150 c/c MAX. SPACING AT PERIPHERY
3. FIRE EXTINGUISHER c/w BRACKET MOUNTED 100 ABOVE FLOOR – (1 REQ'D), SEE SPEC'S
4. HEAVY DUTY CHAIN c/w HOOKS, TYPICAL AT DOORS, SEE SPEC'S (3 REQ'D.)
5. HASP – (3 REQ'D), SEE SPEC'S
6. "NO SMOKING" SIGN – (2 REQ'D), SEE SPEC'S
7. "NO SMOKING/STOP YOUR MOTOR" SIGN (IN ENGLISH) – (2 REQ'D), SEE SPEC'S
8. "NO SMOKING/STOP YOUR MOTOR" SIGN (IN LOCAL TRANSLATION) – (2 REQ'D), SEE SPEC'S
9. UN NUMBER 1203 "LSDL" SIGN, SEE SPEC'S
10. UN NUMBER 1202 "GASOLINE" SIGN, SEE SPEC'S
11. HEAVY DUTY SPRING BUMPER CHAIN ON ALL DOORS, SEE SPEC'S (3 REQ'D)
12. DOUBLE INSULATED THERMOCLEAR POLYCARBONATE SHEETS & ALUM. FRAME.
13. "CLOSE VALVE" SIGN., SEE SPEC'S
14. SEAL ALL FLOOR JOINTS WITH OIL RESISTANT CAULKING.
15. POST PROCESS FLOW SHEET AND OPERATING INSTRUCTIONS.

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. FOR DETAILS OF FRESH AIR INTAKE & EXHAUST DUCTS SEE DRAWING M-GP-01
3. FOR OTHER NOTES AND DETAILS REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13227.
4. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
5. LSDL IS LOW SULPHUR DIESEL.

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

No	DATE	DESCRIPTION	CHK'D
1	04/10/05	UPDATED	LR

REVISIONS

DESIGN EDZ
DRAWN KJ
REVISED REE

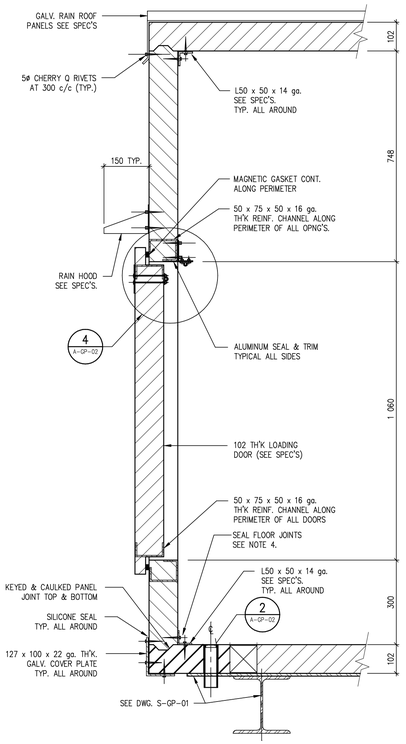
PROJECT TITLE

DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

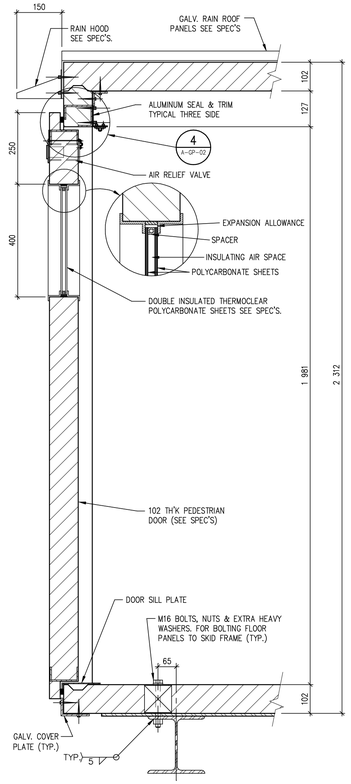
DRAWING TITLE

FLOOR PLAN & ELEVATIONS

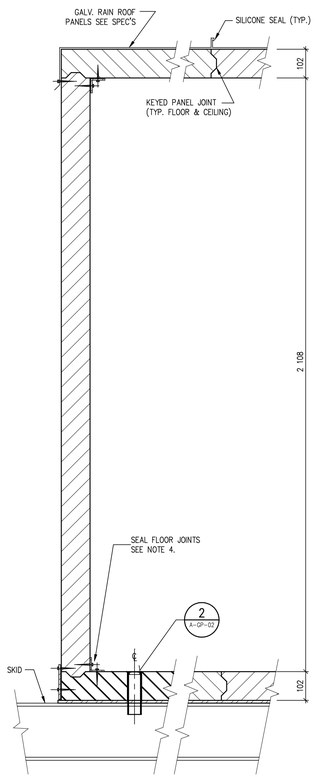
SCALE: 1 : 25
DATE 94/03/24
DRAWING No. A-GP-01
REV. 1



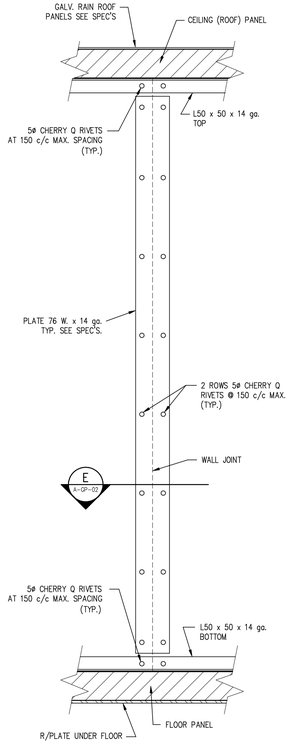
SECTION A
1 : 10 A-GP-02



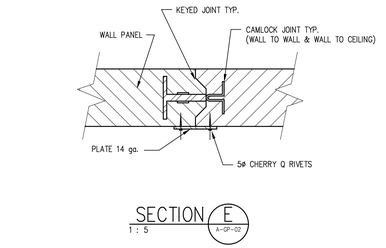
SECTION B
1 : 10 A-GP-02



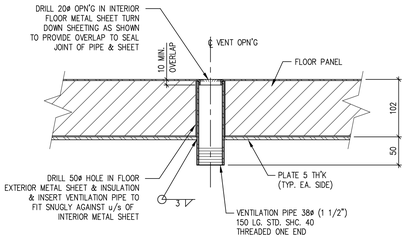
SECTION C
1 : 10 A-GP-02



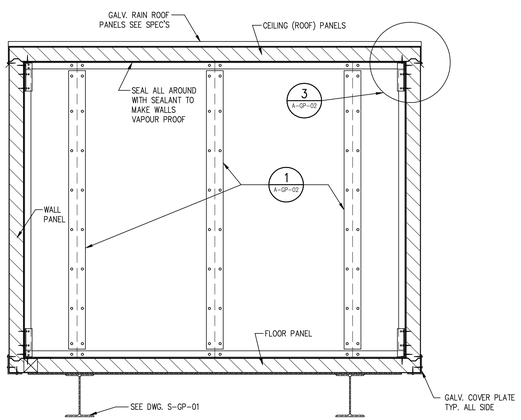
DETAIL 1
1 : 10 S-GP-02



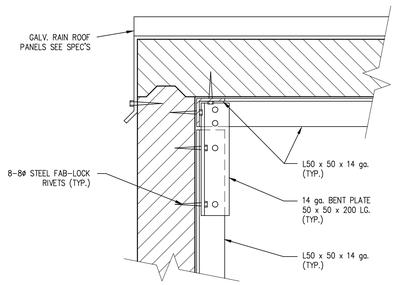
SECTION E
1 : 5 A-GP-02



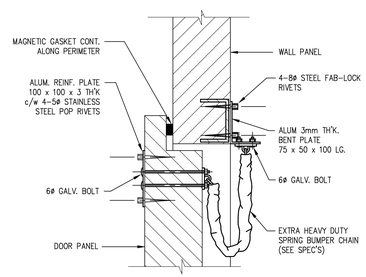
DETAIL 2
1 : 5 A-GP-02 VENTILATION DRAIN THROUGH FLOOR



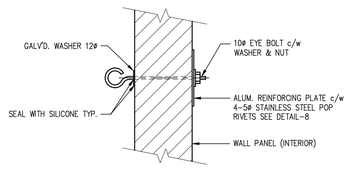
SECTION D
1 : 20 A-GP-02



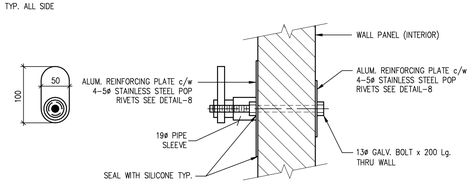
DETAIL 3
1 : 5 A-GP-02



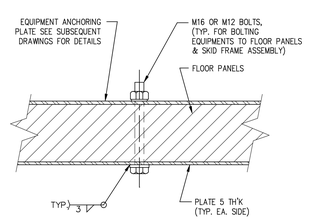
DETAIL 4
1 : 5 A-GP-02



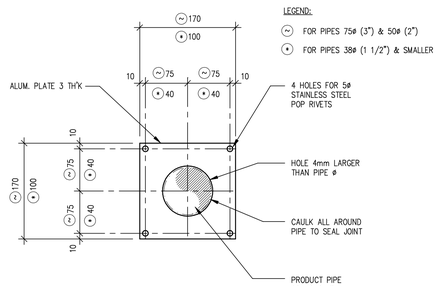
DETAIL 5
1 : 5 A-GP-02 EYE BOLT THROUGH WALL & DOOR



DETAIL 6
1 : 5 A-GP-02 STATIC GROUND CLAMP HANGER



DETAIL 7
1 : 5 A-GP-02 TYPICAL BOLTING OF EQUIPMENT



DETAIL 8
1 : 5 A-GP-02 REINFORCING PLATES AT WALL OPENINGS

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. FOR OTHER NOTES AND DETAILS REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13227.
3. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
4. SEAL ALL FLOOR JOINTS WITH OIL RESISTANT CAULKING
5. LSDL IS LOW SULPHUR DIESEL.

No	DATE	DESCRIPTION	CHK'D
1	04/10/05	UPDATED	LR

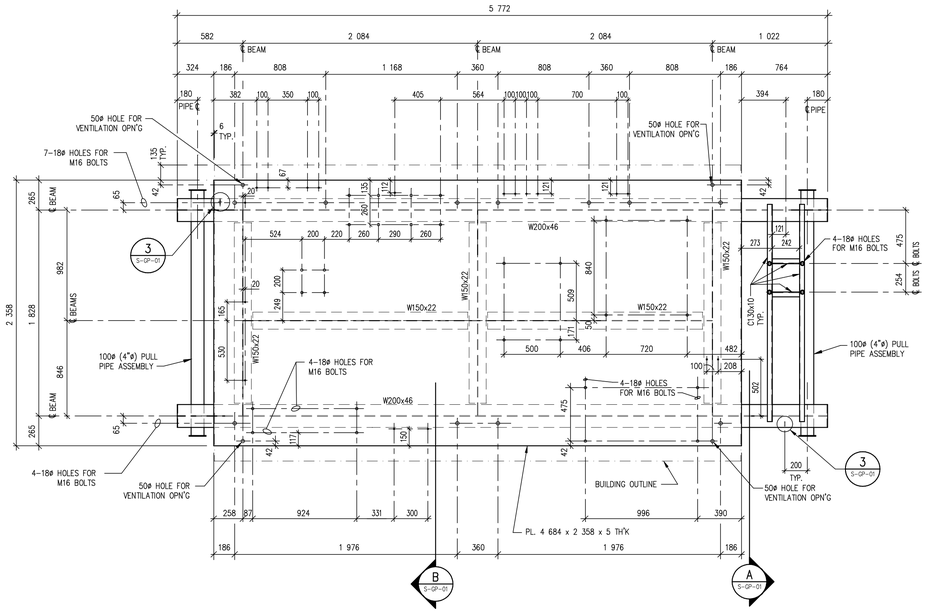
REVISIONS

DESIGN EDZ
DRAWN CAD / SL
REVISED REE

PROJECT TITLE
DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

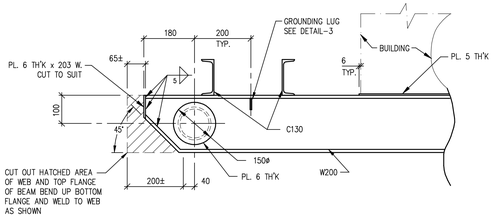
DRAWING TITLE
SECTIONS AND DETAILS

SCALE: 1 : 10 OR AS SHOWN
DATE 94/03/25
DRAWING No. A-GP-02
REV. 1

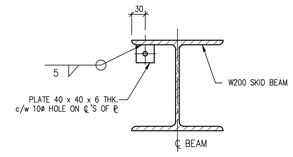


DETAIL 1 — SKID ASSEMBLY
1 : 25

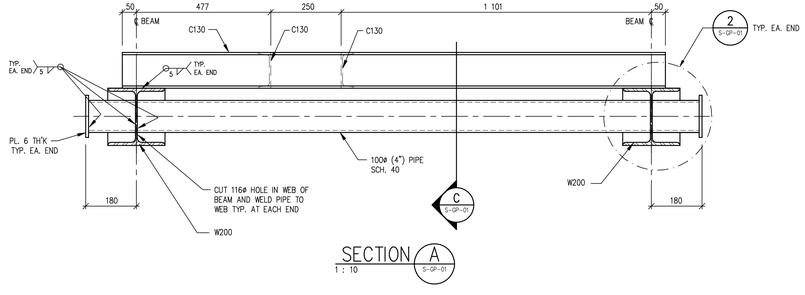
(N.B.: HOLES 14ø UNLESS NOTED OTHERWISE)



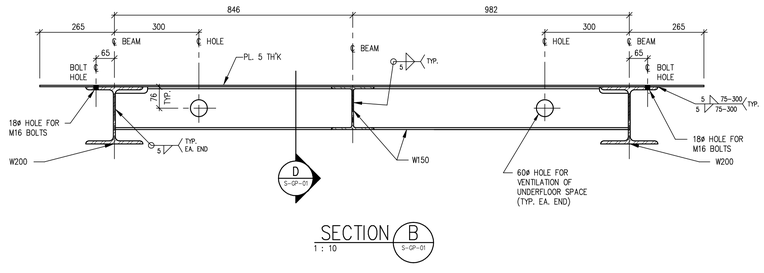
DETAIL 2 — 1 : 10



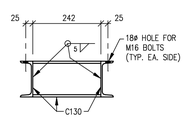
DETAIL 3 — GROUNDING LUG (2 REQ'D.)
1 : 5



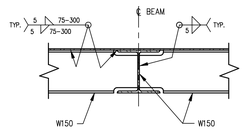
SECTION A — 1 : 10



SECTION B — 1 : 10



SECTION C — 1 : 10



SECTION D — 1 : 10

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. WELDING AT PLATES FLUSH TO U/S OF FLOOR PANELS SHALL BE GROUND SMOOTH TO PERMIT PROPER BEARING OF PANELS TO PLATES.
3. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
4. ALL BOLTING SHALL BE WITH MACHINE BOLTS TO ASTM A325 GALVANIZED HEX. HEADS AND NUTS. ALL SCREWS SHALL BE METAL SCREWS GALVANIZED, SIZES AS SHOWN LENGTHS AS REQUIRED.
5. NUMBER AND SPACINGS OF PANEL MOUNTING HOLES COULD VARY TO SUIT SIZE OF FLOOR PANELS. CONTRACTOR TO VERIFY WITH SHOP DRAWINGS OF PANEL MANUFACTURER FOR FINAL PANEL SIZES PRIOR TO FABRICATION OF SKID FRAME.
6. FOR OTHER NOTES AND DETAILS REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13227.
5. LSDL IS LOW SULPHUR DIESEL.

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

No	DATE	DESCRIPTION	CHK'D
1	04/10/05	UPDATED	LR

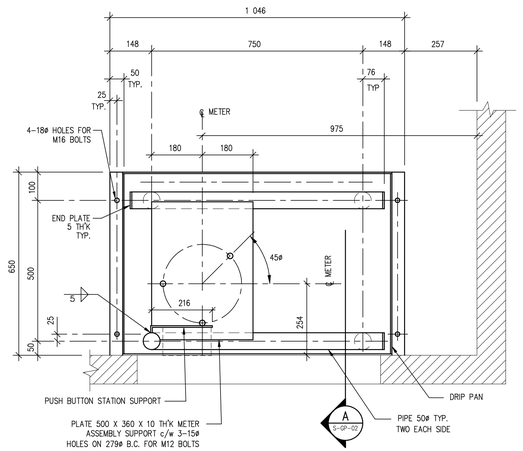
REVISIONS

DESIGN EDZ
DRAWN CAD / SL
REVISED REE

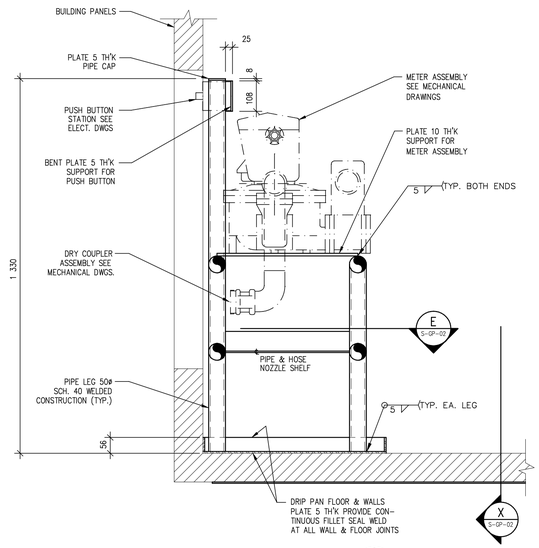
PROJECT TITLE
DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

DRAWING TITLE
SKID ASSEMBLY PLAN, SECTIONS & DETAILS

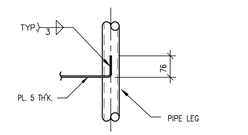
SCALE: 1 : 25 OR AS SHOWN
DATE 94/03/25
DRAWING No. S–GP–01
REV. 1



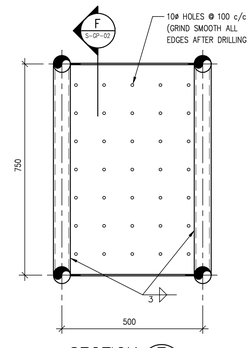
DETAIL 1 S-GP-02 DRIP PAN & METER SUPPORT FOR LSDL FUEL



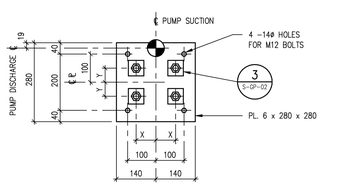
SECTION A S-GP-02



SECTION F S-GP-02

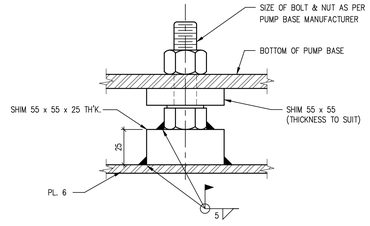


SECTION E S-GP-02

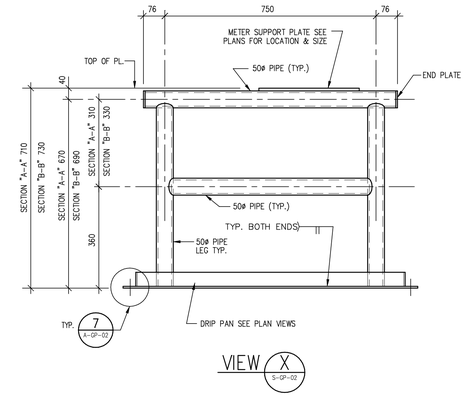


DIMENSIONS "X" & "Y" AS PER PUMP BASE MANUFACTURER

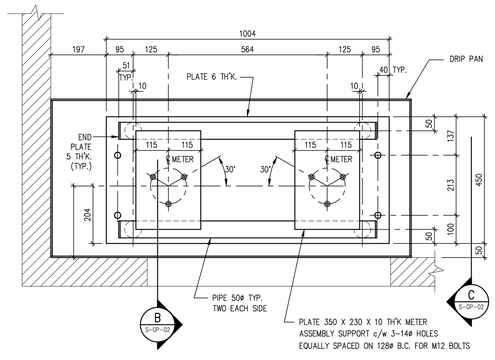
DETAIL 2 S-GP-02 ANCHOR PLATE FOR GASOLINE PUMP



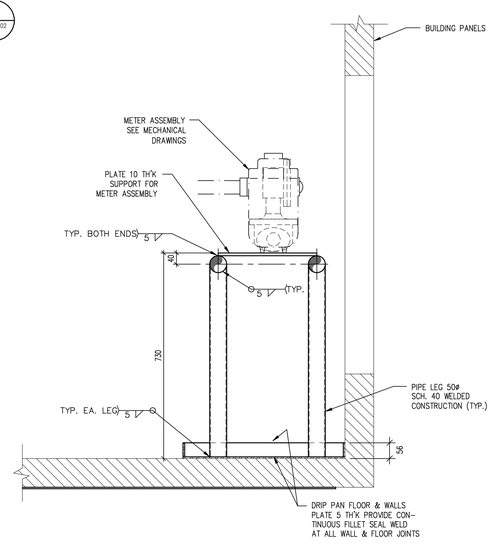
DETAIL 3 S-GP-02
1 : 2



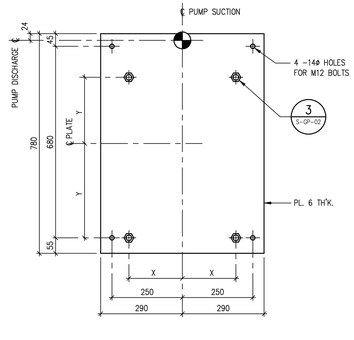
VIEW X S-GP-02



DETAIL 4 S-GP-02 METER SUPPORT FOR GASOLINE & LSDL METERS



SECTION B S-GP-02



DIMENSIONS "X" & "Y" AS PER PUMP BASE MANUFACTURER

DETAIL 7 S-GP-02 ANCHOR PLATE FOR LSDL FUEL PUMP

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. FOR OTHER NOTES REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13227.
3. FOR DETAILS ON UTILITY ROLLERS AND END BRACKETS REFER TO SPECIFICATIONS ON HOSE REEL.
4. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
5. LSDL IS LOW SULPHUR DIESEL.

No	DATE	DESCRIPTION	CHK'D
1	04/10/05	UPDATED	LR

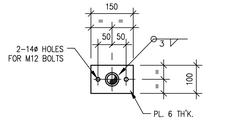
REVISIONS

DESIGN EDZ
DRAWN CAD / SL
REVISED REE

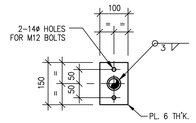
PROJECT TITLE
DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

DRAWING TITLE
DRIP PAN & METER SUPPORT ANCHOR PLATE FOR HOSE REEL & PUMP BASE SECTIONS & DETAILS

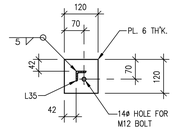
SCALE: 1 : 10 OR AS SHOWN
DATE 94/03/25
DRAWING No. S-GP-02
REV. 1



SECTION 1 S-GP-03

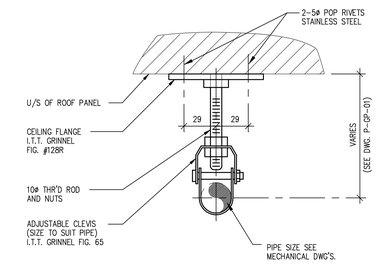


SECTION 2 S-GP-03



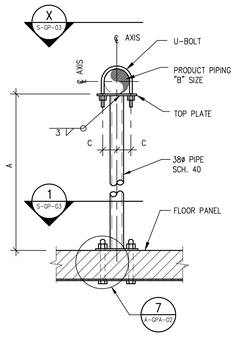
SECTION 3 S-GP-03

TABLE FOR PIPE SUPPORTS						
NO.	TYPE	A	B	C	D	E
PS1	4	800	25ø	20	–	6ø
PS2	4	800	25ø	20	–	6ø
PS3	4	800	25ø	20	–	6ø
PS4	1	370	50ø	36	100	10ø
PS5	1	145	50ø	36	100	10ø
PS6	3	1050	25ø	20	–	6ø
PS7	2	1 163	50ø	36	100	10ø
PS8	1	215	75ø	52	140	12ø
PS9	2	1 148	75ø	52	140	12ø
PS10	1	406	75ø	52	140	12ø
PS11	3	500	19ø	18	–	6ø
PS12	3	500	19ø	18	–	6ø

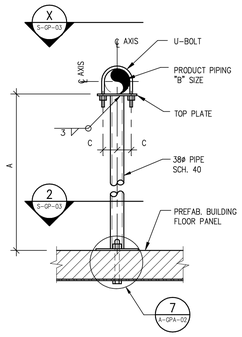


PIPE HANGERS (PH1 TO PH15)

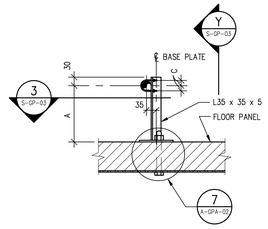
DETAIL 2 S-GP-03
1 : 2.5



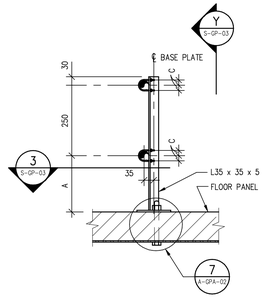
TYPE 1



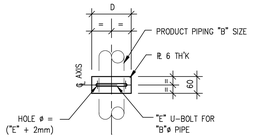
TYPE 2



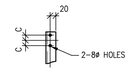
TYPE 3



TYPE 4

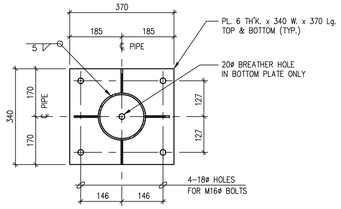


VIEW X S-GP-03

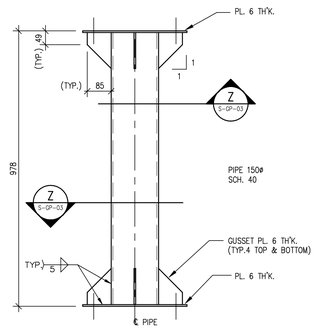


VIEW Y S-GP-03

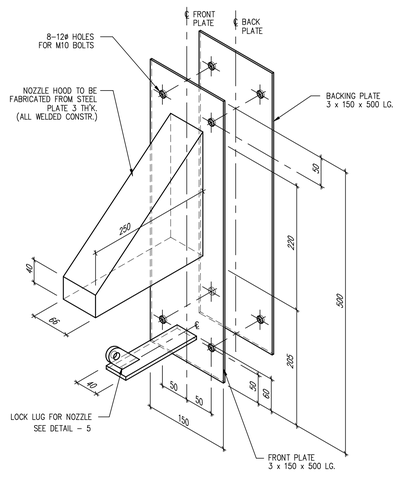
DETAIL 1 S-GP-03 PIPE SUPPORTS



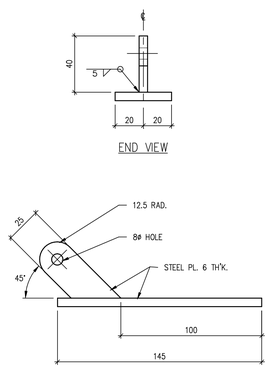
SECTION Z S-GP-03



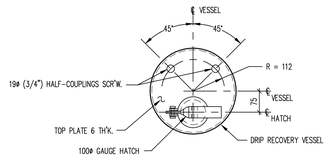
DETAIL 3 S-GP-03 SUPPORT FOR AIR RELEASE TANK



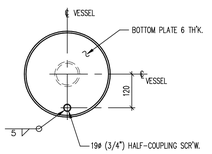
DETAIL 4 S-GP-03
1 : 5 GASOLINE OR LSDL HOSE NOZZLE SUPPORT



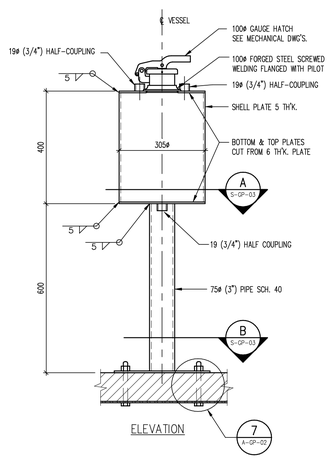
DETAIL 5 S-GP-03
1 : 2



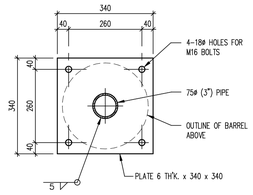
PLAN TOP VIEW



SECTION A S-GP-03



ELEVATION



SECTION B S-GP-03

DETAIL 6 S-GP-01 DRIP RECOVERY VESSEL

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. FOR OTHER NOTES REFER TO SUBSEQUENT PROJECT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13227.
3. NO WELDING OR OPEN FLAME SHALL BE ALLOWED ON METAL IN CONTACT WITH BUILDING PANELS.
4. ALL HOLD DOWN BOLTS OR NUTS TO BE TACK WELDED TO UNDERSIDE OF FLOOR PLATES.
5. LSDL IS LOW SULPHUR DIESEL.

No	DATE	DESCRIPTION	CHK'D
1	04/10/05	UPDATED	LR

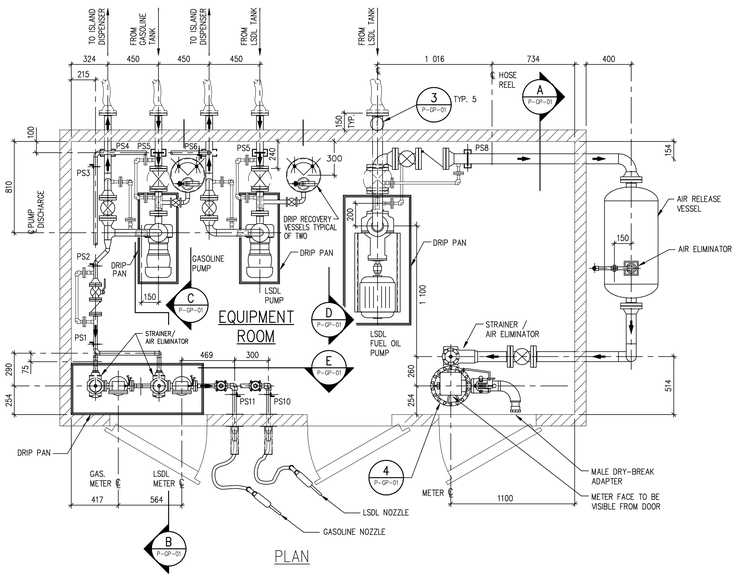
REVISIONS

DESIGN EDZ
DRAWN CAD / SL
REVISED REE

PROJECT TITLE
DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

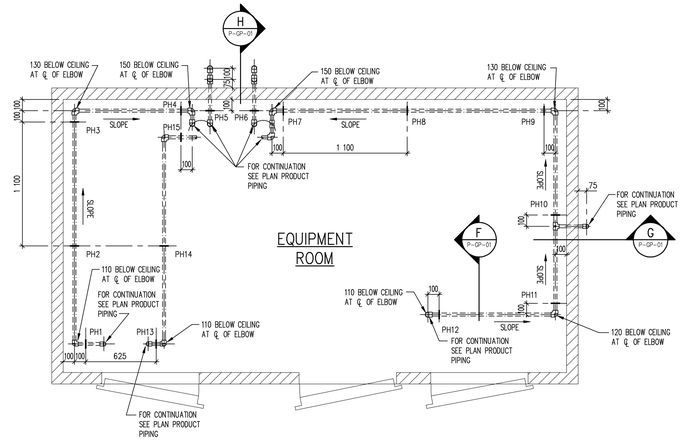
DRAWING TITLE
SUPPORT & SAMPLE BARREL SECTIONS & DETAILS

SCALE: 1 : 10 OR AS SHOWN
DATE 94/03/25
DRAWING No. S-GP-03
REV. 1



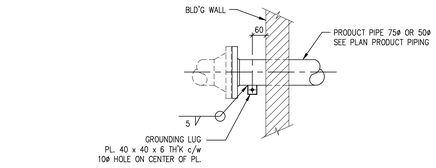
PLAN

DETAIL 1 P-GP-01 PRODUCT PIPING



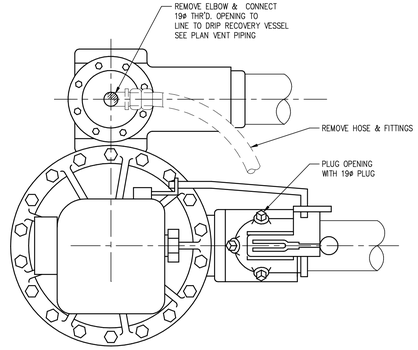
PLAN

DETAIL 2 P-GP-01 VENT PIPING

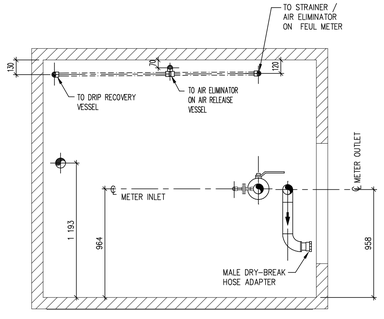


STATIC ELECTRICITY GROUNDING LUG
(5 REQ'D.)

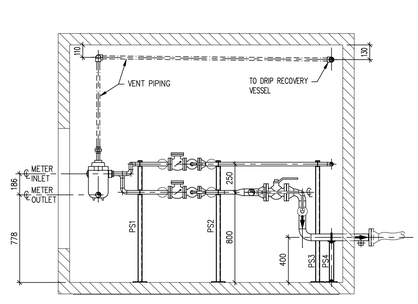
DETAIL 3 P-GP-01
1 : 12,5



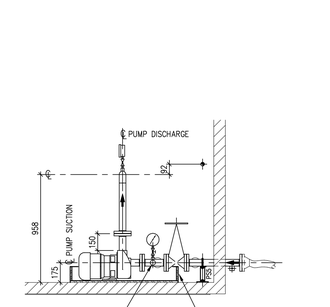
DETAIL 4 P-GP-01
1 : 5



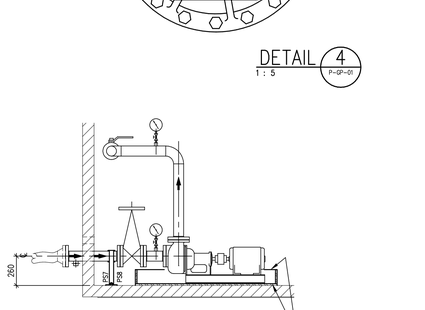
SECTION A P-GP-01



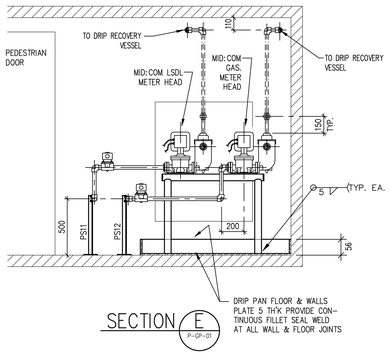
SECTION B P-GP-01



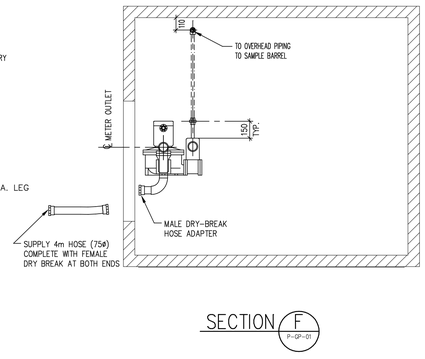
SECTION C P-GP-01



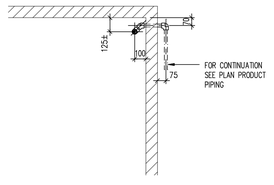
SECTION D P-GP-01



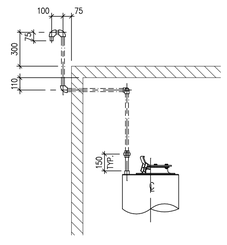
SECTION E P-GP-01



SECTION F P-GP-01



SECTION G P-GP-01



SECTION H P-GP-01

NOTES

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES
2. WELDING TO CONFORM TO CAN/CSA -B51-M, BOILER, PRESSURE VESSEL AND PIPING PRESSURE CODE. ALL ELECTRODES TO BE E70XX. SEE SPEC'S
3. FOR PAINTING, REFER TO SPECIFICATIONS, DIVISION 9, SECTION 09900.
4. SUPPLY AND INSTALL ARROWS ON PIPES SHOWING DIRECTION OF FLOW, REFER TO SPECIFICATIONS, DIVISION 9, SECTION 09900. (➡)
5. LSDL IS LOW SULPHUR DIESEL.

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

No	DATE	DESCRIPTION	CHK'D
1	04/10/05	UPDATED	LR

REVISIONS

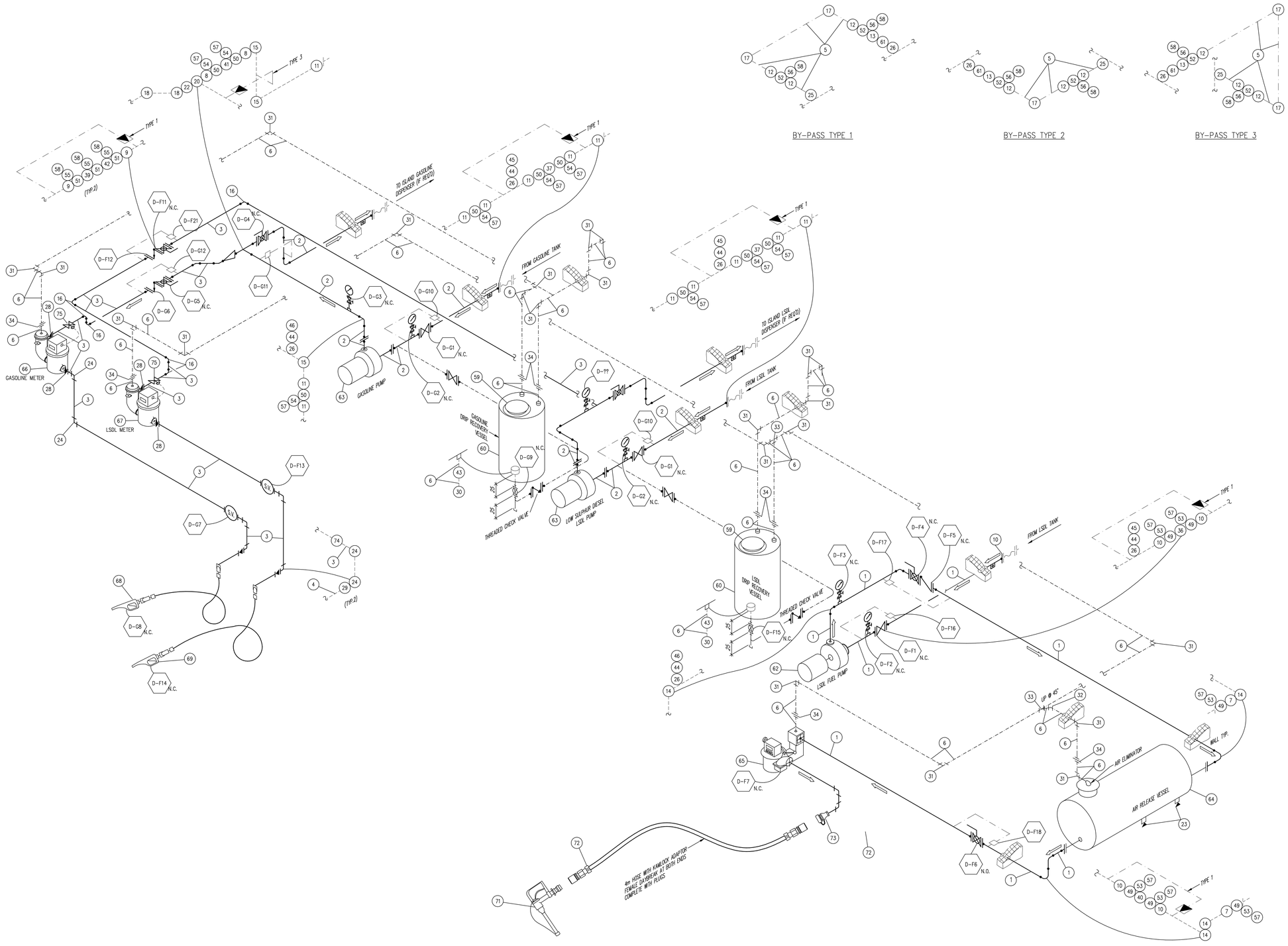
DESIGN RVM
DRAWN KJ
REVISED REE

PROJECT TITLE
DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

DRAWING TITLE
PIPING PLAN, SECTIONS & DETAILS

SCALE: 1 : 25 OR AS SHOWN
DATE 94/03/25

DRAWING No. P-GP-01
REV. 1



SCHEMATIC ISOMETRIC GASOLINE & LSDL FUEL DISPENSING SYSTEMS

(NO SCALE)

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR DESCRIPTION OF CIRCLED NUMBERS REFER TO DRAWING P-GP-02A.
2. NOZZLE AND DRY-BREAK ADAPTER ASSEMBLY TO BE REMOVED AFTER SHOP TESTING, SHIPPED WITH DISPENSER AND REINSTALLED IN FIELD AS DIRECTED.
3. THERMAL PRESSURE TO BE RELIEVED IN DIRECTION OF ARROW (TOWARDS STORAGE TANKS). FOR PRESSURE SETTING OF PRESSURE RELIEF VALVES REFER TO SPECIFICATIONS, DIVISION 15, SECTION 15010.
4. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES
5. WELDING TO CONFORM TO CAN/CSA -B51-M, BOILER, PRESSURE VESSEL AND PIPING PRESSURE CODE. ALL ELECTRODES TO BE E70XX. SEE SPECIFICATIONS, DIVISION 15, SECTION 15010.
6. FOR PAINTING, REFER TO SPECIFICATIONS, DIVISION 9, SECTION 09900.
7. SUPPLY AND INSTALL ARROWS ON PIPES SHOWING DIRECTION OF FLOW, REFER TO SPECIFICATIONS, DIVISION 9, SECTION 09900. (➔)
8. LSDL IS LOW SULPHUR DIESEL.

LEGEND:

F.O.T. : FLAT ON TOP

: PRESSURE RELIEF VALVE

: ARROW INDICATES DIRECTION OF FLOW (SEE SPEC'S.)

(D-F1) : INDICATES VALVE NUMBER ON LSDL FUEL SYSTEM

(D-G1) : INDICATES VALVE NUMBER ON GASOLINE SYSTEM

N.C. : NORMALLY CLOSED

N.O. : NORMALLY OPENED

- - - - - - : INDICATES VENT PIPING LINE.

— · — · — : INDICATES PRESSURE RELIEF LINE.

No	DATE	DESCRIPTION	CHK'D
1	04/10/05	UPDATED	LR

REVISIONS

DESIGN RVM
DRAWN KJ
REVISED REE

PROJECT TITLE

DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

DRAWING TITLE

PIPING ISOMETRIC

SCALE: NTS
DATE 94/03/25
DRAWING No. P-GP-02
REV. 1

BILL OF MATERIALS FOR GASOLINE / LSDL FUEL DISPENSER BUILDING

(NO SCALE)

EQUIPMENT TAG	SIZE (mm)	DESCRIPTION
①	75 ø	PIPE, SCH. 40 SEAMLESS
②	50 ø	PIPE, SCH. 40 SEAMLESS
③	25 ø	PIPE, SCH. 40 SEAMLESS
④	19 ø	PIPE, SCH. 40 SEAMLESS
⑤	12 ø	PIPE, SCH. 40 SEAMLESS
⑥	19 ø	PIPE GALVANIZED, SCH. 40
⑦	75 ø	WELDING NECK FLANGE, CLASS 150, FS, RF
⑧	50 ø	WELDING NECK FLANGE, CLASS 150, FS, RF
⑨	25 ø	WELDING NECK FLANGE, CLASS 150, FS, RF
⑩	75 ø	SLIP-ON FLANGE, CLASS 150, FS, RF
⑪	50 ø	SLIP-ON FLANGE, CLASS 150, FS, RF
⑫	12 ø	SLIP-ON FLANGE, CLASS 150, FS, RF
⑬	12 ø	FLANGE THREADED, CLASS 150, FS, RF
⑭	75 ø	ELBOW 90° L.R.
⑮	50 ø	ELBOW 90° L.R.
⑯	25 ø	ELBOW 90° L.R.
⑰	12 ø	ELBOW 90° SOCKET WELD
⑱	25 ø	ELBOW 45° L.R.
⑲	75 ø	STRAIGHT TEE
⑳	50 ø	STRAIGHT TEE
㉑	75 ø x 50 ø	CONCENTRIC REDUCER
㉒	50 ø x 25 ø	CONCENTRIC REDUCER
㉓	25 ø	PLUG THREADED SQUARE HEAD, STEEL
㉔	25 ø	ELBOW 90° THREADED
㉕	12 ø	HALF COUPLING SOCKET WELD
㉖	12 ø	HALF COUPLING THREADED
㉗	75 ø x 65 ø	REDUCING BUSHING MALE AND FEMALE THREADED HEXAGONAL HEAD
㉘	38 ø x 25 ø	REDUCING BUSHING MALE AND FEMALE THREADED HEXAGONAL HEAD
㉙	25 ø x 19 ø	REDUCING BUSHING MALE AND FEMALE THREADED HEXAGONAL HEAD
㉚	19 ø	PIPE CAP MALLEABLE IRON GALVANIZED
㉛	19 ø	ELBOW 90° MALLEABLE IRON GALVANIZED
㉜	19 ø	ELBOW 45° MALLEABLE IRON GALVANIZED
㉝	19 ø	STRAIGHT TEE MALLEABLE IRON GALVANIZED
㉞	19 ø	UNION MALLEABLE IRON CLASS 300 GROUND JOINT COPPER ALLOY TO IRON GALVANIZED
㉟	65 ø x 50 ø	REDUCER MALLEABLE IRON GALVANIZED
㊱	75 ø	GATE VALVE CAST STEEL FLANGED, CLASS 150, LCB
㊲	50 ø	GATE VALVE CAST STEEL FLANGED, CLASS 150, LCB
㊳	75 ø	CHECK VALVE CAST STEEL FLANGED, CLASS 150, LCB
㊴	25 ø	CHECK VALVE CAST STEEL FLANGED, CLASS 150, LCB
㊵	75 ø	BALL VALVE CAST STEEL FLANGED, CLASS 150, LCB
㊶	50 ø	BALL VALVE CAST STEEL FLANGED, CLASS 150, LCB
㊷	25 ø	BALL VALVE CAST STEEL FLANGED, CLASS 150, LCB
㊸	19 ø	BALL VALVE CARBON STEEL THREADED ENDS
㊹		GAUGE VALVE SEE SECTION 13227
㊺		COMPOUND PRESSURE/ VACUUM GAUGE SEE SECTION 13227

EQUIPMENT TAG	SIZE (mm)	DESCRIPTION
㊻		PRESSURE GAUGE SEE SECTION 13227
㊼	75 ø x 457 Lg.	FLEXIBLE CONNECTOR FLANGED
㊽	50 ø x 65 Lg.	PIPE NIPPLE CARBON STEEL GALVANIZED
㊾	75 ø x 150#	RING GASKET
㊿	50 ø x 150#	GASKET
(51)	25 ø x 150#	GASKET
(52)	12 ø x 150#	GASKET
(53)	16 ø x 89 Lg.	STUD BOLTS (FOR 75ø AND 100ø FLANGES)
(54)	16 ø x 76 Lg.	STUD BOLTS (FOR 50ø FLANGES)
(55)	12 ø x 65 Lg.	STUD BOLTS (FOR 25ø FLANGES)
(56)	12 ø x 57 Lg.	STUD BOLTS (FOR 12ø FLANGES)
(57)	16 ø	NUTS
(58)	12 ø	NUTS
(59)	100 ø	GAUGE HATCH SEE SECTION 13227
(60)		DRIP RECOVERY VESSEL SEE DRAWING NO. S-GP-03, AND SECTION 13227
(61)	12 ø	PRESSURE RELIEF VALVE SEE SECTION 13227
(62)		DIESEL FUEL PUMP SEE SECTION 13227
(63)		LSDL AND GASOLINE PUMP SEE SECTION 13227
(64)		AIR RELEASE VESSEL C/W AIR ELIMINATOR SEE SECTION 13227
(65)		DIESEL FUEL METERING ASSEMBLY SEE SECTION 13227, WITHOUT AUTO TEMPERATURE CORRECTION
(66)		GASOLINE METERING ASSEMBLY SEE SECTION 13227, C/W AUTOMATIC TEMPERATURE CORRECTION
(67)		LSDL (MOTIVE LSDL FUEL) METERING ASS'Y SEE SECTION 13227, C/W AUTOMATIC TEMP. CORRECTION
(68)		HOSE ASSEMBLY FOR GASOLINE DISPENSING SEE SECTION 13227
(69)		HOSE ASSEMBLY FOR LSDL DISPENSING SEE SECTION 13227
(70)		
(71)		NOZZLE FOR TOP LOADING OF LSDL FUEL TRUCK SEE DESCRIPTION SECTION 13227
(72)		DRY-BREAK COUPLER SEE DESCRIPTION SECTION 13227
(73)		DRY-BREAK ADAPTER SEE DESCRIPTION SECTION 13227
(74)	25 ø	TWO-WAY SOLENOID VALVE: FORGED STAINLESS STEEL BODY, S.S. INTERNAL PARTS SUITABLE FOR PETROLEUM PRODUCTS, NORMALLY CLOSED, EXPLOSION PROOF ZONE 1, GROUP IIA, 120V, 60HZ, 12 ø NPT CONDUIT HOUSING, POWER CONSUMPTION: 10W MAXIMUM. SKINNER 'L' SERIES CAT. NO. XL2DB6150 OR EQUIVALENT
(75)	25 ø	SOLENOID OPERATED VALVE, SUPPLIED WITH MID:COM METER SYSTEM

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR EQUIPMENT SCHEMATICS SEE DRAWING P-GP-02.
2. FOR MATERIAL SPECIFICATIONS AND DETAILS SEE SPECIFICATIONS, DIV. 15, SECTION 15010.
3. LSDL IS LOW SULPHUR DIESEL.

No	DATE	DESCRIPTION	CHK'D
1	04/10/05	UPDATED	LR

REVISIONS

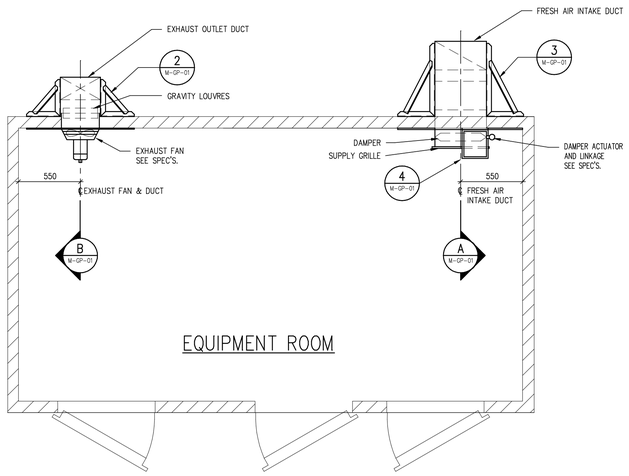
DESIGN RVM
DRAWN KJ
REVISED REE

PROJECT TITLE:
DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

DRAWING TITLE:
BILL OF MATERIALS

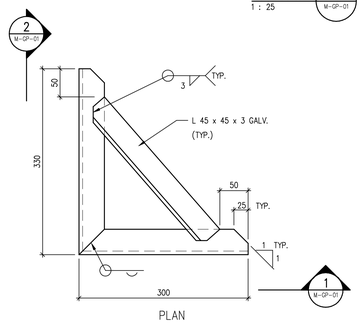
SCALE: N.T.S.
DATE: 94/03/25

DRAWING No.: P-GP-02A
REV.: 1



PLAN

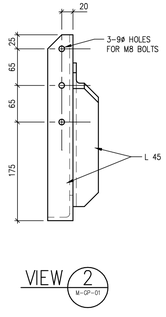
DETAIL 1 (M-GP-01) 1 : 25



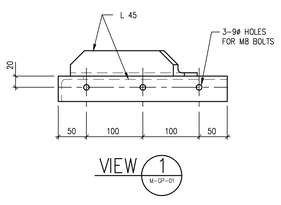
PLAN

DETAIL 2 (M-GP-01) 1 : 5 BRACKET TYPE "A"

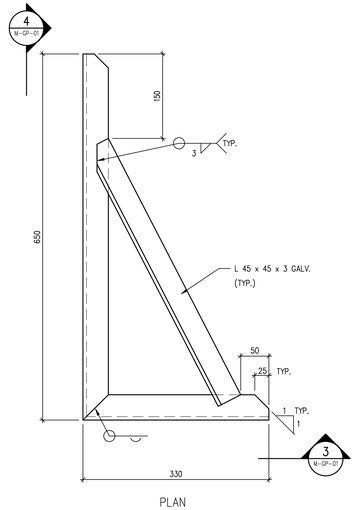
(RIGHT HAND SHOWN – ONE EACH HAND REQ'D)



VIEW 2 (M-GP-01)



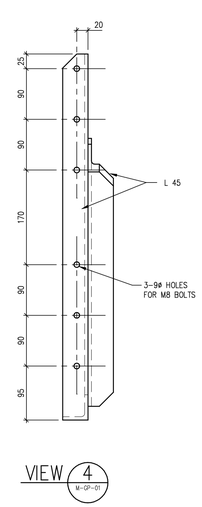
VIEW 1 (M-GP-01)



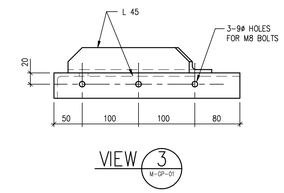
PLAN

DETAIL 3 (M-GP-01) 1 : 5 BRACKET TYPE "B"

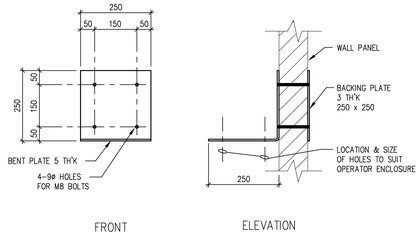
(RIGHT HAND SHOWN – ONE EACH HAND REQ'D)



VIEW 4 (M-GP-01)

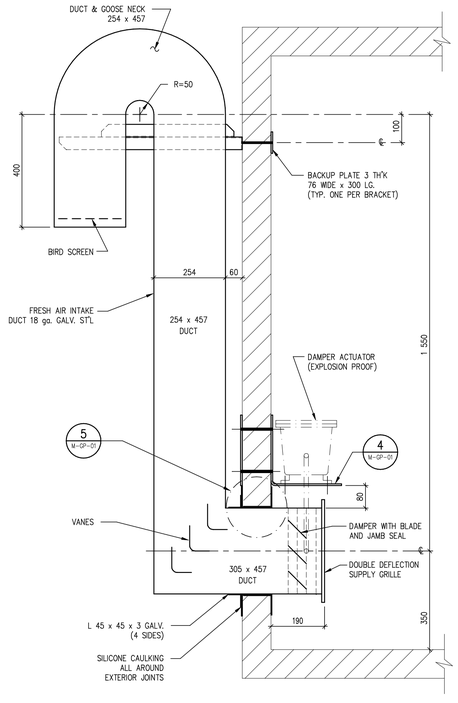


VIEW 3 (M-GP-01)

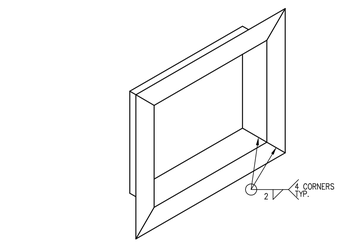


FRONT ELEVATION

DETAIL 4 (M-GP-01) 1 : 10 BRACKET FOR DAMPER OPERATOR



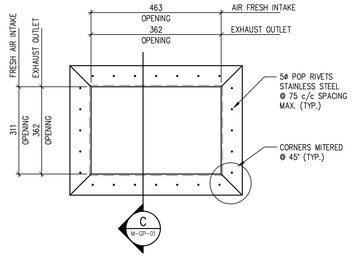
SECTION A (M-GP-01)

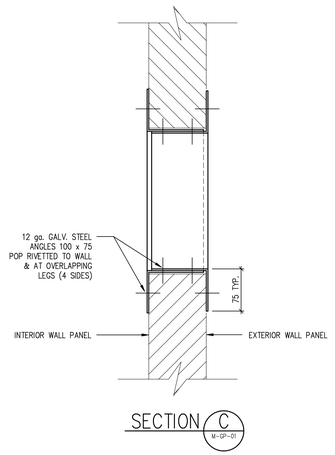


SPLIT FRAME ISOMETRIC AT WALL

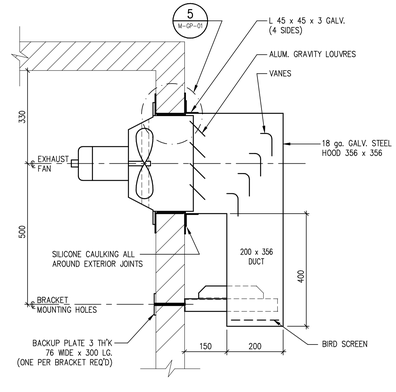
(TYPICAL AT INTAKE & EXHAUST DUCTS)

DETAIL 5 (M-GP-01) 1 : 10 DUCT OPENINGS THROUGH WALL





SECTION C (M-GP-01)



SECTION B (M-GP-01)

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. DIMENSIONS ARE SHOWN IN MILLIMETRES.
2. FOR PARTICULARS ON DUCTWORK, EXHAUST FAN, DAMPER OPERATOR, DAMPER, REGISTER, GRILLE VANES & BIRD SCREENS REFER TO SPECIFICATIONS, DIV. 13, SECTION 13227.
3. FOR OTHER DETAILS SEE SUBSEQUENT DRAWINGS AND SPECIFICATIONS, DIVISION 13, SECTION 13227.
5. LSDL IS LOW SULPHUR DIESEL.

No	DATE	DESCRIPTION	CHK'D
1	04/10/05		LR

REVISIONS

DESIGN RVM
DRAWN CAD / SL
REVISED REE

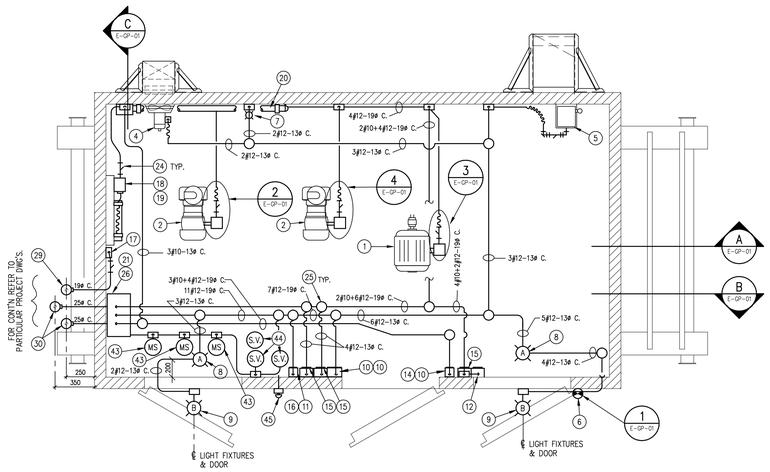
PROJECT TITLE

DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

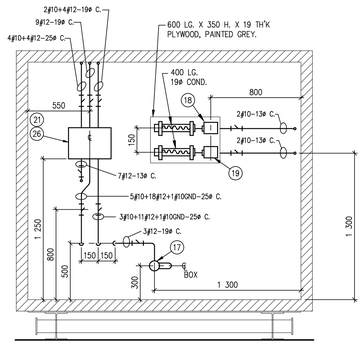
DRAWING TITLE

VENTILATION PLAN, SECTIONS & DETAILS

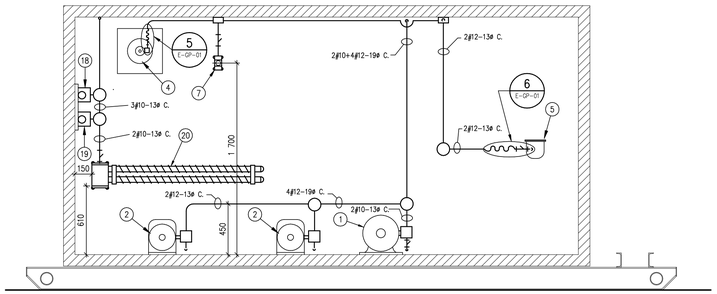
SCALE: 1 : 10 OR AS SHOWN
DATE 94/03/25
DRAWING No. M-GP-01
REV. 1



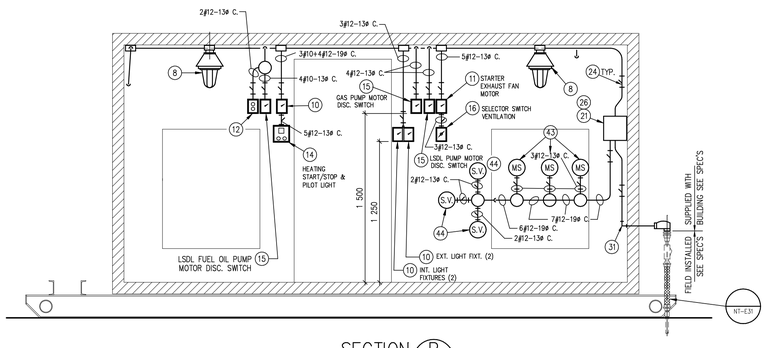
PLAN VIEW



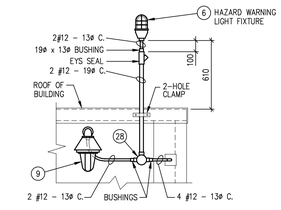
SECTION C E-GP-01



SECTION A E-GP-01

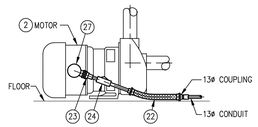


SECTION B E-GP-01

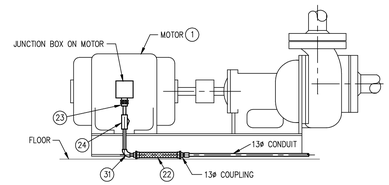


N.B.: FOR LOCATION OF EQUIPMENT SEE DWG. A-GP-01

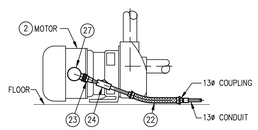
DETAIL 1 E-GP-01 — ARRANGEMENT OF EXTERIOR LIGHT FIXTURES ABOVE SERVICE DOOR
1 : 25



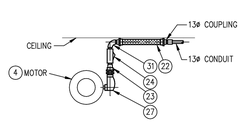
DETAIL 2 E-GP-01 — CONNECTION AT GASOLINE PUMP MOTOR
1 : 12.5



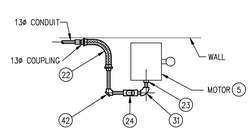
DETAIL 3 E-GP-01 — CONNECTION AT LSDL FUEL OIL PUMP MOTOR
1 : 12.5



DETAIL 4 E-GP-01 — CONNECTION AT LSDL PUMP MOTOR
1 : 12.5



DETAIL 5 E-GP-01 — CONNECTION AT FAN MOTOR
1 : 12.5



DETAIL 6 E-GP-01 — CONNECTION AT DAMPER MOTOR
1 : 12.5

LIST OF GAS./LSDL BUILDING ELECTRICAL EQUIPMENT

NO.	QTY.	DESCRIPTION
1	1	3 HP. PUMP MOTOR, 230 V., 1 ph., 60 Hz. (LSDL FUEL OIL) SEE SPEC'S.
2	2	3/4 HP. PUMP MOTOR, 230 V. 1 ph., 60 Hz. (GASOLINE) SEE SPEC'S.
3	–	NOT USED
4	1	1/3 HP. FAN MOTOR, 115 V. 1 Ph. 60 Hz., SEE SPEC'S.
5	1	DAMPER ACTUATOR MOTOR, SEE SPEC'S.
6	1	HAZARD WARNING LIGHT FIXTURE, SEE SPESC'S.
7	1	HAZARD WARNING RED PILOT LIGHT, SEE SPEC'S.
8	2	LIGHT FIXTURE TYPE "A", SEE SPEC'S.
9	2	LIGHT FIXTURE TYPE "B", SEE SPEC'S.
10	3	TUMBLER SWITCHES, SEE SPEC'S.
11	1	MANUAL STARTER SWITCH, FOR HOSE REEL & EXHAUST SEE SPEC'S. & NOTE #3
12	1	MAINTAINED CONTACT START/STOP PUSH BUTTON STATION, FOR LSDL FUEL OIL PUMP, ALLEN-BRADLEY CAT.# 800H-2HAM7.
13	1	ONE BUTTON PUSH-BUTTON, STATION FORWARD ON HOLD AND STOP ON RELEASE D.P.S.T. ALLEN-BRADLEY CAT.# 800H-BP1A2
14	1	MOMENTARY PUSH BUTTONS START/STOP & RED PILOT LIGHT c/w ENCLOSURE, TYPE ALLEN-BRADLEY CAT.# 800H-2HAD10R7
15	3	DISCONNECT THUMBLER SWITCHES, EEMAC TYPE 7 CD, 2 POLES, RATING 3 HP. @ 240 VAC. APPLETON CAT.# ECS-175 c/w ECSK-2MS
16	1	SELECTOR SWITCH HAND-AUTO, c/w ENCLOSURE,TYPE ALLEN-BRADLEY CAT.# 800H-R2HA7
17	1	SENSOR & CROUSE-HINDS GUJT26 MOUNTING BOX, SEE SPEC'S.
18	1	THERMOSTAT, (HIGH TEMPERATURE) SET AT 10° C. SEE SPEC'S.
19	1	THERMOSTAT, (LOW TEMPERATURE) SET AT -18° C. SEE SPEC'S.
20	1	HEATER, SEE SPEC'S.
21	–	TERMINAL BLOCKS c/w MOUNTING RAIL & END ANCHORS TYPE ALLEN-BRADLEY CAT.# 1492-STYLE "J" MOUNTED IN J.BOX (25 # 1492-U4 & 11 # 1492-U10)
22	5	FLEXIBLE COUPLING, CROUSE-HINDS CAT.# ECH112 (305 Lg.)
23	AS REQ'D.	UNION, TYPE CROUSE-HINDS "UNY" SERIES, SIZE TO SUIT
24	AS REQ'D.	SEAL, TYPE CROUSE-HINDS "EYS", SIZE TO SUIT
25	AS REQ'D.	JUNCTION BOX, TYPE CROUSE-HINDS "GUA" SERIES, SIZE TO SUIT
26	1	JUNCTION BOX, CROUSE-HINDS CAT.# EJB 1284-SA
27	3	JUNCTION BOX, CROUSE-HINDS CAT.# GUAB16
28	1	JUNCTION BOX, TYPE CROUSE-HINDS "GUF" CAT.# GUFT26
29	1	JUNCTION BOX, CROUSE-HINDS CAT.# GUJB-26
30	2	JUNCTION BOX, CROUSE-HINDS CAT.# GUJB-36
31	AS REQ'D.	ELBOW 90°, TYPE CROUSE-HINDS "EL" SERIES. SIZE TO SUIT
42	AS REQ'D.	ELBOW 90°, TYPE CROUSE-HINDS "LBY" SERIES. SIZE TO SUIT
43	3	MICRO-SWITCH, DOUBLE POLE, DOUBLE THROW, 120 V., 3 A., RATING, SUPPLIED WITH METER COUNTER. (SEE NOTE #8)
44	3	SOLENOID VALVE, TWO-WAY, NORMALLY CLOSED, 120 V., 60 CY., SUPPLIED & INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR (SEE NOTE #8)
45	1	JUMBO MUSHROOM HEAD EMERGENCY STOP BUTTON, ALLEN BRADLEY CAT # 800H-DP6D2 MOUNTED IN A ALLEN- BRADLEY CAT#800H-1HYX7M2 GANG BOX WITH A ALLEN-BRADLEY CAT# 800H-NP30 COVER.

Northwest Territories — Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES.
2. CONDUITS SHALL BE RIGID, GALVANIZED STEEL.
3. TO ALL NUMBER OF WIRES SHOWN IN CONDUITS, CONTRACTOR SHALL ADD ONE GROUND WIRE AS PER CODE REQUIREMENTS.
4. MOUNT ALL ELECTRICAL EQUIPMENT SO THAT CONNECTIONS CAN BE EASILY EXPOSED FOR SERVICE.
5. ALL SWITCHES, STARTERS, THERMOSTATS, RELAYS, CONTACTORS, TIMERS, ETC... SHALL BE IDENTIFIED WITH STAINLESS STEEL LABELS FASTENED TO BOXES.
6. FOR WIRING DIAGRAMS SEE DWG. E-GP-02.
7. AVAILABLE POWER SUPPLY TO THIS DISPENSER BUILDING SHALL BE 120/240V. 1 PHASE, 60 CY.
8. FOR FULL DESCRIPTION OF MICRO-SWITCH & SOLENOID VALVE AND OTHER MATERIALS, REFER TO PIPING LIST OF MATERIAL IN SPECIFICATIONS, DIVISION 13, SECTION 13227.
9. OERLOAD HEATER ELEMENT NOT REQUIRED IN MANUAL STARTER ITEM 11 FOR FAN MOTOR.
10. THESE DRAWINGS HAVE BEEN DESIGNED AROUND THE DIVISION METHOD FOR HAZARDOUS LOCATIONS AS SPECIFIED WITHIN SECTION 18 OF THE CANADIAN ELECTRICAL CODE. THE CONTRACTOR HAS THE OPTION TO REDEFINE THE HAZARDOUS LOCATIONS TO SUITE THE ZONE CLASSIFICATION IF SO DESIRED. THE CONTRACTOR SHALL MAKE SUCH CHANGES ONLY WITH THE PERMISSION OF THE ENGINEER.
11. LSDL IS LOW SULPHUR DIESEL.

No	DATE	DESCRIPTION	CHK'D
1	04/10/05	UPDATED	LR

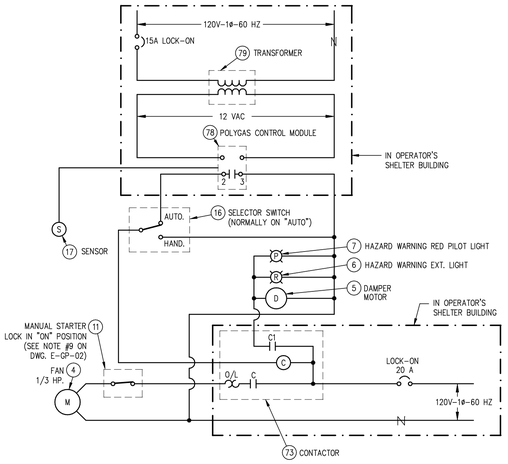
REVISIONS

DESIGN RVM
DRAWN CAD / SL
REVISED REE

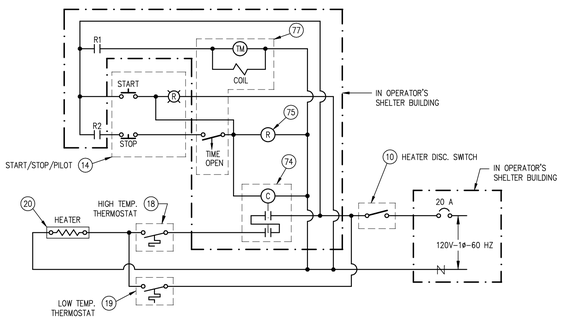
PROJECT TITLE
DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

DRAWING TITLE
ELECTRICAL PLAN, SECTIONS & DETAILS

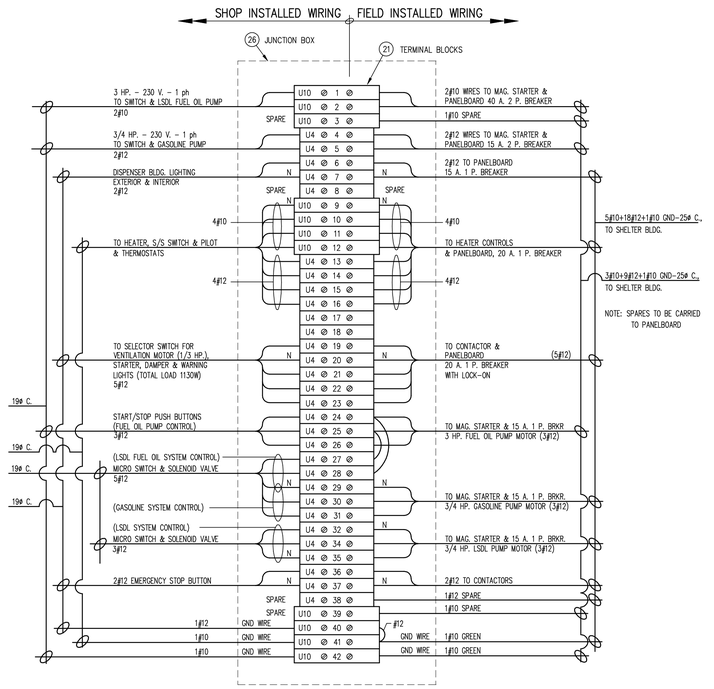
SCALE: 1 : 25 OR AS SHOWN
DATE 94/03/25
DRAWING No. E-GP-01
REV. 1



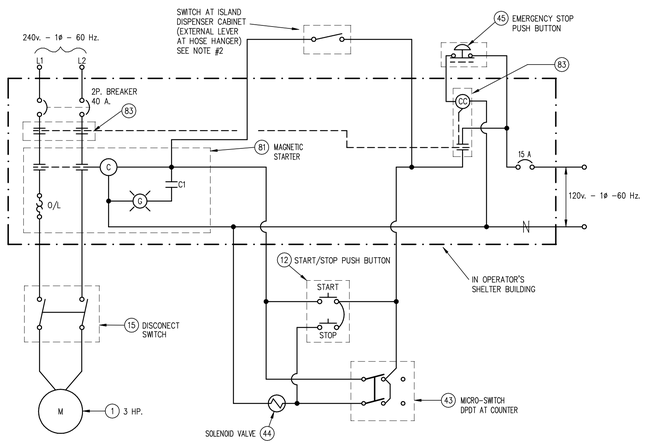
CONTROL WIRING DIAGRAM FOR
POLYGAS DETECTION & VENTILATION SYSTEMS



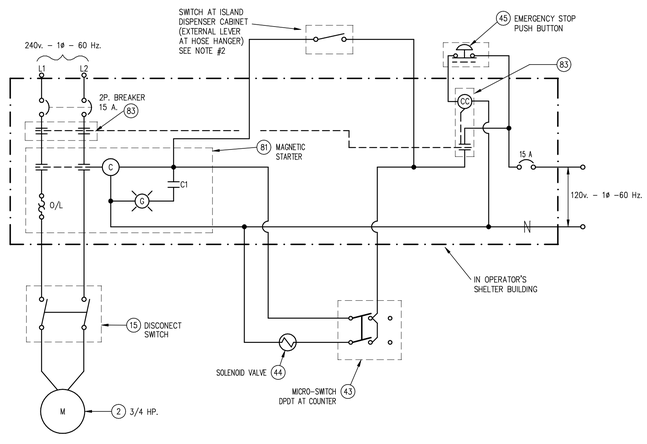
CONTROL WIRING DIAGRAM FOR
HEATING IN DISPENSER BUILDING



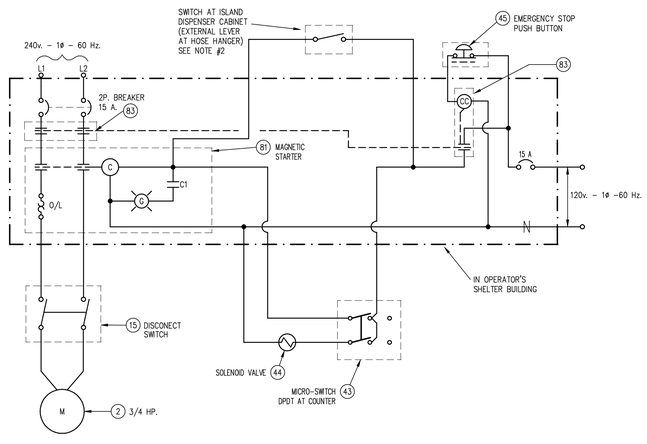
TERMINAL BLOCKS AT MAIN JUNCTION BOX
AT ENTRANCE TO BUILDING



WIRING DIAGRAM FOR LSDL FUEL OIL DISPENSING SYSTEM



WIRING DIAGRAM FOR GASOLINE DISPENSING SYSTEM



WIRING DIAGRAM FOR LSDL DISPENSING SYSTEM

Northwest Territories Public Works & Services

PERMIT & PROFESSIONAL STAMPS

NOTES

1. FOR DESCRIPTION AND QUANTITY OF CIRCLED NUMBERS SHOWN THUS (99) SEE LISTS OF BUILDING ELECTRICAL EQUIPEMENT ON DWG'S. E–GP–01 & E–SB–02
2. REQUIRED ONLY IF ISLAND CALLED FOR ON PARTICULAR PROJECT DRAWINGS.
3. THESE DRAWINGS HAVE BEEN DESIGNED AROUND THE DIVISION METHOD FOR HAZARDOUS LOCATIONS AS SPECIFIED WITHIN SECTION 18 OF THE CANADIAN ELECTRICAL CODE. THE CONTRACTOR HAS THE OPTION TO REDEFINE THE HAZARDOUS LOCATIONS TO SUITE THE ZONE CLASSIFICATION IF SO DESIRED. THE CONTRACTOR SHALL MAKE SUCH CHANGES ONLY WITH THE PERMISSION OF THE ENGINEER.
4. LSDL IS LOW SULPHUR DIESEL.

No	DATE	DESCRIPTION	CHK'D
1	04/10/08	UPDATED	LR

REVISIONS

DESIGN RVM
DRAWN CAD / SL
REVISED REE

PROJECT TITLE
DISPENSER BUILDING FOR GASOLINE / LSDL FUEL

DRAWING TITLE
ELECTRICAL DIAGRAMS & TERMINAL BLOCKS

SCALE: 1 : 1
DATE 94/03/25
DRAWING No. E–GP–02
REV. 1