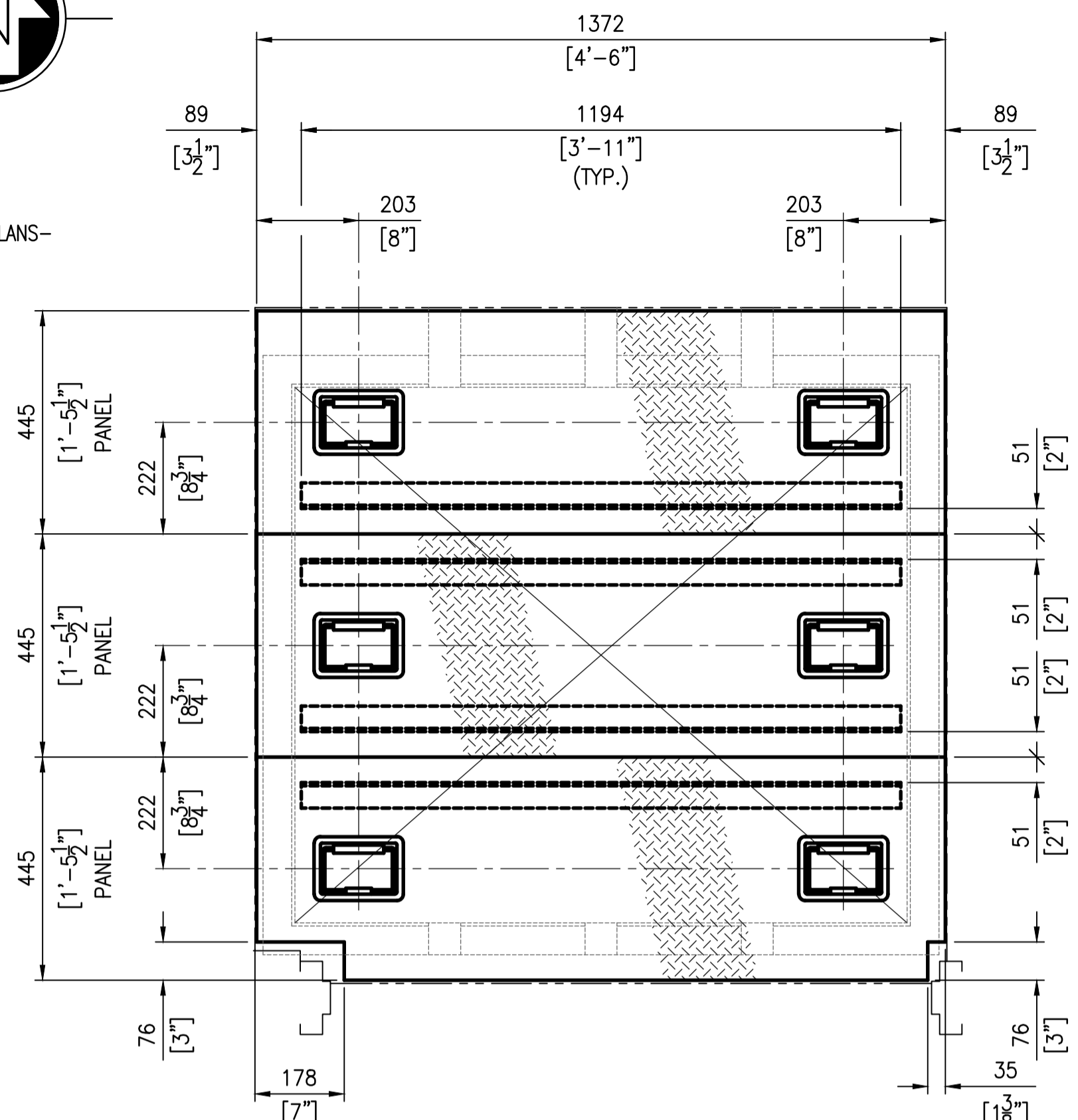
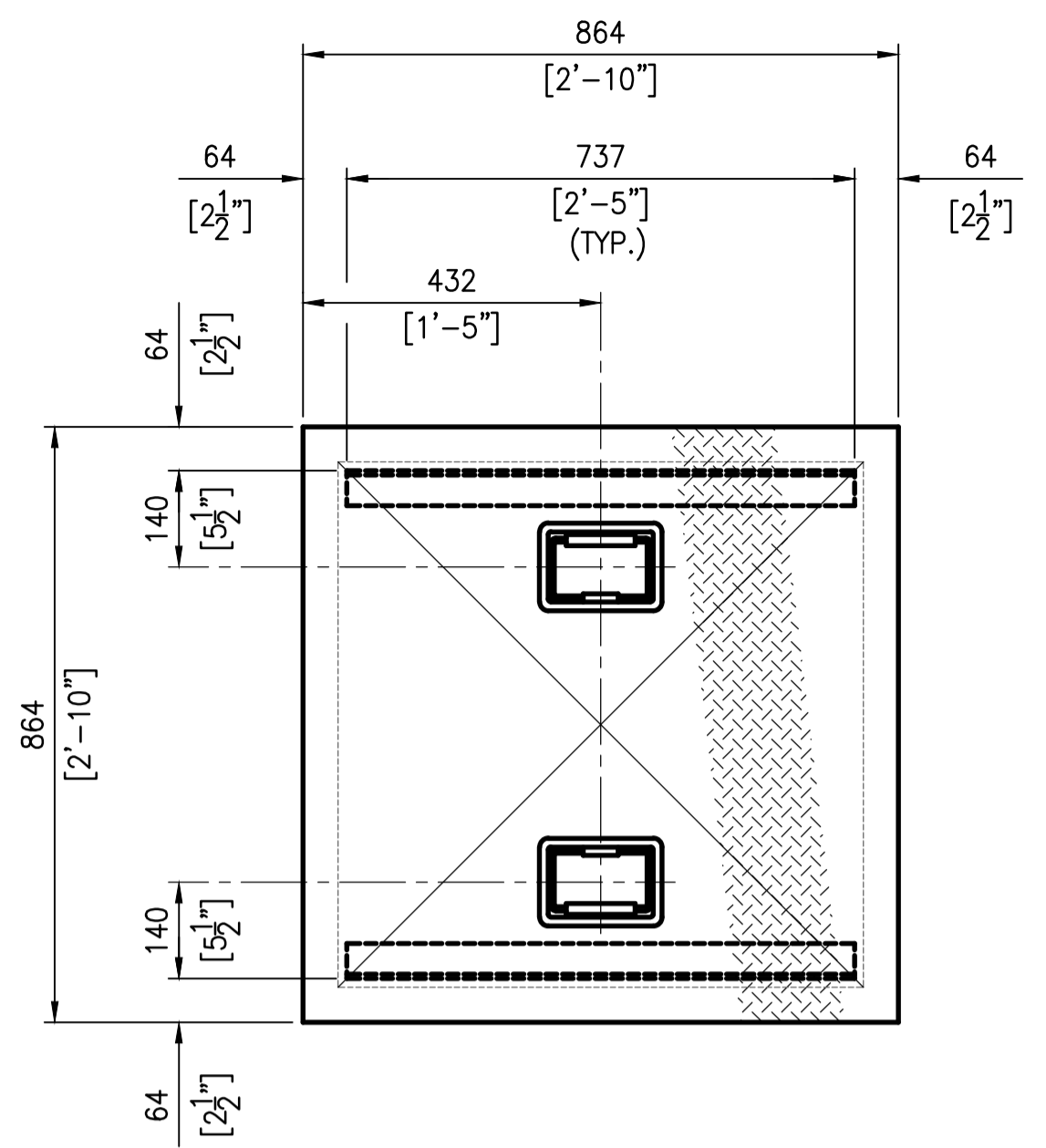
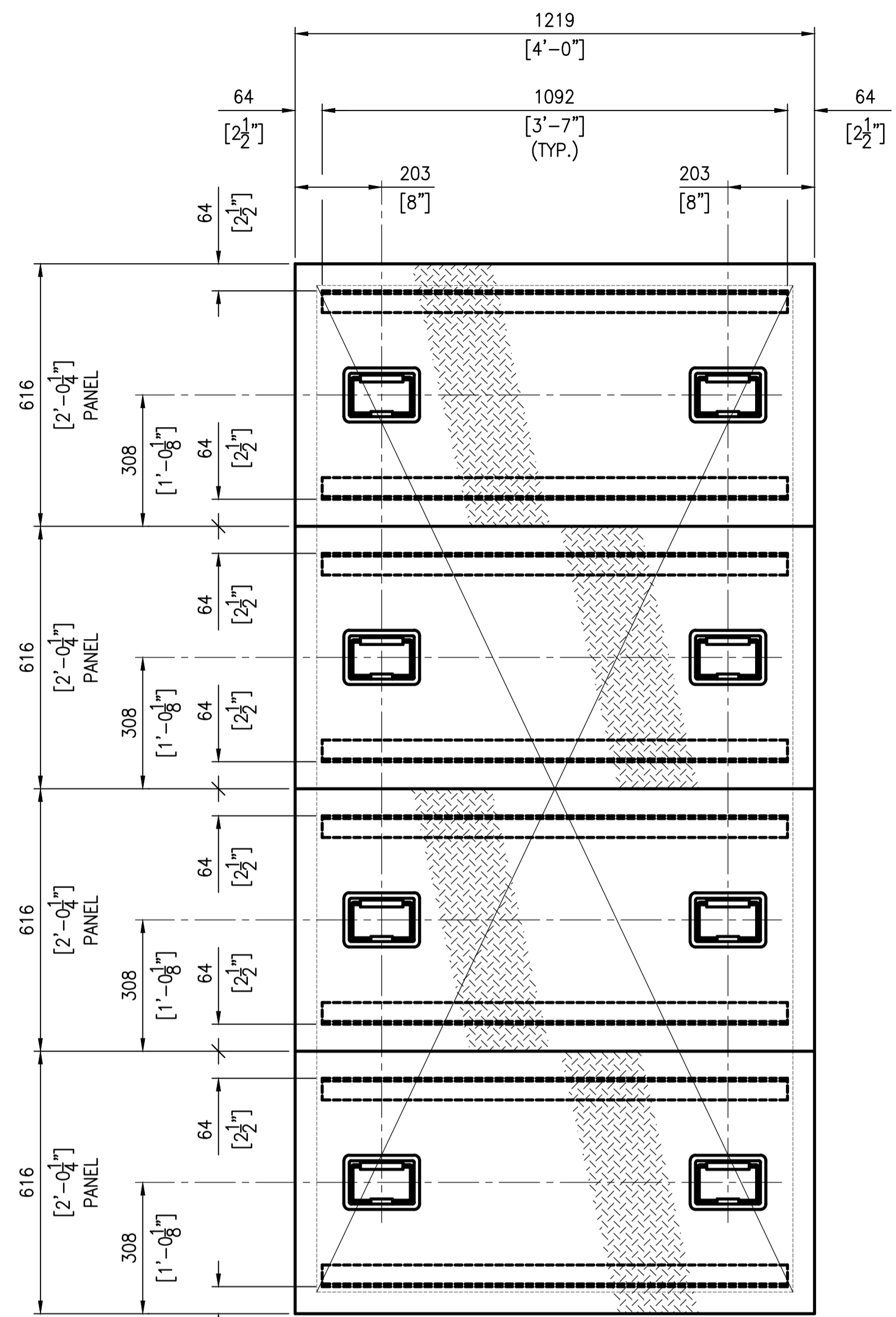


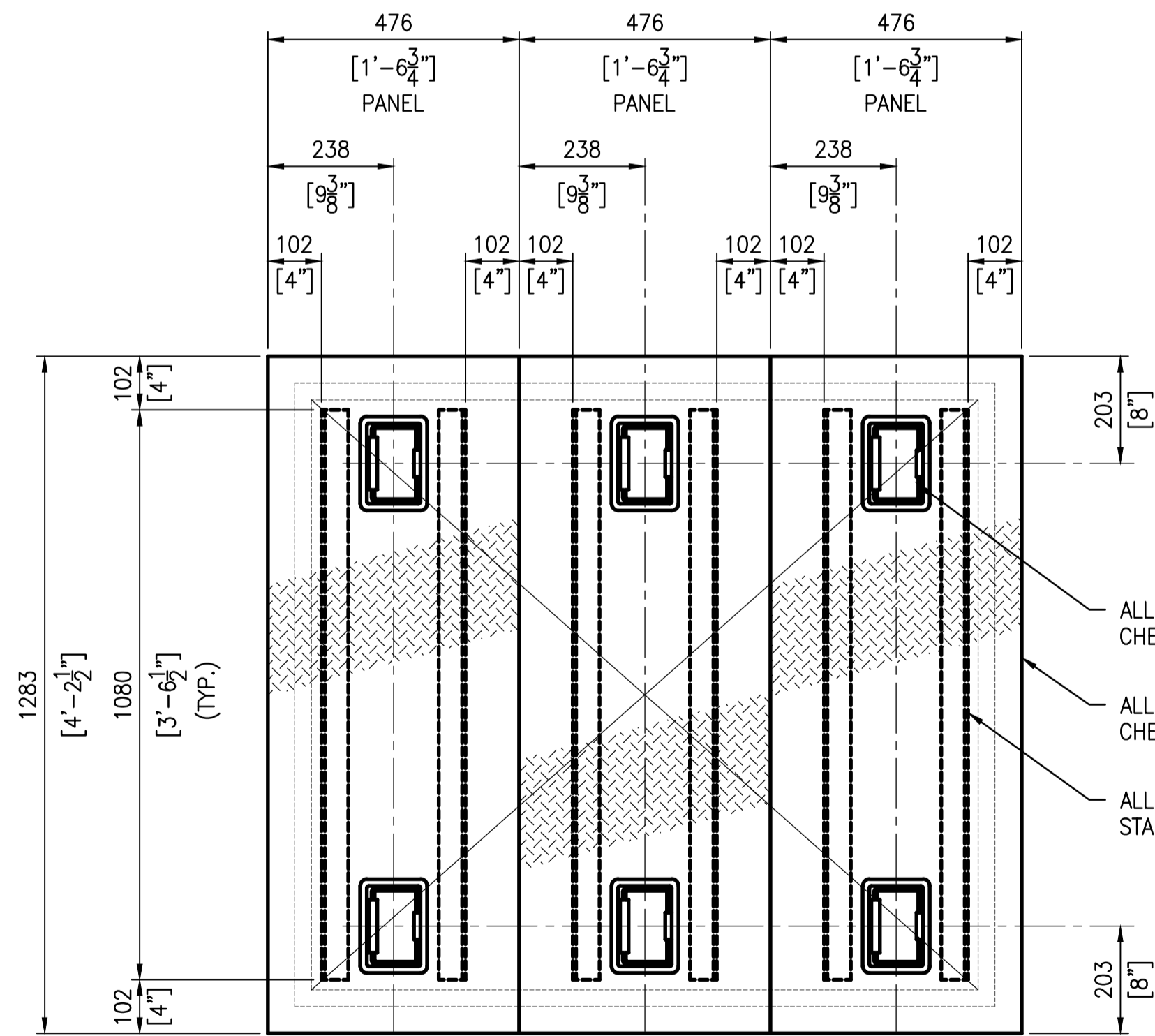
-ALL PLANS-



2 DETAIL - HATCHWAY COVER
SCALE: 1 : 10
AT T.O.C. FLOOR ELEV. = 232.715 (763'-6")



3 DETAIL - OPENING COVER
SCALE: 1 : 10
AT T.O.C. FLOOR ELEV. = 230.175 (755'-2")

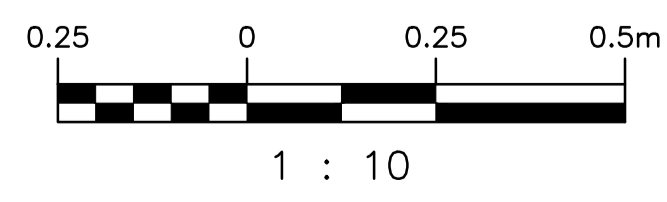


5 DETAIL - HATCHWAY COVER
SCALE: 1 : 10
AT T.O.C. FLOOR ELEV. = 227.635 (746'-10")

- ALL RECESSED SPRING LOADED CHEST HANDLE WITH RUBBER GRIPS
- ALL 6.35mm (1/4") STAINLESS STEEL CHECKER PLATE COVER PANELS
- ALL 50.8mmx50.8mmx6.35mm (2x2x1/2) STAINLESS STEEL STIFFENER ANGLES

ALL STRUCTURAL 304 S.S. SHAPES AND PLATES TO CONFORM TO AISA 430 & ASTM A276.

4 DETAIL - OPENING COVER
SCALE: 1 : 10
AT T.O.C. FLOOR ELEV. = 230.175 (755'-2")



NOTES:

- SEE DRAWING 1-0169L-S0004 FOR GENERAL NOTES.
- STRUCTURAL STEEL:**
- ALL STRUCTURAL STEEL ANGLES AND PLATES TO BE IN ACCORDANCE WITH CSA G40.21 GRADE 300W, ALL OTHERS MEMBERS TO BE 350W UNLESS OTHERWISE NOTED.
 - DETAILING, FABRICATION AND ERECTION TO BE IN ACCORDANCE WITH CAN/CSA-S16-01.
 - ALL WELDING TO CONFORM TO CSA W47.1 & W59.
 - INSTALL ANCHORS IN ACCORDANCE WITH MANUFACTURES INSTRUCTIONS.
 - WELDING SHOPS TO BE CERTIFIED TO DIVISION 1 OR 2 OF CSA W47.1 BY THE CANADIAN WELDING BUREAU. ALL WELDING TO BE PERFORMED BY CWB CERTIFIED WELDERS.

SHOP WELDED CONNECTIONS:

- ALL SHOP WELDING SHALL CONFORM TO CSA W59.1. CONTRACTOR TO BE CERTIFIED IN ACCORDANCE WITH CSA W47.1, DIVISION 1 OR 2. ALL WELDERS TO BE CWB CERTIFIED FOR THE REQUIRED WELDS.
- ALL WELDS TO BE CONTINUOUS FILLET OR GROOVE SEAL WELDS. GROOVE WELDS TO BE DETAILED AS FULL PENETRATION WELDS WITH BACKER PLATE.

DESIGN OF BOLTED CONNECTIONS:

- DESIGN ALL BOLTED CONNECTIONS IN ACCORDANCE WITH CAN/CSA-S16-01 AND THE CISC CODE OF STANDARD PRACTICE FOR STRUCTURAL STEEL.
- ALL CONNECTIONS SHALL BE DESIGNED AND DETAILED BY THE STEEL FABRICATOR. CONNECTION CONFIGURATIONS SHALL (IN GENERAL) CONFORM WITH THE DETAILS PROVIDED. THE STEEL FABRICATOR SHALL ADVISE THE ENGINEER IN WRITING WHEN DEVIATION FROM THE APPROVED CONNECTION CONFIGURATION DETAILS IS REQUIRED.
- OVERSIZED HEAVY DUTY 60mm DIA. x 5mm THICK HARDENED PLATE WASHERS REQUIRED AT ALL SLOTTED/BOLTED CONNECTION LOCATIONS.

FIELD ANCHORING:

- LOCATE EXISTING REINFORCING IN THE CONCRETE ELEMENTS TO RECEIVE POST-FACTO ANCHORAGE AND POSITION HOLES FOR THE NEW ANCHORS CLEAR OF THE EXISTING REINFORCING.
- DRILL HOLES INTO THE EXISTING CONCRETE ADVANCING THE DRILL BIT TO FULL DEPTH OF REQUIRED ANCHORAGE. IF REINFORCEMENT IS ENCOUNTERED, TERMINATE DRILLING THE HOLE AND RELOCATE THE ANCHORAGE CLEAR OF THE REINFORCING. USE A STANDARD HARDENED CARBIDE TIPPED CONCRETE BIT, DO NOT USE A CORE DRILL THAT CAN INTERCEPT AND CUT THE EXISTING REINFORCING.
- ADVISE THE CONTRACT ADMINISTRATOR IMMEDIATELY IF THE REQUIRED ANCHORAGE HOLE LOCATIONS CANNOT BE FIELD ADJUSTED TO CLEAR THE EXISTING REINFORCING AND AWAIT FURTHER INSTRUCTIONS. THE SITE ENGINEER WILL REVIEW THE SITUATION AND MAKE A DETERMINATION REGARDING HOW BEST TO INSTALL THE ANCHORS, GIVEN THE ACTUAL POSITIONS OF THE REINFORCING ENCOUNTERED.



		SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080	
DESIGNED BY:	K. KOTYK	CHECKED BY:	D. COATES
DRAWN BY:	B. DICKSON	APPROVED BY:	I. PARKINSON
SCALE:	1:10	ISSUED FOR CONSTRUCTION BY:	
DATE:	2015/08/24	DATE:	
00 ISSUED FOR TENDER		2015/09/17 K.K.	
NO. REVISIONS		DATE DESIGN/CHECK	
CONSULTANT NO.: 629179-0000-42DD-0001			

ENGINEER'S SEAL

PRELIMINARY
NOT TO BE
USED FOR
CONSTRUCTION

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

OLIVE WASTEWATER LIFT STATION
2015 UPGRADES
PLANS AND GENERAL NOTES
HATCH COVERS

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0169L-S0005	001	00	A1