OFFICE OF

RAMSEY COUNTY ENGINEER

HARRY S. BRONSON

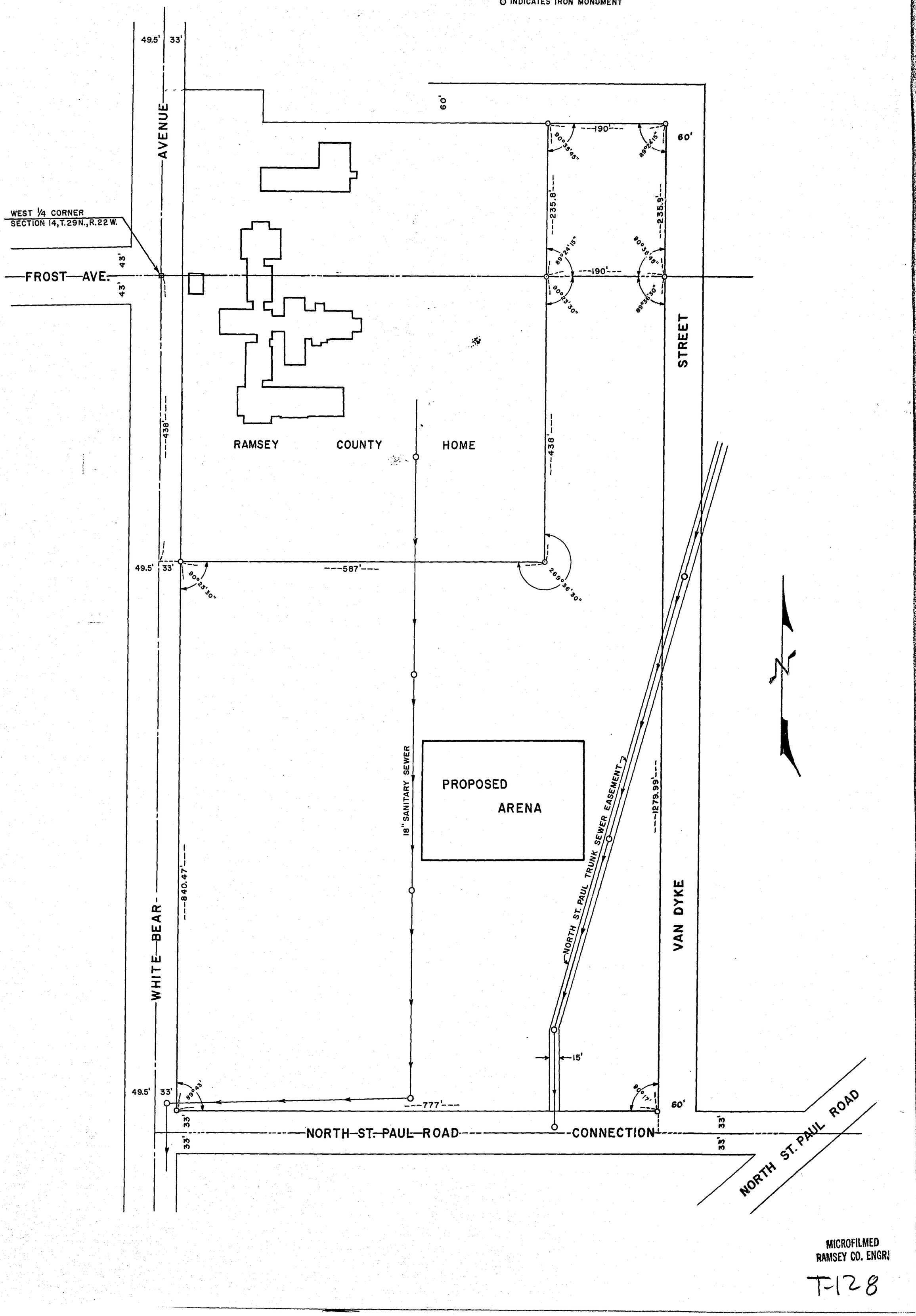
SCALE: 1"=100' APRIL 1960

ALDRICH RECREATION ARENA

PROPERTY DESCRIPTION

The East 190 feet of the West 810 feet of the South 235.80 feet of the Northwest 1/4 of Section 14, Township 29 North, Range 22 West; also, The West 810 feet of the North 1/2 of the Southwest 1/4 of Section 14, Township 29 North, Range 22 West, except the West 620 feet of the North 438 feet thereof. Subject to the rights of the public in White Bear Avenue and North St. Paul Road Connection, (also known as Ripley Street.) Subject to sewer easements of record.

⊙ INDICATES IRON MONUMENT

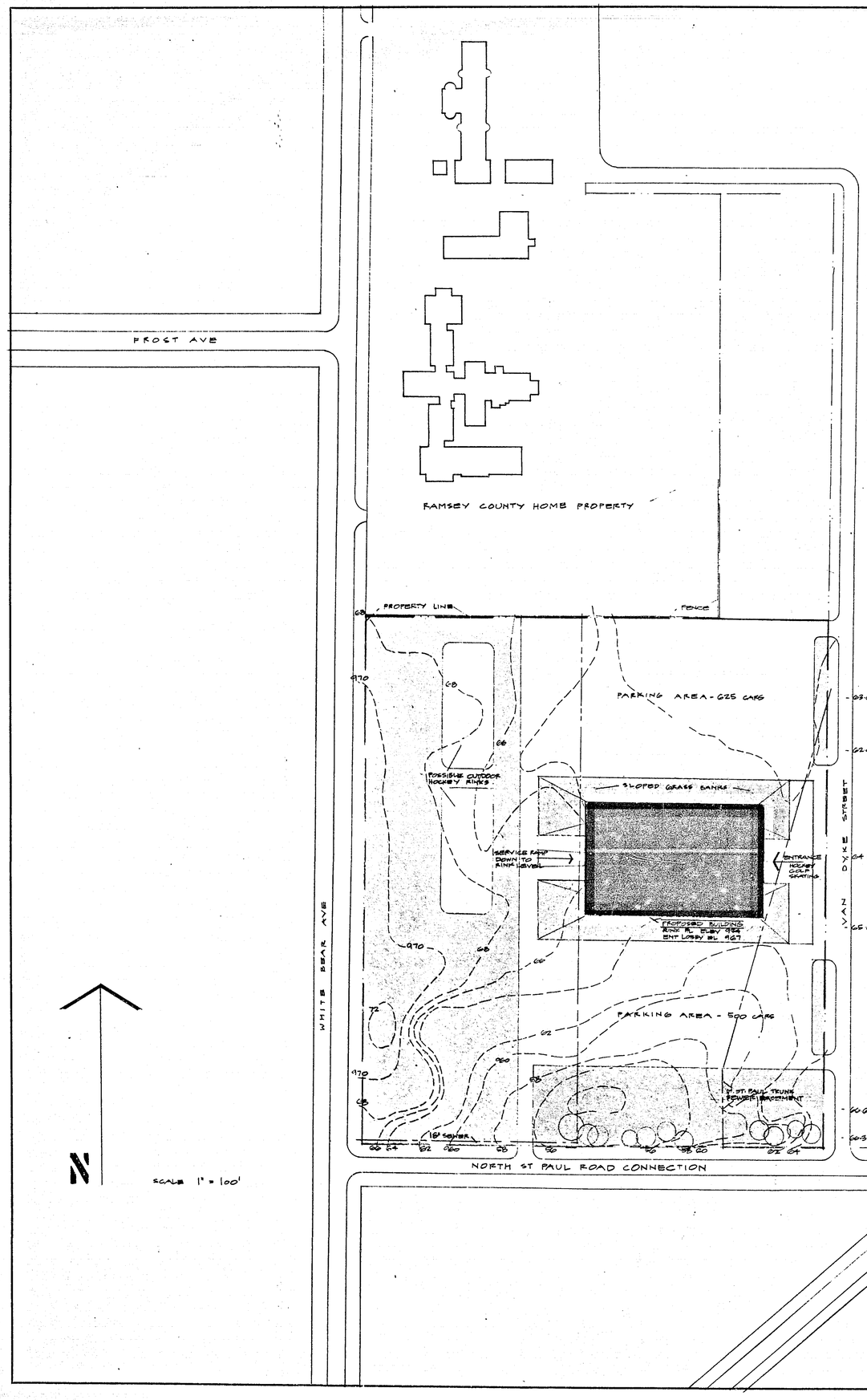


MICROFILMED
RAMSEY CO. ENGR.

T-128

ALDRICH RECREATION ARENA

RAMSEY COUNTY MINN



SITE PLAN

P1

MICROFILMED
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RAMSEY COUNTY PROPERTY IN SECTION 14, T 29 N. R 22 W

INFORMATION TAKEN FROM TOPOGRAPHICAL MAP FROM OFFICE OF RAMSEY COUNTY ENGINEER - HARRY S. BRONSON
JUNE 1955 SCALE 1" = 100'

REVISIONS	DATE	DRAWN

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered _____ under the Laws of the State of Minnesota.

Date_____ Reg. No._____

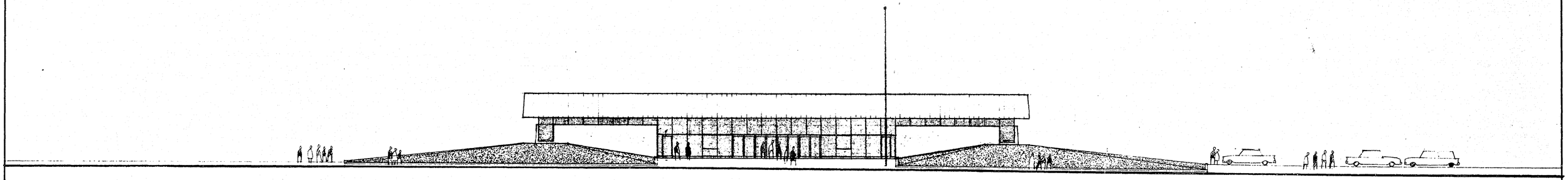
SITE PLAN

ALDRICH RECREATION ARENA
FOR RAMSEY COUNTY
MINNESOTA

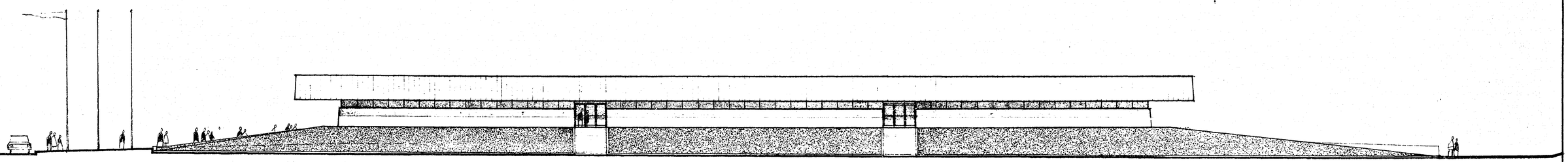
HAARSTICK LUNDGREN AND ASSOCIATES
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BLDG. ST. PAUL, MINN.

DATE 18 Apr. '60
DRAWN FHH
CHECKED
SHEET

T-128



EAST



SOUTH

ELEVATION

PG

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T-128

REVISIONS	DATE	DRAWN

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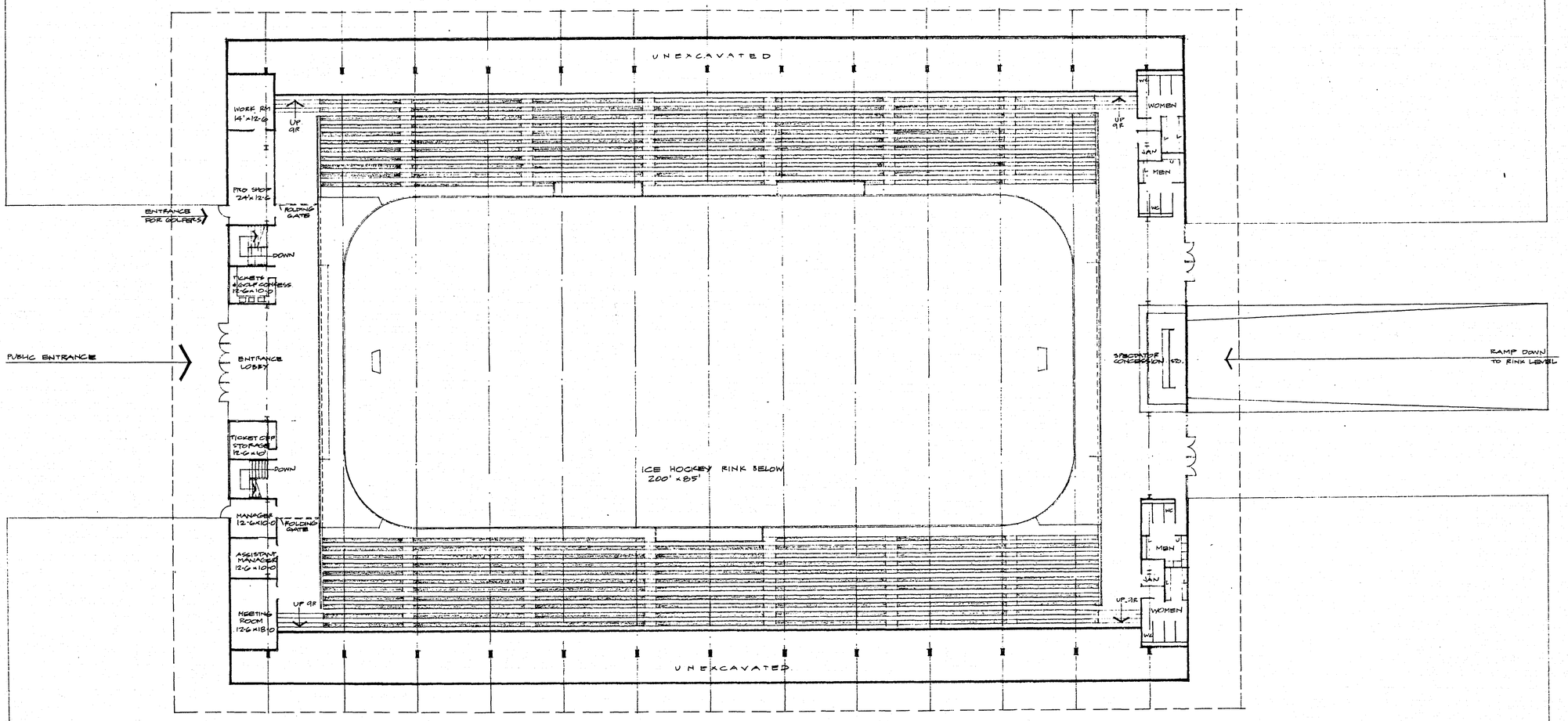
Date_____ Reg. No._____

ELEVATIONS

ALDRICH RECREATION ARENA
FOR RAMSEY COUNTY MINN

DATE 18 APR '60
DRAWN RHT
CHECKED
SHEET

HAARSTICK LUNDGREN AND ASSOCIATES
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BLDG. ST. PAUL, MINN.



ENTRANCE LEVEL PLAN

SCALE 1/8" = 1'-0

P3

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RAMSEY CO. ENGR.

T-128

REVISIONS	DATE	DRAWN

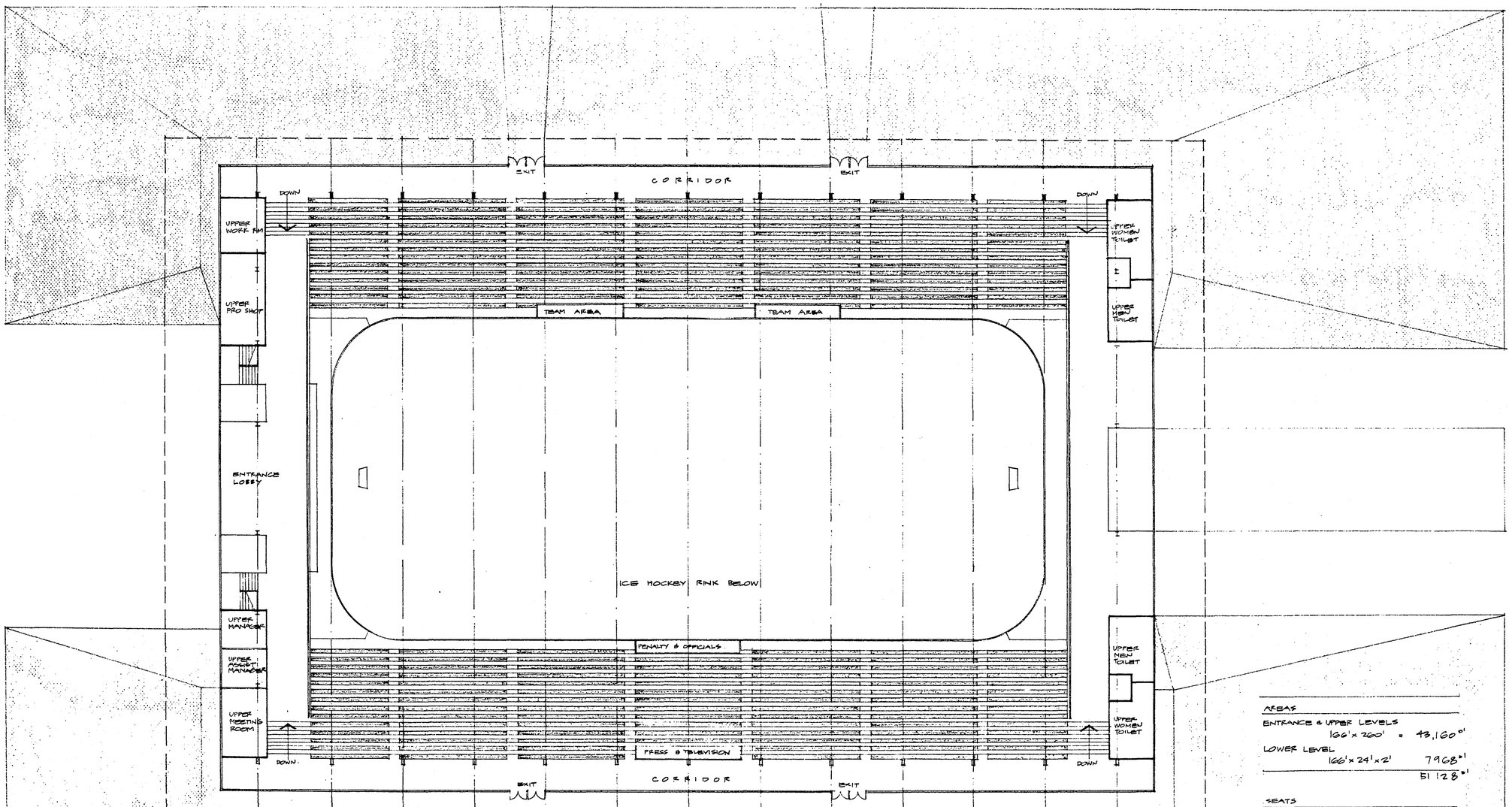
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered _____ under the Laws of the State of Minnesota.

Date_____ Reg. No._____

PLAN AT ENTRANCE LEVEL
ALDRICH RECREATION ARENA
FOR RAMSEY COUNTY MINN.

HAARSTICK LUNDGREN AND ASSOCIATES
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BLDG. ST. PAUL, MINN.

DATE 12 APR 60
DRAWN RMM
CHECKED
SHEET



AREAS

ENTRANCE & UPPER LEVELS 166'x 260'	43,160 sf
LOWER LEVEL 166'x 24'x 2'	7968 sf
	51 128 sf

SEATS

28 ROWS AT 126	3528
PRESS PLAYERS OFFICIALS	72
SPECTATORS	3456

UPPER LEVEL PLAN

SCALE 1/8"=1'-0

MICROFILMED RAMSEY CO. ENGR. T-128

P4

REVISIONS	DATE	DRAWN

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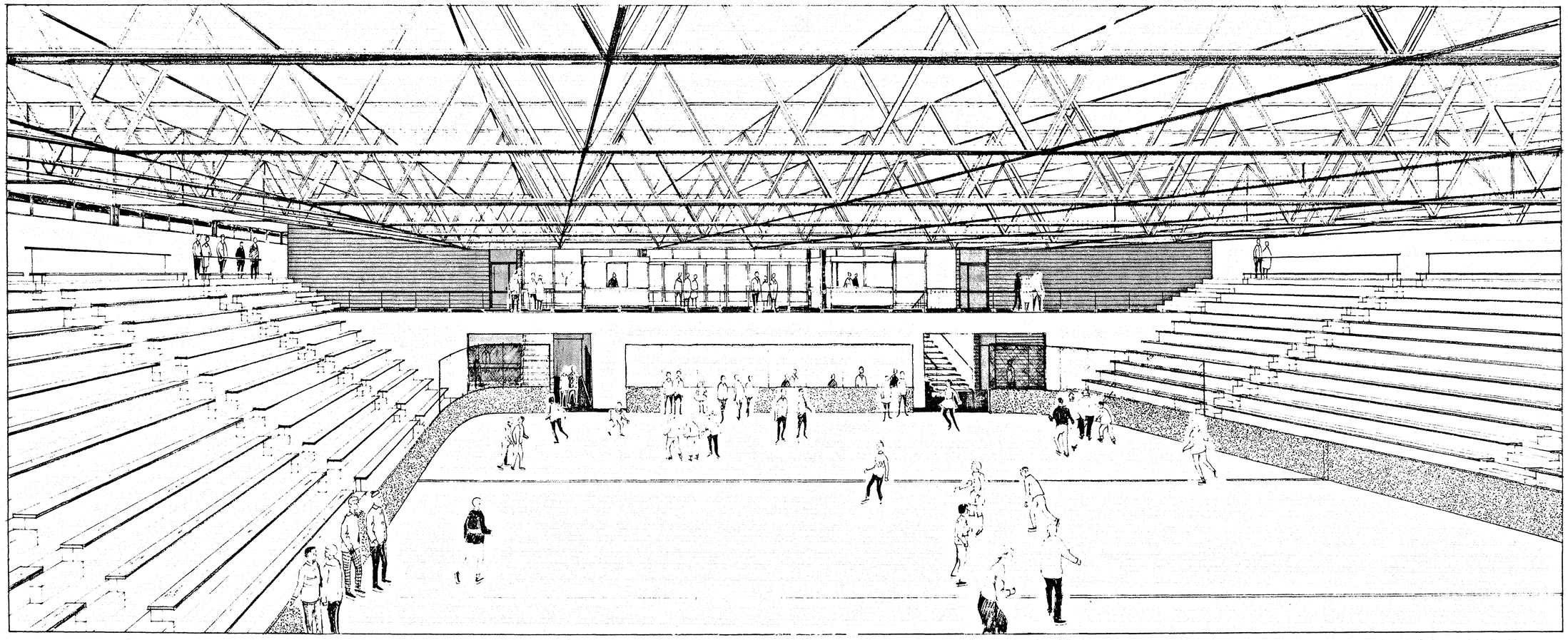
Date_____ Reg. No._____

PLAN AT UPPER LEVEL

ALDRICH RECREATION ARENA
FOR RAMSEY COUNTY MINN

DATE 8 MAR 60
DRAWN RTH.
CHECKED
SHEET

HAARSTICK LUNDGREN AND ASSOCIATES
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BLDG. ST. PAUL, MINN.



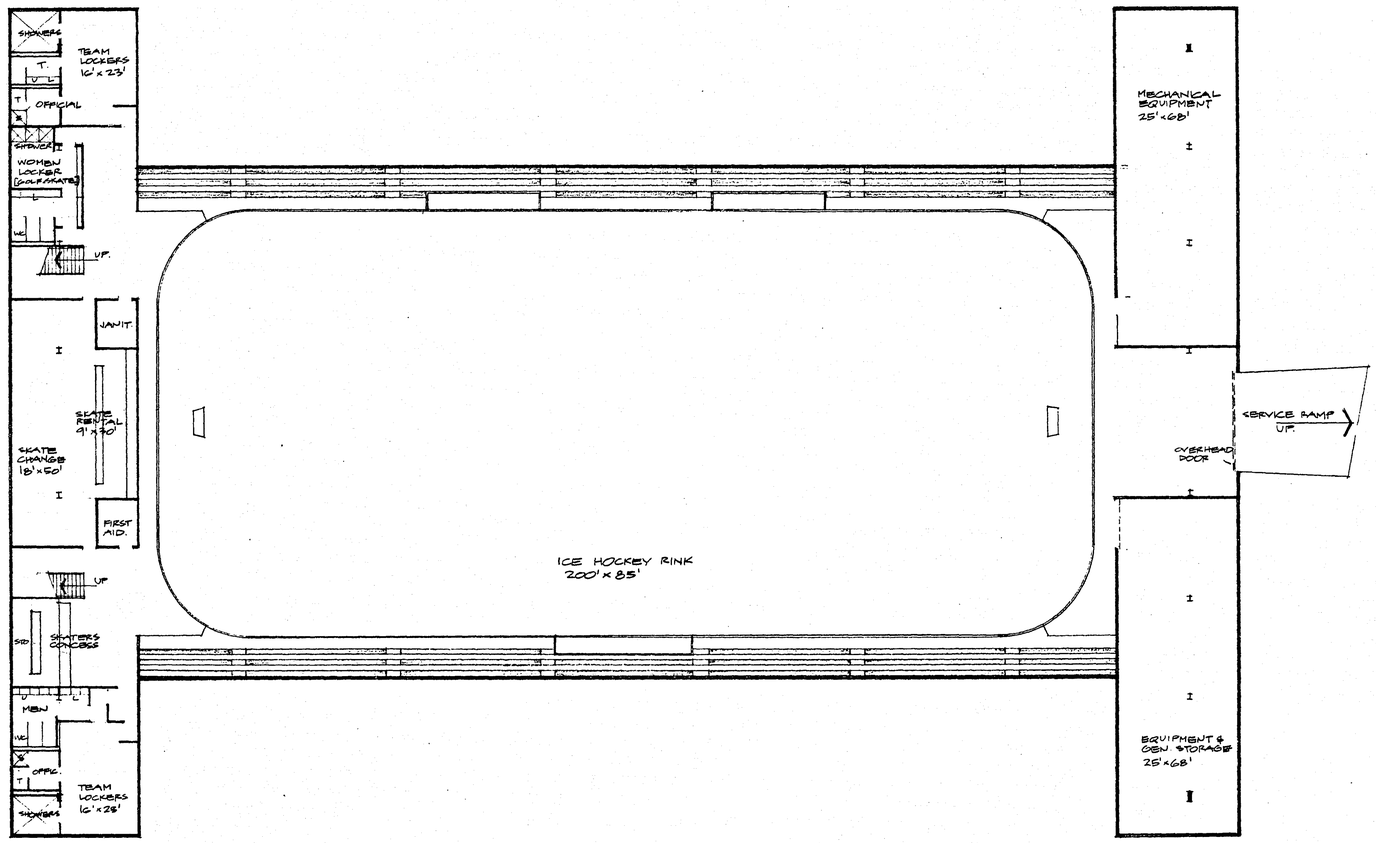
HAARSTICK LUNDGREN AND ASSOCIATES INC
architects
SAINT PAUL

engineers
SAN FRANCISCO

INTERIOR

P7

MICROFILMED
RAMSEY CO. ENGR.
T-128



RINK LEVEL

PLAN

SCALE 1/6" = 1-0

P2

MICROFILMED
RAMSEY CO. ENGR. T-128

REVISIONS	DATE	DRAWN

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Date _____ Reg. No. _____

PLAN AT RINK LEVEL

ALDRICH RECREATION ARENA FOR RAMSEY COUNTY MINN

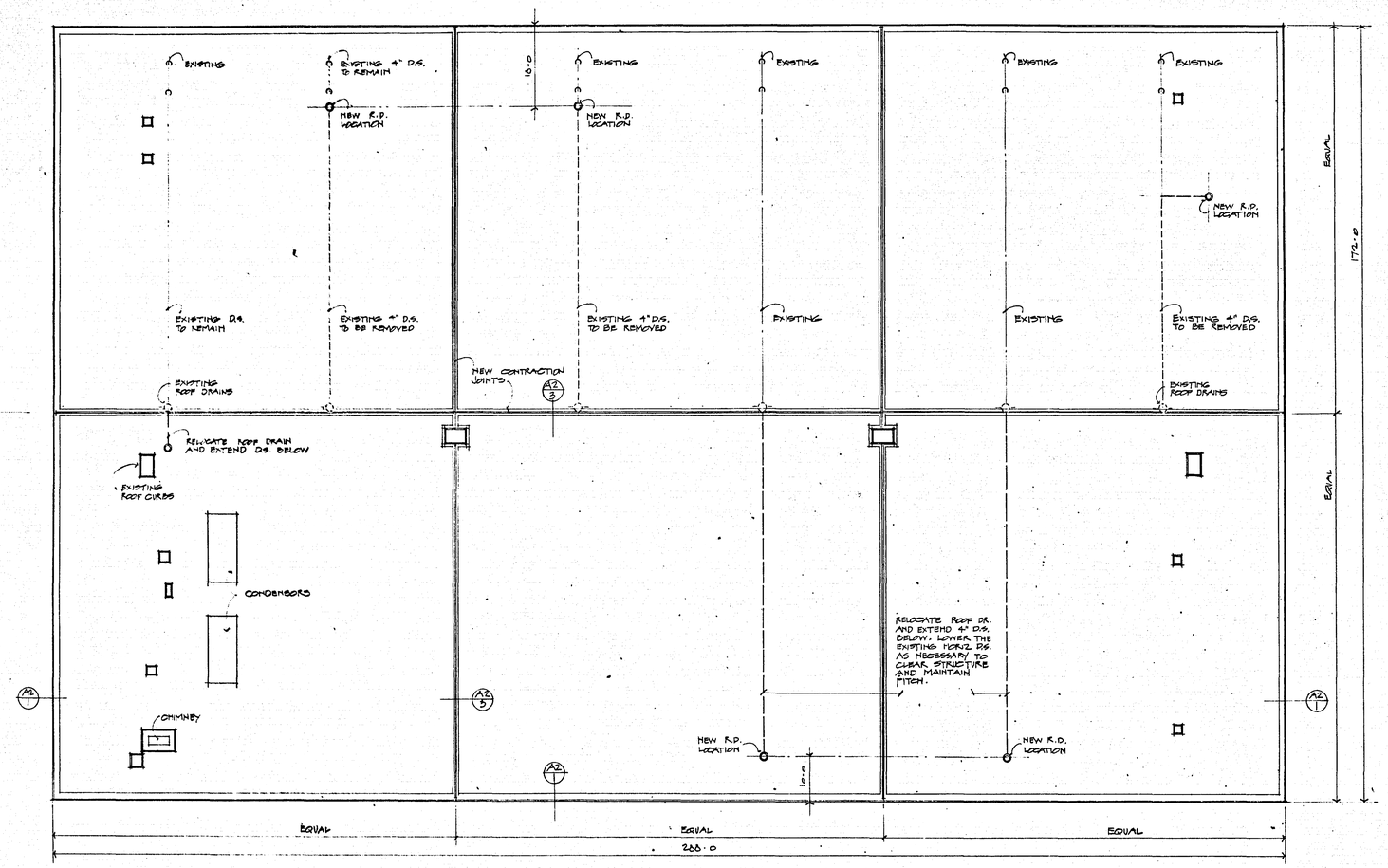
DATE 15 APR '60

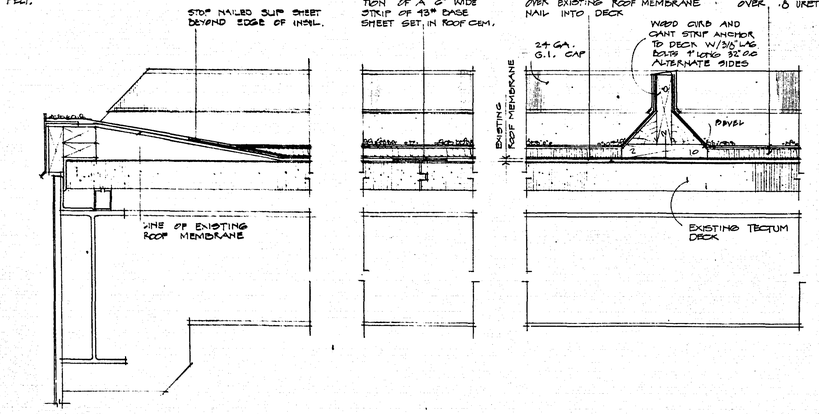
DRAWN R.H.H.

CHECKED

SHEET

HAARSTICK LUNDGREN AND ASSOCIATES
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BLDG. ST. PAUL, MINN.





A2/1 ROOF EDGE

A2/2 DECK JOINT

A2/3 CONTRACTION JOINT

T-128 MICROFILMED RAMSEY CO. ENGR.

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ARCHITECT under Laws of the State of Minnesota.

Date JULY 16, 1965 Reg. No. 2062

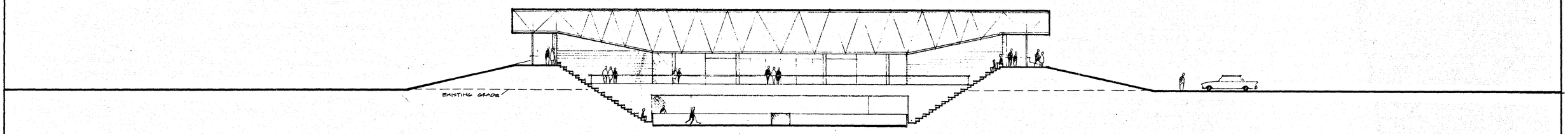
PLAN FOR ALTERNATE BID

ROOFING AND RELATED WORK
ALDRICH RECREATION ARENA
RAMSEY COUNTY MINNESOTA

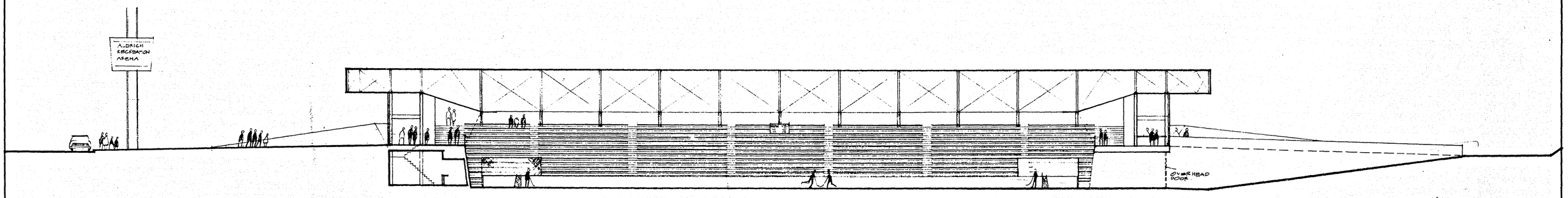
HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE 16 July 1965
DRAWN AEL
CHECKED
SHEET A2

HARCO ST. PAUL 127M 4-63



CROSS



LONGITUDINAL

SECTIONS

SCALE 1/16" = 1'-0"

P5

T-128

MICROFILMED
RAMSEY CO. ENGR.

REVISIONS	DATE	DRAWN

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered _____ under the Laws of the State of Minnesota.

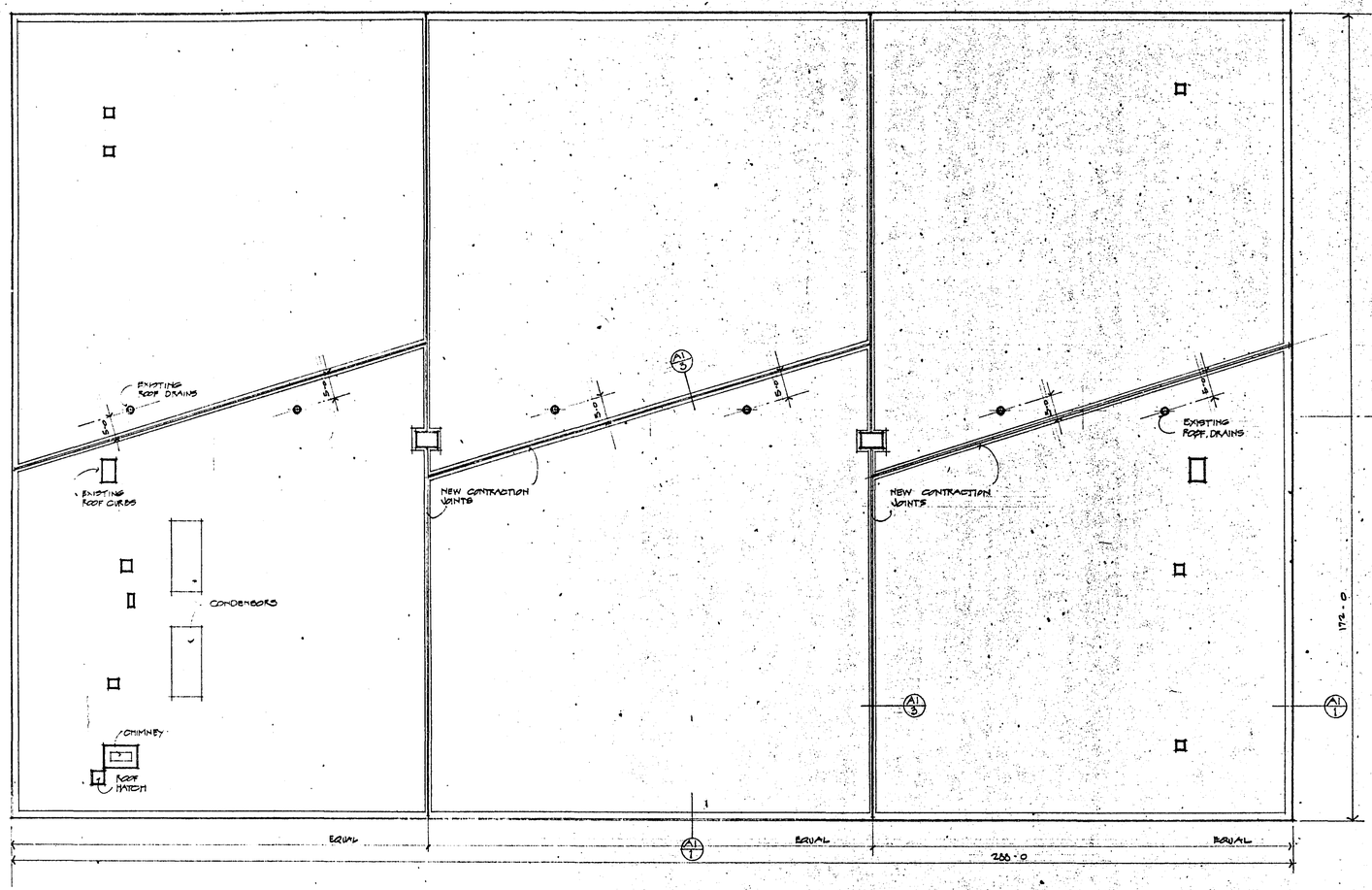
Date_____ Reg. No._____

SECTIONS

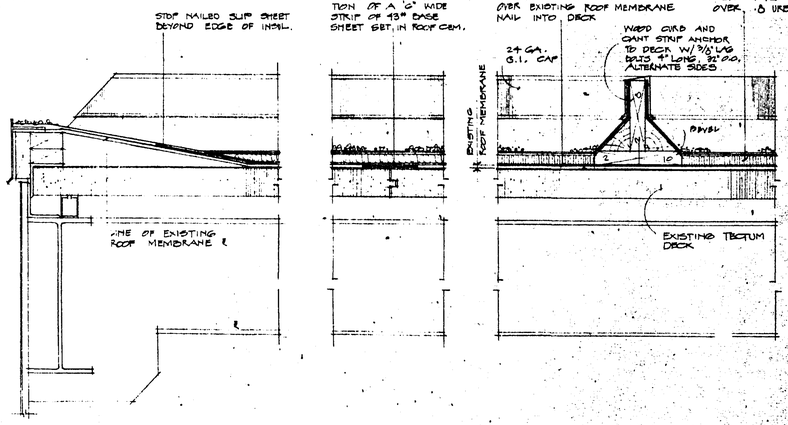
ALDRICH RECREATION ARENA
FOR RAMSEY COUNTY MINN

HAARSTICK LUNDGREN AND ASSOCIATES
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BLDG. ST. PAUL, MINN.

DATE 15 APR '60
DRAWN FHH
CHECKED
SHEET



ROOF PLAN 1/16" = 1'-0



A1/1 ROOF EDGE 1½" = 1'-0"

A1/2 DECK JOINT

A1/3 CONTRACTION JOINT

T-128 MICROFILMED RAMSEY CO. ENGR.

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ARCHITECT under Laws of the State of Minnesota.
Date JULY 16, 1965 Reg. No. 3062.

PLAN FOR BASE BID
ROOFING AND RELATED WORK
ALDRICH RECREATION ARENA
RAMSEY COUNTY MINNESOTA

HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE 16 JULY 1965
DRAWN ASL
CHECKED
SHEET A1

HARCO ST. PAUL 127M 4-65

℄ WHITE BEAR AVENUE

TOE OF SLOPE

TOE OF SLOPE

EXISTING ENTRANCE

℄ ALLEY

65.15

65.13

10'R

5'R

5'R

10'R

64.90

65.41

65.33

ALDRICH ARENA

SIDE WALK IN PLACE

64.83

REPLACE PANEL

+75 64.65

+00 64.50

+25 64.35

+50 64.20

64.01

+25 63.82

+75 63.37

+00 63.15

+25 63.93

PROPOSED CURB 63.59

PROPOSED FENCE

TREES

BOULEVARD

N

℄ VAN DYKE STREET

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

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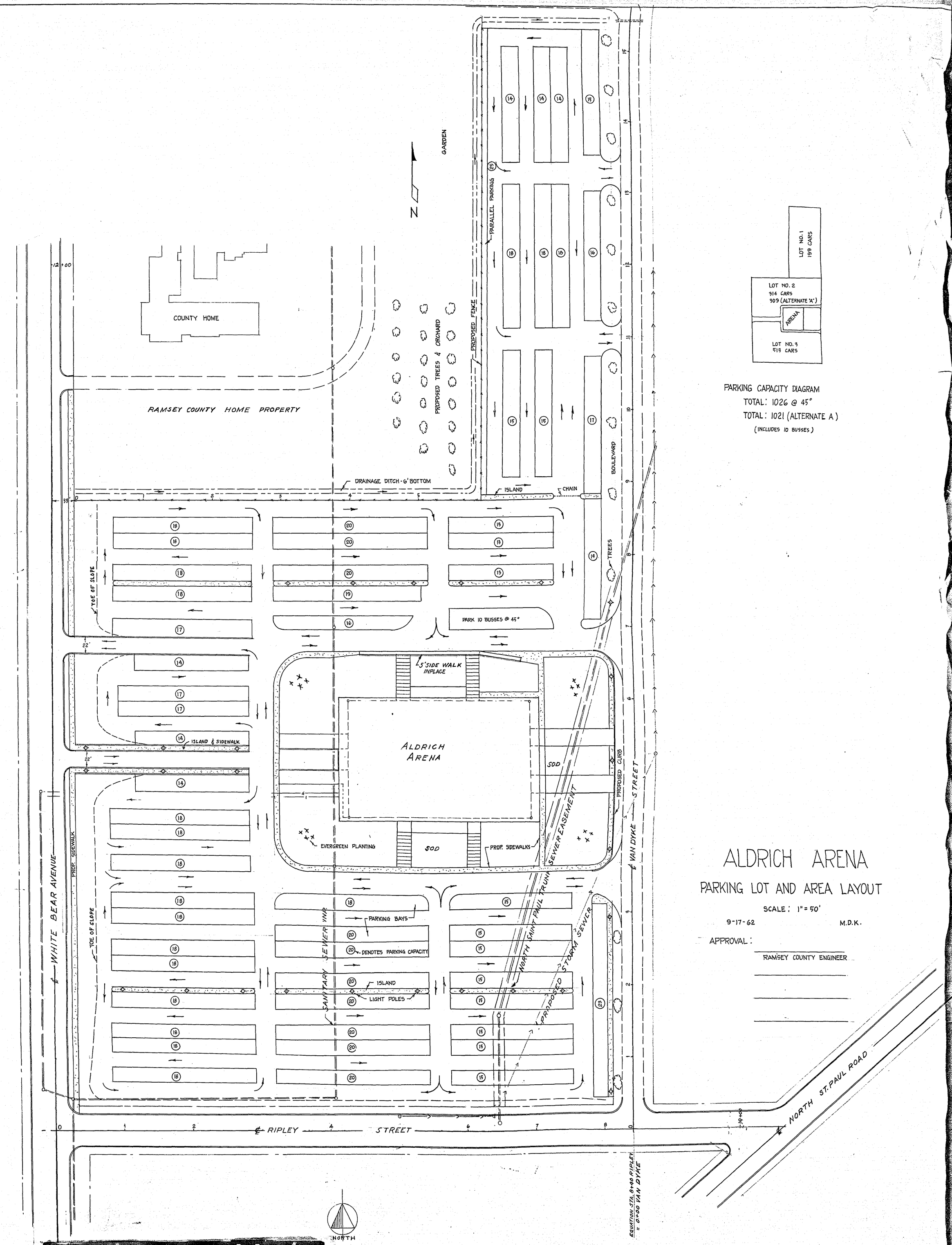
RAMSEY CO. ENGR.
T-128



T-12
MICROFILMED
RAMSEY CO. ENGINEER

3" EXHAUST PIPE. RUN NEAR CEILING & EXTEND OUT OF WALL ABOVE LOUVER OPENING. PROVIDE RAIN COVER OUTSIDE BLDG. & CONDENSATION TRAP AT GENERATOR. USE LONG RADIUS ELLS FOR ALL BENDS.

75 KVA DRY TYPE TRANSFORMER.

METERS & METERING TRANSFORMERS

2"-3"#2/0 TYPE RHW

CONTROL CCT'S. FOR THE MAG. STARTERS ARE BY OTHERS.

2"-3"#2/0 TYPE RHW

2"-¼" COPPER GROUNDING BUS. GROUND TRANSFORMER CASES & PRIMARY NEUTRAL TO BUS.

1" RIGID CONDUIT 1"#10 TO WATER MAIN.

F.A. CONTROL PANEL

IP RELAY, NORMALLY CLOSED. PILOT TO L.T. ONLY WHEN MOTOR CCT. IS OPEN.

#8 WIRE

UP TO MOTORS #16 & #17

REFRIGERATION CONTROL PANEL TERMINATE 3# CCT AT PANEL.

C.M. 37 IS A CLASS I, DIV. C HAZARDOUS AREA.

WATER METER

BURNER CONTROL PANEL. CONNECT TO DISC. SW. IN PANEL.

1"MT CONDUIT TO #18 ON BURNER.

IN ROOM 34 FIXTURES MAY BE MOVED SLIGHTLY & STEMS SHALL BE LENGTHENED WHERE NECESSARY TO AVOID MECHANICAL OBSTRUCTIONS.

FURNISH WITH PILOT

1"MT TO 103

UP TO SWITCHES X & Y IN RM. 136 & THEN TO PANEL EE.

STUB UP 6" & CAP

END OF LINE RESISTOR

1" MT CONDUIT TO TEL. TERM. CAB. IN RM. #128.

ONE CCT. FOR MOTORS 13, 14 & 15 ONLY

PIPE TUNNEL NOTE
ALL FIXTURES SHALL BE TYPE 'N', WALL MOUNTED 6'-2" ABOVE FLOOR. MOUNT RECEPTACLES BELOW LIGHTS AT 3'-0". ALL WIRING SHALL BE #10 FROM PANEL TO FIXTURES & RECEPTACLES.

RINK LEVEL FLOOR PLAN
⅛"=1'-0"

NORTH

MAIN CCT. BKR. (E1/1)
5" CONDUIT SEAL CONDUIT AFTER CABLES HAVE BEEN INSTALLED.
90° INSIDE RISER ELBOW
90° OUTSIDE RISER ELBOW
90° FLAT ELBOW
STRAIGHT ADJUSTABLE SECTION
TRANSFORMER PAD.
DROP OUT
CABLE TRAY FOR SECONDARY WIRING
TRANSFORMERS
POTHEAD
PRIMARY DISCONNECTS
RACK PRIMARY CABLES ALONG WALL USING PORCELAIN INSULATORS.
EXACT LOCATION SHALL BE DETERMINED BY POWER CO. REQUIREMENTS & BY SECONDARY DISTRIBUTION EQUIPMENT LOCATION.

TRANSFORMER VAULT
¼"=1'-0"

CABLE TRAY
5" CONDUIT
MAIN CCT. BKR.
90° ELBOW
9'-6"
6'-6"
FLOOR
(E1/1)
½"=1'-0"

MICROFILMED
RAMSEY CO. ENGR.
T-128

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ENGINEER under Laws of the State of Minnesota.
Robert W. Voigt
Date 7-11-60 Reg. No. 5538

ELECTRICAL RINK LEVEL FL. PLAN
ALDRICH RECREATION ARENA
RAMSEY COUNTY MINNESOTA

HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE JULY 11, 1960
DRAWN P.W.M.
CHECKED R.W.V.
SHEET E1

66

HAMOO ST. PAUL, DSO 12716 10-58 PIP

MOUNT ALL TYPE 'D' FIX. IN RMS. #121, 122 & 123 AT 9'-3" ON WALL.

CCTS. a, b, c, d #10 WIRE

RISE UP BEHIND COLUMN

1" MT. CONDUIT FOR FUTURE BROADCASTING OUTLETS.

RUN CONDUIT UP BEHIND COLUMN & INTO JOIST SPACE & CAR

RISE UP BEHIND COLUMN

CCTS. a, b, c, d #10 WIRE

¾" MT. C.

¾" MT. C.

OUTLET BOX WITH BLANK COVER RECESSED IN WALL 3'-0" ABOVE FLOOR. SEE SEC. 15/A

NON-FUSIBLE

NON-FUSIBLE

ALL CCTS. #10 WIRE

SOKYA DRY TYPE TRANSFORMER & DISC. SW. SEE ELEVATION E3.

TO PANEL E.2. UNDER STAIRWAY 130

THIS 24 HANGERS TO SAME CCT.

LOCATE SWITCHES FOR DARK LEVEL LIGHTING HERE. SEE DWG. ON SH. E3.

LOCATE 24"x 24"x 4" RECESSED PULLBOX HERE FOR FUTURE P.A. SYSTEM. BOTTOM SHALL BE 12" ABOVE FLOOR. FROM BOX STUB 2-1" CONDUITS DN. INTO RM. 16 AT THE CEILING. STUB 3-1" CONDUITS UP THRU CEILING & INTO JOIST SPACE OVER THE KINK AREA. CAP ALL CONDUITS.

1" EMPTY CONDUIT TO TELE. TERMINAL IN RM. 120

STUB DN. 6" BELOW CEILING & CAR

STUB DOWN 6" BELOW CEILING & CAR

DOWN TO PANEL E.2

CCTS. a, b, c, d #10 WIRE

CEILING FRAMING TRUSSES

1" MT COND.

TELEPHONE TERMINAL BOARD 3'-4" x 5'-0" PLYWOOD PAINTED 2 COATS STUB 12-1" CONDUITS UP FROM BOARD INTO JOIST SPACE OVER KINK AREA.

2½" MT CONDUIT. STUB OUT 5' FROM BLDG. FOR UNDERGROUND TELEPHONE SERVICE & STUB UP 2' AT TERMINAL

MOUNT ALL TYPE 'D' FIXT. IN RMS. #111, 112 & 113 AT 9'-3" ON WALL.

DISC. SW'S. FOR MOTORS 16 AND 17 SHALL BE NON-FUSIBLE AND RAINTIGHT

CCTS. a, b, c, d #10 WIRE

RISE UP BEHIND COLUMN

2-¾" MT. CONDUITS FOR FUTURE TELEPHONE & MICROPHONE.

2-2" MT. CONDUITS FOR FUTURE SCORE-BOARD CONTROL.

TERMINATE ALL CONDUITS IN OUTLET BOXES WITH BLANK COVERS. BOXES SHALL BE RECESSED, 9" ABOVE FLOOR. SEE SEC. 16/A

STUB ¾" MT C. INTO TUNNEL & CAR

RUN CONDUIT UP BEHIND COLUMN & INTO JOIST SPACE AND CAR.

TO F.A. CONTROL PANEL IN RM. 34

CEILING FRAMING TRUSSES

VERIFY MECH. EQUIP. IN THIS ROOM BEFORE LOCATING ANY ELEC. EQUIPMENT.

DN. TO STAGETTES IN RM. 34

ELE. 993'-10"

TO F.A. CONTROL PANEL IN RM. 34

ALL CCTS. #10 WIRE

15 #10

16 #10

22'-0"

22'-0"

12'-0"

ENTRANCE LEVEL FLOOR PLAN

1/8" = 1'-0"

NORTH

CCTS. INDICATED BY LOWER CASE LETTERS ARE REMOTELY SWITCHED FROM ROOM 127. SEE SWITCHING RISER ON SH. E3. CERTAIN CCTS. ARE DESIGNATED AS BEING WIRED WITH #10 WIRE. THIS SHALL BE CONSTRUED TO MEAN #10 WIRE FROM THE PANEL TO EACH FIXTURE IN THE CCT.

ADDITIONAL SYMBOL

COMBINATION DUPLEX RECEPTACLE WITH TOP RECEPT. 208V-1Ø & BOTTOM RECEPT. 120V-1Ø. CONNECT TO 20A-2P CCT.

IN THE ARENA AREA, ROOMS 124, 125 & 126, THE CONDUIT RUNS TO THE TYPE A & TYPE B FIXTURES SHALL BE ALONG THE BOTTOM OF THE CEILING FRAMING BEAMS - SEE SH# 33. ALL OTHER EXPOSED CONDUIT RUNS IN THE AREA SHALL BE AT THE ROOF DECK.

MICROFILMED
RAMSEY CO. ENGR. T-128

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ENGINEER under Laws of the State of Minnesota.

Robert W. Voigt

Date 7-11-60 Reg. No. 5508

ELECTRICAL ENTRANCE LEVEL PLAN

ALDRICH RECREATION ARENA
RAMSEY COUNTY MINNESOTA

HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE JULY 11, 1960
DRAWN E.W.M.
CHECKED R.W.V.
SHEET E2

6660

MARCO ST., PAUL, MN 1276 10-58 PCP

SEE PLOT PLAN SHT 1 FOR CONTINUATION OF (G) 6"V.C.P. STORM SEWERS TO CURB OUTLETS

6"V.C.P.

CONC. JOINT

4"C.I.

APPROX. TYP. (G) INV. 956'6"±

6" C.I. STORM THRU WALL

10x24 UD

24x24 G.E. AT CLG.

0° 2" D.S.

INV. LVG. BLDG. 952.9'

3/4"C.H.W.

2"F.D. W/B.L.V.

1½"D. UP DROP 4"

3/4"D.W.

INV. 952.21 CAST I.P. SAN. 18" V.C.P.

AT CLG.

FLOOR ELEV. 956'0"

3/4" GATE VALVE

32

6" H.D. 75 W/BALL CHECK VALVE

24x30 GRILLE 2'0" ABOVE FL.

33

4"SAN.D.

4" C.I. TO THAW PIT

FLOOR ELEV. 956'0"

PIPING AT CLG.

4" DRAIN, BOT. ELEV. 954'0"

EJECTING TRAP W/S.S. TY FLOOR

1½"H.W. & ¾"C.W. DN. TO 1ST HOSE BIB 6'-6"

2" DRAIN AT BOT. OF PIT 2° TO SUMP PUMP

1½" SUMP PUMP DISCH. ABOVE FL. W/ CHECK VALVE DROP TO 6" THN.) PIT DRAIN

ROUGH IN TO FLOOR ABOVE - ¾" H. & C.W. IN WALL TO 2'0" (MAX.) ABOVE FL. 2" W. TO 17" (MAX.) ABOVE FL. AND 1½" VENT IN WALL. CAP H.W., C.W., & W. 1' OUT SIDE OF WALL.

36

34

10X6 DIL TO 12" ABOVE FLOOR

37

2"F.D.

2"SAN. TO SAN. MH

24x12 DUCT UP W/FIRE DAMP AT CLG.

1½"W. UP TO CLG.

2"F.D.

B.B. SAN. FLR. DRN. IN CEM. FLR. CONC.

FIRE DAMP

10X8 UP

2"SAT CLG.

INV. 952.18 CAST I.P. SAN. 18" V.C.P.

10X8 UP

DROP 2½"W.

4"X6"

2"H.W. TO CLG.

2"W. UP

DROP 4"W.

SEE SHT. M-4 FOR EQUIPMENT LAYOUT, H.W., C.W., HEATING, & REFRIG. PIPING IN THIS AREA.

FLOOR ELEV. 956'0"

6.65' PITCH - INVERT 18" VCP SEWER

APPROX. 70'

FLOW INV. 950.81'

RINK FLOOR ELEV 956'0"

31

1¼" IRON FRENCH W.H. PITCH TO DRAIN TO PENALTY BOX

PIPING IN WALL

RISE OVERHEAD TO ALLOW PASSAGE

SLIDING JOINTS AS SHOWN ON SECTION M-3

SHT. M-3.

M-3

1

2"H.W. ¾" C.W. 2½" C.W. & 1½ H.W.R.

35

PIPING RACKED ON WALL

GUIDES

8'-0"

RUN PIPE LOOP TO FL. (DIM. VARIES)

DV

ELEVATION AT "A" EXPANSION LOOP SHOWING PIPING IN TUNNEL

DWG. TAN FOR SIZING OF PIPES

EXTEND C.O. FROM 8" SEWER WITH LINE JUMP SILL TO FLUSH WITH SLEACHER FLOOR, TYPICAL (6) PLACES. COORDINATE LOCATION OF C.O.'S WITH BLEACHER SEAT INSTALLATION

THIS CAN TO MOUNT HEAT EXCHANGER - TYP.

W-20 SHOCK ABSORBS

3"W., 36" H. & C.W. UP

¾" G.H.M.

4"V.S. UP

4"SAN.

DROP 8"W.

¾" C.H.W.

2"F.D., 1½"D UP

¾" H.W. TO CAN.

1½"H.

¾" C.H.W.

1½"H.

3"D.

4"V.S. DN.

2"V.

1½" C.W.D. TO (G) W.C. & LAV.

2"C.W.

2"V.

1½"H.

2"C.W.D. TO (G) URS. & SHR.

2½" C.W.D.

ROUGH IN 2"W. TO WALL TO 17" (MAX.) ABOVE FLOOR AND CAP 1" OUT SIDE OF WALL. 1½" VENT IN WALL AND 3/4" H. & C.W. IN WALL TO 20" (MAX.) ABOVE FLOOR & CAP 1" OUT SIDE OF WALL. SIM. TO 12

1½"V. FROM F.D. BELOW

¾" C.W.

¾" G.H.M.

1½" H.W.

RISE

UP TO 2"F.D.

D.F.

RUN VENT TIGHT TO UNDER SIDE OF WALL

DROP 2" TO UNDER SIDE OF WALL

ROUGH IN 2"W. TO 6" ABOVE FLOOR AND CAP. 1" OUT SIDE OF WALL. 1½" VENT IN WALL AND 3/4" H. & C.W. IN WALL TO 42" ABOVE FL. & CAP 1" OUT SIDE OF WALL. SIM. 19

ROUGH IN 2"W. & ¾" H. & C.W. UP TO 6" ABOVE BLEACHER LEVEL FLOOR AND CAP.

1½"V.

2"F.D.

NOTE SEE SPECIAL PLAN SHEET M-5 FOR HEATING & VENTILATION OF LAST SECTION OF BUILDING

21

20

FLOOR ELEV 957'0"

2½" C.W.

¾" C.H.W.

1½" H.W.

W-20 SHOCK ABSORB

ROUGH IN 2"C.W. & ¾" H. & C.W. UP TO 6" ABOVE BLEACHER LEVEL FLOOR & CAP

UP TO 2"F.D.

D.F.

RISE

22

23

3"F.D.

1½" H.W. & ¾" C.W. DN. TO 2'-6" (G) W.C.

DROP

36"x36" GRILLE - REMOVABLE FROM INSIDE OF TUNNEL

SEE SHT. M-5 FOR CONFIGURATION OF 3/4" H.W.R.

36"x36" SINGLE DOOR FIRE DAMP

C.O.'s IN TUNNEL (6 PLACES)

25

ROUGH IN TO FLOOR ABOVE - RM 1,2,4 2"W. IN WALL TO 17" ABOVE FLOOR (MAX.) AND CAP 1" OUTSIDE OF WALL. 1½" VENT IN WALL AND ¾" H. & C.W. IN WALL TO 20" ABOVE FLOOR (MAX.) AND CAP 1" OUTSIDE OF WALL. MAKE 1½" W., 1½" H. & C.W. GROUP TO D.F. IS SHOWN ON SHT. M-2.

2"C.W.

1½" H.W.

BAL. C.W.

24

(2) 2"F.D.

1½"V.

27

2"C.W.

1½" H.W.

26

4"V.S. DN.

DROP 5"W.

1½" H.W.

4"SAN.

4"V.S. UP

¾" H. & C.W. UP

28

29

W-20 SHOCK ABSORBS

1" H. & C.W. TO EARTH HEATING PIPES IN CONC. SLAB

30

PLUMBING RINK LEVEL FLOOR PLAN

SCALE 1/8"=1'0"

DIMENSION VARIES APPROX. 9" AT CENTER OF RAMP.

CONC. RAMP

2" CRETE INSUL. CONC. TO ½ OF SEWER PIPE

18" VCP

UNDISTURBED SOIL TO CENTER LINE OF EXIST. 18" VCP SEWER

3'0" MIN. TOP & BOT.

SECTION

M-1

1" = 1'0" SCALE

NORTH

MICROFILMED
RAMSEY CO. ENGR. H28

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Engineer under Laws of the State of Minnesota.

Date 7/11/60 Reg. No. 5226

MECHANICAL RINK LEVEL PLAN

ALDRICH RECREATION ARENA
RAMSEY COUNTY, MINNESOTA

HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE JULY 11, 1960
DRAWN E.A.T.
CHECKED
BY

SHEET M1

66-100

MADDO ST. PAUL 320 18795 10-58 PCP

ENTRANCE LEVEL FLOOR PLAN

SCALE 1/8" = 1'-0"
FLOOR ELEV. 973'-0"

NORTH

WASTE & VENT RISERS RMS. 120, 121, & 122
PIPING FOR ROOMS 112 & 113 SIMILAR

WATER RISERS RMS. 120, 121, & 122
PIPING SIMILAR FOR ROOMS 112 & 113

MICROFILMED
RAMSEY CO. ENGR. F128

REVISIONS	DATE	DRAWN

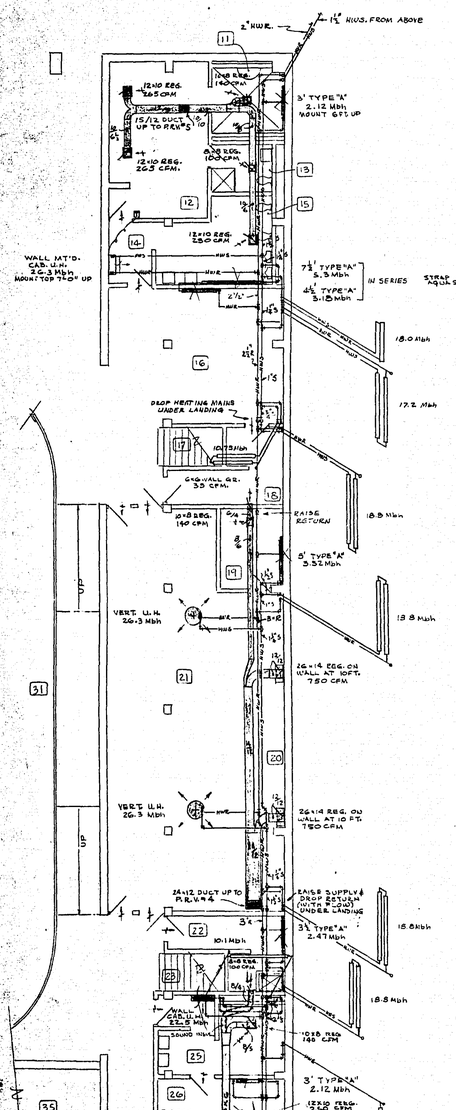
I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Engineer under Laws of the State of Minnesota.
Date 7/11/60 Reg. No. 5236

MECHANICAL ENTRANCE LEVEL PLAN
ALDRICH RECREATION ARENA
RAMSEY COUNTY MINNESOTA

HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

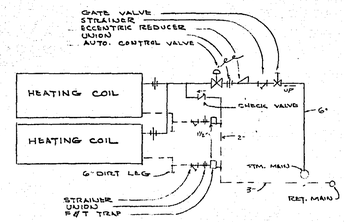
DATE JULY 11, 1960
DRAWN L.G.L., B.A.T.
CHECKED BY
SHEET M2

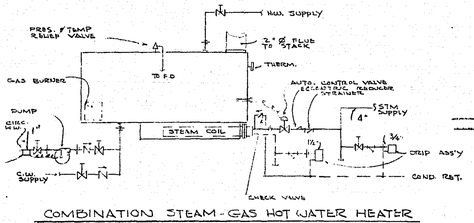
66-105



TYPICAL VENTILATING COIL PIPING

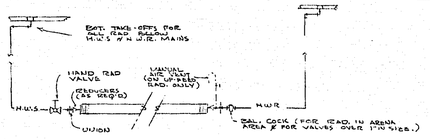
NO SCALE



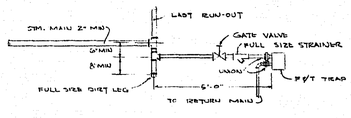


COMBINATION STEAM-GAS HOT WATER HEATER

CABINET UNIT HEATER (HOT WATER)



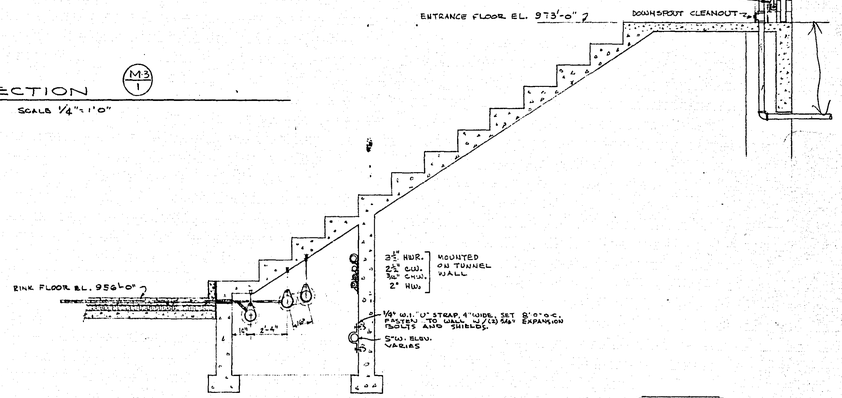
TYPICAL RADIATION DETAIL
(HOT WATER)

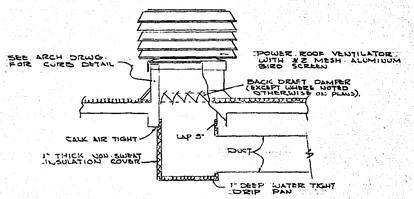


TYPICAL DRIP ASSEMBLY

SECTION (M3/1)

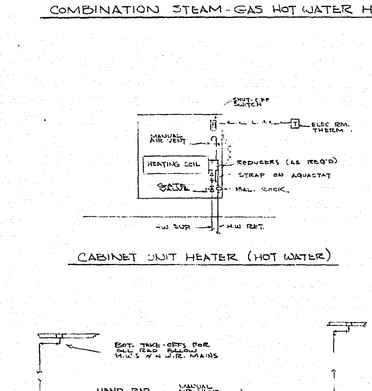
SCALE ⅛"=1'0"



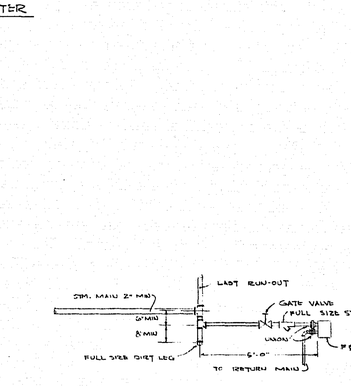


ROOF VENTILATOR DETAIL

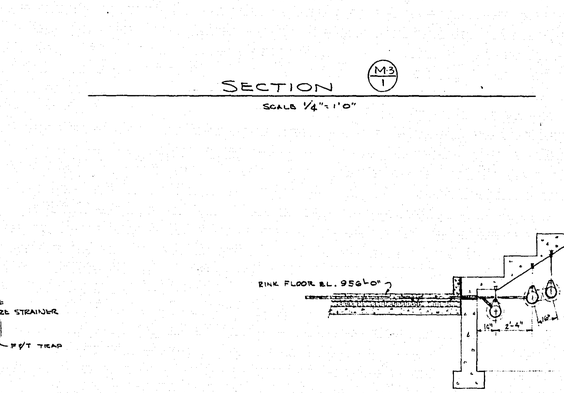
NO SCALE



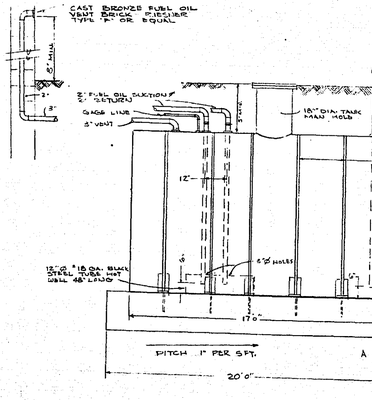
WATER METER PIPING



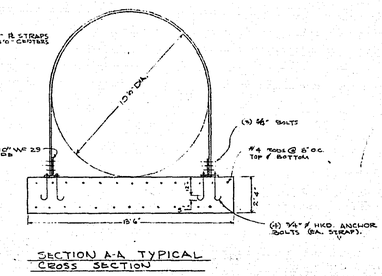
FUEL OIL PUMP PIPING



BOILER PIPING DIAGRAM



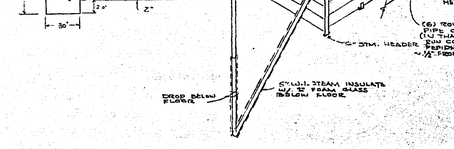
FUEL OIL STORAGE TANK DETAILS



SECTION A-A TYPICAL CROSS SECTION

PLUMBING FIXTURE SCHEDULE

ITEM	SUPPLY	WASTE	VENT	MOUNT HEIGHT
W.C. (FL VALVE)	1¼"	4"	2"	15"
U/R. (FL VALVE)	1"	2"	1½"	1'9"
S.S.	¾"	3"	1½"	VALVE @ 42"
S.R.	¾"	3"	1½"	VALVE @ 42"
SHOWER (HD.)	¾"	2"	1½"	7'8"
SHOWER (GANG)	1"	4"	2"	7'8"
LAV.	¾"	1½"	1½"	3'5"
D.F.	½"	1¼"	1¼"	4'2"



THAW PIT AND CONDENSATE PUMP PIPING DETAIL

NO SCALE

HEATING & VENTILATING - PARTIAL RINK LEVEL PLAN - (EAST END).

SCALE ⅛"=1'0"

NORTH

MICROFILMED
RAMSEY CO. ENGR. F128

REVISIONS	DATE	DRAWN
1		

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Engineer under Laws of the State of Minnesota.

Date 7/11/60 Reg. No. 5236

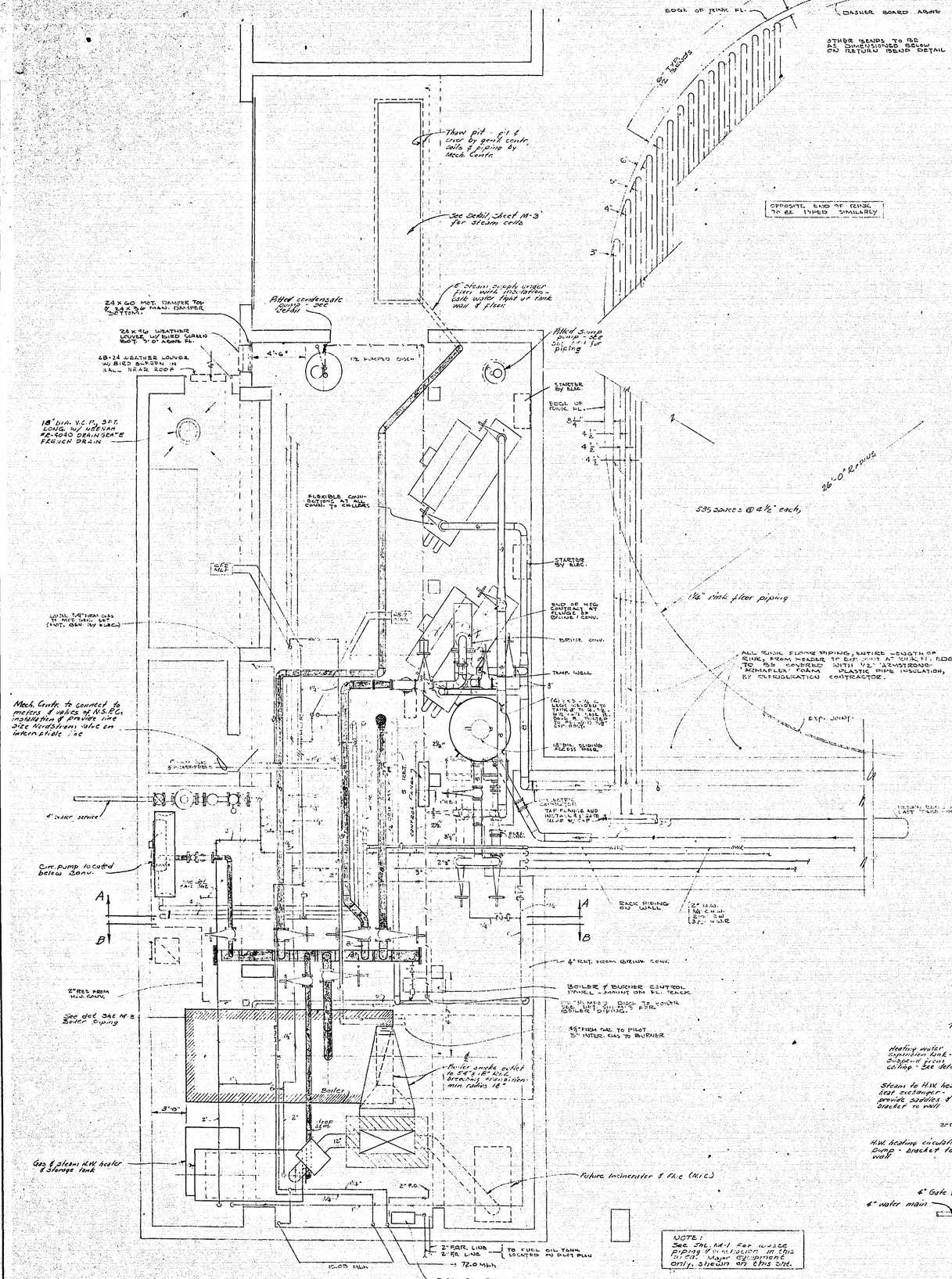
MECHANICAL DETAILS

ALDRICH RECREATION ARENA
RAMSEY COUNTY MINNESOTA

HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

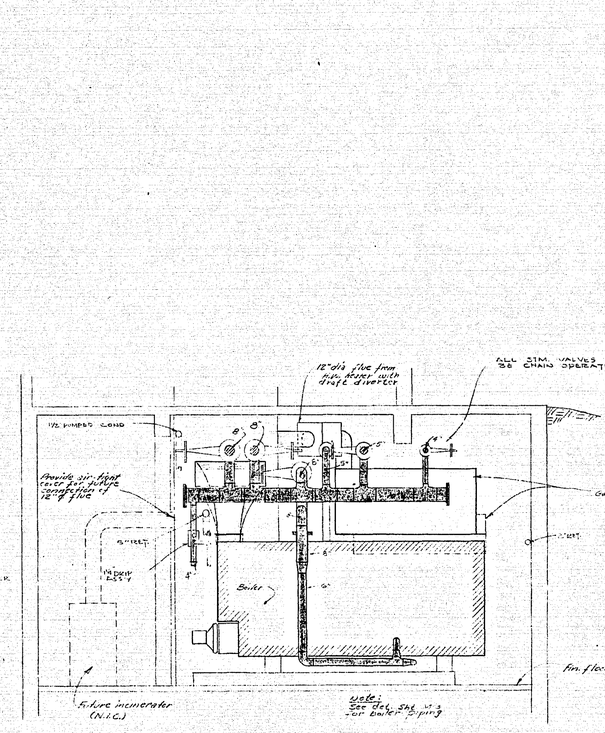
DATE JULY 11, 1960
DRAWN L.G.L., B.A.T.
CHECKED
SHEET M3

66-100



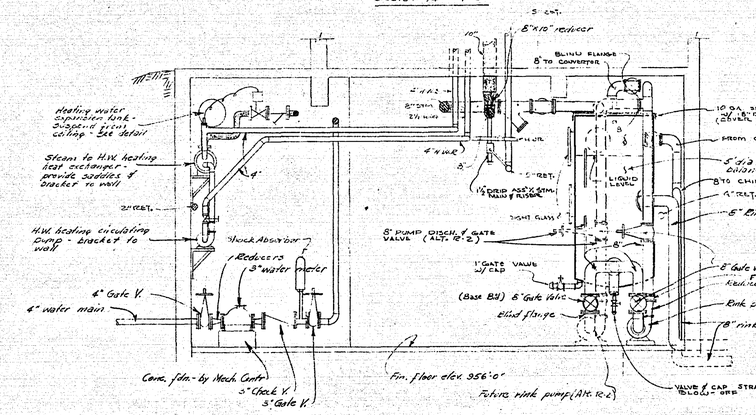
MECHANICAL EQUIPMENT ROOM - PLAN

Scale: ¼" = 1'-0"



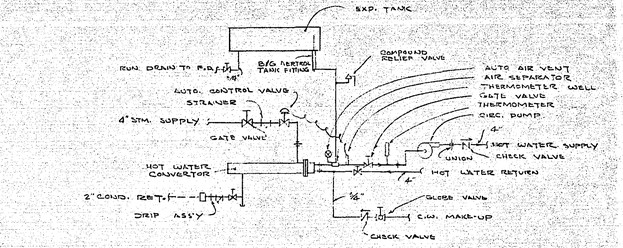
ELEVATION - SECTION B-B

Scale: ¼" = 1'-0"



ELEVATION - SECTION A-A

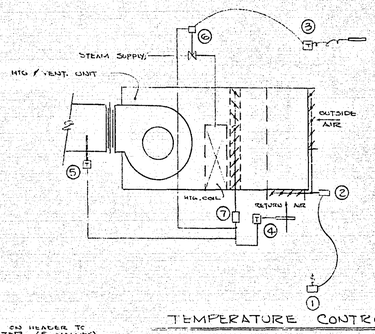
Scale: ¼" = 1'-0"



HOT WATER CONVERTOR PIPING DETAIL

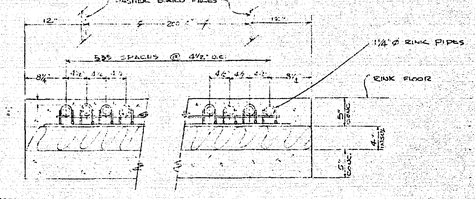
HOT WATER HEATING PIPING SCHEDULE				
MBH	GPM	RUN OUT OR RISER SIZE	VALVE SIZE	BALL COCK ORIF.
0 - 9	0 - 9	½"	½"	
9 - 15	9 - 15	¾"	¾"	Y65 #
15 - 55	15 - 54	1"	1"	Y65 K
54 - 75	54 - 75	1¼"	1¼	Y65
75 - 115	75 - 115	1½"	1¼"	Y65
115 - 210	115 - 210	2"	-	Y65

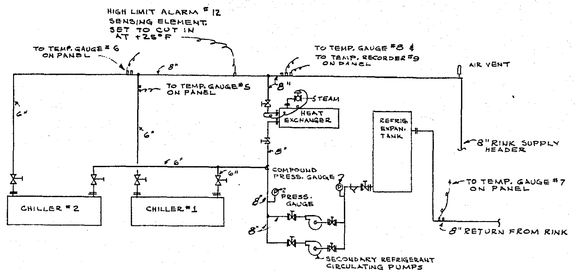
FOR "NO. OF" SIZE



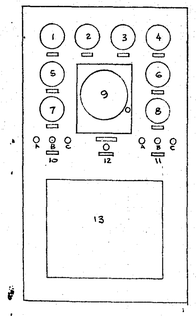
1. REMOTE DAMPER POSITIONING SWITCH.
2. MODULATING MIXING DAMPER MOTOR
3. OUTDOOR STAT SET AT 35°
4. RETURN AIR STAT
5. LOW LIMIT STAT
6. MODULATING STEAM COIL VALVE (7200 EDR @ 5 PSI STM., 2 PSI DROP).
7. MODULATING FACE AND BYPASS DAMPER MOTOR.

TEMPERATURE CONTROL DIAGRAM


DASHER BOARD FACES
12"
200'-0"
535 SPACES @ 4½" O.C.
1¼" ø RINK PIPES
RINK FLOOR
8½"
4½"
4½"
4



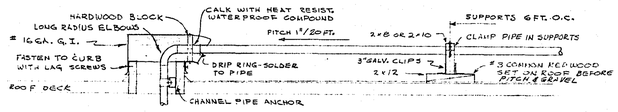
SECONDARY REFRIGERANT PIPING



CONTROL PANEL SCHEDULE

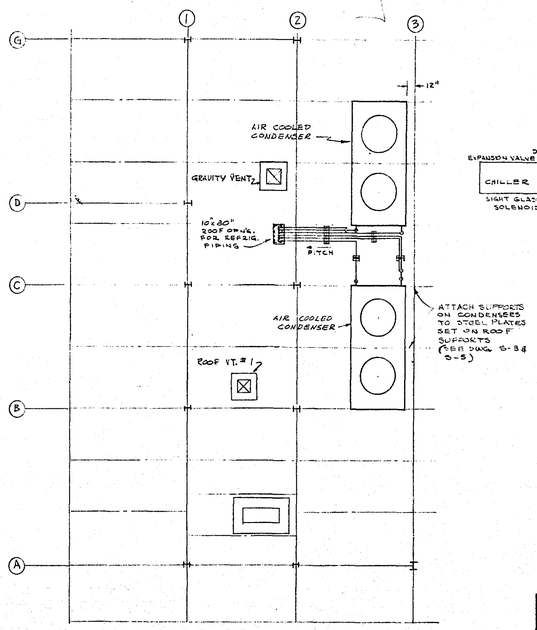
ITEM NO.	DESCRIPTION
1.	SYSTEM NO. 1 - LOW PRESSURE PRIMARY REFRIG. GAUGE
2.	" " 1 - HIGH " " " "
3.	" " 2 - LOW " " " "
4.	" " 2 - HIGH " " " "
5.	CHILLER NO. 1 LEAVING SECONDARY REFRIG. TEMP.
6.	" " 2 " " " "
7.	SECONDARY REFRIG. RETURN TEMP. FROM RINK
8.	" " SUPPLY TEMP. TO RINK
9.	" " " " " " RECORDER
10.	GREEN INDICATING LIGHTS: COMPRESSOR # 1 A. CRANK CASE HEATERS ON B. CHILLER-COMPRESSOR #1 ENERGIZED C. CONTROL CIRCUIT ENERGIZED
11.	GREEN INDICATING LIGHTS: COMPRESSOR # 2 A. CRANKCASE HEATER ON B. CHILLER COMPRESSOR #2 ENERGIZED C. CONTROL CIRCUIT ENERGIZED
12.	RED BLINKER - HIGH LIMIT ALARM
13.	COMPRESSOR CONTROL CABINET - ALL CONTROLS FOR BOTH CHILLER SYSTEMS: A. SEQUENCE CONTROLLER B. MODULATING TEMP. CONTROLLER C. OIL PRESS. CONTROLLERS D. HIGH & LOW PRESS. CONTROLLERS E. LOW TEMP. CUTOUT F. MANUAL 4 WAY SWITCH G. AIR COOLED CONDENSER INTERLOCKS H. SECONDARY REFRIG. LEAVING TEMP. HIGH LIMIT ALARM CONTROL ALL OTHER DEVICES USED IN CONNECTION WITH SYSTEMS NOS. 1 & 2. SEQUENCING AND UNLOADING CONTROLS

REFRIGERATION CONTROL PANEL



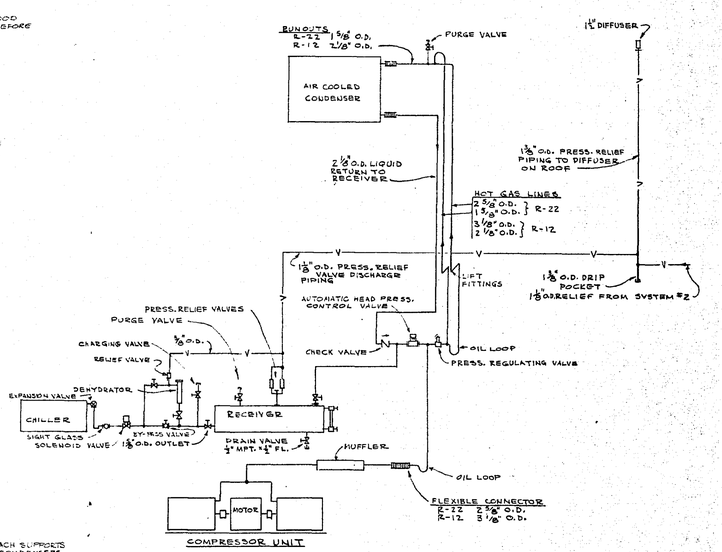
ROOF JACK DETAIL

SCALE 3/4"=1'-0"



AIR COOLED CONDENSER LOCATION

SCALE 1/8"=1'-0"



SCHEMATIC REFRIGERANT PIPING LAYOUT

T-128 MICROFILMED RAMSEY CO. ENGR.

REVISIONS	DATE	DRAWN

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Date 7/11/60 Reg. No. 5236

REFRIGERATION DETAILS

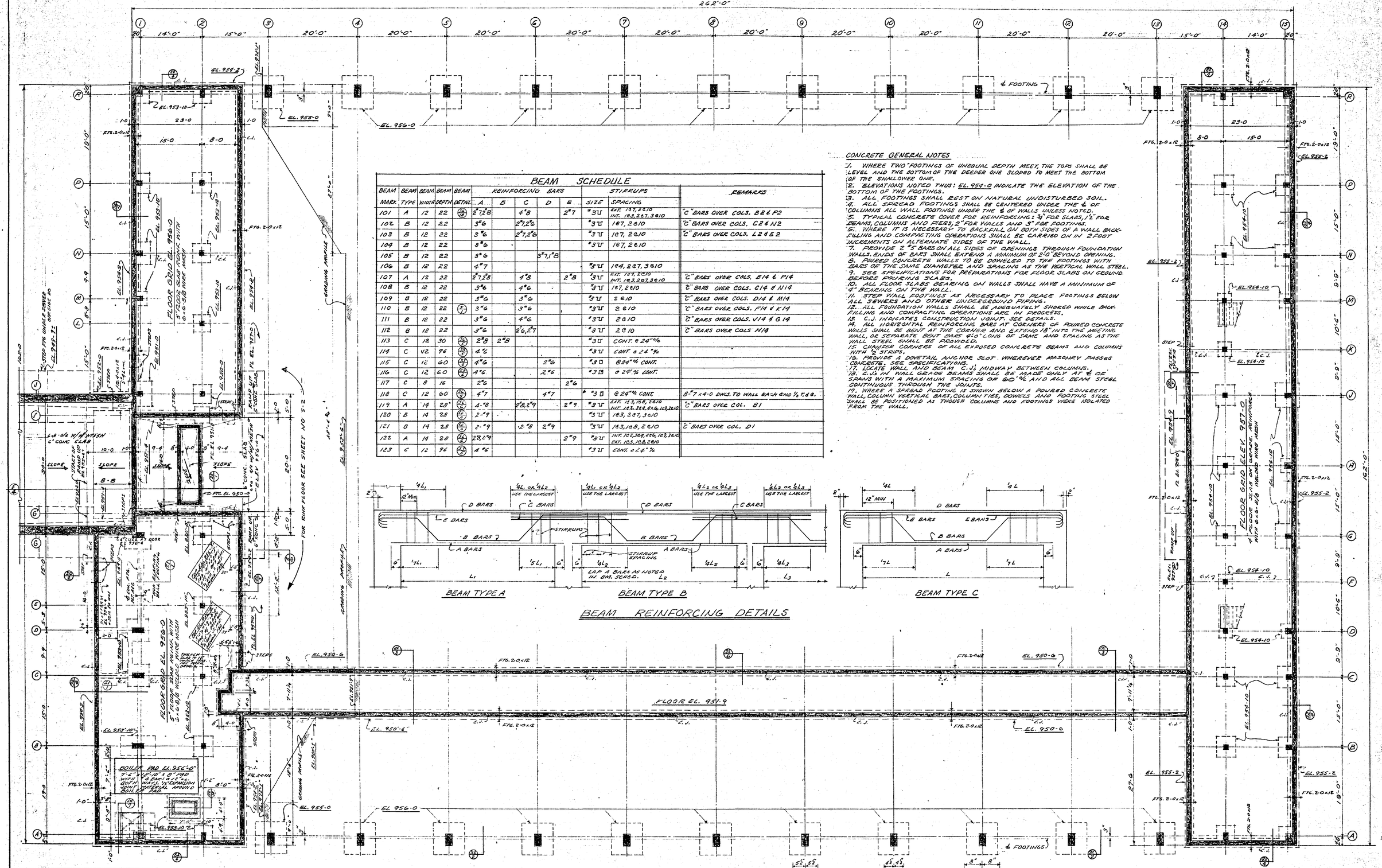
ALDRICH RECREATION ARENA

RAMSEY COUNTY, MINNESOTA

HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE JULY 11, 1960
DRAWN LGL
CHECKED
SHEET M5

66-100



BEAM SCHEDULE

BEAM MARK	BEAM TYPE	BEAM WIDTH	BEAM DEPTH	BEAM DETAIL	REINFORCING BARS A	B	C	D	E	STIRRUPS SIZE	STIRRUPS SPACING	REMARKS
101	A	12	22		2#7,2#8		4#8		2#7	#3 U	EXT. 1@7, 2@10 INT. 1@3, 2@7, 3@10	"C" BARS OVER COLS. B2 & P2
102	B	12	22		3#6		2#7,2#6			#3 U	1@7, 2@10	"C" BARS OVER COLS. C2 & N2
103	B	12	22		3#6		2#7,1#6			#3 U	1@7, 2@10	"C" BARS OVER COLS. L2 & E2
104	B	12	22		3#6					#3 U	1@7, 2@10	
105	B	12	22		3#6			3#7,1#8				
106	B	12	22		4#7					#3 U	1@4, 2@7, 3@10	
107	A	12	22		2#7,2#8		4#8		2#8	#3 U	EXT. 1@7, 2@10 INT. 1@3, 2@7, 3@10	"C" BARS OVER COLS. B14 & P14
108	B	12	22		3#6		4#6			#3 U	1@7, 2@10	"C" BARS OVER COLS. C14 & N14
109	B	12	22		3#6		3#6			#3 U	2@10	"C" BARS OVER COLS. D14 & M14
110	B	12	22	F1	3#6		3#6			#3 U	2@10	"C" BARS OVER COLS. F14 & K14
111	B	12	22		3#6		4#6			#3 U	2@10	"C" BARS OVER COLS. J14 & G14
112	B	12	22		3#6		2#6,2#7			#3 U	2@10	"C" BARS OVER COLS H14
113	C	12	30	G1	2#8	2#8				#3 U	CONT. @ 24"c/c	
114	C	12	96	G2	4#6					#3 U	CONT. @ 24"c/c	
115	C	12	60	G2	4#6			2#6		#3 □	@ 24"c/c CONT.	
116	C	12	60	G2	4#6			2#6		#3 □	@ 24"c/c CONT.	
117	C	8	16		2#6				2#6			
118	C	12	60	G2 G3	4#7			4#7		#3 □	@ 24"c/c CONT.	8"-7 x 4'-0 DWLS. TO WALL EA. H END ½ T. & B.
119	A	14	28	G2 G3	4#8		2#8,2#9		2#9	#3 U	EXT. 1@3, 1@8, 2@10 INT. 1@3, 3@4, 2@6, 1@9, 3@10	"C" BARS OVER COL. B1
120	B	14	28	G2 G3	2#9					#3 U	1@3, 2@7, 3@10	
121	B	14	28	G2 G3	2#9		2#8	2#9		#3 U	1@3, 1@8, 2@10	"C" BARS OVER COL. D1
122	A	14	28	G2 G3	2#8,2#9				2#9	#3 U	INT. 1@2, 3@4, 1@5, 1@8, 3@10 EXT. 1@3, 1@8, 2@10	
123	C	12	96	G4	4#6					#3 U	CONT. @ 24"c/c	

CONCRETE GENERAL NOTES

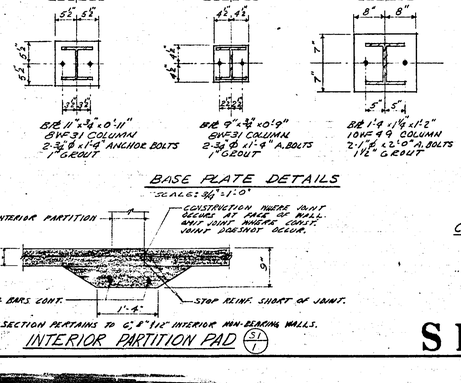
1. WHERE TWO FOOTINGS OF UNEQUAL DEPTH MEET, THE TOPS SHALL BE LEVEL AND THE BOTTOM OF THE DEEPER ONE SLOPED TO MEET THE BOTTOM OF THE SHALLOWER ONE.
2. ELEVATIONS NOTED THUS: EL. 954-0 INDICATE THE ELEVATION OF THE BOTTOM OF THE FOOTINGS.
3. ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL.
4. ALL SPREAD FOOTINGS SHALL BE CENTERED UNDER THE ℄ OF COLUMNS ALL WALL FOOTINGS UNDER THE ℄ OF WALLS UNLESS NOTED.
5. TYPICAL CONCRETE COVER FOR REINFORCING: ¾" FOR SLABS, 1½" FOR BEAMS, COLUMNS AND PIERS, 2" FOR WALLS AND 3" FOR FOOTINGS.
6. WHERE IT IS NECESSARY TO BACKFILL ON BOTH SIDES OF A WALL BACKFILLING AND COMPACTING OPERATIONS SHALL BE CARRIED ON IN 2 FOOT INCREMENTS ON ALTERNATE SIDES OF THE WALL.
7. PROVIDE 2 #5 BARS ON ALL SIDES OF OPENINGS THROUGH FOUNDATION WALLS. ENDS OF BARS SHALL EXTEND A MINIMUM OF 2'-0" BEYOND OPENING.
8. POURED CONCRETE WALLS TO BE DOWELED TO THE FOOTINGS WITH BARS OF THE SAME DIAMETER AND SPACING AS THE VERTICAL WALL STEEL.
9. SEE SPECIFICATIONS FOR PREPARATIONS FOR FLOOR SLABS ON GROUND BEFORE POURING SLABS.
10. ALL FLOOR SLABS BEARING ON WALLS SHALL HAVE A MINIMUM OF 4" BEARING ON THE WALL.
11. STEP WALL FOOTINGS AS NECESSARY TO PLACE FOOTINGS BELOW ALL SEWERS AND OTHER UNDERGROUND PIPING.
12. ALL FOUNDATION WALLS SHALL BE ADEQUATELY SHORED WHILE BACKFILLING AND COMPACTING OPERATIONS ARE IN PROGRESS.
13. C.J. INDICATES CONSTRUCTION JOINT. SEE DETAILS.
14. ALL HORIZONTAL REINFORCING BARS AT CORNERS OF POURED CONCRETE WALLS SHALL BE BENT AT THE CORNER AND EXTEND 15" INTO THE MEETING WALL OR SEPARATE BENT BARS @ 12" LONG OF SAME AND SPACING AS THE WALL STEEL SHALL BE PROVIDED.
15. CHAMFER CORNERS OF ALL EXPOSED CONCRETE BEAMS AND COLUMNS WITH ¾ STRIPS.
16. PROVIDE A DOVETAIL ANCHOR SLOT WHEREVER MASONRY PASSES CONCRETE. SEE SPECIFICATIONS.
17. LOCATE WALL AND BEAM C.J.'S MIDWAY BETWEEN COLUMNS.
18. C.J.'S IN WALL GRADE BEAMS SHALL BE MADE ONLY AT ℄ OF SPANS WITH A MAXIMUM SPACING OF 60'-0" AND ALL BEAM STEEL CONTINUOUS THROUGH THE JOINTS.
19. WHERE A SPREAD FOOTING IS SHOWN BELOW A POURED CONCRETE WALL, COLUMN VERTICAL BARS, COLUMN TIES, DOWELS AND FOOTING STEEL SHALL BE POSITIONED AS THOUGH COLUMNS AND FOOTINGS WERE ISOLATED FROM THE WALL.

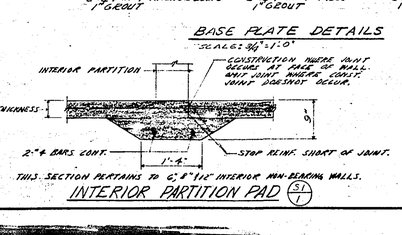
BEAM REINFORCING DETAILS

COLUMN SCHEDULE

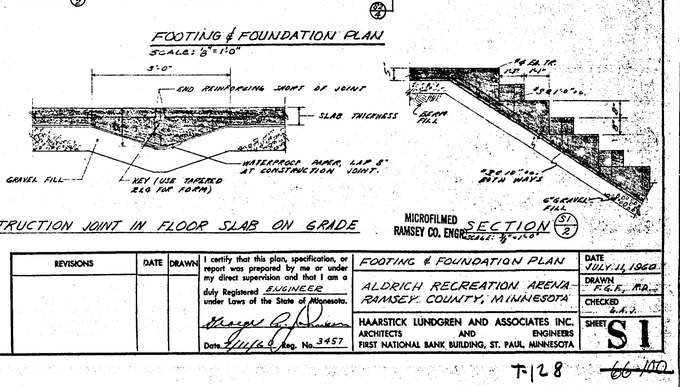
COLUMN MARK	A3,A5,A6,A7,A8,A9,A10 H1,H2,A13,A3,A3,C4,E5,E6 R7,R8,R9,R10,R11,R12,R13	A2, A14 R2, R14	A15 R1, R15	G15 J1, J15	*C1, N1 C15, N15	B15 P1, P15	G2, J2 C2, N2 C14, N14	B2, P2 B14, D14 J14, L14	G'2, J'2	D14, M4 F14, K14	E2, L2 H14	M1, D15 M15, M15	H1	A1	B1	D1	G1
STEEL COL. SECTION	10WF49	8WF31	8WF31	8WF31	8WF31	8WF31	8WF31	8WF31				8WF31	8WF21	8WF31	8WF31	8WF31	8WF31
FOOTING COLUMN PIECE SIZE	1'-8" x 1'-8" x 1'-2"	9'-3" x 9'-0"	9'-3" x 9'-0"	11'-3" x 11'-0"	11'-3" x 11'-0"	9'-3" x 9'-0"	9'-3" x 9'-0"	9'-3" x 9'-0"				9'-3" x 9'-0"	9'-3" x 9'-0"	9'-3" x 9'-0"	9'-3" x 9'-0"	9'-3" x 9'-0"	11'-3" x 11'-0"
FOOTING COLUMN PIECE BOT. EL.	972-7½	973-1	972-7	972-7	972-7	972-7	973-1	973-1				972-7	973-1	973-1	973-1	973-1	973-1
FOOTING COLUMN PIECE VERT. BARS	18 x 32 8"#8	12 x 30 8"#6	30 x 30 8"#7	12 x 30 8"#6	12 x 30 8"#6	12 x 30 8"#6	12 x 12 4"#6	12 x 12 4"#6	12 x 12 4"#6	12 x 12 4"#6	12 x 12 4"#6	12 x 30 8"#6		30 x 30 8"#7	12 x 30 8"#6	12 x 30 8"#6	12 x 30 8"#6
FOOTING COLUMN PIECE TIES	#3@12"c/c (SEE NOTE)	#3@12"c/c (SEE NOTE)	#3@12"c/c (SEE NOTE)	#3@12"c/c (SEE NOTE)	#3@12"c/c (SEE NOTE)	#3@12"c/c (SEE NOTE)	#2@12"c/c	#2@12"c/c	#2@12"c/c	#2@12"c/c	#2@12"c/c	#3@12"c/c (SEE NOTE)		#3@12"c/c (SEE NOTE)	#3@12"c/c (SEE NOTE)	#3@12"c/c (SEE NOTE)	#3@12"c/c (SEE NOTE)
FOOTING COLUMN PIECE SIZE	7'-0 SQ. x 1'-6	4-10 SQ x 1'-4	4-10 SQ x 1'-4	4-13 SQ x 1'-4	4-13 SQ x 1'-4	4-11 SQ x 1'-4	4-10 SQ x 1'-4	4-11 SQ x 1'-4	3-7 SQ x 1'-4	3-8 SQ x 1'-4	3-8 SQ x 1'-4	3-10 SQ x 1'-4		4-10 SQ 11'-4	4-10 SQ x 1'-4	4-13 SQ x 1'-4	6-10 SQ x 1'-4
FOOTING COLUMN PIECE BARS ER WAY	12"#6	10"#4	10"#4	14"#4	12"#4	11"#4	10"#4	11"#4	7"#4	6"#4	8"#4	6"#4		12"#4	9"c LONG 14"c SHORT	12"#4	11"#5
FOOTING COLUMN PIECE DOWELS	8"#8 x 8'-0"	8"#6 x 2'-6	8"#7 x 2'-8	8"#6 x 2'-6	8"#6 x 2'-6	8"#6 x 2'-6	4"#6 x 2'-6	4"#6 x 2'-6	4"#6 x 2'-6	4"#6 x 2'-6	4"#6 x 2'-6	4"#6 x 2'-6		8"#7 x 2'-8	8"#6 x 2'-6	8"#6 x 2'-6	8"#6 x 2'-6

*C1 B.E. EL. 973-1





INTERIOR PARTITION PAD (S1/1)



CONSTRUCTION JOINT IN FLOOR SLAB ON GRADE

MICROFILMED RAMSEY CO. ENGR. SECTION (S1/2) SCALE: ½"=1'-0"

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ENGINEER under Laws of the State of Minnesota.
Date 7/11/60 Reg. No. 3457

FOOTING & FOUNDATION PLAN
ALDRICH RECREATION ARENA
RAMSEY COUNTY, MINNESOTA

HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE JULY 11, 1960
DRAWN P.G.F., M.P.
CHECKED E.H.L.
SHEET S1

S1

HARCO ST. PAUL, MINN 137M 10-58 PCP

T-128 66-100

FLOOR GRID EL. 973-0

RINK LEVEL FLOOR GRID EL. 956-0

5" MONOLITHIC CONCRETE SLAB (W/ 6x6 6/6 WELDED WIRE MESH REINFORCING) OVER REFRIGERATION PIPES AND SPACERS (PERPENDICULAR TO AND UNDER REF. PIPES), OVER 2" FOAMGLAS INSULATION, OVER 5" CONCRETE SLAB (REINFORCED W/ 6x6 6/6 BOTH WAYS), OVER 12" GRANULAR FILL.

202'-0" OUT TO OUT OF CONC. SLAB

87'-0" OUT TO OUT OF CONC. SLAB

FLOOR GRID EL. 973-0

FLOOR GRID EL. 973-0 W/ CONCRETE SLAB REINFORCED W/ 6x6 6/6 BOTH WAYS OVER 6" GRAVEL FILL.

*NOTE: RINK FLOOR SLAB TO BE PLACED IN ONE CONTINUOUS UNINTERRUPTED OPERATION. SEE SPECIFICATIONS.

NORTH

SECTION AA

SECTION AT THAW PIT (S2/1) SCALE: 3/8"=1'-0"

GRADE BEAM SECTION (S2/2) SCALE: 3/8"=1'-0"

TUNNEL SECTION (S2/3) SCALE: 3/8"=1'-0"

WALL SECTION (S2/4) SCALE: 3/8"=1'-0"

WALL SECTION (S2/5) SCALE: 3/8"=1'-0"

TUNNEL SECTION (S2/6) SCALE: 3/8"=1'-0"

SECTION (S2/7) SCALE: 3/8"=1'-0"

FIRST FLOOR FRAMING PLAN SCALE: 1/8"=1'-0"

SECTION (S2/11) SCALE: 3/8"=1'-0"

SECTION (S2/12) SCALE: 3/8"=1'-0"

SECTION (S2/9) SCALE: 3/8"=1'-0"

SECTION (S2/10) SCALE: 3/8"=1'-0"

MICROFILMED RAMSEY CO. ENGR.

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ENGINEER under Laws of the State of Minnesota.

Date 7/11/60 Reg. No. 7457

FIRST FLOOR FRAMING PLAN

ALDRICH RECREATION ARENA
RAMSEY, COUNTY, MINNESOTA

HAARSTICK LUNDGREN AND ASSOCIATES INC. ENGINEERS AND ARCHITECTS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE JULY 11, 1960
DRAWN T.G.F. R.D.
CHECKED G.A.L.
SHEET S2

S2

MARCO ST. PAUL, 890 167M 10-58 PCP

T-128 66-100

288'-0"

ROOF DECK EL. 996'-8 3/8"
3" TECTUM ROOF PLANK ON 16 GA. GAR SECTION SUB-PURLINS @ 24"c.c.

NOTE: IF ROOF DECK ALTERNATE IS ACCEPTED TOP OF ROOF DECK WILL BE AT EL. 996'-9 3/8"

EACH MEMBER OF ROOF CROSS-BRACING TO BE ONE 4"x4"x1/4" L BOLTED TO 8" I. WELDED TO ROOF PURLINS. EACH L TO BE BOLTED TO EACH PURLIN IT CROSSES.

ROOF FRAMING PLAN
SCALE: 1/8"=1'-0"

SECTION S3/1
SCALE: 3/4"=1'-0"
NOTE: SEE ELECTRICAL DETAIL 'A' SHEET E-3 FOR HANGER RODS.

SECTION S3/2
SCALE: 3/4"=1'-0"

SECTION S3/3
SCALE: 3/4"=1'-0"

SECTION S3/4
SCALE: 3/4"=1'-0"

SECTION S3/5
SCALE: 3/4"=1'-0"

SECTION S3/6
SCALE: 3/4"=1'-0"

GENERAL STEEL NOTES

1. PROVIDE HOLES 1/4" LARGER THAN BOLT DIAMETER IN ALL STRUCTURAL STEEL TO WHICH WOOD BLOCKING IS ATTACHED. SEE ARCHITECTURAL DETAILS FOR HOLES REQUIRED.
2. CLIP ANGLES AND HEADER ANGLES SHOWN ATTACHED TO THE STRUCTURAL STEEL FOR SUPPORTING WOOD BLOCKING SHALL BE PROVIDED WITH THE STRUCTURAL STEEL. SEE ARCH'L DETAILS.
3. SET ALL BEARING PLATES IN A MINIMUM OF 3/4" GROUT. SEE SHEET S-1 FOR COL. BASE PLATES AND GROUT THICKNESS.
4. LOCATION AND SIZE OF ALL MECHANICAL AND ELECTRICAL OPENINGS TO BE SET BY THE MECH. AND ELEC. CONTRACTORS.
5. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF ROOF DRAINS.
6. PROVIDE A MINIMUM OF 6" BEARING FOR ALL LINTELS AND 8" FOR ALL BEAMS UNLESS NOTED OTHERWISE.
7. PROVIDE CURB CHANNELS AND HEADER ANGLES FOR ALL OPENINGS IN ROOF CONSTRUCTION. (BY STR. STEEL SUPPLIER).
8. BEARING PLATES TO BE SHOP WELDED TO STEEL COLUMNS AND STRAIGHTENED AFTER WELDING.
9. COLUMN BASES OTHER THAN ROLLED STEEL TO BE MILLED FLAT FOR FULL BEARING.
10. STEEL FRAMING MUST BE GUYED AND BRACED UNTIL CROSS-BRACING IS IN PLACE.
11. ALL STEEL BEAM TO STEEL BEAM FIELD SHEAR CONNECTIONS AND FIELD COLUMN SPLICES TO BE MADE USING HIGH TENSILE OR STRUCTURAL RIB BOLTS.
12. ALL CUTS IN BEAMS MUST BE APPROVED BY THE ENGINEER.

NORTH

MICROFILMED
RAMSEY CO. ENGR. T-128

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ENGINEER under Laws of the State of Minnesota.
Date 7/14/60 Reg. No. 3457

ROOF FRAMING PLAN
ALDRICH RECREATION ARENA
RAMSEY COUNTY, MINNESOTA
HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE JULY 11, 1960
DRAWN R.D.
CHECKED G.A.H.
SHEET S-3

66 | 90

MARCO ST. PAUL, MINN. 1837M 10-59 PCP

288'-0"

14'-8¾" | 14'-0" | 15'-0" | 20'-0" | 20'-0" | 20'-0" | 20'-0" | 20'-0" | 20'-0" | 20'-0" | 20'-0" | 20'-0" | 20'-0" | 15'-0" | 14'-0" | 14'-8¾"

122'-0"

TRUSS A

10'-0" | 15'-0" | 10'-0" | 15'-0" | 20'-0" | 15'-0" | 10'-0" | 15'-0" | 10'-0"

CEILING FRAMING PLAN

SCALE: 1/8" = 1'-0"

NORTH

SECTION (S-4/1) SCALE: 3/4" = 1'-0"

SECTION (S-4/2) SCALE: 3/4" = 1'-0"

SECTION (S-4/3) SCALE: 3/4" = 1'-0"

SECTION (S-4/4) SCALE: 3/4" = 1'-0"

SECTION (S-4/5) SCALE: 3/4" = 1'-0"

SECTION (S-4/6) SCALE: 1 1/2" = 1'-0"

SECTION (S-4/7) SCALE: 3/4" = 1'-0"

MICROFILMED RAMSEY CO. ENGR. T-128

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ENGINEER under Laws of the State of Minnesota.

Date 3/10/60 Reg. No. 8057

AARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

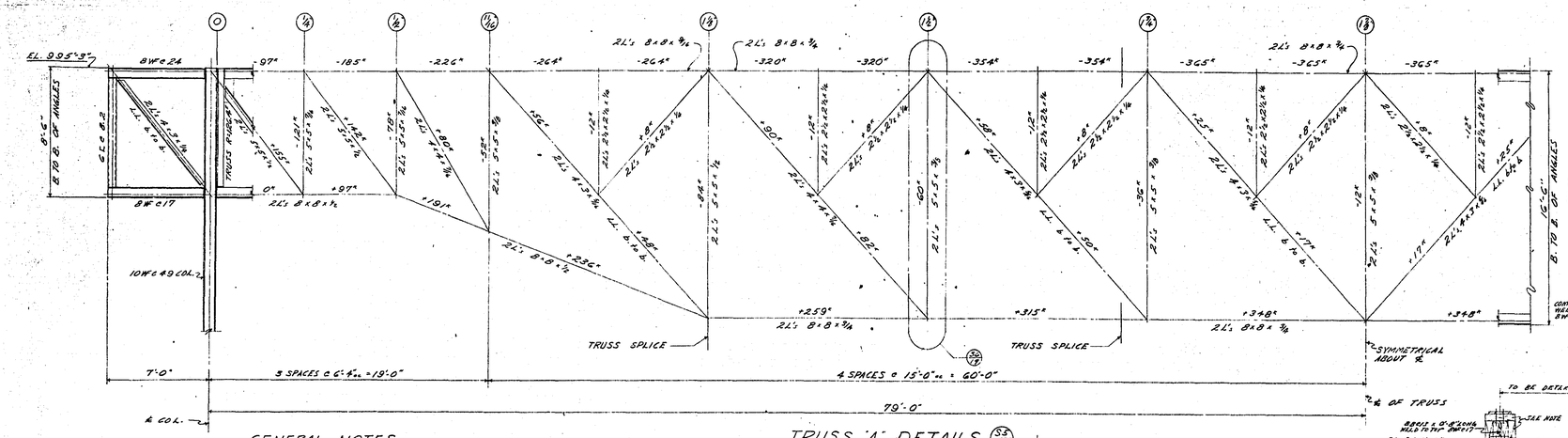
CEILING FRAMING PLAN
ALDRICH RECREATION ARENA
RAMSEY COUNTY, MINNESOTA

DATE JULY 11, 1960
DRAWN R.D.
CHECKED G.A.L.
SHEET S-4

66700

NARCO BY. PAUL, MIN 13TH 10-58 7CP

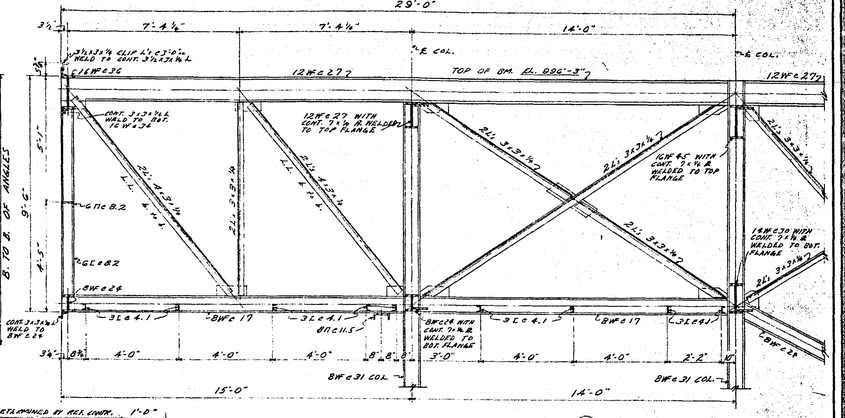
NOTE: + : TENSION
− : COMPRESSION



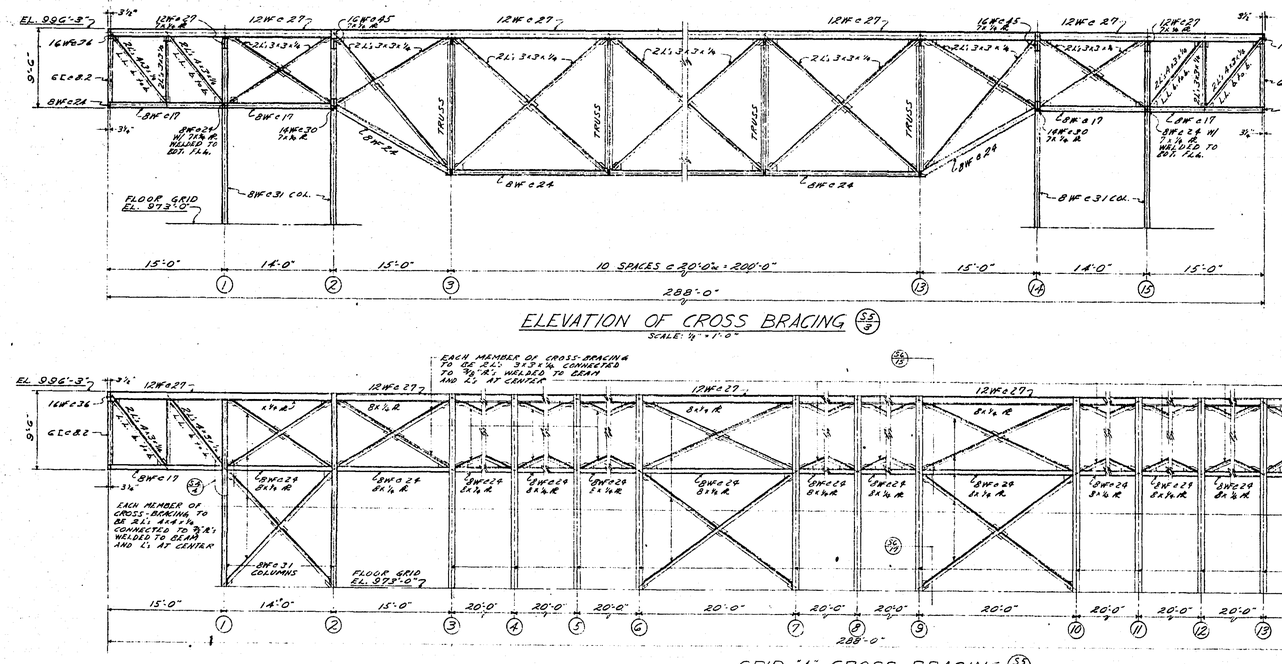
TRUSS "A" DETAILS (S5/1)

GENERAL NOTES

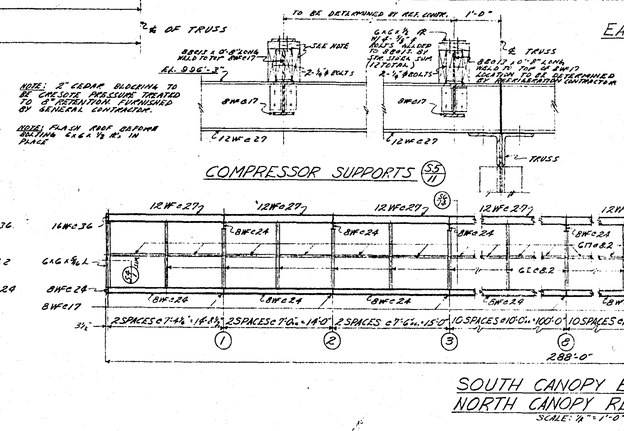
1. THE FIGURES ABOVE THE TRUSS LINE DIAGRAM NOTED THUS: ±2CA⁵ INDICATE THE DESIGN STRESS OF THE MEMBER NOTED IN KIPS. (+ FOR TENSION, − FOR COMPRESSION).
2. ALL SHOP ASSEMBLED CONNECTIONS OF TRUSS MEMBERS SHALL BE RIVETED CONNECTIONS. ALL FIELD SPLICES AND END SUPPORT CONNECTIONS AT COLUMNS TO BE MADE WITH RIVETS, STRUCTURAL A325 BOLTS OR HIGH TENSILE BOLTS.
3. PROVIDE CAMBER AT PANEL POINTS OF THE TRUSS IN THE AMOUNT INDICATED BY THE CIRCLED DIMENSIONS ABOVE EACH PANEL POINT.
4. MINIMUM RIVET SIZE ⅞".



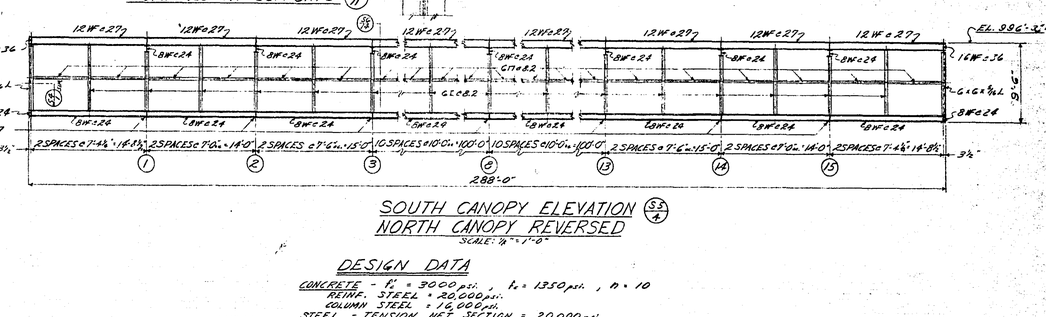
EAST & WEST CANOPY FRAMING (S5/2)



ELEVATION OF CROSS BRACING (S5/3)



COMPRESSOR SUPPORTS (S5/11)

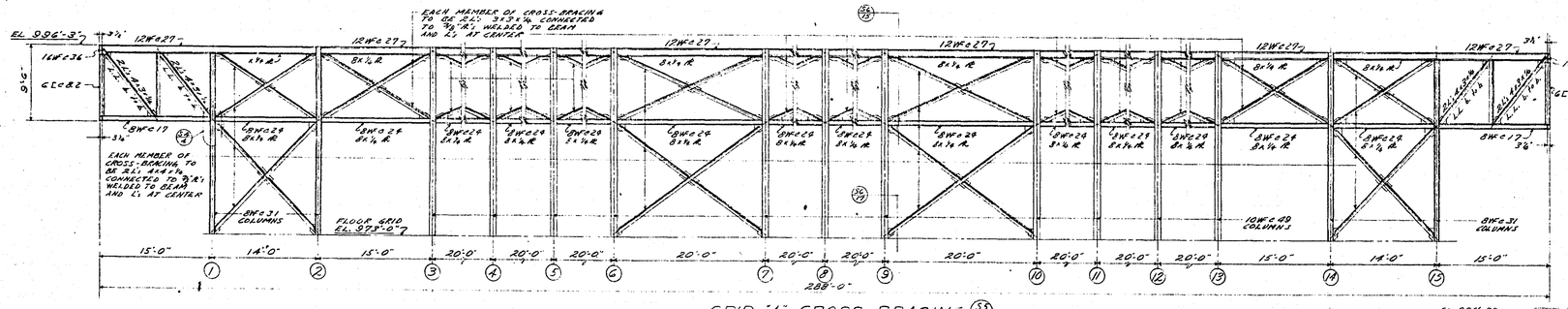


SOUTH CANOPY ELEVATION (S5/4)
NORTH CANOPY REVERSED

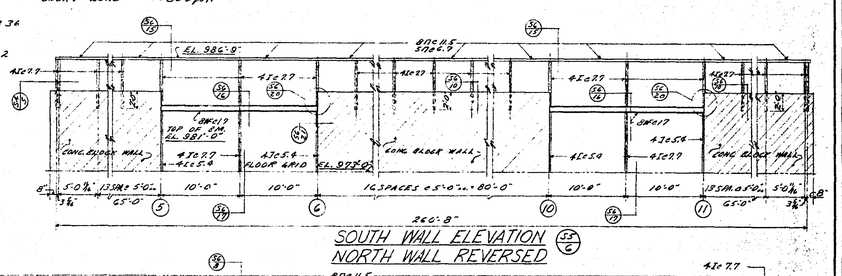
DESIGN DATA

CONCRETE - f'_c = 3000 psi. , f_c = 1350 psi. , n = 10
REINF. STEEL = 20,000 psi.
COLUMN STEEL = 16,000 psi.
STEEL - TENSION NET SECTION = 20,000 psi.
COMPRESSION MAXIMUM = 17,000 psi.
TENSION EXTREME FIBER IN FLEXURE = 24,000 psi.

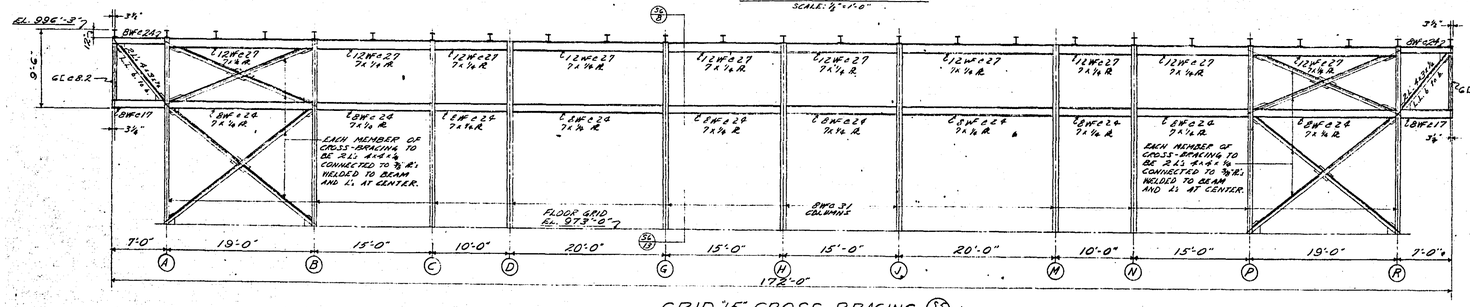
LIVE LOAD ROOF = 40 p.s.f.
STAIRS = 100 p.s.f.
FLOOR SLAB = 100 p.s.f.
COURT LOAD = 300 p.s.f.



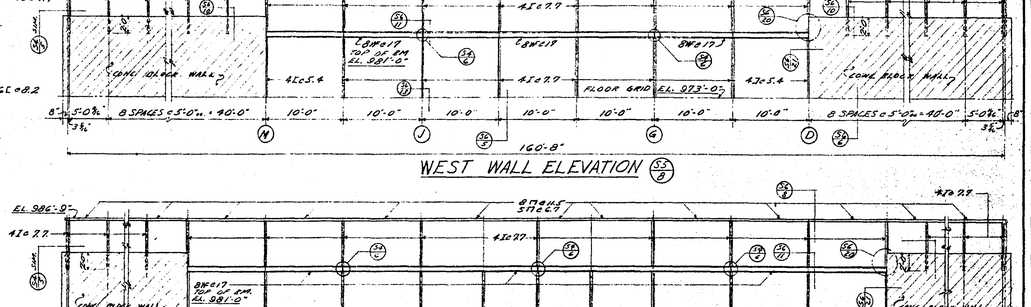
GRID "A" CROSS BRACING
GRID "R" REVERSED



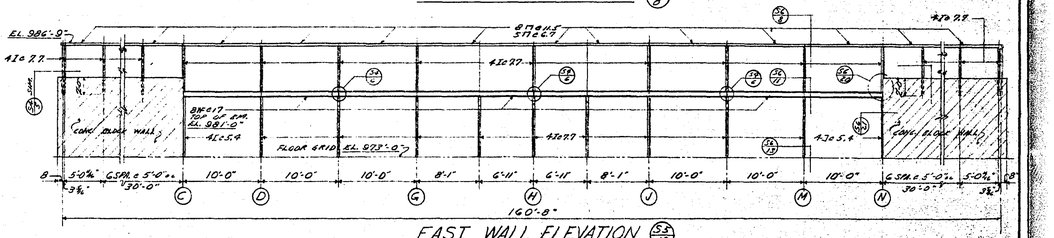
SOUTH WALL ELEVATION
NORTH WALL REVERSED



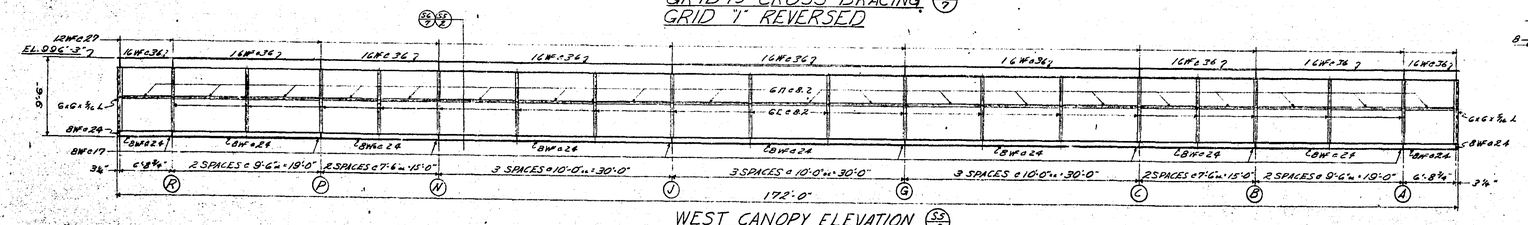
GRID "15" CROSS BRACING
GRID "1" REVERSED



WEST WALL ELEVATION



EAST WALL ELEVATION



WEST CANOPY ELEVATION
EAST CANOPY REVERSED

MICROFILMED
RAMSEY CO. ENGR. T-128

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ENGINEER under Laws of the State of Minnesota.
Date 7/11/60 Reg. No. 3857

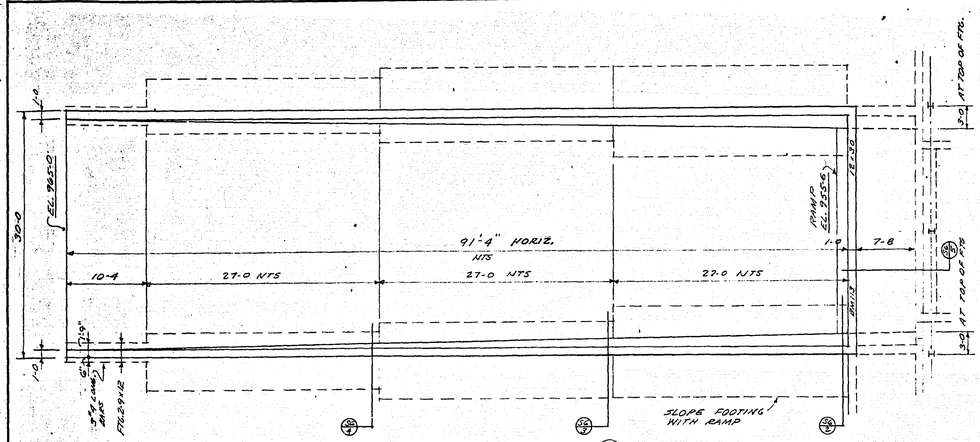
FRAMING DETAILS
ALDRICH RECREATION ARENA
RAMSEY COUNTY, MINNESOTA

DATE JULY 11, 1960
DRAWN R.D.
CHECKED G.A.J.

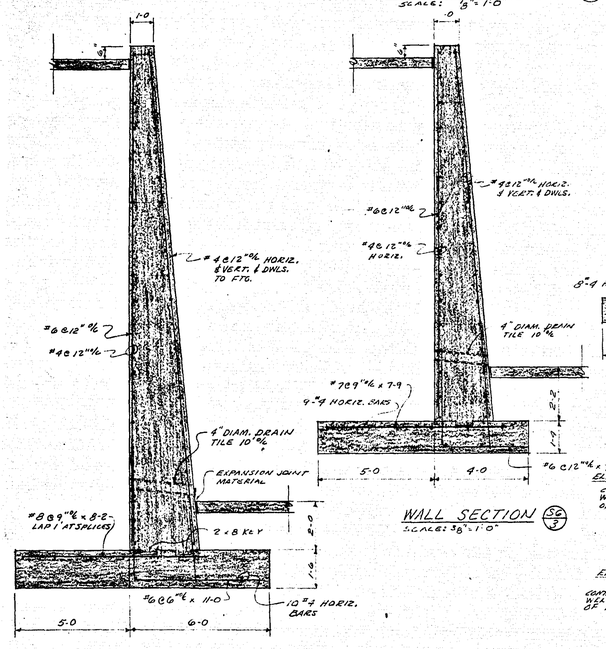
HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

SHEET S-5

66-100



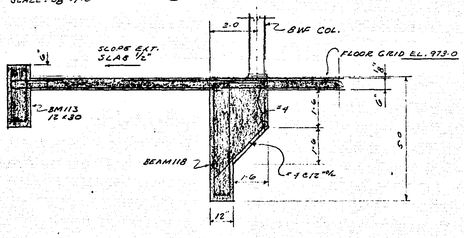
RAMP PLAN (SC/1)
SCALE: 1/8" = 1'-0"



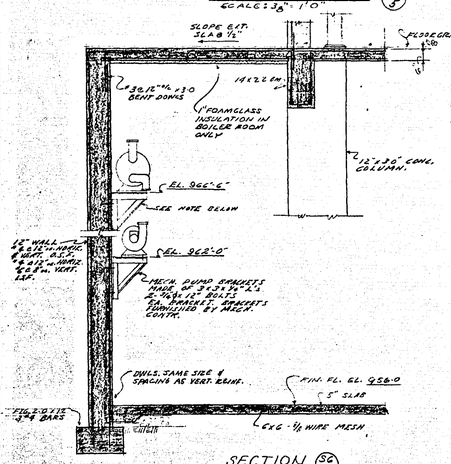
WALL SECTION (SC/4)
SCALE: 3/8" = 1'-0"

WALL SECTION (SC/3)
SCALE: 3/8" = 1'-0"

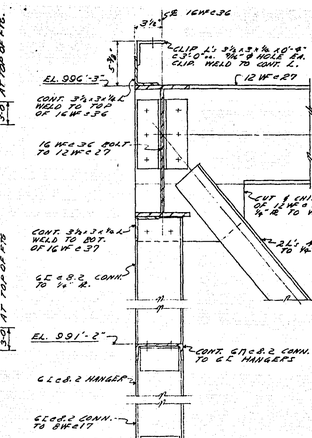
WALL SECTION (SC/2)
SCALE: 3/8" = 1'-0"



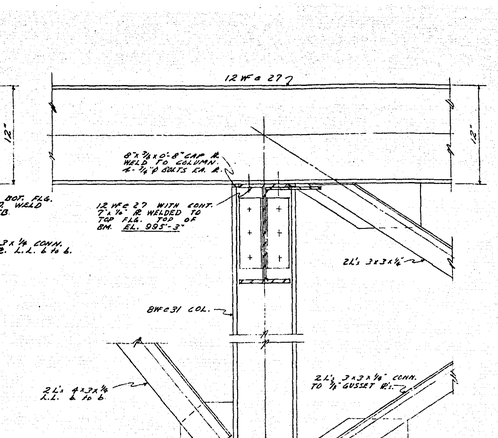
FLOOR SECTION (SC/5)
SCALE: 3/8" = 1'-0"



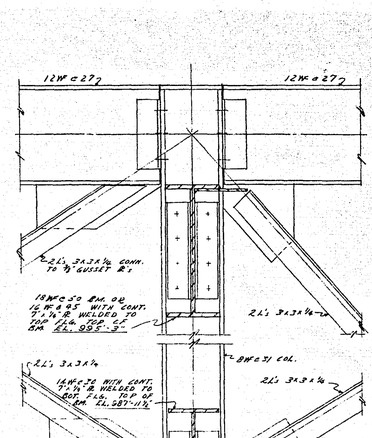
SECTION (SC/6)
SCALE: 3/8" = 1'-0"



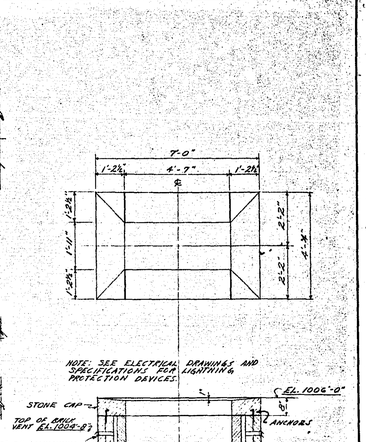
FRAMING DETAIL (SC/7)
SCALE: 1½" = 1'-0"



FRAMING DETAIL (SC/8)
SCALE: 1½" = 1'-0"

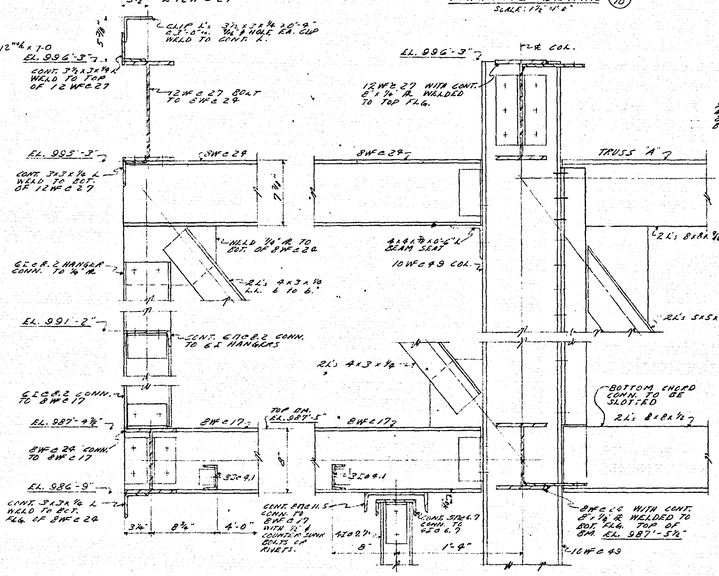


FRAMING DETAIL (SC/9)
SCALE: 1½" = 1'-0"



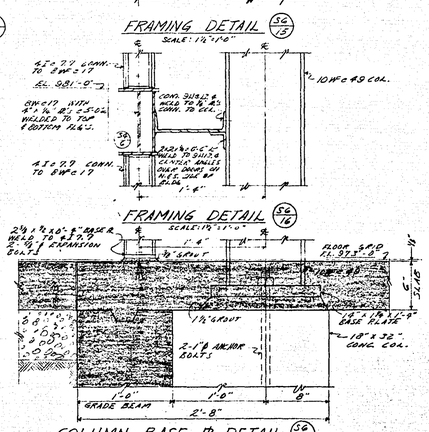
COLUMN BASE ℄ DETAIL (SC/12)
SCALE: 1½" = 1'-0"

WALL SECTION (SC/3)
SCALE: 3/8" = 1'-0"



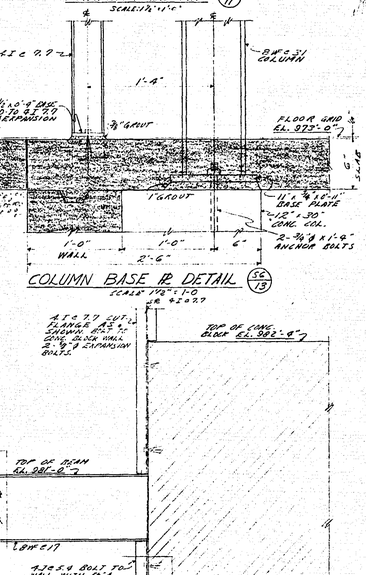
FRAMING DETAIL (SC/14)
SCALE: 1½" = 1'-0"

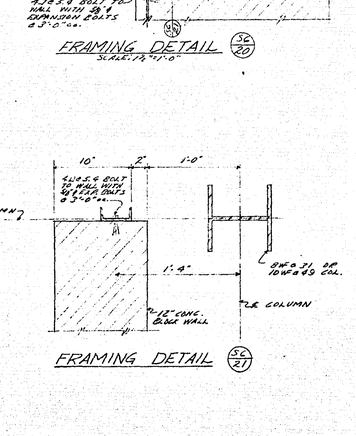
FRAMING DETAIL (SC/15)
SCALE: 1½" = 1'-0"

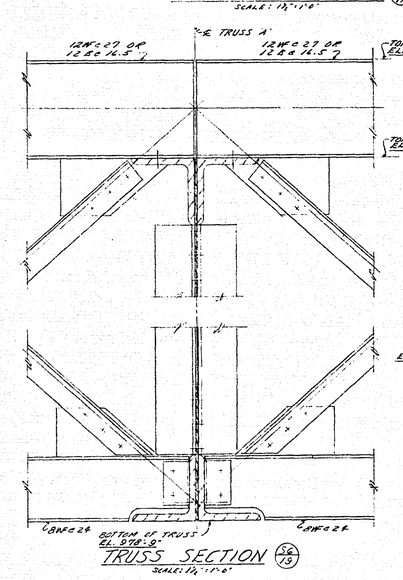


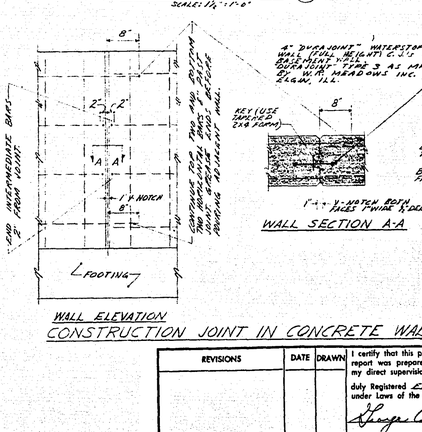
FRAMING DETAIL (SC/16)
SCALE: 1½" = 1'-0"

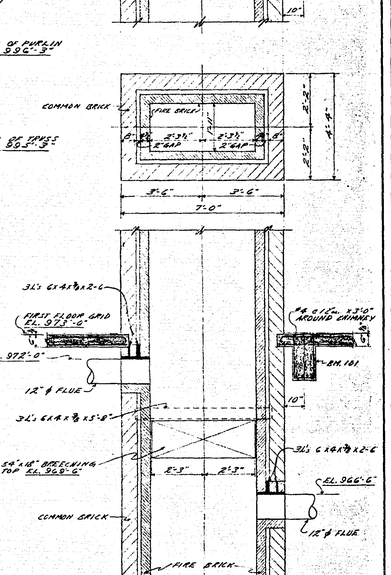
COLUMN BASE ℄ DETAIL (SC/17)
SCALE: 1½" = 1'-0"











LINTEL SCHEDULE		
MARK	DETAIL	WHERE USED
L-1	6" 3½"x 3½"x ⅜" L CONT. OVER CHECK WALL WELD TO CONT. ANGLE OF OPPOSITE SIDE OF CHECK WALL. CUT ONE LEG OF ANGLE AT CHECK WALL WELD ⅜" ø PLUG TO EXP. BOLTS TO CONC.	USE OVER OPNG. IN ROOM NO. 2 & 3 IN WALLS NO. 1, 2, 3, 4, 5, 6, 7, 8, 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,

HOLLOW METAL

HOLLOW METAL FRAME D

HOLLOW METAL FRAME E

NOTE: FRAME IS SYMMETRICAL ABOUT CENTER LINE

A B C

HOLLOW METAL FRAME

NOTE) - FRAME SYMMETRICAL ABOUT CENTER LINE

FRAME TYPES

HOLLOW METAL

HOLLOW METAL

HOLLOW METAL

4"x2½" LOUVER IN MECH HOLLOW METAL

3/16" HEAVY SHEET

3/8" FIR PLYWOOD

G J K

WINDOW TYPES

SCALE 1/4"=1'-0"

CENTERLINE OF MULLION

ALUM. SASH

OVERALL

W1 W2 W3 W4

3/8" V-JOINT PLYWOOD REDWOOD VENEER

ALUM. ROLL-UP DOORS

CONC. BLOCK

CORRIDOR #133 LOOKING EAST OPPOSITE SIDE SIMILAR

3/8" V-JOINT PLYWOOD REDWOOD VENEER

ALUM. ROLL-UP DOORS

CONC. BLOCK

3/8" FIR PLYWOOD

FOYER #132 LOOKING SOUTH FOYER #132 LOOKING NORTH SIMILAR

12" 2½" 1/8"x3" WIRE ANCHOR STRAP @ 4'-0" PER JAMB REINF CONC 12 F 20.7# OVERHEAD GARAGE DOOR SEE PLAN FOR THK

OVERHEAD GARAGE DOOR JAMB DETAIL 6/28 3"=1'-0"

OVERHEAD DOOR 1½" IPS-PIPE THRESHOLD 3/8"ϕ ANCHORS 2'-0" ϕ C WELD ALTERNATE SIDES LINE ELEV. 556-0 12 F 20.7# RUBBER ASTRAGAL CONC. 1½" EXPANS. MAT'L

OVERHEAD GARAGE DOOR THRESHOLD DETAIL 6/29

DOOR TYPES

1 2 3 4 5 6 7

1¾" H.M. FLUSH

SIDE NO 8 T.H.M. 18-LABEL 1¾" H.M. FLUSH

1¾" H.M. FLUSH DOOR'S 181/189 1¾" FLUSH SOLID CORE

1¾" H.M. FLUSH

¼" POL. P. GL.

1¾" H.M.

H.M. 1¾" 18-LABEL

4'-0" 3'-0" H.M. 1¾" 2'-0"

36"x24" LOUVER BY GEN. CONT

FLOOR GRID LINE ELEV. 556'-0

REMOVE FLANGES OF 4¢ OF CR INSIDE ALUM. FRAME

FACE OF WALL

HOLLOW METAL FRAME

JAMB 6/1

SILL 6/7

THOKOL CALK

PAINT WITH ASPHALTIC PAINT

HORIZONTAL MULLION 6/2

MILCOR #66

½" BITUMINOUS MAT'L

¾" FURRING C

¾" MET. LATH

¾" FLAG

EXPANS. MAT'L (1" POLYETHYLENE FOAM)

THOKOL CALK

HEAD 6/8

BE 11.5# SE 6.3# ALUM SASH CALK

GLASS

HOLLOW METAL

ALUM. SASH GLASS JAMB 6A/8

METAL PANELS TO BE FURNISHED BY PANEL SUPPLIER

10" E WELD TO BEAM PLATES & COL

HOLLOW METAL FRAME

ALUM. SASH

CALK

THOKOL CALK

SECTION 6/5

INSUL PANEL

H.M. FRAME SILL 6/4

CONC. BLK

1'-0"

#4 BARS @ 11'-0" FILL CORES WITH CONC. WHERE REINF OCCURS

MET. ANCHORS

JAMB 6/10

8" STEEL BEAM (SEE STRUCT.)

10" STEEL CHANNEL (SEE STRUCT.)

WELD 10" E TO BEAM PLATES

H.M. FRAME

5½"

2"

H.M. FRAME

JAMB SECTION 6/11

3/8" FURRING C ¾" CBN. FLAG. MILCOR #66 BE 11.5# SE 6.7#

EXPANS MAT'L THOKOL CALK HOLLOW METAL FRAME GLASS

FL. GRID TO BEAM

ALCOA # 39265 TYPE "F" GRAVEL STOP PITCH & GRAVEL ROOF 2"x7"x0" ANCHOR TO 3½"x3"x¼" L ½" BOLTS 3'-0" O.C.

INSUL MATL CANT

TOP ROOF DECK GRID LINE ELEV. + 9'-5⅜

3½"x3½"x¼" CLIP ANGLE 3'-0" O.C. WELDED TO 3½"x3½"x¼" CONT. L

ROOF DECK

TECH SECTION PURLIN

METAL PANEL CLOSURE

METAL PANELS

STEEL BEAM (SEE STRUCT.)

STEEL BEAM (SEE STRUCT.)

3" C (SEE STRUCT.)

FURRING

¾" FURRING C ¾" MET. LATH & FLAG

MILCOR #66 THOKOL CALKING

CLIP ANCHOR BY WINDOW SUPPLIER

SECTION 6/12

3" TECTUM ROOF DECK

WOOD BLOCKING

STEEL BEAM (SEE STRUCT.)

BOLT 2x4 TO ¼"x4"x7" CONT. PLATE WITH ½"ϕ ANCHOR BOLT 4'-0" O.C.

WELD ¼"x4" CONT. PLATE TO STEEL BEAM

2" BLANKET TYPE INSUL

6" C (SEE STRUCT.)

2x4 STUD WALL STUDS 16" O.C.

BLANKET INSUL

8'

1'-0"

BOLT 2x4 TO PLATE WITH ⅜"ϕ BOLTS 4'-0" O.C. WELD ¼"x7" CONT PLATE TO BEAM

SECTION 6/13

2" FACE OF WALL

1"x3½"x⅛" ALUM. L

CONT. WELD

4I (SEE STRUCT.)

CALK

H.M. FRAME

CORNER MULLION 6/14

END UNITS 5'-0⅛" CENTERLINE

END UNITS 5'-0"

WIND DIA.

ALUM. SASH

MULLION 6/15

SEALED STEEL

ALUM. SASH

¼"x4"x¼" L

THOKOL CALK

MULLION AT COL. 6/16

BUILT-UP ROOF 3" ROOF DECK

BOX SECTION PURLIN

MILCOR #66

WELD 7"x¼" CONT. STEEL PLATE TO STEEL BEAM

STEEL BEAM (SEE STRUCT.)

STEEL COLUMN (SEE STRUCT.)

SECTION 6/17

2x4 STUD WALL 16" O.C. BLANKET INSUL

WELD CONT 8"x¼" STEEL PLATE TO STEEL BEAM

PLASTER CORNER REINF

¾" FURRING C ¾" MET. LATH & FLAG

MILCOR #66

THOKOL CALK ALUM. SASH

SECTION 1½"=1'-0" 6/17

BUILT-UP ROOF 3" ROOF DECK

BOX SECTION PURLIN

MILCOR #66

¾" PLAS ON MET. LATH 2x4 STUDS 16" O.C.

½"ϕ ANCHOR BOLT 4'-0" O.C.

WELD 7"x¼" CONT. STEEL PLATE TO STEEL BEAM

STEEL BEAM (SEE STRUCT.)

STEEL COL. (SEE STRUCT.)

SECTION 6/18

¾" PLAS & MET. LATH 2x4 STUDS 16" O.C.

3" CHANNEL

BOLT 2x4 TO PLATE WITH ⅜"ϕ BOLTS 4'-0" O.C.

BOLT 2x4 TO ¼"x4"x7" CONT. PLATE WELD PLATE TO STEEL BEAM

PLASTER CORNER REINF

¾" FURRING C WELD TO 8" I

SECTION 1½"=1'-0" 6/18

3/8" PLYWOOD REDWOOD PLANKED PANEL

MILCOR #66

3½"x3½"x¼" L WELD TO FURRING C 3/8"ϕ BOLTS 3'-0" O.C.

¾" FURRING C

¾" MET. LATH & FLAS

3/8" PLYWOOD

HEAD 6/19

HINGE

ALUM. ROLL-UP DOOR HOUSING

5"

LINO TO P. ¾" PLYWOOD

MET. EDGE

FINE TRIM

½" ANCHOR BOLTS 3'-0" O.C.

SILL 6/20

ROLL-UP DOOR FRAME

3/8" PLYWOOD (F.I.C.) GIS 6/22

1 1/8"

HEAD 6/21

H.M. FRAME

14GA. BENT PLATE

8"WF COL. (SEE STRUCT.)

3/8" ANCHOR BOLTS 3'-0" O.C.

15/16" PLYWD

ROLL-UP DOOR FRAMES

JAMB 6/24

INSUL. PANEL

ALUM. FRAME

14GA BENT STEEL R

8"WF COL. (SEE STRUCT.)

THOKOL CALK

6" CONC. BLOCK

SECTION 6/25

SHOWER CURB DETAIL 6/31 1½"=1'-0"

FINE FRAME)

ROLL-UP DOOR FRAME

¾ FINE

⅜" PLYWOOD

JAMB 6/26

SOLID CORE DOOR 2-8 x 7-2

⅜" PLYWOOD

JAMB 6/27

⅜"ϕ ANCHOR BOLTS 8 PER JAMB

ROOF SCUTTLE LADDER DET. 6/23 1¼"=1'-0"

SLOPE RECEPTOR 6/30 1½"=1'-0"

¾ OF HOSE BIBB

CEMENT - CONDITIONS ROOMS 22,120

CEMENT

MEMBRANE METAL LATH

CONT 1⅛" ALUM. CAP STRAP ANCHOR 16" O.C.

2½" 1-0

1-0

MEMBRANE METAL LATH

1½"R TYPICAL

FLOOR GRID ELEV.

CONC.

CEMENT

6" 1'R METAL LATH SLOPE TO DRAIN

REINF CONC SLAB

MEMBRANE

MICROFILMED RAMSEY CO. ENGR. 7-28

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ARCHITECT under Laws of the State of Minnesota.

Date JULY 11, 1962 Reg. No. 3062

WINDOWS, DOORS & MISC. DETAILS

ALDRICH RECREATION CENTER RAMSEY COUNTY, MINNESOTA

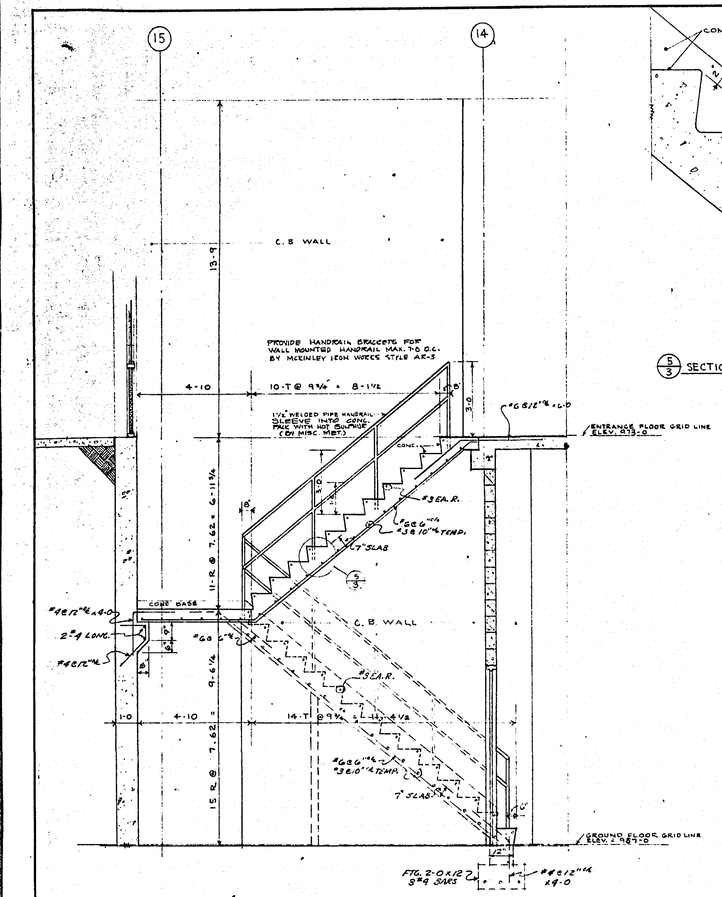
HAARSTICK LUNDGREN AND ASSOCIATES INC. ARCHITECTS AND ENGINEERS FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE	JULY 11, 1962
DRAWN	W.D.
CHECKED	R.J.
SHEET	6

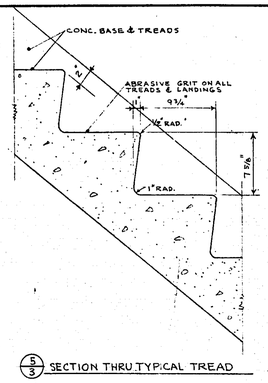
6

HARCO ST. PAUL 890 1276 10-58 FCP

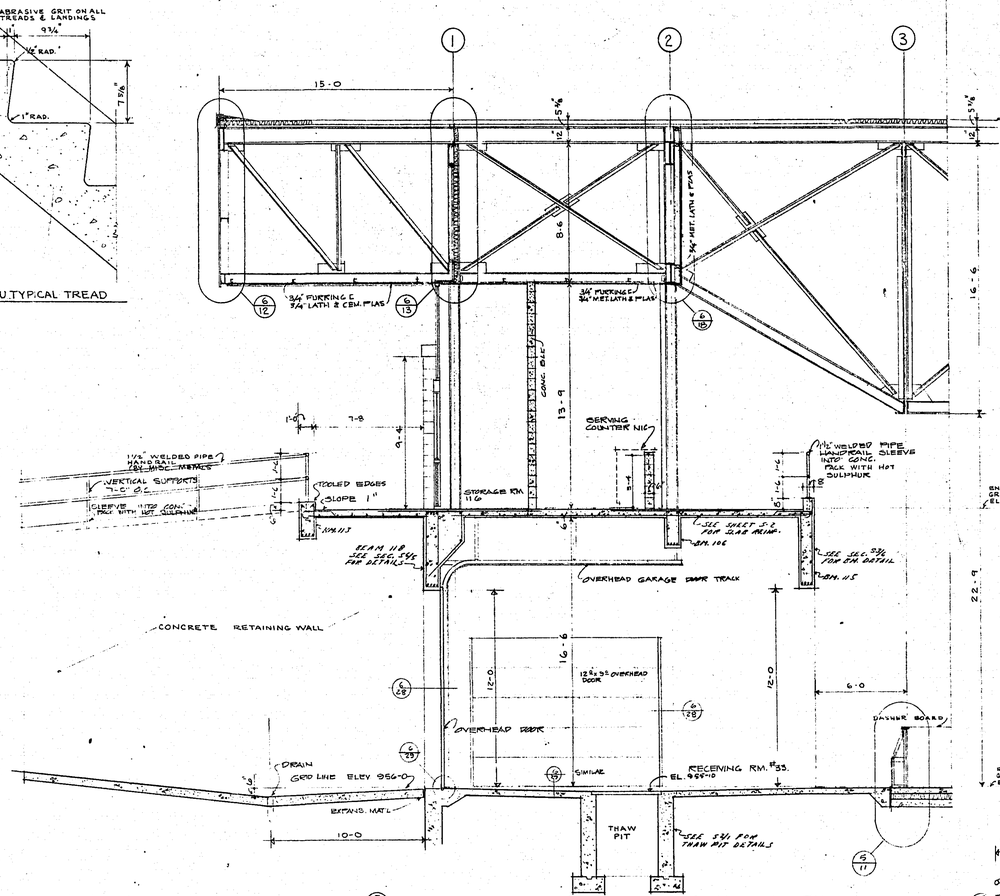
66 100



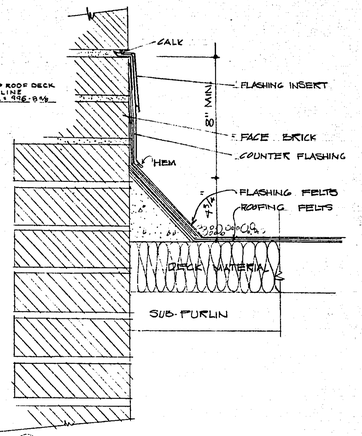
5/1 SECTION THRU STAIR 'A' - LOOKING SOUTH
STAIR 'B' SAME ONLY REVERSED 1/4" = 1'-0"



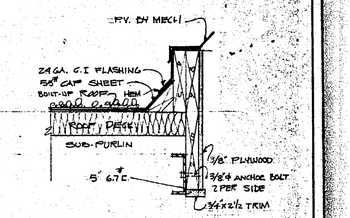
5/3 SECTION THRU TYPICAL TREAD



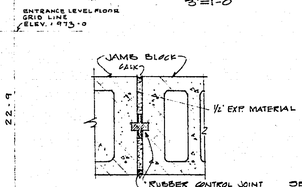
5/4 SECTION THRU WEST WALL - LOOKING NORTH
¼" = 1'-0"



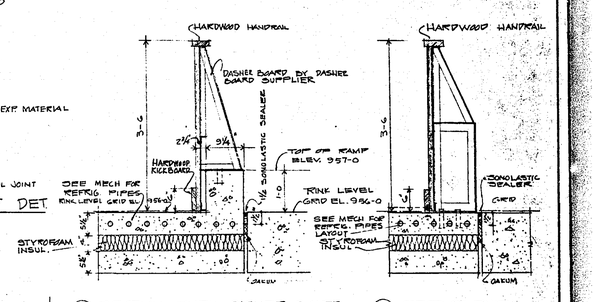
5/6 CHIMNEY FLASHING DETAIL
3"=1'-0"



5/7 ROOF CURB @ POWER VENT
1½"=1'-0"

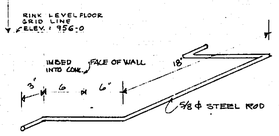


5/8 CONTROL JOINT DET
1½"=1'-0"

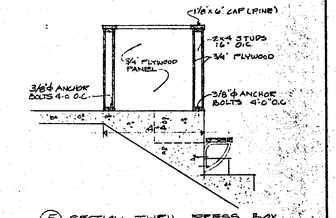


5/10 SECTION THRU DASHER BOARD AT CONC CURB 3/4"=1'-0"

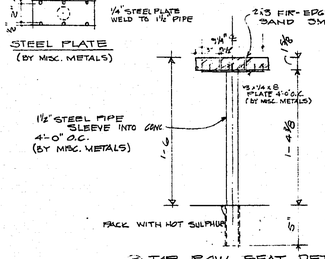
5/11 SECTION THRU DASHER BOARD



5/9 TYPICAL RUNG DETAIL
PROVIDE QUANTITY AS INDICATED (BY METAL SPECIALITIES)

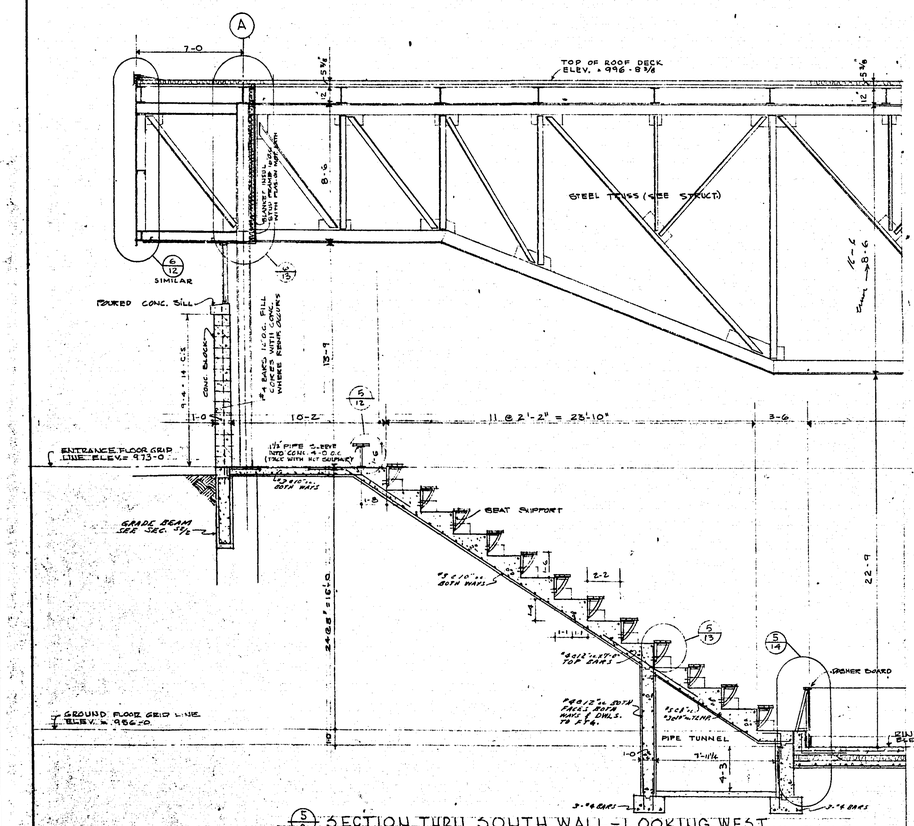


5/11A SECTION THRU PRESS BOX
3/8"=1'-0"

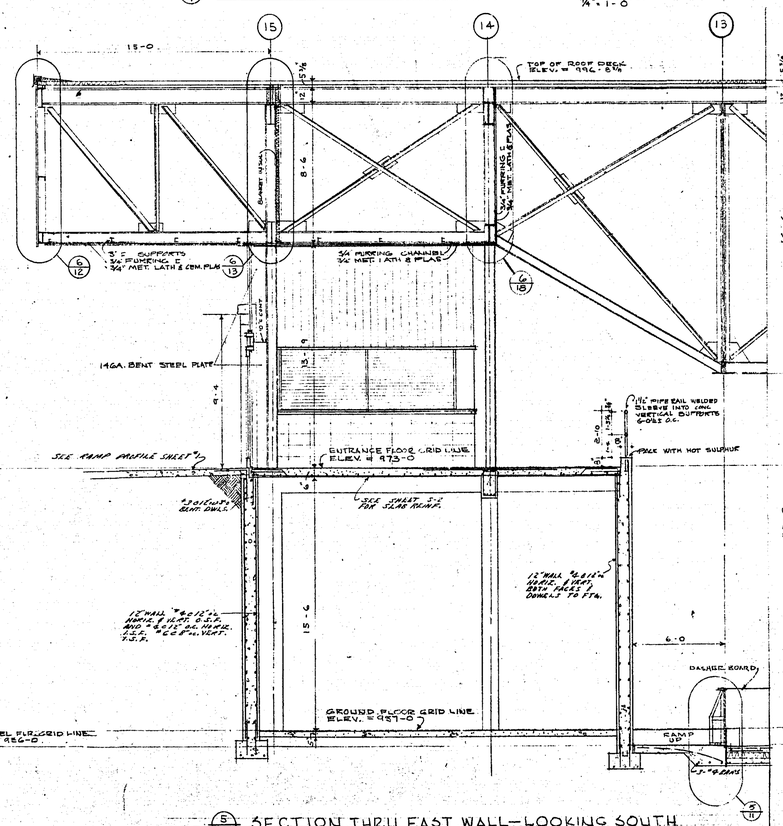


5/12 TOP ROW SEAT DET. 1½"=1'-0" (BY METAL SPECIALITIES)

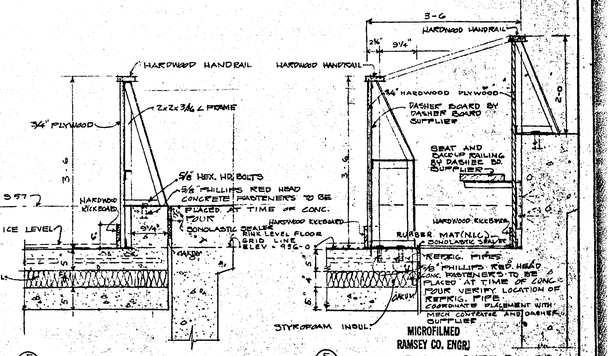
5/13 TYPICAL SEAT DETAIL 1½"=1'-0" (BY METAL SPECIALITIES)



5/2 SECTION THRU SOUTH WALL - LOOKING WEST
¼"=1'-0"



5/5 SECTION THRU EAST WALL - LOOKING SOUTH
¼"=1'-0"



5/14 SECTION THRU DASHER BOARD AT BLEACHERS ¾"=1'-0"

5/15 SECTION THRU DASHER BOARD AT PENALTY & OFFICIAL BOX ¾"=1'-0"

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ARCHITECT under Laws of the State of Minnesota.
Date 11/14/74 Reg. No. 3062

WALL SECTIONS & MISC. DETAILS
ALDRICH RECREATION ARENA
RAMSEY COUNTY, MINNESOTA

DATE 11/14/74
DRAWN K.N. W.R.
CHECKED K.W.

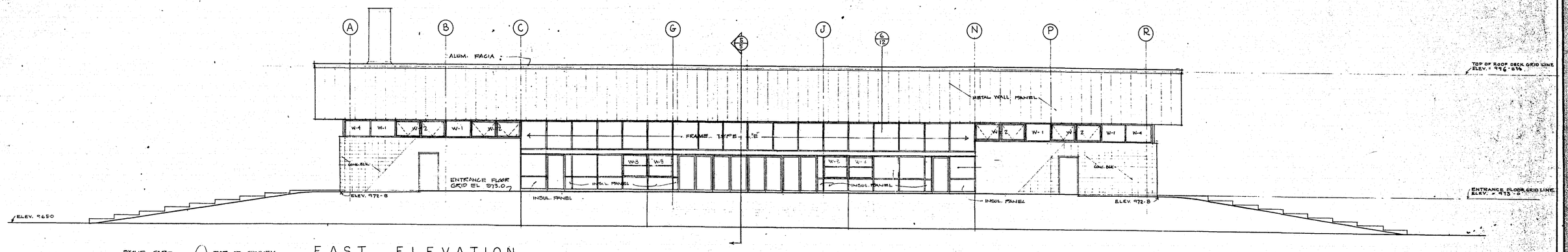
HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

SHEET 5

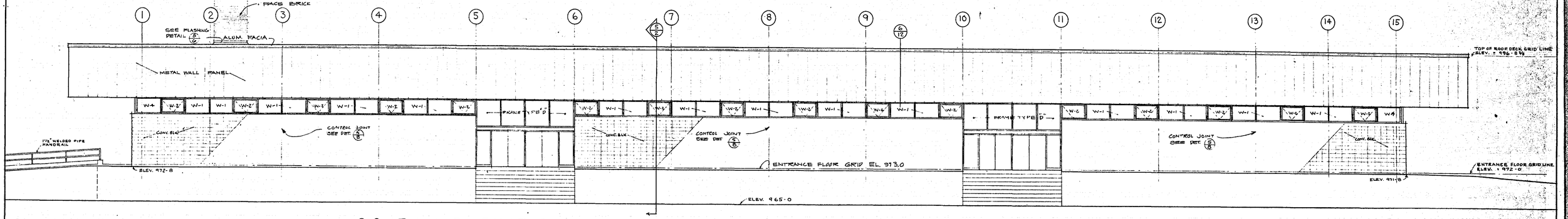
MICROFILMED RAMSEY CO. ENGR.

BLANCO MT. PAUL, 890 157H 10-56 PUP

T-128

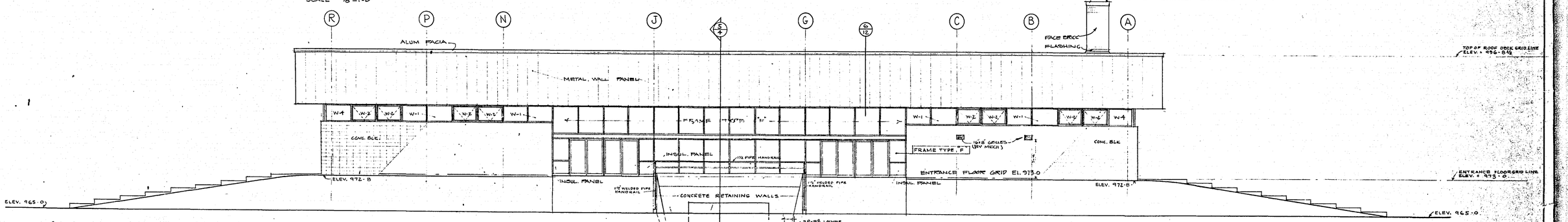


EAST ELEVATION

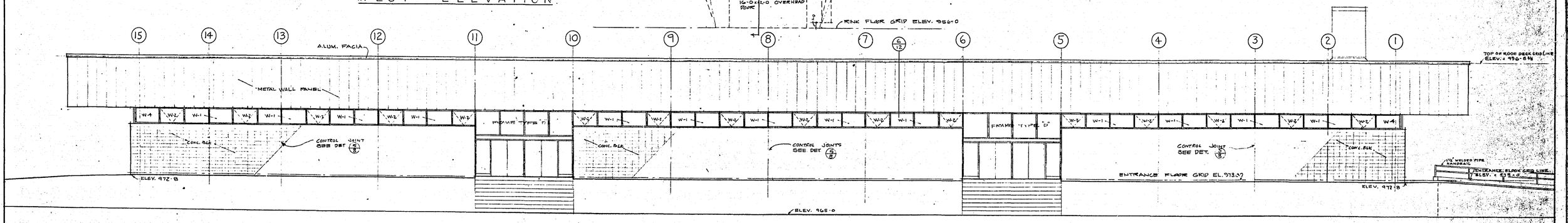


SOUTH ELEVATION

SCALE 1/8"=1'-0"



WEST ELEVATION



NORTH ELEVATION

SCALE 1/8" = 1'-0"

MICROFILMED
RAMSEY CO. ENGR.

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ARCHITECT under Laws of the State of Minnesota.

Date JULY 11, 1960 Reg. No. 3062

ELEVATIONS SCALE 1/8"=1'-0"

ALDRICH RECREATION ARENA
RAMSEY COUNTY, MINNESOTA

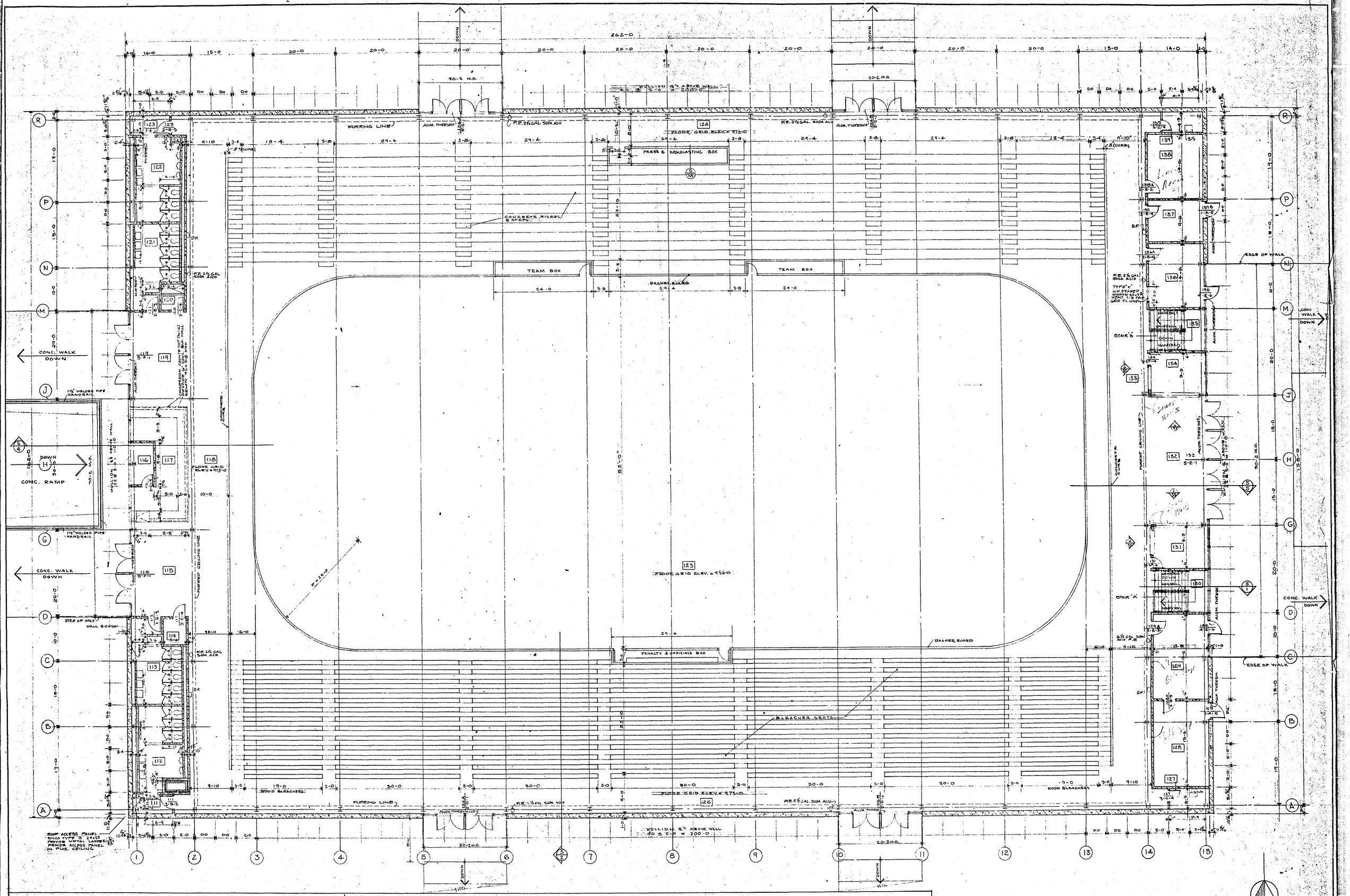
HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

DATE JULY 11, 1960
DRAWN W.D.
CHECKED R.J.L.
SHEET 4

4

T-128 FGG-100

MARCO ST. PAUL ERO 187M 10-58 PCP



ROOM FINISH SCHEDULE

ROOM NO.	NAME	FLOOR	BASE	WALLS	CEILING	CEIL. HT.	REMARKS
111	MENS TOILET ALCOVE	CONC.		C.B.	PLAS.	13-7½	
112	MENS TOILET	CONC.		C.B.	PLAS.	13-7½	
113	WOMENS TOILET	CONC.		C.B.	PLAS.	13-7½	
114	STORAGE	CONC.		C.B.			
115	FOYER	CONC.		C.B.	PLAS	13-7½	
116	STORAGE	CONC.		C.B.	PLAS	13-7½	
117	CONCESSIONS	CONC.		C.B.	PLAS	13-7½	
118	CORRIDOR	CONC.		C.B.	EXPOSED DECK	23-5⅛	
119	FOYER	CONC.		C.B.	PLAS	23-7½	
120	JANITOR	CONC.		C.B.	PLAS	23-7½	
121	WOMENS TOILET	CONC.		C.B.	PLAS	23-7½	
122	MENS TOILET	CONC.		C.B.	PLAS.	13-7½	
123	MENS TOILET ALCOVE	CONC.		C.B.	PLAS.	13-7½	
124	CORRIDOR	CONC.		C.B.	EXPOSED DECK	23-5⅛	
125	RINK	CONC.		C.B.	EXPOSED DECK	23-5⅛	
126	CORRIDOR	CONC.		C.B.	EXPOSED DECK	23-5⅛	
127	JANITOR	CONC.		C.B.	PLAS	13-7½	
√128	STORAGE	CONC.		C.B.	PLAS	13-7½	
129	PRO SHOP	CONC.		C.B.	PLAS	13-7½	
130	STAIR "A"	CONC.	CONC.	C.B.	PLAS	13-7½	
√131	TICKETS & CONCESSIONS	CONC.		C.B.	PLAS	13-7½	WALLS ABOVE WINDOWS PLYWOOD
132	FOYER	CONC.		C.B.	PLAS	13-7½	
133	CORRIDOR	CONC.		C.B.	EXPOSED DECK	23-5⅛	
√134	TICKETS	CONC.		C.B.	PLAS	13-7½	WALLS ABOVE WINDOWS PLYWOOD
135	STAIR "B"	CONC.	CONC.	C.B.	PLAS	—	
136	OFFICE	CONC.		C.B.	PLAS	13-7½	
137	OFFICE	CONC.		C.B.	PLAS	13-7½	
√138	MEETING ROOM	CONC.		C.B.	PLAS	13-7½	
139	JANITOR	CONC.		C.B.	PLAS.	13-7½	

HAROD ST. PAUL 3RD 187M 10-58 FCP

MICROFILMED
RAMSEY CO. ENGR.

REVISIONS	DATE	DRAWN

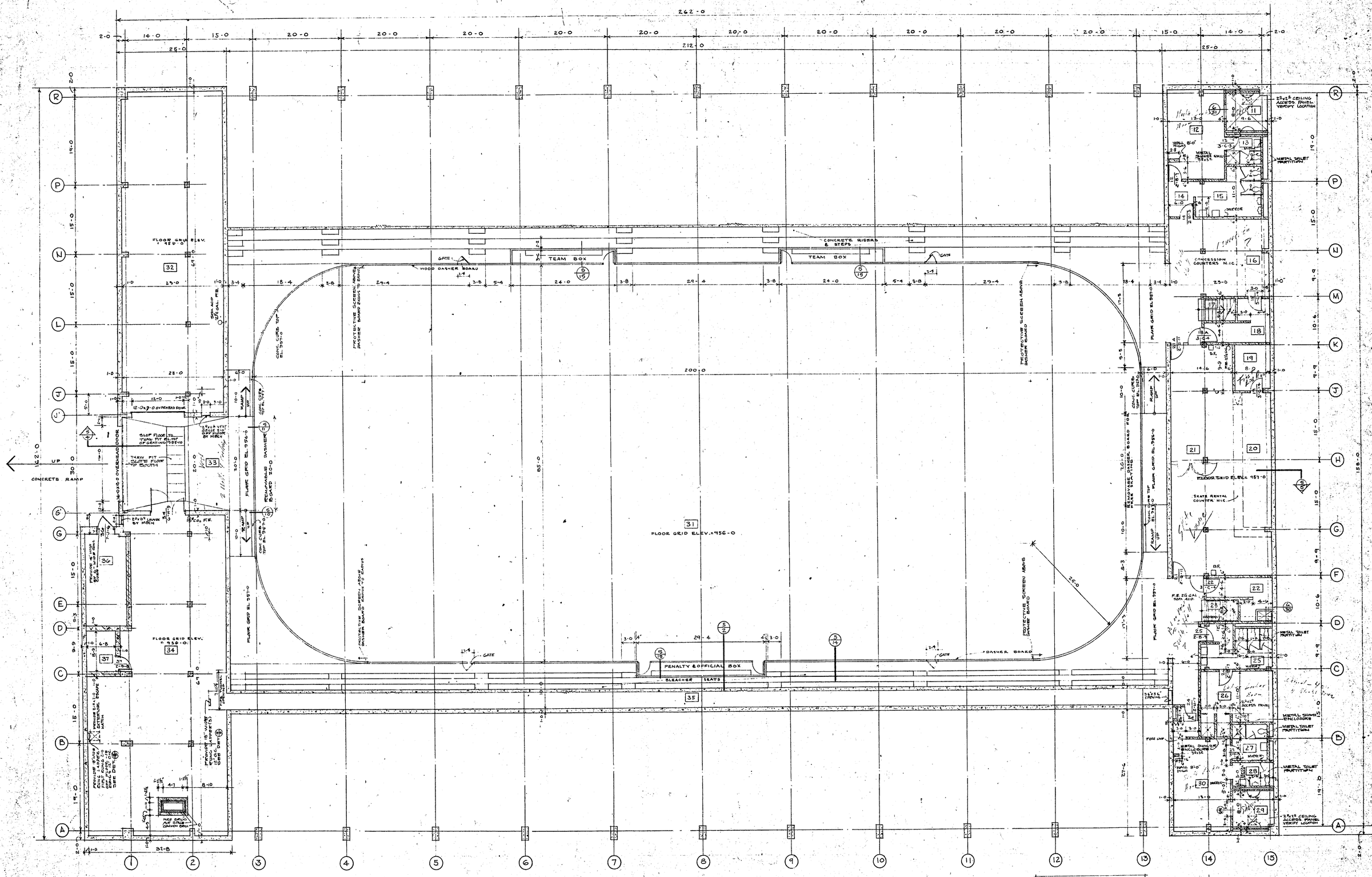
I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ARCHITECT under Laws of the State of Minnesota.
Date JULY 11, 1960 Reg. No. 3082

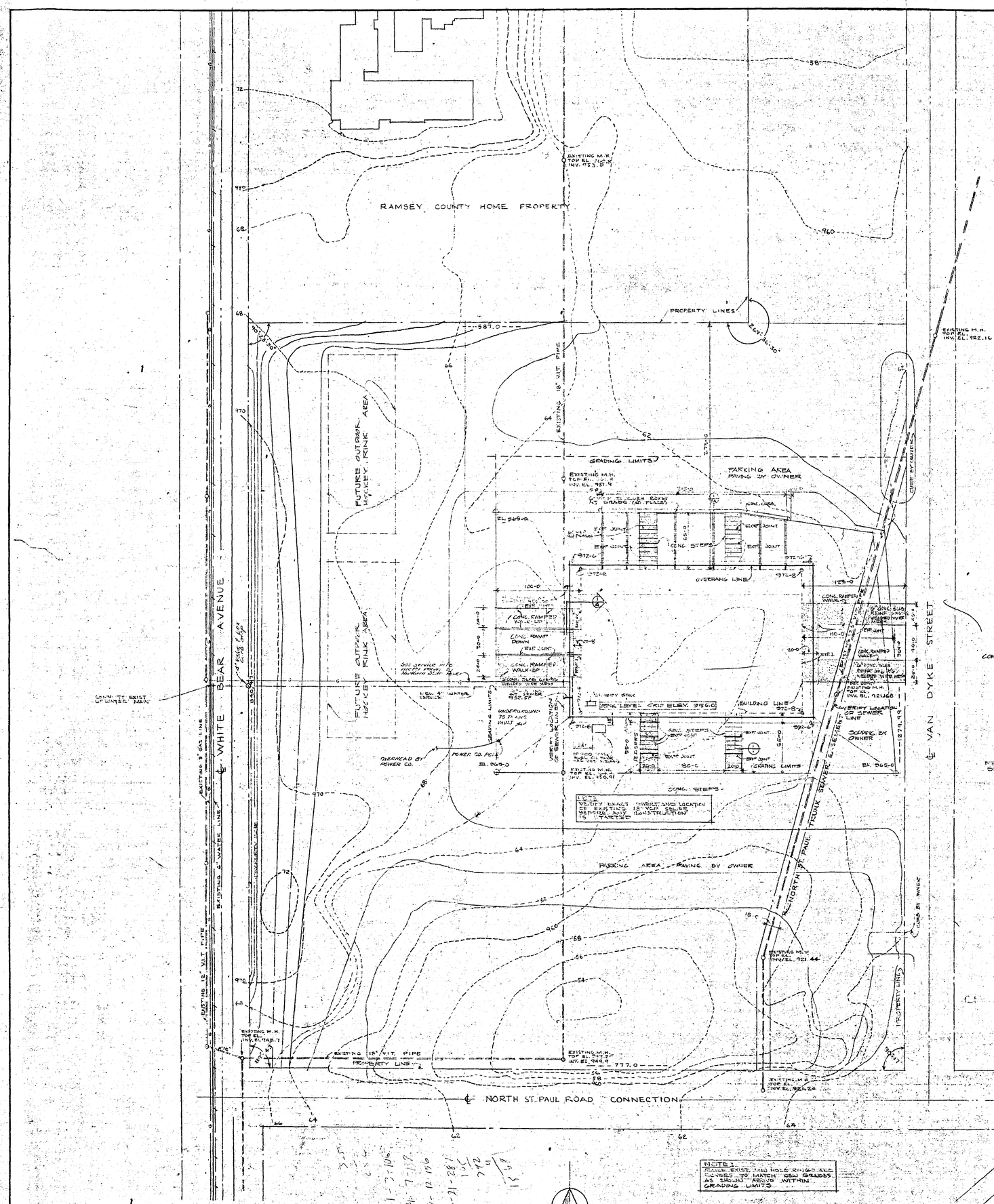
HAARSTICK LUNDGREN AND ASSOCIATES INC. ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINNESOTA

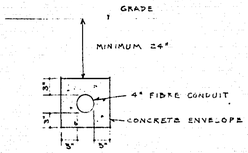
ENTRANCE LEVEL FLOOR PLAN
ALDRICH RECREATION ARENA
RAMSEY COUNTY, MINNESOTA

DATE JULY 11, 1960
DRAWN K.W.D.
CHECKED R.J.
SHEET 3

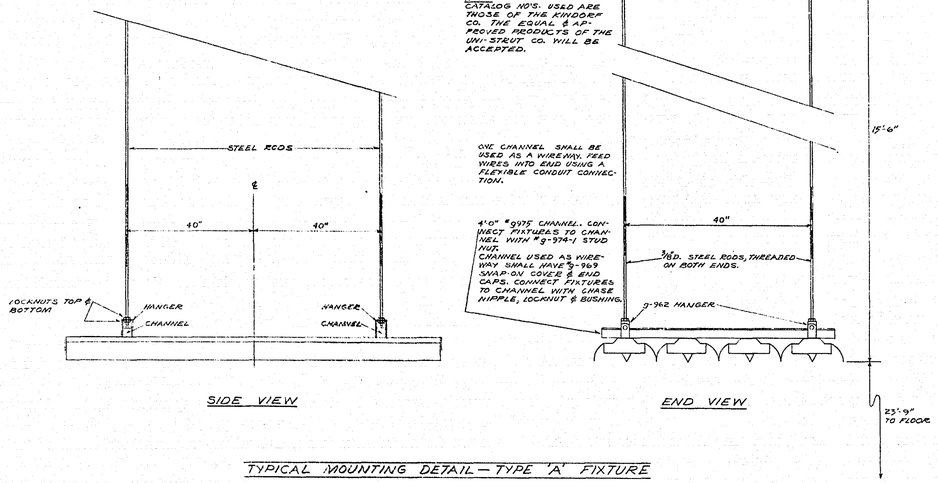
T-128 66-100


262-0
212-0
200-0
85'-0
TEAM BOX
TEAM BOX
CONCRETE RISERS & STEPS
GATE
WOOD DASHER BOARD
PROTECTIVE SCREEN ABOVE DASHER BOARD TO GLASS
CONC. CURB TOP EL. 957-0
FLOOR GRID EL. 956-0
FLOOR GRID


RAMSEY COUNTY HOME PROPERTY
PROPERTY LINES
EXISTING M.H. TOP EL. 974.0 INV. EL. 953.0
EXISTING M.H. TOP EL. INV. EL. 922.16
EXISTING 18" V.I.T. PIPE
GRADING LIMITS
PARKING AREA PAVING BY OWNER
FUTURE OUTDOOR RINK AREA
FUTURE OUTDOOR HOCKEY RINK
CONC. STEPS
OVERHANG LINE
CONC. RAMPED WALK-UP
CONC. RAMPED WALK-DN
CONC. SLAB & REINF. UNDERGROUND TO TANKS VAULT
BUILDING LINE
CONC. LEVEL
CONC. ELEV. 956.0
SEE SERVICE INFO. ELECTRIC SERVICE No. 4 W/4mm STEEL
SEE SERVICE INFO. GAS SERVICE No. 4 W/4mm STEEL
UNDERGROUND TO TANKS VAULT
DIAMEAD BY POWER CO.
POWER CO. POLE
EL. 969.0
EL. 965.0
EXISTING 8" WATER LINE
EXISTING 4" GAS LINE
EXISTING 12" V.I.T. PIPE
EXISTING 18" V.I.T. PIPE
EXISTING M.H. TOP EL. INV. EL. 921.44
EXISTING M.H. TOP EL. INV. EL. 944.0
EXISTING M.H. TOP EL. INV. EL. 921.24
EXISTING M.H. TOP EL. INV. EL. 921.68
EXISTING M.H. TOP EL. INV. EL. 921.58
PROPERTY LINE
CONC. STEPS
CONC. RAMPED WALK
CONC. SLAB & REINF. UNDERGROUND TO TANKS VAULT
CONC. SLAB & REINF. UNDERGROUND TO TANKS VAULT
APPROX. LOCATION OF SEWER LINE
APPROX. LOCATION OF SEWER LINE
SEE SERVICE INFO. ELECTRIC SERVICE No. 4 W/4mm STEEL
SEE SERVICE INFO. GAS SERVICE No. 4 W/4mm STEEL
SEE SERVICE INFO. WATER SERVICE No. 4 W/4mm STEEL
SEE SERVICE INFO. SEWER SERVICE No. 4 W/4mm STEEL
SEE SERVICE INFO. TELEPHONE

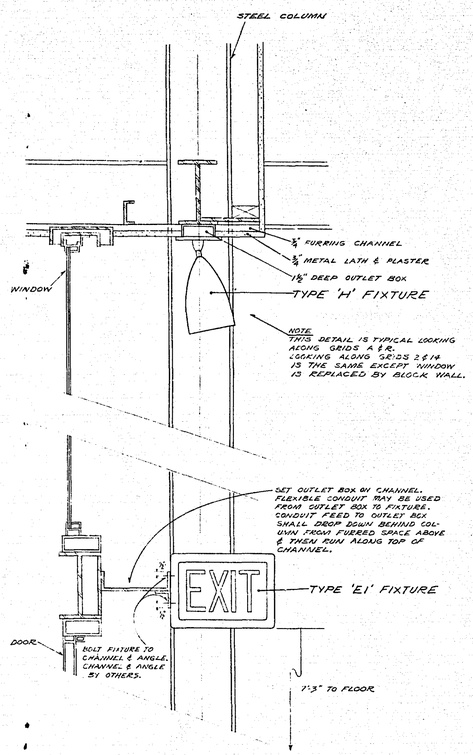


FIBRE CONDUIT FOR PRIMARY SERVICE



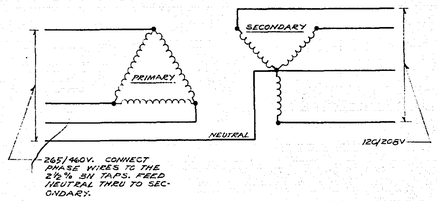
TYPICAL MOUNTING DETAIL — TYPE 'A' FIXTURE

NO SCALE



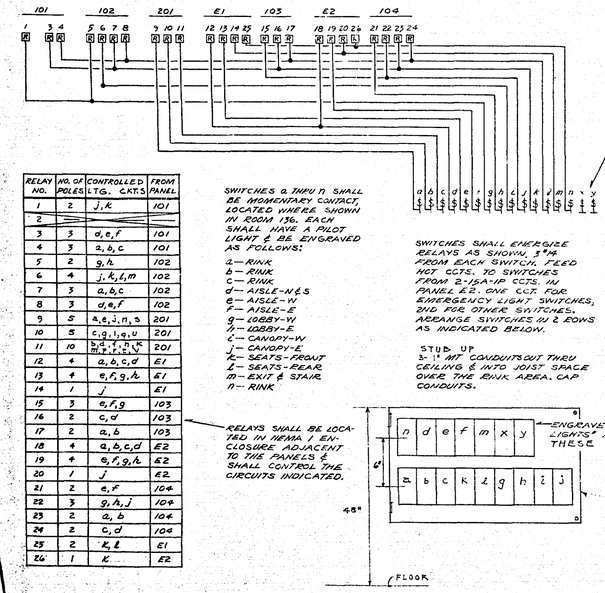
TYPICAL MOUNTING DETAIL — TYPES 'E1' & 'H' FIXTURES

1½" = 1'-0"



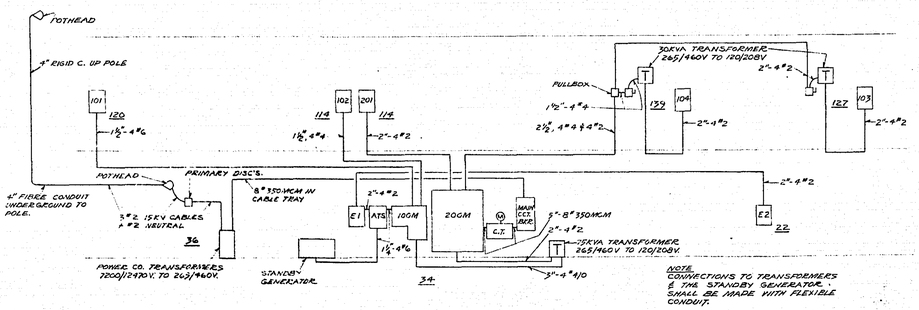
480V Δ TO 120/208V Y TRANSFORMER

DRY TYPE TRANSFORMER CONNECTIONS

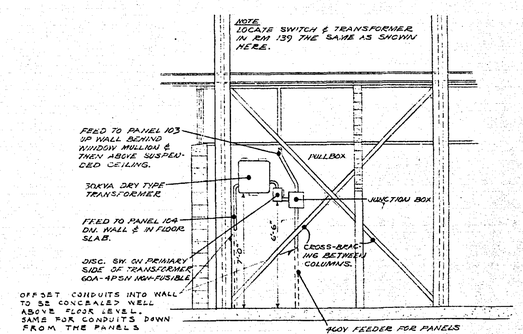


RELAY NO.	NO. OF POLES	CONTROLLED LTG. CKT.S	FROM PANEL
1	2	j, k	101
2			
3	3	d, e, f	101
4	3	a, b, c	101
5	2	g, h	102
6	4	j, k, l, m	102
7	3	a, b, c	102
8	3	d, e, f	102
9	5	a, e, j, n, s	201
10	5	c, g, i, q, u	201
11	10	b, d, f, h, k, m, p, r, t, v	201
12	4	a, b, c, d	E1
13	4	e, f, g, h	E1
14	1	j	E1
15	3	e, f, g	103
16	2	c, d	103
17	2	a, b	103
18	4	a, b, c, d	E2
19	4	e, f, g, h	E2
20	1	j	E2
21	2	e, f	104
22	3	g, h, j	104
23	2	a, b	104
24	2	c, d	104
25	2	k, l	E1
26	1	k	E2

SWITCHING DIAGRAM FOR ENTRANCE LEVEL LIGHTING



LIGHT & POWER RISER DIAGRAM



E2/1 DRY TYPE TRANSFORMER MOUNTING — RMS. 127 & 139

1/4" = 1'-0"

MICROFILMED RAMSEY CO. ENGR. T-128

REVISIONS	DATE	DRAWN

I certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered ENGINEER under Laws of the State of Minnesota.

Robert W. Voight

Date 7-11-60 Reg. No. 5566

ELECTRICAL RISERS & DETAILS

ALDRICH RECREATION ARENA

RAMSEY COUNTY MINNESOTA

HAARSTICK LUNDGREN AND ASSOCIATES INC.
ARCHITECTS AND ENGINEERS
FIRST NATIONAL BANK BUILDING, ST. PAUL, MINN.

DATE JULY 11, 1960
DRAWN FWM.
CHECKED RWV
SHEET E2

ALDRICH ARENA

PARKING LOT AND AREA LAYOUT

SCALE: 1" = 50'

9-17-62 M.D.K.

APPROVAL:

RAMSEY COUNTY ENGINEER

PARKING CAPACITY DIAGRAM

TOTAL: 1026 @ 45°

TOTAL: 1021 (ALTERNATE A)

(INCLUDES 10 BUSSES)

LOT NO. 1
199 CARS

LOT NO. 2
314 CARS
309 (ALTERNATE 'A')

ARENA

LOT NO. 3
513 CARS

RAMSEY COUNTY HOME PROPERTY

COUNTY HOME

ALDRICH ARENA

262' × 162'

PROPOSED FENCE

PARALLEL PARKING

GARDEN

PROPOSED TREES & ORCHARD

DRAINAGE DITCH - 6' BOTTOM

ISLAND

CHAIN

BOULEVARD

TOE OF SLOPE

EXISTING ENTRANCE

PARK 10 BUSSES @ 45°

5' SIDE WALK INPLACE

ISLAND & SIDEWALK

PROPOSED CURB

SOD

EVERGREEN PLANTING

PROP. SIDEWALKS

SEWER EASEMENT

PARKING BAYS

ISLAND

LIGHT POLES

PROPOSED STORM SEWER

PROPOSED TREES

ROJ Hubbard C&S

8-10-33 Left R. Lewis Plans for this Storm Sewer (Smith C&S)

WHITE BEAR AVENUE

PROP. SIDEWALK

TOE OF SLOPE

RIPLEY STREET

VAN DYKE STREET

NORTH ST. PAUL ROAD

EQUATION STA. 8+40 RIPLEY = 0+00 VAN DYKE

NORTH

MICROFILMED
RAMSEY CO. ENGR.

F-128