EAGLE STREET PARKING RAMP
FOR SAINT PAUL CIVIC CENTER

ST. PAUL CIVIC CENTER COMMISSION

DEAN MEREDITH, CHAIRMAN
LLOYD L. LEIDER, VICE CHAIRMAN
FREDERICK BJORKLUND
PATRICK O'HALLORAN
DANIEL M. GEPHART
FRANK C. JUDD
CYRIL P. PESEK
WILLIAM T. PRICE
RICHARD C. RADMAN, JR.

ROBERT VAN HOEF, COORDINATOR

STANDARD ABBREVIATIONS

AP	Access Panel
AC PLAS	Acoustical Plaster
ACT	Acoustical Tile
ADJ	Adjustable
ALT	Alternate
ALUM	Aluminum
A	Ampere
APPROX	Approximate
A-E	Architect-Engineer
ARCH	Architectural
AT	Asphalt Tile
BD	Board
BM	Bench Mark
BTWN	Between
BITUM	Bituminous
BLKG	Blocking
BLDG	Building
CAB	Cabinet
CWK	Casework
CI	Cast Iron
CLG	Ceiling
CEM	Cement
CT	Ceramic Tile
CP	Chrome Plate
CCT	Circuit
CHW	Circulating Hot Water
CO	Cleanout
CLOS	Closet
CW	Cold Water
COL	Column
COMP	Composition
C	Conduit
CONC	Concrete
CB	Concrete Block
COND	Condensate
CONN	Connection or Connect
CJ	Construction Joint
CONT	Continuous
CONTR	Contractor
CONV	Convector
CU	Cubic
DET	Detail
DIA	Diameter
DIM	Dimension
DISC	Disconnect
DIV	Divider or Division
DR	Door
DH	Double Hung
DSA	Double Strength A Quality Glass
DN	Down
DS	Downspout
DWG	Drawing
DF	Drinking Fountain
DW	Dumbwaiter
EA	Each
ELEC	Electric or Electrical
EL	Elevation
MT	Empty
ENT	Entrance
EQUIP	Equipment
EXH	Exhaust
EXIST	Existing
EXP	Expansion
EXT	Exterior
F.T.	Fin Tube
FIN	Finish
FE	Fire Extinguisher
FIXT	Fixture
F&T	Float & Thermostatic
FL	Floor or Flooring
FD	Floor Drain
FLRT	Fluorescent
FTG	Footing
FDN	Foundation
FRMG	Framing
FA	Fresh Air or Fire Alarm
FSD	Full Size Detail
FUR	Furring
GI	Galvanized Iron
G	Gas
GA	Gauge
GENL	General
GL	Glass
GST	Glazed Structural Tile
GB	Grade Beam
GRAV	Gravity Vent
GR	Grille
GYM	Gymnasium
GYP	Gypsum
HBD	Hardboard
HDW	Hardware
HWD	Hardwood
HTR	Heater
H&V	Heating and Ventilating
HT	Height
HM	Hollow Metal
HORIZ	Horizontal
HP	Horsepower
HB	Hose Bibb
HC	Hose Cabinet
HW	Hot Water
HYD	Hydrant
INSUL	Insulation
INT	Interior
INV	Invert
JAN	Janitor
JT	Joint
JST	Joist
JB	Junction Box
KEENES	Keene's Cement
KVA	Kilovolt Amperes
KW	Kilowatt
LT	Laundry Tray
LAV	Lavatory
LWCB	Lightweight Concrete Block
LINO	Linoleum
LVR	Louver
MH	Manhole
MFG	Manufacturer
MBL	Marble
MAS	Masonry
MO	Masonry Opening
MATL	Material
MECH	Mechanical
MED CAB	Medicine Cabinet
MET	Metal
MEZZ	Mezzanine
MIC	Microphone
MIN	Minimum
MISC	Miscellaneous
MOD	Modular
MLDG	Moldings
MC	Momentary Contact
MOT	Motorized
MTG	Mounting
MULL	Mullion
MT	Empty
NIC	Not in Contract
NO	Number
NC	Nurse Call
OBS	Obscure
OC	On Center
OPG	Opening
OD	Outside Diameter
PBD	Panelboard
PTD	Paper Towel Dispenser
PARTN	Partition
P&G	Pitch and Gravel
P LAM	Plastic Laminate
PLAS	Plaster
PL	Plate
PWD	Plywood
P	Pole
PORT C	Portland Cement
PV	Power Ventilator
PRV	Pressure Reducing Valve
QT	Quarry Tile
R	Radius
RAD	Radiator
RECPT	Receptacle
REFRIG	Refrigerator or Refrigeration
REG	Register
REIN	Reinforcing or Reinforced
RC	Remote Control
REMOV	Removable
REQD	Required
RET	Return
RA	Return Air
REV	Revised, Revision
RD	Roof Drain
RM	Room
RUB	Rubber
RT	Rubber Tile
SGT	Salt Glazed Tile
SF	Sand Float Finish
SAN	Sanitary
SND	Sanitary Napkin Dispenser
SCHED	Schedule
SEC	Section
SIS	Seventeen Inch Selvage
SH	Sheet
SHD	Shower Drain
SC	Sill Cock
SIM	Similar
SSA	Single Strength A Quality Glass
S	Sink
SR	Slop Receptor
SS	Slop Sink
SFT	Smooth Face Tile
SWD	Softwood
SPECS	Specifications
STS	Stainless Steel
STN	Station
STM	Steam
STRUCT	Structural
SUP	Supply
SUSP	Suspended
SW	Switch
TEL	Telephone
TV	Television
TEMP	Temperature
TCAC	Temperature Control Air Compressor
TER	Terrazzo
TH	Test Hole
T&G	Tongue and Groove
TF	Trowel Finish
TYP	Typical
UB	Underground
UH	Unit Heater
UV	Unit Ventilator
UR	Urinal
VAC	Vacuum
V	Vent or Volt
VENT	Ventilation or Ventilator
VERT	Vertical
VEST	Vestibule
VAT	Vinyl Asbestos Tile
VCP	Vitreous Clay Pipe
WSCT	Wainscot
W	Waste or Watt
WC	Water Closet
WP	Weatherproof
WWM	Welded Wire Mesh
WF	Wide Flange
WDW	Window
WG	Wire Glass
W/	With
W/O	Without
WD	Wood
WI	Wrought Iron

MECHANICAL SYMBOLS

- Soil, Waste and Storm Drain, underground
- Vitrified Clay Pipe
- Soil, Waste or Storm, above ground
- Vent Pipe
- Cold Water
- 140°F. Hot Water
- Circulating Hot Water
- 180° — 180°F. Hot Water
- T — Tempered Water Piping
- G — Gas Piping
- A — Compressed Air
- F — Fire Line
- H — Hard Water
- S — Soft Water
- O — Oxygen Piping
- FO — Fuel Oil Supply
- FOR — Fuel Oil Return
- Pipe in tile underground, insulated unless noted
- Steam
- Condensate Return
- Pumped Condensate Return
- Concrete Joint; C.I. to VCP
- C.O. C.O. — Cleanout
- Backwater Valve
- Running Trap
- Direction of pitch down
- Supply Duct Section (going away)
- Return or Exhaust Duct Section (going away)
- Duct Dimensions, 1st figure = side shown, 2nd figure = side not shown
- R — Inclined Rise re Air Flow
- D — Inclined Drop re air Flow
- Direction of Air Flow
- Flexible Connection
- Ceiling Register
- Ceiling Diffuser
- Volume Damper
- Back Draft Damper
- Motor Operated Damper
- Splitter Damper
- Duct Turning Vanes
- Wall Intake Louver, with screen
- Float Valve
- Pressure Reducing Valve
- Pneumatic Thermostat
- Electric Thermostat
- Pneumatic Valve
- Electric Motorized Valve
- Self-contained Control Valve
- Reducers
- Expansion Joint with Guides
- Anchor
- Fintube Radiation with Cover
- Cabinet Unit Heater
- Unit Ventilator
- U.H. — Unit Heater
- Pressure Gage (with cock)
- Thermometer
- RD — Refrigerant Discharge Pipe
- RS — Refrigerant Suction Pipe
- CS — Condenser Water Supply
- CR — Condenser Water Return
- CHS — Chilled Water Supply
- CHR — Chilled Water Return
- Hot Water Heating Supply with Zone No. 1
- Elbow turned up
- Elbow turned down
- Tee turned up
- Tee turned down
- Gate Valve
- Globe Valve
- Check Valve
- Strainer
- Union
- Stop and Waste Valve
- Gas Shut-off Valve
- Balancing Cock
- Blow-off Valve, quick opening
- Relief Valve
- R.D. — Roof Drain
- D.S. — Downspout or Rain Leader
- SH.D. F.D. — Floor Drain or Shower Drain
- S.H. — Shower Head
- S.C. — Sill Cock or Wall Hydrant
- W.C. — Water Closet (wall hung)
- UR — Urinal (stall type)
- LAV. — Lavatory
- S.S. — Service or Slop Sink
- D.F. — Draining Fountain (semi-recessed)
- Thermostatic Radiation Trap
- Float and Thermostatic Trap

ELECTRICAL SYMBOLS

- Ceiling Outlet
- Ceiling Outlet, Recessed Fixture
- Wall Outlet
- Exit Light
- Emergency Light
- Single Receptacle
- Duplex Receptacle
- Combination Receptacle, 125/250V
- Suspended Shop Receptacle
- Floor Box
- Stage Pocket
- Range or Special Power Outlet
- Switch Outlet, Single or Two Pole, 3 or 4-way as indicated
- MC — Momentary Contact Switch
- P — Switch and Pilot Light
- Switch and Duplex Receptacle in one Plate
- Remote Control Switch
- TS — Time Switch
- PE — P. E. Switch
- Telephone Outlet
- Thermostat
- T — Transformer, Dry Type
- Home Run to Panel
- Branch Circuit, Ceiling and Wall
- Branch Circuit, Floor

Cross marks indicate the number of wires. Conduit runs with no designation contain two wires.

- Wall Speaker Outlet
- Ceiling Speaker Outlet
- Call-in Switch
- Microphone Outlet
- Sound System Cabinet
- Television Outlet
- Projector Outlet
- Junction Box
- RB — Pull Box
- #2 — Motor
- M — Manual Motor Starter
- Magnetic Motor Starter
- Disconnect Switch
- Branch Circuit Panel
- Power or Distribution Panel
- Telephone Terminal Box

Symbols may be further described by the following subscripts:

W. P. - Weatherproof
P. C. - Pull Chain
P. S. - Pin Switch or Pull Switch
FL. - Floor Mounted
EXP. - Explosion-proof
K - Lock or Key Operated

MATERIAL INDICATION

- Concrete
- Concrete Block
- Insulation, Rigid
- Wood, Structural or Rough
- Wood, Finished
- Earth
- Stone
- Metal
- Glass
- Flashing, Elevation
- Brick
- Cinders or Gravel
- Tile
- Terrazzo

DRAWING SYMBOLS

Detail References

7/A5 Section — 8/A7 Elevation

Detail Identification

5 — Detail Number
A6 — Sheet on Which Detail is Drawn

Door Identification

105

Grid Identification

2 — B

INDEX OF DRAWINGS

A1 TITLE SHEET
A2 SITE PLAN
A3 FIRST LEVEL PLAN
A4 SECOND THRU SEVENTH LEVEL PLAN
A5 PLAZA LEVEL PLAN
A6 ELEVATIONS & BUILDING SECTION
A7 LOBBY - STAIR PLANS & DETAILS
A8 STAIR & ELEVATOR SECTION & DETAILS

S1 FOUNDATION AND FIRST FLOOR PLAN
S2 SECOND THRU SEVENTH LEVEL FRAMING PLAN
S3 PLAZA LEVEL FRAMING PLAN
S4 HELIX PLANS AND DETAILS
S5 COLUMN SCHEDULE AND MISCELLANEOUS DETAILS
S6 BEAM POST-TENSIONING SCHEDULE AND DETAILS
S7 MISCELLANEOUS BEAM SECTIONS AND DETAILS
S8 PEDESTRIAN RAMP SECTIONS AND DETAILS

ME1 FOUNDATION PLAN
ME2 FIRST LEVEL PLAN
ME3 SECOND LEVEL PLAN
ME4 THIRD THRU SEVENTH LEVEL PLAN
ME5 PLAZA LEVEL PLAN
ME6 ELECTRICAL DETAILS
ME7 MECHANICAL PLANS & DETAILS

Pursuant to the provisions of Chapter 459, Laws of Minnesota for 1967, and pursuant to Section 434 of the Charter of the City of Saint Paul, I hereby certify this plan, specification, or report was reviewed by me or by personnel under my direct supervision, and is hereby approved, and that I am a duly Registered Architect under the Laws of the State of Minnesota and City Architect of the City of Saint Paul, Minnesota. Registration No. 5658.

Robert L. Ames

Date DECEMBER 15, 1968

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 Architect under the laws of the State of Minnesota. Registration No. 3239.

Louis R. Lundgren

Date DECEMBER 15, 1968

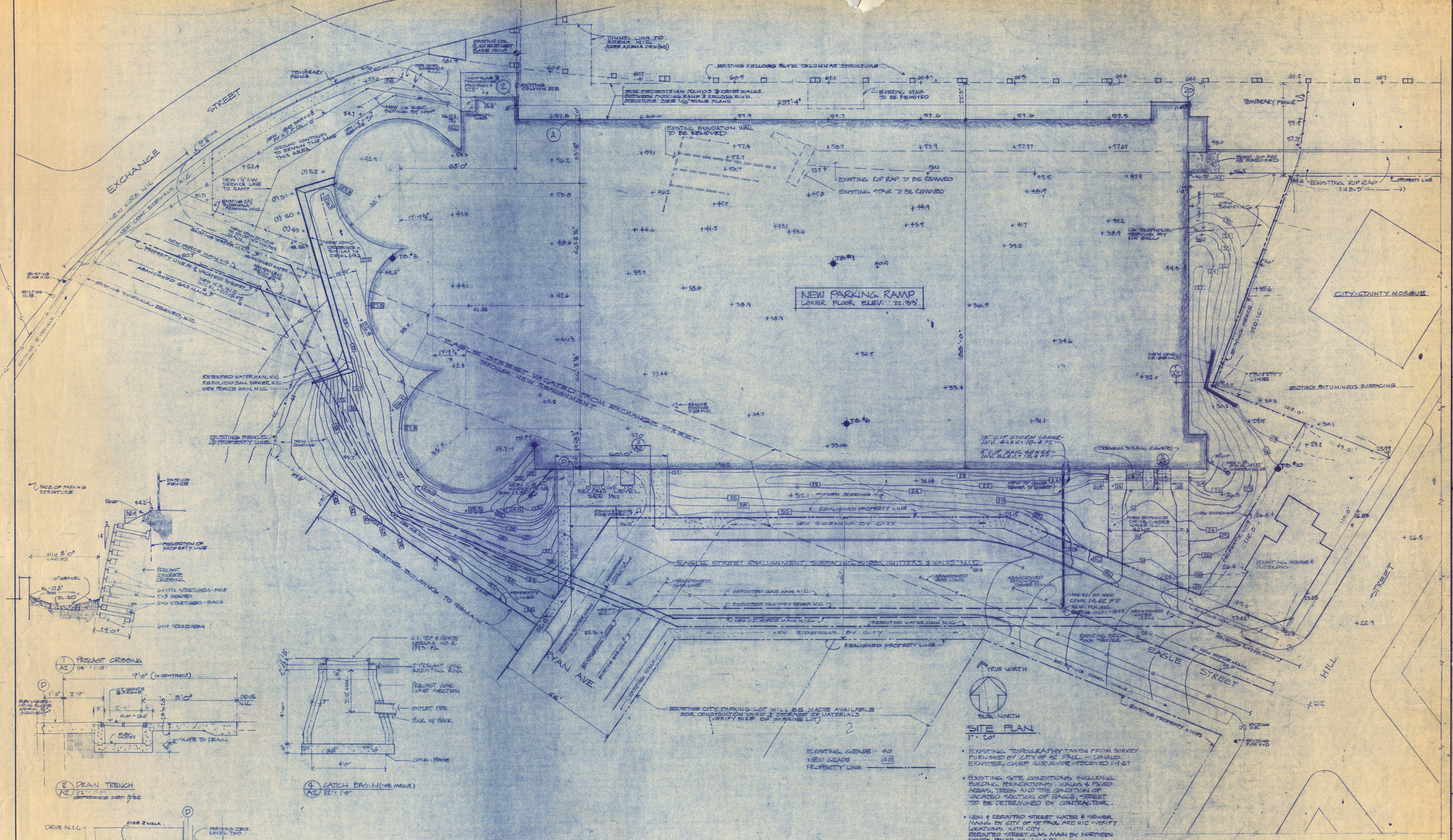
ROBERT L. AMES — SAINT PAUL CITY ARCHITECT
CONVENTION CENTER ARCHITECTS & ENGINEERS, INC. — ASSOCIATE ARCHITECTS
Planners — Architects — Engineers
HAARSTICK LUNDGREN AND ASSOCIATES, INC.
GROVER DIMOND ASSOCIATES, INC.
THE CERNY ASSOCIATES INC.
CAVIN AND PAGE
THE HAMM BLDG. SAINT PAUL, MINNESOTA

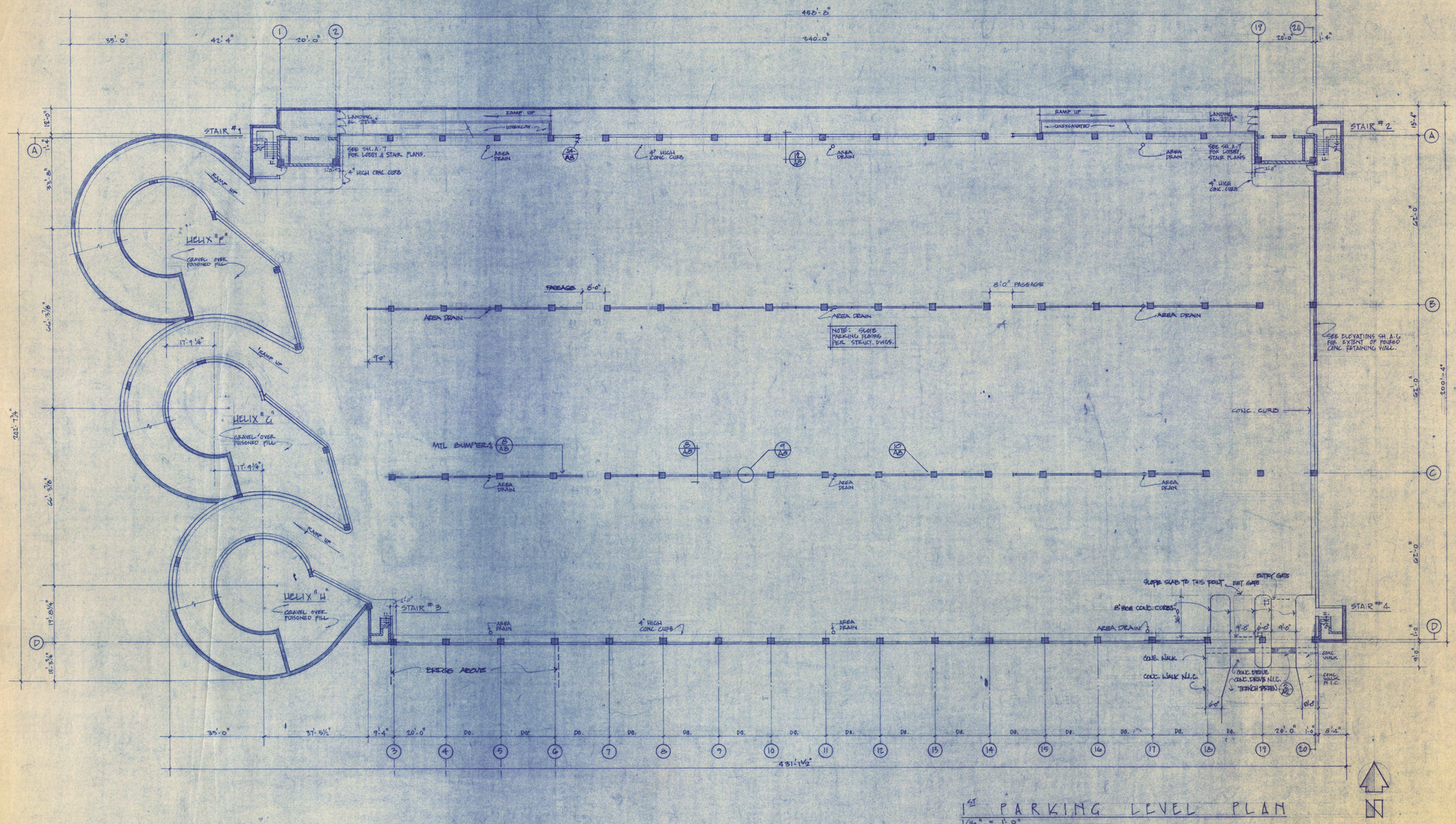
SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

TITLE SHEET

REVISION DATE APRIL 10, 69 — R△

#69-2


EXCHANGE STREET
NEW CURB N.I.C.
NEW CONC. SIDEWALK N.I.C.
TEMPORARY FENCE
TUNNEL LINK TO ARENA N.I.C. (SEE ARENA DWGS)
EXISTING CBL & CO BETWEEN CASE POINT
EXISTING COLUMN #28
NEW CONC. SIDEWALK N.I.C.
NEW 6" SANITARY SEWER SERVICE BY OTHERS
NEW 1" C.W. SERVICE LINE TO RAMP
EXISTING CONC. SIDEWALK REMOVAL N.I.C.
NEW CONC. CURBING SIMILAR TO DETAIL 1/A2
NEW 8" WATER MAIN N.I.C.
ABANDONED WATER MAIN
ABANDONED GAS MAIN
NEW 8" SANITARY SEWER N.I.C.
EXISTING HYD.
EXISTING C.B.
EXISTING SIDEWALK REMOVED, N.I.C.
PROPERTY LINE & VACATED STREET
NEW 4" WATER SERVICE N.I.C.
NEW 6" SANITARY SERVICE N.I.C.
EXISTING BUILDING TO REMAIN
REROUTED WATER MAIN, N.I.C.
REROUTED SAN. SEWER, N.I.C.
NEW FORCE MAIN N.I.C.
EXISTING FENCE & PROPERTY LINES
NEW SODDING
REMOVE EXISTING FIRE HYD.
EXISTING CBL TO SECOND LEVEL SEE Y52
NEW INVERT EL. 22.0
NEW 15" CMP STORM SEWER N.I.C.
NEW 8" CMP SANITARY SEWER N.I.C.
NEW 12" CMP STORM SEWER N.I.C.
NEW 8" CMP SANITARY SEWER N.I.C.
NEW 8" CMP STORM SEWER N.I.C.
NEW 6" CMP SANITARY SEWER N.I.C.
NEW 15



1ST PARKING LEVEL PLAN

1/16" = 1'-0"

ROBERT L. AMES
CENTER ARCHITECTS & ENGINEERS, INC.
SAINT PAUL CITY ARCHITECT
ASSOCIATE ARCHITECTS

SAINT PAUL CIVIC CENTER

FIRST LEVEL PLAN

A

PARTIAL 4TH, 5TH, 6TH & 7TH LEVEL FLOOR PLANS

1/16" = 1'-0" (PORTION NOT SHOWN TO BE SAME AS LEVEL 3 BELOW

2ND AND 3RD LEVEL FLOOR PLANS

1/16" = 1'-0"

PARTIAL 3RD LEVEL FLOOR PLAN

1/16" = 1'-0"

ROBERT L. AMES
CONVENTION CENTER ARCHITECTS & PLANNERS

SAINT PAUL CITY ARCHITECT
ENGINEERS, INC.
ASSOCIATE ARCHITECTS
Engineers
Architects

HARRISTICS, LUNDGREN AND ASSOCIATES, INC.
GROVER DIAMOND ASSOCIATES, INC.

CAVIN AND PAGE
THE CERNY ASSOCIATES, INC.

THE HAMM BLDG.
SAINT PAUL, MINNESOTA

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 Architect under the laws of the State of Minnesota.

Reg. No.

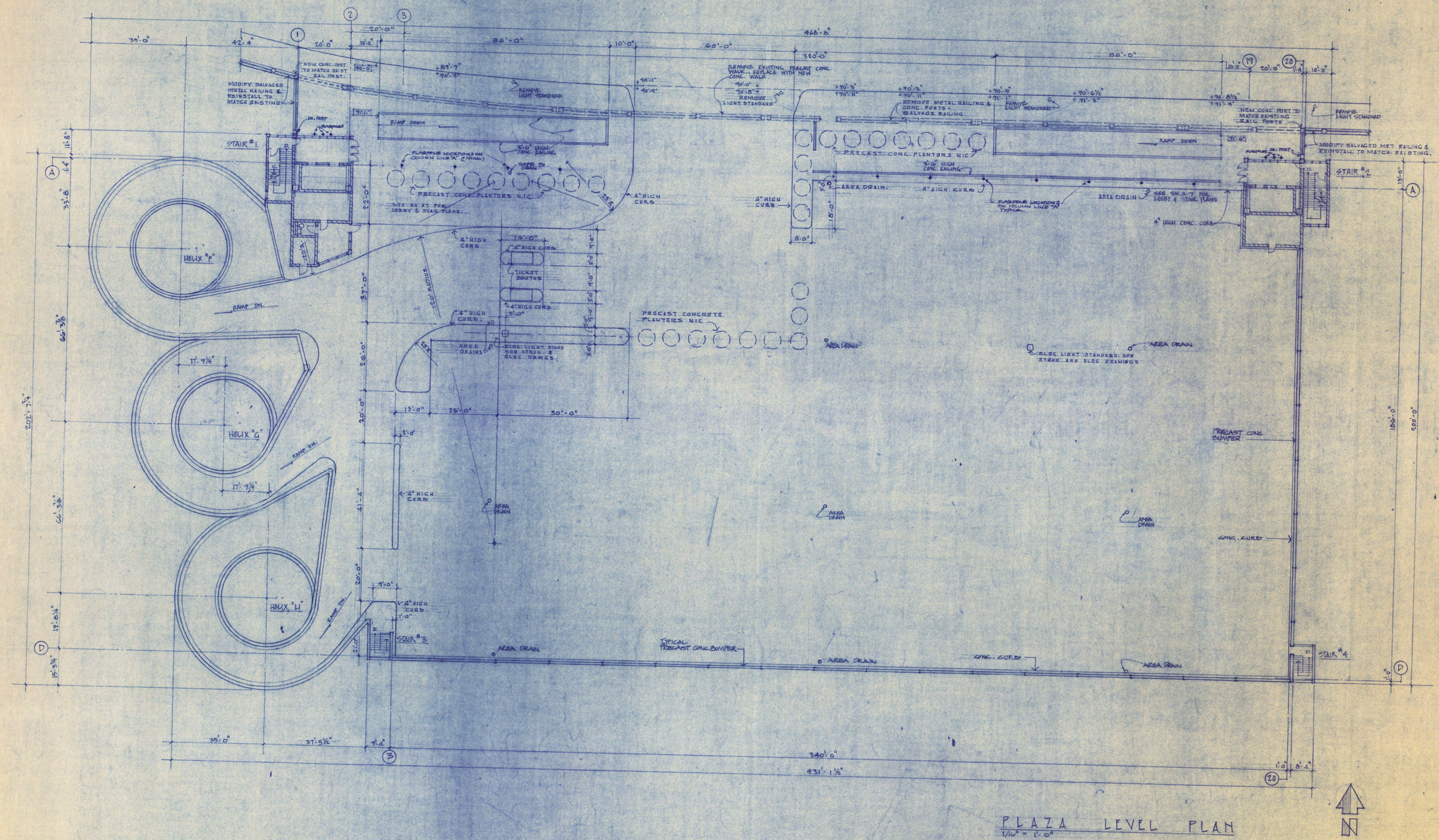
SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

SECOND THRU SEVENTH LEVEL PLAN

ISSUE DATE

REVISION DATE APRIL 13 '67

A4



PLAZA LEVEL PLAN

1/16" = 1'-0"

SEE SHEET M-5 FOR NEW STREET LIGHTING LOCATIONS

SAINT PAUL CITY ARCHITECT
CONVENTION CENTER ARCHITECTS & ENGINEERS, INC. ASSOCIATE ARCHITECTS
Engineers
Architects
Planners
ROBERT L. AMES
HAMMEL, GREEN AND ABRAHAMSON, INC.
THE GERAGHTY ASSOCIATES, INC.
CAVIN AND PAGE ASSOCIATES, INC.
THE HAMM BLDG.
SAINT PAUL, MINNESOTA

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Reg. No. 7927

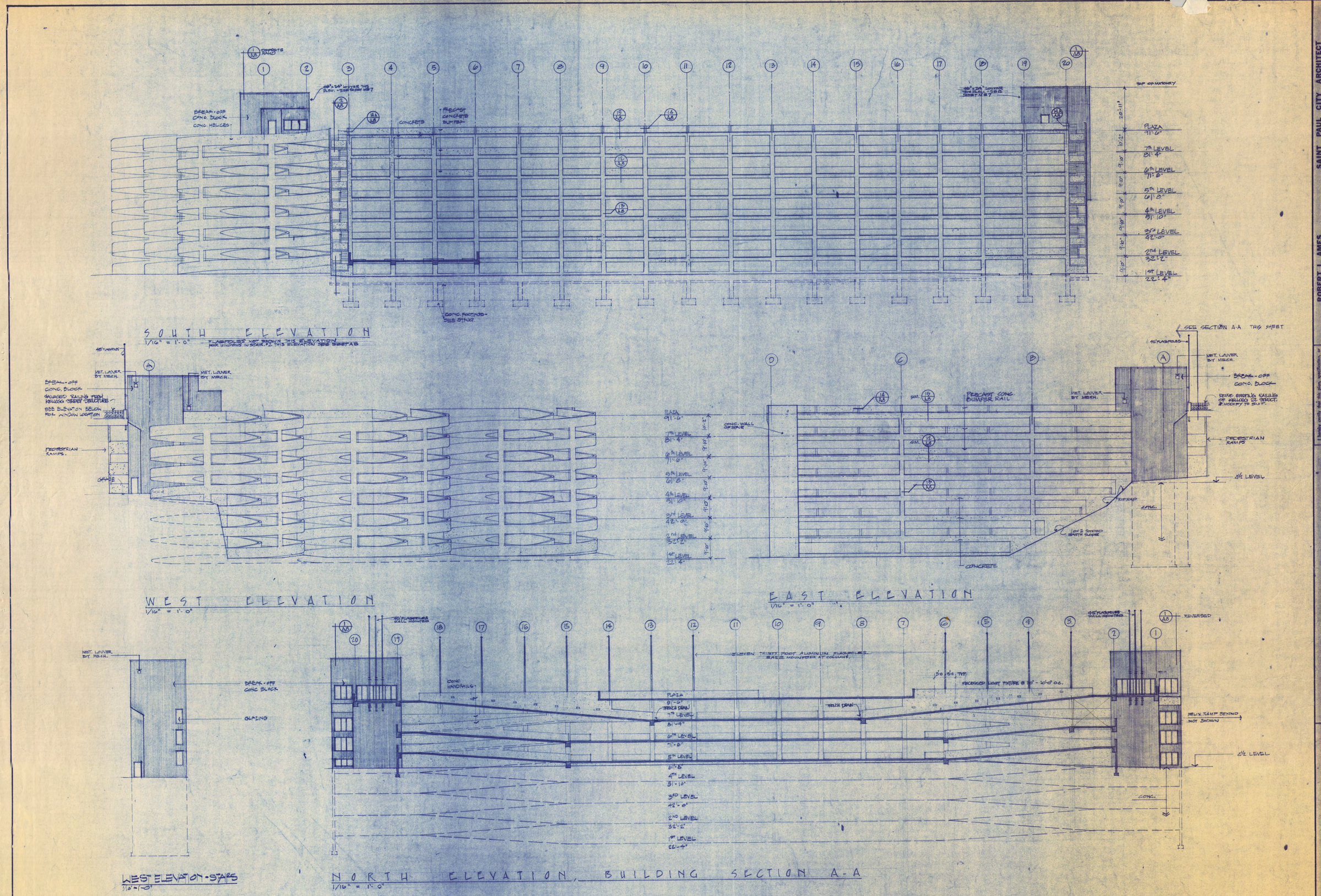
Date: 12-17-68

SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

PLAZA LEVEL PLAN

1ST ISSUE DATE 12-17-68 REVISION DATE APRIL 10, 69 R1

A5



ROBERT L. AMES
CONVENTION CENTER ARCHITECTS & ENGINEERS, INC.
Planners
MAARSTICK LUNDGREN AND ASSOCIATES, INC.
GROVER DIMOND ASSOCIATES, INC.

SAINT PAUL CITY ARCHITECT
ASSOCIATE ARCHITECTS
Engineers
CAVIN AND PAGE
THE CERNY ASSOCIATES INC.

THE HAMM BLDG.
SAINT PAUL, MINNESOTA

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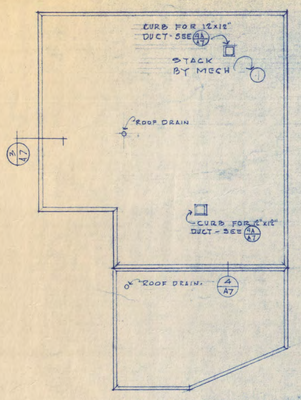
Date 12/15/68 Reg. No. 13239

SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

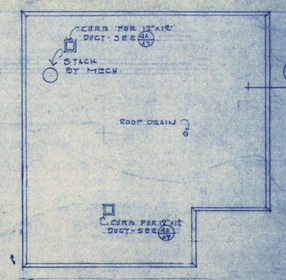
ELEVATIONS & BUILDING SECTION

FIRST ISSUE DATE DEC. 15, 1968
REVISION DATE APRIL 10, '69
R

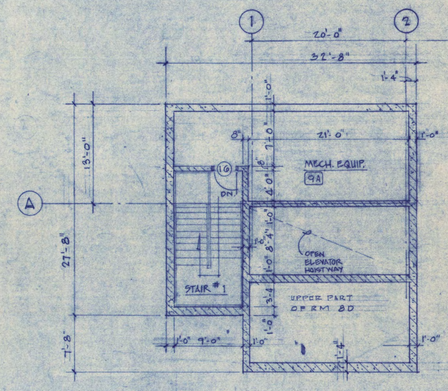
A6



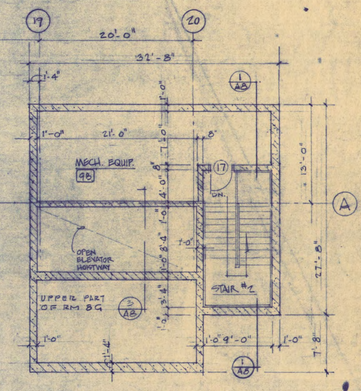
ROOF PLAN - WEST
1/8" = 1'-0"



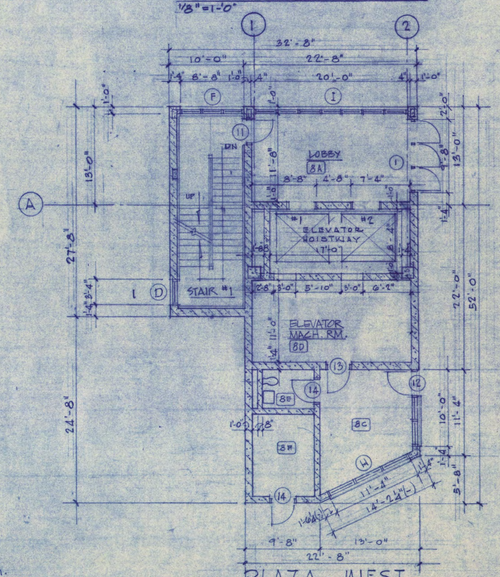
ROOF PLAN - EAST
1/8" = 1'-0"



MECH. EQUIP. RM. - WEST
1/8" = 1'-0"



MECH. EQUIP. RM. - EAST
1/8" = 1'-0"



PLAZA - WEST
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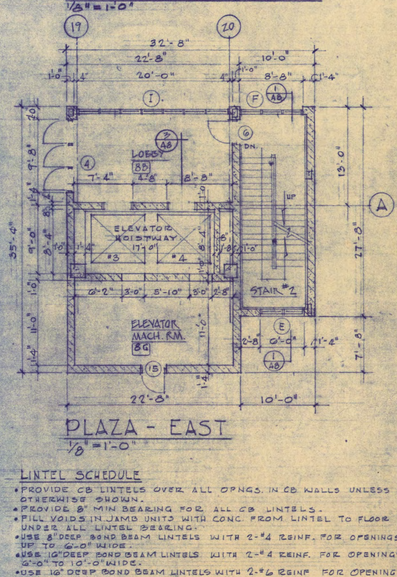
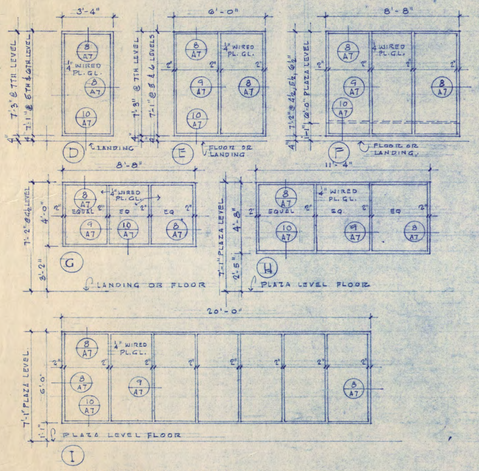
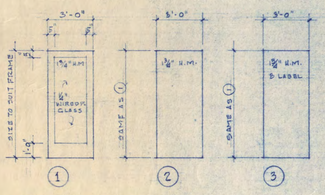


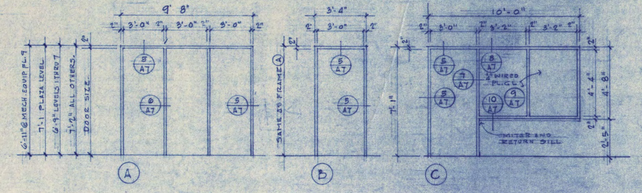
PLAZA - EAST
1/8" = 1'-0"



WINDOW TYPES
1/4" = 1'-0"



DOOR TYPES
1/4" = 1'-0"



FRAME TYPES
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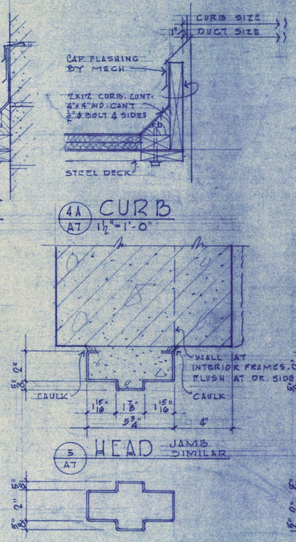


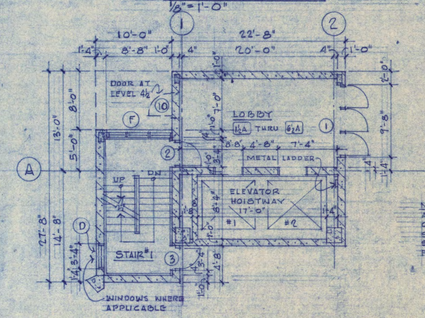
5/A7 COPING 1 1/2" = 1'-0"

4/A7 WALL CANT 1 1/2" = 1'-0"

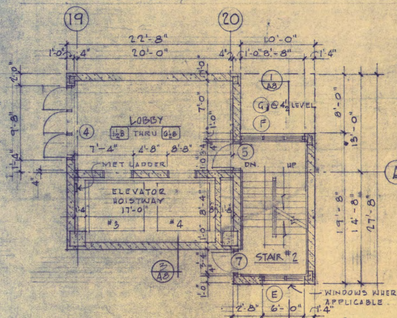
4A/A7 CURB 1 1/2" = 1'-0"

FRAME DETAILS
3" = 1'-0"

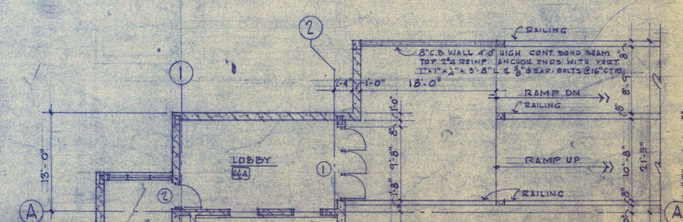
NOTE:
ALL EXTERIOR WALLS BELOW GRADE ARE POURED CONC.- SEE 1/4" SCALE FLOOR PLANS ON SHTS. A3, A4, A5 AND STRUCT DRWGS FOR ADDITIONAL INFORMATION.



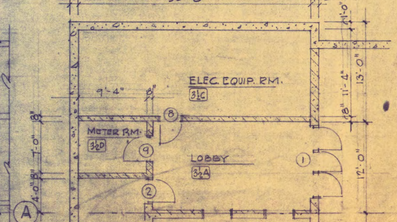
TYP. PLAN - WEST
1/8" = 1'-0" (SEE EXCEPTIONS BELOW)



TYP. PLAN - EAST
1/8" = 1'-0"



LEVEL 6 1/2 PLAN - WEST
3/8" = 1'-0"



LEVEL 3 1/2 PLAN - WEST
1/8" = 1'-0"

LINTEL SCHEDULE
- PROVIDE CB LINTELS OVER ALL OPNGS. IN CB WALLS UNLESS OTHERWISE SHOWN.
- PROVIDE 8" MIN BEARING FOR ALL CB LINTELS.
- FILL VOIDS IN JAMB UNITS WITH CONC. FROM LINTEL TO FLOOR UNDER ALL LINTEL BEARING.
- USE 8" DEEP BOND BEAM LINTELS WITH 2-#4 REINF. FOR OPENINGS UP TO 6'-0" WIDE.
- USE 16" DEEP BOND BEAM LINTELS WITH 2-#4 REINF. FOR OPENINGS 6'-0" TO 10'-0" WIDE.
- USE 16" DEEP BOND BEAM LINTELS WITH 2-#6 REINF FOR OPENING AT FRAME TYPE D.

DOOR SCHEDULE

NO	TYPE	FRAME	HDWE	LOCATION	
1	1	A	4	LEVELS 1½, 2½, 3½, 4½, 5½, 6½ AND PLAZA LEVEL B	(3 DRS. EACH LOCATION)
2	2	D	1	LEVELS 1½, 2½, 3½, 4½, 5½ AND 6½	
3	2	B	20	LEVELS 1, 2, 3, 4, 5, 6 AND 7	
4	1	A	4	LEVELS 1½, 2½, 3½, 4½, 5½ 6½ AND PLAZA LEVEL B	(2 DRS. EACH LOCATION)
5	2	B	1	LEVELS 1½, 2½, 3½, 4½, 5½ AND 6½	
6	2	B	1	PLAZA LEVEL B	
7	2	B	20	LEVELS 1, 2, 3, 4, 5, 6, 7	
8	3	D	8	LEVEL 3½	
9	2	D	8	LEVEL 3½	
10	2	D	20	LEVEL 4½	
11	2	D	1	PLAZA LEVEL B	
12	2	C	2	PLAZA LEVEL B	
13	2	D	8	PLAZA LEVEL B	
14	2	D	8	PLAZA LEVEL B	
15	2	D	6	PLAZA LEVEL B	
16	2	B	7	MECH EQUIP ROOM 9A	
17	3	B	7	MECH EQUIP ROOM 9B	
18	2	D	20	LOBBY LEVEL 4½	

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR MAT.	FLOOR FIN.	BASE MAT.	BASE HGT.	WALLS FIN.	CEILING MAT.	CEILING FIN.	CEILING HEIGHT	REMARKS
1A THRU 1A	WEST LOBBIES	CONC.	VAT	VINYL	C.B.	-	CONC.	PT.	-	BREAK OFF C.B. WALLS
1B THRU 7B	EAST LOBBIES	CONC.	VAT	VINYL	C.B.	-	CONC.	PT.	-	BREAK OFF C.B. WALLS.
3½D	ELECT. EQUIP.	CONC.	H	-	C.B.	-	CONC.	-	-	
3½D	METER	CONC.	H	-	C.B.	-	CONC.	-	-	
8C	OFFICE	CONC.	VAT	VINYL	C.B.	PT.	ACT.	-	10'-0"	
8D	ELEVATOR MACHINE	CONC.	H	-	C.B.	-	COMP.	-	-	
8E	TOILET	CONC.	VAT	VINYL	C.B.	PT.	ACT.	-	8'-0"	
8F	STORAGE	CONC.	H	-	C.B.	-	-	-	-	
8G	ELEVATOR MACHINE	CONC.	H	-	C.B.	-	COMP.	PL.	-	
9A & 9B	MECH. EQUIP.	CONC.	H	-	C.B.	-	COMP.	PL.	-	
1 THRU 8	PIKING DECKS & RAMPS	CONC.	H	-	CONC. C.B.	-	CONC.	-	-	PT. METAL BRIDGE RAILINGS PLAZA LEVEL
8A & 8B	PLAZA LEVEL LOBBIES	CONC.	VAT	VINYL	C.B.	PT.	ACT.	-	10'-0"	BREAK OFF C.B. WALLS
	STAIRS 1 & 2	CONC.	H	STEEL	C.B.	-	CONC. STEEL	PT.	-	PT. STEEL BASE
	STAIRS 3 & 4	CONC.	H	-	C.B.	-	CONC.	-	-	NO PT. ON PRECAST CONC. HANDRAILS

CONC. COLUMNS AND BEAMS EXPOSED IN WALLS SHALL BE FINISHED THE SAME AS ADJACENT WALL.

ROBERT L. AMES
CONVENTION CENTER ARCHITECTS & ENGINEERS, INC.
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CAVIN AND PAGE
THE CERNY ASSOCIATES, INC.

THE HAMM BLDG.
SAINT PAUL, MINNESOTA

"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 ARCHITECT under the laws of the State of Minnesota."

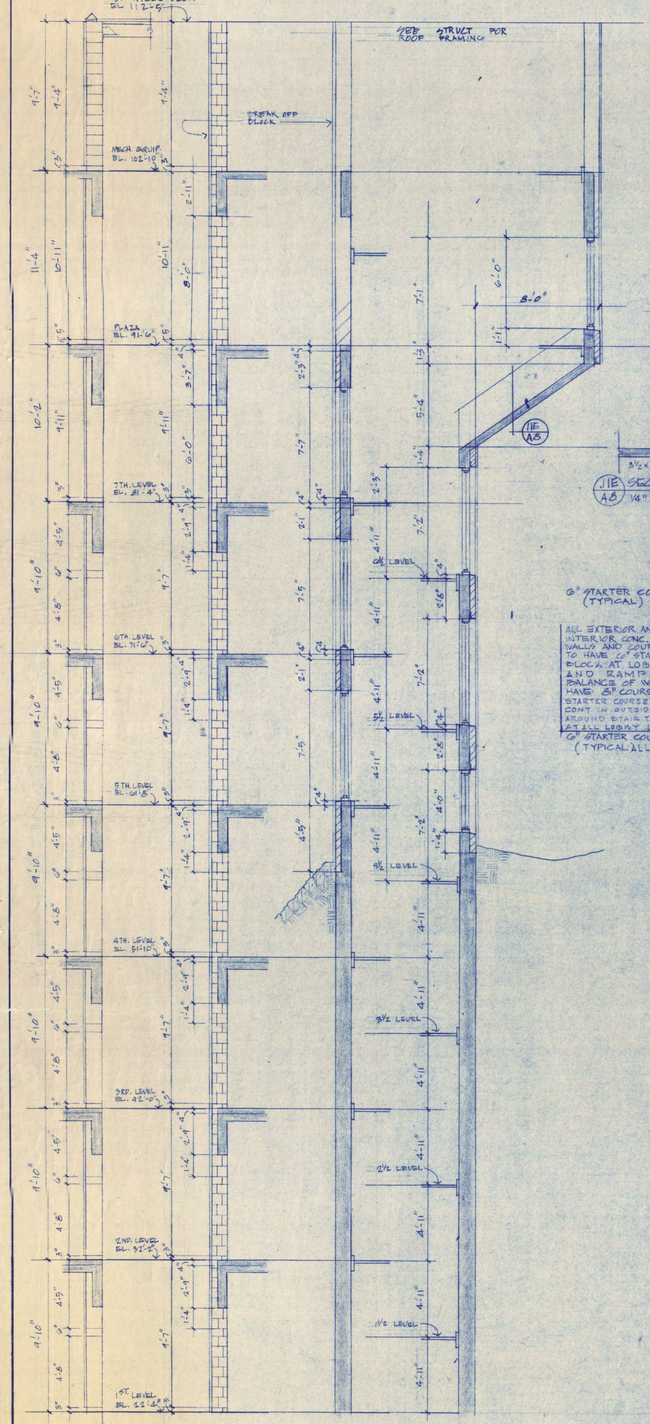
Date 12-15-69 Reg. No. 3297

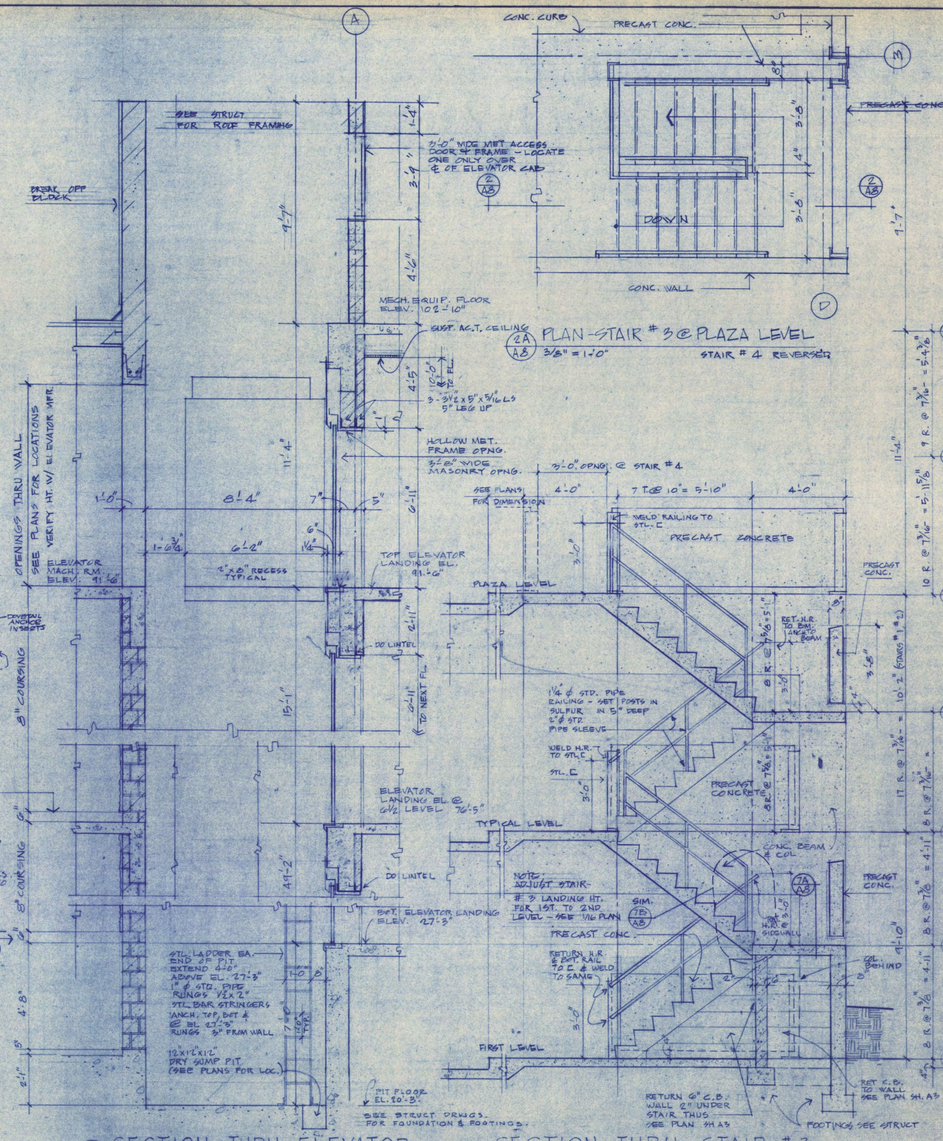
SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

LOBBY - STAIR PLANS & DETAILS

FIRST ISSUE DATE DEC. 15, 69 | REVISION DATE APRIL 10, 1970 | 1

A7

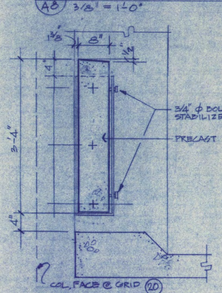




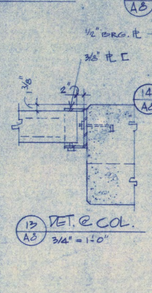
3 A8 SECTION THRU ELEVATOR
3/8" = 1'-0"

2 A8 SECTION THRU STAIR # 3
3/8" = 1'-0"
STAIR # 4 SIMILAR, REVERSED

1 A8 SECTION THRU STAIR # 2
3/8" = 1'-0"
STAIR # 1 REVERSED

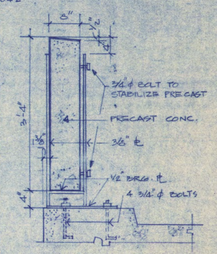


12 A8 RAILING DETAIL
3/4" = 1'-0"

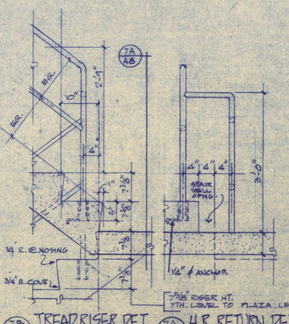


13 A8 DET. @ COL.
3/4" = 1'-0"

14 A8 DET. - POST
3/4" = 1'-0"



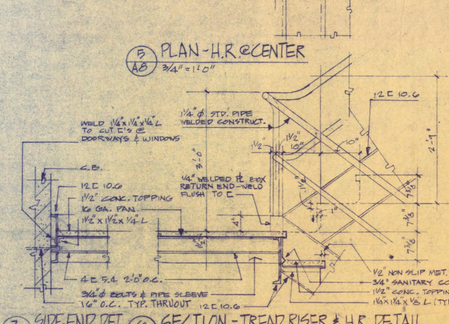
15 A8 RAILING DETAIL
3/4" = 1'-0"



7B A8 TREAD RISER DET.
3/4" = 1'-0"

7A A8 H.R. RETURN DET.
3/4" = 1'-0"

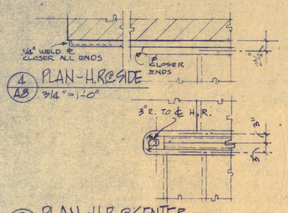
STAIR # 3 & 4 DETAILS



7 A8 SIDE, END DET.
3/4" = 1'-0"

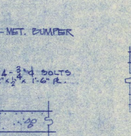
6 A8 SECTION - TREAD, RISER & H.R. DETAIL
3/4" = 1'-0"

STAIR # 1 & 2 DETAILS

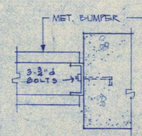


4 A8 PLAN - H.R. @ SIDE
3/4" = 1'-0"

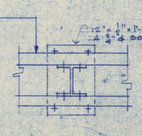
5 A8 PLAN - H.R. @ CENTER
3/4" = 1'-0"



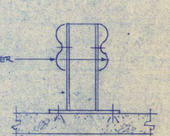
11 A8 MET. BUMPER DET.
3/4" = 1'-0"



10 A8 PLAN @ COL
3/4" = 1'-0"



9 A8 PLAN @ POST
3/4" = 1'-0"



8 A8 MET. BUMPER DET.
3/4" = 1'-0"

11D A8 ELEVATOR 1/4" = 1'-0"
11C A8 EXTERIOR 1/4" = 1'-0"
11B A8 S. STAIR 1/4" = 1'-0"
11A A8 N. STAIR 1/4" = 1'-0"

WALL COURSING DETAILS

6" STARTER COURSE (TYPICAL)

ALL EXTERIOR AND INTERIOR CONC. BLOCK WALLS AND COURSING TO HAVE 6" STARTER BLOCK AT LOBBY AND RAMP LEVELS. BALANCE OF WALLS TO HAVE 8" COURSING. STARTER COURSE TO BE CONT. IN OUTSIDE WALLS AROUND STAIR TOWERS AT ALL LOBBY LEVELS.

6" STARTER COURSE (TYPICAL ALL SIDES)

8" COURSING

ROBERT L. AMES
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Planners Architects

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MARSTRAND-OLSEN AND ASSOCIATES, INC.
GEOFFER SHORD ASSOCIATES, INC.
THE CERNY ASSOCIATES, INC.

SAINT PAUL, MINNESOTA
THE HAMM BLDG.

Issued 12/15/68 for Bids

Issued with proposal by or to whom my hand number and date of last addendum received

SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

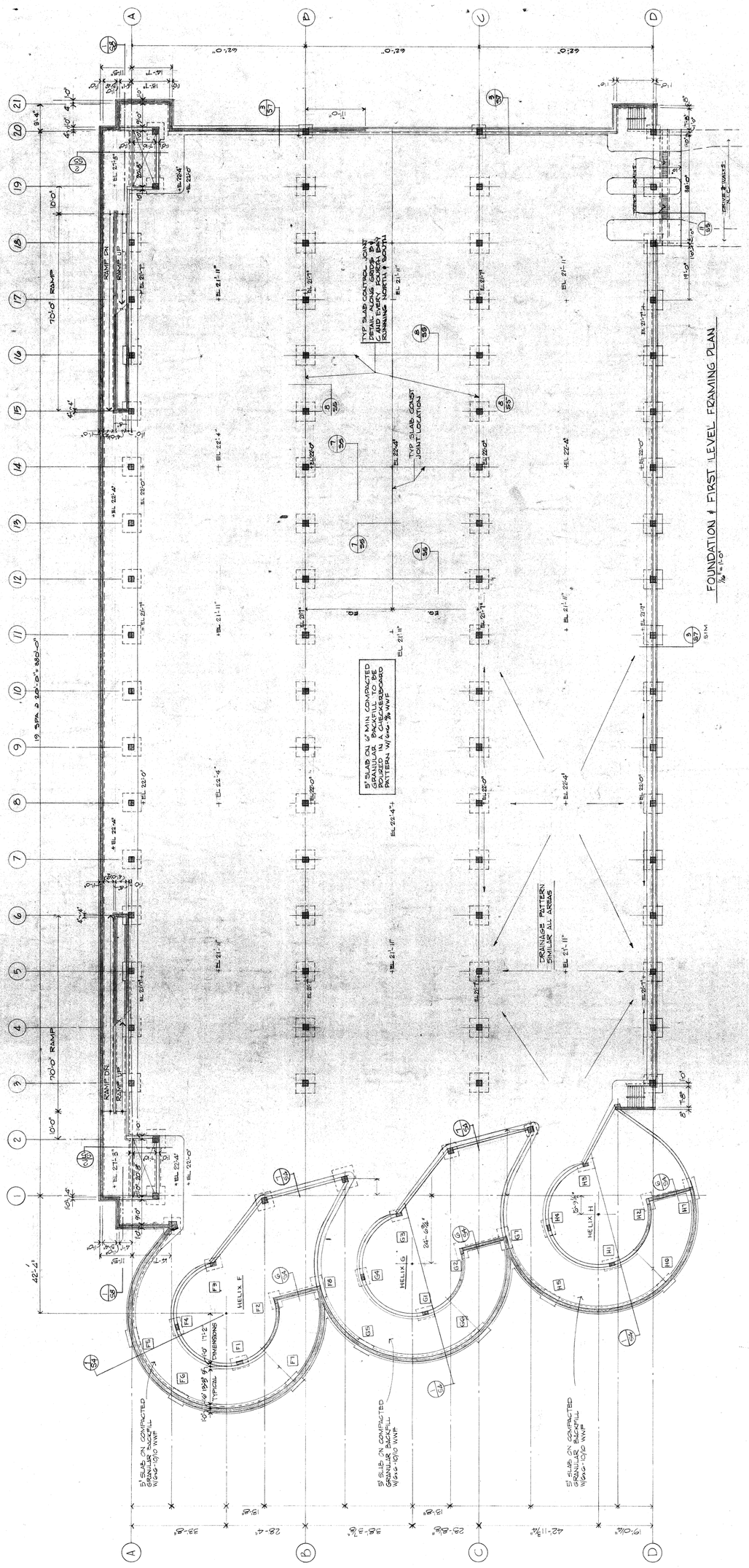
STAIR & ELEVATOR SECTION & DETAILS

FIRST ISSUE DATE DEC. 15 '68

REVISION DATE APRIL 10 '69

R

A8



FIRST ISSUE DATE Dec 16, 1965 | REVISION DATE April 10, '67 | R

FOUNDATION AND FIRST LEVEL PLAN

SAINT PAUL CIVIC CENTER

EAGLE STREET RAMP

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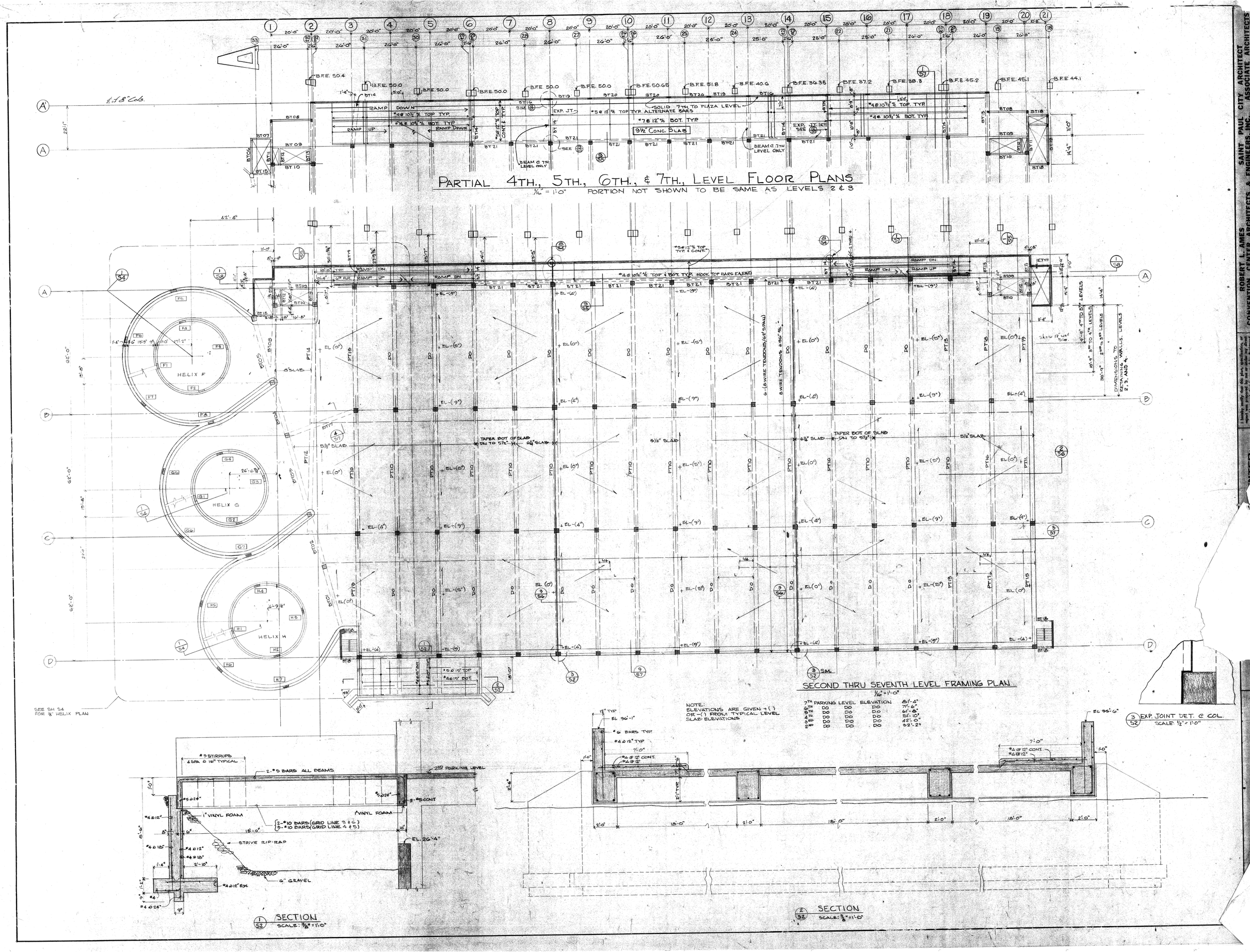
S1



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SAINT PAUL, MINNESOTA

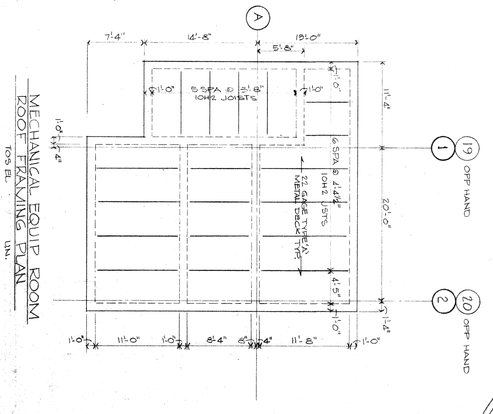
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Engineer under the laws of the State of Minnesota.

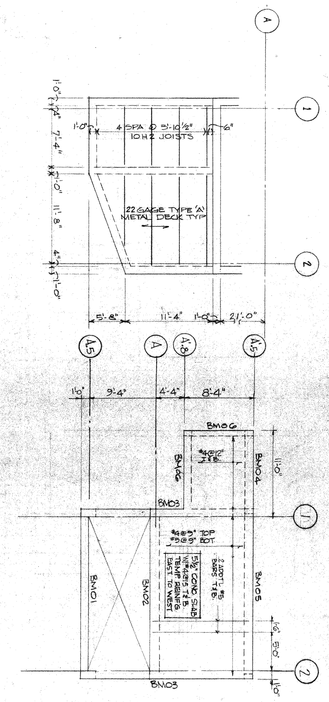
Date 2-2-1966 Reg. No. 4856

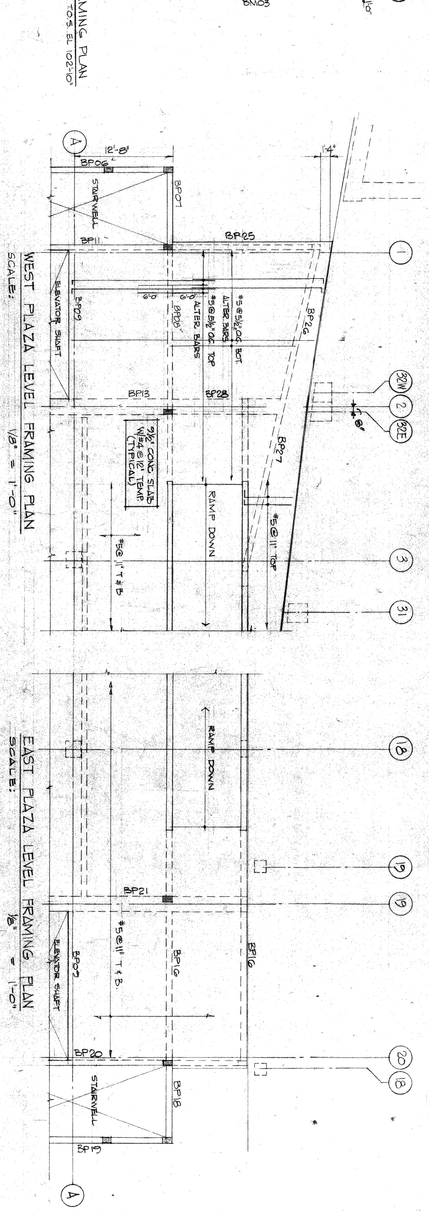
CENTER

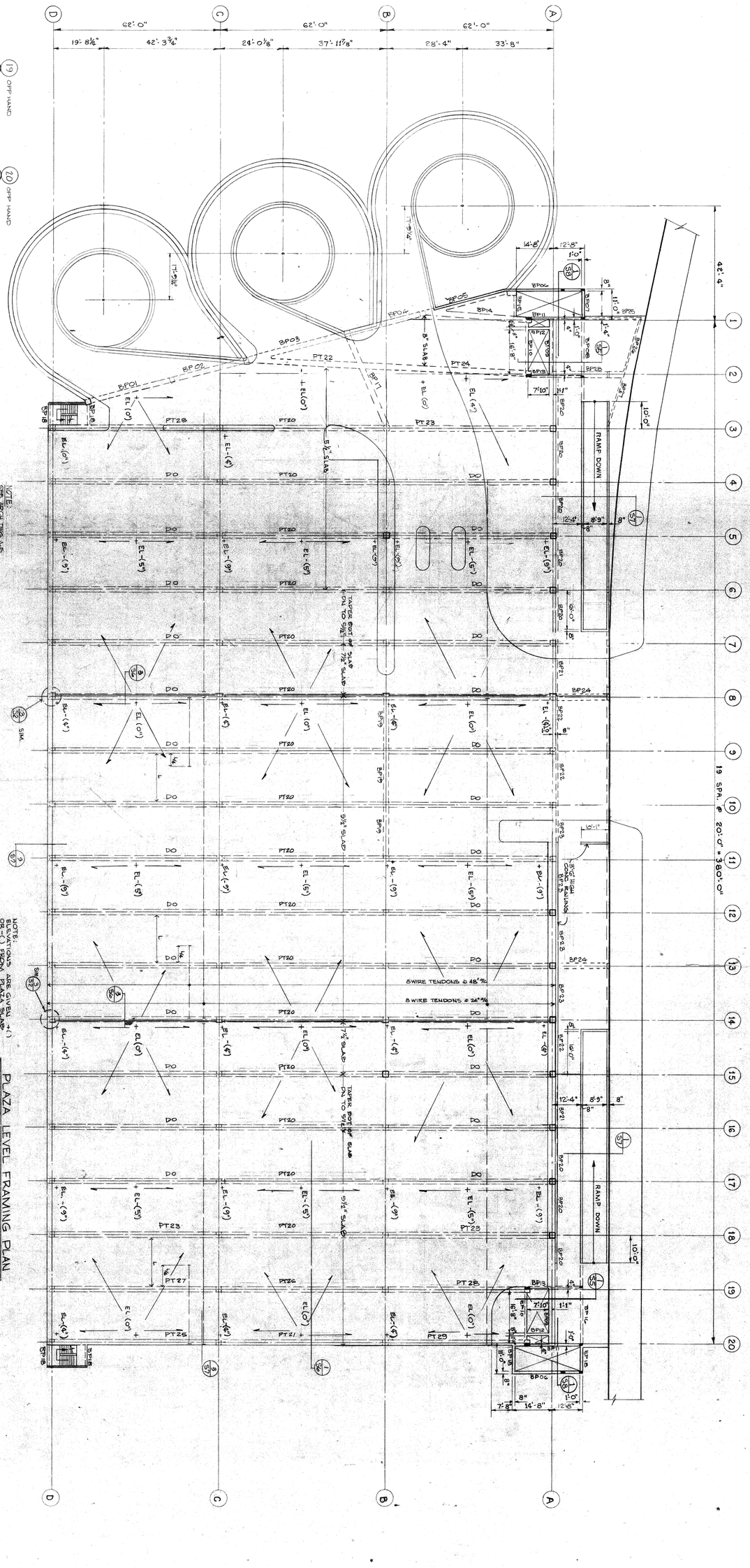
THRU SEVENTH LEVEL FRAMING PLAN

REVISION DATE









PLAZA LEVEL FRAMING PLAN

FIRST ISSUE DATE Dec. 15, 1968 | REVISION DATE APRIL 10, '69 | R△

SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

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 Engineer under the Laws of the State of Minnesota.
Date Dec. 15, 1968 Reg. No. 4855

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ASSOCIATE ARCHITECTS
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CAVIN AND PAGE
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THE HAMM BLDG.
SAINT PAUL, MINNESOTA

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CONVENTION CENTER ARCHITECTS & ENGINEERS, INC.
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Engineers
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THE CERNY ASSOCIATES INC

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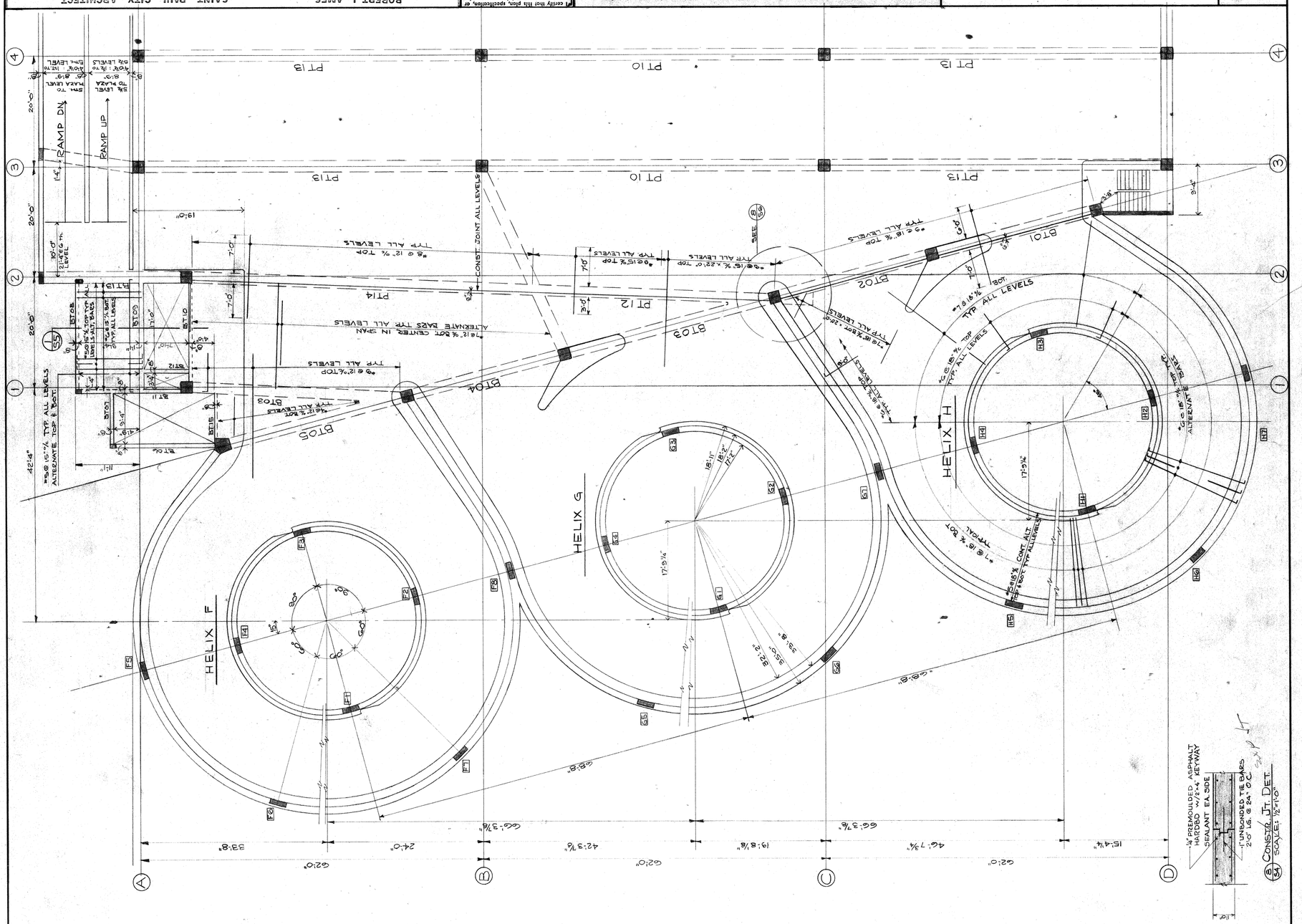
Date Dec 15, 68 Reg. No. 3956

SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

HELIX PLANS AND DETAILS

FIRST ISSUE DATE DEC 15, 68 | REVISION DATE APRIL 10, 69 | R△

S4


HELIX F
HELIX G
HELIX H
PT 13
PT 10
PT 12
PT 14
BT 01
BT 02
BT 03
BT 04
BT 05
RAMP DN.
RAMP UP
CONST. JOINT ALL LEVELS
TYP ALL LEVELS
TYP. ALL LEVELS
ALTERNATE BARS TYP ALL LEVELS
ALTERNATE BARS TYP ALL LEVELS
TYP ALL LEVELS
TYP ALL LEVELS

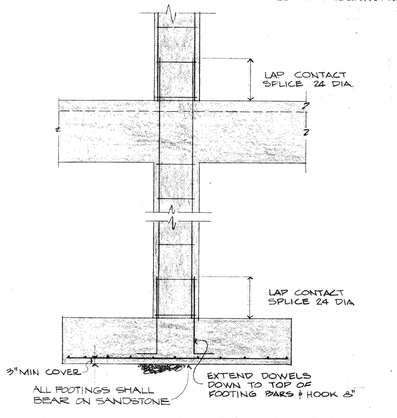
	COLUMN NUMBER		B-4 TO 19 C-5 TO 19	A-4 TO 19	D-5 TO 19	A-5	B-20 C-20	A-20 D-20	B-5	F-1 TO 4 G-1 TO 4 H-1 TO 4	F-5 TO 7 G-5 TO 6 H-5 TO 6	A-2-1, 2 A-2-19, 20	C-8 - 2-3	C-3 - 2-2	B-8 - 1-8 A-7 - 1	B-1 - 1-3	F-8 G-7 H-7		A-2-3, 2-2, 4-3 #5 B-13, 16, 16-8 & 19	A-7-1, 2, 19, 20 B-A'-8 21-A'-8, A-3	A-3 * A-4 *	A-21 * A-3-21
**	TOP OF COL ELEVATIONS											102'-10"							81'-4"	102'-10"		
CONCRETE COLUMNS	EL	COL SIZE										12" x 24"								8" x 12"		
		TIES & TYPE										#2@12" A								#3 @ 8" A		
		VERT. REINF.										6-#10								4-#9		
		DOWELS										2-#10								4-#9		
		SPLICE										LAP								LAP		
	PLAZA	COL SIZE	24" x 24"	24" x 24" *	24" x 24" *	24" x 24" *	24" x 24"	24" x 24" *	24" x 24"	12" x 36"	12" x 36"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"			24" x 24"	12" x 12"	8" x 12"
		TIES & TYPE	#3 @ 18" A	#3 @ 18" B	#3 @ 18" B	3-#18 B	#3 @ 18" A	#3 @ 18" B	#3 @ 18" C	#3 @ 12" I	#3 @ 12" I	#3 @ 18" C	#3 @ 18" C	#3 @ 18" C	#3 @ 18" B	#3 @ 18" B	#3 @ 12" I			#3 @ 18" C	#3 @ 12" B	#3 @ 12" B
		VERT REINF	4-#11	8-#11	8-#11	8-#11	4-#11	8-#11	10-#14	8-#7	8-#7	10-#11	10-#11	4-#11	8-#11	8-#11	8-#7			10-#10	8-#8	6-#8
		DOWELS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—	—
		SPLICE	LAP	BUTT	BUTT	BUTT	LAP	BUTT	BUTT	LAP	LAP	LAP	LAP	LAP	LAP	LAP	LAP			LAP	LAP	LAP
	7	COL SIZE	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"	12" x 36"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"			24" x 24"	12" x 12"	8" x 12"
		TIES & TYPE	#3 @ 18" A	#3 @ 18" B	#3 @ 18" B	#3 @ 18" B	#3 @ 18" A	#3 @ 18" B	#3 @ 18" C	#3 @ 12" I	#3 @ 12" I	#3 @ 18" C	#3 @ 18" D	#3 @ 18" A	#3 @ 18" B	#3 @ 18" B	#3 @ 12" I			#3 @ 18" C	#3 @ 12" B	#3 @ 12" B
		VERT REINF	4-#11	8-#11	8-#11	8-#11	4-#11	8-#11	10-#14	8-#7	8-#7	10-#11	8-#11	4-#11	8-#11	8-#11	8-#7			10-#10	8-#8	6-#8
		DOWELS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—	—
	EL 81'-4"	SPLICE	LAP	BUTT	LAP	LAP	LAP	LAP	BUTT	LAP	LAP	LAP	LAP	LAP	LAP	LAP	LAP			LAP	LAP	LAP
	6	COL SIZE	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"	12" x 36"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"		8" x 24"	24" x 24"	12" x 12"	8" x 12"
		TIES & TYPE	#3 @ 18" A	#3 @ 18" B	#3 @ 18" B	#3 @ 18" B	#3 @ 18" A	#3 @ 18" B	#3 @ 18" C	#3 @ 12" I	#3 @ 12" I	#3 @ 18" C	#3 @ 18" D	#3 @ 18" A	#3 @ 18" B	#3 @ 18" B	#3 @ 12" I		#3 @ 18" I	#3 @ 18" C	#3 @ 12" B	#3 @ 12" B
		VERT REINF	4-#11	8-#11	8-#11	8-#11	4-#11	8-#11	10-#14	8-#7	8-#7	10-#11	8-#11	4-#11	8-#11	8-#11	8-#7		8-#8	10-#10	8-#8	6-#8
		DOWELS	—	—	—	—	—	—	—	—	—	10-#11	—	—	—	—	—		—	—	4-#8	2-#8
	EL 71'-6"	SPLICE	LAP	LAP	LAP	LAP	LAP	LAP	BUTT	LAP	LAP	BUTT	LAP	LAP	LAP	LAP	LAP		LAP	LAP	LAP	LAP
	5	COL SIZE	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"	12" x 36"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"		8" x 24"	24" x 24"	12" x 12"	12" x 12"
		TIES & TYPE	#3 @ 18" A	#3 @ 18" B	#3 @ 18" B	#3 @ 18" D	#3 @ 18" A	#3 @ 18" D	#3 @ 18" C	#3 @ 12" I	#3 @ 12" I	#3 @ 18" C	#3 @ 18" A	#3 @ 18" A	#3 @ 18" B	#3 @ 18" B	#3 @ 12" I		#3 @ 18" I	#3 @ 18" C	#3 @ 12" A	#3 @ 12" A
		VERT REINF.	4-#11	8-#11	8-#11	8-#11	4-#11	8-#11	10-#14	8-#7	8-#7	4-#11	8-#11	4-#11	8-#11	8-#11	8-#10		8-#8	4-#11	4-#8	4-#8
		DOWELS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—
	EL 61'-8"	SPLICE	LAP	LAP	LAP	LAP	LAP	LAP	BUTT	LAP	LAP	BUTT	LAP	LAP	LAP	LAP	LAP		LAP	LAP	LAP	LAP
	4	COL SIZE	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"	12" x 36"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"		8" x 24"	24" x 24"	12" x 12"	12" x 12"
		TIES & TYPE	#3 @ 18" A	#3 @ 18" B	#3 @ 18" B	#3 @ 18" B	#3 @ 18" A	#3 @ 18" D	#3 @ 18" C	#3 @ 12" I	#3 @ 12" I	#3 @ 18" A	#3 @ 18" D	#3 @ 18" A	#3 @ 18" B	#3 @ 18" B	#3 @ 12" I		#3 @ 18" I	#3 @ 18" A	#3 @ 12" A	#3 @ 12" A
		VERT REINF	4-#11	8-#11	8-#11	8-#11	4-#11	8-#11	12-#14	8-#7	8-#7	4-#11	8-#11	4-#11	8-#11	8-#11	8-#10		8-#8	4-#11	4-#8	4-#8
		DOWELS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—
	EL 51'-10"	SPLICE	LAP	LAP	LAP	LAP	LAP	LAP	BUTT	LAP	LAP	BUTT	LAP	LAP	LAP	LAP	LAP		LAP	LAP	LAP	LAP
	3	COL SIZE	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"	12" x 36"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"			24" x 24"	12" x 12"	12" x 12"
		TIES & TYPE	#3 @ 18" D	#3 @ 18" D	#3 @ 18" D	#3 @ 18" D	#3 @ 18" B	#3 @ 18" D	#3 @ 18" F	#3 @ 12" I	#3 @ 12" I	#3 @ 18" C	#3 @ 18" B	#3 @ 18" A	#3 @ 18" B	#3 @ 18" B	#3 @ 12" I			#3 @ 18" A	#3 @ 12" A	#3 @ 12" A
		VERT. REINF.	8-#11	12-#11	12-#11	12-#11	6-#11	12-#11	16-#14	8-#7	8-#7	8-#11	8-#11	4-#11	8-#11	8-#11	8-10			4-#11	4-#8	4-#8
		DOWELS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—	—
	EL 42'-0"	SPLICE	LAP	LAP	LAP	LAP	LAP	LAP	BUTT	LAP	LAP	BUTT	LAP	LAP	LAP	LAP	LAP			LAP	LAP	LAP
	2	COL SIZE	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"	12" x 36"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"			24" x 24"	12" x 12"	12" x 12"
		TIES & TYPE	#3 @ 18" C	#3 @ 18" D	#3 @ 18" D	#3 @ 18" D	#3 @ 18" C	#3 @ 18" D	#3 @ 18" G	#3 @ 12" I	#3 @ 12" I	#3 @ 18" C	#3 @ 18" D	#3 @ 18" A	#3 @ 18" B	#3 @ 18" D	#3 @ 12" I			#3 @ 18" A	#3 @ 12" A	#3 @ 12" A
		VERT REINF	10-#11	12-#11	12-#11	12-#11	10-#11	12-#11	20-#14	8-#7	8-#7	12-#11	12-#11	4-#11	8-#11	12-#11	8-10			4-#11	4-#8	4-#8
		DOWELS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—	—
	EL 32'-2"	SPLICE	LAP	LAP	LAP	LAP	LAP	LAP	BUTT	LAP	LAP	BUTT	LAP	LAP	LAP	BUTT	LAP			LAP	LAP	LAP
	1	COL SIZE	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	12" x 36"	12" x 36"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	24" x 24"	1'-0" x 36"			24" x 24"	12" x 12"	12" x 12"
		TIES & TYPE	#3 @ 18" C	#3 @ 18" D	#3 @ 18" D	#3 @ 18" D	#3 @ 18" D	#3 @ 18" D	#3 @ 18" G	#3 @ 12" I	#3 @ 12" I	#3 @ 18" C	#3 @ 18" D	#3 @ 18" A	#3 @ 18" B	#3 @ 18" D	#3 @ 12" I			#3 @ 18" A	#3 @ 12" A	#3 @ 12" A
		VERT REINF	10-#11	12-#11	12-#11	12-#11	10-#11	12-#11	20-#14	8-#7	8-#7	12-#11	12-#11	4-#11	8-#11	12-#11	8-10			4-#11	4-#8	4-#8
		DOWELS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			—	—	—
	EL 22'-4"	SPLICE	LAP	LAP	LAP	LAP	LAP	LAP	BUTT	LAP	LAP	BUTT	LAP	LAP	LAP	BUTT	LAP			LAP	LAP	LAP
FOOTINGS	DOWELS		10-#11	—	12-#11	12-#11	10-#11	12-#11	20-#14	8-#7	8-#7	12-#11	8-#11	4-#11	8-#11	12-#11	8-#10		4-#11	4-#11	4-#8	4-#8
	EL TOP OF FOOTINGS ***		12'-10"		12'-10"	21'-5"	12'-0"	12'-0"	14'-6"	—	—	14'-8"	11'-8"	11'-4"	12'-2"	21'-5"	—		14'-8"	14'-8"		
	SIZE		6'-9" x 6'-9" x 2'-10"	6'-3" x 5'-3" x 2'-0"	6'-3" x 6'-9" x 2'-10"	6'-3" x 6'-3" x 2'-0"	6'-9" x 6'-9" x 2'-10"	6'-9" x 6'-9" x 2'-10"	8'-0" x 8'-0" x 3'-0"	8'-6" x 8'-6" x 1'-8"	8'-6" x 8'-6" x 1'-8"	6'-0" x 6'-0" x 2'-0"	4'-9" x 4'-9" x 1'-8"	4'-3" x 4'-3" x 1'-8"	5'-6" x 5'-6" x 2'-0"	6'-9" x 6'-9" x 2'-0"	4'-6" x 7'-6" x 2'-8"		SEE (4/S7)	SEE (4/S7)	SEE (4/S7)	SEE (4/S7)
	REINFORCING LONG WAY	RUNNING	9-#8	9-#6	9-#8	9-#6	9-#8	9-#8	19-#8	9-#8	9-#8	9-#5	9-#5	9-#5	10-#6	9-#8	7-#8					
	REINFORCING SHORT WAY	RUNNING	9-#8	9-#6	9-#8	9-#6	9-#8	9-#8	13-#8	10-#4	12-#5	9-#5	9-#5	9-#5	10-#6	9-#8	9-#7					
	EL BOT OF FOOTINGS ***		10'-0"	19'-5"	10'-0"	19'-5"	10'-0"	10'-0"	11'-0"	SEE SH S1	SEE SH S1	12'-8"	10'-0"	10'-0"	10'-0"	18'-7"	SEE S1		47'-10"	12'-8"	SEE (5/S7)	SEE (5/S7)

* COLUMN TAPERS TO 24" x 44" AT PLAZA LEVEL
VERT REINF BECOMES 20-#11 AT PLAZA LEVEL
TIES BECOME #3 @ 18" G AT PLAZA LEVEL
SEE DETAIL (3/S5)

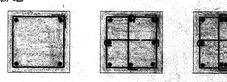
** SEE (2/S7) FOR FOOTING SIZE AND REINF.

** TOP OF COL ELEVATION 91'-6" EXCEPT WHERE NOTED

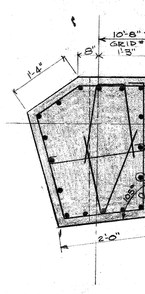
*** FOOTING ELEVATIONS ARE APPROXIMATE & DEPEND UPON ACTUAL ELEVATION OF SANDSTONE AT COLUMN LOCATIONS.



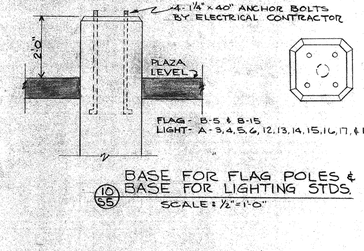
COLUMN BAR SPLICE DETAIL



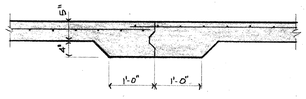
TYPICAL COLUMN TIE DETAILS



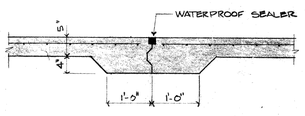
(6/S5) SPECIAL COL. TIE DET.
SCALE: 3/4"=1'-0"



(10/S5) BASE FOR FLAG POLES & BASE FOR LIGHTING STDS
SCALE: ½"=1'-0"



(7/S5) TYPICAL CONST JOINT
SCALE: 3/4"=1'-0"



(8/S5) TYPICAL CONTROL JOINT
SCALE: 3/4"=1'-0"

STRUCTURAL NOTES

STRUCTURAL STEEL

1. All structural steel design, fabrication, and erection shall be in accordance with the AISC Specifications adopted April, 1963.
2. All steel shall be A36.
3. All structural steel shall have one shop coat of primer and touched up to match after erection.
4. Shop connections are to be welded as per Section 1.17 of AISC Specifications.
5. Field connections are to be bolted with 3/4" A325 bolts. Bolts are to be tightened to provide a friction type connection.

REINFORCED CONCRETE

1. All concrete reinforcing design, detailing and construction shall be in accordance with the ACI Code (ACI 318-63) and the latest ACI Detailing Manual.
2. All reinforcing bars shall be new billet steel conforming to ASTM A 615-68 Grade 60.
3. Welded steel wire fabric shall conform to ASTM A185.
4. Concrete to have f'c=5000 @ 28 days.
5. All grout to have f'c=4000 psi @ 28 days.
6. Where reinforcing bars are shown continuous, lap bars 24 dia. at splice.
7. Provide a minimum of 3" protection covering for reinforcement in footings, 2" in walls, 1-1/2 in columns and beams, and 1" in slabs.

FOOTINGS

1. Footings are designed for a bearing pressure of 30,000 psf.
2. Footings shall bear a minimum of 18" below the top of the sandstone formation.

FOOTINGS (continued)

3. If the soil at bottom of footing elevation is of questionable bearing value, notify the Architect-Engineer's office at once.
4. Backfill under slabs shall be clean pit run sand and gravel with a minimum of 95% Modified Procter density.

POST-TENSIONED CONSTRUCTION

1. Post-Tensioning of slab tendons to commence when concrete has reached a compressive strength of 2500 psi, and post-tensioning of beam tendons to commence when concrete has reached a compressive strength of 3500 psi; Tensioning shall be done in the following sequence: (1) slab structural tendons, (2) slab temperature tendons, and (3) beam structural tendons.
2. All post-tensioned beam pours shall be monolithic pours except where noted on drawings. Pour joints in slabs shall occur at quarter point of slab span.
3. Post tensioning tendons shall have a guaranteed minimum ultimate strength of 240,000 psi.

DESIGN LIVE LOADS

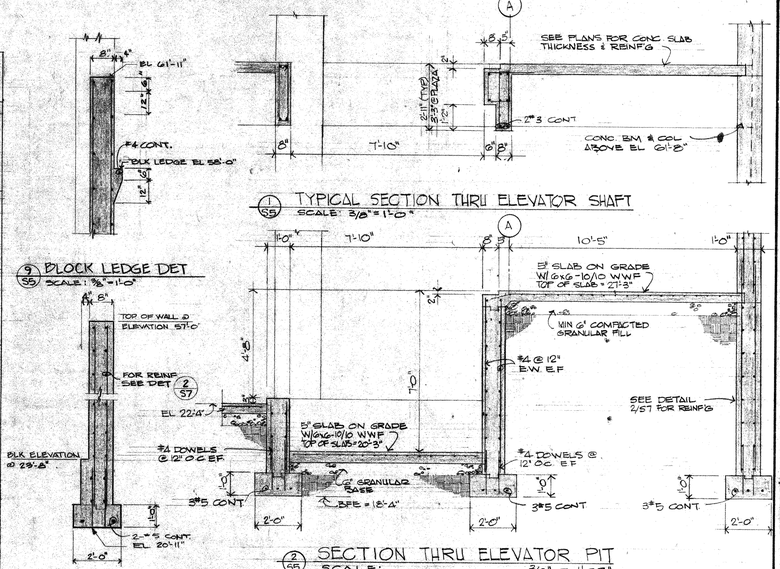
1. The following uniform floor live loads were used for design, with the appropriate reductions as per Saint Paul Building Code, 1953 Edition.

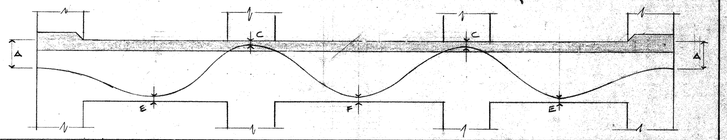
Plaza Level	100 psf.
First to Seventh Levels	50 psf.
Ramps	100 psf.

2. Provisions are made for special mechanical equipment load requirements.
3. Roofs are designed for a uniform live load of 40 psf.

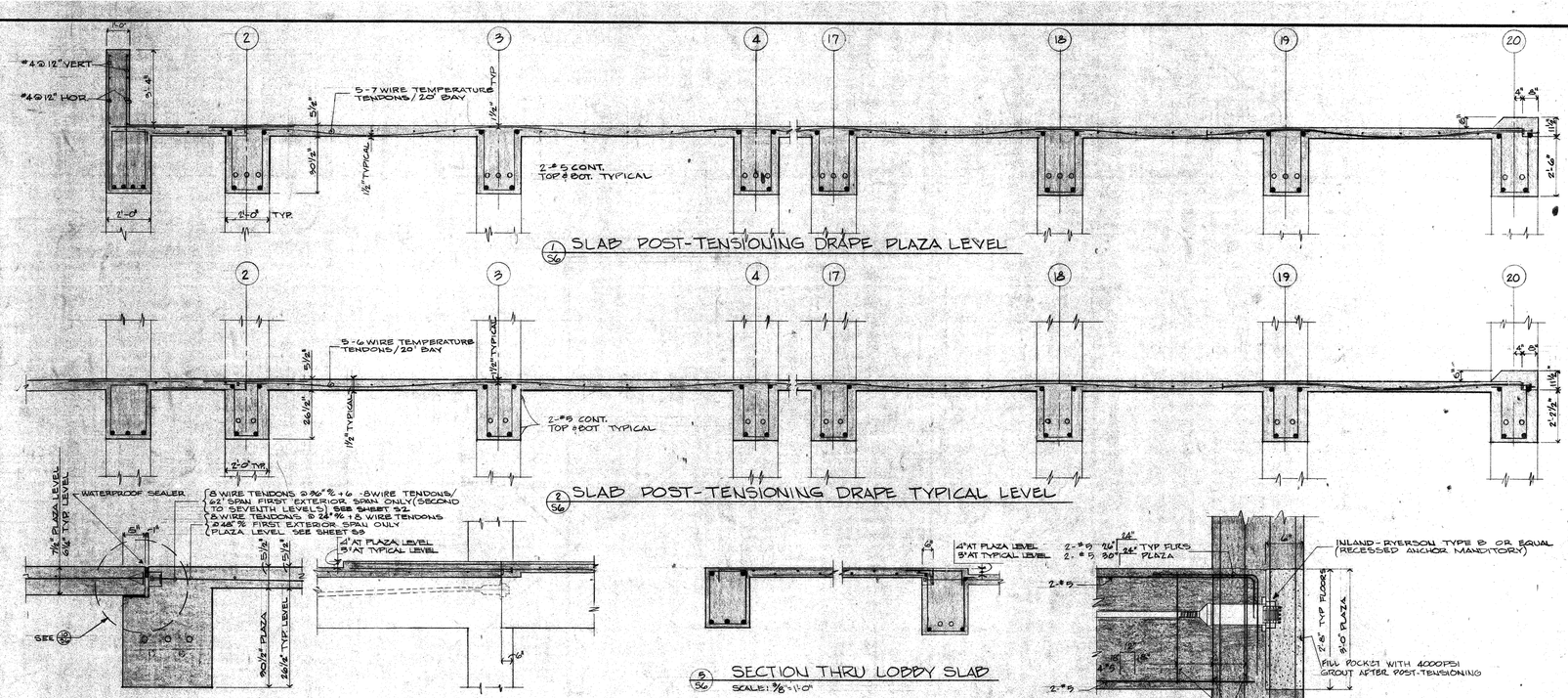
PROVISION FOR FUTURE EXPANSION

Footing and columns along Grid Line D are designed for future expansion with similar sized bays and spans using design live loads as indicated above.


8"
EL 61'-11"
12"
#4 CONT.
BLK LEDGE EL 58'-0"
12"
6"
7'-10"
A
SEE PLANS FOR CONC SLAB THICKNESS & REINFG
2"
2"
2"



BEAM NO	SIZE B	SIZE T	TENDONS: TENDON DRAPE DIM. A	C	E	F	NO TENDON PER BEAM	NO WIRES PER TENDON	STIRRUPS: SIZE & TYPE	STIRRUPS: SPA. EA. END DIST. D FROM FACE OF COL.	REMARKS
										STIRRUPS FROM A D STIRRUPS FROM B	ALL POST-TENSIONED BEAMS TO HAVE OPEN STIRRUPS AS SHOWN
TYPICAL FLOORS 2-7											
PT10	24"	32"	11"	2⅜"	8⅝"	9½"	2	34		#3, #5, 7"/8 EA END	SEE DET (11/S6)
PT11	24"	32"				10½"	2	22		#3, #5, 7"/8 EA END	
PT12	24"	32"	8"	2⅜"	7⅛"	–	2	34		#3, #5, 7"/8 EA END	SEE PT12
PT13	24"	32"								#3, #5, #6, #7, #8, #9 EA END	SEE PT11
PT14	24"	32"	8½"	2⅜"	10¼"	–				#6, #8, #10, #12, #16, #18	
PT15	24"	32"	11"	2⅝"	10"		2	22		#3, #4, #5, #6, #7, #8 EA END	SEE PT11
PT16	24"	32"			10"		2	36		#6, #8, #10, #12 EA END	
PT17	24"	32"	11½"	2⅝"	9½"		2	36		#6, #8, #10, #12, #16, #18 EA END	
PT18	24"	32"	10"	5"	12"		2	36		#6, #8, #10, #12, #16, #18 EA END	
PT19	24"	32"	10"	5⅛"	13"		2	22		#6, #8, #10, #12, #16, #18 EA END	
PLAZA LEVEL											
PT20	24"	30"	10"	2⅝"	10"	12"	3	36		#4, #5, #6, #7, #8, #9, #10, #12, #16, #18 EA END	
PT21	24"	36"				11½"	2	30		#5, #6, #7, #8, #9, #10, #12, #16, #18 EA END	
PT22	24"	36"	4¼"	2⅝"	6"	–	3	36			
PT23	24"	30"								#4, #5, #6, #7, #8, #9, #10, #12, #14, #16, #18, #20	
PT24	24"	30"	8"	2⅝"	8½"	–					
PT25	24"	30"	10"	2⅝"	10"		2	30		#4, #5, #6, #7, #8, #9, #10, #12, #16, #18, #20 EA END	
PT26	24"	30"				10½"	3	36		#5, #6, #7, #8, #9, #10, #12, #16, #18 EA END	
PT27	24"	30"	15½"	2⅝"	9½"		3	36		#4, #5, #6, #7, #8, #9, #10, #12, #14, #16, #18, #20 EA END	
PT28	24"	30"	18"	6"	13"		3	36		#4, #5, #6, #7, #8, #9, #10, #12, #14, #16, #18, #20 EA END	
PT29	24"	30"	18"	6"	11½"		2	30		#4, #5, #6, #7, #8, #9, #10, #12, #14, #16, #18, #20 EA END	



1 (S6) SLAB POST-TENSIONING DRAPE PLAZA LEVEL

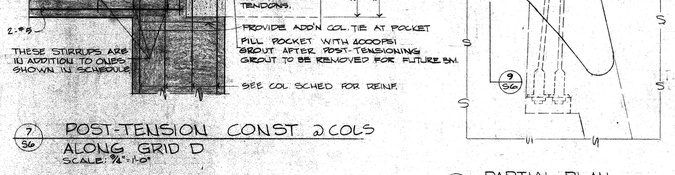
2 (S6) SLAB POST-TENSIONING DRAPE TYPICAL LEVEL

5 (S6) SECTION THRU LOBBY SLAB
SCALE: ⅜"=1'-0"

3 (S6) EXPANSION JOINT DETAIL
SCALE: ¾"=1'-0"

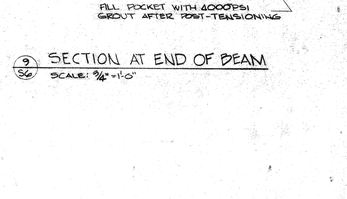
4 (S6) CONST JOINT DET @ COL
SCALE: ⅜"=1'-0"

6 (S6) POST-TENSION CONST. @ COL ALONG GRID A
SCALE: ¾"=1'-0"

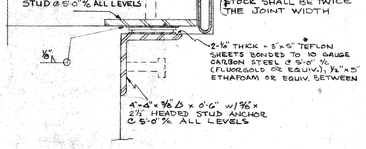


7 (S6) POST-TENSION CONST @ COLS ALONG GRID D
SCALE: ¾"=1'-0"

8 (S6) PARTIAL PLAN
SCALE: ⅜"=1'-0"



9 (S6) SECTION AT END OF BEAM
SCALE: ¾"=1'-0"



10 (S6) EXPANSION JOINT BEARING
SCALE: 3"=1'-0"

ROBERT L. AMES — SAINT PAUL CITY ARCHITECT
CONVENTION CENTER ARCHITECTS & ENGINEERS, INC. — ASSOCIATE ARCHITECTS
Planners — Architects — Engineers
MARSTICK LUNDGREN AND ASSOCIATES, INC. — CAVIN AND PAGE
GROVER-DIMOND ASSOCIATES, INC. — THE CERNY ASSOCIATES, INC.

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 Engineer under the laws of the State of Minnesota.
Date: Dec. 15, 1978 Reg. No. 6858

CENTER — SAINT PAUL CIVIC — EAGLE STREET PARKING — RAMP

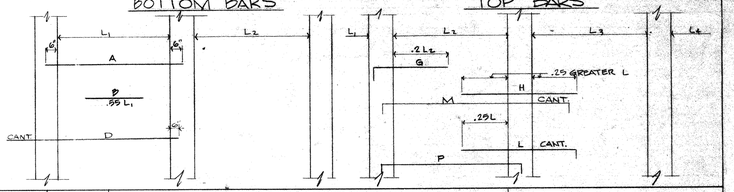
THE HAMM BLDG.
SAINT PAUL, MINNESOTA

BEAM POST-TENSIONING SCHEDULE & DETAILS

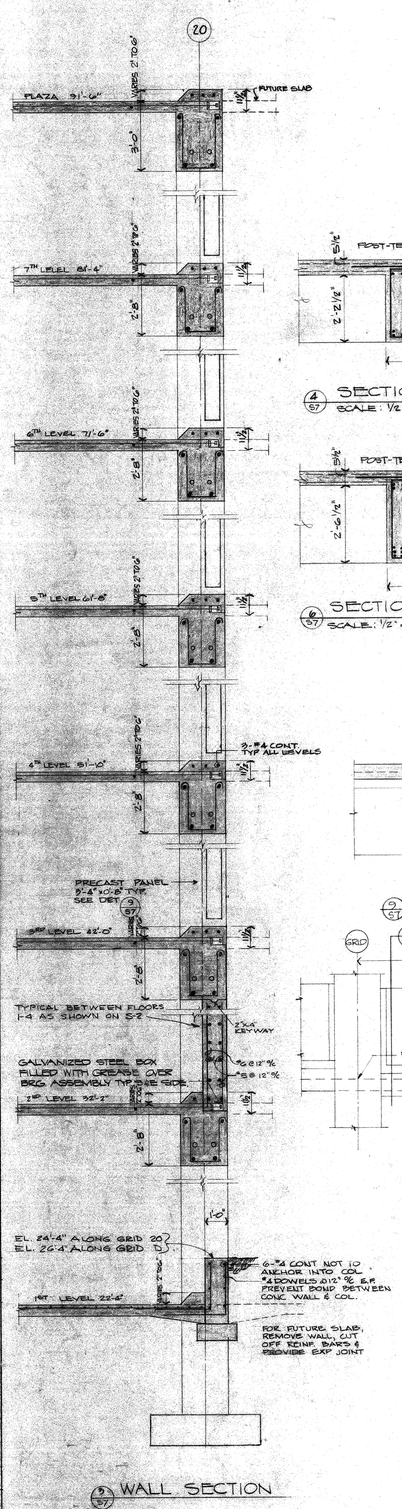
ISSUE	DATE	REVISION	DATE
FIRST	Dec. 15, 1978	R△	APRIL 10, 1979

S6

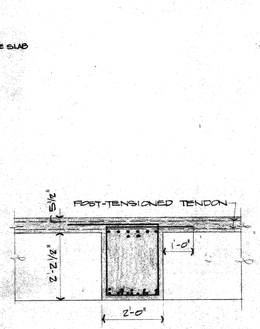
BEAM SCHEDULE



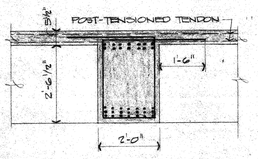
BEAM NO	SIZE B	SIZE D	REINFORCING BOTTOM BARS SIZE	BOTTOM BARS TYPE	TOP BARS SIZE	TOP BARS TYPE	TOP BARS LOCATION	STIRRUPS SIZE-TYPE *S TYPICAL	STIRRUPS SPACING EACH END FROM FACE OF COL. 5PA LISTED FIRST ARE AT 1/6 END, 5PA SECOND ARE 2/3 S/2 END	REMARKS TOP REINF IN EAST - WEST DIRECTION TO BE PLACED NEAREST TO SLAB FACE OF CONC.
			TYPICAL FLOORS 2-7							
BT01	24	32	4-#9	A	2-#10 4-#10	G H	C.8 C.2	#4	18"% THROUGHOUT	
BT02	24	32	2-#4	A	3-#10	H	B.7	#4	18"% THROUGHOUT	
BT03	24	32	8-#9	A	4-#9	H	B.1	#4	18"% THROUGHOUT	TYPE P TOP BAR ON GRID 1
BT04	24	32	2-#8	A	3-#10	H	A.7	#4	18"% THROUGHOUT	
BT05	24	32	3-#8	A	3-#10	H	A.2	#4	18"% THROUGHOUT	
BT06	8	36	2-#9	A	2-#7	P			4/16 EA. END	
BT07	8	36	2-#7	A	2-#7	P			4/16 EA. END	
BT08	8	36	3-#8	A	3-#10	P			5/16 EA. END	
BT09	14	21	3-#8	A	2-#9	P			8/16 EA. END	SEE DETAIL 4/S5
BT10	12	36	2-#8	A	2-#10	P			4/16 EA. END	
BT11	8	36	2-#7	A	2-#7	P			4/16 EA. END	
BT12	8	32	2-#9	A	2-#5	P	4		4/16 EA. END	
BT13	24	36	2-#7	A	2-#7	P			4/16 EA. END	
BT14	24	36	2-#11	A	2-#11	P			4/16 EA. END	
BT15	8	36	2-#7	A	2-#7	P			4/16 EA. END	
BT16	8	51½	2-#10	A	2-#10	P			4/16 EA. END	
BT17	24	32	5-#11 5-#11	B A	8-#11	P		#5@5" OC. THROUGHOUT		SEE DETAIL 4/S7
BT18	8	36	2-#7	A	2-#7	P			4/16 EA. END	
BT19	8	51½	2-#10	A	2-#10	G	8 AND 13		4/16 EA. END	
BT20	8	51½	2-#10	A	2-#10	H	EA. END		4/16 EA. END	
BT21	8	36	2-#10	A	2-#10	H	EA. END		4/16 EA. END	
			PLAZA LEVEL							
BP01	24	36	3-#11	A	4-#10 5-#11	G H	C.8 C.2	#4	18"% THROUGHOUT	
BP02	24	36	2-#4	A	4-#10	H	B.7	#4	18"% THROUGHOUT	
BP03	24	36	4-#10	A	5-#11	H	B.1	#4	18"% THROUGHOUT	
BP04	24	36	2-#6	A	5-#11	H	A.7	#4	18"% THROUGHOUT	
BP05	24	36	4-#11	A	5-#11	H	A.2	#4	18"% THROUGHOUT	
BP06	8	40	3-#10	D	2-#10	M			7/12 EA. END & CANTILEVER	
BP07	12	40	SEE BP05						7/12 EA. END	
BP08	12	40	3-#10	D	3-#9	M			8/10 EA. END	
BP09	14	21	3-#9	A	3-#9	P		#4	7/10 EA. END	SEE DETAIL 1/S5
BP10	12	40	2-#9	A	2-#10	P			4/16 EA. END	SEE DETAIL 18/S7
BP11	8	40	2-#7	A	2-#7	H			4/16 EA. END	
BP12	8	21	2-#9	A	2-#5	P			4/16 EA. END	
BP13	24	40	3-#9	A	3-#9 3-#9	G H			18"% THRU-CUT	
BP14	24	36	4-#10	A	5-#11	P		#4	18"% THRU-CUT	
BP15	8	40	2-#9	A	2-#9	P			4/16 EA. END	
BP16	8	32	2-#7	A	2-#7	P			4/16 EA. END	
BP17	24	36	11-#11 10-#11	B A	14-#11	P		#6@5" OC. THROUGHOUT		SEE DETAIL 6/S7
BP18	8	40	2-#7	A	2-#7	P			4/16 EA. END	
BP19	24	36	2-#9	A	2-#9	H			18"% THRU-CUT	HOOK TOP BARS @ GRID B & 11
BP20	8	40	2-#9	A	2-#9	H			18"% THRU-CUT	
BP21	8	40	2-#10	A	2-#10	H			18"% THRU-CUT	
BP22	8	40	2-#10	A	2-#10	H			18"% THRU-CUT	
BP23	8	40	2-#10	A	2-#10	H			16"% THRU-CUT	
BP24	24	40	2-#11	A	2-#11	P			12"% THRU-CUT	
BP25	8	40	2-#7	A	2-#7	G			18"% THRU-CUT	
BP26	12	40	3-#9	A	2-#8 3-#9	G H			1/6, 8/12 1/3, 5/6, 5/12	
BP27	12	40	2-#8	A	2-#8	G			1/6, 1/12	
BP28	24	40	3-#9	A	3-#9	G			16"% THRU-CUT	
BM01	12	28	3#9	A	2#6	P			12% THRU-OUT	
BM02	16	28	6#10	A	2#9	P		#4	1/3, 1/6, 8/16 EA END	2#10 PLACED IN 2ND LAYER
BM03	12	28	5#11	A	3#5	P		#4	6"% THRU-OUT	2#11 PLACED IN 2ND LAYER
BM04	12	48	2#9	A	2#9	P			18"% THRU-OUT	EXTEND 'A' & 'P' BARS TO GRIDS 2 OR 19
BM05	12	48	—	—	—	—			18"0% THROUGHOUT	SEE BM04 FOR REINF'G.
BM06	12	24	2#6	A	2#6	P			18"0% THROUGHOUT	



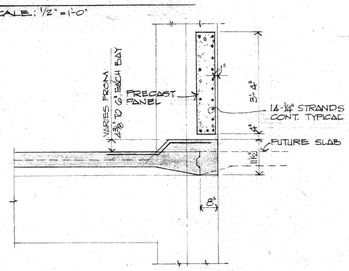
9/S7 WALL SECTION



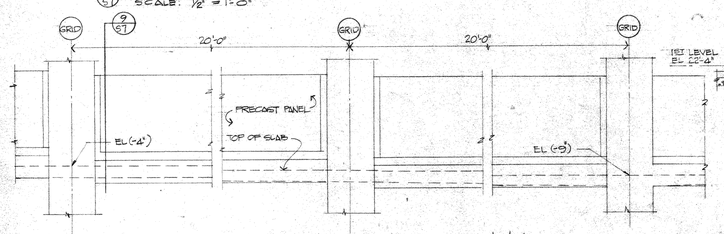
4/S7 SECTION AT BT17
SCALE: 1/2" = 1'-0"



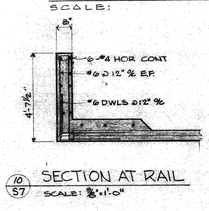
6/S7 SECTION AT BP17
SCALE: 1/2" = 1'-0"



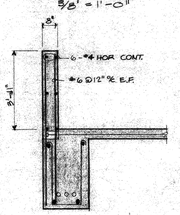
9/S7 EDGE DETAIL
SCALE: 1/2" = 1'-0"



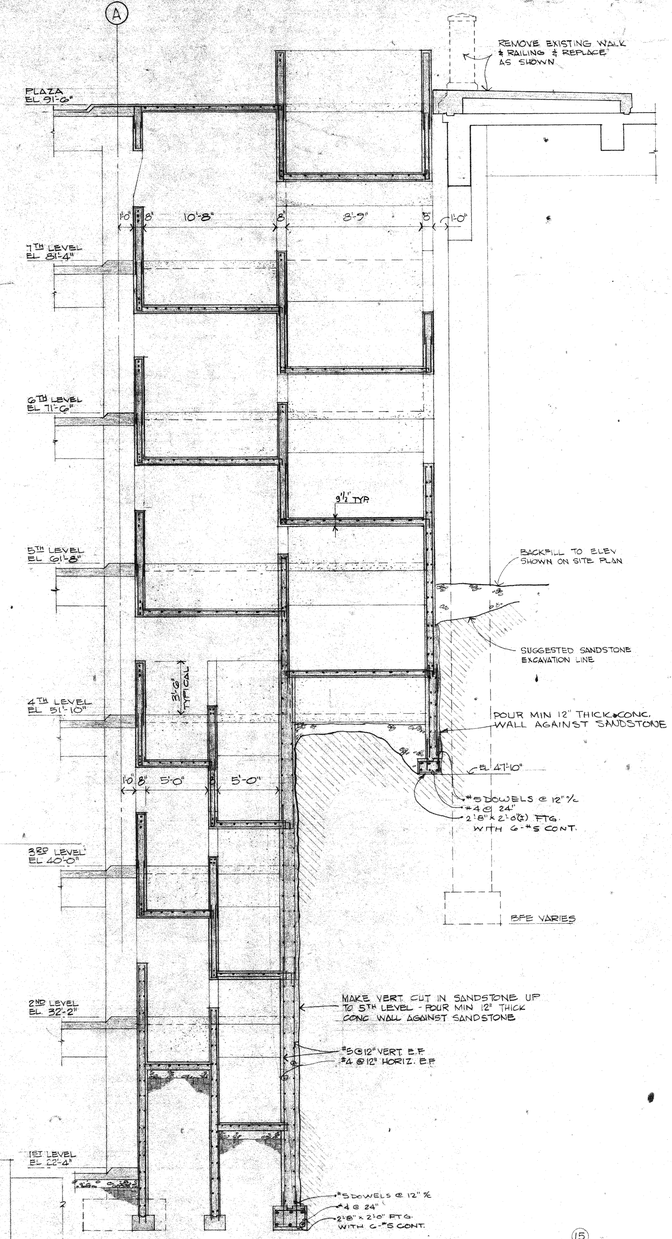
TYPICAL ELEVATION ALONG GRID 'D'
SCALE: 3/8" = 1'-0"



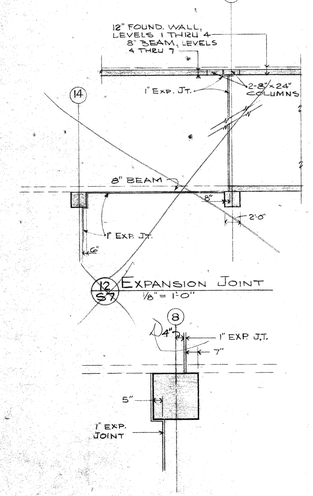
10/S7 SECTION AT RAIL
SCALE: 3/8" = 1'-0"



11/S7 SECTION AT RAIL
SCALE: 3/8" = 1'-0"



1/S7 RAMP SECTION
SCALE: 1/4" = 1'-0"



12/S7 EXPANSION JOINT
1/8" = 1'-0"

13/S7 EXPANSION JOINT @ COLUMN
SCALE: 3/8" = 1'-0"

ROBERT L. AMES CONVENTION CENTER ARCHITECTS & Planners
SAINT PAUL CITY ARCHITECT ENGINEERS, INC. ASSOCIATE ARCHITECTS Engineers Architects
HAAKSTAD LUNDGREN AND ASSOCIATES, INC. GROSSER SIMONS ASSOCIATES, INC.
THE CERNY CAVIN AND PARK ASSOCIATES, INC.
SAINT PAUL, MINNESOTA
THE HAMM BLDG.

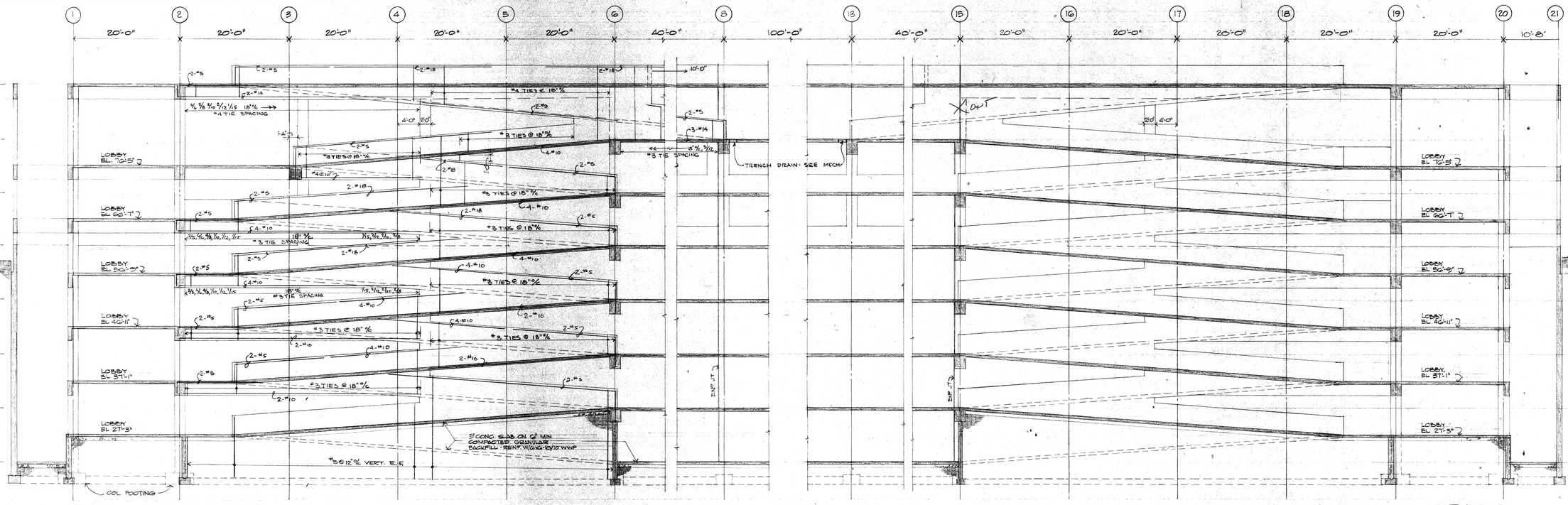
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Architect under the laws of the State of Minnesota.
Date: [illegible] Reg. No. 4656

SAINT PAUL CIVIC CENTER EAGLE STREET PARKING RAMP

MISCELLANEOUS BEAM SCHEDULE & DETAILS

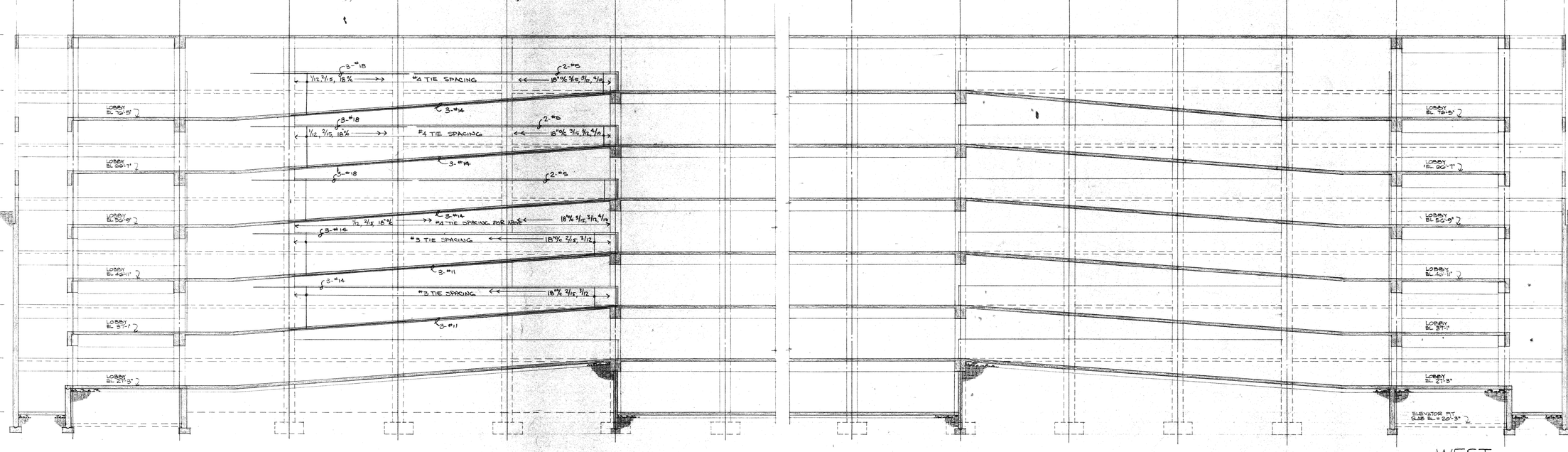
REVISION DATE APRIL 10, 68

S



1/58 PEDESTRIAN RAMP SECTION
SCALE: 1/8" = 1'-0"

GRID 15-19 BEAM TIES & REINF. OPPOSITE HAND AS SHOWN @ GRIDS 2-6



2/58 PEDESTRIAN RAMP SECTION
SCALE: 1/8" = 1'-0"

GRID 2-6 BEAM TIES & REINF. OPPOSITE HAND AS SHOWN @ GRIDS 15-19

ROBERT L. AMES
CONVENTION CENTER ARCHITECTS
Planners

SAINT PAUL CITY ARCHITECT
ASSOCIATE ARCHITECTS & ENGINEERS, INC.
Engineers
Architects

HAARSTICK LUNDGREN AND ASSOCIATES, INC.
GROVER DIMOND ASSOCIATES, INC.

CAVIN AND PAGE
THE CERNY ASSOCIATES, INC.

THE HAMM BLDG.
SAINT PAUL, MINNESOTA

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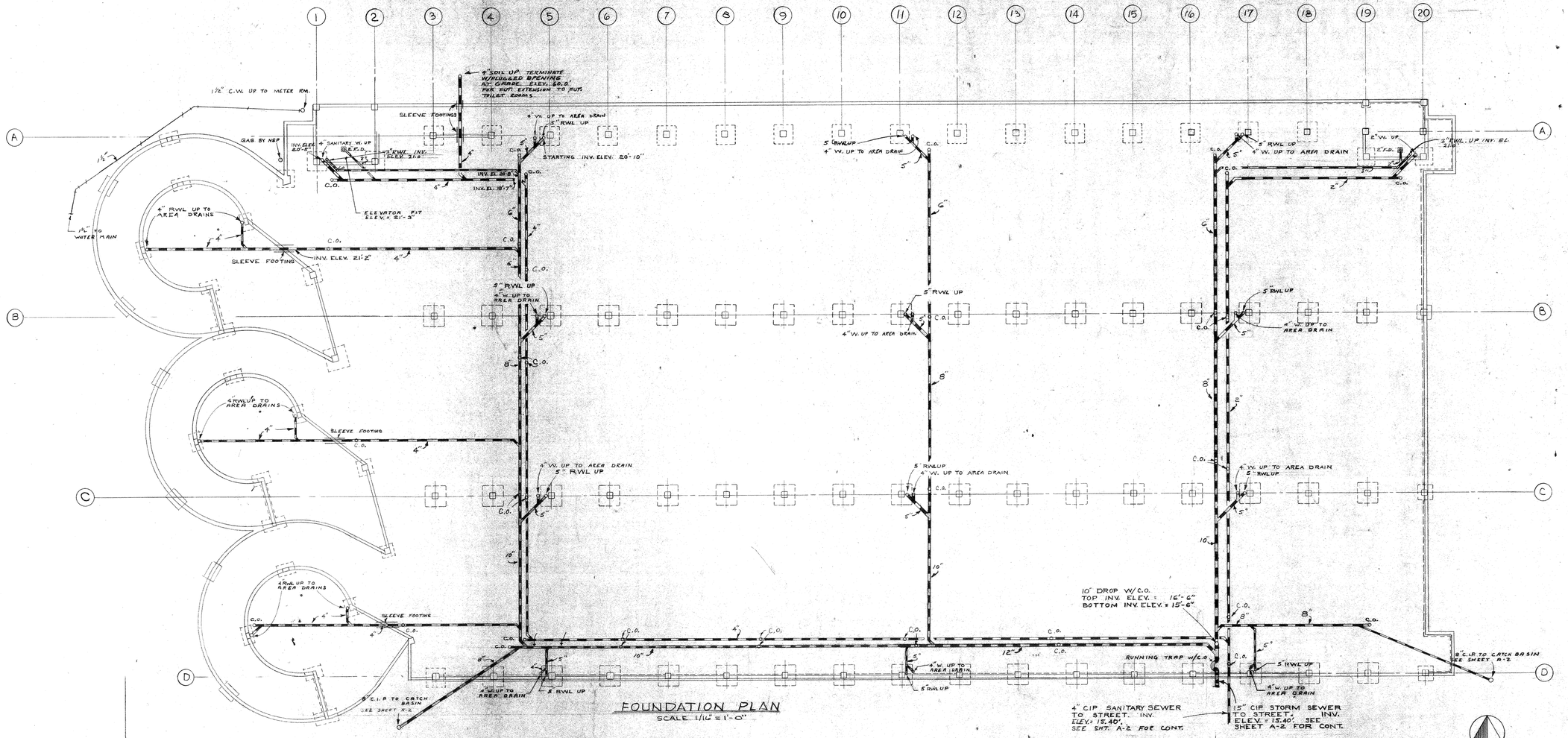
Reg. No.
Date

SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

PEDESTRIAN RAMP SECTIONS AND DETAILS

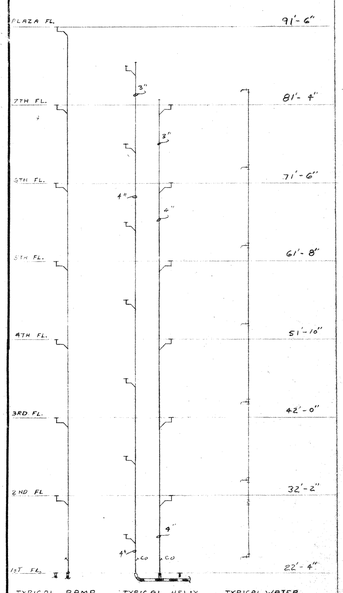
FIRST ISSUE DATE DEC. 15, 68 | REVISION DATE APR. 10 69 | R

S8



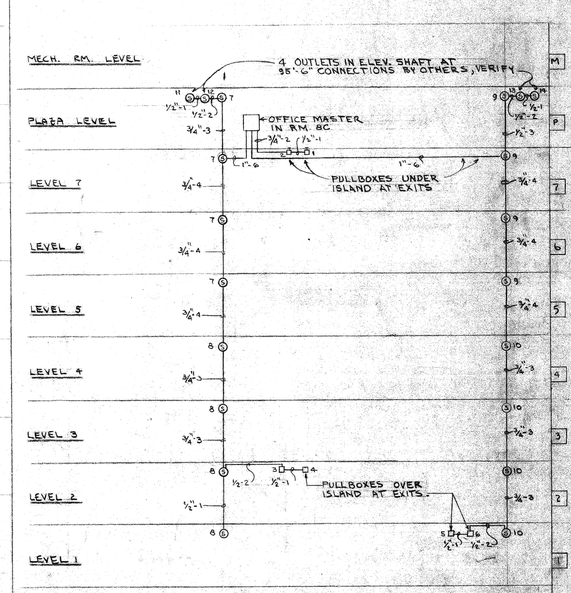
FOUNDATION PLAN

SCALE: 1/16" = 1'-0"



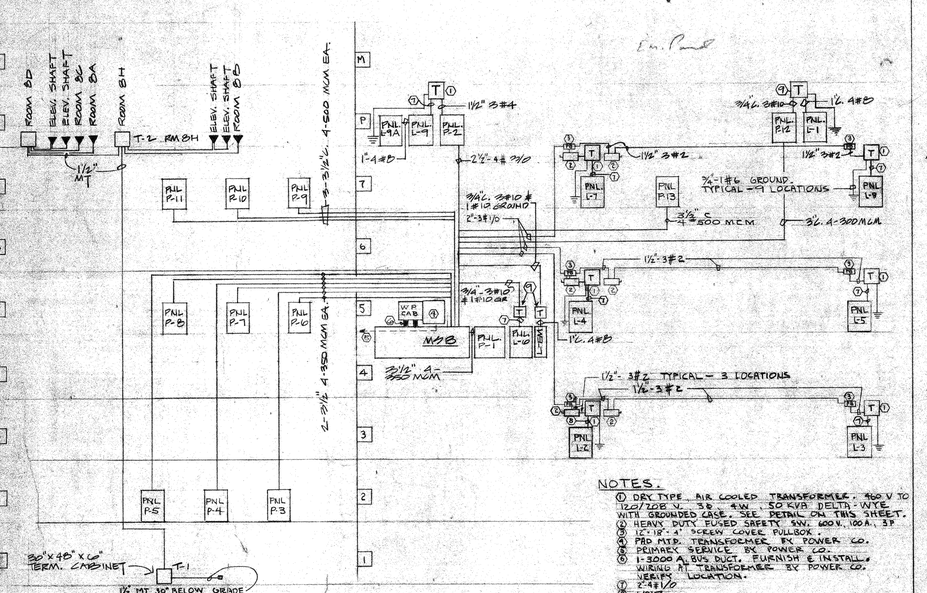
RAMP WASTE & WATER RISER DIAGRAMS

VERTICAL SCALE ⅛"=1'-0"
HORIZONTAL SCALE NONE



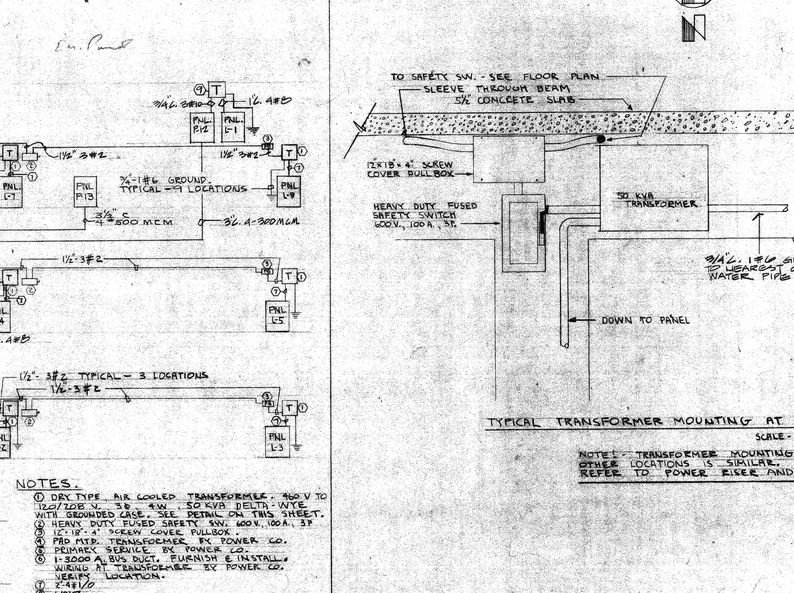
NOTES:
1. NUMBER ADJACENT TO SPEAKER SYMBOL INDICATES ZONE.
2. ALL INTERCOM WIRE IS SHALL BE BELDEN NO. 8761

INTERCOM RISER
NO SCALE



TELEPHONE RISER NO SCALE

T-1: 30" x 48" x 6"
T-2 & T-3: 24" x 30" x 4"
ALL CONDUIT ¾" UNLESS NOTED OTHERWISE



NOTES:

1. DRY TYPE AIR COOLED TRANSFORMER. 460 V TO 120/208 V. 3Ø 4W. 50 KVA DELTA-WYE WITH GROUNDED CASE. SEE DETAIL ON THIS SHEET.
2. HEAVY DUTY FUSED SAFETY SW. 600 V., 100 A., 3 P.
3. 12"-19"-4" SCREW COVER PULLBOX.
4. PAD MTD. TRANSFORMER BY POWER CO. PRIMARY SERVICE BY POWER CO.
5. 1-3000 A. BUS DUCT. FURNISH & INSTALL WIRING AT TRANSFORMER BY POWER CO. VERIFY LOCATION.
6. 2-4" C.
7. 2-4" C.
8. VOID
9. DRY TYPE AIR COOLED TRANSFORMER. 460 V TO 120/208 V. 3Ø 4W. 150 KVA DELTA-WYE WITH GROUNDED CASE.

POWER DISTRIBUTION RISER
NO SCALE

TYPICAL TRANSFORMER MOUNTING AT GRID 8-7

SCALE - ¾" = 1'-0"

NOTE: TRANSFORMER MOUNTING AT ALL OTHER LOCATIONS IS SIMILAR. REFER TO POWER RISER AND FLOOR PLANS.

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 Engineer - under the Laws of the State of Minnesota.
Date: 12/15/68 Reg. No. 7821

I hereby certify that this plan, specification, or report was prepared by me or under my direct

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ASSOCIATE ARCHITECTS
Engineers
Architects
CAVIN-HAND-FRIDE
OWNERS - SAINT PAUL CONVENTION CENTER ASSOCIATES, INC.
THE HAMM BLDG.
SAINT PAUL, MINNESOTA

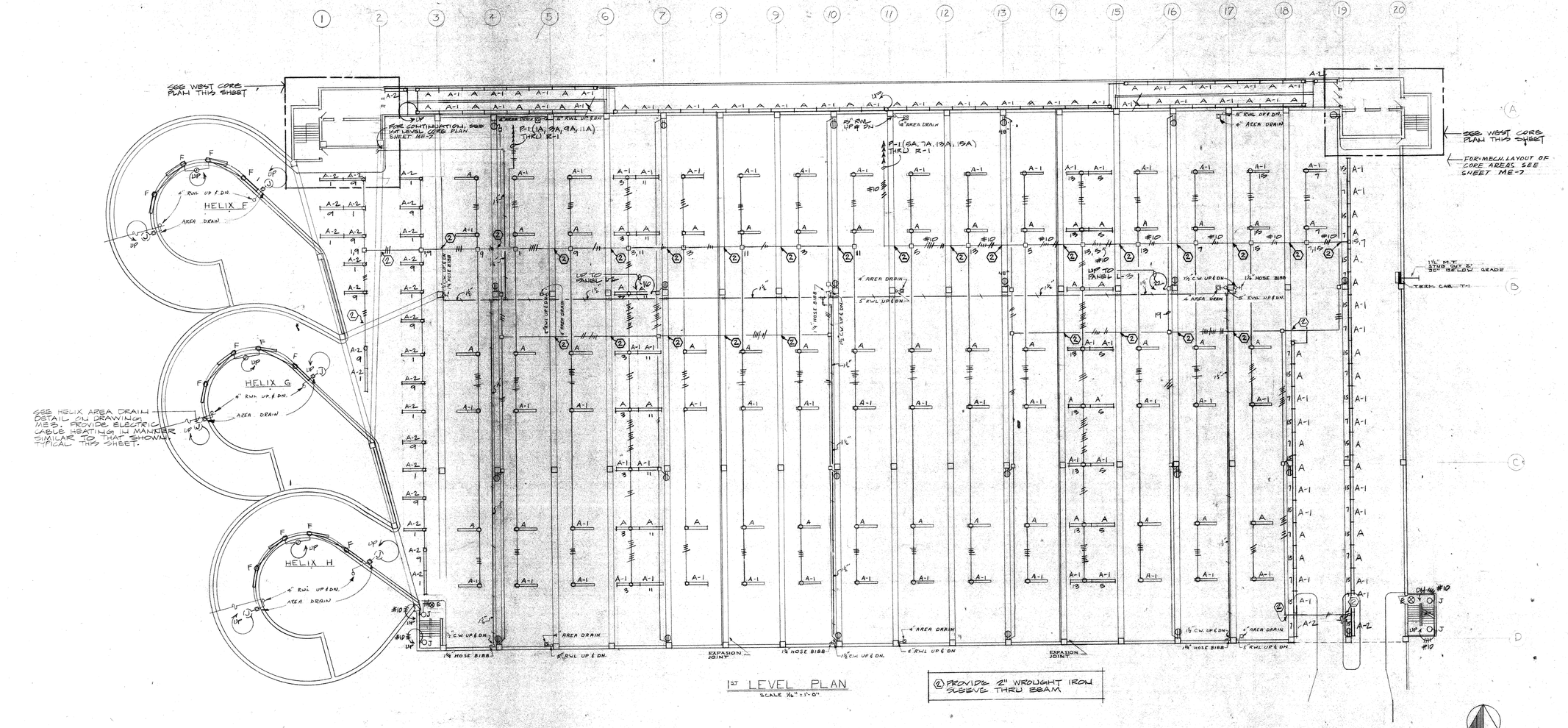
SAINT PAUL CIVIC
EAGLE STREET P

NO.	REVISION DATE
1	APRIL 10, 69

FIRST ISSUE DATE DEC. 16, 1968

FOUNDATION PLAN

ME
1


SEE WEST CORE PLAN THIS SHEET
FOR CONTINUATION, SEE HVAC LEVEL 1 CORE PLAN SHEET ME-7
P-1 (1A, 9A, 9A, 11A) THRU R-1
P-1 (6A, 7A, 13A, 15A) THRU R-1
SEE WEST CORE PLAN THIS SHEET
FOR MECH. LAYOUT OF CORE AREAS SEE SHEET ME-7
HELIX F
HELIX G
HELIX H
4" RWL UP & DN.
AREA DRAIN
SEE HELIX AREA DRAIN DETAIL ON DRAWING ME-3. PROVIDE ELECTRIC HEATING IN MANGER SIMILAR TO THAT SHOWN TYPICAL THIS SHEET.
5" RWL UP & DN.
4" AREA DRAIN
1¼" HOSE BIBB
5" C.W. UP & DN.
EXPANSION JOINT
1½" C.W. UP & DN.
6" RWL UP & DN
1¼" M.T. STUB OUT 2" BELOW GRADE
TERM. CAB. T-1
CH HT #10
#10
#10 E
#10 J
#10 J
#10 E
#10 J
#10 J
#10 E
#10 J
#10 J

ME

SECOND LEVEL PLAN

FIRST ISSUE DATE	REVISION DATE	R
DEC. 15, 1968	APRIL 10, 69	1

SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

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 Engineer under the laws of the State of Minnesota.
Signature
Date 1/15/69 Reg. No. 8281

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 ENGINEER under the laws of the State of Minnesota.
Signature
Date 1/15/69 Reg. No. 4221

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ASSOCIATE ARCHITECTS
THE CRENT ASSOCIATES, INC.
CAVIN AND PAGE
THE HAMM BLDG. SAINT PAUL, MINNESOTA

SEE EAST CORE PLAN ON ME-4

FOR MECH. LAYOUT OF CORES SEE SHEET ME-7

SEE WEST CORE PLAN ON ME-4

SEE HELIX AREA DRAIN DETAIL THIS SHEET FOR ZEALED EXPANSION JOINT DETAIL TYPICAL

2nd LEVEL PLAN
SCALE 1/16"=1'-0"

F.I. (19A, 19A, 19A) THRU 2-1

F.I. (19A, 25A, 27A, 21C, 23B) THRU 2-1

(A) PROVIDE 2" WROUGHT IRON SLEEVE THRU BEAM

EXPANSION JOINT

STANDPIPE

SEE MECH. DWGS. FOR ADDITIONAL DETAILS

3" DRAIN FROM STANDPIPE SEE MECH. DWGS.

EAST ELEV. CORE HEATING RISER DIAGRAM
NO. SCALE

WEST ELEV. CORE HEATING RISER DIAGRAM
NO. SCALE

HELIX AREA DRAIN DETAILS 1/4"=1'-0"

SEE ELEC. DWGS. FOR HEATING CABLE

MAKE CONCRETE COVE AT SIDEWALK

3/8" AREA DRAIN STRAINER

FROM CONC. FILL 1/4" RADIUS

PLAN

SEE ELEC. DWGS. FOR HEATING CABLE

4" SQUARE DRAIN SEE PLAN

SECTION

CONVECTOR PIPING DIAGRAM
NO SCALE

TYPICAL CABINET UNIT HEATER PIPING HOT WATER HEATING SYSTEMS
NO SCALE

WATER METER PIPING DIAGRAM
NO SCALE

BLAST UNIT HEATER PIPING DIAGRAM-HOT WATER
NO SCALE

MANUAL AIR VENT ASSEMBLY-WATER SYSTEMS
NO SCALE

NOTE:
THIS AIR VENT ASSEMBLY SHALL APPLY TO ALL MAIN LINE RISER PIPES, VENTING AT EACH HIGH POINT AND TERMINATING AT THE TOP OF MAIN

OMIT THIS ROW AT 7TH TO PLAZA LEVEL RAMP — SEE ME-5

WIRING AS REQ'D FOR 1 CKT PER LEVEL

SHIFT FIXTURES AS REQ'D TO MISS BEAM AT LEVEL 6 1/2

2" TRENCH DRAIN ON 7TH LEVEL ONLY. TERMINATE DRAIN LINE OUTSIDE RAMP

OMIT THESE FIXTURES ON LEVEL 6 DUE TO SLEEVE BEAMS

WIRING AS REQ'D FOR 1 CKT PER LEVEL

P-1 (90B, 40B, 1C, 3C, 9C, 13C, 17C) 5TH LEVEL ONLY

P-1 (88B, 42B, 3C, 6C, 11C, 15C, 19C) 5TH LEVEL ONLY

UP-LEVEL 6 ONLY

UP-LEVEL 6 ONLY

2 1/2" SMS @ 1'-6" AT 7TH LEVEL CEILING. SEE ME-7 FOR CONTINUATIONS

PARTIAL 4TH, 5TH & 6TH LEVEL PLANS

7TH LEVEL SIMILAR EXCEPT RAMPS FROM 7TH TO PLAZA LEVEL BEGIN AT GRIDS B & 13. SEE ME-5.

1/16" = 1'-0"

SEE WEST CORE PLAN THIS SHEET

SEE EAST CORE PLAN THIS SHEET

2" TRENCH DRAIN AT 7TH LEVEL ONLY. TERMINATE DRAIN LINE OUTSIDE RAMP

3" AREA DRAIN PIPE TERM'N SEE OUTSIDE RAMP - TYP. FENCE

4" AREA DRAIN

5" RWL UP & DN.

3RD LEVEL: P-1 (93A, 95A, 41A, 43A) THRU R-1.
4TH LEVEL: P-1 (8A, 10A, 16A, 18A) THRU R-1.
5TH LEVEL: P-1 (24A, 26A, 32A, 34A) THRU R-1.
6TH LEVEL: P-1 (40A, 42A, 90B, 7B) THRU R-1.
7TH LEVEL: P-1 (11B, 15B, 21B, 23B) THRU R-1.

SAFETY SW. FOR PNL
L-5 (LEVEL 7)
L-5 (LEVEL 5)
L-3 (LEVEL 3)
SEE POWER RISER

3RD LEVEL: P-1 (97A, 99A, 41A, 43A) THRU R-1.
4TH LEVEL: P-1 (12A, 14A, 22A, 24A) THRU R-1.
5TH LEVEL: P-1 (28A, 30A, 36A, 38A) THRU R-1.
6TH LEVEL: P-1 (1B, 3B, 9B, 11B) THRU R-1.
7TH LEVEL: P-1 (17B, 19B, 25B, 27B) THRU R-1.

FOR MECHANICAL LAYOUT OF CORE AREAS SEE SHEET ME-7

SEE TYPICAL HELIX RISER ON ME-1

SEE ME-3 FOR TYPICAL AREA DRAIN LOCATIONS

HELIX 'F'
4" RWL UP & DN.
AREA DRAIN

HELIX 'G'
4" RWL UP & DN.
AREA DRAIN

HELIX 'H'
4" RWL UP & DN.
AREA DRAIN

SEE HELIX AREA DRAIN DETAIL ON DRAWING ME-3 FOR DRAIN ELECTRIC HEATING CABLE INFORMATION. TYPICAL.

3" MT. FOR 15 KV SERVICE CABLE. STUB OUT BELOW GRADE PER NSP REQUIREMENTS.

8'-0" x 3'-0" x 4'-0" NP CABINET FOR SECONDARY CONNECTIONS

3000A SERVICE BUSWAYS

PAD MT. BY NSP

2GS/460 V PANEL
P-8 (LEVEL 7)
P-6 (LEVEL 5)
P-3 (LEVEL 2)

2GS/460 V PANEL
P-10 (LEVEL 7)
P-7 (LEVEL 5)
P-4 (LEVEL 2)

2GS/460 V PANEL
P-9 (LEVEL 7)
P-5 (LEVEL 5)
P-2 (LEVEL 2)

8'-0" TO 2'-9 1/2" TO EM. PWR. STATION NO.1 IN RM 4 1/2 C.

L-EM 2,4

5TH FLOOR SLAB

NOTE:
AT 7TH LEVEL LOCATE DOUBLE FIXTURES BETWEEN GRIDS 7 & 8, AND 13 & 14 (U.N.O.) OF LOCATIONS SHOWN.

EXPANSION JOINT

EXPANSION JOINT

5" RWL UP & DN.

4" AREA DRAIN

1 1/2" HOSE BIBB

1 1/2" CW. UP & DN.

2" C. 2"-4/0 TO EM. PWR. STATION NO.2 IN RM. 5H

(L-EM (9,11) (5TH LEVEL ONLY))

PART WEST CORE PLAN 1/8"=1'-0"
LEVEL 4 1/2

3RD THRU 7TH LEVEL PLANS 1/16" = 1'-0"

(2) PROVIDE 2" WROUGHT IRON SLEEVE THRU BEAM

CIRCUIT NO'S. SHOWN ARE FOR 3RD LEVEL ONLY. ON OTHER LEVELS PROVIDE SIMILAR CIRCUITING PER HOMERUN LABELS.

SEE CORE PLANS AT LEVELS 5 1/2 & 6 1/2 THIS SHEET

EQP'T # 2, 3, 5 OR 6 DEPENDING ON LEVEL. SEE EQP'T SCHEDULE ON ME-2

WEST CORE PLAN 1/8" = 1'-0"
LEVELS 2 1/2, 5 1/2 & 6 1/2

3/4" - 2#8 TO P-1 (10B) THRU R-1 5TH LEVEL ONLY

EQP'T #12, 13, 14, 15 OR 16 DEPENDING ON LEVEL. SEE EQP'T SCHEDULE ON ME-2.

EAST CORE PLAN 1/8" = 1'-0"
LEVELS 2 1/2 THRU 6 1/2

PANEL L-1B 120/208V

EQP'T # 24

12V EMERGENCY POWER STATION NO. 1

TO P-1 (90B) THRU R-1

PANEL L-EM
RELAY PANEL R-1
RELAY PANEL R-2
TELEPHONE TERM. CABINET T-3

3/C, 2-500 MCM GROUNDED CONDUCTORS BOND WATER METER

EQP'T # 25

PANEL L-2 208/480V

EQP'T # 4

TO L-EM THRU R-2

TO EM. PWR. STATION NO. 1

WEST CORE PLAN LEVEL 3 1/2 1/8" = 1'-0"
ELECTRIC EQUIPMENT ROOM DETAILS

LIGHTING CONTROL SCHEDULE

SEL. SWITCH	POS.	RELAY PANEL	CIRCUITS SWITCHED	LIGHTS CONTROLLED
S-1	1	R-1	P-1 (1A, 3A, 5A, 7A)	LEVEL 1 ALTERNATE ROWS
	2		P-1 (17A, 19A, 23C, 21A, 31A)	2
	3		P-1 (33A, 35A, 37A, 39A)	3
	4		P-1 (8A, 10A, 12A, 14A)	4
	5		P-1 (24A, 26A, 28A, 30A)	5
	6		P-1 (40A, 42A, 1B, 3B)	6
	7		P-1 (98, 15B, 17B, 19B)	7
	8		P-1 (23B, 33B)	PLAZA LEVEL (2) 1000W LTS PER POLE
	9		P-1 (8B, 10B)	LOBBIES
	10		P-1 (90B, 40B, 1C, 5C, 9C)	PEDESTRIAN RAMPS
	11		P-1 (13C, 17C, 15C, 19C)	
	12		P-1 (38B, 40B, 36C, 7C, 11C)	
S-2	1		P-1 (9A, 11A, 13A, 15A)	LEVEL 1 ALTERNATE ROWS
	2		P-1 (25A, 27A, 21C, 21A, 29A)	2
	3		P-1 (41A, 2A, 4A, 6A)	3
	4		P-1 (11A, 18A, 20A, 22A)	4
	5		P-1 (32A, 34A, 36A, 38A)	5
	6		P-1 (5B, 7B, 9B, 11B)	6
	7		P-1 (21B, 23B, 25B, 27B)	7
	8		P-1 (31B, 35B)	PLAZA LEVEL (2) 1000W LTS PER POLE
	9		P-1 (13B, 14B, 16B, 18B)	HELIX 'F'
	10		P-1 (20B, 22B, 24B, 26B)	HELIX 'G'
	11		P-1 (28B, 30B, 32B, 34B)	HELIX 'H'
	12			
SWITCH NO.				
1		R-2	L-EM (1, 3)	NORTHWEST STAIRS & EXITS
2			L-EM (5, 7)	NORTHEAST
3			L-EM (2, 4)	SOUTH WEST
4			L-EM (6, 8)	SOUTHEAST

(4) 24V PILOT TYPE PUSHBUTTON SWITCHES UNDER COMMON PLATE FOR STAIR & EXIT LTS.
24V (12) POSITION SELECTOR SWITCHES WITH PILOT LIGHT ASSEMBLIES FOR GEN'L LIGHTING.

5'-0" TO FIN. FLOOR

ELEVATION LIGHTING CONTROLS SCALE: 3/16" = 1"
LOCATED ON WEST WALL OF ROOM BC. SEE ME-5.

3000A 3P 4TH MAIN SERVICE BUSWAY

400A., 3P. FUSED SW. P-1	600A. 3P. FUSED C.B. ELECTRICAL P-6	METERING SECTION	(A)	(V)	METERING SECTION	600A., 3P. FUSED C.B. ELECTRICAL P-9, P-10, P-11	400A. 3P. FUSED SW. P-12, L-1	FUTURE
800A., 3P. FUSED SW. L-2, L-3	600A. 3P. FUSED C.B. ELECTRICAL P-5	DOOR DRILLED FOR NSP CO. METERS			DOOR DRILLED FOR NSP CO. METERS	600A. 3P. FUSED C.B. ELECTRICAL P-7	400A. 3P. FUSED SW. P-2, L-3	
200A., 3P. FUSED SW. L-4, L-5	600A. 3P. FUSED C.B. ELECTRICAL P-4	3000A., 3P MAIN NO.1 SERVICE PROTECTOR	3000A., 3P TIE BREAKER		3000A., 3P MAIN NO.2 SERVICE PROTECTOR	600A. 3P. FUSED C.B. ELECTRICAL P-8	60A. 3P. FUS. SW. L-6 / 60A. 3P. FUS. SW. L-EM	
200A., 3P. FUSED SW. L-7, L-8	600A. 3P. FUSED C.B. ELECTRICAL P-3					400A. 3P. FUSED C.B. ELECTRICAL P-13		

ELEVATION MAIN DISTRIBUTION SWITCHBOARD NO SCALE
No Scale

PANELBOARD SCHEDULE

PANEL P-1 SURFACE MOUNTED 3 PHASE 4 WIRE 208/480 VOLT 3 SECTION PANEL 4000A MAINS TOP CONNECTED. SECTION A: 24 - 20A 1P CIRCUIT BREAKERS SECTIONS B & C SAME. — MAIN DISTRIBUTION SWITCHBOARD 3 PHASE 4 WIRE 208/480 VOLTS 3000A MAINS FULL SIZE. SEE SWITCHBOARD ELEVATION THIS SHEET.

PANELS L-1 & L-3 SURFACE MTD. 3 PHASE 4 WIRE 208/480 VOLTS 2 PHASE 4 WIRE 120/208 VOLTS 225A MAINS TOP CONNECTED 42 - 20A 1 POLE CIRCUIT BREAKERS.

PANELS L-1 & L-3 SURFACE MTD. 3 PHASE 4 WIRE 208/480 VOLTS 225A MAINS TOP CONNECTED 36 - 20A 1 POLE CIRCUIT BREAKERS. — PANEL P-1B SURFACE MOUNTED 3 PHASE 4 WIRE 208/480 VOLTS 400A MAINS BOTTOM CONNECTED 6 - 100A 2P CIRCUIT BREAKERS 12 - 20A 1 POLE SPACES

PANELS L-2 & L-4 SURFACE MTD. 3 PHASE 4 WIRE 120/208V 100A MAINS TOP CONNECTED 10 - 20A 1P CIRCUIT BREAKERS 10 - 20A 1P SPACES — RELAY PANEL R-1 SURFACE MOUNTED 48 SECTIONS 23 - PILOT 20A 1P RELAYS 69 - STD. 20A 1P RELAYS 2 - CONTROL TRANSFORMERS

PANELS L-7 & L-8 SURFACE MTD. 3 PHASE 4 WIRE 120/208 VOLTS 225A MAINS TOP CONNECTED 42 - 20A 1 POLE CIRCUIT BREAKERS. — RELAY PANEL R-2 SURFACE MOUNTED 4 - PILOT 20A 1P RELAYS 4 - STD 20A 1P RELAYS 1 - CONTROL TRANSFORMER

PANELS L-5 & L-6 SURFACE MTD. 3 PHASE 4 WIRE 208/480 VOLTS 225A MAINS TOP CONNECTED 150A 3P CIRCUIT BREAKER. 3 - 20A 2P CIRCUIT BREAKERS 3 - 20A 3P CIRCUIT BREAKERS. — PANEL P-2 SURFACE MOUNTED 3 PHASE 4 WIRE 208/480 VOLTS 225A MAINS BOTTOM CONNECTED 12 - 150A 3P CIRCUIT BREAKERS 18 - 20A 1 POLE CIRCUIT BREAKERS 6 - 1 POLE SPACES

PANELS L-9 & L-10 SURFACE MTD. 3 PHASE 4 WIRE 208/480 VOLTS 225A MAINS TOP CONNECTED 150A 3P CIRCUIT BREAKER. 3 - 20A 2P CIRCUIT BREAKERS 3 - 20A 3P CIRCUIT BREAKERS. — PANELS P-3, P-4, P-5 EACH SURFACE MTD 3Ø 4W 208/480V 600A MAINS TOP CONNECTED. 12 - 150A 3P CIRCUIT BREAKERS 6 - 1P SPACES

PANELS L-11 & L-12 SURFACE MTD 3Ø 4W 208/480V 225A MAINS TOP CONNECTED 9 - 20A 3P & 2 - 40A 3P CB'S. 6 - 1P SPACES — PANELS P-6, P-7, P-8 EACH SURFACE MTD 3Ø 4W 208/480V 600A MAINS TOP CONN. 12 - 150A 3P CIRCUIT BREAKERS 6 - 1P SPACES

PANELS P-9, P-10, P-11 SURFACE MOUNTED 3 PHASE 4 WIRE 208/480 VOLTS 400A MAINS BOTTOM CONNECTED 6 - 100A 2P & 6 - 40A 3P CB'S. 6 - 1P SPACES — PANEL L-EM SURFACE MTD 3 PHASE 4 WIRE 120/208V 100A MAINS TOP CONNECTED 10 - 20A 1P CIRCUIT BREAKERS 2 - 1 POLE SPACES

ROBERT L. AMES
CONVENTION CENTER ARCHITECTS & ENGINEERS
Planners

SAINT PAUL CITY ARCHITECT
ASSOCIATE ARCHITECTS
Engineers
Architects

HARKNESS, IUNGEREN AND ASSOCIATES, INC.
GROVER-DIMOND ASSOCIATES, INC.
CAVIN AND PAGE
THE CERNY ASSOCIATES, INC.

THE HAMM BLDG.
SAINT PAUL, MINNESOTA

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 Engineer under the Laws of the State of Minnesota.
Date: 11/15/82 Reg. No. 9221

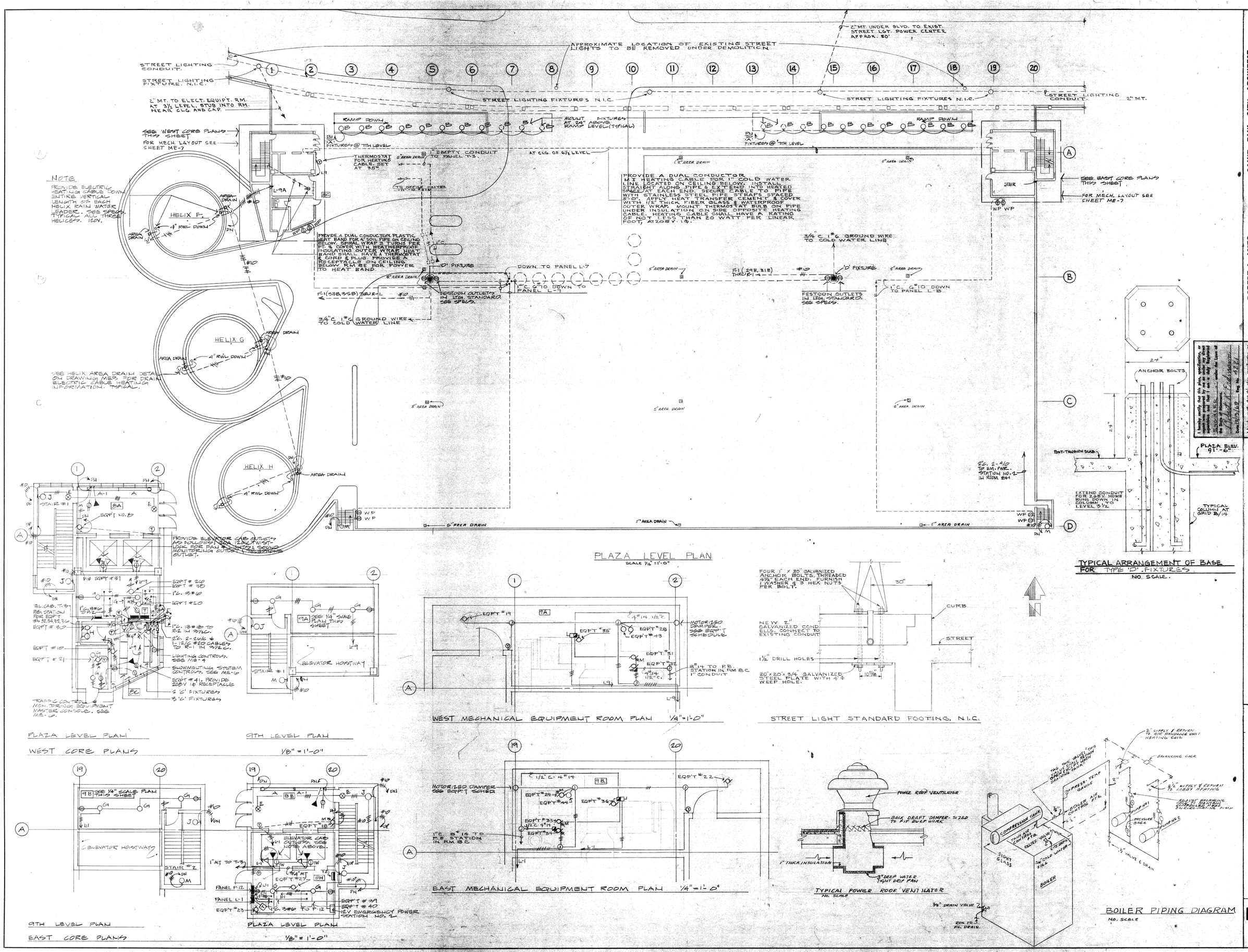
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Architect under the Laws of the State of Minnesota.
Date: 12/1/82 Reg. No. 5787

SAINT PAUL CIVIC CENTER PARKING RAMP
EAGLE STREET

THIRD THRU SEVENTH LEVEL PLAN

ISSUE DATE	REVISION DATE
12/1/82	12/16/82

ME 4



ROBERT L. AMES
CONVENTION CENTER ARCHITECTS & ENGINEERS, INC.
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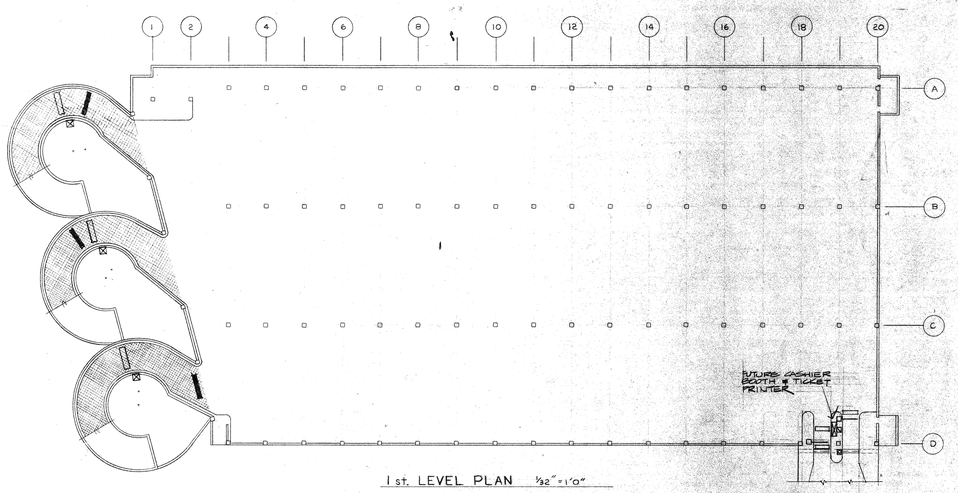
Architects
SAINT PAUL CITY ARCHITECT
ASSOCIATE ARCHITECTS
Engineers
SAINT PAUL, MINNESOTA

SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

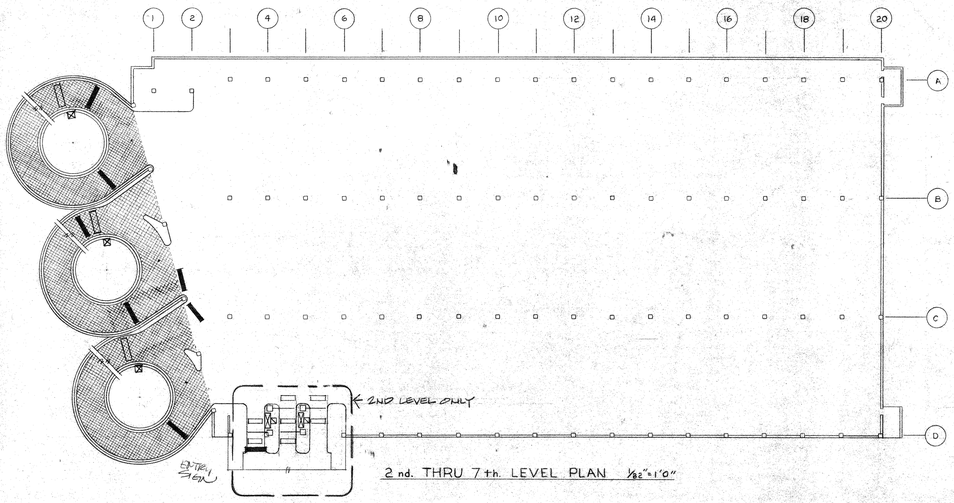
PLAZA LEVEL PLAN

FIRST ISSUE DATE DEC. 15, 1968 | REVISION DATE APRIL 10, 69

ME 5



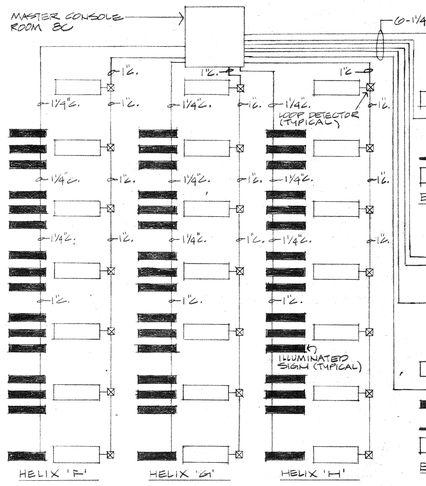
1 st. LEVEL PLAN 1/32"=1'0"

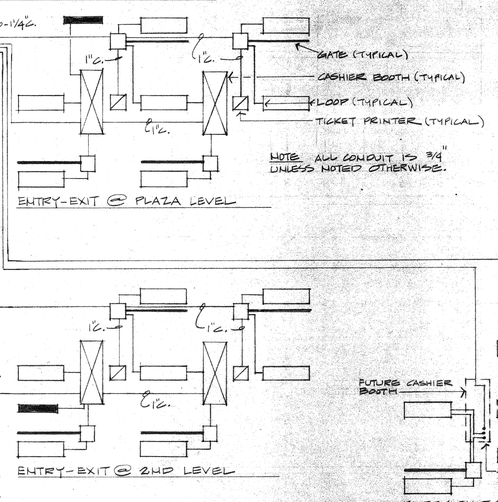


2 nd. THRU 7 th. LEVEL PLAN 1/32"=1'0"

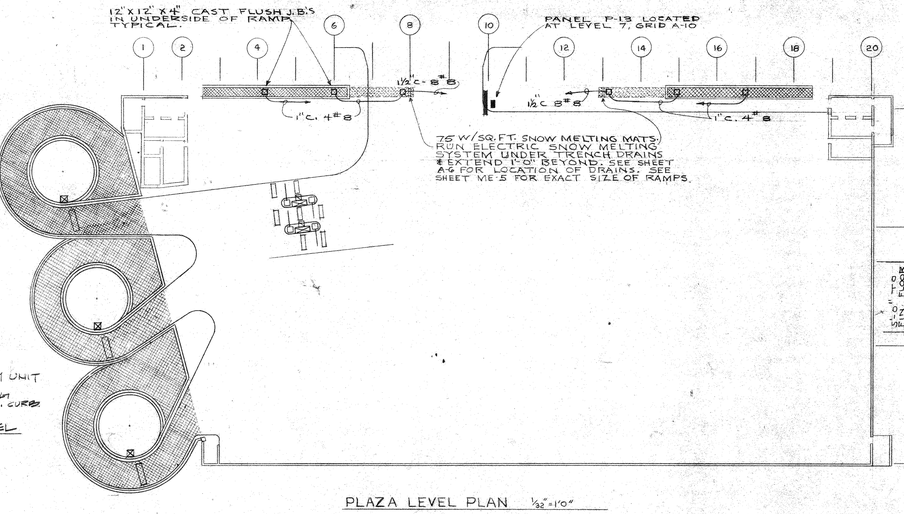
TRAFFIC CONTROL & MONITORING SYSTEM SPECIAL SYMBOLS

- CASHIER BOOTH
- GATE
- TICKET PRINTER
- LOOP
- LOOP DETECTOR
- CARD/KEY UNIT
- ILLUMINATED SIGN



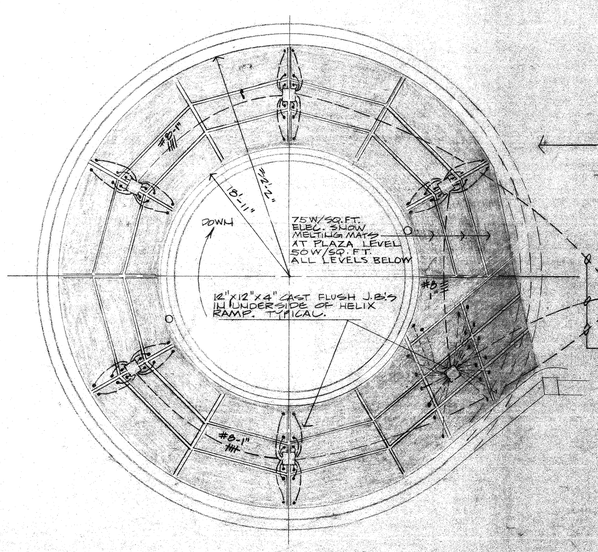


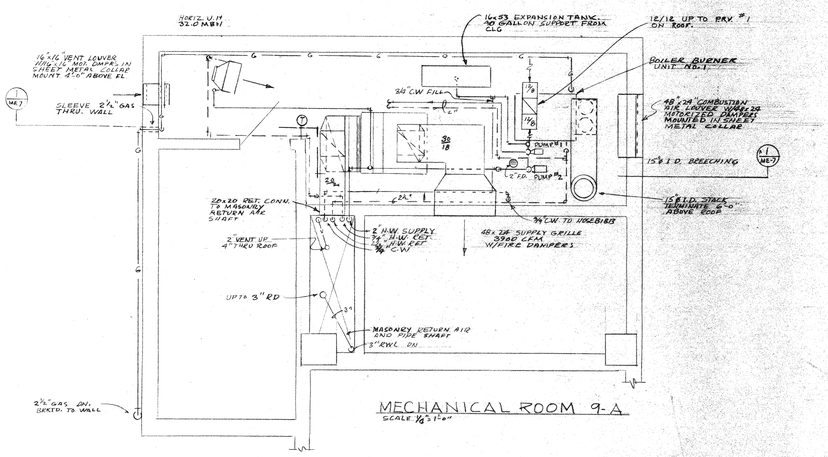
NOTE ALL CONDUIT IS 3/4" UNLESS NOTED OTHERWISE.



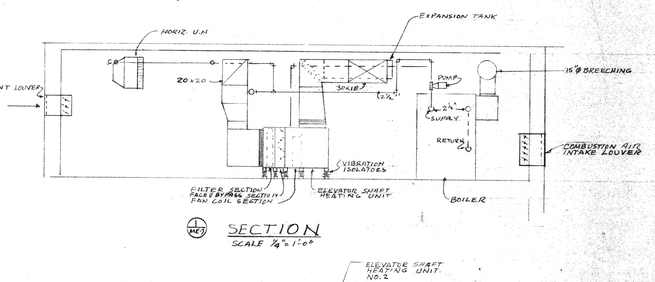
TRAFFIC CONTROL & MONITORING EQUIPMENT RISER DIAGRAM NO SCALE

- ALL EQUIPMENT, RACEWAYS, WIRE & CONNECTIONS SHALL BE INCLUDED TO PROVIDE SYSTEM OPERATION PER SPECIFICATIONS SECTION 16720.
- RISER DIAGRAM IS ONLY A GUIDE. VERIFY EXACT REQUIREMENTS WITH SUCCESSFUL EQUIPMENT SUPPLIER.
- PROVIDE 120 VAC CCTS FOR CONTROL EQUIPMENT FROM SPARE BREAKERS IN PANELS L2, L3, L7 & L9 AS REQUIRED.

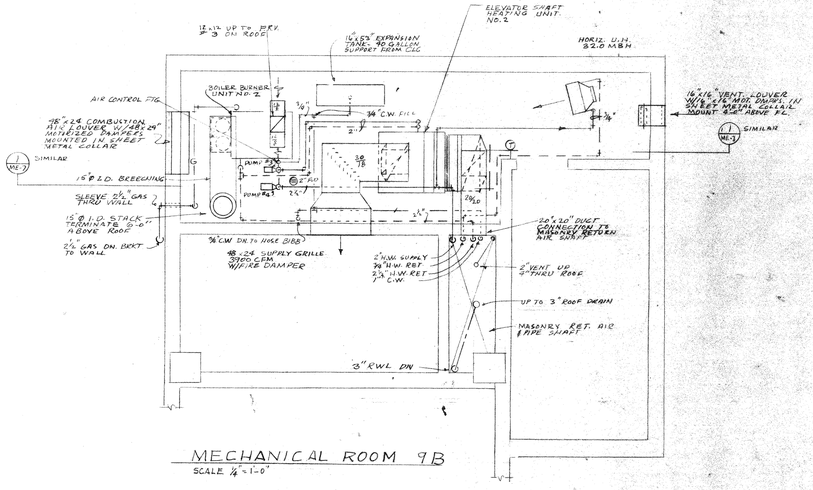

#8-1"
#8-1"
#8-1"



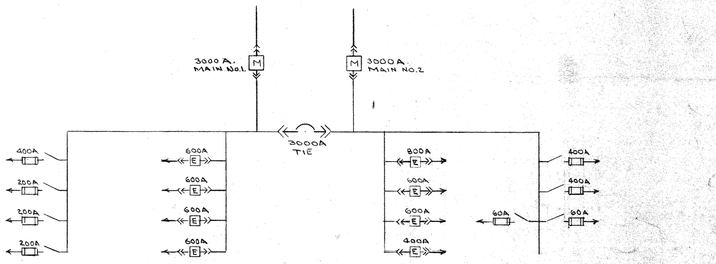
MECHANICAL ROOM 9-A
SCALE ½"=1'-0"



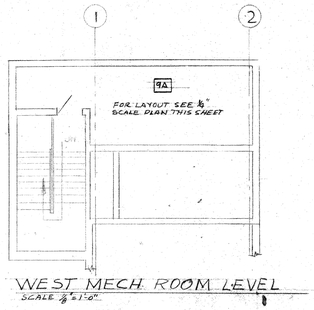
SECTION
SCALE ½"=1'-0"



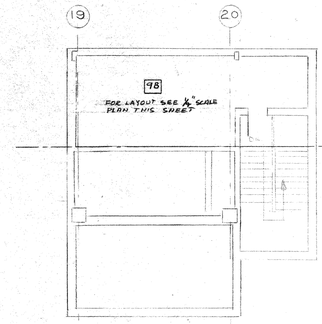
MECHANICAL ROOM 9B
SCALE ½"=1'-0"



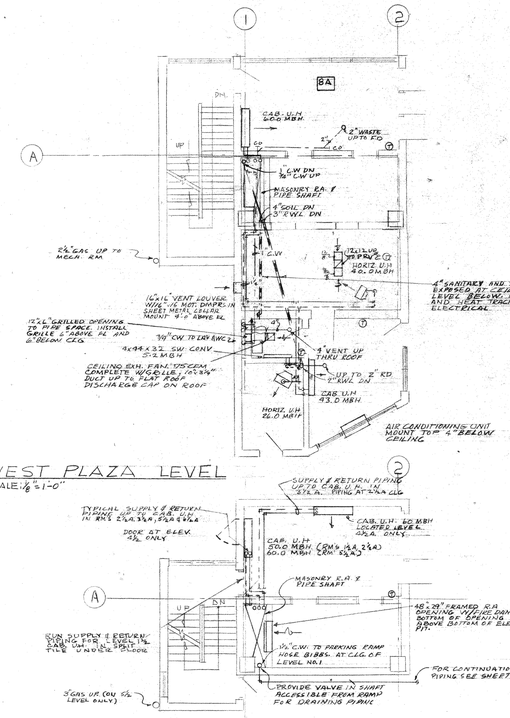
ELECTRICAL DISTRIBUTION
ONE LINE DIAGRAM
No Scale



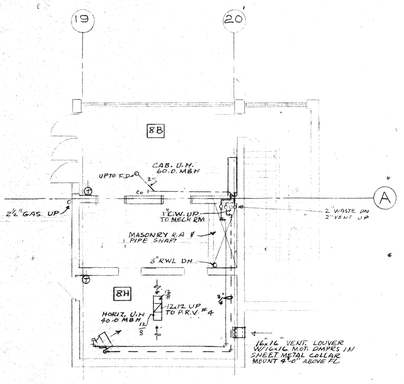
WEST MECH. ROOM LEVEL
SCALE ⅛"=1'-0"



EAST MECH. ROOM LEVEL
⅛"=1'-0"

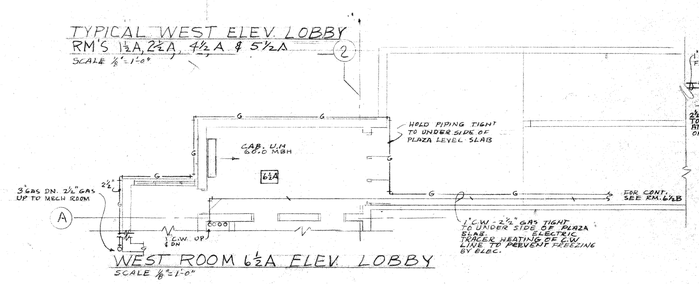


WEST PLAZA LEVEL
SCALE ⅛"=1'-0"

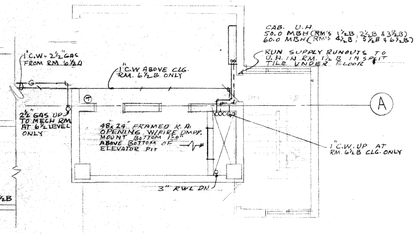


EAST PLAZA LEVEL
SCALE ⅛"=1'-0"

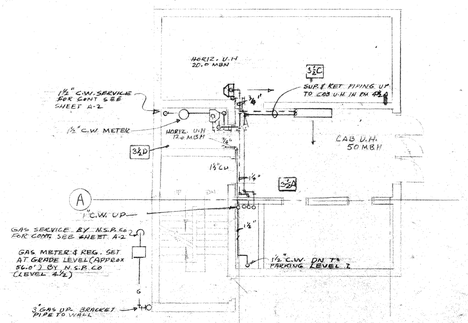
TYPICAL WEST ELEV. LOBBY
RM'S 1½A, 2½A, 4½A & 5½A
SCALE ½"=1'-0"



WEST ROOM 6½A ELEV. LOBBY
SCALE ½"=1'-0"



TYPICAL EAST ELEV. LOBBY
ROOM'S 1½B THRU 6½B
SCALE ⅛"=1'-0"



WEST 3½ LEVEL ELEV. LOBBY
SCALE ⅛"=1'-0"

ROBERT L. AMES
CONVENTION CENTER ARCHITECTS & ENGINEERS, INC.
Planners Architects
HAMMEL, LUNDGREN AND ASSOCIATES, INC.
CAVIN AND PAGE
THE CERNY ASSOCIATES
SAINT PAUL CITY ARCHITECT
ASSOCIATE ARCHITECTS Engineers
SAINT PAUL, MINN.

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

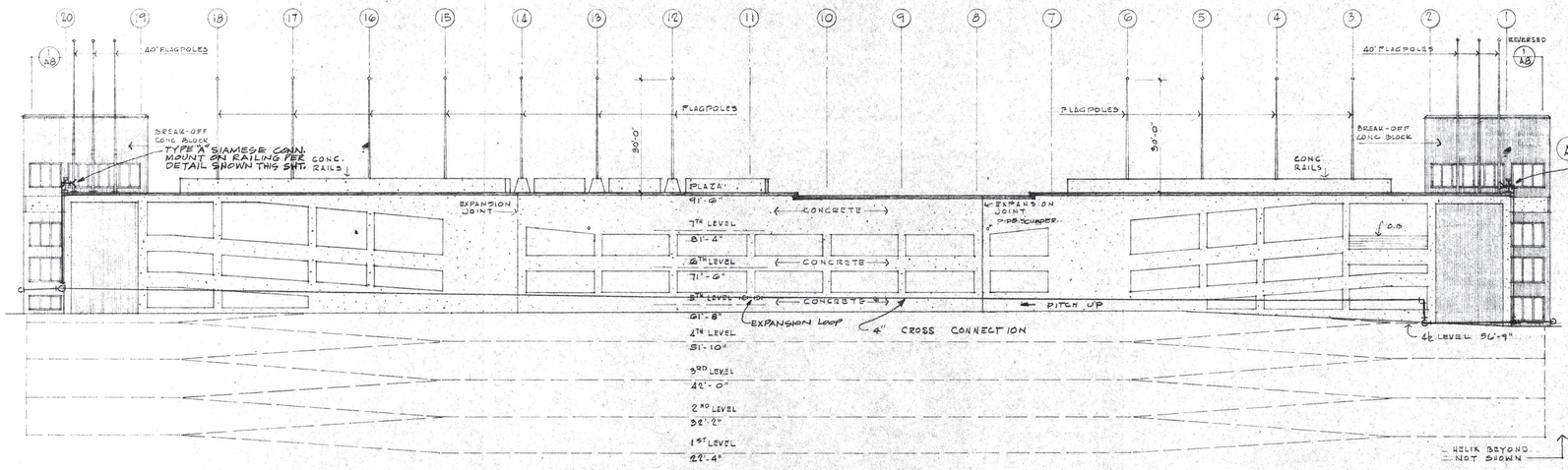
Date ... Reg. No. ...

SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP

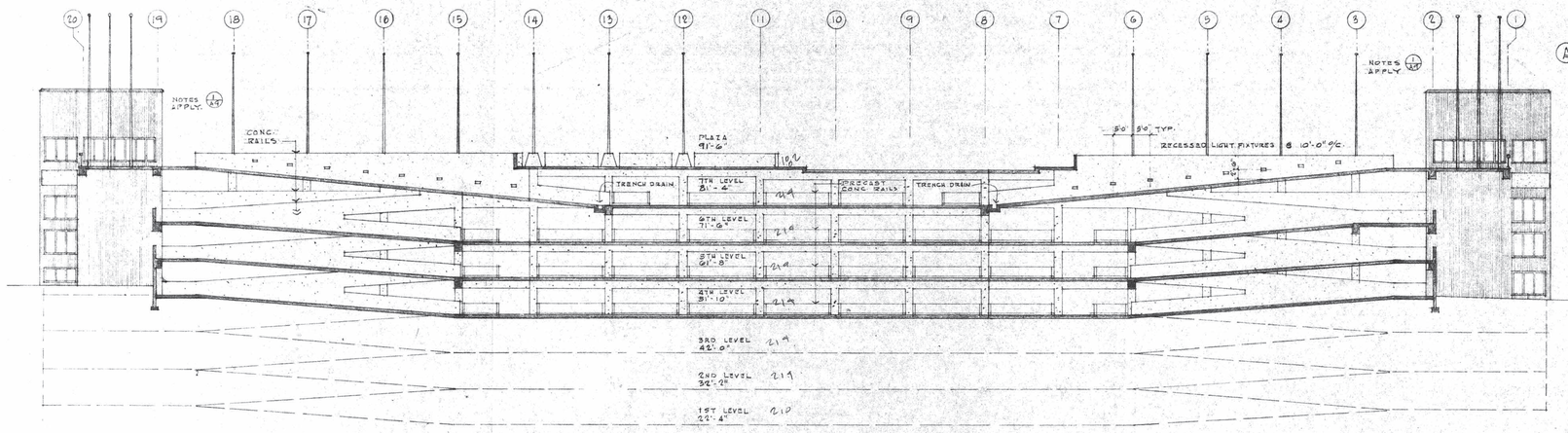
MECHANICAL PLANS & DETAILS

FIRST ISSUE DATE DEC. 15, 69 | REVISION DATE APRIL 10, 1969 | R

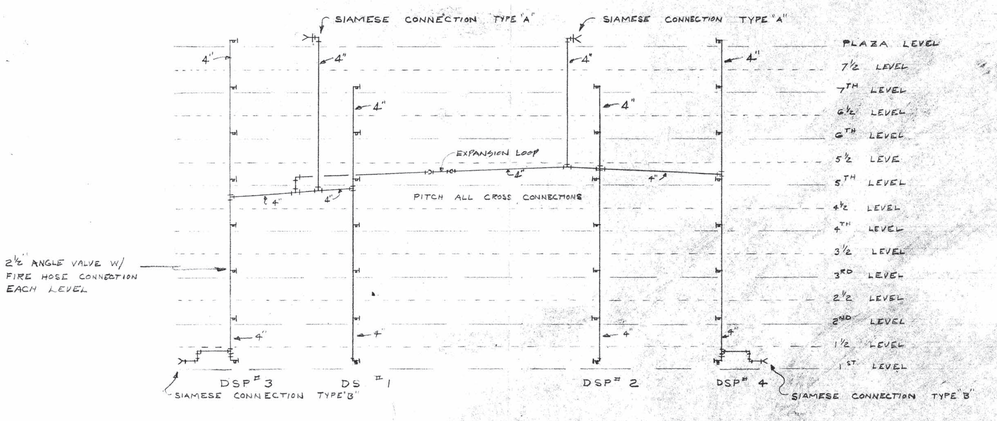
ME 7



1/A9 NORTH ELEVATION
1/16" = 1'-0"



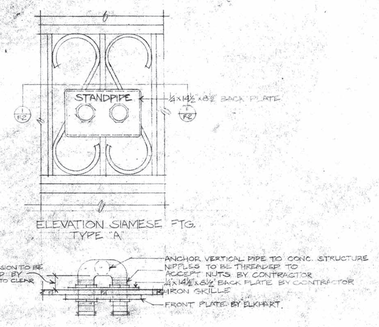
2/A9 SECTION THRU NORTH PEDESTRIAN RAMP
1/16" = 1'-0"

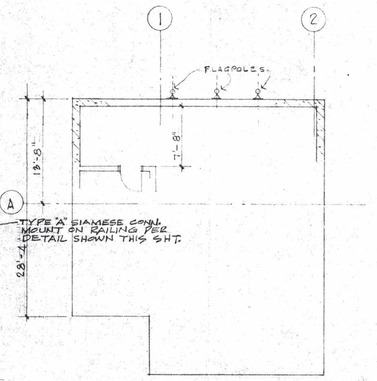


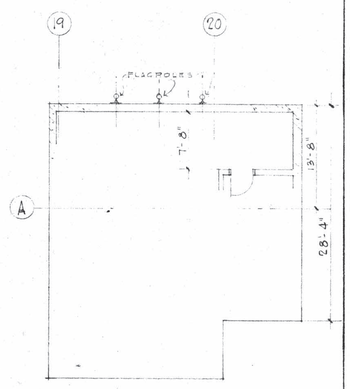
DRY STAND PIPE RISER DIAGRAM
NO SCALE

SIAMESE FTGS. SCHEDULE & NOTES:

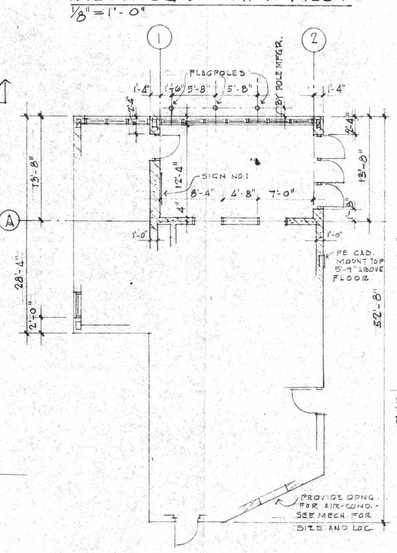
1. SIAMESE FITTING SHALL BE ELKHART NO. 166
   SIZE - 2½ x 2½ x 4"
   FINISH - POLISHED BRASS
   LETTERING TO READ - DRY STAND PIPE FOR FIRE DEPT. CONNECTION USE ONLY
2. TYPE 'A' SHALL BE BOLTED TO IRON GRILLEAGE AT PLAZA LEVEL PER DETAIL BELOW
3. TYPE 'B' SHALL BE SECURED TO CONC. WALL AT LOWER LEVEL





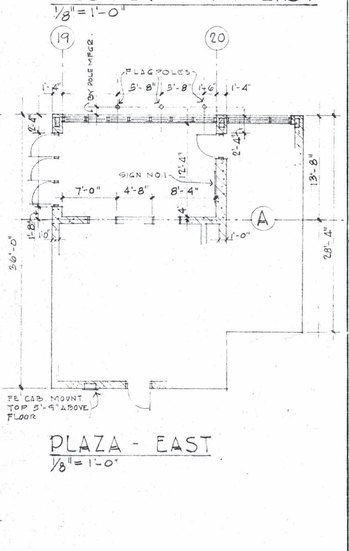


MECH EQUIP RM - WEST
1/8" = 1'-0"

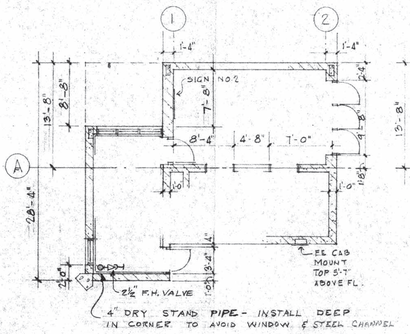


PLAZA - WEST
1/8" = 1'-0"

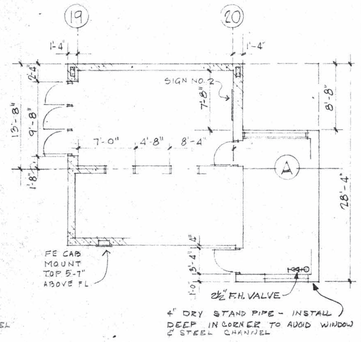
MECH EQUIP RM - EAST
1/8" = 1'-0"



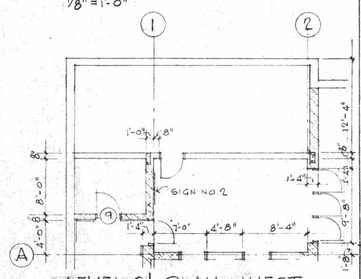
PLAZA - EAST
1/8" = 1'-0"



TYP PLAN - WEST
1/8" = 1'



TYP PLAN - EAST
1/8" = 1'-0"



LEVEL 3½ PLAN - WEST
1/8" = 1'-0"

NOTE:
INFORMATION SHOWN ON 1/A9 ABOVE 1/8 INCH SCALE PARTIAL FLOOR PLANS SUPERCEDES AND REPLACES PORTIONS OF THE INFORMATION SHOWN ON 1/8 INCH SCALE PLANS ON SHEET A7. ADDITIONAL INFORMATION SHOWN ON SHT. PLANS SHALL BE UNCHANGED.

ROBERT L. AMES
CONVENTION CENTER ARCHITECTS
Planners

SAINT PAUL CITY ARCHITECT
ASSOCIATE ARCHITECTS
Engineers
SAINT PAUL CONVENTION CENTER ARCHITECTS & ENGINEERS, INC.
Architects
HARSTICK, LUNDGREN AND ASSOCIATES, INC.
GROVER DIAMOND ASSOCIATES, INC.
CAVIN AND PAGE
THE CERNY ASSOCIATES, INC.

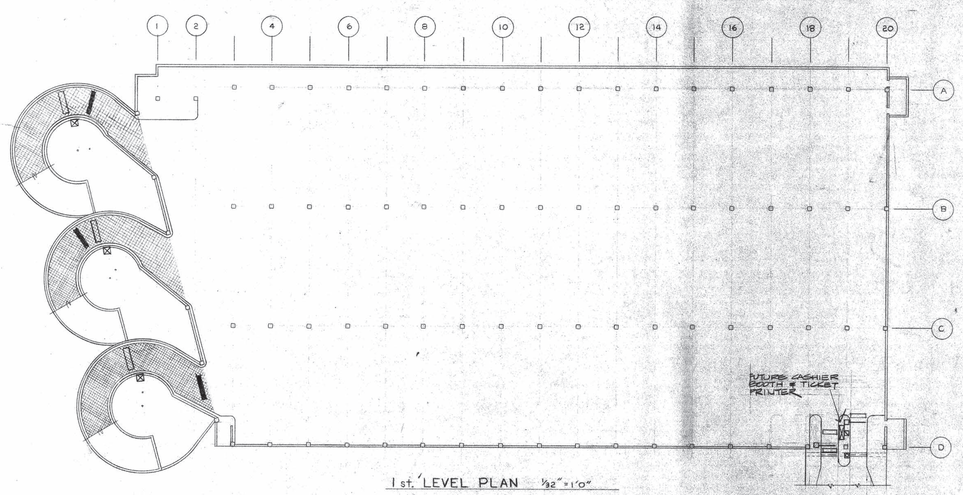
THE HAMM BLDG.
SAINT PAUL, MINNESOTA

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 the laws of the State of Minnesota.
Date May 4 1971 Reg. No. 6447

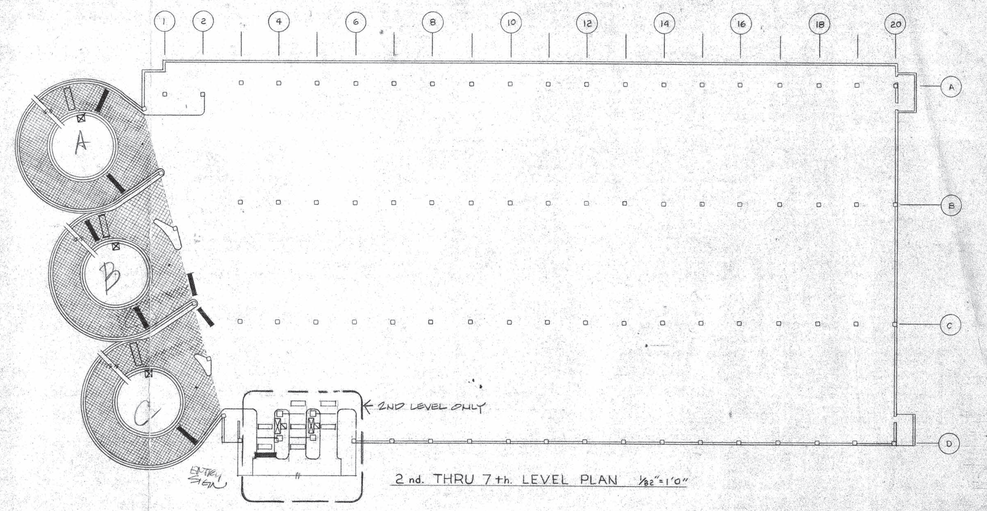
SAINT PAUL CIVIC CENTER
EAGLE STREET PARKING RAMP
DRY PIPE FIRE PROTECTION SYSTEM

SEE BY-GRY ARCHITECTS OFFICE DWG. [illegible] 19[illegible]

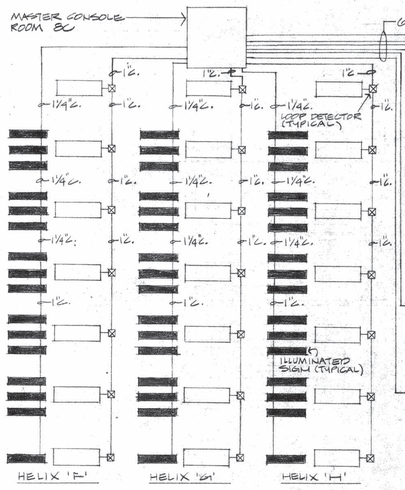
No. 1 REVISION DATE

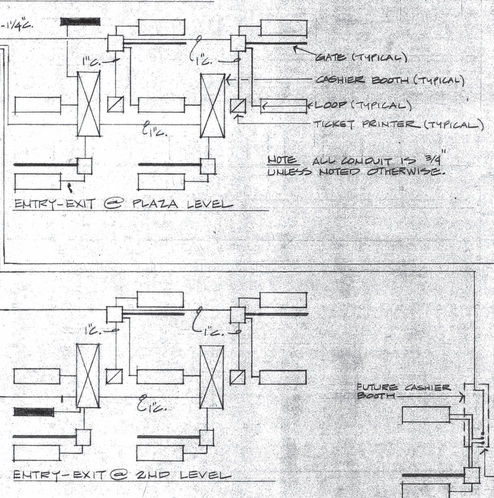


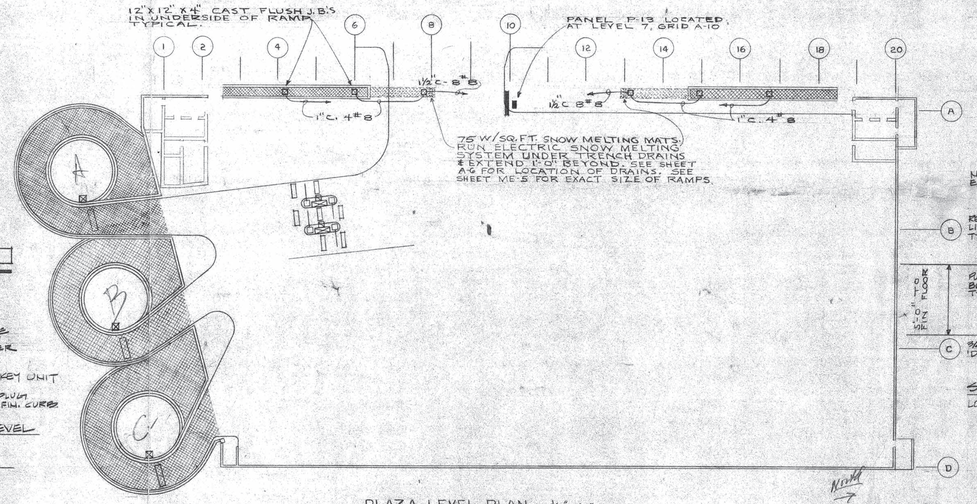
1 st. LEVEL PLAN 1/32"=1'0"

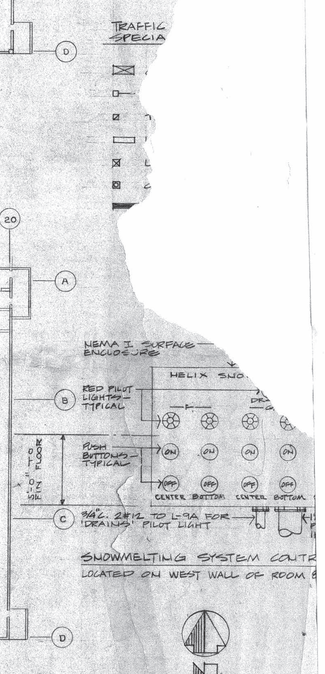


2 nd. THRU 7 th. LEVEL PLAN 1/32"=1'0"





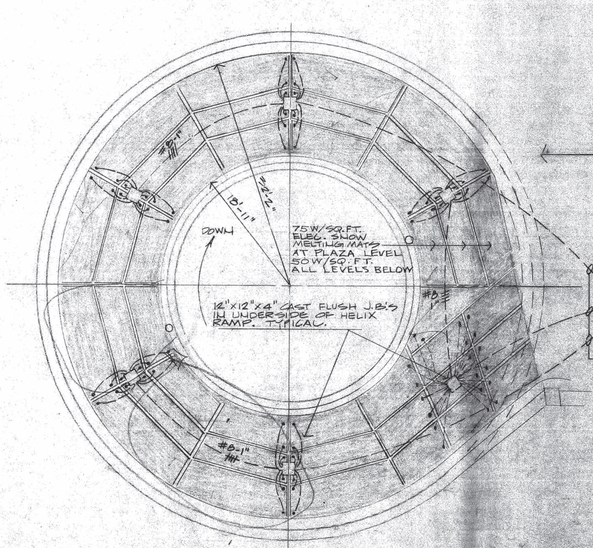




TRAFFIC SPECIA

TRAFFIC CONTROL & MONITORING EQUIPMENT RISER DIAGRAM NO SCALE

- ALL EQUIPMENT, RACEWAYS, WIRE & CONNECTIONS SHALL BE INCLUDED TO PROVIDE SYSTEM OPERATION PER SPECIFICATIONS SECTION 1690.
- RISER DIAGRAM IS ONLY A GUIDE. VERIFY EXACT REQUIREMENTS WITH SUCCESSFUL EQUIPMENT SUPPLIER.
- PROVIDE 120 VAC CCTV FOR CONTROL EQUIPMENT FROM SPARE BREAKERS IN PANELS L-2, L-3, L-7 & L-9 AS REQUIRED.



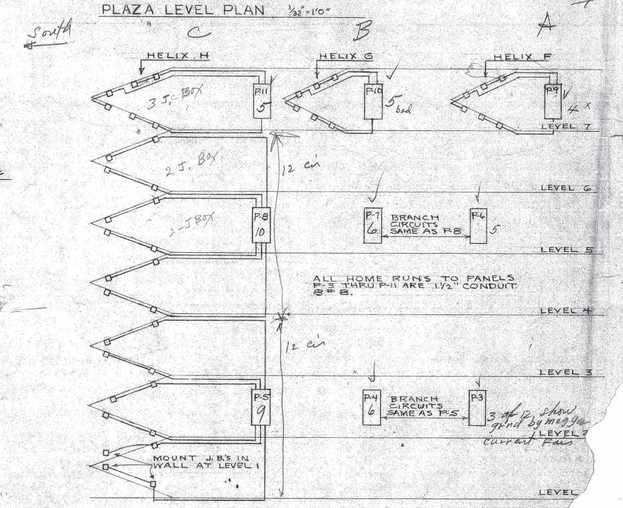
HELIX ELECTRIC SNOW MELTING PLAN NO SCALE

TYPICAL FOR HELICES F, G & H.

MAT SHAPES ARE APPROXIMATE. REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT SHAPES REQUIRED FOR EACH HELIX.

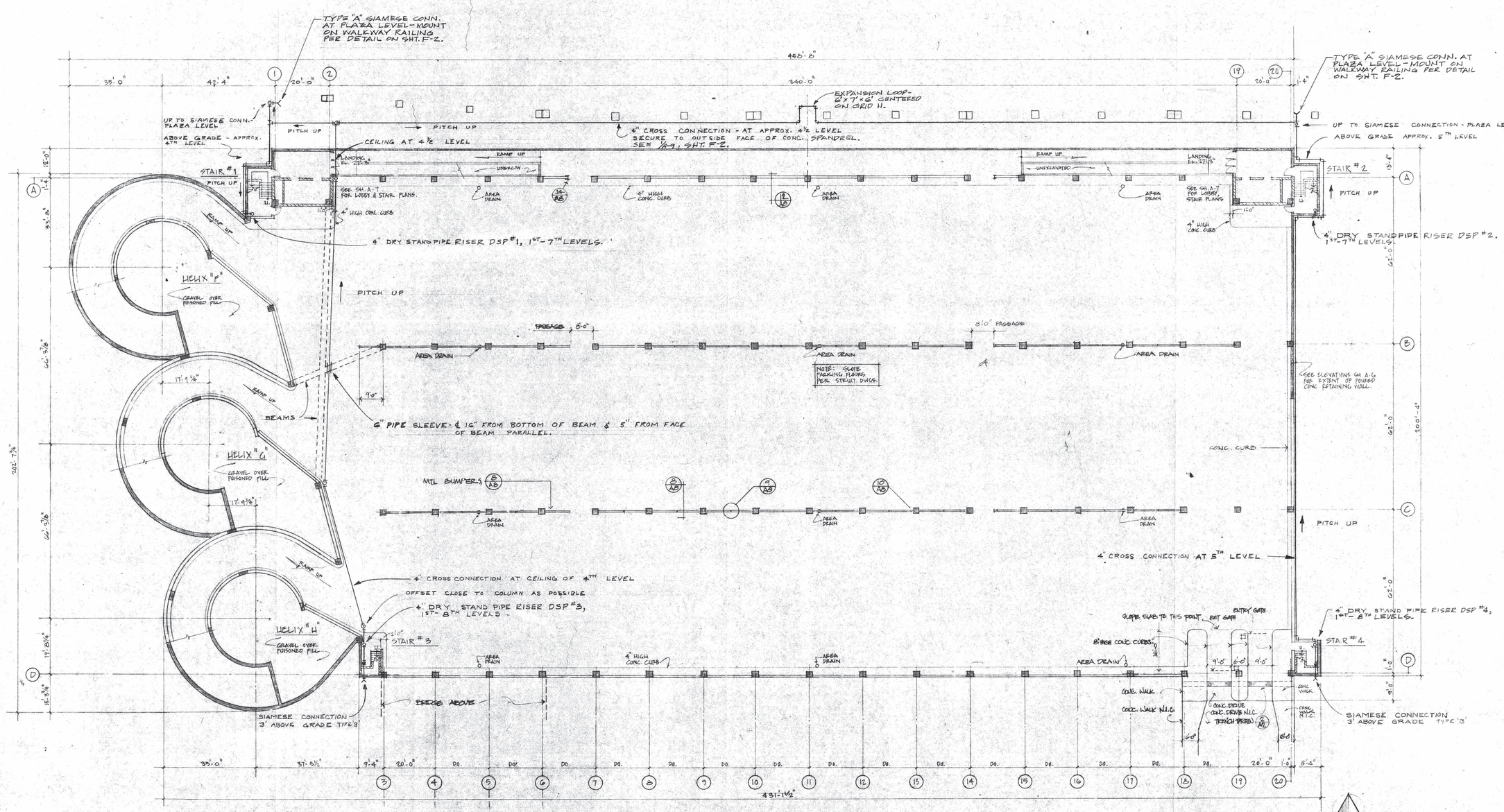
HELIX F: P-3, P-6, P-9
HELIX G: P-4, P-7, P-10
HELIX H: P-5, P-8, P-11

1½" C. 8#8 TO PANEL, PLAZA LEVEL ONLY



NOTE:
ALL CROSSHATCHED AR
ON THIS SHEET ARE E
HEATED. REFER TO AR
DRAWINGS FOR EXACT
OF EACH AREA.

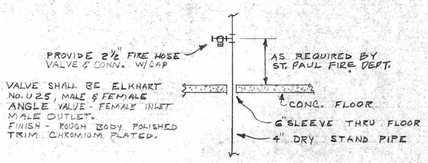
SNOW MELTING RISER DIAGRA



PARKING RAMP DRY STANDPIPE SYSTEM

ALL LEVELS SHOWN

SCALE: 1/16" = 1'-0"



STAND PIPE DETAIL

NO SCALE

ROBERT L. AMES
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EAGLE STREET PARKING RAMP

DRY PIPE FIRE PROTECTION SYSTEM

F-1