

RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS JOHNSON PARKWAY STORM SEWER DIVERSION

CONSTRUCTION PLAN FOR: STORM SEWER PIPE
DIVERSION WORK, FABRICATION & INSTALLATION
OF INVERT ORIFICE PLATE AND CONCRETE
PLACEMENT.

RAMSEY CO. PROJECT NO. 47384

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LOCATION SITE, PROFILES, DETAILS & CONSTRUCTION NOTES

THIS PLAN CONTAINS 2 SHEETS

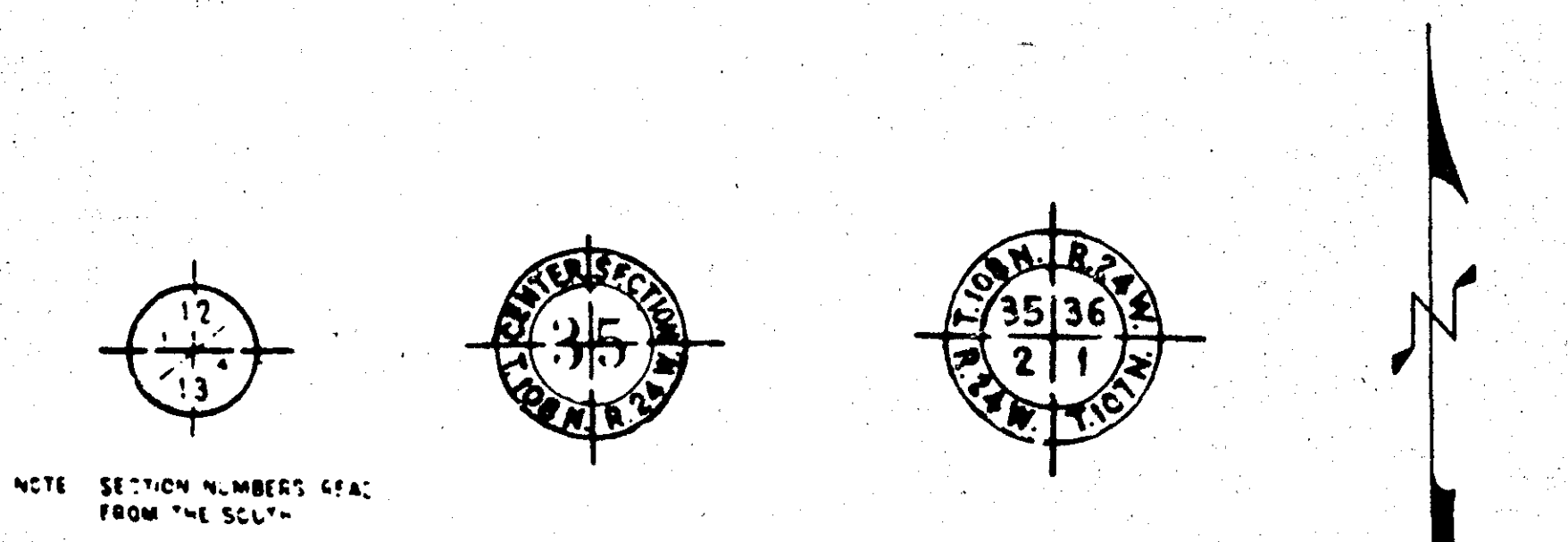


PLANS SYMBOLS

- | | |
|---|---|
| <p>STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT OF WAY LINE
PRESENT RIGHT OF WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OF CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT OF WAY LINE
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DRAIN INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SLOPE EASEMENT (CONST. LIMITS)</p> | <p>SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F FRAME C CONCRETE
S STONE T TILE
B BRICK ST STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY</p> |
|---|---|

UTILITIES SYMBOLS

- | | |
|--|---|
| <p>POWER POLE LINE
TELEPHONE OR TELEGRAPH
POLE LINE
JOINT TELEPHONE AND POWER
OR POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PNEUMATIC TELEPHONE CABLE
TERMINAL
GAS MAIN
WATER MAIN</p> | <p>CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE MAINHOLE
ELECTRIC MAINHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRIC CABLE
AERIAL TELEPHONE CABLE
SEWER (SANITARY OR STORM)
SEWER MAINHOLE</p> |
|--|---|



PIT DATA

PIT NO. _____ Located in _____
Dead Haul _____

PIT NO. _____ Located in _____
Dead Haul _____

PROJECT LOCATION SITE

DESIGN SQUAD _____ DATE _____

DRAWN BY _____ DATE _____

CHECKED BY _____ DATE _____

DATE 11/27/88 REG. NO. 16159 ENGR. James E. Jones

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

RECOMMENDED FOR APPROVAL _____ DATE _____

RECOMMENDED FOR APPROVAL _____ DATE _____

RECOMMENDED FOR APPROVAL _____ DATE _____

RECOMMENDED FOR APPROVAL _____ DATE _____

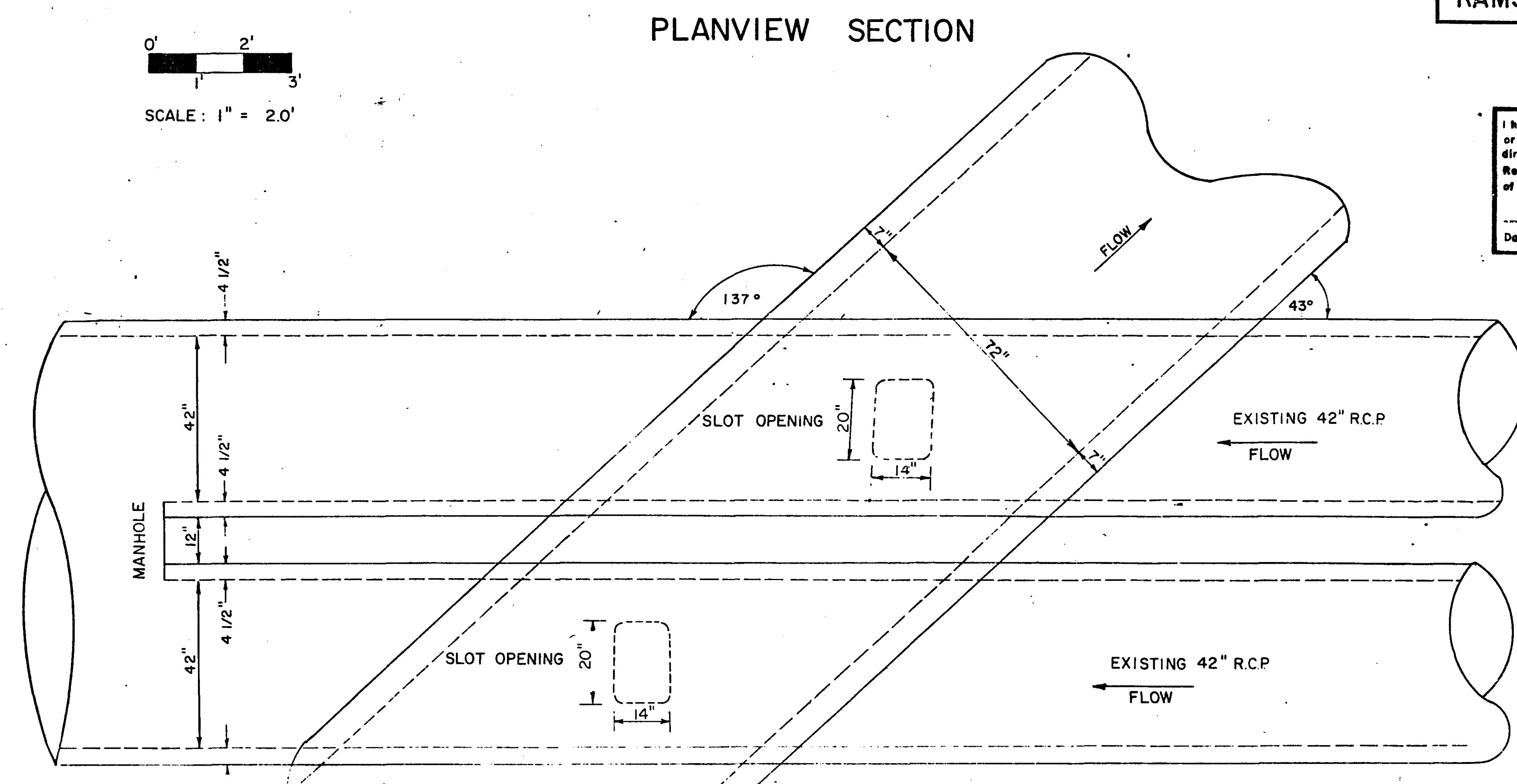
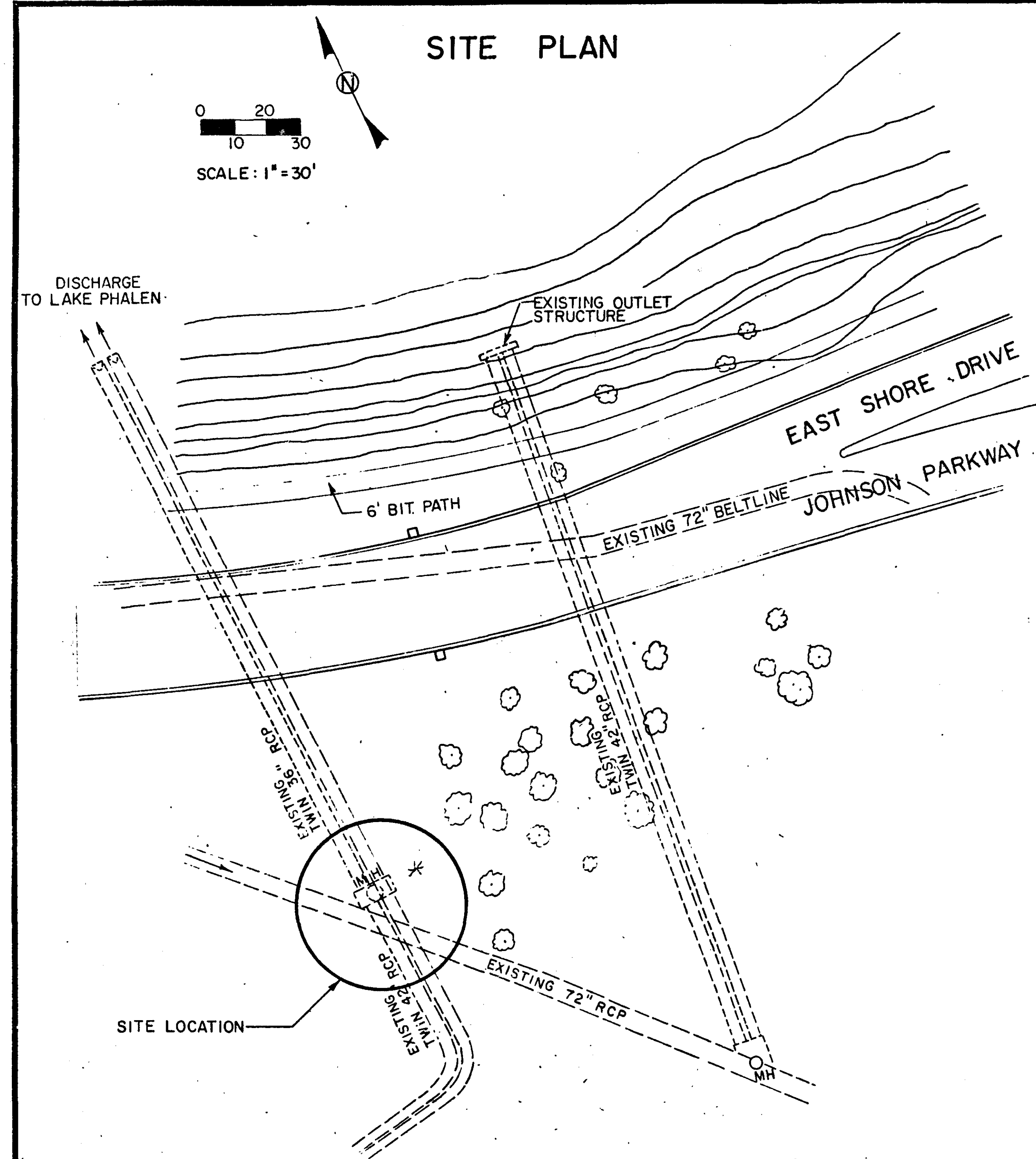
RECOMMENDED FOR APPROVAL _____ DATE _____

RECOMMENDED FOR APPROVAL _____ DATE _____

APPROVED _____ DATE _____

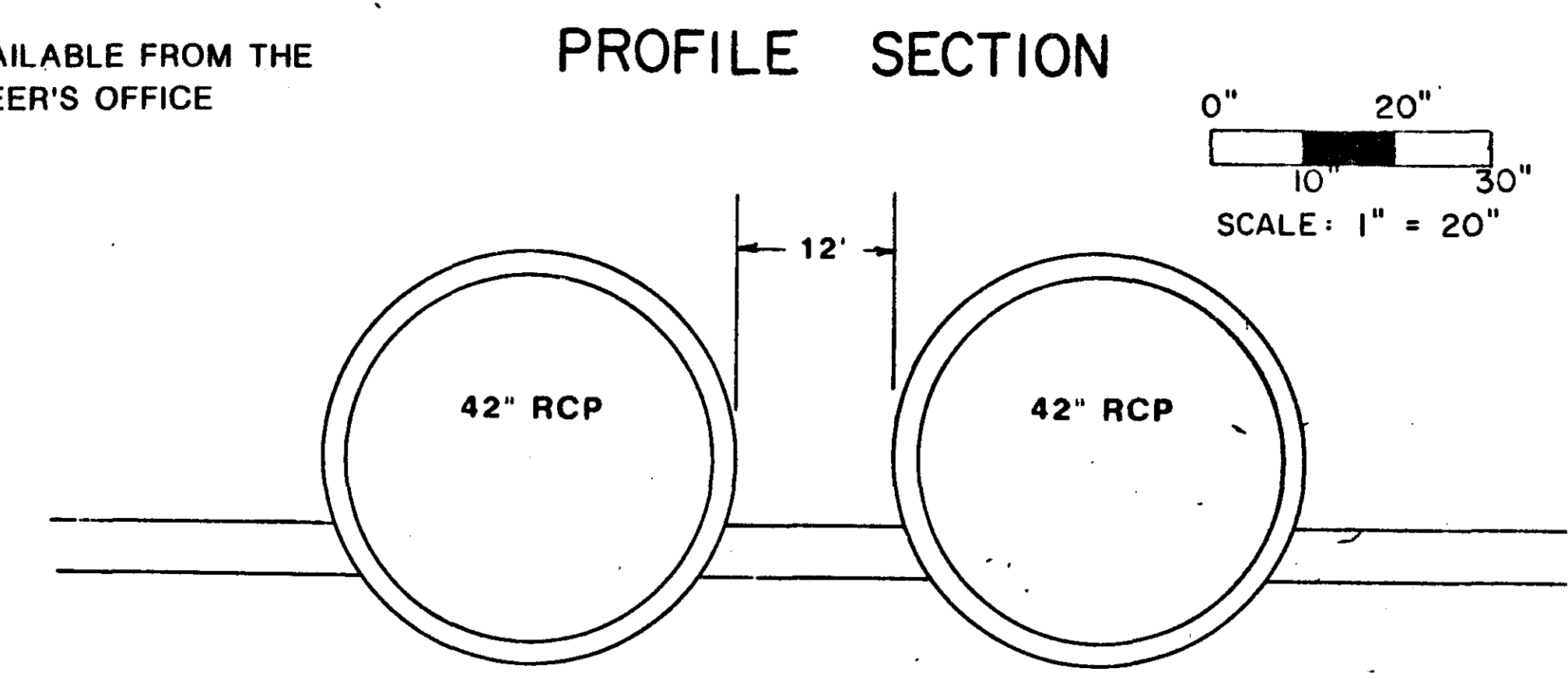
PLAN REVISIONS		
DATE	SHEET NO.	BY

THE 1983 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

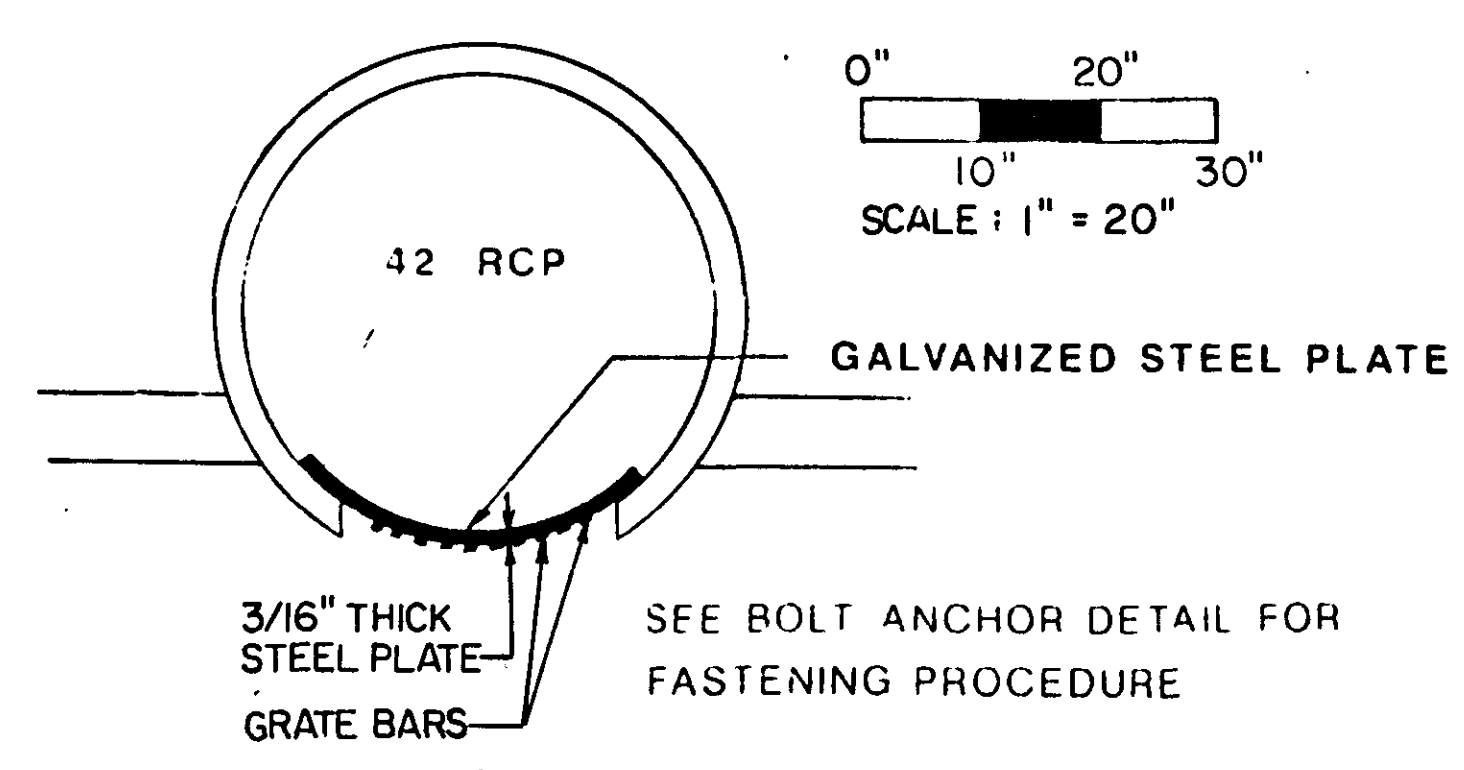


I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

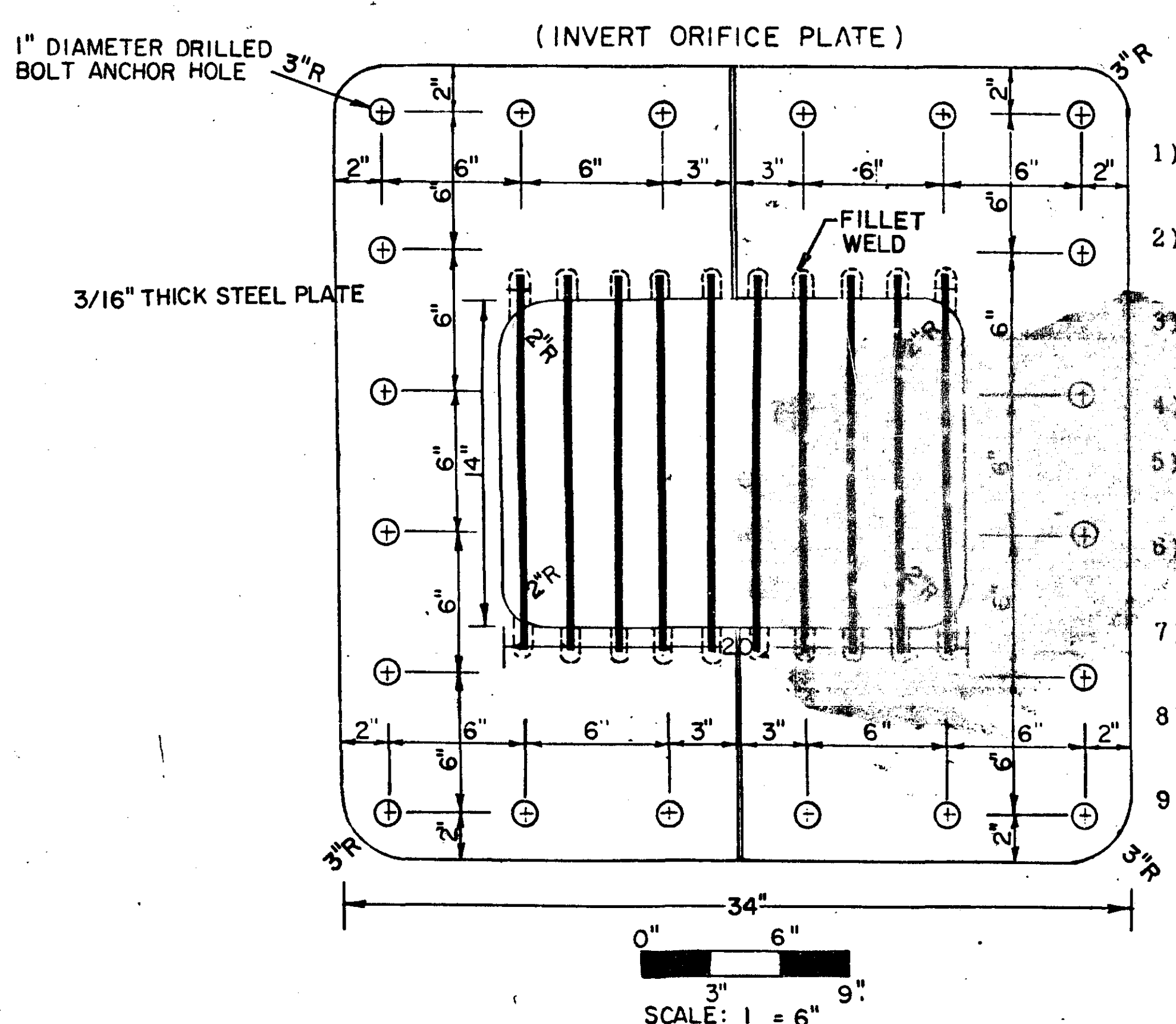
James E. Tolson
Date: 1/27/08 Reg. No. 16152



JOINT CONSTRUCTION DETAIL



GALVANIZED STEEL PLATE DETAIL



STEEL PLATE NOTES

- 1) THE STEEL PLATE SHALL BE FURNISHED IN TWO IDENTICAL HALVES FOR EACH 42" RCP.
- 2) SLOT CUTOUTS AND ANCHOR HOLES IN STEEL PLATES SHALL BE SMOOTH AND FREE FROM IMPERFECTIONS AND BURRS.
- 3) THE STEEL PLATE, BOLT AND WASHER SHALL CONFORM TO MNDOT STANDARD SPECIFICATION 3306.
- 4) THE PLATES SHALL BE 3/16" THICK.
- 5) THE GRATE BARS SHALL BE A36 STEEL 1/4" X 1" X 16", AND SPACED 2" ON CENTER AND 1" FROM THE EDGES.
- 6) THE PLATE SHALL BE CURVED TO MATCH THE INSIDE RADIUS OF A 42" RCP.
- 7) THE BARS SHALL BE WELDED TO THE CONVEX SIDE OF THE PLATE WITH A CONTINUOUS 1/4" FILLET WELD.
- 8) ALL FABRICATION REQUIREMENTS SHALL BE MET PRIOR TO HOT DIP GALVANIZATION.
- 9) THE PLATES SHALL BE GALVANIZED IN ACCORDANCE WITH MNDOT STANDARD SPECIFICATION 3394.

CONSTRUCTION NOTES

- 1) ANY IRREGULARITIES, CRACKS, SPALLS, AND OR OTHER SURFACE DEFECTS SHALL BE CLEANED AND FILLED WITH MNDOT CONCRETE MIX 3U37 AS DIRECTED BY THE ENGINEER. PRIOR TO MATERIAL PLACEMENT, THE AREA TO BE PROTECTED SHALL BE TREATED WITH A "NEET" CEMENT OR OTHER CONCRETE ADHESIVE.
- 2) IMMEDIATELY PRIOR TO SETTING THE METAL PLATE, THE LOWER SURFACE SHALL BE ENTIRELY COATED WITH 1/16" TO 1/8" LAYER OF MASTIC MATERIAL.
- 3) THE CONTRACTOR SHALL SAFEGUARD ALL PARK APPURTENANCES IN AND NEAR THE WORK SITE. ANY DAMAGE TO TURF, VEGETATION, OR MANMADE FACILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER WITH NO ADDITIONAL COMPENSATION.
- 4) THE CONTRACTOR SHALL OBTAIN A ROADWAY USE PERMIT THROUGH THE ST. PAUL PARKS DEPARTMENT PRIOR TO MOVEMENT OF EQUIPMENT.