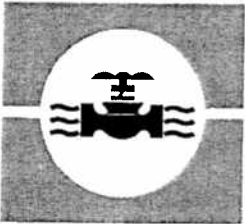


VILLAGE OF BEAVER, ALASKA

WATER SYSTEM

WATER STORAGE TANK

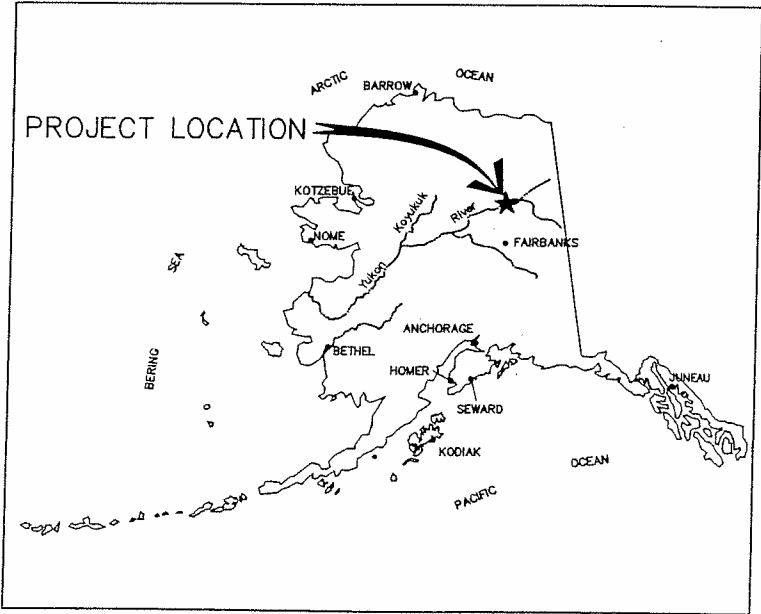
MARCH 2001



IN COOPERATION WITH THE STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
VILLAGE SAFE WATER PROGRAM U.S.
DEPARTMENT OF AGRICULTURE, RURAL ECONOMIC
AND COMMUNITY DEVELOPMENT

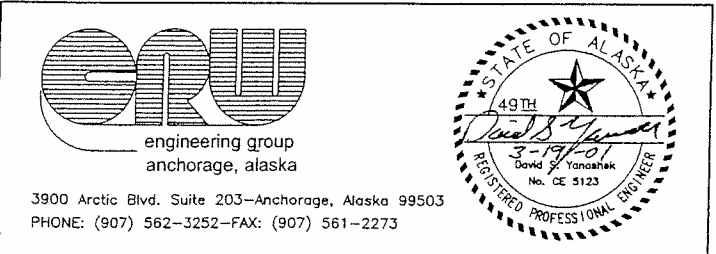
SHEET INDEX

NO.	TITLE
GENERAL	
G1	COVER SHEET AND INDEX
CIVIL	
C1	WATER STORAGE TANK SITE PLAN
T1	WATER STORAGE TANK PLAN, ELEVATION, & DETAILS
T2	WATER STORAGE TANK ROOFING PLAN & DETAILS
T3	WATER STORAGE TANK MISCELLANEOUS DETAILS



LOCATION MAP

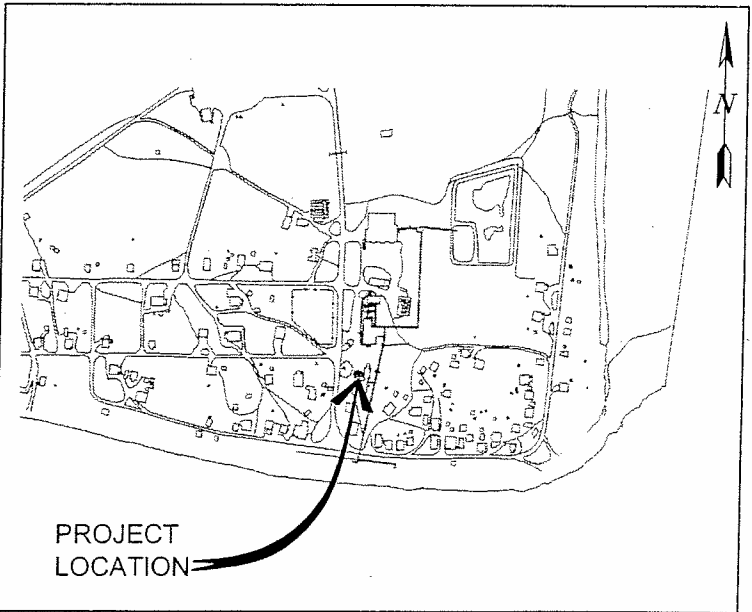
PROJECT NUMBER (CONSULTANT) 9966 (VSW) 16306
VSW PROJECT ENGINEER ROGER BURLEIGH
CONSTRUCTION FOREMAN
FINAL DESIGN (DATE)
ADEC APPROVAL (DATE)
CONSTRUCTION PERIOD (FROM) (To)
AS-BUILTS (DATE)



CONSULTANT

STATUS:
FINAL
DATE:
MARCH 2001

PROJECT STATUS



VICINITY MAP

LOT 1
BLOCK NINE

SECOND STREET
(30' ROW)

LOT 2
BLOCK TEN

"C" STREET
(50' ROW)

"C" STREET
(50' ROW)

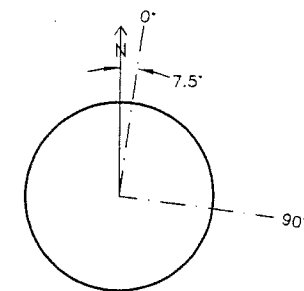
COUNCIL BUILDING

LOT 8
BLOCK SEVEN

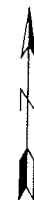
SECOND AVENUE
(40' ROW)

$$L \ O \ T \mid 1 \ 0$$

B L O C K / S I X



TANK ORIENTATION



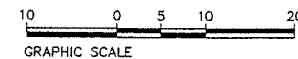
GENERAL NOTE:

RELOCATE WIRE BETWEEN SATELLITE DISH AND
WASHETERIA AS NECESSARY TO AVOID CONFLICT
WITH WATER TANK.

PIPES SHOWN BETWEEN POINTS
LOCATED ARE SURFACE
EVIDENT. CONTINUATION OF
PIPE ALIGNMENTS AND
FUNCTION OF PIPES ARE PER
CONVERSATION WITH LOCAL
POWER PLANT MAINTENANCE
MAN.

SURVEY NOTES:

ELEVATIONS ARE BASED ON "TBM A", A SPIKE IN THE NORTH SIDE OF THE POWER POLE AT THE SOUTH SIDE OF THE INTERSECTION OF FIRST AVENUE AND "C" STREET, SET APRIL 1999, ARBITRARY ELEVATION 100.00 FEET.

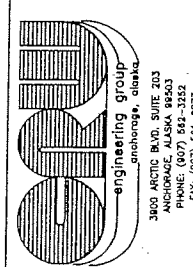
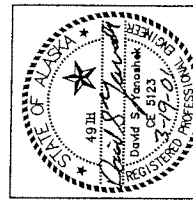
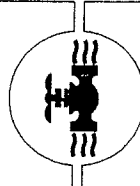


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IS ACCURATE TO THE BEST OF
MY KNOWLEDGE.

NAME _____

VILLAGE SAFE WATER



VILLAGE OF BEAVER

WATER SYSTEM

WATER STORAGE TANK
SITE PLAN

REVISION	BY	DATE
----------	----	------

Project

MAR. 2001

Designed BCM

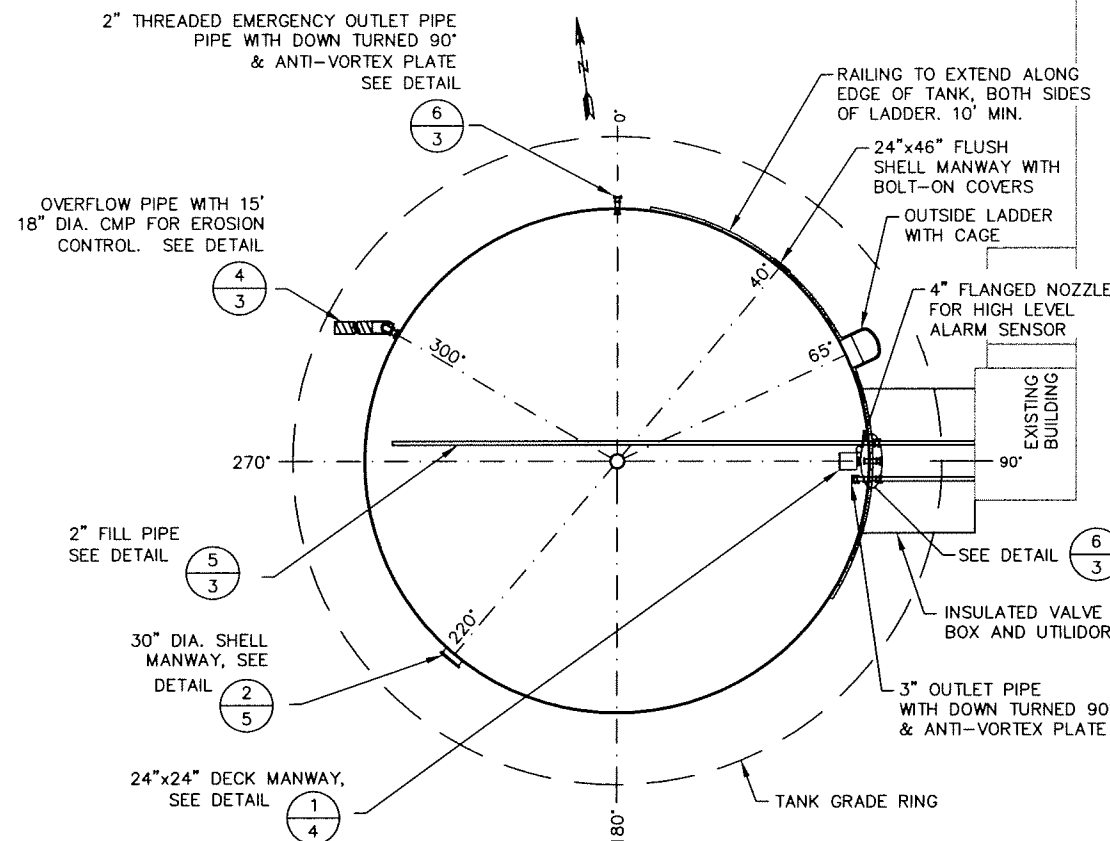
Drawn BCM

Approved _____ DY _____

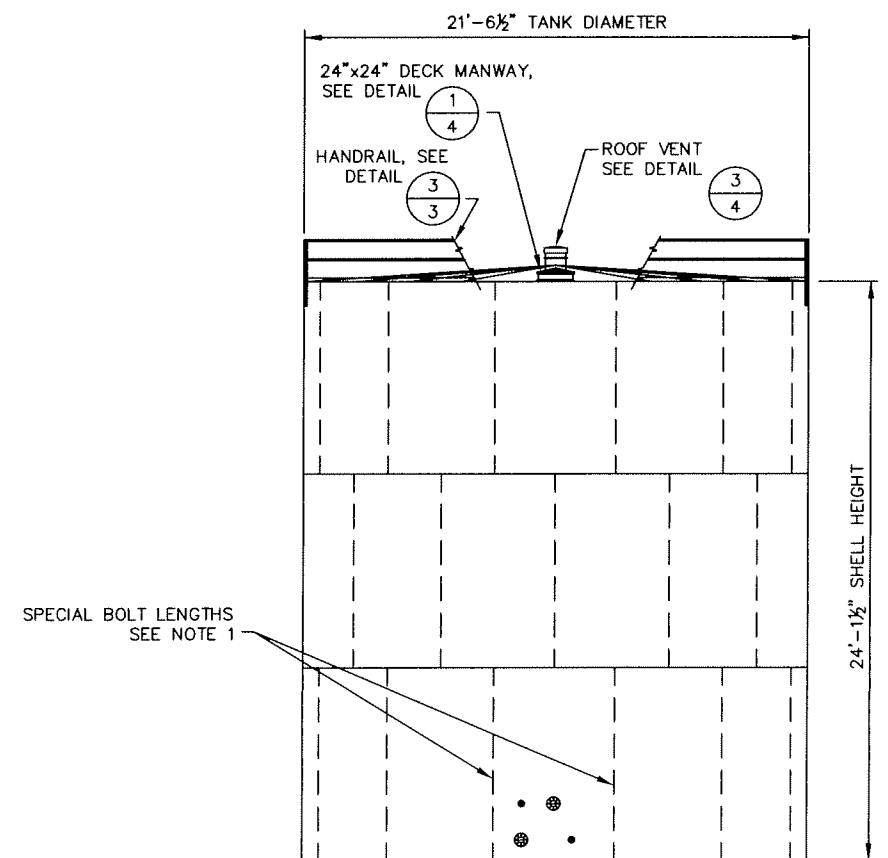
Sheet No.

C1

SHEET 2 OF 5



1
3 **TANK PLAN**
NOT TO SCALE



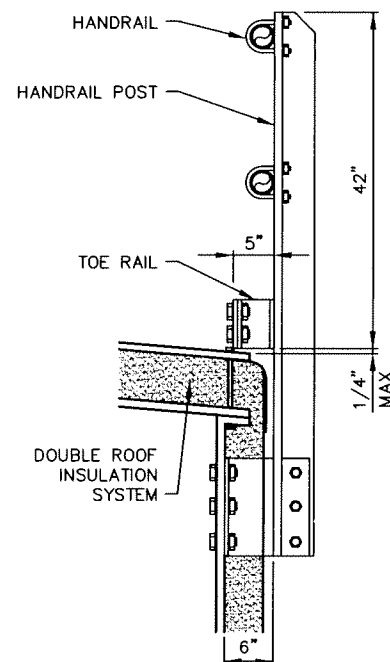
2
3 **TANK ELEVATION (90° LOCATION)**
NOT TO SCALE

TANK NOTES

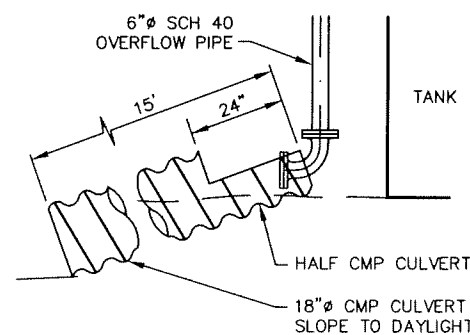
1. THE WATER STORAGE TANK SHALL BE A BOLTED STEEL TANK WITH TANK AND ACCESSORIES AS MANUFACTURED BY COLUMBIA STEEL TANK COMPANY, OR APPROVED EQUAL.
2. 2" LONG, 1/2" DIA. POLYCAPPED BOLTS SHALL BE PROVIDED EVERY 8" ALONG EACH CENTER VERTICAL TANK SEAM ADJACENT TO THE PIPING CONNECTIONS AS LABELED "SPECIAL BOLT LENGTHS" ON THE TANK ELEVATION.
3. THE NECK AND COVER TO THE DECK MANWAY SHALL BE FABRICATED TO ALLOW THE UPPER ROOF DECKING TO BE PLACED OVER IT WITH ADEQUATE CLEARANCE.
4. EACH RADIAL ROOF SEAM SHALL HAVE A BOLT EXTENSION ASSEMBLY AT EACH ROOF PLATE MID-POINT. SEE DETAIL 4/4.
5. ROOF BOLTS ON RADIAL SEAMS SHALL BE SPACED AT 4" OC.
6. COVER 24"x46" SHELL MANWAY WITH INSULATION.
7. THE INTERIOR AND EXTERIOR OF THE WATER STORAGE TANK SHALL BE COATED WITH A COATING SYSTEM NSF APPROVED FOR POTABLE WATER STORAGE.

TANK DESIGN CRITERIA

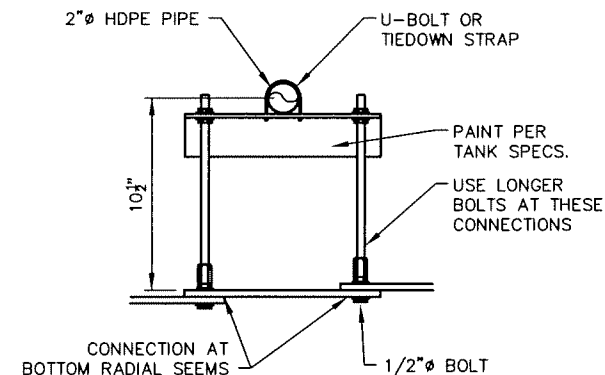
AWWA (D103) SEISMIC ZONE — 3	CAPACITY (GALLONS) — 66,000
ROOF SNOW LOAD (PSF) — 66	INLET FLOW (GPM) — 50
WIND VELOCITY (MPH) — 70	OUTLET FLOW (GPM) — 500



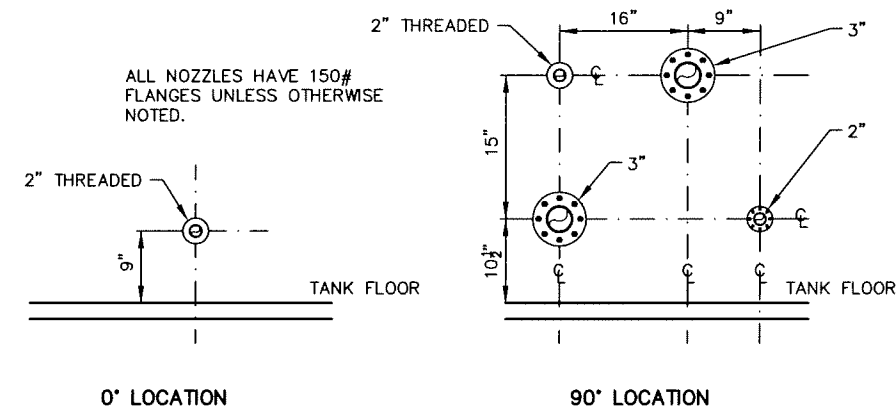
3
3 **PERIMETER HANDRAIL DETAIL**
NOT TO SCALE



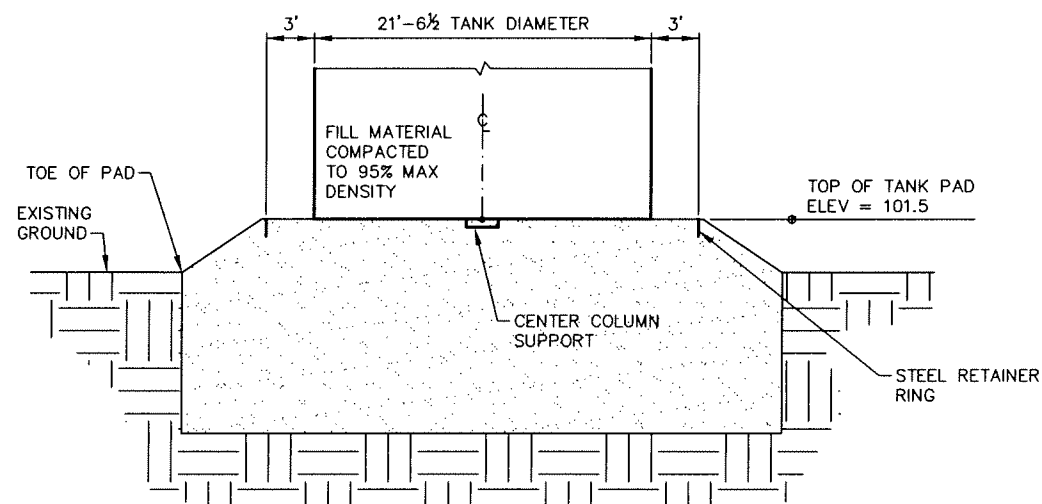
4
3 **CMP EROSION PROTECTION DETAIL**
NOT TO SCALE



5
3 **TANK FILL SUPPORTS (IN TANK)**
NOT TO SCALE



6
3 **PIPE CONNECTION DETAIL**
NOT TO SCALE

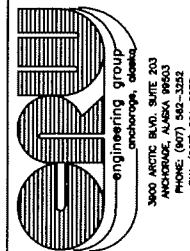


7
3 **TANK FOUNDATION PAD DETAIL**
NOT TO SCALE

TANK DISENFECTION PROCEDURE

THE WATER STORAGE TANK SHALL BE DISENFECTED IN ACCORDANCE WITH AWWA C652-92. DISPOSAL OF CHLORINATED WATER SHALL BE PERFORMED IN ACCORDANCE WITH 'APPENDIX B-DECHLORINATION CHEMICALS AND DOSAGES', PROVIDED AS REFERENCE TO AWWA C652-92.

VILLAGE SAFE WATER

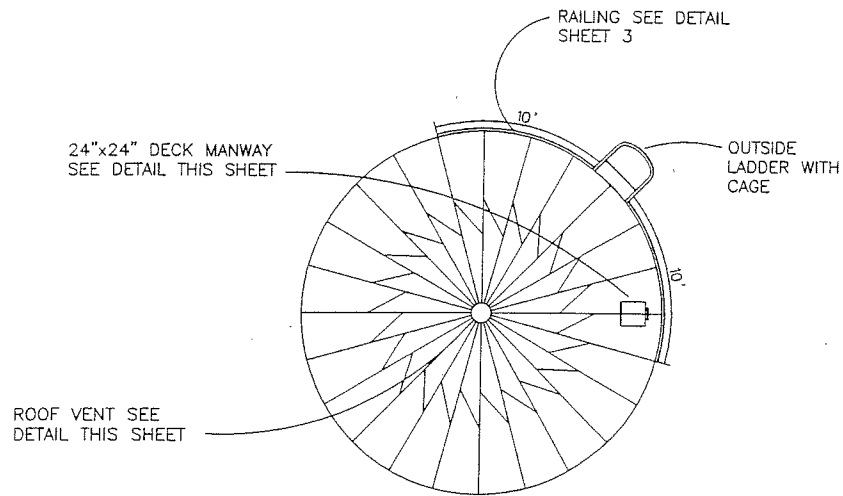


VILLAGE OF BEAVER
WATER SYSTEM
WATER STORAGE TANK
PLAN, ELEVATION, & DETAILS

REVISION	BY	DATE

Project No.	9966
Date	MAR. 2001
Designed	BCM
Drawn	AV
Approved	DY

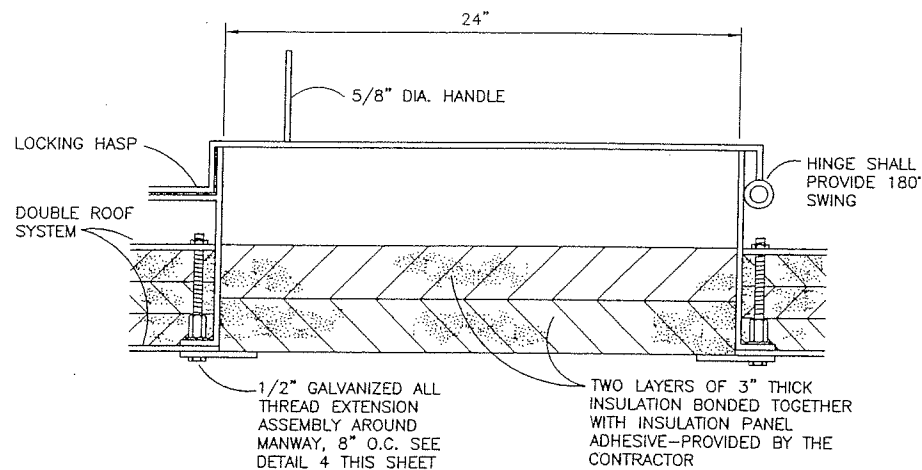
Sheet No. **T1**
SHEET **3** OF **15**



NOTE: ROOF BOLTS ON RADIAL SEAMS SHALL BE SPACED AT 4" O.C.

TANK ROOFING PLAN

NOT TO SCALE

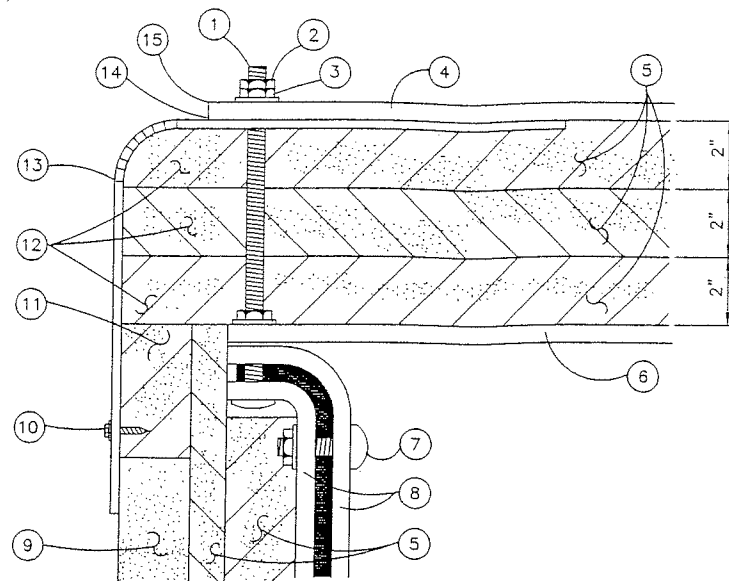


NOTES:

1. THE NECK AND COVER TO THE DECK MANWAY SHALL BE FABRICATED TO ALLOW THE UPPER ROOF DECKING TO BE PLACED OVER IT WITH ADEQUATE CLEARANCE.
2. UPPER ROOF PLATE SEAM AROUND NECK SHALL BE CAULKED

1 DECK MANWAY DETAIL

NOT TO SCALE



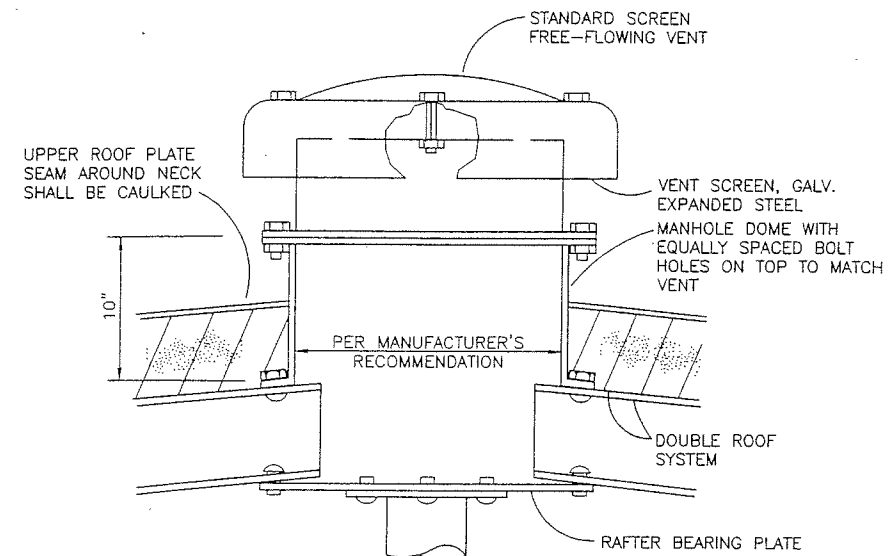
- 1 1/2"x8" HOT DIPPED GALVANIZED BOLT WITH FULL LENGTH THREADS SPACED AT 12" O.C. AROUND PERIMETER OF THE TANK
- JAM NUT
- 1/2" HOT DIPPED GALVANIZED NUTS AND WASHERS, TYPICAL
- 12 GA. HOT DIPPED GALVANIZED ROOF SECTION
- EXTRUDED POLYSTYRENE BOARDSTOCK INSULATION. STAGGER ALL JOINTS ON DECKS. PROVIDED BY THE CONTRACTOR.
- DECK SEGMENT
- POLYCAPPED RIBBED NECK BOLT AND SQUARE NUT, TYP.
- STAVES
- 2" THERMACON INSULATION-EXACT HEIGHT MAY VARY
- NO.12-14x3/4" 410 STAINLESS STEEL HEX HEAD SELF DRILLING SEALER SCREW WITH WASHER. SHALL BE SPACED AT 4" O.C. ON ALL FLASHING POINTS
- INSULATION SHALL BE FIELD CUT AND PLACED
- ROOF INSULATION SHALL EXTEND TO FLASHING
- FLASHING: 0.050" THICK ALUMINUM WITH COATING TYPE AND COLOR TO MATCH SHELL INSULATION PANELS-SUPPLIED BY INSULATION MANUFACTURER, SEE DETAIL THIS SHEET
- LIBERAL COAT OF SILICONE SEALANT SHALL BE APPLIED BETWEEN FLASHING AND ROOF SECTION, AND ALL FLASHING OVERLAPS
- FABRICATE ROOF SECTION (4) TO ALLOW INSTALLATION OF FLASHING (13), NO DOWNWARD LIP ALLOWED ON ROOF SECTION.

2 TANK PERIMETER INSULATION DETAILS

NOT TO SCALE

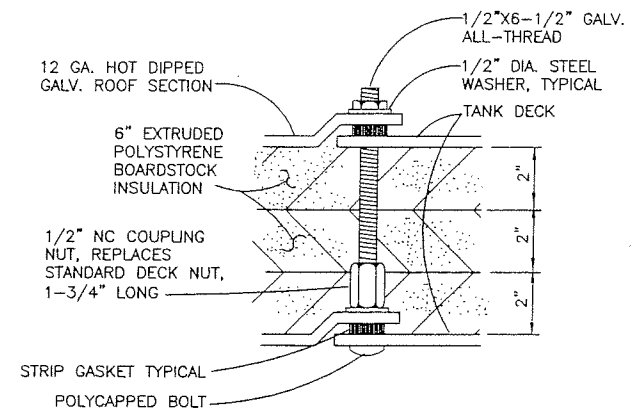
LEGEND

- INSULATION PROVIDED BY TANK ERECTION CONTRACTOR
- INSULATION SUPPLIED WITH INSULATION SHELL



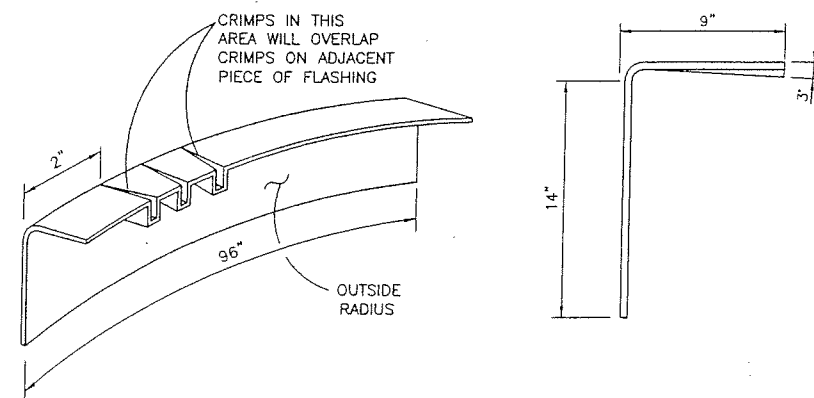
3 TANK ROOF VENT DETAIL

NOT TO SCALE



4 ROOF BOLT EXTENSION DETAIL

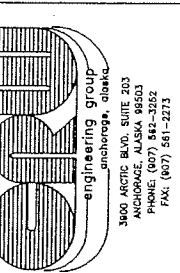
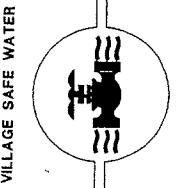
NOT TO SCALE



5 FLASHING DETAILS

NOT TO SCALE

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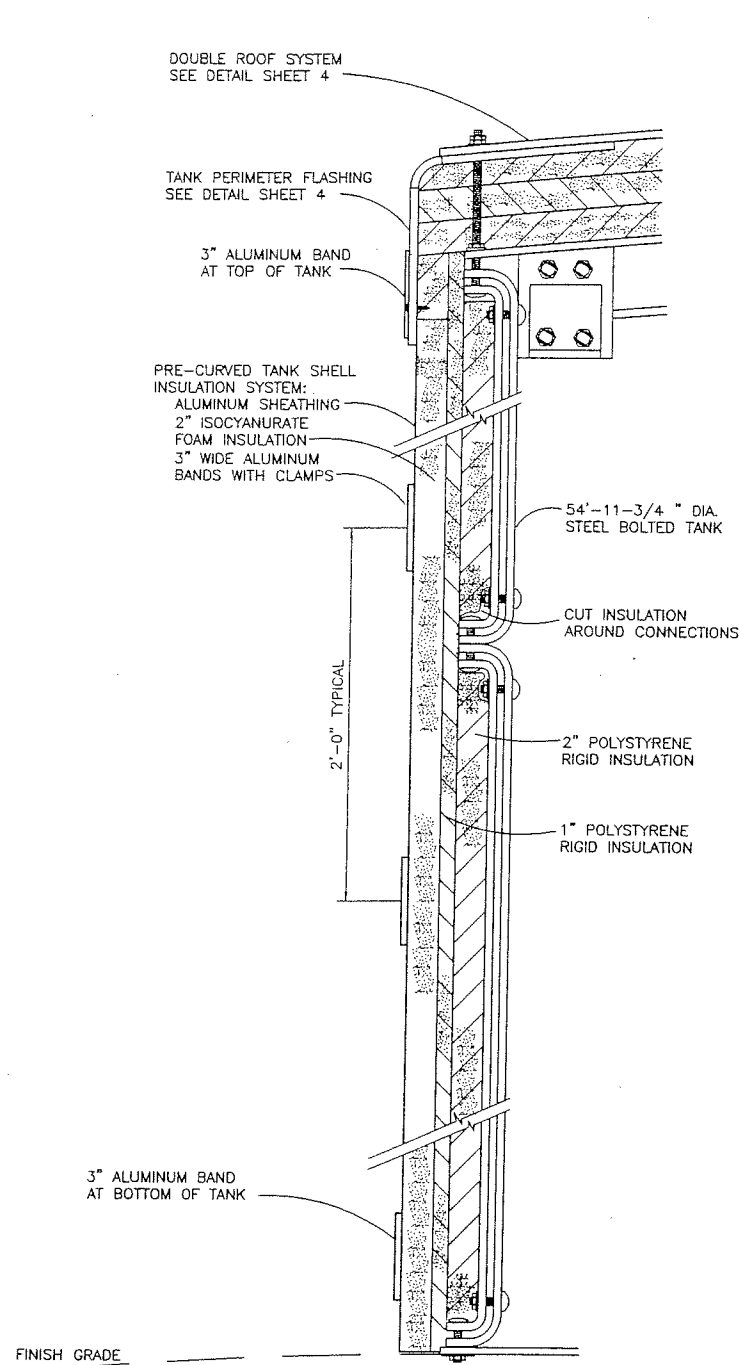


VILLAGE OF BEAVER
WATER SYSTEM
WATER STORAGE TANK
ROOFING PLAN & DETAILS

REVISION	BY	DATE

Project No.	9966
Date	MAR. 2001
Designed	BCM
Drawn	AV
Approved	DY

Sheet No.	T2
4	5

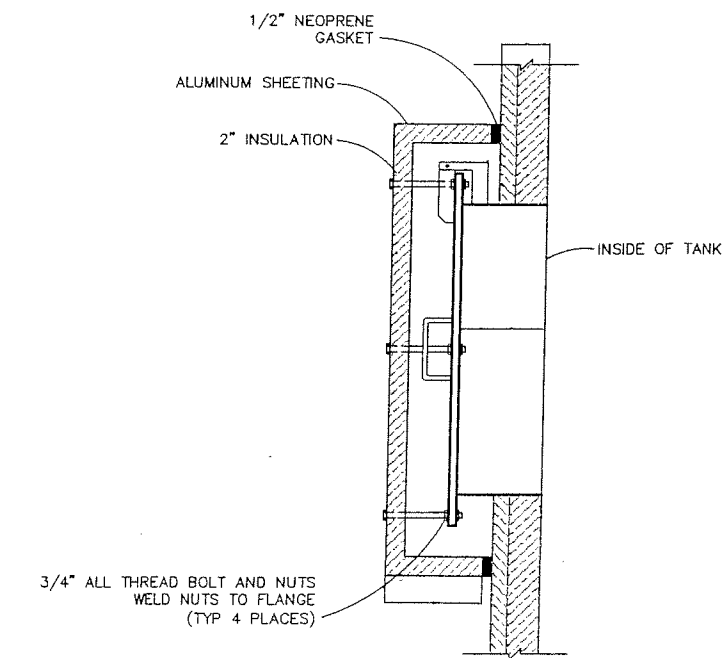
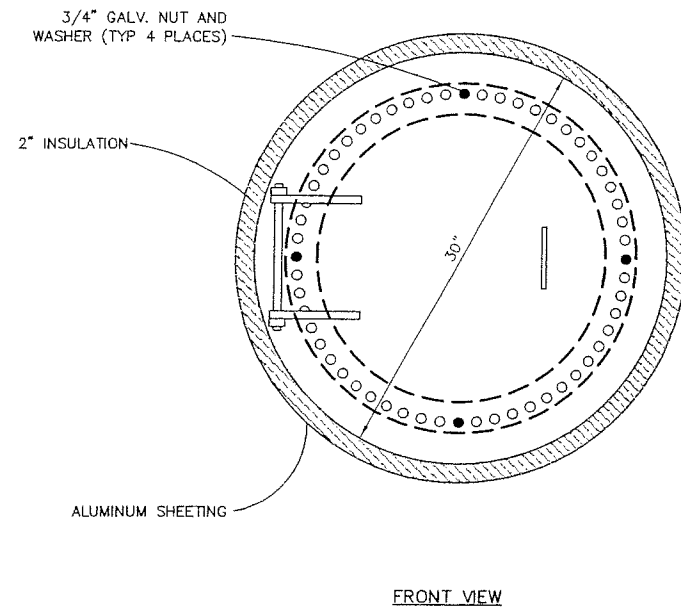
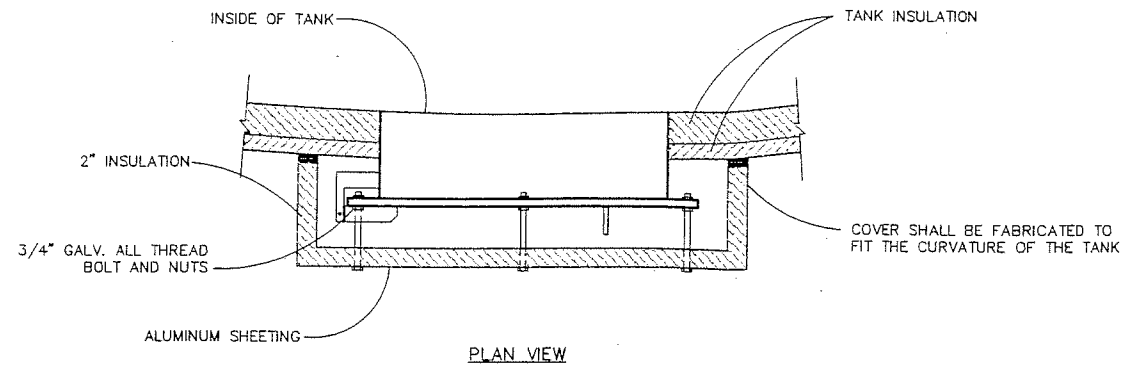


NOTE:
1. STAGGER 1" AND 2" POLYSTYRENE JOINTS.

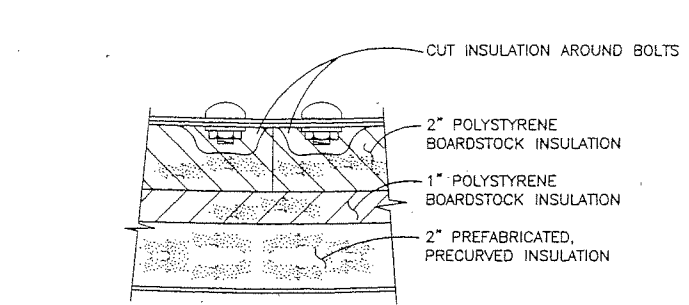
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5 **TANK INSULATION DETAIL**
NOT TO SCALE

LEGEND

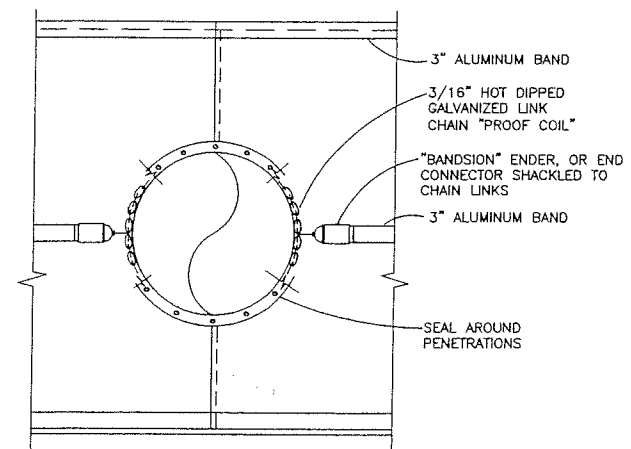
- INSULATION PROVIDED BY TANK ERECTION CONTRACTOR
- INSULATION SUPPLIED WITH INSULATION SHELL



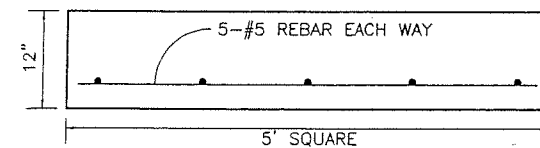
2
5 **INSULATED MANWAY COVER**
NOT TO SCALE



3
5 **WALL INSULATION DETAIL**
NOT TO SCALE

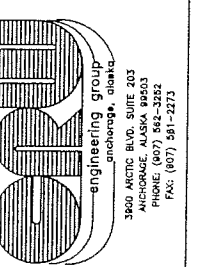
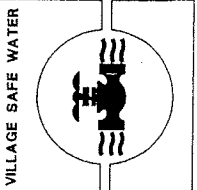


4
5 **SHELL INSULATION PENETRATION DETAIL**
NOT TO SCALE



5
5 **CENTER COLUMN SUPPORT**
NOT TO SCALE

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VILLAGE OF BEAVER
WATER SYSTEM
WATER STORAGE TANK
MISCELLANEOUS TANK DETAILS

REVISION	BY	DATE

Project No.	9966
Date	MAR. 2001
Designed	BCM
Drawn	AV
Approved	DY

Sheet No. **T3**
SHFT 5 OF 5