

ORIGINAL STEEL  
DOME COVER LOCATION

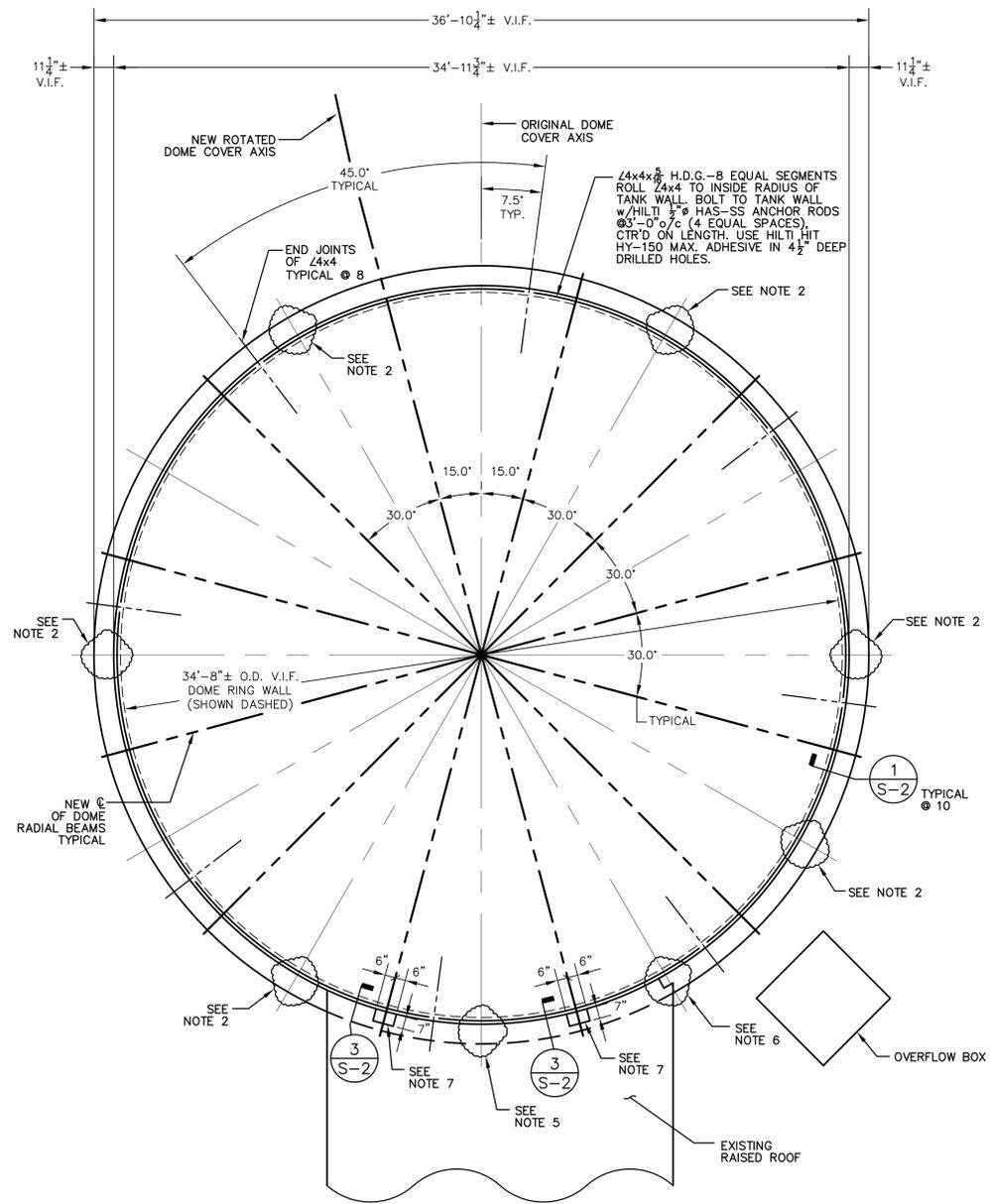
SCALE: 1/4"=1'-0"

NOTES:

- ALL EXISTING ANCHOR BOLTS PROJECTING OUT OF THE TOP OF THE CONCRETE WALLS OF THE DIGESTER TANK SHALL BE CUT OFF FLUSH WITH THE TOP OF THE WALL. COAT ALL NON-STAINLESS STEEL BOLT ENDS AND 1/2" ALL AROUND ON THE CONCRETE SURFACE WITH 2 COATS OF TNEPEC H.S. EPOXY SERIES 104, WITH 5 - 10 MILS DRY FILM THICKNESS PER COAT.
- REPAIR ALL DAMAGED WALL TOPS AT ORIGINAL ANCHORAGES WHERE CONCRETE HAS BEEN CRACKED OFF. CHIP AWAY ALL DELETERIOUS CONCRETE, CREATING A FLAT BUT ROUGH BOTTOM SURFACE AND UNDERCUT ROUGH SIDES AND BACK OF THE REPAIR AREA. LEAVE ALL ENCOUNTERED REINFORCING STEEL IN PLACE. ALL SURFACES OF THE REPAIR AREA SHALL BE SATURATED SURFACE DRY AT THE TIME OF PLACEMENT OF THE REPAIR MATERIAL. PLACE FORM AT INSIDE FACE OF TANK WALL TO CREATE SMOOTH WALL SURFACE. REPAIR CONCRETE SHALL BE SIKACRETE 211, ONE COMPONENT CEMENTITIOUS CONCRETE MIX, PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL REPAIR CONCRETE SHALL BE MOIST CURED BY KEEPING CONTINUOUSLY MOIST WITH WATER FOR A PERIOD OF NOT LESS THAN 5 DAYS.
- THE STEEL DOME COVER RING WALL SHALL HAVE ALL HORIZONTAL PLATES AT THE BOTTOM EDGE OF THE RING WALL CUT OFF IN THEIR ENTIRETY. THE BOTTOM OF THE RING WALL SHALL BE GROUND NEAR SMOOTH FOLLOWING REMOVAL OF THE HORIZONTAL PLATES. THE BOTTOM OF THE RING WALL SHALL BE A CONSTANT DIMENSION BELOW THE BOTTOM OF THE SEAT ANGLES ATTACHED TO THE SIDE OF THE WALL. THE NEW L4X4X5/16 AT THE BOTTOM OF THE RING WALL SHALL BE SET TIGHT TO THE BOTTOM OF THE RING WALL BUT SHALL NOT BE WELDED TO THE RING WALL IN ORDER TO PERMIT THERMAL MOVEMENT OF THE RING WALL AND DOME COVER.
- THE DOME COVER SHALL BE CAREFULLY LOWERED IN PLACE ONTO THE TANK WALL AND SHALL BE CENTERED AS CLOSELY AS POSSIBLE. THE EDGE DISTANCE FROM THE CENTERLINE OF THE NEW 3/4" DIAMETER BOLTS TO THE INSIDE FACE OF TANK CONCRETE WALL IS A CRITICAL DIMENSION. IT IS THE DESIGN INTENT THAT THIS INTERIOR EDGE DISTANCE SHALL BE THE SAME AT ALL SEAT ANGLES AND SHALL NOT BE LESS THAN 3 3/4". THE NEW 3/4" DIAMETER ANCHOR RODS SHALL HAVE THEIR HOLES DRILLED AFTER THE DOME COVER HAS BEEN SET INTO ITS FINAL POSITION. THE DOME COVER SHALL BE ROTATED 15° COUNTERCLOCKWISE FROM ITS ORIGINAL INSTALLED POSITION.
- THE EXISTING BLOCK OUT IN THE CONCRETE WALL AND SLAB BEARING ON THE TANK WALL SHALL BE FILLED WITH NEW SIKACRETE 211 REPAIR CONCRETE, PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL REPAIR CONCRETE SHALL BE MOIST CURED BY KEEPING CONTINUOUSLY MOIST WITH WATER FOR A PERIOD OF NOT LESS THAN 5 DAYS. MATCH THE RADIUS OF THE INSIDE FACE OF THE TANK WALL WHEN FORMING THE REPAIR AREA. REPAIR ROOFING, INSULATION AND ROOF METAL FASCIA TO MATCH EXISTING AT NEW EDGE OF ROOF.
- THE EXISTING CRACKED AND LOOSE CONCRETE AT THE CORNER SHALL BE REMOVED AND THE CONCRETE CHIPPED OUT DOWN TO SOUND CONCRETE. UNDERCUT ALL EDGES TO LOCK IN NEW REPAIR CONCRETE. THE AREA OF REMOVED CONCRETE AND THE EXISTING BLOCK OUT IN THE CONCRETE WALL AND SLAB, BEARING ON THE TANK WALL, SHALL BE FILLED WITH NEW SIKACRETE 211 REPAIR CONCRETE, PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL REPAIR CONCRETE SHALL BE MOIST CURED BY KEEPING CONTINUOUSLY MOIST WITH WATER FOR A PERIOD OF NOT LESS THAN 5 DAYS. MATCH THE RADIUS OF THE INSIDE FACE OF THE TANK WALL WHEN FORMING THE REPAIR AREA.
- CREATE NEW 12"x7" POCKETS IN THE CONCRETE TO RECEIVE THE DOME COVER SEAT ANGLES BY REMOVING CONCRETE DOWN TO THE TOP OF THE ORIGINAL TOP OF TANK WALL. REMOVE AND RE-WORK ROOFING AND METAL ROOF CURB/FASCIA TO FOLLOW THE NEW EDGE OF THE ROOF AT THE POCKET, MATCHING THE EXISTING CONDITIONS, COLORS AND PROFILE.
- ALL FILLER MATERIALS TO BE PLACED BETWEEN THE DOME RING WALL AND THE INSIDE FACE OF THE CONCRETE TANK WALL IS SPECIFIED BY UNDERWOOD ENGINEERS INC. REFER TO THEIR SPECIFICATIONS FOR FILLER MATERIALS.

ABBREVIATIONS

BRG.	BEARING
c-c	CENTER TO CENTER
C	CENTERLINE
CONC.	CONCRETE
CTR'D	CENTERED
EMBED.	EMBEDMENT
EXIST.	EXISTING
H.D.G.	HOT DIPPED GALVANIZED
o/c	ON CENTER
O.D.	OUTSIDE DIAMETER
R	PLATE
REQ'D	REQUIRED
TYP.	TYPICAL
w/	WITH
V.I.F.	VERIFY IN FIELD



NEW ROTATED STEEL  
DOME COVER ORIENTATION

SCALE: 1/4"=1'-0"

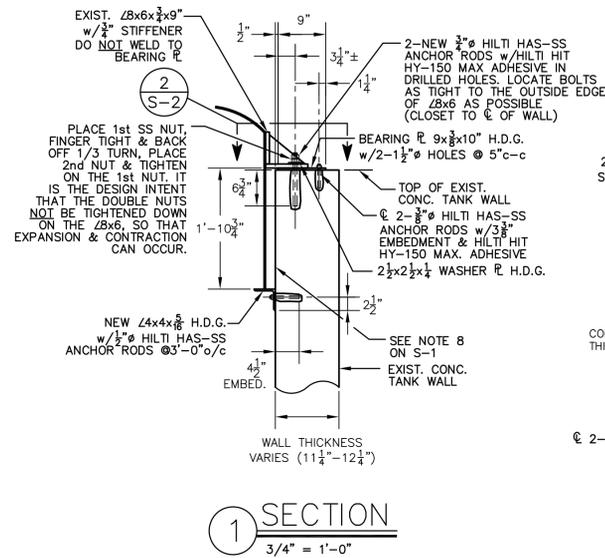
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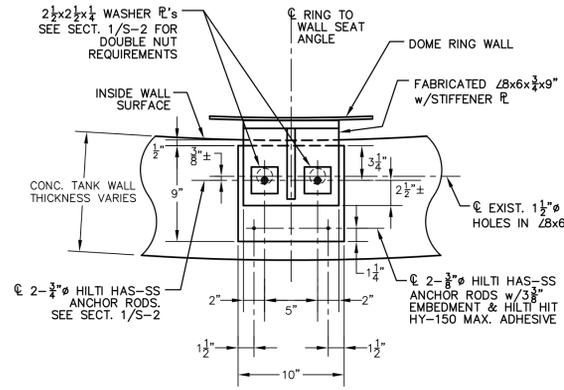
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**TOWN OF NEWMARKET**  
**DIGESTOR TANK COVER REPAIR**  
NEWMARKET, NEW HAMPSHIRE

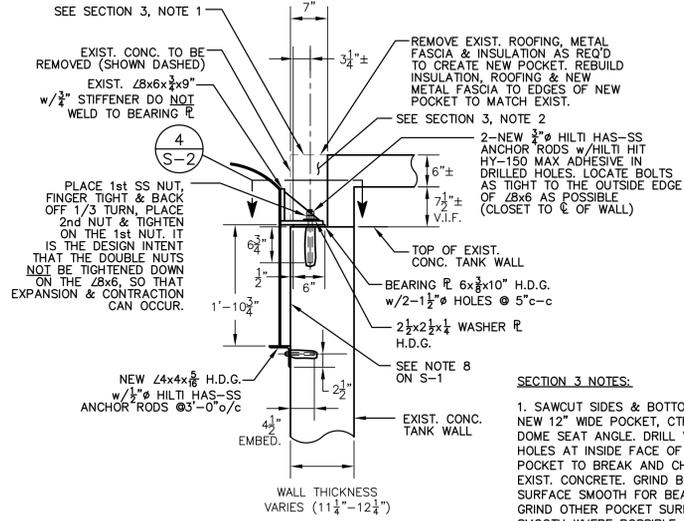
DATE: 3-11-11  
TITLE: DOME COVER PLANS  
SCALE: AS NOTED JOB # 211.001.1



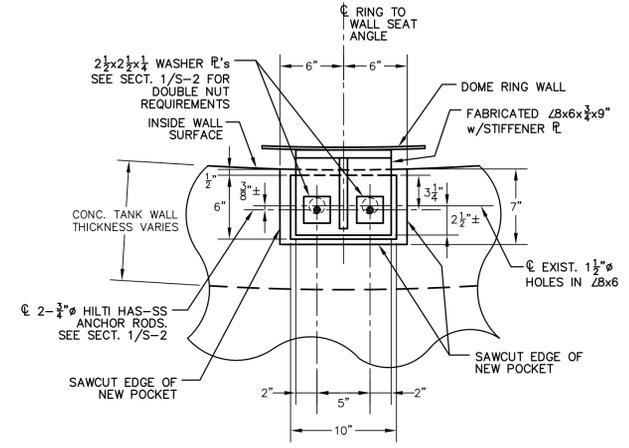
1 SECTION  
3/4" = 1'-0"



2 PLAN DETAIL  
1 1/2" = 1'-0"



3 SECTION  
3/4" = 1'-0"



4 PLAN DETAIL  
1 1/2" = 1'-0"

- SECTION 3 NOTES:**
1. SAWCUT SIDES & BOTTOM OF NEW 12" WIDE POCKET, CTR'D ON DOME SEAT ANGLE. DRILL VERTICAL HOLES AT INSIDE FACE OF NEW POCKET TO BREAK AND CHIP OUT EXIST. CONCRETE. GRIND BOTTOM SURFACE SMOOTH FOR BEARING. GRIND OTHER POCKET SURFACES SMOOTH WHERE POSSIBLE.
  2. PRIOR TO PLACING DOME COVER AND BEARING PLATE, CLEAN ALL CONC. SURFACES AND PAINT WITH TNEPEC H.S EPOXY SERIES 104, 2 COATS MINIMUM AT 5-10 MILS DFT/COAT. USE GRAY COLOR.

REVISIONS	
NO.	DATE



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TITLE: DATE: 3-11-11  
SECTIONS  
SCALE: AS NOTED JOB # 211.001.1