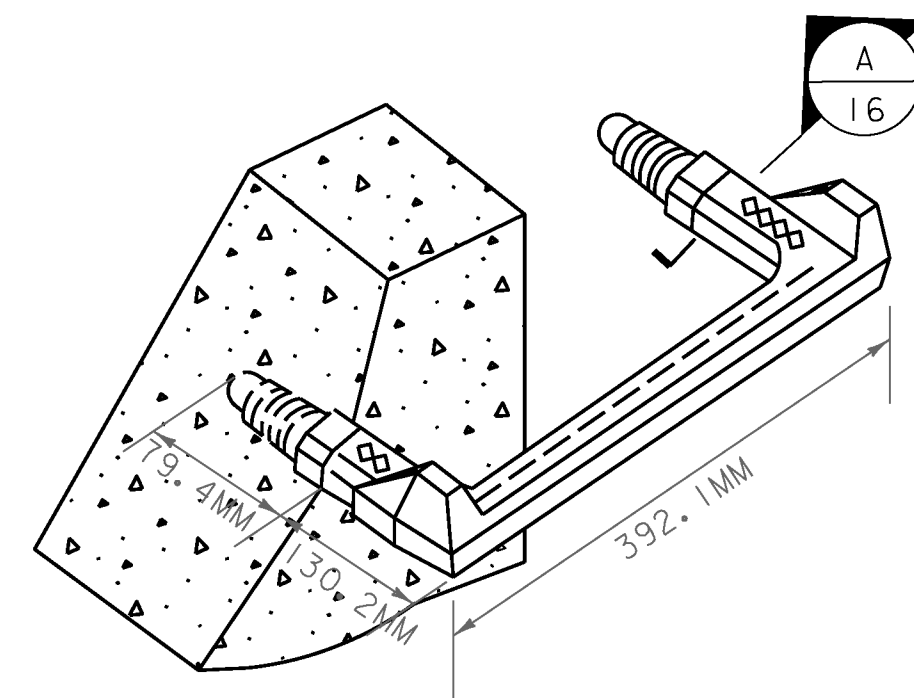
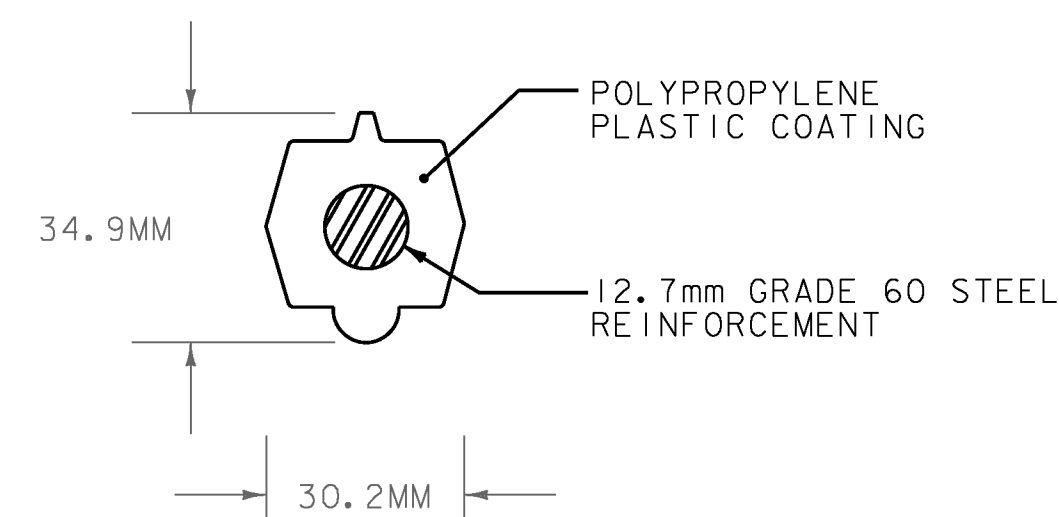


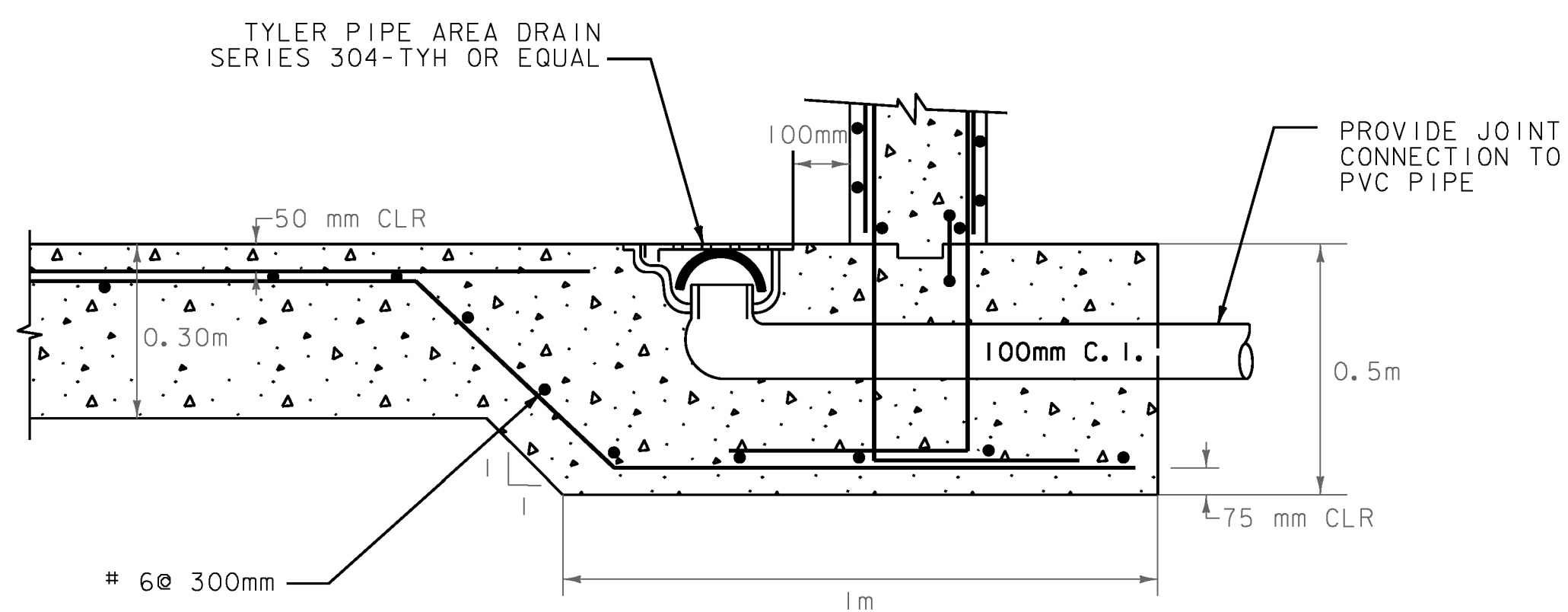
# PRESSURE REDUCING VAULT DETAIL



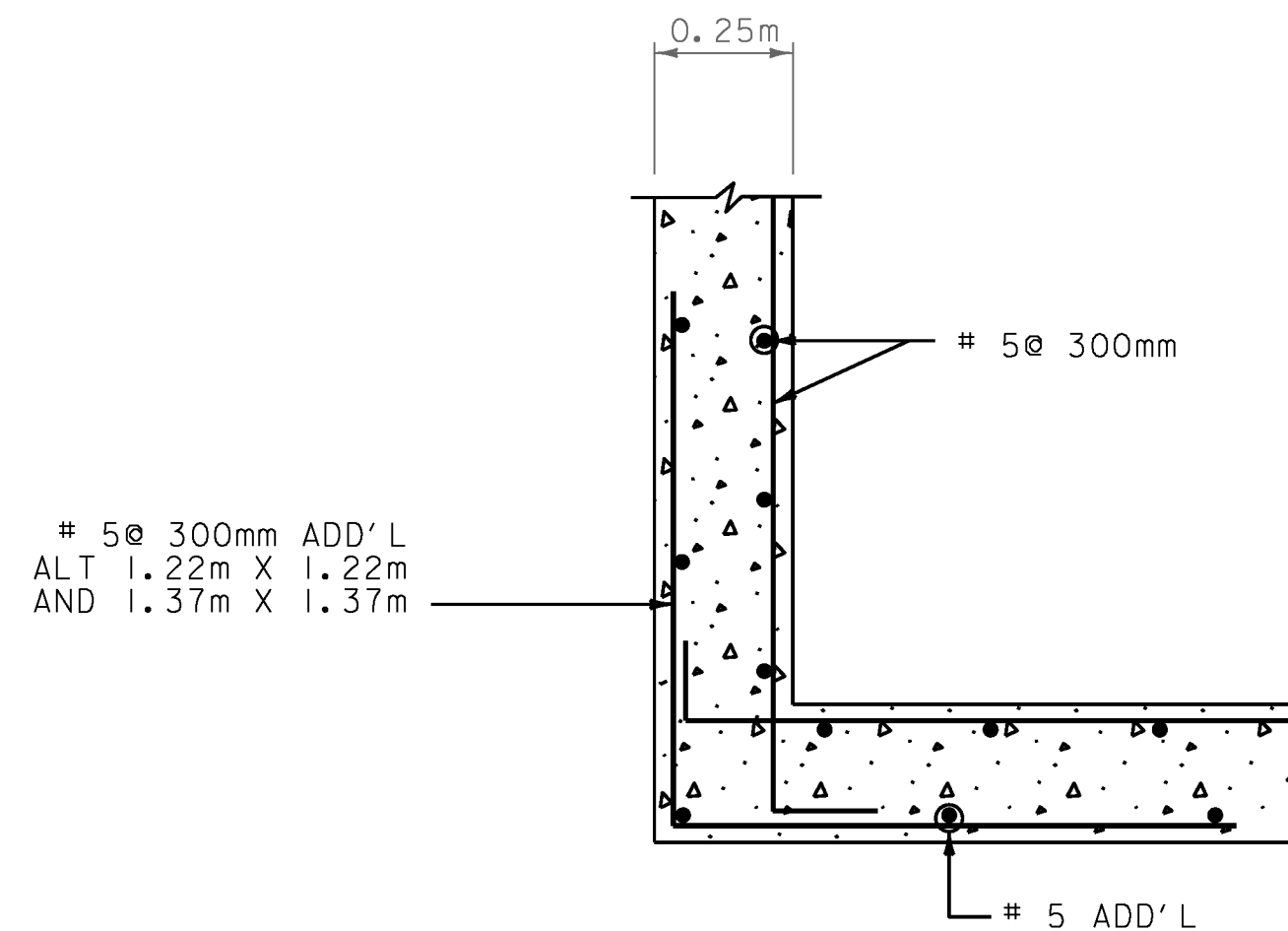
**MANHOLE STEP DETAIL**  
NOT TO SCALE



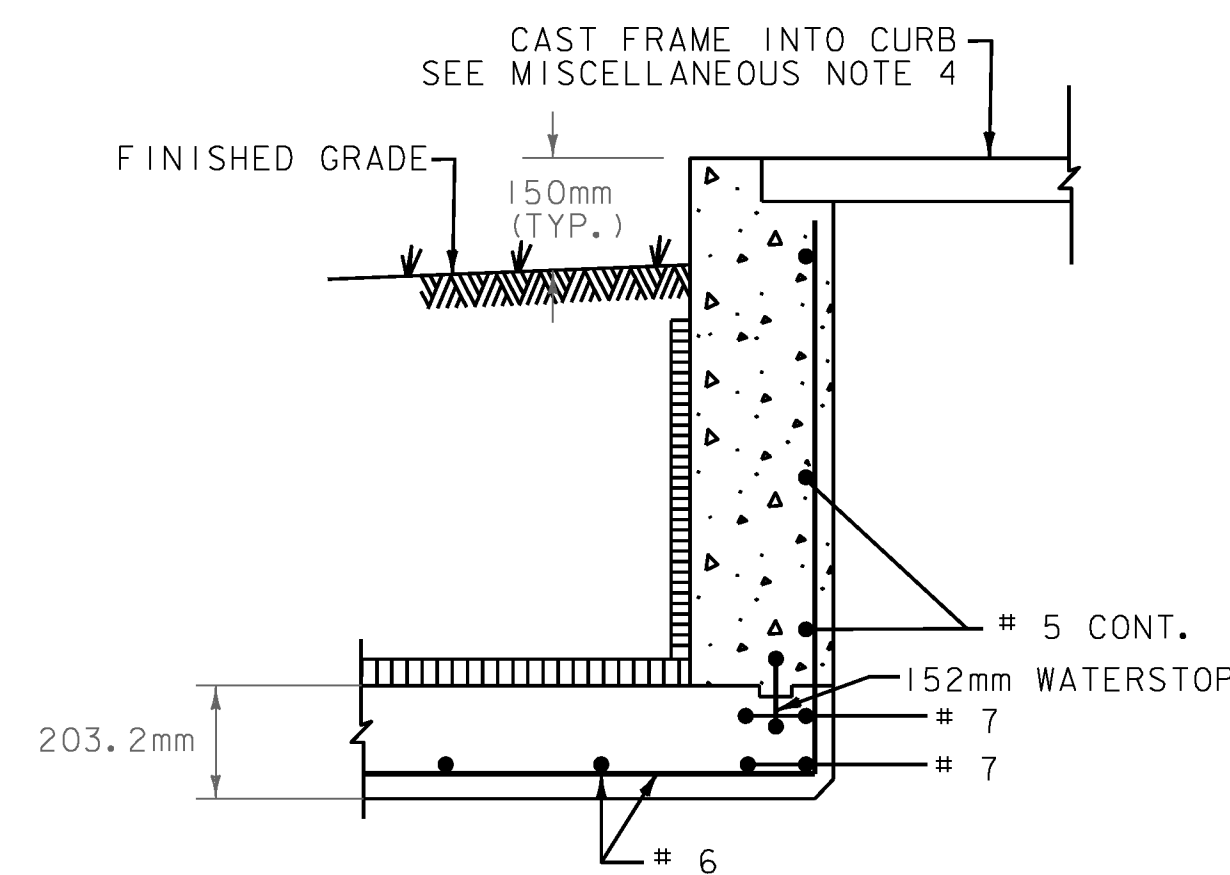
**SECTION A**  
NOT TO SCALE



**SECTION B**  
NOT TO SCALE



**TYPICAL CORNER REINF. DETAIL**  
SCALE 1:20



**HATCH CONCRETE CURB DETAIL**  
NOT TO SCALE

## FOUNDATIONS

1. NO CONCRETE SHALL BE PLACED IN WATER OR ON FROZEN GROUND.
2. ALL FINISHED EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE ENGINEER OR THE ENGINEERS DESIGNATE BEFORE ANY CONCRETE IS PLACED.
3. ALL BACKFILL UNDER OR ADJACENT TO ANY PORTION OF STRUCTURE SHALL BE COMPACTED IN 8" LIFTS (SEE SPECIFICATIONS).

## CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATIONS, THE LATEST EDITION OF THE ACI BUILDING CODE (ACI 318), TO ACI 301-81 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDING AND TO THE NATIONAL BUILDING CODE. IN CASE OF CONFLICT, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
2. ALL CONCRETE SHALL BE READY-MIXED IN ACCORDANCE WITH ASTM C94.
3. AT LEAST 48 HOURS SHALL ELAPSE BEFORE DEPOSITING NEW CONCRETE AGAINST PREVIOUSLY POURED CONCRETE.
4. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS, UNLESS OTHERWISE SPECIFIED.
5. ALL WATERSTOPS SHALL BE 152MM.

## REINFORCING

1. ALL REINFORCING BAR DETAILS SHALL CONFORM TO THE LATEST ACI CODE AND DETAILING MANUAL, EXCEPT AS OTHERWISE SPECIFIED.
2. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615 (FY = 60,000 PSI MIN.).
3. SCHEDULE WITH THE FABRICATION DRAWINGS ALL NECESSARY ACCESSORIES TO HOLD REINFORCING SECURELY IN POSITION. MINIMUM REQUIREMENTS SHALL BE: HIGH CHAIRS 1.22M ON CENTERS; SLAB BOLSTERS 1.07M ON CENTERS; SUPPORT BARS FOR HIGH CHAIRS #5.
4. ALL BARS, EXCEPT AS OTHERWISE NOTED, SHALL BE CONTINUOUS AND SHALL BE RUN CONTINUOUSLY AROUND CORNERS, LAPPED AT NECESSARY SPLICES, AND HOOKED AT DISCONTINUOUS ENDS. LAPS SHALL BE 36 BAR DIAMETER MINIMUM, UNLESS OTHERWISE NOTED.
5. THE CONCRETE PROTECTIVE COVERING FOR MAIN REINFORCEMENT SHALL BE 75MM, UNLESS SHOWN OTHERWISE.
  - A. FOOTING BOTTOMS 76.2MM
  - B. COLUMNS, BEAMS AND FORMED SURFACES IN DIRECT CONTACT GENERAL NOTES WITH SOIL OR EXPOSED TO THE WEATHER (EXCEPT SLABS) 50.8MM
  - C. SLABS ON GRADE 38.1MM
  - D. INTERIOR FACES OF WALLS AND SLABS EXPOSED TO WEATHER 25.4MM
  - E. INTERIOR SLABS 19.1MM
6. ALL CONCRETE, UNLESS SPECIFICALLY NOTED TO BE PLAIN CONCRETE, SHALL BE REINFORCED.
7. ALL REINFORCING SHALL BE INSPECTED AND APPROVED BY THE ENGINEER OR THE ENGINEERS DESIGNATE BEFORE CONCRETE IS PLACED.

## LIST OF ABBREVIATIONS

AL ALUMINUM	HP HIGH POINT	T TOP
CJ CONSTRUCTION JOINT	LP LOW POINT	TOC TOP OF CONCRETE
EF EACH FACE	NTS NOT TO SCALE	TOS TOP OF SLAB, TOP OF STEEL
EL ELEVATION	OCN CENTER	TOW TOP OF WALL
EW EACH WAY	SOG SLAB ON GRADE	TYP TYPICAL
		WS WATERSTOP

## MISCELLANEOUS

1. ALL EQUIPMENT PENETRATIONS TO BE VERIFIED BY CONTRACTOR.
2. THE VAULT FLOOR SHALL RECEIVE A BROOM FINISH AND A LIQUID CHEMICAL HARDENER-SEALANT.
3. DO NOT SCALE DRAWINGS.
4. INSIDE WALLS AND CEILING SHALL RECEIVED TWO COATS OF WHITE CEMENTITIOUS COATING, THOROSEAL OR EQUAL.
5. HATCH SHALL BE 0.91M BY 0.91M. THE HATCH SHALL BE AN ALUMINUM HATCH WITH A PADLOCK AND KEY OF THE TOWN STANDARD TYPE.
6. TOP MANHOLE STEP TO BE WITHIN 152.4MM FROM TOP OF CONCRETE CURB, AND THE LOWEST STEP WILL BE WITHIN 152.4MM OF FLOOR SLAB. A SAFETY POST SHALL BE PROVIDED.
7. ALL WORK AND MATERIALS SHOWN AND NOTED TO BE PAID UNDER ITEM 900.645 SPECIAL PROVISION (PRESSURE REDUCING VAULT)

**REPLACEMENT SHEETS**  
**ISSUED 10/5/11**

PROJECT NAME: DANVILLE  
PROJECT NUMBER: F EGC 028-3(32)

FILE NAME: ...\\ut\Titles\PlotFiles\FD-16.prf PLOT DATE: 10/4/2011  
DESIGN SUPERVISOR: TOM NESBITT DRAWN BY: STANTEC  
DESIGNED BY: STANTEC CHECKED BY: STANTEC  
**FIRE DISTRICT WATER PLAN FD-16** SHEET 305 OF 306

