

GENERAL STRUCTURAL NOTES

MISCELLANEOUS

- BEFORE COMMENCING WORK, CHECK ALL LINES AND LEVELS AND VERIFY ALL DIMENSION INDICATED ON THE DRAWINGS AND WITH MANUFACTURER'S SHOP DRAWINGS AND WITH OTHER WORK THAT HAS BEEN COMPLETED. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BEFORE PROCEEDING WITH ANY WORK.
- THE CONTRACTOR SHALL COORDINATE ALL TRADES AND VERIFY THAT ALL WORK THAT IS TO BE BUILT INTO THE CONCRETE INCLUDING PIPE SLEEVES, INSERTS, ANCHOR BOLTS, ETC. IS LOCATED AND INSTALLED BEFORE PLACING ANY CONCRETE. ALL SUCH ITEMS SHALL BE PLACED SO AS NOT TO INTERFERE WITH REINFORCING STEEL.
- THE CONTRACTOR SHALL GIVE THE ENGINEER 48 HOURS NOTICE PRIOR TO PLACING ANY CONCRETE. AT THE ENGINEER'S OPTION, ALL REINFORCING SHALL BE OBSERVED BY THE ENGINEER PRIOR TO PLACING ANY CONCRETE.
- BEFORE PLACING ANY CONCRETE, ALL EXCAVATION AND FOOTING TRENCHES SHALL BE DRAINED OF WATER AND MUD FILM REMOVED AND LOOSE DIRT LIFTED OUT. THE CONTRACTOR SHALL PREVENT THE FLOW OF WATER INTO THE EXCAVATION AND FORMWORK WHILE THE CONCRETE IS BEING PLACED AND IS SETTING. THE CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO PREVENT FLOTATION OF STRUCTURES DURING CONSTRUCTION.
- SLAB THICKNESS INDICATED ON THE DRAWINGS IS A MINIMUM AND SHALL BE MEASURED FROM THE LOWEST POINT IN THE SLAB.
- NO ADDITIONAL PAYMENT WILL BE MADE FOR ANY ADDITIONAL LABOR AND MATERIALS REQUIRED FOR CONSTRUCTION JOINTS INSTALLED AT THE REQUEST OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR BRACING ALL WORK DURING CONSTRUCTION.
- ALL CONCRETE SHALL BE 4,000 PSI CLASS 'A' CONCRETE UNLESS NOTED OTHERWISE ON DRAWINGS OR IN SPECIFICATIONS.

FOUNDATIONS

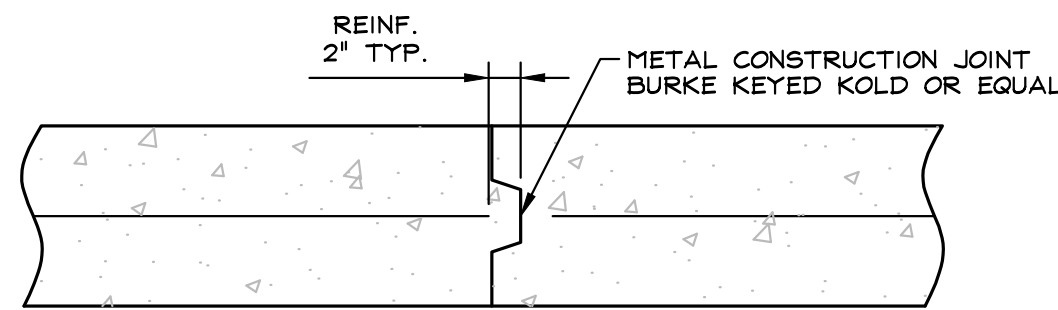
- LOOSE AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE BOTTOM OF THE FOUNDATION AND REPLACED WITH COMPACTED STRUCTURAL FILL OR STONE.
- STRUCTURE UNDER FOOTINGS AND SLABS ON GRADE SHALL BE COMPACTED IN 6-INCH LIFTS TO 98% OF THE MAXIMUM DRY DENSITY AS INDICATED BY ASTM D698 (STANDARD PROCTOR TEST).
- ALL SLABS ON GRADE SHALL BE POURED ON 6" MINIMUM COMPACTED CRUSHED STONE OR SAND. FOR BUILDING SLABS, THE CRUSHED STONE OR SAND SHALL BE COVERED BY A 6 MIL BLACK POLYETHYLENE VAPOR BARRIER.
- AN INDEPENDENT QUALIFIED GEOTECHNICAL ENGINEER SHALL VERIFY THE COMPACTION AND BEARING PRESSURE IS OBTAINED AT ALL FOUNDATIONS, SHALL MONITOR AND APPROVE ALL STRUCTURAL FILL PLACEMENT AND COMPACTION, AND SHALL APPROVE SUBGRADE BELOW ALL SLABS ON-GRADE.

CONCRETE

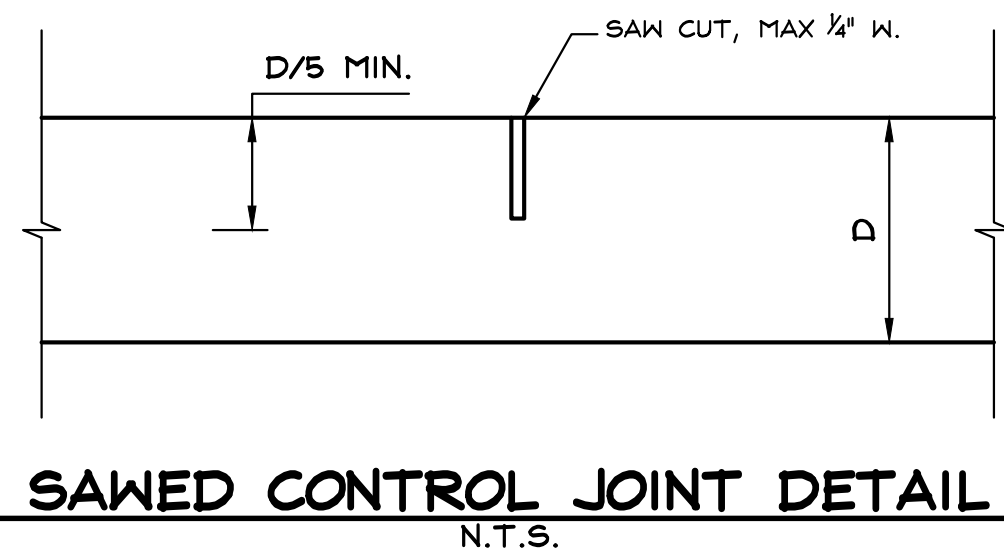
- ALL CONCRETE WORK SHALL CONFORM TO ACI 318 AND ACI 301, ACI 350 LATEST EDITIONS.
- CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH AT 28-DAYS AS FOLLOWS:
 - CLASS A - 4,000 PSI
 - CLASS B - 3,000 PSI
- IN THE ABSENCE OF CONTRARY DESIGNATION, CONCRETE USED FOR ALL CONSTRUCTION SHALL BE CLASS A. PROVIDE THE FOLLOWING COVER FOR REINFORCING STEEL UNLESS OTHERWISE SHOWN ON THE DRAWINGS:
 - CONCRETE CAST AGAINST OR PERMANENTLY EXPOSED TO EARTH: 3"
 - FORMED CONCRETE EXPOSED TO EARTH, WATER OR WEATHER: 2"
 - STRUCTURAL SLABS, BEAMS OR COLUMNS, NOT EXPOSED TO EARTH, WATER OR WEATHER: 1"
 - OTHER FORMED SURFACES NOT EXPOSED TO EARTH, WATER OR WEATHER: 1/2"
- SINGLE MAT REINFORCING IN SLABS ON GRADE SHALL BE PLACED AT MID-DEPTH UNLESS NOTED OTHERWISE.
- INSTALL SLEEVES AT ALL LOCATIONS WHERE PIPING PASSES THROUGH SLABS. SLEEVES, ANCHOR BOLTS, AND OTHER INSERTS SHALL BE POSITIVELY SECURED IN PLACE BEFORE PLACING ANY CONCRETE.
- SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND OTHER DRAWINGS FOR ADDITIONAL OPENINGS IN THE SLABS. ALL OPENINGS SHALL BE FORMED AND SLEAVED BEFORE CONCRETE IS POURED. ADDITIONAL REINFORCEMENT IS NOT REQUIRED FOR OPENINGS WHOSE LONGER DIMENSION IS 12" OR LESS BUT INTERRUPTED BARS SHALL BE DEFLECTED AROUND THE OPENING.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY INCIDENTAL ITEMS LIKE INSERTS, TIES, CLIPS AND OTHER DEVICES EVEN THOUGH SUCH ITEMS MAY NOT BE SPECIFICALLY DESCRIBED OR INDICATED, BUT ARE NECESSARY TO PROPERLY COMPLETE THE WORK. ALL FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH ACI 347, LATEST EDITION.
- ALUMINUM CONDUITS, SLEEVES OR PIPES SHALL NOT BE EMBEDDED IN CONCRETE UNLESS EFFECTIVELY COATED WITH AN APPROVED BITUMINOUS PAINT TO PREVENT CHEMICAL OR ELECTROLYTIC REACTION BETWEEN THE ALUMINUM AND CONCRETE OR REINFORCEMENT.
- UNLESS NOTED OTHERWISE, ALL CONCRETE SLABS SHALL SLOPE TO DRAIN OR SUMP.
- CHAMFER ALL EXPOSED EDGES OF CONCRETE 3/4" UNLESS NOTED OTHERWISE.
- PLACE 1/4" EXPANSION JOINT MATERIAL BETWEEN EDGES OF SLABS AND VERTICAL SURFACES, UNLESS NOTED OTHERWISE.
- PROVIDE CONSTRUCTION OR CONTROL JOINTS IN SLABS AT LOCATIONS SHOWN ON THE DRAWINGS, AT OFFSETS AND CHANGES IN DIRECTION AND AT 30 FEET MAXIMUM. COLD JOINTS SHALL BE CLEANED AND MOISTENED JUST PRIOR TO SECOND POUR.
- SUBMIT MIX DESIGNS FOR REVIEW AND APPROVAL BY THE ENGINEER BEFORE PLACING CONCRETE.

REINFORCING STEEL

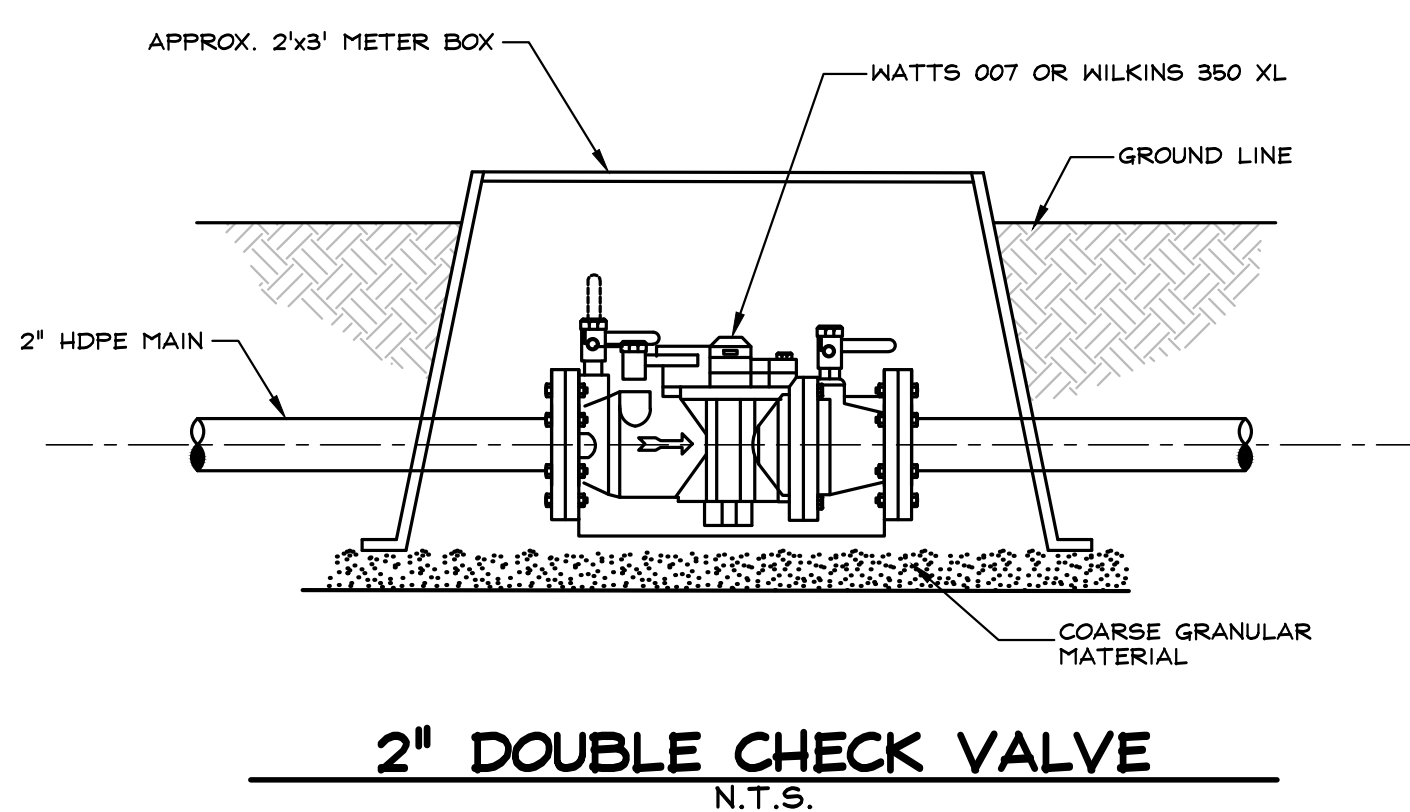
- BARS SHALL BE ROLLED FROM NEW BILLET-STEEL CONFORMING TO ASTM A615, GRADE 60. ALL REINFORCING STEEL SHALL BE FREE OF RUST, SCALE OR OTHER FOREIGN MATERIAL PRIOR TO PLACING CONCRETE.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 OR A497.
- REINFORCING STEEL IN PLACE SHALL BE REVIEWED BY THE ENGINEER PRIOR TO PLACING CONCRETE.
- ALL LAP SPLICES SHALL BE MINIMUM 60 BAR DIAMETERS, UNLESS OTHERWISE NOTED, BUT NOT LESS THAN 24-INCHES.
- SUBMIT REINFORCING STEEL SHOP DRAWINGS FOR REVIEW AND APPROVED BY ENGINEER BEFORE FABRICATION.



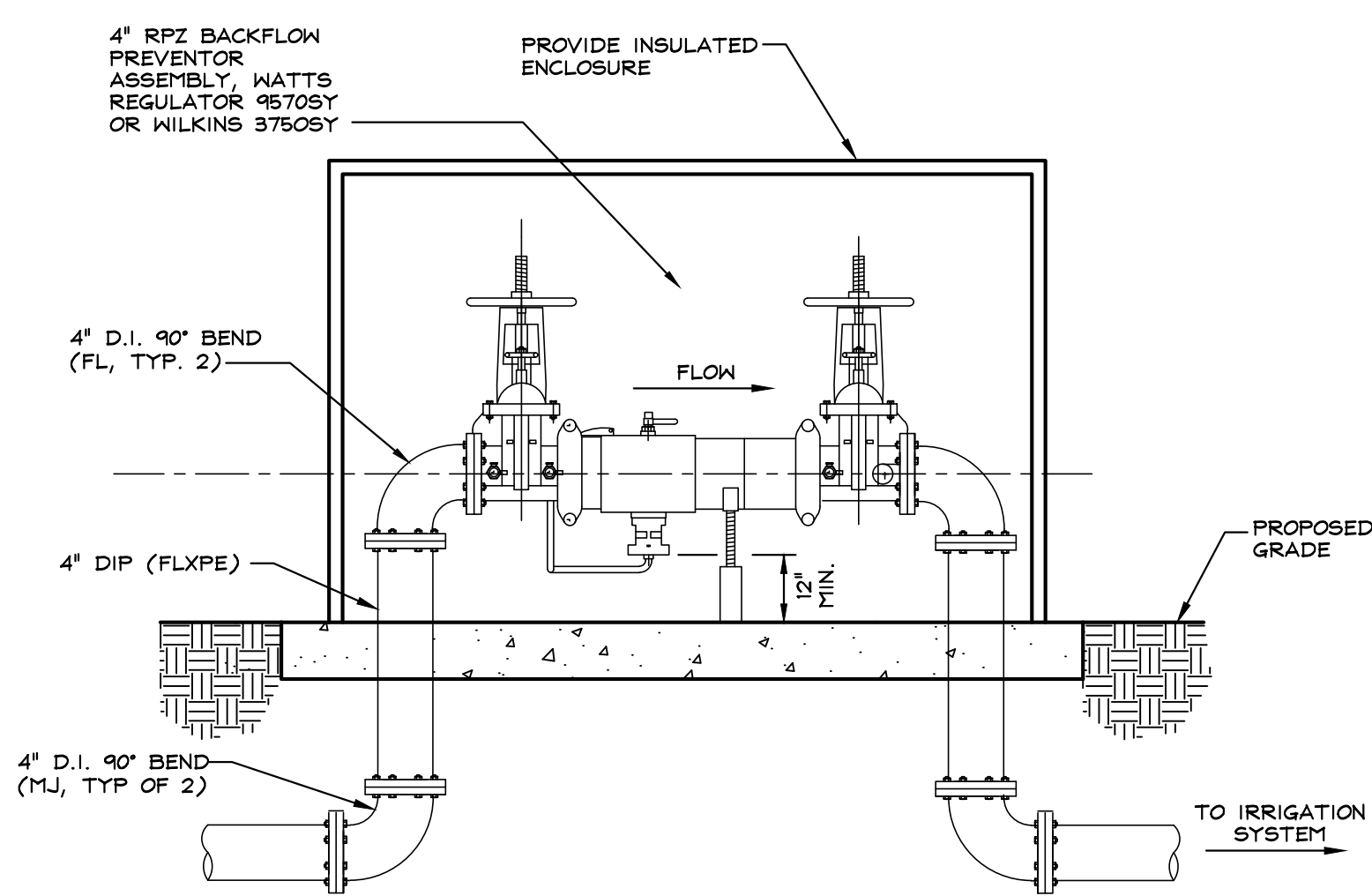
CRACK CONTROL JOINT EXPOSED AREA, NON-WATER BEARING
N.T.S.



SAWED CONTROL JOINT DETAIL
N.T.S.



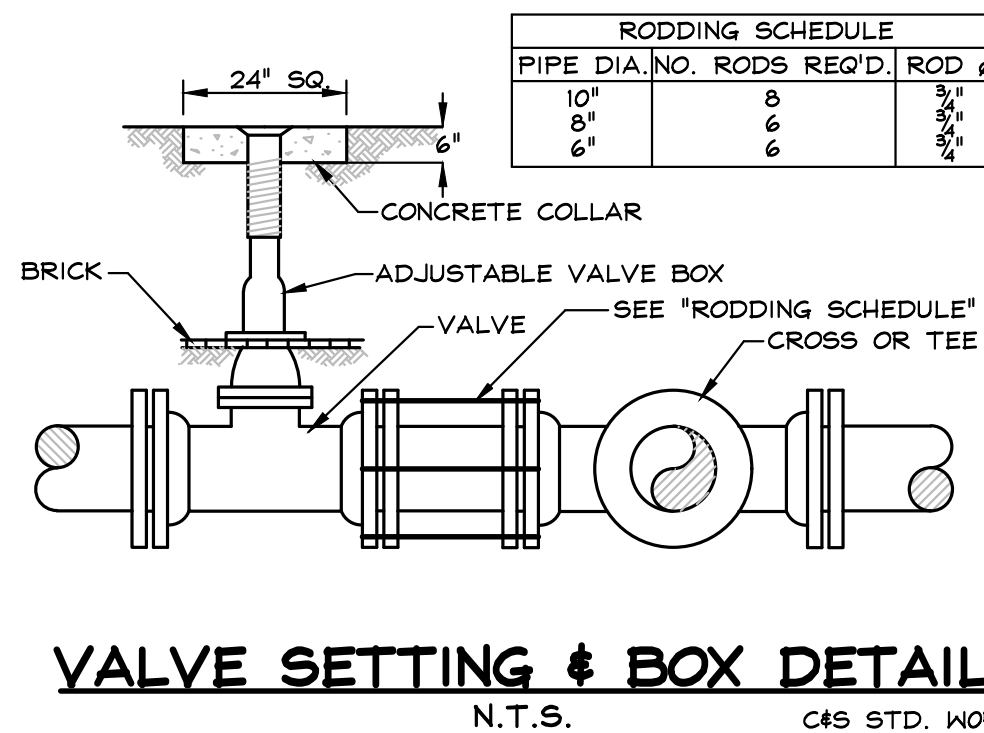
2" DOUBLE CHECK VALVE
N.T.S.



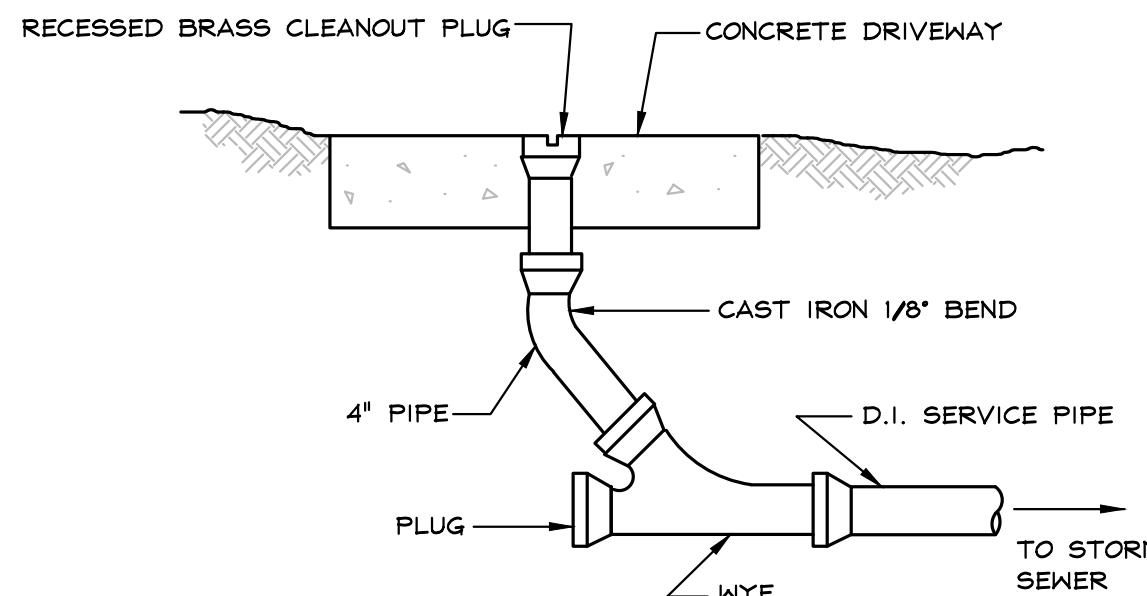
GENERAL CONSTRUCTION NOTES:

- PROVIDE MIN. 12" OF CLEARANCE FROM RELIEF VALVE TO TOP OF SLAB
- PROVIDE 4" CONCRETE SLAB AND INSULATED ENCLOSURE. SIZE SLAB AND ENCLOSURE PER MANUFACTURER'S RECOMMENDATIONS.

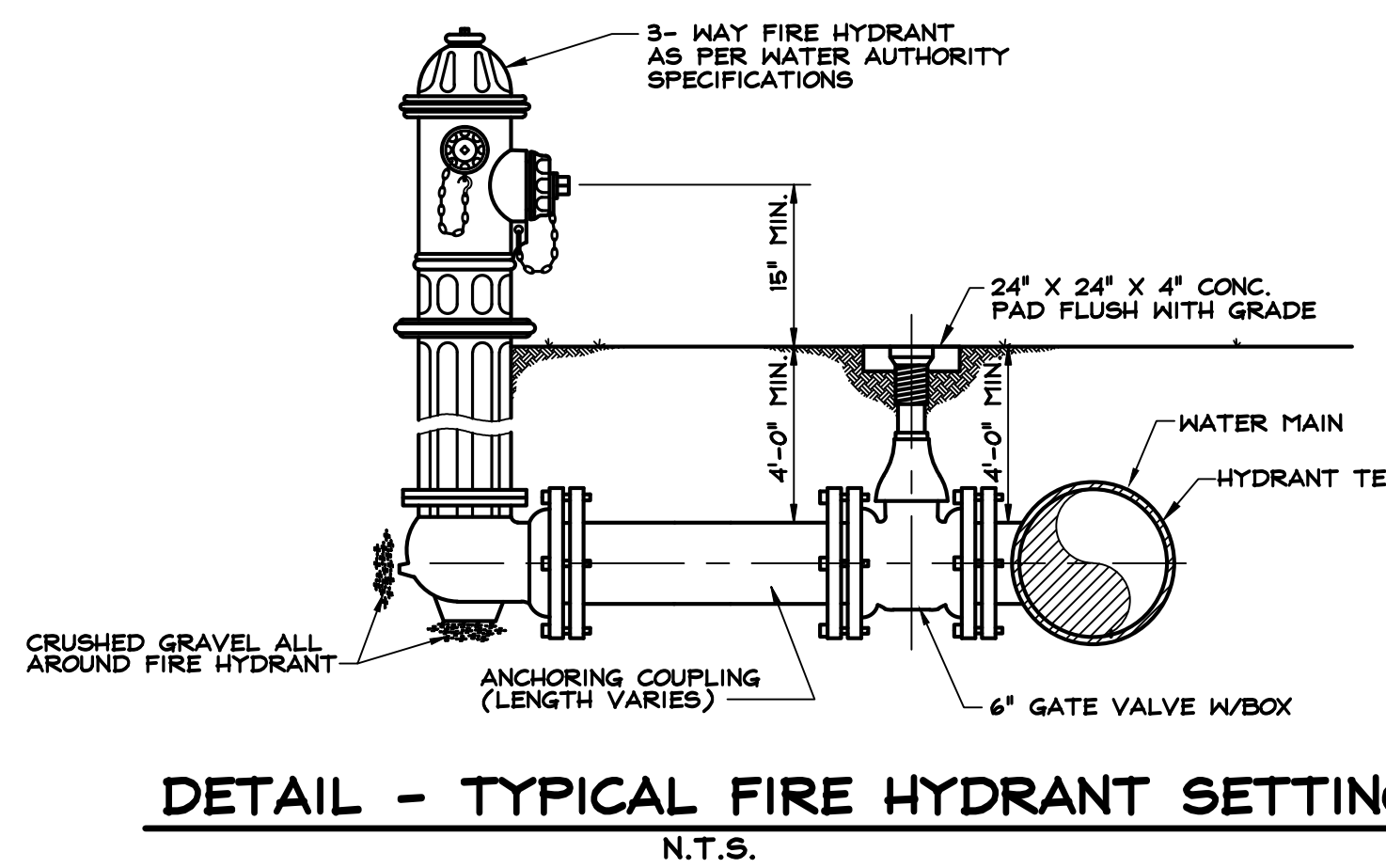
4" RPZ BACKFLOW PREVENTOR
N.T.S.



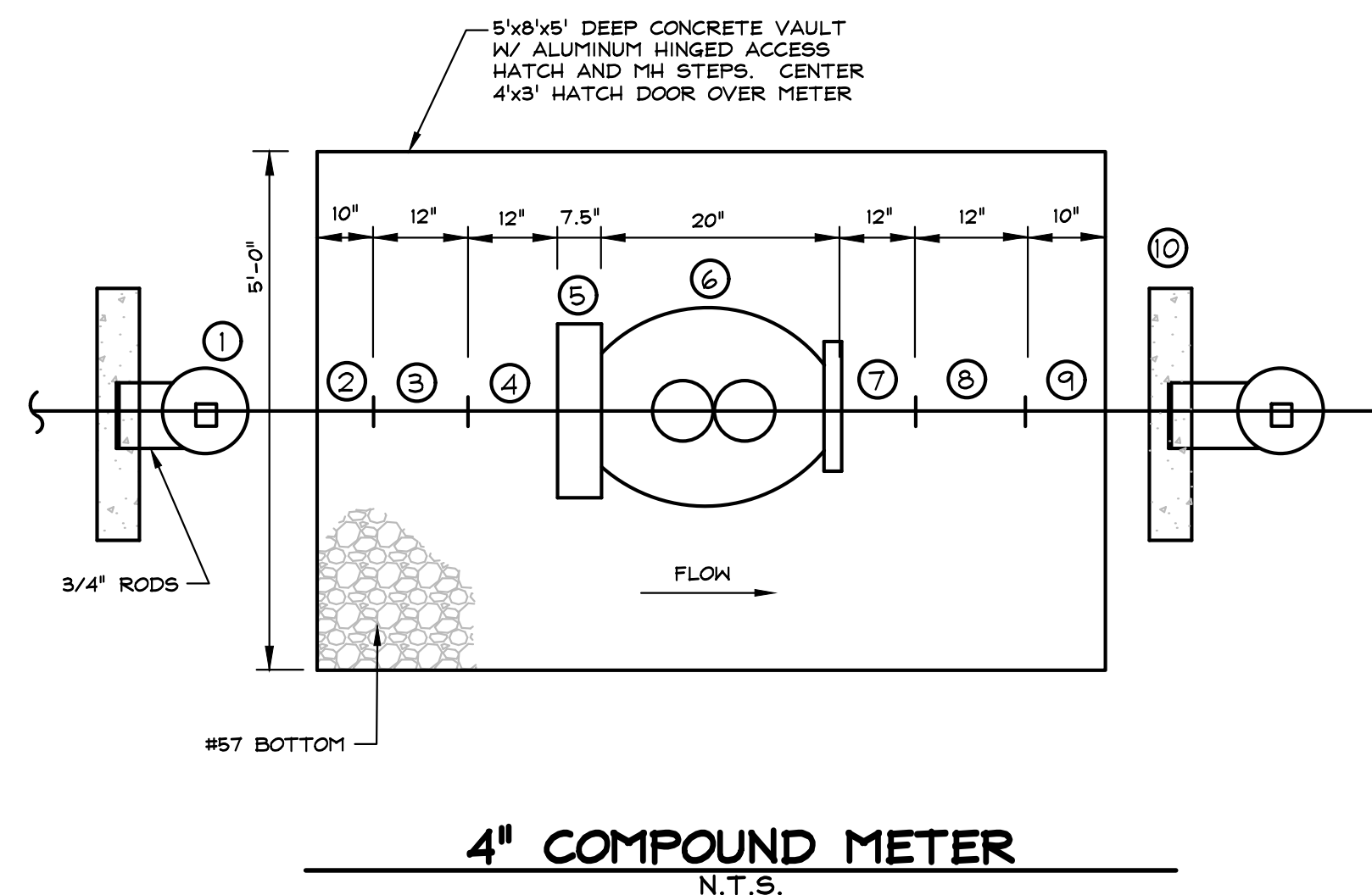
VALVE SETTING & BOX DETAIL
N.T.S. C&S STD. W05



CLEANOUT TO GRADE DETAIL
N.T.S.



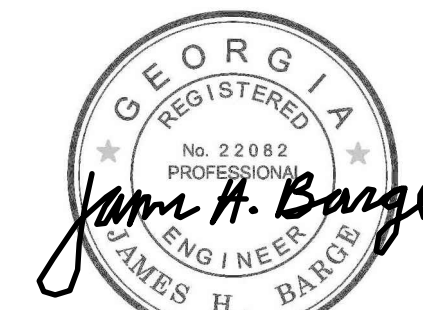
DETAIL - TYPICAL FIRE HYDRANT SETTING
N.T.S.



4" COMPOUND METER
N.T.S.

- 4" MJ GATE VALVE (TYP OF 2)
- 4" SPOOL PIECE (DIP)
- 4" SOLID SLEEVE (MJ x MJ)
- 4" SPOOL PIECE (DIP)
- 4" NEPTUNE STRAINER (FL x FL)
- 4" NEPTUNE TRU-FLO COMPOUND W/ ECODER REGISTER
- 4" SPOOL PIECE (DIP)
- 4" SOLID SLEEVE (MJ x MJ)
- 4" SPOOL PIECE (DIP)
- CONCRETE THRUST COLLAR W/ MEGA LUG RESTRAINT (TYP OF 2)

DETAILS



2-7-2018
GSWCC Certification #: 0000046529
Expires: 10-28-2019

REVISIONS:	
1 BIDDER'S RFI #1	1-19-18
2 BIDDER'S RFI #3	2-7-18

YONAH PRESERVE
 FOR THE
 WHITE COUNTY BOARD OF COMMISSIONERS
 WHITE COUNTY, GEORGIA

Carter & Sloop
 CONSULTING ENGINEERS
 MACON ♦ ALBANY ♦ ATHENS ♦ CANTON

THIS LINE IS ONE INCH LONG WHEN DRAWING IS PLOTTED FULL SCALE	
DSGN: JHB	DRWN: JHB
DWG. NAME: DETAILS	
PROJ. NO.: W6299.008	SHEET NO.: 17
DATE: DECEMBER 2017	OF 63 SHEETS

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