

GENERAL NOTES

1. STANDARDS AND SPECIFICATIONS

ALL WATER MAIN AND WATER SYSTEM CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CHARTER TOWNSHIP OF CHESTERFIELD WATER DEPARTMENT AND THE DETROIT WATER AND SEWERAGE DEPARTMENT...

2. PRECONSTRUCTION REQUIREMENTS

THE DEVELOPER SHALL PROVIDE A BREAKDOWN OF CONSTRUCTION COST TO THE CHARTER TOWNSHIP OF CHESTERFIELD WATER DEPARTMENT AND PAY ALL REQUIRED FEES PRIOR TO SCHEDULING A PRECONSTRUCTION MEETING...

3. PIPE MATERIAL

DUCTILE IRON PIPE WITH EXTERIOR ASPHALTIC MATERIAL COATING SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C151/A21.51 CURRENT SPECIFICATIONS FOR DUCTILE-IRON PIPE, CENTRIFUGALLY CAST, FOR WATER...

NOTE: PVC WATER MAIN SHALL ONLY BE USED WITH WRITTEN AUTHORIZATION OF THE CHARTER TOWNSHIP OF CHESTERFIELD WATER DEPARTMENT.

HIGH-DENSITY POLYETHYLENE (HDPE) PIPE SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C906 CURRENT SPECIFICATIONS FOR POLYETHYLENE PIPE AND FITTINGS, 4 INCH THROUGH 63 INCH, FOR WATER DISTRIBUTION AND TRANSMISSION...

4. HYDRANTS

HYDRANTS SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C502 CURRENT SPECIFICATIONS FOR DRY-BARREL FIRE HYDRANTS. HYDRANTS SHALL BE CHESTERFIELD TOWNSHIP STANDARD EAST JORDAN IRON WORKS MODEL 5BR-250 WATERMASTER WITH PENTAGON OPERATING NUT MEASURING 1-1/8" POINT TO FLAT AND BREAKAWAY FLANGE...

5. GATE VALVES

GATE VALVES SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C509 CURRENT SPECIFICATIONS FOR RESILIENT-SEATED GATE VALVES FOR WATER SUPPLY SERVICE. THE VALVE SHALL BE CAST WITH AN EPOXY COATED DUCTILE IRON BODY AND BRONZE MOUNTED WITH A BRONZE NON-RISING STEM, TRIPLE "O"-RING REPLACEABLE SEALS AND MECHANICAL JOINTS...

6. FITTINGS

ALL FITTINGS SHALL BE DUCTILE IRON AND MEET THE REQUIREMENTS OF ANSI/AWWA C153/A21.53 CURRENT SPECIFICATIONS FOR DUCTILE-IRON COMPACT FITTINGS FOR WATER SERVICE. FITTINGS SHALL BE CEMENT LINED WITH ASPHALTIC MATERIAL SEAL COATING MEETING THE REQUIREMENTS OF ANSI/AWWA C104/A21.4 CURRENT SPECIFICATIONS FOR CEMENT-MORTAR LINING FOR DUCTILE-IRON PIPE AND FITTINGS...

CONCRETE THRUST BLOCKS ARE REQUIRED AT ALL BENDS, TEES, CAPS OR PLUGS. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 2500 PSI (MINIMUM) AT 28 DAYS. MECHANICAL JOINTS FOR ALL FITTINGS SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C111/A21.11 CURRENT SPECIFICATIONS FOR RUBBER-GASKET JOINTS FOR DUCTILE-IRON PRESSURE PIPE AND FITTINGS...

7. CONSTRUCTION

THE WATER MAIN SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF FIVE FEET (5.0'), MEASURED FROM THE PAVEMENT CENTERLINE ELEVATION OR THE EXISTING GROUND, WHICHEVER IS LOWER, TO THE TOP OF PIPE. GENERALLY, THE MAXIMUM DEPTH OF COVER SHALL NOT EXCEED SEVEN FEET (7') FROM FINAL FINISH GRADE...

DEFLECTION OF PIPE JOINTS TO OBTAIN THE DESIRED CLEARANCES OR ALIGNMENT SHALL ONLY BE ACCOMPLISHED WITH THE CHARTER TOWNSHIP OF CHESTERFIELD WATER DEPARTMENT APPROVAL. THE MAXIMUM ALLOWABLE DEFLECTION (FOR FULL LENGTH OF PIPE) IS FOURTEEN INCHES (14") FOR 4" THROUGH 12" PIPE AND EIGHT INCHES (8") FOR 16" AND 24" PIPE.

8. CONNECTION TO EXISTING SYSTEM

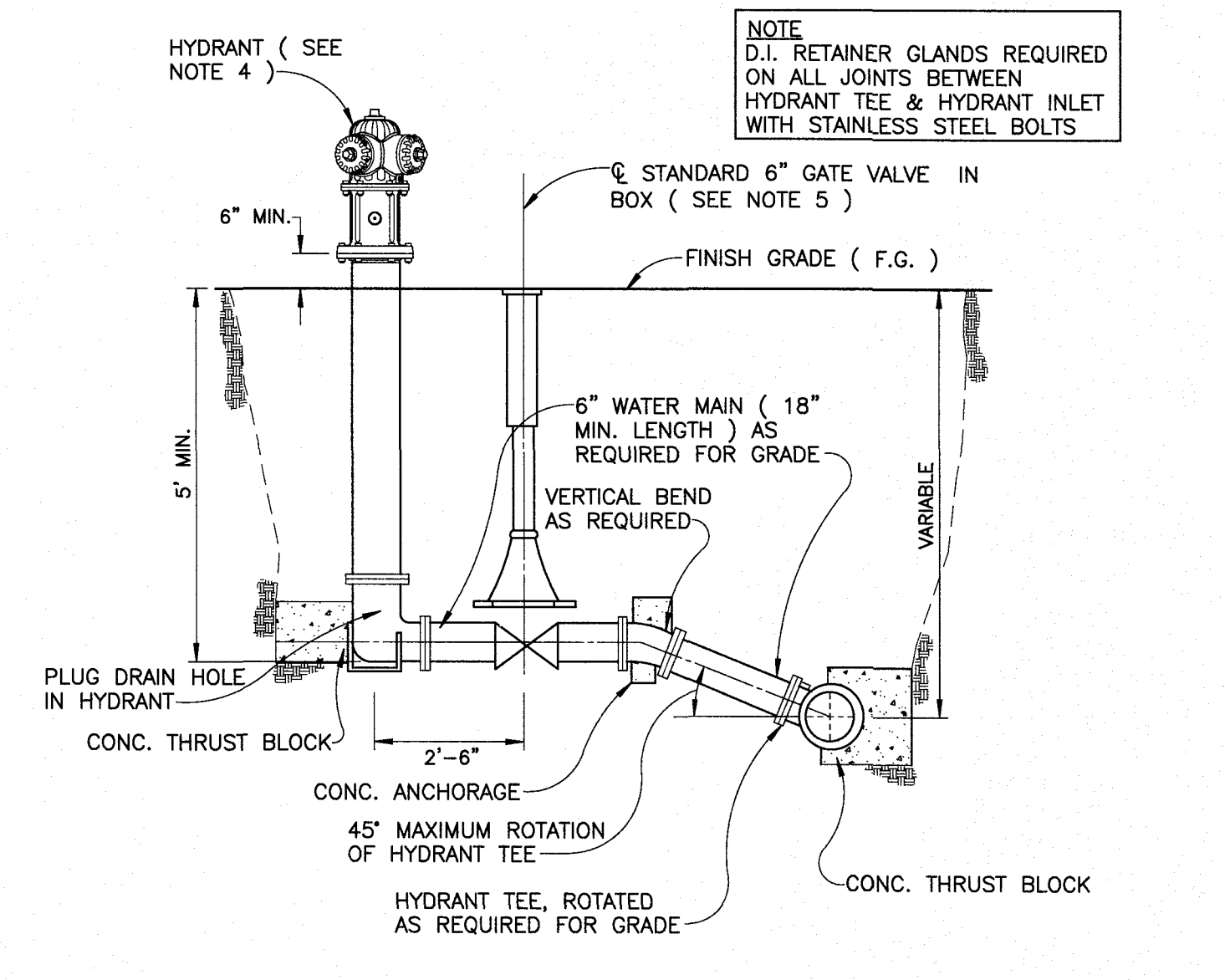
A ONE INCH (1") CORPORATION SHALL BE INSTALLED, FOR TESTING PURPOSES, IN ALL STUBS AND POINTS OF CONNECTION TO EXISTING MAINS. UPON SUCCESSFUL COMPLETION OF THE TESTS AND WITH THE APPROVAL OF THE CHARTER TOWNSHIP OF CHESTERFIELD WATER DEPARTMENT, THE CONTRACTOR SHALL REMOVE THE TESTING CORPORATION AND INSTALL PLUGS...

AFTER CONNECTION IS MADE, THE CONTRACTOR WILL FLUSH THE WATER LINES AT THE END POINT OF THE NEW INSTALLATION TO THE MINIMUM FLOW RATE EQUAL TO THE TOTAL WATER REQUIRED (WITH HOSE DEMAND) OR THE RATE SPECIFIED BY SYSTEM DESIGN, WHICH EVER IS GREATER. THE CONTRACTOR IS RESPONSIBLE FOR THE COST AND DRAINAGE REQUIRED TO FULFILL THE FLUSHING PROCESS.

PROJECT BONDS, INSURANCE AND REGISTRATION. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL BE REGISTERED AT THE CHARTER TOWNSHIP OF CHESTERFIELD WATER DEPARTMENT FOR THE YEAR THAT THE WORK IS BEING PERFORMED. PRIOR TO THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL PROVIDE CONTRACTUAL LIABILITY INSURANCE TO THE CHARTER TOWNSHIP OF CHESTERFIELD WATER DEPARTMENT.

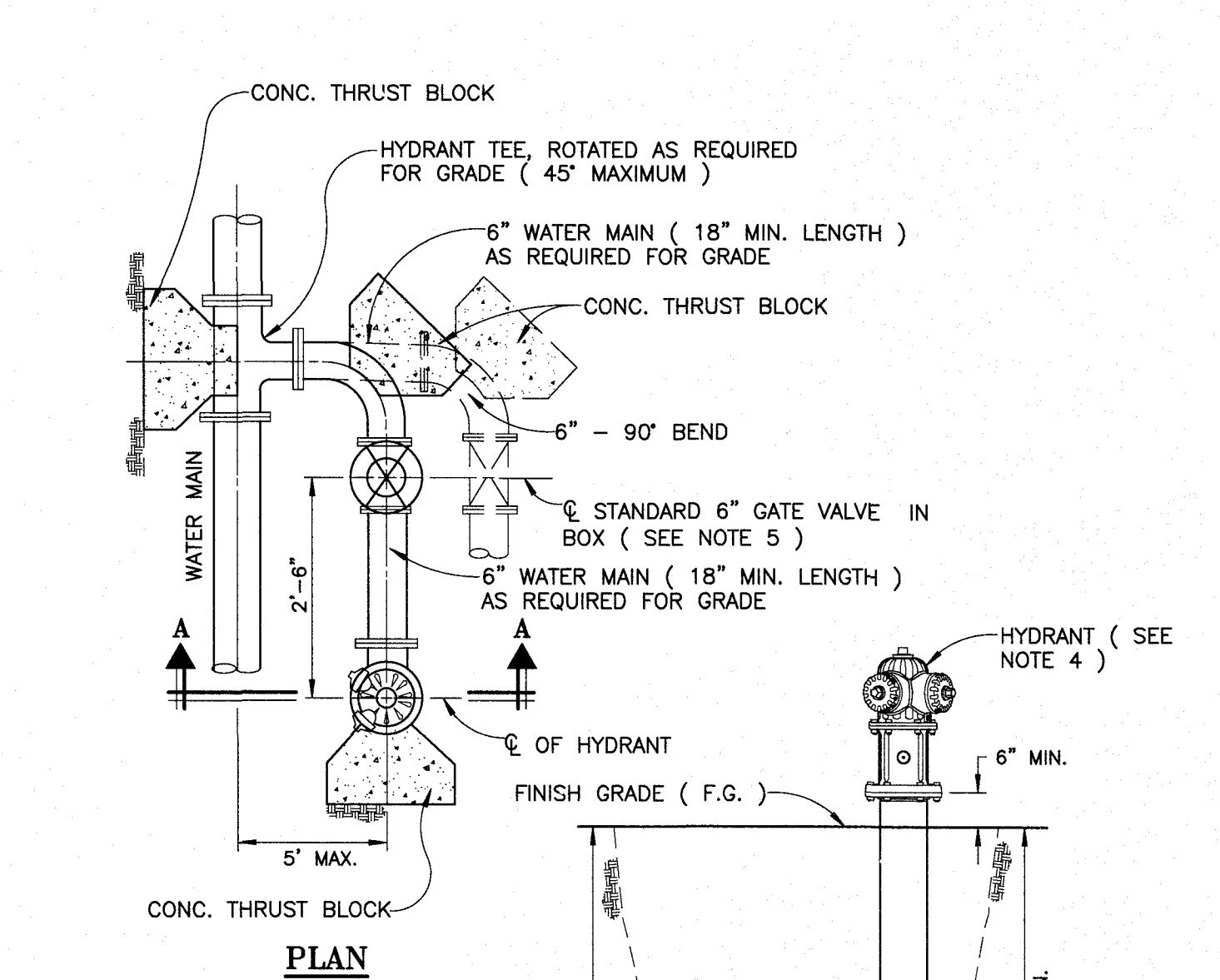
10. WATER SERVICES

ALL WATER SERVICE TRANSFERS SHALL INCLUDE NEW COPPER TUBING, TYPE "K", CORPORATION STOPS, CURB STOP VALVES, SERVICE BOXES, AND UNIONS AS REQUIRED. WATER SERVICE REPLACEMENTS SHALL INCLUDE NEW COPPER TUBING, CORPORATION STOPS, CURB STOP VALVES, SERVICE BOXES AND UNIONS AS REQUIRED. UNIONS FOR WATER SERVICE TRANSFERS SHALL BE MUELLER H-15400 STRAIGHT THREE PART UNION WITH COPPER FLARE NUT (BOTH ENDS)...



"T" HYDRANT CONNECTION

(TO BE INSTALLED ONLY WITH WRITTEN APPROVAL OF THE COMMUNITY) NOT TO SCALE



"L" HYDRANT CONNECTION

NOT TO SCALE



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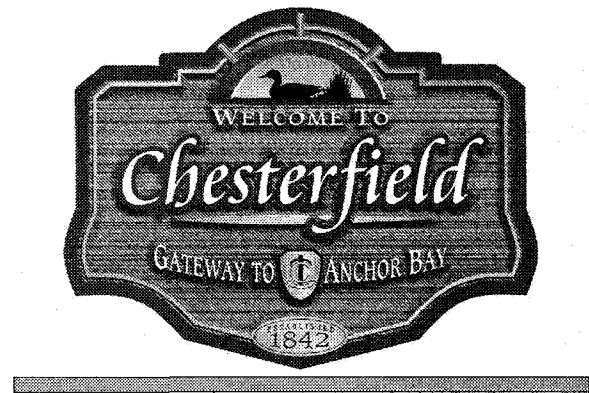
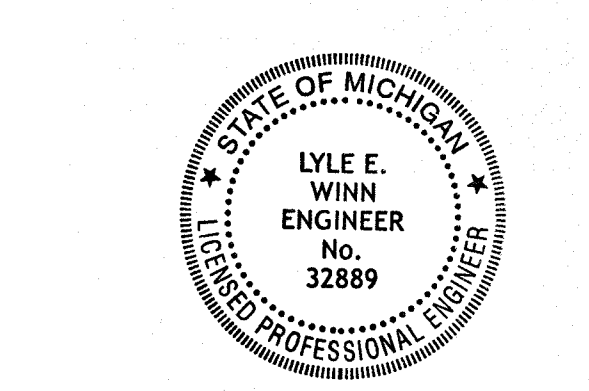


Table with columns for DATE, SUBMITTALS/REVISIONS, DRAWN BY, CHECKED BY, DATE. Includes a signature block for Lyle E. Winn, Engineer No. 32889.

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APPROVED BY: Lyle E. Winn P.E. No. 32889

DEPARTMENT OF PUBLIC WORKS

APPROVED BY: Jon Coddington, DIRECTOR

DATE: 12/6/18

CHARTER TOWNSHIP OF CHESTERFIELD

STANDARD WATER MAIN DETAILS (1 OF 2)

SHEET NO.