Order Plans @ WWW.DLine.com

NOTES:
A. ALL PIPE AND FITTINGS SHALL BE DUCTILE IRON PIPE (DIP) OR PVC. NEW SERVICE LATERALS SHALL BE INSTALLED TO MATCH THE EXISTING SLOPES AND CONFIGURATIONS UNLESS NOTED OTHERWISE. REFER TO DETAIL F.
B. ALL FLANGE ASSEMBLY (BOLTS AND GASKETS) SHALL BE STAINLESS STEEL.
C. ALL PIPE SHALL BE MECHANICALLY RESTRAINED FROM TIP TO PROPERTY LINE VALVE.
D. ONLY 6" MJ, 90 DUCTILE IRON MJ FITTINGS ARE ALLOWED - SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO ORDERING.
E. ALL CONCRETE SHALL BE 3000#/SQ IN 28 DAY COMPRESSIVE STRENGTH.
F. DESIGN SHALL CONFORM TO ACTUAL FIELD CONDITIONS. SPECIFIED ITEMS ARE TYPICAL AND MAY REQUIRE MODIFICATION TO FIT ACTUAL CONDITIONS.
G. ALL PIPE SHALL BE INSTALLED WITH MINIMUM COVER AS WITH LIGHT TRAFFIC SHALL BE LOCK-IN-PLACE ANTI-ROTATION MJ GLAND.
H. INCLUDES MARK FABRIC SHALL CONFORM TO ASTM A 240.
I. DIMENSIONAL INFORMATION SHALL BE VERIFIED IN ALL OPENINGS.
J. PIPE PENETRATIONS SHALL BE SEALED WITH FLEXIBLE CONNECTORS.
K. ALL JOINTS SHALL BE SLOPE WATERTIGHT USING A RANGE OF GUTTY RUBBER JOINT MASTIC.
L. FRAME TO BE FLUSH WITH GROUND OR CONCRETE SIDEWALK, GROUND SHALL SLOPE AWAY FROM VAULT.
M. ALL VAULTS SHALL BE RACK WEATHERPROOF USING 2 RANGE OF GUTTY RUBBER JOINT MASTIC

NO.	ALTERNATE DESCRIPTION
1	WHEN USING SCHEDULE 80 PIPE WITH STAINLESS STEEL SERIES 316 SCHEDULE 80 SET SCREW, USE THE FOLLOWING PRODUCTS:
2	2" BALL CORPORATION STOP (CC TAPER THREAD x FNPT)
3	2" BRASS HEX BUSHING (FNPT x IPS PIPE SCHEDULE 80 THREADS)
4	2" BALL VALVE (FNPT x FNPT)
5	2" BRASS HEX NIPPLE (FNPT x FNPT) - CAP END

NO.	DESCRIPTION
1	EXISTING 24" PRESTRESSED WATER MAIN
2	TAPPING SLEEVE (STEEL) AND GATE VALVE (DUCTILE IRON) FOR 24" PRESTRESSED WATER MAIN
3	STANDARD VALVE BOX ASSEMBLY (TYP.) - ALL VALVES (EXCEPT AT CONNECTION TO EXISTING MAIN)
4	2" TYPE K COPPER TUBING
5	2" BALL VALVE (CORPORATION STOP)
6	2" - 90° BRASS PIPE BEND
7	2" BRASS METER ADAPTER, 1" FLARE X 2" MIP
8	2" WATER METER (DISPLACEMENT)
9	2" BRASS METER ADAPTER, 1" FLARE X 2" MIP
10	2" BRASS METER ADAPTER, 1" FLARE X 2" MIP
11	2" BRASS METER ADAPTER, 1" FLARE X 2" MIP

NOTES:
1. CLEANOUT COVER TO BE FLUSH WITH THE FINAL GRADE. RESTORE SURFACE TO MATCH EXISTING CONDITIONS IN ACCORDANCE WITH CMUD STANDARD SPECIFICATIONS AND DETAILS.
2. LOCATION OF CLEANOUT SHALL BE AS DIRECTED BY ENGINEER.
3. NEW SERVICE LATERAL PIPE, CLEANOUT PIPING AND FITTINGS SHALL BE DUCTILE IRON PIPE (DIP) OR PVC. NEW SERVICE LATERALS SHALL BE INSTALLED TO MATCH THE EXISTING SLOPES AND CONFIGURATIONS UNLESS NOTED OTHERWISE. REFER TO DETAIL F.
4. CLEANOUT CAP SHALL BE PLASTIC GRIPPER PLUG, END OF PIPE MODEL BY CHERNE INDUSTRIES OR APPROVED EQUAL.
5. FOR MEASUREMENT AND PAYMENT, CLEANOUT TO BEGIN AT WYE FITTING.

NOTES:
1. BACKFLOW PREVENTION ASSEMBLIES (BPAS) SHALL CONFORM TO CLT WATER SPECIFICATIONS. SHUT-OFF VALVES ARE SPECIFIC TO EACH APPROVED BPA AND NO SUBSTITUTIONS OF SHUT-OFF VALVES ARE PERMITTED. REFER TO CLT WATER'S APPROVED LIST OF BPAS.
2. PIPE MATERIAL AND FITTINGS SHALL BE AS SPECIFIED BY CLT WATER STANDARDS & SPECIFICATIONS.
3. INSULATED ENCLOSURE SHALL BE AS SPECIFIED IN CLT WATER ENCLOSURE INFORMATION. HEATED INSULATED ENCLOSURES ARE PROHIBITED FOR FIRE LINE SERVICES. NO INSULATION SHALL BE WRAPPED AROUND BPAs.
4. ALL LOCATIONS FOR BPAS REQUIRE CLT WATER APPROVAL AND MUST BE OUTSIDE OF ZONING SET-BACK (TYPICALLY) BEHIND METER.
5. THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FIRE DEPT. CONNECTION POINTS, OR OTHER WATER-USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS CLT WATER-REQUIRED BACKFLOW PREVENTER.
6. EACH CLT WATER-REQUIRED BPA IS REQUIRED TO BE TESTED BY A CLT WATER-APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM IN SERVICE. TEST RESULTS SHALL BE SUBMITTED TO CLT WATER WITHIN 30 DAYS, AND TESTED ANNUALLY THEREAFTER. SUBMITTING RESULTS TO CLT WATER.
7. ALL INSTALLATIONS INTENDED FOR ADDRESSING CLT WATER REQUIREMENTS, REQUIRE PRIOR APPROVAL FROM THE APPROPRIATE CLT WATER BACKFLOW INSPECTOR.

NOTES:
A. CONCRETE FOOTING TO BE CENTERED OVER VALVE NUT, AND SHALL NOT BEAR ON VALVE BODY.
B. PROVIDE CLEARANCE BETWEEN VALVE FOOTING AND THE VALVE.
C. WHEN OPERATING NUT DEPTH EXCEEDS 6'-0" BELOW FINISHED GRADE, PROVIDE EXTENSION STEM WITH STANDARD 2" SQUARE OPERATING NUT IN TOP SECTION OF VALVE BOX. SEE STANDARD DETAIL.
D. VALVE BOX ASSEMBLY SHALL CONSIST OF NO MORE THAN 2 VERTICAL SECTIONS - 1 TOP SECTION, 1 - BOTTOM SECTION, AND 1 - PIPE RISER SECTION.
E. CONCRETE PADS SHALL NOT BE USED IN PAVEMENT (CONCRETE OR ASPHALT) SIDEWALKS OR DRIVEWAYS.

NO.	DESCRIPTION
1.	60" x 85" PRECAST (CMUD CAST IN PLACE) CONCRETE, STEEL FRAME AND 24" DIAMETER PRECAST PAD
2.	NON - SHRINK GROUT - IN ANNULAR SPACE.
3.	VALVE BOX COVER.
4.	TOP SECTION VALVE BOX.
5.	EXTENSION STEM AS REQUIRED. SEE NOTE E
6.	BOTTOM SECTION VALVE BOX.
7.	6" PVC PIPE (C900 OR SDR 26).
8.	PRECAST CONCRETE METAL FOOTINGS - TYPE 1 - SEE DETAIL
9.	GATE VALVE (OR BALL VALVE AS APPLICABLE).
10.	PROVIDE MJ RESTRAINT ON ALL SIDES OF PIPE WELL.
11.	PROVIDE #6 AWG STRANDED COPPER TRACER WIRE (TWO AWG #12 GAUGE COPPER TRACER WIRE (TWIN) WITH BLUE INSULATION, TERMINATE WITH 24 INCH EXCESS WIRE LOOPED AT METER BOX AND VALVE BOX (TYP.)
12.	1" (50 mm) CONDUIT - SDR 9 PEX TUBING - ASTM F 876.
13.	CONCRETE (ROADWAY, DRIVEWAY OR SIDEWALK)
14.	ASPHALT PAVEMENT.
15.	COMPACTED AGGREGATE BASE COURSE (CABC) OR ASPHALT BASE COURSE.
16.	COMPACTED SUBGRADE.
17.	NONWOVEN GEOTEXTILE FABRIC - 10' x 10' - 2 LAYERS - MIRAFI #140N OR CARTHAGE MILLS 6 FX - 40HS
18.	PRECAST CONCRETE FOOTING - TYPE I - SEE DETAIL

REVISIONS			
REV.	DATE	COMMENT	BY
1	10/11/17	PER CITY OF CLT & NCDOT COMMENTS	SRF
2	11/28/17	PER CITY OF CLT & NCDOT COMMENTS	SRF
3	1/9/18	PER MECKLENBURG COUNTY COMMENTS	SRF

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NC@BohlerEng.com

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031128 REGISTERED ANDREW V. MORIARTY
No.31128
1/9/18

PROJECT No. NCC182120
DRAWN BY: SRF/AJS
CHECKED BY: BWR
DATE: 9/9/17
SCALE: AS NOTED
CAD I.D.: SD0

PROJECT:
CONNECTION POINT
FOR
EASTSIDE CONNECTIONS JV, LLC
LOCATION OF SITE
MONROE RD & LONG AVE
CHARLOTTE, NC 28212
MECKLENBURG COUNTY

SHEET TITLE:
UTILITY DETAILS

SHEET NUMBER:
C-10.0