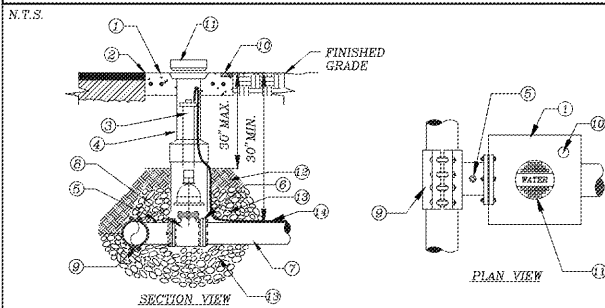


P:\CAD\2017\17-108\CONSTRUCTION\17-108_DTL-UTIL.dwg, 12 UTILITY DETAILS, 1/26/2018 8:09:15 AM, Avalon Engineering Inc.

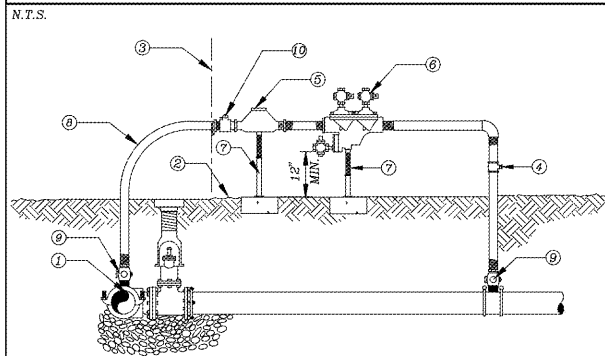
STANDARD DETAIL NO. 6.1 LEE COUNTY UTILITIES TAPPING SLEEVE AND VALVE



- 1 CONCRETE PAD (SEE VALVE INSTALLATION DETAIL)
- 2 SET TOP OF BOX FLUSH WITH FINISHED GRADE
- 3 EXTENSION STEM IF TOP OF OPERATING NUT IS MORE THAN 30" BELOW FINISH GRADE
- 4 VALVE BOX (SEE VALVE INSTALLATION DETAIL)
- 5 OUTLET FOR TESTING
- 6 MJ RESTRAINED
- 7 MAIN SIZE VARIES
- 8 TAPPING VALVE (SEE VALVE INSTALLATION DETAIL)
- 9 LCU APPROVED ALL STAINLESS STEEL PRESSURE RATED TAPPING SLEEVE. FOR SIZE ON SIZE TAPS A FLANGED TAPPING SLEEVE IS REQUIRED. SPRING LOADED TAPPING SLEEVE IS REQUIRED WHEN CONNECTING TO HDPE (SEE APPROVED MATERIAL LIST).
- 10 BRASS PLATE (SEE VALVE INSTALLATION DETAIL)
- 11 CAST IRON DROP COVER MARKED "WATER," "SEWER," OR "REUSE"
- 12 COMPACTED SUITABLE EARTH BACKFILL
- 13 3/4" GRANULAR MATERIAL #57 STONE
- 14 12 GAUGE DOUBLE INSULATED COPPER LOCATING WIRE (SEE LCU STANDARD DETAIL)

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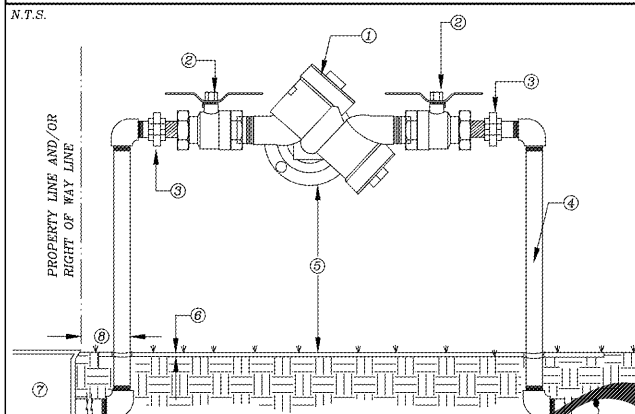
STANDARD DETAIL NO. 6.15 LEE COUNTY UTILITIES TEMPORARY CONSTRUCTION JUMPER WITH METER



- NOTES:
CONTRACTOR/CUSTOMER SHALL APPLY AT LEE COUNTY UTILITIES FOR TEMPORARY WATER SERVICE FIVE DAYS PRIOR TO REQUIRED SERVICE DATE. THE METER ONLY WILL BE FURNISHED BY LEE COUNTY UTILITIES. ALL FITTINGS, PIPING, VALVES AND MATERIALS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR/CUSTOMER. THE APPROVED BACKFLOW PREVENTION DEVICE SHALL BE TESTED AND CERTIFIED BY LEE COUNTY UTILITIES APPROVED CERTIFIED BACKFLOW PREVENTION TECHNICIAN (FURNISHED BY CONTRACTOR/CUSTOMER) AT TIME OF METER INSTALLATION. CONTRACTOR/CUSTOMER SHALL PROTECT THE ASSEMBLY FROM DAMAGE. TEMPORARY CONSTRUCTION JUMPER/METER ASSEMBLY SHALL NOT BE REMOVED UNTIL SYSTEM IS ACCEPTED AND DEPARTMENT OF HEALTH CERTIFICATION AND CLEARANCE FOR SERVICE FORM HAS BEEN RECEIVED BY LEE COUNTY UTILITIES. WHEN THE NEW SYSTEM IS ACCEPTED, THE TEMPORARY CONSTRUCTION JUMPER METER ASSEMBLY MUST BE COMPLETELY REMOVED DOWN TO CORP STOPS.
- 1 TAPPING SLEEVE AND VALVE TO BE FULLY RESTRAINED ON EXISTING MAIN (SEE LCU STANDARD DETAIL)
 - 2 GRADE
 - 3 PROPERTY LINE AND/OR RIGHT OF WAY LINE
 - 4 BRONZE BALL VALVE
 - 5 METER FURNISHED BY LEE COUNTY UTILITIES
 - 6 REDUCED PRESSURE BACKFLOW PREVENTER
 - 7 PIPE STAND
 - 8 2" DIA. HDPE DR9
 - 9 2" DIA. CORPORATION STOP
 - 10 2" DIA. CURB STOP

REV. 12/10/2015

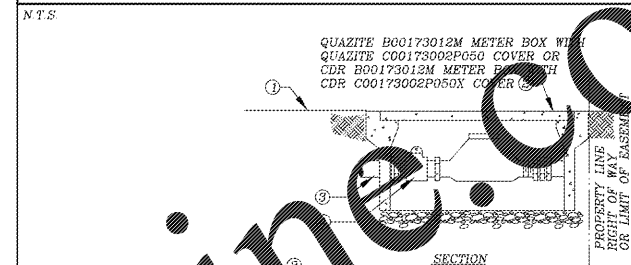
STANDARD DETAIL NO. 6.19 LEE COUNTY UTILITIES 3/4" TO 2" CROSS CONNECTION CONTROL ASSEMBLY



- 1 LCU APPROVED REDUCED PRESSURE BACKFLOW PREVENTION DEVICE (SEE APPROVED MATERIAL LIST)
 - 2 FULL FLOW BRONZE BALL VALVE
 - 3 UNION
 - 4 ALL PIPING AND FITTINGS SHALL BE D.I.P., PRESSURE CLASS 350
 - 5 12" MIN. - 24" MAX. UNLESS OTHERWISE APPROVED BY LCU
 - 6 FINISHED GRADE
 - 7 METER
- NOTES:
1. UNDERGROUND
2. INITIAL AND ANNUAL SERVICE TESTING REQUIRED

REV. 12/10/2015

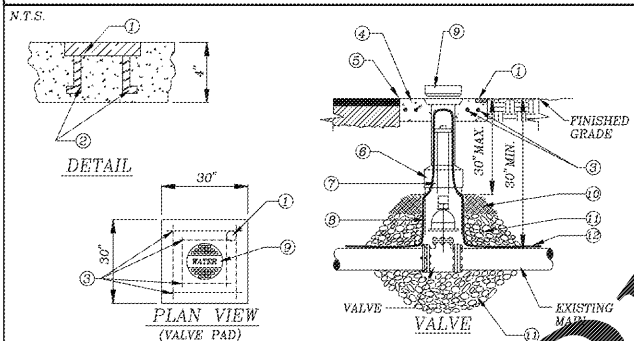
STANDARD DETAIL NO. 6.17 LEE COUNTY UTILITIES WATER SERVICE INSTALLATION 1-1/2" THROUGH 2"



- 1 FINISHED GRADE
 - 2 METER BOX WITH COVER TO BE LOCATED INSIDE R.O.W. @ PROPERTY LINE & CLEAR OF DRIVEWAYS.
 - 3 POLYETHYLENE TUBING, PE 3408, 200PSI, SDR9, BLUE (SEE APPROVED MATERIAL LIST) WITH LOCATING WIRE
 - 4 STRAIGHT CURB STOP WITH PADLOCK WINGS CONNECTED TO LEE COUNTY WATER METER (SEE APPROVED MATERIAL LIST)
 - 5 MIN. 22 1/2" NOT TO EXCEED 45°
 - 6 BALL CORPORATION STOP (SEE APPROVED MATERIAL LIST)
 - 7 DOUBLE STRAP SERVICE SADDLE PROVIDE SPRING LOADED TAPPING SADDLE WHEN TAPPING HDPE (SEE APPROVED MATERIAL LIST)
 - 8 WATER MAIN
- NOTE:
1. TUBING UNDER ROADWAY SHALL BE ENCASED IN 4" P.V.C. PIPE SCHEDULE 40 MINIMUM AND EXTEND 4 FEET BEYOND THE EDGES OF PAVEMENT OR BACK OF CURB.

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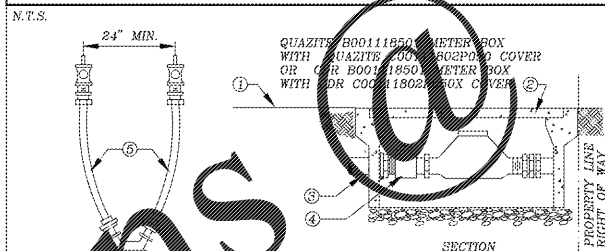
STANDARD DETAIL NO. 6.2 LEE COUNTY UTILITIES VALVE INSTALLATION



- 1 BRASS PLATE: SIZE OF VALVE, VALVE TYPE, NO. OF TURNS & DIRECTION TO OPEN, VALVE M.F.C. & YEAR INSTALL, SYSTEM "WATER" OR "SEWER" OR "REUSE" OR "FIRE"
- 2 ANCHOR
- 3 EIGHT (8) #4 BARS OVERLAP EACH CORNER BY 2"
- 4 30" SQ X 4" THK. CONC. PAD SURROUNDING BOX, MIN. 3,000 P.S.I. POURED IN PLACE
- 5 SET TOP OF BOX FLUSH WITH FINISHED GRADE
- 6 HEAVY DUTY TRAFFIC BEARING CAST IRON VALVE BOX, ADJUSTABLE SCREW TYPE, 5 1/4" DIAMETER SHAFT (SEE APPROVED MATERIAL LIST)
- 7 EXTENSION STEM WITH 2" OPERATING NUT AND WASHER. IF NUT IS MORE THAN 30" BELOW FINISH GRADE, USE SPRING LOADED TAPPING SLEEVE
- 8 RISER NOT TO BEAR ON MAIN OR PIPE
- 9 SET TOP OF DROP COVER MARKED "WATER" OR "SEWER" OR "REUSE" OR "FIRE"
- 10 COMPACTED SUITABLE EARTH BACKFILL
- 11 3/4" GRANULAR MATERIAL #57 STONE
- 12 12 GAUGE DOUBLE INSULATED COPPER LOCATING WIRE (SEE LCU STANDARD DETAIL)

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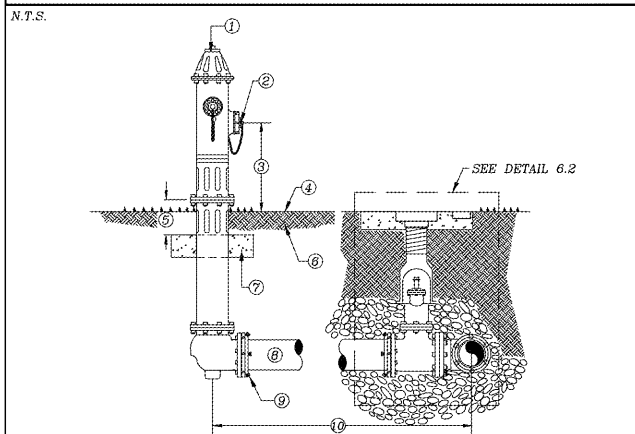
STANDARD DETAIL NO. 6.14 LEE COUNTY UTILITIES WATER SERVICE INSTALLATION 5/8" THROUGH 1"



- 1 FINISHED GRADE
- 2 METER BOX WITH COVER TO BE LOCATED INSIDE R.O.W. @ PROPERTY LINE & CLEAR OF DRIVEWAYS
- 3 POLYETHYLENE TUBING, PE 3408, 200PSI, SDR9, BLUE (SEE APPROVED MATERIAL LIST) WITH LOCATING WIRE
- 4 STRAIGHT CURB STOP WITH PADLOCK WINGS CONNECTED TO LEE COUNTY WATER METER (SEE APPROVED MATERIAL LIST)
- 5 3/4" POLYETHYLENE TUBING, PE 3408, 200 P.S.I. SDR 9, BLUE (SEE APPROVED MATERIAL LIST) WITH LOCATING WIRE
- 6 1" POLYETHYLENE TUBING, PE 3408, SDR 9, BLUE (SEE APPROVED MATERIAL LIST) WITH LOCATING WIRE
- 7 MIN. 22 1/2" NOT TO EXCEED 45°
- 8 BALL CORPORATION STOP (SEE APPROVED MATERIAL LIST)
- 9 BRASS "Y" OR "T" CONNECT (SEE APPROVED MATERIAL LIST)
- 10 DOUBLE STRAP SERVICE SADDLE PROVIDE SPRING LOADED TAPPING SADDLE WHEN TAPPING HDPE (SEE APPROVED MATERIAL LIST)
- 11 WATER MAIN

REV. 12/10/2015

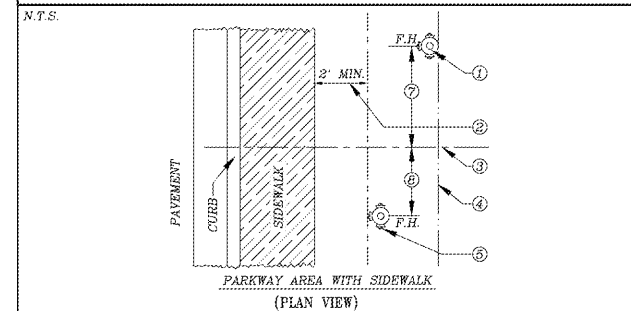
STANDARD DETAIL NO. 6.24 LEE COUNTY UTILITIES FIRE HYDRANT ASSEMBLY



- 1 FIRE HYDRANT, STANDARD A.W.W.A. SAFETY YELLOW (SEE APPROVED MATERIAL LIST)
- 2 PUMPER CONNECTION FACING AS PER FIRE DISTRICT RECOMMENDATION
- 3 18" MIN. - 24" MAX.
- 4 FINISHED GRADE
- 5 6" MIN. CLEARANCE
- 6 COMPACTED FILL
- 7 30" X 30" X 4" CONCRETE BREAK AWAY CONCRETE PAD, 3000 P.S.I.
- 8 PIPE TO BE D.I.P., PRESSURE CLASS 350
- 9 RESTRAINED JOINTS, FROM HYDRANT TO WATER MAIN
- 10 VARIABLE DISTANCE, IF GREATER THAN 100' A VALVE SHALL BE INSTALLED AT HYDRANT BASE

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STANDARD DETAIL NO. 6.25 LEE COUNTY UTILITIES FIRE HYDRANT LOCATIONS/CLEARANCE



- 1 PREFERRED LOCATION
- 2 F.H. TO BE LOCATED 2' MINIMUM FROM EDGE OF SIDEWALK
- 3 P.T. OR P.C. OF CURB RETURN
- 4 PROPERTY LINE RIGHT-OF-WAY OR LIMIT OF EASEMENT
- 5 ACCEPTABLE LOCATION WITH CURB RADIUS OF 20' OR MORE
- 6 BETWEEN 2'-0" MIN. AND 6'-0" MAX.
- 7 6'-0"
- 8 4'-0"

NOTES:
1. OBSTRUCTIONS SUCH AS UTILITY POLES, STREET SIGNS, IRRIGATION BOXES, FENCES, ETC. SHALL NOT BE PLACED BETWEEN CURB AND HYDRANT.
2. SOME LOCATIONS APPLY AT EITHER END OF CURB RETURNS.
3. DIMENSION SHOWN ON CONSTRUCTION DRAWINGS SUPERCEDE LOCATIONS SHOWN HERE.

REV. 12/10/2015

BID SET
(NOT FOR CONSTRUCTION)

01/26/18

Brendon D. Sloan
FL. LICENSE # 69978

DATE	BY	REVISION DESCRIPTION
07/15/17	BS	CONTRACTOR'S SUBMITTAL
12/15/17	BS	CONTRACTOR'S SUBMITTAL
01/25/18	BS	CONTRACTOR'S COMMENTS
01/25/18	BS	PER LCU COMMENTS
01/26/18	BS	REV. SET

AVALON ENGINEERING, INC.
2503 DEL PRADO BLVD. #200
CAPE CORAL, FLORIDA 33904
FBPE#5128 (239) 573-2077

DEVELOPER:
Palmco, Capital Group, LLC
1643 Williamsburg Square
Lakeland, Florida 33803
(863) 808-1320

DOLLAR GENERAL
4055 HANCOCK BRIDGE PARKWAY
LEE COUNTY, FLORIDA

UTILITY DETAILS
LEE COUNTY UTILITIES

17-108/CONST

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