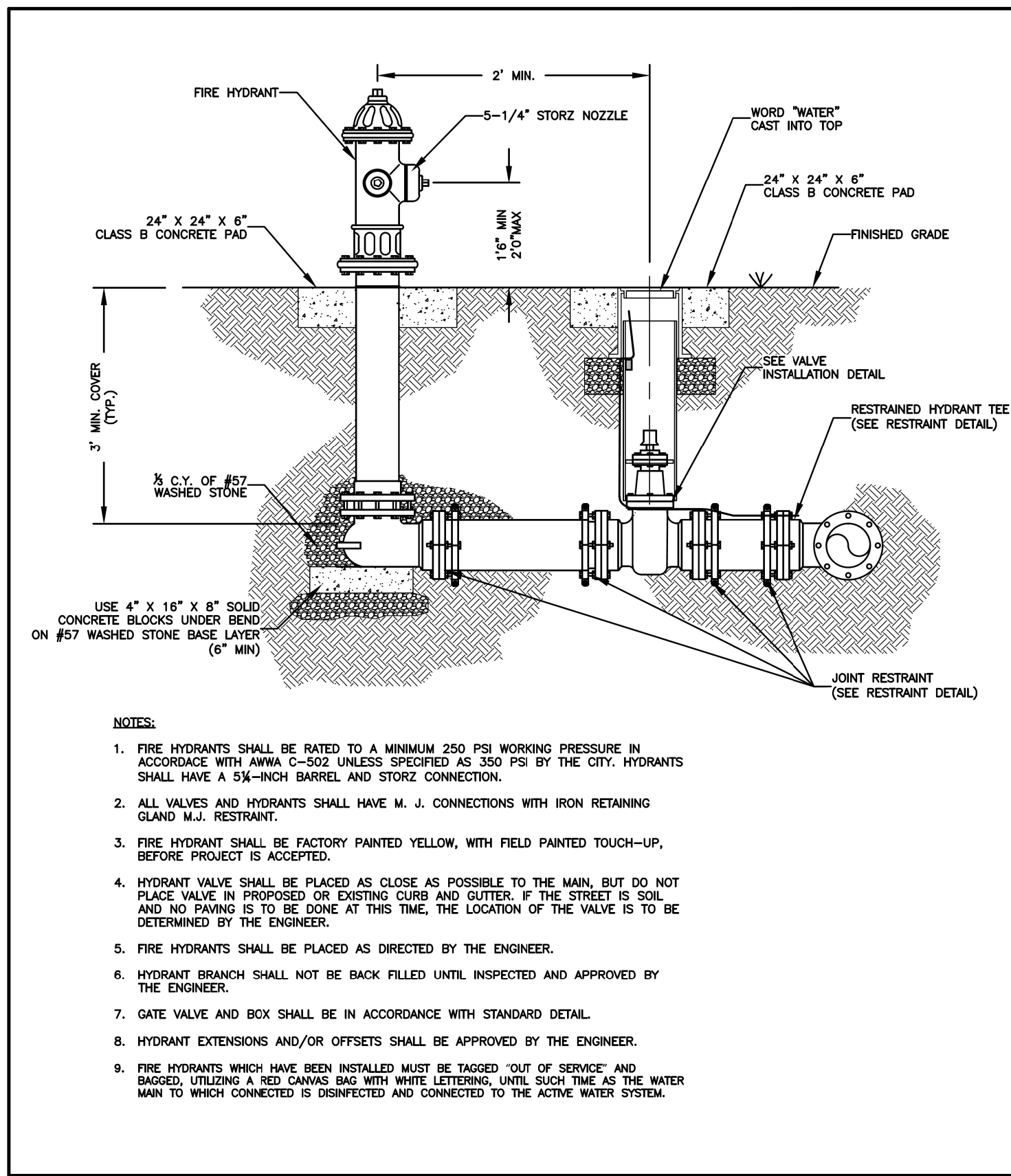


12/31/20

V:\Asheville\transportation\31535-05 U-5886\Utilities\Water and Sewer Design\U5886-UTL-UC-3A.dgn

**HENDERSON COUNTY**

PROJECT REFERENCE NO. <b>U-5887</b>	SHEET NO. <b>UC-3D</b>
DESIGNED BY: <b>DCR</b>	UTILITY CONSTRUCTION PLANS ONLY
DRAWN BY: <b>DCR</b>	
CHECKED BY: <b>JDN</b>	
APPROVED BY: <b>JDN</b>	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
<b>DOCUMENT NOT CONSIDERED FINAL UNTIL ALL SIGNATURES ARE COMPLETED</b>	



- NOTES:**
- FIRE HYDRANTS SHALL BE RATED TO A MINIMUM 250 PSI WORKING PRESSURE IN ACCORDANCE WITH AWWA C-502 UNLESS SPECIFIED AS 300 PSI BY THE CITY. HYDRANTS SHALL HAVE A 5X-INCH BARREL AND STORZ CONNECTION.
  - ALL VALVES AND HYDRANTS SHALL HAVE M. J. CONNECTIONS WITH IRON RETAINING GLAND M.J. RESTRAINT.
  - FIRE HYDRANT SHALL BE FACTORY PAINTED YELLOW, WITH FIELD PAINTED TOUCH-UP, BEFORE PROJECT IS ACCEPTED.
  - HYDRANT VALVE SHALL BE PLACED AS CLOSE AS POSSIBLE TO THE MAIN, BUT DO NOT PLACE VALVE IN PROPOSED OR EXISTING CURB AND GUTTER, IF THE STREET IS SOIL AND NO PAVING IS TO BE DONE AT THIS TIME, THE LOCATION OF THE VALVE IS TO BE DETERMINED BY THE ENGINEER.
  - FIRE HYDRANTS SHALL BE PLACED AS DIRECTED BY THE ENGINEER.
  - HYDRANT BRANCH SHALL NOT BE BACK FILLED UNTIL INSPECTED AND APPROVED BY THE ENGINEER.
  - GATE VALVE AND BOX SHALL BE IN ACCORDANCE WITH STANDARD DETAIL.
  - HYDRANT EXTENSIONS AND/OR OFFSETS SHALL BE APPROVED BY THE ENGINEER.
  - FIRE HYDRANTS WHICH HAVE BEEN INSTALLED MUST BE TAGGED 'OUT OF SERVICE' AND BAGGED, UTILIZING A RED CANVAS BAG WITH WHITE LETTERING, UNTIL SUCH TIME AS THE WATER MAIN TO WHICH CONNECTED IS INSPECTED AND CONNECTED TO THE ACTIVE WATER SYSTEM.

DATE: 04/24/2019 WD DWG. NO. 12

SCALE: NOT TO SCALE  
City of Hendersonville Engineering Department  
305 Williams Street  
Hendersonville, NC 28792  
(828) 697-3000 (office)  
www.cityofhendersonville.org

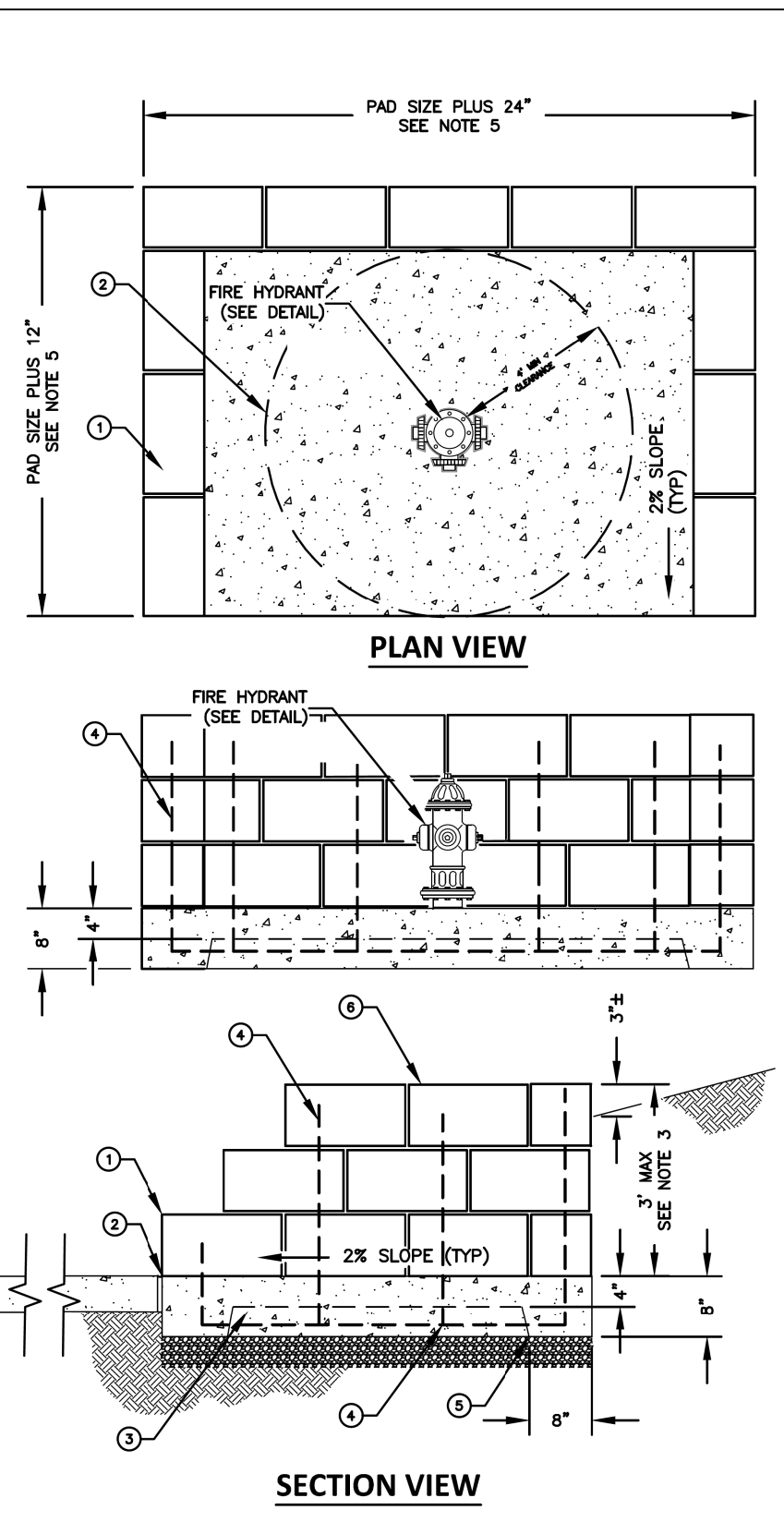
**FIRE HYDRANT  
STANDARD INSTALLATION  
DETAIL**



- NOTES:**
- RETAINING WALLS FOR USE IN CONJUNCTION WITH THE INSTALLATION OF FIRE HYDRANTS SHALL BE INSTALLED WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
  - FIGURES SHOWN REPRESENT MINIMUMS ONLY. ALL RETAINING WALLS ABOVE 4' SHALL BE DESIGNED BY THE ENGINEER OF WORK AND PERMITTED BY THE AGENCY OF JURISDICTION.
  - VERTICAL BARS TO BE INSTALLED AT 18" ON CENTER. INSTALL MINIMUM 1-BAR IN THE CENTER OF THE FOOTING FOR WALL.
  - PAD SIZE TO MATCH SIZE OF PAD REQUIRED FOR FIRE HYDRANT TO BE INSTALLED.
  - GRAVITY WALL MAY BE INSTALLED ONLY WITH PRIOR APPROVAL OF SUBMITTAL FOR INSTALLATION.
  - AN EASEMENT MAY BE REQUIRED DEPENDING ON THE LOCATION OF THE WALL.

**ITEM NO. SIZE AND DESCRIPTION**

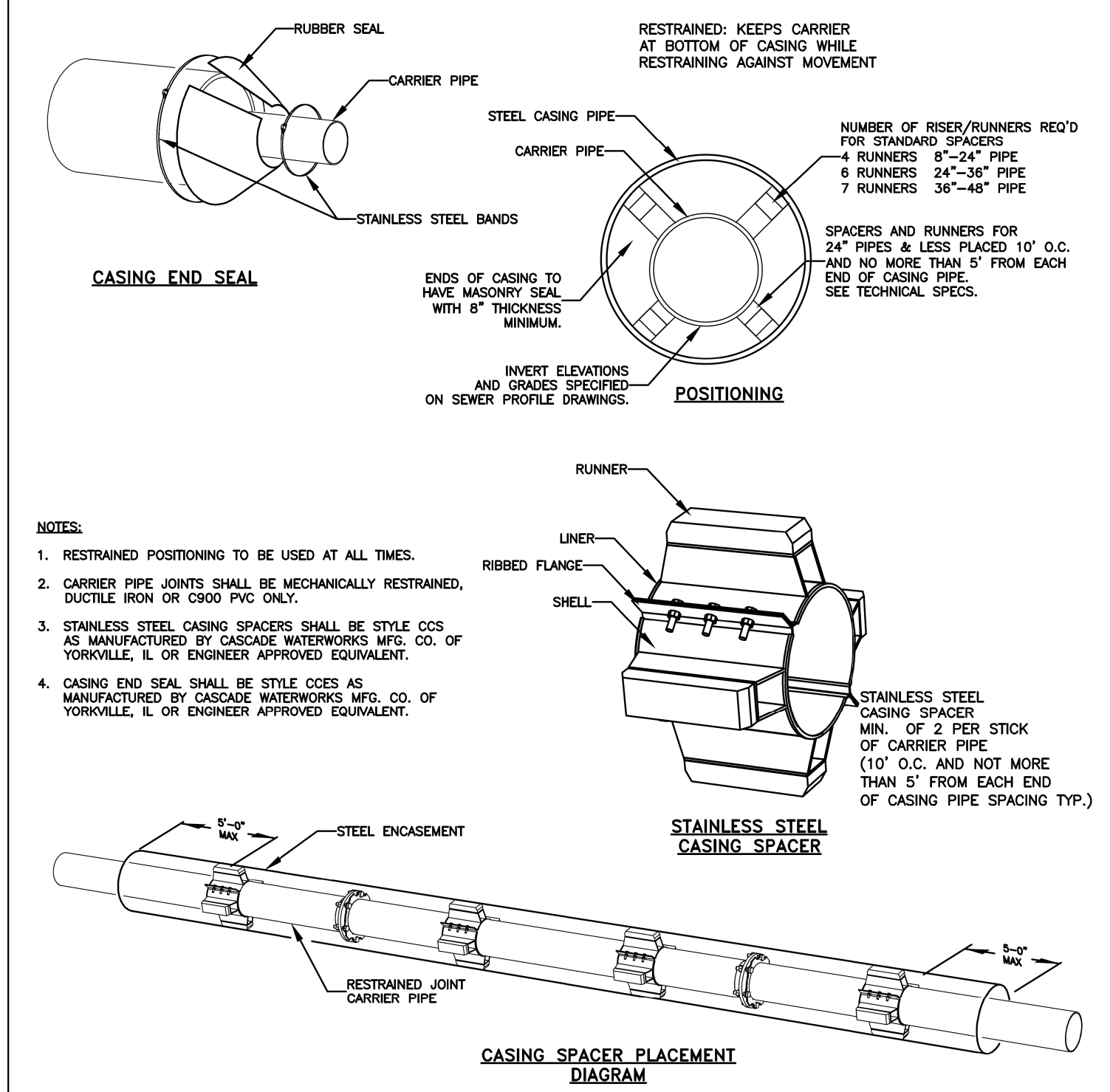
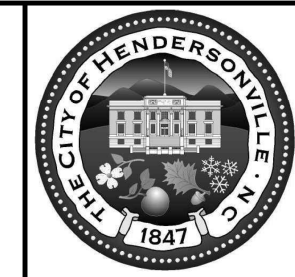
- 200MM X 200MM X 400MM (8" X 8" X 16") CONCRETE OR SLUMP BLOCK (SOLID GROUT ALL CELLS), SEE NOTE 7
- COLD JOINT STRIP
- CLASS B CONCRETE PAD OVER 6" C&C
- #4 REBAR TYPICAL SEE NOTE 3
- 8" X 8" CONCRETE FOOTING
- CONCRETE CAP BLOCK



DATE: 01/12/2019

SCALE: NOT TO SCALE WD DWG. NO. 14  
City of Hendersonville Engineering Department  
305 Williams Street  
Hendersonville, NC 28792  
(828) 697-3000 (office)  
www.cityofhendersonville.org

**FIRE HYDRANT SLOPE INSTALLATION  
DETAIL**

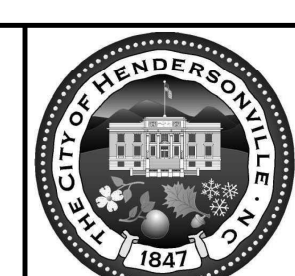


- NOTES:**
- RESTRAINED POSITIONING TO BE USED AT ALL TIMES.
  - CARRIER PIPE JOINTS SHALL BE MECHANICALLY RESTRAINED, DUCTILE IRON OR CS90 PVC ONLY.
  - STAINLESS STEEL CASING SPACERS SHALL BE STYLE CCS AS MANUFACTURED BY CASCADE WATERWORKS MFG. CO. OF YORKVILLE, IL OR ENGINEER APPROVED EQUIVALENT.
  - CASING END SEAL, SHALL BE STYLE COES AS MANUFACTURED BY CASCADE WATERWORKS MFG. CO. OF YORKVILLE, IL OR ENGINEER APPROVED EQUIVALENT.

DATE: 01/12/2019 WD DWG. NO. 16

SCALE: NOT TO SCALE  
City of Hendersonville Engineering Department  
305 Williams Street  
Hendersonville, NC 28792  
(828) 697-3000 (office)  
www.cityofhendersonville.org

**CARRIER PIPE IN STEEL ENCASEMENT  
DETAIL**



**V&M**  
Vaughn & Melton  
Consulting Engineers  
Asheville, North Carolina  
828-253-2796

<input type="checkbox"/> Tri-Cities, TN 423-467-8401	<input type="checkbox"/> Knoxville, TN 865-546-5800	<input type="checkbox"/> Spartanburg, SC 864-574-4175	<input type="checkbox"/> Charleston, SC 843-974-5650
<input type="checkbox"/> Charlotte, NC 704-357-0488	<input type="checkbox"/> Boone, NC 828-355-9933	<input type="checkbox"/> Kennesaw, GA 770-621-3590	<input type="checkbox"/> Indianapolis, IN 606-248-6600

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