500 - General
SEEDING
A. ALL AREAS DESIGNATED FOR SEEDING SHALL HAVE A MINIMUM OF 6" OF TOPSOIL OVER THE ENTIRE AREAS. THE AREA SHALL BE RAKED, ROLLED, AND DRESSED READY FOR SEEDING. NOT STONE OVER 1" IN SIZE PERMITTED.

DRAINS
A. ALL FIELD OR STORM DRAINS WHICH ARE ENCOUNTERED DURING CONSTRUCTION SHALL BE REPAIRED AND PROVIDED WITH UNOBSLOCTED OUTLETS AS APPROVED AND DIRECTED BY THE CITY AND MARKED ON THE RECORD DRAWINGS.

CONNECTIONS TO EXISTING PIPE
A. WHERE THE PLANS PROVIDE FOR PROPOSED CONDUIT TO BE CONNECTED TO, OR TO CROSS EITHER OVER OR UNDER AN EXISTING SEWER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

UTILITIES
A. THE MAXIMUM LENGTH OF ANY UTILITY TRENCH TO BE OPEN AT ANY TIME SHALL BE 250' UNLESS OTHERWISE APPROVED.
B. ALL UNDERGROUND UTILITIES ARE TO BE WITHIN THE PUBLIC RIGHT OF WAY.

COMPACTION METHODS
A. FLOODING SHALL NOT BE PERMITTED.
B. MECHANICAL DEVICES, HAND DEVICES VIBRATING PLATES OR OTHER EQUIPMENT APPROVED BY THE CITY IS ACCEPTABLE 1' ABOVE PIPE IN UNIFORM LIFTS OF 12" (LOOSE DEPTH) OF EXISTING NATIVE MATERIAL AND 6" OF GRANULAR BACKFILL. THE HEIGHT OF LIFTS WILL DEPEND UPON THE TYPE OF MECHANICAL EQUIPMENT BEING USED. THE HEIGHT WILL BE 6" FOR HAND OPERATED TOOLS AND UP TO 12" ON EQUIPMENT MOUNTED TOOLS. THE COMPACTION EQUIPMENT SHALL BE CAPABLE OF COMPACTING THE MATERIAL UNDER THE HAUNCH OF HE PIPE.
C. DENSITY FOR THE ABOVE METHODS SHALL BE NO LESS THAN THAT OF THE SURROUNDING GROUND UNLESS OTHERWISE SPECIFIED.

DISPOSAL OF SURPLUS MATERIAL
A. THE CITY MAY AT THEIR DISCRETION REQUIRE THAT SURPLUS MATERIAL BE DEPOSITED AT A LOCATION DESIGNATED WITHIN A TWO-MILE RADIUS OF THE WORK SITE.

TYPICAL NOTES-ALL SUBDIVISION CONSTRUCTION DRAWINGS
A. ALL CONSTRUCTION METHODS AND MATERIALS SHALL COMPLY WITH THE CITY ENGINEERING STANDARDS OR ODOT WHICHERSOEVER IS MORE RESTRICTIVE.
B. ALL COMPACTION SHALL MEET THE CITY REQUIREMENTS.
C. THE CITY WILL LOCATE AREAS IN NEED OF UNDERCUTTING UNLESS THE DEVELOPER CHOOSES TO HAVE AT HIS EXPENSE AN INDEPENDENT APPROVED TESTING COMPANY TO DETERMINE UNSUITABLE MATERIAL AREAS THAT NEED UNDERCUTTING.
D. ALL EMBANKMENT AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% OF ASTM D698 STANDARD PROCTOR CURVE AND TESTED TO REPRESENT A DEPTH OF 12" UNLESS OTHERWISE SPECIFIED BY THE CITY.
E. ALL UNPAVED AREAS WITHIN THE STREET RIGHT-OF-WAY SHALL BE SEEDED WITHIN 48 HOURS AFTER THE CURB IS BACKFILLED. STAKED STRAW BALES MAY BE REQUIRED IN ADDITION TO SEEDING CONTROL EROSION IF REQUESTED BY THE CITY.
F. STORM WATER POLLUTION PREVENTION SHOULD BE A HIGH PRIORITY ON ALL CONSTRUCTION PROJECTS. ON ALL PROJECTS WHICH DISTURB AT LEAST 1 ACRE OF SOIL, A NPDES PERMIT IS REQUIRED FROM OEP A AND A COPY OF THE PERMIT MUST BE ON FILE AT THE CITY OFFICE BEFORE CONSTRUCTION BEGINS.
BORING / JACKING

A. MATERIALS
   CASING PIPE SHALL BE WELDED STEEL PIPE CONFORMING TO AWWA C-202

B. INSTALLATION (CASING PIPE)
   1. FURNISH PROCEDURE METHODS TO THE CITY FOR APPROVAL.
   2. ALL METHODS AND PROCEDURES SHALL BE APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
   3. ADEQUATELY SUPPORT ALL TRENCHES AND BORING/ JACKING PITS.
   4. INSTALL TO LINE AND GRADE SHOWN.

C. INSTALLATION (CARRIER PIPE)
   1. PLACE CONDUITS IN CASING PIPE TO SAME RELATIVE POSITIONS AS ADJACENT DUCT BY USE OF SPACERS.
   2. FILL THE SPACE BETWEEN CONDUITS INSIDE THE CASING PIPE WITH CLEAN SAND OR OTHER APPROVED MATERIALS AS APPROVED BY THE CITY.

STEEL CASING PIPE

A. STEEL PIPE SHALL HAVE A MINIMUM YIELD STRENGTH OF 35,000 PSI.

B. JOINTS BETWEEN THE SECTIONS OF PIPE SHALL BE FULLY WELDED AROUND THE COMPLETE CIRCUMFERENCE OF THE PIPE.

C. SIZE- A MINIMUM OF 4" GREATER THAN THE LARGEST OUTSIDE DIAMETER OF THE CARRIER PIPE.

D. A STEEL CASING PIPE WILL BE REQUIRED FOR STORM SEWER, WATERMAIN, AND SANITARY SEWER.

<table>
<thead>
<tr>
<th>DIAMETER</th>
<th>NOMINAL</th>
<th>NOMINAL THICKNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(INCHES)</td>
<td>(INCHES)</td>
</tr>
<tr>
<td>10 AND UNDER</td>
<td>0.188</td>
<td></td>
</tr>
<tr>
<td>12 &amp; 14</td>
<td>0.250</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>0.281</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>0.312</td>
<td></td>
</tr>
<tr>
<td>20 &amp; 22</td>
<td>0.344</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>0.375</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>0.406</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>0.438</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>0.469</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>0.500</td>
<td></td>
</tr>
<tr>
<td>34 &amp; 36</td>
<td>0.532</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>0.562</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>0.594</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>0.625</td>
<td></td>
</tr>
<tr>
<td>44 &amp; 46</td>
<td>0.657</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>0.688</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>0.719</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>0.750</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>0.781</td>
<td></td>
</tr>
<tr>
<td>56 &amp; 58</td>
<td>0.812</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>0.844</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>0.875</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>0.906</td>
<td></td>
</tr>
<tr>
<td>66 &amp; 68</td>
<td>0.938</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>0.969</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>1.000</td>
<td></td>
</tr>
</tbody>
</table>
SMOOTH WALL SPIRAL WELDED STEEL CASING PIPE
ASTM - A -139

1" STEEL STRAPS BONDED TO PIPE

CASING PIPE

MECHANICAL RESTRAINED JOINT PIPE

1" STEEL STRAPS BANDED TO PIPE
NOTCHED IN SKIDS

CARRIER PIPE

THREE 4'X4"X5'-0" LONG WOOD, PLASTIC SKIDS OR
OTHER APPROVED DEVICES WITH GREASED
BOTTOMS, STRAPPED TO EACH END OF EACH PIPE.
PIPE BELL MUST BE SUPPORTED OFF CASING PIPE.

CONCRETE PLUGS
AT BOTH ENDS
NOTES

Listed below are construction regulations governing construction activities in the vicinity of trees. The following regulations apply to all types of construction activity being performed within or in close proximity to public right-of-way and easements.

A. For trees measuring 38 inch circumference (equivalent 12’ diameter) or less, soil excavation work or root cutting shall not occur closer than 3 feet from the outer bark of the tree. The circumference of the tree here and elsewhere in these requirements shall be taken 2 feet above ground level. For multi-stemmed trees, the circumference shall be taken at the narrowest point within the first 2 feet above the ground surface.

B. For trees measuring greater than 38 inch circumference, soil excavation work or root cutting shall not occur closer than the distance measured by the circumference of the tree, or a maximum distance of 6 feet, whichever is less.

C. Soil excavation work is permitted closer than the distance parameters established under the above two categories provided all excavation of soil is accomplished by hand shovel or auger, and no roots greater than 2 inch diameter are severed.

D. If there is an inability to perform the requirements established under the aforementioned three situations a representative from the city shall be called to the tree site to make an inspection and recommendation pertaining to the need to remove the tree unless other provisions are specified. In the event removal becomes necessary, trees removed by the city forces or city contract will be removed and replaced by the city at city cost. Trees required to be removed by private contractors, investor-owned public utility companies, or by others who are permitted to perform maintenance and repair work in the public right-of-way and easement areas shall remove said trees at their cost and effort and furthermore shall replace that tree with a suitable size tree and variety per the requirements of the city.

E. In the event removal of the tree is required by private and public utilities, contractors, and others under life threatening or related situations removal of the tree (s) is authorized without written city authorization, providing proper follow-up written documentation is provided in accordance with the city public right-of-way opening and excavation and replacement of the tree(s) is scheduled to the satisfaction of the city.

F. Construction techniques to repair or replace sidewalks and curbs usually involve cutting or severing tree roots, in which the above criteria may apply. However other innovative construction techniques to repair or replace sidewalks and curbs, such as asphalt wedges, grinding, landscape pavers, concrete ramps, etc. to protect tree roots to avoid the requirement of tree removal may be approved by the city urban forester, and will be based on each individual request.

G. Construction projects that involve the removal of curbs and gutters or resurfacing projects may require trimming of the trees along the tree lawn. This trimming is to be coordinated with the city urban forester prior to any work taking place. The trimming will be done to removal all the obstructive branches to permit the largest piece of equipment to pass under the tree’s branches without disturbing any of the tree’s limbs. All pruning must be done according to ANSI A300 standards.

H. All arboriculture work that is performed within the city shall conform to Z133 ANSI standards under the latest revision.
CONSTRUCTION NEAR TREES

TREE TRIMMING DETAIL
NOT TO SCALE

10' ABOVE SIDEWALK
FACE OF SIDEWALK
PUBLIC SIDEWALK
TREE LAWN / GREEN SPACE
FACE OF CURB
15' ABOVE PAVEMENT
STREET SURFACE
SANITARY SEWER DEMO ABANDONMENT

DESTRUCTION ABANDONMENT
AT SANITARY LATERALS ONLY

- SCREW PLUG WITH FLUSH FITTING CAP
- FINISHED GRADE
- VARIABLE
- 45° BEND
- 6" PVC
- COMPACTED BACKFILL
- PVC PIPE
- PVC PLUG OR AS APPROVED BY THE CITY AT HOUSE SIDE
- STANDARD PVC WYE

FLOW

CITY OF PIQUA
SANITARY SEWER DEMO ABANDONMENT