1. Refer to STD DWG DG 1, 2, and 4 for fill height requirements.
3. Place the outside edge of the pipe no closer than 2 times its diameter or span to the embankment fill slope when installed adjacent to the slope face.
4. Follow Standard Specification 02317 and 02056 using AASHTO T-99 with density not less than 90 percent of laboratory density for compacted acceptance of foundation bedding and backfill materials. Remove boulders or rocks within bedding areas.
5. Excavate a trench of equal or greater width than shown in Table 1. Increase the trench width to 2 ft minimum on each side of the pipe when the surrounding material is unsuitable.
6. Overexcavate unstable pipe foundation material as directed by the engineer. Replace with suitable material.
7. Excavate rock or unyielding material from the bottom of the trench and provide 6 inches minimum bedding of backfill material.
8. Recede the bedding to receive pipe joints where applicable.
9. Place bedding material, a minimum 4 inches below the invert and up to the span for pipe arches with stable foundations.
10. Place bedding material, a minimum 6 inches below the invert and up to the span for pipe arches with unyielding foundations.
11. Do not disturb the installed pipe or embankment or leave voids when using trench boxes and shields.
12. Seal the opening around the pipe and the drainage structure. Refer to Standard Specification 2269.
13. Refer to the project plans for material outside of pipe backfill area.
14. Protect pipe during construction. Do not exceed design strength.

Table 1: Minimum Trench Width

<table>
<thead>
<tr>
<th>Pipe Diameter</th>
<th>Trench Width</th>
</tr>
</thead>
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<td>12</td>
<td>12</td>
</tr>
<tr>
<td>24</td>
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<tr>
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<td>54</td>
<td>20</td>
</tr>
<tr>
<td>60</td>
<td>20</td>
</tr>
</tbody>
</table>

Notes:

- Follow Standard Specifications 00820 and the UDOT Construction Safety and Health Manual for minimum trench safety requirements.
- Place the outside edge of the pipe no closer than 2 times its diameter or span to the embankment fill slope when installed adjacent to the slope face.
- Overexcavate unstable pipe foundation material as directed by the engineer. Replace with suitable material.
- Excavate rock or unyielding material from the bottom of the trench and provide 6 inches minimum bedding of backfill material.
- Recede the bedding to receive pipe joints where applicable.
- Place bedding material, a minimum 4 inches below the invert and up to the span for pipe arches with stable foundations.
- Place bedding material, a minimum 6 inches below the invert and up to the span for pipe arches with unyielding foundations.
- Do not disturb the installed pipe or embankment or leave voids when using trench boxes and shields.
- Seal the opening around the pipe and the drainage structure. Refer to Standard Specification 2269.
- Refer to the project plans for material outside of pipe backfill area.
- Protect pipe during construction. Do not exceed design strength.