

| Work | Type | Sewer Main Size (mm) | Junction Depth (m) | Sewer Main Type | Upstream Loading (ETs) | AND/OR | Main Receives Pumped Flows | Contractor has Confined Spaces Certification | Works May be carried out by: | |
|---|---|----------------------|--------------------|-------------------------|------------------------|--------|----------------------------|--|------------------------------|--|
| Sewer Junction Cut-in | SJ - RJ - VJ - MHJ - LHJ | ≤300 & | <2.0 & | uPVC | & <50 | AND | No | Yes | Contractor | |
| | | | | VC | & <50 | | No | Yes | Contractor | |
| | | | | Concrete | & <50 | | No | Yes | Contractor | |
| | | | | AC | - | | - | - | S/Water | |
| | | | | Relined | - | | - | - | S/Water | |
| | | Any | | - | - | | - | S/Water | | |
| | | >300 & | | uPVC | & <50 | | No | Yes | Contractor | |
| Sewer Junction Cut-in | VJ & MHJ | >300 & | >2.0 to <3.5 & | VC | & <50 | AND | No | Yes | Contractor | |
| | | | | Concrete | & <50 | | No | Yes | Contractor | |
| | | | | AC | - | | - | - | S/Water | |
| | | | | Relined | - | | - | - | S/Water | |
| | | | | Any | - | | - | - | S/Water | |
| Sewer Junction Cut-in | VJ & MHJ | Any | >3.5 | Any | - | OR | - | - | S/Water | |
| Sewer Junction Cut-in | Any | 150 & | <2.0 & | uPVC/VC/ Conc | >50 | OR | Yes | Yes | Contractor-S/Water (2) | |
| | >150 | Any | Any | Any | Any | | Yes | - | S/Water | |
| Work | Type | Sewer Main Size (mm) | Junction Depth (m) | Sewer Main Type | Upstream Loading (ETs) | AND | Main Receives Pumped Flows | Contractor has Confined Spaces Certification | Works May be carried out by: | |
| Sewer Interconnection to Existing Manhole | - Core in & Benching | ≤300 | | Any | <100 | | No | Yes | Contractor | |
| | | >300 | | Any | Any | | No | - | S/Water | |
| | - External & Internal Manhole drop & Benching | ≤300 | | Any | <100 | | No | Yes | Contractor | |
| | | | | | | | | | | |
| | | >300 | | Any | Any | | No | - | S/Water | |
| Work | Type | Sewer Main Size (mm) | Junction Depth (m) | Sewer Main Type | Upstream Loading (ETs) | AND | Main Receives Pumped Flows | Contractor has Confined Spaces Certification | Works May be carried out by | |
| Sewer Interconnection to Existing Manhole | - Core in & Benching | 150 | | Any | >100 | OR | Yes | Yes | Contractor-S/Water (2) | |
| | | >150 | | Any | Any | | Yes | - | S/Water | |
| | - External & Internal Manhole drop & Benching | 150 | | Any | >100 | | Yes | Yes | Contractor-S/Water (2) | |
| | | | | | | | | | | |
| | | >150 | | Any | Any | | Yes | - | S/Water | |
| Work | Type | Sewer Main Size (mm) | Junction Depth (m) | Sewer Main Type | Upstream Loading (ETs) | OR | Main Receives Pumped Flows | Contractor has Bypass Arrangement | Works May be carried out by | |
| Construction of Manhole Over Existing Sewer | | ≤300 | | uPVC | <50 | OR | No | Where Required | Contractor | |
| | | | | VC/Concrete /AC/Relined | <50 | | No | Where Required | S/Water / Contractor (1) | |
| | | | | uPVC | >50 | | Yes | Where Required | Contractor-S/Water (2) | |
| | | | | VC | >50 | | Yes | Where Required | S/Water / Contractor (1) | |
| | | | | Concrete | >50 | | Yes | Where Required | S/Water / Contractor (1) | |
| | | >300 | | AC | >50 | | Yes | Where Required | S/Water / Contractor (1) | |
| | | | | Relined | >50 | | Yes | Where Required | S/Water / Contractor (1) | |
| | | | | Any | Any | | Any | N/A | S/Water (4) | |
| | | | | | | | | | | |
| | | | | | | | | | | |

| Work | Type | Rise (mm) | Pipe Size | Existing Manhole Depth | Upstream Loading (ETs) | AND | Main Receives Pumped Flows | Contractor has Confined Spaces Certification | Works May be carried out by: | |
|---------------|--------------|--------------|-----------|------------------------|------------------------|-----|----------------------------|--|------------------------------|-------------|
| Raise Manhole | Pre-Cast | ≤300 & | ≤300 & | <2.70 & | N/A | AND | N/A | Yes | Contractor | |
| | | >300 to ≤600 | ≤300 & | <2.40 & | N/A | | N/A | Yes | Contractor | |
| | | >600 to ≤900 | ≤300 & | <2.10 & | N/A | | N/A | Yes | Contractor | |
| | Cast in Situ | ≤300 | ≤300 & | <2.70 & | N/A | | N/A | Yes | Contractor | |
| | | >300 to ≤600 | ≤300 & | <2.40 & | N/A | | N/A | Yes | Contractor | |
| | | >600 to ≤900 | ≤300 & | <2.10 & | N/A | | N/A | Yes | Contractor | |
| | | Any | >300 & | Any | - | | - | - | - | S/Water (4) |

| Work | Type | Lower (mm) | Pipe Size | Existing Manhole Depth (m) | Upstream Loading (ETs) | AND | Main Receives Pumped Flows | Contractor has Confined Spaces Certification | Works May be carried out by: | |
|---------------|--------------|--------------|-----------|----------------------------|------------------------|-----|----------------------------|--|------------------------------|-------------|
| Lower Manhole | Pre-Cast | ≤300 & | ≤300 & | >1.20 & | N/A | AND | N/A | Yes | Contractor | |
| | | >300 to ≤600 | ≤300 & | >1.50 & | N/A | | N/A | Yes | Contractor | |
| | | >600 to ≤900 | ≤300 & | >1.80 & | N/A | | N/A | Yes | Contractor | |
| | Cast in Situ | ≤300 | ≤300 & | >1.20 & | N/A | | N/A | Yes | Contractor | |
| | | >300 to ≤600 | ≤300 & | >1.50 & | N/A | | N/A | Yes | Contractor | |
| | | >600 to ≤900 | ≤300 & | >1.80 & | N/A | | N/A | Yes | Contractor | |
| | | Any | >300 & | Any | - | | - | - | - | S/Water (4) |

| | |
|---|--|
| For any of the above works the Contractor must: | have a sewer design approved by Shoalhaven Water |
| | comply with the WSAA Sewerage Code of Australia, Shoalhaven Water's Supplement to the WSAA Sewerage Code of Australia and the Shoalhaven Water Design Approval |
| | have technical competence |
| | have construction competence |
| | have appropriate level of insurance to work on/in authority assets |
| | have appropriate level of gear, equipment, plant, workers to carry out the work |
| | have all necessary WHS skills & certifications to work on/in authority assets |
| | have written approval from landowner to work within private land/s |
| | have a confined spaces entry permit |
| | have all other appropriate approvals prior to works commencing (eg, Section 138 approval) |
| have an accepted Work Method Statement | |

| | |
|---------------|--|
| NOTES: | <p>1. S/Water / Contractor refers to Shoalhaven Water changing the pipe from AC/VC/Concrete to PVC and/or fixing the relined sewer before the contractor carries out the new manhole construction and possible need to operate upstream sewage pumping station during installation.</p> <p>2. Contractor-S/Water - refers to Shoalhaven Water being involved in cases where the existing upstream pumping station needs to be operated to ensure the work can be undertaken safely.</p> <p>3. Shoalhaven Water reserves the right to change and/or not permit a contractor to undertake works to any part of the sewerage system/s. This can be due to (but not limited to): environmental matters, critical assets, operational requirements, etc.</p> <p>4. Subject to assessment by S/Water Operations Section approval may be granted for the works to be carried out by the contractor.</p> |
|---------------|--|