



NETWORK INFRASTRUCTURE STANDARDS

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**LIMIT OF CONTRACT NOTES
for
SEWER CONSTRUCTION**

To be read in conjunction with the SA Water Sewer Construction Manual (SCM) latest version.

References to H1, K1, etc are quick references to the drawings in the various sections of the SCM.

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WORK BY CONSTRUCTOR

- 1. Construct the reticulation sewer as shown.**
 - Install plunger* in new IO at 'A' to isolate it from live sewer and lay away with new sewer.
 - Remove plunger* and cap IO fitting after testing and before CPC issue.

- 2. Provide the link up at 'A' (OB junction on live sewer)**
 - Excavate and expose live sewer and install new OB junction clamp, and MS at 'B'.
 - Install plunger * in MS and lay away with new sewer.
 - Remove plunger* from MS at 'B' after testing and before CPC issue.

- 3. Provide the link-up at 'A' (Existing I.O. with stub)**
 - Install plunger* in existing stub to isolate it from live sewer.
 - Excavate up to existing I.O. end, expose stub, remove cap, connect and lay away with new sewer.
 - Remove plunger* after testing and before CPC issue (I.O. riser to be cut down and capped).

- 4. Provide the link-up at 'A' (Existing I.O. end with no stub)**
 - Excavate and expose existing I.O. end assembly.
 - Remove existing I.O. end* assembly and install a new I.O. assembly with stub and a plunger to isolate it from live sewer.
 - Connect to new stub and lay away with new sewer.
 - Remove plunger* after testing and before CPC issue (I.O. riser to be cut down and capped).

- 5. Provide the link-up at 'A' (New I.O. on live sewer)**
 - Excavate and expose the existing sewer and break in* at 'A'.
 - Install* an IO fitting at 'A'
 - Install plunger* in new IO to isolate it from live sewer and lay away with new sewer.
 - Remove plunger* and cap IO fitting after testing and before CPC issue.

- 6. Provide the link-up at 'A' (Existing MSJ with stub)**
 - Install plunger* in existing stub of the MSJ to isolate works from live sewer.
 - Excavate up to existing MSJ end, expose stub, remove cap, connect, and lay away with new sewer.
 - Remove plunger* after testing and before CPC issue.

- 7. Provide the link-up at 'A' (Existing MSJ with stubs)**
 - Install plunger* in existing downstream branch of the MSJ to isolate works from live sewer.
 - Excavate up to existing MSJ ends, expose stubs, remove caps, connect, and lay away with new sewer.
 - Remove plunger* after testing and before CPC issue.

- 8. Provide the link-up at 'A' (New MS over existing I.O. end)**
 - Excavate, expose and remove existing I.O. riser and end assembly.
 - Install plunger* to isolate proposed MS from live sewer.
 - Construct new MS on existing sewer, and lay away with new sewer.
 - Remove plunger* after testing and before CPC issue.

- 9. Provide the link-up at 'A' (New MSJ over existing I.O. end)**
 - Excavate, expose and remove existing I.O. riser and end assembly.
 - Install plunger* to isolate proposed MSJ from live sewer.
 - Construct new MSJ on existing sewer, and lay away with new sewer.
 - Remove plunger* after testing and before CPC issue.

- 10. Provide the link-up at 'A' (New MST over existing I.O. end)**
 - Excavate, expose and remove existing I.O. riser and end assembly.
 - Install plunger* to isolate proposed MST from live sewer.
 - Construct new MST on existing sewer, and lay away with new sewer.
 - Remove plunger* after testing and before CPC issue.

- 11. Provide the link-up at 'A' (New M.S. with branch on live sewer)**
 - Install plunger* in existing M.H. at 'B' to isolate main from live sewer.
 - Bypassing or temporary tankering from the MH at 'B' may be necessary during the installation of the new MS at the developer's expense.
 - Excavate and expose live sewer and install new MS with branch out of riser.
 - Install plunger * in branch and lay away with new sewer.
 - Remove plunger* from MH at 'B' to limit tankering time.
 - Remove plunger* from MS at 'A' after testing and before CPC issue.

- 12. Provide the link-up at 'A' (New M.S. with branch over existing I.O. on live sewer)**
 - Install plunger* in existing M.H. at 'B' to isolate main from live sewer.
 - Bypassing or temporary tankering from the MH at 'B' may be necessary during the installation of the new MS at the developer's expense
 - Excavate, expose and remove existing I.O. and riser.
 - Install new MS with branch out of riser.
 - Install plunger * in branch and lay away with new sewer.
 - Remove plunger* from MH at 'B' to limit tankering time.
 - Remove plunger* from MS at 'A' after testing and before CPC issue.

- 13. Provide the link-up at 'A' (Existing M.H. with stub)**
 - Install plunger* in existing stub to isolate it from live sewer.
 - Excavate up to existing M.H., expose stub, remove cap, connect, and lay away with new sewer.
 - Remove plunger* after testing and before CPC issue.

- 14. Provide the link-up at 'A' (Existing M.H. no stub)**
 - Excavate up to existing M.H., bore through M.H wall and benching, install new stub with plunger to isolate new work from live sewer and lay away with new sewer.
 - Reform* new channel and benching.
 - Remove plunger* after testing and before CPC issue.

- 15. Provide the link-up at 'A' (Existing M.H. with large jump-up)**
 - Install plungers* in existing branch sewer and rodding pipe to isolate it from live sewer.
 - Excavate up to existing stub and lay away with new sewer.
 - Remove plungers* after testing and before CPC issue.

- 16. Provide the link-up at 'A' (Existing M.H. with existing large jump up)**
 - Install plungers* in existing stubs to isolate them from live sewer.
 - Excavate up to existing M.H., remove existing sewer, connect to existing lower branch and lay away with new sewer.
 - Remove plunger* from upper rodding branch and seal from within MH with concrete.
 - Remove plunger* from lower branch after testing and before CPC issue.

- 17. Provide the link-up at 'A' (New M.H. on live sewer)**
 - Excavate and expose live sewer and leave it intact.
 - Construct new M.H. around existing sewer, provide new channel with branch sewer and benching,
 - Install plunger * in branch sewer and lay away with new sewer.
 - Break out* existing sewer within M.H. and remove plunger* after testing and before CPC issue.

- 18. Provide the link-up at 'A' (New M.H. on live sewer and large internal jump up)**
 - Excavate and expose live sewer and leave it intact.
 - Construct new M.H. around existing sewer, provide new channel with branch sewer and benching, including large jump up.
 - Install plunger* in branch sewer and lay away with new sewer
 - Break out* existing sewer within M.H. and remove plunger* after testing and before CPC issue.

- 19. Provide the link-up at 'A' (New M.H. on live sewer end)**
 - Install plunger in existing M.H. at 'B' to isolate any gases
 - Excavate and expose live sewer at 'A' and leave it intact.
 - Construct new M.H. around existing sewer end, provide new channel with branch sewers and benching,
 - Install plungers* in branch sewers (for testing purposes) and lay away with new sewers.
 - Break out* existing sewer within M.H. at 'A' and remove all plungers* after testing and before CPC issue.

- 20. Provide the link-up at 'A' (New M.H. on live sewer end and large jump up)**
 - Install plunger in existing M.H. at 'C' to isolate any gases
 - Excavate and expose live sewer at 'A' and leave it intact.
 - Construct new M.H. around existing sewer end, provide new channel with branch sewers and benching, including large jump up.
 - Install plungers* in branch sewers (for testing purposes) and lay away with new sewers.
 - Break out* existing sewer within M.H. at 'A' and remove all plungers* after testing and before CPC issue.

- 21. Provide the link-up at 'A' (New M.H. over existing I.O. end)**
 - Excavate and expose existing I.O. end assembly.
 - Cut down* existing I.O. assembly to just above sewer.
 - Install plunger to isolate proposed M.H. from live sewer.
 - Construct new M.H. over the cut-off sewer, form new channel and benching, and lay away with new sewer.
 - Break out* existing sewer within M.H. at 'A' and remove plunger* after testing and before CPC issue.

- 22. Provide the link-up at 'A' (New M.H. over existing MSE)**
 - Excavate and expose existing MSE assembly.
 - Cut down* existing MSE assembly to just above sewer.*
 - Install plunger in the remaining riser to isolate proposed M.H. from live sewer.
 - Construct new M.H. over the cut-off riser, form new channel and benching, and lay away with new sewer.
 - Remove plunger* and break out* existing sewer within M.H. at 'A' after testing and before CPC issue.

- 23. Provide the link-up at 'A' (Large external jump-up on existing M.H. no stub)**
 - Excavate up to existing M.H. and bore through M.H. wall and benching.
 - Bore through M.H. wall for rodding pipe
 - Install new stubs with plungers at both boreholes, construct large jump-up, and lay away with new sewer.
 - Remove plungers* after testing and before CPC issue.

- 24. Provide the link-up at 'A' (Large external jump-up on existing M.H. with one stub)**
 - Install plunger* in existing stub to isolate it from live sewer.
 - Excavate up to existing M.H., bore through M.H. wall for rodding pipe, install stub with plunger, construct large jump-up, and lay away with new sewer.
 - Remove plungers* after testing and before CPC issue.

- 25. Provide the link-up at 'A' (Large external jump-up on existing M.H. with existing stubs)**
 - Install plungers* in existing stub and rodding stub to isolate it from live sewer.
 - Excavate up to existing stubs, construct large jump-up and lay away with new sewer.
 - Remove plungers* after testing and before CPC issue.

- 26. Provide the link-up at 'A' (Large internal jump-up on existing M.H. no stub)**
 - Excavate up to existing M.H. and bore through M.H. wall.
 - Install new stub* and construct internal jump up.
 - Install plunger* at inspection opening at top of internal jump up to isolate new work from live sewer and lay away with new sewer.
 - Reform* new channel and benching.
 - Remove plunger* after testing and before CPC issue.

27. Provide the link-up at 'A' (Existing M.H. on trunk sewer no stub)

- Excavate up to existing M.H., bore through M.H wall and benching, install new stub with plunger to isolate new work from live sewer and lay away with new sewer including the water seal (refer SCM H1).
- Reform* new channel and benching.
- Remove plunger* after testing and before CPC issue.

28. Provide the link-up at 'A' (Existing M.H. on trunk sewer with stub)

- Install plunger* in existing stub to isolate it from live sewer.
- Excavate up to existing M.H., expose stub, remove cap, connect, and lay away with new sewer including the water seal (refer SCM H1).
- Remove plunger* after testing and before CPC issue.

29. Provide the link-up at 'A' (New M.H. on trunk sewer) (refer SCM H1)

- Excavate and expose live sewer and leave it intact.
- Construct new M.H. around existing sewer, provide new channel with branch sewer and benching,
- Install plunger* in branch sewer and lay away with new sewer including the water seal
- Break out* existing sewer within M.H. and remove plunger* after testing and before CPC issue.

30. Provide the link-up at 'A' (Riser off trunk sewer) (refer SCM H1 & K12)

- Excavate up to and expose existing Trunk Sewer.
- Bore* through Trunk Sewer.
- Install new stub* & capped Ob, (Ob. riser not to extend to surface)
- Connect to new I.O. and construct new sewer 'A-B' (including water seal & M.H. at 'B').
- Constructor to arrange for partial C.P.C. ('A-B')
- Remove plunger and cap I.O. 'tee'* after testing of new sewer ('A-B').

NOTE: - O.H. &S. requirements to cope with sewer gases in confined spaces shall be observed while making the connection to the trunk sewer.

31. Provide the link up at 'A' (Branch off trunk sewer) (refer SCM H1 & K12)

- Excavate up to and expose existing Trunk Sewer
- Bore * through Trunk Sewer
- Install new stub* with plunger
- Connect to new stub and lay away with new sewers (including water seal and MH at 'B').
- Constructor to arrange for partial C.P.C. ('A'-'B')
- Remove plunger* on commissioning of new sewer.

NOTE: - O.H. &S. requirements to cope with sewer gases in confined spaces shall be observed while making the connection to the trunk sewer.

32. Provide the link-up at 'A' (New 1500 ID tankering M.H.)

- Construct new tankering M.H. at 'A'.

33. Provide the link-up at 'A' (Existing tankering M.H. with stub).

- Install plunger* in existing stub to isolate it from live sewer.
- Excavate up to existing M.H., expose stub, remove cap, connect, and lay away with new sewer.
- Abandon the existing tankering M.H at 'A'.
- Fill the existing tankering sump with concrete
- Form* new channel and benching to match the design invert levels as shown on this sheet.
- Bypassing or temporary tankering may be necessary during the abandonment of the 'Tankering M.H' at the developer's expense.
- Remove plunger* after testing and before CPC issue.

34. Construct new pumping station at 'A'.

Complete with all structures, pipework, electrical and mechanical plant and equipment, telemetry requirements, vehicle access and site works, in accordance with SCM. Section M in readiness for commissioning.

⇒ # Pump Sump: =????mm ID

2 Pumps installed, one duty and one standby

⇒ # Pump Duty: Max Q =???L/s at H =???m.(Preliminary duty only)

Switch Board Rating: = 2 x? kW

⇒ # Max Power: =??kW (??kW per pump) (Preliminary power only)

Required power supply to the Pump Station site

⇒ # 415 V @ 50 Hz

NOTE:

1. Q, H and P are subject to final design.
2. Valve Chamber pipework to be??? mm.
3. Determine the electrical requirement and arrange with ETSA Corporation for the provision of supply

35. Abandon existing live MH pumping station at 'A'

After commissioning the new sewer 'A'-'B', the Constructor* shall:

- Decommission any Telstra and ETSA connections for the old pumping station,
- Remove * all mechanical and electrical plant and equipment and pipe fittings from the existing sump and valve chamber.
- Remove the existing switchboard and concrete plinth and all associated wiring, and reinstate the site.
- Remove the cover from the existing valve chamber; demolish the top 750 mm of the walls and backfill with suitable material in accordance with drg. SCM G-3 (92-0051-01B) to match the existing site and reinstate the roadway to the requirements of Local Council.
- Convert * the existing sump to a M.H. by filling the sump to the new design level,
- Form * new channels and benching, and sealing any existing penetrations (with concrete) that are no longer required,

NOTE- All abandoned equipment shall remain the property of SA Water and shall be delivered by the Constructor to the location determined by SA Water.

**36. Construct the new pumping main 'A'-'B' (???)mm ~ Class?? pipe)
(Link-up to existing M.H. at 'B' with stub)**

- Install plunger* in existing stub to isolate it from live sewer.
- Excavate up to existing M.H., expose stub, remove cap, connect, and lay away with new pumping main.
- Remove plunger* on commissioning of pumping station and pumping main.

**37. Construct the new pumping main 'A'-'B' (???)mm ~ Class?? pipe)
(Link-up to existing M.H. at 'B' with no stub)**

- Excavate up to existing M.H., bore through wall and benching, install new stub with plunger to isolate new work from existing sewer and lay away with new pumping main.
- Reform* new channel and benching.
- Remove plunger* on commissioning of pumping station and pumping main.

38. Provide the link-up at 'B' (New M.H.) and abandon the existing pumping main 'A'-'C'

After the commissioning the new sewer 'A'-'B', the Constructor* shall:

- Place an order with SA Water to arrange for the pumping to be suspended and tankering if required, through United Water.
- All existing sewage within the abandoned pumping main is to be captured and removed from the site without any spillage.
- The Constructor* shall excavate and expose the existing pumping main at 'C'.
- Connect the existing pumping main to new M.H. at 'B'.
- Seal the open end on the severed pumping main at 'C'.
- Remove one metre length of pipe adjacent to the existing M.H. at 'A',
- Seal the original discharge pipe at 'A' within the M.H. wall.
- Reinstate the roadway to the requirements of Local Council.
- SA Water will recover all costs associated with the tankering from the developer including the cost for the provision of tankering access.
- SA Water requires five working days notice in advance prior to this work being undertaken.

39. Abandon existing pumping main 'A'-'B'

- The Constructor* shall excavate down to the pumping main at the existing Pump Sump at 'A' and at point 'B',
- Remove one metre length of pipe adjacent to the sump at 'A' and at point 'B',
- Seal the original discharge pipe at 'B' in the M.H. wall.
- Seal the open ends on the severed 100mm diameter pumping main at points 'A' and 'B' and
- Reinstate the roadway to the requirements of Local Council.

40. Abandon existing pumping main 'A'-'C'

- The existing pumping main is to remain operational until new sewer is tested and passed for use.
- The Constructor* shall excavate down to the pumping main at the existing MH at 'A' and the new MH at 'C'.
- All existing sewage within the abandoned pumping main is to be captured and removed from the site without any spillage.

- Seal the original pumping main at 'A' and 'C' in the M.H. walls.
- Contractor to abandon the existing pumping main that is no longer required, the abandoned main is to be removed and the trench to be backfilled and compacted in accordance with SCM Section G.

Note: - SA WATER accepts no responsibility for the abandoned main or the trench compaction.

41. Abandon existing sewer 'X'-'Y'.

Minimum SA WATER Requirements:-

- Seal branch* of abandoned sewer from within M.H. at 'X'.
- Excavate and expose abandoned sewer main adjacent M.H. at 'X' and remove one metre of length of pipe.
- Remove all castings and the upper one metre of M.H. at 'Y' and fill to existing surface level with clean sand, compacted in accordance with S.C.M. Section G.

Note: - SA WATER accepts no responsibility for the abandoned sewer or the trench compaction.

42. Abandon existing sewer 'X'-'Y'.

- Excavate and remove entire sewer from 'X'-'Y'
- Remove the entire IO including the castings and lid

43. Abandon existing M.H.

- Abandon the existing M.H at XX.XXm
- Remove the entire MH including the castings and lid.

44. Abandon existing MH at 'A'.

Minimum SA WATER Requirements:-

- Seal branches* of abandoned sewers from within M.H. at 'A'.
- Excavate and expose abandoned sewer mains adjacent M.H. at 'A' and remove one metre of length of pipe.
- Remove all castings and the upper one metre of M.H. at 'A' and fill to existing surface level with clean sand, compacted in accordance with S.C.M. Section G.

Note: - SA WATER accepts no responsibility for the abandoned sewer or the trench compaction.

45. Abandon existing tankering M.H.

- Abandon the existing tankering M.H at????
- Fill the existing tankering sump with concrete
- Form* new channel and benching to match the design invert levels as shown on drawing???????
- Bypassing or temporary tankering may be necessary during the abandonment of the 'Tankering M.H' at the developer's expense.

Constructor shall be accredited by SA Water to undertake this work.

46. Temporary effluent disposal (at the Developers expense)

- Temporary effluent disposal shall be provided to the existing house/building on Lot ?? during construction of the new sewer main
OR
the existing private drain to remain operational during construction of the new sewer main.
- Connections to lots ?? & ?? to be reconnected into the new sewer.
- The Developer shall place an order with SA Water to arrange the tankering, through United Water.
- SA Water will recover all costs associated with the tankering from the developer including the cost for the provision of tankering access.
- SA Water requires five working days notice in advance prior to tankering being required.

47. Internal drain alteration to Lot ??.

- Contractor to provide temporary effluent disposal to the existing house/buildings during construction of the sewer main
OR
Contractor to ensure the existing private drain remains operational during construction of the sewer main
- Contractor to arrange for a Licensed Plumbing Contractor to reconnect the existing house/building into the new sewer connection after testing of the sewer main and connections
- Contractor to abandon the internal drain that is no longer required (State method - ie. remove the abandoned drain, backfill and compact to??? standards)

Note: - SA WATER accepts no responsibility for the abandoned internal drain or the trench compaction.

48. Tankering of effluent from MH at 'A' (at the Developer's expense)

- The Developer shall place an order with SA Water to arrange tankering, through United Water, from any stage or part of the development.
- SA Water to install monitoring equipment within the tankering MH.
- SA Water will recover all costs associated with the tankering from the developer including the cost for the provision of tankering access and monitoring equipment.
- SA Water requires five working days notice in advance prior to tankering being required.

49. Construct new connections at ?????.

- Contractor to provide new connections off the new sewer to service the existing dwellings on lots????
- Contractor to provide new connection IP's at the boundaries (at the standard connection positions in easements), on the existing internal drains, to lots ?????
- Temporary effluent disposal may be necessary during construction.

50. Construct new connection to Lot XX.

- Remove the existing casting and cut down IP riser to a metre below the surface and cap;

- Excavate and expose existing connection, install plunger* in existing branch to isolate it from the live sewer and lay away with new connection;
- Construct new IP riser in standard location off boundary;
- Remove plunger* after testing;
- Reinstate the site by filling excavation with clean sand, compacted in accordance with SCM Section G

Note: SA Water accepts no responsibility for the abandoned internal drain or the trench compaction

51. Construct the new Y-connection at 'A'.

- Install plunger* in the existing IP at 'A';
- Construct the new Y-connection off the existing sewer connection at 'A' after confirming the existing IP invert;
- Remove plunger* after testing and before CPC issue.

52. Relocate the existing connections to lots?? to the new easement requirements

- Contractor to relocate the existing connections IP's to lots??? (at the standard connection positions in easements) and provide temporary effluent disposal to the existing dwellings during the relocation.
- Contractor to arrange for a Registered Plumber to reconnect the existing dwellings into the new sewer connections after testing of the sewer connections

53. Abandon the existing connection no longer required at ???.

The alternative processes to be used are:

- The In-Branch Connection Cut Off Method – which uses the Scan Seal process to insert a resin impregnated fibreglass blind liner in the connection at the oblique junction with the sewer or
- The In-Sewer Connection Cut Off Method (to be used only when the inspection point cannot be located) – this involves inserting a Scan Seal resin impregnated fibreglass patch liner along the sewer over the connection opening, or
- The Dig-up and Seal Method – This process involves digging down to the oblique junction between the sewer and the connection removing * a section of pipe and sealing the connection off adjacent to the sewer.
- Remove the castings and cut down IP riser to one metre below the surface.
- Reinstate the site by filling excavation with clean sand, compacted in accordance with SCM Section G.

Note: SA Water accepts no responsibility for the abandoned internal drain or the trench compaction

54. Abandon the existing connections no longer required at 'A'

- Excavate, expose, and remove existing connection adjacent to the main
- Remove the castings and IP. riser
- Reinstate the site by filling excavation with clean sand, compacted in accordance with SCM Section G.

Note: SA Water accepts no responsibility for the abandoned internal drain or the trench compaction

55. Abandon the existing connection in the easement no longer required at 'X'.

- Excavate and expose existing connection, remove * a one metre section adjacent to the main and cap
- Remove the castings and cut down IP. riser to one metre below the surface
- Reinststate the site by filling excavation with clean sand, compacted in accordance with SCM Section G.

Note: SA Water accepts no responsibility for the abandoned internal drain or the trench compaction

56. Abandon the existing connection no longer required at 'X' (from M.H)

- Excavate and expose existing connection, remove * a one metre section behind the kerb and cap
- Remove the castings and cut down IP. riser to one metre below the surface
- Seal the branch * from within the M.H at 'B' with concrete.
- Reinststate the site by filling excavation with clean sand, compacted in accordance with SCM Section G.

Note: SA Water accepts no responsibility for the abandoned internal drain or the trench compaction

57. Abandon the existing "Y" connection no longer required.

- Excavate * and expose existing connection at the "Y" branch, remove a one metre section and cap
- Remove the castings and cut down IP. riser to one metre below the surface
- Reinststate the site by filling excavation with clean sand, compacted in accordance with SCM Section G.

WORK BY SA WATER (at Developer's expense)

58. WORK BY SA WATER (at developer's expense):-

- Supply, install and commission the telemetry system in accordance with SCM Section M.
- Commission the Pumping Station on completion of the works by the Constructor.

59. WORK BY SA WATER (at developer's expense):-

- Arrange for the connections to lots ???,???,???, and ??? into the existing live sewer.
- Supply, install and commission the telemetry system in accordance with SCM Section M.
- Commission the Pumping Station on completion of the works by the Constructor.

CONNECTIONS

- Connections to lots to be laid similar to SCM K3 or K4 unless noted otherwise
- Connections to lots to be laid with a riser off the main similar to SCM K5.
- Connections to lots to be laid with a combination of riser off the main and under the SWD similar to SCM K5 + K6.
- Connections to lots to be laid under the SWD similar to SCM K6.
- Connections to lots to be laid under the SWD with a riser at the boundary similar to SCM K6.
- Connections to lots to be laid with an intermediate riser similar to SCM K7.
- Connections to lots to be laid through the embankment similar to SCM K8.
- Connections to lots to be laid out of MH with a large jump up similar to SCM K9.
- Connections to lots to be laid out of MH without a large jump up similar to SCM K9.
- Connections to lots to be laid out of MH ahead with a large jump up similar to SCM K10.
- Connections to lots to be laid out of MH ahead without a large jump up similar to SCM K10.
- Connections to lots to be laid out of sewer with a water seal similar to SCM K11.
- Connections to lots to be laid with a riser off the trunk main similar to SCM K12.
- Connections to lots to be laid with a branch off the trunk main similar to SCM K12.
- Connections to lots to be laid out of IO with a reducer laid top to top similar to SCM L3.
- Connections to lots to be laid out of MS with a reducer laid top to top similar to SCM L18.
- Connections to lots to be laid out of MSJ with a reducer laid top to top similar to SCM L18.
- Connections to lots to be laid out of the riser of MST similar to SCM L18
- Connections to lots shall be 150mm dia.
- Connections to lots do not conform to CST requirements.

NOTES

- Stormwater pipe to be supported on concrete pads either side of the sewer trench. Gap between pipes to be packed with polystyrene foam.
- Where cover during construction is less than 600mm, pipe to be protected with concrete encasement or other approved method.
- SA WATER accepts no responsibility for any damage to the existing footings or structure due to the construction of the proposed internal sewer drain.
- Bore under train station, rails and access road to be constructed in accordance with AS/NZS 2566.1 and AS4799-2000 and SCM H3

60. Laying Sewers in Proposed Earth Fill

The proposed land fill in which the new sewer is to be laid is to be 'Engineered Fill' compacted to not less than 95% of it's Standard Maximum Dry Density (AS 1285.5.1.1)

61. Trench Fill (Using recycled on site bitumen pavement material)

- Trench fill as shown on the SA Water Drg. No 92-0051-01B (SCM Drg. G3) shall be the existing pavement material on site recycled to Transport SA's specification for P.M.71 (equivalent to P.M.21-20mm quarry rubble).
- Trench fill placement and compaction shall conform to the normal SA Water Standard for trench fill as shown on SCM Drg. G3 for sewers in roads and SCM G4 for sewers in easements.
- The embedment zone to the top of the pipe overlay zone shall be the normal 10mm-7mm screenings required by SA Water.

* Constructor shall be accredited by SA WATER.

NOTE: - Where the alignment of the new sewer pipe overlaps the existing sewer and where the vertical separation between the top of the existing sewer and the invert of the new sewer is less than 200mm then the existing sewer shall be removed and the foundation reinstated in accordance with SCM section G.