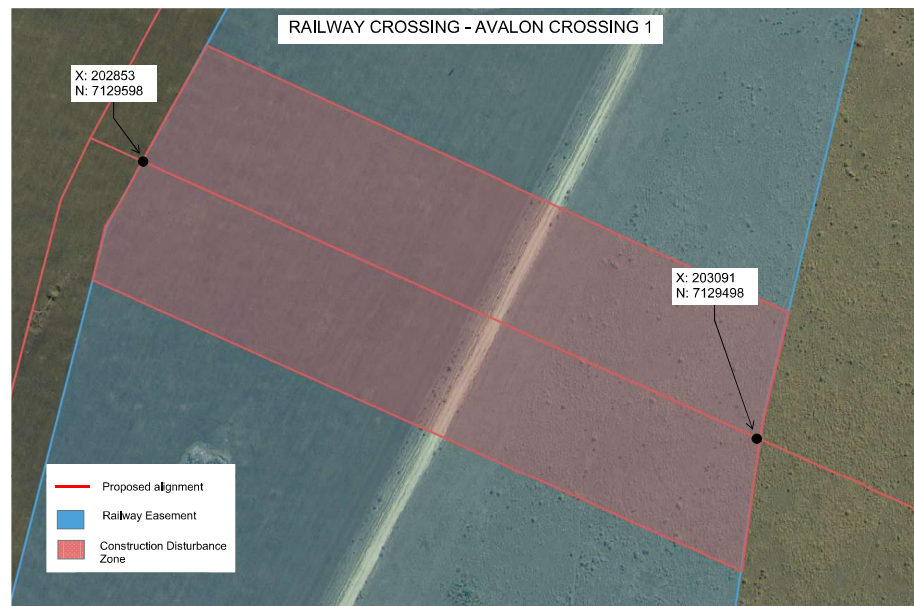


LAYER	MATERIAL	REMARKS												
TOP SOIL	ORIGINAL MATERIAL OR IMPORTED MATERIAL OF EQUAL QUALITY													
BACKFILL	<p>RESTORE TO ORIGINAL CONDITION USING EXCAVATED MATERIAL WITH:</p> <ul style="list-style-type: none"> - ROCK TO 150mm - CLAY TO 100mm <p>ROCK BACKFILL SHALL ONLY BE USED WHERE THERE IS SUFFICIENT SOFT SPOIL TO FILL THE VOIDS BETWEEN THE ROCK PIECES.</p>													
PADDING	<p>MATERIALS EXCAVATED FROM TRENCH, FREE OF ROCKS OR STONES THAT MAY DAMAGE THE PIPE OR CABLES AND COMPLYING TO THE BELOW.</p> <table border="1"> <thead> <tr> <th>SIZE (mm)</th> <th>% PASSING</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>100</td> </tr> <tr> <td>13.2</td> <td>88</td> </tr> <tr> <td>4.75</td> <td>75</td> </tr> <tr> <td>2.6</td> <td>50</td> </tr> <tr> <td>0.6</td> <td>30</td> </tr> </tbody> </table> <p>NO VOIDS ARE TO BE LEFT UNDER OR AROUND THE PIPE.</p>	SIZE (mm)	% PASSING	20	100	13.2	88	4.75	75	2.6	50	0.6	30	
SIZE (mm)	% PASSING													
20	100													
13.2	88													
4.75	75													
2.6	50													
0.6	30													
PADDING														
BEDDING	<p>MATERIAL AS ABOVE.</p> <p>SAND BAGS TO BE USED AS REQUIRED TO PREVENT DAMAGE TO PIPES AND CABLES. SUCH AS WHEN INSTALLED IN A ROCK CUT.</p>													

1. ALL DIMENSIONS IN mm.
2. PIPELINE CONSTRUCTION INCLUDING TRENCING INSTALLATION, BACKFILL AND COMPACTION TO COMPLY WITH APGA CODE OF PRACTICE AND SANTOS EXCAVATION PROCEDURES SMS-HSS-OS02-PD02.
3. ARRANGEMENT SHOWN IS TYPICAL, ALTERNATE TRENCH ARRANGEMENTS MAY BE INSTALLED, PROVIDED THEY MEET THE SEPARATION REQUIREMENTS SPECIFIED IN 1500-040-SEC-0001.
4. ORDER OF PREFERENCE FOR INCREASED SEPARATION DISTANCE BETWEEN SERVICES:
 - POWER CABLE AND OTHER SERVICES
 - PIPELINE AND TRENCH WALL
 - PIPELINES
5. MARKER TAPE DESIGN SHALL COMPLY WITH AS 2648 REQUIREMENTS, TO BE INSTALLED AT:
 - NO LESS THAN 400mm ABOVE THE PIPE/CABLE TO A MAXIMUM OF 900mm ABOVE THE PIPE/CABLE.
 - NO LESS THAN 300mm BELOW GRADE.
6. MARKER SIGNS ARE TO BE INSTALLED AT INTERVALS COMPLYING WITH APGA CODE OF PRACTICE.
7. DEPTH OF BACKFILL TO BE SITE DETERMINED BASED ON DEPTH OF TOP SOIL AND DEPTH OF COVER.
8. BACKFILL SHALL BE PLACED AND COMPACTED IN SUCH A WAY THAT ENSURES NO DAMAGE IS DONE TO THE PIPES OR CABLES AND NO VOIDS ARE LEFT AROUND THE PIPE.
9. BACKFILL SHALL BE COMPACTED MECHANICALLY OR BY 3 PASSES OF A 5 TONNE VEHICLE, ROLLING TO A DENSITY THAT ACHIEVES SETTLEMENT IN THE TRENCH THAT DOES NOT RESULT IN THE SURFACE OVER THE TRENCH SUBSIDING.
10. GATHERING NETWORK CONSTRUCTION TO BE UNDERTAKEN PRIOR TO CONSTRUCTION OF THE PROPOSED RAILWAY CROSSING
11. THE PIPELINE SHALL BE INSTALLED LEVEL AND STRAIGHT ACROSS THE RAILWAY EASEMENT SHOWN. CROSSING ANGLE TO BE AS PER ALIGNMENT SHEETS AND AT 90 DEGREES +/- 5 DEGREES.
12. METHOD OF CONSTRUCTION FOR THE PROPOSED RAILWAY CROSSING SHALL BE OPEN TRENCH AS PER SANTOS APPROVED PROCEDURES.
13. THE PURPOSE OF THIS DRAWING IS ONLY TO SHOW THE EXTENT OF THE CROSSING BETWEEN THE GATHERING AND PROPOSED RAILWAY EASEMENT. IT IS NOT ENGINEERED AS A PROPER RAILWAY CROSSING. THE GATHERING SECTION THAT FALLS WITHIN THE BOUNDS OF THE RAILWAY EASEMENT SHALL BE BUILT IN ACCORDANCE WITH A54799 AND QUEENSLAND RAIL'S STANDARDS SHOULD THE RAILWAY BE APPROVED.
- 12 COORDINATES IN MGA2020 ZONE 56



PLAN VIEW

NTS

[illegible]

AREA 1691 - SCOTIA FIELDS
SBIC SDA CROSSING - AVALON CROSSING 1
SERVICE LAYOUT DRAWING
OPEN TRENCH - SC91-261A1 PROPOSED RAILWAY CROSSING

Santos GLNG	DRAWING No. 1691-040-LAY- 0013	REV A
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