

# STANDARD SPECIFICATION FOR ROADWORKS V 5.0

**March 2022**

**SCHEDULES**

**HOLD POINTS**

**WITNESS POINTS**

## **PROJECT INFORMATION**

Project Number; .....

RFT Number; .....

**Project title;**

.....  
.....  
.....

**Superintendent;**

Name; .....

Phone number; .....

**Contact person** (Project Manager/Officer)

Name; .....

Phone number; .....

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1. HOLD POINTS AND WITNESS POINTS SCHEDULES

1.1 SCHEDULE 1 - HOLD POINTS

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
<b>01 MISCELLANEOUS PROVISIONS</b>				
<b>VOLATILE SUBSTANCES MANAGEMENT</b> Provide details of the volatile substances proposed to be brought in to the area(s) subject to Volatile Substance Abuse Management Plan(s) and provide details of the proposed methods for complying with the requirements of any applicable Volatile Substance Abuse Management Plan(s).	1.7	13		
<b>PERMITS TO ACCESS LAND FOR WORKS ON ROADS</b> The Contractor must provide documentary evidence of having been granted the required permission(s) to; <ul style="list-style-type: none"> <li>– enter the land which is the site(s) of the works, and</li> <li>– to enter any other lands for ancillary activities related to the works, and</li> <li>– carry out the works and works related activities.</li> </ul> Do not enter the land until this evidence has been received by the Superintendent	1.8	14		
<b>PERMITS TO ACCESS LAND FOR WORKS ON ROADS</b> Provide documented advice on sites to which surplus materials will be taken. Provide documentary evidence of permits, from the entity/entities with jurisdiction over those sites, for the dumping of surplus materials at those sites.	1.8	14		
<b>CAMP SITE/COMPOUND/WORKSHOP</b> Provide a copy of written permission from the owner or lessee of the land permitting establishment and operation of a camp site, compound and/or workshop, before commencing works.	1.9	14		
<b>FOOD PREPARATION FACILITIES</b> Provide a copy of proof of registration with DoH of any camp food preparation area in accordance with the <i>Food Act 2004</i> .	1.9.1	14		
<b>EFFLUENT</b> Provide a copy of written approval from Department of Health (DoH) for any proposed on-site effluent disposal system, before commencing works.	1.9.3	15		
<b>EFFLUENT</b> Where the use of septic tanks or portable toilets is not reasonable or practical, pit toilets may be used, but this requires the prior written approval of the Superintendent.	1.9.3	15		
<b>REHABILITATION</b> Obtain approval from the Superintendent for the completed rehabilitation of the camp site/compound/workshop before final demobilisation.	1.9.4	15		
<b>EXPLOSIVES</b> Obtain approval from Superintendent before commencing blasting operations.	1.12	17		

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<b>WORK HEALTH AND SAFETY MANAGEMENT PLAN</b> If the Act requires it, provide a Work Health and Safety Management Plan within 14 calendar days of award of the contract. Do not commence works until the Superintendent has advised that the Work Health and Safety Management Plan may be used.	1.14.2	19		
<b>UTILITIES AND OTHER SERVICES PASSING UNDER EXISTING PAVEMENTS</b> If the pavement is to be subjected to works, and open trenching for the routing of utilities or services is proposed, and has not been approved as part of the works, obtain approval from the Road Authority and the Superintendent before undertaking any excavation works for trenching across the existing pavement.	1.16	20		
<b>WORK ON RAILWAY SITES</b> Do not commence work until the work plan has been approved by the owner and operator of the rail system.	1.17	20 & 21		
<b>WORK NEAR TRAFFIC COUNTING STATIONS OR CULWEIGH STATIONS</b> Prior to commencing any excavation, boring of holes, blasting, rock breaking, soil compaction or similar activity in the vicinity of traffic counter station detector loops, obtain the location of the cables from the Department, Transport Planning Division, Data Contracts Officer and pay all fees.	1.18	21		
<b>AS CONSTRUCTED INFORMATION</b> Provision of As Constructed information is a condition precedent to Practical Completion.	1.26	23		
<b>CONTRACTOR'S SUBMISSIONS</b> Provide copies of permits, and approvals, for works, and associated activities, proposed to be carried out in areas not in the road reserve before commencing any proposed works, and activities.	1.30	26		
<b>CONTRACTOR'S SUBMISSIONS – DOCUMENTS TO BE SUBMITTED TO TECHNICAL RECORDS AND TO SUPERINTENDENT</b> Provision of these documents will be required before the final payment can be processed, and for the final certificate (if applicable) to be issued.	1.30.2	26		
<b>CONTRACTOR'S SUBMISSIONS – WARRANTIES – WARRANTY MARKINGS ON PRODUCTS</b> Obtain Superintendent approval prior to the use of product markings as warranty certificate.	1.30.3.2	27		

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<b>02 PROVISION FOR TRAFFIC</b>				
<p><b>TRAFFIC MANAGEMENT PLAN - SUBMISSION OF TRAFFIC MANAGEMENT PLAN</b></p> <p>Submit the Traffic Management Plan (TMP), with the Traffic Guidance Schemes.</p> <p>For contracts where audits of traffic control measures are required:</p> <ul style="list-style-type: none"> <li>- Do not commence implementing traffic control measures until the TMP has been audited by a Panel Period Audit Consultant and found to be suitable.</li> <li>- Do not commence the works until the TMP has been audited by a Panel Period Audit Consultant and found to be suitable.</li> </ul> <p>For contracts where audits of traffic control measures are not required:</p> <ul style="list-style-type: none"> <li>- Do not commence implementing traffic control measures until the TMP has been appraised by DIPL Road Operations and found to be suitable for use.</li> <li>- Do not commence the works until the TMP has been appraised by DIPL Road Operations and found to be suitable for use.</li> </ul>	2.6.2	37		
<p><b>TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – INDEPENDENT THIRD PARTY WZTM SUITABILITY AUDIT REQUIREMENTS</b></p> <p>The Traffic Management Plan must not be implemented before it is audited for suitability and found to be suitable.</p>	2.8.2	42		
<p><b>TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – INDEPENDENT THIRD PARTY WZTM SUITABILITY AUDIT REQUIREMENTS</b></p> <p>Works must not commence before the Traffic Management Plan is audited for suitability and found to be suitable.</p>	2.8.2	42		
<p><b>AMENDMENTS TO TRAFFIC MANAGEMENT PLANS</b></p> <p>Modified TMPs must be audited for suitability by a Panel Period Audit Consultant, and consent to use granted, or appraised by the Superintendent, and consent to use granted, if Traffic Management audits are not required under the contract, before implementation of the modified TMP.</p>	2.11	43 & 44		
<p><b>AMENDMENTS TO TRAFFIC MANAGEMENT PLANS</b></p> <p>Modified traffic management control measures must be audited for compliance by a Panel Period Audit Consultant, and consent to use granted, or appraised by the Superintendent, and consent to use granted, if Traffic Management audits are not required under the contract, before works resume.</p>	2.11	43 & 44		
<p><b>WORK IN RURAL AREAS</b></p> <p>Undertake work during daylight hours only unless approval is given by the Superintendent. Approval will only be granted in exceptional circumstances.</p>	2.12	44		

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<b>WORK IN URBAN/BUILT-UP AREAS – WORKING TIMES</b> Obtain Superintendent approval if proposing to work inside the restricted work hours.	2.13.1	44		
<b>TRAFFIC LANES</b> Obtain prior written approval from the relevant Local Government or Council if traffic is to be detoured onto their road network or the proposed works affects their network/assets accordingly. Provide a copy of all relevant approvals with the Traffic Management Plan.	2.13.2	44 & 45		
<b>LANE CLOSURES</b> Do not use bullnose or V type barriers unless no other option is available. Obtain permission from the Superintendent to use bullnose or V type barriers before placing them on site.	2.13.3	45		
<b>NIGHT ILLUMINATION</b> Sections of the roadway, including detours and side tracks, affected by Work Zone Traffic Management, must be illuminated at night to AS 1742.3, if night works are in progress, and/or if signage left on site overnight is not illuminated by the headlights of vehicles approaching the signs. Illumination to be 10 lux minimum at ground level.	2.14	45		
<b>NT SPECIFIC DIRECTIONS FOR ROAD WORK SIGNS - NON-STANDARD SIGNS</b> Obtain specific approval from the Superintendent before using signs not included in AS 1742.3.	2.16.4	47		
<b>NT SPECIFIC DIRECTIONS FOR ROAD WORK SIGNS - PORTABLE VARIABLE MESSAGE SIGNS (VMS)</b> Provide details of the messages to be displayed and the locations of the variable message signs. Provide wording for advance warning message(s) and wording for message(s) to be displayed during the works. Do not use any VMS until the messages to be displayed have been approved. Do not use any VMS until the proposed location and orientation of the VMS has been approved. Provide this information not less than 5 working days before the VMSs are to be put in to service for the project.	2.16.5	47		
<b>NT SPECIFIC DIRECTIONS FOR ROAD WORK SIGNS - TEMPORARY SPEED LIMITS</b> Submit temporary speed limit authorisation applications to alter speed limits to the Superintendent, 5 working days prior to the implementation of temporary speed limits, for approval under the Control of Roads Act.	2.16.7	49		

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<p><b>NT SPECIFIC DIRECTIONS FOR ROAD WORK SIGNS - ROAD SAFETY BARRIERS</b></p> <p>Provide a statement, signed by your engineer, and signed by the author of the Traffic Management Plan, which states that the Road Safety Barriers proposal complies with AS 1742.3, and with AS/NZS 3845.1, and with AS/NZS 3845.2, and with the specifications and installation manuals from the manufacturers of the components proposed to be used in the Road Safety Barriers system. Provide the Traffic Management Plan with this statement.</p>	2.16.8	49		
<p><b>DETOURS, SIDE TRACKS, AND CROSSOVERS</b></p> <p>Obtain written approval from the Superintendent before commencing any works.</p>	2.19	52		
<p><b>TEMPORARY BRIDGING</b></p> <p>Obtain written approval from the Regional Manager, Road Projects prior to commencement of any such works.</p>	2.22	54		
<p><b>TEMPORARY BRIDGING</b></p> <p>Provide copies of approvals obtained by Contractor to the Superintendent prior to the commencement of the works</p>	2.22	54		
<p><b>CONTRACTOR'S PLANT AND EQUIPMENT</b></p> <p>On roads carrying significant traffic, floodlight the road and area within 50 m of the site when working at night, if approved by the Superintendent, to a ground level luminance of 10 lux minimum.</p>	2.23	54 & 55		
<p><b>TRAFFIC SIGNALS</b></p> <p>Obtain clearances from the Department's Traffic Section, ph. 8999 4402, prior to commencement of the works.</p> <p>Co-ordinate your works activities with the Department's Traffic Section for the duration of the works.</p>	2.25.1	56		
<p><b>REQUIREMENTS FOR WORKS CARRIED OUT DURING WORKING HOURS</b></p> <p>Provide copies of the endorsed TGSs, and contact the Traffic Section, by phone on 8999 4402, not less than one working day prior to the commencement of work.</p>	2.25.1.1	56		
<p><b>REQUIREMENTS FOR WORKS CARRIED OUT DURING WORKING HOURS</b></p> <p>If the traffic signals need to be re-mapped, advise the Traffic Section not less than one working day prior to the commencement of work.</p> <p>Contact should be made by email to <a href="mailto:traffic.NTG@nt.gov.au">traffic.NTG@nt.gov.au</a> or by phone.</p>	2.25.1.1	56		

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<b>REQUIREMENTS FOR WORKS CARRIED OUT DURING WORKING HOURS</b> Contact the Traffic Section by phone immediately before installing traffic control on the day the works are to be carried out to advise the Traffic Section about the planned lane closures. Contact the Traffic Section immediately if unacceptable traffic congestion occurs during the works so that the Traffic Section can assist by adjusting traffic signal timings. If traffic congestion cannot be relieved by adjusting traffic signal timings it may be necessary to remove lane closures.	2.25.1.1	56		
<b>REQUIREMENTS FOR WORKS CARRIED OUT DURING WORKING HOURS</b> Advise the Traffic Section immediately before traffic control is removed	2.25.1.1	56		
<b>REQUIREMENTS FOR WORKS CARRIED OUT OUTSIDE WORKING HOURS</b> Provide copies of the endorsed TGSs, and contact the Traffic Section, not less than one working day prior to the commencement of work.	2.25.1.2	56		
<b>REQUIREMENTS FOR WORKS CARRIED OUT OUTSIDE WORKING HOURS</b> If the traffic signals need to be re-mapped, advise the Traffic Section not less than one working day prior to the commencement of work.	2.25.1.2	56		
<b>REQUIREMENTS FOR WORKS CARRIED OUT OUTSIDE WORKING HOURS</b> Advise the Traffic Section after-hours contact officer about the planned lane closures, using the after-hours phone number provided, immediately before installing traffic control, on the day the works are to be carried out.	2.25.1.2	56 & 57		
<b>REQUIREMENTS FOR WORKS CARRIED OUT OUTSIDE WORKING HOURS</b> Advise the Traffic Section after-hours contact officer, on the after-hours phone number provided, immediately before traffic control is removed.	2.25.1.2	56 & 57		
<b>VARIABLE SPEED LIMIT ZONES</b> Obtain clearances from the Department's Traffic Section, ph. 8999 4402, not less than five working days prior to commencing works.	2.25.2	57		

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<p><b>TRAFFIC COUNT STATIONS AND CULWEIGH STATIONS</b> Prior to the commencement of work within the trafficked lanes and within 50 m of traffic signals or within 20 m, in any direction, of any component of the traffic count equipment, whether located in or on the trafficked lanes, shoulders, nature strips, and/or medians, or located in another type of area, obtain a clearance to commence the works from Department's Traffic Section for the region in which the works are located, and with either the Superintendent or with the Maintenance Manager (phone 8999 4660). Co-ordinate works activities, with the Department's Traffic Section for the region in which the works are located, for the duration of the works.</p>	2.25.3	57		
<p><b>PORTABLE TRAFFIC SIGNALS</b> Complete and provide the Portable Traffic Signal Authorisation (PTSA) form, included in the application for a Permit to Work in the Road Reserve document, to seek formal approval from the Superintendent to use the proposed portable traffic signals and the proposed time settings, not less than 5 working days prior to the intended use of the portable traffic signals. Do not use any PTSs on site until an authorised Departmental Officer has signed off the PTSA form.</p>	2.26	58		
<p><b>TEMPORARY SPEED LIMITS</b> Work zone speed limits require approval from the Superintendent prior to implementation.</p>	2.26.1	58		
<b>04 EARTHWORKS</b>				
<p><b>EXCESS MATERIAL</b> Obtain approval from Superintendent prior to hauling, dumping and spreading excess material.</p>	4.4.2	63		
<p><b>ROCK IN SUBGRADE</b> Obtain agreement from the Superintendent to the extent of the excavation.</p>	4.4.3	63		
<p><b>UNSUITABLE MATERIAL BELOW SUBGRADE SURFACE OTHER THAN ROCK</b> Obtain directions from the Superintendent before works commence.</p>	4.4.4	63		
<p><b>PREPARATION PRIOR TO FILLING</b> Once moisture conditioned and compacted, subject each lot to a proof roll, with the Superintendent in attendance, as specified in the Proof Rolling sub-clause of the Conformance clause in this work section</p>	4.5.2	64		
<p><b>UNSUITABLE MATERIAL BENEATH FILL</b> Obtain directions from the Superintendent before works commence.</p>	4.5.4	64		
<p><b>EXCAVATION - PREPARATION</b> Obtain Superintendent's agreement with inspection record of current conditions.</p>	4.13.2.2	70		

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<b>EXCAVATION - PREPARATION</b> Obtain the Superintendent's approval for the foundation surface before placing the blinding concrete.	4.13.2.2	70		
<b>PROOF ROLLING</b> Submit a proof rolling procedure to the Superintendent for approval including the proposed method of preparing the areas, the extent of proof rolling, and details of the plant and / or equipment proposed to be used.	4.16.3	72		
<b>CONFORMANCE TESTING</b> Obtain the Superintendent's approval of subgrade conformance prior to placing further material.	4.16.4	72		
<b>05 CONFORMANCE TESTING</b>				
<b>ITP SUBMISSION</b> Submit: ITPs, detailing all procedures and test plans to be undertaken to complete the project, before commencing work.	5.4	75		
<b>06 PAVEMENTS AND SHOULDERS</b>				
<b>PROCESS CONTROL TESTING</b> Provide the Superintendent with a program and procedure for process control testing for the project within 14 days of the awarding of the contract and before work is commenced on site. Base the process control testing on lots and comply with the clause Conformance of Compaction of Soils in CONFORMANCE TESTING.	6.4.1	92		
<b>PAVEMENT ACCEPTANCE REQUIREMENTS</b> Obtain the Superintendent's approval for pavement and shoulders acceptance prior to any surfacing work, including satisfying all requirements for: <ul style="list-style-type: none"> <li>– Final Pavement Layer Integrity</li> <li>– Dry back</li> <li>– Proof Rolling</li> <li>– Conformance testing</li> <li>– Surface Roughness</li> <li>– Other Tolerances</li> </ul> For unsealed pavements, obtain the Superintendent's approval for pavement conformance at conclusion of pavement works.	6.7.1	94		
<b>07 STABILISATION AND MODIFICATION</b>				
<b>BINDER FIELD APPLICATION RATES</b> Determine field application rate for spreading based on laboratory testing of materials. Obtain the Superintendent's approval of the field application rate for each source material for the project.	7.4.4.1	100		
<b>GRANULAR MODIFICATION</b> Determine blending ratios based on laboratory testing of materials. Obtain the Superintendent's approval of determined blending ratio.	7.4.6	101		

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<b>PLANT MIX STABILIZATION - BINDER CONTENT</b> Assess the cement content based upon test results of materials to be stabilised. Obtain the Superintendent's approval for the cement content.	7.5.1	102		
<b>CONFORMANCE TESTING</b> Superintendent to approve conformance of stabilised layer prior to commencing surfacing work.	7.6.2	104		
<b>08 SPRAY SEALING</b>				
<b>MATERIAL REQUIREMENTS – BITUMEN EMULSION</b> Proprietary products: Seek approval from Superintendent before use.	8.4.7	112		
<b>BINDER COAT REQUIREMENTS – GENERAL – REQUIREMENTS</b> Submit all relevant safety and property data for proprietary emulsion primes. Do not use proprietary emulsion primes unless approval for use is granted.	8.8.1.3	117		
<b>APPLICATION SPRAY RATES</b> Do not commence spraying until the spray rates are advised by the Superintendent.	8.13.3	122		
<b>APPLICATION OF GEOFABRIC</b> Submit details of proposed machinery and method of application.	8.14	124		
<b>APPLICATION OF AGGREGATE - SELF-PROPELLED MULTI RUBBER TYRED VIBRATING ROLLERS</b> Obtain Superintendent's approval for the use of self-propelled multi rubber tyred vibrating rollers before using them.	8.15.4	126		
<b>WASTE MATERIAL</b> Obtain written approval from the Superintendent for use of rotary type brooms to windrow the loose aggregate in the urban area. Suction type brooms are still to be used to remove the waste aggregate.	8.17	126		
<b>09 DENSE GRADED ASPHALT</b>				
<b>DESIGN MIX REQUIREMENTS</b> No asphalt shall be supplied until the mix has been registered and the Superintendent has approved the mix for use	9.4.2	134		
<b>DESIGN MIX REQUIREMENTS</b> Where it is proposed to change the source grading or nature of the components or binders, new mix designs must be carried out in accordance with the Department's <b>Registration of asphalt mix designs – Technical directive</b> accessible via <a href="https://dipl.nt.gov.au/industry/technical-standards-guidelines-and-specifications/road-surfacing-standards">https://dipl.nt.gov.au/industry/technical-standards-guidelines-and-specifications/road-surfacing-standards</a> .	9.4.2	134		
<b>TEMPORARY WORKS</b> This work must be approved by the Superintendent before the section is opened to traffic.	9.10.5	140		

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<b>LONGITUDINAL JOINTS</b> Provide a plan showing all proposed longitudinal joints. The plan must be approved by the Superintendent prior to works depicted commencing.	9.13.7	143		
<b>10 SLURRY SURFACING</b>				
<b>BINDER</b> Additives to improve the workability of the mix, or to accelerate or retard setting of the mix may be used with the approval of the Superintendent.	10.5.1	149		
<b>MIX DESIGN – PROCESS TESTING AND ENDORSEMENT</b> At least 14 days before commencing work, forward the details of the mix design, and copies of test reports to the Superintendent.  Testing is to be carried out in a NATA accredited laboratory and at is to be carried out at no cost to the Principal. Once the mix design is endorsed by the Superintendent it becomes the specified job mix.	10.7.2	151		
<b>PREPARATION AND SET OUT - SWEEPING PAVEMENT</b> Do not commence spreading of the slurry surfacing mix until the prepared pavement has been endorsed by the Superintendent.	10.8.1	152		
<b>11 MISCELLANEOUS CONCRETE WORKS</b>				
<b>CHEMICAL ADMIXTURES</b> Do not use admixtures without obtaining prior written approval from the Superintendent.	11.3.5	154		
<b>REINFORCEMENT</b> Do not place concrete until the reinforcement has been inspected by the Superintendent.	11.3.6	155		
<b>PLACING OF CONCRETE</b> Provide verification that all constituent materials, formwork, falsework, reinforcement, and environmental conditions comply with all requirements. Do not cast any concrete without that verification.	11.6.3	156		
<b>EXISTING SERVICES</b> Obtain the Superintendent's approval before altering the line or level of existing services.	11.8	159		
<b>12 DRAINAGE WORKS</b>				
<b>PRECAST REINFORCED CONCRETE BOX CULVERTS</b> Provide drawings showing complete reinforcement and dimensions with tolerances and obtain the Superintendent's approval prior to fabricating any units. Provide manufacturer's certification that the provided culverts comply with the applicable sections of AS 5100.5 and with AS 1597. Certify that the design is reflected accurately by the shop drawings and that the design is adequate to resist all specified loads and the soil loads pertaining to the site. Provide a table of construction axle loads versus minimum required cover for each box culvert size.	12.5.3	162		

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CONSTRUCTION OF CULVERTS AND STRUCTURES - SETTING OUT Obtain the Superintendent's approval for the setting out before construction.	12.6.1	163		
CONSTRUCTION OF CULVERTS AND STRUCTURES - BACKFILL Do not place backfill against any in-situ concrete structure until the concrete has attained 80% characteristic strength and approval has been given.	12.6.10	165		
INLET AND OUTLET STRUCTURES AND MAINTENANCE HOLES - LAYING AND BACKFILLING Obtain Superintendent's approval of the pipe installation before backfilling.	12.11.5	166		
<b>13 PROTECTION WORKS</b>				
GROUTED STONE PITCHING Obtain Superintendent's approval before grouting.	13.5.2	171		
<b>14 ROAD FURNITURE AND TRAFFIC CONTROL DEVICES</b>				
PLASTIC FLEXIBLE GUIDE POSTS - SAMPLES Provide a sample plastic flexible guide post from each batch purchased for this contract for inspection and approval before installing any posts.	14.6.4	181		
PLASTIC FLEXIBLE GUIDE POST – TESTS Test results are to be provided as detailed in <b>Testing of Flexible Guide Posts</b> clause in this work section. Submit test results to the Superintendent in respect to the following characteristics before ordering the guide posts: - Heat resistance. - Cold resistance. - Rigidity - Vehicle impact.	14.6.7	182		
STEEL FLEXIBLE GUIDE POSTS - SAMPLES Provide a sample steel flexible guide post from each batch purchased for this contract for inspection and approval before installing any posts.	14.7.4	183		
STEEL FLEXIBLE GUIDE POST – TESTS Test results are to be provided as detailed in <b>Testing of Flexible Guide Posts</b> clause in this work section. Submit test results to the Superintendent in respect to the following characteristics before ordering the guide posts: - Heat resistance. - Cold resistance. - Rigidity - Vehicle impact.	14.7.7	184		
TESTING OF FLEXIBLE GUIDE POSTS – TESTS This hold point is covered by the hold points in the clauses <b>Plastic Flexible Guide Posts</b> and <b>Steel Flexible Guide Posts</b> above.	14.8.1	184 & 185	N/A	N/A

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<b>SCHEDULE 1 – HOLD POINTS</b>				
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ROAD SIGNS - MATERIALS Obtain Superintendent's approval for the use of anti-graffiti film or coating products. Apply anti-graffiti products only to the new road signs specified by the Superintendent.	14.9.4	187 & 188		
ROAD SAFETY BARRIERS – WIRE ROPE SYSTEMS Obtain Superintendent's approval for any proposed Steel Wire Rope Road Safety Barrier System before ordering any components.	14.13	193		
<b>15 BOAT RAMPS AND BARGE LANDINGS</b>				
EARTHWORKS IN CUT - UNSUITABLE MATERIAL - Unsuitable material below the design excavated surface to be removed before constructing foundations and replaced with crushed rock core fill. Obtain directions from the Superintendent before works commence.	15.7.2	199		
EARTHWORKS IN CUT - EXCAVATED MATERIAL - STOCKPILE MANAGEMENT - Contractor to supply Sampling, Analytical and Quality Plan (SAQP), to the Superintendent for approval prior to commencing soil testing.	15.7.3.1	199		
EARTHWORKS IN CUT – ACCESS CHANNEL PROFILES - Submit to the Superintendent a hydrographic survey demonstrating that the least depth, lines and levels of all navigation zones and re-profiling areas have been achieved. Do not disestablish plant required for the re-profiling works until approval from the Superintendent has been given.	15.7.6	200 & 201		
COMPACTION OF 75MM CRUSHED ROCK – COMPACTION - Obtain Superintendent's approval before commencing alternative method of crushed rock compaction.	15.9.3	202 & 203		
CAST IN-SITU CONCRETE APPROACH SLAB – TESTING FREQUENCY - Submit all test results to the Superintendent.	15.11.5	204		
FULLY GROUTED STONE PITCHED SHOULDERS AND SHOULDER BATTERS – CONSTRUCTION - Obtain Superintendent's approval before grouting.	15.15.4.2	207		
ROCK ARMOUR - ROCK TESTING REQUIREMENTS - Submit all test results to the Superintendent.	15.18.4	209		
ROCK ARMOUR – PLACEMENT - Before placing rock submit to the Superintendent a detailed Method Statements for approval. Method Statements to include: <ul style="list-style-type: none"> <li>• Work methods.</li> <li>• Work sequences.</li> <li>• Proposed plant.</li> <li>• Safety measures.</li> <li>• Contingency plans for inclement weather.</li> <li>• Evidence that the excavator operator has experience in the construction of rock armour works.</li> </ul>	15.18.8	210		
NAVIGATIONAL AIDS - NAVIGATIONAL BUOYS - Submit to the Superintendent nominated buoy technical data for approval	15.21.1	211 & 212		

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NAVIGATIONAL AIDS - SOLAR MARINE LANTERN - Submit to the Superintendent the nominated solar marine lantern technical data for approval.	15.21.3	212		
NAVIGATIONAL AIDS - SOLAR MARINE LANTERN POWER SUPPLY - Submit to the Superintendent nominated solar marine lantern power supply technical data for approval.	15.21.4	212 & 213		
NAVIGATIONAL AIDS - SECTOR LANTERN - Submit to the Superintendent nominated sector lantern technical data for approval.	15.21.5	213		
COMPLETION - OPERATION AND MAINTENANCE MANUALS - Submit to the Superintendent on completion operation and maintenance manuals and maintenance schedules for the following: <ul style="list-style-type: none"> <li>• Boat Ramps and/or Barge Landings.</li> <li>• Rock armour protection.</li> <li>• Marine infrastructure.</li> <li>• Navigational aids</li> </ul>	15.22.1	214		
COMPLETION - AS-CONSTRUCTED DRAWINGS - Provision of as-constructed drawings is a condition precedent to Practical Completion.	15.22.2	214		
COMPLETION – WARRANTIES - Submit to the Superintendent the manufacturer’s published product warranties in the name of the Principal for all navigational aids.	15.22.4	214		
<b>16 PAVEMENT MARKING</b>				
PAVEMENT MARKING PAINT Submit Certificates of Compliance, issued by an accredited testing authority, stating that all paints being used comply with, the relevant Australian Standards and/or APAS specifications.	16.5	217		
GLASS BEADS Submit Certificates of Compliance, issued by an accredited testing authority, stating that the glass beads being used comply with, the relevant Australian Standards and APAS specifications.	16.6	218		
PAVEMENT MARKING CONFORMANCE TOLERANCES Provide evidence that the pavement marking complies with the requirements of this specification.	16.9	219		
THERMOPLASTIC MATERIALS Approval from Project Director Civil Asset Management is required before thermoplastic materials are used.	16.11	221		
COLD APPLIED PLASTIC MATERIALS Approval from Project Director Civil Asset Management is required before cold applied plastic materials are used.	16.12	222		
AUDIO TACTILE LINE MARKING Approval from Project Director Civil Asset Management is required before audio tactile line marking materials are used.	16.13	222		

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<b>RAISED RETROREFLECTIVE PAVEMENT MARKERS</b> Submit details in relation the manufacturer's warranties, performance, durability and maintenance of the raised retroreflective pavement markers	16.14.1	223		
<b>REMOVAL OF PAVEMENT MARKINGS</b> Obtain approval from the Superintendent on the method used for pavement marking removal before commencing removal operations.	16.15	224		
<b>PAINT BLACKOUT</b> Obtain Superintendent's approval before using this methodology.	16.15.4	224		
<b>REPORTING</b> Submit to the Superintendent the following information, in Microsoft Excel spreadsheet format, every quarter, for all works carried out under this contract: <ul style="list-style-type: none"> <li>– CSR number (for panel contract works)</li> <li>– Contract number (for new works)</li> <li>– Date</li> <li>– Road number</li> <li>– Chainages – start point and finish point of each section of works</li> <li>– PRP numbers - start point and finish point of each section of works</li> <li>– GPS coordinates in Decimal Degrees - start point and finish point of each section of works</li> <li>– Type of carriageway – inbound outbound (for duel carriageways) and full width (for two way carriageway) and</li> <li>– Bead size used and Paint application rate.</li> </ul>	16.17	226		
<b>17 LANDSCAPE</b>				
<b>IMPORTED SOILS</b> Advise the name of the proposed supplier. Do not order soils without Superintendent's approval of the supplier.	17.3.4	229		
<b>MULCH</b> Advise the name of the proposed supplier. Do not order mulch without Superintendent's approval of the supplier.	17.3.6	229		
<b>PLANTING - SETTING OUT OF HOLES</b> Obtain approval of the set out from the Superintendent before commencing any planting.	17.5.1	231		
<b>IRRIGATION SYSTEM</b> Backfill trenches only after inspection and approval of wiring.	17.8.1	241 & 242		
<b>IRRIGATION - DESIGN PLANS</b> Submit drawings to Superintendent for approval indicating design proposals showing all pipework, sprinklers, valves and control systems.	17.8.2	242		

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<b>IRRIGATION - TESTING</b> Obtain Superintendent's approval to proceed with backfilling other than spot filling to retain pipework from movement during pressure testing.	17.8.7	244		
<b>19 TRAFFIC CONTROL SIGNALS AND INTELLIGENT TRANSPORT SYSTEMS</b>				
<b>TRAFFIC SIGNAL CABLING</b> Submit documentation of proposed cable layout for approval prior to commencing installation of cabling.	19.5	251		
<b>CONNECTION TO TELSTRA PIT FROM COMMUNICATIONS ISOLATION PILLAR</b> Provide documentary evidence that the installation is approved by Telstra.	19.8.3	253		
<b>DOCUMENTS AND PLANS</b> Submit to the Superintendent one complete set of As Constructed Drawings and completed Cable Layout and Connection Chart before the issue of the Certificate of Practical Completion.	19.9	253		
<b>21 STREET LIGHTING</b>				
<b>TEMPORARY LIGHTING</b> Submit plans of the proposed temporary street lighting to the Superintendent for approval prior to removal of existing street lights.	21.10.2	262		
<b>22 DIRECTIONAL BORING</b>				
<b>PROPOSED METHOD</b> Submit details of the proposed method of directional boring not less than 14 days prior to commencement of construction using that method. Include details of proposed filling of cavities. No disruption or excavation of the surface is to take place over the length nominated.	22.4	263		
<b>DIRECTIONAL BORING WITHOUT PIPE CASING</b> Obtain written permission from the Superintendent to use directional boring without pipe casing.	22.4.2	264		
<b>23 PROTECTIVE COATINGS</b>				
<b>PROTECTIVE COATINGS</b> Surface Preparation: To AS 1627.	23.3	267		
<b>PROTECTIVE COATINGS</b> Complete and submit Site testing of protective coatings: To AS 3894.10 and AS 3894.11 and AS 3894.12.	23.3	267		
<b>ABRASIVE BLASTING</b> At the completion of the final blast and prior to coating application, the surface profile of each item shall be measured according to Method A, Profile Replicating Tape, of AS 3894.5. Provide documentary confirmation that the surface is suitable for the application of the specified coatings. This shall be identified as a Hold Point in the contractor's ITP.	23.12.2	270 & 271		

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<b>SCHEDULE 1 – HOLD POINTS</b>				
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<b>ALTERNATE SURFACE PREPARATION</b> Do not use forms of surface preparation other than abrasive blasting, such as bristle blaster, needle guns, power tool cleaning and hand tool cleaning, without written permission from the Superintendent. Alternate methods of surface preparation must be included in the Contractor's ITP.	23.12.4	271		
<b>COATING</b> Provide coating manufacturers' written approval for use before using any other additives (eg promoters, accelerators etc).	23.13.2	272		
<b>ALTERNATE COATING</b> Do not use coating materials other than specified, without written permission from the Superintendent. Alternate coating materials must be included in the Contractor's ITP.	23.13.6	273		
<b>COATING DEFECTS</b> Provide details of repairs required and procedures and processes proposed for making the repairs to the Superintendent prior to making any repairs. Any requirements for the repair of protective coatings shall be identified as a Hold Point in the contractor's ITP.	23.13.7	273		
<b>ITP, JSA AND SWMS</b> Provide ITPs, JSAs, a SWMS and other quality control procedures and documents to be used during protective coating systems application. These must be approved prior to commencement of work.	23.15	273		
<b>CONTRACTOR RECORDS</b> Provide copies of all NCRs (Non Conformance Reports) immediately they are completed or received. The NCRs must detail the non-conformance and be accompanied by a Corrective Action Report (CAR) which is to detail the action proposed to be undertaken to rectify the non-conformance.	23.16	274		
<b>FILM THICKNESS</b> Final acceptance of each increment of work will not be made until the dry film thickness meets or exceeds the specified thickness. Regardless of the number of coats specified, additional coats shall be applied as may be necessary to achieve the specified thickness, at the contractor's expense.	23.16.1	274		
<b>INSPECTOR</b> Provide the name and qualifications of the inspector prior to commencement of work.	23.16.2	274		

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1.2 SCHEDULE 2 - WITNESS POINTS

<b>SCHEDULE 2 – WITNESS POINTS</b>				
<b>CLAUSE TITLE</b>	<b>SECTION</b>	<b>PAGE</b>	<b>INITIALS</b>	<b>DATE</b>
<b>01 MISCELLANEOUS PROVISIONS</b>				
<b>CRUSHING OR SCREENING</b> Provide documentary evidence of the certification that the plant is fit for use issued by a competent person. Provide documentary evidence of that person’s skills and qualifications which indicate their competence as defined in the NT Work Safe Bulletin cited above. This evidence is to be provided within 2 weeks of the award of the contract.	1.11.3	16		
<b>SAFETY OFFICER</b> Appoint a Safety Officer and notify the Superintendent of the Safety Officer’s name, and contact details, including an after-hours contact phone number. Ensure the Safety Officer is capable and available at all times as required.	1.14.1	19		
<b>CONTROL STATION CHECK SURVEY</b> Verify that the actual levels on site are the same as the levels shown on the contract drawings. Where results exceed the quoted tolerance notify the Superintendent and obtain directions.	1.20	21		
<b>AS CONSTRUCTED INFORMATION</b> Provide As Constructed drawings for all of the works. <ul style="list-style-type: none"> <li>– Show co-ordinate dimensions where applicable.</li> <li>– Show design levels and as constructed levels on the as constructed drawings. Clearly identify on the as constructed drawings which levels are design levels and which levels are as constructed levels.</li> <li>– Clearly show set-out on the as constructed drawings. Show both design set-out and as constructed set-out. Show clearly which is design and which is as constructed.</li> <li>– Refer to the specific deliverables in the NTG Technical Drawings Part 1 - Requirements for Technical Records Management document, which is accessible via <a href="https://dipl.nt.gov.au/infrastructure/technical-standards-guidelines-and-specifications/technical-records">https://dipl.nt.gov.au/infrastructure/technical-standards-guidelines-and-specifications/technical-records</a> .</li> </ul> Drawings without changes shall be described as "As Constructed - No Changes" in the amendment description column.	1.26	23		
<b>AS CONSTRUCTED INFORMATION</b> Before the work commences provide a proposed procedure for recording and submitting the amended drawings.	1.26	23		

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**SCHEDULE 2 – WITNESS POINTS**

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<p><b>CONTRACTOR'S SUBMISSIONS - WARRANTIES</b>                      Provide the standard manufacturer's warranty certificates for manufactured plant, equipment, and other items. Provide installation warranties for the installation of plant, equipment, and other items, where specialized installation practices are a prerequisite for a manufacturer's warranty.</p>	1.30.3.1	26 & 27		
<p><b>CONTRACTOR'S SUBMISSIONS –CERTIFICATES OF COMPLIANCE</b>                      Provide product Certificates of Compliance before Practical Completion.                      Provision of these will be required before the final payment can be processed.</p>	1.30.4	28		
<p><b>CONTRACTOR'S SUBMISSIONS – LIST OF PLANT AND EQUIPMENT INSTALLED</b>                      On or before Practical Completion provide a list of plant and equipment installed as part of the project. Include the following details:</p> <ul style="list-style-type: none"> <li>• Make</li> <li>• Model</li> <li>• Serial number (if applicable)</li> <li>• Year of manufacture</li> <li>• Capacity</li> <li>• Location.</li> </ul> <p>Provide details of the maintenance and servicing regime that will be undertaken during the defects liability period.                      Provide a servicing schedule for each item of plant and equipment which will be serviced and maintained during the defects liability period.                      Provide a copy of Operations and Maintenance Manuals for each different type and model of plant and equipment. Also provide a copy to Technical Records in PDF format.                      Provision of these documents will be required before the final payment can be processed, and for the final certificate (if applicable) to be issued.</p>	1.30.6	28		
<b>02 PROVISION FOR TRAFFIC</b>				
<p><b>TRAFFIC MANAGEMENT PLAN</b>                      Any decision to vary or not follow a requirement or recommendation must be based on sound traffic management judgement by a competent person and must be documented. Provide the documentation to the Superintendent.</p>	2.6	36 & 37		
<p><b>DETOURS, SIDETRACKS, AND CROSSOVERS - CONSTRUCTION</b>                      Obtain advice from the Superintendent that all requirements for the construction of the detours, side tracks, and/or crossovers have been met on completion</p>	2.19.1	52		
<p><b>DETOURS, SIDETRACKS, AND CROSSOVERS - CONSTRUCTION</b>                      Provide not less than 5 days notice before opening any side track, detour, or crossover, to traffic.</p>	2.19.1	52		

<b>SCHEDULE 2 – WITNESS POINTS</b>				
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<b>04 EARTHWORKS</b>				
<b>CONFORMANCE - EXISTING SURFACE LEVELS</b> Obtain inspections of any disputed existing surface levels with the Superintendent prior to any stripping or earthworks operations.	4.16.1	71		
<b>CONFORMANCE - PROOF ROLLING</b> Give the Superintendent not less than 24 hours notice of the location and commencement time for the proof rolling.	4.16.3	72		
<b>05 CONFORMANCE TESTING</b>				
<b>NOTICE OF TESTING</b> Provide the Superintendent with a copy of the order for testing simultaneously with the order being sent to the Panel Period Contractor.	5.8	76		
<b>NOTICE OF TESTING</b> Notify the Superintendent prior to any rework of failed lots.	5.8	76		
<b>06 PAVEMENTS AND SHOULDERS</b>				
<b>PAVEMENT ACCEPTANCE – PROOF ROLLING REQUIREMENT</b> Give the Superintendent not less than 24 hours notice of the location and commencement time for the proof rolling. Give 48hrs notice for remote work (greater than 5hrs travel one way from regional centre).	6.7.2	94		
<b>PAVEMENT ACCEPTANCE - FINAL PAVEMENT LAYER INTEGRITY REQUIREMENT</b> Give the Superintendent not less than 24 hours notice of the location and commencement time for the inspection of the prepared layer. Give 48hrs notice for remote work (greater than 5hrs travel one way from regional centre).	6.7.5	95		
<b>08 SPRAY SEALING</b>				
<b>SAMPLING OF BINDER - COLLECTION OF SAMPLES</b> Take samples from the point of delivery on transfer from the bulker to the sprayer or as directed. Where transfer is for works in the urban area or for small works ensure that conformance testing is ordered and samples are taken at the point of transfer from bulker to sprayer.	8.9.5	119 & 120		
<b>SPRAYING</b> Give the Superintendent 48 hours notice of intention to spray bitumen.	8.13	121		
<b>PREPARATION FOR SPRAYER RUN</b> Record the volume and temperature of the sprayer contents before each run, while sprayer is on level ground. Dip Sprayer Tank before and after each sprayer run. Record the dip readings, and the temperature of the sprayer contents at the time the dip was done. Provide copies of records of Sprayer Tank dips and temperatures of tank contents within one day of the completion of a day's work.	8.13.4	123		

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PREPARATION FOR SPRAYER RUN Allow visual inspection when requested.	8.13.4	123		
PREPARATION FOR SPRAYER RUN Check that the spray bar is at the correct height before spraying begins.	8.13.4	123		
SPRAYSHEETS Supply spraysheets (paper or electronic formats are acceptable) to the Superintendent at the end of each day's production.	8.18.1	127		
PRICE ADJUSTMENT FOR BITUMEN – GENERAL The claim must be supported by adequate information to substantiate the adjustment in Unit Rates. The Contractor must provide details of the relevant average bitumen price indexes from both the date of Contract Award, and the commencement date of application of the seal or the approved program date for the commencement of sealing application. The commencement of sealing date is to be confirmed by the Superintendent	8.21.1	130		
<b>09 DENSE GRADED ASPHALT</b>				
SAMPLING OF BINDER – COLLECTION OF SAMPLES Take samples from the point of manufacture on transfer from the bulker to the asphalt plant.	9.8.5	138		
SURFACE PREPARATION - NEW CONSTRUCTION Give the Superintendent not less than 24 hours notice of the location and scheduled commencement time of surface preparation works.	9.10.1	139		
SPREADING - GENERAL Give at least 24 hours notice before commencement of asphalt material spreading.	9.13.1	141		
LAYING PATTERN Provide a construction program and paving plan at least 7 working days prior to commencement of works. Paving plans must be confirmed prior to the commencement of each shift.	9.13.4	142		
COMPACTION TEMPERATURES The Contractor must advise the Superintendent of temperature limits relating to compaction.	9.14.2	144		
PRICE ADJUSTMENT FOR BITUMEN – GENERAL The claim must be supported by adequate information to substantiate the adjustment in Unit Rates. The Contractor must provide details of the relevant average bitumen price indexes from both the date of Contract Award, and the commencement date of application of the seal or the approved program date for the commencement of sealing application. The commencement of sealing date is to be confirmed by the Superintendent.	9.16.1	147		

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<b>10 SLURRY SURFACING</b>				
<b>COMMENCEMENT OF WORK</b> Give the Superintendent at least 7 days notice of the date and time of the commencement of work.	10.3	149		
<b>RECORDS</b> Forward a copy of the slurry surfacing Daily Record Sheet to the Superintendent daily.	10.13	153		
<b>11 MISCELLANEOUS CONCRETE WORKS</b>				
<b>FORMWORK</b> Do not place concrete until the formwork has been inspected by the Superintendent.	11.6.2	156		
<b>PLACING OF CONCRETE</b> Give the Superintendent sufficient notice so that inspection may be made before and during pouring concrete.	11.6.3	156		
<b>12 DRAINAGE WORKS</b>				
<b>PRECAST REINFORCED CONCRETE BOX CULVERTS</b> Give the Superintendent notice prior to casting concrete.	12.5.3	162		
<b>CONSTRUCTION OF CULVERTS AND STRUCTURES - EXCAVATION</b> Excavate unsuitable material below specified level if directed by the Superintendent.	12.6.2	163		
<b>CONSTRUCTION OF CULVERTS AND STRUCTURES - CONNECTION TO EXISTING SYSTEMS</b> Advise the Superintendent within 2 days when cleaning out is completed.	12.6.9	164		
<b>CONSTRUCTION OF CULVERTS AND STRUCTURES - BACKFILL</b> Notify the Superintendent before backfilling where holes or fissures occur in rock trenches.	12.6.10	165		
<b>INLET AND OUTLET CHANNELS</b> Advise the Superintendent within 2 days when cleaning out is completed.	12.8	165		
<b>SUBSOIL DRAINS - END WALLS</b> Advise the Superintendent within 2 days of when cleaning out is completed.	12.11.6	166		
<b>14 ROAD FURNITURE AND TRAFFIC CONTROL DEVICES</b>				
<b>TACTILE GROUND SURFACE INDICATORS</b> Provide a 5 year warranty for the materials used, and for the devices installed as tactile ground surface indicators. Provide a 5 year warranty for the workmanship for the installation of the tactile ground surface indicators. Both warranties to be in the name of the Principal.	14.4	177 & 178		
<b>TACTILE GROUND SURFACE INDICATORS</b> Provide documentary evidence that the TGSIs meet the minimum performance criteria.	14.4	177 & 178		

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<b>PLASTIC FLEXIBLE GUIDE POSTS – PRODUCT DATA</b> Submit details of the proposed flexible guide post including the following: <ul style="list-style-type: none"> <li>- Manufacturer’s details on the materials, and the properties of the materials, used in the manufacture of the guide posts.</li> <li>- Manufacturer’s recommended installation procedures.</li> <li>- Technical specifications.</li> <li>- Test results per the test sub-clauses</li> </ul>	14.6.2	180		
<b>PLASTIC FLEXIBLE GUIDE POSTS – WARRANTIES</b> Submit the manufacturer’s published product warranties in the name of the Principal.	14.6.3	180		
<b>STEEL FLEXIBLE GUIDE POSTS – PRODUCT DATA</b> Submit details of the proposed flexible guide post including the following: <ul style="list-style-type: none"> <li>- Manufacturer’s details on the materials, and the properties of the materials, used in the manufacture of the guide posts.</li> <li>- Manufacturer’s recommended installation procedures.</li> <li>- Technical specifications.</li> </ul> Test results per the test sub-clauses	14.7.2	183		
<b>STEEL FLEXIBLE GUIDE POSTS – WARRANTIES</b> Submit the manufacturer’s published product warranties in the name of the Principal.	14.7.3	183		
<b>15 BOAT RAMPS AND BARGE LANDINGS</b>				
<b>INSPECTIONS – NOTICE</b> - Give sufficient notice so that inspections may be made at the following stages: <ul style="list-style-type: none"> <li>• Foundations excavated ready for geotextile and geogrid placement.</li> <li>• Compaction of 75 mm crushed rock.</li> <li>• Placement of all concrete.</li> <li>• Manufacture of precast planks.</li> <li>• Construction of fully grouted shoulders and shoulder batters.</li> <li>• Before grouting of rock protection works.</li> <li>• Rock armour sourcing.</li> </ul>	15.2.1	196		
<b>CONTRACTOR SUBMISSIONS - DREDGING STRATEGY</b> - Provide details of any Dredging Strategies for all dredging works required during the execution of the works.	15.3.1	196		
<b>CONTRACTOR SUBMISSIONS – SURVEY</b> - Provide copies of survey reports prepared for the works. This is not required for survey reports commissioned by the Principal or the Superintendent.	15.3.2	196		
<b>CONTRACTOR SUBMISSIONS - GEOTECHNICAL INVESTIGATION</b> - Provide copies of geotechnical investigation reports prepared for the works. This is not required for geotechnical investigation reports commissioned by the Principal or the Superintendent.	15.3.3	196		

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CONTRACTOR SUBMISSIONS - ACID SULFATE SOIL INVESTIGATION - Provide copies of acid sulfate soil investigation reports prepared for the works. This is not required for acid sulfate soil investigation reports commissioned by the Principal or the Superintendent.	15.3.4	196		
CONTRACTOR SUBMISSIONS – CONTAMINATED LAND INVESTIGATION - Provide copies of contaminated land investigation reports prepared for the works. Appropriately scope contaminated land investigations with consideration of the past history and use of the site. Investigations may include, but not be limited to, reporting on hydrocarbons, asbestos, and Perfluoroalkyl and polyfluoroalkyl substances (PFAS) contamination. This is not required for contaminated land investigation reports addressing the listed contaminants or other identified contaminants commissioned by the Principal or the Superintendent.	15.3.5	196		
CONTRACTOR SUBMISSIONS – SAMPLES - Submit to the Superintendent a 300 mm x 300 mm sample of the proposed geotextile and geogrid. Do not commence work until the samples have been approved by the Superintendent.	15.3.6	196		
CONTRACTOR SUBMISSIONS - GEOTEXTILE AND GEOGRID PLACEMENT - Before placement of the geotextile and geogrid submit to the Superintendent: <ul style="list-style-type: none"> <li>• The geogrid layout, lapping and braiding plan.</li> <li>• The geotextile layout and lapping plan.</li> </ul>	15.3.7	197		
CONTRACTOR SUBMISSIONS - PRECAST PANEL LIFTING AND PLACEMENT PROCEDURE - Submit to the Superintendent a precast panel lifting procedure for approval.	15.3.8	197		
CONTRACTOR SUBMISSIONS - PRECAST PANEL LIFTING AND PLACEMENT PROCEDURE - Submit to the Superintendent a precast panel placement procedure for approval.	15.3.8	197		
COMPONENTS AND MATERIALS - COFFER DAMS, TIMBERING, SHORING, AND SHEETING - Provide details of coffer dams, timbering, shoring, and sheeting proposed to be used in the execution of the works.	15.6.1	198		
COMPONENTS AND MATERIALS - COFFER DAMS, TIMBERING, SHORING, AND SHEETING - Provide copies of Safe Work Method Statements for the installation, use, and removal of any coffer dams, timbering, shoring and sheeting proposed to be used in the execution of the works.	15.6.1	198		
EARTHWORKS IN CUT – METHODOLOGY - EXCAVATION EQUIPMENT SELECTION - Submit to the Superintendent a list of the type of equipment to be used to carry out the excavation.	15.7.1.2	199		

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<p><b>EARTHWORKS IN CUT – TREATMENT OF ACID SULFATE SOILS – TREATMENT</b></p> <p>If acid sulfate soils are confirmed, the contractor must develop an Acid Sulfate Soils Management Plan and submit to the Superintendent for review. Treat the acid sulfate soils as per the plan. The plan is to be developed, implemented, and monitored by a suitably qualified independent organization.</p>	15.7.4.1	200		
<p><b>EARTHWORKS IN CUT – TREATMENT OF ACID SULFATE SOILS - TEMPORARY BUNDING - Advise the Superintendent of bunding location for approval.</b></p>	15.7.4.2	200		
<p><b>GEOTEXTILE AND GEOGRID - DELIVERY AND PRODUCT CERTIFICATION - Provide to the Superintendent:</b></p> <ul style="list-style-type: none"> <li>• A Certificate of Compliance that the geotextile and geogrid complies with all the requirements as specified.</li> <li>• Test results reported on NATA endorsed test documents.</li> </ul> <p>The Certificate of Compliance to include:</p> <ul style="list-style-type: none"> <li>• Quality control documentation for the relevant batch/lots.</li> <li>• Physical properties sheet.</li> <li>• Manufacturer's letter of certification stating compliance.</li> <li>• The certificate must not be more than 12 months old.</li> </ul>	15.8.4	201 & 202		
<p><b>GEOTEXTILE AND GEOGRID – PLACEMENT - Contact the Superintendent at placement completion. Do not cover with construction materials until approval from the Superintendent.</b></p>	15.8.5	202		
<p><b>COMPACTION OF 75 MM CRUSHED ROCK (UNDER SLABS) – COMPACTION - Contact the Superintendent so that each layer of 75 mm crushed rock can be witnessed.</b></p>	15.9.3	202		
<p><b>FULLY GROUTED STONE PITCHED SHOULDERS AND SHOULDER BATTERS – STONE - Contractor to notify Superintendent if suitable stone is not available in reasonable proximity to the site(s) of the works.</b></p>	15.15.4.1	206		
<p><b>SHOULDERS AND SHOULDER BATTERS – STONE PITCHED – STONE</b></p> <p>Contractor to notify Superintendent if suitable stone is not available in reasonable proximity to the site(s) of the works.</p>	15.16.1	207		
<p><b>ROCK ARMOUR - PROPERTIES – Provide to the Superintendent a list of nominated projects where rock from the proposed quarry source has performed well in similar applications.</b></p> <p>Alternatively submit a report from an experienced petrologist or geotechnical engineer to certify that rock used in the proposed manner will be durable in a marine environment.</p>	15.18.1	208		

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<p>ROCK ARMOUR - SOURCE OF ROCK – Before delivery of the rock submit to the Superintendent for approval documentation on the source of the rock. Include the following:</p> <ul style="list-style-type: none"> <li>• The location of the quarry.</li> <li>• A method statement outlining how the proposed quarry operations will produce the specified grading of rock and quarry materials for the works.</li> <li>• Demonstrable evidence that the proposed blasting pattern will minimise the production of latent fractures.</li> <li>• Evidence of a system for inspection and testing to identify rock which does not comply with the requirements of this specification. Nominate testing frequency.</li> <li>• Details of how non-compliant rock will be quarantined from stockpiles of rock proposed for incorporation in the works.</li> </ul>	15.18.2	208		
ROCK ARMOUR - SAMPLE PRODUCTION LOADS – Submit all sample load test results to the Superintendent for conformance.	15.18.6	210		
<b>16 PAVEMENT MARKING</b>				
<p>PAVEMENT MARKING APPLICATION</p> <p>Obtain approval from the Superintendent for the type of equipment to be used for applying pavement marking materials.</p>	16.8	218		
<p>PAVEMENT MARKING APPLICATION</p> <p>Produce documented evidence to show that the spraying equipment has been calibrated in accordance with PCCP requirements and is certified by PCCP as being suitable for the works to be carried out under this contract.</p>	16.8	218		
<p>PAVEMENT MARKING APPLICATION</p> <p>Obtain Superintendent's approval for variation to the any of the above requirements.</p>	16.8	218 & 219		
<p>COLD APPLIED PLASTIC MATERIALS</p> <p>Provide evidence that all proprietary products such as epoxy or plastic products have demonstrated satisfactory field performance for a period of at least three years.</p>	16.12	222		
<b>17 LANDSCAPE</b>				
<p>IMPORTED SOILS</p> <p>Provide a 5 kg sample of topsoil proposed for the works. Do not order soils without Superintendent's approval of the sample. Provide copies of delivery dockets for the topsoil delivered to site for the works.</p>	17.3.4	229		

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MULCH Provide a 5 kg sample of mulch proposed for the works. Do not order mulch without Superintendent's approval of the sample. Provide copies of delivery dockets for the mulch delivered to site for the works.	17.3.6	229		
BATTER PROTECTION BY HYDROSEEDING - CONTRACTOR SUBMISSIONS Product Data: Submit manufacturer's product data and installation instructions. Include required substrate preparation, list of materials and application rates	17.7.2	236		
BATTER PROTECTION BY HYDROSEEDING – SOIL TESTING Obtain Superintendent's approval before using additives not listed above in Composition sub-clause. Approved additives are to be applied with the hydroseeding slurry at Manufacturer recommended rates based on soil test results.	17.7.7	238		
<b>19 TRAFFIC CONTROL SIGNALS AND INTELLIGENT TRAFFIC SYSTEMS</b>				
INSPECTIONS Give 24 hours notice to the Superintendent for inspection of excavations for pedestals, bases and conduits.	19.5.8	252		
CHECKING AND TESTING Give 24 hours notice for checking and testing signal controller, cabling and lanterns.	19.10	253		
<b>20 TRAFFIC COUNTING STATIONS</b>				
DETECTOR LOOP Provide 24 hours notice to the Superintendent prior to installation of vehicle detector loops.	20.8.1	257		
TESTING AND INSPECTION - GENERAL Test the installation in the presence of the Superintendent.	20.10.1	258		
TESTING AND INSPECTION - INSPECTION Provide 24 hours notice to the Superintendent for inspection of excavations for foundations and conduits.	20.10.3	258		
<b>21 STREET LIGHTING</b>				
EXCAVATION - TRENCHES Notify the Superintendent when trench excavation is complete and before backfilling has commenced.	21.5.2	260		
<b>22 DIRECTIONAL BORING</b>				
DIRECTIONAL BORING WITH PIPE CASING Provide documentary evidence of the certification that the pipe jacking equipment is fit for use issued by a competent person. Provide documentary evidence of that person's skills and qualifications which indicate their competence as defined in the NT Work Safe Bulletin cited above. This evidence is to be provided within 2 weeks of the award of the contract.	22.4.1	263 & 264		

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<b>23 PROTECTIVE COATINGS</b>				
<b>CONTRACTOR'S RESPONSIBILITIES</b> Provide documentary evidence of PCCP accreditation before commencing protective coatings work.	23.5	268		
<b>EQUIPMENT</b> Give notice so that the oil carry-over tests may be witnessed by the Superintendent or their nominated representative.	23.9.2	270		
<b>APPLICATION OF PROTECTIVE COATINGS - COATING</b> Provide copies of specifications for application of protective coatings from the manufacturers of the products used. Provide copies of manufacturers' product technical data sheets for all products used.	23.13.2	272		
<b>APPLICATION OF PROTECTIVE COATINGS - COATING DEFECTS</b> This compatibility between marker and coating is to be confirmed by the coating manufacturer. Provide written evidence of this compatibility if requested by the Superintendent.	23.13.7	273		
<b>CONTRACTOR RECORDS</b> Maintain written records of the work so that complete traceability of all work and materials provided under this Specification is maintained. Use the relevant sections of AS 3894.10, AS 3894.11 & AS 3894.12 QA report forms as a basis of this record keeping format for all protective coating work under this contract. Use AS 3894.13 and AS 3894.14, in addition to the preceding Australian Standards, for structural steel work coated under this contract.  Maintain these reports on a daily basis. Submit them to the Superintendent when requested, or, if not specifically requested, at least weekly.	23.16	274		
<b>CONTRACTOR RECORDS - FILM THICKNESS</b> Provide and operate wet film and dry film thickness gauges of approved types to ensure the correct thickness of each coat and the full system is achieved. Provide details of the gauges proposed for use.	23.16.1	274		

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