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| --- | --- |
| Project information | |
| Project Number: |  |
| RTF Number: |  |
| Project title: | |
|  | |
|  | |
|  | |
| Superintendent: | |
| Name: |  |
| Phone number: |  |
| Contact person(Project Manager/Officer): | |
| Name: |  |
| Phone number: |  |

# Schedule 1 – Hold Points

| **SCHEDULE 1 – HOLD POINTS** | | | | |
| --- | --- | --- | --- | --- |
| **CLAUSE TITLE** | **CLAUSE NUMBER** | **PAGE No** | **INITIALS** | **DATE** |
| **01 MISCELLANEOUS PROVISIONS** | | | | |
| VOLATILE SUBSTANCES MANAGEMENT  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). | 1.9 | 15 |  |  |
| PERMITS TO ACCESS LAND FOR WORKS ON ROADS  The Contractor must provide documentary evidence of having been granted the required permission(s) to;   * enter the land which is the site(s) of the works, and * enter any other lands for ancillary activities related to the works, and * carry out the works and works related activities.   Do not enter the land until this evidence has been received by the Superintendent | 1.10 | 15 & 16 |  |  |
| PERMITS TO ACCESS LAND FOR WORKS ON ROADS  Provide documented advice on sites to which surplus materials will be taken. Provide documentary evidence of permits, from the entity and/or organisations with jurisdiction over those sites, for the dumping of surplus materials at those sites. | 1.10 | 15 & 16 |  |  |
| CAMP SITE/COMPOUND/WORKSHOP  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. | 1.11 | 16 |  |  |
| CAMP SITE/COMPOUND/WORKSHOP - FOOD PREPARATION FACILITIES  Provide a copy of proof of registration with DoH of any camp food preparation area in accordance with the *Food Act 2004*. | 1.11.1 | 16 |  |  |
| CAMP SITE/COMPOUND/WORKSHOP - EFFLUENT  Provide a copy of written approval from Department of Health (DoH) for any proposed on-site effluent disposal system, before commencing works. | 1.11.3 | 16 |  |  |
| CAMP SITE/COMPOUND/WORKSHOP - EFFLUENT  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. | 1.11.3 | 16 & 17 |  |  |
| CAMP SITE/COMPOUND/WORKSHOP - REHABILITATION  Obtain approval from the Superintendent for the completed rehabilitation of the camp site/compound/workshop before final demobilisation. | 1.11.4 | 17 |  |  |
| EXPLOSIVES  Obtain approval from Superintendent before commencing blasting operations. | 1.14 | 19 |  |  |
| SAFETY - WORK HEALTH AND SAFETY MANAGEMENT PLAN  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. | 1.16.2 | 20 |  |  |
| UTILITIES AND OTHER SERVICES PASSING UNDER EXISTING PAVEMENTS  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. | 1.18 | 22 |  |  |
| WORK ON RAILWAY SITES  Do not commence work until the work plan has been approved by the owner and operator of the rail system. | 1.19 | 22 |  |  |
| WORK NEAR TRAFFIC COUNT STATIONS OR NEAR CULWEIGH STATIONS  Prior to commencing any excavation, boring of holes, blasting, rock breaking, soil compaction or similar activity in the vicinity of traffic count station detector loops or Culweigh Station cabling, obtain the location of the cables from the Department of Infrastructure, Planning and Logistics, Transport Planning Division, Data Contracts Officer and pay all fees. Follow all directions and instructions issued by the Transport Planning Division in relation to work in the vicinity of such cables. | 1.20 | 22 |  |  |
| AS CONSTRUCTED INFORMATION  Provision of As Constructed information is a condition precedent to Practical Completion. | 1.28 | 24 |  |  |
| CONTRACTOR’S SUBMISSIONS – ROAD RESERVE, PERMITS AND APPROVALS  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. | 1.32.1 | 28 |  |  |
| CONTRACTOR’S SUBMISSIONS – DOCUMENTS TO BE SUBMITTED TO TECHNICAL RECORDS AND TO SUPERINTENDENT  Provision of these documents will be required before the final payment can be processed, and for the final certificate (if applicable) to be issued. | 1.32.2 | 28 |  |  |
| CONTRACTOR’S SUBMISSIONS – WARRANTIES – WARRANTY MARKINGS ON PRODUCTS  Obtain Superintendent approval prior to the use of product markings as warranty certificate. | 1.32.3.2 | 29 |  |  |
| **02 PROVISION FOR TRAFFIC** | | | | |
| TEMPORARY TRAFFIC MANAGEMENT – SITE BASED WORKZONE TRAFFIC MANAGEMENT DESIGNER (TMD)  Obtain approval from the Superintendent before making any substitution of staff by the Contractor. The Contractor shall provide to the Superintendent details of the proposed substitute staff including resume, length of time employed as TMD, and any other relevant information. | 2.4.4 | 38 |  |  |
| TRAFFIC MANAGEMENT PLAN - SUBMISSION OF TRAFFIC MANAGEMENT PLAN  Submit the Traffic Management Plan (TMP), with the Traffic Guidance Schemes.  For contracts where audits of traffic control measures are required:   * Do not commence implementing traffic control measures until the TMP has been audited by a Panel Period Audit Consultant and found to be suitable. * Do not commence the works until the TMP has been audited by a Panel Period Audit Consultant and found to be suitable.   For contracts where audits of traffic control measures are not required:   * Do not commence implementing traffic control measures until the TMP has been appraised by DIPL Road Operations and found to be suitable for use. * Do not commence the works until the TMP has been appraised by DIPL Road Operations and found to be suitable for use. | 2.5.2 | 40 |  |  |
| TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – INDEPENDENT THIRD PARTY TTM SUITABILITY AUDIT REQUIREMENTS  The Traffic Management Plan must not be implemented before it is audited for suitability and found to be suitable. | 2.7.2 | 45 |  |  |
| TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – INDEPENDENT THIRD PARTY TTM SUITABILITY AUDIT REQUIREMENTS  Works must not commence before the Traffic Management Plan is audited for suitability and found to be suitable. | 2.7.2 | 45 |  |  |
| AMENDMENTS TO TRAFFIC MANAGEMENT PLANS  Modified TMPs and TGSs must be audited for suitability by a Panel Period Audit Consultant, and consent to use granted, before implementation of the modified TMP and/or TGSs, if audits are required under the contract. If Traffic Management audits are not required under the contract the modified TMPs and TGSs must be appraised by the Superintendent, and consent to use granted, before implementation of the modified TMPs and/or TGSs. | 2.10 | 46 |  |  |
| AMENDMENTS TO TRAFFIC MANAGEMENT PLANS  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. | 2.10 | 46 |  |  |
| WORK IN RURAL AREAS  Undertake work during daylight hours only unless approval is given by the Superintendent. Approval will only be granted in exceptional circumstances. | 2.11 | 47 |  |  |
| WORK IN URBAN/BUILT-UP AREAS – WORKING TIMES  Obtain Superintendent approval if proposing to work inside the restricted work hours. | 2.12.1 | 47 |  |  |
| WORK IN URBAN/BUILT-UP AREAS – TRAFFIC LANES  Obtain the written permission of the Superintendent if it is necessary to fully close a road. | 2.12.2 | 47 |  |  |
| WORK IN URBAN/BUILT-UP AREAS – TRAFFIC LANES  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. | 2.12.2 | 47 |  |  |
| WORK IN URBAN/BUILT-UP AREAS – LANE CLOSURES  Do not use bullnose or V type tapers unless no other option is available. Obtain permission from the Superintendent to use bullnose or V type tapers before placing them on site. | 2.12.3 | 47 |  |  |
| NIGHT ILLUMINATION  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. | 2.13 | 47 |  |  |
| NT SPECIFIC DIRECTIONS FOR ROAD WORK SIGNS - NON-STANDARD SIGNS  Obtain specific approval from the Superintendent before using signs not included in AS 1742.3. | 2.15.4 | 49 |  |  |
| NT SPECIFIC DIRECTIONS FOR ROAD WORK SIGNS - PORTABLE VARIABLE MESSAGE SIGNS (VMS)   * Provide details of the messages to be displayed and the locations of the variable message signs. This information is to be included in TGSs for the project. * Provide wording for advance warning message(s) and wording for message(s) to be displayed during the works. This information is to be included in TGSs for the project. * 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. | 2.15.5 | 50 |  |  |
| NT SPECIFIC DIRECTIONS FOR ROAD WORK SIGNS - TEMPORARY SPEED LIMITS  Submit temporary speed limit authorisation applications to alter speed limits to the Superintendent, no later than 5 working days prior to the implementation of temporary speed limits, for approval under the Control of Roads Act. | 2.15.7 | 51 |  |  |
| NT SPECIFIC DIRECTIONS FOR ROAD WORK SIGNS - ROAD SAFETY BARRIERS  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. | 2.15.11 | 53 & 54 |  |  |
| DETOURS, SIDE TRACKS, AND CROSSOVERS  Obtain written approval from the Superintendent before commencing any works. | 2.18 | 56 |  |  |
| TEMPORARY BRIDGING  Obtain written approval from the Regional Manager, Road Projects prior to commencement of any such works. | 2.21 | 58 |  |  |
| TEMPORARY BRIDGING  Provide copies of approvals obtained by Contractor to the Superintendent prior to the commencement of the works | 2.21 | 58 |  |  |
| CONTRACTOR'S PLANT AND EQUIPMENT  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. | 2.22 | 58 & 59 |  |  |
| TRAFFIC SIGNALS, INTELLIGENT TRANSPORT SYSTEMS (ITS), VARIABLE SPEED LIMIT ZONES, AND TRAFFIC COUNT STATIONS - TRAFFIC SIGNALS  Obtain clearances from the Department’s Traffic Section, ph. 8999 4402, prior to commencement of the works.  Co-ordinate your works activities with the Department's Traffic Section for the duration of the works. | 2.24.1 | 60 |  |  |
| TRAFFIC SIGNALS, INTELLIGENT TRANSPORT SYSTEMS (ITS), VARIABLE SPEED LIMIT ZONES, AND TRAFFIC COUNT STATIONS - WORKS UNDERTAKEN **DURING** WORKING HOURS | | | | |
| Provide copies of the TGSs once consent for their use has been granted, and contact the Traffic Section, by phone on 8999 4402, not less than one working day prior to the commencement of work. | 2.24.2 | 60 |  |  |
| If the traffic signals need to be re-mapped, or other traffic controls implemented, advise the Traffic Section not less than one working day prior to the commencement of work.  Contact must be made by email to [traffic.NTG@nt.gov.au](mailto:traffic.NTG@nt.gov.au) or by phone. | 2.24.2 | 60 |  |  |
| Advise the Traffic Section about the planned lane closures by phone immediately before installing traffic control on the day the works are to be carried out.  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. | 2.24.2 | 60 |  |  |
| Advise the Traffic Section immediately before traffic control is removed.  Any failure to comply with this clause will render the Contractor liable to pay the costs incurred by the Department to procure any rectifications or repairs which become necessary. | 2.24.2 | 60 |  |  |
| TRAFFIC SIGNALS, INTELLIGENT TRANSPORT SYSTEMS (ITS), VARIABLE SPEED LIMIT ZONES, AND TRAFFIC COUNT STATIONS - WORKS UNDERTAKEN **OUTSIDE** WORKING HOURS | | | | |
| Provide copies of the TGSs once consent for their use has been granted, and contact the Traffic Section, not less than one working day prior to the commencement of work. | 2.24.3 | 60 |  |  |
| If the traffic signals need to be re-mapped, or other traffic controls implemented, co-ordinate directly with the Traffic Section not less than one working day prior to the commencement of work. | 2.24.3 | 60 |  |  |
| 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.  Contact the Traffic Section after-hours contact officer, on the after-hours phone number provided, immediately if unacceptable traffic congestion occurs during the works so that the Traffic Section after-hours contact officer 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. | 2.24.3 | 60 & 61 |  |  |
| Advise the Traffic Section after-hours contact officer, on the after-hours phone number provided, immediately before traffic control is removed. | 2.24.3 | 60 & 61 |  |  |
| TRAFFIC SIGNALS, INTELLIGENT TRANSPORT SYSTEMS (ITS), VARIABLE SPEED LIMIT ZONES, AND TRAFFIC COUNT STATIONS - VARIABLE SPEED LIMIT ZONES  Obtain clearances from the Department’s Traffic Section, ph. 8999 4402, not less than five working days prior to commencing works. | 2.24.4 | 61 |  |  |
| TRAFFIC SIGNALS, INTELLIGENT TRANSPORT SYSTEMS (ITS), VARIABLE SPEED LIMIT ZONES, AND TRAFFIC COUNT STATIONS - TRAFFIC COUNT STATIONS AND CULWEIGH STATIONS  Prior to the commencement of work within the trafficked lanes and within 50 m of traffic counters, or Culweigh stations, or within 20 m, in any direction, of any component of the traffic count or Culweigh 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 Maintenance Section for the region in which the works are located, and with either the Superintendent or with the Maintenance Manager (phone (08) 8999 4660).  Co-ordinate works activities, with the Department's Maintenance Section for the region in which the works are located, for the duration of the works. | 2.24.5 | 61 |  |  |
| PORTABLE TRAFFIC SIGNALS  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. | 2.25 | 61 & 62 |  |  |
| PORTABLE TRAFFIC SIGNALS - TEMPORARY SPEED LIMITS  Work zone speed limits require approval from the Superintendent prior to implementation. | 2.25.1 | 62 |  |  |
| **04 EARTHWORKS** | | | | |
| EARTHWORKS IN CUT - EXCESS MATERIAL  Obtain approval from Superintendent prior to hauling, dumping and spreading excess material. | 4.4.2 | 67 |  |  |
| EARTHWORKS IN CUT - ROCK IN SUBGRADE  Obtain agreement from the Superintendent to the extent of the excavation. | 4.4.3 | 67 |  |  |
| EARTHWORKS IN CUT - UNSUITABLE MATERIAL BELOW SUBGRADE SURFACE OTHER THAN ROCK  Obtain directions from the Superintendent before works commence. | 4.4.4 | 67 |  |  |
| EARTHWORKS IN FILL - PREPARATION PRIOR TO FILLING  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 | 4.5.2 | 68 |  |  |
| EARTHWORKS IN FILL - UNSUITABLE MATERIAL BENEATH FILL  Obtain directions from the Superintendent before works commence. | 4.5.4 | 68 |  |  |
| BRIDGE FOUNDATION – EXCAVATION - PREPARATION  Obtain Superintendent’s agreement with inspection record of current conditions. | 4.13.2.2 | 73 |  |  |
| BRIDGE FOUNDATION – EXCAVATION - PREPARATION  Obtain the Superintendent’s approval for the foundation surface before placing the blinding concrete. | 4.13.2.2 | 73 & 74 |  |  |
| CONFORMANCE - PROOF ROLLING  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 | 75 |  |  |
| CONFORMANCE - CONFORMANCE TESTING  Obtain the Superintendent’s approval of subgrade conformance prior to placing further material. | 4.16.4 | 76 |  |  |
| **05 CONFORMANCE TESTING** | | | | |
| ITP SUBMISSION  Submit ITPs, detailing all procedures and test plans to be undertaken to complete the project, before commencing work. | 5.4 | 80 |  |  |
| **06 PAVEMENTS AND SHOULDERS** | | | | |
| CONSTRUCTION OF PAVEMENT LAYERS - PROCESS CONTROL TESTING  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 | 95 |  |  |
| PAVEMENT ACCEPTANCE – PAVEMENT - ACCEPTANCE REQUIREMENTS  Obtain the Superintendent’s approval for pavement and shoulders acceptance prior to any surfacing work, including satisfying all requirements for:   * Proof Rolling * Conformance Testing * Dry back * Final Pavement Layer Integrity * Surface Roughness * Other Tolerances   For unsealed pavements, obtain the Superintendent’s approval for pavement conformance at conclusion of pavement works. | 6.7.1 | 97 |  |  |
| **07 STABILISATION AND MODIFICATION** | | | | |
| IN SITU STABILISATION AND MODIFICATION - BINDER SPREADING - BINDER FIELD APPLICATION RATES  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 | 103 |  |  |
| IN SITU STABILISATION AND MODIFICATION - GRANULAR MODIFICATION  Determine blending ratios based on laboratory testing of materials. Obtain the Superintendent's approval of determined blending ratio. | 7.4.6 | 104 |  |  |
| PLANT MIX STABILIZATION - BINDER CONTENT  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 | 105 |  |  |
| CONFORMANCE - CONFORMANCE TESTING  Superintendent to approve conformance of stabilised layer prior to commencing surfacing work. | 7.6.2 | 107 |  |  |
| **08 SPRAY SEALING** | | | | |
| MATERIAL REQUIREMENTS – BITUMEN EMULSION  Proprietary products: Seek approval from Superintendent before use. | 8.4.7 | 115 |  |  |
| BINDER COAT REQUIREMENTS – GENERAL – REQUIREMENTS  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 | 120 |  |  |
| SPRAYING - APPLICATION SPRAY RATES  Do not commence spraying until the spray rates are advised by the Superintendent. | 8.13.3 | 125 |  |  |
| APPLICATION OF GEOFABRIC  Submit details of proposed machinery and method of application. | 8.14 | 127 |  |  |
| APPLICATION OF AGGREGATE - SELF-PROPELLED MULTI RUBBER TYRED VIBRATING ROLLERS  Obtain Superintendent’s approval for the use of self-propelled multi rubber tyred vibrating rollers before using them. | 8.15.4 | 129 |  |  |
| WASTE MATERIAL  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 | 129 |  |  |
| **09 DENSE GRADED ASPHALT** | | | | |
| ASPHALT MIX DESIGN - DESIGN MIX REQUIREMENTS  No asphalt shall be supplied until the mix has been registered and the Superintendent has approved the mix for use | 9.4.2 | 137 |  |  |
| ASPHALT MIX DESIGN – DESIGN MIX REQUIREMENTS  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 Registration of asphalt mix designs – Technical directive accessible via [https://dipl.nt.gov.au/industry/technical-standards-guidelines-and-specifications/road-surfacing-standards.](mailto:https://dipl.nt.gov.au/industry/technical-standards-guidelines-and-specifications/road-surfacing-standards.) | 9.4.2 | 137 |  |  |
| SURFACE PREPARATION - TEMPORARY WORKS  This work must be approved by the Superintendent before the section is opened to traffic. | 9.10.5 | 144 |  |  |
| SPREADING – LONGITUDINAL JOINTS  Provide a plan showing all proposed longitudinal joints. The plan must be approved by the Superintendent prior to works depicted commencing. | 9.13.7 | 146 |  |  |
| **10 SLURRY SURFACING** | | | | |
| MATERIALS – BINDER  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 | 153 |  |  |
| MIX REQUIREMENTS – MIX DESIGN – PROCESS TESTING AND ENDORSEMENT  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 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 | 155 |  |  |
| PREPARATION AND SET OUT - SWEEPING PAVEMENT  Do not commence spreading of the slurry surfacing mix until the prepared pavement has been endorsed by the Superintendent. | 10.8.1 | 156 |  |  |
| **11 MISCELLANEOUS CONCRETE WORKS** | | | | |
| MATERIAL - CHEMICAL ADMIXTURES  Do not use admixtures without obtaining prior written approval from the Superintendent. | 11.3.5 | 160 |  |  |
| MATERIAL - REINFORCEMENT  Do not place concrete until the reinforcement has been inspected by the Superintendent. | 11.3.6 | 160 |  |  |
| CONSTRUCTION - PLACING OF CONCRETE  Provide verification that all constituent materials, formwork, falsework, reinforcement, reinforcement supports, and environmental conditions comply with all requirements. Do not cast any concrete without that verification. | 11.6.3 | 161 |  |  |
| EXISTING SERVICES  Obtain the Superintendent's approval before altering the line or level of existing services. | 11.8 | 163 |  |  |
| **12 DRAINAGE WORKS** | | | | |
| MATERIALS - PRECAST REINFORCED CONCRETE BOX CULVERTS  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 | 167 |  |  |
| CONSTRUCTION OF CULVERTS AND STRUCTURES - SETTING OUT  Obtain the Superintendent's approval for the setting out before construction. | 12.6.1 | 168 |  |  |
| 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 | 170 |  |  |
| SUBSOIL DRAINAGE SYSTEMS – SUBSOIL DRAINS - LAYING AND BACKFILLING  Obtain Superintendent's approval of the pipe installation before backfilling. | 12.11.1.5 | 171 |  |  |
| **13 PROTECTION WORKS** | | | | |
| STONE PITCHING - GROUTED STONE PITCHING  Obtain Superintendent's approval before grouting. | 13.5.2 | 176 |  |  |
| **14 ROAD FURNITURE AND TRAFFIC CONTROL DEVICES** | | | | |
| PLASTIC FLEXIBLE GUIDE POSTS - SAMPLES  Provide a sample flexible guide post from each batch purchased for this contract for inspection and approval before installing any posts. | 14.6.4 | 186 |  |  |
| PLASTIC FLEXIBLE GUIDE POST – TESTS  Test results are to be provided as detailed in **Testing of Flexible Guide Posts** 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 | 188 |  |  |
| STEEL FLEXIBLE GUIDE POSTS - SAMPLES  Provide a sample flexible steel guide post from each batch purchased for this contract for inspection and approval before installing any posts. | 14.7.4 | 188 |  |  |
| STEEL FLEXIBLE GUIDE POST – TESTS  Test results are to be provided as detailed in **Testing of Flexible Guide Posts** 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 | 190 |  |  |
| TESTING OF FLEXIBLE GUIDE POSTS – TESTS  This hold point is covered by the hold points in the clauses **Plastic Flexible Guide Posts** and **Steel Flexible Guide Posts** above.  Submit test results to the Superintendent in respect to the following characteristics before ordering the guide posts:   * Heat resistance * Cold resistance * Rigidity * Vehicle impact | 14.8.1 | 190 | N/A | N/A |
| 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 | 193 |  |  |
| ROAD SAFETY BARRIERS – STEEL WIRE ROPE SYSTEM  Obtain Superintendent’s approval for any proposed Steel Wire Rope Road Safety Barrier System before ordering any components. | 14.13 | 198 |  |  |
| **15 BOAT RAMPS AND BARGE LANDINGS** | | | | |
| EARTHWORKS IN CUT - UNSUITABLE MATERIAL  Obtain directions from the Superintendent before works commence. | 15.7.2 | 204 & 205 |  |  |
| 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 | 205 |  |  |
| 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 | 206 |  |  |
| COMPACTION OF 75MM CRUSHED ROCK (UNDER SLABS) – COMPACTION  Obtain Superintendent's approval before commencing alternative method of crushed rock compaction. | 15.9.3 | 208 |  |  |
| CONCRETE COMPONENTS - TESTING FREQUENCY  Submit all test results to the Superintendent. | 15.11.5 | 209 |  |  |
| SHOULDERS AND SHOULDER BATTERS – CAST INSITU CONCRETE AND FULLY GROUTED STONE PITCHED – FULLY GROUTED STONE PITCHED SHOULDERS AND SHOULDER BATTERS - CONSTRUCTION - Obtain Superintendent's approval before grouting. | 15.15.4.2 | 212 |  |  |
| ROCK ARMOUR - ROCK TESTING REQUIREMENTS - Submit all test results to the Superintendent. | 15.18.4 | 214 |  |  |
| ROCK ARMOUR – PLACEMENT - Before placing rock submit to the Superintendent a detailed Method Statements for approval. Method Statements to include:   * Work methods. * Work sequences. * Proposed plant. * Safety measures. * Contingency plans for inclement weather. * Evidence that the excavator operator has experience in the construction of rock armour works. | 15.18.8 | 215 |  |  |
| NAVIGATIONAL AIDS - NAVIGATIONAL BUOYS - Submit to the Superintendent nominated buoy technical data for approval | 15.21.1 | 216 & 217 |  |  |
| NAVIGATIONAL AIDS - SOLAR MARINE LANTERN - Submit to the Superintendent the nominated solar marine lantern technical data for approval. | 15.21.3 | 217 |  |  |
| NAVIGATIONAL AIDS - SOLAR MARINE LANTERN POWER SUPPLY - Submit to the Superintendent nominated solar marine lantern power supply technical data for approval. | 15.21.4 | 217 & 218 |  |  |
| NAVIGATIONAL AIDS - SECTOR LANTERN - Submit to the Superintendent nominated sector lantern technical data for approval. | 15.21.5 | 218 |  |  |
| COMPLETION - OPERATION AND MAINTENANCE MANUALS - Submit to the Superintendent on completion operation and maintenance manuals and maintenance schedules for the following:   * Boat Ramps and/or Barge Landings. * Rock armour protection. * Marine infrastructure. * Navigational aids | 15.22.1 | 219 |  |  |
| COMPLETION - AS-CONSTRUCTED DRAWINGS - Provision of as-constructed drawings is a condition precedent to Practical Completion. | 15.22.2 | 219 |  |  |
| 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 | 219 |  |  |
| **16 PAVEMENT MARKING** | | | | |
| 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 | 222 |  |  |
| 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 | 223 |  |  |
| PAVEMENT MARKING CONFORMANCE TOLERANCES  Provide evidence that the pavement marking complies with the requirements of this specification. | 16.9 | 224 |  |  |
| COLD APPLIED PLASTIC MATERIALS  Approval from Project Director Civil Asset Management is required before cold applied plastic materials are used. | 16.11 | 226 |  |  |
| AUDIO TACTILE LINE MARKING  Approval from Project Director Civil Asset Management is required before audio tactile line marking materials are used. | 16.12 | 226 |  |  |
| RAISED RETROREFLECTIVE PAVEMENT MARKERS  Submit details in relation to the manufacturer’s warranties, performance, durability and maintenance of the raised retroreflective pavement markers. | 16.13.1 | 227 |  |  |
| REMOVAL OF PAVEMENT MARKINGS  Obtain approval from the Superintendent on the proposed method used for pavement marking removal before commencing removal operations. | 16.14 | 228 |  |  |
| REMOVAL OF PAVEMENT MARKINGS - PAINT BLACKOUT  Obtain Superintendent’s approval before using this methodology. | 16.14.4 | 228 |  |  |
| **17 LANDSCAPE** | | | | |
| MATERIALS - IMPORTED SOILS  Advise the name of the proposed supplier. Do not order soils without Superintendent’s approval of the supplier. | 17.3.4 | 232 |  |  |
| MATERIALS - MULCH  Advise the name of the proposed supplier. Do not order mulch without Superintendent’s approval of the supplier. | 17.3.6 | 232 |  |  |
| PLANTING - SETTING OUT OF HOLES  Obtain approval of the set out from the Superintendent before commencing any planting. | 17.5.1 | 234 |  |  |
| IRRIGATION - IRRIGATION SYSTEM  Backfill trenches only after inspection and approval of wiring. | 17.8.1 | 243 & 244 |  |  |
| IRRIGATION - DESIGN PLANS  Submit drawings to Superintendent for approval indicating design proposals showing all pipework, sprinklers, valves and control systems. | 17.8.2 | 245 |  |  |
| IRRIGATION - TESTING  Obtain Superintendent's approval to proceed with backfilling other than spot filling to retain pipework from movement during pressure testing. | 17.8.7 | 247 |  |  |
| **19 TRAFFIC CONTROL SIGNALS AND INTELLIGENT TRANSPORT SYSTEMS** | | | | |
| TRAFFIC SIGNAL CABLING  Submit documentation of proposed cable layout for approval prior to commencing installation of cabling. | 19.5 | 254 |  |  |
| SCATS FACILITIES – CONNECTION TO TELSTRA PIT  Provide documentary evidence that the installation is approved by Telstra. | 19.8.3 | 256 |  |  |
| DOCUMENTS AND PLANS  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 | 256 |  |  |
| **21 STREET LIGHTING** | | | | |
| UTILITIES AND OTHER SERVICES PASSING UNDER EXISTING PAVEMENT  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. | 21.7 | 263 & 264 |  |  |
| SOLAR STREET LIGHTING – MANUFACTURER’S SPECIFICATIONS  Submit to the Superintendent manufacturer’s specifications for approval. | 21.9.2 | 265 |  |  |
| EXISTING STREET LIGHTING – TEMPORARY LIGHTING  Submit plans of the proposed temporary street lighting to the Superintendent for approval before removal of existing street lights. | 21.15.2 | 267 |  |  |
| COMPLETION – OPERATION AND MAINTENANCE MANUALS  Submit to the Superintendent Operation and Maintenance manuals for the installed lighting system. | 21.18.1 | 268 |  |  |
| COMPLETION – WARRANTIES  Submit to the Superintendent the manufacturer’s published product warranties in the name of the Principal for the installed lighting system. | 21.18.2 | 268 |  |  |
| **22 DIRECTIONAL BORING** | | | | |
| PROPOSED METHOD  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 | 269 |  |  |
| PROPOSED METHOD - DIRECTIONAL BORING WITHOUT PIPE CASING  Obtain written permission from the Superintendent to use directional boring without pipe casing. | 22.4.2 | 270 |  |  |
| **23 PROTECTIVE COATINGS** | | | | |
| PROTECTIVE COATINGS  Surface Preparation: To AS 1627. Provide a copy of the proposed specification for surface preparation as detailed in AS 1627.0 before commencing surface preparation works. | 23.3 | 273 |  |  |
| PROTECTIVE COATINGS  Complete and submit Site testing of protective coatings: To AS 3894.10 and AS 3894.11 and AS 3894.12. | 23.3 | 273 |  |  |
| SURFACE PREPERATION - ABRASIVE BLASTING  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 | 276 & 277 |  |  |
| SURFACE PREPERATION - ALTERNATE SURFACE PREPARATION  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 | 277 |  |  |
| APPLICATION OF PROTECTIVE COATINGS - COATING  Provide coating manufacturers’ written approval for use before using any other additives (eg promoters, accelerators etc). | 23.13.2 | 278 |  |  |
| APPLICATION OF PROTECTIVE COATINGS - ALTERNATE COATING  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 | 278 |  |  |
| APPLICATION OF PROTECTIVE COATINGS - COATING DEFECTS  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 | 279 |  |  |
| ITP, JSA AND SWMS  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 | 279 |  |  |
| CONTRACTOR RECORDS  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 | 279 |  |  |
| CONTRACTOR RECORDS - FILM THICKNESS  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 | 280 |  |  |
| CONTRACTOR RECORDS - INSPECTOR  Provide the name and qualifications of the inspector prior to commencement of work. | 23.16.2 | 280 |  |  |

# Schedule 2 – Witness Points

| **SCHEDULE 2 – WITNESS POINTS** | | | | |
| --- | --- | --- | --- | --- |
| **CLAUSE TITLE** | **CLAUSE NUMBER** | **PAGE No** | **INITIALS** | **DATE** |
| **01 MISCELLANEOUS PROVISIONS** | | | | |
| EXTRACTION AREAS AND WATER SOURCES- CRUSHING OR SCREENING  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. | 1.13.3 | 18 |  |  |
| SAFETY – SAFETY OFFICER  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. | 1.16.1 | 20 |  |  |
| CONTROL STATION CHECK SURVEY  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. | 1.22 | 23 |  |  |
| AS CONSTRUCTED INFORMATION  Provide As Constructed drawings for all of the works.   * Show in red, on the Contract Drawings, as constructed information relating to works constructed beyond the various construction tolerances. The information includes, but is not limited to:   + Setout co-ordinates, where applicable.   + Design levels.   + Detail dimensions. * Pavement, seal, line marking and protection extents. * Refer to the specific deliverables in the NTG Technical Drawings Part 1 – Requirements for Technical Records Management document, which is accessible via <https://dipl.nt.gov.au/industry/technical-standards-guidelines-and-specifications/technical-records.> * Drawings without changes shall also be included and labelled as “As Constructed” in the amendment description column. | 1.28 | 24 |  |  |
| AS CONSTRUCTED INFORMATION  Before the work commences provide a proposed procedure for recording and submitting the amended drawings. | 1.28 | 24 & 25 |  |  |
| CONTRACTOR’S SUBMISSIONS – WARRANTIES – WARRANTIES  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. | 1.32.3.1 | 28 |  |  |
| CONTRACTOR’S SUBMISSIONS –CERTIFICATES OF COMPLIANCE  Provide product Certificates of Compliance before Practical Completion.  Provision of these will be required before the final payment can be processed. | 1.32.4 | 29 |  |  |
| CONTRACTOR’S SUBMISSIONS – LIST OF PLANT AND EQUIPMENT INSTALLED  On or before Practical Completion provide a list of plant and equipment installed as part of the project. Include the following details:   * Make * Model * Serial number (if applicable) * Year of manufacture * Capacity * Location.   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. | 1.32.6 | 31 |  |  |
| **02 PROVISION FOR TRAFFIC** | | | | |
| TRAFFIC MANAGEMENT PLAN  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. | 2.5 | 39 & 40 |  |  |
| DETOURS, SIDETRACKS, AND CROSSOVERS - CONSTRUCTION  Obtain advice from the Superintendent that all requirements for the construction of the detours, side tracks, and/or crossovers have been met on completion | 2.18.1 | 56 |  |  |
| DETOURS, SIDETRACKS, AND CROSSOVERS - CONSTRUCTION  Provide not less than 5 days notice before opening any side track, detour, or crossover, to traffic. | 2.18.1 | 56 |  |  |
| **04 EARTHWORKS** | | | | |
| CONFORMANCE – EXISTING SURFACE LEVELS  Obtain inspections of any disputed existing surface levels with the Superintendent prior to any stripping or earthworks operations. | 4.16.1 | 75 |  |  |
| CONFORMANCE - PROOF ROLLING  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) | 4.16.3 | 75 |  |  |
| **05 CONFORMANCE TESTING** | | | | |
| NOTICE OF TESTING  Provide the Superintendent with a copy of the order for testing simultaneously with the order being sent to the Panel Period Contractor. | 5.8 | 81 |  |  |
| NOTICE OF TESTING  Notify the Superintendent prior to any rework of failed lots. | 5.8 | 81 |  |  |
| **06 PAVEMENTS AND SHOULDERS** | | | | |
| PAVEMENT ACCEPTANCE – PROOF ROLLING REQUIREMENT  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 | 97 |  |  |
| PAVEMENT ACCEPTANCE - FINAL PAVEMENT LAYER INTEGRITY REQUIREMENT  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 | 98 |  |  |
| **08 SPRAY SEALING** | | | | |
| SAMPLING OF BINDER - COLLECTION OF SAMPLES  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. All sampling must be in accordance with Australian Standards and/or Austroads standards. The supplier is to perform the sampling. Ensure staff carrying out sampling are competent in sampling methods. | 8.9.5 | 122 & 123 |  |  |
| SPRAYING  Give the Superintendent 48 hours notice of intention to spray bitumen. | 8.13 | 124 |  |  |
| SPRAYING – PREPERATION FOR SPRAYER RUN  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 | 126 |  |  |
| SPRAYING – PREPERATION FOR SPRAYER RUN  Allow visual inspection when requested. | 8.13.4 | 126 |  |  |
| SPRAYING – PREPERATION FOR SPRAYER RUN  Check that the spray bar is at the correct height before spraying begins. | 8.13.4 | 126 |  |  |
| REPORTING – SPRAYSHEETS  Supply spraysheets (paper or electronic formats are acceptable) to the Superintendent at the end of each day’s production. Record the following information for all spray runs conducted.   * Contractors name * Project details * Contract number * Specification schedule number * Road name * Product type sprayed * Precoat type used, Precoat litres / m3 * Aggregate supplier, Aggregate type, Aggregate size * Run number, Start time of spray run * Pavement temperature, Ambient temperature * Start chainage of spray run - actual km of road * End chainage of spray run - actual km of road * Total length, Width of spray run * Total area of spray run * Temperature of product at spraying * Start dip, End dip * Total sprayed hot, Correction factor, Total sprayed cold * Application rate cold * Ordered application rate * Percent of application rate ordered * Number of rollers used * Bitumen sample number * Signature of contractor representative * Signature section for client representative | 8.18.1 | 130 |  |  |
| 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 Tender Close, 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 | 133 |  |  |
| **09 DENSE GRADED ASPHALT** | | | | |
| 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 | 142 |  |  |
| 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 | 143 |  |  |
| SPREADING – GENERAL  Give at least 24 hours notice before commencement of asphalt material spreading. | 9.13.1 | 145 |  |  |
| SPREADING – 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 | 146 |  |  |
| COMPACTION – COMPACTION TEMPERATURES  The Contractor must advise the Superintendent of temperature limits relating to compaction. | 9.14.2 | 147 |  |  |
| 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 | 150 & 151 |  |  |
| **10 SLURRY SURFACING** | | | | |
| COMMENCEMENT OF WORK  Give the Superintendent at least 7 days notice of the date and time of the commencement of work. | 10.3 | 153 |  |  |
| RECORDS  Forward a copy of the slurry surfacing Daily Record Sheet to the Superintendent daily. | 10.13 | 158 |  |  |
| **11 MISCELLANEOUS CONCRETE WORKS** | | | | |
| CONSTRUCTION – FORMWORK  Do not place concrete until the formwork has been inspected by the Superintendent. | 11.6.2 | 161 |  |  |
| CONSTRUCTION – PLACING OF CONCRETE  Give the Superintendent sufficient notice so that inspection may be made before and during pouring concrete. | 11.6.3 | 161 |  |  |
| **12 DRAINAGE WORKS** | | | | |
| MATERIALS – PRECAST REINFORCED CONCRETE BOX CULVERTS  Give the Superintendent notice prior to casting concrete. | 12.5.3 | 167 |  |  |
| CONSTRUCTION OF CULVERTS AND STRUCTURES – EXCAVATION  Excavate unsuitable material below specified level if directed by the Superintendent. Replace with select fill, compacted as specified. | 12.6.2 | 168 |  |  |
| CONSTRUCTION OF CULVERTS AND STRUCTURES - CONNECTION TO EXISTING SYSTEMS  Advise the Superintendent within 2 days when cleaning out is completed. | 12.6.9 | 170 |  |  |
| CONSTRUCTION OF CULVERTS AND STRUCTURES - BACKFILL  Notify the Superintendent before backfilling where holes or fissures occur in rock trenches. | 12.6.10 | 170 |  |  |
| INLET AND OUTLET CHANNELS  Advise the Superintendent within 2 days when cleaning out is completed. | 12.8 | 170 & 171 |  |  |
| SUBSOIL DRAINAGE SYSTEMS – SUBSOIL DRAINAGE - END WALLS  Advise the Superintendent within 2 days of when cleaning out is completed. | 12.11.1.6 | 172 |  |  |
| **14 ROAD FURNITURE AND TRAFFIC CONTROL DEVICES** | | | | |
| TACTILE GROUND SURFACE INDICATORS  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 | 183 |  |  |
| TACTILE GROUND SURFACE INDICATORS  Provide documentary evidence that the TGSIs meet the minimum performance criteria. | 14.4 | 183 |  |  |
| PLASTIC FLEXIBLE GUIDE POSTS – PRODUCT DATA  Submit details of the proposed flexible guide post including the following:   * + - * + Manufacturer’s details on the materials, and the properties of the materials, used in the manufacture of the guide posts.         + Manufacturer’s recommended installation procedures.         + Technical specifications.         + Test results per the test sub-clauses | 14.6.2 | 186 |  |  |
| PLASTIC FLEXIBLE GUIDE POSTS – WARRANTIES  Submit the manufacturer’s published product warranties in the name of the Principal. | 14.6.3 | 186 |  |  |
| STEEL FLEXIBLE GUIDE POSTS – PRODUCT DATA  Submit details of the proposed flexible guide post including the following:   * + - * + Manufacturer’s details on the materials, and the properties of the materials, used in the manufacture of the guide posts.         + Manufacturer’s recommended installation procedures.         + Technical specifications. | 14.7.2 | 188 |  |  |
| STEEL FLEXIBLE GUIDE POSTS – WARRANTIES  Submit the manufacturer’s published product warranties in the name of the Principal. | 14.7.3 | 188 |  |  |
| **15 BOAT RAMPS AND BARGE LANDINGS** | | | | |
| INSPECTIONS – NOTICE  Give sufficient notice so that inspections may be made at the following stages:   * Notice to the Superintendent if unsuitable material is encountered. * Foundation inspection prior to geotextile and geogrid placement. * Compaction of 75 mm crushed rock. * Pre-pour inspections and placement of all concrete. * Manufacture of precast planks. * Before grouting of rock protection works. * Construction of fully grouted shoulders and shoulder batters. * Rock armour sourcing. | 15.2.1 | 201 |  |  |
| CONTRACTOR SUBMISSIONS - DREDGING STRATEGY  Provide details of any Dredging Strategies for all dredging works required during the execution of the works. | 15.3.1 | 201 |  |  |
| CONTRACTOR SUBMISSIONS – SURVEY  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 | 201 |  |  |
| CONTRACTOR SUBMISSIONS - GEOTECHNICAL INVESTIGATION  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 | 201 |  |  |
| 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 | 202 |  |  |
| 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 | 202 |  |  |
| 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 received by the Superintendent, and the type of geotextile, and geogrid have been approved. | 15.3.6 | 202 |  |  |
| CONTRACTOR SUBMISSIONS - GEOTEXTILE AND GEOGRID PLACEMENT  Before placement of the geotextile and geogrid submit to the Superintendent:   * The geogrid layout, lapping and braiding plan. * The geotextile layout and lapping plan. | 15.3.7 | 202 |  |  |
| CONTRACTOR SUBMISSIONS - PRECAST PANEL LIFTING AND PLACEMENT PROCEDURE  Submit to the Superintendent a precast panel lifting procedure for approval. | 15.3.8 | 202 |  |  |
| CONTRACTOR SUBMISSIONS - PRECAST PANEL LIFTING AND PLACEMENT PROCEDURE  Submit to the Superintendent a precast panel placement procedure for approval. | 15.3.8 | 202 |  |  |
| 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 | 203 |  |  |
| 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 | 203 |  |  |
| 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 | 204 |  |  |
| EARTHWORKS IN CUT – TREATMENT OF ACID SULFATE SOILS – TREATMENT  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. | 15.7.4.1 | 205 |  |  |
| EARTHWORKS IN CUT – TREATMENT OF ACID SULFATE SOILS - TEMPORARY BUNDING  Advise the Superintendent of bunding location for approval. | 15.7.4.2 | 205 |  |  |
| GEOTEXTILE AND GEOGRID - DELIVERY AND PRODUCT CERTIFICATION  Provide to the Superintendent:   * A Certificate of Compliance that the geotextile and geogrid comply with all the requirements as specified. * Test results reported on NATA endorsed test documents.   The Certificate of Compliance to include:   * Quality control documentation for the relevant batch/ lots. * Physical properties sheet. * Manufacturer’s letter of certification stating compliance. * The certificate must not be more than 12 months old. | 15.8.4 | 207 |  |  |
| GEOTEXTILE AND GEOGRID – PLACEMENT  Contact the Superintendent at placement completion. Do not cover with construction materials until approval from the Superintendent. | 15.8.5 | 207 |  |  |
| COMPACTION OF 75 MM CRUSHED ROCK (UNDER SLABS) – COMPACTION  Contact the Superintendent so that each layer of 75 mm crushed rock can be witnessed. | 15.9.3 | 208 |  |  |
| SHOULDERS AND SHOULDER BATTERS – CAST INSITU CONCRETE AND FULLY GROUTED STONE PITCHED - 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. | 15.15.4.1 | 212 |  |  |
| SHOULDERS AND SHOULDER BATTERS – STONE PITCHED – STONE  Contractor to notify Superintendent if suitable stone is not available in reasonable proximity to the site(s) of the works. | 15.16.1 | 212 |  |  |
| 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.  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. | 15.18.1 | 213 |  |  |
| 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:   * The location of the quarry. * A method statement outlining how the proposed quarry operations will produce the specified grading of rock and quarry materials for the works. * Demonstrable evidence that the proposed blasting pattern will minimise the production of latent fractures. * Evidence of a system for inspection and testing to identify rock which does not comply with the requirements of this specification. Nominate testing frequency. * Details of how non-compliant rock will be quarantined from stockpiles of rock proposed for incorporation in the works. | 15.18.2 | 213 |  |  |
| ROCK ARMOUR - SAMPLE PRODUCTION LOADS  Submit all sample load test results to the Superintendent for conformance. | 15.18.6 | 215 |  |  |
| **16 PAVEMENT MARKING** | | | | |
| PAVEMENT MARKING APPLICATION  Obtain approval from the Superintendent for the type of equipment to be used for applying pavement marking materials. | 16.8 | 223 |  |  |
| PAVEMENT MARKING APPLICATION  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. | 16.8 | 223 |  |  |
| PAVEMENT MARKING APPLICATION  Obtain Superintendent’s approval for variation to any of the above requirements. | 16.8 | 223 & 224 |  |  |
| COLD APPLIED PLASTIC MATERIALS  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. | 16.11 | 226 |  |  |
| **17 LANDSCAPE** | | | | |
| MATERIALS - IMPORTED SOILS  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. | 17.3.4 | 232 |  |  |
| MATERIALS - 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 | 232 |  |  |
| 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 | 239 |  |  |
| 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 | 241 |  |  |
| **19 TRAFFIC CONTROL SIGNALS AND INTELLIGENT TRAFFIC SYSTEMS** | | | | |
| TRAFFIC SIGNAL CABLING - INSPECTIONS  Give 24 hours notice to the Superintendent for inspection of excavations for pedestals, bases and conduits. | 19.5.8 | 255 |  |  |
| CHECKING AND TESTING  Give 24 hours notice for checking and testing signal controllers, cabling and lanterns. | 19.10 | 256 |  |  |
| **20 TRAFFIC COUNTING STATIONS** | | | | |
| INSTALLATION - DETECTOR LOOP  Provide 24 hours notice to the Superintendent prior to installation of vehicle detector loops. | 20.8.1 | 260 |  |  |
| TESTING AND INSPECTION - GENERAL  Test the installation in the presence of the Superintendent. | 20.10.1 | 261 |  |  |
| TESTING AND INSPECTION - INSPECTION  Provide 24 hours notice to the Superintendent for inspection of excavations for foundations and conduits. | 20.10.3 | 261 |  |  |
| **21 STREET LIGHTING** | | | | |
| EXCAVATION – COLUMN FOOTINGS  Notify the Superintendent immediately if rock is encountered. | 21.10.2 | 266 |  |  |
| EXCAVATION – TRENCHES  Notify the Superintendent when trench excavation is complete and before backfilling has commenced. | 21.10.3 | 266 |  |  |
| BACKFILLING – MATERIAL  Provide samples of bedding sand and select fill if requested by the Superintendent. | 21.12.1 | 266 |  |  |
| TESTING AND COMMISSIONING – COMPLIANCE  Submit a compliance certificate stating that all works have been completed as specified to this worksection and to Power and Water Corporation requirements. | 21.16.3 | 268 |  |  |
| **22 DIRECTIONAL BORING** | | | | |
| PROPOSED METHOD - 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 | 270 |  |  |
| **23 PROTECTIVE COATINGS** | | | | |
| CONTRACTOR’S RESPONSIBILITIES  Provide documentary evidence of PCCP accreditation before commencing protective coatings work. | 23.5 | 274 |  |  |
| EQUIPMENT - EQUIPMENT  Give notice so that the oil carry-over tests may be witnessed by the Superintendent or their nominated representative. | 23.9.2 | 276 |  |  |
| APPLICATION OF PROTECTIVE COATINGS - COATING  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 | 278 |  |  |
| APPLICATION OF PROTECTIVE COATINGS - COATING DEFECTS  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 | 279 |  |  |
| CONTRACTOR RECORDS  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 | 279 |  |  |
| CONTRACTOR RECORDS - FILM THICKNESS  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 | 280 |  |  |