



**Comhairle Contae
Dhún na nGall**
Donegal County Council

Community Development & Planning Services

Barrack Hill, Daisy Structure Enhancement,

Carndonagh, Co Donegal

Volume A – Works Requirements

July 2026



**An Roinn Leanaí, Comhionannais,
Míchumais, Lánpháirtíochta agus Óige**
Department of Children, Equality,
Disability, Integration and Youth

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PREAMBLE TO THE WORKS REQUIREMENTS

The Specification referred to in the Contract shall be the Specification for Works (SPW) in TII Publications (Standards) published by TII as a collective group of documents under the Construction and Commissioning activity within the online TII Publications system (<http://www.tiipublications.ie/>), current on the date 10 working days prior to the tender returns date or, if applicable, the extended tender returns date and incorporating all amendments current on that date and as extended by the following:-

- (i) Appendix 0/1: Contract-specific Additional, Substitute and Cancelled Clauses, Tables and Figures;
- (ii) Appendix 0/2: Contract-specific minor alterations to existing Clauses, Tables and Figures;
- (iii) The Numbered Appendices listed in Appendix 0/3;
- (iv) Appendix 0/4 containing a list of the drawings referred to in the Specification.

An Additional Clause as indicated by a suffix “AR” in Appendix 0/1 is a Contract-specific alteration.

A Substitute Clause as indicated by a suffix “SR” in Appendix 0/1 is a Contract-specific alteration.

A Cancelled Clause as indicated by a suffix “CR” in Appendix 0/1 is a Contract-specific alteration.

Insofar as any of the Numbered Appendices may conflict or be inconsistent with any provision of the SPW the Numbered Appendices shall always prevail.

Any reference in the Contract to a Clause number or Appendix shall be deemed to refer to the corresponding Substitute part of the SPW or Appendix listed in Appendix 0/1 or 0/2.

Where a part of the SPW is altered, any original Table/Figure referred to in the part of the SPW shall apply unless the Table/Figure is also altered. Where a Table/Figure is altered, any reference in a part of the SPW to the original Table/Figure shall apply to the altered Table/Figure.

Where a part of the SPW relates to work goods or materials which are not required for the Works it shall be deemed not to apply.

Any Appendix referred to in the SPW that is not used shall be deemed not to apply.

References in the SPW to “NRA Road Construction Details” shall be taken to refer to Standard Construction Details (SCD) in the TII Publications (Standards) published by TII as a collective group of documents under the Construction and Commissioning activity within the online TII Publications system (<http://www.tiipublications.ie/>), current on the date 10 working days prior to the tender returns date or, if applicable, the extended tender returns date.

Text shown in grey highlight applies only to Contracts where the applicable Conditions of Contract is the Public Works Contract for Civil Engineering Works Designed by the Employer, the

Public Works Contract for Minor Building and Civil Engineering Works Designed by the Employer.

Text shown in square brackets immediately following text shown in grey highlight, if any, is deemed to replace the text in grey highlight for Contracts where the applicable Conditions of Contract is the Public Works Contract for Civil Engineering Works Designed by the Contractor.

Throughout the SPW and Appendices to the SPW, the following interpretations shall apply:

“Base Course” shall mean “Binder Course”

“Roadbase” shall mean “Base”

“Wearing Course” shall mean “Surface Course”

“UK Department of Transport” shall mean “UK Highways Agency”

APPENDIX 0/1

CONTRACT SPECIFIC ADDITIONAL, SUBSTITUTE AND CANCELLED CLAUSES, TABLES AND FIGURES INCLUDED IN THE CONTRACT

List of Additional Clauses, Tables and Figures

Clause No.(etc.)	Title
116.6 AR	Privately and Publicly Owned Services or Supplies
116.7 AR	Eir (EIR)
116.8 AR	ESB Networks
137 AR	Safety File Content
206 AR	Invasive Species

List of Substitute Clauses, Tables and Figures

Clause No.	Title
	None

List of Cancelled Clauses, Tables and Figures

Clause No.	Title
	None

Additional Clauses, Tables and Figures

Clause No. (etc.)	Title and written text
116.6 AR	Privately and Publicly Owned Services or Supplies
116.6.1 AR	Prior to and during the construction of the Works, the Contractor shall liaise with and adhere to the requirements of the various Authorities and Utilities who are affected by the Works. These shall include but not be limited to; • Electricity Supply Board • Eir • Donegal County Council • Irish Water • Privately owned Watermains • Privately owned Sewers

Clause No. (etc.)	Title and written text
116.6.2 AR	The Contractor shall, on appointment, assume full responsibility for liaison and shall arrange where necessary, for temporary and/or permanent diversion of any service underground or overground and co-ordinate any service alterations to facilitate construction of the Works. The Contractor shall also carry out his own investigations concerning the location of all overground and underground services and shall make provisions in his rates for all precautions necessary and all restrictions which may be caused to his operations due to their proximity. The Contractor shall notify all the relevant Authorities and Utilities sufficiently (min. 2 weeks) in advance of his excavation Works at each location so that all necessary precautions may be taken.
116.6.3 AR	The Contractor shall be solely responsible for liaison during construction. The Contractor shall issue formal orders for all necessary diversions to Eir, ESB, and all other Authorities and Utilities. The Contractor shall order ducting, pipelines and fittings only after checking the requirements with the various utilities. All discussions/meetings between the Contractor and the Authorities and Utilities shall be notified in advance to the Employer's Representative. The Employer's Representative may attend such discussions/meetings. The content of any communications between the Contractor and utilities shall be notified simultaneously to the Employer's Representative.
116.6.4 AR	The Contractor shall make good any damage resulting from his operations and shall indemnify the Employer against any claims for damage to drains, sewers, mains, cables, water pipes, fittings, boxes and the like or any other property caused by the execution and completion of the Works.
116.7 AR	EIR
116.7.1 AR	<u>Eir Requirements:</u> 1. Records Before commencing any work or moving plant or equipment over any position on the site, the Contractor shall acquaint himself of the location of all Eir equipment in the area. Eir will provide details of such records as are available on request, but cannot vouch for the accuracy of the records. There may be some departures from the depth and course of the plant as shown or indicated. The information is given, therefore, without prejudice to the legal

Clause No. (etc.)	Title and written text
	rights of Eir to compensation, should Eir equipment be damaged. The Contractor shall, therefore, be liable for the cost of repair of all damage to Eir equipment throughout the area covered by this Contract. 2. Damage Eir shall deem the Contractor liable for the safety and security of Eir equipment from malicious or other damage, where the Works cause it's disturbance or exposure. 3. Accidental Damage In the event of damage to Eir equipment, however small or insignificant it may seem, the Contractor shall notify Eir immediately. Prompt reporting of the damage may limit the extent to which the damage may develop and this in turn will be reflected in the cost of repair. Details of Eir Emergency Services will appear at the end of this section. 4. Protection of Plant Where heavy machinery is to work over or across existing cables Eir will specify special protection measures to be adopted to protect the cables. These measures may involve encasing Eir equipment in concrete and/or the use of heavy steel plates. 5. Emergency Services Dial 1901 to report any damage to the Eir equipment be it accidental or malicious and remember prompt reporting of any damage will minimise the costs of any repairs.
116.8 AR	ESB Networks
116.8 AR	<u>ESB Networks Requirements:</u> All Works for ESB Networks or in the vicinity of ESB Networks infrastructure shall be carried out in accordance with the ESB Networks booklet entitled "Code of Practice for Avoiding Danger from Overhead Electricity Lines".
137 AR	Safety File Content
137.1 AR	The Contractor shall be required to comply fully with the following regulations: (1) The Safety, Health and Welfare at Work Act, 2005 and all other applicable legislation (2) (Health and Welfare at Work (Construction) Regulations 2013 (SI

Clause No. (etc.)	Title and written text
	No. 291 of 2013) The Contractor must comply with any particular requirements with regard to Safety File contents. The Contractor shall provide information to the Employer's Representative in digital format. The Contractor shall, in accordance with the requirements of the Regulations provide the following information for inclusion in the Safety File, but not limited to: 1. As-Built Drawings The Contractor shall provide The Employer's Representative with all information required to compile and complete the As-Built Drawings. The As-Built Drawings shall be an updated revision of the Drawings listed in Appendix O/4 Volume A of the Works Requirements in AutoCAD format. The As-Built Drawings shall incorporate all as-constructed details including any Contractor Designs. The As-Built topographical survey is to be supplied in 3D AutoCAD format with each feature on a separate layer. Survey points shall be supplied at a maximum 10m spacing and shall include all new construction features and existing fences, walls and gates within or immediate to the Area Provided by the Employer. 2. Design Information The following information shall be provided as appropriate: I. Design Information for Contractor Designed Structures. II. Design information relating to Contractor Design Structural Elements and Other Features. III. Copies of all surveys and investigations undertaken in advance and during the works, including ground investigations, topographical surveys, drainage surveys, etc. IV. Road Safety Audits (for element for which the Contractor was responsible for design). 3. Materials Provide details of materials and products used in the project. This shall list all suppliers by name, address and material product supplied. Where products or materials are covered by the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 (SI No. 619 of 2001) - full details of the product or material specification shall be given. Where subcontractors were responsible for operations involving the installation or application of products or materials, names and addresses shall be given. 4. Maintenance Facilities/Procedures A maintenance manual shall be provided for any plant, machinery or equipment forming part of the permanent Works for the project. The manual shall detail

Clause No. (etc.)	Title and written text
	the methodology for comprehensive testing, routine maintenance, fault repair and testing. Details shall be provided of any features incorporated into the project to facilitate future maintenance operations to be undertaken e.g. access. Demolition requirements and method statements, for example tensioned material such as safety barrier or hazardous material. 5. Other Information Any other information for inclusion in the Safety File and any additional information reasonably required by the PSDP to allow fulfilment of obligations under the Regulations.
206 AR	Invasive Species
206.1 AR	In the event, that any Invasive Alien Plant Species is brought into the area provided by the Employer for the Works during the Contract, the Contractor shall treat, remove and dispose of all. The Contractor shall comply with “The Management of Alien Invasive Plant Species on National Roads” (current version) published by TII.

Substitute Clauses, Tables and Figures

Clause No.	Title
	None

APPENDIX 0/2

CONTRACT SPECIFIC MINOR ALTERATIONS TO EXISTING CLAUSES, TABLES AND FIGURES INCLUDED IN THE CONTRACT

Clause No.	Title
	None

APPENDIX 0/3

LIST OF NUMBERED APPENDICES REFERRED TO IN THE SPECIFICATION AND INCLUDED IN THE CONTRACT

This Appendix 0/3 is comprised of a list of the Numbered Appendices referred to in the Specification and included in the Contract.

Responsibility for the compilation/completion of the appendices is indicated by the following symbols:

- E Employer compiles.
- C Contractor to compile and return to the Employer's Representative.
- E/C Employer partially compiles, and Contractor completes and submits to the Employer's Representative.
- T/C Tenderer compiles and returns with his Tender. Post award of Contract the Contractor reviews and submits to the Employer's Representative.
- (P) The symbol 'P' indicates the appendix is a national pro-forma and the format must not be altered.

Where a Contractor or Tenderer is required to compile or complete an Appendix, they shall do so in accordance with the GSW and providing information similar to that stated in the sample appendices as a minimum.

Appendix 0/3 is comprised of two lists, A and B, of Numbered Appendices as follows.

List 'A' is a complete list of the Numbered Appendices referred to in the SPW with those not adopted marked 'Not Used'. Those identified by the letters T or C shall be compiled by the Tenderer or Contractor respectively.

List 'B' gives the List of Contract – specific Numbered Appendices devised for this Contract.

List of Numbered Appendices – List A

Compiled/ Completed by	Appendix No.	Title
		INTRODUCTION
E	0/1	Contract-specific Additional, Substitute & Cancelled Clauses, Tables & Figures Included in the Contract
E	0/2	Contract-specific Minor Alterations to Existing Clauses, Tables and Figures Included in the Contract
E	0/3	List of Numbered Appendices Referred to in the Specification and Included in the Contract
E	0/4	List of Drawings Included in the Contract
		PRELIMINARIES
N/A	1/1	Accommodation and Equipment for the Employer's Representative
N/A	1/2	Vehicles for the Employer's Personnel
N/A	1/3	Communication System for the Employer's Representative
N/A	1/4	Working and Fabrication Drawings
E	1/5	Testing to be Carried out by the Contractor
E	1/6	Supply and Delivery of Samples to the Employer's Representative
E	1/7	Site Extent and Limitations on Use
N/A	1/8	Operatives for the Employer's Representative
E	1/9	Control of Noise and Vibration
N/A	1/10	Principal Structures to be Designed by the Contractor
N/A	1/11	Structural Elements and Other Features to be Designed by the Contractor
E	1/12	Setting Out and Existing Ground Levels
E	1/13	Programme of Design and Execution and Completion of the Works
E	1/14	Monthly Statements
E	1/15	Accommodation Works
E	1/16	Privately and Publicly Owned Services and Supplies
E	1/17	Traffic Safety and Management
E	1/18	Temporary Diversions for Traffic
E	1/19	Routing of Vehicles
N/A	1/20	Recovery Vehicles for Breakdown
E	1/21	Information Boards
E	1/22	Progress Photographs
E	1/23	Substances Hazardous to Health
E	1/24	Quality Management Schemes
E	1/25	Product Certification Schemes
E	1/26	Irish Agrément Board Roads and Bridges Certificates
		SITE CLEARANCE
E	2/1	List of Buildings and Structures to be Demolished or Partially Demolished
E	2/2	Filling of Trenches & Pipes
E	2/3	Retention of Material Arising from Site Clearance

Compiled/ Completed by	Appendix No.	Title
N/A	2/4	Explosives and Blasting
E	2/5	Hazardous Materials
		FENCING AND ENVIRONMENTAL NOISE BARRIERS
N/A	3/1	Fencing, Gates and Stiles
E	3/2	Fencing: TII Road Construction Details
		SAFETY FENCES, SAFETY BARRIERS AND PEDESTRIAN GUARDLINES
N/A	4/1	Safety Barriers
N/A	4/2	Pedestrian Restraint Systems
N/A	4/3	Safety Barrier Terminals
N/A	4/4	Safety Barrier Maintenance
N/A	4/5	Anti-Glare Screens
N/A	4/6	Safety Barriers: TII Standard Construction Details
N/A	4/7	Vehicle Parapet Systems
		DRAINAGE AND SERVICE DUCTS
E	5/1	Drainage Requirements
E	5/2	Service Duct Requirements
N/A	5/3	Surface Water Channels and Drainage Channel Blocks
E	5/4	Fin Drains, Narrow Filter Drains and Geotextiles for Filter Drains
N/A	5/5	Combined Drainage and Kerbing Systems
N/A	5/6	Linear Drainage Channel Systems
E	5/7	Drainage and Service Ducts: TII Road Construction Details
N/A	5/8	Thermoplastic Structural Wall Pipes and Fittings
N/A	5/9	Attenuation
		EARTHWORKS
N/A	6/1	Requirements for Acceptability & Testing of Earthworks Materials
E	6/2	Requirements for Dealing with Class U2 Unacceptable Material
E	6/3	Requirements for Excavation, Deposition, Compaction (Other than Dynamic Compaction)
N/A	6/4	Not Used
E	6/5	Geotextiles Used to Separate Earthworks Materials
E	6/6	Fill to Structures & Fill Above Structural Foundations
E	6/7	Sub-Formation & Capping & Preparation & Surface Treatment of Formation
E	6/8	Topsoiling, Grass Seeding and Turfing
N/A	6/9	Earthwork Environmental Bunds, Landscape Areas, Screening Mounds, Strengthened Embankments
N/A	6/10	Ground Anchorages, Crib Walling and Gabions
N/A	6/11	Swallow Holes and Other Naturally Occurring Cavities & Disused Mine Workings
N/A	6/12	Instrumentation and Monitoring
N/A	6/13	Ground Improvement

Compiled/ Completed by	Appendix No.	Title
		ROAD PAVEMENTS – GENERAL
N/A	7/1	Permitted Pavement Options
E	7/2	Excavation and Reinstatement of Existing Surfaces
N/A	7/3	Surface Dressing Product (End Performance)
N/A	7/4	Bituminous Sprays
E	7/5	Road Pavements; TII Road Construction Details
N/A	7/6	Breaking up or Perforation of Existing Pavement
N/A	7/7	Not Used
N/A	7/8	Not Used
N/A	7/9	Cold Milling (Planing) of Bituminous Bound Flexible Pavement
N/A	7/10	Microsurfacing
N/A	7/11	High Friction Surfacing
N/A	7/12	Low Energy Bound Mixtures
N/A	7/21	Recipe Surface Dressing
		KERBS, FOOTWAYS AND PAVED AREAS
E	11/1	Kerbs, Footways and Paved Areas
N/A	11/2	Access Steps
E	11/3	Kerbs, Footways & Paved Areas: TII Standard Construction Detail
		TRAFFIC SIGNS
E	12/1	Traffic Signs: General
N/A	12/2	Traffic Signs: Reflective Markers
E	12/3	Traffic Signs: Road Markings and Studs
N/A	12/4	Traffic Signs: Cones, Cylinders, FTD's and other traffic delineators
N/A	12/5	Traffic Signs: Traffic Signals
N/A	12/6	Traffic Signs: Special sign requirements on Gantries
N/A	12/7	Traffic Signs: Preparation and Finish of Metal and other surfaces
		ROAD LIGHTING COLUMNS AND BRACKETS
N/A	13/1	Description of Lighting Columns & Brackets
N/A	13/2	Typical Column and Bracket Data
N/A	13/3	Instructions for completion of column and bracket data sheets
N/A	13/4	Certification For Lighting Columns
N/A	13/5	Road Lighting Columns And Brackets: TII Road Construction Details
		ELECTRICAL WORK FOR ROAD LIGHTING AND TRAFFIC SIGNS
N/A	14/1	Site Records
N/A	14/2	Location of Lighting Units and Feeder Pillars
N/A	14/3	Temporary Lighting
N/A	14/4	Electrical Equipment for Road Lighting
N/A	14/5	Electrical Equipment for Traffic Signs

Compiled/ Completed by	Appendix No.	Title
N/A	14/6	Preparation and Finish of Metal and Other Surfaces
		MOTORWAY COMMUNICATIONS
N/A	15/1	Motorway Communications
		PILING AND EMBEDDED RETAINING WALLS
N/A	16/1	General Requirements for Piling and Embedded Retaining Walls
N/A	16/2	Precast Reinforcement and Prestressed Concrete Piles and Precast Reinforced Concrete Segmental Piles
N/A	16/3	Bored Cast-in-Place Piles
N/A	16/4	Bored Piles Constructed Using Continuous Flight Augers and Concrete or Grout Injection Through Hollow Auger Stems
N/A	16/5	Driven Cast-in-Place Piles
N/A	16/6	Steel Bearing Piles
N/A	16/7	Reduction of Friction on Piles
N/A	16/8	Non-Destructive Methods for Pile Testing
N/A	16/9	Static Load Testing on Piles
N/A	16/10	Diaphragm Walls
N/A	16/11	Hard/Hard Secant Piles Walls
N/A	16/12	Hard/Soft Secant Piles Walls
N/A	16/13	Contiguous Bored Pile Walls
N/A	16/14	King Post Walls
N/A	16/15	Steel Sheet Piles
N/A	16/16	Integrity Testing of Wall Elements
N/A	16/17	Instrumentation for Piles and Embedded Walls
N/A	16/18	Support Fluid
		STRUCTURAL STEELWORK
N/A	17/1	Concrete – Classification of Mixes
N/A	17/2	Concrete – Impregnation and Coating Schedule
N/A	17/3	Concrete – Surface Finishes
N/A	17/4	Concrete - General
		STRUCTURAL STEELWORK
N/A	18/1	Requirements for Structural Steelwork
		PROTECTION OF STEELWORK AGAINST CORROSION
N/A	19/1	(Specification for Road Works) Sheet No. Form BE/P1 (New Works) Paint System Sheet
N/A	19/2	(New Works) Requirements for Other Works
N/A	19/3	(Specification for Road Works) Form BE/P2 Paint Data Sheet
N/A	19/3*	(Specification for Road Works) Form BE/P3 Paint Sample Despatch List: Sheet 1
N/A	19/3*	(Specification for Road Works) Form BE/P3 Paint Sample Despatch List: Sheet 2
N/A	19/4	(New Works) General Requirements
N/A	19/5	(Specification for Road Works) Form BE/PE1 (Maintenance) Paint System Sheet 1

Compiled/ Completed by	Appendix No.	Title
N/A	19/6	(Specification for Road Works) Form BE/PE1 (Maintenance) Paint System Sheet 2
N/A	19/7	(Maintenance) Requirements for Other Works
N/A	19/8	(Maintenance) General Requirements
		BRICKWORK, BLOCKWORK AND STONEMWORK
N/A	24/1	Brickwork, Blockwork and Stonework
N/A	24/2	Brickwork, Blockwork and Stonework, TII Road Construction Details
		WATERPROOFING FOR CONCRETE STRUCTURES
N/A	20/1	Form PWS Proprietary Waterproofing System Data Sheet (1991 & Annex "A")
N/A	20/2	Waterproofing for Concrete Structures
		BRIDGE BEARINGS
N/A	21/1	Bridge Bearing Schedule
		BRIDGE EXPANSION JOINTS AND SEALING OF GAPS
N/A	23/1	Bridge Deck Expansion Joint Schedule
N/A	23/2	Sealing of Gaps Schedule (other than in Bridge Deck Expansion Joints)
		BRICKWORK, BLOCKWORK AND STONEMWORK
N/A	24/1	Brickwork, Blockwork and Stonework
N/A	24/2	Brickwork, Blockwork and Stonework: TII Standard Construction Details
		SPECIAL STRUCTURES
N/A	25/1	Requirements for Corrugated Steel Buried Structures
N/A	25/2	Requirements for Reinforced Soil and Anchored Earth Structures
N/A	25/3	Requirements for Reinforced Clay Brickwork Retaining Wall of Pocket Type and Grouted Cavity Construction Structures
		MISCELLANEOUS
E	26/1	Ancillary Concrete
N/A	26/2	Bedding Mortar
N/A	26/3	Cored Thermoplastic Node Markers
E	26/4	Playground Equipment
		WATERMAINS, UTILITIES AND ACCOMMODATION WORKS
N/A	27/1	Requirements for Watermains
N/A	27/2	Water mains: TII Road Construction Details
		Trenchless Installation of Road Drainage & Service Ducts
N/A	28/1	Trenches and Minimum Dig Techniques
		CCTV Survey of Road Drainage Systems
N/A	29/1	CCTV Survey of Road Drainage Systems

List ‘B’: List of Contract-specific Numbered Appendices devised for the Contract.

Comp. By	App. No.	Title

APPENDIX 0/4

LIST OF DRAWINGS INCLUDED IN THE CONTRACT

1. **Contract Specific Drawings supplied to each Tenderer**

No.	Drawing Name	Drawing Number
1	Site Location & Extents	2025002-01-001
2	Existing Site Layout	2025002-01-002
3	Proposed Site Clearance	2025002-01-003
4	Proposed Site Layout	2025002-01-004

2. **Standard Drawings**

(i) **Supplied to Each Tenderer**

NOT USED

(ii) **Inspected by Tenderers**

NOT USED

(iii) **Brought into the Contract by Reference**

The TII Standard Construction details contain the following drawings brought into the Contract by reference. Unless otherwise stated below the list refers to the most current revision and the whole drawing is brought into the Contract.

As included in the drawings referenced above.

APPENDIX 1/1

ACCOMMODATION AND EQUIPMENT FOR THE EMPLOYER'S REPRESENTATIVE

Not Used

APPENDIX 1/2

VEHICLES FOR THE EMPLOYER'S PERSONNEL

Not Used

APPENDIX 1/3

COMMUNICATION SYSTEM FOR THE EMPLOYER'S REPRESENTATIVE

Not Used

APPENDIX 1/4

WORKING AND FABRICATION DRAWINGS

Not Used

APPENDIX 1/5

TESTING TO BE CARRIED OUT BY THE CONTRACTOR

Routine Sampling and Testing to be undertaken by the Contractor: -

- I. The Contractor shall be responsible for the taking of samples, and the subsequent testing at the frequency stated in the schedule. All test results shall be passed to the Employer's Representatives Representative in accordance with Clause 105.2.
- II. Testing to be carried out by the Contractor in accordance with Appendix 1/5 shall be undertaken in a laboratory approved by the Employer's Representative.
- III. The Contractor shall arrange for each sample taken to be given a unique reference number which shall be entered into a site register, a copy of which shall be provided to the Employer's Representatives Representative.
- IV. The test results shall be delivered to the Employer's Representatives Representative within 3 days of the tests being carried out.
- V. With regard to the surfacing to be laid by the Contractor, he shall arrange for the production of a schematic plan that correlates the site setting out system with laid materials and with received test results
- VI. (IL) indicates that an Irish National Accreditation Board (ILAB) test report or certificate is required.
- VII. All testing shall be in accordance with CC-SPW-00900 - Specification for Road Works Series 900 - Road Pavements - Bituminous Materials (current version).

- VIII. Testing shall be in accordance with CC-GSW-00100 – Notes for Guidance on the Specification for Road Works – Series NG 100 Preliminaries (current version), Table NG 1/1.
- IX. Unless otherwise shown tests for work, goods or materials as scheduled under any one Clause are required for all such work, goods or materials in the Works.

APPENDIX 1/6

SUPPLY AND DELIVERY OF SAMPLES TO THE EMPLOYER'S REPRESENTATIVE

Samples of materials shall be provided to the Employer's Representative as follows:-

Series	Description	Frequency of Sampling	Delivery Location
500	Samples of Aggregates	1 sample per 250m ³	Donegal County Council, Machinery Yard, Lifford, Co. Donegal
800	Samples of road pavements bound materials	1 per 500 tonnes or minimum of 2 per week	Donegal County Council, Machinery Yard, Lifford, Co. Donegal
900	Samples of bituminous mixtures including cores and other samples	1 per 500 tonnes or minimum of 2 per week	Donegal County Council, Machinery Yard, Lifford, Co. Donegal
900	Samples of Coated Chippings for application to HRA (Cl.915)	1 per 75 tonnes or minimum of 3 for Contract	Donegal County Council, Machinery Yard, Lifford, Co. Donegal

Notes:

- 1 Samples comparable to those specified in this Appendix will be necessary for any equivalent work, goods or materials proposed by the Contractor (See Clause 105).
- 2 Unless otherwise shown in this Appendix, samples of work, goods or materials as scheduled under any one Clause are required for all such work, goods or materials in the Works.
- 3 Unless otherwise scheduled under Clause 2602 samples of concrete complying with that Clause are not required.
- 4 (IL) indicates INAB laboratory accreditation is required for sampling.

APPENDIX 1/7

SITE EXTENT AND LIMITATIONS ON USE

1 Extent of the Site

- 1.1 The extent of the Site shall include the lands identified as “Site Extents” by the Employer on drawing No. 2025002-01-001 Site Location & Extents.
- 1.2 The extent of the Site shall include:-
 - I. The Lands identified as “Land made available by the Employer” may be used for the purpose of temporary traffic & pedestrian control measures subject to requirements of Appendix 1/17 & 1/18.
 - II. Public Roads & footpaths outside of lands made available by the Employer which shall be used for removal or installation of Traffic Signs, Road Markings, Road Studs, and the like.
 - III. Public roads & footpaths outside of the lands made available by the Employer which may be used for Authority and Utility diversions.
 - IV. Any other land which the Employer may make available during the course of the Works.
 - V. Lands owned or occupied by third parties where such lands are permitted to be accessed to reasonably facilitate the construction of Accommodation Works, Authority and Utility connections and Boundary Fencing.
- 1.3 The Contractor shall maintain access for all property owners at all times during the course of the Works.
- 1.4 The Contractor shall maintain access to business premises and public buildings for the general public at all times during the course of the Works.
- 1.5 The Contractor shall be responsible for providing lands for site compounds and any temporary site facilities.
- 1.6 The Contractor is limited to the use of Access Routes by means of public roads to the site as stated in Appendix 1/19.

2 Limitations on Use of the Site:

- 2.1 The lands made available by the Employer shall be used solely for the execution of the Works.
- 2.2 Prior to entering onto the lands made available by the Employer the Contractor shall erect suitable temporary fencing considering adjacent land usage to maintain site security and to exclude the general public from the Works area.

- 2.3 The Contractor shall maintain adequate routes for traffic across the site for public roads or temporary diversions in accordance with Clauses 117, 118 and 119 of the Specification for Works.
- 2.4 The Contractor shall ensure that all areas of land, which have been temporarily occupied, are reinstated to the satisfaction of the affected landowner, occupier and the relevant Authorities and Utilities.
- 2.5 Equivalent parking facilities are required to be maintained during the Works and access for pedestrians, cyclists and vehicular traffic is to be maintained to all properties, the national school and community centre.
- 2.6 Notwithstanding other provisions of the Contract, the Contractor shall not have exclusive use of the lands made available by the Employer and shall be aware that third parties may be operating within the extents of the lands made available by the Employer.
- 2.7 The Contractor shall note the constraints listed in all other parts of the Specification and Specification Appendices which may also limit the site extents and the use of the site.
- 2.8 *The Contractor should be aware that the anticipated start date is Q3 2025. The works must be substantially completed by 01/12/2025. See Volume B: Tender & Schedule Part 1G.*

3.0 Archaeological Investigations

(None at time of going to tender)

4.0 Adjacent Works

(None at time of going to tender)

5.0 Licences

(None at time of going to tender)

6.0 Additional Particular Limitations on the Use of Certain lands

(None at time of going to tender)

APPENDIX 1/8 OPERATIVES FOR THE EMPLOYER'S REPRESENTATIVE

As per Clause 108 of the Specification.

APPENDIX 1/9 CONTROL OF NOISE AND VIBRATION

1 Noise Control

- 1.1 Further to Clause 109 of the Specification, the Contractor's attention is particularly drawn to sections 5, 8 and 10 of the British Standard. Notwithstanding the above, the Contractor shall employ Best Practicable Environmental Option (BPEO) in accordance with PRF PR 70, to minimise noise.
- 1.2 The normal working hours within the Site for all works shall be **Monday to Friday between 08.00 hours and 18.00 hours, Saturdays 09:00 to 15:00** with no working on Sundays or public holidays. Exceptionally the Employer's Representative's consent for work outside these hours may be given after any necessary consultation. Seven days' notice is required from the Contractor when seeking such consent.
- 1.3 The Contractor shall employ the best practical means to minimise noise produced by his operations including plant maintenance.
- 1.4 All vehicles and mechanical plant used on the Works shall be fitted with effective exhaust silencers and shall be maintained in good and efficient working order for the duration of the Works. Machines in intermittent use shall be shut down in the periods between Works or throttled down to a minimum. The Contractor shall remove from the Works any item of plant which in the opinion of the Employer's Representative is ineffectively silenced. All compressors shall be "sound reduced" models fitted with properly lined and sealed acoustic covers which shall be kept closed whenever the machines are in use and all ancillary pneumatic percussive tools shall be fitted with mufflers or silencers of the type recommended by the manufacturers. Pumps and mechanical static plant shall be enclosed by acoustic sheds or screens where directed by the Employer's Representative.
- 1.5 Noise levels shall be monitored by methods set out in Appendix B of BS 5228. All measurements shall be made 1m outside the facade of each building in question. The Contractor shall monitor sound levels at selected other locations specified by the Employer's Representative on site during the progress of the Works.
- 1.6 Any plant such as generators and pumps that are required to work outside the hours of 08.00 - 18.00 shall be surrounded by an acoustic enclosure to the approval of the Employer's Representative that shall restrict the noise levels to not less than 5db(A) below levels quoted in the Table 1.9.1.

- 1.7 The Contractor shall organise his operations with regard to the positioning of plant and the location of haul routes, etc., so it minimises construction noise to adjacent properties.

Table 1.9.1: Schedule of Noise Levels

Period	Hours	Total Noise Levels at Control Stations		
		Ambient Noise Level, L_{Aeq} measured at Control Station dB(A)	Period of Hours over which L_{Aeq} is applicable	Maximum Sound Level (see Note (iv)) below measured at Control Station: dB(A)
Monday to Friday (day time working)	8.00 - 1800	70	1	80
Monday to Friday (night time working)	1900 - 2200	60	1	65
All unattended plant night time work hours working hours	1900 - 2200	60	1	65
Night time working	2200 - 0700	50	1	55

Notes:

- Noise levels relating to free field conditions. Where noise control stations are located 1 metre from facades of buildings, the permitted noise levels can be increased by 3dB(A).
- The ambient noise level, L_{Aeq} , at a specific location is the total L_{Aeq} from all the noise sources in the vicinity over the specified period.
- The existing ambient noise level, L_{Aeq} , at a specific location is the total L_{Aeq} from all the noise sources in the vicinity over the period prior to the commencement of the Works.
- Maximum sound level is the highest value indicated on the sound level meter which meets the requirements of IS EN 61672.

2 Vibration Control

- 2.1 Vibration generated by the Contractor's activities shall not adversely affect the structural and serviceability of any building, wall, or structure. The maximum permitted peak particle velocity generated by the construction of the Works shall be 8mm/second at low velocities (less than 10Hz) measured at the building, wall, or structure closest to the operations being carried out. Allowable levels increase to a maximum of 12.5mm/s at 50Hz and 20mm/s at 100 Hz.
- 2.2 Ground borne vibrations shall not be permitted at sites of freshly placed concrete, i.e. concrete less than 48 hours old.

- 2.3 The Contractor shall employ the best practical means to minimize vibration produced by his activities, including plant selection and maintenance, and shall comply with the recommendations in BS 5228 (Noise and Vibration Control on Construction and Open Sites; Part 1: Code of Practice for basic information and procedures for noise and vibration control).
- 2.4 Monitoring shall be undertaken by the Contractor using a digital seismograph as described in paragraph 2.6 below. Monitoring shall be undertaken at the building, wall or structure closest to the operations being carried out. If necessary, as a result of the Contractors proposed method of work, additional monitoring shall be undertaken at sensitive locations. The Contractor shall obtain all necessary permissions for any additional stations he considers necessary and shall report all findings to the Employer's Representative.
- 2.5 Each vibrograph shall be certified as being in proper working order and shall record vibrations in three directions simultaneously with a printout showing the amplitude and frequency of the vibrations.
- 2.6 Vibration Monitoring Equipment. The type of instrumentation suitable for monitoring vibration shall be a digital seismograph having the following minimum specification:
- i) Minimum sampling rate 1000 samples/second/channel;
 - ii) Capable of recording PPV (Directly), Peak Acceleration (Calculated), Peak Displacement (Calculated), Frequency at the Peak Velocity (Calculated);
 - iii) Dual Mode instrument having (i) Self Triggering Mode and (ii) Continuous Monitoring Mode;
 - iv) Transducer – 3 orthogonally mounted transducers on one mounting unit;
 - v) Frequency Range – 4.5 to 200Hz;
 - vi) Minimum Resolution – 0.05mm/second, velocity;
 - vii) Range – 0 to 100mm/second, velocity;
 - viii) Record of Events – hard copy printout and storage on solid state memory disc for subsequent printout and;
 - ix) Power – 240 volt mains for continuous unattended operation plus internal battery with minimum of 24 hours capacity.
- 2.7 The Contractor shall monitor ground vibrations at selected other locations specified by the Employer's Representative on site during the progress of the Works.

APPENDIX 1/10

PRINCIPLE STRUCTURES TO BE DESIGNED BY THE CONTRACTOR

Not Used

APPENDIX 1/11

STRUCTURAL ELEMENTS AND OTHER FEATURES TO BE DESIGNED BY THE CONTRACTOR

Not Used

APPENDIX 1/12

SETTING OUT AND EXISTING GROUND LEVELS

1. Setting Out & Existing Ground levels are available to the appointed contractor from:

Local Authority/ Consultants Office: Donegal County Council

Address: Station Island
Lifford,
Co. Donegal,
Telephone Number: 074 9153900

2. The Contractor shall be fully responsible for the setting out of the Works and shall be supplied with the information necessary to establish the lines and levels of the Works.
3. The Contractor shall, within one week prior to commencement of the Works, survey the permanent ground markers to verify their integrity, and supply the results of the survey to the Employer's Representative.
4. The Contractor shall ensure that all permanent ground markers and secondary ground markers are fully protected during the construction of the Works.
5. The Contractor shall not destroy any Permanent Ground Marker (PGM) until a replacement control marker has been established in a position agreed with the Employer's Representative.
6. Where the Contractor establishes permanent control markers, a schedule of all such markers, detailing colour coding or any other distinguishing features, shall be supplied to the Employer's Representative.
7. The design, execution and completion of the Works shall ensure that works finished levels tie in satisfactorily to provide a smooth transition to existing.

APPENDIX 1/13

PROGRAMME OF DESIGN AND EXECUTION AND COMPLETION OF THE WORKS

1. The Contractor shall provide a programme of Works in accordance with the Contract in the form of a Gantt/Bar Chart produced using Microsoft Project. The programme shall show the level of detail appropriate to each section of the Works. All activities shall be given a short title and numbered. The relevant resources to undertake each activity shall also be shown. The programme must be updated in advance of each progress meeting to show the actual progress against the programme, and the adjustments necessary to achieve Contract completion. The Programme shall be provided in hard copy and in electronic format (.mpp).
2. The following list of Constraints is not exhaustive and should be developed by the Contractor in preparing his programme.
 - Working Hours and Limitations on use of the lands made available by the Employer included in Appendix 1/7 and 1/9 of the Specification.
 - The work to privately and publicly owned Public Services and Supplies in Appendix 1/16 of the Specification.
 - “Traffic Safety and Management” requirements are outlined in Appendix 1/17 of the Specification and the requirements for “Temporary Diversions for Traffic” are outlined in Appendix 1/18 of the Specification. The requirements of these clauses and of Appendices 1/17 and 1/18 are to be considered in the preparation of the programme and detailed programmes are to be prepared and submitted to the Employer's Representative, for each area interacting with the existing road network.
 - The “Permitted Access Routes” to and from the Site are outlined in Appendix 1/19 of the Specification. The Contractor shall allow for the construction of access routes to site and restrictions on access to and from the site in his programme of Works.
 - Compliance with technical approval procedures in relation to structures, and structural elements and other features to be designed by the Contractor including quality approvals, resubmissions, and modifications.
 - The Contractor will be required to obtain approval from Donegal County Council, An Garda Síochána and the Employers Representative of his proposals for traffic management, including the traffic management measures for controlling access to and from the Site of his construction traffic, in accordance with Appendices 1/17, 1/18 and 1/19 of the Specification.
 - Before any Works to services are carried out, proposals for protection, diversions and temporary support to services are to be agreed and approved by the relevant Authority or Utility provider.

- Maintenance of access for traffic, pedestrians, and cyclists during the Works.
 - Constrained nature of the site.
 - The Contractor shall facilitate other Contractors, Local Authorities, Authorities or Utilities.
 - The Contractor is required to consult and comply with the requirements of the National Parks and Wildlife Service. In particular, removal of Vegetation is not permitted between 01st March and 31st August and the natural habitat must be protected during the works and not unnecessarily damaged.
3. The programme of Works shall be subdivided as follows: -
- Mobilisation.
 - Installation and commissioning of traffic management measures.
 - Site Clearance.
 - Earthworks.
 - Drainage.
 - Works for eir, ESB and Public Lighting.
 - Works for Donegal County Council and Irish Water.
 - Planeing, Sub-base, Base Course, Binder Course, Surface Course and Safety Surfacing showing the quantity of each type of material to be placed each day.
 - Kerbs, Footways, Paved Areas and any other surfacing works.
 - Fencing works.
 - Street furniture & other equipment installation works.
 - Traffic Signs and Road Markings
 - Accommodation Works.
 - Soiling, Landscaping and Finishing Works.

APPENDIX 1/14

MONTHLY STATEMENTS

- 1 The monthly statements submitted by the Contractor to the Employer's Representative shall, whenever dealing with matters covered by the Pricing Document, be set out under Part and Section headings similar to those in the Pricing Document and shall separately identify each item and specify, quantity, unit, rate and value.

APPENDIX 1/15

ACCOMMODATION WORKS

1. Accommodation Works are detailed on the drawings.
2. The Contractor shall complete the Accommodation Works in an expeditious manner. The Contractor shall give the Employer's Representative at least ten days' notice of the date on which he intends to start Accommodation Works.
3. The Contractor shall take precautions to avoid damage to land and property outside of the Area Provided by the Employer, and on completion of the Accommodation Works, the Contractor shall at his own cost, repair and make good to the satisfaction of the Employer's Representative any such damage resulting from both temporary occupation of land necessary for the carrying out of the work and gaining access to the Site of the Accommodation Works. All authorised work carried out by the Contractor outside of the authorised Site shall be at the Contractor's own expense and with the written approval of the landowner concerned. The Contractor shall take all necessary precautions to safeguard all existing buildings and Works from damage by construction activity, plant operation, ground movement and settlement, and all other activities associated with the execution of the Contract. The Contractor shall make all necessary records (photographic or otherwise) of existing structures and other properties that could be affected by execution of the Works prior to the commencement of construction.
4. All drains and services interfered with during the Works shall be reinstated, unless stated otherwise.
5. All garden areas affected during the Works shall be reinstated to its original condition. This includes re-grading and re-seeding of lawn areas using 150mm screened topsoil and grass seed.
6. The Contractor shall provide access at all times to domestic and commercial properties unless otherwise agreed in writing with the property owner.

APPENDIX 1/16

PRIVATELY AND PUBLICLY OWNED SERVICES AND SUPPLIES

1. Details of the preliminary arrangements that have been made with Authorities, Utilities and others for the alteration of services affected by the Works are listed in this Appendix.
2. The Contractor shall make arrangements with the Authorities, Utilities, and others concerned, for the co-ordination of his work with all work which needs to be done by them or their Contractors concurrently with the Works. Compliance with the periods of notice given in this Appendix does not relieve the Contractor of his obligations.
3. The Contractor shall take measures for the locating all services prior to commencing Works on Site and for support and full protection of pipes, cables and other apparatus

during the progress of the Works and for keeping the Employer's Representative informed of all arrangements he makes with owners of privately owned services, Authorities, Utilities and Public Authorities as appropriate and for ensuring that no existing mains and services are interrupted without the written consent of the appropriate Authority, Utility or management of other publicly or privately owned service or supply.

4. The Contractor shall be responsible for all temporary diversions of mains or services whether listed in this Appendix or not.
5. Should any leakage or damage to any service be discovered, the Contractor shall immediately notify the Employer's Representative and the owners of the service and the Contractor shall afford every facility for repair or replacement of the apparatus affected.
6. Construction traffic, including all traffic at site accommodation areas, shall only be permitted to transverse buried services after protective measures to be agreed with the Employer's Representative have been implemented. The Contractor shall restrict construction traffic to approved designated crossing points only.
7. Private services to individual properties have not generally been listed or shown on the Drawings. The Contractor shall make arrangements with the Authorities, Utilities and others concerned for the phasing of all necessary disconnections and diversions of private services affected by the Works.
8. Disconnected apparatus shall be removed by the Contractor only with the prior consent of the Authority concerned.
9. The names and telephone numbers of the authorities / bodies serving in the locality are listed in Table 1.16.1;

Table 1.16.1 - Schedule of Contacts for Private and Publicly Owned Services

Names	Contact Details
Donegal County Council, Water and Environmental Services Section	Donegal County Council County House Lifford Co. Donegal Tel: (074) 9153900
Donegal County Council, Roads Section.	Donegal County Council County House Lifford Co. Donegal Tel: (074) 9153900
eir	Open eir plantalterations@eir.ie
ESB Networks	ESB Networks Business Park Road Lisnenan Letterkenny Co. Donegal Tel: 1850 372372

10. Table 1.16.2 – Irish Water Required by the Works.

Water Services Required by the Works				
Approx. Location	Description of Works Required	Group **	Drawing No.	Notice to Relevant Body Required to Commence*
	None at the time of tender			

***Notes:** The period of '*Notice to Relevant Body Required to Commence*' is the period after:

- a) Liaising with the relevant personnel within the Authority or Utility including technical meetings on-site and;
- b) Agreement has been reached with the Authority or Utility on the extent of the works operation and measures to be taken for traffic control measures and safe working and;
- c) Formal notice has been issued by Contractor following completion of a) and b).

**** Group Descriptions**

- A Work expected to be completed before commencement of the Works.
- B Work required in the Contract, which does not require prior work by the Contractor.
- C Work required by the Contract, which does require work by the Contractor.
- D Work expected to be under construction at the commencement of Works.
- E Work required to be carried out jointly by the Contractor and the Authority or Utility in close liaison and co-operation with each other.
- F Work to be wholly undertaken by the Contractor (in liaison with the Authority or Utility).
- G Services for which work is not required but due care and attention is required to protect the services during the execution of the Works

11. Table 1.16.3 - Road Services Required by the Works.

Road Services Required by the Works				
Approx. Location	Description of Works Required	Group **	Drawing Series.	Notice to Relevant Body Required to Commence*
	None at time of tender			

***Notes:** The period of '*Notice to Relevant Body Required to Commence*' is the period after:

- a) Liaising with the relevant personnel within the Authority or Utility including technical meetings on-site and;
- b) Agreement has been reached with the Authority or Utility on the extent of the works operation and measures to be taken for traffic control measures and safe working and;
- c) Formal notice has been issued by Contractor following completion of a) and b).

**** Group Descriptions**

- A Work expected to be completed before commencement of the Works.
- B Work required in the Contract, which does not require prior work by the Contractor.
- C Work required by the Contract, which does require work by the Contractor.
- D Work expected to be under construction at the commencement of Works.
- E Work required to be carried out jointly by the Contractor and the Authority or Utility in close liaison and co-operation with each other.
- F Work to be wholly undertaken by the Contractor (in liaison with the Authority or Utility).
- G Services for which work is not required but due care and attention is required to protect the services during the execution of the Works

12. Table 1.16.4 – ESB Networks & eir Services and Supplies affected by the Works

Eircom Services and Supplies affected by the Works				
Approx. Location	Description of Works Required	Group **	Drawing Series.	Notice to Relevant Body Required to Commence*
	None at time of tender			

***Notes:** The period of '*Notice to Relevant Body Required to Commence*' is the period after:

- a) Liaising with the relevant personnel within the Authority or Utility including technical meetings on-site and;
- b) Agreement has been reached with the Authority or Utility on the extent of the works operation and measures to be taken for traffic control measures and safe working and;
- c) Formal notice has been issued by Contractor following completion of a) and b).

**** Group Descriptions**

- A Work expected to be completed before commencement of the Works.
- B Work required in the Contract, which does not require prior work by the Contractor.
- C Work required by the Contract, which does require work by the Contractor.
- D Work expected to be under construction at the commencement of Works.
- E Work required to be carried out jointly by the Contractor and the Authority or Utility in close liaison and co-operation with each other.
- F Work to be wholly undertaken by the Contractor (in liaison with the Authority or Utility).
- G Services for which work is not required but due care and attention is required to protect the services during the execution of the Works

13. Table 1.16.5 - Privately Owned Services affected by the Works

Approx. Location	Description of Works Required	Group	Drawing Series.	Notice to Relevant Body Required to Commence
	Protect privately owned services in situ for the duration of the Works or until such time as any replacement services are ready to be operational in liaison with the relevant owner of the service.	N/A	N/A	N/A

APPENDIX 1/17

TRAFFIC SAFETY AND MANAGEMENT

1.0 Traffic Safety and Management Requirements

- 1.1 The Contractor shall be responsible for the planning, design, implementation, maintenance and removal of traffic safety and management measures required in order to facilitate the work.
- 1.2 The Contractor shall comply at all times with the requirements of Chapter 8 of the “Temporary Traffic Measures and Signs for Roadworks” (current edition), the requirements of “Temporary Traffic Management Design Guidance” (current edition) and the requirements of “Temporary Traffic Management Operations Guidance” (current edition).
- 1.3 If the contractor decides to utilise the initial traffic management proposal as prescribed by the PSDP, he shall further develop it as set out herein under and finalise its inception through the PSCS and Employers Representative. In the event that an alternative plan is proposed, it shall as a minimum meet the requirements as set out above and herein under. The PSDP shall additionally be consulted prior to its inception.
- 1.4 The Contractor shall submit three weeks prior to the commencement of each traffic management phase of the works to the Employers Representative detailed traffic management plans, including the following information as a minimum:
 - (a) Phasing of the works at each location;
 - (b) Drawings showing the traffic management layout, including:
 - (i) Geometric Design
 - (ii) Width of Lanes
 - (iii) Working Areas
 - (iv) Safety Zones
 - (v) Access and exit locations for construction vehicles
 - (vi) Barriers
 - (vii) Signing
 - (viii) Road markings
 - (ix) Temporary lighting
 - (x) Provision for pedestrians
 - (xi) Provision for emergency service
 - (c) Timing of operations.
 - (d) Road lighting.

- 1.5 Drawings showing the Contractor's Traffic Management plans shall be to a scale not less than 1/2000, supplemented by drawings at 1/500 scales as necessary, or as required by the Employers Representative.
- 1.6 The Contractor's traffic management proposals shall take account of the work area required for paving and the location of construction joints.
- 1.7 The Contractor shall be subject to the full statutory procedures outlined in the Temporary Closing of Roads Regulations. The period of closure shall be the minimum to facilitate construction of the works. All applications relating to road closures, lane occupations, signs or signals must be submitted to the Employers Representative in writing and require the following notice:
 - i) For making road closures 6 weeks
 - ii) For non-prescribed signs 4 weeks
 - iii) For temporary traffic signals 4 weeks

A temporary road closure shall only be permitted in circumstances where the Contractor can demonstrate to the Employers Representative that such a closure is absolutely necessary for the execution of the works and in accordance with a risk assessment report.

- 1.8 The Contractor shall be responsible for the maintenance of all public roads, site access roads and temporary diversions within the site until issue of the certificate of Substantial Completion. The Contractor shall constantly monitor the public roads while any Lane and/or Carriageway Occupations are in force during the execution of the Works. Any defects identified shall be rectified immediately to the satisfaction of the Employers Representative.
- 1.9 The Contractor shall keep a daily record of all defects, the times when they were identified or reported to him, the action taken to correct the defects, and the times when they were successfully corrected. A copy of this record shall be forwarded to the Employers Representative on the following day, until the completion of those Works requiring the Lane or Carriageway Occupation.
- 1.10 The Contractor shall provide and maintain access to all existing properties adjacent to the Works.
- 1.11 In the event of a traffic accident occurring adjacent to any of the Works, the Contractor shall immediately contact the Gardaí and the Employers Representative informing them of the following:
 - a) Location of the accident
 - b) The seriousness of the accident and whether any persons are trapped, whether the collision involves vehicles carrying inflammable, corrosive or hazardous substances, whether there is a possibility of ignition from leaking fuel or chemicals.

1.12 Liaison with Traffic Gardaí shall be through the following offices:

Carndonagh Garda Station
Malin Road,
Carndonagh,
Co. Donegal

The Contractor shall provide telephone numbers of a minimum of 3 employees who can be contacted by the Gardaí and/or Employers Representative, both during and outside normal working hours, and who shall be responsible for initiating whatever action shall reasonably be required in the event of an emergency.

1.13 All drivers including those delivering plant and materials must be given clear instructions regarding the traffic arrangements applicable at any particular time.

1.14 The Contractor shall be responsible for maintaining the running traffic carriageway and any pedestrian routes adjacent to the Works in a clean and safe condition at all times.

1.15 The Contractor shall assist the Gardaí in moving wide/abnormal loads through the Works by modifying the signing/coning as necessary. Signs/cones so moved shall be replaced immediately the abnormal loads have passed through the Works.

1.16 Heavy Goods Vehicles used on Site by the Contractor; his Sub-Contractors or suppliers must be fitted with an audible reversing warning device.

Suitable locations shall be agreed with the Gardaí and the bus service operators for temporary bus stops where existing facilities are affected by the works.

1.17 Access to national school and childcare facility to be maintained at all times. Contractor to consult with Employers Representative if there are any planned activities which may affect this.

2.0 Minimum Provisions for Vehicular Traffic

2.1 Where the existing available carriageway width is sufficient, two 3m (minimum) wide traffic lanes are to be kept open for two-way traffic at all times during the course of the Works.

2.2 Where the existing available carriageway width is not sufficient to maintain 2-way traffic, alternate one-way (shuttle) working will be permitted provided:

2.2.1 An optimal carriageway width of 3.5m is maintained at all times. An absolute minimum width of 2.7m shall be permitted in exceptional circumstances. The minimum width shall only be considered where

- “follow –me” convoy vehicles are provided to assist guiding vehicles through the works during site working hours.
- 2.2.2 The one-way shuttle system shall be designed to operate on the basis of a maximum time delay per vehicle of 6 minutes and a maximum queue length of 35 vehicles.
- 2.2.3 If unacceptable traffic congestion disruption occurs as defined in 2.2.2 above, or where queuing traffic affects the operation of another junction, the shuttle working is to be removed forthwith and an alternative method employed.
- 2.3 Flagmen shall be used to provide variable ‘green’ time commensurate with actual demand at all times during working hours. Outside working hours temporary traffic signals may be considered, subject to a risk assessment. The Contractor’s proposal together with the risk assessment shall be submitted to the Employer’s Representative in accordance with Clause 4.7 of the Conditions of Contract.
- 2.4 At all times when one-way shuttle working is in operation, a sufficient number of suitable operatives are to be in attendance solely for traffic management duties
- 2.5 The overall length of road subject to shuttle working shall be designed to satisfy the requirements of paragraph 2.2.2 above and should be in the range of 250m to 750m in length, with inter-visibility (where practicable) between flagmen and traffic signals. The geometry of the road including bends and junctions shall be taken account of when planning and implementing the shuttle system.

3.0 Pedestrian Traffic

The Contractor shall programme the works with the aim of ensuring the safety of pedestrians/cyclists at all times and keeping disruption to pedestrians/cyclists to an absolute practical **minimum and** shall submit to the Employers Representative a method statement to demonstrate how he intends to achieve that aim.

4.0 Details of Events that could have a Bearing of the Works

None

Roads including footpaths, cycle tracks and other traffic routes, described above or listed in Appendix 1/19 are the responsibility of:

Road No.	Barrack Hill town Park
Authority	Donegal County Council
Address:	County House Lifford Co. Donegal
Tel No:	074-9153900

APPENDIX 1/18

TEMPORARY DIVERSIONS FOR TRAFFIC

Temporary Diversions for Traffic Specified by the Employer's Representative:

None

Temporary Diversions Proposed by the Contractor:

(i) Notice Requirements:

For obtaining the Employer's Representative's consent in accordance with Clause 118.5 - 2 weeks

See also Notice Requirements in Appendix 1/17.

(ii) Details of Constraints;

The standard of construction of temporary diversions shall in all respects be suitable for the class or classes of traffic using them.

The Contractor shall provide temporary diversion of traffic at all locations where the Works will interfere with existing public or private roads or other ways over which there is a public or private right of way for any traffic.

APPENDIX 1/19

ROUTING OF VEHICLES

(i) Permitted Access Routes to and from the Site

Access to and from the Site shall be by sharing road space with through traffic.

(ii) The use of Permanent Works by Construction Traffic

The Contractor shall take every precaution to prevent dirt, mud or other material being dropped or spread by traffic associated with the works on roads being part of the works, which are made available for public use by the Contractor, whether such traffic is the Contractor's own vehicles, his sub-contractors or his suppliers or vehicles hired by any of the above. The Contractor shall clean roadways of any such dirt, mud or other materials, which may be spilt or spread by traffic travelling to or from the site in connection with the works, whether such traffic belongs to the Contractor, his sub-contractors or his suppliers. The Contractor shall clean all public roads within a distance of 500m of the site and will employ a road suction sweeper where necessary. Such cleaning operations shall be carried out notwithstanding road cleaning work being carried out by the Employer or other Contractors to the Employer.

(iii) Movement of Machinery and Plant across Public Roads

The Contractor shall take care to avoid damage to roads, footpaths, grass margins, and other surfaces within or outside of the authorised site, and shall be liable for the cost of repairing, to the satisfaction of the Employer's Representative and the owner, all such damage caused by his operations. The Contractor shall take precautions to prevent spillage of diesel fuel or other solvents. He shall also prohibit the use of tracked plant on road surfaces outside of the site unless suitably approved protective measures are taken to safeguard the integrity of the road surfaces. Any damage so caused shall be made good by the Contractor at his own expense.

The Contractor shall comply with the maximum legal permissible loads for public roads in Ireland and where requested by the Employer's Representative, the Contractor shall provide evidence of compliance with regard to delivery of material to site. The Contractor shall also prohibit the use of tracked plant on road surfaces outside of the site unless suitably approved protective measures are taken to safeguard the integrity of the road surfaces. Pumping of water onto a public road or private property shall not be permitted. Heavy discharges to gullies and storm drains shall have silt traps incorporated in the temporary discharge arrangement. Any damage so caused shall be made good by the Contractor at his own expense.

(iv) Temporary Structures for Construction Traffic Spanning Areas Used by the Public

Prior approval from the employer will be necessary before constructing any temporary structures in areas used by the public. The contractor will demonstrate that such works are necessary and are safe and suitably designed for use in areas used by the public.

APPENDIX 1/20

RECOVERY VEHICLED FOR BREAKDOWNS

NOT USED

APPENDIX 1/21

INFORMATION BOARDS

One number Project Information Boards required at the site, locations to be agreed with the Employers Representative. All associated logo's regarding funding agencies and text (to be provided by Donegal County Council) to be placed on all information boards.

Approximate Size of Information Boards = 1200mm x 1200mm.

Signage material to be coriboard, mounted on timber posts for similar approved.



Comhairle Contae
Dhún na nGall
Donegal County Council

PUBLIC NOTICE

Barrack Hill Daisy Structure

Refurbishment works are to be carried in the Tank Road Playground over a period of 10-12 weeks from XX-XX-2026 which will require the temporary closure of the playground.

Traffic Control and other measures may be in place at various times to facilitate the works.

THE WINNING CONTRACTOR working on behalf of Donegal County Council apologises for any inconvenience caused.

For any further information in relation to the Works please contact CONTRACTOR CONTACT No.

Sample wording of project information board, final text to be agreed with Employers Representative

APPENDIX 1/22

PROGRESS PHOTOGRAPHS

Contractor to provide a set of progress photographs in electronic format. Progress photographs shall be made available to the Employer's Representative as and when required.

APPENDIX 1/23

SUBSTANCES HAZARDOUS TO HEALTH

Risks to Health and Safety from Materials or Substances

The Contractor must comply with the recommendations of any Site Investigation, all Health and Safety Policies, and the requirements of COSHH (Control of Substances Hazardous to Health Regulations 2002).

The Contractor shall ensure that all sub-contractors, public utilities, and visitors to the site are made aware and allowed every opportunity to see any risk assessments, COSHH statements pertaining to the site.

Protection from Nuisance due to the Works

a) Roads to be kept clean:

All roads used by construction traffic shall be kept free of all dirt, mud or any other materials dropped from plant vehicle's tyres and tracks.

The Contractor shall provide, maintain, and keep available at all times, equipment incorporating a brush suction device with collection compartment and such other plant, labour, and equipment necessary to keep the roads clean.

b) Nuisance from Dust:

The Contractor shall take all necessary measures to prevent dust arising from the works causing nuisance to traffic and property. He shall keep available at all times plant, labour, and equipment capable of preventing dust arising from the works. When excessive dust is emitted from operations within the works, they are to cease on the instruction of the Roads Authority. Also, when traffic speed through the works is limited to less than 15 Kph, operations emitting dust must cease when the prevailing wind speed and direction is causing a hazard to virtually standing traffic. The Contractor is to monitor air quality at all times and when assessed as hazardous, he shall cease work immediately and certainly on the instruction of the Roads Authority.

APPENDIX 1/24

QUALITY MANAGEMENT SCHEMES

As per Clause 104 of the Specification.

APPENDIX 1/25

PRODUCT CERTIFICATION SCHEMES

As per Clause 104 of the Specification.

APPENDIX 1/26

IRISH AGRÉMENT BOARD ROADS AND BRIDGES CERTIFICATES

As per Clause 104 of the Specification.

APPENDIX 2/1

LIST OF BUILDINGS AND STRUCTURES TO BE DEMOLISHED OR PARTIALLY DEMOLISHED

NOT USED

APPENDIX 2/2

FILLING OF TRENCHES AND PIPES

Fill for trenches and pipes shall be in accordance with CC-SPW-00500.

APPENDIX 2/3

RETENTION OF MATERIAL ARISING FROM SITE CLEARANCE

Table 2.3.1 - Retention of Materials Arising from Site Clearance List

Description	Location	Delivered to: (unless otherwise agreed by the Employer's Representative)	Requirements
All Traffic Signs		Contractors Site Compound	Signs shall be set aside and stored safely for reuse as per Appendix 12/1 and as identified on the Works Requirements Drawings.
Kerbs, quadrants		Contractors Site Compound	
Chamber covers	As directed by the Employer's Representative	Contractors Site Compound	Employer's Representative to be given one weeks' notice of delivery date to allow for arrangements to be made for taking delivery and collection of Chamber Covers
Gully gratings and frames	As directed by the Employer's Representative	Contractors Site Compound	Employer's Representative to be given one weeks' notice of delivery date to allow for arrangements to be made for taking delivery and collection of Gully Gratings

APPENDIX 2/4

EXPLOSIVES AND BLASTING

NOT USED

APPENDIX 2/5 HAZARDOUS MATERIALS

The Contractor must ensure that all hazardous waste is handled, collected, transferred, and disposed of in compliance with the Waste Management (Hazardous Waste) Regulations (1998) and any subsequent amendments. The Contractor shall outline methodology in this regard in his Waste Management Plan.

APPENDIX 3/1 FENCING, GATES, AND STILES

Supply and install a hot dipped galvanised steel supported fence and gates that will surround the storage area with timber cladding the detail of the posts for the fence will be 127mm x 76mm x 2.6m high RSJ the base plate is 200mm long x 200mm wide x 10mm thick base plate with 16mm mounting holes see Detail A. Posts for the fencing will be surface mounted using M16 125mm Rawl bolts or similar approved by the engineer. The posts will be 1.8m centres with timber infill. The timber panels will match the existing timber on the building (Douglas fir). Steel posts to be covered with matching timber also. The design is described in Drawing No. 08-2026004-01-008 and in attached pictures.

Gates

The gates will be made of 40mm x 40mm box iron with 20mm angle iron welded along the inside edge of the frame to hold timber in place. The timber panels will match the existing timber on the building (Douglas fir) will be attached with stainless steel screws with antitheft head. The gates will be attached to the posts using heavy duty galvanised hinges and lock bolts for security.

APPENDIX 3/2 FENCING: TII ROAD CONSTRUCTION DETAILS

As per Appendix 0/4.

**APPENDIX 4/1
SAFETY BARRIERS**

NOT USED

**APPENDIX 4/2
PEDESTRIAN RESTRAINT SYSTEMS**

NOT USED

**APPENDIX 4/3
SAFETY BARRIER TERMINALS**

NOT USED

**APPENDIX 4/4
SAFETY BARRIER MAINTENANCE**

NOT USED

**APPENDIX 4/5
ANTI-GLARE SCREENS**

NOT USED

**APPENDIX 4/6
SAFETY BARRIERS: TII STANDARD CONSTRUCTION DETAILS**

NOT USED

**APPENDIX 4/7
VEHICLE PARAPET SYSTEMS**

NOT USED

APPENDIX 5/1 DRAINAGE REQUIREMENTS

1. The Contractor shall ensure as far as possible that no harmful material is allowed to enter any of the watercourses on or around the sites. In particular, no pumping of contaminated groundwater or leachate from excavations into watercourses shall be allowed. In addition, provisions should be made to ensure that any sediment generated during the works does not reach any drainage systems within or adjacent to the site.
2. Fuel required for plant and machinery on site shall be contained in a suitable designated fuel point to ensure that surface water and ground water are protected. Fuel storage facility to be double bunded with 150% capacity.
3. All existing gullies and drainage channels shall be cleaned out and unblocked. All material removed shall be disposed of offsite by the Contractor.
4. Fuel required for mechanical excavators and generators on site shall be contained in a designated fuel point of the Contractor's choice to ensure that surface water and ground water is protected from potential adverse impacts. The fuel storage facility is to be double bunded.

APPENDIX 5/2 SERVICE DUCT REQUIREMENTS

NOT USED

APPENDIX 5/3 SURFACE WATER CHANNELS AND DRAINAGE CHANNEL BLOCKS

NOT USED

APPENDIX 5/4 FIN DRAINS AND NARROW FILTER DRAINS AND GEOTEXILES FOR FILTER DRAINS

1. Filter drains shall be installed as shown on the drawings and as per CC/SCD/0520 – Type K.
2. Bedding and backfilling details for Filter Drains shall be as per CC/SCD/0520 – Type K.

APPENDIX 5/5 COMBINED DRAINAGE AND KERBING SYSTEMS

NOT USED

APPENDIX 5/6
LINEAR DRAINAGE CHANNELS SYSTEMS

NOT USED

APPENDIX 5/7
DRAINAGE & SERVICE DUCTS: TII ROADS CONSTRUCTION DETAILS

As per Appendix 0/4.

APPENDIX 5/8
THERMOPLASTICS STRUCTURAL WALL PIPES AND FITTINGS

NOT USED

APPENDIX 5/9
ATTENUATION

NOT USED

APPENDIX 6/1

REQUIREMENTS FOR ACCEPTABILITY AND TESTING ETC OF EARTHWORKS MATERIALS

NOT USED

APPENDIX 6/2

REQUIREMENTS FOR DEALING WITH CLASS U2 UNACCEPTABLE MATERIAL

1. For the purpose of the Contract, Unacceptable Material Class U2 shall be as defined in CC-SPW-00600, section 1.2 of the Specification, where hazardous chemical properties shall be defined as containing biodegradable (putrescible) material (i.e. capable of producing landfill gas), containing leachate, capable of producing leachate, containing asbestos or containing petroleum products.

2. Provisional Measures for Dealing with Unacceptable Material Class U2

In the event that the Contractor encounters any area where the presence of Unacceptable Material Class U2 is suspected, the Contractor shall cease any excavation work in that area immediately. The Contractor shall make arrangements to have an approved Sub-Contractor, specialising in the identification of such material, carry out testing and sampling on suspected hazardous material.

Where this material is identified as Class U2, the Contractor shall make arrangements for this material to be excavated and removed off site by a specialist waste-disposal Contractor approved by the Employer's Representative. The material shall be disposed of at the properly licensed landfill site subject to the approval of the appropriate Waste Regulation Authority. No materials shall leave the site without the approval of the Employer's Representative. The Contractor shall keep records of the materials removed and shall obtain the Employer's Representative's authentication of the records.

Excavations into or adjacent to Unacceptable material or wastes may encounter concentrations of landfill gas or other hazardous substances. The Contractor shall take all measures necessary to protect site staff, adjacent landowners, and members of the public from any harmful effects arising from his operations.

The Contractor shall prepare appropriate Method Statements and safety plans to cover any such operations, which will be subject to the approval of the Employer's Representative.

Groundwater/leachate from contaminated areas shall not be discharged to public or private surface water or foul sewers, or to watercourses without prior approval from the appropriate authority. Should groundwater or leachate be found in contaminated areas, it shall be contained so as to prevent contamination of uncontaminated ground, prior to disposal off site.

APPENDIX 6/3

REQUIREMENTS FOR EXCAVATION, DEPOSITION, COMPACTION (OTHER THAN DYNAMIC COMPACTION)

1. Excavations shall be formed as required
2. Excavations must be programmed, planned, and executed taking particular, but not exclusive, account of the constraints given in the other parts of these Specification Appendices.

APPENDIX 6/4

NOT USED

NOT USED

APPENDIX 6/5

GEOTEXTILES USED TO SEPARATE EARTHWORKS MATERIALS

NOT USED

APPENDIX 6/6

FILL TO STRUCTURES AND FILL ABOVE STRUCTURAL FOUNDATIONS

NOT USED

APPENDIX 6/7

SUB-FORMATION, CAPPING, PREPARATION AND SURFACE TREATMENT OF FORMATION

Capping

1. Where required, capping material is to be provided
2. Capping shall be Class 6F2 only.

Excavation below Formation Level

3. Excavation below formation level shall generally be 600mm to allow for the construction of the capping layer. Further excavation below the proposed base of capping is not expected although local soft spots may be identified. Soft spots shall be excavated and backfilled to a level directed by the Employer's Representative with acceptable material deposited and compacted using plant and a working method which are suitable to the materials to be handled and traversed. Where, in these circumstances, such backfill has to be deposited below standing water, the Contractor shall use only Class 6A material. Such material shall be deposited below water without the associated use of compaction.

APPENDIX 6/8

TOPSOILING, GRASS SEEDING AND TURFING

The finished edge of the concrete must be sloped to tie into the existing ground level and grass seed sown to return the area to a manageable state for the local group to maintain and cut the grass.

APPENDIX 6/9

EARTHWORK ENVIRONMENTAL BUNDS, LANDSCAPE AREAS, SCREENING MOUNDS STRENGTHENED EMBANKMENTS

Supply and install 27m of wooden planter boxes for the top of the wall matching existing timber on the building. The planters will need to be secured to the wall and fitted with a hard plastic insert for longevity from rot the planters will be 300mm x 300mm x 3.6m or alternatively the planters could be in 3 parts to make up the 3.6m in total. Any other planter idea will need to be pre-approved by engineer.

APPENDIX 6/10

GROUND ANCHORAGES, CRIB WALLINGS AND GABIONS

NOT USED

APPENDIX 6/11

SWALLOW HOLES AND OTHER NATURALLY OCCURRING CAVITIES AND DISUSED MINE WORKINGS

NOT USED

APPENDIX 6/12

INSTRUMENTATION AND MONITORING

NOT USED

APPENDIX 6/13

GROUND IMPROVEMENT

NOT USED

APPENDIX 7/1

PERMITTED PAVEMENT OPTIONS

NOT USED

APPENDIX 7/2

EXCAVATION AND REINSTATEMENT OF EXISTING SURFACES

Where excavation/planning of any existing road or footpath is undertaken by the Contractor, the outline of excavation shall be formed using a road saw. Any excavated material shall be replaced with equivalent material to the satisfaction of the Employer's Representative. Joints in bituminous surfaces shall be coated with tar prior to backfilling.

1. All existing road studs in any section of pavement to be overlaid shall be removed prior to any surfacing taking place.
2. All voids left in the existing surface as a result of removing existing road studs/ buried road studs shall be swept completely clean and shall be free of all debris etc. The void shall be filled with AC 10 Close Surf 70/100 rec and compacted with a 50mm x 50mm square headed steel rammer prior to any surfacing taking place.
3. All gulleys, pots and chambers which are not being retained shall be removed prior to any surfacing taking place.
4. All voids left in the existing surface as a result of removing gulleys, pots and chambers shall be filled following the principles of CC-SCD-00700 prior to any surfacing taking place.
5. Trench excavations in the road carriageway/ hard shoulder or hard strip for Carrier Drains are to be reinstated following the principles of CC-SCD-00700.

APPENDIX 7/3

SURFACE DRESSING PRODUCT (END PERFORMANCE)

NOT USED

APPENDIX 7/4

BITUMINOUS SPRAYS

NOT USED

APPENDIX 7/5

ROAD PAVEMENTS; TII STANDARD CONSTRUCTION DETAIL

As per Appendix 0/4.

APPENDIX 7/6

BREAKING UP OR PERFORATION OF EXISTING PAVEMENT

NOT USED

APPENDIX 7/7

NOT USED

NOT USED

APPENDIX 7/8

NOT USED

NOT USED

APPENDIX 7/9

COLD MILLING (PLANING) OF BITUMINOUS BOUND FLEXIBLE PAVEMENT

NOT USED

APPENDIX 7/10

MICROSURFACING

NOT USED

APPENDIX 7/11

HIGH FRICTION SURFACING

NOT USED

APPENDIX 7/12

LOW ENERGY BOUND MIXTURES

NOT USED

APPENDIX 7/13

RECIPE SURFACE DRESSING

NOT USED

APPENDIX 11/1

KERBS, FOOTWAYS AND PAVED AREAS

1. Installation of a concrete base brushed finished for new storage area the concrete is to be 150mm thickness to TII specification Clause 1106 laid on 150mm compacted 804 granular material Type B to TII specification Clause 804, see TII detail drawing CC-SCD-01105 Type 1 for details, locations of concrete area as per drawing 07-2026004-01-007

APPENDIX 11/2

ACCESS STEPS

NOT USED

APPENDIX 11/3

KERBS, FOOTWAYS AND PAVED AREAS: TII STANDARD CONSTRUCTION DETAIL

Publication Number	Title
CC-SCD-01101	Precast Kerbs
CC-SCD-01103	Dropped Kerb Ramp
CC-SCD-01104	Bituminous Footway
CC-SCD-01109	Precast Kerb Units

APPENDIX 12/1

TRAFFIC SIGNS: GENERAL

1. Traffic sign's locations and type are shown on the Drawings.
2. Where the contractor proposes to use prescribed temporary traffic signs, he shall obtain the approval of the Employer's Representative to their intended location.

Appendix 12/2

TRAFFIC SIGNS: REFLECTIVE MARKERS

NOT USED

APPENDIX 12/3

TRAFFIC SIGNS: ROAD MARKINGS AND STUDS

Road Markings

1. The Contractor shall make available to the Employer's Representative for the duration of the Contract: -
 - (a) A Micrometre suitable for measuring markings.
 - (b) 3 number Steel Plates suitable for measuring markings.
2. Unless otherwise directed by the Employer's Representative, all markings shall be reflectorised by the application of glass beads to the surface of the marking material.
3. In the case of reflectorised markings solid glass beads, 400 g/m² to 500 g/m², shall be applied by pressure concurrently with the laying of the line with sufficient velocity to ensure retention in the surface of the line. The solid glass beads so sprayed shall give uniform cover and immediate reflectivity over the whole surface of the marking. (On screed applied markings where pressure application is not practicable, gravity application will be permitted).
4. The Contractor shall note that the above-mentioned solid glass beads which are to be applied to the surface of the markings are in addition to the solid glass bead content incorporated within the body of the mix for reflectorised markings.
5. Where directed by the Employer's Representative, the Contractor shall apply a 50/50 blend of 70 pen. Bitumen to the road surface in a volatile solvent such as dichloromethane, applied with a brush, roller or portable sprayer and spread at a rate of 14 square metres to the litre. The solvent shall be allowed to evaporate before the thermoplastic is applied.
6. The Contractor shall, when requested by the Employer's Representative, supply name(s) of the manufacturer(s) from whom it is intended to purchase thermoplastic material, glass beads, road studs for use in the Works.

7. The Contractor shall supply to the Employer's Representative certification that the proposed materials and the method of application of markings to the road conform to the specification as outlined above. For this purpose, the Contractor shall obtain from an agency approved by the Employer's Representative, a report containing: -
 - (a) The certified analysis, from a laboratory with a current ISO Certificate for the specific purpose, of each grade of thermoplastic material the Contractor proposes to use, and
 - (b) The results of an examination of the application equipment the Contractor proposes to use. This examination shall be carried out by a company approved to do so by the Employer's Representative. (In the event that a company has an up-to-date ISO Certification for maintenance of road marking machinery and apparatus including control devices this will be accepted as complying with this requirement on submission of such Certification to the Employer's Representative for verification.)
8. The submitted report shall relate to certification carried out within the previous six months. Any subsequent change in the source of thermoplastic material or the method of application shall be certified as acceptable by Employer's Representative or other approved agency before use. All costs associated with such certification(s) shall be borne by the Contractor.
9. The methods of testing shall be in accordance with IS EN 1436 or with those approved by The Transport Infrastructure Ireland or other agency approved by the Employer's Representative.
10. All the necessary costs associated with such certifications shall be borne by the Contractor.
11. Notwithstanding the above the road authority may at any stage request independent analysis of the material and/or equipment. The costs in these circumstances shall be borne by the Contractor if the materials or equipment fail and by the authority in the event of full compliance.
12. In any location where there is less than 0.6m of hard strip, a suction sweeper must be used so as to ensure it is clear of debris or loose material before lining or stud Works commence.

Thermoplastic Road Markings Under Guarantee

13. The minimum period of guarantee shall be for 3 years after completion of all markings and shall apply to markings laid on all cement-bound and bituminous-bound road surfaces including surface dressings.
14. The following properties of the markings are required to be covered by the guarantee: -
 - Durability
 - Reflectivity

- Skid Resistance
- Luminance Factor
- Chromaticity

The average value of the above properties shall be established for each line adequate to guarantee that all markings are correct.

15. During the 3-year period of guarantee the Contractor shall be required to replace or renew markings which fail to comply with one or more of the minimum values of the marking properties listed above. Renewal of failed markings shall be carried out to the original specification for both scabbling and marking quality and depth. The guarantee period will recommence on such renewal. All costs associated with this testing, replacement, or renewal of markings during the period of guarantee shall be borne by the Contractor. Testing will be in accordance with Appendix 1/5.
16. Notwithstanding the above verification tests, the Contractor shall be required to carry out verification tests at any time during the period of guarantee if the Employer's Representative considers that the properties of the markings are less than the minimum values specified above. The costs of such testing will be borne by the Contractor if the results of the tests show that the markings fail to comply with the prescribed minima. The costs of such testing shall be borne by the National Roads Authority if the Contractor can demonstrate to the satisfaction of the Employer's Representative that the requirements of the specification have been complied with in full.
17. On application and during the period of guarantee, these properties, when measured in situ in an approved manner, shall not be less than the values stated below.

Durability:

At least 90 per cent of the marked areas shall contain a uniform coating of marking material through which the underlying surfacing has not penetrated. Discontinuities, due to wear, shall not be accepted in continuous lines and at least 75 per cent of each marked segment of a broken line shall remain intact.

Reflectivity:

$R4^a \geq 200 \text{ mcd/m}^2$. 1x, following application of longitudinal markings.

$R3^a \geq 150 \text{ mcd/m}^2$. 1x, 12- 24 months following application.

$R2^a \geq 100 \text{ mcd/m}^2$. 1x, 24- 36 months following application.

when measured by the digital retrometer LTL 2000 in accordance with Annex B of IS EN 1436

Skid Resistance:

50 B.P.N, when measured by the British portable pendulum apparatus or $SRT > 50$, in accordance with Annex D of IS EN 1436

Luminance Factor:

White Material...B4: $\beta \geq 50$ Yellow Material...B2: $\beta \geq 30$
when measured in accordance with Annex C of IS EN 1436

Chromaticity:

Refer to results in Table 6 of EN 1436; testing method is in Annex C.

18. The procedures for carrying out the above tests shall be in accordance with those approved by Transport Infrastructure Ireland or another agency approved by the Employer's Representative.
19. The Contractor shall measure the values of the above properties on applied markings in accordance with the Appendix 1/5 of the Specification. The tests shall be carried out in the presence of the Employer's Representative. The sections on which such measurements are taken shall be randomly selected and representative of a marked length of road. The test report shall detail site locations, road type description, weather condition, values recorded for all test results and their average result for each section. The report will also specify areas which do not comply with the requirements stated above. Contractors are required to specify the location of all test sections along the route. The report will include the Contractor and any sub-Contractor who may have worked on that section.
20. At least five observations/measurements shall be taken to establish average values of the above properties for the representative length of road. During the period of guarantee the Contractor shall replace or renew markings which fail to comply with one or more of the minimum values of the marking properties listed above. All costs associated with this testing, replacement, or renewal of markings during the period of guarantee shall be borne by the Contractor.

APPENDIX 12/4

TRAFFIC SIGNS: CONES, CYLINDERS, FTDs AND OTHER TRAFFIC DELINEATORS

NOT USED

APPENDIX 12/5

TRAFFIC SIGNS: TRAFFIC SIGNALS

NOT USED

APPENDIX 12/6

TRAFFIC SIGNS: SPECIAL SIGN REQUIREMENTS ON GANTRIES

NOT USED

APPENDIX 12/7

TRAFFIC SIGNS: PREPARATION AND FINISH OF METAL AND OTHER SURFACES

NOT USED

APPENDIX 13/1

**INFORMATION TO BE PROVIDED BY THE DESIGNER FOR THE ROAD LIGHTING WORKS
WHEN SPECIFYING LIGHTING COLUMNS & BRACKETS**

NOT USED

APPENDIX 13/2

COLUMN AND BRACKET DATA SHEETS 1 & 2

NOT USED

APPENDIX 13/3:

INSTRUCTIONS FOR COMPLETION OF COLUMN AND BRACKET DATA SHEETS

NOT USED

APPENDIX 13/4:

CERTIFICATION FOR LIGHTING COLUMNS

NOT USED

APPENDIX 13/5:

ROAD LIGHTING COLUMNS AND BRACKETS: TII ROAD CONSTRUCTION DETAILS

NOT USED

APPENDIX 14/1

SITE RECORDS

NOT USED

APPENDIX 14/2

LOCATION OF LIGHTING UNITS AND FEEDER PILLARS

NOT USED

APPENDIX 14/3

TEMPORARY LIGHTING

NOT USED

APPENDIX 14/4

ELECTRICAL EQUIPMENT FOR ROAD LIGHTING

NOT USED

APPENDIX 14/5

ELECTRICAL EQUIPMENT FOR TRAFFIC SIGNS

NOT USED

APPENDIX 14/6

PREPARATION AND FINISH OF METAL AND OTHER SURFACES

NOT USED

APPENDIX 15/1
MOTORWAY COMMUNICATIONS

NOT USED

APPENDIX 16/1
REQUIREMENTS FOR PILING AND EMBEDDED RETAINING WALLS

NOT USED

APPENDIX 16/2
PRECAST REINFORCED AND PRESTRESSED CONCRETE PILES AND PRECAST REINFORCED CONCRETE SEGMENTAL PILES

NOT USED

APPENDIX 16/3
BORED CAST-IN-PLACE PILES

NOT USED

APPENDIX 16/4
BORED PILES CONSTRUCTED USING CONTINUOUS FLIGHT AUGERS AND CONCRETE OR GROUT INJECTION THROUGH HOLLOW AUGER STEMS

NOT USED

APPENDIX 16/5
DRIVEN CAST-IN-PLACE PILES

NOT USED

APPENDIX 16/6
STEEL BEARING PILES

NOT USED

APPENDIX 16/7
REDUCTION OF FRICTION ON PILES

NOT USED

APPENDIX 16/8
NON-DESTRUCTIVE METHODS FOR TESTING PILES

NOT USED

APPENDIX 16/9
STATIC LOAD TESTING OF PILES

NOT USED

**APPENDIX 16/10
DIAPHRAGM WALLS**

NOT USED

**APPENDIX 16/11
HARD/HARD SECANT PILE WALLS**

NOT USED

**APPENDIX 16/12
HARD/SOFT SECANT PILE WALLS**

NOT USED

**APPENDIX 16/13
CONTIGUOUS BORED PILE WALLS**

NOT USED

**APPENDIX 16/14
KING POST WALLS**

NOT USED

**APPENDIX 16/15
STEEL SHEET PILES**

NOT USED

**APPENDIX 16/16
INTEGRITY TESTING OF WALL ELEMENTS**

NOT USED

**APPENDIX 16/17
INSTRUMENTATION FOR PILES AND EMBEDDED WALLS**

NOT USED

**APPENDIX 16/18
SUPPORT FLUID**

NOT USED

APPENDIX 17/1
CONCRETE – CLASSIFICATION OF MIXES

30N Concrete

APPENDIX 17/2
CONCRETE - IMPREGNATION AND COATING SCHEDULE

NOT USED

APPENDIX 17/3
CONCRETE – SURFACE FINISHES

Installation of a concrete base with a brush finish

APPENDIX 17/4
CONCRETE - GENERAL

Installation of a concrete base brushed finished for new storage area the concrete is to be 150mm thickness to laid on 150mm compacted 804 granular material, details & location of the proposed concrete area is in Drawing No. 07-2026004-01-007

APPENDIX 18/1
REQUIREMENTS FOR STRUCTURAL STEELWORK

NOT USED

APPENDIX 19/1
(SPECIFICATION FOR ROAD WORKS) SHEET NO. FORM BE/P1 (NEW WORKS) PAINT
SYSTEM SHEET

NOT USED

APPENDIX 19/2
(NEW WORKS) REQUIREMENTS FOR OTHER WORKS

NOT USED

APPENDIX 19/3
(SPECIFICATION FOR ROAD WORKS) FORM BE/P2 PAINT DATA SHEET

NOT USED

APPENDIX 19/3*
(SPECIFICATION FOR ROAD WORKS) FORM BE/P3 PAINT SAMPLE DESPATCH LIST: SHEET 1

NOT USED

APPENDIX 19/3*
(SPECIFICATION FOR ROAD WORKS) FORM BE/P3 PAINT SAMPLE DESPATCH LIST: SHEET 2

NOT USED

APPENDIX 19/4
(NEW WORKS) GENERAL REQUIREMENTS

NOT USED

APPENDIX 19/5
(SPECIFICATION FOR ROAD WORKS) FORM BE/P1 (MAINTENANCE) PAINT SYSTEM SHEET 1

NOT USED

APPENDIX 19/6
(SPECIFICATION FOR ROAD WORKS) FORM BE/P1 (MAINTENANCE) PAINT SYSTEM SHEET 2

NOT USED

APPENDIX 19/7
(MAINTENANCE) REQUIREMENTS FOR OTHER WORKS

NOT USED

APPENDIX 19/8
(MAINTENANCE) GENERAL REQUIREMENTS

NOT USED

APPENDIX 20/1.
FORM PWS PROPRIETARY WATERPROOFING SYSTEM DATA SHEET

NOT USED

APPENDIX 20/2
WATERPROOFING FOR CONCRETE STRUCTURES

NOT USED

APPENDIX 21/1
BRIDGE BEARING SCHEDULE

NOT USED

APPENDIX 23/1
BRIDGE DECK EXPANSION JOINT SCHEDULE

NOT USED

APPENDIX 23/2
SEALING OF GAPS SCHEDULE (OTHER THEN IN BRIDGE DECK EXPANSION JOINTS)

NOT USED

APPENDIX 24/1

BRICKWORK, BLOCKWORK AND STONEMWORK

Supply and install stone masonry faced blockwork wall within the daisy building between each timber pillars up to a height of 1m as described in Drawing No. 05-2026004-01-005 End View. The wall will be 300mm wide in total and a height of 1m the finish on the stone is to match the walls that are existing the Barack Hill Public Park. The top of the wall will be finished with a flat stone with S/S wall ties used to tie stonework and block work together. Full adhesion of Block work and stonework to mortar at all interfaces. The walls between the wooden post ends at the posts the open end of the building has 2 wall jams and are finished with a stone face all details of wall ties and copings all details are in Drawing No. 05-2026004-01-005 End view wall

APPENDIX 24/2

BRICKWORK, BLOCKWORK AND STONEMWORK – TII STANDARD CONSTRUCTION DETAILS

Supply and install stone masonry faced blockwork wall within the daisy building between each timber pillars up to a height of 1m as described in Drawing No. 05-2026004-01-005 End View. The wall will be 300mm wide in total and a height of 1m the finish on the stone is to match the walls that are existing the Barack Hill Public Park. The top of the wall will be finished with a flat stone with S/S wall ties used to tie stonework and block work together. Full adhesion of Block work and stonework to mortar at all interfaces. The walls between the wooden post ends at the posts the open end of the building has 2 wall jams and are finished with a stone face all details of wall ties and copings all details are in Drawing No. 05-2026004-01-005 End view wall

APPENDIX 25/1
REQUIREMENTS FOR CORRUGATED STEEL BURIED STRUCTURES

NOT USED

APPENDIX 25/2
REQUIREMENTS FOR REINFORCED SOIL AND ANCHORED EARTH STRUCTURES

NOT USED

APPENDIX 25/3
**REQUIREMENTS FOR REINFORCED CLAY BRICKWORK RETAINING WALLS OF POCKET-TYPE
AND GROUTED CAVITY CONSTRUCTION STRUCTURES**

NOT USED

**APPENDIX 26/1
ANCILLARY CONCRETE**

<u>Location</u>	<u>Grade</u>
Bedding and backing to pre-cast concrete kerbing, edging and channels	ST1
Blinding	ST1
Traffic Signs, fencing, street furniture and playground equipment	ST2
Drainage Systems	In accordance with manufacturers recommendations.

**APPENDIX 26/2
BEDDING MORTAR**

Full adhesion of Block work and stonework to mortar at all interfaces. The walls between the wooden post ends at the posts the open end of the building has 2 wall jams and are finished with a stone face all details of wall ties and copings all details are in Drawing No. 05-2026004-01-005 End view wall

**APPENDIX 26/3
CORED THERMOPLASTIC NODE MARKERS**

NOT USED

**APPENDIX 26/4
PLAYGROUND EQUIPMENT**

NOT USED

APPENDIX 27/1
REQUIREMENTS FOR WATERMAINS

The water tap will be moved and positioned inside the storage area at the front of the container described in drawing 07-2026004-01-007 Top view of storage

APPENDIX 27/2:
WATERMAINS: TII ROAD CONSTRUCTION DETAILS

NOT USED

APPENDIX 28/1:
TRENCHLESS AND MINIMUM DIG TECHNIQUES

NOT USED

APPENDIX 29/1:
CCTV SURVEY OF ROAD DRAINAGE SYSTEMS

NOT USED

Appendix A