



Methodology (10%)

- Bidders must submit a response to the question below and upload electronically to PCS-T Technical Envelope as part of their submission.
- Only the information provided in the Tender submission will be evaluated.

Question	Weighting
<p>Tenderers should set out their preliminary Method Statement in respect of how they will deliver the works <u>from appointment through to completion and making good defects</u> including:</p> <ul style="list-style-type: none"> • Methodology • Proposed Traffic Management Plan, addressing access routes to and from the site and the control of pedestrian movement. • Project Risks and Mitigation measures • Proposed Waste Management & Environmental Plan • Major items of Plant and Equipment to be used 	<p>10%</p>
<p><u>RESPONSE</u></p>	
<p>Refer to appended Method Statement document, inclusive of TM methodology and TM plans.</p>	

MS01 – Method Statement

24259/MS01/230917

17 September 2023

A79/30 VICTORIA BRIDGE, AYR MAINTENANCE PAINTING & CONCRETE REPAIRS

METHOD STATEMENT – ISSUE 01

1 Scope of Works

- 1.1 Install & maintain temporary traffic management (nearside lane closures) as required for each phase of the works.
- 1.2 Install & maintain temporary access scaffolding, complete with sealed shrink-wrap encapsulation and cordex sheeting to the crash deck, to contain debris from polluting the watercourse.
- 1.3 Implement structural steelwork repairs as required, which are to be carried out by a NHSS 20 approved steelwork subcontractor who is UKAS certified to BS EN1090, Execution Class 2.
- 1.4 Carry out grit-blast preparation (SA2.5) and maintenance painting of parapets and structural steelwork to bridge. All steelwork preparation and maintenance painting works will be carried out by a specialist subcontractor who is NHSS 19A approved, ICATS registered, RISQS verified and whose site personnel are monitored under an EMAS doctor.
- 1.5 Carry out concrete repairs to bridge deck with proprietary structural repair mortar (Flexcrete Monolite & Monomix).

2 Location of Works

- 2.1 A79/30 Victoria Bridge, Ayr

3 Parties Affected by Work & Control Measures

Client's Employees	Yes	✓	No		Site Induction & PPE
Visitors	Yes	✓	No		Site Induction & PPE
Members of the Public	Yes	✓	No		Traffic / Pedestrian Management, Site Enclosure
Contractor's Employees	Yes	✓	No		Site Induction & PPE
Subcontractor's Employees	Yes	✓	No		Site Induction & PPE

4 Principal Foreseeable Hazards, Risks Assessments & Control Measures

Hazard	Risk Assessments & Control Measures
Abrasive Wheels & Disc Cutters	Risk Assessment RA01 & Safe Working Instruction SW01
Driving at Work	Risk Assessment RA08 & Safe Working Instruction SW08
Dust & Fumes	Risk Assessment RA09 & Safe Working Instruction SW09
Hand Tools	Risk Assessment RA12 & Safe Working Instruction SW12
Hot Working	Risk Assessment RA13 & Safe Working Instruction SW13
Lifting Operations	Risk Assessment RA15 & Safe Working Instruction SW15
Manual Handling	Risk Assessment RA16 & Safe Working Instruction SW16
Noise & Public Nuisance	Risk Assessment RA19 & Safe Working Instruction SW19
Portable Electrical Equipment	Risk Assessment RA23 & Safe Working Instruction SW23
Site Conditions, Slips, Trips & Litter	Risk Assessment RA26 & Safe Working Instruction SW26
Underground Services	Risk Assessment RA27 & Safe Working Instruction SW27
Work on Highways	Risk Assessment RA28 & Safe Working Instruction SW28
Working at Height	Risk Assessment RA29 & Safe Working Instruction SW29
Working over/near Water	Risk Assessment RA31 & Safe Working Instruction SW31
Waste Handling, Storage & Disposal	Risk Assessment RA44 & Safe Working Instruction SW44
Coronavirus (COVID-19)	Risk Assessment RA50 & Safe Working Instruction SW50
Brick/Stone/Concrete Dust	CoSHH Assessment CA01
Wet Concrete	CoSHH Assessment CA03
Mortar	CoSHH Assessment CA09

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5 Health & Safety Requirements

- 5.1 CDM Regulations 2015 will apply to these works.
- 5.2 Strict adherence to relevant legislation will be maintained for those items covered by CoSHH.
- 5.3 CoSHH assessments will be provided and made available to all operatives.
- 5.4 All site operations to be carried out in accordance with the Construction Phase Plan and all relevant Risk Assessments, Safe Working Instructions and CoSHH Assessments.
- 5.5 Long-sleeved 6-point hi-visibility jackets and long trousers (yellow or orange), safety boots, hard hat, safety glasses and gloves must be worn at all times during the works.
- 5.6 All operatives must receive an Initial Site Induction and Work Activity Briefing.
- 5.7 All site operatives must be fully fit to work and without any symptoms of COVID-19.
- 5.8 All site vehicles and cabins must be provided with ample supplies of paper towels, hand sanitising gel and disinfectant spray to clean down and sanitise surfaces.

6 Protection of Third Parties

- 6.1 Traffic & pedestrian management to be installed & maintained for duration of works.
- 6.2 Pedestrian barriers and Heras fencing to be installed & maintained to secure work site and where appropriate a 1m buffer zone is to be delineated between public and working areas.

7 Personal Protective Equipment

Hi-Vis Clothing (EN471, Class 3)	✓	Safety Glasses (EN166)	✓	Hard Hat (EN397)	✓
Dust Mask (EN149, FFP2/FFP3)	✓	Safety Goggles (EN166)	✓	Safety Gloves (EN388)	✓
Ear Protection (EN352-2)	✓	Respiratory Protective Equipment (RPE)		Safety Boots (ISO 20345, SBP)	✓

8 Environmental Risks & Control Measures

Hazard	Risk	Risk Control
Noise	Operative Hearing Protection & Public Nuisance	Noise levels to be reviewed on commencement of works, action to be implemented as per Risk Assessment RA19 & Safe Working Instruction SW19 to ensure compliance with BS5228: Control of Noise & Vibration on Construction & Open Sites.
Dust	Inhalation & Public Nuisance	Measures to be implemented as per Risk Assessment RA09 & Safe Working Instruction SW09 and HSE Construction Information Sheet No 36 (Revision 2): Construction Dust, to prevent dust inhalation by operatives and passers-by, including RPE and water suppression.
Working over Watercourse	Water Pollution	Measures to be implemented as per Risk Assessment RA31 & Safe Working Instruction SW31 to prevent pollution of watercourse in accordance with SEPA Guidance for Pollution Prevention PPG1, GPP5 & PPG22. Works to be undertaken in line with SEPA General Binding Rules GBR5, GBR6, GBR9, GBR10(b) & GBR13. All scaffolding to be shrink-wrap encapsulated and sealed and all crash-decking to be fitted with cordex sheeting to prevent migration of debris into the watercourse.
Coronavirus	Spread of Coronavirus	Control measures to be implemented as per Risk Assessment RA50 and Safe Working Instruction SW50 to protect the workforce from the spread of Coronavirus.

9 Environmental Incident Procedure

- 9.1 In the event of an environmental incident the Spillage Procedure shall be followed and the Site Supervisor will immediately advise the Contracts Director who will notify the Local Authority (responsible person) & SEPA without delay, and in any event by the next working day.
- 9.2 Incident notification will include details of the time and duration of the incident, a description of the cause, any effect on the environment and any measures taken to minimise or mitigate the effects and prevent a recurrence.
- 9.3 If requested, a written report on the incident will be provided within 14 days.
- 9.4 Incident contacts and telephone numbers are detailed in the Spillage Procedure Form SF15.

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10 Waste Management & Disposal

- 10.1 [REDACTED] are a registered waste carrier ([REDACTED]) and can transport small quantities of waste materials off-site.
- 10.2 Where larger quantities of waste materials are generated, [REDACTED], or other SEPA registered waste carrier, will be sub-contracted to transport waste material from site to an appropriate licensed waste receiving facility.
- 10.3 Waste Transfer Notes will be obtained and retained in the contract file for each load taken off-site. Waste Transfer Notes to be signed by the waste producer & waste carrier and with the correct SIC Code (42990) & correct EWC code for type of waste being removed to be clearly marked.

11 Site Works

- 11.1 Point of Work Risk Assessment
On arrival on site, Site Supervisor to carry out a Point of Work Risk Assessment and ensure all relevant activity Risk Assessments, Safe Working instructions and COSHH sheets are made available to all site operatives and are followed during execution of the works.

- 11.2 Site Compound
Set up site compound, including any on-site mobile welfare facilities, in accordance with CDM2015, Schedule 2. All welfare units must be provided with ample supplies of paper towels, hand sanitising gel and disinfectant spray to clean down and sanitise surfaces.

Site enclosure to be provided by means of red interlocking pedestrian barriers and/or Heras fencing panels as appropriate. Site safety signage is to be displayed at all site access points. First aid points and fire assembly points to be signed. Where the site is within or adjacent to public areas accessible to pedestrians, the site enclosure will incorporate a buffer zone to maintain a 1m minimum distance between pedestrians on the public side and the workforce within the site compound.

- 11.3 Site Inductions
All site visitors to receive a health & safety induction and complete a site attendance record prior to entering the site. PPE requirements shall be confirmed during the induction, with the minimum requirement being long-sleeved 6-point hi-vis top & long trousers, safety boots, hard hat, safety gloves, safety glasses and respirator mask (FFP3 preferred, minimum FFP2).

Additional information on social distancing and personal hygiene practices in relation to the COVID-19 pandemic will be included in the briefing before each work shift, as detailed in Risk Assessment RA50 and Safe Working Instruction SW50.

- 11.4 Traffic Management
All traffic management to be installed, maintained and removed by NHSS 12D TM operatives. Traffic management and signage to be checked a minimum of 3 times daily at intervals of not more than 4 hours for duration of works and recorded on site form SF33. Refer to appended traffic management method statement and quality plan for further details on traffic management.

- 11.5 Access Scaffolding
Access scaffolding to be erected and loaded in accordance with relevant NASC TG20:21 Compliance Sheet. Operatives involved in the installation will do so in complete compliance with NASC Guidance Note SG4:15 (Preventing Falls in Scaffolding Operations), all operatives will be suitably trained in scaffolding operations to CITB or In-House standards.

All scaffolding must be fitted with a signed 'scafftag' prior to first use and re-inspected and re-tagged on a weekly basis thereafter.

Scaffolding to be installed complete with sealed shrink-wrap encapsulation and cordex sheeting to the crash deck, to contain debris from polluting the watercourse.

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Site operatives will carry out pre-use checks of the tower scaffold. Operatives using the scaffold must wear a hard hat at all times. No lone working permitted on scaffold. Materials storage on scaffold to be limited, to avoid overloading. For further guidance on working safely at height refer to Risk Assessment RA29 and Safe Working Instruction SW29.

11.6 Concrete Repairs (Flexcrete Repair System)

Where the use of hand-held breakers is required to mechanically break out concrete, select breakers with the lowest possible vibration magnitude. Hand held breakers with a vibration magnitude of less than 7m/s^2 are preferred, and those with a vibration magnitude in excess of 7m/s^2 should be avoided if at all possible.

Whilst breaking out concrete with hand-held breakers, all operatives should refer to the HAVS Ready Reckoner (Site Form SF16A) to calculate their daily HAVS points. All operatives must complete a HAVS Record Sheet (Site Form SF16B) and must ensure that they do not exceed 400 HAVS points in any single shift.

Upon reaching 100 HAVS points, operatives must actively seek opportunities to limit any further HAVS exposure, as far as reasonably practicable, by taking breaks and/or task sharing with other operatives. For further guidance on hand-arm vibration and control measures refer to Risk Assessment RA12 and Safe Working Instruction SW12.

Remove all loose material, dust, surface laitance, mould release agent and any other form of contamination. Any exposed rebar to be abraded to bright metal and treated with Flexcrete Steel Protector 841.

Mix proprietary repair mortar (Flexcrete Monomix/Monolite) to an even consistency with a forced action pan mixer for 2-3 minutes (a normal concrete mixer is not suitable). Once mixed, use repair mortar without delay. The following water to powder mix ratios apply:

Monomix: 3.3 – 3.7 litres per 25kg bag, depending on required consistency

Monolite: 2.7 – 3.1 litres per 18kg bag, depending on required consistency

Soak prepared substrate with clean water, remove excess water and place repair mortar into recess with a float or trowel in a single application (no primer required except when treating highly porous concrete, in which case apply Flexcrete Bonding Bridge 842).

When handling concrete repair mortars, minimum PPE must include safety gloves, safety glasses and face mask (FFP3). For further guidance on working safely with mortar refer to CoSHH Assessment CA09 and Flexcrete material safety data sheets.

11.7 Steelwork Repairs

All structural steelwork repairs to be carried out by a NHSS 20 approved steelwork subcontractor who is UKAS certified to BS EN1090, Execution Class 2.

All hot works to be executed only with appropriate spark shields in place and fire extinguishers readily available. Where welding galvanised steel, welders shall wear an Air Fed Welding Helmet to prevent inhalation of Zinc Oxide fumes.

All hot working to be subject to a Hot Works Permit (Form SF50) and executed fully in accordance with Risk Assessment RA13, Safe Working Instruction SW13 and HSE guidance document INDG297 (Rev 1).

Repairs to Road Vehicle Restraint parapets are to be supervised by a competent operative working on behalf of a NHSS 10B certified VRS installer.

11.8 Steelwork Preparation & Painting

All steelwork preparation and maintenance painting works will be carried out by a specialist subcontractor who is NHSS 19A approved, ICATS registered, RISQS verified and whose site personnel are monitored under an EMAS doctor.

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The steelwork shall be prepared by grit blasting (SA2.5), where also required mechanical abrading back to sound paint or bare steel will be carried out using 4" angle grinders (with flexible fibre discs to ensure no groove marks are left), sand paper and wire brushes. All sound existing coatings shall receive power and manually operated tools to clean the surface and provide a key for the new painting system.

Once the steelwork is dry and has received a final clean by using rags, all paint flakes and used rags shall be gathered together the bagged and stored until taken away from site to an approved tip for waste.

Once the preparation and cleaning is fully completed the paint system will be applied by brush and/or roller as per the paint system data sheets / application guide. All painting operatives will be fully competent and have a full understanding on the procedure of applying the specified paint system.

All work pots during painting shall contain a minimum of paint and shall be situated in such a manner as it cannot be knocked over or spilt. The competent operator shall be careful making sure there are no splashes or drips coming from the brushes or rollers. Painters to work in pairs and wear appropriate respiratory protection equipment (minimum FFP3).

It shall be prohibited for any employee to eat, drink, chew gum or smoke within the work area whilst carrying out preparation and painting works. Before breaks and at the end of each shift, the personnel involved with preparation and painting works will have a full hand/arm wash prior to eating and drinking.

TRAFFIC MANAGEMENT METHOD STATEMENT SECTOR SCHEME 12D – DUAL CARRIAGEWAY LANE CLOSURE (40mph or less)

Intent of Method Statement

- This method statement is devised to assist in the safe implementation of a slow lane closures on a dual carriageway with a speed limit of 40mph or less. Adherence to this method statement should result in protection of both employees working within the Traffic Management and the public.
- All Traffic Management personnel are to be briefed on all relevant method statements and risk assessments prior to arrival on site.

Resource for Activity

- 3no NHSS 12D (Module 3) TM Operatives; Conspicuous Signing Vehicle; Temporary road signs and frames; Cones; Lamps; Sand bags.

Planning of Works

- All traffic management proposals and road space booking applications have to be approved in advance by the client. A unique ADF number will have been provided for the overall contract. This should be used for all traffic management installations/switches and removals, and also for reporting of any queues, breakdowns or accidents.
- Each operative engaged in the installation, operation and removal of the lane closure, shall possess a level of competence on Sector Scheme 12D (Module 3) and should have a full understanding of the signing requirements for this activity and the correct operation of the equipment they are using.
- All operatives are to wear the appropriate Personal Protective Equipment.
- A three minute traffic count shall be done prior to any traffic management measures being put in place. The maximum allowable traffic flow in a three minute period is 60 vehicles per lane. This is with a 15% - 20% content of HGVs.
- Tapers are a fundamental element of Traffic Management plans and their position should have been considered as an integral part of the traffic management design. Traffic cones should be placed close enough together to give an impression of continuity and an appearance of substance.

The size of cone and the rate of taper to be used on different classes of road are specified in *Table A1.3 (Appendix 1)* of Chapter 8 Traffic Signs Manual and the inside rear cover of Safety at Street Works and Road Works, A Code of Practice (Extracts are contained within the operatives gangpack).

The tapered line of cones must be located so that it is clearly visible by drivers on approach to the works area. These precautions will also help safeguard those persons working on the road.

Method of Installation

- Activate roof-mounted light bars and park vehicle safely off road if possible. The light arrow and or 610 arrow on the vehicle should be activated and pointing to the right at this time.
- Take care when using verges for vehicle movement to avoid damage, i.e. french drains, etc.
- Engines to be switched off when vehicles are not in use.
- Place signing, commencing from outer signs and work back towards site, staying on verge or footway, securing with sand bags.
- Adjust position of signs where local geometry reduces visibility, or obscures permanent signage.

MS/SS12/13 - Dual C/W Lane Closures

- After establishing the length of the taper (from the extract of the table contained in *Safety at Street works and Road works, A code of practice* (a copy of which forms part of the gang pack in each vehicle), the taper cones and signs will be laid out along the kerbline/verge. The operatives will then proceed to form the taper, closing the slow lane.
- Once the main taper is complete the coning vehicle will drive along the slow lane with an operative placing cones from the dropwell at 9m centres. The work zone will be formed (including the lateral safety zone of 0.5m, minimum).
- Set up 'end of roadworks' signs.
- A lateral distance of 3.25m should be maintained for the 'live lane', unless the absolute minimum 3.0m clearance has been requested/agreed with the local authority/overseeing organisation, prior to the commencement of the works.
- After closure safely installed the main contractor will be contacted to enter site via signed works access point.

Location and Protection of Any Services

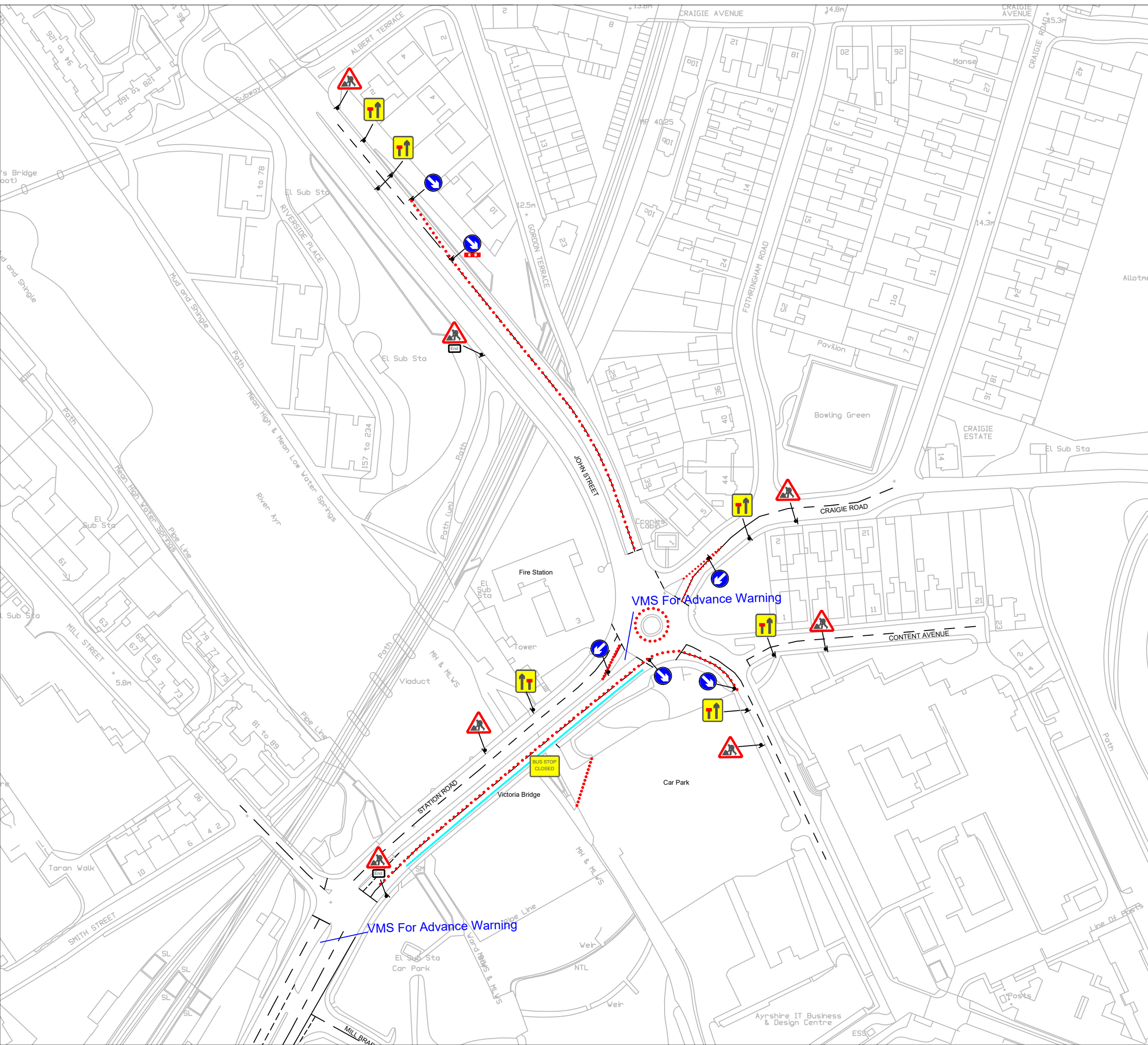
- The main service hazard which will be encountered during Traffic Management operations are overhead cables. Particular care must be used when lifting/placing signs and frames. Some overhead cables are clearly labelled by a sign denoting hazard above. If in any doubt advice must be obtained from supervisory staff prior to commencement of works in areas at risk from overhead cables.

Method of Removal

- Remove the traffic management using the above sequence in reverse.

Procedures to be followed in the event of a problem arising

<u>Event</u>	<u>Action</u>
<p>Fog, heavy rain, spray, snow.</p> <p>Sudden change in weather not anticipated</p>	<ul style="list-style-type: none"> ➤ If TM commenced, consult Supervisor. ➤ Do not commence TM in these conditions. ➤ If TM is in place, remove all personnel unless it is necessary to maintain a safe closure. ➤ Suspend the works immediately.
<p>Abnormal Load</p>	<ul style="list-style-type: none"> ➤ Consult with Supervisor, if TM is not in place, do not commence TM until instructed. ➤ If TM is in place agree any variation to scheme which may be safely carried out to aid passage through the works.
<p>Traffic Accident</p>	<ul style="list-style-type: none"> ➤ Contact the Police and if necessary, Ambulance and Fire Service immediately. Do not get involved in any action, which may put your fellow workers into greater danger. Contact Supervisor.



DETAIL B (B)

- 40mph or less - 450mm traffic cones, spacing 1.5m.
- 50mph or more - 750mm traffic cones, spacing 1.5m.
- Motorways and NSL dual with hardshoulders - 750mm traffic cones, spacing 1.5m, relaxation 3m.

Notes:
 1) During darkness, regulation 55 lamps should be provided at 9m centres, relaxation for 40mph or less - 18m.
 2) 45° tapers have 1.5m spacing, no relaxations.

DETAIL C1 (C1)

- 40mph or less - 450mm traffic cones.
- 50mph or more and motorways - 750mm traffic cones.

Notes:
 1) During darkness, regulation 55 lamps are to be provided at 9m centres, relaxation for 40mph or less - 18m.

NOTES

- 1 All traffic management equipment shall be provided by the Contractor, unless otherwise specified.
- 2 All signs shall be positioned so as not to be obscured by any other objects and shall not obstruct any other sign, permanent or temporary as much as is reasonably practicable.
- 3 The minimum lateral clearance between any area in which work is being carried out and that part of the carriageway available to traffic shall be 0.5m for roads with a speed limit of 40 mph or less and 1.2m for motorways and roads with a speed limit of 50 mph or more.
- 4 Access and egress from works areas shall be via the designated accesses and exits. At no time shall access or egress be obtained through the cone lines. Further constraints shall be as specified.
- 5 The location of datum positions shall be as specified.
- 6 The permitted use of given types of closure shall be as specified.
- 7 Constraints on the use of given types of closure shall be as specified.
- 8 See Traffic Signs Manual, Chapter 8 for the requirements for ramps, barriers and other items for pedestrian safety.
- 9 The lengths of tapers shown on the lane closure drawings are based on a basic lane width of 3.65m, rounded up to generally the nearest 5m. Where the actual lane width varies from this figure the following shall be used to calculate taper lengths:
 Single carriageway road (speed limit 30 mph or less) - Rate of Taper 1 in 13
- 10 See Traffic Signs Manual, Chapter 8, Table A1.2 for sign sizes.

-	First issue
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DRG TITLE

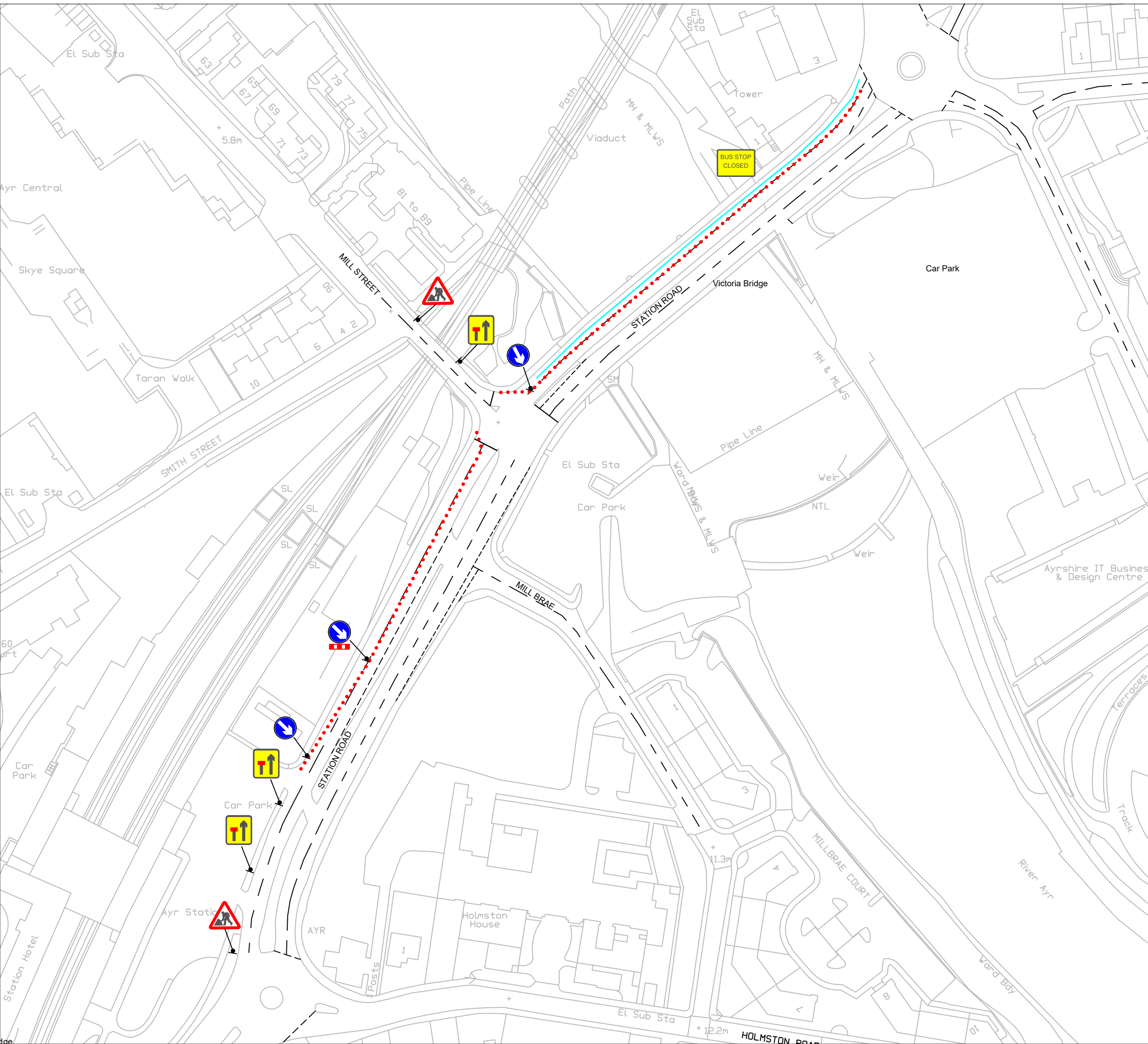
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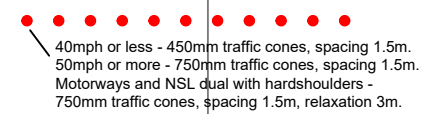
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CONTRACT NO

24259



DETAIL B (B)



Notes:
 1) During darkness, regulation 55 lamps should be provided at 9m centres, relaxation for 40mph or less - 18m.
 2) 45° tapers have 1.5m spacing, no relaxations.

DETAIL C1 (C1)



Notes:
 1) During darkness, regulation 55 lamps are to be provided at 9m centres, relaxation for 40mph or less - 18m.

NOTES

- All traffic management equipment shall be provided by the Contractor, unless otherwise specified.
- All signs shall be positioned so as not to be obscured by any other objects and shall not obstruct any other sign, permanent or temporary as much as is reasonably practicable.
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- Access and egress from works areas shall be via the designated accesses and exits. At no time shall access or egress be obtained through the cone lines. Further constraints shall be as specified.
- The location of datum positions shall be as specified.
- The permitted use of given types of closure shall be as specified.
- Constraints on the use of given types of closure shall be as specified.
- See Traffic Signs Manual, Chapter 8 for the requirements for ramps, barriers and other items for pedestrian safety.
- The lengths of tapers shown on the lane closure drawings are based on a basic lane width of 3.65m, rounded up to generally the nearest 5m. Where the actual lane width varies from this figure the following shall be used to calculate taper lengths:
 Single carriageway road (speed limit 30 mph or less) - Rate of Taper 1 in 13
- See Traffic Signs Manual, Chapter 8, Table A1.2 for sign sizes.

— First issue

REV DETAILS



PROJECT

A79 VIC

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CONTRACT NO

24259

Additional Information

- 1) Concrete repairs are in small patches and existing defective concrete will be broken out using hand held power tools, and the repair mortar applied by hand in a putty like consistency and trowel finished.
- 2) Following blast cleaning the new paint system will be applied in typically three coats, using airless spray guns.

The likely working hours will be 8am – 4pm Monday to Friday, with occasional weekend working if the works fall behind schedule.