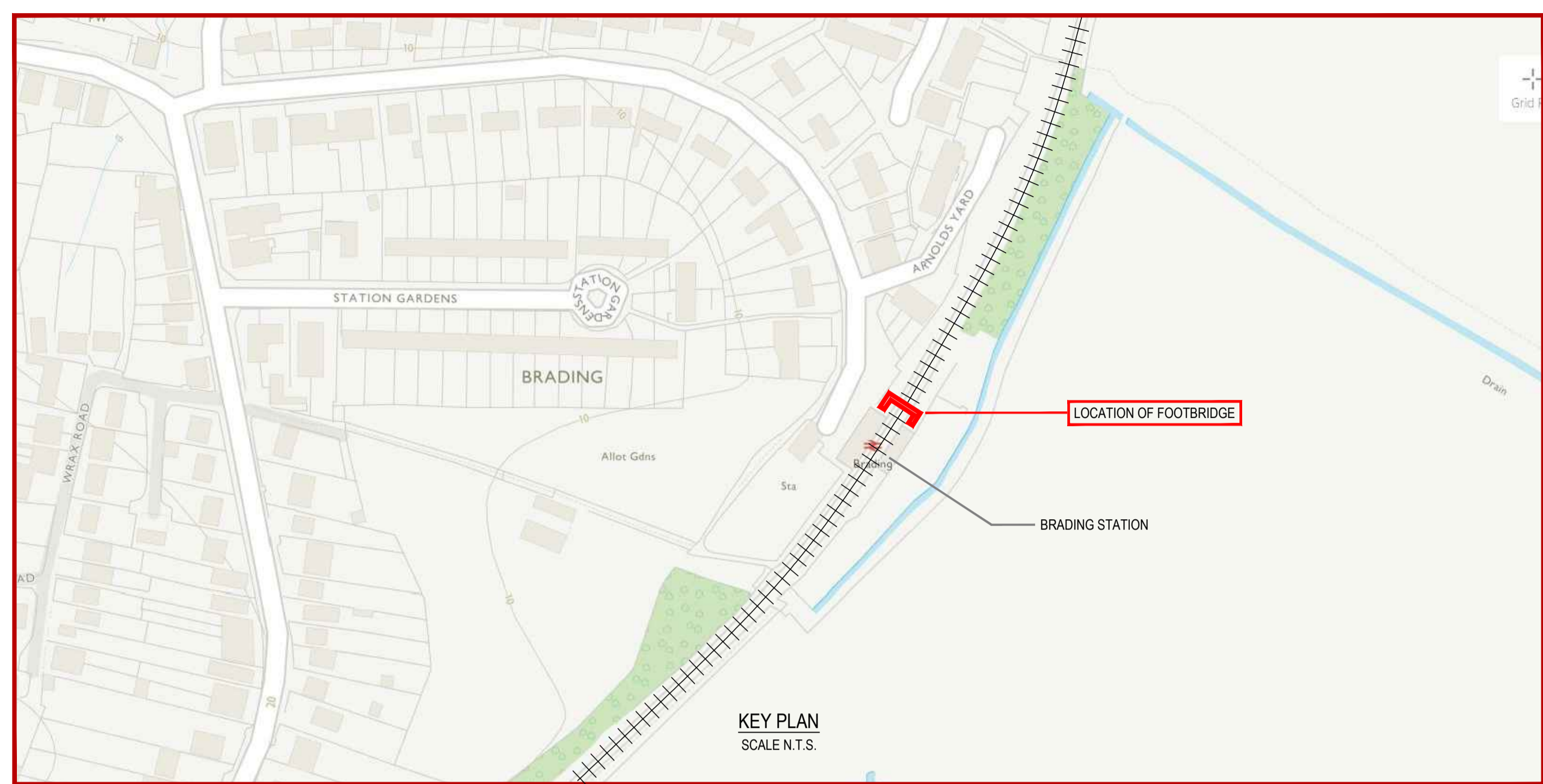




DRAWING NOTES

- THESE DRAWINGS TO BE READ IN CONJUNCTION WITH DRAWING 10755-001.

SAFETY HEALTH & ENVIRONMENTAL	
SIGNIFICANT DESIGNER IDENTIFIED HAZARDS	
REF	HAZARD
A	PROPOSED STRUCTURE DESIGNED IN ACCORDANCE WITH CURRENT STANDARDS AS FAR AS IS REASONABLY PRACTICABLE. APPROVAL AND RELEVANT DEROGATIONS TO BE SOUGHT AND APPROVED.
B	WORKING ADJACENT TO RAILWAY. WORK AT HEIGHT AND LIFTING OPERATIONS. WORKS ON OR NEAR THE LINE TO BE UNDERTAKEN IN ACCORDANCE WITH NETWORK RAIL WORK PROCEDURES.
C	DEMOLITION OF EXISTING STRUCTURE. CONTRACTOR TO DESIGN NECESSARY TEMPORARY WORKS AND DETERMINE SAFE DEMOLITION SEQUENCE & LIFTING PLAN FOR EXISTING STRUCTURE.
D	CONDITION OF EXISTING TRESTLES. ADDITIONAL STRENGTHENING/RENEWAL OF SUBSTRUCTURES TO BE IMPLEMENTED PRIOR TO INSTALLATION OF NEW MAIN SPAN.
E	CONDITION OF EXISTING FOUNDATIONS. ADDITIONAL STRENGTHENING/RENEWAL OF FOUNDATIONS TO BE IMPLEMENTED PRIOR TO INSTALLATION OF NEW MAIN SPAN.
F	EXISTING SERVICES. SERVICES TO BE IDENTIFIED, TRACED AND ISOLATED AND TEMPORARILY SUPPORTED PRIOR TO WORKS. SUITABLE PROTECTION MEASURES TO BE UNDERTAKEN BY CONTRACTOR PRIOR TO INSTALLATION.
G	EXISTING STAIRS AND LANDING PARAPETS TO BE TEMPORARILY SUPPORTED OR REMOVED DURING WORKS. SEE TEMPORARY WORKS SUBMISSION FOR DETAILS.
H	RAIL IMPACT LOADS DUE TO STRUCTURE CLEARANCE. RESIDUAL RISK
I	LIFTING POINTS DESIGNED FOR VERTICAL LOADS ONLY. LIFTING BEAMS TO BE UTILISED TO ENSURE VERTICAL LOADING APPLIED TO LIFTING POINTS DURING LIFTING PROCEDURES



KEY PLAN
SCALE N.T.S.

GENERAL NOTES

- DRAWINGS HAVE BEEN PRODUCED ON THE BASIS OF THE FOLLOWING :
 - SITE SURVEY UNDERTAKEN 18/01/2022 & 25/02/2022.
 - TOPOGRAPHICAL SURVEY PROVIDED BY NETWORK RAIL.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO ANY WORKS BEING PUT IN HAND.
- ANY DISCREPANCIES BETWEEN THE INFORMATION GIVEN ARE TO BE BROUGHT TO THE ATTENTION OF THE DESIGNER AS SOON AS POSSIBLE.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND RELEVANT STRUCTURAL SPECIFICATIONS.

PROPOSED WORKS

- THESE DRAWING ARE FOR FORM B - DETAILED DESIGN APPROVAL PURPOSES ONLY AND NOT FOR CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE / EXCAVATIONS AT ALL TIMES DURING THE WORKS.
- IF DURING THE WORKS THE CONTRACTOR IS CONCERNED ABOUT THE STABILITY OF THE STRUCTURE / EXCAVATIONS THEY SHOULD CEASE ACTIVITIES AND CONTACT THE DESIGNER.
- ALL MATERIALS USED IN THE WORKS SHALL BE TO EUROPEAN STANDARDS OR OTHER APPLICABLE SPECIFICATIONS.
- ALL WORK TO BE CARRIED OUT TO EUROPEAN CODES OF PRACTICE.
- ALL PROPRIETARY SYSTEMS TO BE IN ACCORDANCE WITH CURRENT APPROVED CODES OF PRACTICE.
- PROPRIETARY SYSTEMS TO BE INSTALLED, FIXED, USED AND REMOVED IN ACCORDANCE WITH MANUFACTURERS DETAILS, METHODS AND SPECIFICATIONS.
- ALL PROPRIETARY SYSTEMS SPECIFIED MAY BE SUBSTITUTED FOR EQUIVALENT APPROVED SYSTEMS IF REQUIRED.
- ALL BURIED, SURFACE AND OVERHEAD SERVICE INFORMATION DEPICTED IS SHOWN INDICATIVELY. THE SERVICES SHOWN MAY NOT REPRESENT THE ENTIRETY OF ALL SERVICES THAT MAY BE ENCOUNTERED. ALL SOURCE INFORMATION SHOULD BE REFERRED TO PRIOR TO UNDERTAKING WORKS ON SITE. FOUR-TEES ENGINEERS ACCEPT NO RESPONSIBILITY FOR OMISSIONS OR ERRORS IN THE POSITIONING OF THE SERVICES PRESENT ON SITE. REFER TO ALL RELATED ENGINEERING DRAWINGS. DOCUMENTATION AND SPECIFICATIONS FOR FURTHER INFORMATION. THE CONTRACTOR SHALL ENSURE THAT ALL SERVICES BOTH BURIED AND EXPOSED ARE FOUND AND IDENTIFIED PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- DESIGNER TO BE INFORMED IMMEDIATELY OF ANY UNEXPECTED SERVICES LOCATED.
- THE CONTRACTOR SHALL ENSURE THAT SUITABLE VEGETATION CLEARANCE HAS BEEN UNDERTAKEN PRIOR TO WORK ON SITE.

MATERIALS

STEELWORK

- ALL PROPOSED STEELWORK TO BE CE MARKED AND FABRICATED TO EXECUTION CLASS 2 (EXC2).
- THE WHOLE OF THE STRUCTURAL STEELWORK IS TO COMPLY WITH THE RELEVANT CLAUSES OF BS EN 10025, BS EN 10020 & BS EN 10027, BS EN 1090 AND THE NATIONAL STRUCTURAL STEELWORK SPECIFICATION (7TH EDITION)
- ALL MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 2 OF THE NSSS (7TH EDITION)
- STEELWORK GRADES ARE AS FOLLOWS:
 - HOLLOW SECTIONS TO BE GRADE S355 J2H IN ACCORDANCE WITH BS EN 10210 2006.
 - UB, UC, PFC, ANGLE SECTIONS AND PLATES TO BE GRADE S355 J2-N TO BS EN 10025:2004.
- WORKMANSHIP SHALL BE IN ACCORDANCE WITH SECTIONS 4 TO 9 OF THE NSSS (7TH EDITION) UNLESS NOTED OTHERWISE.

PROTECTIVE COATING

- PROPOSED STEELWORK TO BE BLAST CLEANED TO SA3 STANDARD IN ACCORDANCE WITH BS EN ISO 8501-1
- PROPOSED STEELWORK TO RECEIVE A N1 PAINT SYSTEM IN ACCORDANCE WITH NETWORK RAIL STANDARDS NR/GN/CIV/002 'USE OF PROTECTIVE TREATMENTS AND SEALANTS', NR/L3/CIV/039 AND NR/L3/CIV/040.
COLOUR: TBC BY DPE/PGMR.
- EXISTING STEELWORK TO BE BLAST CLEANED TO SA2.5 STANDARD IN ACCORDANCE WITH BS EN ISO 8501-1 AND RECEIVE A M24 PAINT SYSTEM IN ACCORDANCE WITH NETWORK RAIL STANDARDS NR/GN/CIV/002 'USE OF PROTECTIVE TREATMENTS AND SEALANTS', NR/L3/CIV/039 AND NR/L3/CIV/040.
COLOUR: TBC BY DPE/PGMR.
- STORAGE AND HANDLING PROCEDURES SHALL ENSURE THAT DAMAGE TO PROTECTIVE SYSTEM IS MINIMISED. ANY DAMAGE IS TO BE MADE GOOD ON SITE (INACCESSIBLE AREAS PRIOR TO ERECTION).
- AREAS OF TRESTLE AND ANCHOR HEADS SITUATED BELOW GROUND LEVEL TO BE PROVIDED WITH RIW TOUGHSEAL SITE APPLIED WATERPROOFING OR SIMILAR APPROVED. WATERPROOFING TO EXTEND 50mm ABOVE GROUND LEVEL. WATERPROOFING TO BE APPLIED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

BONDING

- LUGS TO BE WELDED TO STRUCTURE TO ENSURE ADEQUATE BONDING SYSTEM FOR ALL BONDING & EARTHING REQUIREMENTS. REFER ALSO TO NR/CIV/SD/TUM/400 CL8.4.
- ELECTRICAL CONTINUITY OF FOOTBRIDGE TO BE MAINTAINED.

WELDS

- ALL MAIN SPAN WELDS TO BE CONTINUOUS FILLET WELDS OF 8mm LEG LENGTH, UNLESS NOTED OTHERWISE, TO CLASS EXC 2 IN ACCORDANCE WITH BS EN 1090-2.
- ALL WELDS TO BE IN ACCORDANCE WITH B.S. EN 1011-1:2009 U.N.O.
- WELD CONSUMABLES SHOULD, AS A MINIMUM, HAVE A MATERIAL STRENGTH AND PROPERTIES OF PARENT MATERIAL.
- CARE TO BE TAKEN TO AVOID LOCKED IN STRESSES RESULTING FROM WELD SHRINKAGE ETC.
- THE WELDED SURFACE, AND AREAS AT LEAST 20mm AWAY, SHALL BE CLEANED FREE FROM DIRT, SCALE, GREASE, PAINT, HEAVY RUST OR OTHER SURFACE DEPOSITS.
- ALL RHS/SHS/CHS SECTIONS TO BE FULLY WELDED AND SEALED AGAINST INGRESS. END PLATES, WHERE REQUIRED, TO BE MIN 6mm THICK. HOLES FOR BOLT FIXINGS ETC. ARE NOT PERMITTED.
- STEELWORK SPLICES, WHERE REQUIRED, TO BE FORMED FROM FULL PENETRATION BUTT WELDS. SPLICE POSITIONS TO BE APPROVED BY DESIGNER.

BOLTS & ANCHORS

- ALL NEW STRUCTURAL STEELWORK BOLTS TO BE HR BOLTS CLASS 8.8, UNLESS NOTED OTHERWISE.
- CARE TO BE TAKEN TIGHTENING TRESTLE CLAMP PLATE, BASEPLATE AND HEADPLATE BOLTS TO ENSURE CAST IRON DOES NOT CRACK UNDER TIGHTENING OF BOLTS/ANCHORS.
- ANCHORS TO BE HILTI HIT-RE-500 V4 RESIN WITH M20 HILTI HAS-U A4 THREADED ROD INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION. MINIMUM EMBEDMENT DEPTH OF 250mm.
- MINIMUM EDGE DISTANCE FOR PROPOSED BOLTS TO BE 1.5x BOLT HOLE DIAMETER, i.e. 16.5mm FOR M10 BOLTS (11mm HOLE) AND 27mm FOR M16 (18mm HOLE).
- BEARING PLATE BOLTS TO BE M16 GRADE HR BOLTS WITH CORRESPONDING NUT AS PER THE NSSS 7TH EDITION. NYLOC NUTS TO BE USED ON MAIN SPAN BEARING PLATE BOLTS.
- MAIN SPAN TO STANCHION BEARING PLATE BOLTS NOT TO BE PRELOADED.
- DESIGNER TO BE INFORMED IMMEDIATELY IF CRACKING LOCATED DURING INSPECTION/REFURBISHMENT
- ANY GAPS OR POOR FITTING CONNECTIONS ARE TO BE PACKED OR SHIMMED USING STEEL PLATES.
- ANY UNDULATIONS IN CAST IRON BEARING PLATES TO BE TAKEN OUT BY PROVIDING LAYER OF DEVCON PLASTIC STEEL PUTTY A. TO BE APPLIED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS

CONCRETE

- CONCRETE MIXES IN ACCORDANCE WITH BS 8800-2 & BS EN 206-1:
 - FOUNDATION :- C40/50
 - BLINDING :- ST2
- COVER TO REINFORCEMENT TO BE MIN 65mm UNLESS NOTED OTHERWISE.
- CONCRETE TO BE CURED BY APPROVED METHOD FOR A MINIMUM OF 7 DAYS. FOR GUIDANCE REFER TO 'CONCRETE ADVICE DOCUMENT No. 20' BY 'THE CONCRETE SOCIETY'
- CARE IS TO BE TAKEN TO PROTECT CONCRETE FROM ADVERSE WEATHER. FOR GUIDANCE REFER TO 'CONCRETE ADVICE DOCUMENT No. 20' BY 'THE CONCRETE SOCIETY'.
- SAMPLING AND TESTING OF CONCRETE IS TO BE CARRIED OUT IN ACCORDANCE WITH BS EN 12350-1 & 2. FOR GUIDANCE REFER TO 'CONCRETE ADVICE DOCUMENT No. 30' BY 'THE CONCRETE SOCIETY'.
 - FIVE CUBES SHALL BE CAST FOR EACH MAIN ELEMENT
 - 2 TO BE CRUSHED AT 7 DAYS, 2 TO BE CRUSHED AT 28 DAYS & 1 SPARE
- ALL BURIED CONCRETE FACES TO RECEIVE 2 No. COATS OF BITUMASTIC PAINT OR EQUIVALENT APPROVED.

REINFORCEMENT

- REINFORCEMENT IS TO BE CUT AND BENT IN ACCORDANCE WITH BS 8666.
- REINFORCEMENT IS TO BE TYPE H - GRADE 500 IN ACCORDANCE WITH BS 4449.

GROUT

- BASEPLATE GROUT TO BE WEBER FIVE STAR GROUT SP OR SIMILAR APPROVED.
- CONCRETE REPAIR GROUT TO BE SIKA MONOTOP REPAIR SYSTEM OR SIMILAR APPROVED.

HANDRAILS

- HANDRAIL DETAILS SPECIFIED BY OTHERS. SUBJECT TO SEPARATE M&E SUBMISSION.

PARAPET INFILL PANELS


- PARAPET INFILL PANELS TO BE 25 x 25 x 3mm THICK WIRE MESH. MESH TO BE GALVANISED IN ACCORDANCE WITH BS EN ISO 1461, BS EN 14713 AND NR/L3/CIV/040 PROVIDING A NOMINAL COATING WEIGHT 1000g/m² (140µm).
- MESH TO BE FIXED USING SUITABLE CLAMPS AT APPROX 275mm CENTRES. LATTICE MEMBERS AND HOLLOW SECTIONS NOT TO BE DRILLED FOR MESH FIXINGS.
- MAXIMUM HOLE APERTURE TO BE 25mm.
- PARAPET PANELS TO BE FIXED WITH TAMPER RESISTANT FITTINGS.
- THE WHOLE PEDESTRIAN RESTRAINT SYSTEM SHALL BE FREE FROM BURRS AND SHARP EDGES.
- METAL-TO-METAL CONTACT BETWEEN DISSIMILAR METALS SHALL BE AVOIDED BY THE USE OF NON-METALLIC SLEEVES, WASHERS OR COATINGS.

SURFACING


- FOOTBRIDGE MAIN SPAN TO HAVE SOLID TOP FRP GRATING WITH NON-SLIP SURFACE. FRP PACKERS MAY BE USED AT EACH CROSS MEMBER LOCATION TO PROVIDE REQUIRED 25mm DEPTH WITH THINNER FRP GRATING.
- LANDING TO BE PROVIDED WITH VULCAGRIP C16 NON-SLIP SHEETING OR SIMILAR APPROVED NONE-SLIP FINISH.
- SPLICE SURFACES TO BE MADE GOOD TO FORM UNIFORM AND WATERPROOF JOINT.
- COMPOSITE SECTIONS TO BE MODIFIED, INSTALLED, FIXED, MAINTAINED AND REMOVED IN ACCORDANCE WITH MANUFACTURERS GUIDANCE.
- COLOUR CONTRASTING NOSING TO BE MINIMUM OF 50mm WITH TOP AND BOTTOM NOSINGS OF EACH FLIGHT YELLOW AND INTERMEDIATE STEP NOSINGS TO BE WHITE.
- SURFACING TO ACHIEVE MINIMUM SLIP RESISTANCE VALUE OF 55 MEASURED IN THE DRY AND WET FOR 4S GRADE RUBBER IN ACCORDANCE WITH BS EN 13036-4.
- REPLACEMENT STAIR TREADS AND LANDING TIMBERS TO BE MINIMUM 'DURABLE' D40 TIMBER WITH SERVICE LIFE OF AT LEAST 15 YEARS. NO SAPWOOD TO BE INCLUDED IN TIMBERS.
- TIMBER TREADS TO INCORPORATE NON-SLP NOSING AND 3no. NON SLIP RESIN BONDED AGGREGATE STRIPS.
- MAIN SPAN TREADS TO BE SET ON CONTINUOUS FLEXIBLE SEALANT AROUND PERIMETER. ONCE TREAD AND RISER INSTALLED FULL TOP PERIMETER TO TREAD TO BE PROVIDED WITH FLEXIBLE SEALANT TO PROVIDE WATERPROOF JOINT.
- ALL CUT FRP EDGES SHALL BE TREATED WITH MANUFACTURER APPROVED CLEAR ACRYLIC LACQUER.
- TACTILES TO BE VIZTEK CORDUROY SURFACE MOUNTED TACTILE OR SIMILAR APPROVED. TO BE MOUNTED TO FRP DECK IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION. TACTILES TO BE COLOUR CONTRASTED WITH SURROUNDING AREA.

FORM B

REV	AMENDMENT	DRN	CHK	APP	DATE
C	FORM B (3) ISSUE	NR	BTB	BTB	22.02.23
B	FORM B (2) ISSUE	NR	SC	BTB	15.12.22
A	FORM B (1) ISSUE	NR	SC	BTB	18.03.22



CLIENT



PROJECT TITLE

BRADING STATION FOOTBRIDGE
ELR - IOW
STRUCTURE No. EW1/25
MILEAGE - 4m 1166yds

DRAWING TITLE

NOTES AND KEY PLAN

DRAWN	CHK	APP	DATE	SCALE
NR	SC	BTB	FEB 22	AS SHOWN AT A1
JOB NUMBER	DRAWING NUMBER	REVISION		
10755	001	C		