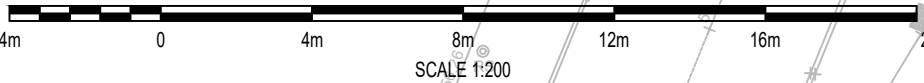
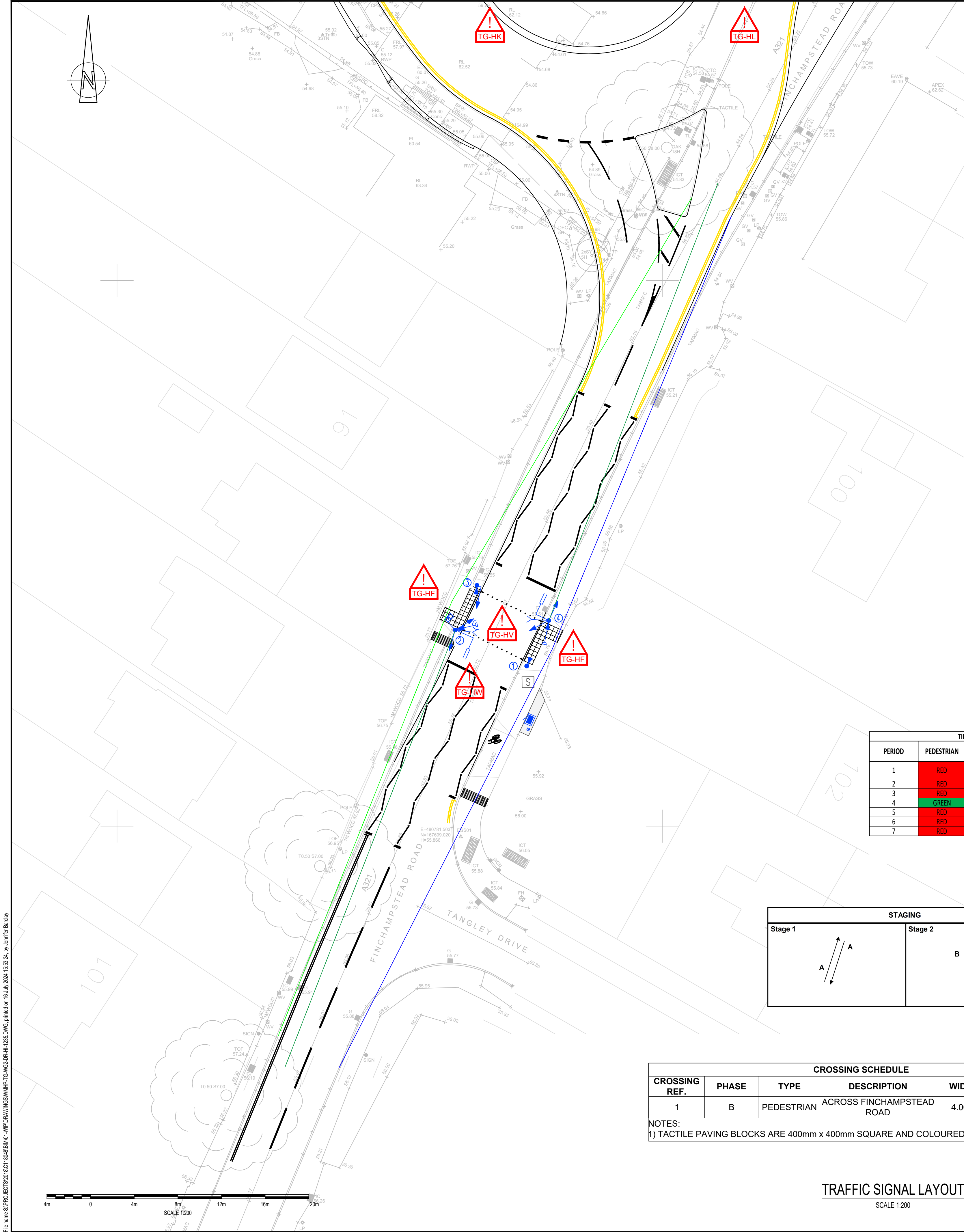


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TRAFFIC SIGNAL LAYOUT
SCALE 1:200

TRAFFIC SIGNAL NOTES

- THE SITE IS A NEW ELV NEARSIDE PEDESTRIAN CROSSING RUNNING VA. ON-CROSSING DETECTION IS UTILISED BUT KERBSIDE DETECTION IS NOT.
- BECAUSE THE WESTERN FOOTWAY IS SO NARROW POLES 2 AND 3 HAVE TO BE SET TO THE BACK OF THE FOOTWAY.
- THE NEARSIDE SECONDARY HEAD ON POLE 3 IS ALIGNED FOR TRAFFIC EMERGING FROM TANGLEY DRIVE.
- NEARSIDE PEDESTRIAN SIGNALS AND PUSHBUTTONS WITH COMBINED PUSHBUTTON AND AUDIBLE AND TACTILE DEVICES ARE UTILISED. AUDIBLE DEVICES SHALL BE TIMETABLED NOT TO OPERATE OVERNIGHT.
- ALL TRAFFIC SIGNAL HEADS SHALL BE INSTALLED WITH 2.3M CLEARANCE TO THE UNDERSIDE.
- ALL SECONDARY HEADS SHALL BE FITTED WITH PRIMARY HOODS.
- ON-CROSSING DETECTORS SHALL BE AGD326 OR AGREED EQUIVALENT. WHERE NECESSARY PEDESTRIAN DETECTION SHALL BE INSTALLED ON EXTENDED BRACKETS TO ENSURE CLEAR VISIBILITY OF THE REQUIRED DETECTION AREA.
- ALL SIGNAL HEADS, NEARSIDE SIGNALS AND PUSHBUTTONS SHALL BE LED.
- NO SIGNAL EQUIPMENT SHALL BE INSTALLED WITH LESS THAN 450mm CLEARANCE FROM THE KERBFACE.
- THE CONTROLLER CABINET SHALL BE A LARGE FORM CASE WITH A NAL 'CABINET STYLE' BASE APPROPRIATE FOR THE CONTROLLER TYPE.
- LABELLING:
 - THE CONTROLLER CABINET SHALL BE LABELLED WITH THE SITE REFERENCE USING BLACK LETTERS OF 75MM X-HEIGHT IMPRINTED ON A WHITE BACKGROUND AND WITH A BS7671 ELECTRICITY HAZARD WARNING SYMBOL BELOW.
 - THE POWER PILLAR SHALL BE LABELLED WITH THE SITE REFERENCE USING BLACK LETTERS OF 75MM X-HEIGHT IMPRINTED ON A WHITE BACKGROUND AND WITH A BS7671 ELECTRICITY HAZARD WARNING SYMBOL BELOW. AND
 - ALL POLES TO HAVE POLE NUMBERS WHICH SHALL BE FIXED BEFORE THE SITE ACCEPTANCE TESTING (SAT).
- EACH POLE SHALL BE SEPARATELY CABLED FROM THE CONTROLLER.
- ALL POLES SHALL BE MID-ACCESS FITTED WITH A STANDARD MATCHING COLOUR VENTED POLE CAP. SHORT POLES SHALL HAVE WELDED POLE CAPS. ALL POLES SHALL NOT BE PRE-DRILLED FOR PUSHBUTTONS AND SHALL NOT HAVE CABLE ENTRY SLOTS.
- POLE 4 SHALL BE INSTALLED TWISTED BY 45 DEGREES TO CORRECT CLEARANCE OF SIGNAL HEADS FROM EDGE OF CARRIAGEWAY.
- EACH POLE SHALL BE SEPARATELY CABLED FROM THE CONTROLLER.
- POLES, CONTROLLER, CONTROLLER NAL BASE AND POWER PILLAR SHALL BE FINISHED BLACK.
- A 4G STRATOS UNIT SHALL BE SUPPLIED, INSTALLED AND CONFIGURED TO THE READING BOROUGH COUNCIL (RBC) CLOUD-BASED SYSTEM. A STRATOS 4G AERIAL SHALL BE FIXED TO THE OUTSIDE OF THE CONTROLLER CASE AND BLACK IN COLOUR. SIM CARD SHALL BE FREE ISSUED BY THE LOCAL AUTHORITY.
- THE LOCATION OF THE CONTROLLER, POWER PILLAR AND ALL POLES AND THE ALIGNMENT OF SIGNAL HEADS AND NEARSIDE TOUCAN SIGNALS AND PUSHBUTTONS SHALL BE AGREED ON SITE WITH THE LOCAL AUTHORITY TRAFFIC SIGNAL ENGINEER.
- DNO SUPPLY ARRANGEMENT TO BE AGREED/ARRANGED BY CONTRACTOR.
- ALL WORKS SHALL COMPLY WITH THE APPENDIX 12/5 WORKS SPECIFICATION AND ALL OTHER RELEVANT ENGINEERING DETAILS AND DRAWINGS. THE SCHEME SHALL BE CARRIED OUT IN ACCORDANCE WITH THE DMRB CODE OF PRACTICE.

POLE SCHEDULE										
POLE REF	POLE TYPE	HEAD REFERENCE	TRAFFIC SIGNAL HEADS		PEDESTRIAN EQUIPMENT		DETECTION		SETTING OUT	
			HEAD TYPE	PRIMARY HEAD WITH PRIMARY HOODS	NEARSIDE PEDESTRIAN SIGNAL	NEARSIDE PUSHBUTTON	ON-CROSSING DETECTOR	MVD	CLEARANCE STOPLINE TO STUDS	CLEARANCE POLE FROM KERB FACE
1	S	-	-	-	-	YES	-	-	-	0.50m
2	4m	1	RAG+	YES	YES (NFV)	-	YES	YES	3.00m	0.50m
3	4m	1	RAG+	YES	-	YES	-	-	0.50m	-
4	4m	1	RAG+	YES	YES	-	YES	YES	3.00m	0.50m
		2	RAG+	YES	-	-	-	-	0.60m	-

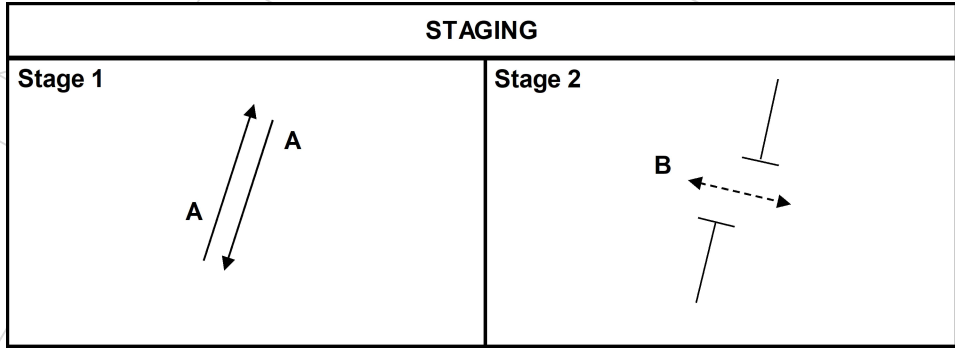
KEY:
A) PE = PHOTO ELECTRIC CELL;
B) 4m = 4m (NOMINAL) STRAIGHT POLE;
C) NFV = NARROW FIELD OF VIEW;

D) S = SHORT POLE (2.4m); AND
E) + = 2.3m CLEARANCE TO THE UNDERSIDE OF THE HEAD

SIGNIFICANT RESIDUAL HAZARDS

RESIDUAL HAZARD	STAGE	SUGGESTED CONTROL MEASURE
STRIKING UNDERGROUND SERVICES	C	HAND DIGGING AND CAT SCANNING TECHNIQUES SHALL BE UNDERTAKEN TO LOCATE SERVICES/UTILITIES. MARK UP ON SITE IF REQUIRED. NO WORKS TO BE UNDERTAKEN WITHOUT A VALID PERMIT TO DIG.
ELECTROCUTION OF OPERATIVES - LARGE PLANT OR INFRASTRUCTURE STRIKING OVERHEAD CABLES (WHICH EXTENDS ACROSS AND ALONG MOLLY MILLARS LANE BEFORE CROSSING FINCHAMPSTEAD ROAD (NORTH OF THE ROUNDABOUT))	C	ALL WORKERS WORKING IN THE VICINITY ARE TO BE AWARE OF THE LOCATION OF OVERHEAD CABLES AND THE ELECTRICITY PYLON AT ALL TIMES DURING THE WORKS. ENSURE THAT THE PROCEDURES SET OUT IN GUIDANCE NOTE G56 ARE CARRIED OUT AND A SAFE SYSTEM OF WORK IS IN PLACE.
PLANT/EQUIPMENT STRIKING THE RESTRICTED HEIGHT RAIL OVERBRIDGE ON FINCHAMPSTEAD ROAD (NORTH OF THE ROUNDABOUT) -126" (3.8M) AT CENTRE: 99" (3.0M) ABOVE NORTHBOUND LANE (DUE TO ARCH)	C	DUE CONSIDERATION SHOULD BE MADE TO ACCESS AND EGRESS FOR LARGE PLANT ENTERING OR LEAVING THE SITE. ROBUST PLANNING WITH REGARDS TO TM AND TRAFFIC DIVERSIONS TO BE PUT IN PLACE TO MANAGE SITE TRAFFIC. APPROPRIATE SIGNAGE SHOULD REMAIN OR TEMPORARY SIGNS ERECTED IN THEIR PLACE AT ALL TIMES IN ACCORDANCE WITH TSM CHAPTER 8.
DANGER TO NMUS IN CASE OF SIGNAL HEAD FAILURE	C	NEARSIDE AND FARSIDE SECONDARY SIGNAL HEADS ARE PROVIDED IN ORDER TO IMPROVE OVERALL VISIBILITY TO SIGNAL HEADS AS WELL AS PROVIDING BACK UP SHOULD A SIGNAL HEAD FAIL.
RISK OF ROAD USERS MISINTERPRETING THE SIGNALISED CROSSING ON FINCHAMPSTEAD ROAD DUE TO ITS CLOSE PROXIMITY TO THE ROUNDABOUT, BELIEVING THAT THEY HAVE CLEAR ACCESS ONTO THE ROUNDABOUT, RESULTING IN COLLISION WITH VEHICLES CIRCULATING THE ROUNDABOUT	C	THE RISK IS CONSIDERED NEGLIGIBLE AS MOST ROAD USERS WILL BE FAMILIAR WITH THE ARRANGEMENT. FURTHERMORE, GIVE WAY LINE MARKINGS ARE PROVIDED ON THE APPROACH TO THE ROUNDABOUT TO INFORM ROAD USERS THAT THEY MUST GIVE WAY TO VEHICLES ON THE CIRCULATORY. THE LOCATION OF THE CROSSING FACILITIES TO SUIT AN EXISTING PEDESTRIAN DESIRE LINE THEREFORE IMPROVE PEDESTRIAN SAFETY.
NOTE: The above hazards do not include every hazard or assumption, but identify significant residual construction hazards that are not likely to be obvious to a competent contractor and those that could be difficult to manage effectively. Refer also to the designer's risk documentation.		

TIMINGS			
PERIOD	PEDESTRIAN	TRAFFIC	TIME (SECONDS)
1	RED	GREEN	MAX 30, MIN 7
2	RED	AMBER	3
3	RED	RED	1 GAP, 3 MAX
4	GREEN	RED	5
5	RED	RED	3
6	RED	RED	6
7	RED	RED + AMBER	2

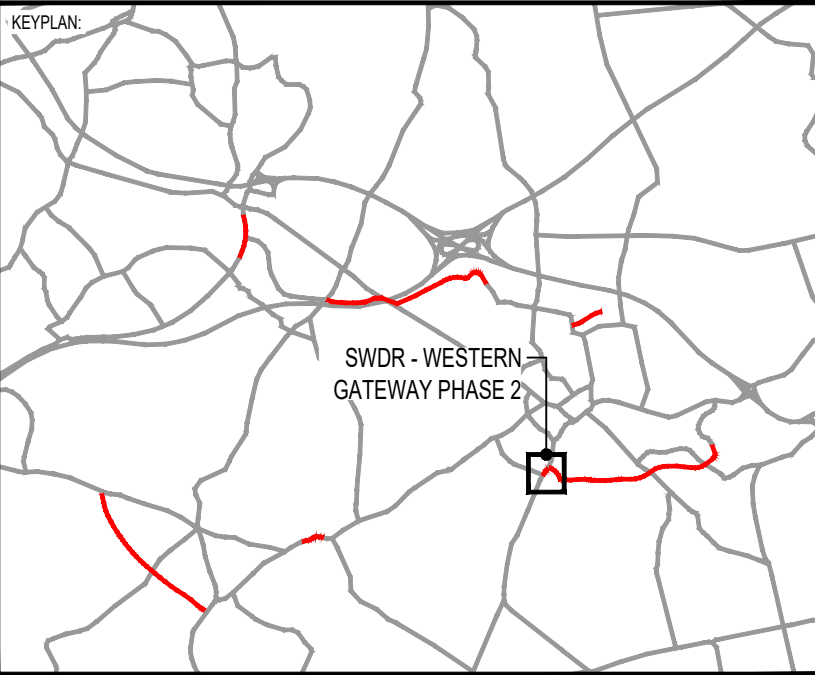


CROSSING SCHEDULE					
CROSSING REF.	PHASE	TYPE	DESCRIPTION	WIDTH	NUMBER TACTILE PAVING BLOCKS
1	B	PEDESTRIAN	ACROSS FINCHAMPSTEAD ROAD	4.00m	10

NOTES:
1) TACTILE PAVING BLOCKS ARE 400mm x 400mm SQUARE AND COLOURED RED.

DO NOT SCALE

- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
 - ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.
 - THIS DRAWING SHALL ONLY BE USED FOR THE DESIGN ELEMENT STATED IN THE DRAWING TITLE.
 - FOR DETAILS OF HIGH FRICTION SURFACING REFER TO 700 SERIES.
 - FOR DETAILS OF TACTILE PAVING REFER TO 1100 SERIES.
 - DRAWING TO BE READ IN CONJUNCTION WITH DRAWINGS
WMHP-TG-WG2-DR-HI-1201,
WMHP-TG-WG2-DR-HI-1211,
WMHP-TG-WG2-DR-HI-1221,
AND SPECIFICATION
WMHP-TG-WG2-SP-HI-1201.
- LEGEND
- PRIMARY RAG SIGNAL HEAD
 - 4m POLE STRAIGHT
 - SHORT POLE (2.0m)
 - TRAFFIC SIGNAL POLE NUMBERING
 - MVD (STANDARD BEAM)
 - ON-CROSSING DETECTOR
 - NEARSIDE PEDESTRIAN SIGNAL WITH COMBINED PUSHBUTTON AND AUDIBLE AND TACTILE DEVICES
 - NEARSIDE PEDESTRIAN SIGNAL, NARROW FIELD OF VIEW, WITH COMBINED PUSHBUTTON AND AUDIBLE AND TACTILE DEVICES
 - NEARSIDE PUSHBUTTON WITH AUDIBLE AND TACTILE DEVICES
 - PHOTO ELECTRIC CELL
 - TRAFFIC SIGNAL CONTROLLER ON NAL BASE
 - PROPOSED POWER PILLAR
 - HARDSTANDING
 - PEDESTRIAN VISIBILITY AT APPROACH TO CROSSING - DESIRABLE MINIMUM X DISTANCE = 2 m, Y DISTANCE = 43 m SSD ACCORDING TO MFS, AS REQUIRED BY CD 143
 - PEDESTRIAN VISIBILITY AT APPROACH TO CROSSING - ABSOLUTE MINIMUM X DISTANCE = 1.5 m, Y DISTANCE = 43 m SSD ACCORDING TO MFS, AS REQUIRED BY CD 143
 - PRIMARY SIGNAL HEAD VISIBILITY AT APPROACH TO CROSSING - DISTANCE = 43 m SSD ACCORDING TO MFS, AS REQUIRED BY CD 123



P05	16/07/2024	JB	UPDATED FOR PLANNING CONDITION DISCHARGE	DJF	JC
P04	02/06/2022	HD	MATTERS OUTSTANDING WMHP-TG-WG2-RG-DM-0002	BH	JC
P03	27/10/2021	AMG	CONTROLLER RELOCATED / HARDSTANDING WIDTH REDUCED BH	JC	
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: **SUITABLE FOR EXAMINATION** **S8**

DESIGNER: **Tony Gee and Partners LLP**
Hardy House
140 High Street
Esher, Surrey
KT10 9QJ
Tel: 01372 461600
www.tonygee.com
Consulting Civil, Structural and Geotechnical Engineers

CONTRACTOR: **Balfour Beatty**

CLIENT: **WOKINGHAM BOROUGH COUNCIL**
Shute End, Wokingham, Berkshire RG40 1BN
Tel: (0118) 974 6000 Web: www.wokingham.gov.uk

PROJECT: **WOKINGHAM MAJOR HIGHWAYS PROGRAMME**
SWDR WESTERN GATEWAY PHASE 2

TITLE: **ROUNDABOUT ENHANCEMENT**
FINCHAMPSTEAD ROAD PEDESTRIAN CROSSING 1
SIGNALS LAYOUT

SCALE @ A1: 1:250	CHECKED: PR	APPROVED: IR
PROJECT NO: C118048	DESIGNED: IR	DRAWN: ANT
DRAWING No: WMHP-TG-WG2-DR-HI-1235	DATE: July 21	REV: P05