

TRAFFIC SIGNAL NOTES

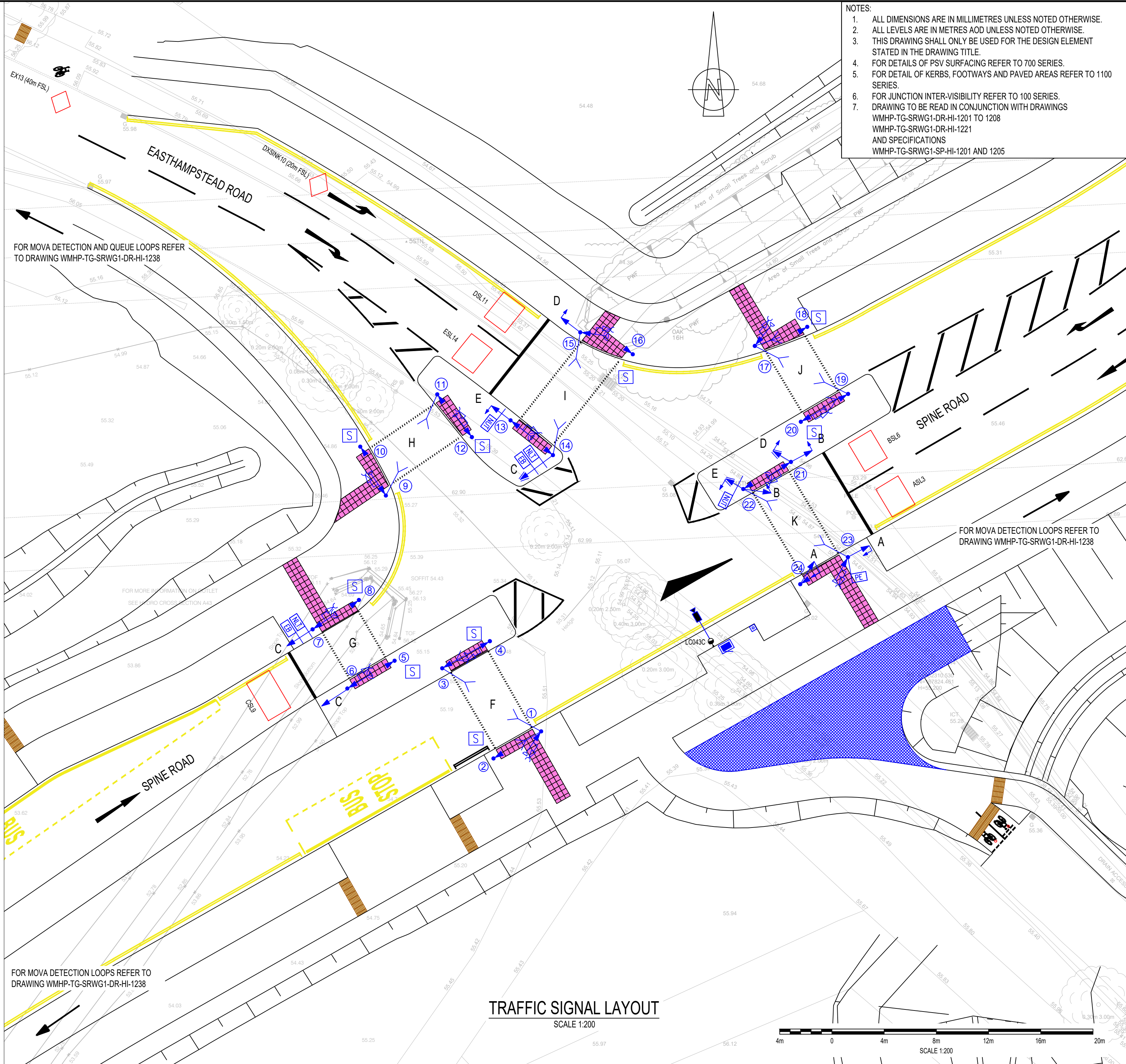
- THE SITE IS A NEW ELV TRAFFIC SIGNAL JUNCTION RUNNING MOVA WITH VA FALLBACK AND REMOTE MONITORING.
- VA USES STOPLINE LOOPS AND X DETECTION.
- NEARSIDE TOUCAN SIGNALS AND PUSHBUTTONS WITH COMBINED PUSHBUTTON AND TACTILE DEVICES ARE UTILISED. AUDIBLE DEVICES ARE NOT UTILISED.
- ON-CROSSING AND KERBSIDE DETECTION IS UTILISED. ON-CROSSING DETECTORS SHALL BE AGD326 OR AGREED EQUIVALENT. KERBSIDE DETECTION IS ONLY UTILISED WHERE THE ASSOCIATED TOUCAN PHASE DOES NOT RUN IN PARALLEL WITH TRAFFIC (PHASES F AND J). 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).
- POLES:
 - SHORT POLES (1.8m) SHALL HAVE WELDED POLE CAPS AND SHALL NOT HAVE CABLE ENTRY SLOTS; AND
 - 4m (NOMINAL) POLES SHALL BE MID-ACCESS FITTED WITH A STANDARD MATCHING COLOUR VENTED POLE CAP. POLES SHALL NOT BE PRE-DRILLED FOR PUSHBUTTONS AND SHALL NOT HAVE CABLE ENTRY SLOTS.
- WHERE INDICATED IN THE POLE SCHEDULE, TRAFFIC SIGNAL HEADS ADJACENT TO FOOTWAYS/CYCLEWAYS USED BY CYCLISTS SHALL BE INSTALLED WITH 2.3m CLEARANCE TO THE UNDERSIDE.
- EACH POLE SHALL BE SEPARATELY CABLED FROM THE CONTROLLER EXCEPT SHORT POLES WHICH MAY BE CABLED FROM AN ADJACENT FULL HEIGHT POLE.
- POLES, CONTROLLER, CONTROLLER NAL BASE AND POWER PILLAR SHALL BE FINISHED BLACK.
- BLOCKING BACK FROM THE LEVEL CROSSING ON EASTHAMPSTEAD ROAD:
 - THERE IS A POTENTIAL RISK THAT WHEN THE LEVEL CROSSING ON EASTHAMPSTEAD ROAD IS CLOSED FOR A LONG PERIOD TRAFFIC TURNING RIGHT OFF THE SPINE ROAD TRYING TO TRAVEL NORTH ON EASTHAMPSTEAD ROAD WILL QUEUE BACK AND POTENTIALLY BLOCK THE SPINE ROAD;
 - BECAUSE OUTPUTS FROM THE LEVEL CROSSING BARRIER ARE NOT AVAILABLE, QUEUE DETECTION DETERMINES WHEN QUEUING IS OCCURRING; AND
 - WHEN A QUEUE IS DETECTED MOVA CONTROL SHALL BE DROPPED AND THE CONTROLLER SHALL RUN VA WITH STAGE 2 INHIBITED TO PREVENT QUEUES OBSTRUCTING THE SPINE ROAD.
- A 4G STRATOS UNIT SHALL BE SUPPLIED, INSTALLED AND CONFIGURED TO THE WOKINGHAM BOROUGH COUNCIL (WBC) CLOUD-BASED SYSTEM. A BLACK STRATOS 4G AERIAL SHALL BE FIXED TO THE OUTSIDE OF THE CONTROLLER CASE. SIM CARDS SHALL BE FREE ISSUED BY THE LOCAL AUTHORITY.
- CCTV WITH RADIO COMMUNICATIONS TO BE INSTALLED ON A LIGHTING COLUMN BY OTHER WITH A FUSED SUPPLY IN THE LIGHTING COLUMN BASE AND A COMMANDO SOCKET 6.5M ABOVE GROUND LEVEL. THERE IS NO CONNECTION BETWEEN CCTV AND THE SIGNALS EQUIPMENT.
- THE LOCATION OF THE CONTROLLER, POWER PILLAR AND ALL POLES AND LOOPS TOGETHER WITH 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 1215 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	TRAFFIC SIGNAL HEADS				TOUCAN EQUIPMENT		DETECTION		SETTING OUT			COMMENTS
		HEAD REFERENCE	HEAD TYPE	PRIMARY HEAD + PRIMARY HOOD	SECONDARY HEAD + SECONDARY HOOD	NEARSIDE TOUCAN SIGNAL	NEARSIDE PUSHBUTTON	ON-CROSSING DETECTOR	KERBSIDE DETECTOR	CLEARANCE STOPLINE TO STUDS	CLEARANCE POLE FROM STUDS	CLEARANCE POLE FROM KERB FACE	
1	4m	-	-	-	-	YES	-	YES	YES	-	0.50m	0.60m	
2	S	-	-	-	-	-	YES	-	-	-	0.50m	0.60m	
3	4m	-	-	-	-	-	YES	YES	YES	-	0.50m	0.60m	
4	4m	-	-	-	-	YES	-	-	-	-	0.50m	0.60m	
5	S	-	-	-	-	-	YES	-	-	-	0.50m	0.60m	
6	4m	1	RAG+	YES	-	YES ^A	-	-	-	3.00m	0.50m	0.60m	POLE TWISTED BY 45 DEGREES
7	4m	1	RAG AND NLT AND EB+	YES	-	YES ^A	-	-	-	3.00m	0.50m	0.60m	NLT ROUNDEL MOUNTED TO THE LEFT OF THE GREEN ASPECT AND EB TO THE LEFT OF THE AMBER ASPECT. POLE TWISTED BY 45 DEGREES
8	S	-	-	-	-	-	YES	-	-	-	0.50m	0.60m	
9	4m	-	-	-	-	YES	-	YES	-	-	0.50m	0.60m	
10	S	-	-	-	-	-	YES	-	-	-	0.50m	0.60m	
11	4m	-	-	-	-	-	YES	YES	-	-	0.50m	0.60m	
12	S	-	-	-	-	YES	-	-	-	-	0.50m	0.60m	
13	4m	1	RAG/A (RIGHT) AND NUT+	YES	-	YES ^A	-	-	-	3.00m	0.50m	0.60m	POLE TWISTED BY 45 DEGREES. NUT ROUNDEL MOUNTED TO THE RIGHT OF THE GREEN ARROW ASPECT
14	4m	1	RAG AND NLT AND EB+	-	YES	-	YES	YES	-	-	0.50m	0.60m	NLT ROUNDEL MOUNTED TO THE LEFT OF THE GREEN ASPECT AND EB TO THE LEFT OF THE AMBER ASPECT
15	4m	1	RAG/A (LEFT)+	YES	-	YES ^A	-	YES	-	3.00m	0.50m	0.60m	POLE TWISTED BY 45 DEGREES
16	S	-	-	-	-	-	YES	-	-	-	0.50m	0.60m	
17	4m	-	-	-	-	YES	-	YES	YES	-	0.50m	0.60m	
18	S	-	-	-	-	-	YES	-	-	-	0.50m	0.60m	
19	4m	-	-	-	-	-	YES	YES	YES	-	0.50m	0.60m	
20	S	-	-	-	-	YES	-	-	-	-	0.50m	0.60m	
21	4m	1	RAG/A (RIGHT)+	YES	-	YES ^A	-	-	-	3.00m	0.50m	0.60m	POLE TWISTED BY 45 DEGREES
		2	RAG/A (LEFT)+	-	YES	-	-	-	-	-	-	-	
22	4m	1	RAG/A (RIGHT)+	YES	-	-	YES	YES	-	-	0.50m	0.60m	POLE TWISTED BY 45 DEGREES
		2	RAG/A (RIGHT) AND NUT+	-	YES	-	-	-	-	-	-	-	
23	4m	1	RAG/A (AHEAD)+	YES	-	YES	-	YES	-	3.00m	0.50m	0.60m	POLE TWISTED BY 45 DEGREES. PE ON THIS POLE
24	4m	1	RAG/A (AHEAD)+	YES	-	-	YES	-	-	-	0.50m	0.60m	POLE TWISTED BY 45 DEGREES

KEY:
A) PE = PHOTO ELECTRIC CELL;
B) 4m = 4m (NOMINAL) STRAIGHT POLE;
C) S = SHORT POLE FOR PUSHBUTTON;
D) EB = EXCEPT BUSES ROUNDEL;

E) NUT = NO-U-TURN ROUNDEL;
F) NLT = NO-LEFT-TURN ROUNDEL;
G) + = 2.3m CLEARANCE TO THE UNDERSIDE OF THE HEAD; AND
H) + = NARROW FIELD OF VIEW



CROSSING SCHEDULE

Crossing Ref.	PHASE	TYPE	DESCRIPTION	WIDTH	NUMBER TACTILE PAVING BLOCKS
1	F	TOUCAN	ACROSS SPINE ROAD WESTBOUND EXIT	3.20m	8
2	G	TOUCAN	ACROSS SPINE ROAD EASTBOUND ENTRY	3.20m	8
3	H	TOUCAN	ACROSS EASTHAMPSTEAD ROAD EXIT	3.20m	8
4	I	TOUCAN	ACROSS EASTHAMPSTEAD ROAD ENTRY	3.20m	8
5	J	TOUCAN	ACROSS SPINE ROAD EASTBOUND EXIT	3.20m	8
6	K	TOUCAN	ACROSS SPINE ROAD WESTBOUND ENTRY	3.20m	8

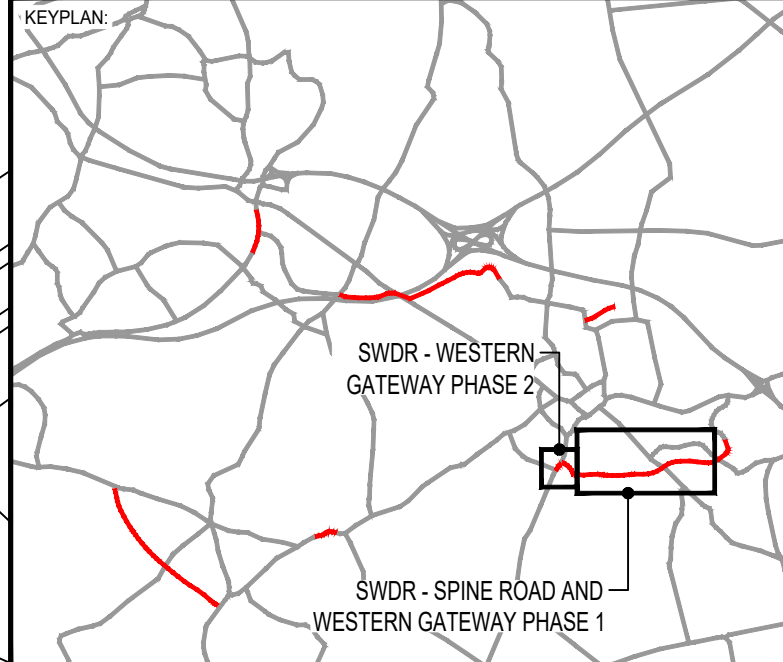
NOTES:
1) TACTILE PAVING BLOCKS ARE 400mm X 400mm SQUARE AND COLOURED RED.

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DO NOT SCALE

LEGEND

- PRIMARY RAG SIGNAL HEAD
- SECONDARY RAG SIGNAL HEAD SIGNAL
- SECONDARY RAG SIGNAL HEAD SIGNAL, SIDE MOUNTED
- SECONDARY RAG + G/A (RIGHT) SIGNAL HEAD
- PRIMARY RAG/A (LEFT) SIGNAL HEAD
- SECONDARY RAG/A (LEFT) SIGNAL HEAD
- PRIMARY RAG/A (RIGHT) SIGNAL HEAD
- SECONDARY RAG/A (RIGHT) SIGNAL HEAD
- PRIMARY RAG/A (AHEAD) SIGNAL HEAD
- N0-LEFT-TURN (NLT) ROUNDEL
- N0-LEFT-TURN (NLT) ROUNDEL
- EXCEPT BUSES (EB) ROUNDEL
- 4m POLE STRAIGHT
- SHORT POLE
- PHASE LETTER
- TRAFFIC SIGNAL POLE NUMBERING
- ON-CROSSING DETECTOR
- KERBSIDE DETECTOR
- NEARSIDE TOUCAN SIGNAL WITH COMBINED PUSHBUTTON AND AUDIBLE AND TACTILE DEVICES
- NEARSIDE NARROW FIELD OF VIEW TOUCAN SIGNAL WITH COMBINED PUSHBUTTON AND AUDIBLE AND TACTILE DEVICES
- NEARSIDE PEDESTRIAN SIGNAL WITH COMBINED PUSHBUTTON AND AUDIBLE AND TACTILE DEVICE
- NEARSIDE NARROW FIELD OF VIEW PEDESTRIAN SIGNAL WITH COMBINED PUSHBUTTON AND TACTILE DEVICE
- NEARSIDE PUSHBUTTON WITH AUDIBLE AND TACTILE DEVICE
- PHOTO ELECTRIC CELL
- STOPLINE LOOP AND REFERENCE
- MOVA DIAMOND LOOP AND REFERENCE
- WCCTV 4G IR SPEED DOME CCTV CAMERA FIXED TO LIGHTING COLUMN
- LIGHTING COLUMN AND REFERENCE
- MAINTENANCE VEHICLE PARKING BAY
- TRAFFIC SIGNAL CONTROLLER ON NAL BASE
- POWER PILLAR



PO4	14/10/2024	JB	REVISED FOR PLANNING DISCHARGE	JC	JC
PO3	02/06/2022	N2M	MATTERS OUTSTANDING WMHP-TG-SRWG1-RG-DM-0010	BH	JC
PO2	01/04/2022	PR	UPDATED BASED ON COMMENTS	IR	IR
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: **SUITABLE FOR APPROVAL** **S5**

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

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

PROJECT: **SPINE ROAD AND WESTERN GATEWAY PHASE 1**

TITLE: **HIGHWAYS EASTHAMPSTEAD ROAD JUNCTION SIGNAL LAYOUT** **SHEET 1**

SCALE @ A1:	1:200	CHECKED:	IR	APPROVED:	IR
PROJECT NO:	C118047	DESIGNED:	PR	DRAWN:	BPH
DRAWING No:	WMHP-TG-SRWG1-DR-HI-1237	DATE:	July 21	REV:	P04