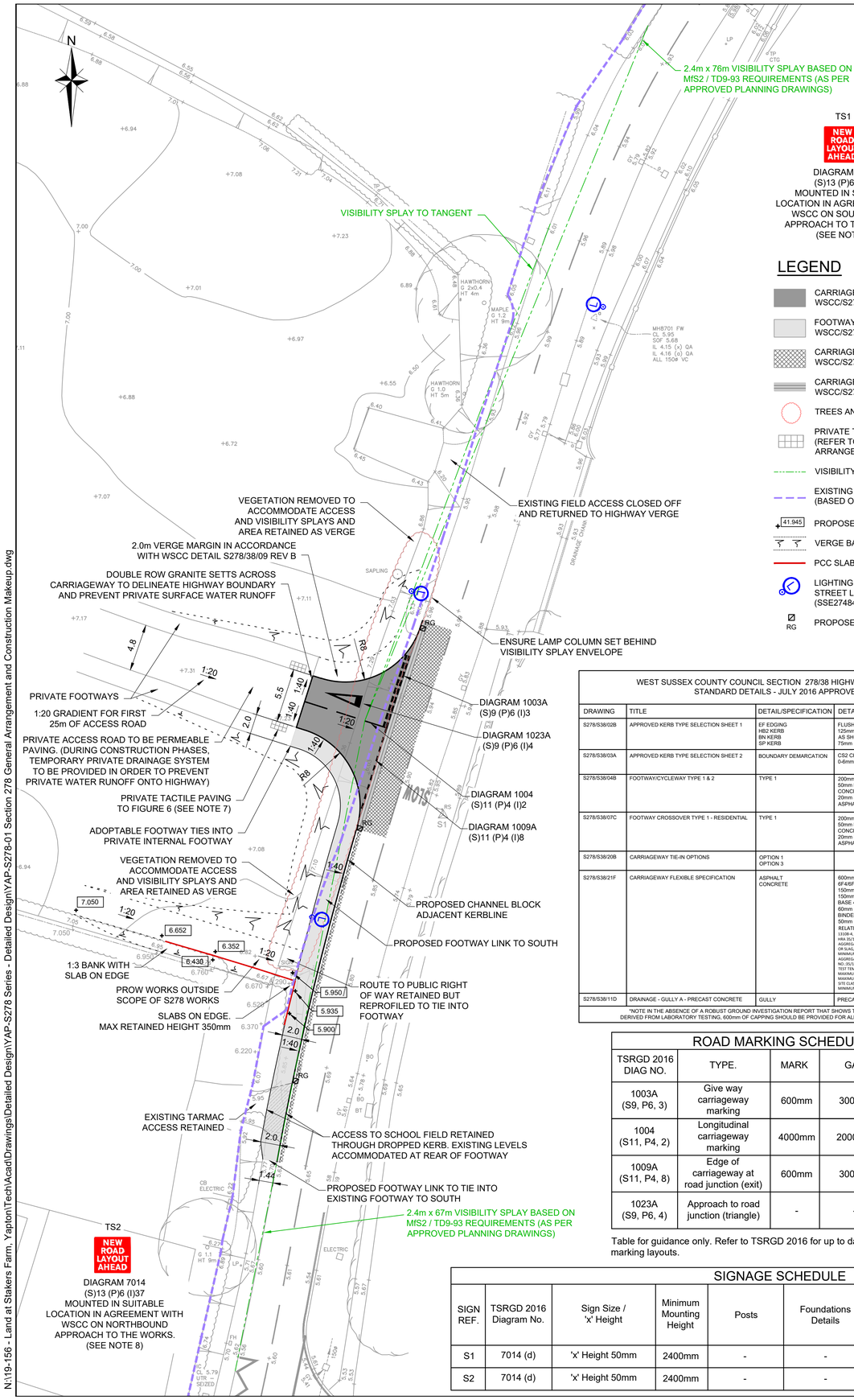


LEGEND

- CARRIAGEWAY CONSTRUCTION TO WSCC/S278/S38/21 REV F
- FOOTWAY CONSTRUCTION TO WSCC/S278/38/04 REV B
- CARRIAGEWAY RESURFACING TO WSCC/S278/38/20 REV B
- CARRIAGEWAY OPTION 1 TIE-IN TO WSCC/S278/38/20 REV B
- TREES AND VEGETATION TO BE REMOVED
- PRIVATE TACTILE PAVING (REFER TO SPECIFIC LOCATIONS FOR ARRANGEMENT TYPE)
- VISIBILITY SPLAY
- EXISTING HIGHWAY BOUNDARY (BASED ON WSCC MAPPING RECORDS)
- 41.945 PROPOSED LEVELS (mAOD)
- VERGE BANKING AT 1:3
- PCC SLAB ON EDGE
- LIGHTING COLUMN POSTIONS. SEE SSE STREET LIGHTING DESIGN DRAWING (SSE274844-LD-001-A)
- RG PROPOSED HIGHWAY GULLIES

WEST SUSSEX COUNTY COUNCIL SECTION 278/38 HIGHWAY AGREEMENT
STANDARD DETAILS - JULY 2016 APPROVED

DRAWING	TITLE	DETAIL/SPECIFICATION	DETAIL/SPECIFICATION
S278/S38/02B	APPROVED KERB TYPE SELECTION SHEET 1	EF EDGING HB2 KERB BN KERB SP KERB	FLUSH 125mm AS SHOWN 75mm
S278/S38/03A	APPROVED KERB TYPE SELECTION SHEET 2	BOUNDARY DEMARCATION	CS2 CHANNEL KERB 0-6mm UPSTAND
S278/S38/04B	FOOTWAY/CYCLEWAY TYPE 1 & 2	TYPE 1	200mm SUB BASE (TYPE 1/TYPE2) 50mm BINDER COURSE (20mm DENSE ASPHALT CONCRETE BINDER 40/60 PEN) 20mm SURFACE COURSE (6mm CLOSE GRADED ASPHALT CONCRETE SURFACE COURSE 100/160)
S278/S38/07C	FOOTWAY CROSSOVER TYPE 1 - RESIDENTIAL	TYPE 1	200mm SUB BASE (TYPE 1/TYPE2) 50mm BINDER COURSE (20mm DENSE ASPHALT CONCRETE BINDER 40/60 PEN) 20mm SURFACE COURSE (6mm CLOSE GRADED ASPHALT CONCRETE SURFACE COURSE 100/160)
S278/S38/20B	CARRIAGEWAY TIE-IN OPTIONS	OPTION 1 OPTION 3	
S278/S38/21F	CARRIAGEWAY FLEXIBLE SPECIFICATION	ASPHALT CONCRETE	600mm CAPPING (CLASS 6F1/6F2 SITE WON OR 6F4/6F5 IMPORTED MATERIAL) 150mm SUB BASE (TYPE 1) 150mm BASE (32mm DENSE ASPHALT CONCRETE BASE 40/60 PEN) 60mm BINDER (20mm DENSE ASPHALT CONCRETE BINDER 40/60 PEN) 50mm 35/14 HOT ROLLED ASPHALT (PERFORMANCE RELATED DESIGN MIX) TO CL. 943 IN ACCORDANCE WITH BS EN 13108-4, PD 6691, BS 594987 HRA 35/14F SURF DES COURSE AGGREGATE COARSE : 35% COARSE AGGREGATE TO BE CRUSHED ROCK OR SLAG, EXCLUDING LIMESTONE MINIMUM PSV = 50 AGGREGATE GRADING BS EN 13108-4 TABLE 4] COLUMN NO.: 35/14F TEST TEMPERATURE FOR WHEEL-TRACKING TO BS 598-110: 45 °C MAXIMUM WHEEL-TRACKING RATE: 2 MM MAXIMUM WHEEL-TRACKING RUT DEPTH: 4 MM SITE CLASSIFICATION: 1 MINIMUM TARGET BINDER CONTENT BACT = 7.0%
S278/S38/11D	DRAINAGE - GULLY A - PRECAST CONCRETE	GULLY	PRECAST CONCRETE GULLY

NOTE IN THE ABSENCE OF A ROBUST GROUND INVESTIGATION REPORT THAT SHOWS THE WORST CASE CBR VALUE DERIVED FROM LABORATORY TESTING, 600mm OF CAPPING SHOULD BE PROVIDED FOR ALL S278 CARRIAGEWAYS WORKS.

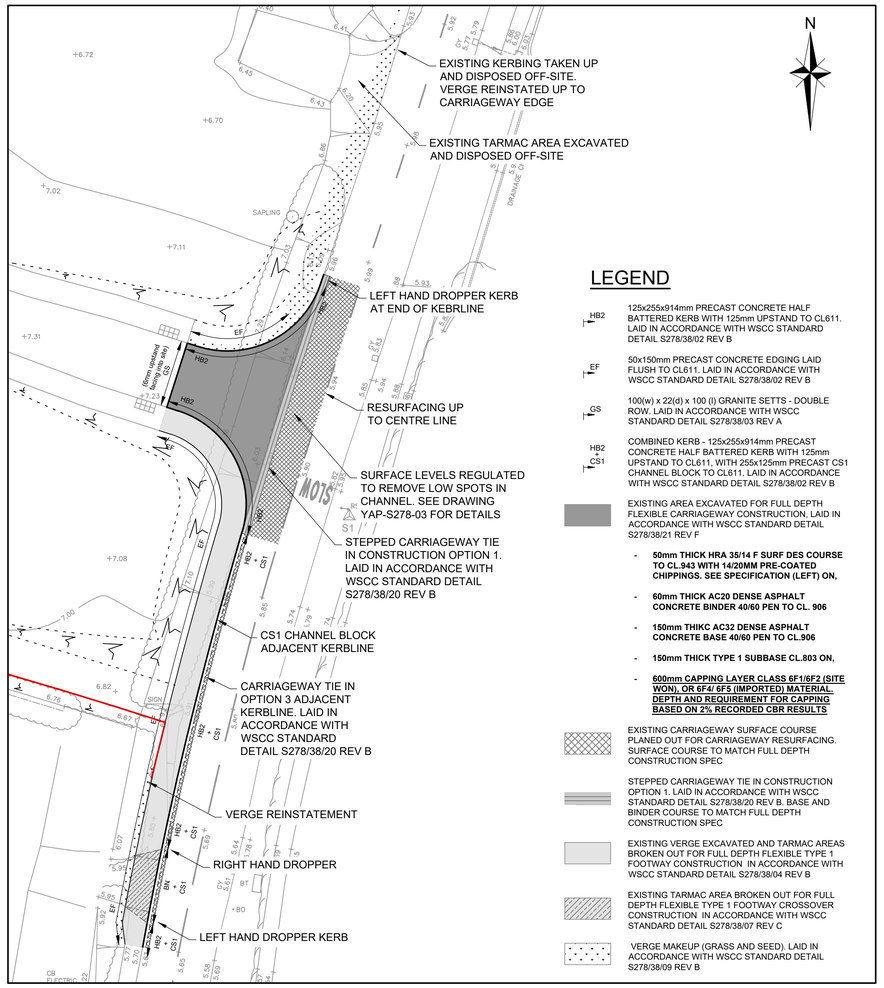
ROAD MARKING SCHEDULE

TSRGD 2016 DIAG NO.	TYPE.	MARK	GAP	WIDTH
1003A (S9, P6, 3)	Give way carriageway marking	600mm	300mm	200mm (300mm gap)
1004 (S11, P4, 2)	Longitudinal carriageway marking	4000mm	2000mm	100mm
1009A (S11, P4, 8)	Edge of carriageway at road junction (exit)	600mm	300mm	100mm
1023A (S9, P6, 4)	Approach to road junction (triangle)	-	-	as shown in TSRGD

Table for guidance only. Refer to TSRGD 2016 for up to date dimensions and marking layouts.

SIGNAGE SCHEDULE

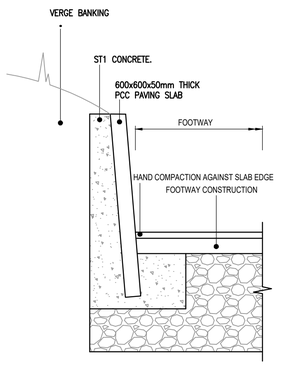
SIGN REF.	TSRGD 2016 Diagram No.	Sign Size / 'x' Height	Minimum Mounting Height	Posts	Foundations Details	Illumination	Mounting Locations and Orientation
S1	7014 (d)	'x' Height 50mm	2400mm	-	-	Reflectorised Material	To be agreed with WSCC Engineer on-site
S2	7014 (d)	'x' Height 50mm	2400mm	-	-	Reflectorised Material	To be agreed with WSCC Engineer on-site



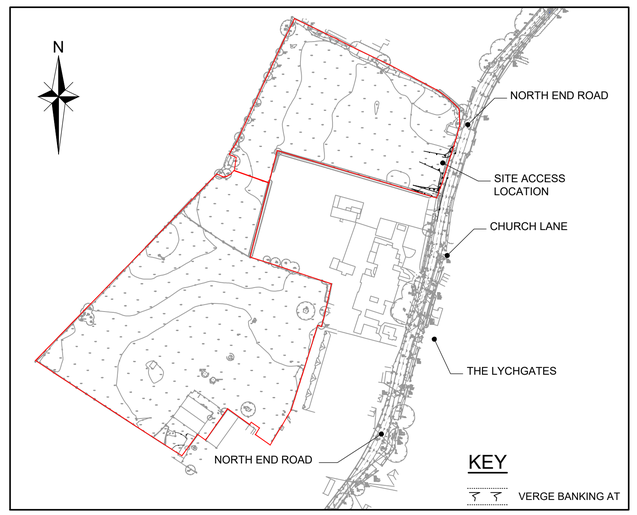
LEGEND

- HB2 125x255x914mm PRECAST CONCRETE HALF BATTERED KERB WITH 125mm UPSTAND TO CL611. LAID IN ACCORDANCE WITH WSCC STANDARD DETAIL S278/38/02 REV B
- EF 50x150mm PRECAST CONCRETE EDGING LAID FLUSH TO CL611. LAID IN ACCORDANCE WITH WSCC STANDARD DETAIL S278/38/02 REV B
- GS 100(w) x 22(d) x 100 (l) GRANITE SETTS - DOUBLE ROW. LAID IN ACCORDANCE WITH WSCC STANDARD DETAIL S278/38/03 REV A
- HB2 CS1 COMBINED KERB - 125x255x914mm PRECAST CONCRETE HALF BATTERED KERB WITH 125mm UPSTAND TO CL611, WITH 255x125mm PRECAST CS1 CHANNEL BLOCK TO CL611. LAID IN ACCORDANCE WITH WSCC STANDARD DETAIL S278/38/02 REV B
- EXISTING AREA EXCAVATED FOR FULL DEPTH FLEXIBLE CARRIAGEWAY CONSTRUCTION, LAID IN ACCORDANCE WITH WSCC STANDARD DETAIL S278/38/21 REV F
  - **50mm THICK HRA 35/14 F SURF DES COURSE TO CL.943 WITH 14/20MM PRE-COATED CHIPPINGS. SEE SPECIFICATION (LEFT) ON,**
  - **60mm THICK AC20 DENSE ASPHALT CONCRETE BINDER 40/60 PEN TO CL. 906**
  - **150mm THIKC AC32 DENSE ASPHALT CONCRETE BASE 40/60 PEN TO CL.906**
  - **150mm THICK TYPE 1 SUBBASE CL.803 ON,**
  - **600mm CAPPING LAYER CLASS 6F1/6F2 (SITE WON), OR 6F4/ 6F5 (IMPORTED) MATERIAL. DEPTH AND REQUIREMENT FOR CAPPING BASED ON 2% RECORDED CBR RESULTS**
- EXISTING CARRIAGEWAY SURFACE COURSE PLANED OUT FOR CARRIAGEWAY RESURFACING. SURFACE COURSE TO MATCH FULL DEPTH CONSTRUCTION SPEC
- STEPPED CARRIAGEWAY TIE IN CONSTRUCTION OPTION 1. LAID IN ACCORDANCE WITH WSCC STANDARD DETAIL S278/38/20 REV B. BASE AND BINDER COURSE TO MATCH FULL DEPTH CONSTRUCTION SPEC
- EXISTING VERGE EXCAVATED AND TARMAC AREAS BROKEN OUT FOR FULL DEPTH FLEXIBLE TYPE 1 FOOTWAY CONSTRUCTION IN ACCORDANCE WITH WSCC STANDARD DETAIL S278/38/04 REV B
- EXISTING TARMAC AREA BROKEN OUT FOR FULL DEPTH FLEXIBLE TYPE 1 FOOTWAY CROSSOVER CONSTRUCTION IN ACCORDANCE WITH WSCC STANDARD DETAIL S278/38/07 REV C
- VERGE MAKEUP (GRASS AND SEED). LAID IN ACCORDANCE WITH WSCC STANDARD DETAIL S278/38/09 REV B

SITE CLEARANCE AND CONSTRUCTION MAKEUP



SLAB ON EDGE (NOT TO SCALE)



LOCATION PLAN (SCALE 1:2500)

APPROVED FOR CONSTRUCTION

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE MANUAL FOR CONTRACT DOCUMENTS, VOLUME 1, SPECIFICATION FOR HIGHWAY WORKS, WEST SUSSEX COUNTY COUNCIL SPECIFICATION, "SEWERS FOR ADOPTION 6TH EDITION - A DESIGN GUIDE FOR DEVELOPERS AND ALL OTHER RELATED DRAWINGS ISSUED.
2. IF THERE IS ANY AMBIGUITY BETWEEN THE SPECIFICATION & THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER.
3. DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
4. ALL WORKS TO BE CONSTRUCTED WITHIN HIGHWAY LAND AND LAND TO BE DEDICATED TO THE HIGHWAY AUTHORITY.
5. VISIBILITY SPLAYS FOR THE PROPOSED SITE ACCESS BASED ON APPROVED PLANNING DRAWING '2014/2270/001 REV C' BY RGP.
6. TREE PROTECTION AND REMOVAL TO BE CARRIED OUT IN ACCORDANCE WITH ARBORICULTURE CONSULTANT
7. TACTILE PAVING LAYOUTS TO FIGURE 'X' ARE PRESCRIBED LAYOUTS DEFINED IN DETR GUIDANCE ON THE USE OF TACTILE PAVING SURFACE.
8. TEMPORARY SIGNS S1 TO S2 (DIA.7014) TO BE MOUNTED WHERE REQUIRED AND TO BE REMOVED AFTER 3 MONTHS. LOCATION TO BE AGREED ONSITE. REAR OF SIGN TO INCLUDE DATED STICKER STATING DATE OF REMOVAL.
9. ALL EXISTING LEVELS, GRADIENTS, DEPTHS, Etc., ARE TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES ARE TO REPORTED TO THE ENGINEER IMMEDIATELY.
10. ANY SOFT SPOTS WITHIN THE PROPOSED HIGHWAY SHALL BE DUG OUT AND THE VOID BACKFILLED IN LAYERS UP TO FORMATION LEVEL WITH SELECTED GRANULAR MATERIAL AS DIRECTED AND TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR.
11. ALL FILL MATERIAL UP TO FOUNDATION LEVEL OF THE PROPOSED HIGHWAYS TO BE APPROVED AND COMPACTED IN LAYERS AS DIRECTED AND TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR
12. ANY EXISTING LIVE DRAINS, SEWERS, DUCTS, CABLES, ETC. THAT WILL PASS UNDER THE PROPOSED HIGHWAY SHALL BE SURVEYED, PROBED, TRACED, RODDED, JETTED, CCTVD, ETC. TO ASCERTAIN THEIR STRUCTURAL CONDITION AND SUITABILITY TO FALL WITHIN THE NEW HIGHWAY. IF DEEMED NECESSARY, SPECIAL PROTECTION AND/OR REPLACEMENT MAY BE REQUIRED AS DIRECTED AND TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR, AREA ENGINEER AND/OR UTILITY COMPANY INVOLVED.
13. ANY EXISTING LIVE MANHOLES, CHAMBERS, BOXES, ETC. THAT WILL BE LOCATED WITHIN THE PROPOSED HIGHWAY SHALL BE SURVEYED TO ASCERTAIN THEIR STRUCTURAL CONDITION AND SUITABILITY TO FALL WITHIN THE NEW HIGHWAY. IF DEEMED NECESSARY, SPECIAL PROTECTION AND/OR REPLACEMENT MAY BE REQUIRED AS DIRECTED AND TO THE SATISFACTION OF THE HIGHWAYS INSPECTOR, AREA ENGINEER AND/OR UTILITY COMPANY INVOLVED.
14. NO CONCRETE TO BE POURED OR LAID IN TEMPERATURES BELOW 2DEG C ON A FALLING MAX/MIN THERMOMETER OR BEFORE THE TEMPERATURE REACHES 2DEG C ON A RISING MAX/MIN THERMOMETER (TO BE PROVIDED BY THE CONTRACTOR AND DISPLAYED IN A POSITION AGREED BY THE HIGHWAYS INSPECTOR).
15. ALL ROAD MARKINGS TO BE THERMOPLASTIC.
16. CONTRACTOR TO COMPLY WITH CHAPTER 8 OF THE TRAFFIC SIGNS MANUAL 2009.
17. CDM REGULATIONS 2015

(i) IN COMPLIANCE WITH CDM 2015 ODYSSEY HAS FOLLOWED IT'S DESIGN RISK MANAGEMENT PROCESS FOR HAZARD ELIMINATION AND RISK REDUCTION IN DEVELOPING THE ODYSSEY DESIGNS SHOWN ON THIS DRAWING.

(ii) THERE ARE NO ABNORMAL OR UNUSUAL RESIDUAL RISKS ASSOCIATED WITH THE DESIGN. ANY OTHER RESIDUAL RISKS ARE THOSE THAT WOULD NORMALLY BE EXPECTED BY COMPETENT PERSONS OR CONTRACTORS WITH NECESSARY SKILLS KNOWLEDGE AND EXPERIENCE TO BE ENGAGED ON WORK OF THIS NATURE OR TYPE.

18. ACCESS ROAD TO HAVE GRADIENT OF 1:20 FOR THE FIRST 25m FROM JUNCTION CHANNEL TO BRING SITE UP TO LEVELS.

KEY TO HEALTH AND SAFETY SYMBOLS

ABNORMAL OR UNUSUAL RESIDUAL RISKS ASSOCIATED WITH THE DESIGN OUTCOMES SHOWN ON THIS DRAWING MAYBE INDICATED BY MEANS OF THE FOLLOWING SYMBOLS.

- INDICATES A RESIDUAL RISK REQUIRING A COMPULSORY ACTION.
- INDICATES A RESIDUAL RISK FOR INFORMATION.
- INDICATES A RESIDUAL RISK REQUIRING A PROHIBITIVE ACTION.
- INDICATES A RESIDUAL RISK AS A WARNING.

Rev	Amendments	Dm	Chk	App	Date
J	APPROVED FOR CONSTRUCTION	LJH	CJL	JHM	20.03.20
H	RESPONSE TO WSCC COMMENTS - SURFACE COURSE SPEC IN DETAILS TABLE	CJL	SW	JHM	18.03.20
G	RESPONSE TO WSCC COMMENTS #2	CJL	SW	JHM	05.03.20
F	RESPONSE TO WSCC DESIGN CHECK #1	CJL	SW	JHM	28.02.20
E	ISSUED FOR WSCC S278 REVIEW	CJL	SW	JHM	04.02.20
D	H/WAY BOUNDARY UPDATED./R/W REVISED	CJL	SW	JHM	22.01.20
C	LEVELS INFO MOVED TO NEW DRAWING	CJL	SW	JHM	18.12.19
B	INDICATIVE STREET LIGHTING ADDED	CJL	SW	JHM	05.12.19
A	CLIENT COMMENTS. BOUNDARIES UPDATED	CJL	SW	JHM	15.11.19

ODYSSEY

Odyssey House
Unit 3 Winchester Hill Business Park
Winchester Hill, Romsey
Southampton SO51 7UT

Telephone: 01794 537880
Fax: 01256 331134
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title
LAND AT STAKERS FARM, YAPTON

Drawing Title
S278 GENERAL ARRANGEMENT AND CONSTRUCTION MAKEUP

Client
DANDARA LIMITED (SOUTHERN)

Scale	Date	Designed
1:250 @A1	OCT 19	CJL
Drawn	Checked	Approved
CJL	SW	JHM

Job No	Drawing No	Rev
19-156	YAP-S278-01	J

N:\19-156 - Land at Stakers Farm, Yapton\Tech\Acad\Drawings\Detailed Design\YAP-S278 Series - Detailed Design\YAP-S278-01 Section 278 General Arrangement and Construction Makeup.dwg