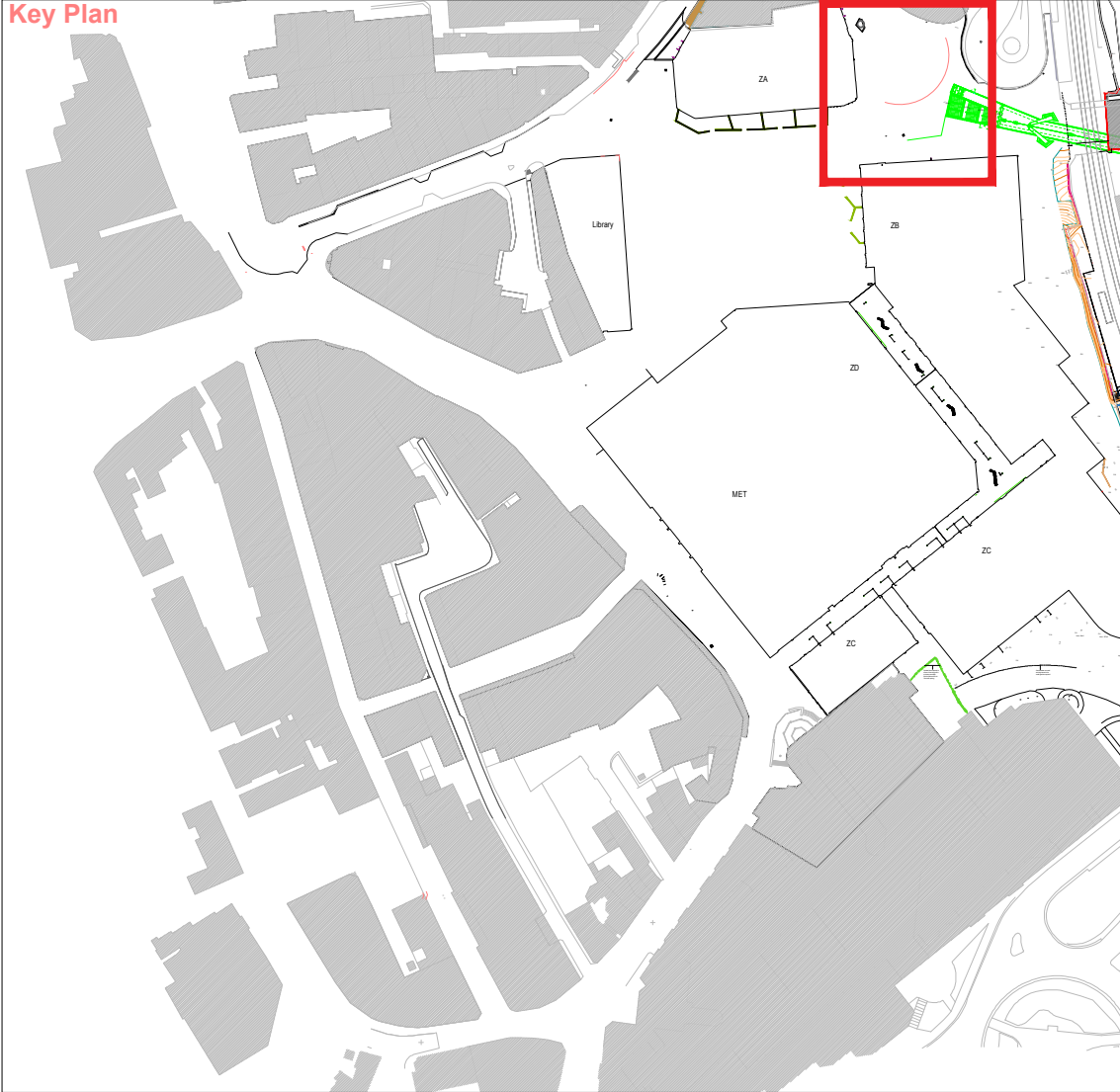


Key Plan

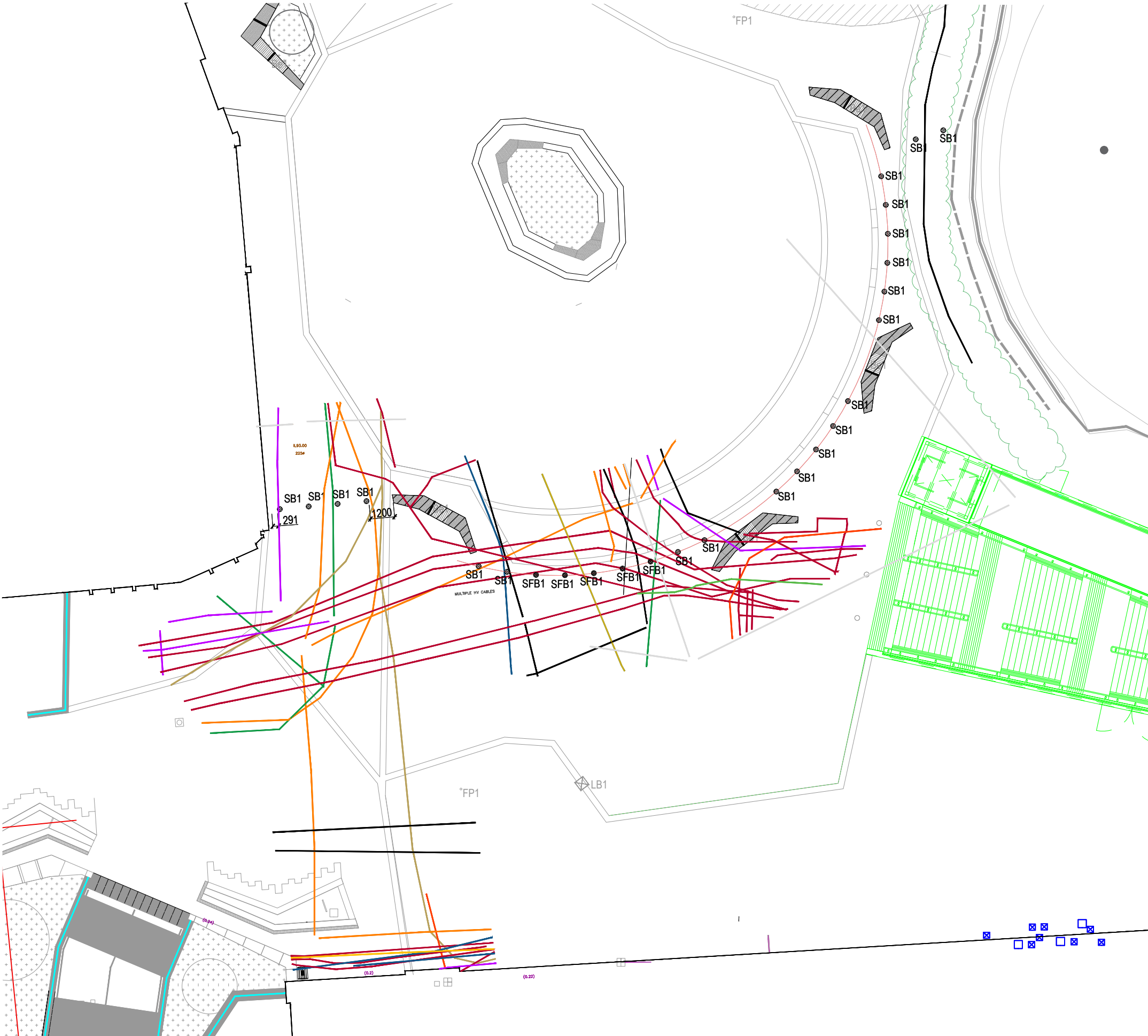


MFD Thornton Tomasetti Vehicle Dynamic Assessment [VDA] Commentary

Target	Route ID.	VDA Drg.	Measure	Vehicle	ATR	Location	Roads	Direction	Speed (mph)	Speed (km/h)	Energy (kJ)	Limit	Outcome	Notes
1	01	1011	Mixed Static & Rising Bollards	NZA	02	Kendray Street at junction with Midland Street	Midland Street	Southbound	25.5	47.5	627	Turning	3	Low speed turn from Eldon Street or Regent Street. Turn over wide paved area south of the Bus Station (used by market stalls it appears, but this may be just a temporary situation while local redevelopment takes place) and turn onto Line Of Protection. The existing widely-spaced bollards here it's thought are certainly not crash rated.
	02			NZA	04		Barnsley Transport Interchange	Southbound	35.7	57.5	919	Turning	2	Low speed turn into the bus station (or standing start from the small adjoining car park) turn through pedestrian guardrail and widely spaced (non-crash rated) bollards outside turning loop.
	03			NZA	03		Kendray Street	Westbound	35.4	63.5	1120	Acceleration	4	Standing start on Pontefract Road at junction with Bala Street, running the ATS junction of Schwabish Grund Way and Kendray Street. This starting point 'feels' a logical one (even if it is a simple Give Way junction, rather than one controlled by ATS) but it should be noted that the extended run from the south would see an NZA vehicle easily achieve 80.0km/h [DATA LIMIT]. <i>Based on the limited information for this area on the supplied drawings, there appears there will be no northbound routes to this target when the local redevelopment is complete. Also, on-line research suggests that - contrary to the supplied drawings and the latest available Google Streetview - Network Rail applied some time ago to permanently close the Jumble Lane (Level) Crossing; if completed, this would effectively remove all westbound routes to this target.</i>

Summary of HVM measures needed include;

- 3Nr Rising Bollards
- 9Nr + 1Nr Static Bollards



	Marshalls Static Bollard Stainless Steel - BSI PAS 68:2013 or IWA 14-1:2013 in response to HVM measures. <i>NBS TBC</i>
	Marshalls Rising Bollard Stainless Steel - BSI PAS 68:2013 or IWA 14-1:2013 in response to HVM measures. <i>NBS TBC</i>
	W1 Wall Type 1: Solid Granite Seating Walls - <i>Q50 / 220A</i>
	W1 Walls, Clad Granite walls and K2 Kerb type forming planting areas
	S1 Step Type 1: Solid Granite Steps <i>Q25 / 310D</i>
	PL1 Planting Type 1 - See Planting Plan: Q31 + Q28
	Proposed Granite Stone Units [W1] 500mm high as alternative HVM measure
	Existing litter bin
	Existing Traffic Light Location
	Existing post box
	Existing bollard to be retained / removed <i>TBA</i>
	Existing sign to be retained / removed / repositioned <i>TBA</i>
	Existing communication services
	Existing fence line
	Cable TV
	Unidentified
	CATV
	Traffic Light Cables
	Radio
	K Com Cables
	Street Light Cable
	Drains combined
	Electricity
	Gas
	British Telecom cables
	Communication cables
	Possible linear feature
	Water
	Drainage foul
	Street light cables
	Surface drainage
	Empty duct

Notes:

- This drawing is copyright.
- Do not scale dimensions from this drawing.
- This drawing is to be read in conjunction with all other relevant drawings
- All discrepancies on this drawing are to be reported to the architect.
- Do not modify any element of this drawing.
- Use drawing only for purpose(s) issued.

North Sign / Key Plan

The following external model files are included within this drawing:

0mm

100mm

A	13/10/20	Minor amendments following comment from Client and Contractor team	JH	DW
Rev	Date	Revision Notes	Dn	Rv
Client / Contractor				

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Project
BARNSELY PUBLIC REALM

Drawing Title
HOSTILE VEHICLE MITIGATION MEASURES -
INTERCHANGE SQUARE OPTION 2 [CCP080]

Job Number 51184	Drawing Originated Date 02/10/20	PAS 1192 Status Code -
Scale@A2 1:200	Purpose COMMENT AND APPROVAL	

Drawing Number BBTC_IBI_N3_L_G700_PL_00_28	Revision A
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