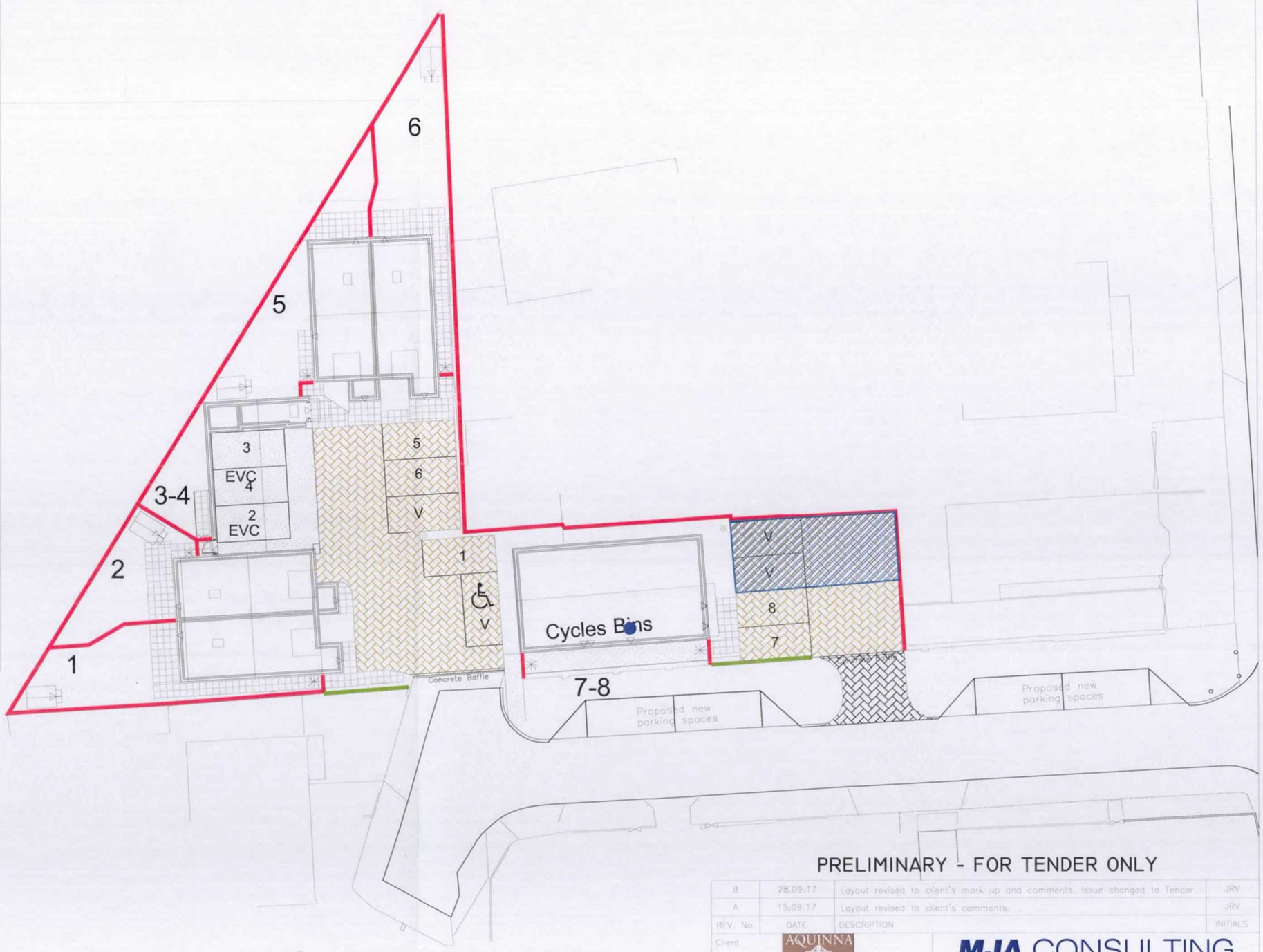
EXTERNAL WORKS KEY

- 1.8m high face brick screen wall to match existing
- 1.8m closeboard fence in dark brown stain with timber posts and gravel boards
- 0.6m closeboard fence in dark brown stain with timber posts and gravel boards
- Extent of 450 x 450mm patio, min 4 slabs in depth from house
- 450 x 450mm paving slabs min 900mm wide with 600 x 600mm slabs to areas outside front entrance door
- * Gate in fence or screen wall, 1.8m high to match fencing/wall
- Bollard to architect's specification
- Private refuse storage
- Permeable block paving
- Impermeable block paving
- Impermeable Macadam
- Extent of no dig road construction - Permeable paving



PRELIMINARY - FOR TENDER ONLY

REV. No.	DATE	DESCRIPTION	INITIALS
B	28.09.17	Layout revised to client's mark up and comments. Issue changed to Tender.	JRV
A	15.09.17	Layout revised to client's comments.	JRV

Client: AQUINNA HOMES

Project: New Road Hillingdon

Title: External Works Layout

MJA CONSULTING
CIVIL AND STRUCTURAL ENGINEERS
Monarch House, Barton Lane,
Abingdon, Oxon, OX14 3NB
Tel: 01235 555173
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Scale	Date	Drawing No.	Rev
1:200 @A2	Sept' 17	5641:40	B
Checked: KTG	Drawn: JRV		

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Construction Notes:

1. Do not scale from this drawing.

2. All dimensions in metres.

3. All levels relate to ordnance datum.

4. This drawing is based on the latest Architectural planning layout and shall be read in conjunction with all other relevant longitudinal sections and construction drawings.

5. Any discrepancies with any of the drawings shall be reported to MJA Consulting Engineer.

6. The level and location of all existing services shall be verified on site by the Contractor before commencing any construction work.

7. Contractor must comply with all current legislation relating to CDM, Health and Safety and COSHH.

8. All material in excess of 20kg (i.e. kerbs, manhole units cover etc.) shall be mechanically lifted and laid where possible at all times.

9. Manholes, sewers, headwalls and other structures intended to convey surface water or sewerage are to be constructed in accordance with the Water Authorities Association specification "Sewers for Adoption" 7th edition and to Thames Water specification and addendum.

10. Gullies, gully connections, drains, manholes, catchpits, soakaways, headwalls and other drainage structures intended to convey highway water are to be constructed in accordance with the specification issued by Oxfordshire County Council.

11. All foul and storm water drains which are not to be adopted as public sewers under a section 104 agreement shall be constructed using uPVC pipes or similar approved, bedded and backfilled in accordance with the manufacturers instructions and to the Building Regulations Part H, BS EN 752 & B.R.E. SD1.

12. All building drainage to be 100mm dia. laid at a minimum gradient of 1 in 40 where serving less than 1 WC, 1 in 80 otherwise (FW) and 1 in 80 (SW) unless otherwise shown.

13. Sewers and drains of different diameters should be laid soffit to soffit

14. Inspection chambers on private drains shall be non–access preformed polypropylene.

Depth to invert	Minimum size
< 0.6m	DN300
> 0.6m	DN475

In accordance with the Building Regulations Part H & BS EN 752.

15. Position of soil pipes, stubstacks, WC outlets rainwater downpipes etc positions shall be checked against architects house type drawings to ensure compatibility.

16. Where back inlet gullies are used they should be roddable.

17. All stub stacks to be fitted with air admittance valve where branch drain exceeds 12m except at head of run.

18. Rainwater downpipes to be connected directly to drains via removable adapter to permit access for rodding.

19. Positions of yard and house gullies are nominal and may be adjusted on site, aco drains to be installed at the end of all drives falling towards the public highway. All gully gratings in drives and parking areas should be of sufficient strength to withstand vehicular loading.

20. Lintels or sleeves are to be provided for drains passing through foundation brickwork.

21. All gully connections to be 150 dia. uPVC ultrarib or similar.

22. All gully connections other than at manholes to be "Y" junctions

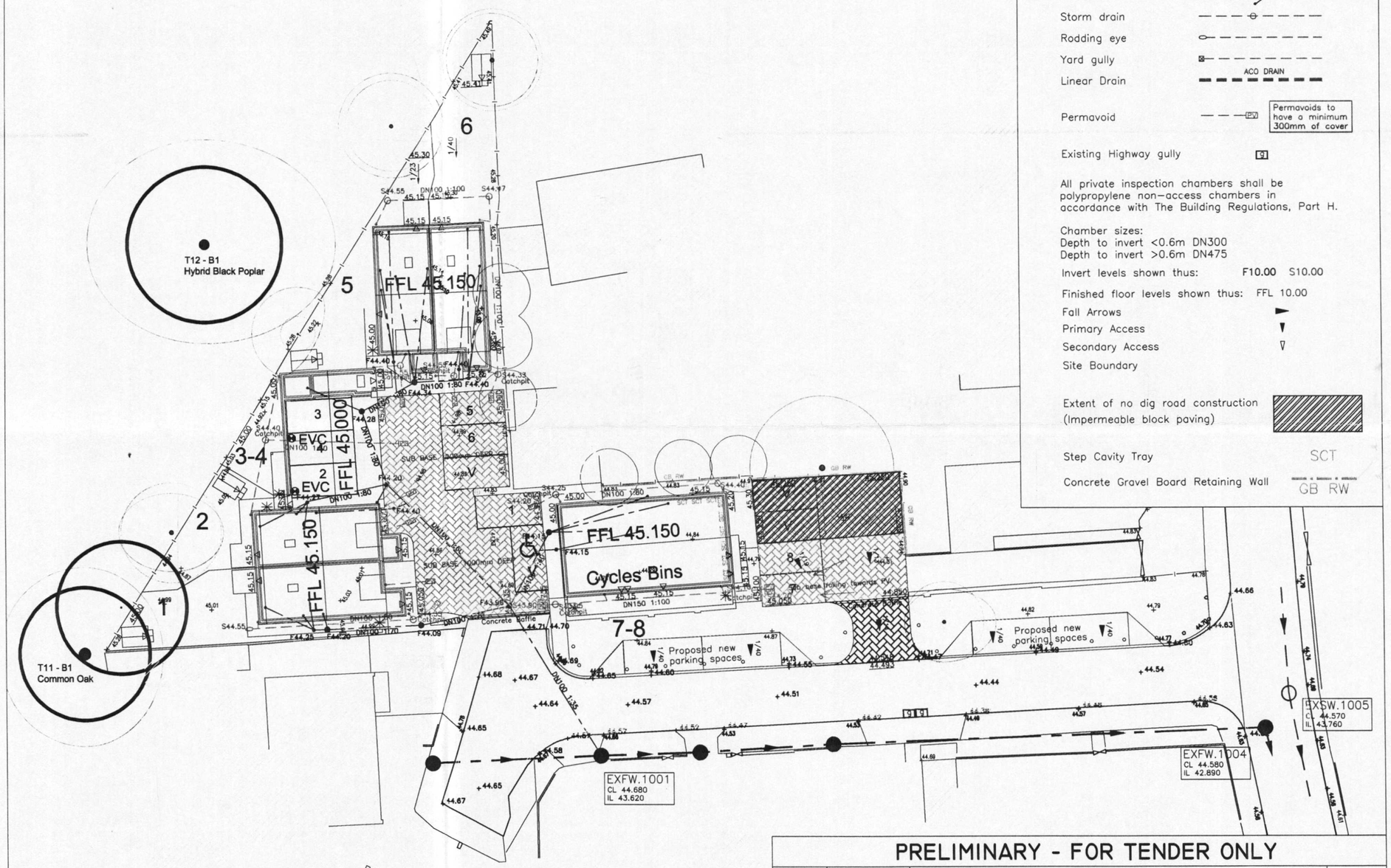
23. All drain runs are to be flushed through and building materials removed where necessary at the time of final test by Building Inspector and prior to occupation.

24. All soakaways to be positioned a minimum of 5.0m from buildings (where utilised)

25. All finished floor levels are shown on the drawing for guidance only and may need to be adjusted on site. However there is to be no deviation without prior approval

26. All drives are to have a crossfall or gradient of 1:40 minimum. Maximum drive gradient on down slope to be 1 in 10 and 1 in 8 on up slopes.

27. The construction of all pond embankments including selection of fill material, placing, compaction and use of stabilization membranes is to be carried out in accordance with an engineering earthworks specification approved by a specialist Geotechnical Engineer and in accordance with BS EN 1997–1 and BRE 363 to ensure safe and stable slopes during all phases of construction and operation.



KEY:

Existing Sewers:

Foul sewer

Storm sewer

Proposed Adoptable Sewers:

Foul sewer

Storm sewer

Proposed Private Drainage:

Existing foul drain

Foul drain

Storm drain

Rodding eye

Yard gully

Linear Drain — ACO DRAIN

Permavoid — PV — Permavoids to have a minimum 300mm of cover

Existing Highway gully

All private inspection chambers shall be polypropylene non–access chambers in accordance with The Building Regulations, Part H.

Chamber sizes:
Depth to invert <0.6m DN300
Depth to invert >0.6m DN475

Invert levels shown thus: F10.00 S10.00

Finished floor levels shown thus: FFL 10.00

Fall Arrows

Primary Access

Secondary Access

Site Boundary

Extent of no dig road construction (Impermeable block paving)

Step Cavity Tray — SCT

Concrete Gravel Board Retaining Wall — GB RW

PRELIMINARY - FOR TENDER ONLY

REV. No.	DATE	DESCRIPTION	INITIALS
A	28.09.17	Layout revised to client's mark up and comments. Issue changed to Tender.	JRV

Client: AQUINNA HOMES

Project: New Road Hillingdon

Title: Engineering Layout

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Scale	Date	Drawing No.	Rev
1:250 @A2	July 17	5641:01	A

Checked: KTG — Drawn: JRV

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