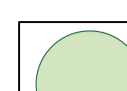

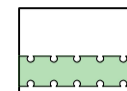






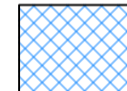

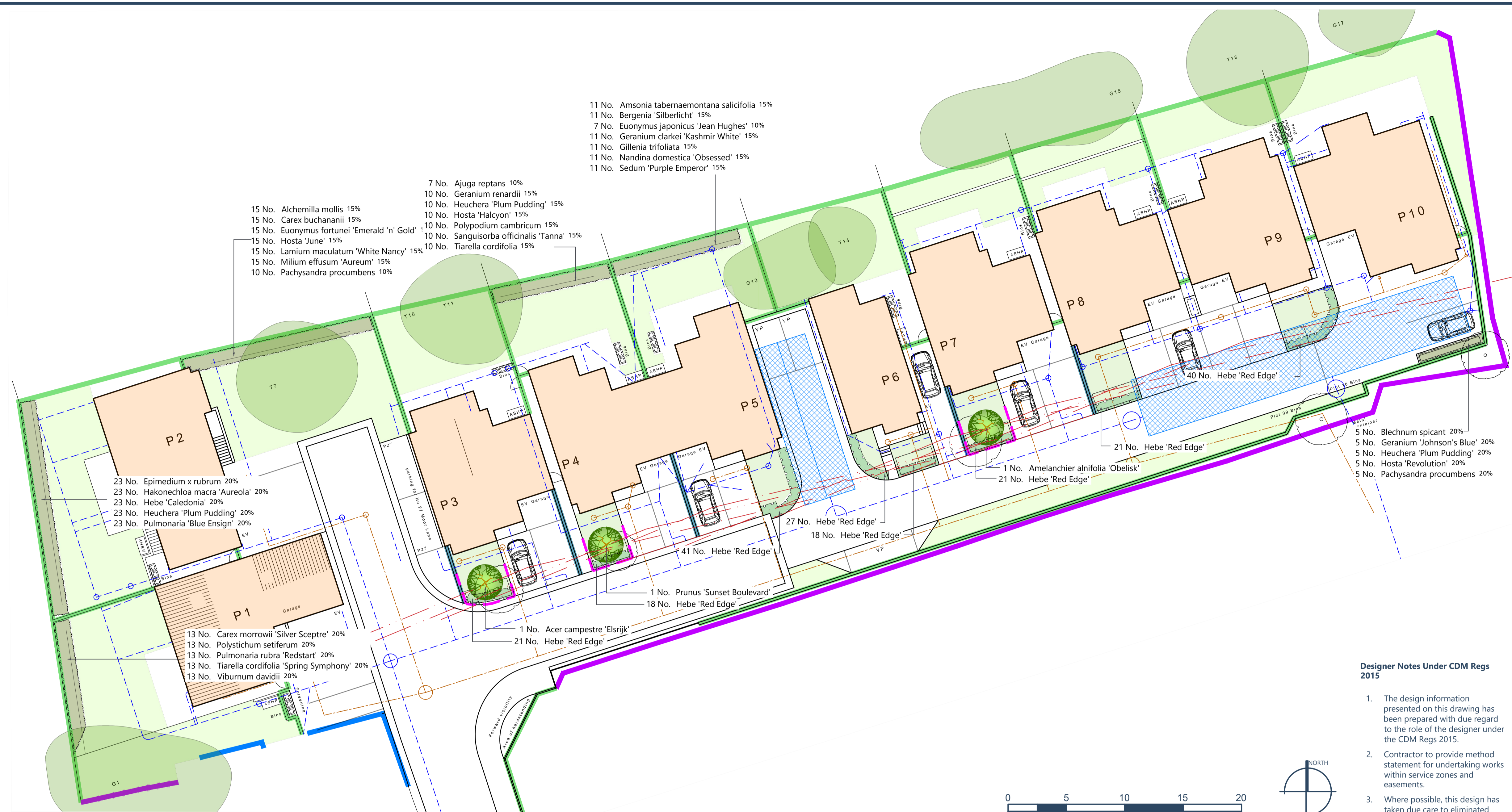


- LANDSCAPE KEY**
-  EXISTING TREES RETAINED
  -  PROPOSED TREE PLANTING
  -  PROPOSED HEDGE PLANTING  
Hebe 'Red Edge' max height 600mm
  -  PROPOSED SHRUB & HERBACEOUS PLANTING
  -  PROPOSED AMENITY TURF  
Rolawn 'Medallion' or similar approved.
  -  PROPOSED GRASS SEEDING  
Boston Seeds Shade Tolerant Grass Seed sown at 35g/m2 or similar approved.
  -  PROPOSED ROOT BARRIER  
1m deep root barrier eg Greentech Root Barrier 360 or similar laid in accordance with suppliers recommendations
  -  VISIBILITY SPLAYS  
2m x 25m visibility splays

- NOTES:**
- For detailed levels and drainage refer to Engineers dwgs.
  - For hard surfaces and boundary treatments refer to Architects drawings.

- DRAINAGE KEY**
-  Surface Water Sewer
  -  Surface Water Attenuation Tank
  -  Foul Sewer
- Refer to Engineers drawings for details.

- Designer Notes Under CDM Regs 2015**
1. The design information presented on this drawing has been prepared with due regard to the role of the designer under the CDM Regs 2015.
  2. Contractor to provide method statement for undertaking works within service zones and easements.
  3. Where possible, this design has taken due care to eliminate hazards and reduced risks.



**PLANTING SCHEDULE**

Trees	Number	Species	Height	Girth	Specification	Density
	1	Acer campestre 'Elsrijk'	3.0-4.0m	12-14cm	Heavy Standard :Clear Stem 150-175 :3/5 brks :2x :RB Counted	
	1	Amelanchier alnifolia 'Obelisk'	3.0-4.0m	12-14cm	Heavy Standard :Clear Stem 150-175 :3/5 brks :2x :RB Counted	
	1	Prunus 'Sunset Boulevard'	3.0-4.0m	12-14cm	Heavy Standard :Clear Stem 150-175 :3/5 brks :2x :RB Counted	

**Shrubs**

Number	Species	Height	Pot Size	Specification	Density
15	Euonymus fortunei 'Emerald 'n' Gold'	20-25cm	3L	C :5 brks	4/m <sup>2</sup>
7	Euonymus japonicus 'Jean Hughes'	20-30cm	3L	3/5 brks :C	4/m <sup>2</sup>
23	Hebe 'Caledonia'	20-30cm	3L	5 brks :C	4/m <sup>2</sup>
11	Nandina domestica 'Obsessed'	20-30cm	3L	3/5 brks :C	4/m <sup>2</sup>
5	Pachysandra procumbens	10-20cm	3L	C :5 brks	4/m <sup>2</sup>
10	Pachysandra procumbens	15-20cm	3L	5 brks :C	4/m <sup>2</sup>
13	Viburnum davidii	20-30cm	3L	5 brks :C	4/m <sup>2</sup>

**Herbaceous**

Number	Species	Pot Size	Specification	Density
7	Ajuga reptans	3L	Full Pot	4/m <sup>2</sup>
15	Alchemilla mollis	3L	Full Pot	4/m <sup>2</sup>
11	Amsonia tabernaemontana salicifolia	3L	Full Pot	4/m <sup>2</sup>
11	Bergenia 'Silberlicht'	3L	Full Pot	4/m <sup>2</sup>
23	Epimedium x rubrum	3L	Full Pot	4/m <sup>2</sup>
5	Geranium 'Johnson's Blue'	3L	Full Pot	4/m <sup>2</sup>
11	Geranium clarkii 'Kashmir White'	3L	Full Pot	4/m <sup>2</sup>
10	Geranium renardii	3L	Full Pot	4/m <sup>2</sup>
11	Gillenia trifoliata	3L	Full Pot	4/m <sup>2</sup>
38	Heuchera 'Plum Pudding'	3L	Full Pot	4/m <sup>2</sup>
10	Hosta 'Halcyon'	3L	Full Pot	4/m <sup>2</sup>
15	Hosta 'June'	3L	Full Pot	4/m <sup>2</sup>
5	Hosta 'Revolution'	3L	Full Pot	4/m <sup>2</sup>
15	Lamium maculatum 'White Nancy'	3L	Full Pot	4/m <sup>2</sup>
23	Pulmonaria 'Blue Ensign'	3L	Full Pot	4/m <sup>2</sup>
13	Pulmonaria rubra 'Redstart'	3L	Full Pot	4/m <sup>2</sup>
10	Sanguisorba officinalis 'Tanna'	3L	Full Pot	4/m <sup>2</sup>
11	Sedum 'Purple Emperor'	3L	Full Pot	4/m <sup>2</sup>
10	Tiarella cordifolia	3L	Full Pot	4/m <sup>2</sup>
13	Tiarella cordifolia 'Spring Symphony'	3L	Full Pot	4/m <sup>2</sup>

**Hedges**

Number	Species	Specification	Density
207	Hebe 'Red Edge'	C :Bushy :C :3/5 brks 5/m	

**NOTES**

All planting to be carried out in the first planting season unless an alternative phasing scheme has been approved by the local authority.

The following standards shall apply:

General landscape operations:

- BS 4428:1989 CoP for general landscape operations

Trees:

- BS 3998:2010 Tree work
- BS 8545:2014 Trees: from nursery to independence in the landscape.
- NHBC Chapter 4a - Building near trees

Ground preparation:

- BS 3882:2015 Specification for topsoil and requirements for use
- BS 8601:2013 Specification for subsoil and requirements for use
- Construction Code of Practice for the Sustainable Use of Soils on Construction Sites 2009. (Issued by Defra)

Topsoil

Unless otherwise specified all 'topsoil' for planting, turfing or seeding shall comply with the following criteria.

- Compliance with the general requirements of BS3882:2015, Grade - Multi purpose. However the following additional constraints apply;
- pH Value: 5.5-7.5
- Textural classification: 'Loam soils' are acceptable within the following parameters  
 Silt = 0-65%  
 Sand = 30-70%  
 Clay = 5-30%

'Topsoil' is deemed to include imported, and existing reclaimed or manufactured growing medium.

Topsoil amelioration to be undertaken subject to analysis and recommendations of a suitably qualified soil scientist. General amelioration will utilise PAS 100 Green waste compost unless an alternative is specifically recommended by the soil scientist.

Standard depth of topsoil layer, placed over 300mm decompacted and free-draining subsoil, to be as follows (subject to completion of ground preparation proposals):-

All grass sward types - 150mm  
 Ornamental planting - 300mm  
 Native mix planting - 300mm  
 Tree pits - 400mm topsoil layer

Additional growing medium required to meet recommended tree planting volumes will be achieved using approved subsoil or washed sand.

**Cultivation**  
 All cultivation to be carried out in accordance with good practice and appropriate to the planting type, ground conditions and risk assessments/method statements. Incorporate proprietary non peat compost to BSI PAS 100 to 50mm depth evenly worked into soil and a general purpose slow release fertiliser at the rate of 75g/m<sup>2</sup>

No cultivation of soil to be undertaken within RPA of retained trees and hedgerows.

**Tree Planting**

All trees to be in accordance with BS 3936 and The National Plant Specification - 'Rootballed Trees' recommendations. Trees to be planted in accordance with BS 4428:1989 and double staked. Tree pits in open field / un-compacted ground conditions to be 1000mm x 1000mm (at least 75mm greater than that of the root system) with pit depth to be based on the planting depth of the tree (distance from root flare to underside of rootball) in accordance with BS 8545:2012. Topsoils and subsoils to be excavated and stored separately for reuse. Tree pit to be backfilled with stored subsoil and topsoil at depths to replicate the existing soil horizons. Topsoil to be mixed enriched with 40L of peat free tree planting compost. Root balls to be encircled by Root Rain Metro or similar irrigation pipe. Well water after planting. The base of trees to be planted in grass areas are to be covered with 75mm amenity grade bark mulch to 1.0 metre diameter and kept weed free.

Tree pits in poorly draining soils are to be positively drained, connecting into the surface water drainage system to engineers details. Suitable foundations are to be provided to accommodate proposed tree planting and retained trees in accordance with the NHBC Standards. In locations close to footpaths and roadways linear root barriers are to be installed in accordance with manufacturers instructions. Where proposed tree locations conflict with services, trees are to be relocated in accordance with the appropriate utilities guidance notes subject to client / local authority approval.

**Shrub and Herbaceous Planting**

Plants to be in accordance with BS 3936 and handled in accordance with CPSE guidelines and planted in accordance with BS 4428:1989. Nursery stock supplier to be approved by the Landscape Architect. Well water plants immediately after planting and prior to spreading of mulch. Planting areas to be covered with 75mm depth amenity grade bark mulch and kept weed free.

**Hedge Planting**

Plants to be in accordance with BS 3936 and handled in accordance with CPSE guidelines and planted in accordance with BS 4428:1989. Hedge plants to be pit planted in double staggered rows 300mm apart at 450mm centres. Well water plants immediately after planting and prior to spreading of mulch. Planted areas to be covered with 75mm depth bark mulch and kept weed free.

**Turfing**

Grass turf areas to be Tillers 'Arena' or similar approved cultivated turf, laid in accordance with BS 4428:1989. Topsoil to be rotavated and levelled as required and any debris or stones greater than 50mm diameter removed. Pre-turfing fertiliser to be applied in accordance with manufacturers instructions. Turf to be laid from planks with broken joints well butted up, pegged to slopes where required. Well water after laying to avoid shrinkage.

**Seeding**

Grass areas to be seeded in accordance with BS 4428:1989 during March, April or September. Topsoil to be rotavated and levelled as required and any debris or stones greater than 50mm diameter removed. Pre-seed fertiliser to be applied in accordance with manufacturers instructions. Lightly rake areas after sowing.

**Species Rich Grassed Areas**

Grass areas to be seeded in accordance with BS 4428:1989 during March, April or September. Unimproved topsoil to be imported, rotavated and levelled as required and any debris or stones greater than 20mm diameter removed. Lightly rake areas after sowing. Seed to be as per the planting schedule.

**Watering**

All plant material to be watered in dry periods until established during April through to September with a fine rose until the water penetrates the topsoil to at least 5cm depth and achieves field capacity. Frequency of watering regime to be determined by weather conditions, soil conditions and underlying geology, all plant beds to be watered to ensure soil is consistently moist to promote successful establishment. As a guide only it is suggested that during hot, dry periods, plants are to be watered every six to ten days. For individual trees it is suggested that 18 watering visits per year are carried out commencing late March (prior to budburst) and utilising a minimum of 50 litres of water per tree. Soil probe to be used to determine soil saturation to full depth of root ball.

