

### Legend

- Bitmac path
- Area of path grading requiring fill
- Area of path grading requiring excavation
- note: other minor areas of cut and fill will be required, as required to grade path into surrounding levels at gradients not exceeding 1 in 5
- Path levels and falls/ gradients
- path breakdown for costing
  - Main path to skatepark - 107Lm x 1.8m wide
  - Bottom path to play area - 8.3Lm x 1.8m wide
  - Top path to play area - 1.4Lm x 1.4m wide

Notes

Mapping supplied by client

Revisions			
No.	Comments	Date	By
0	Draft issue	01.12.21	GS
01	Amendments/ additions as per client comments, additional details for path in path and timber edging	06.12.21	GS



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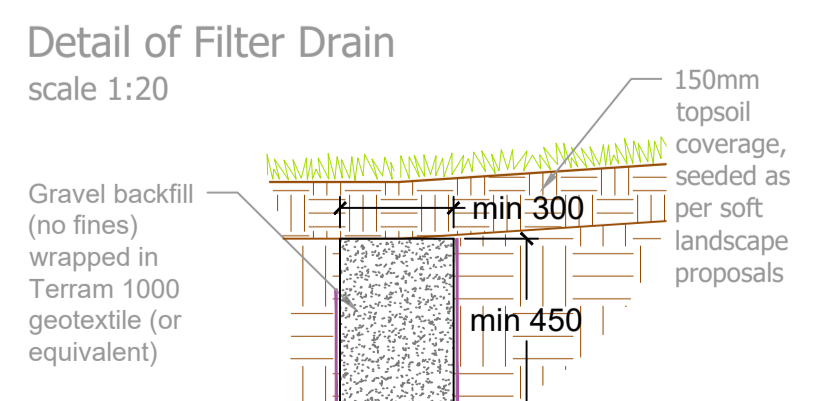
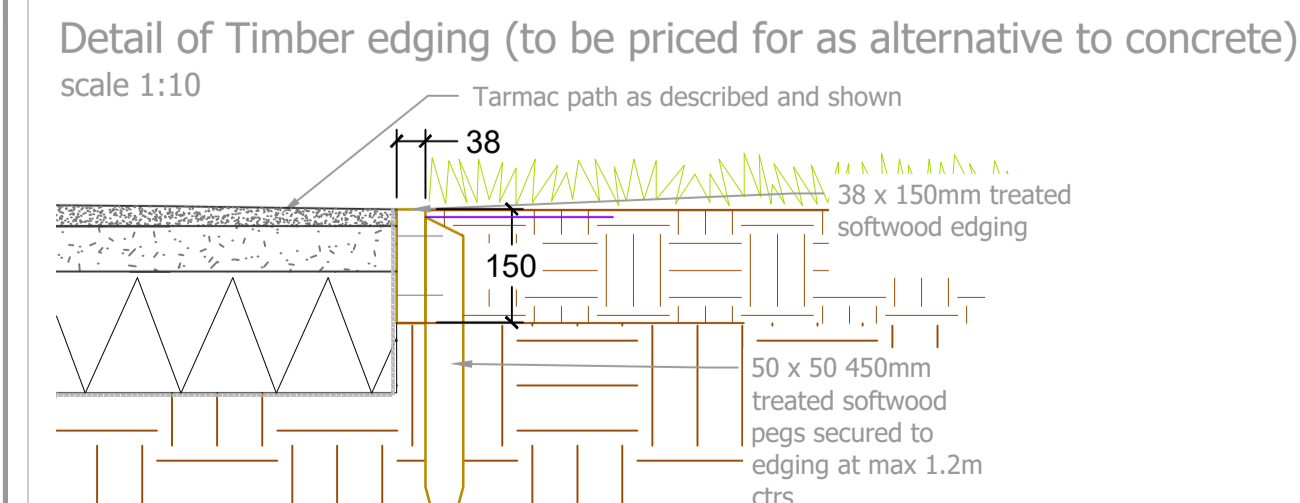
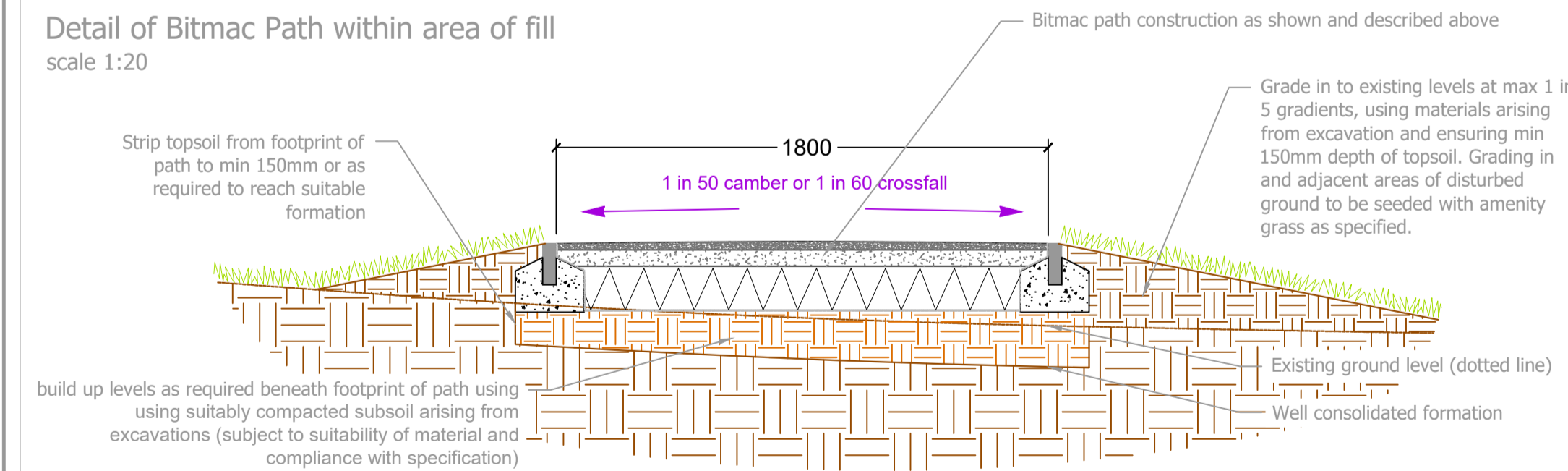
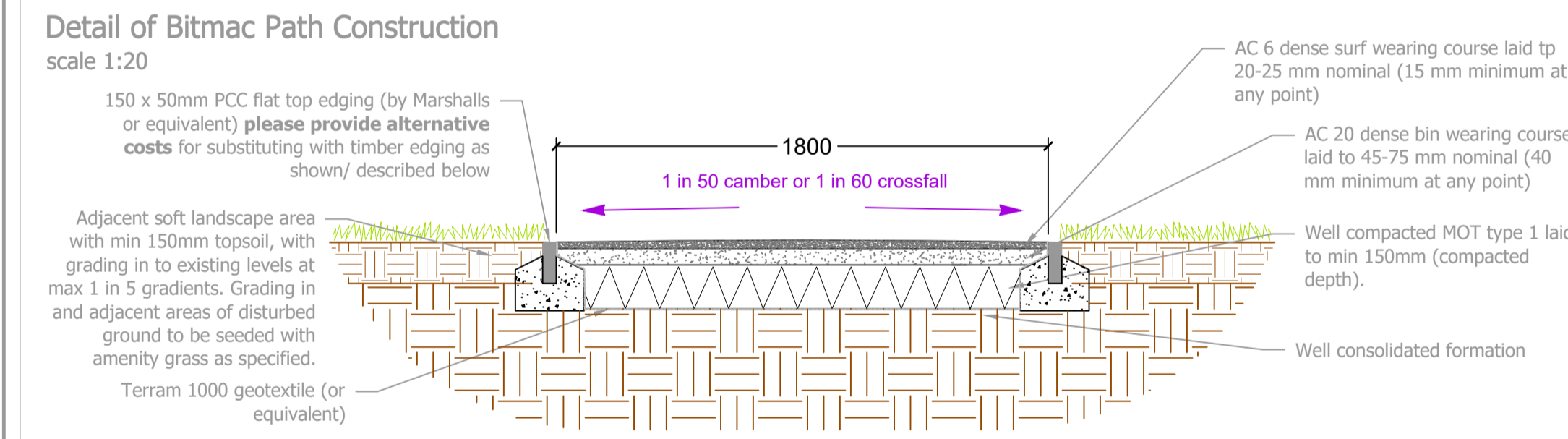
Client  
**Redruth Town Council**

Project reference  
**East**

Figure  
**Detailed Plan of Path Works**

Scale	Drawn	Checked	Approved
1:200@A1	GS	LF	LF

Figure No	Status	Rev
3675-CEC-ZZ-XX-DR-L-0001	D2	01



### Specification for Path Construction (refer also to requirements set out by employer)

#### D20 Excavating and filling

**Clearance/ Excavating**  
 220A STRIPPING TOPSOIL  
 • General: Before beginning general excavation or filling, strip topsoil from areas shown on drawings.  
 • Depth: Remove full depth of topsoil assumed to be 200mm.  
 • Give notice where the depth of topsoil is difficult to determine or significantly less than assumed.  
 • Handling: Handle topsoil for reuse or sale in accordance with clause 225.  
 • Site storage: Keep separate from excavated sub-soil.

**Disposal of Materials**  
 420 TOPSOIL STORAGE HEAPS  
 • Location: to be agreed with the CA.  
 • Standard: To BS 3882.  
 • Height (maximum): 1.5m.  
 • Protection:  
 - Do not place any other material on top of storage heaps.  
 - Do not allow construction plant to pass over storage heaps.  
 - Prevent compaction and contamination.

**Filling**  
 510 HAZARDOUS, AGGRESSIVE OR UNSTABLE MATERIALS  
 • General: Do not use fill materials which would, either in themselves or in combination with other materials or ground water, give rise to a health hazard, damage to building structures or instability in the filling, including material that is:  
 - Frozen or containing ice.  
 - Organic.  
 - Contaminated or noxious.  
 - Susceptible to spontaneous combustion.  
 - Likely to erode or decay and cause voids.  
 - With excessive moisture content, slurry, mud or from marshes or bogs.  
 - Clay of liquid limit exceeding 90 and/or plasticity index exceeding 55.  
 - Unacceptable, class U2 as defined in the Highways Agency 'Specification for highway works', clause 601.

**530 PLACING FILL**  
 • Surfaces of excavations and areas to be filled: Free from loose soil, topsoil, organic material, rubbish and standing water.  
 • Freezing conditions: Do not place fill on frozen surfaces. Remove material affected by Replace and recompact if not damaged after thawing.  
 • Adjacent structures, membranes and buried services:  
 - Do not overload, destabilise or damage.  
 - Submit proposals for temporary support necessary to ensure stability during filling.  
 - Allow 14 days (minimum) before backfilling against in situ concrete structures.  
 • Layers: Place so that only one type of material occurs in each layer.  
 • Earthmoving equipment: Vary route to avoid rutting.

**535 COMPACTION GENERALLY**  
 • General: Compact fill not specified to be left loose as soon as possible after placing.  
 • After compaction: Surface of each layer must be well closed, showing no movement under compaction plant, and without cracks, holes, ridges, loose material and the like.  
 • Defective areas: Remove and recompact to full thickness of layer using new material.

**610 COMPACTED FILLING FOR LANDSCAPE AREAS**  
 • Fill: Material capable of compaction by light earthmoving plant.  
 • Filling: Layers not more than 200 mm thick. Lightly compact each layer to produce a stable soil structure.

#### Q10 Kerbs/ edgings/ channels/ paving accessories

**Types of Kerbs/Edgings and Channels**  
 110 PROPRIETARY PRECAST CONCRETE EDGINGS - GENERAL BITMAC  
 Standard: To BS EN 1340, where there will be regrading, buildings, pavings/roads and other areas shown on drawings.  
 • Manufacturer: Contractor's choice.  
 • Product reference: PCC Edging Kerb.  
 • Recycled content: Contractor's choice.  
 • Designations: EF Edging, flat top.  
 • Size (width x height x length): 50 x 150 x 915 mm.  
 • Special shapes: n/a.  
 • Finish: As cast.  
 • Colour: Natural.  
 • Bedding: Cement mortar.  
 • Joints generally: Dry, 2-3 mm gap.  
 • Sealant movement joints: Not required.  
 • Accessories: None.

310 TIMBER EDGING (To Be Priced for as alternative to Concrete Edge Above)  
 • Softwood board:  
 - Size: 150 x 38 mm.  
 - Fixing: Galvanized nails into softwood pegs.  
 • Softwood pegs:  
 - Size: 50 x 50 x 450 mm long.  
 - Fixing: Drive into ground.  
 - Centres: 1200 mm.  
 • Preservative treatment: Tanalised - to provide min 25yrs service life.

**Laying**  
 510 LAYING KERBS, EDGINGS AND CHANNELS  
 • Cutting: Neat, accurate and without spalling. Form neat junctions.  
 • Long units (450 mm and over) minimum length after cutting: 300 mm.  
 • Short units minimum length after cutting: The lower of one third of their original length or 50 mm.  
 • Bedding of units: Positioned true to line and levelled along top and front faces, in a mortar bed on accurately cast foundations or on a race of fresh concrete.  
 • Securing of units: After bedding has set, secured with a continuous haunching of concrete or on a race of fresh concrete with backing concrete cast monolithically.

**530 CONCRETE FOR FOUNDATIONS, RACES AND HAUNCHING**  
 • Standard: To BS 8500-2.  
 • Designated mix: Not less than GEN0 or Standard mix ST1.  
 • Workability: Very low.

#### Q20 Granular sub-bases to roads/pavings

**140 EXCAVATION OF SUBGRADES**  
 • Final excavation to formation or subformation level: Carry out immediately before compaction of subgrade.  
 • Soft spots and voids: Give notice.  
 • Old drainage and service trenches: Give notice.  
 • Wet conditions: Do not excavate or compact when the subgrade may be damaged or destabilized.

**145 PREPARATION AND COMPACTION OF SUBGRADES**  
 • Timing: Immediately before placing sub-base.  
 • Soft or damaged areas: Excavate and replace with sub-base material, compacted in layers 300 mm (maximum) thick.  
 • Compaction: Thoroughly, by roller or other suitable means, adequate to resist subsidence or deformation of the subgrade during construction and of the completed roads/ pavings when in use. Take particular care to compact fully at intrusions, perimeters and where local excavation and backfilling has taken place.

**620 ACCURACY**  
 • Deviations (maximum):  
 - Level: ± 6 mm  
 - Horizontal and vertical alignment: 3 mm in 3 m.

**Q22 Asphalt roads/ pavings**

**Types of Paving**  
 115 ASPHALT CONCRETE PAVING TO CYCLE PATHS AND FOOTWAYS  
 • Standard: To BS EN 13108-1.  
 • Subgrade improvement layer: As section Q20.  
 • Compacted thickness: Not applicable.  
 • Geotextile: Sheet.  
 • Manufacturer: Terram or equal approved.  
 • Product reference: 1000 or equal approved.  
 • Granular sub-base: Highways Agency Type 1 unbound mixture, as section Q20.  
 • Compacted thickness: 150mm.  
 • Binder course: AC 20 dense bin.  
 • Paving grade: 100/150.  
 • Surface course: AC 6 dense surf.  
 • Paving grade: 100/150.  
 • Slip/ Skid resistance: PTV to BS 7976-2 of 45 (water) wet.  
 • Compacted thickness: 20-25 mm nominal, 15 mm minimum at any point.  
 • Reclaimed content:  
 - Standard: To BS EN 13108-8.  
 - Value (maximum): Contractor's choice.  
 • Other requirements: N/A.

**Laying**  
 310 LAYING GENERALLY  
 • Preparation: Remove all loose material, rubbish and standing water.  
 • Adjacent work: Form neat junctions. Do not damage.  
 • Channels, kerbs, inspection covers etc: Keep clean.  
 • New paving:  
 - Keep traffic free until it has cooled to prevailing atmospheric temperature.  
 - Do not allow rollers to stand at any time.  
 - Prevent damage.  
 - Lines and levels: With regular falls to prevent ponding.

**710 SPREADING TOPSOIL**  
 • Temporary roads/ surfacing: Remove before spreading topsoil.  
 • Layers:  
 - Depth (maximum): 150 mm.  
 • Gently firm each layer before spreading the next.  
 • Depths after firming and settlement (minimum): 450mm for planting beds containing trees, 300mm for shrub planting areas and 150mm for amenity grass, 100mm for wildflower areas.  
 • Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

**720 FINISHED LEVELS OF TOPSOIL AFTER SETTLEMENT**  
 • Above adjoining paving or kerbs: Flush.  
 • Below dpc of adjoining buildings: Not less than 150 mm.  
 • Shrub areas: Higher than adjoining grass areas by Flush.  
 • Within root spread of existing trees: Unchanged.  
 • Adjoining soil areas: Marry in.  
 • Thickness of turf or mulch: Included.

**Q30 Seeding/turfing FOR WILDFLOWER AND GRASS SEEDING**  
 281 FINAL CULTIVATION FOR WILDFLOWER AND GRASS SEEDING  
 • Timing: After grading.  
 • Seed bed: Reduce to fine, firm tilth with good crumb structure.  
 - Depth: 25 mm.  
 - Surface preparation: Rake to a true, even surface, friable and lightly firmed but not over compacted.  
 - Remove surface stones/earth clods exceeding:  
 • Particle size (maximum): 2.8 mm.  
 • General areas: 30 mm.  
 • Adjacent levels: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.

**Seeding**  
 310 GRASS SEED FOR AMENITY GRASS AREAS - PUBLIC REALM  
 • Mixture: A19 (All Purpose Landscaping) by Germinal Seeds or equal approved.  
 • Application rate: 35 g/m<sup>2</sup>.

**319 QUALITY OF SEED FOR all seeding areas**  
 • Freshness: Produced for the current growing season.  
 • Certification: Blue label certified varieties.  
 - Standard: EC purity and germination regulations.  
 - Official Seed Testing Station certificate of germination, purity and composition: Submit when requested.  
 • Samples of mixtures: Submit when requested.

**330 SOWING**  
 • General: Establish good seed contact with the root zone.  
 • Method: To suit soil type, proposed usage, location and weather conditions during and after sowing.  
 • Contours: Smooth and flowing, with falls for adequate drainage.  
 - Hollows and ridges: Not permitted.  
 • Finished levels after settlement: 25 mm above adjoining paving, kerbs, manholes etc.  
 • Give notice: If required levels cannot be achieved by movement of existing soil.

**705 HANDLING TOPSOIL**  
 • Aggressive weeds: Give notice and obtain instructions before moving topsoil.  
 • Plant: Select and use plant to minimize disturbance, trafficking and compaction.  
 • Contamination: Do not mix topsoil with:  
 - Subsoil, stone, hardcore, rubbish or material from demolition work.  
 - Other grades of topsoil.  
 • Multiple handling: Keep to a minimum. Use or stockpile topsoil immediately after stripping.  
 • Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall or when it is wetter than the plastic limit less 3%, to BS 1377-2.