

ROADS & SEWERS TO BINDER COURSE & ROADS, SEWERS & FOOTPATH STAGE 2 WORKS.

TRADE SPECIFICATION

GENERAL

- a) **BDW Trading Limited**
Barratt Homes, David Wilson Homes and Ward Homes are all trading names of BDW Trading Limited "the Company".
- b) **Site Condition**
The Contractor is to examine the drawings, visit the site in order to ascertain position of site office, compound, electricity and water supplies and the local conditions, nature of the soil, extent of wet conditions, etc as no claim for adverse site conditions will be entertained.
- c) **Materials**
The Contractor must ensure that all materials are satisfactory for use and have not been subject to deterioration and confirm to the relevant BSS, if applicable or Agrément Certificates, NHBC and Local Authority requirements. Failure resulting from the Contractor using unsuitable or damaged materials will incur the Contractor the costs of rectifying the same.
- d) **Unloading Materials**
It is the Contractors responsibility for unloading and storing all of their own materials.
- e) **Sub-Contractor**
No work is to be further Sub-Contracted without the prior approval of the Company.
- f) **Defective Workmanship**
All defects arising from bad workmanship by Contractors are to be remedied by the Contractor at no cost to the Company. Failure by the Contractor to carry out this contractual obligation resulting in an alternative contractor carrying out this work will incur the Contractor with the cost thereof.
- g) **Clearing**
Contractor is responsible for clearing up and removing waste materials resulting from executing his trade process. Failure to comply with this requirement resulting in the Company's labour performing this task will result in contra charges.
- h) **Contract Conditions**
The Contractors attention is drawn to the Company's Conditions of Contract and General Terms.

i) **Group Suppliers**

Contractors should be aware that the Company operates an agreed National specification with:

Below Ground Drainage –

Polypipe Limited

Broomhouse Lane
Edlington
Doncaster
DN12 1ES

Merchants –

- All pipe work including fittings (concrete, clay and plastic)
- Manhole rings,
- Cover slabs,
- Road gullies,
- Cast iron covers gully,
- Gratings.
- Concrete slabs,
- Kerbs and edgings,
- Polypipe plot drainage and geotextiles
- Merchants also offer Contractors a full take-off service including Value Engineering

Buildbase Civils and Lintels

Gemini One
5520 Oxford Business Park South
Cowley
Oxford
OX4 2LL

Or

Keyline Builders Merchants

Unit S3, 8 Strathkelvin Place
Kirkintilloch
Glasgow
G66 1XH

No other manufacturers' products are to be specified unless otherwise stated in an addendum to this specification.

1. SCOPE OF WORKS

- 1.1. The basis on which these works are to be placed i.e. all risk, or re-measure shall be indicated within the invitation to tender letter. It is the Contractors responsibility to ascertain this information as no claims based upon want of knowledge will be accepted.
- 1.2. This specification covers the Construction of Roads and Sewers up to and including the uppermost layer of tarmac underneath the final surfacing (which should contain sufficient fines to avoid an open texture) and kerbs (which are to be laid on cured concrete kerb beams which will have been shuttered both sides in accordance with working drawings) where roads are to be finished with block pavements no kerbs are to be laid, instead you should allow for a temporary block restraint.
- 1.3. Contractors pricing this contract must complete the summary schedule in the appendix to this specification.
- 1.4. All materials and work must be in accordance with the specification requirements of the Local highways and sewer adopting authorities.

- 1.5. Any mobile plant brought onto site shall meet the requirements laid down in the Provision and Use of Work Equipment Regulations.
- 1.6. Contractors shall include for keeping all existing roads, used for access, clean and free from any mud, debris or other deleterious material for the duration of your construction programme.
- 1.7. Any queries should be directed to the quantity surveyor before submitting your tender, as no claims for want of knowledge will be entertained.

2. GUIDANCE NOTES

- 2.1. A fully inclusive fixed price lump sum for Roads/Sewers (excluding capping layer & service trenches and ducts unless tendered as “all risk” – see scope of works above) is required in accordance with the below specification, tender drawings enclosed and Invitation to tender letter.
- 2.2. The Contractor is to ascertain the nature, character and extent of the proposed work. The Contractor is required to visit the site and to satisfy himself as to the nature of the ground, local conditions and accessibility of the site. The Contractor will acquaint himself with the conditions affecting the supply of labour, materials, Local Highways Authority and relevant local Statutory Authority requirements/specifications and any other matters, as any claim based upon want of knowledge in these respects will not be accepted.
- 2.3. The Contractor is to ascertain the nature, character and extent of the proposed work. The Contractor is required to visit the site and to satisfy himself as to the nature of the ground, local conditions and accessibility of the site. The Contractor will acquaint himself with the conditions affecting the supply of labour, materials, Local Highways Authority and relevant local Statutory Authority requirements/specifications and any other matters, as any claim based upon want of knowledge in these respects will not be accepted.
- 2.4. Contractors are deemed to have priced in accordance with the current codes of practice, good standards of workmanship, NHBC “Buildmark” and Local Authority requirements. All work must further conform to local By-laws and other Authorities and bodies.
- 2.5. Adequate and proper supervision of labour is to be maintained throughout the duration of the contract. A competent foreman or charge hand to be kept on site during the works.
- 2.6. Should there be any apparent conflict between the requirements of the contract drawings enclosed and the specification, the situation should be clarified with the Company in writing prior to commencement.
- 2.7. All variations to be agreed in writing prior to commencement of such work. The value of all such variations should be formally agreed with the relevant Job Surveyor prior to execution.
- 2.8. It should be noted that where shown on drawings construction depth of roads, drives and footpaths are to minimum adopting authority standards and will obviously vary dependent upon the findings of the soil report and site conditions. The contractor is to adopt the LA drawings and specification as per the location of the development.

- 2.9. All works carried out to adoptable areas are to be the relevant adopting authority standards and any failure due to incorrect construction thickness or materials will be corrected by the Contractor at no expense to the Company. The contractor is to adopt the LA drawings and specification as per the location of the development.
- 2.10. Roads/Sewers works are deemed to include for all roads, parking areas (excluding private/domestic). Public Open Space works and main drainage runs and laterals (measured to nearest domestic manhole). The balance of the work is deemed to be included within the Groundwork contract (i.e. house/garage foundations, front/rear gardens, domestic drainage, oversite slabs, service entries, domestic paths/patios, drives, etc.). A schedule of rates is required for site development works i.e. screenwalls, public footpaths etc.
- 2.11. The Contractor should note that where occupied houses are adjacent to the site noise and vibration nuisance must be kept to a minimum.
- 2.12. The Contractor is to allow for complying with adopting authority specifications for the Layout and Construction of new Estate Roads and carrying out the works to their entire satisfaction. Therefore the regional LA drawings will supersede the construction drawings for adopted areas on the development.
- 2.13. The Contractor is to allow for complying with Department of Environment specification for Road and Bridge Works and all contract drawings (item 2.6 is to take precedence).
- 2.14. The Contractor is to allow for maintaining the works including remedial works for a period of eighteen months from the certified date of completion (allowance to be made within Roads/Sewers contract). To this end retention will be treated as follows:
- 2.14.1. Retention of 5% from all Valuations/Claims shall be deducted from payment (unless otherwise agreed to Global limit).
- 2.14.2. 50% of the retained monies will be released on practical completion.
- 2.14.3. The balance of retained monies (net of any deductions made under the Housing Grant Regeneration Act 1996) will be released on receipt of the adopting authorities certificate or written confirmation of acceptance by the Clerk of Works, on the status of both roads and sewers.
- 2.15. The Contractors final application must be accompanied by:
- 2.15.1. Fully marked-up drawings showing the “as-built” locations of all service ducts and positions of branches from manholes measured to known points.
- 2.15.2. Details of any amendments and/or variations made on site which contradict the working drawings with the original instruction or letter of authorisation from the respective Clerk of Works.
- 2.15.3. All material laboratory test certificates.

- 2.16. Contractors are to allow for within their tender sum for all costs associated with testing materials provided by them to satisfy Local Authority Highway Officer's requirement. Should the Company receive any costs from Local Authorities/County Councils in respect of the above, these costs will be charged to the Contractor.
- 2.17. Should the Contractor or persons either acting as his Sub-Contractor or Supplier cause damage to Statutory Authority plant or Local Authority property then the full costs will be charged to the Contractor.
- 2.18. Contractors are to price strictly in accordance with the pricing notes using headings and schedule provided. A full bill of quantities showing all measurements, provide a fully marked-up drawing showing all areas included and provide a full schedule of rates at the time of tender submission.
- 2.19. Variations to contract will not be accepted unless agreed in writing before work commences with the site surveyor or engineer.
- 2.20. You will be deemed to have included for excavating in whatever ground conditions may be encountered with the exception of rock, as per the detailed site investigation (unless all risk). Rock is defined as that material which requires the use of specialist plant to be removed, either a pneumatic compact hammer or by blasting.
- 2.21. Your tender must also be accompanied by a schedule of daywork rates for both labour and materials, if applicable.

3. PRE-START SITE INVESTIGATION

- 3.1. The Contractor shall be deemed to have full knowledge of all matters appertaining to the execution of the works. He is required to visit the site and acquaint himself with all the features thereof including the nature of the ground and subsoil as no claim will be authorised due to lack of knowledge in any respects.
- 3.2. Subsoil information (soils report) is attached for information. The Contractor should make their own judgments on the offered information to ensure that the details are adequate for tender purposes. Contractors are deemed to have allowed for any de-watering that may be necessary and to have made provision for all attendance's including suitable acoustics baffles where construction adjoins occupied properties. Contractors should make provision for all necessary trench supports in accordance with recognised guidelines. The contractor will make full allowances for the contamination strategy & topsoil depths for the development.
- 3.3. Should Contractors feel it necessary, they may carry out, at their own expense, additional trial holes. However, arrangements must be made with the Company prior to these works being carried out.
- 3.4. Although whilst submitting a price for the scheme the contractor can work to the storm and foul sewers and road area as contained with the enclosed design drawings. Prior to accepting the contract the contractor is to visit the site to ensure that the invert levels of any existing manholes that are required to be tied into are in accordance with the documents

priced, and to ensure that the positions both horizontally and vertically accord with the price submitted, (i.e. we would not expect for a claim to be made for an extra 4m of road or sewers due to the tie in point being different from the design drawing.) It is for the Contractor to ascertain this prior to being awarded the contract, as no future claims will be considered in this respect.

4. PRELIMINARIES

- 4.1. All attendance's on Main Contractor BDW Trading Limited.
- 4.2. Preliminary costs & profit are to be included within your rates and not as separate item(s), as additional works will be paid on "rates" basis only and no claim for additional preliminary costs and or plant/labour/material inefficiencies will be accepted. Detailed and broken down into the relevant stages.
- 4.3. The Contractor should include for within their tender offer, means of cleaning vehicle wheels associated with their works prior to egress from the site, for the duration of works (by means of mechanical sweeper if necessary), to clean all site roads and public highways adjoining the development to the Local Authority's satisfaction and site roads to the Company's satisfaction (to be allowed for within Roads/Sewers).
- 4.4. The Company may provide, from time to time, a mechanical road sweeper to attend site to clean site roads, during the duration of the contract this does not negate the contractor's responsibility.
- 4.5. Contractors will be provided FOC by the Company the use of the following:-
 - 4.5.1. Water for the works at certain points.
 - 4.5.2. Shared welfare facilities.
- 4.6. The Contractor is to allow for the off-loading, storing and protecting within the compound, as necessary, of any groundwork's materials supplied either by him or by the Company. Contractor will be responsible for any deterioration in materials and the cost of replacement due to inadequate storage.
- 4.7. The Contractor is responsible for maintaining general site tidiness; including clearance and placing any debris created by the Contractor, in skip containers for disposal by the Contractor as and when instructed by the Company's site representative.
- 4.8. Attendance on all Sub-Contractors working under the Contractor's authority such as PCC floor beam installers (to include for storage areas, temporary roads, hard-standings, access points etc.).

5. SETTING OUT

- 5.1. The Contractor is to include for all costs associated with detailed setting out from co-ordinates provided by the Company's engineers. It is the responsibility of the Contractor to check all setting out co-ordinates and levels given to him by the Company's engineers.



Should any discrepancies be noted, these should be advised to the Company in writing prior to commencement. Failure to comply will result in the Contractor being deemed to have accepted the details provided and made them liable for the costs associated with any subsequent abortive groundwork costs. An “As Built” survey will be commissioned by the Company’s engineers to ensure that the roads/houses have been set out in accordance with the co-ordinates provided. All setting-out must be carried out by a qualified, competent engineer.

6. EXISTING ROADS & SEWERS

- 6.1. The Contractor shall include for making all connections & alterations into existing sewers & manholes and maintaining flow as necessary. The Contractor should satisfy himself of their position and condition prior to the submission of the tender. All remedial work to these manholes (if required) shall be deemed to be included within your tender sum.
- 6.2. The Contractor shall include for making good connections to existing roads and footpaths together with the provision of all notices and the obtaining of all licenses necessary from any relevant Authority prior to commencing the works

7. OFF-SITE WORKS

- 7.1. Include for all foul and storm outfalls (if applicable), together with road opening notices and / or connection to public sewer notices. Contractor is to allow for connecting into existing sewers and marrying roads and pavements including necessary reinstatement.

8. SITE CLEARANCE

- 8.1. Allow for general site clearance of the whole working areas of whatever nature including cutting down brushwood, hedges, fencing, shrubs and mechanical debris. Allow for disposal costs as no burning on site will be allowed). Allow for all temporary fencing/tree protection to Local Authority necessary requirements.
- 8.2. You will be responsible for clearing away your own debris at the end of each day, to your spoil heap and the off-site. Road clean will be included in your price for the duration of the build, not just spoil or topsoil removal.

9. TOPSOIL SITE STRIP

- 9.1. Contractor to excavate and remove topsoil to levels indicated in the site investigation report/detail drawings. The contractor is place excavated topsoil into heaps in positions agreed by the Company’s site manager and then remove from site within 7 (seven) days unless otherwise agreed in writing.
- 9.2. It should be assumed that the whole area of work is to be stripped at the same time, other areas designated for site strip will be at the discretion of the Site Manager/Contracts Manager and will be at the contract rates.

10. DRAINAGE

- 10.1. The Contractor is to provide all manholes, and appropriate diameter pipe runs as per drawing details.
- 10.2. All manhole frames must be suitably haunched and secured to chambers (this is most easily achieved by using manufacturer's clips).
- 10.3. Provide all first off manholes (see specification below), in accordance with co-ordinates provided.
- 10.4. Main drain runs to include for all lateral connections, road gullies, P1's etc. up to but excluding first manhole finishing behind footpath edging (taken in groundwork's package) to include for jetting and testing on completion.
- 10.5. Laterals shall be laid at a minimum fall of 1:80, unless otherwise dictated by the working drawings, site conditions or adopting authority specification ready for connection from plot drainage at a depth of 1.00m. Should the fall dictate that backdrops will be required into the manholes concerned, these will be included within your tender and qualified accordingly. Your tender shall also include for the requisite specified bed and surround, backfill and additional disposal of spoil offsite to and from lateral runs.
- 10.6. All manhole types and chamber sizes (C1.2.1.12.3) are to be taken from the latest edition of the Water Authorities Association Sewers for adoption. C1.21.12.5 states that the sizes quoted are a minimum and if two (or more) pipes enter the manhole the chamber size must be sufficient to accommodate adequate benching. It is the contractor's responsibility to ensure that ring sizes quoted in their tender are sufficient to suit site conditions.
- 10.7. All manholes to comply with the latest edition of the Water Authorities Association sewers for adoption incorporating step rings Polypropylene encapsulated to comply with W/S 4-33-01 in place of step irons or ladders where required.
- 10.8. Where works include, or are, associated with pumping stations all works are to be in accordance with the adopting authority's sewage pumping stations specification.
- 10.9. The contractor shall include for periodic cleaning of main sewer runs and lateral connections as necessary to prevent build-up of waste or debris until the adoption of the sewers or the end of any defects period as required under the relevant latest edition of the Water Authorities Association Sewers for Adoption.
- 10.10. The Contractor shall be responsible for any remedial costs, as required to be completed to the adoptable sewers either by the Contractor or completed by the adopting Water Authority.

11. GULLEYS

- 11.1. All gully gratings are to be positioned at the necessary level to allow for the surface water to drain whilst the roads are at the uppermost level of tarmac prior to finishes, not finished

level as this is specified under separate enquiry (Roads & Sewers Stage 2 Roadworks).

- 11.2. **Gully gratings are to be wrapped in Hessian , gully pot filled with straw or Gully guard, upon completion, in order to allow water passage only and not mud and debris. This should be inspected regularly and replaced periodically as necessary to ensure gulleys remain in working order.**

12. DUCT CROSSINGS

13. Where adequate drawings are not available, duct crossings shall be remeasured and monies due calculated on a unit rate basis. Accordingly please indicate within your tender your rates for the following duct sizes.

100mm diameter, concrete bed and surround	£	per m
150mm diameter, concrete bed and surround	£	per m
225mm diameter, concrete bed and surround	£	per m
300mm diameter, concrete bed and surround	£	per m

Assume 750mm depth for 100mm and 150mm diameter ducts and 1000mm for 225mm and 300mm ducts.

14. CCTV & AS BUILT SURVEYS

- 14.1. Prior to completion of any works including the construction of sewers and drains or adoptable works and as a condition of payment the Contractor shall carry out and supply to the Company a CCTV survey of all sewer and drain runs forming part of the works. The Contractor is to provide 2 copies of video and report to the Company.
- 14.2. On completion of the works and the construction of sewers, drains and adopted works and as a condition precedent to the release of any retention the Contractor shall supply to the Company 1 hard copy and 1 copy on disc in a format to be agreed of an "as-built" survey of the works identifying but not limited to all levels manholes and drain and sewer runs.

15. CAPPING LAYER (RATE ONLY IF NOT ALL-RISK)

- 15.1. Your tender shall be based upon construction thickness as stipulated within the road construction drawings and in accordance with the Local Authority standard construction details. Should site conditions dictate that additional sub-base or capping layer is required, then this shall be remeasured with any due monies calculated from unit rates, payment of such monies is conditional upon receipt of written instruction from the relevant Local Authority representative being provided and suitable substantiation provided by the Contractor. Accordingly please include within your tender additional rates as detailed below.
- 15.2. Where site conditions dictate the requirement of an additional sub-base or capping layer the additional depths of sub-base or capping layer shall be deemed to be included within any filling or making up of levels from the existing site levels to the underside of the required road construction. The Contractor should allow for filling or making up in suitable material to satisfy this requirement and in accordance with Local Authority requirements.



Excavate, dispose of spoil offsite, fill with approved capping	£	per m ³
Supply and Lay MOT type 1 (Add or Omit)	£	per m ³
Additional trim operation to capping layer	£	per m ²
Terram	£	per m ²
Weed killer/herbicide application	£	per m ²

16. ROADS/PARKING AREAS/SHARED ACCESS

- 16.1. The Contractor is to allow for any costs involved in setting out from co-ordinates supplied by the Company's engineers. The Contractor is to satisfy himself that co-ordinates are correct, as he will be liable for any errors emanating from incorrect data being used.
- 16.2. The Contractor is to allow for topsoil strip, excavate to reduce levels/make up levels as necessary with approved fill, excavate to formation and construct road to standard detailed. Sub base to suit site conditions. Allowances for additional sub-base and capping layers to be clearly indicated within the Contractors price.
- 16.3. Dense bitumen macadam road base and binder course shall be laid to comply with design drawings, levels and thicknesses and in accordance with the adopting authority specifications and requirements
- 16.4. Where work is required to existing areas of Highways, the Contractor is deemed to have included for all/any costs associated with obtaining Road Opening Licences and the like. The Contractor is to ensure that he possesses adequate cover to comply with Local Authority requirements where contract works are executed outside the site boundaries. Provision is to be made for the sealing off of and breaking out of any existing drains/services as required by the Local or Statutory Authorities. The Contractor is deemed to have included all costs associated with Traffic Management, Traffic Diversions or any other costs involved with obtaining suitable Licences or Permissions to carry out the works.
- 16.5. The Contractor will agree final levels with our final surfacing contractor as we will not pay for any regulating tarmac. The Contractor shall supply to the Company "as built" drawings detailing the line and level of the base course and or binder course and also of all kerbs and edgings installed by the Contractor.

17. CONCRETE KERB RACE

- 17.1. The Contractor is to provide a concrete kerb race in accordance with details provided and temporary block or concrete upstand/sacrificial kerbs or permanent kerbs, as indicated within the tender enquiry letter and/or addendum page. The contractor is to make due allowance for dropped kerb positions at driveway entrances and pram crossings.
- 17.2. The contractor is to lay a brick into the kerb race at the ends of each service duct road crossing to assist future identification.

18. LOCAL AUTHORITY REQUIREMENTS

- 18.1. The contractor shall be deemed to have included within his price for all items required by the Local Authority in the execution of the works to completion, whether or not the same are particularly referred to in this specification, working drawings or enquiry package.

19. NEW ROAD AND STREET WORKS ACT

- 19.1. The contractor is to comply with all the requirements of this Act. With special attention to The Street Works (Qualifications of Supervisors and Operatives) Regulations.
- 19.2. The contractor shall furnish the Company with a copy of their supervisors and operatives licenses for works in connection with the above Act prior to commencement of any works.
- 19.3. The Contractor is to ensure that the tender includes for all the necessary temporary works, haul routes, pumping and any protective measures to trees etc., that may be required by the Local Authority. The contractor must arrange for the rapid disposal of water from any source and must provide, where necessary, temporary water courses, ditches, drains, pumping or other means of maintaining the works free from water.
- 19.4. The Contractor is to take careful note of all existing services and take all appropriate action to work around them so as not to damage the service. Any costs resulting from damaged services are to be borne by the contractor and his insurance.
- 19.5. The Contractor will be responsible for complying with Police regulations and the provisions of the Road and Traffic Act with particular regard to Chapter 3 and all notices, warning signs, statutory compliance etc., in connection with this work.
- 19.6. All instructions are to be taken from the Company's Site Manager/Engineer and not the Local Authority's representatives.
- 19.7. Any assumption made by yourselves in pricing the works must be clearly stated in a covering letter.
- 19.8. In the event of any discrepancies between drawings and/or specifications, the Local Authority Specification is to take precedence. The prices for roads and sewers are to include for the specification required by the Local Authority with regard to all items including fill, backfill over sewers, sewer material specifications, bollards and street furniture etc.
- 19.9. Any breaking out and reinstatement of the existing paving, roadworks and kerblines at the junctions with existing roads is to be included in the lump sum prices for the respective new roads. The Contractor is deemed to have included suitable provision for tying in any new Road, Footpath or other completed surface to the Local Authority requirements and approved details.

The contractor should satisfy himself of the existing levels and ground conditions and the extent and location of existing services and drainage prior to submitting his tender, as no claims for variations in existing conditions will be entertained subsequent to the tender being accepted.

19.10. Note: The contractor is responsible for ensuring that all ironwork differences in level with existing roads or kerbs and surfaces are suitably constructed to ensure that where practicable there are no tripping hazards.

20. SCOPE OF WORKS

21. STAGE 2 ROADWORKS (INCLUDING FINAL SURFACING)

21.1. The basis on which these works are to be placed i.e. all risk, or re-measure shall be indicated within the invitation to tender letter. It is the Contractors responsibility to ascertain this information, as no claims based upon want of knowledge will be accepted.

21.2. Tenderers pricing this contract must follow the headings below and complete the summary schedule as indicated, any Contractors not adhering to this will be automatically excluded from the tender selection.

21.3. All materials and work must be in accordance with the specification requirements of the Local highways and sewer adopting authorities.

22. KERBS/EDGINGS

22.1. The Contractor is to provide pre-cast concrete kerbs to previously formed kerb race and remove temporary up-stand if applicable. Contractor to provide concrete bed and haunch to receive pre-cast concrete edgings, forming footpath. Provide continuous bed, haunch and pre-cast concrete edging to mark service strip highway verges. Provide pram crossing as appropriate.

23. FOOTPATH MAKE UP

23.1. Provide Type 2 sub-base and dense base course macadam to footpath areas. Due allowances should be made for additional thickness to sub-base where vehicular crossings occur.

23.2. Under this section also allow for forming highway verges, providing 100mm of clean topsoil, turfing by others.

24. BLOCK PAVING

24.1. Provide sand and blocks in accordance with the details provided. The Contractor is to clean base tarmac and puncture the surface to allow water passage to the satisfaction of the Highways Authority prior to sand bed being laid.

25. CLEAN AND TACK (ROAD AND FOOTPATHS)

25.1. The Contractor is to sweep loose materials away and jet wash clean prior to tack base course to roads and footpaths ready to receive wearing course to avoid debonding in accordance with LA highway standards.

26. WEARING COURSE

- 26.1. Road 1 – the contractor is to provide 30 mm dense bitumen macadam (or local adopting authority specification) finished to the highest standards.
- 26.2. Footpaths – the contractor is to provide 6 nominal size medium graded wearing course, laid and compacted to 20 mm thick, (or local adopting authority specification) finished to the highest standards.
- 26.3. Where sites are completed and there is no presence from the Company on site, all legislative obligations are deemed to be the Contractors responsibility.

27. ROAD RAMPS

- 27.1. The Contractor is to provide road ramps, types HRDO2, unless otherwise stated, (or local adopting authority specification) to locations indicated (if applicable.)

28. SIGNING

- 28.1. The Contractor is to provide traffic signing together with bollards and to arrange for electrical connections as appropriate.

29. WHITE LINING

- 29.1. Contractor to allow for all white lining works.

30. HEALTH & SAFETY

- 30.1. Manual handling of materials such as heavy blocks and kerbs present a particular high risk of injury. The weight of all items to be manually lifted is to be established prior to the commencement of the lifting process.
- 30.2. **It is an absolute requirement for mechanical handling solutions to be used for any length of heavy block or heavy kerb laying.** (Note: the terms 'heavy block' and 'heavy kerb' refers to any kerb which weighs more than 20kg).
- 30.3. Manual handling of materials such as blocks or kerbs that weigh less than 20kg should be eliminated wherever possible. Where lifting aids cannot be used, all workers are to be trained in basic safe manual handling techniques.
- 30.4. Tools, as defined in the Provision and use of Work Equipment Regulations, should be suitable for use and be maintained adequately. Only properly trained operatives are to use these items. No 240-volt tools are to be used on a Construction Site.
- 30.5. The affect of hand held vibrating equipment and tools should be assessed to eliminate HAVS (Hand-arm Vibration Syndrome). The use of green, amber and red labels on power tools to indicate increasing vibration levels, and control / monitor exposure periods. Please follow guidance attached regarding hand vibrating tools as guidance.



- 30.6. If people have difficulty speaking to each other at two metres apart then there may be a noise problem. It is recommended that a hire and purchasing policy is established that gives preference to low vibration / noise emission equipment and tools.
- 30.7. All relevant personal protection equipment must be worn at all times without exception. The use of suitable gloves should be considered to protect against Dermatitis and burns to the hands from contact with cement and cement products.
- 30.8. It is the Contractors responsibility to ensure they are in receipt of all service drawings and relevant service information, and to have carried out on-site surveys and investigation into live buried services prior to the commencement of any excavation works. It is the responsibility of the Contractor to document what surveys or investigation works have been carried out prior to commencement of any excavations. This is to eliminate for the potential for labour or machinery coming into contact with live buried services.

Tender Summary

Heading	Price £
1 Preliminaries	
1 Setting out/Supervision/As-Built survey	
2 Signage/Lighting	
3 Test, Clean, Jetting and CCTV Survey all Sewers	
2 Off Site Enabling Works	
3 Site Strip	
4 Road/Sewer Works to Binder & stage 2	
Stage 1 & 2	
a) Excavate to formation levels (Roads & Footpaths)	
b) Fill to make up levels	
c) Load and Cart Surplus arisings off site	
d) Sub Base (Roads only)	
c) Base Course (Roads Only)	
d) Binder Course (Roads Only)	
e) Concrete Kerb Race & Temporary restraint	
5 Main Sewers	
a) Foul Sewers and Manholes	
b) Foul Pumping Stations, Rising Main & associated works	
c) Storm Sewers and Manholes	
d) Gullies and Connections	
e) Storm Attenuation and all Associated Work	
6 Other site specific items:	
a) Section 185 Sewer Diversion Works	
b) Section 278 Works	
c) Earthworks	
d) Structures and Ponds	
e) Principal Contractor Items	
7 Services (Mains Only)	
Rate Only (Provide separate sheet)	
TOTAL CONTRACT SUM	



**ROADS & SEWERS TO BINDER COURSE & ROADS,
SEWERS & FOOTPATH STAGE 2 WORKS.**

TRADE SPECIFICATION AGREEMENT

This Specification Agreement relates specifically to the Company's development at

I confirm that I have read and understood the foregoing Specification and that my prices include for all items contained therein and will "Remain Fixed" for a period of: as outlined in the Enquiry letter.

SIGNED:

FOR AND ON BEHALF OF:
.....

DATE:

N.B. The contractor is to sign this Agreement and return it with his Quotation. Any prices received without this Agreement will be excluded from consideration.

- Revised: Rev A – 6 September 2001
- Rev B – 1 December 2003
- Rev C – 30 September 2004
- Rev D – 30 November 2004
- Rev E – 1 June 2005
- Rev F – 3 January 2008
- Rev G – 3 September 2008
- Rev H – 22 July 2009
- Rev I – 30 April 2010
- Rev J – 1 August 2010
- Rev K – 1 February 2015
- Rev L – 1 July 2016
- Rev M – 1 July 2017
- Rev N – 1 January 2018