

**Lancaster City Council Invitation to tender for the
Procurement of
Lancaster South Area Action Plan**

**Flood Risk and Water Management
Project Brief**

January 2022

RETURN DATE FOR SUBMISSION

12noon Monday 24th January 2022

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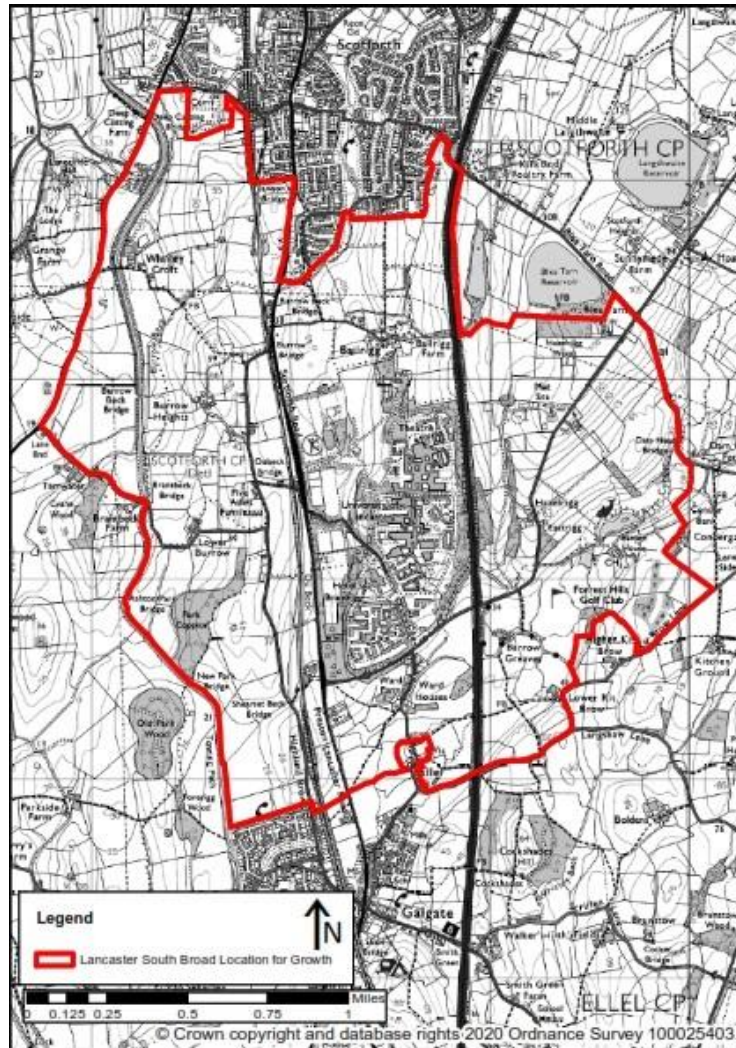
1. Introduction

- 1.1 Lancaster City Council formally adopted its new Local Plan in July 2020 which included a Strategic Policies and Land Allocations Development Plan Document (DPD) and a reviewed Development Management DPD. Policy SG1 'Lancaster South Broad Location for Growth (Including Bailrigg Garden Village)' of the Strategic Policies and Land Allocations document identifies South Lancaster as a 'Broad Location for Growth'. This includes the creation of a new Garden Village (Bailrigg Garden Village). The policy sets out a commitment for the Council to prepare an Area Action Plan DPD (AAP DPD) which will guide and manage future growth in the South Lancaster area, including the evolution of the new Garden Village.
- 1.2 As part of the preparation of this document Lancaster City Council is seeking to commission suitably qualified flood risk and water management engineering consultants to assist it in the preparation of the water management evidence base required to support the AAP DPD.
- 1.3 This work will build on the existing evidence prepared in 2017 and 2018 as part of the Local Plan preparation and in 2021 for the Climate Emergency Local Plan Review. The work will update this evidence to reflect current circumstances as well as the provision of more detailed assessment work required to inform flood risk and water management policies, support the identification of constraints and development parcels within the AAP area, areas for safeguarding for flood risk management schemes and a water management strategy and plan to reduce flood risk within the AAP area and beyond.
- 1.4 On completion the Council will expect to be in receipt of a Area Action Plan Sustainable Drainage Strategy and Primary Strategic Drainage Plan. The Strategy will cover SG1 Broad Location for Growth Area (plan 1) the Primary Strategic Drainage Plan will cover Bailrigg Garden Village (plan 2).

2. The Client

- 2.1 The City Council is looking to procure work under its role as Local Planning Authority for the District.
- 2.2 The project is being commissioned by:

Planning and Place Service
Planning Policy & Housing Strategy
Lancaster City Council
PO Box 4
Town Hall
Lancaster City Council LA1 1QR



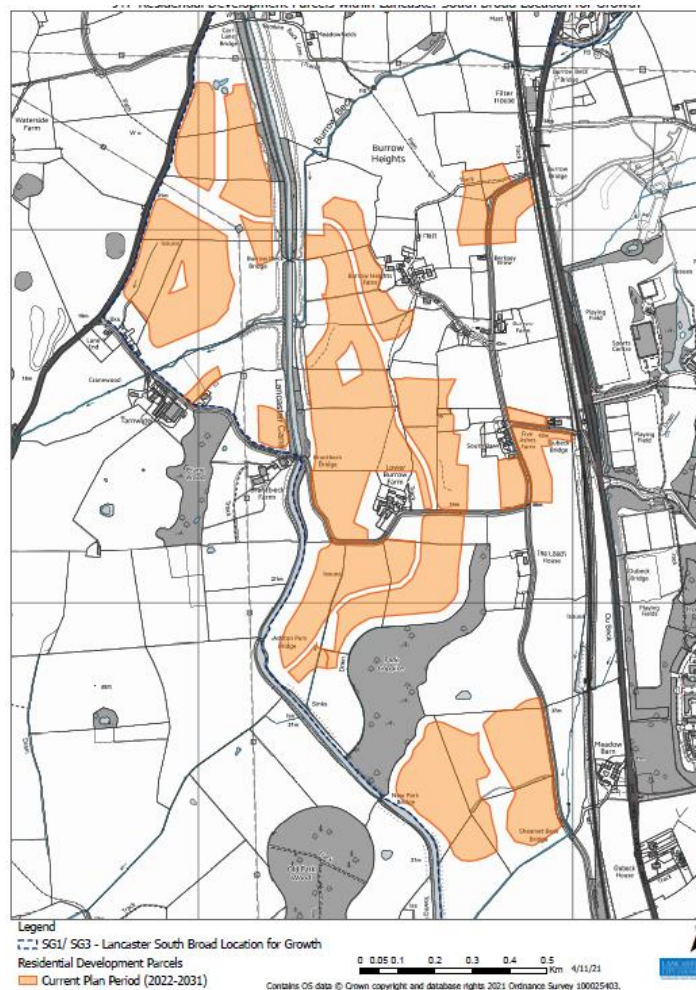
Plan 1: A Map to show the extent of the ‘Lancaster South Broad Location for Growth’ which is to be used as the study area for this assessment.

3. Background

- 3.1 On the 29th July 2020, the City Council formally adopted the Strategic Policies and Land Allocations DPD and reviewed Development Management DPD (the Local Plan for Lancaster District). The Local Plan establishes the planning policy framework for the district setting out the spatial vision for the area and the policies and land allocations that will be used to determine future planning decisions.
- 3.2 In addition to allocating land it also identifies a Broad Location for Growth to the south of Lancaster. The Council’s expectations for development in this area, the Key Growth Principles, are established in Policy SG1 of the Strategic Policies and Land Allocations DPD. Importantly the policy does not allocate land in this area, rather it establishes the intention that development needed to meet the district’s requirements will be achieved in South Lancaster and commits the Council to prepare an Area Action Plan DPD (AAP DPD) which will provide the detailed planning policies and allocations for this area.
- 3.3 Policy SG1 includes the expectation that Lancaster South will include a new Garden Community – the Bailrigg Garden Village. This follows the successful identification of the area,

one of only 34 Garden Villages across the country, by the Government as part of its Garden Towns and Villages Programme. The Government is clear that these areas should be vibrant, mixed use, communities where people can live, work, and play for generations to come with each holistically planned, self-sustaining and characterful.

- 3.4 Initial work on the AAP DPD commenced in 2017 with the Council exploring through early engagement sessions development growth issues for this area and potential options. Through engagement sessions in late 2017 and the Spring of 2018 the Council explored potential options of development and the issues and challenges that exist. This work forms the basis for the AAP DPD and will be used to inform the next stages of preparation.
- 3.5 Running in parallel with the AAP DPD the Council, through its Property, Investment and Regeneration Team, commissioned external consultants JTP to assist it in the preparation of a Masterplan and Design Code for the Bailrigg Garden Village area. This work is now nearing completion with a final Masterplan due to be handed over to the Council by the end of the year.
- 3.6 The Masterplan establishes the general location, shape, and layout of development. 12 parcels for development are identified within the Bailrigg Garden Village boundary (Plan 2). The exact boundaries of these will be investigated through the AAP.



Plan 2 – Bailrigg Garden Village Development Parcels

- 3.7 Further growth is proposed outside of the Bailrigg Garden Village boundary with additional development to the south of Lancaster under investigation. Whilst outside of the Bailrigg Garden Village these areas are located within the Broad Location for Growth (Policy SG1) (Plan 1) and as such will be considered through the AAP. It should be noted that several of these areas are currently the subject of live planning applications and as such some flood risk and water management assessment work already exists to support these applications.
- 3.8 Importantly whilst a Masterplan has been prepared it is the AAP DPD which will provide the formal allocation of land and take this forward into policy. It is recognised that both documents must work together to ensure a robust and positive framework for growth in this area, complementing each other and ensuring that the regulatory requirements are met. The AAP will concentrate upon the development area in the masterplan within the Broad Location and will also look to allocated separate parcels of land to the South of Lancaster. The specific areas for development will evolve through the AAP process and will be influenced by a variety of work including landscape and the water management evidence.
- 3.9 The AAP will allocate areas for development, strategic transport corridors, green and blue infrastructure including strategic above ground sustainable drainage system (SuDS) components, flood storage and alleviation and provide policies specific for the broad location with regard to flood risk, green and blue infrastructure, including sustainable water management and drainage, densities, biodiversity and water quality management measures.
- 3.10 The Council is committed to the plan-led development of this area and following early engagement work and the adoption of the Local Plan is now looking to progress preparation of the AAP DPD. The Council wish to make rapid progress in preparing the AAP DPD, the timetable is set out in the February 2021 Local Development Scheme (LDS). This anticipates that much of the work needed to support the AAP DPD, including the Masterplan and the completion of the Design Code will progress through the course of 2021 and 2022.
- 3.11 The Council would anticipate that a draft AAP DPD would be available for informal consultation (under Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012) mid 2022. The supporting evidence which will be used to underpin the allocations and policy direction of the AAP DPD will need to be completed and available in time for the informal Regulation 18 consultation.

Flood Risk and Water Management Evidence

- 3.12 To ensure soundness and robust decision-making, the Local Plan was supported by a proportionate evidence base which was used to inform the content and direction of the DPD, from the allocations made, to the policy positions taken. This included an SFRA (2017) which has now been updated by the CELPR SFRA Updated (Nov 2021), a Concept Flood Risk and Drainage Strategy Bailrigg Garden Village (2018), Bailrigg Garden Village Geo-Environmental Assessment (2018) and Bailrigg Garden Village Outline Drainage Strategy (2019).

4. AAP Flood Risk and Water Management Aims

- 4.1 The flood risk and water management evidence and the Area Action Plan Sustainable Drainage Strategy and Primary Strategic Drainage Plan is expected to support the Council aims for the AAP flood risk and water management planning policy which will include:

1. A requirement for site specific flood risk assessment (SS-FRA), sustainable drainage scheme and/or strategy (depending upon the type of application), using a whole catchment approach, for all development (other than minor extensions). SS-FRA and drainage strategy/scheme to be informed by ground investigation, avoiding elevated ground water levels/areas of peat etc. SS-FRA, scheme and strategy to be in accordance with BRE365 and/or The SuDS Manual etc. Documents to include assessment of managing existing flow routes and surface water drainage scheme/strategy, to outline design and layout and foul water management and treatment. Water supply and treatment, highway drainage and residential development.
2. The layout of development must be designed to minimise the need for new roads or access crossings of watercourses (main river and ordinary). Culverting of any watercourse should not be allowed, and any opportunities to remove culverts and other buried watercourses should be taken. Where they are necessary, crossings should be in the form of clear span bridges with flow routes clear and free from obstruction and include suitable scour, freeboard and soft bed allowances, blockage assessment, eco impacts and safe road levels free from flood risk, including to exceedance level.
3. The layout of the development should also be designed around the SuDS systems and natural flow paths, in line with the CIRIA SuDS manual. The SuDS systems should link with wider landscape features (e.g. connecting habitat corridors, creating wetlands and ponds that connect to existing watercourses). An overall approach should be to define natural flow routes and surface water sub catchments, define potential SuDS locations, parks, open spaces and habitat corridors, then design roads, development and exceedance routes (see chapter 7 of the SuDS manual)
4. In addition to a SuDS, the provision of additional attenuation including natural flood management (NFM) to reduce flood risk to existing and new communities and provide further water quality, amenity, biodiversity and climate benefits (provision to be informed by the Area Action Plan Sustainable Drainage Strategy) and Primary Strategic Sustainable Drainage Plan).
5. Protection and enhancement of areas defined as strategic drainage, flood risk management areas, public open space, community value, habitat and ecology areas – blue and green infrastructure.
6. Adoption of the NW SuDS Pro-forma for the submission of technical information associated with the Sustainable Drainage Strategy/Scheme.
7. SuDS to be designed in accordance with Defra's Technical Standards for SuDS (as updated and/or subsequent documents to replace this) and comply with the CIRIA's The SuDS Manual (as updated).
8. Ensuring as built ground and surface water flows are designed to effectively manage flood risk, working with the natural site topography and flow routes, and that as built SuDS components are demonstrated to comply with the approved SuDS design.
9. Protection of gardens/play areas/infrastructure (gardens, play areas and public open space (POS) will need to be integral to the design – elevated and actively drained if required. Areas of residential development should not include surface water flow routes

(as this will result in disruption to residents but will also cause flow impedance through fencing and planting).

10. Infrastructure should be treated as a specific issue through design to adoptable standards including suitable capacity culvert and bridge crossings.
11. Requirement for above ground SuDS to provide multifunctional benefits, including climate benefits in accordance with the following Sustainable Drainage Hierarchy:
 - i. Re-use and reduce surface water run-off /rainwater harvesting/green walls/roofs,
 - ii. Attenuated source control such as infiltration through above ground SuDS components including infiltration basins, permeable surfaces, swales and trenches etc.,
 - iii. Attenuation and conveyance using above ground water components (including ponds, swales etc.) for gradual release into infiltration features and if this is not possible to a watercourse,
 - iv. Treat water then attenuate surface water via storage in tanks or sealed water components for gradual release into infiltration features and if this is not possible a watercourse,
 - v. In exceptional cases, controlled discharge to a sewer or other drainage system, via above ground attenuation, and if this is not possible, underground attenuation.
12. Surface water should be managed through the provision of above ground sustainable drainage components with multi-functional benefits as part of an integrated high-quality green and blue environment. All development must incorporate SuDS which meet the requirements of the SuDS Pro-forma and have been designed to incorporate the following:
 - a) Flood risk reduction measures;
 - b) The management of surface water in stages as close to the source as possible;
 - c) Environmental, water quality and biodiversity benefits;
 - d) Pollution control, multi-level source control;
 - e) Landscape and amenity enhancement;
 - f) Where a site includes a watercourse or buried surface water drainage system, development must include measures to restore and provide natural flood management, remove and naturalise culverts and other artificial modifications (eg. Weirs, underground surface water drainage), create a predictable flow, include storage, measures to manage peak flows;
 - g) SuDS components of an adoptable standard; and
 - h) Appropriate safety measures.
 - i) Exceedance routes for flows in excess of the design standard which minimise the impact on property and infrastructure

(The above criteria are included within draft policy DM34 of the Climate Emergency Local Plan Review).

13. The cascading impacts of SuDS will be taken into account - development cannot progress until downstream drainage (including capturing upstream inflows) have been designed and constructed.
14. SuDS to be of an adoptable standard (Ciria C753 The SuDS Manual, SuDS Proforma and non-technical standards for SuDS).
15. Requirement for the following to be submitted with applications:
 - a. A Sustainable Drainage Strategy. The Sustainable Drainage Strategy must show the type of sustainable drainage system and/or detailed measures proposed to control the flow of water/surface water and measures to protect flooding and pollution during construction (depending on the type of application) and on completion of the development. For any development proposal which is part of a wider development site, it will be necessary to ensure the foul and surface water drainage proposals are part of a wider, holistic strategy which coordinates the approach to drainage between phases, between developers, and over a number of years of construction.
 - b. The SuDS Pro-forma and the information/evidence required by the SuDS Pro-forma and identification and investigation of pre-existing drainage systems including source and capacity of culverts etc.
 - c. A comprehensive Surface Water Lifetime Management and Maintenance Plan which includes clear arrangements and funding mechanism for ongoing management and maintenance for every SuDS component over the lifetime of the development.
 - d. Post construction, applicants must provide to the Council certification that the sustainable drainage scheme has been implemented in accordance with the approved strategy.
16. Requirement for inclusion of measures to reduce existing flooding within and beyond AAP area where appropriate (identification of areas and potential measures).
17. Prevention of development on areas to be retained for potential future flood alleviation measures (areas to be identified) (including fluvial CC/1000yr flood outlines over 100yr design period – i.e. future modelling scenarios required for surface water and fluvial).
18. Measures to use water for renewable energy (electricity) (undershot/over water wheels just need suitable head of water/channel gradient – for street lighting, pathways etc)

5. Flood Risk and Water Management Evidence

- 5.1 In order to support and inform the preparation of the Lancaster South AAP DPD the Council recognise that further flood risk and water management work is required to update previous evidence and to meet the Council's aspiration to ensure development reduces flood risk on and off the site and manages water in a sustainable way.
- 5.2 The evidence and documents required by this brief to support the AAP include:
 1. Update fluvial modelling (where necessary) to define any changes to EA mapping, up to date climate change allowances and consider recent upstream works. Modelling will also be required to define cumulative impacts to existing communities within the AAP and within the catchments.

2. Update SFRA maps (updates completed as part of the CELPR SFRA, further updates required where necessary) and assess all sources of flood risk to the AAP area and associated land outside the area.
3. Identify all watercourses including ditches which may hold water ephemerally including a capacity/restriction review of any existing culverts (including culverts as previously surveyed and trash screens) and recommendation for enhancement where necessary.
4. Identify and evaluate existing drainage and water flow pathways including those from infrastructure (roads, canal, railway etc) within AAP area. Identify existing systems that could be altered to surface water systems.
5. Identify overflows from canal and impact downstream plus impacts of development on overtopping.
6. Assessment of the parcels (these are intended to evolve during the AAP process as evidence with regard to landscape/ecology and water management evolves) which will be identified for development (parcels are divided into areas for built development and those for strategic SuDS) (in terms of SuDS a “parcel” should comprise interconnected drainage areas including all development zones from headland source to outfall). SFRA Level 2 (based on the indicative plans available from JTP and areas to be allocated within the AAP) for the parcels to determine suitability for the development proposed and recommendations for refinement where necessary to inform the final allocation of parcels.
7. To determine the volume/land areas required for above ground SuDS associated with the development parcels and transport corridors. These will need to be based on agreed SuDS techniques such as wet and dry basins and swales, including interactions with key infrastructure, layout and services. The SuDS strategy will need to be taken further with provisional modelling and ground conditions investigation to demonstrate appropriateness, interconnectivity and capacity of these features so that a series of flood and drainage maps can be developed. Flows and capacities will need to be confirmed so that the wider aspirations for development, such as reducing runoff, may be demonstrated. Any controlling structures, freeboard requirements and overflows will need to be identified and requirements defined. Potential discharge points into watercourses should be identified, ensuring discharge points are physically and legally possible.
8. An assessment and provision of evidence to enable allocation of land for the strategic drainage and areas for flood alleviation works (either measures to be carried out as part of the development or areas which may be allocated for future alleviation works when and if funds become available). Areas as defined in EA’s Galgate SOC plus additional area where evidence supports inclusion.
9. To provide an Area Action Plan Sustainable Drainage Strategy and Primary Strategic Drainage Plan based upon the previous JBA work, the JTP work and the policy aims. The strategy and drainage plan to:
 - a. The drainage strategy should be designed in accordance with the Defra Technical Standards for Sustainable Drainage Systems (and updated recommendations in the latest report Feb 2021), CIRIA’s C753 The SuDS Manual’ and to of an adoptable

standard (liaison with United Utilities will be required to ensure this) plus additional attenuation where this will benefit existing and proposed communities).

- b. Identify and provide supporting evidence for strategic drainage including an indication of areas/quantities/techniques and locations appropriate for (taking into account ground conditions and existing and proposed flood risk) and required for storage, conveyance and discharge etc. and identifying potential overland flow-paths in conjunction with landscaping requirements and any barriers that will need to be considered through delivery. The strategy will need to include both the development parcels and highway drainage (these elements may need to be separate depending upon the stance of the County Council - highways would be separated for adoption). Liaison with the Lancashire County Council (Highway Authority) will be necessary, to ensure that the strategy addresses the scheme the County Council is progressing.
- c. The strategy will need to assess and make recommendations for new road or access crossings over watercourses to minimise the need for crossings. Flow routes should be clear and free from obstruction and any crossing should be provided as a clear span bridge with suitable scour, freeboard and soft bed allowances, blockage assessment and safe road levels free from flood risk, including to exceedance level.
- d. The drainage strategy to mimic the existing pathways, discharge points and rates unless additional attenuation will minimise or prevent flooding to existing and future communities. An assessment of the implications upon the flow of water into existing watercourses will be required (this is to allow an assessment of the ecological implications).
- e. The Strategy also to identify and quantify potential for additional attenuation within development and SuDS parcels where it can be of benefit to the development and existing communities. This could include specific attenuation and the use of natural flood management techniques. The additional attenuation to be supported by evidence that it will resolve or minimise existing flooding issues (depending on what can be achieved) and include techniques and scale. (LLFA advise that such measures would need to be separate to development SuDS as they would not be adoptable).
- f. Strategic drainage and areas for flood alleviation works (either measures to be carried out as part of the development or areas which may be allocated for future alleviation works when and if funds become available). - areas as defined in EA's Galgate SOC, Burrow Beck SOC plus additional where evidence supports inclusion.
- g. To provide recommendations on the phasing of development including provision of strategic SuDS to take into account the cascading impacts of SuDS - development cannot progress until downstream drainage (including capturing upstream inflows) have been designed and constructed.

This is key as the phasing of strategic drainage is considered a prerequisite for development - making best use of land and existing flow routes to effectively manage surface water discharge. Strategic drainage also needs to take account of existing baseline flows, including climate change impacts not attributable to the development. The Strategy and AAP will need to demonstrate a robust, future proofed approach to surface water management that works with for both new and existing communities.

- 10. The drainage strategy will be developed as a phased approach. Firstly desktop, to produce a series of maps to demonstrate current and future risks, including the proposed development. This will be layered with services and layout plans, GI in order to identify

constraints and opportunities for green energy etc. Following agreement with stakeholders this strategy will need to be developed further through modelling in order to demonstrate connectivity and viability. This stage does not include for detailed sewer modelling and more detailed design but would provide a clear and quantified approach to surface water management as part of the green infrastructure strategy. Whilst housing would not be explicitly modelled the interconnecting SuDS features will be. Allowance will be made for the adoptable drainage when determining drainage, connecting and threshold levels. This process will need to be completed for each development parcel. Mapping and indicative SuDS visualisations will be required to support the APP and the wider stakeholder consultation and engagement process.

11. An assessment of the potential for and locations where water may be used to generate renewable energy (e.g. Street lighting).
12. An assessment of the potential for and location where water may be stored and reused.
13. An estimate of costs of parcel specific and overall drainage strategy costs (this information is necessary to feed into the viability assessment).
14. Foul water and water supply strategy. Assessment of sewer and water supply capacity for the proposed development and where this may be or could cause issues and contributing to local flood risk.

6. Costs

- 5.1 Submitted proposals should provide a quotation for the preparation of each part of the project including any additional costs, for example Inception Meeting and any additional meeting requirements. Under the current circumstances it is acknowledged that meetings will likely be held virtually through the project period. Regular progress update meetings should also be included within the proposal.
- 5.2 Payments should be made at specific trigger points within the project and following the receipt of an invoice with a purchase order provided by the Council. These trigger points can be finalised and agreed prior to appointment but will have to relate to tangible outputs.
- 5.3 Please note that whilst looking to obtain the best value for the Council, the Council is not bound to accept the lowest cost with the quality and output of the work being an important consideration.

7. Selection Process

- 7.1 The selection process for this project is composed of two components. The first component requires the submission of costed proposals which must identify costs for each stage of the commission and details of the key individuals which will be working on the project.
- 7.2 The assessment criteria which the City Council will follow in assessing costed proposals is outlined below. At this stage, the assessment will take the form of a subjective desk top review of the submitted proposals focused on capacity to undertake the project, previous experience and understanding of the project requirements.

- 7.3 Following this the City Council will select a maximum of three consultants to take forward to stage 2 of the selection process. It is important to highlight that the City Council is looking to establish an on-going working relationship with the selected consultants with services retained for several months. Stage 2 of the selection process is therefore designed to assess potential for this relationship and as such will be focused on determining the capacity for establishing a positive and responsive relationship between the plan making and landscape team. Assessment at this stage will therefore take the form of a short informal interview with the selected consultants. This may be held virtually rather than in person.

Submissions Requirements

- 7.4 Submitted proposals should contain the following information:
- A descriptive account of appropriate relevant and recent experience. Contact details should be provided for authorities previously worked with.
 - The proposed methodology for undertaking the project.
 - The submitted proposals should identify why you see yourselves as the most appropriate contractor for the project.
 - Proposed staff with CV's appended. It is important that details of the actual project team are provided. If progressed to stage 2 of the selection process the City Council would expect to meet this project team at interview.
 - Fee costing for each element of the work required plus for stakeholder workshops/meetings and responding to representations.
 - Indicative timetable for undertaking the project, including specific elements such as modelling and updating of maps.
- 7.5 Whilst not forming part of this commission submitted proposals should highlight relevant experience in giving evidence and attending Examination in Public Hearing sessions.

8. Assessment Criteria

- 8.1 Consultants will be selected for informal interview based on the following factors:

1. Capability: Submission will be assessed based on the skills and experience of staff, including specialised technical knowledge.

2. Experience and track record: Past experience will be examined in detail to ensure that the commissioned consultant has the ability to provide the required outputs.

3. Capacity: Submissions should identify how the project will be managed to ensure outputs are delivered. The availability of staff within the organisation to undertake this work will be assessed.

4. Methodology: Submission will be assessed based on the proposed method for undertaking the project. This will take account of the consultant's own views on why they are the most appropriate contractor for the project.

9. Outline Timetable

- 9.1 The deadline for submitting tenders is 12noon on Monday 24th January 2022.
- 9.2 Consultants proposing to submit proposals are advised to ensure that they are fully familiar with the procedures, requirements and obligations of Lancaster City Council's contractual processes for the appointment of external consultants.
- 9.3 As outlined above, based on the information returned the City Council will seek to interview a maximum of three consultancies. Interviews are currently scheduled to take place in the week commencing the week of the 24th January 2022.
- 9.4 The dates given below for undertaking the project are indicative and may be subject to change. Through the tender and interview process the City Council would wish to explore the appropriate timeframes for this work to ensure the completion of a robust assessment and would welcome suggested timeframes to be included within any submission.

Target Date	Activity
w/c 4 January 2022	Issue Invitation to Tender Documents
Monday 24th January 2022	Return of Tender Documents
W/c 24th January 2022	Interview Date (via Microsoft Teams)
W/c 24 th January 2022	Notification of Intention to Award Contract
W/c 31 st January 2022	Inception Meeting
To be discussed & agreed	Completion

10. Contact Details

- 10.1 To discuss the brief and aid the submission of tenders please contact:

Planning & Place Service
Planning Policy & Housing Strategy
Lancaster City Council
PO Box 4
Lancaster Town Hall
Dalton Square
Lancaster
LA1 1QR

- 10.2 Please note all Tender submission documents must be submitted to the Chest and responses to any questions posed by interested parties must be posted on the Council's CHEST system. Please also view the Terms & Conditions before making your submissions.