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REDEVELOPMENT WORKS, BURTON STREET CAR PARK, MELTON MOWBRAY

MELTON BOROUGH COUNCIL

FEASIBILITY REPORT

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Sheppard Lockton House Cafferata Way Newark-on-Trent Nottinghamshire NG24 2TN Tel: 01636 704361 Fax: 01636 702809 W: wm-saunders.co.uk

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FEASIBILITY REPORT

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FEASIBILITY REPORT

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1.0 INTRODUCTION

William Saunders were appointed by Melton Borough Council (MBC) in May 2012 to prepare feasibility options for redevelopment of the currently unmade Burton Street Pay & Display car park adjacent to MBC's Parkside offices in Melton Mowbray.

This report outlines the research undertaken into previous studies on the site, the constraints and opportunities of the development proposals, the proposal options, associated costings, and the next steps required to progress the works.



2.0 PREVIOUS WORK

The site has been subject to a number of previous studies around the time of the development of the Parkside offices. These studies, and their relevant findings, are summarised thus:-

2.1 Flood Risk and Drainage Constraints – BSP – December 2008

Findings

Burton Street is in Flood Zone 3 but is defended upstream by Brentingby flood storage reservoir, constructed following the 1999 floods. {Note that the 2012 EA flood zoning shows the site to be in Flood Zones 2 and 3, and defended} Ground levels vary between 71.1m and 72.5mAOD. The EA predicted 1 in 100 year flood level, with a 20% allowance for climate change, varies between 71.23 and 71.58mAOD.

Severn Trent Water plc have a storm water sewer and a combined sewer crossing the site from East to West. In 2008 they confirmed that no surface water would be permitted to connect to the combined sewer, but a connection to the storm water sewer may be permissible, albeit that the discharge must be no more than at present. Both sewers are relatively shallow.

It was anticipated that 27% of the pre-development site drained to the sewer (0.4ha) although at the time of the report there was no evidence of this.

Ground investigation showed shallow groundwater and low permeability soils.

An assessment of the total volume of stormwater attenuation required for the development was 875m3.

Discussion

Subsequently to this report, the Parkside offices have been constructed on part of the subject site. A supplemental Flood Risk Assessment was prepared for this part of the site.

2.2 Flood Risk Assessment – BJB – November 2009

Findings

The report was a supplemental report to the December 2008 BSP report. Ground investigation had confirmed that underlying soils were unsuitable for soakaways. The surface water drainage strategy was for a positive drainage system including an 800m3 below ground storage tank.

Discussion

Subsequently to this report, the drainage strategy was amended to include permeable paving to the car park, with a 36m3 attenuation tank with a vortex control unit (BJB drawing 1928/601/D). The attenuated discharge from the site was connected to the existing public combined sewer in the station access, off Burton Street which flows Northwards along Burton Street before turning West and running past the Northern boundary of the current subject site.



2.3 Archaeological Desk Based Assessment – CgMs – December 2008

<u>Findings</u>

There are two listed buildings from the Medieval era near the site and their settings may influence development. Other historic environment records show:-

- The garage in the Northern part was redeveloped post 1904 and post 1930
- The warehouse to the rear of Hancock's was developed post 1930
- Mucky Lane {2008 alignment} followed the course of the former Melton Canal
- There are no listed buildings on the subject site itself

The Historic Environment Record has several entries for the site

- Medieval remains (x2)
- A sherd of Bronze Age pottery
- 16 Burton Street (now demolished)
- Anglo Saxon ditches and a well
- The canal

The Northern part of the site, and the Burton Street frontage, have the highest potential for archaeological interest. Archaeological monitoring was recommended.

Discussion

The site has a reasonable degree of archaeological interest, and relevant monitoring is likely to be required during redevelopment.

2.4 Traffic and Transportation Assessment – BSP – December 2008

<u>Findings</u>

The report was not a full Transportation Assessment but assessed the proposed development, being the Council offices, a 5,000sqft public library, and 170 space pay and display car park. Recommendations for a form of access were made, which are broadly those implemented during the Parkside development.

Recommendations were made that 5% of the public car park should be disabled spaces.

2.5 Phase I and II Ground Investigation – BSP – December 2008

Findings

- Made ground was encountered between 0.6 and 2.0m thick
- Groundwater was encountered between 2.1 and 3.4m below ground level
- Excavations may require support
- Clay materials are susceptible to deterioration in wet weather
- CBR's were found to be 2% in made ground and 2-4% in natural strata
- All common chemical determinands were found to be below Tier 1 assessment criteria for a commercial end use



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- The former garage in the North of the site may have had underground storage tanks, though samples did not show any evidence of hydrocarbons
- Remediation works to reduce risks to controlled waters may be required

Discussion

The site was noted not to present a risk to human health but may present a potential risk to controlled waters. It is not known whether further appraisal work was undertaken or if remediation was required during the Parkside development. CBR's are noted to be poor.

2.6 Waste Acceptance Criteria Tests – BSP – March 2009

Findings

This report details findings of a limited investigation in land to the South of Mucky Lane. Made ground was encountered to depths of between 0.6 and 2.0m below ground level. Human health was not found to be an issue. The samples were quite variable, with two being lnert, one Non-hazardous, and two Hazardous.

Discussion

The site has a covering of made ground, which is quite variable in its chemical constituents.

2.7 Ecological Desk Study – Andrew McCarthy Associates – December 2008

<u>Findings</u>

Existing trees were recommended to be retained. There is bat roost potential in adjacent buildings. No records of Great Crested Newts were noted in nearby ponds, but they are present at other ponds within 2km of the site.

2.8 Bat and Reptile Survey – URS – July 2009

<u>Findings</u>

One building was assessed as unsuitable for bats and the roof of the other was dismantled under supervision after an inconclusive internal survey.

Reptiles were found to be present on site and further work is recommended prior to any development of the site.

Discussion

A further reptile survey is required prior to commencement of construction works.

2.9 Party Wall Award – 34 & 38 Burton Street – EC Harris – January 2011

<u>Findings</u>

The Award covers making good to the warehouse wall following the demolition of the warehouse and provision of the associated shoring.



Discussion

The Award does not address the shoring of the retained warehouse wall. The design and calculations for the original shoring are awaited from BJB Consultants.

2.10 Topographical Survey – Met Surveys – May 2002

Findings

The drawing is available as a PDF file, and relates to the site before the Parkside development and associated enabling works.

Discussion

An updated topographical survey is recommended to ensure that the current boundaries and features of the site are correctly mapped.

2.11 Japanese Knotweed method statement – DSA Environment – February 2009

Findings

Japanese Knotweed was identified in the South Eastern corner of the site, with methodology for its eradication.

Discussion

A watching brief will be required for works in the area of the original stand of Japanese Knotweed to ensure that any remaining materials are properly dealt with.

2.12 Public Consultation – March 2012

<u>Findings</u>

The public consultation exercise ran between 16th and 28th February 2012, and had 83 reponses. Steps and ramps were considered important. Signage was important. Some respondents considered a signed cycle route to be of benefit. A 'gateway arch' between the car park and Play Close had mixed reception. A site for stalls and mobile commercial units was not popular. Facilities and access for the disabled was important to some. A 'you are here' map was suggested. The Gap was suggested for vehicle access but the location of new traffic lights preclude this. Moving pedestrian access via a green pathway that is accessible to families and those with limited mobility would enhance access and use of Play Close. The Gap could be developed at a later date if there is demand.

Discussion

Several suggestions are made which are to be incorporated into the proposals:-

- Level / ramped access routes
- Gateway / public information signage
- Access for all
- Pedestrian / cyclist priority pathway
- Use of the Gap that does not preclude future frontage development



3.0 PROPOSALS

Proposals for the site may be found at Appendix B, with local constraints on the plan at Appendix A. Issues that the proposals address are:-

- Requirement for continued access to the rear of properties 22-32 Burton Street
- Change in levels between the main site and Park Close
- Existing shoring of boundary wall to rear of Hancock's
- Variable condition of the historic wall on the Western boundary
- Existing planting within 'the Gap'
- Existing pedestrian routes and desire lines
- Existing vegetation
- Existing utilities

Melton Borough Council's Planning department have confirmed that plannind consent will be required, as a full application for engineering works. Comments from the Conservation Officer have not yet been received.

The same basic layout is adopted for all proposal options, with variations in specification and sub options being as follows:-

3.1 Main Option 1 – High specification / long life construction

- 183 marked parking bays
- 14 marked blue badge bays (7%)
- Motorcycle parking accommodation
- 200mm thick macadam surfacing, giving expected 50 60 year design life and 20 25 years to first surface renewal
- Pedestrian / cyclist priority route between Burton Street and Park Close with possible 'gateway' opportunity
- Bespoke lighting
- 5no pay stations with electrical connections
- Soft landscaping
- Signage
- Positive surface water drainage with restricted discharge to public sewer attenuation in below ground tank



3.2 Main Option 2 – Lower specification / shorter life construction

- 183 marked parking bays
- 14 marked blue badge bays (7%)
- Motorcycle parking accommodation
- 100mm thick macadam surfacing, giving expected 35 40 year design life and 15-20 years to first surface renewal
- Pedestrian / cyclist priority route between Burton Street and Park Close with possible
 'gateway' opportunity
- Standard lighting
- 5no pay stations with electrical connections
- Soft landscaping
- Signage
- Positive surface water drainage with restricted discharge to public sewer attenuation in below ground tank

3.3 Main Option 3 – Permeable surfacing

- 183 marked parking bays
- 14 marked blue badge bays (7%)
- Motorcycle parking accommodation
- Permeable block paving surfacing, giving expected 35 40 year design life and 15-20 years to first significant maintenance
- Pedestrian / cyclist priority route between Burton Street and Park Close with possible
 'gateway' opportunity
- Standard lighting
- 5no pay stations with electrical connections
- Soft landscaping
- Signage
- SuDS surface water drainage with restricted discharge to public sewer

3.4 Western boundary options

- No boundary remove remains of boundary wall and provide soft landscaping to edge
 of existing path only. Note that following provision of new surfacing and kerbing the
 level difference will result in a slope of around 1:7 to 1:10
- 2. New brick wall with bowtop railing infill panels
- 3. Hedgerow or timber knee rail fence



3.5 Gateway

A budget cost option is given for an enhanced entrance gateway feature at Burton Street / Play Close or both.

3.6 Landscape planting

A budget cost option is given for enhanced soft landscaping, primarily the provision of specimen trees.

3.7 Shoring to rear of Hancock's

A budget cost option is given for providing a permanent solution to the existing shored wall to the rear of Hancock's.

3.8 Play Close car park options

Four options are given for the surfacing of the Play Close overspill car park. These are on similar lines to the main options for Burton Street car park, these being:-

- 1. Kerbed car park with longer life macadam surface and positive drainage lighting etc as existing
- 2. Kerbed car park with medium life macadam surface and positive drainage lighting etc as existing
- 3. Permeable paved car park with SuDS drainage lighting etc as existing
- 4. Reinforced grass surface lighting as existing



4.0 COSTINGS

Estimates have been prepared of construction costs, allowing for actual costs, main contractor's preliminaries, overheads and profit. An allowance has also been made for additional costs associated with phasing, the detail of which will be determined through the design development. The breakdown of these costs may be found at Appendix C. All costs are stated exclusive of VAT.

To all these construction values should be added fees, to cover design, ground investigation, updated topographical survey, reptile survey, planning application, contract administration, archaeological watching brief, party wall award etc. Project contingency has also been included to cover design development, planning risks, ground risks etc.



5.0 NEXT STEPS

The next steps to progress the scheme are:-

- Verify the site boundary
- Determine the extent of works and available project budget
- Update topographical surveys
- Obtain and appraise shoring calculations and determine design solution
- Obtain pre-application advice from LPA and EA
- Develop designs to planning stage

