



D2N2 Investment Board - November 2020

Confidentiality Level	Restricted [Controlled	Public	Commercially sensitive
Meeting and Date	D2N2 Investment Board – 4 th November 2020			
Subject	Project for Approval – Centre of Excellence, Modern Construction and Digital Technologies			
Author	T Goshawk/ R Lister and S Dancer (Excluding cover sheet) 12		12	
Papers are provided for:			nformation	
	Recommendations			
In July 2020, D2N2 was allocated £44.4 million from the governments Getting Building Fund towards the delivery of a range of projects across the region to stimulate economic activity and aid recovery from the impacts of Covid-19 on the region. The funding is subject to each of the 10 identified projects submitting a business case that is fully compliant with the D2N2 Local Assurance Framework (LAF).				
In order to support D2N2 and the accountable body, independent expertise has been procured from Thomas Lister Ltd and Amion consultants to assess each of the projects against the requirements of the local assurance framework.				
This project being put before the Investment board has now been assessed and is being recommended for consideration and approval based on its full compliance with the LAF. Following an approval D2N2 will release £500k of				

Getting Building Fund to Chesterfield College.







D2N2 Investment Board

Centre of Excellence – Modern Construction and Digital Technologies Final Business Case – Project for Decision

Getting Building Fund

Project Name	Centre of Excellence – Modern Construction and Digital Technologies	Project Applicant	The Chesterfield College Group
Construction Start Date	November 2020	Construction End Date	February 2021
Getting Building Fund Requested	£500,000	Total Project cost and Sources of funding	£875,000 £375,000 is match funding from Chesterfield College
Gross Value Added/ Benefit Cost Ratio	£3.5m/4.6:1	Expected Outputs	 Private Sector investment levered £375,000. 3 new jobs created Floorspace constructed refurbished 330 sq m refurbished. 560 new learners supported.

1.0 Project Description

The proposals for this scheme are for Chesterfield College to develop a centre of excellence for modern construction techniques and digital technology, to provide a higher level of skills within the industry to meet employer demand.

Key areas of skills development will include;

- Building Information Modelling (BIM)
- Modern construction techniques
- Augmented/Virtual Reality (AR/VR)

The development at BIM and modern construction techniques will provide progression routes for level 2 students and apprentices to progress to level 3. In addition, opportunities will be provided for the existing workforce to upskill to higher levels to move up the skills escalator into more productive, better paid jobs, future proofing skills and to meet the growing demand of new technologies and methods by employers.







The college already has an advanced manufacturing and building technologies facility and have established partnerships and collaboration with high profile companies and local businesses within the construction sector.

It is through this collaboration that a range of gaps in the provision of courses and education at the college and within the workforce have been identified. New and refined courses are proposed to be provided within the new Centre of Excellence.

Delivery of the project will involve the redevelopment of existing premises owned by the college within their campus, which will involve the following works;

- Clearing out of the existing building and ensuring all utility provision to the building is sufficient and in appropriate locations. Testing of ground composition to ensure that the floor is of suitable bearing capacity to take the installation of the proposed equipment.
- Construction of a mezzanine floor.
- Installation of equipment including;

A CAD workstation

* Wacom Tablets

VR Headsets

* Design Workstation

* VR Cave

* 3D Printer

* 3D Scanner (Scan Arm)

* 3D Scanner

* Laser Scanner

The college has confirmed that the refurbishment of the building does not require planning approval and all works are now ready to proceed subject to D2N2 funding being secured.

2.0 Summary of Strategic Case/Fit

The strategic fit of the project is presented below;

i. D2N2 Strategic Economic Plan (SEP)

The project would directly support Three Priority Areas identified in the SEP as follows;

- Advanced Manufacturing and Engineering
- Digital Technologies and Data
- Energy and Low Carbon Technologies

The education and training to be provided at the proposed facility is strictly in accordance with these areas, seeking to drive productivity and support construction as a Core Priority Sector to D2N2.

ii. Local Industrial Strategy (LIS)







Whilst the LIS has not been referred to within the Business Case, the project is considered to fit with various strategic objectives particularly around support being provided to the future workforce, many of whom are young people. The potential to upskill and reskill the existing workforce, many of which are in low skilled occupations and are potentially at risk from automation of jobs is also supported.

Typically, within many parts of Derbyshire, there is a high proportion of jobs at risk of being displaced, well above the national average many of whom are located within the catchment area of the college.

The ability therefore to target potentially marginalised sectors of the community assists to create a more inclusive society through the provision of education and training opportunities is recognised.

Government Policy and Strategy

iii. Central Government have issued a number of policy papers, programmes and strategies over the last twelve months, designed to stimulate economic activity, incorporating construction.

The Chancellor announced in the Summer Economic Update of plans to invest in green homes and technology along with investment in energy efficient public buildings, stating that construction is one of the most important sectors to the UK economy. The proposed centre will allow unemployed adults to reskill and upskill in new construction technologies through training courses offered.

The proposed centre will also support the governments 'New Deal' as part of a comprehensive plan by government to build, delivering upgrades to local infrastructure and boosting skills to assist with economic recovery across the UK.

There have also been other funds and funding programmes launched providing investment including the COVID-19 sustainable innovation fund. This fund seeks to support the UK to build a sustainable and productive future, based upon technological advancement within the construction sector, such as BIM and enhancing construction skills.

The proposed Centre of Excellence therefore seeks to develop skills and knowledge for the future, helping to address a significant gap in skills of people in the D2N2 area and matching these to demand from employers, which is essential to achieving a productive economy within the D2N2 area.

Assessors	The rationale for the project has been clearly identified within
Comments	the Business Case and it is demonstrated that there is a clear
	alignment to D2N2 strategic objectives and those of Central
	Government.







3.0 Summary of Economic Case and expected outcomes

The economic case has examined a long list of options and a framework for short listing (using CSFs against the level of ambition in terms of service delivery). The shortlist comprises a Do Minimum option within this case is based on no new investment in college facilities. A full VfM exercise has been undertaken by the applicant on the following short-listed options:

- Option 1: Business as Usual (where the existing position is maintained with no change) Do nothing – continue to deliver our current suite of qualifications using current equipment; not meeting local needs and key priorities – Cost estimate @ £0
- Option 3: Reduced option: Reduced Option One room dedicated to BIM, MMC and VR/AR technology low cost tech and some specific software would not add much value, would not support career development and address local needs/priorities, Potential loss of investment due to lack of interest from learners and employers Cost estimate @ £61,000
- Option 5: Preferred Approach: Converted building space exclusively for BIM, MMC and VR/AR technology and modelling up to industry standard including VR/AR Caves, Additive manufacturing (3D modelling, printing and scanning; mixed material processing (resin, polymer, glass etc)) with bespoke curriculum designed and developed – Cost estimate @ £875,000

This has examined the key economic benefits in terms of education and training outputs. The redevelopment of the site at Chesterfield College will increase the number of students training on site and receiving qualifications. This will create further economic benefits through increasing the number of people in employment and increasing the future wages of students due to their improved qualifications.

The analysis shows that Option 5 provides the largest NPSV and also the highest BCR at 4.6. The assessed wider benefits analysis also favours Option 5 over Option 3.

On this basis Option 5 has been selected as the preferred option. Sensitivity analysis has been conducted and Option 5 remains robust with significant changes to costs and benefits

The approach has set a different level of OB for Option 3 based on the lower level of development of this option. If the OB is set the same across the two options (at 10%) then the BCR is marginally higher for Option 5 than Option 3. In addition, Option 5 would still deliver the largest PVSB.

Assessors	The economic case provides an assessment of alternative		
Comments	options and has undertaken a VfM assessment adopting an		
	appropriate methodology. This is deemed as being compliant		
	with HMT Green Book and D2N2 assurance principles. The		
	results of the analysis demonstrate that Option 5 is the best		





performing option, in particular as it delivers the highest level of
BCR that is in the 'high' VFM category (significantly above the
D2N2 threshold of 2:1). Sensitivity analysis indicates that the
BCR is robust to changes in cost/benefits assumptions.

4.0 Summary of Commercial Case

The commercial case is presented to assess the optimum means to deliver the preferred option, along with setting out the delivery and procurement arrangements. The commercial case is summarised as follows;

i. Market Assessment

The market assessment has concentrated on local evidence within Chesterfield, Derbyshire and wider area in terms of the employment profile, qualification and skills of the local residents. The findings of the assessment are detailed as follows:

- Within a 30 mile radius of Chesterfield, there are 9,000 jobs requiring BIM, which is 10% above the national average and set to increase by 3.6% by 2024.
- There are over 35,000 jobs in the local area requiring modular building skills, forecast to increase by 3.7% by 2024, which is again above the national average.
- There are 21,000 jobs requiring augmented reality skills within the local area, projected to increase by 9.4% by 2024.
- More frequently, sustainable modern construction methods are being specified within planning applications for larger developments, which will result in the expansion of modular construction within the local and regional area thus in turn this will increase demand for skilled jobs within the construction process.

In context with this demand for modern skills and construction processes, is the socio-economic position within the D2N2 area, which is presented as follows;

- GVA in D2N2 is projected to decline by a greater proportion than the national average, equating to a decline of around 37.5% in the second quarter of 2020, compared to 35.1% nationally.
- Across the D2N2 area, there exists considerable divergence with some of the highest declines across North East Derbyshire, Derbyshire Dales, Bolsover, Amber Valley and High Peak, all of which are within the normal catchment area for the college.
- In the majority of the areas noted above, projected output losses are linked to the manufacturing and construction sectors.
- ONS Data forecasts that Chesterfield will have the second highest unemployment rate in the D2N2 area at 12.2%. Chesterfield already has high youth unemployment and this is set to grow disproportionately accelerated by the pandemic.





- Data from the DMP Bank of England survey suggests that by quarter three 2020, employment levels in Chesterfield will reduce by over 4,000 and a reduction of nearly 25,000 across Derbyshire.
- CJRS Data shows there are 11,500 employees currently furloughed in Chesterfield, equating to around 18% of the working population and in excess 96,100 across the wider Derbyshire conurbation.

The demand, need and opportunity therefore to seek to reskill and upskill residents within the Derbyshire catchment area for the college has therefore been demonstrated, reinforced with an identified skills gap collaboration with employers working in partnership with the college.

ii. Procurement Strategy

Whilst the college could utilise various frameworks to procure building works and acquisition of equipment, due to the nature of the work to be undertaken/equipment to be acquired, it has been necessary to approach specialist contractors/suppliers for this project. This is detailed as 'single tender justification' and is wholly in accordance with the Colleges' procurement policy. The quotations received for the works and equipment purchase have been obtained from companies vetted by the college as suitable suppliers and whilst current quotations are in excess of budget, negotiations are on-going to ensure that costs will be brought to be within the budget of £875,000.

The overall procurement strategy will be managed and monitored by the college in accordance with the identified correct procedure and subject to approval within the college's financial regulations.

Assessors	The Commercial case has demonstrated need, demand and
Comments	opportunity both within Chesterfield and the wider Derbyshire
	area, underpinned by an identified gap in skills provision within
	this area by employers currently working with the college. In
	terms of delivery of the scheme, the college have identified that
	a public sector compliant procurement process will be utilised
	for this scheme.

5.0 Summary of Financial Case

The Financial Case presented within the Full Business Case primarily identifies that the D2N2 GBF would be spent on preparing the building for high end visualisation equipment and suites in accordance with plans that have been prepared for delivery of the scheme.

The £375,000 match funding from the college will be sourced from the internal Estates and Infrastructure budgets and will be used to acquire all of the equipment necessary to fitout the completed refurbished space. The Business Case is supported by scheme drawings produced by PDic and we further understand the scheme costs have been estimated by consultants acting on behalf of the college.







Beyond the plans that have been provided, we do not have any further information to substantiate the costs of the scheme. It is therefore recommended as a condition of GBF, that the college provide a copy of all tenders/quotations obtained for the scheme in its entirety, to demonstrate that it is deliverable in accordance with the proposals and programme provided.

With regard to the operation of the completed facility, the college has produced a three-year income and expenditure account for the additional income generated and costs that will be incurred post capital investment.

The income and expenditure profile in year one shows that a small loss is made in the region of £2,394; however, for subsequent years two and three there is a significant surplus generated and on this basis the facility should be sustainable in the very short term.

The college has confirmed that across all of its operational activities, and in order to support group overheads, each facility is expected to reach a contribution to overheads in excess of 40%. Therefore, this project will need to exceed a 40% surplus in order to comply with this requirement. It is noted that the surplus made shows a surplus of £242,052, which is less than the 40% threshold of £265,256, equating to a shortfall of £23,204.

The college do state that the forecast is based on delivery numbers much lower than current profiled numbers throughout the college and that in addition there may be some commercial activity on the back of this project in order to support local business; however, this has not yet been included.

Therefore, it is anticipated that the ongoing costs of delivery for the new facility should be affordable, based on the delivery models outlined.

It is however recommended as condition of any investment that the college confirm that in the event that the new facility does make a loss beyond year one, that the college will underwrite any revenue shortfalls in order to ensure that the facility is sustained and remains operational.

Assessors	The college are well established and are deemed to have the
Comments	expertise to be able to deliver this project on a sustainable
	basis. There are recommendations to be attached to any offer
	of funding specifically in relation to the financial case, which
	should enable the provision of more detailed information at the
	time when this is available and also to mitigate any risk to D2N2
	of the facility not being retained post funding and construction
	stage.







6.0 Summary of Management Case

The Management Case for this project as presented in the Business Case is summarised as follows;

i. Programme Management and Governance

The project will have input from the following college staff;

- Director of Facilities and Estates to work in conjunction with the design and build team on-site to ensure the build is completed on time, to specifications, meets regulations and is in accordance with budget.
- Chief Operations Officer undertaking the role of project sponsor working with the Director of Facilities and Estates on design and specification and overseeing the project to ensure that all elements meet the needs of the curriculum. The Chief Operations Officer will report to the College Senior Management Team and Corporation in respect of the progress of the project.
- Chief Finance Officer will manage the finances and financial processes of the project, reporting to the Senior Management Team and Corporation.
- College Senior Leadership Team in place to give consideration to the overall Business Case of the scheme, input on design and curriculum requirements. Also undertaking the monitoring of the project during the construction stage through project meetings and reporting on different levels to in respect of project management and governance.

ii. Procurement of Specialist Advice

The college employs the services of a design and build team to work alongside the colleges inhouse facilities and estates team in producing designs to meet the technical specifications of the facility as required. In addition, a building control team will be appointed to ensure that all current building regulations are complied with as part of the project also with a responsibility for managing works onsite.

iii. Change Control

Any changes to the project will be managed through the project governance channels and agreed or otherwise at all levels before being actioned. As this is a design and build scheme, very little change is anticipated and should any arise it would be risk assessed for costs and timescales that primarily the responsibility of the contractor.

iv. Risk Management

The college has a robust risk management and mitigation risk management policy and framework in place, which applies across all the college's activities, internal control and corporate governance arrangements.





The policy has been provided as part of the Business Case supporting information and no issues are noted in this regard.

The college has also procured a risk register for the subject project which was prepared for the initial design process which commenced in December 2019 and will operate, be monitored and updated throughout the duration and delivery of the project. The risk register has been reviewed as part of this assessment along with the estates project plan and no concerns or issues have been identified in this regard.

Assessors	The Full Business Case and supporting information		
Comments	demonstrates that the college have established project		
	management, risk management subject to a formal risk register		
	that has been in place since the inception of the project. No		
	issues are therefore identified in relation to the management		
	case.		

7.0 Assessors Recommendation

The recommendation is for £500,000 of GBF to be approved for this project, subject to compliance with the following conditions;

- An updated programme for the delivery of the scheme to be provided confirming the final arrangements for delivery with the contractor and equipment suppliers.
- ii. A revised profile for the drawdown of GBF to be provided to D2N2 once the programme for delivery has been finalised.







8.0 Officer's Recommendations

Strategically the project aligns with various parts of the D2N2 Emerging Recovery and Growth Strategy and looks to contribute to multiple aims of this. In particular the investment will deliver on Guiding principle 1, proposition 3 to enable a focus on skills for life and an inclusive and productive workforce for the D2N2 Economy. The new centre and capital equipment will enable Chesterfield College to offer specialised training to not only provide skills to new learners but also to reskill and upskill the existing workforce of D2N2 to higher educational standards which will be key to covid recovery. This in turn relates directly to Guiding principle 3, proposition 2 by providing access to these skills and employment opportunities right across the D2N2 Region and focusing on a key town of Chesterfield for this provision.

The project has been tested against the conditions of the Local Assurance Framework and fully complies with the document and is therefore eligible for funding to be released.

Following a review of the business case alongside the independent assessment, officers would recommend the Investment Board to approve the request of £500,000 of Getting Building Fund to be released to Chesterfield College







Getting Building Fund Checklist

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1.	A detailed 'Green Book' compliant business case has	The promoter has submitted a compliant business case which
	been completed detailing the project and its alignment to	aligns with HM Treasury's 5 case Green Book Model.
	the 5 case model. 'The Checklist1' published by HM	
	Treasury is a useful one page guidance paper.	
2.	A VFM assessment must be completed. This VFM	The projects Value for Money has been independently
	assessment will be independently assessed by D2N2	scrutinised by Amion Consulting and has been confirmed to
	and must show an overall score of 'High'.	provide High Value for Money.
3.	Details confirming that all planning consents have been	The project does not require planning permission as this project
	granted and that all prestart conditions have been met.	works under permitted development.
		' '
4.	Confirmation that any Section 106 or other agreements	N/A
	have been entered into.	
5.	Confirmation of the results of the procurement exercise	The Project sponsor has confirmed the procurement
	detailing:	arrangements for the project. Both the equipment purchases,
	-the tenders received (along with detailed costs)	and main contracts of work have been procured using single
	-the tender accepted (along with timescales/conditions)	supplier arrangements which aligns to the College's and public
	and torradi accepted (dierig mar amedeales, serialierie)	procurement regulations.
6.	Details of the construction contract to be entered into by	Chesterfield College have agreed the construction contracts for
	the promoter detailing:	the development and purchase of equipment. The construction
	-start date	works will begin in November 2020 and are scheduled to last
	-completion date	until February 2021.
	-liquidated damages/cost over runs	The Capital Equipment purchases for the project are due to
	-ilquidated darriages/60st over fulls	take place in January 2021.
		take place ili Jaliualy 2021.

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7. Confirmation that the promoter will be responsible for any variations to the contract price and that once entered into, the contract will be completed in line with the details submitted. The promoter should submit a separate letter appended to the Business Case which confirms this from their Financial Director or equivalent.	The promoter has confirmed that they will be responsible for any cost overruns on the project.
Confirmation that the project has been designed to RIBA stage 4 or its equivalent.	The project has completed all designs for the works associated.
Details of any outstanding points preventing/delaying the start-up of the construction contract.	There are no outstanding issues which would delay the start of the Contract
10. Details of any changes for the project form the initial EOI and OBC submissions with reasoning behind these changes. Including an updated viability report as submitted in point 5 of the OBC.	The project has made no substantive changes from the EOI submitted in Summer 2020.
11. Confirmation that all funding is now in place with details of the sources of funding, please include letters from third party funders confirming any conditions and timescales.	The promoter has confirmed that all match funding for the project is in place and the College's Finance Committee and Full corporation Board approved the match funding contributions on the 15 th of October.
12. Confirmation that all land/legal agreements have been completed and are in the control of the promoter to deliver the entire project	Chesterfield College have confirmed they own the freehold for all the land associated with the development.
13. A phasing plan identifying the start and completion elements of the project along with costs associated with each phase and the outputs/outcomes that will be delivered on a quarterly basis.	A phasing plan for the development has been included within the Final Business Case. This sets out both the funding by quarter for the development and the build timelines for both phases of the development.
14. An updated risk register identifying the key risks and the project manager responsible. The risk register needs to be scored and include a mitigation plan.	The project promoter has provided an up to date risk register which sets out the main risks to the project and a subsequent RAG rating and mitigation.



