T Level Technical Qualification in Onsite Construction (8711-30)

8711-033 Employer-Set Project
Exemplar – A Grade
Summer 2023

-





Contents

Introduction	2
Task 1.1 Research	5
Task 1.2 Report	15
Task 1.3 Project plan	23
Task 1.4 Presentation	27
Task 2.1 Collaborative problem-solving	44
Task 2.2 Evaluation	49

Introduction

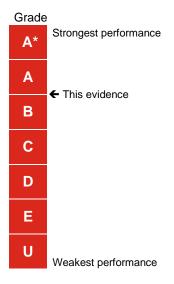
Summer 2023 Results

This document is aimed at providers and learners to help understand the standard that was required in the summer 2023 assessment series to achieve an A grade for the 8711-033 Onsite Construction Employer-Set Project (ESP).

Providers and learners may wish to use it to benchmark the performance in formative assessment against this to help understand a potential grade that may be achieved if a learner was to attempt the next summative assessment series.

The Employer-Set Project is graded A* to E and Unclassified.

The exemplar evidence provided for the A grade displays the holistic standard required across the tasks to achieve the A grade boundary for the summer 2023 series. A slightly weaker performance would have resulted in a B grade result being issued.



The Employer-Set Project brief and tasks can be downloaded from here.

Important things to note:

- We discussed the approach to standard setting/maintaining with Ofqual and the other awarding organisations before awarding this year. We have agreed to take account of the newness of qualifications in how we award this year to recognise that students and teachers are less familiar with the assessments (Vocational and technical qualifications grading in 2023 – Ofqual blog), whilst also recognising the standards required for these qualifications.
- The exemplar evidence presented, as a whole, was sufficient to achieve the A grade.
 However, performance across the tasks may vary (i.e. some tasks completed to a higher/lower standard than an A grade).

Marking of this Employer-Set Project is by task and Assessment Objective, below is a summary of these along with the mark achieved by the evidence presented and the maximum mark available for each aspect.

Task	Assessment Objectives	Mark achieved	Max mark available
Task 1.1 Research	 AO1 Planning skills and strategies AO2a Apply knowledge to the context of the project AO3 Analyse contexts to make informed decisions AO4c Use digital skills 	7	9
Task 1.1 Research			6
Task 1.2 Report	- AO2 Apply knowledge and skills to the context of the project	7	12
Tuok 112 Nopoli	- AO3 Analyse contexts to make informed decisions	1	2
	- AO4 Use maths, English and digital skills	4	6
Task 1.3 Project plan	 AO3 Analyse contexts to make informed decisions 	achieved In g skills and strategies It knowledge to the context of the project It e contexts to make informed decisions Iligital skills In g skills and strategies It e contexts to make informed decisions It exposes to make informed decisions It e contexts to make informed decisions It eaths, English and digital skills In g skills and strategies It e contexts to make informed decisions It exposes to make info	8
	- AO2 Apply knowledge and skills to the context of the project	10	16
1	 AO3 Analyse contexts to make informed decisions 	5	6
	- AO2 Apply knowledge and skills to the context of the project	10	12

Task 2.1 Collaborative problem-solving	 AO2 Apply knowledge and skills to the context of the project AO3 Analyse contexts to make informed decisions AO5a Carry out tasks 	10	15
Task 2.2 Evaluation	AO4b Use English skillsAO5b Evaluate for fitness for purpose	5	8

Task 1.1 Research

Assessment number (eg 1234-033)	8711-033
Assessment title	Employer-Set Project
Candidate name	<first name=""> <surname></surname></first>
City & Guilds candidate No.	ABC1234
Provider name	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
City & Guilds provider No.	999999a

Task(s)	1.1
Evidence title / description	Research notes (with record of sources)
Date submitted by candidate	DD/MM/YY

Employer set project. Task 1.1 Research

Legislation, and documents associated with terraced listed buildings?

Listed buildings or buildings in conservation areas are not exempt from complying with building regulations. However, the special needs of historic buildings are recognized in some of the building regulations. https://historicengland.org.uk/

Carrying out unauthorized works on a listed building is a criminal offence [Planning (Listed Buildings and Conservation Areas) Act 1990 Sections 7–9. Planning Policy Guidance Note 15 (PPG 15) provides detailed advice and guidance for those making or considering applications for Listed Building Consent. http://www.castle-surveyors.co.uk/Building Regulations and Historic Buildings.pdf">http://www.castle-surveyors.co.uk/Building Regulations and Historic Buildings.pdf Listed buildings are to be enjoyed and used, like any other building. These buildings can be altered, extended, and sometimes even demolished within government planning guidance. The local authority uses listed building consent to make decisions that balance the site's historic significance against other issues, such as its function, condition, or viability.

https://www.bing.com/ck/a?l&&p=8937e178f4dbfad6JmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0xODI5YjI0NS0zYTMxLTZkM2YtMzdmYi1h MTQ0M2JJMzZjMDcmaW5zaWQ9NTE3OQ&ptn=3&hsh=3&fclid=1829b245-3a31-6d3f-37fb-

 $\frac{a1443be36c07\&psq=what+principles+are+involved+with+graded+2*+buildings+being+repaired\&u=a1aHR0cHM6Ly9oaXN0b3JpY2VuZ2xhbmQub3JnLnVrL2xpc3Rpbmcvd2hhdC1pcy1kZXNpZ25hdGlvbi9saXN0ZWQtYnVpbGRpbmdzLw&ntb=1$

You do not need to apply for planning permission for repairs or maintenance, including minor improvements, such as painting your house or repairing existing windows. However, if you live in a **listed building, you may need listed building consent for repair works to your windows.**

a1443be36c07&psq=what+planning+permission+is+needed+to+do+repairs+on+a+listed+building&u=a1aHR0cHM6Ly93d3cuaGFzdGluZ3MuZ292LnVrL3BsY W5uaW5nL25lZWQvd2luZG93cy93aW5kb3dzY29uc2VydmF0aW9uLyM6fjp0ZXh0PVlvdSUyMGRvJTlwbm90JTlwbmVlZCUyMHRvJTlwYXBwbHklMjBmb3llMjB wbGFubmluZyxidWlsZGluZyUyMGNvbnNlbnQlMjBmb3llMjByZXBhaXllMjB3b3JrcyUyMHRvJTlweW91ciUyMHdpbmRvd3Mu&ntb=1

PPG 15 is a statement of Government policies for the identification and protection of historic buildings, conservation areas, and other elements of the historic environment. https://uk.practicallaw.thomsonreuters.com/8-106-

4662?transitionType=Default&contextData=(sc.Default)#:~:text=PPG%2015%20is%20a%20statement,PPG% 2016%20%2D%20Archaeology%20and%20Planning

If a building is listed, you will need listed building consent to make changes to:

- The inside and outside of the building
- Any object or structure fixed to the building
- Any object or structure that forms part of the land and has done since before 1 July 1948

https://www.bing.com/ck/a?!&&p=5d4d1985711e3c8dJmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0xODI5YjI0NS0zYTMxLTZkM2YtMzdmYi1hMTQ0M2JIMzZjMDcmaW5zaWQ9NTQyNA&pt

a1443be36c07&psq=what+DOCUMENT+is+needed+to+do+repairs+on+a+listed+building&u=a1aHR0cHM6Ly93d3cuYnJpc3RvbC5nb3YudWsvcmVzaWRlbnRzL3BsYW5uaW5nLWFuZC1idWlsZGluZy1yZWd1bGF0aW9ucy9jb25zZXJ2YXRpb24tbGlzdGVkLWJ1aWxkaW5ncy1hbmQtdGhlLWhpc3RvcmljLWVudmlyb25tZW50L2xpc3RlZC1idWlsZGluZ3MvbWFraW5nLWFsdGVy

The need for LBC is set out in Section 7 of the Planning (Listed Buildings and Conservation Areas) Act 1990, which states that 'no person shall execute or cause to be executed any works for the demolition of a listed building or for its alteration or extension in any manner which would affect its character [emphasis added] as a building of special architectural or historic interest, unless the works are authorised'.

The grade 2 listed building I am analyzing requires many defects to be taken care off:

Brickwork requiring repointing

Repointing brickwork involves carefully repacking the mortar sitting between the individual bricks, or stone blocks, that make up the exterior skin of your home. Although many renovators carry our DIY repointing, given the requirement for working at heights it can be a job that is best outsourced to a professional. Repacking the mortar is necessary.

https://www.homebuilding.co.uk/advice/repointing-

<u>brickwork#:~:text=Repointing%20brickwork%20involves%20carefully%20repacking,best%20outsourced%2</u> 0to%20a%20professional

Due to the listed building being a 19th century building the mortar used was likely to be lime. However, with the introduction of Portland cement during the 19th century, lime mortar's use in new constructions declined. This was due to the ease of use of Portland cement, its quick setting, and it has a high compressive strength.

 $\frac{https://en.wikipedia.org/wiki/Lime_mortar\#:\sim:text=With\%20the\%20introduction\%20of\%20Portland,setting\\ \underline{\%2C\%20and\%20high\%20compressive\%20strength}$

The bricklayer shall be replacing Portland cement. This was used for the efficiency qualities it possesses. Cement was improved in 1843. This was accomplished by vigorous heating and using better grinding equipment to handle the hard clinker. To this day, Portland cement is still the most used cement around the globe. (screedscientist.com)

The bricklayer will be using Portland cement. This is due to it still being used globally.

Chimney repointing is a restorative process that replaces the decaying mortar with new mortar material to strengthen the chimney's structural integrity. It also helps prevent moisture from seeping through the

exposed mortar joints where it can cause extensive damage to interior components.

 $\frac{https://www.felgemachermasonry.com/felgemacher-blog/chimney-rebuilding-vs-chimney-repointing/#:\sim:text=Chimney%20repointing%20is%20a%20restorative,extensive%20damage%20to%20interior%20components$

To repoint the front wall, which also requires a scaffold, will have a total cost of £5643.

For the chimney to be repointed this shall cost a total of £750. Raking out will cost £2633.40.

This adds the total cost for the brickwork to £9026.40.

Hazards involved with restoration?

Unnecessary repointing, however, carefully done, risks damage to the edges of bricks or stones, as well as the loss of valuable clues to a building's construction and history. Seriously decayed pointing will let moisture into the wall. Saturated masonry will deteriorate more rapidly and is likely to cause damage to interior plaster and woodwork.

 $\frac{\text{https://www.bing.com/ck/a?!\&\&p=48421a877e1a90afJmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0xNTY3ZjA5Ny 00NDhlLTZkNTAtMWEyZi1lMzk2NDU2ZTZjOGYmaW5zaWQ9NTQ4MA\&ptn=3&hsh=3&fclid=1567f097-448e-6d50-1a2f-}{\text{https://www.bing.com/ck/a?!\&\&p=48421a877e1a90afJmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0xNTY3ZjA5Ny 00NDhlLTZkNTAtMWEyZi1lMzk2NDU2ZTZjOGYmaW5zaWQ9NTQ4MA&ptn=3&hsh=3&fclid=1567f097-448e-6d50-1a2f-}{\text{https://www.bing.com/ck/a?!&&p=48421a877e1a90afJmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0xNTY3ZjA5Ny 00NDhlLTZkNTAtMWEyZi1lMzk2NDU2ZTZjOGYmaW5zaWQ9NTQ4MA&ptn=3&hsh=3&fclid=1567f097-448e-6d50-1a2f-}{\text{https://www.bing.com/ck/a?!&&p=48421a877e1a90afJmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0xNTY3ZjA5Ny 00NDhlLTZkNTAtMWEyZi1lMzk2NDU2ZTZjOGYmaW5zaWQ9NTQ4MA&ptn=3&hsh=3&fclid=1567f097-448e-6d50-1a2f-}{\text{https://www.bing.com/ck/a?!}}{\text{http$

e396456e6c8f&psq=hazards+involved+with+repointing+a+brick+wall+&u=a1aHR0cHM6Ly93d3cuYmFzc2V0b GF3Lmdvdi51ay9tZWRpYS8zNTcyL25jY3JlcG9pbnRpbmdndWlkZS5wZGYjOn46dGV4dD1Vbm5lY2Vzc2FyeSUy MHJlcG9pbnRpbmclMkMlMjBob3dldmVyJTlwY2FyZWZ1bGx5JTlwZG9uZSUyQyUyMHJpc2tzJTlwZGFtYWdlJT lwdG8sdG8lMjBjYXVzZSUyMGRhbWFnZSUyMHRvJTlwaW50ZXJpb3llMjBwbGFzdGVyJTlwYW5kJTlwd29vZHdv cmsu&ntb=1

Timber decay

When does decaying occur?

Timber decay occurs when there are elevated levels of moisture in timber, causing it to naturally decay. The cause of this is always a structural defect; water collecting on the timber, or adjacent walls suffering from damp. You need to look for signs of rot in vulnerable areas of timber, such as window and door frames.

https://georgehill-timber.co.uk/blog/timber-decay-what-to-look-for/#:~:text=It%20occurs%20when%20there%20are,as%20window%20and%20door%20frames

Was it popular in the 19th century?

Timber frame or 'half-timber' revivalism superseded the high Victorian style of architecture typically characterized by the Gothic Revivalism of the mid-19th century. By the 1860s, half-timbered buildings were common, although elements of Gothic are often included in the architectural composition.

https://www.buildingconservation.com/articles/timber-revival/timber-revival.html

Is it expensive to repair?

As such, dry rot repair costs can be quite high. Frustratingly, this is not a problem that will go away on its own, and if you put off repairing dry rot, the problem will spread throughout your property. Therefore, treating dry rot as soon as possible is wise to keep repair costs low.

https://www.checkatrade.com/blog/cost-guides/dry-rot-repair-cost/#:~:text=As%20such%2C%20dry%20rot%20repair,to%20keep%20repair%20costs%20low

How do you repair it?

To repair decayed timber, you must use Epoxy or Wood Putty to Fill the Wood- To make sure there is an even finish, wood or epoxy filler should be applied to areas of wood that need to be filled. Make sure that any excess putty is removed before it dries, so we would recommend that this process is done as efficiently as possible.

Hazards involved with restoration?

The levels of dampness and types of timber defects from which old buildings suffer are often misunderstood. The influence that the introduction of incompatible impervious materials in the repair and maintenance of old buildings has upon the actual rate of deterioration is underestimated. Remedial treatments can address the symptoms of deterioration that is the increased levels of dampness, fungal decay, and wood boring insect attack and not the actual causes of the problem. This is exacerbating the rate of deterioration suffered by our historic building stock. That is why in many cases the wrong diagnosis of the damp and/or timber problem, or the incorrect specification for controlling it, has led to unnecessary work and expense.

https://www.bing.com/ck/a?!&&p=e2859fecec2bd700JmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0xNTY3ZjA5Ny00NDhlLTZkNTAtMWEyZi1lMzk2NDU2ZTZjOGYmaW5zaWQ9NTQ3Nw&ptn=3&hsh=3&fclid=1567f097-448e-6d50-1a2f-

e396456e6c8f&psq=what+happens+if+timber+decay+is+taken+care+of+incorrectly&u=a1aHR0cHM6Ly93d3c ub3hsZXljb25zZXJ2YXRpb24uY28udWsvd3AtY29udGVudC91cGxvYWRzLzlwMjEvMDYvZG9hbmRkb25vdHNnd WlkZTNkYW1wYW5kdGltYmVydHJlYXRtZW50LnBkZiM6fjp0ZXh0PVRoZSUyMGxldmVscyUyMG9mJTlwZGFtcG 5lc3MlMjBhbmQlMjB0eXBlcyUyMG9mJTlwdGltYmVyLHByb2JsZW0lMkMlMjBoYXMlMjBsZWQlMjB0byUyMHVu bmVjZXNzYXJ5JTlwd29yayUyMGFuZCUyMGV4cGVuc2Uu&ntb=1

Corroding ironwork

When does corrosion occur?

Wrought iron is mostly subject to corrosion when the unprotected metal is exposed to oxygen along with moisture. Galvanic corrosion also

occurs in wrought iron when it has direct contact with copper or zinc, and to a lesser extent galvanized iron or steel.

https://www.corrosionpedia.com/definition/2204/wrought-

 $\underline{iron\#:\sim:text=Wrought\%20 iron\%20 is\%20 mostly\%20 subject,extent\%20 galvanized\%20 iron\%20 or\%20 steel}$

Was it popular in the 19th century?

Wrought and cast-iron Victorian gates and railings are a common feature of terraced houses across the country and were installed to mark the boundaries of houses from the public highway and to provide a level of security.

How do you repair it?

Rust on wrought iron can be easily repaired and made to look new again but how do you know when it is time for it to be replaced? If you do not know anything about it, it is wise to ask a professional like a welder or the people who build your wrought iron if anything is dangerous.

https://www.bigeasyironworks.com/can-rusted-wrought-iron-be-

repaired/#:~:text=Rust%20on%20wrought%20iron%20can,iron%20if%20anything%20is%20dangerous

If you have a wrought iron fence you should know that having one provides security while having a pleasing appearance to your property. Over time, you might need rusted wrought iron repair brought by wear and tear due to the natural elements. Rust can build up on the fence and can change the overall appearance.

A rusted wrought iron fence needs special attention as it can deteriorate the durability of the fence. If left untreated, the accumulated rust can damage the fence which can break or bend the fence.

If you are a homeowner, with a fence that is rusted, or bought a home with a wrought iron fence that is already rusted, here are maintenance tips and valuable information to keep your wrought iron fence looking new and free of rust.

Clean and wash

To get started get a hose and some soap and water to clean and rinse. This will get rid of dirt, mold, or any build-up on your wrought iron.

• Remove the rust and old paint

You can use a sandblaster or a rust remover to remove rust manually. If you are planning to repaint, make sure to thoroughly remove the old

paint rather than paint over it as it ensures that the new paint will stick well.

Neutralize the rust

Make sure you remove all rust as much as possible, you can use chemical rust neutralizers if available, if not, you can use a mixture of two ingredients that can be found in any home, lemon juice and vinegar.

Paint your wrought iron

First, prepare a rust-inhibiting primer that will act as a base coat. This primer will help seal the metal from moisture and corrosion that prevents rust from forming.

Second, mix paint conditioner and primer to make the surface of the paint smoother and will have an even coat of paint.

Last, use two coats of primer and use rust-proofing paint as it helps protect the paint from natural elements.

Wrought iron maintenance

To keep the wrought iron in tip-top shape, regular maintenance is key. This helps keep it strong and durable. Regularly check for any signs of rust, peeling, and cracking so that they can be addressed as soon as possible.

https://www.bigeasyironworks.com/can-rusted-wrought-iron-be-repaired/

Hazards when restoring

Of the many diverse types of corrosion events that can occur, the 10 corrosion issues below are the most brought to our attention. Some are obvious by the presence, such as thread leaks and pinhole failures; others, such as corrosion under insulation and dry fire internal rust deposits, require more proactive investigation.

Operators of all types of equipment potentially face dangers from corrosion every day. The danger is not always obvious, but the risk is always present. Understanding corrosion's dangers to equipment and operators is the first step in preventing accidents and injuries.

Damaged plasterwork

How does this occur?

There are many ways that plaster can be caused to crack, these being:

• Corrosion to steel framing members or fasteners

- Distortion or sagging of the plasterboard
- Swelling or softening of the plasterboard core
- Plasterboard joint distortion
- Plasterboard liner paper delamination
- Fastener popping/pull through
- Adhesive de-bonded from plasterboard or frame
- Excessive mould growth.

The warning signs of damaged plaster include cracks and bulges, loose plaster, sagging ceilings, stained patches, and plaster that sounds hollow when it is tapped. You might first notice a fine white powder on the surface of the plaster, which is caused when soluble salts move to the surface.

https://www.yourhomestyle.uk/diy/how-to-repair-a-damaged-wall/#:~:text=The%20warning%20signs%20of%20damaged,salts%20move%20to%20the%20surface

Was it used in the 19th century?

Old plasters are made with lime and sand, with animal hair added as a binder to provide extra strength and reduce shrinking and cracking. Sometimes in high-status work it is gauged with gypsum. Plaster may also be clay based, with animal dung and a lime binder.

https://www.mybuilder.com/questions/v/14237/plastering-inside-a-1870-victorian-terrace-should-lime-plaster-be-used

The walls and ceilings in this 19th century house would have been plastered, meaning if any damage were done to the plasterwork the internal walls and ceiling would need to be repaired.

Since plaster is considered a higher quality material than drywall anyway, it should not be replaced with drywall in most situations. The one exception is if you are pulling down the walls to replace the plumbing and electrical systems anyway. In that case, it makes sense to replace it with drywall. If you have holes or cracks in your plaster walls or ceilings, repairing them is not difficult. It can, however, require a bit more extra time and skill than patching a hole in drywall.

How do you repair it?

The cost to repair a hole in your drywall or plasterboard will depend on the severity of the damage to your wall and the remedy required. For a foot-shaped hole in the wall, you can expect a professional plasterer or handyperson to charge at least £120 for the repair. This cost includes labour and the materials to fill that gaping hole. To plaster a small crack, you can expect the cost to be around £100. If, for example, the damage is so severe that a repair or patch up is not going to resolve the issue, then additional costs will be required, and you will need to work with a plasterer to apply new drywall and plastering.

https://www.checkatrade.com/blog/cost-guides/cost-repair-hole-drywall/

To repair plaster:

- Remove Jagged Plaster Edges.
- Vacuum the Dust and Dirt.
- Apply Spackle to Small Cracks.
- Seal Large Holes.
- Sand to Smooth.
- Prime, Paint, and Let Dry.

Flaking paint

When would this occur?

The reasons for peeling paint can vary widely. Painting over dirty walls, excess moisture, improper prep, and using latex paint on top of oil paint can all affect the paint's adhesion and cause it to eventually begin flaking off.

 $\frac{https://www.bhg.com/decorating/paint/how-tos/how-to-fix-peeling-paint/#:\sim:text=The\%20reasons\%20for\%20peeling\%20paint,to\%20eventually\%20begin\%20flaking\%20off}$

How to repair this?

All internal walls of this house would have been painted and due to age, I believe all painted surfaces must be taken care of.

Using a scraper or 100-grit sandpaper, remove any loose, cracked, or peeled paint from the damaged area. Remove any dust or debris from the area with a water-dampened rag. Using a putty knife, apply a thin layer of patching material to the damaged area. Allow it to dry.

https://www.behr.com/consumer/how-to/interior/how-to-repair-peeling-paint#:~:text=Using%20a%20scraper%20or%20100,with%20a%20water%2Ddampened%20rag.&text=Using%20a%20putty%20knife%2C%20apply,Allow%20it%20to%20dry

It is not expensive to repair flaky paint. This is due to no expensive equipment or tools being required for the job.

Hazards when repairing?

Paints and coatings can contain many different substances. Some of these can harm you by causing several short and long-term health problems:

- Skin, eye, and mucous membrane irritation
- Headaches, dizziness, and sickness
- Lung problems
- Effects on the nervous system, blood, liver, and kidneys
- Cancer

ALL high-risk work, particularly in confined spaces, requires detailed planning to identify the risks and the control measures needed. If you have any concerns that the steps you are going to take for this work are not good enough you should get expert help before starting.

Task 1.2 Report

Assessment number (eg 1234-033)	8711-033
Assessment title	Employer-Set Project

Candidate name	<first name=""> <surname></surname></first>
City & Guilds candidate No.	ABC1234

Provider name	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	
City & Guilds provider No.	999999a	

ort
/IM/YY

Employer set project. Task 1.2 Report

During my research stage I gained a lot of additional knowledge regarding all factors to do with the job description. This includes the conservation principles, laws and legislations, and documents regarding listed buildings and the allowance to perform repairs and renovation. Along my research journey I discovered the materials that have been used in the past and what materials should be used now for repairs without renovation due to the historical significance of the graded 2* property. With this material research I found out about how hazards are involved with repairing listed buildings, and this is not just because of the materials used. I additionally took time to research pricing, specifically the costs of raking out and repointing the front wall, which is a main priority.

Listed building conservation principles.

Throughout my research, one of the main pieces of information I learned is that listed/graded buildings in conservation areas are not exempt from complying with building regulations. If the listed building has a substantial amount of historical significance, then the government will have recognition of this, and these locations will not be altered.

I also found out that any alterations made, without authorization, on a listed building with any historical significance is a criminal offence as stated in section 7-9 in the Listed Building Conservation Act which was formed in 1990.

I know that any alterations wanting to be made to your home or even repairs do not require planning permission. Unless the building you live in is listed/graded. The reason for this seriousness is to preserve our nationality's history or in some places culture.

One other thing I learned is that it is not only exterior aesthetic, but also interior aesthetic anything built to/into the building itself.

'No person shall execute or cause to be executed any works for the demolition of a listed building or for its alteration or extension in any manner which would affect its character as a building of special architectural or historic interest, unless the works are authorized.' This was stated in the Listed Building Conservation Act 1990.

https://historicengland.org.uk/

http://www.castle-surveyors.co.uk/Building_Regulations_and_Historic_Buildings.pdf

 $\frac{\text{https://www.bing.com/ck/a?!\&\&p=8937e178f4dbfad6JmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0x0DI5YjI0NS0zYTMxLTZkM2YtMzdmYi1h}{\text{MTQ0M2JIMzZjMDcmaW5zaWQ9NTE30Q\&ptn=3\&hsh=3\&fclid=1829b245-3a31-6d3f-37fb-}$

 $\frac{a1443be36c07\&psq=what+principles+are+involved+with+graded+2*+buildings+being+repaired\&u=a1aHR0cHM6Ly9oaXN0b3JpY2VuZ2xhbmQub3JnLnVrL2xpc3Rpbmcvd2hhdC1pcy1kZXNpZ25hdGlvbi9saXN0ZWQtYnVpbGRpbmdzLw&ntb=1$

 $\frac{https://www.bing.com/ck/a?!\&\&p=754b15423cfacfb9JmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0xODI5Yjl0NS0zYTMxLTZkM2YtMzdmYi1hMTQ0M2JlMzZjMDcmaW5zaWQ9NTQyNg\&ptn=3&hsh=3&fclid=1829b245-3a31-6d3f-37fb-1829b245-3660b245-3660b245-3660b245-3660b245-3660b245-3660b245-3660b245-3660b245-3660b245-3660b245-3660b24$

a1443be36c07&psq=what+planning+permission+is+needed+to+do+repairs+on+a+listed+building&u=a1aHR0cHM6Ly93d3c uaGFzdGluZ3MuZ292LnVrL3BsYW5uaW5nL25lZWQvd2luZG93cy93aW5kb3dzY29uc2VydmF0aW9uLyM6fjp0ZXh0PVlvdSUyMGR vJTlwbm90JTlwbmVlZCUyMHRvJTlwYXBwbHklMjBmb3lIMjBwbGFubmluZyxidWlsZGluZyUyMGNvbnNlbnQlMjBmb3llMjByZXBha XllMjB3b3JrcyUyMHRvJTlweW91ciUyMHdpbmRvd3Mu&ntb=1

https://uk.practicallaw.thomsonreuters.com/8-106-

https://www.bing.com/ck/a?!&&p=5d4d1985711e3c8dJmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0xODI5YjI0NS0zYTMxLTZkM2YtMzdmYi1h MTQ0M2JlMzZiMDcmaW5zaWQ9NTQyNA&ptn=3&hsh=3&fclid=1829b245-3a31-6d3f-37fb-

a1443be36c07&psq=what+DOCUMENT+is+needed+to+do+repairs+on+a+listed+building&u=a1aHR0cHM6Ly93d3cuYnJpc3RvbC5nb3Yu dWsvcmVzaWRlbnRzL3BsYW5uaW5nLWFuZC1idWlsZGluZy1yZWd1bGF0aW9ucy9jb25zZXJ2YXRpb24tbGlzdGVkLWJ1aWxkaW5ncy1hbm QtdGhlLWhpc3RvcmljLWVudmlyb25tZW50L2xpc3RlZC1idWlsZGluZ3MvbWFraW5nLWFsdGVyYXRpb25zLXRvLWEtbGlzdGVkLWJ1aWxkaW5nlzn-

 $\label{thm:constraint} OnRleHQ9SWYIMjBhJTIwYnVpbGRpbmclMjBpcyUyMGxpc3RlZCUyQyUyMHlvdSVFMiU4MCU5OWxsJTIwbmVlZCUyMGxpc3RlZCxhbmQlMjBoYXMIMjBkb25lJTIwc2luY2UlMjBiZWZvcmUlMjAxJTIwSnVseSUyMDE5NDg&ntb=1$

Materials, techniques, typical risks/hazards

Within my brief I learned that many defects needed taking care of. That is why I have researched materials used and how they can be repaired. But most importantly, how can they be repaired without damaging the buildings' historical significance? To repair this property without damaging its historical reputation we must use techniques that were used when initially building the property. This led me to research what materials would have been used to ensure the same materials are used again to minimize change but maximize repair.

Brickwork requires repointing.

The brickwork of this four-storey terraced property has aged significantly due to the age of the property itself. The house was built around 1810, making it a 19th century property. Due to its huge age the mortar/cement used for the bricks will have started to decay. If not already then this can cause potential risk to the health of homeowners or the public due to the low stability of the front wall specifically.

To achieve maximum stability of the brick wall, new cement/mortar must be used to replace the old and decayed mortar. I researched into how this problem

is solved and found out that mortar must be repacked between the individual bricks/stones.

Due to this listed building being from the 19th century the cement being used could have been lime mortar or Portland cement. I found out that Portland cement grew more popular in the 19th century, this leads me to think the wall may not have used lime mortar however, Portland cement was introduced through the mid 19th century, this leads me to think that lime mortar was probably used. I also learned that Portland cement had been improved in 1843 due to the vigorous heating and using more technologically advanced equipment/tools. I now know that Portland cement is still popular and used globally to this day.

I believe that the four-storey terraced property front wall would have used lime mortar was used due to it being built around 1810 making it early 19th century.

The brief also mentions that the chimney needs repointing as well. This job would take less time but must be taken care of correctly.

I did some research on prices for the front brick wall to be repointed as well as the chimney and raking out which came to a total of £9026.40 to be precise.

The research I completed broke this price list down to the wall repointing costing £5643 (including scaffold for wall height factor). The chimney repointing at £750. Finally, the raking out which alone would cost £2633.40 (including scaffold).

I learned that along the way there could be potential risks/hazards whilst or even after the repointing process is complete. If the bricklayer is not careful whilst repointing this could cause the damage/chipping of bricks/stones making the overall aesthetics of the building poor. Another hazard I have learned is if the repointing is done incorrectly this could lead to rapid and serious decay as well as moisture entering the walls. I now know that saturated masonry will decay at a much faster rate and can also cause internal damage to wood or plaster. I also now know that if any bricks or stones are damaged or chipped this could also damage the historical significance of said building.

https://www.homebuilding.co.uk/advice/repointing-

 $\underline{brickwork\#:\sim:text=Repointing\%20brickwork\%20involves\%20carefully\%20repacking,best\%20outsourced\%20to\%20a\%20professional}$

 $\frac{\text{https://en.wikipedia.org/wiki/Lime_mortar\#:}\sim:\text{text=With\%20the\%20introduction\%20of\%20Portland,setting\%2C\%20and\%20high\%20compressive\%20strength}{\text{https://en.wikipedia.org/wiki/Lime_mortar\#:}\sim:\text{text=With\%20the\%20introduction\%20of\%20Portland,setting\%2C\%20and\%20high\%20compressive\%20strength}{\text{https://en.wikipedia.org/wiki/Lime_mortar\#:}\sim:\text{text=With\%20the\%20introduction\%20of\%20Portland,setting\%2C\%20and\%20high\%20compressive\%20strength}{\text{https://en.wikipedia.org/wiki/Lime_mortar\#:}\sim:\text{text=With\%20the\%20introduction\%20of\%20Portland,setting\%2C\%20and\%20high\%20compressive\%20strength}{\text{https://en.wikipedia.org/wiki/Lime_mortar\#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar\#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wikipedia.org/wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/Lime_mortar#:}\sim:\text{https://en.wiki/$

https://www.felgemachermasonry.com/felgemacher-blog/chimney-rebuilding-vs-chimney-repointing/#:~:text=Chimney%20repointing%20is%20a%20restorative,extensive%20damage%20to%20interior%20components

Working at height

The terraced building within my brief is four-storey, meaning the top of the wall cannot be reached without a safe and adequate elevation. I researched scaffolds. I now know that a scaffold is needed. The building/house within my brief needs work on the front wall and chimney (brickwork). The building wall's width is 7.6m and its height 9.9m. Due to this height a scaffold is mandatory.

Timber decay

Throughout the building from my brief timber would have been used. However, due to this building's age, the timber has decayed/rotted. From my research I learned that timber decays due to excess moisture within the timber. I also learned that this is a structural defect and ca even be caused by opposing walls containing damp. I found out that this is mostly common by doors and around windows.

I then researched into how popular timber was in the 19th century and found out that timber houses or even half-timber houses were seen as the high Victorian style of architecture. However midway through the 19th century these timber/half-timber houses were built commonly due to how easier it is to lift, transport overall build with timber.

I researched about timber rot, and I found out that dry timber rot can cost quite a bit. However, if this rot problem is not solved, it will gradually increase until there is no stability to the building, causing major and potential health hazards/risks. I now know that to take care of dry rot as soon as possible is the best solution.

I then started to research and find out how to replace decayed/rotted timber. I now understand that if it is wet rot then let all excess moisture dry out completely. I also now know that to repair rot you must use either a wood filler or epoxy to place over the rot and smooth of once dried out. Wet rot is the same, you just must make sure all excess moisture is taken care of. I now know from my research to always double if not triple check there is no excess moisture left within timber.

Along the way I have identified one significant hazard that could potentially take place is if the procurement is incorrect or done incorrectly, this can lead to unnecessary expense for another repair.

https://georgehill-timber.co.uk/blog/timber-decay-what-to-look-for/#:~:text=It%20occurs%20when%20there%20are,as%20window%20and%20door%20frames

https://www.buildingconservation.com/articles/timber-revival/timber-revival.html

https://www.checkatrade.com/blog/cost-guides/dry-rot-repair-

cost/#:~:text=As%20such%2C%20dry%20rot%20repair,to%20keep%20repair%20costs%20low

 $\frac{\text{https://www.bing.com/ck/a?!\&\&p=e2859fecec2bd700JmltdHM9MTY4MjY0MDAwMCZpZ3VpZD0xNTY3ZjA5Ny00NDhlLTZkNTAtMWEyZill}{\text{Mzk2NDU2ZTZjOGYmaW5zaWQ9NTQ3Nw\&ptn=3\&hsh=3\&fclid=1567f097-448e-6d50-1a2f-1}}$

 $\underline{e396456e6c8f\&psq=what+happens+if+timber+decay+is+taken+care+of+incorrectly\&u=a1aHR0cHM6Ly93d3cub3hsZXljb25zZXJ2YXRpb2\\ \underline{4uY28udWsvd3AtY29udGVudC91cGxvYWRzLzlwMjEvMDYvZG9hbmRkb25vdHNndWlkZTNkYW1wYW5kdGltYmVydHJlYXRtZW50LnBkZiM6\\ \underline{fjp0ZXh0PVRoZSUyMGxldmVscyUyMG9mJTlwZGFtcG5lc3MlMjBhbmQlMjB0eXBlcyUyMG9mJTlwdGltYmVyLHByb2JsZW0lMkMlMjBoYXMl\\ \underline{MjBsZWQlMjB0byUyMHVubmVjZXNzYXJ5JTlwd29yayUyMGFuZCUyMGV4cGVuc2Uu&ntb=1}$

Corroding ironwork

From my research I learned that unprotected ironworks corrode when exposed with oxygen and moisture. I also learned that some ironwork could corrode when in contact with other metals like copper or zinc. I know this is called galvanized corrosion. I now know that wrought-iron and cast-iron were used for Victorian gates and railings. These were here for the obvious reasons of security and allowing the public to know where a walkway ends.

I found out that rust on ironworks is quite simple to take care of. However, it comes in many stages. First you must clean and wash the iron. Then you must remove the rust and old paint. After that you will want to neutralize the rust. Finally, you paint your iron. I also now know that this needs to be maintained otherwise your solution price will inevitably increase.

https://www.corrosionpedia.com/definition/2204/wrought-

 $\underline{iron\#:} \sim \underline{text=Wrought\%20 iron\%20 is\%20 mostly\%20 subject, \underline{extent\%20 galvanized\%20 iron\%20 or\%20 steel}$

 $\underline{https://www.bigeasyironworks.com/can-rusted-wrought-iron-be-}$

 $\underline{repaired/\#:\sim:text=Rust\%20on\%20wrought\%20iron\%20can, iron\%20if\%20anything\%20is\%20dangerous}$

https://www.bigeasyironworks.com/can-rusted-wrought-iron-be-repaired/

Damaged plasterwork.

I have learned that plaster can crack and that there are many diverse reasons why this happens. These factors being; Corrosion to steel framing members or fasteners, Distortion or sagging of the plasterboard, swelling, or softening of the plasterboard core, plasterboard joint distortion, etc.

I now know that there are warning signs that the plaster has been damaged. You can see this though cracking or bulging. This can also be identified through loose

plaster or sagging ceilings. I know that the first signs of plaster deteriorating are the fine white powder will be on the surface you have plastered. This fine white powder on the surface is caused when the soluble salts within the plaster rise to the surface.

I found out that plaster was used in the 19th century but the way it was made was diverse. Old plasters were made using sand and lime. To make this an adhesive people added horsehair as a binder to hold the plaster in place and to work as a solid coating. This also helps reduce the cracking of the plaster. Plaster was also made using clay, animal refuse, and a lime binder.

From my research I found out that plaster is considered higher quality than drywall. This is leading me to think that the four-story terraced property in my brief would have had internal walls and ceiling made from plaster, drywall would be the common solution, however due to the building having historical significance we would not want to take away any historical integrity that still holds.

Along my way I found out that most plasterers and drywallers would be required for repair as repairing plaster is not as simple as it may look. A qualified/professional plasterer should always be the solution. I decided to research prices for a qualified plasterer and found out that even just to repair a small crack is £100 alone. The price depends on the size of the crack/damage.

I researched and found out the steps on how plaster damage is replaced in these stages; remove jagged plaster edges, vacuum the dust and dirt, apply spackle to small crack, seal large holes, sand to smooth, prime, paint, and let dry.

 $\frac{https://www.yourhomestyle.uk/diy/how-to-repair-a-damaged-wall/#:~:text=The%20warning%20signs%20of%20damaged,salts%20move%20to%20the%20surface$

https://www.mybuilder.com/questions/v/14237/plastering-inside-a-1870-victorian-terrace-should-lime-plaster-be-used

 $\underline{https://www.checkatrade.com/blog/cost-guides/cost-repair-hole-drywall/}$

Flaking/peeling paint

I learned that paint flaking/peeling and overall damage to surface coatings can be caused by a broad variety of reasons.

From my brief I am not 100% certain which walls were painted but from the paint decaying image I can assume places were painted. Now I gathered this information I needed to research on how to remove this decaying problem that

declines the properties internal level of aesthetic. I discovered that sandpaper is often used to scrape/scour of any damage or decayed paint until the surface you are repainting is smooth. You must also make sure that the surface you are going to paint on must be clean because in my research I found out that even the smallest types of dirt on a painted surface could cause the paint to decay at an increased rate.

Also, whilst researching the decaying of paint I discovered that many hazards can be involved. I learned that some paint contains many chemicals and substances. These substances can cause short-term and long-term health problems to your skin, vision impairment, headaches, dizziness and nausea, lung problems and sometimes even cancer.

https://www.bhg.com/decorating/paint/how-tos/how-to-fix-peeling-paint/#:~:text=The%20reasons%20for%20peeling%20paint,to%20eventually%20begin%20flaking%20off

 $\frac{\text{https://www.behr.com/consumer/how-to/interior/how-to-repair-peeling-paint#:~:text=Using\%20a\%20scraper\%20or\%20100,with\%20a\%20water\%2Ddampened\%20rag.\&text=Using\%20a\%20putty\%20knife%2C\%20apply,Allow%20it%20to%20dry}{\text{https://www.behr.com/consumer/how-to/interior/how-to-repair-peeling-paint#:~:text=Using\%20a\%20scraper%20or%20100,with\%20a%20water%2Ddampened%20rag.\&text=Using\%20a\%20putty\%20knife%2C\%20apply,Allow%20it%20to%20dry}{\text{https://www.behr.com/consumer/how-to-interior/how-to-repair-peeling-paint#:~:text=Using%20a%20scraper%20or%20100,with%20a%20water%2Ddampened%20rag.\&text=Using%20a%20putty%20knife%2C%20apply,Allow%20it%20to%20dry}{\text{https://www.behr.com/consumer/how-to-repair-peeling-paint#:~:text=Using%20a%20putty%20knife%2C%20apply,Allow%20it%20to%20dry}{\text{https://www.behr.com/consumer/how-to-repair-peeling-paint#:~:text=Using%20a%20putty%20knife%2C%20apply,Allow%20it%20to%20dry}{\text{https://www.behr.com/consumer/how-to-repair-peeling-paint#:~:text=Using%20a%20putty%20knife%2C%20apply,Allow%20it%20to%20dry}{\text{https://www.behr.com/consumer/how-to-repair-peeling-paint#:~:text=Using%20a%20putty%20knife%2C%20apply,Allow%20it%20to%20dry}{\text{https://www.behr.com/consumer/how-to-repair-peeling-paint#:~:text=Using%20a%20putty%20aw20p$

Age of property consideration

Due to the age of the property, I have been assigned to consider what/if hazards occur what should be done to protect the building and its historical significance. I need to ensure all materials used are as similar as what were used to build the property in 1810. This is so the building can stay as historical as humanly possible and preserve its graded significance. Another hazard could be that because the building is very old the frame of the house or any other structural components could be less stable causing dangers to health for occupants, workers, and even the public in case of the property collapsing. This is why we must repair the property but also make as little changes as possible to, again, preserve its historical reputation. I also believe a huge hazard would be the fireplaces within the property. Due to their old age, they are damaged or broken. Damaged fireplaces can lead to some critical hazards which is why we must make sure these fireplaces are either replaced or capped off. Preferably they want to be capped because replacing it would be renovation and this can cause historical significance deficiency.

Task 1.3 Project plan

Assessment number (eg 1234-033)	8711-033
Assessment title	Employer-Set Project
Candidate name	<first name=""> <surname></surname></first>
City & Guilds candidate No.	ABC1234
Provider name	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
City & Guilds provider No.	999999

Task(s)	1.3
Evidence title / description	Programme of works
	Supporting statement
Date submitted by candidate	DD/MM/YY

	Week1	Week2	VA/1-0	10/1-4	1A/I-F	Week6	Week7	Week8	1A/I-O	Week10	10/ I-4 4	VA/1-40				+
	vveeki	vveekz	Week3	Week4	Week5	vveeko	vveek/	vveek8	Week9	vveek10	Week11	Week12				+
Task																+
Scaffold erection				+	+	-			-	+	+			-		+
					+	+		+	-	-	+			-		+
Repair roof						-					-					+
Rake out chimney				_		-								-		+
Repoint chimney				_												
Rake out wall																
Repoint wall										1						
Repair fireplaces																
Remove oringingal plasterboard																
Repair original panelling																
Repair pipe system																
Repair cable system																
Install insulation																
Repair doors																
Repair windows																
Fit flooring																
Painting and redecorating																
Snagging																
Taking down scaffold																
-																
Plasterer																
Painter and decorator																
Carpenter and joiner																+
Bricklayer																+
Scaffolder																+
nsulation specialist																+
Plumber																+
																-
Electrician						-						-				
Roof tiler																

Employer set project Task 1.3 Statement

Due to there being a selected number of different trades working at the same time to complete jobs that they have all been given, this can sometimes cause work to be done at a minimal standard. This is due to many reasons. I know now from my project planning that many jobs need to be completed in a set amount of time by a set of different trades. If a specific job is not done within its time limit this could cause other trades to have difficulties with completing their jobs within the time requirement.

During my project planning I realized that all jobs that need to be solved/taken care of, these jobs all rely on other jobs being completed in the correct order. For example, if a bricklayer was to rake out a chimney and the roof, they are working on has not been repaired, then this can cause a major issue/health risk for anyone on the roof and people/worker underneath said roof.

All trades involved with this job must know how to communicate in not just a professional but successful manner. This is to ensure that the job/ project has been completed correctly. If the workers from the same trades miscommunicate that could even cause problems for other trades as all jobs/trades and overall work needs to be done accordingly by the planning but also to fit in with the other trades in a successful manner. If this is not achieved it can cause major problems for all people involved, this being the client, trade workers, and even the project itself. This is due to the reliability required.

Just as in my research about materials, all trades and workers involved must be made fully aware of the historical significance of this grade 2* listed building. All workers on the site should know which materials to use not to damage the historical integrity of the graded property. For example, instead of using Portland cement, which is used popularly and globally to this day, lime mortar is what would have been used in the period the said property was built.

I have found about that a big injury/death risk always inv0lved with jobs like these. The most common way to be injured in this job would be falling either off or through the roof during repair or even when raking out or repointing a chimney or walls at a risky height. Obviously, a scaffold will be present, which helps but all workers must be aware of each other's surroundings when working at height because if not the repercussions can be extremely dangerous.

The reason I have created this Gantt chart for a project plan is to analyze and verify how all necessary jobs can be completed at a certain time from different trades efficiently. All jobs, workers, and trades need to be controlled in an orderly and efficient fashion. This is the reason for my creation of a Gantt chart.

I believe the assignment I have been given to complete this project plan is not broad, which means I did not have much information to work with. I needed to analyze my chart significantly to ensure that all jobs can be completed by the necessary trade without causing disruption to other trades working on the same site.

Throughout my plan of work, I realized that PPE (personal protective equipment) is required for all trades involved. This could be from rubber gloves for electricians to breathing masks for trades where dust or harmful chemicals are involved. I now understand that when multiple trades are working in the same period it can cause some hazards or health risks. I now know that PPE can reduce any health risks involved with the job and help to ensure that work is done correctly and completed at the required time.

One last key point would be the historical significance. To ensure no historical features are removed/ruined. To ensure this we must use materials that were initially used when building this four-storey terraced property. Allowing this will avoid any changes to the level of historical importance. However, a minor problem is that these slightly aged materials can sometimes be a struggle to get a hold of due to either their popularity or even stock that is left globally. Everything is limited, this includes old materials used for buildings.

Overall, I believe that my schedule of trades, if any, is necessary for work on projects. I believe that without a plan of work no work will be completed correctly. Practice may make perfect; however, planning makes success.

Task 1.4 Presentation

Provider name

City & Guilds provider No.

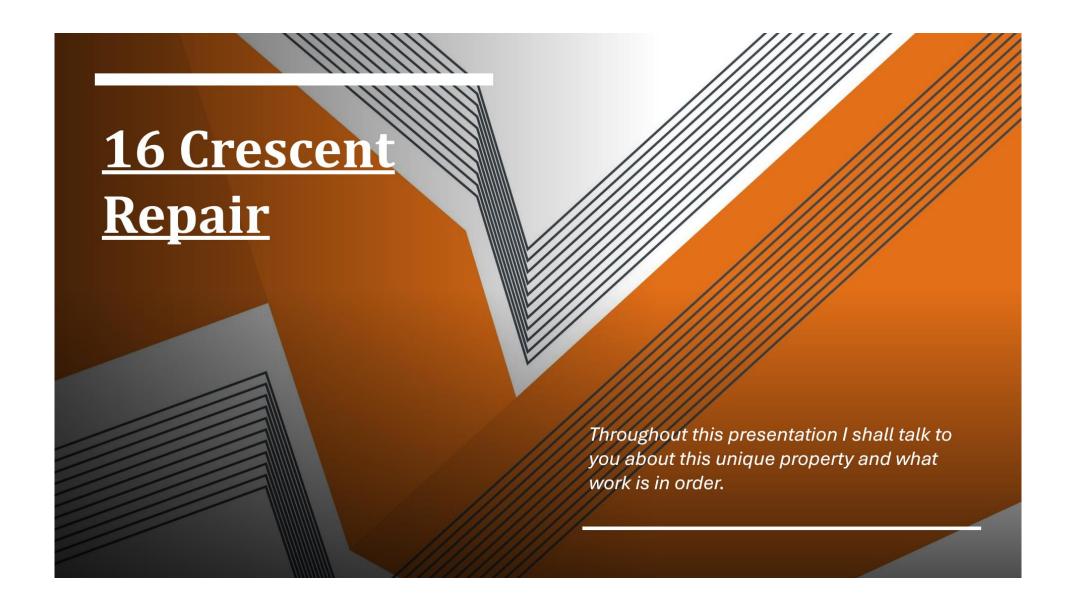
Assessment number (eg 1234-033)	8711-033
Assessment title	Employer-Set Project
Candidate name	<first name=""> <surname></surname></first>
City & Guilds candidate No.	ABC1234

ovider name>

999999a

Task(s)	1.4
Evidence title / description	Presentation slides
	Note: Presentation recording is not included with this document. Please refer to the Observation Record below the presentation slides for commentary

	presentation slides for commentary
Date submitted by candidate	DD/MM/YY



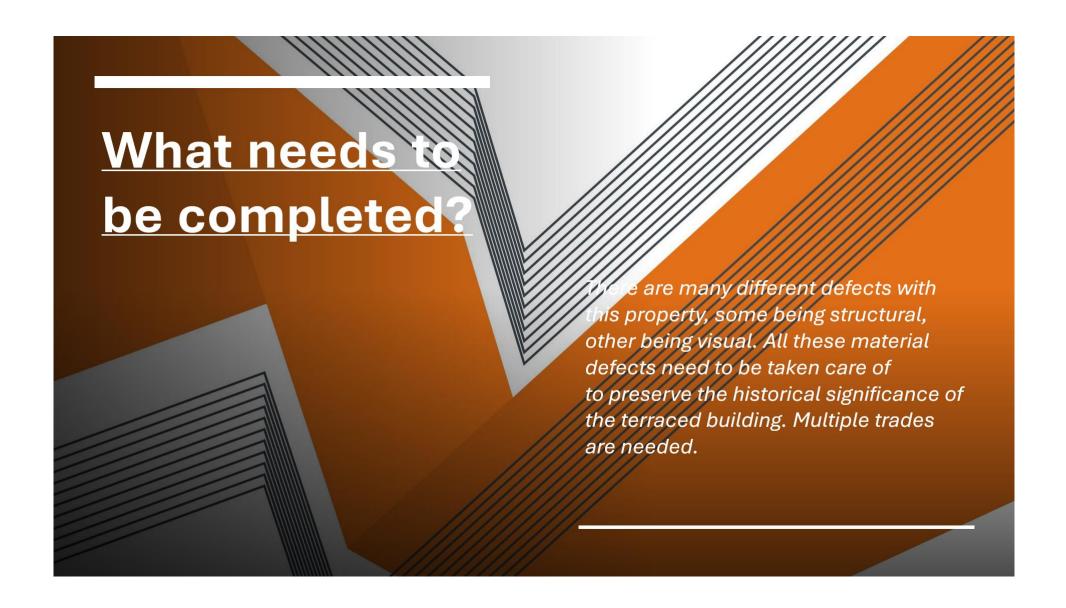
Graded/listed buildings.

Grade 1 - Exceptional historical significance.

Grade 2*- Great historical significance.

Grade 2- Historical significance.

This property is a Victorian four-storey terraced property that was built in the early 19th century. This property is a grade 2* listed building.

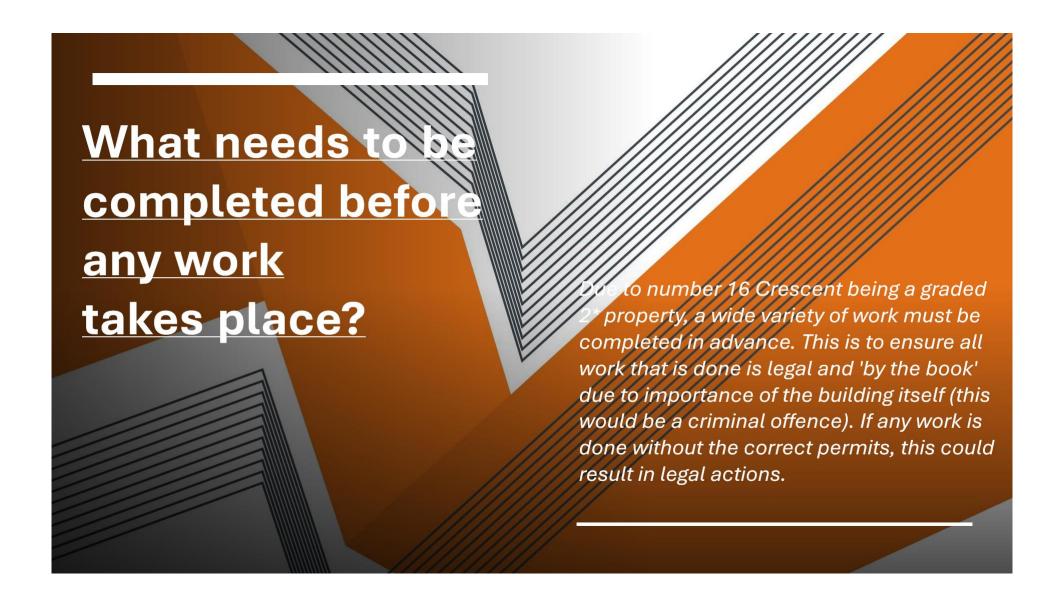


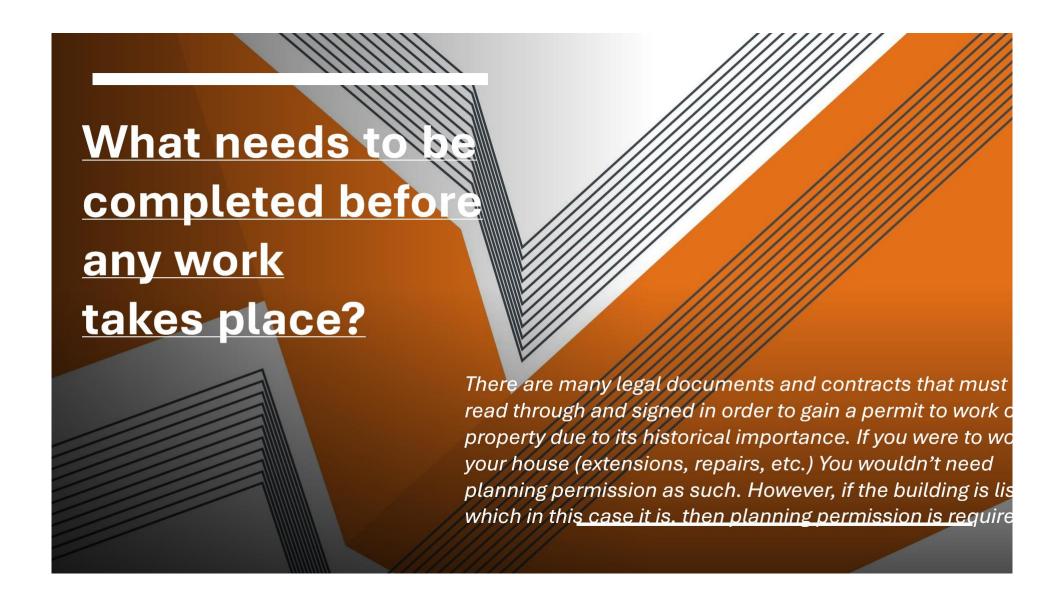
Trades required.

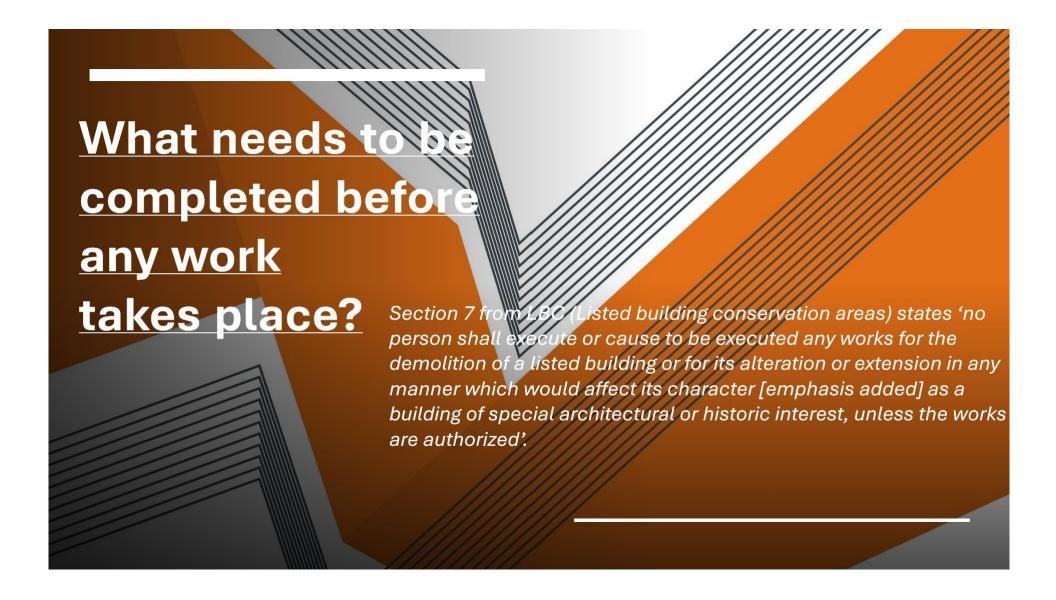
The diverse trades required for the projects are:

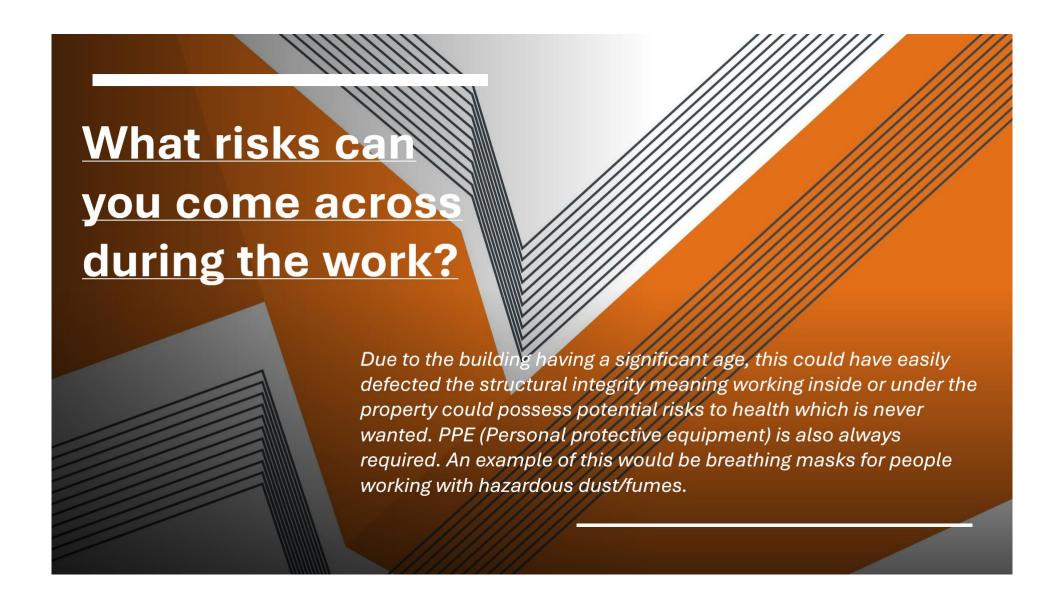
- 1. Plasterer
- 2. Painter and decorator
- 3. Carpenter and joiner
- 4. Bricklayer
- 5. Scaffolder
- 6. Insulation specialist
- 7. Plumber
- 8. Electrician
- 9. Roof tiler

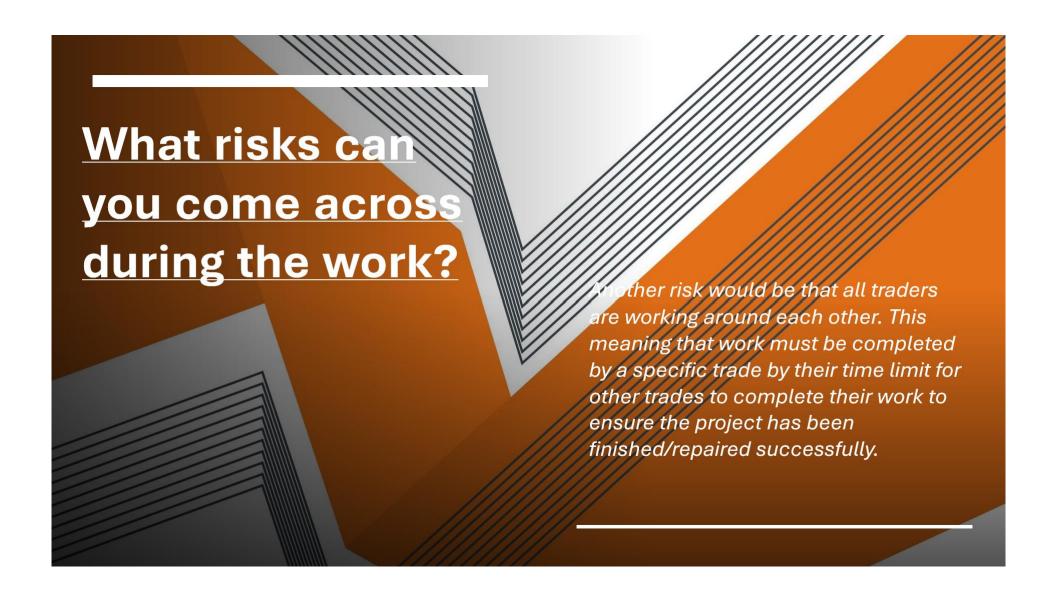
Due to the amount of repairs needed on these defects many diverse types of trade will be required to ensure all decay/damage is taken care of correctly.









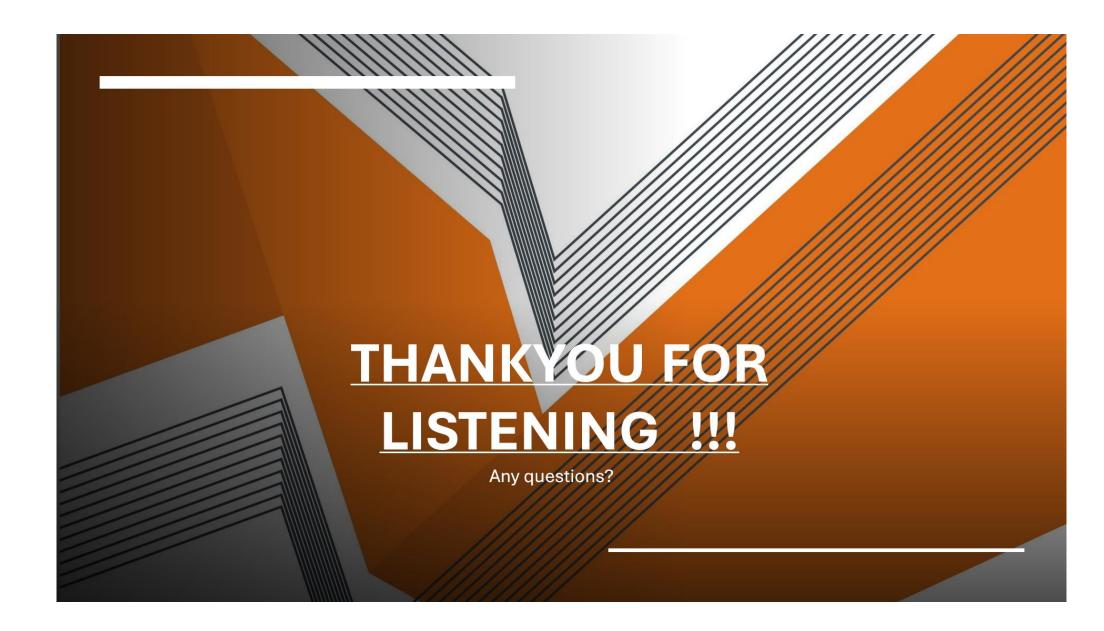




What risks can you come across during the work?

Also, all the materials must be carefully considered for repairs on this 2* listed building to ensure that the historical significance doesn't decline as we want the building to be as similar to the original property as humanly possible. With this in mind all original techniques and materials used must be used again, if possible. An example of this would be that during the 19th century, lime mortar was used. So instead of using Portland cement, we shall use lime mortar to reach our initial goal which is to repair the property and minimizing the levels of change whilst doing so.





Employer-Set Project – Observation Record (Task 1.4 Presentation)

8711-30 T Level Technical Qualification in Onsite Construction

8711-033 Core: Employer-Set Project (Summer 2023)

Candidate name	<first name=""> <surname></surname></first>
City & Guilds candidate No.	ABC1234
Date	DD/MM/YY
Provider name	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
City & Guilds Provider No.	999999a

Record observation notes below to inform external marking. **Notes must be detailed**, accurate and differentiating. They should identify areas of strength and weakness to distinguish different levels of performance quality for each of the prompts below.

Structure/detail

Heading on each slide, and each slide followed on in a chronological order. Slides clear and easy to read. Lack of images though.

Techniques

Learner looked comfortable presenting the slides. Learner did elaborate on each slide demonstrating a good depth of knowledge throughout.

Terminology

Good use of construction-based terms and phrases throughout the presentation, showing a depth of knowledge.

Theories and concepts

The learner displayed a good level of knowledge throughout the presentation and was able to back it up with facts. Good depth of knowledge shown. At times I feel the learner was a little incorrect with their facts. Learner spoke in a clear manner, but did not always focus on their audience and did read from their slides at times. Learner did repeat themselves on a few occasions.

Communication

Learner sounded confident throughout and gave good answers to the questions.

Tutor questions to candidate	Candidate responses
What did you find the most challenging aspect of the brief?	From the brief I found task 1.3 difficult as there was not a lot of information to work from.
What special considerations should be given to the processes and materials used on heritage projects?	What is altered must be replaced with the same materials.
What is the biggest challenge when considering retrofitting to properties of this type?	Considering how to make the building more energy efficient is very difficult.

Any other aspects

Tutor signature	Date
<u>X</u>	DD/MM/YY

If completing electronically, double click next to the 'X' to add an electronic signature once the record is **finalised**.

Task 2.1 Collaborative problem-solving

Assessment number (eg 1234-033)	8711-033
Assessment title	Employer-Set Project

Candidate name	<first name=""> <surname></surname></first>
City & Guilds candidate No.	ABC1234

Provider name	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
City & Guilds provider No.	99999a

Task(s)	2.1
Evidence title / description	Collaborative problem-solving group discussion notes
	Draft email
	Note: Collaborative discussion recording is not included with this document. Please refer to the Observation Record below for commentary
Date submitted by candidate	DD/MM/YY

Insulating the ceilings and ground floor. Draft excluder in the chimney Silicone bead around the window. Could damage timber. Material for floor covering. The roof is flat with no apex frame so it cannot insulate cold. Cannot separate property. I cannot add central heating. Wear breathing equipment

Draft email

Terraced property

Draft notes

To Manager and whom it may concern.

I am writing in regard to the Victorian four-storey terraced property you have assigned me to work on. Many material defects and decays are in desperate need of repair for the level of historical aesthetic and level of stability. I decided to do some research and create a report on my findings. I took part in a collaborative solution solving conversation whilst taking notes on how to make this property more thermally efficient. Throughout this discussion there was

a variety of different ideas, but we had to remember to allow them to still conserve English heritage inside and outside the building.

Within this discussion we talked about places where insulation can be stored. Due to there being no cavity wall this was not a successful idea. However, we overcame this hurdle once we realized we could install insulation into the floor and ceiling joists, even the loft to improve the properties overall thermal efficiency.

Throughout the problem solving, we found that the windows can be no thicker than the original windows fitted when the property was first built. This is due to the window frames not being built wide enough to fit double-pane windows or even triple-pane windows. We discussed and considered altering the frame. However, if the window frames were altered, this could damage the historical integrity of the property, which is the main factor we need to avoid.

Deeply considering these points is crucial and more were discussed as you will see in my notes. These all need to be considered to maximize repair, minimize change, and conserve English heritage within the building.

I shall be looking forward to discussing these issues further with you or whoever is involved in this project to ensure that the project mission has been completed successfully and efficiently.

Yours sincerely.

<first name> <surname>

Employer-Set Project - Observation Record (Task 2.1 Collaborative problem-solving)

8711-30 T Level Technical Qualification in Onsite Construction

8711-033 Core: Employer-Set Project (Summer 2023)

Candidate name	<first name=""> <surname></surname></first>
City & Guilds Candidate No.	ABC1234
Date	DD/MM/YY
Provider name	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
City & Guilds Provider No.	999999a

Record observation notes below to inform external marking. **Notes must be detailed**, accurate and differentiating. They should identify areas of strength and weakness to distinguish different levels of performance quality for each of the prompts below.

Communication skills		
Collaboration/contribution		

Methods to solve the problem

Insulating the loft, draught excluder in the chimney, silicone around the windows but take care not to damage the timber, insulation under the roof tiles, heavy curtains around windows, good ventilation in bathrooms to prevent mould, draught excluders on doors and letter box.

Any other aspects		

Tutor signature	Date
X	

If completing electronically, double click next to the 'X' to add an electronic signature once the record is **finalised**.

Task 2.2 Evaluation

Assessment number (eg 1234-033)	8711-033
Assessment title	Employer-Set Project

Candidate name	<first name=""> <surname></surname></first>
City & Guilds candidate No.	ABC1234

Provider name	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
City & Guilds provider No.	99999a

Task(s)	2.2
Evidence title / description	Evaluation
Date submitted by candidate	DD/MM/YY

Task 2.2- Evaluation template for employer set project.

Task 1.1- Research

During my research stage a lot of success took place. Researching about the listed building specifications significantly helped me find out and learn extended information about required factors like legislation and all the material decays. I believe the research I have completed is to a great standard and exceptionally meets the requirements of the brief I have received.

I felt that the most successful task responses would be the material decays. My reason behind this is because I took the opportunity to learn and understand a wider variety of materials, how they decay, how common they were in the listed buildings period, and how to repair/renovate these material defects.

Along my research journey I learned a broad amount about the legislations involved with the repairs/renovation of a grade 2* building/house. I found out that many things can go wrong with many varied materials used. Now I know about these material defects and what methods I can use to avoid the said defects within my research. Now I have researched these things I can ensure that in the future when I am working, I can use this knowledge to my advantage to optimise my work quality.

However, I do believe that the specification for my research was quite brief and did not give off a fully clear specification on what to include. Despite this point I have put in effort to find out as much necessary information as possible for what is required.

Task 1.2 Report

I have completed a report on regards to the brief specification I have been given. Throughout my report I started to understand that all jobs that need to be completed are done so whilst in progressing work of other trades. By this I mean I know now that trades must find a way/ suitable method to complete all jobs required without interrupting other jobs for other trades along the process.

I genuinely believe that I have reached a further understanding of the laws and legislations regarding repairs on listed buildings. I now know these are important to ensure historical significance does not decrease during the process of repairs and other jobs that need to be completed. My report helped me to understand that materials need to be chosen carefully and correctly. This is due to even incorrect materials damaging the property's historical importance.

I would say that my report taught me the most as I have had to analyse the reasons behind everything. Materials used, techniques used, schedule of trades, PPE (Personal Protection Equipment) that is required, etc.

Task 1.3 Project plan

I think that the project plan has gone successful. However, my overall opinion on the project plan and the schedule of trades were extremely basic and I believe more information could have been required in the brief. Throughout completing my project plan and schedule of trades I found an understanding of the importance in why specific jobs must be do not by the required trade by the required date, if not this can cause an unstable and unsafe system of work for all tradespeople involved.

There was not enough information to go off on about the different trades and how much of a period each trade holds. This meant I had a brief Gantt chart due to the decreased number of statistics that were given in the brief.

Task 1.4 Presentation

The presentation brief was put together and came across very welcoming. However, it is hard to stand up and present your findings for those who are introverts. Despite this fact, I agree that having top present my presentation on my findings helps increase stage confidence and allows for improved social skills in later life. Making task 1.4 optimally efficient.

Task 2.1 Collaborative Problem-solving

Task 2.1 went very well, and the brief required the necessary information. This meant I could complete this task with the confidence that I am doing it all correctly and efficiently. The collaborative discussion went very well and was crucial to the task as it allowed me to not only share my opinion but to adapt ideas together from other people's findings.

I now know that I have the knowledge from my findings, as well as others. This means that I have an extended knowledge thanks to the collaborative discussion between me and my peers.

The email was crucial as it has helped me learn and understand how to set out and communicate via email to a manager of peer to solve problems within the projects brief.

Overall evaluation

Overall, I believe that the project has throughout been very vague with its specification. Each task holds truly little information on what I need to complete for the project. I think the task that went most successful for me was the report. The reason for this is because I did not require much information from the project brief itself. The report was successful due to the information sources I had access to, were my own. Task 1.2 went the most successful for me. The most unsuccessful part of the project for me was the project plan. The project plan was task 1.3 and it held extraordinarily little information for the requirements I needed to meet. With the project plan being my first attempt, this was a significant issue as I did not have the information required to complete the Gantt chart specifically. However, despite this hurdle I attempted and have completed a Gantt chart with a schedule of trades included. With all aspects and tasks considered overall the project was successful despite the huge struggle with task 1.3.



Get in touch

The City & Guilds Quality team are here to answer any queries you may have regarding your T Level Technical Qualification delivery.

Should you require assistance, please contact us using the details below:

Monday - Friday | 08:30 - 17:00 GMT

T: 0300 303 53 52

E: technicals.quality@cityandguilds.com

W: http://www.cityandguilds.com/tlevels

Web chat available **here**.

The T Level is a qualification approved and managed by the Institute for Apprenticeships and Technical Education.

Copyright in this document belongs to, and is used under licence from, the Institute for Apprenticeships and Technical Education, © 2023. 'T-LEVELS' is a registered trademark of the Department for Education. 'T Level' is a registered trademark of the Institute for Apprenticeships and Technical Education. 'Institute for Apprenticeships & Technical Education' and logo are registered trademarks of the Institute for Apprenticeships and Technical Education.

We make every effort to ensure that the information contained in this publication is true and correct at the time of going to press. However, City & Guilds' products and services are subject to continuous development and improvement, and the right is reserved to change products and services from time to time. City & Guilds cannot accept responsibility for any loss or damage arising from the use of information in this publication.

City & Guilds is a trademark of the City & Guilds of London Institute, a charity established to promote education and training registered in England & Wales (312832) and Scotland (SC039576). City and Guilds Group Giltspur House, 5–6 Giltspur Street London EC1A 9DE

