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Heritage Assessment: Butler's Green Retaining Wall (Road Reserve, Town of Arrowtown)

This heritage assessment has been prepared for Queenstown Lakes District Council (QLDC), c/o Stantec, in relation to the proposed remediation of the stone retaining wall located adjacent to Butler's Green.

The wall was constructed in 1886 to retain the road connecting the Arrowtown township with the Macetown dray track. It was constructed in stacked schist walling, with a parapet along the top. Historically, this parapet was raised above road level. The stone wall is a listed heritage feature (Category 3) in the QLDC Proposed District Plan and is also included in the Rārangi Kōrero/Heritage New Zealand Pouhere Taonga List. It has heritage significance associated with its construction as part of a key route connecting two goldfields' settlements, demonstrating the investment in infrastructure routes in the late 19th century. It is also a substantial, highly prominent heritage structure at the western end of Arrowtown and is a key visual heritage feature linking the Arrowtown Town Centre Heritage Precinct with Dudley's Cottage and the Arrowtown Chinese Settlement.

As per the fee estimate dated 12 July 2023, this assessment includes:

- Research to inform a historical narrative for the structure;
- A site visit to assess its heritage fabric and values;
- A written assessment of the heritage values of the wall; and
- An assessment of the impact of the proposed remediation options on the structure's heritage values.

In general terms, this report follows an accepted best-practice approach as described in Sustainable Management of Historic Heritage Guidance Information Sheet 9 by Heritage New Zealand Pouhere Taonga in that it states: what heritage place is affected or involved; what work or changes are proposed; the principles that guide the assessment/heritage impact advice; and how the proposal(s) measures up to the Regional and District Plan assessment standards (or other best practice standards).

Disclaimer

This assessment has been prepared in relation to the particular brief outlined above. The advice and/or information contained in this assessment may not be used or relied on in any other context for any other purpose. No responsibility is accepted for the use of any advice or information contained in it in any other context or for any other purpose.

The professional advice and opinions contained in this report are those of Origin Consultants, and do not represent the opinions and policies of any third party. The professional advice and opinions contained in this report do not constitute legal advice.

Methodology

Information in this assessment has been based on Stantec, 'LCLR Minor Works: Butler's Green Retaining Wall Remediation,' March 2022 and Stantec conceptual drawings, 'Butler's Green, Buckingham Street, Arrowtown Retaining Wall Remediation,' dated 22 November 2022 (Revision A). Reference has also been made to Stantec, 'Butlers Green Retaining Wall – Option Study,' prepared for the Queenstown Lakes District Council, dated 23 February 2018.

A site inspection was undertaken on 15 August 2023 by Jeremy Moyle and Lucy King of Origin Consultants, and on 28 August 2023 by Robin Miller of Origin Consultants.

This report is also based upon research provided from a variety of archival sources, reports, and information held by Heritage New Zealand Pouhere Taonga. The principal research sources have been:

- Online and physical archives, including the Lakes District Museum and PapersPast,
- Personal communications with members of the Queenstown District Historical Society, and
- Photographic archives, including the Hocken Collections and the Lakes District Museum.

Limitations

Observations and recommendations within this report are based upon a visual, non-destructive inspection of the wall only. No opening-up, deconstruction, or testing has been carried out. Reasonable time and budget constraints meant that the scope of the history was limited.

Site Details

Address	Butler's Green, Buckingham Street
Built	1886
Legal Description	Legal Road Reserve
District Plan Zone	Informal Recreation (PDP); Rural General (ODP)

Heritage Listing

The Butler's Green wall is scheduled in both the Operative (ODP) and Proposed (PDP) Queenstown Lakes District Council (QLDC) District Plan as:

Ref. No.	Description	Legal Description (Valuation Reference)	HNZ Cat/No.	QLDC Cat.
311	Stone Wall, Recreation Reserve, Buckingham Street, Arrowtown	Sections 1 and 2, Block XXV, Town of Arrowtown (2918233400, 2918232600)	2/2120	3

The PDP provides that Category 3 features are significant to the District and/or locally and their retention is warranted. The Council will be more flexible regarding significant alterations to the features in this category.

The importance of the wall is recognised in the Arrowtown Design Guidelines 2016. It forms part of Neighbourhood 2 – Soldier's Hill, which includes the following description:

> *This neighbourhood's relationship to other neighbourhoods is important. It abuts the river, the Town Centre, other Old Town Residential neighbourhoods and the New Town. It also includes the western end of Buckingham Street down to Buckingham Green and bounds the Chinese Settlement. This route with Butler's Wall and Dudley's cottages is very important historically as it was the main track from the historic: mining sites to the town…*

The wall is recorded on the New Zealand Archaeological Association (NZAA) site recording scheme, ArchSite, as F41/752.

Location & Orientation

The wall is located within the Buckingham Street Road Reserve, adjacent to Sections 1 and 2, Block XXV, Town of Arrowtown. The wall is formed by three sections of stacked schist, which follow the road as it curves to the north. The structure's design includes a stacked rubble schist base with protruding cap stones. These cap stones create a ledge upon which the parapet wall and vertical coping stones sit. The eastern-most section of the wall is not original; its construction date is unclear.

Figure 1. Location of the Butler's Green stone wall (reproduced from HNZPT Listing Report).

Figure 2. Butler's Green wall looking east along Buckingham Street.

Background

The following provides a brief history of the stone wall, drawing heavily from the HNZPT Listing Report with some updates to this existing research.

Brief History

Gold was discovered in the Arrow River in the early 1860s, and a mining settlement sprung up at the site of Arrowtown. By the end of 1862, there were 1,500 men camped at the Arrow amongst a sea of canvas tents.[1] The township of Arrowtown was formally surveyed and streets laid out in 1867. Buckingham Street appears to have been designated at this time and it is shown in the 1867 plan of Arrowtown.[2] Early photographs show Buckingham Street as a dirt track with a steep drop down to the flat near Bush Creek and the Arrow River (Figure 2). This track provided access to the Arrow River from the township.

There was no formed road up the Arrow River to Macetown until 1884. Prior to this, all supplies were packed in via a steep track across Big Hill. The lack of access increased the cost of mining and severely limited the machinery that could be used at isolated sites. Despite repeated calls for the construction of a dray road, this was not constructed until 1884.[3] Access to the river level from the township remained problematic with floods scouring away the edge of the terrace below the township.[4]

[1] J Hall-Jones, *Goldfields of Otago - An Illustrated History* (Invercargill, NZ: Craig Printing, 2005).
[2] Archives New Zealand, Arrowtown Crown Grant Index Map, Series Code 9432; Lakes District Museum, N1013-A.
[3] P Petchey, *Archaeological survey of the Arrow River and Macetown, Otago* (Wellington, NZ: Department of Conservation, 2002).
[4] Personal correspondence with Marion Borrell, Queenstown and District Historical Society Incorporated, 22 August 2023.

Figure 3. The unretained bank of Buckingham Street from the township to the Arrow River and Bush Creek, circa 1874.[5]

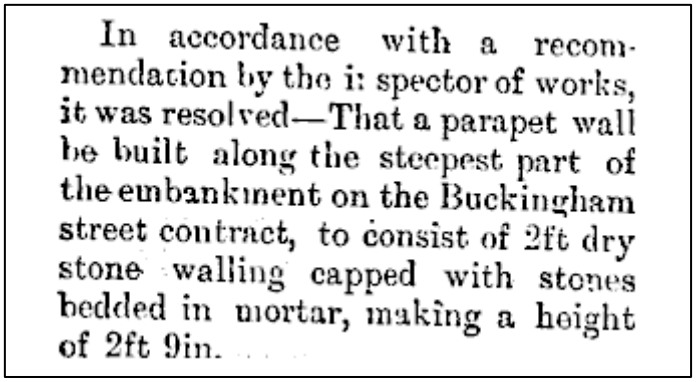
The Borough Council had begun to discuss the construction of a road connecting Arrowtown with the Macetown dray road by June 1885.[6] Initial options were explored by the Borough Council and Government representatives and included extending Berkshire Street and establishing a scrub embankment (rather than stone).[7] The Berkshire Street route was surveyed and specifications prepared; however, this plan did not eventuate with the Borough Council instead preferring to widen and extend Buckingham Street.[8] Plans and specifications were commissioned from Mr McGeorge by the Council in September 1885.[9]

Works on the connecting road do not appear to have started immediately, as the *Lake County Press* reported on further requests for "road work to connect Buckingham street [sic] with the Macetown Road" in September 1885.[10] A parapet was also recommended to be constructed along the steepest section of the embankment and dangerous portion of the road, consisting of 2 feet high dry stone walling and capped with stones bedded in mortar (Figure 4).[11]

Tenders were called in January 1886 to widen the section of Buckingham Street connecting to the Macetown dray road.[12] Only two tenders were received by the Council – Peter Henderson who quoted £124.12.6 and William Clark who quoted £217.12.0. A further call for tenders for the construction of the parapet wall was made in May of that year.[13] P. Henderson's tender was accepted in June 1886.[14] Henderson's quote for the

[5] Lakes District Museum, EL1278.
[6] Lakes District Museum, Borough Council Minutes, ACR Minute Book 3, 23 June 1885.
[7] *Lake County Press*, 3 December 1885, p. 3.
[8] Lakes District Council, Borough Council Minutes, ACR Minute Book 3, 18 August 1885.
[9] Lakes District Council, Borough Council Minutes, ACR Minute Book 3, 1 September 1885.
[10] *Lake County Press*, 3 September 1885, p. 3.
[11] *Lake County Press*, 3 September 1885, p. 3; Lakes District Council, Borough Council Minutes, ACR Minute Book 3, 1 September 1885.
[12] *Lake County Press*, 21 January 1886, p. 2.
[13] *Lake County Press*, 27 May 1886, p. 3.
[14] *Lake County Press*, 24 June 1886, p. 3.

parapet wall was also accepted.[15] Henderson appears to have also been involved in the formation of the Macetown dray road and the contract to widen Buckingham Street.[16]



In accordance with a recommendation by the i: spector of works, it was resolved—That a parapet wall be built along the steepest part of the embankment on the Buckingham street contract, to consist of 2ft dry stone walling capped with stones bedded in mortar, making a height of 2ft 9in.

Figure 4. Article in the *Lake County Press* reporting on the proposal to construct a parapet wall, 20 May 1886.[17]

In July, the *Lake County Press* reported on progress, noting that "the water tables have yet to be made, the road crowned up, a parapet wall built, and the drains remain to be connected."[18] On 8 July, Henderson reported that the wall would be finished within the next fortnight, before the next meeting of the Arrow Borough Council.[19]

The Mines Department had agreed to fund two-thirds of the cost for the connection with the Macetown dray road.[20] When completed, the Government subsidy totalled £150, suggesting a total contract price of £225.[21] The *Cromwell Argus* described the works as the most "substantial and faithfully-executed piece of work [that] has ever been done in the township."[22]

Local histories often link the construction of the wall with Chinese workers. No archival records have been located that confirm this association; however, the contribution of Chinese in New Zealand has often been ignored. Local histories also suggest that the stone was quarried from the nearby Memorial Hill (Feehly Hill).[23]

Photographs from the 1880s and 1890s show the finished wall, consisting of three sections that follow the curve of Buckingham Street (Figure 5 and Figure 6). Figure 6 shows the original height of the parapet wall above road level, and the wall also appears to have some level of batter. These historic photographs also show the past uses of Butler's Green, which contained some small buildings, stock yards, and the public pound.[24]

Although the necessity for access to Macetown has waned since the 1880s, Buckingham Street has remained in constant use. The development of Arrowtown as a tourist destination, river trails, and the Arrowtown Chinese Settlement as a reserve has led to very heavy use of Buckingham Street down to the Arrow River.[25]

[15] Lakes District Council, Borough Council Minutes, ACR Minute Book 3, 8 June 1886.
[16] *Lake County Press*, 6 July 1883, p. 7; *Cromwell Argus*, 29 June 1886, p. 3.
[17] *Lake County Press*, 20 May 1886, p. 3.
[18] *Lake County Press*, 1 July 1886, p. 2.
[19] *Lake County Press*, 8 July 1886, p. 3.
[20] *Lake County Press*, 6 August 1885, p. 3.
[21] *Lake County Press*, 20 October 1887, p. 2.
[22] *Cromwell Argus,* 29 June 1886, p. 3.
[23] Personal correspondence with Marion Borrell, Queenstown and District Historical Society Incorporated, 22 August 2023.
[24] *Lake County Press*, 25 November 1886, p. 2.
[25] Heritage New Zealand Pouhere Taonga, Summary Upgrade Report: Stone Wall, Arrowtown (List No. 2120, Category 2), February 2023.

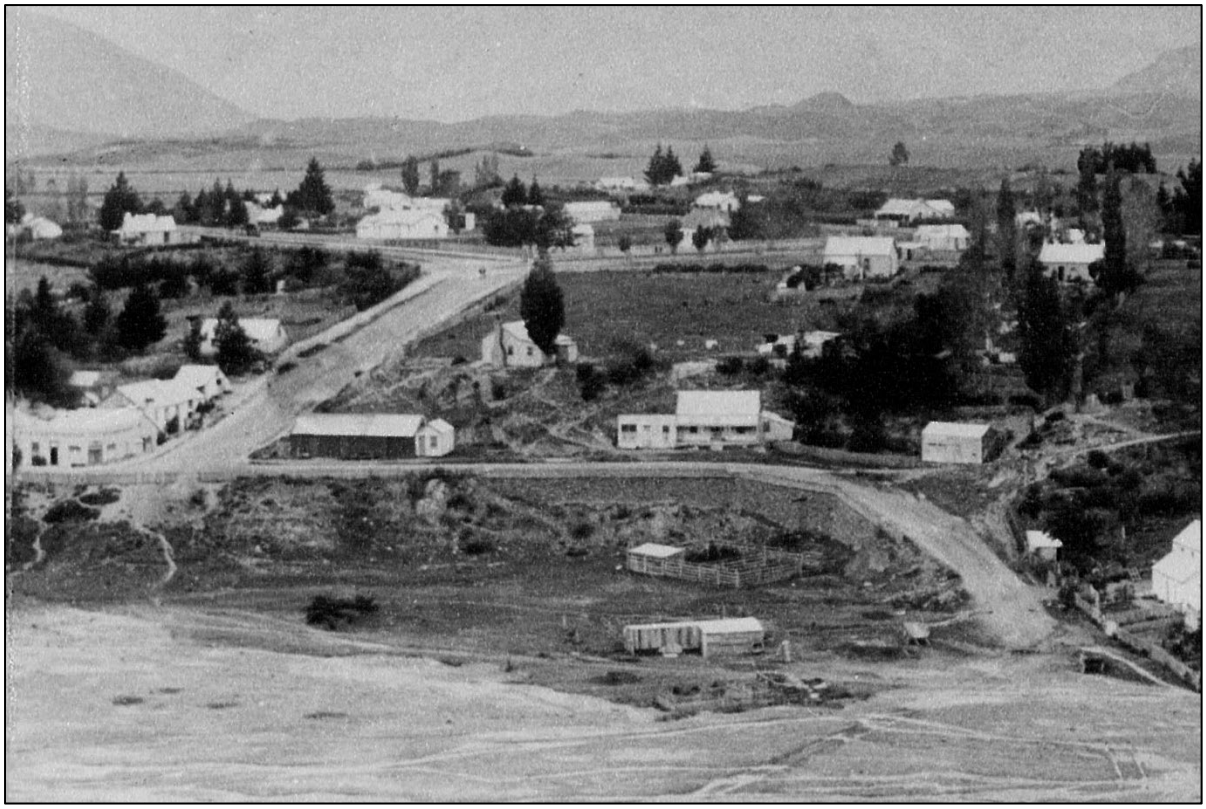


Figure 5. Butler's Green wall soon after its completion in 1887.[26]

Figure 6. Butler's Green wall, circa 1890s, showing the height of the parapet above road level.[27]

[26] Lakes District Museum, EL0093.
[27] Auckland Libraries Heritage Collections, AWNS-19050330-12-4 (cropped).

It is unclear what works have been undertaken on the wall since its construction. There is evidence that some repairs have been undertaken with concrete and some coping stones have been lost. The ground level has also been raised over time, with the parapet wall now largely sitting in line with the road surface. This has likely created increasing pressure on the retaining wall; there have been reports of the wall bowing since at least 2006.[28] Overall, however, the original form of the wall as built in 1886 is still readily recognisable today, including its stacked schist construction, horizontal line of capping stones, remaining sections of parapet with vertical copings, and projecting cast iron outlet pipe (see Figure 6).

The eastern-most section of the wall was not constructed as part of the original retaining wall. It is not visible in the historic photos below (Figure 5-Figure 6). Its construction date is unclear.

Identification of Significance

There are many aspects to the concept of 'heritage significance,' but the following significance assessment has been based on the evaluation criteria at 26.6 of the QLDC PDP.

Historic and Social Value

The Butler's Green wall has historical value associated with its construction as part of the key route connecting the Whakatipu Basin with Macetown. The wall was constructed to retain Buckingham Street, which was widened and connected to the Macetown track. Macetown experienced a gold mining boom from the 1860s to 1900s and the construction of a dray track in 1884 created an important infrastructure connection to the isolated settlement. The wall symbolises the need to cart supplies between the goldfields settlements and its substantial size shows the investment in infrastructure routes that was made between goldfields settlements. For Arrowtown, it was a major infrastructure project associated with the growth of the town and its continued development as a permanent settlement in the region. The road remains a key access point to the Arrow River and adjacent trails.

The stone wall has a degree of community association. It forms a substantial backdrop to Butler's Green and the adjacent Dudley's Cottage precinct and Arrowtown Chinese Settlement, which are frequently visited by locals and tourists. It is a key historic feature of this part of the town that helps inform public education of the history of the area, and the town's goldfields' heritage, which is demonstrated by a recently erected information sign.

It may also have been constructed by Chinese workers, whose contribution to the early settlement of the area and gold mining is often ignored. This association has not yet been confirmed.

Assessment – High

Cultural and Spiritual Value

This criterion is not considered to apply.

Assessment – N/A

Architectural Value

Although a utilitarian structure constructed in basic materials, the wall has some value as an architectural feature in the built environment of this part of the town. It has been constructed in three sections, which follow the curve of Buckingham Street to the north and is topped by a low parapet wall with vertical coping stones. The form of the historic wall largely remains intact, with some repairs evident.

Assessment – Low to Moderate

[28] NZAA Site Record Form F41/752.

Townscape and Contextual Value

The Butler's Green wall is a substantial structure and is a landmark feature in Arrowtown. It is highly prominent at the north-western end of Arrowtown and defines the western end of Buckingham Street. It continues to provide one of the key access points to the Arrow River.

The structure has amenity value and a high degree of unity in terms of materials, textures, and colour in its surroundings. Historic stacked stone structures and buildings remain prominent in Arrowtown, and the stone buildings of Dudley's Cottage, Ah Lum's store, and Ah Wak's lavatory are located adjacent to Butler's Green. Many modern buildings have adopted similar materials to reinforce this historic aesthetic.

Assessment – High

Rarity and Representative Value

Historically, stone was a common construction material in Arrowtown, with numerous stacked stone buildings and walls in the township. However, dry stonewalling is now a rare construction methodology. While some similar dry stone walls are seen in Arrowtown, the Butler's Green wall is unusual and unique due to its scale.

Assessment – Moderate

Technological Value

The Butler's Green wall is representative of stacked stone construction, which was common in the late 19th century. Numerous early settlers in Arrowtown had migrated from Europe, where stone was a common building material and, as such, many were adept in stonemasonry and produced high quality work. The scale and longevity of the wall demonstrate the skill of the stonemasons who constructed it.

Assessment – Low

Archaeological Value

Archaeological investigations into the wall could shed light on the original construction techniques and the history of infrastructure-building in the area. There may also be artefacts in the fill behind the wall. Any artefacts would be subsidiary to the wall itself.

Assessment – Moderate

Assessment of Proposed Works

Summary of Proposed Works

The following summary is based on Stantec, 'LCLR Minor Works: Butler's Green Retaining Wall Remediation,' March 2022 (referred to as the Stantec report) and Stantec conceptual drawings, 'Butler's Green, Buckingham Street, Arrowtown Retaining Wall Remediation,' dated 22 November 2022 (Revision A).

Three remediation options were identified which would improve pedestrian safety, improve security of road/services, and increase the life of the historic structure. Doing nothing is not a viable option. The options presented were:

- **Option 1** – Dismantle the existing stacked stone structure and replace with an engineered structure with recreated facing from original rock.
- **Option 2** – Provide external support to the front of the wall with cantilevered columns.
- **Option 3** – Tie back rock/soil anchors with pattress plates and steel wire mesh netting.

Secondary options, such as burying the wall and installing proximity fencing/signage/planting at the base of the wall, were also identified, which would not meet the key objectives of safety, security, and increasing the life of the historic structure.

The Stantec report also identified that a combination of the identified options could also be employed.

Assessment Objectives & Principles

Heritage significance is embodied in the structure itself and its fabric, its setting, and its intangible values and associations. Heritage conservation practices have historically prioritised the integrity and authenticity of heritage fabric, which was regarded to have intrinsic value. Conservation practices gradually shifted to also incorporate assessments of the intangible values associated with a place or feature. The aim of conservation is to retain the heritage significance, both tangible and intangible, of a place or feature. Based on heritage best practice, the following principles have been developed to assist in the assessment of the proposed options:

- **Effects on heritage values** – the effects of the proposed option on the assessed heritage values of the wall.
- **Retention of heritage fabric** – whether the option retains the integrity of the heritage fabric comprising the wall.

The following heritage conservation processes have been adapted from the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value 2010 (ICOMOS New Zealand Charter) and the Australia ICOMOS Charter for Places of Cultural Significance 2013 (Burra Charter). ICOMOS is an international non-governmental organisation of heritage professions engaged in the conservation of places of cultural heritage value. The ICOMOS New Zealand Charter and Burra Charter provide a set of principles to guide the conservation of places of cultural heritage value. Although not statutory documents, these Charters constitute a recognised benchmark for conservation standards and practice. Heritage conservation processes outlined in these Charters include:

- **Preservation** through stabilisation, maintenance, and repair. Preservation maintains a feature in its existing state and aims to slow down deterioration, with as little intervention as possible. Preservation is appropriate where the existing heritage fabric is of such significance that it should not be altered. Preservation methods should protect fabric without obscuring it.
- **Restoration** aims to return the feature to its original state by reassembling and reinstating existing materials. Occasionally, existing fabric may need to be removed from a place due to decay or loss of structural integrity.
- **Reconstruction** aims to rebuild the feature as closely as possible to a documented earlier form, using new materials. Reconstruction is appropriate where it is essential to the integrity, intangible value, or understanding of a place.
- **Adaptation** is acceptable where it has minimal impact on the heritage significance of the feature. Alterations and additions may be acceptable where they are necessary to safeguard the feature. Any alterations or additions should be compatible with, and not dominate/obscure, the form and fabric of the place.

Multiple heritage conservation processes may be employed, for example, repairs involving restoration by reinstating dislodged materials to its original location.

Options Assessment

The following section considers options proposed in the Stantec report from a heritage perspective. This section is intended to provide guidance on the most appropriate approach that takes heritage significance into account and applies heritage conservation practices. It may not fully take into account other relevant considerations that may influence the outcome of the project, such as the seismic performance of each option.

Option 1 – Dismantle and Reconstruct Wall

The Stantec report notes:

> "This option requires completely removing the wall facing stones and constructing an engineered retaining wall. The facing would then be reconstructed from the original materials using masonry ties to the engineered wall" (p. 2).

Option 1 would involve the deconstruction of the historic wall and restoration to its original form by reassembling the original stone and recreating the original features. This option requires significant intervention into the wall with the deconstruction/reassembly of the entire wall. However, heritage fabric could largely be retained and used to reassemble the original wall. The stone may need to be re-laid as a facing/veneer. When rebuilt the stone wall would be unencumbered by the structural supports required by Option 2 and 3. If carefully rebuilt, the wall would have the same appearance as its historic form and it is likely that much of its original stone would be reused. Assuming that an experienced specialist heritage stonemason is engaged to deconstruct and reconstruct the wall, and adequate recording of it pre-deconstruction is undertaken, it would be possible to ensure that specific stones (such as large feature/marker stones) are placed back in their original wall positions.

Option 1 will maintain the townscape/contextual value of the wall by reassembling the form of the wall, unencumbered by bracing, pattress plates, and mesh (in comparison to Option 2 and 3). There will be some impact on the architectural, rarity/representative, and technological values of the wall by its deconstruction i.e., it will be rebuilt and will no longer be truly authentic. However, careful reconstruction will mitigate adverse effects on the architectural and rarity/representative value as a largely true representation of the historic wall would be reassembled. To some extent the technological value would be affected, but again accurate reconstruction would mitigate this. The potential archaeological value of the wall would be lost; however, its deconstruction would offer an opportunity to record the construction techniques and methodology of the retaining wall and so there would be some mitigation.

In conclusion, adverse effects could be managed by reassembling the wall in a very similar manner to its historic form. As mentioned above, the wall would need to be carefully dismantled with the stones laid out to ensure that large 'marker' stones are re-laid in the same/similar locations. The reassembled form should also recreate the same design details, scale, and proportions of the historic wall. Works could also reinstate the original parapet height above the road (2ft 9in), which is visible in historic photographs. Heritage-sensitive design will be needed if this parapet height must be increased for safety reasons.

Option 2 – Cantilevered Bracing

The Stantec report notes:

> "This option involves cantilevered counterfort posts at the base of the wall with walers spanning horizontally between the counterforts… this structure would consist of cantilevered UC posts cast into bored holes at the toe of the wall… the 'windows' between the walers and columns would be retained with steel SE62 mesh" (p. 2).

In essence, Option 2 is an attempt to preserve the wall in its current condition, which requires considerable bracing. While heritage best practice accepts that new work may be necessary to stabilise a heritage feature, new work should not distort/obscure the heritage significance or detract from its interpretation and appreciation. While Option 2 enables the historic fabric of the wall to be preserved in its current state, the level of bracing required would obscure the wall and areas that are not directly braced with counterforts and walers would be retained with mesh. This option effectively requires the entire wall to be obscured to some level – either by bracing, walers, or mesh. The Stantec report also notes that this option may require fencing around the base as the risk of loss of facing rock remains (see p. 5), which would further obscure the feature.

Option 2 provides for the stabilisation of the wall; however, it will have substantial impacts on the intangible heritage values of the wall. The wall will be obscured by the bracing, which will affect the

townscape/contextual value of the wall by reducing its visibility and prominence from Butler's Green. The historic/social, architectural, rarity/representative, and technological values will all be impacted as the structure of the wall will be less visible and less able to be appreciated.

Option 3 – Tie Back with Pattress Plates

The Stantec report states that:

> "This option involves the use of self-drilling anchors drilled through the wall facing and anchored behind the moving soil block. To capture the facing, pattress plates (steel washers) would be placed over the ends of the anchors. The pattress plates could have a rustic appearance to be sympathetic to the structure… the anchors would be placed in several rows with higher concentrations at the least stable areas" (p. 3).

Like Option 2, this option enables the retention of the wall in its current condition. Isolated pattress plates are a common intervention to stabilise and pin back unreinforced masonry so, in small numbers, would not appear out of place on the heritage feature. Drawings contained in the Stantec report show X-style plates of 1m x 1m size at 1.2m centres across the face of the wall held in place by the self-drilling anchors and the conceptual drawings (dated 22 November 2022) show 300m square head plates at 1.5m centres holding steel wire mesh netting in place. Based on these drawings, a significant number of self-drilling anchors appear to be required and higher concentrations may be required in less stable areas. The Stantec report also notes that this option may require fencing around the base as the risk of loss of facing rock remains, which would further obscure the feature (see p. 5).

Although appearing to provide the lowest level of intervention of all three options, cumulatively the number of pattress plates is expected to have an adverse impact on the townscape/contextual value of the wall in reducing its visibility and focusing the eye instead on a multitude of steel pattress plates. Like Option 2, the wall will be obscured, which will affect the townscape/contextual value of the wall by reducing its visibility and prominence from Butler's Green. While the historic form of the wall will be retained, the historic/social, architectural, rarity/representative, and technological values will be impacted as the structure of the wall will be less visible and able to be appreciated.

Secondary Options

The Stantec report also considered:

- Doing nothing – Preserving the wall as is/in situ has not been identified as a viable option due to the current condition of the wall and risk of failure.
- Fill in front of the wall – This would completely obscure the wall and have significant adverse effects on the townscape/contextual values.
- Proximity fencing/signage/planting around the base of the wall – This option is discounted in the Stantec report as it would not achieve engineering objectives.

Assessment Summary

The following summary builds on the assessment table in the Stantec report by adding two new objectives to the assessment:

Primary Options	Key Objectives	
	Effects on heritage values	Retention of heritage fabric
Option 1 (Preferred)	• Restoration of historic form of the wall • Maintain prominence of the historic structure • Deconstruction provides opportunity to record historic construction	• Retained (as much as possible) • Deconstructed and reassembled with key features and selected stones replaced in original positions

	techniques/methodologies (mitigating factor)	
Option 2	• Wall obscured by bracing and becomes less prominent in the landscape	• Retained (original stacked form) • Obscured by bracing/mesh
Option 3	• Wall obscured to a substantial degree by pattress plates	• Retained (original stacked form) • Some minimal loss of heritage fabric associated with drilling • Obscured by pattress plates and mesh

District Plan Application

The following section considers the application of the heritage rules of the QLDC Proposed District Plan to the proposed works. As a listed heritage feature, the rules of the heritage chapter (Chapter 26) apply to the proposed works. Given that the Butler's Green wall is a structure (rather than a building), the application of the PDP to the Butler's Green wall is not tidy; it is likely that the proposed works will be considered an alteration. The 'demolition' rules are not clear as to how they apply to deconstruction and reconstruction as opposed to removing something and not reconstructing it.

The PDP outlines that a Category 3 heritage feature is significant to the District and/or locally and their retention is warranted. The Council will be more flexible regarding significant alterations to heritage features in this Category.

Heritage rules that may be triggered by the proposed works include:

- Minor repairs and maintenance are a permitted activity (rule 26.5.2); however, the proposed works are very likely to be considered more than minor.
- Alterations and additions to a Category 3 feature is a restricted discretionary activity (rule 26.5.7) with discretion restricted to effects on the heritage values and significance of the feature.
- Rule 26.5.9 for development within the setting of the wall may be triggered for new structures abutting the wall. Discretion is restricted to the extent of the development and its cumulative effects and effects on the heritage values and significance of the feature.
- Earthworks within the setting of the wall is a discretionary activity (rule 25.4.5).
- Based on the proposed options, no heritage fabric will be demolished and destroyed. As such, the demolition rules are unlikely to apply, but this will need to be confirmed with the QLDC Planning Department.

Various objectives and policies in Chapter 26 provide for works that will enhance historic heritage features through works which increase the resilience of the feature by ways of upgrades to meet building and safety standards (see 26.3.1.2 and 26.3.4.4).

Conclusion

Based on current information, Option 1 to dismantle and reconstruct the wall is considered the preferred option for a heritage conservation perspective. This assessment has applied weight to the townscape/contextual values of the wall. The heritage 'success' of this option will however depend on the extent to which care is taken to record the wall, deconstruct it and reconstruct it to retain its primary stacked schist form with particular features reinstated in their original position. It is also unclear at the moment what recreating this veneer would mean for the wall; how thick are the existing stones and how thick would the veneer be?

It is expected that this work will require a Resource Consent and consultation should be undertaken with Heritage New Zealand Pouhere Taonga.

Consent conditions should include:

- Recording of the existing wall to be carried out by a suitably qualified and experienced heritage professional. This should include identification of key heritage features for reinstatement. For systematic recording of the wall prior to deconstruction, photogrammetry is likely to be appropriate.
- Deconstruction and reconstruction methodologies to be approved by the heritage professional.
- Works to be undertaken by an experienced heritage stonemason in conjunction with monitoring by the heritage professional.

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