

OVERVIEW						
Option No.	Façade Proposal	External Design Description <i>See also Design and Access Statement</i>	Internal Design Description <i>See also Design and Access Statement</i>	Fabric Impact <i>See also Heritage Statement</i>	Visual Impact <i>See also Heritage Statement</i>	Heritage Impact Summary <i>See also Heritage Statement, for detailed impact assessment and consideration of wider heritage benefits that could outweigh the impacts identified below.</i>
Baseline	Retain in current condition.	Frames and hidiminium rails exhibiting corrosion and patination. Finishes peeling. Spandrels beginning to bow and sag, with finish patination. Glass locally broken, with post applied solar film to inside face delaminating. Obscurity panel discolouring and sealants inconsistent in type and age. Column casings corroding and finish degrading. Mosaic tesserae tiling delaminating and soiled . Hidiminium rails are structural (supporting frames) and are deadloaded on top of one another, requiring a top-down removal.	Aging and varied; reflecting a number of fitouts/refurbishments and maintenance works over design life. Post applied solar film is delaminating, diminishing the performance benefits and distracts from original visual intent of transparency.	Façade is little altered and retains original, historic fabric.However, historic fabric continues to deteriorate requiring localised, ad-hoc, repairs.	The façade expresses the original architectural design intent which is of high significance. However, appearance of building continues to deteriorate.	Negligible adverse in the short-term becoming increasing higher over time if this option results in the building not being in active use / repaired.
1	Refurbishment inline with 2020 Planning Consent (new double glazing and spandrels, existing frame and rails refurbished insitu).	Visual changes with regard to spandrel finish and glass type (glass becomes clear as original intent, albeit double glazed with modern coatings). Metalwork finishes restored/refurbished.	Unchanged internal appearance and profiles beyond homogenisation of internal decoration and replacement beading to support new glazing.	Direct Impact: minor adverse Option ensures minimal intervention to historic fabric.	Indirect Impact: beneficial The façade expresses the original architectural design intent which is of high significance.	Beneficial
2	Refurbished frames and rails; single glazing with secondary glazing; new spandels.	Visual changes with regard to spandrel finish. Post applied glass coatings removed. Secondary glazing system visible through external wall glazing. Metalwork finishes restored/refurbished.	New secondary glazing system installed to interior becomes the dominant feature to the internal elevation, obscuring existing framing. Homogenisation of internal decoration also required.	Direct Impact: minor adverse Option ensures minimal intervention to historic fabric.	Indirect Impact: minor-to-moderate adverse Secondary glazing has potential for adverse impact on the external architectural expression of the building.	Minor adverse
3	Refurbished frames and rails; double glazing with secondary glazing; new spandels.	Visual changes with regard to spandrel finish and glass type (glass becomes clear as original intent, albeit double glazed with modern coatings). Metalwork finishes restored/refurbished. Secondary glazing system visible through external wall glazing.	New secondary glazing system installed to interior becomes the dominant feature to the internal elevation, obscuring existing framing. Homogenisation of internal decoration also required, alongside replacement beading to support new glazing.	Direct Impact: minor adverse Option ensures minimal intervention to historic fabric.	Indirect Impact: Minor-to-moderate adverse Secondary glazing has potential for adverse impact on the external architectural expression of the building.	Minor adverse
4	Replacement unitised façade with structural reuse of hidiminium rails and bespoke extrusions.	New metallic PPC finishes to all external framing, except for refurbished hidiminium rails. New double glazing to receive modern coatings. Wet seals retained. Shadow gap profiles vary from original.	New curtain wall to interior with cover plates to disguise panel joints. Shallow depth profiles retain similar sight lines. Framing marginally wider than existing profiles, in elevation.	Direct Impact: moderate adverse All historic fabric removed bar the hidiminium rails	Indirect Impact: beneficial Architectural design intent maintained - changes imperceptible.	Minor adverse
5	Replacement unitised façade with structural reuse of hidiminium rails and bespoke extrusions (variation).	New metallic PPC finishes to all external framing, except for refurbished hidiminium rails. New double glazing to receive modern coatings. Wet seals retained. Shadow gap profiles vary from original. Line of façade moves outboard.	New curtain wall to interior with cover plates to disguise panel joints. Deeper profiles than original system alters sight lines. Framing marginally wider than existing profiles, in elevation.	Direct Impact: moderate adverse All historic fabric removed bar the hidiminium rails	Indirect Impact: beneficial Architectural design intent maintained - changes imperceptible.	Minor adverse
6	Replacement unitised façade with non-structural reuse of hidiminium rails, bespoke extrusions and slab cut to receive framing and fire stopping. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	New metallic PPC finishes to all external framing, except for refurbished hidiminium rails. New double glazing to receive modern coatings. Wet seals retained. Shadow gap profiles vary from original. Line of façade moves outboard.	New curtain wall to interior with cover plates to disguise panel joints. Much deeper profiles than original system alters sight lines. Framing marginally wider than existing profiles, in elevation. Overall profile stepped to reduce overall impact.	Direct Impact: moderate-to-major adverse All historic fabric removed bar the hidiminium rails. Additional fabric intervention to slab.	Indirect Impact: beneficial The façade expresses the original architectural design intent which is of high significance.	Moderate adverse
7	Replacement unitised façade with non-structural reuse of hidiminium rails, bespoke extrusions and façade line offset to enable framing and fire stopping installation without cutting slabs. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	New metallic PPC finishes to all external framing, except for refurbished hidiminium rails. New double glazing to receive modern coatings. Wet seals retained. Shadow gap profiles vary from original. Line of façade moves outboard.	New curtain wall to interior with cover plates to disguise panel joints. Much deeper profiles than original system alters sight lines. Framing marginally wider than existing profiles, in elevation. Overall profile stepped to reduce overall impact.	Direct Impact: moderate adverse All historic fabric removed bar the hidiminium rails	Indirect Impact: beneficial The façade expresses the original architectural design intent which is of high significance.	Minor-to-moderate adverse
8	Replacement unitised façade with partially-structural reuse of hidiminium rails, bespoke extrusions and reduced mullion depth in spandrel zone to enable framing and fire stopping installation without cutting slabs. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	New metallic PPC finishes to all external framing, except for refurbished hidiminium rails. New double glazing to receive modern coatings. Wet seals retained. Shadow gap profiles vary from original. Line of façade moves outboard.	New curtain wall to interior with cover plates to disguise panel joints. Much deeper profiles than original system alters sight lines. Framing marginally wider than existing profiles, in elevation. Overall profile stepped to reduce overall impact.	Direct Impact: moderate adverse All historic fabric removed bar the hidiminium rails	Indirect Impact: beneficial The façade expresses the original architectural design intent which is of high significance.	Minor-to -moderate adverse
9	Replacement unitised façade with non-structural reuse of hidiminium rails and typical modern slimline profiles. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	New metallic PPC finishes to all external framing, except for refurbished hidiminium rails. New double glazing to receive modern coatings. Shadow gaps/caps omitted, removing design language of original profiles. Line of façade moves outboard.	New curtain wall to interior with cover plates to disguise panel joints. System deeper and narrower than original, posing significant change in overall profile to original.	Direct Impact: moderate adverse All historic fabric removed bar the hidiminium rails	Indirect Impact: moderate adverse Change to architectural design intent will be perceptible.	Moderate adverse
10	Replacement unitised façade with non-structural reuse of hidiminium rails and typical modern slimline profiles with bespoke caps.	New metallic PPC finishes to all external framing, except for refurbished hidiminium rails. New double glazing to receive modern coatings. Shadow gaps/caps utilised to mimic design language of original profiles. Line of façade moves outboard.	New curtain wall to interior with cover plates to disguise panel joints. Much deeper profiles than original system alters sight lines. Framing marginally wider than existing profiles, in elevation. Overall profile stepped to reduce overall impact.	Direct Impact: moderate adverse All historic fabric removed bar the hidiminium rails	Indirect Impact: beneficial The façade expresses the original architectural design intent which is of high significance.	Minor adverse
11 (Proposed Option)	Replacement unitised façade with new non-structural aluminium rails and typical modern slimline profiles with bespoke caps.	New metallic PPC finishes to all external framing; new natural anodised finish to aluminium rails. New double glazing to receive modern coatings. Shadow gaps/caps utilised to mimic design language of original profiles. Line of façade moves outboard.	New curtain wall to interior with cover plates to disguise panel joints. Much deeper profiles than original system alters sight lines. Framing marginally wider than existing profiles, in elevation. Overall profile stepped to reduce overall impact.	Direct Impact: major All historic fabric removed.	Indirect Impact: beneficial The façade expresses the original architectural design intent which is of high significance.	Moderate adverse

OVERVIEW			
Option No.	Façade Proposal	Sustainability	Public Benefit (including Heritage Benefit) <i>See also Planning Statement and Public Benefit Considerations Statement</i>
Baseline	Retain in current condition.	Weakest thermal performance and operational energy. Results in substantial energy wastage and requires oversized HVAC plant to provide comfortable internal environment. ESG targets unlikely to be achieved.	Ability to obtain full warranty: N/A Façade supply chain availability: N/A EEEEEE The façade is of low performance and condition is degrading. The current appearance of the building detracts visually from the surrounding area. It does not meet the requirements of potential future occupiers and would therefore likely struggle to secure tenants and therefore an optimum viable use. This option therefore makes a limited to no positive impact on job creation or supporting economic growth of the city region. Without a viable long term use then the building could fall into further disrepair. With limited occupation there will be limited access and appreciation of the heritage asset. The 'do nothing' approach would generate no net public benefits.
1	Refurbishment inline with 2020 Planning Consent (new double glazing and spandrels, existing frame and rails refurbished insitu).	Glazing heat loss is lowered but framing heat loss remains high, mitigating potential reductions on heating demand. Solar control glazing can be incorporated to improve internal environment quality. ESG targets unlikely to be achieved. Lower embodied carbon but higher whole life carbon than replacement approach (over a life of 60 years). Refurbishment of existing hiduminium rails more carbon intensive than replacement with new aluminium rails.	Ability to obtain full warranty: partial warranty, for new elements only Façade supply chain availability: limited EEEEEE Double glazing would help enhance the environmental attributes of the building; however, improvements would be limited. It does not meet the requirements of potential future occupiers and would therefore likely struggle to secure tenants and therefore an optimum viable use. There would therefore be limited / no public benefits associated with the long-term viability or occupation of the building. This option makes a limited to no positive impact on job creation or supporting economic growth of the city region. If the building cannot attract occupiers it would not be commercially viable for a developer, meaning the heritage benefits (bringing the building back into optimum viable use) would not be fully realised. With limited occupation there will be limited access and appreciation of the heritage asset, resulting in limited to no net heritage benefits.
2	Refurbished frames and rails; single glazing with secondary glazing; new spandels.	Thermal performance improved, but over-specified HVAC plant still required to provide comfortable internal environment. No opportunity to incorporate solar control glazing to further improve performance. ESG targets unlikely to be achieved. Lower embodied carbon but higher whole life carbon than replacement approach (over a life of 60 years). Refurbishment of existing hiduminium rails more carbon intensive than replacement with new aluminium rails.	Ability to obtain full warranty: partial warranty, for new elements only Façade supply chain availability: limited EEEEEE Secondary glazing would help enhance the environmental attributes of the building; however, improvements would be limited. It does not meet the requirements of potential future occupiers and would therefore likely struggle to secure tenants and therefore an optimum viable use. There would therefore be limited / no public benefits associated with the long-term viability or occupation of the building This option makes a limited to no positive impact on job creation or supporting economic growth of the city region. If the building cannot attract occupiers it would not be commercially viable for a developer, meaning the heritage benefits (bringing the building back into optimum viable use) would not be fully realised. With limited occupation there will be limited access and appreciation of the heritage asset, resulting in limited to no net heritage benefits.
3	Refurbished frames and rails; double glazing with secondary glazing; new spandels.	Thermal performance improved to meet targets in Building Regulations, but over-specified HVAC plant still required to provide comfortable internal environment. Solar control glazing can be incorporated to further improve internal environment quality. Some ESG targets may be achieved, but this would require enhanced servicing plant. Lower embodied carbon but higher whole life carbon than replacement approach (over a life of 60 years). Refurbishment of existing hiduminium rails more carbon intensive than replacement with new aluminium rails.	Ability to obtain full warranty: partial warranty, for new elements only Façade supply chain availability: limited EEEEEE Secondary glazing would help enhance the environmental attributes of the building; however, improvements would be limited. It does not meet the requirements of potential future occupiers and would therefore likely struggle to secure tenants and therefore an optimum viable use. There would therefore be limited / no public benefits associated with the long-term viability or occupation of the building This option makes a limited to no positive impact on job creation or supporting economic growth of the city region. If the building cannot attract occupiers it would not be commercially viable for a developer, meaning the heritage benefits (bringing the building back into optimum viable use) would not be fully realised. With limited occupation there will be limited access and appreciation of the heritage asset, resulting in limited to no net heritage benefits.
4	Replacement unitised façade with structural reuse of hidiminium rails and bespoke extrusions.	Thermal performance improved to meet targets in Building Regulations, but over-specified HVAC plant still required to provide comfortable internal environment. Solar control glazing can be incorporated to further improve internal environment quality. Some ESG targets may be achieved, but this would require enhanced servicing plant. Combination of replacement facade and refurbished hiduminium rails results in highest embodied carbon, but still results in lower whole life carbon than full refurbishment approach (over a life of 60 years). Refurbishment of existing hiduminium rails more carbon intensive than replacement with new aluminium rails.	Ability to obtain full warranty: partial warranty, for new elements only; structural reuse of hiduminium rails not understood to be warrantable. Façade supply chain availability: very limited EEEEEE Improved environmental performance, however, replacement of the façade combined with the retention of the rails has the highest embodied carbon. Improvements may meet the requirements of potential future occupiers, and if successfully occupied, the proposals would secure the long-term occupation of the building, thus facilitating job creation and supporting the economic growth of the city region. If successfully occupied, this would secure the long-term use of the building, by re-activating an existing heritage asset through securing its 'optimum viable use' alongside newly created retail and leisure space, drawing people into the area to appreciate and understand the value of this historic asset, in addition to securing ongoing retention and maintenance.
5	Replacement unitised façade with structural reuse of hidiminium rails and bespoke extrusions (variation).	Thermal performance improved to meet targets in Building Regulations, but over-specified HVAC plant still required to provide comfortable internal environment. Solar control glazing can be incorporated to further improve internal environment quality. Some ESG targets may be achieved, but this would require enhanced servicing plant. Combination of replacement facade and refurbished hiduminium rails results in highest embodied carbon, but still results in lower whole life carbon than full refurbishment approach (over a life of 60 years). Refurbishment of existing hiduminium rails more carbon intensive than replacement with new aluminium rails.	Ability to obtain full warranty: partial warranty, for new elements only; structural reuse of hiduminium rails not understood to be warrantable. Façade supply chain availability: very limited EEEEEE Improved environmental performance, however, replacement of the façade combined with the retention of the rails has the highest embodied carbon. Improvements may meet the requirements of potential future occupiers, and if successfully occupied, the proposals would secure the long-term occupation of the building, thus facilitating job creation and supporting the economic growth of the city region. If successfully occupied, this would secure the long-term use of the building, by re-activating an existing heritage asset through securing its 'optimum viable use' alongside newly created retail and leisure space, drawing people into the area to appreciate and understand the value of this historic asset, in addition to securing ongoing retention and maintenance.
6	Replacement unitised façade with non-structural reuse of hidiminium rails, bespoke extrusions and slab cut to receive framing and fire stopping. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Thermal performance improved to meet targets in Building Regulations, but over-specified HVAC plant still required to provide comfortable internal environment. Solar control glazing can be incorporated to further improve internal environment quality. Some ESG targets may be achieved, but this would require enhanced servicing plant. Combination of replacement facade and refurbished hiduminium rails results in highest embodied carbon, but still results in lower whole life carbon than full refurbishment approach (over a life of 60 years). Refurbishment of existing hiduminium rails more carbon intensive than replacement with new aluminium rails.	Ability to obtain full warranty: partial, for new elements only Façade supply chain availability: very limited EEEEEE Improved environmental performance, however, replacement of the façade combined with the retention of the rails has the highest embodied carbon. Improvements may meet the requirements of potential future occupiers, and if successfully occupied, the proposals would secure the long-term occupation of the building, thus facilitating job creation and supporting the economic growth of the city region. If successfully occupied, this would secure the long-term use of the building, by re-activating an existing heritage asset through securing its 'optimum viable use' alongside newly created retail and leisure space, drawing people into the area to appreciate and understand the value of this historic asset, in addition to securing ongoing retention and maintenance.
7	Replacement unitised façade with non-structural reuse of hidiminium rails, bespoke extrusions and façade line offset to enable framing and fire stopping installation without cutting slabs. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Thermal performance improved to meet targets in Building Regulations, but over-specified HVAC plant still required to provide comfortable internal environment. Solar control glazing can be incorporated to further improve internal environment quality. Some ESG targets may be achieved, but this would require enhanced servicing plant. Combination of replacement facade and refurbished hiduminium rails results in highest embodied carbon, but still results in lower whole life carbon than full refurbishment approach (over a life of 60 years). Refurbishment of existing hiduminium rails more carbon intensive than replacement with new aluminium rails.	Ability to obtain full warranty: partial, for new elements only Façade supply chain availability: very limited EEEEEE Improved environmental performance, however, replacement of the façade combined with the retention of the rails has the highest embodied carbon. Improvements may meet the requirements of potential future occupiers, and if successfully occupied, the proposals would secure the long-term occupation of the building, thus facilitating job creation and supporting the economic growth of the city region. If successfully occupied, this would secure the long-term use of the building, by re-activating an existing heritage asset through securing its 'optimum viable use' alongside newly created retail and leisure space, drawing people into the area to appreciate and understand the value of this historic asset, in addition to securing ongoing retention and maintenance.
8	Replacement unitised façade with partially-structural reuse of hidiminium rails, bespoke extrusions and reduced mullion depth in spandrel zone to enable framing and fire stopping installation without cutting slabs. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Thermal performance improved to meet targets in Building Regulations without requirement to over-spec HVAC plant. Solar control glazing can be incorporated to further improve internal environment quality. ESG targets can be achieved, but this may require some enhanced servicing plant. Combination of replacement facade and refurbished hiduminium rails results in highest embodied carbon, but still results in lower whole life carbon than full refurbishment approach (over a life of 60 years). Refurbishment of existing hiduminium rails more carbon intensive than replacement with new aluminium rails.	Ability to obtain full warranty: partial, for new elements only; structural reuse of hiduminium rails not understood to be warrantable. Façade supply chain availability: very limited EEEEEE Improved environmental performance, however, replacement of the façade combined with the retention of the rails has the highest embodied carbon. Improvements may meet the requirements of potential future occupiers, and if successfully occupied, the proposals would secure the long-term occupation of the building, thus facilitating job creation and supporting the economic growth of the city region. If successfully occupied, this would secure the long-term use of the building, by re-activating an existing heritage asset through securing its 'optimum viable use' alongside newly created retail and leisure space, drawing people into the area to appreciate and understand the value of this historic asset, in addition to securing ongoing retention and maintenance.
9	Replacement unitised façade with non-structural reuse of hidiminium rails and typical modern slimline profiles. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Thermal performance improved to meet targets in Building Regulations without requirement to over-spec HVAC plant. Solar control glazing can be incorporated to further improve internal environment quality. ESG targets can be achieved, but this may require some enhanced servicing plant. Combination of replacement facade and refurbished hiduminium rails results in highest embodied carbon, but still results in lower whole life carbon than full refurbishment approach (over a life of 60 years). Refurbishment of existing hiduminium rails more carbon intensive than replacement with new aluminium rails.	Ability to obtain full warranty: partial, for new elements only Façade supply chain availability: very limited EEEEEE Improved environmental performance, however, replacement of the façade combined with the retention of the rails has the highest embodied carbon. In addition, the visual change from the original will detract from the appearance. Improvements may meet the requirements of potential future occupiers, and if successfully occupied, the proposals would secure the long-term occupation of the building, thus facilitating job creation and supporting the economic growth of the city region. As the proposals are likely to attract occupiers it will secure the long-term future of the building, thus securing heritage benefits. However, the poor aesthetics may detract from the overall visual appearance of the building, and impact on ability for visitors to appreciate the original architectural expression of heritage asset.
10	Replacement unitised façade with non-structural reuse of hidiminium rails and typical modern slimline profiles with bespoke caps.	Best thermal performance of all options, minimising building energy requirements and removing need to over-spec HVAC plant. Solar control glazing can be incorporated to further improve internal environment quality. ESG targets likely to be achieved, without requirement for enhanced servicing plant. Combination of replacement facade and refurbished hiduminium rails results in highest embodied carbon, but still results in lower whole life carbon than full refurbishment approach (over a life of 60 years). Refurbishment of existing hiduminium rails more carbon intensive than replacement with new aluminium rails.	Ability to obtain full warranty: partial, for new elements only Façade supply chain availability: very limited EEEEEE Improved environmental performance. However, refurbishment of existing rails is more carbon intensive than replacing them with new aluminium rail. Improved environmental performance would meet the requirements of potential future occupiers. The proposals are therefore likely secure the long-term occupation of the building, thus facilitating job creation and supporting the economic growth of the city region. If successfully occupied, this would secure the long-term use of the building, by re-activating an existing heritage asset through securing its 'optimum viable use' alongside newly created retail and leisure space, drawing people into the area to appreciate and understand the value of this historic asset, in addition to securing ongoing retention and maintenance.
11 (Proposed Option)	Replacement unitised façade with new non-structural aluminium rails and typical modern slimline profiles with bespoke caps.	Best thermal performance of all options, minimising building energy requirements and removing need to over-spec HVAC plant. Solar control glazing can be incorporated to further improve internal environment quality. ESG targets likely to be achieved, without requirement for enhanced servicing plant. Higher embodied carbon than refurbishment approach, but best whole life carbon performance of all options (over a life of 60 years).	Ability to obtain full warranty: yes Façade supply chain availability: good EEEEEE Significant improvements to environmental performance. This also represents the most thermally efficient option, therefore minimising the energy requirements of the building. Would secure the long-term use of the building which in-turn would enhance activity and pedestrian footfall in the area, reducing anti-social behaviour and providing improved connections through the city. Improved environmental performance would meet requirements of potential future occupiers. The proposals are therefore likely to secure the long-term occupation of the building, thus facilitating job creation and supporting the economic growth of the city region. The proposals will secure the long-term occupation and use of the building - the optimum viable use, and will therefore also secure heritage benefits, which the viability of this scheme allows. By re-activating an existing heritage asset, people will be drawn into the area to appreciate and understand the value of this historic asset, in addition to securing ongoing retention and maintenance.

PERFORMANCE CONSIDERATIONS										
Option No.	Façade Proposal	U-Value	EPC rating <i>See also Façade Operational Energy and Carbon Study</i>	Condensation risk <i>(Theoretical RH at which condensation would occur as %)</i>	Embodied Carbon <i>Calculated based on upgraded building services</i>	Operational Carbon <i>Calculated based on upgraded building services</i>	Whole Life Carbon <i>Calculated based on upgraded building services</i>	Design life <i>See also Façade Engineering Report</i>	Structural impacts <i>See also Structural Report</i>	Acoustic performance <i>See also Acoustic Report</i>
Baseline	Retain in current condition.	Circa 5.3 W/m²K	EPC: E-125; B-33 with new services NCM Energy vs Existing: -38.3% NCM CO2 vs. Existing: -50.54%	High [24%]. Condensation is observed.	N/A	14.81kgCO ₂ /m²	N/A	Elements beyond intended design life.	N/A (estimated current weight of 160kg/m).	Min. Requirement 30 dB Rw + Ctr. Proposal could achieve 30 to 33 dB Rw + Ctr based on on-site measurements.
1	Refurbishment inline with 2020 Planning Consent (new double glazing and spandrels, existing frame and rails refurbished insitu).	Circa 2.6 W/m2K	EPC: A-24 NCM Energy vs Existing: -49.42% NCM CO2 vs. Existing: -59.57%	High [25%]	130kgCO ₂ /m²	13.38kgCO ₂ /m²	480kgCO ₂ /m²	Anticipated 25-30 years for refurbished framing and new glazing; expected that refurbished existing framing would require refinishing every 10-15 years, and full replacement at the same time as new glazing.	Estimated weight of 230kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr. Proposal could achieve 30 to 33 dB Rw + Ctr based on on-site measurements.
2	Refurbished frames and rails; single glazing with secondary glazing; new spandels.	Circa 3.0 W/m2K	EPC: A-25 NCM Energy vs Existing: -48.12% NCM CO2 vs. Existing: -58.84%	High [41%]	130kgCO ₂ /m²	13.60kgCO ₂ /m²	480kgCO ₂ /m²	Anticipated 25-30 years for refurbished framing and new glazing; expected that refurbished existing framing would require refinishing every 10-15 years, and full replacement at the same time as new glazing.	Estimated weight of 240kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr Proposal could readily achieve ≥38 dB Rw + Ctr
3	Refurbished frames and rails; double glazing with secondary glazing; new spandels.	Circa 2.0 W/m2K	EPC: A-22 NCM Energy vs Existing: -50.77% NCM CO2 vs. Existing: -61.22%	High [31%]	130kgCO ₂ /m²	12.97kgCO ₂ /m²	480kgCO ₂ /m²	Anticipated 25-30 years for refurbished framing and new glazing; expected that refurbished existing framing would require refinishing every 10-15 years, and full replacement at the same time as new glazing.	Estimated weight of 260kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr Proposal could readily achieve ≥38 dB Rw + Ctr
4	Replacement unitised façade with structural reuse of hidiminium rails and bespoke extrusions.	Circa 2.0 W/m2K	EPC: A-22 NCM Energy vs Existing: -50.77% NCM CO2 vs. Existing: -61.22%	Medium/Low [60%]	180kgCO ₂ /m²	12.97kgCO ₂ /m²	420kgCO ₂ /m²	Framing 50-60 years; glazing 25-30 years	Estimated weight of 220-250kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr Proposal could achieve between 30 to 40 dB Rw + Ctr depending on specification of glazing.
5	Replacement unitised façade with structural reuse of hidiminium rails and bespoke extrusions (variation).	Circa 2.0 W/m2K	EPC: A-22 NCM Energy vs Existing: -50.77% NCM CO2 vs. Existing: -61.22%	Medium/Low [60%]	180kgCO ₂ /m²	12.97kgCO ₂ /m²	420kgCO ₂ /m²	Framing 50-60 years; glazing 25-30 years	Estimated weight of 220-250kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr Proposal could achieve between 30 to 40 dB Rw + Ctr depending on specification of glazing.
6	Replacement unitised façade with non-structural reuse of hidiminium rails, bespoke extrusions and slab cut to receive framing and fire stopping. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Circa 2.0 W/m2K	EPC: A-22 NCM Energy vs Existing: -50.77% NCM CO2 vs. Existing: -61.22%	Medium/Low [58%]	180kgCO ₂ /m²	12.97kgCO ₂ /m²	420kgCO ₂ /m²	Framing 50-60 years; glazing 25-30 years	Estimated weight of 250-280kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr Proposal could achieve between 30 to 40 dB Rw + Ctr depending on specification of glazing.
7	Replacement unitised façade with non-structural reuse of hidiminium rails, bespoke extrusions and façade line offset to enable framing and fire stopping installation without cutting slabs. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Circa 2.0 W/m2K	EPC: A-22 NCM Energy vs Existing: -50.77% NCM CO2 vs. Existing: -61.22%	Medium/Low [58%]	180kgCO ₂ /m²	12.97kgCO ₂ /m²	420kgCO ₂ /m²	Framing 50-60 years; glazing 25-30 years	Estimated weight of 250-280kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr Proposal could achieve between 30 to 40 dB Rw + Ctr depending on specification of glazing.
8	Replacement unitised façade with partially-structural reuse of hidiminium rails, bespoke extrusions and reduced mullion depth in spandrel zone to enable framing and fire stopping installation without cutting slabs. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Circa 1.53 W/m2k	EPC: A-22 NCM Energy vs Existing: -52.46% NCM CO2 vs. Existing: -62.7%	Medium/Low [58%]	180kgCO ₂ /m²	12.67kgCO ₂ /m²	420kgCO ₂ /m²	Framing 50-60 years; glazing 25-30 years	Estimated weight of 250-280kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr Proposal could achieve between 30 to 40 dB Rw + Ctr depending on specification of glazing.
9	Replacement unitised façade with non-structural reuse of hidiminium rails and typical modern slimline profiles. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Circa 1.53 W/m2K	EPC: A-21 NCM Energy vs Existing: -52.46% NCM CO2 vs. Existing: -62.7%	Low [67%]	180kgCO ₂ /m²	12.65kgCO ₂ /m²	420kgCO ₂ /m²	Framing 50-60 years; glazing 25-30 years	Estimated weight of 250-280kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr Proposal could achieve between 30 to 40 dB Rw + Ctr depending on specification of glazing.
10	Replacement unitised façade with non-structural reuse of hidiminium rails and typical modern slimline profiles with bespoke caps.	Circa 1.44 W/m2K	EPC: A-21 NCM Energy vs Existing: -53.12% NCM CO2 vs. Existing: -74.98%	Low [65%]	180kgCO ₂ /m²	12.62kgCO ₂ /m²	420kgCO ₂ /m²	Framing 50-60 years; glazing 25-30 years	Estimated weight of 250-280kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr Proposal could achieve between 30 to 40 dB Rw + Ctr depending on specification of glazing.
11 (Proposed Option)	Replacement unitised façade with new non-structural aluminium rails and typical modern slimline profiles with bespoke caps.	Circa 1.44 W/m2K	EPC: A-21 NCM Energy vs Existing: -53.12% NCM CO2 vs. Existing: -63.01%	Low [65%]	150kgCO ₂ /m²	12.62kgCO ₂ /m²	380kgCO ₂ /m²	Framing 50-60 years; glazing 25-30 years	Estimated weight of 250-280kg/m. Additional steel brackets required on perimeter to increase existing structure's load capacity.	Min. Requirement 30 dB Rw + Ctr Proposal could achieve between 30 to 40 dB Rw + Ctr depending on specification of glazing.

OTHER CONSIDERATIONS					
Option No.	Façade Proposal	CDM / H&S considerations	Access & Maintenance considerations	Capital cost / sqm <i>Excludes costs associated with differing programme lengths, access requirements and installation requirements.</i>	Market considerations <i>See also Market Considerations Statement</i>
Baseline	Retain in current condition.	Existing single glazing lacks the required structural and safe breakage requirements. Continuity, performance and extents of fire stopping unknown; archival drawings suggest there may be no fire stopping present. Existing spandrel panels known to contain asbestos. BMU restraint reliant on existing hiduminium rails.	BMU utilises hiduminium rails. Consideration of asbestos disturbance required. Framing wet sealed externally.	N/A	Low EPC rating and poor environmental performance unlikely to meet prospective occupiers' ESG goals; high risk of condensation expected to be unacceptable to occupiers.
1	Refurbishment inline with 2020 Planning Consent (new double glazing and spandrels, existing frame and rails refurbished insitu).	New glazing provides safe breakage and barrier loading in line with modern requirements. New fire stopping can be installed, but continuity and performance may be limited by spatial constraints of existing framing. Replacement of spandrel panel likely to remove bulk of asbestos, but some may require encapsulation if retention of existing framing prevents access for full removal. BMU restraint reliant on existing hiduminium rails.	Periodic cleaning at least 3 times per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 5 years, and then every 2 years. Existing BMU can be retained, with facade restraint system using existing hiduminium rail. Glass replacement can occur from inside with external support from BMU; spandrel replacement external via BMU.	£1,100	Poor EPC rating and poor environmental performance unlikely to meet prospective occupiers' ESG goals; high risk of condensation expected to be unacceptable to occupiers.
2	Refurbished frames and rails; single glazing with secondary glazing; new spandels.	Existing single glazing lacks the required structural and safe breakage requirements; barrier loading would need to be provided by secondary glazing. New fire stopping can be installed, but continuity and performance may be limited by spatial constraints of existing framing. Replacement of spandrel panel likely to remove bulk of asbestos, but some may require encapsulation if retention of existing framing prevents access for full removal. BMU restraint reliant on existing hiduminium rails.	Periodic cleaning at least 3 times per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 5 years, and then every 2 years. Existing BMU can be retained, with facade restraint system using existing hiduminium rail. Glass replacement can occur from inside with external support from BMU, but requires access through secondary glazing; spandrel replacement external via BMU.	£1,025	Poor EPC rating; environmental performance improved; high risk of condensation expected to be unacceptable to occupiers; secondary glazing creates dated design and feel to office interiors, expected to be unappealing to prospective occupiers.
3	Refurbished frames and rails; double glazing with secondary glazing; new spandels.	New glazing provides safe breakage and barrier loading in line with modern requirements. New fire stopping can be installed, but continuity and performance may be limited by spatial constraints of existing framing. Replacement of spandrel panel likely to remove bulk of asbestos, but some may require encapsulation if retention of existing framing prevents access for full removal. BMU restraint reliant on existing hiduminium rails.	Periodic cleaning at least 3 times per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 5 years, and then every 2 years. Existing BMU can be retained, with facade restraint system using existing hiduminium rail. Glass replacement can occur from inside with external support from BMU, but requires access through secondary glazing; spandrel replacement external via BMU.	£1,200	EPC rating and environmental performance improved; high risk of condensation expected to be unacceptable to occupiers; secondary glazing creates dated design and feel to office interiors, expected to be unappealing to prospective occupiers.
4	Replacement unitised façade with structural reuse of hidiminium rails and bespoke extrusions.	Modern safety standards in relation to safe breakage and barrier loading achieved by new facade. New fire stopping can be installed to achieve the required performance and compartmentation. Asbestos removed from facade in full. BMU restraint can continue to use existing hiduminium rails or new pins can be post-applied.	Periodic cleaning at least 3 times per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 5 years, and then every 2 years. Existing BMU can be retained, with facade restraint system using existing hiduminium rail. Glass and spandrel replacement external via BMU; removal of hiduminium rail required for replacement.	£1,400	EPC rating and environmental performance better aligned with ESG goals of prospective clients; risk of condensation significantly reduced and less likely to concern prospective occupiers; modern and sleek design and feel to office interiors likely to be appealing to prospective occupiers.
5	Replacement unitised façade with structural reuse of hidiminium rails and bespoke extrusions (variation).	Modern safety standards in relation to safe breakage and barrier loading achieved by new facade. New fire stopping can be installed to achieve the required performance and compartmentation. Asbestos removed from facade in full. BMU restraint can continue to use existing hiduminium rails or new pins can be post-applied.	Periodic cleaning at least 3 times per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 5 years, and then every 2 years. Existing BMU can be retained, with facade restraint system using existing hiduminium rail. Glass and spandrel replacement external via BMU; removal of hiduminium rail required for replacement.	£1,400	EPC rating and environmental performance better aligned with ESG goals of prospective clients; risk of condensation significantly reduced and less likely to concern prospective occupiers; modern and sleek design and feel to office interiors likely to be appealing to prospective occupiers.
6	Replacement unitised façade with non-structural reuse of hidiminium rails, bespoke extrusions and slab cut to receive framing and fire stopping. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Modern safety standards in relation to safe breakage and barrier loading achieved by new facade. New fire stopping can be installed to achieve the required performance and compartmentation. Asbestos removed from facade in full. BMU restraint via new pins post-applied to existing hiduminium rails.	Periodic cleaning at least 3 times per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 5 years, and then every 2 years. Existing BMU can be retained, with facade restraint system using existing hiduminium rail. Glass and spandrel replacement external via BMU; removal of hiduminium rail required for replacement.	£1,350	EPC rating and environmental performance better aligned with ESG goals of prospective clients; risk of condensation significantly reduced and less likely to concern prospective occupiers; modern and sleek design and feel to office interiors likely to be appealing to prospective occupiers.
7	Replacement unitised façade with non-structural reuse of hidiminium rails, bespoke extrusions and façade line offset to enable framing and fire stopping installation without cutting slabs. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Modern safety standards in relation to safe breakage and barrier loading achieved by new facade. New fire stopping can be installed to achieve the required performance and compartmentation. Asbestos removed from facade in full. BMU restraint via new pins post-applied to existing hiduminium rails.	Periodic cleaning at least 3 times per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 5 years, and then every 2 years. Existing BMU can be retained, with facade restraint system using existing hiduminium rail. Glass and spandrel replacement external via BMU; removal of hiduminium rail required for replacement.	£1,325	EPC rating and environmental performance better aligned with ESG goals of prospective clients; risk of condensation significantly reduced and less likely to concern prospective occupiers; modern and sleek design and feel to office interiors likely to be appealing to prospective occupiers.
8	Replacement unitised façade with partially-structural reuse of hidiminium rails, bespoke extrusions and reduced multion depth in spandrel zone to enable framing and fire stopping installation without cutting slabs. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Modern safety standards in relation to safe breakage and barrier loading achieved by new facade. New fire stopping can be installed to achieve the required performance and compartmentation. Asbestos removed from facade in full. BMU restraint via new pins post-applied to existing hiduminium rails.	Periodic cleaning at least 3 times per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 5 years, and then every 2 years. Existing BMU can be retained, with facade restraint system using existing hiduminium rail. Glass replacement can occur from inside with external support from BMU, but requires access through secondary glazing; spandrel replacement external via BMU.	£1,325	EPC rating and environmental performance better aligned with ESG goals of prospective clients; risk of condensation significantly reduced and less likely to concern prospective occupiers; modern and sleek design and feel to office interiors likely to be appealing to prospective occupiers.
9	Replacement unitised façade with non-structural reuse of hidiminium rails and typical modern slimline profiles. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Modern safety standards in relation to safe breakage and barrier loading achieved by new facade. New fire stopping can be installed to achieve the required performance and compartmentation. Asbestos removed from facade in full. BMU restraint via new pins post-applied to existing hiduminium rails.	Periodic cleaning at least 3 times per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 5 years, and then every 2 years. Existing BMU can be retained, with facade restraint system using existing hiduminium rail. Glass and spandrel replacement external via BMU; removal of hiduminium rail required for replacement.	£1,275	EPC rating and environmental performance best aligned with ESG goals of prospective clients; low risk of condensation removes concern for prospective occupiers; modern and sleek design and feel to office interiors likely to be appealing to prospective occupiers.
10	Replacement unitised façade with non-structural reuse of hidiminium rails and typical modern slimline profiles with bespoke caps.	Modern safety standards in relation to safe breakage and barrier loading achieved by new facade. New fire stopping can be installed to achieve the required performance and compartmentation. Asbestos removed from facade in full. BMU restraint via new pins post-applied to existing hiduminium rails.	Periodic cleaning at least twice per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 10 years, and then every 5 years. Existing BMU can be retained, with facade restraint system using existing hiduminium rail. Glass and spandrel replacement external via BMU; removal of hiduminium rail required for replacement.	£1,275	EPC rating and environmental performance best aligned with ESG goals of prospective clients; low risk of condensation removes concern for prospective occupiers; modern and sleek design and feel to office interiors likely to be appealing to prospective occupiers.
11 (Proposed Option)	Replacement unitised façade with new non-structural aluminium rails and typical modern slimline profiles with bespoke caps.	Modern safety standards in relation to safe breakage and barrier loading achieved by new facade. New fire stopping can be installed to achieve the required performance and compartmentation. Asbestos removed from facade in full. BMU restraint via new pins integrated into design of new aluminium rails.	Periodic cleaning at least twice per year using traditonal hands on window cleaning techniques. Inspection of external gaskets and seals required after 10 years, and then every 5 years. Existing BMU can be retained, with facade restraint system using new akuminium rail. Glass and spandrel replacement external via BMU; removal of aluminium rail required for replacement.	£1,250	EPC rating and environmental performance best aligned with ESG goals of prospective clients; low risk of condensation removes concern for prospective occupiers; modern and sleek design and feel to office interiors likely to be appealing to prospective occupiers.

OTHER CONSIDERATIONS				
Option No.	Façade Proposal	Warranty considerations	Circularity principles and procurement	Buildability considerations
Baseline	Retain in current condition.	Warranties no longer valid.	N/A	N/A
1	Refurbishment inline with 2020 Planning Consent (new double glazing and spandrels, existing frame and rails refurbished insitu).	Warranties would only cover new elements and seals to existing frames.	Reuse framing and rails, recycle glass, reduce new spandrel and glass consumption.	Scaffolding required to tower and podium for full extents of work to facade to replace glazing and spandrels and refurbish framing; asbestos removal may require sealed environment.
2	Refurbished frames and rails; single glazing with secondary glazing; new spandels.	Warranties would only cover new elements and seals to existing frames.	Reuse framing and rails, reduce new spandrel and secondary glazing consumption.	Scaffolding required to tower and podium for full extents of work to facade to replace glazing and spandrels and refurbish framing; asbestos removal may require sealed environment.
3	Refurbished frames and rails; double glazing with secondary glazing; new spandels.	Warranties would only cover new elements and seals to existing frames.	Reuse framing and rails, recycle glass, reduce new spandrel and secondary glazing consumption.	Scaffolding required to tower and podium for full extents of work to facade to replace glazing and spandrels and refurbish framing; asbestos removal may require sealed environment.
4	Replacement unitised façade with structural reuse of hidiminium rails and bespoke extrusions.	Full warranty to all new elements for 10-12 years; reused hiduminium unlikely to be warrantable.	Reuse rails, recycle framing and glass, reduce new framing; new framing to use recycled aluminium content.	Destructive testing required to determine structural capacity of existing hiduminium rails; reuse of hiduminium rails lengthens construction programme and adds complexity to demolition. Bespoke extrusions introduce risk and limit supply chain availability. Scaffolding required to tower and podium removal of existing façade, but can be removed prior to installation of new facade; asbestos removal may require sealed environment.
5	Replacement unitised façade with structural reuse of hidiminium rails and bespoke extrusions (variation).	Full warranty to all new elements for 10-12 years; reused hiduminium unlikely to be warrantable.	Reuse rails, recycle framing and glass, reduce new framing; new framing to use recycled aluminium content.	Destructive testing required to determine structural capacity of existing hiduminium rails; reuse of hiduminium rails lengthens construction programme and adds complexity to demolition. Bespoke extrusions introduce risk and limit supply chain availability. Scaffolding required to tower and podium removal of existing façade, but can be removed prior to installation of new facade; asbestos removal may require sealed environment.
6	Replacement unitised façade with non-structural reuse of hidiminium rails, bespoke extrusions and slab cut to receive framing and fire stopping. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Full warranty to all new elements for 10-12 years; reused hiduminium unlikely to be warrantable.	Reuse rails, recycle framing and glass, reduce new framing; new framing to use recycled aluminium content.	Cutting of slab and edge beam would be required to approx. 2,200 locations and would necessitate extensive remedial structural work, thus not considered feasible. Bespoke extrusions introduce risk and limit supply chain availability. Reuse of hiduminium rails lengthens construction programme and adds complexity to demolition. Scaffolding required to tower and podium removal of existing façade, but can be removed prior to installation of new facade; asbestos removal may require sealed environment.
7	Replacement unitised façade with non-structural reuse of hidiminium rails, bespoke extrusions and façade line offset to enable framing and fire stopping installation without cutting slabs. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Full warranty to all new elements for 10-12 years; reused hiduminium unlikely to be warrantable.	Reuse rails, recycle framing and glass, reduce new framing and glazing consumption; new framing to use recycled aluminium content.	Bespoke extrusions introduce risk and limit supply chain availability. Reuse of hiduminium rails lengthens construction programme and adds complexity to demolition. Scaffolding required to tower and podium removal of existing façade, but can be removed prior to installation of new facade; asbestos removal may require sealed environment.
8	Replacement unitised façade with partially-structural reuse of hidiminium rails, bespoke extrusions and reduced mullion depth in spandrel zone to enable framing and fire stopping installation without cutting slabs. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Full warranty to all new elements for 10-12 years; reused hiduminium unlikely to be warrantable.	Reuse rails, recycle framing and glass, reduce new framing; new framing to use recycled aluminium content.	Bespoke extrusions introduce risk and limit supply chain availability; reduced mullion depth to spandrel zone adds complexity to design and construction of facade. Destructive testing required to determine structural capacity of existing hiduminium rails; reuse of hiduminium rails lengthens construction programme and adds complexity to demolition. Scaffolding required to tower and podium removal of existing façade, but can be removed prior to installation of new facade; asbestos removal may require sealed environment.
9	Replacement unitised façade with non-structural reuse of hidiminium rails and typical modern slimline profiles. <i>Note: new aluminium rails could also be used in place of existing hiduminium rails.</i>	Full warranty to all new elements for 10-12 years; reused hiduminium unlikely to be warrantable.	Reuse rails, recycle framing and glass; new framing to use recycled aluminium content.	Reuse of hiduminium rails lengthens construction programme and adds complexity to demolition. Standardised unitised framing design increases supply chain availability and deliverability. Scaffolding required to tower and podium removal of existing façade, but can be removed prior to installation of new facade; asbestos removal may require sealed environment.
10	Replacement unitised façade with non-structural reuse of hidiminium rails and typical modern slimline profiles with bespoke caps.	Full warranty to all new elements for 10-12 years; reused hiduminium unlikely to be warrantable.	Reuse rails, recycle framing and glass, reduce new framing and glazing consumption; new framing to use recycled aluminium content.	Reuse of hiduminium rails lengthens construction programme and adds complexity to demolition. Standardised unitised framing design increases supply chain availability and deliverability; bespoke profiles limited to external capping only, mitigating impact on supply chain availability and deliverability. Scaffolding required to tower and podium removal of existing façade, but can be removed prior to installation of new facade; asbestos removal may require sealed environment.
11 (Proposed Option)	Replacement unitised façade with new non-structural aluminium rails and typical modern slimline profiles with bespoke caps.	Full warranty to all elements for 10-12 years.	Recycle framing, rails and glass, reduce new framing and rails; new framing and rails to use recycled aluminium content.	Standardised unitised framing design increases supply chain availability and deliverability; bespoke profiles limited to external capping only, mitigating impact on supply chain availability and deliverability. Scaffolding required to tower and podium removal of existing façade, but can be removed prior to installation of new facade; asbestos removal may require sealed environment.