

To: Ashford Joint Transportation Board
By: Lisa Holder
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Subject: Ashford Shared Space Study
Classification: For information

Summary A progress report on the Ashford Shared Space Study to investigate maintenance issues.

Kent County Council commissioned Amey in April 2013 to independently examine the design, construction and maintenance of the scheme to identify the issues contributing to the defects and how they were caused. The study will identify feasible options to remediate the defects and prevent future recurrence with associated costs. This report summarises Amey's findings to date through consultation with stakeholders, review of documentation, review of the design and construction processes, review of maintenance and cleansing schedules, detailed site visits. The Study is due to be completed at the end of June 2013.

The original client team comprised multiple partners including Ashford's Future Delivery Board, Ashford Borough Council and Kent County Council with support from development agencies English Partnerships and SEEDA. The client team embraced the concept of the shared space as an opportunity for an innovative and exemplar public realm scheme using high quality materials and public artwork.

Extensive documentary evidence has been reviewed during this Study to contribute to the understanding of the complexity of the Shared Space Scheme development and the design decisions. At the time there were no examples in the UK to learn from but, since opening, the concept has spread to many other towns and cities. The interpretation of the shared space philosophy still has contextual differences between the traffic and pedestrian areas provided by the paving finishes, but the implications of unrestrained vehicle access over the pedestrian areas, especially by delivery vehicles, may not have been fully understood.

The design review has identified that there are a number of areas where assumptions were made that with hindsight may be considered optimistic or have proved incorrect; this is particularly true of Bank Street's east footway. The assumption about the number and type of vehicles unloading has proved incorrect, as has the expectation that vehicles would use the loading bays provided. Delivery drivers appear to use the full width and length of the footway to unload except where they are physically prevented from doing so; there is also evidence of ad-hoc parking on the footway.

The assumptions made have led to the adoption of a relatively light form of construction; however loading was not the only factor that was, or needed, to be considered. The form of construction was also based on a desire to ensure the continuing aesthetic appearance of the scheme by providing a construction that could be easily reinstated following works by utility companies.

The relationship between Flume artwork and the loading bays in Bank Street is an issue. The loading bays are rectangular in plan and are long enough to allow vehicles to enter, and leave, without overrunning the adjacent footway construction. If the loading bay were kerbed, or with some other physical feature protecting the ends this would work well and there would be little risk of over run. However, it is natural for drivers to pull off the carriageway before the start of the bay, over running a triangle of footway, and leave in the same way. These triangles of footway are not strengthened or intended to be overrun. Similarly with no physical restraint at the rear of the loading bay delivery drivers easily over run the footway to the rear.

Since the opening of the shared space in 2008, repairs have been necessary to elements of the hard landscaping, especially the high quality granite paving in Bank Street. Effective cleaning of the granite paving has been prevented by the sand bedding they are laid on to facilitate maintenance of buried utility services. To a large extent these issues are the consequence of decisions taken during the design phase with regard to surfacing materials, construction details and vehicle access. The granite pavers were laid on a sand bedding to facilitate maintenance works by utility contractors for buried utility services, so that removal and restoration of the pavers is straightforward. If the granite pavers are bedded on cement mortar it is likely that they will be damaged by utility works. There have been no utility works affecting the granite pavers since the completion of the works in Bank Street, so the benefit of the sand bedding has not been realised so far.

It was accepted by the client team during the design phase that an enhanced maintenance regime would be necessary for the high quality materials used in the public realm to protect the capital investment in the town centre. However, in practice, budget restrictions on highway maintenance due to significant funding reductions must be recognised.

A review of the design development indicates that the engineering of the pavement was conducted with professional care. A great deal of effort was expended in preparing construction details for the various materials and for the interfaces between these materials. The details are adequate and have proved so on site. These assumptions were not made arbitrarily, but after deliberate consideration and including attention to the best form of construction for the long term maintenance of the project.

Cleaning the town centre is the responsibility of ABC, but difficulties have been experienced since the opening of the Shared Space Scheme with proper cleaning of the granite paving that is used in the predominant pedestrian areas. A sealant was not applied to the granite paving due to the budget constraints at the end of the construction phase

Remedial Considerations

Costing of potential options has yet to be completed at this interim stage of the Shared Space Study.

The Ring Road: The number of defects recorded in the hard landscaping around the Ring Road is not considered to be significant for a paved scheme with the amount of traffic it carries. Drainage provisions could be inadequate in some areas and a drainage study would identify where additional collection points may be required. An increased drainage maintenance regime may be necessary for slot drains. The majority of other defects are considered to be an inevitable consequence of wear and tear that can be expected on a predominantly block paved highway.

Bank Street: Although it was considered at an early stage whether Bank Street should become a purely pedestrian area, it was decided that it should remain open to one-way traffic for at least the next 5 years until alternative provision could be found for access by buses and delivery vehicles. Options to be considered include making Bank Street into a fully pedestrianised area because the existing materials and paving construction are not sufficiently robust throughout for vehicles to share the whole space. An effective alternative to a purely pedestrian area would be to restrict access to public transport vehicles only to resolve the problem of vehicle damage to the granite pavers on the east side of Bank Street, where the unloading bay is universally ignored by delivery drivers. If restricting delivery vehicles is not achievable then physical barriers between the carriageway and the pedestrian areas is an option to prevent parking on the granite pavers.

Granite Cleansing: Attempts to cleanse ingrained grease staining from the granite pavers has not been successful to date despite deep steam cleaning by the granite supplier and also application of sealant to the darker granite which should have masked the remaining stains but was ineffective. Several remedial options are suggested and include: trialling of a new specialist cleansing product to remove deep oil stains; replacement of the worst affected pavers; application of impregnators as durability is greater than that of sealants and impregnation should increase resistance to the granite to absorptions of stains; to cleanse the paving effectively the sand jointing need to be stabilised by relaying of pavers with much tighter joints than previously to prevent wash out – the decision of whether to use sand or cement mortar bedding would be subject to a risk assessment on the extent and frequency of any utility maintenance works. Elsewhere where grease staining is less evident a less rigorous treatment and cleaning regime may be sufficient.

Conclusions

Extensive documentary evidence has been reviewed during this Study to contribute to the understanding of the complexity of the Shared Space Scheme development and the design decisions. It is evident that there were many parties involved in the planning and design decisions. It would be difficult to draw a clear conclusion that any person or organisation was responsible for a decision without the support of others. Indicators are that the creativity of the client team resulted in a focus on aesthetics in comparison to the practical use and maintenance considerations. However, despite the precedence of aesthetics in the scheme development, the detailed design of the engineering was found to have been undertaken with due care. Appropriate construction details were developed for the various materials and for the interfaces between these materials. Some decisions about paving the area of Bank Street can be seen with hindsight to have been optimistic or incorrect. However they were not made arbitrarily, but after deliberate consideration and attention to the best form of construction for the long term maintenance of the project. The positioning of a complex piece of pavement artwork in Bank Street within the loading bays was an oversight in the overall scheme design. Responsibility for this decision has not been attributable to any individual.

The Ashford Shared Space scheme is an innovative and high quality public realm landscaping scheme, which was the intention of the client team. It has also put Ashford 'on the map' and removed the effect of the ring road 'collar' constricting the town centre. Since its completion in November 2008, The Ashford Ring Road Shared Space Scheme has been successful in terms of its aims to reduce speeds and the number of recorded collisions as well as improving the street scene in this area.

Contact Officer: Lisa Holder
Tel: 08458 247 800