

**Herefordshire Council Highways and Transport – Departure from Standard Form**
**1. APPLICANT DETAILS**

Project Name	Stretton Grandison Village - Calming Initiative (TRIAL COLOURED SD)
Applicant Organisation	Herefordshire Council
Applicant Reference Number	Not applicable
Internal (HC) Reference Number	Not applicable
Date of Submission	20/07/2021

**2. PROJECT DETAILS**

Description	Using coloured surface dressing to change the highway environment in the village. To achieve this a reduction in the Polished Stone Value of the aggregate to be used is required.
Location	A417 Stretton Grandison
OSGRs of Scheme Location(s)	363055, 244041
Road Type and Hierarchy	A Road and part of the Strategic Network
Design Speed	30 mph
Current Speed Limit	30 mph
Traffic Flows	2020 AADF 3848 (2019 AADF – Pre Covid 5019)
NMU Flows	Recorded as circa 2 cyclists daily – Minimal Pedestrian Movements

**3. DEPARTURE DETAILS**

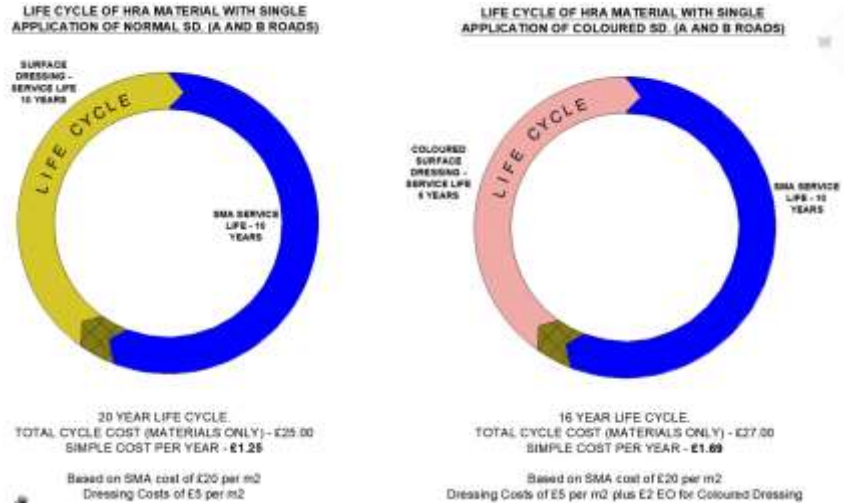
Nature of Departure	Reduction in the specified Polished Stone Value (PSV) of aggregate relating to surface dressing to facilitate a colour change of the carriageway area.
Relevant Standards	Public Realm Contract Specification CD 236
Clause	971 AR and Numbered Appendix 7/3.
Difference Between Standards and Proposals	The standard set out in the public realm contract specification requires a PSV of 65 PSV in the environment proposed.
Reason for Departure	In order to support the principle of changing the environment of the road through this village via the colour change of the surface. This principle is founded in the DfT's Manual for Streets and Manual for Streets 2.

	This is anticipated to deliver a number of benefits to the community such as improving the road safety of the route through reduction in vehicle speeds and improving village amenity.
Associated Project Departures	There are no other associated departures.
Other Options Considered	Resurfacing is an option; however delivering road surface treatments to routes is a vital aspect of achieving improved whole life costs and delivering lower carbon.

<b>4. DEPARTURE JUSTIFICATION (Positive and Negative Impacts to be Explained)</b>	
Safety	<p>In considering the safety implications of the departure a number of considerations are required. The first is that the PSV is measuring the resistance to polishing from the action of traffic. This relates to the maintenance of micro texture of the surface over the life of the product. The reduction in PSV is likely to result in faster polishing of the surface and therefore a shorter service life. This may negatively affect the overall skidding resistance of the surface; however, this is mitigated by the speed limit of the site (30 mph). In addition the site is on the A class strategic road network. Because of this, the site is subject to a SCRIM survey annually. This survey monitors the performance of the aggregate and any deficiency can be identified and mitigated as required.</p> <p>The survey has been completed for the year of installation so ad-hoc testing is proposed as part of initial site monitoring to ensure that any risk is quantified and acted upon swiftly.</p> <p>Whilst there is likely a minor detriment to the safety of the surface towards the end of the life of the product, this is anticipated to be negligible and can be mitigated.</p>
Congestion/Delay/Capacity	The disruption to the travelling public is commensurate with any other surface dressing treatment. This is considered acceptable.
Environmental and Sustainability Considerations	The use of road surface treatments is a lower carbon treatment over resurfacing options. In order to lower, the overall carbon emissions of highway maintenance these types of treatments are important aspects of the tool kit available to those maintaining the network. In conjunction with this, the improvement of the amenity and connectivity of communities that are built around A and B roads is an important objective. This departure represents a trial that will enable lower carbon, lower costs treatments to the network to change the environment of the highway.
Whole Life Cost/Value	In summary of the standards, a low PSV stone is not necessarily a slippery stone when laid. The surface is likely to have a lesser service life compared to an appropriately designed dressing, but if the SD is not designed correctly, it remains at risk of earlier than projected failure. In the context of the scheme outcome for

Stretton Grandison this departure seeks to trial the performance of the material on the site, and will be monitored in accordance with the requirements of survey and monitoring set out in Appendix 10 of the HMP.





In terms of quantifying the increase in whole life cost the comparison diagrams below set out the implications.



These diagrams show the whole life cost per m2 increases from circa £1.25 per year to £1.69 per year. This is considered a moderate increase, however the benefits of the scheme are considered to validate this investment.

Accessibility	The accessibility of the highway environment is not altered by the proposed departure.
Integration	There are no integration issues that result from the proposed departure.
Structural	The treatment is not structural; therefore, this section does not apply.
Network Resilience and Maintenance	<p>The reduced service life is set out above. The implications of the surface material on the resilience of the surface is considered similar to other treatments on the network.</p> <p>The principle maintenance requirement will come at the end of the dressing life if structural defects present such as potholes. Reinstating this surface will be undertaken with traditional bituminous material patching. Hotbox repairs will be black, contrasting to the proposed red surface. This will devalue the scheme so delivering interventions at appropriate times is key to maintaining the overall principles of the scheme in the future.</p>

**5. ATTACHMENTS AND REFERENCE DOCUMENTS**

List of Attachments	<p>Material PSV test sheet attached to the form below.</p>  <p>PSV 2021.pdf</p> <p>Contractors considerations in site assessment</p>  <p>Copy of HEREFORDSHIRE SD :</p> <p>Hardness Testing</p>  <p>A417 Hardness Test.xlsx</p> <p>BBLP supplied contractors design sheet</p>  <p>H1 Design Sheet.xlsx</p>
Consultations Undertaken	The specification of the material has been undertaken with liaison between the local parish council, ward member, Public Realm Service Provider and HC Engineering Team members.
Other Information	No other information is considered relevant.
Internal (HC) Note – All attachments along with this form should be stored in the relevant file on the Departures from Standard SharePoint Site. These should be stored in a Folder titled with the scheme name.	

## 6. COMPENSATORY MEASURES

Set Out Measures Included	<p>The reduced PSV is mitigated with the overall package of measures on the route to deliver the scheme.</p> <p>Ad-hoc testing of the skid resistance provided following installation.</p>
Set Out Options Rejected (and Why)	The principle measure rejected is to resurface the route using an HRA with coloured Pre Coated Chippings. This would remove the opportunity for trialling the material and further expand the tool palette of materials deployed on the network.

## 7. DESIGN ORGANISATIONS CONCLUDING REMARKS

<p>The trial of a coloured surface dressing is considered appropriate for the character and usage of the A417 through Stretton Grandison. This opportunity could unlock the use of similar treatments in other key villages, improving the environment of such villages, improving road safety and reducing vehicle speeds.</p>
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Any increase in the polishing of the surface is mitigated via the policy set out in Appendix 10 of the Highways Maintenance Plan. In order to develop data for the trial the readings from the SCRIM Surveys shall be monitored following ad-hoc testing, and the information summarised on the site at years 2, 4 and 6 to monitor any deterioration.

There is an increase in whole life costs for this type of treatment; however, this is less than using other coloured surface options such as Master Tint or High Friction Surface options.

In summary, the opportunity for a trial is considered appropriate to develop future treatment types on these sections of the network.

#### 8. DECISION

Name	C. Hall	Role	Head of Highways and Community Services	Signed	<b>YES</b>	Date	02.08.2021
Name	B. Evans	Role	Engineering Manager	Signed	<b>YES</b>	Date	02.08.2021
<b>Select one Outcome:</b>							
Approved							
Approved with Comment							
Rejected							
<b>Comment or Reasons for Refusal (Delete as Applicable)</b>							

**Notes:**

- The submission to accompany this form should include a signed cover sheet giving full details for the applicant's staff and checking process.
- If a box is not relevant, please enter 'Not Applicable' rather than leaving it blank.

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