



A-one+ AREA 12 Sharing Achievements and Promoting Work Done A64 Askham Bar to Grimston Pavement Scheme



We completed £2.25m of essential maintenance work to replace the road surface on the A64 between Askham Bar and Grimston, near York. This work was carried out over 10 weeks between July and September 2017.

- We re-surfaced 158,543m² of carriageway, enough to cover the 40 acres of royal gardens at Buckingham Palace. That used 11,300 tonnes of bituminous material, the weight of 115 Flying Scotsman's, the world's most famous steam locomotive, which is based in York at the National Railway Museum. 
- We laid over 4,400m² of special fuel resistant material in laybys to ensure a resilient pavement surface with reduced defects. That's more than enough to surface the 8 lanes of the athletics track at the University of York.
- We re-laid nearly 40km of white lines and re-installed over 4,700 new road studs. That white lining would be enough to go round York Racecourse over 12 times.
- City of York Council staff worked with us to minimise future disruption and improve customer experience. They collected 160 bags of litter, filled 4 caged pick-ups of larger debris, and swept 186 tonnes of detritus from the channels. 

The pavement design solution used the repave process, a hot insitu recycling solution that re-invigorates existing material without removing it from site. This saved an estimated 1,100m³ of existing pavement material, which was recycled on site as part of the process. As well as reducing the need for new material, this in turn saved 132 lorry trips from the supply plant saving nearly 8,000 miles of roadtrips. That's the same as travelling from London to the Falkland Islands, saving over £5k in fuel costs alone. So this solution has locked in safety, environmental, air quality, customer and efficiency benefits.



case study

A-one+ AREA 12 Sharing Achievements and Promoting Work Done A64 Bramham to Askham Pavement Renewal



We completed £2.3m of resurfacing, drainage, bridge joints and general civils work on the A64 between Bramham Roundabout and Askham Bryan near York, over 81 days between November 2017 and January 2018.

- We resurfaced 97,610m² of carriageway, including 744m² using innovative Ultigrip material. That's enough surfacing to cover the entire 20 acre site of the National Railway Museum in York nearly 1¼ times. The museum houses hundreds of thousands of items including over 100 historic locomotives, including the Duchess of Hamilton, Mallard, and Shinkansen (bullet train).
- We laid nearly 25km of new white lining and installed 3,162 new road studs. That length of white lining would stretch the length of platform 3 at York Railway station 46 times, and that's one of the longest operational platforms in the UK.



Although the primary work activity was resurfacing, we took the opportunity to maximise use of the occupied roadspace to carry out other activities. This minimises the need for future roadworks, delivering both customer benefit and efficiency savings.

- We renewed 500m of roadside filter drain to address a flooding concern
- We installed new sensors for a weather station near Askham Bryan
- We replaced four bridge joints at Bramham Roundabout
- The new surfacing addressed one Noise Impact Assessment (NIA) area

Collaborative working and planning with our supply chain was essential to successful delivery. These included Colas, Tarmac, Jointline, Crown Cutting, Recomac, Lane Rental, Socotec, Route One, C R Civils, and Vaisala.



CUSTOMER POSTCARD



Scheme

SID36 A64 Bramham to Askham Bryan CR VRS

March 2018

Problem

This scheme to install new central reserve steel barrier required a temporary reduction in the speed limit from 70mph to 40mph, over varying lengths for a period of 6 months. This speed restriction was required on a 24/7 basis due to the removal of the central reserve barrier. So even though roadworks were only apparent to customers overnight, the speed limit had to remain in place during the day to ensure the safety of the customer was maintained. With the increased risk of cross-over accidents for customers, excellent observation of the temporary 40mph speed restriction was necessary. To facilitate this average speed cameras were installed.

At the start of the scheme, we installed the temporary speed restriction signs and average speed camera signs, but did not clearly communicate with customers either at the roadside or through local media, why the 40mph speed restriction as required during the day. This led to a significant spike in enquiries through HAIL regarding the temporary 40mph speed restriction.

What we did

Working with Highways England we developed an enhanced level of roadside information signs to better communicate with customers what we were doing, why we were doing it, and why restrictions remained in place during the day.

This comprised a number of stand alone black on yellow information signs, and up to six portable variable messages signs positioned at key points through the works. We included signs advising customers how far we were progressing with the works i.e. 5 miles out of 11 miles completed.

We introduced the #A64 signs to encourage customers to use social media to both learn about the scheme and provide us feedback.

Lessons Learned

1. Ensure any scheme where a reduction in speed limit to 40mph or less, includes for roadside information signs explaining why the speed limit is necessary (as part of the TM design).
2. Ensure the scheme communications plan sufficiently captures the pre-scheme activities and engagement with the customer to explain why the speed limit is required.



A-one+ AREA 12 Sharing Achievements and Promoting Work Done A64 Bramham to Askham Bryan VRS Phase 1



We have completed Phase 1 of our £3.6m central reserve safety barrier works on the A64 between Bramham and Askham Bryan near York. These Phase 1 works were completed in 15 weeks between January and May 2018. This was slightly longer than anticipated due to severe weather and unforeseen ground conditions at the start of the scheme.

- We have installed just over 5 miles of new barrier in the central reserve. We have removed around 3000 tonnes of old steel barrier and components and installed around 2000 tonnes of new steel barrier and components. We have removed 67,500 old bolts and installed 35,000 new bolts, thanks to new longer beam lengths and increased post spacing.
- We had an average of 30 roadworkers on site each night, peaking at 50 during periods of multiple activities. That's around 27,000 hours of work.

During the Phase 1 works, 5.9 million vehicles have driven through the roadworks. With no central reserve barrier in place, the speed limit was reduced to 40mph. Based on pre-scheme average traffic speeds, this added around 2 minutes and 45 seconds to customer journey times. So communicating with customers was an important aspect of the scheme.

- We installed customer information signs at the roadside in each direction explaining why we were undertaking the work. This included using up to 6 portable variable message signs (VMS) at any one time to communicate key messages to customers, including why the 40mph speed limit was needed, advance notice of full road closures, and time to end of roadworks.
- We used social media to keep customers updated using #A64 on Twitter. One customer commented on Twitter, *"To be fair I'm pleased to see extra information on this scheme, #A64 simply makes it easier to find out info and is a little more 21st century, plus this phase of works is far shorter and work is moving on quicker. I think Highways England have listened to people."*



Key Achievements

1. Extensive programme of carriageway resurfacing completed, with nearly three times as much carriageway surface renewed as in 2016/17, continuing the considerable investment in the renewal of the road surface.
2. Managing the extensive programme of work to fit with roadspace constraints.
3. Making good progress on the the significant junction improvement at Barton Hill Crossroads despite a number of significant challenges, e.g. severe weather, environmental constraints and problems with the design.

Resurfacing Activities (78.9 lane kilometres of new surfacing)

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| <ul style="list-style-type: none"> • Bramham Roundabout # • Headley Bar to Tadcaster Bar Eastbound # • Tadcaster Bar to Tadcaster Ings Westbound • Askham Bryan to Bilbrough Westbound # • Askham Bar to Fulford • Fulford Slip Roads • Hopgrove to Stockton # • Whitwell Duals Westbound • Sherburn Village | <ul style="list-style-type: none"> • Westbound Approach to Bramham # • Tadcaster Ings Eastbound Entry • Bilbrough to Tadcaster Bar Westbound Patching • Askham Bryan Slip Roads # • Fulford to Grimston Bar • Grimston Bar Roundabout • Sand Hutton to Claxton Patching • East Heslerton to Sherburn Patching |
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Including extensive lengths of deeper patching (below 100mm) to maintain structural integrity of the carriageway.

Structures Activities

- Grimston Bar North and South Bridges Joint Renewal

Improvement Activities

- Barton Hill Junction Improvement (scheme to complete in 2018/19)

Other Renewal Activities

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| <ul style="list-style-type: none"> • Bramham to Askham Bryan Vehicle Restraint System Renewal (scheme to complete in 2018/19) • Askham Bryan Westbound Entry Slip Footway Renewal • Askham Bar to Fulford Vehicle Restraint System Renewal • Askham Bar to Fulford Drainage Renewal • Grimston Bar Footway Renewal | <ul style="list-style-type: none"> • Grimston Bar Traffic Signal Renewal • Murton Grange Overbridge Vehicle Restraint System Renewal • Hopgrove to Whitwell Hazard Marker Post Renewal • Whinney Lane, Claxton Drainage Renewal • Whitwell Duals Footway Renewal • Crambeck Bridge Drainage Renewal |
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Key Challenges

1. Carrying out the carriageway renewal of the single carriageway section of the A64 between Crambeck and Malton. Will require full weekend closures with extensive traffic management and stakeholder communication plan to be implemented.
2. Significant amount of drainage renewal planned to be started.
3. Managing the programme (estimated value £10 million) to fit with roadspace constraints.
4. Overcoming the last few issues and completing the significant junction improvement at Barton Hill Crossroads and VRS renewal between Bramham and Askham Bryan.

Resurfacing Activities

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| <ul style="list-style-type: none"> • High Hutton to Golden Hill Resurfacing • Golden Hill to Musley Bank Resurfacing • Musley Bank Eastbound Exit Slip Resurfacing • Musley Bank to Pickering Interchange Eastbound Pavement Patching | <ul style="list-style-type: none"> • Sherburn Village Resurfacing (expected to span into 2019/20) • Staxton Roundabout Resurfacing • Seamer Roundabout Resurfacing • Seamer Bypass Pavement Patching |
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Structures Activities

- No major structures schemes planned

Improvement Activities

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| <ul style="list-style-type: none"> • A64 Tadcaster Ings Westbound Exit Junction Improvement • A64 Tadcaster Bar Westbound Exit Cyclepath Improvement • A64 Askham Bryan to Bilbrough Safety Improvement (Verge VRS) • A64 Claxton Hall Drainage • Barton Hill Junction Improvement | <ul style="list-style-type: none"> • A64 Low Hutton Safety Improvement • A64 Musley Bank to Hutton Non-motorised User Facility • A64 Scampston Hall Park & Gardens Wall Cultural Heritage Improvement • A64 Grassland Corridor Environmental Improvement |
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Other Renewal Activities

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| <ul style="list-style-type: none"> • Bramham to Askham Bryan Vehicle Restraint System Renewal • Tadcaster Bar Westbound Fence Renewal • High Hutton Footpath Renewal • Huttons Ambo to Musley Bank VRS Renewal • Musley Bank to Pickering Interchange Filter Drain Renewal • Pickering Interchange to Brambling Fields Eastbound Verge VRS Renewal | <ul style="list-style-type: none"> • River Derwent Toe of Embankment Filter Drain Renewal • Sherburn Village Footpath Renewal (expected to span into 2019/20) • Sherburn to Ganton Drainage Renewal (expected to span into 2019/20) • Staxton Footpath Renewal • Staxton Roundabout Lighting Renewal • Seamer Roundabout Lighting Renewal |
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A-one+ AREA 12 Sharing Achievements and Promoting Work Done **A64 Scotchman Lane Drainage**



We completed £500k of drainage, signing, fencing, resurfacing and road marking work over a 2.2km single carriageway length of the A64 near Scotchman Lane in North Yorkshire. Works were completed over 5 weeks during February and March 2018.

We took the opportunity to accelerate a Designated Fund (Flooding) scheme from 2018/19 to carry this work out at the same time as the renewal works therefore maximising work undertaken within the traffic management and minimising future customer disruption. This additional work installed new positive drainage at a localised flooding hotspot which was affecting customer experience on the route and access to a local business.

- **We renewed 26 gullies and connecting pipework; installed 7 new gullies with new connecting pipework, installed 21 new soakaways; and re-profiled 285m of drainage ditch.**
- **We renewed 490m of existing drainage pipework, ranging in diameter from 150mm to 300mm size. Depth of excavation to carry out this work was up to 1.6m in places. The renewed length of pipework would surround the perimeter of the football pitch at Wembley Stadium nearly 1½ times.**
- **We re-surfaced 1,095m² of carriageway and replaced 66 verge mounted hazard marker posts. Laid end to end, these 66 hazard marker posts would be around 80m long.**



During March, 11 out of 31 days had yellow or amber weather warnings, representing 35.5% of the month hampered by severe weather. Despite these adverse weather conditions, the works were completed by month end ensuring year end renewal and Designated Fund outputs were delivered.

