

| SEMMMS- Corderoy Cost Estimate Report Review | | | |
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| Minutes of Meeting held 19.11.09 (Grd Flr Hygarth House) | | | |
| Attendees: | Martin Rigby (SMBC) | | |
| | David Taylor (SMBC) | | |
| | Naz Huda (SMBC) | | |
| | Tim Baker (Scott Wilson) | | |
| | Joseph Roberts (Scott Wilson) | | |
| | Andrew Doyle (Corderoy) | | |
| | John Smith (Corderoy) | | |
| Apologies: | None | | |
| Distribution: | As above | | |
| | | Noted by | Action |
| 1 Purpose of meeting | | | |
| 1.1 | To discuss / amend Corderoy Estimated Cost Report dated November 2009 based on Design Freeze 2 (Oct 2009). | | |
| 1.2 | MR provided Comparison of Corderoy DF4 and DF2 Estimates schedule. | | |
| 2 Prelims | | | |
| 2.1 | Prelims have reduced by c£50k due to construction programme reducing from 156 weeks to 130 weeks. | JS | |
| 2 Safety Fencing | | | |
| 2.5 | Concrete barrier to be priced as an option for full length of scheme and/or unit rate per metre. | | JS |
| 3 Kerbs and Footways | | | |
| 3.1 | Kerbs and footways have increased by £3.426m due to revised cross section. | MR | |
| 3.2 | Central reserve has widened from 2.5m to 4.5m due to revised cross section. | JS | |
| 3.3 | Additional allowance made for kerbs on the central reserve (i.e ~10km x 2) | JS | |
| 3.4 | Additional allowance made for kerbs on the slip roads | JS | |
| 3.5 | Agreed revised cross section drawing to be provided by SMBC to be appended to the report. | | NH |
| 4 Drainage | | | |
| 4.1 | Drainage down £1.113m to £4.632m. | MR | |
| 4.2 | TB notes that this appear low at approximately 4% of total construction costs (inc contractor's overheads), 5% of total construction costs (excl contractor's overheads). His experience indicates 10% more realistic. | TB | |
| 4.3 | AD concurs. Drainage costs have been calculated by applying a percentage output cost to the pavement area/costs. Corderoy rates based on scheme data with potentially less junctions and subsequently less piped drainage and more channelled drainage e.g. motorway schemes with long distance between junction. SEMMMS provides several junctions within a relatively short length. | AD | |
| 4.4 | Risk on underestimating drainage costs to be added to Risk Register within new risk item no. 136 "Estimate Uncertainty Risk on Construction Costs". | AD | JR/MR |
| Earthworks | | | |
| 5.1 | Earthworks balance based on previous schedule, with adjustments for: | JS | |
| 5.2 | Relief road now under Woodford Rd rather than over. | | |
| 5.3 | A6 junction now T junction rather than roundabout. | | |
| 5.4 | No adjustment made to earthworks for narrower road box now that 2 x 1m wide nearside hardstips removed. | JS | |
| 5.5 | Earthworks balance is currently net cut (disposal required) for Manchester / Cheshire sections. | TB | |
| 5.6 | Corderoy have assumed a carriageway construction depth of 350mm capping and 450mm pavement. | JS | |

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| 6 Street Lighting | | | |
| 6.1 | Corderoy have assumed lighting from the centre with double wire rope. | | |
| 6.2 | NH to provide a drawing indicating the areas of scheme that the street lighting costs for this report have been based on i.e 30m centres for Manchester section to ch 12,280, Stockport section ch13,814-12,000 and ch10,000-9000, realigned A6 and all slip roads. | | NH |
| 7 Structures | | | |
| 7.1 | JS confirms that the cost estimate allows for the relief road over the airport railway (Cheshire), works on existing Styal Road bridge (Mcr) and M56/airport roundabout bridge (Mcr) | JS | |
| 7.2 | JS to add a pedestrian/cycle bridge over the relief road south of Yew Tree farm. | | JS |
| 7.3 | NH to update the SMBC DF2 Structures Schedule to reflect all MCC and CE structures including bridges, retaining walls and culverts. | | NH |
| 7.4 | JS to update Corderoy structures schedule currently part completed within the report. | | JS |
| 7.5 | NH to update drawings to show all MCC and CE structures envisaged at this stage i.e. DF2. Design likely to change but allowance to be made for completeness of DF2 Cost Estimate Report. | | NH |
| 7.6 | Potential Metrolink structures to be excluded from this report. Consider adding as a risk to the risk Register. Cost will be required in the future, potentially with DF3. | SMBC | |
| 8 Traffic Signs / Signals | | | |
| 8.1 | Traffic Signs costs appear low. | AD | |
| 8.2 | Toucan crossing rate per unit to be raised from ~£10k to ~£50k. | | JS |
| 8.3 | <i>Post meeting note - Traffic Signal Schedule dated 04.11.09 supplied by NH identifies 14 locations. Unit rate of £40,372 appears light even as an average when considering so many large signalised junctions are part of the scheme. JS to advise on rate coverage for "Traffic Signal Installations complete".</i> | | JS |
| 8.4 | Additional toucan crossing to be allowed for east of the Styal Road junction. <i>Post meeting note - this should not be included within DF2 design and costs, this is a DF3 addition.</i> | SMBC | |
| 9 Overhead, Mark Up, Preparation Costs | | | |
| 9.1 | Professional Fees at 7.74% includes for Contractor's designers fees including designer's supervision fees. | AD | |
| 9.2 | Phase 1a Preparation, Phase 1b Preparation and Employer's Costs up to Award of Contract costs to be taken out of Estimate or at least below "bottom line" figure. | | JS |
| 9.3 | Rail and Local Authority Costs @ 0.20%, £249k total (mean) includes for Network Rail Fees. Network Rail to be stated within the item to negate ambiguity. JS to check what this items covers exactly. | AD | JS |
| 9.4 | TB comments that this appears low in light of 3 rail crossings on the scheme. | TB | |
| 9.5 | Employer's costs after Award of Contract is £2.490m. SMBC have a figure set higher than this with external report. TB however thought that it was in the correct order of magnitude. | MR | |
| 9.6 | Complimentary measures to be reduced to £12m (Q2 2007) | | JS |
| 9.7 | AD thought that a QRA of about 20% plus OB of 25% is of the right order at this stage of design. He would expect "design growth" in accomodation works, off-line signage and Network Rail costs. | AD | |
| 9.8 | £4.5m allowance for SU diversion to remain as is, previously provided by SMBC using C3 budget estimates. Await completion of DF3 before re-submission of C3 requests. | | |
| 9.9 | Outturn cost to be determined by SMBC | | |
| 10 General Comments | | | |
| 10.1 | Probable procurement method is late ECI and D&B. NEC ECC Target Cost contract also likely to be used. | MR | |
| 10.2 | Construction commencement programmed as Feb 2013 currently. | MR | |
| 10.3 | Rail possessions may drive programme, likely to be within Easter/Christmas periods. | JR | |
| 10.4 | JS / AD to provide explanantion of statistical / arithmetical total costs. | | JS |
| 10.5 | Within the Draft Estimate spreadsheet, Variables sheet header to be corrected, currently showing M1 Junctions 11A-19. | | JS |

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| | 11 Risk Register | | |
| 11.1 | Risk register utilises fixed percentages of probability at 10%,20%,50%,70% 90%. There is an option available to discard fixed percentages. | AD | |
| 11.2 | The fixed percentages are based on Highways Agency template which utilises "HARM" risk assessment programme | JR | |
| 11.3 | Some redundant risks to be deleted e.g. risks relating to PFI Procurement, M60 to A6 section risks. | MR | |
| 11.4 | Some risks still to be allocated costs | JR | |
| 11.5 | Land and Part 1 claims risk to be separated into a separate land related register. | MR | SMBC/ Scott Wilson |
| 11.6 | Deleted risks should remain in the register, denoted "DELETED" to show evidence of thought having been provided. | AD | |
| 11.7 | It is important to ensure risks are not duplicated. | TB/MR | |
| 11.7 | Opportunities register has not been tables/drawn. | AD | |
| 11.8 | This has been suggested previously. The cost estimate report will provide a prompt for future potential Value Engineering exercise. | MR | |
| 11.9 | Risk Register to be updated potentially Thursday 26th November | | SMBC/ Scott Wilson |
| 11.10 | Date, time, venue TBC | | JR |
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