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| **Highways England Confirmation of Task Order** |
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| **Supplier:** | JMP | **Fee Request for this CTO** | £12,033.36 |   |
| **Project Title:** | Wyre Local Plan – SRN evidence base development (additional/refined scope) |
| **Contract Ref.** | 114/2/1391/4 | **CPA No.:** | Redacted | **BPA No.:** | Redacted  |
| **PIN Description:** | Spatial Planning | **Sub Pin:** | Redacted | **PIN No.:** | Redacted |
| **HA Reference:** | NW 147 15/16JMP | **Start and End Date :** | 31/03/2016 - 18/04/2016 |
| **Task Overview and Expected Outcomes** |
| This task forms additional/refined scope to the study (as part of task W632004) seeking to provide a level of assessment that can provide a suitable evidence base in determining the influence of the scale of development being sought by Wyre Borough Council within their Local Plan, the influence of this on the A585 elements of the SRN and (if required) an identification of the scale of additional infrastructure required to support the Local Plan.This method statement seeks to set out the additional/refined scope to the study (set of tasks, study processes and delivery timescales) taking into account the work completed to date; the discussions that have taken place and the outcomes of the exercise undertaken to understand the data and models available for the study.The commission is presented with the same milestone format (to enable the additional/refined scope to be identified), as follows:• Milestone 1: Method Statement• Milestone 2: Spatial planning - representation of trips on the network• Milestone 3: Establish assessment platforms• Milestone 4: Operational assessment• Milestone 5: Fylde & Wyre considerations• Milestone 6: Outputs |
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| **Task Objectives and Milestones** |
| ***Milestone 1 (Method statement)****A method statement (this document) will be prepared that sets out the key elements of the task and will be submitted (electronically) to Highways England for agreement prior to the task being entered into TAPE.**This method statement also retrospectively details tasks included within the preceding method statement (W632004), explaining their progress/outcomes and their role in establishing the additional/refined task process detailed within this method statement. In many cases, the original data source or methodology intended was not deemed suitable for use upon receipt of this data, hence alternative and more intensive processes have had to be employed.****Milestone 2 (Spatial planning – representation of trips on the network)****Milestone 2 of the preceding method statement contained a series of actions relating to the extraction of development trip data from existing modelled sources, namely SATURN (developed by Jacobs).**Upon receipt of the SATURN model however, investigations determined that the SATURN model did not cover the entirety of the A585 study area in a level of detail required for this study. Further, the A585 from the M55 to Windy Harbour was ‘on the edge’ of the study area for which the SATURN model was developed and as such, Jacobs acknowledged that the region had not been scrutinised in detail when validating the model. CH2M did uncover some illogical trip assignment routing in this region and therefore determined the SATURN model not to be suitable for the original purpose intended.**As a result, the CH2M held Wyre GraHAm tool was utilised in order to determine the number, distribution and assignment of Wyre development trips through the study area. This GIS based process, while sound in method, was a more resource intensive methodology that the original SATURN methodology intended. As an aside benefit of this methodology however, development trip movement information is held in a format which is easily adaptable to suit the various assessment methods utilised within this study. This includes the ability to share a versatile spreadsheet based assessment tool which can be used by both Wyre and Highways England in order to ascertain and understand the scale of impact on study junctions by development trips generated through a variety of different development aspiration ‘mixes’. This facility will facilitate and ease the ‘next steps’ of the process in relation to the Local Plan.* ***Milestone 3 (Establish assessment platforms)****As detailed within the preceding method statement, investigations needed to be completed in order to identify the most suitable and time efficient modelling package for the study area.**Liaison with several 3rd parties offered a number of modelling package options. These included:** ***CH2M A585 Thistleton PICADY*** *– a bespoke PICADY model was developed by CH2M in order to model the A585 Thistleton junction. However, the output results indicated that the PICADY package was not able to realistically model the staggered priority and filter lane junction layout which is currently in place.*
* ***Jacobs SATURN*** *– used for the assessment of the Preston Western Distributor scheme (including M55 J2) and Ribble Link. Determined as not suitable for development flow data extraction and GraHAm used instead as per Milestone 2. Further liaison with Jacobs saw the provision of SATURN traffic flows on a network without the provision of the committed M55 J2. This allowed base flow traffic movement shifts at M55 J2 to be calculated, which were subsequently used for the future year assessment of M55 J3. A number of iterations of gathering information from this model were required in order to get the correct information and in a format suitable to the study.*
* ***Mouchel Paramics A585*** *– model held from previous Highways England studies by CH2M. Covers the entirety of the Wyre region however run times are prohibitive for use within this study’s timescales and a number of network edits are required from the last time the model was used to reflect the current layout. A section of this model has been extracted and used for the base and future year assessment of the A585 Thistleton junction and M55 J3 base year assessment.*
* ***Mouchel Paramics M55 J3*** *– used for the assessment of the future signalisation and lane marking scheme at M55 J3. Model used for the future year assessment of M55 J3.*
* ***Arcadis Paramics A585*** *– model developed to assess the Windy Harbour – Skippool major improvement scheme. At meetings with Arcadis, CH2M were advised this covered the length of the A585 and so CH2M held off further modelling for a number of weeks so to make use of this potential ‘catch all’ model. However upon receipt of the model, only the A585 up to Skippool was included. There is limited use therefore which can be made of this model and so focus shifted back to the CH2M Paramics model of the corridor which was already held.*

*Due to the above and time constraints (and reporting requirements), the study was split into two key assessment stages.** ***Stage 1*** *covered the assessment of M55 J3 and A585 Thistleton junction using an extract from the readily available CH2M Paramics model and Mouchel Paramics model of the M55 J3. These assessments have been completed.*
* ***Stage 2*** *covers the assessment of the A585 from Fleetwood Road south to Bourne Way using the CH2M Paramics model.*

*This has led to some inefficiencies in (i) determining the best method to adopt on the basis of available information and (ii) a staggered approach of information becoming available and outcomes being required.****Milestone 4 (Operational assessment)***Stage 1 of the operational assessments covers M55 J3 and the A585 Thistleton junction. These assessments have been completed.* ***M65 J3*** *– The assessment of M55 J3 in the base year was completed using the Paramics model held by CH2M. Base flows have been extracted from the validated CH2M Paramics model initially, followed by the application of SATURN flows with and without M55 J2 in order to provide a representation of future year base flows, Future development flows have been derived from the GraHAm tool.*
* ***A585 Thistleton*** *–. Paramics assessment of the junction in both the base and future year was undertaken using the model held by CH2M as part of Stage 1. Base flows have been extracted from the validated CH2M Paramics model, with future development flows derived from the Graham tool.*

*The preceding method statement planned to include the assessment of the A585 from Windy Harbour to Skippool. As the detail of the scheme (or its associated modelling) was not anticipated to be ready within the timescales of this assessment a proxy (backward engineer of growth) was planned with a view to determining the scale of development that this link may support. However, a review of the forecast report developed by Arcadis (who are completing the assessment of this link) uncovered some concerns associated with background traffic growth forecast within the major scheme modelled. This has been raised by CH2M to Highways England and it is understood this element will be revisited by Arcadis as part of future stages of the assessment. To that end, the original plan to ‘backward engineer’ traffic growth from the Arcadis Paramics model is not deemed sound. As the timescales associated with the ongoing Arcadis work do not correlate with the CH2M study, the junctions between Skippool and Windy Harbour are not to be considered within the CH2M study but will be the subject of carefully formed wording. This has involved wider discussions than previously envisaged.* *Stage 2 of this operational assessments therefore will cover the assessment of the A585 from Fleetwood Road south to Bourne Way.* *Base flows have been extracted from the validated Mouchel Paramics model, with future development flows derived from the Graham tool. This will involve extensive manipulation and cordoning of the existing A585 Paramics corridor model (as it is too large to run within the study timescales) into a form suitable for the section of the A585 required to be considered. This was not originally envisaged to be required. In addition, bespoke OD matrices are required to be developed for the study area from the GraHAm outputs.**As per the influence of the forthcoming M55 J2 on M55 J3 flows, CH2M will look to establish if the proposed Windy Harbour – Skippool major improvement scheme will influence traffic flows with the Stage 2 assessment section of the A585 corridor.**Depending on the outcomes of the Stage 1 and 2 junction model assessments, further operational analysis will be undertaking to consider the benefits offered by feasible improvement measures.****Milestone 5 (******Fylde / Wyre considerations)****With a view to considering the joint impacts of the Fylde developments and the Wyre developments, an analysis will be undertaken of M55 J3 using the model available to consider the influences of both sets of development on M55 J3. This will be summarised in a separate technical note.****Milestone 6 (Outputs)****On the basis of the analysis undertaken, a study report will be produced that identifies the likely issues and considers the potential ‘scale’ of additional infrastructure that is required to overcome these issues and summarise these with reference to the Local Plan.**As noted above, a versatile spreadsheet-based tool will be produced that can be used by both Wyre and Highways England in order to ascertain and understand the scale of impact on study junctions by development trips generated through a variety of different development aspiration ‘mixes’. This should ease further consideration.**As discussed at the previous meeting with Wyre, CH2M will also reflect the outcomes of this study in a non-technical “evidence document” that the planners can sue to inform the Local Plan progression.**An output document containing the results of the assessment of both proposed Fylde Local Plan and Wyre Local Plan traffic impacts upon M55 Junction 3 will be contained in a separate study document for use by Fylde Borough Council.* |
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| **Expected Project Outcomes** |
| *The project outcomes will be a study report outlining the approach to the assessment and the findings of the analysis and an evidence document / supporting tool.* |
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| **Project Risk and Management** |
| Risks (and associated mitigation in brackets) identified below:- Delay in CTO approval (None available)- Task allows for testing of a base and future year assessment ‘do-minimum’ scenarios. In addition, this task also allows for the testing of a future year ‘do-something’ scenario following the identification and implementation of suitable mitigation measures. |
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| **HA Project Sponsor** | **Sign:** |   | **Print Name:** |   | **Date: 31/3/2016** |
| **Management Approver:** | **Sign:** |   | **Print Name:** |   | **Date: 31/3/2-16** |
| **Contractual Approval:** | **Sign:** |   | **Print Name:** |   | **Date: 31/3/2016** |