

Major Infrastructure Project Delivery, Governance and Risk Management

To: Highways and Transport Committee

Meeting Date: 9th March 2021

From: Steve Cox, Executive Director, Place and Economy

Electoral division(s): All

Forward Plan ref: n/a

Key decision: No

Outcome: To provide committee with an update on the improvements underway relating to delivery of infrastructure projects, their governance and risk management

Recommendation: Committee is recommended to:

- a) note the improvements underway relating to the delivery of infrastructure projects;
- b) agree committee decisions are required gateways 2, 4 and 6 of the gateway framework as part of project governance;
- c) note the project status summary in Appendix 3 including key risks and mitigation;
- d) agree regular reporting of projects to Members;

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1. Background

- 1.1 Cambridgeshire County Council (CCC) has continued to be successful in attracting funding for long standing and ambitious projects to support sustainable growth. This has created a significant forward programme of capital projects. Highways are currently commissioning highways works in excess of £50million annually including the annual highways capital delivery programme.
- 1.2 During the summer of 2020 an internal review of Highway Capital Delivery was commissioned to understand the effectiveness of capital programme management and the overall control environment. Initial findings led to consideration as to common themes where project design and delivery could be enhanced. Additional projects have more recently been investigated, as to any recurring themes and the governance and oversight required.
- 1.3 The reviews have highlighted the significant programme of work being delivered across the Major Infrastructure and Delivery (MID) service and the scale of the forward programme and multimillion pound projects that include new roads, bridges and ambitious schemes to transform how people travel. The expectations for expeditious delivery, the complexity of multiple stakeholders and varied funding arrangements require talented teams, the broadest support network of specialist consultants and delivery mechanisms, and clear processes from inception to completion.
- 1.4 The review underlined the importance of continuous improvement to the skill base of teams involved in project delivery, how teams are aligned and grouped, and the best ways to maintain the energy and support to staff to overcome scheme complexities.
- 1.5 As part of the review a new Group Manager for MID was appointed in October 2020 being a qualified civil engineer with significant experience of programme and major project delivery. The Group Manager is providing direct expertise leading a programme of major projects, including developing project teams and resources in light of new and the ever increasing demands of projects and funding commitments. The role includes chairing a range of Project and Programme Boards to ensure visibility of all the projects being developed and delivered with the MID service.
- 1.6 In October 2020 a task and finish team of experts was formed led by the newly appointed Group Manager of MID. The group, named the "Project Assurance Group", was formed of permanent, interim and consultant resources with the relevant expertise relating to project management, forms of contract, procurement and financial control as well as internal audit. The group have met regularly since its inception, identifying areas for improvement relating to all aspects of project delivery and control.

2. Main Issues

- 2.1 Delivery of capital programmes has been an Officer led process that relies on Members approving projects as they are presented for consultation, and later prior to construction.
- 2.2 Consistent and sustained project delivery depends on a control environment which includes the key elements that must mutually support each other but also create

constructive challenge to understand and manage risk and ensure the best possible outcomes and value for money.

- 2.3 The review of project design, development, delivery and control identified three key areas for improvement:
- a) strengthen systems and processes to provide an appropriate control environment
 - b) supporting change in managing successful teams and projects
 - c) project reporting and risk management

Systems and Processes

- 2.4 The review highlighted the key areas listed below, including an update of the improvements now in place or being introduced:
- 2.5 **Project Governance** – A review of project governance concluded a mixed approach to governance, accountability and decision making across projects. A governance organogram has been produced provided at Appendix 1, supported by a 'Governance for Infrastructure Projects' user guide. Both are based on Prince 2 project management methods and designed to ensure a consistent and compliant control environment where all individuals involved with delivery of major projects understand their responsibility, accountability and delegated authority relating to delivery of infrastructure projects.
- 2.6 **Project Gateway Framework** – A project gateway process and an accompanying user guide for project managers has been developed and is being rolled out. Some projects have migrated onto the new processes, and the others will be migrating over the coming months. All projects will be required to satisfy a series of gateways ensuring effective project management based on Prince 2 project management, leading to greater transparency of decision making within the project as well as oversight for Group Managers and support colleagues such as finance and procurement. The gateway process is summarised at the bottom of Appendix 1 which identifies the eight gateways from project inception to delivery.
- 2.7 **Project Tracker** – This is an existing system providing process and project oversight to deliver a picture of progress and service performance for all projects focussing around cost control via monthly reporting. This tracker has been enhanced to create a clear and effective project reporting focussing on finance. During 2021 the content is expected to migrate to MS Project Online and Powa BI, detailed below, which will enhance project management and reporting, with all information being held digitally in a single place.
- 2.8 **MS Project Online & MS Powa BI** – Highways and Transportation teams are early adopters of these systems as a corporate programme management IT system to improve project programming, delivery, control and reporting. MID is the corporate service user lead and the systems are being adapted and refined based on the needs of the County. Both are recognised systems aligned with best practice and will ensure all aspects of projects are captured and reported, reliant on live project updating by Project Manager and others involved with project delivery and project oversight.

- 2.9 **Financial Control** - projects require financial transparency and cost control at all project and programme levels and gateways. Key projects are being reviewed, resulting in re-baselining of cost (where necessary) and improved control and reporting mechanisms implemented. Forward forecasting of project costs has been a common area of concern, which will be improved with strong interplay with fully costed risk registers and accountability at each gateway for the project to proceed. A refresh of how Financial Regulations, accountability and delegations for decision making will be a key feature of improving project delivery.
- 2.10 **Procurement & Contract Management**- Through the Term Services Contract, Skanska will remain central to delivery. However, they will no longer be the automatic route for design and construction services. The optimum route for project delivery and Value for Money will be considered as part of the gateway process and decision relating to provision of design, specialist consultancy and construction services will be made using the full range of options available to project managers. A Procurement Choices summary is provided at Appendix 2 which details the procurement choices that will be considered for project delivery at project feasibility and during the project lifecycle. There will be an emphasis on measuring performance, and rewarding providers who perform well with opportunities to Tender for and deliver future works packages and projects. When a supplier does not perform at the feasibility, preliminary or detailed design stage, then the procurement choices and gateway process will provide an opportunity to move to another provider part way through a project.

Supporting change- “Managing Successful Teams and Projects”

- 2.11 The Project Assurance Group, working with Learning and Development and Human Resources colleagues identified the nature and extent of change required to ensure effective, compliant and timely delivery of projects.
- 2.12 It was recognised that this change demanded teams to think differently about how work is delivered, often with ever more complex partnership arrangements including with the Greater Cambridge Partnership (GCP) and the Cambridgeshire and Peterborough Combined Authority (CPCA). This requires the empowering of project teams and project managers in new and different ways. This requires support to be available to teams and their managers and as expectations continue to evolve.
- 2.14 Projects Teams also need to think differently and be less risk averse. Through being more inquisitive as to why we are doing certain things there will be a new culture that starts to constructively challenge traditional approaches. This is not change for the sake of it, but focussing on outcomes including quality and value for money.
- 2.15 Challenging our partners and supply chains to support us differently has also been identified. It will mean taking calculated risks, informed by new support arrangements and leadership. This creates opportunities for teams to succeed personally and professionally.

- 2.16 This requires teams to be more innovative, agile and flexible in what they do and where they work, increasingly focussed on outcomes rather than inputs. This will not happen overnight, but is underway.
- 2.17 In response, a change programme was developed during November and December 2020 titled “Managing Successful Teams and Projects”. The training programme includes one to one coaching over eight weeks as well as the delivery of four Training Modules delivered weekly being:
- a) Module 1 Governance & Project Gateway Frameworks
 - b) Module 2 Project Tracker, MS Project and Power BI
 - c) Module 3 Financial Control, Processes & Accountability
 - d) Module 4 Commissioning, Procurement & Contract Management
- 2.18 Key staff involved in delivery of infrastructure projects across Highways & Transport are going through the programme in a series of cohorts and a light version has been delivered to interims and consultants working across MID, to ensure they are also complying with the improved and emerging requirements relating to project delivery and control.

Project reporting and risk management

- 2.19 As detailed in Appendix 1, the Governance Organogram, the control environment requires that programmes and projects are regularly reported to finance, corporate (Directors) and Members. The organogram also references the Member Advisory Groups that will operate on some projects, providing regular and timely updates, determined early in the life cycle of the project.
- 2.20 Although there are eight gateways identified in a project’s lifecycle committee approval at all of the eight gateways would lead to delays and additional costs to delivery of projects. It would also lead to difficulties with time compliance associated with contractual obligations on the Employer. Therefore, to balance efficient and timely delivery of projects and Member control and oversight, approval at the following three gateways by committee Decisions to proceed to the subsequent gateway in a project lifecycle is recommended, as the appropriate balance for project delivery versus control and project oversight:
- a) Gateway 2- commence consultation
 - b) Gateway 4- approve the preliminary design
 - c) Gateway 6- allow construction
- 2.20 The organogram also formalises regular reporting of overall programme and project status to Members, including key risks and mitigation. Appendix 3 has been produced to provide clear and concise visibility of key project risks relating to: design, land, budget, programme, procurement and delivery. The projects are also given an overall project status of High Risk (H), Medium Risk (M) and Low Risk (L). And a summary of any key

issues and mitigation/intervention underway, when required. The criteria for the risk rating of projects is proposed as:

- a) Low Risk (L) - no or minor issues being managed under existing project resources and controls
- b) Medium Risk (M) - a risk that is being managed under existing project controls but is not considered to risk the overall project in terms of programme and/or budget
- c) High Risk (H) - a risk that has the potential to put the project programme and/or project budget at risk or the project failing to deliver its agreed and expected delivery outcomes. Intervention and mitigation will be underway by the respective Project Team to reduce the risk and re-align the project to programme and cost or re-baseline the project where this is not possible.

2.21 This project summary in Appendix 3 has been compiled from recent programme and project risks identified from “Dependency Returns” undertaken by Project Managers and Project Teams for each project listed. The returns identified key risks relating to design, planning, Traffic Regulation Orders, land/CPO, finance, programme and delivery being critical elements of any project. Key risks were scrutinised in greater detail at subsequent Project Boards and targeted “Challenge Sessions” on some projects to gain greater understanding of key risks and their potential impact on project delivery. This has given the newly appointed Group Manager of MID accurate visibility of all key projects, provided in the appendix. High risks identified have been investigated in further detail with Project Managers and Project Teams, with appropriate mitigation now in place or underway as stated in the appendix.

2.22 Aligned with the migration of projects onto the new IT systems associated with project management detailed earlier in this report, highlight and summary reports will evolve in the future be generated from the IT systems (MS Project Online and Powa BI), which will be maintained on a “live” basis by all those involved with project delivery. This will ensure an accurate picture of all projects is available at all times where risk arising can be immediately notified, assessed and mitigated.

3. Alignment with corporate priorities

3.1 A good quality of life for everyone

- Provision and development of infrastructure, including the highway network allows residents and visitors to move around the county freely, supporting the economy and access to services including recreation and leisure. Additionally it encourages healthy journeys including those by public transport and non-motorised use, such as walking, cycling and equestrian.

3.2 Thriving places for people to live

- Provision and development of infrastructure, including the highway network allows residents and visitors to move around the county freely, supporting the economy and access to services.

3.3 The best start for Cambridgeshire's children

- Provision and development of infrastructure, including the highway network helps children to access schools and leisure services. It also promotes non-motorised users including cycling and walking with the accompanying health benefits.

3.4 Net zero carbon emissions for Cambridgeshire by 2050

- Provision and development of infrastructure, including the highway network allows residents and visitors to move around the county freely, supporting the economy and access to services. Additionally it encourages healthy journeys including those by public transport and non-motorised use, such as walking and cycling reducing carbon emissions and use of the motor vehicle.

4. Significant Implications

4.1 Resource Implications

Resources to improve delivery of major infrastructure programmes and projects is being addressed through the pending restructure of Place and Economy.

4.2 Procurement/Contractual/Council Contract Procedure Rules Implications

This report includes measures and improvements relating to procurement and contract management relating to this.

4.3 Statutory, Legal and Risk Implications

There are no significant implications within this category

4.4 Equality and Diversity Implications

There are no significant implications within this category

4.5 Engagement and Communications Implications

There are no significant implications within this category

4.6 Localism and Local Member Involvement

There are no significant implications within this category

4.7 Public Health Implications

There are no significant implications within this category

Have the resource implications been cleared by Finance? Yes

Name of Financial Officer: Sarah Heywood

Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement? Yes

Name of Officer: Gus de Silva

Has the impact on statutory, legal and risk implications been cleared by the Council's Monitoring Officer or LGSS Law? Yes

Name of Legal Officer: Fiona McMillan

Have the equality and diversity implications been cleared by your Service Contact?

Yes

Name of Officer: Elsa Evans

Have any engagement and communication implications been cleared by Communications? Yes

Name of Officer: Sarah Silk

Have any localism and Local Member involvement issues been cleared by your Service Contact? Yes

Name of Officer: Graham Hughes

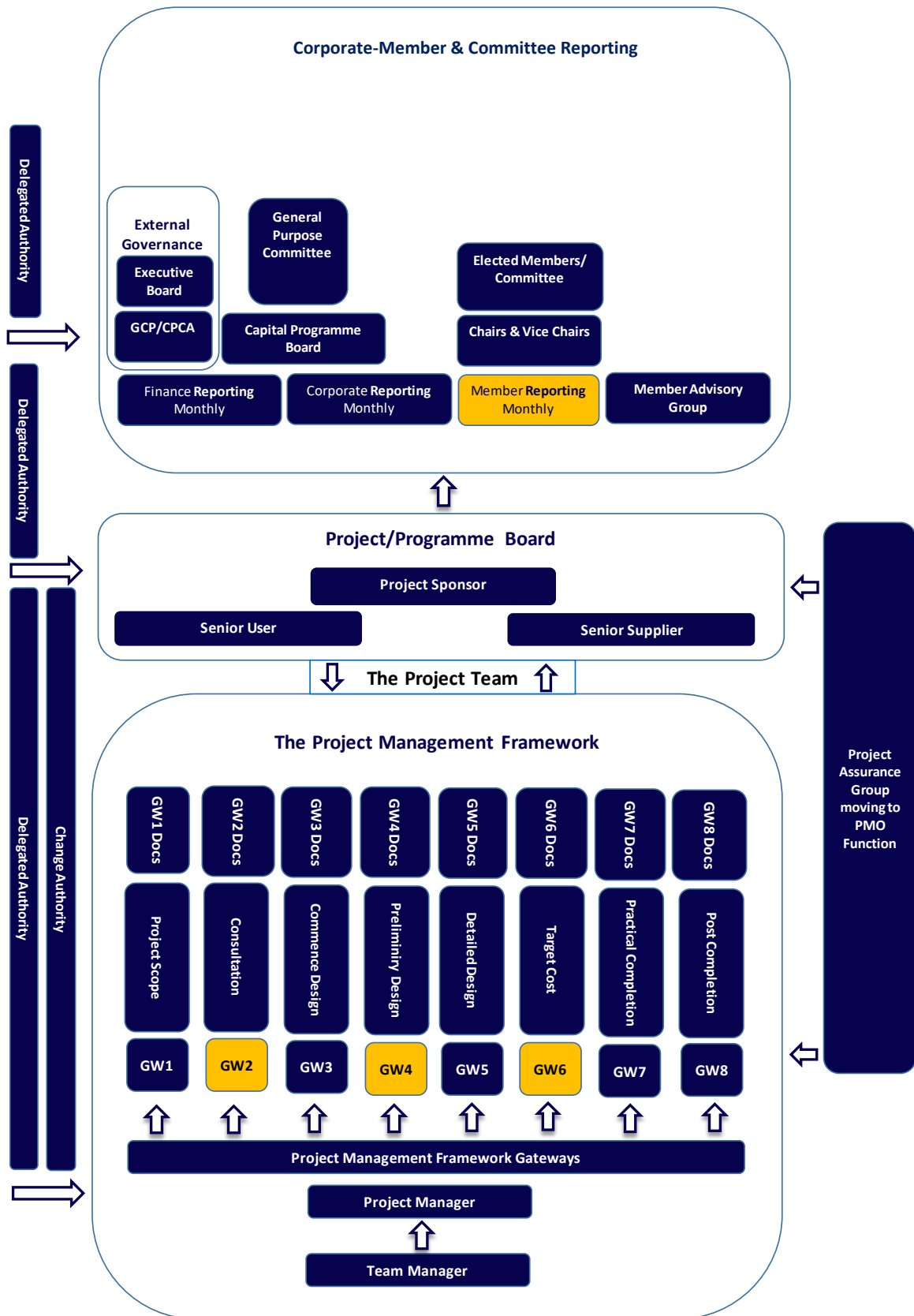
Have any Public Health implications been cleared by Public Health No

Name of Officer:

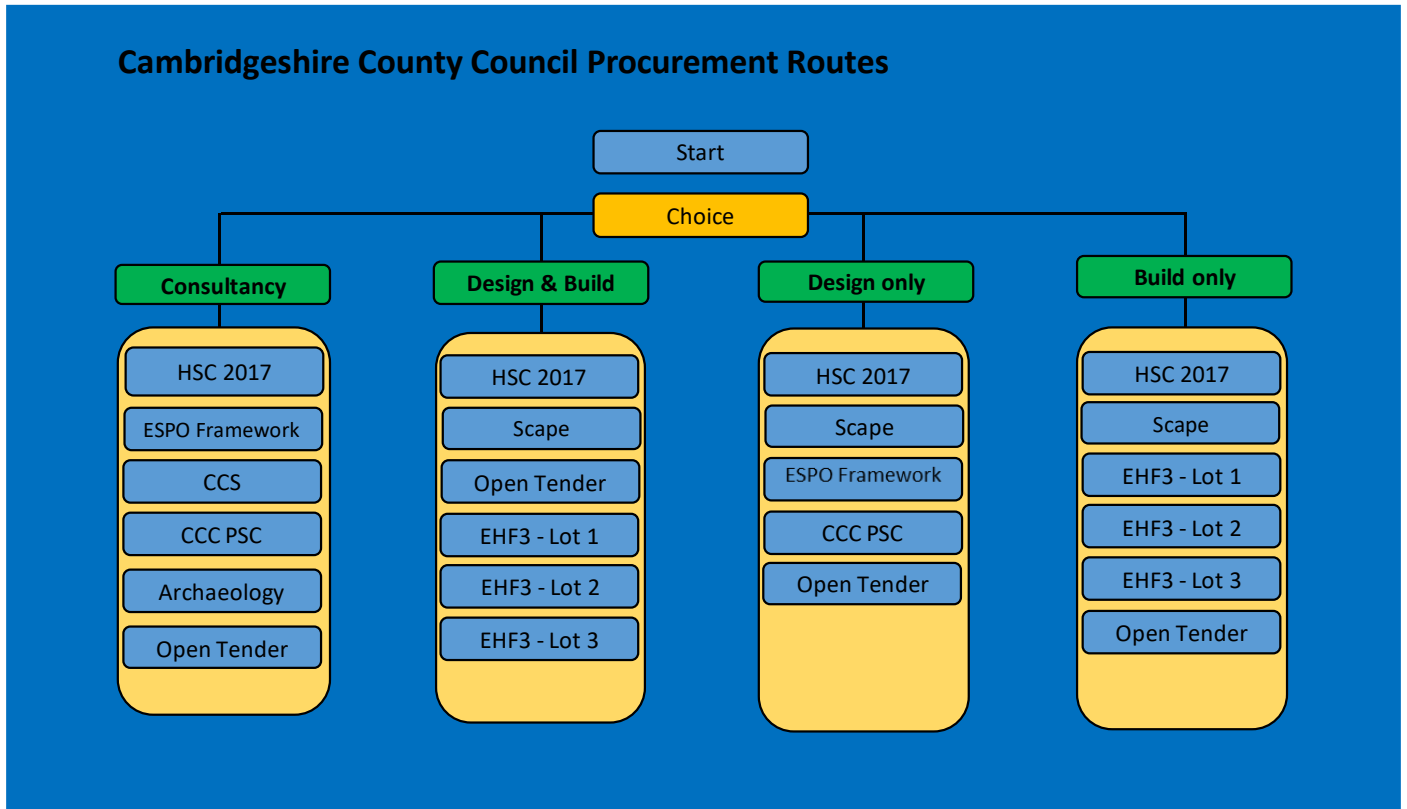
5. Source documents guidance

5.1 None

APPENDIX 1: Governance Organogram for delivery of Infrastructure Projects



APPENDIX 2: Procurement Choices for delivery of Infrastructure Services



APPENDIX 3: Major Infrastructure Project Risk Summary Dated 19 February 2021

Scheme Name	Design	Land	Budget	Prog	Delivery	Overall	Summary of key issues	Mitigation / Intervention (where required)
Active Travel Programme 2	M	L	L	M	M	M	Programme to be confirmed and delivered by end March 2022	Intensify engagement with supply chain for delivery
Cherry Hinton Road	L	L	L	L	L	L	Funding in place to progress detailed design	
Chisholm Trail	L	M	M	M	M	M	Pressures remain on programme including land/planning/budget for scheme completion by November 2021	Developing resources in Project Team for completion by November 2021
Chisholm Trail (Coldham's Common)	L	H	H	H	H	H	Works package above budget / delivery programme challenging	Descoppe works, accelerate delivery programme and review budget position
Chisholm Trail Fen Road Package	M	M	M	M	M	M	Bolt on package being considered for seed funding from GCP ideally for completion with wider Chisholm Trail project for November 2021	Accelerate design and delivery
Downing St / St Andrews	L	L	L	L	L	L	No issues	
Dry Drayton	L	H	L	L	M	M	CPO required for land parcel which may be challenged by land owner	Commence CPO process
Ely Stuntney Cycleway	M	L	M	M	M	M	Departure required for pedestrian island / risks around budget	
Fenstanton Fenlane Busway	L	L	M	M	M	M	Pressures regarding programme and delivery, being managed by Project Team	

Scheme Name	Design	Land	Budget	Prog	Delivery	Overall	Summary of key issues	Mitigation / Intervention (where required)
Fenstanton to Busway	M	L	M	L	L	L	Repairs to section damaged by flooding required / risk to budget	
Greenways Programme	L	L	L	L	L	L	Early stages of design underway and programme to be agreed	
Hardwick Path	L	L	H	M	M	M	Risks around cost and programme being managed by Project Team	Descoppe project to fit budget available
Kings Dyke	L	M	L	L	L	L	NR possessions secured / minor land issues being resolved	
Lancaster Way Roundabout	L	L	L	M	L	L	Pressures regarding programme and delivery by end April 2021, but being managed	
Maddingley Road	L	L	L	L	L	L	No issues	
March OBC Projects	L	L	L	L	M	L	In early concept / design stages / procurement for detailed design and construction to be determined	
March Quick Wins	L	L	L	M	M	L	Pressures regarding programme and delivery, but being managed	Seek additional project resource to support with delivery of projects during 2021/22
NMU Bar Hill to Longstanton	M	M	H	M	M	H	Forecast over budget allocation / programme delayed due to developer works on network in 2021	Reduce project scope / seek additional project/s106 funding and re-programme delivery
NMU Girton to Oakington	L	M	L	M	L	M	Risks with land owners	Maintain good

Scheme Name	Design	Land	Budget	Prog	Delivery	Overall	Summary of key issues	Mitigation / Intervention (where required)
								relationships with land owners
NMU Longstanton Bridleway 10 Upgrade	H	M	M	H	H	H	Design delayed / delivery behind programme	Accelerate delivery programme and request HE carry forward of grant funding
NMU Papworth to Cambourne	M	M	H	H	H	H	Risks around budget / construction programme delayed	Accelerate delivery programme, reduce project scope and request HE carry forward of grant funding
NMU Washpit Lane	L	L	L	L	L	L	Under construction / no issues	
Northstowe Bus Link	L	L	H	H	H	H	Project is over budget and risks remain over delivery/programme	Reduce project scope costs and programme for delivery in 2021/22
Ring Fort Path	L	M	L	L	L	M	Risk relating to access onto land owned between CCC and HE	Being resolved by CCC Assets Team and HE
WAS Broadend Road/A47 rbt (BER2)	H	H	H	H	H	H	Acquisition of single land parcel causing challenges / budget and programme are under pressure	Seeking innovative design/re-design solutions to avoid CPO / review of programme and costs underway
WAS Elm High Road/A47 (EH1)	M	M	H	H	H	H	Late stats return in January 2021 has potential for significant impact on budget and programme	Escalate within UKPN / review of programme and costs underway

Scheme Name	Design	Land	Budget	Prog	Delivery	Overall	Summary of key issues	Mitigation / Intervention (where required)
WAS Elm High Road/Weasenham Ln rbt (EH7B)	L	H	H	H	H	H	Outstanding property acquisition and extended COVID eviction requirement is risk to delivery	Accelerate property acquisition / review of overall programme and cost