Summary Notes of Meeting: Pumping Test Consent

Project:	HS2 MWCC Lot C1
Document number:	1MC05-ALJ-EV-MRC-CS02_CL04-310019
Meeting Date and Time:	Tuesday 3 July 2018, 10:00 – 12:00
Meeting Title:	Pumping Tests
Location:	HS2 office, 2 Snowhill, Room 3.12

Attendees

Name	Organisation
Reg. 13	HS2
Reg. 13	Environment Agency
Reg. 13	Align
Reg. 13)	Align-D
Reg. 13	Align-D
Reg. 13	Environment Agency

Apologies

Name	Organisation
Reg. 13	Environment Agency

Distribution

Name	Organisation
Attendees, apologies & Reg. 13	Align

Agenda

#	Actions and Notes	
1	Introductions	
2	Safety moment	
3	Objectives	
4	Pumping test overview / approach / water discharge	
5	Water features surveys	
6	Application process / requirements / programme	
7	Consent for dewatering – requirements / programme	
8	Abstraction well for water supply - options	
9	Piling tests – scope, consent	
10	Consents for construction – overview of required consents and EA requirements	

#	Actions and Notes	
	AOB	
	Next meeting	

Attachments: none

#	Actions and Notes	Action	Date
3	**Objectives** To discuss approach to pump tests; abstraction well and recharge well locations; Water feature surveys; consenting and application process; pile load tests and turbidity migration tests; Options for abstraction well for construction water supply at South Portal; EA requirements for consents for construction per design element		
4	**Pumping test overview / approach / water discharge** Reg. 13 gave overview of pumping tests including likely borehole dimensions, recharge method, test length (8 hour step test and 4-7 day constant rate test) and monitoring well configuration. Maximum pumping rate was established as approx. 1Ml/d (11.6l/s). Reg. 13 flagged nitrate flushing as a potential concern as a result of the recharge to ground of pumped groundwater and requested water quality measurements be collected before during and after the test. Groundwater level measurement in the recharge borehole was discussed to ensure surface flooding is avoided – Reg. 13 and Reg. 13 to discuss with the Contractor their proposals to satisfy these aspects (i.e. groundwater level and quality) as well as plans regarding the nature of the recharge system (closed loop vs settlement/treatment plans). Reg. 13 requested a management system be documented in the Water Feature Survey detailing how groundwater flooding at the recharge borehole will be avoided.	Reg. 13	

5	**Water features surveys** Reg. 12(5)(a) • EA agreed with findings of the WFS and do not expect any monitoring of identified features. • Reg. 13 requested monitoring be added at EA observation boreholes located at Reg. 12(5)(a) and Reg. 12(5)(a) and indicated that Affinity Water may already have loggers in these positions. EA to provide details of observation borehole. Align-D to confirm with Affinity Water if a logger is in the borehole. Reg. 12(5)(a) • EA agreed with findings of the WFS and do not expect any monitoring of identified features. • EA requested monitoring be added at EA Reg. 12(5)(a) observation borehole where the road crosses the river. Reg. 12(5)(a) • Reg. 13 indicated that more justification would be required for not monitoring the one licensed and two unlicensed abstractions. Reg. 13 indicated that we can include the unlicensed abstractions in the monitoring. The EA agreed that any potential impact on the licensed supply at Reg. 12(5)(a) ~~ar enough away~~ would most likely be mitigated by the presence of the River Misbourne. Post meeting note: Reg. 13 has checked the BGS borehole record Reg. 12(5)(a) for this site and it indicates a well 100 ft deep and a RWL 10 ft 6 inches which is below the level of the river. Consequently it is recommended that this location is considered further (visit to ascertain water level and possible monitoring). • EA indicated BGS logs were available online for the unlicensed supply to the south of the vent shaft location. • Reg. 13 queried if landowners could be approached directly by Align, Reg. 13 stated he would confirm process required by HS2. • Reg. 13 requested monitoring be added at EA observation borehole located at Reg. 12(5)(a) – this would also help to determine any impact on the River Misbourne and the licensed abstraction. Align to check if Affinity Water has a logger in the borehole. Reg. 12(5)(a) • Reg. 13 queried why Water Feature 3 had been discounted. It was agreed to monitor this feature with a stage board, which will be communicated to the contractor. • Reg. 13 identified EA Reg. 12(5)(a) surface water flow gauge on Mop End Lane which can be used to assess impacts on the River Misbourne. • Reg. 13 indicated the presence of a private abstraction upstream of the pump test location and outside the 1km radius but which may still be of significance due to nature of abstraction (wetland support). It was agreed to contact this landowner to request they refrain from abstracting water during the pumping test. • Reg. 13 also provided information on borehole log named Reg. 12(5)(a) which was suspected to be an old well. No unlicensed abstraction was returned from this location from the Local Authority but it was requested this be checked.	Reg. 13 Reg. 13 Reg. 13 Reg. 13 Reg. 13 Reg. 13 Reg. 13 Reg. 13 Reg. 13	

	• Reg. 13 equested monitoring be added at EA Reg. 12(5)(a) observation borehole located at Reg. 12(5)(a) agreed to provide locations of the EA observation boreholes. to check presence of loggers with Affinity Water once locations provided.		
6	**Application process / requirements / programme** It was confirmed that consent applications should take the form of a Protective Provisions application for approval form. EA requested expansion of the draft Water Feature Survey to include details on the abstraction and recharge boreholes dimensions and depths, monitoring locations and geological formations – borehole positions to be provided to nearest 10m (figure grid reference). Reg. 13 Reg. 1: queried time needed to review the consents and confirmed 56 days for approval process but was confident approvals would be actioned swiftly. Early engagement was advocated to ensure this was the case. It was highlighted that the EA is obliged to consult with Affinity Water on any consent that impacts their assets, which could delay the consents slightly. Regular upfront liaison with Affinity Water was recommended. The discharge to ground of abstracted groundwater must be uncontaminated and follow the principals of the Environment Agency guidance for: "Temporary dewatering from excavations to surface water". The water quality monitoring details to be provided in the application form/WFS.		
7	**Consent for dewatering – requirements / programme** Initial meeting needed 12 months before consent is required in order to discuss approach / requirements. Risk assessment required with level of detail dependent upon level of risk. Regular meetings necessary to discuss progress / requirements.		
8	**Abstraction well for water supply – options** Reg. 12(4)(d)		

9	**Piling tests – scope, consent** Reg. 12(4)(d)		
10	**Consents for construction – overview of required consents and EA requirements** The structure of the consenting process was discussed in terms of how to present the consent applications and the required level of detail required by the EA. Reg. 13 and Reg. 13 agreed that grouping the consents together as far as practicable would be the best approach (e.g abstraction and discharge consents together) but could not give a more prescriptive response. A pragmatic approach was suggested to this as programme considerations would dictate the potential for joint submissions. The level of detail required would be assessed on a case by case basis and would come into focus during pre-application discussions. It should be noted that though the pumping tests can be consented under the Protective Provisions it is not guaranteed that construction dewatering can also be covered in this way. This will have to be assessed again when details on the volume, rate, duration and any other details are established (Reg. 13 post meeting email comms).		
11	**AOB** GI boreholes within SSSI and consenting requirements were discussed. The EA indicated that locations within SSSI dictated consultation with Natural England. Align would have to ensure that Natural England had been consulted in advance of the consent application. Reg. 13 offered to provide contact details for Natural England. Reg. 13 queried the progress being made in the Environmental Management Plan for construction activities and Reg. 13 confirmed this would be chased within Align. Reg. 13 also requested Reg. 13 and Reg. 13 meet the local EA team and provide them with an overview of the proposed works in the Colne Valley. Another pump test meeting was to be arranged between the EA and Align following further discussions between Align and the pump test contractor. Reg. 13 asked for visibility of the Align consents programme. Reg. 13 (Reg. 13) to meet / conf call with Reg. 13 to discuss.	Reg. 13	