Annex 4

		Sharp Sand & Gravel	Soft Sand	Crushed Rock
		(million tonnes)	(million tonnes)	(million tonnes)
Α.	Annual Provision (from policy M2 / LAA)	1.015	0.189	0.584
В.	Requirement 2014 – 2031 (policy M2) (A x 18 years)	18.270	3.402	10.512
B.i	Requirement 2014 – 2031 (North)	9.135	n/a	n/a
B.ii	Requirement 2014 – 2031 (South)	9.135	n/a	n/a
C.	Sales in 2014 – 2018 (Oxfordshire)	3.558	1.193	4.308
C.i	Sales in 2014 – 2018 (North)	1.974	n/a	n/a
C.ii	Sales in 2014 – 2018 (South)	1.584	n/a	n/a
D.	Remaining requirement $(B - C)$	14.712	2.209	6.204
D.i	Remaining requirement (North) (Bi – Ci)	7.161	n/a	n/a
D.ii	Remaining requirement (South) (Bii – Cii)	7.551	n/a	n/a
E.	Permitted Reserves at end 2018	12.925	3.091	7.718
E.i	Permitted Reserves at end 2017 (North)	7.728	n/a	n/a
E.ii	Permitted Reserves at end 2017 (South)	5.197	n/a	n/a
F.	Permissions granted from 01.01.2019 to 25.07.2019	0	0	0
F.i	Permissions 01.01.19 – 25.07.19 (North)	0	n/a	n/a
F.ii	Permissions 01.01.19 – 25.07.19 (South)	0	n/a	n/a
G.	Total permitted reserves available (from beginning 2019) (E + F)	12.925	3.091	7.718
G.i	Total reserves available (North)	7.728	n/a	n/a
G.ii	Total reserves available (South)	5.197	n/a	n/a
H.	Estimated permitted reserves available to be worked during remainder of plan	11.075	2.54	7.718

Aggregate provision required over plan period 2014 – 2031 (alternative method)

	period (from beginning 2019 to end 2031)			
H.i	Estimated permitted reserves available to be worked during remainder of plan period (from beginning 2019 to end 2031) (North)	6.578	n/a	n/a
H.ii	Estimated permitted reserves available to be worked during remainder of plan period (from beginning 2019 to end 2031) (South)	4.497	n/a	n/a
J.	Remaining requirement to be provided for in Plan (D – H)	3.637 (100%)	0	0
Ji	Remaining requirement to be provided for in the Plan (North) – alternative method of calculation (Di – Hi)	0.583 (16%)	n/a	n/a
Jii	Remaining requirement to be provided for in the Plan (South) – alternative method of calculation (Dii – Hii)	3.054 (84%)	n/a	n/a

Notes:

- 1. Permitted Reserves at end 2017 (Row E) do not include approximately 1.0 million tonnes of sharp sand and gravel at Thrupp Farm Quarry, Radley (South), which were previously included. Under 'ROMP' procedure the planning permission for this site has gone into suspension, and is currently dormant, and the site cannot be worked until there has been a review of the planning conditions attached to the planning permission. Consequently, in accordance with national Planning Practice Guidance, the 'reserves' at this site should not currently be included as permitted reserves and they do not form part of the landbank.
- 2. The planning application for an extension to Gill Mill Quarry (South) submitted in 2013 and permitted in 2015 is for the working of a total of 7.8 million tonnes of sharp sand and gravel (including 2.8 million tonnes previously permitted and 5.0 million tonnes in the extension area). Information in the application indicates this will be worked over 22 years from 2013, giving an average rate of working of approximately 0.35 million tonnes per annum. Mineral working at Gill Mill Quarry is therefore expected to extend beyond the end of the plan period (2031); of the total of 7.8 million tonnes, it is estimated approximately 6.65 million tonnes will be worked after 2031.

- 3. The planning application for a new quarry at New Barn Farm, Cholsey (South) submitted in 2016 and permitted in 2018 is for the working of a total of 2.5 million tonnes of sharp sand and gravel. Information in the application indicates this will be worked over 18 years from 2019, at an average rate of working of approximately 0.14 million tonnes per annum. Mineral extraction at New Barn Farm is therefore expected to extend beyond the end of the plan period (2031); of the total of 2.5 million tonnes, it is estimated approximately 1.8 million tonnes will be worked within the plan period and approximately 0.7 million tonnes will remain to be worked after 2031.
- 4. The permitted reserves of sharp sand and gravel available to be worked during the plan period have therefore been reduced by 1.85 million tonnes, from 12.946 million tonnes (row G) to an estimated 11.096 million tonnes (row H).
- 5. The planning application for an extension to Bowling Green Farm Quarry submitted in 2016 and permitted in June 2017 is for the working of a total of 1.6 million tonnes of soft sand. Information in the application indicates this will be worked over 19 years from 2018 to 2036 at an average rate of working of approximately 0.08 million tonnes per annum. Mineral working at Bowling Green Farm Quarry is therefore expected to extend beyond the end of the plan period (2031); of the total of 1.6 million tonnes, it is estimated approximately 1.1 million tonnes will be worked within the plan period and approximately 0.5 million tonnes will remain to be worked after 2031.
- 6. The planning application for an extension to Duns Tew Quarry submitted in 2014 and permitted in May 2017 is for the working of a total of 0.415 million tonnes of soft sand. Information in the application indicates this will be worked over 16/17 years from 2017 to 2033/34 at an average rate of working of approximately 0.025 million tonnes per annum. Mineral working at Duns Tew Quarry is therefore expected to extend beyond the end of the plan period (2031); of the total of 0.415 million tonnes, it is estimated approximately 0.365 million tonnes will be worked within the plan period and approximately 0.05 million tonnes will remain to be worked after 2031.
- The permitted reserves of soft sand available to be worked during the plan period have therefore been reduced by 0.55 million tonnes, from 3.209 million tonnes (row G) to an estimated 2.659 million tonnes (row H).
- 8. The figures at rows E.i & Eii, Gi & Gii and H.i & H.ii for sharp sand and gravel represent the *current* distribution of permitted reserves.

		Soft Sand	Soft Sand
		(million tonnes)	(million tonnes)
		Original Method	Alternative Method
Δ	Appual Provision	0 189	0.243
л.	Annual Trovision	(from policy M2 /	(2) year calco average
	-	LAA)	2016 – 2018)
В.	Requirement 2014 –		
	2031 (policy M2)	3.402	4.374
	(A x 18 years)		
C.	Sales in 2014 – 2018	1 100	1 100
		1.193	1.193
D.	Remaining requirement		
	(B - C)	2.209	3.181
F	Permitted Reserves at		
L.	and 2018	3.091	3.091
_	Dermissions granted		
г.	frame of of options	0	0
	from 01.01.2019 to	0	0
	25.07.2019		
G.	Total permitted		
	reserves available (from	2 001	2 001
	beginning 2019)	5.091	5.091
	(E + F)		
Η.	Estimated permitted		
	reserves available to be		
	worked during		
	romainder of plan	2.54	2.54
	pariad (from baginning		
	period (ironi beginning		
	2019 to end 2031)		
Ι.	Remaining requirement		
	to be provided for in	0	0.641
	Plan	0	0.011
	(D – H)		
J.	Add 10% Contingency	0	0.064
	2 7	U	0.064
K.	Total provision to be		
	made in Plan	0	0.705
	(L + J)	-	

Soft Sand provision required over plan period 2014 – 2031 (alternative method based on 3-year sales average)

Notes:

1. The planning application for an extension to Bowling Green Farm Quarry submitted in 2016 and permitted in June 2017 is for the working of a total of 1.6 million tonnes of soft sand. Information in the application indicates this will be worked over 19 years from 2018 to 2036 at an average rate of working of approximately 0.08 million tonnes per annum. Mineral working at Bowling Green Farm Quarry is therefore expected to extend beyond the end of the plan period (2031); of the total of 1.6 million tonnes, it is estimated approximately 1.1 million tonnes will be worked within the plan period and approximately 0.5 million tonnes will remain to be worked after 2031.

- 2. The planning application for an extension to Duns Tew Quarry submitted in 2014 and permitted in May 2017 is for the working of a total of 0.415 million tonnes of soft sand. Information in the application indicates this will be worked over 16/17 years from 2017 to 2033/34 at an average rate of working of approximately 0.025 million tonnes per annum. Mineral working at Duns Tew Quarry is therefore expected to extend beyond the end of the plan period (2031); of the total of 0.415 million tonnes, it is estimated approximately 0.365 million tonnes will be worked within the plan period and approximately 0.05 million tonnes will remain to be worked after 2031.
- 3. The permitted reserves of soft sand available to be worked during the plan period have therefore been reduced by 0.55 million tonnes, from 3.209 million tonnes (row G) to an estimated 2.659 million tonnes (row H).

Crushed Rock provision required over plan period 2014 – 2031 (alternative method based on 3-year sales average – at 26 July 2019)

		Original Method	Crushed Rock (million tonnes) Alternative Method
Α.	Annual Provision (from policy M2 / LAA)	0.584 (from policy M2 / LAA)	0.778 (3-year sales average 2016 – 2018)
В.	Requirement 2014 – 2031 (policy M2) (A x 18 years)	10.512	14.004
C.	Sales in 2014 – 2018	4.308	4.308
D.	Remaining requirement (B – C)	6.204	9.696
E.	Permitted Reserves at end 2018	7.718	7.718
F.	Permissions granted from 1 January 2018 to 28 January 2018	0	0
G.	Total permitted reserves available (from beginning 2019) (E + F)	7.718	7.718
H.	Estimated permitted reserves available to be worked during remainder of plan period (from beginning 2019 to end 2031)	7.718	7.718
Ι.	Remaining requirement to be provided for in Plan (D – H)	0	1.978
J.	Add 10% Contingency	0	0.198
K.	Total provision to be made in Plan (I + J)	0	2.176