at South Heath.

319. MR SMART: Okay. Can I start off by just reminding the Committee –

320. SIR PETER BOTTOMLEY: Can you use your other hand to point?

321. MR SMART: This one.

322. SIR PETER BOTTOMLEY: Yes.

323. MR SMART: I'm not very good at left hand – this is really now getting challenging. The Committee will hopefully recall the strategy for moving excavated material. Now, we are using material in mitigation earthworks to the north, but the way in which we get onto the A413, and I completely understand the concerns of the traffic, is – our proposal is via the link road and then via Rocky Lane. And what we have said is that the area that's been referred to as the spoil dump, which is around Hunts Farm there, we would use as a buffer in order to regulate the flow onto the A413. It is not in our interests to use that area, particularly because it involves a double handling of material: taking it there, unloading it and then putting it back on. However, of course because the excavated material could be wet we may have to use that area to dry out material or to move it, but the prime reason is either for drying material if we need to or to use it as a buffer. The best way for us is to load it into a wagon and take it straight off.

324. Now, we have proposed the link road here, which is a higher grade of link road to the haul road, which is shown in yellow along the trace, because we need – we will use this not only for removing excavated – wrong hand – excavated material –

325. SIR PETER BOTTOMLEY: No, just in –

326. MR SMART: This is the link road, so we would use that not only for moving excavated material but as this is a tunnel portal we have to get access in there for tunnel fit out and for the electrical and mechanical equipment that goes in the head houses and the buildings around this portal, so the link road would also do that. And, if I can remind the Committee, this is the point where the TBMs will come out –

327. SIR PETER BOTTOMLEY: Tunnel boring machines?

- 328. MR SMART: Tunnel boring machines. These TBMs are 10 metre machines, and I think, Mr Chairman, someone said that this Committee room was 6.7 metres, so these are 10 metre machines. They come out here, the cutter heads are 300 tonnes etc, and we would need to decommission the machines. So again the link road would serve that for the limited time that we need to do that, and, as I said, also to fit out of the mechanical, electrical and other rail systems, so it isn't just for excavating the trace.
- 329. So we would obviously –we've constructed this area here. We would move the point of the haul road down and would be this yellow haul road, which is here at the top, would move this way, and so we would very early on, maybe within the first year, 18 months, the way onto the haul road would move away from the, sort of, Potter Row residents. We'd look to, sort of, move that very as quickly as we could
- 330. MR MOULD QC (DfT): Down into the trace itself?
- 331. MR SMART: Yes, into the cutting.
- 332. MR MOULD QC (DfT): So if you bring the cursor down there we are, yes, there.
- 333. MR SMART: And we would be moving down there. Now, if we didn't have the link road, which would be fit and I know Mr Clifton-Brown's raised this before, the use of haul roads. That link road is a little bit more than just a haul road. It would take traffic that can't go on the haul road. Now, if we didn't have that link road but we still would have to access material sorry, equipment in for all the electrical, mechanical and rail systems fit out, we'd have to find an alternative way in, and that would likely be off Frith Hill. So we think this works for us, not just from looking at how we deal with the excavated material but it also relieves pressure, if you like, that comes from the later stages, so I think that's really the rationale behind it.
- 334. MR MOULD QC (DfT): Now, it may follow from that answer, but one of the claims that is made for relocating the link road further to the north in the area of Leather Lane is it would avoid the need for double handling or double journeys, as it were, because the premise being that HS2 construction traffic using our proposed link would come up the link and then have to go along to the material storage area and other working sites along here, and then come back again in order to serve the works at the

tunnel portal. And – whereas if Leather Lane were the location for the link road one would be able to avoid those doubling back. I mean, is that actually based on the reality of what's likely to happen or not?

335. MR SMART: No, because the double handling comes either because we would use it as a buffer to regulate wagons coming onto the road, and that would happen wherever you have a link road, because we've got the choice of potentially an entry point her, whether it be Leather Lane or the link road, but we say the link road because it's much better, or Rocky Lane. But the other reason of course is to allow material to dry, so we'd have to do that if we have excessively wet material whatever happens, so it wouldn't avoid the need for that, and there are other drawbacks with the – with using Leather Lane as well.

336. MR MOULD QC (DfT): Could you just explain what they are –?

337. MR SMART: Yes, okay. Well, as I just mentioned, the – wrong hand – the petitioner has referred to the spoil dump. They're not actually spoil dumps as such. They're actually storage of topsoil, which we will take off when we create the link road. So they would be grassed over fairly early, and I think you've heard evidence from Mr Miller that we would look to use that topsoil to try and provide some sort of screening, visual screening of that link road. We have to be sensitive to the landowner, who I think has sheep in here, so there is some – there would have to be some discussions about how we could do that. But if we were to use Leather Lane, first of all it would, I think, almost certainly require the creation of a roundabout at the junction of Leather Lane and the A413. And the creation of a new roundabout on the A413 will in itself cause traffic congestion and is quite a difficult thing to achieve on a live A road. So that in itself is not ideal.

338. Secondly, we would – in order to avoid Leather Lane we'd have a new junction, but because of the proximity of Leather Lane to where we would have to bring the haul road on to the A413, we couldn't really have two junctions close together, and there are other limitations with all these junctions around here. What we would have to do is the very end point of the – where the roundabout is and where the haul road would come onto the A413, we'd have to bring Leather Lane into the newly constructed haul road and make that a permanent piece of road. Otherwise we'd have two junctions that

would be in proximity to one another. So there are some problems with that.

- 339. The other thing is that the when you look at the geometry of putting in a haul road here, although we have issues with our link road in terms of there's some cutting, if we had if we created a haul road here, in terms of the level that we would need to create gradient for the wagons, we would have a significant amount of cutting on that route, and indeed embankment. In fact, we'd have about 100 metres of a five metre embankment at the lower end, which would mean importing material. So again there are disadvantages with using significant disadvantages with having the haul road at that point.
- 340. MR MOULD QC (DfT): In effect, whether it's at the point that we have proposed or whether it were to be constructed further to the north adjacent to Leather Lane, in each case you're driving a new road up a hill, and the engineering that is required in order to create that road would involve a mixture of substantial cutting and embankment, which would be a visual feature in the landscape for as long as that link road existed.
- 341. MR SMART: Yes. I mean, this is substantially cutting, and I'm not there's not really much fill on here. This will require much more fill and so arguably would be more visible, but I don't know. It would depend on the lie of the land, but arguably that would be potentially more visible in terms of the haul road itself, but it depends on where you look from.
- 342. MR MOULD QC (DfT): Yes. Now, can we go please to sorry, just one other point while we're on this plan. Can we just note the B485 Chesham Road?
- 343. MR SMART: Yes.
- 344. MR MOULD QC (DfT): And I think that is it's the junction of that road with the A413 that is most proximate to the school that was mentioned earlier. Is that road under the AP4 scheme is that road and that junction proposed to accommodate HS2 mass haul construction traffic and traffic associated with the creation of the tunnel portal and the trace to the north?
- 345. MR SMART: When you say mass haul, Mr Mould, no. It is actually taking the

material from the Chesham Road vent shaft, so the – in terms of earth moving that is a very limited time, three to four months when we construct the vent shaft, so it is not taking any of the more major construction work – construction traffic that is serving this area here.

- 346. MR MOULD QC (DfT): Is the duration and intensity of use of that junction greater, the same or lesser under the AP4 scheme than it was under the Hybrid Bill?
- 347. MR SMART: Thinking back, I think we've got a new vent shaft there. There will be a time when it's slightly more, but otherwise, because we've not got material going south, I would have to check this, but I think it's probably less.
- 348. MR MOULD QC (DfT): Less.
- 349. MR SMART: Because we're not going south. We're now going north, and we've only got the vent shaft.
- 350. MR MOULD QC (DfT): Now then let's go to –
- 351. MR CLIFTON-BROWN: Mr Mould, before we go to the next slide, can I just ask Mr Smart, we've had all the negatives of a Leather Lane haul road. Are there any positives from your construction of the railway point of view?
- 352. MR SMART: Well, not it's hard to think of one, sir.
- 353. MR CLIFTON-BROWN: If you had soil, for example, in that sustainable placement area that had dried out and you want to get it out, surely that would be much more convenient to have it in Leather Lane?
- 354. MR SMART: That is true. It is a shorter haul. It depends which way we're working the trace though, because obviously we want to get that done early but we may actually work the trace this way. But there is a potential that if we did have a lot of material in there that was drying out that would be a slightly shorter route. It's not massively shorter, but I come back to the fact that we've then got problems I mean, we are talking a relatively small amount of time compared to the construction programme here on the mass haul. That is a, sort of, 18 month to two year activity. But the work we need to do for fit out etc is longer, and therefore with a link road we relieve Frith

Hill etc, and I just think that the — if we don't have that when we're here we wouldn't be able to take fit out wagons and LGVs etc along the trace, and therefore we'd have to have another way in. And I just think we'd be then putting a problem into this area here, which we're trying to avoid by using the A road. I take the point about the roundabouts, but they are being looked at in association with Buckinghamshire County Council to see what maybe local remodelling can alleviate any problems to that. We are aware that we might have to do something there, but I think on balance that, you know, then — we're then creating a problem here.

- 355. MR MOULD QC (DfT): I'm going to come back to the roundabout in a moment, but just to pursue Mr Clifton-Brown's question a little further, can you just help us with the significance of Rocky Lane so far as the removal of excavated material along the trace is concerned. Does that have a role to play?
- 356. MR SMART: Yes. As I was saying earlier, we have two ways which we can move from the trace: Rocky Lane and the link road. We would look to not have, as the Committee's heard many times, certainly our mass haul wagons coming onto roundabouts and the road and the A413 during the peak times. It is not in our interests to do that, and it is not in the interests of you know, of progress, and of course we are aware of the effects. But what we can do is, using Rocky Lane and the link road, we can look at how we can regulate and also the distances of what is happening. It gives us some flexibility in minimising the mass haul with these two points. And I should emphasise that at this junction there are some busy periods but for the vast majority of the mass haul time it's going to be around 60 to 100 wagons a day, which is in the scheme of things, you know, is manageable on that, as opposed –
- 357. MR CLIFTON-BROWN: So around about 10 per hour.
- 358. MR SMART: Yes, one every five minutes, something like that. That's right, sir. But we have to say we have got and of course material can go out to Rocky Lane, which is that way, so I think we have that flexibility.
- 359. MR MOULD QC (DfT): Can we then go to P14675 please? I just want to come back to the this just gives you a larger scale sense of the link road. So here is Frith Hill. Here is the B485 and there is the vent shaft site that you mentioned was the sole basis for HS2 construction traffic on the B485.

- 360. MR SMART: That's right.
- 361. MR MOULD QC (DfT): Here is the link road, and you can see on plan the basic construction elements of that road. It's largely in cutting, isn't it, as it goes up the hill?
- 362. MR SMART: Yes, this is cutting. There's a little bit filled in down here, but then that's pretty much cutting.
- 363. MR MOULD QC (DfT): These are the soil storage areas –
- 364. MR SMART: Yes.
- 365. MR MOULD QC (DfT): which you say will go to grass during the presence of the link road, before it's restored to the end of the construction. This facility here which is being pointed out just before one gets to the roundabout, what's that?
- 366. MR SMART: Well, that facility is there largely well, is the compound to build the link road.
- 367. MR MOULD QC (DfT): Right.
- 368. MR SMART: So one would imagine that during the vast majority of construction there would probably be some sort of facility there, because we would need to potentially have some sort of security on this, but, I mean, it would be a very, very small facility.
- 369. MR MOULD QC (DfT): Now, here is the junction that is the source of concern. It's an existing roundabout?
- 370. MR SMART: Yes.
- 371. MR MOULD QC (DfT): Right. Is there an arm to serve the creation of a link road on that junction already or not?
- 372. MR SMART: Well, I think we'd have to do some local remodelling to create that, but we believe that there is sufficient we can remodel it within the bounds of the highway.
- 373. MR MOULD QC (DfT): Yes. Have we looked at are we looking already at the

opportunities within the highway to improve the capacity of that roundabout?

374. MR SMART: Yes, we have. We looked at some schemes, and not necessarily as – you could look at signalisation, but we believe that isn't necessarily how it would be achieved. There might be potential to just put slips in etc. That would have to be agreed with Bucks but we believe there's the potential to do a number of things to improve that junction.

375. MR CLIFTON-BROWN: Could I just ask you there, I know we have visited that but not obviously looked at this in sufficient detail. Is there sufficient room with the land there that's available? I mean, one of the ways is to enlarge the roundabout and put slips in, as you've just said. Is there sufficient room in that land area to do that?

376. MR SMART: Subject to the highway authority etc we believe there is, sir, yes.

377. MR CLIFTON-BROWN: Thank you.

378. MR MOULD QC (DfT): And another option presumably that is available for consideration is – I don't think that is a signalised junction at the moment, is it?

379. MR SMART: No, it's not, and we would think that we might not have to go as far as that, but that's a matter for discussion with the highway authority.

380. MR MOULD QC (DfT): But you can see that were it the case that the – given that the main direction of travel from HS2 vehicles coming out of the link road and onto the highway is going to be northbound –

381. MR SMART: Correct.

382. MR MOULD QC (DfT): So you can see the concern that if there were a substantial volume at any given time of such traffic, particularly during the peak hours, of HS2 construction vehicles entering that junction and turning right, northwards along – northbound along the A413, that would – might provide – certainly provide a blocker to traffic which is trying to get out of the Great Missenden link and wanting to turn southwards into – towards London.

383. MR SMART: Yes.

- 384. MR MOULD QC (DfT): But presumably one obvious solution to that which would fall to be considered is whether one should signalise if nothing else signalise the entry onto that junction from the link road so as to enable so as to avoid excessive impact on those who are looking to get out of Great Missenden and southwards onto the A413 during peak hours of activity.
- 385. MR SMART: That would be one way of achieving it.
- 386. MR MOULD QC (DfT): Yes. And that's something which is presumably a matter to discuss with the county council as the highway authority.
- 387. MR SMART: Correct, yes.
- 388. MR MOULD QC (DfT): And this one of the one of a number of junctions on the A413 that we have identified in assurances that we have just offered to Buckinghamshire County Council for further review in relation to their capacity to accommodate HS2 vehicles into the existing flows and a procedure for identifying any necessary improvements to those junctions that might be needed, either temporarily or permanently, to enable them to continue to function effectively whilst the HS2 construction traffic is using them.
- 389. MR SMART: That's correct.
- 390. MR MOULD QC (DfT): And just to remind ourselves, I'm sure that this is well in mind, but these are junctions, as I think the petitioners themselves alluded to a few moments ago, where there is already a good deal of stress during certain times of the day as a result of existing flows.
- 391. MR SMART: That's correct, yes.
- 392. MR MOULD QC (DfT): So there's some logic in the process that you've just described which is being which we've assured to Buckinghamshire County Council.
- 393. MR SMART: I believe so.
- 394. SIR PETER BOTTOMLEY: Are you going to also come onto the issue raised about the protection in case a vehicle comes off the road, whether –

- 395. MR MOULD QC (DfT): Indeed I am, and, Mr Smart, we might just come to that. The suggestion was, as I understand it, that those who children who are at school or going to school would be at risk from HS2 construction traffic using these junctions in the way that Sir Peter has just indicated. Can we just take that point with regard to the link road?
- 396. MR SMART: Yes.
- 397. MR MOULD QC (DfT): How likely is that to be a point of concern?
- 398. MR SMART: Well, as I understand it, the entrance to the school is effectively from somewhere down here, and we wouldn't be going down there, so I don't quite –
- 399. SIR PETER BOTTOMLEY: At the roundabout where you've got children playing just inside a post and rail fence where the skateboard park and with activity inside the land, whether it's sensible to have what I used to call Armco, but barriers.
- 400. MR SMART: Yes, barrier vehicle protection or whatever. Yes, if that was if there was a risk then of course we would put that in.
- 401. MR MOULD QC (DfT): In other words, is that a manageable –
- 402. MR SMART: Yes, it is manageable, and we would put the necessary protection measures in if that was the a risk that –
- 403. MR MOULD QC (DfT): I don't know if we can go back to the previous slide, which was 14673, but we may it's always easier if we can just picture where we are on the plan. Here is the link road junction that we've just been talking about. Here is the roundabout sorry, the junction serving the B485. I think the area the playing fields are, I think, most proximate to that junction, and I think you told the Committee that the duration of activity at the those construction works which are generating HGV activity in substantial numbers going through that junction is limited to about three months in duration. That's for the vent shaft, and of course there will be some construction traffic using the A413 generally, material suppliers etc.
- 404. MR SMART: Yes.
- 405. MR MOULD QC (DfT): But not diverting into and out of that the B485 in large

numbers –

406. MR SMART: No, that's true.

407. MR MOULD QC (DfT): – other than during that three month period.

408. MR SMART: That's correct.

409. MR MOULD QC (DfT): So the main area of movement off and on to the A413 in the area of the Great Missenden link is via the proposed link road, and that is an area where you've – where, as we've said, there's a commitment to examine – to investigate the capacity of that junction. I think also there's a commitment to investigate highway safety at key junctions as well, isn't there?

410. MR SMART: That's right.

411. MR MOULD QC (DfT): Yes.

412. MR SMART: Yes.

413. MR MOULD QC (DfT): So these are all matters for which there's a process.

414. MR SMART: Correct.

415. MR MOULD QC (DfT): The question then arises as to if that – if you assume that those processes take their course and management measures are installed and we bear in mind, as we saw yesterday, the levels – the relative levels of HS2 traffic that are being introduced into the existing flows, some 350 odd HS2 vehicles as against flows each way – as against flows of I think it was about 8,300 each way on a daily basis, whether there's any material advantage in terms of the operation of the highway, both in capacity and safety terms, in selecting a link road solution further to the north at Leather Lane as compared to that which is set out in the Bill. Is there any material advantage in terms of the operation of the highway?

416. MR SMART: Not to my mind, because remodelling the roundabout that's already there is much easier to achieve without a disruption. If you create – if we move to Leather Lane we would have to create a roundabout. You've then got the disruption of creating that and then you've got another roundabout, which will be a permanent

feature. If it weren't to be another – to stay there, you've then got the disruption while you take the roundabout out. So, I mean, I don't think – and then of course I have said it but just to be clear, we would then have increased traffic on Frith Hill, because we wouldn't be able to use the link road for the auto-transformers and all the other tunnel portal building, so no I don't think it makes sense.

417. MR MOULD QC (DfT): So no material advantage in highway terms. I think you've mentioned that our proposal would be to manage the capacity of an existing roundabout, whereas the alternative would almost certainly involve the creation of a wholly new junction on the A413, which is already – where the junctions are already at stress, yes. And I think you've made the point through comparing the – what is needed in order to construct these two facilities, one our proposal at – as shown on the plan here, and the alternative in the vicinity of Leather Lane, that in terms of visual impact you can expect that the visual impact whilst those facilities exist is going to be much of a muchness.

418. MR SMART: I believe so.

419. MR MOULD QC (DfT): Yes. And you've also pointed out that there are some engineering – there are some engineering and operational – sorry, when I say operational I mean construction, in terms of the construction of the railway. You have some concerns about – which lead you to the view that the alternative proposal at Leather Lane is to some degree suboptimal to the proposal that we have put in.

420. MR SMART: Yes. I mean, I think the Leather Lane proposal would probably need – apart from an embankment of around about five metres high and 300 metres long – now, if we couldn't – the material, we couldn't get that out of the rest of the – we've got to get it there, so there's other, you know... So I think it's just suboptimal.

421. MR MOULD QC (DfT): I think we heard yesterday that the owner of – the farmer who owns the land at Leather Lane that this alternative would have to go through, he said I think yesterday that he would petition if that were –

422. MR SMART: He did say that, yes.

423. MR MOULD QC (DfT): And we know of course that there is a petition in

relation to the current – the landowner in relation to the current proposal, which I – in respect of which I believe we're in negotiation, but that as well seems not to be an obvious point of distinction between the two. Mr Smart, have we covered the points you wanted to make in relation to this issue?

- 424. MR SMART: Yes.
- 425. MR MOULD QC (DfT): Thank you.
- 426. MR BURTON: Right. Mr Smart, hello. Can we stay on your screen with this 14673 please, but perhaps if the Committee and Mr Smart, if you don't have our slides I'm very happy to hand you our pack, because I'd like would you like that pack?
- 427. MR SMART: I haven't got all on the screen.
- 428. MR BURTON: Well, let's there we go. It's unmarked. It's what was handed to me by the clerk, so perhaps if the Committee could and you, whilst we're looking at this, turn up our slide 5 please. We're very anxious to make sure that this is clear and the Committee is no, no, leave the leave the screen where it I mean, I'd like to leave the screen on this slide, 1673, but allow looking at the hard copy of our own slide. Now, you said, Mr Smart, that the B485 roundabout was the one that was closest to the school, and I think you later referred to the school entrance as well in that context. Now, you've –
- 429. MR SMART: Well, I'm not sure which one's closest to the school, but –
- 430. MR BURTON: You understand, I hope –
- 431. MR SMART: The school was, yes.
- 432. MR BURTON: that the school playing fields, which there seemed to be some mistake about, extend all but to the so-called link road roundabout. That is understood, is it?
- 433. MR SMART: Yes.
- 434. MR BURTON: Right, okay. And it's also understood that the woodland play area that Mrs Thompson showed the Committee is I mean, that's hard up by the skate

park, which is itself by the link road roundabout. That is understood.

- 435. MR MOULD QC (DfT): I wonder if we could put up A19355 so we can just see precisely what the relationship is. There we go. I'm sure Mr Burton is –
- 436. MR BURTON: Well, this is the page I'm talking to.
- 437. MR MOULD QC (DfT): Yes, well, as you –
- 438. MR BURTON: Yes.
- 439. MR MOULD QC (DfT): As we can see there, there's the link road roundabout, there's the Chesham Road roundabout and here are the playing fields here.
- 440. MR BURTON: Okay. So obviously, Mr Smart, when we're talking about what the school is concerned about firstly and the parish council are concerned about, we've got these areas where children, as it were, play under the parish council's wing and play under the school's wing, which are around the so-called link road roundabout, okay. That's clear?
- 441. MR SMART: Mm-hmm.
- 442. MR BURTON: And when the Committee ask themselves about children going to and from these facilities, the Committee of course need to know not just where the, as it were, entrance to the school is, but they need to know the routes that children tend to take. And you wouldn't dispute, would you, but I'll need to check this –
- 443. SIR PETER BOTTOMLEY: If you could speed this up a bit, James.
- 444. MR BURTON: Yes, Sir Peter. The photograph that Mrs Thomson showed, do you recall, which is further on in the slides, we can get it up now, children walking on the narrow grass verge, slide 11 of our presentation, and she explained this is off the link road roundabout.
- 445. MR SMART: Yes, I understand.
- 446. MR BURTON: Okay, that is understood. I was concerned that there appeared to be some concentration on the B485 roundabout as being the one that really mattered.

- 447. MR SMART: No, I completely understand.
- 448. MR BURTON: As a general principle, if one can put to one side the convenience and what is desirable for the promoter in terms of building the railway, dropping –
- 449. SIR PETER BOTTOMLEY: The effectiveness of the arrangements is probably a more neutral way.
- 450. MR BURTON: The effectiveness of the arrangements Sir Peter, I'm grateful if we put that to one side, as a general principle dropping the haul road or link road down into a population centre as opposed to dropping it down outside a population centre, so far as the human population concerned, is less desirable. Would you agree as a general principle?
- 451. MR SMART: Well, I think yes it is slightly less desirable from the point of view that you've got children here and you haven't at Leather Lane. The point is that you can make sure that there are safe that is as you've already heard from Mr Mould in the figures, that is a roundabout that currently takes HGVs, and yes we are we are adding to that for a period of time. I do understand that, and I completely get the fact of the paramount safety of the children, but my point is that we can ensure that it's safely done. That's what I'm saying, because you have got HGVs using that roundabout whether we are there or not.
- 452. MR BURTON: You've referred to possible enlargement of the roundabout.
- 453. MR SMART: Yes.
- 454. MR BURTON: And you've referred to potential armoured barriers. Now, in relation to the latter of course one of the concerns of the Committee is visual impact, and clearly armoured barriers where presently there's a post and rail attractive post and rail fence arrangement –
- 455. SIR PETER BOTTOMLEY: We're getting into the sort of detail which is not going to be helpful, and we're perfectly aware that there are two issues. One is well, three. One is how you build the project, the second is safety and the third is an environmental what it looks like, and we know that two of them clash and sometimes three do.

- 456. MR BURTON: Yes. Sir Peter, I'm just building up to my question. Thank you. In relation –
- 457. SIR PETER BOTTOMLEY: Well, after a year and a half and we much prefer it when people get there rather faster.
- 458. MR BURTON: In relation to the enlargement, Mr Smart, clearly enlarging the roundabout is not going to result in the traffic being further away from the facilities.
- 459. MR SMART: Well, I mean, one could question really how I think children on a roundabout is a risk. We would look at remodelling that and clearly we would have in mind the position of the school and children on the roundabout. There's a potential we can improve the situation, and we would certainly look at reducing risk by using the thing that Sir Peter called it Armco but I would call it vehicle protection. I take your point about the visual impact of that, but, of course, whilst that might improve things generally, if that were a problem, we could remove it afterwards. But what I'm saying is that whatever we did here would be with agreement with the highway authority and would have to be safe, not just of course for traffic, but for the people that are potentially in and around that roundabout.
- 460. MR BURTON: Now, if we go back and just consider the question that Mr Clifton-Brown asked you about potential advantages of a link road, if we perhaps go back to your 14673, promoter's slide, just so we have that up in front of us again potential advantages of having the link road, so this high-quality haul road, further north. Now, of course, we're not being specific, because, in a sense, it's not really for us, as to where further north it should be, but, if the issue which you've raised is about the type of vehicles that you'd need to get in and out for the fit out and you need a high-quality road for that, then presumably a solution that would accommodate a haul road up here, further north, rather than where it is, dropping down into Great Missenden, would be that you would make the haul road running along, as it were, the top of the trace, higher quality.
- 461. MR SMART: Well, there are problems with that, because there are blockers, and then of course you've got to get down into a deep cutting. So I'm not saying it's impossible to engineer a solution like that, but what you're doing is prolonging

construction activity in that area and creating more need for construction traffic, so it's suboptimal.

- 462. In fact, when we're doing the fit out here you couldn't get to there, so my contention is actually if we don't come off here potentially the school would face more HGVs through here. We'd have to then get to this point potentially via Frith Hill, so we'd be going along here, actually past the school. I understand I completely get your point about the roundabout, but we are going off rather than along and up here, so we would pass potentially further past the school's playing grounds.
- 463. MR BURTON: Yes. What you wouldn't have, of course, is you wouldn't have lorries coming down the hill and turning right and well, we won't go back to the photograph of the verge –
- 464. MR SMART: No, I understand.
- 465. MR BURTON: but that you would not have.
- 466. MR SMART: But you would have them coming down here and turning right, so –
- 467. SIR PETER BOTTOMLEY: Do we anticipate this coming up again this afternoon with Buckinghamshire?
- 468. MR MOULD QC (DfT): We do. The only caveat is that we are talking to Buckinghamshire, but at the moment they're due to appear this afternoon on this issue.
- 469. MR CLIFTON-BROWN: Can I ask a question? I think the main concern, apart from safety, which is obviously the paramount concern, of everybody of motorists, of the children and everything else is the length of queues, the ease of passing through that roundabout. Is it your view, as an engineer of considerable experience, that, once you've remodelled that roundabout, the queues even allowing for your extra HS2 HGVs will be no worse, and might even be better, than it is at the moment?
- 470. MR SMART: I would have to caveat that, sir. There's a potential for that if we can remodel that roundabout, and certainly, you know, the vast majority of the wagons that we'll be using is under that restricted period of time, which I said is about when

we're doing the mass haul, which is around about 18 months to two years. And after that, then, yes, there might be a legacy benefit, if you like, of that roundabout, because, as you've heard, there was a problem on this road for some considerable time anyway, so we know that, and then there is the potential for us to improve it. Of course, whether that would actually be better for that 18 months, I would like to say it's not significantly worse, but there is a potential for it to be better.

- 471. SIR PETER BOTTOMLEY: And, just picking up the point from the traffic doctor, the issue about whether some other places have or haven't been assessed is that material to all this?
- 472. MR SMART: Well, I think probably less material to the link road, because that's a localised thing, but certainly, in terms of traffic on the road generally, there is a long list of junctions that we are assessing and looking at with Buckinghamshire. So I think probably less material for this particular link road, but, in terms of it as it's all part of the network, anything that can be done generally, of course, is better.
- 473. SIR PETER BOTTOMLEY: So the fact there may be one or two which haven't been assessed yet doesn't matter, either to the project or for local people or a particular set of schools.
- 474. MR SMART: Yes, because I think the thing that's causing the main concern here is the mass haul, and that is a localised loop, if you like, between Rocky, the link road and Nash Lee, and that is a very localised traffic route.
- 475. SIR PETER BOTTOMLEY: I think we're getting pretty close to hearing as much as we need to hear from both sides on this.
- 476. MR BURTON: Yes. Thank you, Mr Smart. I've no further questions for Mr Smart. I'm grateful. Obviously nothing that we say would seek to, well, queer the pitch, I suppose, for the county council.
- 477. SIR PETER BOTTOMLEY: We aren't guaranteeing they're going to come. They may settle, but I think we've got the points that have been made.
- 478. MR BURTON: Yes, sir. Obviously, as I say, we did listen quite carefully to what the promoter said yesterday, which was, 'We'll be responding to this after the county

council.' So it's very nice to have Mr Smart here.

479. SIR PETER BOTTOMLEY: The Chairman may let the traffic doctor say one sentence.

480. DR CONBOY: May I just make three remarks? Admittedly, it's more difficult to get to the portal from Leather Lane, but it's no harder than it would've been to get to Mantle's Wood from Hyde Lane, so if they put in the right sort of road it can be done. Secondly, our ask is that what he's calling a link road be moved away from the link road roundabout, confusing as it may be. Leather Lane is not the only option – there's an overbridge, accommodation bridge – it could be done there, so that should be looked at. And it appears, when you get down to it, we have an option of using a new roundabout or one that's already stressed. That's what it comes down to, and the local opinion seems to be in favour of a new roundabout.

481. SIR PETER BOTTOMLEY: That'll be in the transcript

482. DR CONBOY: Yes.

483. CHAIR: Any other contributions? Have we done? I think I have.

484. MRS HEWETT: Thank you.

485. MR BURTON: Yes, thank you. So, just very, very – in one sentence, sir – so far as this haul road, link road, is concerned, the choice does seem to be what is better for the operational needs of the railway and what is clearly better for the local people, and we very much hope that you favour, ultimately, the local population here and favour a movement –

486. SIR PETER BOTTOMLEY: That, of course, is not unchallenged by the other side.

487. MR BURTON: No, no, it's not – well, not unchallenged, but you know our case, and obviously we hope our movement will find favour with you.

488. MS HEWETT: Thank you very much.

489. CHAIR: Thank you for that. Thank you. Now we're going to move to 58 AP4