

Our Ref: 784-B030858

Date: 29 July 2021

Mr S Blacker
SRE Associates

By email

Dear Simon

BELVEDERE, CLEATOR MOOR – ACCESS APPRAISAL

As requested, we have undertaken the necessary work to provide advice on access to your client's property at Belvedere, Wath Brow, Cleator Moor. The proposal is to construct one additional dwelling house in the grounds of the existing farm, utilising an existing access close to a bend on the C4017. An application was submitted (ref number 4/21/2202/001) to the LPA which received a no objection response from Cumbria Highways. The consultation response noted that the existing access would need to be widened to at least 4.1m for the first 10m so that two cars can pass without either having to wait on the public highway. It is noted that no visibility splays were provided with the application, therefore 215m has been requested as the C4017 is a national speed limit road. There is a condition included in the permission which states:

“The development shall not commence until visibility splays providing clear visibility of 215 metres measured 2.4 metres down the centre of the access road and the nearside channel line of the carriageway edge have been provided at the junction of the access road with the county highway.”

Due to the width and alignment of the road, the presence of a footway, and the location of the access close to a bend drivers proceed at speeds considerably lower than the national speed limit, therefore 215m visibility splays are not appropriate. A speed survey has been undertaken and this letter summarises the results and calculates the visibility splays, thereby providing information to amend the condition.

The site is located to the east of Cleator Moor village, as shown in Extract 1 below.



Extract 1: Google Maps – Site Location

The site has an existing access from the C4017, as shown in Extract 2 below. The C4017 runs east from a priority junction with the A5086 Trumpet Road in Cleator Moor. It serves some residential properties, a number of farms and a few rural lanes, it also provides a connection to the nearby village of Ennerdale Bridge. In the vicinity of the site it is approx. 5.5m wide with a 1.8m footway on the southern side.



Extract 2: Google Streetview – Existing Access

A traffic survey was undertaken at the access by Traffic Sense Ltd. An Automatic Traffic Counter (ATC) was installed and recorded a full week of data between 20th and 26th July 2021, inclusive of both. The full ATC report is attached. The ATC recorded average 24-hour 85th percentile speeds of:

- 32mph westbound (travelling uphill)
- 31mph eastbound (travelling downhill)

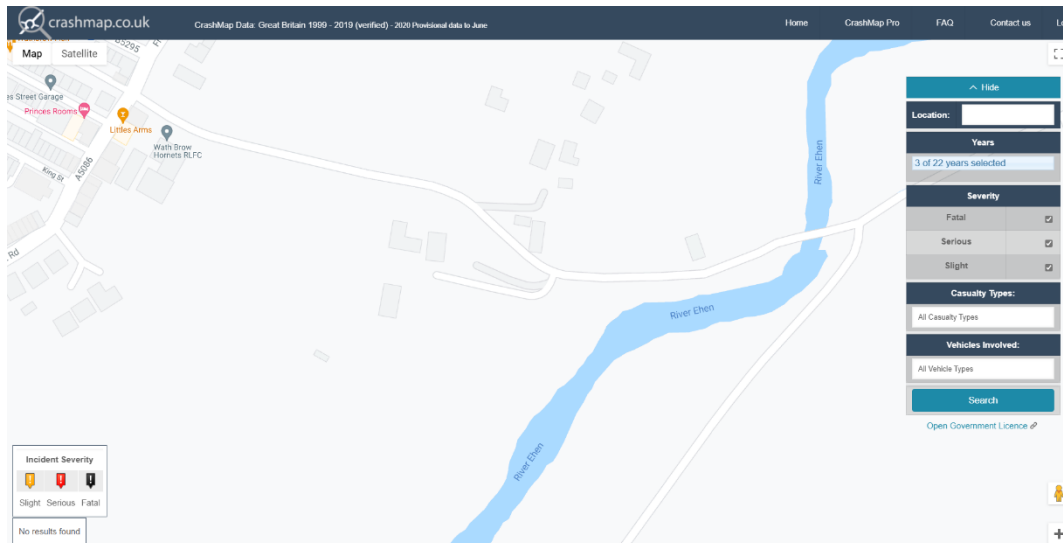
As the 85th percentile speeds are below 37mph, Manual for Streets has been used for determining the recommended visibility splays. There is an approx. 7% gradient on the road, this has been taken into account in the calculations. From a 2.4m set-back distance, the recommended visibility splays are:

- 41.1m to the left (looking downhill)
- 46.2m to the right (looking uphill)

Traffic volumes were recorded, with an average daily of 1531 vehicles, and an average of 60 vehicles in the AM peak hours. Using TRICS, 1 dwelling house would be expected at most to generate 1 trip in each network peak hour. This increase is immaterial and can be easily accommodated on the local road network.

The MfS recommended visibility splays are deliverable at the existing access, from a 2.4m set-back distance, as shown on the attached Tetra Tech Drawing 784-B030858/C001. The splays can be delivered wholly within first party land with the removal/relocation of the current boundary treatments.

From a review of Crashmap, it can be seen that the area local to the site access has a very good safety record. There have been no personal injury accidents reported in the area in the most recent 3-year period available, 2018-2020 inclusive, as shown in Extract 3 below.



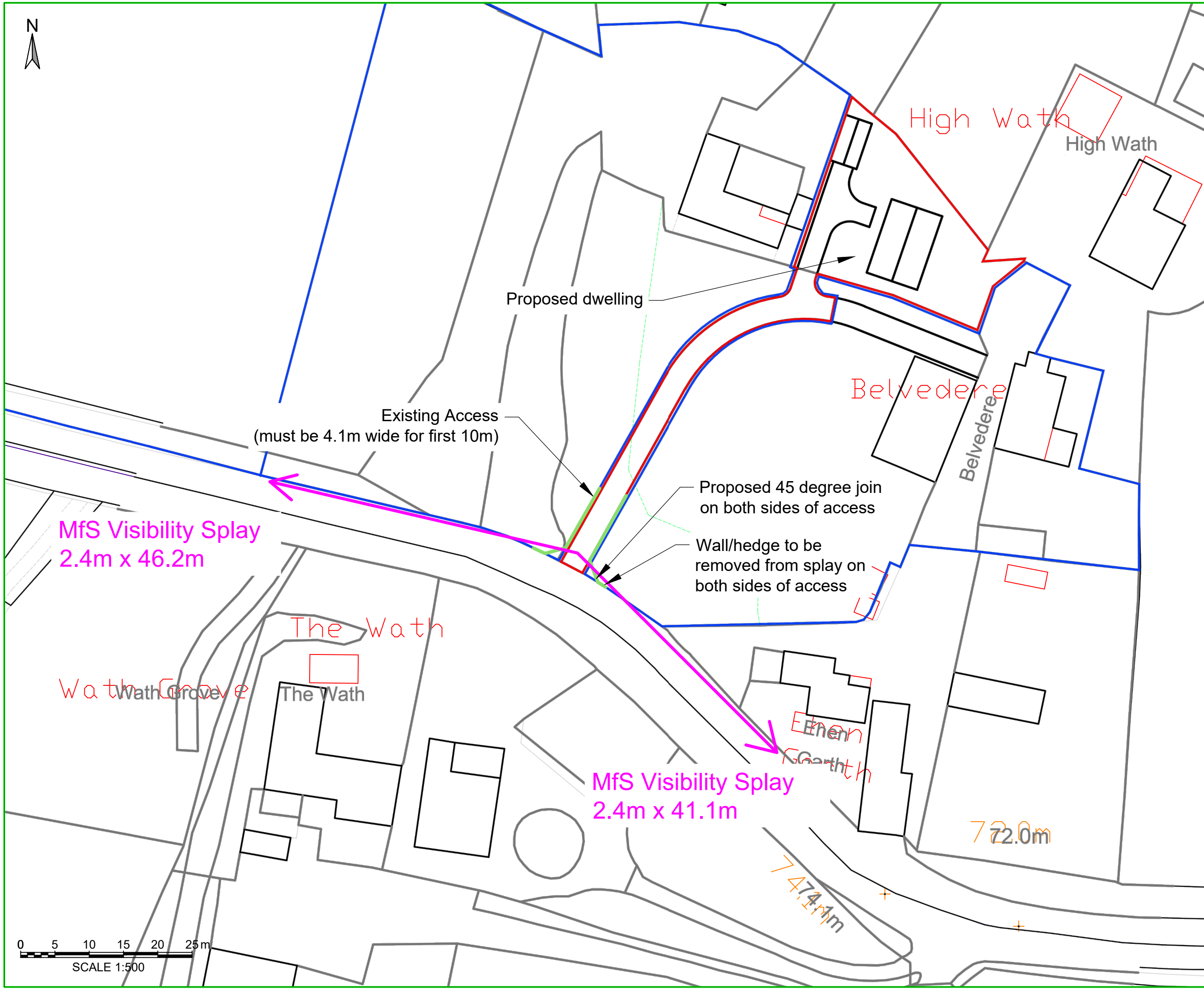
Extract 3: Crashmap – Reported Accidents

In conclusion, the appropriate MfS visibility splays for the recorded 85th percentile traffic speeds of 32mph and 31mph are calculated at 41.1m and 46.2m, taking account of the gradient. These can be provided from a 2.4m set-back distance within the first party land at the existing access; the planning condition should be amended accordingly. The existing access will be widened as per the consultation response.

Yours sincerely

Eleanor Bunn
Transport Planner
 For and on behalf of TetraTech Europe

Enc ATC results
 Tetra Tech Drawing 784-B030858/C001



- KEY**
- First Party Land
 - Red Line Boundary
 - Proposed Access Amendments
 - MfS Visibility Splays

Rev	Description	Date	By	App
01	FIRST ISSUE	29.07.2021	EB	AA, NB

Issuing Office
Tetra Tech Cockerthorpe
 Lakeland Business Park, Lamplugh Road,
 Cockerthorpe, Cumbria, United Kingdom,
 CA13 9QT
 Tel: +44 (0)19 0089 8600
 www.tetrateteurope.com



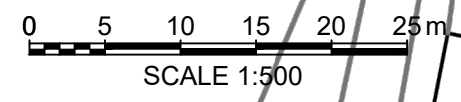
Client
SRE ASSOCIATES
 MR G COAN

Project Name
PROPOSED RESIDENTIAL DWELLING
BELVEDERE
CLEATOR MOOR

Sheet Title
PROPOSED ACCESS ARRANGEMENTS
& VISIBILITY SPLAYS

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @	Stability
784-B030858	EB	Jul '21	AA	Jul '21	NB	Jul '21	A3 1:500	S0

Client Project Number: - TTE - 00 - XX - DR - O - C001



Automatic Classified Counts

LOCATION: CLEATOR
Direction : WESTBOUND

Table with columns for Saturday 24/07/2021, VEHICLE CLASSIFICATION (1-13), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

Direction : EASTBOUND

Table with columns for Saturday 24/07/2021, VEHICLE CLASSIFICATION (1-13), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

Automatic Classified Counts

LOCATION: CLEATOR
Direction : WESTBOUND

Table with columns for Sunday 25/07/2021, VEHICLE CLASSIFICATION (1-13), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

Direction : EASTBOUND

Table with columns for Sunday 25/07/2021, VEHICLE CLASSIFICATION (1-13), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

Automatic Classified Counts

LOCATION: CLEATOR
Direction : WESTBOUND

Table with columns for Monday 26/07/2021, VEHICLE CLASSIFICATION (1-13), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

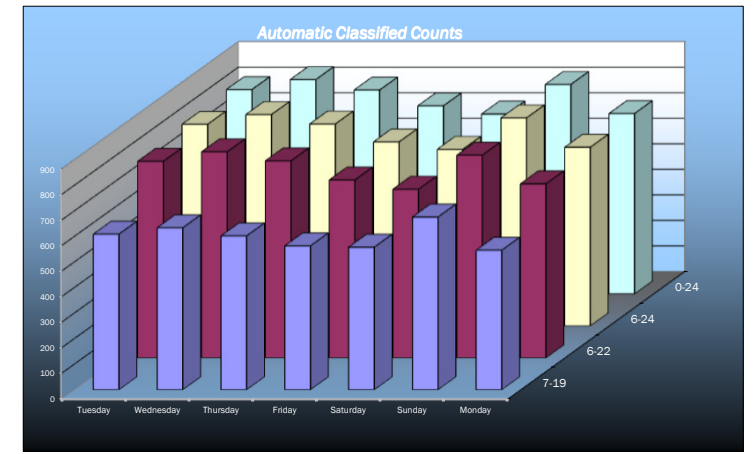
Direction : EASTBOUND

Table with columns for Monday 26/07/2021, VEHICLE CLASSIFICATION (1-13), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

Automatic Classified Counts

LOCATION: CLEATOR
Direction : WESTBOUND

Table with columns for VEHICLE FLOWS (Tuesday 20-Jul-21 to Monday 26-Jul-21), WEEKDAY AVERAGE, and WEEK AVERAGE. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.



Automatic Classified Counts

LOCATION: CLEATOR
Direction : WESTBOUND

Table with columns for Saturday 24/07/2021, VEHICLE SPEED (MPH) (0-10 to 81-120), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

Direction : EASTBOUND

Table with columns for Saturday 24/07/2021, VEHICLE SPEED (MPH) (0-10 to 81-120), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

Automatic Classified Counts

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Direction : WESTBOUND

Table with columns for Sunday 25/07/2021, VEHICLE SPEED (MPH) (0-10 to 81-120), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

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Automatic Classified Counts

LOCATION: CLEATOR
Direction : WESTBOUND

Table with columns for Monday 26/07/2021, VEHICLE SPEED (MPH) (0-10 to 81-120), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

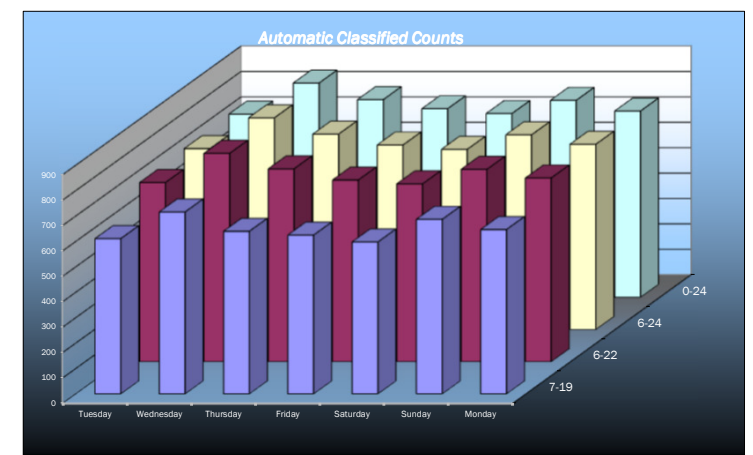
Direction : EASTBOUND

Table with columns for Monday 26/07/2021, VEHICLE SPEED (MPH) (0-10 to 81-120), and TOTAL. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.

Automatic Classified Counts

LOCATION: CLEATOR
Direction : EASTBOUND

Table with columns for EASTBOUND (Tuesday 20-Jul-21 to Monday 26-Jul-21), WEEKDAY AVERAGE, and WEEK AVERAGE. Includes summary rows for 7-19, 6-22, 6-24, and 0-24.



Automatic Classified Counts

LOCATION: CLEATOR

Direction : WESTBOUND

Table with columns: Hr Ending, Tuesday 20-Jul-21, Wednesday 21-Jul-21, Thursday 22-Jul-21, Friday 23-Jul-21, Saturday 24-Jul-21, Sunday 25-Jul-21, Monday 26-Jul-21. Rows show average speeds for various time intervals.

Table with columns: Hr Ending, Tuesday 20-Jul-21, Wednesday 21-Jul-21, Thursday 22-Jul-21, Friday 23-Jul-21, Saturday 24-Jul-21, Sunday 25-Jul-21, Monday 26-Jul-21. Rows show 85th percentile speeds.

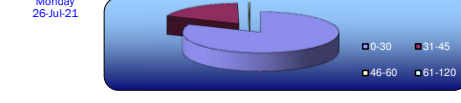
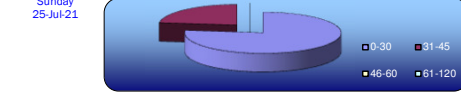
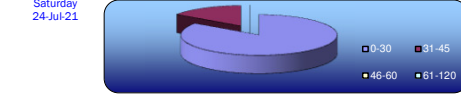
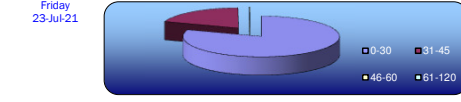
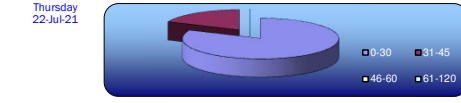
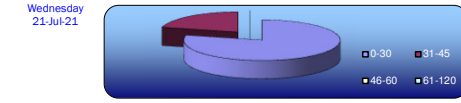
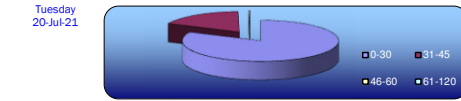
Summary table: 7 DAY AVERAGE SPEED (26.8), 7 DAY AVERAGE 85th PERCENTILE (31.9), 8 DAY OFF PEAK AVERAGE SPEED (25.9), 8 DAY OFF PEAK AVERAGE 85th PERCENTILE (31.1).

Automatic Classified Counts

LOCATION: CLEATOR

Direction : WESTBOUND

Table with columns: SPEED (MPH), Tuesday 20-Jul-21, Wednesday 21-Jul-21, Thursday 22-Jul-21, Friday 23-Jul-21, Saturday 24-Jul-21, Sunday 25-Jul-21, Monday 26-Jul-21. Rows show speed summary for 0-30, 31-45, 46-60, 61-120 mph.

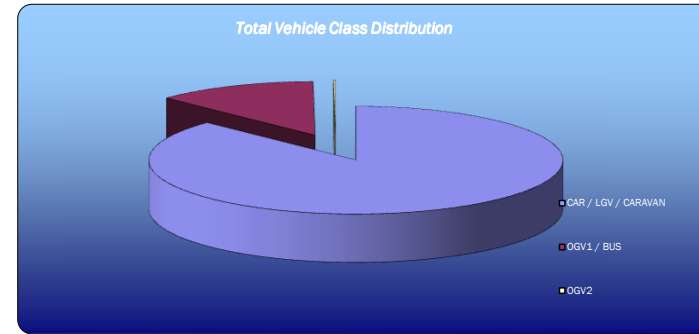


Automatic Classified Counts

LOCATION: CLEATOR

Direction : WESTBOUND

Table with columns: VEHICLE CLASSIFICATION, CAR / LGV / CARAVAN, OGv1 / BUS, OGv2, TOTAL. Rows show vehicle counts for various time intervals.



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Automatic Classified Counts

LOCATION: CLEATOR

Direction : EASTBOUND

Table with columns: Hr Ending, Tuesday 20-Jul-21, Wednesday 21-Jul-21, Thursday 22-Jul-21, Friday 23-Jul-21, Saturday 24-Jul-21, Sunday 25-Jul-21, Monday 26-Jul-21. Rows show average speeds for various time intervals.

Table with columns: Hr Ending, Tuesday 20-Jul-21, Wednesday 21-Jul-21, Thursday 22-Jul-21, Friday 23-Jul-21, Saturday 24-Jul-21, Sunday 25-Jul-21, Monday 26-Jul-21. Rows show 85th percentile speeds.

Summary table: 7 DAY AVERAGE SPEED (25.0), 7 DAY AVERAGE 85th PERCENTILE (30.7), 8 DAY OFF PEAK AVERAGE SPEED (24.4), 8 DAY OFF PEAK AVERAGE 85th PERCENTILE (29.5).

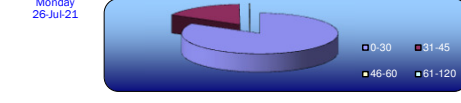
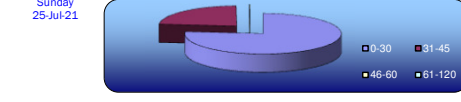
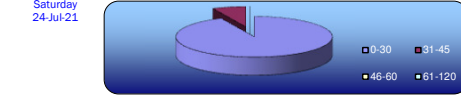
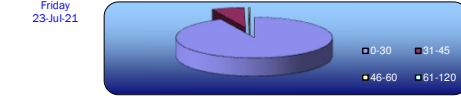
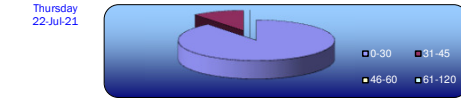
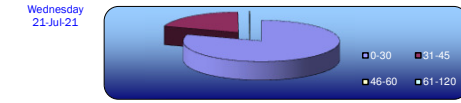
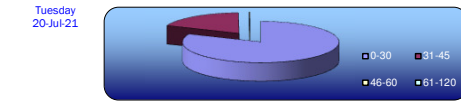
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Automatic Classified Counts

LOCATION: CLEATOR

Direction : EASTBOUND

Table with columns: SPEED (MPH), Tuesday 20-Jul-21, Wednesday 21-Jul-21, Thursday 22-Jul-21, Friday 23-Jul-21, Saturday 24-Jul-21, Sunday 25-Jul-21, Monday 26-Jul-21. Rows show speed summary for 0-30, 31-45, 46-60, 61-120 mph.



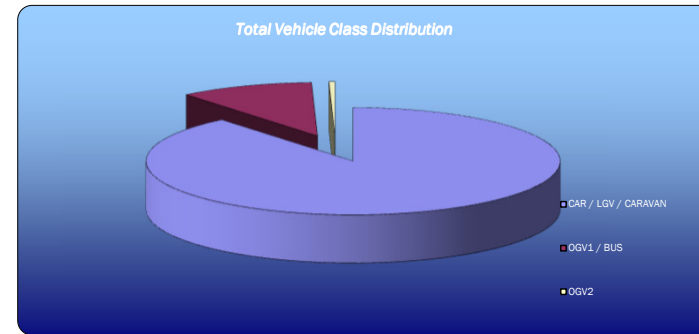
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Automatic Classified Counts

LOCATION: CLEATOR

Direction : EASTBOUND

Table with columns: VEHICLE CLASSIFICATION, CAR / LGV / CARAVAN, OGv1 / BUS, OGv2, TOTAL. Rows show vehicle counts for various time intervals.



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