

| Job Name:    | Chichester Local Plan           |  |  |  |
|--------------|---------------------------------|--|--|--|
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| Note No:     | TN HCC01 v3                     |  |  |  |
| Date:        | 29 January 2024                 |  |  |  |
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| Subject:     | Impacts on A259 in Hampshire v2 |  |  |  |

#### Introduction

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This note sets out further information relating to the impacts of the Chichester Local Plan on the A259 within Hampshire. The note considers the following:

- Flows on A259 within Hampshire
  - Reassignment of Traffic resulting from Local Plan traffic and the addition of mitigation packages
    - The full mitigation package proposed for the Local Plan which includes a series of junction improvements along the A27, Stockbridge Link Road and highway mitigation within Chichester city.
    - o Just the Fishbourne and Bognor Road Roundabout mitigation schemes
- Impacts at the A259/North Street Junction in Emsworth and the A27 Warblington Interchange.

The information provided is taken from the 2039 models which represents the end of the plan period.

#### **Trip Rate Assumptions**

Assumed trip rates used in all developments were reported in Section 4.4 of the Local Plan Transport Assessment (TA). The trip rates used in the study were agreed by stakeholders including Chichester District Council (CDC), West Sussex County Council (WSCC) and National Highways (NH).

The agreed residential trip rates were for mixed private/affordable housing, and it was agreed that they would be used as global rates for suburban and out of town sites for the study. Residential trip rates are in units of trips/dwelling while employment trip rates are in units of trips/100 square metres of gross floor area.

| Peak | Trip Rate ID                   | Туре        | Arrivals | Departures | Total |
|------|--------------------------------|-------------|----------|------------|-------|
| AM   | Residential                    | Residential | 0.1200   | 0.3520     | 0.472 |
| AM   | Warehousing<br>(Commercial)    | Employment  | 0.168    | 0.076      | 0.244 |
| AM   | <b>Business Park</b>           | Employment  | 1.686    | 0.169      | 1.855 |
| AM   | Fruit and<br>Vegetable<br>Farm | Employment  | 0.06     | 0.001      | 0.061 |
| IP   | Residential                    | Residential | 0.16500  | 0.16500    | 0.33  |
| IP   | Warehousing<br>(Commercial)    | Employment  | 0.87     | 0.093      | 0.963 |
| IP   | Business Park                  | Employment  | 0.254    | 0.310      | 0.564 |

#### Table 1 Assumed Trip Rates (Residential and Employment)



| Peak | Trip Rate ID                   | Туре        | Arrivals | Departures | Total |
|------|--------------------------------|-------------|----------|------------|-------|
| IP   | Fruit and<br>Vegetable<br>Farm | Employment  | 0.005    | 0.004      | 0.009 |
| PM   | Residential                    | Residential | 0.31800  | 0.15900    | 0.477 |
| PM   | Warehousing<br>(Commercial)    | Employment  | 0.055    | 0.161      | 0.216 |
| PM   | <b>Business</b> Park           | Employment  | 0.124    | 1.273      | 1.397 |
| PM   | Fruit and<br>Vegetable<br>Farm | Employment  | 0.003    | 0.006      | 0.009 |

#### Flows on A259

Flow difference plots have been provided within **Appendix A**. The plots show differences in Passenger Car Units (PCU) with blue indicating a reduction in flow and green an increase in flows. A PCU reflects the fact that different vehicle types take up different amounts of road space. The Chichester model assumes all light vehicles are 1 PCU and Heavy Goods vehicles equivalent to 2.3 PCU's.

The modelling indicates that flows on the A259 increase when the Chichester Local Plan traffic is added, however the flows fall back to at least the Reference Case traffic levels, once the Fishbourne and Bognor Mitigation schemes and the full Mitigation schemes are added into the modelling.

A summary of the key findings is provided below.

#### AM Peak

- The *LP without mitigation* when compared to the *Reference Case* shows an increase in actual flow on the A259 in both directions with a two-way flow increase of roughly 190 PCUs. However, on the A259 between Broad Road and B2146, there are decreases in the eastbound direction of approximately 32 PCUs. The A27 has a decrease of 74 PCUs westbound and an increase of 71PCUs eastbound.
- When the *LP with mitigation* (Fishbourne and Bognor Road Roundabout only) is compared to the *Reference Case* the A259 has a decrease in westbound direction of averagely 300 PCUs and an increase of averagely 400 PCUs in eastbound direction. On A27, there is a two-way flow of approximately 470 PCUs.
- When the *LP with mitigation* (Full STN Mitigation) is compared to the *Reference Case* the A259 has a decrease in westbound direction of averagely 300 PCUs and an increase of averagely 350 PCUs in eastbound direction. On A27, there is a two-way flow of approximately 750 PCUs.
- When the *LP with mitigation* (Fishbourne and Bognor Road Roundabout only) is compared to the *LP without mitigation* the A259 has a decrease in westbound direction of averagely 360 PCUs and an increase of averagely 300 PCUs in eastbound direction. On A27, there is a two-way flow of approximately 480 PCUs.
- When the *LP with mitigation* (Full STN Mitigation) is compared to the *LP without mitigation* the A259 has a decrease in westbound direction of averagely 320 PCUs and an increase of averagely 250 PCUs in eastbound direction. On A27, there is a two-way flow of approximately 700 PCUs.

#### PM Peak

- The PM shows an almost identical pattern to that of the AM with only the degree of changes being different.
- The *LP without mitigation* increases the two-way flow on the A259 by roughly 230 PCUs when compared to the *Reference Case*.
- The westbound decrease on the A27 is 148 PCUs and a 18 PCUs increase eastbound.



- *With the mitigation* (Fishbourne and Bognor Only) included the A259 still has a slight increase eastbound of 103 PCUs but now has a decrease of 132 PCUs westbound when compared to the *Reference Case*. On the A27, there is a two-way flow increase of roughly 264 PCUs.
- When comparing *LP with mitigation* (Full STN mitigation) to *Reference Case*, there is a decrease of 211 PCUs in the westbound direction and an increase of 108 PCUs in the eastbound direction. The A27 increases by 463 PCUs in the westbound direction and a decrease of 61 PCUs in the eastbound direction.
- When comparing the *LP with mitigation* (Fishbourne and Bognor Only) to *LP without mitigation,* westbound flows on the A259 decrease by 274 PCUs and increase by 9 PCUs in the eastbound direction. The A27 increases westbound by 357 PCUs and eastbound has a decrease of 38PCUs.
- When comparing the *LP with mitigation* (Full STN mitigation) to *LP without mitigation,* westbound flows on the A259 decrease by 353 PCUs and increase by 14 PCUs in the eastbound direction. The A27 increases westbound by 611PCUs and eastbound has a decrease of 79 PCUs.

#### Flows on Emsworth Common Road

• Flows on Emsworth Common Road increase slightly in the PM peak, but decrease in the AM peak, as shown in the table below.

| Direction | Refe | rence | LP + Fishbourne and Bognor |      |  |
|-----------|------|-------|----------------------------|------|--|
|           | AM   | PM    | AM                         | PM   |  |
| EB        | 879  | 370   | 596                        | 404  |  |
| WB        | 728  | 964   | 878                        | 1044 |  |
| Two-Way   | 1607 | 1334  | 1474                       | 1448 |  |

#### Table 2 A259 Flows

(Flows in PCU's)

#### Reassignment of Traffic from A259

To inform reassignment impacts seen within the modelling, a series of select link analysis plots have been produced and these are provided within **Appendix B**. The select link analysis has been undertaken on two screenlines, one to the east, nearer Chichester, and one to the west, just to the west of Southbourne.

The commentary below is provided to assist in the understanding of the impacts.

#### Eastern Screenline

- More trips that are seen crossing the eastern screenline in the westbound direction are seen on the A259 than those travelling eastbound i.e. there are very few A259 through trips from Hampshire to Chichester eastbound.
- Generally for vehicles crossing the eastern screenline, flows on the A259 in Hampshire increase slightly in both eastbound and westbound direction, when comparing the Reference Case and the Local Plan with no mitigation, however this decreases markedly when the Fishbourne mitigation scheme is introduced. This occurs in both the AM and PM peaks.
- Trips on Emsworth Common Road do increase slightly in the AM peak.
- In both the AM and PM peaks, a fair number of trips travelling northbound from Appledram Lane turn left on the A259 and travel into Hampshire on the A259, in the Reference Case and with no mitigation. However, these trips are mostly removed with the Fishbourne scheme introduced.
- Flows on the A27 increase in both directions and in both peaks.

#### Western Screenline

• On the western screenline trips westbound on the A259 are seen to increase when the Local Plan trips are added, but in both the AM and PM peaks, the number of trips reduce below reference case levels.



- There is an increase in trips on Emsworth Common Road in the AM peak and a very slight increase in the PM peak compared to the Reference Case, when the mitigation scheme is added.
- In the eastbound direction there are slight increases on the A259. This appears to be mainly a result of trips returning to the Southbourne development, as the trips east of Southbourne reduce slightly with the mitigation scheme.
- Flows on the A27 increase in both directions and in both peaks.

#### Summary

The analysis indicates that the Local Plan with Fishbourne mitigation scheme decreases the amount of traffic on the A259 in Hampshire as traffic uses the A27 instead. The largest impact is seen in the westbound direction, mainly due to traffic which was using Appledram Lane South and turning left onto the A259, now joining the A27 at the Stockbridge junction and staying on the A27 towards Hampshire. Increase in flows at Fishbourne junction, is having a knock-on impact with some additional trips now using Emsworth Common Road towards Havant, from Chichester District.

#### Impact of Local Plan on Junctions Within Hampshire

Commentary is provided below on the impacts of the Chichester Local Plan traffic on the A259/North Street junction in Emsworth and the A27 Warblington Interchange.

#### A259/North Street, Emsworth

The modelling indicates that for all scenarios the A259/North Street roundabout operates within capacity and with minimal delays in both the AM and PM peaks.

It should be noted that the High Street arm to the south of the junction is not modelled.

#### AM Peak

#### Reference Case

• All turns are within capacity with only the straight on movement from the A259 east to the A259 west being above 50 at 86%. The highest turn delay is 18 seconds.

#### LP no mitigation

• All turns are within capacity with only the straight on and right turn movements from the A259 east being above 50 at 94% and 56% respectively. The highest turn delay is 19 seconds.

#### LP with mitigation (Full mitigation including Stockbridge Link Road))

All turns are within capacity with only the straight on movement from the A259 east to the A259 west being above 50 at 61%. The highest turn delay is 18 seconds.

#### LP with mitigation (Fishbourne Roundabout and Bognor Roundabout mitigation only)

• All turns are within capacity with only the straight on movement from the A259 east to the A259 west being above 50 at 69%. The highest turn delay is 18 seconds.

#### **PM Peak**

#### Reference Case

• All turns are within capacity with the straight on movement from the A259 east to the A259 west having the highest V/C at 44%. The highest turn delay is 18 seconds.

#### LP no mitigation

• All turns are within capacity with only the straight on movement from the A259 east to the A259 west being above 50 at 53%. The highest turn delay is 19 seconds.



#### LP with mitigation (Full mitigation including Stockbridge Link Road)

• All turns are within capacity with the straight on movement from the A259 west to the A259 east having the highest V/C at 35%. The highest turn delay is 18 seconds.

#### LP with mitigation (Fishbourne Roundabout and Bognor Roundabout mitigation only)

• All turns are within capacity with the straight on movement from the A259 west to the A259 east having the highest V/C at 35%. The highest turn delay is 18 seconds.

The modelling indicates that the junction operates within capacity for all scenarios. With no mitigation in place, but with the Local Plan traffic added, the A259 east arm is close to capacity, however when the Local Plan mitigation is added the junctions works well within capacity. This is due to the decrease in flows on the A259, resulting from the introduction of the mitigation. And is shown in the flow difference analysis.

In summary, the Chichester Local Plan, with the Fishbourne mitigation scheme implemented, does not have a detrimental impact on this junction and in fact sees improvements to the operation of the junction.

#### A27/A259 Warblington Interchange

The modelling indicates that for all scenarios, both roundabouts at the Warblington Interchange operate within capacity and with minimal delays in both the AM and PM peaks.

#### AM Peak

#### Reference Case

• All turns are within capacity with only the straight on movement at the northern roundabout from the A259 to Emsworth Road being above 50 at 74%. The highest turn delay is 17 seconds.

#### LP no mitigation

• All turns are within capacity with only the straight on movement at the northern roundabout from the A259 to Emsworth Road being above 50 at 77%. The highest turn delay is 17 seconds.

#### LP with mitigation (Full mitigation including Stockbridge Link Road)

• All turns are within capacity with only the straight on movement at the northern roundabout from the A259 to Emsworth Road being and the turn from Emsworth Road to the A27 above 50 at 77% and 52% respectively. The highest turn delay is 17 seconds.

#### LP with mitigation (Fishbourne Roundabout and Bognor Roundabout mitigation only)

• All turns are within capacity with only the straight on movement at the northern roundabout from the A259 to Emsworth Road being and the turn from Emsworth Road to the A27 above 50 at 76% and 54% respectively. The highest turn delay is 17 seconds.

#### PM Peak

#### Reference Case

• All turns are within capacity with only the turns at the northern roundabout from Emsworth Road to Castle Avenue and the A259 being above 50 at 53% and 64% respectively. The highest turn delay is 17 seconds.

#### LP no mitigation

• All turns are within capacity with only the turns at the northern roundabout from Emsworth Road to Castle Avenue, A27 and the A259 being above 50 at 62%, 57% and 76% respectively. The highest turn delay is 18 seconds.

#### LP with mitigation

• All turns are within capacity with only the turns at the northern roundabout from Emsworth Road to Castle Avenue and the A259 being above 50 at 55% and 70% respectively. The highest turn delay is 18 seconds.





#### LP with mitigation (Fishbourne Roundabout and Bognor Roundabout mitigation only)

• All turns are within capacity with only the turns at the northern roundabout from Emsworth Road being above 50 with the highest at 80%. The highest turn delay is 19 seconds.

In all scenarios the model indicates that the Warblington Interchange operates within capacity and therefore the Chichester Local Plan is deemed to have no detrimental impact on the junction.

#### Southbourne Development

**Appendix C** provides plots of the trip distribution from the Southbourne Development. A commentary is provided below.

#### AM Peak

- In the AM trips from the development are split between going north via Stein Road, west via the A259 and east via the A259 and Priors Leaze Lane.
- The split is 107 PCUs going north, 113 PCUs going west and 150 PCUs going east in the with mitigation model which has very similar flows to the without mitigation model.
- Trips to the development are fewer in number but again split over the same three routes with little change between the with and without mitigation models.
- The split is 32 PCUs from the north, 38 PCUs from the west and 56 PCUs from the east in the with mitigation model.

#### PM Peak

- In the PM, the trips to the development via the three routes are split by 41 PCUs from the north, 62 PCUs from the west and 64 PCUs from the east. The with and without mitigation models are very similar.
- Trips to the development via the three routes are split by 41 PCUs going north, 62 PCUs going west and 64 PCUs going east. The with and without mitigation models are very similar.
- The split for trips to the development is 87 PCUs from the north, 99 PCUs from the west and 149
  PCUs from the east in the with mitigation model. Again the mitigation has minimal impact on the
  splits.

#### Analysis with respect to HCC/i-Transport Junction Modelling

Hampshire County Council (HCC) has stated that junction capacity assessments undertaken for Cooks Lane development (Chichester planning reference 18/03145/OUT) across the Warblington Interchange, has indicated differences between the findings of the junction capacity assessments by i-Transport (Junction modelling) and the results of the Local Plan by Stantec.

The i-Transport junction modelling for the Warblington Interchange and for the A259 Main Road/A259 Havant Road/North Street roundabout (Emsworth roundabout) was undertaken using TRL software Junction 9. Standalone modelling using such software is likely to produce different results and the data used within the i-Transport modelling will differ from a more strategic model, not validated at every single junction.

Th i-Transport outputs have been reviewed and the comments below pertain to this review and potential impacts of the Chichester Local Plan.

This junction modelling identified overcapacity issues at the northern/western roundabout of the Warblington Interchange in the PM peak, whereas no capacity issues were identified in the LP modelling which was based on the strategic CATM.

In light of this HCC, stated that it would be beneficial for Stantec to undertake a comparison between the two assessments and provide further evidence that the sites identified within the Chichester Local Plan will not exacerbate the existing situation. This section provides some analysis to this effect. No capacity issues were identified on the southern/eastern roundabout of the Warblington Interchange and hence this is not considered further here.



#### A27 Warblington Interchange Northern Roundabout

The junction modelling results were provided to Stantec in a Technical Note 'Junction Capacity Assessment Summary.pdf' (Land North of Cooks Lane, Southbourne; Junction Capacity Assessment Summary: Ref MG/GT/ITB7261 dated 19 March 2019). This technical note provided a summary of the results of the junction capacity assessments such as Ratio of Flow to Capacity (RFC), queue (vehicles) and delays (seconds/vehicle). However, it did not include the model inputs themselves such as the turning flows used in the assessments.

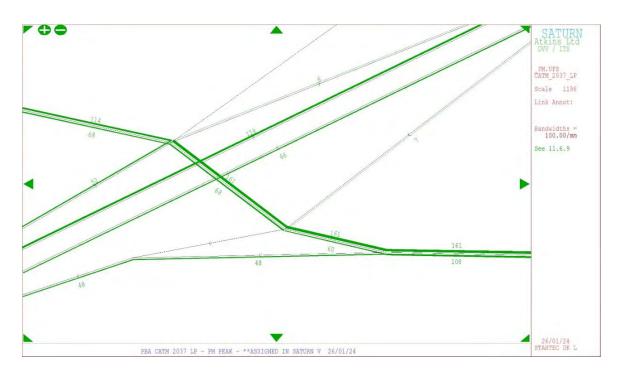
As noted, the junction assessment identified overcapacity issues at the northern/western roundabout of the Warblington whereby the RFC values greater than 1.0. The Table below provides a summary of the RFC values for this roundabout from the i-Transport Technical Note. The overcapacity arm was identified to be the Emsworth Road northern/western arm identified as Emsworth Road N in the TN. The results in the table are for this arm.

| Scenario         | 2021 | 2023 | 2031 |  |
|------------------|------|------|------|--|
| With Committed   | 0.95 | 0.99 | 1.14 |  |
| development      |      |      |      |  |
| With Committed   | 1.01 | 1.05 | 1.20 |  |
| development plus |      |      |      |  |
| development      |      |      |      |  |

It is noted that the LP modelling provides a strategic view of the cumulative impacts of development within the study area particularly in Chichester district rather than specific impacts from specific developments. As such, it was always expected that developers would still be required to undertake their own Transport Assessment to identify local impacts and mitigate them appropriately prior to planning consent. Notwithstanding this, for this analysis, it was considered that a better way of understanding whether the Chichester LP development will not exacerbate the existing situation was to understand whether the LP puts more trips at this location.

The LP trips that impact the Warblington Interchange in the PM peak are shown graphically below.

#### Figure 1 PM Peak Local Pan Trips at Warblington Interchange





The key points in respect of the LP trips are:

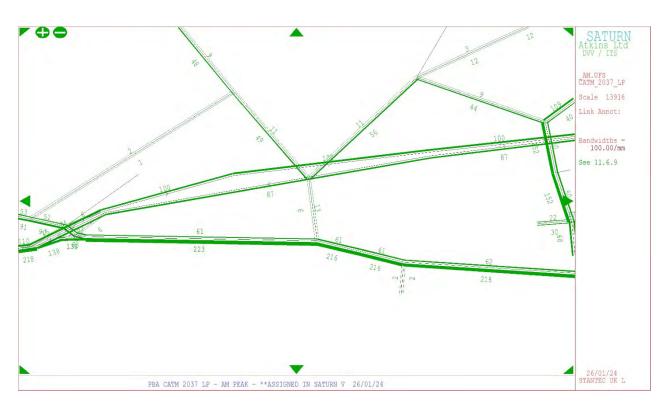
- It was noted from the i-Transport junction assessment that the Emsworth Road North arm will be overcapacity in the PM peak, hence this arm would be sensitive to an increase in flows on it as well as to increases from the opposing A27 Northbound Off-Slip arm.
- The plot above shows that the LP will place 114 trips southbound on Emsworth Road North while 52 trips will turn right from the A27 Northbound Off-Slip arm. These LP have the potential to exacerbate the capacity issues at the Warblington Interchange northern/western roundabout;
- There would be 68 LP trips northbound from the Emsworth Road South to the Emsworth Road North. This will provide more gaps for traffic from Emsworth Road North to negotiate the roundabout by opposing the flow from the A27 Northbound Off-Slip;
- The low RFC values which range from 0.14 to 0.17 on the A27 Northbound Off-slip as predicted in the i-Transport junction assessments, suggests that this arm would be able to accommodate an increase in opposing flows.
- In summary, the LP is predicted to increase flows on the northern/western roundabout at the Warblington Interchange, and there is potential for the LP to exacerbate any existing capacity issues.
- In conclusion, the junction may see additional issues with Southbourne development and this should be considered as part of the more detailed work for any forthcoming TA for Southbourne development, alongside inclusion in discussions through the Monitor and Manage process.

#### A259 Emsworth Roundabout

Both the i-Transport and CATM strategic modelling does not identify capacity issues at the A259 Main Road/A259 Havant Road/North Street roundabout (Emsworth roundabout).

The i-Transport junction modelling identifies the highest RFC at the junction to be 0.69 in the AM peak which is predicted on the A259 East arm, and 0.77 in the PM peak which is predicted on the A259 West arm. These are both well below capacity. It is noted from the AM and PM peak graphical plots below that the LP puts some trips onto the Emsworth roundabout.



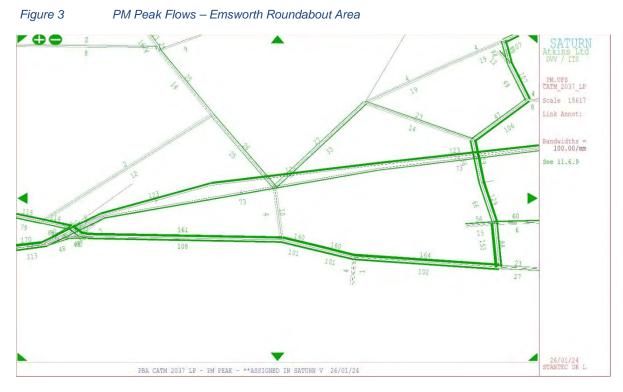




It can be seen from the plot above that in the AM peak at Emsworth roundabout that:

- 216 LP trips are added on the A259 East/Main Road approach arm westbound;
- 61 LP trips are added on the A259 West/Havant Road approach arm eastbound;
- 13 LP trips are added on B2148 North Street approach arm southbound.

The equivalent PM peak plot of LP trips around Emsworth roundabout is shown below:



It can also be seen from the plots that in the PM peak:

- 101 LP trips are added on the A259 East/Main Road approach arm westbound;
- 161 trips are added on the A259 West/Havant Road approach arm eastbound;
- 10 LP trips are added on B2148 North Street approach arm southbound.

The CATM modelling has shown that with no Fishbourne mitigation, substantial flows would be added on to the Emsworth roundabout. The majority of the additional trips will be a result of the Southbourne development.

Going forwards, it will therefore be necessary for the Southbourne TA to looking at this junction further and consideration made through the Monitor and Manage commitment as to any potential mitigation in the future and depending on what mitigation comes through that process.

#### Locations with LP trips on the network with focus on western side of CATM

The figures below show LP only trips and the locations on the network that would be used by the LP trips. Some of the plots have already been discussed as part of the impacts at Warblington Interchange and Emsworth roundabout. The plots are included as part of a wider consideration of where LP trips are seen to assign and hence potentially impact. The focus of the graphical outputs has been on the western side of CATM that would be of interest to HCC. This includes locations around the Warblington Interchange, Emsworth roundabout and the wider western side of CATM. The trips are shown for the AM and PM peak hours in PCU units.



The routes taken by the LP tips are based on the routes the trips would use in the LP Without Mitigation scenario and have been derived based on SATURN's One Song To The Tune of Another (OSTTTA) facility. It is evident from the plots that the western side of the network will have LP trips use this part of the network.



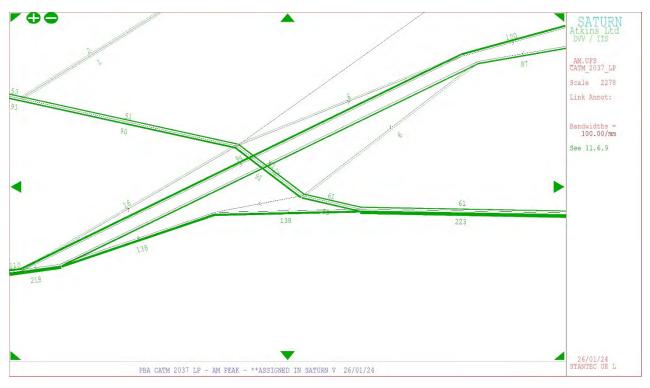


Figure 5 AM Peak - Including Warblington Interchange and Emsworth roundabout areas

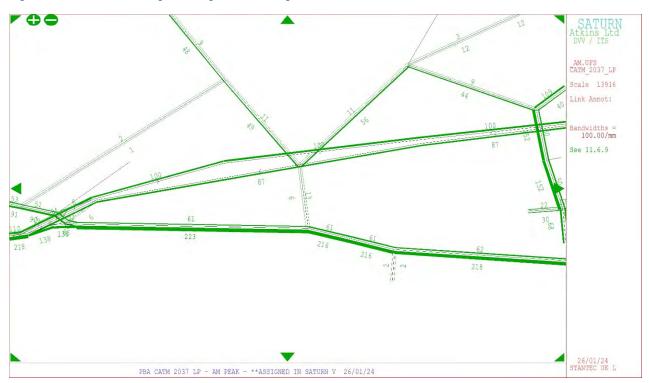
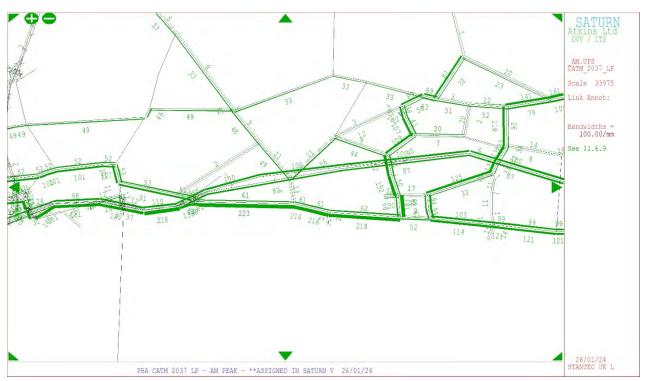




Figure 6 AM Peak - Wider western area of CATM network





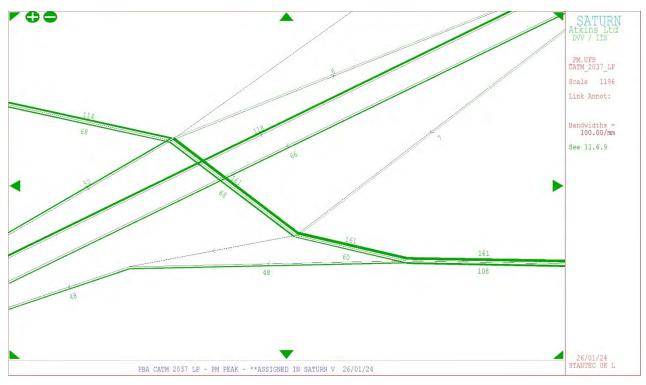




Figure 8 PM Peak - Warblington Interchange and Emsworth roundabout areas

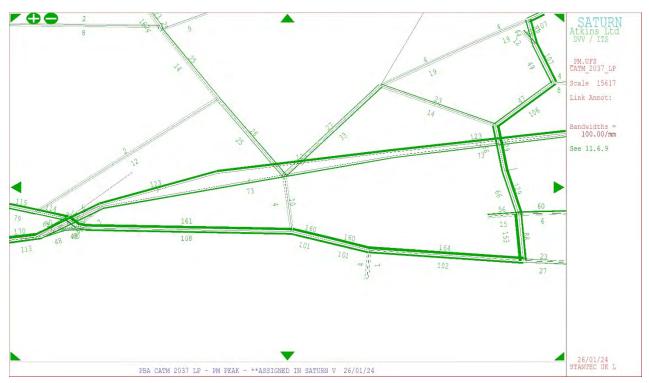
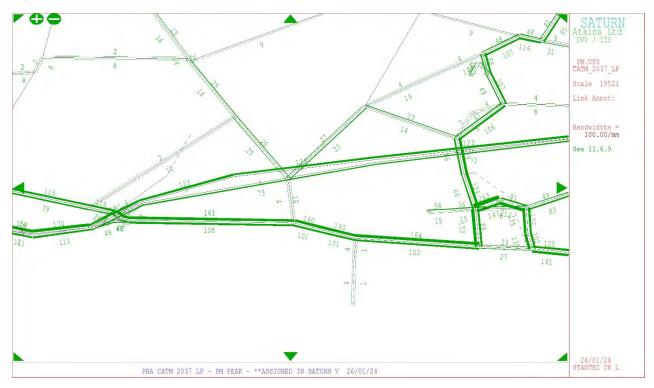


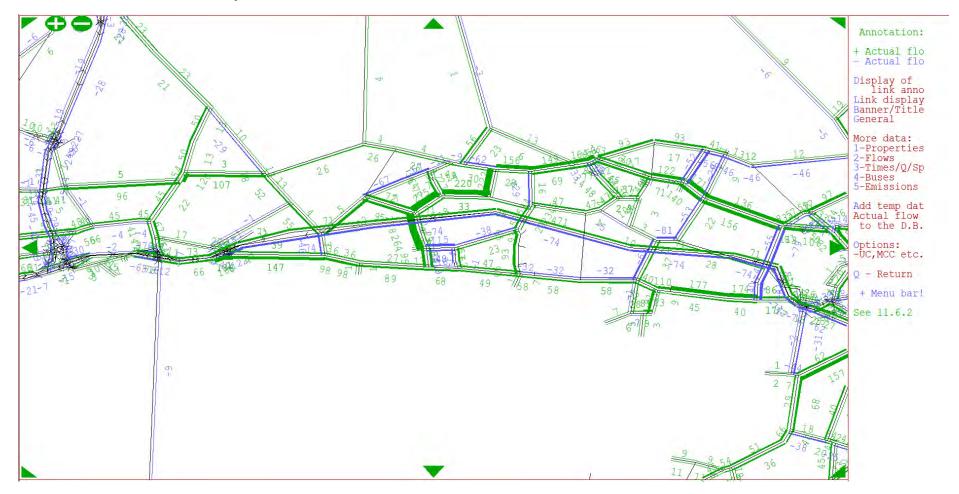
Figure 9 PM Peak - Wider western area of CATM network



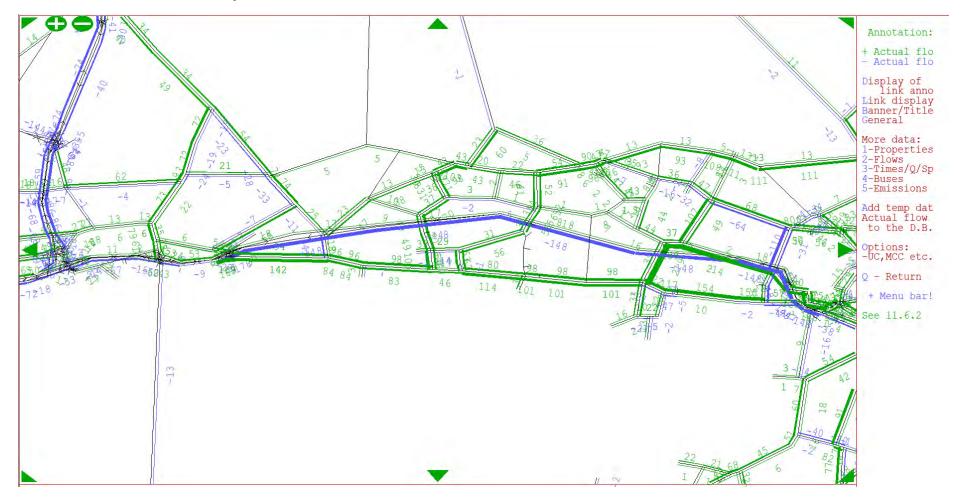
## **Appendix A – Flow Difference Plots**

# LOCAL PLAN no MITIGATION minus REFERENCE

## AM Actual Flow Difference, pcus



## PM Actual Flow Difference, pcus



# LOCAL PLAN with FISHBOURNE and BOGNOR minus REFERENCE

## AM Actual Flow Difference, pcus



## PM Actual Flow Difference, pcus



# LOCAL PLAN FULL MITIGATION minus REFERENCE

## AM Actual Flow Difference, pcus

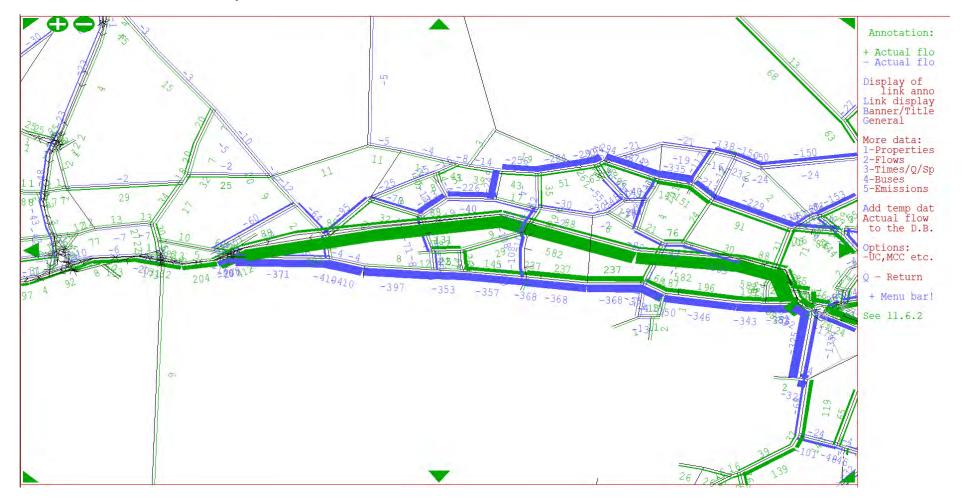


## PM Actual Flow Difference, pcus

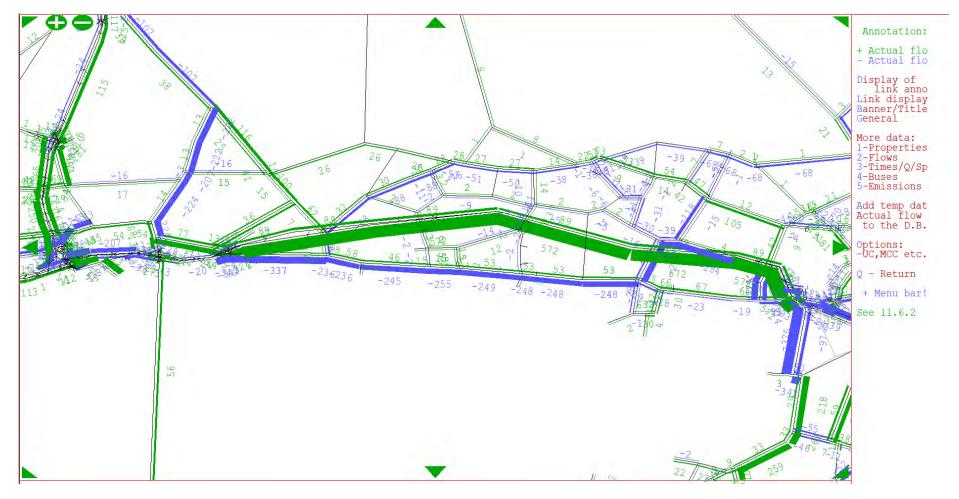


LOCAL PLAN with FISHBOURNE and BOGNOR minus LOCAL PLAN no MITIGATION

## AM Actual Flow Difference, pcus

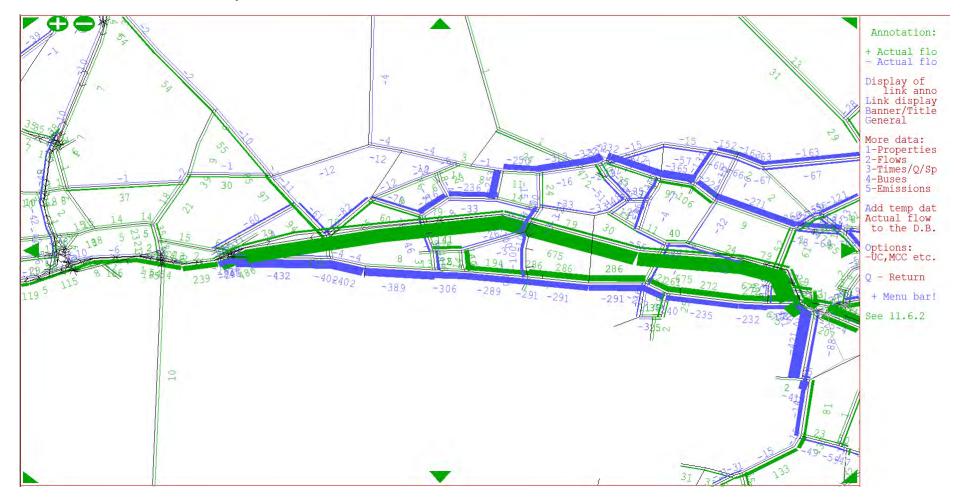


## PM Actual Flow Difference, pcus



# LOCAL PLAN FULL MITIGATION minus LOCAL PLAN no MITIGATION

## AM Actual Flow Difference, pcus



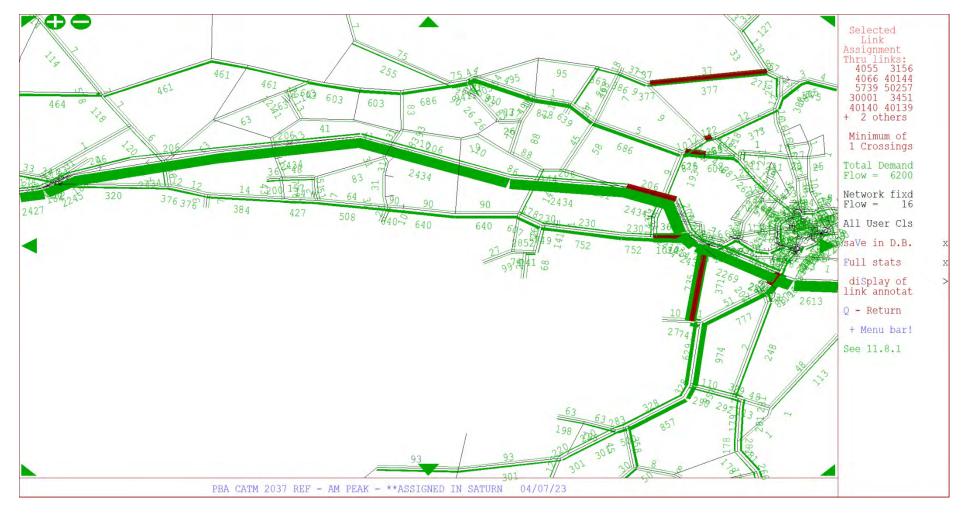
## PM Actual Flow Difference, pcus



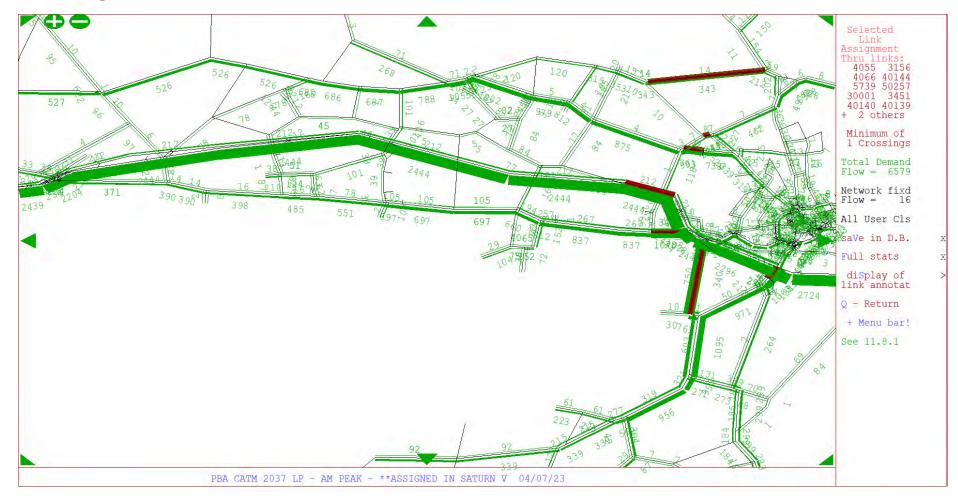
## **Appendix B – Traffic Reassignment**

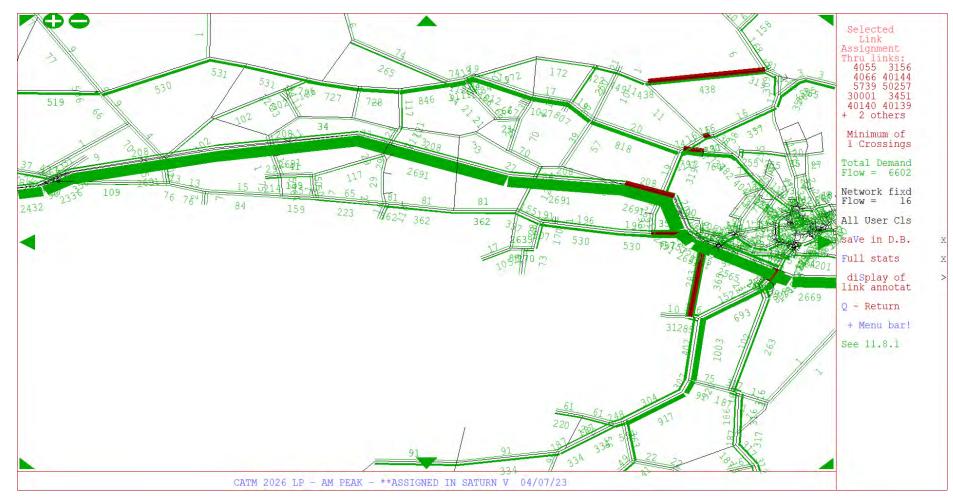
## **Eastern Screenline - AM**

#### **Reference Case WB - AM**



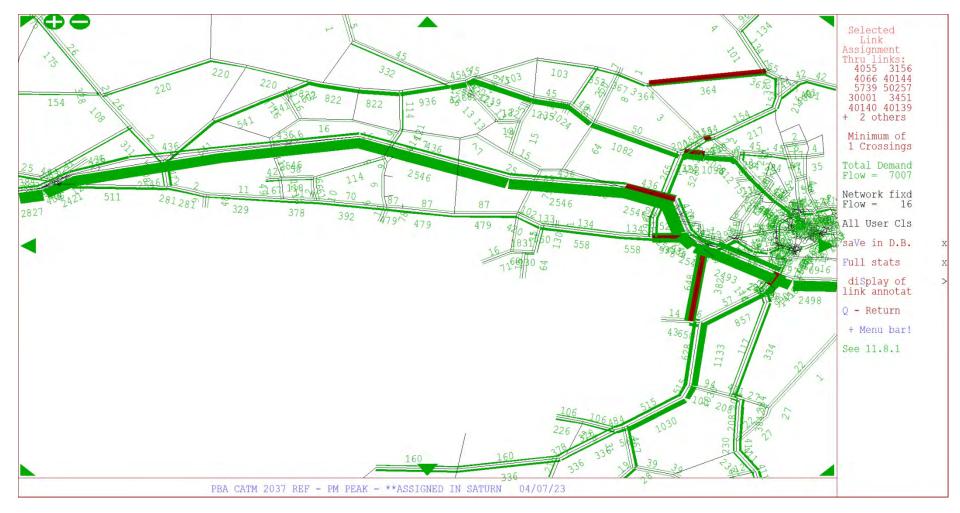
#### LP No Mitigation WB - AM



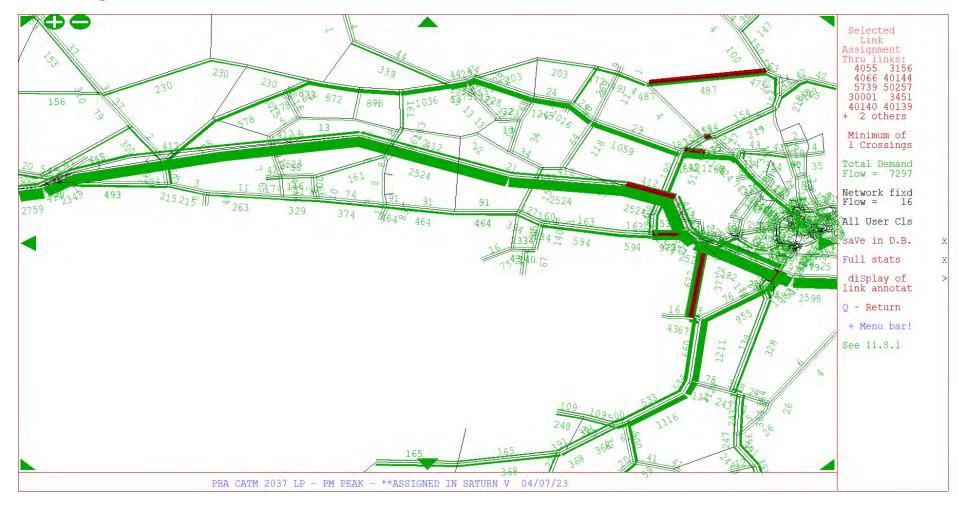


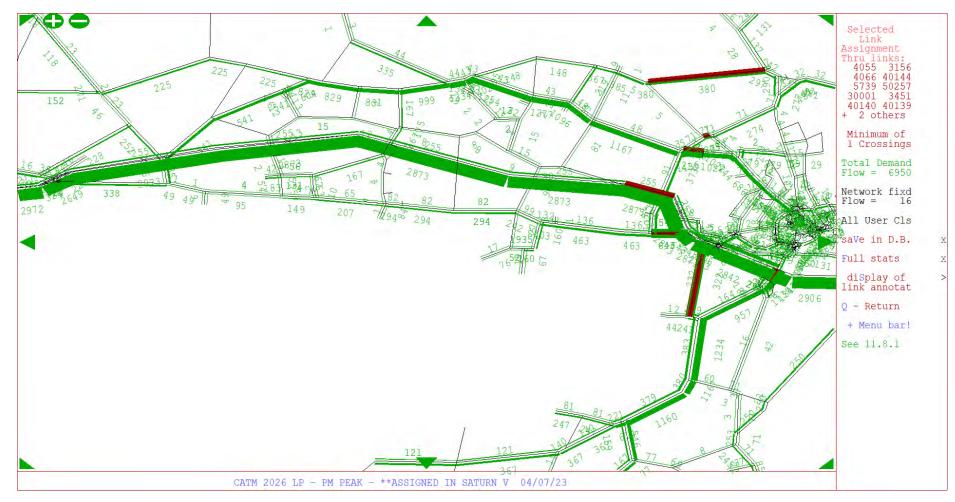
## LP with Fishbourne and Bognor Only WB - AM

#### **Reference Case WB - PM**



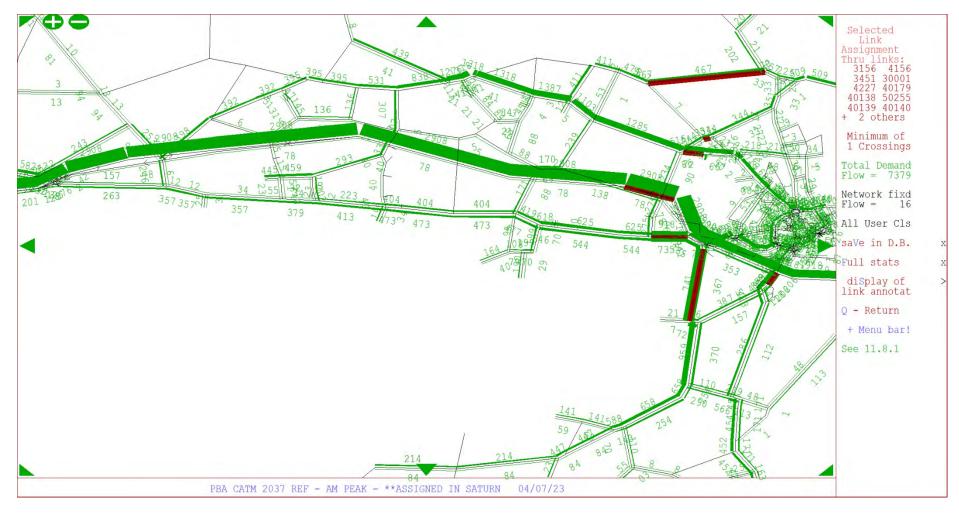
#### LP No Mitigation WB - PM



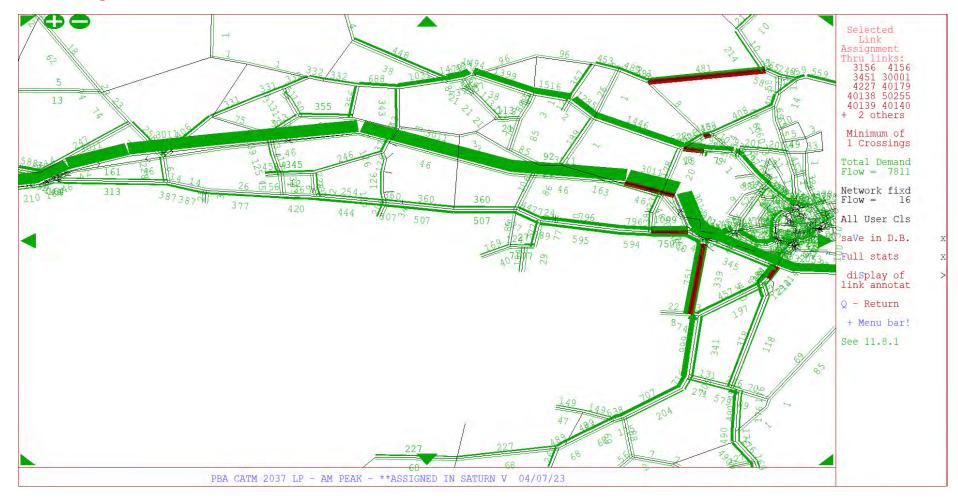


## LP with Fishbourne and Bognor Only WB - PM

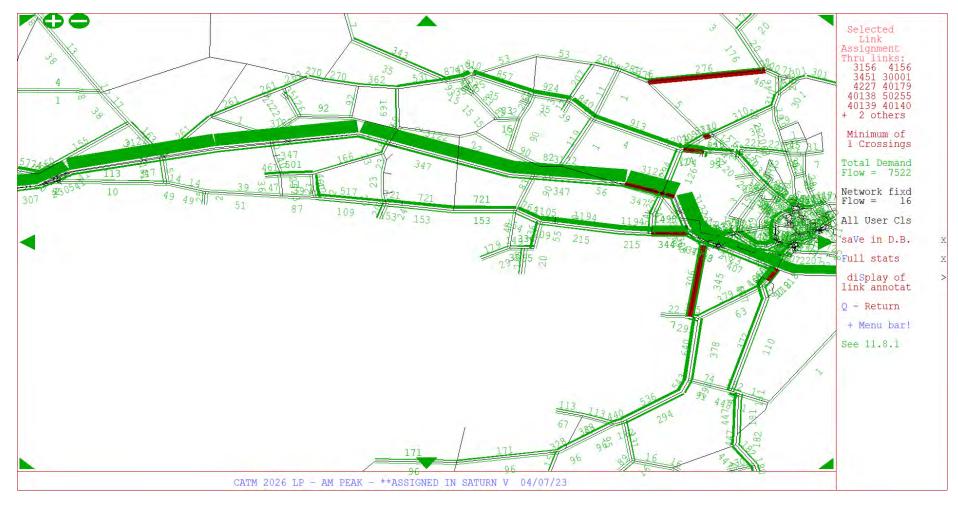
#### **Reference Case EB - AM**



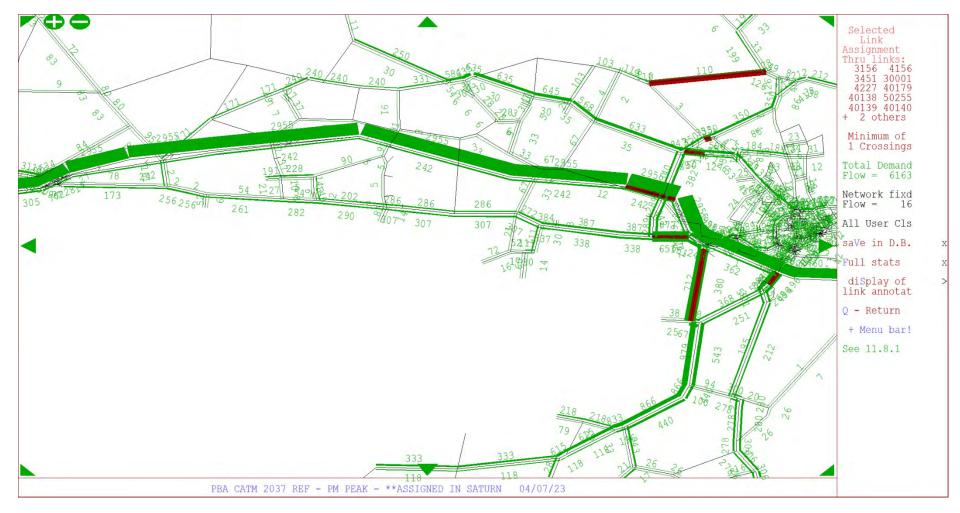
#### LP No Mitigation EB - AM



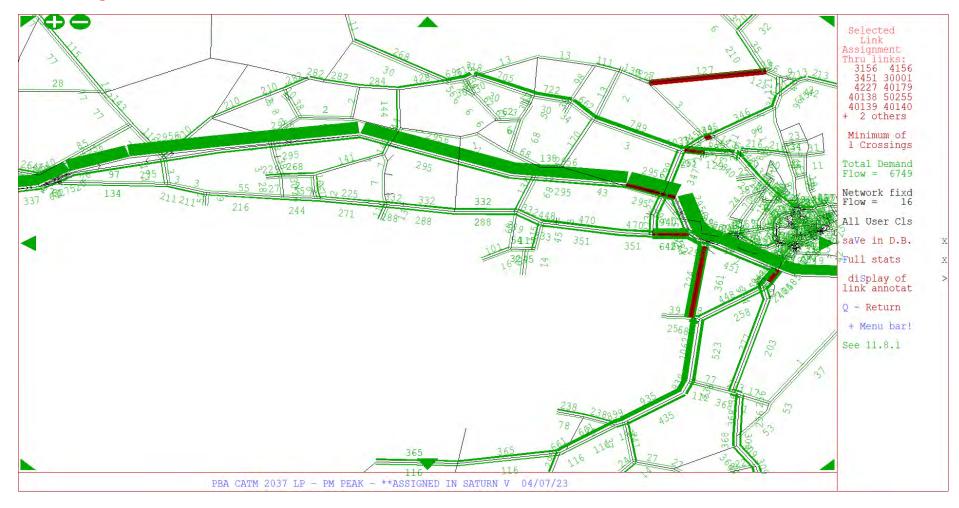
## LP with Fishbourne and Bognor Only EB - AM

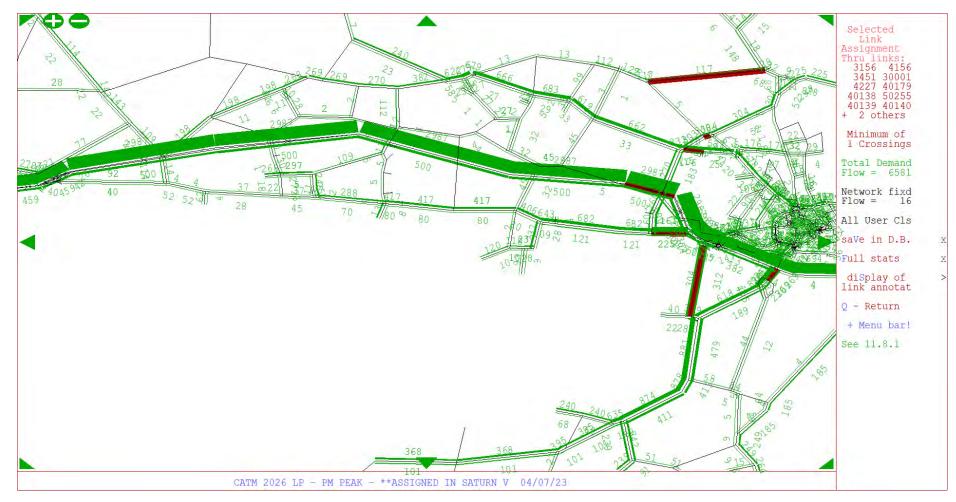


#### **Reference Case EB - PM**



#### LP No Mitigation EB - PM

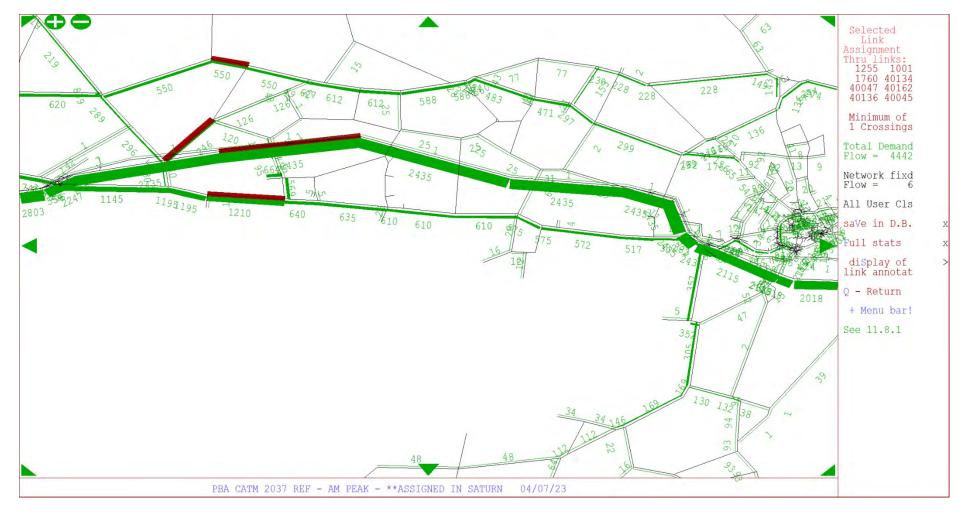




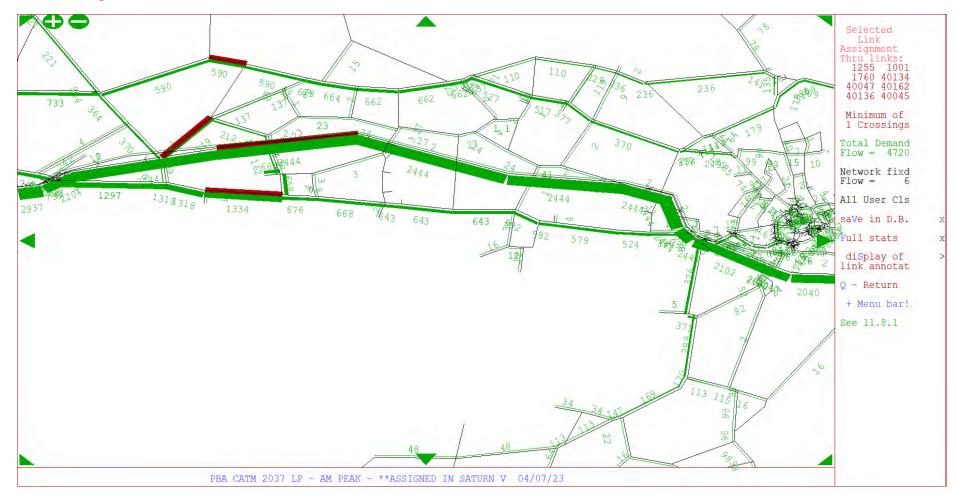
## LP with Fishbourne and Bognor Only EB - PM

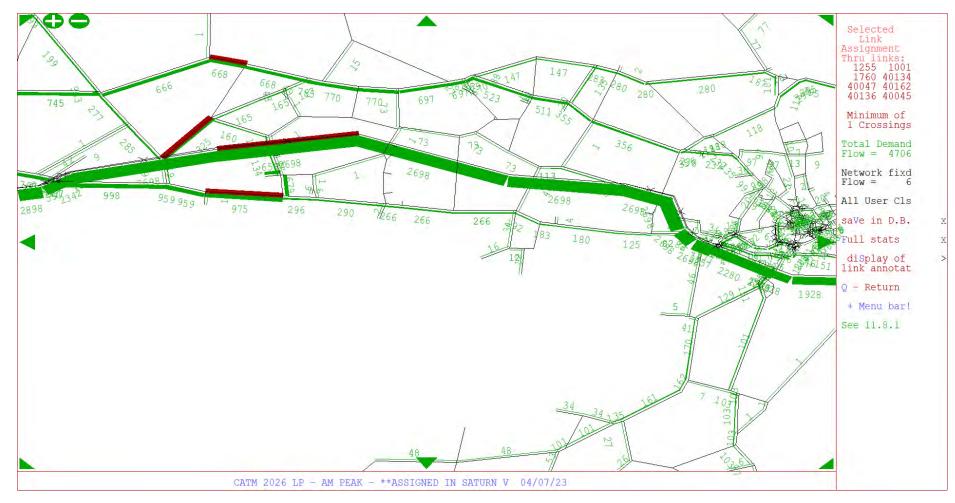
## Western Screenline

#### **Reference Case WB - AM**



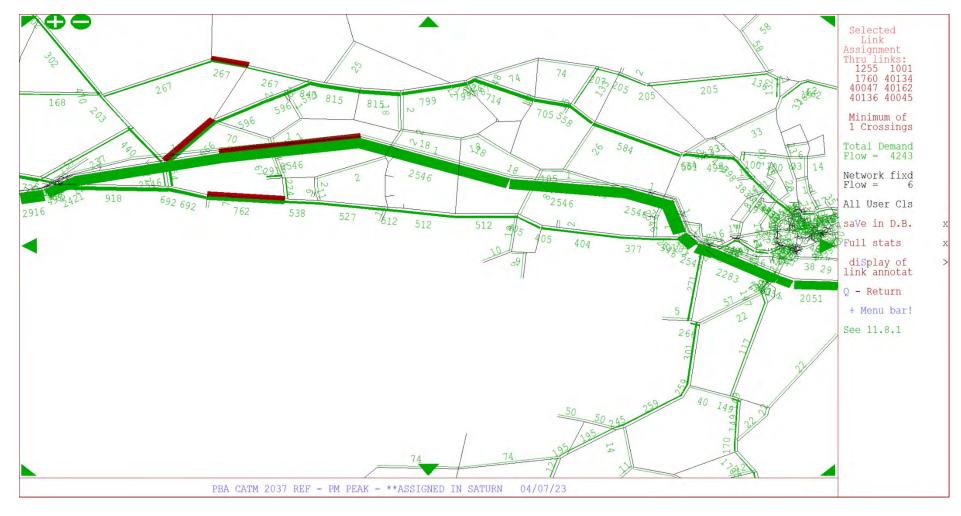
#### LP No Mitigation WB - AM



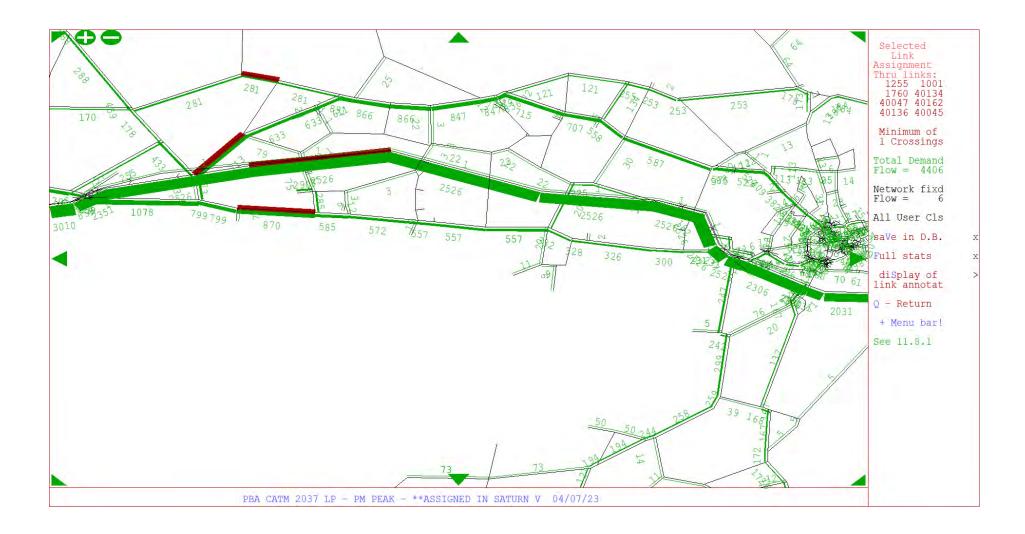


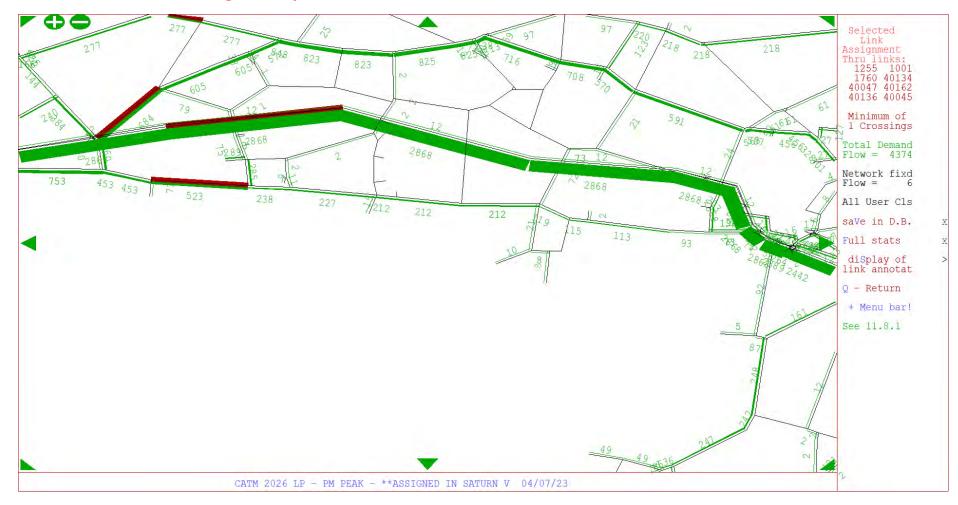
## LP with Fishbourne and Bognor Only WB - AM

#### **Reference Case WB - PM**



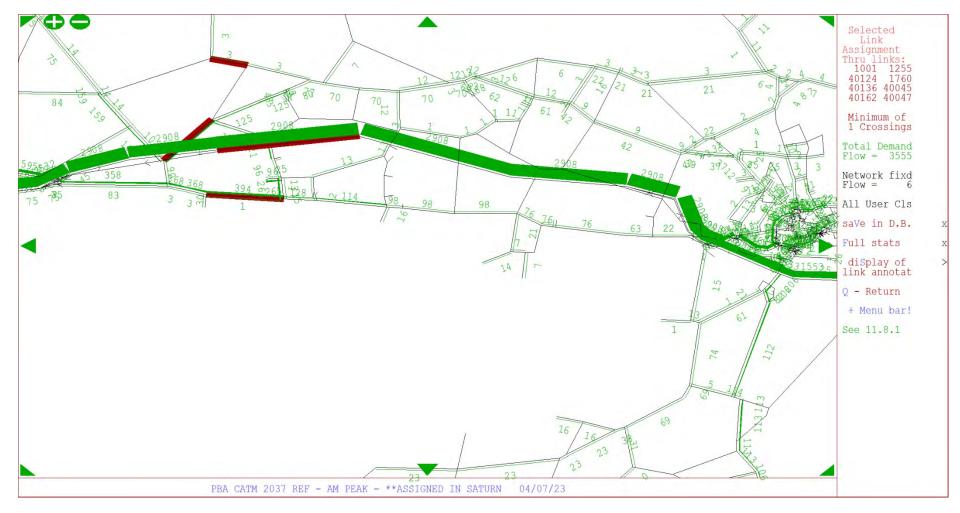
#### LP No Mitigation WB - PM



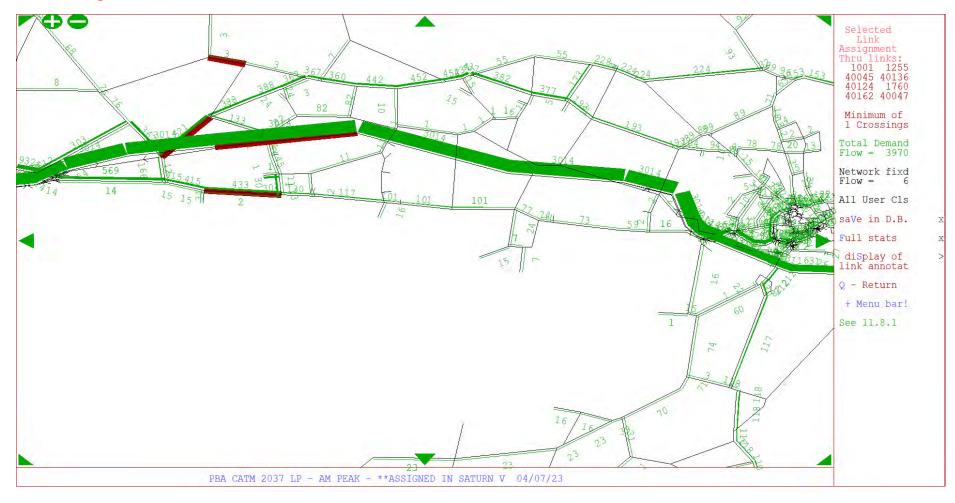


## LP with Fishbourne and Bognor Only WB - PM

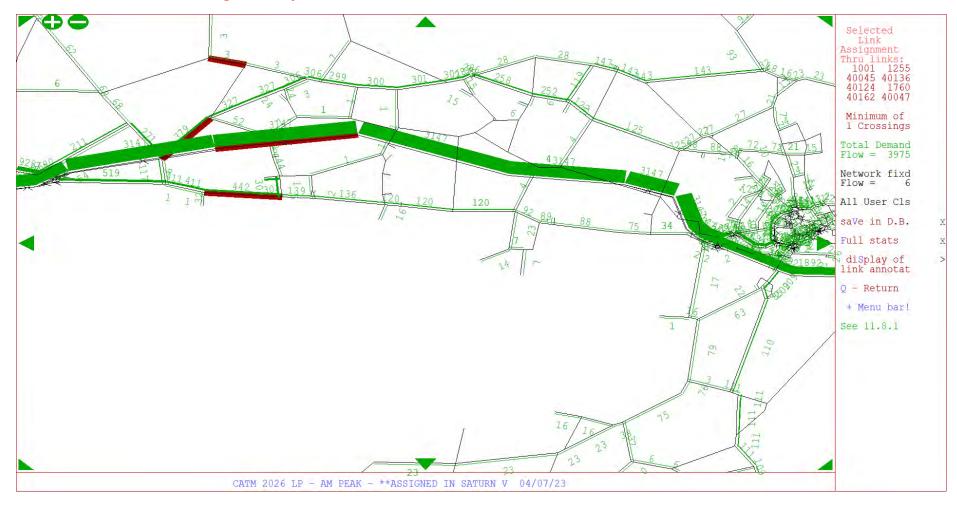
#### **Reference Case EB - AM**



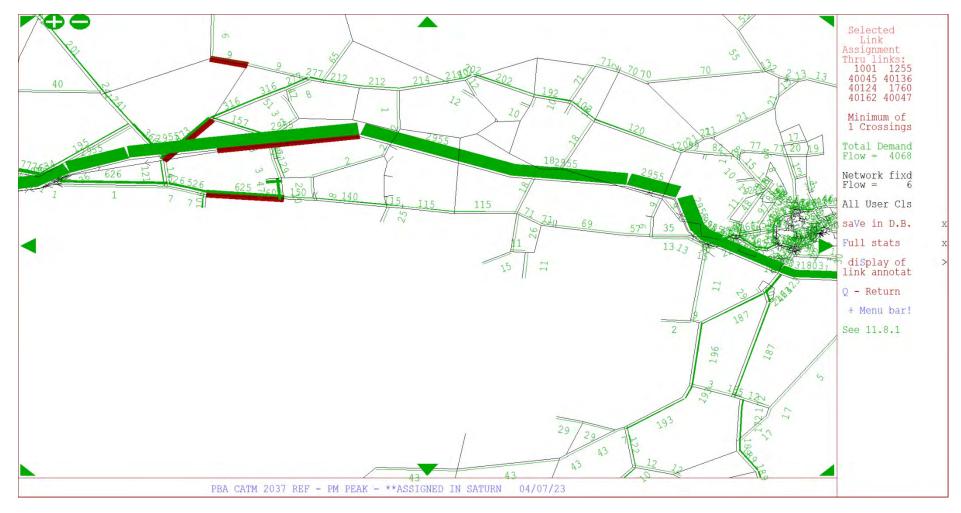
#### LP No Mitigation EB - AM



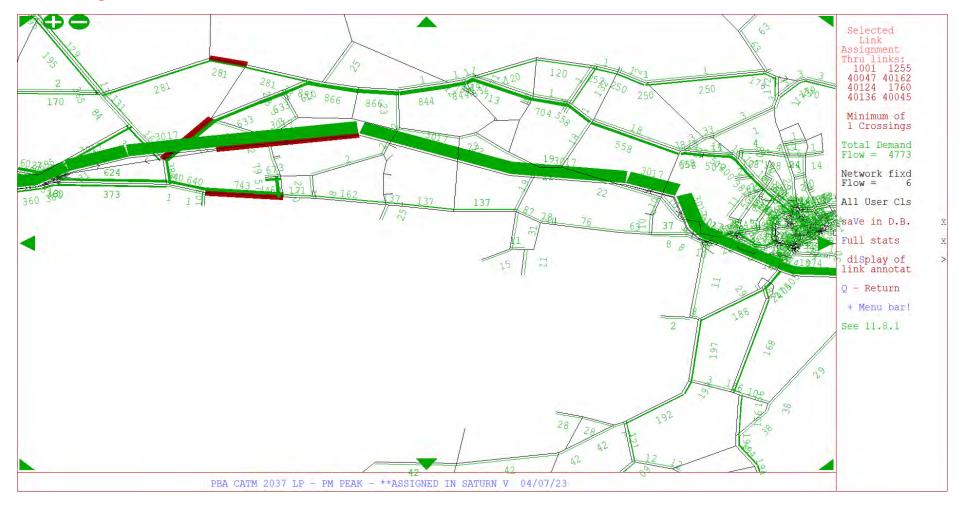
## LP with Fishbourne and Bognor Only EB - AM



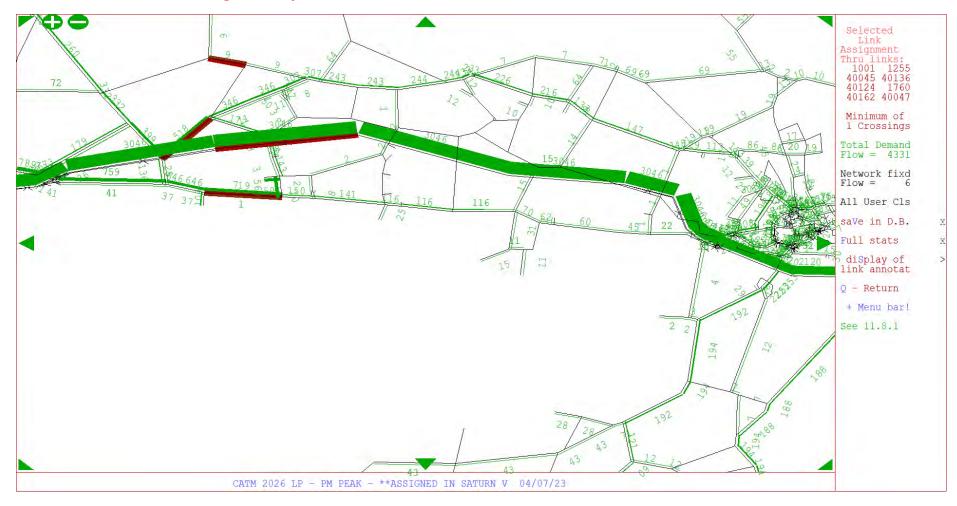
#### **Reference Case EB - PM**



#### LP No Mitigation EB - PM



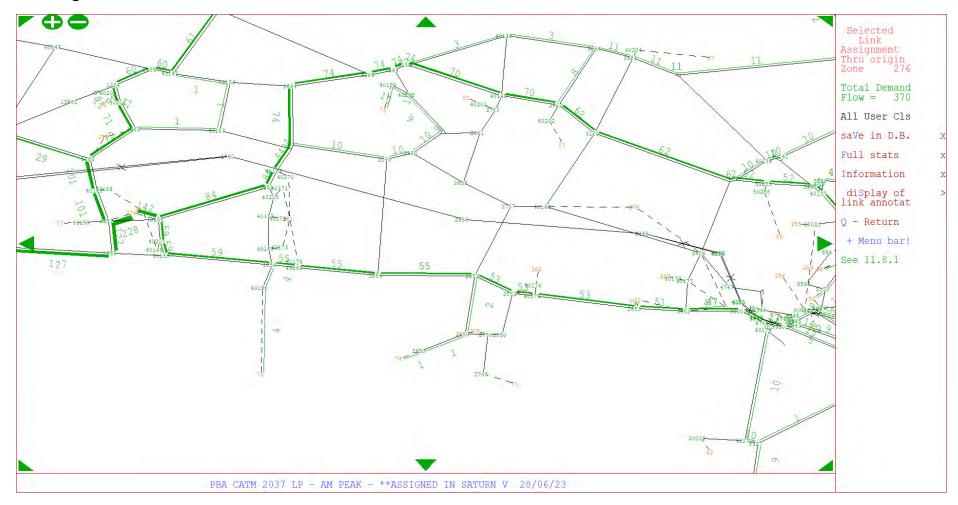
## LP with Fishbourne and Bognor Only EB - PM

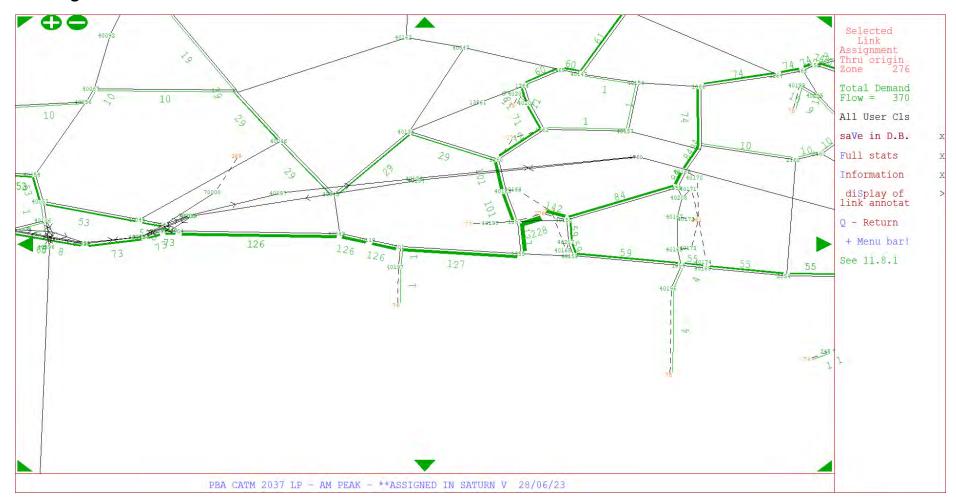


# Appendix C – Southbourne Trip Distribution

## **2037 Local Plan Without Mitigation**

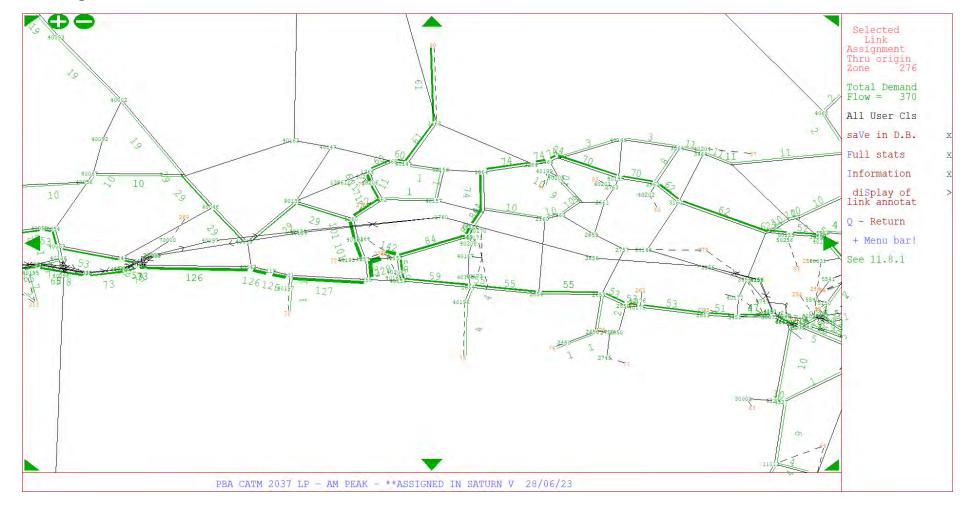
AM Origin East



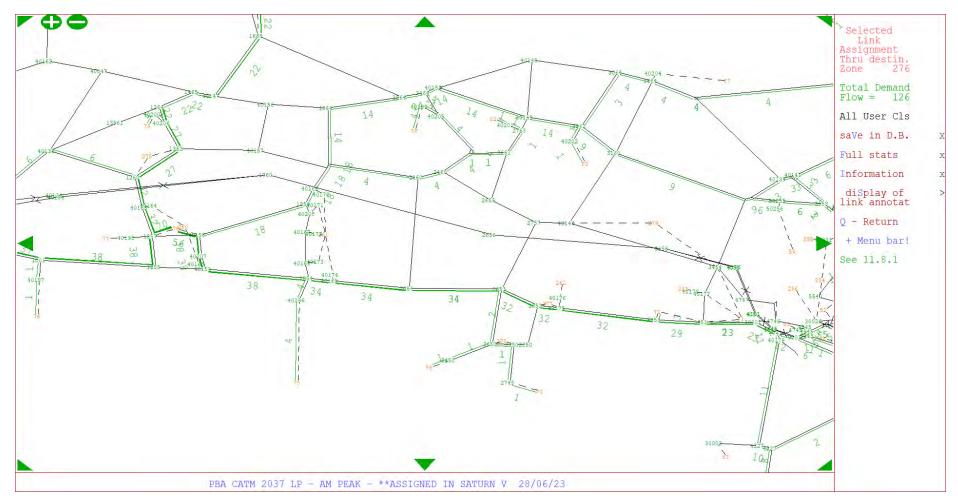


AM Origin West

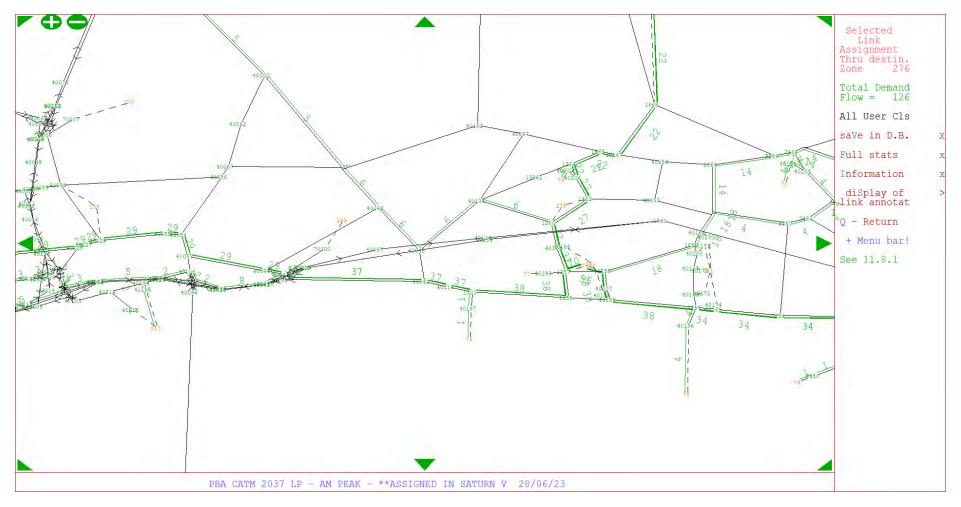




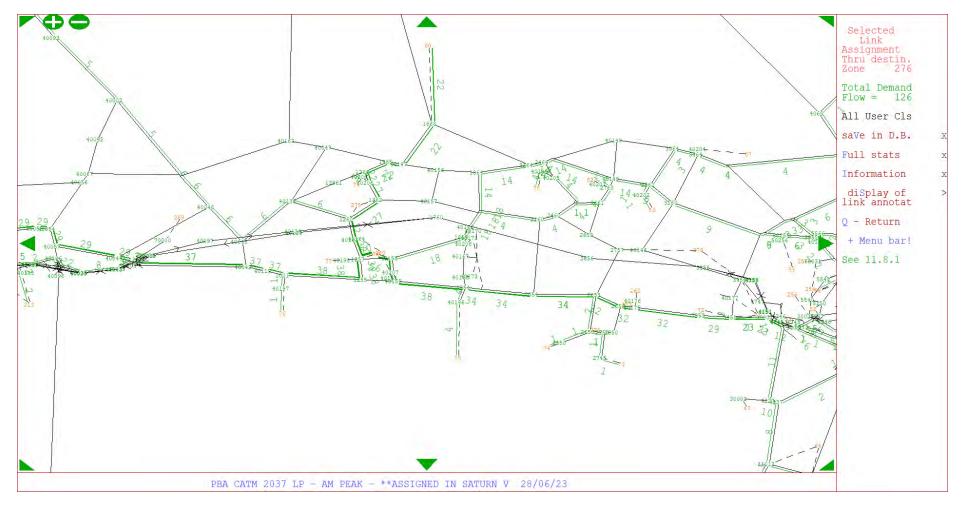
#### **AM Destination East**



#### **AM Destination West**

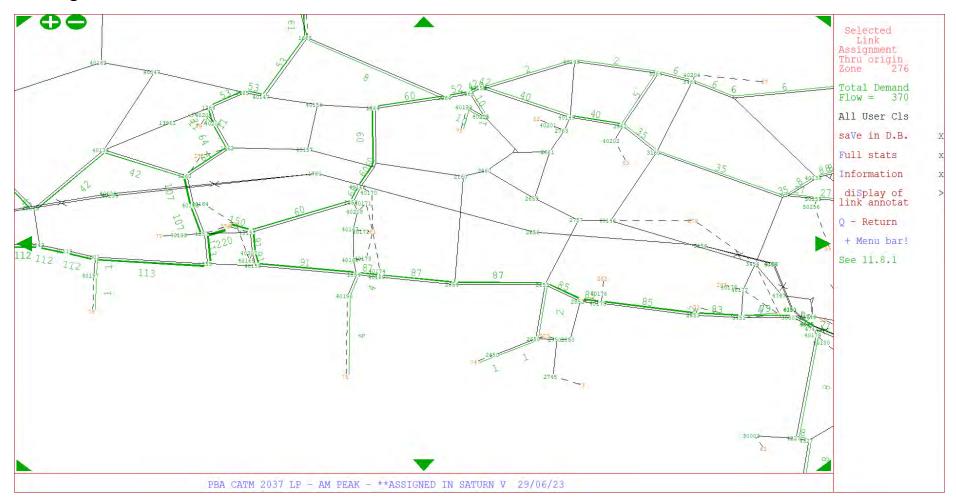


#### **AM Destination Wide**

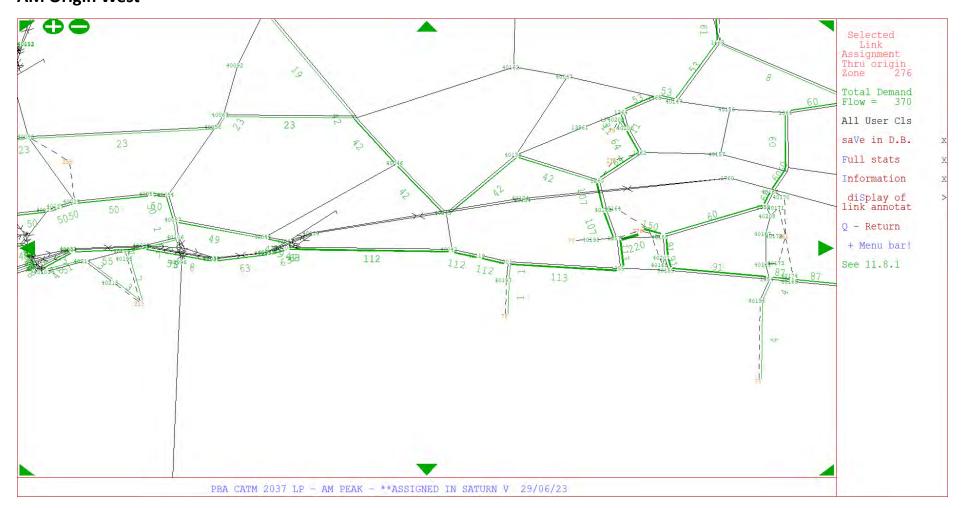


## 2037 Local Plan Models with Full STN Mitigation

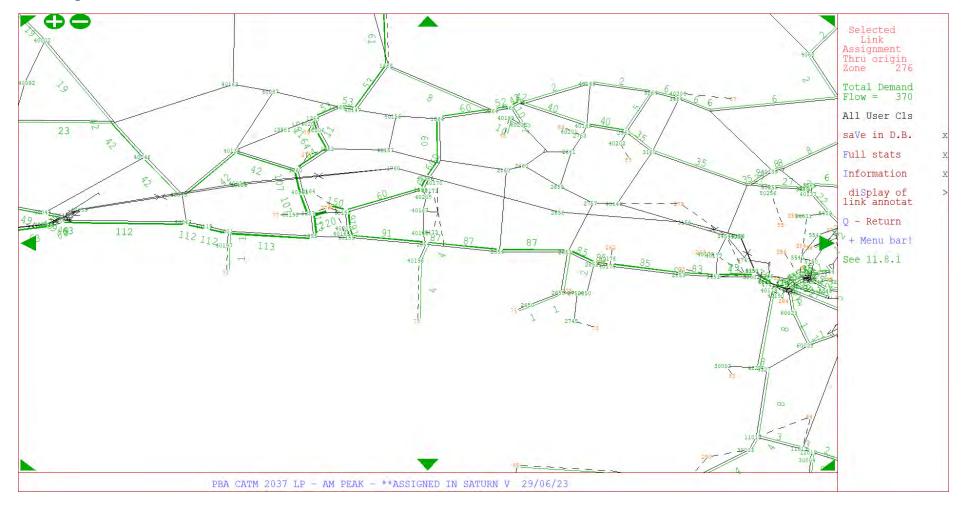
AM Origin East



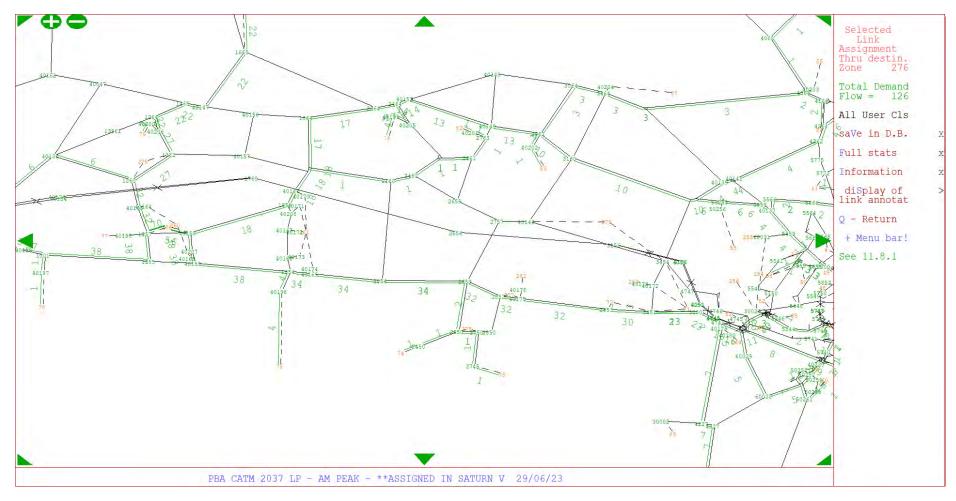




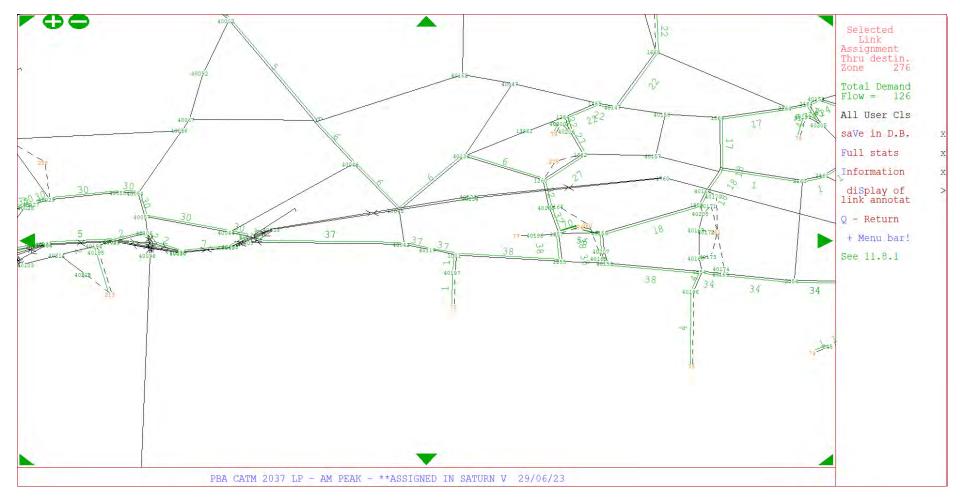




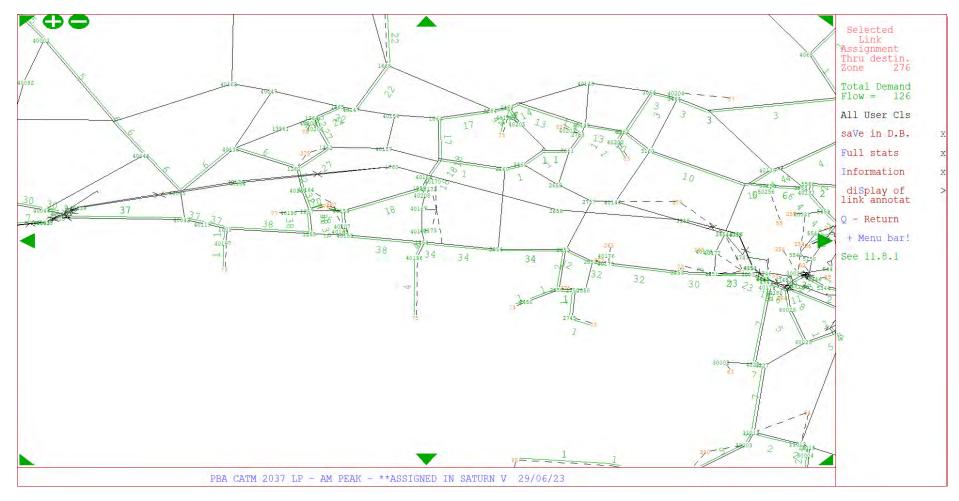
#### **AM Destination East**



#### AM Destination West

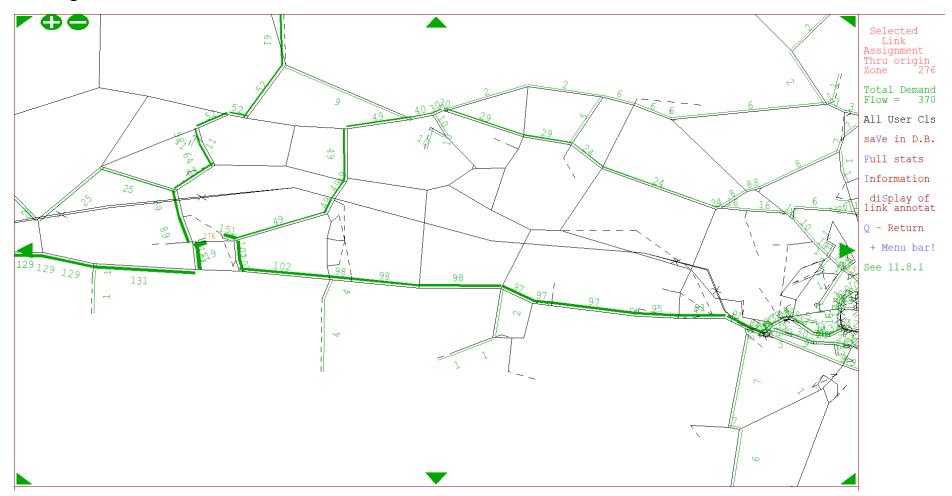


#### **AM Destination Wide**

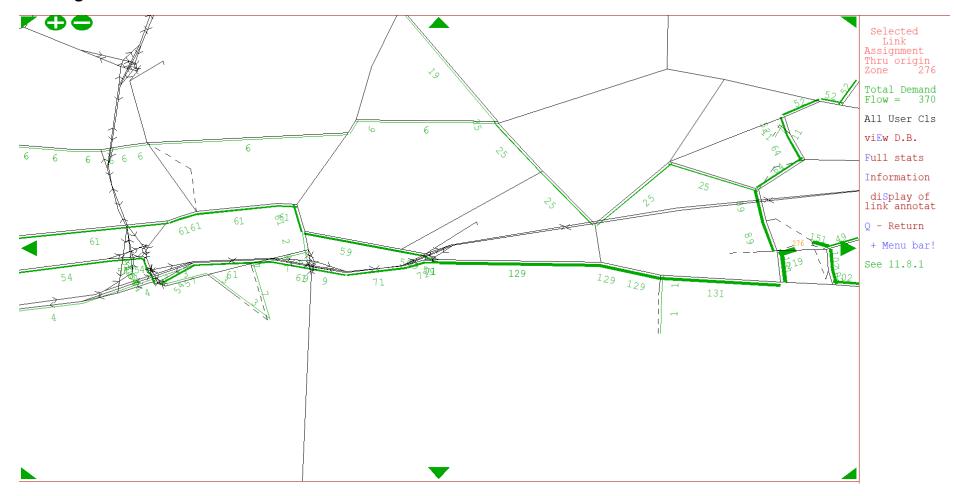


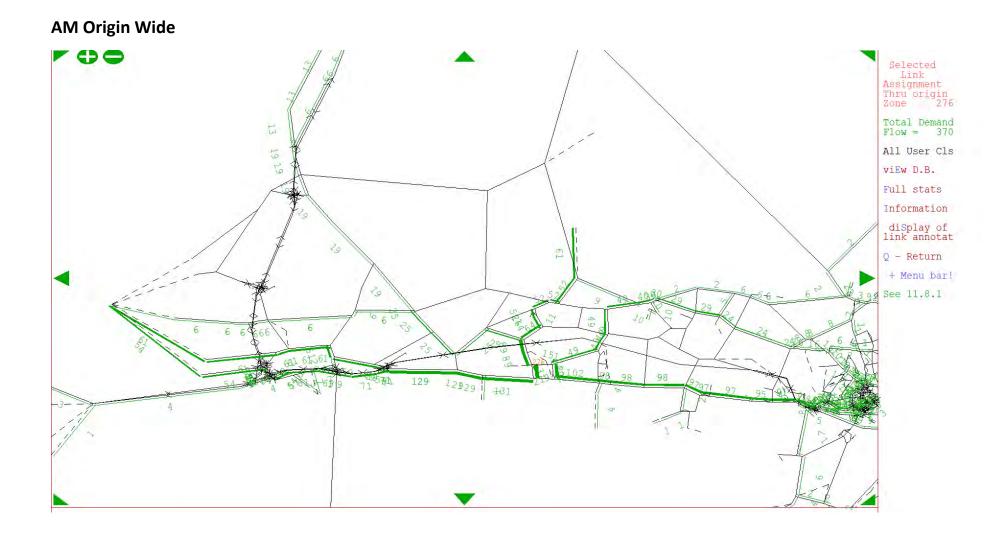
## 2037 Local Plan with Fishbourne (No SLR) and Bognor Mitigation

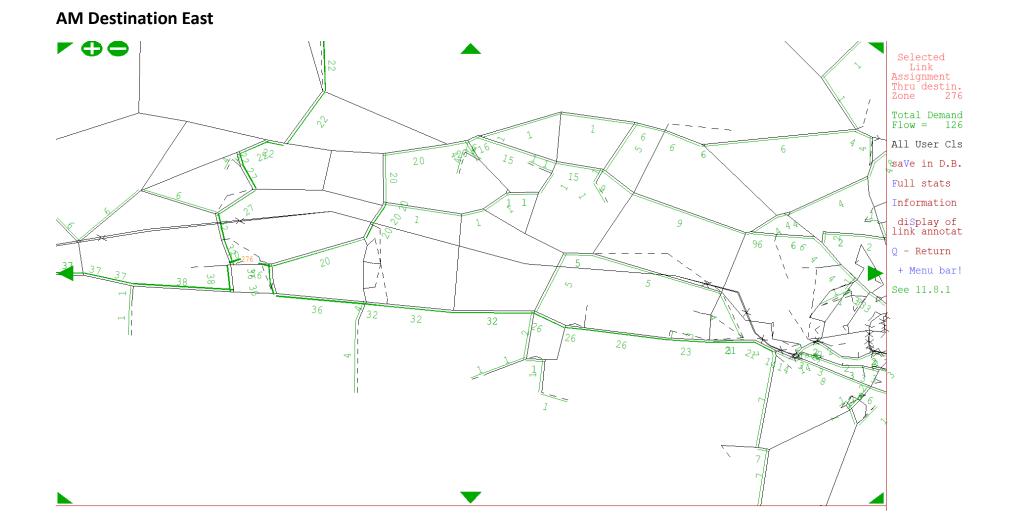
AM Origin East



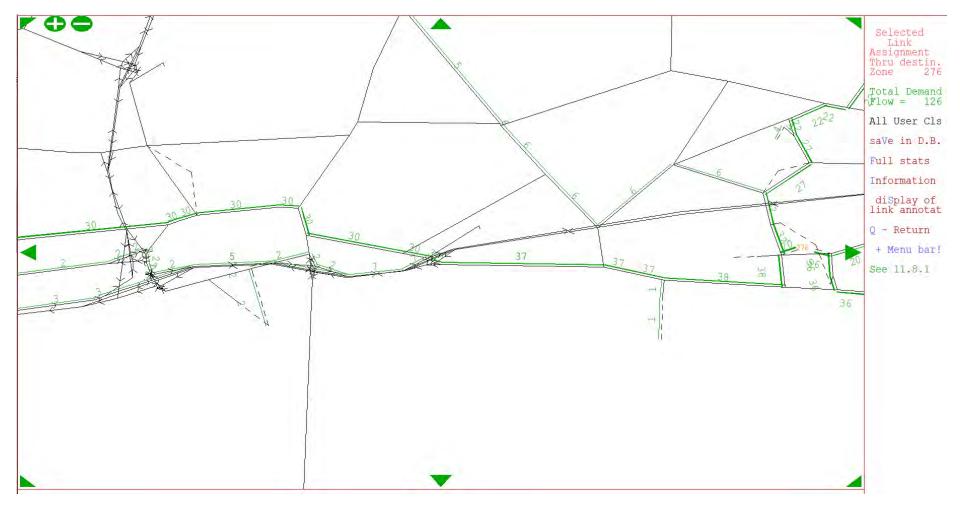
## AM Origin West



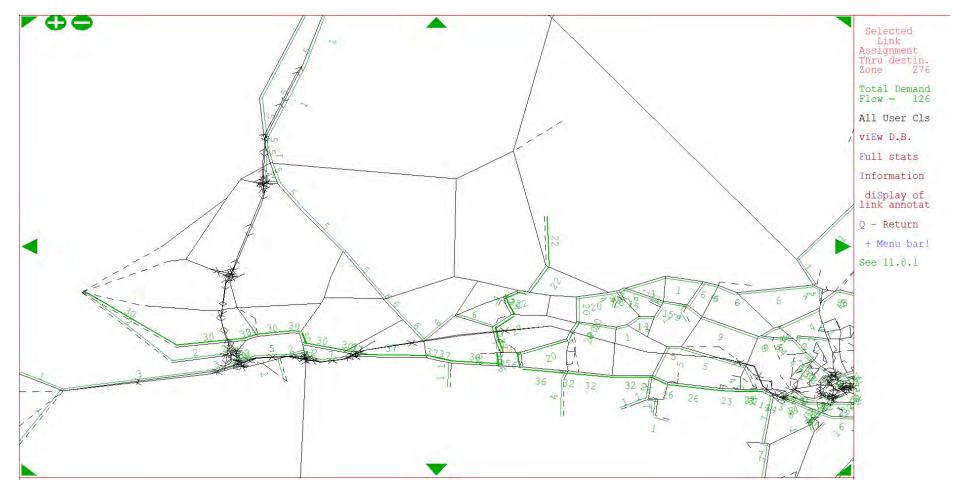




## **AM Destination West**

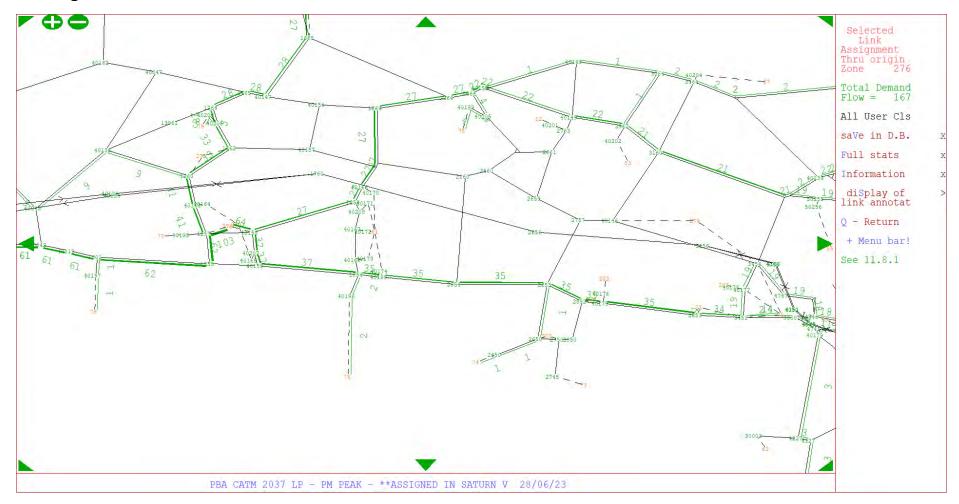


## **AM Destination Wide**

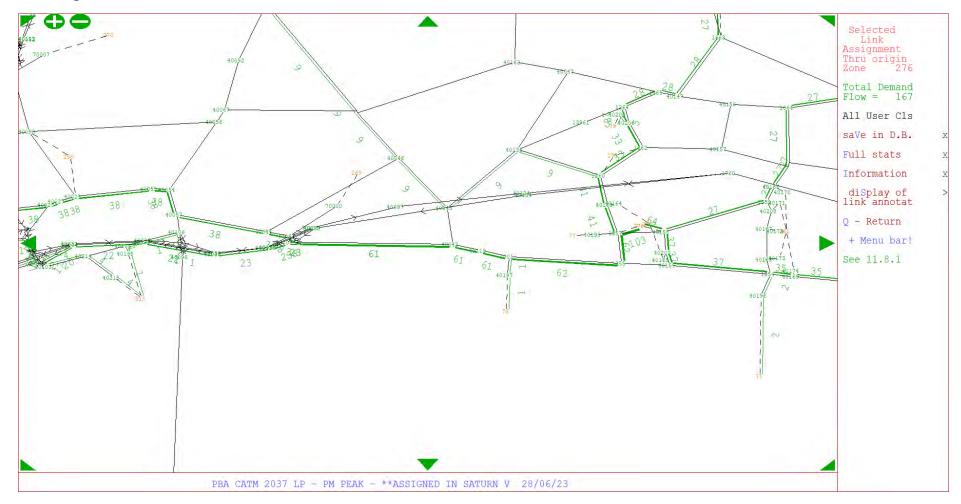


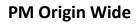
# **2037 Local Plan Without Mitigation**

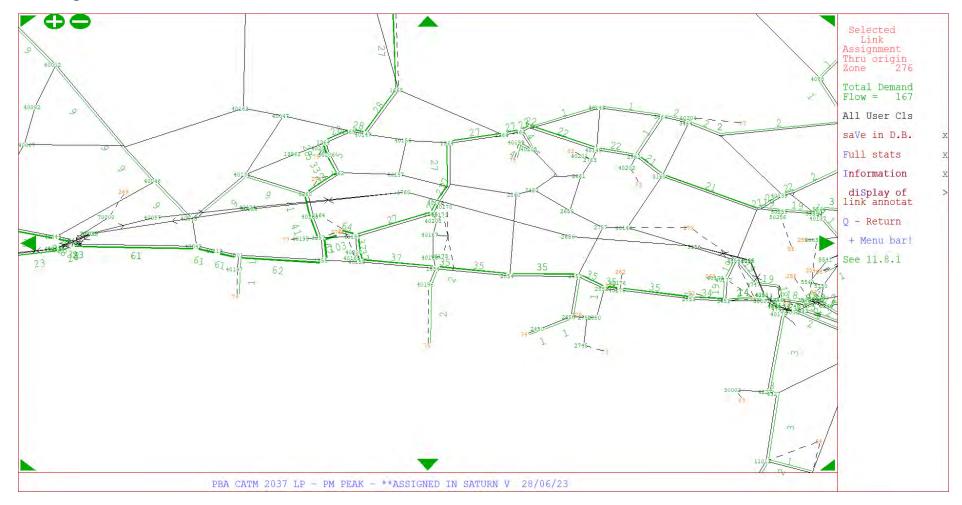
**PM Origin East** 



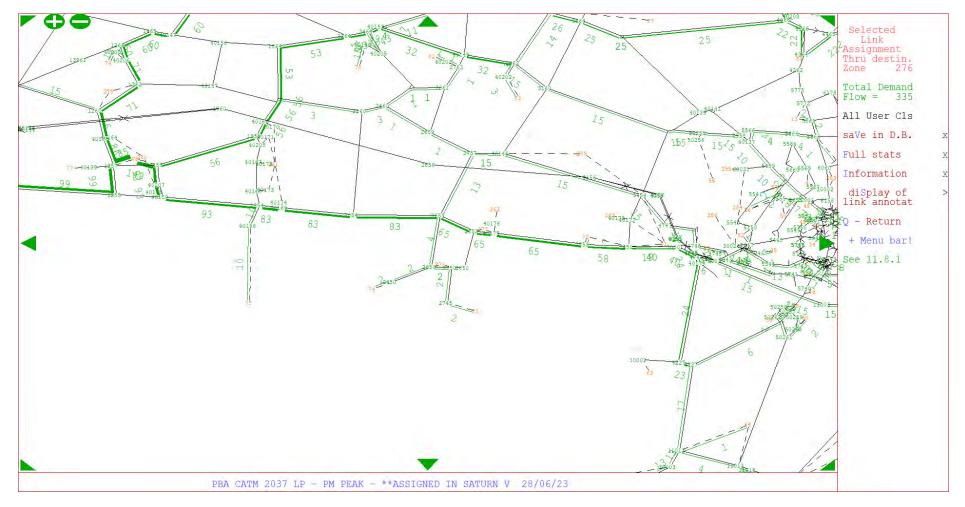




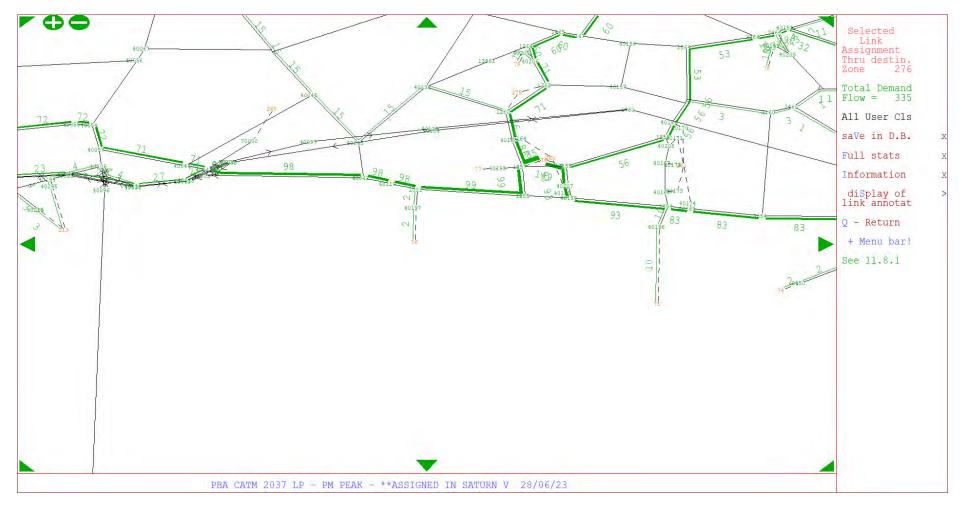




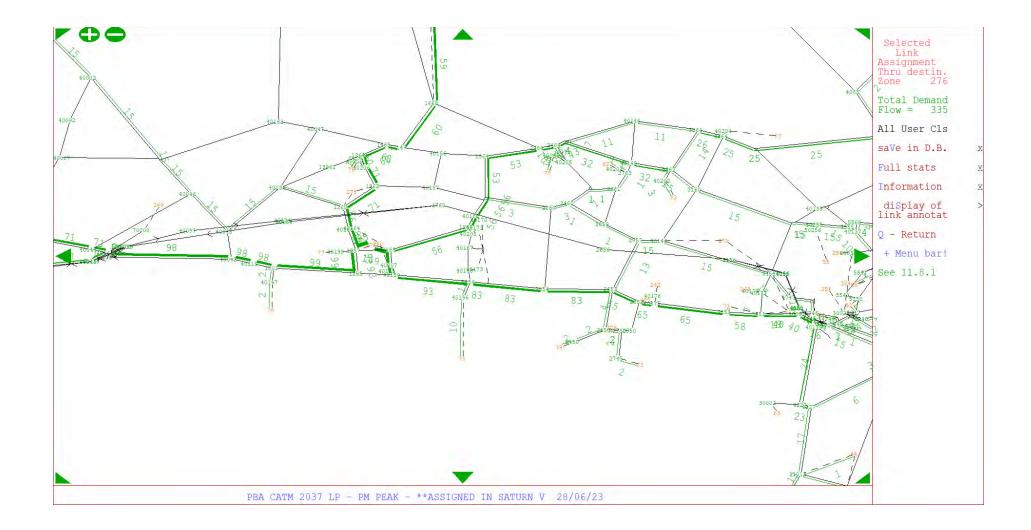
### **PM Destination East**



## **PM Destination West**

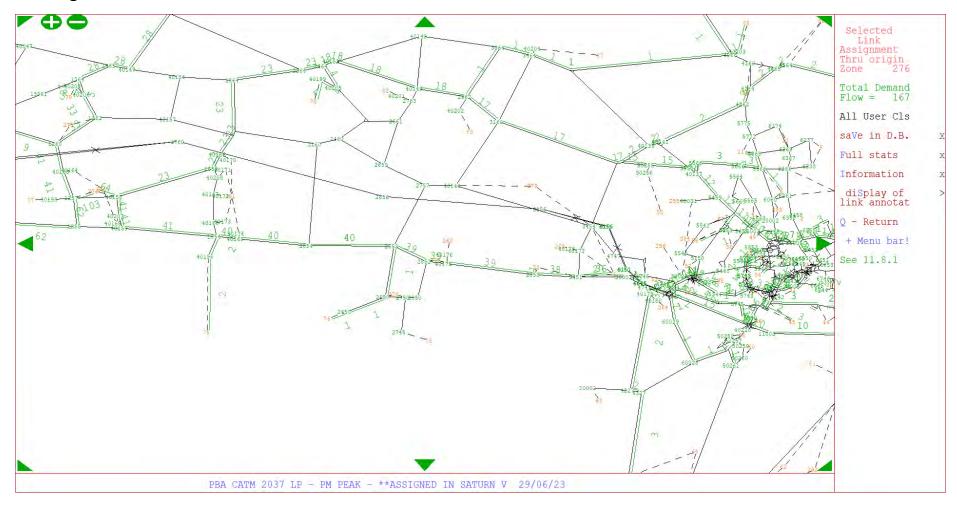


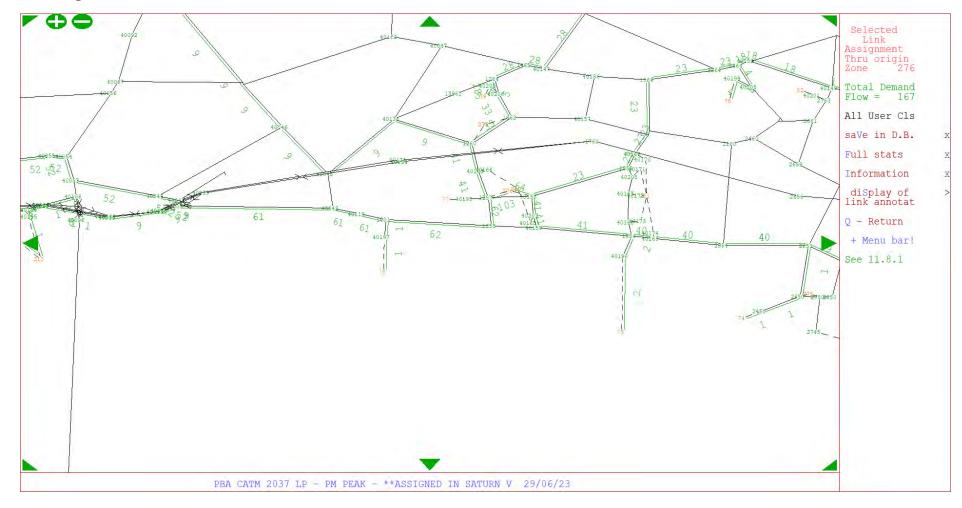
### **PM Destination Wide**



# 2037 Local Plan Models with Full STN Mitigation

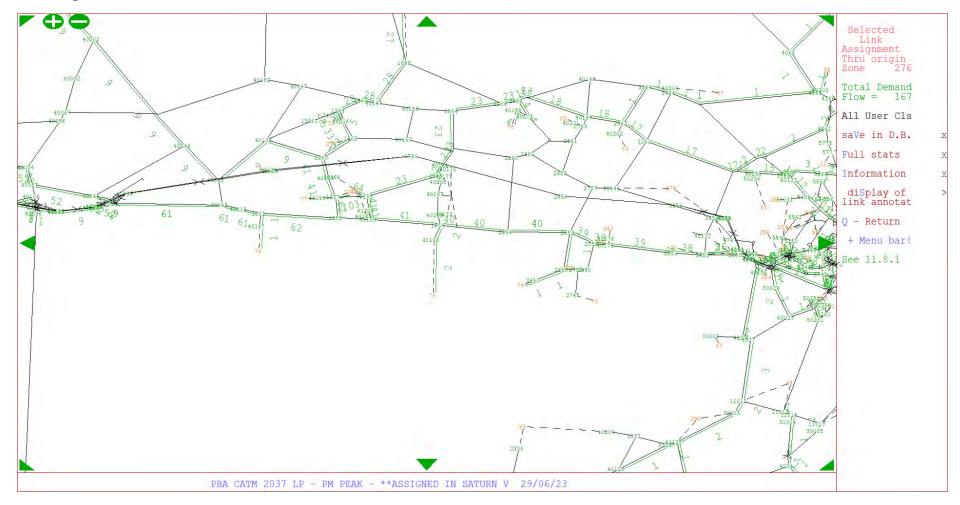
**PM Origin East** 



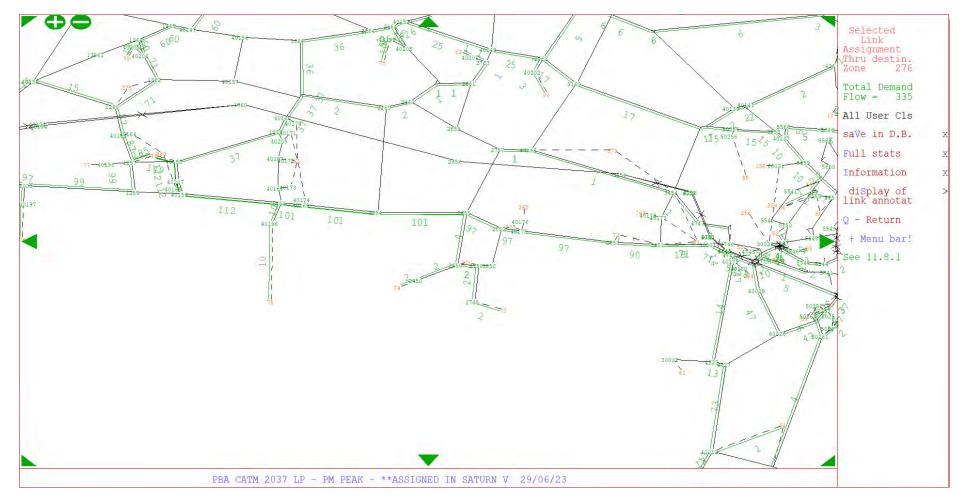


**PM Origin West** 

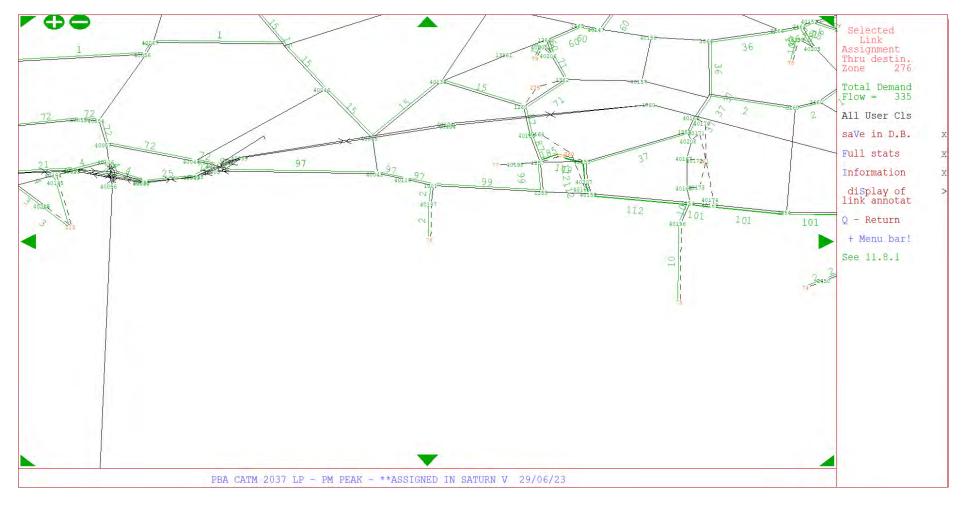




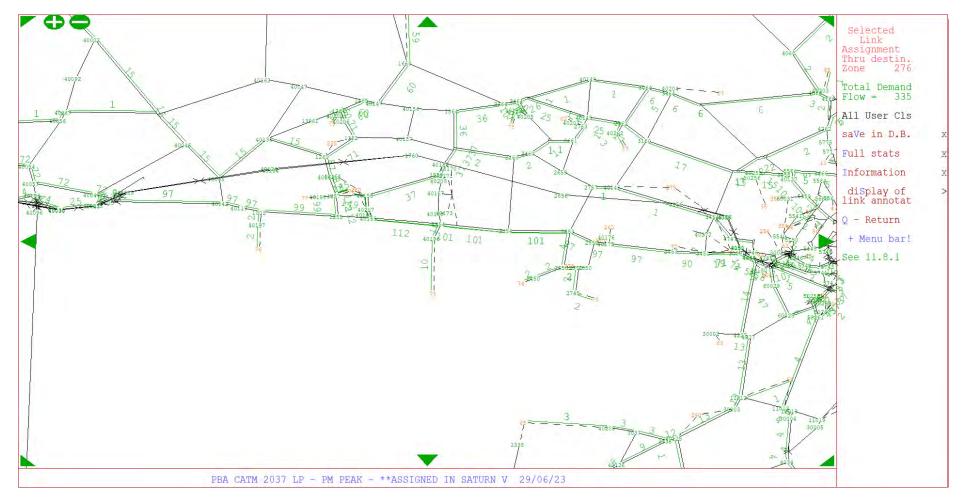
#### **PM Destination East**



## **PM Destination West**

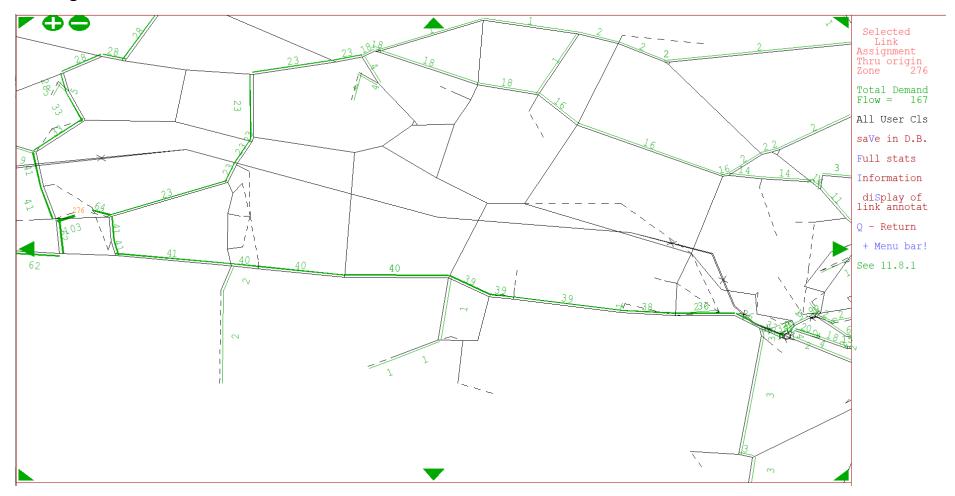


## **PM Destination Wide**

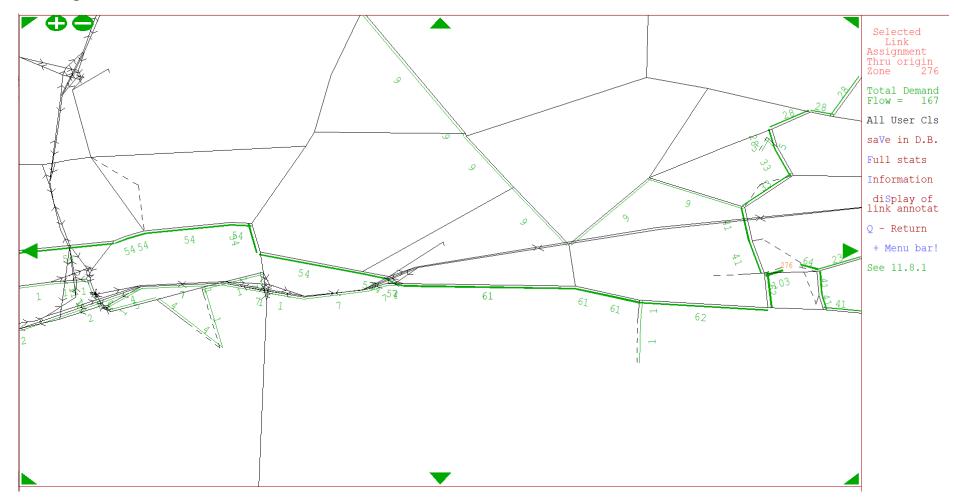


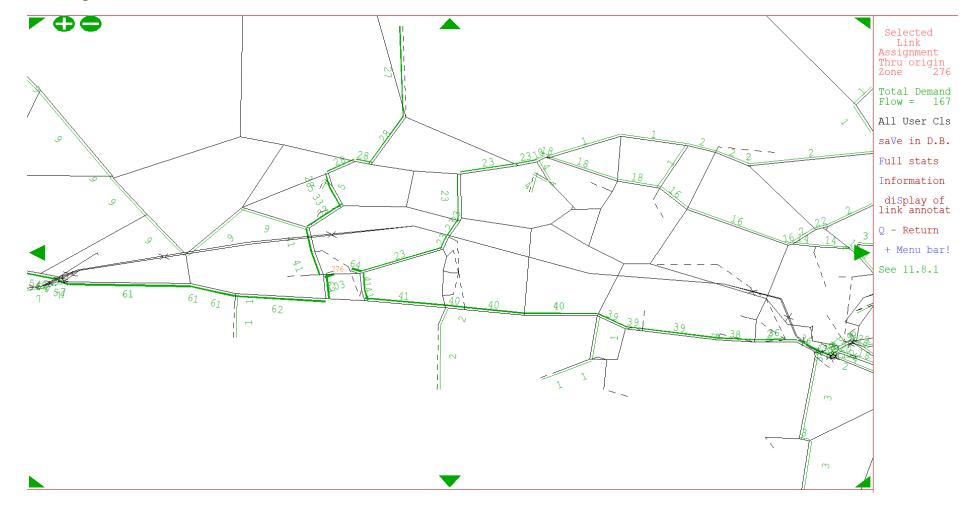
# 2037 Local Plan with Fishbourne (No SLR) and Bognor - STN Mitigation

**PM Origin East** 



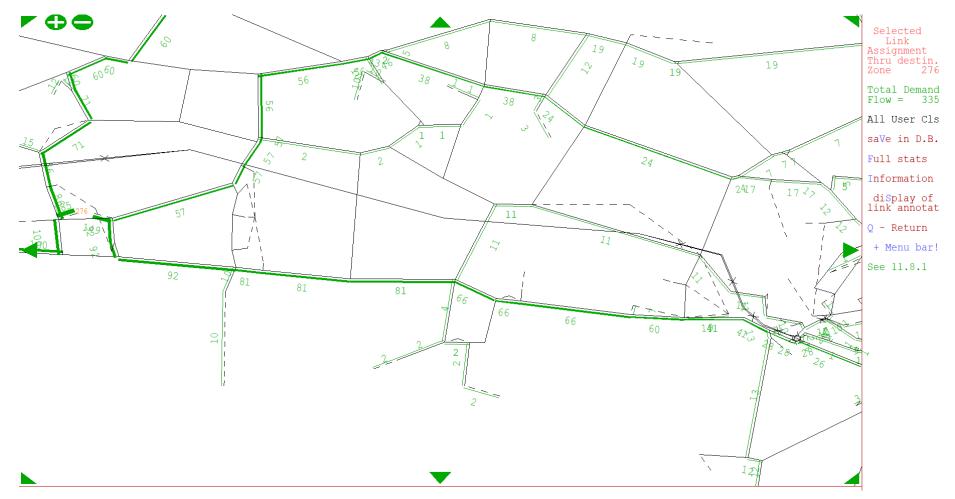
# PM Origin West



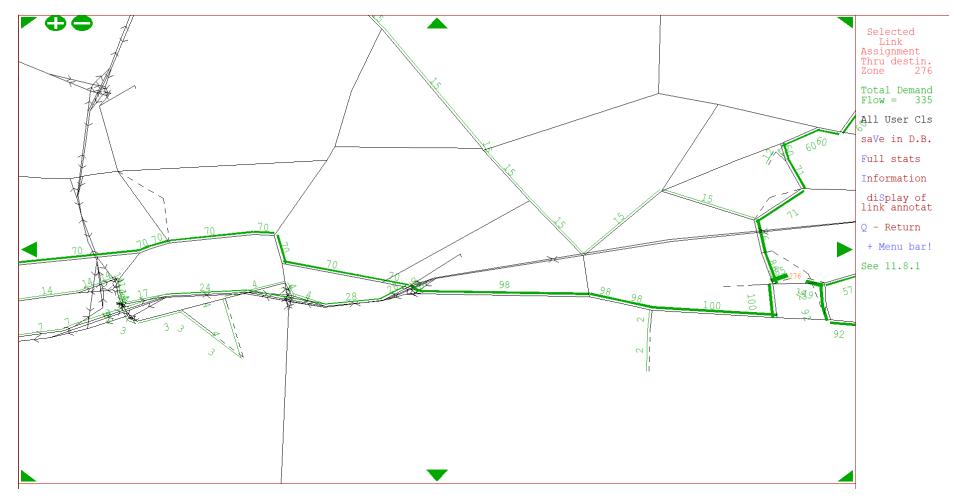


PM Origin Wide

### **PM Destination East**



## **PM Destination West**



### **PM Destination Wide**

