Due by: 15/	01/18	Visit Date: 19	/12/17
Site address	Land adjacent to East Cov	ves Liberal Club, York Avenue, E	East Cowes
Visit Officer	JW		
Application Type	T/P/O not applicable.	CA – East Cowes (Central)	

Application reference no: TW-0569-17

Site Notes: There have been two notifications for work on this tree in the past (TW/420/15 and TW/500/15).TW/420/15 was a notification to raise the crown of the tree to allow better access. The reply to this has an advisory note stating that the fungal body Inonotus hispidus was seen to be present on the trunk of the tree. TW/500/15 was a notification to reduce the crown to limit weight to the weakened trunk. Site inspections were made on the 13 and 27 of October 2015. I have no record that Island roads had work carried out on the tree, but from inspection it is thought that at least the crown raising was carried out due to the fact access round the tree was possible.

The tree is located in a wide pavement that is a busy public thoroughfare that adjoins a busy road. Around the base of the tree is a bench that completely encircles the trunk, allowing the public to sit beneath the tree's crown. There is a metal frame round the tree which was designed to offer support to the crown, but the tree has grown free of the frame which now provides support to only one branch.

Tree 1	Height	Diameter at	Age
Species: Weeping Ash, Fraxinus excelsior	Approx. 5m	Breast Height	Mature
"pendula"		Approx. 40cm	

Condition

A seemingly healthy crown, but the tree is structurally poor due to a fungal infection of Inonotus hispidus in the trunk around the graft point.

Work requested:

Remove the tree and plant a Betula pendula

"Youngii"

Reason:

Diseased

Tree Inspection assessment





From this and previous inspections of the tree a fungi, Inonotus hispidus, has been found to be growing on it (as shown in the above photos taken 23 January, 2018). This is a heart rot fungi causing the loss of lignin and cellulose, weakening the tree's structural integrity. The fungal brackets of this fungi are transient (appears once a year and then degrades leaving a black scar on the bark) as such at certain points of the year no fungal blooms are seen. From the most recent inspection the I. hispidus fungal bracket was seen to be growing from the grafting point of the tree's trunk. Weeping ash are generally grafted onto a common ash stem about 2 to 3 metres tall, it is from here that the crown grows. As a result of this it is possible to say the fungal mycelium is growing in the area of the trunk that is supporting the whole crown, and could be thought to be undermining the tree's ability to support the crown.

The crown is in good form with healthy buds, and it is full when in leaf. However the fungal body does not affect the vascular system in the tree (that which provides the water to the crown from the roots), but undermines the heart wood (that which gives the tree structural integrity). Due to this the tree can give the impression of being safe whilst the heart wood is being undermined. The healthy crown can also have an adverse effect on the weakened point in the trunk due to the additional weight stress it gives in full leaf.

Legislation

It is noted that this is a tree protected by virtue of being in a conservation area and as such this is not an application but rather a notification to carry out the work. The process being for the council if it were to object to its removal it would have to place a Tree Preservation Order (TPO) on it to prevent such an occurrence (Paragraph: 114 –134 Gov. PPG "Tree Preservation Orders and trees in conservation areas").

Analysis of inspection and recommendations

It is seen from the inspection of the tree, and knowledge of the fungal infection from previous inspections, that the fungal body I. hispidus is growing from the trunk of the tree which could be said to be putting the whole trees stability into question. It should be noted David Lonsdale's "Principles of Tree Hazard Assessment and Management" Forestry Commission: Research for amenity N0.7 says "Since I. hispidus weakens the wood of F. excelsior at an early stage of decay, its presence on this species, often indicates that breakage of the affected branch or trunk could be imminent." Whilst this specimen is Weeping Ash, (*Fraxinus excelsior "pendula"*) this would still be relevant and more so as its general weeping form has an inherent structural weakness.

From my 25 years of arboricultural experience I have often seen collapse of ash stems and branches caused by I. hispidus undermining the structural integrity of the trees heartwood. The reason it does this is that this is a heart rot fungi that feeds on both the lignin and cellulose in the heartwood, weakening the trees structural integrity by undermining the trees flexibility and rigidity at the same time. I would concur with David Lonsdale that it indicates that breakage of the affected area could be imminent. David Lonsdale also points out in the same publication that Ash has a low resistance to decay this is because "The relatively low moisture content of Fraxinus wood makes it rather susceptible to decay. Also the heartwood does not appear to be rich in preformed defensive substances" What this means is the trees level of toxins that are used by trees to fight decay and fungal – bacterial infection are low in this species and as such fungi like I. hispidus can cause high levels of damage here where as in a plane tree it may be lower. It is for this reason the fungi is commonly found on Ash trees

Treatment

It is not possible to treat this fungal infection with the exception of pruning the infected area out. Such action is only possible if the disease is caught at the early stages, even then there is a possibility the infection could have already spread. However given the point of infection in this tree is around the grafting point on the trunk, it would not be possible to remove the infected area in this case without removing all the tree with the exception of a 2 metre tall trunk.

Other assessments

A member of the public has sent in a report that has a conflicting position on the trees condition. However this report is based upon a misidentification of the fungal body found on the tree, and as such an inaccurate understanding of the problems it is causing.

Safety

The tree is located in a public thoroughfare, has a bench beneath that encircles the trunk of the tree. The Analysis of inspection and recommendations identifies that an imminent breakage is likely, and therefore public safety is a key issue.

Managing risk

At present the management risk for this tree stands with Island Roads as they are contracted to manage trees belonging to the council that are located on the Project Network. At present if the tree were to fail and damage property or harm a member of the public they would be culpable. If the

council were to object to the removal of the tree and it were to fail, then that culpability would potentially fall to the council and as such leave it open to compensation claims.

Conclusion

The tree in question is clearly a significant feature tree of arboreal and historical importance in the local community. However due to the location of the fungal infestation, the likely public risk due to (potentially imminent) failure must be considered. The options available to the council in determining a section 211 notice are limited. Due to this it is advised that, in accordance with the legal section 211 process, the council does not object to the removal of the tree.

Decision

No objection to the removal of the weeping ash and replacing the tree with a Betula pendula Youngii.

Reason: The tree is infected with the fugal body Inonotus hispidus, which undermines the strength of the tree and often indicates that breakage of the affected branch or trunk could be imminent.

Advisory Note(s)

 All work should be carried out to a minimum of BS3998 2010 "Recommendations for Tree Work" or current industry "best practice". Working practices should comply with guidance and regulations issued by the Health & Safety Executive.

Reason: To ensure the health and future amenity value of the trees.

- Outside of the formal section 211 process the following options could be considered and investigated further by the applicant (with responsibility for the tree):
 - a) Retain and reduce the tree reducing the weight stress to the weakened area.
 - b) As a) but also to design and install additional support structures for the areas of the reduced crown.

However, the council has no legal powers to require such approaches through the section 211 process as the notification is to remove the tree. Island Roads is aware that the period within which the council should make a decision has expired, but has agreed not to take any action until it has had a chance to receive and consider this report. It is therefore suggested that:

- This report is shared both with the highways PFI contractor (Island Roads) and with other interested parties, so that options a and b can be considered by the contractor. Other parties would similarly be invited to comment on the option of transferring liability to a third party. A period of 21 days should be given for responses.
- A decision on how to manage the tree is then taken following receipt of comments, and that the decision will be made publicly available. It is suggested that no work be undertaken on the tree until this final decision has been made.