2014-243

MEMORANDUM

TO: **Mayor and Council**

FROM: **Chief Administrative Officer**

DATE: **October 14, 2014**

RE: **Update -CRD Regional Deer Management Strategy (RDMS) - Oak Bay Pilot**

REASON FOR THE REPORT:

The purpose of this report is to advise Council on the current status of Capital Regional District 's Regional Deer Management Strategy (RDMS) – Oak Bay Pilot.

BACKGROUND:

In response to concerns for public safety and evidence of the growing number of deer fatalities in Oak Bay neighbourhoods and on Oak Bay streets, Council resolved in November 2013 to participate in the Capital Regional District's Deer Management Strategy (RDMS) urban pilot project. The CRD would support the pilot with staff and expertise. Based on CRD budget estimates, Council approved an allocation of $25,000 in the 2014 municipal budget, with an understanding that population reduction measure was a potential outcome.

The RDMS urban pilot project outlined a number of initiatives for the municipality to follow to reduce deer/human conflict. Public education and awareness formed the foundation of these initiatives.

Earlier in the year two municipal bylaws were reviewed and changed:

- Bylaw #4610 increased feeding deer fines from $100.00 to $300.00.
- Bylaw #3536 fence heights for residential side and back yards were reviewed and deemed appropriate

In the spring, a public education campaign was undertaken to promote awareness of how best to mitigate human/deer conflict. Two CRD prepared awareness brochures (Deer in the Capital Region - Information for Residents; and Reducing Deer –Human Conflict – Deterrents) were distributed through the Oak Bay News. Editorials were

printed in the Oak Bay News and regular meetings with concerned citizens were held by the Mayor, and are ongoing. The municipal website also hosted messages from Mayor and Council regarding Deer Management and a section on Frequently Asked Questions. The municipality itself supports deer resistant planting and the use of deer repellents as demonstrated in municipal gardens and parks in the community.

CRD staff, volunteers, and the municipal animal control contractor, undertook a deer count over the course of several days in June. While the count methodology would not stand up to scientific rigor, the methodology used was informed by the provincial wildlife branch that has overall authority for urban deer. Given that we are currently measuring the population by the number of deaths each year, the count is an important relevant undertaking and is considered to be a baseline tool required by the province if/when the municipality submits a permit application for a deer cull. In the future, the deer count could continue to be a yearly event through the CRD (should they carry forward with their role in a Regional Deer Management Strategy) and serve as a helpful indicator of the deer population in Oak Bay.

In the early summer, the municipality acquired two sets of speed boards through ICBC that were strategically located throughout the community as a tool for driver awareness of speed in high collision areas and to reduce risk of deer/vehicle collisions through awareness of speed. The District strengthened its street signage in order to raise greater awareness of the possibility of deer vehicle collisions in our neighbourhoods.

An information session was held in March for Council, along with CRD staff in attendance and the provincial wildlife veterinarian Dr. Helen Schwantje (the provincial biologist Mr. Sean Pendergast was unable to attend), to discuss deer population reduction strategies. Dr. Schwantje has overall provincial authority for the deer population reduction permitting and was able to provide Council with professional guidance and information based on her permitting authority. While she reviewed various options for population reduction and took questions from Council (on various methods including, immunocontraceptives, hazing and frightening, public hunting/sharpshooting, capture and relocation...), she was very clear that the only population reduction method that she would authorize for an urban setting is capture and euthanize. Dr. Schwantje indicated clearly at this time that this is the only humane option available to any municipality in BC that is attempting to address the growing problem of urban deer throughout the province (the attached fact sheet prepared by CRD staff provides the rational that would prevent the authorization of other methodologies). (See Attachments #1) Further to the discussion of this deer management strategy, the wildlife veterinarian also discussed with Council that deer management is not just a one time event, but that further monitoring and evaluating of human/deer conflict will be required for several years to come.

During this same meeting with Dr. Schwantje , Council requested her assistance to help inform/educate Oak Bay citizens on the capture and euthanize methodology, and why

only this option would be permitted. As the recognized subject matter expert and person of authority, she agreed to assist providing her Minister was in agreement and her time was available. In the meantime staff are heavily reliant on the various information and fact sheets produced and provided by the Provincial Government, several of which have been attached to this report. (See Attachment #2)

Throughout the course of this initiative, the District of Oak Bay and the Capital Regional District have prepared and sent several letters to the provincial government requesting funding for deer management, access to the subject matter expert Dr. Helen Schwantje and access to modified clover traps.

During the summer the municipality was advised that: "*The province cannot agree to the sharing of operational costs. As previously communicated, while the province will provide advice, administer permits and loan equipment, it cannot assume responsibility for urban deer management activities*." Following the request to access for the traps, the municipality has received conflicting information, with recent written correspondence late this summer from ministry staff that said: *"Region One (Vancouver Island Region) has Clover traps (up to 4) that could be made available however, they are not the 'modified' variety. They are not as efficient, require more manpower, would cause more stress to the deer and could possibly be associated (with) slightly higher safety risks to the operators. For these reasons, our Provincial Veterinarian warns against their use for deer in 'capture and euthanize' applications.*" The correspondence goes on to further say that "*the Provincial Government does not have suitable traps that can be made available on loan to the District of Oak Bay...*". As a result of these developments the municipality determined it could not proceed with population reduction until (at the earliest) January 2015.

Also during the summer, the CRD provided Oak Bay with notice that they would no longer be able to provide staff support to the urban Oak Bay DMS pilot after September 30, 2014. The Regional District had limited resources assigned to undertake the pilot project that was scheduled to end in October 2014. Oak Bay staff was directed to write to the CAO of the CRD to request an extension of support to enable Oak Bay to complete its pilot project. As a result the CRD has since indicated they would continue to support Oak Bay through to the end of March 2015.

CURRENT STATUS:

Deer deaths in Oak Bay: trending higher

The number of deer deaths in Oak Bay has continued to increase. The following yearly statistics of deer carcasses removed from the District of Oak Bay have and continue to be collected by our Public Works department:

YEAR	# of deer deaths
2007	3
2008	0
2009	7
2010	8
2011	14
2012	23
2013	40
2014	29 (to the end of September 2014)

In the early summer our Oak Bay Police Department received training from the provincial conservation officer on how best to dispatch injured deer. Although not the best use of our policing resources it has become a more common practice in recent times.

Budget Revision:

As of September, half of the budget allocation ($25,000) has been spent on the deer management conflict reduction measures described above including public education and communication. The original budget proposed by the CRD last year did not reflect the costs associated with implementation of a deer cull that factored in the appropriate management of the animal in its entirety which would include the use of the meat, hides and hooves. Nor did it reflect the costs associated with use of additional equipment needed to monitor the traps throughout the duration of the cull. CRD staff have been requested to update the budget estimates for the actual deer cull for Council's consideration. These costs will fall into the 2015 budget cycle.

Continued Public Education:

Staff will be introducing posters at recreation centres and all public spaces to remind residents not to feed the deer throughout the fall and winter months.

Permit Application:

Given the number of deer counted over a period of 5 days earlier this year, the CRD had drafted a permit application for up to 50 deer exceeding the initial estimate of 25. There is no scientific evidence or formula that informs any decision regarding scope of the recommended population reduction. Council's most poignant evidence is the escalating deer deaths year over year on the streets of Oak Bay. Municipal staff will be proceeding with review and submission of the permit application to cull up to 25 deer for the Ministry of Forest Lands and Natural Resources.

Deer Management Following the Cull:

Talks are continuing with the Esquimalt and Songhees Nations regarding the distribution of the deer meat and the traditional uses of the entire animal to ensure the complete honouring of the animal's life.

Conversations with the Government of BC
-Traps And Subject Matter Expert:

Following the recent Union of BC Municipalities meeting with Hon. Steve Thomson, Minister of Forests, Lands, and Natural Resource Operations, Mayor Jensen sent a letter to ensure confirmation on the Minister's commitment to provide the necessary modified clover traps, and to confirm the subject matter expertise resource of Dr. Helen Schwantje, the provincial wildlife veterinarian.

Provincial Meeting on Deer Management:

At the recent UBCM meeting, Minister Thomson also indicated that his ministry staff would be calling a meeting in mid-November to discuss regional deer management strategies particularly with all those local governments who have already undertaken deer management strategies in their regions and municipalities. District of Oak Bay staff will make every effort to attend this meeting when it is called.

During the UBCM meeting Minister Thomson also indicated that there maybe an interest in undertaking of a pilot relocation project. The details including location and terms of reference have not yet been finalized or released. Speculation is that such a pilot project may be analyzed next year in and around the Cranbrook area and would be for a different species of deer. Staff will continue to monitor the progress of this potential initiative for future consideration.

NEXT STEPS:

There continues to be strong support for, and a vocal opposition against, a deer cull in Oak Bay.

Staff have been working, over the past year, through the various steps outlined in the deer management strategy prepared by the Capital Regional District. Bylaws regarding fencing and feeding have been reviewed and altered as necessary, monitoring of the number of deer and vehicle altercations has been maintained, public education has been undertaken with distribution of two brochures and provincial government literature is linked to our website. Additional signage in the high traffic areas has been installed. These are all mitigation strategies to avoid human/deer conflicts. These initiatives, however, have not reduced the growth of the urban deer population in Oak Bay, and the next course of action is the submission of a permit application to the provincial

government who have overall authority for wildlife management in B.C. If approved, the province would allow the District of Oak Bay to undertake a cull.

While this continues to be a very emotional and sensitive issue, many Oak Bay residents acknowledge being more "deer aware", and despite initiating the recommended actions to minimize deer human conflict, the number of deer killed in Oak Bay in 2014 is trending higher than in any previous year.

Staff will prepare to submit the permit application in the coming weeks, and begin the logistical work with the CRD staff for its implementation. Staff will also be working with the CRD to prepare the necessary Request for Proposals advertisements leading to the selection of an appropriate contractor. The permit, should it be granted, would allow for a cull of up to 25 deer in 2015.

As this permit is a public document, communications support will be required to prepare the community. Staff will assume the responsibility for preparing a communications plan. Staff recommends that given the sensitive nature of this initiative, all information regarding population reduction measures and options be authored and supported by the provincial wildlife veterinarian, Dr. Helen Schwantje to strengthen the legitimacy of the population reduction measures.

FINANCIAL IMPACT:

Staff will continue to work with CRD in revising a budget for Council's consideration.

Council should be made aware that there are limited staffing resources for this project identified within the municipality. The Project Management of this pilot project has been undertaken by the office of the Chief Administrative Officer with some additional contracted services provide by our communications contractor. There are no other staff assigned to this project.

RECOMMENDATION(S):

That Council receive this report for information.

Helen Koning
Chief Administrative Officer

ATTACHMENTS

Frequently Asked Questions
Deer Management Strategy

CRD | Planning & Protective Services

Why is population reduction an important component of a deer management strategy?
Public education, outreach, bylaw enforcement, street signage and traffic calming measures along with fencing, landscape design and deer repellant utilization are all components of a successful deer management strategy. Population reduction is only one component of a deer management strategy. When dealing with an overabundance of deer in an area where there are no natural predators, there needs to be a mechanism to reduce the population to more manageable numbers.

What is the Regional Deer Management Strategy?
The CRD Board provided direction to move forward with a Regional Deer Management Strategy in 2011. The CRD utilized a citizens advisory group (CAG) consisting of eleven members of the public, chosen from applicants by the CRD Board, to guide the development of a regional deer management strategy (RDMS). The strategy is designed to be action based using the Urban Ungulate Conflict Analysis (Hesse 2010) as a foundation to address the deer-human conflicts within the Capital Region.

In April of 2012 the CRD assembled and an expert resources working group (ERWG) , which included provincial wildlife biologists, the provincial wildlife vet and experts from the private sector, to advise and clarify information for the citizens advisory group. In December of 2012 the CRD Board adopted the Regional Deer Management Strategy. A "terms of reference" was drafted to give the framework for an urban and an agriculture pilot project. The Oak Bay council voted to work with the CRD initiative in June of 2013.
https://www.crd.bc.ca/docs/default-source/regional-planning-pdf/Regional-Deer-Management/regional-deer-management-strategy.pdf?sfvrsn=2

Why did Oak Bay agree to participate in the Pilot Program?
Like the municipalities throughout the CRD, the District of Oak Bay has, over the past several years, been hearing concerns and growing complaints from residents throughout the municipality regarding the growing population of black tail deer in Oak Bay and the risk to public safety. We were asked to take action.

Public safety is our primary concern. In the absence of any natural predators, the deer population is on the rise, and as a consequence so are the incidents of deer-human conflict throughout our streets and neighbourhoods. 40 deer died in 2013 in Oak Bay due to human-deer conflict and these deaths were not humane – they were long and painful and most often the result of vehicle collisions, failed attempts to jump fences, and illness. Oak Bay is expected to surpass these recorded carcass removal numbers in 2014.

The Provincial Government, who has the authority for wildlife management in BC, has reviewed the CRD's Regional Deer Management Strategy and requires the Ministry of Forest Lands and Natural Resource Operations to issue permits authorizing population reduction. After the regional deer management strategy release Oak Bay residents urged council to step forward and participate in the urban pilot project.
Please see the following links for more information: https://www.crd.bc.ca/docs/default-source/regional-planning-pdf/Regional-Deer-Management/regional-deer-management-strategy.pdf?sfvrsn=2

Frequently Asked Questions
Deer Management Strategy

CRD | Planning & Protective Services

What does the Oak Bay Urban Pilot Project include?

- Public Education and Communication
- Deer Vehicle Collision mitigation:
  - » Signage
  - » Speed limit considerations
- Bylaws that include:
  - » Fencing (higher back and side fencing allowances for home owners)
  - » Feeding the deer is prohibited and fines have increased to $300.00
- CRD Database design and compilation: Deer count to better understand the size of the population throughout the community
- Data Analysis: CRD Count + ICBC deer vehicle collisions + Oak Bay carcass removal + Oak Bay resident complaints
- Population reduction – if necessary.
- CRD evaluation of Pilot Project
- Determination of next steps

What can residents do to help address the risks associated with human-deer conflict?

The following brochures are available with more information:

- Deer in the Capital Region Brochure
- Reducing Deer-Human Conflict Brochure
- Ministry of Environment - Discouraging Ungulate Conflicts

Be Deer Aware:

- Use caution when in the proximity of the deer. When driving, slow down and be very aware.
- Deer are most aggressive when they have young to protect (spring and early summer) and in the fall during mating season (end of October through early December.)
- educate your children, neighbours and friends, and prevent your pets from chasing or confronting deer.
- not feed the deer! A fine can be levied for feeding deer in Oak Bay.

When are deer most aggressive?

Deer are most aggressive during the spring birthing period as well as the fall/winter mating period (rut). The doe's instinct to protect their fawns from a perceived threat is what could provoke a defensive reaction from a doe. The rut is another sensitive time to be aware of potential conflict because the bucks are rutting. They are looking for females to mate with and can become very aggressive towards pets and in rare cases children due to elevated levels of testosterone which causes the bucks to become very focused on the does.

Frequently Asked Questions
Deer Management Strategy

CRD | Planning & Protective Services

What Considerations and Options Were Explored with the Province of BC and the CRD to Address Population Reduction in Oak Bay?

If there is a population reduction, will other deer move into neighbourhoods to fill the void?
Wildlife experts in the provincial government have informed us that the void will not be filled right away with deer from other areas. Black-tail does do not migrate very far from where they were born. They generally don't cover more than a few square blocks. Home range in urban areas is estimated to be about 2.5 square kms. Bucks, however, will cover slightly more ground in search of females and prime food. Deer generally will not move to a new area unless they are pushed because of predation (animal or people), dense populations and/or a lack of desirable habitat.

Capture and relocate has not been supported as a deer management option by the government of BC.
This method is not currently supported by the Ministry of Forest Lands and Natural Resource Operations for black tail deer in this region. The Ministry Forest Lands and Natural Resource Operations stated that it will not authorize the capture and relocation of black-tail deer due to the transportation stress and resulting high mortality rate. Deer habituated to urban and suburban environments do not fare well when introduced into wild environments. http://www.env.gov.bc.ca/cos/info/wildlife_human_interaction/UrbanUngulatesConflictAnalysisFINALJuly5-2010.pdf

Tranquilize and relocate has not been supported as a deer management option by the government of BC.
The Ministry of Forest Lands and Natural Resource Operations has stated that it will not authorize the use of tranquilizers to aid in the relocation of deer due to the high risk of the deer reacting poorly to the tranquilizer. Risks range from no reaction to the deer succumbing to the tranquilizer causing death. Deer habituated to urban and suburban environments do not fare well when introduced into wild environments. Residual tranquilizers can impact other animals that consume deer that have been tranquilized.

Immunocontraceptives have not been supported as a deer management option by the government of BC.
This method involves trapping a deer in a clover trap, releasing the males, marking the females and injecting them with a contraceptive. This is currently only possible and legal as part of a research project and the contraceptive application must be supervised by Provincial staff. The cost per doe is approximately $1000.00 including the contraceptive. It is necessary to trap the deer in order to give the inoculation and manage any appropriate tagging or radio collaring for tracking. The inoculation not only sterilizes the doe, it also makes the meat unfit for human consumption. If the animal dies, scavengers that feed on the inoculated carcass could become contaminated. Approximately 70- 90% of the doe population must be treated in order to start slowing population growth. Best results occur in geographically isolated populations. The contraceptives are not currently licenced or approved by Health Canada for use except when being used for experimental scientific research and by permit only. Immunocontraceptive treatment needs to be ongoing in order to be effective over the long term. Treated deer will live out the remainder of the natural life the result being that any population reduction will be very gradual.

Frequently Asked Questions
Deer Management Strategy

CRD | Planning & Protective Services

The farming of Black Tail deer has not been supported as a deer management option by the government of BC.
The Province has never permitted the farming of black tail deer. This is to reduce the risk of transferring diseases between wild populations and domesticated, farmed big game animals. According to the Provincial Big Game Farm Act, the only big game animals that can be legally farmed in the province are Fallow Deer, Reindeer and Bison.

Capture and euthanize is the only population reduction deer management option that has been approved recommended by the Provincial Government and Provincial Wildlife Veterinarian as a deer management population reduction option for an urban area.
Under the direction of professional wildlife experts, deer are baited into modified clover traps. The wildlife experts use the trap to constrain the deer and employ a bolt gun to euthanize the deer. The deer dies quickly, and the meat, having not been contaminated by tranquilizers or contraceptives, can be consumed rather than wasted. Talks are underway with First Nations to receive the deer meat along with the deer hides, antlers and hooves which can be used for ceremonial purposes.
This issue of managing the growing population of black-tail deer in our community is a very emotional one for all of us. We will continue to listen to our residents, to work to ensure that we have the most accurate and up to date information available and we remain committed to act responsibly to protect the safety of our residents and the wellbeing of the deer.

Attachment #2

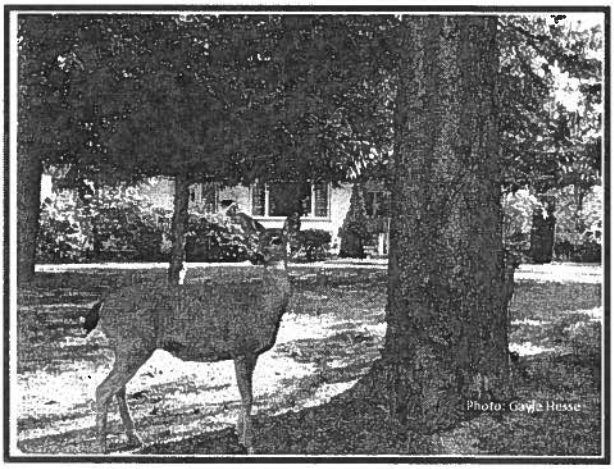
Ministry of Environment

Conservation Officer Service

Urban Ungulates Conflict Analysis

Dial Toll Free 1-877-952-7277 (RAPP) to report wildlife-human interactions where public safety is at risk.

There is a growing concern within many B.C. communities with respect to the growing numbers of deer populating urban areas. These increases are creating some issues such as higher rates of car accidents involving deer, aggressive behavior towards humans and damage to private gardens.



Recognizing this issue, Ministry staff conducted a thorough review of urban deer conflicts, called "British Columbia Urban Ungulate Conflict Analysis". The purpose of the project was to identify mitigation options for urban ungulate conflicts, including:

- identifying the scope of the conflict;
- reviewing current information regarding conflict reduction, including management practices in other jurisdictions and their effectiveness; and
- providing recommendations regarding a strategy to deliver conflict reduction programs in B.C. and effective management practices to implement.

The report includes conflict reduction strategies, such as repellents, landscaping alternatives, fencing, and vehicle collision mitigation. Population reduction strategies are also discussed in the report, such as capture and relocate programs, as are fertility control strategies and administrative options such as bylaws, regulations, and public education.

The next steps are to share this report with local municipalities and work collaboratively to assist them with the implementation of the recommendations. Successful resolution will involve cooperation and partnership between the provincial government, municipal governments, and community stakeholders.

British Columbia Urban Ungulates Conflict Analysis [PDF 6.67MB]

British Columbia Urban Ungulates Summary Report [PDF 1.56MB]

Wildlife Fact Sheets:

- FACTSHEET: Urban deer management in B.C.
- Using Dogs to Haze Urban Deer

- Donated Game Meat: Standards for the donation of culled game meat
- Fertility Control Of Deer [PDF 261KB]
- Feeding Wild Ungulates – why it isn't the answer [PDF 466KB]
- "Winterkill" In Coastal Blacktailed Deer [PDF 80KB]

For reports in portable document format [PDF]:
Visit the Adobe Acrobat site to download the free software you need to read PDF documents.

FACTSHEET: Urban deer management in B.C.

/ministries/forests-lands-and-natural-resource-operations/factsheets/factsheet-urban-deer-management-in-bc.html
Friday, September 5, 2014 10:40 AM

- The Province is committed to helping local communities throughout B.C. manage deer and other wild animals in urban environments.
- In some areas, urban deer have become a safety concern due to the growing number of conflicts between people and pets, increases in deer-related automobile collisions and the tendency of urban deer to attract predators such as cougars.
- Since every community has a different geography, deer population and capacity for dealing with urban wildlife, solutions can vary depending on specific conditions and local attitudes.
- Ministry staff help communities manage urban deer conflicts by taking part in planning committees, providing technical advice, developing hunting regulations, issuing permits to manage urban deer populations and loaning equipment to communities, when available and as required.
- Local governments experiencing urban deer issues are encouraged to develop detailed community management plans that include resident opinion surveys, deer population estimates, "no-feeding" bylaws and educational initiative outlining various conflict reduction strategies.
- Some communities have opted for limited culls as a way of reducing populations to a level where non-lethal, management tools can be used more effectively.
- As part of their deer management plans, communities must make full use of healthy deer carcasses resulting from these culls, for example by donating the meat to First Nations, local food banks or other charitable groups.
- Wildlife experts advise that capturing deer in modified collapsible clover traps and euthanizing them with a bolt gun is the safest, most efficient and most humane method of deer control in urban areas.
- Modified clover traps, which resemble oversized hockey nets, are placed in secluded locations to reduce stress on deer. To further reduce stress, deer are not trapped during daylight.
- Culls are conducted by trained contractors and meat must be processed by a qualified butcher. Organizations accepting wild game meat may distribute it to the public but may not sell it.

Contact:

Media Relations
Ministry of Forests, Lands and
Natural Resource Operations
250 356-5261

Using Dogs to Haze Urban Deer
BC Ministry of Forest, Lands and Natural Resource Operations
April 20, 2012

In communities experiencing high numbers of urban deer where there is public opposition of lethal control measures, proposals have been put forward to use trained dogs to chase the deer (haze) out of town.

Currently there is no provision that would authorize a person to use a dog to harass or haze wildlife. Consideration of permitting this activity would require further policy discussion as well as government approval for an amendment to regulation.

Section 78 of the *Wildlife Act* prohibits the use of dogs to harass wildlife. It reads:

> "A person commits an offence if the person causes or allows a dog to hunt or pursue
>
> (a) wildlife or an endangered species or threatened species, or
>
> (b) game, except in accordance with the regulations."

Regulations do allow the use of dogs to hunt wildlife in specific circumstances, but would not apply in cases of urban deer. Dogs can only be used in hunting deer where the dog is on a leash and under the direct control of the person, as part of a scheduled open season, by a person holding a valid hunting licence.

Hazing of ungulates using dogs has occurred in National Parks in Alberta, however all land is owned by the federal government and wild lands exist directly outside of the towns. Using dogs to haze ungulates becomes much more complicated in urban areas. Associated risks or complications with this activity can include:

- Deer becoming a traffic hazard
- Deer causing property damage
- Deer becoming injured
- Deer becoming a nuisance in adjacent farmland or nearby communities
- Requiring land owner permission to access properties

In consideration of the risks and the current Policy restrictions, this Ministry is not currently contemplating permitting the hazing of urban deer by dogs.

WILDLIFE HEALTH FACT SHEET
FERTILITY CONTROL OF DEER

This fact sheet gives an overview of a relatively new method of controlling overabundant deer - immunocontraception.

Background – Over the past three decades, the number of urban/suburban areas in North America where deer are overabundant has grown enormously. The consequences of high deer density range from vehicle collisions and damage to agriculture crops and gardens, to the loss of the natural biodiversity of other animals and plants. Deer may also serve as disease reservoirs for certain infectious diseases and have injured people and pets. Particularly in urban areas, the options for controlling deer populations are limited.

Options for Controlling Deer Populations – The number of deer in any given area is controlled by four factors: 1) birth, 2) death, 3) emigration (moving out), and 4) immigration (moving in). Emigration and immigration are difficult to influence. Increasing emigration by capturing and moving animals is difficult, expensive, stressful, and results in very high animal mortality from capture and transport and the difficulties adjusting to new habitats. Immigration can be controlled to some extent through hunting and reducing deer density on the urban fringe. Humane killing by gunshot can be effective and humane, even in urban areas, especially when deer are shot by highly trained marksmen under controlled conditions. Fertility control or contraception is the remaining option.

Contraception – Several approaches to contraception of large mammals have been explored, including surgical sterilization, hormone implants, and vaccination. Surgical sterilization requires the capture of deer, a general anesthetic that provides adequate pain control, and sterile surgical techniques employed by a veterinarian. It is highly invasive, expensive and impractical on an operational basis for a wild population. Hormone implants have to be replaced frequently and there are concerns about food-chain effects when treated animals are consumed by people or other animals. The use of vaccines to control fertility (immunocontraception) is considered a promising approach, but those available currently are still experimental, expensive and difficult to implement.

Immunocontraception – Immunocontraception is the use of vaccines to produce antibodies that target the reproductive system or its function. The most tested approach uses PZP (pig zona pellucida) proteins to produce antibodies that attach to the surface of the eggs of treated females and prevent sperm from fertilizing the egg; PZP vaccines are ineffective on males. PZP vaccines do not change normal behaviour, but may extend the breeding season with females coming into heat for more cycles since they do not become pregnant. Another type of vaccine, GonaCon®, produces antibodies that interfere with normal sexual development at the hormonal level; however, the duration of efficacy of GonaCon® is too short (only about 1 year) to be very useful.

The most promising contraceptive vaccine is SpayVac®, a PZP vaccine developed in Canada. SpayVac® is highly effective in deer, lasting several years (up to 6 years) with a single dose. Other PZP vaccines require boosters, increasing the technical challenges, risks to the deer, and the costs. PZP vaccines are advocated by a number of animal welfare groups, including the Humane Society of the US. None of these vaccines are licenced in Canada and are accessed only through an experimental permitting process from Health Canada.

Implementing a Contraception Program on a Deer Population – Using contraception to control deer populations depends on three factors:

1) An effective, long-lasting contraceptive vaccine,

2) A situation where the deer are tame and confined to some degree, to allow capture, treatment and marking, and

3) Adequate funding.

No matter how effective the contraceptive agent, if deer easily enter the population or are too difficult to catch and treat, the population cannot be brought under control with reasonable cost. The ideal situation for applying contraception is a small, isolated island, with small numbers of easily approachable, tame deer. It may also be possible to use contraception in other deer populations but such trials have not been done.

Requirements for a Program – Approximately 90% + of does in a population should be treated. Treatment includes capture, vaccination and a permanent form of marking for identification. Vaccines can be delivered with darts using a marker dye but deer are marked only until the dye wears off. Ear tags and a collar are permanent and allow treated deer to be easily recognized, avoiding accidental recaptures of previously treated animals.

The best time of year to capture deer is during the winter (cooler and animals tend to congregate), however does are usually pregnant at this time. The vaccine does not harm pregnant does or fawns so new fawns will be born the first year of the program. This means a delay in deer number reductions and the new female fawns will need to be treated.

Contraception and Lethal Removal – The process of reducing the population by contraception alone is slow – if there are too many animals before the program begins there is likely to be too many afterwards. Therefore, while with enough time and money, a deer population should be able to be brought under control by contraception alone, the process is complicated, is likely to take up to 10 years and be very expensive. To increase success, shorten the time required, and reduce costs, contraception and lethal removal are recommended to be used together. With this approach, a certain number of deer are treated *before* a number-reducing cull, while the deer are easier to capture.

Controlling a deer population by contraception alone requires that approximately 90% of the does be treated – a very tall order. Combining contraception with lethal removal accomplishes two goals:

1) the population size is reduced quickly, and

2) a high proportion of the remaining does can be treated.

It is important to understand that treating only 50-60% of the does in a population will be largely a waste of time and money – the main result will be improved survivorship of the remaining deer, with little effect on population size since treated does tend to live longer without the costs of pregnancy and lactation.

Personnel Required to Implement Contraception – Non-government persons require permits to handle and treat wildlife. The administration of drugs to immobilize deer and handling procedures requires specialized training and experience. Volunteers can be very helpful, but must work under appropriate supervision.

Costs – The information given here is very general. The cost of capturing a deer, where the deer are easily approached, is generally $400-600/deer, even with volunteer help with baiting and monitoring traps – likely the most cost effective capture technique. The vaccine cost is at least $200/dose = total of $600-800/treated deer. There are additional costs for personnel time for consultation, preparing implementation plans, and coordinating outreach and community meetings. The cost of culling, whether used alone or in conjunction with contraception, is additional.

Annual monitoring and follow-up treatment is necessary to vaccinate untreated does that enter the population as immigrants, as fawns conceived before their dams were inoculated, or born from untreated does. Implementing immunocontraception is a long-term commitment. In its first year, a program to vaccinate 20-25 does is estimated to cost $20-25 000. At this time this approach is not considered feasible for widespread use as a deer management tool in British Columbia.

Mark A. Fraker, M.A., R.P.Bio.
TerraMar Environmental Research Ltd.

Helen Schwantje, DVM, MSc.
Ministry of Forest, Lands and Natural Resource Operations

April 15, 2011

BRITISH COLUMBIA
The Best Place on Earth

WILDLIFE HEALTH FACT SHEET
Feeding Wild Ungulates – why it isn't the answer.

Keep wildlife wild – it is BC policy and it makes sense. When humans provide food to wild animals it changes their "wildness", no matter what species is being fed. There are justifiable reasons to feed wild animals, such as to attract them for capture, but these situations are rare. The consequences of feeding a wild animal unnatural types and amounts of feed can range from mildly irritating behaviour to catastrophic health issues, so understanding the reasons behind this policy is important.

The following guidance is specific to ungulates (hoofed mammals) such as deer, elk, or bighorn sheep but the principle of keeping wildlife wild apply to all wild animals.

Background

Opportunities to come close to wild ungulates are rare but rewarding, especially when the animals are unaware of the humans. Habituation, or increased animal tolerance for close contact with humans, occurs when animals are fed, and with this comes unplanned consequences. Some of the consequences include:

1. **Feed Effects**

   Wild ungulates have specialized seasonal food requirements, which they fulfill by eating a wide variety of foods from their environment. Well-intentioned people may quite literally be "killing with kindness" when they provide unnatural food items to wild ungulates.

   - All ungulates are ruminants with specific bacteria in their digestive tracts, specialized to digest their specific diet. It can take weeks for ungulate digestive systems to adjust to new food items. Rapid changes, especially at critical times such as the fall, can result in death, even with rumens full of (unnatural) food.
   - Dry feeds, such as hay, grains or pelleted types, are prepared for domestic livestock and meant to be used with abundant fresh water. Without ready access to water, dry feed can impact in the digestive tract and can kill wild ungulates.
   - Grains, pelleted feeds or surplus fruits are high in carbohydrates/protein/energy and even small amounts can cause digestive upsets that lead to diarrhea, bloating and significant damage to ungulate digestive tracts.

2. **Population Effects**

   Wild ungulate populations are naturally limited by a number of factors, including the amount and quality of food their habitat supplies. Animals in poor body condition or with high nutritional needs, such as the young may die when natural environmental conditions and appropriate foods are not present in the right amount and quality to sustain them.

   Feeding of wild ungulates by humans increases animal density in the short term by concentrating animals around the feed source. Density increases may also occur over time if the feeding results in

Ministry of Forests, Lands and Natural Resource Operations
Fish, Wildlife and Habitat Management Branch
Mailing Address: PO Box 9391 Stn Prov Govt Victoria BC V8W 9M8
Phone: (250) 387-9771
Fax: (250) 387-0239
Website: www.gov.bc.ca/nro

improved body condition or more frequent reproduction. Increased density results in increased competition for natural resources with other animals that share that range. Other consequences of increased animal density include:

- Increased risk of infectious diseases:
    - Disease transmission and outbreaks – animals in close and frequent contact with others transmit organisms more easily than when at lower density. There are many examples across North America where high ungulate density contributes to disease issues, e.g. pneumonia in wild sheep, tuberculosis, brucellosis and chronic wasting disease.
    - Higher stress on individual animals. Stress can lead to reduced immune function, making these animals more susceptible to infections.
    - In BC, viral papillomas (warts) in deer appear to be increasing in urban areas where deer numbers are unnaturally high.
- Poor body condition – animals may not grow or gain weight due to reduced feed quality or quantity.
- Increased conflicts with humans:
    - Increased habituation. Animals that learn to take human supplied feed become habituated, losing their natural wariness of humans. Habituated ungulates can be aggressive towards humans and their pets – especially during the spring when protecting the young fawns or in the fall during the breeding season.
    - Increased motor vehicle collisions causing injuries or death of humans and wildlife.
- Increased mortality from wild predators and humans – when animals are concentrated and much easier to find.
- Other major ecological effects from ungulate feeding are documented across North America and include:
    - Disruption of normal wild animal movement patterns and spatial distribution
    - Alteration of native plant community structure with reduced diversity and abundance
    - Introduction and/or expansion of invasive exotic plant species
    - General degradation of local habitat

Alternatives to Feeding ***Better ways to help wild ungulates***

Wild ungulates benefit when we preserve and restore natural habitats and reduce human-caused disturbances, leaving them alone to conserve their energy to survive severe winter conditions.

- The best way to help wild ungulates survive in severe weather is to maintain high-quality habitat year-round. If animals enter the winter in good condition, most survive persistent deep snow and cold temperatures. Even in well-functioning natural ecosystems, however, some animals succumb during winter months. This is natural, winter mortality helps keep ungulates populations in balance with the available habitat.
- Another way to help wild ungulates in winter is to avoid disturbing them. Animals must conserve their energy to survive in winter conditions. Human-related causes of disturbance such as from recreation (e.g. snowmobile activity) and chasing by domestic dogs can result in wild ungulates expending valuable energy.

Dr. Helen Schwantje, Wildlife Veterinarian
helen.schwantje@gov.bc.ca

Wildlife Health website: http://www.env.gov.bc.ca/wld/wldhealth.html

WILDLIFE HEALTH FACT SHEET
"WINTERKILL" IN COASTAL BLACK-TAILED DEER

This fact sheet gives an overview of the increasingly common issue of **deer in poor health during the late winter and early spring in and around coastal British Columbia**. Some of the information can also be applied to many wild animals during extreme and persistent inclement weather conditions.

The south coast of British Columbia has one species of native deer, the coastal black-tailed deer. The population density of deer varies significantly throughout its range on Vancouver Island and the coastal mainland. They are at moderate to high density on some islands and increasing in some semi-rural, suburban and even urban areas on Vancouver Island and the Fraser Valley. In these areas, deer now inhabit a new type of habitat for the species, sharing fields with domestic livestock and using cultivated landscapes such as golf courses, gardens and shrubs for feeding, in some cases on a year round basis. The lack of natural predators and milder winter conditions in rural and suburban areas also supports increased numbers of deer living near humans.

Every year Ministry of Environment staff and the concerned public report a variable number of deer, particularly the young of the previous year, showing one or several signs that can indicate poor health. These include:

- Loss of fear of humans
- Weakness and presence near homes, on porches, in outbuildings
- Poor to extremely thin body condition
- Poor hair coats – from small areas of hairloss to almost completely bald
- Digestive tract upsets – especially diarrhea, seen as green soft to liquid feces on the ground or coating the tail area
- Death with no apparent warning, especially after a period of supplemental feeding

Surprisingly, there is no evidence that these deer suffer from infectious diseases, but there is indication that the **poor health is associated with high deer density and seasonal nutritional issues.** It is difficult to do laboratory analyses on all deer reported in poor health, but the analyses done so far do not show infectious diseases other than high numbers of parasites in some animals, both in their intestinal tracts and on their skin. And these parasites do not appear to be the primary cause of their ill health but just one of several factors.

Deer that live at low elevation on the coast are born over a more extended period of time than other populations. This results in fawns born later in the year that are typically very small as winter approaches. When they live in habitats that are partially or highly disturbed and not considered natural to them (i.e. farmlands, , gardens, golf courses), they feed on many types of vegetation that may or may not provide proper nutrition. Deer evolved as browsers of native shrub-like plants more than grazers of grasses. Even if their nutrition was the very best, any animal entering the most nutritionally stressful time of the year (i.e. winter) at a small size will be highly stressed. These small deer must not only maintain their weight when the weather is cold, wet and windy, using large amounts of energy, but also invest energy in growing muscle and bone. A very high quality and quantity of nutrition is needed to grow and maintain weight during our wet and windy coastal winters.
There are a number of other animals that live on or in our coastal deer. Several species of ticks, lice, deer keds and internal parasites are normally present in most deer populations. In a highly stressed young animal that may not have the energy to move around much, and in a high density population, the

numbers of parasites on each animal are more likely to increase. The parasites alone - or the combination of them and the nutritional challenges the animals face - can be enough to push struggling young deer "over the edge" and show the signs of poor health noted above.

For many people the solution appears to be to give deer a "high quality" feed when the weather worsens – that is what we would do for our livestock, pets or ourselves. However, for any animal in a negative energy state, even for a horse or a dog, changing to a positive or weight gaining state can be a challenge. For a wild animal that did not evolve to eat a high carbohydrate diet of grains and rich feeds such as apples, grasses and alfalfa, the result can be a slow death. They cannot adjust to and digest feeds that they are not used to, and the result can be diarrhea, impaction (severe constipation) and a worse situation than before. In addition, the provision of supplemental feeds creates another challenge - further increasing animal density and the reliance on unnatural feeds - increasing the likelihood of parasite or disease transmission and further degrading the existing habitat.

Both parasites and improper feeds – too rich or too sudden a change – can start the diarrhea, weight loss and other metabolic changes that can end in emaciation and death. Once they are in this state they cannot be medicated into health – any handling or intensive care causes extreme stress and usually results in death. Many die as a result of end-state metabolic problems such as hypothermia (low body temperature), hypoglycaemia (low blood sugar), or exhaustion, and all of these, if not fatal, add to their stress.

Please do care for these animals by reporting their condition to the Ministry of Environment – we are interested in tracking wildlife health and sampling specific animals. But please do not add to the problem by providing supplemental feed to deer at any time of year – you may be "killing them with kindness". Help us keep BC wild animals wild and healthy.

Dr. Helen Schwantje
Wildlife Veterinarian
Wildlife Health Program
http://www.env.gov.bc.ca/wld/wldhealth.html
Ministry of Environment
April 16, 2009

2014-244-1

September 25, 2014

To: Mayor and Council

From: Municipal Clerk

Re: Tree Protection Bylaw Application for Reconsideration of Permit Refusal – 2226 Lansdowne Road

---

Under the *Tree Protection Bylaw*, adopted in 2006, the two Garry Oak trees, located at 2226 Lansdowne Road, for which a permit to remove was denied, would be considered protected.

Pursuant to the Bylaw, the Manager of Parks Services would issue a permit for the removal or damage of a protected tree where such removal or damage was required as per the various criteria laid out in the bylaw, which are as follows:

6. (1) to eliminate a hazard caused by a tree or part thereof which is dead, dying, severely damaged, unstable or severely leaning and in danger of falling;

(2) to eliminate a hazard caused by interference with utility wires;

(3) to eliminate a situation where a water line, sewer pipe or drain pipe is being chronically blocked or damaged by roots, or where pressure or penetration from tree growths above or below ground is causing damage to a building or part thereof, or to a significant structure, and there is no other reasonable solution that would not impose an undue hardship;

(4) subject to Section 9, to allow the construction of a principal building in the location shown on a building permit application which complies with all applicable enactments and bylaws, and where the plans for the same have been approved by the building permit issuing authority for the Municipality;

(5) to allow the construction of an accessory building or structure in a location complying with all applicable bylaws and regulations where a requirement to construct the building or structure in an alternate location would impose an undue hardship;

(6) to prevent a foreseeable hazard that would be created by damage to the root system of a tree attributable to the construction of a building or structure in a location approved by the building permit issuing authority for the Municipality;

(7) to allow the installation of underground or overhead services where a requirement to install the same in an alternate location would impose an undue hardship;

(8) to allow the installation of a driveway or required off-street parking area where a requirement to install the same in an alternate location would impose an undue hardship;

(9) or warranted because the tree, due to disease, decay, dieback or other pathological condition, mishap or pest attack is in an advanced and irreversible state of decline:

(a) that will on balance of probability cause the death of the tree within 5 years or less; or

(b) which has already caused the tree to deteriorate to the point that its continued retention can no longer reasonably be considered to serve the tree protection objectives of this Bylaw;

(10) , in accordance with sound arboricultural principles and practices, and pursuant to the goal of maintaining the native urban forest in a state of ongoing renewal, to promote and protect the health and vigour of any one tree of the species Garry Oak (*Quercus garryana*), Arbutus (*Arbutus menziesii*), Pacific (Western) Yew (*Taxus brevifolia*), Black Hawthorn *(Crataegus douglasii)*" or Pacific (Western Flowering) Dogwood (*Cornus nuttallii*), which has either a basal diameter greater than 10 centimetres or a height above the point of germination in excess of 2 metres.

(11) to prevent foreseeable damage to a building, or to a significant structure, from:

(a) a limb, trunk or stem failure; or
(b) pressure or penetration from tree growths above or below ground,
which the Manager of Parks Services has identified as a substantial based on his examination of the tree in the context of its location, characteristics and general environment, notwithstanding that the tree may not at the time of application exhibit any of the hazardous conditions set out in Section 6(1) or actually be causing damage as described in Section 6(3); or

(12) to remedy an undue hardship attributable to the material and deleterious effect of the tree on an improvement of significant value located on the subject parcel, or on land adjoining the subject parcel.

In the case at hand, the Manager of Parks Services has determined that none of the criteria under which he has the authority to issue a permit apply (see additional information attached). Therefore, the owner of 2226 Lansdowne Road is seeking Council reconsideration of the decision to refuse to issue a permit.

In this regard, Section 21.1 of the Tree Protection Bylaw provides that in the case of a request for reconsideration of a decision of the Manager of Parks Services, Council would review the Manager's interpretation and application of the permit-issuing criteria set out in Section 6 and, if supported by the facts and in harmony with the scheme of this Bylaw generally and the language of that section in particular, may substitute its own interpretation or application and order the issuance of a permit where it is satisfied that the issuance of the permit having regard to:

(1) the species of the tree;
(2) the form of the tree;
(3) the condition of the tree; or
(4) the general density of protected trees on the subject parcel,
would not defeat the intent of this Bylaw.

Loranne Hilton
Municipal Clerk

Oak Bay Parks & Recreation

Memo

To: Loranne Hilton

From Chris Hyde-Lay,

Date: October 9, 2014

Subject: 2226 Lansdowne

Assignment

To visually examine two Garry Oaks (Quercus garryana) located at 2226 Lansdowne road.

48.3 and 42.2 cm diameter

Observations

On October 9th, 2014, I visually examined two Garry Oaks located at the left side of the rear deck at 2226 Lansdowne road. There were no signs of decay pathogens at the root plate, on the tree truck or the main branch structures. All stems and large limbs appear well attached to the parent stem. Annual bud and shoot growth appear average for this species of tree.

Both Garry oak trees have been considerably defoliated by an insect called Linden looper this year. Recently, this insect has reached extreme numbers in the Lansdowne and Uplands area causing considerable foliage damage on Garry oak trees. Some level of control can be achieved by banding the trees in September as this defoliating insect re-infects earlier than most. Controlling the insect thru spaying is also a viable and successful option. There was also evidence of minor jumping gall wasp damage on the foliage. This insect is very common on Garry oaks and rarely seriously impacts their health.

Although these two Garry oak trees do have some insect damage on the foliage, it is mostly aesthetic. Overall both trees are in average health and contribute to the Urban forest. In my opinion they do not meet any of the removal criteria set out in section 6 of the Tree Protection Bylaw.

Some pruning would be approved to improve lower limb clearances over the rear deck if requested.

2014-245

MEMORANDUM

TO:	**Mayor and Council**
FROM:	**Director of Building and Planning**
DATE:	**October 6, 2014**
RE:	**Request for amendment to Section 219 covenant as part of subdivision approval.** **131 Beach Drive** **Lot A, Section 22, Victoria District, Plan EPP35523**

BACKGROUND:

The owner's have recently purchased the subdivided property at 131 Beach Drive and would like to request a covenant change to accommodate their preliminary design of their new home. The proposed changes would alter the current building envelope established through approval of Development Variance Permit #PL116-2013 (see attached). The building envelope was part of the registered covenant of the subdivision to maintain the streetscape and trees on and near the subject property.

DISCUSSION:

In 2003/2004 an application for subdivision could not move forward to final approval as an application for a development variance permit did not receive approval of Council. In addition to neighbours concerns Council was concerned that a subdivision would impact the streetscape of that portion of Beach Drive and it would not be in keeping with the current neighbourhood.

During the 2013 subdivision application there were some concerns from the neighbourhood on the effect of the streetscape however some also supported the subdivision provided consideration of the existing streetscape be maintained. To accommodate these concerns a new building envelope was developed through a certified arborist report, identifying areas of no excavation, limited excavation with no crawl space or basement development and an area of limited concern. The building envelope provided for all buildings to have an exterior side lot line setback of 7.62 meters (25 ft) from Beach Drive (maintaining the streetscape), a rear lot line of 4.2 meters to protect the neighbours tulip tree, and a front lot line setback of 11.1 meters from Sylvan Lane in order to protect a number of Garry Oak trees, a large Douglas Fir tree and the streetscape. (See arborist report dated April 29, 2013 attached)

The architect for the owner, Ryan Hoyt has now developed a design for the new owners however the designed buildings would not meet the restrictive covenant registered on the property at the time of subdivision. The proposal shows approximately a 1.5 meter encroachment into the root zones beyond the identified root trench which originally stated no ground disturbance beyond this root trench. The proposed accessory building would encroach on the Beach Drive setback identified as 7.62 meters (25 ft) by approximately 3.6 m (12 ft). The proposed accessory building would also encroach 3.6 meters (12 ft) on the south/east side towards the neighbour's tulip tree resulting in the garage within .65 meters of this tree.

The certified arborist (Gye and Associates Ltd.) have now resubmitted a report dated September 8, 2014 and an additional letter dated September 15, 2014 outlining that he thinks it is possible to accommodate foundation designs, however further investigation is required of the below ground conditions.

The municipal arborist has provided a memorandum outlining some concerns with the change to the covenant based on impacts on the trees that are likely to occur.
(See Attached)

OPTIONS:

1. That Council receive this report for information.

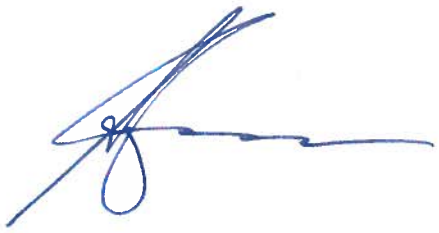
2. That Council refer this application to Committee of the Whole for further detailed discussion, and have the municipal arborist in attendance to answer any questions of the Committee.

3. If Council is in agreement with the proposal to amend the covenant, that direction be given to the applicant to have their lawyers draft the necessary changes for Councils consideration at a future Council meeting.

RECOMMENDATION(S):

That Council refer this application to Committee of the Whole for further detailed discussion, and have the municipal arborist in attendance to answer any questions of the Committee.

Respectfully Submitted,



Roy Thomassen
Director of Building and Planning

I concur with the recommendation of the Director of Building and Planning.

Helen Koning
Chief Administrative Officer

THE CORPORATION OF THE DISTRICT OF OAK BAY
DEVELOPMENT VARIANCE PERMIT

Permit #PL116-2013

1. In this Permit:

   (a) The "Land" is:

   Lot A, Section 22, Victoria District, Plan EPP35523

   Parcel Identifier: 029-259-550

   (129 Beach Drive)

   (b) The "Permit Holder" and registered owner of the Land is:

   Keith John Middleton
   Teresa Mary Middleton
   129 Beach Drive
   Victoria BC V8S 2L6

   (c) The "Plans and Documents" attached hereto and forming a part of this Permit are:

   T-1 Tree Plan
   - Site Plan

2. The bylaw variance(s) allowed pursuant to this Permit has/have been authorized in the conte of the development of the Land as depicted in the Plans and Documents. Except for min revisions not materially affecting the form or character of the development of the Land as s depicted, which may be approved by the Director of Building and Planning, **all amendment variations or revisions to the Plans and Documents must be approved by resolution the Municipal Council.**

3. This Permit is issued subject to compliance with all bylaws applicable to the Land and the us and development thereof, except as specifically varied by this Permit.

4. In the context of the Plans and Documents, the following bylaw variances are authorized by this Permit:

   (a) Bylaw 3531, Zoning Bylaw, 1986, as amended:

   Proposed Lot A –

   (i) Section 6.5.4. (2)(b) Minimum rear lot line setback is varied by 3.42 metres t permit a minimum rear lot line setback of 4.2 metres;

5. This Permit shall run with the Land and shall be binding on the Permit Holder and the Perm Holder's heirs, administrators, executors, successors and assigns, and on all successors in titl to the Land, save and except that none of the terms and conditions hereof shall be personal binding on the Permit Holder save and except during the Permit Holder's ownership of an interest in the Land.

6. **This Permit does not constitute a building permit**, and nothing herein relieves the Permit Holder, the Permit Holder's heirs, administrators, executors, successors and assigns any successor in title to the Land, nor any person contracted to carry out the work depicted i the Plans and Documents, from their obligation to apply for and obtain, before commencin such work, a building permit, or any other permit, where required under the *Building an Plumbing Bylaw* of the District.

7. Nothing in this Permit confers any approval, permission or authority to carry out work on publi property, including but not limited to the boulevard and the portion of any driveway lying outsid the boundaries of the Land.

Signature(s) of Permit Holder:

12 Mar. 2014
Date

Keith J. Middleton
Signature of Keith John Middleton

Mar. 12, 2014
Date

Teresa Mary Middleton
Signature of Teresa Mary Middleton

Issued by:

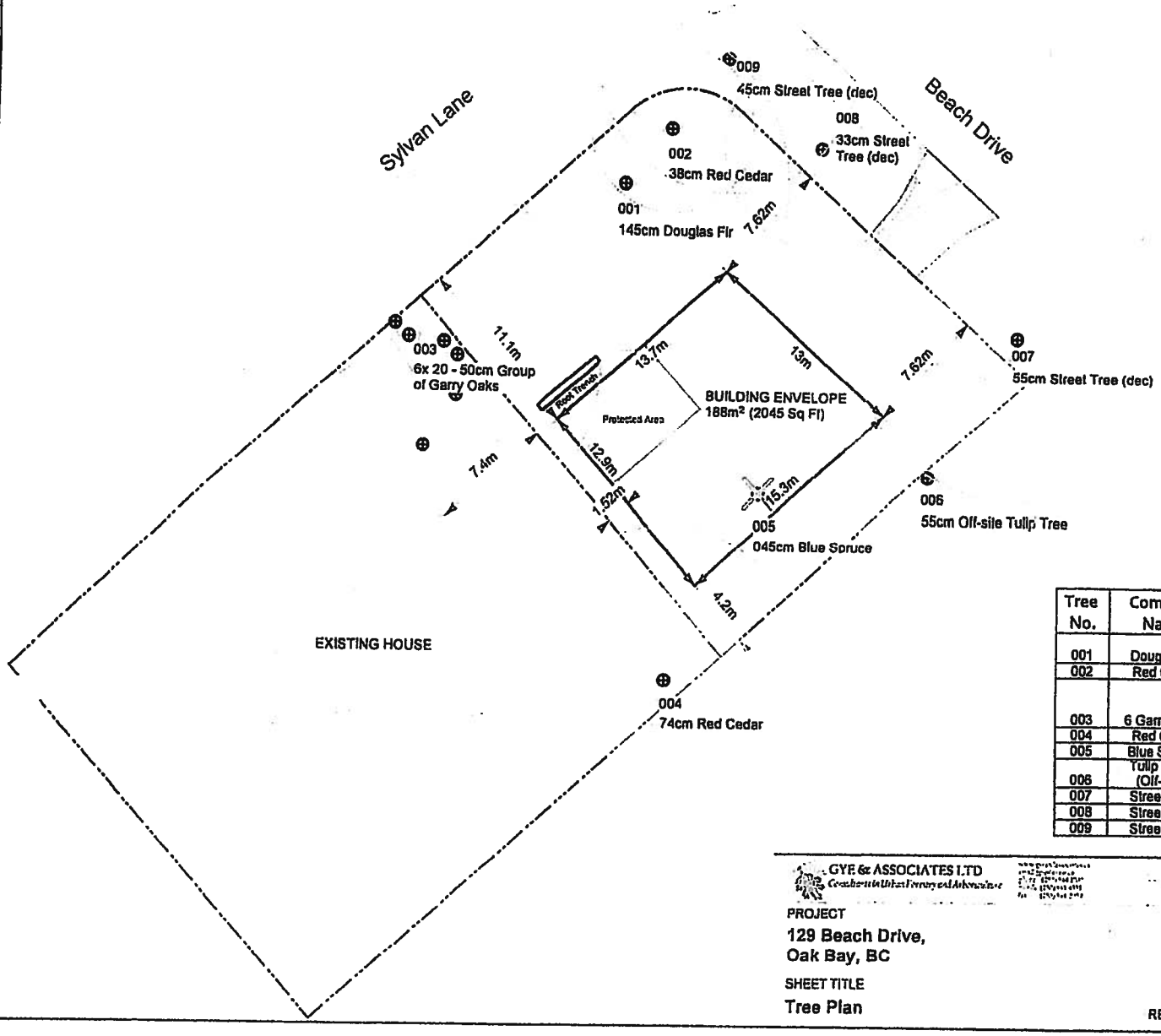
MARCH 19, 2014
Date

Roy Thomassen, Director of Building & Planning

July 22 2013
Authorizing Resolution of Council

March 19 2014
Development Variance Permit Issued

April 15 2014
Filed in the Land Title Office



LEGEND

Proposed Driveway

Tree Canopy
Tree Centre
20
Protected Root Zone

Trees to be retained undisturbed

Tree Tag #
20
Remove Tree Symbol

Trees to be removed

SUMMARY TREE STATISTICS

Trees on site	10
Trees to be removed for construction	1
Trees to be retained undisturbed	9
Adjacent off-site trees (incl. boundary and street trees)	4

Tree No.	Common Name	Stem Diameter (cm)	Structural Condition	Biological Health	Recommended Action
001	Douglas Fir	145	Fair	Fair	Retain & prune for encroachment
002	Red Cedar	38	Good	Good	Retain
003	6 Garry Oaks	Avg: 43 cm Ranging from 20-50cm	Poor-Good	Fair-Good	Retain & prune for encroachment
004	Red Cedar	74	Fair-Good	Good	Retain
005	Blue Spruce	45	Poor	Fair	Remove
006	Tulip Tree (Off-Site)	55	Poor	Good	Retain
007	Street Tree	55	Good	Good	Retain
008	Street Tree	33	Good	Good	Retain
009	Street Tree	45	Good	Good	Retain

GYE & ASSOCIATES LTD
Consulting Urban Foresters and Arborists

PROJECT
129 Beach Drive,
Oak Bay, BC

SHEET TITLE
Tree Plan

REV NO	DESCRIPTION	DATE
01	FOR REVIEW	April 25-2013

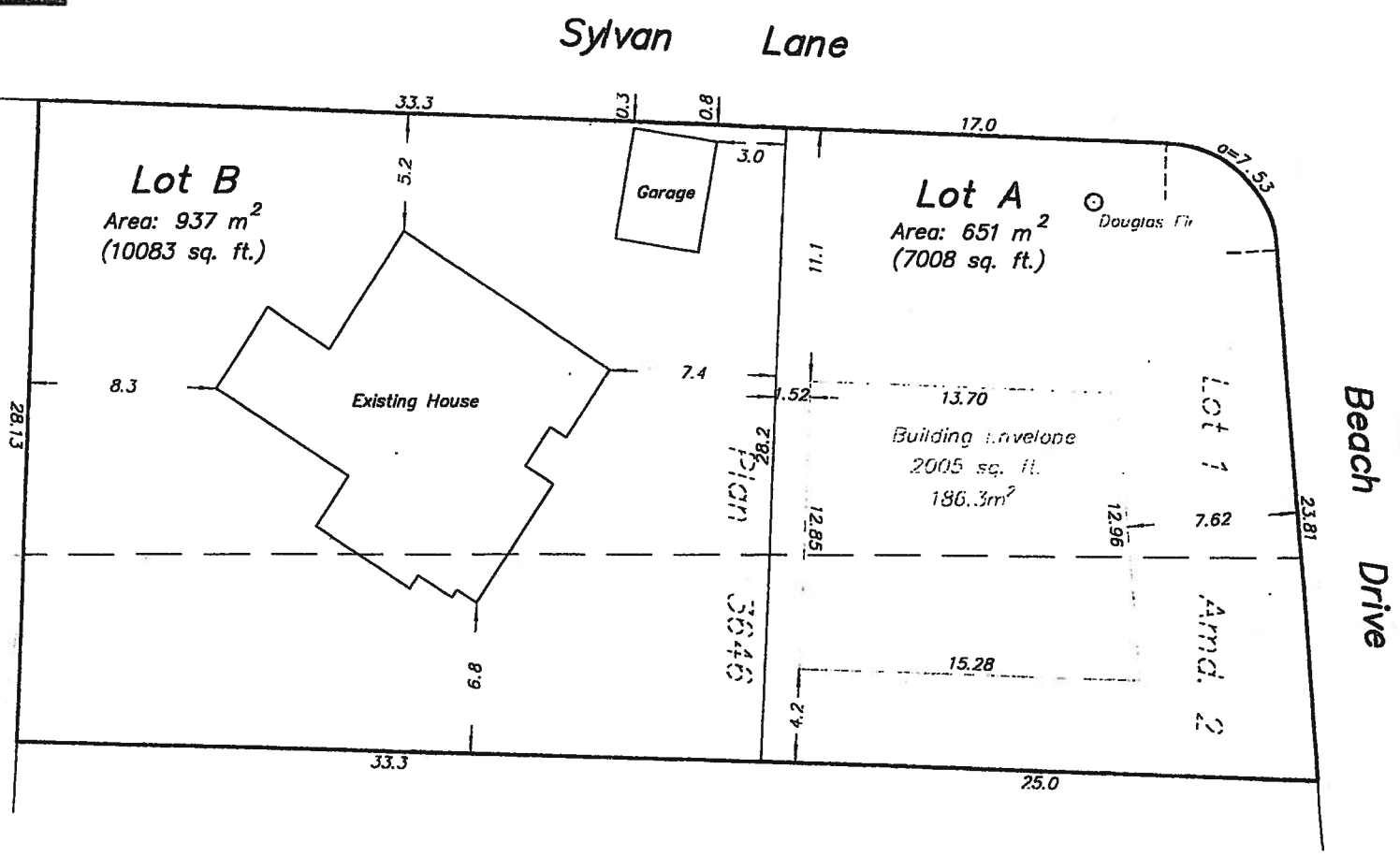
PROJECT NO.	13-007
DATE	April. 25. 2013
SCALE	1:250
DRAWN BY	JG/EP
SHEET NO.	T - 1

Plan Showing Proposed Subdivision Of:
Lot 1 And Amended Lot 2, Sections 22 And 47, Victoria District, Plan 3646.

5 4 3 2 1 0 5 10 15

Scale = 1:250

Dated this 10th day of May, 2013.
Distances shown are in metres.



RICHARD J. WEY & ASSOCIATES
Land Surveying Inc.
www.weysurveys.com
#4–2227 James White Boulevard
Sidney, BC V8L 1Z5
Telephone (250) 656-6155

Oak Bay Parks & Recreation

Memo

To: **Roy Thomassen, Director of Building and Planning**

From: **Chris Paul, Municipal Arborist**

Date: **October 6, 2014**

Subject: **131 Beach Drive**

In reviewing the new plans for 131 Beach drive I have some concerns about impacts on the trees. The proposed garage is well within the critical root zone of the Tulip tree in the yard to the south. Any soil removal in this area will have an effect on the tree as it will impact approximately 40% of the root zone of the tree. There will be many small roots in the top layer of soil and the support roots will be lower but at only one meter from the tree they will still be near the surface. The garage will be within a meter of the tree. A previous report stated that the tree would not be at risk provided the edge of the disturbance does not encroach closer than 5.0 meters distance from the tree. I think the garage will have an impact on the tree.

Extending the house to the north will encroach on the fir and the oaks to the north. The plan shows a crawlspace on that side of the house. This area has very shallow soil and I would suspect blasting may be needed to install a crawl space of any depth. The trenches that were dug to inspect the oak roots were showing roots at 25 cm below grade and larger roots down at 75 cm. In order to reach load bearing soil the excavation will have to go below these roots. A slab on a grade beam may be supported with smaller pad footings but a crawl space would require the removal of the roots. This also pushes construction traffic closer to the trees. This puts the soil in the critical root zones at risk of compaction.

The original covenant was created to protect the trees and the proposed changes will cause higher impacts on the trees so I would oppose the changes.

Any variations from the protection outlined in the Tree Protection Brochure will have to be outlined in a Tree Protection Plan submitted to the Parks Department. Tree protection must be inspected by the Parks Department before any demolition or construction begins. Please call 250-592-7275 to book an inspection.

Gye and Associates Ltd.

Consultants in Urban Forestry and Arboriculture

April 29, 2013

Keith and Theresa Middleton
129 Beach Avenue
Victoria, BC V8S 2L6

Re: 129 Beach Drive
Tree Assessment in support of 2-lot Sub-division Application

Dear Mr. and Mrs. Middleton:

We have prepared the following report to document the results of our assessment of several trees in the front of your property. The purpose of this assessment is to provide feedback on proposed setbacks for a new building lot.

Fig-1 Site Photo

5965 Wallace Drive, Victoria, BC V9E 2G7
Phone: (250)544-1700 Fax: (250) 544-2059 Toll Free: (800) 667-2877
jgye@shaw.ca www.gyeandassociates.ca

Methodology

We adopted the following approach to this assignment:

1. We began by familiarizing ourselves with the current proposed sub-division plan.
2. We then confirmed the sub-set of trees that might be impacted by, or pose a risk to, the new building lot.
3. These trees were then measured and visually assessed.
4. Where we encountered visual evidence of potential concern, further investigation was undertaken. The base of the Douglas Fir was investigated with a Resistograph tool to determine whether woody decay was present and, if so, to what extent.
5. Once we were confident that none of the surrounding trees posed a threat to the new lot, we began to assess the potential impacts to these trees that might be posed by new house construction within the proposed building envelope.
6. The location and canopy of each tree was plotted on the current site plan.
7. A preliminary critical root zone was calculated and plotted for each tree, using an 18x multiplier of the stem diameter.
8. We hand-excavated two trenches to investigate soil conditions and the presence, size and density of tree roots associated with the cluster of Garry Oaks and from the large Douglas Fir. Additional soil plots were taken near the large cedar and between the Tulip Tree and the building envelope.
9. On the basis of this investigation, the critical root zones of the subject trees were refined.
10. We next met with Mr. Middleton and his planning consultant to discuss the results of our assessment and explain our recommendation for an adjustment to the front and rear-yard setbacks (off Sylvan Lane).

Observations

The subject trees are described below, along with summary results of the visual assessment of their condition. Tree locations are provided in the attached drawing.

Tree #	Common Name	Stem Diameter (cm)	Structural Condition	Biological Health
001	Douglas Fir	145	Fair	Fair
002	Red Cedar	38	Good	Good
003	6 Garry Oaks	Avg: 43cm Range from 20-50 cm	Poor-Good	Fair - Good
004	Red Cedar	74	Fair - Good	Good
005	Blue Spruce	45	Poor	Fair
006	Tulip Tree (Off-site)	55	Poor	Good
007	Street tree	55	Good	Good
008	Street tree	33	Good	Good
009	Street tree	45	Good	Good

The Douglas Fir has a notable swelling of the lower stem, which can sometimes be an indication of woody decay. Three resistograph samples were taken on the south, west and north-east aspects of the trunk approximately 250mm above grade. All samples indicated sound wood with no indication of decay.

A trench was hand-dug between the fir tree and the proposed building envelope at an approximate distance of 10m from the Sylvan Lane propery boundary. Bedrock was encountered at a depth of 150mm. No fir roots were encountered. The topography in this area suggests there may be an extensive amount of superficial bedrock between the fir tree and the building envelope.

Fig-2 Douglas Fir, East Elevation

Several structural defects were observed on the two Garry Oak stems closest to the proposed house site (see images below). Fig-3 shows a cavity located on the top of one of these stems close to a kink in the branch, which is heavily end-weighted. Significant local decay if often associated with a cavity of this size.

Fig-3 Oak limb with cavity

Fig-4 shows the second subject stem which exhibits an unusual cantilevered form with significant end-weight and a cavity at a structurally critical point along the stem.

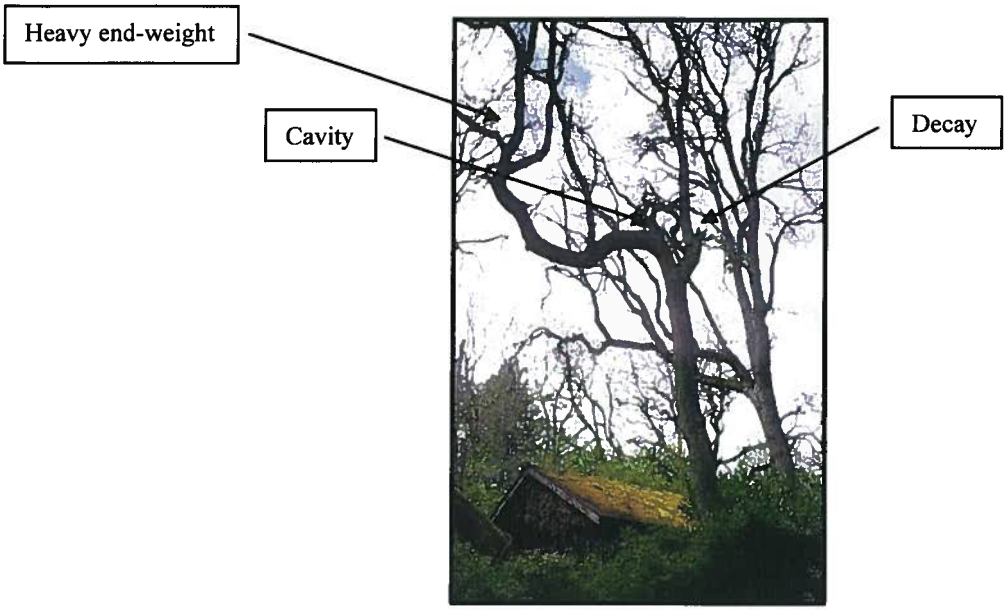


Fig-4 Cantilevered oak limb with cavity

Figure-5 is a photograph of the hand-excavated trench (located on the attached tree plan). The purpose of this trench was to investigate the soil profile, as well as the number, size and depth of oak roots at this off-set from the nearest oak stem (6m). A soil pit was excavated to 750mm without any sign of bedrock. A superficial horizon of roots 20 – 30mm in diameter was encountered 250mm below grade. 6 such roots were identified in a 3m span of trench at this depth. 2 larger roots (50 - 70mm in diameter) were encountered at depth (750mm) in the soil pit, which was approximately 600mm x 600mm in area.

Fig-5 Root trench

The large red cedar located at the south-east corner of the proposed lot appeared vigorous and healthy with a healthy live-crown ratio and a stable height-to-girth ratio. The tree has been topped in the past and has re-established several new co-dominant leaders, which we do not consider to be at risk of failure. **The south-east corner of the current building envelope placement encroaches beneath the canopy of this cedar and well into its critical root zone.**

The Blue Spruce that is located within the proposed building envelope is in poor structural condition, with a propogating lean and several broken leaders evident in the top of its crown (Figure-6).

Fig-6 Blue Spruce with broken leaders

An off-site Tulip Tree (*Lirodendron tulipifera*) is located approximately 7.3 meters from the nearest side of the proposed building envelope. The root system of this tree will not be at risk from any future house excavation, provided the edge of disturbance does not encroach closer than 5.0m distance from this tree.

Conclusion:
After a careful evaluation of both above and below-ground conditions, it is the opinion of this author that a building lot can be created without causing undue harm to the current condition or future potential of the trees identified in this study (with the exception of the Blue Spruce, which should be removed), subject to the following recommendations.

Recommendations

1. Shift the building envelope west of its current location to reduce the impacts to the Red Cedar (tree # 4 on Plan). The new front-yard setback recommended from Sylvan Lane is 11.1m. The new rear-yard setback recommended is 4.2m. The current side-yard setback from the west lot line (i.e. nearest the existing house) is recommended to stay unchanged at 1.52m, as is the side-yard setback from the lot line adjacent to Beach Drive at 7.62m.
2. No ground disturbance is permitted closer than the side of the root trench located closest to the oaks. The most superficial horizon of 20 – 30mm roots at this off-set from the tree should be correctly pruned. The deeper roots (750mm depth +/-) should be left intact and undisturbed.
3. Covenant language must be developed to minimize the excavation of soils at this corner of the building envelope in order to protect the deeper roots of the oak. An area 3m in depth and 7m in length should be protected in this manner, including excluding a basement or crawl-space treatment in any future house from this area. Soils should not be excavated deeper than 30cm in this area without the on-site approval of the arborist.

4. A bedrock removal must be developed in consultation with arborist as a condition of any future building permit to ensure that there are no associated impacts to the root system of the adjacent fir and oaks.
5. The branches of the oaks and fir that encroach into the building envelope should be pruned back. Pruning standards must meet or exceed those endorsed by the International Society of Arboriculture (ISA) and must be carried out by an ISA Certified Arborist or Arboricultural Technician.
6. It is strongly recommended that any future building permit application be required to include a comprehensive Tree Protection and Mitigation Plan prepared by an ISA Certified Arborist to the satisfaction of the District of Oak Bay's Manager of Parks.

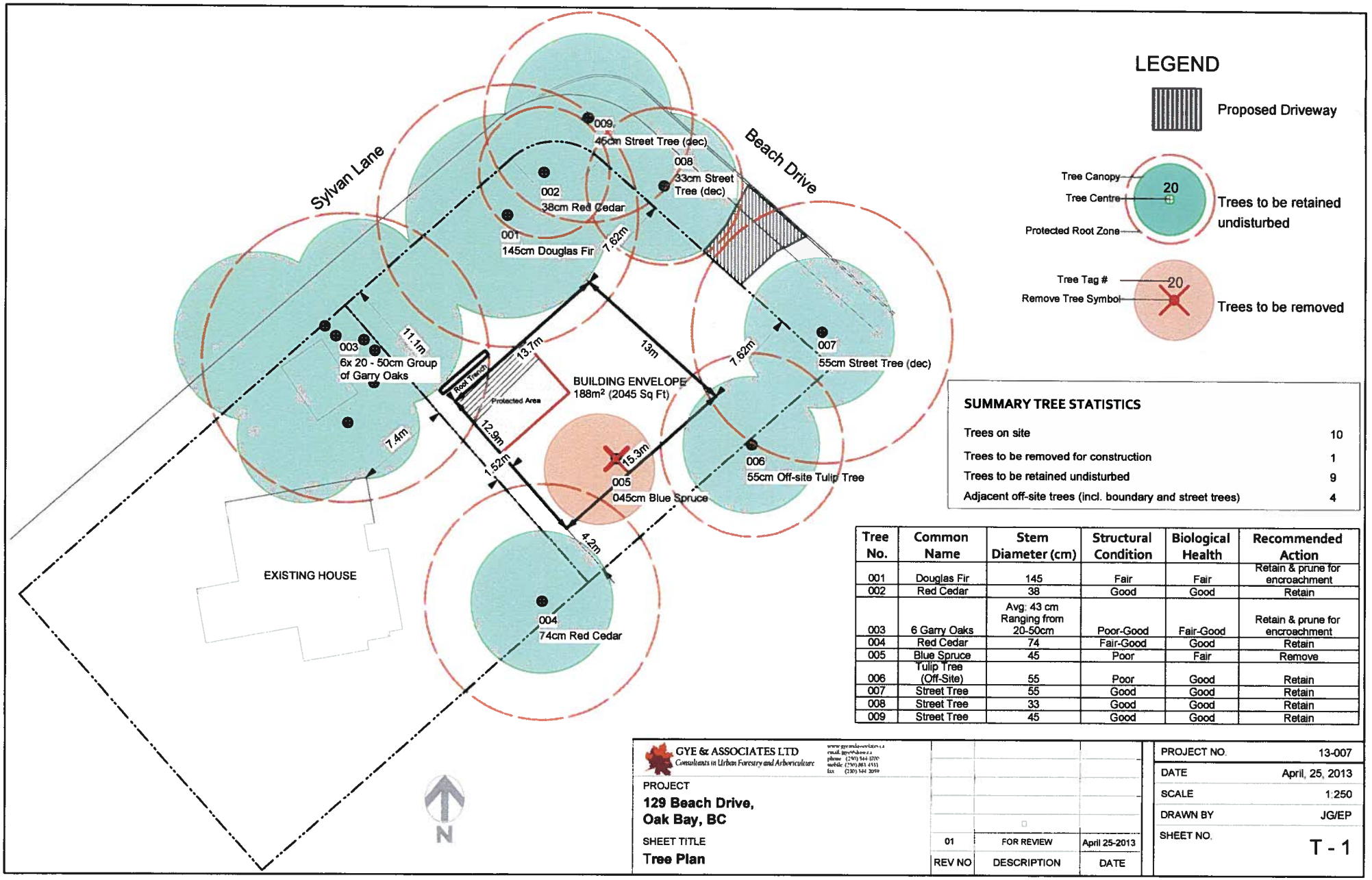
Certification:

This report and the opinions expressed within it have been prepared in good faith and to accepted arboricultural standards within the scope afforded by its terms of reference and the resources made available to the consultant.

Dated: April 29, 2013

Respectfully submitted,

Jeremy Gye – B.A. (Hons); Dip. Consulting Arboriculture (ASCA)
I.S.A. Certification # PN-0144
TRACE Cerification # 0016



LEGEND

Proposed Driveway

Tree Canopy
Tree Centre
Protected Root Zone
20
Trees to be retained undisturbed

Tree Tag #
Remove Tree Symbol
20
Trees to be removed

SUMMARY TREE STATISTICS

Trees on site	10
Trees to be removed for construction	1
Trees to be retained undisturbed	9
Adjacent off-site trees (incl. boundary and street trees)	4

Tree No.	Common Name	Stem Diameter (cm)	Structural Condition	Biological Health	Recommended Action
001	Douglas Fir	145	Fair	Fair	Retain & prune for encroachment
002	Red Cedar	38	Good	Good	Retain
003	6 Garry Oaks	Avg: 43 cm Ranging from 20-50cm	Poor-Good	Fair-Good	Retain & prune for encroachment
004	Red Cedar	74	Fair-Good	Good	Retain
005	Blue Spruce	45	Poor	Fair	Remove
006	Tulip Tree (Off-Site)	55	Poor	Good	Retain
007	Street Tree	55	Good	Good	Retain
008	Street Tree	33	Good	Good	Retain
009	Street Tree	45	Good	Good	Retain

GYE & ASSOCIATES LTD
Consultants in Urban Forestry and Arboriculture
www.gyeandassociates.ca
email: gye@shaw.ca
phone (250) 544-1070
mobile (250) 881-4511
fax (250) 544-2070

PROJECT
129 Beach Drive, Oak Bay, BC

SHEET TITLE
Tree Plan

REV NO	DESCRIPTION	DATE
01	FOR REVIEW	April 25-2013

PROJECT NO.	13-007
DATE	April, 25, 2013
SCALE	1:250
DRAWN BY	JG/EP
SHEET NO.	T - 1

Gye and Associates Ltd.

Consultants in Urban Forestry and Arboriculture

September 8, 2014

Keith and Theresa Middleton
129 Beach Avenue
Victoria, BC V8S 2L6

Re: 129 Beach Drive
Tree Risk Assessment Report

Gye and Associates Ltd (G&A) were recently consulted by the new owner of 131 Beach Avenue to assess the opportunities for pruning several Garry Oaks, growing on your property and District road right-of-way. One of the trees on your property encroaches over the building envelope of 131 Beach Avenue (see Oak 003[a] in Figures 1 & 2 below). The oaks in question are protected under a recent sub-division agreement reached between yourselves and the District. For this reason, G&A consulted with the District of Oak Bay's Parks Arborist, Chris Paul, regarding pruning of these trees. During the ensuing site meeting, Mr. Paul identified a fungal fruiting body growing at the base of Oak 003(a). The species of fungus is an aggressive decay fungus identified as *Inonotus dryadeus* (sometimes known as Oak Bracket Fungus or Weeping Polypore) that attacks the root crown and anchoring roots of the tree.

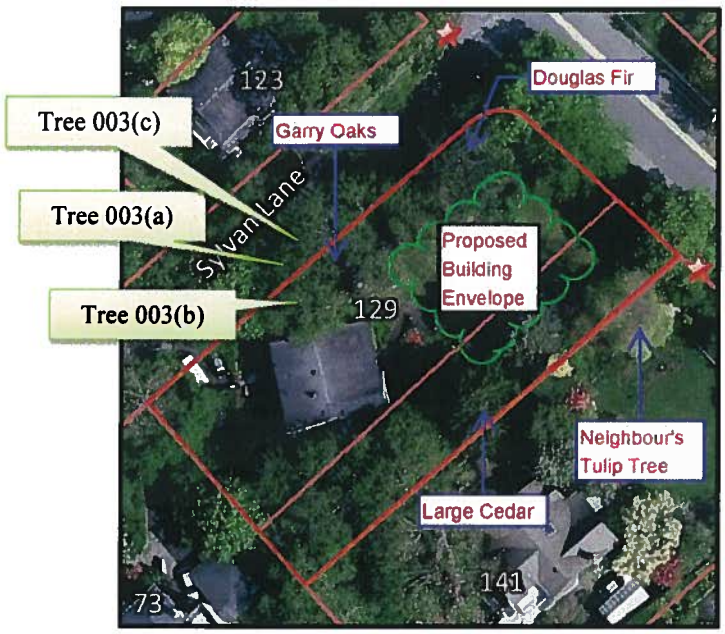


Fig-1 Site Photo

5965 Wallace Drive, Victoria, BC V9E 2G7
Phone: (250)544-1700 Fax: (250) 544-2059 Toll Free: (800) 667-2877
jgye@shaw.ca www.gyeandassociates.ca

It was also observed during this meeting that a second tree, identified here as Oak 3(b), which exhibits a pronounced lean and grows out over your own residence, had settled further down toward your roof since our original tree assessment in 2012. Mr. Paul recommended that we undertake a Tree Risk Assessment of both trees before proceeding further.

Fig-2, Oaks 003(a), (b) & (c)

With respect to the four remaining oaks, no visual indicators of decay or other significant structural defects were observed on three of these trees. The fourth oak (Oak 003(c)), which is located 1m due north of Oak 003(a), has a significant lean toward the north. A visual examination of the base of the tree, on the side opposing the lean, lead us to explore the root crown on the south side of the tree in more detail.

Some epicormic sprouting was evident on two of the remaining three oaks. As epicormic sprouting is often an indication of stress in trees, Mr. Paul recommended that any pruning be limited to dead and broken wood and the removal of a small number of crossing and duplicating branches. An exception to this would be pruning of Oak 003(c), which encroaches into the building site of 131 Beach Drive (see the section *Recommendations and Conclusions* below).

Methodology

We adopted the following approach to the tree risk assessment:

1. We undertook a more careful visual assessment of the two trees in question and their growing site. The trees were measured and photographed.

2. The base of the two Garry oak trees were investigated with an electric drill with a 3/16th" bit, 11" in length, in order to determine whether woody decay was present and, if so, to what extent.
3. After indications of decay were observed in the base of Oak 003(a), the sound shell wall thickness was determined and a strength-loss calculation was made.
4. We assessed the interaction of Oak 003(b) an adjacent shed that it was in contact with.
5. We hand-excavated the root-crown of Oak 003(c). Using a small diameter bit and cordless drill, we examined the integrity of the supporting woods and the base of the tree.
6. Suspected structural defects where found were identified, measured and assessed on the three trees.
7. The parts of the tree placed at risk by these defects were measured and assessed, both for size and for an estimated probability of failure.
8. In the event of a failure, potential targets located within striking distance were identified and assessed.
9. Each of these assessment factors were numerically rated and then collated to arrive at a Comprehensive Tree Risk Evaluation Rating.
10. These risk assessment procedures follow those recommended in the Tree Risk Assessment Course and Exam (TRACE) developed by the Pacific North-West Chapter of the International Society of Arboriculture and recognized by WorkSafe BC and B.C. Hydro.
11. Based on the findings of this assessment, management options were developed and included in this report for the consideration of yourself and the District.

Observations

The three subject trees are described below, along with summary results of the measurements and visual assessment of their condition.

Oak 003(a)

The fungal fruiting body noted above was observed at base of Oak 003(a) on the north aspect, measuring approximately 10cm across. An interview with the owner (Mr. Middleton) determined that an earlier version of this fruiting body had been removed, suggesting that an undisturbed polypore would likely have been larger. An initial drilling sample indicated decay in the base of the stem of Oak 003(a). Three additional samples were taken to estimate the residual sound shell wall thickness of the stem.

Diameter of stem at base of tree: 50cm.
North East side sample (beside fruiting body): degraded wood was identified inside of 10-12 cm sound wood shell.
West side drill: degraded wood was identified inside of 15cm sound wood shell with water leaking out of the drill hole.
South side drill: 18cm sound wood shell.
East side drill: 18cm sound wood shell.
Required Shell Thickness (RST) (≥30% of the stem radius): 7.5cm.
Average Actual Shell Thickness (AST): 15cm.

Fig-3 Garry oak 003(1), Fungal fruiting body

In the upper portion of Oak 003(a), the main stem of the tree exhibits an atypical "kink" in its form. A radial shear-crack and swelling of the stem can be observed associated with decay cavity located on the top of the "kink" (see Fig-4 below).

Fig-4 Garry oak, Share crack

The second Gary oak, tree 003(2) has become imbedded into the east wall of an old wooden shed. The shed is gradually deflecting over time, which we consider strong evidence that the lean of Oak 003(b) is increasing—essentially an active failure of the tree in slow motion (see Fig-5 and 6).

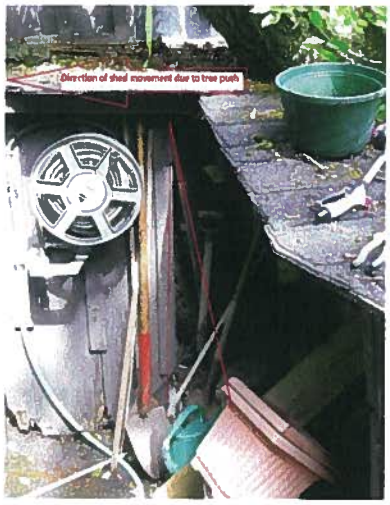


Fig-5 Oak 003(b), lean against shed

Fig-6 Close up of lower stem of Oak 003(b) lean against shed

Evidence of the failure of a companion stem to Oak 003(b) was observed on the north side of the remaining stem. Remnants of the companion stem and a well-decayed root crown (or stump) were noted. During our interview, Mr. Middleton indicated the failure of the companion stem occurred 8 – 10 years ago.

Drilling assessments of Oak 003(b) indicated that the base of the stem and root flare of this tree is sound. Notwithstanding the soundness of the wood tissue, our historical observations and measurements of the propogating lean of the tree lead us to surmise that the loss of the companion stem and structural roots are compromising the anchorage of the remaining stem on the tension-side of the lean. The extreme angle of the lean now appears to have overcome the structural ability of the compromised root system to support it; as a result, the tree is gradually subsiding toward the roof of Mr. Middleton's residence.

Oak 003(c)

Our root crown excavation revealed eight woody roots supporting the tree on the tension-side of its lean. Two superficial roots exhibited signs of past injury, likely associated with the construction of a pathway (see Root #s 1 & 3 in Fig-7 below). The remaining roots were tested and found to be sound and healthy.

Fig-7 Close up of root-crown excavation of south side of Oak 003(c)

Tree#	Common Name	DBH (cm)	Structural Condition	Biological Health	Probability of Failure (1-5pts)	Size of Defective Part (1-3pts)	Target Area (1-4pts)	Risk Assessment Summary (1-12pts)	Recommendations
003(a)	Garry oak	46	poor	fair	3	3	4	10 (high risk)	Remove
003(b)	Garry oak	55	poor	fair	3	3	4	10 (high risk)	Remove
003(c)	Garry oak	50	Fair	Fair	1	3	4	8 (moderate risk)	Prune

Conclusions and Recommendations:

Oak 003(a)

This tree is infected with an aggressive root-crown decay fungus and we consider its medium-to-long term structural prognosis to be poor; this despite the adequate shell of sound wood that makes up the base of the decayed stem. The upper portion of the tree is actively failing. Given the form of the tree, we do not feel that pruning the distal end of the tree in order to "unweight" the load on the defective portion of the stem is a viable option. (What would remain of the tree would be unsustainable and an eye-sore.)

Recommendation: Given these two structural defects, we recommend the removal of this tree.

Oak 003(b)

While we are not able to predict with any certainty when the increasing lean of this tree toward your house will result in a sudden and complete failure, there is sufficient evidence to believe that such a collapse may well occur in the short term (weeks to months).

Recommendation: We recommend the removal of this tree at the earliest practical opportunity.

Oak 003(c)

We recommend reducing the weight of the tree on the east side of the canopy, nearest the proposed building site of 131 Beach Drive. This is the part of the tree opposite the two decayed roots identified during our root-crown excavation. Limbs from this area of the canopy will also likely need to be pruned mitigate encroachment into the future building site.

Certification:

This report and the opinions expressed within it have been prepared in good faith and to accepted arboricultural standards within the scope afforded by its terms of reference and the resources made available to the consultant.

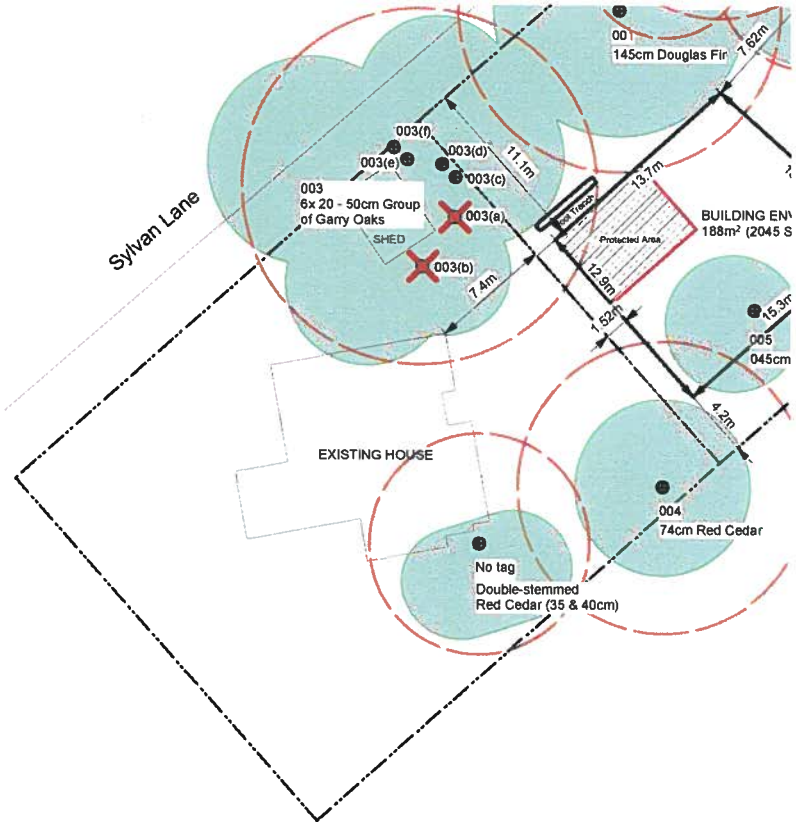
Dated: August 28, 2014

Respectfully submitted by:

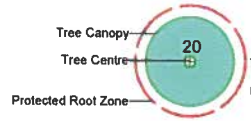
Lucian Serban, B.Sc.F.
ISA Certified Arborist
ISA Tree Risk Assessment Qualification

Reviewed by:
Jeremy Gye, Senior Consultant
Consulting Arborist (Diploma, American Society of Consulting Arborists, 1997)
ISA Certified Arborist (Certification No. PN-0144A)
Certified Tree Risk Assessor (TRACE No. 0016)

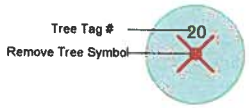
On behalf of Gye & Associates – Urban Forestry Consultants Ltd.



LEGEND



Trees to be retained undisturbed



Trees to be removed

N

GyeandAssociates.ca

PROJECT
129 Beach Drive,
Oak Bay, BC

SHEET TITLE
Tree Plan

REV NO	DESCRIPTION	DATE
	FOR REVIEW	

PROJECT NO	13-007
DATE	Sept, 8, 2014
SCALE	1.250
DRAWN BY	JG/EP
SHEET NO.	T - 1

GYE + ASSOCIATES
Consultants in Urban Forestry and Arboriculture

September 15, 2014

District of Oak Bay
Advisory Design Panel

Attention: Chairperson

To whom it may concern:

Re: 131 Beach Drive

The new owner of the above property is proposing to build a detached garage at the east corner of the site, adjacent to an off-site shade tree identified on the attached tree plan as No. 006, as 55cm Tulip tree *(Liriodendron tulipifera)*. The placement of the garage sits partially in the rear-yard setback and within the critical root zone calculated for this off-site tree. Detailed design drawings have yet to be developed; however, it should be possible to design a foundation plan for the garage that minimizes impacts to the subject tree. The builder and client have indicated their willingness to collaborate with Gye and Associates (G&A) in developing the foundation plan and in overseeing its construction.

The new owner would also like to extend the house into the front setback and tree covenant area by 5'. At risk is an a potential encroachment into the root system of the protected trees and a greater aerial encroachment into the canopy of one oak and the large Douglas Fir than is already implied by the current building envelope. I have undertaken a preliminary assessment of both encroachments and offer the following comments.

- The aerial encroachment can be managed by sensitive design of the house (to minimize interference with the tree canopies) and careful pruning of the oak and fir under the supervision of the consulting arborist. A recent tree risk assessment completed by G&A on behalf of the Middletons, who own the existing home at 129 Beach Drive, recommends lightening the oak limbs in question in order to reduce the risk of a larger branch failure, due to a cavity and decay observed on the limb in question (see attached). The limbs of the Douglas Fir do not pose an undue challenge if a sensitive house design is achieved.
- Further assessment of below-ground conditions is required in order to inform that portion of the house design and foundation plan implicated in the 5' encroachment into the front-yard setback; however, in principle, I am confident that a solution can be found that both protects the trees in question and affords some extra floor-space and functional latitude to the owner. Having said that, the guidelines provided in the Covenant Tree Plan with respect to the west corner of the building site, soil & root depth, bedrock removal and adequate tree protection planning and oversight should be followed (see attached, recommendations 2 – 6 on pp. 5 & 6 of the report).

In conclusion, G&A conditionally support the owner in these variances, subject to the cautions and recommendations provided above.

T (250) 544-1700
jgye@shaw.ca
www.gyeandassociates.ca

Respectfully submitted,

Jeremy Gye – President & Senior Consultant
Gye and Associates, Urban Forestry Consultants Ltd.

Consulting Arborist (Diploma, American Society of Consulting Arborists, 1997)
ISA Certified Arborist (Certification No. PN-0144A)
ISA Municipal Specialist (Certification No. PN-0144AM)
Certified Tree Risk Assessor (TRACE No. 0016)
Certified Master Woodland Manager (Small Woodlands Program of BC)

Attachments

NEW CUSTOM HOME:

Blumer Residence

131 BEACH DRIVE
VICTORIA, BC

PROJECT INFORMATION:

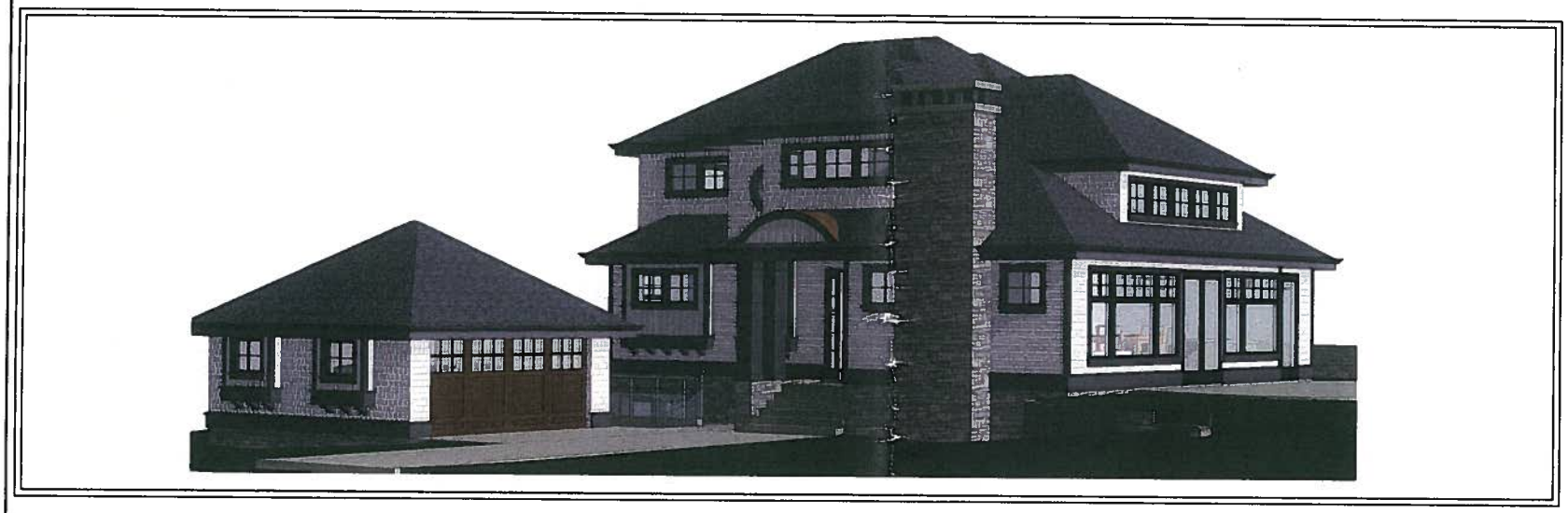
SITE ADDRESS: 131 BEACH DRIVE, VICTORIA BC

LOT A, SECTION 22, VICTORIA DISTRICT, PLAN EPP35823

OWNER: RANDY & BEV BLUMER

SCOPE OF WORK:

CONSTRUCTION OF A NEW SINGLE FAMILY DWELLING



ZONING ANALYSIS:

ZONE: RS-5

LOT AREA: 647.1m2

AVERAGE GRADE:

HOUSE	19.5m (4 POINTS)
GARAGE	19.5m

GROSS FLOOR AREA:	ALLOWABLE	PROPOSED
BASEMENT:	NO LIMIT	67.2 m2
MAIN FLOOR:	240m2 (MAIN & UPPER)	158.3 m2
UPPER FLOOR:	240m2 (MAIN & UPPER)	81.8 m2
TOTAL:	380m2	327.3 m2

LOT COVERAGE:	ALLOWABLE	PROPOSED
HOUSE	25%	158.3/647.1 = 24.4%
GARAGE	44m2	38.9m2

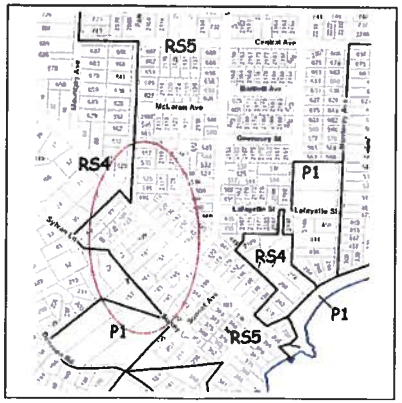
HEIGHT (HOUSE):	ALLOWABLE	PROPOSED
OCCUPIABLE HEIGHT:	4.57m	3.6m
BUILDING HEIGHT:	7.32m	6.3m
ROOF HEIGHT:	9.14m	8.8m

HEIGHT (GARAGE):	ALLOWABLE	PROPOSED
OCCUPIABLE HEIGHT:	0.25m	xxm
BUILDING HEIGHT:	3.0m	xxm
ROOF HEIGHT:	4.6m	xxm

SETBACKS (HOUSE):	ALLOWABLE (COVENANT)	PROPOSED
FRONT:	11.1m	9.41m
REAR:	4.2m	4.2m
SIDE (E):	7.62m	8.84m
SIDE (W):	1.52m	1.52m

SETBACKS (GARAGE:	ALLOWABLE (COVENANT)	PROPOSED
FRONT:	11.1m	21.11m
REAR:	4.2m	0.81m
SIDE (E):	7.62m	3.65m
SIDE (W):	1.52m	14.26m

KEY PLAN:



SHEET INDEX:

PROJECT DIRECTORY:

DESIGNER:	RYAN HOYT DESIGNS INC. RYAN HOYT 250.999.9893 INFO@RYANHOYTDESIGNS.COM
GENERAL CONTRACTOR:	SC SMITH BUILDING CO. STEVE SMITH 250.883.3712 INFO@SCSMITHBUILDING.COM
STRUCTURAL ENGINEER:	TBD
SURVEYOR:	RICHARD WEY & ASSOCIATES LLOYD EAKINS 250.655.5155 LLOYD@WEYSURVEYS.COM

Sheet:

RYAN HOYT
Ryan Hoyt Designs Inc.
Suite 203, 2642 Bloomfield Street
Victoria, BC V9E 1B3
250.999.9893
info@ryanhoytdesigns.com
www.ryanhoytdesigns.com

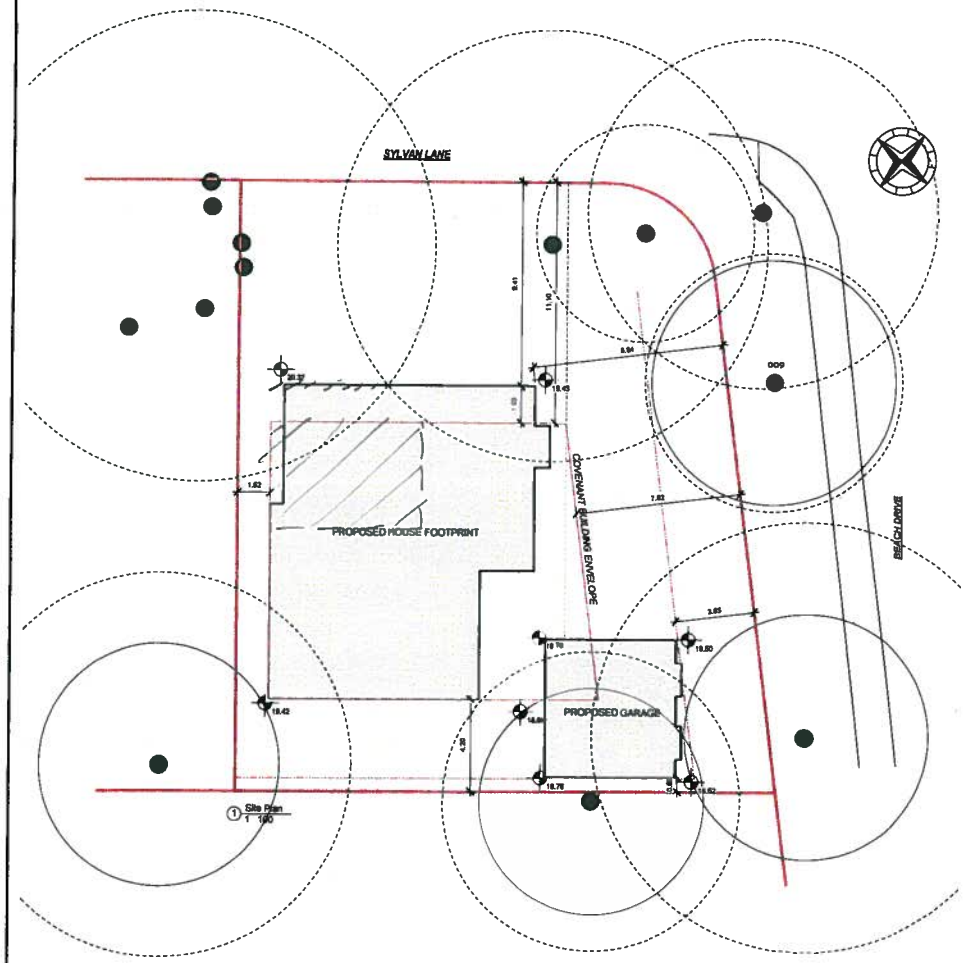
Project: 131 Beach Drive

Sheet Title: Cover Sheet

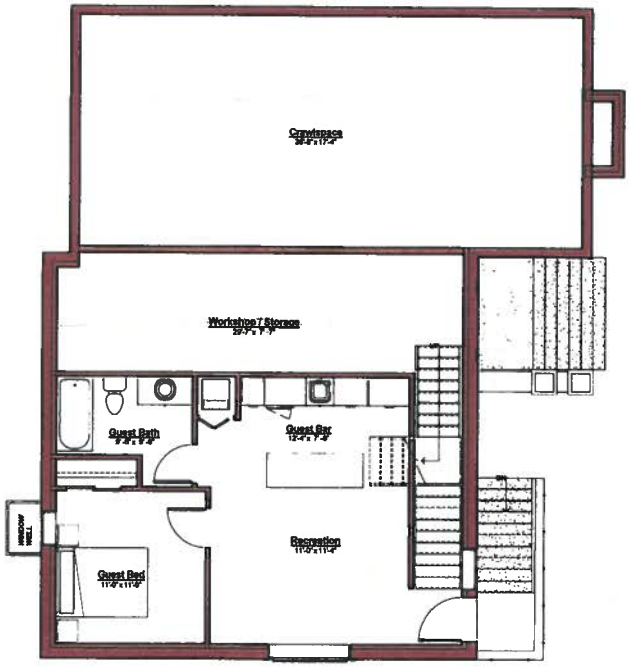
No.	By	Description:	Date:
1	RH	Concept 1	14Aug08
2	RH	Concept 2	14Aug11
3	RH	Concept 3	14Aug12
4	RH	Concept 4	14Aug14
5	RH	Issue for Covenant Review	14Aug19

Project No. 1471

Sheet: A0.0 5



1 Site Plan
1 : 100



2 Basement
1/4" = 1'-0"

GROSS FLOOR AREA:

LIMITS: 2582SF (MAIN & UPPER) 3675SF (TOTAL)

BASEMENT:	938SF
MAIN FLOOR:	1703SF
SECOND FLOOR:	880SF
TOTAL:	3521SF

LOT COVERAGE (25% MAX): 1582.3/6647.1 = 24.4%

GENERAL NOTES

1. All drawings, plans, models, designs, specifications and other instruments prepared by Ryan Hoyt Designs (RHD) in relation with any work executed from them, shall remain the property of RHD and may not be used by any person or corporation for any purpose whatsoever without the written consent of RHD, and RHD reserves the copyrights to such works. Work executed from these drawings shall be the exclusive property of the client for whom it was executed, and RHD reserves the right to use the drawings for any other work or purpose.
2. Any of these drawings in relation to building code requirements shall be the responsibility of the Contractor to verify all dimensions and conditions on site/building or all conditions as indicated on the drawings and shall be responsible for reporting any discrepancies to RHD before proceeding with the work. Do not scale drawings. Figured dimensions are to be taken in preference to scaled measurements. Any errors or omissions shall be reported to RHD before commencement of the work. Commencement of construction or any part thereof shall imply acceptance of the drawings.
3. Contractor shall verify the location of the existing site services, and these dimensions and conditions have been checked and verified and are complete.
4. Any set of drawings generally considered as preliminary or "Issued for Approval" shall not be used for construction purposes. The contractor is responsible for obtaining and using the most recent "Issued for Construction" drawings when executing the work. Any work carried out using preliminary drawings shall be at the contractor's own risk and responsibility.

Seal:

RYAN HOYT
Ryan Hoyt Designs Inc.
Suite 203, 2643 Bloomfield Street
Victoria, BC V9E 3R3
250.590.8473
info@ryanhoytdesigns.com
www.ryanhoytdesigns.com

Project: 131 Beach Drive

Sheet Title: Site & Basement

Date:	Description:	By:	No.
14Aug08	Concept 1	RH	1
14Aug11	Concept 2	RH	2
14Aug12	Concept 3	RH	3
14Aug14	Concept 4	RH	4
14Aug19	Issue for Covenant Review	RH	5

Project No. 1471

Sheet: A2.1 5

GROSS FLOOR AREA:

LIMITS: 2583SF (MAIN & UPPER) 3675SF (TOTAL)

BASEMENT:	938SF
MAIN FLOOR:	1703SF
SECOND FLOOR:	880SF
TOTAL:	3521SF

LOT COVERAGE (25% MAX): 158.3/647.1 = 24.4%

GENERAL NOTES:

1. All drawings, plans, models, designs, specifications and other documents prepared by Ryan Hoyt Designs Inc. are instruments of service for the sole purpose of the Project and shall remain the sole property of Ryan Hoyt Designs Inc. and may not be used in whole or in part for any other project without the written permission of Ryan Hoyt Designs Inc. Ryan Hoyt Designs Inc. shall retain all common law, statutory and other reserved rights, including the copyright. Visual contact with these drawings or models shall constitute proof of acceptance of these restrictions.
2. Title of these drawings is borne by Ryan Hoyt Designs Inc. to their clients as an instrument of service for the Project only.
3. Dimensions noted from these drawings shall be used in preference to scaled dimensions. Contractor shall verify all dimensions on the job and report any discrepancies to Ryan Hoyt Designs Inc. before commencing work.
4. These drawings shall not be used for "pricing", "tender" or "permit" unless so indicated by the issue/revision column. "Pricing" or "tender" drawings are incomplete and are not to be used for construction purposes. Refer only to drawings issued for permit or construction.
5. It is the responsibility of the Contractor to verify all dimensions and conditions relating to the Project and to notify Ryan Hoyt Designs Inc. of any discrepancies or omissions before commencing with any work. Ryan Hoyt Designs Inc. shall not be responsible for any errors, omissions or discrepancies found in these drawings after the commencement of work.
6. Contractor shall review all shop drawings with reasonable promptness and shall indicate his approval thereon before submitting them to Ryan Hoyt Designs Inc. for review. Ryan Hoyt Designs Inc. will review shop drawings with reasonable promptness and only for conformance with the design concept of the project and compliance with the information given in the contract documents. Review of shop drawings by Ryan Hoyt Designs Inc. does not relieve the Contractor of responsibility for errors or omissions in the shop drawings or for meeting all requirements of the contract documents.
7. Any use of drawings reasonably identified as the property of Ryan Hoyt Designs Inc. by anyone other than Ryan Hoyt Designs Inc. or those expressly authorized by it in writing to do so, is unauthorized without the express written permission of Ryan Hoyt Designs Inc. and any such user agrees to indemnify Ryan Hoyt Designs Inc. and its officers, directors, employees, consultants and agents against all claims, liabilities, expenses, losses, costs, fines and penalties that may be incurred or suffered by Ryan Hoyt Designs Inc. resulting from the unauthorized use of the drawings. Ryan Hoyt Designs Inc. shall retain all common law, statutory and other reserved rights, including the copyright.

Seal:

rhd RYAN HOYT
Ryan Hoyt Designs Inc.
Suite 203, 2645 Bloomfield Street
Victoria, BC V8S 1G3
250.515.3023
info@ryanhoytdesigns.com
www.ryanhoytdesigns.com

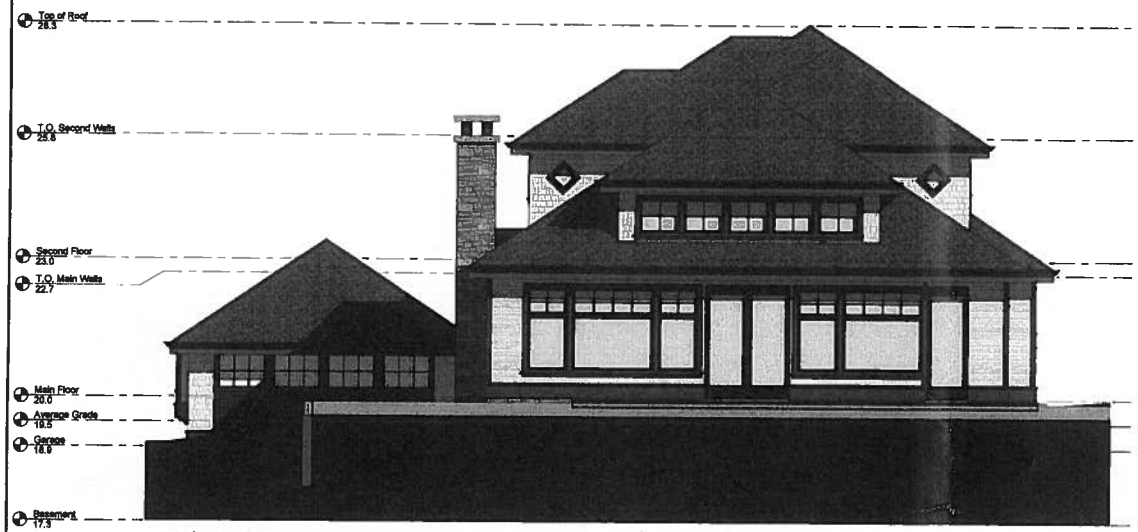
Project: 131 Beach Drive

Sheet Title: Floor Plans

Date:	Description:	By:	No.
14Aug06	Concept 1	RH	1
14Aug11	Concept 2	RH	2
14Aug12	Concept 3	RH	3

Project No. 1471

Sheet: A2.2 3



① North - Sylvan Lane Frontage
1/4" = 1'-0"

② East - Beach Drive View
1/4" = 1'-0"

GENERAL NOTES
[illegible]

Seal:

RYAN HOYT
Ryan Hoyt Designs Inc.
Suite 202, 1842 [illegible] Street
Victoria, BC [illegible]
[illegible]

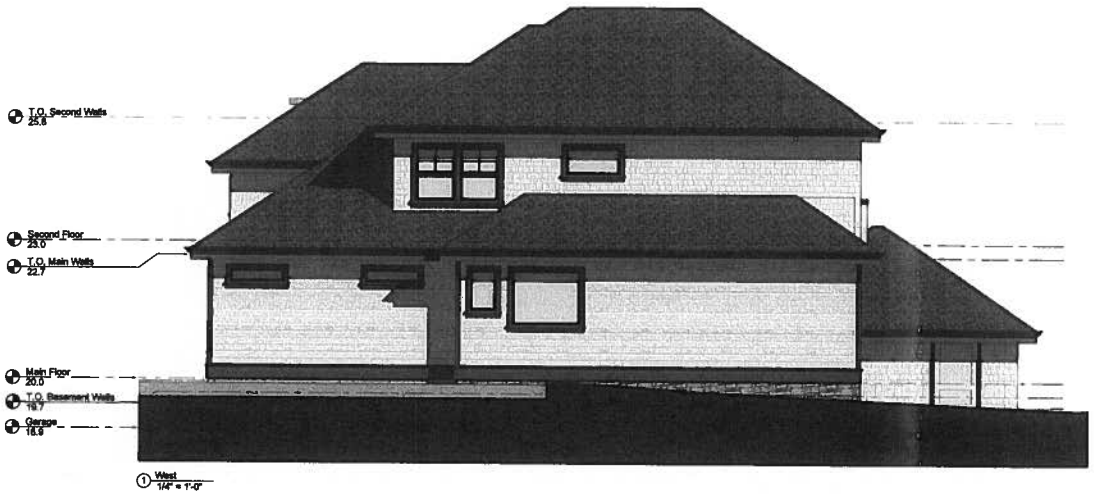
Project:
131 Beach Drive

Sheet Title:
Elevations

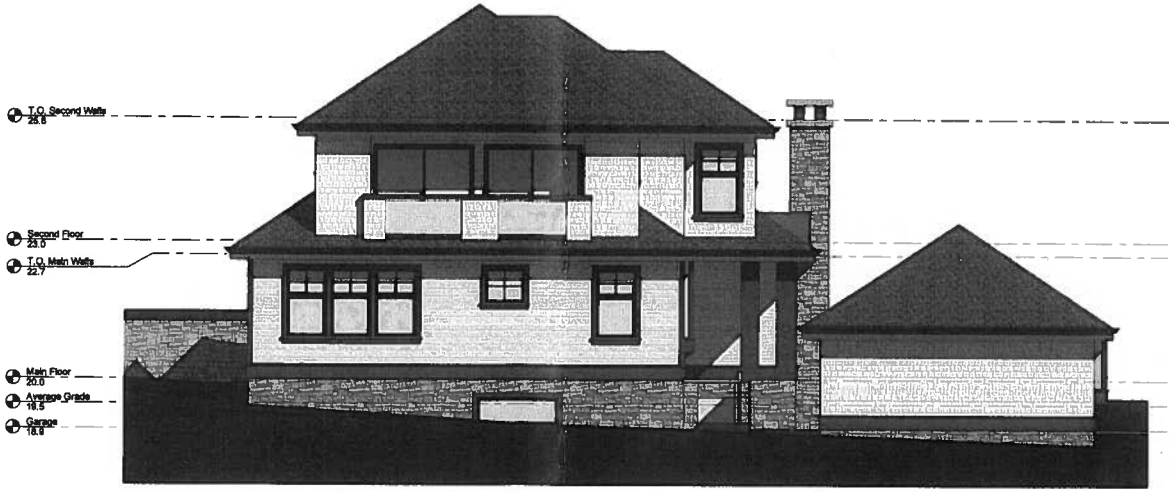
Date:	Description:	By:	No.
14Aug08	Concept 1	RH	1
14Aug11	Concept 2	RH	2
14Aug12	Concept 3	RH	3
14Aug14	Concept 4	RH	4
14Aug19	Issue for Covenant Review	RH	5

Project No.
1471

Sheet:
A4.1 5



1 West
1/4" = 1'-0"



2 South
1/4" = 1'-0"

Seal:

RYAN HOYT

Ryan Hoyt Design Inc.
Suite 203, 1642 Richmond Street
Victoria, BC V8S 1B3
250.595.0272
ryan@ryanhoytdesign.com

Project:
131 Beach Drive

Sheet Title:
Elevations

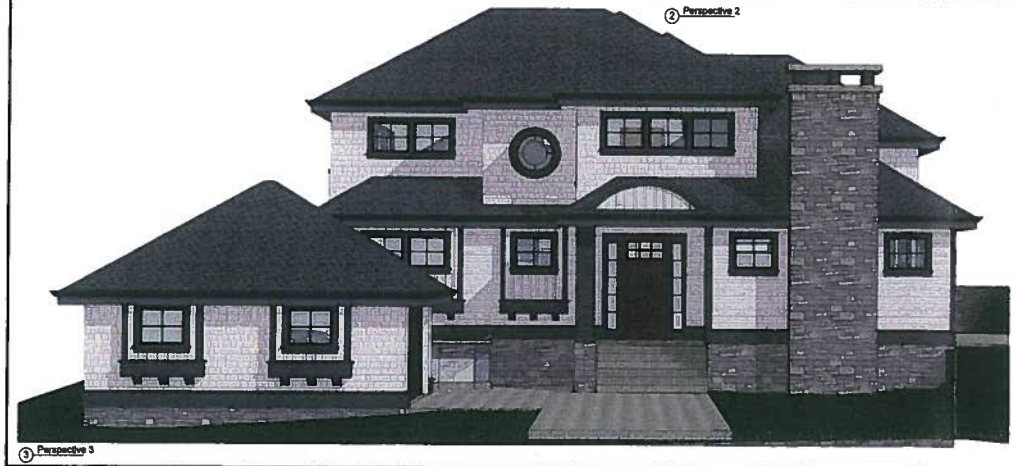
Date:	Description:	By:	No:
14Aug08	Concept 1	RH	1
14Aug11	Concept 2	RH	2
14Aug12	Concept 3	RH	3
14Aug14	Concept 4	RH	4

Project No.
1471

Sheet:
A4.2
4

1 Perspective 1

2 Perspective 2



3 Perspective 3

Project: 131 Beach Drive

Sheet Title: Perspectives

Date:	Description:	By:	No.
14Aug08	Concept 1	RH	1
14Aug11	Concept 2	RH	2
14Aug12	Concept 3	RH	3
14Aug14	Concept 4	RH	4
14Aug19	Issue for Covenant Review	RH	5

Project No. 1471

Sheet: A5.1 5

4. TERMS OF INSTRUMENT - PART 2

W H E R E A S:

A. The Transferor is the registered owner in fee-simple of those lands and premises located within The Corporation of the District of Oak Bay, in the Province of British Columbia, more particularly described as:

PID 006-175-244
Lot , Section 22 and 47, Victoria District, Plan 3646

and

PID: 006-175-945
Amended Lot 2(DD 93767I), Section 22 and 47, Victoria District, Plan 3646

(collectively the "Lands")

B. The Transferee is The Corporation of the District of Oak Bay;

C. The Transferor acknowledges that it is in the public interest that the development and use of the Lands be limited and wishes to grant this covenant to the Transferee;

D. Section 219 of the *Land Title Act* provides that a covenant, whether of negative or positive nature and includes the following provisions:

(a) that land, is not to be built on or subdivided except in accordance with the covenant;

(b) that land, or specified amenities be protected, preserved, conserved, maintained, enhanced, restored or kept in its natural or existing state,

may be granted in favour of The **Corporation of the District of Oak Bay** and may be registered as a charge against the title to that land.

NOW THEREFORE THIS AGREEMENT WITNESSES that under Section 219 of the *Land Title Act*, and in consideration of the premises and the mutual covenants and agreements contained herein, and the sum of TEN ($10.00) DOLLARS of lawful money of Canada now paid to the Transferor by the Transferee (the receipt and sufficiency of which is hereby acknowledged), and for other good and valuable consideration the parties covenant and agree each with the other as follows:

1. No building or structure shall be erected, constructed or placed on the "Lands", and no addition to any such building or structure shall be made, unless and until:

(a) the proposal to erect, construct, place or make the same; and
(b) scaled and dimensioned plans (including without limitation a siting plan and driveway plan), elevations and specifications thereof, including details as to exterior finish,

shall have been first submitted to and approved in writing by the Transferee as to the siting, architectural design and exterior finish.

2. The Transferee may, having regard to the proximity of the proposed construction to property boundaries, adjoining or neighbouring properties, the effect on the amenities, views, the privacy of adjoining or neighbouring properties, and the overall character of the neighbourhood:

(i) approve the proposed construction;
(ii) withhold approval for the proposed construction; or
(iii) grant approval, subject to the conditions relating to the siting, architectural design and exterior finish that the Transferee reasonably considers will address the matters referred to above.

If the approval is granted, subject to the conditions referred to in section 1, then the Transferor shall not erect, construct, place or make any building or structure on the "Lands", unless the building or structure complies with the conditions.

3. The Transferor covenants and agrees with the Transferee that it shall not use or permit the use of the Lands or any building on the Lands for any purpose, construct any building on the Lands or subdivide the Lands except in strict accordance with this Agreement.

4. The Transferor agrees in order to protect environment and trees, that blasting near tree roots shall only be performed using explosives of low phytotoxicity, and techniques that minimize tree damage must be used. The blasting should use small low-concussion charges, and multiple small charges designed to pre-shear the rock face, to reduce fracturing, ground vibration, and minimize the impact on the surrounding environment. Provisions must be made to store blast rock, and other construction materials and debris, away from critical tree root zones.

5. The Transferor agrees in order to protect the environment and trees, that in respect to the tree plan attached as Appendix "A" the following conditions apply:

   (a) The siting of any new building is required to be within the identified building envelope,
   (b) No ground disturbance is permitted between Sylvan Lane and the identified 'root trench',
   (c) The 'protected area' identified shall have no crawl space or basement development and any excavation deeper than 30cm must be under the supervision and approval of a certified arborist licensed in British Columbia,
   (d) Any bedrock removal must be developed in consultation with a certified arborist licensed in British Columbia, and
   (e) A comprehensive tree protection and mitigation plan prepared by a certified arborist licensed in British Columbia must be submitted with any building permit application and approved by the manager of parks of the Transferee.

6. The Transferor shall indemnify and save harmless the Transferee from any and all claims, causes of action, suits, demands, fines, penalties, costs or expenses or legal fees whatsoever which anyone has or may have against the Transferee or which the Transferee incurs as a result of any loss or damage or injury, including economic loss, arising out of or connected with:

   (a) the breach of any covenant in this Agreement;
   (b) the use of the Lands contemplated under this Agreement, including, without limitation, blasting in connection with the construction of a building on the Lands; and
   (c) restrictions or requirements under this Agreement.

7. The Transferor hereby releases and forever discharges the Transferee of and from any claims, causes of action, suits, demands, fines, penalties, costs or expenses or legal fees whatsoever which the Transferor can or may have against the Transferee for any loss or damage or injury, including economic loss, that the Transferor may sustain or suffer arising out of or connected with:

   (a) the breach of any covenant in this Agreement;
   (b) the use of the Lands contemplated under this Agreement; and
   (c) restrictions or requirements under this Agreement.

8. At the Transferor's expense, the Transferor must do everything necessary to secure priority of registration and interest for this Agreement and the Section 219 Covenant it creates over all registered and pending charges and encumbrances of a financial nature against the Lands.

9. Nothing contained or implied in this Agreement shall prejudice or affect the rights and powers of the Transferee in the exercise of its functions under any public or private statutes, bylaws, orders and regulations, all of which may be fully and effectively exercised in relation to the Lands as if the Agreement had not been executed and delivered by the Transferor.

10. Time is of the essence of this Agreement.

11. The Transferor covenants and agrees for itself, its heirs, executors, successors and assigns, that it will at all times perform and observe the requirements and restrictions set out in this Agreement and they shall be binding upon the Transferor as personal covenants only during the period of its respective ownership of any interest in the Lands.

12. It is mutually understood, acknowledged and agreed by the parties hereto that the Transferee has made no representations, covenants, warranties, guarantees, promises or agreements (oral or otherwise) with the Transferor other than those contained in this Agreement.

13. The Transferor shall pay the legal fees of the Transferee in connection with the preparation and registration of this Agreement. This is a personal covenant between the parties.

14. The waiver by a party of any breach of this Agreement or failure on the part of the other party to perform in accordance with any of the terms or conditions of this Agreement is not to be construed as a waiver of any future or continuing failure, whether similar or dissimilar, and no waiver shall be effective unless it is in writing signed by both parties.

15. Wherever the singular, masculine and neuter are used throughout this Agreement, the same is to be construed as meaning the plural or the feminine or the body corporate or politic as the context so requires.

16. No remedy under this Agreement is to be deemed exclusive but will, where possible, be cumulative with all other remedies at law or in equity.

17. The enforcement of this Agreement shall be entirely within the discretion of the Transferee and the execution and registration of the Agreement against title to the Lands shall not be interpreted as creating any duty on the part of the Transferee to the Transferor or to any other person to enforce any provision of the breach of any provision of this Agreement.

18. The restrictions and covenants herein contained shall be covenants running with the Lands and shall be perpetual, and shall continue to bind all of the Lands when subdivided, and shall be registered in the Victoria Land Title Office pursuant to section 219 of the *Land Title Act* as covenants in favour of the Transferee as a first charge against the Lands.

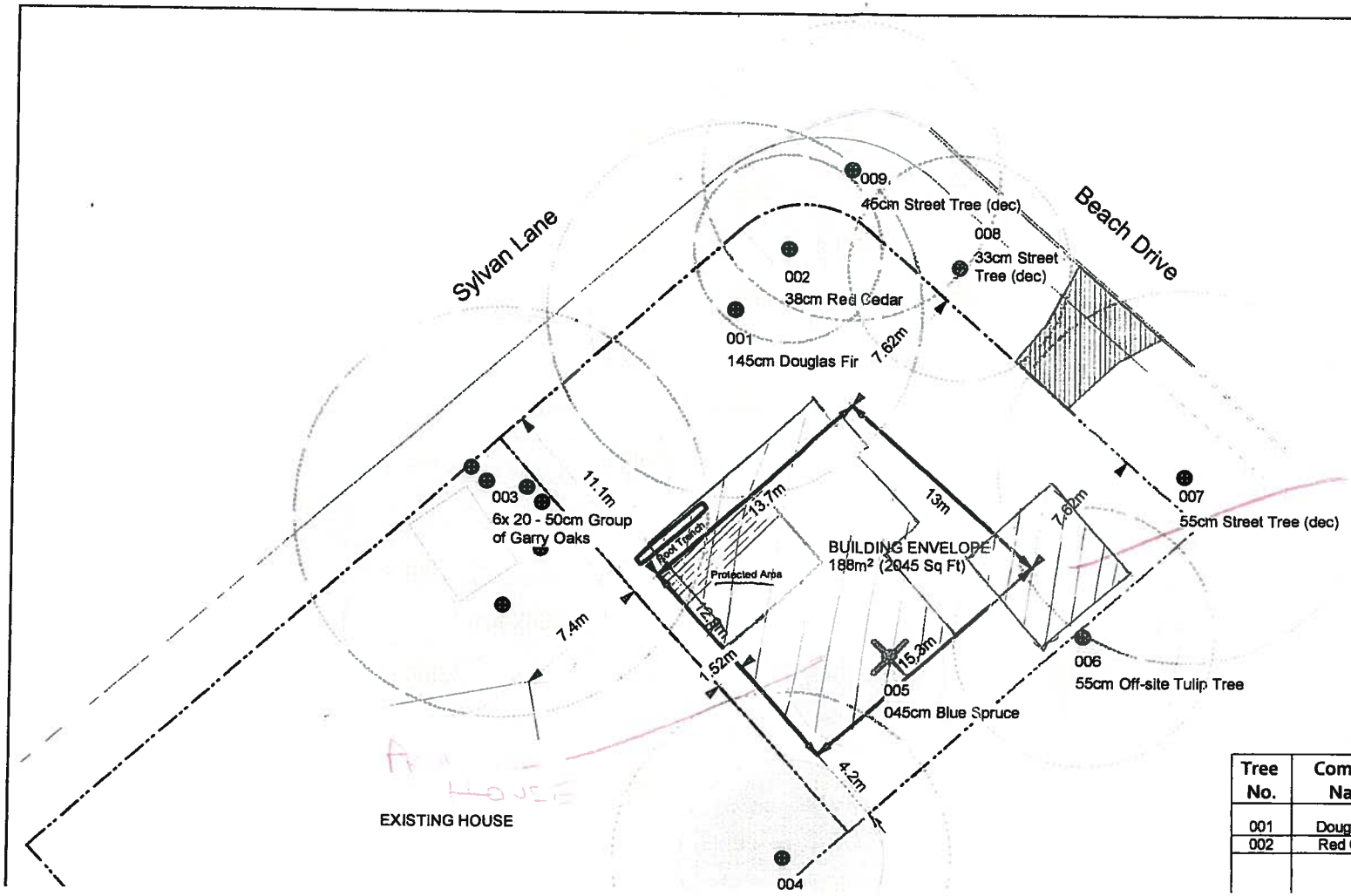
19. The Transferor agrees to execute all other documents and provide all other assurances necessary to give effect to the covenants contained in this Agreement.

20. If any part of this Agreement is found to be illegal or unenforceable, that part will be considered separate and severable and the remaining parts will not be affected thereby and will be enforceable to the fullest extent permitted by law.

21. This Agreement is to be construed in accordance with and governed by the laws applicable in the Province of British Columbia.

22. Whereas Coast Capital Savings Credit Union, the registered holder of a charge by way of a Mortgage against the Lands and registered under No. CA3429636 (the "**Charge**") in the Land Title Office at Victoria, British Columbia, for and in consideration of the sum of One ($1.00) Dollar paid by the Transferee to the said Chargeholder (the receipt whereof is hereby acknowledged), agrees with the Transferee, its successors and assigns, that the within section 219 Covenant shall be an encumbrance upon the Lands in priority to the Charge in the same manner and to the same effect as if it had been dated and registered prior to the Charge.

The Transferor and Transferee acknowledge that this Agreement has been duly executed and delivered by the parties executing Forms C and D attached hereto.



LEGEND

Tree Canopy
Tree Centre
20
Protected Root Zone

Tree Tag # 20
Remove Tree Symbol

SUMMARY TREE STATISTICS

Trees on site

Trees to be removed for construction

Trees to be retained undisturbed

Adjacent off-site trees (incl. boundary and street

Tree No.	Common Name	Stem Diameter (cm)	Structural Condition	Biologi Healt
001	Douglas Fir	145	Fair	Fair
002	Red Cedar	38	Good	Good
		Avg: 43 cm Ranging from		

Randy and Bev Blumer
PO Box 5302, Victoria
Ph. 250 595-7628
Email. Bevblumer1@gmail.com

October 8, 2014

District of Oak Bay
Mayor, Council, Advisory Design Panel

To whom it may concern:

RE: 131 Beach Drive

The purpose of our letter is to provide some background information on us (the Blumers) and our intentions and desires for the development of 131 Beach Drive.

We became the happy owners of the newly subdivided lot at 131 Beach Drive in July of this year and have spent a number of months pursuing an appropriate home design. In order to proceed we must seek your approval for a relaxation of the building envelope dictated by the Covenant on the Property. We wish to pursue this without diminishing the intent of the Covenant to protect trees and maintain the classic Oak Bay design and streetscape.

Our team has worked hard and accompanying this submission for approval are the Proposed Design Plans from Ryan Hoyt Designs, a very detailed account of the design and decision process articulated by our builder, Steve Smith of SCSmith Building Company, as well as back up documents including arborist Gye & Associates communications with Oak Bay and neighbors The Middletons.

Background
We both grew up in Edmonton, but Randy's first Navy posting brought him to Victoria in 1984 and we were married in Victoria in 1985. We fell in love with Oak Bay and were determined to be able to live in this beautiful community. In 1987 we purchased our first home on Hampshire. While the Navy took us to the East Coast for a few intervening years, we returned to Victoria and have spent many years living in Oak Bay. We've enjoyed character homes on Monterey, Lulie and Newport and our last Oak Bay home was in the University Woods development. In 2007, when our 2 boys left Victoria for University, we downsized and purchased a condo in Cordova Bay.

We enjoyed the condo lifestyle for a time, but realized it was not conducive to our out of town family visits (our boys are now in careers in Toronto and Calgary respectively, parents in Kamloops and siblings in Alberta). As well, Cordova Bay was simply too far from the Victoria Golf Course of which Randy is a member, and we missed the character and warmth of the Oak Bay community. Being the first and last home we intend to build from scratch, we want to meet the needs of our family well into our retirement. Of course, this project must also be financially responsible - our lot purchase price plus build budget needs to be in line with the surrounding area's home values.

We sold our condo in July 2014 and within weeks closed on the lot at 131 Beach Drive. The only condition on our Offer to Purchase was to review and approve of the Arborist Report and the Covenant on Title. In fact, our review of the Covenant revealed that the original filing referenced but did not

include the Schedule A – Arborist Report. Without the Schedule A, the Covenant would be able to be challenged. Instead, we made the filing of a Modification to the Covenant to include the previously omitted Schedule A a condition of the sale. Because our vision of the home was Oak Bay cottage style, with exposure and access to the beautiful natural features of the lot, we appreciate the intention of the Covenant to protect the trees and have Oak Bay's design oversight.

The design process was a collaborative one and once the topographic survey was conducted, Steve, Ryan and ourselves spent many hours brainstorming a functional layout of the home that would fit within the Covenant Building Envelope and satisfy both the mandates of Oak Bay and our own home requirements. After many iterations it became obvious that our preferred solution would require relaxing the building envelope without compromising the spirit of the Covenant itself.

The first call we made was to Jeremy Gye who prepared the Schedule A - Arborist Report. Jeremy and Steve investigated the protected trees, aerial canopies and roots that may be affected by our proposed plans. The Oak Bay arborist was also a part of the onsite consultations. After these investigations, it became clear that there was a way ahead to achieve both our retirement home needs as well as honour the Covenant's intent which is to protect the trees and maintain the classic Oak Bay design and streetscape.

And this is what has brought us to this point, respectfully requesting the Mayor, Oak Bay Council and the Advisory Design Panel to support us by approving our proposal to change the Covenant's building envelope.

We wish to attend the Council meeting, along with our team, in order to present the entire submission documents and answer questions that arise. We have a sense of urgency now, being that we've moved into a 1 bedroom rental accommodation for the course of the build and would very much like to get underway. Our inclusion on the Agenda for the October 14, 2014 Council Meeting would be much appreciated.

Thank you for your time and consideration.

Sincerely,

B. Blumer R Blumer

Bev and Randy Blumer

scsmithbuilding
company
Distinctive Homes • Timeless Renovations

PO Box 43, Mill Bay BC, V0R2P0

District of Oak Bay
Mayor, Council, Advisory Design Panel

Please accept this letter and accompanying documents in our quest to receive Oak Bay approval to modify the existing Covenant for the property at 131 Beach Drive.

Accompanying Documents include:

- Personal letter from the owners, Randy and Bev Blumer
- Ryan Hoyt Designs Proposed Plans
- Gye & Associates Letter to Oak Bay Advisory Design Panel addressing the Blumers' proposed plans
- Gye & Associates 129 Beach Tree Risk Assessment Report to Middleton's addressing the health of the protected trees on their property
- Mock up of an engineered slab for the proposed detached garage

Overview

The proposed new residence at 131 Beach Drive will be built and used as a private residence for Randy and Bev Blumer. They have purchased the lot with a vision to create a beautiful family style home that they plan to live in well into retirement. After many lots were viewed and considered, the lot at 131 Beach was purchased to take advantage of the natural setting and opportunity to build a character home with equally attractive grounds. Despite the challenges of the property they were immediately attracted to the neighborhood and the possibility to create something special. With a growing family living in different parts of Canada it was also important to create a home that would allow for frequent, comfortable visits by their family and create memories. We feel it is an important fact that the property is not being used as a development property or the home being built for the purpose of profit but will become an attractive family home and hopefully a highlight of design and construction for the neighborhood.

To proceed with the project, the Blumers are seeking approval from the Mayor and Oak Bay Council to modify the existing Covenant with respect to the building envelope without altering the spirit of the Covenant, which is to protect the trees and ensure a classic Oak Bay design and streetscape.

The modification sought is twofold:

1) to add 5 feet to the building envelope on the northwest Sylvan Lane side, expanding the root protected area accordingly, and
2) to expand the building envelope to accommodate a small detached double garage with garage doors perpendicular to Beach Drive and stipulating special engineered construction technique for the garage siting for the purpose of root protection.

The modifications are in compliance with RS5 zoning and no variances are being sought.

The Blumers' design objectives were

- to recreate a classic Oak Bay styling ensuring a streetscape pleasing to the community,
- to maximize exposure and preserve the lot's natural features,
- enable main floor "retirement" living,
- garage parking for 2 vehicles, and
- to develop a partial basement.

As the design process evolved, countless hours of time and expense were spent with custom home specialist Ryan Hoyt Designs, builder SC Smith Building and arborist Gye & Associates to come up with a functional floor plan that also complemented the natural features of the lot, an attractive exterior view from all sides while remaining within the constraints of the property's Covenant and Oak Bay's zoning requirements. Unfortunately, the dimensions of the Covenant building envelope were not quite enough to give latitude to accommodate the design priorities, and the slope of the lot coupled with the protected root area all but precluded an attached garage without giving up a basement entirely.

With the context now of building for a family, we sought to come up with a design that would allow for a small detached garage, be RS5 zoning compliant and require the least modification to the covenant building boundary. The entire process was driven by the overriding mandate which was to maintain the spirit of the Covenant in all ways.

To appreciate just some of the many decision points that brought us to the point of seeking the Covenant modifications, the design process is elaborated below.

Recreate a classic Oak Bay styling and ensure a streetscape pleasing to the community – in the initial conversations of purchasing the lot from owner Keith Middleton, who resides directly behind the lot on Sylvan Lane, it was imperative to include the Middleton's wishes to stay true to the Oak Bay features in all aspects of the design and not to build something that was not out of character with the neighborhood. A personal spin has been injected to make the home unique and special to Randy and Bev. This design objective was easy to meet because it is the Blumers' style preference as well.

Maximize exposure to the lot's natural features, and preserve those features – the Blumers' vision was to have a great room with a wall of windows & french doors to appreciate nature and flow effortlessly to the outside at ground level. The Sylvan Lane exposure and the higher elevation on this side of the lot is perfect. The Oaks, Fir, and laurel hedge coupled with the rock and natural features are the exact outlook the Blumers seek. The desire to protect and encourage the health of these trees is fundamental to the enjoyment of this exposure. Further landscaping will complement the natural features with drought resistant plantings and minimal hardscaping.

Main floor living - because they are planning on living in the home well into their retirement it was important to design the home with main floor living as a priority. The full allocation of the allowable square footage on the main to living space was necessary to meet this priority.

Garage parking for 2 vehicles - A thorough exploration of an attached 2 car garage revealed the following:

- an attached 2 car garage limited the overall floor area available for the main & upper (to meet the Blumers' requirements),
- the natural lot slope did not allow for an attached garage that would be level entry to either the main floor or the basement, necessitating a split level design which is not in keeping with classic Oak Bay design, or the Blumers' "no stairs" retirement main level living requirement
- even if an attached 2 car garage were possible, due to the topography and natural lot features, the only option would be to position the garage at the low side of the lot (ie. Tulip tree side).
- In reality, an attached 2 car garage with doors facing Beach Drive would result in the worst possible outcome:
    - a basement would be virtually eliminated because of the inability to develop the northwest side of the house due to the Covenant's root protected area
    - the garage doors would be the dominant feature of the house to Beach Drive, and thus not presenting the best possible look to the streetscape
    - the driveway would be within feet of the southend street tree, thereby jeopardizing that tree's health
    - the driveway would pass over the municipal sewer connection to the lot
    - virtually all of the Blumers design objectives would have been compromised without adding any value to the Oak Bay community

After consultation with the Gye & Associates and Precision Engineering **(*)**, it was determined a detached garage could be constructed in the area of the neighboring property's Tulip tree without jeopardizing its health. The trade off, however, in allowing for the 10' separation between the house and the detached garage, was the shape of house could no longer utilize some of the current covenant area and thereby necessitated a slight (5 foot) expansion of the Covenant building envelope boundary on the northwest Sylvan Lane side of the property (in addition to the garage location). Again, after consultation with Gye & Associates **(*)**, it was determined the northwest trees would be unaffected by the expansion provided the Covenant root protection area was expanded accordingly.

(*) further information on this is detailed in the section below "Arborist Involvement"

For the above reasons, a detached garage was considered.

In order to address the importance of the streetscape view from Beach Drive a plan that included a double car garage to keep vehicles hidden was designed. The double garage doors were thought to take away from the look of the front elevation so they were turned ninety degrees to the street. This positioning allowed the driveway to sit nicely between the 2 street trees, away from the municipal sewer connection, albeit closer to the municipal water connection.

The design elements from the house were then applied to the side view of the garage to soften the look and blend the typically out of place garage to become an important feature in the overall feel of the home. The size of the garage was kept purposely small to accommodate just what was needed for the vehicles, and no more. The garage dimension in relation to the overall frontage on Beach Drive coupled with the street tree and laurel hedge minimizes the impact of the garage to the street.

All things considered, the proposed detached garage constructed under engineering and arborist oversight, meets both Oak Bay community mandates as well as the Blumers' requirements.

Basement – the ability to develop a portion of the basement for a recreation area and guest bedroom was a priority to accommodate out of town family. As the design process progressed, it became evident the only space for a mudroom would be in the basement. Due to the lot slope, any exterior "side door" into the house from the Tulip tree side, would require stairs either up to the main floor, or down to the basement.

In order to eliminate a stairwell on the Tulip tree side which would otherwise also be outside the existing covenant building envelope, the 10' setback to the detached garage provided the perfect space for the basement mudroom access.

Arborist Involvement
Despite dozens of iterations it became apparent that in order to design a functional, main floor living plan that included basic requirements of space in keeping with other homes of the area in similar price points, it would be necessary to modify the building envelope dimensions.

Because it was stated early in the process that the protection of the trees on the property was a priority to the Blumers, they selected the design/build team with that in mind. In order to find out if there was an option to relax the covenant and increase the allowable building envelope without any increased risk to the protected trees, arborist Jeremy Gye was retained to conduct further research. As the original arborist for the site we felt that he was already well versed in the challenges of the site and had a trusted working relationship with the District of Oak Bay as well as the Oak Bay arborist.

- Upon further review of the protected trees by Gye and Associates two of the protected oaks in the northwest corner, on the neighboring Middleton property, were found to be critically ill and recommended for removal. Using a mini excavator under the careful direction of arborist Jeremy Gye further investigation of the root zone of the oak trees and the Douglas Fir tree found roots to be minimal in the requested five foot extension of the covenant line on the northwest Sylvan Lane side of the property. Heights and radius of the trees canopy were found to be unaffected by the proposed building, with recommended pruning for the health of the trees to be completed at the owners expense at the commencement of the construction.

  So there is no question as to the protection of the roots in this 5 foot extension to the covenant line, the Blumers are suggesting the protected root area within the existing Covenant be expanded to protect the 5 foot extension as well.

  See attached Gye & Associates 129 Beach Tree Risk Assessment Report
  See attached Gye & Associates Letter to Oak Bay Design Panel

- The separate proposed garage at the southeast corner of the property was also deemed possible to build without harm to the protected Tulip tree through careful excavation, detailed monitoring by the arborist and a foundation designed and constructed with structural piers, concrete grade beams and a suspended slab to allow for air and nutrients to continue in their natural path to the Tulip tree roots. SC Smith Building is a Built Green certified contractor with successful previous experience in this type of tree sensitive construction across Southern Vancouver Island. Consultation with Precision Engineering has also reinforced the ability to meet all structural requirements for foundation and building. The modification to the Covenant to accommodate a small detached 2 vehicle garage ought to stipulate a protected root area and mandate an engineered foundation accordingly.

  See attached Gye & Associates Letter to Oak Bay Advisory Design Panel
  See attached Mock up of an engineered slab for the proposed detached garage

- Gye & Associates has declared his willingness to work with the Blumers to oversee the construction as he has conditionally given his endorsement to the proposed plans as described herein.
  See attached Gye & Associates Letter to Oak Bay Advisory Design Panel

In Conclusion

Understandably the existing Covenant building envelope was created in the absence of extensive research into the realities of necessary space or working floor plans, thus the potential for adjustments to the building envelope were a very realistic possibility for any purchaser wishing to develop the property. Throughout the process, however, the Blumers have made every effort to honour the Covenant and their design takes into consideration not only their requirements but also meets the Oak Bay Community's classic Oak Bay design and streetscape and tree protection mandates. They have demonstrated a commitment to expanding the root protected area within the building envelope and specialized construction techniques are being accepted without question.

Randy and Bev Blumer have further indicated interest in enrolling their new home in the Built Green program. The team at SC Smith Building has maintained a Gold Standard or better in the last twenty new homes they have constructed and have several awards for their tireless approach to sensitive, environmentally conscious building practices. By implementing green building technology in both the construction and landscaping phases of the new home it will certainly benefit both the neighborhood and all residents of Oak Bay. The new home owners are willing to work with both Oak Bay building officials and their designer to insure a tasteful, environmentally sensitive building that will be regarded as an added benefit to the neighborhood for years to come.

Thank you for your consideration and we trust you will approve a Covenant modification so the Blumers may be a step closer to their dream home.

Best regards,

Steve Smith
SC Smith Building Co

scsmithbuilding
company
Distinctive Homes · Timeless Renovations

Re:131 Beach Drive

Proposed foundation system for southeast corner of building lot at 131 Beach Drive for minimal excavation and preservation of tree root zones in construction of separate double car garage. . All details to be confirmed with structural engineer and arborist on site as construction proceeds. Space below suspended slab to remain clear to allow water, air and nutrients to follow natural course to tree root system.