

Attachment B



Black Hills Audubon Society

A Washington State Chapter of the National Audubon Society
(360) 352-7299 ! www.blackhillsaudubon.com
P.O. Box 2524, Olympia, WA 98507

S-1

19 April 2010

Thurston County Planning Commission
2000 Lakeridge Drive SW
Olympia, WA 98502

Dear Planning Commission Members:

These comments are in response to the proposed revisions to Mineral Extraction Code, Special Use 20.54.070.

We support the adoption of these requirements as the county moves toward the permanent implementation of more science-based comprehensive environmental protections under a revised Critical Areas Ordinance.

Section 20.54.070 (21)(c) is confusing and appears to have an unintended double negative. Assuming that a critical area "net loss" is not the goal here, this section should be re-written as follows:

"In addition to the requirements of Chapter 17.15, the SUP shall require that no activity or use be allowed that results in a net loss of critical area functions. For example, loss of critical area functions could result from sediment harmful to aquatic life in marine or freshwater habitats and from reduced groundwater flows to streams and/or wetlands that would adversely affect dependent flora and fauna."

Thank you for your consideration of these remarks.

Respectfully,

Sam Merrill

Sam Merrill, President
Black Hills Audubon Society

S-2

April 19, 2010

Thurston County Planning Commissioners
2000 Lakeridge Drive SW
Olympia, WA 98502-6045

Dear Commissioners:

My name is Tom Cook and I live at 652 Sandra Lee Court Se, Olympia, WA 98513. My purpose in writing this letter is to provide my comments regarding the proposed amendments to Mineral Extraction Code, Special Use 20.54.070.

I support the adoption of the proposed text changes to Chapter 20.54.070 Mineral Extraction of the Special Use Code. It is understood that the new established environmental criteria may change once the Critical Area Ordinance is revised.

20.54.070.21.a.ii and

Let it be noted that the word "asphalt" even though it is missing from ~~20.54.070.21.k.iii~~ should have been included and noted by a strikeout line as proposed in earlier drafts. This change needs to be reflected in the final Code.

Thank you for the opportunity to comment.

Sincerely,



Tom Cook

Howard Glastetter
11110 Kuhlman Road SE
Olympia, WA 98513-9605
April 21, 2010 - Public Comment

Thurston County Planning Commission

Dear Commissioners,

I was an alternate member of the Mineral Lands Task Force, attending 12 of 13 meetings starting in 2004, filling in for Tom Cook twice. I was a member of the Asphalt Advisory Task Force, starting 2007, attending 9 of 10 meetings. I've also attended recent Planning Commission meetings that analyzed MLTF and AATF results.

I'm commenting on the proposed text changes for Chapter 20.54.070, in particular, the following text found on the bottom of page 2 and the top of page 3. The text currently reads (I've bolded and underlined what needs to be **removed**):

All other **accessory** uses are allowed **only** when approved after administrative review by the department.

ii. **Accessory** uses are permitted only in conjunction with an existing mineral extraction operation. The permit for the **accessory** use expires when the SUP for the mineral extraction expires, is revoked, or when significant mineral extraction activity as defined in Section 17.20.150 ceases.

I propose the following changes to the above wording (**additions** bolded and underlined):

All other uses are allowed when approved after administrative review by the department. **A public hearing would be required if a non-accessory use would have significant traffic or environmental impacts.**

ii. **Non-extraction** uses are permitted only in conjunction with an existing mineral extraction operation. The permit for the **non-extraction** use expires when the SUP for the mineral extraction expires, is revoked, or when significant mineral extraction activity as defined in Section 17.20.150 ceases.

The rationale for the changes is as follows (you may need to glance between the two above paragraphs): The document defines what are accessory uses. There are no "other accessory uses" just "other uses". Giving a go ahead "**only** when approved after an administrative review by the department" has a potential for abuse. All non-extraction industry in a mine should cease when a mine stops extraction. These functions should either be removed or have to be re-justified through a re-permitting process.

Thank you,



Howard Glastetter
howard.glastetter@comcast.net (360) 491-6645



April 21, 2010

2000 Lakeridge Dr. SW
Olympia, WA 98502
Thurston County Planning Commission

RE: Thurston County Mineral Extraction Special Use Permit Ordinance

Thurston County Planning Commission,

Groundwater is a very important public resource in Thurston County and should be protected for the good of human health. Sand and gravel resources are also an important resource in Thurston County and should receive appropriate protection as well. Developing restrictive language that uses hard and fast numbers to create buffer distances away from critical areas that are not supported by any science is not in the best interest of the citizens of Thurston County. As human health should not be compromised at the expense of natural resource management it should be understood that we as human beings rely on these resources to sustain our own existence. Mining sand and gravel can coexist along with other types of land-use in Thurston County as long as the appropriate environmental review has been conducted and mitigation measures have been developed based on sound science and educated decision making.

As we all know groundwater impacts have been a topic of conversation throughout the mineral lands and asphalt plant ordinance revision process. I would like to discuss the importance of the techniques used to develop hydrogeologic reports and the methods used for delineating well head protection areas. The Planning Commission and the stakeholders need to understand how the wellhead protection areas are developed in Thurston County and the implications which would prohibit any type of surface mining within the designated area regardless of the details contained within a professional report analyzing the specific groundwater characteristics.

It should be known to the Thurston County Planning Commission that methods used to develop wellhead protection areas may be created based upon either of the following methods;

- 1.) Arbitrary Fixed Radius-Method involves drawing a circle of a specified radius around a well being protected based on very generalized hydrogeologic considerations and/or professional judgement.
- 2.) Calculated Fixed Radius- Method involves drawing a circle around a well for a specified time-of-travel using an equation that is based on the volume of water that will be drawn to a well in a specified time. Does not take into account the rate or direction of groundwater flow.
- 3.) Analytical Modeling- Method involves the use of equations to define groundwater flow and contaminant transport. Requires the input of various hydrogeologic parameters including transmissivity, porosity, hydraulic gradient, hydraulic conductivity, and saturated thickness of the aquifer.
Note: Most widely used methods for accurately determining wellhead protection areas
- 4.) Hydrogeologic Mapping – Involves the use of dye tracing methods to map flow boundary and time-of-travel.
- 5.) Numeric Flow/Transport Models-Method involves using computer models that approximate groundwater flow based on site specific data that include hydrogeologic parameters such as permeability, porosity, saturated thickness, recharge rates, and aquifer geometries.

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The variety of different wellhead protection area delineation methods includes multiple parameters. Each of these methods have increasing technical sophistication that range from simple and inexpensive to highly complex and very costly. It is important to understand when developing specific regulations that prohibit certain activities within them.

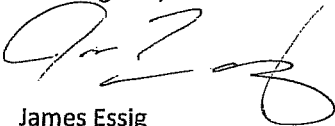
My question to the Planning Commission is what method was used to determine the designated wellhead protection areas in Thurston County?

The purpose of a site specific hydrogeologic study is to evaluate the unique hydrogeological features that impact the groundwater flow rates and volumes as well as establishing a baseline of groundwater characteristics of the area. These characteristics would include but not limited to; depth to ground water, seasonal fluctuations, background water quality data, flow rates including volume and direction of flow. Most sand and gravel mining operations have groundwater monitoring plans which were developed through extensive hydrogeological studies as required through the County special use permit process and Department of Natural Resources surface mining regulations. A groundwater monitoring plan is required to be prepared by a professional hydrogeologist and further approved by Thurston County Environmental Health Services. The data retrieved from the established monitoring wells is a required submittal to the County on an annual basis or as described by the adopted plan and is a condition within most mining special use permits in Thurston County.

Creating language that prohibits mining operations within wellhead protection areas and areas of high groundwater further restricts the use of lands that may hold large deposits of sand and gravel resources in Thurston County. Precluding areas to surface mining prior to any intense groundwater study is not appropriate. Groundwater flow in Thurston County is complex and highly variable due to the nature of the geologic deposits. The draft language proposed within the Mineral Extraction Special Use ordinance is broad and does not offer any type of mitigation or alternatives to further examine the pre-delineated wellhead protection areas or furthermore offer any type of alternative investigation methods to evaluate a specific site.

Language that allows further investigation to the site specific groundwater characteristics and the opportunity to develop mitigation measures to eliminate any potential impacts on the groundwater is appropriate. Mining site characteristics are unique and so should be the mitigation measures/conditions developed though the SEPA review and Special Use Permit process. Precluding surface mining with a laundry list of critical area buffers and prohibitions not supported by science is just as effective as a moratorium.

Best regards,



James Essig

Resource Coordinator

Granite Construction Company, Puget Sound Region

1525 E. Marine View Dr.

Everett, WA 98201

(360) 410-8117

WellHead Protection Area Delineation Methods

There are five primary delineation methods selected for use in California, in order of increasing technical sophistication.

1. Arbitrary fixed radius
2. Calculated fixed radius
3. Analytical methods
4. Hydrogeologic mapping
5. Numerical flow/transport models

The methods range from simple, inexpensive methods to highly complex and costly ones. It is important to note that more than one method can be used to determine the wellhead protection area for a well. See the attached guidance for the appropriate method(s) to use in a particular case. Listed below is a description of each method.

Arbitrary Fixed Radius

This method involves drawing a circle of a specified radius around a well being protected. The radius of the WHPA may be an arbitrarily selected distance value. Although it may appear that protection areas delineated by this method are not based on scientific principles, the distance criteria's threshold may be based on very generalized hydrogeologic considerations and/or professional judgment. As proposed for the California wellhead protection program, this method is only acceptable for non-community systems that do not know the pumping rate of the well.

Calculated Fixed Radius

This method involves drawing a circle around a well for a specified time-of-travel criterion. A radius is calculated using an equation that is based on the volume of water that will be drawn to a well in the specified time. The input data required by the equation includes the pumping capacity of the well, the screened interval of the well, and the porosity of the aquifer. The time period to be used is described in the wellhead protection area delineation guidance. If the screened interval is unknown, a value of 10 feet can be assumed for an initial assessment. Similarly, if the porosity is unknown, a value of 0.22 can be used for the initial calculation. This method provides more accuracy than the arbitrary fixed radius method, but may still be inaccurate because it does not take into account the rate or direction of groundwater flow, and other factors that may influence contaminant transport.

Analytical Methods

These methods involve the use of equations to define groundwater flow and contaminant transport. The uniform flow equations (Todd, 1980) are often used to define the area of contribution to a pumping well in a sloping water table. These are the most widely used methods for accurately determining wellhead protection areas.

These methods require the input of various hydrogeologic parameters to calculate the distance to the downgradient divide, or stagnation point, and the width of the zone of contribution to the well. The upgradient extent of the wellhead protection area can then be calculated based on either a time-of-travel or flow boundaries criterion. Site specific hydrogeologic parameters are required as input data for each well at which the method is applied. These parameters can include the transmissivity, porosity, hydraulic gradient, hydraulic conductivity, and saturated thickness of the aquifer.

Hydrogeologic Mapping

In many hydrogeologic settings, flow boundary and time-of-travel criteria can be mapped by geological, geophysical, and dye tracing methods. The flow boundaries are defined by lithologic variation or permeability contrasts within the aquifer. Geological observations may provide surface indications of lithology changes, which will correlate with wellhead protection area boundaries. Hydrogeologic mapping may also include mapping of ground water levels in order to identify groundwater drainage divides.

This method for delineating wellhead protection areas may be particularly useful for shallow aquifers, and for karst or fractured rock aquifers.

Numeric Flow/Transport Models

WellHead protection areas can be delineated using computer models that approximate groundwater flow and/or solute transport equations numerically. A wide variety of numerical models are presently available both commercially and through various organizations.

Numeric flow/transport models are particularly useful for delineating wellhead protection areas where boundary and hydrogeologic conditions are complex. Input data may include such hydrogeologic parameters as permeability, porosity, specific yield, saturated thickness, recharge rates, aquifer geometries, and the locations of hydrologic boundaries. Solute transport parameters such as dispersivity may also be incorporated in these models.

Olivia Terwilleger - Thurston County Planning Commission/4-21-2010 Public Hearing on Text Changes For Chapter 20..54.070 TCC

From: Dave Lewis <davel@gravelpits.com>
To: "Olivia Terwilleger " <terwilo@co.thurston.wa.us>
Date: 4/21/2010 2:08 PM
Subject: Thurston County Planning Commission/4-21-2010 Public Hearing on Text Changes For Chapter 20..54.070 TCC
CC: Jerry Trudeau <jerryt@gravelpits.com>, Mike Schuh <mikes@gravelpits.com>, bchattin <bchattin@washingtonconcrete.org>, Dave Ward <david.ward@gknet.com>, Dean Smith <deans@lakesideind.com>, "James Essig " <james.essig@gcinc.com>, "mhancock@segaleproperties.com" <mhancock@segaleproperties.com>

Olivia,

Please present the following comments to the Planning Commission.

Thurston County Planning Commission,

The proposed changes to chapter 20.54.070 TCC are very difficult to comment on as there is not a full staff report or a published Findings of Fact. The following comments are on behalf of Miles Sand and Gravel and the Washington Aggregate and Concrete Association.

20.54.070.21. b and c; What Best Available Science was used to determine the setbacks and the features requiring the setbacks? If these setbacks are from other existing codes then these codes should just be referenced. If all the items listed, with their setbacks, are adopted then there would be very little land in Thurston County available for surface mines.

20.54.070.21.d; The proposed change is already covered in TCC. Listing repetitive requirements in several codes will lead to confusion when other codes are revised.

20.54.070.21.e; Why must just surface mines be required to submit a Weed Review? Weed control is already covered in TCC and applies to all property within Thurston County. By adding items to a code would appear to show a mistrust in other County Departments to enforce a code.

20.54.070.21.f; By adding "by a new Critical Area Ordinance anticipated" makes an uncertainty about what to expect in the future. This section should read "All applications should conform to the Critical Area Ordinance in effect at the time of a complete application."

20.54.070.21.fii; What is the justification for deleting recycling of asphalt? This appears to be emotion rather a justified reason.

Please provide a response to this email stating it was delivered to the Planning Commission's 4-21-2010 hearing

Thank you for the opportunity to comment.

Dave Lewis
Miles Sand and Gravel Co
1220 M St SE
Auburn WA 98002
PO Box 130
Auburn, WA 98071
253-833-3705 x437
253-370-6862 cell
davel@gravelpits.com



SEGALE PROPERTIES

A LIMITED LIABILITY COMPANY

COMMERCIAL • INDUSTRIAL • AGRICULTURAL • NATURAL RESOURCES

0-3

April 21, 2010

Thurston County Planning Commission
2000 Lakeridge Drive SW
Olympia, WA 98502

RE: Mineral Lands Public Hearing Comments

Dear Commissioners:

Thank you for this opportunity to comment on the proposed changes to the Mineral Extracton language in the Special Use chapter of the County Code (20.54.070 #21). As a member of the Thurston County Mineral Lands Task Force, we also bring over 40 years of experience in this industry (including over 30 years in Thurston County).

The changes to the code as proposed are unreasonable and not supported in a number of areas. These include:

- 1) In proposed paragraph 21.a, no extraction activities may be permitted in sites that have not been designated as mineral lands of long term commercial significance. This would appear to be in contradiction with WAC 365-190-040(6) which states "The purpose [of designation] is not to confine all natural resource production activity only to designated lands nor to require designation as the basis for a permit to engage in natural resource production." Designation is to set aside valuable land, not to limit use of land.
- 2) In proposed paragraph 21.b, critical area exclusions include buffers that are 2 to 4 times greater than current code requirements. These buffer distances are random in nature, as there is no science cited to defend them, no explanation of the impacts that they are supposed to protect from, and no consideration for the specifics of a proposed mineral extraction project which may not have those impacts. Extreme buffers without consideration of project and site specifics are not reasonable, particularly when the code does not allow for flexibility in those requirements during the permitting process where different distances may be justified. Furthermore, the mineral lands projects are already subject to the critical areas ordinance, and that is where these regulations should be – not in this section of the code. Administration is simpler, and as CAO's change over time what will happen here? The Mineral Lands Task Force did not support extreme random buffers that lacked specifics to define and defend them - that should carry some weight now. If these distances are still to be pursued, there will need to be a public process of review.
- 3) In proposed paragraph 21.b.vii, the wellhead protection requirements are not well defined, are extreme, and do not allow for the consideration of specific site conditions and

proposed operations during the permit process. By its nature, the supply of gravel normally lies in areas of "porous soils" with an "absence of till", and therefore is likely within a "10-year travel zone" and area of "sole potable water supply for residents in the area." Are these requirements intended to be only in Category 1 aquifer recharge areas? Does "gravel" fall under "minerals"? What are the impacts that call for these restrictions? The code allows mining operations on small parcels, which may only be a front-end loader taking material on an occasional basis and not digging into groundwater. Even though that operation has little or no impact, these requirements do not take that into consideration or allow any flexibility in the permit process to accommodate an operation based on factual site specific impacts. Random distances should be modified by actual site conditions.

4) In proposed paragraph 21.c, what are the "no net loss" standards that will apply here? How does this apply to an operation that by its nature involves digging into the land? Since it says "not limited to" the impacts cited, what will happen if a future development use is proposed for the land after mining that is allowed under the zoning for the property, in lieu of returning the land to its natural state?

5) In proposed paragraph 21.f, it says that the stricter standards in this language will supersede the current Critical Areas regulations. Where is the science to back up these extreme regulations, and what are the impacts from mining that warrant them? What if the mining operation does not have those impacts due to the size of the operation and/or the specific site conditions? There is no flexibility in this code to accommodate that, and the County's variance process is not designed to allow that flexibility (it is too restrictive to be applied here). The ability to make changes needs to be stated, with minimums set, and authority given to staff and/or the Hearing Examiner to set standards during the SUP process as appropriate based on actual site and project specifics.

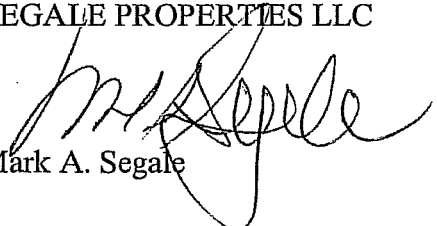
6) In proposed paragraph 21.n, designation is again a requirement for a special use application for mineral extraction, and is contrary to WAC 365-190-040(6) as noted above.

In summary, while we respect the need to protect the environment, we cannot agree with extreme "one size fits all" buffers and other restrictions, without also building in the flexibility to consider specific site conditions and the characteristics of the specific mining operation being proposed, thereby matching the real environment with real impacts, not imagined ones.

Thank you for your consideration of the above.

Very truly yours,

SEGALE PROPERTIES LLC


Mark A. Segale

When Is A Variance Needed?

Any property owner may apply for a variance from size, dimension, setback or design requirements of a zoning district. A variance can be approved in situations where unusual physical conditions of the property, such as size, shape or topography, make it impossible or unduly difficult to meet requirements of the zoning district. Variance requests in both the urban and rural County are subject to the provisions outlined in TCC 20.52.

The fact that property may be utilized more profitably is not an element of consideration in the review of a variance request.

How Do I Apply?

Submit a completed application package to the Permit Assistance Center with the applicable fee. Complete package requirements are outlined in the application.

Review Process and Timing

Variance applications are reviewed under the Type III procedure. The review time can be up to 148 days. The review time may take longer if a request for additional information is required. This process requires public notification and a public hearing. The approval authority is the Hearing Examiner for Thurston County. Workload may affect the review time.

To Grant A Variance The Hearing Examiner Must Find That:

1. The variance does not constitute a rezone; that is, it must not be for a use not permitted in the zoning district.
2. Special physical conditions exist on the property which makes literal application of zoning requirements impossible to meet, or would cause undue hardship.
3. The special conditions peculiar to the

property are not the result of actions of the applicant.

4. The variance does not confer a special privilege that is denied to other properties in the same district.
5. The granting of the variance will not be detrimental to the neighborhood or injurious to the public welfare and properties or improvements in the vicinity.
6. The variance is the minimum that will make possible the reasonable use of the land.
7. The variance is in harmony with the purpose and intent of the Zoning Ordinance.

Appeals

All decisions may be appealed. Variance decisions are considered final if not appealed to the Board of County Commissioners within 14 calendar days of the date of the decision. There is a fee for an appeal.

Expiration

If a building permit has not been issued, or if construction activity or operation has not commenced within three years from the date of final approval, the variance shall expire. The variance shall also expire when the use or activity for which the variance was granted is vacated for a period of three years.

I Still Have Questions....

The information in this bulletin is a general guideline of the procedures and rules. You should not rely on this bulletin to identify the specific requirements for your project. For additional information, speak with a staff member at the Permit Assistance Center. Contact information is listed below. You may also review all Thurston County Codes online on the County website referenced at the bottom of this page.

Thurston County Permit Assistance Center

2000 Lakeridge Drive SW, Bldg 1, Second Floor; Olympia, WA 98502
Phone: (360) 786-5490; TDD line: (360) 754-2933; Fax: (360) 754-2939
www.co.thurston.wa.us/permitting



Thurston County Development Services
 2000 Lakeridge Dr. SW Olympia, WA 98502
 (360)786-5490 / (360)754-2939 (Fax)
 TDD Line (360) 754-2933
 Email: permit@co.thurston.wa.us
www.co.thurston.wa.us/permitting

Supplemental Application VARIANCE

STAFF USE ONLY	DATE STAMP
<h1 style="font-size: 4em; margin: 0;">LABEL</h1> <p style="text-align: center; margin-top: 20px;">PLEASE NOTE: ALL APPLICATIONS AND SITE PLANS MUST BE COMPLETED IN BLACK OR BLUE INK <u>ONLY</u></p>	Intake by: _____

This application cannot be submitted alone. In addition to this form, a complete package includes:

Applicant Use	SUBMITTAL CHECKLIST	Staff Use Only
<input type="checkbox"/>	Master application	<input type="checkbox"/>
<input type="checkbox"/>	Applicable processing fees. <i>Refer to current fee schedules. Depending on the adopted fee structure, additional fees may occur if base hours/fees at intake are exhausted.</i>	<input type="checkbox"/>
<input type="checkbox"/>	One site plan on 8.5" x 11" or 11" x 17" sheet	<input type="checkbox"/>
<input type="checkbox"/>	Site plan requirement checklist	<input type="checkbox"/>
<input type="checkbox"/>	Any required special reports (may include wetland delineation, geotechnical report, mitigation plan, or other).	<input type="checkbox"/>

Provide a Detailed Description of the Project. The project description shall be legible and include what is existing and what is proposed on the subject parcel. Be specific as to the parcel size, the use and activities proposed to occur on-site, the type of critical area, and the specific allowance or reduction being requested.
(Attach separate sheet as needed)

The following questions must be answered completely. If additional space is needed, attach a separate sheet to the application. The attachment shall reference the question number.

1. List the specific provision(s) of the Zoning Ordinance from which you are seeking a variance.

2. What are exceptions or extraordinary circumstances which lead the applicant to believe a variance is justified?

3. What characteristics of your property prevent it from being used without a variance? (Also illustrate on the site plan). Check all that apply.

- Too Narrow Too Small Too Shallow Elevation Soil Slope
 Subsurface Shape Other Explain: _____

4. To the best of your knowledge, was the hardship described above caused by an action of anyone having property interests in the land after the Zoning Ordinance or applicable part thereof became law? YES NO

If yes, explain why the hardship should not be regarded as self-imposed (self-imposed hardships are not entitled to a variance):

5. If your variance request is granted, would it confer upon you a special privilege that is denied other lands in the same district? YES NO Explain Below:

6. How will the granting of the variance be in harmony with the neighborhood and not be detrimental to the public welfare or to the properties in the vicinity? Explain Below:

7. Is this the minimum variance that will make possible the reasonable use of the land? YES NO Explain Below:

8. How will the granting of the variance be in harmony with the purpose and intent of the Zoning Ordinance?

SUPPLEMENTAL AND SITE PLAN REQUIREMENT CHECKLIST

This application shall contain and/or address the following in a clear, accurate and intelligible form. Submit this checklist with your application. Check the box for each item addressed. Provide an explanation for any unchecked item.

Applicant Use		Staff Use Only
<input type="checkbox"/>	1. The project site must be identified in the field by posting an identification sign visible from the access road and by flagging the property corners and the center of the driveway/road access location. Signs and flags are provided by the Thurston County Development Services Department and can be obtained at the Permit Assistance Center.	<input type="checkbox"/>
<input type="checkbox"/>	2. Narrative summary of all uses and activities proposed onsite. For nonresidential developments, provide hours of operation and a statement which indicates whether hazardous materials, as defined in TCC 17.15.200 of the Critical Areas Ordinance, will be used, stored or disposed of on-site, or as a result of site activities.	<input type="checkbox"/>
<input type="checkbox"/>	3. One 8.5" x 11" or 11" x 17" site plan drawing using a standard interval of engineer scale, which shall include or show the following:	<input type="checkbox"/>
<input type="checkbox"/>	a. All information drawn to scale (standard engineer scale).	<input type="checkbox"/>
<input type="checkbox"/>	b. A north arrow, map scale, date and directions to the site.	<input type="checkbox"/>
<input type="checkbox"/>	c. Property line boundaries and dimensions for <u>all</u> property lines.	<input type="checkbox"/>
<input type="checkbox"/>	d. The location of all existing and proposed structures, including, but not limited to, mobile homes, houses, sheds, garages, barns, fences, culverts, bridges, and storage tanks.	<input type="checkbox"/>
<input type="checkbox"/>	e. Description of proposed grading including a written estimate of both cut and fill quantities in cubic yards and a separate map showing the location of cut and fill areas.	<input type="checkbox"/>
<input type="checkbox"/>	f. All means, existing and proposed vehicular and pedestrian ingress and egress to and from the site, such as driveways, streets and fire access roads, including existing road names and existing county and state right-of-way.	<input type="checkbox"/>
<input type="checkbox"/>	g. The location of all existing and proposed easements.	<input type="checkbox"/>
<input type="checkbox"/>	h. The location of all existing public and on-site utility structures and lines, such as on-site septic tanks, drainfield and reserve areas, water lines, wells and springs.	<input type="checkbox"/>
<input type="checkbox"/>	i. Vicinity sketch, at a scale of not less than three (3) inches to the mile, indicating the boundary lines and names of adjacent developments, streets and boundary lines of adjacent parcels, and the relationship of the proposed development to major roads and highways.	<input type="checkbox"/>
<input type="checkbox"/>	j. Location of critical areas or buffers affecting the site, both on-site and on adjacent properties, including but not limited to shorelines, wetlands, streams, flood zones, high groundwater, steep slopes and special habitats.	<input type="checkbox"/>
<input type="checkbox"/>	k. The number of square feet covered by each existing and proposed building, total square feet in graveled, paved or covered surfaces, whether covered by buildings, driveways, parking lots or any other structure, and the total number of square feet in the entire subject parcel or parcels.	<input type="checkbox"/>
<input type="checkbox"/>	l. All existing vegetation to remain and all proposed landscaping, including location and type.	<input type="checkbox"/>
<input type="checkbox"/>	m. Setback distance measurements from all property lines (or road access easements) to all existing and proposed buildings.	<input type="checkbox"/>
<input type="checkbox"/>	4. Special reports as required (may include wetland delineation, geotechnical report, mitigation plan, or other).	<input type="checkbox"/>