AGENDA

DEVELOPMENT and ENGINEERING ADVISORY BOARD

Thursday, January 7, 2016

2:30 – 4:30 p.m.
Public Service Center
6th Floor, Training Room

ITEM	TIME		FACILITATOR
	Start	Duration	
1. Administrative Actions • Introductions • DEAB meeting is being recorded and the audio will be posted on the DEAB's website • Review/Adopt minutes • Review upcoming events • DEAB member announcements	2:30	15 min	Gunther
2. Election of 2016 Officers	2:45	10 min	Gunther
3. Review 2015 Annual Report/Preview 2016-2017 Work Plan	2:55	30 min	Gunther
4. Corner Lots/Driveway Location and Sight distance	3:25	30 min	Safayi
5. Public Comment	3:55	30 min	All

Next DEAB Meeting:

Thursday, February 4, 2015
2:30 – 4:30 p.m.
Public Service Center
6th Floor, Training Room

Agenda:
Shoreline Exemption Process – Snell/Hardy/Tyler
Retaining Walls and Setbacks Update – Snell/Bazala

BOCC Work Sessions and Hearings

BOCC Work Session – every Wednesday at 9 a.m. *

BOCC Hearing – every Tuesday at 10 a.m. **

BOCC Work Session – 2016 Comprehensive Plan Update – Wednesday, January 13, 10:00 a.m.

BOCC Hearing – 2016 Comprehensive Plan Update – Tuesday, January 19, 10:00 a.m.

PC Work Sessions and Hearings

PC Work Session for January 7, 2016 has been cancelled.

No PC hearing is scheduled on Thursday, January 21, 2016.

Note: Work sessions are frequently rescheduled. Check with the BOCC's office to confirm date/time of scheduled meetings.

PC – Planning Commission
BOCC – Board of Clark County Commissioners

* Unless cancelled, which some are if there are no topics
** Except first Tuesday when the hearing is typically in the evening

Development and Engineering Advisory Board Meeting
December 3, 2015
2:30 p.m.-4:30 p.m.
Public Service Center

Board members in attendance: Steve Bacon, Don Hardy, Ott Gaither, Eric Golemo, Andrew Gunther, James Howsley, Mike Odren, Terry Wollam, and Jeff Wriston.

County staff: Gary Albrecht, Jan Bazala, Brent Davis, Greg Shafer, Marty Snell, Nicole Snider, and Kevin Tyler.

Public: none

Administrative Actions

- DEAB meeting is recorded and posted to the county's website.
- Review/Adopt Minutes: Minutes from December 2015 were adopted. Jeff Wriston abstained.
- Reviewed Upcoming Events:
    - County Manager Briefing – every Wednesday at 10 a.m. (Unless cancelled if there are no topics)
    - BOCC Hearing – every Tuesday at 10 a.m. (Except first Tuesday the hearing is typically at 6 p.m.)
    - BOCC Hearing – Continuance of Shoreline Master program – Limited Amendment - Tuesday, December 15, 2015; 10:00 a.m.
    - BOCC Hearing – Continuance of Fee Waiver Discussion – Tuesday, December 22, 10:00 a.m.
    - PC Hearing – Designation of a Rural Industrial Land Bank – Thursday, December 17, 6:30 p.m.
- Ott Gaither asked about the County Manger Briefing – What are the agenda items typically at the County Manager briefing? Who briefs whom? Greg Shafer responded that information could be found on the Grid. The County Manager briefs the County Council.
- Ott Gaither asked what is the Rural Industrial Land Bank – Jamie Howsley responded that is the Langler property on NE 117th Av. A large parcel of land outside of the Urban Growth boundary to be set aside for Industrial use.
- DEAB member announcements: Jeff Wriston brought up an issue that he was asked to look into regarding driveway spacing on corner lots. Ott Gaither agreed that we need to discuss this issue. Greg Schafer suggested adding it to January 7th agenda. Eric Golemo suggested adding in the corner sight distance triangle to the discussion as well.
- Greg recognized Ott Gaither, Eric Golemo, and Jeff Wriston for applying and being reappointed to DEAB. He thanked them for their continued service.
- Marty Snell announced that as of January 1st, Susan Ellinger will take over as Land Use Review manager. Chuck Crider will take over the Permit Center. Currently they are co-managing the Land Use Review group. He will also be hiring a finance manager. There will still be a planner of the

day in the Permit Center. Michel Uduk retired November 30th and we went through recruitment and hired two new Planners. He also has promoted Melissa Curtis from Permit Tech to Planner; Bryan Mattson was promoted to a project Planner, and Shanna Lazzarini has been promoted to Planning Tech.

- Ott Gaither recognized that the planner of the day function is working great; he got a call back from Jan Bazala.

Shoreline Exemption Application and Process

Don Hardy, Susan Ellinger, Kevin Tyler and Marty Snell met to talk about this process in Clark County, the outcome of that is that they recognized that there should be a simpler process. Snohomish County has a simplified application and process that we would like use.

There will be some additional review for a simplified process, code amendment not required since it is a process. The code provides that they be planned and carried out in a manner consistent with the program. Marty does have some leeway to adjust the process. He has reached out to Snohomish County regarding the staff review and decision, they provided some examples. He thinks we can move forward with a simple review, response, and staff report. Work will continue, should be able to review by February. There will be discussion with the Planner groups, Public Works, and other staff.

Mike Odren asked about the OHM, would a survey still be required? Discussion followed on Shoreline process, timelines, and costs. Currently the exemption is classified as a type 2 review, 13 page application form. Marty Snell stated that we need to make it a simpler process, similar to other jurisdictions.

Kevin Tyler said that he and Susan Ellinger are part of a shoreline work group and that Susan committed to getting a 2 page document out this month.

It was discussed and determined that Marty will give us an update at the February meeting.

Retaining Walls & Set-backs/Code Updates

Jan Bazala provided two draft handouts; there are not a lot of big changes. The one with the yellow highlighting is the same language we saw before with some very minor changes that are highlighted in yellow. He researched some other jurisdictions and found some items that might be of value; they are height limits for retaining walls against a right-of-way, is that something we would want to have?

Ott Gaither thanked Jan for this review. He asked that since most of the retaining walls he has seen are built by public agencies; how would those be affected? Jan Bazala also asked if we wanted to limit the use of the plain faced walls. Jeff Wriston said that the blocks are made with the excess concrete and probably could add some design to them at a minor cost. Discussion followed regarding aesthetics and

design standards. Ott Gaither asked why just the retaining walls, is this fair? Jan provided other examples that have design standards; cottage housing, mixed use, and Highway 99. Discussion followed regarding wall heights and should we be addressing it?

Jeff Wriston provided an example of a wall they are designing and some of the challenges they are dealing with, he drew a sketch on the white board to illustrate the issues. This is an issue with the land that is available, try to solve problems with grading rather than walls. The walls are very expensive to build, they try to balance the cost and the customer's wants. Discussion regarding exemptions and variances, it was suggested that the County rely on the existing variance process.

Terry Wollam asked for clarification as to what is allowed now. The response was that you can have a 4' wall on the property line, with a 4' sight-obscuring fence on top. Discussion followed.

Andrew Gunther asked if non-residential projects should be treated different than residential. More discussion followed.

Jan will work on a draft to be included in the bi-annual code amendments that will be presented to the Board in February or March. Then it will be brought back to DEAB for review.

Ott Gaither requested that Marty Snell help manage this particular process and help streamline some guidelines, he can influence that. Marty Snell responded having someone full time manage Land Use review will be very helpful; since he and Susan Ellinger work well together and she knows what Marty is after. He is after what is right sized for the County and for DEAB.

Review 2015 Annual Report/Preview 2016-2017 Work Plan

Andrew Gunther discussed the work plan and that at the January meeting Mark McCauley, Heath Henderson, Oliver Orjiako, and Marty Snell will all be here to hear about it. DEAB needs to talk about accomplishments and there is a good start for next year's work plan. There is a copy included in packet.

Mike Odren stated a lot of the stuff that is on the work plan has been in direct response to things we see that could be improved; procedures, code changes. DEAB continues to monitor and get updates on these things.

Discussion followed on potential items for the work plan; road modifications, grading permit review and process; timelines. SEPA process in regards to grading, suggestion made to ask the State to come back & do some training.

Eric Golemo commented on how much more complicated the single-family process has become in the last 2 years.

Archaeological review process – Marty Snell said Susan Ellinger will be working on this.

ADUs in the rural area, tied to the Comp Plan at this point. Ott Gaither asked for Marty Snell's opinion. Marty Snell responded that he feels there needs to be conservation about it. Suggestion made to address it when it comes.

Jamie Howsley suggested removing some items or paring it down. Mike Odren stated we could have another category either ongoing, monitoring, or receive updates on.

Jeff Wriston suggested meeting several times a year on the final plat process.

Mike Odren said if something is important enough to give input; we should continue to follow up and receive updates.

Decision made to develop two lists; action items and monitoring items.

Public Comment

There was no public comment.

Meeting adjourned at 4:27 p.m.
Meeting minutes prepared by: Nicole Snider
Reviewed by: Greg Shafer

2015 Annual Report & 2016/2017 Work Plan

The Board of Clark County Commissioners (now, Board of County Councilors, BOCC) formed the Development and Engineering Advisory Board (DEAB) in late 2006. DEAB works with the County Manager, Community Development, Public Works, and Environmental Services to review process improvements, proposed code changes, and development fee strategies.

Although initially formed to focus on development engineering issues, the BOCC broadened DEAB's responsibilities in 2010 to cover the county's entire development and building activities. DEAB's bylaws are attached to this report.

DEAB has nine members. Seven members are selected and appointed by the County Manager: three private sector planners or engineers, one construction contractor, one land developer, one public sector planner or engineer, and one Building Industry Association representative. Two at-large members are nominated by DEAB, with appointment by the County Manager. The 2015 roster included:

Chair	Andrew Gunther	PLS Engineering
Vice-Chair	Don Hardy	BergerABAM
	Mike Odren	Olson Engineering, Inc.
	Ott Gaither	Gaither Homes, LLC
	Eric Golemo	SGA Engineering, PLLC
	Terry Wollam	RE/MAX
	Jeff Wriston	Moss Wriston
	James Howsley	Jordan Ramis PC
	Steve Bacon	Clark Regional Wastewater District

2015 Accomplishments

The past year was a busy and challenging one for DEAB. The following is a summary of DEAB's accomplishments.

Code Revisions

1. DEAB received presentations and provided input, and supported revisions to the TIF program.
2. DEAB has been provided regular updates on the Comprehensive Plan updates. DEAB provided input and raised concerns related to population growth assumptions, calculations of the buildable land supply, and assumed infrastructure deduction percentage.
3. DEAB has been provided regular updates and has commented on and has participated in the Stormwater Ordinance updates.
4. Reviewed and provided input with regard to proposed revisions to the HOC and R-12 through R-43 housing regulations.
5. DEAB initiated discussions with staff regarding potential revisions to regulations for retaining walls at the perimeter of developments.
6. DEAB provided suggestions on policy and code changes/improvements.

Development Related Issues

1. Received an update and participated in discussion regarding updates to the Parks Master Plan.
2. Expressed continued concern over development review staff's ability to meet timelines and have sufficient staff and resources with the increase in development activity.
3. Reviewed proposed delays in the payment of residential impact fees. Discussed pending State legislation that would assist builders with deferring these payments to time that impact is created.
4. Provided comments, and data for substantiation, to Clark County Community Planning that the current infrastructure percent deduction for residential development in the Comprehensive Plan does not reflect the actual amount of land set aside for infrastructure (roads and stormwater facilities).
5. Received a staff presentation regarding WDFW/County non-riparian habitat mapping, regulations. Discussed with staff concerns about whether the mapping and/or process has recently changed and how the mapping affects developer rights and might affect long-time property owners' in terms of property values and development potential.
6. Looked into changes to the Shoreline Exemption submittal requirements for low-impact construction (i.e. utility repairs, etc.)

Process Improvements

1. Worked on committee with staff to improve the Final Plat process.
2. Provided input into and requested improvements to the Final Site Plan process.
3. Continued to encourage Community Development to update the 60-Day Type II Site Plan Review process to make it a permanent procedure.
4. Continued to encourage review of potential changes to the Plat Alteration process to identify ways the process could be simplified.
5. Supported an all electronic final engineering review process.

6. Received updates on how staff was addressing permit center wait times. Staff recommends setting up an appointment to avoid long wait times.

Technology

1. Supported updating technology to increase efficiency in Development Engineering. Received periodic updates on the status/progress in replacing the Tidemark software system.
2. Received a staff update on County website revisions and provided comments on potential adjustments.
3. General discussion of technology trends in the development and building construction industries.

Participation on Special Work Groups

In addition to the regular monthly meetings, DEAB members assisted on several special working groups:

- Stormwater Code Rewrite
- Final Plat Process
- Transportation Impact Fee Stakeholder

Economic Development

DEAB continues to be an active supporter for economic development in Clark County.

2016/2017 DEAB Work Plan Suggestions

DEAB looks forward to continuing to discuss the following proposed top priorities with County Councilors:

1. Economic Development. DEAB could continue to assist with the BOCC's commitment to economic growth.
2. Fee Reforms. Fees include fee holiday programs, impact fees, concurrency, and development and building permit fees. Are fee reforms and current practices successful in generating job growth?
3. Process Improvements. DEAB could continue to provide guidance in the following areas:
   a. Staffing levels and resource strategies as development activity increases.
   b. Customer service enhancement.
   c. Continued LEAN efficiency implementation for other development review processes.
   d. Early review of proposed policy and code changes, possibly in a work session format to provide an early dialogue with staff.
   e. Tidemark (permit software) replacement project and other technology.

DEAB is in agreement with the following 2016/2017 work plan:

DEAB 2016/2017 action items (no particular order):

1. SEPA thresholds and exemptions.
2. Engineering/stormwater reviews/requirements for Single Family Residences.
3. Impact fee deferrals.

4. Shoreline Exemptions – simplify process for the most basic projects.
5. Plat Alteration process – look at ways to simplify where allowed by State law.
6. Infrastructure percent deduction for residential development in the Comprehensive Plan.
7. Continuing encouragement to make the 60-day expedited review codified.
8. Review County policies and regulations with regard to driveway locations on corner lots.
9. Work with staff to improve County code with regard to retaining walls at perimeter of developments.
10. Encouraging the use of technology where applications can be made, such as inspections, meetings, etc.
11. Streamlining engineering reviews i.e. final engineering submitted with Type I PST's.
12. Grading Permit process improvements for early grading permits.
13. Accessory dwelling units in rural zones.
14. Reviewing the need for road modifications that are almost, if not always, approved.
15. Archaeological review process/timelines.
16. Review options for extending Site Plan and Plat approvals.

DEAB 2016/2017 monitoring items:

1. Final Site Plan process improvements (ongoing monitoring, major committee work accomplished in 2015).
2. Final Plat process improvements (some continuing committee work but primarily monitoring effectiveness/implementation of process improvements identified by committee work in 2015).
3. Comprehensive Plan update.
4. Fee Holiday program to establish a "cost per job."
5. Vacant Buildable Lands model.
6. Tidemark replacement.
7. Single Family Residential LEAN process.
8. Staffing levels in all departments and ability to maintain high level of service.
9. Stormwater Ordinance update. Monitor any issues with new ordinance and Manual.
10. Reducing Permit Center wait times.

DEAB looks forward to continuing their successful collaboration with Clark County.

Andrew Gunther, PE
2015 DEAB Chair

Attachments:

1. DEAB Bylaws

BYLAWS

SECTION 1: PURPOSE

The Board of Clark County Commissioners (now, Board of County Councilors, BOCC) established the Development and Engineering Advisory Board. The purpose of the advisory board is to serve as a standing advisory committee to Community Development, Environmental Services, Public Works, the County Manager, and the BOCC. The Development and Engineering Advisory Board will be a procedural step in reviewing new policy and code revisions, provide input on process improvements, and review specific development issues.

SECTION 2: DUTIES

The Development and Engineering Advisory Board has the following duties and responsibilities, as directed by the County Manager, including, but not limited to:

A) The advisory board shall review and evaluate on an ongoing basis consistency in development plan submittal review.

B) The advisory board shall assist to standardize and accelerate the development review processes performed by Community Development, Environmental Services, and Public Works.

C) The advisory board shall advise the County Manager on adequate staffing levels, staff expertise, resources, and customer service attitudes.

D) The advisory board shall facilitate collaborative partnering between the public and private sectors.

E) The advisory board shall review and comment as requested by the County Manager, the BOCC and/or senior staff on project specific development issues.

F) The advisory board shall coordinate its activities with other agencies and boards involved with development review and regulation to avoid duplication and provide the best service possible.

G) The advisory board shall not be responsible for the day-to-day operations of county development functions and shall refer those matters to appropriate staff members. The current phone number and mailing address are as follows:

Development and Engineering Advisory Board
c/o Clark County Public Works – Development Engineering
P.O. Box 9810
Vancouver, WA 98666-9810
(360) 397-6118

SECTION 3: MEMBERSHIP

The Development and Engineering Advisory Board consists of nine members. Members are appointed by the County Manager. Appointments shall attempt to include the following affiliations and categories, as provided below. Such representation shall be:

A) Three members who are a private-sector planner or consulting licensed professional engineer who work or live in Clark County;

B) One member who is a public sector planner or licensed professional engineer who works or lives in Clark County;

C) One member who is a construction contractor who works or lives in Clark County;

D) One member who is a land developer who works or lives in Clark County;

E) One member who is a representative of the Building Industry Association of Clark County.

F) Two at-large members professionally associated with development work.

In addition to these members, the Directors of Community Development, Environmental Services, and Public Works shall serve as ex-officio, non-voting members of the advisory board.

SECTION 4: TERMS OF THE OFFICE

All members shall be appointed or reappointed to three-year terms. More than one consecutive term may be served.

SECTION 5: APPOINTMENTS AND VACANCIES

For the two at-large positions, the advisory board shall recommend applicants to the County Manager for appointment. The advisory board shall make these recommendations based on the background of current members and the advisory board's priorities for upcoming years. The goal is to have membership on the advisory board represent a balance of development interests.

For all other positions, the County Manager shall appoint members after soliciting letters of interest for the advisory board.

When vacancies occur, the County Manager shall appoint someone to fill the unexpired term. This includes vacancies caused by a change in status of a member under the selection criteria set forth above during the course of their term.

Vacancies may be declared when any member misses three consecutive regular meetings or when any member misses the equivalent of one-quarter of the scheduled meetings within a 12-month period. Reasonable effort will be made to determine the member's continued interest before the vacancy is declared.

This section will in no way abrogate the authority of the County Manager to reappoint a member to finish their original term of appointment.

SECTION 6: OFFICERS

The advisory board shall elect annually one of its voting members to serve as chair and one member to serve as vice-chair; other officers shall be elected as the board deems appropriate.

Election of officers shall be held at the first regular Board meeting of the calendar year. All terms of elected office shall be one year. More than one consecutive term may be served.

SECTION 7: MEETINGS

The advisory board will hold regular meetings, open to the public, and will give advanced public notice of these meetings by notice on the Clark County web site and via e-mail when requested. Until otherwise determined by the advisory board, the regular board meetings will be held as follows:

Day:	First Thursday of each month
Time:	2:30-4:30 p.m.
Place:	Clark County Public Service Building 1300 Franklin Street Vancouver, WA 98666

A majority of the currently appointed board members shall constitute a quorum.

The advisory board shall keep written record of meetings, resolutions, recommendations, findings, etc., which shall be a public record. The county shall provide staff to take minutes.

In the absence of the chair and vice-chair (in the event a vice-chair has been elected), an acting chair shall be appointed by the board members present.

SECTION 8: AMENDMENTS TO BYLAWS

The provisions set forth herein (except those established by statute and county resolution) may be amended by a two-thirds vote of the advisory board members. Any amendments shall be voted on at a regular meeting and all members shall receive a minimum of 10 days prior notice.

SECTION 9: PARLIAMENTARY AUTHORITY

All meetings of the Board shall be conducted using Roberts Rules of Order Newly Revised as a nonbinding guide.

Road Intersection Sight Distance and Corner Lot Driveways

CCC 40.350.030(B)(4). Access Management.

a. Applicability. As noted in Section 40.350.030(A)(2), this subsection also applies to applications for building permits and applications for access to public roads.

b. Access to Local Access Roads.

(1) Driveway Spacing.

(a) Excepting the bulbs of cul-de-sacs, driveways providing access onto nonarterial streets serving single-family or duplex residential structures shall be located a minimum of five (5) feet from the property lines furthest from the intersection. Where two (2) driveways are permitted, a minimum separation of fifty (50) feet shall be required between the driveways, measured from near edge to near edge.

(b) Corner lot driveways shall be a minimum of fifty (50) feet from the intersecting property lines, as measured to the nearest edge of the driveway, or in the case where this is impractical, the driveway may be limited to twenty (20) feet in width and located five (5) feet from the property line away from the intersection or as a joint use driveway at this property line. Where a residential corner lot is located at the intersection of a nonarterial street with an arterial street, the corner clearance requirements of Section 40.350.030(B)(4)(c)(2)(f) shall apply to the nonarterial street.

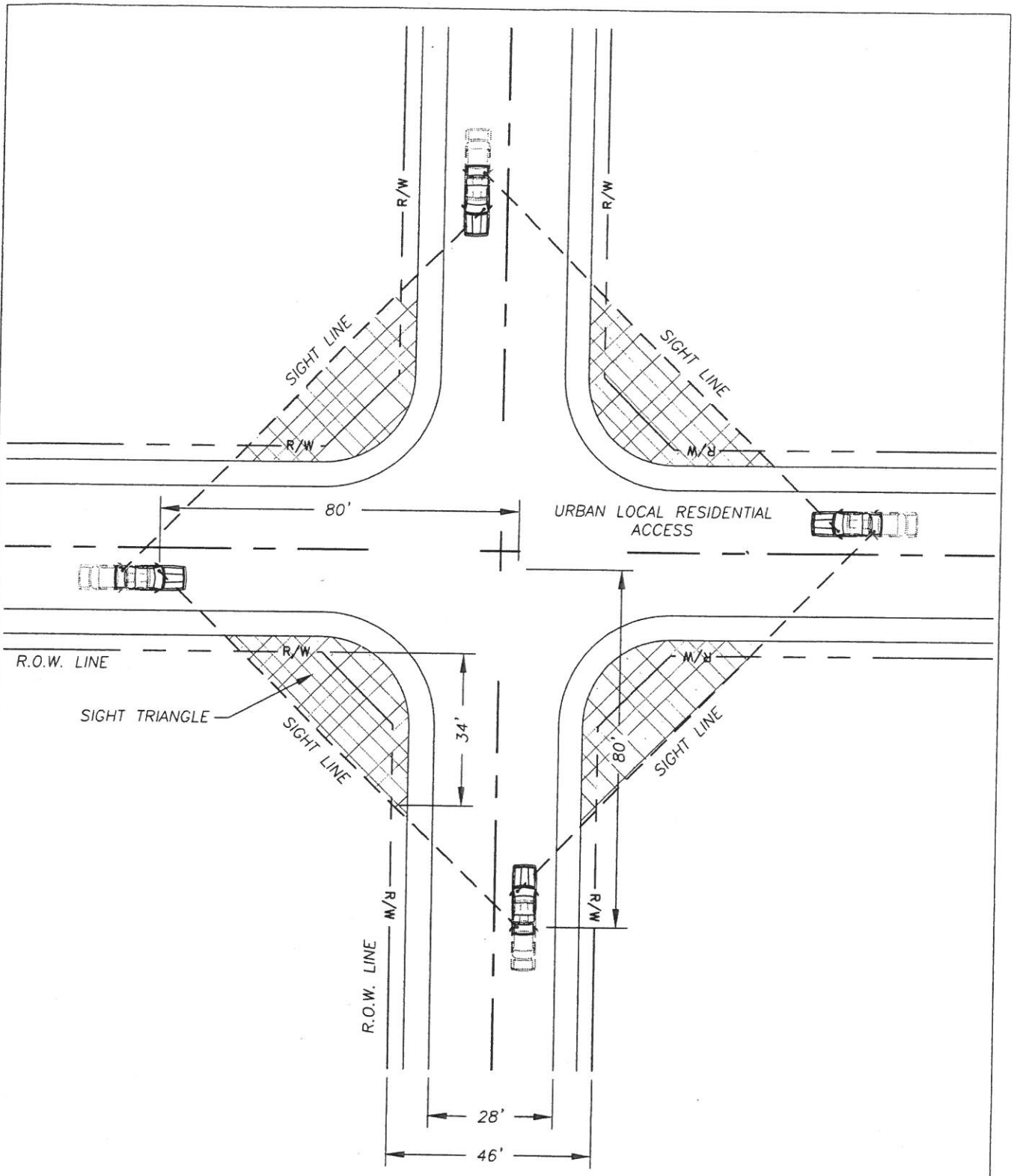
(c) Flag lots and joint driveways serving two (2) or three (3) lots are exempt from the requirements of this subsection.

(d) Nonresidential driveways are prohibited from taking access from an urban access road as defined in Table 40.350.030-2 unless no access exists or can be provided to a collector.

Sight Distance Triangle for Uncontrolled Intersections

CCC 40.350.030(B)(8)(c). Uncontrolled Intersections.

Uncontrolled intersections for access roads in urban and rural areas with a posted speed limit of twenty-five (25) mph or less shall have an unobstructed intersection sight distance triangle per Section 40.350.030(B)(8)(b) of one hundred (100) feet on both approaches. This requirement may be reduced to eighty (80) feet for intersections abutting corner lots in an urban residential subdivision. The intersection sight distance shall be measured along the lines four (4) feet from the roadway center, in drivers' direction, for both approaches.



NO.	REVISIONS	DATE	BY

Department of Public Works
CLARK COUNTY
WASHINGTON
proud past, promising future

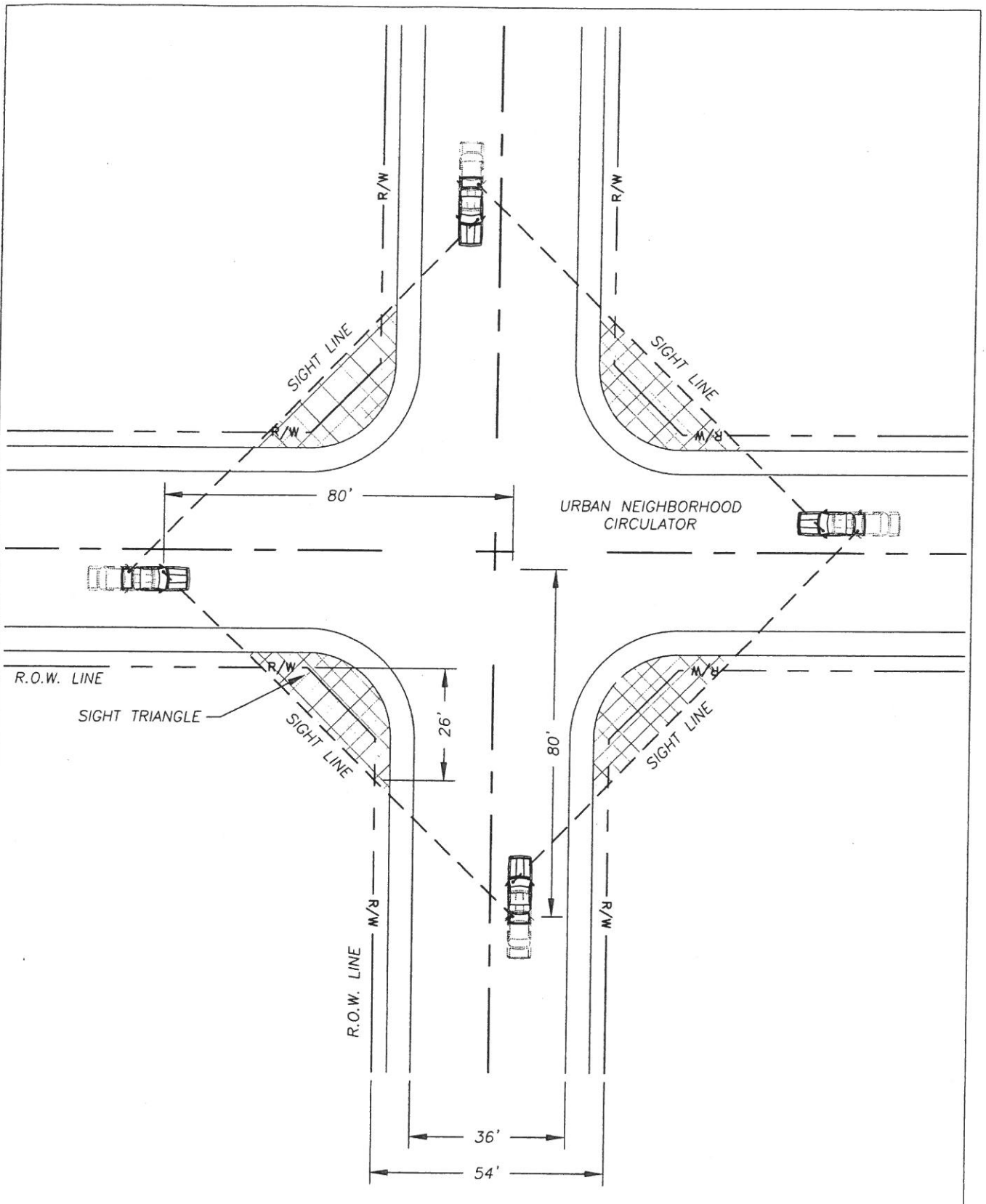
SIGHT DISTANCE/URBAN LOCAL ACCESS

STANDARD
XXX
DETAIL

APPROVED

COUNTY ENGINEER _____ DATE _____

DESIGNED
DRAWN
DATE 05/23/08



NO.	REVISIONS	DATE	BY

Department of Public Works
CLARK COUNTY
WASHINGTON
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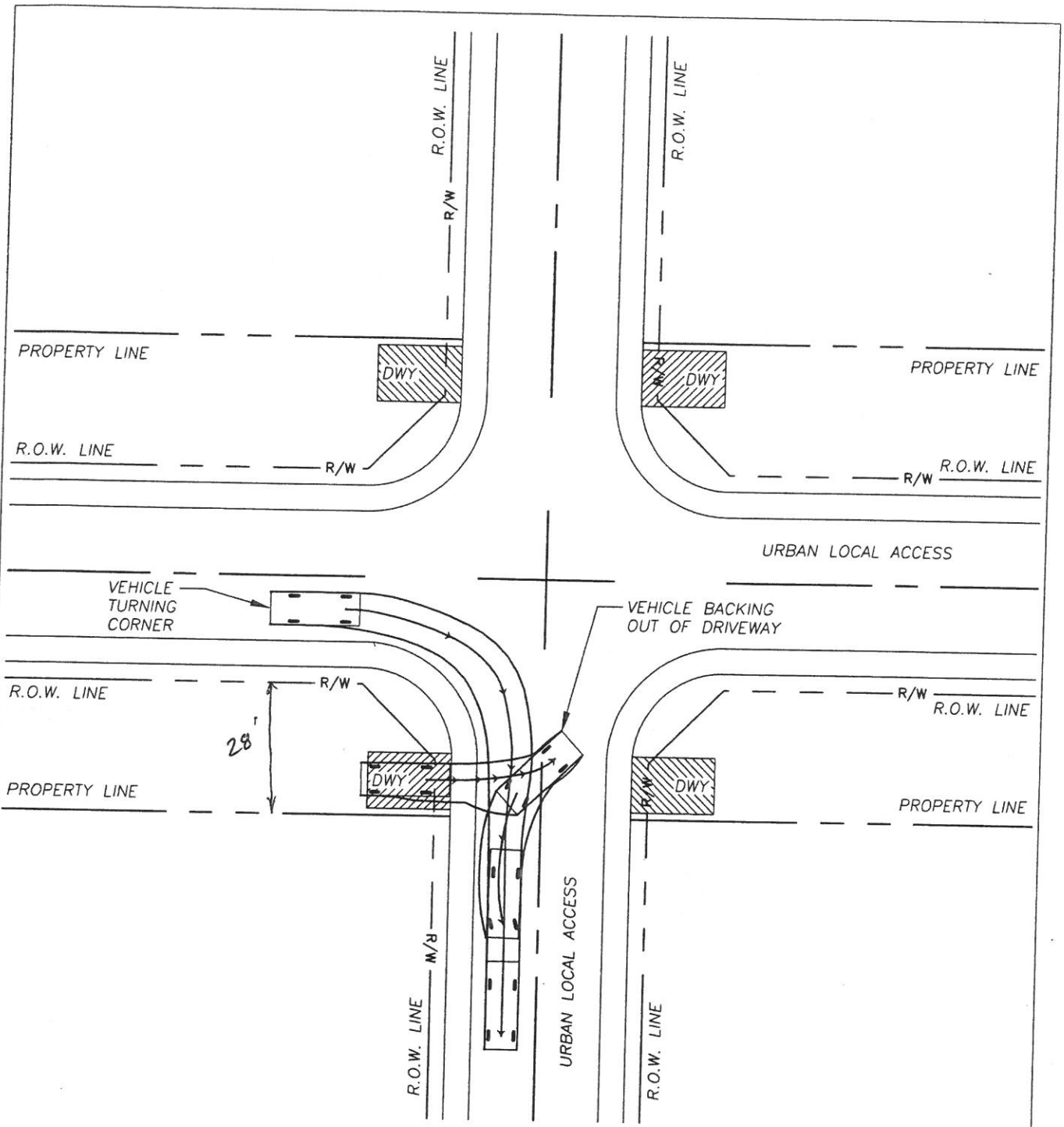
SIGHT DISTANCE/URBAN NEIGHBORHOOD

APPROVED

COUNTY ENGINEER _____ DATE _____

STANDARD
XXX
DETAIL
DESIGNED
DRAWN
DATE 05/23/08



NO.	REVISIONS	DATE	BY

Department of Public Works
CLARK COUNTY
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DRIVEWAY SPACING/URBAN LOCAL ACCESS

APPROVED

COUNTY ENGINEER _____ DATE _____

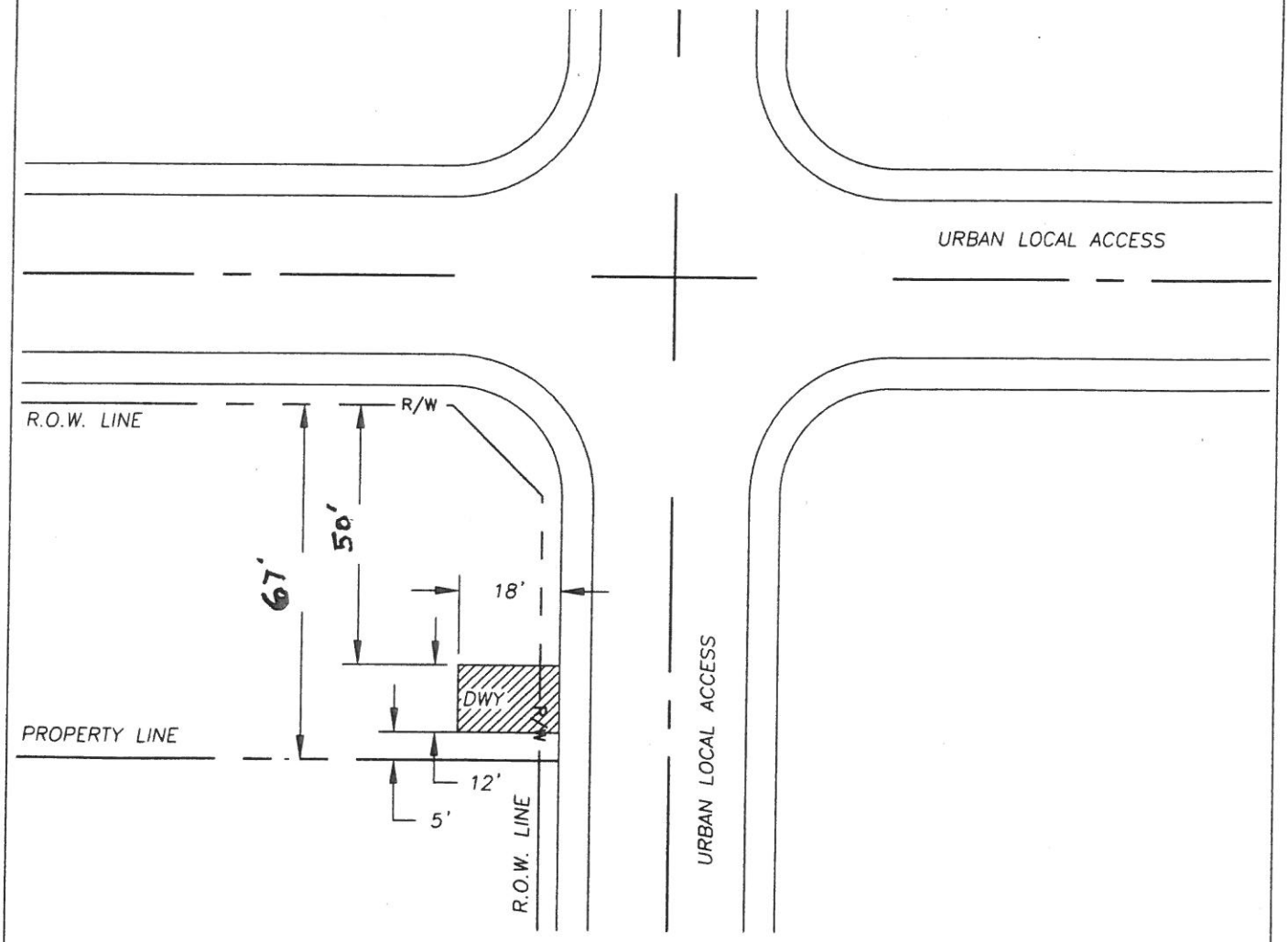
STANDARD XXX DETAIL

DESIGNED

DRAWN

DATE 05/23/08

(b) Corner lot driveways shall be a minimum of fifty (50) feet from the intersecting property lines, as measured to the nearest edge of the driveway, or in the case where this is impractical, the driveway may be limited to twenty (20) feet in width and located five (5) feet from the property line away from the intersection or as a joint use driveway at this property line. Where a residential corner lot is located at the intersection of a nonarterial street with an arterial street, the corner clearance requirements of Section 40.350.030(B)(4)(c)(2)(f) shall apply to the nonarterial street.



NO.	REVISIONS	DATE	BY

Department of Public Works
CLARK COUNTY
WASHINGTON
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DRIVEWAY SPACING/URBAN LOCAL ACCESS

APPROVED

COUNTY ENGINEER _____ DATE _____

STANDARD XXX DETAIL

DESIGNED

DRAWN

DATE 05/23/08

On January 8, 2016, Clark County's new Municipal Stormwater Permit (New Permit) takes effect. The purpose of this memo is to provide guidance on whether and when the New Permit's stormwater requirements will apply to a development project, or whether other stormwater standards will govern permit approval. Clark County will review and authorize development and construction as follows:

Land Divisions and Site Plans

1. Final engineering approval before December 28, 2011– Applications for land divisions or site plans that received final engineering approval prior to December 28, 2011 are subject to the stormwater standards pursuant to which they were approved.

2. Fully complete applications before January 8, 2016 and final engineering approval on or after December 28, 2011 -- Applications for land divisions or site plans that were fully complete before January 8, 2016, and that received final engineering approval on or after December 28, 2011, must comply with the standards of the 2007 Municipal Stormwater Permit (2007 Permit), except as provided in paragraph #5. Those standards are set forth in Chapter 40.385 Clark County Code (CCC), as amended June 16, 2013, Chapter 13.26A CCC, and the Clark County Stormwater Manual.

3. Complete application filed before January 8, 2016 – Fully complete applications for land divisions and site plans filed before January 8, 2016 must comply with the standards of the 2007 Permit, except as provided in paragraphs #1 and #5.

4. Complete application filed on or after January 8, 2016 – Fully complete applications for land divisions or site plans filed on or after January 8, 2016 must comply with the standards of the New Permit, which are stated in Chapters 40.386 and 13.26A CCC, and the Clark County Stormwater Manual. A later permit may require that the application comply with standards set forth in that later permit.

5. Project does not start construction* before January 8, 2021 – Fully complete applications for land divisions or site plans filed before January 8, 2016 must comply with the standards of the New Permit, or with standards set forth in a later permit, if the project has not started construction* before January 8, 2021.

*** "Started construction"** is defined by the New Permit to mean that the site work associated with and directly related to the approved project has begun. For example, grading the site to final grade or utility installation is starting construction, but clearing the project site is not.

** **Contingent vesting** does not apply to stormwater regulations. The above rules explain which stormwater standards govern land divisions and site plans, regardless of land use vesting.

Building Permits

1. Stormwater facility approved prior to December 28, 2011 – A development that drains to a stormwater facility which includes BMPs designed to control runoff from that development and that received final engineering approval prior to December 28, 2011, must comply with the decision by which the stormwater facility was approved, as long as construction has started* on the building site before January 8, 2021.

2. Stormwater facility approved on or after December 28, 2011 and before January 8, 2016 – A development that drains to a stormwater facility which includes BMPs designed to control runoff from that development and that received final engineering approval on or after December 28, 2011 and before January 8, 2016, must comply with the standards of the 2007 Permit, as long as construction has started* on the building site before January 8, 2021.

3. Complete application filed before January 8, 2016, without stormwater BMPs approved before January 8, 2016 – A complete building application filed before January 8, 2016, for a development that does not drain to a stormwater facility which includes BMPs designed to control runoff from that development and that received final engineering approval before January 8, 2016, must comply with the standards of the New Permit, which are stated in Chapters 40.386 and 13.26A CCC, and the Clark County Stormwater Manual. A later permit may require that the application comply with standards set forth in that later permit.

4. Complete application filed on or after January 8, 2016, without stormwater BMP's approved before January 8, 2016 – A complete building application filed on or after January 8, 2016, for a development that does not drain to a stormwater facility which includes BMPs designed to control runoff from that development and that received final engineering approval before January 8, 2016, must comply with the standards of the New Permit. A later permit may require that the application comply with standards set forth in that later permit.

5. Project does not start construction* before January 8, 2021 – A complete building application filed before January 8, 2016 must comply with stormwater standards of the New Permit, or with standards set forth in a later permit, if the project has not started construction* before January 8, 2021.

Permits for Other Activities

Applications for permits associated with site plans, land divisions, and building projects, as well as for stand-alone activities, will be reviewed following routine procedures. These might include, but are not limited to, permits for grading and critical areas, shorelines, and construction inspection. Staff will review the applications to determine whether they must comply with stormwater requirements and which requirements are applicable.

*** "Started construction"** is defined by the New Permit to mean the site work associated with and directly related to the approved project has begun. For example, grading the site to final grade or utility installation is starting construction, but clearing the project site is not.

** **Contingent vesting** does not apply to stormwater regulations. The above rules explain which stormwater standards govern building permits and other activities, regardless of land use vesting.

For Further Information, Please Contact:

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Rod Swanson, Clean Water Division, Clark County Environmental Services, (360) 397-2121, ext. 4581, rod.swanson@clark.wa.gov, or

Susan Ellinger, Land Use Review, Clark County Community Development, (360) 397-2375, ext. 5122, susan.ellinger@clark.wa.gov.

Stopping sight distance is provided continuously along each highway or street so that drivers have a view of the roadway ahead that is sufficient to allow drivers to stop. The provision of stopping sight distance at all locations along each highway or street, including intersection approaches, is fundamental to intersection operation.

Vehicles are assigned the right-of-way at intersections by traffic-control devices or, where no traffic-control devices are present, by the rules of the road. A basic rule of the road, at an intersection where no traffic-control devices are present, requires the vehicle on the left to yield to the vehicle on the right if they arrive at approximately the same time. Sight distance is provided at intersections to allow drivers to perceive the presence of potentially conflicting vehicles. This should occur in sufficient time for a motorist to stop or adjust their speed, as appropriate, to avoid colliding in the intersection. The methods for determining the sight distances needed by drivers approaching intersections are based on the same principles as stopping sight distance, but incorporate modified assumptions based on observed driver behavior at intersections.

The driver of a vehicle approaching an intersection should have an unobstructed view of the entire intersection, including any traffic-control devices, and sufficient lengths along the intersecting highway to permit the driver to anticipate and avoid potential collisions. The sight distance needed under various assumptions of physical conditions and driver behavior is directly related to vehicle speeds and to the resultant distances traversed during perception-reaction time and braking.

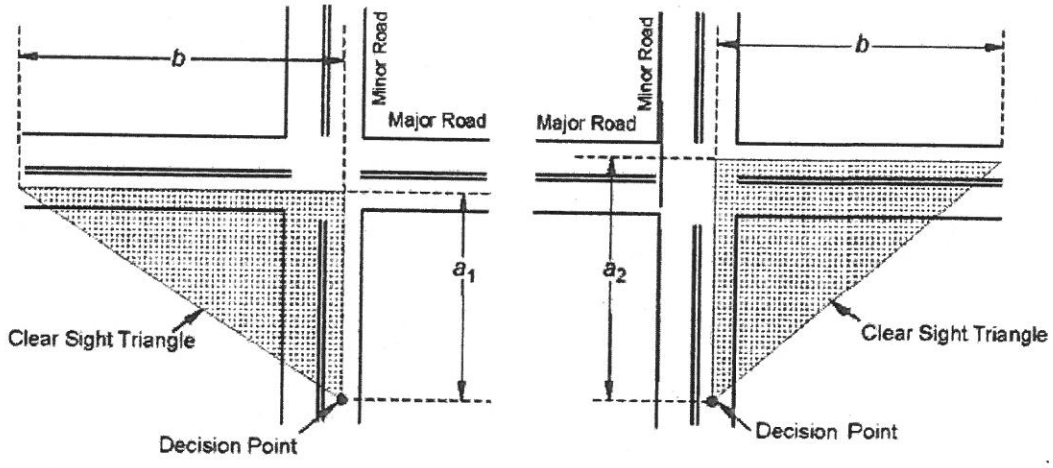
Sight distance is also provided at intersections to allow the drivers of stopped vehicles a sufficient view of the intersecting highway to decide when to enter the intersecting highway or to cross it. If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. However, in some cases, a major-road vehicle may need to stop or slow to accommodate the maneuver by a minor-road vehicle. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road.

9.5.2 Sight Triangles

Specified areas along intersection approach legs and across their included corners should be clear of obstructions that might block a driver's view of potentially conflicting vehicles. These specified areas are known as clear sight triangles. The dimensions of the legs of the sight triangles depend on the design speeds of the intersecting roadways and the type of traffic control used at the intersection. These dimensions are based on observed driver behavior and are documented by space-time profiles and speed choices of drivers on intersection approaches (*12*). Two types of clear sight triangles are considered in intersection design—approach sight triangles and departure sight triangles.

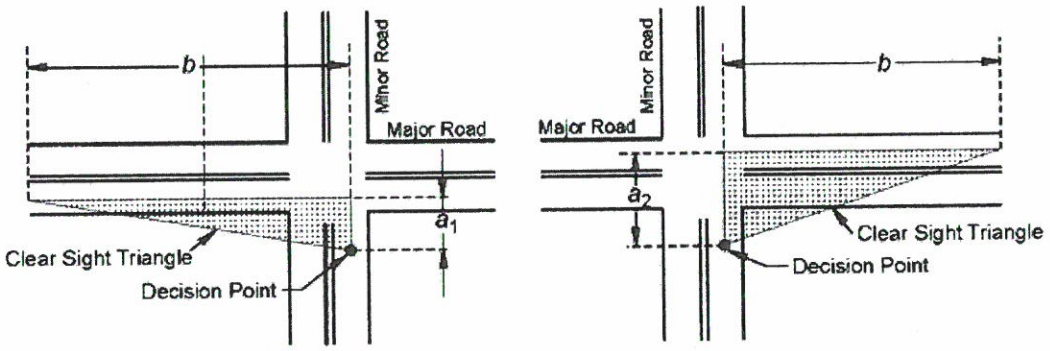
Approach Sight Triangles

Each quadrant of an intersection should contain a triangular area free of obstructions that might block an approaching driver's view of potentially conflicting vehicles. The length of the legs of this triangular area, along both intersecting roadways, should be such that the drivers can see any potentially conflicting vehicles in sufficient time to slow or stop before colliding within the intersection. Figure 9-15A shows typical clear sight triangles to the left and to the right for a vehicle approaching an uncontrolled or yield-controlled intersection.



Approach Sight Triangles (Uncontrolled or Yield-Controlled)

– A –



Departure Sight Triangle for Viewing Traffic Approaching the Minor Road from the Left

Departure Sight Triangle for Viewing Traffic Approaching the Minor Road from the Right

Departure Sight Triangles (Stop-Controlled)

– B –

Figure 9-15 Intersection Sight Triangles

The vertex of the sight triangle on a minor-road approach (or an uncontrolled approach) represents the decision point for the minor-road driver (see Figure 9-15A). This decision point is the location at which the minor-road driver should begin to brake to a stop if another vehicle is present on an intersecting approach. The distance from the major road, along the minor road, is illustrated by the distance a_1 to the left and a_2 to the right as shown in Figure 9-15A. Distance a_2 is equal to distance a_1 plus the width of the lane(s) departing from the intersection on the major road to the right. Distance a_2 should also include the width of any median present on the major road unless the median is wide enough to permit a vehicle to stop before entering or crossing the roadway beyond the median.

The geometry of a clear sight triangle is such that when the driver of a vehicle without the right-of-way sees a vehicle that has the right of way on an intersecting approach, the driver of that potentially conflicting vehicle can also see the first vehicle. Distance b illustrates the length of this leg of the sight triangle. Thus, the provision of a clear sight triangle for vehicles without the right-of-way also permits the drivers of vehicles with the right-of-way to slow, stop, or avoid other vehicles, if needed.

Although desirable at higher volume intersections, approach sight triangles like those shown in Figure 9-15A are not needed for intersection approaches controlled by stop signs or traffic signals. In that case, the need for approaching vehicles to stop at the intersection is determined by the traffic control devices and not by the presence or absence of vehicles on the intersecting approaches.

Departure Sight Triangles

A second type of clear sight triangle provides sight distance sufficient for a stopped driver on a minor-road approach to depart from the intersection and enter or cross the major road. Figure 9-15B shows typical departure sight triangles to the left and to the right of the location of a stopped vehicle on the minor road. Departure sight triangles should be provided in each quadrant of each intersection approach controlled by stop or yield signs. Departure sight triangles should also be provided for some signalized intersection approaches (see Case D in Section 9.5.3 on "Intersection Control"). Distance a_2 in Figure 9-15B is equal to distance a_1 plus the width of the lane(s) departing from the intersection on the major road to the right. Distance a_2 should also include the width of any median present on the major road unless the median is wide enough to permit a vehicle to stop before entering or crossing the roadway beyond the median. The appropriate measurement of distances a_1 and a_2 for departure sight triangles depends on the placement of any marked stop line that may be present and, thus, may vary with site-specific conditions.

The recommended dimensions of the clear sight triangle for desirable traffic operations where stopped vehicles enter or cross a major road are based on assumptions derived from field observations of driver gap-acceptance behavior (*12*). The provision of clear sight triangles like those shown in Figure 9-15B also allows the drivers of vehicles on the major road to see any vehicles stopped on the minor-road approach and to be prepared to slow or stop, if needed.

Identification of Sight Obstructions within Sight Triangles

The profiles of the intersecting roadways should be designed to provide the recommended sight distances for drivers on the intersection approaches. Within a sight triangle, any object at a height above the elevation of the adjacent roadways that would obstruct the driver's view should be removed or lowered, if practical. Such objects may include buildings, parked vehicles, highway structures, roadside hardware, hedges, trees, bushes, unmowed grass, tall crops, walls, fences, and the terrain itself.

Particular attention should be given to the evaluation of clear sight triangles at interchange ramp/crossroad intersections where features such as bridge railings, piers, and abutments are potential sight obstructions.

The determination of whether an object constitutes a sight obstruction should consider both the horizontal and vertical alignment of both intersecting roadways, as well as the height and position of the object. In making this determination, it should be assumed that the driver's eye is 1.08 m [3.50 ft] above the roadway surface and that the object to be seen is 1.08 m [3.50 ft] above the surface of the intersecting road.

This object height is based on a vehicle height of 1.33 m [4.35 ft], which represents the 15th percentile of vehicle heights in the current passenger car population less an allowance of 250 mm [10 in.]. This allowance represents a near-maximum value for the portion of a passenger car height that needs to be visible for another driver to recognize it as the object. The use of an object height equal to the driver eye height makes intersection sight distances reciprocal (i.e., if one driver can see another vehicle, then the driver of that vehicle can also see the first vehicle).

Where the sight-distance value used in design is based on a single-unit or combination truck as the design vehicle, it is also appropriate to use the eye height of a truck driver in checking sight obstructions. The recommended value of a truck driver's eye height is 2.33 m [7.6 ft] above the roadway surface.

9.5.3 Intersection Control

The recommended dimensions of the sight triangles vary with the type of traffic control used at an intersection because different types of control impose different legal constraints on drivers and, therefore, result in different driver behavior. Procedures to determine sight distances at intersections are presented below according to different types of traffic control, as follows:

- Case A—Intersections with no control
- Case B—Intersections with stop control on the minor road
  - Case B1—Left turn from the minor road
  - Case B2—Right turn from the minor road
  - Case B3—Crossing maneuver from the minor road
- Case C—Intersections with yield control on the minor road

  Case C1—Crossing maneuver from the minor road

  Case C2—Left or right turn from the minor road
- Case D—Intersections with traffic signal control
- Case E—Intersections with all-way stop control
- Case F—Left turns from the major road

Case A—Intersections with No Control

For intersections not controlled by yield signs, stop signs, or traffic signals, the driver of a vehicle approaching an intersection should be able to see potentially conflicting vehicles in sufficient time to stop before reaching the intersection. The location of the decision point (driver's eye) of the sight triangles on each approach is determined from a model that is analogous to the stopping sight distance model, with slightly different assumptions.

While some perceptual tasks at intersections may need substantially less time, the detection and recognition of a vehicle that is a substantial distance away on an intersecting approach, and is near the limits of the driver's peripheral vision, may take up to 2.5 s. The distance to brake to a stop can be determined from the same braking coefficients used to determine stopping sight distance in Table 3-1.

Field observations indicate that vehicles approaching uncontrolled intersections typically slow to approximately 50 percent of their midblock running speed. This occurs even when no potentially conflicting vehicles are present (*12*). This initial slowing typically occurs at deceleration rates up to 1.5 m/s^2 [5 ft/s^2]. Deceleration at this gradual rate has been observed to begin even before a potentially conflicting vehicle comes into view. Braking at greater deceleration rates, which can approach those assumed in stopping sight distance, can begin up to 2.5 s after a vehicle on the intersecting approach comes into view. Thus, approaching vehicles may be traveling at less than their midblock running speed during all or part of the perception-reaction time and can, therefore, where needed, brake to a stop from a speed less than the midblock running speed.

Table 9-3 shows the distance traveled by an approaching vehicle during perception-reaction and braking time as a function of the design speed of the roadway on which the intersection approach is located. These distances should be used as the legs of the sight triangles shown in Figure 9-15A as dimensions a_1 and b. Distance a_2 is longer than distance a_1, as defined in discussion of "Approach Sight Triangles" in Section 9.5.2. Referring to Figure 9-15A, highway A with an assumed design speed of 80 km/h [50 mph] and highway B with an assumed design speed of 50 km/h [30 mph] need a clear sight triangle with legs extending at least 75 m and 45 m [245 and 140 ft] along highways A and B, respectively. Figure 9-16 shows the length of the legs of the sight triangle from Table 9-3.

Table 9-3 Length of Sight Triangle Leg—Case A, No Traffic Control

Metric		U.S. Customary	
Design Speed (km/h)	**Length of Leg (m)**	**Design Speed (mph)**	**Length of Leg (ft)**
20	20	15	70
30	25	20	90
40	35	25	115
50	45	30	140
60	55	35	165
70	65	40	195
80	75	45	220
90	90	50	245
100	105	55	285
110	120	60	325
120	135	65	365
130	150	70	405
—	—	75	445
—	—	80	485

Note: For approach grades greater than 3%, multiply the sight distance values in this table by the appropriate adjustment factor from Table 9-4.

This clear triangular area will permit the vehicles on either road to stop, if needed, before reaching the intersection. If the design speed of any approach is not known, it can be estimated by using the 85th percentile of the midblock running speeds for that approach.

Section 2B.06 STOP Sign Applications

Guidance:

01 *At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs (see Sections 2B.08 and 2B.09).*

02 *The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:*

- *A. The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;*
- *B. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or*
- *C. Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.*

Support:

03 The use of STOP signs at grade crossings is described in Sections 8B.04 and 8B.05.

Section 2B.07 Multi-Way Stop Applications

Support:

01 Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.

02 The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications.

Guidance:

03 *The decision to install multi-way stop control should be based on an engineering study.*

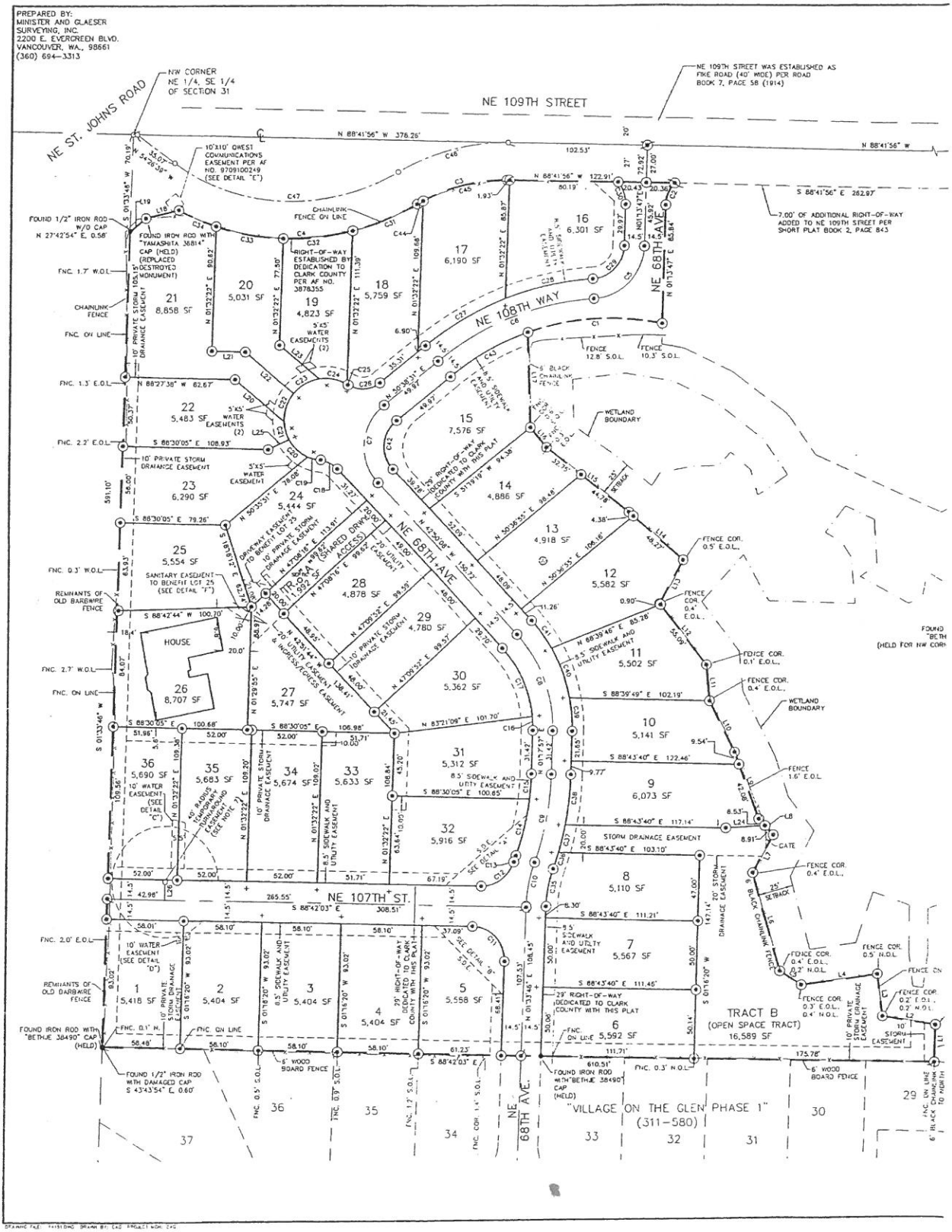
04 *The following criteria should be considered in the engineering study for a multi-way STOP sign installation:*

- *A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*
- *B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*
- *C. Minimum volumes:*
  1. *The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*
  2. *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but*
  3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*
- *D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*

Option:

05 Other criteria that may be considered in an engineering study include:

- A. The need to control left-turn conflicts;
- B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
- D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.


PREPARED BY:
MINISTER AND GLAESER
SURVEYING, INC.
2200 E. EVERGREEN BLVD.
VANCOUVER, WA., 98661
(360) 694-3313
NW CORNER
NE 1/4, SE 1/4
OF SECTION 31
NE ST. JOHNS ROAD
NE 109TH STREET
NE 109TH STREET WAS ESTABLISHED AS
PIKE ROAD (40' WIDE) PER ROAD
BOOK 7, PAGE 58 (1914)
N 88°41'56" W 378.26'
10'X10' QWEST
COMMUNICATIONS
EASEMENT PER AF
NO. 9709100249
(SEE DETAIL "E")
FOUND 1/2" IRON ROD
W/O CAP
N 27°42'54" E, 0.58'
FOUND IRON ROD WITH
"YAMASHITA 36814"
CAP (HELD)
(REPLACED
DESTROYED
MONUMENT)
CHAINLINK
FENCE ON LINE
RIGHT-OF-WAY
ESTABLISHED BY
DEDICATION TO
CLARK COUNTY
PER AF NO.
3878355
7.00' OF ADDITIONAL RIGHT-OF-WAY
ADDED TO NE 109TH STREET PER
SHORT PLAT BOOK 2, PAGE 843
NE 68TH AVE
NE 108TH WAY
FENCE 1.7' W.O.L.
CHAINLINK
FENCE
FNC. ON LINE
FNC. 1.3' E.O.L.
FNC. 2.2' E.O.L.
FNC. 0.3' W.O.L.
REMNANTS OF
OLD BARBWIRE
FENCE
FNC. 2.7' W.O.L.
FNC. ON LINE
FNC. 2.0' E.O.L.
REMNANTS OF
OLD BARBWIRE
FENCE
FOUND IRON ROD WITH
"BETHJE 38490" CAP
(HELD)
FNC. 0.1' N.
FNC. ON LINE
FOUND 1/2" IRON ROD WITH
DAMAGED CAP
S 43°43'54" E, 0.60'
10' PRIVATE STORM
DRAINAGE EASEMENT
5'X5' WATER
EASEMENTS
(2)
SANITARY EASEMENT
TO BENEFIT LOT 25
(SEE DETAIL "F")
HOUSE
DRIVEWAY EASEMENT
TO BENEFIT LOT 25
10' PRIVATE STORM
DRAINAGE EASEMENT
TRACT A
1,952 SF
(SHARED DRIVE
ACCESS)
20' UTILITY
EASEMENT
20' UTILITY
& INGRESS/EGRESS
EASEMENT
10' PRIVATE STORM
DRAINAGE EASEMENT
10' WATER
EASEMENT
(SEE
DETAIL
"C")
10' RADIUS
TURNAROUND
EASEMENT
(SEE NOTE 7)
10' PRIVATE STORM
DRAINAGE EASEMENT
8.5' SIDEWALK AND
UTILITY EASEMENT
8.5' SIDEWALK AND
UTILITY EASEMENT
29' RIGHT-OF-WAY
DEDICATED TO CLARK
COUNTY WITH THIS PLAT
10' PRIVATE STORM
DRAINAGE EASEMENT
5'X5' WATER
EASEMENTS
(2)
10' PRIVATE STORM
DRAINAGE EASEMENT
5'X5' WATER
EASEMENT
10' PRIVATE STORM
DRAINAGE EASEMENT
8.5' SIDEWALK AND
UTILITY EASEMENT
8.5' SIDEWALK AND
UTILITY EASEMENT
29' RIGHT-OF-WAY
DEDICATED TO CLARK
COUNTY WITH THIS PLAT
6' BLACK CHAINLINK FENCE
WETLAND
BOUNDARY
WETLAND
BOUNDARY
FENCE 12.8' S.O.L.
FENCE 10.3' S.O.L.
FENCE COR.
0.5' E.O.L.
FENCE COR.
0.1' E.O.L.
FENCE COR.
0.4' E.O.L.
FENCE COR.
0.4' E.O.L.
FENCE 1.6' E.O.L.
GATE
FENCE COR.
0.4' E.O.L.
FENCE COR.
0.4' E.O.L.
FENCE COR.
0.5' N.O.L.
FENCE COR.
0.2' E.O.L.
0.2' N.O.L.
FENCE COR.
0.2' E.O.L.
0.2' N.O.L.
FENCE COR.
0.3' E.O.L.
0.4' N.O.L.
FENCE ON
LINE
10' PRIVATE
STORM DRAINAGE
EASEMENT
10'
STORM
EASEMENT
6' WOOD
BOARD FENCE
FNC. ON LINE
6' BLACK CHAINLINK
FENCE TO NORTH
STORM DRAINAGE EASEMENT
STORM DRAINAGE EASEMENT
STORM DRAINAGE EASEMENT