

***ALTERNATIVES CONSIDERED  
BUT REJECTED***

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***Appendix H***

2545

(A)

DEPARTMENT OF THE ARMY  
HEADQUARTERS, I CORPS AND FORT LEWIS  
FORT LEWIS, WASHINGTON 98433-5000



REPLY TO  
ATTENTION OF:

December 17, 1986

Office of the Commanding General

ROUTE TO	DEC 22 1986
JOE	
DAN	County Executive
ALBY	A
MIMI	
SUSAN	
INTENT	
FILE	

Mr. Joe Stortini  
Pierce County Executive  
535 County-City Building  
Tacoma, Washington. 98402

Dear Mr. Stortini:

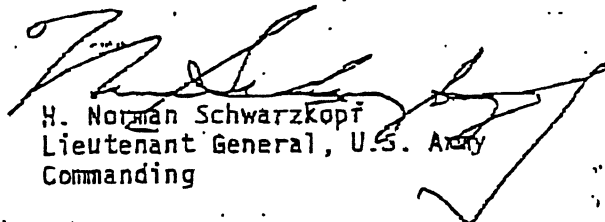
This is in response to your letter regarding the development of an extension to 176th Street East connecting with I-5.

The concept of a connecting corridor from I-5 to the Spanaway-Parkland area may be feasible under certain conditions. As you are aware, my major concerns are physical security of the installation, military training requirements and tactical mobility. Thus, any proposal would have to address, at a minimum, the following issues:

- a. Physical security such as cyclone fencing on both sides of the roadway.
- b. No interference with ongoing activities such as the Ammunition Supply Point or Madigan Army Medical Center.
- c. No reduction in available areas for training activities.
- d. Unrestricted access to McChord Air Force Base for deployment and supply movement without closing down your corridor (i.e., the construction of over or underpasses).
- e. If near installation housing, provisions for noise abatement such as baffles must be installed to retain the quality of life of soldiers and their families.
- f. All aspects of the construction will be at no cost to the government.

Let me assure you that in the spirit of good community relations, I and my staff are willing to work to assist your needs; however, you must understand that all proposals must not only be acceptable to Fort Lewis, but ultimately to the Department of the Army.

Sincerely,



H. Norman Schwarzkopf  
Lieutenant General, U.S. Army  
Commanding

Official government material



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 62D AIRLIFT WING (AMC)


17 3 SEP 1996

MEMORANDUM FOR PARAMETRIX, INC  
(Attn: Mr David Mattern)

FROM: 62 CES/CEV  
555 A Street, Suite 1  
McChord AFB, WA 98438-1325

SUBJECT: Wildlife Passageways (Yr ltr, 6 Sept 96)

1. The proposed cross-base highway will effectively bisect existing wildlife habitat on Fort Lewis and McChord AFB on a permanent basis. This will be a natural resources cost resulting from the project. The proposed roadway will be chain-link fenced on both sides for its entire length through the military reservations to ensure the security of military lands and the military missions. No unguarded openings in the McChord fenceline are acceptable.
2. There is no possibility at all of providing unguarded tunnel crossings for large mammals, such as deer. These crossings could be used by people to penetrate the McChord fenceline, and are therefore unacceptable as a security problem. The use of remote video cameras is an unacceptable alternative.
3. There is a small possibility of providing unguarded tunnel crossings for small animals, providing the diameter of the tunnels does not exceed approximately ten inches. A second concern is the responsibility for and cost of maintenance of these structures. The Air Force should not be asked to incur additional costs for maintaining these structures as excess taxpayer dollars are not available for this purpose. The responsibility for and cost of maintaining the structures, if any are constructed, will necessarily be shouldered by Pierce County or another agency.

  
MICHAEL J GRENKO  
Chief, Environmental  
Management Flight

cc: CECP (Mr. Higa)

AMC-GLOBAL REACH FOR AMERICA



DEPARTMENT OF THE ARMY  
HEADQUARTERS, I CORPS AND FORT LEWIS  
BOX 339500  
FORT LEWIS, WASHINGTON 98433-9500

REPLY TO  
ATTENTION OF:

11 October 1996

Garrison Commander

Mr. Gene K. Fong  
Division Administrator  
Federal Highway Administration  
U. S. Department of Highways  
Suite 501 Evergreen Plaza  
711 South Capitol Way  
Olympia, Washington 98501-1284

Dear Mr. Fong:

This letter is in response to your September 20, 1996, correspondence concerning the siting of Pierce County's proposed cross-base highway.

In cooperation with the local communities we have conceptually agreed to provide a maximum 200 feet wide highway corridor adjacent to our military reservation boundary subject to six conditions. The conditions were initially identified in our December 22, 1986 letter to then Pierce County Executive Joe Stortini.

Federal lands will provide in excess of 90% of the total real estate requirements for this local road project. I cannot support any further highway encroachment into the Fort Lewis Military Reservation west of Murray Road as suggested in your recent correspondence.

While we believe this planned highway construction has merit, this project remains a Pierce County road project for siting, funding and construction. We will continue to be a good neighbor and abide by Pierce County's ultimate decision to pursue or cancel this highway project.

Sincerely,

A handwritten signature in cursive script, reading "Edward P. Egan", is positioned above the typed name.

Edward P. Egan  
Colonel, U.S. Army  
Garrison Commander



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS AIR MOBILITY COMMAND (AMC)



6 November 1997

MEMORANDUM FOR 62 AW/CC

FROM: HQ AMC/CE  
507 A Street  
Scott AFB IL 62225-5022

SUBJECT: Local Initiative For Cross-Base Highway (Your Memo, 22 Oct 97)

1. In response to your memo, we concur with locating the proposed cross-base highway to the south to permit extending the south runway end, if ever required. It gives the Air Force flexibility at McChord to accommodate future aircraft operations that may require a longer runway. We appreciate your staff continuing to work with the Pierce County officials to ensure the interests of McChord and the Air Force are taken into consideration in planning the road location.

2. If the members of your staff have any questions, please have them contact Mr. Mike Blahive, CFPR, DSN 576-5043, ext. 339.

VIR  
*Peter K. Klobber*  
PETER K. KLOBBER  
Colonel, USAF  
Deputy Director, Civil Engineering

cc: 15 AF/CC  
62 CES/CE

Post-it* Fax Note	7671	Date	11/12	# of pages	2
To	Pat Baughman		From	Debi	
Co./Dept.			Co.	PCPW+U	
Phone #			Phone #	(253) 798-7250	
Fax #			Fax #	(253) 798-2740	

## TECHNICAL MEMORANDUM

Date: October 24, 2001  
To: Pat Baughman, Pierce County Public Works  
From: David Mattern *DM (by SR)*  
Subject: Preliminary environmental review of Tahoma Audubon's new alignment  
cc: John Perlic, File  
Project Number: 554-1588-030  
Project Name: Cross-Base Highway EIS

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At your request we have reviewed a new alignment for the Cross-Base Highway proposed by the Tahoma Audubon group. The new alignment deviates from the proposed project at the east side of the McChord AFB runway departure clearance area (see DEIS Figure 3.1-2) and proceeds in an east-northeasterly direction to connect with Spanaway Loop Road at a new signalized intersection with the Cross-Base Highway. The intersection would require three southbound approach lanes (two left turn and one right turn) on Spanaway Loop Road, an exclusive westbound right-turn lane and eastbound left-turn lane to improve the operational efficiency of the intersection. The Cross-Base Highway would then turn south and generally follow Spanaway Loop Road to 176<sup>th</sup> Street S. and the same terminus at SR 7 compared to the original Cross-Base Highway alignment. The portion of this new alignment on Spanaway Loop Road would result in widening the roadway from two to five lanes to accommodate future traffic volumes on the Cross-Base Highway.

Two alignment options were considered in the Spanaway Loop Road area:

**Option 5A** follows the entire length of Spanaway Loop Road and its planned extension to 176<sup>th</sup> Street S. This option would not maintain access to a mobile home park and other residential properties east of Spanaway Loop Road because of the limited access design of the Cross-Base Highway. The design speed for this option is 60 mph at the horizontal curve just south and east of the 174<sup>th</sup> St. S. intersection. Figure A shows the location of the Option 5A alignment.

**Option 5B** would veer to the west of the current Spanaway Loop Road alignment just south of 168<sup>th</sup> Street S. to minimize impacts to a mobile home park and other residential properties. In this area, the existing Spanaway Loop Road would become a two-lane local access roadway to maintain access to the mobile home park and other residences along 168<sup>th</sup> Street S. The minimum design speed for this option is 60 mph. Figure B shows the location of the Option 5B alignment.

For both Option 5A and Option 5B, a second signalized intersection would be added on the Cross Base Highway at 174<sup>th</sup> St. S. to provide access to residential property located west of SR 7 between 174<sup>th</sup> St. S.

and 176<sup>th</sup> St. S. This intersection would require a southbound left turn lane from the Cross-Base Highway to 174<sup>th</sup> St. S.

Both alignment alternatives have been designed to a WSDOT P-1 standard, similar to other portions of the Cross-Base Highway, except for the final horizontal curve west of SR 7. This horizontal curve meets a 60 mph design speed consistent with a WSDOT P-6 standard. The P-6 standard is reasonable to consider in this area of the Cross-Base Highway, since the speed limit would need to be reduced as vehicles approached SR 7 regardless of the design speed on this final horizontal curve.

Our review is based on available information, most of which was already on-hand from previous studies for the Cross-Base Highway, and aerial photographs of the area. No additional field studies have been conducted.

Wetlands along the new alignment have not been delineated; however, National Wetland Inventory (NWI) and Pierce County wetland maps of the area show several wetlands in the vicinity of the proposed new alignment. By using aerial photographs, the NWI and Pierce County wetland maps, and the map of the new alignments, the wetland area that could potentially be impacted by the new alignment was estimated.

The new alignment would pass through or next to several large wetland areas, totaling roughly 62 acres associated with Spanaway Lake.

- The alignment passes through a Category I wetland (per Pierce County Wetland Atlas). This wetland was not in the original DEIS since it is significantly north of the original proposed alignments, see Figure C.
- These wetlands include the 166<sup>th</sup> Street wetland, identified on Figures 5.51 and 5.54 of the DEIS and located south of the above Category I wetland. The NWI maps and aerial photographs indicate that these wetlands are predominantly seasonally flooded, emergent and scrub/shrub (PEMC, PSSC) wetlands, with smaller areas of seasonally flooded forested (PFO) wetlands. These wetlands would likely be considered Category II due to their size and likely hydraulic connection to Spanaway Lake, and their relatively high habitat value.
- The alignment also appears to pass near two small forested wetlands (PFOC) located on the east side of McChord AFB property (BEEF and BEEF-2 wetlands on Figures 5.51 and 5.54, DEIS). The larger of these two wetlands would likely be considered Category II, however, the smaller wetland is likely a Category III because of the small size and lack of habitat diversity.
- In addition, the new alignment appears to pass through or adjacent to the northernmost tip of the Audubon Marsh wetland.

The new alignment appears to have substantial potential impacts to the Category I wetland and the Audubon Marsh wetland resulting from filling and grading operations. Overlaying Pierce County wetland maps on the alignment, we calculate that approximately 3.5 acres of mostly Category I wetland are directly impacted by both options. In addition, just over 12 acres of mostly Category I wetland buffers are directly impacted. (The buffer impacts are estimated to be slightly higher for Option 5B.)

Water howellia is a rooted aquatic plant that is listed as a threatened species under the Endangered Species Act. While it occurs in several wetlands on McChord AFB (DEIS, 1998), no records of its occurrence within the above wetlands impacted by the new alignment have been identified. However, these areas were not field reconnoitered.

occurrence within the above wetlands impacted by the new alignment have been identified. However, these areas were not field reconnoitered.

Portions of Spanaway Loop Road included in the new alignment are used for local access by residences and subdivisions on or near Spanaway Lake. Several residences would likely be displaced either directly by the widened roadway or indirectly through loss of access. Providing a frontage road for access could increase displacements and wetland impacts. Property impacts and displacements would be minimized with Option 5B.

Direct impacts to oak woodland, savanna, and western gray squirrel habitats on McChord AFB from the new alignment are expected to be similar to the original alignment. Based on a review of the aerial photographs the two new alignment options appear to pass through similar habitat types as the original Cross-Base Highway alignment. The new alignment would have the same types of indirect impacts (i.e., fragmentation ) to oak woodland habitats and associated species as the original alignment.

Representatives from McChord AFB also reviewed the alignment (see attached memo, dated October 18, 2001). Among other considerations, the elevation of the highway in the vicinity of the runway extension may have to be lowered (i.e., depressed) for clearance. As a result, additional drainage analysis and engineering would be necessary to avoid impacts to hydrology and natural resources (e.g., wetlands, water howellia) in this area. The memo concludes that “the additional impacts caused by the proposed alternative route serve to further encroach upon the current and future military operations on McChord AFB, require additional studies, potentially reduce traffic efficiency, and adds costs and delays to the overall project.”

The proposed alignment shift on the east end of the corridor does not appear to warrant further study, based on the relatively large impacts to wetlands, residential property impacts, added signalized intersection, reduced design speed of the Cross-Base Highway, and impacts to McChord AFB operations. With alignment Option 5B, impacts to residential property were minimized; however, this option continues to have more significant impacts than the preferred Cross-Base Highway alignment identified in the Draft EIS. Therefore, the east end alignment shift suggested by the Tahoma Audubon is not recommended for further consideration.







**DEPARTMENT OF THE AIR FORCE**  
**HEADQUARTERS 62D AIRLIFT WING (AMC)**

MEMORANDUM FOR PARAMETRIX, INC.

18 OCT 2001

(ATTN: MR DAVID MATTERN)

5808 LAKE WASHINGTON BLVD, NE SUITE 200  
KIRKLAND, WA 98033-7350

FROM: 62<sup>ND</sup> CIVIL ENGINEER SQUADRON  
(ATTN: 62 CES/CEC)  
555 A STREET  
MCCHORD AFB, WA 98438

SUBJECT: Tahoma Audubon Alignment of the Cross-Base Highway

1. References:

- a. Your memo, 3 Oct 01, same subject.
- b. Our email, 7 Sep 01, similar subject.
- c. Our memo, 20 Aug 01, similar subject.

2. As requested, we have reviewed the revised proposal provided by reference 1.a. and note that the revised proposal, generally speaking, places the roadway further south than the earlier proposals submitted for review in references 1.b. and 1.c.

a. The Audubon proposal, as compared to the current Cross-Base Corridor plan, encroaches 250 feet closer to the expected runway end of the planned 5,000-foot runway extension. The proposal appears to remain outside the Graded Area (1,000 feet long by 2,000 feet wide, centered on the runway end centerline). However, because of the proximity to the runway end, the roadway in this section will likely require an additional 5 foot depression, lower than that currently planned for the Cross-Base Corridor roadway. This is required to ensure Air Force (and FAA) Approach-Departure Surface Height Criteria are not violated.

b. The proposed alternative route is expected to pass through a former landfill site believed to contain construction and demolition debris. Construction along the proposed alternate route will disturb this former landfill site and may require the additive costs of sampling/monitoring, and possible mitigation/disposal, as well as, potentially cause delays during construction.

c. The proposed alternative route appears to pass near or through two identified sites of potential archaeological significance. Construction along the proposed alternative route may require additional Section 106 coordination and the possible added costs for sampling/-monitoring/mitigation, as well as, potentially cause delays during construction.

d. The proposed alternative route, it appears, may add significant amounts of traffic onto Spanaway Loop Road South, traffic impacts which were not likely accounted for in the recently completed roadway improvements to these areas, nor formally evaluated in the traffic engineering portions of the Cross-Base Corridor DEIS studies. Additional traffic engineering analysis may be necessary to assess the roadway capacity when considering the added curvature created at the point of connection of the proposed alternate route to the present Cross-Base Corridor route, connection at Spanaway Loop Road South, and the connection at 174<sup>th</sup> Street East.

e. The proposed alternative route appears to traverse other additional wetland areas that will require evaluation and possible mitigation costs/impacts.

f. The proposed alternative route further encroaches upon and reduces the existing military training area of the south McChord property. Also, the proposed alternative route further encroaches and constricts the available setback forming the operational clearance space around the future extended runway.

2. The additional impacts caused by the proposed alternative route serve to further encroach upon the current and future military operations on McChord AFB, require additional studies, potentially reduce traffic efficiency, and adds costs and delays to the overall project. Respectfully recommend no further support for the proposed alternative route and continuation of the current (southerly) Cross-Base Corridor alignment. Thank you for the opportunity to comment on this proposal. Questions may be addressed to Mr. Gaylord Higa, Comprehensive Planning (62 CES/CECP), at the address indicated above or by telephone at (253) 982-3268.



ALLEN H. DRIEMEIER  
Chief Engineering Flight

cc: Pierce County, Public Works &  
Utilities, Transportation Services  
(ATTN: Mr Baughman, Consultant  
Engineering/Environmental Supervisor)  
2401 South 35<sup>TH</sup> Street, Room 150  
Tacoma, WA 98409-7485

62 CES/CEV

(MemoPCCBAudubon3Oct16Oct01.doc/)



**DEPARTMENT OF THE AIR FORCE**  
**HEADQUARTERS 62D AIRLIFT WING (AMC)**

**18 FEB 2000**

Mr. Chuck Clark, Administrator  
US Environmental Protection Agency, Region 10  
1200 Sixth Avenue  
Seattle, WA 98101

Colonel Raymond E. Johns, Jr., Commander  
62d Airlift Wing  
100 Main Street, Suite 1025  
McChord AFB, WA 98438-1109

Dear Mr. Clark

Thank you for your letter, ECO-088, dated 14 Jan 00, soliciting our views on two possible alternative routes for the Cross Base Corridor Highway project. As requested, our responses to the two alternative concepts you have posed, a) Surface Route Perimeter Road right-of-way and b) Underground Route Perimeter Road right-of-way, are as follows:

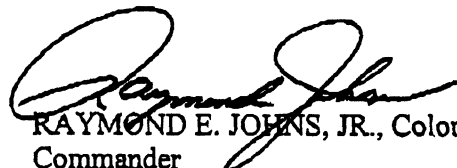
a. Surface Route Perimeter Road. This route is not acceptable to the Air Force because it eliminates the Air Force's future capability to extend our runway southward by 5,000 feet. This extension capability is critical to the long-term operational viability of McChord. Existing, as well as, planned/approved future incompatible land uses and development immediately north of the McChord runway end require that we maintain plans to extend our runway south by 5,000 feet, allowing us to displace our runway operations accordingly. Placing the proposed Cross-Base Highway at the existing Perimeter Road right-of-way eliminates our ability to ensure continued air operations at McChord, given the continually increasing incompatible development and land uses north of the McChord runway end. Additionally, this proposed routing would violate an existing explosives safety/quantity distance criterion surrounding existing Air Force explosives storage facilities just east of the A Street interchange. This Air Force explosives safety criterion must be avoided in the same way that the current Cross-Base Highway route must avoid the Army's explosive storage safety setback, just to the south.

b. Underground Route Perimeter Road. This route is not acceptable to the Air Force because it places an unsecurable public access beneath what would be our future runway extension. While an underground highway could be constructed so that the McChord runway could be extended over it, this would pose an unacceptable force protection risk in that our future runway would be continuously vulnerable to a potential terrorist attack involving placement of explosives in the tunnel beneath the runway. This

could result in the complete shutdown of air operations at McChord. The same explosives safety concerns remain for this alternative as in paragraph a., above.

We would like to mention that McChord's involvement in the Cross-Base Highway issue has extended over 10 years, during which numerous meetings and coordination efforts between the Air Force, U. S. Army (Fort Lewis), Pierce County, Federal Highway Administration, and Washington State Department of Transportation have occurred. As a result the various route alternatives (including your proposals) were reviewed and the list of feasible alternatives reduced to those identified in the Draft EIS released in March 1998. We are sensitive to the various environmental concerns related to a potential Cross-Base Highway, but we are equally sensitive to the need to preserve the long-term air operational viability of McChord AFB. The Draft EIS lists those route alternatives that the Air Force finds compatible with the long-term objectives for this base.

Thank you for the opportunity to review and comment on your proposals. While we regret we are unable to accept either alternative you suggested, we appreciate the opportunity to explore these issues with you and remain hopeful that the Cross-Base Highway will be routed in a manner compatible with long-term Air Force plans, while minimizing environmental impacts. If your staff has questions, please have them contact Mr Gaylord Higa of my Comprehensive Planning staff at 253-984-3268.



RAYMOND E. JOHNS, JR., Colonel, USAF  
Commander  
62d Airlift Wing

cc: Pierce County Dept of Transportation



## TECHNICAL MEMORANDUM

Date: February 5, 2002  
To: Pat Baughman, Pierce County Public Works Department  
From: Theresa Turpin, Parametrix/Sumner  
Subject: Cross-Base Windshield Survey – Spanaway Loop Road  
cc: Jenny Bailey, John Perlic, Project File  
Project Number: 554-1588-030  
Project Name: Cross-Base Highway Supplemental DEIS

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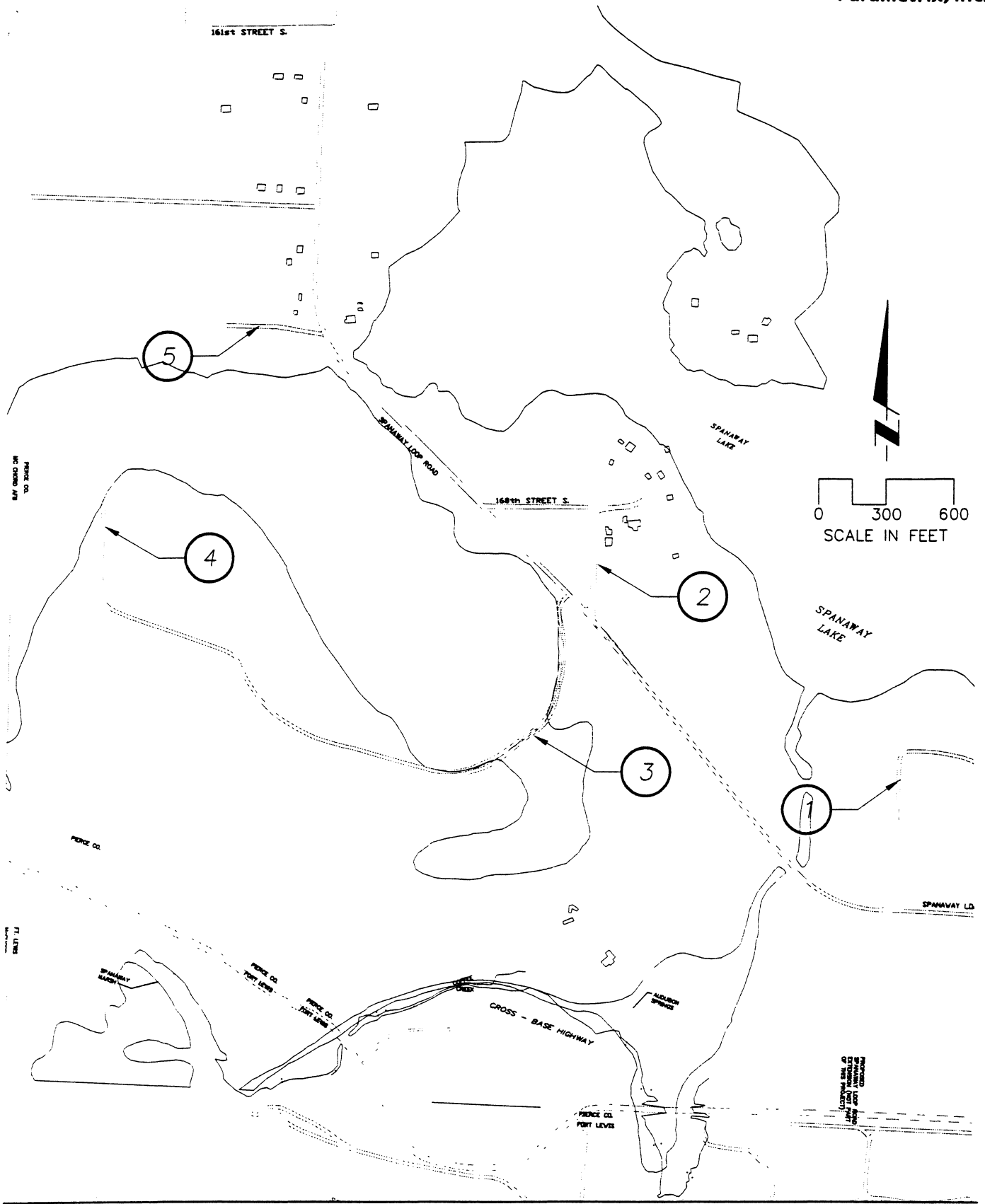
On Friday, January 11, 2002, a “windshield survey” of Spanaway Loop Road was conducted in the area from 166th Street South to 10th Avenue South, encompassing both sides of Spanaway Loop Road and side roads. The purpose of the survey was to identify the number of residences potentially affected by the Cross-Base Highway alignment suggested by Tahoma Audubon. The area is a mixture of residences, including single family dwellings, mobile homes, apartments (on 10th Avenue South), and condominiums (see attached map).

From this survey, it was determined there are approximately 239 residences along this portion of Spanaway Loop Road (combination of wood-frame housing, apartments, condominiums, and mobile and manufactured homes). Below is a detailed description of the area surveyed.

- Viewing the west side of Spanaway Loop Road beginning from 166th Street South and travelling south to 10th Avenue South, the following was determined:
  - 166th Street South is a private road with one home in the front and just west are 10 mailboxes for a total of 11 homes.
  - There is one house at the intersection of 169th Street Court South and Spanaway Loop Road.
  - Travelling south from the above home, 169th Street Court South extends through a depression where significant amounts of standing water were on both sides of the roadway.
  - Travelling further south, uphill from the depression and west on 169th Street Court South, there are 18 homes (includes 17th Court South). At this point, 169th branches off to 18th Avenue Court South and 19th Avenue South. There are four homes on 18th Avenue Court South and 19th Avenue South has seven homes, with 19th Avenue South continuing further north (see map) where there is a “no trespassing” sign and fence. Three homes were visible in this area. The estimated number of homes (a mixture of mobile, manufactured and wood-frame houses) in this area is 32 homes.

- On Spanaway Loop Road, southeast of 169th Street Court South and before 10th Avenue South, there are at least 14 homes visible on the west/southwest side of the road (some houses were slightly off the road).
- There are approximately 58 homes total in the area along the west side of Spanaway Loop Road.
- Viewing the eastside of Spanaway Loop Road, beginning from 166th Street and the Beyer residence at 16605 Spanaway Loop Road, travelling south to 10th Avenue South, the following was determined:
  - 168th Street South has at least seven homes with a new development, Tucker Cove (a small cul-de-sac), being added just off 168th Street South. There is a sign on the Tucker Cove cul-de-sac stating the area beyond the sign is wetlands. One home is under construction and is included with the seven homes counted. Some of the homes off 168th Street South have private driveways, but it appeared most of the homes were visible from 168th Street South.
  - Perpendicular to 168th Street South is 14th Avenue South. It was difficult to accurately determine the number of homes due to the private road (posted no trespassing) parallel to 168th Street South. There were three dwellings (possibly duplexes) visible from 14th Avenue South on this private road, for an estimated total of six homes.
  - Travelling on Spanaway Loop Road towards 10th Avenue South there were two more homes.
  - South of the above homes on Spanaway Lake is Lakeside Terrace, a senior housing (age 55+) mobile home community. Per the Pierce County web site, Lakeside Terrace has 40 mobile home parcels.
  - Adjacent to Lakeside Terrace is the Coffee Creek Condominium complex. There are 56 condominium units in the complex.
  - At the intersection of 10th Avenue South and Spanaway Loop Road (west side) is the Sun Park Apartment complex, with 70 Apartments.
  - There are approximately 181 residences total (wood-frame houses, mobile homes, condominiums and apartments) along the east side of Spanaway Loop Road.

Due to the limited access design and function of the proposed Cross-Base Highway, access to some or all of the residences on the east and west sides of Spanaway Loop Road may not be possible. Without access, up to 239 residences could be displaced as a result of the alignment suggested by Tahoma Audubon. The attached map shows the location of residences potentially displaced by Tahoma Audubon's proposed alignment.



FILE: southA-de  
DATE: 02/08/02

- ① 10th Avenue S.
- ② 14th Avenue
- ③ 169th Avenue S.
- ④ Private Drive
- ⑤ 166th Street

**Cross Base Windshield Survey  
Cross Base Highway Project**

