JohnsMonroe MitsunagaKolouškováPLLC

Robert D. Johns (*Retired*)
Michael P. Monroe
Darrell S. Mitsunaga
Duana T. Kolouškováá
Vicki E. Orrico
Trisna W. Tanus

February 2, 2016

Lacey Hatch
Michael Paine
City of Bellevue
PO Box 90012
Bellevue, WA 98009-9012

Re: 402 and 410 102nd Avenue SE
Bellevue Critical Areas Land Use Application No 15-103115-LO

Dear Lacey and Michael:

On behalf of Jere Enterprises LLC we submit this application for code interpretation along with the associated study materials for 402 and 410 102nd Avenue SE, Bellevue. This application is submitted in accordance with the terms set forth in the Stipulation and Order of Dismissal dated October 2, 2015, constituting Jere Enterprises' application for formal code interpretation under Chapter 20.30K of the City of Land Use Code, regarding the classification of the onsite water feature.

Please contact me should you have any questions.

Thank you.

Sincerely,

Duana T. Kolouškováá

*Direct Tel: (425) 467-9966*
*Email: kolouskova@jmmlaw.com*

cc: Client
Soundview Consultants, LLC
*1023-1 Application Ltr 2-1-16*

# MEYDENBAUER STREAM HABITAT ASSESSMENT

## TAMASHA APARTMENTS - BELLEVUE

JANUARY 2016

Soundview Consultants

Received
FEB 03 2016
Permit Processing

# MEYDENBAUER STREAM HABITAT ASSESSMENT

## TAMASHA APARTMENTS - BELLEVUE

**JANUARY 8, 2016**

**PROJECT LOCATION**

402 102ND AVENUE SOUTHEAST
BELLEVUE, WA 98004

**PREPARED FOR**

JERE ENTERPRISES LLC
1027 HARBOR AVENUE SOUTHWEST #603
SEATTLE, WASHINGTON 98116-1759

**PREPARED BY**

**SOUNDVIEW CONSULTANTS LLC**
2907 HARBORVIEW DRIVE
GIG HARBOR, WASHINGTON 98335
(253) 514-8952

Soundview Consultants

# Table of Contents

Chapter 1. Project Overview ..... 1
1.1 Purpose ..... 1
1.2 Project Area and Location ..... 1
Chapter 2. Methods ..... 3
2.1 Background Information ..... 3
2.2 Fieldwork ..... 3
Chapter 3. Results ..... 5
3.1 Upstream Assessment ..... 5
3.2 Downstream Assessment ..... 5
3.3 Buffer Conditions ..... 6
3.4 Onsite Biotic and Abiotic Assessment ..... 6
Chapter 4. Code Analysis ..... 8
4.1 Definition of a Stream ..... 8
4.2 Stream Typing ..... 8
4.3 Stream Buffers and Setbacks ..... 10
Chapter 5. Conclusions ..... 12
Chapter 6. References ..... 13

# Tables

Table 1. Drainage Feature Habitat Characteristics ..... 7
Table 2. Water Quality Results ..... 7

# Figures

**Figure 1.** Location of Meydenbauer Creek in Study Area ..... 2
**Figure 2.** Location of Meydenbauer Creek Outlet ..... 6
**Figure 3.** Meydenbauer Creek with potential 25-foot stream buffer overlay ..... 10

# Chapter 1. Project Overview

Soundview Consultants LLC conducted a thorough stream habitat assessment and code analysis for a portion of Meydenbauer Creek located at 402 102nd Avenue Southeast in City of Bellevue (subject property), on one tax parcel (King County Tax Parcel Number: 0666000280). The stream habitat assessment included a formal electrofishing survey. In addition, water quality samples, quantitative and qualitative bed and bank data, and water channel conditions were assessed. Assessment of water channel conditions also included investigation of adjacent development, and associated buffers.

No fish were observed within the onsite reach of Meydenbauer Creek during the electrofishing survey. This result is verified by the City of Bellevue, which types the upper reaches of Meydenbauer Creek as non-fish bearing and indicates the presence of fish barriers in the lower reaches of Meydenbauer Creek. In addition, Washington Department of Fish and Wildlife (WDFW), and DNR maps do not type this creek at all, suggesting that the onsite reach of Meydenbauer Creek should be treated as non-fish bearing. Further, Soundview Consultants LLC's stream habitat assessment observed above-normal levels of fecal coliform bacteria, conductivity, temperature, and nitrate & nitrite concentrations, these results support the conclusion that the onsite reach of Meydenbauer Creek is not-suitable habitat for fish. An analysis of historical aerial photography and the City of Bellevue's stormwater infrastructure maps indicate that Meydenbauer Creek is likely a man-made feature, created to drain surface waters from surrounding development.

## 1.1 Purpose

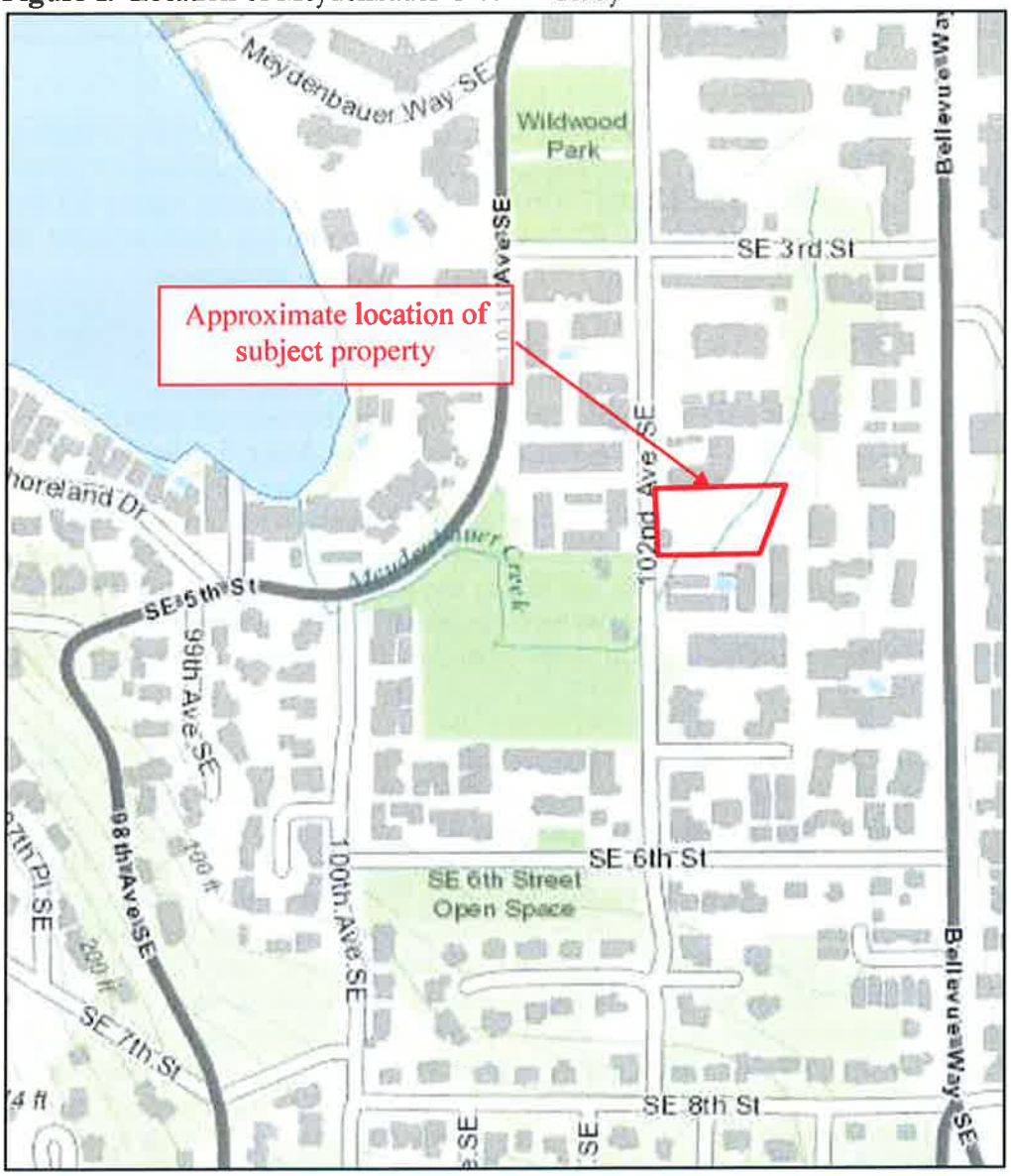
The purpose of the onsite detailed fish and habitat assessment is to review accessible data to determine applicable City of Bellevue codified stream and buffer requirements which may be pertinent to future site development.

## 1.2 Project Area and Location

The subject property is located at 402 102nd Avenue Southeast in City of Bellevue near the downtown area just two blocks south of Main Street. It is located in Section 32, Township 25 North, Range 05 East, W.M. WRIA 8, in King County, Washington. The King County Tax Parcel Number for the property is 066600-0280.

To access the subject property from northbound Interstate 405, take Exit 11 for Interstate 90 West toward Seattle/Mercer Island, merge and continue on to Bellevue Way Southeast. Turn left onto Southeast 6th Street and turn right on 102nd Avenue Southeast. The subject property is located on the right side of the 102nd Avenue Southeast along Meydenbauer Creek.

**Figure 1.** Location of Meydenbauer Creek in Study Area




Source: WDFW SalmonScape

# Chapter 2. Methods

## 2.1 Background Information

Soundview Consultants LLC conducted an assessment of background data from the City of Bellevue maps, U.S. Fish and Wildlife Service (USFWS) maps, Washington State Department of Natural Resources (DNR) maps, King County iMap data, Federal Emergency Management Agency (FEMA) maps, and Washington Department of Fish and Wildlife (WDFW) SalmonScape (SalmonScape). See Appendix A for maps detailing background data.

## 2.2 Fieldwork

The fish presence and assessment survey for the Tamasha Apartments-Bellevue project is being provided by Soundview Consultants LLC of Gig Harbor, Washington, under the direction of Jere Enterprises LLC. Soundview Consultants LLC's responsible fisheries biologists, Mike Shaw and Railin Santiago performed a fish presence and assessment survey within portions of Meydenbauer Creek on August 12, 2015. The objective of the survey was to evaluate the presence of resident fish populations in this drainage feature, and determine if suitable fish habitat was present within the onsite reach. For more details regarding watershed characteristics and methods, please refer to the Wetland Delineation and Fish and Wildlife Habitat Assessment Report prepared by Soundview Consultants LLC in July of 2014.

Soundview Consultants LLC evaluated fish presence by performing a systematic single-pass electrofishing survey of the Meydenbauer Creek drainage channel on the subject property using a Smith-Root Model LR-24 backpack electrofisher (settings 30 Hz, 12%, 225V) with pulsed direct current. The Department of Natural Resources (DNR) electrofishing protocols as outlined in Washington's Forest Practices Rules (WA-222-16-030) were used to conduct the fish presence survey. Data was collected by qualified staff operating under Washington Department of Fish and Wildlife Scientific Collecting Permit Number 15-082. A backpack electrofisher was used to electrofish the onsite stream segment of Meydenbauer Creek to determine fish presence. During electrofishing sampling, efforts progressed systematically in an upstream manner. Soundview Consultants LLC staff electrofished all pools and glides, and riffles, during the single-pass survey. Each electrofishing attempt was conducted in a manner that minimized harm to fish and began with low settings for pulse width and pulse rate. The lowest effective settings for pulse width, pulse rate, and voltage was used to minimize risks to both personnel and fish (USFWS, 2012). All backpack electrofisher operators have received previous electrofishing equipment training in sampling equipment operation and field protocol. Information from relevant background sources was analyzed to verify the results of the fish presence survey.

Safe implementation is a high priority and a qualified Senior Fisheries Biologist acted as a directing biologist to ensure safety of staff involved in sampling efforts, safe handling and recovery of any potentially present fish species and aquatic organisms. While only macroinvertebrates were identified, aquatic organisms were captured using handheld dip nets and temporarily removed from the stream during electrofishing efforts. All captured aquatic organisms were identified and inventoried for species counts and released at their point of capture following a full recovery from the effects of electrofishing.

In addition to the fish presence survey, a visual biological survey and collection of abiotic habitat characteristics was conducted within portions of Meydenbauer Creek on August 12, 2015. Visual observations were taken to evaluate the presence or absence of wildlife and aquatic life in the water channel, as well as to observe habitat characteristics and gross physical attributes. A macroinvertebrate survey was also conducted using the leaf-pack sorting method (United States EPA, 2015), which requires collecting in-stream detritus that is sorted through to remove and identify macroinvertebrates. Evaluation of in-channel characteristics including; bankfull width, wetted width, substrate, in-channel organic material, bank shape, and water depth were also measured. Local watershed characteristics including observations of adjacent land use were recorded to evaluate their potential impact on the ecological health of the drainage feature. Finally, water quality indicators including; pH, dissolved oxygen, heavy metals, TSS, and bacteria were assessed through collection of water samples along portions of the drainage feature.

# Chapter 3. Results

The City of Bellevue classifies Lower Meydenbauer Creek, below 102nd Avenue, as a fish bearing stream (Type F) with historical records of coho salmon and cutthroat trout (Appendix A1), while the upper section is classified as non-fish bearing (Type Np, Appendix A1, A2). Washington State DNR and WDFW SalmonScape do not classify Meydenbauer Creek (Appendix A3, A4), indicating that no fish presence or stream feature has been documented by these agencies. In addition, a FEMA flood map indicates that the onsite drainage feature constitutes the north fork of Meydenbauer Creek and joins with the main-stem several blocks south of the site in a portion of the Creek which is entirely culverted (Appendix A6).

## 3.1 Upstream Assessment

The Meydenbauer Creek drainage feature begins in a small draw just north of 3rd Street and flows into Lake Washington approximately 870 linear feet downstream from the subject property (Figure 2). Residential and commercial development is present upstream and downstream. Upstream of the subject property, the drainage feature flows under a road crossing associated with Southeast 3rd Street which provides direct storm water discharge. In addition, there is an onsite 12-inch diameter corrugated metal pipe that discharges stormwater into Meydenbauer Creek. An analysis of stormwater inputs conducted using the City of Bellevue's stormwater drainage map, indicates that approximately 1.2 million square feet of developed area drains into the Meydenbauer Creek drainage through constructed stormwater infrastructure upland of the site.

## 3.2 Downstream Assessment

The drainage feature flows west offsite through metal grate and box culvert and then south along 102nd Avenue in a 90 foot long, 15 inch diameter culvert which has been identified as a fish barrier by the City (City of Bellevue, 2015). Then it is channeled into a 176 foot long, 60 inch diameter, corrugated metal pipe. This pipe discharges into an approximate open channel on parcel number 0666000405 before it re-enters stormwater infrastructure and flows west toward Lake Washington, until finally draining into Lake Washington (Figure 2).

**Figure 2.** Location of Meydenbauer Creek Outlet, Lake Washington.

Source: Coastal Atlas, Department of Ecology

## 3.3 Buffer Conditions

Buffer conditions along the length of Meydenbauer Creek are variable and include an approximate 40-foot vegetated buffer, which likely includes the 25-foot stream Type O buffer and a 10-foot setback, along most of the upstream sections. Onsite, no functional buffer exists as there is a paved parking lot immediately to the south and maintained lawn immediately to the north. Downstream after crossing 102nd Avenue there is a stretch of open channel approximately 470 linear feet long. However, the feature then returns to City stormwater infrastructure until discharging into Lake Washington. An analysis of Google Earth imagery indicates that the width of the buffer in the downstream open channel section of Meydenbauer Creek ranges from 10 to 30 feet (Appendix A10). 2013 Google Earth imagery indicates that a pre-existing single-family residence, downstream of the 102nd Avenue culvert, only appeared to have a ten-foot setback from Meydenbauer Creek (Appendix A11).

## 3.4 Onsite Biotic and Abiotic Assessment

No fish were found in the onsite portion of the Meydenbauer Creek drainage feature during fish presence surveys conducted on August 12, 2015. In addition no frogs, salamanders, or crayfish were identified during the survey. Macroinvertebrates collected in Meydenbauer Creek include dragonfly nymphs, caddis fly casings, gastropods, worms, and water striders.

Along 11 sampled points the average depth in Meydenbauer Creek was approximately four inches (Table 1) and the most frequently observed substrate was a mix of cobble and pebbles with sections

of riprap along the banks of the drainage feature. The channel has been historically created and modified by the City of Bellevue to accommodate stormwater drainage by dredging the drainage channel. The City also has a recorded history of infrastructure improvements associated with the onsite drainage feature, including construction of additional stormwater infrastructure in 1981. The City also created a temporary easement associated with the drainage feature in 1981 (City of Bellevue, 1981). Morphologic channel characteristics including bankfull width and wetted width of the channel are included in Table 1 below. The results of water quality tests indicate that the sampled reach of Meydenbauer Creek is contaminated by fecal coliform bacteria as the level of fecal coliforms exceeded the WAC guideline by more than 300 percent. In addition, in-stream temperature exceeded the WAC guideline for salmonid spawning, rearing and migration by more than 1° C. Conductivity was well outside the normal range for comparable streams in the same watershed as Meydenbauer Creek, and the concentration of nitrate and nitrite was outside the normal range for the watershed (Table 2).

**Table 1. Drainage Feature Habitat Characteristics**

| Sampling Point | Bankfull Width (feet) | Wetted Width (feet) |
|---|---|---|
| 1 | 7 | 4.5 |
| 2 | 8 | 7 |
| 3 | 3 | 2.5 |
| 4 | 6.5 | 4.5 |
| 5 | 10.5 | 8.5 |
| 6 | 7.5 | 4 |
| 7 | 8.5 | 4 |
| 8 | 8 | 2 |
| 9 | 5.5 | 4 |
| 10 | 6.5 | 4.5 |
| 11 | 6.5 | 4 |

**Table 2. Water Quality Results**

| Water Quality Indicator | Observed Value | Guideline [A, B] |
|---|---|---|
| Temperature (° C) | 18.6 | 17.5 max.[A] |
| pH | 7.97 | 6.5 - 8.5[A] |
| TSS (mg/L) | 3.2 | ~2.93[B] |
| Calcium (mg/L) [C] | 29.6 | - |
| Magnesium (mg/L) [C] | 19.2 | - |
| Iron (mg/L) [C] | 0.099 | - |
| Conductivity (umhos/cm) | 336 | 58 – 102[B] |
| NO3 + NO2 (mg/L) | 1.49 | 0.0097 – 0.5137[B] |
| Fecal Coliform (CFU/100 mL) | 700 | 200 max.[A] |
| Dissolved Oxygen (mg/L) | 9.1 | 8.0 min.[A] |

A. Standards from WAC-173-201A-200 (1), freshwater water quality criteria.
B. Standard calculated using Department of Ecology long-term dataset for Cedar River station 08C110, located in the same watershed as Meydenbauer Creek. The range represent the average ± 2 standard deviations for the given parameter.
C. No standard is provided in the WAC and the Department of Ecology does not include these parameters in their dataset.

# Chapter 4. Code Analysis

The following sections present an analysis of pertinent codes and regulations pertaining to the onsite reach of Meydenbauer Creek. Section 4.1 assesses the onsite drainage feature in terms of the City of Bellevue's definition of a stream. Section 4.2 provides an analysis of typing the onsite feature using BMC 20.25H.075. Section 4.3 addresses potential buffers and setbacks associated with the onsite drainage feature, and presents mechanisms within BMC which allows for buffer and setback averaging and/or elimination.

## 4.1 Definition of a Stream

Bellevue Municipal Code (BMC), 20.25H.075.A, defines a stream as:

> *An aquatic area where surface water produces a channel, not including a wholly artificial channel, unless the artificial channel is: 1. Used by salmonids; or 2. Used to convey a stream that occurred naturally before construction of the artificial channel.*

The onsite feature is not used by salmonids as demonstrated by the electrofishing survey conducted by Soundview Consultants LLC on August 12, 2015, which is also supported by WDFW SalmonScape and DNR maps which do not indicate fish presence in this feature, (Appendix A3 and A4) and the City of Bellevue's Meydenbauer Creek Basin Map (Appendix A1), which also indicates that the onsite reach is typed non-fish bearing, Type Np or Ns.

In addition, the feature appears to be excavated wholly from uplands as evidenced by a King County iMap aerial photograph from 1936, King County Road Vault Maps from 1937 and 1954, and a historical aerial from 1969 (Appendices A5-A8, respectively). These photographs do not show any indication of a hydrologic feature in the vicinity of the existing onsite drainage feature. In addition, the 1936, 1937 and 1954 images do not show a channel in surrounding areas indicating that the hydrology in the current channel is likely a result of increased surface flows from development in surrounding areas. Reduction in forested areas and increases in impervious surfaces caused by adjacent development have likely lead to increases in surface water flows and reduced infiltration capacity, which have concentrated water systems. Due to consistent flows in the absence of a storm event, Soundview Consultants LLC believes this feature likely carries some natural waters including seeps, and drained wetlands from historic development. However, since the onsite drainage feature is not "used by salmonids" and since the site (or surrounding areas) did not convey a stream that occurred naturally before construction of the artificial channel, it appears the onsite feature does not meet the definition of a stream under BMC 20.25H.075(A).

## 4.2 Stream Typing

BMC 20.25H.075.B outlines stream typing. As discussed under 4.1, the onsite drainage feature does not meet the definition of a stream and therefore, would not need to be typed as a stream under BMC. However, an analysis of stream typing is presented here which can be utilized by the City of Bellevue if they chose to call the onsite drainage feature a stream. Under BMC 20.25H.075.B.1, the onsite feature is not a Type S water as it is not considered shoreline under Chapter 90.58 RCW, or shoreline critical area.

BMC 20.25H.075.B.2, defines a Type F water as a non-Type S water that "contains fish or fish habitat, including waters diverted for use by a federal, state, or tribal fish hatchery from the point of diversion for 1,500 feet or the entire tributary if the tributary is highly significant for protection of downstream water quality". As discussed is Section 4.1 of this report, the onsite drainage feature does not contain fish. In addition, multiple downstream culverts are present as identified by the City of Bellevue's drainage maps, restricting fish movement to the onsite feature. With regards to fish habitat, Under BMC 20.50.010, fish habitat is defined as:

> *Any habitat which is used by any fish at any life stage at any time of year, including potential habitat likely to be used by fish which could be recovered by restoration or management. "Fish habitat" includes off-channel habitat.*

As stated previously, the onsite drainage feature is not "used by any fish at any life stage at any time of the year". The City of Bellevue's code does not provide a definition of habitat 'recoverable by restoration or management'. The WDFW 2012 Stream Habitat Restoration Guidelines state

> *Restoration of stream habitat refers to actions taken to enable physical and biological processes to operate free from artificial constraints and to return the stream to a self-sustaining condition resembling conditions that existed prior to anthropogenic disturbance.*

As there was no stream feature prior to anthropogenic disturbance, restoring what existed would eliminate the feature entirely and therefore, would not result in fish habitat. WDFW 2012 guidelines seek to restore lost habitat, channel degradation and lost ecosystem functions. Since the drainage feature never contained fish species and there was never a natural channel feature; WDFW's restoration guidelines do not appear to apply. It becomes a question of can fish habitat be created here; not restored. Creating fish habitat on a private property has an entirely different set of laws and maybe considered as take under common land use regulations. To create suitable onsite habitat, half a dozen or more downstream properties would be significantly impacted as would City road and stormwater infrastructure. The WDFW stream restoration guidance also states *Habitat restoration is of little long-term value in a watershed incapable of supporting the processes that create and maintain habitat conditions.* As surrounding areas are entirely developed and surfacewater inputs show signs of fecal coliform and excessive levels of turbidity, this drainage feature is not likely capable of supporting created fish habitat.

Based on the BMC definition of fish habitat, the onsite reach of Meydenbauer Creek would fail to provide habitat for fish as there was never any fish habitat that could be recovered by restoration or management, nor is the drainage feature suitable for fish habitat creation due to surrounding development. In its present state the onsite reach of Meydenbauer Creek does not provide habitat for fish at any life stage or any time of the year due to inputs from constructed stormwater channels and presence of extensive downstream fish barriers. In addition, water quality indicators such as temperature, and conductivity, further discussed in Chapter 5, were found to be above guidelines set by the Department of Ecology and Washington Administrative Code (WAC) Surface Water Quality Standards, indicating that the onsite feature if accessible to fish would not provide suitable habitat.

In addition, per BMC 20.25H.075.B.3, the onsite feature is not a Type N water, it is connected to a Type S water, Lake Washington, via an underground culvert, not an above ground channel. The onsite feature, while manmade and non-natural, would be considered a Type O water if considered a stream

by the City. The onsite drainage feature does not meet the requirements for Type S, F or N waters and is not connected by an above ground channel system to these waters.

## 4.3 Stream Buffers and Setbacks

As the onsite drainage feature appears to be a non-natural, man-made stormwater conveyance system, an analysis of BMC indicates a buffer or setback should not be applied. However, if the City of Bellevue choses to call this portion of Meydenbauer Creek a natural stream, the feature should be considered a Type O water as determined in Section 342 of this report. Type O waters, require a 25 foot buffer under BMC 20.25H.075.C.1. This buffer is consistent with previous development which has occurred along Meydenbauer Creek as can be observed from Google Earth aerial photography (Figure 3). In addition, the City of Bellevue previously determined that a downstream reach of Meydenbauer Creek on an adjacent plat was also subject to a 25 foot buffer, indicating that a 25 foot buffer and 10 foot setback on the subject property would be consistent with surrounding properties (City of Bellevue, 2013).

**Figure 3.** Meydenbauer Creek with potential 25-foot stream buffer overlay

Source: Google Earth

The site is considered undeveloped due to the lack of primary structures. The onsite drainage feature does not have a closed stream segment and is not located in the West Tributary of Kelsey Basin. The out-of-use existing structure onsite does not encroach on an existing critical area buffer or structural setback. No existing permitted buffers or setbacks are associated with the onsite drainage feature, and thus there is no need to modify measurements of critical area buffer to account for stream bank erosion, or previous restoration plans or reach studies. Pursuant to BMC 20.25H.075.C.1, if the feature is considered natural by the City of Bellevue, the drainage feature is an open water channel along most of the site and is located on an undeveloped site and a standard 25-foot buffer and 10 foot

structural setback (BMC 20.25H.075D) would pertain to this feature. The first 50 feet onsite, east of the sidewalk along 102nd Avenue Southeast is culverted and in this location the Creek is not open, thus it does not require a buffer in this portion of the site.

The BMC provides a mechanism for stream buffer modification via buffer averaging under BMC 20.25H.075.C.2. Buffer averaging is permitted up to 75 percent of the standard buffer dimension when the Applicant can demonstrate that the total buffer area isn't reduced; averaging does not result in adverse impacts to species of local importance; the buffer area is contiguous; buffer function and ecological structure are equal to or greater than buffer function prior to averaging; averaging does not destabilize slopes or increase erosion hazard; and averaging of the stream buffer is necessary to accommodate proposed development. The BMC does not provide a mechanism for stream buffer reduction.

Under BMC 20.25H.075.D.3, structural setbacks associated with open streams on undeveloped sites may be modified or waived if the Applicant can demonstrate that; setback modification will not adversely affect a species of local importance, vegetation will not be adversely affected by development and will be maintained in healthy condition, enhancement of the setback area via plantings will reduce development impacts on the setbacks, and slope stability and water quality will not be adversely affected.

# Chapter 5. Conclusions

An assessment of historic aerial photography and the City of Bellevue's stormwater infrastructure maps indicate that Meydenbauer Creek is a man-made feature created to drain and convey surface waters associated with surrounding development. The concentration of fecal coliform bacteria far exceeded state guidelines, indicating high levels of anthropogenic disturbance and potential contaminated stormwater inputs. Observed in-channel temperature and conductivity were also above guidelines. These abiotic indicators and the intensity of surrounding development are especially important in determining salmonid habitat quality, and indicate that even if fish had access to the onsite reach of Meydenbauer Creek, it is not suitable habitat for these species. No fish, frogs, salamanders, or crayfish were observed during the electrofishing survey. In addition, the City of Bellevue types the upstream portion of Meydenbauer Creek- above 102nd Avenue- Type Np waters due to the presence of a downstream fish movement barrier. This area includes the onsite reach of Meydenbauer Creek and confirms our observed lack of fish presence.

Soundview Consultants LLC's stream habitat assessment and historical aerial photographs from 1936, 1937, 1954 and 1969 present substantial evidence to support the conclusion that the onsite reach of Meydenbauer Creek is not considered a stream feature under BMC 20.25H.075. Further, if the City of Bellevue chooses to call the feature a stream, the analysis presented under Section 4.2 of this report, demonstrates that the feature does not meet the definition of a Type F water as there is no salmonid presence and fish habitat is not recoverable as there was never any historic fish habitat present on or adjacent to the site. If the City of Bellevue chooses to call the feature a stream, the code would define the feature as a non-fish bearing, Type O water on an undeveloped site requiring a 25 foot buffer and 10 foot structural setback.

# Chapter 6. References


Barnard, R. J., J. Johnson, P. Brooks, K. M. Bates, B. Heiner, J. P. Klavas, D.C. Ponder, P.D. Smith, and P. D. Powers (2013), Water Crossings Design Guidelines, Washington Department of Fish and Wildlife, Olympia, Washington. http://wdfw.wa.gov/hab/ahg/culverts.htm

City of Bellevue. 2015. Bellevue Municipal Code: Critical Areas Regulations, Section 20.25H. http://www.codepublishing.com/wa/bellevue/

City of Bellevue. 2015. Storm Utility As-built: Stormwater Inventory Map.

City of Bellevue. 2013. Public Records Request - Land Use Staff Report, Reference Number: 98-2516-LD.

City of Bellevue. 1981. Storm Drain Easement, File Number 7110.

Coastal Watershed Planning and Assessment Program. 2010. Lower Eel River Assessment Report. http://coastalwatersheds.ca.gov/Portals/0/Watersheds/North/EelLower/docs/LowerEel_Estuary_07272010.pdf

Cramer, Michelle L. (managing editor). 2012. Stream Habitat Restoration Guidelines. Copublished by the Washington Departments of Fish and Wildlife, Natural Resources, Transportation and Ecology, Washington State Recreation and Conservation Office, Puget Sound Partnership, and the U.S. Fish and Wildlife Service. Olympia, Washington.

Soundview Consultants LLC. 2014. Meydenbauer: Wetland Delineation and Habitat Assessment, Tamasha Apartments – Bellevue. Prepared for Jere Enterprises LLC.

United States Environmental Protection Agency. 2012. Stream Habitat Walk. http://water.epa.gov/type/rsl/monitoring/vms41.cfm

Washington Conservation Commission. 2001. Salmon and Steelhead Habitat Limiting Factors Report for the Cedar-Sammamish Basin.

Washington Department of Fish and Wildlife. 2002. Forest Practices Board Manual: Determining Fish Use for the Purpose of Typing Waters.

Washington Department of Fish and Wildlife. 2009. Water Quality Modifications.

Washington Department of Fish and Wildlife. 2015. SalmonScape. http://apps.wdfw.wa.gov/salmonscape/

Washington Department of Natural Resources, 2015. Forest Practices Application Mapping Tool. https://fortress.wa.gov/dnr/protectiongis/fpamt/index.html

Washington State Department of Ecology. 2009. Review of Storm-Event Water Quality Data, City of Bellevue.

Washington State Legislature. 2015. Water Quality Standards for Surface Waters of the State of Washington. Chapter 173-201A.

# Appendix A — Background Information

This appendix includes a City of Bellevue's Basin Map (A1 & A2); WDFW SalmonScape Map (A3); DNR Map (A4); 1936 iMap Photo (A5); 1937 and 1954 King County Road Vault Maps (A6 & A7); 1969 Historic Aerial (A8); and FEMA Flood Map (A9).

## Appendix A1. Meydenbauer Creek Basin

# Meydenbauer Creek Basin

Lake Washington Watershed

City Basin Population (2000): 7,816

| | | |
|---|---|---|
| Basin Areas: 927 | Total Acres | |
| City | 832 | Acres |
| Clyde Hill | 95 | Acres |

Drainage Jurisdictions: Bellevue, Clyde Hill

| | |
|---|---|
| % Impervious | 53% |
| Basin Relief | 184ft |
| Basin Energy | 0.3 |
| Basin Length | 2.2 mi |
| Average Basin Width | 0.7mi |

Total Length of Open Channel 1,718 ft

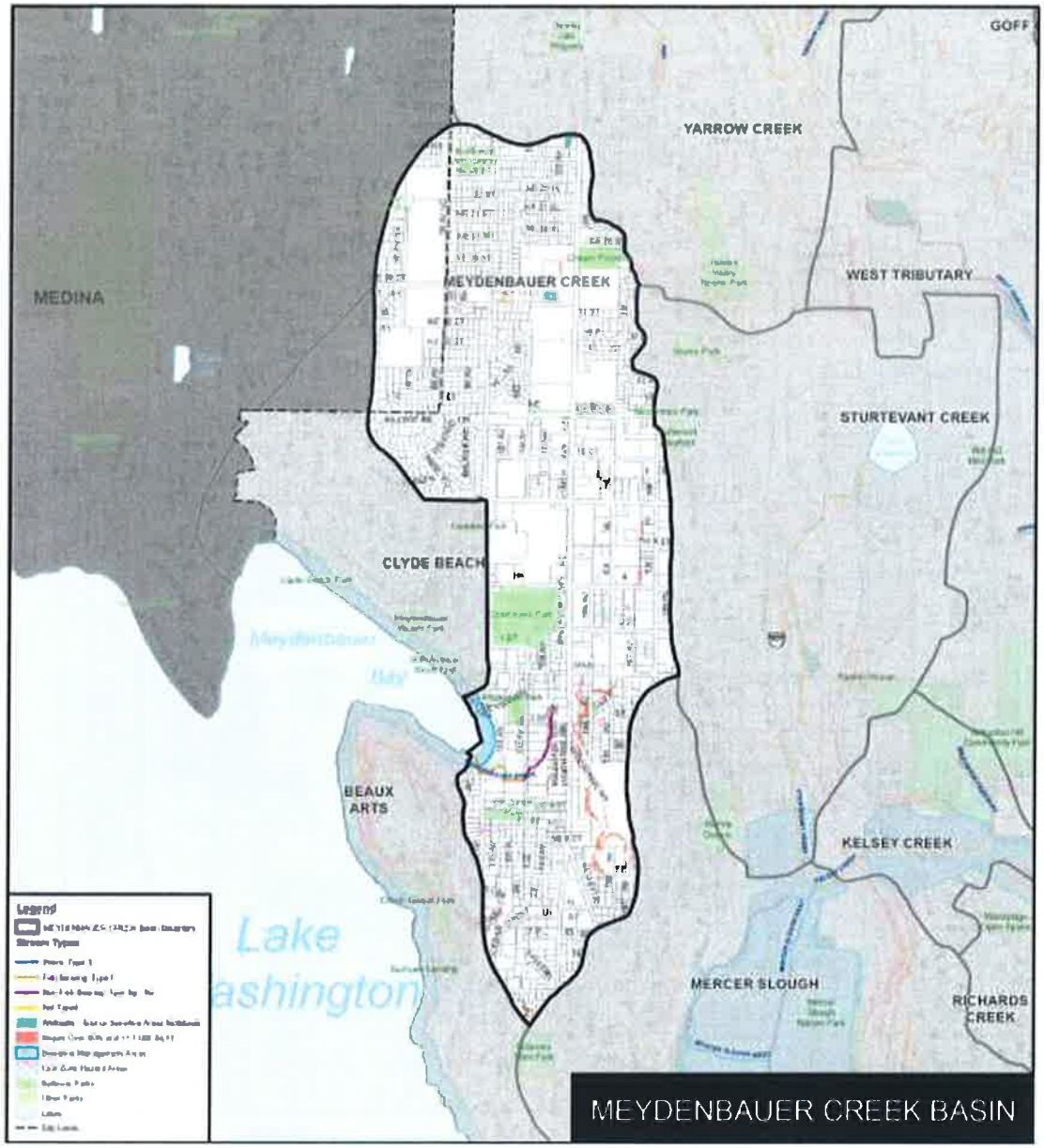
| Land Use Within the City Area | |
|---|---|
| Single family residential | 32% |
| Multi-family residential | 14% |
| Commercial/Office | 14% |
| Industrial | 0% |
| Institutional/Government | 7% |
| Open Space/Park | 3% |
| Mixed use/Misc. | 3% |
| Public streets | 24% |

SCALE 1" = 2400'

**Fish Use:** Lower Meydenbauer Creek ( 08-0258) is a fish-bearing stream. The historical record mentions local residents fishing for trout and salmon (McDonald 1984). The stream likely supported both resident and migratory cutthroat trout; the salmon mentioned in local histories were likely coho. Adult sockeye salmon, cutthroat trout, scalpin and stickleback have been noted in Meydenbauer Creek downstream of 101st AVE SE in both 2000 and 2001.

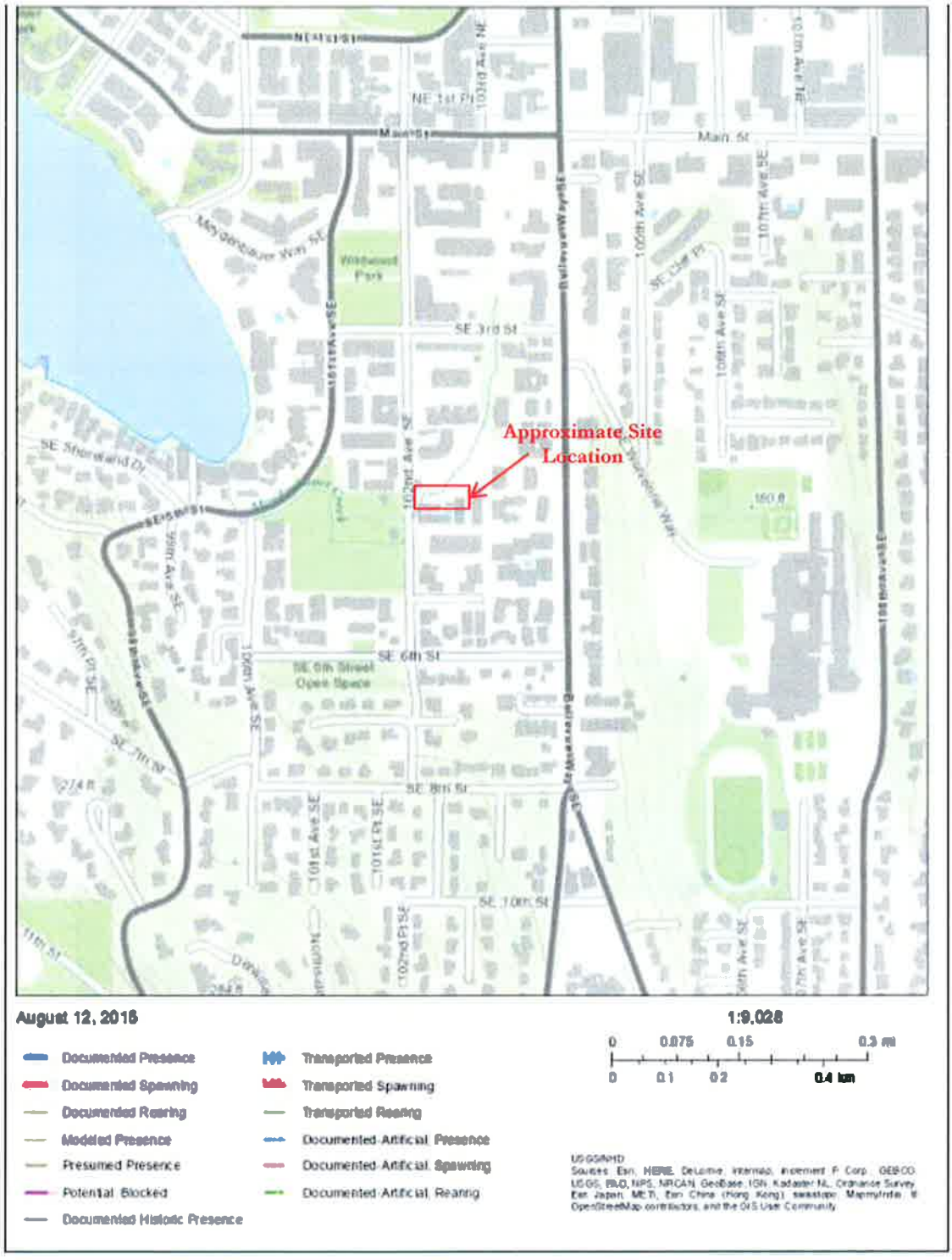
Source: http://www.ci.bellevue.wa.us/streams_wetlands.htm

## Appendix A2. Meydenbauer Creek Basin




Source: http://www.ci.bellevue.wa.us/streams_wetlands.htm

## Appendix A3. Meydenbauer Creek – WDFW SalmonScape

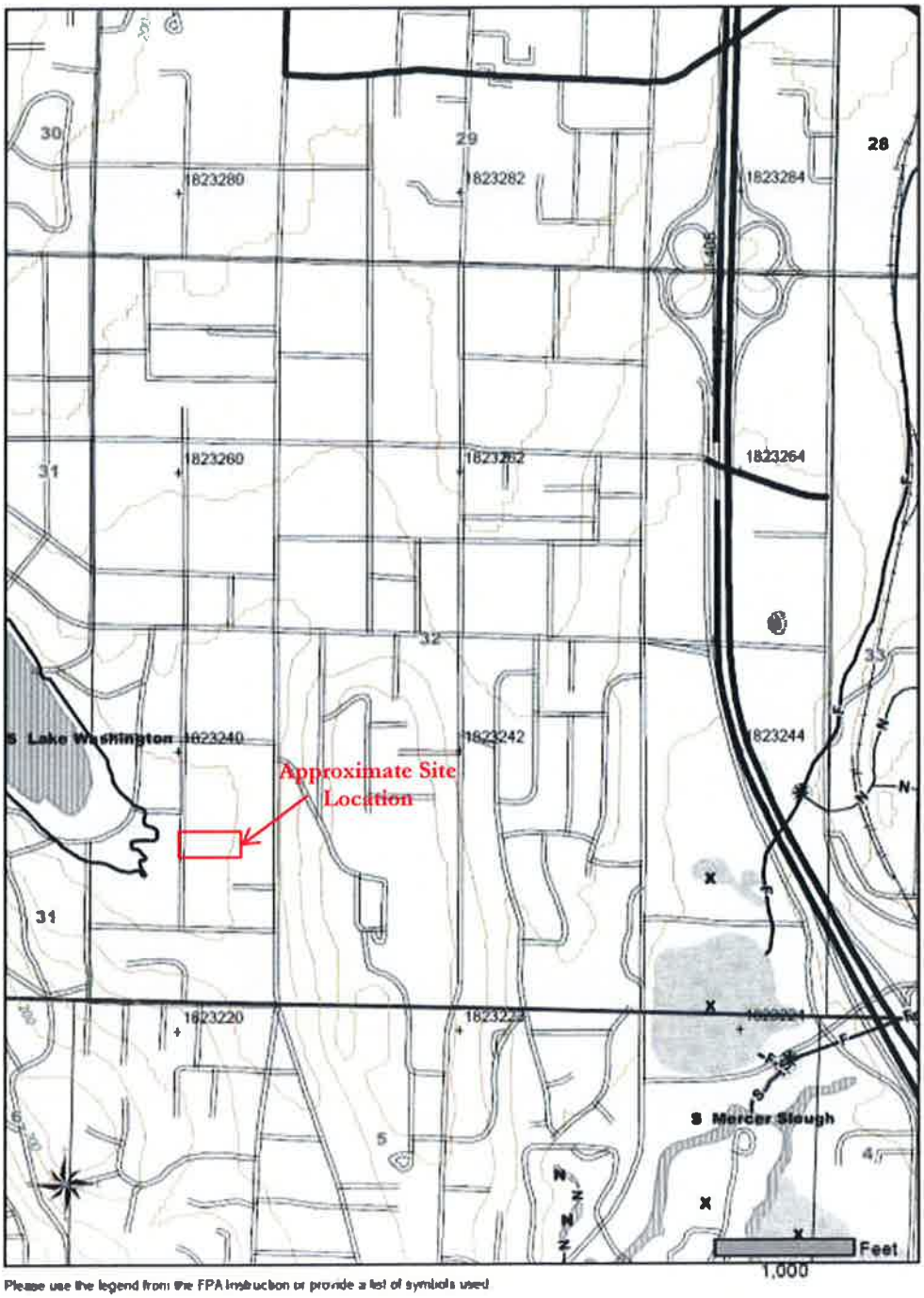


# Appendix A4. DNR Forest Practice Activity Map

**FOREST PRACTICE ACTIVITY MAP**

TOWNSHIP 25 NORTH HALF 0, RANGE 05 EAST (W.M.) HALF 0, SECTION 32

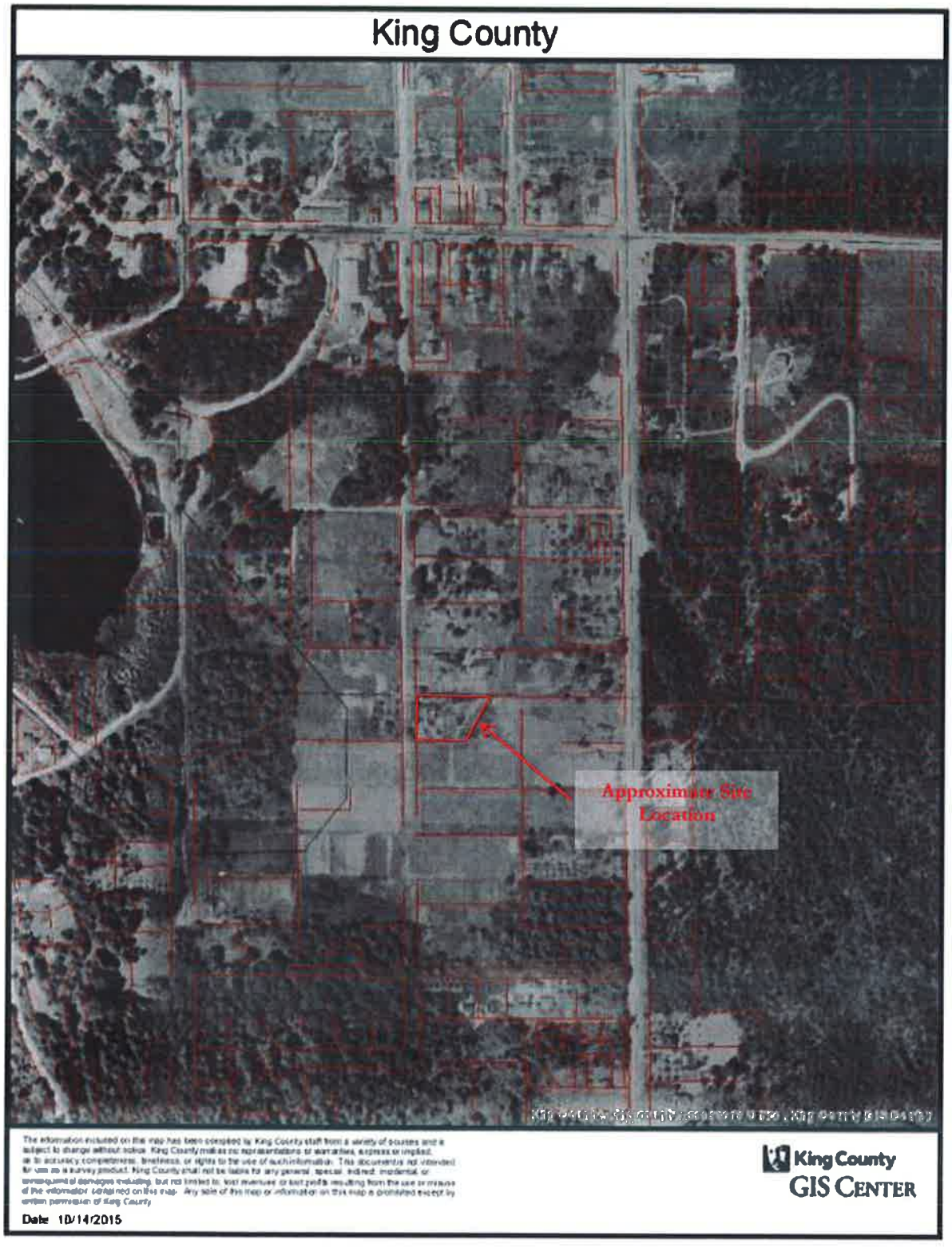
Application # _____




Please use the legend from the FPA instruction or provide a list of symbols used

Date 8/27/2015 Time 10:30:28 AM
NAD 83
Contour Interval 40 Feet

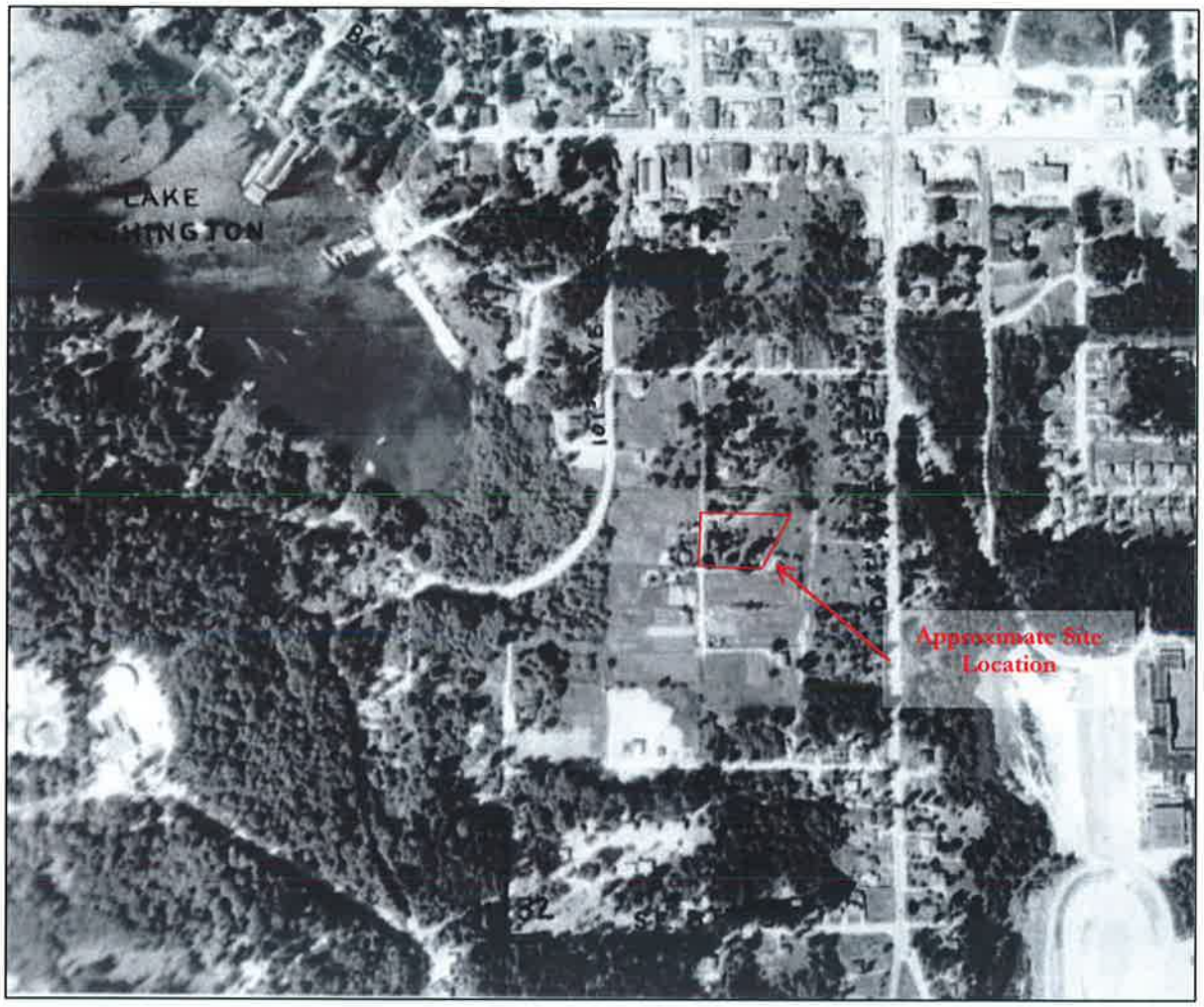
## Appendix A5. 1936 King County iMap Photo



## Appendix A6. 1937 Historical Aerial

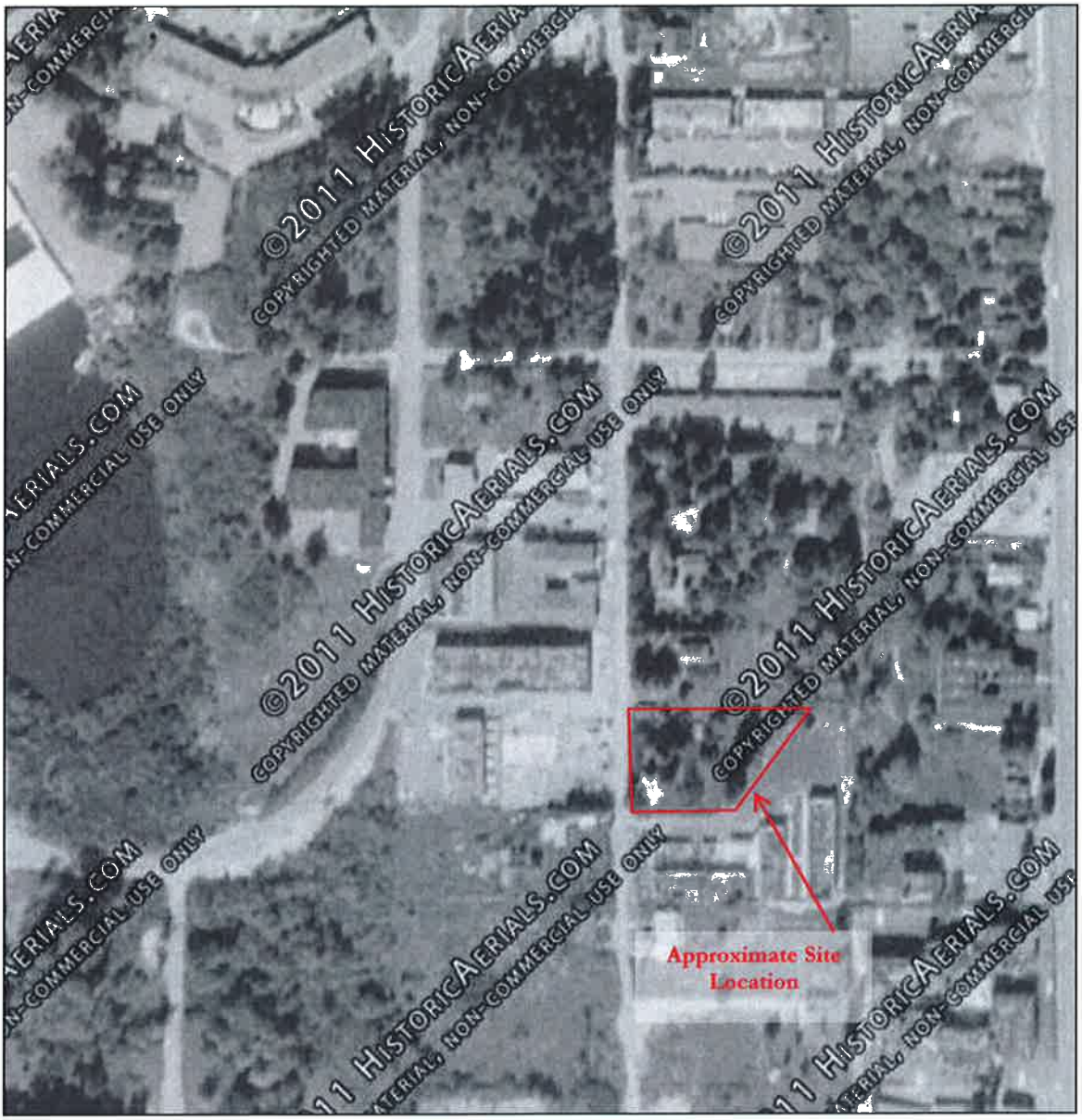
**Source:** King County Road Services Map Vault
http://info.kingcounty.gov/transportation/kcdot/roads/mapandrecordscenter/mapvault/Default.aspx

## Appendix A7. 1954 Historical Aerial



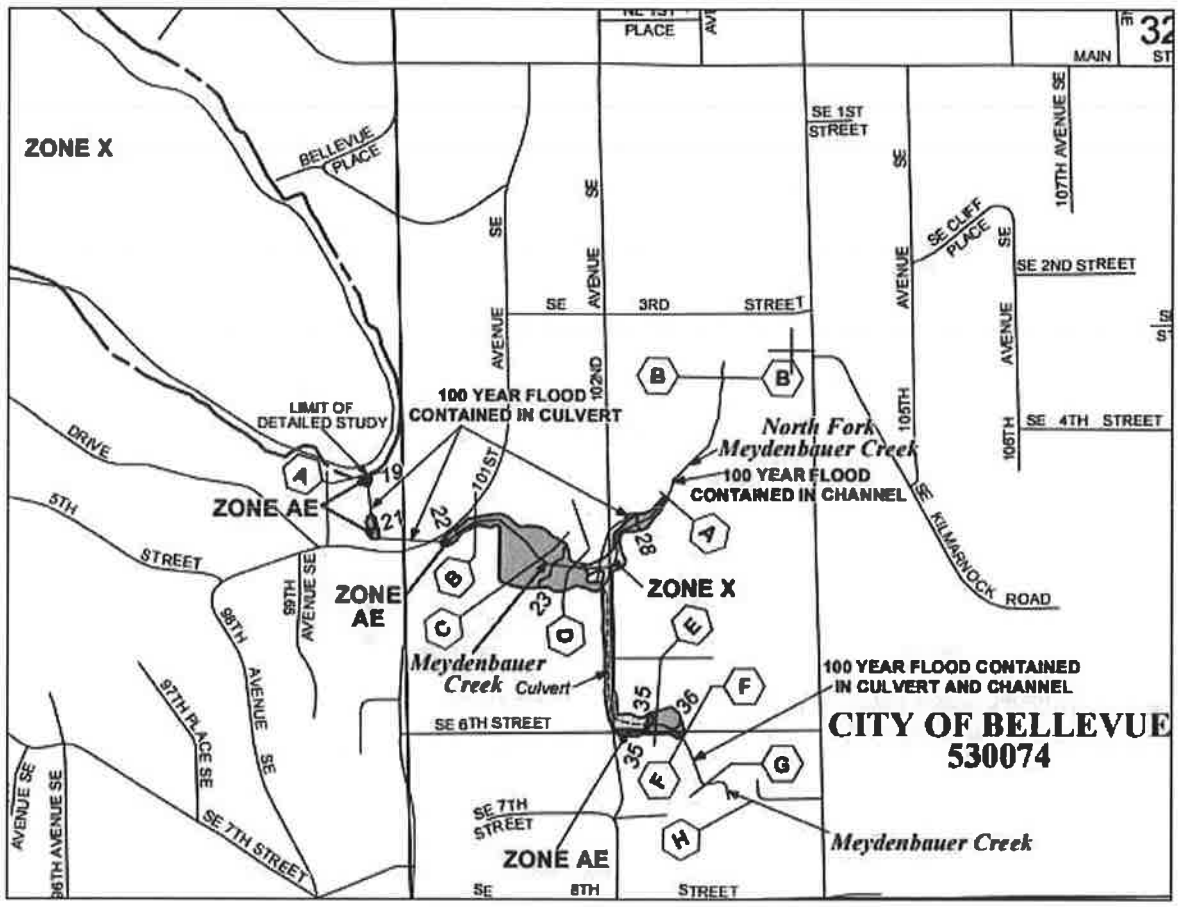

**Source:** King County Road Services Map Vault
http://info.kingcounty.gov/transportation/kcdot/roads/mapandrecordscenter/mapvault/Default.aspx

## Appendix A8. 1969 Historical Aerial



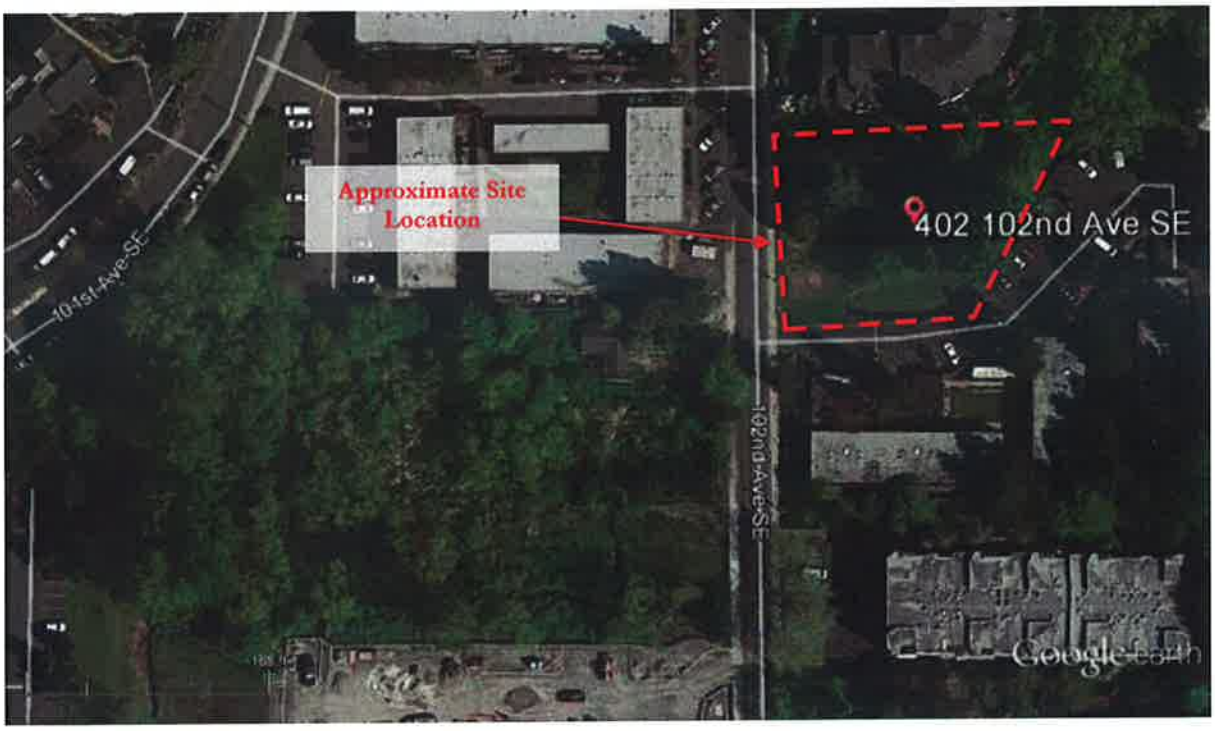

**Source: www.historicaerials.com**

## Appendix A9. FEMA Flood Map




**Source: http://www.ci.bellevue.wa.us/pdf/Utilities/D53033C_0652.pdf**

## Appendix A10. 2015 Google Earth Aerial Imagery



## Appendix A11. 2013 Google Earth Aerial Imagery

5

Hearing Examiner Gary Neil McLean

BEFORE THE HEARING EXAMINER FOR THE CITY OF BELLEVUE
IN AND FOR THE STATE OF WASHINGTON

| | |
|---|---|
| JERE ENTERPRISES LLC<br><br>Petitioner,<br><br>v.<br><br>CITY OF BELLEVUE,<br><br>Respondent. | File No. AAD 15-68<br><br>STIPULATION OF DISMISSAL AND ORDER |

## STIPULATION

COME NOW THE PARTIES HERETO, through their respective counsel, and stipulate that the Petitioner JERE Enterprises LLC's shall submit an application for a formal code interpretation (the Code Interpretation) under Chapter 20.30K of the City of Bellevue Land Use Code, regarding the classification of the water feature, identified by the City as a stream, located on Petitioner's property at 402 and 140 102nd Ave. NE, Bellevue, Washington. Once the City issues its final decision on the Code Interpretation, the City will accept a new complete application for a Critical Areas Land Use Permit, including the critical area studies completed to date. The purpose of such new application shall be to preserve the parties' respective positions regarding a Critical Areas Land Use Permit for the property; such



CITY OF BELLEVUE
450 110th Avenue NE
Bellevue, WA 98004
425-452-6829

application shall not be barred by the doctrines of res judicata or collateral estoppel. Therefore, Applicant's Appeal of the City of Bellevue's cancellation of Critical Areas Land Use Application No. 15-103115-LO shall be dismissed without cost to any party.

DATED this 22nd day of October, 2015.

CITY OF BELLEVUE
OFFICE OF THE CITY ATTORNEY
Lori M. Riordan, City Attorney

Cheryl A. Zakrzewski, WSBA 15906
Lacey L. Hatch, WSBA No. 34876
Assistant City Attorney
Attorneys for Respondent City of Bellevue

JOHNS MONROE MITSUNAGA KOLOUSKOVA PLLC

Duana T. Kolouskova, WSBA No. 27532
Attorney for Petitioner JERE Enterprises LLC



CITY OF BELLEVUE
450 110th Avenue NE
Bellevue, WA 98004
425-452-6829

## ORDER

On the basis of the foregoing Stipulation of Dismissal, IT IS HEREBY ORDERED, ADJUDGED and DECREED that this appeal, numbered AAD 15-68, is hereby DISMISSED with Prejudice.

SIGNED this 26th day of October, 2015.

Gary N. McLean, Hearing Examiner



BELLEVUE HEARING EXAMINER'S OFFICE
450 – 110TH AVENUE NE
P.O. BOX 90012
BELLEVUE, WASHINGTON 98009-9012