



RETURN NAME and ADDRESS

DOUGLAS I. JAYNE

8511 E. UPRIVER DR

SPOKANE, WA 99212

Please Type or Print Neatly and Clearly All Information

Document Title(s)

MAINTENANCE AGREEMENT FOR SHORT PLAT SHP-1587-15

Reference Number(s) of Related Documents

Grantor(s) (Last Name, First Name, Middle Initial)

DOUGLAS I. JAYNE AND BERTHA MARY JAYNE (TRUSTEES)

DOUGLAS AND MARY JAYNE FAMILY TRUST

Grantee(s) (Last Name, First Name, Middle Initial)

UPRIVER PINES ESTATES HOMEOWNERS ASSOCIATION MEMBERS

Legal Description (Abbreviated form is acceptable, i.e. Section/Township/Range/Qtr Section or Lot/Block/Subdivision)

6-25-44 NE

31-26-44 SE

Assessor's Tax Parcel ID Number 45061.0423 & 46314.0629

The County Auditor will rely on the information provided on this form. The Staff will not read the document to verify the accuracy and completeness of the indexing information provided herein.

Sign below only if your document is Non-Standard.

I am requesting an emergency non-standard recording for an additional fee as provided in RCW 36.18.010. I understand that the recording processing requirements may cover up or otherwise obscure some parts of the text of the original document. Fee for non-standard processing is \$50.

Signature of Requesting Party

AFTER RECORDING RETURN TO:

Douglas I. Jayne
8511 E. Upriver Drive
Spokane, WA 99212

**MAINTENANCE AGREEMENT
FOR SHORT PLAT SHP-1587-15**

Owner: DOUGLAS I. JAYNE and BERTHA MARY JAYNE, as Trustees of the DOUGLAS AND MARY JAYNE FAMILY TRUST dated the 15th day of April, 2005

Parent Parcel Number(s): 45061.0423,46314.0629

Abbreviated Legal Description:

PASADENA PARK #2 PTNS OF W155 FT OF TR 231, TR 229 AND TR 230 TOG W/ VAC IRRIGATION CANAL 40FT WIDE LYG N OF AND ADJ & TOG W/ VAC UNNAMED ROAD (RES 7-0423) LYG S OF & ADJ TR 236 & N OF VAC CANAL LYG ELY OF W LN OF TR 236 EXT S ALL IN SEC 6-25-44 (TOGETHER WITH PARCEL 46314.0629 IN TAX DISTRICT 2760)

Section, Township and Range, W.M.
S. 6-25-44 and SE¼ 31-26-44

The above parent parcel(s) is being short platted into a total of 4 residential lots. This short plat contains the following facilities, which require regular maintenance.

- X Private Road called N Bessie Lane
- X Signs: street name, and "No Parking - Fire Lane" signs
- X Gates, gate opener
- X Storm water swale

The lots numbered as #1-4 in this plat are utilizing or are benefitting from these facilities. The owners of these lots are responsible for (details described later):

- The continued operation and maintenance, including repair and replacement as needed, of these facilities,
- Providing funds to finance the continued operation and maintenance of these facilities,
- The administration of this agreement with each property owner being bound by this agreement and with the responsibilities to be shared equally between each property owner, and,
- Establishing a maintenance committee consisting of one representative from each lot and designating a member to be responsible for the administration of this agreement.

This maintenance agreement runs with the land and is binding upon the property owners, their heirs, successors and assigns.

1.00 PURPOSE

This maintenance agreement is to provide:

1. General operations and maintenance responsibilities for the facilities described herein, and,
2. Cost estimates of the assessments to be provided by each property owner mentioned herein for the funding of this maintenance.

2.00 GENERAL OPERATIONAL CHARACTERISTICS

Private Road

The private road (Bessie Lane) is intended to provide access from the public street (Upriver Drive) to the lots. One of the more important accesses being provided is that for emergency vehicles. Therefore, it is essential that the street remain clear and in good condition throughout the whole year. Typical private roads are designed to deliver a usable service life of 20-30 years, if properly maintained. Maintenance details are discussed below in Section 3.0.

Drainage Facilities

The private drainage system in this short plat is intended to collect, treat and discharge stormwater runoff generated by onsite improvements and, possibly, also stormwater from adjacent properties that has historically flowed onto this site. The drainage facilities consist primarily of roadside swales and grassy areas. Storm water runoff from the street is routed into the grassy roadside swales where the grass and underlying soil provide treatment and infiltration. It is important to provide adequate maintenance activities to ensure that the drainage facilities remain silt and dirt free, as this silt and dirt will affect their performance. Maintenance details are discussed below in Section 3.0.

3.00 MAINTENANCE REQUIREMENTS AND SCHEDULES

Private Road

The following describes the main components of the private road and the recommended maintenance. The private road pavement should be visually inspected each season (spring, summer, fall, and winter). Special attention should be paid in the spring when the spring thaw occurs. Inspect and remove debris and obstructions from pavement surface.

Crack Seal: The inspector should be mindful of cracks and seams in the asphalt paving surface, as asphalt pavement is not a rigid surface but a flexible surface. Because of typical flexible pavement characteristics, even a 1/2-inch crack on the pavement surface can represent a 1-inch to 2-inch crack at the bottom face of the pavement that cannot be seen. Cracks and seams allow water intrusion that can lead to alligator cracks, settlement, potholes, and eventually pavement failure. Cracks or seams in the street surface may become evident as early as the 5th year into the street's design life. These cracks and seams should be "crack sealed" by an asphalt specialist or paving company on an annual basis, preferably prior to October, to prevent water intrusion.

Fog Seal: A "fog seal", also known as a "seal coat", is a light application of a diluted, slow-setting asphalt emulsion to the surface of an aged pavement. Fog seals are low-cost and are used to minimize weathering of the asphalt surface and restore flexibility to the pavement section and are generally suitable for low-volume private streets. The expected life of a fog seal is 3 to 5 years and the overall life of the pavement

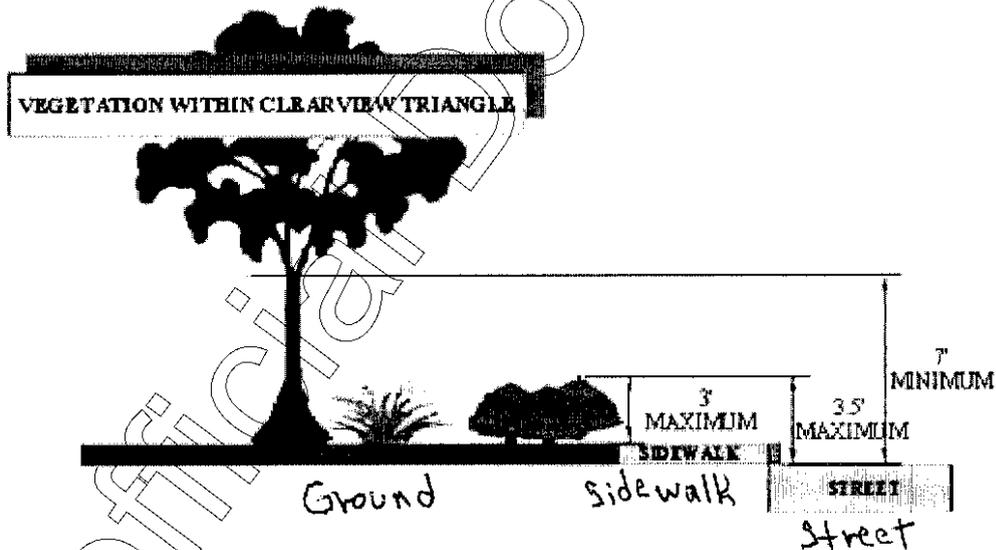
will be extended with each application. As a caution, though, excessive applications may result in a built-up asphalt layer on top of the original asphalt pavement surface that can be very smooth and cause a loss of skid resistance. The maintenance committee should consult with an asphalt specialist or paving company to determine when a fog seal is necessary.

Snow-Ice: During the winter, the private road should be snow plowed and have the ice removed as often as necessary to maintain lot access, especially for emergency vehicles. Snow plowing also ensures that snow melt and stormwater runoff can reach the roadside swales without ponding and eliminates the potential for water intrusion into cracks and seams that can create potholes and pavement failure through repetitive freeze/thaw cycles.

Signs: All signs associated with the private road and private driveway, such as the road name sign, the “No Parking – Fire Lane” signs should be visually inspected on an annual basis. Ensure that the sign posts are vertical and that the signs are clearly visible and easy to read. The design life of the signs will typically depend on the amount of sun exposure and the level of fading. The signs should be replaced when they are damaged, stolen or faded.

Clearview triangle: On each side of the private road (Bessie Lane) where it intersects the public road (Upriver Drive) is a triangular area (see attached exhibit) in which the vegetation needs to be trimmed to specific heights to make sure that motorists entering onto the public street can adequately see oncoming traffic (see figure below and Spokane Valley Municipal Code section 22.70.020). Trimming to occur as needed.

Clearview Triangle Vegetation Trimming Requirements



Automatic Gates: automatic gates typically require annual maintenance for lubricating moving parts and replacing worn parts as well as emergency maintenance for when the gate is not functioning or has been damaged. The gate’s low voltage batteries will need to be periodically replaced. The Maintenance should be provided by a hired professional.

Private Driveway

Maintenance of the paved section of the Private Driveway leading from the intersection of lot #4 (the Jayne residence) driveway, to lots #1-3 is the responsibility of the owners of those lots. To provide the owners of lots #1-3 some idea of the costs associated with maintaining the Private Driveway estimated maintenance costs are shown below. They include the costs to replace, repair, and for re-sealing the asphalt every 5 years is in a separate sinking fund calculation (entitled Private Driveway) shown below. The three owners may want to re-gravel or pave the rest of the private driveway.

Drainage Facilities

The drainage facilities consist of roadside swales and grassy areas planted along the outside edge of the road. The following describes these facilities and the recommended maintenance.

The roadside swales need to be maintained to ensure a strong, healthy, dense vegetative cover and that they are free of debris. A visual inspection of the drainage facilities should be conducted each season (spring, summer, fall and winter) and after significant rainfall and snowmelt events. For long duration storms, greater than 24 hours, the drainage facilities should be inspected during the storm event to identify any developing problems and safely correct them before they become major problems.

In general it is important to provide adequate maintenance activities to ensure that the vegetated areas remain silt, dirt and debris free because accumulations of these will affect the swale's function for stormwater treatment and storage volume. Should these facilities fill up or become clogged, the only remedy would be to remove the material. Therefore, periodic maintenance is a must.

4.00 SINKING FUNDS

A sinking fund is an account that is set up to receive regular deposits which are to be used for paying off future costs and debts. The sinking fund monies will be used to pay for planned and unplanned operation and maintenance costs along with certain future replacement costs for the Private Road (road leading from Upriver Drive to the intersection of the Jayne residence driveway) and associated facilities. The sinking fund calculation should be revised as necessary to account for actual expenses and changes in rates.

In setting up the fund, first the future replacement costs are estimated and then they are converted to annual costs (or deposits) by the following calculations. These calculations assume that the inflation rate is 3% (for estimating the future replacement costs), the typical interest rate is 2% (for estimating the annual costs) and the number of years before replacement is 20. Equations and guidance for using other rates and years can be found in Appendix A.

- 1) Estimate the value that the item will have in the future when it is time to replace it using the following equation:

$$FV = PV * 1.8061, \text{ where: } \quad \begin{array}{l} FV = \text{future value} \\ PV = \text{present value} \end{array}$$

- 2) Estimate how much money will need to be deposited each year in a bank account in order to have enough money accumulated in time to pay for the replacement using the following equation.

$$A = FV * 0.0412, \text{ where: } \quad \begin{array}{l} A = \text{annual payment (or deposit)} \\ FV = \text{future value (from step 1, above)} \end{array}$$

Sinking Fund Calculation Results for Lots #1-4:

- The following values are the results of the calculations which are shown immediately following

Annual cost for regular operation and maintenance	\$1,265
Annual cost for replacements	\$665
Total annual costs	\$1,930
Total monthly costs (= total annual costs /12)	\$160.83
Number of lots	4
Monthly cost per lot (= total monthly costs /# lots)	\$40.21

Sinking Fund Calculations:

REGULAR OPERATION AND MAINTENANCE COSTS

Description	Units	Annual Quantity	x	Unit Price	Annual Cost
Pavement cleaning	LS	2		\$50	\$100
Crack Seal	LS	1/2		\$250	\$125
Fog Seal (every 5 years)	EA	1/5		\$750	\$150
Snow-ice removal	EA	4		\$150	\$600
Automatic Gate opener	LS	1		\$150	\$150
Mowing storm water swale	EA	2		\$70	\$140
				Total	\$1,265

REPLACEMENT COSTS

Item	Units	Quantity	Unit Price	Present Value	Future Value	Annual Cost
Automatic Gate Opener & Key Pad	EA	1	\$3,860	\$3,860	\$6,972	\$287
Private Road Pavement	SY	321	\$15.55	\$4,992	\$9,016	\$371
Sign repair/replacement	EA	2	\$50	\$100	\$181	\$7
					Total	\$665

Notes:

N=number of years to replacement (20 years assumed)

Inflation Rate – assumed at 3% annually

Return on Investment – assumed at 2%

LS means Lump Sum, EA means Each, SY means square yard

Future Value (FV) multiplier for figuring Annual Cost at 2% annual return over 20 years =0.0412

*Assumes half the road would need to be repaved in 20 years & 50% added to paving cost for old asphalt removal.

Sinking Fund Calculations Results for Private Driveway to Lots #1-3:

- The following values are the results of the calculations which are shown immediately following

Annual cost for regular operation and maintenance	\$608
Annual cost for replacements	\$212
Total annual costs	\$820
Total monthly costs (= total annual costs /12)	\$68.33
Number of lots	3
Monthly cost per lot (= total monthly costs /# lots)	\$22.78

Sinking Fund Calculations:

REGULAR OPERATION AND MAINTENANCE COSTS

Description	Units	Annual Quantity x	Unit Price =	Annual Cost
Pavement cleaning	LS	2	\$50	\$100
Crack Seal	LS	1/2	\$250	\$125
Fog Seal (every 5 years)	EA	1/5	\$413	\$83
Snow-ice removal	EA	4	\$75	\$300
			Total	\$608

REPLACEMENT COSTS

Item	Units	Quantity	Unit Price	Present Value	Future Value	Annual Cost
Private Road Pavement	SY	177	\$15.55	\$2,752	\$4,970	\$205
Sign repair/replacement	EA	2	\$50	\$100	\$181	\$7
					Total	\$212

Notes:

N=number of years to replacement (20 years assumed)

Inflation Rate – assumed at 3% annually

Return on Investment – assumed at 2%

LS means Lump Sum, EA means Each, SY means square yard

Future Value (FV) multiplier for figuring Annual Cost at 2% annual return over 20 years =0.0412

*Assumes half the road would need to be repaved in 20 years & 50% added to paving cost for old asphalt removal.

IN WITNESS WHEREOF, the undersigned has reviewed the above information and determined it to be appropriate for the improvements proposed for this short plat and has caused this instrument to be executed on this 29th day of November, 2016.

Signature: Douglas I. Jayne

Name (print): Douglas I. Jayne

Title: Developer

STATE OF WASHINGTON)
COUNTY OF SPOKANE)

I certify that I know or have satisfactory evidence that Douglas I. Jayne is/are the individual(s) who personally appeared before me, and who acknowledged that he/she/they executed and signed this instrument and acknowledged it to be his/her/their free and voluntary act for the uses and purposes mentioned in this instrument.

Dated this 29th date of November, 2016.

Unofficial Document



A. McLallen
NOTARY PUBLIC
In and for the State of Washington,
Residing at Spokane county
My appointment expires: March 13th 2018

Appendix A

The future replacement costs can be estimated and then converted to annual costs (or deposits) by the following calculations.

- 1) Estimate the value that the item will have in the future when it is time to replace it using an assumed (best estimate) inflation rate and the following equation:

$$FV = PV * (1 + i_1)^n, \text{ where:}$$

FV = future value

i_1 = inflation rate

PV = present value

n = number of years to replacement

Example values for the factor: $(1 + i)^n$

		n, years			
		5	10	15	20
i_1	0.02	1.1041	1.2190	1.3459	1.4859
	0.03	1.1593	1.3439	1.5580	1.8061
	0.04	1.2167	1.4802	1.8009	2.1911
	0.05	1.2763	1.6289	2.0789	2.6533

- 2) Estimate how much money will need to be deposited each year in a bank account in order to have enough money accumulated in time to pay for the replacement using an assumed (best estimate) interest rate and the following equation:

$$A = FV * i_2 / [(1 + i_2)^n - 1], \text{ where:}$$

A = annual payment

i_2 = interest rate

FV = future value

n = number of years to replacement

Example values for the factor: $i_2 / [(1 + i_2)^n - 1]$

		n, years			
		5	10	15	20
i_2	0.02	0.1922	0.0913	0.0578	0.0412
	0.03	0.1884	0.0872	0.0538	0.0372
	0.04	0.1846	0.0833	0.0499	0.0336
	0.05	0.1810	0.0795	0.0463	0.0302