

ARTICLE 6.6 – PUBLIC STREET STANDARDS

SECTION 6.6.001 - PURPOSE

Upon the request of the La Grande City Council, a variety of street design standards have been reviewed and are now incorporated in the Land Development Code.

SECTION 6.6.002 - CLASS I IMPROVEMENT STANDARDS

This classification will cover those streets that are designed to meet the standards for an expected life of twenty (20) years or more. The drawings set forth in the Public Works *Engineering Standard Drawings and Specifications for Construction Manual*, adopted by Resolution of the City Council, shall be the minimum standard for those streets in this classification. All streets designated as Federal Aid Urban Streets (F.A.U.) shall be constructed under these design standards. Streets in this designation shall be constructed with sidewalks when at all possible in an effort to increase pedestrian safety. Collector streets are designed to withstand normal trucks of an HS 20 loading. Larger trucks are to utilize Arterial streets where at all possible. This level of development shall be the ultimate goal for all streets within the City of La Grande.

A. Advantages

1. The construction life is extended to a period above other City standards.
2. The visible aesthetics in relationship to having curbs and a blacktop surface with landscaping or concrete driveways and a sidewalk is generally appealing to the public.
3. Easy maintenance for the Public Works Department for cleaning and minor repair.
4. Storm sewer drainage is confined within the bounds of the curbs during minor flooding periods.
5. Parking is restricted to a solid barrier, that being the curb; this restricts parking in the area on the back side of the curb and confines travel to the street surface.
6. Defined areas for possible cross walks, signs, power poles, and other utilities that are restricted to the outside areas behind the curbs.
7. It allows for a wide range of financing methods and is to City standards for a ten (10) year Bancroft bonding.
8. Provides a dust free surface.

B. Disadvantages

1. The extreme high level of cost that is incurred with this type of development.

SECTION 6.6.003 - CLASS II IMPROVEMENT LEVEL

Streets constructed in this classification shall be constructed to the same standards as Class I Streets with the exception of the form of drainage system. These streets shall meet the standards as set forth in the Public Works *Engineering Standard Drawings and Specifications for Construction Manual*, adopted by Resolution of the City Council. This level of construction shall be only utilized in substitution for Class I Streets when it is determined by the City Council at the recommendation of the City Engineer or Engineering Superintendent, that an adequate drainage system cannot be installed for a Class I Street.

Factors for consideration of the class of construction will be, but not limited to: Cost, maintenance, hydrology, adverse weather conditions, or geographic location and soil types.

Parking in this Class shall be restricted to the asphalt surface and discouraged from any vehicular use of the street shoulder. This method shall be used with extreme scrutiny. Streets under this Classification are expected to have a twenty (20) year life with minimal maintenance.

A. Advantages

1. The surface level of the street is constructed to maintain a twenty (20) year life.
2. It allows for on-site drainage within the right-of-way.
3. Two (2) travel and parking lanes are provided under the thirty-six foot (36') wide or wider design.
4. It can be utilized with or without sidewalks without adverse effects on the drainage system.
5. It allows for a wide range of financing methods and is to City standards for a ten (10) year Bancroft bonding.
6. Provides a dust free surface.

B. Disadvantages

1. Cars have a tendency to utilize the French drain system for parking which plugs the drainage system.
2. There is not a defined area for street cleaning or snow plowing.
3. The initial cost for the project is fairly high but is reduced from the Class I improvement level.
4. Surface water flow is not restricted to the street surface during low level flooding periods.
5. This improvement level cannot be constructed within certain soil classifications due to poor subsurface drainage.

SECTION 6.6.004 - CLASS III IMPROVEMENT LEVEL

Streets developed to this classification shall be constructed at a service level to expect a five (5) year life with minimal maintenance. They shall be constructed to the standard as indicated set forth in the Public Works *Engineering Standard Drawings and Specifications for Construction Manual*, adopted by Resolution of the City Council. This construction class does not require storm sewer development. Only existing oil-mat streets will receive this treatment. A minimum of base material will be utilized to develop a street crown.

This Class of street should only be done when a large enough project has been developed to fully use a full load of liquid asphaltic concrete oil. These projects should be constructed during the months of June, July, and August.

With a street development of this Class, property owners would be required to monetarily support any repairs or maintenance after the five (5) year life expectancy.

A. Advantages

1. A reduced cost.

2. Provides a dust free surface.
3. A fairly wide range of financing methods.
4. An easy construction method with a minimal base.

B. Disadvantages

1. The surface level of the street is constructed to maintain a maximum five (5) year life expectancy.
2. Does not apply for F.A.U. funding.
3. There is no drainage system allowed for in the design of this level.
4. Street maintenance is increased.
5. Does not have a defined area for street cleaning or snow plowing.
6. No defined low level flood water runoff is allowed for.

SECTION 6.6.005 - CLASS IV IMPROVEMENT LEVEL

This level is intended to be used only for the purpose of dust control. Because of the quality of the different products that can be used for this purpose, the effective life expectancy can range from two (2) months to twelve (12) months. Because of this, no warranties are being implied or offered. Only existing gravel streets will receive this treatment. Prior to the actual application, the Public Works Department will review the street to determine the necessary level of repair. Actual work will be done generally within a one (1) week period after review.

When needed, base rock and/or blading will be done to facilitate the project as determined by the Public Works Department. A minimum of one (1) block or its equivalent, three hundred feet (300'), will be the acceptable project length. This level of service will be divided into divisions due in the most part to the wide range of application methods.

Level I - Heavy Oils and Asphalt Emulsions

These are sold under a variety of product names including DO-4, DO-5, DO-6, DO-8, and CSS-1. The DO products are heavy virgin oil products similar to bunker fuel; while CSS-1 is an asphaltic emulsion.

Level II - Sodium Lignin Sulfate

This forestry by-product contains lignin and sugar that act as "glue" to hold dust particles together and to fill small spaces between particles. Care must be taken to grade the road so that water does not stand on the road surface causing the lignin and sugar to leach away.

Level III - Oil Water Emulsion

This emulsion is mixed with water on a four to one (4:1) to ten to one (10:1) basis depending on surface qualities. Under average conditions, a four to one (4:1) dilution applied at one and one-half (1½) gallons per square yard will suffice. The first application should be good for approximately three (3) months depending on the amount of traffic use.

Level IV - Magnesium Chloride

This is a salt product that allows the surface of the road to maintain moisture and to bind particles together. It should not be used on previously oiled surfaces, and it may cause slight damage to vegetation within a few feet of treated roads.

A. Advantages

1. The cost per property line foot is low.
2. Ease of application
3. Utilized for dust abatement only.

B. Disadvantages

1. Minimal life expectancy of two (2) months.

SECTION 6.6.003 - CLASS V IMPROVEMENT LEVEL

This level is intended to be used only for the purpose of semi-private local street access when it is determined by the Planning Commission at the recommendation of the City Public Works Director, that a full Class I or Class II street cannot adequately be constructed to serve the development. Streets constructed in this classification shall be constructed to the same standards as Class I Streets with the exception of the form of drainage system, curbs, parkway strip and sidewalk. These streets shall meet the standards as set forth in the Public Works *Engineering Standard Drawings and Specifications for Construction Manual*, adopted by Resolution of the City Council.

Factors for consideration of the class of construction will be, but not limited to: topography, land use density, emergency services Cost, maintenance, hydrology, adverse weather conditions, or geographic location and soil types.

Parking in this Class shall be restricted to the asphalt surface and discouraged from any vehicular use of the street shoulder. This method shall be used with extreme scrutiny. Streets under this Classification are expected to have a twenty (20) year life with minimal maintenance.