

MAPLELANE URBAN RESERVE AREA

Total Acres	573	Parcel Acres	555
Gross Vacant Buildable Acres	260	Net Vacant Buildable Acres	197

General Description (see attached map)

The Maplelane Urban Reserve Area is an irregular shaped area on the east side of Oregon City, north and south of S Maplelane Road that totals 574 acres in size. The current UGB forms the eastern and southern boundary of the area. A tributary to Abernathy Creek flows east through the central portion of the reserve and three tributaries to Thimble Creek flow east through the southern portion. The area is primarily flat, with the exception of some small areas of steep slopes along the stream corridors and within the forested northeastern corner of the reserve area. The area is served by S Maplelane Road, S Waldow Road and S Thayer Road. Abernathy Creek flows north, just outside of the reserve area to the east

Parcelization, Building Values, Development Pattern (see attached aerial photo)

This mid-sized urban reserve area contains 166 parcels that range in size from less than 1,000 square feet to over 57 acres in size. Ninety-five percent of the parcels are less than ten acres in size and only four are greater than 20 acres. Overall, 146 of the 166 parcels have improvements, with a median value of \$171,015, excluding any publicly owned buildings. The area is generally composed of rural residential development focused on S Maplelane and S Thayer Roads with a few locations of very small scale agricultural activity. Five of the parcels are in public ownership, including the largest parcel that is owned by the Oregon City School District (57 acres). Portland General Electric has a 35 acre substation at the corner of S Waldow Road and S Maplelane Road. Ten power lines radiate from the substation, three to the west, two to the north and five to the south, two of which are partially located on three contiguous parcels owned by the United States government.

GOAL 14 LOCATIONAL FACTORS

Efficient accommodation of identified land needs

The reserve area is generally flat with only a few locations of slopes greater than 10%, mainly located at the edges of the area and along stream corridors. While this provides the opportunity for employment possibilities from a land topography perspective, the number of small parcels and the somewhat isolated nature of the land some distance from I-205 reduce the attractiveness of the area for employment use. In addition, there is an existing employment and commercial node at Highway 213 and Beaver Creek Road and additional vacant industrial zoned land nearby, further reducing the need for additional employment land. The existing rural residential development

pattern does provide the opportunity for future residential development and school district's property would provide a focal point for the neighborhood once a school was built. Therefore this area is able to accommodate a residential land need.

Orderly and economic provision of public facilities and services

Sanitary Sewer Services

Capacity of existing facilities to serve areas already inside the UGB

Oregon City's Infrastructure Master Plan includes planned improvements and funding necessary to support the expected growth within the existing UGB.

Capacity of existing facilities to serve areas proposed for addition to the UGB

Additional growth beyond the UGB is going to be a challenge for Oregon City due to the capacity of existing major facilities such as wastewater treatment and conveyance. Currently the City is not completing necessary infrastructure planning for growth in the urban reserve areas. Development in the reserve area will include major infrastructure changes and costs for improving the existing infrastructure have not been included in the sewer cost estimate due to the unknown nature of actual improvements required.

Impacts to existing facilities that serve nearby areas already inside the UGB

There will be significant impacts to existing facilities and other necessary facilities will require major construction in sensitive (landslide prone) areas. Most of this infrastructure would be built by the development community. All flows for this area are pumped.

Sanitary Sewer Piping Costs

Sanitary sewer piping costs	Cost (in millions)
Less than 12" pipe (gravity)	\$2.18
Force main	\$2.60
Pump station	\$2.45
Total	\$7.23

Water Distribution Services

Capacity of existing facilities to serve areas already inside the UGB

The City of Oregon City serves lands within their corporate boundary. Oregon City has recently annexed the Beaver Creek UGB expansion area to the southwest. While the city is adequately served elsewhere, they do not have the water storage necessary to serve these recently annexed areas. Lands within the jurisdiction of Clackamas County in this vicinity are served by Clackamas River Water (CRW). CRW has adequate capacity to serve both the lands within the UGB and its rural customers. They operate a 30 MGD water treatment plant. Volumes available for their service area

are 7.4 MGD on north and around 4 MGD on south for a total availability of approximately 11 MGD. The treatment plant is 50 years old and a pending facility master plan will determine what types of upgrades will be needed in the future. As noted above, the Beaver Creek (previous UGB expansion) area needs a new reservoir to serve its pressure zone. Within five years, CRW expects to have a 2.2 or 2.5 million gallon elevated reservoir in the area. It is unclear however if this, or a future city owned facility will serve the Beaver Creek area.

Capacity of existing facilities to serve areas proposed for addition to the UGB

CRW is planning for the urban reserve areas and most the Maplelane reserve area is in CRW. However they will not likely be the service provider in the future. Oregon City has the general policy that they will serve all of the lands within the UGB. As reserve areas are included in the UGB, the City intends to serve them. Oregon City would therefore annex the areas and subsequently take ownership of any water related infrastructure within the reserve area. There would be an exception for facilities that are needed to go beyond the area in question such as large scale transmission lines. Accordingly CRW, like many service providers must be are cautious about investing in improvements for the rural areas that may become urban. CRW has more than enough water to serve the urban reserve area and is expected to build a new storage reservoir within the next few years. Oregon City has plans to build reservoirs that could serve urban reserves, but no timeline information is available at this time.

Impacts to existing facilities that serve nearby areas already inside the UGB

As noted above, CRW has water networks in place that can serve the reserve area without significant upgrades; however it is not clear that CRW will be the future water provider. There are new storage reservoirs currently planned to serve lands within the existing UGB that are also needed for servicing the Maplelane reserve area. These reservoirs will be constructed regardless of the status of reserve area. Oregon City will need to provide new facilities.

Water Costs

Water piping/storage/pumping costs	Cost (in millions)
12" and smaller	\$5.84
Storage/pumping	\$2.7
Total	\$8.54

Storm Sewer Services

Capacity of existing facilities to serve areas already inside the UGB

There is no indication of capacity issues with existing stormwater facilities that serve the land inside the UGB.

Capacity of existing facilities to serve areas proposed for addition to the UGB

Stormwater will be conveyed, treated, and disposed of within the reserve area, therefore, it is not anticipated that existing facilities would be utilized. Stormwater will be complex but manageable given this infrastructure would be at the upstream edge of the surrounding basins.

Impacts to existing facilities that serve nearby areas already inside the UGB

Stormwater will be conveyed, treated, and disposed of within the reserve area; therefore, no impacts to existing facilities are anticipated.

Storm sewer conveyance and water quality/detention costs for roadways

Conveyance & water quality/detention costs	Cost (in millions)
Conveyance	\$6.71
Water quality/detention	\$6.38
Total	\$13.09

Transportation Services

Capacity of existing facilities to serve areas already inside the UGB

Roadway: Most of the roadways in Oregon City have an acceptable volume/capacity ratio (<0.9) for the 2015 pm peak. Southbound Highway 213, from Holcomb Blvd to Beaver Creek Road, has a congested volume/capacity ratio (<1.0) as does most of I-205 in both directions through Oregon City and across the Abernathy Bridge. A short section of southbound Highway 213, between I-205 and Holcomb Blvd has a severely congested volume/capacity ratio (>1.0) as does short portions of I-205 through Oregon City. Highway 213 also has a small severely congested section in both directions between Meyers Road and Glen Oak Road.

Highway 213 south of Beaver Creek Road, Molalla Ave from Division Street to Highway 213 and McLoughlin Boulevard through downtown Oregon City are classified as high injury corridors for automobiles. McLoughlin Boulevard through downtown Oregon City is classified as a high injury corridor for pedestrians.

Transit: Four TriMet bus lines serve Oregon City all of which focus on the downtown and central portion of the city along Molalla Ave. Service is provided to Clackamas Community College but large portions of the city are not served by transit.

Bike: Oregon City has 24 miles of dedicated bike lanes and three miles of established bikeways with most of them located in the “up-top” section of the city. The Park Place neighborhood is also fairly well served and Highway 213 has dedicated bike lanes. Most of the downtown streets are classified as bike with caution streets and the South End neighborhood has minimal bike facilities.

Pedestrian: Downtown Oregon City is well served by sidewalks as is Molalla Ave as it extends to the “up-top” portion of the city. There are a number of pockets of older subdivisions that do not have sidewalks with more recent developments well served by sidewalks.

Capacity of existing facilities to serve areas proposed for addition to the UGB

Roadway: S Maplelane Road and S Thayer Road are the main access ways to the reserve area and both have an acceptable volume/capacity ratio (<0.9) for the 2015 pm peak as does the nearby section of Beaver creek Road. Southbound Highway 213, from Holcomb Blvd to Beaver creek Road, has a congested volume/capacity ratio (<1.0) and a short section of southbound Highway 213, between I-205 and Holcomb Blvd has a severely congested volume/capacity ratio (>1.0).

Transit: TriMet bus lines 32 and 99 provide service to Clackamas Community College which is approximately 1¼ miles away with the closest stop on route 32 at Highway 213 and S Beaver creek Road just under one mile away from the reserve area. No other bus line provides service near the reserve.

Bike: The dedicated bike lane on S Maplelane Road ends approximately one-third of a mile from the reserve area. A 650 foot portion of S Thayer Road that is close to the urban reserve area also contains a dedicated bike lane on one side of the road, adjacent to a newer subdivision. There is a 1,100 foot gap between this bike lane and the bike lane on S Maplelane Road, which connects to the bike lane on Beaver creek Road and numerous other bike facilities “up-top”.

Pedestrian: One nearby subdivision at Thayer Road and Maplelane Road has streets that have sidewalks, however none of the streets that serve the reserve area have sidewalks and there are no trails that serve or extend to the reserve area.

Impacts to existing facilities that serve nearby areas already inside the UGB

Roadway: S Maplelane Road and S Thayer Road are the main access ways to the reserve area and both have an acceptable volume/capacity ratio (<0.9) for the 2015 pm peak. These roads would not be impacted beyond the need to improve the roads to urban standards. Southbound Highway 213, from Holcomb Blvd to Beaver creek Road, has a congested volume/capacity ratio (<1.0) and a short section of southbound Highway 213, between I-205 and Holcomb Blvd has a severely congested volume/capacity ratio (>1.0). Both of these sections would be impacted in the pm peak timeframe.

Transit: TriMet bus lines 32 and 99 would not be impacted by urbanization of the reserve area. See transit analysis below.

Bike: The nearby bike lanes on S Maplelane Road and S Thayer Road could see additional use when bike lanes are constructed on the portions of these two roadways within the reserve area. The gaps in the bike lanes will need to be completed. The bike lanes on Beaver creek Road could also see additional use as it leads to numerous other bike facilities “up-top” and the Highway 213 Trail that leads to Clackamas Community College.

Pedestrian: There is no impact to the sidewalks or trails that serve nearby areas inside the UGB. Sidewalk gaps need to be completed on the roadways already inside the UGB to connect with the reserve area.

Need for new transportation facilities and costs (see attached transportation map)

S Maplelane Road would need to be improved to urban arterial standards and S Waldow Road and S Thayer Road would need to be improved to urban collector standards. Three new collectors are needed to provide necessary street connectivity.

Facility Class		
Arterials	Type	Cost (in millions)
	Existing/Improved	\$48.29
Collectors	Type	Cost (in millions)
	Existing/Improved	\$40.27
	New	\$26.04
Total		\$114.60

Provision of public transit service

TriMet evaluated the reserve area for providing transit service. TriMet could provide services to the reserve area although there is no guarantee of service. Actual service depends on the level of development in the expansion area and in the corridors leading to the reserve area. Service could be provided at 30 minute headways for all day service, seven days a week, by extending line 79 with two additional buses at a capital cost of \$800,000 (recurs every 16 years). Annual service cost is \$1,216,666 and grows 2% per year.

Prior to land being included in the UGB a more detailed concept plan, consistent with the requirements of Metro’s Urban Growth Management Functional Plan Title 11, is required. This concept plan process will develop more refined public facility and service needs and cost estimates.

Comparative environmental, energy, economic and social consequences (ESEE analysis)

Environmental

A tributary of Abernethy Creek flows east through the reserve area for approximately six-tenths of a mile on the north side of S Maplelane Road, east of S Waldow Road. Just over half of the stream flows through open land and includes two National Wetland Inventory (NWI) wetlands (0.92 & 0.76 acres) and identified riparian habitat. The remaining portion flows through a forested area that contains significant sections of slopes greater than 25%. The open landscape stream section is located in such a manner that would allow for the protection of the stream corridor, wetlands and habitat areas consistent with urban protection levels while allowing for future development opportunities on the remaining portion of the parcels. The forested section would also be impacted minimally from urbanization due to development constraints related to steep slopes. In addition, a significant portion of the upland habitat adjacent to the stream is located on the school district

property, which would not be impacted by the development of future school facilities given steep slope constraints.

Three tributaries to Thimble Creek flow generally east through the southern portion of the area on the south side of S Thayer Road. The main tributary flows in an arcing pattern from the southern edge of the reserve area and then east for 0.6 miles before joining Thimble Creek just outside the reserve boundary, ultimately draining into Abernathy Creek. About a half of this stream flows through semi-forested or forested land that provides a fairly good riparian corridor. The remaining portion of the stream is located adjacent to S Thayer Road, away from the developable portions of these parcels. While this allows for development of the parcels without impacting the stream corridor, road improvements to bring S Thayer Road up to urban standards would impact the stream's riparian habitat in this location. There are some significant locations of upland habitat adjacent to the stream corridor that could be impacted as access to this portion of the urban reserve would need to come from S Thayer Road, unless access came from S Loder Road to the south that is already inside the UGB. The steep slopes in these areas would limit the amount of the residential development that can occur, thus protecting significant portions of the upland habitat. Natural resource protection requirements on land inside the UGB will help reduce the overall impacts, although significant impacts would be expected given the stream's location near S Thayer Road, needed access to the parcels to the south and other transportation connection needs.

A minor tributary (600 feet) joins the main tributary in the southwest corner of the reserve area. About half of this stream is located on land owned by the U.S. government and would be off limits to development due to the presence of power lines. The remaining section flows through an intact riparian corridor that is identified as habitat. Impacts to the habitat areas could occur depending on the design of the future development and transportation connection needs.

The third tributary appears to originate from a pond (not included in NWI) on the north side of S Thayer Road and flows for about a third of a mile before joining the main tributary south the roadway. This stream flows mostly through forested areas and a second pond, also not identified as a wetland on the NWI, is located along the stream route. There is both riparian and upland habitat identified along this stream segment. Impacts to the habitat areas could occur depending on the design of the future development and transportation connection needs.

Overall urbanization of the area could occur with moderate to high impacts to the stream corridors, wetland and the upland habitat areas.

Energy, Economic & Social

The power lines, steep slopes and natural resources divide up the reserve area into small sections of developable land. Development of the school property as a school facility further reduces the potential buildable area. It is expected that urbanization of the reserve area will result in new housing replacing the existing rural residences over time, resulting in clusters or relatively small new developments with nearby green spaces similar to what is currently there now. Any development that did occur in these small areas would not be substantial, thus the social impacts to the existing residents would be minimal. S Maplelane Road and S Thayer Road provide the only

connections between the reserve area and the commercial/employment node along Highway 213 and S Beavercreek Road and any additional development would increase the amount of traffic that occurs on these two roadways. However, given the modest amount of development that would occur, the increase in traffic would not be great and there is potential for new connections through the land to the south that is in the UGB but not yet urbanized. Existing residents are already near a commercial area and urbanization would provide the opportunity for other modes of transportation besides the automobile that could reduce some local trips, thus the energy impact is not substantial. The agricultural activity within the reserve area is minimal. The loss of the economic impact from these agricultural uses would not be considerable and the potential economic impact of residential urbanization, even though it is not significant will outweigh this loss. Overall this analysis area has low economic, social and energy consequences from urbanization.

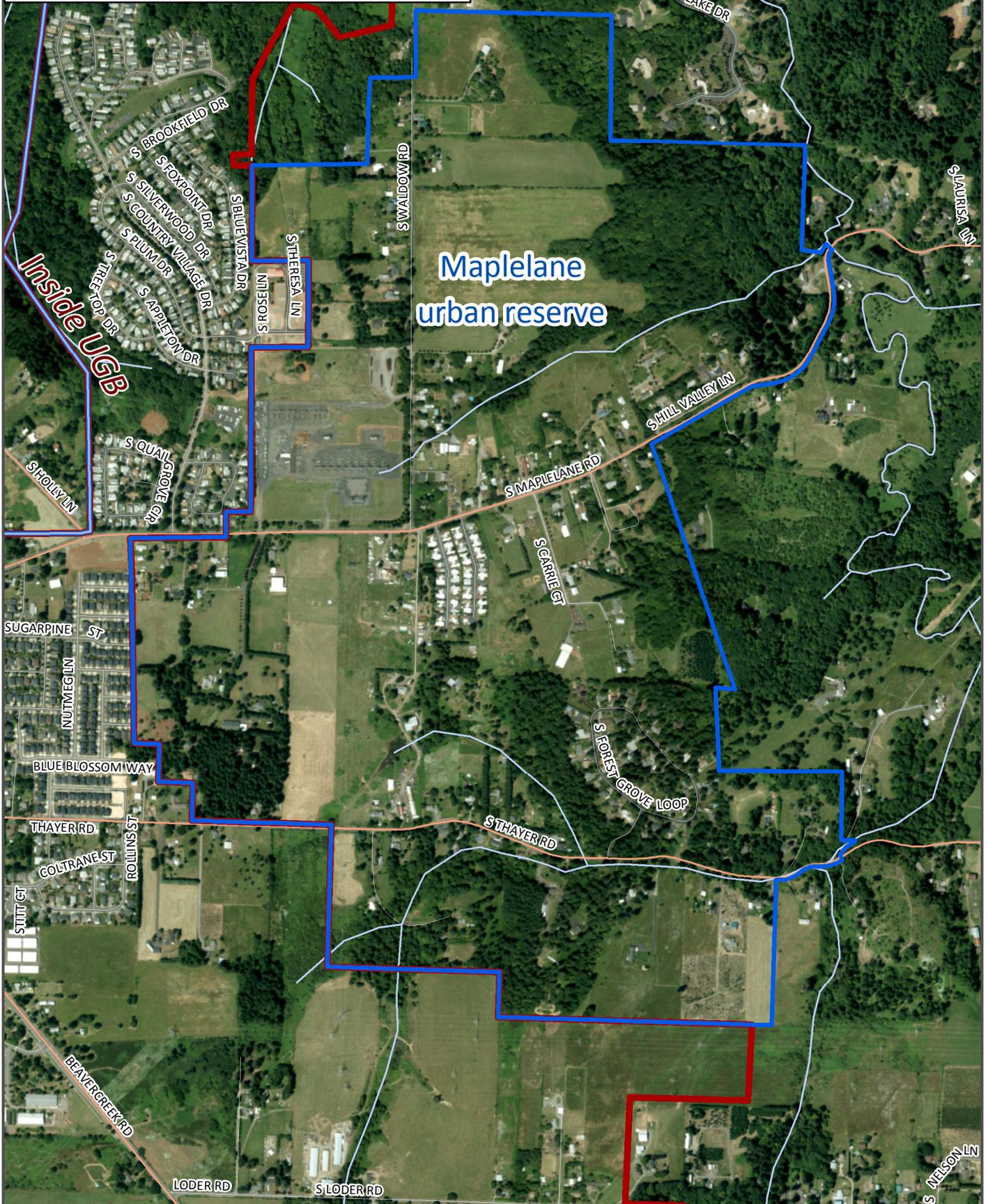
Compatibility of proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB (see attached resource land map)

There are three locations where farm or forest land is contiguous to the urban reserve area. The first area consists of one parcel at the north end of S Waldow Road that is zoned for timber use (TBR). This 15 acre parcel contains a single family residence and is adjacent to a rural residential development that contains very large homes on one to three acre parcels. Due to the current residential use of the property and the adjacent uses, the likely hood of timber activities on this property is small, thus the proposed urban uses would be compatible with nearby forest activities in this location. The second location is a single eight acre parcel zoned TBR that shares a 170 foot edge with the northeast corner of the reserve area. This parcel contains Abernethy Creek and is in the same ownership as the adjacent parcel that is part of the rural residential subdivision with very large homes. Due to the fact that the parcel contains Abernethy Creek and is under the same ownership as a parcel within the rural residential subdivision, the likely hood of timber activities on this property is small, thus the proposed urban uses would be compatible with forest activities in this location. The third location is near S Thayer Road adjacent to the southeast corner of the area and consists of three parcels zoned TBR that are mainly in rural residential use and have very minimal amounts of forest on the land. Therefore it is unlikely that timber activities would occur on this land and the proposed urban uses would be compatible with the forest activities occurring on the timber zoned land. Overall, the proposed urban uses have high compatibility with the nearby agricultural and forest activities occurring on farm and forest land.



Metro

Preliminary Urban Growth Boundary
Alternatives Analysis
Maplelane



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