



Active Transportation & Complete Streets Projects

Name of Project Jade and Montavilla Connected Centers

Project application

The project application provides in depth process, location and project definition details and serves as the nomination form for project funding consideration. **Project applications should be kept to 12 pages total per project.** The application form is available electronically at: <http://www.oregonmetro.gov/rffa>. Please complete the following:

Project Definition

Project Description

- Facility or area: street(s), intersection(s), path or area.
Construct multi-modal improvements on key pedestrian and bicycle routes within and connecting to the Jade District and Montavilla Neighborhood Centers. The Jade District center is located along 82nd Ave between roughly SE Division St and SE Powell Blvd, SE 75th Ave and I-205. The Montavilla center is along 82nd Ave, center on the SE Stark and SE Washington couplet from roughly 75th Ave to I-205.
- Beginning facility or milepost.
This project involves multiple facilities within the Jade and Montavilla centers.
Jade District projects beginning points: SE Woodward and SE 75th Ave;
Montavilla projects beginning point SE Washington and 75th Ave.
- Ending facility or milepost.
This project involves multiple facilities within the Jade and Montavilla centers.
Jade District projects ending point SE Clinton and 87th Ave
Montavilla projects ending point SE Washington and I-205 multi-use path.
- Provide a brief description of the project elements.
Jade District Improvements:
 1. Street, sidewalk and lighting on SE Clinton between 82nd Ave and 87th Ave.
 2. Sidewalks on portions of SE 85th between Powell and Division to fill gaps of missing sidewalk. Add lighting at Division. Minor improvements to the 80's Neighborhood Greenway on SE 85th Ave between Division and Powell to address segments exceeding recommended volumes or speed per the 2015 PBOT Neighborhood Greenway Guidelines.
 3. (3 and 4, or 5) SE Woodward Neighborhood Greenway improvements from approximately 75th/78th to 85th Ave. Either improve the route along SE Tibbetts to SE Brooklyn (5) or SE Woodward to SE Brooklyn (3 and 4). Either includes a jog on 82nd Ave for roughly half a block with a two-way bike path combined with the sidewalk behind existing curb.
 - Enhanced crossings of arterials, locations to be determined.Montavilla Improvements:
 6. Add Separated Bike Lane with physical protection on SE Washington from 72nd to 92nd Ave/ I-205 multi-use path.
 7. (7 or 8) Preferably reconfigure left turn movements from 82nd to the Stark/Washington couplet to reduce neighborhood cut-through traffic impacts on local streets, particularly SE Alder. Or

alternatively, construct sidewalk, lighting, curb and drainage on SE Alder from 82nd to 84th Ave where cut-through traffic is problematic currently. (7)

9. Enhanced crossings of arterials, including SE Washington and Stark at 84th and 86th.

- City (ies). City of Portland
- County(ies). Multnomah County

Base project information

- Corresponding RTP project number(s) for the nominated project.
 - 11193: Citywide Sidewalk Infill Program
 - 11191: Citywide Bicycle Boulevards
 - 11572: Powell-Division Safety and Access to Transit
 - 10289: Division St, SE (60th – I-205): Multimodal Improvements, Phase 2
- Attach a completed Public Engagement and Non-discrimination checklist (Appendix A).
- Purpose and need statement (The purpose and need statement should address the criteria as they apply to the project, for example: increase non-auto trip access to essential services in the X town center, particularly for the high concentration of Y and Z populations in the project area).

The purpose of this project is to help create healthy, connected Neighborhood Centers in the Jade District and Montavilla, so that people can safely reach their daily needs within a 20 minute walk or bike ride, use more mass transit and active transportation, reduce their energy use and mitigate climate change. This is envisioned in the Portland Comprehensive Plan 2035. The intent is to also support implementing the two Station Communities envisioned around the I-205 MAX stations in the Region 2040 Growth Concept, where the Jade District is located.

The Jade District and Montavilla are far from being the envisioned healthy, connected Centers or Station Communities. Both centers are surrounded and severed by busy multi-lane arterials. 82nd Ave, Powell, Division, and Stark are all High Crash Corridors with high crash intersections. Metro has identified these streets as barriers to non-auto travel. Many bus stops serving these centers have very high transit ridership and high numbers ramp deployments to serve people who use wheelchairs, especially along 82nd Ave, SE Division and SE Powell. Currently, in the Jade District there is not a single route in and out of the interior neighborhood that has continuous sidewalks. There are large blocks with poor connectivity. The few through streets have segments of missing sidewalk, corners that don't meet ADA and segments of unimproved dirt roads with large potholes/puddles that serve as barriers to all.

The project is focused on building and improving critical walking and biking connections to and through the Jade District and Montavilla to serve the multiple existing high concentrations of Environmental Justice and underserved communities. The specific improvements included in this project were selected because they were identified as important by community members in these Centers. The key priority routes were identified through engagement with the Jade District Neighborhood Prosperity Initiative, APANO, 82nd Ave Improvement Coalition, Montavilla Neighborhood Association, among others and targeted language-based outreach.

The purpose is in part to help realize the vision and urban design opportunity concept for the Jade District captured in the [Portland Local Action Plan](#) for the Powell-Division Transit and Development Project:

“The Jade District is a bustling Neighborhood Center that is a hub for diverse residents and businesses. A welcoming pedestrian environment on 82nd Ave and throughout the neighborhoods to the east provides excellent access to homes and businesses, supporting a vibrant main street between Division St and Powell Blvd—the commercial heart of the Jade District. Places for community gatherings provide opportunities for people to relax and recreate inside and out. Continued growth and investment at Portland Community College provide options for learning and business development. The Jade District maintains its unique community character and racial and ethnic diversity; and provides affordable living options in a service rich environment for people of all ages, backgrounds and incomes.”

- Attach a completed Active Transportation Design checklist (Appendix C).
- Description of post implementation measurement of project effectiveness (Metro staff is available to help design measurement methodologies for post-construction project criteria performance).

First, PBOT will conduct pre- and post-project traffic counts that will include bicycle and pedestrian use. Bicycles and pedestrian traffic will be monitored with manual traffic counts. The methodology will be consistent with PBOT’s annual Bicycle Count Reports and pedestrian count methodology used for engineering evaluations. Motor vehicle traffic is not expected to change with the sidewalk and pathway improvements. However, traffic volumes and patterns are expected to change with two scope elements, traffic calming on SE 85th Ave along the 80’s Neighborhood Greenway and reconfiguring the left turn movements from 82nd to the Stark/Washington couplet to reduce neighborhood cut-through traffic impacts on local streets. PBOT will monitor motor vehicle traffic with the most reliable technology available. Pneumatic tube counters will be utilized to capture speed, volume, and vehicle classification data pre- and post-project. Bluetooth sensors will capture unique Bluetooth signals to measure travel times through the corridors. When necessary, manual intersection turning movement counts will be utilized to better understand the distinct operational needs of intersections within the project boundaries.

Second, we will measure safety by evaluating pre- and post-project traffic crash data. Traffic crash information will be monitored for early performance. However, the best data analysis can only take place at least three years post-project. PBOT will monitor to compare pre- and post- crash data in 3- and 5-year evaluations. Third, user experience information will be gathered. PBOT will conduct pre- and post-project intercept surveys on the affected streets. The purpose will be to ask about comfort, safety, and convenience of walking and bicycling along the treated roadways.

Project Cost and Funding Request Summary

- *Attach a completed Cost Methodology workbook (Appendix E) or alternative cost methodology. Describe how the project cost estimate was determined, including details on project readiness and ability for project funding to be obligated within the 2019-21 timeframe. Reference availability of local match funds, status of project development relative to the requirements of federal-aid projects, and indicators of political and community support.*

Please find the attached cost estimate using an alternative PBOT cost methodology. The cost estimate was determined by engineers in the Civil Design Services and Traffic Design Services sections, based on a scope jointly developed by planners and engineers familiar with the project area. The cost estimate is based on a preliminary assessment of existing conditions and conceptual designs using PBOT design standards and guidelines. The estimate accounts for construction costs based on itemized costs and calculated quantities. Project Management, Design Engineering, Construction Management, Overhead and Contingency are added as a percentage of the construction cost based on experience with past projects. Additional \$160,000 budget has been

added to the attached cost estimate for additional targeted Community Engagement during Project Development and Construction, Demand Management, and Project Measurement/Evaluation.

The project has a high level of readiness and funding for the project can be obligated within the allotted timeframe. The elements of this project are ready to receive funding and have been scoped sufficient enough to begin NEPA environmental work and enter preliminary engineering. This project is not expected to have significant environmental impacts and would be eligible for a categorical exclusion under NEPA.

The local funding will come from Transportation System Development Charges, an ongoing revenue stream for PBOT that is eligible to be used for a portion of the cost of capacity-enhancing projects. If funded with 2019-2021 RFF, this project would be completed and complement the planned Powell-Division BRT project and the 70's Neighborhood Greenway that crosses both the Jade District on 79th and Montavilla on 80th Ave. Both are anticipated to be complete in 2021.

There is strong political and community support for this project. City Council passed Ordinance No. 187954 supporting and directing PBOT to submit this and other RFF grant applications on August 17, 2016. See attached Ordinance. This grant was prioritized and selected based on input from the City's modal advisory committees and the Transportation Justice Alliance during the Spring and Summer of 2016. Elements of this project have been identified as priorities in multiple locally-adopted plans. APANO and the 82nd Ave Improvement Coalition wrote letters of support for this grant application. Members of both groups were involved in identifying improvements that were included in this project scope and grant application. In addition, TriMet provided a letter of support for this grant application recognizing the benefits it can bring to improving access to transit, particularly the Powell-Division Transit and Development Project.

The attached detailed cost estimate sheets include the separate cost of individual project scope elements. A couple of these sub-project items are alternate and design route options if the preferred option is found to not be feasible during the preliminary design phase. Most notably, this is the case for the SE Woodward Neighborhood Greenway route between 75th Ave and 82nd Ave. The preferred route is SE Tibbetts to 82nd to SE Brooklyn. However, SE Woodward is an acceptable alternate route. The more expensive of the two routes, SE Tibbetts, is included in the total cost estimate.

- Total project cost
 - \$7,883,000

- RFFA funding request by project phase:
 - PE: \$1,158,450
 - ROW: \$193,075
 - Construction: \$2,509,975
 - TDM: \$80,000

- Local match or other funds
 - \$3,941,500 (50%)

Map of project area

- Provide a map of the project consistent with GIS shapefile standards found in Appendix B

Project sponsor agency

- Contact information (phone # & email) for:
- Application lead staff:
April Bertelsen (503-823-6177; april.bertelsen@portlandoregon.gov)
- Project Manager (or assigning manager):
Dan Layden (503-823-2804; Dan.Layden@portlandoregon.gov)
- Project Engineer (or assigning manager):
Lola Gailey (503-823-7563; Lola.Gailey@portlandoregon.gov)
- Describe the agencies record in delivering federal aid transportation projects on time and budget or whether the lead agency has failed to deliver a federal aid transportation project and if so, why.

The Portland Bureau of Transportation is one of the few local agencies in the state that are fully certified by ODOT to deliver federal aid projects and has extensive experience with delivering federal aid projects. The Bureau has successfully delivered federal transportation projects for over 20 years, and was one of the first agencies to become fully certified. The Bureau has delivered a wide range of projects including large bridge projects, active transportation and safe routes to school projects. The large majority of the projects have been delivered on time and on budget. On the few occasions where projects have encountered budget issues the bureau has been able to identify funding to deliver the projects. The bureau has had a few projects that have been delayed mostly due to permitting and right of way issues. For all current projects those issues are resolved and the projects are on track to be delivered. The status of some of the bureau's projects are listed below.

The following are examples of previously awarded RFFA projects and their status:

- 1) N. Lombard/St. Louis/Ivanhoe/Philadelphia intersection project (Construction Phase completed in 2012)
 - 2) N. Portland Rd/Columbia Blvd intersection project (2014/15 RFFA. Planning and Design Phase completed in 2013. Construction Phase funded by STIP and will begin in 2017)
 - 3) North Time Oil Road-Burgard Street Intersection Project (2014/15 RFFA. Awaiting notice to proceed from FHWA.
 - 4) Going to the Island Freight Improvement Project (2014/15 RFFA. Design Phase to be completed in 2017 and Construction completed in 2019)
 - 5) South Rivergate Freight improvement Project (2016-18 RFFA. Design Phase to begin in 2016. Project construction will be funded by multiple local and federal funding sources)
 - 6) SE Foster Road (2014-2016 and 2015-2017 RFFA. Design phase underway. Construction to occur in 2017)
- *Describe how the agency currently has the technical, administrative and budget capacity to deliver the project, with an emphasis on accounting for the process and requirements of federal aid transportation projects.*

The Portland Bureau of Transportation currently has the staff capable to provide all the administrative services related to project management and all technical services related to design engineering, and construction management for delivering federal-aid projects. PBOT has a staff of well-trained project managers and delivery staff with extensive experience in the delivery of federal transportation projects. PBOT has a long track record of delivering federal projects that meet the requirements of the Federal Highway Administration.

Highest priority criteria

1. *What communities will the proposed project serve? What are the estimated totals of low-income, low-English proficiency, non-white, elderly and young, and persons with disabilities populations that will benefit from this project, and how will they benefit?*

In aggregate, this project will serve large numbers of people in the Jade District and Montavilla and high concentrations of targeted Environmental Justice and underserved communities. The demographics for households and persons in absolute numbers and percentages are displayed in the table below for the Census Tracts within and near the Jade District and Montavilla. To highlight, 36 percent (4,335) of the households have low incomes. Non-white persons accounts for 30.7 percent (9,249) of the population.

Jade District & Montavilla Population Demographics

Total population in adjacent census tracts	30,103	
Total Households	12,028	
Low income households (less than \$35k)	4,335	36.0%
LEP persons	1,120	3.7%
Non-white persons	9,249	30.7%
Young (under 18) persons	6,288	20.9%
Elderly (over 65) persons	3,709	12.3%
Persons with disabilities	3,582	11.9%

Source: 2014 five-year American Community Survey

Many of the connections provide low-stress, accessible, family and age friendly alternative routes to busy arterials and enhance crossings of the busy arterials to help access transit and destinations. These improvements will most benefit the people who live in or adjacent to these centers, as well as people who take transit, walk or bike to the district to access jobs, education opportunities and daily services.

The targeted Environmental Justice and underserved communities listed below are statistically more likely to not drive and instead depend upon walking, biking and transit. The currently auto-dominated roadways, lack of complete sidewalks, infrequent enhanced crossing and substandard or missing biking facilities limit the opportunities to walk, bike and access transit. For people who have no choice but to do so, they are left with walking and biking through the mud or on road shoulders or walking long distances out of direction. There are frequent barriers that block people with disabilities from traveling throughout the centers. This project will help change these conditions and provide accessible, walkable, bikeable routes to and through these centers to better serve people of all ages and abilities.

In the Jade District, this project will directly serve two Census Tracts with significantly above average concentrations of Environmental Justice and underserved communities, based on the 2016-18 RFFA - Equity Analysis – Demographics Maps. The project area is also surrounded by Census Tracts with above average concentrations of Environmental Justice and underserved communities.

- **Non-White.** The Census Tract at the center of Jade District has significantly above average concentrations and surrounded by Census Tracts with above average concentrations.
- **Low-income households.** The Tract south of Powell has significantly above average concentrations. The center of the Jade District and surrounding Tracts have above average concentrations.

- **Low English Proficiency households.** The Tracts southwest of Powell and 82nd Ave have significantly above average concentrations. The Tract at the center of the Jade District has above average concentrations.
- **Elderly.** The Census Tracts south of Powell have above average concentrations.
- **Young.** The Tract at the center of Jade District has significantly above average concentrations and the Census Tract north of Division has above average concentrations.

In Montavilla, this project will directly serve one Census Tract west of 82nd with above average concentrations of Environmental Justice and underserved communities.

- **Non-White.** Tracts southeast of Washington & 82nd Ave have above average concentrations.
- **Low-income households.** The Tracts northwest of Washington and 82nd Ave have significantly above average concentrations. Nearby Census Tracts have above average.
- **Low English Proficiency households.** The Tracts southeast of Washington and 82nd Ave and northwest of Washington and 82nd Ave have above average concentrations.
- **Elderly.** The Tract southwest of Washington and 82nd has above average concentrations.
- **Young.** The Tract northeast of Washington and 82nd has above average concentrations.

In addition, the City of Portland and Metro are working on community stabilization efforts to help prevent involuntary displacement. The Portland Local Action Plan for the Powell-Division corridor is the City's community development component of the Powell-Division Transit and Development project. It focuses on getting more and better affordable housing along the corridor, especially in and around East Portland, and making sure the project benefits current businesses and residents. The intent is to address housing and economic development issues in the corridor, while synchronizing investments with construction of the transit project and other infrastructure investments. Over the next five years, the plan aims to generate 300 affordable housing units, improve multi-dwelling standards and strengthen tenant protections. On the economic development side, the goal is to provide business assistance and retention services (i.e., prevent displacement of local businesses) and improve access to jobs for residents along the corridor from outer Southeast Portland to the Gresham border. This includes in the Jade District. The Portland Housing Bureau is currently seeking properties along the Powell-Division corridor to build affordable housing and meet this 300-unit target. Metro has already purchased the Furniture Store site at SE Division and 82nd Ave and will develop it with affordable housing.

2. *What safety problem does the proposed project address in an area(s) with higher-than-average levels of fatal and severe crashes? How does the proposed project make people feel safer in an area with high walking and bicycling demand by removing vehicle conflicts?*

82nd Ave, Powell, Division, and Stark are all designated High Crash Network corridors identified through PBOT's Vision Zero planning work, with high-crash intersections in the Jade District and Montavilla at 82nd Ave & Division, Powell, Stark, and Washington. Metro safety maps also show ped/bike crash hotspots along 82nd Ave, Division, Powell, and Stark/Washington in the project area.

Many of the walking and biking connections improved in this project will provide low-stress, family and age friendly alternative routes to busy arterials and enhance crossings of the busy arterials to help access transit and destinations: protected bike lanes on Washington will help to make travel by bike and foot safer by keeping fast-moving cars further from vulnerable road users; paved streets and new multiuse paths leading to and along 82nd Ave will provide clearer and safer space designations for pedestrians, bicyclists, and drivers; improving sidewalks and lighting on walking

and biking routes adjacent to 82nd Ave and SE Division St will provide safer and lower stress alternative routes for those walking and biking.

3. *What priority destinations will the proposed project will serve? How will the proposed project improve access to these destinations?*

These connections will provide access to transit, as well as schools, parks, grocery stores, and other essential daily services in the Jade District and Montavilla centers. Currently, in the Jade District there is not a single route in and out of the interior neighborhood that has continuous sidewalks. This project would build continuous accessible sidewalks on 85th Ave between Powell and Division and on SE Clinton from 82nd to 87th Ave. This will allow residents to walk/roll to Harrison Park Elementary and Middle School north of Division and Franklin High School and Eastport Plaza south of Powell. It will also provide access to and from Frequent Service transit, future BRT, Portland Community College, Fubonn Shopping Center, Winco Food shopping center, culturally specific restaurants, clinics and daily services along 82nd Ave, Division and Powell. The Woodward or Tibbetts Neighborhood Greenway would help connect west to Kellogg Middle School.

The improvements in Montavilla, particularly the separated bike lane on SE Washington, will provide access to and from the Main Street along Stark/Washington, including the Montavilla Farmer’s Market, a hardwood store, Academy Theater, retail shops, several restaurants and a future grocery store coming soon on 82nd Ave.

4. *How will the proposed project support the existing and planned housing/employment densities in the project area?*

This project will improve and serve two growing Neighborhood Centers, Jade District and Montavilla, as designated in the Portland 2035 Comprehensive Plan. In addition, 82nd Ave which passes through both centers is designated a Civic Corridor. The Jade District and Montavilla Centers are already home to many businesses, Portland Community College, single-family and multi-family homes. Both Centers are forecasted to grow significantly. The table below displays the current number of households and 2035 forecasted households and employment.

Jade District & Montavilla Households & Employment

Current housing units within a half mile	11,573
Projected 2035 housing units within a half mile	16,362
Current jobs within a half mile	8,752
Projected 2035 jobs within a half mile	14,314

2035 Forecast Source: Portland Comprehensive Plan Growth Scenario

In the 2035 Comprehensive Plan Update, Centers and Corridors are part of the City’s preferred growth scenario. Centers are envisioned as places with concentrations of commercial and community services, housing, gathering places, and transit. Centers provide services to surrounding neighborhoods and are a focus of housing and job growth. Corridors are envisioned as Major city streets with new growth that offer critical multi-modal connections to centers, commercial services, jobs and housing options. Achieving this plan of Corridors and Centers requires many changes on the ground in the Jade District and Montavilla given there are many existing substandard public rights-of-way. This project will build many of the priority walking and biking connections needed to support the Comprehensive Plan and the forecasted growth in households and employment.

Higher priority criteria

5. *How does the proposed project complete a gap or improve a deficiency in the Regional Active Transportation network? (See Appendix 1 of the Regional ATP: Network Completion, Gaps and Deficiencies).*

This project will complete a gap in the [Regional Active Transportation Network](#). SE Stark is designated a [Regional Bikeway](#) east of 76th Ave. However, no bike lane exists there today. This project proposes a separated bike lane with a raised protection between SE 72nd and I-205. This project will make improvements within the SE Powell Blvd and 82nd Ave Focus Area identified in the [TriMet Pedestrian Network Analysis Report](#). This is one of ten Focus Areas prioritized within the TriMet service district. This project will improve walking route connecting to both Powell Blvd and 82nd Ave, enabling residents and visitors to better access businesses and transit from the adjacent neighborhoods.

In addition, in the [Portland TSP Stage 2 Update Recommended Draft](#), the SE Woodward Neighborhood Greenway is designated as a Major City Bikeway connecting to the I-205 Path and MAX station. The 80's Neighborhood Greenway and Stark/Washington couplet are designated as City Bikeways. City Council adoption of the TSP Update is anticipated Fall 2016.

6. *What design elements of the proposed project will lead to increased use of Active Transportation modes by providing a good user experience/increasing user comfort? What barriers will be eliminated or mitigated?*

The Separated, Protected Bike Lane on SE Washington from 72nd to I-205 will include a 16-inch wide raised curb between the motor vehicle travel lane and bike lane. This involves removal of on-street parking on one side only. The segment west of 76th Ave will have K-rail (Jersey barrier) separation and will be a pedestrian and cyclist facility, and involves removal of a travel lane without no significant traffic impact. Bike lanes with physical protection separation for cyclists provide a higher level of safety and comfort for people. Research has found providing physical separation increases cycling and attracts new riders.

Many of the other walking and biking connections improved in this project will provide low-stress, family and age friendly alternative routes to busy arterials and enhance crossings of the busy arterials to help access transit and destinations. This includes the SE Woodward Neighborhood Greenway, 80's Neighborhood Greenway and SE Clinton from 82nd to 87th Ave. These routes all have segments of missing sidewalk, corners that don't meet ADA and segments of unimproved dirt roads with large potholes/puddles that would be improved with sidewalks, curb ramps and paved low volume, low speed roadways. Currently, the Woodward bikeway detours around two unimproved blocks. SE Woodward would be improved in the block between 78th and 79th with two 12' multi-use paths separated by a vegetated median for pedestrians and cyclists. This would provide diversion to keep motor vehicle volumes low.

7. *How does the proposed project complete a so-called 'last-mile' connection between a transit stop/station and an employment area(s)?*

The project will build sidewalks, crossings and bike improvements along Neighborhood Greenways to complete multiple last mile connections between transit stops and jobs in these Centers.

Priority criteria

8. *How the public will be engaged relative to the proposed project? Include description of engagement during project development and construction, as well as demand management efforts to increase public*

awareness and utilization of the project post-construction. (Metro Regional Travel Options staff is available to help design an effective and appropriate level of education and marketing for your project nomination).

Before engagement can begin, a stakeholder analysis will be completed to identify potentially impacted businesses, community organizations and historically underrepresented populations, user groups and other potential audiences to engage. PBOT staff will document consideration of potential distribution of benefits and burdens, especially as pertaining to people of color, people with Limited English Proficiency and people with low income. A plan for engagement will be created and will include specific milestones and engagement activities. Public engagement during project development and construction will follow the International Association for Public Participation (IAP2) Spectrum of Public Participation framework in which a variety of engagement tools will be used in order to inform, consult, involve and collaborate with community members at large and those who could potentially be impacted by project decisions. PBOT will keep the public informed, listen to and acknowledge concerns, work with the public to ensure that concerns and issues are directly reflected in the alternatives developed and provide feedback on how public input influenced the decisions. Where possible, PBOT will look to the public for direct advice and innovation in formulating solutions and will incorporate public advice and recommendations into the decisions to the maximum extent possible. At every opportunity, staff will conduct culturally-responsive and language-based outreach and engagement especially focused to traditionally underserved communities. Public engagement tools to be used for informing the public may include website, social media updates, interested parties emails, selective advertising, press releases, earned media and mailers. Tools to consult, involve and collaborate with the public may additionally include community advisory groups, public workshops, feedback surveys, open houses, focus groups, Community Engagement Liaison services and working directly with businesses, neighborhood and cultural organizations and community groups.

After the project is completed, we will use demand management programs to increase public awareness and utilization of the projects. The TDM elements may include wayfinding for all neighborhood greenway and bicycle route facilities with information on nearby neighborhood and commercial destinations. Coordinated outreach activities with community organizations, including guided walks, bicycle rides, and targeted awareness campaigns (Portland SmartTrips).

9. *What additional sources of funding, and the amounts, will be leveraged by an investment of regional flexible funds in the proposed project?*

The local funding of \$3,941,500 will come from Transportation System Development Charges, an ongoing revenue stream for PBOT that is eligible to be used for a portion of the cost of capacity-enhancing projects. If funded with 2019-2021 RFF, this project would be completed at the same time and complement the planned Powell-Division BRT project and the 70's Neighborhood Greenway that crosses both the Jade District on 79th and Montavilla on 80th Ave. Both projects are anticipated to be complete in 2021.

10. *How will the proposed project provide people with improved options to driving in a congested corridor?* Several very congested corridors intersect the Jade District and Montavilla, most notably 82nd Ave, SE Division, SE Powell Blvd, I-205, and I-84. Building this project will improve walking and biking connections and provide low-stress, family and age friendly alternative routes to busy arterials and enhance crossings of the busy arterials to help access transit and destinations. This project contains elements that will make walking and biking more accessible, convenient, comfortable and safe and encourage more people to make trips by walking, biking and transit. This project includes building

sidewalks where they are missing, improving neighborhood Greenway routes that are substandard or missing segments, separated, protected bike lanes where there is no facility today, add enhanced crossings where there are long distances between marked crosswalks and build streets with sidewalks where there is dirt, gravel, large potholes and a small lake today.

Process

- *Describe the planning process that led to the identification of this project and the process used to identify the project to be put forward for funding consideration. (Answer should demonstrate that the process met minimum public involvement requirements for project applications per Appendix A)*

In the spring of 2014, PBOT staff began the process of forming a Candidate list of Major Projects for inclusion in the Transportation System Plan (TSP). This process began by considering projects that were included in the 2007 TSP, the 2014 TRP, or other plans adopted since 2007. The TSP Major Project List update process included extensive opportunities for public engagement with projects displayed on the 2035 Comprehensive Plan Proposed Draft Map App starting in June 2014. Members of the public were invited to comment directly through the Map App, and there was extensive community outreach at meetings and events. As noted in our certification of Appendix A – the public engagement and non-discrimination certification, PBOT developed and used a thorough public engagement plan which included stakeholder analysis and a focus on efforts to engage underrepresented populations. In order to develop the TSP Major Projects list, projects were also evaluated based on criteria that measures the following: safety, neighborhood access, economic benefit, health, equity, climate, costs effectiveness and community support. This evaluation, along with additional public feedback, helped to determine the final TSP Major Projects List.

When looking for projects to be considered for this funding opportunity, PBOT staff looked to projects identified within the above TSP Major Projects selection process. We narrowed this large list by also considering the specific RFF grant criteria, the availability of match, readiness factors for projects, feedback from PBOTs pedestrian and bicycle advisory committees, feedback from the Transportation Justice Alliance, other City Bureau priorities, and community needs identified not only within the TSP, but also from additional ongoing planning efforts and bureau commitments.

Specifically, the project elements in the Jade District were identified through the [Portland Local Action](#) for the Powell-Division Transit and Development Project. It was adopted unanimously by Portland City Council on July 27, 2016. Metro and the City of Portland partnered together to conduct inclusive, targeted, language-based outreach during the planning process. Staff solicited feedback from residents that live in the Jade District received through targeted non-English language outreach to Non-white populations and seniors conducted during the planning. Many of the connections in this project are in the urban design opportunity area concept for the Jade district in the Portland Location Action Plan (page 16-17). Many of the improvements are also part of the [Jade District Visioning Report](#).

Elements of the project in Montavilla were identified together with community members based on early outreach and input during the 82nd Avenue of the Roses Implementation Plan led by ODOT. City of Portland staff is participating in the ODOT planning process and beginning a coordinated planning effort for the 82nd Ave Study: Understanding Barriers to Development plan. This City-led is funded with a Metro CPDG grant 2016-2018. PBOT will continue seeking community input and refine the project scope during these plan processes.

- *Describe how you coordinated with regional or other transportation agencies (e.g. Transit, Port, ODOT, Metro, Freight Rail operators, ODOT Region 1, Regional Safety Workgroup, and Utilities if critical to use of right-of-way) and how it impacted the project location and design.*

PBOT staff coordinated with ODOT Region 1 staff including, planners and engineers, to review and develop individual elements of this scope that cross 82nd Ave, an ODOT Highway. ODOT staff is supportive of PBOT submitting a RFF grant application for the proposed project. They did not see fatal flaws and were comfortable with the conceptual design advancing. They offered design considerations and identified items that may need further coordination once the project is funded and entering preliminary design. PBOT is committed to continued coordination with ODOT Region 1 and seeking their review as well as any necessary State Traffic Engineer approvals for elements of the project that fall under their jurisdiction. This includes, most notably, modifications to existing signals on 82nd Ave, any enhanced crossings and the two-way bike path combined with the sidewalk behind existing curb where the Neighborhood Greenway must jog on 82nd Ave between the off-set streets to reach SE Brooklyn. The project includes two route options for the SE Woodward Neighborhood Greenway to cross 82nd Ave, including the existing signal at SE Woodward. This provides us with options for addressing any issues that may arise during design and increases the likelihood of receiving ODOT approval.

In addition, we coordinated with TriMet. They provided a letter of support for this grant application recognizing the benefits it can bring to improving access to transit, particularly the Powell-Division Transit and Development Project. Many elements of this project were identified during joint outreach in the Jade District for the Powell-Division Transit and Development Project and companion Portland Local Action Plan.

APPENDIX A – ENVIRONMENTAL JUSTICE COMPLIANCE

Public engagement and non-discrimination certification

Regional flexible funds 2019-21

Background and purpose

Use of this checklist is intended to ensure project applicants have offered an adequate opportunity for public engagement, including identifying and engaging historically underrepresented populations. Applications for project implementation are expected to have analyzed the distribution of benefits and burdens for people of color, people with limited English proficiency and people with low income compared to those for other residents.

The completed checklist will aid Metro in its review and evaluation of projects.

Instructions

Applicants must complete this certification, including a summary of non-discriminatory engagement (see Section B), for projects submitted to Metro for consideration for 2019-21 regional flexible funding.

Project sponsors should keep referenced records on file in case of a dispute. Retained records do not have to be submitted unless requested by Metro.

Please forward questions regarding the public involvement checklist to regional flexible funds allocation project manager Dan Kaempff at daniel.kaempff@oregonmetro.gov or 503-813-7559.

1. Checklist

Transportation or service plan development

- At the beginning of the agency's transportation or service plan, a public engagement plan was developed to encourage broad-based, early and continuing for public involvement.
Retained records: *public engagement plan and/or procedures*
- At the beginning of the agency's transportation or service plan, a jurisdiction-wide demographic analysis was completed to understand the location of communities of color, limited English proficient and low-income populations, disabled, seniors and youth in order to include them in engagement opportunities.
Retained records: *summary of or maps illustrating jurisdiction-wide demographic analysis*
- Public notices included a statement of non-discrimination (Metro can provide a sample).
Retained records: *public engagement reports including/or dated copies of notices*
- Throughout the process, timely and accessible forums for public input were provided.
Retained records: *public engagement reports including/or descriptions of opportunities for ongoing engagement, descriptions of opportunities for input at key milestones, public meeting records, online or community survey results*

- Throughout the process, appropriate interested and affected groups were identified and contact information was maintained in order to share project information, updates were provided for key decision points, and opportunities to engage and comment were provided.

Retained records: public engagement reports including/or list of interested and affected parties, dated copies of communications and notices sent, descriptions of efforts to engage the public, including strategies used to attract interest and obtain initial input, summary of key findings; for announcements sent by mail or email, documented number of persons/groups on mailing list

- Throughout the process, focused efforts were made to engage underrepresented populations such as communities of color, limited English proficient and low-income populations, disabled, seniors and youth. Meetings or events were held in accessible locations with access to transit. Language assistance was provided, as needed, which may include translation of key materials, using a telephone language line service to respond to questions or take input in different languages and providing interpretation at meetings or events.

Retained records: public engagement reports including/or list of community organizations and/or diverse community members with whom coordination occurred; description of language assistance resources and how they were used, dated copies of communications and notices, copies of translated materials, summary of key findings

- Public comments were considered throughout the process, and comments received on the staff recommendation were compiled, summarized and responded to, as appropriate.

Retained records: public engagement reports or staff reports including/or summary of comments, key findings and final staff recommendation, including changes made to reflect public comments

- Adequate notification was provided regarding final adoption of the plan or program, at least 15 days in advance of adoption, if feasible, and follow-up notice was distributed prior to the adoption to provide more detailed information. Notice included information and instructions for how to testify, if applicable.

Retained records: public engagement reports or final staff reports including/or dated copies of the notices; for announcements sent by mail or email document number of persons/groups on mailing list

Project development

This part of the checklist is provided in past tense for applications for project implementation funding. Parenthetical notes in future tense are provided for applicants that have not completed project development to attest to ongoing and future activities.

- At the beginning of project development, a public engagement plan was (is budgeted to be) developed to encourage broad-based, early and continuing opportunity for public involvement.

Retained records: public engagement plan and/or procedures

- At the beginning of project development, a demographic analysis was (is budgeted to be) completed for the area potentially affected by the project to understand the location of

communities of color, limited English proficient and low-income populations, disabled, seniors and youth in order to include them in engagement opportunities.

Retained records: *summary of or maps illustrating demographic analysis*

- Throughout project development, project initiation and requests for input were (will be) sent at least 15 days in advance of the project start, engagement activity or input opportunity.

Retained records: *public engagement reports including/or dated copies of notices*

- Throughout project development, public notices included (will include) a statement of non-discrimination.

Retained records: *public engagement reports including/or dated copies of notices*

- Throughout project development, timely and accessible forums for public input were (will be) provided.

Retained records: *public engagement reports including/or descriptions of opportunities for ongoing engagement, descriptions of opportunities for input at key milestones, public meeting records, online or community survey results*

- Throughout project development, appropriate interested and affected groups were (will be) identified and contact information was (will be) maintained in order to share project information, updates were (will be) provided for key decision points, and opportunities to engage and comment were (will be) provided.

Retained records: *public engagement reports including/or list of interested and affected parties, dated copies of communications and notices sent, descriptions of efforts to engage the public, including strategies used to attract interest and obtain initial input, summary of key findings; for announcements sent by mail or email, documented number of persons/groups on mailing list*

- Throughout and with an analysis at the end of project development, consideration was (will be) given to the benefits and burdens of the project for people of color, people with limited English proficiency and people with low income compared to those for other residents, as identified through engagement activities.

Retained records: *staff reports including/or description of identified populations and information about benefits and burdens of the project for them in relation to other residents;*

- There was a finding of inequitable distribution of benefits and burdens for people of color, people with limited English proficiency and people with low income

Submitted records: *for a finding of inequitable distribution of benefits and burdens, attach analysis, finding and documentation justifying the project and showing there is no less discriminatory alternative.*

- Public comments were (will be) considered throughout project development, and comments received on the staff recommendation were (will be) compiled, summarized and responded to, as appropriate.

Retained records: public engagement reports or staff reports including/or summary of comments, key findings and final staff recommendation, including changes made to reflect public comments

- Adequate notification was (will be) provided regarding final adoption of the plan, at least 15 days in advance of adoption, if feasible, and follow-up notice was distributed prior to the adoption to provide more detailed information. Notice included (will include) information and instructions for how to testify, if applicable.

Retained records: public engagement reports or final staff reports including/or dated copies of the notices; for announcements sent by mail or email document number of persons/groups on mailing list

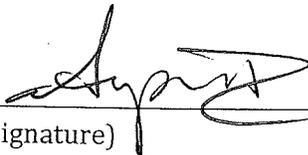
2. Summary of non-discriminatory engagement

Attach a summary (1-2 pages) of the key elements of the public engagement process, including outreach to communities of color, limited English and low-income populations, for this project or transportation or service plan.

3. Certification statement

Portland Bureau of Transportation (agency) certifies adherence to engagement and non-discrimination procedures developed to enhance public participation and comply with federal civil rights guidance.

As attested by:



(signature)

Art Pearce, Policy, planning and projects manager

(name and title)

8/23/16

(date)

APPENDIX C – ACTIVE TRANSPORTATION DESIGN GUIDELINES

The following checklist items are street design elements that are appropriate and desirable in regional mobility corridors. Trail projects should use the *Off-Street and Trail Facilities* checklist (item D) at the end of this list. All other projects should use items A – C.

Use of federal transportation funds on separated pathways are intended for projects that primarily serve a transportation function. Pathways for recreation are not eligible for federal transportation funding through the regional flexible fund process. Federal funds are available from other sources for recreational trails. To allow for comfortable mixing of persons on foot, bicycle and mobility devices at volumes expected to be a priority for funding in the metropolitan region, a 12-foot hard surface with shoulders is a base design width acceptable to FHWA Oregon. Exceptions to this width for limited segments is acceptable to respond to surrounding context, with widths less than 10-feet subject to a design exception process. Wider surfaces are desirable in high volume locations.

A. Pedestrian Project design elements – check all that apply
Design elements emphasize separating pedestrians from auto traffic with buffers, increasing the visibility of pedestrians, especially when crossing roadways, and make it easier and more comfortable for people walking to access destinations.

For every element checked describe existing conditions and proposed features:

- Add sidewalks or improve vertical delineation of pedestrian right-of-way (i.e. missing curb)
- Add sidewalk width and/or buffer for a total width of 17 feet (recommended), 10 feet minimum; buffer may be provided by parking on streets with higher traffic volumes and speeds (over 35 mph, ADT over 6,000)
- Add sidewalk width and/or buffer for a total width of 10 feet (recommended), 8 feet minimum on streets with lower traffic volumes and speeds (ADT less than 6,000 and 30 mph or less); Buffer may be provided by parking, protected bike lane, furnishing zone, street trees/planting strip
- Sidewalk clear zone of 6 feet or more
- Remove obstructions from the primary pedestrian-way or add missing curb ramps
- Add pedestrian crossing at appropriate location
- Re-open closed crosswalks
- Raised pedestrian refuge median or raised crossing, required if project is on a roadway with 4 or more lanes
- Reduced pedestrian crossing distance
- Narrowed travel lanes
- Reduced corner radii (e.g. truck apron)
- Curb extensions
- Rectangular Rapid Flashing Beacon (RRFB) or pedestrian signal
- Lighting, especially at crosswalks – pedestrian scale (10-15 feet), preferably poised over sidewalk
- Add countdown heads at signals
- Shorten signal cycle lengths of 90 seconds or less – pedestrian friendly signal timing, lead pedestrian intervals
- Access management: minimize number and spacing of driveways
- Arterial traffic calming: Textured intersections, gateway treatments, raised medians, road diets, roundabouts
- Wayfinding
- Benches

- Transit stop amenities or bus stop pads
- Add crosswalk at transit stop
- Pedestrian priority street treatment (e.g. woonerf) on very low traffic/low volume street

B. Bicycle Projects design elements

Design elements emphasize separating bicycle and auto traffic, increasing visibility of bicyclists, making it easier and more comfortable for people traveling by bicycle to access routes and destinations.

For every element checked describe existing conditions and proposed features:

- On streets with higher traffic volumes and speeds (over 35 mph, ADT over 6,000): Buffered bicycle lane, 6 foot bike lane, 3 foot buffer; Protected bikeway with physical separation (e.g. planters, parking); Raised bikeway
- Separated multi-use trail parallel to roadway
- Bike priority treatments at intersections and crossings (i.e. advance stop lines, bike boxes, signals, high-intensity activated crosswalk (HAWK) signals, user-activated signals)
- Medians and crossing treatments
- Wayfinding, street markings
- Lighting at intersections
- Bicycle boulevard treatment where ADT is less than 3,000 per day: Buffered bicycle lane, 6 foot bike lane, 3 foot buffer

C. Other Complete Street Features

For every element checked describe existing conditions and proposed features:

- Turning radius improvements (freight route only)
- Gateway feature
- Street trees
- ITS elements (i.e. signal timing and speed detection)

D. Off-Street and Trail Facilities

For every element checked describe existing conditions and proposed features:

- Minimum 12' trail width (plus 2' graded area each side)
- Always maintains minimum 5' separation when adjacent to street **or** never adjacent to street
- All on-street segments include improvements beyond bike lanes (item C, above) **or** no on-street segments
- All street crossings include an appropriate high-visibility crosswalk treatment
- All 4-lane street crossings include appropriate refuge island **or** no 4-lane street crossings
- Frequent access points (generally every ¼-mile)
- All crosswalks and underpasses include lighting
- Trail lighting throughout
- Trailhead improvements
- Rest areas with benches and wheelchair spaces
- Wayfinding or interpretive signage
- Signs regulating bike/pedestrian interaction (e.g. bikes yield to pedestrians)
- Trail priority at all local street/driveway crossing

Project Estimate Report: Development Phase

for

Jade & Montavilla Connected Centers Project

(multiple sub-projects addressed separately)

August 25, 2016

Requested by: April Bertelsen

Prepared by: Neal Robinson

Locations:

- 1a – SE Clinton Street, 82nd Ave. to 85th Avenue
- 1b – SE Clinton Street, 85th Ave. to 87th Avenue.
- 2 – SE 85th Ave., Powell St. to Division St.
- 3a – SE Woodward St, 75th - 78th, full street.
- 3b – SE Woodward St, 75th - 78th, half street.
- 4 – SE Woodward Street, 78th to 79th.
- 5 – SE Tibbets St., 78th Ave. to 82nd; SE 82nd Ave., Tibbets to Brooklyn
- 6 – SE Washington St, 72nd to I-205.
- 7 – SE Alder Street, 82nd to 84th.
- 8 – SE 82nd Ave. at Washington & Stark streets. (Incl. in TRAFFIC Estimate)
- 9 – SE 84th and 86th Avenue Crossing Improvements at Washington & Stark

Location: 1a – SE Clinton Street, 82nd Ave. to 85th Avenue

Description: Infill sidewalk, lighting and missing street improvements, ADA ramp upgrades

Current Cross-Section:

- 82nd to 84th: Curbed and 44' paved street with missing sidewalk sections in 60' R/W
- 84th Ave to 84th Pl.: Curbed and 28' paved street with missing sidewalk sections in 60' R/W
- 84th Pl. to 85th Ave: Center strip gravel in 50' R/W

Proposed Cross-Section:

- 82nd to 84th Pl.: Add separated sidewalks to existing cross section where missing
- 84th Pl. to 85th Ave: 28' pavement with planter strips, trees, and 6' separated sidewalks

Issues: (describe issues, or indicate "none identified")

- Water – None identified
- BES (storm, sanitary, water-quality facilities) – None identified
- Signals and Street Lighting – Add wood pole mounted luminaires
- Environmental and Zoning (OPDR; Army Corp of Engineers; Division of State Lands) – None identified
- Contaminated Media – None identified

SUB-PROJECT 1b Cost Estimate:

(Estimates greater than \$10,000 round numbers to the nearest \$1,000; for less than \$10,000 round to the nearest \$100)

Construction	\$ 215,000
Project Management (5%)	\$ 9,000
Design Engineering (25%)	\$ 46,000
Construction Management (15%)	\$ 28,000
Right-of-Way (Cost + 20% Contingency)	\$ -
Overhead (79.27% of personnel)	\$ 66,000
Estimate Contingency	\$ 155,000

Total Sub-Project Estimate: \$519,000

Estimating Assumptions:

(Written explanation of contingencies, variations from the base unit prices and why)

- Assume residential street section of 3" AC on 8" aggregate base with subgrade geotextile.
- Assume no main improvement to existing water and sewer system. However, a sump/sed system is required. Estimate provided by Tim Knighton, BES
- Assume street trees planted at 25' intervals.
- Level of confidence for estimate is low

Location: 2 – SE 85th Ave., Powell St. to Division St.

Description: Infill sidewalk, lighting and missing sidewalks, ADA ramp & driveway upgrades

Current Cross-Section: Powell to Kelly: 28' pavement with sporadic 5' curb tight sidewalks in 35' to 40' R/W
Kelly to Division: 20' to 32' pavement with sporadic curb tight and separated sidewalks in 50' R/W

Proposed Cross-Section: Powell to Kelly: 28' pavement with infill 8' curb tight sidewalks. Add easement or R/W to accommodate
Kelly to Division: 20' to 32' pavement with infill curb tight and separated sidewalks in 50' R/W

Issues: (describe issues, or indicate "none identified")

- Water – None identified
- BES (storm, sanitary, water-quality facilities) – None identified
- Signals and Street Lighting – Add wood pole mounted luminaires and lighting system for Division St. pedestrian overcrossing.
- Environmental and Zoning (OPDR; Army Corp of Engineers; Division of State Lands) – None identified
- Contaminated Media – None identified

- Right-of-Way Needs – Easements or R/W acquisition for sidewalk construction in Powell to Kelley portion
- Railroads (BNSF; UPRR; PTTR) – None identified
- Parks (landscaping and irrigation) – None identified
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – None identified

SUB-PROJECT 2 Cost Estimate:

(Estimates greater than \$10,000 round numbers to the nearest \$1,000; for less than \$10,000 round to the nearest \$100)

Construction	\$ 738,000
Project Management (5%)	\$ 31,000
Design Engineering (25%)	\$ 155,000
Construction Management (15%)	\$ 93,000
Right-of-Way (Cost + 20% Contingency)	\$ 100,000
Overhead (79.27% of personnel)	\$ 221,000
Estimate Contingency	\$ 528,000

Total Sub-Project Estimate: \$1,866,000

Estimating Assumptions:

(Written explanation of contingencies, variations from the base unit prices and why)

- Assume no main improvement to existing water and sewer system
- Include lighting system for existing pedestrian overcrossing at Division St. Estimate provided by Stefan Bussey, STL
- Assume street trees planted at 25' intervals.
- Assume R/W acquisition for sidewalk construction in Powell to Kelley portion.
- Level of confidence for estimate is low

Location: 3a – SE Woodward St, 75th - 78th, full street.

Description: Construct street improvement of unimproved street

Current Cross-Section: Gravel center strip in incomplete 60' R/W

Proposed Cross-Section: 38' pavement with 6' separated sidewalks in 60' R/W

Issues: *(describe issues, or indicate "none identified")*

- Water – None identified
- BES (storm, sanitary, water-quality facilities) – None identified
- Signals and Street Lighting – Add wood pole mounted luminaires
- Environmental and Zoning (OPDR; Army Corp of Engineers; Division of State Lands) – None identified
- Contaminated Media – None identified
- Right-of-Way Needs – R/W acquisition from 4 parcels for completion of north portion of street
- Railroads (BNSF; UPRR; PTTR) – None identified

- Parks (landscaping and irrigation) – None identified
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – None identified

SUB-PROJECT 3a Cost Estimate:

(Estimates greater than \$10,000 round numbers to the nearest \$1,000; for less than \$10,000 round to the nearest \$100)

Construction	\$ 263,000
Project Management (5%)	\$ 11,000
Design Engineering (25%)	\$ 55,000
Construction Management (15%)	\$ 33,000
Right-of-Way (Cost + 20% Contingency)	\$ 386,000
Overhead (79.27% of personnel)	\$ 78,000
Estimate Contingency	\$ 188,000

Total Sub-Project Estimate: \$1,014,000

Estimating Assumptions:

(Written explanation of contingencies, variations from the base unit prices and why)

- Assume residential street section of 3" AC on 8" aggregate base on subgrade geotextile.
- Assume no main improvement to existing water and sewer system
- Assume street trees planted at 25' intervals.
- Assume R/W acquisition from 4 parcels for completion of north portion of street.
- Level of confidence for estimate is low
-

Location: 3b – SE Woodward St, 75th - 78th, half street.

Description: Construct half street improvement of unimproved street

Current Cross-Section: Gravel center strip in incomplete 60' R/W

Proposed Cross-Section: 19' pavement with 6' separated sidewalk in S half of incomplete 60' R/W

Issues: *(describe issues, or indicate "none identified")*

- Water – None identified
- BES (storm, sanitary, water-quality facilities) – None identified
- Signals and Street Lighting – Add wood pole mounted luminaires
- Environmental and Zoning (OPDR; Army Corp of Engineers; Division of State Lands) – None identified
- Contaminated Media – None identified
- Right-of-Way Needs – R/W acquisition from 3 parcels for completion of half street.
- Railroads (BNSF; UPRR; PTTR) – None identified
- Parks (landscaping and irrigation) – None identified
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – None identified

SUB-PROJECT 3b Cost Estimate:

(Estimates greater than \$10,000 round numbers to the nearest \$1,000; for less than \$10,000 round to the nearest \$100)

Construction	\$ 134,000
Project Management (5%)	\$ 5,000
Design Engineering (25%)	\$ 27,000
Construction Management (15%)	\$ 16,000
Right-of-Way (Cost + 20% Contingency)	\$ 234,000
Overhead (79.27% of personnel)	\$ 39,000
Estimate Contingency	\$ 95,000

Total Sub-Project Estimate: \$550,000

NOTE: This sub-project estimate is an alternate and not included in TOTAL Cost Estimate since this cost is totally included in sub-project 3a

Estimating Assumptions:

(Written explanation of contingencies, variations from the base unit prices and why)

- Assume residential street section of 3" AC on 8" aggregate base on subgrade geotextile.
- Assume no main improvement to existing water and sewer system.
- Assume street trees planted at 25' intervals.
- Assume R/W acquisition from 3 parcels for completion of half street in S. portion of street R/W.
- Level of confidence for estimate is low

Location: 4 – SE Woodward Street, 78th to 79th

Description: Construct ped/bike improvement of unimproved street

Current Cross-Section: Gravel center strip in 60' R/W

Proposed Cross-Section: 9' vegetated median island with two curbed 12' multi-use paths in 60' R/W

Issues: (describe issues, or indicate "none identified")

- Water – None identified
- BES (storm, sanitary, water-quality facilities) – None identified
- Signals and Street Lighting – Add wood pole mounted luminaires
- Environmental and Zoning (OPDR; Army Corp of Engineers; Division of State Lands) – None identified
- Contaminated Media – None identified
- Right-of-Way Needs – None identified.
- Railroads (BNSF; UPRR; PTTR) – None identified
- Parks (landscaping and irrigation) – None identified
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – None identified

SUB-PROJECT 4 Cost Estimate:

(Estimates greater than \$10,000 round numbers to the nearest \$1,000; for less than \$10,000 round to the nearest \$100)

Construction	\$ 112,000
Project Management (5%)	\$ 5,000
Design Engineering (25%)	\$ 23,000
Construction Management (15%)	\$ 14,000
Right-of-Way (Cost + 20% Contingency)	\$ -
Overhead (79.27% of personnel)	\$ 33,000
Estimate Contingency	\$ 80,000

Total Sub-Project Estimate: \$267,000

Estimating Assumptions:

(Written explanation of contingencies, variations from the base unit prices and why)

- Assume residential street section of 3" AC on 8" aggregate base on subgrade geotextile.
- Assume no main improvement to existing water and sewer system.
- Assume street trees in median planted at 25' intervals.
- Assume removable bollards at each end of 12' multi-use paths.
- Level of confidence for estimate is low.

Location: 5 – SE Tibbets St., 78th Ave. to 82nd; SE 82nd Ave., Tibbets to Brooklyn

Description: Infill sidewalk & curb, ADA ramp reconstructs, street trees on Tibbets, add multi-use path on E side of 82nd to Brooklyn

Current Cross-Section: Center paved street with some curbs & sidewalks in 50' R/W

Proposed Cross-Section: Tibbets: Add 6' separated sidewalks to existing cross section;
82nd: Add 12' multi-use path from Tibbets to Brooklyn

Issues: (describe issues, or indicate "none identified")

- Water – None identified
- BES (storm, sanitary, water-quality facilities) – None identified
- Signals and Street Lighting – Add wood pole mounted luminaires on Tibbets
- Environmental and Zoning (OPDR; Army Corp of Engineers; Division of State Lands) – None identified
- Contaminated Media – None identified
- Right-of-Way Needs – 82nd Ave. portion requires additional 4' R/W for multi-use path.
- Railroads (BNSF; UPRR; PTTR) – None identified
- Parks (landscaping and irrigation) – None identified
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – None identified

SUB-PROJECT 5 Cost Estimate:

(Estimates greater than \$10,000 round numbers to the nearest \$1,000; for less than \$10,000 round to the nearest \$100)

Construction	\$ 445,000
Project Management (5%)	\$ 18,000
Design Engineering (25%)	\$ 92,000
Construction Management (15%)	\$ 55,000
Right-of-Way (Cost + 20% Contingency)	\$ 36,000
Overhead (79.27% of personnel)	\$ 132,000
Estimate Contingency	\$ 317,000

Total Sub-Project Estimate: \$1,095,000

Estimating Assumptions:

(Written explanation of contingencies, variations from the base unit prices and why)

- Assume residential street section of 3" AC on 8" aggregate base on subgrade geotextile.
- Assume no main improvement to existing water and sewer system.
- R/W acquisition from 1 parcel for completion of multi-use path on 82nd.
- Assume street trees planted at 25' intervals on Tibbets.
- Level of confidence for estimate is low.

Location: 6 – SE Washington St, 72nd to I-205

Description: Reconfigure Washington lanes to add protected bike lane to existing street section including. Add multi-use path on east side of 76th to Stark

Current Cross-Section: Washington: 36' Pavement (2-7' parking, 2-11' EB through) with 5' planter strip and 6' walks & 1' to PL in 60' R/W
 76th: 28' Pavement (1-7' parking, 2-9.5' through) with 5' planter strips and 6' walks & 1' to PL in 50' R/W

Proposed Cross-Section: Washington: 36' Pavement (1-7' parking, 2-10.5' EB through, 1-8' protected bikelane) with 5' planter strip and 6' walks & 1' to PL in 60' R/W
 76th: 28' Pavement (1-7' parking, 2-9.5' through) with 5' planter strip and 6' walk & 1' to PL on W side and 12' multi-use on E side in 50' R/W

Issues: (describe issues, or indicate "none identified")

- Water – None identified
- BES (storm, sanitary, water-quality facilities) – None identified
- Signals and Street Lighting – None identified
- Environmental and Zoning (OPDR; Army Corp of Engineers; Division of State Lands) – None identified
- Contaminated Media – None identified
- Right-of-Way Needs – None identified.
- Railroads (BNSF; UPRR; PTTR) – None identified

- Parks (landscaping and irrigation) – None identified
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – None identified

SUB-PROJECT 6 Cost Estimate:

(Estimates greater than \$10,000 round numbers to the nearest \$1,000; for less than \$10,000 round to the nearest \$100)

Construction	\$ 322,000
Project Management (5%)	\$ 14,000
Design Engineering (25%)	\$ 70,000
Construction Management (15%)	\$ 42,000
Right-of-Way (Cost + 20% Contingency)	\$ -
Overhead (79.27% of personnel)	\$ 100,000
Estimate Contingency	\$ 233,000

Total Sub-Project Estimate: \$781,000

Estimating Assumptions:

(Written explanation of contingencies, variations from the base unit prices and why)

- Assume no main improvement to existing water and sewer system
- Impact attenuators required for barrier ends, Type E assumed.
- Assumed "Concrete Islands" unit price to estimate traffic separators (RD706)
- Level of confidence for estimate is low

Location: 7 – SE Alder Street, 82nd to 84th

Description: Construct full street improvement of unimproved street

Current Cross-Section: Center strip gravel in 60' R/W

Proposed Cross-Section: 38' pavement with planter strips, trees, and 6' separated sidewalks in 60' R/W

Issues: *(describe issues, or indicate "none identified")*

- Water – None identified
- BES (storm, sanitary, water-quality facilities) – None identified
- Signals and Street Lighting – Add wood pole mounted luminaires
- Environmental and Zoning (OPDR; Army Corp of Engineers; Division of State Lands) – None identified
- Contaminated Media – None identified
- Right-of-Way Needs – None identified
- Railroads (BNSF; UPRR; PTTR) – None identified
- Parks (landscaping and irrigation) – None identified
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – None identified

SUB-PROJECT 7 Cost Estimate:

(Estimates greater than \$10,000 round numbers to the nearest \$1,000; for less than \$10,000 round to the nearest \$100)

Construction	\$ 290,000
Project Management (5%)	\$ 12,000
Design Engineering (25%)	\$ 62,000
Construction Management (15%)	\$ 37,000
Right-of-Way (Cost + 20% Contingency)	\$ -
Overhead (79.27% of personnel)	\$ 88,000
Estimate Contingency	\$ 209,000

Total Sub-Project Estimate: \$698,000

Estimating Assumptions:

(Written explanation of contingencies, variations from the base unit prices and why)

- Assume residential street section of 3" AC on 8" aggregate base with subgrade geotextile.
- Assume no main improvement to existing water and sewer system
- Assume street trees planted at 25' intervals.
- Level of confidence for estimate is low

Location: 9 – SE 84th and 86th Avenue Crossing Improvements at Washington & Stark

Description: ADA ramp reconstructs, curb extension removal, planter relocation & corner rebuild

Current Cross-Section:

- Stark at 84th: Approximately 8' curb/sidewalks with 44' pavement (2-parking, 2-WB through, 1-WB bike) in 60' R/W
- Stark at 84th: Approximately 8' curb/sidewalks with 44' pavement (2-parking, 2-WB through, 1-WB bike) in 60' R/W
- Washington at 84th: 4' sidewalks planter strips (W)8' curb-tight sidewalks (E), 36' pavement (2-parking, 2-EB through) in 60' R/W
- Washington at 86th: Approximately 7' sidewalks with 2-7' planters, 23.5' through lanes in 52.5'(W) to 60'(E) R/W

Proposed Cross-Section:

- 84th: Same section, corner/ramp rebuild only
- 86th: Same section with extension/planters removed from the N side of Stark and the S side of Washington

Issues: (describe issues, or indicate "none identified")

- Water – None identified
- BES (storm, sanitary, water-quality facilities) – relocate existing planters if possible
- Signals and Street Lighting – None identified
- Environmental and Zoning (OPDR; Army Corp of Engineers; Division of State Lands) – None identified
- Contaminated Media – None identified

- Right-of-Way Needs – None identified
- Railroads (BNSF; UPRR; PTTR) – None identified
- Parks (landscaping and irrigation) – None identified
- Other Jurisdictions (counties, schools, Port, ODOT, Tri-Met) – bus stop involved in one extension removal

SUB-PROJECT 9 Cost Estimate:

(Estimates greater than \$10,000 round numbers to the nearest \$1,000; for less than \$10,000 round to the nearest \$100)

Construction	\$ 169,000
Project Management (5%)	\$ 7,000
Design Engineering (25%)	\$ 35,000
Construction Management (15%)	\$ 21,000
Right-of-Way (Cost + 20% Contingency)	\$ -
Overhead (79.27% of personnel)	\$ 50,000
Estimate Contingency	\$ 121,000

Total Sub-Project Estimate: \$403,000

Estimating Assumptions:

(Written explanation of contingencies, variations from the base unit prices and why)

- Assume pavement repair section of 3" AC on 8" aggregate base.
- Assume no main improvement to existing water and sewer system.
- Assume planters in existing extensions can be relocated
- Level of confidence for estimate is low

Description: Project wide estimate of traffic items.

Includes: Signing, striping, marking, traffic control, RRFBs, Signal Mods and reconfiguration of turning movements at 82nd Ave with Stark & Washington streets (sub-project 8). These items are not included in sub-project estimates.

TRAFFIC Cost Estimate:

(Estimates greater than \$10,000 round numbers to the nearest \$1,000; for less than \$10,000 round to the nearest \$100)

Construction	\$ 786,000
Project Management (5%)	\$ 34,000
Design Engineering (25%)	\$ 171,000
Construction Management (15%)	\$ 102,000
Right-of-Way (Cost + 20% Contingency)	\$ -
Overhead (79.27% of personnel)	\$ 244,000
Estimate Contingency	\$ 569,000

Total Sub-Project Estimate: \$1,906,000

Jade & Montavilla Connected Centers Project

TOTAL PROJECT

Construction	\$ 3,153,000
Project Management (5%)	\$ 133,000
Design Engineering (25%)	\$ 672,000
Construction Management (15%)	\$ 402,000
Right-of-Way (Cost + 20% Contingency)	\$ 136,000
Overhead (79.27% of personnel)	\$ 959,000
Estimate Contingency	\$ 2,268,000

\$ 7,723,000

* 3a, 3b, 4 and 5 are alternate estimates for decision purposes. Of these, only 5 – SE Tibbets St., 78th Ave. to 82nd; SE 82nd Ave., Tibbets to Brooklyn is included in the TOTAL PROJECT estimate

Project-wide TRAFFIC ITEMS Includes: Signing, striping, marking, traffic control, RRFBs, Signal Mods and reconfiguration of turning movements at 82nd Ave at Stark & Washington (sub-project 8)

SUB - PROJECTS

	1a	1b	2	3a *
	\$ 188,000	\$ 215,000	\$ 738,000	\$ 263,000
	\$ 8,000	\$ 9,000	\$ 31,000	\$ 11,000
	\$ 41,000	\$ 46,000	\$ 155,000	\$ 55,000
	\$ 24,000	\$ 28,000	\$ 93,000	\$ 33,000
	\$ -	\$ -	\$ 100,000	\$ 386,000
	\$ 58,000	\$ 66,000	\$ 221,000	\$ 78,000
	\$ 136,000	\$ 155,000	\$ 528,000	\$ 188,000

\$ 455,000 \$ 519,000 \$ 1,866,000 \$ 1,014,000

	3b *	4	5 *	6
	\$ 134,000	\$ 112,000	\$ 445,000	\$ 322,000
	\$ 5,000	\$ 5,000	\$ 18,000	\$ 14,000
	\$ 27,000	\$ 23,000	\$ 92,000	\$ 70,000
	\$ 16,000	\$ 14,000	\$ 55,000	\$ 42,000
	\$ 234,000	\$ -	\$ 36,000	\$ -
	\$ 39,000	\$ 33,000	\$ 132,000	\$ 100,000
	\$ 95,000	\$ 80,000	\$ 317,000	\$ 233,000

\$ 550,000 \$ 267,000 \$ 1,095,000 \$ 781,000

	7	9	Traffic #
	\$ 290,000	\$ 169,000	\$ 786,000
	\$ 12,000	\$ 7,000	\$ 34,000
	\$ 62,000	\$ 35,000	\$ 171,000
	\$ 37,000	\$ 21,000	\$ 102,000
	\$ -	\$ -	\$ -
	\$ 88,000	\$ 50,000	\$ 244,000
	\$ 209,000	\$ 121,000	\$ 569,000

\$ 698,000 \$ 403,000 \$ 1,906,000

**CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE
NE Clinton St. 82nd Ave. to 85th**

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF **NE Clinton St. 82nd Ave. to 85th**

VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 13,503.64	\$ 13,503.64
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 4,051.09	\$ 4,051.09
23	EROSION CONTROL	LS	1.00	\$ 1,350.36	\$ 1,350.36
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 135.04	\$ 135.04
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 5,401.46	\$ 5,401.46
45	CLEARING AND GRUBBING	LS	1.00	\$ 3,510.95	\$ 3,510.95
49	GENERAL EXCAVATION	CUYD	234.00	\$ 49.00	\$ 11,466.00
53	12 INCH SUBGRADE STABILIZATION	SQYD	48.20	\$ 30.17	\$ 1,454.19
58	SUBGRADE GEOTEXTILE	SQYD	482.00	\$ 1.25	\$ 602.50
146	AGGREGATE BASE, 8 INCH THICK	SQYD	482.22	\$ 12.30	\$ 5,931.33
149	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	TON	84.00	\$ 89.50	\$ 7,518.00
153	13 INCH ASPHALT CONCRETE PAVEMENT REPAIR	SQYD	188.00	\$ 179.00	\$ 33,652.00
164	CONCRETE CURBS, STANDARD CURB	FOOT	120.00	\$ 25.50	\$ 3,060.00
170	CONCRETE WALKS	SQFT	3,096.00	\$ 7.40	\$ 22,910.40
171	MONOLITHIC CURB AND SIDEWALKS	SQFT	1,413.68	\$ 18.00	\$ 25,446.24
251	LAWN SEEDING	SQYD	344.00	\$ 10.04	\$ 3,453.76
252	TOPSOIL	CUYD	38.00	\$ 60.00	\$ 2,280.00
255	DECIDUOUS TREES, 2-1/2 INCH CALIPER	EACH	21.00	\$ 822.00	\$ 17,262.00
TOTAL BID ITEMS					\$ 162,988.96

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
14	BOLI FEE PAYMENT	LS	1.00	\$ 250.00	\$ 250.00
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 16,298.90	\$ 16,298.90

TOTAL ANTICIPATED ITEMS **\$ 16,548.90**

SCHEDULE SUMMARY

BID ITEMS		\$ 162,989
CONSTRUCTION CONTINGENCY	5% of Bid Items*	\$ 8,149
SUBTOTAL		\$ 171,138
 ANTICIPATED ITEMS		 \$ 16,549
 TOTAL CONSTRUCTION		 \$ 187,687
PROJECT MANAGEMENT	5% of Bid Items	\$ 8,149
DESIGN ENGINEERING	25% of Bid Items	\$ 40,747
CONSTRUCTION MANAGEMENT	15% of Bid Items	\$ 24,448
SUBTOTAL		\$ 73,344
 PROJECT ENGINEERING & MANAGEMENT OVERHEAD	79.27% of PM, Eng, and CM	 \$ 58,140
 TOTAL PROJECT ENGINEERING & MANAGEMENT		 \$ 131,485
 RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES		 \$ -
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION		\$ -

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	RIGHT-OF-WAY CONTINGENCY		30%	of Land, Improve, and Damages	\$ -
	TOTAL PROJECT RIGHT-OF-WAY				\$ -
	INFLATION RATE ON CONTRACT	Years	5	4.5% of Construction	\$ 46,205
	INFLATION RATE ON PERSONNEL	5	2.0%	of Eng & Mgmt	\$ 13,685
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE		20%	of Const, Eng & Mgmt, and Inflation	\$ 75,812
	TOTAL PROJECT CONTINGENCY				\$ 135,702
	TOTAL PROJECT ESTIMATE				\$ 454,874

NE Clinton St. 82nd Ave. to 85th

Location: NE Clinton St. 82nd Ave. to 85th

Description: Infill sidewalk, lighting and missing street improvements, ADA ramp upgrades

Current Cross-Section: 82nd to 84th: Curbed and 44' paved street with missing sidewalk sections in 60' RW
 84th Ave to 84th Pl: Curbed and 28' paved street with missing sidewalk sections in 60' RW
 84th Pl. to 85th Ave: Center strip gravel in 50' RW

Proposed Cross-Section: 82nd to 84th Pl: Add separated sidewalks to existing cross section where missing
 84th Pl. to 85th Ave: 28' pavement with planter strips, trees, and 6' separated sidewalks

Typical Sections	Pl.	SW/Curb	Swalk/Curb	Parking	through	Leftturn	through	Parking	Swalk/Curb	SW/Curb	Pl.	Existing
1 82nd to 84th	1	5	3	10	12	12	10	3	5			60' RW
2 84th to 84th Place	1	6	9	14	14	14	14	9	6			60' RW
3 84th Place to 85th Ave	1	6	4		14		14	4	6			60' RW

MMWAC	L. ft.	W. ft.	Area sf	Depth. In.	Vol./CY	Tons
1 Base & Weaving			0.0		0.0	0.0
2 84th Place to 85th Ave	155	28	4340.0	3	40.2	84.4
			0.0		0.0	0.0
			4340		40	84

Aggregate Base - Thickness	L. ft.	W. ft.	Area, sf	Area, SY	Depth. In.	Depth. In.	Vol./CY	Tons
1 X inch Thick			0.0	0.0			0.0	0.0
2 X inch Thick			0.0	0.0			0.0	0.0
3 84th Place to 85th Ave	155	28	4340.0	482.2	8		0.0	0.0
4 X inch Thick			0.0	0.0			0.0	0.0

Total 4 Inch Thick
 Total 6 Inch Thick
 Total 8 Inch Thick

< Insert formula
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 482

Aggregate Base - Tons	L. ft.	W. ft.	Area, sf	Depth. In.	Vol./CY	Tons
1			0.0		0.0	0.0
2			0.0		0.0	0.0
3			0.0		0.0	0.0
			0.0		0.0	0.0
			0.0		0.0	0.0

Subgrade Geotextile	Area, sy
Area, sy	482

General Excavation - from Thickness	Area, sf	Depth. In.	Vol./CY
1 Roadway	0.0	0.0	0.0
2 Roadway	0.0	0.0	0.0
3 84th Place to 85th Ave	4340.0	11	147.3
Curb	60	16	3.0
Curb & Gutter	0	0.0	0.0
Sidewalk	4510	6	83.5
			234

General Excavation - from Tons	Area, sf	Depth. In.	Vol./CY
1 Roadway	0.0	0.0	0.0
2 Roadway	0.0	0.0	0.0
3 Roadway	4340.0	0.0	0.0
Form Curb	0	0.0	0.0
Curb & Gutter	0	0.0	0.0
Sidewalk	0	0.0	0.0

Swale curb & gutter

Pavement Repair	L. ft.	W. ft.	Area, sf
13' AC Pavement Repair (< 1Ft)	188.48	1	188
16' AC Pavement Repair (> 3Ft)			0

Concrete Curbs	L. ft.	W. ft.	Area, sf
Curb	120		0
Curb & 18" Gutter			0

Sidewalks	L. ft.	W. ft.	Area, sf
Separated	516	6	3096
Length for AC repair	0		0
Monolithic Curb & Sidewalk, ramps, Ea	8		1413.68
Monolithic Curb & Sidewalk			0
Monolithic Curb Gutter & Sidewalk			0

82nd - 84th 84 - 84 Pl 84 Pl-85
 23.56 Ft. curb/corner 195 201 120
 176.71 Sfr/corner, R= 15 3 3 2
 4509.66

Driveways	Dwy L. ft.	Wings L. ft.	W. ft.	Area, sf
Adjacent to Swale				0
Adjacent to Planter Strip				0
Monolithic Curb & Driveway				0
Monolithic Curb Gutter & Driveway				0

Inlets & Leads	Length	Total	1 per	2 per	ft.
SW Inlets					
PB Inlets					
G-2 Inlets					
CG-2 Inlets					
Inlet Lead					
Rip Rap					

Trees	L. ft.	Dwgs. ft.	1 every 25'	21
Trees in Swales				
Trees in Planter Strip	516	0	0	21
Trees in Tree Wells				0
				21

Topsoil	L. ft.	W. ft.	Area, sf	D. In.	Vol./CY
planter strip	516	6	3096	4	38
			3096		0
					38

Retaining Wall	L. ft.	Ht. ft.	Area, sf
Segmental			0
Prefabricated modular			0

Stripping	L. ft.	L. ft.	L. Tot., ft.
Removal	0	0	0
Permanent	0	0	0

Marking	L. ft.	L. ft.	L. Tot., ft.
Arrows			0
Strip Bars			0

Illumination	EA
New LL Poles	
Wood Pole Lights	
Coora	
Single Ornamental	
Twin Ornamental	

Signs	ODOT #	City #	ea	Dimensions, in	Area, sf	Name
G	G5500		6	24	0	Street name
G	G5500		9	60	0	Destination
R2	R 1060		36	36	0	Yield
W7	R 5020		36	12	0	One Way (R, Arrow)
W7			30	30	0	roundabout left thru/right only
W7			30	30	0	roundabout left thru/right
Y1	R 4020		18	18	0	15 MPH Rider
Y3	R 1700		30	30	0	Traffic Circle Ahead
			posts/footings		0.0	

R/W	Area	Cost/ SF	Land Cost	No. Properties	Acq./ Prop	Appr./ Prop	Total R/W
Location			\$ -	\$ 50,000	\$ -	\$ 93,000	\$ -
			\$ -	\$ -	\$ -	\$ -	\$ -
			\$ -	\$ -	\$ -	\$ -	\$ -

Summary	G	R2	W7	Y1	Y3
	0.0	0.0	0.0	0	0.0

Insert values

CITY OF PORTLAND, OREGON
 BUREAU OF TRANSPORTATION
 PRELIMINARY ENGINEER'S ESTIMATE
 NE Clinton St., 85th to 87th

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF NE Clinton St., 85th to 87th

VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 15,390.62	\$ 15,390.62
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 4,617.19	\$ 4,617.19
23	EROSION CONTROL	LS	1.00	\$ 1,539.06	\$ 1,539.06
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 153.91	\$ 153.91
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 6,156.25	\$ 6,156.25
45	CLEARING AND GRUBBING	LS	1.00	\$ 4,001.56	\$ 4,001.56
49	GENERAL EXCAVATION	CUYD	500.00	\$ 49.00	\$ 24,500.00
53	12 INCH SUBGRADE STABILIZATION	SQYD	147.60	\$ 30.17	\$ 4,453.09
58	SUBGRADE GEOTEXTILE	SQYD	1,476.00	\$ 1.25	\$ 1,845.00
80	12 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	FOOT	65.00	\$ 120.00	\$ 7,800.00
92	CONCRETE MANHOLES, SEDIMENTATION	EACH	1.00	\$ 5,610.00	\$ 5,610.00
93	CONCRETE MANHOLES, SUMP	EACH	1.00	\$ 13,000.00	\$ 13,000.00
94	SUMP CAPACITY TEST	EACH	1.00	\$ 1,690.00	\$ 1,690.00
96	CONCRETE INLETS, TYPE CG-2	EACH	2.00	\$ 1,900.00	\$ 3,800.00
118	TRENCH RESURFACING	SQYD	25.33	\$ 109.00	\$ 2,761.33
119	TEMPORARY TRENCH RESURFACING	SQYD	18.11	\$ 25.20	\$ 456.40
146	AGGREGATE BASE, 8 INCH THICK	SQYD	1,522.00	\$ 12.30	\$ 18,720.60
149	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	TON	258.00	\$ 89.50	\$ 23,091.00
168	CONCRETE DRIVEWAYS	SQFT	736.00	\$ 8.40	\$ 6,182.40
170	CONCRETE WALKS	SQFT	1,956.00	\$ 7.40	\$ 14,474.40
171	MONOLITHIC CURB AND SIDEWALKS	SQFT	706.84	\$ 18.00	\$ 12,723.12
251	LAWN SEEDING	SQYD	126.78	\$ 10.04	\$ 1,272.85
252	TOPSOIL	CUYD	14.00	\$ 60.00	\$ 840.00
255	DECIDUOUS TREES, 2-1/2 INCH CALIPER	EACH	13.00	\$ 822.00	\$ 10,686.00
TOTAL BID ITEMS					\$ 185,764.78

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
6	CONNECT CONTRACTOR INSTALLED TRAFFIC SIGNAL LOOPS TO CONTROLLER BY BOM	EACH	1.00	\$ 1,000.00	\$ 1,000.00
14	BOLI FEE PAYMENT	LS	1.00	\$ 250.00	\$ 250.00
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 18,576.48	\$ 18,576.48

TOTAL ANTICIPATED ITEMS \$ 19,826.48

SCHEDULE SUMMARY

BID ITEMS		\$ 185,765
CONSTRUCTION CONTINGENCY	5% of Bid Items*	\$ 9,288
SUBTOTAL		\$ 195,053
ANTICIPATED ITEMS		\$ 19,826
TOTAL CONSTRUCTION		\$ 214,879
PROJECT MANAGEMENT	5% of Bid Items	\$ 9,288
DESIGN ENGINEERING	25% of Bid Items	\$ 46,441
CONSTRUCTION MANAGEMENT	15% of Bid Items	\$ 27,865
SUBTOTAL		\$ 83,594

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	PROJECT ENGINEERING & MANAGEMENT OVERHEAD		79.27%	of PM, Eng, and CM	\$ 66,265
	TOTAL PROJECT ENGINEERING & MANAGEMENT				\$ 149,859
	RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES				\$ -
	RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION				\$ -
	RIGHT-OF-WAY CONTINGENCY		30%	of Land, Improve, and Damages	\$ -
	TOTAL PROJECT RIGHT-OF-WAY				\$ -
	INFLATION RATE ON CONTRACT	Years	5	4.5% of Construction	\$ 52,899
	INFLATION RATE ON PERSONNEL	5		2.0% of Eng & Mgmt	\$ 15,597
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE			20% of Const, Eng & Mgmt, and Inflation	\$ 86,647
	TOTAL PROJECT CONTINGENCY				\$ 155,143
	TOTAL PROJECT ESTIMATE				\$ 519,882

NE Clinton St., 85th to 87th

Location: NE Clinton St., 85th to 87th
Description: Construct street improvement of unimproved street
Current Cross-Section: Unimproved
Proposed Cross-Section: Thirty two foot pavement in 60' RW with separated 6' sidewalks

Typical Sections	Pl.	SW/Gr	SW/Gr	Paving	Shoulder	Lat/ur	Shoulder	Paving	SW/Gr	SW/Gr	Pl.
1 85th - 87th	1	5	10	4	12		12	4	4	5	1

50' RW
0' RW

Existing
50'
50'

32' Pavement
0' Pavement

MMW/MAC	L. Ft.	Wt. Ft.	Area sf	Depth in.	Vol. CV	Tons
1 Base & Wearing	415	32	13280.0	3	123.0	258.2
2			0.0		0.0	0.0
3			0.0		0.0	0.0
					0.0	0.0
					0.0	0.0
					123	258

Aggregate Base - Thickness	L. Ft.	Wt. Ft.	Area sf	Area SY	Depth in.
1 6.5in - 8.7in	415	33	13695.0	1521.7	8
2 X Inch Thick			0.0	0.0	
3 X Inch Thick			0.0	0.0	
4 X Inch Thick			0.0	0.0	

Total 4 Inch Thick
Total 5 Inch Thick
Total 8 Inch Thick

Area SY
< Insert formula
< Insert formula
< Insert formula
1522

Aggregate Base - Tons	L. Ft.	Wt. Ft.	Area sf	Depth in.	Vol. CV	Tons
1			0.0		0.0	0.0
2			0.0		0.0	0.0
3			0.0		0.0	0.0
					0.0	0.0
					0	0

Subgrade Geotextile	Area SY
1475	

General Excavation - from Thickness	Area sf	Depth in.	Vol. CV
1 Roadway	13280.0	11	450.9
2 Roadway	0.0	0.0	0.0
3 Roadway	0.0	0.0	0.0
Curb	0	0	0.0
Curb & Gutter	0	0	0.0
Sidewalk	2663	6	49.3
			500

Swale curb & gutter

General Excavation - from Tons	Area sf	Depth in.	Vol. CV
1 Roadway	13280.0	0.0	0.0
2 Roadway	0.0	0.0	0.0
3 Roadway	0.0	0.0	0.0
Curb	0	0	0.0
Curb & Gutter	0	0	0.0
Sidewalk	0	0	0.0

Swale curb & gutter

Create link to Estimate >>

Pavement Repair	L. Ft.	W. Ft.	Area sf
13" AC Pavement Repair (< 1ft)	94	24	0
16" AC Pavement Repair (> 3ft)	65	3.5	228
Trench Resurfacing	65	2.5	163
Temporary Trench Resurfacing			0

CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE
NE 85th Ave, Powell to Division

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF NE 85th Ave, Powell to Division
VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 51,320.31	\$ 51,320.31
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 15,396.09	\$ 15,396.09
23	EROSION CONTROL	LS	1.00	\$ 5,132.03	\$ 5,132.03
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 513.20	\$ 513.20
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 20,528.12	\$ 20,528.12
45	CLEARING AND GRUBBING	LS	1.00	\$ 13,343.28	\$ 13,343.28
49	GENERAL EXCAVATION	CUYD	482.00	\$ 49.00	\$ 23,618.00
153	13 INCH ASPHALT CONCRETE PAVEMENT REPAIR	SQYD	1,011.00	\$ 179.00	\$ 180,969.00
163	CONCRETE CURBS, CURB AND GUTTER	FOOT	200.00	\$ 33.03	\$ 6,606.00
168	CONCRETE DRIVEWAYS	SQFT	4,448.00	\$ 8.40	\$ 37,363.20
170	CONCRETE WALKS	SQFT	13,854.00	\$ 7.40	\$ 102,519.60
171	MONOLITHIC CURB AND SIDEWALKS	SQFT	1,767.10	\$ 18.00	\$ 31,807.80
	LIGHTING SYSTEM, DIVISION PEDESTRIAN OVERCROSSING	LS*	1.00	\$ 38,000.00	\$ 38,000.00
251	LAWN SEEDING	SQYD	769.67	\$ 10.04	\$ 7,727.45
252	TOPSOIL	CUYD	86.00	\$ 60.00	\$ 5,160.00
255	DECIDUOUS TREES, 2-1/2 INCH CALIPER	EACH	92.00	\$ 822.00	\$ 75,624.00
283	REMOVE & REINSTALL MAILBOX SUPPORTS	EACH	17.00	\$ 224.00	\$ 3,808.00
TOTAL BID ITEMS					\$ 619,436.08

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
5	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	EACH	5.00	\$ 5,000.00	\$ 25,000.00
14	BOLI FEE PAYMENT	LS	1.00	\$ 619.44	\$ 619.44
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 61,943.61	\$ 61,943.61
TOTAL ANTICIPATED ITEMS					\$ 87,563.04

SCHEDULE SUMMARY

BID ITEMS		\$ 619,436
CONSTRUCTION CONTINGENCY	5% of Bid Items	\$ 30,972
SUBTOTAL		\$ 650,408
ANTICIPATED ITEMS		\$ 87,563
TOTAL CONSTRUCTION		\$ 737,971
PROJECT MANAGEMENT	5% of Bid Items	\$ 30,972
DESIGN ENGINEERING	25% of Bid Items	\$ 154,859
CONSTRUCTION MANAGEMENT	15% of Bid Items	\$ 92,915
SUBTOTAL		\$ 278,746
PROJECT ENGINEERING & MANAGEMENT OVERHEAD	79.27% of PM, Eng, and CM	\$ 220,962
TOTAL PROJECT ENGINEERING & MANAGEMENT		\$ 499,708
RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES		\$ 48,625
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION		\$ 36,600

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	RIGHT-OF-WAY CONTINGENCY			30% of Land, Improve, and Damages	\$ 14,588
	TOTAL PROJECT RIGHT-OF-WAY				\$ 99,813
	INFLATION RATE ON CONTRACT	Years		Inflation	
	INFLATION RATE ON PERSONNEL	5		4.5% of Construction	\$ 181,675
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE	5		2.0% of Eng & Mgmt	\$ 52,010
				20% of Const, Eng & Mgmt, and Inflation	\$ 294,273
	TOTAL PROJECT CONTINGENCY				\$ 527,958
	TOTAL PROJECT ESTIMATE				\$ 1,865,449

NE 85th Ave, Powell to Division

Location: 2 - NE 85th Ave, Powell to Division

Description: Infill sidewalk, ramp construction, DW ADA reconstruct

Current Cross-Section: Powell to Kelly: 28' pavement with sporadic 5' curb light sidewalks in 35' to 40' RW
Kelly to Division: 20' to 32' pavement with sporadic curb light and separated sidewalks in 50' RW

Proposed Cross-Section: Powell to Kelly: 28' pavement with infill 8' curb light sidewalks. Add easement or RW to accommodate Kelly to Division: 20' to 32' pavement with infill curb light and separated sidewalks in 50' RW

Typical Sections	FL	SW/Curb	Swale/Curb	Parking	through	through	through	through	Swale/Curb	SW/Curb	PL	Existing
1 Powell - Kelly	1.5	0.5	4	4	10	10	4	4	8	8	35	38' RW
2 Kelly - Brooklyn	6	3	4	4	12	12	4	4	3	6	50	50' RW
3 So. Brooklyn - Clinton	0.5	6	4.5	4	10	10	4	4	4.5	6	50	50' RW
4 Mid. Brooklyn - Clinton	7	6	9	4	10	10	4	4	3	6	50	50' RW
5 No. Brooklyn - Clinton	6	6	3	4	12	12	4	4	3	6	50	50' RW
6 Clinton - Division	6	3	4	4	12	12	4	4	3	6	50	50' RW

M/R/MAC	L, ft.	W, ft.	Area, sf	Depth, in.	Vol., cy	Tons
Base & Wearing			0.0	3	0.0	0.0
1 Powell - Kelly			0.0		0.0	0.0
2 Kelly - Brooklyn			0.0		0.0	0.0
3 So. Brooklyn - Clinton			0.0		0.0	0.0
4 Clinton - Division			0.0		0.0	0.0
Total			0		0	0

Aggregate Base - Thickness	L, ft.	W, ft.	Area, sf	Depth, in.	Vol., cy	Tons
1 Powell - Kelly	0	1	0.0	9	0.0	0.0
2 Kelly - Brooklyn			0.0		0.0	0.0
3 So. Brooklyn - Clinton			0.0		0.0	0.0
4 Clinton - Division			0.0		0.0	0.0
Total			0		0	0

Total 4 Inch Thick
Total 6 Inch Thick
Total 8 Inch Thick

Aggregate Base - Tons	L, ft.	W, ft.	Area, sf	Depth, in.	Vol., cy	Tons
1 Powell - Kelly			0.0		0.0	0.0
2 Kelly - Brooklyn			0.0		0.0	0.0
3 So. Brooklyn - Clinton			0.0		0.0	0.0
4 Clinton - Division			0.0		0.0	0.0
Total			0		0	0

Subgrade Geotextile	Area, sy
0	

General Excavation - from Thickness	Area, sf	Depth, in.	Vol., cy
1 Roadway	0.0	11	0.0
2 Roadway	0.0	0	0.0
3 Roadway	0.0	0	0.0
Curb	0	0	0.0
Curb & Gutter	400	9	11.1
Driveways	4448	6	82.4
Sidewalks	16364	6	303.0
Topsoil	6927	4	85.5
Total			482

General Excavation - from Tons	Area, sf	Depth, in.	Vol., cy
1 Roadway	0.0	0.0	0.0
2 Roadway	0.0	0.0	0.0
3 Roadway	0.0	0.0	0.0
Curb	0	0.0	0.0
Curb & Gutter	400	0.0	0.0
Driveways	4448	0.0	0.0
Sidewalks	16364	0.0	0.0
Total			0

Create link to Estimate >>

Pavement Repair	L, ft.	W, ft.	Area, sf
13' AC Pavement Repair (< 1ft)	1011.2	1	1011
16' AC Pavement Repair (> 3ft)	0	3.5	0
Trench Resurfacing	0	2.5	0
Temporary Trench Resurfacing	0	0	0

Concrete Curbs	L, ft.	W, ft.	Area, sf
Curb	200	0	0
Curb & 16" Gutter	200	2	400
Total			0

Sidewalks	L, ft.	W, ft.	Area, sf
Separated	2309	6	13854
Tight to Ex. Curb	98	7.5	743
Length for AC repair	776		
Monolithic Curb & Sidewalk, ramps, Ea	1.0		1767.1
Monolithic Curb & Sidewalk			0
Monolithic Curb Gutter & Sidewalk			0
Total			16364.1

Driveways	Dwg L, ft.	Wings L, ft	W, ft.	Area, sf
Adjacent to Swale	0	0	0	0
Adjacent to Planting Strip	0	3	9	854
Monolithic Curb & Driveway	280	3	8	3534
Monolithic Curb Gutter & Driveway	340	0	340	4448
Total				2890

Inlets & Leads	Length	Total
SW Inlets	#DIV/0!	1 per
PB Inlets	#DIV/0!	1 per
G-2 Inlets		2 per
CG-2 Inlets		2 per
Sump/Set Set		LF
Inlet Lead, 12"		CY
Rip Rsp		

Swales	L, ft.	W, ft.	Area, sf
			0

Trees	L, ft.	Dwgs, ft.	L, Tot, ft.
Trees in Swales	0	0	1 each 25'
Trees in Planting Strip	2309	0	0
Trees in Tree Wells	0	0	0
Total			82

Topsoil	L, ft.	W, ft.	Area, sf	D, in.	Vol., cy
Planter strip	2309	3	6927	4	85
Total			6927		85

Retaining Wall	L, ft.	Ht, ft.	Area, sf
Segmental			0
Prefabricated modular			0

Striping	L, ft.	L, ft.	L, Tot, ft.
Removal	0	0	0
Permanent	0	0	0

Marking	L, ft.	L, ft.	L, Tot, ft.
Arrows			0
Slope Bars			0

Illumination	Ea
New Lt. Poles	5
Wood Pole Lights	
Cobra	
Single Ornamental	2
Twirl Ornamental	

@ Division ped overcrossing

R/W Location	Area	Cost / SF	Land Cost	No. Properties	Acq./Prop	Appr./Prop	Total R/W
Lazar	300	\$ 38.16	\$ 11,448	1	\$ 3,100	\$ 3,000	\$ 20,600
Black	64	\$ 32.81	\$ 2,100	1	\$ 3,100	\$ 3,000	\$ 8,200
Melville	380	\$ 28.95	\$ 10,983	1	\$ 3,100	\$ 3,000	\$ 17,100
Bloom	280	\$ 33.93	\$ 9,500	1	\$ 3,100	\$ 3,000	\$ 15,600
Huyhn	25	\$ 45.00	\$ 1,125	1	\$ 3,100	\$ 3,000	\$ 7,225
Pham	316	\$ 32.91	\$ 10,400	1	\$ 3,100	\$ 3,000	\$ 16,500
Total			48,625		18,600	18,000	\$ 85,225

Powell -	Kelly	Brooklyn	Clinton, S	Clinton, M	Clinton, N	Division
0	0	0	0	0	0	200
TOTAL	0	0	0	0	0	200

Powell -	Kelly	Brooklyn	Clinton, S	Clinton, M	Clinton, N	Division
2359	379	908	86	580	249	546
200	10	1	3	2	200	2
0	0	0	0	0	0	0
TOTAL	2359	379	908	86	580	546

Powell -	Kelly	Brooklyn	Clinton, S	Clinton, M	Clinton, N	Division
0	0	0	0	0	0	0
60	60	120	40	40	80	80
280	0	0	0	0	0	0
Total	34	6	12	4	4	8

D/W per reach:

Factor	2	2	0.6	2	1.125	1	1
Strip			slip	double	2 way LT	Fog	Spiral

Signs	ODOT #	Civ #	Area, sf	Dimensions, in	Name
G	G5500	6	24	6	Street name
R2	R 1060	36	36	36	Yield
W7	R 5020	30	30	30	One Way (Rt. Arrow)
W7	R 4020	18	18	18	roundabout left thru/ght only
Y3	R 1700	30	30	30	roundabout left thru/ght thru 15 MPH Rider
posts/footings			0.0		Traffic Circle Ahead

Summary	G	R2	W7	Y3
0.0	0.0	0.0	0.0	0.0

CITY OF PORTLAND, OREGON
 BUREAU OF TRANSPORTATION
 PRELIMINARY ENGINEER'S ESTIMATE
NE Woodward St, 75th - 78th, FULL STREET

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF NE Woodward St, 75th - 78th, full street

VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 18,173.72	\$ 18,173.72
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 5,452.12	\$ 5,452.12
23	EROSION CONTROL	LS	1.00	\$ 1,817.37	\$ 1,817.37
26	CONSTRUCTION ENTRANCES	EACH	2.00	\$ 1,890.00	\$ 3,780.00
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 181.74	\$ 181.74
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 7,269.49	\$ 7,269.49
45	CLEARING AND GRUBBING	LS	1.00	\$ 4,725.17	\$ 4,725.17
49	GENERAL EXCAVATION	CUYD	625.00	\$ 49.00	\$ 30,625.00
53	12 INCH SUBGRADE STABILIZATION	SQYD	156.20	\$ 30.17	\$ 4,712.55
58	SUBGRADE GEOTEXTILE	SQYD	1,562.00	\$ 1.25	\$ 1,952.50
146	AGGREGATE BASE, 8 INCH THICK	SQYD	1,562.00	\$ 12.30	\$ 19,212.60
149	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	TON	273.00	\$ 89.50	\$ 24,433.50
164	CONCRETE CURBS, STANDARD CURB	FOOT	724.00	\$ 25.50	\$ 18,462.00
168	CONCRETE DRIVEWAYS	SQFT	1,680.00	\$ 8.40	\$ 14,112.00
170	CONCRETE WALKS	SQFT	3,744.00	\$ 7.40	\$ 27,705.60
171	MONOLITHIC CURB AND SIDEWALKS	SQFT	706.84	\$ 18.00	\$ 12,723.12
251	LAWN SEEDING	SQYD	208.00	\$ 10.04	\$ 2,088.32
252	TOPSOIL	CUYD	23.00	\$ 60.00	\$ 1,380.00
255	DECIDUOUS TREES, 2-1/2 INCH CALIPER	EACH	25.00	\$ 822.00	\$ 20,550.00
TOTAL BID ITEMS					\$ 219,356.80

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
5	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	EACH	2.00	\$ 5,000.00	\$ 10,000.00
14	BOLI FEE PAYMENT	LS	1.00	\$ 250.00	\$ 250.00
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 21,935.68	\$ 21,935.68
TOTAL ANTICIPATED ITEMS					\$ 32,185.68

SCHEDULE SUMMARY

BID ITEMS		\$ 219,357
CONSTRUCTION CONTINGENCY	5% of Bid Items*	\$ 10,968
SUBTOTAL		\$ 230,325
ANTICIPATED ITEMS		\$ 32,186
TOTAL CONSTRUCTION		\$ 262,510
PROJECT MANAGEMENT	5% of Bid Items	\$ 10,968
DESIGN ENGINEERING	25% of Bid Items	\$ 54,839
CONSTRUCTION MANAGEMENT	15% of Bid Items	\$ 32,904
SUBTOTAL		\$ 98,711
PROJECT ENGINEERING & MANAGEMENT OVERHEAD	79.27% of PM, Eng, and CM	\$ 78,248
TOTAL PROJECT ENGINEERING & MANAGEMENT		\$ 176,959

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES				\$ 281,250
	RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION				\$ 20,300
	RIGHT-OF-WAY CONTINGENCY		30%	of Land, Improve, and Damages	\$ 84,375
	TOTAL PROJECT RIGHT-OF-WAY				\$ 385,925
	INFLATION RATE ON CONTRACT	Years	5	Inflation 4.5% of Construction	\$ 64,625
	INFLATION RATE ON PERSONNEL		5	2.0% of Eng & Mgmt	\$ 18,418
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE			20% of Const, Eng & Mgmt, and Inflation	\$ 104,502
	TOTAL PROJECT CONTINGENCY				\$ 187,545
	TOTAL PROJECT ESTIMATE				\$ 1,012,940

NE Woodward St, 75th - 78th, HALF STREET

Location: 3b - NE Woodward St, 75th - 78th, 1/2 street

Description: Infill sidewalk, ramp construction, DW ADA reconstruct

Current Cross-Section: unimproved

Proposed Cross-Section: Half street improvement, S side

Typical Sections	PL	SW/curb	Swal/curb	Paving	Strength	Left/W	Right/W	Paving	Swal/curb	SW/curb	PL
1 75th to midway b/n 76 & 77, S side					3				12	7	0.5
2											
3											
4											
5											
6											

Existing	19' Pavement	0' Pavement	0' RW				
30' RW	0	0	0	0	0	0	0
33' to 60'	0	0	0	0	0	0	0

MW/MAC	L, ft	W, ft	Area, sf	Depth, in	Vol, cy	Tons
Base & Wearing						
1 75th to midway b/n 76 & 77, S side	370	19	7030.0	3	65.1	136.7
2			0.0		0.0	0.0
3			0.0		0.0	0.0
4			0.0		0.0	0.0
Total			7030.0		65.1	137

Aggregate Base - Thickness	L, ft	W, ft	Area, sf	Depth, in	Vol, cy	Tons
1 75th to midway b/n 76 & 77, S side	370	19	7030.0	8	783.1	1581.1
2			0.0		0.0	0.0
3			0.0		0.0	0.0
4			0.0		0.0	0.0
Total			7030.0		783.1	1581.1

Total 4 Inch Thick
Total 8 Inch Thick
Total 8 Inch Thick

Area, SF
< Insert formula
< Insert formula
< Insert formula
781

Aggregate Base - Tons	L, ft	W, ft	Area, sf	Depth, in	Vol, cy	Tons
1			0.0		0.0	0.0
2			0.0		0.0	0.0
3			0.0		0.0	0.0
Total			0.0		0.0	0.0

Subgrade Geotextile	Area, SF
781	

General Excavation - from Thickness	Area, sf	Depth, in	Vol, cy
1 Roadway	7030.0	11	228.7
2 Roadway	0.0	0.0	0.0
3 Roadway	0.0	0.0	0.0
Curb	169	0.0	0.0
Curb & Gutter	0	0.0	0.0
Driveways	840	6	15.6
Sidewalk	2252	6	44.7
16920	1448	6	44.2
Total			310

General Excavation - from Tons	Area, sf	Depth, in	Vol, cy
1 Roadway	7030.0	0.0	0.0
2 Roadway	0.0	0.0	0.0
3 Roadway	0.0	0.0	0.0
Curb	169	0.0	0.0
Curb & Gutter	0	0.0	0.0
Driveways & Connections	840	0.0	0.0
Sidewalk	2252	0.0	0.0
Total			0

Create link to Estimate >>

Pavement Repair	L, ft	W, ft	Area, sf
13' AC Pavement Repair (< 1ft)	70.68	0	0
6' AC Pavement Repair (> 3ft)	0	3.5	0
Trench Resurfacing	0	2.5	0
Temporary Trench Resurfacing	0	3	0
AC Driveway Connection	0	0	0

CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE
NE Woodward St, 75th - 78th, HALF STREET

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF NE Woodward St, 75th - 78th, 1/2 street

VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 8,948.76	\$ 8,948.76
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 2,684.63	\$ 2,684.63
23	EROSION CONTROL	LS	1.00	\$ 894.88	\$ 894.88
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 89.49	\$ 89.49
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 3,579.51	\$ 3,579.51
45	CLEARING AND GRUBBING	LS	1.00	\$ 2,326.68	\$ 2,326.68
49	GENERAL EXCAVATION	CUYD	310.00	\$ 49.00	\$ 15,190.00
53	12 INCH SUBGRADE STABILIZATION	SQYD	78.10	\$ 30.17	\$ 2,356.28
58	SUBGRADE GEOTEXTILE	SQYD	781.00	\$ 1.25	\$ 976.25
146	AGGREGATE BASE, 8 INCH THICK	SQYD	781.00	\$ 12.30	\$ 9,606.30
149	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	TON	137.00	\$ 89.50	\$ 12,261.50
164	CONCRETE CURBS, STANDARD CURB	FOOT	337.00	\$ 25.50	\$ 8,593.50
168	CONCRETE DRIVEWAYS	SQFT	840.00	\$ 8.40	\$ 7,056.00
170	CONCRETE WALKS	SQFT	1,722.00	\$ 7.40	\$ 12,742.80
171	MONOLITHIC CURB AND SIDEWALKS	SQFT	530.13	\$ 18.00	\$ 9,542.34
251	LAWN SEEDING	SQYD	127.56	\$ 10.04	\$ 1,280.66
252	TOPSOIL	CUYD	14.00	\$ 60.00	\$ 840.00
255	DECIDUOUS TREES, 2-1/2 INCH CALIPER	EACH	11.00	\$ 822.00	\$ 9,042.00
TOTAL BID ITEMS					\$ 108,011.58

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
5	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	EACH	2.00	\$ 5,000.00	\$ 10,000.00
14	BOLI FEE PAYMENT	LS	1.00	\$ 250.00	\$ 250.00
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 10,801.16	\$ 10,801.16
TOTAL ANTICIPATED ITEMS					\$ 21,051.16

SCHEDULE SUMMARY

BID ITEMS		\$ 108,012
CONSTRUCTION CONTINGENCY	5% of Bid Items*	\$ 5,401
SUBTOTAL		\$ 113,413
ANTICIPATED ITEMS		\$ 21,051
TOTAL CONSTRUCTION		\$ 134,464
PROJECT MANAGEMENT	5% of Bid Items	\$ 5,401
DESIGN ENGINEERING	25% of Bid Items	\$ 27,003
CONSTRUCTION MANAGEMENT	15% of Bid Items	\$ 16,202
SUBTOTAL		\$ 48,606
PROJECT ENGINEERING & MANAGEMENT OVERHEAD	79.27% of PM, Eng, and CM	\$ 38,530
TOTAL PROJECT ENGINEERING & MANAGEMENT		\$ 87,135
RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES		\$ 169,250

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION				\$ 13,700
	RIGHT-OF-WAY CONTINGENCY		30%	of Land, Improve, and Damages	\$ 50,775
	TOTAL PROJECT RIGHT-OF-WAY				\$ 233,725
	INFLATION RATE ON CONTRACT	Years	5	4.5% of Construction	\$ 33,103
	INFLATION RATE ON PERSONNEL	5		2.0% of Eng & Mgmt	\$ 9,069
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE			20% of Const, Eng & Mgmt, and Inflation	\$ 52,754
	TOTAL PROJECT CONTINGENCY				\$ 94,926
	TOTAL PROJECT ESTIMATE				\$ 550,250

CITY OF PORTLAND, OREGON
 BUREAU OF TRANSPORTATION
 PRELIMINARY ENGINEER'S ESTIMATE
 SE Woodward Street, 78th to 79th

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF SE Woodward Street, 78th to 79th
 VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 7,673.43	\$ 7,673.43
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 2,302.03	\$ 2,302.03
23	EROSION CONTROL	LS	1.00	\$ 767.34	\$ 767.34
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 76.73	\$ 76.73
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 3,069.37	\$ 3,069.37
45	CLEARING AND GRUBBING	LS	1.00	\$ 1,995.09	\$ 1,995.09
49	GENERAL EXCAVATION	CUYD	227.00	\$ 49.00	\$ 11,123.00
53	12 INCH SUBGRADE STABILIZATION	SQYD	58.70	\$ 30.17	\$ 1,770.98
58	SUBGRADE GEOTEXTILE	SQYD	587.00	\$ 1.25	\$ 733.75
146	AGGREGATE BASE, 8 INCH THICK	SQYD	587.00	\$ 12.30	\$ 7,220.10
149	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	TON	103.00	\$ 89.50	\$ 9,218.50
164	CONCRETE CURBS, STANDARD CURB	FOOT	825.13	\$ 25.50	\$ 21,040.82
171	MONOLITHIC CURB AND SIDEWALKS	SQFT	706.84	\$ 18.00	\$ 12,723.12
193	REMOVABLE BOLLARDS	EACH	4.00	\$ 750.00	\$ 3,000.00
251	LAWN SEEDING	SQYD	200.00	\$ 10.04	\$ 2,008.00
252	TOPSOIL	CUYD	22.00	\$ 60.00	\$ 1,320.00
255	DECIDUOUS TREES, 2-1/2 INCH CALIPER	EACH	8.00	\$ 822.00	\$ 6,576.00
TOTAL BID ITEMS					\$ 92,618.26

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
5	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	EACH	1.00	\$ 5,000.00	\$ 5,000.00
14	BOLI FEE PAYMENT	LS	1.00	\$ 250.00	\$ 250.00
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 9,261.83	\$ 9,261.83

TOTAL ANTICIPATED ITEMS

\$ 14,511.83

SCHEDULE SUMMARY

BID ITEMS		\$ 92,618
CONSTRUCTION CONTINGENCY	5% of Bid Items*	\$ 4,631
SUBTOTAL		\$ 97,249
ANTICIPATED ITEMS		\$ 14,512
TOTAL CONSTRUCTION		\$ 111,761

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	RIGHT-OF-WAY CONTINGENCY		30%	of Land, Improve, and Damages	\$ -
	TOTAL PROJECT RIGHT-OF-WAY				\$ -
	INFLATION RATE ON CONTRACT	Years	5	4.5% of Construction	\$ 27,514
	INFLATION RATE ON PERSONNEL		5	2.0% of Eng & Mgmt	\$ 7,777
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE			20% of Const, Eng & Mgmt, and Inflation	\$ 44,354
	TOTAL PROJECT CONTINGENCY				\$ 79,645
	TOTAL PROJECT ESTIMATE				\$ 266,124

Item	Qty	Unit	Area (sq ft)
Curb	525.13	6.5	413
Curb & 18" Gutter	0	2	0

Item	Qty	Unit	Area (sq ft)
Separated	0	7.5	0
Tight to E/Curb	0	7.5	0
Leads to AC regular	4		706.84
Monolithic Curb & Sidewalk, ramps, Ea			706.84
Monolithic Curb & Sidewalk			0
Monolithic Curb Gutter & Sidewalk			0

23.55 Ft curbstone
176.71 Sidewalk, R=15

Item	Qty	Unit	Area (sq ft)
Monolithic Curb & Driveway	0	3	0
Monolithic Curb & Driveway	0	3	0
Monolithic Curb Gutter & Driveway	0	0	0

Item	Qty	Unit	Area (sq ft)
SW Inlets	1	per	400
PB Inlets	2	per	400
G-2 Inlets	2	per	400
CG-2 Inlets	2	per	400
Sump/Sed Set	0	LF	0
Inlet Lead, 12"	0	LF	0
Inlet Lead, 10"	0	CY	0

Item	Qty	Unit	Area (sq ft)
Swales	0	ft	0

Item	Qty	Unit	Area (sq ft)
Trees in Swales	0	1 every 25'	0
Trees in Planting Strip	200	0	0
Trees in Tree Wells	0	0	0

Item	Qty	Unit	Area (sq ft)
Planter strip	200	9	1800

Item	Qty	Unit	Area (sq ft)
Segmental	0	ft	0
Prefabricated modular	0	ft	0

Item	Qty	Unit	Area (sq ft)
Removal	0	0	0
Permanent	0	0	0

Item	Qty	Unit	Area (sq ft)
Arrows	0	ft	0
Stop Bars	0	ft	0

Item	Qty	Unit	Area (sq ft)
New Lt. Poles	0	ft	0
Wood Pole Lights	1		0
Cobra	0		0
Single Ornamental	0		0
Twin Ornamental	0		0

Item	Area	Cost / SF	Land Cost	No. Properties	Acct / Prop	Appr / Prop	Total RW
R/W Location					\$5,000	\$3,000	

Insert values

Item	Qty	Unit	Area (sq ft)
Curb	525.13	6.5	413
Curb & 18" Gutter	0	2	0

Item	Qty	Unit	Area (sq ft)
Separated	0	7.5	0
Tight to E/Curb	0	7.5	0
Leads to AC regular	4		706.84
Monolithic Curb & Sidewalk, ramps, Ea			706.84
Monolithic Curb & Sidewalk			0
Monolithic Curb Gutter & Sidewalk			0

23.55 Ft curbstone
176.71 Sidewalk, R=15

Item	Qty	Unit	Area (sq ft)
Monolithic Curb & Driveway	0	3	0
Monolithic Curb & Driveway	0	3	0
Monolithic Curb Gutter & Driveway	0	0	0

Item	Qty	Unit	Area (sq ft)
SW Inlets	1	per	400
PB Inlets	2	per	400
G-2 Inlets	2	per	400
CG-2 Inlets	2	per	400
Sump/Sed Set	0	LF	0
Inlet Lead, 12"	0	LF	0
Inlet Lead, 10"	0	CY	0

Item	Qty	Unit	Area (sq ft)
Swales	0	ft	0

Item	Qty	Unit	Area (sq ft)
Trees in Swales	0	1 every 25'	0
Trees in Planting Strip	200	0	0
Trees in Tree Wells	0	0	0

Item	Qty	Unit	Area (sq ft)
Planter strip	200	9	1800

Item	Qty	Unit	Area (sq ft)
Segmental	0	ft	0
Prefabricated modular	0	ft	0

Item	Qty	Unit	Area (sq ft)
Removal	0	0	0
Permanent	0	0	0

Item	Qty	Unit	Area (sq ft)
Arrows	0	ft	0
Stop Bars	0	ft	0

Item	Qty	Unit	Area (sq ft)
New Lt. Poles	0	ft	0
Wood Pole Lights	1		0
Cobra	0		0
Single Ornamental	0		0
Twin Ornamental	0		0

Item	Area	Cost / SF	Land Cost	No. Properties	Acct / Prop	Appr / Prop	Total RW
R/W Location					\$5,000	\$3,000	

Insert values

Item	Qty	Unit	Area (sq ft)
Curb	525.13	6.5	413
Curb & 18" Gutter	0	2	0

Item	Qty	Unit	Area (sq ft)
Separated	0	7.5	0
Tight to E/Curb	0	7.5	0
Leads to AC regular	4		706.84
Monolithic Curb & Sidewalk, ramps, Ea			706.84
Monolithic Curb & Sidewalk			0
Monolithic Curb Gutter & Sidewalk			0

23.55 Ft curbstone
176.71 Sidewalk, R=15

Item	Qty	Unit	Area (sq ft)
Monolithic Curb & Driveway	0	3	0
Monolithic Curb & Driveway	0	3	0
Monolithic Curb Gutter & Driveway	0	0	0

Item	Qty	Unit	Area (sq ft)
SW Inlets	1	per	400
PB Inlets	2	per	400
G-2 Inlets	2	per	400
CG-2 Inlets	2	per	400
Sump/Sed Set	0	LF	0
Inlet Lead, 12"	0	LF	0
Inlet Lead, 10"	0	CY	0

Item	Qty	Unit	Area (sq ft)
Swales	0	ft	0

Item	Qty	Unit	Area (sq ft)
Trees in Swales	0	1 every 25'	0
Trees in Planting Strip	200	0	0
Trees in Tree Wells	0	0	0

Item	Qty	Unit	Area (sq ft)
Planter strip	200	9	1800

Item	Qty	Unit	Area (sq ft)
Segmental	0	ft	0
Prefabricated modular	0	ft	0

Item	Qty	Unit	Area (sq ft)
Removal	0	0	0
Permanent	0	0	0

Item	Qty	Unit	Area (sq ft)
Arrows	0	ft	0
Stop Bars	0	ft	0

Item	Qty	Unit	Area (sq ft)
New Lt. Poles	0	ft	0
Wood Pole Lights	1		0
Cobra	0		0
Single Ornamental	0		0
Twin Ornamental	0		0

Item	Area	Cost / SF	Land Cost	No. Properties	Acct / Prop	Appr / Prop	Total RW
R/W Location					\$5,000	\$3,000	

Insert values

CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE
SE Tibbets St., 78th to 82nd Ave. & 82nd, Tibbits to Brooklyn

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF SE Tibbets St., 78th to 82nd Ave. & 82nd, Tibbits to Brooklyn

VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 30,565.97	\$ 30,565.97
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 9,169.79	\$ 9,169.79
23	EROSION CONTROL	LS	1.00	\$ 3,056.60	\$ 3,056.60
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 305.66	\$ 305.66
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 12,226.39	\$ 12,226.39
45	CLEARING AND GRUBBING	LS	1.00	\$ 7,947.15	\$ 7,947.15
49	GENERAL EXCAVATION	CUYD	240.00	\$ 49.00	\$ 11,760.00
82	10 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D, COMPLETE	FOOT	105.00	\$ 110.00	\$ 11,550.00
100	CONCRETE INLETS, TYPE G-2	EACH	7.00	\$ 1,800.00	\$ 12,600.00
153	13 INCH ASPHALT CONCRETE PAVEMENT REPAIR	SQYD	55.00	\$ 179.00	\$ 9,845.00
154	16 INCH ASPHALT CONCRETE PAVEMENT REPAIR	SQYD	280.00	\$ 112.00	\$ 31,360.00
164	CONCRETE CURBS, STANDARD CURB	FOOT	840.00	\$ 25.50	\$ 21,420.00
168	CONCRETE DRIVEWAYS	SQFT	1,056.00	\$ 8.40	\$ 8,870.40
170	CONCRETE WALKS	SQFT	6,660.00	\$ 7.40	\$ 49,284.00
171	MONOLITHIC CURB AND SIDEWALKS	SQFT	3,710.91	\$ 18.00	\$ 66,796.38
172	MONOLITHIC CURB GUTTER AND SIDEWALKS	SQFT	1,885.00	\$ 19.00	\$ 35,815.00
251	LAWN SEEDING	SQYD	706.67	\$ 10.04	\$ 7,094.93
252	TOPSOIL	CUYD	79.00	\$ 60.00	\$ 4,740.00
255	DECIDUOUS TREES, 2-1/2 INCH CALIPER	EACH	42.00	\$ 822.00	\$ 34,524.00
TOTAL BID ITEMS					\$ 368,931.27

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
5	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	EACH	4.00	\$ 5,000.00	\$ 20,000.00
14	BOLI FEE PAYMENT	LS	1.00	\$ 368.93	\$ 368.93
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 36,893.13	\$ 36,893.13
TOTAL ANTICIPATED ITEMS					\$ 57,262.06

SCHEDULE SUMMARY

BID ITEMS		\$ 368,931
CONSTRUCTION CONTINGENCY	5% of Bid Items*	\$ 18,447
SUBTOTAL		\$ 387,378
ANTICIPATED ITEMS		\$ 57,262
TOTAL CONSTRUCTION		\$ 444,640
PROJECT MANAGEMENT	5% of Bid Items	\$ 18,447
DESIGN ENGINEERING	25% of Bid Items	\$ 92,233
CONSTRUCTION MANAGEMENT	15% of Bid Items	\$ 55,340
SUBTOTAL		\$ 166,020
PROJECT ENGINEERING & MANAGEMENT OVERHEAD	79.27% of PM, Eng. and CM	\$ 131,604
TOTAL PROJECT ENGINEERING & MANAGEMENT		\$ 297,623

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES				\$ 22,600
	RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION				\$ 6,600
	RIGHT-OF-WAY CONTINGENCY			30% of Land, Improve, and Damages	\$ 6,780
	TOTAL PROJECT RIGHT-OF-WAY				\$ 35,980
	INFLATION RATE ON CONTRACT	Years		Inflation	
	INFLATION RATE ON PERSONNEL	5		4.5% of Construction	\$ 109,462
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE	5		2.0% of Eng & Mgmt	\$ 30,977
				20% of Const, Eng & Mgmt, and Inflation	\$ 176,541
	TOTAL PROJECT CONTINGENCY				\$ 316,980
	TOTAL PROJECT ESTIMATE				\$ 1,095,223

SE Tibbets St, 78th to 82nd Ave. & 82nd, Tibbets to Brooklyn

Location: 5 - SE Tibbets St, 78th Ave. to 82nd, SE 82nd Ave., Tibbets to Brooklyn

Description: Infill sidewalk & curb, ADA ramp reconstructs, street trees on Tibbets, add multi-use path on E side of 82nd to Brooklyn

Current Cross-Section: Tibbets: Center paved street with some curbs & sidewalks in 50' RW

Proposed Cross-Section: Tibbets: Add missing curbs & 6' separated sidewalks to existing cross section; 82nd: Add 12' multi-use path from Tibbets to Brooklyn

Typical Sections	PL	SW/Curb	Swale/Curb	Parking	Through	Lift/turn	Through	Swale/Curb	SW/Curb	PL
1 78th - 82nd	1	6	4	3	11		11	3	4	6

Existing	50' RW	0' pavement	0' pavement	0' pavement
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MWMAC			
L, ft.	W, ft.	Area, sf	Vol, cy
1	Base & Wearing	0.0	0.0
2		0.0	0.0
3		0.0	0.0
4		0.0	0.0

Aggregate Base - Thickness			
L, ft.	W, ft.	Area, sf	Depth, in.
1	X 1/2 inch Thick	0.0	0.0
2	X 1/2 inch Thick	0.0	0.0
3	X 1/2 inch Thick	0.0	0.0
4	X 1/2 inch Thick	0.0	0.0

Total 4 Inch Thick
Total 6 Inch Thick
Total 8 Inch Thick

Aggregate Base - Tons			
L, ft.	W, ft.	Area, sf	Depth, in.
1		0.0	0.0
2		0.0	0.0
3		0.0	0.0
4		0.0	0.0

Subgrade Geotextile	Area, sy	0
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General Excavation - from Thickness			
Area, sf	Depth, in.	Vol, cy	Area, sf
1	Roadway	0.0	0.0
2	Roadway	0.0	0.0
3	Roadway	0.0	0.0
	Curb	420	13.0
	Curb & Gutter	0	0.0
	Sidewalk	12256	6

General Excavation - from Tons			
Area, sf	Depth, in.	Vol, cy	Area, sf
1	Roadway	0.0	0.0
2	Roadway	0.0	0.0
3	Roadway	0.0	0.0
	Curb & Gutter	1885	0
	Sidewalk	0	0.0

Pavement Repair			
L, ft.	W, ft.	Area, sf	Area, sf
13' AC Pavement Repair (< 4ft)	454.75	1	455
16' AC Pavement Repair (> 3ft)	840	3	2520

Concrete Curbs			
L, ft.	W, ft.	Area, sf	Area, sf
Curb	840	0.5	420
Curb & 18" Gutter	0	0	0

Sidewalks			
L, ft.	W, ft.	Area, sf	Area, sf
Separated	1110	6	6660
Length for AC repair	0	0	0
Monolithic Curb & Sidewalk, ramps, Ea	21	0	3710.91
Monolithic Curb & Sidewalk	130	14.5	1885

Driveways			
Dwy, L, ft.	Wings, L, ft.	W, ft.	Area, sf
Adjacent to Swale	0	3	10
Adjacent to Planting Strip	0	3	10
Monolithic Curb & Driveway	0	3	10
Monolithic Curb Gutter & Driveway	0	3	10

Inlets & Leads			
Length	Total	#DIV/0!	#DIV/0!
SW Inlets	1	1	1
PB Inlets	7	7	7
G-2 Inlets	0	0	0
CG-2 Inlets	0	0	0
Sump/Sed Set	105	105	105
Inlet Lead, 10"	0	0	0
Inlet Lead, 12"	0	0	0

Swales			
L, ft.	W, ft.	Area, sf	Area, sf
Adjacent to Swale	0	0	0
Adjacent to Planting Strip	0	0	0
Monolithic Curb & Driveway	0	0	0
Monolithic Curb Gutter & Driveway	0	0	0

Trees			
L, ft.	Dwvs, ft.	1 every 25'	Area, sf
Trees in Swales	0	0	0
Trees in Planting Strip	1060	0	42
Trees in Tree Wells	0	0	0

Topsoil			
L, ft.	W, ft.	Area, sf	D, in.
planter strip	1060	6	6360

Retaining Wall			
L, ft.	Ht, ft.	Area, sf	Area, sf
Segmental	0	0	0
Prefabricated modular	0	0	0

Striping			
L, ft.	L, ft.	L, Tot, ft.	Removal
Removal	0	0	Permanent
Permanent	0	0	Permanent

Marking			
L, ft.	L, ft.	L, Tot, ft.	Area, sf
Arrows	0	0	0
Stop Bars	0	0	0

Illumination			
Ea	Area	Cost/ SF	Land Cost
New Light, Ex Wood pole	0		
Wood Pole Lights	4		
Cobra	0		
Single Ornamental	0		
Twirl Ornamental	0		

RW			
Location	Area	Cost/ SF	Land Cost
Ocean City Rest, 82/Brooklyn, SE (Chu)	520	\$ 43.46	\$ 22,800

Acq/ Prop Properties			
Acq/ Prop	Appr/ Prop	Total RW	Total RW
\$ 3,100	\$ 3,500	\$ 3,500	\$ 29,200
\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ -	\$ 29,200

TOTAL	7879	7980	8081	8182	Tibbets Brooklyn	6
	840	400	220	220		
	0	0	0	0		

TOTAL	7879	7980	8081	8182	Tibbets Brooklyn	6
	775	335	220	220		
	17	4	4	4		
	0	0	0	0		
	130	0	0	0		

TOTAL	7879	7980	8081	8182	Tibbets Brooklyn	6
	66	44	10	12		
	0	0	0	0		
	0	0	0	0		

TOTAL	7879	7980	8081	8182	Tibbets Brooklyn	6
	0	0	0	0		
	7	2	3	2		
	0	0	0	0		
	105	30	45	30		
	0	0	0	0		

TOTAL	7879	7980	8081	8182	Tibbets Brooklyn	6
	0	0	0	0		

Factor:	2	2	0.6	2	1.125	1	1
	Blue	Turn	skip	double	2 way LT	Fog	Spiral
	E Circle						
	W Circle						

ODOT #	City #	Dimensions, in	Area, sf	Name
G	G5500	6	24	Street name
G	G5500	9	60	Destination
R2	R 1060	36	36	Yield
W7	R 5020	36	12	One Way (Rt. Arrow)
Y1	R 4020	18	18	15 MPH Rider
Y3	R 1700	30	30	Traffic Circle Ahead

Summary	G	0.0
	R2	0.0
	W7	#REF!
	Y1	0
	Y3	0.0

TOTAL	7879	7980	8081	8182	Tibbets Brooklyn	6
	0	1	1	1		
	4	0	0	0		
	0	0	0	0		

CITY OF PORTLAND, OREGON
 BUREAU OF TRANSPORTATION
 PRELIMINARY ENGINEER'S ESTIMATE
SE Washington St. Protected Bike Lanes, 72nd to I-205

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF **SE Washington St. Protected Bike Lanes, 72nd to I-205**
VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 23,187.49	\$ 23,187.49
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 6,956.25	\$ 6,956.25
23	EROSION CONTROL	LS	1.00	\$ 2,318.75	\$ 2,318.75
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 231.87	\$ 231.87
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 9,274.99	\$ 9,274.99
45	CLEARING AND GRUBBING	LS	1.00	\$ 6,028.75	\$ 6,028.75
49	GENERAL EXCAVATION	CUYD	60.00	\$ 49.00	\$ 2,940.00
154	16 INCH ASPHALT CONCRETE PAVEMENT REPAIR	SQYD	89.00	\$ 112.00	\$ 9,968.00
167	CONCRETE ISLANDS	SQFT	5,747.00	\$ 11.70	\$ 67,239.90
168	CONCRETE DRIVEWAYS	SQFT	384.00	\$ 8.40	\$ 3,225.60
171	MONOLITHIC CURB AND SIDEWALKS	SQFT	2,753.42	\$ 18.00	\$ 49,561.56
194	CONCRETE BARRIER	FOOT	987.00	\$ 35.40	\$ 34,939.80
196	IMPACT ATTENUATORS, TYPE E	EACH	4.00	\$ 16,000.00	\$ 64,000.00
TOTAL BID ITEMS					\$ 279,872.96

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
14	BOLI FEE PAYMENT	LS	1.00	\$ 279.87	\$ 279.87
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 27,987.30	\$ 27,987.30

TOTAL ANTICIPATED ITEMS **\$ 28,267.17**

SCHEDULE SUMMARY

BID ITEMS		\$ 279,873
CONSTRUCTION CONTINGENCY	5% of Bid Items*	\$ 13,994
SUBTOTAL		\$ 293,867
ANTICIPATED ITEMS		\$ 28,267
TOTAL CONSTRUCTION		\$ 322,134
PROJECT MANAGEMENT	5% of Bid Items	\$ 13,994
DESIGN ENGINEERING	25% of Bid Items	\$ 69,968
CONSTRUCTION MANAGEMENT	15% of Bid Items	\$ 41,981
SUBTOTAL		\$ 125,943
PROJECT ENGINEERING & MANAGEMENT OVERHEAD	79.27% of PM, Eng, and CM	\$ 99,835
TOTAL PROJECT ENGINEERING & MANAGEMENT		\$ 225,777
RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES		\$ -
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION		\$ -
RIGHT-OF-WAY CONTINGENCY	30% of Land, Improve, and Damages	\$ -
TOTAL PROJECT RIGHT-OF-WAY		\$ -

Years Inflation

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	INFLATION RATE ON CONTRACT	5	4.5%	of Construction	\$ 79,304
	INFLATION RATE ON PERSONNEL	5	2.0%	of Eng & Mgmt	\$ 23,499
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE		20%	of Const, Eng & Mgmt, and Inflation	\$ 130,143
	TOTAL PROJECT CONTINGENCY				\$ 232,946
	TOTAL PROJECT ESTIMATE				\$ 780,857

CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE
SE Alder Street, 82nd to 84th

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF SE Alder Street, 82nd to 84th

VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 20,517.83	\$ 20,517.83
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 6,155.35	\$ 6,155.35
23	EROSION CONTROL	LS	1.00	\$ 2,051.78	\$ 2,051.78
26	CONSTRUCTION ENTRANCES	EACH	2.00	\$ 1,890.00	\$ 3,780.00
29	INLET PROTECTION	EACH	3.00	\$ 88.00	\$ 264.00
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 205.18	\$ 205.18
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 8,207.13	\$ 8,207.13
45	CLEARING AND GRUBBING	LS	1.00	\$ 5,334.64	\$ 5,334.64
49	GENERAL EXCAVATION	CUYD	706.00	\$ 49.00	\$ 34,594.00
53	12 INCH SUBGRADE STABILIZATION	SQYD	179.40	\$ 30.17	\$ 5,412.50
58	SUBGRADE GEOTEXTILE	SQYD	1,794.00	\$ 1.25	\$ 2,242.50
80	12 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	FOOT	50.00	\$ 120.00	\$ 6,000.00
96	CONCRETE INLETS, TYPE CG-2	EACH	2.00	\$ 1,900.00	\$ 3,800.00
118	TRENCH RESURFACING	SQYD	19.44	\$ 109.00	\$ 2,119.44
146	AGGREGATE BASE, 8 INCH THICK	SQYD	1,794.00	\$ 12.30	\$ 22,066.20
149	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	TON	314.00	\$ 89.50	\$ 28,103.00
164	CONCRETE CURBS, STANDARD CURB	FOOT	715.00	\$ 25.50	\$ 18,232.50
168	CONCRETE DRIVEWAYS	SQFT	2,944.00	\$ 8.40	\$ 24,729.60
170	CONCRETE WALKS	SQFT	3,186.00	\$ 7.40	\$ 23,576.40
171	MONOLITHIC CURB AND SIDEWALKS	SQFT	530.13	\$ 18.00	\$ 9,542.34
251	LAWN SEEDING	SQYD	206.56	\$ 10.04	\$ 2,073.82
252	TOPSOIL	CUYD	23.00	\$ 60.00	\$ 1,380.00
255	DECIDUOUS TREES, 2-1/2 INCH CALIPER	EACH	21.00	\$ 822.00	\$ 17,262.00
TOTAL BID ITEMS					\$ 247,650.21

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
5	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	EACH	1.00	\$ 5,000.00	\$ 5,000.00
14	BOLI FEE PAYMENT	LS	1.00	\$ 250.00	\$ 250.00
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 24,765.02	\$ 24,765.02

TOTAL ANTICIPATED ITEMS

\$ 30,015.02

SCHEDULE SUMMARY

BID ITEMS		\$ 247,650
CONSTRUCTION CONTINGENCY	5% of Bid Items	\$ 12,383
SUBTOTAL		\$ 260,033
ANTICIPATED ITEMS		\$ 30,015
TOTAL CONSTRUCTION		\$ 290,048
PROJECT MANAGEMENT	5% of Bid Items	\$ 12,383
DESIGN ENGINEERING	25% of Bid Items	\$ 61,913
CONSTRUCTION MANAGEMENT	15% of Bid Items	\$ 37,148
SUBTOTAL		\$ 111,444
PROJECT ENGINEERING & MANAGEMENT OVERHEAD	79.27% of PM, Eng, and CM	\$ 88,341

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	TOTAL PROJECT ENGINEERING & MANAGEMENT				\$ 199,785
	RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES				\$ -
	RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION				\$ -
	RIGHT-OF-WAY CONTINGENCY		30%	of Land, Improve, and Damages	\$ -
	TOTAL PROJECT RIGHT-OF-WAY				\$ -
	INFLATION RATE ON CONTRACT	Years		<i>Inflation</i>	
	INFLATION RATE ON PERSONNEL	5		4.5% of Construction	\$ 71,405
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE	5		2.0% of Eng & Mgmt	\$ 20,794
				20% of Const, Eng & Mgmt, and Inflation	\$ 116,406
	TOTAL PROJECT CONTINGENCY				\$ 208,605
	TOTAL PROJECT ESTIMATE				\$ 698,438

7 SE Alder Street, 82nd to 84th

SE Alder Street, 82nd to 84th

Construct full street improvement of unimproved street

center strip pavement

Current Cross-Section:

Proposed Cross-Section: Full street improvement w/6'sidewalks, planter strips, 38' pavement

Typical Sections	PL	SW/Curb	Swalk/Curb	Parking	through	through	Left/Turn	through	Parking	Swalk/Curb	SW/Curb	PL
1 SE Alder Street, 82nd to 84th	1	6	4	7	12	12		12	7	4	6	1
2												
3												
4												
5												
6												

Existing	60' RW	0' pavement	0' RW	0' pavement						
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Item	L, ft.	W, ft.	Area, sf	Depth, in.	Vol, CY	Tons
1 SE Alder Street, 82nd to 84th	425	38	16150.0	3	149.5	314.0
2	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0
Total			16150		150	314

Item	L, ft.	W, ft.	Area, sf	Depth, in.	Vol, CY	Tons
1 SE Alder Street, 82nd to 84th	425	38	16150.0	3	149.5	314.0
2	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0
Total			16150		150	314

Total 4 Inch Thick
Total 6 Inch Thick
Total 8 Inch Thick

Item	L, ft.	W, ft.	Area, sf	Depth, in.	Vol, CY	Tons
Aggregate Base - Tons						1.8 TCY
1	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0
Total			1794		0	0

Subgrade Geotextile	Area, SY	1794
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Item	Area, sf	Depth, in.	Vol, CY
1 Roadway	16150.0	11	548.3
2 Roadway	0.0	0.0	0.0
3 Roadway	0.0	0.0	0.0
Curb	358	10	11.0
Curb & Gutter	0	9	0.0
Driveways	2944	6	54.5
Sidewalk	3716	6	68.8
Topsoil	1859	4	23.0
Total			706

Item	Area, sf	Depth, in.	Vol, CY
1 Roadway	16150.0	0.0	0.0
2 Roadway	0.0	0.0	0.0
3 Roadway	0.0	0.0	0.0
Curb & Gutter	358	0.0	0.0
Driveways & Connections	2944	0.0	0.0
Sidewalk	3716	0.0	0.0
Total			0

Item	L, ft.	W, ft.	Area, sf
13' AC Pavement Repair (< 1F)	70.68	0	0
16' AC Pavement Repair (> 3F)	50	3.5	175
Trench Resurfacing	50	2.5	0
Temporary Trench Resurfacing	184	3	552
AC Driveway Connection			
Total			727

Item	L, ft.	W, ft.	Area, sf
Curb	715	0.5	358
Curb & 18" Gutter	0	2	0
Total			358

Item	L, ft.	W, ft.	Area, sf
Separated	531	6	3186
Tight to Ex. Curb			
Length for AC repair	3	7.5	0
Monolithic Curb & Sidewalk, ramps, Ea			530.13
Monolithic Curb & Sidewalk			0
Monolithic Curb Gutter & Sidewalk			0
Total			3716.13

Item	Dwy L, ft.	Wings L, ft	W, ft.	Area, sf
Monolithic Curb & Driveway	0	3	10	1216
Monolithic Curb & Driveway	108	3	10	1728
Monolithic Curb Gutter & Driveway	184	0	184	2844
Total				5788

Item	Length	Total #DIV/0!	1 per	2 per	LF	CY
SW Inlets			1 per			
PB Inlets			1 per			
G-2 Inlets			2 per			
CG-2 Inlets			2 per			
Sump/Sed Set						
Inlet Lead, 12"			50			
Inlet Lead, 10"			38			
Total						

Item	L, ft.	W, ft.	Area, sf
Trees			
Trees in Swales			
Trees in Planting Strip	531	0	21
Trees in Tree Wells			0
Total			21

Item	L, ft.	W, ft.	Area, sf	D, in.	Vol, CY
Planter strip	531	3.5	1859	4	23
Total			1859		23

Item	L, ft.	Ht, ft.	Area, sf
Segmental Prefabricated modular			0
Total			0

Item	L, ft.	L, ft.	L, Tot, ft.
Removal Permanent	0	0	0
Removal Permanent	0	0	0
Total			0

Item	L, ft.	L, ft.	L, Tot, ft.
Arrows			0
Stop Bars			0
Total			0

Item	Area	Cost / SF	Land Cost	NO Properties	Acq / Proc	Acq / Proc	Total RW
1					\$5,000	\$	\$
Total					\$5,000	\$	\$

TOTAL	North	South	3	4	5	6
	715	315	400			
	0	0				

TOTAL	North	South	3	4	5	6
	715	315	400			
	0	0				

TOTAL	North	South	3	4	5	6
	715	315	400			
	0	0				

TOTAL	North	South	3	4	5	6
	715	315	400			
	0	0				

Factor	2	0.8	2	1.125	1
Blk	2	0.8	2	1.125	1
Turn	2	0.8	2	1.125	1
Double	2	0.8	2	1.125	1
2 way LT	2	0.8	2	1.125	1
Spiral	2	0.8	2	1.125	1

ODOT #	Civ. #	Area, sf	Dimensions, in	Name
G	G5500	6	24	Street name
R2	R 1060	9	60	Destination
W7	W7	36	36	Yield
Y1	Y1	36	12	One Way (R- Arrow)
Y3	Y3	30	30	roundabout left thru/ght only
Y1	Y1	30	30	roundabout left thru/ght thru
Y1	Y1	16	16	15 MPH Rider
Y1	Y1	30	30	Traffic Circle Ahead
Posters/footings		0.0		

Summary	G	R2	W7	Y1	Y3
Area, sf	0.0	0.0	0.0	0.0	0.0
Dimensions, in	0.0	0.0	0.0	0.0	0.0
Name	0	0	0	0	0

Insert values

CITY OF PORTLAND, OREGON
 BUREAU OF TRANSPORTATION
 PRELIMINARY ENGINEER'S ESTIMATE
NE 84th and 86th Avenue Crossing Improvements at Washington & Stark

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF NE 84th and 86th Avenue Crossing Improvements at Washin
VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 11,694.29	\$ 11,694.29
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 3,508.29	\$ 3,508.29
23	EROSION CONTROL	LS	1.00	\$ 1,169.43	\$ 1,169.43
29	INLET PROTECTION	EACH	3.00	\$ 88.00	\$ 264.00
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 116.94	\$ 116.94
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 4,677.72	\$ 4,677.72
45	CLEARING AND GRUBBING	LS	1.00	\$ 3,040.52	\$ 3,040.52
49	GENERAL EXCAVATION	CUYD	71.00	\$ 49.00	\$ 3,479.00
72	STORMWATER PLANTERS	SQFT	333.00	\$ 38.10	\$ 12,687.30
82	10 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D, COMPLETE	FOOT	55.00	\$ 110.00	\$ 6,050.00
96	CONCRETE INLETS, TYPE CG-2	EACH	3.00	\$ 1,900.00	\$ 5,700.00
153	13 INCH ASPHALT CONCRETE PAVEMENT REPAIR	SQYD	41.89	\$ 179.00	\$ 7,498.11
154	16 INCH ASPHALT CONCRETE PAVEMENT REPAIR	SQYD	120.00	\$ 112.00	\$ 13,440.00
164	CONCRETE CURBS, STANDARD CURB	FOOT	20.00	\$ 25.50	\$ 510.00
170	CONCRETE WALKS	SQFT	120.00	\$ 7.40	\$ 888.00
171	MONOLITHIC CURB AND SIDEWALKS	SQFT	3,690.36	\$ 18.00	\$ 66,426.48
TOTAL BID ITEMS					\$ 141,150.08

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
7	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT	SQFT	299.70	\$ 20.00	\$ 5,994.00
14	BOLI FEE PAYMENT	LS	1.00	\$ 250.00	\$ 250.00
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 14,115.01	\$ 14,115.01

TOTAL ANTICIPATED ITEMS **\$ 20,359.01**

SCHEDULE SUMMARY

BID ITEMS		\$ 141,150
CONSTRUCTION CONTINGENCY	5% of Bid Items*	\$ 7,058
SUBTOTAL		\$ 148,208
ANTICIPATED ITEMS		\$ 20,359
TOTAL CONSTRUCTION		\$ 168,567
PROJECT MANAGEMENT	5% of Bid Items	\$ 7,058
DESIGN ENGINEERING	25% of Bid Items	\$ 35,288
CONSTRUCTION MANAGEMENT	15% of Bid Items	\$ 21,173
SUBTOTAL		\$ 63,519
PROJECT ENGINEERING & MANAGEMENT OVERHEAD	79.27% of PM, Eng., and CM	\$ 50,351
TOTAL PROJECT ENGINEERING & MANAGEMENT		\$ 113,870
RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES		\$ -
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION		\$ -

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	RIGHT-OF-WAY CONTINGENCY		30%	of Land, Improve, and Damages	\$ -
	TOTAL PROJECT RIGHT-OF-WAY				\$ -
	INFLATION RATE ON CONTRACT	Years	5	4.5% of Construction	\$ 41,498
	INFLATION RATE ON PERSONNEL		5	2.0% of Eng & Mgmt	\$ 11,852
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE			20% of Const, Eng & Mgmt, and Inflation	\$ 67,157
	TOTAL PROJECT CONTINGENCY				\$ 120,507
	TOTAL PROJECT ESTIMATE				\$ 402,944

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	20	20	4	4	4	4	5	6
23.56 Ft. curb/curb	0	0	0	0	0	0	0	0
176.71 SF/curb, R=	15	15	4	4	4	4	5	6
Monolithic Curb & Sidewalk	115	115	4	4	4	4	5	6
Monolithic Curb Gutter & Sidewalk	0	0	0	0	0	0	0	0
Monolithic Curb Gutter & Sidewalk	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Adjacent to Swales	0	0	0	0	0	0	0	0
Adjacent to Planting Strip	0	0	0	0	0	0	0	0
Monolithic Curb & Driveway	0	0	0	0	0	0	0	0
Monolithic Curb & Driveway	0	0	0	0	0	0	0	0
Monolithic Curb Gutter & Driveway	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
SW Inlets	0	0	0	0	0	0	0	0
PB Inlets	0	0	0	0	0	0	0	0
G-2 Inlets	0	0	0	0	0	0	0	0
CG-2 Inlets	0	0	0	0	0	0	0	0
Sumpl/Seed Set	0	0	0	0	0	0	0	0
Inlet Lead, 10"	55	55	0	0	0	0	0	0
Inlet Lead, 12"	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Planter	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Trees in Swales	0	0	0	0	0	0	0	0
Trees in Planting Strip	0	0	0	0	0	0	0	0
Trees in Tree Wells	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
planter strip	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Segmental	0	0	0	0	0	0	0	0
Prefabricated modular	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Removal	0	0	0	0	0	0	0	0
Permanent	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Arrows	0	0	0	0	0	0	0	0
Stop Bars	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
New Light Ex. Wood pole	0	0	0	0	0	0	0	0
Wood Pole Lights	0	0	0	0	0	0	0	0
Cobra	0	0	0	0	0	0	0	0
Single Ornamental	0	0	0	0	0	0	0	0
Twin Ornamental	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Area	0	0	0	0	0	0	0	0
Cost / SF	0	0	0	0	0	0	0	0
Land Cost	0	0	0	0	0	0	0	0
No. Properties	0	0	0	0	0	0	0	0
Acq./Prop	0	0	0	0	0	0	0	0
Appr./Prob	0	0	0	0	0	0	0	0
Total RW	0	0	0	0	0	0	0	0

Insert values

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Separated	0	0	0	0	0	0	0	0
Length for AC repair	0	0	0	0	0	0	0	0
Monolithic Curb & Sidewalk	0	0	0	0	0	0	0	0
Monolithic Curb & Sidewalk	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Adjacent to Swales	0	0	0	0	0	0	0	0
Adjacent to Planting Strip	0	0	0	0	0	0	0	0
Monolithic Curb & Driveway	0	0	0	0	0	0	0	0
Monolithic Curb & Driveway	0	0	0	0	0	0	0	0
Monolithic Curb Gutter & Driveway	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
SW Inlets	0	0	0	0	0	0	0	0
PB Inlets	0	0	0	0	0	0	0	0
G-2 Inlets	0	0	0	0	0	0	0	0
CG-2 Inlets	0	0	0	0	0	0	0	0
Sumpl/Seed Set	0	0	0	0	0	0	0	0
Inlet Lead, 10"	0	0	0	0	0	0	0	0
Inlet Lead, 12"	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Planter	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Trees in Swales	0	0	0	0	0	0	0	0
Trees in Planting Strip	0	0	0	0	0	0	0	0
Trees in Tree Wells	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
planter strip	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Segmental	0	0	0	0	0	0	0	0
Prefabricated modular	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Removal	0	0	0	0	0	0	0	0
Permanent	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Arrows	0	0	0	0	0	0	0	0
Stop Bars	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
New Light Ex. Wood pole	0	0	0	0	0	0	0	0
Wood Pole Lights	0	0	0	0	0	0	0	0
Cobra	0	0	0	0	0	0	0	0
Single Ornamental	0	0	0	0	0	0	0	0
Twin Ornamental	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Area	0	0	0	0	0	0	0	0
Cost / SF	0	0	0	0	0	0	0	0
Land Cost	0	0	0	0	0	0	0	0
No. Properties	0	0	0	0	0	0	0	0
Acq./Prop	0	0	0	0	0	0	0	0
Appr./Prob	0	0	0	0	0	0	0	0
Total RW	0	0	0	0	0	0	0	0

Insert values

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Adjacent to Swales	0	0	0	0	0	0	0	0
Adjacent to Planting Strip	0	0	0	0	0	0	0	0
Monolithic Curb & Driveway	0	0	0	0	0	0	0	0
Monolithic Curb & Driveway	0	0	0	0	0	0	0	0
Monolithic Curb Gutter & Driveway	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
SW Inlets	0	0	0	0	0	0	0	0
PB Inlets	0	0	0	0	0	0	0	0
G-2 Inlets	0	0	0	0	0	0	0	0
CG-2 Inlets	0	0	0	0	0	0	0	0
Sumpl/Seed Set	0	0	0	0	0	0	0	0
Inlet Lead, 10"	0	0	0	0	0	0	0	0
Inlet Lead, 12"	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
TOTAL	0	0	0	0	0	0	0	0
Planter	0	0	0	0	0	0	0	0

	84th Wash.	84th Stark	86th Wash.	86th Stark	86th Wash.	86th Stark
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CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE

Jade & Montavilla Connected Centers Project

PROJECT-WIDE TRAFFIC ITEMS - Includes: Signing, striping, marking, traffic control, RRFBs, Signal Mods and reconfiguration of turning movements at 82nd with Stark & Washington (sub-project 8)

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF **Jade & Montavilla Connected Centers Project**

VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$ 56,594.89	\$ 56,594.89
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$ 16,978.47	\$ 16,978.47
3	TEMPORARY SIGNS	SQFT	102.00	\$ 20.00	\$ 2,040.00
4	TEMPORARY BARRICADES, TYPE II	EACH	50.00	\$ 100.00	\$ 5,000.00
5	TEMPORARY BARRICADES, TYPE III	EACH	50.00	\$ 150.00	\$ 7,500.00
10	TEMPORARY PLASTIC DRUMS	EACH	200.00	\$ 52.00	\$ 10,400.00
14	STRIPE REMOVAL	FOOT	1,000.00	\$ 0.82	\$ 820.00
15	STRIPING & STRIPE REMOVAL MOBILIZATION	EACH	4.00	\$ 425.00	\$ 1,700.00
17	SEQUENTIAL ARROW SIGNS	EACH	6.00	\$ 1,800.00	\$ 10,800.00
18	PORTABLE CHANGEABLE MESSAGE SIGNS	EACH	2.00	\$ 4,330.00	\$ 8,660.00
19	FLAGGERS	HOUR	100.00	\$ 48.50	\$ 4,850.00
20	TRAFFIC CONTROL SUPERVISOR	HOUR	10.00	\$ 65.40	\$ 654.00
23	EROSION CONTROL	LS	1.00	\$ 5,659.49	\$ 5,659.49
30	POLLUTION CONTROL PLAN	LS	1.00	\$ 565.95	\$ 565.95
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$ 22,637.96	\$ 22,637.96
45	CLEARING AND GRUBBING	LS	1.00	\$ 14,714.67	\$ 14,714.67
200	RECTANGULAR RAPID FLASHING BEACON	EACH	1.00	\$ 130,000.00	\$ 130,000.00
201	SIGNAL AND SIGN UPDATES - 82ND	EACH	1.00	\$ 150,000.00	\$ 150,000.00
202	TRAFFIC CALMING	EACH	1.00	\$ 100,000.00	\$ 100,000.00
204	LONGITUDINAL PAVEMENT MARKING - PAINT	FOOT	7,000.00	\$ 0.46	\$ 3,220.00
205	CURB MARKINGS - PAINT	FOOT	6,100.00	\$ 2.00	\$ 12,200.00
207	PAVEMENT LEGEND, TYPE B: ARROWS	EACH	13.00	\$ 279.00	\$ 3,627.00
208	PAVEMENT LEGEND, TYPE B: "ONLY"	EACH	12.00	\$ 332.00	\$ 3,984.00
210	PAVEMENT LEGEND, TYPE B-HS: ARROWS	EACH	25.00	\$ 261.00	\$ 6,525.00
211	PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL	EACH	38.00	\$ 290.00	\$ 11,020.00
212	PAVEMENT BAR, TYP B-HS	SQFT	754.00	\$ 9.90	\$ 7,464.60
213	PAVEMENT BAR, TYPE A	SQFT	200.00	\$ 4.50	\$ 900.00
215	REMOVE EXISTING SIGNS	LS*	74.00	\$ 41.70	\$ 3,085.80
216	REMOVE & REINSTALL EXISTING SIGNS	LS*	123.00	\$ 167.00	\$ 20,541.00
217	SIGN SUPPORT FOOTINGS, BREAKAWAY	LS*	107.00	\$ 182.00	\$ 19,474.00
218	SIGNAL POLE MOUNTS	LS*	22.00	\$ 570.00	\$ 12,540.00
219	PIPE SIGN SUPPORTS	LS*	119.00	\$ 180.00	\$ 21,420.00
223	TYPE "G" SIGNS IN PLACE	SQFT	98.00	\$ 39.60	\$ 3,880.80
226	TYPE "R" SIGNS IN PLACE	SQFT	91.00	\$ 20.90	\$ 1,901.90
233	TYPE "W12" SIGNS IN PLACE	SQFT	68.00	\$ 25.60	\$ 1,740.80
TOTAL BID ITEMS					\$ 683,100.33

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	AMOUNT
14	BOLI FEE PAYMENT	LS	1.00	\$ 683.10	\$ 683.10
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$ 68,310.03	\$ 68,310.03
TOTAL ANTICIPATED ITEMS					\$ 68,993.13

SCHEDULE SUMMARY

BID ITEMS	\$ 683,100
CONSTRUCTION CONTINGENCY	\$ 34,155
	5% of Bid Items*

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
	SUBTOTAL				\$ 717,255
	ANTICIPATED ITEMS				\$ 68,993
	TOTAL CONSTRUCTION				\$ 786,248
	PROJECT MANAGEMENT			5% of Bid Items	\$ 34,155
	DESIGN ENGINEERING			25% of Bid Items	\$ 170,775
	CONSTRUCTION MANAGEMENT			15% of Bid Items	\$ 102,465
	SUBTOTAL				\$ 307,395
	PROJECT ENGINEERING & MANAGEMENT OVERHEAD			79.27% of PM, Eng, and CM	\$ 243,672
	TOTAL PROJECT ENGINEERING & MANAGEMENT				\$ 551,067
	RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES				\$ -
	RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION				\$ -
	RIGHT-OF-WAY CONTINGENCY			of Land, Improve, and Damages 30%	\$ -
	TOTAL PROJECT RIGHT-OF-WAY				\$ -
	INFLATION RATE ON CONTRACT	Years		Inflation	
	INFLATION RATE ON PERSONNEL	5		4.5% of Construction	\$ 193,560
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE	5		2.0% of Eng & Mgmt	\$ 57,356
				20% of Const, Eng & Mgmt, and Inflation	\$ 317,646
	TOTAL PROJECT CONTINGENCY				\$ 568,562
	TOTAL PROJECT ESTIMATE				\$ 1,905,878



82nd Avenue Improvement Coalition

August 17, 2016

82nd Avenue Improvement Coalition
Portland OR
82ndAvenue@gmail.com

Joint Policy Advisory Committee on Transportation
c/o Regional Flexible Funding

To Joint Policy Advisory Committee on Transportation Members;

We are excited to write a letter of support for the following Regional Flexible Funding projects:

- NE Halsey Street Safety and Access to Transit Project
- Jade & Montavilla Connected Centers Project
- Brentwood-Darlington Safe Routes to School: Sidewalk Infill and Neighborhood Greenway Project

These projects will align with several projects currently underway that directly involve 82nd Avenue; specifically, the City of Portland led Understanding Barriers to Development and the Oregon Department of Transportation led 82nd Avenue Implementation Plan. Both studies are supported by the 82nd Avenue Improvement Coalition.

The 82nd Avenue Improvement Coalition seeks to encourage development of multi-modal transportation facilities and promote creation of “complete neighborhoods.” Complete neighborhoods offer a variety of transportation options that are built at walkable and bikeable human scale.

Presently, 82nd Avenue is a High Crash Corridor. Those that live near 82nd Avenue view this boulevard as a physical barrier separating neighborhoods that is challenging, at best, and dangerous, at worst, to access as a pedestrian or bicyclist. These projects seek to enhance crossing opportunities and connect key pedestrian and bike routes.

Examples include the addition of pedestrian scale lightening near the 82nd Avenue MAX station and crossing enhancements at several intersections and addition of bicycle lanes to the Halsey Street overpass.

We support the three projects with the understanding that they will be further developed, discussed, and finalized using aforementioned planning efforts and community engagement,

Brian Wong
Chair



2788 SE 82nd. Ave. Ste 203
Portland, OR 97266
971-340-4866
www.jadedistrict.org

Metro
600 NE Grand Ave
Portland, OR 97232

August 12, 2016

Subject: Letter in Support of Portland Bureau of Transportation Jade and Montavilla Connected Centers Project

Dear Metro Grant Committee:

We are writing this letter in support of the Portland Bureau of Transportation's application for funding for the Connected Centers Project, and in particular the proposed improvements for the Jade and Montavilla areas.

Through our community-based outreach efforts and an extensive visioning process conducted in 2014, the residents and businesses of the Jade District have consistently identified transportation safety and infrastructure improvements as priorities. In particular, residents have singled out lighting and sidewalk improvements as investments that will make a big difference in of feeling safe while walking to school or taking care of the daily errands.

The Jade District also recognizes the historic lack of investment and infrastructure in East Portland and the disparities in outcomes for residents in this area of Portland. We also recognize that improvements in services and investments often lead to higher rents and an increased cost of living, and we continue to work for development without displacement.

In addition to this specific project, we continue to advocate for all public projects impacting our neighborhood to coordinate with all city and regional planning efforts. We believe projects should work to ensure a stable and healthy community serving the current residents of the Jade District and work to resist the displacement pressures currently facing our most vulnerable residents.

We again reiterate our support for the Portland Bureau of Transportation's Connected Centers Project with specific endorsement of the Jade and Montavilla projects. We look forward to working with city staff to engage our residents and implement this project in a way that includes genuine outreach and input into the infrastructure in the neighborhood.

Thank you.

A handwritten signature in black ink, appearing to read "Todd Struble", written over a horizontal line.

Todd Struble
Jade District Manager

cc. April Bertelsen, Portland Bureau of Transportation

August 26, 2016

Metro Council and JPACT Members
600 NE Grand Avenue
Portland, Oregon 97232

Dear Selection Committee:

I am writing this letter to offer TriMet's support for the **City of Portland's Jade & Montavilla Connected Centers** project application for the 2019-2021 Metropolitan Transportation Improvement Program (MTIP) funding program Regional Flexible Funds Active Transportation Candidate Project.

This project will support access both current bus lines and future improvements in transit service, including the Powell-Division Transit and Development Project.

Specifically, TriMet supports improvements in access to transit stops and moving safely around the area, including: SE Woodward Neighborhood Greenway improvements; 80's Neighborhood Greenway improvements; safe crossings improvements which help people access transit stops; and other bikeway, sidewalk, lighting, and curb and drainage improvements.

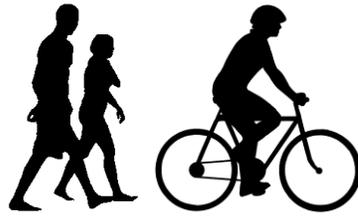
Funding of this project will improve safe connections to transit and complementary active modes of mobility, and improve connections within the connected centers area of the Jade District and Montavilla Neighborhood Centers. This project would coincide with, and extend the benefits of, the planned Powell-Division Transit and Development Project. It will bring timely improvements in two key Centers that are already seeing increased development activity.

We look forward to working in coordination with the City of Portland on this project after funding and connections to transit.

Sincerely,



Alan Lehto
Director Planning and Policy



A Joint Letter from the
Bicycle Advisory Committee & Pedestrian Advisory Committee
1120 SW 5th Avenue Room 800, Portland OR 97204

August 24, 2016

Metro Council
600 NE Grand Ave
Portland, OR 97232

The City of Portland Bureau of Transportation (PBOT) Pedestrian Advisory Committee and Bicycle Advisory Committee consist of a wide cross-section of Portlanders who come together to advise City decision makers on matters related to their particular transportation mode. Members come from every area of the City as well as a broad spectrum of interests and professional backgrounds. Each modal committee has been an ongoing contributor and advisor during the City's Regional Flexible Fund selection process.

Each committee has reviewed the projects and feels that all of the projects, both collectively and individually, are strong candidates that would bring needed investment to geographic areas where it has long been lacking. Therefore as modal Chairs, we would like to express the support of our committees for the City of Portland applications for Metro's Regional Flexible Funds for the following active transportation projects:

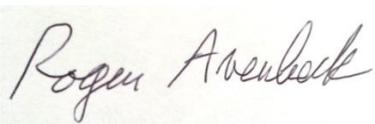
- Brentwood-Darlington Safe Routes to School - Sidewalk Infill & Neighborhood Greenway: Provides Brentwood-Darlington, an underserved neighborhood that relies on active transportation, walking and bicycle facilities. The project will improve safety in a high-crash area and removes conflicts between modes to improve access to and from priority destinations.
- Connected Cully, Phase 2 - NE 72nd Ave Pedestrian/Bicycle Parkway: Provides the Cully neighborhood low-stress walking and bicycling facilities. Traditionally a lower socioeconomic neighborhood with high concentration of low-income Hispanic residents, the project will improve a high-crash area, provide access to and from priority destinations (i.e. schools, parks and economic centers) and ultimately is supported by the community through stakeholder engagement.
- David Douglas Safe Routes to School - Sidewalk Infill on 117th, 130th, and Mill: Provides David Douglas High School and the surrounding neighborhoods a safe route for students to get to school. The David Douglas School District is one of the most diverse communities within the Portland Metropolitan Region yet it is deficient in active transportation facilities. This project will close sidewalk gaps, create safe bicycle facilities and most importantly has strong support from the residents, David Douglas High School and political representatives in the area.
- Hillsdale Town Center Pedestrian Connections: Sidewalk Infill on SW Beaverton-Hillsdale Hwy: Provides the Hillsdale Town Center with pedestrian facilities between nearby Robert Grey Middle School, Mary Rieke Elementary and Wilson High School. This project has strong community support and will improve access to an underserved community with many children and seniors adjacent to a High Crash Corridor.

- Jade & Montavilla Connected Centers Project: Provides multi-modal improvements in key areas to the up and coming Jade District and Montavilla Neighborhood Centers. These improvements will promote safety along a high crash corridor, address climate change and health through the creation of a walkable and bikeable network and serve diverse communities of color.
- NE Halsey Safety & Access to Transit: Provide solutions to problems in this High Crash Network. Using the suite of tools, which include signal improvements, intersection redesigns, pedestrian improvements and bicycle facilities, this project will alleviate deficiencies in the transportation network and better connect the growing population to the developing economic centers in this area.
- N. Portland Greenway Trail: Baltimore Woods Segment: Provides a better active transportation connection between nature, places of interest, job corridors and other priority locations. This project will add bicycle lanes, sidewalks, off-street pathways and other improvements to create a high quality network of alternative options for the St. Johns neighborhood.
- Outer Stark and Outer Halsey Complete Streets Project Development: Provide safety improvements to a High Crash Network that affects all modes. This project will add bicycle and pedestrian facilities for an area that is highly dependent on single occupancy vehicles thereby giving the residents greater choice in their transportation options and modes. These updates will also serve a diverse community that is low-income and has a high percent of immigrant/refugee or identify as people of color.

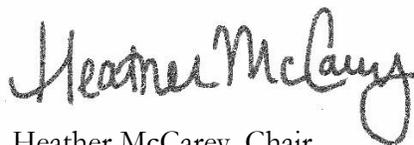
Each of these projects are region-wide investments that make our communities more livable and give people choices in how they travel. Each of these projects score high on the prioritization criteria by serving underrepresented populations that are in projected high growth areas in the Portland Metro region, improving safety in high crash corridors, and providing access to priority destinations.

These projects achieve multiple transportation policy objectives for both a bicycling and walking perspective and support Metro’s efforts to address air quality requirements by ensuring the region reduces its reliance on fossil fuel consumption and single occupancy trips. Each of these projects provides significant transportation benefits to the Portland Metropolitan Region in helping to ensure that our transportation system is strong, diverse and efficient.

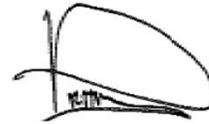
Respectfully submitted on behalf of Portland’s Pedestrian Advisory Committee and Bicycle Advisory Committee,



Roger Averbeck, Co-Chair
Pedestrian Advisory Committee



Heather McCarey, Chair
Bicycle Advisory Committee



Rithy Khut, Vice-Chair
Bicycle Advisory Committee

Please note: PAC members Rebecca Hamilton, Co-Chair and Anthony Buczek, as Metro employees, recused themselves from participating in all discussions related to the RFF project selection and related issues.

cc: Joint Policy Advisory Committee on Transportation (JPACT)

Summary of non-discriminatory engagement

The City of Portland Bureau of Transportation (PBOT) recognizes that equity is realized when identity -such as race, ethnicity, gender, age, disability, national origin, sexual orientation- has no detrimental effect on the distribution of resources, opportunities, and outcomes for group members in society. PBOT is committed to the fair treatment and meaningful involvement of all people, regardless of income or identity, with respect to the development, implementation and enforcement of plans, policies and procedures in the course of the Bureau's work.

Fair treatment means that no group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies. Meaningful involvement means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the concerns of all participants involved will be considered in the decision making process; and (4) the decision makers seek out and facilitate the involvement of those potentially affected.

PBOT acknowledges historical injustice and context of local decision-making and supports the equitable distribution of the benefits and burdens of decisions to ensure that those most impacted from decisions have an opportunity to meaningfully participate. PBOT's commitment to non-discriminatory engagement includes supporting special efforts to engage minority, low-income, women, people with disabilities, people with Limited English Proficiency, senior and youth populations.

Non-discrimination policy statement It is the policy of the City of Portland that no person shall be denied the benefits of or be subjected to discrimination in any City program, service, or activity on the grounds of race, religion, color, national origin, English proficiency, sex, age, disability, religion, sexual orientation, gender identity, or source of income. The City of Portland also requires its contractors and grantees to comply with this policy. This is in accordance with Title VI of the Civil Rights Act of 1964 and subsequent federal nondiscrimination directives such as the Federal-Aid Highway Act of 1973, the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Civil Rights Restoration Act of 1987, Americans with Disabilities Act of 1990 (ADA), Executive Order 12898 (Environmental Justice), and Executive Order 13166 (Limited English Proficiency).

Implementation of non-discriminatory engagement PBOT's public engagement plans, policies and practices are guided by and in conformance with the City of Portland Title VI Civil Rights Program and Plan.

In June 2013 the City Council unanimously adopted the Civil Rights Title VI Plan which included the Environmental Justice Policy and Analysis Guidelines. The City of Portland also adopted, by Ordinance, the above Non Discrimination Policy Statement and the Non Discrimination Agreement for Certified Local Agencies. All of the above support implementation of the City of Portland's Civil Rights Code, located in Chapter 23.01 Civil Rights, which was adopted on October 3, 1991 by Ordinance Number 164709.

The City has developed extensive resources and best practices to ensure that the public is meaningfully involved in the decisions it makes. Such involvement is critical to the implementation of the Title VI program. The City Council adopted the following Public Involvement Principles in August, 2010, and is committed to applying them in planning, providing services and decision-making.

- *Partnership*: Community members have a right to be involved in decisions that affect them. Participants can influence decision-making and receive feedback on how their input was used. The public has the opportunity to recommend projects and issues for government consideration.
- *Early Involvement*: Public involvement is an integral part of issue and opportunity identification, concept development, design, and implementation of City policies, programs, and projects.
- *Building Relationships and Community Capacity*: Public involvement processes develop long-term, collaborative working relationships and learning opportunities with community partners and stakeholders.
- *Inclusiveness and Equity*: Public dialogue and decision-making processes identify, reach out to, and encourage participation of the community in its full diversity. Processes respect a range of values and interests and the knowledge of those involved. Historically excluded individuals and groups are included authentically in processes, activities, and decision- and policy-making. Impacts, including costs and benefits, are identified and distributed fairly.
- *Good Quality Process Design and Implementation*: Public involvement processes and techniques are well-designed to appropriately fit the scope, character, and impact of a policy or project. Processes adapt to changing needs and issues as they move forward.
- *Transparency*: Public decision-making processes are accessible, open, honest, and understandable. Members of the public receive the information they need to participate effectively.
- *Accountability*: City leaders and staff are accountable for ensuring meaningful public involvement in the work of city government.

Additional non-discriminatory policies The Portland Bureau of Transportation has in place a Transportation Title VI Civil Rights Program and Plan to support and ensure implementation of the above policy. The plan's elements that protect against discrimination apply to PBOT, its sub-recipients, contractors and consultants. The Transportation Title VI Civil Rights Program Plan and Ordinance are located on the Portland Bureau of Transportation website at the following web address: www.portlandonline.com/transportation/index.cfm?c=34752

The August 2016 Recommended Draft of the Transportation System Plan (TSP) Stage 2 Update includes specific acknowledgement of the goals and policies of *Chapter 2: Community Involvement* of the adopted City of Portland 2035 Comprehensive Plan. It also identifies 19 additional TSP *Section 3: Community Involvement Objectives*.

Inclusive Outreach and Engagement Strategies To insure participation of Title VI protected groups, and to address physical accessibility, language issues and other accommodations for Title VI protected groups. At a minimum, such strategies shall include:

- Providing for a variety of ways for community members to participate in public processes, including informal meetings/open house presentations and written and oral testimony;
- Ensuring that meeting locations and times are convenient and accessible to all, including low income, minority communities, people with Limited English Proficiency and people with disabilities;
- Seeking out and considering the views of minority and/or low income communities;
- Providing meeting facilities that are accessible to all and specifying in meeting notices that accommodations are available upon request;
- Ensuring equal access to City programs, services and activities by providing reasonable modifications and accommodations upon request; and
- Following all Oregon Public Records and Public Meetings Laws for relevant meetings.

ORDINANCE NO. 187954

*Authorize application to the Metro Regional Government for grants up to \$30 million for eight Active Transportation infrastructure or project development projects and two Regional Freight Investment Projects (Ordinance)

The City of Portland ordains:

Section 1. The Council finds:

1. Through the Regional Flexible Funds grant process, the Metro Regional Government is soliciting transportation infrastructure and project development proposals for federal transportation funding that will be available between 2019 and 2021.
2. There is approximately \$26 million available region-wide for Active Transportation/Complete Streets projects that support non-auto trips and ensure safe streets designed for all users.
3. There is approximately \$7 million available region-wide for Regional Freight Investments projects which support the development of the region's economy through investment in green infrastructure and key freight projects or programs.
4. Working with stakeholders, the Bureaus of Transportation and Parks and Recreation identified eight priority Active Transportation projects and two priority freight projects (Exhibit A) for application for Metro Regional Flexible Funds grants.
5. The projects identified will help to build critical transportation infrastructure and support multi-modal safety improvements throughout the City of Portland transportation system.
6. The projects listed on Exhibit A are consistent with the recently updated Transportation System Plan Project List. The grant application project list was developed with the help of the City's Bicycle, Pedestrian and Freight Advisory Committees and with additional feedback provided by the Transportation Justice Alliance.
7. Local match of at least 10.27% will be provided from Transportation and Parks System Development Charges.

NOW, THEREFORE, The Council directs:

- a. The Director of the Portland Bureau of Transportation is hereby authorized to make application to Metro for grants in the amount of up to \$30 million and to document City Council support in the required projects nomination letter.
- b. The Director of the Portland Bureau of Transportation is authorized to provide such information and assurances as are required for the grant period.
- c. The OMF Grants Office is authorized to perform all administrative matters in relation to the grant application, grant agreement or amendments, requests for reimbursement from the grantor, and to submit required online grant documents on the Commissioner-in-Charge's behalf.

Section 2. The Council declares that an emergency exists because the grant applications are due immediately; therefore, this ordinance shall be in full force and effect from and after its passage by the Council.

Passed by the Council: **AUG 17 2016**

Commissioner Steve Novick

Prepared by: Mark Lear:CK

Date Prepared: 08/02/16

Mary Hull Caballero

AUDITOR OF THE CITY OF PORTLAND

By 

Deputy

Agenda No.
ORDINANCE NO. 187954
 Title

*Authorize application to the Metro Regional Government for grants in the amount of up to \$30 million for eight Active Transportation infrastructure or project development projects and two Regional Freight Investment Projects. (Ordinance)

<p>INTRODUCED BY Commissioner/Auditor: COMMISSIONER STEVE NOVICK</p> <p>COMMISSIONER APPROVAL</p> <p>Mayor—Finance and Administration - Hales</p> <p>Position 1/Utilities - Fritz</p> <p>Position 2/Works - Fish</p> <p>Position 3/Affairs - Saltzman</p> <p>Position 4/Safety - Novick <i>SN</i></p> <p>BUREAU APPROVAL Bureau: <u>Transportation</u> LEAH TREAT, DIRECTOR <i>LT</i></p> <p>Prepared by: Mark Lear: CK <i>MSL</i> Date Prepared: August 2, 2016 Supervisor:</p> <p>Impact Statement Completed <input checked="" type="checkbox"/> Amends Budget <input type="checkbox"/></p> <p>Portland Policy Document If "Yes" requires City Policy paragraph stated in document. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>City Auditor Office Approval: required for Code Ordinances</p> <p>City Attorney Approval: required for contract, code, easement, franchise, comp plan, charter</p> <p>Council Meeting Date August 17th, 2016</p>	<p>CLERK USE: DATE FILED <u>AUG 09 2016</u></p> <p style="text-align: center;">Mary Hull Caballero Auditor of the City of Portland</p> <p>By: <u><i>MHC</i></u> Deputy</p> <p>ACTION TAKEN:</p>
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AGENDA
<p>TIME CERTAIN <input type="checkbox"/></p> <p>Start time: _____</p> <p>Total amount of time needed: (for presentation, testimony and discussion)</p>
<p>CONSENT <input type="checkbox"/></p>
<p>REGULAR <input checked="" type="checkbox"/></p> <p>Total amount of time needed: 20 minutes (for presentation, testimony and discussion)</p>

FOUR-FIFTHS AGENDA	COMMISSIONERS VOTED AS FOLLOWS:		
		YEAS	NAYS
1. Fritz	1. Fritz	✓	
2. Fish	2. Fish	_____	
3. Saltzman	3. Saltzman	✓	
4. Novick	4. Novick	✓	
Hales	Hales	✓	

Exhibit A: City of Portland Grant Applications for Metro Regional Flexible Funds

Active Transportation Projects Name (Alphabetical)	Description	Maximum Grant Request
Brentwood-Darlington Safe Routes to School: Sidewalk Infill & Neighborhood Greenway	Brentwood-Darlington is a neighborhood with numerous sidewalk gaps and substandard bicycle facilities. This project would provide sidewalk infill on SE Duke St and SE Flavel St. from 52 nd Ave to 82 nd Ave; a neighborhood greenway on Knapp and Ogden from 32 nd to 87 th ; and a pedestrian/bicycle connection to the Springwater Corridor on 87 th Ave. south of Flavel.	\$3,500,000
Connected Cully, Phase 2: NE 72 nd Ave Pedestrian/Bicycle Parkway	Provide a high-quality pedestrian and bicycle parkway along NE 72 nd Ave through the heart of Cully. This project will connect Cully residents to nearby commercial areas and schools, provide multimodal accessibility to parks and green space in Cully and Roseway, and will connect to the future 70s Neighborhood Greenway to the south. The project would construct a multi-use path in the center of the heritage parkway median from Sandy to Prescott, separated pedestrian and bicycle pathways from Prescott to Sumner, and a shared pathway from Sumner to Killingsworth. The project will also include lighting, street trees, and place-making elements.	\$4,000,000
David Douglas Safe Routes to School: Sidewalk Infill on 117 th , 130 th , and Mill	This project would fill important sidewalk gaps on key walking routes in the David Douglas School District. The project would construct sidewalk infill on SE 130 th Ave from Stark to Division, SE Mill St from 130 th to 148 th , and SE 117 th Ave from Stark to Division.	\$3,500,000
Hillsdale Town Center Pedestrian Connections: Sidewalk Infill on SW Beaverton-Hillsdale Hwy	Provide better pedestrian facilities and access to Hillsdale Town Center, the Red Electric Trail, transit and schools by constructing sidewalk infill on SW Beaverton-Hillsdale Highway between Dosch and 18 th Avenue/Hillsdale Town Center and on Dosch from Beaverton-Hillsdale Highway to Flower.	\$3,500,000
Jade & Montavilla Connected Centers Project	Construct multi-modal improvements on key pedestrian and bicycle routes within and connecting to the Jade District and Montavilla Neighborhood Centers. Several improvements have been identified through the Portland Local Action Plan for the Powell-Division Transit and Development Project and additional improvements will be identified through coordinated planning efforts by ODOT, PBOT and BPS along the 82 nd Ave. Corridor.	\$4,000,000

Exhibit A: City of Portland Grant Applications for Metro Regional Flexible Funds

<p>NE Halsey Safety & Access to Transit</p>	<p>NE Halsey is a High Crash Network street and a street TriMet has identified for more frequent future transit service. This project would focus on the 82nd Ave MAX Station Area and would provide signal improvements, intersection redesigns, bus stop improvements and high-priority crossings on NE Halsey between 47th and 92nd, a bikeway on Halsey from 65th to 92nd, and multi-use path connection from the 82nd Ave. MAX station to the future I-205 undercrossing.</p>	<p>\$3,000,000</p>
<p>N. Portland Greenway Trail: Baltimore Woods Segment</p>	<p>This project will provide better active transportation connections to nature and also to Rivergate jobs by construct 1.8 miles of high quality bikeway improvements in the St. Johns neighborhood to complete a trail gap between Pier Park and Willamette Greenway. The improvements will include bicycle lanes, sidewalks, neighborhood greenways and off-street pathways.</p>	<p>\$3,000,000</p>
<p>Outer Stark and Outer Halsey Complete Streets Project Development</p>	<p>Outer Stark and Outer Halsey are both High Crash Network streets that need to be fundamentally redesigned as Complete Streets to achieve Vision Zero goals and allow for multimodal accessibility to transit and commercial areas such as Gateway and Rosewood. This project development grant will be used to help determine the most effective infrastructure improvements and roadway designs to increase safety and provide transit, schools, services and employment access improvements to community members.</p>	<p>\$300,000</p>

Exhibit A: City of Portland Grant Applications for Metro Regional Flexible Funds

Regional Freight Investment Projects

Name (Alphabetical)	Description	Maximum Grant Request
Central Eastside Circulation and Safety Enhancement Project	Drawing on themes identified in the Central City 2035 Southeast Quadrant Plan, improve freight movement through the Central Eastside and reduce mode conflict. ITS improvements would include new traffic signals at MLK and Washington, Grand and Washington, 16 th and Irving and additional locations and protected left turns at Stark and Washington and Clay and Mill.	\$3,500,000
Columbia Blvd. ITS for Freight	The traffic signals throughout the Columbia Blvd. corridor are neither interconnected nor timed for the heavy concentration of truck activity that is present in the corridor. The individual performance characteristics of freight vehicles is not accounted for in current signal operations. As a result, travel through the corridor is unpredictable, negatively affecting the companies that depend on delivery as a part of their business. Smart Technologies and advanced communications infrastructure will allow active management of the corridor to improve conditions for freight and enable safer and more efficient progression of truck traffic.	\$750,000