



Active Transportation & Complete Streets Projects

Name of Project NE Cornfoot Road Multi-use Path

(project name will be adjusted to comply with ODOT naming convention if necessary)

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.** NE Cornfoot Road between NE Alderwood Road and NE 47th Avenue
- **Beginning facility or milepost.** 1400 feet west of Alderwood Road
- **Ending facility or milepost.** NE 47th Avenue
- **Provide a brief description of the project elements.**

The project will design, acquire right-of-way for, and construct a multi-use path on the north side of NE Cornfoot Road. The multi-use path will be 12 feet wide with minimum one foot shoulders. The multi-use path will be approximately 1.2 miles long. Between NE Air Trans Way and NE 47th Avenue the path may transition to on-street bike lanes.

- **City.** Portland
- **County.** Multnomah

Base project information

- **Corresponding RTP project number(s) for the nominated project.** 10340
- **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 the project is to provide a safe pedestrian and bicycle facility that is physically separated from a high volume National Highway System Intermodal Connector. There are over

9000 trips a day on NE Cornfoot Road and over nine percent of the trips are heavy vehicles. The need for the project is that there are currently no pedestrian or bike facilities on this section of NE Cornfoot Road. In fact there are no shoulders on either side of the roadway. (See photo on page 12.) The project is located in an area of high job density and is near the Cully neighborhood which has a high percentage of equity community members. The intent of the project is to make it more feasible for nearby residents to use bicycle transportation for commute trips rather than drive, thereby increasing the community's access to jobs. It is also intended to make it safer for cyclists and pedestrians by removing conflicts with automobiles and heavy vehicles.

The project would provide an alternative to bicycling on NE Columbia Blvd., which has no bike lanes and only narrow curb-tight sidewalks adjacent to moving traffic.

The project will complete the connection between facilities recently constructed to the east on Alderwood and new facilities to be constructed to the west on 47th Ave.

- **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).**

The measure will be the number of pedestrians and bike riders that use this section of NE Cornfoot Road before and after the project. We will collect bicycle and pedestrian counts before and after the project is constructed. It would also be helpful to conduct interviews with cyclists to determine origin and destination. We would also like to work with Metro staff to design other methodologies that could help to measure the success of the project.

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.**

The City of Portland Bureau of Transportation prepared the cost estimate for the project. A City of Portland estimate template is attached. The Port of Portland adjusted the project estimate to account for right of way acquisitions costs. The right-of-way needed for the project appears to be mostly owned by the Port of Portland, in an area outside of the Oregon Air National Guard lease and north of NE Cornfoot Road. Federal Aviation Administration rules require compensation for dedication of property that was obtained with aviation related funding.

The Port of Portland will provide the match funds for this project. The project has been studied and scoped by the Port of Portland and the City of Portland. The most likely NEPA category for the project is a categorical exclusion. The property needed for the project is owned by the Port of Portland. There is a long term lease to the Oregon Air National Guard (ORANG) for most of the property adjacent to the project. It appears that the r.o.w. needed is outside the ORANG leasehold. Funds can be obligated within the required time frame. There is high political support for this project. Both the City of Portland and Port of Portland support it. The Oregon Air National Guard (ORANG), which has a long term lease on the property adjacent to the project, also supports the project. The nearby Cully neighborhood is also in support of the project.

- **Total project cost**

(Include and describe any cost elements beyond those funded by the request + match):

\$3,708,539 is the total project cost. The grant funds requested are **\$3,327,672**.

- **RFFA funding request by project phase:**

(e.g. Project Development, P.E., Environmental, ROW acquisition, Construction)

Project Development, P.E. and Environmental	\$ 1,146,953
Right of Way	\$ 145,377
Construction	\$ 2,035,342

- **Local match or other funds**

(minimum match = 10.27% of funds requested + match): \$ 380,867

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** Phil Healy 503-415-6512, philip.healy@portofportland.com
- **Project Manager** Phil Healy, 503-415-6512, philip.healy@portofportland.com
- **Project Engineer** Mike Coleman, 503-415-6618, mike.coleman@portofportland.com
- **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 project is a joint project between the City of Portland and the Port of Portland. Both agencies have extensive experience in delivering federal aid projects and neither agency has ever failed to deliver a federal aid project. Examples of projects the Port has independently delivered include:

- 1) South Rivergate Rail Yard (Federal Rail Administration)
- 2) Ramsey Rail Yard (Federal Rail Administration)
- 3) PDX North Runway Expansion (Federal Aviation Administration)

The Port has partnered with the City of Portland to deliver a number of Federal Highway Administration funded projects including:

- 1) 47th Avenue @ Columbia Blvd.
- 2) South Rivergate Overcrossing
- 3) N. Leadbetter Overcrossing

- **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 Port of Portland has Engineering Project Managers, Development Engineers, Development Managers, a Financial department that includes personnel with extensive and ongoing experience in delivery of federally funded projects. The City of Portland is a federal aid certified agency and has Engineers, Project Managers, and a Financial department that includes personnel with extensive and ongoing experience in delivery of federally funded projects.

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?**

NE Cornfoot Road is the northern boundary of the Cully neighborhood. According to the Regional Equity Atlas maps the Cully neighborhood has above the regional average percent population of color. It is 15.9% Black, 2.1% American Indian/Eskimo & Aleut, 6.2% Asian and Pacific Islander, and 21.3% Hispanic. The percent of households with low English proficiency is 9% to 18%. The percent of recent immigrants is 31.6% to 37.9%. There are a high percentage of households below the poverty line. One of the census tracts is 23% to 50% of households below the poverty level. According to 2010 census data for zip code 97218, which makes up most of Cully neighborhood, the percent of youth is above average at 24.2%. According to 2010 census data for zip code 97218 13.8% of the population has a disability, which is higher than the regional average of 10.9%. One of the drivers for the project is to increase bicycle access for the Cully neighborhood. The project benefits the residents by providing an opportunity for economical transportation to an area with high job density. It will also increase access to recreational areas and facilities.

- 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?**

The project area for NE Cornfoot Road has no bicycle facilities, no sidewalks, and no shoulders on either side of the roadway. Traffic counts collected by the Port in April 2016 (500 feet east of Air Trans Way) show 9150 vehicles per day. This might be low because many vehicles may enter Air Trans Way from 47th Avenue that aren't captured by the tube data. Intersection counts for the p.m. peak hour at Cornfoot/Air Trans Way show that 104 of the 1120 vehicles during the p.m. peak hour are heavy vehicles. This is 9.4% trucks, which is a high percentage. The daily truck percentage may even be higher because many trucks operate off peak due to roadway congestion during the peak hour. There is a high amount of truck traffic (9.4% of all traffic) because NE Cornfoot Road serves air cargo facilities on the north side of the road and industrial businesses on the south side of the road. The City of Portland Vision Zero Traffic Injuries and Fatalities Map identifies one fatality between 2005 and 2014 at or near NE Cornfoot and NE Schilling (1 person in an auto) and one serious injury accident at or near NE Cornfoot Road and NE Air Trans Way (1 person in an auto). This project will provide an alternative to bike travel on NE Columbia Blvd., which had one fatality and 7 serious injury crashes in the same time period parallel to the project area. Although there are many jobs in the area, there is a lack of pedestrian and bicycle facilities that provide options besides an automobile to get to the jobs. The bicyclists that do use NE Cornfoot Road must ride on a road with no bike lanes and no shoulder. On the south side of the road there is a steep drop-off into the Columbia Slough. If the project were to provide a multi-use path on the north side of the road that is separated from the roadway, it would provide a much safer facility for bicyclists and a safe facility for pedestrians, and a much safer alternative to NE Columbia Blvd.

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

The project is located in an area designated as a Regionally Significant Industrial Area (RSIA) and is a high jobs area. The airport and surrounding businesses are identified on the Active Transportation Plan "Access to Regional Destinations" map. At Portland International Airport alone there are over 12,000 jobs. The area bound by 33rd Avenue, Columbia Blvd., I-205, and the Columbia River has 20,000 jobs. Additionally, the United States Postal Service (USPS) will be moving to NE Cornfoot Road from downtown. Many of the employees live in the residential areas to the south of the airport and within biking distance. Currently if a resident cannot or chooses not to drive the only option is to go out of direction and take a bus to a Max Red Line light rail to Cascade Station or PDX and walk or bike to the job destination. The nearest transit stops are 1.7 miles away (Line 75 at 47th and Columbia) and 1.1 mile away (Cascade Station Max). Completing a safe bicycling and walking network could encourage workers to bike directly to work. The Cully neighborhood to the south lacks a safe way to get to this jobs center by bike. . The project would also provide bike and walking connectivity to nearby recreational and natural areas. These include the new Colwood Par 3 course and reclaimed natural areas, the new park in Cully (K^hunamokwst Park), Whitaker Ponds on 47th Avenue, and the trails within and through Cascade Station and Portland International Center along the Columbia Slough. Other bike facility improvements are

planned in the area to allow better biking connections to the residential area to the south. These include the Columbia/Cully/Alderwood (ODOT Enhance) project which will construct a multi-use path on Columbia Blvd, between Alderwood Road and Cully Avenue. It will also provide a signalized crossing of NE Columbia Blvd. at NE Alderwood Road. The 47th Avenue improvements the City will construct in 2017 will include bike and pedestrian improvements between NE Cornfoot Road and the community to the south of Columbia Blvd and Lombard Avenue. It completes the multi-use path that was constructed at the USPS site on the corner of Alderwood and Cornfoot Road. (See photo on Page 12.) It will connect the multi-use path that the City Bureau of Parks and Recreation is required to build (LU 12-213885CP ZC EN) along NE Alderwood Road between NE Columbia Blvd. and NE Cornfoot Road. This project would provide a much needed component of the bike infrastructure necessary for the Cully neighborhood to bike to PDX and nearby employers.

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

As noted above the project area is in a Regionally Significant Industrial area with over 20,000 jobs. The USPS is moving from downtown to the project area and will bring over 1000 jobs with it. It is likely that many of the downtown USPS employees are accustomed to biking to work on good bicycling infrastructure. Providing the multi-use path on Cornfoot will encourage the relocated employees that live within biking distance to continue using their bicycles to commute to work instead of driving. The project, in conjunction with the other recent and upcoming active transportation infrastructure projects, will also encourage existing employees in the surrounding PDX employment area to consider biking instead of driving to work.

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).

The project is in Appendix 1 of the Regional ATP as project T31. It is described as a project that is needed to fill a gap in the system. It is included in the 2014 Port of Portland International Airport Bicycle and Pedestrian Master Plan. It is included in the Port Transportation Improvement Plan. It is included in the City of Portland TSP as project number 40036 and it is included in the Regional Transportation Plan as project number 10340. The path is included as a project in Metro's Regional Trails and Greenway System. The project will complete a gap between the Cully neighborhood and other neighborhoods to the south and the airport employment area. The City of Portland will be constructing bicycle and pedestrian facilities on NE 47th Avenue between Columbia Boulevard and NE Cornfoot Road in 2017. This project would provide the connection from NE 47th Avenue to the existing bicycle and pedestrian facilities on NE Alderwood Road. The City of Portland Bureau of

Parks and Recreation is required to construct a multi-use path between NE Columbia Blvd. and NE Cornfoot Road. Existing facilities exist on NE Alderwood Road north of NE Cornfoot Road to provide connectivity to existing airport and Cascade Station bicycle and pedestrian facilities. The Columbia-Cully-Alderwood project, funded through ODOT Enhance, will provide a multi-use path on NE Columbia Blvd. between NE Cully and NE Alderwood as well as a signal at Columbia-Alderwood. This suite of projects will greatly increase bicycle and pedestrian connectivity to the Cully neighborhood to the south.

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?

Because there are no pedestrian facilities within the project area of NE Cornfoot Road it is very unsuitable for pedestrians. Although there is a grassy area on the north side of NE Cornfoot Road, there is no sidewalk or paved surface. Pedestrians are not accommodated and it would be impossible for a wheelchair to travel on NE Cornfoot Road. There is a similar situation for bicyclists. Bikes can use the travel lanes on NE Cornfoot but there are no bike lanes. There is a lot of truck traffic on NE Cornfoot Road. On the south side of the road there is almost no shoulder. There is an approximately one-foot wide paved area beyond the roadway striping. There is a steep drop-off into the Columbia slough. Providing a wide multi-use path on the north side of the road would dramatically increase user comfort and safety by providing a facility where currently there is none. The project can create opportunities that don't exist for employees in the area. People like to walk on their lunch hour. Some might even walk to work. The relocated postal workers will be able to exercise. So there is a barrier to maintaining a healthy lifestyle that will be removed. Although there is a lot of industrial and airport related uses in the vicinity there are some retail establishments in the area too, and likely to be more after arrival of the USPS facility. People will be able to walk to work and to businesses.

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

This project and improvements planned for NE 47th Avenue connect with Tri Met Line 75 at 47th and Columbia. Tri Met's North/Northeast Service Enhancement Plan also adds a new Line 11 route on Columbia Avenue that the project will connect to. As noted above this project will connect to the already existing bicycle and pedestrian improvements surrounding PDX, Cascade Station, and Airport Way.

In addition to expanding the reach of the Line 75 bus, the project will significantly improve direct bicycle connectivity between residences south of Columbia Blvd/Lombard Ave and jobs to the north. A 2 to 4-mile bicycle ride via Cornfoot Rd would connect many residences to many jobs.

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).**

During project development and construction there will be outreach to the nearby residential neighborhoods, the business community, and the larger community. The Port has a PDX Citizens Advisory Committee that is comprised of representatives from the community including the East Columbia Neighborhood, the Central Northeast Neighbors, Clark County, Northeast Coalition of Neighbors, East Multnomah County Neighborhood, a representative for Environmental Justice for the Cully neighborhood, the Oregon Air National Guard, Tri Met Active Transportation, the Portland Planning and Sustainability Commission, the East Portland Neighborhood Office, the Audubon Society, an Air Cargo representative, North Portland Neighborhood Services, the Vancouver Neighborhood, the Columbia Slough Watershed Council, the PDX Citizen Noise Advisory Committee, Clackamas County, Multnomah County, Clark County, Washington County, Portland Bureau of Planning and Sustainability, and Metro. The Port has a Social Program Equity Manager who will assist with planning the outreach effort. We would also like to develop additional outreach activities with assistance from Metro.

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

The Port proposes to provide the financial match for the grant dollars in the amount of 10.27%. The project will leverage other improvements that have recently been built or will be built. This includes:

- A roadway reconstruction project that is being planned by the City of Portland for Cornfoot Road (\$2.9 million). This is subject to approval by the Heavy Vehicle Utility Tax oversight committee.
- The adjacent roadway and multi-use path improvements recently constructed for the United States Postal Service site at the intersection of NE Cornfoot Road and NE Alderwood Road (\$.55 million).
- Pedestrian, bicycle, and roadway improvements on NE 47th Avenue that are going to be constructed by the City of Portland in 2017 (\$6.2 million).
- A multi-use path and ped/bike improvements, and signalization on Columbia Blvd. between NE Cully Blvd. and NE Alderwood Road to be constructed in the next 2 to 3 years (\$5.5 million).

- A multi-use path on NE Alderwood Road between NE Columbia Blvd. and NE Cornfoot Road that the City Bureau of Parks and Recreation is required to build as part of a land use approval obligation (\$2.5 million).
- Improvements at the gate to Oregon Air National Guard on NE Cornfoot Road that will alleviate queuing and congestion issues on NE Cornfoot Road (Cost uncertain).

The requested RFFA funds will leverage a total of approximately \$17.65 million.

10. How will the proposed project provide people with improved options to driving in a congested corridor?

The project will significantly improve travel speed, convenience and comfort for bicyclists. Coupled with the improvements on 47th, cycling can become a very competitive alternative to driving on increasingly congested streets. The Atlas of Mobility Corridors (Corridors 7 and 18) shows Cornfoot Road as having traffic volumes of between 1000 and 5000 vpd. Counts collected by the Port show that volumes are actually over 9000 vpd with a high percentage (9.4%) of heavy vehicles. Parallel facilities such as Columbia Blvd. are shown as having a V/C ratio of .8 to .9. NE Cornfoot Road is shown in the Atlas as being a gap in the planned bicycle and pedestrian systems. There is not currently a safe or comfortable way to travel to or from Cascade Station/PDX to areas west and south of the airport on a bicycle. This project will complete a significant gap on that route. People will be able to travel via bicycle from Max Light Rail stations at Cascade Station and PDX using the existing bicycle infrastructure to/from points west or south. If they choose to they can make bus connections on Columbia Boulevard for longer trips. This project, along with other leveraged projects improves bicycle and pedestrian connections from the Cully neighborhood to the south.

Process

11. 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)

The project has been identified through at least five planning efforts that included public participation.

The project was studied as part of Airport Futures. Airport Futures was a collaborative effort between the City of Portland, Port of Portland, and the Portland-Vancouver metropolitan community to create an integrated long-range development plan for Portland

International Airport (PDX). An outcome of Airport Futures was the PDX Citizens Advisory Committee, which is described below.

The project has also been identified through the Portland International Airport Bicycle and Pedestrian Master Plan. In support of the PDX Bike and Pedestrian Master Plan update, the Port conducted outreach to gather input about existing bike and pedestrian facilities and examples of potential future facilities from users of the systems. Outreach efforts are described in more detail in the following section. In March 2013, the Port hosted an open house for airport employees. The event was advertised using an internal employee newsletter, fliers for airport employees, signage in the terminal, announcements at tenant operations managers' meetings and the widely viewed local bike blog, BikePortland.org. The open house also drew some Port employees, travelers and the general public. Open house attendees identified themselves as airport terminal employees, employees of organizations in nearby Portland International Center or from the general public. The open house provided information on existing bike and pedestrian facilities and examples of potential future facilities. Attendees were encouraged to complete a questionnaire to collect feedback on the bike and pedestrian system serving PDX.

The Appendix to the plan contains scanned versions of the questionnaires and feedback received. From the questionnaires and verbal feedback collected, cyclists identified NE Cornfoot Rd. as an area where safety improvements are needed due to the narrow shoulder along the roadway. In May 2013, an open house for Port staff was held to provide input on the master plan update. Port police officers provided input on bike usage around PDX as part of this plan update. In the course of their daily work, the police officers both observe users of the bike and pedestrian facilities and are themselves users of them, particularly when conducting bike patrols. They identified NE Cornfoot Road as an area of concern.

In April 2013, the Port hosted a meeting and tour for local bicycle and pedestrian planning professionals from around the region. Attendees included representatives from the City of Portland, Metro, ODOT, Tri Met, City of Vancouver, Portland State University and Oregon Health Sciences University. The goal of the meeting and tour was to share information on the update of this plan, get input on issues to consider and to take a look at existing airport facilities and areas for improvement. The same group also offered valuable input and review of this document. The plan was brought for review to the PDX Citizen Advisory Committee (CAC). The CAC is a bi-state, regional and diverse committee whose purpose is to support meaningful and collaborative public dialogue and engagement on airport planning and development matters that impact the surrounding community. The CAC meets quarterly and all meetings are open to the public. The CAC will continue to review and comment on bicycle and pedestrian improvements at PDX and will be involved with the proposed project going forward.

The project is included in the Port Transportation Improvement Plan (PTIP). Each year the Port Commission conducts a public hearing to consider the PTIP projects. There is a 45 day advance notice and an opportunity for public testimony and comments is provided.

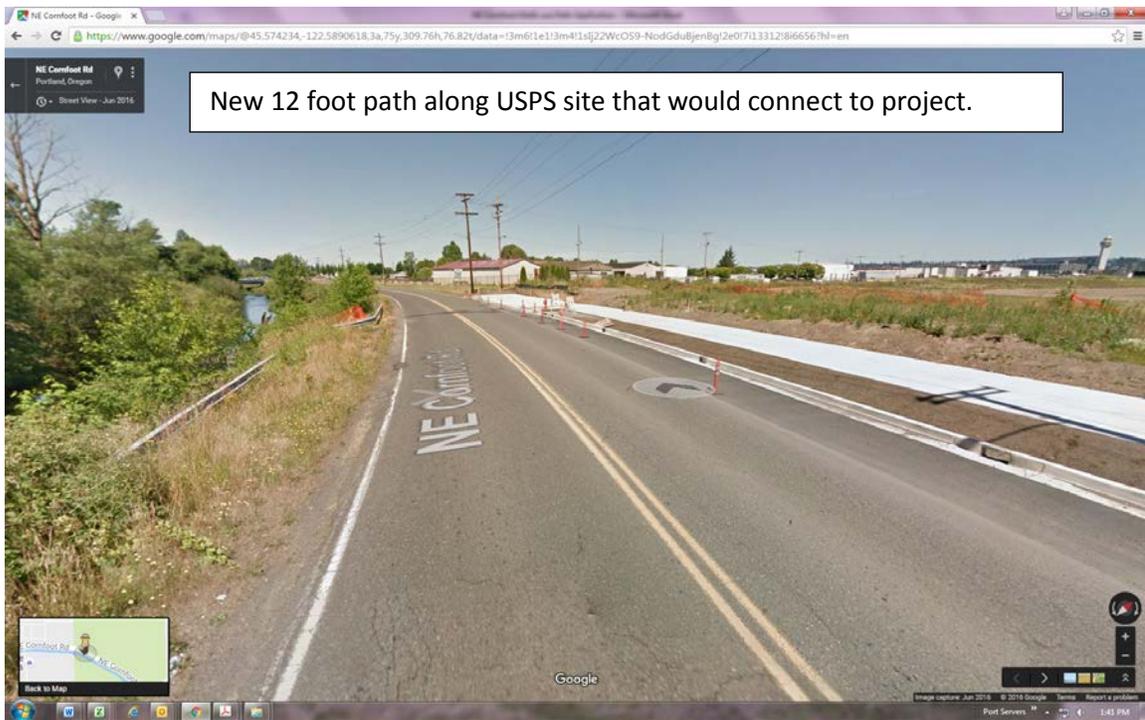
The project is included in the Regional Transportation Plan, which goes through a rigorous public review, outreach, and comment process.

The project is included in Metro's Regional Trails and Greenways publication for 2014.

The project is included in the City of Portland TSP. The most recent update of the TSP had extensive public outreach.

- **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.**

As described above, in April 2013 the Port hosted a meeting and tour for local bicycle and pedestrian planning professionals from around the region. Attendees included representatives from the City of Portland, Metro, ODOT, Tri Met, City of Vancouver, Portland State University and Oregon Health Sciences University. We have also contacted the Oregon Air National Guard which has the lease on the property adjacent to where the multi-use path will be located. There have not been any changes to the project due to this outreach. The reason is that the project is limited in where it can be located and what the alignment is. We know that there will be some utility implications when constructing the project and there will be a need to coordinate appropriately. We will continue outreach during project development and design.



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

through Metro and City of Portland, and Part of Portland.

- 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 ^(will be) 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

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

As attested by:

Phil Heady
(signature)

Senia Transportation Planner
(name and title)

August 22, 2016
(date)

Attachment 1 to Appendix A

Summary of non-discriminatory engagement

NE Cornfoot Road Multiuse Path

The project has been identified through at least five planning efforts that included non-discriminatory public participation.

The Port of Portland is not a land use agency and is not required under state or federal law to adopt a transportation system plan. The Port works with partner agencies such as the City of Portland and Metro to adopt Port projects into their transportation plans. Therefore our projects have gone through the non-discriminatory public outreach processes employed by those agencies for adoption into their Transportation System Plans. The Port of Portland does go through public processes to identify projects of interest to the Port that subsequently get adopted into City, County, Regional, and State plans.

The project was studied as part of Airport Futures. Airport Futures was a collaborative effort between the City of Portland, Port of Portland, and the Portland-Vancouver metropolitan community to create an integrated long-range development plan for Portland International Airport (PDX). An outcome of Airport Futures was the PDX Citizens Advisory Committee. The PDX Citizens Advisory Committee is comprised of representatives from the community including the East Columbia Neighborhood, the Central Northeast Neighbors, Clark County, Northeast Coalition of Neighbors, East Multnomah County Neighborhood, the Oregon Air National Guard, Tri Met Active Transportation, the Portland Planning and Sustainability Commission, the East Portland Neighborhood Office, the Audubon Society, an Air Cargo representative, North Portland Neighborhood Services, the Vancouver Neighborhood, the Columbia Slough Watershed Council, the PDX Citizen Noise Advisory Committee, Clackamas County, Multnomah County, Clark County, Washington County, Portland Bureau of Planning and Sustainability, Metro, and a representative for Environmental Justice for the Cully neighborhood. NE Cornfoot Road is the northern boundary of the Cully neighborhood. According to the Regional Equity Atlas maps the Cully neighborhood has above the regional average percent population of color. It is 15.9% Black, 2.1% American Indian/Eskimo & Aleut, 6.2% Asian and Pacific Islander, and 21.3% Hispanic. The percent of households with low English proficiency is 9% to 18%. The percent of recent immigrants is 31.6% to 37.9%. There are a high percentage of households below the poverty line. One of the census tracts is 23% to 50% of households below the poverty level. According to 2010 census data for zip code 97218, which makes up most of Cully neighborhood, the percent of youth is above average at 24.2%. According to 2012 census data for zip code 97218 13.8% of the population has a disability, which is higher than the regional average of 10.9%.

The project has also been identified through the Portland International Airport Bicycle and Pedestrian Master Plan. In support of the PDX Bike and Pedestrian Master Plan update, the Port conducted outreach to gather input about existing bike and pedestrian facilities and examples of potential future facilities from users of the systems. Outreach efforts are described in more detail in the following section. In March 2013, the Port hosted an open house for airport employees. The event was advertised using an internal employee newsletter, fliers for airport employees, signage in the terminal,

announcements at tenant operations managers' meetings and the widely viewed local bike blog, BikePortland.org. The open house also drew some Port employees, travelers and the general public. Open house attendees identified themselves as airport terminal employees, employees of organizations in nearby Portland International Center or from the general public. The open house provided information on existing bike and pedestrian facilities and examples of potential future facilities. Attendees were encouraged to complete a questionnaire to collect feedback on the bike and pedestrian system serving PDX. The Appendix to the plan contains scanned versions of the questionnaires and feedback received. From the questionnaires and verbal feedback collected, cyclists identified NE Cornfoot Rd. as an area where safety improvements are needed due to the narrow shoulder along the roadway. In May 2013, an open house for Port staff was held to provide input on the master plan update. Port police officers provided input on bike usage around PDX as part of this plan update. In the course of their daily work, the police officers both observe users of the bike and pedestrian facilities and are themselves users of them, particularly when conducting bike patrols. They identified NE Cornfoot Road as an area of concern. In April 2013, the Port hosted a meeting and tour for local bicycle and pedestrian planning professionals from around the region. Attendees included representatives from the City of Portland, Metro, ODOT, TriMet, City of Vancouver, Portland State University and Oregon Health Sciences University. The goal of the meeting and tour was to share information on the update of this plan, get input on issues to consider and to take a look at existing airport facilities and areas for improvement. The same group also offered valuable input and review of this document. The plan was brought for review to the PDX Citizen Advisory Committee (CAC). The CAC is a bi-state, regional and diverse committee whose purpose is to support meaningful and collaborative public dialogue and engagement on airport planning and development matters that impact the surrounding community. The CAC meets quarterly and all meetings are open to the public. The CAC will continue to review and comment on bicycle and pedestrian improvements at PDX and will be involved with the proposed project going forward.

The project is included in the Port Transportation Improvement Plan (PTIP). Each year the Port Commission conducts a public hearing to consider the PTIP projects. There is a 45 day advance notice and an opportunity for public testimony and comments is provided.

The project is included in the Regional Transportation Plan, which goes through a rigorous non-discriminatory public review, outreach, and comment process.

The project is included in Metro's Regional Trails and Greenways publication for 2014.

The project is included in the City of Portland TSP. The most recent update of the TSP had extensive non-discriminatory public outreach. In addition to public outreach events it had a Transportation Expert Group that included individuals representing seniors, the disabled, and equity groups.

Looking forward to the project development that will still need to occur for the project, the Port has a Social Program Equity Manager who will assist with planning the outreach effort. We would also like to develop additional outreach activities with assistance from Metro.

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)
There are currently no pedestrian facilities. A 12 foot wide path will be provided.
- 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)
There will be a 12 foot wide path with minimum 1 foot shoulders. It will be separated at least 4 feet from roadway.
- 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
The pathway will be 12 feet wide clear.
- Remove obstructions from the primary pedestrian-way or add missing curb ramps
Utility poles and features will be relocated to eliminate any possible obstructions.
- Add pedestrian crossing at appropriate location
Crossing treatments will be designed to transition to on-street bike lanes that will be built with the City's NE 47th Avenue project.
- 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
Wayfinding signage will be provided as part of the project.
- 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
The posted speed on NE Cornfoot is 40 mph. The traffic volume is over 9000 ADT. Currently there are no pedestrian facilities or bike lanes on NE Cornfoot Road. The project will provide a multi-use path separated from and parallel to the 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

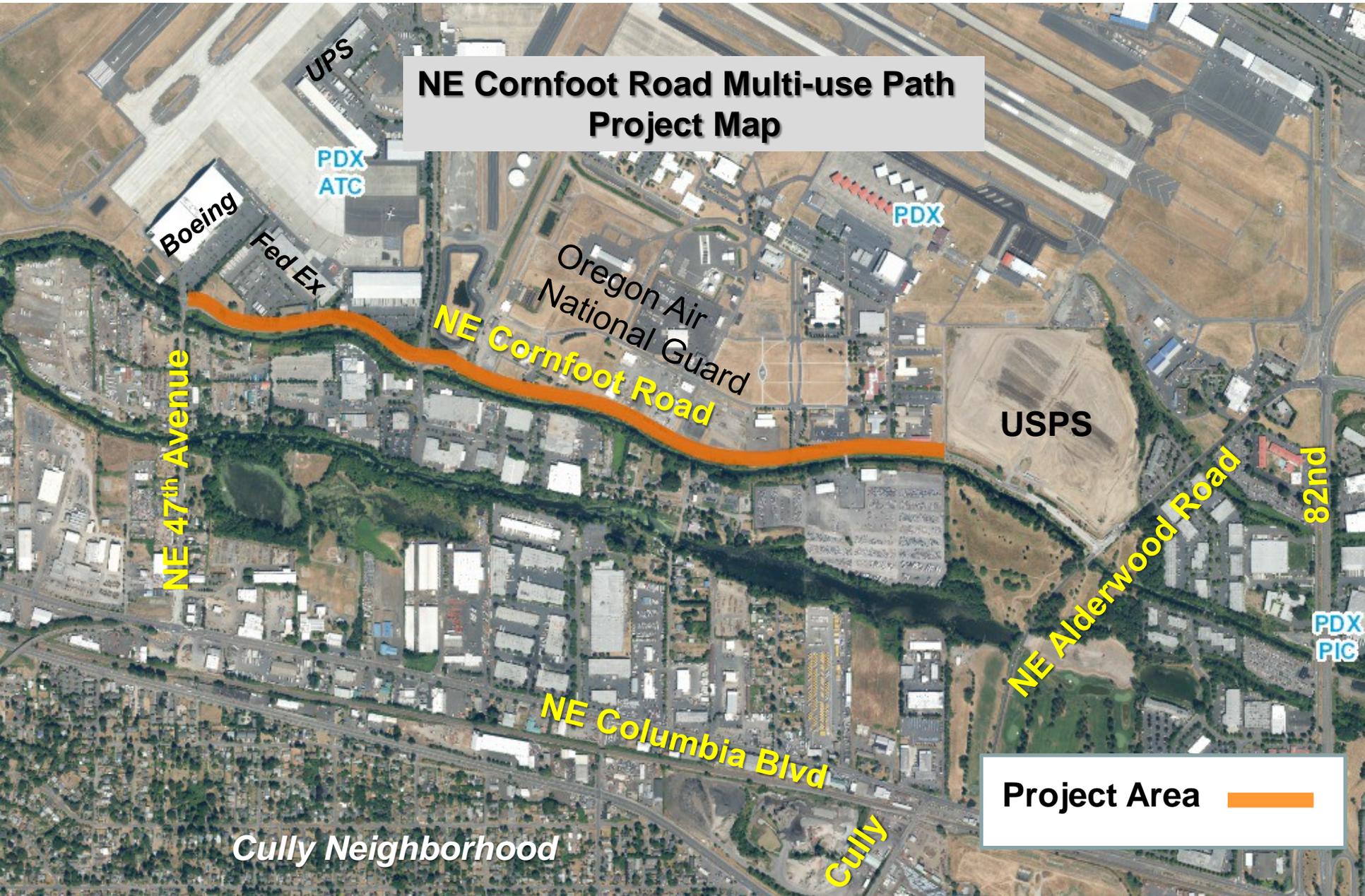
- For every element checked describe existing conditions and proposed features:
- Turning radius improvements (freight route only)
- Gateway feature
- Street trees
There are not currently street trees on NE Cornfoot Road. There will be street trees planted between the path and the roadway.
- ITS elements (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)

- The path will maintain a minimum width of 12 feet. The graded area on each side will depend on the topography.**
- Always maintains minimum 5' separation when adjacent to street or never adjacent to street
The path will never abut the street and should be able to maintain a 5 foot separation from the roadway.
 - 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
The design for the transition to the on-street bike lanes on NE 47th Avenue will include high visibility features.
 - 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
Benches will be provided at appropriate locations.
 - Wayfinding or interpretive signage
Wayfinding signage will be included with the project.
 - Signs regulating bike/pedestrian interaction (e.g. bikes yield to pedestrians)
Since this will be a shared multi-use path this signage will be important.
 - Trail priority at all local street/driveway crossings

NE Cornfoot Road Multi-use Path Project Map



NE 47th Avenue

NE Cornfoot Road

NE Columbia Blvd

NE Alderwood Road

82nd

Boeing

Fed Ex

UPS

PDX
ATC

Oregon Air
National Guard

PDX

USPS

Cully Neighborhood

Gully

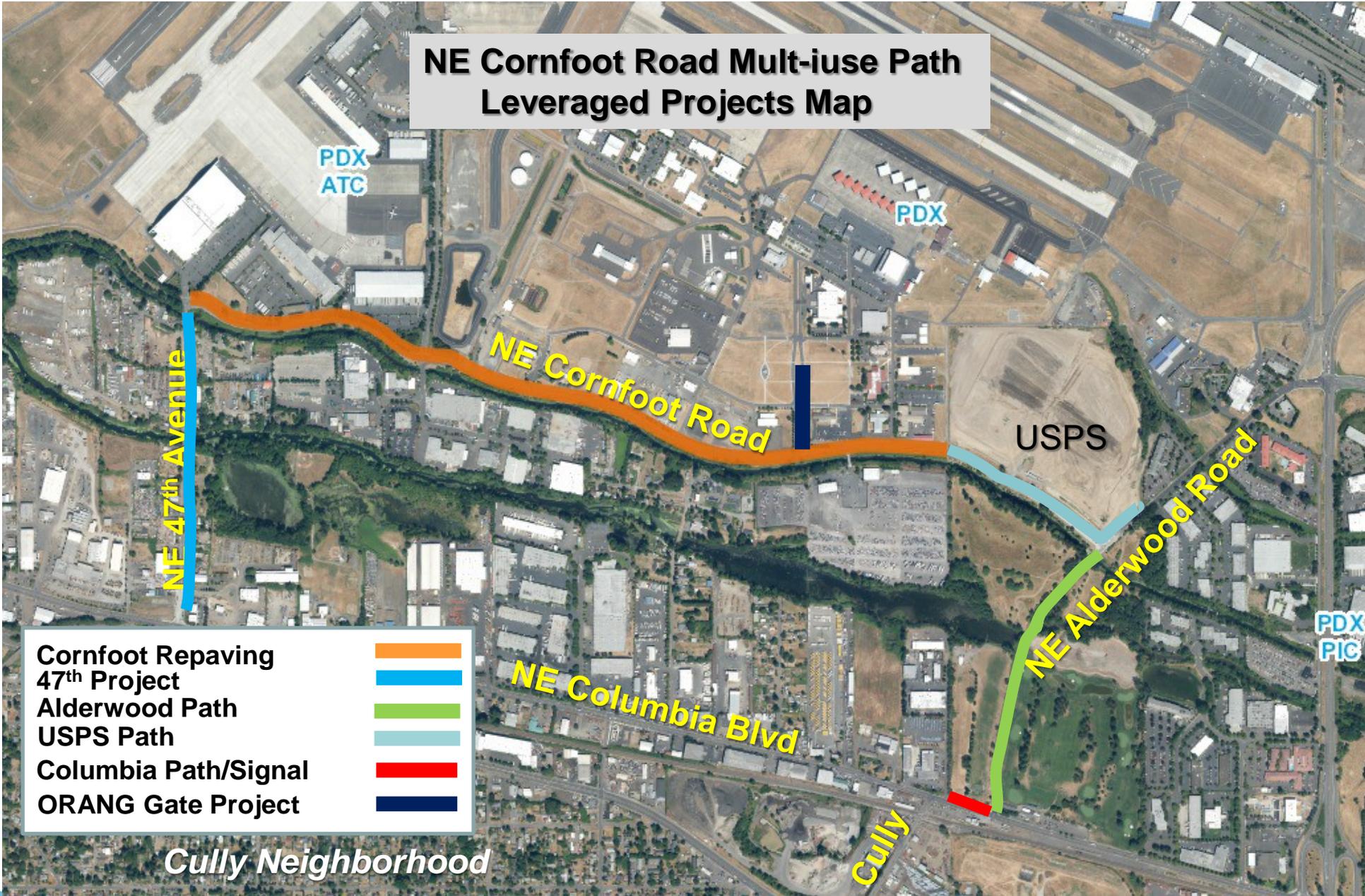
Project Area



PDX
PIC



NE Cornfoot Road Multi-use Path Leveraged Projects Map



CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE
NE Cornfoot Rd Multi-Use Path

Date: June 1, 2016

By: Jason Shepard

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF NE CORNFOOT RD FROM NE 47TH AVE TO COLWOOD PROPERTY

VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	1.00	LS	\$ 72,324.12	\$ 72,324.12
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	1.00	LS	\$ 27,121.55	\$ 27,121.55
3	TEMPORARY SIGNS	300.00	SQFT	\$ 20.00	\$ 6,000.00
4	TEMPORARY BARRICADES, TYPE II	0.00	EACH	\$ 100.00	\$ -
5	TEMPORARY BARRICADES, TYPE III	0.00	EACH	\$ 150.00	\$ -
6	TEMPORARY CONCRETE BARRIER, REFLECTORIZED	0.00	FOOT	\$ 23.41	\$ -
7	MOVING TEMPORARY CONCRETE BARRIER	0.00	FOOT	\$ 5.03	\$ -
8	TEMPORARY IMPACT ATTENUATOR	0.00	EACH	\$ 3,160.62	\$ -
9	TEMPORARY PEDESTRIAN WALKWAYS	0.00	FOOT	\$ 90.14	\$ -
10	TEMPORARY PLASTIC DRUMS	50.00	EACH	\$ 52.00	\$ 2,600.00
11	TEMPORARY REFLECTIVE PAVEMENT MARKERS	0.00	EACH	\$ 3.51	\$ -
12	TEMPORARY FLEXIBLE PAVEMENT MARKERS	0.00	EACH	\$ 1.99	\$ -
13	TEMPORARY STRIPING	0.00	FOOT	\$ 0.23	\$ -
14	STRIPE REMOVAL	0.00	FOOT	\$ 0.76	\$ -
15	STRIPING & STRIPE REMOVAL MOBILIZATION	0.00	EACH	\$ 403.86	\$ -
16	TEMPORARY TRAFFIC SIGNAL INSTALLATION	0.00	EACH	\$ 63,212.40	\$ -
17	SEQUENTIAL ARROW SIGNS	0.00	EACH	\$ 4,916.52	\$ -
18	PORTABLE CHANGEABLE MESSAGE SIGNS	0.00	EACH	\$ 14,398.38	\$ -
19	FLAGGERS	300.00	HOUR	\$ 48.50	\$ 14,550.00
20	TEMPORARY TYPE ORANGE PLASTIC MESH FENCE	0.00	FOOT	\$ 2.93	\$ -
21	TEMPORARY CL-6R CHAIN LINK FENCE	0.00	FOOT	\$ 9.36	\$ -
22	EROSION CONTROL	1.00	LS	\$ 9,040.52	\$ 9,040.52
23	PLASTIC SHEETING	0.00	SQFT	\$ 0.59	\$ -
24	MATTING	0.00	SQFT	\$ 0.35	\$ -
25	CONSTRUCTION ENTRANCES	0.00	EACH	\$ 1,404.72	\$ -
26	SEDIMENT FENCE, SUPPORTED	0.00	FOOT	\$ 5.09	\$ -
27	SEDIMENT FENCE, UNSUPPORTED	0.00	FOOT	\$ 3.51	\$ -
28	INLET PROTECTION	10.00	EACH	\$ 88.00	\$ 880.00
29	POLLUTION CONTROL PLAN	1.00	LS	\$ 904.05	\$ 904.05
30	CONTAMINATED MEDIA DISPOSAL	0.00	CUYD	\$ 70.00	\$ -
31	TRUCK LINERS	0.00	EACH	\$ 100.00	\$ -
32	HASP/CMDP WORKPLANS	0.00	LS	\$ 2,000.00	\$ -
33	REMOVAL OF PIPES	0.00	FOOT	\$ 23.41	\$ -
34	REMOVAL OF CURBS	0.00	FOOT	\$ 6.79	\$ -
35	REMOVAL OF WALKS AND DRIVEWAYS	0.00	SQYD	\$ 12.88	\$ -
36	REMOVAL OF SURFACINGS	0.00	SQYD	\$ 7.61	\$ -
37	REMOVAL OF INLETS	0.00	EACH	\$ 286.80	\$ -
38	REMOVAL OF MANHOLES	0.00	EACH	\$ 971.60	\$ -
39	REMOVAL OF RAILROAD TRACK AND TIES	0.00	FOOT	\$ 24.58	\$ -
40	SALVAGING AND STOCKPILING OF COBBLESTONES	0.00	SQYD	\$ 8.19	\$ -
41	REMOVE AND REINSTALL HORSE RINGS	0.00	EACH	\$ 50.00	\$ -
42	REMOVAL OF STRUCTURES & OBSTRUCTIONS	1.00	LS	\$ 36,162.06	\$ 36,162.06
43	REMOVAL OF FENCES	0.00	FOOT	\$ 2.87	\$ -
44	CLEARING AND GRUBBING	1.00	LS	\$ 23,505.34	\$ 23,505.34
45	TREE ROOT REMOVAL	0.00	HOUR	\$ 180.00	\$ -
46	TREE TRIMMING	0.00	HOUR	\$ 350.00	\$ -
47	TREE REMOVAL, 12 INCH	0.00	EACH	\$ 690.00	\$ -
48	DITCH EXCAVATION	0.00	CUYD	\$ 18.73	\$ -
49	GENERAL EXCAVATION	2,193.00	CUYD	\$ 49.00	\$ 107,457.00
50	SURCHARGE EXCAVATION	0.00	CUYD	\$ 3.51	\$ -
51	EMBANKMENT IN PLACE	0.00	CUYD	\$ 16.39	\$ -
52	SETTLEMENT PLATE	0.00	EACH	\$ 497.51	\$ -

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
53	12 INCH SUBGRADE STABILIZATION	582.10	SQYD	\$ 30.17	\$ 17,561.96
54	AGGREGATE DITCH LINING	0.00	SQYD	\$ 19.90	\$ -
55	WATERING	0.00	MGAL	\$ 31.02	\$ -
56	DRAINAGE GEOTEXTILE, TYPE 2	0.00	SQYD	\$ 2.34	\$ -
57	EMBANKMENT GEOTEXTILE	0.00	SQYD	\$ 1.17	\$ -
58	SUBGRADE GEOTEXTILE	5,821.00	SQYD	\$ 1.25	\$ 7,276.25
59	GEOGRID	0.00	SQYD	\$ 5.85	\$ -
60	GRANULAR DRAINAGE BLANKET	0.00	TON	\$ 42.14	\$ -
61	FILTER BLANKET	0.00	SQYD	\$ 32.02	\$ -
62	LOOSE RIPRAP, CLASS 50	0.00	CUYD	\$ 117.06	\$ -
63	LOOSE RIPRAP, CLASS 100	0.00	CUYD	\$ 93.65	\$ -
64	WIRE MESH SLOPE PROTECTION	0.00	SQFT	\$ 2.90	\$ -
65	VIDEO INSPECTION OF SEWERS, MAINLINE	0.00	FOOT	\$ 2.00	\$ -
66	TRENCH EXCAVATION, COMMON	0.00	CUYD	\$ 20.00	\$ -
67	EXPLORATORY EXCAVATION	0.00	CUYD	\$ 146.33	\$ -
68	POTHOLE EXCAVATION	0.00	EACH	\$ 250.00	\$ -
69	TRENCH FOUNDATION STABILIZATION	0.00	CUYD	\$ 55.02	\$ -
70	TRENCH BACKFILL, CLASS B	0.00	CUYD	\$ 27.30	\$ -
71	STORMWATER CURB EXTENSIONS	0.00	SQFT	\$ 20.00	\$ -
72	STORMWATER PLANTERS	0.00	SQFT	\$ 20.00	\$ -
73	STORMWATER SWALES	0.00	SQFT	\$ 10.00	\$ -
74	3 INCH DRAIN PIPE	0.00	FOOT	\$ 16.39	\$ -
75	SUBSURFACE DRAIN OUTLETS	0.00	EACH	\$ 152.18	\$ -
76	12 INCH PIPE, PVC AWWA C900, CI 150, BEDDING TYPE: D, COMPLETE	0.00	FOOT	\$ 130.00	\$ -
77	6 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D	0.00	FOOT	\$ 80.00	\$ -
78	8 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D	0.00	FOOT	\$ 90.00	\$ -
79	10 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0.00	FOOT	\$ 110.00	\$ -
80	12 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0.00	FOOT	\$ 120.00	\$ -
81	18 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D	0.00	FOOT	\$ 130.00	\$ -
82	10 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D, COMPLETE	0.00	FOOT	\$ 110.00	\$ -
83	12 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D, COMPLETE	0.00	FOOT	\$ 120.00	\$ -
84	8 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D	0.00	FOOT	\$ 90.00	\$ -
85	CONCRETE CLOSURE COLLAR	0.00	EACH	\$ 526.77	\$ -
86	CONCRETE MANHOLES, 48 INCH, 0-8 FT DEPTH	0.00	EACH	\$ 4,400.00	\$ -
87	CONCRETE MANHOLES, 48 INCH, DEEPER THAN 8 FT	0.00	FOOT	\$ 300.00	\$ -
88	CONCRETE MANHOLES, SANITARY SEWER	0.00	EACH	\$ 3,511.80	\$ -
89	CONCRETE MANHOLES, STORM SEWER	0.00	EACH	\$ 3,160.62	\$ -
90	CONCRETE MANHOLES, WATER QUALITY	0.00	EACH	\$ 23,412.00	\$ -
91	CONCRETE MANHOLES, SEDIMENTATION	0.00	EACH	\$ 8,779.50	\$ -
92	CONCRETE INLETS, TYPE CG-1	0.00	EACH	\$ 1,492.52	\$ -
93	CONCRETE INLETS, TYPE CG-2	0.00	EACH	\$ 1,900.00	\$ -
94	CONCRETE INLETS, TYPE CG-3	0.00	EACH	\$ 1,404.72	\$ -
95	CONCRETE INLETS, TYPE D	0.00	EACH	\$ 1,404.72	\$ -
96	CONCRETE INLETS, TYPE G-1	0.00	EACH	\$ 1,551.05	\$ -
97	CONCRETE INLETS, TYPE G-2	0.00	EACH	\$ 1,800.00	\$ -
98	CONCRETE INLETS, TYPE G-2MA	0.00	EACH	\$ 1,638.84	\$ -
99	CONCRETE INLETS, TYPE METAL	0.00	EACH	\$ 550.00	\$ -
100	CONCRETE INLETS, TYPE CHANNEL & GRATE	0.00	EACH	\$ 870.00	\$ -
101	CONCRETE INLETS, TYPE CONCRETE	0.00	EACH	\$ 100.00	\$ -
102	CONCRETE INLETS, TYPE BEEHIVE	0.00	EACH	\$ 1,800.00	\$ -
103	CATCH BASINS, METAL SUMP	0.00	EACH	\$ 1,755.90	\$ -
104	ACCESS DOORS	0.00	EACH	\$ 2,975.00	\$ -
105	DRAINAGE CURBS	0.00	FOOT	\$ 6.44	\$ -
106	ADJUSTING BOXES	20.00	EACH	\$ 217.00	\$ 4,340.00
107	CONNECTION TO EXISTING STRUCTURES	0.00	EACH	\$ 3,160.62	\$ -
108	ADJUSTING INLETS	0.00	EACH	\$ 585.30	\$ -
109	FILLING ABANDON STRUCTURES	0.00	EACH	\$ 772.60	\$ -
110	MINOR ADJUSTMENT OF MANHOLES	0.00	EACH	\$ 790.16	\$ -
111	MAJOR ADJUSTMENT OF MANHOLES	0.00	EACH	\$ 1,931.49	\$ -
112	MANHOLES OVER EXISTING SEWERS	0.00	EACH	\$ 7,023.60	\$ -
113	TRENCH RESURFACING	0.00	SQYD	\$ 79.60	\$ -
114	SHORING, CRIBBING AND COFFERDAMS	0.00	LS	\$ -	\$ -
115	STRUCTURE EXCAVATION	0.00	CUYD	\$ 37.63	\$ -
116	GRANULAR WALL BACKFILL	0.00	CUYD	\$ 45.01	\$ -
117	GRANULAR STRUCTURAL BACKFILL	0.00	CUYD	\$ 37.81	\$ -
118	REINFORCEMENT	0.00	LS*	\$ 0.80	\$ -

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
119	CONCRETE BRIDGE	0.00	SQFT	\$ 204.86	\$ -
120	BIKE OASIS	0.00	EACH	\$ 30,201.48	\$ -
121	3 INCH ELECTRICAL CONDUIT	0.00	FOOT	\$ 24.23	\$ -
122	ASPHALTIC PLUG JOINT SEALS	0.00	LS	\$ 38,044.50	\$ -
123	ASPHALTIC PLUG JOINT SEAL MATERIAL	0.00	CUYD	\$ 4,975.05	\$ -
124	CONCRETE BRIDGE RAIL WITH ORNAMENTAL PROTECTIVE SCREENING	0.00	LS*	\$ 147.38	\$ -
125	RETAINING WALL, CAST-IN-PLACE CONCRETE	0.00	SQFT	\$ 66.43	\$ -
126	RETAINING WALL, GABION	0.00	SQFT	\$ 22.42	\$ -
127	RETAINING WALL, PREFABRICATED MODULAR	0.00	SQFT	\$ 65.26	\$ -
128	RETAINING WALL, CONVENTIONAL SEGMENTAL	1200.00	SQFT	\$ 43.30	\$ 51,960.00
129	RETAINING WALL, MSE	0.00	SQFT	\$ 45.30	\$ -
130	SOUND WALLS	0.00	SQFT	\$ 19.02	\$ -
131	CONCRETE ARCH CULVERT	0.00	FOOT	\$ 1,428.13	\$ -
132	CONCRETE SLOPE PAVING	0.00	SQFT	\$ 22.00	\$ -
133	COLD PLANE PAVEMENT REMOVAL, 2 INCH DEEP	0.00	SQYD	\$ 0.35	\$ -
134	COLD PLANE PAVEMENT REMOVAL, 3 INCH DEEP	0.00	SQYD	\$ 0.41	\$ -
135	COLD PLANE PAVEMENT REMOVAL, 4 INCH DEEP	0.00	SQYD	\$ 0.39	\$ -
136	COLD PLANE PAVEMENT REMOVAL, 5 INCH DEEP	0.00	SQYD	\$ 0.40	\$ -
137	AGGREGATE BASE	2,925.00	TON	\$ 36.90	\$ 107,932.50
138	LEVEL 1, 1/2 INCH DENSE MHMAC MIXTURE, IN TEMPORARY	0.00	TON	\$ 85.81	\$ -
139	LEVEL 2, 1/2 INCH DENSE, MHMAC MIXTURE	0.00	TON	\$ 85.81	\$ -
140	LEVEL 2, 1/2 INCH OPEN, MHMAC MIXTURE	1,019.00	TON	\$ 100.00	\$ 101,900.00
141	LEVEL 3, 1/2 INCH DENSE MHMAC MIXTURE, IN LEVELING	0.00	TON	\$ 85.81	\$ -
142	LEVEL 3, 3/4 INCH ATPB MHMAC MIXTURE	0.00	TON	\$ 70.82	\$ -
143	CRACK SEALING	0.00	FOOT	\$ 6.15	\$ -
144	14 INCH ASPHALT CONCRETE PAVEMENT REPAIR	0.00	SQYD	\$ 179.00	\$ -
145	EXTRA FOR ASPHALT APPROACHES	0.00	EACH	\$ 567.74	\$ -
146	PLAIN CONCRETE PAVEMENT, UNDOVELLED, 6 INCH THICK	0.00	SQYD	\$ 64.38	\$ -
147	PLAIN CONCRETE PAVEMENT, UNDOVELLED, 8 INCH THICK	0.00	SQYD	\$ 74.92	\$ -
148	PLAIN CONCRETE PAVEMENT, UNDOVELLED, 10 INCH THICK	0.00	SQYD	\$ 46.57	\$ -
149	PLAIN CONCRETE PAVEMENT, UNDOVELLED, 12 INCH THICK	0.00	SQYD	\$ 51.25	\$ -
150	PLAIN PERVIOUS CONCRETE PAVEMENT, UNDOVELLED, 10 INCH THICK	0.00	SQYD	\$ 67.89	\$ -
151	CONCRETE CURBS, CURB AND GUTTER	0.00	FOOT	\$ 33.03	\$ -
152	CONCRETE CURBS, STANDARD CURB	0.00	FOOT	\$ 18.73	\$ -
153	CONCRETE CURB, MOUNTABLE CURB	0.00	FOOT	\$ 26.34	\$ -
154	CONCRETE CURBS, THICKENED CURB AND GUTTER	0.00	FOOT	\$ 30.00	\$ -
155	CONCRETE ISLANDS	0.00	SQFT	\$ 6.79	\$ -
156	CONCRETE DRIVEWAYS	0.00	SQFT	\$ 7.02	\$ -
157	CONCRETE DRIVEWAYS, REINFORCED	0.00	SQFT	\$ 7.80	\$ -
158	CONCRETE WALKS	13,635.00	SQFT	\$ 7.40	\$ 100,899.00
159	MONOLITHIC CURB AND SIDEWALKS	0.00	SQFT	\$ 18.00	\$ -
160	MONOLITHIC CURB GUTTER AND SIDEWALKS	0.00	SQFT	\$ 19.00	\$ -
161	CONCRETE VALLEY GUTTER	0.00	FOOT	\$ 35.70	\$ -
162	6 INCH CONCRETE SURFACING	0.00	SQFT	\$ 11.12	\$ -
163	CONCRETE STAIRS	0.00	CUYD	\$ 1,638.84	\$ -
164	CONCRETE DRIVEWAY CONNECTIONS	0.00	SQFT	\$ 7.02	\$ -
165	CONCRETE SIDEWALK RAMPS	0.00	EACH	\$ 1,463.25	\$ -
166	CONCRETE BUS SHELTER PADS	0.00	EACH	\$ 678.95	\$ -
167	DETECTABLE WARNING SURFACE	0.00	SQFT	\$ 46.82	\$ -
168	BRICK PAVERS	0.00	SQFT	\$ 42.73	\$ -
169	CONCRETE PAVERS	0.00	SQFT	\$ 10.83	\$ -
170	PERMEABLE PAVERS	0.00	SQFT	\$ 10.48	\$ -
171	CONCRETE RAILROAD CROSSING	0.00	FOOT	\$ 438.98	\$ -
172	GUARDRAIL, TYPE 2A	0.00	FOOT	\$ 21.36	\$ -
173	GUARDRAIL, TYPE 3	0.00	FOOT	\$ 59.70	\$ -
174	GUARDRAIL ANCHORS, TYPE 1	0.00	EACH	\$ 807.71	\$ -
175	GUARDRAIL END PIECES, TYPE C	0.00	EACH	\$ 131.11	\$ -
176	GUARDRAIL TRANSITION	0.00	EACH	\$ 2,663.12	\$ -
177	GUARDRAIL CONNECTIONS	0.00	EACH	\$ 743.33	\$ -
178	GUARDRAIL TERMINALS, NON-FLARED	0.00	EACH	\$ 2,604.59	\$ -
179	GUARDRAIL TERMINALS, FLARED	0.00	EACH	\$ 2,458.26	\$ -
180	REMOVABLE BOLLARDS	0.00	EACH	\$ 819.42	\$ -
181	CONCRETE BARRIER	0.00	FOOT	\$ 46.82	\$ -
182	IMPACT ATTENUATORS, TYPE B	0.00	EACH	\$ 4,467.00	\$ -
183	IMPACT ATTENUATORS, TYPE E	0.00	EACH	\$ 14,961.00	\$ -
184	DELINEATORS TYPE 2	0.00	EACH	\$ 52.68	\$ -

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
185	DELINEATORS TYPE 4	0.00	EACH	\$ 30.44	\$ -
186	PAVEMENT LINE REMOVAL	0.00	FOOT	\$ 0.62	\$ -
187	PAVEMENT LEGEND REMOVAL	0.00	EACH	\$ 59.12	\$ -
188	BI-DIRECTIONAL YELLOW TYPE I MARKERS	0.00	EACH	\$ 4.68	\$ -
189	MONO-DIRECTIONAL WHITE TYPE I MARKERS	0.00	EACH	\$ 4.55	\$ -
190	CURB MARKINGS - PAINT	0.00	FOOT	\$ 1.30	\$ -
191	THERMOPLASTIC, NON-PROFILE, 120 MILS, EXTRUDED	2,619.00	FOOT	\$ 1.40	\$ 3,666.60
192	PAVEMENT LEGEND, TYPE B: ARROWS	0.00	EACH	\$ 243.48	\$ -
193	PAVEMENT LEGEND, TYPE B: "ONLY"	0.00	EACH	\$ 362.89	\$ -
194	PAVEMENT LEGEND, TYPE B: BICYCLE LANE SYMBOLS	0.00	EACH	\$ 250.51	\$ -
195	PAVEMENT BAR, TYPE A	0.00	SQFT	\$ 4.33	\$ -
196	PAVEMENT BAR, TYPE B	0.00	SQFT	\$ 6.91	\$ -
197	REMOVE EXISTING SIGNS	1.00	LS*	\$ 417.00	\$ 417.00
198	REMOVE & REINSTALL EXISTING SIGNS	1.00	LS*	\$ 3,340.00	\$ 3,340.00
199	SIGN SUPPORT FOOTINGS, BREAKAWAY	0.00	LS*	\$ 102.90	\$ -
200	SIGNAL POLE MOUNTS	0.00	LS*	\$ 585.30	\$ -
201	PIPE SIGN SUPPORTS	0.00	LS*	\$ 117.00	\$ -
202	TYPE "B" SIGNS IN PLACE	0.00	SQFT	\$ 36.87	\$ -
203	TYPE "B1" SIGNS IN PLACE	0.00	SQFT	\$ 24.58	\$ -
204	TYPE "C" SIGNS IN PLACE	0.00	SQFT	\$ 29.85	\$ -
205	TYPE "G" SIGNS IN PLACE	0.00	SQFT	\$ 32.78	\$ -
206	TYPE "G1" SIGNS IN PLACE	0.00	SQFT	\$ 30.44	\$ -
207	TYPE "G5" SIGNS IN PLACE	0.00	SQFT	\$ 38.92	\$ -
208	TYPE "R" SIGNS IN PLACE	0.00	SQFT	\$ 27.51	\$ -
209	TYPE "R1" SIGNS IN PLACE	0.00	SQFT	\$ 26.92	\$ -
210	TYPE "W1" SIGNS IN PLACE	0.00	SQFT	\$ 24.58	\$ -
211	TYPE "W2" SIGNS IN PLACE	0.00	SQFT	\$ 25.58	\$ -
212	TYPE "W4" SIGNS IN PLACE	0.00	SQFT	\$ 25.17	\$ -
213	TYPE "W6" SIGNS IN PLACE	0.00	SQFT	\$ 25.17	\$ -
214	TYPE "W7" SIGNS IN PLACE	0.00	SQFT	\$ 27.27	\$ -
215	TYPE "Y1" SIGNS IN PLACE	0.00	SQFT	\$ 24.58	\$ -
216	TYPE "Y2" SIGNS IN PLACE	0.00	SQFT	\$ 21.66	\$ -
217	REMOVAL OF ELECTRICAL SYSTEMS (lighting)	0.00	LS*	\$ 362.89	\$ -
218	REMOVAL OF ELECTRICAL SYSTEMS (traffic signals)	0.00	LS*	\$ 3,394.74	\$ -
219	POLE FOUNDATIONS	0.00	LS*	\$ 1,404.72	\$ -
220	LIGHTING POLES, FIXED BASE	0.00	LS*	\$ 6,438.30	\$ -
221	LIGHTING POLE ARMS	0.00	LS*	\$ 316.06	\$ -
222	LUMINAIRES, LAMPS AND BALLASTS	0.00	LS*	\$ 995.01	\$ -
223	SWITCHING, CONDUIT AND WIRING	0.00	LS*	\$ 4,155.63	\$ -
224	TRAFFIC SIGNAL INSTALLATION	1.00	LS*	\$ 120,000.00	\$ 120,000.00
225	TRAFFIC SIGNAL MODIFICATION	0.00	LS*	\$ 30,435.60	\$ -
226	LOOP DETECTOR INSTALLATION	0.00	LS*	\$ 10,909.99	\$ -
227	INTERCONNECT SYSTEM (underground)	0.00	LS*	\$ 36.29	\$ -
228	INTERCONNECT SYSTEM (overhead)	0.00	LS*	\$ 3.51	\$ -
229	TRAFFIC CAMERA INSTALLATION	0.00	LS*	\$ 23,997.30	\$ -
230	PERMANENT SEEDING	0.00	ACRE	\$ 2,019.29	\$ -
231	LAWN SEEDING	2,910.28	SQYD	\$ 10.04	\$ 29,219.19
232	TOPSOIL	485.00	CUYD	\$ 60.00	\$ 29,100.00
233	SOIL CONDITIONER	0.00	CUYD	\$ 45.95	\$ -
234	CONIFER TREES, 9 FT HEIGHT	0.00	EACH	\$ 327.77	\$ -
235	DECIDUOUS TREES, 2-1/2 INCH CALIPER	132.00	EACH	\$ 822.00	\$ 108,504.00
236	DECIDUOUS TREES, 3 INCH CALIPER	0.00	EACH	\$ 802.60	\$ -
237	SHRUBS, NO. 1 CONTAINER	0.00	EACH	\$ 11.71	\$ -
238	SHRUBS, NO. 2 CONTAINER	0.00	EACH	\$ 26.92	\$ -
239	SHRUBS, NO. 3 CONTAINER	0.00	EACH	\$ 40.97	\$ -
240	SHRUBS, NO. 5 CONTAINER	0.00	EACH	\$ 46.82	\$ -
241	GROUND COVERS, NO. 1 CONTAINERS	0.00	EACH	\$ 11.71	\$ -
242	GROUND COVERS, 4 INCH POTS	0.00	EACH	\$ 4.39	\$ -
243	BULBS	0.00	EACH	\$ 3.51	\$ -
244	SEEDLING PLANTS	0.00	EACH	\$ 10.54	\$ -
245	ROOTED PLANT CUTTINGS	0.00	EACH	\$ 5.85	\$ -
246	SOD LAWN	0.00	SQYD	\$ 15.45	\$ -
247	BARK MULCH	0.00	CUYD	\$ 35.12	\$ -

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
248	ROCK MULCH	0.00	TON	\$ 62.92	\$ -
249	ADDITIONAL ESTABLISHMENT PERIOD	1.00	YEAR	\$ 34,848.00	\$ 34,848.00
250	TREE GRATES	0.00	EACH	\$ 1,024.28	\$ -
251	ROOT BARRIER	0.00	FOOT	\$ 13.11	\$ -
252	TREE GRATE FRAMES	0.00	EACH	\$ 421.42	\$ -
253	BORDER EDGING	0.00	FOOT	\$ 12.12	\$ -
254	TYPE 2 FENCE	0.00	FOOT	\$ 25.23	\$ -
255	CL-6 CHAIN-LINK FENCE	2,000.00	FOOT	\$ 25.80	\$ 51,600.00
256	CL-6R CHAIN-LINK FENCE	0.00	FOOT	\$ 18.73	\$ -
257	CL-4R CHAIN-LINK FENCE WITH VINYL CLAD FABRIC	0.00	FOOT	\$ 20.25	\$ -
258	ORNAMENTAL PROTECTIVE SCREENING	0.00	FOOT	\$ 147.38	\$ -
259	SINGLE MAILBOX SUPPORTS	0.00	EACH	\$ 273.92	\$ -
260	MULTIPLE MAILBOX SUPPORTS	0.00	EACH	\$ 389.81	\$ -
261	MAILBOX CONCRETE COLLARS	0.00	EACH	\$ 120.57	\$ -
262	REMOVE & REINSTALL MAILBOX SUPPORTS	0.00	EACH	\$ 585.30	\$ -
263	BENCHES, TYPE _____	0.00	EACH	\$ 2,663.12	\$ -
264	BICYCLE RACKS	0.00	EACH	\$ 386.30	\$ -
265	LITTER RECEPTACLES	0.00	EACH	\$ 1,580.31	\$ -
266	IRRIGATION SYSTEM	0.00	LS	\$ -	\$ -
267	4 INCH DUCTILE IRON PIPE	0.00	FOOT	\$ 94.23	\$ -
268	6 INCH DUCTILE IRON PIPE	0.00	FOOT	\$ 119.99	\$ -
269	8 INCH DUCTILE IRON PIPE	0.00	FOOT	\$ 99.85	\$ -
270	12 INCH DUCTILE IRON PIPE	0.00	FOOT	\$ 124.96	\$ -
271	4 INCH GATE VALVE	0.00	EACH	\$ 745.67	\$ -
272	6 INCH GATE VALVE	0.00	EACH	\$ 1,002.03	\$ -
273	8 INCH GATE VALVE	0.00	EACH	\$ 1,258.40	\$ -
274	12 INCH GATE VALVE	0.00	EACH	\$ 1,275.95	\$ -
275	HYDRANT ASSEMBLIES	0.00	EACH	\$ 2,996.74	\$ -
276	2 INCH SERVICE LINE, SHORT RUN	0.00	EACH	\$ 1,960.76	\$ -
277	3 INCH SERVICE LINE, SHORT RUN	0.00	EACH	\$ 2,633.85	\$ -

* Unit Price Shown is on Pound, Each, or Foot Basis as Applicable

TOTAL BID ITEMS

\$ 1,073,109.14

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	RIGHT OF WAY MONUMENTATION	1.00	LS	\$ 15,000.00	\$ 15,000.00
2	ADJUST WATER FACILITIES - FIRE HYDRANT	2.00	EACH	\$ 12,000.00	\$ 24,000.00
3	ADJUST WATER FACILITIES - METER	0.00	EACH	\$ 1,000.00	\$ -
4	STREET LIGHTING - UPGRADE LUMINAIRES	0.00	EACH	\$ 350.00	\$ -
5	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	0.00	EACH	\$ 550.00	\$ -
6	CONNECT CONTRACTOR INSTALLED TRAFFIC SIGNAL LOOPS TO CONTROLLER BY BOM	0.00	EACH	\$ 1,000.00	\$ -
7	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT	0.00	SQFT	\$ 15.00	\$ -
8	STORMWATER OFFSITE MANAGEMENT FEE	0.00	SQFT	\$ 2.76	\$ -
9	ROCK EXCAVATION	0.00	CUYD	\$ 106.00	\$ -
10	UTILITY RELOCATES	1.00	LS	\$ 100,000.00	\$ 100,000.00
11	ASPHALT CEMENT ESCALATION	0.00	LS	\$ 1,000.00	\$ -
12	FUEL ESCALATION	1.00	LS	\$ 3,000.00	\$ 3,000.00
13	TESTING CONTAMINATED MEDIA	0.00	LS	\$ 5,000.00	\$ -
14	BOLI FEE PAYMENT	1.00	LS	\$ 1,073.11	\$ 1,073.11
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	1.00	LS	\$ 107,310.91	\$ 107,310.91

TOTAL ANTICIPATED ITEMS

\$ 250,384.02

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
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SCHEDULE SUMMARY

BID ITEMS					\$ 1,073,109
CONSTRUCTION CONTINGENCY				3.5% of Bid Items*	\$ 37,559
SUBTOTAL					\$ 1,110,668
ANTICIPATED ITEMS					\$ 250,384
TOTAL CONSTRUCTION					\$ 1,361,052
PROJECT MANAGEMENT				5% of Bid Items	\$ 53,655
DESIGN ENGINEERING				25% of Bid Items	\$ 268,277
CONSTRUCTION MANAGEMENT				15% of Bid Items	\$ 160,966
SUBTOTAL					\$ 482,898
PROJECT ENGINEERING & MANAGEMENT OVERHEAD				79.27% of PM, Eng, and CM	\$ 382,794
TOTAL PROJECT ENGINEERING & MANAGEMENT					\$ 865,692
RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES					\$ 397,880
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION					\$ 9,000
RIGHT-OF-WAY CONTINGENCY				30% of Land, Improve, and Damages	\$ 119,364
TOTAL PROJECT RIGHT-OF-WAY					\$ 526,244
INFLATION RATE ON CONTRACT	5	Years		4.5% of Construction	\$ 335,066
INFLATION RATE ON PERSONNEL	5	Years		2.0% of Eng & Mgmt	\$ 90,102
ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE				20% of Const, Eng & Mgmt, and Inflation	\$ 530,382
TOTAL PROJECT CONTINGENCY					\$ 955,550
TOTAL PROJECT ESTIMATE					\$ 3,708,539

NE Cornfoot Rd Multi-Use Path

Location: NE Cornfoot Rd
Description: 12' Multi Use Path along North side of NE Cornfoot Rd
Current Cross-Section:
Proposed Cross-Section:

Typical Sections	PL	SW/Curb	Swale/Curb	Parking	through	Left turn	through	Parking	Swale/Curb	SW/Curb	PL

0' R/W Existing 60
 0' R/W 60
 0' pavement
 0' pavement

HMAC								2.1 T/CY	updated quantities
Base & Wearing	L, ft.	W, ft.	Area, sf	Depth, in.	Vol., cy	Tons			
MUP	4365.417		52385	3	485.0	1018.6			
			0		0.0	0.0			
			0		0.0	0.0			
			0		0.0	0.0			
			52385		485	1019			

Agg Base								1.9 T/CY
	L, ft.	W, ft.	Area, sf	Depth, in.	Vol., cy	Tons		
MUP	4365.417	0	52385	9	1455.1	2764.8		
Sidewalk	2273	0	13635	2	84.2	159.9		
			0		0.0	0.0		
			0		0.0	0.0		
			1.257181		1539	2925		
			66020					

Subgrade Geotextile	
Area, sy	
5821	

Values from Microstation

Excavation				Swale curb & gutter
	Area, sf	Depth, in.	Vol., cy	
Roadway	52385	12	1940.2	
Curb	0		0.0	
Curb & Gutter	0		0.0	
Sidewalk	13635	6	252.5	
			2193	

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

Sidewalk			
	L, ft.	W, ft.	Area, sf
Separated	2273		13635
Monolithic Curb & Sidewalk			0
6" thick Path			0
			13635

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

Inlets & Leads			
	Length	Total	
SW Inlets	#DIV/0!		1 per ft.
PB Inlets	#DIV/0!		1 per ft.
G-2 Inlets	0		2 per 400 ft.
CG-2 Inlets	0		2 per 400 ft.
Inlet Lead			LF
Rip Rap			CY

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

Trees									
	L, ft.	Dwys, ft.	1 every 30'						
Trees in Swales		0	0						
Trees in Planting Strip	4365.417	404	132	93	78	32	56	36	59
Trees in Tree Wells		0	0						
			132						

Topsoil				
	L, ft.	W, ft.	D, ft.	Vol., cy
	4365.417	6	0.5	485
				0
				485

Retaining Wall			
	L, ft.	Ht., ft.	Area, sf
Segmental	300	4	1200
Prefabricated modular			0

Striping				Factor:	2	2	0.6	2	1.125	1	1
	L, ft.	L, ft.	L, Tot., ft.		Bike	Turn	skip	double	2 way LT	Fog	Spiral
Removal	0	0	0	Removal							
Permanent	2619	0	2619	Permanent	E Circle			4365.417			
					W Circle						

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

Signs						
ODOT #	City #	ea	Dimensions, in	Area, sf	Name	
G	G5500	6	24	0	Street name	
G	G5550	9	60	0	Destination	
R2	R 1060	36	36	0	Yield	
W7	R 5020	36	12	0	One Way (Rt. Arrow)	
W7		30	30	0	roundabout left thru/right thru	
W7		30	30	0	roundabout left thru/right thru	
Y1	R 4020	18	18	0	15 MPH Rider	
Y3	R 1700	30	30	0	Traffic Circle Ahead	
	posts/footings	0.0		0		

Illumination	
	Ea
New Lt. Poles	
Wood Pole Lights	
Cobra	
Single Ornamental	
Twin Ornamental	

Summary	
G	0.0
R2	0.0
W7	0.0
Y1	0
Y3	0.0
	0

R/W							
	Area	Cost / SF	Land Cost	No. Properties	Acq./ Prop	Appr./ Prop	Total R/W
Location					\$6,000	\$3,000	
Colwood	0	\$ 10.00	\$ -	0	\$ -	\$ -	\$ -
Port	56840	\$ 7.00	\$ 397,880	1	\$ 6,000	\$ 3,000	\$ 406,880
							\$ 406,880