



**CITY COUNCIL MEETING  
STAFF REPORT**

<b>Meeting Date:</b>  Dec.7, 2015	<b>Subject: Resolution No. 2558</b> Intergovernmental Cooperative Agreement with West Linn-Wilsonville School District for Advance Road Middle School Site Infrastructure  <b>Staff Member:</b> Michael Kohlhoff <b>Department:</b> Legal	
<b>Action Required</b>	<b>Advisory Board/Commission Recommendation</b>	
<input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input type="checkbox"/> Ordinance 1 <sup>st</sup> Reading Date: <input type="checkbox"/> Ordinance 2 <sup>nd</sup> Reading Date: <input checked="" type="checkbox"/> Resolution <input type="checkbox"/> Information or Direction <input type="checkbox"/> Information Only <input type="checkbox"/> Council Direction <input type="checkbox"/> Consent Agenda	<input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input type="checkbox"/> Not Applicable	
<b>Comments:</b>		
<b>Staff Recommendation:</b> Approval of resolution and accompanying Intergovernmental Agreement.		
<b>Recommended Language for Motion:</b> I move to approve Resolution No. 2558.		
<b>Project / Issue Relates To:</b> <i>[Identify which goal(s), master plans(s) your issue relates to.]</i>		
<input type="checkbox"/> Council Goals/Priorities	<input type="checkbox"/> Adopted Master Plan(s)	<input checked="" type="checkbox"/> Not Applicable

**ISSUE BEFORE COUNCIL:** Action is needed to approve a cooperative agreement between the City of Wilsonville and West Linn-Wilsonville School District for Advance Road Middle School’s site infrastructure.

**EXECUTIVE SUMMARY:** This agreement provides for the necessary infrastructure for development of the middle school, including road improvements to Advance Road, signalization at the intersection of Advance/ Boeckman and Wilsonville/Stafford, a major sewer line, water

line, and that the property will be portioned to complete the exchange agreement and deed the City approximately ten acres of park land.

**EXPECTED RESULTS:**

The timely building of a middle school by fall 2017. The City owning approximately 10 acres for a park and sports fields.

**TIMELINE:**

**CURRENT YEAR BUDGET IMPACTS:**

**FINANCIAL REVIEW / COMMENTS:**

Reviewed by: SCole Date: 11/30/2015

This agreement will allow the City to partner with the West Linn-Wilsonville School District to cost-effectively provide necessary public capital infrastructure to serve the school and future development. Public capital infrastructure projects for this area have been programmed into the City's five-year Capital Improvement Program (CIP).

**LEGAL REVIEW / COMMENT:**

Reviewed by: MEK \_\_\_\_\_ Date: 11/24/2015

Resolution prepared by Legal and agreement prepared with engineering

**COMMUNITY INVOLVEMENT PROCESS:**

**POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY** (businesses, neighborhoods, protected and other groups): Less overcrowding of our schools and more recreational opportunities for our citizens.

**ALTERNATIVES:**

**CITY MANAGER COMMENT:**

**ATTACHMENTS:**

- A. Resolution 2558
- B. Intergovernmental Agreement

## **RESOLUTION NO. 2558**

### **A RESOLUTION OF THE CITY OF WILSONVILLE AUTHORIZING INTERGOVERNMENTAL COOPERATIVE AGREEMENT FOR ADVANCE ROAD MIDDLE SCHOOL SITE INFRASTRUCTURE BETWEEN CITY OF WILSONVILLE AND WEST-LINN WILSONVILLE SCHOOL DISTRICT**

WHEREAS, the City of Wilsonville (“City”), an Oregon municipal corporation, and the West Linn-Wilsonville School District (“District”), an Oregon school district, are authorized pursuant to ORS 190.003 et seq. to enter into intergovernmental agreements for the performance of any and all functions and activities that a party, or its officers or agencies, have authority to perform; and

WHEREAS, City and District are authorized pursuant to ORS 280.150 to “jointly, in such manner as they shall agree upon, construct, acquire, own, equip, operate and maintain facilities which will directly aid each participating governmental unit in performing a duty or duties imposed upon it or aid in exercising a power or powers conferred upon it, and may appropriate money and may issue bonds therefor”; and

WHEREAS, in the exercise of their respective duties and powers, the City and District have previously planned and conferred regarding the residential growth of the City, now and into the future, and the need to plan for, construct, and operate, among other things, school facilities, recreation field facilities, and infrastructure facilities to serve the planned school and recreation facilities in coordination with such growth; and

WHEREAS, to meet the City’s needs for future recreation field facilities to accommodate growth, as defined in the Master Parks and Recreation Plan, and the District’s needs for future schools, the City and District entered into an exchange agreement whereby the City caused to be acquired an approximate 10-acre site in the eastern section of the Villebois Village development and deeded it to the District, in consideration that the District would deed to the City an approximate 10-acre portion of a 40-acre parcel of land owned by the District along Advance Road and 60<sup>th</sup> Avenue, upon the District obtaining Metro approval to bring the parcel into the Urban Growth Boundary and annexing the parcel into the City; and

WHEREAS, in the exercise of its duties and powers, the City is currently developing a master concept plan for the Frog Pond Area located around and near the District’s 40-acre site,

and also will be developing a field development plan for the 10-acre site to be deeded to the City, but development of the fields is currently anticipated to be after the need to open the school, as described below; and

WHEREAS, the District, with cooperation and support of the City, has successfully petitioned Metro and caused the Advance Road site to be included within the Urban Growth Boundary, and the District has also caused the site to be annexed into the City; and

WHEREAS, the District plans to construct a middle school and a primary school on the remaining portion of the site; however, the City and District find the District has experienced an overcrowding at its Inza R. Wood Middle School site, which is being used to serve all of Wilsonville and surrounding areas, and that the District voters have approved a bond that includes the funds to construct a new Middle School at the Advance Road 40-acre site, with a scheduled opening in the fall of 2017, and with time being of the essence given increasing middle school overcrowding and the rules of arbitrage necessitating timely construction of the middle school, with the primary school not being needed to be constructed until a later date; and

WHEREAS, the development of this school site will require, as conditions for development approval, the construction of a public road system to access the site, improvements to connecting roads serving the site, installation of a signalized intersection, extension of water and sanitary sewer main lines, and providing of storm drainage systems; and

WHEREAS, due to the location of the school site and the need to extend roadway and utility services to the site, as well as needing to begin the school's construction by Fall 2017, cost savings for both parties can be achieved by the District also contracting to build the infrastructure, in that by avoiding having both the City and the District use separate contractors for construction of shared infrastructure, dual mobilization, coordination, and standby costs can be avoided with the District constructing its school site, and the District should be able to achieve better cost proposals if it also contracts the construction of the infrastructure required to service the site and provided for herein; and

WHEREAS, to the extent the infrastructure that is required for the District to provide to develop and serve the site also involves extra capacity to serve subsequent development, then the District is entitled to reimbursement by such development or by the City, as the case may be; and

WHEREAS, the terms "costs for construction" or "infrastructure costs" for streets and/or sewer, water, storm drainage, and associated facilities used herein shall be intended to include

both soft costs such as design, engineering, permitting, inspection, and management of construction, legal, bonding, and like costs (as set forth in Section 7.1), and hard costs such as the material, labor, contingency, overhead, and like costs, except as may otherwise be set forth; and

WHEREAS, the District has conferred with the City and duly reviewed the aforementioned conditions recited above, and finds it has the authority to proceed in mutual aid of cooperatively advancing the development of education of its District's children through well planned and funded schools and safe routes to schools, future recreational facilities for use by its school age population, and the necessity of having adequate and timely infrastructure facilities provided to serve schools and recreation facilities, and that such cooperative agreement can be prudently structured for funding appropriation to aid each participating government entity in carrying out its duties and powers and to advance the public's interest;

NOW, THEREFORE, THE CITY OF WILSONVILLE RESOLVES AS FOLLOWS:

1. The above recitals are incorporated by reference herein.
2. A copy of the Intergovernmental Cooperative Agreement for Advance Road Middle School Site Infrastructure Between City of Wilsonville and West Linn-Wilsonville School District is marked as Exhibit 1 and attached hereto and incorporated by reference as if fully set forth herein. The City Manager is authorized to execute the Intergovernmental Cooperative Agreement on behalf of the City, upon the City Attorney's approval as to form.
3. This Resolution becomes effective upon the date of adoption.

ADOPTED by the Wilsonville City Council at a regular meeting thereof this 7th day of December, 2015, and filed with the Wilsonville City Recorder this date.

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Tim Knapp, Mayor

ATTEST:

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Sandra C. King, MMC, City Recorder

SUMMARY OF VOTES:

Mayor Knapp	Yes
Council President Starr	Yes
Councilor Fitzgerald	Excused
Councilor Stevens	Yes
Councilor Lehan	Excused

Attachments:

**Exhibit 1** – Intergovernmental Cooperative Agreement for Advance Road Middle School Site Infrastructure between City of Wilsonville and West Linn-Wilsonville School District

**INTERGOVERNMENTAL COOPERATIVE AGREEMENT  
FOR ADVANCE ROAD MIDDLE SCHOOL SITE INFRASTRUCTURE  
BETWEEN CITY OF WILSONVILLE AND  
WEST LINN-WILSONVILLE SCHOOL DISTRICT**

RECITALS:

**A.** WHEREAS, the City of Wilsonville (“City”), an Oregon municipal corporation, and the West Linn-Wilsonville School District (“District”), an Oregon school district, are authorized pursuant to ORS 190.003 et seq. to enter into intergovernmental agreements for the performance of any and all functions and activities that a party, or its officers or agencies, have authority to perform; and

**B.** WHEREAS, City and District are authorized pursuant to ORS 280.150 to “jointly, in such manner as they shall agree upon, construct, acquire, own, equip, operate and maintain facilities which will directly aid each participating governmental unit in performing a duty or duties imposed upon it or aid in exercising a power or powers conferred upon it, and may appropriate money and may issue bonds therefor”; and

**C.** WHEREAS, in the exercise of their respective duties and powers, the City and District have previously planned and conferred regarding the residential growth of the City, now and into the future, and the need to plan for, construct, and operate, among other things, school facilities, recreation field facilities, and infrastructure facilities to serve the planned school and recreation facilities in coordination with such growth; and

**D.** WHEREAS, to meet the City’s needs for future recreation field facilities to accommodate growth, as defined in the Master Parks and Recreation Plan, and the District’s needs for future schools, the City and District entered into an exchange agreement whereby the City caused to be acquired an approximate 10-acre site in the eastern section of the Villebois Village development and deeded it to the District, in consideration that the District would deed to the City an approximate 10-acre portion of a 40-acre parcel of land owned by the District along Advance Road and 60<sup>th</sup> Avenue, upon the District obtaining Metro approval to bring the parcel into the Urban Growth Boundary and annexing the parcel into the City; and

**E.** WHEREAS, in the exercise of its duties and powers, the City is currently developing a master concept plan for the Frog Pond Area located around and near the District’s 40-acre site, and also will be developing a field development plan for the 10-acre site to be deeded to the City, but

development of the fields is currently anticipated to be after the need to open the school, as described below; and

**F.** WHEREAS, the District, with cooperation and support of the City, has successfully petitioned Metro and caused the Advance Road site to be included within the Urban Growth Boundary, and the District has also caused the site to be annexed into the City; and

**G.** WHEREAS, the District plans to construct a middle school and a primary school on the remaining portion of the site; however, the City and District find the District has experienced an overcrowding at its Inza R. Wood Middle School site, which is being used to serve all of Wilsonville and surrounding areas, and that the District voters have approved a bond that includes the funds to construct a new Middle School at the Advance Road 40-acre site, with a scheduled opening in the fall of 2017, and with time being of the essence given increasing middle school overcrowding and the rules of arbitrage necessitating timely construction of the middle school, with the primary school not being needed to be constructed until a later date; and

**H.** WHEREAS, the development of this school site will require, as conditions for development approval, the construction of a public road system to access the site, improvements to connecting roads serving the site, installation of a signalized intersection, extension of water and sanitary sewer main lines, and providing of storm drainage systems; and

**I.** WHEREAS, due to the location of the school site and the need to extend roadway and utility services to the site, as well as needing to begin the school's construction by Fall 2017, cost savings for both parties can be achieved by the District also contracting to build the infrastructure, in that by avoiding having both the City and the District use separate contractors for construction of shared infrastructure, dual mobilization, coordination, and standby costs can be avoided with the District constructing its school site, and the District should be able to achieve better cost proposals if it also contracts the construction of the infrastructure required to service the site and provided for herein; and

**J.** WHEREAS, to the extent the infrastructure that is required for the District to provide to develop and serve the site also involves extra capacity to serve subsequent development, then the District is entitled to reimbursement by such development or by the City, as the case may be; and

**K.** WHEREAS, the terms "costs for construction" or "infrastructure costs" for streets and/or sewer, water, storm drainage, and associated facilities used herein shall be intended to include both soft costs such as design, engineering, permitting, inspection, and management of construction,



legal, bonding, and like costs (as set forth in Section 7.1), and hard costs such as the material, labor, contingency, overhead, and like costs, except as may otherwise be set forth; and

**L. WHEREAS**, the District has conferred with the City and duly reviewed the aforementioned conditions recited above, and finds it has the authority to proceed in mutual aid of cooperatively advancing the development of education of its District's children through well planned and funded schools and safe routes to schools, future recreational facilities for use by its school age population, and the necessity of having adequate and timely infrastructure facilities provided to serve schools and recreation facilities, and that such cooperative agreement can be prudently structured for funding appropriation to aid each participating government entity in carrying out its duties and powers and to advance the public's interest;

**NOW, THEREFORE, in consideration of the mutual promises and agreements contained herein, the undersigned parties jointly and respectively agree as follows:**

1. The recitals above are included herein as findings in support of the respective parties' authority pursuant to ORS 190.003 et seq. and ORS 280.150.

2. Advance Road Middle School Site.

2.1. Site Location and Description. The proposed site is approximately 40 acres, is of sufficient size to accommodate a middle school and future primary school building, parking, bus service, playgrounds, and associated facilities, with an approximate 10-acre portion to be provided to the City for a future park. The site is located adjacent to City residential areas and is located within the Frog Pond Area Plan, and the site is more particularly described in **Exhibit A**, attached hereto and incorporated by reference herein.

2.2. Streets Accessing the Site. The Advance Road Middle School site will be accessed by proposed public streets connecting to Advance Road. In the future, with construction of the Primary School additional site, access is anticipated to occur from 60<sup>th</sup> Avenue. A map generally depicting the site location and the access streets and intersections is marked as **Exhibit B**, attached hereto and incorporated by reference herein.

3. Street Infrastructure.

3.1. Local Streets. Public streets to serve the Middle School site must meet City street standards for Residential Streets, with the District responsible for design and construction of the streets required to service the school site, as determined by the City. However, the City recognizes that excess capacity is being created with construction of these roadways, and therefore

the District is entitled to partial SDC credits or reimbursements of costs as outlined within. When a public street provides service to separate developments, then each developer is responsible for a share of the street costs or such applicable pro rata share if there is more than one benefitting developer on each side of the street. One of the methods available to ensure the first-in developer who builds the street is fairly reimbursed is through the formation of a Reimbursement District, pursuant to W.C. 3.116.

3.2. District as Developer; Estimated Costs. The parties agree that as a first-in developer, the District would be responsible for implementing design and construction of the aforementioned street improvements. Section 4.177 of the City's Development Code provides that the developer provide 24-ft of street improvements (equivalent to two travel lanes) to service their development. Also, the Code anticipates that many of the City streets were county roads or streets built at a time to support farm to market uses, and that many of the existing streets, except those in new subdivisions or newly constructed, will require complete reconstruction to support urban level traffic volumes. Therefore, the City and District have agreed to share in the design and construction costs of the required street improvements, as outlined below. In addition, portions of Frog Pond East and Frog Pond South neighborhoods will also receive benefit and be serviced by these improvements; therefore, the opportunity for the District to form a Reimbursement District exists. The cost responsibilities are set forth below.

3.2.1. Access Street 63<sup>rd</sup> Avenue: An approximate 520-foot long North-South public street is required to access the school site from Advance Road. The cross section of 63<sup>rd</sup> Avenue is anticipated to be two 12-ft travel lanes, an additional 12-ft left-turn lane at Advance Road (200 feet in length plus 100-foot transition), and the west side will be fully improved with curb & gutter, landscape strip/storm swale & irrigation, sidewalk, and streetlighting. The City will be responsible for 12-feet of street improvements (consisting of the two bike lanes), bike signage, bike lane striping, the east side gravel shoulder, storm swale, and a prorated share of streetlighting. The District will be responsible for all other street costs. The 63<sup>rd</sup> Avenue street improvement costs, inclusive of soft costs, are estimated at approximately \$1,038,000. The City's portion of these costs is estimated at \$286,000, and the District's portion is estimated to be \$753,000.

3.2.2. Access Street Hazel Street: An approximate 400-foot long East-West public street, connecting with 63<sup>rd</sup> Avenue, is required to provide access to the front of the

school. The cross section of Hazel Street is anticipated to be two 12-ft travel lanes, and the south side will be fully improved with curb & gutter, bus drop off area, landscape & irrigation, sidewalk, and streetlights. The City will be responsible for 12-feet of street improvements (consisting of the two bike lanes), bike signage, bike lane striping, the north side gravel shoulder and storm swale, the SMART transit stop, bus shelter and adjacent sidewalk, and a prorated share of streetlighting. The District will be responsible for all other street costs, including the cul-de-sac to be used as a temporary vehicle turn-around. Hazel Street street improvement costs, inclusive of soft costs, are estimated at approximately \$552,000. The City's portion of these costs is estimated at \$216,000, and the District's portion is estimated to be \$336,000.

3.2.3. Advance Road: Advance Road is shown as a Collector type road in the City's Transportation System Plan. The road right-of-way also dates to the 1850's and the structural section of the current roadway is not well documented. To accommodate increased traffic demands, Advance Road needs to be completely rebuilt. The cross section of Advance Road at the Stafford-Wilsonville intersection is required to be two 11-ft travel lanes, one 12-ft left-turn lane (200 feet in length plus 100-foot transition), and on the south side a 2-ft bike buffer, 6-ft bike lane, curb & gutter, landscape strip/storm swale & irrigation, 10-ft sidewalk, and streetlighting. East of the left-turn lane, the street will transition to the existing width of Advance Road. The City will be responsible for all roadway construction beyond 24-feet from face of curb and one-half of the 10-foot sidewalk. The District will be responsible for all other street costs. The Advance Road street improvement costs, inclusive of soft costs, are estimated at approximately \$1,103,000. The City's portion of these costs is estimated at \$439,000, and the District's portion is estimated to be \$664,000.

3.2.4 Boeckman Road. Boeckman Road is shown as a Collector type road in the City's Transportation System Plan. The road right-of-way also dates to the 1850's and the structural section of the current roadway is not well documented. To accommodate increased traffic demands, Boeckman Road needs to be completely rebuilt. The cross section of Boeckman Road at the Stafford-Wilsonville intersection is required to be two 11-ft travel lanes, one 12-ft left-turn lane (200 feet in length plus 100-foot transition), one 12-ft right-turn lane, and on the south side a 6-ft bike lane, curb & gutter, landscape strip/storm swale & irrigation, 5-ft sidewalk, and streetlighting. West of the left-turn lane,

the street will transition to the existing width of Boeckman Road. The City will be responsible for all roadway construction costs and may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area. The Boeckman Road street improvement costs, inclusive of soft costs, are estimated at approximately \$535,000.

3.2.5 Stafford Road. Stafford Road is shown as an Arterial type road in the City's Transportation System Plan. The road right-of-way also dates to the 1850's and the structural section of the current roadway is not well documented. To accommodate increased traffic demands, Stafford Road needs to be completely rebuilt. The cross section of Stafford Road at the Boeckman-Advance intersection is required to be two 11-ft travel lanes, one 12-ft left-turn lane (125 feet in length plus 100-foot transition), and streetlighting. North of the left-turn lane, the street will transition to the existing width of Stafford Road. The City will be responsible for all roadway construction costs and may establish a Reimbursement District to the extent improvements benefit the Frog Pond Conceptual Plan development area. The Stafford Road street improvement costs, inclusive of soft costs, are estimated at approximately \$329,000.

3.2.6. Intersection of Boeckman-Advance / Stafford-Wilsonville Roads: To accommodate increased traffic demands created by the Advance Road Middle School, the intersection at Boeckman-Advance / Stafford-Wilsonville Roads will need to be rebuilt and completely signalized. The City will be responsible for 75% of the costs to rebuild and signalize this intersection. The District will be responsible for 25% of the costs to rebuild and signalize this intersection. The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area. The intersection improvement costs, inclusive of soft costs, are estimated at approximately \$1,061,000. The City's portion of these costs is estimated at \$796,000, and the District's portion is estimated to be \$266,000.

#### **4. Sewer Line Improvements.**

4.1. Advance Road. In order to properly serve this site, a sanitary sewer main line needs to be extended from the Landover subdivision, following the Advance Road right-of-way to 63<sup>rd</sup> Avenue, then south to the school site. The Frog Pond Area Plan anticipated the need of a 21" trunk line within Boeckman Road, a 12" trunk line within Advance Road, and a 15" trunk line

within Advance Road to provide service to the Frog Pond neighborhoods. The City and District agree that a segment of these trunk lines can be constructed at this time (using the anticipated elevations provided by Murray Smith & Associates, Inc.), with the District providing a temporary 8” line to tie into the north end of the existing system in Wagner Street. It is understood that this “temporary” connection may actually exist for 10 years or more, until Metro allows Frog Pond East and/or Frog Pond South neighborhoods to be included in the UGB. Costs associated with upsizing this section of the sanitary sewer main within Advance Road, from Wagner Street to 63<sup>rd</sup> Avenue, from 8” to 15”, and any extra depth from an 8” line required to service the school site to the 15” line for Frog Pond, would be eligible for Sanitary Sewer SDC credits. Furthermore, to avoid future disruption within the Boeckman-Advance / Stafford-Wilsonville Roads intersection, the City desires construction of the 21” and 12” sewer trunk lines to Boeckman Road and Stafford Road, respectively, to occur at this time. The City will be responsible for the costs to extend the sewer trunk line west of the Wagner Street connecting manhole. The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area. The sanitary sewer line costs, inclusive of soft costs, are estimated at approximately \$295,000. The City’s portion of these costs is estimated at \$152,000, and the District’s portion is estimated to be \$143,000.

4.2. Access Road 63<sup>rd</sup> Avenue. In order to connect the school site to the Advance Road Sewer Line, the District will need to construct a sewer line within 63<sup>rd</sup> Avenue, from Advance Road to the school site. The District will bear all costs to design and construct this sewer line.

4.3. Sewer Line Locations. The general location of the Advance Road Sewer Line (*see* 4.1) and 63<sup>rd</sup> Avenue Sewer Line (*see* 4.2) are set forth in **Exhibit C**, attached hereto and incorporated by reference herein.

5. Water Line Improvements. The District’s project engineer has determined that, without the benefit of a looped water system, a 12” water main is needed to serve the school site and provide the required fire flows. Therefore, the cost to design and construct this 12” water main from the terminus of the existing line near the City limit on Advance Road to the school site shall be borne by the District. However, preliminary engineering for the Frog Pond Area Plan also indicates that a 12” main line is necessary to provide service to the Frog Pond East and Frog Pond South neighborhoods, so the District may be able to recoup some of their costs by including this water line within a Reimbursement District. Furthermore, to avoid future disruption within the Boeckman-

Advance / Stafford-Wilsonville Road intersection, the City desires construction of the 12” water main line north to Stafford Road. The City will be responsible for the costs to tie into the existing water main and extend the water line northward through the intersection. The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area. The 12” water line costs, inclusive of soft costs, are estimated at approximately \$392,000. The City’s portion of these costs is estimated at \$50,000, and the District’s portion is estimated to be \$342,000.

**6. Right-of-Way and Easements.**

6.1 The District will work with adjacent property owners to acquire all right-of-way and easements required to support all street and utility improvements. The City will be responsible for the cost to obtain required rights-of-way and easements for improvements to Boeckman Road, Stafford Road, the north side of Advance Road, and the Boeckman-Advance / Stafford-Wilsonville Roads interchange (outside of the southeast corner), subject to the provisions in **Section 6.2**. The District will be responsible for the cost to obtain required rights-of-way and easements for improvements to the south side of Advance Road, the southeast corner of the Boeckman-Advance / Stafford-Wilsonville Roads intersection, 63<sup>rd</sup> Avenue, Hazel Street, and Wagner Street. Upon obtaining the necessary survey information and appraisals, the City and the District will cooperate with each other in determining their respective right-of-way and easement acquisition costs in order to provide uniform and fair cost of acquisitions.

6.2 Cost of Right-of-Way and Easements. The parties agree that the estimated land costs for rights-of-way and easements needed for the street improvements shall be determined by an MAI appraisal, which shall be solicited by the District and be part of the project’s soft cost. Provided further, however, should the City not accept the appraisal, the City shall have the right to secure its own appraisal at its cost. In the event the District does not accept the City’s appraisal or the parties do not otherwise agree on the value of the land, then the respective appraisers shall agree upon a third appraiser whose appraisal shall be binding on the parties, and this appraisal cost shall be split equally between the District and the City.

**7. SDC Credit and Reimbursement Calculations.**

7.1 Included Soft Costs. The standards for calculating the costs of constructing infrastructure, including both soft and hard construction costs, are standards known to the City and District and have been used for the calculations herein, against which SDC credits are calculated or

reimbursement provided. Soft costs incurred in connection with the improvements described in this IGA are included in SDC credits. The District shall be treated equitably and consistently with the other developers receiving SDC credits in the City, and such soft costs, for the purposes of SDC credits, shall be calculated as a percentage of construction costs as follows: Design, Engineering, and Surveying, 10%; City Permit Fee, 7%; Geotechnical Inspection, 2%; and Construction Management, 5%; for a total of 24% of construction costs. Provided that the infrastructure improvements outlined in this IGA are completed and the request for SDC credits has been submitted to the City and approved prior to building permits being issued to the District, then all SDC credits shall be credited to the District at time of issuance of building permits for the Advance Road Middle School project. If credits are insufficient to cover the system development charges, then the District shall pay the balance; if credits exceed the system development charges, then the City shall reimburse the District the balance due. Should building permits be issued prior to the request for SDC credits being submitted to the City and approved, then all SDC creditable costs shall be reimbursed by the City to the District within 30 days of reimbursement submittal and approval, which approval shall not be unnecessarily withheld or delayed by the City.

7.2 Final Estimates and True Up. In order to secure a Public Works permit for the infrastructure provided for herein, plans for the construction of the infrastructure must be provided to and approved by the City. In constructing the infrastructure, the approved plans must be followed and, to ensure the cost for providing the infrastructure is reasonable, any potential change order exceeding \$25,000 affecting construction which the City would be responsible for shall be provided to the City for review and approval prior to the District issuing the change order to the contractor. Such review and approval shall not be unnecessarily withheld or delayed by the City. The District shall provide the applicable construction contract costs for the Advance Road Middle School on-site and off-site construction work to the City as the final estimate for the City's review and approval, which approval shall not be unreasonably withheld. The final cost, SDC credits, and reimbursements shall be based on actual costs trued up from the construction contract costs; provided, however, that for any such true-up change cost, the parties must mutually agree they are reasonable.

**8. Actual Costs and Reimbursements for Infrastructure Improvements, Rights-of-Way, and Easements.**

8.1 True-Up to Actual Costs. The parties recognize that the aforementioned costs are estimates only. The actual costs incurred and known at the time of the completion of construction contracts and the purchase of rights-of-way and easements shall be substituted for the estimates for the purposes of payment and reimbursement, as required herein. The costs shall be subject to true-up to actual payments, inclusive of any additions or subtractions made to the full payment for each construction contract.

8.2 Formation of Street and Utility Reimbursement District. The parties agree that the parties may respectively form Street and Utility Reimbursement Districts pursuant to W.C. 3.116, as set forth above. Pursuant to WC 3.116 (6), an application for a Reimbursement District may be submitted within 90 days of the applicable public street and utility infrastructure being completed and accepted by the City. A reimbursement district has a ten (10) year term, but may be extended by the City upon good cause shown. Upon an application being submitted, the City Engineer will prepare and recommend to the City Council the refund methodology that fairly apportions the refund among the properties adjacent to or served by the improvement, which shall be paid upon such property making use of such infrastructure. Provided, however, that under current law no lien attaches to such property by the formation of the District and adoption of the refund methodology.

**9. Fees and Charges (SDC).**

9.1. Systems Development Charges (SDCs). The following SDCs have been estimated by the City, using current 2015/16 SDC rates and methodology, to be incurred by the District (pending initial and ultimate building size):

<b><u>Middle School building size</u></b>	<b><u>73 K sq.ft.</u></b>	<b><u>97 K sq.ft.</u></b>
Streets	\$ 657,292	\$ 873,388
Parks	\$ 4,745	\$ 6,305
Water	\$ 158,022	\$ 158,022
Sewer	\$ 106,848	\$ 146,916
Storm	\$ 100,375	\$ 133,375
<b>Total</b>	<b>\$1,027,282</b>	<b>\$1,318,006</b>

**Note: All SDCs are subject to an annual inflation index and go into effect each July 1 and are charged at the time of pulling building permits. If the SDC estimate set forth**



**above is paid in full to the City on or before June 30, 2016, then the above 2015-2016 rates will apply to all of the above-listed charges and any true-up thereof.**

9.2. Planning and Building Fees. The following planning and building fees have been estimated by the City to be incurred by the District:

Planning	\$ 22,139
Building Permits	\$175,000
<b>Total</b>	<b>\$197,139</b>

10. Stormwater. The cost for stormwater management associated with the aforementioned streets to be constructed is included in the above estimated costs for the streets. On-site stormwater management shall be the responsibility and cost of the District.

11. Dry Utilities. The cost for providing dry utilities to serve the site, inclusive of any undergrounding, whether in the City's right-of-way or not, is the responsibility of the District. Dry utilities means the conduit, cable, wire, pipe, or other materials used for the transmission of electricity, fuel, natural gas, or communications that are owned, operated, and/or maintained by a private company or other public utility agency or district, and any City fiber or City/County fiber network.

12. Land Use Approvals. The District and City have worked cooperatively to determine the necessary land use development approvals to be obtained and submitted. The City has expeditiously reviewed the submittals for completeness and made its recommendations accordingly to the respective approval bodies. The District has obtained the necessary land use approvals with conditions to develop the middle school.

13. Miscellaneous.

13.1. Further Assurances. Each party shall execute and deliver any and all additional papers, documents, and other assurances, and shall do any and all acts and things reasonably necessary in connection with the performance of its obligations hereunder, in good faith, to carry out the intent of the parties hereto.

13.2. Modification or Amendment. No amendment, change, or modification of this Agreement shall be valid, unless in writing and signed by the parties hereto.

13.3. Burden and Benefit; Assignment. The covenants and agreements contained herein shall be binding upon and inure to the benefit of the parties and their successors and assigns. Neither party may assign this Agreement without the prior written consent of the other party, which consent shall not be unreasonably withheld, conditioned, or delayed.

13.4. No Continuing Waiver. The waiver by either party of any breach of this Agreement shall not operate as, or be construed to be, a waiver of any subsequent breach.

13.5. Applicable Law. This Agreement shall be interpreted under the laws of the State of Oregon.

13.6. Time of Essence. Time is expressly declared to be the essence of this Agreement.

13.7. Notices. All notices, demands, consents, approvals, and other communications which are required or desired to be given by either party to the other hereunder shall be in writing and shall be faxed, scanned to PDF format and emailed, hand delivered, or sent by overnight courier or United States Mail at its address set forth below, or at such other address as such party shall have last designated by notice to the other. Notices, demands, consents, approvals, and other communications shall be deemed given when delivered, three days after mailing by United States Mail, or upon receipt if sent by courier; provided, however, that if any such notice or other communication shall also be sent by telecopy or fax machine, such notice shall be deemed given at the time and on the date of machine transmittal.

To City: Steve R. Adams, P.E.  
Development Engineering Manager  
City of Wilsonville  
29799 SW Town Center Loop E.  
Wilsonville OR 97070

To District: West Linn-Wilsonville School District  
Attn: Bill Rhoades  
22210 SW Stafford Rd.  
Tualatin OR 97062

13.8. Rights Cumulative. All rights, remedies, powers, and privileges conferred under this Agreement on the parties shall be cumulative of and in addition to, but not restrictive of or in lieu of, those conferred by law.

13.9. Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed an original, and all of such counterparts together shall constitute one and the same instrument.

13.10. No Third Party Beneficiaries. None of the duties and obligations of any party under this Agreement shall in any way or in any manner be deemed to create any rights in any person or entity other than the parties hereto.

13.11. Dispute Resolution.

13.11.1. Mediation. All disputes arising out of this Agreement, save and except for acquisition of property subject to eminent domain, shall first be submitted to mediation. Either party desiring mediation shall provide the other party with a written notice (the “Request to Mediate”), which shall set forth the nature of the dispute. The parties shall in good faith cooperate in the selection of a mediator and may adopt any procedural format that seems appropriate for the particular dispute. In the event a written settlement agreement is not executed by the parties, in the parties’ sole discretion, within twenty (20) days from the date of the Request to Mediate, or such longer time frame as may be agreed upon in writing by the parties, then either party may make demand for arbitration pursuant to the following paragraph.

13.11.2. Arbitration. Any dispute arising under this Agreement, save and except for acquisition of property subject to eminent domain, and which is not resolved through mediation, may be submitted by either party to arbitration conducted in Portland, Oregon before a single arbitrator selected by mutual agreement of the parties. The arbitrator shall have substantial experience in commercial real estate and construction disputes. If the parties are unable to mutually select an arbitrator within 20 days, then each party shall select an arbitrator, and the two arbitrators shall select a single arbitrator. Judgment upon the arbitrator’s award may be entered in any court having jurisdiction of the matter.

13.11.3 Aid to Understanding Estimated Cost Allocation. **Exhibit D**, Advance Road Middle School Site Financial Allocation, is attached hereto and incorporated by reference herein as an aid to understanding the various estimated cost allocations set forth in this Agreement.

**14.** Deed from District to City for Park and Sports Fields Area. The District has applied to the City for a partition of its 40-acre site in order to deliver a deed to the City for the approximate 10-acre park and sports fields area, and shall cause the deed to be delivered to the City upon recordation of the partition with Clackamas County. The metes and bounds legal description is set forth in **Exhibit E**, attached hereto and incorporated by reference as if fully set forth herein. **Exhibit E** also includes in the description additional property for dedication for certain of the Advance Road improvements adjacent to the 10-acre park and sports fields. The District shall pay

for the cost of title insurance and the parties shall each pay 50% of the escrow costs in accordance with the above-recited exchange agreement.

IN WITNESS WHEREOF, the parties hereto have entered into this Agreement as of this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

WEST LINN WILSONVILLE  
SCHOOL DISTRICT

CITY OF WILSONVILLE

By: \_\_\_\_\_  
Dr. William Rhoades  
Its: Superintendent

By: \_\_\_\_\_  
Bryan Cosgrove  
Its: City Manager

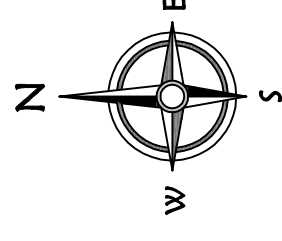
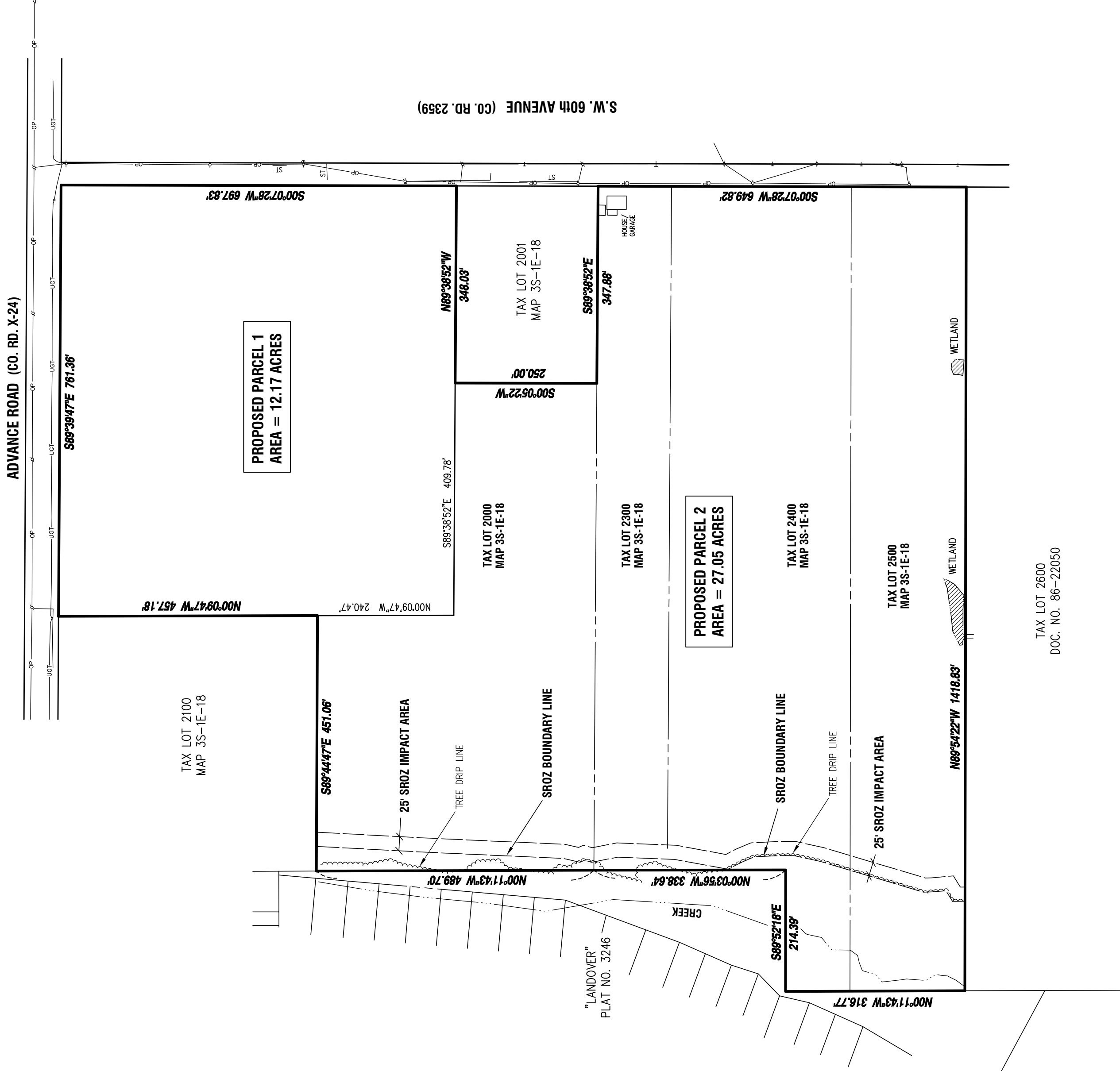
Approved as to form:

Approved as to form:

\_\_\_\_\_  
Peter R. Mersereau, OSB #732028  
District's Attorney

\_\_\_\_\_  
Barbara A. Jacobson, OSB #824630  
City Attorney

EXHIBIT "A"



Scale: 1" = 150'

- ST — STORM SEWER LINE
- UT — UNDERGROUND TELEPHONE LINE
- OP — OVERHEAD ELECTRIC LINE

OWNER/APPLICANT: TIM WOODLEY  
WEST LINN WILSONVILLE SCHOOL DISTRICT

LOCATION: NW 1/4 OF SECTION 18, T.3S., R.1E., W.M.

ACREAGE: 39.22 ACRES

SURVEYED BY: MIKE RADEMACHER  
COMPASS LAND SURVEYORS  
4107 SE INTERNATIONAL WAY, SUITE 705  
MILWAUKIE, OREGON 97222 503-653-9093

TAX LOT 2600  
DOC. NO. 86-22050

TENTATIVE PLAT

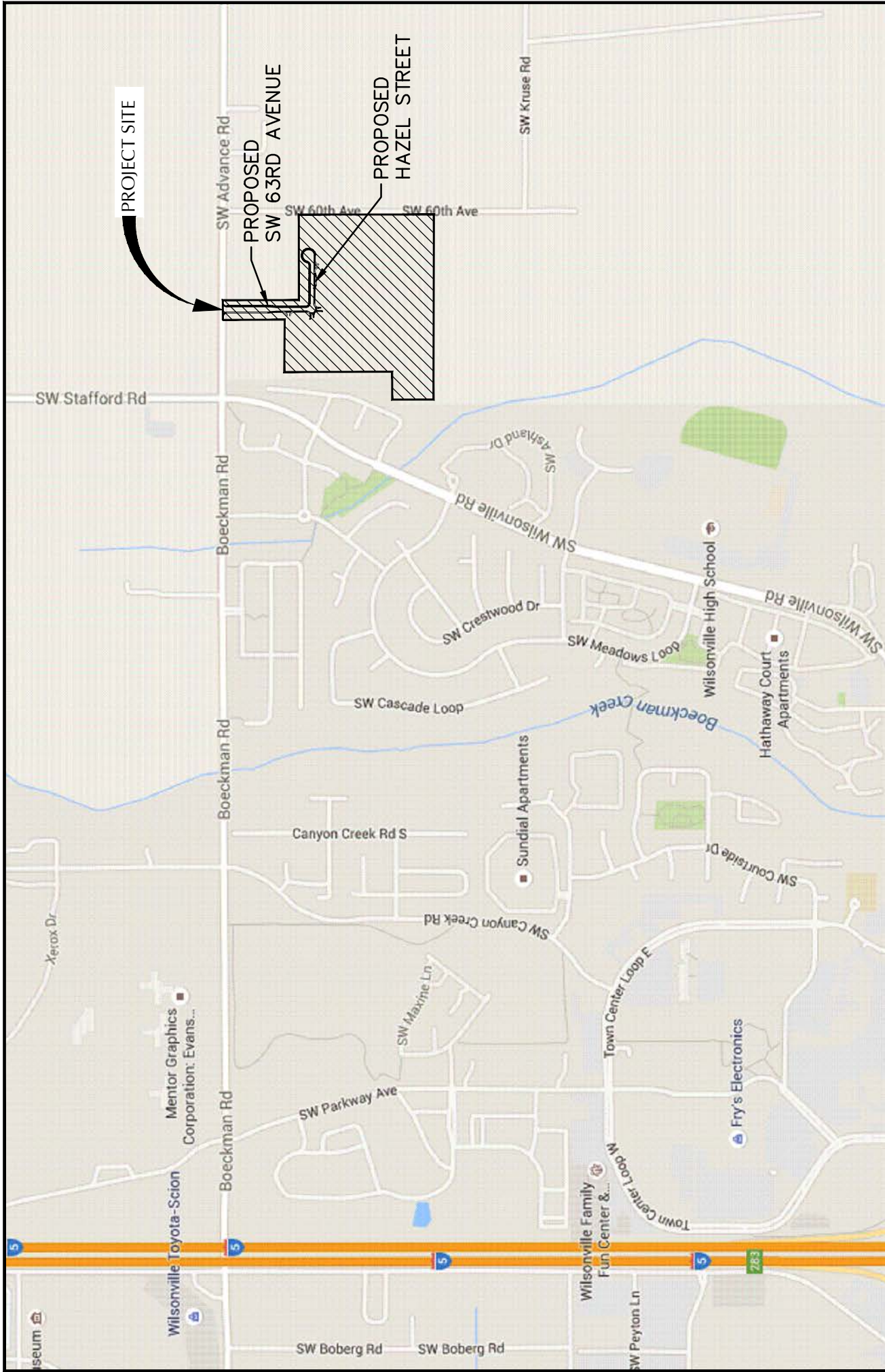
REVISIONS				
PLAN	6729 Prelim partition.dwg			
SCALE	1" = 150'	DATE	NOV., 2015	
CHECKED	MAR			

**COMPASS** Land Surveyors  
4107 SE International Way, Suite 705  
Milwaukie, Oregon 97222 503-653-9093

WEST LINN-WILSONVILLE SCHOOL DISTRICT  
22210 SW STAFFORD ROAD  
TUALATIN, OREGON 97068 503-673-7700

TAX LOTS 2000, 2300, 2400 & 2500  
T.3S., R.1E., SECTION 18  
CITY OF WILSONVILLE, CLACKAMAS COUNTY, OREGON

EXHIBIT "B"

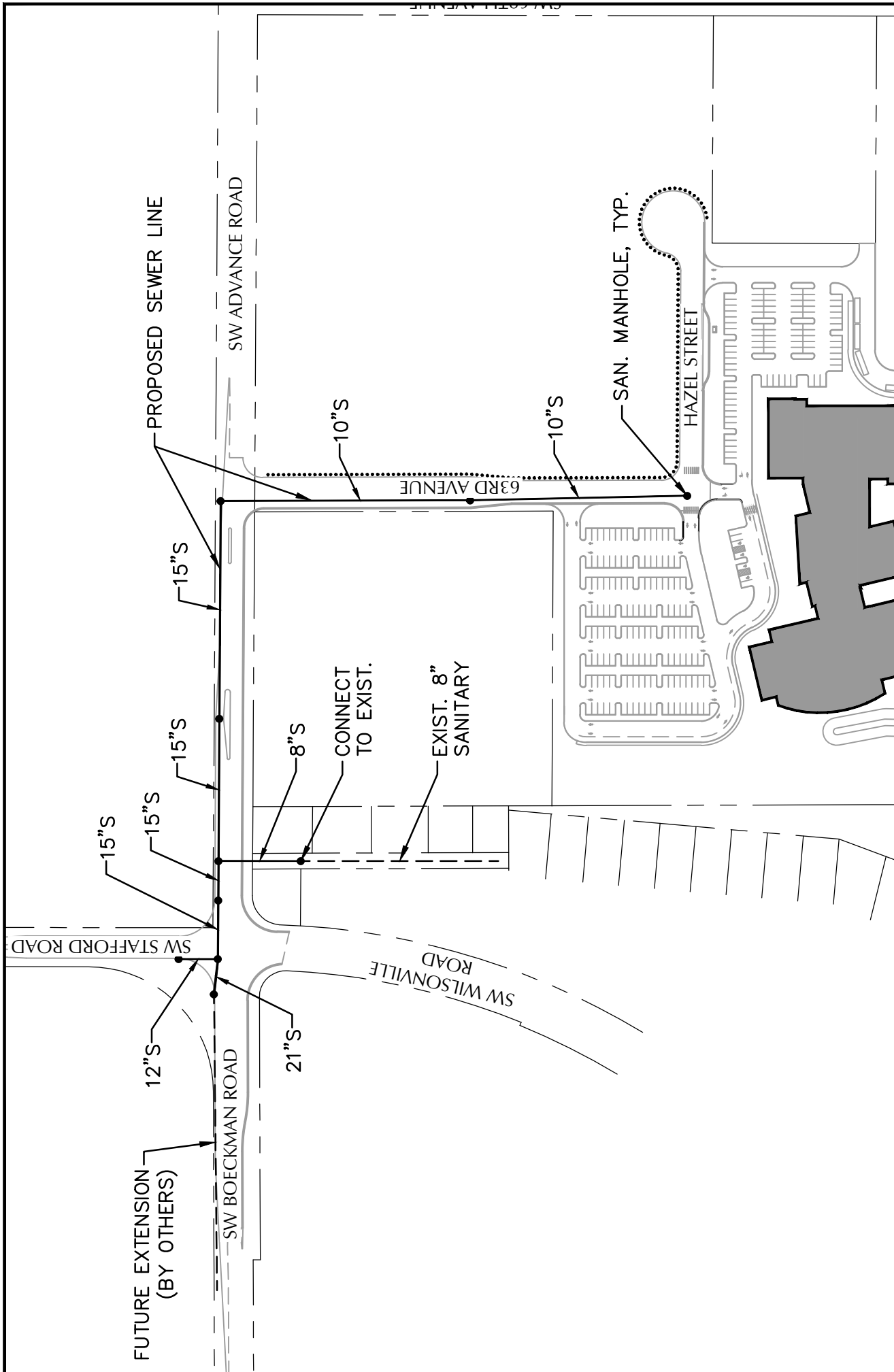


111 SW 10th Ave, Suite 2500  
Portland, OR 97204  
P: 503.274.4881  
www.kpff.com

ADVANCE ROAD MIDDLE SCHOOL  
SITE LOCATION  
WEST-LINN - WILSONVILLE SCHOOL DISTRICT

EXHIBIT B

EXHIBIT "C"



111 SW 8th Ave., Suite 2500  
 Portland, OR 97204  
 P: 503.274.4881  
 www.kpff.com

ADVANCE ROAD MIDDLE SCHOOL  
 SEWER LINE LOCATION  
 WEST-LINN - WILSONVILLE SCHOOL DISTRICT

EXH-C

**Construction Cost Estimate  
 Advance Road Middle School - Public Improvements  
 30% Design (Draft)**

**EXHIBIT "D"**

<u>WORK BREAKDOWN</u>	<u>TOTAL</u>	<u>CITY</u>	<u>DISTRICT</u>
<b>ACCESS STREET 63RD AVENUE</b> (See note 1 for cost split breakdown)	\$ 1,045,000	\$ 318,000	\$ 728,000
<b>ACCESS STREET HAZEL STREET</b> (See note 1 for cost split breakdown)	\$ 549,000	\$ 229,000	\$ 320,000
<b>ADVANCE ROAD</b> (See note 1 for cost split breakdown)	\$ 1,091,000	\$ 414,000	\$ 677,000
<b>BOECKMAN ROAD</b> (100% City)	\$ 535,000	\$ 535,000	\$ -
<b>STAFFORD ROAD</b> (100% City)	\$ 329,000	\$ 329,000	\$ -
<b>INTERSECTION OF BOECKMAN-ADVANCE / STAFFORD-WILSONVILLE ROADS</b> (75% CITY, 25% DISTRICT)	\$ 1,061,000	\$ 796,000	\$ 266,000
<b>SEWER LINE IMPROVEMENTS</b> (Advance Road/Stafford Road/Boeckman Road)	\$ 295,000	\$ 152,000	\$ 143,000
<b>WATER LINE IMPROVEMENTS</b> (12" WATER MAIN)	\$ 392,000	\$ 50,000	\$ 342,000
<b>TOTAL</b>	<b>\$ 5,297,000</b>	<b>\$ 2,823,000</b>	<b>\$ 2,476,000</b>

**General Notes:**

- For cost split breakdown, see cost split notes located at the bottom of each individual estimate
- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable



ACCESS STREET 63RD AVENUE  
30% Construction Cost Estimate (DRAFT)  
Advance Road Middle School - Public Improvements

Advance Road Middle School  
School District  
Submitted 11/25/15

ITEM NUMBER	ITEM DESCRIPTION	CITY PORTION			DISTRICT PORTION			REMARKS
		QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>								
0210-0100000A	MOBILIZATION	1 LS	\$ 19,700.00	\$ 19,700.00	1 LS	\$ 45,200.00	\$ 45,200.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 5,900.00	\$ 5,900.00	1 LS	\$ 13,500.00	\$ 13,500.00	3.0%
0280-0100000A	EROSION CONTROL	1 LS	\$ 3,900.00	\$ 3,900.00	1 LS	\$ 9,000.00	\$ 9,000.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00	1 LS	\$ 1,000.00	\$ 1,000.00	
<b>PART 00300 - ROADWORK</b>								
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 3,900.00	\$ 3,900.00	1 LS	\$ 9,000.00	\$ 9,000.00	2.0%
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 2,000.00	\$ 2,000.00	1 LS	\$ 4,500.00	\$ 4,500.00	1.0%
0330-0105000K	GENERAL EXCAVATION	600 CUVD	\$ 20.00	\$ 12,000.00	1,800 CUVD	\$ 20.00	\$ 36,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	183 SQVD	\$ 20.00	\$ 3,660.00	470 SQVD	\$ 20.00	\$ 9,400.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>								
0405-0106000K	TRENCH FOUNDATION	0 CUVD	\$ 40.00	\$ -	30 CUVD	\$ 40.00	\$ 1,200.00	
0415-0100000F	MAINLINE VIDEO INSPECTION	0 FOOT	\$ 3.00	\$ -	1,333 FOOT	\$ 3.00	\$ 3,999.00	
0445-030010BF	10 INCH SANITARY SEWER PIPE, 10 FT DEPTH	0 FOOT	\$ 70.00	\$ -	420 FOOT	\$ 70.00	\$ 29,400.00	
0445-030010CF	10 INCH SANITARY SEWER PIPE, 20 FT DEPTH	0 FOOT	\$ 140.00	\$ -	294 FOOT	\$ 140.00	\$ 41,160.00	
0445-030010ZAF	12 INCH STORM SEWER PIPE, 5 FT DEPTH	0 FOOT	\$ 55.00	\$ -	619 FOOT	\$ 55.00	\$ 34,045.00	
0470-0100000E	CONCRETE SANITARY SEWER MANHOLES	0 EACH	\$ 5,000.00	\$ -	2 EACH	\$ 5,000.00	\$ 10,000.00	
0470-0101000E	CONCRETE STORM SEWER MANHOLES	0 EACH	\$ 4,000.00	\$ -	3 EACH	\$ 4,000.00	\$ 12,000.00	
0470-NEW	CONCRETE INLETS, TYPE CG-30	0 EACH	\$ 2,000.00	\$ -	3 EACH	\$ 2,000.00	\$ 6,000.00	
0470-0311000E	CONCRETE INLETS, TYPE D	0 EACH	\$ 1,700.00	\$ -	1 EACH	\$ 1,700.00	\$ 1,700.00	
<b>PART 00600 - BASES</b>								
0640-0100000M	AGGREGATE BASE	1,100 TON	\$ 35.00	\$ 38,500.00	2,000 TON	\$ 35.00	\$ 70,000.00	
<b>PART 00700 - WEARING SURFACES</b>								
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	220 TON	\$ 100.00	\$ 22,000.00	550 TON	\$ 100.00	\$ 55,000.00	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	0 FOOT	\$ 25.00	\$ -	746 FOOT	\$ 25.00	\$ 18,650.00	
0759-0127000J	CONCRETE DRIVEWAYS, REINFORCED	0 SQFT	\$ 10.00	\$ -	522 SQFT	\$ 10.00	\$ 5,220.00	
0759-0128000J	CONCRETE WALKS	1,999 SQFT	\$ 6.00	\$ 11,994.00	1,999 SQFT	\$ 6.00	\$ 11,994.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>								
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	1 LS	\$ 2,000.00	\$ 2,000.00	City covers bike striping (say half)
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>								
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 1,000.00	\$ 1,000.00	1 LS	\$ 1,000.00	\$ 1,000.00	
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	1 EACH	\$ 6,500.00	\$ 6,500.00	3 EACH	\$ 6,500.00	\$ 19,500.00	Per DKS, assume 1 light every 150'
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>								
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 20,000.00	\$ 20,000.00	1 LS	\$ -	\$ -	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	0 EACH	\$ 600.00	\$ -	Assume city covers
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	0.0 ACRE	\$ 3,000.00	\$ -	Assume city covers
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	0.0 ACRE	\$ 4,000.00	\$ -	City covers
1040-0203000E	BOULDERS	80 EACH	\$ 200.00	\$ 16,000.00	0 EACH	\$ 200.00	\$ -	Assume city covers
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 25,000.00	\$ 25,000.00	1 LS	\$ -	\$ -	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>								
		CONSTRUCTION SUBTOTAL		\$ 196,654.00	CONSTRUCTION SUBTOTAL		\$ 451,468.00	
		CONTINGENCY (30.0%)		\$ 58,996.00	CONTINGENCY (30.0%)		\$ 135,440.00	Take after Const. Eng.
		TOTAL CONSTRUCTION COST		\$ 255,650.00	TOTAL CONSTRUCTION COST		\$ 586,908.00	
		Soft Costs @ 24%		\$ 61,356.00	Soft Costs @ 24%		\$ 140,857.92	
		TOTAL CONSTRUCTION COST WITH SOFT COSTS		\$ 317,006.00	TOTAL CONSTRUCTION COST WITH SOFT COSTS		\$ 727,765.92	
		TOTAL COSTS		\$ 3,044,771.92	TOTAL COSTS		\$ 3,044,771.92	

**Cost Split Notes:**

- The City will be responsible for 12-foot of street improvements (consisting of the two bike lanes), bike signage, bike lane striping, the east side gravel shoulder, storm swale and sidewalk, and a prorated share of streetlighting.
- The District will be responsible for all other street costs.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties

ACCESS STREET HAZEL STREET  
30% Construction Cost Estimate (DRAFT)  
Advance Road Middle School - Public Improvements

Advance Road Middle School  
School District  
Submitted 11/25/15

ITEM NUMBER	ITEM DESCRIPTION	CITY PORTION			DISTRICT PORTION			REMARKS
		QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	
PART 00200 - TEMPORARY FEATURES AND APPURTENANCES								
0210-0100000A	MOBILIZATION	1 LS	\$ 22,300.00	\$ 22,300.00			\$ 30,800.00	
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 14,200.00	\$ 14,200.00	1 LS	\$ 19,800.00	\$ 19,800.00	10.0%
0280-0100000A	EROSION CONTROL	1 LS	\$ 4,300.00	\$ 4,300.00	1 LS	\$ 6,000.00	\$ 6,000.00	3.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 2,800.00	\$ 2,800.00	1 LS	\$ 4,000.00	\$ 4,000.00	2.0%
PART 00300 - ROADWORK								
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 12,180.00	\$ 12,180.00			\$ 49,440.00	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 2,800.00	\$ 2,800.00	1 LS	\$ 4,000.00	\$ 4,000.00	2.0%
0320-0100000R	CLEARING AND GRUBBING	0.0 ACRE	\$ 1,400.00	\$ 1,400.00	1 LS	\$ 2,000.00	\$ 2,000.00	1.0%
0330-0105000K	GENERAL EXCAVATION	300 CUYD	\$ 5,000.00	\$ -	0.2 ACRE	\$ 5,000.00	\$ 1,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	99 SQYD	\$ 20.00	\$ 6,000.00	1,800 CUYD	\$ 20.00	\$ 36,000.00	
PART 00400 - DRAINAGE AND SEWERS								
PART 00600 - BASES								
0640-0100000M	AGGREGATE BASE	700 TON	\$ 35.00	\$ 24,500.00	1,300 TON	\$ 35.00	\$ 45,500.00	
PART 00700 - WEARING SURFACES								
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	120 TON	\$ 32,759.00	\$ -	380 TON	\$ 100.00	\$ 38,000.00	
0756-0104000J	PLAIN CONCRETE PAVEMENT, UNDOWELED, 9 INCHES THICK	148 SQYD	\$ 85.00	\$ 12,155.00	0 SQYD	\$ 85.00	\$ -	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	0 FOOT	\$ 25.00	\$ -	376 FOOT	\$ 25.00	\$ 9,400.00	
0759-0127000J	CONCRETE DRIVEWAYS, REINFORCED	0 SQFT	\$ 10.00	\$ -	520 SQFT	\$ 10.00	\$ 5,200.00	
0759-0128000J	CONCRETE WALKS	1,434 SQFT	\$ 6.00	\$ 8,604.00	684 SQFT	\$ 6.00	\$ 4,104.00	
PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES								
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	1 LS	\$ 2,000.00	\$ 2,000.00	City covers bike striping (say half)
PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS								
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 7,500.00	\$ 7,500.00	1 LS	\$ 1,000.00	\$ 1,000.00	
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	1 EACH	\$ 6,500.00	\$ 6,500.00	2 EACH	\$ 6,500.00	\$ 13,000.00	Per DKS, assume 1 light every 150'
PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL								
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 40,600.00	\$ 40,600.00	1 LS	\$ -	\$ -	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 10,000.00	\$ 10,000.00	0 EACH	\$ 600.00	\$ -	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	0.0 ACRE	\$ 3,000.00	\$ -	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	0.0 ACRE	\$ 4,000.00	\$ -	
1040-0203000E	BOULDERS	70 EACH	\$ 200.00	\$ 14,000.00	0 EACH	\$ 200.00	\$ -	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 15,000.00	\$ 15,000.00	1 LS	\$ -	\$ -	
PART 01100 - WATER SUPPLY SYSTEMS								
	CONSTRUCTION SUBTOTAL		\$ 141,839.00	\$ 141,839.00		\$ 198,444.00	\$ 198,444.00	
	CONTINGENCY (30.0%)		\$ 42,552.00	\$ 42,552.00		\$ 59,533.00	\$ 59,533.00	Take after Const. Eng.
	TOTAL CONSTRUCTION COST		\$ 184,391.00	\$ 184,391.00		\$ 257,977.00	\$ 257,977.00	
	Soft Costs @ 24%		\$ 44,253.84	\$ 44,253.84		\$ 61,914.48	\$ 61,914.48	
	TOTAL CONSTRUCTION COST WITH SOFT COSTS		\$ 228,644.84	\$ 228,644.84		\$ 319,891.48	\$ 319,891.48	
	TOTAL COSTS =		\$ 548,536.32	\$ 548,536.32		\$ -	\$ -	

**Cost Split Notes:**

- The City will be responsible for 12-feet of street improvements (consisting of the two bike lanes), bike signage, bike lane striping, the north side gravel shoulder and storm swale, the SMART transit stop, bus shelter and adjacent sidewalk, and a prorated share of streetlighting.
- The District will be responsible for all other street costs, including the cut-de-sac to be used as a temporary vehicle turn-around.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

ADVANCE ROAD  
30% Construction Cost Estimate (DRAFT)  
Advance Road Middle School - Public Improvements

Advance Road Middle School  
School District  
Submitted 11/25/15

ITEM NUMBER	ITEM DESCRIPTION	PART PORTION			DISTRICT PORTION			REMARKS
		QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	
PART 00200 - TEMPORARY FEATURES AND APPURTENANCES				\$ 43,180.00				
0210-0100000A	MOBILIZATION	1 LS	\$ 25,700.00	\$ 25,700.00	1 LS	\$ 42,000.00	\$ 42,000.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 7,700.00	\$ 7,700.00	1 LS	\$ 12,600.00	\$ 12,600.00	3.0%
0250-0108000F	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day
0280-0100000A	EROSION CONTROL	1 LS	\$ 5,100.00	\$ 5,100.00	1 LS	\$ 8,400.00	\$ 8,400.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00	1 LS	\$ 1,000.00	\$ 1,000.00	2.0%
PART 00300 - ROADWORK				\$ 45,648.00			\$ 64,438.00	
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 5,100.00	\$ 5,100.00	1 LS	\$ 8,400.00	\$ 8,400.00	2.0%
0310-0100000F	REMOVAL OF PIPES	204 FOOT	\$ 12.00	\$ 2,448.00	36 FOOT	\$ 12.00	\$ 432.00	Measured full length of pipes
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	86 SQYD	\$ 10.00	\$ 860.00	134 SQYD	\$ 10.00	\$ 1,340.00	
0310-0103000G	REMOVAL OF SURFACINGS	0 SQYD	\$ 6.00	\$ -	1,713 SQYD	\$ 6.00	\$ 10,278.00	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 2,600.00	\$ 2,600.00	1 LS	\$ 4,200.00	\$ 4,200.00	1.0%
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	0 FOOT	\$ 2.00	\$ -	144 FOOT	\$ 2.00	\$ 288.00	
0320-0100000R	CLEARING AND GRUBBING	0.4 ACRE	\$ 5,000.00	\$ 2,000.00	0.4 ACRE	\$ 5,000.00	\$ 2,000.00	
0330-0105000K	GENERAL EXCAVATION	1,400 CUYD	\$ 20.00	\$ 28,000.00	1,500 CUYD	\$ 20.00	\$ 30,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	232 SQYD	\$ 20.00	\$ 4,640.00	375 SQYD	\$ 20.00	\$ 7,500.00	
PART 00400 - DRAINAGE AND SEWERS				\$ 13,050.00			\$ 3,580.00	
0405-0106000K	TRENCH FOUNDATION	6 CUYD	\$ 40.00	\$ 240.00	2 CUYD	\$ 40.00	\$ 80.00	
0445-010012AF	12 INCH CULVERT PIPE, 5 FT DEPTH	202 FOOT	\$ 55.00	\$ 11,110.00	0 FOOT	\$ 55.00	\$ -	
0445-010024AF	24 INCH CULVERT PIPE, 5 FT DEPTH	24 FOOT	\$ 70.00	\$ 1,680.00	50 FOOT	\$ 70.00	\$ 3,500.00	
PART 00600 - BASES				\$ 56,000.00			\$ 63,000.00	
0640-0100000M	AGGREGATE BASE	1,600 TON	\$ 35.00	\$ 56,000.00	1,800 TON	\$ 35.00	\$ 63,000.00	
PART 00700 - WEARING SURFACES				\$ 73,595.00			\$ 106,790.00	
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	470 TON	\$ 100.00	\$ 47,000.00	670 TON	\$ 100.00	\$ 67,000.00	
0749-0100000E	EXTRA FOR ASPHALT APPROACHES	3 EACH	\$ 500.00	\$ 1,500.00	2 EACH	\$ 500.00	\$ 1,000.00	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	0 FOOT	\$ 25.00	\$ -	609 FOOT	\$ 25.00	\$ 15,225.00	
0759-0110000F	CONCRETE CURBS, STANDARD CURB	333 FOOT	\$ 25.00	\$ 8,325.00	0 FOOT	\$ 25.00	\$ -	
0759-0126000J	CONCRETE DRIVEWAYS	0 SQFT	\$ 9.00	\$ -	755 SQFT	\$ 9.00	\$ 6,795.00	
0759-0128000J	CONCRETE WALKS	2,795 SQFT	\$ 6.00	\$ 16,770.00	2,795 SQFT	\$ 6.00	\$ 16,770.00	
PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES				\$ 2,500.00			\$ 4,500.00	
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 2,500.00	\$ 2,500.00	1 LS	\$ 4,500.00	\$ 4,500.00	Per DKS, assume 1 light every 150'
PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS				\$ 1,000.00			\$ 2,000.00	
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 1,000.00	\$ 1,000.00	1 LS	\$ 2,000.00	\$ 2,000.00	
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	0 EACH	\$ 6,500.00	\$ -	4 EACH	\$ 6,500.00	\$ 26,000.00	
0990-	ALLOWANCE FOR SCHOOL SPEED ZONE FLASHERS (DKS TO DESIGN)	1 LS	\$ -	\$ -	1 LS	\$ 30,000.00	\$ 30,000.00	
PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL				\$ 21,600.00			\$ 51,700.00	
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 10,000.00	\$ 10,000.00	1 LS	\$ 10,000.00	\$ 10,000.00	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	1 EACH	\$ 600.00	\$ 600.00	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	0.1 ACRE	\$ 3,000.00	\$ 300.00	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	0.2 ACRE	\$ 4,000.00	\$ 800.00	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 10,000.00	\$ 10,000.00	1 LS	\$ 40,000.00	\$ 40,000.00	
PART 01100 - WATER SUPPLY SYSTEMS				\$ -			\$ -	
	CONSTRUCTION SUBTOTAL			\$ 256,553.00			\$ 419,688.00	
	CONTINGENCY (30.0%)			\$ 76,965.90			\$ 125,906.00	Take after Const. Eng.
	TOTAL CONSTRUCTION COST			\$ 333,518.90			\$ 545,594.00	
	Soft Costs @ 24%			\$ 80,044.56			\$ 130,942.56	
	TOTAL CONSTRUCTION COST WITH SOFT COSTS			\$ 413,563.46			\$ 676,536.56	
	TOTAL COSTS =			\$ 1,090,100.12				

Cost Split Notes:

- The City will be responsible for all roadway construction beyond 24-feet from face of curb and one-half of the 10-foot sidewalk.
- The District will be responsible for all other street costs.

General Notes:

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

**BOECKMAN ROAD**

**30% Construction Cost Estimate (DRAFT)**

**Advance Road Middle School - Public Improvements**



**CITY PORTION (100%)**

ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				\$ 54,480.00	
0210-010000A	MOBILIZATION	1 LS	\$ 33,200.00	\$ 33,200.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 10,000.00	\$ 10,000.00	3.0%
0225-0168000T	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day
0280-0100000A	EROSION CONTROL	1 LS	\$ 6,600.00	\$ 6,600.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00	
<b>PART 00300 - ROADWORK</b>				\$ 79,344.00	
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 6,600.00	\$ 6,600.00	2.0%
0310-0100000F	REMOVAL OF PIPES	80 FOOT	\$ 12.00	\$ 960.00	
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	42 SQYD	\$ 10.00	\$ 420.00	
0310-0103000J	REMOVAL OF SURFACINGS	1,116 SQYD	\$ 6.00	\$ 6,696.00	
0310-0104000E	REMOVAL OF INLETS	2 EACH	\$ 325.00	\$ 650.00	
0310-0105000E	REMOVAL OF MANHOLES	0 EACH	\$ 750.00	\$ -	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 3,300.00	\$ 3,300.00	1.0%
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	349 FOOT	\$ 2.00	\$ 698.00	
0320-0100000R	CLEARING AND GRUBBING	0.4 ACRE	\$ 5,000.00	\$ 2,000.00	
0330-0105000K	GENERAL EXCAVATION	2,500 CUYD	\$ 20.00	\$ 50,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	401 SQYD	\$ 20.00	\$ 8,020.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>				\$ -	
<b>PART 00600 - BASES</b>				\$ 77,000.00	
0640-0100000M	AGGREGATE BASE	2,200 TON	\$ 35.00	\$ 77,000.00	
<b>PART 00700 - WEARING SURFACES</b>				\$ 92,305.00	
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	780 TON	\$ 100.00	\$ 78,000.00	
0749-0100000E	EXTRA FOR ASPHALT APPROACHES	1 EACH	\$ 500.00	\$ 500.00	
0749-0106000J	EXTRA FOR ASPHALT WALKS	1,270 SQFT	\$ 4.00	\$ 5,080.00	
0756-0104000J	PLAIN CONCRETE PAVEMENT, UNDOWELED, 9 INCHES THICK	0 SQYD	\$ 85.00	\$ -	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	349 FOOT	\$ 25.00	\$ 8,725.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>				\$ 5,000.00	
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>				\$ 2,000.00	
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>				\$ 21,600.00	
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 10,000.00	\$ 10,000.00	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 10,000.00	\$ 10,000.00	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>				\$ -	
<b>CONSTRUCTION SUBTOTAL</b>				\$ 331,729.00	
<b>CONTINGENCY (30.0%)</b>				\$ 99,519.00	Take after Const. Eng.
<b>TOTAL ESTIMATED CONSTRUCTION COST</b>				\$ 431,248.00	
<b>Soft Costs @ 24%</b>				\$ 103,499.52	
<b>TOTAL ESTIMATED CONSTRUCTION COST WITH SOFT COSTS</b>				\$ 534,747.52	

**Cost Split Notes:**

- The City will be responsible for all roadway construction costs and may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

STAFFORD ROAD



30% Construction Cost Estimate (DRAFT)

Advance Road Middle School - Public Improvements

CITY PORTION (100%)

ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				\$ 35,280.00	
0210-010000A	MOBILIZATION	1 LS	\$ 20,400.00	\$ 20,400.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 6,100.00	\$ 6,100.00	3.0%
0225-0168000T	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day
0280-0100000A	EROSION CONTROL	1 LS	\$ 4,100.00	\$ 4,100.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00	
<b>PART 00300 - ROADWORK</b>				\$ 48,546.00	
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 4,100.00	\$ 4,100.00	2.0%
0310-0100000F	REMOVAL OF PIPES	16 FOOT	\$ 12.00	\$ 192.00	
0310-0101000F	REMOVAL OF CURBS	0 FOOT	\$ 4.00	\$ -	
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	0 SQYD	\$ 10.00	\$ -	
0310-0103000J	REMOVAL OF SURFACINGS	984 SQYD	\$ 6.00	\$ 5,904.00	
0310-0104000E	REMOVAL OF INLETS	0 EACH	\$ 325.00	\$ -	
0310-0105000E	REMOVAL OF MANHOLES	0 EACH	\$ 750.00	\$ -	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 2,000.00	\$ 2,000.00	1.0%
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	95 FOOT	\$ 2.00	\$ 190.00	
0320-0100000R	CLEARING AND GRUBBING	0.3 ACRE	\$ 5,000.00	\$ 1,500.00	
0330-0105000K	GENERAL EXCAVATION	1,500 CUYD	\$ 20.00	\$ 30,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	233 SQYD	\$ 20.00	\$ 4,660.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>				\$ -	
<b>PART 00600 - BASES</b>				\$ 49,000.00	
0640-0100000M	AGGREGATE BASE	1,400 TON	\$ 35.00	\$ 49,000.00	
<b>PART 00700 - WEARING SURFACES</b>				\$ 47,375.00	
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	410 TON	\$ 100.00	\$ 41,000.00	
0759-0110000F	CONCRETE CURBS, STANDARD CURB	255 FOOT	\$ 25.00	\$ 6,375.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>				\$ 5,000.00	
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>				\$ 2,000.00	
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>				\$ 16,600.00	
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 10,000.00	\$ 10,000.00	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>				\$ -	
				CONSTRUCTION SUBTOTAL \$ 203,801.00	
				CONTINGENCY (30.0%) \$ 61,140.00	Take after Const. Eng.
				TOTAL ESTIMATED CONSTRUCTION COST \$ 264,941.00	
				Soft Costs @ 24% \$ 63,585.84	
				TOTAL ESTIMATED CONSTRUCTION COST WITH SOFT COSTS \$ 328,526.84	

**Cost Split Notes:**

- The City will be responsible for all roadway construction costs and may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

**INTERSECTION OF BOECKMAN-ADVANCE / STAFFORD-WILSONVILLE ROADS**  
**30% Construction Cost Estimate (DRAFT)**  
**Public Improvements**



**SPLIT COSTS (SEE BELOW)**

ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				\$ 103,380.00	
0210-010000A	MOBILIZATION	1 LS	\$ 65,800.00	\$ 65,800.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 19,700.00	\$ 19,700.00	3.0%
0225-0168000T	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day
0280-0100000A	EROSION CONTROL	1 LS	\$ 13,200.00	\$ 13,200.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00	
<b>PART 00300 - ROADWORK</b>				\$ 75,929.00	
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 13,200.00	\$ 13,200.00	2.0%
0310-0100000F	REMOVAL OF PIPES	548 FOOT	\$ 12.00	\$ 6,576.00	Measured full length of pipes
0310-0101000F	REMOVAL OF CURBS	186 FOOT	\$ 4.00	\$ 744.00	
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	94 SQYD	\$ 10.00	\$ 940.00	
0310-0103000J	REMOVAL OF SURFACINGS	1,508 SQYD	\$ 6.00	\$ 9,048.00	
0310-0104000E	REMOVAL OF INLETS	1 EACH	\$ 325.00	\$ 325.00	
0310-0105000E	REMOVAL OF MANHOLES	2 EACH	\$ 750.00	\$ 1,500.00	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 6,600.00	\$ 6,600.00	1.0%
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	48 FOOT	\$ 2.00	\$ 96.00	
0320-0100000R	CLEARING AND GRUBBING	0.1 ACRE	\$ 5,000.00	\$ 500.00	
0330-0105000K	GENERAL EXCAVATION	1,500 CUYD	\$ 20.00	\$ 30,000.00	20,000 sf*2/27
0331-0106000J	12 INCH SUBGRADE STABILIZATION	320 SQYD	\$ 20.00	\$ 6,400.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>				\$ 60,075.00	
0405-0106000K	TRENCH FOUNDATION	10 CUYD	\$ 40.00	\$ 400.00	
0415-0100000F	MAINLINE VIDEO INSPECTION	440 FOOT	\$ 3.00	\$ 1,320.00	
0445-035012AF	12 INCH STORM SEWER PIPE, 5 FT DEPTH	27 FOOT	\$ 55.00	\$ 1,485.00	
0445-035024BF	24 INCH STORM SEWER PIPE, 10 FT DEPTH	413 FOOT	\$ 90.00	\$ 37,170.00	Includes 24 inch storm pipe to outfall
0470-0106000E	CONCRETE MANHOLES, LARGE PRECAST	2 EACH	\$ 8,000.00	\$ 16,000.00	Includes 24 inch storm MHs to outfall
0470-NEW	CONCRETE INLETS, TYPE CG-30	1 EACH	\$ 2,000.00	\$ 2,000.00	
0470-0311000E	CONCRETE INLETS, TYPE D	1 EACH	\$ 1,700.00	\$ 1,700.00	
<b>PART 00600 - BASES</b>				\$ 52,500.00	
0640-0100000M	AGGREGATE BASE	1,500 TON	\$ 35.00	\$ 52,500.00	
<b>PART 00700 - WEARING SURFACES</b>				\$ 67,771.00	
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	560 TON	\$ 100.00	\$ 56,000.00	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	191 FOOT	\$ 25.00	\$ 4,775.00	
0759-0110000F	CONCRETE CURBS, STANDARD CURB	0 FOOT	\$ 25.00	\$ -	
0759-0128000J	CONCRETE WALKS	1,166 SQFT	\$ 6.00	\$ 6,996.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>				\$ 5,000.00	
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>				\$ 267,000.00	
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 4,000.00	\$ 4,000.00	
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	2 EACH	\$ 6,500.00	\$ 13,000.00	Per DKS, assume 1 light every 150'
0990-	ALLOWANCE FOR SCHOOL SPEED ZONE FLASHERS (DKS TO DESIGN)	1 LS	\$ -	\$ -	
0990-	ALLOWANCE FOR TRAFFIC SIGNALS (DKS TO DESIGN)	1 LS	\$ 250,000.00	\$ 250,000.00	Per DKS
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>				\$ 26,300.00	
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 20,000.00	\$ 20,000.00	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	
1030-0108000R	PERMANENT SEEDING	0.1 ACRE	\$ 3,000.00	\$ 300.00	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>				\$ -	
<b>CONSTRUCTION SUBTOTAL</b>				\$ 657,955.00	
<b>CONTINGENCY (30.0%)</b>				\$ 197,387.00	Take after Const. Eng.
<b>TOTAL ESTIMATED CONSTRUCTION COST</b>				\$ 855,342.00	
<b>Soft Costs @ 24%</b>				\$ 205,282.08	
<b>TOTAL ESTIMATED CONSTRUCTION COST WITH SOFT COSTS</b>				\$ 1,060,624.08	

**Cost Split Notes:**

- The City will be responsible for 75% of the costs to rebuild and signalize this intersection.
- The District will be responsible for 25% of the costs to rebuild and signalize the intersection.
- The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

**CITY PORTION(75%) \$ 795,468.00**

**DISTRICT PORTION(25%) \$ 265,156.00**

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable



**WATER LINE IMPROVEMENTS**  
**30% Construction Cost Estimate (DRAFT)**  
**Advance Road Middle School - Public Improvements**

Advance Road Middle School  
 School District  
 Submitted 11/25/15

ITEM NUMBER	ITEM DESCRIPTION	CITY PORTION			DISTRICT PORTION			REMARKS
		QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	
PART 00200 - TEMPORARY FEATURES AND APPURTENANCES								
0210-0100000A	MOBILIZATION	1 LS	\$ 4,600.00	\$ 4,600.00			\$ 31,800.00	
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 3,100.00	\$ 3,100.00	1 LS	\$ 21,200.00	\$ 21,200.00	10.0%
0280-0100000A	EROSION CONTROL	1 LS	\$ 900.00	\$ 900.00	1 LS	\$ 6,400.00	\$ 6,400.00	3.0%
		1 LS	\$ 600.00	\$ 600.00	1 LS	\$ 4,200.00	\$ 4,200.00	2.0%
PART 00300 - ROADWORK								
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 900.00	\$ 900.00			\$ 6,300.00	2.0%
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 600.00	\$ 600.00	1 LS	\$ 4,200.00	\$ 4,200.00	1.0%
		1 LS	\$ 300.00	\$ 300.00	1 LS	\$ 2,100.00	\$ 2,100.00	
PART 00400 - DRAINAGE AND SEWERS								
PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES								
PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS								
PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL								
PART 01100 - WATER SUPPLY SYSTEMS								
1140-0145000F	6 INCH POTABLE WATER PIPE, FITTINGS & COUPLINGS WITH RESTRAINED JOINTS AND CLASS _____ BACKFILL	10 FOOT	\$ 50.00	\$ 500.00	20 FOOT	\$ 50.00	\$ 1,000.00	
1140-0145000F	12 INCH POTABLE WATER PIPE, FITTINGS & COUPLINGS WITH RESTRAINED JOINTS AND CLASS _____ BACKFILL	128 FOOT	\$ 80.00	\$ 10,240.00	1,682 FOOT	\$ 80.00	\$ 134,560.00	Includes extra lengths for 4 T fittings and 2 valves per 01140.80
1140-0300000E	12 INCH CONNECTION TO 12 INCH EXISTING MAIN	1 EACH	\$ 2,500.00	\$ 2,500.00	1 EACH	\$ 2,500.00	\$ 2,500.00	Assumed; verify w/city
1150-0100000E	12 INCH GATE VALVE	4 EACH	\$ 2,000.00	\$ 8,000.00	10 EACH	\$ 2,000.00	\$ 20,000.00	
1150-0600000E	2 INCH COMBINATION AIR RELEASE / AIR VACUUM VALVE ASSEMBLY	0 EACH	\$ 4,000.00	\$ -	2 EACH	\$ 4,000.00	\$ 8,000.00	
1160-0100000E	HYDRANT ASSEMBLIES	1 EACH	\$ 4,000.00	\$ 4,000.00	2 EACH	\$ 4,000.00	\$ 8,000.00	
		CONSTRUCTION SUBTOTAL		\$ 30,740.00	CONSTRUCTION SUBTOTAL		\$ 212,160.00	
		CONTINGENCY (30.0%)		\$ 9,222.00	CONTINGENCY (30.0%)		\$ 63,648.00	Take after Const. Eng.
		TOTAL CONSTRUCTION COST		\$ 39,962.00	TOTAL CONSTRUCTION COST		\$ 275,808.00	
		Soft Costs @ 24%		\$ 9,590.88	Soft Costs @ 24%		\$ 66,193.92	
		TOTAL CONSTRUCTION COST WITH SOFT COSTS		\$ 49,552.88	TOTAL CONSTRUCTION COST WITH SOFT COSTS		\$ 342,001.92	
		TOTAL COSTS		\$ 391,554.80	TOTAL COSTS		\$ 391,554.80	

**Cost Split Notes:**

- The cost to design and construct this 12" water main from the terminus of the existing line near the City limit on Advance Road to the school site shall be borne by the District.
- The City will be responsible for the costs to tie into the existing water main and extend the water line northward through the intersection.
- The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable



**SEWER LINE IMPROVEMENTS**  
**30% Construction Cost Estimate (DRAFT)**  
**Advance Road Middle School - Public Improvements**

Advance Road Middle School  
 School District  
 Submitted 11/25/15

**DISTRICT PORTION**

**CITY PORTION**

ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>								
0210-010000A	MOBILIZATION	1 LS	\$ 6,900.00	\$ 6,900.00	1 LS	\$ 11,400.00	\$ 11,400.00	10.0%
0225-010100A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 2,100.00	\$ 2,100.00	1 LS	\$ 3,400.00	\$ 3,400.00	3.0%
0280-010000A	EROSION CONTROL	1 LS	\$ 1,400.00	\$ 1,400.00	1 LS	\$ 2,300.00	\$ 2,300.00	2.0%
<b>PART 00300 - ROADWORK</b>								
0305-010000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 1,400.00	\$ 1,400.00	1 LS	\$ 2,300.00	\$ 2,300.00	2.0%
0310-010600A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 700.00	\$ 700.00	1 LS	\$ 1,100.00	\$ 1,100.00	1.0%
<b>PART 00400 - DRAINAGE AND SEWERS</b>								
0405-010600K	TRENCH FOUNDATION	6 CUYD	\$ 40.00	\$ 240.00	16 CUYD	\$ 40.00	\$ 640.00	
0415-010000F	MAINLINE VIDEO INSPECTION	265 FOOT	\$ 3.00	\$ 795.00	677 FOOT	\$ 3.00	\$ 2,031.00	
0445-030008B	8 INCH SANITARY SEWER PIPE, 10 FT DEPTH	0 FOOT	\$ 60.00	\$ -	126 FOOT	\$ 60.00	\$ 7,560.00	
0445-030012C	12 INCH SANITARY SEWER PIPE, 20 FT DEPTH	60 FOOT	\$ 150.00	\$ 9,000.00	0 FOOT	\$ 150.00	\$ -	
0445-030015B	15 INCH SANITARY SEWER PIPE, 10 FT DEPTH	151 FOOT	\$ 100.00	\$ 15,100.00	401 FOOT	\$ 100.00	\$ 40,100.00	
0445-030015C	15 INCH SANITARY SEWER PIPE, 20 FT DEPTH	0 FOOT	\$ 180.00	\$ -	150 FOOT	\$ 180.00	\$ 27,000.00	
0445-030020C	21 INCH SANITARY SEWER PIPE, 20 FT DEPTH	54 FOOT	\$ 210.00	\$ 11,340.00	0 FOOT	\$ 210.00	\$ -	
0470-010000E	CONCRETE SANITARY SEWER MANHOLES	4 EACH	\$ 5,000.00	\$ 20,000.00	3 EACH	\$ 5,000.00	\$ 15,000.00	
0490-010400E	CONNECTION TO EXISTING STRUCTURES	0 EACH	\$ 900.00	\$ -	1 EACH	\$ 900.00	\$ 900.00	
<b>PART 00600 - BASES</b>								
<b>PART 00700 - WEARING SURFACES</b>								
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>								
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>								
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>								
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>								
		CONSTRUCTION SUBTOTAL	\$ 68,975.00	\$ 68,975.00	CONSTRUCTION SUBTOTAL	\$ 113,731.00	\$ 113,731.00	Take after Const. Eng.
		CONTINGENCY (30.0%)	\$ 20,693.00	\$ 20,693.00	CONTINGENCY (30.0%)	\$ 34,119.00	\$ 34,119.00	
		TOTAL CONSTRUCTION COST	\$ 89,668.00	\$ 89,668.00	TOTAL CONSTRUCTION COST	\$ 147,850.00	\$ 147,850.00	
		Soft Costs @ 24%	\$ 21,520.32	\$ 21,520.32	Soft Costs @ 24%	\$ 35,484.00	\$ 35,484.00	
		TOTAL CONSTRUCTION COST WITH SOFT COSTS	\$ 111,188.32	\$ 111,188.32	TOTAL CONSTRUCTION COST WITH SOFT COSTS	\$ 183,334.00	\$ 183,334.00	

**Cost Split Notes:**

- The City will be responsible for all roadway construction beyond 24-feet from face of curb and one-half of the 10-foot sidewalk.
- The District will be responsible for all other street costs.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

Cost Difference 8" to 15" Pipe Size \$ 40,774.00 ADD'L PAVED BY CITY

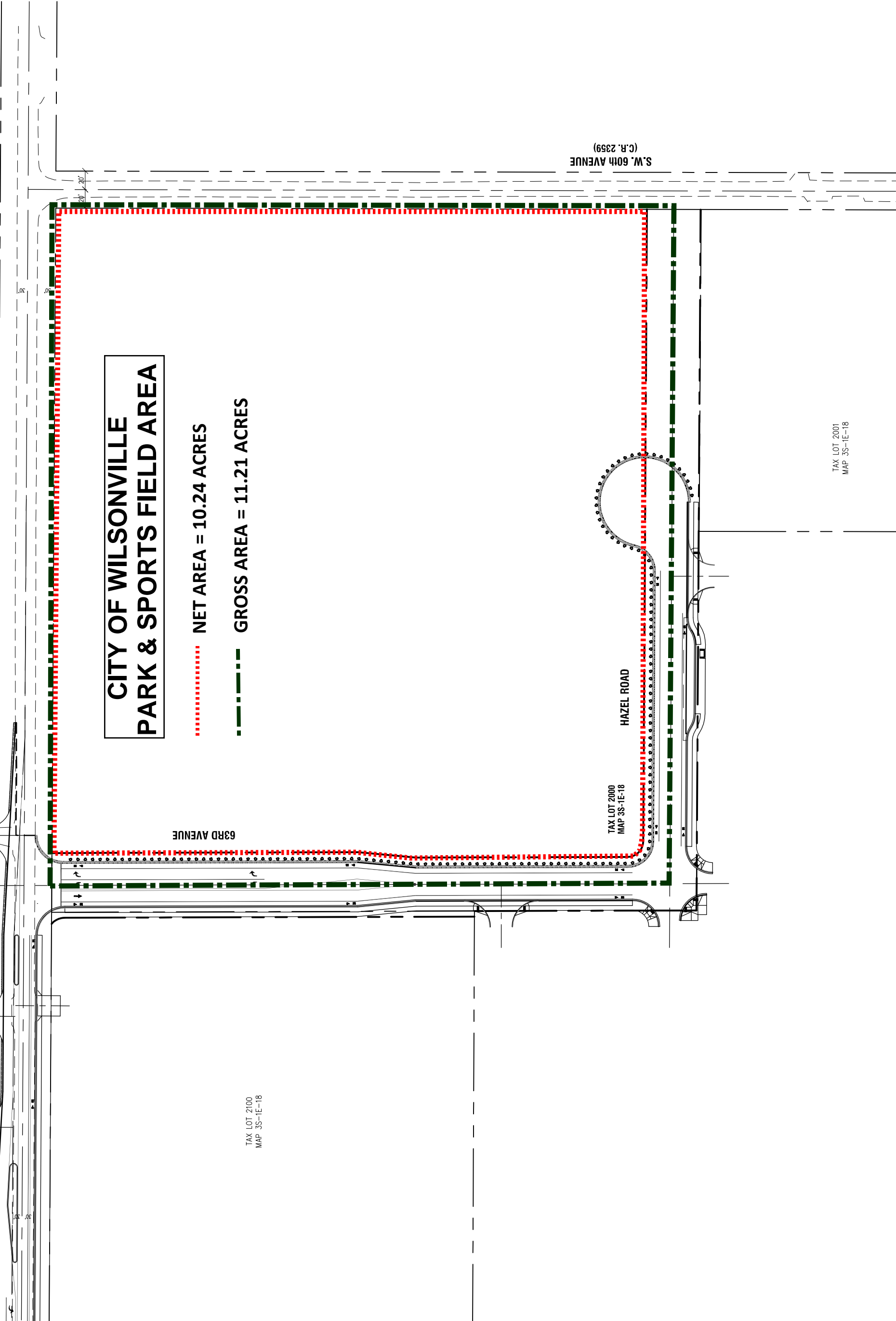
\$ 142,560.00 PAVED BY DISTRICT

TOTAL COSTS = \$ 294,522.32



ADVANCE ROAD

# EXHIBIT E



**CITY OF WILSONVILLE  
PARK & SPORTS FIELD AREA**

..... NET AREA = 10.24 ACRES

- - - - - GROSS AREA = 11.21 ACRES

63RD AVENUE

S.W. 60th AVENUE  
(C.R. 2359)

HAZEL ROAD

TAX LOT 2000  
MAP 3S-1E-18

TAX LOT 2100  
MAP 3S-1E-18

TAX LOT 2001  
MAP 3S-1E-18

EXHIBIT "E"



**MPASS**  
Land Surveyors

LEGAL DESCRIPTION  
PROPOSED PARCEL 1 (PARK)  
WEST LINN-WILSONVILLE SCHOOL DISTRICT

#6729  
11/25/15 MAR

EXHIBIT "A"

A TRACT OF LAND LOCATED IN THE NORTHWEST ONE-QUARTER OF SECTION 18, TOWNSHIP 3 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, CLACKAMAS COUNTY, OREGON, BEING DESCRIBED AS FOLLOWS:

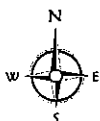
COMMENCING AT THE STONE, MARKED WITH AN "X" IN A MONUMENT BOX AT THE WEST 1/16TH CORNER COMMON TO SECTIONS 7 AND 18; THENCE S.33°52'48"W., 35.99 FEET TO THE INTERSECTION OF THE SOUTH RIGHT OF WAY LINE OF ADVANCE ROAD (COUNTY ROAD X-24) (30.00 FEET FROM CENTERLINE) AND THE WEST RIGHT OF WAY LINE OF SW 60TH AVENUE (COUNTY ROAD NO. 2359) (20.00 FEET FROM CENTERLINE) AND THE POINT OF BEGINNING; THENCE ALONG THE WEST RIGHT OF WAY LINE OF SW 60<sup>TH</sup> AVENUE, S.00°07'28"W., 697.83 FEET TO THE NORTH LINE OF THAT TRACT OF LAND DESCRIBED IN DEED TO WAYNE G. LOWRIE AND SHIRLEY L. LOWRIE, TRUSTEES OF THE LOWRIE FAMILY TRUST, RECORDED IN MAY 3, 1991, IN DOCUMENT NO. 91-20213, CLACKAMAS COUNTY DEED RECORDS; THENCE ALONG THE NORTH BOUNDARY OF SAID LOWRIE TRACT AND ITS WESTERLY EXTENSION, N.89°38'52"W. 757.81 FEET TO A POINT; THENCE N.00°09'47"W. 240.47 FEET TO A 5/8" DIAMETER IRON ROD AT THE SOUTHEAST CORNER OF THAT TRACT OF LAND DESCRIBED IN DEED TO FAY A. GYAPONG, RECORDED MARCH 3, 2014 IN DOCUMENT NO. 2014-011271, CLACKAMAS COUNTY DEED RECORDS; THENCE ALONG THE EAST LINE OF SAID GYAPONG TRACT, N.00°09'47"W. 457.18 FEET TO THE SOUTH RIGHT OF WAY LINE OF ADVANCE ROAD (COUNTY ROAD X-24) (30.00 FEET FROM CENTERLINE); THENCE ALONG SAID RIGHT OF WAY LINE, S.89°39'47"E. 761.36 FEET TO THE POINT OF BEGINNING, CONTAINING 529,961 SQUARE FEET (12.17 ACRES), MORE OR LESS.

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JULY 16, 1987  
MICHAEL A. RADEMACHER  
2303

DATE OF SIGNATURE: 11-25-15

EXPIRES: 12/31/2016



4107 SE International Way, Suite 705, Milwaukie, Oregon 97222

Phone: 503.653.9093 Fax: 503.653.9095 Email: compass@compass-landsurveyors.com

# EXHIBIT D

## Construction Cost Estimate Advance Road Middle School - Public Improvements 30% Design (Draft)

Advance Road Middle School  
School District  
Submitted 11/25/15  
Revised 12/04/2015

<u>WORK BREAKDOWN</u>	<u>TOTAL</u>	<u>CITY</u>	<u>DISTRICT</u>
<b>ACCESS STREET 63RD AVENUE</b> (See note 1 for cost split breakdown)	\$ 1,038,000	\$ 286,000	\$ 753,000
<b>ACCESS STREET HAZEL STREET</b> (See note 1 for cost split breakdown)	\$ 552,000	\$ 216,000	\$ 336,000
<b>ADVANCE ROAD</b> (See note 1 for cost split breakdown)	\$ 1,103,000	\$ 439,000	\$ 664,000
<b>BOECKMAN ROAD</b> (100% City)	\$ 535,000	\$ 535,000	\$ -
<b>STAFFORD ROAD</b> (100% City)	\$ 329,000	\$ 329,000	\$ -
<b>INTERSECTION OF BOECKMAN-ADVANCE / STAFFORD-WILSONVILLE ROADS</b> (75% CITY, 25% DISTRICT)	\$ 1,061,000	\$ 796,000	\$ 266,000
<b>SEWER LINE IMPROVEMENTS</b> (Advance Road/Stafford Road/Boeckman Road)	\$ 295,000	\$ 152,000	\$ 143,000
<b>WATER LINE IMPROVEMENTS</b> (12" WATER MAIN)	\$ 392,000	\$ 50,000	\$ 342,000
<b>TOTAL</b>	<b>\$ 5,307,000</b>	<b>\$ 2,803,000</b>	<b>\$ 2,504,000</b>

**General Notes:**

- For cost split breakdown, see cost split notes located at the bottom of each individual estimate
- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable
- Estimate includes soft costs (design, permit fees, inspections and const. management) at 24% of estimated const. costs.

**ACCESS STREET 63RD AVENUE**  
**30% Construction Cost Estimate (DRAFT)**  
**Advance Road Middle School - Public Improvements**

ITEM NUMBER	ITEM DESCRIPTION	CITY PORTION			DISTRICT PORTION			REMARKS
		QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>								
0210-0100000A	MOBILIZATION	1 LS	\$ 17,700.00	\$ 17,700.00	1 LS	\$ 46,700.00	\$ 46,700.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 5,300.00	\$ 5,300.00	1 LS	\$ 14,000.00	\$ 14,000.00	3.0%
0280-0100000A	EROSION CONTROL	1 LS	\$ 3,500.00	\$ 3,500.00	1 LS	\$ 9,300.00	\$ 9,300.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 550.00	\$ 550.00	1 LS	\$ 1,450.00	\$ 1,450.00	
<b>PART 00300 - ROADWORK</b>								
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 3,500.00	\$ 3,500.00	1 LS	\$ 9,300.00	\$ 9,300.00	2.0%
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 1,800.00	\$ 1,800.00	1 LS	\$ 4,700.00	\$ 4,700.00	1.0%
0330-0105000K	GENERAL EXCAVATION	600 CUYD	\$ 20.00	\$ 12,000.00	1,800 CUYD	\$ 20.00	\$ 36,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	183 SQYD	\$ 20.00	\$ 3,660.00	470 SQYD	\$ 20.00	\$ 9,400.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>								
0405-0106000K	TRENCH FOUNDATION	0 CUYD	\$ 40.00	\$ -	30 CUYD	\$ 40.00	\$ 1,200.00	
0415-0100000F	MAINLINE VIDEO INSPECTION	0 FOOT	\$ 3.00	\$ -	1,333 FOOT	\$ 3.00	\$ 3,999.00	
0445-0300108F	10 INCH SANITARY SEWER PIPE, 10 FT DEPTH	0 FOOT	\$ 70.00	\$ -	420 FOOT	\$ 70.00	\$ 29,400.00	
0445-030010CF	10 INCH SANITARY SEWER PIPE, 20 FT DEPTH	0 FOOT	\$ 140.00	\$ -	294 FOOT	\$ 140.00	\$ 41,160.00	
0445-035012AF	12 INCH STORM SEWER PIPE, 5 FT DEPTH	0 FOOT	\$ 55.00	\$ -	619 FOOT	\$ 55.00	\$ 34,045.00	
0470-0100000E	CONCRETE SANITARY SEWER MANHOLES	0 EACH	\$ 5,000.00	\$ -	2 EACH	\$ 5,000.00	\$ 10,000.00	
0470-0101000E	CONCRETE STORM SEWER MANHOLES	0 EACH	\$ 4,000.00	\$ -	3 EACH	\$ 4,000.00	\$ 12,000.00	
0470-NEW	CONCRETE INLETS, TYPE CG-30	0 EACH	\$ 2,000.00	\$ -	3 EACH	\$ 2,000.00	\$ 6,000.00	
0470-0311000E	CONCRETE INLETS, TYPE D	0 EACH	\$ 1,700.00	\$ -	1 EACH	\$ 1,700.00	\$ 1,700.00	
<b>PART 00600 - BASES</b>								
0640-0100000M	AGGREGATE BASE	1,000 TON	\$ 35.00	\$ 35,000.00	2,000 TON	\$ 35.00	\$ 70,000.00	
<b>PART 00700 - WEARING SURFACES</b>								
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	220 TON	\$ 100.00	\$ 22,000.00	550 TON	\$ 100.00	\$ 55,000.00	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	0 FOOT	\$ 25.00	\$ -	746 FOOT	\$ 25.00	\$ 18,650.00	
0759-0127000J	CONCRETE DRIVEWAYS, REINFORCED	0 SQFT	\$ 10.00	\$ -	522 SQFT	\$ 10.00	\$ 5,220.00	
0759-0128000J	CONCRETE WALKS	0 SQFT	\$ 6.00	\$ -	3,998 SQFT	\$ 6.00	\$ 23,988.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>								
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	1 LS	\$ 2,000.00	\$ 2,000.00	City covers bike striping (say half)
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>								
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 1,000.00	\$ 1,000.00	1 LS	\$ 1,000.00	\$ 1,000.00	
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	1 EACH	\$ 6,500.00	\$ 6,500.00	3 EACH	\$ 6,500.00	\$ 19,500.00	Per DKS, assume 1 light every 150'
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>								
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 20,000.00	\$ 20,000.00	1 LS	\$ -	\$ -	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	0 EACH	\$ 600.00	\$ -	Assume city covers
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	0.0 ACRE	\$ 3,000.00	\$ -	Assume city covers
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	0.0 ACRE	\$ 4,000.00	\$ -	City covers
1040-0203000E	BOULDERS	80 EACH	\$ 200.00	\$ 16,000.00	0 EACH	\$ 200.00	\$ -	Assume city covers
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 25,000.00	\$ 25,000.00	1 LS	\$ -	\$ -	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>								
1140-0145000F	6 INCH POTABLE WATER PIPE, FITTINGS & COUPLINGS WITH RESTRAINED JOINTS AND CLASS _____ BACKFILL	0 FOOT	\$ 50.00	\$ -	0 FOOT	\$ 50.00	\$ -	
<b>SOFT COSTS</b>		CONSTRUCTION SUBTOTAL \$ 177,110.00		CONSTRUCTION SUBTOTAL \$ 466,712.00		CONSTRUCTION SUBTOTAL \$ 466,712.00		
		CONTINGENCY (30.0%) \$ 53,133.00		CONTINGENCY (30.0%) \$ 140,014.00		CONTINGENCY (30.0%) \$ 140,014.00		Take after Const. Eng
		TOTAL CONSTRUCTION COST \$ 230,243.00		TOTAL CONSTRUCTION COST \$ 606,726.00		TOTAL CONSTRUCTION COST \$ 606,726.00		
		24% \$ 55,258.32		24% \$ 145,614.24		24% \$ 145,614.24		
		10% \$ 23,024.30		10% \$ 60,672.60		10% \$ 60,672.60		
		7% \$ 16,117.01		7% \$ 42,470.82		7% \$ 42,470.82		
		2% \$ 4,604.86		2% \$ 12,134.52		2% \$ 12,134.52		
		5% \$ 11,512.15		5% \$ 30,336.30		5% \$ 30,336.30		
		TOTAL ESTIMATED COST \$ 285,501.32		TOTAL ESTIMATED COST \$ 752,340.24		TOTAL ESTIMATED COST \$ 752,340.24		
		TOTAL COSTS \$ 1,037,841.56		TOTAL COSTS \$ 1,037,841.56		TOTAL COSTS \$ 1,037,841.56		

**Cost Split Notes:**

- The City will be responsible for 12-foot of street improvements (consisting of the two bike lanes), bike signage, bike lane striping, the east side gravel shoulder, and storm swale, and a prorated share of streetlighting.
- The District will be responsible for all other street costs.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

ACCESS STREET HAZEL STREET  
30% Construction Cost Estimate (DRAFT)  
Advance Road Middle School - Public Improvements

ITEM NUMBER	ITEM DESCRIPTION	CITY PORTION			DISTRICT PORTION			REMARKS
		QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>								60.84%
0210-0100000A	MOBILIZATION	1 LS	\$ 20,880.00	\$ 20,880.00	1 LS	\$ 20,800.00	\$ 20,800.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 4,000.00	\$ 4,000.00	1 LS	\$ 6,200.00	\$ 6,200.00	3.0%
0280-0100000A	EROSION CONTROL	1 LS	\$ 2,700.00	\$ 2,700.00	1 LS	\$ 4,200.00	\$ 4,200.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 780.00	\$ 780.00	1 LS	\$ 1,220.00	\$ 1,220.00	
<b>PART 00300 - ROADWORK</b>								
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 2,700.00	\$ 2,700.00	1 LS	\$ 4,200.00	\$ 4,200.00	2.0%
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 1,300.00	\$ 1,300.00	1 LS	\$ 2,100.00	\$ 2,100.00	1.0%
0320-0100000R	CLEARING AND GRUBBING	0.0 ACRE	\$ 5,000.00	\$ -	0.2 ACRE	\$ 5,000.00	\$ 1,000.00	
0330-0105000K	GENERAL EXCAVATION	300 CUVD	\$ 20.00	\$ 6,000.00	1,800 CUVD	\$ 20.00	\$ 36,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	99 SQYD	\$ 20.00	\$ 1,980.00	322 SQYD	\$ 20.00	\$ 6,440.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>								
<b>PART 00600 - BASES</b>								
0640-0100000M	AGGREGATE BASE	700 TON	\$ 35.00	\$ 24,500.00	1,400 TON	\$ 35.00	\$ 49,000.00	
<b>PART 00700 - WEARING SURFACES</b>								
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	120 TON	\$ 100.00	\$ 12,000.00	380 TON	\$ 100.00	\$ 38,000.00	
0756-0104000J	PLAIN CONCRETE PAVEMENT, UNDOWELED, 9 INCHES THICK	143 SQYD	\$ 85.00	\$ 12,155.00	0 SQYD	\$ 85.00	\$ -	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	0 FOOT	\$ 25.00	\$ -	376 FOOT	\$ 25.00	\$ 9,400.00	
0759-0127000J	CONCRETE DRIVEWAYS, REINFORCED	0 SQFT	\$ 10.00	\$ -	520 SQFT	\$ 10.00	\$ 5,200.00	
0759-0128000J	CONCRETE WALKS	375 SQFT	\$ 6.00	\$ 2,250.00	1,368 SQFT	\$ 6.00	\$ 8,208.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>								
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	1 LS	\$ 2,000.00	\$ 2,000.00	City covers bike striping (say half)
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>								
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 1,000.00	\$ 1,000.00	1 LS	\$ 1,000.00	\$ 1,000.00	
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	1 EACH	\$ 6,500.00	\$ 6,500.00	2 EACH	\$ 6,500.00	\$ 13,000.00	Per DKS, assume 1 light every 150'
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>								
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 10,000.00	\$ 10,000.00	1 LS	\$ -	\$ -	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	0 EACH	\$ 600.00	\$ -	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	0.0 ACRE	\$ 3,000.00	\$ -	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	0.0 ACRE	\$ 4,000.00	\$ -	
1040-0203000E	BOULDERS	70 EACH	\$ 200.00	\$ 14,000.00	0 EACH	\$ 200.00	\$ -	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 15,000.00	\$ 15,000.00	1 LS	\$ -	\$ -	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>								
<b>SOFT COSTS</b>								
CONSTRUCTION SUBTOTAL			\$ 133,865.00	\$ 133,865.00	CONSTRUCTION SUBTOTAL		\$ 207,968.00	
CONTINGENCY (30.0%)			\$ 40,160.00	\$ 40,160.00	CONTINGENCY (30.0%)		\$ 62,390.00	Take after Const. Eng.
TOTAL CONSTRUCTION COST			\$ 174,025.00	\$ 174,025.00	TOTAL CONSTRUCTION COST		\$ 270,358.00	
			24%	\$ 41,766.00			24%	\$ 64,885.92
DESIGN, ENGINEERING AND SURVEYING			10%	\$ 17,402.50			10%	\$ 27,035.80
CITY PERMIT FEE			7%	\$ 12,181.75			7%	\$ 18,925.06
GEOTECHNICAL INSPECTION			2%	\$ 3,480.50			2%	\$ 5,407.16
CONSTRUCTION MANAGEMENT			5%	\$ 8,701.25			5%	\$ 13,517.90
TOTAL ESTIMATED COST			\$ 215,791.00	\$ 215,791.00	TOTAL ESTIMATED COST		\$ 335,243.92	
TOTAL COSTS =			\$ 551,034.92	\$ 551,034.92	TOTAL COSTS =		\$ 551,034.92	

**Cost Split Notes:**

- The City will be responsible for 12-feet of street improvements (consisting of the two bike lanes), bike signage, bike lane striping, the north side gravel shoulder and storm swale, the SMART transit stop, bus shelter and adjacent sidewalk, and a prorated share of streetlighting.
- The District will be responsible for all other street costs, including the cul-de-sac to be used as a temporary vehicle turn-around.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

ADVANCE ROAD  
30% Construction Cost Estimate (DRAFT)  
Advance Road Middle School - Public Improvements

ITEM NUMBER	ITEM DESCRIPTION	CITY PORTION			DISTRICT PORTION			REMARKS
		QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				39.78%			60.22%	
0210-0100000A	MOBILIZATION	1 LS	\$ 27,200.00	\$ 27,200.00	1 LS	\$ 41,200.00	\$ 41,200.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 8,200.00	\$ 8,200.00	1 LS	\$ 12,400.00	\$ 12,400.00	3.0%
0225-0168000T	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day
0280-0100000A	EROSION CONTROL	1 LS	\$ 5,400.00	\$ 5,400.00	1 LS	\$ 8,200.00	\$ 8,200.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 800.00	\$ 800.00	1 LS	\$ 1,200.00	\$ 1,200.00	
<b>PART 00300 - ROADWORK</b>								
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 46,048.00	\$ 46,048.00	1 LS	\$ 64,138.00	\$ 64,138.00	
0310-0100000F	REMOVAL OF PIPES	1 LS	\$ 5,400.00	\$ 5,400.00	1 LS	\$ 8,200.00	\$ 8,200.00	2.0%
0310-0102000I	REMOVAL OF WALKS AND DRIVEWAYS	204 FOOT	\$ 12.00	\$ 2,448.00	36 FOOT	\$ 12.00	\$ 432.00	Measured full length of pipes
0310-0103000J	REMOVAL OF SURFACINGS	86 SQYD	\$ 10.00	\$ 860.00	134 SQYD	\$ 10.00	\$ 1,340.00	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	0 SQYD	\$ 6.00	\$ -	1,713 SQYD	\$ 6.00	\$ 10,278.00	
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	1 LS	\$ 2,700.00	\$ 2,700.00	1 LS	\$ 4,100.00	\$ 4,100.00	1.0%
0320-0100000R	CLEARING AND GRUBBING	0 FOOT	\$ 2.00	\$ -	144 FOOT	\$ 2.00	\$ 288.00	
0330-0105000K	GENERAL EXCAVATION	0.4 ACRE	\$ 5,000.00	\$ 2,000.00	0.4 ACRE	\$ 5,000.00	\$ 2,000.00	
0331-0106000I	12 INCH SUBGRADE STABILIZATION	1,400 CUYD	\$ 20.00	\$ 28,000.00	1,500 CUYD	\$ 20.00	\$ 30,000.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>								
0405-0106000K	TRENCH FOUNDATION	232 SQYD	\$ 20.00	\$ 4,640.00	375 SQYD	\$ 20.00	\$ 7,500.00	
0445-010012AF	12 INCH CULVERT PIPE, 5 FT DEPTH	6 CUYD	\$ 40.00	\$ 240.00	2 CUYD	\$ 40.00	\$ 80.00	
0445-010024AF	24 INCH CULVERT PIPE, 5 FT DEPTH	202 FOOT	\$ 55.00	\$ 11,110.00	0 FOOT	\$ 55.00	\$ -	
<b>PART 00600 - BASES</b>								
0640-0100000M	AGGREGATE BASE	24 FOOT	\$ 70.00	\$ 1,680.00	50 FOOT	\$ 70.00	\$ 3,500.00	
<b>PART 00700 - WEARING SURFACES</b>								
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	1,600 TON	\$ 35.00	\$ 56,000.00	1,800 TON	\$ 35.00	\$ 63,000.00	
0749-0100000E	EXTRA FOR ASPHALT APPROACHES	470 TON	\$ 100.00	\$ 47,000.00	670 TON	\$ 100.00	\$ 67,000.00	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	3 EACH	\$ 500.00	\$ 1,500.00	2 EACH	\$ 500.00	\$ 1,000.00	
0759-0110000F	CONCRETE CURBS, STANDARD CURB	0 FOOT	\$ 25.00	\$ -	609 FOOT	\$ 25.00	\$ 15,225.00	
0759-0126000I	CONCRETE DRIVEWAYS	333 FOOT	\$ 25.00	\$ 8,325.00	0 FOOT	\$ 25.00	\$ -	
0759-0128000I	CONCRETE WALKS	0 SQFT	\$ 9.00	\$ -	755 SQFT	\$ 9.00	\$ 6,795.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>								
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	2,795 SQFT	\$ 6.00	\$ 16,770.00	2,795 SQFT	\$ 6.00	\$ 16,770.00	
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>								
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 2,500.00	\$ 2,500.00	1 LS	\$ 4,500.00	\$ 4,500.00	
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	1 LS	\$ 1,000.00	\$ 1,000.00	1 LS	\$ 2,000.00	\$ 2,000.00	
0990-	ALLOWANCE FOR SCHOOL SPEED ZONE FLASHERS (DKS TO DESIGN)	1 LS	\$ 13,000.00	\$ 13,000.00	1 LS	\$ 19,500.00	\$ 19,500.00	40% City / 60% District
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>								
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 21,600.00	\$ 21,600.00	1 LS	\$ 51,700.00	\$ 51,700.00	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 10,000.00	\$ 10,000.00	1 EACH	\$ 10,000.00	\$ 10,000.00	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 600.00	\$ 600.00	0.1 ACRE	\$ 3,000.00	\$ 300.00	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	0.2 ACRE	\$ 4,000.00	\$ 800.00	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 10,000.00	\$ 10,000.00	1 LS	\$ 40,000.00	\$ 40,000.00	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>								
<b>SOFT COSTS</b>								
CONSTRUCTION SUBTOTAL			\$ 272,053.00	\$ 272,053.00	CONSTRUCTION SUBTOTAL		\$ 411,888.00	
CONTINGENCY (30.0%)			\$ 81,616.00	\$ 81,616.00	CONTINGENCY (30.0%)		\$ 123,566.00	Take after Const. Eng.
TOTAL CONSTRUCTION COST			\$ 353,669.00	\$ 353,669.00	TOTAL CONSTRUCTION COST		\$ 535,454.00	
			24%	\$ 84,880.56			24%	\$ 128,508.56
DESIGN, ENGINEERING AND SURVEYING			10%	\$ 35,366.90			10%	\$ 53,545.40
CITY PERMIT FEE			7%	\$ 24,756.83			7%	\$ 37,481.78
GEOTECHNICAL INSPECTION			2%	\$ 7,073.38			2%	\$ 10,709.08
CONSTRUCTION MANAGEMENT			5%	\$ 17,683.45			5%	\$ 26,772.70
TOTAL ESTIMATED COST			\$ 438,549.56	\$ 438,549.56	TOTAL ESTIMATED COST		\$ 663,962.96	
					TOTAL COSTS =		\$ 1,102,512.52	

**Cost Split Notes:**

- The City will be responsible for all roadway construction beyond 24-feet from face of curb and one-half of the 10-foot sidewalk.
- The District will be responsible for all other street costs.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

**BOECKMAN ROAD**  
**30% Construction Cost Estimate (DRAFT)**  
**Advance Road Middle School - Public Improvements**



**CITY PORTION (100%)**

ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>					\$ 54,480.00
0210-010000A	MOBILIZATION	1 LS	\$ 33,200.00	\$ 33,200.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 10,000.00	\$ 10,000.00	3.0%
0225-0168000T	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day
0280-0100000A	EROSION CONTROL	1 LS	\$ 6,600.00	\$ 6,600.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00	
<b>PART 00300 - ROADWORK</b>					\$ 79,344.00
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 6,600.00	\$ 6,600.00	2.0%
0310-0100000F	REMOVAL OF PIPES	80 FOOT	\$ 12.00	\$ 960.00	
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	42 SQYD	\$ 10.00	\$ 420.00	
0310-0103000J	REMOVAL OF SURFACINGS	1,116 SQYD	\$ 6.00	\$ 6,696.00	
0310-0104000E	REMOVAL OF INLETS	2 EACH	\$ 325.00	\$ 650.00	
0310-0105000E	REMOVAL OF MANHOLES	0 EACH	\$ 750.00	\$ -	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 3,300.00	\$ 3,300.00	1.0%
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	349 FOOT	\$ 2.00	\$ 698.00	
0320-0100000R	CLEARING AND GRUBBING	0.4 ACRE	\$ 5,000.00	\$ 2,000.00	
0330-0105000K	GENERAL EXCAVATION	2,500 CUYD	\$ 20.00	\$ 50,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	401 SQYD	\$ 20.00	\$ 8,020.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>					\$ -
<b>PART 00600 - BASES</b>					\$ 77,000.00
0640-0100000M	AGGREGATE BASE	2,200 TON	\$ 35.00	\$ 77,000.00	
<b>PART 00700 - WEARING SURFACES</b>					\$ 92,305.00
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	780 TON	\$ 100.00	\$ 78,000.00	
0749-0100000E	EXTRA FOR ASPHALT APPROACHES	1 EACH	\$ 500.00	\$ 500.00	
0749-0106000J	EXTRA FOR ASPHALT WALKS	1,270 SQFT	\$ 4.00	\$ 5,080.00	
0756-0104000J	PLAIN CONCRETE PAVEMENT, UNDOWELED, 9 INCHES THICK	0 SQYD	\$ 85.00	\$ -	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	349 FOOT	\$ 25.00	\$ 8,725.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>					\$ 5,000.00
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>					\$ 2,000.00
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>					\$ 21,600.00
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 10,000.00	\$ 10,000.00	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 10,000.00	\$ 10,000.00	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>					\$ -
				CONSTRUCTION SUBTOTAL	\$ 331,729.00
				CONTINGENCY (30.0%)	\$ 99,519.00 Take after Const. Eng.
				<b>TOTAL ESTIMATED CONSTRUCTION COST</b>	<b>\$ 431,248.00</b>
<b>SOFT COSTS</b>					\$ 103,499.52
				DESIGN, ENGINEERING AND SURVEYING	10% \$ 43,124.80
				CITY PERMIT FEE	7% \$ 30,187.36
				GEOTECHNICAL INSPECTION	2% \$ 8,624.96
				CONSTRUCTION MANAGEMENT	5% \$ 21,562.40
				<b>TOTAL ESTIMATED COST</b>	<b>\$ 534,747.52</b>

**Cost Split Notes:**

- The City will be responsible for all roadway construction costs and may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

**STAFFORD ROAD**  
**30% Construction Cost Estimate (DRAFT)**  
**Advance Road Middle School - Public Improvements**



**CITY PORTION (100%)**

ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				\$ 35,280.00	
0210-010000A	MOBILIZATION	1 LS	\$ 20,400.00	\$ 20,400.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 6,100.00	\$ 6,100.00	3.0%
0225-0168000T	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day
0280-0100000A	EROSION CONTROL	1 LS	\$ 4,100.00	\$ 4,100.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00	
<b>PART 00300 - ROADWORK</b>				\$ 48,546.00	
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 4,100.00	\$ 4,100.00	2.0%
0310-0100000F	REMOVAL OF PIPES	16 FOOT	\$ 12.00	\$ 192.00	
0310-0101000F	REMOVAL OF CURBS	0 FOOT	\$ 4.00	\$ -	
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	0 SQYD	\$ 10.00	\$ -	
0310-0103000J	REMOVAL OF SURFACINGS	984 SQYD	\$ 6.00	\$ 5,904.00	
0310-0104000E	REMOVAL OF INLETS	0 EACH	\$ 325.00	\$ -	
0310-0105000E	REMOVAL OF MANHOLES	0 EACH	\$ 750.00	\$ -	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 2,000.00	\$ 2,000.00	1.0%
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	95 FOOT	\$ 2.00	\$ 190.00	
0320-0100000R	CLEARING AND GRUBBING	0.3 ACRE	\$ 5,000.00	\$ 1,500.00	
0330-0105000K	GENERAL EXCAVATION	1,500 CUYD	\$ 20.00	\$ 30,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	233 SQYD	\$ 20.00	\$ 4,660.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>				\$ -	
<b>PART 00600 - BASES</b>				\$ 49,000.00	
0640-0100000M	AGGREGATE BASE	1,400 TON	\$ 35.00	\$ 49,000.00	
<b>PART 00700 - WEARING SURFACES</b>				\$ 47,375.00	
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	410 TON	\$ 100.00	\$ 41,000.00	
0759-0110000F	CONCRETE CURBS, STANDARD CURB	255 FOOT	\$ 25.00	\$ 6,375.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>				\$ 5,000.00	
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>				\$ 2,000.00	
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>				\$ 16,600.00	
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 10,000.00	\$ 10,000.00	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>				\$ -	
<b>CONSTRUCTION SUBTOTAL</b>				\$ 203,801.00	
<b>CONTINGENCY (30.0%)</b>				\$ 61,140.00	Take after Const. Eng.
<b>TOTAL ESTIMATED CONSTRUCTION COST</b>				\$ 264,941.00	
<b>SOFT COSTS</b>				24% \$ 63,585.84	
	DESIGN, ENGINEERING AND SURVEYING		10%	\$ 26,494.10	
	CITY PERMIT FEE		7%	\$ 18,545.87	
	GEOTECHNICAL INSPECTION		2%	\$ 5,298.82	
	CONSTRUCTION MANAGEMENT		5%	\$ 13,247.05	
<b>TOTAL ESTIMATED COST</b>				\$ 328,526.84	

**Cost Split Notes:**

- The City will be responsible for all roadway construction costs and may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable



**INTERSECTION OF BOECKMAN-ADVANCE / STAFFORD-WILSONVILLE ROADS**  
**30% Construction Cost Estimate (DRAFT)**  
**Public Improvements**



**SPLIT COSTS (SEE BELOW)**

ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	REMARKS	
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				\$	103,380.00	
0210-010000A	MOBILIZATION	1 LS	\$ 65,800.00	\$ 65,800.00	10.0%	
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 19,700.00	\$ 19,700.00	3.0%	
0225-0168000T	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day	
0280-0100000A	EROSION CONTROL	1 LS	\$ 13,200.00	\$ 13,200.00	2.0%	
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00		
<b>PART 00300 - ROADWORK</b>				\$	75,828.00	
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 13,200.00	\$ 13,200.00	2.0%	
0310-0100000F	REMOVAL OF PIPES	548 FOOT	\$ 12.00	\$ 6,576.00	Measured full length of pipes	
0310-0101000F	REMOVAL OF CURBS	186 FOOT	\$ 4.00	\$ 744.00		
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	94 SQYD	\$ 10.00	\$ 940.00		
0310-0103000J	REMOVAL OF SURFACINGS	1,508 SQYD	\$ 6.00	\$ 9,048.00		
0310-0104000E	REMOVAL OF INLETS	1 EACH	\$ 325.00	\$ 325.00		
0310-0105000E	REMOVAL OF MANHOLES	2 EACH	\$ 750.00	\$ 1,500.00		
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 6,600.00	\$ 6,600.00	1.0%	
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	48 FOOT	\$ 2.00	\$ 96.00		
0320-0100000R	CLEARING AND GRUBBING	0.1 ACRE	\$ 5,000.00	\$ 500.00		
0330-0105000K	GENERAL EXCAVATION	1,500 CUYD	\$ 20.00	\$ 30,000.00	20,000 sf*2/27	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	320 SQYD	\$ 20.00	\$ 6,400.00		
<b>PART 00400 - DRAINAGE AND SEWERS</b>				\$	60,075.00	
0405-0106000K	TRENCH FOUNDATION	10 CUYD	\$ 40.00	\$ 400.00		
0415-0100000F	MAINLINE VIDEO INSPECTION	440 FOOT	\$ 3.00	\$ 1,320.00		
0445-035012AF	12 INCH STORM SEWER PIPE, 5 FT DEPTH	27 FOOT	\$ 55.00	\$ 1,485.00		
0445-035024BF	24 INCH STORM SEWER PIPE, 10 FT DEPTH	413 FOOT	\$ 90.00	\$ 37,170.00	Includes 24 inch storm pipe to outfall	
0470-0106000E	CONCRETE MANHOLES, LARGE PRECAST	2 EACH	\$ 8,000.00	\$ 16,000.00	Includes 24 inch storm MHs to outfall	
0470-NEW	CONCRETE INLETS, TYPE CG-30	1 EACH	\$ 2,000.00	\$ 2,000.00		
0470-0311000E	CONCRETE INLETS, TYPE D	1 EACH	\$ 1,700.00	\$ 1,700.00		
<b>PART 00600 - BASES</b>				\$	52,500.00	
0640-0100000M	AGGREGATE BASE	1,500 TON	\$ 35.00	\$ 52,500.00		
<b>PART 00700 - WEARING SURFACES</b>				\$	67,771.00	
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	560 TON	\$ 100.00	\$ 56,000.00		
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	191 FOOT	\$ 25.00	\$ 4,775.00		
0759-0110000F	CONCRETE CURBS, STANDARD CURB	0 FOOT	\$ 25.00	\$ -		
0759-0128000J	CONCRETE WALKS	1,166 SQFT	\$ 6.00	\$ 6,996.00		
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>				\$	5,000.00	
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 5,000.00	\$ 5,000.00		
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>				\$	267,000.00	
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 4,000.00	\$ 4,000.00		
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	2 EACH	\$ 6,500.00	\$ 13,000.00	Per DKS, assume 1 light every 150'	
0990-	ALLOWANCE FOR SCHOOL SPEED ZONE FLASHERS (DKS TO DESIGN)	1 LS	\$ -	\$ -		
0990-	ALLOWANCE FOR TRAFFIC SIGNALS (DKS TO DESIGN)	1 LS	\$ 250,000.00	\$ 250,000.00	Per DKS	
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>				\$	26,300.00	
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 20,000.00	\$ 20,000.00		
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00		
1030-0108000R	PERMANENT SEEDING	0.1 ACRE	\$ 3,000.00	\$ 300.00		
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00		
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 5,000.00	\$ 5,000.00		
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>				\$	-	
				CONSTRUCTION SUBTOTAL	\$ 657,955.00	
				CONTINGENCY (30.0%)	\$ 197,387.00	Take after Const. Eng.
				<b>TOTAL ESTIMATED CONSTRUCTION COST</b>	<b>\$ 855,342.00</b>	
<b>SOFT COSTS</b>				24%	\$ 205,282.08	
DESIGN, ENGINEERING AND SURVEYING				10%	\$ 85,534.20	
CITY PERMIT FEE				7%	\$ 59,873.94	
GEOTECHNICAL INSPECTION				2%	\$ 17,106.84	
CONSTRUCTION MANAGEMENT				5%	\$ 42,767.10	
				<b>TOTAL ESTIMATED COST</b>	<b>\$ 1,060,624.08</b>	

**Cost Split Notes:**

- The City will be responsible for 75% of the costs to rebuild and signalize this intersection.
- The District will be responsible for 25% of the costs to rebuild and signalize the intersection.
- The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

CITY PORTION(75%)	\$ 795,468.00
DISTRICT PORTION(25%)	\$ 265,156.00

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

SEWER LINE IMPROVEMENTS  
30% Construction Cost Estimate (DRAFT)  
Advance Road Middle School - Public Improvements

Advance Road Middle School  
School District  
Submitted 12/04/15

ITEM NUMBER	ITEM DESCRIPTION	CITY PORTION			DISTRICT PORTION			REMARKS
		QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	
PART 00200 - TEMPORARY FEATURES AND APPURTENANCES								62.25%
0210-0100000A	MOBILIZATION	1 LS	\$ 6,900.00	\$ 6,900.00	1 LS	\$ 11,400.00	\$ 11,400.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 2,100.00	\$ 2,100.00	1 LS	\$ 3,400.00	\$ 3,400.00	3.0%
0280-0100000A	EROSION CONTROL	1 LS	\$ 1,400.00	\$ 1,400.00	1 LS	\$ 2,300.00	\$ 2,300.00	2.0%
PART 00300 - ROADWORK								
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 1,400.00	\$ 1,400.00	1 LS	\$ 2,300.00	\$ 2,300.00	2.0%
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 700.00	\$ 700.00	1 LS	\$ 1,100.00	\$ 1,100.00	1.0%
PART 00400 - DRAINAGE AND SEWERS								
0405-0106000K	TRENCH FOUNDATION	6 CUYD	\$ 40.00	\$ 240.00	16 CUYD	\$ 40.00	\$ 640.00	
0415-0100000F	MAINLINE VIDEO INSPECTION	265 FOOT	\$ 3.00	\$ 795.00	677 FOOT	\$ 3.00	\$ 2,031.00	
0445-0300088F	8 INCH SANITARY SEWER PIPE, 10 FT DEPTH	0 FOOT	\$ 60.00	\$ -	126 FOOT	\$ 60.00	\$ 7,560.00	
0445-030012CF	12 INCH SANITARY SEWER PIPE, 20 FT DEPTH	60 FOOT	\$ 150.00	\$ 9,000.00	0 FOOT	\$ 150.00	\$ -	
0445-030015BF	15 INCH SANITARY SEWER PIPE, 10 FT DEPTH	151 FOOT	\$ 100.00	\$ 15,100.00	401 FOOT	\$ 100.00	\$ 40,100.00	
0445-030015CF	15 INCH SANITARY SEWER PIPE, 20 FT DEPTH	0 FOOT	\$ 180.00	\$ -	150 FOOT	\$ 180.00	\$ 27,000.00	
0445-030020CF	21 INCH SANITARY SEWER PIPE, 20 FT DEPTH	54 FOOT	\$ 210.00	\$ 11,340.00	0 FOOT	\$ 210.00	\$ -	
0470-0100000E	CONCRETE SANITARY SEWER MANHOLES	4 EACH	\$ 5,000.00	\$ 20,000.00	3 EACH	\$ 5,000.00	\$ 15,000.00	
0490-0104000E	CONNECTION TO EXISTING STRUCTURES	0 EACH	\$ 900.00	\$ -	1 EACH	\$ 900.00	\$ 900.00	
PART 00600 - BASES								
0470-0100000E	CONCRETE SANITARY SEWER MANHOLES	4 EACH	\$ 5,000.00	\$ 20,000.00	3 EACH	\$ 5,000.00	\$ 15,000.00	
PART 00700 - WEARING SURFACES								
0470-0100000E	CONCRETE SANITARY SEWER MANHOLES	4 EACH	\$ 5,000.00	\$ 20,000.00	3 EACH	\$ 5,000.00	\$ 15,000.00	
PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES								
0470-0100000E	CONCRETE SANITARY SEWER MANHOLES	4 EACH	\$ 5,000.00	\$ 20,000.00	3 EACH	\$ 5,000.00	\$ 15,000.00	
PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS								
0470-0100000E	CONCRETE SANITARY SEWER MANHOLES	4 EACH	\$ 5,000.00	\$ 20,000.00	3 EACH	\$ 5,000.00	\$ 15,000.00	
PART 01100 - WATER SUPPLY SYSTEMS								
CONSTRUCTION SUBTOTAL \$ 68,975.00								CONSTRUCTION SUBTOTAL \$ 113,731.00
CONTINGENCY (30.0%) \$ 20,693.00								CONTINGENCY (30.0%) \$ 34,119.00
TOTAL CONSTRUCTION COST \$ 89,668.00								TOTAL CONSTRUCTION COST \$ 147,850.00
ADJUSTMENT								
COST DIFFERENCE 8" TO 15" PIPE SIZE								
COST FOR ADDITIONAL DEPTH OF SEWER IN ADVANCE ROAD								
TOTAL WITH ADJUSTMENT \$ 130,442.00								TOTAL ESTIMATED COST \$ 142,560.00
CONSTRUCTION SUBTOTAL \$ 113,731.00								TOTAL ESTIMATED COST \$ 142,560.00
CONTINGENCY (30.0%) \$ 34,119.00								TOTAL ESTIMATED COST \$ 142,560.00
TOTAL CONSTRUCTION COST \$ 147,850.00								TOTAL ESTIMATED COST \$ 142,560.00
ADJUSTMENT								
COST DIFFERENCE 8" TO 15" PIPE SIZE								
COST FOR ADDITIONAL DEPTH OF SEWER IN ADVANCE ROAD								
TOTAL WITH ADJUSTMENT \$ 130,442.00								TOTAL ESTIMATED COST \$ 142,560.00
CONSTRUCTION SUBTOTAL \$ 113,731.00								TOTAL ESTIMATED COST \$ 142,560.00
CONTINGENCY (30.0%) \$ 34,119.00								TOTAL ESTIMATED COST \$ 142,560.00
TOTAL CONSTRUCTION COST \$ 147,850.00								TOTAL ESTIMATED COST \$ 142,560.00

**Cost Split Notes:**

- Costs associated with upsizing this section of the sanitary sewer main within Advance Road, from Wagner Street to 63rd Avenue, from 8" to 15", and any extra depth from an 8" line required to service the school site to the 15" line for Frog Pond, would be eligible for Sanitary Sewer SDC credits.
- The City will be responsible for the costs to extend the sewer trunk line west of the Wagner Street connecting manhole. The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

WATER LINE IMPROVEMENTS  
30% Construction Cost Estimate (DRAFT)  
Advance Road Middle School - Public Improvements

Advance Road Middle School  
School District  
Submitted 12/04/15

ITEM NUMBER	ITEM DESCRIPTION	CITY PORTION			DISTRICT PORTION			ITEM COST	REMARKS
		QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST		
PART 00200 - TEMPORARY FEATURES AND APPURTENANCES									
0210-0100000A	MOBILIZATION	1	\$	4,600.00			\$	31,800.00	
0225-01010000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1	\$	3,100.00			\$	21,200.00	10.0%
0280-0100000A	EROSION CONTROL	1	\$	900.00			\$	6,400.00	3.0%
		1	\$	600.00			\$	4,200.00	2.0%
PART 00300 - ROADWORK									
0305-0100000A	CONSTRUCTION SURVEY WORK	1	\$	900.00			\$	6,300.00	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	\$	600.00			\$	4,200.00	2.0%
		1	\$	300.00			\$	2,100.00	1.0%
PART 00400 - DRAINAGE AND SEWERS									
PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES									
PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS									
PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL									
PART 01100 - WATER SUPPLY SYSTEMS									
1140-0145000F	6 INCH POTABLE WATER PIPE, FITTINGS & COUPLINGS WITH RESTRAINED JOINTS AND CLASS _____ BACKFILL	10	FOOT	\$	50.00	\$	500.00		
1140-0145000F	12 INCH POTABLE WATER PIPE, FITTINGS & COUPLINGS WITH RESTRAINED JOINTS AND CLASS _____ BACKFILL	128	FOOT	\$	80.00	\$	10,240.00		
1140-0300000E	12 INCH CONNECTION TO 12 INCH EXISTING MAIN	1	EACH	\$	2,500.00	\$	2,500.00		
1150-0100000E	12 INCH GATE VALVE	4	EACH	\$	2,000.00	\$	8,000.00		
1150-0600000E	2 INCH COMBINATION AIR RELEASE /AIR VACUUM VALVE ASSEMBLY	0	EACH	\$	4,000.00	\$	-		
1160-0100000E	HYDRANT ASSEMBLIES	1	EACH	\$	4,000.00	\$	4,000.00		
	METER AND SERVICE CONNECTION FOR L'SCAPED MEDIANS	2	EACH	\$	10,000.00	\$	20,000.00		
				CONSTRUCTION SUBTOTAL	\$	50,740.00		212,160.00	
				CONTINGENCY (30.0%)	\$	15,222.00		63,648.00	Take after Const. Eng.
				TOTAL CONSTRUCTION COST	\$	65,962.00		275,808.00	
							24%	66,193.92	
SOFT COSTS									
				CONSTRUCTION SUBTOTAL	\$	50,740.00		212,160.00	
				CONTINGENCY (30.0%)	\$	15,222.00		63,648.00	
				TOTAL CONSTRUCTION COST	\$	65,962.00		275,808.00	
							24%	66,193.92	
				DESIGN, ENGINEERING AND SURVEYING		10%	\$	27,580.80	
				CITY PERMIT FEE		7%	\$	19,306.56	
				GEOTECHNICAL INSPECTION		2%	\$	5,516.16	
				CONSTRUCTION MANAGEMENT		5%	\$	13,790.40	
				TOTAL ESTIMATED COST	\$	81,792.88		342,001.92	
				TOTAL COSTS	\$			423,794.80	

Cost Split Notes:

- The cost to design and construct this 12" water main from the terminus of the existing line near the City limit on Advance Road to the school site shall be borne by the District.
- The City will be responsible for the costs to tie into the existing water main and extend the water line northward through the intersection.
- The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

General Notes:

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

Advance Road Middle School  
 School District  
 Submitted 11/25/15  
 Revised 12/04/2015

**Construction Cost Estimate**  
**Advance Road Middle School - Public Improvements**  
**30% Design (Draft)**

<u>WORK BREAKDOWN</u>	<u>TOTAL</u>	<u>CITY</u>	<u>DISTRICT</u>
<b>ACCESS STREET 63RD AVENUE</b> (See note 1 for cost split breakdown)	\$ 1,038,000	\$ 286,000	\$ 753,000
<b>ACCESS STREET HAZEL STREET</b> (See note 1 for cost split breakdown)	\$ 552,000	\$ 216,000	\$ 336,000
<b>ADVANCE ROAD</b> (See note 1 for cost split breakdown)	\$ 1,103,000	\$ 439,000	\$ 664,000
<b>BOECKMAN ROAD</b> (100% City)	\$ 535,000	\$ 535,000	\$ -
<b>STAFFORD ROAD</b> (100% City)	\$ 329,000	\$ 329,000	\$ -
<b>INTERSECTION OF BOECKMAN-ADVANCE / STAFFORD-WILSONVILLE ROADS</b> (75% CITY, 25% DISTRICT)	\$ 1,061,000	\$ 796,000	\$ 266,000
<b>SEWER LINE IMPROVEMENTS</b> (Advance Road/Stafford Road/Boeckman Road)	\$ 295,000	\$ 152,000	\$ 143,000
<b>WATER LINE IMPROVEMENTS</b> (12" WATER MAIN)	\$ 392,000	\$ 50,000	\$ 342,000
<b>TOTAL</b>	<b>\$ 5,307,000</b>	<b>\$ 2,803,000</b>	<b>\$ 2,504,000</b>

**General Notes:**

1. For cost split breakdown, see cost split notes located at the bottom of each individual estimate
2. Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
3. Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
4. Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
5. Allowance provided for landscaping. Costs to be verified with landscape consultant
6. Estimate does not include right-of-way acquisition or settlements with adjacent private properties
7. Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable
8. Estimate includes soft costs (design, permit fees, inspections and const. management) at 24% of estimated const. costs.

**ACCESS STREET 63RD AVENUE**  
**30% Construction Cost Estimate (DRAFT)**  
**Advance Road Middle School - Public Improvements**

		CITY PORTION			DISTRICT PORTION				
		27.51%			72.49%				
ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	REMARKS	
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				\$	27,050.00		\$	71,450.00	
0210-010000A	MOBILIZATION	1 LS	\$ 17,700.00	\$ 17,700.00	1 LS	\$ 46,700.00	\$ 46,700.00	10.0%	
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 5,300.00	\$ 5,300.00	1 LS	\$ 14,000.00	\$ 14,000.00	3.0%	
0280-0100000A	EROSION CONTROL	1 LS	\$ 3,500.00	\$ 3,500.00	1 LS	\$ 9,300.00	\$ 9,300.00	2.0%	
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 550.00	\$ 550.00	1 LS	\$ 1,450.00	\$ 1,450.00		
<b>PART 00300 - ROADWORK</b>				\$	20,960.00		\$	60,400.00	
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 3,500.00	\$ 3,500.00	1 LS	\$ 9,300.00	\$ 9,300.00	2.0%	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 1,800.00	\$ 1,800.00	# 1 LS	\$ 4,700.00	\$ 4,700.00	1.0%	
0330-0105000K	GENERAL EXCAVATION	600 CUYD	\$ 20.00	\$ 12,000.00	1,800 CUYD	\$ 20.00	\$ 36,000.00		
0331-0106000J	12 INCH SUBGRADE STABILIZATION	183 SQYD	\$ 20.00	\$ 3,660.00	470 SQYD	\$ 20.00	\$ 9,400.00		
<b>PART 00400 - DRAINAGE AND SEWERS</b>				\$	-		\$	139,504.00	
0405-0106000K	TRENCH FOUNDATION	0 CUYD	\$ 40.00	\$ -	30 CUYD	\$ 40.00	\$ 1,200.00		
0415-0100000F	MAINLINE VIDEO INSPECTION	0 FOOT	\$ 3.00	\$ -	1,333 FOOT	\$ 3.00	\$ 3,999.00		
0445-030010BF	10 INCH SANITARY SEWER PIPE, 10 FT DEPTH	0 FOOT	\$ 70.00	\$ -	420 FOOT	\$ 70.00	\$ 29,400.00		
0445-030010CF	10 INCH SANITARY SEWER PIPE, 20 FT DEPTH	0 FOOT	\$ 140.00	\$ -	294 FOOT	\$ 140.00	\$ 41,160.00		
0445-035012AF	12 INCH STORM SEWER PIPE, 5 FT DEPTH	0 FOOT	\$ 55.00	\$ -	619 FOOT	\$ 55.00	\$ 34,045.00		
0470-0100000E	CONCRETE SANITARY SEWER MANHOLES	0 EACH	\$ 5,000.00	\$ -	2 EACH	\$ 5,000.00	\$ 10,000.00		
0470-0101000E	CONCRETE STORM SEWER MANHOLES	0 EACH	\$ 4,000.00	\$ -	3 EACH	\$ 4,000.00	\$ 12,000.00		
0470-NEW	CONCRETE INLETS, TYPE CG-30	0 EACH	\$ 2,000.00	\$ -	3 EACH	\$ 2,000.00	\$ 6,000.00		
0470-0311000E	CONCRETE INLETS, TYPE D	0 EACH	\$ 1,700.00	\$ -	1 EACH	\$ 1,700.00	\$ 1,700.00		
<b>PART 00600 - BASES</b>				\$	35,000.00		\$	70,000.00	
0640-0100000M	AGGREGATE BASE	1,000 TON	\$ 35.00	\$ 35,000.00	2,000 TON	\$ 35.00	\$ 70,000.00		
<b>PART 00700 - WEARING SURFACES</b>				\$	22,000.00		\$	102,858.00	
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	220 TON	\$ 100.00	\$ 22,000.00	550 TON	\$ 100.00	\$ 55,000.00		
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	0 FOOT	\$ 25.00	\$ -	746 FOOT	\$ 25.00	\$ 18,650.00		
0759-0127000J	CONCRETE DRIVEWAYS, REINFORCED	0 SQFT	\$ 10.00	\$ -	522 SQFT	\$ 10.00	\$ 5,220.00		
0759-0128000J	CONCRETE WALKS	0 SQFT	\$ 6.00	\$ -	3,998 SQFT	\$ 6.00	\$ 23,988.00		
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>				\$	2,000.00		\$	2,000.00	
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	1 LS	\$ 2,000.00	\$ 2,000.00	City covers bike striping (say half)	
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>				\$	7,500.00		\$	20,500.00	
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 1,000.00	\$ 1,000.00	1 LS	\$ 1,000.00	\$ 1,000.00		
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	1 EACH	\$ 6,500.00	\$ 6,500.00	3 EACH	\$ 6,500.00	\$ 19,500.00	Per DKS, assume 1 light every 150'	
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>				\$	62,600.00		\$	-	
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 20,000.00	\$ 20,000.00	1 LS	\$ -	\$ -		
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	0 EACH	\$ 600.00	\$ -	Assume city covers	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	0.0 ACRE	\$ 3,000.00	\$ -	Assume city covers	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	0.0 ACRE	\$ 4,000.00	\$ -	City covers	
1040-0203000E	BOULDERS	80 EACH	\$ 200.00	\$ 16,000.00	0 EACH	\$ 200.00	\$ -	Assume city covers	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 25,000.00	\$ 25,000.00	1 LS	\$ -	\$ -		
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>				\$	-		\$	-	
1140-0145000F	6 INCH POTABLE WATER PIPE, FITTINGS & COUPLINGS WITH RESTRAINED JOINTS AND CLASS _____ BACKFILL	0 FOOT	\$ 50.00	\$ -	0 FOOT	\$ 50.00	\$ -		
				CONSTRUCTION SUBTOTAL	\$ 177,110.00	CONSTRUCTION SUBTOTAL	\$ 466,712.00		
				CONTINGENCY (30.0%)	\$ 53,133.00	CONTINGENCY (30.0%)	\$ 140,014.00	Take after Const. Eng.	
				TOTAL CONSTRUCTION COST	\$ 230,243.00	TOTAL CONSTRUCTION COST	\$ 606,726.00		
<b>SOFT COSTS</b>				24%	\$ 55,258.32	24%	\$ 145,614.24		
				DESIGN, ENGINEERING AND SURVEYING	10%	\$ 23,024.30	10%	\$ 60,672.60	
				CITY PERMIT FEE	7%	\$ 16,117.01	7%	\$ 42,470.82	
				GEOTECHNICAL INSPECTION	2%	\$ 4,604.86	2%	\$ 12,134.52	
				CONSTRUCTION MANAGEMENT	5%	\$ 11,512.15	5%	\$ 30,336.30	
				TOTAL ESTIMATED COST	\$ 285,501.32	TOTAL ESTIMATED COST	\$ 752,340.24		

**Cost Split Notes:**

- The City will be responsible for 12-feet of street improvements (consisting of the two bike lanes), bike signage, bike lane striping, the east side gravel shoulder, and storm swale, and a prorated share of streetlighting.
- The District will be responsible for all other street costs.

**TOTAL COSTS \$ 1,037,841.56**

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties

**ACCESS STREET HAZEL STREET**  
**30% Construction Cost Estimate (DRAFT)**  
**Advance Road Middle School - Public Improvements**

		CITY PORTION			DISTRICT PORTION			
		39.16%			60.84%			
ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				\$ 20,880.00	\$ 32,420.00			
0210-010000A	MOBILIZATION	1 LS	\$ 13,400.00	\$ 13,400.00	1 LS	\$ 20,800.00	\$ 20,800.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 4,000.00	\$ 4,000.00	1 LS	\$ 6,200.00	\$ 6,200.00	3.0%
0280-0100000A	EROSION CONTROL	1 LS	\$ 2,700.00	\$ 2,700.00	1 LS	\$ 4,200.00	\$ 4,200.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 780.00	\$ 780.00	1 LS	\$ 1,220.00	\$ 1,220.00	
<b>PART 00300 - ROADWORK</b>				\$ 11,980.00	\$ 49,740.00			
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 2,700.00	\$ 2,700.00	1 LS	\$ 4,200.00	\$ 4,200.00	2.0%
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 1,300.00	\$ 1,300.00	1 LS	\$ 2,100.00	\$ 2,100.00	1.0%
0320-0100000R	CLEARING AND GRUBBING	0.0 ACRE	\$ 5,000.00	\$ -	0.2 ACRE	\$ 5,000.00	\$ 1,000.00	
0330-0105000K	GENERAL EXCAVATION	300 CU YD	\$ 20.00	\$ 6,000.00	1,800 CU YD	\$ 20.00	\$ 36,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	99 SQ YD	\$ 20.00	\$ 1,980.00	322 SQ YD	\$ 20.00	\$ 6,440.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>				\$ -	\$ -			
<b>PART 00600 - BASES</b>				\$ 24,500.00	\$ 49,000.00			
0640-0100000M	AGGREGATE BASE	700 TON	\$ 35.00	\$ 24,500.00	1,400 TON	\$ 35.00	\$ 49,000.00	
<b>PART 00700 - WEARING SURFACES</b>				\$ 26,405.00	\$ 60,808.00			
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	120 TON	\$ 100.00	\$ 12,000.00	380 TON	\$ 100.00	\$ 38,000.00	
0756-0104000J	PLAIN CONCRETE PAVEMENT, UNDOWELED, 9 INCHES THICK	143 SQ YD	\$ 85.00	\$ 12,155.00	0 SQ YD	\$ 85.00	\$ -	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	0 FOOT	\$ 25.00	\$ -	376 FOOT	\$ 25.00	\$ 9,400.00	
0759-0127000J	CONCRETE DRIVEWAYS, REINFORCED	0 SQ FT	\$ 10.00	\$ -	520 SQ FT	\$ 10.00	\$ 5,200.00	
0759-0128000J	CONCRETE WALKS	375 SQ FT	\$ 6.00	\$ 2,250.00	1,368 SQ FT	\$ 6.00	\$ 8,208.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>				\$ 2,000.00	\$ 2,000.00			
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	1 LS	\$ 2,000.00	\$ 2,000.00	City covers bike striping (say half)
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>				\$ 7,500.00	\$ 14,000.00			
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 1,000.00	\$ 1,000.00	1 LS	\$ 1,000.00	\$ 1,000.00	
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	1 EACH	\$ 6,500.00	\$ 6,500.00	2 EACH	\$ 6,500.00	\$ 13,000.00	Per DKS, assume 1 light every 150'
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>				\$ 40,600.00	\$ -			
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 10,000.00	\$ 10,000.00	1 LS	\$ -	\$ -	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	0 EACH	\$ 600.00	\$ -	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	0.0 ACRE	\$ 3,000.00	\$ -	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	0.0 ACRE	\$ 4,000.00	\$ -	
1040-0203000E	BOULDERS	70 EACH	\$ 200.00	\$ 14,000.00	0 EACH	\$ 200.00	\$ -	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 15,000.00	\$ 15,000.00	1 LS	\$ -	\$ -	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>				\$ -	\$ -			
				CONSTRUCTION SUBTOTAL \$ 133,865.00	CONSTRUCTION SUBTOTAL \$ 207,968.00			
				CONTINGENCY (30.0%) \$ 40,160.00	CONTINGENCY (30.0%) \$ 62,390.00			
				TOTAL CONSTRUCTION COST \$ 174,025.00	TOTAL CONSTRUCTION COST \$ 270,358.00			
<b>SOFT COSTS</b>				24% \$ 41,766.00	24% \$ 64,885.92			
				DESIGN, ENGINEERING AND SURVEYING 10% \$ 17,402.50	10% \$ 27,035.80			
				CITY PERMIT FEE 7% \$ 12,181.75	7% \$ 18,925.06			
				GEOTECHNICAL INSPECTION 2% \$ 3,480.50	2% \$ 5,407.16			
				CONSTRUCTION MANAGEMENT 5% \$ 8,701.25	5% \$ 13,517.90			
				<b>TOTAL ESTIMATED COST \$ 215,791.00</b>	<b>TOTAL ESTIMATED COST \$ 335,243.92</b>			

**Cost Split Notes:**

- The City will be responsible for 12-feet of street improvements (consisting of the two bike lanes), bike signage, bike lane striping, the north side gravel shoulder and storm swale, the SMART transit stop, bus shelter and adjacent sidewalk, and a prorated share of streetlighting.
- The District will be responsible for all other street costs, including the cul-de-sac to be used as a temporary vehicle turn-around.

**TOTAL COSTS = \$ 551,034.92**

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

## ADVANCE ROAD 30% Construction Cost Estimate (DRAFT) Advance Road Middle School - Public Improvements

		CITY PORTION 39.78%			DISTRICT PORTION 60.22%			
ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>								
0210-010000A	MOBILIZATION	1	LS \$ 27,200.00	\$ 27,200.00	1	LS \$ 41,200.00	\$ 41,200.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1	LS \$ 8,200.00	\$ 8,200.00	1	LS \$ 12,400.00	\$ 12,400.00	3.0%
0225-0168000T	FLAGGERS	80	HOUR \$ 46.00	\$ 3,680.00	80	HOUR \$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day
0280-0100000A	EROSION CONTROL	1	LS \$ 5,400.00	\$ 5,400.00	1	LS \$ 8,200.00	\$ 8,200.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1	LS \$ 800.00	\$ 800.00	1	LS \$ 1,200.00	\$ 1,200.00	
<b>PART 00300 - ROADWORK</b>								
0305-0100000A	CONSTRUCTION SURVEY WORK	1	LS \$ 5,400.00	\$ 5,400.00	1	LS \$ 8,200.00	\$ 8,200.00	2.0%
0310-0100000F	REMOVAL OF PIPES	204	FOOT \$ 12.00	\$ 2,448.00	36	FOOT \$ 12.00	\$ 432.00	Measured full length of pipes
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	86	SQYD \$ 10.00	\$ 860.00	134	SQYD \$ 10.00	\$ 1,340.00	
0310-0103000J	REMOVAL OF SURFACINGS	0	SQYD \$ 6.00	-	1,713	SQYD \$ 6.00	\$ 10,278.00	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS \$ 2,700.00	\$ 2,700.00	# 1	LS \$ 4,100.00	\$ 4,100.00	1.0%
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	0	FOOT \$ 2.00	-	144	FOOT \$ 2.00	\$ 288.00	
0320-0100000R	CLEARING AND GRUBBING	0.4	ACRE \$ 5,000.00	\$ 2,000.00	0.4	ACRE \$ 5,000.00	\$ 2,000.00	
0330-0105000K	GENERAL EXCAVATION	1,400	CUYD \$ 20.00	\$ 28,000.00	1,500	CUYD \$ 20.00	\$ 30,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	232	SQYD \$ 20.00	\$ 4,640.00	375	SQYD \$ 20.00	\$ 7,500.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>								
0405-0106000K	TRENCH FOUNDATION	6	CUYD \$ 40.00	\$ 240.00	2	CUYD \$ 40.00	\$ 80.00	
0445-010012AF	12 INCH CULVERT PIPE, 5 FT DEPTH	202	FOOT \$ 55.00	\$ 11,110.00	0	FOOT \$ 55.00	-	
0445-010024AF	24 INCH CULVERT PIPE, 5 FT DEPTH	24	FOOT \$ 70.00	\$ 1,680.00	50	FOOT \$ 70.00	\$ 3,500.00	
<b>PART 00600 - BASES</b>								
0640-0100000M	AGGREGATE BASE	1,600	TON \$ 35.00	\$ 56,000.00	1,800	TON \$ 35.00	\$ 63,000.00	
<b>PART 00700 - WEARING SURFACES</b>								
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	470	TON \$ 100.00	\$ 47,000.00	670	TON \$ 100.00	\$ 67,000.00	
0749-0100000E	EXTRA FOR ASPHALT APPROACHES	3	EACH \$ 500.00	\$ 1,500.00	2	EACH \$ 500.00	\$ 1,000.00	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	0	FOOT \$ 25.00	-	609	FOOT \$ 25.00	\$ 15,225.00	
0759-0110000F	CONCRETE CURBS, STANDARD CURB	333	FOOT \$ 25.00	\$ 8,325.00	0	FOOT \$ 25.00	-	
0759-0126000J	CONCRETE DRIVEWAYS	0	SQFT \$ 9.00	-	755	SQFT \$ 9.00	\$ 6,795.00	
0759-0128000J	CONCRETE WALKS	2,795	SQFT \$ 6.00	\$ 16,770.00	2,795	SQFT \$ 6.00	\$ 16,770.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>								
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1	LS \$ 2,500.00	\$ 2,500.00	1	LS \$ 4,500.00	\$ 4,500.00	
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>								
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1	LS \$ 1,000.00	\$ 1,000.00	1	LS \$ 2,000.00	\$ 2,000.00	
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	1	LS \$ 13,000.00	\$ 13,000.00	1	LS \$ 19,500.00	\$ 19,500.00	40% City / 60% District
0990-	ALLOWANCE FOR SCHOOL SPEED ZONE FLASHERS (DKS TO DESIGN)	1	LS \$ -	-	1	LS \$ 30,000.00	\$ 30,000.00	
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>								
1012-0100000A	WATER QUALITY SWALE	1	LS \$ 10,000.00	\$ 10,000.00	1	LS \$ 10,000.00	\$ 10,000.00	
1030-0102000E	SEEDING MOBILIZATION	1	EACH \$ 600.00	\$ 600.00	1	EACH \$ 600.00	\$ 600.00	
1030-0108000R	PERMANENT SEEDING	0.2	ACRE \$ 3,000.00	\$ 600.00	0.1	ACRE \$ 3,000.00	\$ 300.00	
1030-0118000R	WATER QUALITY SEEDING	0.1	ACRE \$ 4,000.00	\$ 400.00	0.2	ACRE \$ 4,000.00	\$ 800.00	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1	LS \$ 10,000.00	\$ 10,000.00	1	LS \$ 40,000.00	\$ 40,000.00	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>								
				CONSTRUCTION SUBTOTAL	\$	272,053.00		
				CONTINGENCY (30.0%)	\$	81,616.00		
				TOTAL CONSTRUCTION COST	\$	353,669.00		
				CONSTRUCTION SUBTOTAL	\$	411,888.00		
				CONTINGENCY (30.0%)	\$	123,566.00	Take after Const. Eng.	
				TOTAL CONSTRUCTION COST	\$	535,454.00		
<b>SOFT COSTS</b>								
		24%			\$	84,880.56		
	DESIGN, ENGINEERING AND SURVEYING	10%			\$	35,366.90		
	CITY PERMIT FEE	7%			\$	24,756.83		
	GEO TECHNICAL INSPECTION	2%			\$	7,073.38		
	CONSTRUCTION MANAGEMENT	5%			\$	17,683.45		
				TOTAL ESTIMATED COST	\$	438,549.56		
				TOTAL ESTIMATED COST	\$	663,962.96		

**Cost Split Notes:**

- The City will be responsible for all roadway construction beyond 24-feet from face of curb and one-half of the 10-foot sidewalk.
- The District will be responsible for all other street costs.

**TOTAL COSTS = \$ 1,102,512.52**

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

**BOECKMAN ROAD**  
**30% Construction Cost Estimate (DRAFT)**  
**Advance Road Middle School - Public Improvements**



**CITY PORTION (100%)**

ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				\$	54,480.00
0210-010000A	MOBILIZATION	1 LS	\$ 33,200.00	\$ 33,200.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 10,000.00	\$ 10,000.00	3.0%
0225-0168000T	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day
0280-0100000A	EROSION CONTROL	1 LS	\$ 6,600.00	\$ 6,600.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00	
<b>PART 00300 - ROADWORK</b>				\$	79,344.00
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 6,600.00	\$ 6,600.00	2.0%
0310-0100000F	REMOVAL OF PIPES	80 FOOT	\$ 12.00	\$ 960.00	
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	42 SQYD	\$ 10.00	\$ 420.00	
0310-0103000J	REMOVAL OF SURFACINGS	1,116 SQYD	\$ 6.00	\$ 6,696.00	
0310-0104000E	REMOVAL OF INLETS	2 EACH	\$ 325.00	\$ 650.00	
0310-0105000E	REMOVAL OF MANHOLES	0 EACH	\$ 750.00	\$ -	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 3,300.00	\$ 3,300.00	1.0%
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	349 FOOT	\$ 2.00	\$ 698.00	
0320-0100000R	CLEARING AND GRUBBING	0.4 ACRE	\$ 5,000.00	\$ 2,000.00	
0330-0105000K	GENERAL EXCAVATION	2,500 CUYD	\$ 20.00	\$ 50,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	401 SQYD	\$ 20.00	\$ 8,020.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>				\$	-
<b>PART 00600 - BASES</b>				\$	77,000.00
0640-0100000M	AGGREGATE BASE	2,200 TON	\$ 35.00	\$ 77,000.00	
<b>PART 00700 - WEARING SURFACES</b>				\$	92,305.00
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	780 TON	\$ 100.00	\$ 78,000.00	
0749-0100000E	EXTRA FOR ASPHALT APPROACHES	1 EACH	\$ 500.00	\$ 500.00	
0749-0106000J	EXTRA FOR ASPHALT WALKS	1,270 SQFT	\$ 4.00	\$ 5,080.00	
0756-0104000J	PLAIN CONCRETE PAVEMENT, UNDOWELED, 9 INCHES THICK	0 SQYD	\$ 85.00	\$ -	
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	349 FOOT	\$ 25.00	\$ 8,725.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>				\$	5,000.00
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>				\$	2,000.00
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>				\$	21,600.00
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 10,000.00	\$ 10,000.00	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 10,000.00	\$ 10,000.00	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>				\$	-
<b>CONSTRUCTION SUBTOTAL</b>				\$	331,729.00
<b>CONTINGENCY (30.0%)</b>				\$	99,519.00
<b>TOTAL ESTIMATED CONSTRUCTION COST</b>				\$	431,248.00
<b>SOFT COSTS</b>				24%	\$ 103,499.52
	DESIGN, ENGINEERING AND SURVEYING		10%	\$ 43,124.80	
	CITY PERMIT FEE		7%	\$ 30,187.36	
	GEOTECHNICAL INSPECTION		2%	\$ 8,624.96	
	CONSTRUCTION MANAGEMENT		5%	\$ 21,562.40	
<b>TOTAL ESTIMATED COST</b>				\$	534,747.52

**Cost Split Notes:**

- The City will be responsible for all roadway construction costs and may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable



**STAFFORD ROAD**  
**30% Construction Cost Estimate (DRAFT)**  
**Advance Road Middle School - Public Improvements**



**CITY PORTION (100%)**

ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				\$	35,280.00
0210-010000A	MOBILIZATION	1 LS	\$ 20,400.00	\$ 20,400.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 6,100.00	\$ 6,100.00	3.0%
0225-0168000T	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day
0280-0100000A	EROSION CONTROL	1 LS	\$ 4,100.00	\$ 4,100.00	2.0%
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00	
<b>PART 00300 - ROADWORK</b>				\$	48,546.00
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 4,100.00	\$ 4,100.00	2.0%
0310-0100000F	REMOVAL OF PIPES	16 FOOT	\$ 12.00	\$ 192.00	
0310-0101000F	REMOVAL OF CURBS	0 FOOT	\$ 4.00	\$ -	
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	0 SQYD	\$ 10.00	\$ -	
0310-0103000J	REMOVAL OF SURFACINGS	984 SQYD	\$ 6.00	\$ 5,904.00	
0310-0104000E	REMOVAL OF INLETS	0 EACH	\$ 325.00	\$ -	
0310-0105000E	REMOVAL OF MANHOLES	0 EACH	\$ 750.00	\$ -	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 2,000.00	\$ 2,000.00	1.0%
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	95 FOOT	\$ 2.00	\$ 190.00	
0320-0100000R	CLEARING AND GRUBBING	0.3 ACRE	\$ 5,000.00	\$ 1,500.00	
0330-0105000K	GENERAL EXCAVATION	1,500 CUYD	\$ 20.00	\$ 30,000.00	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	233 SQYD	\$ 20.00	\$ 4,660.00	
<b>PART 00400 - DRAINAGE AND SEWERS</b>				\$	-
<b>PART 00600 - BASES</b>				\$	49,000.00
0640-0100000M	AGGREGATE BASE	1,400 TON	\$ 35.00	\$ 49,000.00	
<b>PART 00700 - WEARING SURFACES</b>				\$	47,375.00
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	410 TON	\$ 100.00	\$ 41,000.00	
0759-0110000F	CONCRETE CURBS, STANDARD CURB	255 FOOT	\$ 25.00	\$ 6,375.00	
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>				\$	5,000.00
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>				\$	2,000.00
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 2,000.00	\$ 2,000.00	
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>				\$	16,600.00
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 10,000.00	\$ 10,000.00	
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00	
1030-0108000R	PERMANENT SEEDING	0.2 ACRE	\$ 3,000.00	\$ 600.00	
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00	
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 5,000.00	\$ 5,000.00	
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>				\$	-
<b>CONSTRUCTION SUBTOTAL</b>				\$	203,801.00
<b>CONTINGENCY (30.0%)</b>				\$	61,140.00
<b>TOTAL ESTIMATED CONSTRUCTION COST</b>				\$	264,941.00
<b>SOFT COSTS</b>				24%	\$ 63,585.84
	DESIGN, ENGINEERING AND SURVEYING		10%	\$ 26,494.10	
	CITY PERMIT FEE		7%	\$ 18,545.87	
	GEOTECHNICAL INSPECTION		2%	\$ 5,298.82	
	CONSTRUCTION MANAGEMENT		5%	\$ 13,247.05	
<b>TOTAL ESTIMATED COST</b>				\$	328,526.84

**Cost Split Notes:**

- The City will be responsible for all roadway construction costs and may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

**INTERSECTION OF BOECKMAN-ADVANCE / STAFFORD-WILSONVILLE ROADS**  
**30% Construction Cost Estimate (DRAFT)**  
**Public Improvements**



**SPLIT COSTS (SEE BELOW)**

ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	REMARKS	
<b>PART 00200 - TEMPORARY FEATURES AND APPURTENANCES</b>				\$	103,380.00	
0210-010000A	MOBILIZATION	1 LS	\$ 65,800.00	\$ 65,800.00	10.0%	
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1 LS	\$ 19,700.00	\$ 19,700.00	3.0%	
0225-0168000T	FLAGGERS	80 HOUR	\$ 46.00	\$ 3,680.00	2 x 5 days x 8 hrs/day	
0280-0100000A	EROSION CONTROL	1 LS	\$ 13,200.00	\$ 13,200.00	2.0%	
0290-0100000A	POLLUTION CONTROL PLAN	1 LS	\$ 1,000.00	\$ 1,000.00		
<b>PART 00300 - ROADWORK</b>				\$	75,929.00	
0305-0100000A	CONSTRUCTION SURVEY WORK	1 LS	\$ 13,200.00	\$ 13,200.00	2.0%	
0310-0100000F	REMOVAL OF PIPES	548 FOOT	\$ 12.00	\$ 6,576.00	Measured full length of pipes	
0310-0101000F	REMOVAL OF CURBS	186 FOOT	\$ 4.00	\$ 744.00		
0310-0102000J	REMOVAL OF WALKS AND DRIVEWAYS	94 SQYD	\$ 10.00	\$ 940.00		
0310-0103000J	REMOVAL OF SURFACINGS	1,508 SQYD	\$ 6.00	\$ 9,048.00		
0310-0104000E	REMOVAL OF INLETS	1 EACH	\$ 325.00	\$ 325.00		
0310-0105000E	REMOVAL OF MANHOLES	2 EACH	\$ 750.00	\$ 1,500.00		
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1 LS	\$ 6,600.00	\$ 6,600.00	1.0%	
0310-0119000F	ASPHALT PAVEMENT SAW CUTTING	48 FOOT	\$ 2.00	\$ 96.00		
0320-0100000R	CLEARING AND GRUBBING	0.1 ACRE	\$ 5,000.00	\$ 500.00		
0330-0105000K	GENERAL EXCAVATION	1,500 CUYD	\$ 20.00	\$ 30,000.00	20,000 sf*2'/27	
0331-0106000J	12 INCH SUBGRADE STABILIZATION	320 SQYD	\$ 20.00	\$ 6,400.00		
<b>PART 00400 - DRAINAGE AND SEWERS</b>				\$	60,075.00	
0405-0106000K	TRENCH FOUNDATION	10 CUYD	\$ 40.00	\$ 400.00		
0415-0100000F	MAINLINE VIDEO INSPECTION	440 FOOT	\$ 3.00	\$ 1,320.00		
0445-035012AF	12 INCH STORM SEWER PIPE, 5 FT DEPTH	27 FOOT	\$ 55.00	\$ 1,485.00		
0445-035024BF	24 INCH STORM SEWER PIPE, 10 FT DEPTH	413 FOOT	\$ 90.00	\$ 37,170.00	Includes 24 inch storm pipe to outfall	
0470-0106000E	CONCRETE MANHOLES, LARGE PRECAST	2 EACH	\$ 8,000.00	\$ 16,000.00	Includes 24 inch storm MHs to outfall	
0470-NEW	CONCRETE INLETS, TYPE CG-30	1 EACH	\$ 2,000.00	\$ 2,000.00		
0470-0311000E	CONCRETE INLETS, TYPE D	1 EACH	\$ 1,700.00	\$ 1,700.00		
<b>PART 00600 - BASES</b>				\$	52,500.00	
0640-0100000M	AGGREGATE BASE	1,500 TON	\$ 35.00	\$ 52,500.00		
<b>PART 00700 - WEARING SURFACES</b>				\$	67,771.00	
0744-0302000M	LEVEL 3, 1/2 INCH ACP MIXTURE	560 TON	\$ 100.00	\$ 56,000.00		
0759-0103000F	CONCRETE CURBS, CURB AND GUTTER	191 FOOT	\$ 25.00	\$ 4,775.00		
0759-0110000F	CONCRETE CURBS, STANDARD CURB	0 FOOT	\$ 25.00	\$ -		
0759-0128000J	CONCRETE WALKS	1,166 SQFT	\$ 6.00	\$ 6,996.00		
<b>PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES</b>				\$	5,000.00	
08XX-	ALLOWANCE FOR STRIPING (DKS TO DESIGN)	1 LS	\$ 5,000.00	\$ 5,000.00		
<b>PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS</b>				\$	267,000.00	
09XX-	ALLOWANCE FOR SIGNING (DKS TO DESIGN)	1 LS	\$ 4,000.00	\$ 4,000.00		
09XX-	ALLOWANCE FOR STREET LIGHTING (DKS TO DESIGN)	2 EACH	\$ 6,500.00	\$ 13,000.00	Per DKS, assume 1 light every 150'	
0990-	ALLOWANCE FOR SCHOOL SPEED ZONE FLASHERS (DKS TO DESIGN)	1 LS	\$ -	\$ -		
0990-	ALLOWANCE FOR TRAFFIC SIGNALS (DKS TO DESIGN)	1 LS	\$ 250,000.00	\$ 250,000.00	Per DKS	
<b>PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL</b>				\$	26,300.00	
1012-0100000A	WATER QUALITY SWALE	1 LS	\$ 20,000.00	\$ 20,000.00		
1030-0102000E	SEEDING MOBILIZATION	1 EACH	\$ 600.00	\$ 600.00		
1030-0108000R	PERMANENT SEEDING	0.1 ACRE	\$ 3,000.00	\$ 300.00		
1030-0118000R	WATER QUALITY SEEDING	0.1 ACRE	\$ 4,000.00	\$ 400.00		
1040-	ALLOWANCE FOR LANDSCAPING (WALKER MACY)	1 LS	\$ 5,000.00	\$ 5,000.00		
<b>PART 01100 - WATER SUPPLY SYSTEMS</b>				\$	-	
<b>CONSTRUCTION SUBTOTAL</b>				\$	657,955.00	
<b>CONTINGENCY (30.0%)</b>				\$	197,387.00	Take after Const. Eng.
<b>TOTAL ESTIMATED CONSTRUCTION COST</b>				\$	855,342.00	
<b>SOFT COSTS</b>				24%	\$ 205,282.08	
	DESIGN, ENGINEERING AND SURVEYING		10%	\$ 85,534.20		
	CITY PERMIT FEE		7%	\$ 59,873.94		
	GEOTECHNICAL INSPECTION		2%	\$ 17,106.84		
	CONSTRUCTION MANAGEMENT		5%	\$ 42,767.10		
<b>TOTAL ESTIMATED COST</b>				\$	1,060,624.08	

**Cost Split Notes:**

- The City will be responsible for 75% of the costs to rebuild and signalize this intersection.
- The District will be responsible for 25% of the costs to rebuild and signalize the intersection.
- The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

CITY PORTION(75%)	\$ 795,468.00
DISTRICT PORTION(25%)	\$ 265,156.00

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

## SEWER LINE IMPROVEMENTS 30% Construction Cost Estimate (DRAFT) Advance Road Middle School - Public Improvements

		CITY PORTION 37.75%			DISTRICT PORTION 62.25%			
ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST	QUANTITY	UNIT PRICE	ITEM COST	REMARKS
PART 00200 - TEMPORARY FEATURES AND APPURTENANCES				\$	10,400.00			
0210-010000A	MOBILIZATION	1	LS \$ 6,900.00	\$ 6,900.00	1	LS \$ 11,400.00	\$ 11,400.00	10.0%
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1	LS \$ 2,100.00	\$ 2,100.00	1	LS \$ 3,400.00	\$ 3,400.00	3.0%
0280-0100000A	EROSION CONTROL	1	LS \$ 1,400.00	\$ 1,400.00	1	LS \$ 2,300.00	\$ 2,300.00	2.0%
PART 00300 - ROADWORK				\$	2,100.00			
0305-0100000A	CONSTRUCTION SURVEY WORK	1	LS \$ 1,400.00	\$ 1,400.00	1	LS \$ 2,300.00	\$ 2,300.00	2.0%
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS \$ 700.00	\$ 700.00	# 1	LS \$ 1,100.00	\$ 1,100.00	1.0%
PART 00400 - DRAINAGE AND SEWERS				\$	56,475.00			
0405-0106000K	TRENCH FOUNDATION	6	CUYD \$ 40.00	\$ 240.00	16	CUYD \$ 40.00	\$ 640.00	
0415-0100000F	MAINLINE VIDEO INSPECTION	265	FOOT \$ 3.00	\$ 795.00	677	FOOT \$ 3.00	\$ 2,031.00	
0445-030008BF	8 INCH SANITARY SEWER PIPE, 10 FT DEPTH	0	FOOT \$ 60.00	\$ -	126	FOOT \$ 60.00	\$ 7,560.00	
0445-030012CF	12 INCH SANITARY SEWER PIPE, 20 FT DEPTH	60	FOOT \$ 150.00	\$ 9,000.00	0	FOOT \$ 150.00	\$ -	
0445-030015BF	15 INCH SANITARY SEWER PIPE, 10 FT DEPTH	151	FOOT \$ 100.00	\$ 15,100.00	401	FOOT \$ 100.00	\$ 40,100.00	
0445-030015CF	15 INCH SANITARY SEWER PIPE, 20 FT DEPTH	0	FOOT \$ 180.00	\$ -	150	FOOT \$ 180.00	\$ 27,000.00	
0445-030020CF	21 INCH SANITARY SEWER PIPE, 20 FT DEPTH	54	FOOT \$ 210.00	\$ 11,340.00	0	FOOT \$ 210.00	\$ -	
0470-0100000E	CONCRETE SANITARY SEWER MANHOLES	4	EACH \$ 5,000.00	\$ 20,000.00	3	EACH \$ 5,000.00	\$ 15,000.00	
0490-0104000E	CONNECTION TO EXISTING STRUCTURES	0	EACH \$ 900.00	\$ -	1	EACH \$ 900.00	\$ 900.00	
PART 00600 - BASES				\$	-			
PART 00700 - WEARING SURFACES				\$	-			
PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES				\$	-			
PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS				\$	-			
PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL				\$	-			
PART 01100 - WATER SUPPLY SYSTEMS				\$	-			
CONSTRUCTION SUBTOTAL				\$	68,975.00	CONSTRUCTION SUBTOTAL \$ 113,731.00		
CONTINGENCY (30.0%)				\$	20,693.00	CONTINGENCY (30.0%) \$ 34,119.00		Take after Const. Eng.
TOTAL CONSTRUCTION COST				\$	89,668.00	TOTAL CONSTRUCTION COST \$ 147,850.00		
ADJUSTMENT								
	COST DIFFERENCE 8" TO 15" PIPE SIZE			\$ 40,774.00			\$ (40,774.00)	
	COST FOR ADDITIONAL DEPTH OF SEWER IN ADVANCE ROAD			\$ -			\$ -	To be determined.
TOTAL WITH ADJUSTMENT				\$	130,442.00	\$ 107,076.00		
SOFT COSTS				24%	\$ 21,520.32	24%	\$ 35,484.00	
	DESIGN, ENGINEERING AND SURVEYING		10%	\$ 8,966.80		10%	\$ 14,785.00	
	CITY PERMIT FEE		7%	\$ 6,276.76		7%	\$ 10,349.50	
	GEOTECHNICAL INSPECTION		2%	\$ 1,793.36		2%	\$ 2,957.00	
	CONSTRUCTION MANAGEMENT		5%	\$ 4,483.40		5%	\$ 7,392.50	
TOTAL ESTIMATED COST				\$	151,962.32	TOTAL ESTIMATED COST \$ 142,560.00		

**Cost Split Notes:**

- Costs associated with upsizing this section of the sanitary sewer main within Advance Road, from Wagner Street to 63rd Avenue, from 8" to 15", and any extra depth from an 8" line required to service the school site to the 15" line for Frog Pond, would be eligible for Sanitary Sewer SDC credits.
- The City will be responsible for the costs to extend the sewer trunk line west of the Wagner Street connecting manhole. The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Conceptual Plan development area.

**TOTAL COSTS = \$ 294,522.32**

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable



## WATER LINE IMPROVEMENTS 30% Construction Cost Estimate (DRAFT) Advance Road Middle School - Public Improvements

		CITY PORTION			19.30%	DISTRICT PORTION			80.70%	
ITEM NUMBER	ITEM DESCRIPTION	QUANTITY	UNIT PRICE	ITEM COST		QUANTITY	UNIT PRICE	ITEM COST		REMARKS
PART 00200 - TEMPORARY FEATURES AND APPURTENANCES				\$ 4,600.00				\$ 31,800.00		
0210-010000A	MOBILIZATION	1	LS \$ 3,100.00	\$ 3,100.00		1	LS \$ 21,200.00	\$ 21,200.00	10.0%	
0225-0101000A	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1	LS \$ 900.00	\$ 900.00		1	LS \$ 6,400.00	\$ 6,400.00	3.0%	
0280-0100000A	EROSION CONTROL	1	LS \$ 600.00	\$ 600.00		1	LS \$ 4,200.00	\$ 4,200.00	2.0%	
PART 00300 - ROADWORK				\$ 900.00				\$ 6,300.00		
0305-0100000A	CONSTRUCTION SURVEY WORK	1	LS \$ 600.00	\$ 600.00		1	LS \$ 4,200.00	\$ 4,200.00	2.0%	
0310-0106000A	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	LS \$ 300.00	\$ 300.00	#	1	LS \$ 2,100.00	\$ 2,100.00	1.0%	
PART 00400 - DRAINAGE AND SEWERS				\$ -				\$ -		
PART 00800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES				\$ -				\$ -		
PART 00900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS				\$ -				\$ -		
PART 01000 - RIGHT OF WAY DEVELOPMENT AND CONTROL				\$ -				\$ -		
PART 01100 - WATER SUPPLY SYSTEMS				\$ 45,240.00				\$ 174,060.00		
1140-0145000F	6 INCH POTABLE WATER PIPE, FITTINGS & COUPLINGS WITH RESTRAINED JOINTS AND CLASS ____ BACKFILL	10	FOOT \$ 50.00	\$ 500.00		20	FOOT \$ 50.00	\$ 1,000.00		
1140-0145000F	12 INCH POTABLE WATER PIPE, FITTINGS & COUPLINGS WITH RESTRAINED JOINTS AND CLASS ____ BACKFILL	128	FOOT \$ 80.00	\$ 10,240.00		1,682	FOOT \$ 80.00	\$ 134,560.00		Includes extra lengths for 4 T Fittings and 2 valves per 01140.80
1140-0300000E	12 INCH CONNECTION TO 12 INCH EXISTING MAIN	1	EACH \$ 2,500.00	\$ 2,500.00		1	EACH \$ 2,500.00	\$ 2,500.00		
1150-0100000E	12 INCH GATE VALVE	4	EACH \$ 2,000.00	\$ 8,000.00		10	EACH \$ 2,000.00	\$ 20,000.00		Assumed; verify w/city
1150-0600000E	2 INCH COMBINATION AIR RELEASE / AIR VACUUM VALVE ASSEMBLY	0	EACH \$ 4,000.00	\$ -		2	EACH \$ 4,000.00	\$ 8,000.00		
1160-0100000E	HYDRANT ASSEMBLIES	1	EACH \$ 4,000.00	\$ 4,000.00		2	EACH \$ 4,000.00	\$ 8,000.00		
	METER AND SERVICE CONNECTION FOR L'SCAPED MEDIANS	2	EACH \$ 10,000.00	\$ 20,000.00		0	EACH \$ 10,000.00	\$ -		
CONSTRUCTION SUBTOTAL				\$ 50,740.00		CONSTRUCTION SUBTOTAL				\$ 212,160.00
CONTINGENCY (30.0%)				\$ 15,222.00		CONTINGENCY (30.0%)				\$ 63,648.00
TOTAL CONSTRUCTION COST				\$ 65,962.00		TOTAL CONSTRUCTION COST				\$ 275,808.00
SOFT COSTS				24% \$ 15,830.88				24% \$ 66,193.92		
	DESIGN, ENGINEERING AND SURVEYING			10% \$ 6,596.20				10% \$ 27,580.80		
	CITY PERMIT FEE			7% \$ 4,617.34				7% \$ 19,306.56		
	GEO TECHNICAL INSPECTION			2% \$ 1,319.24				2% \$ 5,516.16		
	CONSTRUCTION MANAGEMENT			5% \$ 3,298.10				5% \$ 13,790.40		
TOTAL ESTIMATED COST				\$ 81,792.88		TOTAL ESTIMATED COST				\$ 342,001.92

**Cost Split Notes:**

- The cost to design and construct this 12" water main from the terminus of the existing line near the City limit on Advance Road to the school site shall be borne by the District.
- The City will be responsible for the costs to tie into the existing water main and extend the water line northward through the intersection.
- The City may establish a Reimbursement District to the extent the improvements benefit the Frog Pond Coneptual Plan development area.

**TOTAL COSTS \$ 423,794.80**

**General Notes:**

- Costs are preliminary. Estimate based on standard measurement and payment practices as specified in the 2015 Oregon Standard Specifications for Construction
- Unit prices based on ODOT Weighted Average Item Prices - Calendar Year 2014 dated 1/13/2015
- Allowances provided for traffic signals, street lighting and other traffic items. Costs to be verified with traffic consultant
- Allowance provided for landscaping. Costs to be verified with landscape consultant
- Estimate does not include right-of-way acquisition or settlements with adjacent private properties
- Estimate does not include costs for relocating utilities including transmission poles, gas, fiber and cable

### 30% TAKEOFFS

AC (Tons) =  per cy          AB (Tons) =  per cy

INTERSECTION TAKEOFFS	Length (LF)	AB Section Area (SF)	CAD Plan Area (SF)	AC 1/2" Lvl 3 Depth (Inch)	AC 1/2" Lvl 3 Volume (Tons)	AB Depth (Inch)	AB Volume (CY)	AB Volume (Tons)	Comments
AC Roadway			14,393.0	6	559.7	15	666.3	1266.1	
AC Approach (Extra)			0.0	4	0.0	8	0.0	0.0	
AC Sidewalk (Extra)			0.0	4	0.0	4	0.0	0.0	
Conc Pavement, Undowelled 9"			0.0			6	0.0	0.0	
Conc Curb and Gutter	191	3.65					25.8	49.1	
Conc Curb (Median)	0	1.50					0.0	0.0	
Conc Driveway			0.0			4	0.0	0.0	
Conc Driveway, Reinforced			0.0			6	0.0	0.0	
Conc Sidewalk			1,166.0			4	14.4	27.4	
Gravel Shoulder (beyond EOP)	172	7.87					50.1	95.3	
						559.7	756.7	1437.7	

Subgrade Stabilization (20%) =  SY           Tons           Tons

BOECKMAN TAKEOFFS	Length (LF)	AB Section Area (SF)	CAD Plan Area (SF)	AC 1/2" Lvl 3 Depth (Inch)	AC 1/2" Lvl 3 Volume (Tons)	AB Depth (Inch)	AB Volume (CY)	AB Volume (Tons)	Comments
AC Roadway			18,002.0	6	700.1	15	833.4	1583.5	
AC Approach (Extra)			1,429.0	4	37.0	8	35.3	67.0	
AC Sidewalk (Extra)			1,270.0	4	32.9	4	15.7	29.8	
Conc Pavement, Undowelled 9"			0.0		0.0	6	0.0	0.0	
Conc Curb and Gutter	349	3.65					47.2	89.6	
Conc Curb (Median)	0	1.50					0.0	0.0	
Conc Driveway			0.0		0.0	4	0.0	0.0	
Conc Driveway, Reinforced			0.0		0.0	6	0.0	0.0	
Conc Sidewalk			0.0		0.0	4	0.0	0.0	
Gravel Shoulder (beyond EOP)	687	7.87					200.2	380.5	
						770.1	1131.8	2150.5	

Subgrade Stabilization (20%) =  SY           Tons           Tons

STAFFORD TAKEOFFS	Length (LF)	AB Section Area (SF)	CAD Plan Area (SF)	AC 1/2" Lvl 3 Depth (Inch)	AC 1/2" Lvl 3 Volume (Tons)	AB Depth (Inch)	AB Volume (CY)	AB Volume (Tons)	Comments
AC Roadway			10,452.2	6	406.5	15	483.9	919.4	
AC Approach (Extra)			0.0	4	0.0	8	0.0	0.0	
AC Sidewalk (Extra)			0.0	4	0.0	4	0.0	0.0	
Conc Pavement, Undowelled 9"			0.0		0.0	6	0.0	0.0	
Conc Curb and Gutter	0	0	0.0				0.0	0.0	
Conc Curb (Median)	255	1.50					14.2	26.9	
Conc Driveway			0.0		0.0	4	0.0	0.0	
Conc Driveway, Reinforced			0.0		0.0	6	0.0	0.0	
Conc Sidewalk			0.0		0.0	4	0.0	0.0	
Gravel Shoulder (beyond EOP)	692	7.87					201.7	383.2	
						406.5	699.8	1329.6	

Subgrade Stabilization (20%) =  SY           Tons           Tons

ADVANCE ROAD (NORTH) TAKEOFFS (CITY)	Length (LF)	AB Section Area (SF)	CAD Plan Area (SF)	AC 1/2" Lvl 3 Depth (Inch)	AC 1/2" Lvl 3 Volume (Tons)	AB Depth (Inch)	AB Volume (CY)	AB Volume (Tons)	Comments
AC Roadway			10,404.0	6	404.6	15	481.7	915.2	
AC Approach (Extra)			2,188.0	4	56.7	8	54.0	102.6	
AC Sidewalk (Extra)			0.0	4	0.0	4	0.0	0.0	
Conc Pavement, Undowelled 9"			0.0		0.0	6	0.0	0.0	
Conc Curb and Gutter			0.0				0.0	0.0	
Conc Curb (Median)	333	1.50					18.5	35.2	
Conc Driveway			0.0		0.0	4	0.0	0.0	
Conc Driveway, Reinforced			0.0		0.0	6	0.0	0.0	
Conc Sidewalk			2,795.0		0.0	4	34.5	65.6	City pays half
Gravel Shoulder (beyond EOP)	800	7.87					233.2	443.1	
						461.3	821.9	1561.6	

Subgrade Stabilization (20%) =  SY           Tons           Tons

ADVANCE ROAD (SOUTH) TAKEOFFS (DISTRICT)	Length (LF)	AB Section Area (SF)	CAD Plan Area (SF)	AC 1/2" Lvl 3 Depth (Inch)	AC 1/2" Lvl 3 Volume (Tons)	AB Depth (Inch)	AB Volume (CY)	AB Volume (Tons)	Comments
AC Roadway			16,875.0	6	656.3	15	781.3	1484.4	
AC Approach (Extra)			483.0	4	12.5	8	11.9	22.7	Driveway connections
AC Sidewalk (Extra)			0.0	4	0.0	4	0.0	0.0	
Conc Pavement, Undowelled 9"			0.0		0.0	6	0.0	0.0	
Conc Curb and Gutter	609	3.65					82.3	156.4	
Conc Curb (Median)	0	1.50					0.0	0.0	
Conc Driveway			755.0		0.0	4	9.3	17.7	
Conc Driveway, Reinforced			0.0		0.0	6	0.0	0.0	
Conc Sidewalk			2,795.0		0.0	4	34.5	65.6	District pays half
Gravel Shoulder (beyond EOP)	44	7.87					12.8	24.4	
						668.8	932.2	1771.1	

Subgrade Stabilization (20%) =  SY           Tons           Tons

ACCESS STREET - 63RD AVE TAKEOFFS (CITY)	Length (LF)	AB Section Area (SF)	CAD Plan Area (SF)	AC 1/2" Lvl 3 Depth (Inch)	AC 1/2" Lvl 3 Volume (Tons)	AB Depth (Inch)	AB Volume (CY)	AB Volume (Tons)	Comments
AC Roadway			8,220.0	4	213.1	14	355.2	674.9	2 bike lanes x 6' x 685'
AC Approach (Extra)			0.0	4	0.0	8	0.0	0.0	
AC Sidewalk (Extra)			0.0	4	0.0	4	0.0	0.0	
Conc Pavement, Undowelled 9"			0.0		0.0	6	0.0	0.0	
Conc Curb and Gutter	0	0					0.0	0.0	
Conc Curb (Median)	0	1.50					0.0	0.0	
Conc Driveway			0.0		0.0	4	0.0	0.0	
Conc Driveway, Reinforced			0.0		0.0	6	0.0	0.0	
Conc Sidewalk					0.0	4	0.0	0.0	City pays half
Gravel Shoulder (beyond EOP)	651	6.14					148.0	281.3	
						213.1	503.2	956.1	

Subgrade Stabilization (20%) =  SY           Tons           Tons

ACCESS STREET - 63RD AVE TAKEOFFS (DISTRICT)	Length (LF)	AB Section Area (SF)	CAD Plan Area (SF)	AC 1/2" Lvl 3 Depth (Inch)	AC 1/2" Lvl 3 Volume (Tons)	AB Depth (Inch)	AB Volume (CY)	AB Volume (Tons)	Comments
AC Roadway			21,143.0	4	548.2	14	913.6	1735.8	Roadway area minus 6' bike lanes (x2)
AC Approach (Extra)			0.0	4	0.0	8	0.0	0.0	
AC Sidewalk (Extra)			0.0	4	0.0	4	0.0	0.0	
Conc Pavement, Undowelled 9"			0.0		0.0	6	0.0	0.0	
Conc Curb and Gutter	746	2.78					76.8	145.9	
Conc Curb (Median)	0	1.50					0.0	0.0	
Conc Driveway			0.0		0.0	4	0.0	0.0	
Conc Driveway, Reinforced			522.0		0.0	6	9.7	18.4	
Conc Sidewalk			3,998.0		0.0	4	49.4	93.8	District pays all
Gravel Shoulder (beyond EOP)	0	6.14					0.0	0.0	
						548.2	1049.4	1993.9	

Subgrade Stabilization (20%) =  SY           Tons           Tons

ACCESS STREET - HAZEL ST TAKEOFFS (CITY)	Length (LF)	AB Section Area (SF)	CAD Plan Area (SF)	AC 1/2" Lvl 3 Depth (Inch)	AC 1/2" Lvl 3 Volume (Tons)	AB Depth (Inch)	AB Volume (CY)	AB Volume (Tons)	Comments
AC Roadway			4,440.0	4	115.1	14	191.9	364.5	2 bike lanes x 6' x 685'
AC Approach (Extra)			0.0	4	0.0	8	0.0	0.0	
AC Sidewalk (Extra)			0.0	4	0.0	4	0.0	0.0	
Conc Pavement, Undowelled 9"			1,280.0		0.0	6	23.7	45.0	at bus turnout
Conc Curb and Gutter	0	0					0.0	0.0	
Conc Curb (Median)	0	1.50					0.0	0.0	
Conc Driveway			0.0		0.0	4	0.0	0.0	
Conc Driveway, Reinforced			0.0		0.0	6	0.0	0.0	
Conc Sidewalk			375.0		0.0	4	4.6	8.8	City pays 375sf at bus stop
Gravel Shoulder (beyond EOP)	553	6.14					125.8	238.9	City paid gravel shoulders
						115.1	345.9	657.3	

Subgrade Stabilization (20%) =  SY           Tons           Tons

ACCESS STREET - HAZEL ST TAKEOFFS (DISTRICT)	Length (LF)	AB Section Area (SF)	CAD Plan Area (SF)	AC 1/2" Lvl 3 Depth (Inch)	AC 1/2" Lvl 3 Volume (Tons)	AB Depth (Inch)	AB Volume (CY)	AB Volume (Tons)	Comments
AC Roadway			14,449.0	4	374.6	14	624.3	1186.2	Roadway area minus 6' bike lanes (x2)
AC Approach (Extra)			0.0	4	0.0	8	0.0	0.0	
AC Sidewalk (Extra)			0.0	4	0.0	4	0.0	0.0	
Conc Pavement, Undowelled 9"			0.0		0.0	6	0.0	0.0	
Conc Curb and Gutter	376	2.78					38.7	73.6	
Conc Curb (Median)	0	1.50					0.0	0.0	
Conc Driveway			0.0		0.0	4	0.0	0.0	
Conc Driveway, Reinforced			520.0		0.0	6	9.6	18.3	
Conc Sidewalk			1,368.0		0.0	4	16.9	32.1	District pays
Gravel Shoulder (beyond EOP)	0	0					0.0	0.0	
						374.6	689.6	1310.2	

Subgrade Stabilization (20%) =  SY           Tons           Tons

<b>INTERSECTION</b>	<b>Volume (CY)</b>	<b>Comments</b>
Intersection w/out corridor	1,481	Assumed = 20,000 sf*2'/27
	1,481	
<b>Rounded Volume =</b>	<b>1,500</b>	

<b>BOECKMAN</b>	<b>Volume (CY)</b>	<b>Comments</b>
Boeckman	2,040	From CAD
Boeckman Widening	422	From CAD
	2,462	
<b>Rounded Volume =</b>	<b>2,500</b>	

<b>STAFFORD</b>	<b>Volume (CY)</b>	<b>Comments</b>
Stafford	1,437	From CAD
Stafford Widening	36	From CAD
	1,473	
<b>Rounded Volume =</b>	<b>1,500</b>	

<b>ADVANCE NORTH</b>	<b>Volume (CY)</b>	<b>Comments</b>
Advance North	1,200	From CAD divided by 2
Advance North Intersection	100	Assumed non-corridor volume
Advance North Widening	100	Assumed non-corridor volume
	1,400	
<b>Rounded Volume =</b>	<b>1,400</b>	

<b>ADVANCE SOUTH</b>	<b>Volume (CY)</b>	<b>Comments</b>
Advance South	1,200	From CAD divided by 2
Advance South Intersection	200	Assumed non-corridor volume
Advance South Widening	100	Assumed non-corridor volume
	1,500	
<b>Rounded Volume =</b>	<b>1,500</b>	

<b>63RD - CITY</b>	<b>Volume (CY)</b>	<b>Comments</b>
63rd City	457	Bike lane areas x 1.5' deep
Intersection @ Hazel	50	Assumed non-corridor volume
	507	
<b>Rounded Volume =</b>	<b>600</b>	

<b>63RD - DISTRICT</b>	<b>Volume (CY)</b>	<b>Comments</b>
63rd District	1,719	CAD Volume minus City Volume
Intersection @ Hazel	50	Assumed non-corridor volume
	1,769	
<b>Rounded Volume =</b>	<b>1,800</b>	

<b>HAZEL - CITY</b>	<b>Volume (CY)</b>	<b>Comments</b>
Hazel City & Cul-de-sac	247	Bike lane areas x 1.5' deep
	247	
<b>Rounded Volume =</b>	<b>300</b>	

<b>HAZEL - DISTRICT</b>	<b>Volume (CY)</b>	<b>Comments</b>
Hazel District & Cul-de-sac	1,729	CAD Volume minus City Volume
	1,729	
<b>Rounded Volume =</b>	<b>1,800</b>	

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9400-0011100A
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9400-0011300A
9400-0011410A
9400-0011420A
9400-0011430A
9400-0011600A
9400-0011900A
9400-0012000A
9400-0012100A
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9400-0012800A
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1999-9Z90000K
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1999-9Z90000O
1999-9Z90000P
1999-9Z90000Q
1999-9Z90000R
1999-9Z90000T
1999-9Z90000U
1999-9Z90000V
1999-9Z90000W

## BID ITEM LIST for 2015 SPECIFICATIONS

**NOTE:** Bid Items that are highlighted in Light Turquoise color are not in the Standard Specifications Book but do have Special Provisions. (Remarks column indicates "Stand Alone Special Provision".)

**NOTE:** Bid Items that are highlighted in Mint Green color are not in the Standard Specifications Book but are part of the Boilerplate for a Section that is in the Standard Specifications Book. (Remarks column indicates "Special Provision".)

**NOTE:** Bid Items that are highlighted in Pale Yellow color are not in the Standard Specifications Book but are a Unique Specification. (Remarks column indicates "Unique Specification".)

**NOTE:** Use the **CLASS OF WORK** column to prepare the "Class of Work" Sheet (Blue Sheet).

Item Description
TRAINING
FURNISHING FIELD LABORATORY
AGENCY-FURNISHED FIELD LABORATORY
MOBILIZATION
TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC
TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE
TEMPORARY SIGNS
AMBER FLASHERS
TEMPORARY BARRICADES, TYPE II
TEMPORARY BARRICADES, TYPE III
TEMPORARY GUARDRAIL, TYPE 2A REFLECTORIZED
TEMPORARY GUARDRAIL, TYPE 3 REFLECTORIZED
TEMPORARY GUARDRAIL, TYPE 4 REFLECTORIZED
TEMPORARY GUARDRAIL TERMINALS, FLARED
TEMPORARY GUARDRAIL TERMINALS, NON-FLARED
TEMPORARY GUARDRAIL TRANSITION
TEMPORARY BRIDGE CONNECTIONS
TEMPORARY CONCRETE BARRIER, REFLECTORIZED
TEMPORARY CONCRETE BARRIER, TALL, REFLECTORIZED
MOVING TEMPORARY CONCRETE BARRIER
TEMPORARY IMPACT ATTENUATOR
TEMPORARY IMPACT ATTENUATOR, NARROW SITE SYSTEM
MOVING TEMPORARY IMPACT ATTENUATORS
MOVING TEMPORARY IMPACT ATTENUATORS, NARROW SITE SYSTEM
TEMPORARY IMPACT ATTENUATOR, TRUCK MOUNTED
TEMPORARY GLARE SHIELDS
MOVING TEMPORARY GLARE SHIELDS
REFLECTIVE BARRIER PANELS

REPAIR TEMPORARY IMPACT ATTENUATOR
REPAIR TEMPORARY IMPACT ATTENUATOR, NARROW SITE SYSTEM
REPAIR TEMPORARY IMPACT ATTENUATOR, TRUCK MOUNTED
REPAIR TEMPORARY IMPACT ATTENUATOR, SAND MODULE
PEDESTRIAN CHANNELIZING DEVICES
SECURING TEMPORARY CONCRETE BARRIER
MOBILE BARRIER
TEMPORARY GLARE SCREENS
MOVING TEMPORARY GLARE SCREENS
SURFACE MOUNTED TUBULAR MARKERS
REPLACE SURFACE MOUNTED TUBULAR MARKERS
TEMPORARY PLASTIC DRUMS
TEMPORARY DELINEATORS
TEMPORARY REFLECTIVE PAVEMENT MARKERS
TEMPORARY FLEXIBLE PAVEMENT MARKERS
TEMPORARY REMOVABLE TAPE
TEMPORARY NON-REMOVABLE TAPE
TEMPORARY NON-REFLECTIVE TAPE
TEMPORARY STRIPING
TEMPORARY PAVEMENT LEGENDS
TEMPORARY PAVEMENT BARS
TEMPORARY TRANSVERSE RUMBLE STRIPS
STRIPE REMOVAL
LEGEND REMOVAL
BAR REMOVAL
TEMPORARY ILLUMINATION
TEMPORARY TRAFFIC SIGNAL
PORTABLE TRAFFIC SIGNAL
SEQUENTIAL ARROW SIGNS
PORTABLE CHANGEABLE MESSAGE SIGNS
OVERHEIGHT VEHICLE WARNING SYSTEM
PORTABLE TRAFFIC MANAGEMENT SYSTEM MOBILIZATION
PORTABLE TRAFFIC MANAGEMENT SYSTEM
RADAR SPEED TRAILER
FLAGGERS
FLAGGER STATION LIGHTING
FLAGGER STATION LIGHTING
AUTOMATED FLAGGER ASSISTANCE DEVICE
AUTOMATED FLAGGER ASSISTANCE DEVICE
TRAFFIC CONTROL SUPERVISOR
PILOT CARS
CONSTRUCT AND REMOVE DETOURS
TEMPORARY DRAINAGE FACILITIES
TEMPORARY WATER MANAGEMENT FACILITY AT STATION _____
TEMPORARY DETOUR BRIDGES
TEMPORARY DETOUR BRIDGES, AGENCY-PROVIDED
TEMPORARY WORK BRIDGES
TEMPORARY WORK PLATFORM
TEMPORARY WORK ACCESS
TEMPORARY RETAINING WALL
TEMPORARY TYPE 1 FENCE
TEMPORARY TYPE 1-5W FENCE

TEMPORARY TYPE 1-6W FENCE
TEMPORARY TYPE 2 FENCE
TEMPORARY TYPE 3 FENCE
TEMPORARY TYPE 3-70 FENCE
TEMPORARY TYPE CL CHAIN LINK FENCE
TEMPORARY GATES
TEMPORARY ROCK PROTECTION FENCE, BARRIER MOUNTED
EROSION CONTROL
PLASTIC SHEETING
CHEMICAL SOIL BINDER
CHEMICAL DUST CONTROL
TEMPORARY MULCHING, HYDROMULCH
TEMPORARY MULCHING, STRAW
TEMPORARY MULCHING, COMPOST
MATTING, TYPE A
MATTING, TYPE B
MATTING, TYPE C
MATTING, TYPE D
MATTING, TYPE E
MATTING, TYPE F
MATTING, TYPE G
MATTING, TYPE H
COMPOST EROSION BLANKET
CHECK DAM, TYPE 1
CHECK DAM, TYPE 2
CHECK DAM, TYPE 3
CHECK DAM, TYPE 4
CHECK DAM, TYPE 5
CHECK DAM, TYPE 6
TEMPORARY INTERCEPTOR DIKE/SWALE
TEMPORARY SLOPE DRAIN
TEMPORARY SLOPE DRAIN
FLOW SPREADER
COMPOST FILTER SOCK, _____ INCH
COMPOST FILTER BERM
CONSTRUCTION ENTRANCE, TYPE 1
CONSTRUCTION ENTRANCE, TYPE 2
CONSTRUCTION ENTRANCE, TYPE 3
TIRE WASH FACILITY, TYPE 1
TIRE WASH FACILITY, TYPE 2
CONCRETE WASHOUT FACILITY
SEDIMENT FENCE
INLET PROTECTION, TYPE 2
INLET PROTECTION, TYPE 3
INLET PROTECTION, TYPE 4
INLET PROTECTION, TYPE 6
INLET PROTECTION, TYPE 7
SEDIMENT BARRIER, TYPE 2
SEDIMENT BARRIER, TYPE 2
SEDIMENT BARRIER, TYPE 3
SEDIMENT BARRIER, TYPE 3
SEDIMENT BARRIER, TYPE 4

SEDIMENT BARRIER, TYPE 4
SEDIMENT BARRIER, TYPE 5
SEDIMENT BARRIER, TYPE 5
SEDIMENT BARRIER, TYPE 6
SEDIMENT BARRIER, TYPE 6
SEDIMENT BARRIER, TYPE 7
SEDIMENT BARRIER, TYPE 7
SEDIMENT BARRIER, TYPE 8
SEDIMENT BARRIER, TYPE 8
SEDIMENT BARRIER, TYPE 9
SEDIMENT BARRIER, TYPE 9
SEDIMENT MAT
TEMPORARY ENERGY DISSIPATER
TEMPORARY SEDIMENT TRAP
POLLUTION CONTROL PLAN
WORK CONTAINMENT PLAN AND SYSTEM
TURBIDITY MONITORING
DECOMMISSION REGULATED UNDERGROUND STORAGE TANKS
DECOMMISSION HEATING OIL TANKS
HEALTH AND SAFETY PLAN
CONTAMINATED SOIL REMOVAL
CONTAMINATED GROUNDWATER MOBILIZATION
CONTAMINATED GROUNDWATER REMOVAL
REMOVE ASBESTOS MATERIAL, FRIABLE
REMOVE ASBESTOS MATERIAL, NON-FRIABLE
REMOVE ASBESTOS MATERIAL, FRIABLE
REMOVE ASBESTOS MATERIAL, NON-FRIABLE
PAINTED CONCRETE
PAINTED WOOD
SEPARATED PAINT
PROTECT MONITORING WELLS
ABANDON MONITORING WELLS
PROTECT WATER WELLS
ABANDON WATER WELLS
DECOMMISSION UNDERGROUND INJECTION CONTROL SYSTEMS
DECOMMISSION SEPTIC SYSTEMS
CONSTRUCTION SURVEY WORK
REMOVAL OF PIPES
REMOVAL OF CURBS
REMOVAL OF WALKS AND DRIVEWAYS
REMOVAL OF SURFACINGS
REMOVAL OF INLETS
REMOVAL OF MANHOLES
REMOVAL OF STRUCTURES AND OBSTRUCTIONS
REMOVAL OF ASPHALT CONCRETE WEARING SURFACE
REMOVAL OF BARRIERS
REMOVAL OF BUILDINGS
REMOVAL OF DELINEATORS
REMOVAL OF DETOURS
REMOVAL OF FENCES
REMOVAL OF GUARDRAIL
REMOVAL OF HAUL ROAD STRUCTURE



REMOVAL OF PAVEMENT, AC/PCC
REMOVAL OF PIPES
REMOVAL OF RAILROAD TRACK AND TIES
REMOVAL OF SEPTIC TANKS
ASPHALT PAVEMENT SAW CUTTING
CLEARING AND GRUBBING
CLEARING AND GRUBBING
DITCH EXCAVATION
FOUNDATION EXCAVATION
TOE TRENCH EXCAVATION
GENERAL EXCAVATION
BORROW EXCAVATION
EMBANKMENT IN PLACE
STONE EMBANKMENT
EXTRA FOR SELECTED EMBANKMENT MATERIAL
EXTRA FOR SELECTED GRANULAR MATERIAL
EXTRA FOR SELECTED GRANULAR BACKFILL MATERIAL
EXTRA FOR SELECTED GRANULAR EMBANKMENT MATERIAL
EXTRA FOR SELECTED OVERBURDEN MATERIAL
EXTRA FOR SELECTED STONE BACKFILL MATERIAL
EXTRA FOR SELECTED STONE EMBANKMENT MATERIAL
EXTRA FOR SELECTED SUBGRADE MATERIAL
EXTRA FOR SELECTED TOPSOIL MATERIAL
EXTRA FOR SELECTED WETLAND TOPSOIL MATERIAL
6 INCH SUBGRADE STABILIZATION
9 INCH SUBGRADE STABILIZATION
12 INCH SUBGRADE STABILIZATION
15 INCH SUBGRADE STABILIZATION
18 INCH SUBGRADE STABILIZATION
21 INCH SUBGRADE STABILIZATION
24 INCH SUBGRADE STABILIZATION
27 INCH SUBGRADE STABILIZATION
30 INCH SUBGRADE STABILIZATION
33 INCH SUBGRADE STABILIZATION
36 INCH SUBGRADE STABILIZATION
42 INCH SUBGRADE STABILIZATION
48 INCH SUBGRADE STABILIZATION
AGGREGATE DITCH LINING
PREPARATION OF SHOULDERS
PREPARATION OF SHOULDERS
PERIMETER CONTROLLED BLAST HOLES
WATERING
EMULSIFIED ASPHALT IN WATERING
TREATED SUBGRADE, 6 INCH THICK
TREATED SUBGRADE, 9 INCH THICK
TREATED SUBGRADE, 12 INCH THICK
TREATED SUBGRADE, 15 INCH THICK
TREATED SUBGRADE, 18 INCH THICK
TREATED SUBGRADE, 21 INCH THICK
TREATED SUBGRADE, 24 INCH THICK
TREATED SUBGRADE, 30 INCH THICK
PORTLAND CEMENT

LIME
CALCIUM CHLORIDE
SODIUM CHLORIDE
DRAINAGE GEOTEXTILE, TYPE 1
DRAINAGE GEOTEXTILE, TYPE 2
EMBANKMENT GEOTEXTILE
RIPRAP GEOTEXTILE, TYPE 1
RIPRAP GEOTEXTILE, TYPE 2
SUBGRADE GEOTEXTILE
PAVEMENT OVERLAY GEOTEXTILE
SUBGRADE REINFORCEMENT GEOGRID
SAND DRAINAGE BLANKET
SAND DRAINAGE BLANKET
GRANULAR DRAINAGE BLANKET
GRANULAR DRAINAGE BLANKET
FINISHING ROADBEDS
OBLITERATING SURFACINGS
SCALERS
SCALERS AND EQUIPMENT
SCALER HELPERS
MACHINE SCALING
MOVING COSTS
MOVING COSTS
STANDBY TIME
FILTER BLANKET
RIPRAP BACKING
LOOSE RIPRAP, CLASS 50
LOOSE RIPRAP, CLASS 50
LOOSE RIPRAP, CLASS 100
LOOSE RIPRAP, CLASS 100
LOOSE RIPRAP, CLASS 200
LOOSE RIPRAP, CLASS 200
LOOSE RIPRAP, CLASS 700
LOOSE RIPRAP, CLASS 700
LOOSE RIPRAP, CLASS 2000
LOOSE RIPRAP, CLASS 2000
GROUTED RIPRAP, CLASS _____
GROUTED RIPRAP, CLASS _____
KEYED RIPRAP, CLASS 50
KEYED RIPRAP, CLASS 50
KEYED RIPRAP, CLASS 100
KEYED RIPRAP, CLASS 100
KEYED RIPRAP, CLASS 200
KEYED RIPRAP, CLASS 200
KEYED RIPRAP, CLASS 700
KEYED RIPRAP, CLASS 700
KEYED RIPRAP, CLASS 2000
KEYED RIPRAP, CLASS 2000
RIPRAP BASINS
SHOTCRETE SLOPE STABILIZATION
WIRE MESH SLOPE PROTECTION
POST-SUPPORTED WIRE MESH SLOPE PROTECTION

ROCK PROTECTION SCREEN BEHIND CONCRETE BARRIER AND GUARDRAIL
BARRIER MOUNTED ROCK PROTECTION SCREEN
ROCK REINFORCING BOLT
ROCK REINFORCING DOWEL
ROCKFALL NET SYSTEM
ROCK EXCAVATION
BOULDER EXCAVATION
TRENCH FOUNDATION
TRENCH FOUNDATION
TUNNELING, BORING, AND JACKING
PIPE BURSTING, _____ INCH
SLIP LINING, _____ INCH
SERVICE LINE RECONNECTION
CIPP LINER, _____ INCH
SERVICE LINE RECONNECTION
MAINLINE VIDEO INSPECTION
SERVICE LINE VIDEO INSPECTION, LAUNCH CAMERA
SERVICE LINE VIDEO INSPECTION, PUSH CAMERA
SALVAGING AND STOCKPILING _____ INCH PIPE
SALVAGING AND RELAYING _____ INCH PIPE, _____ DEPTH
2 INCH DRAIN PIPE
3 INCH DRAIN PIPE
4 INCH DRAIN PIPE
6 INCH DRAIN PIPE
8 INCH DRAIN PIPE
10 INCH DRAIN PIPE
12 INCH DRAIN PIPE
18 INCH DRAIN PIPE
SUBSURFACE DRAIN OUTLETS
WEARING SURFACE DRAINS
WEARING SURFACE DRAIN OUTLETS
PREFABRICATED VERTICAL DRAINS
OBSTRUCTION CLEARANCE
6 INCH CULVERT PIPE, 5 FT DEPTH
6 INCH CULVERT PIPE, 10 FT DEPTH
6 INCH CULVERT PIPE, 20 FT DEPTH
6 INCH CULVERT PIPE, OVER 20 FT DEPTH
8 INCH CULVERT PIPE, 5 FT DEPTH
8 INCH CULVERT PIPE, 10 FT DEPTH
8 INCH CULVERT PIPE, 20 FT DEPTH
8 INCH CULVERT PIPE, OVER 20 FT DEPTH
10 INCH CULVERT PIPE, 5 FT DEPTH
10 INCH CULVERT PIPE, 10 FT DEPTH
10 INCH CULVERT PIPE, 20 FT DEPTH
10 INCH CULVERT PIPE, OVER 20 FT DEPTH
12 INCH CULVERT PIPE, 5 FT DEPTH
12 INCH CULVERT PIPE, 10 FT DEPTH
12 INCH CULVERT PIPE, 20 FT DEPTH
12 INCH CULVERT PIPE, OVER 20 FT DEPTH
15 INCH CULVERT PIPE, 5 FT DEPTH
15 INCH CULVERT PIPE, 10 FT DEPTH

15 INCH CULVERT PIPE, 20 FT DEPTH
15 INCH CULVERT PIPE, OVER 20 FT DEPTH
18 INCH CULVERT PIPE, 5 FT DEPTH
18 INCH CULVERT PIPE, 10 FT DEPTH
18 INCH CULVERT PIPE, 20 FT DEPTH
18 INCH CULVERT PIPE, OVER 20 FT DEPTH
21 INCH CULVERT PIPE, 5 FT DEPTH
21 INCH CULVERT PIPE, 10 FT DEPTH
21 INCH CULVERT PIPE, 20 FT DEPTH
21 INCH CULVERT PIPE, OVER 20 FT DEPTH
24 INCH CULVERT PIPE, 5 FT DEPTH
24 INCH CULVERT PIPE, 10 FT DEPTH
24 INCH CULVERT PIPE, 20 FT DEPTH
24 INCH CULVERT PIPE, OVER 20 FT DEPTH
27 INCH CULVERT PIPE, 5 FT DEPTH
27 INCH CULVERT PIPE, 10 FT DEPTH
27 INCH CULVERT PIPE, 20 FT DEPTH
27 INCH CULVERT PIPE, OVER 20 FT DEPTH
30 INCH CULVERT PIPE, 5 FT DEPTH
30 INCH CULVERT PIPE, 10 FT DEPTH
30 INCH CULVERT PIPE, 20 FT DEPTH
30 INCH CULVERT PIPE, OVER 20 FT DEPTH
36 INCH CULVERT PIPE, 5 FT DEPTH
36 INCH CULVERT PIPE, 10 FT DEPTH
36 INCH CULVERT PIPE, 20 FT DEPTH
36 INCH CULVERT PIPE, OVER 20 FT DEPTH
42 INCH CULVERT PIPE, 5 FT DEPTH
42 INCH CULVERT PIPE, 10 FT DEPTH
42 INCH CULVERT PIPE, 20 FT DEPTH
42 INCH CULVERT PIPE, OVER 20 FT DEPTH
48 INCH CULVERT PIPE, 5 FT DEPTH
48 INCH CULVERT PIPE, 10 FT DEPTH
48 INCH CULVERT PIPE, 20 FT DEPTH
48 INCH CULVERT PIPE, OVER 20 FT DEPTH
54 INCH CULVERT PIPE, 5 FT DEPTH
54 INCH CULVERT PIPE, 10 FT DEPTH
54 INCH CULVERT PIPE, 20 FT DEPTH
54 INCH CULVERT PIPE, OVER 20 FT DEPTH
60 INCH CULVERT PIPE, 5 FT DEPTH
60 INCH CULVERT PIPE, 10 FT DEPTH
60 INCH CULVERT PIPE, 20 FT DEPTH
60 INCH CULVERT PIPE, OVER 20 FT DEPTH
66 INCH CULVERT PIPE, 10 FT DEPTH
66 INCH CULVERT PIPE, 20 FT DEPTH
66 INCH CULVERT PIPE, OVER 20 FT DEPTH
72 INCH CULVERT PIPE, 10 FT DEPTH
72 INCH CULVERT PIPE, 20 FT DEPTH
72 INCH CULVERT PIPE, OVER 20 FT DEPTH
78 INCH CULVERT PIPE
84 INCH CULVERT PIPE
90 INCH CULVERT PIPE
96 INCH CULVERT PIPE

_____ INCH ARCH TYPE PIPE, _____ DEPTH
_____ INCH SIPHON PIPE, _____ DEPTH
4 INCH SANITARY SEWER PIPE, 5 FT DEPTH
4 INCH SANITARY SEWER PIPE, 10 FT DEPTH
4 INCH SANITARY SEWER PIPE, 20 FT DEPTH
4 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
6 INCH SANITARY SEWER PIPE, 5 FT DEPTH
6 INCH SANITARY SEWER PIPE, 10 FT DEPTH
6 INCH SANITARY SEWER PIPE, 20 FT DEPTH
6 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
8 INCH SANITARY SEWER PIPE, 5 FT DEPTH
8 INCH SANITARY SEWER PIPE, 10 FT DEPTH
8 INCH SANITARY SEWER PIPE, 20 FT DEPTH
8 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
10 INCH SANITARY SEWER PIPE, 5 FT DEPTH
10 INCH SANITARY SEWER PIPE, 10 FT DEPTH
10 INCH SANITARY SEWER PIPE, 20 FT DEPTH
10 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
12 INCH SANITARY SEWER PIPE, 5 FT DEPTH
12 INCH SANITARY SEWER PIPE, 10 FT DEPTH
12 INCH SANITARY SEWER PIPE, 20 FT DEPTH
12 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
15 INCH SANITARY SEWER PIPE, 5 FT DEPTH
15 INCH SANITARY SEWER PIPE, 10 FT DEPTH
15 INCH SANITARY SEWER PIPE, 20 FT DEPTH
15 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
18 INCH SANITARY SEWER PIPE, 5 FT DEPTH
18 INCH SANITARY SEWER PIPE, 10 FT DEPTH
18 INCH SANITARY SEWER PIPE, 20 FT DEPTH
18 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
21 INCH SANITARY SEWER PIPE, 5 FT DEPTH
21 INCH SANITARY SEWER PIPE, 10 FT DEPTH
21 INCH SANITARY SEWER PIPE, 20 FT DEPTH
21 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
24 INCH SANITARY SEWER PIPE, 5 FT DEPTH
24 INCH SANITARY SEWER PIPE, 10 FT DEPTH
24 INCH SANITARY SEWER PIPE, 20 FT DEPTH
24 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
27 INCH SANITARY SEWER PIPE, 5 FT DEPTH
27 INCH SANITARY SEWER PIPE, 10 FT DEPTH
27 INCH SANITARY SEWER PIPE, 20 FT DEPTH
27 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
30 INCH SANITARY SEWER PIPE, 5 FT DEPTH
30 INCH SANITARY SEWER PIPE, 10 FT DEPTH
30 INCH SANITARY SEWER PIPE, 20 FT DEPTH
30 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
36 INCH SANITARY SEWER PIPE, 5 FT DEPTH
36 INCH SANITARY SEWER PIPE, 10 FT DEPTH
36 INCH SANITARY SEWER PIPE, 20 FT DEPTH
36 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
48 INCH SANITARY SEWER PIPE, 5 FT DEPTH
48 INCH SANITARY SEWER PIPE, 10 FT DEPTH

48 INCH SANITARY SEWER PIPE, 20 FT DEPTH
48 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
72 INCH SANITARY SEWER PIPE, 10 FT DEPTH
72 INCH SANITARY SEWER PIPE, 20 FT DEPTH
72 INCH SANITARY SEWER PIPE, OVER 20 FT DEPTH
6 INCH STORM SEWER PIPE, 5 FT DEPTH
6 INCH STORM SEWER PIPE, 10 FT DEPTH
6 INCH STORM SEWER PIPE, 20 FT DEPTH
6 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
8 INCH STORM SEWER PIPE, 5 FT DEPTH
8 INCH STORM SEWER PIPE, 10 FT DEPTH
8 INCH STORM SEWER PIPE, 20 FT DEPTH
8 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
10 INCH STORM SEWER PIPE, 5 FT DEPTH
10 INCH STORM SEWER PIPE, 10 FT DEPTH
10 INCH STORM SEWER PIPE, 20 FT DEPTH
10 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
12 INCH STORM SEWER PIPE, 5 FT DEPTH
12 INCH STORM SEWER PIPE, 10 FT DEPTH
12 INCH STORM SEWER PIPE, 20 FT DEPTH
12 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
15 INCH STORM SEWER PIPE, 5 FT DEPTH
15 INCH STORM SEWER PIPE, 10 FT DEPTH
15 INCH STORM SEWER PIPE, 20 FT DEPTH
15 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
18 INCH STORM SEWER PIPE, 5 FT DEPTH
18 INCH STORM SEWER PIPE, 10 FT DEPTH
18 INCH STORM SEWER PIPE, 20 FT DEPTH
18 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
21 INCH STORM SEWER PIPE, 5 FT DEPTH
21 INCH STORM SEWER PIPE, 10 FT DEPTH
21 INCH STORM SEWER PIPE, 20 FT DEPTH
21 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
24 INCH STORM SEWER PIPE, 5 FT DEPTH
24 INCH STORM SEWER PIPE, 10 FT DEPTH
24 INCH STORM SEWER PIPE, 20 FT DEPTH
24 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
27 INCH STORM SEWER PIPE, 5 FT DEPTH
27 INCH STORM SEWER PIPE, 10 FT DEPTH
27 INCH STORM SEWER PIPE, 20 FT DEPTH
27 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
30 INCH STORM SEWER PIPE, 5 FT DEPTH
30 INCH STORM SEWER PIPE, 10 FT DEPTH
30 INCH STORM SEWER PIPE, 20 FT DEPTH
30 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
36 INCH STORM SEWER PIPE, 5 FT DEPTH
36 INCH STORM SEWER PIPE, 10 FT DEPTH
36 INCH STORM SEWER PIPE, 20 FT DEPTH
36 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
42 INCH STORM SEWER PIPE, 5 FT DEPTH
42 INCH STORM SEWER PIPE, 10 FT DEPTH
42 INCH STORM SEWER PIPE, 20 FT DEPTH

42 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
48 INCH STORM SEWER PIPE, 5 FT DEPTH
48 INCH STORM SEWER PIPE, 10 FT DEPTH
48 INCH STORM SEWER PIPE, 20 FT DEPTH
48 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
54 INCH STORM SEWER PIPE, 5 FT DEPTH
54 INCH STORM SEWER PIPE, 10 FT DEPTH
54 INCH STORM SEWER PIPE, 20 FT DEPTH
54 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
60 INCH STORM SEWER PIPE, 5 FT DEPTH
60 INCH STORM SEWER PIPE, 10 FT DEPTH
60 INCH STORM SEWER PIPE, 20 FT DEPTH
60 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
66 INCH STORM SEWER PIPE, 10 FT DEPTH
66 INCH STORM SEWER PIPE, 20 FT DEPTH
66 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
72 INCH STORM SEWER PIPE, 10 FT DEPTH
72 INCH STORM SEWER PIPE, 20 FT DEPTH
72 INCH STORM SEWER PIPE, OVER 20 FT DEPTH
78 INCH STORM SEWER PIPE
84 INCH STORM SEWER PIPE
90 INCH STORM SEWER PIPE
6 INCH SLOTTED DRAIN PIPE, 5 FT DEPTH
8 INCH SLOTTED DRAIN PIPE, 5 FT DEPTH
12 INCH SLOTTED DRAIN PIPE, 5 FT DEPTH
18 INCH SLOTTED DRAIN PIPE, 5 FT DEPTH
_____ INCH IRRIGATION PIPE, _____ DEPTH
2 INCH PVC PIPE, 5 FT DEPTH
3 INCH PVC PIPE, 5 FT DEPTH
4 INCH PVC PIPE, 5 FT DEPTH
6 INCH PVC PIPE, 5 FT DEPTH
8 INCH PVC PIPE, 5 FT DEPTH
10 INCH PVC PIPE, 5 FT DEPTH
12 INCH PVC PIPE, 5 FT DEPTH
12 INCH HDPE PIPE, 5 FT DEPTH
20 INCH HDPE PIPE, 5 FT DEPTH
28 INCH HDPE PIPE, 5 FT DEPTH
4 INCH DUCTILE IRON PIPE, 5 FT DEPTH
6 INCH DUCTILE IRON PIPE, 5 FT DEPTH
8 INCH DUCTILE IRON PIPE, 5 FT DEPTH
10 INCH DUCTILE IRON PIPE, 5 FT DEPTH
12 INCH DUCTILE IRON PIPE, 5 FT DEPTH
14 INCH DUCTILE IRON PIPE, 5 FT DEPTH
15 INCH DUCTILE IRON PIPE, 5 FT DEPTH
16 INCH DUCTILE IRON PIPE, 5 FT DEPTH
18 INCH DUCTILE IRON PIPE, 5 FT DEPTH
20 INCH DUCTILE IRON PIPE, 5 FT DEPTH
24 INCH DUCTILE IRON PIPE, 5 FT DEPTH
24 INCH DUCTILE IRON PIPE, 10 FT DEPTH
27 INCH DUCTILE IRON PIPE, 5 FT DEPTH
30 INCH DUCTILE IRON PIPE, 5 FT DEPTH
36 INCH DUCTILE IRON PIPE, 5 FT DEPTH

PIPE TEES, _____ INCH
PIPE WYES, _____ INCH
SLIP JOINTS, _____ INCH
SLOPED END SECTIONS, 8 INCH
SLOPED END SECTIONS, 10 INCH
SLOPED END SECTIONS, 12 INCH
SLOPED END SECTIONS, 15 INCH
SLOPED END SECTIONS, 18 INCH
SLOPED END SECTIONS, 21 INCH
SLOPED END SECTIONS, 24 INCH
SLOPED END SECTIONS, 30 INCH
SLOPED END SECTIONS, 36 INCH
SLOPED END SECTIONS, 42 INCH
SLOPED END SECTIONS, 48 INCH
SLOPED END SECTIONS, 54 INCH
SLOPED END SECTIONS, 60 INCH
SLOPED END SECTIONS, 72 INCH
SAFETY END SECTIONS, 15 INCH
SAFETY END SECTIONS, 18 INCH
SAFETY END SECTIONS, 21 INCH
SAFETY END SECTIONS, 24 INCH
SAFETY END SECTIONS, 30 INCH
SAFETY END SECTIONS, 36 INCH
SAFETY END SECTIONS, 42 INCH
SAFETY END SECTIONS, 48 INCH
SAFETY END SECTIONS, 54 INCH
SAFETY END SECTIONS, 60 INCH
SAFETY END SECTIONS, 72 INCH
CONCRETE PIPE ANCHORS
CONCRETE CLOSURE COLLARS
CONCRETE IN BLOCKS
REINFORCEMENT IN BLOCKS
REINFORCEMENT IN BLOCKS
INSTALLING _____ INCH PIPE UNDER RAILROAD
TRENCH DRAIN, TYPE 1
TRENCH DRAIN, TYPE 2
_____ INCH STRUCTURAL PLATE PIPE
_____ INCH X _____ INCH STRUCTURAL PLATE PIPE ARCH
_____ INCH X _____ INCH STRUCTURAL PLATE ARCH
_____ INCH X _____ INCH STRUCTURAL PLATE ELLIPSE
_____ INCH X _____ INCH STRUCTURAL PLATE VEHICULAR UNDERPASS
STRUCTURAL PLATE CONCRETE FOOTINGS AND HEADWALLS
_____ INCH CAST-IN-PLACE CONCRETE PIPE
PAVED CULVERT END SLOPES
CONCRETE SANITARY SEWER MANHOLES
CONCRETE STORM SEWER MANHOLES
CONCRETE MANHOLES, OUTSIDE DROP
CONCRETE MANHOLES, WITH INLET
CONCRETE MANHOLES, STORM SEWER POLLUTION CONTROL
CONCRETE MANHOLES, SHALLOW
CONCRETE MANHOLES, LARGE PRECAST



CONCRETE MANHOLES, DROP TYPE WITH INLET
CONCRETE MANHOLES, DROP TYPE, LARGE
CONCRETE MANHOLES, DROP TYPE WITH INLET, LARGE
CONCRETE MANHOLES, WATER QUALITY
CONCRETE MANHOLE, WATER QUALITY, LARGE
CONCRETE MANHOLES, WATER QUALITY WITH INLET
CONCRETE MANHOLES, SEDIMENTATION
CONCRETE MANHOLES, SEDIMENTATION WITH INLET
CONCRETE MANHOLES, SIPHON
CONCRETE MANHOLES, DIVERSION
CONCRETE MANHOLES, WITH INLET, LARGE
CONCRETE INLETS, TYPE B
CONCRETE INLETS, TYPE B (MODIFIED)
CONCRETE INLETS, TYPE B-SL
CONCRETE INLETS, TYPE CG-1
CONCRETE INLETS, TYPE CG-1 (MODIFIED)
CONCRETE INLETS, TYPE CG-1 (WITH BASIN)
CONCRETE INLETS, TYPE CG-2
CONCRETE INLETS, TYPE CG-2 (MODIFIED)
CONCRETE INLETS, TYPE CG-3
CONCRETE INLETS, TYPE CG-3 (MODIFIED)
CONCRETE INLETS, TYPE D
CONCRETE INLETS, TYPE D (MODIFIED)
CONCRETE INLETS, TYPE G-1
CONCRETE INLETS, TYPE G-1 (MODIFIED)
CONCRETE INLETS, TYPE G-2
CONCRETE INLETS, TYPE G-2 (MODIFIED)
CONCRETE INLETS, TYPE G-2M
CONCRETE INLETS, TYPE G-2M (MODIFIED)
CONCRETE INLETS, TYPE G-2MA
CONCRETE INLETS, TYPE G-2MA (MODIFIED)
CONCRETE INLETS, TYPE M-E
CONCRETE INLETS, TYPE M-E (MODIFIED)
CONCRETE INLETS, TYPE M-O
CONCRETE INLETS, TYPE M-O (MODIFIED)
CONCRETE SIPHON BOXES
CONCRETE DIVERSION BOXES
CONCRETE IRRIGATION BOXES
CONCRETE JUNCTION BOXES
CONCRETE MONUMENT BOXES
MANHOLE SLOPE PROTECTORS
CATCH BASINS, TYPE 3
8 INCH DRAIN WELLS
EXTRA FOR 8 INCH DRAIN WELLS DEEPER THAN 100 FEET
NPS 8 INCH STEEL WELL CASING
DRAINAGE CURBS
ADJUSTING BOXES
ADJUSTING CATCH BASINS
CONNECTION TO EXISTING STRUCTURES
ADJUSTING INLETS
FILLING ABANDONED STRUCTURES
MINOR ADJUSTMENT OF MANHOLES

MAJOR ADJUSTMENT OF MANHOLES
MANHOLES OVER EXISTING SEWERS
TRENCH RESURFACING
BRIDGE REMOVAL WORK
BRIDGE DECK COLD PLANE PAVEMENT REMOVAL, 0-2 INCHES DEEP
BRIDGE DECK COLD PLANE PAVEMENT REMOVAL, 2-4 INCHES DEEP
SHORING, CRIBBING AND COFFERDAMS
STRUCTURE EXCAVATION
STRUCTURE EXCAVATION
STRUCTURE EXCAVATION BELOW ELEVATIONS SHOWN
GRANULAR WALL BACKFILL
GRANULAR WALL BACKFILL
GRANULAR STRUCTURE BACKFILL
GRANULAR STRUCTURE BACKFILL
FURNISH DRILLING EQUIPMENT
DRILLED SHAFT CONCRETE
DRILLED SHAFT REINFORCEMENT
CSL TEST ACCESS TUBES
CSL TESTS
DRILLED SHAFT EXCAVATION, 30 INCH DIAMETER
DRILLED SHAFT EXCAVATION, 36 INCH DIAMETER
DRILLED SHAFT EXCAVATION, 42 INCH DIAMETER
DRILLED SHAFT EXCAVATION, 48 INCH DIAMETER
DRILLED SHAFT EXCAVATION, 60 INCH DIAMETER
DRILLED SHAFT EXCAVATION, 72 INCH DIAMETER
DRILLED SHAFT EXCAVATION, 84 INCH DIAMETER
DRILLED SHAFT EXCAVATION, 96 INCH DIAMETER
PERMANENT SHAFT CASINGS
FURNISH PILE DRIVING EQUIPMENT
FURNISH HP 10 X 42 STEEL PILES
FURNISH HP 10 X 57 STEEL PILES
FURNISH HP 12 X 53 STEEL PILES
FURNISH HP 12 X 63 STEEL PILES
FURNISH HP 12 X 74 STEEL PILES
FURNISH HP 12 X 84 STEEL PILES
FURNISH HP 14 X 73 STEEL PILES
FURNISH HP 14 X 89 STEEL PILES
FURNISH HP 14 X 117 STEEL PILES
FURNISH HP 14 X 132 STEEL PILES
FURNISH PP 10 X 0.375 STEEL PILES
FURNISH PP 12-3/4 X 0.25 STEEL PILES
FURNISH PP 12-3/4 X 0.312 STEEL PILES
FURNISH PP 12-3/4 X 0.375 STEEL PILES
FURNISH PP 12-3/4 X 0.5 STEEL PILES
FURNISH PP 14 X 0.25 STEEL PILES
FURNISH PP 14 X 0.375 STEEL PILES
FURNISH PP 14 X 0.5 STEEL PILES
FURNISH PP 16 X 0.25 STEEL PILES
FURNISH PP 16 X 0.312 STEEL PILES
FURNISH PP 16 X 0.375 STEEL PILES
FURNISH PP 16 X 0.438 STEEL PILES
FURNISH PP 16 X 0.5 STEEL PILES

FURNISH PP 18 X 0.25 STEEL PILES
FURNISH PP 18 X 0.375 STEEL PILES
FURNISH PP 18 X 0.438 STEEL PILES
FURNISH PP 18 X 0.5 STEEL PILES
FURNISH PP 20 X 0.375 STEEL PILES
FURNISH PP 20 X 0.438 STEEL PILES
FURNISH PP 20 X 0.5 STEEL PILES
FURNISH PP 24 X 0.375 STEEL PILES
FURNISH PP 24 X 0.438 STEEL PILES
FURNISH PP 24 X 0.5 STEEL PILES
FURNISH PP 24 X 0.562 STEEL PILES
FURNISH PP 24 X 0.625 STEEL PILES
FURNISH PP 36 X 0.75 STEEL PILES
FURNISH _____ TEST PILES
DRIVE HP 10 X 42 STEEL PILES
DRIVE HP 10 X 57 STEEL PILES
DRIVE HP 12 X 53 STEEL PILES
DRIVE HP 12 X 63 STEEL PILES
DRIVE HP 12 X 74 STEEL PILES
DRIVE HP 12 X 84 STEEL PILES
DRIVE HP 14 X 73 STEEL PILES
DRIVE HP 14 X 89 STEEL PILES
DRIVE HP 14 X 117 STEEL PILES
DRIVE HP 14 X 132 STEEL PILES
DRIVE PP 10 X 0.375 STEEL PILES
DRIVE PP 12-3/4 X 0.25 STEEL PILES
DRIVE PP 12-3/4 X 0.312 STEEL PILES
DRIVE PP 12-3/4 X 0.375 STEEL PILES
DRIVE PP 12-3/4 X 0.5 STEEL PILES
DRIVE PP 14 X 0.25 STEEL PILES
DRIVE PP 14 X 0.375 STEEL PILES
DRIVE PP 14 X 0.5 STEEL PILES
DRIVE PP 16 X 0.25 STEEL PILES
DRIVE PP 16 X 0.312 STEEL PILES
DRIVE PP 16 X 0.375 STEEL PILES
DRIVE PP 16 X 0.438 STEEL PILES
DRIVE PP 16 X 0.5 STEEL PILES
DRIVE PP 18 X 0.25 STEEL PILES
DRIVE PP 18 X 0.375 STEEL PILES
DRIVE PP 18 X 0.438 STEEL PILES
DRIVE PP 18 X 0.5 STEEL PILES
DRIVE PP 20 X 0.375 STEEL PILES
DRIVE PP 20 X 0.438 STEEL PILES
DRIVE PP 20 X 0.5 STEEL PILES
DRIVE PP 24 X 0.375 STEEL PILES
DRIVE PP 24 X 0.438 STEEL PILES
DRIVE PP 24 X 0.5 STEEL PILES
DRIVE PP 24 X 0.562 STEEL PILES
DRIVE PP 24 X 0.625 STEEL PILES
DRIVE TEST PILES
PREBORING PILES
JETTING PILES

PILE LOAD TEST (STATIC)
PILE LOAD TEST (DYNAMIC)
REINFORCED PILE TIPS
HP 10 X 42 STEEL PILE SPLICES
HP 10 X 57 STEEL PILE SPLICES
HP 12 X 53 STEEL PILE SPLICES
HP 12 X 63 STEEL PILE SPLICES
HP 12 X 74 STEEL PILE SPLICES
HP 12 X 84 STEEL PILE SPLICES
HP 14 X 73 STEEL PILE SPLICES
HP 14 X 89 STEEL PILE SPLICES
HP 14 X 117 STEEL PILE SPLICES
HP 14 X 132 STEEL PILE SPLICES
PP 10 X 0.375 STEEL PILE SPLICES
PP 12-3/4 X 0.25 STEEL PILE SPLICES
PP 12-3/4 X 0.312 STEEL PILE SPLICES
PP 12-3/4 X 0.375 STEEL PILE SPLICES
PP 12-3/4 X 0.5 STEEL PILE SPLICES
PP 14 X 0.25 STEEL PILE SPLICES
PP 14 X 0.375 STEEL PILE SPLICES
PP 14 X 0.5 STEEL PILE SPLICES
PP 16 X 0.25 STEEL PILE SPLICES
PP 16 X 0.312 STEEL PILE SPLICES
PP 16 X 0.375 STEEL PILE SPLICES
PP 16 X 0.438 STEEL PILE SPLICES
PP 16 X 0.5 STEEL PILE SPLICES
PP 18 X 0.25 STEEL PILE SPLICES
PP 18 X 0.375 STEEL PILE SPLICES
PP 18 X 0.438 STEEL PILE SPLICES
PP 18 X 0.5 STEEL PILE SPLICES
PP 20 X 0.375 STEEL PILE SPLICES
PP 20 X 0.438 STEEL PILE SPLICES
PP 20 X 0.5 STEEL PILE SPLICES
PP 24 X 0.375 STEEL PILE SPLICES
PP 24 X 0.438 STEEL PILE SPLICES
PP 24 X 0.5 STEEL PILE SPLICES
PP 24 X 0.562 STEEL PILE SPLICES
PP 24 X 0.625 STEEL PILE SPLICES
REINFORCEMENT
REINFORCEMENT
STAINLESS STEEL REINFORCEMENT
STAINLESS STEEL REINFORCEMENT
COATED REINFORCEMENT
COATED REINFORCEMENT
REBAR CONTINUITY
INTERNAL SHEAR ANCHORS, TOP
INTERNAL SHEAR ANCHORS, BOTTOM
ANCHOR DEMONSTRATION
INJECT AND SEAL CRACKS
CONCRETE AND CRACK SEALER
FOUNDATION CONCRETE, CLASS 3300
FOUNDATION CONCRETE, CLASS 4000

FOUNDATION CONCRETE, CLASS 5000
FOUNDATION CONCRETE, CLASS 5500
FOUNDATION CONCRETE, CLASS 6000
FOUNDATION CONCRETE, CLASS 3300
FOUNDATION CONCRETE, CLASS 4000
FOUNDATION CONCRETE, CLASS 5000
FOUNDATION CONCRETE, CLASS 5500
FOUNDATION CONCRETE, CLASS 6000
DECK CONCRETE, CLASS 4000
DECK CONCRETE, CLASS 5000
DECK CONCRETE, CLASS HPC4000
DECK CONCRETE, CLASS HPC5000
DECK CONCRETE, CLASS 4000
DECK CONCRETE, CLASS 5000
DECK CONCRETE, CLASS HPC4000
DECK CONCRETE, CLASS HPC5000
GENERAL STRUCTURAL CONCRETE, CLASS 3300
GENERAL STRUCTURAL CONCRETE, CLASS 4000
GENERAL STRUCTURAL CONCRETE, CLASS 5000
GENERAL STRUCTURAL CONCRETE, CLASS 5500
GENERAL STRUCTURAL CONCRETE, CLASS 6000
GENERAL STRUCTURAL CONCRETE, CLASS HPC3300
GENERAL STRUCTURAL CONCRETE, CLASS HPC4000
GENERAL STRUCTURAL CONCRETE, CLASS HPC5000
GENERAL STRUCTURAL CONCRETE, CLASS HPC5500
GENERAL STRUCTURAL CONCRETE, CLASS HPC6000
GENERAL STRUCTURAL CONCRETE, CLASS 3300
GENERAL STRUCTURAL CONCRETE, CLASS 4000
GENERAL STRUCTURAL CONCRETE, CLASS 5000
GENERAL STRUCTURAL CONCRETE, CLASS 5500
GENERAL STRUCTURAL CONCRETE, CLASS 6000
GENERAL STRUCTURAL CONCRETE, CLASS HPC3300
GENERAL STRUCTURAL CONCRETE, CLASS HPC4000
GENERAL STRUCTURAL CONCRETE, CLASS HPC5000
GENERAL STRUCTURAL CONCRETE, CLASS HPC5500
GENERAL STRUCTURAL CONCRETE, CLASS HPC6000
SAW CUT TEXTURING
REINFORCED CONCRETE BRIDGE END PANELS
BI 51 PRECAST PRESTRESSED GIRDERS
BI 63 PRECAST PRESTRESSED GIRDERS
BI 75 PRECAST PRESTRESSED GIRDERS
BT 48 PRECAST PRESTRESSED GIRDERS
BT 60 PRECAST PRESTRESSED GIRDERS
BT 72 PRECAST PRESTRESSED GIRDERS
BT 84 PRECAST PRESTRESSED GIRDERS
BT 90 PRECAST PRESTRESSED GIRDERS
BT 96 PRECAST PRESTRESSED GIRDERS
TUB 52 PRECAST PRESTRESSED GIRDERS
TUB 58 PRECAST PRESTRESSED GIRDERS
TUB 64 PRECAST PRESTRESSED GIRDERS
TUB 70 PRECAST PRESTRESSED GIRDERS
TUB 76 PRECAST PRESTRESSED GIRDERS

HAUNCHED TUB 52 PRECAST PRESTRESSED GIRDERS
HAUNCHED TUB 58 PRECAST PRESTRESSED GIRDERS
HAUNCHED TUB 64 PRECAST PRESTRESSED GIRDERS
HAUNCHED TUB 70 PRECAST PRESTRESSED GIRDERS
HAUNCHED TUB 76 PRECAST PRESTRESSED GIRDERS
DECK BT 36 PRECAST PRESTRESSED GIRDERS
DECK BT 45 PRECAST PRESTRESSED GIRDERS
DECK BT 60 PRECAST PRESTRESSED GIRDERS
TYPE II PRECAST PRESTRESSED GIRDERS
TYPE III PRECAST PRESTRESSED GIRDERS
TYPE IV PRECAST PRESTRESSED GIRDERS
TYPE V PRECAST PRESTRESSED GIRDERS
12 INCH PRECAST PRESTRESSED SLABS
15 INCH PRECAST PRESTRESSED SLABS
18 INCH PRECAST PRESTRESSED SLABS
21 INCH PRECAST PRESTRESSED SLABS
26 INCH PRECAST PRESTRESSED SLABS
30 INCH PRECAST PRESTRESSED SLABS
33 INCH PRECAST PRESTRESSED BOX BEAMS
39 INCH PRECAST PRESTRESSED BOX BEAMS
42 INCH PRECAST PRESTRESSED BOX BEAMS
48 INCH PRECAST PRESTRESSED BOX BEAMS
POST-TENSIONING
CLASS 2 PREPARATION
FURNISH MULTI-LAYER POLYMER CONCRETE OVERLAY MATERIAL
CONSTRUCT MULTI-LAYER POLYMER CONCRETE OVERLAY
CLASS 2 PREPARATION
FURNISH PREMIXED POLYMER CONCRETE
CONSTRUCT PPC OVERLAY
CRACK SEALANT REMOVAL
CLASS 2 PREPARATION
FURNISH SILICA FUME CONCRETE
FURNISH LATEX MODIFIED CONCRETE
CONSTRUCT SFC RESURFACING
CONSTRUCT LMC RESURFACING
SAW CUT TEXTURING
STEEL PLATE GIRDER
STEEL PLATE GIRDER WITH HAUNCH
HORIZONTAL CURVED STEEL PLATE GIRDER
STEEL BOX GIRDER
TRAPEZIODAL STEEL BOX GIRDER WITH HAUNCH
HORIZONTAL CURVED STEEL BOX GIRDER
STEEL ROLLED BEAM
STRUCTURAL STEEL MAINTENANCE
TIMBER AND LUMBER
GLUE LAMINATED TIMBER
BRIDGE DRAINS
BEARING DEVICES, BENT _____
1/2 INCH ELECTRICAL CONDUIT
3/4 INCH ELECTRICAL CONDUIT
1 INCH ELECTRICAL CONDUIT
1-1/4 INCH ELECTRICAL CONDUIT

1-1/2 INCH ELECTRICAL CONDUIT
2 INCH ELECTRICAL CONDUIT
2-1/2 INCH ELECTRICAL CONDUIT
3 INCH ELECTRICAL CONDUIT
3-1/2 INCH ELECTRICAL CONDUIT
4 INCH ELECTRICAL CONDUIT
5 INCH ELECTRICAL CONDUIT
6 INCH ELECTRICAL CONDUIT
8 INCH ELECTRICAL CONDUIT
ELASTOMERIC CONCRETE NOSING
ELASTOMERIC CONCRETE NOSING MATERIAL FOR REPAIR
REPAIR ELASTOMERIC CONCRETE NOSING
ASPHALTIC PLUG SEALS
ASPHALTIC PLUG SEAL MATERIAL
POURED SEALS
TYPE "A" COMPRESSION SEALS
TYPE "B" COMPRESSION SEALS
TYPE "C" COMPRESSION SEALS
TYPE "D" COMPRESSION SEALS
TYPE "E" COMPRESSION SEALS
TYPE "F" COMPRESSION SEALS
STRIP SEALS
MODULAR BRIDGE JOINT SYSTEMS
PROTECTION RAILING
2 TUBE STEEL RAIL
2 TUBE STEEL RAIL, RETROFIT
2 TUBE STEEL RAIL, MODIFIED
3 TUBE STEEL RAIL
3 TUBE STEEL RAIL, MODIFIED
THREE BEAM STEEL RAIL
COMBINATION BRIDGE RAIL
CONCRETE BRIDGE RAIL
CONCRETE BRIDGE RAIL WITH PEDESTRIAN RAIL
CONCRETE BRIDGE RAIL WITH CHAIN LINK FENCE
CONCRETE BRIDGE RAIL, MODIFIED
TEXAS TYPE CONCRETE BRIDGE RAIL
CONCRETE PARAPET
CONCRETE PARAPET WITH PEDESTRIAN RAIL
CONCRETE PARAPET WITH CHAIN LINK FENCE
CONCRETE PARAPET WITH ORNAMENTAL PEDESTRIAN RAIL
CONCRETE PARAPET, MODIFIED
SINGLE SLOPE CONCRETE BRIDGE RAIL
TYPE "F" CONCRETE RAIL
TYPE "F" CONCRETE RAIL WITH PEDESTRIAN RAIL
TYPE "F" CONCRETE RAIL WITH CHAIN LINK FENCE
TYPE "F" CONCRETE RAIL, MODIFIED
TYPE "F" CONCRETE RAIL, MODIFIED, WITH METAL RAIL
TYPE "F" CONCRETE RAIL, RETROFIT
TYPE "F" CONCRETE RAIL, WITH METAL RAIL, RETROFIT
PEDESTRIAN RAIL
PEDESTRIAN RAIL, MODIFIED
PEDESTRIAN RAIL, RETROFIT

ORNAMENTAL RAIL
ORNAMENTAL RAIL WITH PEDESTRIAN HANDRAIL
TIMBER RAIL
TIMBER RAIL, STEEL BACKED
BICYCLE RAIL
HANDRAIL
ORNAMENTAL PEDESTRIAN RAIL
CONCRETE BALUSTER BRIDGE RAIL
THRIE BEAM STEEL RAIL, RETROFIT
UTILITY ATTACHMENT ON STRUCTURES
WARRANTED SPRAY WATERPROOFING MEMBRANE
PREPARE AND POWDER COAT EXISTING STRUCTURES
CONTAINMENT
MOVING BRIDGE CONTAINMENT SYSTEM
SURFACE PREPARATION
COATING APPLICATION
COATING MATERIALS
PACK RUST REMOVAL
BARGE
REINFORCED CONCRETE BOX CULVERTS
WINGWALLS AND APRONS
SIDEWALK COPING
RETAINING WALL, MSE
RETAINING WALL, PREFABRICATED MODULAR GRAVITY
RETAINING WALL, CAST-IN-PLACE CONCRETE RIGID GRAVITY
RETAINING WALL, CAST-IN-PLACE CONC SEMI-GRAVITY CANTILEVER
32 INCH TYPE "F" TRAFFIC BARRIER COPING WITH MOMENT SLAB
42 INCH TYPE "F" TRAFFIC BARRIER COPING WITH MOMENT SLAB
SOUND WALLS
CONCRETE SLOPE PAVING
BERM PAVING
SLOPE PAVING CURBS
RECONDITIONING EXISTING ROADWAY
COLD PLANE PAVEMENT REMOVAL, 0 - 1 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 0 - 2 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 0 - 2 1/2 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 0 - 3 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 0 - 4 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 0 - 5 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 0 - 6 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 1/2 - 2 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 1 - 2 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 2 - 4 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 2 - 6 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 4 - 6 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 6 - 10 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 1/2 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 3/4 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 1 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 1 1/2 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 2 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 2 1/2 INCHES DEEP



COLD PLANE PAVEMENT REMOVAL, 3 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 4 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 5 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 6 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 7 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 8 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 9 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 10 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 11 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 12 INCHES DEEP
COLD PLANE PAVEMENT REMOVAL, 14 INCHES DEEP
GRIND CONCRETE PAVEMENT
GRID-ROLLED AGGREGATE SUBBASE, _____ INCHES THICK
AGGREGATE BASE
AGGREGATE SHOULDERS
AGGREGATE SUBBASE
AGGREGATE SUBBASE
AGGREGATE BASE
AGGREGATE BASE
1/4 INCH - 0 AGGREGATE BASE
1/4 INCH - 0 AGGREGATE BASE
1/2 INCH - 0 AGGREGATE BASE
1/2 INCH - 0 AGGREGATE BASE
3/4 INCH - 0 AGGREGATE BASE
3/4 INCH - 0 AGGREGATE BASE
1 INCH - 0 AGGREGATE BASE
1 INCH - 0 AGGREGATE BASE
1-1/2 INCH - 0 AGGREGATE BASE
1-1/2 INCH - 0 AGGREGATE BASE
2 INCH - 0 AGGREGATE BASE
2 INCH - 0 AGGREGATE BASE
2-1/2 INCH - 0 AGGREGATE BASE
2-1/2 INCH - 0 AGGREGATE BASE
3 INCH - 0 AGGREGATE BASE
3 INCH - 0 AGGREGATE BASE
4 INCH - 0 AGGREGATE BASE
4 INCH - 0 AGGREGATE BASE
PLANT MIX AGGREGATE BASE
PLANT MIX AGGREGATE BASE
PLANT MIX _____ AGGREGATE BASE
PLANT MIX _____ AGGREGATE BASE
AGGREGATE SHOULDERS
AGGREGATE SHOULDERS
AGGREGATE BASE, _____ INCHES THICK
RECYCLED ASPHALT PRODUCTS IN BASE, 4 INCHES THICK
RECYCLED ASPHALT PRODUCTS IN BASE, 6 INCHES THICK
RECYCLED ASPHALT PRODUCTS IN BASE, 8 INCHES THICK
RECYCLED ASPHALT PRODUCTS IN BASE, 10 INCHES THICK
RECYCLED ASPHALT PRODUCTS IN BASE, 12 INCHES THICK
RECYCLED ASPHALT PRODUCTS IN BASE, 14 INCHES THICK
RECYCLED ASPHALT PRODUCTS IN BASE, 16 INCHES THICK
RECYCLED ASPHALT PRODUCTS IN BASE, 18 INCHES THICK

LEAN CONCRETE BASE, 6 INCHES THICK
LEAN CONCRETE BASE, 7 INCHES THICK
LEAN CONCRETE BASE, 8 INCHES THICK
LEAN CONCRETE BASE, 10 INCHES THICK
LEAN CONCRETE BASE, 12 INCHES THICK
LEAN CONCRETE BASE, 14 INCHES THICK
LEAN CONCRETE BASE, 16 INCHES THICK
LEAN CONCRETE BASE, 18 INCHES THICK
DRILLED HOLES
CONCRETE UNDERSEALING GROUT
_____ MATERIAL IN STOCKPILE
_____ MATERIAL IN STOCKPILE
EMULSIFIED ASPHALT IN PRIME COAT
EMULSIFIED ASPHALT IN FOG COAT
AGGREGATE COVER MATERIAL
AGGREGATE COVER MATERIAL
SLURRY SEAL
SLURRY SEAL CRACK SEALING
AGGREGATE IN EMULSIFIED ASPHALT SURFACE TREATMENT
AGGREGATE IN EMULSIFIED ASPHALT SURFACE TREATMENT
ASPHALT IN EMULSIFIED ASPHALT SURFACE TREATMENT
EXTRA FOR EMULSIFIED ASPHALT SURFACE TREATMENT APPROACHES
PRE-COATED AGGREGATE IN ASPHALT SURFACE TREATMENT
ASPHALT BINDER COAT IN ASPHALT SURFACE TREATMENT
PG 64-22 IN PRE-COATED AGGREGATE
AGGREGATE IN DRY KEY EMULSIFIED ASPHALT SURFACE TREATMENT
ASPHALT IN DRY KEY EMULSIFIED ASPHALT SURFACE TREATMENT
EXTRA FOR DRY KEY EMULSIFIED ASPHALT SURFACE TREATMENT APPROACHES
AGGREGATE IN MULTIPLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT
AGGREGATE IN MULTIPLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT
ASPHALT IN MULTIPLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT
EXTRA FOR MULTIPLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT APPROACHES
HYDRATED LIME IN CIR
LIME FOR TREATED RECYCLE
COLD IN-PLACE RECYCLED ASPHALT CONCRETE PAVEMENT
RECYCLING AGENT IN CIR
COLD RECYCLED EMULSIFIED ASPHALT PAVEMENT
RECYCLING AGENT IN CRP
LINE IN CRP
HOT IN-PLACE RECYCLED ASPHALT CONCRETE PAVEMENT
RA 1 RECYCLING AGENT IN HIR
RA 5 RECYCLING AGENT IN HIR
RA 25 RECYCLING AGENT IN HIR
RA 75 RECYCLING AGENT IN HIR
RA 250 RECYCLING AGENT IN HIR
RA 500 RECYCLING AGENT IN HIR
EMULSIFIED ASPHALT FOR TACK COAT
EMULSIFIED ASPHALT CONCRETE MIXTURE
EMULSIFIED ASPHALT IN MIXTURE
CHOKE AGGREGATE
CHOKE AGGREGATE
EMULSIFIED ASPHALT CONCRETE IN LEVELING AND/OR PATCHING

HAUL AND PLACE EMULSIFIED ASPHALT CONCRETE MIXTURE
HAUL AND PLACE CHOKO AGGREGATE
COMMERCIAL ASPHALT CONCRETE PAVEMENT
3/8 INCH PAC MIXTURE
1/2 INCH PAC MIXTURE
3/4 INCH ATPB MIXTURE
LEVEL 1, _____ ACP MIXTURE _____
LEVEL 2, 3/4 INCH ACP MIXTURE
LEVEL 2, 1/2 INCH ACP MIXTURE
LEVEL 2, 3/8 INCH ACP MIXTURE
LEVEL 2, 3/4 INCH ACP MIXTURE IN LEVELING
LEVEL 2, 1/2 INCH ACP MIXTURE IN LEVELING
LEVEL 2, 3/8 INCH ACP MIXTURE IN LEVELING
LEVEL 2, 3/4 INCH ACP MIXTURE IN TEMPORARY
LEVEL 2, 1/2 INCH ACP MIXTURE IN TEMPORARY
LEVEL 2, 3/8 INCH ACP MIXTURE IN TEMPORARY
LEVEL 2, 3/4 INCH ACP MIXTURE IN LEVELING AND TEMPORARY
LEVEL 2, 1/2 INCH ACP MIXTURE IN LEVELING AND TEMPORARY
LEVEL 2, 3/8 INCH ACP MIXTURE IN LEVELING AND TEMPORARY
LEVEL 3, 3/4 INCH ACP MIXTURE
LEVEL 3, 1/2 INCH ACP MIXTURE
LEVEL 3, 3/8 INCH ACP MIXTURE
LEVEL 3, 3/4 INCH ACP MIXTURE IN LEVELING
LEVEL 3, 1/2 INCH ACP MIXTURE IN LEVELING
LEVEL 3, 3/8 INCH ACP MIXTURE IN LEVELING
LEVEL 3, 3/4 INCH ACP MIXTURE IN TEMPORARY
LEVEL 3, 1/2 INCH ACP MIXTURE IN TEMPORARY
LEVEL 3, 3/8 INCH ACP MIXTURE IN TEMPORARY
LEVEL 3, 3/4 INCH ACP MIXTURE IN LEVELING AND TEMPORARY
LEVEL 3, 1/2 INCH ACP MIXTURE IN LEVELING AND TEMPORARY
LEVEL 3, 3/8 INCH ACP MIXTURE IN LEVELING AND TEMPORARY
LEVEL 1, _____ _____ ACP _____
LEVEL 2, 3/4 INCH ACP
LEVEL 2, 1/2 INCH ACP
LEVEL 2, 3/8 INCH ACP
LEVEL 2, 3/4 INCH LIME TREATED ACP
LEVEL 2, 1/2 INCH LIME TREATED ACP
LEVEL 2, 3/8 INCH LIME TREATED ACP
LEVEL 2, 3/4 INCH ACP IN LEVELING
LEVEL 2, 1/2 INCH ACP IN LEVELING
LEVEL 2, 3/8 INCH ACP IN LEVELING
LEVEL 2, 3/4 INCH LIME TREATED ACP IN LEVELING
LEVEL 2, 1/2 INCH LIME TREATED ACP IN LEVELING
LEVEL 2, 3/8 INCH LIME TREATED ACP IN LEVELING
LEVEL 2, 3/4 INCH ACP IN TEMPORARY
LEVEL 2, 1/2 INCH ACP IN TEMPORARY
LEVEL 2, 3/8 INCH ACP IN TEMPORARY
LEVEL 2, 3/4 INCH LIME TREATED ACP IN TEMPORARY
LEVEL 2, 1/2 INCH LIME TREATED ACP IN TEMPORARY
LEVEL 2, 3/8 INCH LIME TREATED ACP IN TEMPORARY

LEVEL 2, 3/4 INCH ACP IN LEVELING AND TEMPORARY
LEVEL 2, 1/2 INCH ACP IN LEVELING AND TEMPORARY
LEVEL 2, 3/8 INCH ACP IN LEVELING AND TEMPORARY
LEVEL 2, 3/4 INCH LIME TREATED ACP IN LEVELING AND TEMPORARY
LEVEL 2, 1/2 INCH LIME TREATED ACP IN LEVELING AND TEMPORARY
LEVEL 2, 3/8 INCH LIME TREATED ACP IN LEVELING AND TEMPORARY
LEVEL 3, 3/4 INCH ACP
LEVEL 3, 1/2 INCH ACP
LEVEL 3, 3/8 INCH ACP
LEVEL 3, 3/4 INCH LIME TREATED ACP
LEVEL 3, 1/2 INCH LIME TREATED ACP
LEVEL 3, 3/8 INCH LIME TREATED ACP
LEVEL 3, 3/4 INCH ACP IN LEVELING
LEVEL 3, 1/2 INCH ACP IN LEVELING
LEVEL 3, 3/8 INCH ACP IN LEVELING
LEVEL 3, 3/4 INCH LIME TREATED ACP IN LEVELING
LEVEL 3, 1/2 INCH LIME TREATED ACP IN LEVELING
LEVEL 3, 3/8 INCH LIME TREATED ACP IN LEVELING
LEVEL 3, 3/4 INCH ACP IN TEMPORARY
LEVEL 3, 1/2 INCH ACP IN TEMPORARY
LEVEL 3, 3/8 INCH ACP IN TEMPORARY
LEVEL 3, 3/4 INCH LIME TREATED ACP IN TEMPORARY
LEVEL 3, 1/2 INCH LIME TREATED ACP IN TEMPORARY
LEVEL 3, 3/8 INCH LIME TREATED ACP IN TEMPORARY
LEVEL 3, 3/4 INCH ACP IN LEVELING AND TEMPORARY
LEVEL 3, 1/2 INCH ACP IN LEVELING AND TEMPORARY
LEVEL 3, 3/8 INCH ACP IN LEVELING AND TEMPORARY
LEVEL 3, 3/4 INCH LIME TREATED ACP IN LEVELING AND TEMPORARY
LEVEL 3, 1/2 INCH LIME TREATED ACP IN LEVELING AND TEMPORARY
LEVEL 3, 3/8 INCH LIME TREATED ACP IN LEVELING AND TEMPORARY
LEVEL 4, 3/4 INCH ACP
LEVEL 4, 1/2 INCH ACP
LEVEL 4, 3/8 INCH ACP
LEVEL 4, 3/4 INCH LIME TREATED ACP
LEVEL 4, 1/2 INCH LIME TREATED ACP
LEVEL 4, 3/8 INCH LIME TREATED ACP
LEVEL 4, 3/4 INCH ACP IN LEVELING
LEVEL 4, 1/2 INCH ACP IN LEVELING
LEVEL 4, 3/8 INCH ACP IN LEVELING
LEVEL 4, 3/4 INCH LIME TREATED ACP IN LEVELING
LEVEL 4, 1/2 INCH LIME TREATED ACP IN LEVELING
LEVEL 4, 3/8 INCH LIME TREATED ACP IN LEVELING
LEVEL 4, 3/4 INCH ACP IN TEMPORARY
LEVEL 4, 1/2 INCH ACP IN TEMPORARY
LEVEL 4, 3/8 INCH ACP IN TEMPORARY
LEVEL 4, 3/4 INCH LIME TREATED ACP IN TEMPORARY
LEVEL 4, 1/2 INCH LIME TREATED ACP IN TEMPORARY
LEVEL 4, 3/8 INCH LIME TREATED ACP IN TEMPORARY

LEVEL 4, 3/4 INCH ACP IN LEVELING AND TEMPORARY
LEVEL 4, 1/2 INCH ACP IN LEVELING AND TEMPORARY
LEVEL 4, 3/8 INCH ACP IN LEVELING AND TEMPORARY
LEVEL 4, 3/4 INCH LIME TREATED ACP IN LEVELING AND TEMPORARY
LEVEL 4, 1/2 INCH LIME TREATED ACP IN LEVELING AND TEMPORARY
LEVEL 4, 3/8 INCH LIME TREATED ACP IN LEVELING AND TEMPORARY
PG 58-22 ASPHALT IN _____ ACP
PG 58-28 ASPHALT IN _____ ACP
PG 64-22 ASPHALT IN _____ ACP
PG 64-22ER ASPHALT IN _____ ACP
PG 64-28 ASPHALT IN _____ ACP
PG 64-28ER ASPHALT IN _____ ACP
PG 64-34 ASPHALT IN _____ ACP
PG 70-22 ASPHALT IN _____ ACP
PG 70-22ER ASPHALT IN _____ ACP
PG 70-28 ASPHALT IN _____ ACP
PG 70-28ER ASPHALT IN _____ ACP
CRACK SEALING
CRACK SEALING
6 INCH ASPHALT CONCRETE PAVEMENT REPAIR
9 INCH ASPHALT CONCRETE PAVEMENT REPAIR
10 INCH ASPHALT CONCRETE PAVEMENT REPAIR
12 INCH ASPHALT CONCRETE PAVEMENT REPAIR
14 INCH ASPHALT CONCRETE PAVEMENT REPAIR
15 INCH ASPHALT CONCRETE PAVEMENT REPAIR
16 INCH ASPHALT CONCRETE PAVEMENT REPAIR
18 INCH ASPHALT CONCRETE PAVEMENT REPAIR
20 INCH ASPHALT CONCRETE PAVEMENT REPAIR
21 INCH ASPHALT CONCRETE PAVEMENT REPAIR
22 INCH ASPHALT CONCRETE PAVEMENT REPAIR
24 INCH ASPHALT CONCRETE PAVEMENT REPAIR
26 INCH ASPHALT CONCRETE PAVEMENT REPAIR
30 INCH ASPHALT CONCRETE PAVEMENT REPAIR
32 INCH ASPHALT CONCRETE PAVEMENT REPAIR
34 INCH ASPHALT CONCRETE PAVEMENT REPAIR
36 INCH ASPHALT CONCRETE PAVEMENT REPAIR
38 INCH ASPHALT CONCRETE PAVEMENT REPAIR
42 INCH ASPHALT CONCRETE PAVEMENT REPAIR
48 INCH ASPHALT CONCRETE PAVEMENT REPAIR
EXTRA FOR ASPHALT APPROACHES
EXTRA FOR ASPHALT DRAINS
EXTRA FOR PEDESTRIAN LANDINGS
EXTRA FOR ASPHALT DIKES
EXTRA FOR ASPHALT ISLANDS
EXTRA FOR ASPHALT WALKS
EXTRA FOR ASPHALT DITCH LINING
EXTRA FOR ASPHALT SLOPE PAVING
EXTRA FOR PAVEMENT REPAIR
ASPHALT APPROACHES
ASPHALT DIKES

ASPHALT ISLANDS
ASPHALT WALKS
ASPHALT DITCH LINING
ASPHALT SLOPE PAVING
PLAIN CONCRETE PAVEMENT REPAIR
CONCRETE PAVEMENT SPALL REPAIR
CONCRETE PAVEMENT BASE REPAIR
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 5 INCH THICK
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 6 INCH THICK
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 7 INCH THICK
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 8 INCH THICK
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 9 INCH THICK
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 10 INCH THICK
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 11 INCH THICK
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 12 INCH THICK
REINFORCED CONCRETE PAVEMENT
REINFORCED CONCRETE PAVEMENT 5 INCH THICK
REINFORCED CONCRETE PAVEMENT 6 INCH THICK
REINFORCED CONCRETE PAVEMENT 7 INCH THICK
REINFORCED CONCRETE PAVEMENT 8 INCH THICK
REINFORCED CONCRETE PAVEMENT 9 INCH THICK
REINFORCED CONCRETE PAVEMENT 10 INCH THICK
REINFORCED CONCRETE PAVEMENT 11 INCH THICK
REINFORCED CONCRETE PAVEMENT 12 INCH THICK
TERMINAL ANCHORS
FLEXIBLE TO RIGID PAVEMENT TRANSITIONS
PLAIN CONCRETE PAVEMENT, UNDOWELED, 5 INCHES THICK
PLAIN CONCRETE PAVEMENT, UNDOWELED, 6 INCHES THICK
PLAIN CONCRETE PAVEMENT, UNDOWELED, 7 INCHES THICK
PLAIN CONCRETE PAVEMENT, UNDOWELED, 8 INCHES THICK
PLAIN CONCRETE PAVEMENT, UNDOWELED, 9 INCHES THICK
PLAIN CONCRETE PAVEMENT, UNDOWELED, 10 INCHES THICK
PLAIN CONCRETE PAVEMENT, UNDOWELED, 11 INCHES THICK
PLAIN CONCRETE PAVEMENT, UNDOWELED, 12 INCHES THICK
PLAIN CONCRETE PAVEMENT, DOWELED, 5 INCHES THICK
PLAIN CONCRETE PAVEMENT, DOWELED, 6 INCHES THICK
PLAIN CONCRETE PAVEMENT, DOWELED, 7 INCHES THICK
PLAIN CONCRETE PAVEMENT, DOWELED, 4 INCHES THICK
PLAIN CONCRETE PAVEMENT, DOWELED, 8 INCHES THICK
PLAIN CONCRETE PAVEMENT, DOWELED, 9 INCHES THICK
PLAIN CONCRETE PAVEMENT, DOWELED, 10 INCHES THICK
PLAIN CONCRETE PAVEMENT, DOWELED, 11 INCHES THICK
PLAIN CONCRETE PAVEMENT, DOWELED, 12 INCHES THICK
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR
EXTRA FOR REINFORCED BAR LAP AREAS
REINFORCED CONCRETE PAVEMENT REPAIR
CONCRETE PAVEMENT SPALL REPAIR
EXTRA FOR EXPANSION JOINT REPAIR
EXTRA FOR TERMINAL EXPANSION JOINT REPAIR
EXTRA FOR TERMINAL EXPANSION JOINT REPAIR (STEEL BEAM)
CONCRETE PAVEMENT BASE, 6 INCH THICK

CONCRETE CURBS
CONCRETE CURBS
CONCRETE CURBS, MODIFIED
CONCRETE CURBS, CURB AND GUTTER
CONCRETE CURBS, CURB AND GUTTER
CONCRETE CURBS, CURB AND GUTTER, MODIFIED
CONCRETE CURBS, LOW PROFILE MOUNTABLE CURB
CONCRETE CURBS, LOW PROFILE MOUNTABLE CURB
CONCRETE CURBS, LOW PROFILE MOUNTABLE CURB, MODIFIED
CONCRETE CURBS, LOW PROFILE MOUNTABLE, MODIFIED
CONCRETE CURBS, STANDARD CURB
CONCRETE CURBS, STANDARD CURB
CONCRETE CURBS, STANDARD CURB, MODIFIED
CONCRETE CURBS, STANDARD CURB, MODIFIED
CONCRETE CURBS, MOUNTABLE CURB AND GUTTER
CONCRETE CURBS, MOUNTABLE CURB AND GUTTER
CONCRETE CURBS, MOUNTABLE CURB AND GUTTER, MODIFIED
CONCRETE CURBS, MOUNTABLE CURB AND GUTTER, MODIFIED
CONCRETE CURBS, MOUNTABLE CURB
CONCRETE CURBS, MOUNTABLE CURB
CONCRETE CURBS, MOUNTABLE CURB, MODIFIED
CONCRETE CURBS, MOUNTABLE CURB, MODIFIED
CONCRETE ISLANDS
CONCRETE DRIVEWAYS
CONCRETE DRIVEWAYS, REINFORCED
CONCRETE WALKS
MONOLITHIC CURB AND SIDEWALKS
MONOLITHIC CURB AND SIDEWALKS
VALLEY GUTTER CONCRETE SURFACING
3 INCH CONCRETE SURFACING
4 INCH CONCRETE SURFACING
5 INCH CONCRETE SURFACING
6 INCH CONCRETE SURFACING
7 INCH CONCRETE SURFACING
8 INCH CONCRETE SURFACING
9 INCH CONCRETE SURFACING
10 INCH CONCRETE SURFACING
11 INCH CONCRETE SURFACING
12 INCH CONCRETE SURFACING
PATTERNED CONCRETE SURFACING
EXPOSED AGGREGATE CONCRETE SURFACING
POROUS CONCRETE SURFACING
CONCRETE STAIRS
CONCRETE DRIVEWAY CONNECTIONS
RETROFIT CONCRETE SIDEWALK RAMPS
EXTRA FOR NEW SIDEWALK RAMPS
CONCRETE BUS SHELTER PADS
CONCRETE MOWING STRIP
METAL HANDRAIL, 2 RAILS
METAL HANDRAIL, 3 RAILS
UNIT PAVERS
GUARDRAIL, TYPE 1

GUARDRAIL, TYPE 1 (MODIFIED)
GUARDRAIL, TYPE 2 WEATHERIZED
GUARDRAIL, TYPE 2A WEATHERIZED
GUARDRAIL, TYPE 2A
GUARDRAIL, TYPE 2A (MODIFIED)
GUARDRAIL, TYPE 3 WEATHERIZED
GUARDRAIL, TYPE 3
GUARDRAIL, TYPE 3 (MODIFIED)
GUARDRAIL, TYPE 4
GUARDRAIL, TYPE 4 (MODIFIED)
GUARDRAIL, TYPE 4 WEATHERIZED
METAL MEDIAN BARRIER
GUARDRAIL ANCHORS, TYPE 1
GUARDRAIL ANCHORS, TYPE 1 MODIFIED
GUARDRAIL END PIECES, TYPE B
GUARDRAIL END PIECES, TYPE C
GUARDRAIL TRANSITION
GUARDRAIL CONNECTIONS
GUARDRAIL TERMINALS, NON-FLARED
GUARDRAIL TERMINALS, FLARED
GUARDRAIL TERMINALS, NON-FLARED, TEST LEVEL 2
GUARDRAIL TERMINALS, FLARED, TEST LEVEL 2
EXTRA FOR 8 FOOT POSTS
EXTRA FOR 11 FOOT POSTS
CONSTRUCT GUARDRAIL FLARES
GUARDRAIL, TYPE 4 WEATHERIZED
EXTRA FOR HAND DUG GUARDRAIL POST HOLES
31 INCH GUARDRAIL, TYPE _____
GUARDRAIL HEIGHT CONVERSION, TYPE _____
CABLE BARRIER, TEST LEVEL 3
CABLE BARRIER, TEST LEVEL 4
CABLE BARRIER TERMINALS
CABLE BARRIER GUARDRAIL CONNECTIONS
ADJUSTING GUARDRAIL
METAL BEAM RAILS
GUARDRAIL POSTS
GUARDRAIL BLOCKS
STEEL BACKED TIMBER GUARDRAIL
STEEL BACKED TERMINAL ANCHORS
BOLLARDS
REMOVABLE BOLLARDS
FIRE HYDRANT BOLLARDS
CONCRETE BARRIER
CONCRETE BARRIER, TALL
_____ INCH GLARE SHIELDS
IMPACT ATTENUATOR, TYPE A
IMPACT ATTENUATOR, TYPE B
IMPACT ATTENUATOR, TYPE C
IMPACT ATTENUATOR, TYPE D
IMPACT ATTENUATOR, TYPE E
IMPACT ATTENUATOR, TYPE F
IMPACT ATTENUATOR, TYPE G



IMPACT ATTENUATOR, TYPE H
IMPACT ATTENUATOR, TYPE J
IMPACT ATTENUATOR, TYPE K
IMPACT ATTENUATOR, TYPE L
IMPACT ATTENUATOR, TYPE M
DELINEATORS, TYPE 1
DELINEATORS, TYPE 1U
DELINEATORS, TYPE 2
DELINEATORS, TYPE 3
DELINEATORS, TYPE 4 ALTERNATE 1
DELINEATORS, TYPE 4 ALTERNATE 2
DELINEATORS, TYPE 5
DELINEATORS, TYPE 6
MILEPOST MARKER POSTS
FIELD FACILITY MARKERS, TYPE S1 GREEN
FIELD FACILITY MARKERS, TYPE S1 RED
FIELD FACILITY MARKERS, TYPE S2
FIELD FACILITY MARKERS, TYPE S3
CULVERT DRAINAGE MARKERS, TYPE 1
CULVERT DRAINAGE MARKERS, TYPE 2
BRIDGE IDENTIFICATION MARKERS
PAVEMENT LINE REMOVAL
PAVEMENT BAR REMOVAL
PAVEMENT LEGEND REMOVAL
MONO-DIRECTIONAL WHITE TYPE 1 MARKERS
MONO-DIRECTIONAL WHITE TYPE 1AR MARKERS
BI-DIRECTIONAL YELLOW TYPE 1 MARKERS
BI-DIRECTIONAL YELLOW TYPE 1AR MARKERS
WHITE TYPE II MARKERS
YELLOW TYPE II MARKERS
MONO-DIRECTIONAL WHITE TYPE 1AR MARKERS, RECESSED
BI-DIRECTIONAL YELLOW TYPE 1AR MARKERS, RECESSED
PERMANENT SURFACE MOUNTED TUBULAR MARKERS
CONTINUOUS RUMBLE STRIPS
GAP PATTERN RUMBLE STRIPS
TRANSVERSE RUMBLE STRIPS
LONGITUDINAL PAVEMENT MARKINGS - PAINT
METHYL METHACRYLATE, EXTRUDED, SURFACE, PROFILED
METHYL METHACRYLATE, EXTRUDED, SURFACE, NON-PROFILED
METHYL METHACRYLATE, EXTRUDED, GROOVED, PROFILED
METHYL METHACRYLATE, EXTRUDED, GROOVED, NON-PROFILED
THERMOPLASTIC, EXTRUDED, SURFACE, PROFILED
THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED
THERMOPLASTIC, EXTRUDED, GROOVED, PROFILED
THERMOPLASTIC, EXTRUDED, GROOVED, NON-PROFILED
METHYL METHACRYLATE, SPRAYED, SURFACE, NON-PROFILED
THERMOPLASTIC, SPRAYED, SURFACE, NON-PROFILED
PAVEMENT MARKING TAPE, ROLLED-IN, PATTERNED
PAVEMENT MARKING TAPE, ROLLED-IN, NON-PATTERNED
PAVEMENT MARKING TAPE, GROOVED, PATTERNED
PAVEMENT MARKING TAPE, GROOVED, NON-PATTERNED
PAVEMENT MARKING TAPE, ROLLED-IN, PATTERNED, WET WEATHER

PAVEMENT MARKING TAPE, ROLLED-IN, NON-PATTERNED, WET WEATHER
PAVEMENT MARKING TAPE, GROOVED, PATTERNED, WET WEATHER
PAVEMENT MARKING TAPE, GROOVED, NON-PATTERNED, WET WEATHER
METHYL METHACRYLATE, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED
THERMOPLASTIC, EXTRUDED OR SPRAYED, SURFACE, NON-PROFILED
METHYL METHACRYLATE, WET WEATHER, SURFACE, PROFILED
METHYL METHACRYLATE, WET WEATHER, SURFACE, NON-PROFILED
METHYL METHACRYLATE, WET WEATHER, GROOVED, PROFILED
METHYL METHACRYLATE, WET WEATHER, GROOVED, NON-PROFILED
THERMOPLASTIC, WET WEATHER, SURFACE, PROFILED
THERMOPLASTIC, WET WEATHER, SURFACE, NON-PROFILED
THERMOPLASTIC, WET WEATHER, GROOVED, PROFILED
THERMOPLASTIC, WET WEATHER, GROOVED, NON-PROFILED
PLURAL COMPONENT, EXTRUDED, SURFACE
PLURAL COMPONENT, EXTRUDED, GROOVED
PLURAL COMPONENT, EXTRUDED, WET WEATHER, SURFACE
PLURAL COMPONENT, EXTRUDED, WET WEATHER, GROOVED
HI-BUILD PAINT, EXTRUDED, SURFACE
HI-BUILD PAINT, EXTRUDED, GROOVED
HI-BUILD PAINT, EXTRUDED, WET WEATHER, SURFACE
HI-BUILD PAINT, EXTRUDED, WET WEATHER, GROOVED
PLURAL COMPONENT, SPRAYED, SURFACE
PLURAL COMPONENT, SPRAYED, GROOVED
PLURAL COMPONENT, SPRAYED, WET WEATHER, SURFACE
PLURAL COMPONENT, SPRAYED, WET WEATHER, GROOVED
HI-BUILD PAINT, SPRAYED, SURFACE
HI-BUILD PAINT, SPRAYED, GROOVED
HI-BUILD PAINT, SPRAYED, WET WEATHER, SURFACE
HI-BUILD PAINT, SPRAYED, WET WEATHER, GROOVED
PLURAL COMPONENT, EXTRUDED OR SPRAYED, SURFACE
PLURAL COMPONENT, EXTRUDED OR SPRAYED, GROOVED
PLURAL COMPONENT, EXTRUDED OR SPRAYED, WET WEATHER, SURFACE
PLURAL COMPONENT, EXTRUDED OR SPRAYED, WET WEATHER, GROOVED
HI-BUILD PAINT, EXTRUDED OR SPRAYED, SURFACE
HI-BUILD PAINT, EXTRUDED OR SPRAYED, GROOVED
HI-BUILD PAINT, EXTRUDED OR SPRAYED, WET WEATHER, SURFACE
HI-BUILD PAINT, EXTRUDED OR SPRAYED, WET WEATHER, GROOVED
PAVEMENT LEGEND, TYPE A: ARROWS
PAVEMENT LEGEND, TYPE B: ARROWS
PAVEMENT LEGEND, TYPE B-HS: ARROWS
PAVEMENT LEGEND, TYPE AB: ARROWS
PAVEMENT LEGEND, TYPE A: "ONLY"
PAVEMENT LEGEND, TYPE B: "ONLY"
PAVEMENT LEGEND, TYPE B-HS: "ONLY"
PAVEMENT LEGEND, TYPE AB: "ONLY"
PAVEMENT LEGEND, TYPE A: "SCHOOL"
PAVEMENT LEGEND, TYPE B: "SCHOOL"
PAVEMENT LEGEND, TYPE B-HS: "SCHOOL"
PAVEMENT LEGEND, TYPE AB: "SCHOOL"
PAVEMENT LEGEND, TYPE A: "SCHOOL" LARGE
PAVEMENT LEGEND, TYPE B: "SCHOOL" LARGE
PAVEMENT LEGEND, TYPE B-HS: "SCHOOL" LARGE

PAVEMENT LEGEND, TYPE AB: "SCHOOL" LARGE
PAVEMENT LEGEND, TYPE A: RAILROAD CROSSING
PAVEMENT LEGEND, TYPE A: RAILROAD CROSSING, NARROW
PAVEMENT LEGEND, TYPE B: RAILROAD CROSSING
PAVEMENT LEGEND, TYPE B: RAILROAD CROSSING, NARROW
PAVEMENT LEGEND, TYPE B-HS: RAILROAD CROSSING
PAVEMENT LEGEND, TYPE B-HS: RAILROAD CROSSING, NARROW
PAVEMENT LEGEND, TYPE AB: RAILROAD CROSSING
PAVEMENT LEGEND, TYPE AB: RAILROAD CROSSING, NARROW
PAVEMENT LEGEND, TYPE B-HS: RAILROAD CROSSING, BIKE
PAVEMENT LEGEND, TYPE A: HOV DIAMOND
PAVEMENT LEGEND, TYPE B: HOV DIAMOND
PAVEMENT LEGEND, TYPE B-HS: HOV DIAMOND
PAVEMENT LEGEND, TYPE AB: HOV DIAMOND
PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL
PAVEMENT BAR, TYPE A
PAVEMENT BAR, TYPE B
PAVEMENT BAR, TYPE B-HS
PAVEMENT BAR: TYPE AB
PAVEMENT LEGEND, TYPE A: "CROSSING" LARGE
PAVEMENT LEGEND, TYPE B: "CROSSING" LARGE
PAVEMENT LEGEND, TYPE B-HS: "CROSSING" LARGE
PAVEMENT LEGEND, TYPE AB: "CROSSING" LARGE
PAVEMENT LEGEND, TYPE A: "XING"
PAVEMENT LEGEND, TYPE B: "XING"
PAVEMENT LEGEND, TYPE B-HS: "XING"
PAVEMENT LEGEND, TYPE AB: "XING"
PAVEMENT LEGEND, TYPE A: "BUS"
PAVEMENT LEGEND, TYPE B: "BUS"
PAVEMENT LEGEND, TYPE B-HS: "BUS"
PAVEMENT LEGEND, TYPE AB: "BUS"
PAVEMENT LEGEND, TYPE A: CATTLE GUARD
PAVEMENT LEGEND, TYPE B: CATTLE GUARD
PAVEMENT LEGEND, TYPE B-HS: CATTLE GUARD
PAVEMENT LEGEND, TYPE AB: CATTLE GUARD
PAVEMENT LEGEND, TYPE A: ON-STREET PARKING
PAVEMENT LEGEND, TYPE B: ON-STREET PARKING
PAVEMENT LEGEND, TYPE B-HS: ON-STREET PARKING
PAVEMENT LEGEND, TYPE AB: ON-STREET PARKING
PAVEMENT LEGEND, TYPE A: YIELD LINE TRIANGLE
PAVEMENT LEGEND, TYPE B: YIELD LINE TRIANGLE
PAVEMENT LEGEND, TYPE B-HS: YIELD LINE TRIANGLE
PAVEMENT LEGEND, TYPE AB: YIELD LINE TRIANGLE
PAVEMENT LEGEND, TYPE A: DISABLED PARKING
PAVEMENT LEGEND, TYPE B: DISABLED PARKING
PAVEMENT LEGEND, TYPE B-HS: DISABLED PARKING
PAVEMENT LEGEND, TYPE AB: DISABLED PARKING
CROSSWALK CLOSURE BARRICADES
REMOVE EXISTING SIGNS
REMOVE AND REINSTALL EXISTING SIGNS
MODIFY EXISTING SIGNS AND LEGENDS
WOOD SIGN POSTS

SIGN SUPPORT FOOTINGS
36 INCH DIAMETER SIGN SUPPORT DRILLED SHAFT FOUNDATION
48 INCH DIAMETER SIGN SUPPORT DRILLED SHAFT FOUNDATION
60 INCH DIAMETER SIGN SUPPORT DRILLED SHAFT FOUNDATION
TRUSS SIGN BRIDGE
MONOTUBE SIGN BRIDGE
BUTTERFLY SIGN STRUCTURES
MONOTUBE CANTILEVER SIGN STRUCTURES
BRIDGE STRUCTURE MOUNTS
EXIT NUMBER SIGN MOUNTS
SIGNAL POLE MOUNTS
ADJUSTABLE SIGN MOUNTS
VERTICAL SIGN MOUNTS ON EXISTING STRUCTURES
SECONDARY SIGN MOUNTS
MULTI-POST BREAKAWAY SIGN SUPPORTS
TRIANGULAR BASE BREAKAWAY SIGN SUPPORTS
PIPE BREAKAWAY SIGN SUPPORTS
PERFORATED STEEL SQUARE TUBE SLIP BASE SIGN SUPPORTS
90 DEGREE ROTATIONAL SIGN SUPPORTS
PIPE SIGN SUPPORTS
PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS
TYPE "B" SIGNS IN PLACE
TYPE "B1" SIGNS IN PLACE
TYPE "B2" SIGNS IN PLACE
TYPE "B3" SIGNS IN PLACE
TYPE "C" SIGNS IN PLACE
TYPE "C1" SIGNS IN PLACE
TYPE "C2" SIGNS IN PLACE
TYPE "F" SIGNS IN PLACE
TYPE "F1" SIGNS IN PLACE
TYPE "G" SIGNS IN PLACE
TYPE "G1" SIGNS IN PLACE
TYPE "G2" SIGNS IN PLACE
TYPE "G3" SIGNS IN PLACE
TYPE "G4" SIGNS IN PLACE
TYPE "O" SIGNS IN PLACE
TYPE "OO" SIGNS IN PLACE
TYPE "O3" SIGNS IN PLACE
TYPE "O4" SIGNS IN PLACE
TYPE "O5" SIGNS IN PLACE
TYPE "O6" SIGNS IN PLACE
TYPE "O8" SIGNS IN PLACE
TYPE "R" SIGNS IN PLACE
TYPE "R1" SIGNS IN PLACE
TYPE "R2" SIGNS IN PLACE
TYPE "R3" SIGNS IN PLACE
TYPE "R4" SIGNS IN PLACE
TYPE "W1" SIGNS IN PLACE
TYPE "W2" SIGNS IN PLACE
TYPE "W3" SIGNS IN PLACE
TYPE "W4" SIGNS IN PLACE
TYPE "W5" SIGNS IN PLACE

TYPE "W6" SIGNS IN PLACE
TYPE "W7" SIGNS IN PLACE
TYPE "W8" SIGNS IN PLACE
TYPE "W9" SIGNS IN PLACE
TYPE "W10" SIGNS IN PLACE
TYPE "W11" SIGNS IN PLACE
TYPE "W12"SIGNS IN PLACE
TYPE "Y1" SIGNS IN PLACE
TYPE "Y2" SIGNS IN PLACE
TYPE "Y3" SIGNS IN PLACE
TYPE "Y4" SIGNS IN PLACE
TYPE "Y5" SIGNS IN PLACE
TYPE "Y6" SIGNS IN PLACE
TYPE "Y7" SIGNS IN PLACE
TYPE "Y8" SIGNS IN PLACE
TYPE "YG" SIGNS IN PLACE
TYPE "YGW" SIGNS IN PLACE
TYPE"YW"SIGNS IN PLACE
PERMANENT TYPE III BARRICADES
REMOVAL OF ELECTRICAL SYSTEMS
36 INCH DIAMETER SIGNAL SUPPORT DRILLED SHAFT
42 INCH DIAMETER SIGNAL SUPPORT DRILLED SHAFT
CAMERA POLES AND FOUNDATIONS
POLE FOUNDATIONS
LIGHTING POLES, FIXED BASE
LIGHTING POLES, SLIP BASE
LIGHTING POLE ARMS
LUMINAIRES, LAMPS, AND BALLASTS
SWITCHING, CONDUIT, AND WIRING
REFURBISHING AND REINSTALLING EXISTING ILLUMINATION SYSTEMS
TRAFFIC SIGNAL INSTALLATION, _____
TRAFFIC SIGNAL MODIFICATION, _____
DETECTOR INSTALLATION, _____
RAMP METER SIGNAL INSTALLATION, _____
INTERCONNECT SYSTEM
FLASHING BEACON INSTALLATION, _____
AUTOMATIC TRAFFIC RECORDER INSTALLATION, _____
WATER QUALITY STRUCTURE, _____
STORAGE POND, _____
BIORETENTION POND, _____
WATER QUALITY SWALE, _____
BIOSLOPE, _____
WATER QUALITY FILTER STRIP, _____
WEED CONTROL
SEEDING MOBILIZATION
TEMPORARY SEEDING
TEMPORARY SEEDING, MIX NO. 1
TEMPORARY SEEDING, MIX NO. 2
TEMPORARY SEEDING, MIX NO. 3
TEMPORARY SEEDING, MIX NO. 4
PERMANENT SEEDING
PERMANENT SEEDING, MIX NO. 1

PERMANENT SEEDING, MIX NO. 2
PERMANENT SEEDING, MIX NO. 3
PERMANENT SEEDING, MIX NO. 4
WETLAND SEEDING
WETLAND SEEDING, MIX NO. 1
WETLAND SEEDING, MIX NO. 2
WETLAND SEEDING, MIX NO. 3
WETLAND SEEDING, MIX NO. 4
WATER QUALITY SEEDING
WATER QUALITY SEEDING, MIX NO. 1
WATER QUALITY SEEDING, MIX NO. 2
WATER QUALITY SEEDING, MIX NO. 3
WATER QUALITY SEEDING, MIX NO. 4
PLANT SEEDING
PLANT SEEDING, MIX NO. 1
PLANT SEEDING, MIX NO. 2
PLANT SEEDING, MIX NO. 3
PLANT SEEDING, MIX NO. 4
NATIVE PLANT SEEDING
NATIVE PLANT SEEDING, MIX NO. 1
NATIVE PLANT SEEDING, MIX NO. 2
NATIVE PLANT SEEDING, MIX NO. 3
NATIVE PLANT SEEDING, MIX NO. 4
WILDFLOWER SEEDING
WILDFLOWER SEEDING, MIX NO. 1
WILDFLOWER SEEDING, MIX NO. 2
WILDFLOWER SEEDING, MIX NO. 3
WILDFLOWER SEEDING, MIX NO. 4
LAWN SEEDING
LAWN SEEDING
FERTILIZING
MULCHING
SOIL TESTING
TOPSOIL
WETLAND TOPSOIL
SOIL CONDITIONER
CONIFER TREES, SEEDLINGS
CONIFER TREES, 2 FT HEIGHT
CONIFER TREES, 4 FT HEIGHT
CONIFER TREES, 6 FT HEIGHT
CONIFER TREES, SPECIMEN
SEEDLING TREES, DECIDUOUS
DECIDUOUS TREES, 1 INCH CALIPER
DECIDUOUS TREES, 2 INCH CALIPER
DECIDUOUS TREES, 3 INCH CALIPER
DECIDUOUS TREES, 4 INCH CALIPER
DECIDUOUS TREES, SPECIMEN
DECIDUOUS TREES, #1 CONTAINER
DECIDUOUS TREES, #2 CONTAINER
DECIDUOUS TREES, #3 CONTAINER
DECIDUOUS TREES, #5 CONTAINER
SEEDLING SHRUBS

SHRUBS, BARE ROOT
SHRUBS, #SP4 CONTAINER
SHRUBS, #SP5 CONTAINER
SHRUBS, #1 CONTAINER
SHRUBS, #2 CONTAINER
SHRUBS, #3 CONTAINER
SHRUBS, #5 CONTAINER
SHRUBS, SPECIMEN
TUBELING PLANT
VINES, #SP4 CONTAINER
VINES, #1 CONTAINER
GROUNDCOVERS, #1 CONTAINER
GROUNDCOVERS, #2 CONTAINER
GROUNDCOVERS, #SP2 CONTAINER
GROUNDCOVERS, #SP4 CONTAINER
BULBS
SITE-COLLECTED PLANTS
SEEDLING PLANTS
PLANT CUTTINGS, LESS THAN 1 INCH
PLANT CUTTINGS, GREATER THAN 1 INCH
ROOTED PLANT CUTTINGS
WETLAND PLANTS, BARE ROOT
WETLAND PLANTS, PLUGS
WETLAND PLANTS, #SP4 CONTAINER
WETLAND PLANTS, #1 CONTAINER
WETLAND PLANTS, #2 OR LARGER CONTAINER
ANNUALS
TRANSPLANTED SPECIMEN PLANTS
SOD LAWN
BARK MULCH
CINDER MULCH
WOOD CHIP MULCH
COMPOST MULCH
GRASS STRAW MULCH
ROCK MULCH
TREE GRATES
WOODY COARSE DEBRIS
BOULDERS
BOULDERS
ROOT BARRIER
WEED CONTROL GEOTEXTILE
TYPE 1 FENCE
TYPE 1 MODIFIED FENCE
TYPE 1-5W FENCE
TYPE 1-5W MODIFIED FENCE
TYPE 2 FENCE
TYPE 2 MODIFIED FENCE
4 FOOT SINGLE GATES
8 FOOT SINGLE GATES
10 FOOT SINGLE GATES
12 FOOT SINGLE GATES
16 FOOT SINGLE GATES

20 FOOT SINGLE GATES
16 FOOT DOUBLE GATES
18 FOOT DOUBLE GATES
20 FOOT DOUBLE GATES
22 FOOT DOUBLE GATES
24 FOOT DOUBLE GATES
28 FOOT DOUBLE GATES
30 FOOT DOUBLE GATES
34 FOOT DOUBLE GATES
36 FOOT DOUBLE GATES
_____ CHAIN LINK FENCE
_____ CHAIN LINK FENCE WITH _____
4 FOOT X 24 INCH CHAIN LINK SINGLE GATES
3 FOOT X 48 INCH CHAIN LINK SINGLE GATES
6 FOOT X 48 INCH CHAIN LINK SINGLE GATES
15 FOOT X 48 INCH CHAIN LINK SINGLE GATES
3 FOOT X 72 INCH CHAIN LINK SINGLE GATES
8 FOOT X 72 INCH CHAIN LINK SINGLE GATES
10 FOOT X 72 INCH CHAIN LINK SINGLE GATES
12 FOOT X 60 INCH CHAIN LINK SINGLE GATES
12 FOOT X 72 INCH CHAIN LINK SINGLE GATES
16 FOOT X 60 INCH CHAIN LINK SINGLE GATES
16 FOOT X 72 INCH CHAIN LINK SINGLE GATES
12 FOOT X 48 INCH CHAIN LINK DOUBLE GATES
12 FOOT X 60 INCH CHAIN LINK DOUBLE GATES
16 FOOT X 60 INCH CHAIN LINK DOUBLE GATES
6 FOOT X 72 INCH CHAIN LINK DOUBLE GATES
12 FOOT X 72 INCH CHAIN LINK DOUBLE GATES
22 FOOT X 72 INCH CHAIN LINK DOUBLE GATES
24 FOOT X 72 INCH CHAIN LINK DOUBLE GATES
28 FOOT X 72 INCH CHAIN LINK DOUBLE GATES
30 FOOT X 72 INCH CHAIN LINK DOUBLE GATES
8 FOOT X 96 INCH CHAIN LINK DOUBLE GATES
16 FOOT X 96 INCH CHAIN LINK DOUBLE GATES
24 FOOT X 96 INCH CHAIN LINK DOUBLE GATES
_____ FT TYPE _____ PROTECTIVE FENCE
REMOVING AND REBUILDING FENCE
_____ CATTLE GUARD
SINGLE MAILBOX SUPPORTS
MULTIPLE MAILBOX SUPPORTS
MAILBOX CONCRETE COLLARS
REMOVE AND REINSTALL MAILBOX SUPPORTS
GRAVEL BEDS
GRAVEL BLANKET
STREAMBED ENHANCEMENT
STREAMBED EXCAVATION
FISH ROCKS, TYPE 1
FISH ROCKS, TYPE 2
FISH ROCKS, TYPE 3
FISH LOGS
STREAMBED GRAVEL



BENCHES, TYPE _____
BICYCLE RACKS
LITTER RECEPTACLES
PICNIC TABLES
SAND URNS
AERATION SYSTEM
PLANT TRELLIS
IRRIGATION SYSTEM
_____ INCH POTABLE WATER PIPE, FITTINGS AND COUPLINGS WITH CLASS _____ BACKFILL
_____ INCH POTABLE WATER PIPE, FITTINGS & COUPLINGS WITH RESTRAINED JOINTS AND CLASS _____
EXTRA TRENCH EXCAVATION WITH CLASS _____ BACKFILL
BLOWOFF ASSEMBLY, _____ INCH
_____ INCH CONNECTION TO _____ INCH EXISTING MAIN
_____ INCH _____ VALVE
_____ INCH _____ VALVE WITH _____ ACTUATOR
_____ INCH _____ CHECK VALVE
_____ INCH _____ BACKFLOW PREVENTION ASSEMBLY
_____ INCH HYDRAULICALLY OPERATED VALVE
_____ INCH COMBINATION AIR RELEASE / AIR VACUUM VALVE ASSEMBLY
_____ INCH TAPPING SLEEVE AND _____ INCH VALVE ASSEMBLY
HYDRANT ASSEMBLIES
RESETTING EXISTING HYDRANTS
MOVING EXISTING HYDRANTS
RECONNECTING EXISTING HYDRANTS
HYDRANT GUARD POSTS
HYDRANT EXTENSIONS
3/4 INCH WATER SERVICE CONNECTIONS
1 INCH WATER SERVICE CONNECTIONS
1-1/2 INCH WATER SERVICE CONNECTIONS
2 INCH WATER SERVICE CONNECTIONS
RECONNECTING EXISTING WATER SERVICES, 3/4 INCH
RECONNECTING EXISTING WATER SERVICES, 1 INCH
RECONNECTING EXISTING WATER SERVICES, 1-1/2 INCH
RECONNECTING EXISTING WATER SERVICES, 2 INCH
WATER SAMPLING STATIONS
QCE TRAINING AND CERTIFICATION
PROVIDE WORK PLATFORM/CONTAINMENT
LOCATE NEAR SURFACE METAL
REMOVE NON-ESSENTIAL NEAR SURFACE METAL
REPAIR DAMAGED REINFORCING BARS
MOBILIZE FOR CONCRETE REPAIR
LOCATE DAMAGED CONCRETE
CONCRETE ANCHORS
REPAIR DAMAGED CONCRETE
CONCRETE BUILDUP ON SHALLOW REBAR
RESIN BUILDUP ON SHALLOW REBAR
INSTALL REFERENCE CELLS
BASIC CONTINUITY CHECK
ADDITIONAL CONTINUITY CHECK
EXCAVATE FOR CONTINUITY WELDS

ESTABLISH CONTINUITY
INSTALL ANODE TERMINAL PLATES
PREPARE ANODE SURFACES
INSTALL ZINC ANODES
INSTALL DC POWER DISTRIBUTION SYSTEM
INSTALL REMOTE MONITOR WIRING
INSTALL POWER AND COMMUNICATION UTILITIES
PROVIDE CP CABINETS, RISERS AND WEATHER EQUIPMENT
INSTALL CP CABINETS AND RISERS
RAILROAD PROTECTIVE COSTS
OTHER RAILROAD COSTS
STATISTICAL ASPHALT BONUS
STATISTICAL PCC BONUS
PCC SMOOTHNESS BONUS
AC SMOOTHNESS BONUS
AC ESCALATION
FUEL ESCALATION
STEEL ESCALATION
STATE RESPONSIBILITY FOR DAMAGES
SPECIALS (INCLUDED IN CONTINGENCIES)
SPECIALS, UTILITIES ADJUSTMENT
SPECIALS, STATE FURNISHED
SPECIALS (NOT INCLUDED IN CONTINGENCIES)
APHIS MIGRATORY BIRD MONITORING
PUBLIC OUTREACH
ARCHAEOLOGICAL SITE MONITORING
ENGINEERING
MISCELLANEOUS - LS
MISCELLANEOUS - EACH
MISCELLANEOUS - FOOT
MISCELLANEOUS - SQYD
MISCELLANEOUS - SQFT
MISCELLANEOUS - CUYD
MISCELLANEOUS - MILE
MISCELLANEOUS - TON
MISCELLANEOUS - LB
MISCELLANEOUS - GAL
MISCELLANEOUS - MGAL
MISCELLANEOUS - ACRE
MISCELLANEOUS - HOUR
MISCELLANEOUS - DAY
MISCELLANEOUS - FBM
MISCELLANEOUS - MFBM

Revised October 29, 2015

to have existing Special

part of the Special Provision  
(on Boilerplate".)

Unique Specification. (Remarks

Unit	Class of Work		Remarks
HOUR	N/A	N/A	
EACH	12	MHA	
EACH	12	MHA	
LS	N/A	N/A	
LS	13	TTC	
LS	13	TTC	
SQFT	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
FOOT	13	TTC	
FOOT	13	TTC	
FOOT	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
FOOT	13	TTC	
FOOT	13	TTC	
FOOT	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
FOOT	13	TTC	
FOOT	13	TTC	
EACH	13	TTC	

EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
FOOT	13	TTC	
FOOT	13	TTC	
DAY	13	TTC	Unique Specification
FOOT	13	TTC	Unique Specification
FOOT	13	TTC	Unique Specification
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
FOOT	13	TTC	
FOOT	13	TTC	
FOOT	13	TTC	
FOOT	13	TTC	
EACH	13	TTC	
SQFT	13	TTC	
FOOT	13	TTC	Unique Specification
FOOT	13	TTC	
SQFT	13	TTC	
SQFT	13	TTC	
LS	13	TTC	
LS	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	
EACH	13	TTC	Unique Specification
LS	13	TTC	Unique Specification
DAY	13	TTC	Unique Specification
EACH	13	TTC	Unique Specification
HOUR	13	TTC	
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HOUR	13	TTC	
EACH	13	TTC	Unique Specification
HOUR	13	TTC	Unique Specification
EACH	13	TTC	
HOUR	13	TTC	
LS	1	EART	Stand Alone Special Provision
LS	1	EART	
LS	1	EART	Stand Alone Special Provision
LS	2	REIN	Stand Alone Special Provision
LS	2	REIN	Stand Alone Special Provision
LS	2	REIN	Stand Alone Special Provision
LS	2	REIN	Stand Alone Special Provision
LS	2	REIN	Stand Alone Special Provision
LS	2	REIN	Stand Alone Special Provision
SQFT	2	REIN	Stand Alone Special Provision
FOOT	12	MHA	
FOOT	12	MHA	

FOOT	12	MHA	
FOOT	12	MHA	
FOOT	12	MHA	
FOOT	12	MHA	
FOOT	12	MHA	
EACH	12	MHA	
FOOT	12	MHA	
LS	11	LS	
SQYD	11	LS	
ACRE	11	LS	
ACRE	11	LS	
ACRE	11	LS	Special Provision Boilerplate
ACRE	11	LS	Special Provision Boilerplate
ACRE	11	LS	Special Provision Boilerplate
SQYD	11	LS	Special Provision Boilerplate
SQYD	11	LS	Special Provision Boilerplate
SQYD	11	LS	Special Provision Boilerplate
SQYD	11	LS	Special Provision Boilerplate
SQYD	11	LS	Special Provision Boilerplate
SQYD	11	LS	Special Provision Boilerplate
SQYD	11	LS	Special Provision Boilerplate
SQYD	11	LS	Special Provision Boilerplate
SQYD	11	LS	
EACH	11	LS	Special Provision Boilerplate
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EACH	11	LS	Special Provision Boilerplate
FOOT	11	LS	
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FOOT	11	LS	Special Provision Boilerplate
FOOT	11	LS	
EACH	11	LS	Special Provision Boilerplate
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EACH	11	LS	
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EACH	11	LS	Special Provision Boilerplate
EACH	11	LS	Special Provision Boilerplate
FOOT	11	LS	Special Provision Boilerplate
EACH	11	LS	Special Provision Boilerplate
FOOT	11	LS	Special Provision Boilerplate
EACH	11	LS	Special Provision Boilerplate



























FOOT	2	REIN	
FOOT	2	REIN	
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SQYD	5	AB	Unique Specification
SQYD	5	AB	Unique Specification
SQYD	5	AB	Unique Specification
SQYD	5	AB	Unique Specification
SQYD	5	AB	Unique Specification
SQYD	5	AB	Unique Specification
SQYD	5	AB	Unique Specification
SQYD	5	AB	Unique Specification
EACH	7	PCP	Stand Alone Special Provision
CUYD	7	PCP	Stand Alone Special Provision
CUYD	4	AC	
TON	4	AC	
TON	6	ACP	
TON	6	ACP	
CUYD	6	ACP	
TON	6	ACP	
SQYD	6	ACP	
FOOT	6	ACP	
CUYD	6	ACP	
TON	6	ACP	
TON	6	ACP	
EACH	6	ACP	
TON	6	ACP	
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TON	6	ACP	
CUYD	6	ACP	Unique Specification
TON	6	ACP	Unique Specification
EACH	6	ACP	Unique Specification
CUYD	6	ACP	
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EACH	6	ACP	
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TON	6	ACP	Unique Specification
SQYD	6	ACP	Unique Specification
TON	6	ACP	Unique Specification
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SQYD	6	ACP	Unique Specification
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CUYD	6	ACP	
TON	6	ACP	
TON	6	ACP	











FOOT	12	MHA	
CUYD	12	MHA	
FOOT	12	MHA	
FOOT	12	MHA	
CUYD	12	MHA	
FOOT	12	MHA	
FOOT	12	MHA	
CUYD	12	MHA	
FOOT	12	MHA	
CUYD	12	MHA	
FOOT	12	MHA	
CUYD	12	MHA	
FOOT	12	MHA	
CUYD	12	MHA	
FOOT	12	MHA	
CUYD	12	MHA	
FOOT	12	MHA	
CUYD	12	MHA	
SQFT	12	MHA	
SQFT	12	MHA	
SQFT	12	MHA	
SQFT	12	MHA	
FOOT	12	MHA	
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SQFT	12	MHA	
CUYD	12	MHA	
SQFT	12	MHA	Special Provision Boilerplate
EACH	12	MHA	Special Provision Boilerplate
EACH	12	MHA	Special Provision Boilerplate
EACH	12	MHA	
FOOT	12	MHA	
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FOOT	12	MHA	
SQFT	11	LS	Stand Alone Special Provision
FOOT	12	MHA	





















EACH	11	LS	Stand Alone Special Provision
EACH	11	LS	Stand Alone Special Provision
EACH	11	LS	Stand Alone Special Provision
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EACH	11	LS	Stand Alone Special Provision
EACH	11	LS	Stand Alone Special Provision
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FOOT	1	EART	
FOOT	1	EART	
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LS	N/A	N/A	
EACH	N/A	N/A	
FOOT	N/A	N/A	
SQYD	N/A	N/A	
SQFT	N/A	N/A	
CUYD	N/A	N/A	
MILE	N/A	N/A	
TON	N/A	N/A	
LB	N/A	N/A	
GAL	N/A	N/A	
MGAL	N/A	N/A	
ACRE	N/A	N/A	
HOUR	N/A	N/A	
DAY	N/A	N/A	
FBM	N/A	N/A	
MFBM	N/A	N/A	



CITY OF PORTLAND, OREGON  
BUREAU OF TRANSPORTATION  
PRELIMINARY ENGINEER'S ESTIMATE

\*

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF \* FROM \*

**VALUES IN BLUE ARE PERCENT OF CONTRACT.**

**##### BID ITEMS #####**

NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE
1	MOBILIZATION	0210
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	0225
3	TEMPORARY SIGNS	0225
4	TEMPORARY BARRICADES, TYPE II	0225
5	TEMPORARY BARRICADES, TYPE III	0225
6	TEMPORARY CONCRETE BARRIER, REFLECTORIZED	0225
7	MOVING TEMPORARY CONCRETE BARRIER	0225
8	TEMPORARY IMPACT ATTENUATOR	0225
9	TEMPORARY PEDESTRIAN WALKWAYS	0225
10	TEMPORARY PLASTIC DRUMS	0225
11	TEMPORARY REFLECTIVE PAVEMENT MARKERS	0225
12	TEMPORARY FLEXIBLE PAVEMENT MARKERS	0225
13	TEMPORARY STRIPING	0225
14	STRIPE REMOVAL	0225
15	STRIPING & STRIPE REMOVAL MOBILIZATION	0225
16	TEMPORARY TRAFFIC SIGNAL INSTALLATION	0225
17	SEQUENTIAL ARROW SIGNS	0225
18	PORTABLE CHANGEABLE MESSAGE SIGNS	0225
19	FLAGGERS	0225
20	TRAFFIC CONTROL SUPERVISOR	0225
21	TEMPORARY TYPE ORANGE PLASTIC MESH FENCE	0270
22	TEMPORARY CL-6R CHAIN LINK FENCE	0270
23	EROSION CONTROL	0280
24	PLASTIC SHEETING	0280
25	MATTING	0280
26	CONSTRUCTION ENTRANCES	0280
27	SEDIMENT FENCE, SUPPORTED	0280
28	SEDIMENT FENCE, UNSUPPORTED	0280
29	INLET PROTECTION	0280
30	POLLUTION CONTROL PLAN	0290
31	CONTAMINATED MEDIA DISPOSAL	0291
32	TRUCK LINERS	0291
33	HASP/CMDP WORKPLANS	0291
34	REMOVAL OF PIPES	0310
35	REMOVAL OF CURBS	0310
36	REMOVAL OF WALKS AND DRIVEWAYS	0310
37	REMOVAL OF SURFACINGS	0310
38	REMOVAL OF INLETS	0310

39	REMOVAL OF MANHOLES	0310
40	REMOVAL OF RAILROAD TRACK AND TIES	0310
41	SALVAGING AND STOCKPILING OF COBBLESTONES	0310
42	REMOVE AND REINSTALL HORSE RINGS	0310
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	0310
44	REMOVAL OF FENCES	0310
45	CLEARING AND GRUBBING	0320
46	TREE ROOT REMOVAL	0320
47	TREE TRIMMING	0320
48	DITCH EXCAVATION	0330
49	GENERAL EXCAVATION	0330
50	SURCHARGE EXCAVATION	0330
51	EMBANKMENT IN PLACE	0330
52	SETTLEMENT PLATE	0330
53	12 INCH SUBGRADE STABILIZATION	0331
54	AGGREGATE DITCH LINING	0333
55	WATERING	0340
56	DRAINAGE GEOTEXTILE, TYPE 2	0350
57	EMBANKMENT GEOTEXTILE	0350
58	SUBGRADE GEOTEXTILE	0350
59	GEOGRID	0350
60	GRANULAR DRAINAGE BLANKET	0360
61	FILTER BLANKET	0390
62	LOOSE RIPRAP, CLASS 50	0390
63	LOOSE RIPRAP, CLASS 100	0390
64	WIRE MESH SLOPE PROTECTION	0398
65	VIDEO INSPECTION OF SEWERS, MAINLINE	0401
66	TRENCH EXCAVATION, COMMON	0405
67	EXPLORATORY EXCAVATION	0405
68	POTHOLE EXCAVATION	0405
69	TRENCH FOUNDATION STABILIZATION	0405
70	TRENCH BACKFILL, CLASS B	0405
71	STORMWATER CURB EXTENSIONS	0415
72	STORMWATER PLANTERS	0415
73	STORMWATER SWALES	0415
74	3 INCH DRAIN PIPE	0430
75	SUBSURFACE DRAIN OUTLETS	0430
76	12 INCH PIPE, PVC AWWA C900, CI 150, BEDDING TYPE: D, COMPLETE	0445
77	6 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D	0445
78	8 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D	0445
79	10 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0445
80	12 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0445
81	18 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D	0445
82	10 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D, COMPLETE	0445
83	12 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D, COMPLETE	0445
84	8 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D	0445
85	10 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D	0445
86	12 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D	0445
87	CONCRETE CLOSURE COLLAR	0445
88	CONCRETE MANHOLES, 48 INCH, 0-8 FT DEPTH	0470
89	CONCRETE MANHOLES, 48 INCH, DEEPER THAN 8 FT	0470
90	CONCRETE MANHOLES, SANITARY SEWER	0470
91	CONCRETE MANHOLES, WATER QUALITY	0470
92	CONCRETE MANHOLES, SEDIMENTATION	0470
93	CONCRETE MANHOLES, SUMP	0470

94	SUMP CAPACITY TEST	0470
95	CONCRETE INLETS, TYPE CG-1	0470
96	CONCRETE INLETS, TYPE CG-2	0470
97	CONCRETE INLETS, TYPE CG-3	0470
98	CONCRETE INLETS, TYPE D	0470
99	CONCRETE INLETS, TYPE G-1	0470
100	CONCRETE INLETS, TYPE G-2	0470
101	CONCRETE INLETS, TYPE G-2MA	0470
102	CONCRETE INLETS, DEEPER THAN 4 FT	0470
103	CONCRETE INLETS, TYPE METAL	0470
104	CONCRETE INLETS, TYPE METAL, MODIFIED	0470
105	CONCRETE INLETS, TYPE CHANNEL & GRATE	0470
106	CONCRETE INLETS, TYPE CONCRETE	0470
107	CONCRETE INLETS, TYPE BEEHIVE	0470
108	CATCH BASINS, METAL SUMP	0470
109	ACCESS DOORS	0470
110	DRAINAGE CURBS	0480
111	ADJUSTING BOXES	0490
112	CONNECTION TO EXISTING STRUCTURES	0490
113	ADJUSTING INLETS	0490
114	FILLING ABANDON STRUCTURES	0490
115	MINOR ADJUSTMENT OF MANHOLES	0490
116	MAJOR ADJUSTMENT OF MANHOLES	0490
117	MANHOLES OVER EXISTING SEWERS	0490
118	TRENCH RESURFACING	0495
119	TEMPORARY TRENCH RESURFACING	0495
120	SHORING, CRIBBING AND COFFERDAMS	0510
121	STRUCTURE EXCAVATION	0510
122	GRANULAR WALL BACKFILL	0510
123	GRANULAR STRUCTURAL BACKFILL	0510
124	REINFORCEMENT	0530
125	CONCRETE BRIDGE	0540
126	BIKE OASIS	0561
127	3 INCH ELECTRICAL CONDUIT	0583
128	ASPHALTIC PLUG JOINT SEALS	0585
129	ASPHALTIC PLUG JOINT SEAL MATERIAL	0585
130	CONCRETE BRIDGE RAIL WITH ORNAMENTAL PROTECTIVE SCREENING	0587
131	RETAINING WALL, CAST-IN-PLACE CONCRETE	0596
132	RETAINING WALL, GABION	0596
133	RETAINING WALL, PREFABRICATED MODULAR	0596
134	RETAINING WALL, CONVENTIONAL SEGMENTAL	0596
135	RETAINING WALL, MSE	0596
136	SOUND WALLS	0597
137	CONCRETE ARCH CULVERT	0598
138	CONCRETE SLOPE PAVING	0599
139	COLD PLANE PAVEMENT REMOVAL, 2 INCH DEEP	0620
140	COLD PLANE PAVEMENT REMOVAL, 3 INCH DEEP	0620
141	COLD PLANE PAVEMENT REMOVAL, 4 INCH DEEP	0620
142	COLD PLANE PAVEMENT REMOVAL, 5 INCH DEEP	0620
143	AGGREGATE BASE	0640
144	AGGREGATE BASE, 4 INCH THICK	0640
145	AGGREGATE BASE, 6 INCH THICK	0640
146	AGGREGATE BASE, 8 INCH THICK	0640
147	LEVEL 1, 1/2 INCH DENSE, MWMAC MIXTURE, IN TEMPORARY	0744
148	LEVEL 2, 1/2 INCH DENSE, MWMAC MIXTURE	0744

149	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	0744
150	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE, IN LEVELING	0744
151	LEVEL 3, 3/4 INCH ATPB, MWMAC MIXTURE	0744
152	CRACK SEALING	0746
153	13 INCH ASPHALT CONCRETE PAVEMENT REPAIR	0748
154	16 INCH ASPHALT CONCRETE PAVEMENT REPAIR	0748
155	EXTRA FOR ASPHALT APPROACHES	0749
156	ASPHALT CONNECTIONS	0749
157	ASPHALT SPEED BUMPS	0749
158	PLAIN CONCRETE PAVEMENT, UNDOWELLED, 6 INCH THICK	0756
159	PLAIN CONCRETE PAVEMENT, UNDOWELLED, 8 INCH THICK	0756
160	PLAIN CONCRETE PAVEMENT, UNDOWELLED, 10 INCH THICK	0756
161	PLAIN CONCRETE PAVEMENT, UNDOWELLED, 12 INCH THICK	0756
162	PLAIN PERVIOUS CONCRETE PAVEMENT, UNDOWELLED, 10-INCH THICK	0757
163	CONCRETE CURBS, CURB AND GUTTER	0759
164	CONCRETE CURBS, STANDARD CURB	0759
165	CONCRETE CURB, MOUNTABLE CURB	0759
166	CONCRETE CURBS, THICKENED CURB AND GUTTER	0759
167	CONCRETE ISLANDS	0759
168	CONCRETE DRIVEWAYS	0759
169	CONCRETE DRIVEWAYS, REINFORCED	0759
170	CONCRETE WALKS	0759
171	MONOLITHIC CURB AND SIDEWALKS	0759
172	MONOLITHIC CURB GUTTER AND SIDEWALKS	0759
173	CONCRETE VALLEY GUTTER	0759
174	6 INCH CONCRETE SURFACING	0759
175	CONCRETE STAIRS	0759
176	CONCRETE DRIVEWAY CONNECTIONS	0759
177	CONCRETE SIDEWALK RAMPS	0759
178	CONCRETE BUS SHELTER PADS	0759
179	DETECTABLE WARNING SURFACE	0759
180	MONOLITHIC SIDEWALKS AND WALL, REINFORCED	0759
181	BRICK PAVERS	0760
182	CONCRETE PAVERS	0760
183	PERMEABLE PAVERS	0760
184	CONCRETE RAILROAD CROSSING	0770
185	GUARDRAIL, TYPE 2A	0810
186	GUARDRAIL, TYPE 3	0810
187	GUARDRAIL ANCHORS, TYPE 1	0810
188	GUARDRAIL END PIECES, TYPE C	0810
189	GUARDRAIL TRANSITION	0810
190	GUARDRAIL CONNECTIONS	0810
191	GUARDRAIL TERMINALS, NON-FLARED	0810
192	GUARDRAIL TERMINALS, FLARED	0810
193	REMOVABLE BOLLARDS	0815
194	CONCRETE BARRIER	0820
195	IMPACT ATTENUATORS, TYPE B	0830
196	IMPACT ATTENUATORS, TYPE E	0830
197	DELINEATORS TYPE 2	0840
198	DELINEATORS TYPE 4	0840
199	PAVEMENT LINE REMOVAL	0851
200	PAVEMENT LEGEND REMOVAL	0851
201	PAVEMENT BAR REMOVAL	0851
202	BI-DIRECTIONAL YELLOW TYPE I MARKERS	0855
203	MONO-DIRECTIONAL WHITE TYPE I MARKERS	0855

204	LONGITUDINAL PAVEMENT MARKING - PAINT	0860
205	CURB MARKINGS - PAINT	0861
206	THERMOPLASTIC, NON-PROFILE, 120 MILS, EXTRUDED	0865
207	PAVEMENT LEGEND, TYPE B: ARROWS	0867
208	PAVEMENT LEGEND, TYPE B: "ONLY"	0867
209	PAVEMENT LEGEND, TYPE B: BICYCLE LANE SYMBOLS	0867
210	PAVEMENT LEGEND, TYPE B-HS: ARROWS	0867
211	PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL	0867
212	PAVEMENT BAR , TYP B-HS	0867
213	PAVEMENT BAR, TYPE A	0867
214	PAVEMENT BAR, TYPE B	0867
215	REMOVE EXISTING SIGNS	0905
216	REMOVE & REINSTALL EXISTING SIGNS	0905
217	SIGN SUPPORT FOOTINGS, BREAKAWAY	0920
218	SIGNAL POLE MOUNTS	0930
219	PIPE SIGN SUPPORTS	0930
220	TYPE "B" SIGNS IN PLACE	0940
221	TYPE "B1" SIGNS IN PLACE	0940
222	TYPE "C" SIGNS IN PLACE	0940
223	TYPE "G" SIGNS IN PLACE	0940
224	TYPE "G1" SIGNS IN PLACE	0940
225	TYPE "G5" SIGNS IN PLACE	0940
226	TYPE "R" SIGNS IN PLACE	0940
227	TYPE "R1" SIGNS IN PLACE	0940
228	TYPE "W1" SIGNS IN PLACE	0940
229	TYPE "W2" SIGNS IN PLACE	0940
230	TYPE "W4" SIGNS IN PLACE	0940
231	TYPE "W6" SIGNS IN PLACE	0940
232	TYPE "W7" SIGNS IN PLACE	0940
233	TYPE "W12" SIGNS IN PLACE	0940
234	TYPE "Y1 "SIGNS IN PLACE	0940
235	TYPE "Y2" SIGNS IN PLACE	0940
236	REMOVAL OF ELECTRICAL SYSTEMS (lighting)	0950
237	REMOVAL OF ELECTRICAL SYSTEMS (traffic signals)	0950
238	POLE FOUNDATIONS	0970
239	LIGHTING POLES, FIXED BASE	0970
240	LIGHTING POLE ARMS	0970
241	LUMINAIRES, LAMPS AND BALLASTS	0970
242	SWITCHING, CONDUIT AND WIRING	0970
243	TRAFFIC SIGNAL INSTALLATION	0990
244	TRAFFIC SIGNAL MODIFICATION	0990
245	FLASHING BEACON INSTALLATION	0990
246	LOOP DETECTOR INSTALLATION	0990
247	INTERCONNECT SYSTEM (underground)	0990
248	INTERCONNECT SYSTEM (overhead)	0990
249	TRAFFIC CAMERA INSTALLATION	0996
250	PERMANENT SEEDING	1030
251	LAWN SEEDING	1030
252	TOPSOIL	1040
253	SOIL CONDITIONER	1040
254	CONIFER TREES, 9 FT HEIGHT	1040
255	DECIDUOUS TREES, 2-1/2 INCH CALIPER	1040
256	DECIDUOUS TREES, 3 INCH CALIPER	1040
257	SHRUBS, NO. 1 CONTAINER	1040
258	SHRUBS, NO. 2 CONTAINER	1040

259	SHRUBS, NO. 3 CONTAINER	1040
260	SHRUBS, NO. 5 CONTAINER	1040
261	GROUND COVERS, NO. 1 CONTAINERS	1040
262	GROUND COVERS, 4 INCH POTS	1040
263	BULBS	1040
264	SEEDLING PLANTS	1040
265	ROOTED PLANT CUTTINGS	1040
266	SOD LAWN	1040
267	BARK MULCH	1040
268	ROCK MULCH	1040
269	ADDITIONAL ESTABLISHMENT PERIOD	1040
270	TREE GRATES	1040
271	ROOT BARRIER	1040
272	TREE GRATE FRAMES	1040
273	BORDER EDGING	1040
274	TYPE 2 FENCE	1050
275	CL-6 CHAIN-LINK FENCE	1050
276	CL-6R CHAIN-LINK FENCE	1050
277	CL-4R CHAIN-LINK FENCE WITH VINYL CLAD FABRIC	1050
278	ORNAMENTAL PROTECTIVE SCREENING	1050
279	REMOVING AND REBUILDING FENCE	1050
280	SINGLE MAILBOX SUPPORTS	1070
281	MULTIPLE MAILBOX SUPPORTS	1070
282	MAILBOX CONCRETE COLLARS	1070
283	REMOVE & REINSTALL MAILBOX SUPPORTS	1070
284	BENCHES, TYPE_____	1095
285	BICYCLE RACKS	1095
286	LITTER RECEPTACLES	1095
287	IRRIGATION SYSTEM	1120
288	4 INCH DUCTILE IRON PIPE	1140
289	6 INCH DUCTILE IRON PIPE	1140
290	8 INCH DUCTILE IRON PIPE	1140
291	12 INCH DUCTILE IRON PIPE	1140
292	4 INCH GATE VALVE, MJ	1150
293	6 INCH GATE VALVE, MJ	1150
294	8 INCH GATE VALVE, MJ	1150
295	12 INCH GATE VALVE, MJ	1150
296	HYDRANT ASSEMBLIES	1160
297	2 INCH SERVICE LINE, SHORT RUN	1170
298	3 INCH SERVICE LINE, SHORT RUN	1170

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

TOTAL BID ITEMS

		##### ANTICIPATED ITEMS
NO.	ITEMS OF WORK AND MATERIALS	REFERENCE
1	RIGHT OF WAY MONUMENTATION	
2	RELOCATE WATER FACILITIES - FIRE HYDRANT	
3	RELOCATE WATER FACILITIES - METER	
4	STREET LIGHTING - UPGRADE LUMINAIRES	
5	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	
6	CONNECT CONTRACTOR INSTALLED TRAFFIC SIGNAL LOOPS TO CONTROLLER BY BOM	
7	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT	
8	STORMWATER OFFSITE MANAGEMENT FEE	

9	ROCK EXCAVATION	
10	RAILROAD PROTECTION SERVICES (ONE YEAR)	
11	ASPHALT CEMENT ESCALATION	
12	FUEL ESCALATION	
13	TESTING CONTAMINATED MEDIA	
14	BOLI FEE PAYMENT	
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	

TOTAL ANTICIPATED ITEMS

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**SCHEDULE SUMMARY**

BID ITEMS  
CONSTRUCTION CONTINGENCY  
SUBTOTAL

ANTICIPATED ITEMS

**TOTAL CONSTRUCTION**

PROJECT MANAGEMENT  
DESIGN ENGINEERING  
CONSTRUCTION MANAGEMENT  
SUBTOTAL

PROJECT ENGINEERING & MANAGEMENT OVERHEAD

**TOTAL PROJECT ENGINEERING & MANAGEMENT**

RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES  
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION

RIGHT-OF-WAY CONTINGENCY

**TOTAL PROJECT RIGHT-OF-WAY**

INFLATION RATE ON CONTRACT  
INFLATION RATE ON PERSONNEL  
ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE

**TOTAL PROJECT CONTINGENCY**

**TOTAL PROJECT ESTIMATE**

\* Use 3.5% Construction Contingency for Federal-Aid Projects

Blue numbers can be changed.

79.27% overhead rate is for the 14/15 fiscal years and applies to all projects, regardless of funding (i.e. federal, I/A, LID's, GTR, PDC, ODOT, OTIA)

Yellow Highlighted Quantity Items are calculated values from Quantites Tab

**Orange Highlighted prices are to be calculated in Fuel/Asphalt Worksheet**

**When printing Estimate for review, hide columns C, D, and E**



**CON  
TIONS  
ESTIMATE**

Date: , 2015

By:

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ITEM NUMBER	CLASS OF WORK	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT	Percentage Applied
0100000A	n/a	LS	1.00	\$ -	\$ -	10.0%
0100000A	13	LS	1.00	\$ -	\$ -	3.0%
0102000J	13	SQFT	0.00	\$ 20.00	\$ -	
0104000E	13	EACH	0.00	\$ 60.00	\$ -	
0105000E	13	EACH	0.00	\$ 115.00	\$ -	
0126000F	13	FOOT	0.00	\$ 17.00	\$ -	
0132000F	13	FOOT	0.00	\$ 5.30	\$ -	
0133000E	13	EACH	0.00	\$ 1,150.00	\$ -	
1141150F	13	FOOT	0.00	\$ 65.00	\$ -	
0145000E	13	EACH	0.00	\$ 52.00	\$ -	
0148000E	13	EACH	0.00	\$ 4.80	\$ -	
0149000E	13	EACH	0.00	\$ 3.00	\$ -	
0152000F	13	FOOT	0.00	\$ 0.65	\$ -	
0154000F	13	FOOT	0.00	\$ 0.82	\$ -	
0156000E	13	EACH	0.00	\$ 425.00	\$ -	
0158000A	13	EACH	0.00	\$ 68,000.00	\$ -	
0162000E	13	EACH	0.00	\$ 1,800.00	\$ -	
0164000E	13	EACH	0.00	\$ 4,330.00	\$ -	
0168000T	13	HOUR	0.00	\$ 48.50	\$ -	
		HOUR	0.00	\$ 65.40	\$ -	
0112000F	12	FOOT	0.00	\$ 3.60	\$ -	
0137000F	12	FOOT	0.00	\$ 17.60	\$ -	
0100000A	11	LS	1.00	\$ -	\$ -	1.0%
0101000J	11	SQFT	0.00	\$ 0.20	\$ -	
0105000J	11	SQFT	0.00	\$ 0.78	\$ -	
0110000E	11	EACH	0.00	\$ 1,890.00	\$ -	
0112000F	11	FOOT	0.00	\$ 4.20	\$ -	
0113000F	11	FOOT	0.00	\$ 2.50	\$ -	
0114000E	11	EACH	0.00	\$ 88.00	\$ -	
0100000A	12	LS	1.00	\$ -	\$ -	0.1%
1101000K	12	CUYD	0.00	\$ 163.00	\$ -	
1104000E	12	EACH	0.00	\$ 470.00	\$ -	
1105000A	12	LS	0.00	\$ 1,000.00	\$ -	
0100000F	1	FOOT	0.00	\$ 25.30	\$ -	
0101000F	1	FOOT	0.00	\$ 7.30	\$ -	
0102000J	1	SQYD	0.00	\$ 13.90	\$ -	
0103000J	1	SQYD	0.00	\$ 8.20	\$ -	
0104000E	1	EACH	0.00	\$ 310.00	\$ -	

0105000E	1	EACH	0.00	\$	1,050.00	\$	-
1105200F	1	FOOT	0.00	\$	58.70	\$	-
1105300J	1	SQYD	0.00	\$	20.90	\$	-
1105400E	1	EACH	0.00	\$	227.00	\$	-
0106000A	1	LS	1.00	\$	-	\$	-
0112000F	1	FOOT	0.00	\$	3.06	\$	-
0100000A	1	LS	1.00	\$	-	\$	-
1101000T	1	HOUR	0.00	\$	178.00	\$	-
1102000T	1	HOUR	0.00	\$	152.00	\$	-
0101000K	1	CUYD	0.00	\$	18.00	\$	-
0105000K	1	CUYD	0.00	\$	35.00	\$	-
1120000K	1	CUYD	0.00	\$	3.80	\$	-
0123000K	1	CUYD	0.00	\$	24.00	\$	-
1148000E	1	EACH	0.00	\$	772.00	\$	-
0106000J	1	SQYD	0.00	\$	21.90	\$	-
0100000J	1	SQYD	0.00	\$	38.40	\$	-
0100000Q	1	MGAL	0.00	\$	26.20	\$	-
0101000J	1	SQYD	0.00	\$	1.05	\$	-
0102000J	1	SQYD	0.00	\$	1.50	\$	-
0105000J	1	SQYD	0.00	\$	1.25	\$	-
1108000J	1	SQYD	0.00	\$	2.60	\$	-
0102000M	1	TON	0.00	\$	93.00	\$	-
0101000J	1	SQYD	0.00	\$	15.00	\$	-
0105000K	1	CUYD	0.00	\$	35.10	\$	-
0108000K	1	CUYD	0.00	\$	59.70	\$	-
0101000J	1	SQFT	0.00	\$	5.60	\$	-
1100000F	1	FOOT	0.00	\$	3.30	\$	-
1101000K	1	CUYD	0.00	\$	16.70	\$	-
1105000K	1	CUYD	0.00	\$	51.60	\$	-
1106000E	1	EACH	0.00	\$	548.00	\$	-
1107000K	1	CUYD	0.00	\$	61.00	\$	-
1109000K	1	CUYD	0.00	\$	33.00	\$	-
1101000J	1	SQFT	0.00	\$	23.80	\$	-
1102000J	1	SQFT	0.00	\$	38.10	\$	-
1103000J	1	SQFT	0.00	\$	15.10	\$	-
0100030F	1	FOOT	0.00	\$	17.00	\$	-
0101000E	1	EACH	0.00	\$	387.00	\$	-
Special		FOOT	0.00	\$	95.00	\$	-
		FOOT	0.00	\$	57.00	\$	-
		FOOT	0.00	\$	57.00	\$	-
Special		FOOT	0.00	\$	75.00	\$	-
Special		FOOT	0.00	\$	100.00	\$	-
		FOOT	0.00	\$	112.00	\$	-
Special	1	FOOT	0.00	\$	122.00	\$	-
Special	1	FOOT	0.00	\$	141.00	\$	-
150080AF	1	FOOT	0.00	\$	57.00	\$	-
150100AF	1	FOOT	0.00	\$	60.00	\$	-
150120AF	1	FOOT	0.00	\$	69.00	\$	-
0735020E	1	EACH	0.00	\$	550.00	\$	-
110048AE	1	EACH	0.00	\$	4,100.00	\$	-
110048BF	1	FOOT	0.00	\$	220.00	\$	-
0100000E	1	EACH	0.00	\$	3,460.00	\$	-
0110000E	1	EACH	0.00	\$	12,410.00	\$	-
0113000E	1	EACH	0.00	\$	5,610.00	\$	-
		EACH	0.00	\$	13,000.00	\$	-

4.0%

2.5%

		EACH	0.00	\$	1,690.00	\$	-
0304000E	1	EACH	0.00	\$	1,700.00	\$	-
0307000E	1	EACH	0.00	\$	1,690.00	\$	-
0309000E	1	EACH	0.00	\$	2,000.00	\$	-
0311000E	1	EACH	0.00	\$	1,750.00	\$	-
0313000E	1	EACH	0.00	\$	1,940.00	\$	-
0315000E	1	EACH	0.00	\$	1,770.00	\$	-
0319000E	1	EACH	0.00	\$	1,900.00	\$	-
Special		FOOT	0.00	\$	300.00	\$	-
1324010E	1	EACH	0.00	\$	500.00	\$	-
	1	EACH	0.00	\$	550.00	\$	-
1324020E	1	EACH	0.00	\$	2,290.00	\$	-
1324030E	1	EACH	0.00	\$	135.00	\$	-
1324040E	1	EACH	0.00	\$	1,310.00	\$	-
0334000E	1	EACH	0.00	\$	1,710.00	\$	-
1500400E	1	EACH	0.00	\$	2,700.00	\$	-
0100000F	12	FOOT	0.00	\$	19.10	\$	-
0100000E	1	EACH	0.00	\$	217.00	\$	-
0104000E	1	EACH	0.00	\$	841.00	\$	-
0105000E	1	EACH	0.00	\$	664.00	\$	-
0117000E	1	EACH	0.00	\$	3,000.00	\$	-
0120000E	1	EACH	0.00	\$	642.00	\$	-
0121000E	1	EACH	0.00	\$	1,520.00	\$	-
0123000E	1	EACH	0.00	\$	4,200.00	\$	-
0100000J	1	SQYD	0.00	\$	109.00	\$	-
		SQYD	0.00	\$	25.20	\$	-
0100000A	2	LS	0.00	\$	-	\$	-
0101000K	2	CUYD	0.00	\$	48.30	\$	-
0106000K	2	CUYD	0.00	\$	63.90	\$	-
0108000K	2	CUYD	0.00	\$	40.60	\$	-
0100000A	2	LS*	0.00	\$	0.86	\$	-
Special	2	SQFT	0.00	\$	250.00	\$	-
1101000E	2	EACH	0.00	\$	32,400.00	\$	-
0107000F	10	FOOT	0.00	\$	9.05	\$	-
0100000A	2	LS	0.00	\$	7,470.00	\$	-
0105000K	2	CUYD	0.00	\$	5,350.00	\$	-
1111500A	2	LS*	0.00	\$	158.00	\$	-
0100000J	2	SQFT	0.00	\$	95.80	\$	-
0101000J	2	SQFT	0.00	\$	24.10	\$	-
0102000J	2	SQFT	0.00	\$	39.50	\$	-
0103000J	2	SQFT	0.00	\$	43.30	\$	-
0104000J	2	SQFT	0.00	\$	49.00	\$	-
0100000J	2	SQFT	0.00	\$	23.50	\$	-
Special	2	FOOT	0.00	\$	1,530.00	\$	-
0100000J	2	SQFT	0.00	\$	11.25	\$	-
0120000J	12	SQYD	0.00	\$	3.42	\$	-
0122000J	12	SQYD	0.00	\$	3.42	\$	-
0123000J	12	SQYD	0.00	\$	3.42	\$	-
0124000J	12	SQYD	0.00	\$	3.42	\$	-
0102000M	5	TON	0.00	\$	36.90	\$	-
		SQYD	0.00	\$	7.15	\$	-
		SQYD	0.00	\$	9.80	\$	-
		SQYD	0.00	\$	12.30	\$	-
0141000M	6	TON	0.00	\$	89.50	\$	-
0202000M	6	TON	0.00	\$	89.50	\$	-

0302000M	6	TON	0.00	\$	89.50	\$	-
0331000M	6	TON	0.00	\$	89.50	\$	-
0389000M	6	TON	0.00	\$	89.50	\$	-
0100000F	6	FOOT	0.00	\$	1.00	\$	-
Special	1	SQYD	0.00	\$	30.00	\$	-
Special		SQYD	0.00	\$	68.80	\$	-
0100000E	6	EACH	0.00	\$	651.00	\$	-
Special		SQFT	0.00	\$	7.30	\$	-
		EACH	0.00	\$	1,800.00	\$	-
0101000J	7	SQYD	0.00	\$	64.70	\$	-
0103000J	7	SQYD	0.00	\$	66.40	\$	-
0106000J	7	SQYD	0.00	\$	68.10	\$	-
0108000J	7	SQYD	0.00	\$	70.00	\$	-
0100000J	7	SQYD	0.00	\$	73.00	\$	-
0103000F	12	FOOT	0.00	\$	25.50	\$	-
0110000F	12	FOOT	0.00	\$	25.50	\$	-
0118000F	12	FOOT	0.00	\$	28.09	\$	-
1119000F	12	FOOT	0.00	\$	37.70	\$	-
0122000J	12	SQFT	0.00	\$	11.70	\$	-
0126000J	12	SQFT	0.00	\$	8.40	\$	-
0127000J	12	SQFT	0.00	\$	9.20	\$	-
0128000J	12	SQFT	0.00	\$	7.40	\$	-
0134000J	12	SQFT	0.00	\$	11.50	\$	-
0134100J	12	SQFT	0.00	\$	12.30	\$	-
1135000F	12	FOOT	0.00	\$	35.90	\$	-
0140000J	12	SQFT	0.00	\$	4.90	\$	-
0150000K	12	CUYD	0.00	\$	2,170.00	\$	-
0152000J	12	SQFT	0.00	\$	7.75	\$	-
0153000E	12	EACH	0.00	\$	1,930.00	\$	-
0156000E	12	EACH	0.00	\$	730.00	\$	-
1158000J	12	SQFT	0.00	\$	42.30	\$	-
Special		SQFT	0.00	\$	14.00	\$	-
1100000J	12	SQFT	0.00	\$	45.90	\$	-
1101000J	12	SQFT	0.00	\$	11.70	\$	-
1102000J	12	SQFT	0.00	\$	11.00	\$	-
1100000F	12	FOOT	0.00	\$	472.00	\$	-
0104000F	12	FOOT	0.00	\$	17.30	\$	-
0107000F	12	FOOT	0.00	\$	48.80	\$	-
0119000E	12	EACH	0.00	\$	722.00	\$	-
0123000E	12	EACH	0.00	\$	121.00	\$	-
0126000E	12	EACH	0.00	\$	2,240.00	\$	-
0128000E	12	EACH	0.00	\$	415.00	\$	-
0129000E	12	EACH	0.00	\$	220.00	\$	-
0130000E	12	EACH	0.00	\$	1,980.00	\$	-
0101000E	12	EACH	0.00	\$	750.00	\$	-
0100000F	12	FOOT	0.00	\$	35.40	\$	-
0115000E	12	EACH	0.00	\$	4,780.00	\$	-
0118000E	12	EACH	0.00	\$	16,000.00	\$	-
0102000E	8	EACH	0.00	\$	68.80	\$	-
0104000E	8	EACH	0.00	\$	29.30	\$	-
0101000F	8	FOOT	0.00	\$	0.60	\$	-
0103000E	8	EACH	0.00	\$	55.10	\$	-
		SQFT	0.00	\$	3.00	\$	-
0102000E	8	EACH	0.00	\$	5.65	\$	-
0100000E	8	EACH	0.00	\$	5.65	\$	-

		FOOT	0.00	\$ 0.46	\$ -
0130000F	8	FOOT	0.00	\$ 2.00	\$ -
0107000F	8	FOOT	0.00	\$ 1.40	\$ -
0103000E	8	EACH	0.00	\$ 279.00	\$ -
0107000E	8	EACH	0.00	\$ 332.00	\$ -
0123000E	8	EACH	0.00	\$ 286.00	\$ -
		EACH	0.00	\$ 261.00	\$ -
Special		EACH	0.00	\$ 290.00	\$ -
		SQFT	0.00	\$ 9.90	\$ -
0144000J	8	SQFT	0.00	\$ 4.50	\$ -
0145000J	8	SQFT	0.00	\$ 9.40	\$ -
0100000A	9	LS*	0.00	\$ 41.70	\$ -
0101000A	9	LS*	0.00	\$ 167.00	\$ -
1101000A	9	LS*	0.00	\$ 182.00	\$ -
0107000A	9	LS*	0.00	\$ 570.00	\$ -
0116000A	9	LS*	0.00	\$ 180.00	\$ -
0102000J	9	SQFT	0.00	\$ 18.60	\$ -
0103000J	9	SQFT	0.00	\$ 23.20	\$ -
0107000J	9	SQFT	0.00	\$ 19.80	\$ -
0113000J	9	SQFT	0.00	\$ 39.60	\$ -
0114000J	9	SQFT	0.00	\$ 36.10	\$ -
1116200J	9	SQFT	0.00	\$ 33.00	\$ -
0121000J	9	SQFT	0.00	\$ 20.90	\$ -
0122000J	9	SQFT	0.00	\$ 18.80	\$ -
0124000J	9	SQFT	0.00	\$ 19.00	\$ -
0125000J	9	SQFT	0.00	\$ 19.90	\$ -
0127000J	9	SQFT	0.00	\$ 20.90	\$ -
0129000J	9	SQFT	0.00	\$ 15.00	\$ -
0130000J	9	SQFT	0.00	\$ 20.60	\$ -
		SQFT	0.00	\$ 25.60	\$ -
0134000J	9	SQFT	0.00	\$ 19.00	\$ -
0135000J	9	SQFT	0.00	\$ 14.60	\$ -
0101000A	10	LS*	0.00	\$ 389.00	\$ -
0101000A	10	LS*	0.00	\$ 3,640.00	\$ -
0100000A	10	LS*	0.00	\$ 2,000.00	\$ -
0101000A	10	LS*	0.00	\$ 6,890.00	\$ -
0103000A	10	LS*	0.00	\$ 338.00	\$ -
0104000A	10	LS*	0.00	\$ 1,000.00	\$ -
0105000A	10	LS*	0.00	\$ 25.00	\$ -
0101000A	10	LS*	0.00	\$ 120,000.00	\$ -
0102000A	10	LS*	0.00	\$ 45,700.00	\$ -
		LS*	0.00	\$ 40,000.00	\$ -
0103000A	10	LS*	0.00	\$ 9,120.00	\$ -
0105000A	10	LS*	0.00	\$ 38.90	\$ -
0105000A	10	LS*	0.00	\$ 3.80	\$ -
1101000A	10	LS*	0.00	\$ 2,600.00	\$ -
0108000R	11	ACRE	0.00	\$ 2,480.00	\$ -
0138000J	11	SQYD	0.00	\$ 4.00	\$ -
0101000K	11	CUYD	0.00	\$ 43.60	\$ -
0107000K	11	CUYD	0.00	\$ 35.20	\$ -
0117000E	11	EACH	0.00	\$ 351.00	\$ -
0131000E	11	EACH	0.00	\$ 822.00	\$ -
0132000E	11	EACH	0.00	\$ 890.00	\$ -
0153000E	11	EACH	0.00	\$ 12.50	\$ -
0154000E	11	EACH	0.00	\$ 19.10	\$ -

0155000E	11	EACH	0.00	\$	33.50	\$	-
0156000E	11	EACH	0.00	\$	21.70	\$	-
0171000E	11	EACH	0.00	\$	8.00	\$	-
0174000E	11	EACH	0.00	\$	4.50	\$	-
0176000E	11	EACH	0.00	\$	2.40	\$	-
0178000E	11	EACH	0.00	\$	11.30	\$	-
0181000E	11	EACH	0.00	\$	5.10	\$	-
0189000J	11	SQYD	0.00	\$	8.20	\$	-
0190000K	11	CUYD	0.00	\$	55.60	\$	-
0196000M	11	TON	0.00	\$	92.60	\$	-
1199000X	11	YEAR*	0.00	\$	264.00	\$	-
0200000E	11	EACH	0.00	\$	1,170.00	\$	-
0206000F	11	FOOT	0.00	\$	11.90	\$	-
Special	11	EACH	0.00	\$	451.00	\$	-
Special	11	FOOT	0.00	\$	6.70	\$	-
0104000F	12	FOOT	0.00	\$	6.85	\$	-
0135000F	12	FOOT	0.00	\$	25.80	\$	-
0137000F	12	FOOT	0.00	\$	22.90	\$	-
0162000F	12	FOOT	0.00	\$	27.80	\$	-
Special	12	FOOT	0.00	\$	158.00	\$	-
		FOOT	0.00	\$	27.40	\$	-
0100000E	12	EACH	0.00	\$	207.00	\$	-
0101000E	12	EACH	0.00	\$	339.00	\$	-
0102000E	12	EACH	0.00	\$	66.00	\$	-
0103000E	12	EACH	0.00	\$	224.00	\$	-
0100000E	11	EACH	0.00	\$	3,090.00	\$	-
0101000E	11	EACH	0.00	\$	739.00	\$	-
0104000E	11	EACH	0.00	\$	1,290.00	\$	-
0100000A	11	LS	0.00	\$	3,100.00	\$	-
1100040F	12	FOOT	0.00	\$	67.70	\$	-
1100060F	12	FOOT	0.00	\$	74.90	\$	-
1100080F	12	FOOT	0.00	\$	82.00	\$	-
1100120F	12	FOOT	0.00	\$	96.40	\$	-
0102000E	12	EACH	0.00	\$	924.00	\$	-
0103000E	12	EACH	0.00	\$	1,090.00	\$	-
0104000E	12	EACH	0.00	\$	1,970.00	\$	-
0106000E	12	EACH	0.00	\$	2,340.00	\$	-
0100000E	12	EACH	0.00	\$	5,040.00	\$	-
1101000E	12	EACH	0.00	\$	2,100.00	\$	-
1102000E	12	EACH	0.00	\$	2,820.00	\$	-

\$ -

#####					
NUMBER	OF	UNIT	QUANTITY	UNIT PRICE	AMOUNT
		LS	0.00	\$ -	\$ -
		EACH	0.00	\$ 20,000.00	\$ -
		EACH	0.00	\$ 6,000.00	\$ -
		EACH	0.00	\$ 600.00	\$ -
		EACH	0.00	\$ 5,000.00	\$ -
		EACH	0.00	\$ 1,000.00	\$ -
		SQFT	0.00	\$ 15.00	\$ -
		SQFT	0.00	\$ 3.70	\$ -

		CUYD	0.00	\$ 106.00	\$ -
		LS	0.00	\$ 100,000.00	\$ -
		LS	1.00	\$ -	\$ -
		LS	1.00	\$ -	\$ -
		LS	0.00	\$ 5,000.00	\$ -
		LS	1.00	\$ 250.00	\$ -
		LS	1.00	\$ -	\$ -

FYI: 0.1% of con  
FYI: 10% of bid i

\$ -

\$ -

\$ -

5% of Bid Items\* \$ -

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\$ -

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\$ -

\$ -

5% of Bid Items \$ -

25% of Bid Items \$ -

15% of Bid Items \$ -

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\$ -

\$ -

79.27% of PM, Eng, and CM \$ -

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\$ -

\$ -

\$ -

30% of Land, Improve, and Damages \$ -

---

\$ -

Years Inflation

1 4.5% of Construction \$ -

1 2.0% of Eng & Mgmt \$ -

20% of Const, Eng & Mgmt, and Inflation \$ -

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\$ -

\$ -

source





### Info for Engineer

<i>Paved Street</i>	<i>Unpaved Street</i>	<i>Small Projects</i>
10%	10%	10%
3%	2%	1%

1.0%

1.0%

1.0%

0.1%

0.1%

0.1%

4%

2%

2.5%

2.5%

2.5%

*Includes Planter Walls*

*Base for Roadways*  
*Base for Roadways*  
*Base for Roadways*

*Complete In-Place*  
*Complete In-Place*

*Complete In-Place*

*Include Aggregate Base*  
*Include Aggregate Base*  
*Include Aggregate Base*  
*Include Aggregate Base*  
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*Include Aggregate Base*  
*Include Aggregate Base*  
*Include Aggregate Base*  
*Pay Item When Used On Existing Ramps*  
*Include Aggregate Base*





*tract; min \$250; max \$7500; all City-bid projects ---- already calculated in  
items ---- already calculated in cell formula*

















1 cell formula





L

















**PRELIMINARY ENGINEER'S ESTIMATE**  
**60% ENGINEER'S ESTIMATE**  
**100% ENGINEER'S ESTIMATE**









































































































































NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE
1	MOBILIZATION	0210
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	0225
3	TEMPORARY SIGNS	0225
4	TEMPORARY BARRICADES, TYPE II	0225
5	TEMPORARY BARRICADES, TYPE III	0225
6	TEMPORARY CONCRETE BARRIER, REFLECTORIZED	0225
7	MOVING TEMPORARY CONCRETE BARRIER	0225
8	TEMPORARY IMPACT ATTENUATOR	0225
9	TEMPORARY PEDESTRIAN WALKWAYS	0225
10	TEMPORARY PLASTIC DRUMS	0225
11	TEMPORARY REFLECTIVE PAVEMENT MARKERS	0225
12	TEMPORARY FLEXIBLE PAVEMENT MARKERS	0225
13	TEMPORARY STRIPING	0225
14	STRIPE REMOVAL	0225
15	STRIPING & STRIPE REMOVAL MOBILIZATION	0225
16	TEMPORARY TRAFFIC SIGNAL INSTALLATION	0225
17	SEQUENTIAL ARROW SIGNS	0225
18	PORTABLE CHANGEABLE MESSAGE SIGNS	0225
19	FLAGGERS	0225
20	TRAFFIC CONTROL SUPERVISOR	0225
21	TEMPORARY TYPE ORANGE PLASTIC MESH FENCE	0270
22	TEMPORARY CL-6R CHAIN LINK FENCE	0270
23	EROSION CONTROL	0280
24	PLASTIC SHEETING	0280
25	MATTING	0280
26	CONSTRUCTION ENTRANCES	0280
27	SEDIMENT FENCE, SUPPORTED	0280
28	SEDIMENT FENCE, UNSUPPORTED	0280
29	INLET PROTECTION	0280
30	POLLUTION CONTROL PLAN	0290
31	CONTAMINATED MEDIA DISPOSAL	0291

32	TRUCK LINERS	0291
33	HASP/CMDP WORKPLANS	0291
34	REMOVAL OF PIPES	0310
35	REMOVAL OF CURBS	0310
36	REMOVAL OF WALKS AND DRIVEWAYS	0310
37	REMOVAL OF SURFACINGS	0310
38	REMOVAL OF INLETS	0310
39	REMOVAL OF MANHOLES	0310
40	REMOVAL OF RAILROAD TRACK AND TIES	0310
41	SALVAGING AND STOCKPILING OF COBBLESTONES	0310
42	REMOVE AND REINSTALL HORSE RINGS	0310
43	REMOVAL OF STRUCTURES & OBSTRUCTIONS	0310
44	REMOVAL OF FENCES	0310
45	CLEARING AND GRUBBING	0320
46	TREE ROOT REMOVAL	0320
47	TREE TRIMMING	0320
48	DITCH EXCAVATION	0330
49	GENERAL EXCAVATION	0330
50	SURCHARGE EXCAVATION	0330
51	EMBANKMENT IN PLACE	0330
52	SETTLEMENT PLATE	0330
53	12 INCH SUBGRADE STABILIZATION	0331
54	AGGREGATE DITCH LINING	0333
55	WATERING	0340
56	DRAINAGE GEOTEXTILE, TYPE 2	0350
57	EMBANKMENT GEOTEXTILE	0350
58	SUBGRADE GEOTEXTILE	0350



59	GEOGRID	0350
60	GRANULAR DRAINAGE BLANKET	0360
61	FILTER BLANKET	0390
62	LOOSE RIPRAP, CLASS 50	0390
63	LOOSE RIPRAP, CLASS 100	0390
64	WIRE MESH SLOPE PROTECTION	0398
65	VIDEO INSPECTION OF SEWERS, MAINLINE	0401
66	TRENCH EXCAVATION, COMMON	0405
67	EXPLORATORY EXCAVATION	0405
68	POTHOLE EXCAVATION	0405
69	TRENCH FOUNDATION STABILIZATION	0405
70	TRENCH BACKFILL, CLASS B	0405
71	STORMWATER CURB EXTENSIONS	0415
72	STORMWATER PLANTERS	0415
73	STORMWATER SWALES	0415
74	3 INCH DRAIN PIPE	0430
75	SUBSURFACE DRAIN OUTLETS	0430
76	12 INCH PIPE, PVC AWWA C900, CI 150, BEDDING TYPE: D, COMPLETE	0445
77	6 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D	0445
78	8 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D	0445
79	10 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0445
80	12 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0445
81	18 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D	0445
82	10 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D, COMPLETE	0445
83	12 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D, COMPLETE	0445
84	8 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D	0445
85	10 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D	0445
86	12 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE:D	0445
87	CONCRETE CLOSURE COLLAR	0445
88	CONCRETE MANHOLES, 48 INCH, 0-8 FT DEPTH	0470
89	CONCRETE MANHOLES, 48 INCH, DEEPER THAN 8 FT	0470
90	CONCRETE MANHOLES, SANITARY SEWER	0470
91	CONCRETE MANHOLES, STORM SEWER	0470
92	CONCRETE MANHOLES, WATER QUALITY	0470
93	CONCRETE MANHOLES, SEDIMENTATION	0470
94	CONCRETE MANHOLES, SUMP	0470
95	SUMP CAPACITY TEST	0470

96	CONCRETE INLETS, TYPE CG-1	0470
97	CONCRETE INLETS, TYPE CG-2	0470
98	CONCRETE INLETS, TYPE CG-3	0470
99	CONCRETE INLETS, TYPE D	0470
100	CONCRETE INLETS, TYPE G-1	0470
101	CONCRETE INLETS, TYPE G-2	0470
102	CONCRETE INLETS, TYPE G-2MA	0470
103	CONCRETE INLETS, DEEPER THAN 4 FT	0470
104	CONCRETE INLETS, TYPE METAL	0470
105	CONCRETE INLETS, TYPE METAL, MODIFIED	0470
106	CONCRETE INLETS, TYPE CHANNEL & GRATE	0470
107	CONCRETE INLETS, TYPE CONCRETE	0470
108	CONCRETE INLETS, TYPE BEEHIVE	0470
109	CATCH BASINS, METAL SUMP	0470
110	ACCESS DOORS	0470
111	DRAINAGE CURBS	0480
112	ADJUSTING BOXES	0490
113	CONNECTION TO EXISTING STRUCTURES	0490
114	ADJUSTING INLETS	0490
115	FILLING ABANDON STRUCTURES	0490
116	MINOR ADJUSTMENT OF MANHOLES	0490
117	MAJOR ADJUSTMENT OF MANHOLES	0490
118	MANHOLES OVER EXISTING SEWERS	0490
119	TRENCH RESURFACING	0495
120	TEMPORARY TRENCH RESURFACING	0495
121	SHORING, CRIBBING AND COFFERDAMS	0510
122	STRUCTURE EXCAVATION	0510
123	GRANULAR WALL BACKFILL	0510
124	GRANULAR STRUCTURAL BACKFILL	0510
125	REINFORCEMENT	0530
126	CONCRETE BRIDGE	0540
127	BIKE OASIS	0561
128	3 INCH ELECTRICAL CONDUIT	0583
129	ASPHALTIC PLUG JOINT SEALS	0585
130	ASPHALTIC PLUG JOINT SEAL MATERIAL	0585
131	CONCRETE BRIDGE RAIL WITH ORNAMENTAL PROTECTIVE SCREENING	0587
132	RETAINING WALL, CAST-IN-PLACE CONCRETE	0596

133	RETAINING WALL, GABION	0596
134	RETAINING WALL, PREFABRICATED MODULAR	0596
135	RETAINING WALL, CONVENTIONAL SEGMENTAL	0596
136	RETAINING WALL, MSE	0596
137	SOUND WALLS	0597
138	CONCRETE ARCH CULVERT	0598
139	CONCRETE SLOPE PAVING	0599
140	COLD PLANE PAVEMENT REMOVAL, 2 INCH DEEP	0620
141	COLD PLANE PAVEMENT REMOVAL, 3 INCH DEEP	0620
142	COLD PLANE PAVEMENT REMOVAL, 4 INCH DEEP	0620
143	COLD PLANE PAVEMENT REMOVAL, 5 INCH DEEP	0620
144	AGGREGATE BASE	0640
145	AGGREGATE BASE, 4 INCH THICK	0640
146	AGGREGATE BASE, 6 INCH THICK	0640
147	AGGREGATE BASE, 8 INCH THICK	0640
148	LEVEL 1, 1/2 INCH DENSE MWMAC MIXTURE, IN TEMPORARY	0744
149	LEVEL 2, 1/2 INCH DENSE, MWMAC MIXTURE	0744
150	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	0744
151	LEVEL 3, 1/2 INCH DENSE MWMAC MIXTURE, IN LEVELING	0744
152	LEVEL 3, 3/4 INCH ATPB MWMAC MIXTURE	0744
153	CRACK SEALING	0746
154	13 INCH ASPHALT CONCRETE PAVEMENT REPAIR	0748
155	16 INCH ASPHALT CONCRETE PAVEMENT REPAIR	0748
156	EXTRA FOR ASPHALT APPROACHES	0749
157	ASPHALT CONNECTIONS	0749
158	PLAIN CONCRETE PAVEMENT, UNBONDED, 6 INCH THICK	0756
159	PLAIN CONCRETE PAVEMENT, UNBONDED, 8 INCH THICK	0756
160	PLAIN CONCRETE PAVEMENT, UNBONDED, 10 INCH THICK	0756
161	PLAIN CONCRETE PAVEMENT, UNBONDED, 12 INCH THICK	0756
162	PLAIN PERVIOUS CONCRETE PAVEMENT, UNBONDED, 10-INCH THICK	0757
163	CONCRETE CURBS, CURB AND GUTTER	0759
164	CONCRETE CURBS, STANDARD CURB	0759
165	CONCRETE CURB, MOUNTABLE CURB	0759
166	CONCRETE CURBS, THICKENED CURB AND GUTTER	0759
167	CONCRETE ISLANDS	0759
168	CONCRETE DRIVEWAYS	0759

169	CONCRETE DRIVEWAYS, REINFORCED	0759
170	CONCRETE WALKS	0759
171	MONOLITHIC CURB AND SIDEWALKS	0759
172	MONOLITHIC CURB GUTTER AND SIDEWALKS	0759
173	CONCRETE VALLEY GUTTER	0759
174	6 INCH CONCRETE SURFACING	0759
175	CONCRETE STAIRS	0759
176	CONCRETE DRIVEWAY CONNECTIONS	0759
177	CONCRETE SIDEWALK RAMPS	0759
178	CONCRETE BUS SHELTER PADS	0759
179	DETECTABLE WARNING SURFACE	0759
180	MONOLITHIC SIDEWALKS AND WALL, REINFORCED	0759
181	BRICK PAVERS	0760
182	CONCRETE PAVERS	0760
183	PERMEABLE PAVERS	0760
184	CONCRETE RAILROAD CROSSING	0770
185	GUARDRAIL, TYPE 2A	0810
186	GUARDRAIL, TYPE 3	0810
187	GUARDRAIL ANCHORS, TYPE 1	0810
188	GUARDRAIL END PIECES, TYPE C	0810
189	GUARDRAIL TRANSITION	0810
190	GUARDRAIL CONNECTIONS	0810
191	GUARDRAIL TERMINALS, NON-FLARED	0810
192	GUARDRAIL TERMINALS, FLARED	0810
193	REMOVABLE BOLLARDS	0815
194	CONCRETE BARRIER	0820
195	IMPACT ATTENUATORS, TYPE B	0830
196	IMPACT ATTENUATORS, TYPE E	0830
197	DELINEATORS TYPE 2	0840
198	DELINEATORS TYPE 4	0840
199	PAVEMENT LINE REMOVAL	0851
200	PAVEMENT LEGEND REMOVAL	0851
201	PAVEMENT BAR REMOVAL	0851
202	BI-DIRECTIONAL YELLOW TYPE I MARKERS	0855
203	MONO-DIRECTIONAL WHITE TYPE I MARKERS	0855
204	LONGITUDINAL PAVEMENT MARKING - PAINT	0860
205	CURB MARKINGS - PAINT	0861
206	THERMOPLASTIC, NON-PROFILE, 120 MILS, EXTRUDED	0865
207	PAVEMENT LEGEND, TYPE B: ARROWS	0867
208	PAVEMENT LEGEND, TYPE B: "ONLY"	0867
209	PAVEMENT LEGEND, TYPE B: BICYCLE LANE SYMBOLS	0867

210	PAVEMENT LEGEND, TYPE B-HS: ARROWS	0867
211	PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL	0867
212	PAVEMENT BAR , TYP B-HS	0867
213	PAVEMENT BAR, TYPE A	0867
214	PAVEMENT BAR, TYPE B	0867
215	REMOVE EXISTING SIGNS	0905
216	REMOVE & REINSTALL EXISTING SIGNS	0905
217	SIGN SUPPORT FOOTINGS, BREAKAWAY	0920
218	SIGNAL POLE MOUNTS	0930
219	PIPE SIGN SUPPORTS	0930
220	TYPE "B" SIGNS IN PLACE	0940
221	TYPE "B1" SIGNS IN PLACE	0940
222	TYPE "C" SIGNS IN PLACE	0940
223	TYPE "G" SIGNS IN PLACE	0940
224	TYPE "G1" SIGNS IN PLACE	0940
225	TYPE "G5" SIGNS IN PLACE	0940
226	TYPE "R" SIGNS IN PLACE	0940
227	TYPE "R1" SIGNS IN PLACE	0940
228	TYPE "W1" SIGNS IN PLACE	0940
229	TYPE "W2" SIGNS IN PLACE	0940
230	TYPE "W4" SIGNS IN PLACE	0940
231	TYPE "W6" SIGNS IN PLACE	0940
232	TYPE "W7" SIGNS IN PLACE	0940
233	TYPE "W12" SIGNS IN PLACE	0940
234	TYPE "Y1 "SIGNS IN PLACE	0940
235	TYPE "Y2" SIGNS IN PLACE	0940
236	REMOVAL OF ELECTRICAL SYSTEMS (lighting)	0950
237	REMOVAL OF ELECTRICAL SYSTEMS (traffic signals)	0950
238	POLE FOUNDATIONS	0970
239	LIGHTING POLES, FIXED BASE	0970
240	LIGHTING POLE ARMS	0970
241	LUMINAIRES, LAMPS AND BALLASTS	0970
242	SWITCHING, CONDUIT AND WIRING	0970
243	TRAFFIC SIGNAL INSTALLATION	0990
244	TRAFFIC SIGNAL MODIFICATION	0990
245	FLASHING BEACON INSTALLATION	0990
246	LOOP DETECTOR INSTALLATION	0990
247	INTERCONNECT SYSTEM (underground)	0990
248	INTERCONNECT SYSTEM (overhead)	0990
249	TRAFFIC CAMERA INSTALLATION	0996
250	PERMANENT SEEDING	1030
251	LAWN SEEDING	1030
252	TOPSOIL	1040
253	SOIL CONDITIONER	1040

254	CONIFER TREES, 9 FT HEIGHT	1040
255	DECIDUOUS TREES, 2-1/2 INCH CALIPER	1040
256	DECIDUOUS TREES, 3 INCH CALIPER	1040
257	SHRUBS, NO. 1 CONTAINER	1040
258	SHRUBS, NO. 2 CONTAINER	1040
259	SHRUBS, NO. 3 CONTAINER	1040
260	SHRUBS, NO. 5 CONTAINER	1040
261	GROUND COVERS, NO. 1 CONTAINERS	1040
262	GROUND COVERS, 4 INCH POTS	1040
263	BULBS	1040
264	SEEDLING PLANTS	1040
265	ROOTED PLANT CUTTINGS	1040
266	SOD LAWN	1040
267	BARK MULCH	1040
268	ROCK MULCH	1040
269	ADDITIONAL ESTABLISHMENT PERIOD	1040
270	TREE GRATES	1040
271	ROOT BARRIER	1040
272	TREE GRATE FRAMES	1040
273	BORDER EDGING	1040
274	TYPE 2 FENCE	1050
275	CL-6 CHAIN-LINK FENCE	1050
276	CL-6R CHAIN-LINK FENCE	1050
277	CL-4R CHAIN-LINK FENCE WITH VINYL CLAD FABRIC	1050
278	ORNAMENTAL PROTECTIVE SCREENING	1050
279	REMOVING AND REBUILDING FENCE	1050
280	SINGLE MAILBOX SUPPORTS	1070
281	MULTIPLE MAILBOX SUPPORTS	1070
282	MAILBOX CONCRETE COLLARS	1070
283	REMOVE & REINSTALL MAILBOX SUPPORTS	1070
284	BENCHES, TYPE_____	1095
285	BICYCLE RACKS	1095
286	LITTER RECEPTACLES	1095
287	IRRIGATION SYSTEM	1120
288	4 INCH DUCTILE IRON PIPE	1140
289	6 INCH DUCTILE IRON PIPE	1140
290	8 INCH DUCTILE IRON PIPE	1140
291	12 INCH DUCTILE IRON PIPE	1140
292	4 INCH GATE VALVE, MJ	1150
293	6 INCH GATE VALVE, MJ	1150
294	8 INCH GATE VALVE, MJ	1150
295	12 INCH GATE VALVE, MJ	1150
296	HYDRANT ASSEMBLIES	1160
297	2 INCH SERVICE LINE, SHORT RUN	1170
298	3 INCH SERVICE LINE, SHORT RUN	1170

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

TOTAL BID ITEMS

CIPATED ITEMS #####

NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE
1	RIGHT OF WAY MONUMENTATION	
2	RELOCATE WATER FACILITIES - FIRE HYDRANT	
3	RELOCATE WATER FACILITIES - METER	
4	STREET LIGHTING - UPGRADE LUMINAIRES	
5	STREET LIGHTING - INSTALL ARMS AND LUMINAIRES	
6	CONNECT CONTRACTOR INSTALLED TRAFFIC SIGNAL LOOPS TO CONTROLLER BY BOM	
7	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT	
8	STORMWATER OFFSITE MANAGEMENT FEE	
9	ROCK EXCAVATION	
10	RAILROAD PROTECTION SERVICES (ONE YEAR)	
11	ASPHALT CEMENT ESCALATION	
12	FUEL ESCALATION	
13	TESTING CONTAMINATED MEDIA	
14	BOLI FEE PAYMENT	
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	

TOTAL ANTICIPATED ITEMS

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## NOTES FOR ENGINEER

Pays for insurance, profit, and mobilization costs.

See lists of items covered in Specifications P.193 - include tubular and conical markers; include routine inspections by TCS

Minimum of 8 signs at least

Only for commercial areas. Hanging signs for Business Open and Sidewalk Closed etc.

More commonly used than Type II

Check with TE

Check with TE

Check with TE

Unique to the City, includes wooden walkways for access to businesses and all ADA compliant.

Always add because plastic drums are **not** incidental to Pay Item #2.

See stage construction - if staging is two months or more, then this is for semi-permanent.

This is for overlays (not always!). Make sure you get the stickies in place **before** you open to traffic.

Temporary paint lines, typically paint, for stage construction say.

This is for removing **temporary** striping.

Only need when we have stage construction in urban settings.

Bid item for the urban setting for the typical four head signal (4 way intersection).

When we push traffic from one side to the other.

Variable Message Sign - notify travelling public of pending construction work.

Flaggers are paid by the **hours** worked. For signalized intersection, two or more flaggers are required.

Required for more complex projects. Otherwise it's incidental to TPDT. Check with TE.

Keeping pedestrians in place and for environmental zones ~~and tree zones~~. Trees will require fencing for protection in new tree code.

For high pedestrian use or for keeping pets and children in .

Always have this. This covers the erosion control plan.

Typically used for most erosion control. Especially used in the winter for embankments.

Typically used for most erosion control. Especially used in seeded embankments .

Typically used for keeping dirt on job site

For erosion control

Typically used for most erosion control.

This is the minimum required inlet protection. Typically use "inserts".

Always have this. This is for dealing with the Contractors' hazardous materials spills.

For contamination that exists **before** the project starts.

Disposal to certified / approved landfills and disposal facilities.



For use in hauling trucks for contaminated media.  
For contamination that exists **before** the project starts.  
Contractor provided HASP and CMDP plans  
Only use in special cases. Best is to include in bid item #43. List quantity in Specials.  
Only use in special cases. Best is to include in bid item #43. List quantity in Specials.  
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The ties need to be disposed off as contaminated media to an approved site. Specials to define a foot of rails as a pair of rails.  
Includes separation, cleaning, delivery, and stockpiling.  
Includes remove from old curb and reinstall in new curb.  
COP uses this bid item (lump sum), rather than 34-40. It is easier to manage and measure.  
Remove and dispose of fences and not rebuild  
This includes vegetation, trees, and stumps etc and salvaging timber when requested.  
Must be inspected by an arborist, then our Forester makes the decision to cut the root or not!  
Contractor to use certified arborist. Hourly rate includes all labor and equipment. If paving near trees, include this due to height of paving machine!  
Includes canals, channels, diversions, drains, and open ditches.  
Either use 49 or 51, not both. Use this bid item when excavation is **more** than embankment. Check there's enough usable material for filling.  
Excavation of surcharge material after settlement achieved. Could have Surcharge Excavation and Embankment on same project  
Either use 49 or 51, not both. Use this bid item when embankment is **more** than excavation or when not enough suitable material available on site.  
Use for monitoring surcharge settlement.  
Include 10% - 20% of surface area for reconstruction and 5% for new - for soft spots repair.  
Esp. if grade is significant, to prevent erosion.  
Always use watering but its always incidental. Needs to be in the Specials. Every once in a while, detours/haul road requires dust control.  
There are two types, Type 1 and Type 2. Type 2 is better. Type 2 for pervious pavements and for wrapping 3" subgrade drains.  
If Fill, use this. Stronger than #58.  
Use between subgrade and base aggregate to stop migration of fines into the base aggregate.

Use to reduce the thickness of the aggregate base to shallow the pavement thickness and for soft soils reinforcement.  
Used for under pervious pavement.  
For outfalls; goes under the rip rap.  
For protection of outfalls from erosion.  
For protection of outfalls from erosion.  
Requested by Structures group - may be used for rock fall protection.  
For all pipes  
BES method >> excavation, pipe, and backfill are paid separately for big pipes!  
For dig outs where you expect conflicts  
Less disruptive. Generally just depth and location verification for resolving utility conflicts.  
For mainline sewers if needed.  
BES method >> excavation, pipe, and backfill are paid separately for big pipes!  
See 00415.80 for measurement of area  
See 00415.80 for spec. for measurement of area.  
See 00415.80 for spec. for measurement of area.  
Subsurface drains under the pavement for high water table areas or at bottom of slopes.

Discharge of subsurface drains, typically into nearest inlet  
PBOT jobs with **only** inlets and leads. Complete for furnish and install - pipe, bedding and backfill.  
BES for Pipe **only** - use with BES 66 and 70  
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For outfalls - last pipe needs a closure collar or it will fall off due to erosion of last joint.  
BES / PBOT - Typical  
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BES / PBOT  
BES - Was used for water quality ("vortex"), but don't use these anymore. Probably can remove.  
BES - Every once in a while, used to protect sumps from sedimentation. Stormceptor Water Quality manhole - no longer used.  
BES / PBOT - Water quality facility  
BES / PBOT - Water quality facility  
Be sure that a FH(s) that can discharge enough water (gpm) is/are available nearby!

Use in bike lanes. If no bike lanes, use CG2.  
Typically used, unless there is a bike lane.  
Use where you don't have a bypass issue, like at sag, or to avoid conflicts with utilities. Not efficient. Located in the sidewalk.

D- for ditches

At wings of curb ramps with bike lanes and when curb exposure is less than 6 inches.

At wings of curb ramps with **no** bike lanes and when exposure is less than 6 inches.

This is a G-2 with a concrete apron. Used in unimproved areas to keep open and be located easily.

BES - similar to MHs. Need a Special bid item if used.

Swale inlet / outlet with metal bar, use for arterials

Swale inlet / outlet with metal bar, use for arterials.

Typically at the ends / curb returns of the swale.

Channel under 2' wide sidewalk (step out) adjacent to planter, where there's parking allowed.

Swale inlet without metal bar, typically used for local streets  
Overflow inside planters.

For private property installation Only two CB types are approved by the City.

Access doors over manholes that are in conflict with the curb

Can be used as wheel stops

All utility boxes - including water meters

For connections to **existing structures** only (see definition for structures in specs). Connections to new are incidental to appropriate PI.

Use this with overlays because of bikes.

Typically manholes and abandoned seds and sumps.

Raising (lowering) the frame and grate up using grade rings.

When the cone needs to be replaced.

BES item

For replacing the entire pavement section, **base aggregate and AC**, over sewer trenches. Not the same as AC Pavement Repair. See 00748

Temporarily replacing pavement section over sewer trenches. Not the same as AC Pavement Repair. See 00748

Structures

Structures

Structures - All retaining walls need this!

Structures

Structures

Structures

Specialty item! Covered shelter with bike racks!

Conduits across street or to bus shelters from a power supply.

Use when grinding / overlay of bridges

Use when grinding / overlay of bridges

Brett's railing - HOLIDAY GREEN is the color we use!

Structures

Structures

Structures

Structures

Structures - Beware of using these when utilities present because they can cut the straps!

Structures

Bottomless - does include the footing.

Especially at bridges and anytime under an ODOT facility.

Avoid paying by the TON. Use #145 to #147 instead. To eliminate over-runs!

Use this for Pavement Sections instead of paying by the TON.

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Use this for Pavement Sections instead of paying by the TON.

Use **MWMAC** always, unless ..... Need Special

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Use **MWMAC** always, unless ..... Need Special

Always use in grind / inlay projects

Open graded - for under concrete streets

Only on the surface - do not crack seal under a new / fresh overlay.

For a 1' cut in front of the curb for retrofits per detail P-506.

**Write Special to include MWMAC in Pay Item. See Section 00748**

Use for pavement repairs 3' or wider per detail P-506.

**Write Special to include MWMAC in Pay Item. See Section 00748**

Use for side streets and driveway connections etc. See definition of approaches.

Suggest: Use for driveway connections by SQ FT. Need a Special to define payment for complete in place.

Typically laid by concrete paving machine.

Typically laid by concrete paving machine.

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Typically laid by concrete paving machine.

Includes Aggregate Base, typically 2" thick. Need Special to define payment. See std. details P-XX.

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Typically for bike / multiuse paths.

Includes pipe handrail.

Includes Aggregate Base, typically 2" thick. Need Special to define payment. See std. details P-XX.

Retrofitting ramps only. (New ramps are measured with new sidewalk and includes the truncated domes.)

TriMet standards

Use this if only need truncated dome (and ramp is existing and ADA compliant)

Includes Aggregate Base, typically 2" thick. Need Special to define that the area basis (surface area) measurement **does or does not** include the wall face. Need details on typical section.

Sand set brick pavers

Usually sidewalks. Transit mall is one exception

Sand set brick pavers

ODOT requirements

Most common. Need to be trained on guard rail design

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Need to be trained on guard rail design

Aka "jersey barriers"

B and E - most common types in urban settings

B and E - most common types in urban settings

Full height - for shoulders

Shorter height - on guard rails for example

These are permanent lines that you want removed, **not** temporary lines.

These are permanent legends that you want removed, **not** temporary legends.

These are permanent bars that you want removed, **not** temporary bars.

Paint on sides of curb extensions / swales.

TE

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TE

ODOT's breakaway is the sign post; COP is the footing itself.

Specifically used to mount a directional / informational sign on a signal pole.

Define the removal items in the Specials.

Does not include loops! Remember with grind / inlays, to include new loops!

238 to 242 For new full system installed by a Contractor. Have to use all five.

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238 to 242 For new full system installed by a Contractor. Have to use all five.

This is for a typical 4 legged intersection, complete. Modifying an existing signal(s)

Includes advance and main loops on all four legs

You can have both loops and a camera at certain high traffic locations.

Include this because everything that is disturbed, we don't leave bare.

If you have lawn seeding, use this instead of #250.

Topsoil for a tree is usually 2/3 top soil plus 1/3 soil conditioner.

See above.

Know that sod lawn often only lasts five years. Usually better to go with lawn seeding.

In addition to the standard 1 year, for a total of 2 years of establishment. Always use this for street trees. ODOT only goes with one year.  
Not popular with Forester. Chokes the tree.

If pavers used, **must** have a frame.  
Used with pavers

Use this on retaining walls for fall protection and safety!!!!  
Brett's fence - HOLIDAY GREEN is the color we use! Need Special.  
Better to use 2 PIs >> Remove Fence and Install New Fence (one of 274 to 278). Contractor typically will use new materials.

Remember to salvage the mailbox and reuse it. It is personal property and federal law applies here.  
Remember to salvage the mailbox and reuse it. It is personal property and federal law applies here.

For fancier / unique mailbox supports.

City/maintenance does not maintain these. Make sure maintenance arrangements are in place.

PWB

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PWB

If you buy ROW, must monument the new ROW lines.

Used when sewers are being installed in areas with known rock.

Use Worksheet to calculate

Use Worksheet to calculate

State law requires acceptance of bids up to 10% over engineer's estimate.



**01012 STORMWATER CONTROL, WATER QUALITY BIOFILTRATION SWALE - QUANTITY BREAKDOWN**

**Swale No. 1** L = 110 FT W = 5.5 FT

ITEM NUMBER	ITEM DESCRIPTION	DEPTH (FT)	QUANTITY	UNIT	UNIT COST	ITEM COST
0330-0101000K	DITCH EXCAVATION	2.5	66	CUYD	\$ 15.00	\$ 990.00
0350-0100000J	DRAINAGE GEOTEXTILE, TYPE 1		161	SQYD	\$ 1.20	\$ 193.20
	GRANULAR DRAIN BACKFILL	1.0	24	CUYD	\$ 20.00	\$ 480.00
	WATER QUALITY MIXTURE	1.5	40	CUYD	\$ 30.00	\$ 1,200.00
0430-0100040F	4 INCH DRAIN PIPE		120	FOOT	\$ 17.00	\$ 2,040.00
	STONE EMBANKMENT	0.5	1.1	CUYD	\$ 25.00	\$ 27.50

**Base Total = \$ 4,930.70**

**\$ 5,000.00**

**Swale No. 2** L = 130 FT W = 5.0 FT

ITEM NUMBER	ITEM DESCRIPTION	DEPTH (FT)	QUANTITY	UNIT	UNIT COST	ITEM COST
0330-0101000K	DITCH EXCAVATION	2.5	72	CUYD	\$ 15.00	\$ 1,080.00
0350-0100000J	DRAINAGE GEOTEXTILE, TYPE 1		175	SQYD	\$ 1.20	\$ 210.00
	GRANULAR DRAIN BACKFILL	1.0	26	CUYD	\$ 20.00	\$ 520.00
	WATER QUALITY MIXTURE	1.5	43	CUYD	\$ 30.00	\$ 1,290.00
0430-0100040F	4 INCH DRAIN PIPE		140	FOOT	\$ 17.00	\$ 2,380.00
	STONE EMBANKMENT	0.5	1.2	CUYD	\$ 25.00	\$ 30.00

**Base Total = \$ 5,510.00**

**\$ 5,600.00**

**Swale No. 3** L = 140 FT W = 5.0 FT

ITEM NUMBER	ITEM DESCRIPTION	DEPTH (FT)	QUANTITY	UNIT	UNIT COST	ITEM COST
0330-0101000K	DITCH EXCAVATION	2.5	78	CUYD	\$ 15.00	\$ 1,170.00
0350-0100000J	DRAINAGE GEOTEXTILE, TYPE 1		188	SQYD	\$ 1.20	\$ 225.60
	GRANULAR DRAIN BACKFILL	1.0	29	CUYD	\$ 20.00	\$ 580.00
	WATER QUALITY MIXTURE	1.5	47	CUYD	\$ 30.00	\$ 1,410.00
0430-0100040F	4 INCH DRAIN PIPE		150	FOOT	\$ 17.00	\$ 2,550.00
	STONE EMBANKMENT	0.5	1.3	CUYD	\$ 25.00	\$ 32.50

**Base Total = \$ 5,968.10**

**\$ 6,000.00**

/N

x  
x

50	CUYD
120	SQYD
20	CUYD
30	CUYD
110	FOOT
1.1	CUYD

50
120
20
30
110
1.1

65
160
20
45
140
1.4