

RESOLUTION NO. 1147

A RESOLUTION OF THE CITY OF WILSONVILLE ACCEPTING THE ENGINEERING DESIGN REPORT PREPARED BY CASCADE PACIFIC ENGINEERING, INC. (CPEI) FOR THE RE-CONSTRUCTION OF WILSONVILLE ROAD; ADOPTING A PORTION OF THE REPORT BETWEEN BOONES FERRY ROAD TO JUST WEST OF THE BURLINGTON - NORTHERN RAILROAD TRACKS, HEREINAFTER REFERRED TO AS PHASE I; DIRECTING STAFF TO PROCEED WITH THE DESIGN AND CONSTRUCTION; EXEMPTING THE CITY FROM COMPETITIVE BIDDING REQUIREMENTS OF PHASE I; AUTHORIZING THE CITY ENGINEER TO SIGN A PROFESSIONAL SERVICES AGREEMENT WITH CPEI TO FURNISH PROFESSIONAL SERVICES.

WHEREAS, the Transportation Master Plan, a component of the City of Wilsonville's Comprehensive Plan, which plan has been duly adopted after public hearings, provides for the re-construction of Wilsonville Road a segment of which extends from the intersection with Boones Ferry Road west to just west of the Burlington Northern railroad tracks; and

WHEREAS, the Urban Renewal Plan of the City of Wilsonville includes funds for the construction or re-construction of various roads, sanitary sewer, storm sewer and water projects of which some are street inclusive of the aforementioned utilities, to provide vehicular (commercial/private), bike, pedestrian and mass transit access and egress to the area in and around the intersection with Boones Ferry Road west to just west of the Burlington Northern railroad tracks; and

WHEREAS, there is a demonstrated Level of Service in excess of 'D' at the intersection of Wilsonville Road with Boones Ferry Road; and

WHEREAS, the re-construction of Wilsonville Road was included in Council Goal #4 for the 1994/95 fiscal year; and

WHEREAS, the design and re-construction of Wilsonville Road was included in the advisory election on Urban Renewal and was approved by the citizens of the City of Wilsonville on June 30, 1992; and

WHEREAS, the section of Wilsonville Road from the intersection with Boones Ferry Road west to just west of the Burlington Northern railroad tracks hereinafter will be referred to as Phase I; and

WHEREAS, the construction of Phase I is urgently needed to provide safe and efficient movement of vehicular (commercial/private), bike, pedestrian and mass transit along Wilsonville Road and at the Interstate 5/Wilsonville Road interchange; and

WHEREAS, the current and projected traffic volumes warrant the construction of Phase I and the Interstate 5 / Wilsonville Road interchange; and

WHEREAS, the existing vehicular accesses onto Wilsonville Road from Boones Ferry Road west to just west of the Burlington Northern railroad tracks need to be closed, combined, engineered and/or relocated to provide safe and efficient access onto Wilsonville Road and design services are essential to the determination of same; and

WHEREAS, the existing Wilsonville Road on-grade crossing of the Burlington Northern railroad tracks needs to be upgraded, re-constructed and widened for safe and efficient vehicular (commercial/private), bike, pedestrian and mass transit operations and movements within the City of Wilsonville; and

WHEREAS, the Transportation Master Plan includes bicycle lanes and sidewalks along both sides of Wilsonville Road; and

WHEREAS, there is presently limited safe and efficient access for bicycles and pedestrians along Wilsonville Road; and

WHEREAS, utility extensions and replacements along Wilsonville Road are urgently needed to provide safe and efficient distribution and collection of public utilities in the immediate area adjacent to Wilsonville; and

WHEREAS, the construction of Phase I may require relocation or acquisition of certain businesses, right-of-way, accesses and easements and engineering design services are essential to these determinations including that Phase I is planned or located in such a manner which will be the most compatible with the greatest public good and the least private injury; and

WHEREAS, the City Council referred the actual formation and preparation of the Engineering Design Report for the Wilsonville Road Improvement to the Transportation Advisory Commission (TAC); and

WHEREAS, the City Council approved a Professional Services Agreement with Cascade Pacific Engineering, Inc. (CPEI) to prepare the Engineering Design Report for the re-construction of Wilsonville Road from Boones Ferry Road to Brown Road; and

WHEREAS, in completing the evaluation of the improvements to be constructed along Wilsonville Road, the TAC conducted studies and public hearings on the proposed improvements with the expressed intent on addressing the concerns of the individual property owners, private citizens, business owners and users (present and future) in

studying the particular aspects of the improvements; and

WHEREAS, at the completion of their work, the TAC recommended that (2) possible options for the improvement of Wilsonville Road be forwarded to the City Council for formal adoption; and

WHEREAS, prior to forwarding the (2) improvement options for Wilsonville Road to the City Council, the TAC re-evaluated its position on (2) options and then decided (1) option should be forwarded to the City Council; and

WHEREAS, the option adopted by the TAC for recommendation consists of a (5) lane vehicular facility with sidewalks and bike paths on both sides of the street from the intersection of Wilsonville Road and Boones Ferry Road west to Brown Road; and

WHEREAS, the section of Wilsonville Road from Boones Ferry Road west to just west of the Burlington Northern railroad tracks was the same in either option package and is therefore unaffected by any improvement option chosen or recommended for Phase I; and

WHEREAS, City staff now wishes to proceed with the engineering design services of a portion of the improvements outlined in the Engineering Design Report prepared by CPEI, specifically the portion of Wilsonville Road from the intersection with Boones Ferry Road west to just west of the Burlington Northern railroad tracks (Phase I) and seeks the services of a private consulting firm to provide the professional engineering design services for the referenced section of Wilsonville Road; and

WHEREAS, completion of Phase I is vital and required for proper operation of the Interchange improvements; and

WHEREAS, the City Engineer wishes to utilize the information gathered by, and the past experience and expertise of CPEI in the preparation of the Engineering Design Report for Wilsonville Road for design, construction, surveying and project management services during the construction of Phase I; and

WHEREAS, these Oregon Revised Statutes 279.011 (5) and Section 2.310 (1) (a) of the Wilsonville code define public contracts as being other than agreements for personal service. The contract to be awarded for professional services is for personal services; and

WHEREAS, Section 2.312 of the City code states that "The Council is hereby designated as a Local Contract Review board an relative to contract concerns for the City, shall have all the powers granted to the State Contract Review Board"; and

WHEREAS, Section 2.314 (1) states that "All contracts shall be based upon competitive bid with certain exceptions," which the City interprets to mean public

contracts, but in the vent it is construed to apply to any contract, the City recites and finds as set forth below; and

WHEREAS, additionally, Section 2.314 (2) states that "The Board may, by Resolution, exempt other contracts from competitive bidding if it finds (a) the lack of bids will not result in favoritism or substantially diminish competition in awarding the contract; and (b) the exemption will result in substantial cost savings. In making such a finding, the Board may consider the type, cost amount of the contract, number of persons available to bid and such other factors as the Board may deem appropriate"; and

WHEREAS, Oregon Revised Statues 279.015 Competitive Bidding Exemptions also allows exemptions as stated in the City Code; and

WHEREAS, after reviewing the fees associated with providing the requested design, construction, surveying and project management services, staff has determined that the fees for the services as proposed by Cascade Pacific Engineering, Inc. have found to be fair and reasonable; and

WHEREAS, if Cascade Pacific Engineering, Inc. provides the professional services for the above referenced project, the City will realize additional cost savings by utilization of all information gathered in the preparation of the Engineering Design Report and completing the improvements prior to the interchange improvements at Interstate 5 and Wilsonville Road; and

WHEREAS, these fees are calculated to be \$192,000.

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

1. The City Council hereby accepts and authorizes the information in the Engineering Design Report prepared by Cascade Pacific Engineering, Inc. dated May, 1994 to be used in the engineering design services authorized below, a copy of said report is marked Exhibit "A", attached hereto and incorporated by reference as if fully set forth herein.

2. The City Council, serving in its role as Local Contract Review Board does hereby exempt the award of contract for Engineering services for the planned reconstruction of Wilsonville Road set forth in the recitals above. from competitive bidding and further concludes this award will not diminish competition and will result in substantial costs savings.


3. The City Council, serving as a Local Contract Review Board, does hereby approve and authorize the City Engineer to sign a Professional Services Agreement between the City of Wilsonville and Cascade Pacific Engineering, Inc. to provide the

engineering design services recited above for the referenced project. A copy of the agreement is marked Exhibit "B", attached hereto and incorporated by reference as if fully set forth herein.

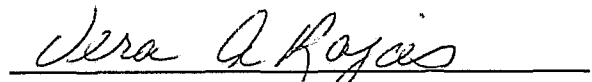
4. Authorize the expenditures for this contract not to exceed budget amount from:

Account	Budget Amount
540 49130 5000 403	\$192,000

ADOPTED by the City Council of the City of Wilsonville at a regular meeting thereof this 5th day of December, 1994, and filed with the Wilsonville City Recorder this date.

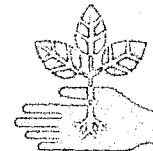

GERALD A. KRUMMEL, Mayor

ATTEST:


VERA A. ROJAS, CMC/AAC, City Recorder

SUMMARY of Voices:

Mayor Krummel	<u>AYE</u>
Councilor Hawkins	<u>ABSENT</u>
Councilor Benson	<u>AYE</u>
Councilor Lehan	<u>AYE</u>
Councilor Sempert	<u>ABSENT</u>



City of
WILSONVILLE
in OREGON

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Wilsonville, Oregon 97070
FAX (503) 682-1015
(503) 682-1011

ENGINEERING DEPARTMENT
STAFF REPORT & RECOMMENDATION

DATE: DECEMBER 5, 1994

TO: HONORABLE MAYOR AND
CITY COUNCILORS

FROM: MICHAEL A. STONE, P.E.
CITY ENGINEER

SUBJECT: DESIGN AND CONSTRUCTION OF WILSONVILLE ROAD
FROM BOONES FERRY ROAD TO WEST OF THE
BURLINGTON NORTHERN RAILROAD TRACKS

SUMMARY:

In the later part of 1993, the Traffic Advisory Commission (TAC) accepted the Engineering Design Report (EDR) for the re-construction of Wilsonville Rd., extending from the intersection with Boones Ferry Road westward to Brown Road. Given the Transportation and Comprehensive Plans in effect at the time of the commencement of the study, the report reflects the anticipated vehicular volumes and possible alternative alignments. The TAC then narrowed the alternatives to a single recommendation. Copies of selected portions of the EDR are attached as Exhibit 'A'. Copies of the entire document are available for review upon request from the Engineering Department.

Staff recommends that the design and construction of the TAC recommended alignment alternative (5-lanes) along Wilsonville Rd. between Boones Ferry Road to just west of the Burlington Northern railroad tracks (Phase I) be commenced. Staff also requests that the consultant responsible for the technical preparation of the EDR, Cascade Pacific Engineering, Inc. be retained to do the plans and specifications for Phase I. The cost for these professional services is estimated at \$192,000. The Professional Services Agreement is attached as Exhibit 'B'.

Funds in the amount of \$2,800,000 are available for this project. The project is needed to clear traffic from the Boones Ferry Road intersection so the new Wilsonville Road / I5 interchange can function properly.

DISCUSSION:

Early in the analysis for the possible re-construction of Wilsonville Rd., the TAC was charged by the City Council to study the size and alignment of the road and to be compatible with the Transportation and Comprehensive Plans. In order to assist the Commission and staff with the preparation of the analysis, city staff issued a request for qualifications for a consulting engineering team to furnish the technical work as well as the public involvement, wildlife, archaeological, environmental and landscape issues. The team selected by the city was headed by Cascade Pacific Engineering, Inc. with several sub-consultants used for the preparation of the

Staff Report - Wilsonville Rd. Design

December 5, 1994

Page 2

independent reports outlined above. Working closely with the TAC, a set of common goals and objectives were developed which in turn lead to a work plan. That work plan was followed by the consultant team.

Through a series of primary public hearings, comments were expressed by individual property and business owners within the city and some citizens living immediately adjacent to Wilsonville Rd. Upon completion of the public input portion of the process, Cascade Pacific Engineering, Inc. was charged with developing several alternatives based on the comments made for the road improvements on a general nature. Once these alternatives were developed, they were again the subject of public hearings. At the completion of the secondary hearings, two alternatives were selected for further analysis and study. Again, public comment was taken and a final recommended alternative was presented by the consultant to the TAC.

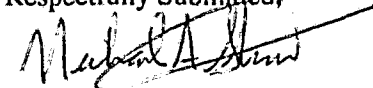
The Commission had reservations as to whether or not a single alternative would be sufficient and came forth with a recommendation for (2) alternatives. Subsequent to this, the Commission re-evaluated its position and settled on a single alternative to be presented to the Council. The recommended alternative would construct a 5-lane facility between Boones Ferry Road and Brown Road. This re-evaluation raised the issue of how the city has changed since the inception of the study. Recognizing this, the Mayor has formed a new West Side Development Committee to analyze the land uses that currently exist to determine if land uses requirements should remain the same or be modified. This in turn may affect the overall improvement of the Wilsonville Road Corridor. One issue that has remained a constant, even if the additional evaluation is undertaken, is the need to reconstruct the portion of Wilsonville Rd. between Boones Ferry Road to just west of the Burlington Northern railroad tracks. With the construction of the improvements at the I-5 / Wilsonville Rd. interchange, there is a need to assure the Oregon Department of Transportation (ODOT) that the interchange will function correctly. This will require the improvement of Wilsonville Rd. along this section.

City staff has not had the opportunity to look at any of the proposed improvements along this section of Wilsonville Rd. other than on a very general nature for rough construction cost estimates and alignment alternatives. In order for a proposed project to be constructed in time for the completion of the interchange improvements, staff is now requesting that the design and construction commence as soon as possible. As several of the property owners and/or businesses along Wilsonville Rd. will be impacted by the construction of not only the interchange improvements, but the Wilsonville Rd. improvements, coordination and staging of the improvements will be of paramount importance.

RECOMMENDATION:

Staff respectfully recommends that the City Council accept the Engineering Design Report, adopt a portion of the report, authorize the commencement of the design and construction of Phase I of the Wilsonville Rd. between Boones Ferry Road West to just west of the Burlington Northern railroad tracks and authorize the City Engineer to enter into a Professional Services Agreement in an amount not to exceed \$192,000. At the completion of the preliminary design work, a report will be presented to the City Council which will look at the alignment and the expected impacts on adjacent businesses.

Respectfully Submitted,



Michael A. Stone, P.E.
City Engineer

MAS/dr

Attachment

MS STF REPRT/DesWiV101094

CITY OF WILSONVILLE
WILSONVILLE ROAD PROJECT

ENGINEERING DESIGN REPORT

May 1994



CASCADE
PACIFIC
ENGINEERING, INC.

890 PROMONTORY PLACE, SE
SALEM, OR 97302
(503) 363-8760

WORK PLAN

Our task is to prepare an alignment study, preliminary plans, final plans, construction documents, and engineering services during construction which provide for a safe, low maintenance urban arterial roadway with limited impact to the environment, existing residences, businesses, drainage courses, and utilities. The work plan developed focuses on the following tasks.

- * Providing a procedure that will allow for establishment of a balance between the interests of the driver, bicycle rider, pedestrian, adjacent property owners, wildlife preservationists, and the transit user.
- * Provide a road that considers the alternatives with regard to pedestrian and bicycle lanes. This includes road that does not inhibit cross or parallel pedestrian and bicycle movement and a road that provides for bicycle travel by the recreational, school, and the serious biker.
- * Provides a road that considers the alternatives to significant widening of Wilsonville Road.
- * Provides a road which makes an aesthetic statement concerning Wilsonville.
- * Provides a road which minimizes the impact to adjacent residences and business.
- * Provides long term alignment modification and maintains ease of pedestrian movement at Boones Ferry Road, while providing required turn lanes of a realistic length.

CONCEPTUAL/LOCATION DESIGN

TASK 1 - PROJECT ORIENTATION, INITIATION, AND INFORMATION REVIEW

- 1.1 Meet with City staff to initiate the project and gather background information. The purpose and scope of the project will be reviewed in detail.
 - a. Introduce consultant team members and designated City personnel assigned to the project.
 - b. Review City of Wilsonville files on the project, along with policies and procedures manuals.
 - Establish right of entry procedure for entering private property to do survey work and future property owner notification.
 - c. Establish a strategy plan on how to deal with the property owners.
 - d. Review design, drafting, and mapping standards, along with technical data supplied by the City.
 - e. Discuss design constraints, problem areas, and special details.
 - f. Discuss computer systems' compatibility and develop procedures for electronic transfer of plans, details, and data.

- g. Discuss public involvement program and establish format, content, and timing of the various elements involved in the public information process for the project.
- h. Discuss the permits required for the project and the process and responsibilities of the City and the consultant to apply for, process, and obtain the required permits.
- i. Present proposed format of alternatives for conceptual study and set a meeting time to review alternatives and obtain City traffic counts.

1.2 Obtain and catalog available documents.

- a. Property survey information, including records of survey and tax assessor maps, and legal descriptions.
- b. City, County, and State road surveys, street right-of-way maps, government corner ties, and Railroad right-of-way maps.
- c. As-constructed plans for Wilsonville Road and adjoining streets affected by the new construction.
- d. Traffic studies and other data for project signals and pavement design.
- e. Environmental Studies such as hazardous materials and wetlands information.
- f. Research railroad design requirements and appropriate permit needs.

1.3 Design Criteria Report

- a. Catalog the design criteria required for the project. The City has determined the design speed will be 45 mph.
- b. Submit design criteria to the City for review and approval.

TASK 2 - PROJECT MANAGEMENT

2.1 Project schedule control

- a. Prepare a project design development schedule for review and approval by City staff.
- b. Submit a monthly progress report including:
 - A narrative of actions taken to complete assigned tasks.
 - Description of new impacts and circumstances affecting the project.
 - A graph that depicts the estimated progress against the budgeted cost.

2.2 City involvement and utility coordination

- a. Meet with City staff on design issues, as established on an on-going basis. One meeting every month has been assumed for budget estimating purposes.

- b. Meet with City staff for review at end of each phase of the project.
- c. Meet with affected utility companies at end of preliminary and final design.

2.3 ODOT Coordination

- a. Meet with ODOT Region One staff to determine and facilitate Wilsonville Road and I-5/ Wilsonville Road interchange requirements to meet the requirements of both ODOT and the City of Wilsonville.
- b. Meet with ODOT Headquarters staff to facilitate acceptance of the location design developed by Region One of ODOT and the City of Wilsonville.

TASK 3 - PUBLIC INVOLVEMENT/INFORMATION

Due to the existing and potential controversy of this study, and the potential impacts on homes and businesses, it is important that an integrated community involvement program be designed to: 1) maximize public awareness of the problems the study will address, the study process, alternatives, and the selected alternative; 2) provide a forum for identifying significant issues; and 3) ensure that the community has input into the overall planning process. The engineers and planners will be an integral part of the team's community involvement program in order to ensure the exchange of information necessary for the proper development and review of design alternatives.

The process will be guided by the following objectives:

- ▶ To build consensus on a viable solution.
- ▶ To build and maintain the credibility of the technical studies and the City.
- ▶ To accurately identify and consider the values and concerns of the community and officials.
- ▶ To inform and educate potentially affected parties as to the problems this project will address and possible impacts.
- ▶ To ensure that public input and agency policy is integrated with technical data into the overall decision-making process.

Given that this study is based on an existing facility, the public involvement program will focus on involving the immediate area and rely on existing public involvement structures - the City Council and Transportation Advisory Commission (TAC) - to incorporate the broad public.

Alignment Study

3.1 Scoping

In order to understand community concerns and values, the team will interview 12 community members by phone. The effort will help identify and establish relationships with key stakeholders and will characterize their positions.

3.2 Community Meeting

The team has assumed three Community meetings will be held as an introduction to three of the TAC meetings. The purpose of the meetings will be an informal open house for the neighbors and users of the road and for other interested parties. The first open house/TAC will be held early in the process and will present the project purpose and process through simple displays and will solicit feedback on issues. The third TAC meeting will be preceded with an open house presenting the goals and objectives, alternatives, and evaluation of those alternatives. Response forms will solicit feedback on the evaluation. The fifth meeting/third open house will present the selected alternative.

3.3 Transportation Advisory Commission and City Council

To ensure that the broader community concerns are incorporated and to ensure that the decision makers have ownership in the study's recommendations, the team will work with the established TAC and the City Council. For the Alignment Study, we anticipate meeting with the TAC on five occasions.

For the open houses, the team will prepare meeting plans, prepare simple displays, and facilitate. The Public Involvement Director will assist with strategy for the meetings that include open houses. For the TAC meetings, the team will assist with presentations and will assist with facilitation, as appropriate; the City will be responsible for all displays except maps and other technical presentation material.

To ensure the decision makers have ownership in the study's recommendations, the team will assist the City with two meetings or work sessions with the City Council: 1) to obtain a decision on what the improvement should look like (how wide), and to present recommendations for an alignment; and 2) for adoption of the final plan. The team will conduct one strategy session with City staff prior to each Council meeting and will assist with presentations at the meeting.

3.4 Liaison and News Media Relations

The City will be responsible for all citizen and news media relations, including issuing meeting notices.

3.5 Newsletters and Mailing List

a. Newsletters

The team will issue three newsletters. The first will describe the purpose and process, announce the first open house, and solicit comments. It will be distributed to those on the mailing list and placed in distribution centers -- library, city hall, etc. The second newsletter will present the results of the project goals and objectives, and the project alternatives, and will announce the second open house. The third will present the selected alternative and announce the third community meeting open house.

b. The team will write and produce 3000 copies of the newsletter, and prepare a carrier-route mailing for up to 2800 pieces. The City will cover postage and will provide mailing labels for non-resident property owners. This scope assumes the newsletter will be printed black on 11" X 17" standard white 20 pound paper stock.

3.6 Reports

The Public Involvement Summary will outline the elements and results of the public involvement program.

TASK 4 - TRANSPORTATION PLAN REVIEW

The purpose of this scope of work is to provide to the design team the expertise to evaluate the proposed plan for safe traffic operations and provide analysis of all alternatives.

The following is detail scope of work designed to accomplish the task described above.

4.1 Review of Transportation Plan

Due to the inconsistencies found in the Wilsonville Transportation Plan, it is necessary to review the base assumptions that were used in the preparation of the plan. The existing and proposed land uses located in the study area boundary will need to be reviewed and verified with the planning department. The travel demands as outlined in the Transportation Plan will be verified with the traffic model supplied by the Transportation Plan consultant.

This work will determine the projected travel volumes on Wilsonville Road and will aid in the determination of the ultimate roadway cross-section. The verified traffic volumes will be used in the determination of the required number of lanes and intersection improvements at the major intersections.

4.2 Evaluate the traffic requirements assuming the delaying of the Boeckman Road extension to Brown Road. This will require running the transportation model for Alternative 2 in the Wilsonville Transportation Plan without this extension and reviewing the resulting data for the impact.

4.3 Evaluate the traffic impacts and benefits assuming that Seely Avenue will be routed over to the west to Kinsman Road and that the Seely Avenue connection to Wilsonville Road will be eliminated.

TASK 5 - CONCEPTUAL DESIGN/ALTERNATIVE ALIGNMENT STUDY

CPEI, after reviewing the project data and attending orientation meeting, will proceed with the conceptual design

Roadway Alignment Study. We have assumed that only the alternative options within a corridor of 200 feet on either side of the existing centerline of Wilsonville Road will be considered. After determining the requirements for the roadway improvement options to be investigated, an analyses will be done for each alternative.

For budget purposes, CPEI has assumed that 6 alternative alignments will be forwarded in the original (initial) discussion with the City. The level of effort for the initial 6 alternative will be to show them on one plan with centerline delineation and a cross section only. After the City has agreed on the three most desirable alternatives, those three will be developed into separate plan and profile plans showing cut and fill lines, impacted right-of-way lines, property lines, and curb lines.

The following elements will be considered in the Study.

5.1 Vertical and horizontal curvature

The criteria established in the Engineering Design Criteria report will be used to determine the geometry of the project.

5.2 Right-of-way needs

- a. A preliminary right-of-way report will assess the financial and relocation impacts of the alternatives. The report will perform alternative route alignment cost estimates to include the cost of the land and improvements taken, damages to the remainder properties, and reasonable anticipated cost of relocation benefits if any. The report will cover the three alignments in the selection process.
- b. A Right-of-Way agent will be available during the third community meeting to explain the process to the public.

5.3 Hydrologic/Drainage requirements

The flood/drainage requirements will be applied to the project to determine the impact to construction of the facility.

- a. Perform watershed analysis for Seely Ditch at Wilsonville Road.
 - 1. Delineate watershed basin and subbasins.
 - 2. Run watershed modeling program to simulate 1974 conditions and match with FEMA 100-year flood elevation at Wilsonville Road.
 - 3. Modeling will need to be adjusted for urbanization and re-evaluated for hydraulic conditions at existing Seely Ditch culverts.
 - 4. The upstream culvert entrances' improvements will need to be analyzed to determine total discharge capacity.
- b. Perform watershed analysis for ditch west of Brown Road at Wilsonville Road.

5.4 Cost estimate

Develop a rough cost estimate using per foot unit cost of street construction to assist in the alternative selection process.

5.5 Traffic safety and access management

Access management of the existing driveways will be assessed for their impact on the location, spacing, traffic safety, and impact to the adjoining property. Traffic safety will be determine where existing conditions do not meet the accepted national standards for design. The information will be developed to a level to assist in selection of the alternatives.

5.6 Wetland Inventory

The City of Wilsonville has already mapped the wetland areas in the project area. A design team staff member will walk the project area to determine the areas of environmental concern for this project. The areas will be developed into a map to show relative impacts for the alignment selection process. The scope here is only to identify areas of concern for alignment selection and is not intended to delineate wetlands.

5.7 Wildlife Migration Routes

The area will be looked at by a design team staff member to determine wildlife migration routes that may exist in the area. The scope here is to determine what types of wildlife can be expected in the habitat on both sides of the road and how the widening of the road will affect those species.

A review of reference information and our field data will be accomplished to prepare an assessment of the project's impact on wildlife movements in the area. This statement will be in the form of a letter report.

5.8 Archaeological

We propose to perform a standard archaeological field survey and records review to identify any known or presently unrecorded archaeological sites within the project area. The records review would entail collecting information from the Oregon State Historic Preservation Office (SHPO), Bureau of Land Management (for historical General Land Office data), and County historical inventory about the project area and immediate vicinity. The field survey would be completed in one day with two persons (assuming landowners had all been notified) and would identify visible archaeological materials or probable locations for sites where visibility is poor. The results would be written in a letter report, including a map of the project area and the locations where any sites were identified.

The above scope of work assumes that one site will be found, and will be recorded on a site record form (including a site map) for inclusion in the Clackamas County and SHPO inventories, and this form will be included as an enclosure with the report. Additional sites will be assumed as extra work beyond the scope suggested here.

5.9 Utilities conflicts

Each utility (public and private) will be looked at to determine the existing and proposed impacts to the utility.

5.10 Lane and turn lane requirements

The lane requirements necessary to maintain a minimum level of service based upon traffic projections for ultimate development within the Urban Growth Boundary.

Evaluate the required turn lanes at Boones Ferry Road to determine the most realistic lengths considering the needs of the area and to minimize impacts to adjacent properties.

Evaluate separate high occupancy vehicle and transit lanes along Wilsonville Road.

5.11 Bikeway/Pedestrian way requirements

We will coordinate with the City of Wilsonville Bicycle consultant and Bicycle Task Force to aid in the determination of the bikeway/pedestrian requirements along Wilsonville Road. Information such as school location, school walking routes and numbers of bikeway/pedestrian path users will be reviewed.

5.12 ODOT coordination

Coordination with both the location design group in Region One of ODOT and final design group at Headquarters in Salem.

5.13 Landscape Design

Landscape design will look at site analysis and visual review of the impacts to the surrounding properties from the roadway perception.

During the conceptual design, two (2) alternatives of a streetscape scheme will be reviewed (within the project area, but limited to the railroad tracks on the west and Boones Ferry Road on the east). The review of the streetscape will include the immediate properties adjacent to Boones Ferry Road in the project area. The streetscape process will be reviewed by the traffic committee, City Council, and citizens of Wilsonville.

During the final selection process, one of the final plans will be developed in plan view to show a possible landscape solution to the roadway environment. A cross section will be developed to show vertical and horizontal relationships of the landscape input to the project and will extend out to show the streetscape along the edges of the project.

5.14 Illumination Design

The chosen alignment alternative will be reviewed to evaluate illumination design to determine possible lighting methods that will apply appropriate light levels to the roadway, bikeway, and pedestrian way surfaces using the American National Standard Practice for ROADWAY LIGHTING, sponsored and published by the Illuminating Engineering Society of North America.

5.15 Sewer Service

Evaluate requirements for sewer service to the area immediately North of Wilsonville Road for future sewer service. The evaluation purpose is to determine pipe sizing and connections so that Wilsonville Road will not need to be damaged during future development of the area.

5.16 Water Service

Evaluate requirements for enhanced water service (fire protection) west of Kinsman Road. The evaluation purpose is to determine pipe sizing and connections so that Wilsonville Road will not need to be damaged during future enhancement of the fire protection system.

5.17 Limited Level One Environmental Site Assessment for the Roadway Corridor

The team will preform a limited Level One environmental site assessment (ESA) covering approximately 0.8 miles of the Wilsonville road corridor. The corridor will cover a 400 foot wide path centered along the existing centerline of Wilsonville Road. The ESA will be limited by lack of entry on each property to visually inspect and to interview the current owners and renters.

a. Data Collection and Review

CPEI will review the past history and usage of the site to assess if obvious environmentally undesirable activities may have occurred at the site and to review the status of available environmentally related permits on the site or surrounding properties. If necessary, this information will be updated, expanded, or confirmed information will be obtained by performing the following:

1. Site History - Available historical aerial photographs of the site will be reviewed. Any land use changes observed from study of the photographs will be discussed. Various local agencies within the City of Wilsonville and Clackamas County (e.g. Fire Marshal, Departments of Public Works, Planning, etc.) will be contacted for information concerning past history of the area, including historical and current land uses.
2. Agency Files - U.S. Environmental Protection Agency Region 10 and DEQ will be consulted to determine if files exist for the site with respect to previous environmental problems. The USGS Water Supply Papers and Open File Reports will be reviewed for hydrogeologic information on the area.

b. Site Walkover

A limited site survey will consist of an examination of the properties and buildings from publicly accessible areas. The site survey will, to the extent possible, check for visual indications of potential environmental problems, including the presence of surface staining, stressed vegetation, appearance or odor of surface waters, potential asbestos-containing materials, pits or depressions that may indicate buried drums or unknown storage tanks, etc. The subject area will be photographed for documentation and use in the final report.

c. Final Report

A written report will be prepared that will clearly present the results, conclusions, and recommendations of the assessment. The report will identify those areas where additional on site investigations and interviews are suggested.

TASK 6 - PHOTO SIMULATION OF THE ALTERNATIVES FOR PUBLIC INVOLVEMENT

The project will include nine photo simulations showing road alignment. Three key points along the alignment will be selected by the consultant and the City; at each point the three alignment options will be shown.

6.1 Data acquisition

At the key points along Wilsonville Road, photographs of the existing roadway will be taken. The photographs will be scanned and prepared by transferring the 2D road alignment, striping, and photo acquisition locations from AutoCad format to 3D rendering file format and add the 3D details.

6.2 Photo Simulation

This will include removal of power poles and selected trees, while adding of proposed roadway improvements and plantings.

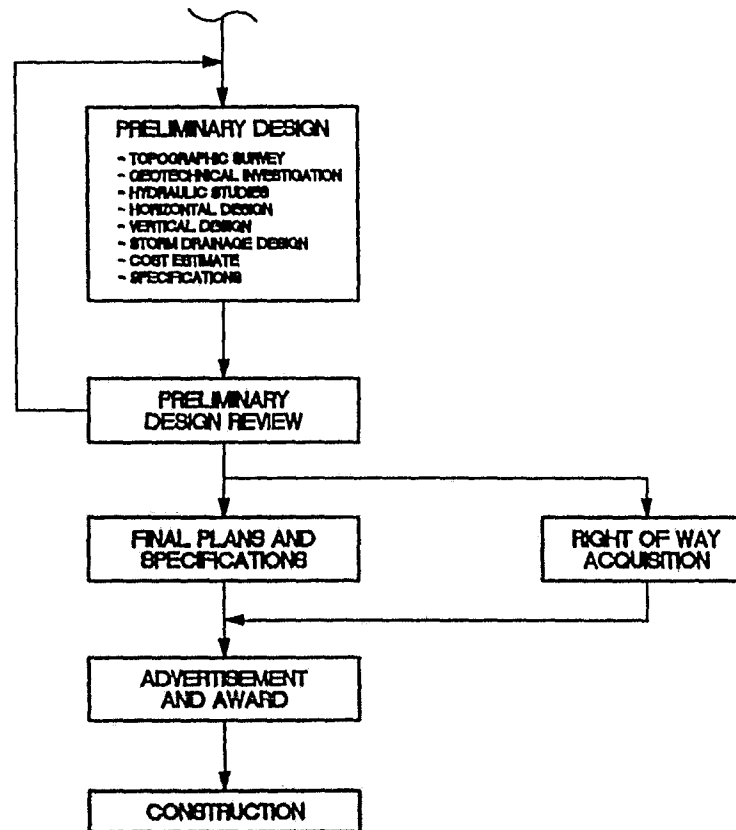
6.3 Presentation Materials

The nine photographs will be developed into a 35mm slide and a 4-inch by 6-inch photograph.

TASK 7 - ADDITIONAL WORK

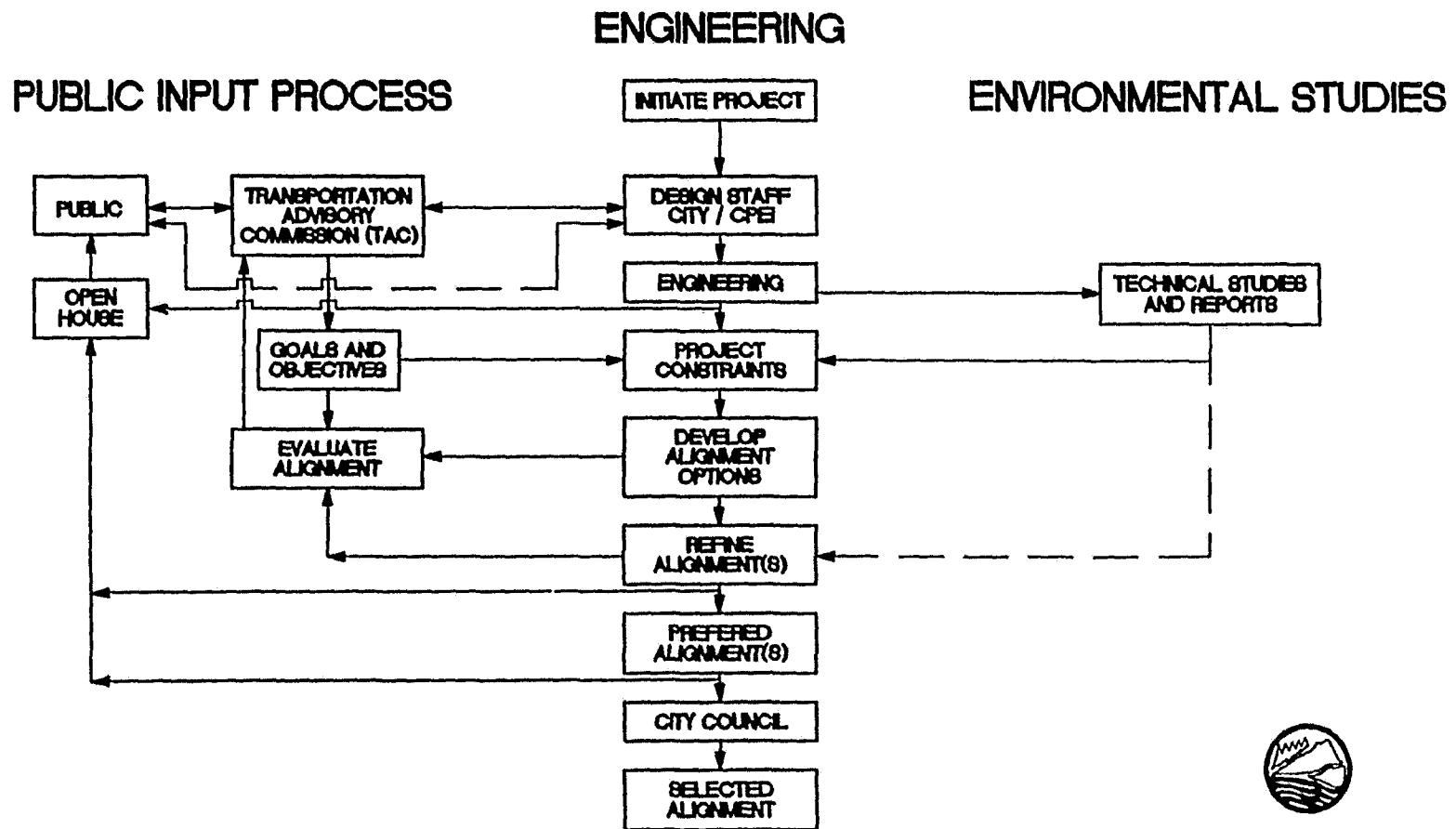
7.1 Work to be determined by the City Engineer at a later date.

WILSONVILLE ROAD DESIGN PROJECT DEVELOPMENT



Cascade Pacific Engineering, Inc.

WILSONVILLE ROAD ALIGNMENT STUDY PROJECT DEVELOPMENT



FORWARDED OPTIONS REFINEMENT

D. Refinement Options C and G2.

At this point in the project Options C (6C) and G2 were selected as the most viable options. The following is a description of the two:

Option C:

This option is also known as Option 6C and is basically Option 6 of the original set of alternatives. Option C is a five-lane roadway from Boones Ferry Road to Brown Road. On the east end, this threads the road through the business area, minimizing the impact to Lowrie's Market complex and the office buildings on the north side. On the west end, this option continues to thread the road between the fir trees, apartment complex, and church parking lot. In the middle, this option is primarily a southern alignment to minimize the wetland/natural area impacts. There is no impact to the Charter Oak or the electrical tower. This option strikes a balance between property impacts and natural resources impacts, with both being affected equally but less than the other options reviewed.

An advantage of Option C over the basic Option 6 is a 12-foot wide combination sidewalk and bike path on the north side of the roadway and behind the curb. The roadway will have two on-street bike lanes for the serious biker and a 12-foot off-street bike path/sidewalk for the children going to and from the school and store.

Option G2:

From Kinsman Road eastward to Boones Ferry Road, this option is a five-lane roadway, the same as Option C.

From Kinsman Road westward to Brown Road, this option is a one-way grid. The original Wilsonville Road will be a one-way westerly street, and Brown Road would be extended and directed easterly to Kinsman Road and become the one-way segment going east. Montebello Road will be connected between the two one-way segments.

The Wilsonville Road westerly one-way grid will be a three-lane roadway with two on-street bike lanes. The Brown Road segment (heading easterly) will be two lanes with two on-street bike lanes.

Two selection matrices were developed to assist selection between the two options, along with an overall and detailed (by section of roadway) cost-comparison matrix.

The Transportation Advisory Committee, in their February 1994 meeting, dropped Option G2 from further consideration and selected Option C as the selected option.

ALTERNATIVE SELECTION MATRIX

	C	G-2	
OBJECTIVES	ALT. "6C", 5 LANES W/BICYCLE LANE ON EACH SIDE, 12 FOOT SIDEWALK FOR REC BICYCLISTS & PEDESTRIANS ON NORTH & 5 FOOT SIDEWALK ON SOUTH	ALTERNATIVE "G-2", 5 LANES W/BICYCLE LANE & SIDEWALK ON EACH SIDE FROM BOONES FERRY TO KINSMAN & ONE WAY LOOP (2 LANES WITH BICYCLE LANE & SIDEWALK ON EACH SIDE) KINSMAN TO BROWN, WAIT ON DEV. 3 LANES INITIALLY FROM KINSMAN TO BROWN	SUMMARY
1A. MINIMIZE IMPACT ON THE ENVIRONMENT & SPECIFIC NATURAL RESOURCES, TREES.	LARGEST IMPACT ON FIR & MAPLE TREES VIC. BROWN ROAD	MINIMAL IMPACT ON TREES VIC. BROWN ROAD	ALTERNATIVE 6 REQUIRES AN ADDITIONAL 750SF OF ROW
1B. CONTINUED. WETLANDS	MINIMAL IMPACT ON WETLANDS	TWO CREEK CROSSINGS. SLIGHTLY MORE IMPACT ON WETLANDS.	FAVORS ALTERNATIVE 6
1C. CONTINUED. WILDLIFE MIGRATION	NO SIGNIFICANT DIFFERENCE ON WILDLIFE MIGRATION	NO SIGNIFICANT DIFFERENCE ON WILDLIFE MIGRATION	NO SIGNIFICANT DIFFERENCE
1D. CONTINUED. ARCHEOLOGICAL	NO SIGNIFICANT ARCHEOLOGICAL DIFFERENCE	NO SIGNIFICANT ARCHEOLOGICAL DIFFERENCE	NO SIGNIFICANT DIFFERENCE
2. ENHANCE THE NATURAL SETTING OF THE COMMUNITY	MOST CREATIVITY NEEDED TO RECREATE NATURAL SETTING	CREATIVITY NEEDED TO RECREATE NATURAL SETTING	FAVORS ALTERNATIVE G-2
3. ENSURE ECONOMIC VIABILITY OF IMPROVEMENTS BY MINIMIZING & MITIGATING RESIDENTIAL & BUSINESS IMPACTS.	SIGNIFICANT IMPACT ON ADJACENT RESIDENCES & BUSINESSES	GREATEST POTENTIAL IMPACT BY ROUTING ARTERIAL TRAFFIC INTO LARGER AREAS	PERSONAL PREFERENCE
4. COORDINATE WITH OTHER IMPROVEMENT PROJECTS (I-5 INTERCHANGE), UTILITIES & TRANSIT	GOOD COMPATIBILITY WITH OTHER PROJECTS	GOOD COMPATIBILITY WITH OTHER PROJECTS	NO SIGNIFICANT DIFFERENCE
5. DEVELOP A DESIGN THAT MEETS EXISTING & FUTURE TRANSPORTATION NEEDS	MEETS EXISTING & FUTURE TRANSPORTATION NEEDS	MEETS EXISTING & FUTURE TRANSPORTATION NEEDS	NO SIGNIFICANT DIFFERENCE
6A. ENSURE MORE EFFICIENT TRAFFIC FLOW & IMPROVE ACCESS TO & FROM WILSONVILLE ROAD	ENSURES GOOD TRAFFIC FLOW	ENSURES GOOD TRAFFIC FLOW. LESS EFFICIENT BECAUSE OF EXTRA DISTANCE	FAVORS ALTERNATIVE 6C
6B. CONTINUED. COMMERCIAL ACCESS	COULD DECREASE ACCESS IN COMMERCIAL AREAS	COULD DECREASE ACCESS IN COMMERCIAL AREAS	NO SIGNIFICANT DIFFERENCE
7. ACCOMMODATE & IMPROVE SAFETY FOR ALL USERS-CYCLISTS, MOTORISTS, & PEDESTRIANS	WOULD IMPROVE SAFETY FOR ALL USERS WITH BEST SAFETY FOR SCHOOL BICYCLE RIDERS	WOULD IMPROVE SAFETY FOR ALL USERS	FAVORS ALTERNATIVE 6C

WILSONVILLE ROAD PROJECT

ALTERNATIVE SELECTION MATRIX

OPTIONS

- 1 OUT OF DIRECTION TRAVEL
- 2 CREEK CROSSINGS/WETLANDS
- 3 TREES
- 4 PROPERTY USE IMPACTS
- 5 AREA OF NEW RIGHT-OF-WAY
- 6 BUILDING IMPACTS
- 7 CONSTRUCTABILITY
- 8 COST

	A	B	C	G1	G2
1	LOW	LOW	LOW	HI	HI
2	MED	MED	MED	HI	HI
3	MED	MED	HI	LOW	LOW
4	HI	HI	HI	LOW	MED
5	MED	MED	MED	HI	HI
6	HI	HI	HI	LOW	MED
7	MED	MED	MED	LOW	LOW
8	1	3	2	4	5

LOW OR 1 IS THE BEST OPTION
 HI OR 5 IS THE WORST OPTION

WILSONVILLE ROAD PROJECT

COST COMPARISON MATRIX

OPTIONS

CONSTRUCTION COST

PHASE 1

PHASE 2

SUBTOTAL

A	B	C	G1	G2
2,910,000	1,468,000	2,990,000	3,527,000	2,515,000
-----	1,922,000	-----	-----	1,073,000
2,910,000	3,390,000	2,990,000	3,527,000	3,588,000

RIGHT-OF-WAY COST

PHASE 1

PHASE 2

SUBTOTAL

850,000	850,000	900,000	800,000	800,000
-----	-----	-----	150,000	150,000
850,000	850,000	900,000	950,000	950,000

TOTAL

3,760,000	4,240,000	3,890,000	4,477,000	4,538,000
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NOTE: THESE COSTS WERE DEVELOPED FOR COMPARISON PURPOSES ONLY AND SHOULD NOT BE CONSIDERED FINAL

WILSONVILLE ROAD PROJECT

COST COMPARISON MATRIX

OPTIONS	SEGMENT									TOTAL	
	BROWN ROAD - KINSMAN ROAD			KINSMAN ROAD - BOONES FERRY ROAD			BOONES FERRY INTERSECTION				
	TEMP	FULL	R/W	TEMP	FULL	R/W	TEMP	FULL	R/W		
C - 5 LANE	--	\$2,070,000	\$425,000	\$23,000	\$1,870,000	\$525,000	\$131,000	\$582,000	\$750,000	\$4,522,000	\$1,700,000
G2 - WILSONVILLE RD.											
3 + 5 LANE	--	\$1,330,000	\$315,000	\$23,000	\$1,870,000	\$525,000	\$131,000	\$582,000	\$750,000	\$3,782,000	\$1,590,000
5 LANE (FUTURE)	--	\$952,000	\$150,000	--	--	--	--	--	--	\$952,000	\$150,000
- SOUTH LOOP	--	\$1,610,000	\$150,000	--	--	--	--	--	--	\$1,610,000	\$150,000
BIKE PATH											
TEMPORARY	\$90,000	--	\$40,000	--	--	--	--	--	--	\$90,000	\$40,000
PERMANENT	--	\$122,000	\$40,000	--	--	--	--	--	--	\$122,000	\$40,000

SELECTED OPTION

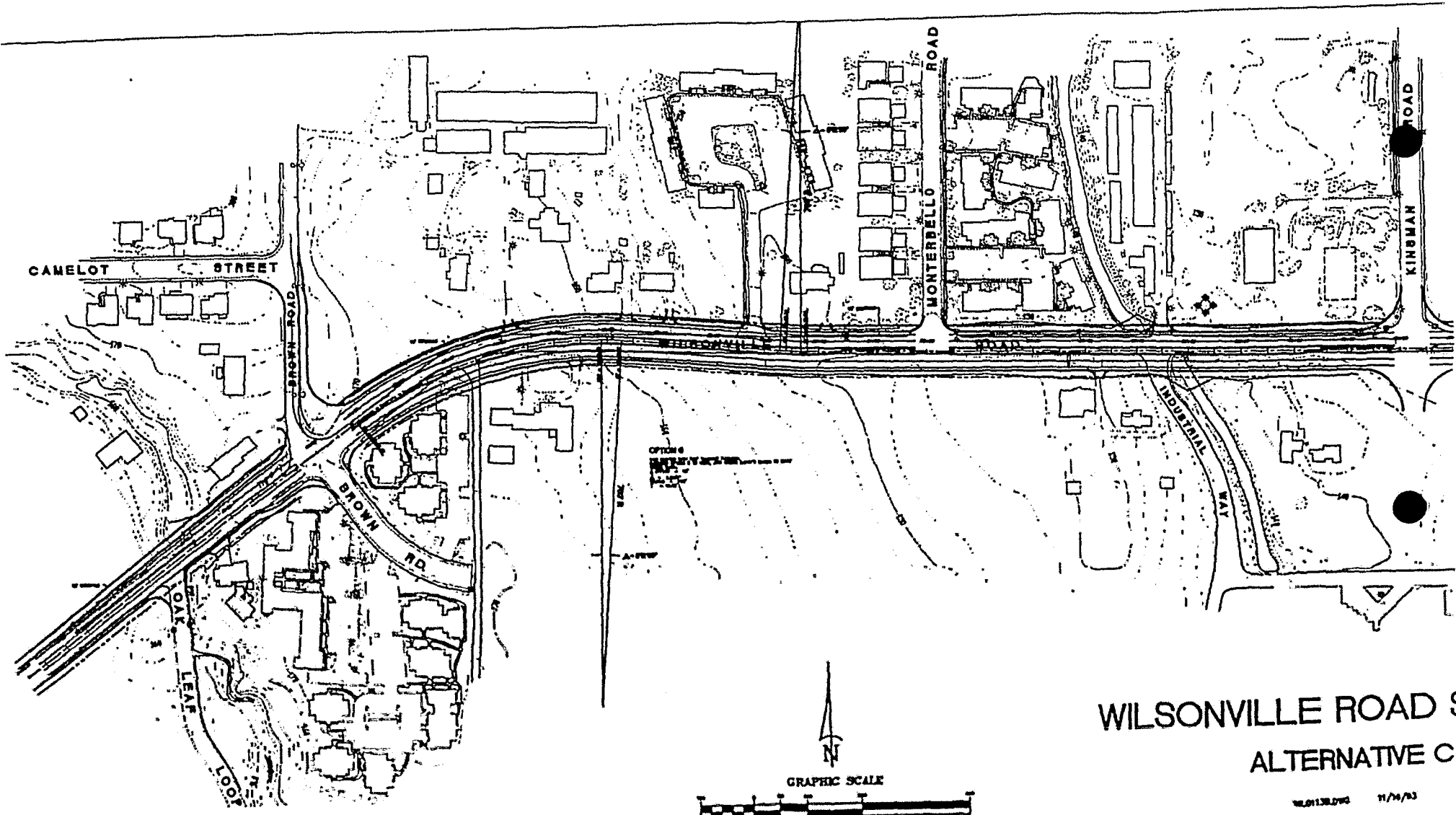
THE TRANSPORTATION ADVISORY COMMITTEE SELECTED OPTION C (6C) AS THE SELECTED OPTION IN THEIR FEBRUARY 1994 MEETING.

At this point in the study the City of Wilsonville Engineering Staff has taken over the study to present a number of funding options to the City Council.

Enclosed is the plan for Option C.

wils2/finalrep/repalign.sec

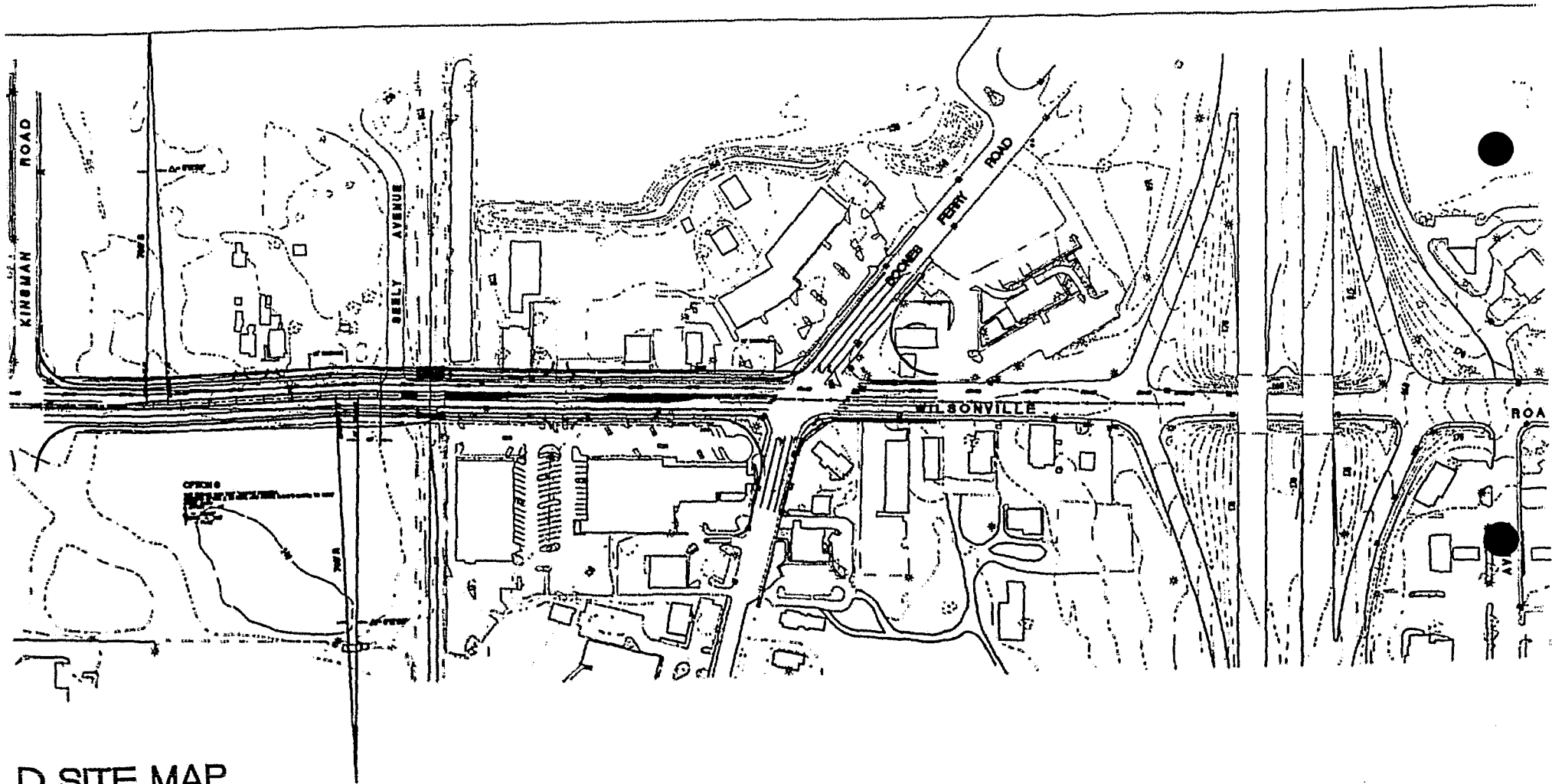
Selected Option C Plan



OPTION C
 WILSONVILLE ROAD ALTERNATIVE C

WILSONVILLE ROAD &
 ALTERNATIVE C

11/24/83



D SITE MAP

III C

**CITY OF WILSONVILLE
PERSONAL SERVICES AGREEMENT
WILSONVILLE ROAD RE-CONSTRUCTION-BOONES FERRY ROAD INTERSECTION
WEST TO JUST WEST OF THE BURLINGTON NORTHERN
RAILROAD TRACKS (PHASE I)
PROJECT # 540-49130-5000-430**

THIS AGREEMENT is made and entered into as of the date first indicated on the signature page, by and between the City of Wilsonville, Wilsonville, Oregon, (hereinafter referred to as the "City"), and Cascade Pacific Engineering, Inc., hereinafter referred to as "Consultant".

WHEREAS, City requires services which Consultant is capable of providing, under terms and conditions hereinafter described; and

WHEREAS, Consultant represents that it is qualified on the basis of specialized experience and technical competence and prepared to provide such services as City does hereinafter require;

NOW, THEREFORE, in consideration of those mutual promises and the terms and conditions set forth hereafter, the parties agreed as follows:

A. Term

The term of this Agreement shall be from the date of execution by both parties until tasks required hereunder are complete and accepted, unless earlier terminated in accordance herewith.

B. Consultant's Services

- B.1 The scope of Consultant's services and time of performance under this Agreement are set forth in Exhibit A. All provisions and covenants contained in Exhibit A are hereby incorporated by reference and shall become a part of this Agreement as if fully set forth herein.
- B.2 All written documents, drawings, and plans submitted by Consultant and intended to be relied on for the project shall bear the signature, stamp or initials of Consultant or Consultant's authorized Project Manager. Any documents submitted by Consultant which do not bear Consultant's signature, stamp or initials or those of the Consultant's authorized Project Manager shall not be relied upon by City. Interpretation of plans and answers to questions covering Plans given by Consultant or Consultant's Project Manager need not be put in writing and may be relied upon by City.
- B.3 All agreements on the Consultant's part are contingent upon, and the Consultant shall not be responsible for damages or be in default or be deemed to be in default by reason of delays in performance due to strikes, lockouts, accidents, acts of God and other delays unavoidable or beyond the Consultant's reasonable control, or due to shortages or unavailability of labor at established area wage rates or delays caused by failure of the City or City's agents to furnish information or to approve or disapprove the Consultant's work promptly, or due to late or slow, or faulty performance by the City, other contractors, other consultants not under Consultant's control or governmental agencies, the performance of whose work is precedent to or concurrent with the performance of the Consultant's work. In the case of the happening of any such cause of delay, the time of completion shall be extended accordingly.

B.4 The existence of this Agreement between City and Consultant shall not be construed as City's promise or assurance that Consultant will be retained for future services unrelated to this public works project.

B.5 Consultant shall maintain confidentiality of any private confidential information and any public information which is exempt from disclosure under state or federal law to which the Consultant may have access by reason of this Agreement. Consultant warrants that its employees assigned to work on services provided in this Agreement shall maintain confidentiality. All agreements with respect to confidentiality shall survive the termination or expiration of this Agreement.

C. City's Responsibilities

C.1 The scope of City's responsibilities, including those of its Project Manager, are set forth in Exhibit B, which is attached hereto and incorporated herein.

C.2 City certifies that sufficient funds are available and authorized for expenditure to finance costs of this Agreement.

D. Compensation

D.1 Except as otherwise set forth in this subsection D, City agrees to pay Consultant not more than \$192,000 for performance of those services provided hereunder. However, compensation may be less than such maximum amount and shall be actually determined on an hourly basis as shown on the Rate Schedule attached as Exhibit C. Compensation shall be only for actual hours worked on this project and related direct expenses. Consultant shall furnish with each bill for services an itemized statement showing the amount of hours devoted to the project by Consultant as well as any agents or employees of Consultant and any direct expenses.

D.2 During the course of Consultant's performance, if City or its Project Manager specifically requests Consultant to provide additional services which are beyond the scope of the services described on Exhibit A, Consultant shall provide such additional services and bill the City either at Consultant's actual costs or at the hourly rates outlined on the attached Standard Hourly Rate Schedule, provided the parties comply with the requirements of Section R. No compensation for additional services shall be paid or owing unless both parties specifically agree to such additional compensation and services.

D.3 Unless expressly set forth on Exhibit A as a reimbursable expense item, Consultant shall only be entitled to the compensation amount specified in subsections D.1 and D.2. Only those reimbursable expenses which are set forth on Exhibit A and itemized on Consultant's bills for services shall be the basis for which payment of those expenses by City shall be owing.

D.4 Except for amounts withheld by City pursuant to this agreement, Consultant will be paid for services for which an itemized bill is received by City within 30 days.

D.5 City shall be responsible for payment of required fees, payable to governmental agencies including, but not limited to plan checking, land use, zoning and all other similar fees resulting from this project, and not specifically covered by Exhibit A.

D.6 Consultant's compensation consists of salaries or wages plus fringe benefits and contributions including payroll taxes, workers' compensation insurance, liability insurance, pension benefits and similar contributions and benefits.

D.7 In the event Consultant's responsibilities as described on Exhibit A have been separated into two or more phases, then Consultant shall not be entitled to any compensation for work performed directly on a later category of responsibilities unless and until City specifically directs that Consultant proceed with such work.

E. City's Project Manager

City's Project Manager is Michael A. Stone. City shall give Consultant prompt written notice of any redesignation of its Project Manager.

F. Consultant's Project Manager

Consultant's Project Manager is Gene Miller. In the event that Consultant's designated Project Manager is changed, Consultant shall give City prompt written notification of such redesignation. In the event that City receives any communication from Consultant of whatsoever nature which is not executed by Consultant's designated Project Manager, City may request clarification by Consultant's Project Manager, which shall be promptly furnished.

G. Project Information

City shall provide full information regarding its requirements for the Project. Consultant agrees to share all project information, to fully cooperate with all corporations, firms, contractors, public utilities, governmental entities, and persons involved in or associated with the Project. No information, news or press releases related to the Project, whether made to representatives of newspaper, magazines or television and radio stations, shall be made without the authorization of City's Project Manager.

H. Duty to Inform

If at any time during the performance of this Agreement, or any future phase of this Agreement for which Consultant has been retained, Consultant becomes aware of actual or potential problems, faults or defects in the project or any portion thereof, any nonconformance with the federal, state or local law, rule, or regulation, or has any objection to any decision or order made by City with respect to such laws, rules or regulations, Consultant shall give prompt written notice thereof to City's Project Manager. Any delay or failure on the part of City to provide a written response to Consultant shall neither constitute agreement with nor acquiescence to Consultant's statement or claim, nor constitute a waiver of any of City's rights.

I. Consultant is Independent Contractor

I.1 Consultant shall be and herein declares that it is an independent contractor for all purposes and shall be entitled to no compensation other than compensation provided for under paragraph D of this Agreement. Consultant binds itself, its partners, officers, successors, assigns and legal representatives to the City.

Consultant shall be completely independent and solely determine the manner and means of accomplishing the end result of this Agreement, and City does not have the right to control or interfere with the manner or method of accomplishing said results. City, however, has the right to specify and control the results of the Consultant's responsibilities.

- I.2 Subcontracting: City understands and agrees that only those special consulting services identified on Exhibit A may be performed by those persons identified on Exhibit A and not by Consultant. Consultant acknowledges such services are provided to City pursuant to a subcontract(s) between Consultant and those who provide such services. Consultant may not utilize any subcontractors or in any way assign its responsibility under the Agreement without first obtaining the express written consent of the City.
- I.3 Consultant shall be responsible for and indemnify and defend City against any liability, cost or damage arising out of Consultant's use of such subcontractor(s) and subcontractor's negligent acts, omissions, or errors. Subcontractors will be required to meet the same insurance requirements of Consultant under this Agreement. Unless otherwise specifically agreed to by City, Consultant shall require that subcontractors also comply with and be subject to the provisions of this Section I.
- I.4 Consultant shall make prompt payment of any claim for labor, materials or services furnished to the Consultant by any person in connection with this Agreement as such claim becomes due. Consultant shall not permit any lien or claim to be filed or prosecuted against the City on account of any labor or material furnished to or on behalf of the Consultant. If the Consultant fails, neglects or refuses to make prompt payment of any such claim, the City may pay such claim to the person furnishing the labor, materials or services and charge the amount of the payment against funds due or to become due the Consultant under this Agreement.
- I.5 No person shall be employed for more than eight hours in any one day, or 40 hours in any one week, except in cases of absolute necessity, emergency or where the public policy absolutely requires it, and in such cases except in cases of agreements for personal services as defined in ORS 279.051, the laborer shall be paid at least time and a half pay for all overtime in excess of eight hours a day and for work performed on Saturday and on any legal holiday specified in ORS 279.334. Persons who perform work under a personal services agreement shall be paid at least time and a half of all overtime worked in excess of 40 hours in any one week, except for individuals who are excluded under ORS 653.010 to 653.261 or under 29 U.S.C. §§201 to 209 from receiving overtime.
- I.6 Consultant shall make prompt payment as due to any person, co-partnership, association or corporation, furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to the employees of such Consultant of all sums which the Consultant agrees to pay for such services and all monies and sums which the Consultant collected or deducted from the wages of employees pursuant to any law, contract or agreement for the purpose of providing or paying for such service.
- I.7 Should Consultant elect to utilize employees on any aspect of this Agreement, Consultant shall be fully responsible for payment of all withholding required by law, including but not limited to taxes, including payroll, income, Social Security (FICA) and Medicaid. Consultant shall also be fully responsible for payment of salaries, benefits, taxes, Industrial Accident Fund contributions and all other charges on account of any employees. Consultant shall pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167. All costs incident to the hiring of assistants or employees shall be Consultant's responsibility. Consultant shall indemnify, defend and hold City harmless from claims for payment of all such

expenses. Unless otherwise expressly set forth on Exhibit A as a reimbursable expense item, specific costs associated with items set forth in this paragraph shall be considered part of Consultant's compensation.

- I.8 No person shall be denied or subjected to discrimination in receipt of the benefits of any services or activities made possible by or resulting from this Agreement on the grounds of sex, race, color, creed, marital status, age, disability or national origin. Any violation of this provision shall be grounds for cancellation, termination or suspension of the Agreement in whole or in part by the City.

J. Indemnity and Insurance

- J.1 Consultant acknowledges responsibility for liability arising out of the performance of this Agreement and shall hold City harmless from and indemnify City of any and all liability, settlements, loss, costs and expenses in connection with any action, suit, or claim resulting or allegedly resulting from Consultant's negligent acts, omissions, or errors provided pursuant to this Agreement or from Consultant's failure to perform its responsibilities as set forth in this agreement. The review, approval or acceptance by City, its Project manager or City of Wilsonville employees of documents or other work prepared or submitted by Consultant shall not relieve Consultant of its responsibility to provide such materials in full conformity with City's requirements as set forth in this Agreement and to indemnify City from any and all costs and damages resulting from Consultant's failure to adhere to the standard of performance described in Section J.2.3. The provisions of this section shall survive termination of this Agreement. City agrees to indemnify and hold Consultant harmless from liability, settlements, losses, costs, and expenses in connection with any action, suit or claim resulting or allegedly resulting from City's negligent acts, omissions or activities or from its willful misconduct.

- J.2 Insurance Requirements and Consultant's Standard of Care.

J.2.1 Consultant shall provide City with evidence of the following insurance coverages prior to the commencement of the work. A copy of each insurance policy, issued by a company currently licensed in the State of Oregon, and certified as a true copy by an authorized representative of the issuing company or at the discretion of the City, in lieu thereof, a certificate in a form satisfactory to City certifying to the issuance of such insurance shall be furnished to City. Unless specifically set forth on Exhibit A, expenses relating to the cost of insurance shall not be the basis for additional reimbursement to Consultant.

J.2.2 The City agrees that in accordance with generally accepted construction practices, the construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property.

- J.2.3 In the performance of its professional services, the Consultant shall use that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession practicing in the Portland Metropolitan Area. The Consultant will reperform any services not meeting this standard without additional compensation. Consultant's reperformance of any services, even if done at City's request, shall not be considered as a limitation or waiver by City of any other remedies or claims it may have arising out of consultant's failure to perform in accordance with the applicable standard of care or this Agreement.
- J.2.4 Consultant shall furnish the City a certificate evidencing the date, amount and type of insurance that has been procured pursuant to this Agreement. All policies shall be written on an "occurrence basis," except for Consultant's Professional Liability Insurance which may be written on a "claims made" basis, provided it shall endeavor to be maintained in full force for not less than four (4) years following Consultant's performance under this Agreement. All policies shall provide for not less than 30 days' written notice to the City before they may be revised, non-renewed, or canceled. The Consultant shall endeavor to provide for not less than 30 days' written notice to the City before the policy coverage may be reduced. Excepting professional liability and worker's compensation coverage, all policies shall provide an endorsement naming the City, its officers, employees and agents as additional insureds. In the event the policy lapses during performance, the City may: treat said lapse as a breach; terminate this Agreement and seek damages; withhold progress payments without impairing obligations of Consultant to proceed with work; pay an insurance carrier (either Consultants' or a substitute) the premium amount and withhold that amount from payments; and, use any other remedy provided by this Agreement or by law.
- J.2.5 Insurance Requirements. The Consultant, its subcontractors, if any, and all employers working under this Agreement are subject employers under the Oregon Worker's Compensation Law and shall comply with ORS 656.017 which requires them to provide workers' compensation coverage for all their subject workers. The Consultant will maintain throughout this Agreement the following insurance:
- J.2.5.1 Workers' compensation and employers liability insurance as required by the State where the work is performed.
 - J.2.5.2 Comprehensive automobile and vehicle liability insurance covering claims for injuries to members of the public and/or damages to property of others arising from the use of motor vehicles, including on-site and off-site operations, and owned, non-owned, or hired vehicles, with \$1,000,000 combined single limits.
 - J.2.5.3 Commercial general liability insurance covering claims for injuries to members of the public or damage to property of others arising out of any covered negligent act or omission of the Consultant or of any of its employees, agents or subcontractors, with \$1,000,000 per occurrence and in the aggregate.

J.2.5.4 Professional liability insurance of \$1,000,000 per occurrence and in the aggregate, including contractual liability coverage. If Consultant proposes using subcontractors, in addition to any other requirements of this Agreement, City may require subcontractors to provide Professional Liability Insurance, provided the amount and form of coverage complies with the requirements of paragraphs J.2.1, J.2.2, J.2.3, J.2.4 and J.2.5.4.

J.2.5.5 City will be named as an additional insured with respect to Consultant's liabilities hereunder in insurance coverages identified in items J.2.5.2 and J.2.5.3.

J.2.6 The coverage provided by these policies shall be primary and any other insurance carried by City is excess. Consultant shall be responsible for any deductible amounts payable under all policies of insurance. In the event a dispute arises between City and Consultant for which Consultant has obtained insurance, the maximum amount which may be withheld by City for all such claims shall be no more than the amount of the applicable insurance deductible.

K. Early Termination

K.1 This Agreement may be terminated prior to the expiration of the agreed upon terms:

K.1.1 By mutual written consent of the parties;

K.1.2 By City for any reason within its sole discretion, effective upon delivery of written notice to Consultant by mail or in person; and

K.1.3 By Consultant, effective upon seven days prior written notice in the event of substantial failure by the City to perform in accordance with the terms through no fault of the Consultant.

K.2 If City terminates the Agreement in whole or in part due to default or failure of Consultant to perform services in accordance with this Agreement, City may procure, upon reasonable terms and in a reasonable manner, services similar to those so terminated. In addition to any other remedies the City may have, Consultant shall be liable for all costs and damages incurred by City in procuring such similar service, and the Contract shall be in full force to the extent not terminated.

K.3 If City terminates the Agreement for its own convenience, payment of Consultant shall be prorated to and include the day of termination and shall be in full satisfaction of all claims by Consultant against City under this Agreement.

K.4 Termination under any provision of this paragraph shall not affect any right, obligation or liability of Consultant or City which accrued prior to such termination. Consultant shall surrender to City items of work or portions thereof, referred to in Paragraph O for which Consultant has received payment, or City has made payment. City retains the right to elect whether or not to proceed with actual construction of the project.

L. Suspension of Work

City may suspend, delay or interrupt all or any part of the work for such time as the City deems appropriate for its own convenience by giving written notice thereof to Consultant. An adjustment in the time of performance or method of compensation shall be allowed as a result of such delay or suspension unless the reason for the delay is within the Consultant's control. City shall not be responsible for work performed by any subcontractors after notice of suspension is given by City to Consultant. Should the City suspend, delay or interrupt the work and the suspension is not within the Consultant's control, then the City shall extend the time of completion by the length of the delay and the method of compensation shall be adjusted to reflect the Consultant's increase or decrease in its standard hourly rates.

M. Subconsultants and Assignments

M.1 Unless expressly authorized in Exhibit A or Paragraph I of this Agreement, Consultant shall neither subcontract with others for any of the work prescribed herein, nor assign any of Consultant's rights acquired hereunder without obtaining prior written approval from City. Work may be performed by persons other than Consultant, provided Consultant advises City of the names of such subcontractors and the work which they intend to perform and the City specifically agrees thereto. Consultant acknowledges such services are provided to City pursuant to a subcontract(s) between Consultant and subcontractor(s). Except as otherwise provided by this Agreement, City incurs no liability to third persons for payment of any compensation provided herein to Consultant. Any attempted assignment of this contract without the written consent of City shall be void. Except as otherwise specifically agreed, all costs for services performed by others on behalf of Consultant shall not be subject to additional reimbursement by City.

M.2 City shall have the right to let other agreements be coordinated with this Agreement. Consultant shall cooperate with other firms, engineers or subconsultants on the project and the City so that all portions of the project may be completed in the least possible time within normal working hours. Consultant shall furnish other engineers and subconsultants and affected public utilities, whose designs are fitted into Consultant's design, detail drawings giving full information so that conflicts can be avoided.

N. Access to Records

City shall have access upon request to such books, documents, receipts, papers and records of Consultant as are directly pertinent to this Agreement for the purpose of making audit, examination, excerpts, and transcripts for a period of four (4) years unless within that time City specifically requests an extension. This clause shall survive the expiration, completion or termination of this Agreement.

O. Work is Property of City

A. All work in its original form, including but not limited to documents, drawings, tracings, surveying records, mylars, papers, computer programs, diaries and photographs, performed or produced by Consultant under this Agreement shall be the exclusive property of City and shall be delivered to City prior to final payment. Any statutory or common law rights to such property held by Consultant as creator of such work shall be conveyed to City upon request without additional compensation. Upon City's approval and provided City is identified in connection therewith Consultant may include Consultant's work in its promotional materials. Drawings may bear a disclaimer releasing the Consultant from any liability for changes made on the original drawings and for reuse of the drawings subsequent to the date they are turned over to the City.

B. Consultant shall not be held liable for any damage, loss, increased expenses or

otherwise caused by or attributed to the reuse, by City or their designees, of all work performed by Consultant pursuant to this contract without the express written permission of the Consultant.

- C. City agrees it will indemnify and hold Consultant harmless for all losses or damages that arise out of the reuse of any provided materials on any extensions, enlargements or other projects, without the express written permission of the Consultant.

P. Law of Oregon

The Agreement shall be governed by the laws of the State of Oregon. The Agreement provisions required by ORS Chapter 279 to be included in public agreements are hereby incorporated by reference and shall become a part of this Agreement as if fully set forth herein.

Consultant shall adhere to all applicable federal and state laws, including but not limited to laws, rules, regulations, and policies concerning employer and employee relationships, workers' compensation, and minimum and prevailing wage requirements. Any certificates, licenses or permits which Consultant is required by law to obtain or maintain in order to perform work described on Exhibit A, shall be obtained and maintained throughout the term of this Agreement.

Q. Adherence to Law

Consultant shall adhere to all applicable federal and state laws, including but not limited to laws, rules, regulations, and policies concerning employer and employee relationships, workers' compensation, and minimum and prevailing wage requirements. Any certificates, licenses or permits which Consultant is required by law to obtain or maintain in order to perform work described on Exhibit A, shall be obtained and maintained throughout the term of this Agreement.

R. Modification

Any modification of the provisions of this Agreement shall not be enforceable unless reduced to writing and signed by both parties. A modification is a written document, contemporaneously executed by City and Consultant, which increases or decreases the cost to City over the agreed sum or changes or modifies the scope of service or time of performance. No modification shall be binding unless executed in writing by Consultant and City. In the event that Consultant receives any communication of whatsoever nature from City, which communication Consultant contends to give rise to any modification of this Agreement, Consultant shall, within ten (10) days after receipt, make a written request for modification to City's Project Manager. Consultant's failure to submit such written request for modification in a timely manner may be the basis for refusal by the City to treat said communication as a basis for modification. In connection with any modification to the contract affecting any change in price, Consultant shall submit a complete breakdown of labor, material, equipment and other costs. If Consultant incurs additional costs or devotes additional time on project tasks which were reasonably expected as part of the original agreement or any mutually approved modifications, then City shall be responsible for payment of only those costs for which it has agreed to pay.

S. Other Conditions

- S.1 Except as otherwise provided in paragraphs S.1.1, S.1.2, and S.1.3 Consultant represents and agrees that the contract specifications and plans, if any, prepared by the Consultant will be adequate and sufficient to accomplish the purposes of the project; and further, that any review or approval by the owner of the plans and specifications shall not be deemed to diminish the adequacy of Consultant's work.
- S.1.1 Subsurface Investigations. In soils, foundation, ground water, and other subsurface investigations, the actual characteristics may vary significantly between successive test points and sample intervals and at locations other than where observations, exploration, and investigations have been made. Because of the inherent uncertainties in subsurface evaluations, changed or unanticipated underground conditions may occur that could affect total Project cost and/or execution. These conditions and cost/execution effects are not the responsibility of the Engineer.
- S.1.2 Opinions of Cost, Financial Considerations, and Schedules. In providing opinions of cost, financial analyses, economic feasibility projections, and schedules for the Project, Engineer has no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by third parties; quality, type, management, or direction of operating personnel; and other economic and operational factors that may materially affect the ultimate Project cost or schedule. Therefore, Engineer makes no warranty that Owner's actual Project costs, financial aspects, economic feasibility, or schedules will not vary from Engineer's opinions, analyses, projections, or estimates.
- S.1.3 Record Drawings. Record drawings, if required, will be prepared, in part, on the basis of information compiled and furnished by others, and may not always represent the exact location, type of various components, or exact manner in which the Project was finally constructed. Engineer is not responsible for any errors or omissions in the information from others that is incorporated into the record drawings.
- S.2 Notwithstanding any acceptance or payments, City shall not be precluded or estopped from recovering from Consultant, or its insurer or surety, such damages as may be sustained by reason of Consultant's failure to comply with the terms of this Agreement. A waiver by City of any breach by Consultant shall not be deemed to be a waiver of any subsequent breach by Consultant.

T. Integration

This Agreement, including but not limited to Exhibits and Consultant's proposal submitted to City contains the entire and integrated agreement between the parties and supersedes all prior written or oral discussions, representations or agreements. In case of conflict among these documents the provisions of this Agreement shall control.

The CONSULTANT and the CITY hereby agree to all provisions of this AGREEMENT.

IN WITNESS WHEREOF, the parties by their signatures below enter into this Agreement this _____ day of _____, 19____

CONSULTANT:

Name of Firm

By _____
Typed or
Printed Name: _____

Title: _____

Mailing
Address: _____

Employer I.D. No. _____

CITY OF WILSONVILLE:

By _____
Michael A. Stone
City Engineer

Attest:

Vera A. Rojas, CMC/AAE
City Recorder

Mailing
Address:
30000 SW Town Center Loop East
Wilsonville, OR 97070

Approved as to form:

Michael E. Kohlhoff
City Attorney

WORK PLAN

Our task is to prepare preliminary plans, final plans, construction documents, and engineering services during construction. The work plan developed focuses on the following tasks.

CONCEPTUAL/LOCATION DESIGN

TASK 1 - PROJECT ORIENTATION, INITIATION, AND INFORMATION REVIEW

- 1.1 Meet with City staff to initiate the project and gather background information. The purpose and scope of the project will be reviewed in detail.
 - a. Introduce consultant team members and designated City personnel assigned to the project.
 - b. Review City of Wilsonville files on the project, along with policies and procedures manuals.
 - Establish right of entry procedure for entering private property to do survey work and future property owner notification.
 - c. Establish a strategy plan on how to deal with the property owners.
 - d. Review design, drafting, and mapping standards, along with technical data supplied by the City.
 - e. Discuss design constraints, problem areas, and special details.
 - f. Discuss computer systems' compatibility and develop procedures for electronic transfer of plans, details, and data.
 - g. Discuss public involvement program and establish format, content, and timing of the various elements involved in the public information process for the project.
 - h. Discuss the permits required for the project and the process and responsibilities of the City and the consultant to apply for, process, and obtain the required permits.

1.2 Obtain and catalog available documents.

- a. Property survey information, including records of survey and tax assessor maps, and legal descriptions.
- b. City, County, and State road surveys, street right-of-way maps, government corner ties, and Railroad right-of-way maps.
- c. As-constructed plans for Wilsonville Road and adjoining streets affected by the new construction.
- d. Traffic studies and other data for project signals and pavement design.
- e. Research railroad design requirements and appropriate permit needs.

1.3 Design Criteria Report

- a. Catalog the design criteria required for the project.
- b. Submit design criteria to the City for review and approval.

TASK 2 - PROJECT MANAGEMENT

2.1 Project schedule control

- a. Prepare a project design development schedule for review and approval by City staff.
- b. Submit a monthly progress report including:
 - A narrative of actions taken to complete assigned tasks.
 - Description of new impacts and circumstances affecting the project.
 - A graph that depicts the estimated progress against the budgeted cost.

2.2 City involvement and utility coordination

- a. Meet with City staff on design issues, as established on an on-going basis. One meeting every month has been assumed for budget estimating purposes.
- b. Meet with City staff for review at end of each phase of the project.
- c. Meet with affected utility companies at end of preliminary and final design.

2.3 ODOT Coordination

- a. Meet with ODOT Region One staff to determine and facilitate Wilsonville Road and I-5/ Wilsonville Road interchange requirements to meet the requirements of both ODOT and the City of Wilsonville.
- b. Meet with ODOT Headquarters staff to facilitate acceptance of the location design developed by Region One of ODOT and the City of Wilsonville.

**TASK 3 - PUBLIC INVOLVEMENT/INFORMATION
"Completed except as noted for Final Design"**

**TASK 4 - TRANSPORTATION PLAN REVIEW
"Completed"**

TASK 5 - CONCEPTUAL DESIGN/ALTERNATIVE ALIGNMENT STUDY

- a. Develop conceptual design of landscaping.
- b. Review conceptual design with City.

**TASK 6 - PHOTO SIMULATION OF THE ALTERNATIVES FOR PUBLIC INVOLVEMENT
"Completed"**

TASK 7 - Not Used

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PRELIMINARY AND FINAL DESIGN

TASK 8 - FIELD LOCATION SURVEY AND BASE MAPPING

8.1 Contact Property Owners

- a. Prior to any topographic survey work, all affected property owners will be contacted in person. If property owners cannot be contacted, a door notice will be placed at each home or business.

8.2 Preliminary utility location research.

- a. Collect information for utilities along the design corridor.
- b. Write introductory letters to utilities outlining the proposed design and construction schedule in order to coordinate relocation and upgrade design work.
- c. Request field locates of underground utilities and establish schedules and procedures for potholing.

8.3 Photographic project record.

- a. Photograph and catalog 35-mm pictures throughout the project limits.
- b. Videotape the project with an audio recording of details such as signs, striping, walls, curbs, inlets, buildings, etc.

8.4 Right-of-way location research.

- a. Review records of survey for properties affected by the project.
- b. Review survey information provided by the City of Wilsonville for control points including:
 - Public land survey corners
 - City control points and GPS points
- c. Review "as constructed" plans from previous projects which identify right-of-way for Wilsonville Road and adjacent streets.
- d. Title reports on each affected tax lot to be obtained by the City.

- e. Prepare an index of reference documents for each tax lot affected for future legal description preparation.

8.5 Field survey work.

- a. Review specific survey procedures with the City and establish procedures and methods of preparing and submitting field notes and data collector printouts in a form satisfactory to the City.
 - Traverse the entire project to provide horizontal survey control throughout the project limits.
 - Set and measure temporary bench marks at 500 foot intervals using City of Wilsonville vertical datum.
 - Calculate state plane coordinates for all traverse points.
- b. Locate monuments, right-of-way, and centerline points.
 - Research and locate property corners and monuments to establish property and right-of-way lines. Centerline and right-of-way of intersecting streets, centerline and right-of-way of the Burlington Northern Railroad, and control points in the ODOT system of control in the area of the Wilsonville interchange on I-5.
 - Field survey found control points and property corners to establish existing property line and right-of-way locations. It is assumed complete boundary survey work will be required to establish new right-of-way or right-of-way acquisitions. All properties will have a metes and bounds description.
- c. Pothole utilities.
 - Coordinate with City utilities and utility companies to pothole known underground utilities including domestic water, storm sewers, power, telephone, natural gas, and television cable. Every utility crossing will be potholed. Utilities to be potholed that are not uncovered by the utility owner will be potholed by the City with prior review and approval by the City Engineer.
 - Tie known utilities horizontally as frequently as practicable, and vertically at manholes and pothole locations.

- Plot known utilities on base maps for future design coordination and distribution to utility owners.
- d. Locate driveways and buildings.
- Locate and profile existing driveways that will be affected by the project.
 - Obtain development plans for adjacent property owners for future driveway locations and profile existing groundlines.
 - Tie affected buildings and obtain building elevations which may not be required for right-of-way but may be affected by or affect roadway construction.
- e. Locate drainage facilities.
- f. Locate topographic features in proposed right-of-way areas.
- Items included will be trees, orchard pattern, pavement edges, sidewalks, fences, signs, traffic signal poles, traffic signal junction boxes, loop detectors, buildings, railroad switch points and leads, drainage channel structures, and other existing features as required for design and right-of-way map preparation.
- g. Locate geotechnical boring sites.
- Locate all geotechnical borings.
- h. Establish the right-of-way and construction centerline.
- i. Cross-section proposed project.
- 50 foot intervals along the roadway P-line, 100 feet each side of centerline, or as appropriate.

8.6 Right-of-way acquisition map preparation.

- a. Resolve property lines and existing right-of-way.
- b. Prepare base maps at a scale of 1" = 50' for the properties to be acquired for right-of-way.

- Prepare plans indicating the existing property line and topographic information which impacts the new right-of-way.
- Indicate survey monumentation found and appropriate ownership and tax lot number. Indicate number of square feet taken and remaining in each parcel.
- Identify existing easement lines.

8.7 Base map preparation.

- a. Input survey information into computer system for base mapping purposes.
- b. Prepare base maps and P-line profile.
 - Prepare base maps at 1" = 20' scale to be used for design purposes. Maps shall be a composite of the following items.
 - Existing roadway, pavement, and sidewalk locations.
 - Drainage features, structures, and facilities.
 - Existing buildings, driveways, fences, and other topographic features.
 - Existing utilities and railroad.
 - Property lines and right-of-ways.
 - Elevations taken at all topographic feature points.

8.8 Prepare right-of-way acquisition documents and provide to City. Assume for budget purposes to be 12 properties. The information provided will include:

- a. Property descriptions for right-of-way takes.
- b. Right-of-way acquisition plans.
- c. Permanent slope, drainage, and utility easement descriptions.
- d. Construction easement descriptions.

- 8.9 After right-of-way acquisition lines have been determined and approved by the City, a survey lath will be set on the proposed right-of-way, easement, and slope line for reference and to show the owner the impacts to the project.

TASK 9 - GEOTECHNICAL FIELD WORK AND REPORT

9.1 Orientation

a. **Planning and Coordination**

Review the standard construction specifications for the City of Wilsonville. Review details of recently constructed local road. Discuss alignment options for the widened roadway.

b. **Walk the existing road alignment**

Determine which properties will need right-of-entry for the field work. Examine utility locations and determine potential difficulties in traffic routing. Plan the location of the test pits to reflect the existing utilities and traffic routing. Determine the number, type, size, and depth of the test pits.

c. **Plan traffic control for the field work.**

Determine the lanes that need traffic control during the investigation.

9.2 Coordinating Field Work and Sampling

a. **Retain a contractor that can saw cut the asphalt pavement and dig the test pits. Roadway surface to be repaired to match existing.**

b. **Record existing pavement thickness and subgrade profiles and take soil samples.**

9.3 Laboratory Testing

a. **Classification and water content test of the subgrade soils.**

b. **Determine compaction characteristics of the subgrade soils.**

c. **Determine CBR and resilient modules values for the subgrade soils.**

9.4 Data Reduction and Analysis

- a. Analyze laboratory test data.
- b. Develop parameters for pavement analysis.

9.5 Summary Geotechnical Report

The report will describe the work performed, soil, and subgrade conditions. Laboratory test results will be summarized. The report will include recommendations for design parameters for the pavement analysis and site preparation and construction procedures.

9.6 Engineering (Pavement) Analysis

- a. Evaluate traffic parameters

Review break down of traffic data based on the types of vehicles. Review traffic growth factors for each vehicle type.
- b. Establish design variables

Choose appropriate reliability, deviation, initial and terminal serviceability index, design life, load transfer coefficients, layer coefficients, and flexural strength. Determine soil and material properties.
- c. Analyze pavement sections using AASHTO 86 method.

Determine optional Portland Cement pavement sections.
- d. Choose an appropriate pavement section for the roadway.

Recommend design sections for the roadway.

TASK 10 - PRELIMINARY ENGINEERING DESIGN AND PLAN PREPARATION

10.1 Establish horizontal alignment and roadway geometry.

- a. Review traffic requirements for roadway geometry, such as storage lengths and tapers.
- b. Assess impact of alignment to existing structures, utilities, and private accesses.

- c. **Revise alignment and geometry as required to address detailed design considerations.**
- 10.2 Perform preliminary roadway drainage design.**
- a. **Perform drainage calculations based upon City of Wilsonville design criteria for storm return period, freeboard, underground piping systems, culverts, etc.**
- 10.3 Establish road profile.**
- a. **Establish profile considering survey and geotechnical information.**
 - b. **Assess impact of profile to adjacent properties, existing structures, utilities, and drainage courses.**
- 10.4 Develop preliminary traffic signal design in accordance with City of Wilsonville standards.**
- a. **Preliminary traffic signal design will be based upon the City direction for signal phasing and operation.**
 - b. **Signal installation will consist of fully actuated traffic signal controllers, mast arm signal head mountings, vehicle detector loops, opticons, pedestrian actuated signals, and signal system interconnect conduit, wiring, and components. Each signal control cabinet will have automatic traffic counter provisions.**
- 10.5 Prepare preliminary roadway and bicycle lighting plans. Preliminary street lighting design will be based on the American National Standard Practice for ROADWAY LIGHTING, sponsored and published by the illuminating engineering Society of North America and ODOT Standard Specifications for street lighting design.**
- 10.6 Prepare preliminary signing and striping plans and traffic control plans for the roadway and intersection improvements.**
- a. **Plans will conform to current City and ODOT standards and FHWA Manual on Uniform Traffic Control Devices.**
- 10.7 Prepare preliminary landscape and irrigation plans showing typical layout.**

10.8 Prepare base (roll maps) plans on vellum paper using computer aided design and drafting (CADD) system. Base plans will be prepared in accordance with City plan format and drafting standards and will reflect the following preliminary design elements.

- a. Typical sections.
- b. Roadway plans and profiles at a scale of 1" = 20' with storm drainage facilities, including culverts and outfalls.
- c. Proposed right-of-way limits.
- d. Existing driveways, structures, and utilities affected by the project.

10.9 Calculate preliminary earthwork quantities.

10.10 Not Used

10.11 Not Used

10.12 Submit preliminary plans for review to City of Wilsonville.

- a. Prepare and submit to the City a narrative report that summarizes the design criteria and findings, including recommended alignment, pavement design, right-of-way requirements, drainage, structures, and a cost estimate.
- b. Meet with City to discuss preliminary plans. Note revisions for incorporation in final design.

10.13 Prepare permits/licenses and easement applications for City submittal.

- a. Easements
- b. P.U.C. permit

10.14 Public Involvement/Community Meeting

It will be important to maintain the credibility and communication established during the concept/alignment study as the team moves from preliminary design to final design.

The team will assist the City at one City Council meeting at the end of preliminary design to ensure the community is informed of developments and refinements of final design.

10.15 Not Used
10.16 Not Used
10.17 Not Used

TASK 11 - FINAL DESIGN PLAN PREPARATION

- 11.1 Complete horizontal alignment plans with notes and calculations to establish project "L" line in accordance with approved preliminary design.
- 11.2 Develop final project profile in accordance with City design standards.
 - a. Consider existing driveway connection and drainage requirements.
 - b. Calculate control grades for detailed intersection design.
- 11.3 Prepare final plans for roadway and storm drainage facilities.
- 11.4 Prepare final design plans for traffic signals and intersection improvements.
- 11.5 Prepare final design plans for illumination of roadway and bicycle lanes.
- 11.6 Prepare final design plans for signing and striping.
- 11.7 Prepare final staging plans for traffic control and phasing.
 - a. Maintain two lane traffic flow at all times.
 - b. Develop schematic staging plans which clearly delineate the areas of operation and order of work.
- 11.8 Prepare final Landscape and irrigation plans, complete with plant list, sizes, and spacing requirements.
- 11.9 Not Used

11.10 Submit final design plans for review to City and utility companies. Plans will consist of the following drawings.

- Title sheet.
 - Typical sections.
 - Summary sheet.
 - Pipe data sheets.
 - Traffic signals and intersection plans.
 - Construction staging and traffic control plans.
 - Signing and striping plans.
 - Construction details.
 - Roadway plans.
- a. Meet with the City to discuss design plans. Note revisions and incorporate in final construction drawings.
- b. Prepare utility conflict reports. Contact affected utility companies to specify facility relocation.

TASK 12 - CONSTRUCTION SPECIFICATIONS AND COST ESTIMATION PREPARATION

12.1 Prepare specifications and the bid package for the project.

- a. Prepare special provisions to the current City of Wilsonville Standard Construction Specifications to reflect variations from these standards.
- b. Prepare bid item list. Complete material quantity take offs on all unit price bid items to be contained in the bid proposal.
- Calculate earthwork volumes utilizing our computer system.
 - Plot cross section information.
 - Submit cross sections and earthwork volume information to City for review and inclusion in the bid proposal.
- c. Obtain from City the bidding information, including bond requirements, etc.
- d. Submit standard specification and special provisions document to City for review.

12.2 Prepare construction cost estimates.

- a. Prepare an engineer's estimate of the construction cost for the total project.
- b. All estimates will be prepared to reflect the construction staging implications.
- c. Submit for review and approval by the City of Wilsonville.

SERVICES DURING CONSTRUCTION

TASK 13 - CONSTRUCTION SERVICES

13.1 Attend the pre-bid conference.

- a. Present the general description of the project and major considerations including the project schedule.
- b. Respond to bidder questions about the plans and specifications and prepare addenda as required.

13.2 Respond to bidder questions.

- a. Questions from contractors after the pre-bid conference will be answered by written response to all contractors. Responses will be processed through the City.
- b. Prepare addenda as required to clarify the intent and/or requirements of the contract documents.

13.3 Review bids and recommend award.

- a. Prepare a spreadsheet to verify all bids.

13.4 Site visits and design questions.

- a. Visit project site (for budget purposes estimated four hours on-site per week for project duration) when requested by the City during construction to determine if design is being adhered to by contractor(s) or to answer questions.
- b. Provide requested interpretation of plans and specification to the City to ensure successful completion of the project.

13.5 Change Orders and Shop Drawings.

- a. Provide consultation to City, as required, on project construction change orders. Change Orders will be prepared by the consultant and processed by the City.
- b. Coordinate and review Shop Drawings submittal for conformance to plans and specifications. Maintain log showing status of Shop Drawings.

13.6 Survey.

- a. Place centerline monumentation at beginning and end of project and at all P.C.'s and P.T.'s after construction is complete. File a survey showing all set monuments.
- b. Construction Staking

The original staking will be done by Engineer (necessary for the measurement of earthwork and pay quantities). All vertical and horizontal control points and their references will be staked by the Engineer. The initial establishment of the construction centerline, drainage staking, and initial slope staking will be done by the Engineer. The measurement and calculations for all pay quantities, the staking of all design changes, and all finish grades will be furnished by the Engineer. Any subsequent staking or the replacement of destroyed stakes is to be paid for by the contractor.

13.7 As Constructed Plans.

- a. Develop "As Constructed" plans and submit to City at completion of project.

13.8 Not Used.

TASK 14 - Expenses

Travel Time: Time spent in local travel will be invoiced in accordance with the preceding schedule. No more than eight (8) travel hours in a day will be invoiced for out of area travel.

Direct Cost: Direct costs associated with the services provided such as: shipping charges, printing/reproduction, special fees, insurance, licenses, non-inventories equipment and supplies, public travel fare, equipment rental, subcontractors, meals, lodging, communications, outside computer time, expendable materials, etc. will be invoiced at cost plus ten (10) percent.

Mileage: Mileage of Company and/or employee owned vehicles will be invoiced at \$0.35 per mile.

EXHIBIT 'B'

CITY RESPONSIBILITIES

- A. Provide as-constructed plans, maps and copies of pertinent file data for existing public utilities within the proposed alignment area.
- B. Pothole utilities, as need, prior to site survey.
- C. Review and make comments on proposed plans, submittals, specifications or any other materials as required for the work outlined under Exhibit 'A' outlined herein in a timely manner.
- D. Provide construction inspection and project management services of the improvements outlined under Exhibit 'A' outlined herein.

EXHIBIT 'C'

HOURLY RATE AND FEE SCHEDULE

The following hourly rate schedule will apply to professional services provided in connection with the City of Wilsonville Road Re-Construction - Boones Ferry Road Intersection west to just west of the Burlington Northern Railroad Tracks Project. This rate schedule shall apply through June 30, 1995.

<u>POSITION TITLE</u>	<u>HOURLY RATE</u>
Project Manager / Professional Engineer III	\$80.00
Professional Engineer II	\$70.00
Project Designer II	\$55.00
Project Technician III	\$50.00
Project Technician I	\$40.00
Chief Surveyor	\$60.00
Two-Person Survey Crew	\$85.00
Three-Person Survey Crew	\$115.00
AutoCAD	\$45.00
Clerical / Administration	\$35.00