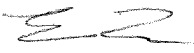


MEMORANDUM

CITY/BOROUGH OF JUNEAU
155 South Seward Street, Juneau, Alaska 99801

DATE: January 18, 2012

TO: Planning Commission

FROM: Eric Feldt, Planner II, CFM 
Community Development Department

FILE NO.: CSP2011-0009

PROPOSAL: A City consistency review for the reconstruction of Main Street from Second Street to Fifth Street in downtown Juneau.

GENERAL INFORMATION

Applicant: City and Borough of Juneau (CBJ)

Property Owner: City and Borough of Juneau

Property Address: Main Street from Second to Fifth Street

Legal Description: N/A

Project Length: .12 Mile

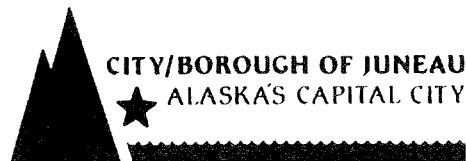
Zoning: Mixed Use

Utilities: Public Water & Sewer

Access: Main Street

Existing Land Use: City Right-of-way

Surrounding Land Use: North - MU; Single- and Multi-family Dwellings
South - MU; Merchant's Wharf Mall (Restaurant, Office, Retail)
East - MU; Miscellaneous Retail and Offices
West - MU; Downtown Transit Center & Public Offices



ATTACHMENTS

Attachment A	Vicinity Map
Attachment B	Project Narrative
Attachment C	Proposed Alternative 1 Design
Attachment D	Proposed Alternative 2 Design

BACKGROUND

Most streets within downtown Juneau were built around the turn of the 20th century and were not designed around the automobile with wide travel lanes, generous on-street parking, or wide turning radiuses. Main Street, however, is one of the few streets that was designed primarily for the automobile and has proven unsatisfactory for pedestrian safety and connectivity.

Main Street is located immediately east of Telephone Hill and runs from Egan Drive near the Merchants Wharf Mall to Seventh Street in the Chicken Ridge neighborhood. See Attachment A. This street acts as a gateway to the State Capitol building and other state offices. Additionally, Main Street forms a border of the downtown commercial core. Where Fourth Street intersects Main Street, Calhoun Street begins on the opposite side and provides a main connection to the Casey Shattuck residential neighborhood. These streets are labeled on the vicinity map.



Figure 1: Picture of Main Street. The Downtown Transportation Center (DTC) is on the left with a tall glass façade, and the State Capitol building is in the far background. Picture taken by staff on 12-13-11

The commercial downtown core is defined by Main Street to the west, Fourth Street to the north, and North Franklin Street to the east. Main Street receives heavy vehicular and pedestrian traffic for many reasons: connects to several employment centers, provides a connection to Calhoun Street leading to the Flats, provides access to the DTC, and connects to several other downtown streets. Traffic volume decreases after Fifth Street as Main Street becomes a narrow residential street.



Figure 2: Main Street with islands for pedestrian crossing at the Front Street intersection. The State Capitol building is shown in the upper right corner. Main Street narrows as it goes up hill into a residential neighborhood. Picture taken by staff on 12-13-11.

ANALYSIS

The CBJ Engineering Department plans to reconstruct Main Street from Second Street to Fifth Street next year. This project is listed as a Capital Improvement Project (CIP) in FY 2010-2015. See below.

CIP FY 2010 – 2015 Main Street Improvements: 2nd Street to 7th Street

The project involves replacement of old utilities to reduce operational maintenance costs; separation of storm and sanitary sewer flows in accordance with EPA Clean Water Regulations; replacement of deteriorating road base, asphalt pavement, curb & gutter, and sidewalks, and to improve street lighting. The separation of storm water from the sanitary sewer system reduces the volume of sewer treated at the JDTP, reduces the risk of combined sewer overflow (CSO) events during heavy rain storms, and increases the available capacity

of the treatment plant to accommodate future customer growth. The project area extends along Main Street from 2nd Street to 7th Street. This work would be in coordination with the Main Street improvements associated with the new Downtown Transportation Center [DTC] development as funded in FY2009.

The DTC has been in operation for over a year, and the Main Street improvements have been completed in sections from Egan Drive to Second Street and from Fifth Street to Seventh Street (Memorandums CSP2009-0009 & CSP2010-00007).

According to the Land Use Code (see paragraph below), all Capital Improvement Projects shall be reviewed by the Planning Commission, who shall then provide a recommendation to the Assembly.

CBJ § 49.10.170 (c) City and borough land acquisitions, disposals and projects. The commission shall review and make recommendations to the assembly on land acquisitions and disposals as prescribed by Title 53 or capital improvement project by any City and Borough agency. The report and recommendation of the commission shall be based upon the provisions of this title, the comprehensive plan, and the capital improvements program. (emphasis added)

Existing Conditions

Figures 1 – 4 of this memorandum show recent pictures of Main Street. There are sidewalks on both sides of the street (at varying widths) with curb and gutters. Travel lanes are wide from Second to Fourth Street at approximately 16-feet; up hill of Fourth Street they narrower lane. Many on-street parking spaces exist throughout the project area. Designated pedestrian crossings with striping exist at intersections. Street lights are located at intersections and mid-block sections. Canopies intermittently cover sidewalks where buildings are close to the street.

Traffic

As stated earlier, Main Street is a very busy street for both cars and pedestrians, especially during the tourist season. Since the street is one long hill, cars tend to exceed the speed limit driving downhill toward Egan Drive. With wide travel lanes, drivers may feel comfortable driving too fast. The wide travel lanes also accommodate very large vehicles such as tourist buses, oil trucks, and Capital Transit buses. The high traffic speeds creates a risky pedestrian environment and may deter pedestrians from using Main Street. Narrowing the travel lanes will help calm traffic speeds and create a more inviting pedestrian environment.

Retaining the on-street parking spaces, which are frequently used, would be another traffic calming element. These parked cars provide a separation between pedestrians on the sidewalks from moving vehicles. Retaining spaces in the downtown area has been recognized by the city assembly as being critical for local businesses.

Few of the intersections along Main Street contain curb extensions, and with the existing wide travel lanes crossing distances for pedestrians are long. With fast moving vehicles, pedestrians may feel less inclined to cross the street near their destination. This causes pedestrians to cross mid-block where crossings are not established or cross further down/up the block. Shortening crossing distances at intersections and slowing traffic would increase pedestrian movement and safety.

Proposal

There are two proposed designs for this project: Alternative 1 (Attachment C) and Alternative 2 design (Attachment D). Both drawings show 12-foot wide travel lanes; approximately 10-foot wide sidewalks; different pedestrian crossing striping (different than existing); new curb extensions; and retention of on-street parking. Proposed and existing street curbs are indicated on both plans. The Engineering Department is thinking of extending the existing canopy (west side of street) from the JD Phone Co. building up hill to Calhoun Avenue. This would be a self-supported canopy structure where buildings are not near the street, similar to what exists at the Bishop Michael Kenny Memorial Peace Park (Corner of Third Street & Seward Street). Extending the canopy is currently being discussed with property owners and the Engineering Dept. Drawings have not been created at the time of this memorandum.

The two proposed designs differ in that Alternative 1 consists of a new “pork chop” island¹ at the Fourth Street intersection and retention of more on-street parking. Wider sidewalks are shown in the Alternative 2 design where on-street parking spaces were removed. No on-street parking would be lost with the Alternative 1 design; several spaces would be removed in Alternative 2.

A pork chop island was considered at the intersection of Fourth Street as a way to: reduce the long crossing distance for pedestrians, slow traffic speeds, and provide a resting spot for pedestrians. Additionally, this is a physical indicator of a pedestrian crossing area. This new island may increase snow plowing challenges with new curbs in the street. The CBJ Public Works Department did not object to this new feature. Overall, this pork chop island will increase safety of pedestrians at the intersection. The CBJ will need permission from the State of Alaska to slightly expand the right-of-way (ROW) into state property by the intersection to construct the pork chop island. If the state does not agree to this improvement it will not be part of the design. The applicant believes that the state does not have strong feelings against this idea.

¹ Pork Chop Islands: These are small islands that separate the right turn lane from the through traffic lane, provide a refuge for pedestrians and shorten the crossing distance for pedestrians. Definition provided on Page 11 of 2009 Juneau Non-Motorized Transportation Plan (NMTP).



Figure 3: Picture of a curb-extension at Second Street with on-street parking spaces. Future curb-extensions will look similar to the one in the picture. Photograph taken by staff on 12-13-11.

There are many benefits to on-street parking spaces: traffic calming element, providing short term parking, separating pedestrians on sidewalks from moving vehicles, and if curb extensions exist to define the parking spaces, pedestrian crossings could be shortened. Figure 3 shows existing on-street parking with a curb-extension. The existing on-street spaces are frequently used and would continue to provide those pedestrian benefits if preserved.

The Alternative 2 plan offers many benefits over existing conditions, but fewer than the Alternative 1 proposal. Removing many on-street parking spaces would provide additional room to create sidewalks over 10 feet wide. However, with fewer on-street parking spaces drivers may continue to drive fast. Further, removing the on-street parking spaces will increase the demand for other on-street spaces and drivers will spend more time looking for available spaces. Snow plowing would likely be easier without the pork chop island and on-street parking spaces. Overall, the Alternative 2 design is less efficient at increasing pedestrian safety.



Figure 4: The photograph above shows Fourth Street on the right (State Capitol building) and Calhoun Street on the left (City Museum) intersecting Main Street. This intersection is very busy with automobiles and pedestrians. Main Street narrows as it continues up hill as it enters a residential neighborhood. Picture taken by staff on 12-13-11.

CONFORMITY WITH ADOPTED PLANS

This project was reviewed for conformity with the following plans: 2010 Downtown Juneau Parking Management Plan, 2009 Non-Motorized Transportation Plan, 2008 Comprehensive Plan, and the 2001 Area-Wide Transportation Plan.

2010 Downtown Juneau Parking Management Plan

This plan addresses the issues of managing and supplying parking in the core downtown area. One of the goals stated in this plan is to ensure on-street parking spaces are available near all destinations at all times of the day for those who need short-term parking. The on-street parking spaces shown in the Alternative 1 proposal will provide this need. With fewer on-street parking spaces shown in the Alternative 2 proposal, the plan's goal of creating available on-street parking spaces would not be met. Therefore, Alternative 1 is consistent with the 2010 Downtown Juneau Parking Management Plan.

2009 Non-Motorized Transportation Plan (NMTP)

This plan promotes active transportation by guiding development of infrastructure that accommodates everyone in a safe and convenient form. The following goals of the NMTP relate to the project:

- Use new approaches to street design that focus on working together early in project design to plan and build transportation projects that address the needs of all users: pedestrians, cyclists, public transit riders and motorists.

- Encourage an increase in bicycling, walking and other active forms of transportation by providing safe, efficient and easy-to-use facilities that connect activity centers.

The NMTP indicates there were 10 accidents involving pedestrian/ bicyclists and vehicles along Main Street between 1999 and 2008. Ways to increase user safety should start with slowing vehicles and making safer places for pedestrians. Both street layout designs incorporate wider sidewalks (as compared to existing) providing more safe areas for pedestrians; narrower travel lanes and on-street parking to slow traffic; shorter crossing distances to lessen pedestrian crossing time (especially in Alternative 1); and use of better pedestrian crossing striping to alert drivers, and keep pedestrian in marked crossing areas.

Even though the NMTP does not recommend specific improvements to Main Street, it does recommend many methods to slow vehicle speeds and increase pedestrian/ bicyclist safety. These methods include:

- Narrow travel lanes: 11-10 feet wide for traffic calming and reduce crossing distances
- Retain curb parking for traffic calming and create a buffer between moving vehicles and pedestrians
- Tighten curb radii, raise medians, and extend curbs for reducing crossing distances and traffic calming
- Widen sidewalks to 8 to 10 feet on both sides of street for better pedestrian accommodation
 - Separate sidewalk from street with a 4-6 feet wide vegetative buffer where high traffic volume exists to increase pedestrian safety
- Include pavement marking sharrow for bicyclists where bike lanes cannot be accommodated to alert drivers and bicyclists of each others presence and to share the road
- Add “pork chop” islands to shorten crossing distances at intersections
- Add street lights for increased pedestrian & bicyclist’s visibility.

The elements recommended above that are not being proposed at this time are 10-11 feet wide travel lanes, sharrow pavement markings for bicyclists, and vegetative buffers separating sidewalks. As stated earlier, Main Street is used frequently by very large tourist buses and City transit buses that need additional lane width. Creating 12-foot wide travel lanes was proposed as being adequate for the users of the road. Main Street is not identified as a bicycle route in the Non-Motorized Transportation Plan, and therefore, is not an element of high priority. With the steep slope of Main Street many bicyclists may choose to ride other downtown streets. Alternative 1 will provide approximately 10-foot wide sidewalks and many on-street parking spaces to accommodate pedestrians and offer a safety buffer from moving vehicles.

Staff finds the elements of Alternative 1 most consistent with the intent of the 2009 Non-Motorized Transportation Plan.

2008 Comprehensive Plan

Improvements specific to Main Street are not listed in the 2008 Comprehensive Plan. This street is

indicated as being one of the boundary streets of the central business district in the plan. Many vehicles and pedestrians use this street to enter the core downtown area, as well as to reach the State Capitol building and other state offices.

The following Implementing Action in Comprehensive Plan applies to the project:

- 5.3.IA3 Facilitate the pedestrian usage of Downtown with physical improvements, Land Use Code amendments, or other programs or initiatives which could include:
- A. Encourage development that improves year-round safe, convenient and dry pedestrian facilities;
 - B. Extend the waterfront seawalk;
 - C. Repair and widen sidewalks and provide a network of canopies throughout the Downtown;
 - D. Separate pedestrian ways from vehicular traffic, where practical; (emphasis added)
 - E. Encourage development of dry, secure bicycle storage throughout the Downtown; and
 - F. Consider revising the parking requirements in the CBJ Land Use Code to eliminate or drastically reduce the parking requirement for Single-Room-Occupancy (SRO), efficiency, and other dwelling types.

- 5.4.IA4 Establish a covered walkway network throughout the Downtown.

The plan lists several borough-wide problems with the local transportation system. The following is germane to the downtown area:

- *Incomplete and dangerous pedestrian and bicycle circulation systems, including inadequate sidewalk space in Downtown Juneau during the summer visitor season;*

The following policies apply to the project:

POLICY 8.1 IT IS THE POLICY OF THE CBJ TO PROMOTE A BALANCED, WELL INTEGRATED LOCAL MULTI-MODAL SURFACE TRANSPORTATION SYSTEM THAT PROVIDES SAFE, CONVENIENT AND ENERGY-EFFICIENT ACCESS AND TRANSPORT FOR PEOPLE AND COMMODITIES.

POLICY 8.2 IT IS THE POLICY OF THE CBJ TO PROMOTE AND FACILITATE TRANSPORTATION ALTERNATIVES TO PRIVATE VEHICLES AS A MEANS OF REDUCING TRAFFIC CONGESTION, AIR POLLUTION AND THE

CONSUMPTION OF FOSSIL FUELS, AND TO PROVIDE SAFE AND HEALTHY MEANS OF TRANSPORTATION TO ALL PEOPLE.

12.1.SOP2 UTILIZE THE SIX-YEAR CAPITAL IMPROVEMENT PROGRAM (CIP) THAT INCLUDES A LIST OF PROJECTS TO BE FUNDED DURING THE COMING FISCAL YEAR AS WELL AS THOSE RECOMMENDED FOR CONSIDERATION DURING THE SUBSEQUENT FIVE YEARS. ANNUALLY REVIEW ALL PREVIOUSLY UNFUNDED PROJECTS AND NEW PROJECTS FOR RELEVANCE AND CONSISTENCY WITH THIS PLAN AND EXTEND THE CIP AN ADDITIONAL YEAR.

The project aims to increase pedestrian safety, accommodation, and connectivity in the downtown area. This will encourage greater pedestrian usage in the region and reduce vehicular dependency. Though both proposed street designs will increase pedestrian safety, Alternative 1 offers greater safety amenities, and therefore, is more consistent with the policies and implementing actions of the 2008 Comprehensive Plan.

2001 Area-Wide Transportation Plan

This plan defines the transportation framework through 2021 (10 years) by recommending solutions for transportation problems with emphasizes in safety, improvements to existing facilities, development of new facilities, improved connections between modes of transportation and cost effective solution concepts with limited environmental impacts. The following goals of the plan are germane to the project:

- **Public safety is of paramount concern.**
Measures that enhance safety for users of the transportation system will be carefully reviewed, evaluated, selected, and recommended.
- **Bicycles provide a low-cost alternative to automobiles**
Surface transportation needs to be improved so that it works as well for bicyclists as it does for other vehicle operators.
- **Travel by foot needs to be safe and convenient.**
The addition of pedestrian facilities at many locations is needed to provide for all travelers, including children, the elderly and the disabled.

The Area Wide Transportation Plan does not specifically list problems or concerns with Main Street. However, the plan does recommend as an area-wide improvement during the reconstruction of pedestrian facilities that pedestrian and bicycle needs in all commercial and residential subdivisions be evaluated.

The proposal will increase pedestrian safety and user comfort while maintaining vehicular circulation. Bicycle paths or lanes along Main Street are not indicated in this plan. Reducing the lane width to 12-feet to accommodate large vehicles will leave inadequate room for bicycle lanes. In conclusion, Alternative 1 provides additional pedestrian safety elements and vehicular amenities more than the alternative design. As such Alternative 1 is most consistent with the 2001 Area-Wide Transportation Plan.

PUBLIC COMMENT

No public comments were received as of the date of this memorandum.

HABITAT

There are no sensitive habitats in the project scope that are listed in the Land Use Code.

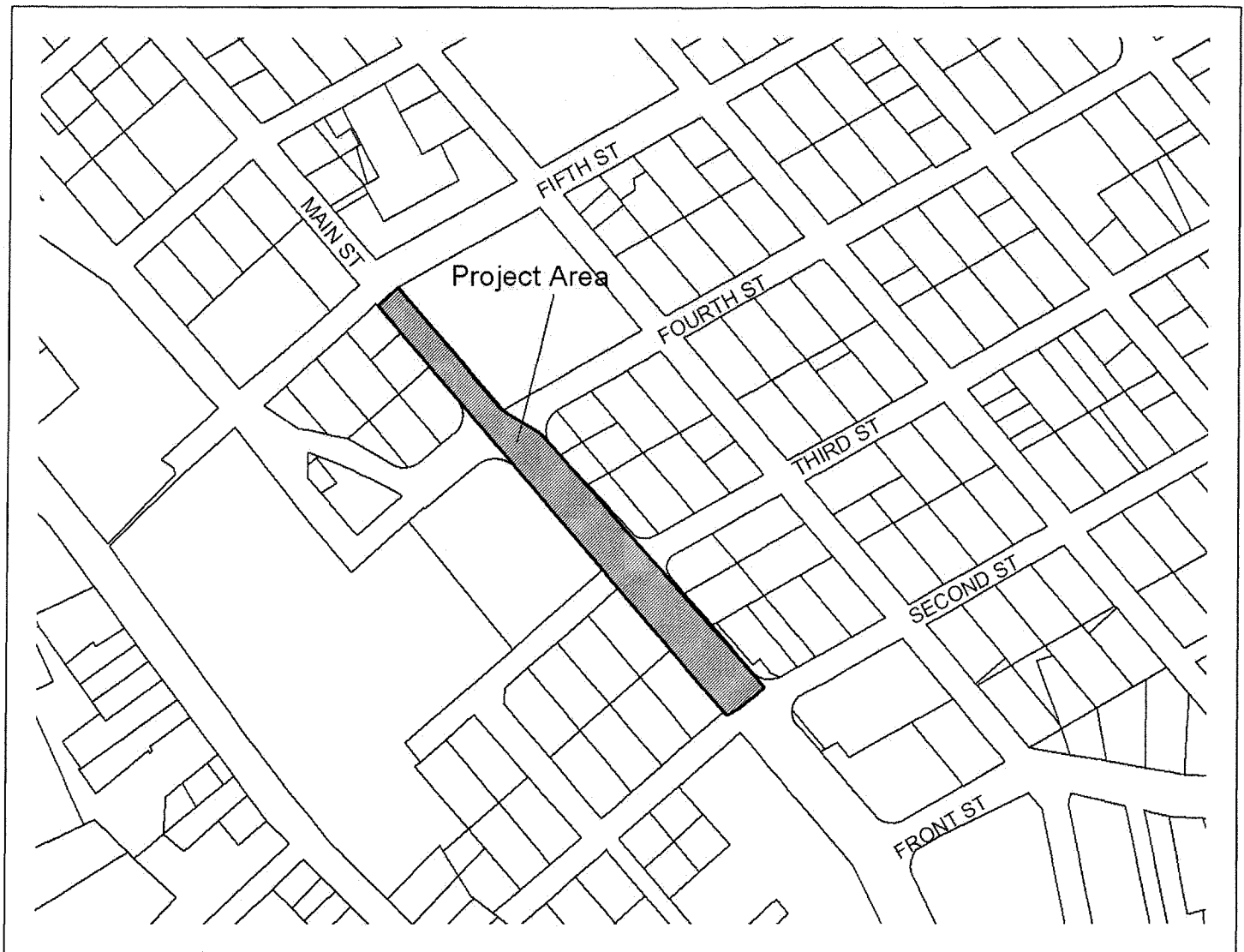
FINDINGS

As stated earlier, both proposals will increase pedestrian safety. Alternative 1 would retain many on-street parking spaces (no loss in parking) and provide a new pedestrian crossing island at the intersection of Fourth Street/ Calhoun Avenue. Alternative 2 removes many on-street parking spaces in favor of wider sidewalks. Overall, the Alternative 1 proposal provides more pedestrian safety elements and is more consistent with adopted plans.

RECOMMENDATION

It is recommended the Planning Commission adopt the Director's analysis and findings and recommend approval of the Alternative 1 proposal street design for Main Street between Second and Fifth Street to the Assembly.

NOTICE OF PUBLIC HEARING



PROPOSAL: A City Consistency Review for reconstruction of Main Street, from 2nd Street to 5th Street.

FILE NO.:	CSP20110009	APPLICANT:	Skye Stekoll CBJ Engineering
TO:	All Adjacent Property Owners	PROPERTY OWNERS:	City & Borough of Juneau
HEARING DATE:	January 24, 2012	PROPERTY ADDRESS:	Main Street
HEARING TIME:	7:00 PM	SITE SIZE:	665 linear feet
PLACE:	ASSEMBLY CHAMBERS Municipal Building 155 South Seward Street Juneau, Alaska 99801	ZONE:	Mixed Use

PROPERTY OWNERS PLEASE NOTE:

You are invited to attend this Public Hearing and present oral testimony. The Planning Commission will also consider written testimony. You are encouraged to submit written material to the Community Development Department no later than 8:30 A.M. on the Wednesday preceding the Public Hearing. Materials received by this deadline are included in the information packet given to the Planning Commission a few days before the Public Hearing. Written material received after the deadline will be provided to the Planning Commission at the Public Hearing.

If you have questions, please contact Eric Feldt at 907-586-0764, or e-mail: eric_feldt@ci.juneau.ak.us

CITY/STATE PROJECT AND LAND ACTION REVIEW APPLICATION

Project Number	Project Name (15 characters)	Case Number CSP 20110009	Date Received 11/10/11
----------------	------------------------------	-----------------------------	---------------------------

TYPE OF PROJECT REVIEW:

City Project Review
 City Land Acquisition /Disposal
 State Project Review

DESCRIPTION OF PROJECT Reconstruction of Main St from 2nd - 5th St Intersections.
Goals include improving pedestrian & vehicular movement & improve overall appearance to match lower Main St.
Remove & replace all underground utilities & eliminate the old util/walk sections along the W side of
Main St (sidewalk). Canopies are being considered along the W side of Main St.

Please attach a cover letter to fully explain the project if there is not adequate space on this form.

CURRENT USE OF LAND OR BUILDING(S): _____

PROPOSED USE OF LAND OR BUILDING(S): _____

PROJECT NUMBERS ASSOCIATED WITH PROPOSAL:

Is this project associated with any other Land Use Permits? No Yes Case No.: _____

Capital Improvement Program # (CIP) _____

Local Improvement District # (LID) _____

State Project # _____

ESTIMATED PROJECT COST: \$ 2-3 Million

For more information regarding the permitting process and the submittals required for a complete application, please see the reverse side.

If you need any assistance filling out this form, please contact the Permit Center at 586-0770.

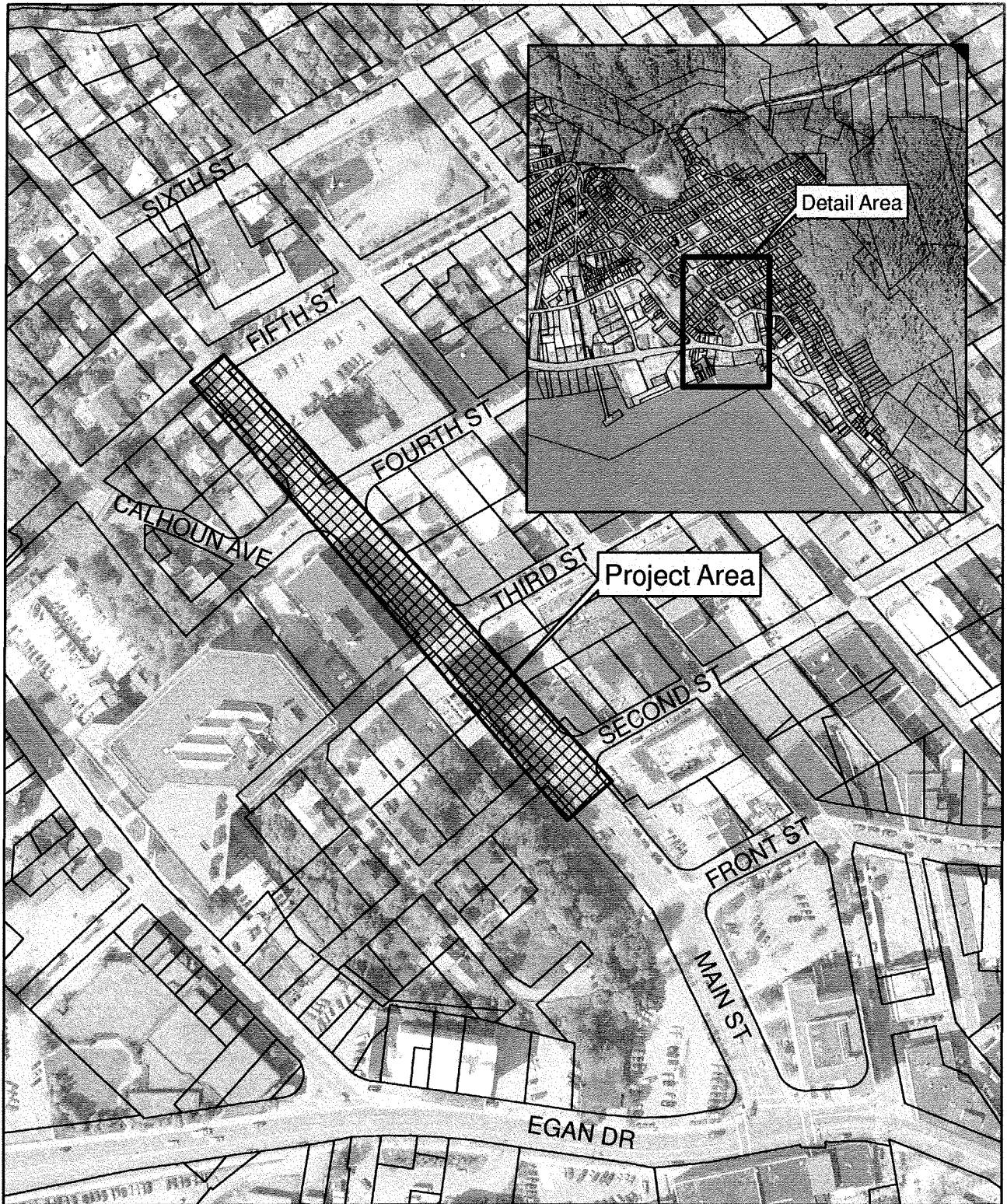
CITY/STATE PROJECT FEES

	Fees	Check No.	Receipt	Date
Application Fees	\$ 1600 ⁰⁰			
Total Fee	\$ 1600 ⁰⁰	PAC Dept Transfer		11/18/11

NOTE: MUST BE ACCOMPANIED BY DEVELOPMENT PERMIT APPLICATION FORM &

EVEN IF THE PROPOSED PROJECT IS ASSOCIATE WITH OTHER LAND USE PERMITS, THIS APPLICATION MUST BE FILLED OUT

TO BE COMPLETED BY THE APPLICANT



**MAIN ST
VICINITY**

-NOT A SURVEY-

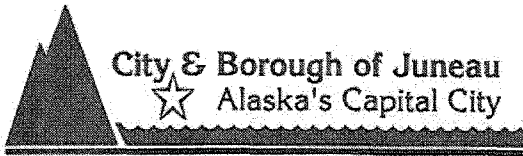
Property lines are approximate

0 125 250 Feet



Map created: 12/07/ 2011

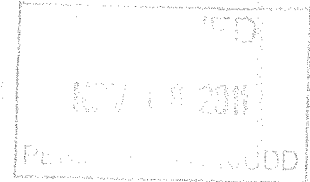
ATTACHMENT A



City & Borough of Juneau
Alaska's Capital City

City and Borough of Juneau
Engineering Department
155 South Seward Street
Juneau, Alaska 99801
Telephone: 586-0800 Facsimile: 463-2606

DATE: November 4, 2011
TO: Randy Wanamaker, Chair, Assembly Public Works & Facilities Committee
FROM: Rorie Watt, Engineering Director
Engineering Department
RE: Main Street Reconstruction – Phase III



We are working on preliminary plans for the third and final phase of Main Street, the reconstruction of the roadway from 2nd Street to 5th Street. There are a number of issues to be discussed, and decisions to be made. As for process, I would suggest an informal committee process today.

Project goals include complete reconstruction of water, sewer, storm drainage, pavements and sidewalks. The electrical utility companies (AEL&P, ACS and GCI) plan work to be in conjunction with the CBJ project; their work will eliminate the last section of old "Utiliwalk" (corridor for electrical lines). We propose to improve pedestrian routes and crossings and match the approach used on lower Main Street.

The civil works portion of the project is estimated at about \$2M. At a future meeting, I will recommend project closeouts and transfers to complete the project budget.

Parking

On street parking hampers snow plowing operations, but is usually treasured by the public. Currently, there are 15 on street spaces on Main between 2nd and 4th, they appear to get heavy usage, and are well situated for visitors to the legislature and other State facilities. In the past, we have widened some downtown sidewalks, often at the expense of on-street parking.

Canopies

In 2003, the Assembly created a "Downtown Covered Sidewalks" CIP. That project was folded into the reconstruction of Seward Street and at a cost of about \$500K, the CBJ constructed the free standing steel and glass canopy around the Court Building (Seward between 3rd & 4th and part of 4th Street opposite the Capital). The goal of the project was to provide better pedestrian connections for legislators and visitors to the state facilities. Canopies are widely appreciated, can reduce snow shoveling, and are expensive.

Pork Chop Island at Main/4th Street

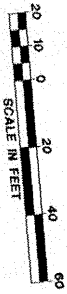
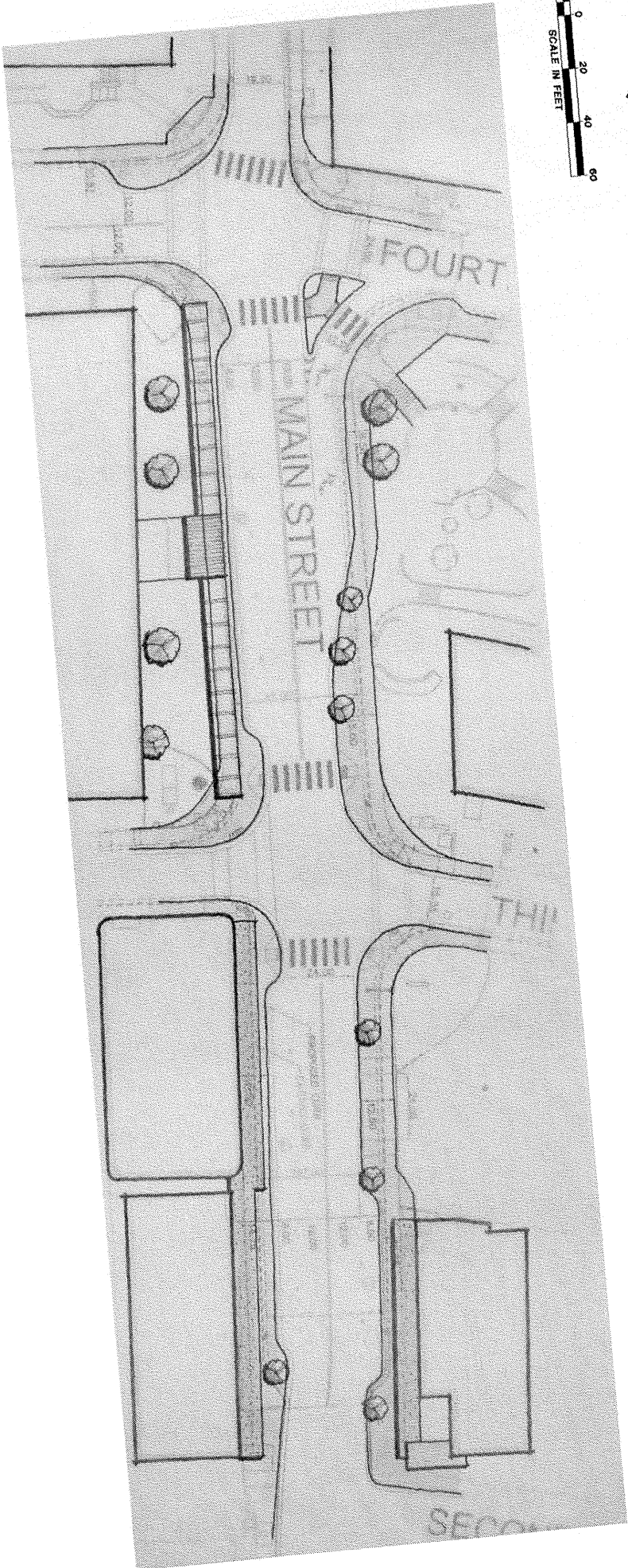
An island in this location would greatly improve pedestrian crossings to and from the AOB, SOB, Capital and Court Building. It is another obstacle for snow plow operations.

Sidewalk Width

Throughout downtown, we have widened sidewalks to make them more pedestrian friendly. During this project, we have good opportunity to improve the pedestrian connections between the Downtown Transportation Center and the State facilities.

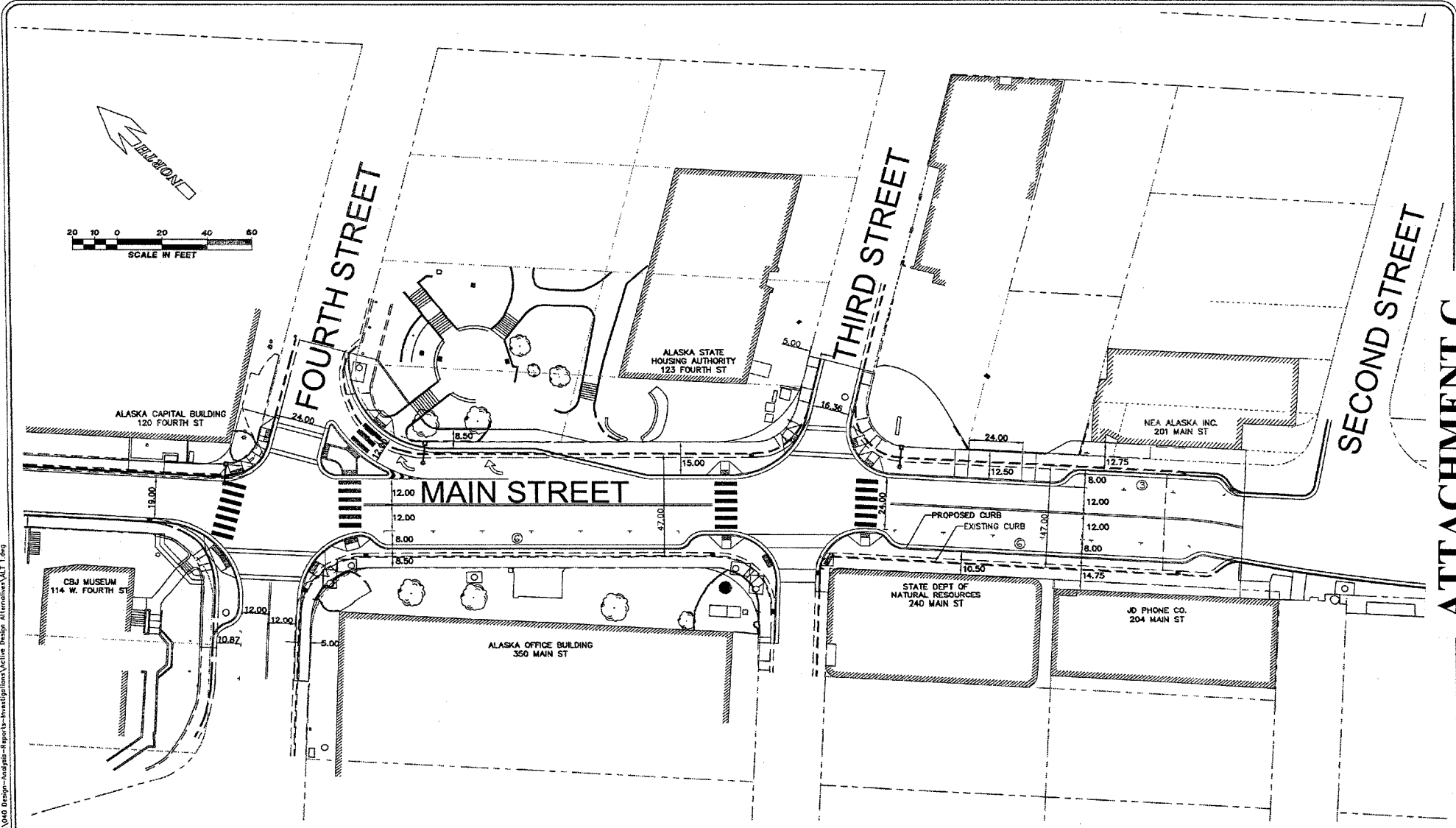
Lane Width

The existing driving lanes on upper Main Street are quite wide, almost 16' in width. That width is bad for pedestrians trying to cross the road and encourages excessive traffic speeds, but useful in the winter for Public Works when they plow snow to the center of the road. A lane width of 12' matches lower Main and is more appropriate for the upper street. A narrower lane gives Public Works less area to clear, with fewer options for snow storage. Currently pedestrians have to cross about 55-60' to get across the road. The options can reduce that to about 25'. Shorter pedestrian crossings also benefit the vehicles because they have to wait shorter amounts of time for pedestrians to cross.



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ATTACHMENT C



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DOWL HKM
 Consulting Engineers - Land Surveyors - Construction Administration

5368 Commercial Blvd.
 Juneau, Alaska 99801
 (907) 780-3533 Office
 (907) 780-3535 Fax

Peter L. Fikere
 No. CE-42025
 PROFESSIONAL ENGINEER

JOB NO. J70456 DRAWN BY: DESIGNED BY: CHECKED BY: DATE NOV. 2011

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CITY/BOROUGH OF JUNEAU
 ALASKA'S CAPITAL CITY

DEPARTMENT OF ENGINEERING

**MAIN STREET,
 SECOND TO FIFTH
 IMPROVEMENTS**

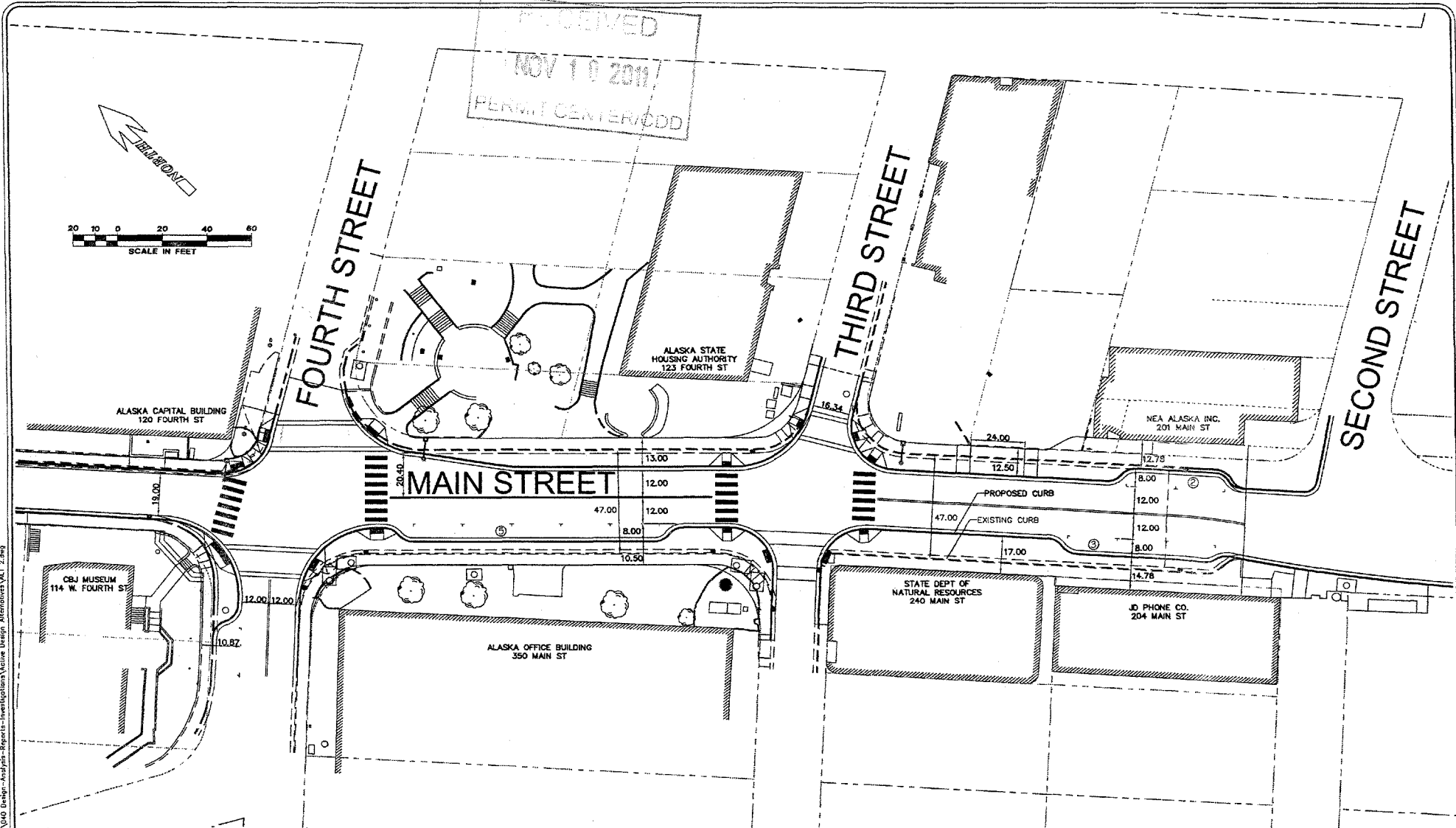
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ALTERNATIVE 01

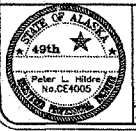
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ATTACHMENT D

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Consulting Engineers • Land Surveyors • Construction Administration

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Juneau, Alaska 99801
(907) 780-3533 Office
(907) 780-3535 Fax

JOB NO. J01456 DRAWN BY: DESIGNED BY: CHECKED BY: DATE NOV. 2011

Corvus Design
Sustainable Infrastructure • Planning • Technical Design

CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

DEPARTMENT OF ENGINEERING

**MAIN STREET,
SECOND TO FIFTH
IMPROVEMENTS**
CONTRACT NO. E12-041

ALTERNATIVE 02

**02
OF
03**