

**OPEN SPACE BOARD OF TRUSTEES**

**Wednesday, September 9, 2015**

**Council Chambers, 1777 Broadway**

**MEETING AGENDA**

*(Please note that times are approximate.)*

- 6:00 I.** Approval of Minutes
- 6:05 II.** Public Participation for Items Not Identified for Public Hearing
- 6:15 III.** Matters from Staff  
North Trail Study Area Plan Update
- 6:30 IV.** Matters from the Board
- 6:40 V.** Staff briefing regarding the Chautauqua Pedestrian Safety, Access and Lighting Improvements Project
- 7:10 VI.** Request for a recommendation to renew a ten-year lease, including an option to extend the lease term for an additional ten years, with Colorado Parks and Wildlife for 39.65 acres of open space property adjacent to Eldorado Canyon State Park for coordinated trail corridor management.\*
- 7:25 VII.** Request for a recommendation to renew a ten-year lease, including an option to extend the lease term for an additional ten years, with Colorado Parks and Wildlife for 73 acres of open space property adjacent to Eldorado Canyon State Park for coordinated climbing access corridor management.\*
- 7:40 VIII.** Review the City Manager's 2016 proposed budget for the Open Space and Mountain Parks Department and recommend approval of the Operating and Capital Improvement Program Budgets and a portion of the Lottery Fund Capital Improvement Program Budget.\*
- 8:10 IX.** Adjournment

\*Public Hearing

## OPEN SPACE BOARD OF TRUSTEES

Minutes

Meeting Date August 12, 2015

### BOARD MEMBERS PRESENT

Shelley Dunbar      Frances Hartogh      Molly Davis      Kevin Bracy Knight      Tom Isaacson

### STAFF MEMBERS PRESENT

Tracy Winfree      Jim Reeder      Steve Armstead      Mark Gershman      Kelly Wasserbach  
Alyssa Frideres      Phil Yates      Brian Anacker      Deryn Wagner      Juliet Bonnell  
Lynne Sullivan      Lisa Dierauf      Juanita Echeverri      Jayne Basford      Dave Sutherland  
Joe Reale      Leah Case      Cecil Fenio

### GUESTS

Brian Wilkerson, Revolution Advisors  
Heather Bergman, Peak Facilitation

### CALL TO ORDER

The meeting was called to order at 6:02 p.m.

### AGENDA ITEM 1 – Approval of the Minutes

Shelley Dunbar said on page two in the fourth paragraph under North TSA and Youth Engagement Update, the word “public” should be added before “involvement.”

Frances Hartogh moved the Open Space Board of Trustees to approve the minutes from July 8, 2015 as amended. Tom Isaacson seconded. This motion passed four to zero; Kevin Bracy Knight abstained as he was absent at the last meeting.

### AGENDA ITEM 2 – Public Participation for Items not on the Agenda

Alan Delamere, Boulder, expressed his concern that the development at Mapleton Hospital will negatively impact the parking near Sanitas. He requested that the Board weigh in on this development. He also suggested designating some of the flood sites in the Sanitas Valley area as historic.

Suzanne Webel, Boulder County, said the data used for the visitation study in the North Trail Study Area (TSA) report is skewed; sites that were used for this study do not have equestrian access or parking. She said the equestrian community is much higher than one percent. She added that all of the social trails at Joder Ranch should be included in this process.

Mike Barrow, on behalf of Boulder Mountainbike Alliance, said during the West TSA, the Board engaged in discussion after the public process was over, which led to compromises not being held in very high esteem. He said he was pleased to hear that during the North TSA, the Board was going to own this process. Decisions made throughout the public process should also include what the Board would like to see. He asked that the Board choose not to make changes to decisions made once this process is over.

### AGENDA ITEM 3 – Matters from Staff

#### General Updates

Brian Wilkerson, Revolution Advisors, gave an overview of the findings from the Open Space and Mountain Parks (OSMP) organizational assessment.

Tom asked where staff is in this process. Tracy said all of these recommendations have been accepted; the next step will be posting for the vacant division manager positions. Tom asked what the budget impacts will be. Tracy said there are five new Full Time Equivalent (FTE) positions. Kevin asked how the District Management Council will work. Tracy said this is still in the works, but generally, various staff within OSMP who bring different skill sets would work together to help manage particular areas of OSMP. Frances expressed her concern that the Board was not involved in this process. Tracy said these types of decisions generally do not involve the Board; staff was simply bringing this update as a courtesy.

### **Regulation Updates**

Joe Reale, Ranger Supervisor, informed the Board about several possible regulation updates that will be taken to City Council for approval. This includes, a change to current regulations regarding equine use, sledding/skiing and a new regulation regarding horse trailer parking per the West Trail Study Area Plan.

Tom asked if this change would take away the city manager authority to designate new sliding areas. Joe said no, but fixed heel activities within the sliding areas would remain illegal. Shelley asked how this will affect areas that have not gone through a TSA planning process yet. Joe said a TSA process could designate another sliding area, but it would still be subject to this regulation.

Frances asked what will change with horse trailer parking. Joe said the new regulation will allow rangers to actually enforce these areas. Kevin suggested that all of these ordinance changes should get noticed publicly to ensure there are no surprises.

Tracy added that a new ordinance, which will clarify that a transfer of property from one department to another is a disposal, will go to City Council in the first quarter of 2016.

### **Education Programs Update**

Juanita Echeverri, Lynne Sullivan, and Dave Sutherland, Education and Outreach Coordinators; and Jayne Basford, Dog Regulation Education Coordinator, gave a presentation on the various OSMP education programs.

Frances asked if more programs could be offered in school classrooms if OSMP had more volunteer naturalists. Lynne said yes, but with more educators she would hope to bring more kids out on to the land. She said the one aspect that prevents this, is schools not having funding for transportation. Molly said she would like to see a larger budget dedicated to this program; having people physically look at and experience the land is so important.

### **AGENDA ITEM 4 – Matters from the Board**

Tracy Winfree, Director, gave an update on the upcoming joint Board meeting regarding the Chautauqua lease. This meeting will be focused on updating and renegotiating lease terms between the city and Chautauqua. The OSBT is not a party to this lease, but this may affect the access management plan. Any questions or feedback can be brought to that meeting.

Shelley suggested that the Board retreat be postponed until the new Board member has started next spring.

Tom asked that staff notice the North TSA expert panels as a public meeting so that all Board members are able to attend,

**ADJOURNMENT** – The meeting adjourned at 7:37 p.m.  
These draft minutes were prepared by Leah Case.

**OSBT Sept. 9 2015 Meeting**  
**Chautauqua 2A Sidewalk Project Agenda Item OSMP Staff Comments**

Open Space and Mountain Parks (OSMP) staff have been working closely with Brian Wiltshire and other City departments to collaborate on design concepts for the Chautauqua 2A Sidewalk Improvements Project. The attached memo is being sent to other boards and contains superfluous information for the Open Space Board of Trustees (OSBT). Attachment A contains all of the original Chautauqua 2A documentation including Council approval, initial design concepts, and Chautauqua specific improvements that have minimal impact to OSMP property. The memo describes the nature of the project, and Attachment B shows the current proposed design concept. Board members are encouraged to focus their efforts toward reviewing the memo and Attachment B.



**CITY OF BOULDER**  
**OPEN SPACE BOARD OF TRUSTEES AGENDA ITEM**  
**MEETING DATE: September 9, 2015**

**AGENDA TITLE:** Staff briefing regarding the Chautauqua Pedestrian Safety, Access and Lighting Improvements Project

**PRESENTER:**  
Brian Wiltshire, Project Manager, Public Works Transportation

**EXECUTIVE SUMMARY**

The Chautauqua Pedestrian Improvement Project will direct the construction of a sidewalk on the south side of Baseline Road from 6<sup>th</sup> Street east to the historic trolley/current transit stop (King's Gate), improve pedestrian crossings at three street crossings within the project area, connect to Open Space and Mountain Parks designated access trails, make the existing transit stop compliant with the Americans with Disability Act (ADA), and install pedestrian lighting and way-finding elements from the project area into Chautauqua Park. The total project budget is \$1.5 million and is funded by the 2014 voter-approved Community, Culture and Safety Tax.

Vegetation pruning and removal will begin in the fall of 2016. Project construction is anticipated to begin in the winter of 2016 and will take six months to complete.

**STAFF RECOMMENDATION**

Staff will continue gathering public input on the design and incorporating comments where possible. No action is requested at this time.

## COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS

- **Social** – There are overall impacts on the needs of diverse communities, e.g. different ethnicities and cultures, abilities, age, income, family demographics and under-represented residents. The project engages broad segments of the community for input and may also include intergovernmental relations or issues. This project helps the city achieve its social sustainability goal by expanding transportation options for all members of the community by completing a missing sidewalk link, adding ADA ramps on Baseline Road and at the transit stop (King’s Gate) and adding pedestrian lighting within Chautauqua.
- **Economic** - The project helps the city achieve its economic goals by adding transportation facilities and access for residents, businesses, employees, customers and visitors along the Baseline Road in Boulder. This multimodal infrastructure contributes to the quality of life in Boulder, which can help to attract, sustain, and retain businesses and entrepreneurs.
- **Environmental** - The project helps the city achieve its environmental goals by providing another transportation mode in this section of Baseline Road for property owners, residents, visitors and employees to use. A decrease in vehicle use is anticipated, which would reduce and minimize the use of non-renewable energy resources and greenhouse gas emissions (GHG).

## OTHER IMPACTS

- **Fiscal** – The project budget is \$1.5 million and is funded entirely with 2A Community, Culture, and Safety Tax funds. All design options are estimated to be within the project budget.
- **Staff time** – Staff time costs are included in the current project budget.
- **OSMP Property** – There are no property disposals anticipated for this project.

## Background

This section of Baseline Road serves an important role for the use of Chautauqua Park, Open Space and Mountain Parks trails and Chautauqua Association lodging, programming and venues. These three facets of Chautauqua, combined, attract over half a million visitors per year.

Currently, no sidewalk exists on the south side of Baseline from 6<sup>th</sup> Street east to the historic trolley/current transit stop (King’s Gate). As a result, pedestrians travel in the street increasing pedestrian-vehicle and pedestrian-bicycle conflict. Additionally, the lack of sidewalks impedes the mobility and access of the Project area residents. Consequently, the Project area has been identified in the City’s Missing Sidewalk Links program.

The facilities constructed as part of this project will improve and/or provide important pedestrian safety treatments such as sidewalks, lighting, crosswalks and handicap ramps.

The proposed project elements include:

- Construction of five-foot wide sidewalks and curb ramps on the south side of Baseline between 10<sup>th</sup> and 6<sup>th</sup> streets
- Improved pedestrian crossings at the intersections of Baseline and Kinnikinic roads, and at King's Gate
- Improved connections from the project sidewalk to Open Space and Mountain Parks designated access trails (per the West Trail Study Area Plan) and the Ranger Cottage
- Transit stop improvements, including construction of an ADA compliant ramp from the historic trolley/current transit stop (King's Gate) to the interior of the park
- Pedestrian lighting and way-finding elements from the project site into Chautauqua Park.

The Transportation Master Plan (TMP) prioritizes providing travel options by constructing multimodal facilities. The project supports this TMP goal through construction of sidewalks and transit stop amenities.

Planning and design of the project has begun. The Project team is meeting with other city departments including Parks and Recreation, Urban Forestry, Open Space and Mountain Parks and Historic Preservation.

Vegetation pruning and removal will begin in the fall of 2016. Project construction is anticipated to begin in the winter of 2016 and will take six months to complete.

## **ANALYSIS**

The project team considered existing plans and studies, current conditions and user needs in the creation of the proposed preliminary design. However, the Project's 2A ballot narrative (Attachment A) delimits the Project's improvements. Given the defined scope, the goals of the Project and the public process to date, one preliminary proposed design is presented here (Attachment B).

### **Project Details**

The project sidewalk will be built to a width (five feet) that allows year-round maintenance (i.e. to accommodate snow removal equipment) but does not negatively impact mature trees in the Project area.

Sidewalks constructed along Baseline Road from 6<sup>th</sup> Street to Grant Place/Kinnikinic Road will continue into Chautauqua along Kinnikinic Road, connecting pedestrians to existing sidewalks and the Chautauqua trailhead. To honor the historic nature of the Project area, alternative materials to concrete are being considered for the section of sidewalk that will connect the Project area to the west side of Kinnikinic Road within Chautauqua.

Pedestrian crossings will be improved through installation of a raised median west of the intersection of Grant Place/Kinnikinic Road and Baseline Road, and the installation of bulb-outs at Queen's Gate, King's Gate and Kinnikinic Road. The median and bulb-outs

will reduce the potential for conflicts across modes. Additionally, ADA compliant intersection curb ramps will be installed at the northwest corner of Grant and Baseline roads, at the southeast corner of Kinnikinic and Baseline roads, at the northwest and southwest intersection of Lincoln Place and Baseline Road, and at King's Gate.

Currently, at least seven access trails have been established between 6th Street and Grant Place/Kinnikinic Road. The proposed preliminary design uses a combination of slope, retaining wall, and vegetation to discourage entry at the eliminated trails and encourage entry at the designated/retained trails as identified in the West Trail Study Area Plan.

The new retaining wall between Kinnikinic Road and Queen's Gate will be constructed to vary in height with the existing slope at Chautauqua Park at the project area. The newly constructed retaining wall will reflect the historic context of the current retaining wall through design and material selection.

Some vegetation will be pruned or removed to accommodate the project sidewalk and retaining wall. The majority of the trees identified by Urban Forestry to be removed for the Project are those that are of poor health and/or structure or susceptible to the emerald ash borer. The mature trees within the Project area will be retained and protected.

Queen's Gate and King's Gate will be reconstructed to include bulb-outs and ADA accessible ramps. The stairs and transit stop at King's Gate will also be reconstructed.

## **PUBLIC COMMENT AND PROCESS**

During the planning and design of the project, the team will implement a variety of outreach tools to inform and engage the public including:

- Presenting to appropriate boards and committees (Open Space Board of Trustees, Transportation Advisory Board, Colorado Chautauqua Association, Parks and Recreation Advisory Board, Landmarks Review Board, and the Chautauqua Building and Grounds Committee),
- Hosting a public open-house meeting (October 2015),
- Creation of a project webpage that includes links to Inquire Boulder,
- Placement of a comment box at the Chautauqua Ranger Cottage,
- Utilization of City of Boulder communications media (e.g., Channel 8, public library and recreation center video screens, etc.) and
- Project and meeting mailings to nearby residents, property owners, businesses and other interested parties.

### **Staff Recommendation:**

Staff is still gathering input on the proposed preliminary design. This input will come from appropriate boards and committees, and the public.

### **Next Steps:**

Staff will be moving forward with a final design and will incorporate public feedback where possible. Staff will keep the Board updated on the project and its proposed construction schedule, phasing and impacts.

Submitted by:



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Brian Wiltshire, Project Manager

**ATTACHMENTS:**

**Attachment A:** 2A Project Narratives

**Attachment B:** Chautauqua Pedestrian Improvement Project Proposed Preliminary Design

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**CITY OF BOULDER  
CITY COUNCIL AGENDA ITEM**

**MEETING DATE: August 5, 2014**

**AGENDA TITLE:** Second reading and consideration of a motion to publish by title only an ordinance submitting to the registered electors of the City of Boulder at the special municipal coordinated election to be held on Tuesday, November 4, 2014, the question of authorizing the city council to increase the sales and use tax by up to 0.3 cents on every dollar, effective from January 1, 2015 through December 31, 2017 for the purpose of funding a variety of capital improvement projects; giving approval for the collection, retention and expenditure of the full tax proceeds and any related earnings, notwithstanding any state revenue or expenditure limitation; and setting forth the effective date, ballot title, amendments to section 3-2-5, "Rate of Tax," B.R.C. 1981 and related details.

**PRESENTERS**

Jane S. Brautigam, City Manager  
 Tom Carr, City Attorney  
 David Gehr, Deputy City Attorney  
 Bob Eichen, Chief Financial Officer  
 David Driskell, Executive Director of Community Planning and Sustainability  
 Maureen Rait, Executive Director of Public Works  
 Tracy Winfree, Director Public Works Transportation  
 Molly Winter, Director of Downtown, University Hill Management Division and Parking  
 Jeff Dillon, Director of Parks and Recreation  
 David Farnan, Director of Library and Arts  
 Alisa Lewis, City Clerk  
 Peggy Bunzli, Budget Officer  
 Elena Lazarevska, Senior Financial Analyst

## EXECUTIVE SUMMARY

In preparation for the discussion of this agenda item, city council members have reviewed or considered potential 2014 ballot items in four previous meetings during 2014. The meetings were held on Feb. 18, Apr. 22, Jun.17, and Jul. 22. Council expressed interest in placing a temporary sales and use tax increase for three years (2015, 2016 and 2017) on the ballot for the November 4, 2014 election.

During the Jul. 22 meeting council passed on first reading a proposed .3% temporary sales and use tax increase for three years to fund Community, Cultural and Safety investments that cannot be funded with current revenues. The proposed investments and amounts associated with them can be found later in the background and analysis section of this memo.

Some council members requested options that would lower the rate of the temporary tax. **Attachment J** is an option that would reduce the temporary tax to .28% for three years by eliminating the underpass at Arapahoe and 13<sup>th</sup> Street. **Attachment K** is .27% for three years and would eliminate the underpass, the Eben Fine Park Stream Bank Restoration, and \$250,000 from the Chautauqua lighting project. There was also a request to determine if other options are possible for the underpass project. The response to this question can be found in **Attachment L**.

## STAFF RECOMMENDATION

### Suggested Motion Language:

Staff requests council consideration of this matter and action in the form of one of the two following motions:

#### **Option 1 if changes are made to the ordinance passed on July 22**

Consideration of a motion to approve Ordinance No. 7983 submitting to the registered electors of the City of Boulder at the special municipal coordinated election to be held on Tuesday, November 4, 2014, the question of authorizing the city council to increase the sales and use tax by up to 0.3 cents on every dollar, effective from January 1, 2015 through December 31, 2017 for the purpose of funding a variety of capital improvement projects; giving approval for the collection, retention and expenditure of the full tax proceeds and any related earnings, notwithstanding any state revenue or expenditure limitation; and setting forth the effective date, ballot title, amendments to section 3-2-5, "Rate of Tax," B.R.C. 1981 and related details, as amended.

#### **Option 2 if no changes are made to the ordinance passed on July 22**

Move to continue the item until August 19, 2014

## **COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS**

- Economic:
  - An increase in the sales and use tax rate would create an incremental economic impact equal to the amount of the tax increase approved by the voters. Any increase would be charged on all retail purchases, and items subject to use tax for the length of the tax. The new revenue collected would provide increased funds for capital investments that can help the economic vitality of the city.
- Environmental:
  - It is expected that some of the capital investments that would be funded with this tax increase may generate more travel to the City of Boulder to enjoy the improvements made in the city. At the same time, the investments would include efficient and effective improvements to infrastructure, which would help address environmental sustainability.
- Social:
  - It is projected that an increase in the sales and use tax would provide more opportunities for everyone to enjoy the uniqueness of the quality of life in Boulder.

## **OTHER IMPACTS**

- Fiscal: Three tenths percent increase in the sales and use tax rate for the City of Boulder would increase the tax on a hundred dollar purchase by thirty cents. Other fiscal impacts to the city are covered in the background and analysis sections of this agenda item.
- Staff time: The staff time needed to complete the background work for ballot items is included within the departmental work plans.

## **PUBLIC FEEDBACK**

A public hearing was held at the Jul. 22 City Council meeting. Several people participated in the public hearing and provided input on the proposed investments.

## **BACKGROUND and ANALYSIS**

The following link leads to the Feb. 18 agenda packet when 2014 ballot items were considered briefly by the City Council.

[February 18 Comprehensive Financial Strategy Update](#)

As follow up to the Feb. 18 meeting, more specific ballot topics were considered at the Apr. 22 study session. The summary and answers to most of the questions asked by council members at the Apr. 22 study session were provided in the Jun. 3 council packet under agenda item 3B starting on page 7. At the Apr. 22 study session, ballot items were considered and reviewed in the context of the ongoing long range fiscal planning used by the city. An explanation of this and the progress made to date can be found in attachment

2 of the Apr. 22 study session packet, starting on page 40. The following link leads to this attachment.

[Attachment 2 - Long Range Fiscal Planning](#)

At the Jun. 17 Council meeting, the City Council discussed proposed recommendations. The link for the Jun. 17 meeting is:

[June 17 Council Meeting - Potential Ballot Items](#)

At the Jul. 22 regular council meeting the City Council passed on first reading a .3% three year temporary sales and use tax for Community, Cultural and Safety investments. The link to that meeting is

[https://www-static.bouldercolorado.gov/docs/00\\_Agenda-1-201407171129.pdf](https://www-static.bouldercolorado.gov/docs/00_Agenda-1-201407171129.pdf)

***Temporary Three Year Sales and Use Tax Options for Capital Investments***

The following table was developed to assist council in discussing the possible options in terms of percentage increases in sales and use tax, as well as in the number of years the increase would be effective. The expected collections for .3% and a three year time duration have been highlighted.

<b>Rate</b>	<b>One Year Amount</b>	<b>Three years</b>	<b>Five Years</b>
.1%	\$3.0M	\$9.0M	\$15.0M
.2%	\$6.1M	\$18.3M	\$30.5M
.3%	\$9.2M	\$27.6M	\$46.0M

**Staff Recommendation**

Based upon staff review of the capital investments discussed previously and in light of a focus on shorter term investments that would be impactful to the community, the staff is recommending that city council consider placing a 0.3 percent - 3 year temporary sales and use tax on the ballot in Nov. 2014 that would include the following investments:

**Hill Investments (Attachment B):**

Residential Pedestrian Lighting	\$2,000,000	
Commercial District Event Street	\$ 750,000	
Commercial District Irrig. and St. Tree Improv.	\$ 520,000	\$3,270,000

**Civic Area Initial Improvements – Begin Vision Plan (Attachments C and D)** \$8,700,000

**Boulder Creek Area (Attachment E):**

Boulder Creek Path Lighting	\$1,040,000	
Boulder Creek Path Improvements	\$ 885,000	
Arapahoe.13 <sup>th</sup> Underpass	\$2,500,000	
Eben Fine Park Stream Bank Restoration	\$ 700,000	\$5,125,000

**Public Arts (Attachment F):** \$ 600,000

<b>Chautauqua Pedestrian Safety Access and Lighting: (Attachment G)</b>	\$1,500,000
<b>Dairy Center for the Arts (Attachment H):</b>	\$3,850,000
<b>Museum of Boulder (Attachment I):</b>	\$4,000,000
Contingency	<u>\$ 555,000</u>
Total	<u>\$27,600,000</u>
Estimated Revenue-3 years -.3%	<u>\$27,600,000</u>
Difference	-0-

There are attachments for each of the capital investment and they can be found at the end of this agenda memo.

**Other Cultural Enhancements in the City of Boulder**

Prior to the Apr. 22 study session, several culturally focused non-profits contacted the City Manager to request city consideration of including specific capital investments. Since that study session, additional information has been received regarding each of the proposals, and city council has received communications from each of them in support of using the proposed temporary tax for financing for their needs. Copies of the letters from each of the entities can be found in the Apr. 22 study session packet, starting on page 33, as Exhibits B-D, at the link below.

[April 22 Study Session - Letters from Non Profits](#)

**Agreements Proposed for Use and Flow of Funds for Entities that Do Not Use City Financial and Accounting Internal Controls and Processes**

If this ballot issue goes forward, all parties want it to be successful. At the same time, the handling of taxpayer funds requires due diligence, oversight for appropriate usage, accountability, and other appropriate levels of fiscal stewardship. For internal city investments, appropriate internal controls are already in place for both the collection of revenues and the expenditures of city funds. In addition, these controls are periodically reviewed and tested by internal city staff and external city auditors.

These same processes are not in place for capital investments that do not fall under city processes and procedures. Therefore, staff feels that appropriate controls will need to be agreed upon by any external entity receiving funds, if this ballot proposal goes forward and is approved by the voters. As proposed, the ballot language would require that an agreement be entered into and approved by the City Manager for any project that is not subject to city fiscal controls. This would include draws on the funds available for the investments and the appropriate documentation that will be required. Staff does not propose placing the procedures and process in the actual ballot language as it could be

confusing and difficult to modify if things would change in the future. Initial discussions indicate that this process is acceptable to any entity that would be in such a relationship.

### **Contingency**

There are many unknowns that can occur when capital investments will be built over a period of time. Examples are: inflationary costs can rise unexpectedly and be greater than are estimated in the original cost projections, revenues can fall short of projections, and unexpected costs can occur that were unforeseen. The fire training center was a prime example of all three and the project was delayed for nearly a decade until a solution was found so the project could move forward. Therefore, to mitigate these issues a contingency is needed. The proposed \$555,000 is approximately two percent of the total investments. Finance staff members have reviewed the capital investment estimates and feel the costs and revenues have been projected conservatively so this level of contingency will be acceptable.

### **Operating Costs for Investments**

The major cause of failed capital improvement programs across the United States is the lack of a funding stream adequate to pay for the new operating costs associated with new capital investments. There have been numerous stories across the United States of new schools and prisons that have been built, or where funds are in place to build them, that have not been completed or have not been able to be used because there were no resources to pay for the new operating costs. If the voters approve investing in new or expanded investments, then new operating dollars need to accompany the approval of the investments, if they cannot be absorbed within existing resources. At this time, it does not appear that the capital investments being considered will generate large increases in operating costs. It is expected that the new operating costs can either be absorbed in or reallocated in the city's operating budget. Staff will monitor costs as the investments develop and report back to council if operating costs escalate beyond expectations.

### **NEXT STEPS**

If council decides to make no changes to the ordinance that was passed on first reading Jul. 22, staff suggests that this item be continued until Aug. 19. This would allow staff to provide additional information council may want and to provide facts and data sheets about the individual investments and post them on the website.

If changes are made on second reading a third reading would occur on Aug. 19. All ballot items must be passed on final reading by council by the end of August to meet county deadlines.

If a fourth reading would be needed, past Aug. 19, it will need to be a special meeting and must meet all timeline requirements, which would be difficult to do.

### **ATTACHMENTS**

- A: Temporary Sales and Use Tax Ballot Ordinance
- B: University Hill Investments
- C: Civic Area Investments

- D: Civic Area: Additional Information
- E: Boulder Creek Area Investments
- F: Public Art Investments
- G: Chautauqua Investments
- H: Dairy Center for the Arts Investments
- I: Museum of Boulder Investments
- J: .28% Temporary Sales and Use Tax Option
- K: .27% Temporary Sales and Use Tax Option
- L: Options for the Underpass at Arapahoe and 13<sup>th</sup> Street

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ORDINANCE NO.7983

(Tax Increase for Capital Facilities)

AN ORDINANCE SUBMITTING TO THE ELECTORS OF THE CITY OF BOULDER AT THE SPECIAL MUNICIPAL COORDINATED ELECTION TO BE HELD ON TUESDAY, NOVEMBER 4, 2014, THE QUESTION OF AUTHORIZING THE CITY COUNCIL TO INCREASE THE SALES AND USE TAX BY UP TO 0.3 CENTS ON EVERY DOLLAR, EFFECTIVE FROM JANUARY 1, 2015 THROUGH DECEMBER 31, 2017 FOR THE PURPOSE OF FUNDING A VARIETY OF CAPITAL IMPROVEMENT PROJECTS; GIVING APPROVAL FOR THE COLLECTION, RETENTION AND EXPENDITURE OF THE FULL TAX PROCEEDS AND ANY RELATED EARNINGS, NOTWITHSTANDING ANY STATE REVENUE OR EXPENDITURE LIMITATION; AND SETTING FORTH THE EFFECTIVE DATE, BALLOT TITLE, AMENDMENTS TO SECTION 3-2-5, "RATE OF TAX," B.R.C. 1981 AND RELATED DETAILS.

WHEREAS the City Council finds that it is appropriate for voters to approve collection, retention, and expenditure of the full amount collected from the tax proposed by the ballot issue described below.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. A special municipal coordinated election will be held in the City of Boulder, county of Boulder and state of Colorado, on Tuesday, November 4, 2014, between the hours of 7 a.m. and 7 p.m.

Section 2. At that election, there shall be submitted to the electors of the City of Boulder entitled by law to vote the issue of a sales and use tax increase as described in the ballot issue title in this ordinance.

Section 3. The official ballot shall contain the following ballot title, which shall also be the designation and submission clause for the issue:

1  
2 ISSUE NO. \_\_\_\_

3 **TAX INCREASE FOR CAPITAL FACILITIES**

4 SHALL CITY OF BOULDER TAXES BE INCREASED  
5 (\$9,200,000 first full fiscal year increase) ANNUALLY BY  
6 INCREASING THE SALES AND USE TAX BY 0.3 CENTS  
7 FOR THE PERIOD OF JANUARY 1, 2015 TO DECEMBER  
8 31, 2017;

9 AND IN CONNECTION THEREWITH,

10 SHALL ALL OF THE REVENUES COLLECTED USED TO  
11 FUND CAPITAL IMPROVEMENTS THAT WILL INCLUDE  
12 WITHOUT LIMITATION THE FOLLOWING:

- 13 • UP TO \$ 8,700,000 FOR CAPITAL IMPROVEMENTS  
14 FOR THE BOULDER CIVIC AREA GENERALLY  
15 BOUNDED BY CANYON BLVD, ARAPAHOE AVE,  
16 9<sup>TH</sup> STREET AND 13<sup>TH</sup> STREET,
- 17 • UP TO \$ 3,270,000 FOR CAPITAL IMPROVEMENTS  
18 IN THE UNIVERSITY HILL COMMERCIAL DISTRICT  
19 AND HIGH DENSITY RESIDENTIAL AREAS  
20 INCLUDING LIGHTING, IRRIGATION AND TO  
21 IMPROVE PUBLIC STREETS,
- 22 • UP TO \$ 5,125,000 FOR CAPITAL IMPROVEMENTS  
23 TO THE BOULDER CREEK PATH AND ITS  
24 ENVIRONS GENERALLY BETWEEN 3<sup>RD</sup> AND 17<sup>TH</sup>  
25 STREETS, INCLUDING LIGHTING AND PATH  
26 IMPROVEMENTS TO INCREASE SAFETY,
- 27 • UP TO \$ 600,000 FOR PUBLIC ART AND TO  
28 PRESERVE OR RESTORE THE EXISTING ART  
COLLECTION,
- UP TO \$ 3,850,000 TO IMPROVE THE DAIRY  
CENTER FOR THE ARTS PROPERTY,
- UP TO \$ 1,500,000 FOR IMPROVEMENTS TO  
CHAUTAUQUA PARK AND ITS ENVIRONS FOR  
ACCESS, PEDESTRIAN, SAFETY, AND LIGHTING  
IMPROVEMENTS,

- UP TO \$ 4,000,000 FOR CAPITAL IMPROVEMENTS AT THE MUSEUM OF BOULDER PROVIDED THAT THE MUSEUM OF BOULDER HAS FIRST RAISED AND DEDICATED AN EQUAL AMOUNT AND IN COMPLIANCE WITH TERMS, CONDITIONS, AND TIMING APPROVED BY THE CITY COUNCIL, AND
- ANY REMAINING FUNDS TO BE APPROPRIATED BY THE BOULDER CITY COUNCIL TO FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS;

AND IN CONNECTION THEREWITH,

SHALL THE FULL PROCEEDS OF SUCH TAXES AT SUCH RATES AND ANY EARNINGS THEREON BE COLLECTED, RETAINED, AND SPENT, AS A VOTER-APPROVED REVENUE CHANGE WITHOUT LIMITATION OR CONDITION, AND WITHOUT LIMITING THE COLLECTION, RETENTION, OR SPENDING OF ANY OTHER REVENUES OR FUNDS BY THE CITY OF BOULDER UNDER ARTICLE X SECTION 20 OF THE COLORADO CONSTITUTION OR ANY OTHER LAW?

FOR THE ISSUE \_\_\_\_\_ AGAINST THE ISSUE \_\_\_\_\_

Section 4. If this ballot issue is approved by the voters, the City Council will adopt terms, conditions, and timing of payments prior to any appropriations to the Museum of Boulder that it finds are necessary to protect the public health, safety and welfare of the residents and visitors of the City of Boulder. In the event that the city, in its legislative or administrative capacity, determines that the Museum of Boulder cannot meet such terms or conditions in a reasonable or timely manner, such funds may be appropriated by the City Council for other capital improvement projects that are consistent with the ballot issue title.

Section 5. If this ballot issue is approved by the voters, the City Council further amends the Boulder Revised Code, effective on January 1, 2015, to read:

**3-2-5. Rate of Tax.**

1 (a) Except as specified in Subsection (b) of this section, the amount of the tax hereby levied is  
2 3.56-86 percent of the purchase price of tangible personal property or taxable services sold  
3 or purchased at retail.

4 (b) The amount of the tax hereby levied on food sold in or by a food service establishment  
5 shall be the amount levied in Subsection (a) of this section plus 0.15 percent of the  
6 purchase price of such food. Cover charges, admission, or entrance fees and mandatory  
7 service or service-related charges shall be included as part of the purchase price of such  
8 food. However, a mandatory service or service-related charge shall not be included as part  
9 of the purchase price of such food if the full amount of the charge is passed on to the  
10 employees of the food service establishment who have provided direct service to each  
11 person paying the charge, and if all federal and state income and other applicable taxes due  
12 on such charge have been withheld by the food service establishment and paid to the  
13 appropriate government.

14 (c) Of said amount:

15 (1) Parks and Recreation: 0.25 percent shall be deemed a parks and recreation tax, which  
16 tax shall expire at midnight on December 31, 2035 (Ord. No. 7862, approved by voters  
17 in 2012).

18 (2) Open Space and General: 0.33 percent shall be used for the purposes, during the time  
19 periods, and in the following amounts, as follows:

20 (A) An open space tax through midnight on December 31, 2018 (Ord. No. 5893,  
21 approved by voters in 1997).

22 (B) An open space tax for 0.22 percent, and a general sales and use tax for 0.11  
23 percent from January 1, 2019 through midnight on December 31, 2034 (Ord. No.  
24 7912, approved by voters in 2013).

25 (C) An open space tax for 0.10 percent, and a general sales and use tax for 0.23  
26 percent from January 1, 2035 and continuing without expiration (Ord. No. 7912,  
27 approved by voters in 2013).

28 (3) Open Space: 0.15 percent shall be deemed an open space tax through midnight on  
December 31, 2019 (Ord. No. 7301, approved by voters in 2003).

(4) Transportation and General: 0.15 percent shall be used for the purposes, during the  
time periods, and in the following amounts, as follows:

(A) a transportation tax from January 1, 2014 through midnight on December 31,  
2029 (Ord. Nos. 7913 and 7922, approved by voters in 2013).

1 (B) a general sales and use tax from January 1, 2030, which tax shall expire at  
2 midnight on December 31, 2039 (Ord. No. 7922, approved by voters in 2013).

3 (5) Capital improvement tax. 0.3 percent shall be deemed a capital improvement tax  
4 through midnight on December 31, 2017 (Ord. No. \*\*\*, approved by voters in 2014).

5 As each tax expires, the aggregate tax shall be reduced accordingly.

6 Section 6. If this ballot issue is approved by the voters, the City Council may adopt  
7 amendments to the Boulder Revised Code to further implement this sales and use tax increase  
8 and such other amendments to the Boulder Revised Code as may be necessary to implement the  
9 intent and purpose of this ordinance.

10 Section 7. If a majority of all the votes cast at the election on the issue submitted shall be  
11 for the issue, the issue shall be deemed to have passed and shall be effective upon passage, and it  
12 shall be lawful for the City Council to provide for the amendment of its tax code in accordance  
13 with the issue approved.

14 Section 8. The election shall be conducted under the provisions of the Colorado  
15 Constitution, the charter and ordinances of the City, the Boulder Revised Code, 1981, and this  
16 ordinance, and all contrary provisions of the statutes of the state of Colorado are hereby  
17 superseded.

18 Section 9. The officers of the City are authorized to take all action necessary or  
19 appropriate to effectuate the provisions of this ordinance and to contract with the county clerk to  
20 conduct the election for the City.

21 Section 10. If any section, paragraph, clause, or provision of this ordinance shall for any  
22 reason be held to be invalid or unenforceable, such decision shall not affect any of the remaining  
23 provisions of this ordinance.

24 Section 11. This ordinance is necessary to protect the public health, safety and welfare of  
25 the residents of the City, and covers matters of local concern.  
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Section 12. The City Council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY TITLE ONLY this 22<sup>nd</sup> day of July, 2014.

\_\_\_\_\_  
Mayor

Attest:

\_\_\_\_\_  
City Clerk

READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED PUBLISHED BY TITLE ONLY this 5<sup>th</sup> day of August, 2014.

\_\_\_\_\_  
Mayor

Attest:

\_\_\_\_\_  
City Clerk

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## CHAUTAUQUA PEDESTRIAN SAFETY, ACCESS AND LIGHTING IMPROVEMENTS

The Colorado Chautauqua is a unique public asset to the City of Boulder and provides a world-class destination for recreation, culture and historic distinction to the community and visitors. Through collaborative stewardship, city staff continues to work closely with the Colorado Chautauqua Association and members of the community to provide stewardship of this critical asset for the community and future generations. Through the current Pay-As-You-Go capital funding initiative, the community has an opportunity to experience capital improvements that will have a current and lasting impact on the visitor experience of Chautauqua.

Based on direction from Council, an interdepartmental team comprised of Public Works, Parks and Recreation and Open Space and Mountain Parks have developed a scope and initial cost estimates to enhance visitor experiences, improve public safety for access, lighting and amenities. The proposed Chautauqua Park historic site visitor experience improvements will include health and safety related items such as historic lighting designed to keep within cultural landscape design guidelines, access improvements such as safe pedestrian walkways and educational and interpretive signage. The estimated scope of this work is approximately \$1.5 million depending on final design drawings and historic preservation reviews.

### **Three three key improvement investments include:**

- 1. Improved access and pedestrian safety along Baseline Road that may include new sidewalks, aligned parking and related safety enhancements totaling approximately \$1M (see Attachment 1)**
- 2. Pedestrian lighting along key access points for safety and accessibility from Baseline Road through the major park access walks to visitor facilities totaling approximately \$250,000 (see Attachment 2).**
- 3. Interpretive and wayfinding signage for historic interpretation of the site and to improve overall visitor experiences and understanding of the site character totaling approximately \$250,000 (see attachment 3).**

### **Collaborative Stewardship**

As noted above, the improvements will continue to inform the collaborative stewardship process (**see attachment 4**). If these projects are selected for funding, a working group will hold several meetings to shape next steps on the broader stewardship and implementation of the improvements.

The overall purpose of the next phase of the collaborative stewardship is to build off of the previous work done to adopt guiding principles by putting these into action. The guiding principles are not intended to define the specific structures, processes, or agreements for making key decisions at Chautauqua. The next phase will focus on the implementation items that can put these guiding principles into action.

Leading up to and following council action on the projects, staff will begin developing a work plan for this next phase of the stewardship improvements.

## **ATTACHMENTS**

**Attachment G-1:** Transportation Improvements Concept Design

**Attachment G-2:** Chautauqua Master Exterior Lighting Plan

**Attachment G-3:** Chautauqua Master Signage Plan

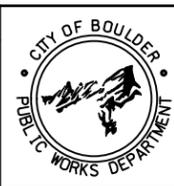
**Attachment G-4:** Collaborative Stewardship of the Colorado Chautauqua - Guiding Principles for Place Management and Fiscal Sustainability



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Print Date: 7/2/2014	0000
Drawing File Name: Baseline West-Chautauqua Concept Design01.dgn	
Horiz. Scale: 1:80      Vert. Scale: As Noted	
Unit Information      Unit Leader Initials	

Sheet Revisions		
Date:	Comments	Init.



As Constructed
No Revisions:
Revised:
Void:

BASELINE RD. WEST-CHAUTAUQUA PARK PEDESTRIAN IMPROVEMENTS			
Designer:	Structure Numbers		
Detailer:			
Sheet Subset:	Subset Sheets:		

Project No./Code
Sheet Number



# **Colorado Chautauqua National Historic Landmark Master Exterior Lighting Plan**

January 20, 2012  
Clanton & Associates

## Table of Contents

Introduction .....	1
Design Philosophy.....	1
Image and Identity .....	1
Environmental Issues and Goals.....	2
Historic Preservation.....	2
Nighttime Visibility.....	3
Safety and Security.....	4
Nighttime Aesthetics .....	4
City of Boulder Lighting Ordinance.....	4
Prescriptive Designs and Strategies .....	5
Primary Roadways (Public).....	6
Secondary Roadways (Residential) .....	7
Parking (Public) .....	8
Pedestrian Paths.....	9
Parks and Public Spaces .....	10
Building Facades .....	11
Monuments/Structures.....	16
Residential Exterior.....	17
Historic Globe Lighting.....	18
Control Strategies.....	19
Maps and Drawings.....	20
Appendix A.....	25
Appendix B.....	25

## **Introduction**

On the Chautauqua campus, the exterior lighting helps to organize and define the nighttime visual environment. The placement, style, and performance of the lighting equipment determine much of the visual character of the environment after dark as well as the overall visibility for visitors. Changes in light levels should signify changes in public (more light) versus private (less light) zones of the park. During the day, the decorative elements of the lighting equipment will support the historic nature of the architecture and site and provide a unifying aesthetic element on the property. In addition to identifying where to provide light, the masterplan also designates areas that should remain dark. Every effort should be made to minimize light trespass and light pollution for the residences and adjacent open space.

The site lighting system should provide for driver and pedestrian visibility and way finding. Traveled pathways are lighted to provide guidance and good visibility while parking lots are lighted to provide security for both pedestrians and motorists. All of these design issues should be addressed with minimal energy use and effective maintenance in mind.

## **Design Philosophy**

The exterior lighting masterplan for Chautauqua will provide light for safety and comfort while preserving the natural resources and atmosphere that make the park so unique.

The lighting program throughout will help retain a low level of natural ambient light suitable for the City of Boulder open space and mountain parks, save energy, and reduce waste to support Chautauqua green building goals. Low glare, well-placed lighting will provide a safe and comfortable nighttime environment. This masterplan recommends lighting strategies for areas where Chautauqua deems that safety and security is a concern, but does not propose lighting throughout the entire park. Specific control measures will ensure that lighting is not used when it is not needed.

The following design principles address the philosophy of site lighting throughout the Chautauqua National Historic Landmark:

- Image & Identity
- Environmentally Sensitive Lighting
- Historic Preservation
- Nighttime Visibility
- Safety and Security
- Nighttime Aesthetics

### ***Image and Identity***

The most important issue related to Chautauqua image and identity is not so much the selection of luminaire style, but rather the consistent application of styles, mounting heights, and light levels throughout the entire historic site. This masterplan establishes a clear hierarchy of lighting equipment and strategies to support the architecture and infrastructure of the park.

The luminaire styles should be influenced by the architectural styles of the park structures. However, many traditional lighting fixtures create as much glare as they do useful light and are not designed to minimize light trespass and light pollution. With some modifications, many traditional styles can be made to better control the light and still stay true to the traditional forms.

Light enhances architectural form and will support massing, hierarchy, and details of the architecture. Surfaces will be revealed with light, but views of the light fixtures will be minimized. Light fixtures should be integrated into the architecture where possible by mounting in eaves, under canopies, recesses, or within low walls. Light fixtures shall be inconspicuous unless there is an intentional decorative purpose. In general, the pedestrian level of the architectural form shall be the emphasis for appropriate exterior lighting. Only a few select facades should have light above the pedestrian level as a way to identify Chautauqua's very prominent and public features.

### ***Environmental Issues and Goals***

Environmentally sensitive lighting minimizes light pollution and light trespass, and applies only the right amount of light where and when it is needed. To limit light trespass and light pollution, the Lighting Masterplan complies with the City of Boulder Outdoor Lighting Standards, Section 9-9-16. All exterior area lighting will be shielded or fully shielded, aimed downward, and will utilize white light sources. Lighting levels will be minimized and lighting controls will ensure that lighting is turned off in some areas when it is not needed.

- ***Dark Skies – Minimizing Light Pollution***

Light pollution is uncontrolled light that travels into the atmosphere. This light represents wasted energy and creates "sky glow" that reduces visibility of stars in the night sky. Unshielded luminaires and excessively high light levels cause more light pollution than properly controlled light fixtures. The lighting within Chautauqua will be well shielded and designed to limit light levels to help maintain dark skies.

- ***Friendly Neighbor – Limiting Light Trespass***

Light trespass is often felt as "the light shining in my window". Usual culprits are unshielded floodlights, high wattage lamps, and other unshielded luminaires that are improperly located and poorly aimed. Light trespass will be avoided throughout Chautauqua. Light trespass can be minimized with careful equipment selection, proper location, and proper aiming and shielding.

- ***Lighting only WHAT is necessary.***

The determination of what to light is just as important as how to light. Some areas may be specifically designated as dark preserves. When an area does require lighting, the design should contain the light to that area as much as possible. For instance, light from parking areas should be adequately shielded to limit stray light onto adjacent areas or buildings. This same principle applies to street and trail lighting locations to minimize stray light onto adjacent cabins. By lighting only what is necessary, the light that is used will be more effective as compared to a design that lights all areas equally.

- ***Lighting only WHEN it is necessary.***

Energy use and light pollution can be reduced by turning off lights when they are not needed. Time control and motion sensors can be used to automatically turn lights off in areas that are used less at night yet still provide light when needed for late night use.

### ***Historic Preservation***

The Chautauqua Design Guidelines note that the development of the park spanned several decades. While lighting equipment such as street poles may have some historic character, the guidelines state that simplicity should be the most important consideration. This masterplan illustrates various period styles that could be used on the site. While the style may reflect a lantern-like aesthetic, the lighting technology will still address glare and uplift from the luminaire.

The lighting of building facades and structures at Chautauqua will focus on highlighting elements and features of the existing architecture. The designs should take care to hide the lighting equipment and not use any stylized fixtures that become an additional decorative element on the façade.

### ***Nighttime Visibility***

- *Lighting Quality, not Quantity.*

Often, architectural exterior lighting is used principally for floodlighting instead of lighting quality, resulting in over-lit facades that create reflected light pollution or trespass. High quality accent lighting creates a composition of light and darkness on the architecture, using less light for greater effect. Streets and parking lots are also often over-lit when light level is used as the main lighting criteria without concern for the many other factors that affect visibility.

Lighting quality involves many issues such as contrast, brightness adaptation, minimal glare and light source color. Good visibility is achieved by balancing brightness, lighting vertical surfaces, providing clear visual cues, and controlling glare. These strategies create a high quality visual environment using low light levels and minimal energy.

- *Brightness Adaptation.*

Our eyes adjust to the brightest object in our field of view. This adjustment of our eyes is referred to as brightness adaptation. If an object is very bright, such as uncontrolled light from a floodlight, everything else in the immediate surrounding area appears relatively dark, making it harder to detect object details.

- *Reducing Glare.*

Glare is usually caused by uncontrolled light emitted from unshielded luminaires. An example of this is unshielded wall pack fixtures or floodlights located on a building façade. These situations can be easily avoided with proper equipment selection, location, aiming, and shielding.

- *Better Visibility with White Light.*

Light source color is another key to low light level visibility. Reaction time and color recognition under low light levels is superior with white light sources like metal halide, fluorescent, LED, and induction lamps. Using a warm colored light source (3000 K) will give a warm residential aesthetic while taking advantage of the white light visibility benefit.

- *Lighting Vertical Surfaces.*

Illuminated surfaces improve the sense of brightness, safety, and security in an exterior environment. These surfaces allow pedestrians to see other people and objects in silhouette as well as accenting the character of the architecture and features.

- *Wayfinding.*

Sign lighting provides an obvious complement to wayfinding features. However, lighting may also augment wayfinding in the form of indicators. For example bollards may alert motorists to the presence of pedestrians. Additionally, changes in brightness provide visual cues and orientation for pedestrians. Continuously lighted streets may identify a primary vehicle route while lower lighting levels suggest private or residential areas.

## **Safety and Security**

Lighting to improve safety involves lighting hazards so that they can be seen with sufficient reaction time. Hazards may include vehicle intersections, crosswalks, stairs and ramps, and other site features that may be perceived as unsafe if not well identified at normal night time lighted conditions. The lighting system, along with other site design elements, must provide visual information to assist users in avoiding such things as a collision or loss of bearings.

Security can be described as the perception of safety. Lighting to improve security involves lighting potentially hazardous locations and situations. For example, an increase in reaction time can improve the ability to find refuge, or call for help. Lighting can also act as a deterrent by increasing the visibility in an area of concern. However, it should be noted that an increase in the number of people in an area will be a more effective deterrent against crime than an increase in light level.

## **Nighttime Aesthetics**

The lighting system at night should reveal a hierarchy of brightness levels and provide subtle surface brightness throughout the public spaces. The style of lighting equipment will be less noticeable at night but an organized sequence of lighted areas and surfaces will provide wayfinding and a sense of security. For example, a street that provides access to cottages may have a relatively low light level when the surrounding cottage porches have lights. Similarly, the lighted façade of the Auditorium at the end of Morning Glory Drive provides a visible destination at the end of a public street.

## **City of Boulder Lighting Ordinance**

The City of Boulder adopted a lighting ordinance in 2003. Its objective is to ensure safety and security, establish the use of white light sources (compact fluorescent, LED, and induction), prevent overlighting, and minimize light pollution. The ordinance sets limits on the following lighting characteristics:

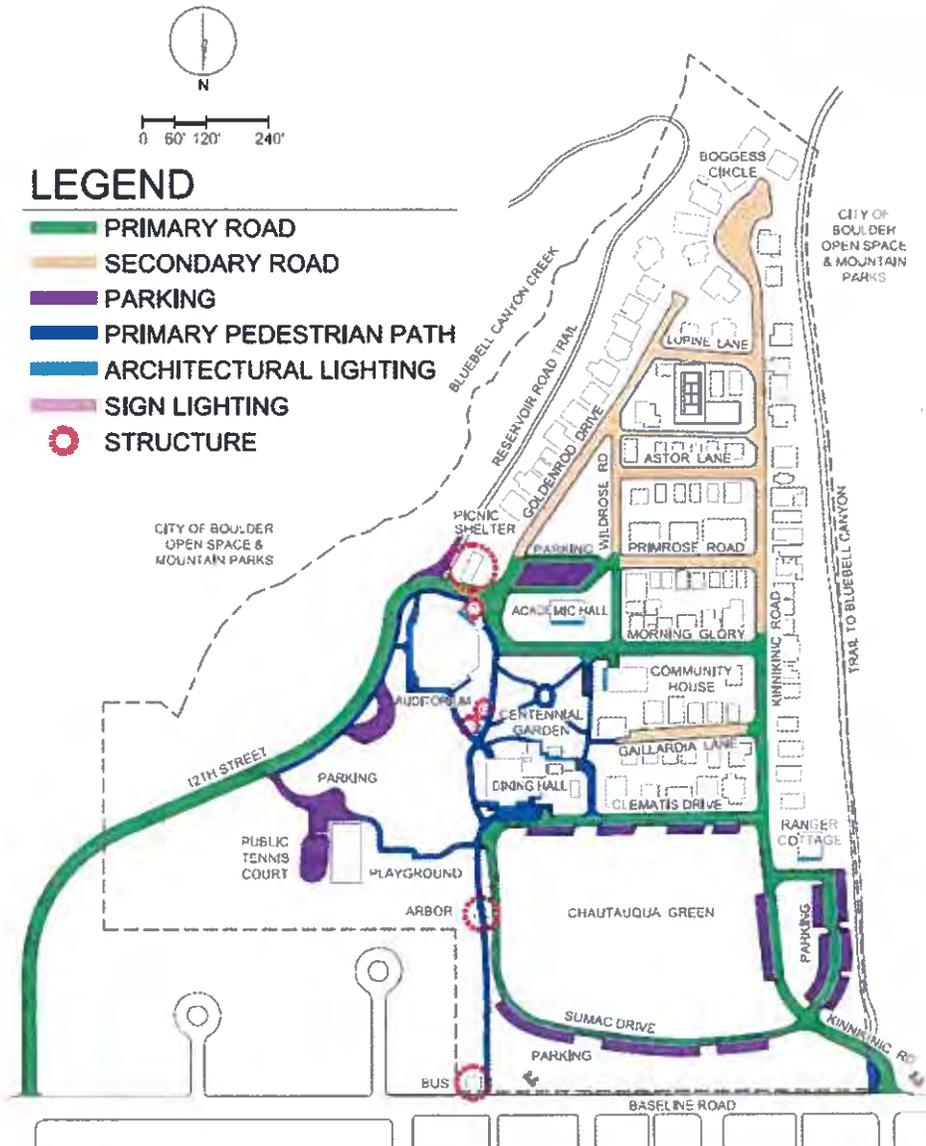
Maximum allowable light levels (illuminance in footcandles)	Building Entries: 5 Parking Lots: 5 Pedestrian Walkways: 3
Maximum uniformity ratio	15:1
Maximum lumen rating for full cutoff luminaires	14,000
Maximum lumen rating for cutoff and semi cutoff luminaires	1,250
Maximum lumen rating for unshielded luminaires	900
Lighting controls	Recommended after close of business
Maximum pole height	20' adjacent to residential 25' otherwise
Flagpole lighting	(1) Uplight not to exceed 3,500 lumens

Additional and special use requirements can be found in the City of Boulder Land Use Code, Chapter 9-9, under Section 9-9-16, Lighting, Outdoor.

# Prescriptive Designs and Strategies

The previously described concepts are applied to the typical components found throughout the Chautauqua park: roads, pedestrian spaces, structures, and residences. Roadways are made up of primary (public) routes that are frequently used by park visitors who are not necessarily staying there (open space parking, auditorium drop-off). Secondary (residential) routes serve all of the cottages but most likely are not frequented by the visiting public. Pedestrian spaces include both paths and open areas. Structures may be small focal points such as the arbor and signage or large, public facades such as the auditorium. Finally, the residential component includes all of the rented and privately owned cottages.

The map below color codes these components.



The following sections illustrate prescriptive designs and strategies for each of the components described on the map. Each section documents typical existing conditions, lighting equipment specifications, rules of thumb for location, spacing, and mounting heights, and appropriate sketches for mounting details.

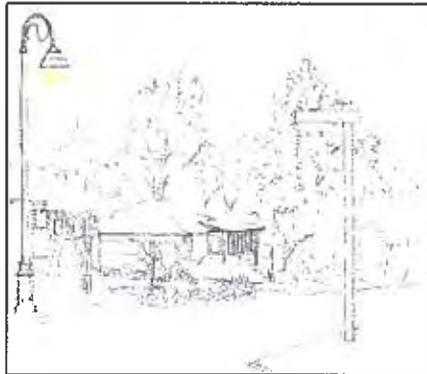
## Primary Roadways (Public)

### EXISTING CONDITIONS:



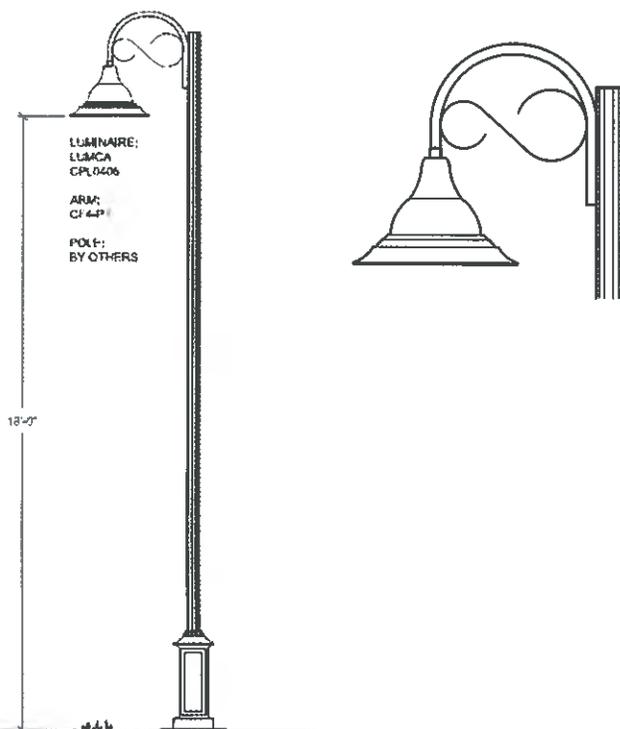
Currently, cobrahead luminaires with high pressure sodium lamps are mounted on wood poles for the majority of the street lighting. The poles are not consistently located at intersections or on the same side of the road.

### PROPOSED LIGHTING CONCEPT:



A traditional style, pole-mounted luminaire will provide lighting along the primary roads at intersections. Along stretches of primary roadway without intersections, luminaires should be spaced uniformly at curves or other decision points.

### EXAMPLES



### LUMINAIRE SPECIFICATIONS

Horizontal Distribution	Type IV or V
Lamp Type	Induction
Lumen Output	6000 lumens (85 watt)
Color Temperature	3000 K
Color Rendering Index	80+
Pole Height	18'
Pole Layout	Locate at intersections and mid-block
Controls:	Photocell ON, dim to 50% after curfew.

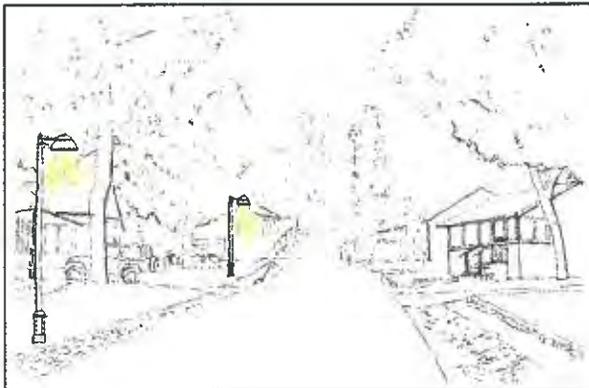
## Secondary Roadways (Residential)

### EXISTING CONDITIONS:



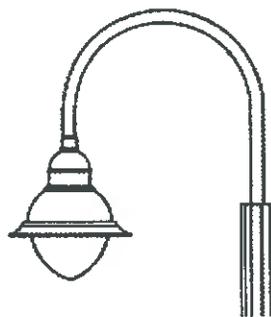
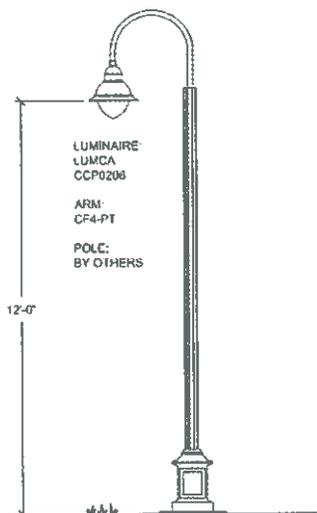
Currently, cobrahead luminaires with high pressure sodium lamps are mounted on wood poles for the majority of the secondary street lighting. Pole locations are not consistent. The remainder of the street lighting in residential streets comes from the porch lighting on the cabins.

### PROPOSED LIGHTING CONCEPT:



Smaller scale poles and luminaires should light the secondary streets. The cabin porch lanterns provide background brightness while the streetlights illuminate the roadway. Backlight from the luminaires should be controlled to prevent light trespass onto the cabin property.

### EXAMPLES



Note: Teardrop shaped globes introduce additional upright and do not meet the City of Boulder Lighting Ordinance. Because the lamp is concealed fully within the opaque shroud, a variance may be possible.

### LUMINAIRE SPECIFICATIONS

Horizontal Distribution	Type IV or V
Lamp Type	Induction
Lumen Output	3500 lumens (55 watt induction)
Color Temperature	3000 K
Color Rendering Index	80+
Pole Height	12' - 14'
Pole Layout	Locate at intersections.
Controls:	Photocell ON, dim to 50% after curfew.

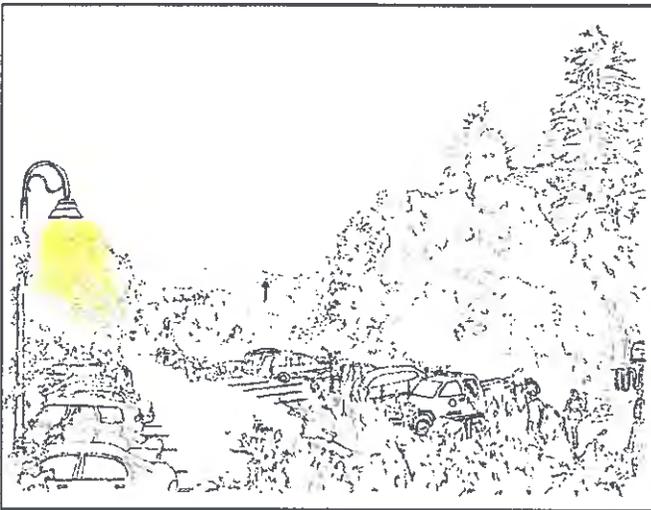
## Parking (Public)

### EXISTING CONDITIONS:



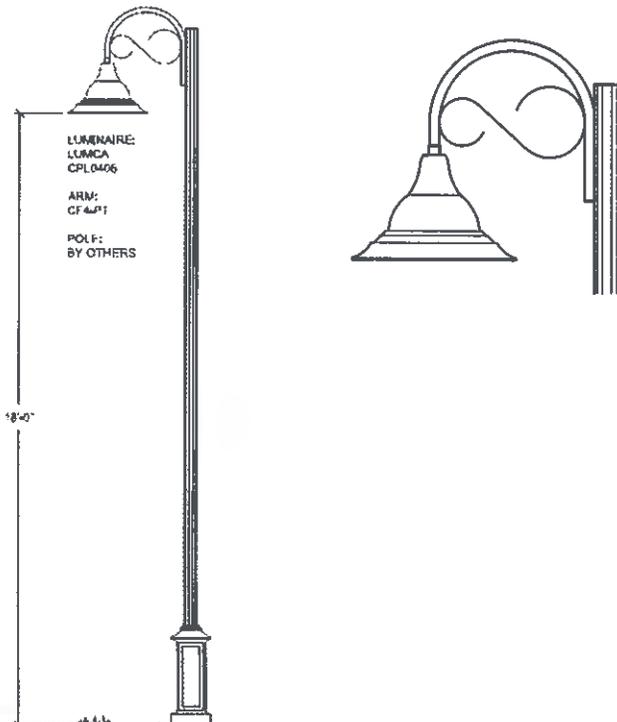
Currently, cobrahead luminaires with high pressure sodium lamps provide the lighting for parking lots. No specific lighting is provided for public parking in areas such as along the Chautauqua Green.

### PROPOSED LIGHTING CONCEPT



A traditional style, pole-mounted luminaire should provide lighting for the parking areas. The luminaire and pole configuration should match that of the adjacent roadway (primary or secondary).

### EXAMPLES

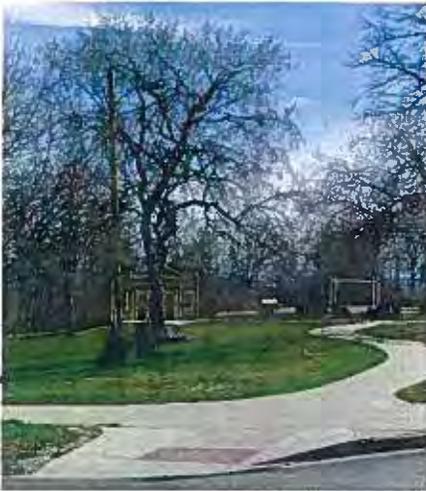


### LUMINAIRE SPECIFICATIONS

Horizontal Distribution	Type IV or V
Lamp Type	Induction or CFL
Lumen Output	3500 lumens (55 watt induction)
Color Temperature	3000 K
Color Rendering Index	80+
Pole Height	12' - 14'
Pole Layout	Space at 4-6 times pole ht.
Controls:	Photocell ON, dim to 50% after curfew.

## Pedestrian Paths

### EXISTING CONDITIONS:



Currently, pedestrian scale lighting exists along some paths and in the Centennial Garden. However, it is typically provided by adjacent street lighting (cobrahead luminaires).

### PROPOSED LIGHTING CONCEPT



For pedestrian paths that are frequently traveled at night and are not near lighted roadways, smaller scale lighting should be used. Matching existing acorn style lighting is recommended.

### EXAMPLES



### LUMINAIRE SPECIFICATIONS

Horizontal Distribution	Type IV or V
Lamp Type	CFL
Lumen Output	1200 lumens (18 watt)
Color Temperature	3000 K
Color Rendering Index	80+
Mounting Height	12'
Pole Layout	Locate poles at path intersections and traffic / pedestrian conflict areas.
Controls:	Photocell ON, dim to 50% after curfew.

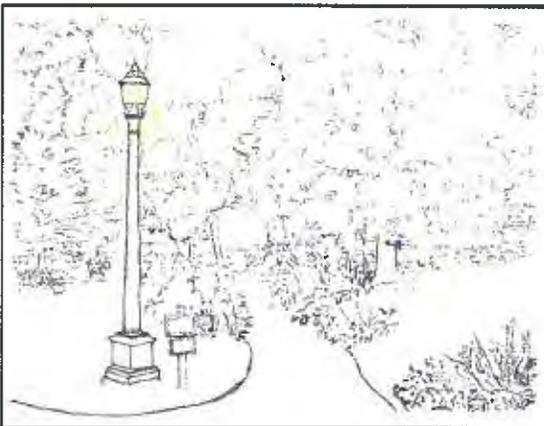
## Parks and Public Spaces

### EXISTING CONDITIONS:



Centennial Garden, currently lit by acorn style lights, is an example of an illuminated public space. The park serves as a pedestrian corridor at night as well.

### PROPOSED LIGHTING CONCEPT



These areas will use the pedestrian luminaire to match the existing acorn style lighting.

### EXAMPLE PRODUCTS



### LUMINAIRE SPECIFICATIONS

Horizontal Distribution	Type IV or V
Lamp Type	Induction or CFL
Lumen Output	1200 lumens (18 watt CFL)
Color Temperature	3000 K
Color Rendering Index	80+
Pole Height	12'
Pole Layout	Locate at path intersections.
Controls:	Photocell ON, dim to 50% after curfew.

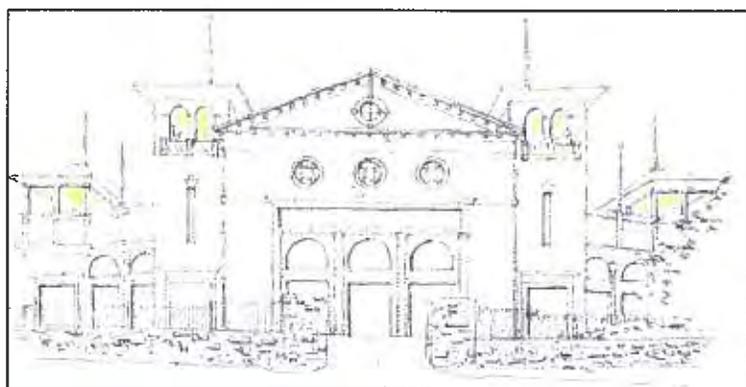
## Building Facades

### EXISTING CONDITIONS:



The existing Auditorium façade has no exterior lighting. While it would not be lit every night, its prominence to drivers coming to Boulder on Highway 36 makes it a good landmark and public icon during events.

### PROPOSED LIGHTING CONCEPT:



Like many buildings in the park, small architectural details (niches, cupolas, etc.) could be lit with minimal lighting equipment and energy use.

Lighting in niches should be mounted at the top, lighting downward. Uplighting of the cupolas must be contained within the roof overhangs to reduce light escaping into the night sky.

### EXAMPLES



### LUMINAIRE SPECIFICATIONS

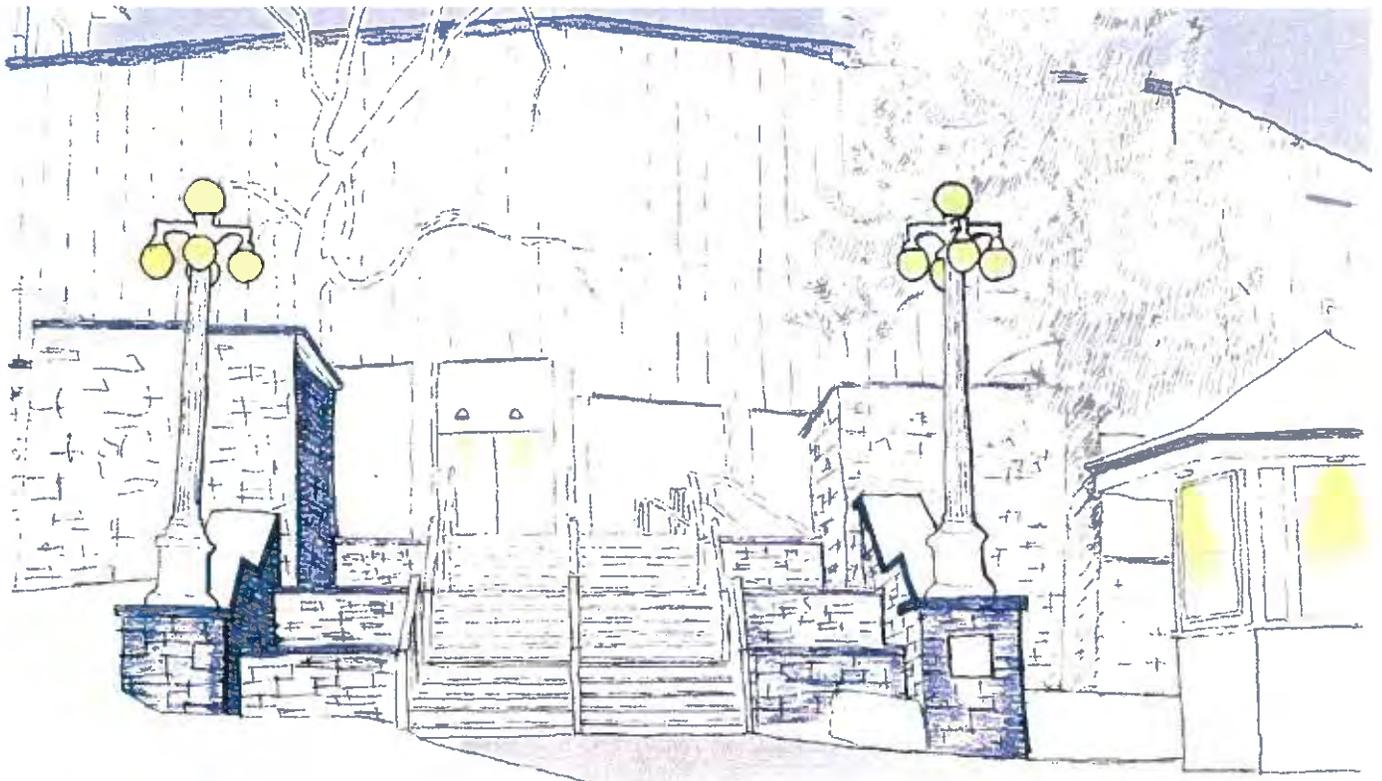
Distribution	20°-40° beam spread
Lamp Type	Linear LED
Lumen Output	400 – 900 lumens max
Color Temperature	3000 K
Color Rendering Index	80+
Controls:	Provide for the changing of overall light levels by switching different luminaire types separately. Controls should provide for a minimum of two “scenes” such as open/closed, event/no event, etc.



**Auditorium – Non-Event Evenings**



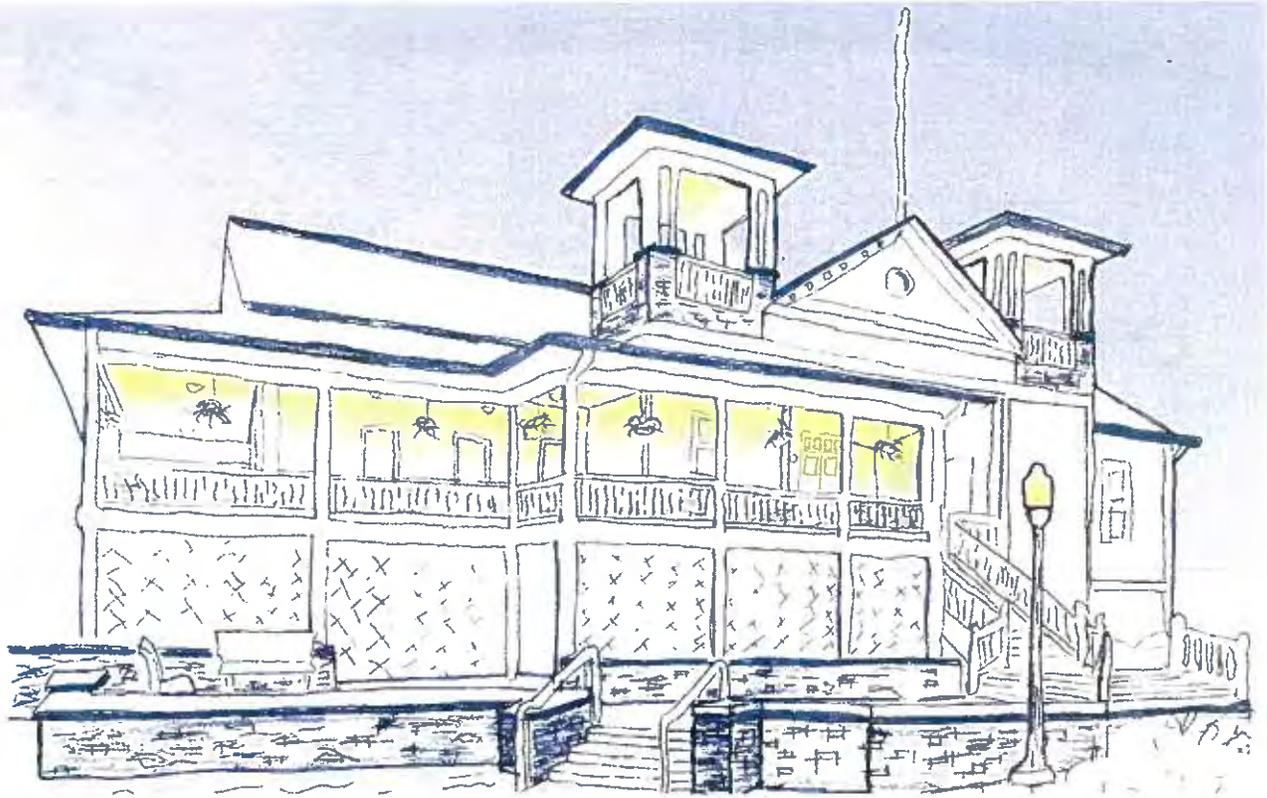
**Auditorium – Event Schedule**



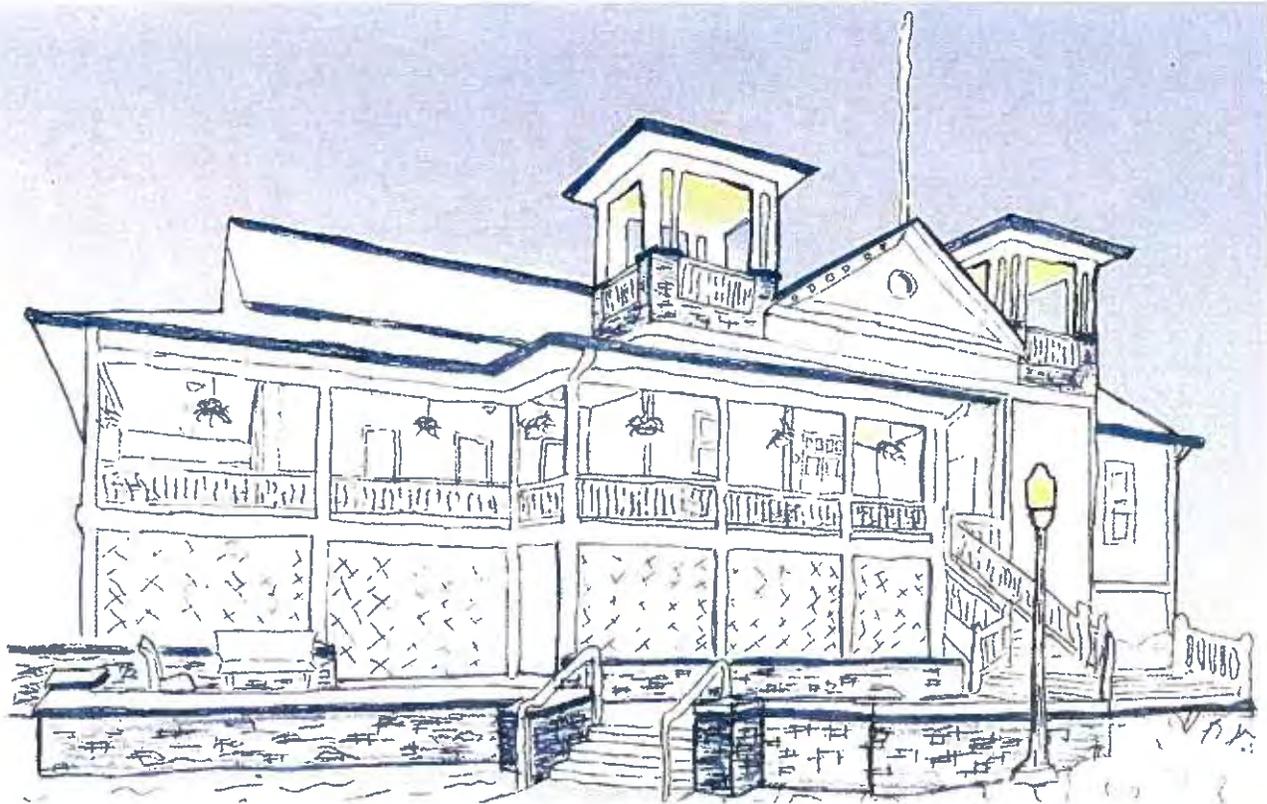
**Auditorium –Event Evenings**



**Auditorium –Event Evenings**



**Dining Hall – Open**



**Dining Hall – Closed**



**Academic Hall**



**Community House**

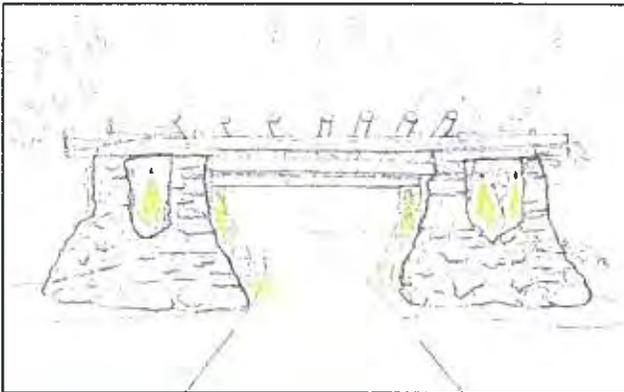
## Monuments/Structures

### EXISTING CONDITIONS:



Currently, very few structures are lighted in the Park. However, structures such as the Arbor receive a significant amount of pedestrian traffic at night and warrant additional illumination.

### PROPOSED LIGHTING CONCEPT:



Structure lighting should remain subtle, downward directed, and controllable so that it is only on during events or certain times of the evening.

In this lighting concept for the arbor, only the inside surfaces of the stone columns are illuminated. The reflected light will produce a glow inside the structure, inviting pedestrians to pass through on their way to the Auditorium or to Baseline Road.

### EXAMPLES:



### LUMINAIRE SPECIFICATIONS:

Distribution	Flood or Narrow Flood
Lamp Type	LED
Lumen Output	100 – 400 lumens
Color Temperature	3000 K
Color Rendering Index	80+
Controls:	Provide for the changing of overall light levels by switching different luminaire types separately. Controls should provide for a minimum of two "scenes" such as open/closed, event/no event, etc.

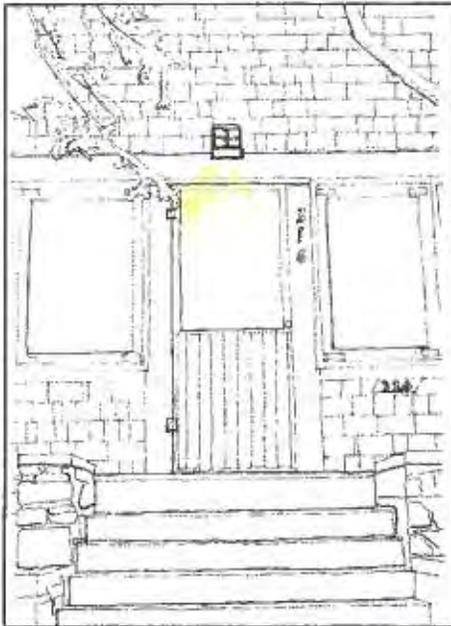
## Residential Exterior

### EXISTING CONDITIONS:



Currently, exterior lighting on and around the cabins is kept to a minimum. Most cabins have a lantern style porch light beside or above the door.

### PROPOSED LIGHTING CONCEPT



The lamps in the porch lights should be changed to compact fluorescent or LED and controlled with an automatic timer. The location of lights and building number should be paired in such a way that the number is clearly illuminated for late night arrivals and easy address identification.

For Private cottage owners:

CCA is implementing this porch lighting plan on all CCA owned cottages and CCA may offer assistance to private cottage owners in retrofitting existing switches with timers to maintain consistency throughout the park by providing a source for the timers being used and contact information for the CCA electrician. The timers being used are completely programmable and can be set to turn porch lights on from dusk until dawn.

### EXAMPLES



Lamp Type	Compact Fluorescent or LED
Lumen Output	400 – 900 lumens (max)
Color Temperature	3000 K
Color Rendering Index	80+
Mounting Height	Over door.
Controls:	Photocell ON / Timer OFF.

## Historic Globe Lighting

### EXISTING CONDITIONS:



The decorative globe fixtures located at the auditorium are dated from the early 1900's and are a character defining feature of the district.

These luminaires have been relamped with low wattage compact fluorescent lamps. This approach keeps the historic fixture while reducing glare, energy consumption, and light pollution.

### LAMP RETROFITS

Lamp Type	Compact Fluorescent
Lumen Output	900 lumens (max)
Color Temperature	3000 K
Color Rendering Index	80+
Controls:	Provide automatic time switch.

## Control Strategies

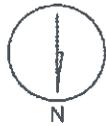
Exterior lighting control for the campus uses several different strategies:

- Automatic photocontrol: turns the light ON at sunset and OFF at dawn.
- Automatic photocontrol with time switch: turns light ON at sunset and OFF at a set time of night.
- Automatic photocontrol with time switch and manual override: turns the light ON at sunset and OFF at a set time; can be overridden to stay ON later and then reset to the regular schedule the next day.
- Partial night photocontrol: turns the light ON at sunset, dims the light to 50% at 10pm (or other selected time) and then OFF at dawn.

The control schedule for all of the lighting components is listed in the following table. The lighting varies by time of year (standard season and event nights) and by time of day (dusk to curfew and curfew to dawn).

Exterior Lighting	Standard Seasonal Schedule		Event Schedule		Control Type
	Dusk to 10 PM	10 PM to Dawn	Dusk to Post Event Time	Post Event Time to Dawn	
Primary Lighting	ON	ON at HALF POWER	ON	ON at HALF POWER	Auto
Secondary Lighting	ON	ON at HALF POWER	ON	ON at HALF POWER	Auto
Pedestrian Lighting	ON	ON at HALF POWER	ON	ON at HALF POWER	Auto
<b>Architectural Lighting</b>					
Auditorium	Tower Lighting ON	OFF	ALL ON	OFF	Auto/Manual for Event
Community House	ALL ON	OFF	ALL ON	OFF	Auto/Manual for Event
Dining Hall	Tower Lighting ON	OFF	ALL ON	OFF	Auto/Manual for Event
Academic Hall	ALL ON	Entry Lighting ON	ALL ON	Entry Lighting ON	Auto/Manual for Event
Ranger Cottage	ALL ON	OFF	ALL ON	OFF	Auto
<b>Structure Lighting</b>					
Kiosks	OFF	OFF	ON	OFF	Auto/Manual for Event
Arbor	ON	OFF	ON	OFF	Auto/Manual for Event
Trolley Stop	ON	OFF	ON	OFF	Auto/Manual for Event
Picnic Shelter	OFF	OFF	ON	OFF	Auto/Manual for Event
<b>Sign Lighting</b>					
Baseline Entry	ON	ON	ON	ON	Auto
Trolley Stop	ON	OFF	ON	OFF	Auto/Manual for Event

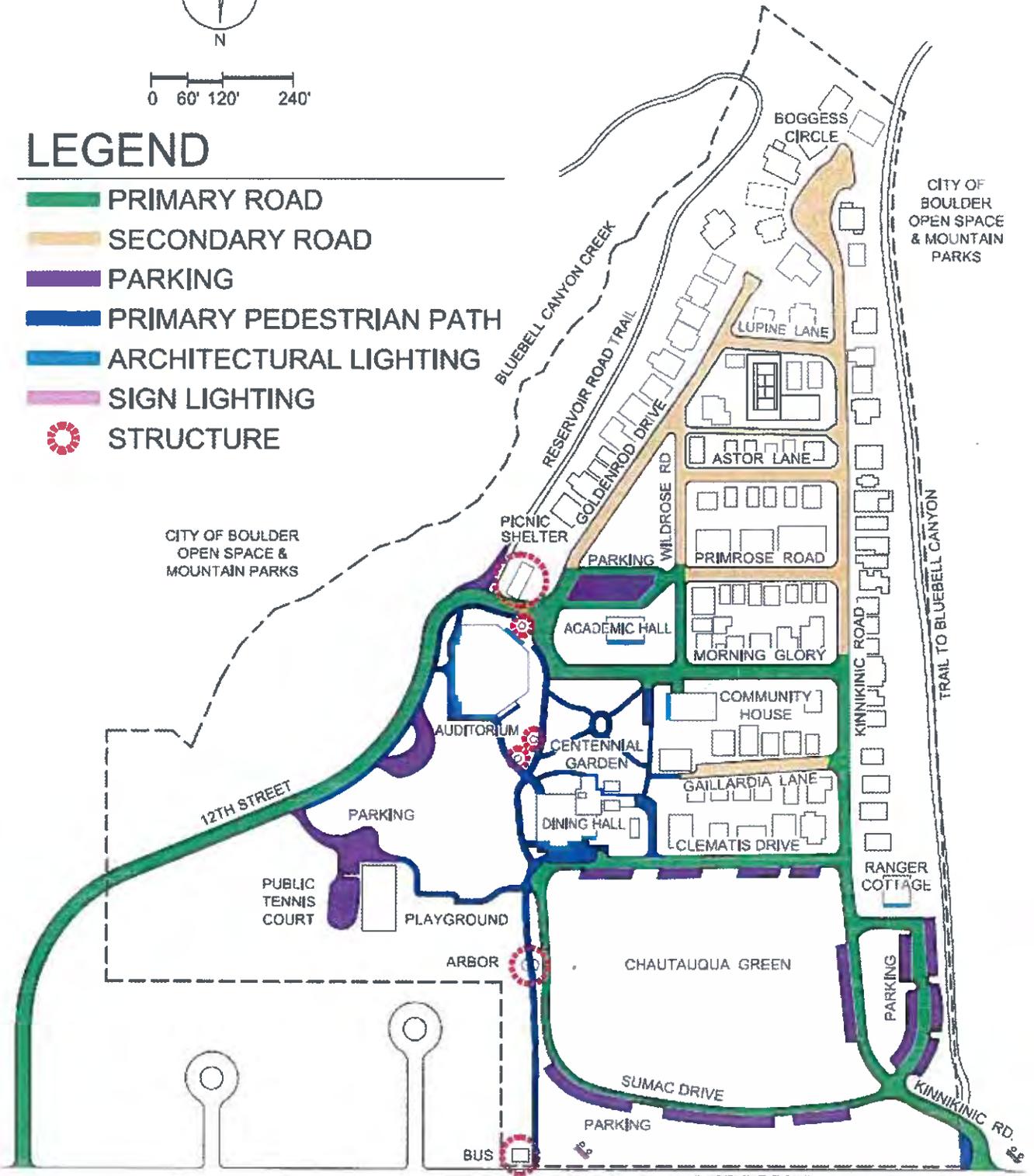
# Maps and Drawings



0 60' 120' 240'

## LEGEND

- PRIMARY ROAD
- SECONDARY ROAD
- PARKING
- PRIMARY PEDESTRIAN PATH
- ARCHITECTURAL LIGHTING
- SIGN LIGHTING
- STRUCTURE



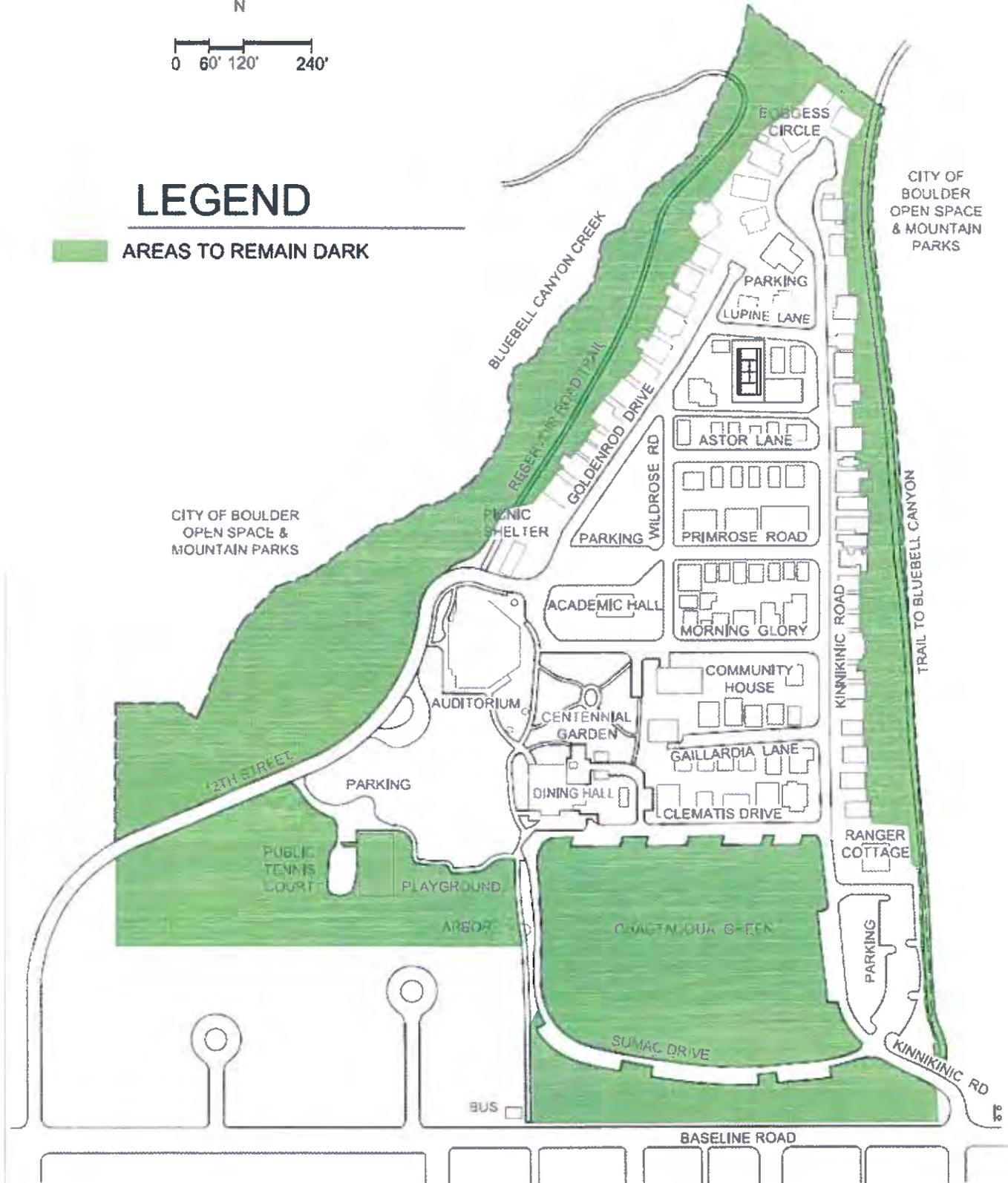
## AREA CLASSIFICATIONS



0 60' 120' 240'

# LEGEND

 AREAS TO REMAIN DARK



CITY OF BOULDER  
OPEN SPACE &  
MOUNTAIN PARKS

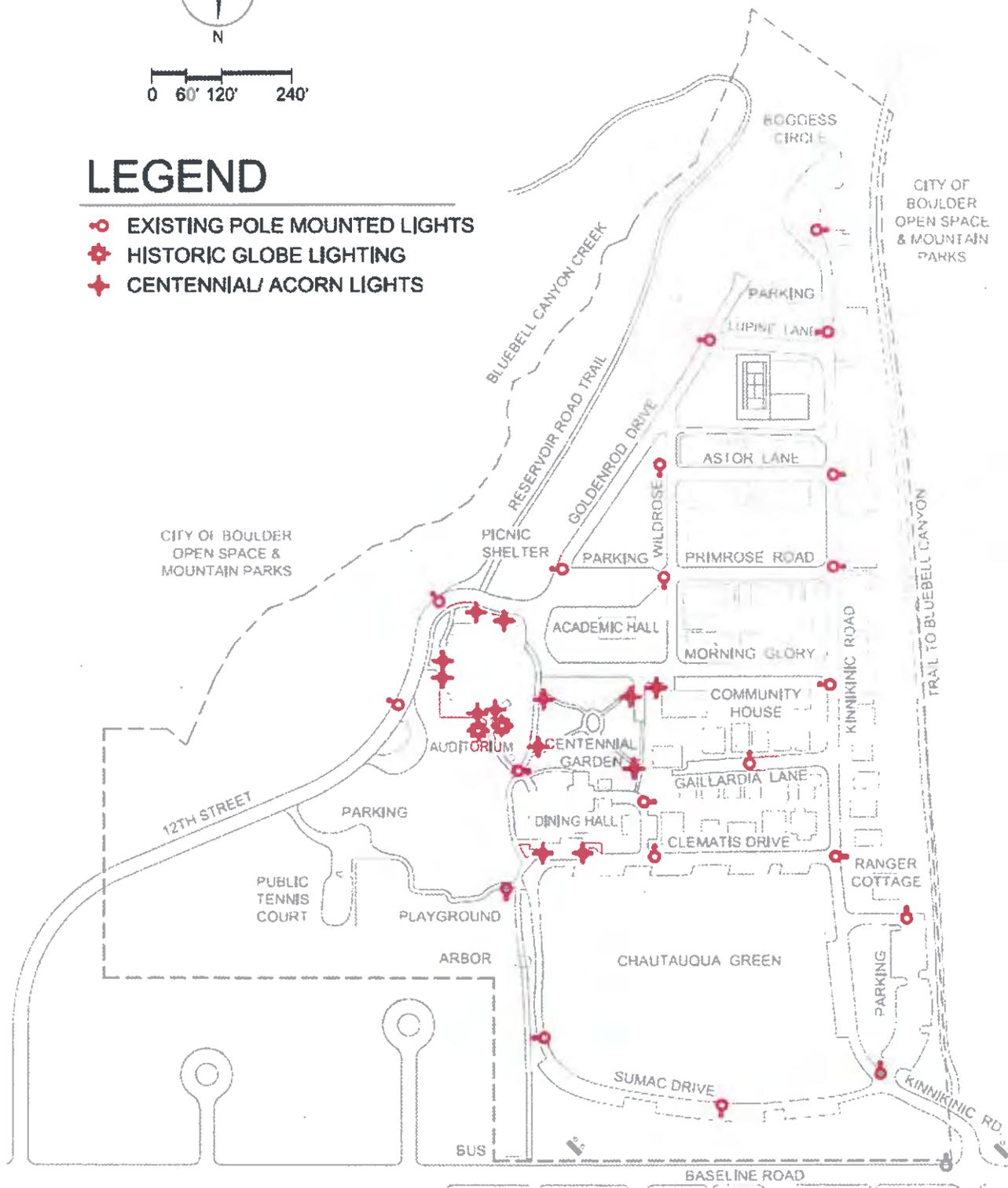
CITY OF BOULDER  
OPEN SPACE &  
MOUNTAIN PARKS



0 60' 120' 240'

# LEGEND

-  EXISTING POLE MOUNTED LIGHTS
-  HISTORIC GLOBE LIGHTING
-  CENTENNIAL/ ACORN LIGHTS



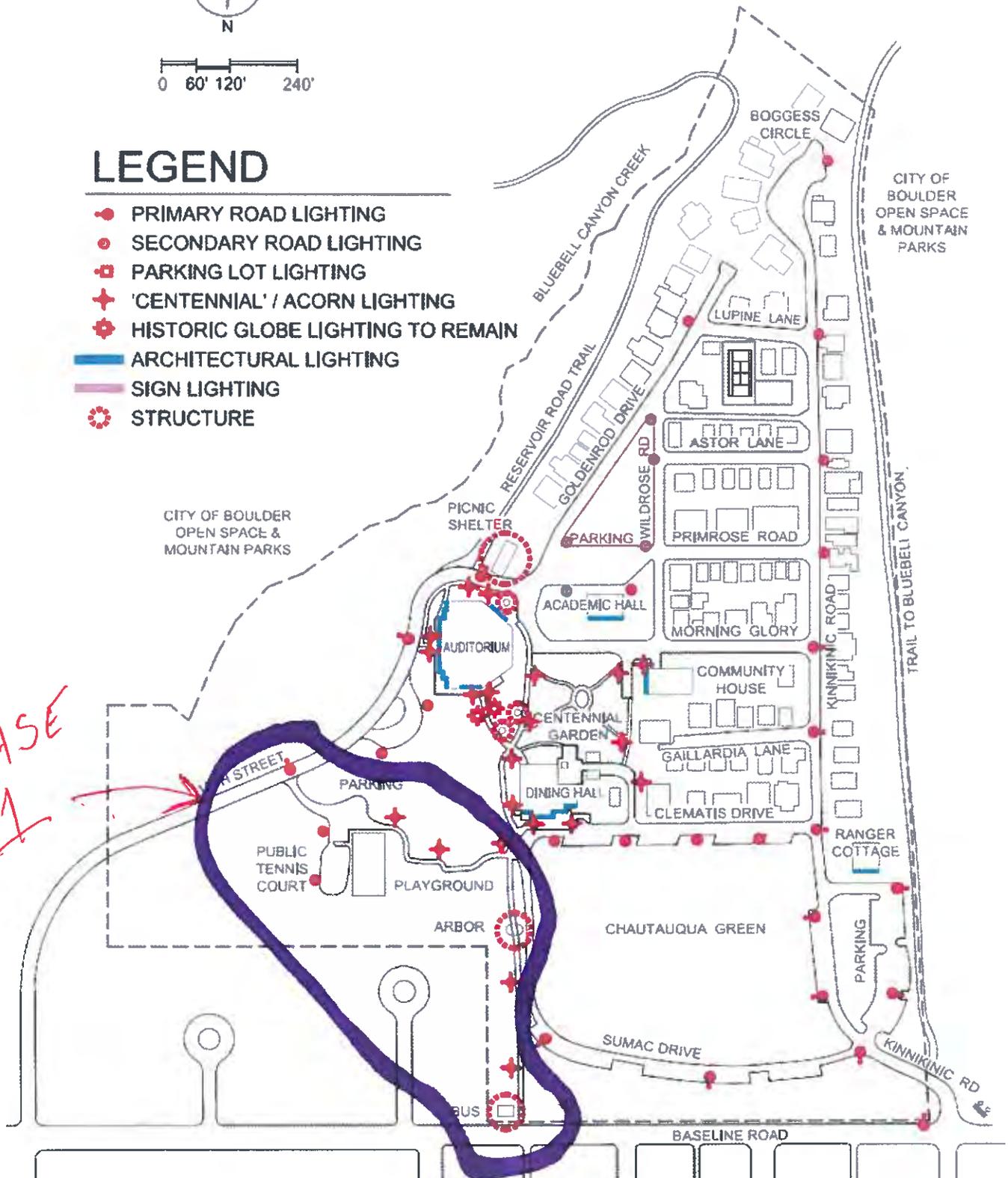
## EXISTING POLE MOUNTED LIGHTING LOCATIONS (APPROX.)



0 60' 120' 240'

# LEGEND

-  PRIMARY ROAD LIGHTING
-  SECONDARY ROAD LIGHTING
-  PARKING LOT LIGHTING
-  'CENTENNIAL' / ACORN LIGHTING
-  HISTORIC GLOBE LIGHTING TO REMAIN
-  ARCHITECTURAL LIGHTING
-  SIGN LIGHTING
-  STRUCTURE



*PHASE I*

# LIGHTING MASTER PLAN



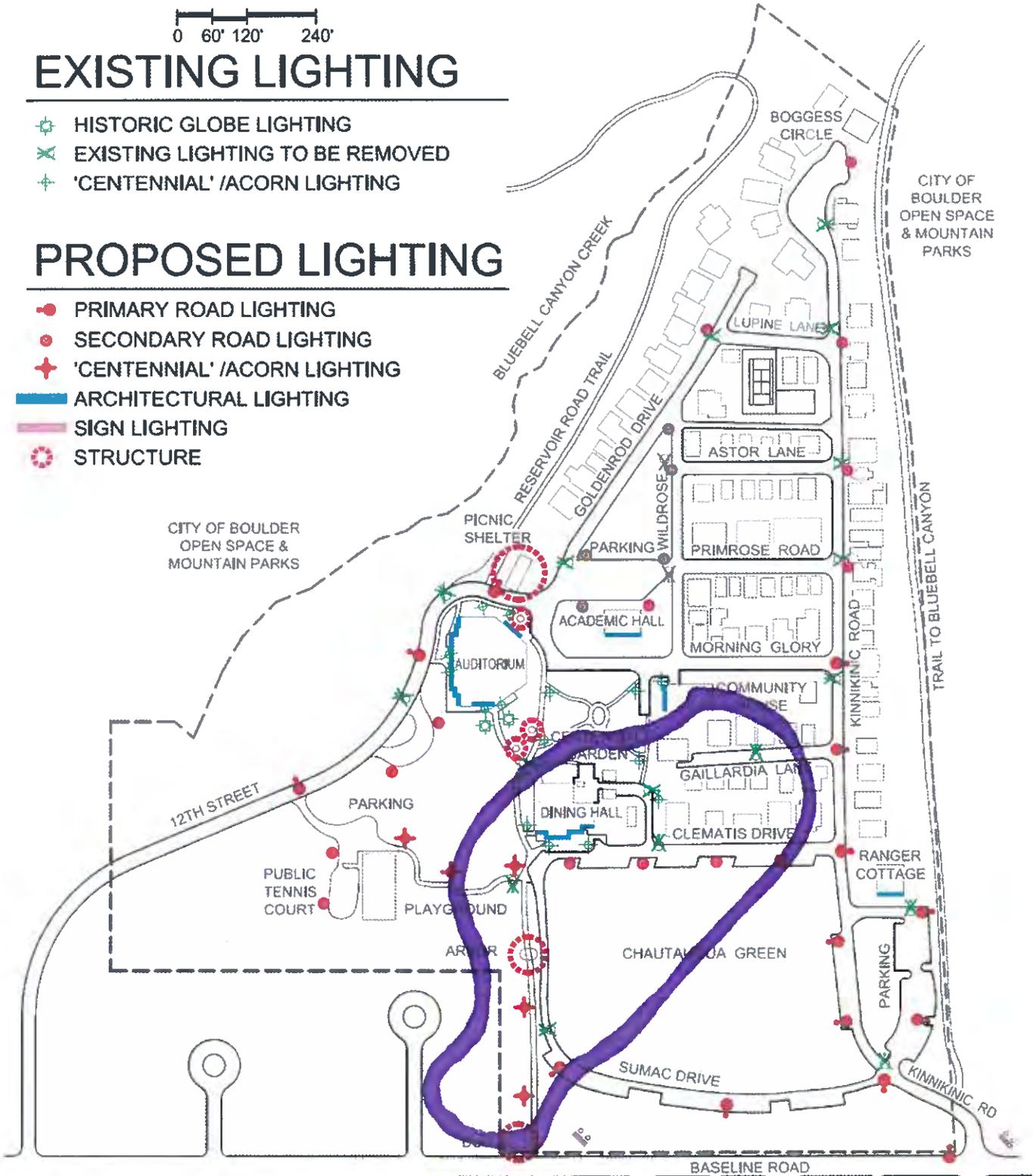
0 60' 120' 240'

# EXISTING LIGHTING

-  HISTORIC GLOBE LIGHTING
-  EXISTING LIGHTING TO BE REMOVED
-  'CENTENNIAL' /ACORN LIGHTING

# PROPOSED LIGHTING

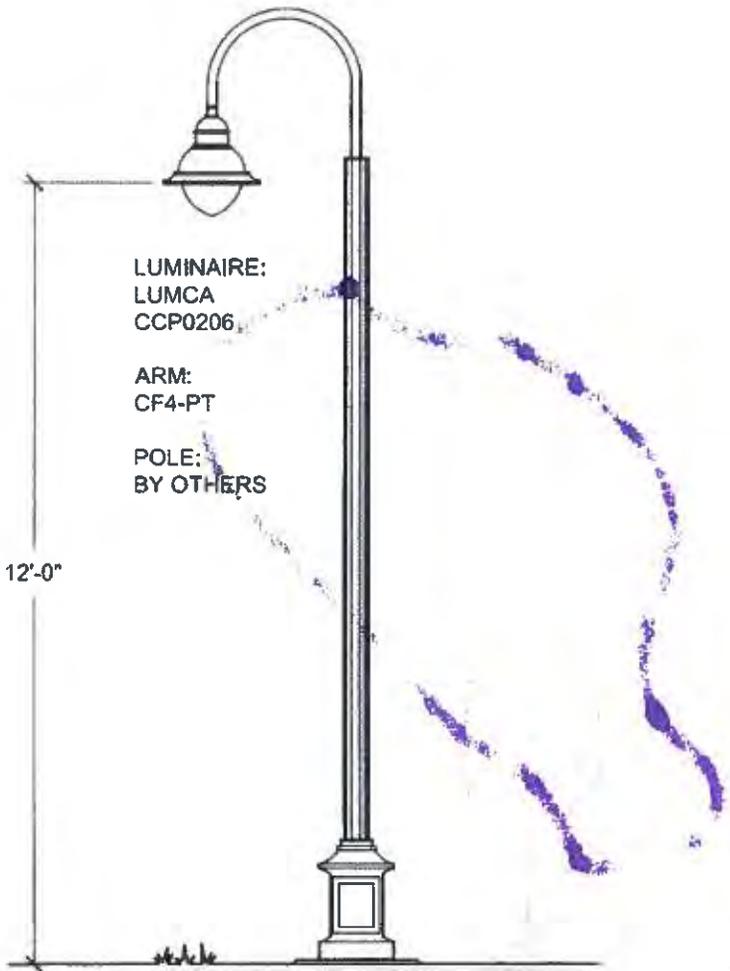
-  PRIMARY ROAD LIGHTING
-  SECONDARY ROAD LIGHTING
-  'CENTENNIAL' /ACORN LIGHTING
-  ARCHITECTURAL LIGHTING
-  SIGN LIGHTING
-  STRUCTURE



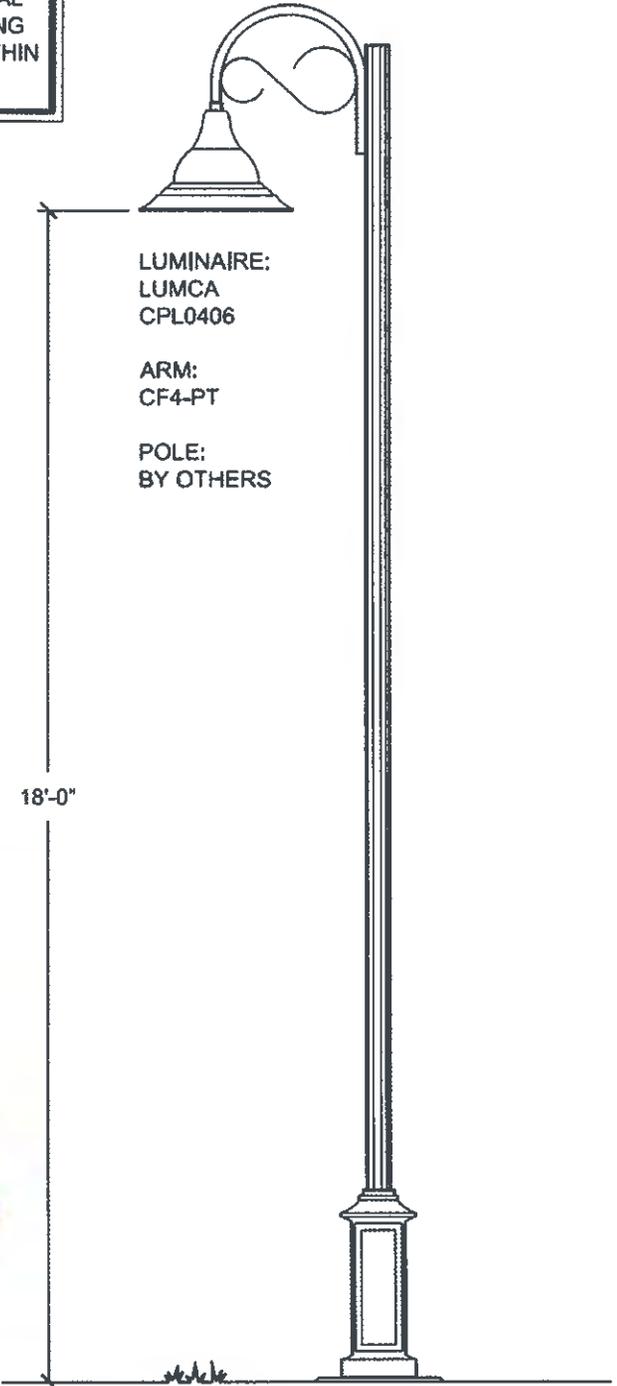
## EXISTING & NEW PROPOSED LOCATIONS (APPROX.)

# Appendix A

NOTE: TEARDROP SHAPED GLOBES INTRODUCE ADDITIONAL UPLIGHT AND DO NOT MEET THE CITY OF BOULDER LIGHTING ORDINANCE. BECAUSE THE LAMP IS CONCEALED FULLY WITHIN THE OPAQUE SHROUD, A VARIANCE MAY BE POSSIBLE.



SECONDARY



PRIMARY

## CHAUTAUQUA STREET LUMINAIRES

## Appendix B

In 1998, Clanton & Associates completed a lighting design for the Centennial Garden. At that time, other recommendations were made for the auditorium architectural lighting and pedestrian lighting north of the arbor and near the playground. This appendix contains the documentation for those recommendations. The concepts and designs shown in the masterplan continue the recommendations made at that time.



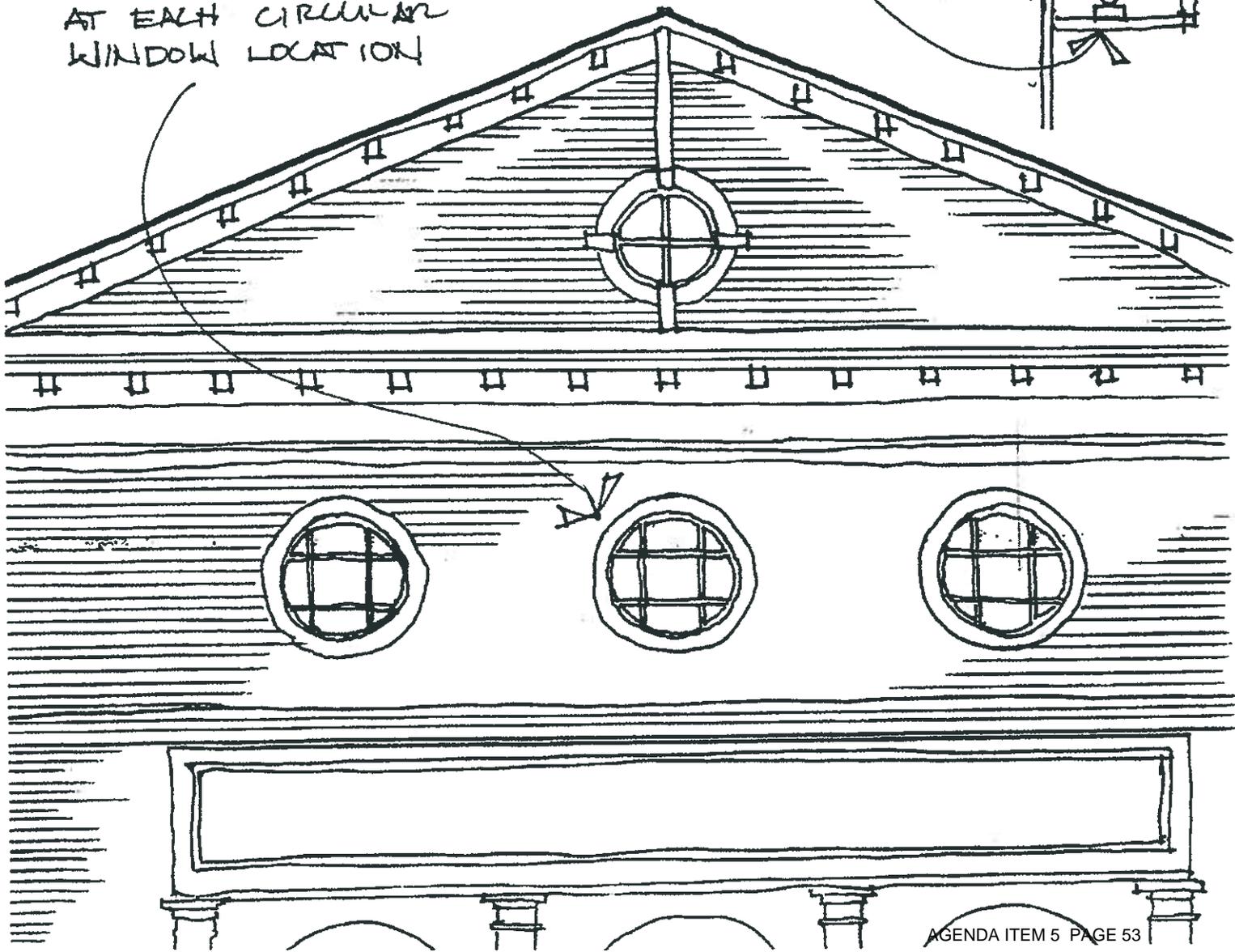
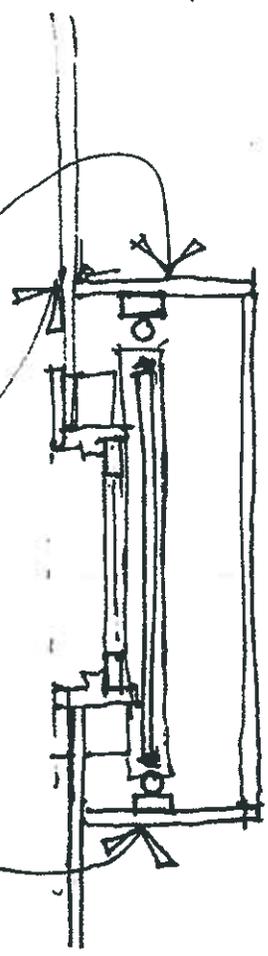
# "FALSE" LIGHTED WINDOW

BUILD A PLYWOOD BOX BEHIND EACH WINDOW

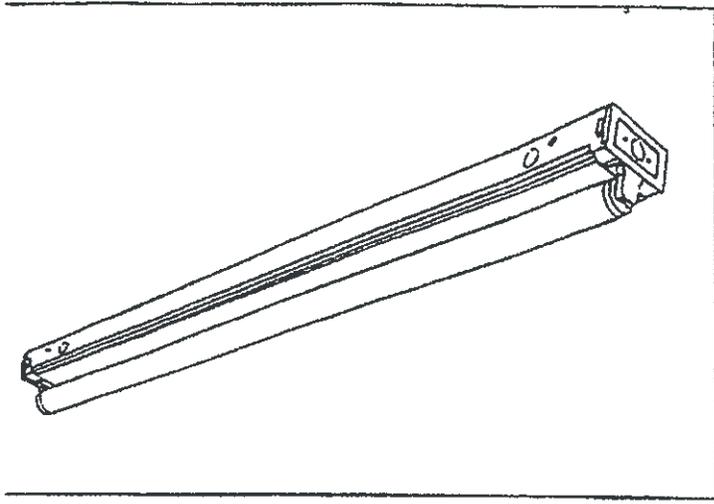
INSTALL A HINGE TO PERMIT LAMP REPLACEMENT

INSTALL FOUR STRIPLIGHTS IN EACH BOX

INSTALL LIGHT BOX AT EACH CIRCULAR WINDOW LOCATION



# CS2-1, CS3-1 CS4-1, CS8-1 STRAIGHTLINER CHANNEL ONE LAMP TS & RS



Type: \_\_\_\_\_  
Job Description: \_\_\_\_\_

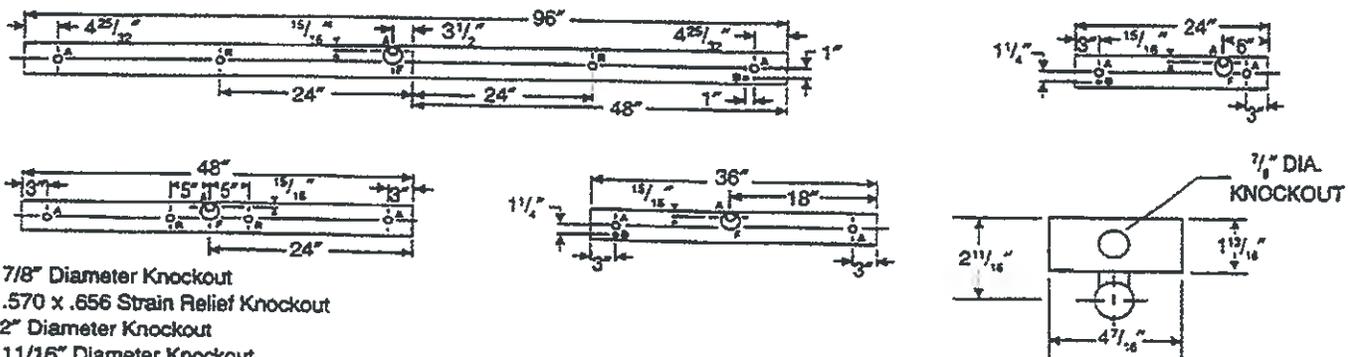
### FEATURES:

- Available 2', 3', 4' or 8'.
- Heavy die formed steel channel.
- Rotary lock lampholders for positive lamp contact.
- Channel ends double as joiners.
- Individual or row mounting. Surface or suspended.
- Ballast covers on 4' and 8' units are secured with 1/4-turn fasteners.

### SPECIFICATIONS:

- Ballasts**  
Energy efficient ballasts are thermally protected, automatic resetting, Class P, high power factor, CBM, sound rated A, unless otherwise specified. 20 watt ballasts are trigger start, low power factor, Class P. All are U.L. listed.
- Housing**  
Die formed steel with heat sink embossments for cooler running ballasts. Socket saddles are factory installed.
- Finish**  
All parts pre-painted with high gloss baked white enamel, minimum reflectance 86%, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.
- Labels**  
All fixtures carry the U.L. label. 2', 3' and 4' units are listed for use on combustible low density, cellulose fiberboard ceilings. (CSA approval available. Use Suffix "CSA"). (HPF only).

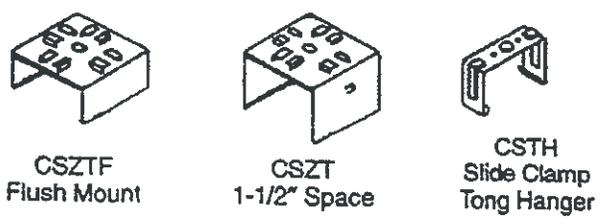
### Cross Section



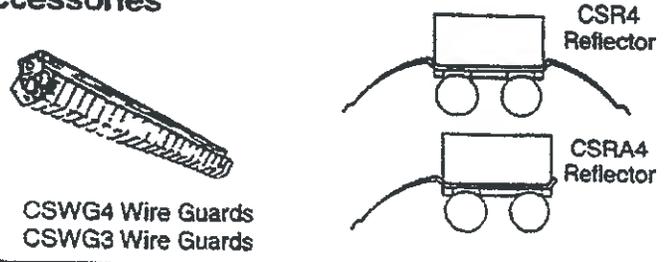
- A - 7/8" Diameter Knockout
- B - .570 x .656 Strain Relief Knockout
- F - 2" Diameter Knockout
- R - 1 1/16" Diameter Knockout

Note 1: All Non-Shielded (strip) fixtures - Deduct 1/16" from overall dimension for continuous row mounting. Dimensions shown include end panel.

### Mounting Data



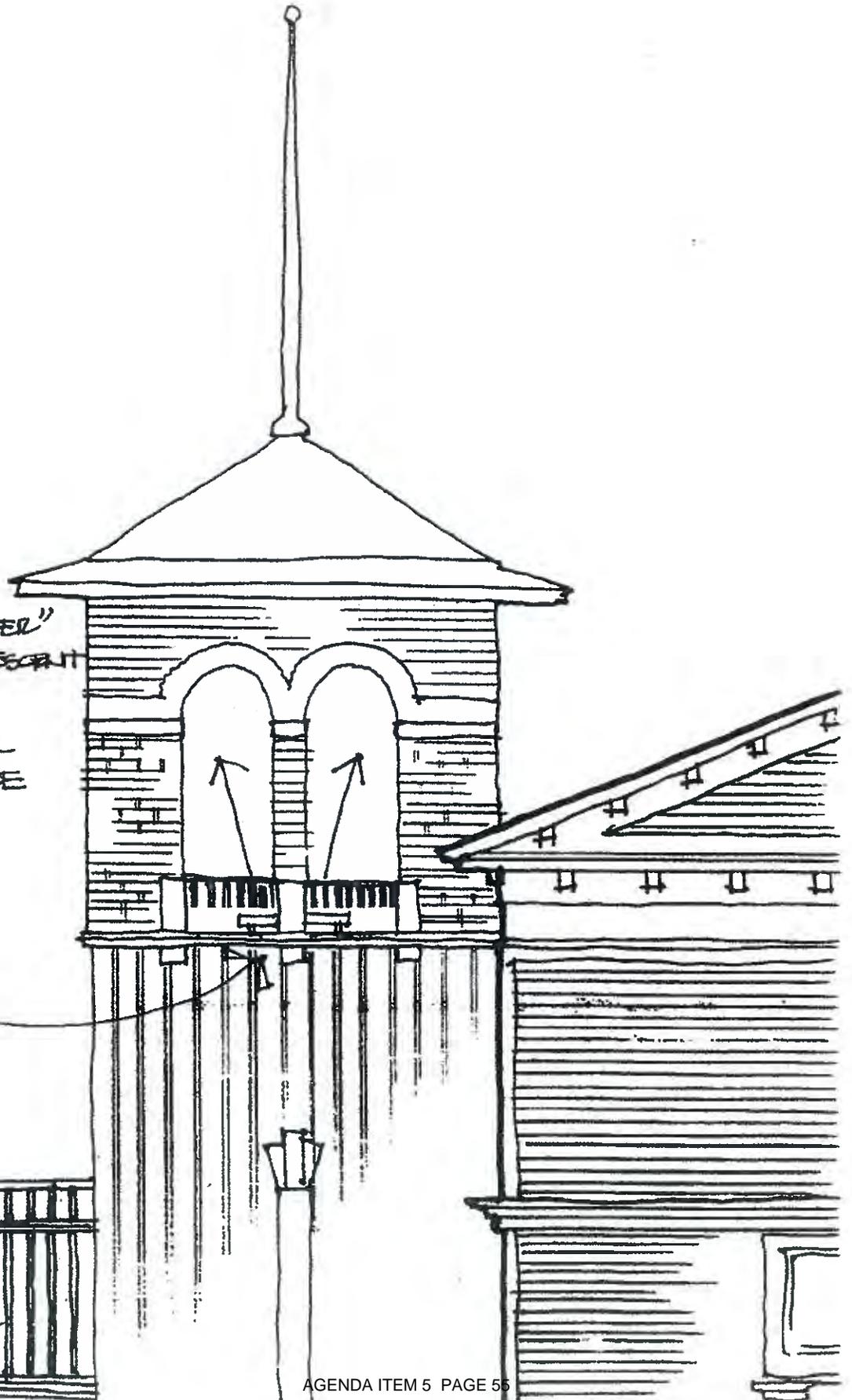
### Accessories



# UPLIGHTING FOR COPULA

CEI . MM . 3.3.98

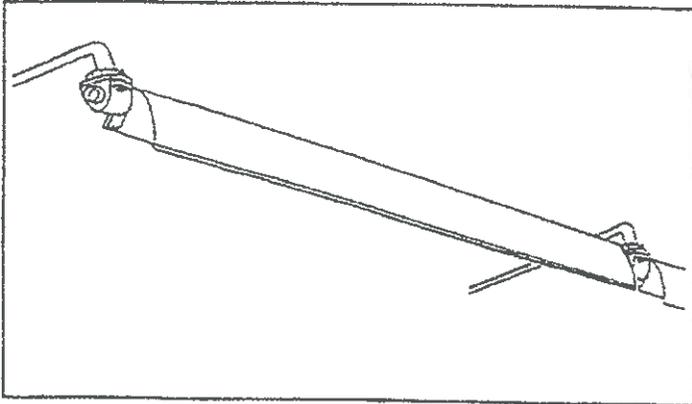
INSTALL "SIGNLIGHTER"  
ADJUSTABLE FLUORESCENT  
INSIDE RAILING.  
CONCEAL AS WELL  
AS POSSIBLE. USE  
ONE FOR EACH  
OPEN FACADE.



# Outdoor Sign and Poster Luminaire

**SLA**

**Asymmetric Distribution  
End Arm Mount**



Type: \_\_\_\_\_

Job Description: \_\_\_\_\_

## SPECIFICATIONS:

### Construction

Socket housings are constructed of die-cast aluminum and permit easy access to the socket and ample splicing room. Full socket housings on unit must be used. Neoprene sleeves around sockets provide weathertight enclosure. Reflector is constructed of extruded aluminum and is optically designed to provide maximum illumination. Reflector ends are precision die cast with a keyed shoulder which securely locks the reflector to the socket housing. A simple nut adjustment gives the reflector 360° aiming. One inch diameter holes are provided at each end of the reflector for drainage.

### Shielding

A "DR" acrylic shield with outstanding impact resistance is recommended for areas with temperatures 35°F or lower. The shield is optional and protects the lamp for wind, ensuring proper lamp operating temperature. The shield must be specified as shown in the ordering guide.

### Finish

Exterior finish is anodized diffuse. Optional painted colors are available. Internal reflector is high reflectance baked white enamel.

### Installation

The SLA may be mounted singly or in continuous rows. See back of this page for a typical layout.

### Labels

The SLA is U.L. approved as being raintight or weatherproof in normal outdoor use. U.L. approved for uplighting or downlighting and bears appropriate U.L. labels.

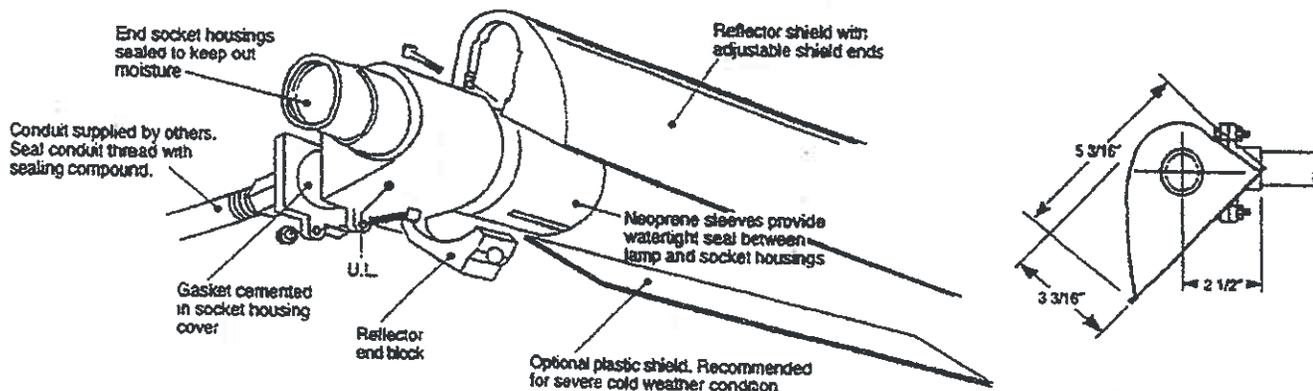
## APPLICATIONS:

- Wet location sign light can be mounted in any direction and still operate properly and retain its wet location approval.
- Asymmetric reflector provides outstanding distribution for a crisp clean appearance.
- Choice of lamps allows maximum flexibility for any application.
- Choice of three ballast types for any application.
- U.L. approval for uplighting even in outdoor applications.

## Ballast & Electrical

The SLA may be ordered with or without ballasts. Fixtures less ballasts may be wired with any of a wide choice of ballast types available including the plastic sign types. A choice of three outdoor ballasts are available from the factory. Other ballasts may be ordered for indoor use. Ballasts must be remote mounted no longer than 15' from the socket. For electronic ballast lead lengths, consult factory. Units are wired with leads in socket housings only. All conduit, condulets and extension wiring are furnished by the installing contractor.

## General Assembly



Socket housings are threaded for standard 3/4" rigid conduit.



# FORUM

PRO-10 (430 MA, T-8)  
 PRO-30 (800 MA, T-12)  
 PRO-40 (1500 MA, T-12)

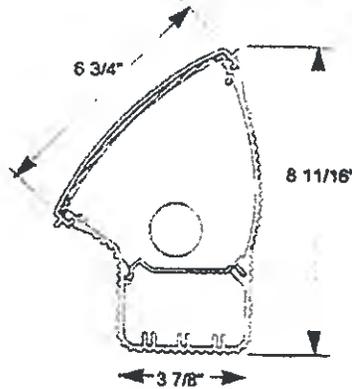
## PROJECTOR (Outdoor, Wet Location)

### FORUM PROJECTOR SERIES

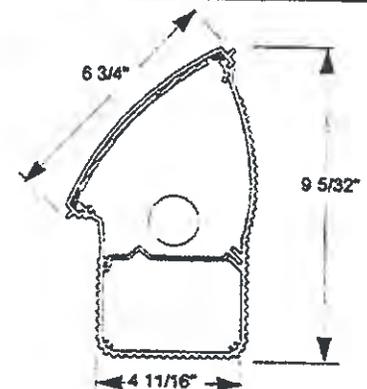
The PRO is a heavy duty, wet location, integral ballasted, floodlight with a high degree of beam control. The optics are designed to evenly illuminate vertical or horizontal surfaces.

**Applications:** For illuminating sides of buildings, signs, columns, parapets and facia.

**Mounting:** The PRO can be ground, parapet, or ledge mounted as close as one foot from the surface to be illuminated. The mounting brackets permit 359 degree rotation for up or down orientation and end-to-end mounting for an uninterrupted light pattern.



PRO-10



PRO-30, PRO-40

### HOW TO SPECIFY

WET LOCATION

LIGHT LENGTH  
4', 6' or 8'

BRIGHT DIP ANODIZED (STANDARD)  
CUSTOM PAINTED FINISHES AVAILABLE

## PRO - 10 X L - 120 - FINISH

10 = 430 MA  
 30 = 800 MA  
 40 = 1500 MA

VOLTAGE  
120 V or 277 V

### SPECIFICATION:

**Housing:** Shall be .125 thick extruded aluminum 6063-T5 alloy with external surface ribs for heat dissipation to prolong ballast life. Sockets shall be pre-wired and factory installed. The ends shall be .250 thick cast aluminum mechanically attached and gasketed for water tightness. Standard finish shall be bright dip anodized.

**Lens:** Shall be extruded acrylic with 100% DR for maximum toughness. Lens shall be gasketed along all edges for water tight seal.

**Reflector:** Reflector shall be die formed 22 gauge aluminum with 86% reflectivity

**Mounting Brackets:** Shall be fabricated from 12 gauge CRS with provisions for 359 degree rotation.

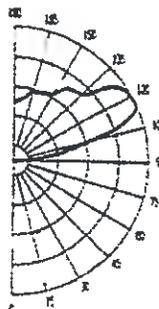
**Ballast:** Ballast shall be CBM/ETL certified Class P.

**Product Listing:** The fixture shall be listed with I.L.

### CANDLEPOWER SUMMARY

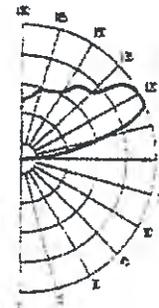
CATALOG NO.: PRO-10  
 LAMP TYPE: F40T12WW/RS  
 LUMENS: 3200  
 FIXTURE EFFICIENCY: 67%  
 LUMINAIRE INPUT WATTS: 51  
 TEST REPORT NO.: B.A.L. 5822.0

CATALOG NO.: PRO-30  
 LAMP TYPE: F48T12/WW/HO  
 LUMENS: 4200  
 FIXTURE EFFICIENCY: 67%  
 LUMINAIRE INPUT WATTS: 84  
 TEST REPORT NO.: B.A.L. 5822.MOD



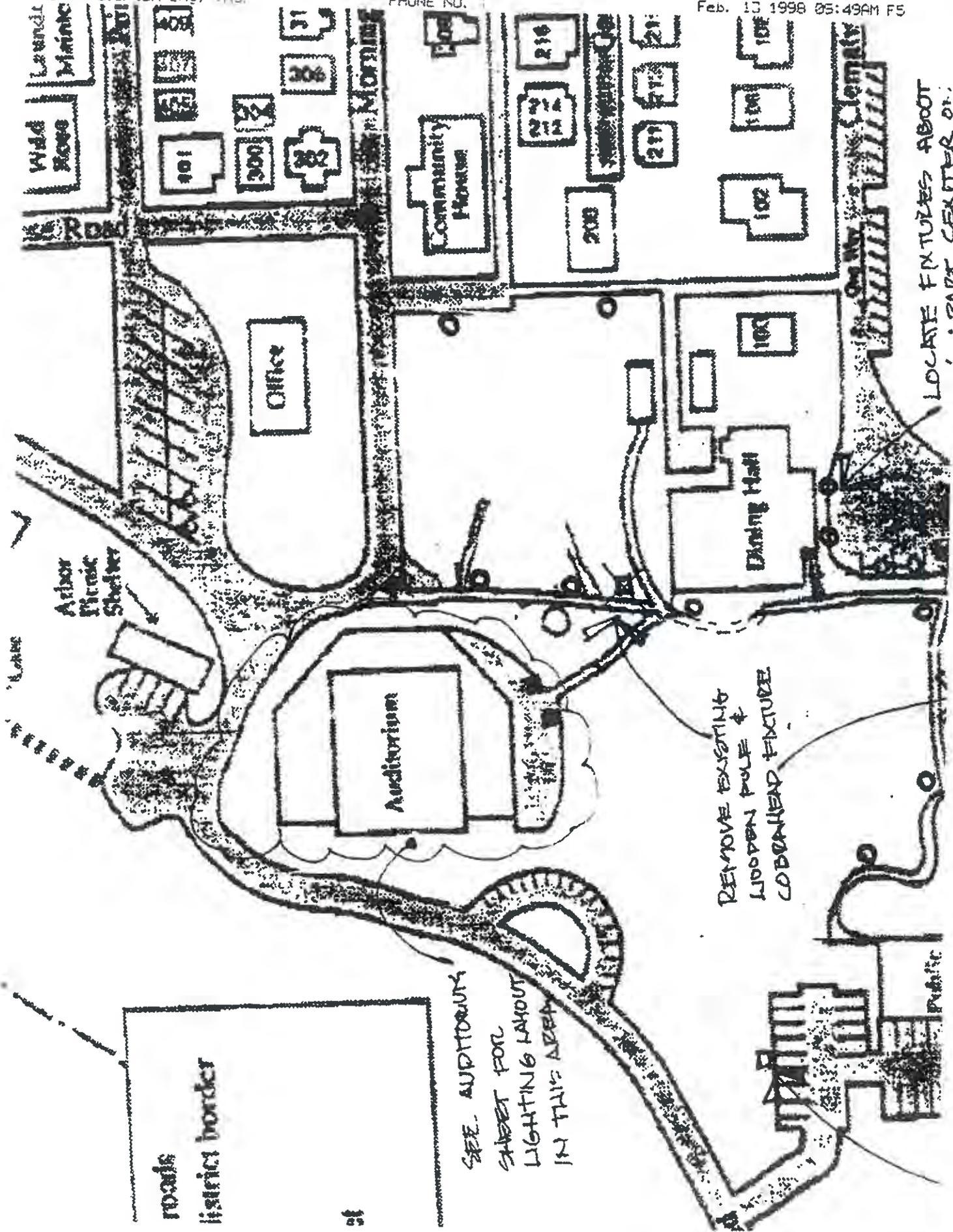
#### ANGLE CANDELA LUMENS

180	562	
175	585	53
165	702	155
155	732	208
145	867	288
135	931	277
125	1257	355
115	1286	395
105	778	307
95	231	95
90	91	
85	42	16
75	37	11
65	25	6
55	15	3
45	4	0
35	0	0
25	0	0
15	0	0
5	0	0
0	0	0



#### ANGLE CANDELA LUMENS

180	736	
175	778	53
165	920	155
155	959	208
145	1136	268
135	1220	277
125	1647	355
115	1688	395
105	1019	307
95	303	95
90	119	
85	55	16
75	48	11
65	33	6
55	20	3
45	5	0
35	0	0
25	0	0
15	0	0
5	0	0
0	0	0



roads district border

SEE AUDITORIUM SHEET FOR LIGHTING LAYOUT IN THIS AREA

REMOVE EXISTING LIPOON POLE & COBBAHEAD FIXTURE

LOCATE FIXTURES ABOUT 1' FROM CENTER OF



**Colorado Chautauqua National Historic Landmark  
Master Signage Plan: Wayfinding and Interpretive**

February 27, 2009

Presented by:  
ECOS Communications, Inc.  
*for*  
Colorado Chautauqua Association

**Background** ..... 1

**Wayfinding Signs**

- Overview ..... 2
- Color Palette ..... 3
- Fonts ..... 4
- Sign Types ..... 5
- G: Gateway ..... 6
- P: Pedestrian Directional ..... 8
- V: Vehicular Directional ..... 11
- A: Identity ..... 14
- B: Area Identity ..... 16
- D: Directory Map ..... 18
- C: Changeable ..... 20
- Installation ..... 22

**Interpretive Signs**

- Overview ..... 23
- Color Palette ..... 24
- Fonts ..... 25
- Photography ..... 27
- Illustration ..... 28
- Flourishes, Rules, and Dingbats ..... 29
- Interpretive Writing ..... 30
- Sign Types ..... 31
- E1-E4: Slopers ..... 32
- E5-E6: Wall ..... 39
- E7, E8, E9, E10: Tour Locators ..... 44
- Installation ..... 48

Locator Maps ..... 49

**Purpose**

This document serves as a set of implementation instructions for a new system of wayfinding and interpretive signs at the Colorado Chautauqua National Historic Landmark. The recommendations and specifications herein comply with the recently amended (February 2009) Chautauqua Park Historic District Design Guidelines, originally adopted by the City of Boulder's Landmarks Preservation Advisory Board in June 1987.

**Context**

In 2007, the Colorado Chautauqua Association (CCA) underwent a site-wide interpretive planning process using outside consulting. The resulting document, the Interpretive Services Plan for Chautauqua, sets forth detailed recommendations for a set of wayfinding signs and a set of interpretive signs to better orient and educate visitors about the site: navigation, offerings, and historic significance.

In addition, CCA applied for and received National Historic Landmark status for the Colorado Chautauqua site in 2006. The heritage and preservation enthusiasts anticipated to visit Chautauqua will expect a level of interpretation on par with other NHL sites. This expected increase in visitors specifically interested in Chautauqua's historical story brings another strong argument to the need for high quality interpretive signage (available to visitors without need for personal interpretive staff).

**Scope**

The Design Guidelines presented herein shall apply to all new signage installed on the 40 acres designated a National Historic Landmark. While all of this property is owned by the City of Boulder, its management is split among three entities: CCA and two City of Boulder departments: Parks and Recreation, and Open Space and Mountain Parks. All signage occurring on property within the National Historic Landmark boundary shall be subject to the guidelines herein, regardless of management status.

*Note: City of Boulder regulatory signage related to parking, speed limits, and all city code is not subject to these Design Guidelines.*

*CCA is an independent non-profit entity that owns 63 historic buildings on the site (cottages, lodges, and the Community House) and manages 26 acres at the site, including the entire historic core and the site's most important public structures: the Auditorium, the Dining Hall, and the Academic Hall. The mission of the Colorado Chautauqua Association is to preserve, perpetuate, and improve the site and spirit of the historic Chautauqua by enhancing its community and values through cultural, educational, social and recreational experiences.*



### Introduction

Visitors to the Colorado Chautauqua National Historic Landmark and associated park and trail system need to be properly directed around the site and educated about its offerings. The system of strategically placed directional, identity, and directory signage proposed in this plan will serve this purpose, and greatly improve the visitor experience.

The intact historic nature of the site demands that great care be taken in the design, materials, size, messaging, and placement of signs. The Chautauqua motto of “Voluntary Simplicity” governs each decision, even as care is taken to match the style of the period of significance (1898-1930) where it may show ornamentation or typical graphic elements.

Colors and type styles used throughout the wayfinding system draw from the site’s primary public buildings and what has become the Chautauqua style over the past several decades.

Materials are historically appropriate, and consist primarily of painted or stained wood for all posts and sign frames. Design elements are few and simple, making the signs relatively easy and inexpensive to produce.

### Design Challenges

The scale of Chautauqua has stayed intimate over time, even as American vehicles, municipal codes, and habits call for larger roadways and greater caution. The goal with this wayfinding system is to strike a balance between making signage large enough to be legible and serve its purpose, while keeping sign panel sizes and heights to a minimum. This balance is attempted again where it comes to color: keep the signage consistent with the site’s neutral palette while giving enough visual interest to call visitors’ attention to directions and information.

*Note: Requirements of the Americans with Disabilities Act have been considered in specifications for the signs and graphics herein.*

## Wayfinding: Color Palette

Colors selected for wayfinding signage were derived from those found in existing architecture and are specified using Kwal paint formulas.

Lettering for signage is specified as a matte black vinyl from Avery Graphics.

Sample	Kwal Paint Match	Pantone Closest Match
	CL 2933M - Salsify	413
	CL 2725D - Dissent	465
	8673M - Tavern Taupe	7535
	CW055W - Honeywind	413
	7735D - Topaz	7405
	8644M - Seal Beach	7538
	Black	100% Process
	CW057W - White Solitude	N/A

## Wayfinding: Fonts

The Windsor font is currently used on all Chautauqua Park signage. During an exploration of period typography, it was determined that Windsor is relevant to the character and styles used at the turn of the century.

1. Full Windsor display
2. Directional Signs  
Initial Caps
3. Identity Signs  
Large/Small Caps
4. Large/Small Caps Proportion  
Small caps are sized at 77% of their larger counterparts.

1 **ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**

2 **Community House**

3 **COMMUNITY HOUSE**

4 **HOUSE**



## Wayfinding: Sign Types

Wayfinding signs on the site fall into two primary categories: Directionals and Identities. Directory maps and other programmatic signage is considered informational.

Directional signs may be intended primarily to be viewed either by visitors traveling along roadways (Vehicular Directionals) or by visitors traveling along footpaths (Pedestrian Directionals).

### Type G - Gateways

Occur at primary property entrances.

### Types P1 and P2 - Pedestrian Directionals

Provide directional information to pedestrian traffic. Scaled down versions of V (Vehicular Directional) signs, located on or adjacent to pedestrian pathways.

### Types V1 and V2 - Vehicular Directionals

Provide directional information to vehicular traffic. Their secondary function is to provide directional information to pedestrian traffic. For placement on roadways on the right side of the driver, before a decision point.

### Types A1 and A2 - Building Identities

Identify buildings. These are free-standing, single post ground signs positioned parallel to building, scaled to be viewed by vehicles and pedestrians.

### Types B1 and B2 - Area Identities

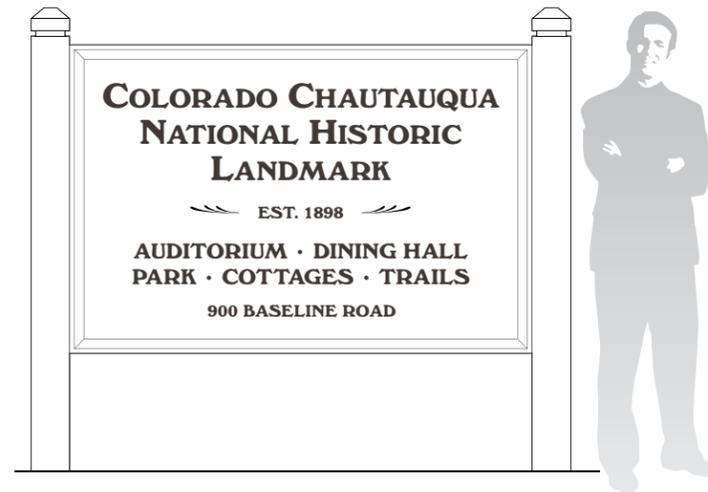
Identify open spaces and features of interest (such as "Chautauqua Park"). These are free-standing, double post ground signs positioned parallel to the road, scaled to be viewed by vehicles and pedestrians.

### Type D - Directory Maps

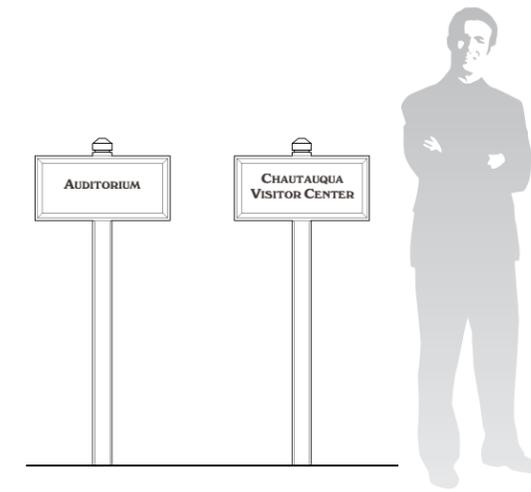
Provide visual orientation and destination locations. Placed in areas where visitors congregate or merge.

### Type C - Changeable Panels

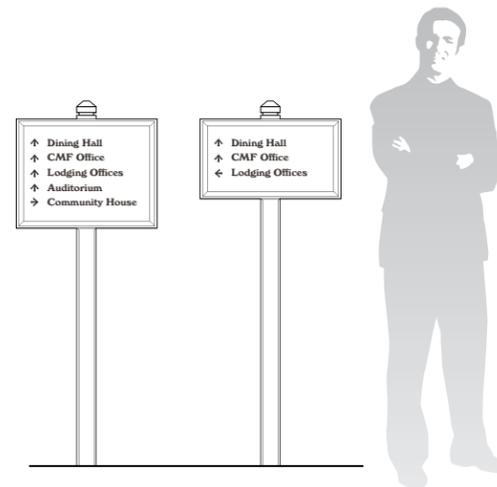
Provide seasonal or alternating information to visitors. Applied to any sign that requires a changeable messaging.



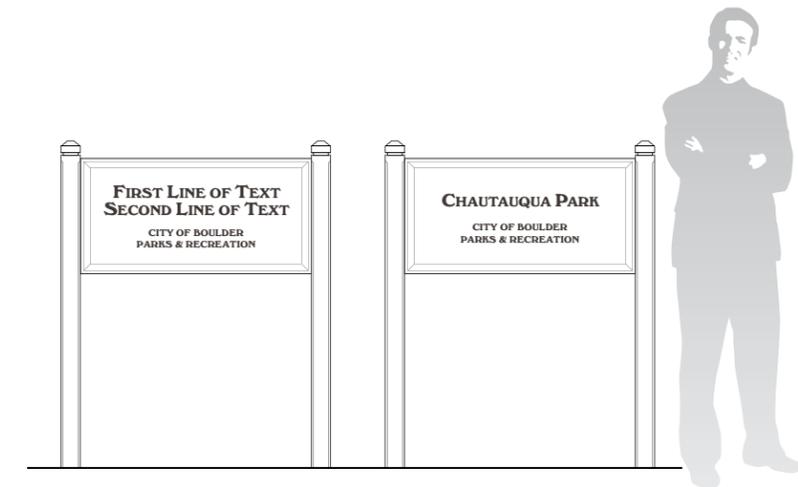
Type G



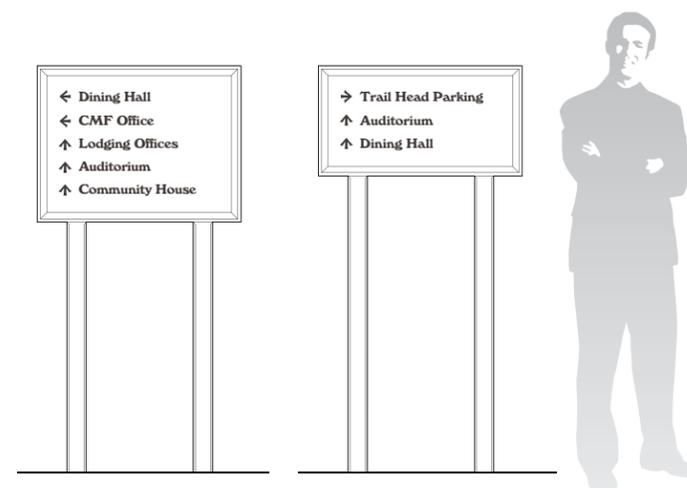
Types A1 and A2



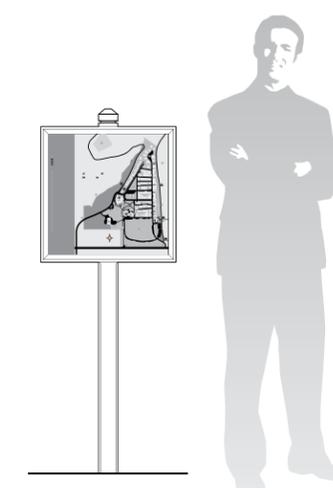
Types P1 and P2



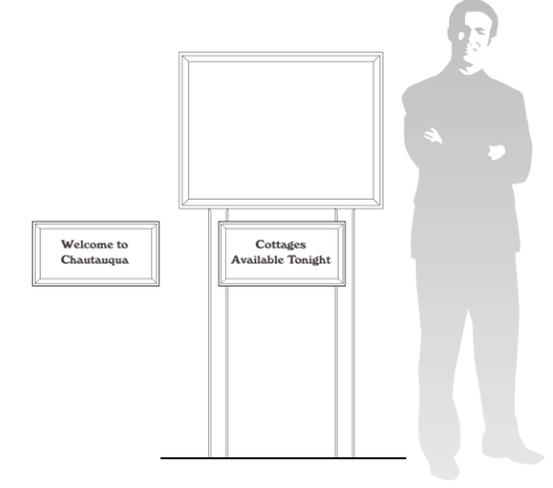
Types B1 and B2



Types V1 and V2



Type D



Type C

## Wayfinding: Type G - Graphic Layout

The existing gateway sign (entrance identity) at Chautauqua's Baseline entrance will be repainted, and a new message will be applied to the front and back faces. Other primary entry signs to be developed will follow this general design, and may be one- or two-sided.

1. Finished with exterior grade penetrating opaque stain to match 8644M Seal Beach.
2. Finished with exterior grade sign paint with smooth low-sheen finish, to match CL2933M Salsify.
3. Finished with exterior grade enamel to match CW057W White Solitude.
4. Matte Black A9090-O High Performance opaque vinyl (Avery), or black silk screen/print.

### NOTE:

*The decision to choose one fabrication method over the other for graphic information should be made considering sign size, durability needed/ desired, and risk of vandalism.*



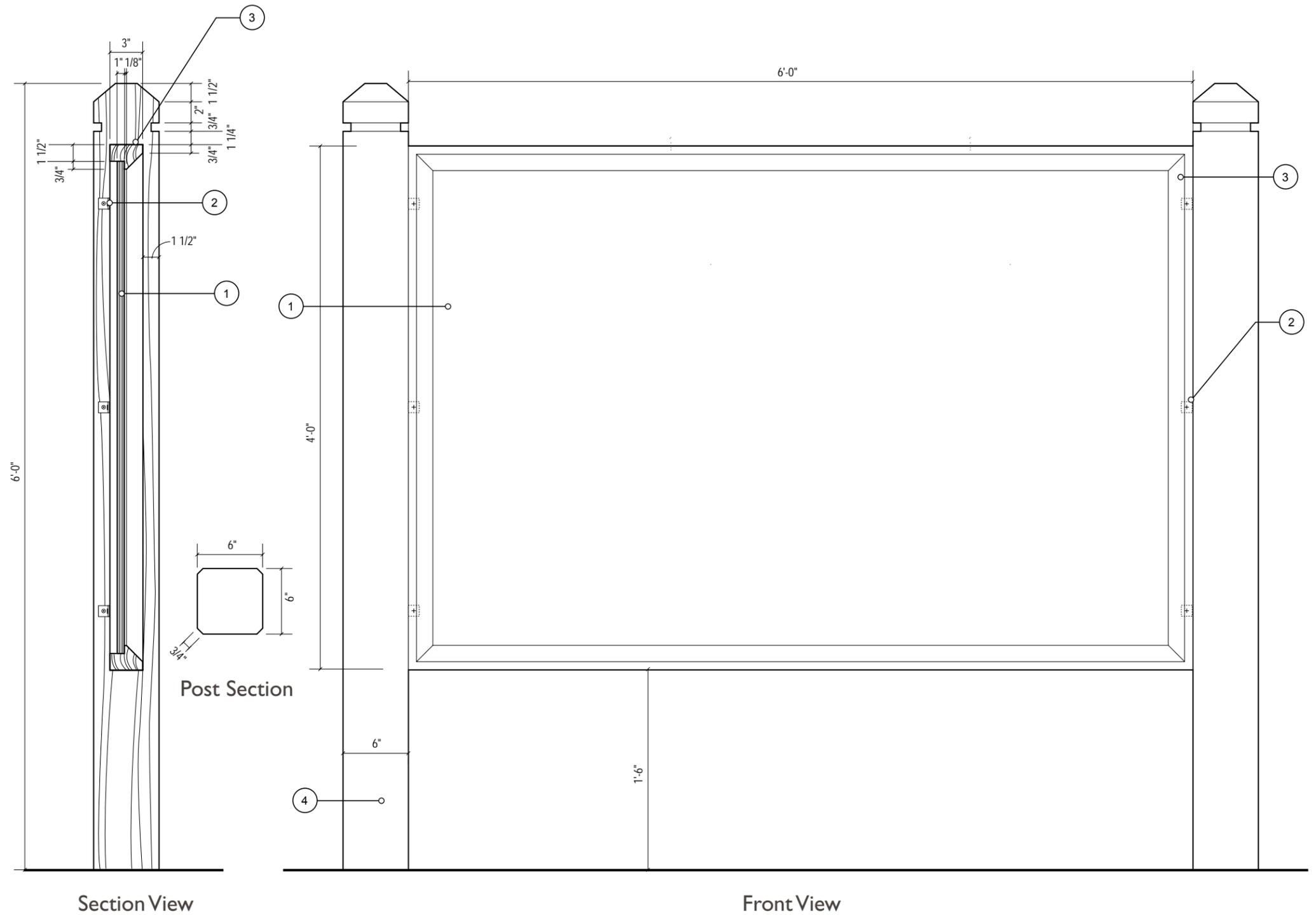
## Wayfinding: Type G - Structure

Additional gateway signs (entrance identity) may be fabricated and installed at alternate entrances.

1. 1" thick SignPly (or approved equal) Single-sided, painted aluminum over furniture grade exterior plywood core.
2. Stainless steel angle bracket with galvanized or stainless steel wood screw.
3. Frame made from clear grain hardwood or cedar and finished smooth.
4. Clear grain cedar post. Post cap routed and sawed from solid post material – not added as a separate component.

### NOTE:

*All surfaces of sign frame/panel and post must be primed and painted prior to assembly to ensure complete weather seal.*



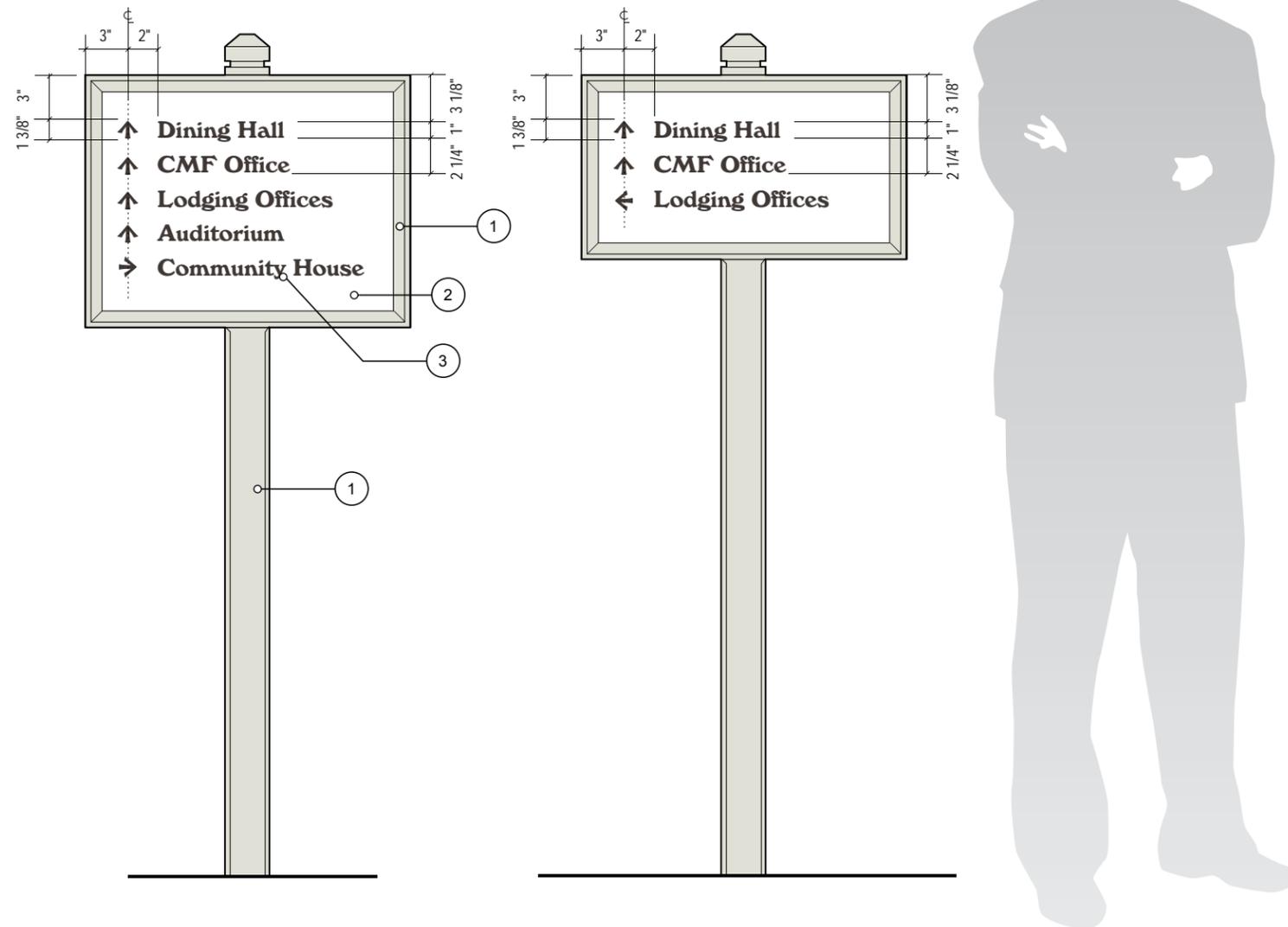
## Wayfinding: Types P1 and P2 - Graphics

Pedestrian directional signs include two size formats. The large format will accommodate four to five line items. The small format will accommodate one to three line items.

1. Finished with exterior grade penetrating opaque stain to match CL 2933M Salsify.
2. Finished with exterior grade enamel to match CW057W White Solitude.
3. Matte Black A9090-O High Performance opaque vinyl (Avery), or black silk screen/print.

### NOTE:

*The decision to choose one fabrication method over the other for graphic information should be made considering sign size, durability needed/ desired, and risk of vandalism.*



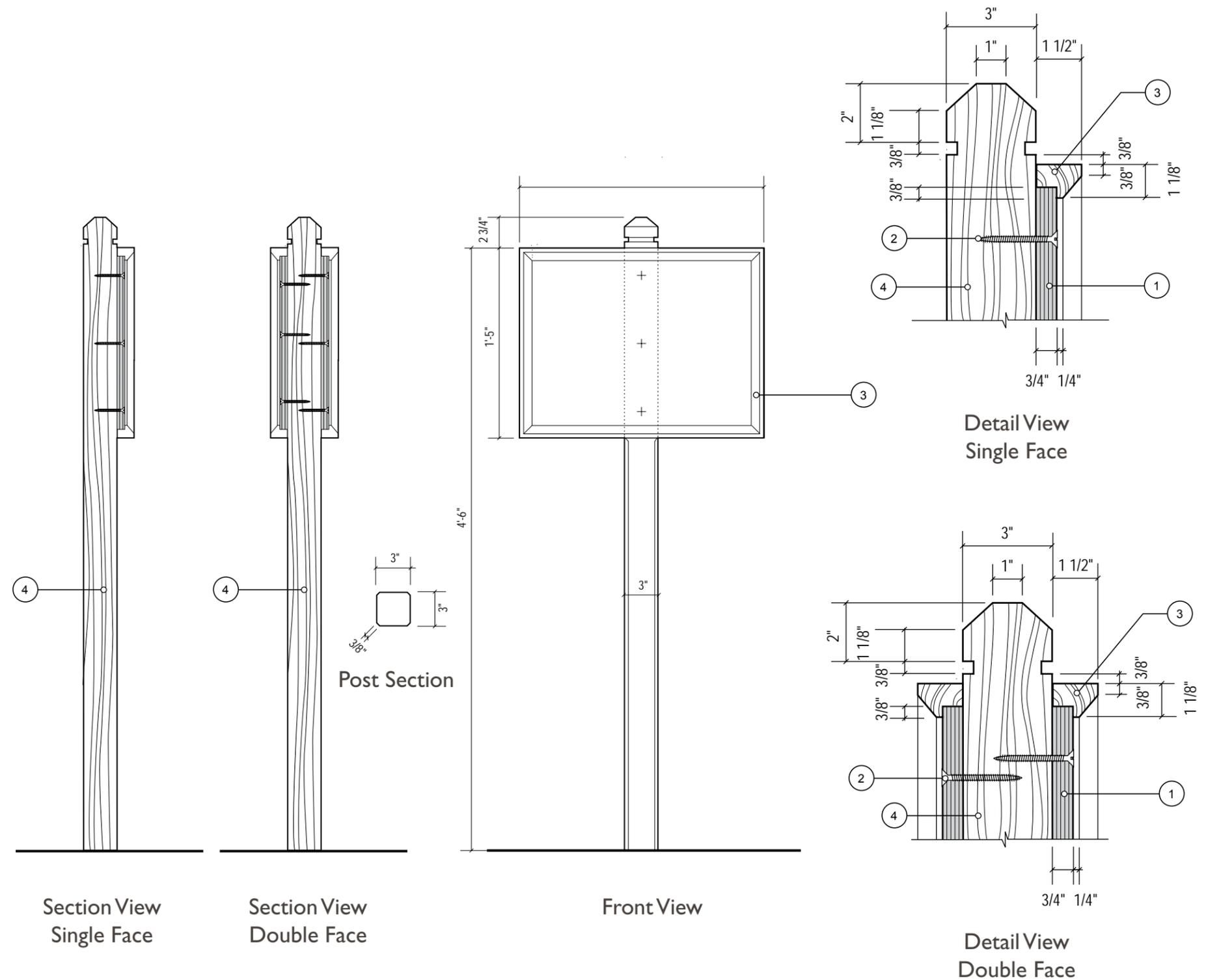
## Wayfinding: Type PI - Structure

Large pedestrian directional signs are to be placed perpendicular to pedestrian routes accessing more than three destinations.

1. 3/4" thick SignPly (or approved equal) Single-sided, painted aluminum over furniture grade exterior plywood core.
2. Galvanized wood screw.
3. Frame made from clear grain hardwood or cedar and finished smooth.
4. Clear grain cedar post. Post cap routed and sawed from solid post material – not added as a separate component.

**NOTE:**

*All surfaces of sign frame/panel and post must be primed and painted prior to assembly to ensure complete weather seal.*



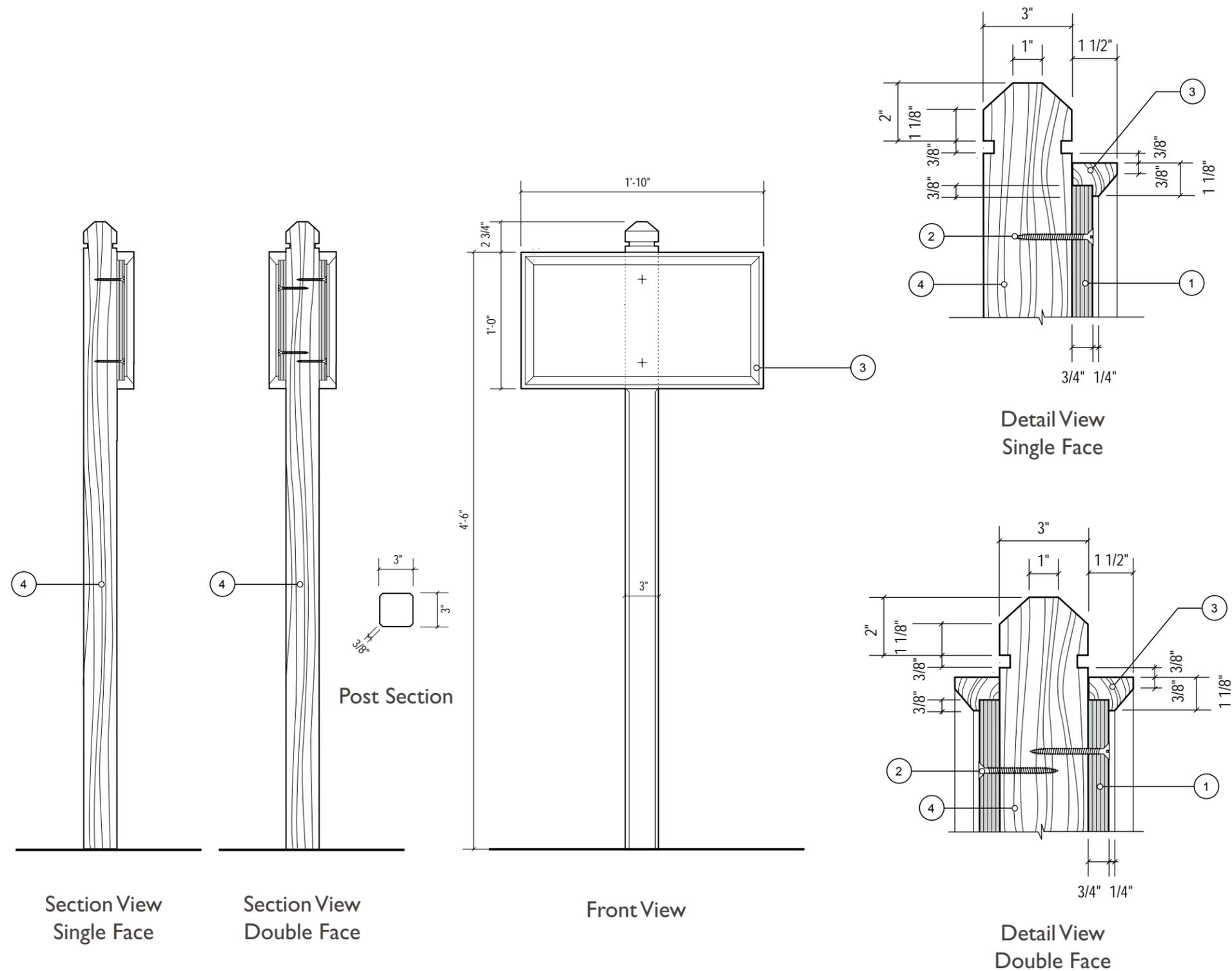
## Wayfinding: Type P2 - Structure

Small pedestrian directional signs are to be placed perpendicular to pedestrian routes accessing three or fewer destinations.

1. 3/4" thick SignPly (or approved equal) Single-sided, painted aluminum over furniture grade exterior plywood core.
2. Galvanized wood screw.
3. Frame made from clear grain hardwood or cedar and finished smooth.
4. Clear grain cedar post. Post cap routed and sawed from solid post material – not added as a separate component.

**NOTE:**

*All surfaces of sign frame/panel and post must be primed and painted prior to assembly to ensure complete weather seal.*



**Wayfinding:** Types V1 and V2 - Graphics

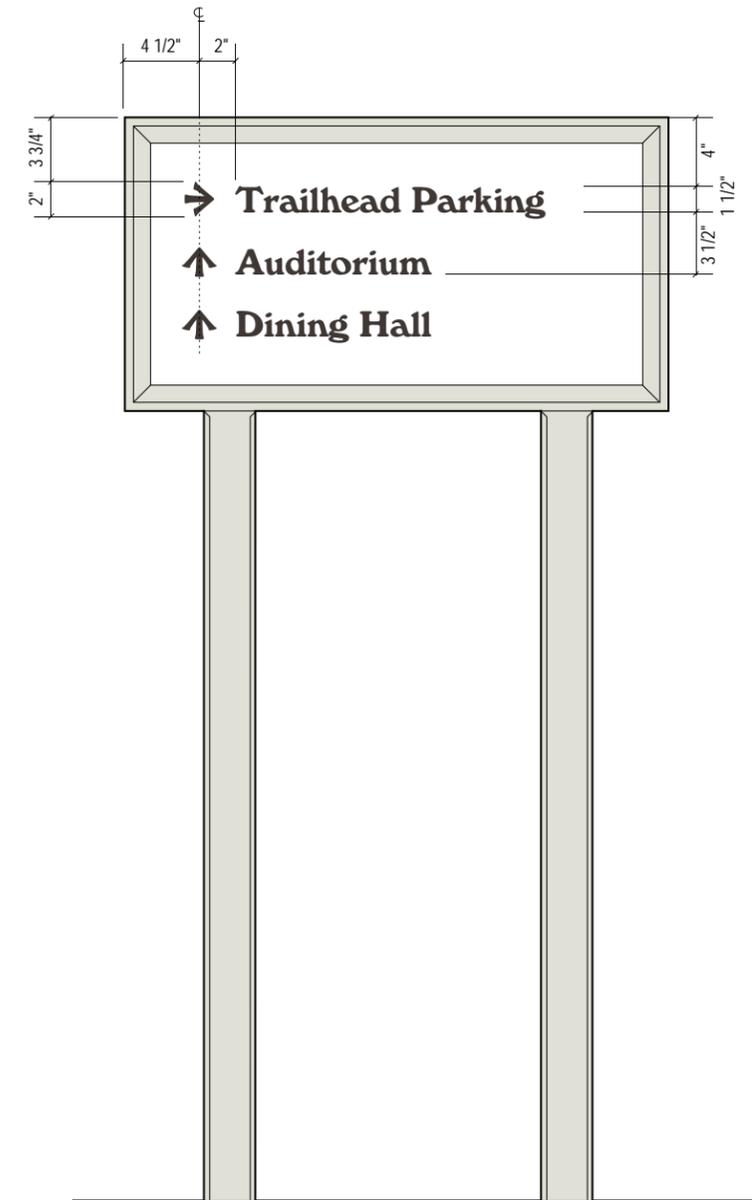
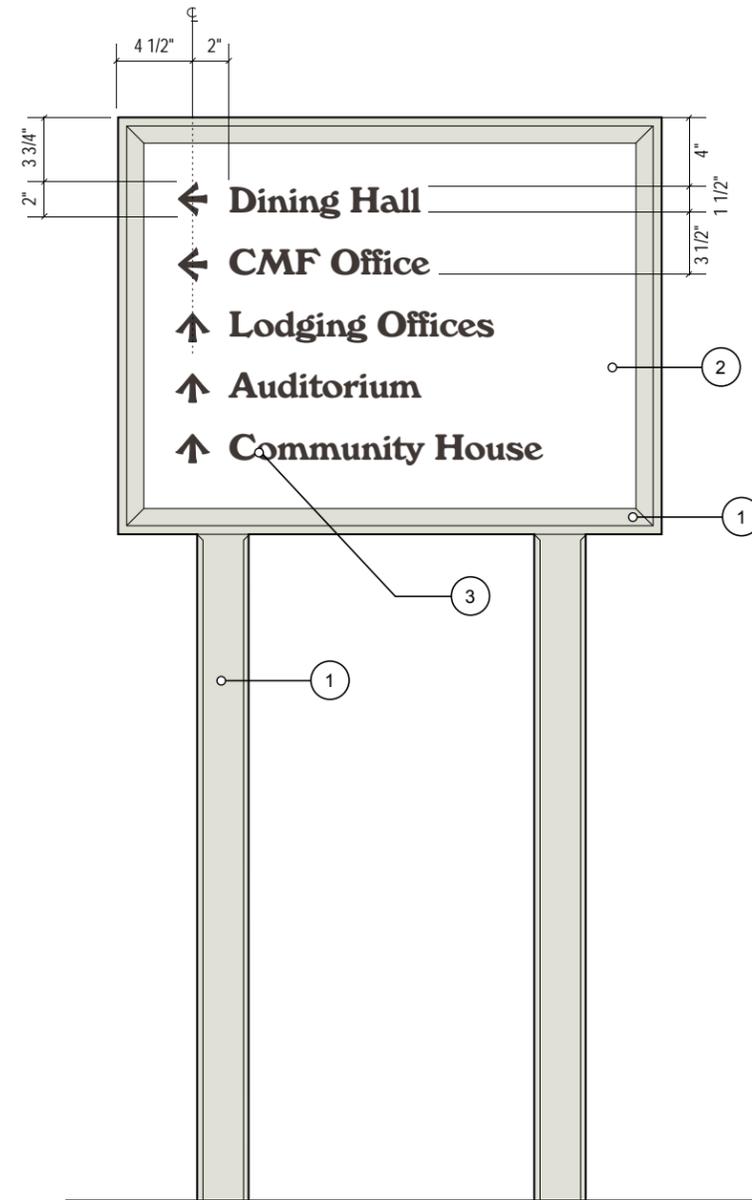
Vehicular directional signs include two size formats. The large format will accommodate four to five line items. The small format will accommodate one to three line items.

The smaller of two types of Vehicular directional signs will accommodate one to three line items.

1. Finished with exterior grade penetrating opaque stain to match CL 2933M Salsify).
2. Finished with exterior grade enamel to match CW057W White Solitude.
3. Matte Black A9090-O High Performance opaque vinyl (Avery), or black silk screen/print.

**NOTE:**

*The decision to choose one fabrication method over the other for graphic information should be made considering sign size, durability needed/ desired, and risk of vandalism.*



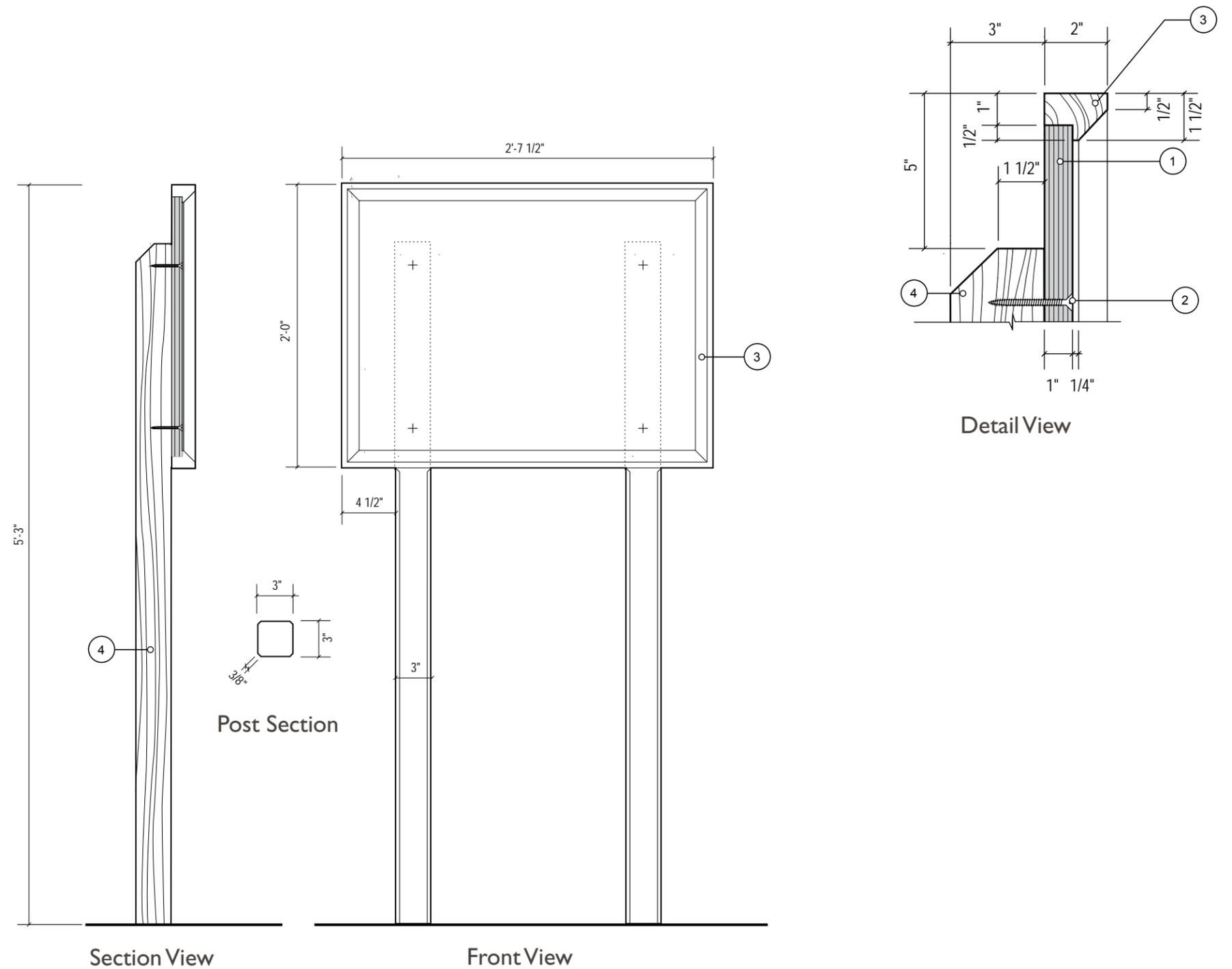
## Wayfinding: Type VI - Structure

Large vehicular directional signs are to be placed perpendicular to vehicular routes accessing four or more destinations.

1. 1" thick SignPly (or approved equal) Single-sided, painted aluminum over furniture grade exterior plywood core.
2. Galvanized wood screw.
3. Frame made from clear grain hardwood or cedar and finished smooth.
4. Clear grain cedar post. Top beveled and finished smooth.

### NOTE:

*All surfaces of sign frame/panel and post must be primed and painted prior to assembly to ensure complete weather seal.*



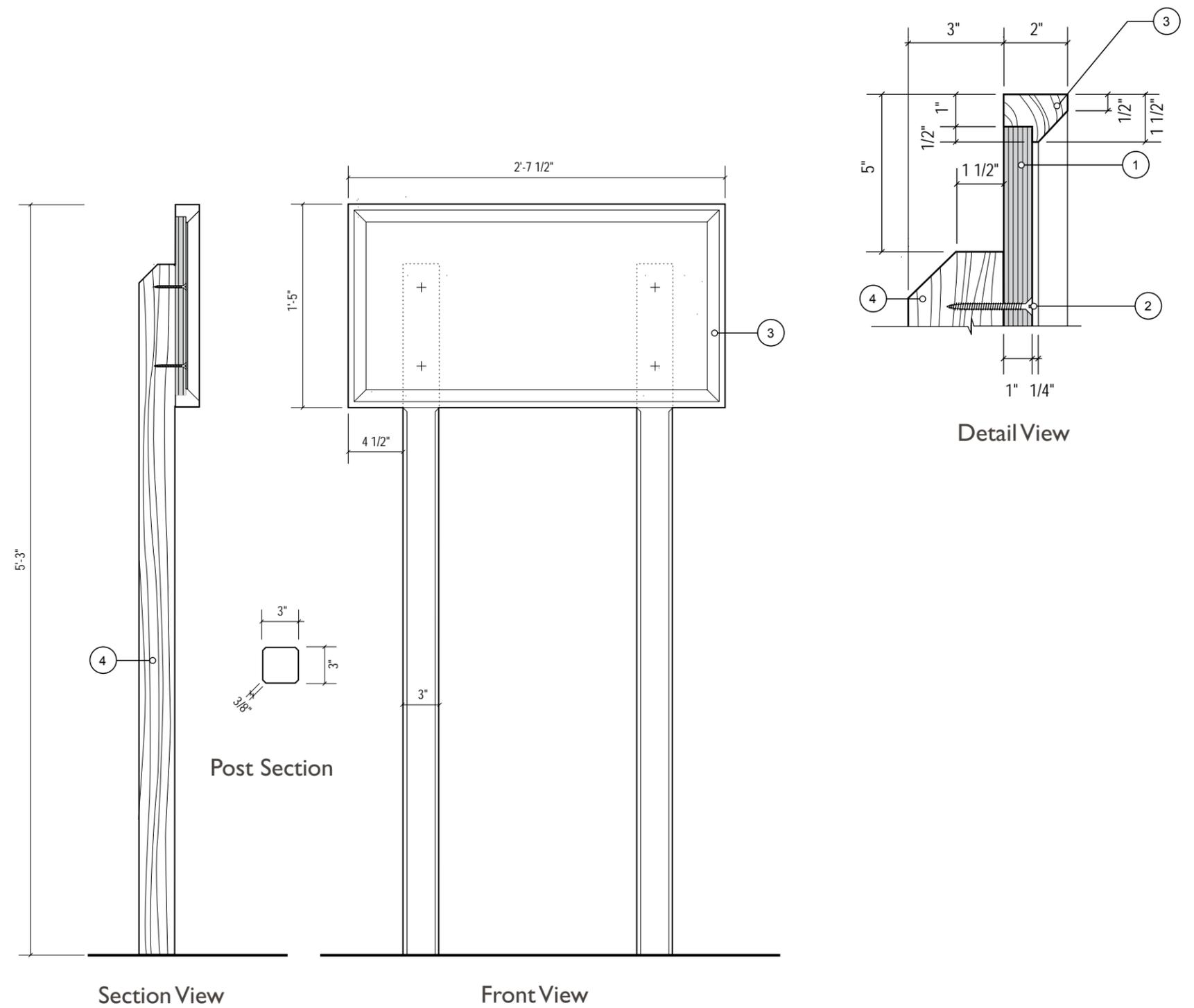
## Wayfinding: Type V2 - Structure

Small vehicular directional signs are to be placed perpendicular to vehicular routes accessing three or fewer destinations.

1. 1" thick SignPly (or approved equal) Single-sided, painted aluminum over furniture grade exterior plywood core.
2. Galvanized wood screw.
3. Frame made from clear grain hardwood or cedar and finished smooth.
4. Clear grain cedar post. Top beveled and finished smooth.

### NOTE:

*All surfaces of sign frame/panel and post must be primed and painted prior to assembly to ensure complete weather seal.*



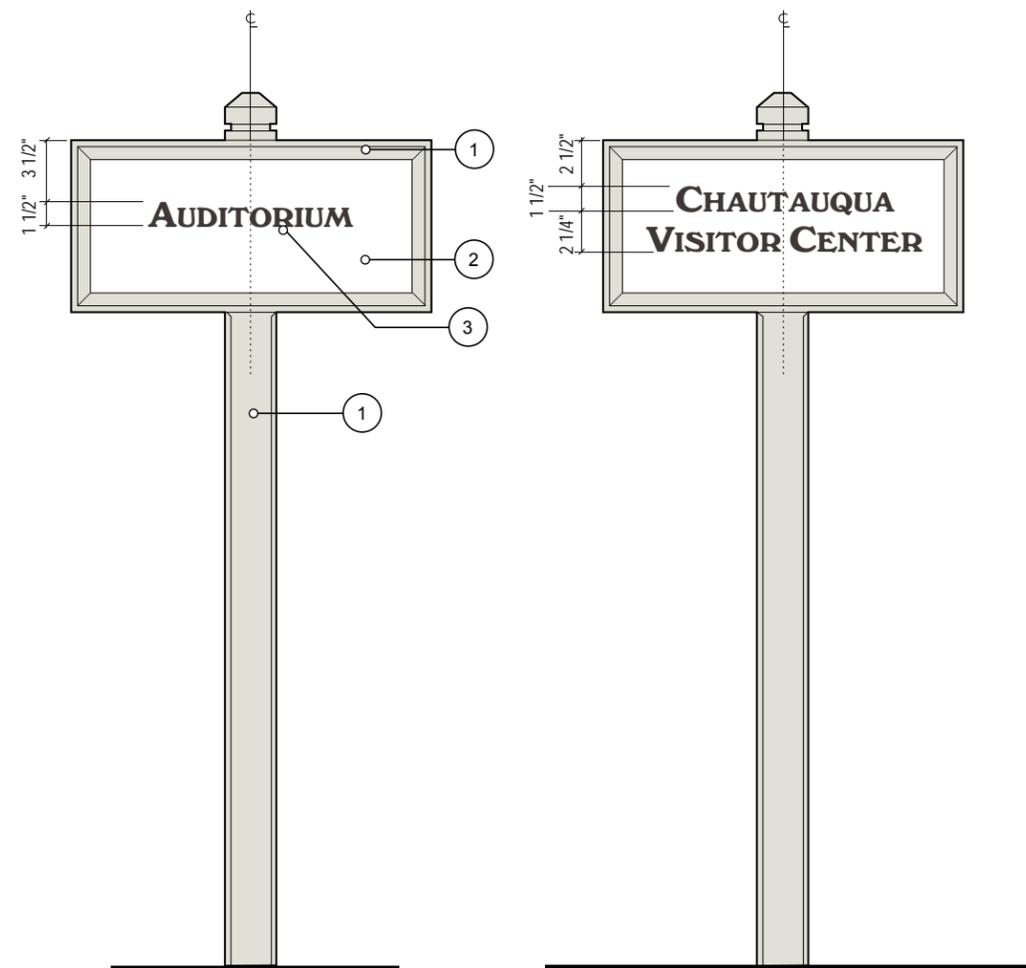
## Wayfinding: Type A - Graphic Layout

Identity signs may accommodate one or two line names.

1. Finished with exterior grade penetrating opaque stain to match CL 2933M Salsify.
2. Finished with exterior grade enamel to match CW057W White Solitude.
3. Matte Black A9090-O High Performance opaque vinyl (Avery), or black silk screen/print.

### NOTE:

*The decision to choose one fabrication method over the other for graphic information should be made considering sign size, durability needed/ desired, and risk of vandalism.*



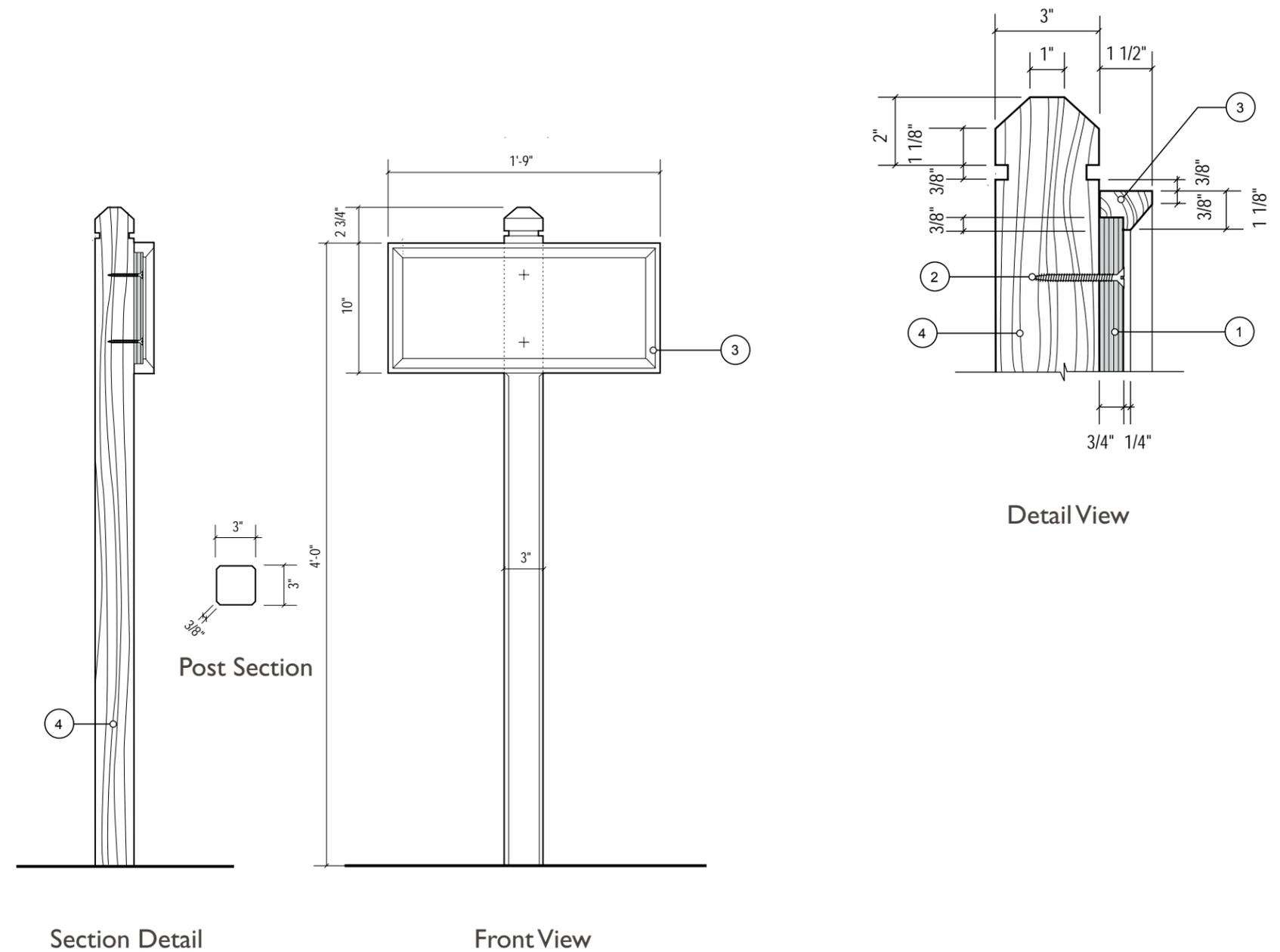
## Wayfinding: Type A - Structure

Identity signs are placed parallel to the building or facility it represents.

1. 3/4" thick SignPly (or approved equal) Single-sided, painted aluminum over furniture grade exterior plywood core.
2. Galvanized wood screw.
3. Frame made from clear grain hardwood or cedar and finished smooth.
4. Clear grain cedar post. Post cap routed and sawed from solid post material – not added as a separate component.

### NOTE:

*All surfaces of sign frame/panel and post must be primed and painted prior to assembly to ensure complete weather seal.*



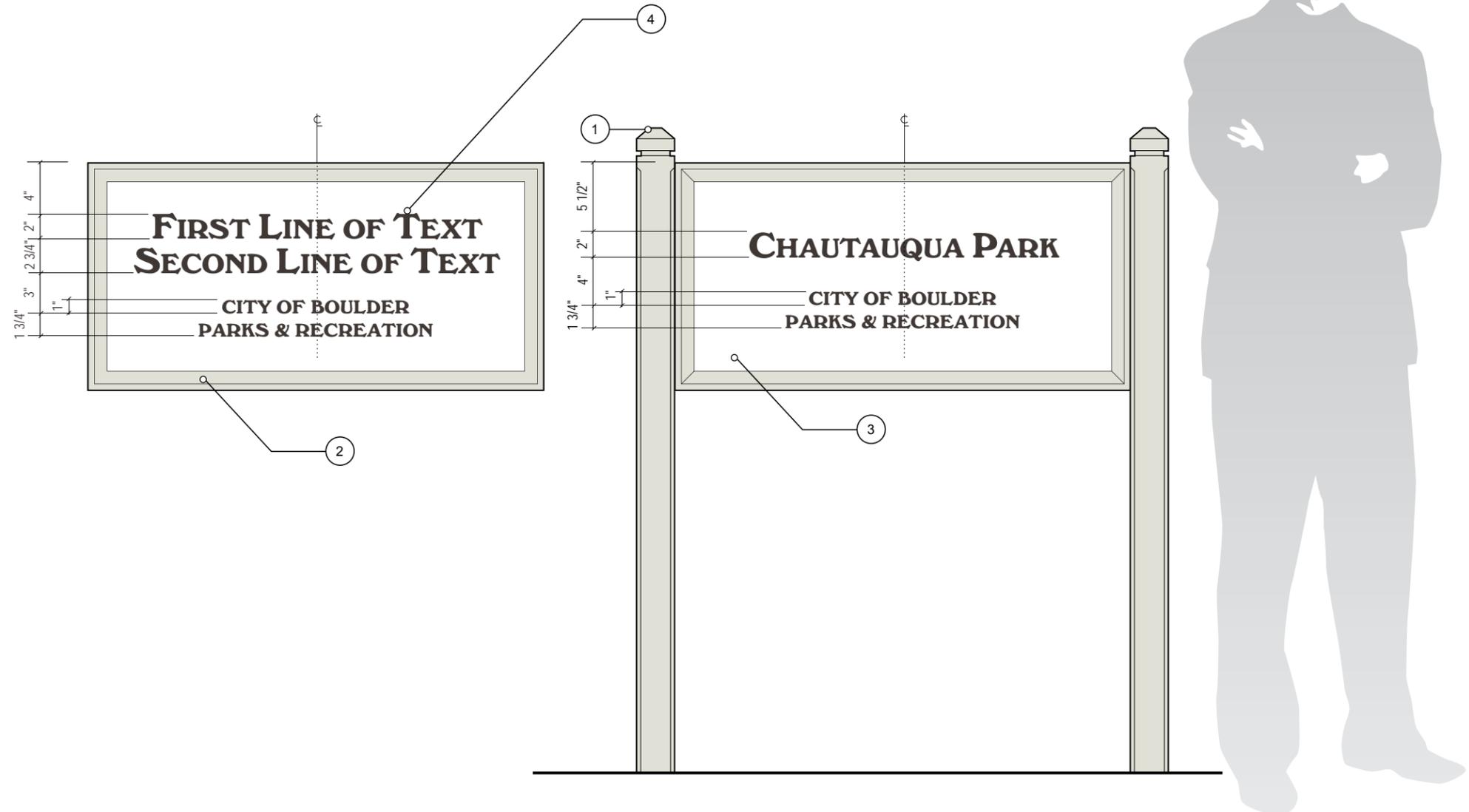
## Wayfinding: Type B - Graphic Layout

Area identity signs include two graphic formats— a two line identity and a single line identity. Both include accommodations for two lines of sub text.

1. Finished with exterior grade penetrating opaque stain to match 8644M Seal Beach.
2. Finished with exterior grade sign paint with smooth low-sheen finish, to match CL2933M Salsify.
3. Finished with exterior grade enamel to match CW057W White Solitude.
4. Matte Black A9090-O High Performance opaque vinyl (Avery), or black silk screen/print.

### NOTE:

*The decision to choose one fabrication method over the other for graphic information should be made considering sign size, durability needed/ desired, and risk of vandalism.*



## Wayfinding: Type B - Structure

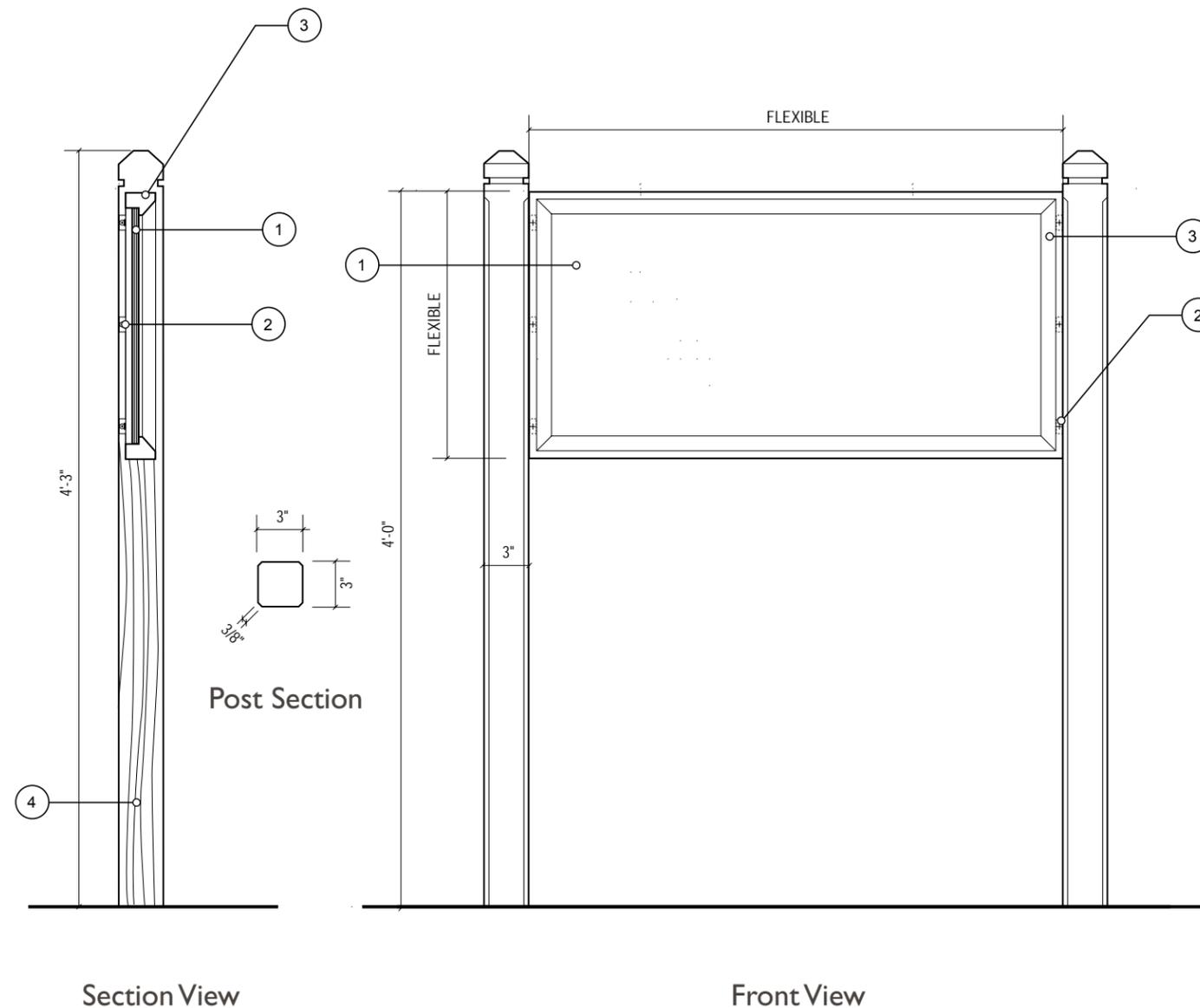
Area identity signs are to be placed parallel to vehicular routes Preferably at or near pedestrian access entries.

1. 1/2" thick SignPly (or approved equal) Single-sided, painted aluminum over furniture grade exterior plywood core.
2. Stainless steel angle bracket with galvanized or stainless steel wood screw.
3. Frame made from clear grain hardwood or cedar and finished smooth.
4. Clear grain cedar post. Post cap routed and sawed from solid post material – not added as a separate component.

### NOTES:

*All surfaces of sign frame/panel and post must be primed and painted prior to assembly to ensure complete weather seal.*

*This sign type can be used for future needs currently unforeseen, and scaled proportionately up or down 20% to accommodate necessary messages.*

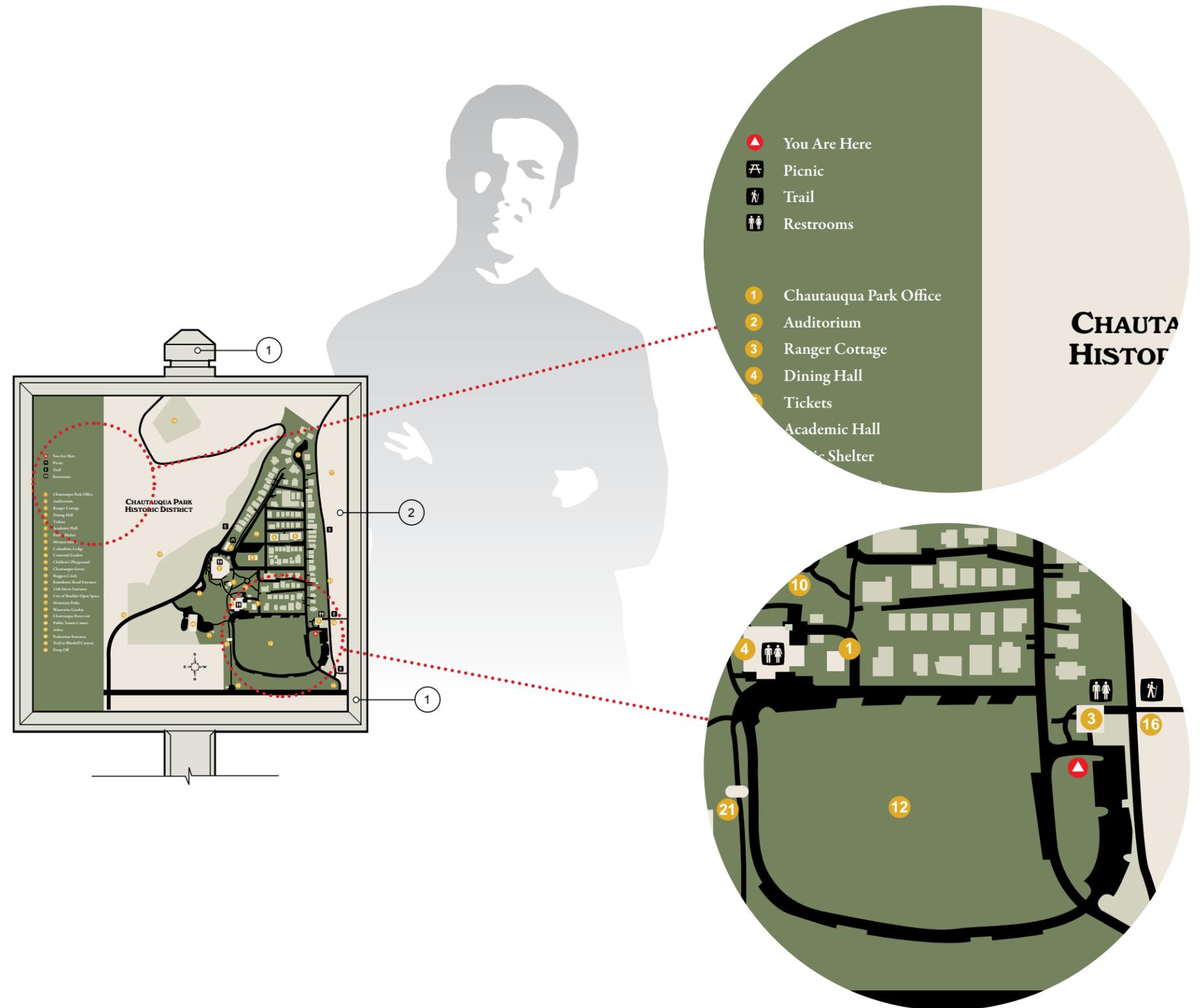


**Wayfinding:** Type D - Graphic Layout

The free standing directory maps include four map configurations, each representing a right-read orientation to assist the viewer in place navigation.

1. Finished with exterior grade penetrating opaque stain to match CL 2933M Salsify.
2. Porcelain enamel panel. Colors derived from project standard palette.

NOTE:  
*Fiberglass embedment digital output is acceptable to locations likely to require changes to the map graphic.*



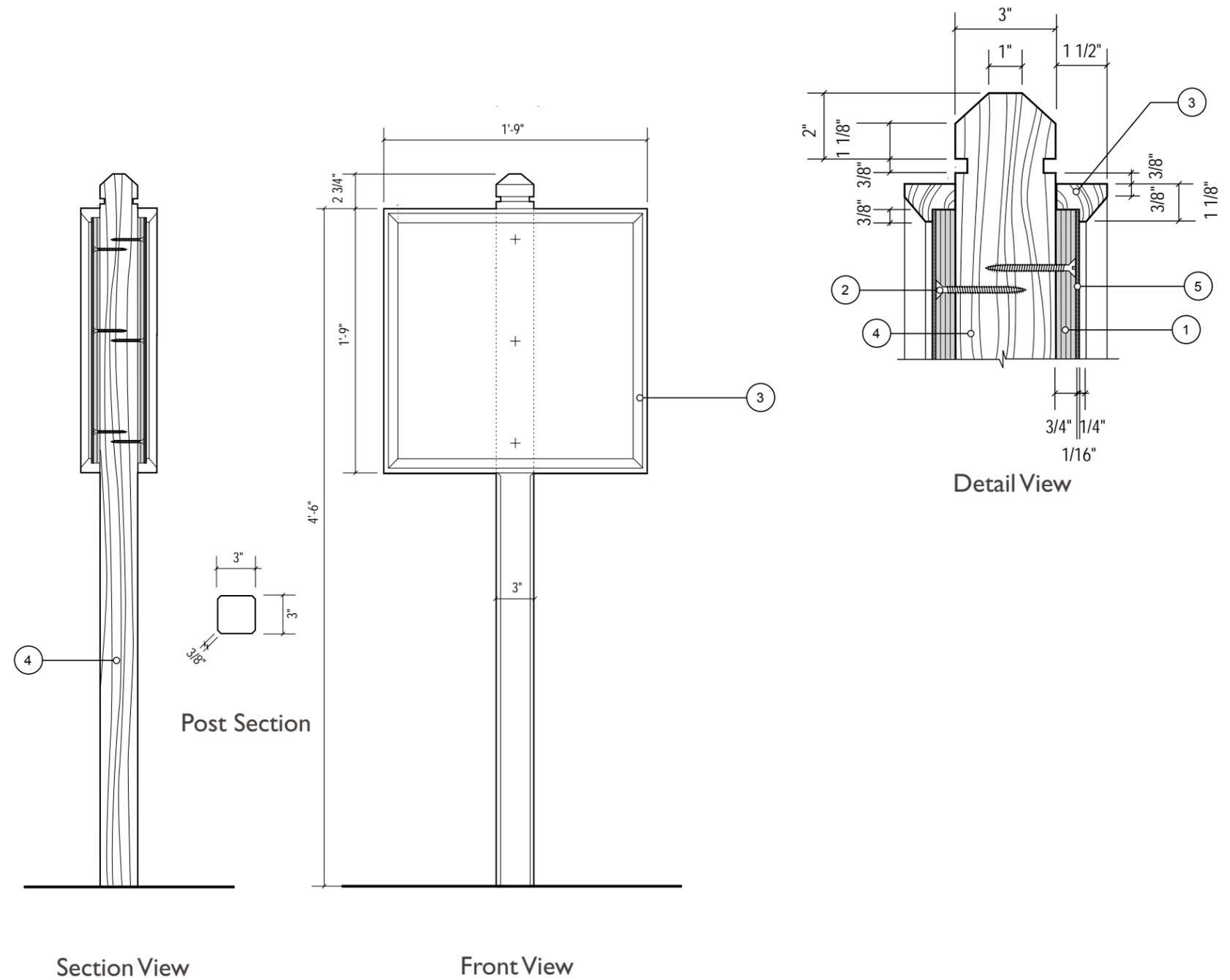
## Wayfinding: Type D - Structure

Directory map signs are to be strategically placed in areas where visitors congregate or converge.

1. 3/4" thick SignPly (or approved equal) Single-sided, painted aluminum over furniture grade exterior plywood core.
2. Galvanized wood screw.
3. Frame made from clear grain hardwood or cedar and finished smooth.
4. Clear grain cedar post. Post cap routed and sawed from solid post material – not added as a separate component.
5. Porcelain enamel or fiberglass embedded panel.

### NOTE:

*All surfaces of sign frame/panel and post must be primed and painted prior to assembly to ensure complete weather seal.*



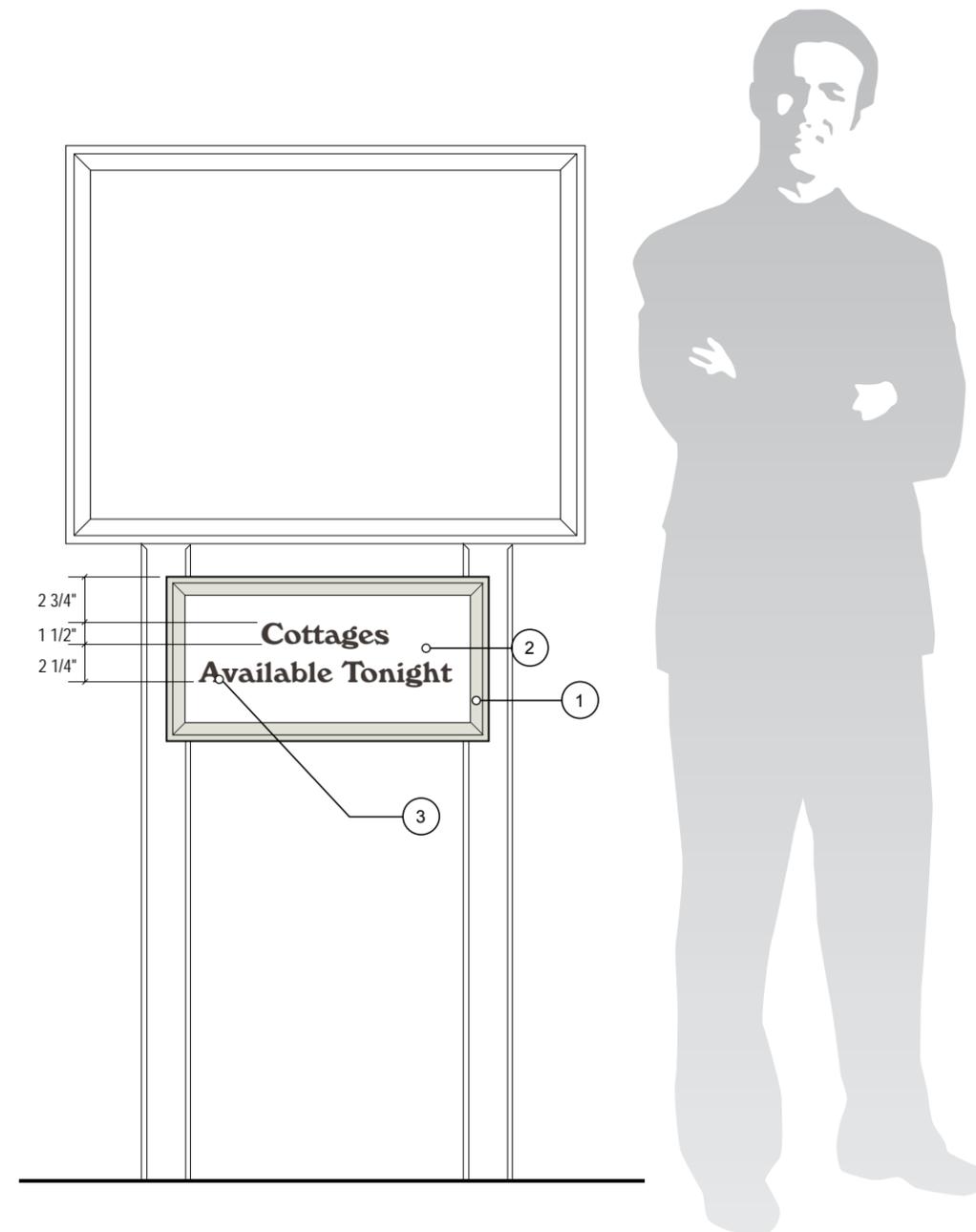
## Wayfinding: Type C - Graphic Layout

The changeable sign will accommodate two line items.

1. Finished with exterior grade penetrating opaque stain to match CL 2933M Salsify.
2. Finished with exterior grade enamel to match CW057W White Solitude.
3. Matte Black A9090-O High Performance opaque vinyl (Avery), or black silk screen/print.

### NOTE:

*The decision to choose one fabrication method over the other for graphic information should be made considering sign size, durability needed/ desired, and risk of vandalism.*



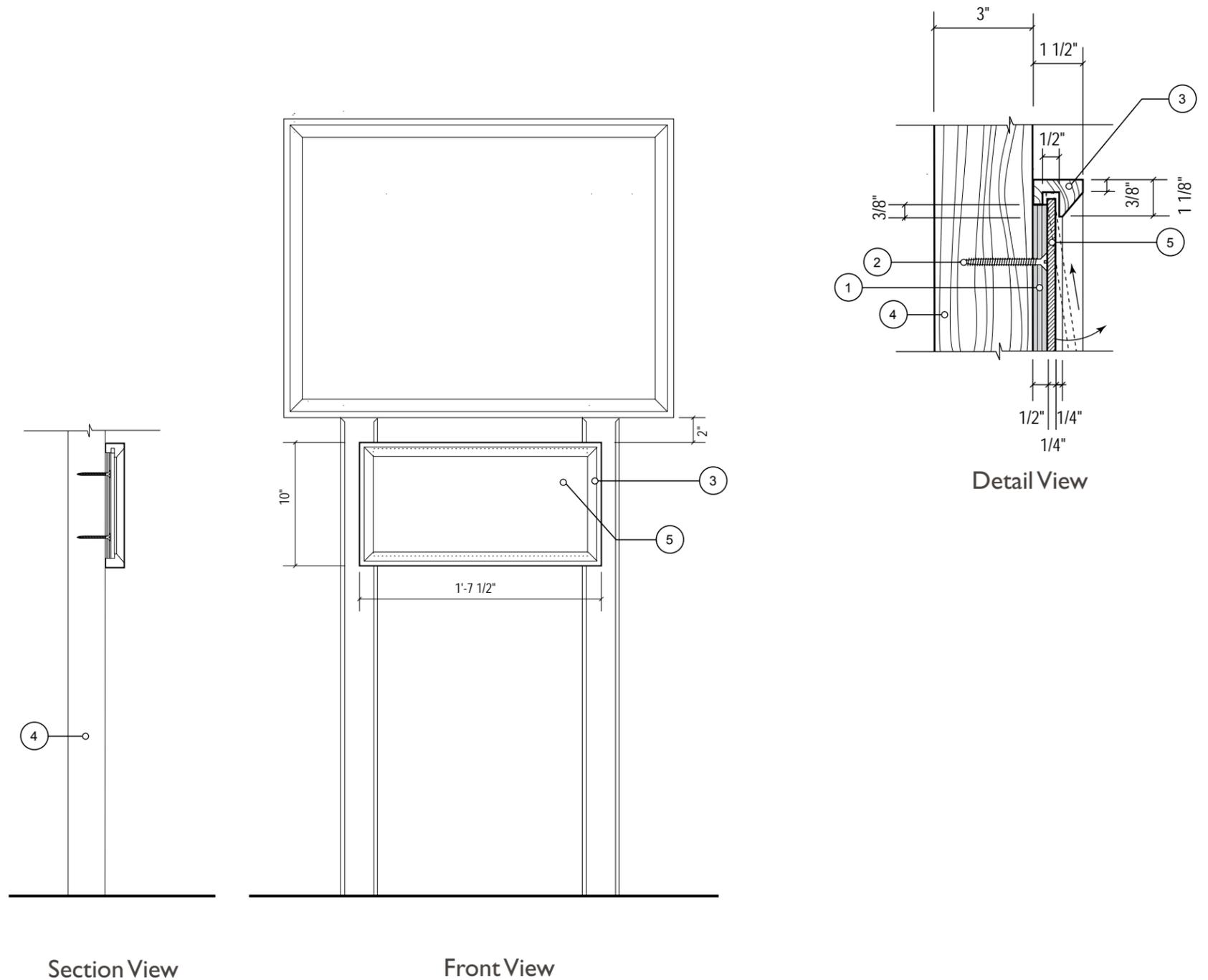
## Wayfinding: Type C - Structure

Changeable signs will be mounted beneath directional sign panels and directly onto the support posts. The panel inserts are held in place by slotted grooves within the top and bottom frame edges. Panels receive a thumb slot visible only when panel has been slid upward.

1. 3/4" thick SignPly (or approved equal) Single-sided, painted aluminum over furniture grade exterior plywood core.
2. Galvanized wood screw.
3. Frame made from clear grain hardwood or cedar and finished smooth.
4. Clear grain cedar post. Post cap routed and sawed from solid post material – not added as a separate component.
5. 1/4" thick aluminum, primed and painted with exterior enamel to match CW057W White Solitude. Fits loose, but secure in grooved frame. Slide up and pull out to remove. Message on both sides of removable panel.

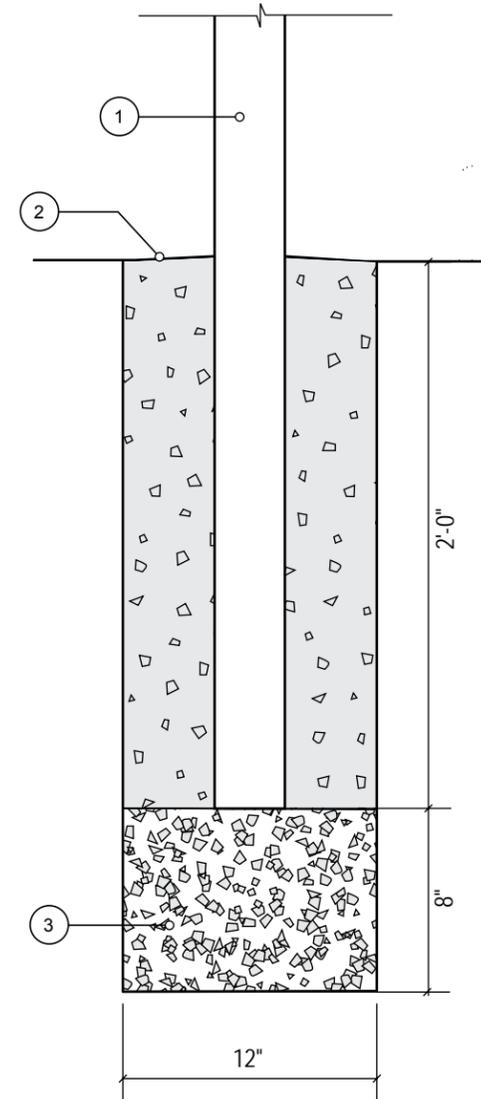
### NOTE:

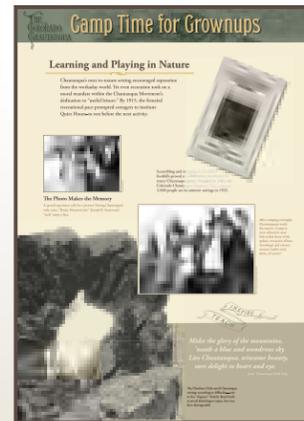
*All surfaces of sign frame/panel and post must be primed and painted prior to assembly to ensure complete weather seal.*



## Wayfinding: Installation

1. Post
2. Concrete to grade with positive top drainage angle
3. Gravel





### Introduction

The Colorado Chautauqua is a local treasure of national importance. It holds a unique place in history as one of the last chautauquas in continuous operation in the United States, and the only such site west of the Mississippi with its original structures intact. The site continues to draw hundreds of thousands of visitors each year, many of whom are unaware of Chautauqua's historic significance. Rather, they seek the amenities and programs offered today.

The interpretive program at Chautauqua serves to connect all visitors to the site's rich history and to an important chapter in American history, thereby building appreciation and support for the resource. While education is the primary purpose of interpretation, encouraging attitudes and behaviors that promote conservation and preservation is a strong secondary purpose.

Designs for the interpretive program draw from the typical styles of the historic period of significance (1898-1930), including illustration, type, and graphic treatment. However, best practices in today's interpretive methods are used for text writing, panel organization, universal access and fabrication. Samples are shown herein. Ornamentation is deliberate and judicious, and used to convey the character of Chautauqua's formative days and to create hierarchy of information, as well as visual richness. Colors draw from the primary public structures, and include additional accent hues as appropriate to the times. The goal is to convey central messages in an engaging way for today's visitors, while creating layouts that elicit the look and feel of the early Chautauqua days.

### Design Challenges

There is no end to interesting stories to tell about Chautauqua, yet the manner and means of telling them must be done carefully, and in small numbers. Individuals and firms responsible for implementing the interpretive program must exercise restraint regarding both numbers of exhibits created, and density of information.

Exterior sloper panels allow for viewing of the structures and/or resources being interpreted. Porcelain enamel graphic panels are specified for this "permanent" application. While they are more expensive to produce, they provide a sophisticated high resolution full-color look, and are extremely durable in outdoor conditions. Temporary and event signage may be produced in faster turn-around and cost effective materials.

Interpretive signs and exhibits are to be located in strategic locations that add to, rather than detract from, Chautauqua's historic nature.

*Note: Requirements of the Americans with Disabilities Act have been considered in specifications for the signs and graphics herein.*

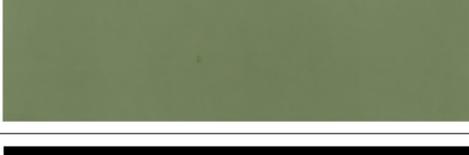
**Interpretive:** Color Palette

Colors selected for wayfinding signage were derived from those found in existing architecture and are specified using Kwal paint formulas.

Gradations of these colors are permissible.

All process and blends are to match physical paint samples as closely as possible, not specifications.

NOTE: Colors show on this page are for representation only. Actual colors will differ due to output limitations.

Sample	Kwal Paint Match	Pantone Closest Match
	CL 2933M - Salsify	413
	CL 2725D - Dissent	465
	8673M - Tavern Taupe	7535
	CW055W - Honeywind	413
	7735D - Topaz	7405
	8644M - Seal Beach	7538
	Black	100% Process
	CW057W - White Solitude	N/A

Interpretive: Fonts - Style

1. **Gable Antique Condensed**  
Main Panel Titles
2. **Adobe Garamond Pro Bold**  
Headers: Primary Text, Secondary Text, and Caption
3. **Adobe Garamond Pro Bold Italic**  
Quotations, Poetry, Lyrics
4. **Adobe Garamond Pro Semibold**  
Body and Caption Copy
5. **Adobe Garamond Pro Semibold Italic**  
Image Credits



1909 use of type nearly identical to Gable Antique Condensed

1

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz

2

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz

3

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*

4

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
abcdefghijklmnopqrstuvwxyz

5

*ABCDEFGHIJKLMNOPQRSTUVWXYZ*  
*abcdefghijklmnopqrstuvwxyz*

**Interpretive:** Fonts - Size

1. **Main Panel Title**  
Gable Antique Condensed 160 pt.  
Customized with a stepped drop shadow.
2. **Primary Header**  
Adobe Garamond Pro Bold 65 pt.
3. **Secondary Header**  
Adobe Garamond Pro Bold 41 pt.
4. **Caption Header**  
Adobe Garamond Pro Bold 33 pt.
5. **Primary Text**  
Adobe Garamond Pro Semibold 30 pt.
6. **Secondary Text**  
Adobe Garamond Pro Semibold 24 pt.
7. **Caption Text**  
Adobe Garamond Pro Semibold 20 pt.
8. **Quotation**  
Adobe Garamond Pro Bold Italic 42 pt.
9. **Quotation Source**  
Adobe Garamond Pro Semibold Italic 20 pt.
10. **Photo Credit/Source**  
Adobe Garamond Pro Semibold 8 pt.

NOTES:

Point size shown here is accurate only when this document is printed or viewed at tabloid size (11" x 17") at 100%.

Gable Antique Condensed as shown here and on the previous page has a few modifications. Serifs descending below the baseline have been modified in these forms: Uppercase F, H, K, M, N, R and lowercase p and q.

1 **The Most**

2 **Uplifts**

3 **Tabernacle of Learning**

4 **Entertainment as Enlightenment**

5 **When the "Texas-Colorado Chautauqua"**

6 **Commitment to self-improvement**

7 **Easy access to nature and the mountains**

8 ***Midst the glory***

9 **from "Chautauqua Rally Song"**

10 **Photo Courtesy of**

## Interpretive: Photography

Black and white historic photos will serve as the primary graphic elements for interpretive panels. The archives stored and managed by the Colorado Chautauqua Association are a treasury of high quality images that can serve nearly all the essential messages for the site. Other local resources for historic photos include Boulder's Carnegie Branch Library for Local History and the Archives at the University of Colorado Libraries.

### 1. Titles

Where existing, handwritten information on original photographs will be displayed.

### 2. Tone of Photographs

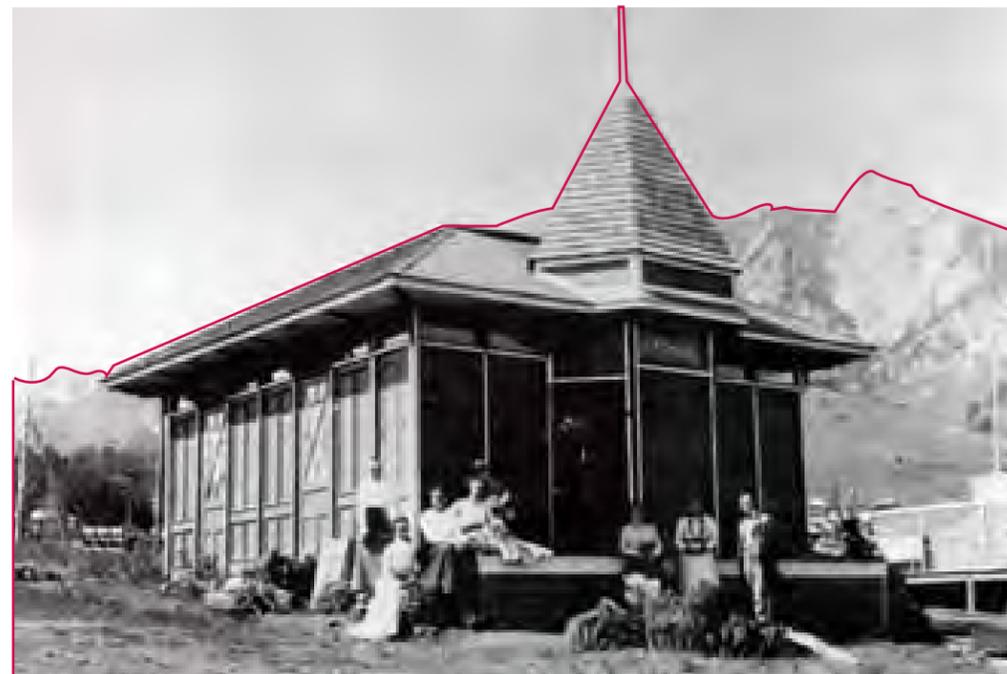
B & W and color original photographs shall be scanned as color CMYK files to show warmth of original prints.

### 3. Rules

Photographs shall generally include a 2-point rule around their perimeter at .125" from photo edge. Rule color may vary within the acceptable palette.

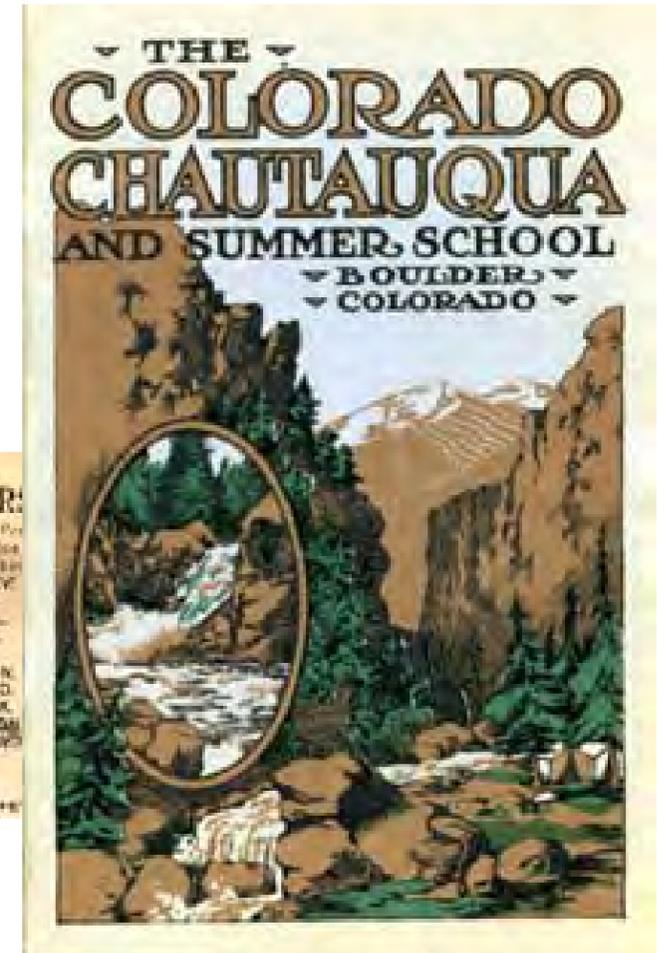
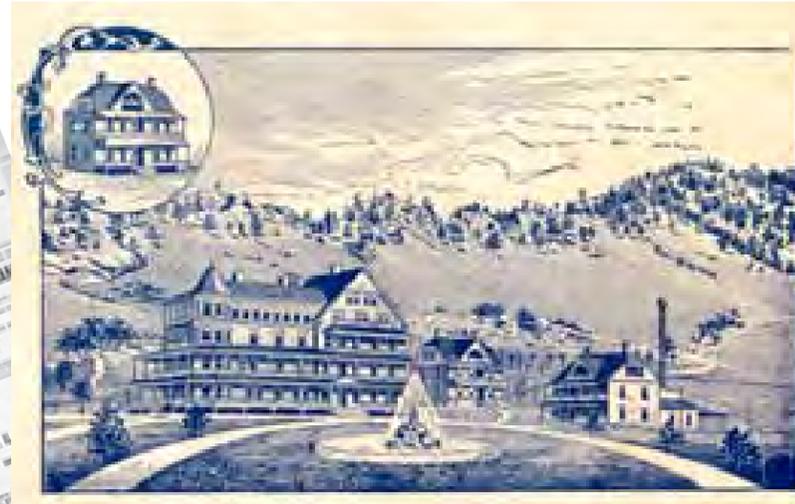
### 4. Clipping Paths

For variety and interest of large photographic images, photos may be clipped at logical and appropriate breaks. Clipping must be VERY carefully completed with 1-2 pixel feathering to soften edges. (Note red line indicated in lower figure shows location of break, not decorative element).



**Interpretive:** Illustration

Illustration style shall use continuous solid tone in early 20th century "poster" style. Duo-tone and multi-tone are acceptable, depending on existing source materials. Gradations within the illustration are to be avoided. Color originals should be placed as such.

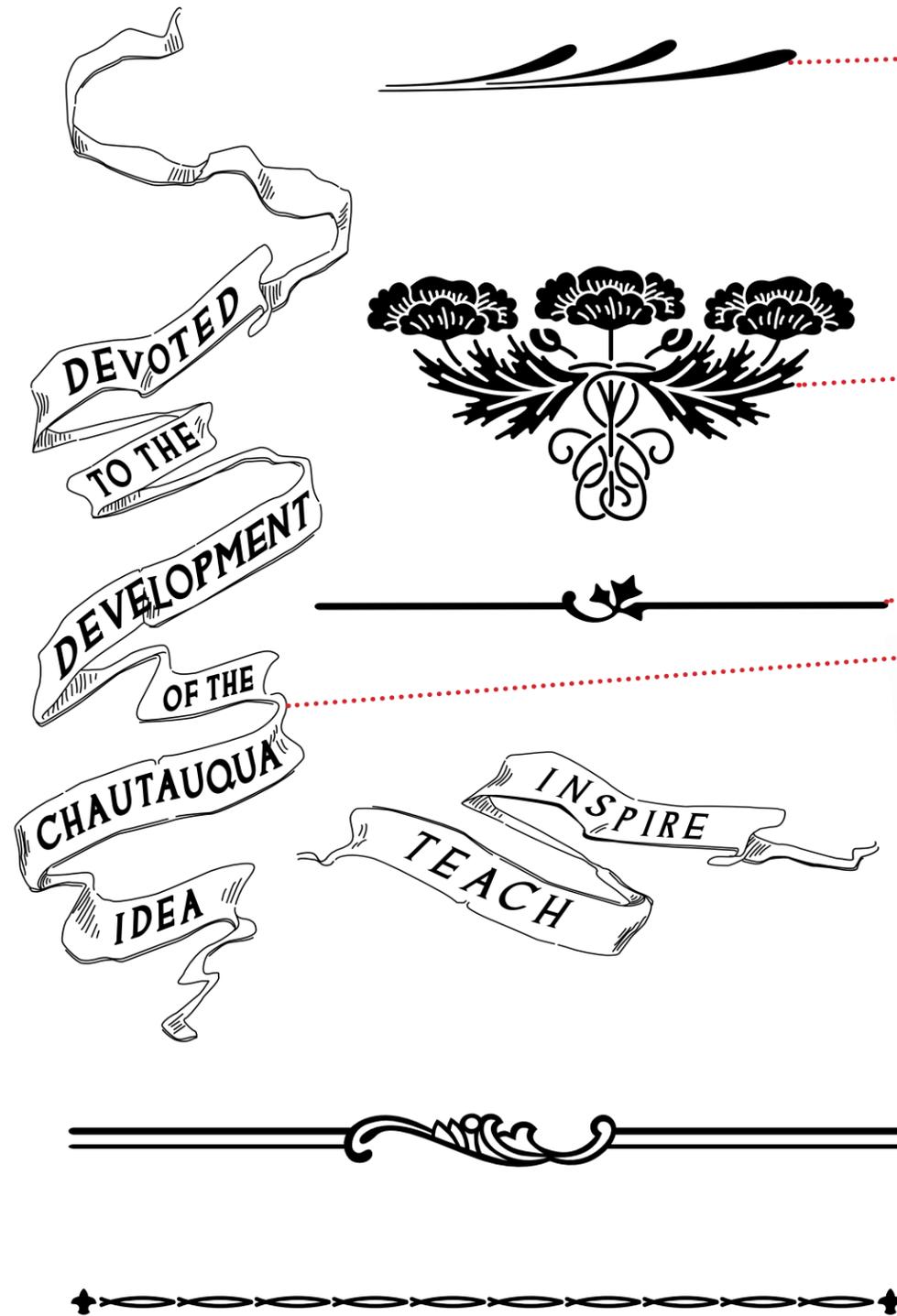


**Interpretive:** Flourishes, Rules, and Dingbats

Design elements are to be derived from historic references. Simpler forms are preferred over highly ornamental designs.

Use is to be limited primarily to key elements, such as primary headers.

If artifact images are used on a particular panel, elements may tie directly to these references.



### Overview

Interpretive writing is an art that involves using language precisely to engage visitors and convey key messages quickly. This is prose as story telling. Reading interpretive writing should be enjoyable for visitors. Such writing should include information that helps visitors connect to the resource as well as to their own lives.

### Writing Guidelines

- In general, use short words, sentences, and paragraphs.
- Vary sentence length and structure.
- Use active verb forms wherever possible.
- Use “colorful” descriptors.
- Avoid highly technical terms, as well as slang or overly casual constructions (except where these are integral to the content).

Once text has been written, then edit, edit, edit. Brevity and simplicity are always key to successful interpretive writing. Readership always trumps elegance.

### Text Layout Guidelines

How interpretive text is presented on the page carries equal importance to its content. Layout can determine whether text gets read and understood. These guidelines are intended to help visitors engage easily with the printed word.

- Use different type styles and sizes to cue the reader about where to begin, and to communicate the most essential elements.
- Avoid hyphenation.
- Take care with line length and wraps; avoid widows.
- Do not exceed 55 characters in a line of text, regardless of font size or panel width.
- View blocks of copy as graphic elements, to be grouped on the panel in harmonious balance with other elements.

### Design and Installation Considerations

Exhibits are generally viewed while visitors are standing, except in the case of visitors using wheelchairs. For most of us, looking down is easier down than up, as the head and eyes naturally incline downward. Therefore, care should be taken regarding where content sits above the floor on panels. In general, panel content (excluding large headers and graphics) should not exceed 66” above the floor at the viewing location.

*Note: These guidelines do not discuss storyline and message development. These essential steps must occur before the process of text development.*

## Interpretive: Sign Types

Interpretive signs at the site may be free-standing or mounted to existing or future structures.

### Type E1

Sloper panel: large, free-standing

### Type E2

Sloper panel: small, free-standing

### Type E3

Sloper panel: large, wall mount

### Type E4

Sloper panel: small, wall mount

### Type E5

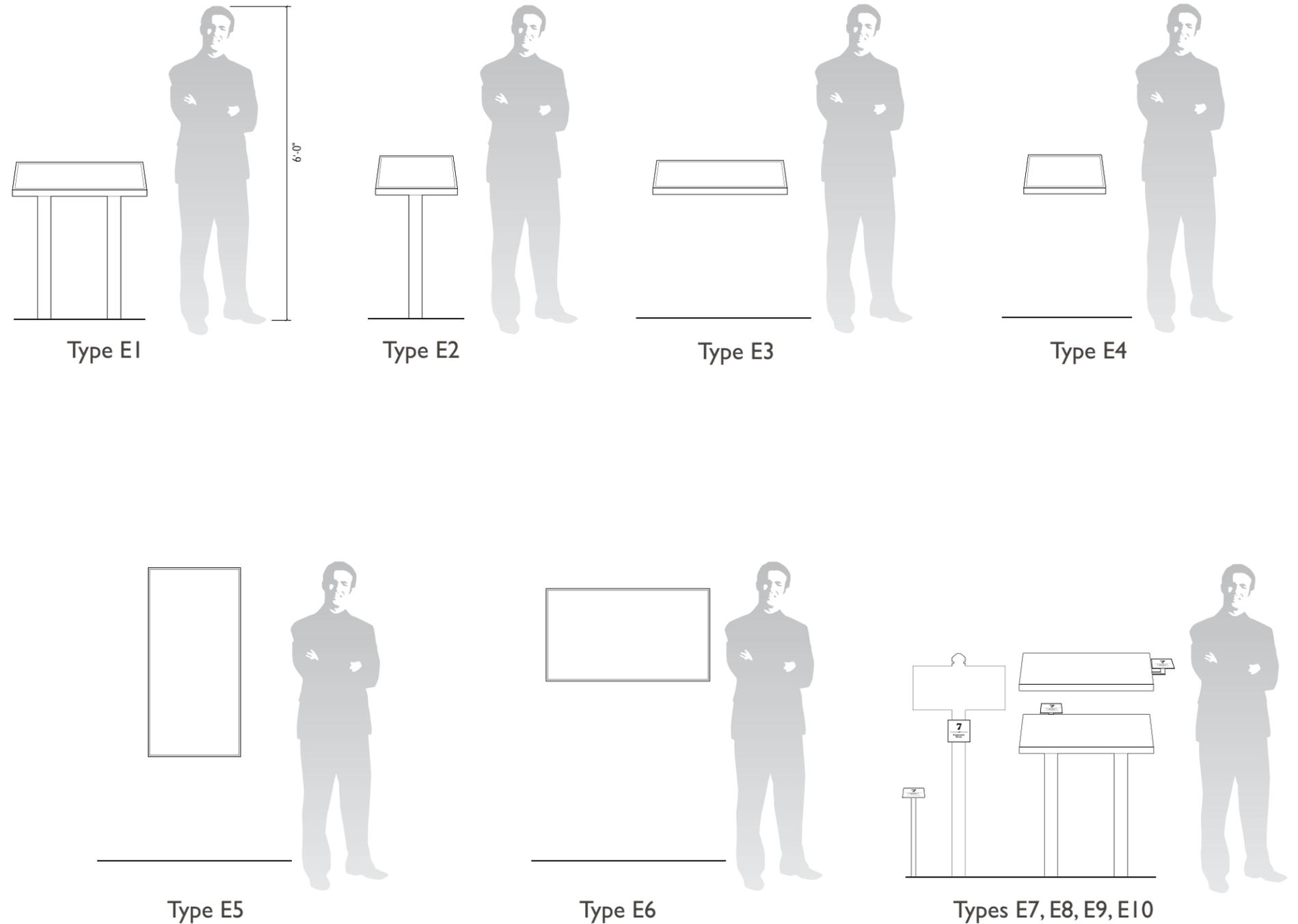
Flush wall mount: Vertical Panel

### Type E6

Flush wall mount: Horizontal Panel

### Type E7, E8, E9, E10

Tour Locator, free-standing and adaptations to sign structures.



**Fonts and Sizes:**

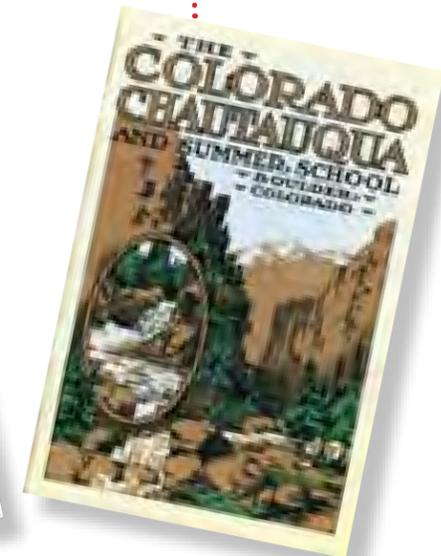
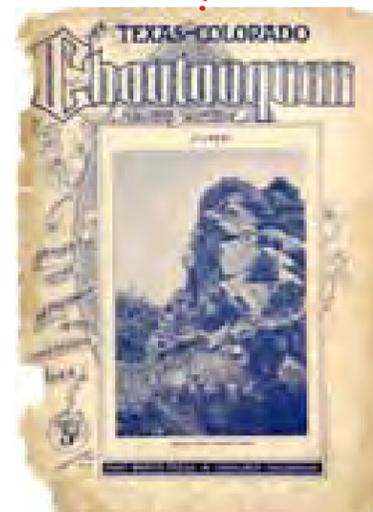
1. **Main Panel Title**  
Gable Antique Condensed 160 pt.  
Customized with a stepped drop shadow.
2. **Primary Header**  
Adobe Garamond Pro Bold 65 pt.
3. **Secondary Header**  
Adobe Garamond Pro Bold 41 pt.
4. **Caption Header**  
Adobe Garamond Pro Bold 33 pt.
5. **Primary Text**  
Adobe Garamond Pro Semibold 30/40 pt.
6. **Secondary Text**  
Adobe Garamond Pro Semibold 24/28 pt.
7. **Caption Text**  
Adobe Garamond Pro Semibold 20/25 pt.
8. **Photo Credit/Source**  
Adobe Garamond Pro Semibold 8 pt.



**Interpretive:** Sloper - Design Elements

1. Primary title header and copy to be on panel, harkening to early 20th century print style.
2. Logo and Flatirons lithograph image from 1909 letterhead works as background to panel title.
3. Panel title text is a screened version of 7735D (Topaz) with a black drop-shadow rule.
4. Vary size and configuration of photography across panels to include both large (feature) images and smaller (detail) images.
5. Rules and dingbats are permitted when used in traditional style; however, elements should be used only modestly and to create hierarchy of content.
6. Where appropriate, background illustrations may strengthen panel content. Illustrations to be from historic print collateral artwork or newly commissioned work in this style.
7. Historic photography shown in a rectilinear fashion will always be square to panel and include a 2-point rule .125" from photo edge.
8. When possible, photo representations of historically relevant printwork should be used as "artifacts." Showing such artifacts at an angle can enhance variety. Text accompanying artifacts can justify to angle, where appropriate.
9. Second background color on panel can be used to accentuate or isolate content.

*Note: This sample layout serves to illustrate the guidelines; it is not intended as a template.*



## Interpretive: Sloper - Message Length

Messaging is designed to provide varying levels of information that match the user's interest. A clearly defined hierarchy encourages visitor engagement and helps direct readers through the intended flow of content.

### 1. 3 Second Message

Panel title uses short and well-crafted copy to convey "big-picture" take away.

Copy Length - Up to 6 words

### 2. 30 Second Message

Primary header and text are constructed to convey the overall message of the panel.

Copy Length

Text - Up to 45 words

### 3. 3 Minute Message

In-depth information for a more specialized read. Secondary storylines further enhance overall messaging.

Copy Length

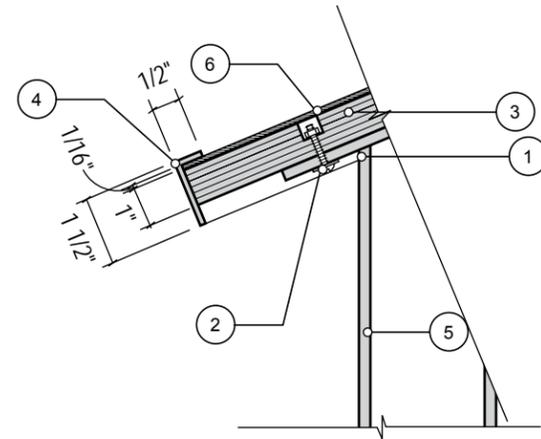
Secondary Text - Up to 45 words

Caption Text - Up to 25 words

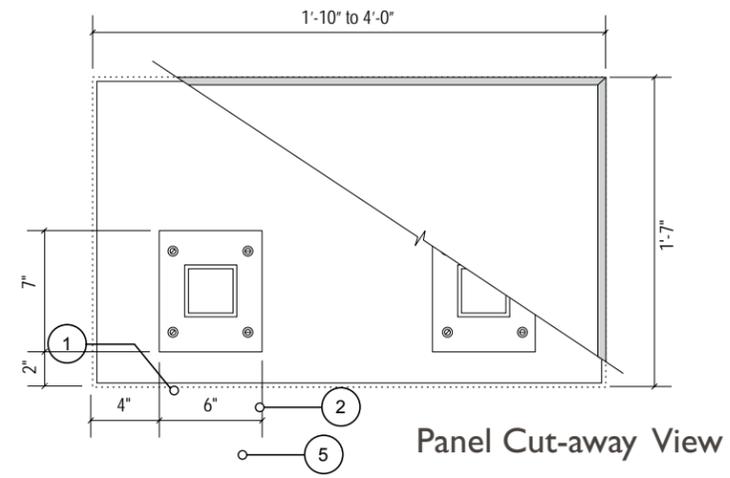


**Interpretive:** Type EI - Structure

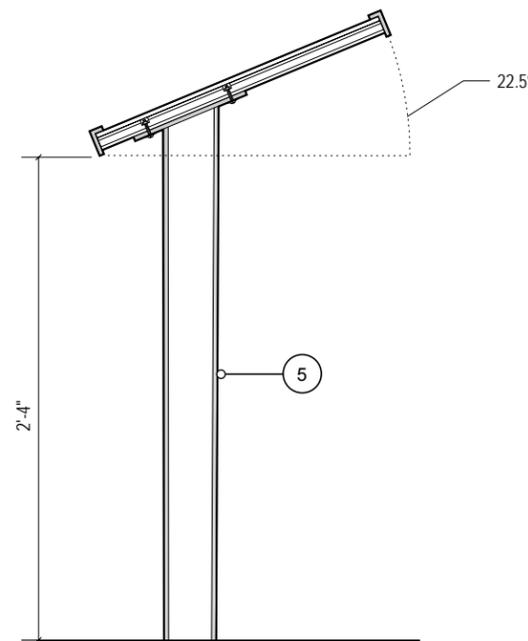
1. Painted 1/4" thick aluminum plate welded to post
2. Security hardware
3. 1" thick all-weather backer panel
4. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware, painted to match CL2725D Dissent
5. Painted aluminum 3" x 3" post, direct burial or as over-sleeve depending on mounting condition, painted to match CL2725D Dissent
6. Porcelain enamel graphic



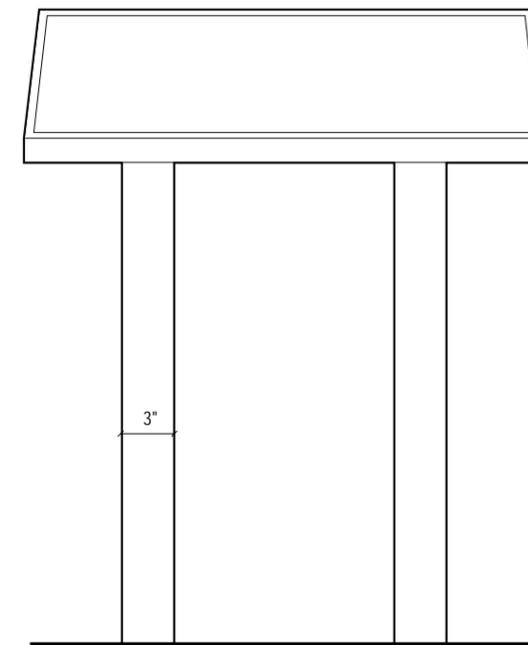
Detail View



Panel Cut-away View



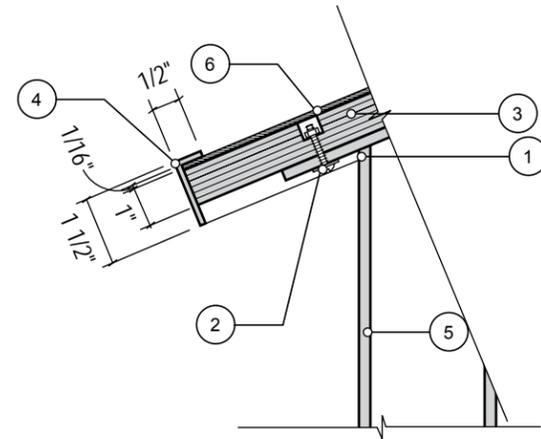
Section View



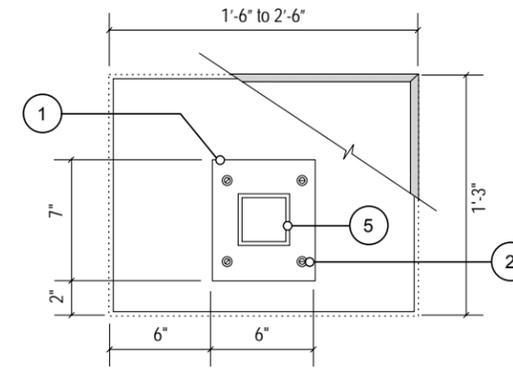
Front View

**Interpretive:** Type E2 - Structure

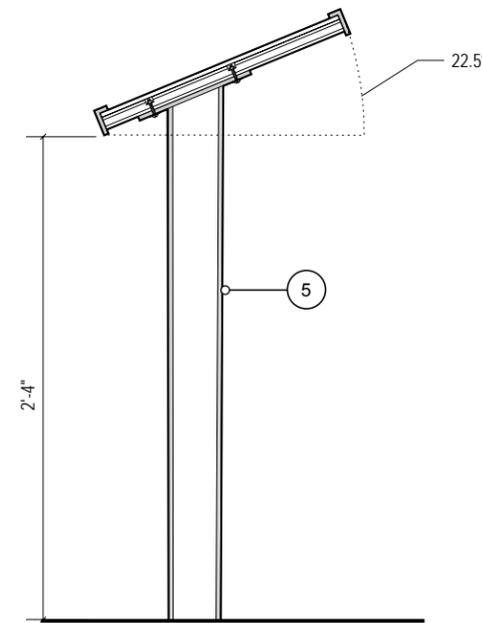
1. Painted 1/4" thick aluminum plate welded to post
2. Security hardware
3. 1" thick all-weather backer panel
4. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware, painted to match CL2725D Dissent
5. Painted aluminum 3" x 3" post, direct burial or as over-sleeve depending on mounting condition, painted to match CL2725D Dissent
6. Porcelain enamel graphic



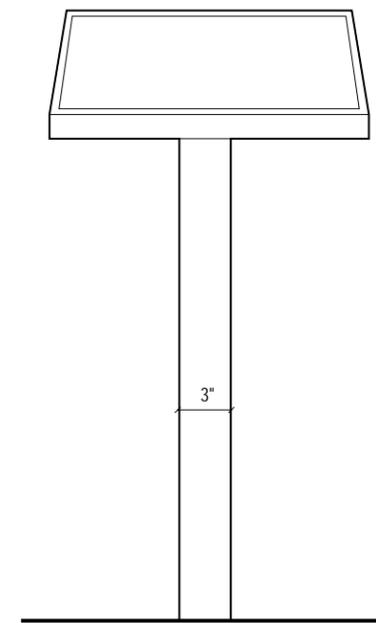
Detail View



Panel Cut-away View



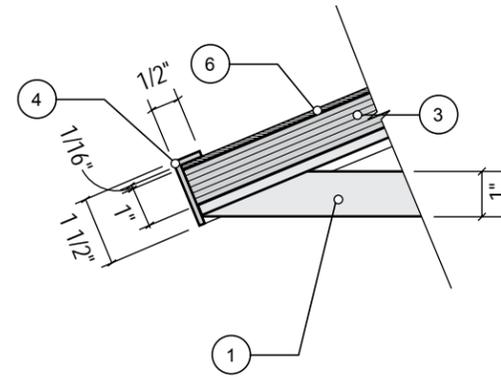
Section View



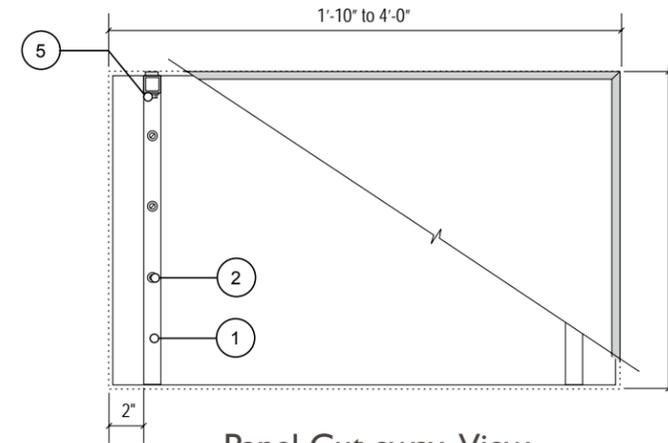
Front View

**Interpretive:** Type E3 - Structure

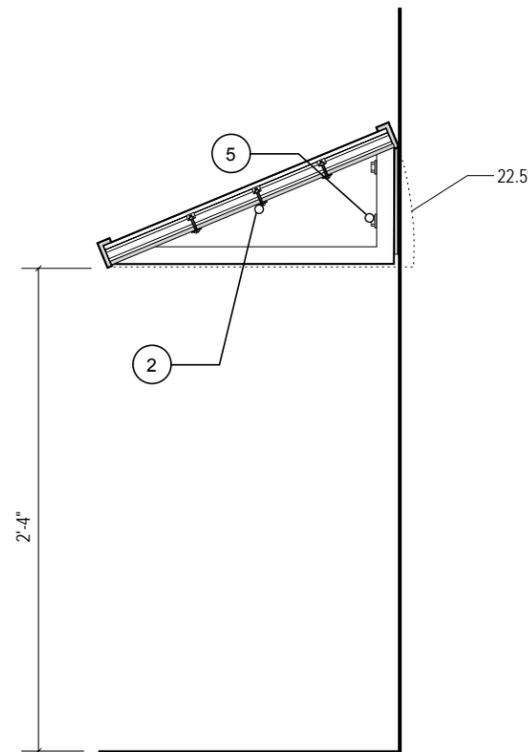
1. Painted aluminum 1" x 1" welded frame system, painted to match CL2725D Dissent
2. Security hardware
3. 1" thick all-weather backer panel
4. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware, painted to match CL2725D Dissent
5. Galvanized lag or bolt connection, painted cap to match frame
6. Porcelain enamel graphic



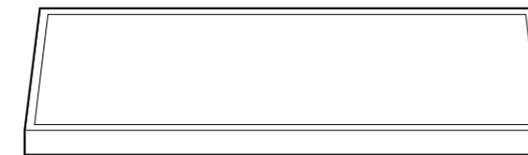
Detail View



Panel Cut-away View



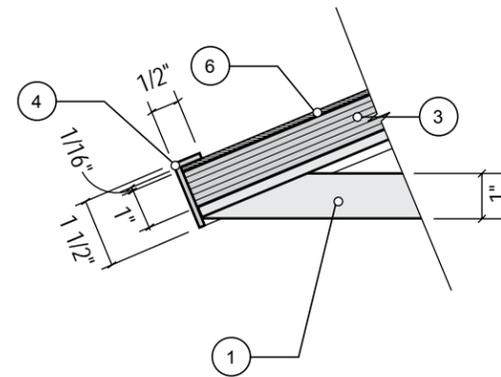
Section View



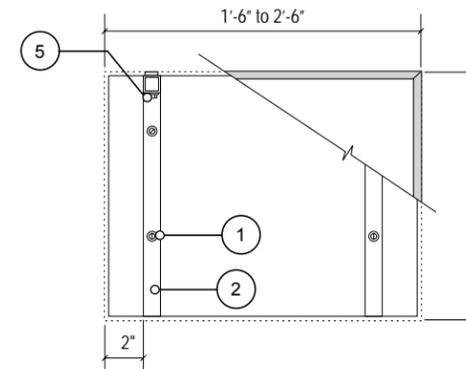
Front View

**Interpretive:** Type E4 - Structure

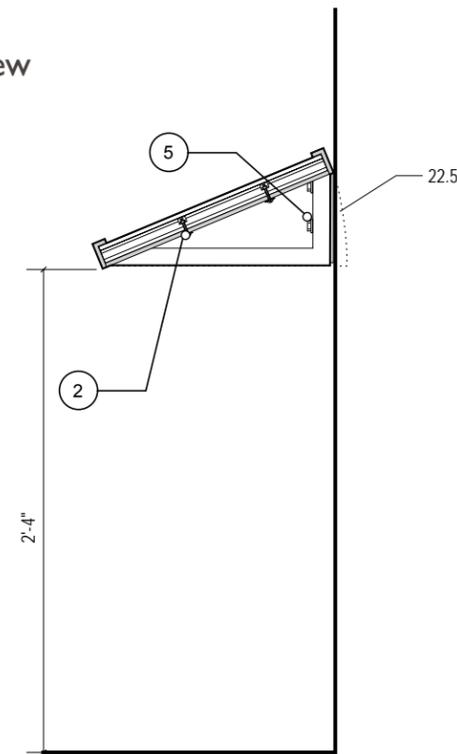
1. Painted aluminum 1" x 1" welded frame system, painted to match CL2725D Dissent
2. Security hardware
3. 1" thick all-weather backer panel
4. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware, painted to match CL2725D Dissent
5. Galvanized lag or bolt connection, painted cap to match frame
6. Porcelain enamel graphic



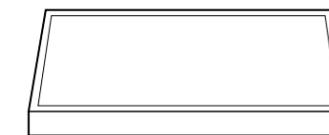
Detail View



Panel Cut-away View



Section View



Front View

**Interpretive:** Types E5 and E6 - Type Sizing

**Fonts and Sizes:**

1. **Main Panel Title**  
Gable Antique Condensed 160 pt.  
Customized with a stepped drop shadow.
2. **Primary Header**  
Adobe Garamond Pro Bold 65 pt.
3. **Caption Header**  
Adobe Garamond Pro Bold 33 pt.
4. **Primary Text**  
Adobe Garamond Pro Semibold 30/40 pt.
5. **Secondary Text**  
Adobe Garamond Pro Semibold 24/28 pt.
6. **Caption Text**  
Adobe Garamond Pro Semibold 20/25 pt.
7. **Quotation**  
Adobe Garamond Pro Bold Italic 42 pt.
8. **Quotation Source**  
Adobe Garamond Pro Semibold Italic 20 pt.
9. **Photo Credit/Source**  
Adobe Garamond Pro Semibold 8 pt.

**THE COLORADO CHAUTAUQUA** **Camp Time for Grownups**

**Learning and Playing in Nature**

Chautauqua's next-to-nature setting encouraged separation from the workaday world. Yet even recreation took on a moral mandate within the Chautauqua Movement's dedication to "useful leisure." By 1915, the frenzied recreational pace prompted cottagers to institute Quiet Hours—to rest before the next activity.

**The Photo Makes the Memory**  
A special experience calls for a picture! During Chautauqua's early years, "Rocky Mountain Joe" (Joseph B. Sturtevant) "tuck" many a face.

Scrambling and tramping in Boulder's foothills proved an exhilarating experience for many Chautauqua-goers. Founded in 1906, the Colorado Chautauqua Climbers Club counted 2,000 people on its summer outings in 1929.

After camping overnight, Chautauquans watch the sunrise. Campers were advised to wear hob-nailed shoes (with spikes), two pairs of hose (stockings) and a heavy sweater. Ladies wore skirts, of course!

*INSPIRE  
TEACH*

*Midst the glory of the mountains  
'neath a blue and wondrous sky  
Lies Chautauqua, winsome beauty,  
sure delight to heart and eye.*  
from "Chautauqua Rally Song"

The Climbers Club rated Chautauqua outings according to difficulty—one to five "degrees." Nearby Royal Arch received third degree status, but was later downgraded.

Callouts: 1 (Main Panel Title), 2 (Primary Header), 3 (Caption Header), 4 (Primary Text), 5 (Secondary Text), 6 (Caption Text), 7 (Quotation), 8 (Quotation Source), 9 (Photo Credit/Source)

**Interpretive:** Types E5 and E6 - Design

1. Use of drop shadows is limited to images used as "artifact" objects, thereby creating a distinction and hierarchy of elements.
2. 1/2" face-profile metal frame on edges adds visual containment to panels.
3. Quotations and excerpts can be drawn from historic sources to provide quick read delivery of major ideas and/or to engage the visitor.
4. Clipped or cutout historical photographs can be used as major anchoring elements.
5. Ornamental graphics taken from period print material may be used to support the panel's historical aesthetic and/or to place emphasis on certain content.

**NOTE:**

*This sample layout serves to illustrate the guidelines; it is not intended as a template.*

**THE COLORADO CHAUTAUQUA** **Camp Time for Grownups**

**Learning and Playing in Nature**

Chautauqua's next-to-nature setting encouraged separation from the workaday world. Yet even recreation took on a moral mandate within the Chautauqua Movement's dedication to "useful leisure." By 1915, the frenzied recreational pace prompted cottagers to institute Quiet Hours—to rest before the next activity.

**The Photo Makes the Memory**  
A special experience calls for a picture! During Chautauqua's early years, "Rocky Mountain Joe" (Joseph B. Sturtevant) "tuck" many a face.

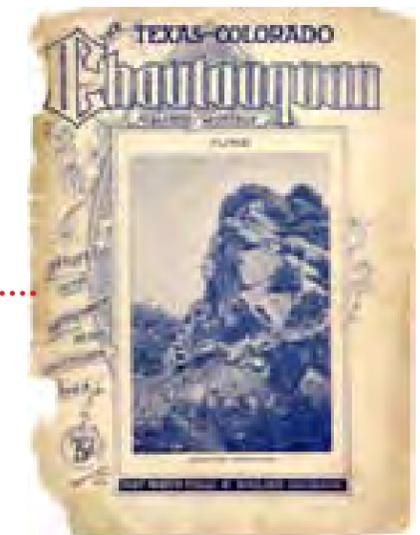
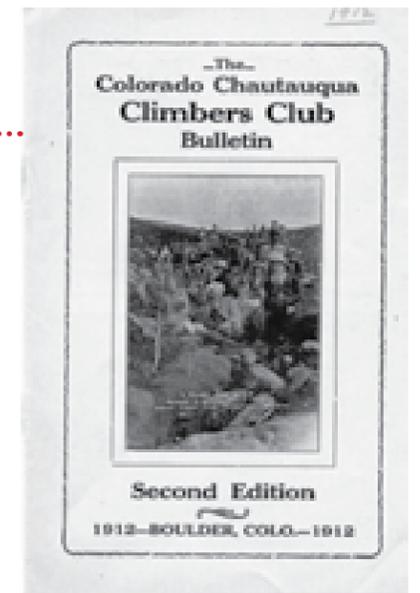
Scrambling and camping in Boulder's foothills proved an exhilarating experience for many Chautauqua-goers. Founded in 1906, the Colorado Chautauqua Climbers Club counted 2,000 people on its summer outings in 1923.

After camping overnight, Chautauquans watch the sunrise. Campers were advised to wear hob-nailed shoes (with spikes), two pairs of hose (stockings) and a heavy sweater. Ladies wore skirts, of course!

**INSPIRE**  
**TEACH**

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The Climbers Club rated Chautauqua outings according to difficulty—one to five "degrees." Nearby Royal Arch received third degree status, but was later downgraded.



## Interpretive: Types E5 and E6 - Messaging

Messaging is designed to provide varying levels of information that match the user's interest. A clearly defined hierarchy encourages visitor engagement and helps direct readers through the intended flow of content.

### 1. 3 Second Message

Panel title uses short and well-crafted copy to convey "big-picture" take away.

Copy Length - Up to 6 words

### 2. 30 Second Message

Primary header and text are constructed to convey the overall message of the panel.

Copy Length

Text - Up to 45 words

### 3. 3 Minute Message

In-depth information for a more specialized read. Secondary storylines further enhance overall messaging.

Copy Length

Secondary Text - Up to 45 words

Caption Text - Up to 25 words

**1** THE COLORADO CHAUTAUQUA **Camp Time for Grownups**

**2** **Learning and Playing in Nature**

Chautauqua's next-to-nature setting encouraged separation from the workaday world. Yet even recreation took on a moral mandate within the Chautauqua Movement's dedication to "useful leisure." By 1915, the frenzied recreational pace prompted cottagers to institute Quiet Hours—to rest before the next activity.

**3** **The Photo Makes the Memory**

A special experience calls for a picture! During Chautauqua's early years, "Rocky Mountain Joe" (Joseph B. Sturtevant) "tuck" many a face.

Scrambling and tramping in Boulder's foothills proved an exhilarating experience for many Chautauqua-goers. Founded in 1906, the Colorado Chautauqua Climbers Club counted 2,000 people on its summer outings in 1923.

After camping overnight, Chautauquans watch the sunrise. Campers were advised to wear hob-nailed shoes (with spikes), two pairs of hose (stockings) and a heavy sweater. Ladies wore skirts, of course!

**INSPIRE  
TEACH**

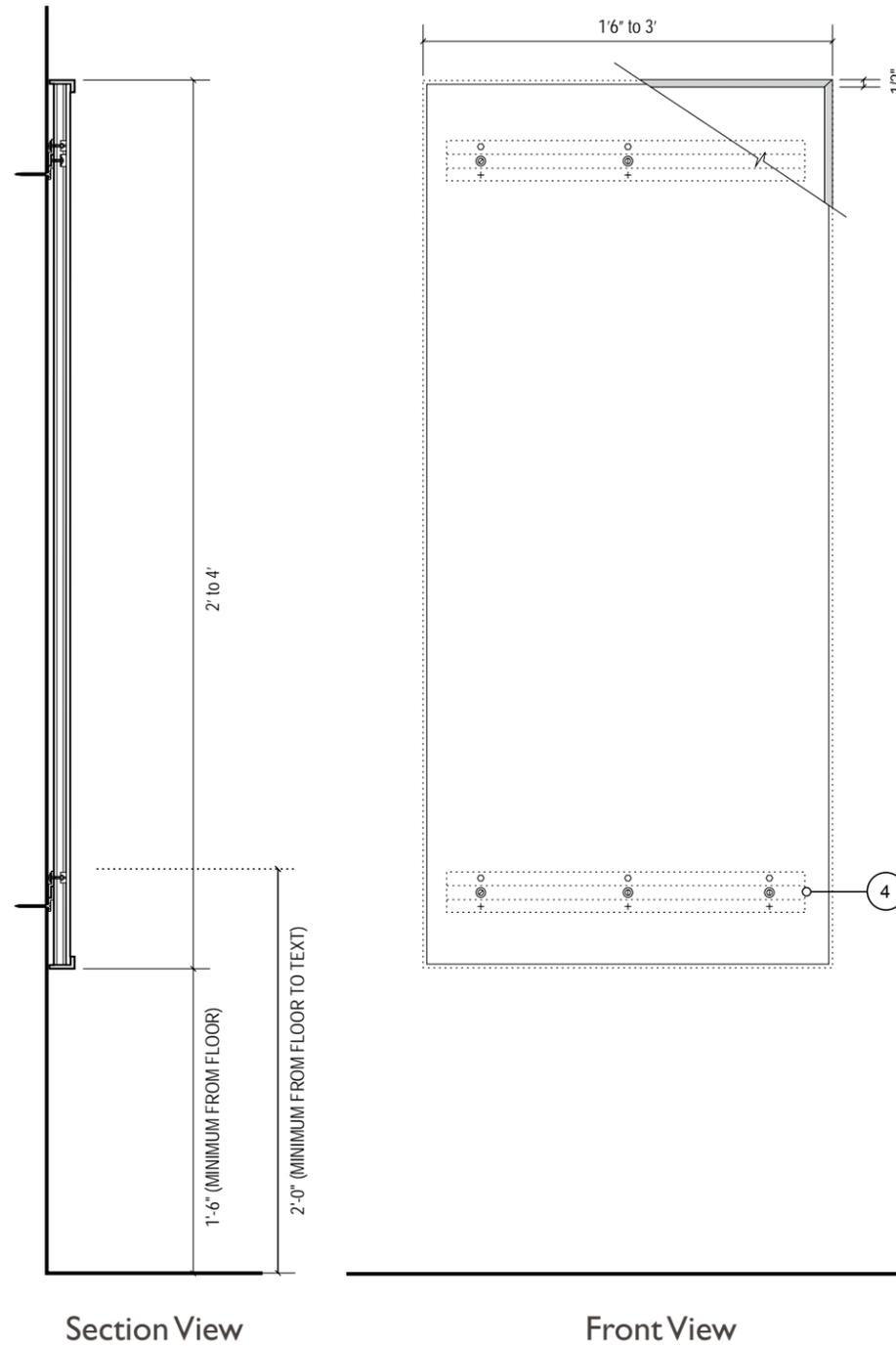
*Midst the glory of the mountains,  
'neath a blue and wondrous sky  
Lies Chautauqua, winsome beauty,  
sure delight to heart and eye.*

from "Chautauqua Rally Song"

The Climbers Club rated Chautauqua outings according to difficulty—one to five "degrees." Nearby Royal Arch received third degree status, but was later downgraded.

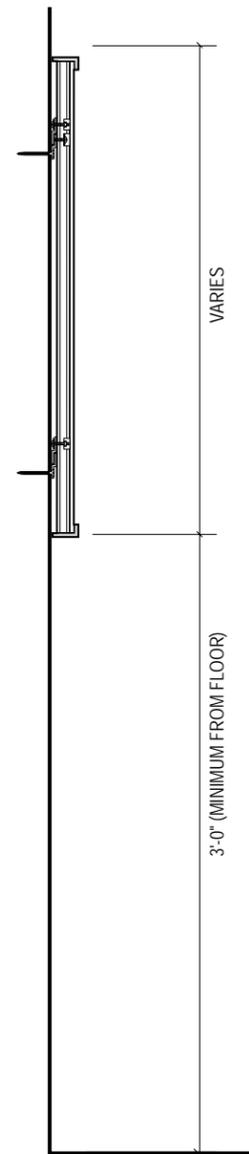
**Interpretive:** Type E5 - Structure

1. Attachment hardware, style depends on substrate
2. 1" thick all-weather backer panel
3. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware
4. Low-profile "Z" cleat
5. 4-color fiberglass embed digital exterior graphic

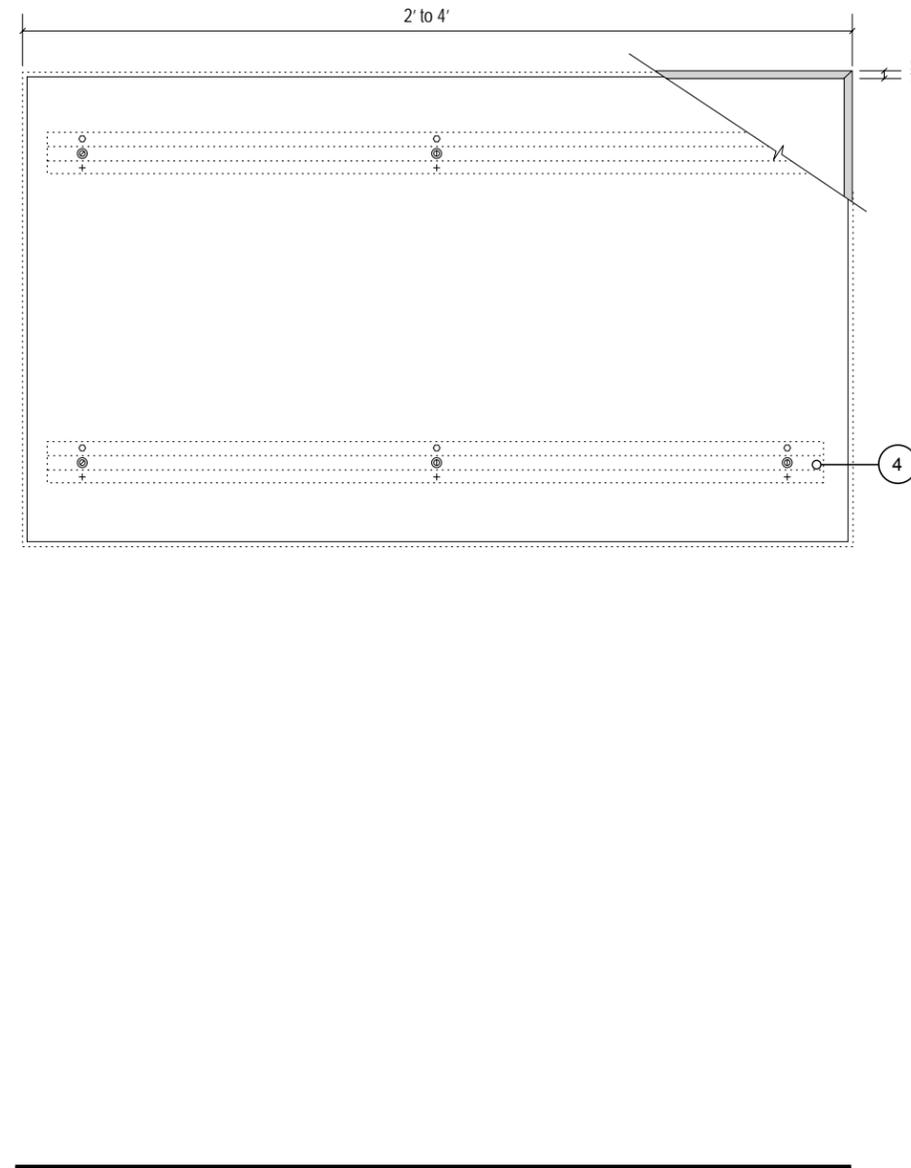


**Interpretive:** Type E6 - Structure

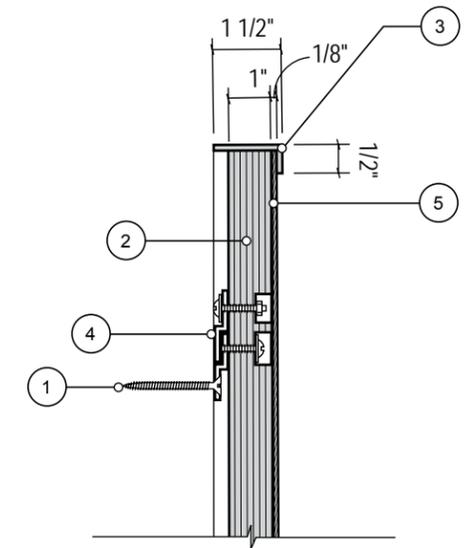
1. Attachment hardware, style depends on substrate
2. 1" thick all-weather backer panel
3. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware
4. Low-profile "Z" cleat
5. 4-color fiberglass embed digital exterior graphic



Section View



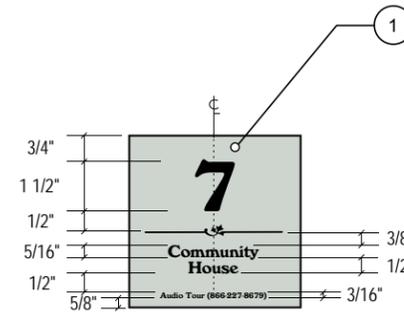
Front View



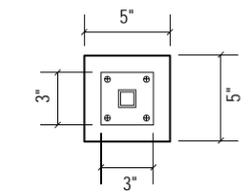
Detail View

**Interpretive:** Type E7 - Structure & Graphic

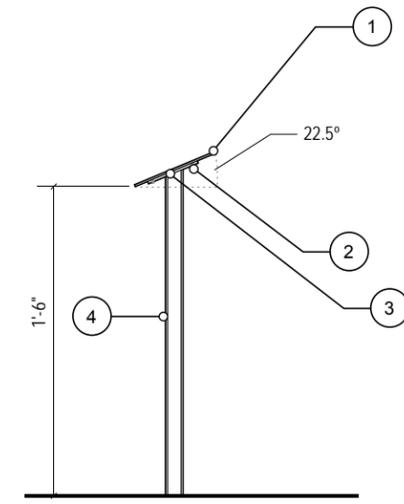
1. Porcelain enamel plate (or equivalent). Numeral and text to match black, background to match 8644M Seal Beach.
2. Integral protruding bolt secures aluminum backer plate to aluminum tubing with security nut.
3. 1/8" thick aluminum backer plate, coated with heavy enamel as buffer between aluminum and porcelain steel plate.
4. Painted aluminum 1" x 1" post, direct burial or as over-sleeve depending on mounting condition, painted to match CL2725D Dissent.



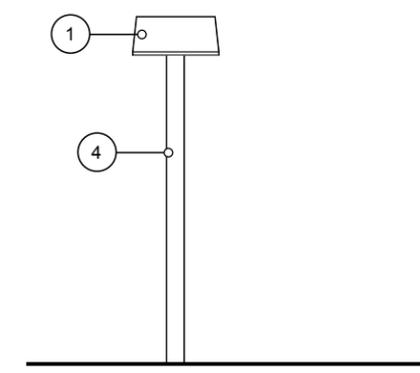
Detail View  
(Graphic)



Plan View



Section View

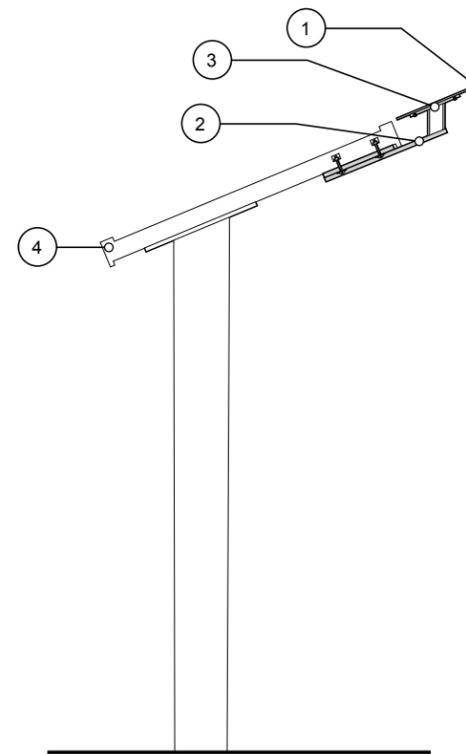


Front View

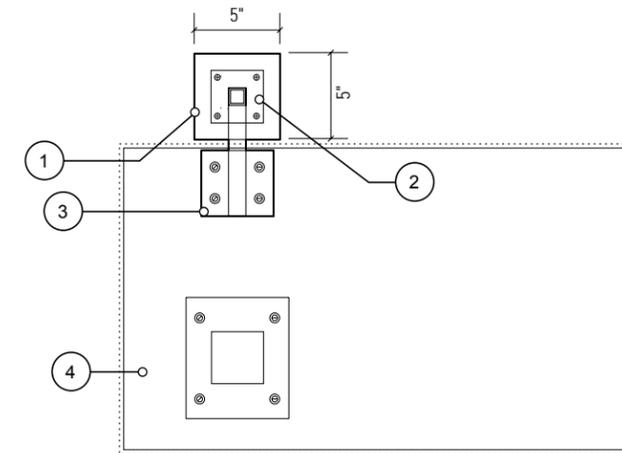


**Interpretive:** Type E8 - Structure & Graphic

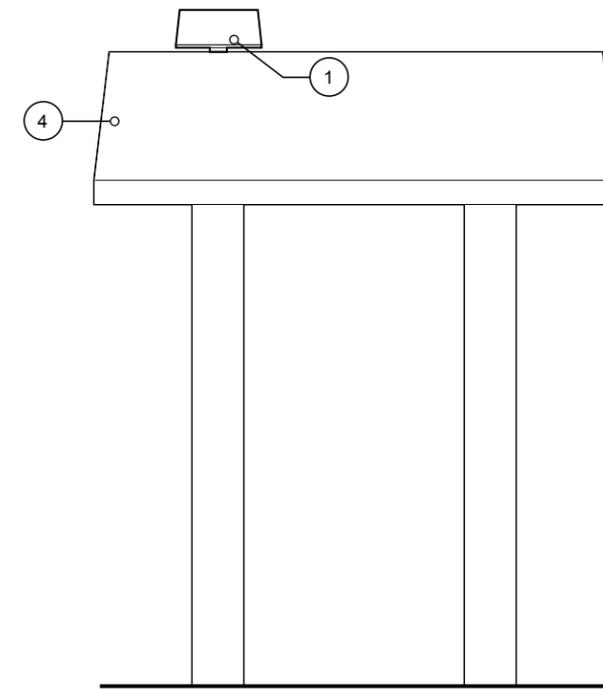
1. Porcelain enamel plate (or equivalent). Numeral and text to match black, background to match 8644M Seal Beach.
2. Mounting assembly. Consists of 1/8" thick aluminum plate and 1" x 1" square aluminum tube.
3. 1/8" thick aluminum backer plate, coated with heavy enamel as buffer between aluminum and porcelain steel plate, mechanically fastened.
4. Existing free-standing sloper.



Section View



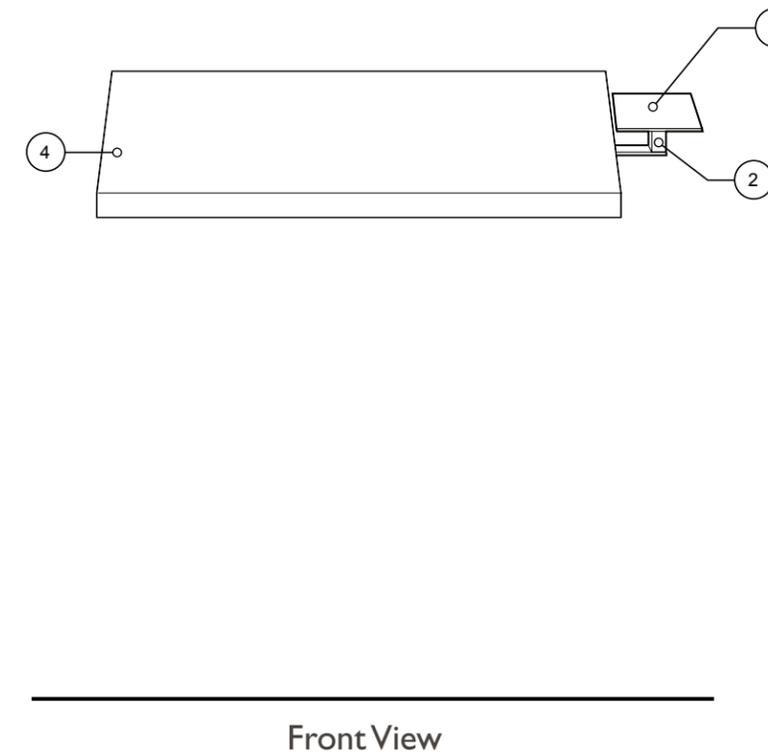
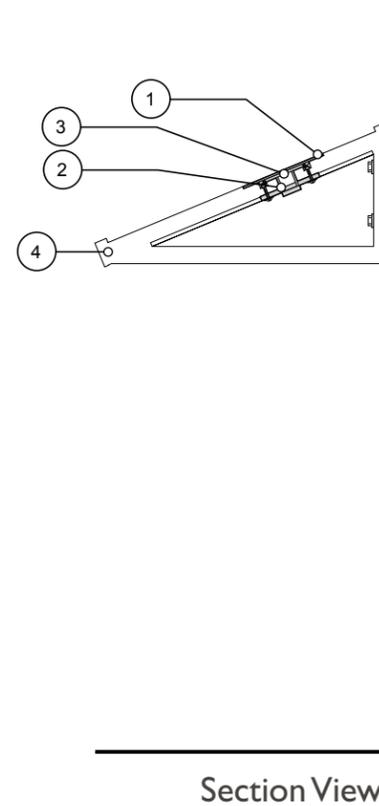
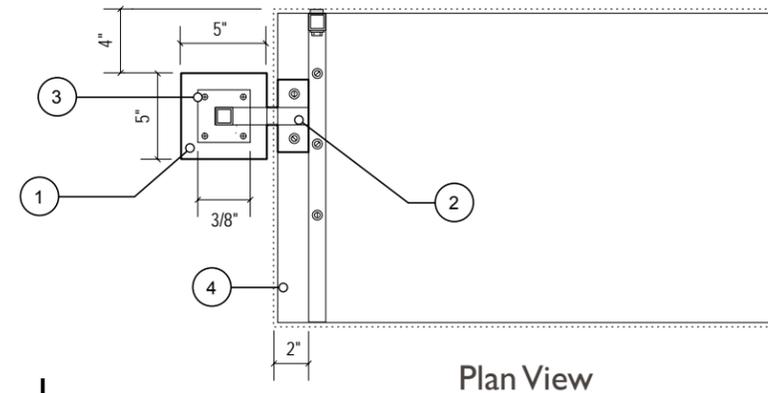
Plan View



Front View

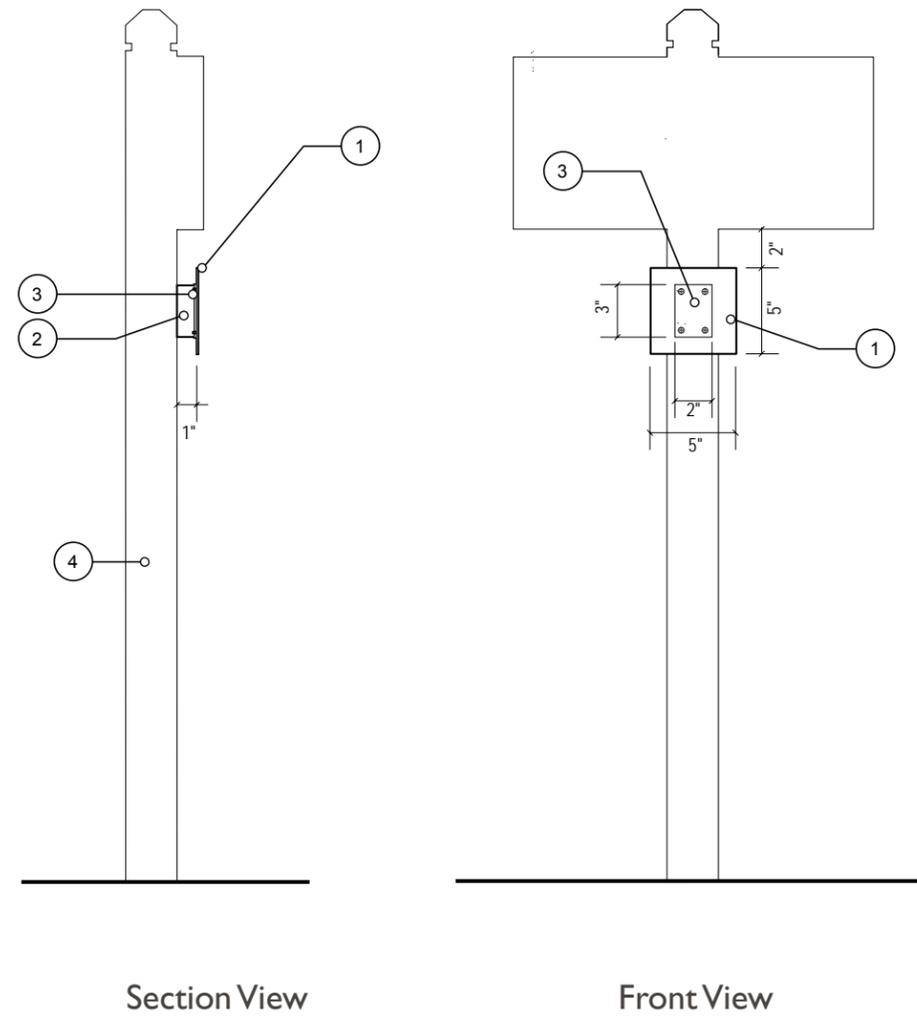
**Interpretive:** Type E9 - Structure & Graphic

1. Porcelain enamel plate (or equivalent). Numeral and text to match black, background to match 8644M Seal Beach.
2. Mounting assembly. Consists of 1/8" thick aluminum plate and 1" x 1" square aluminum tube.
3. 1/8" thick aluminum backer plate, coated with heavy enamel as buffer between aluminum and porcelain steel plate, mechanically fastened.
4. Existing wall mounted sloper.



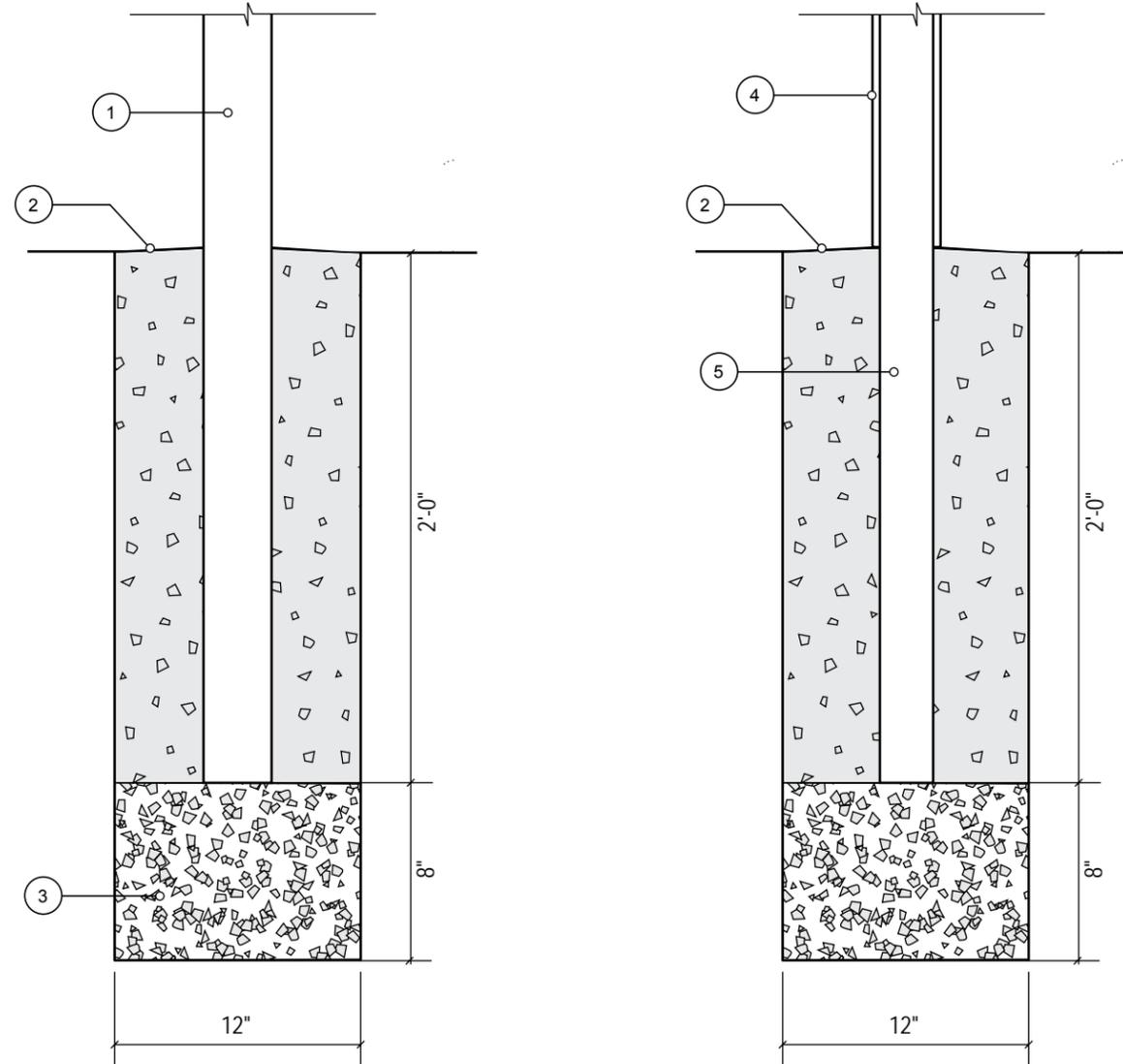
**Interpretive:** Type E10 - Structure & Graphic

1. Porcelain enamel plate (or equivalent). Numeral and text to match black, background to match 8644M Seal Beach.
2. Wood support mount, secured to sign post with mechanical fasteners, finished smooth and painted to match substrate.
3. 1/8" thick aluminum backer plate, coated with heavy enamel as buffer between aluminum and porcelain steel plate, mechanically fastened to wood support mount.
4. Existing Building Identity Sign.

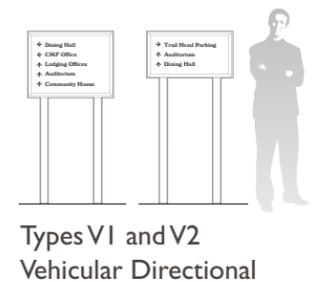
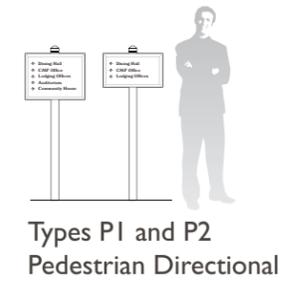
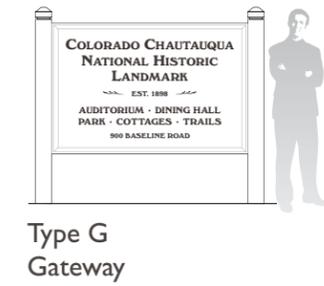
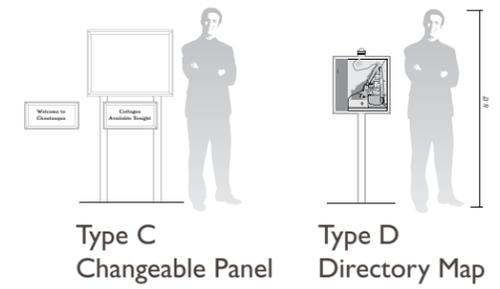


**Interpretive:** Installation

1. Post
2. Concrete, with positive top drainage angle
3. Gravel
4. Post (sleeve)
5. Post Anchor



Over-sleeve Mounting Option

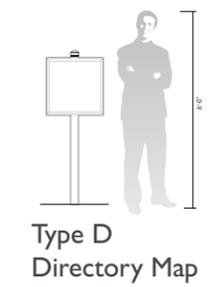
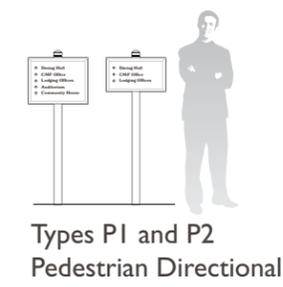


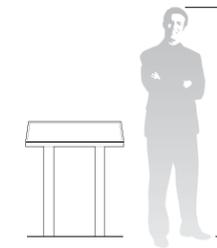


Type E1  
Large Sloper  
Free-standing

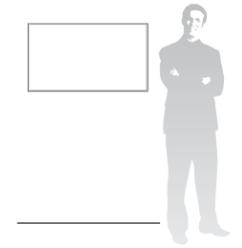


Type E5  
Wall Mount  
Vertical

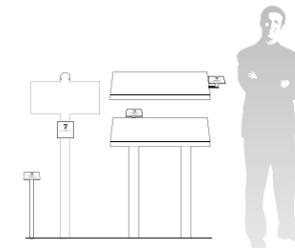




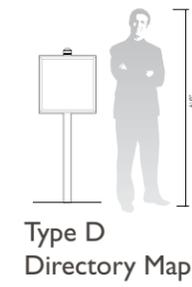
Type E1  
Large Sloper  
Free-standing



Type E6  
Flush Wall Mount  
Horizontal



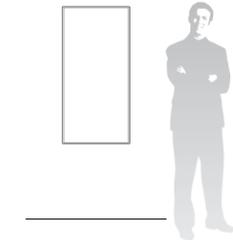
Type E7, E8, E9, E10  
Tour Locator



Locator Maps: Future Interpretive Locations



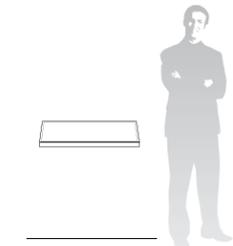
Type E1  
Large Sloper  
Free-standing



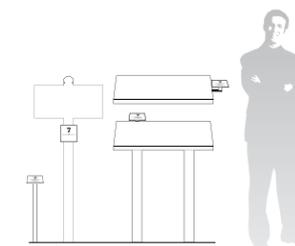
Type E5  
Wall Mount  
Vertical



Type E2  
Small Sloper  
Free-standing



Type E3  
Large Sloper  
Wall Mount



Type E7, E8, E9, E10  
Tour Locator

**Community, Culture and Safety Investments - 0.28% total for three years \$25.2M - reduction of \$2.4M from .30%**

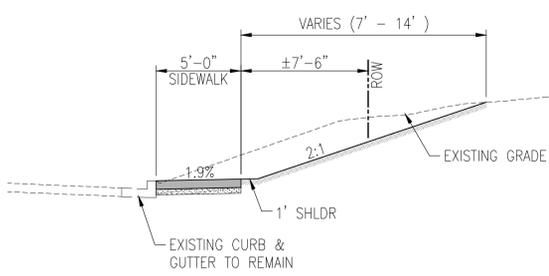
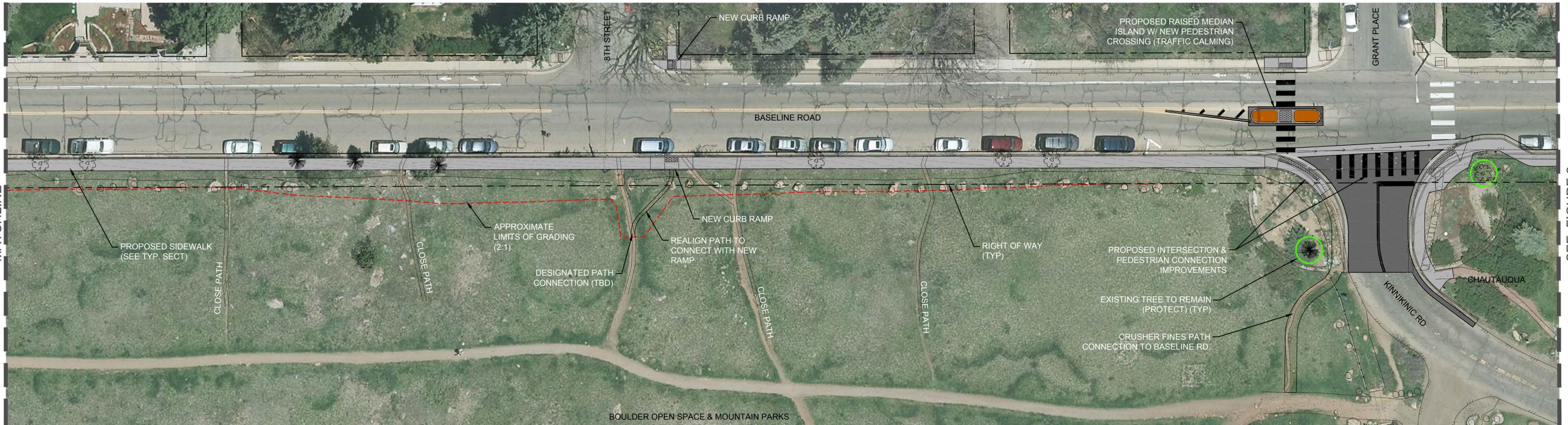
<b>Item</b>	<b>Amount</b>	<b>Group Costs</b>
Civic Area	8,700,000	8,700,000
Hill Residential Pedestrian Lighting	2,000,000	
Hill Commercial District Event Street	750,000	
Hill Commercial District Irrigation and Street Tree Improvements	520,000	3,270,000
Boulder Creek Path Lighting	1,040,000	
Boulder Creek Pathway Improvements	885,000	1,925,000
Arapahoe / 13th Street Underpass	-	-
Eben Fine Park Stream Bank Restoration	700,000	700,000
Dairy Center	3,850,000	3,850,000
Museum of Boulder	4,000,000	4,000,000
Public Arts Program	600,000	600,000
Chautauqua Pedestrian Safety Access / Lighting	1,500,000	1,500,000
Contingency added \$100,000	655,000	655,000
<b>Total</b>	<b>25,200,000</b>	<b>25,200,000</b>
Est. Revenue	25,200,000	25,200,000
Over/(Under)	-	-

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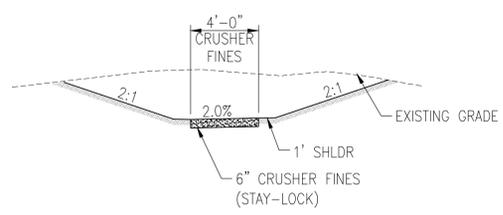
**Community, Culture and Safety Investments - 0.27% total for three years \$24.3M - reduction of \$3.3M from .30%**

<b>Item</b>	<b>Amount</b>	<b>Group Costs</b>
Civic Area	8,700,000	8,700,000
Hill Residential Pedestrian Lighting	2,000,000	
Hill Commercial District Event Street	750,000	
Hill Commercial District Irrigation and Street Tree Improvements	520,000	3,270,000
Boulder Creek Path Lighting	1,040,000	
Boulder Creek Pathway Improvements	885,000	1,925,000
Arapahoe / 13th Street Underpass	-	-
Eben Fine Park Stream Bank Restoration	-	-
Dairy Center	3,850,000	3,850,000
Museum of Boulder	4,000,000	4,000,000
Public Arts Program	600,000	600,000
Chautauqua Pedestrian Safety Access / Lighting - reduced \$250K	1,250,000	1,250,000
Contingency-Increased by \$150K	705,000	705,000
<b>Total</b>	<b>24,300,000</b>	<b>24,300,000</b>
Est. Revenue	24,300,000	24,300,000
Over/(Under)	-	-

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SIDEWALK TYPICAL SECTION  
6TH STREET TO GRANT PLACE



OPEN SPACE CONNECTION PATH TYPICAL SECTION  
6TH STREET TO GRANT PLACE

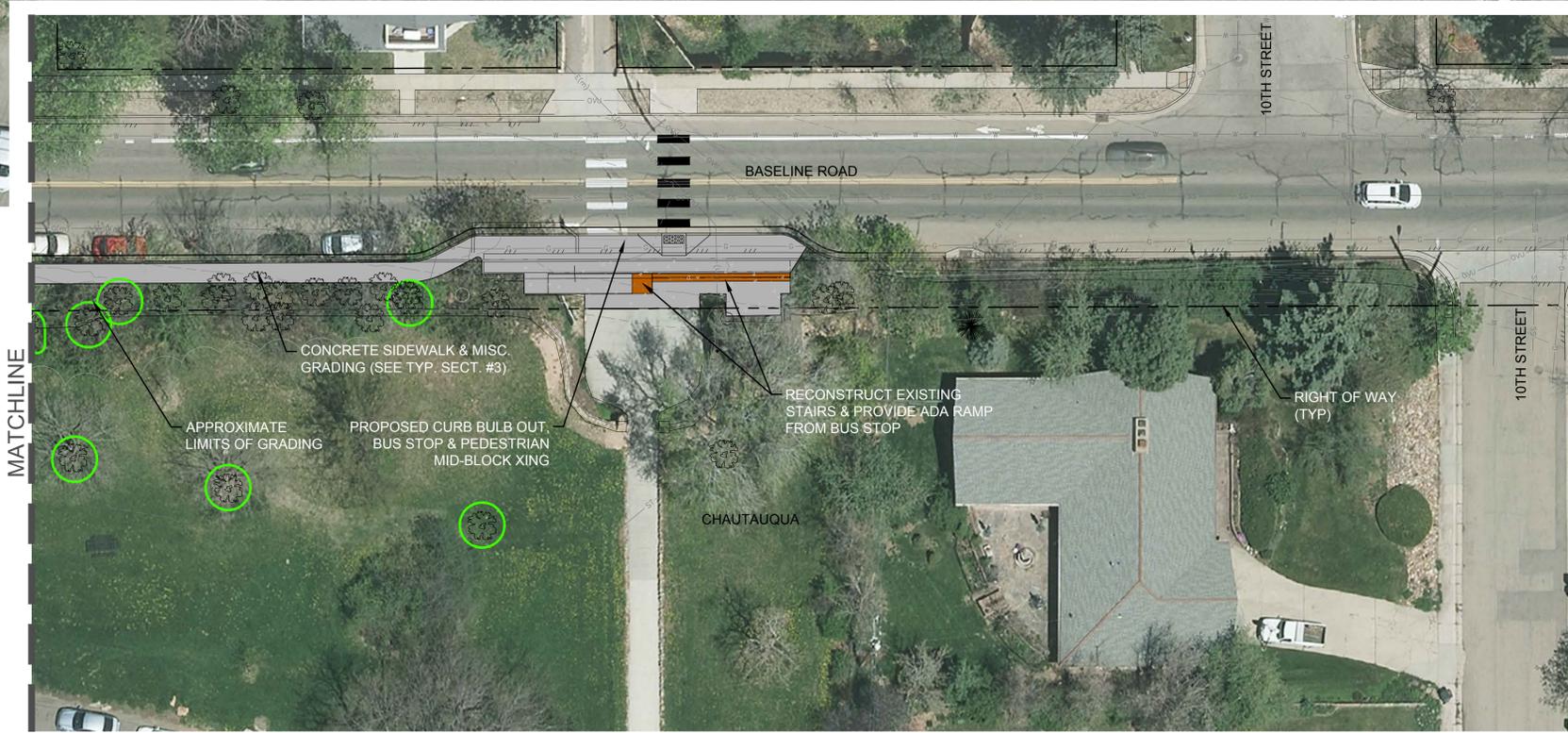
**WEST BASELINE PEDESTRIAN IMPROVEMENTS  
CONCEPTUAL SITE PLAN  
6th STREET to GRANT PLACE  
SEPTEMBER, 2015**

**FIGURE 1**

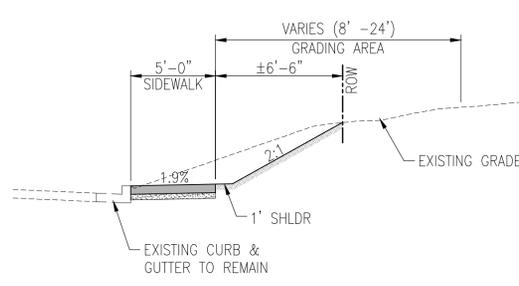


SEE FIGURE 1

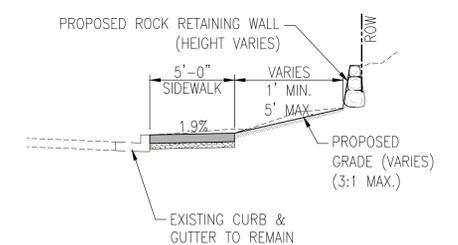
MATCHLINE



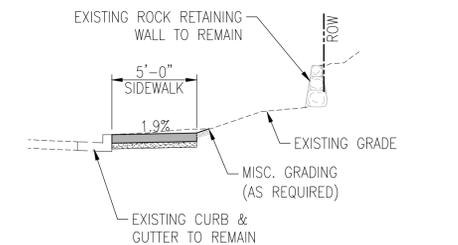
MATCHLINE



CHAUTAUQUA SIDEWALK TYPICAL SECTION #1  
GRANT PLACE TO 9TH STREET



CHAUTAUQUA SIDEWALK TYPICAL SECTION #2  
9TH STREET TO LINCOLN PLACE



CHAUTAUQUA SIDEWALK TYPICAL SECTION #3  
LINCOLN PLACE TO 10TH STREET

**WEST BASELINE PEDESTRIAN IMPROVEMENTS  
CONCEPTUAL SITE PLAN  
GRANT PLACE to 10th STREET  
SEPTEMBER, 2015**

**FIGURE 2**



**CITY OF BOULDER  
OPEN SPACE BOARD OF TRUSTEES AGENDA ITEM**

**MEETING DATE: September 9, 2015**

**AGENDA TITLE:** Request for a recommendation to renew a ten-year lease, including an option to extend the lease term for an additional ten years, with Colorado Parks and Wildlife for 39.65 acres of open space property adjacent to Eldorado Canyon State Park for coordinated trail corridor management.

**PRESENTERS:**

Open Space and Mountain Parks  
Tracy Winfree, Director  
Bethany Collins, Property Agent

Office of the City Attorney  
Janet Michels, Sr. Assistant City Attorney

**EXECUTIVE SUMMARY**

This request would recommend a ten-year renewal of a lease of a 39.65-acre open space property adjacent to Eldorado Canyon State Park including the option to extend the lease term for an additional ten years. The renewal allows the State of Colorado – Colorado Parks and Wildlife (CPW) – continued management of a portion of the Rattlesnake Gulch Trail that lies on City of Boulder Open Space and Mountain Parks (OSMP) lands. This is a renewal of the lease that expired in September 2011, but had a hold over clause and CPW continues to manage the trail corridor under the terms of that lease.

Since 1904, the Rattlesnake Gulch Trail (Attachment A) has been a popular corridor for visitors to Eldorado Canyon State Park and the management coordination of OSMP property permitted by this lease fulfills the City of Boulder Charter's purposes of preservation and providing land for passive recreational use. OSMP acquired this property from the State Board of Land Commissioners in 1992 with the trail lease in place and renewed the agreement with CPW in 2001. As with the original lease, the city is not requesting a fee for this lease renewal and CPW incurs the costs associated with management and maintenance of the trail.

Public notice is required by the city Charter prior to Open Space Board of Trustees (OSBT) action on a disposal of OSMP lands. Council approval is also required by the city Charter for leases of open space lands.

### **STAFF RECOMMENDATION**

Staff requests the Open Space Board of Trustees recommend that the City Council authorize the city manager to enter into a ten-year lease, including the option to renew for an additional ten years, for 39.65 acres of open space property adjacent to Eldorado Canyon State Park for coordinated trail corridor management as approved by OSMP and CPW staff and the City Attorney's Office.

### **COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS**

- Economic – This lease renewal does not provide revenue to OSMP, but OSMP also does not incur any additional costs associated with the permitted activities. Eldorado Canyon State Park is responsible for management costs of the trail corridor and is permitted to charge access fees since the trail must be accessed through Eldorado Canyon State Park.
- Environmental – The management coordination allowed by this lease renewal reduces impacts caused by undesignated trails, and preserves and protects important species and habitats.
- Social – This lease renewal permits CPW to continue to provide the general public with managed access to a popular trail asset. While the state park access fees may limit some residents' ability to use the City of Boulder Open Space, the city land subject to this lease renewal is not otherwise accessible without this lease.

### **OTHER IMPACTS**

- Fiscal – This lease renewal does not require additional fiscal resources.
- Staff time – Administration of this lease renewal is within the budgeted functions of OSMP.

### **PUBLIC COMMENT AND PROCESS**

This item is being heard at this public meeting advertised in the *Daily Camera* on Sept. 6, 2015. A Notice of Disposal of Open Space Lands was published in the *Daily Camera* on Aug. 29, 2015 and Aug. 30, 2015 pursuant to Section 177 of the City Charter. This item will also be advertised and heard during a public Colorado Parks and Wildlife Commission meeting in early 2016.

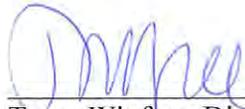
### **ANALYSIS**

The Rattlesnake Gulch Trail is a multiple-use, 2 ½ mile, moderately difficult trail that gains nearly 1,200 feet in elevation and offers spectacular views of Eldorado Canyon, the continental divide, and the eastern plains, and it is in close proximity to the historic Crags Hotel ruins. This trail corridor is located in the Eldorado Mountain Habitat Conservation Area, which because of its diverse terrain, provides habitat for animals such as Flammulated Owls, forest hawks, mountain lions, Preble's meadow jumping mice and

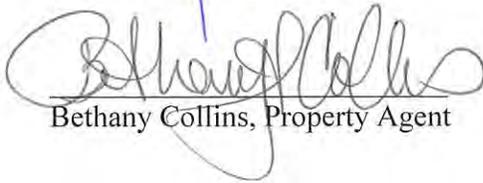
rare butterflies such as Moss' elfin. Important resources in the area include a diverse bird community utilizing the high-quality montane habitat, and the management of the property and trail includes a seasonal closure due to a nearby Golden Eagle nest.

The proposed lease renewal modifies the existing management coordination that has been in place since 1992 by contracting with Colorado Parks and Wildlife to patrol, enforce and maintain the trail corridor. The staff of Eldorado Canyon State Park and OSMP staff will consult periodically on the use and condition of the area and needed maintenance of, and around, the trail corridor. CPW and OSMP will communicate during regular intervals regarding the nesting status fo the Golden Eagle nest. CPW will enforce all applicable state laws consistent with enforcement within Eldorado Canyon State Park, including dogs on leash. As with the original leases, the city is not requesting a fee for this lease renewal and CPW incurs the costs associated with management and maintenance of the trail.

Submitted by:



Tracy Winfree, Director



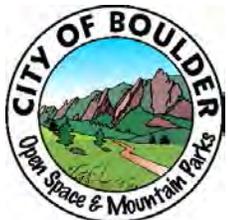
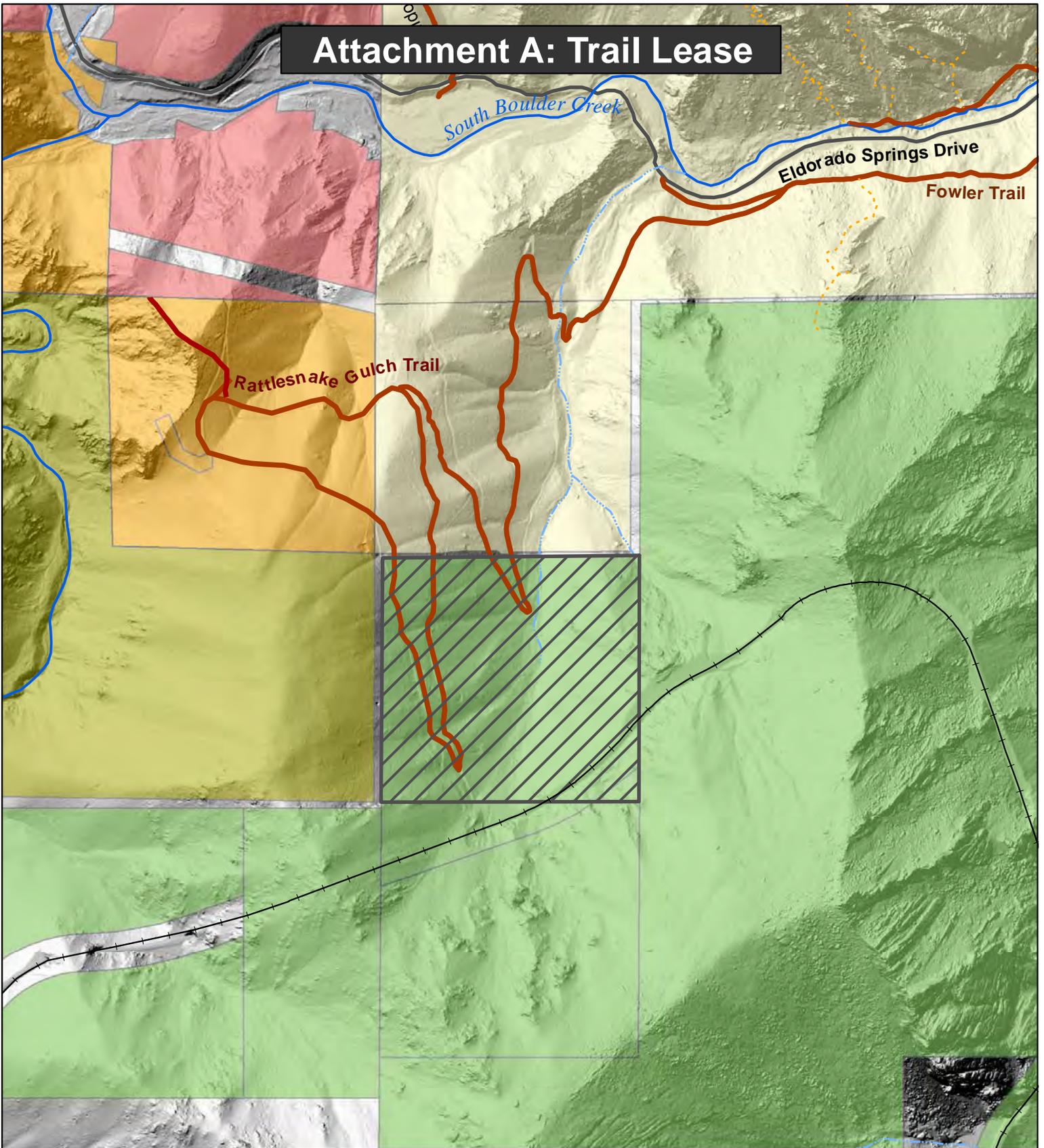
Bethany Collins, Property Agent

**ATTACHMENT:**

A. Rattlesnake Gulch Trail Corridor Map

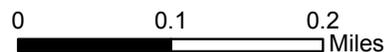
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# Attachment A: Trail Lease



## Legend

- Railroads
- Lease Property
- CPW Trail
- OSMP Land
- Boulder County Land
- Eldorado Canyon State Park
- Colorado Open Land CE
- BLM





**CITY OF BOULDER  
OPEN SPACE BOARD OF TRUSTEES AGENDA ITEM**

**MEETING DATE: September 9, 2015**

**AGENDA TITLE** Request for a recommendation to renew a ten-year lease, including an option to extend the lease term for an additional ten years, with Colorado Parks and Wildlife for 73 acres of open space property adjacent to Eldorado Canyon State Park for coordinated climbing access corridor management.

**PRESENTERS**

Open Space and Mountain Parks  
Tracy Winfree, Director  
Bethany Collins, Property Agent

Office of City Attorney  
Janet Michels, Sr. Assistant City Attorney

**EXECUTIVE SUMMARY**

This request would recommend a ten-year lease renewal of two open space properties adjacent to Eldorado Canyon State Park, including the option to extend the lease term for an additional ten years. The renewal allows continued coordinated management by Open Space and Mountain Parks (OSMP) and the State of Colorado – Colorado Parks and Wildlife (CPW) – in order to permit state park staff to enforce regulations on OSMP lands where rock climbing access corridors to Upper Peanuts Wall, Continental Crag cliffs, and Cadillac Crag cliffs are accessible only from state park lands (Attachments A and B).

Collaborating to provide climbing access trails is a goal and management strategy outlined in the 2005 Visitor Master Plan and this is a renewal of the current lease that expires in April 2016. As with the original lease, the city is not requesting a fee for this lease renewal and CPW incurs the costs associated with management and maintenance of the access corridors.

Public notice is required by the city Charter prior to Open Space Board of Trustees (OSBT) action on a disposal of OSMP lands. Council approval is also required by the city Charter for leases of open space lands.

### **STAFF RECOMMENDATION**

Staff requests the Open Space Board of Trustees recommend that the City Council authorize the city manager to enter into a ten-year lease, including the option to renew for an additional ten years, for 73 acres of open space property adjacent to Eldorado Canyon State Park for coordinated climbing access corridor management as approved by OSMP and CPW staff and the City Attorney's Office.

### **COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS**

- Economic – This lease renewal does not provide revenue to OSMP, but OSMP also does not incur any additional costs associated with the permitted activities. Eldorado Canyon State Park is responsible for management costs of the access corridors and is permitted to charge fees since the climbing corridors must be accessed through Eldorado Canyon State Park.
- Environmental – The management coordination allowed by this lease renewal reduces impacts caused by undesignated trails and fixed climbing hardware, and preserves and protects important species and habitats.
- Social – This lease renewal permits CPW to provide the general public with sustainable, managed access to desired climbing features. While the state park access fees may limit some residents' ability to use the City of Boulder Open Space, the city lands subject to this lease renewal are not otherwise accessible without this lease.

### **OTHER IMPACTS**

- Fiscal – This lease renewal does not require additional fiscal resources.
- Staff time – Administration of this lease renewal is within the budgeted functions of OSMP.

### **PUBLIC COMMENT AND PROCESS**

This item is being heard at this public meeting advertised in the *Daily Camera* on Sept. 6, 2015. A Notice of Disposal of Open Space Lands was published in the *Daily Camera* on Aug. 29, 2015 and Aug. 30, 2015 pursuant to Section 177 of the City Charter. This item will also be advertised and heard during a public Colorado Parks and Wildlife Commission meeting in early 2016.

### **ANALYSIS**

This request is for renewal of a 2006 lease agreement, originally created to reduce the environmental impacts and management burdens of undesignated climbing access trails on OSMP and CPW properties.

The OSMP Visitor Master Plan of 2005 (VMP) calls for development of the Eldorado Canyon climbing access corridors as described by the current lease. The Recreational Opportunities Initiative provides that:

“Climbing Access Trails. Collaborate with the climbing community to develop a system of climbing access trails that provide sustainable access to desired destinations. This action involves: evaluation of existing undesignated trails with defined criteria; decisions on which trails to designate, close, or improve; and restoration of natural resources damaged by historically unsustainable access.” (VMP 2005, Page 39. See also: <https://bouldercolorado.gov/osmp/visitor-master-plan>)

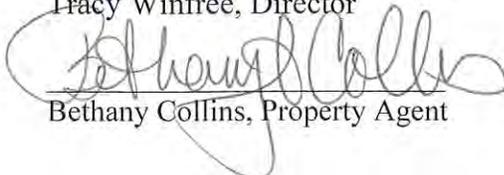
Additionally, the VMP directed the city to designate climbing accesses in Habitat Conservation Areas (HCA), including Peanuts Wall. This access route is located in the Eldorado Mountain HCA, which because of its diverse terrain, provides habitat for animals such as Flammulated Owls, forest hawks, mountain lions, Preble’s meadow jumping mice and rare butterflies such as Moss’ elfin.

The proposed lease renewal extends the terms of the original lease by permitting Colorado Parks and Wildlife to develop, construct and manage the Upper Peanuts, Continental Crag cliffs, and Cadillac Crag cliffs trail and climbing access corridors. The staff of Eldorado Canyon State Park and OSMP staff will consult periodically on the use and condition of the areas and needed maintenance of, and around, the access corridors. As with the original lease, the city is not requesting a fee for this lease renewal and CPW incurs the costs associated with management and maintenance of the access corridors.

CPW will enforce all applicable state laws consistent with enforcement within Eldorado Canyon State Park, including dogs on leash. In addition, collaboration with the climbing community is achieved by a requirement that review and approval of fixed climbing hardware will be done in compliance with the Action Committee for Eldorado’s Fixed Hardware Review Committee procedures.

Submitted by:

  
\_\_\_\_\_  
Tracy Winfree, Director

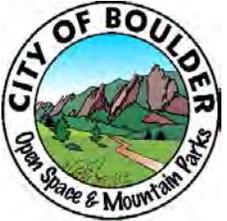
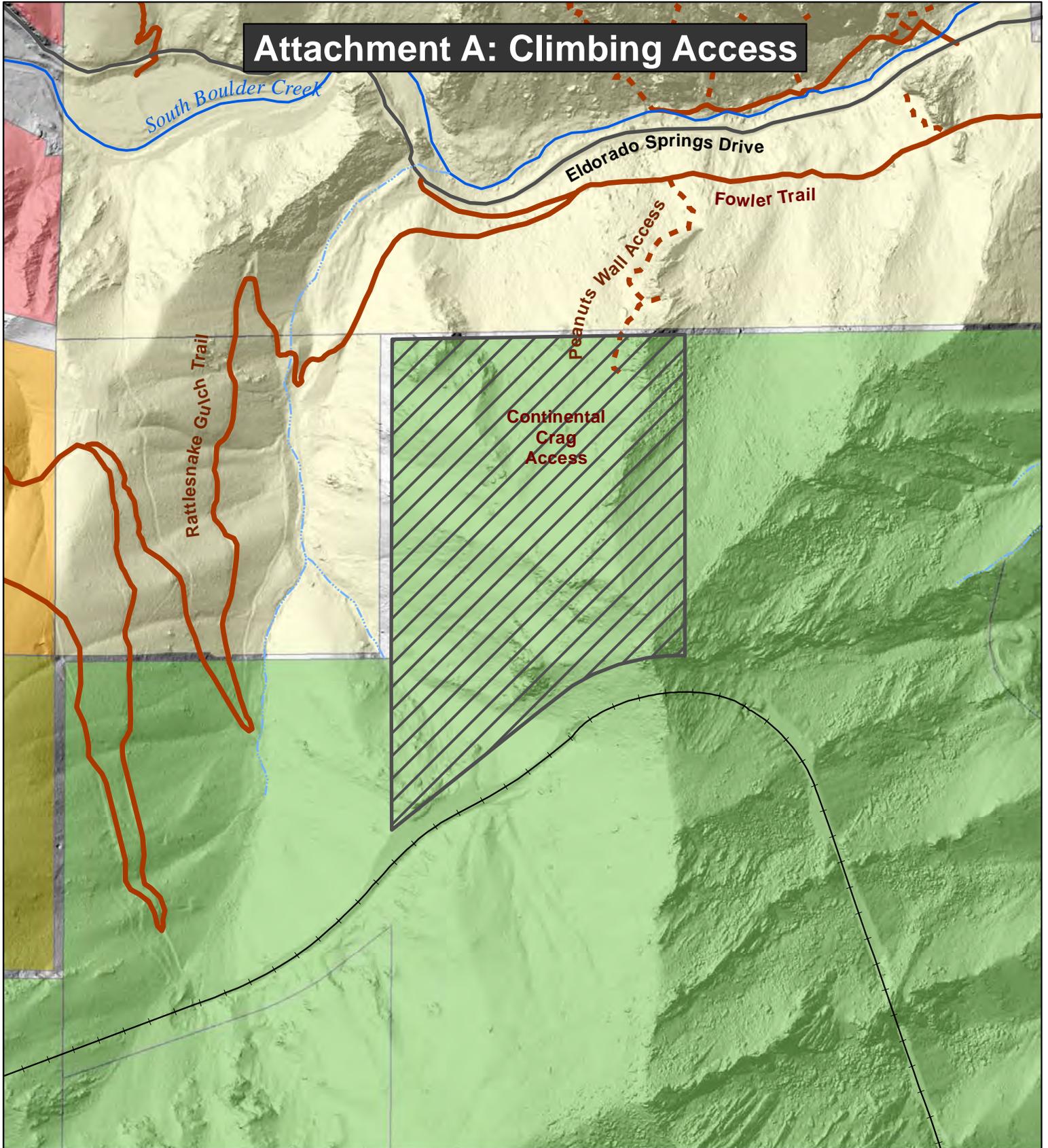
  
\_\_\_\_\_  
Bethany Collins, Property Agent

**ATTACHMENTS:**

- A. Peanuts Wall and Continental Crag Cliffs Access Map
- B. Cadillac Crag Cliffs Access Map

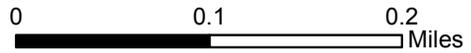
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# Attachment A: Climbing Access

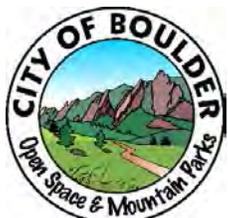
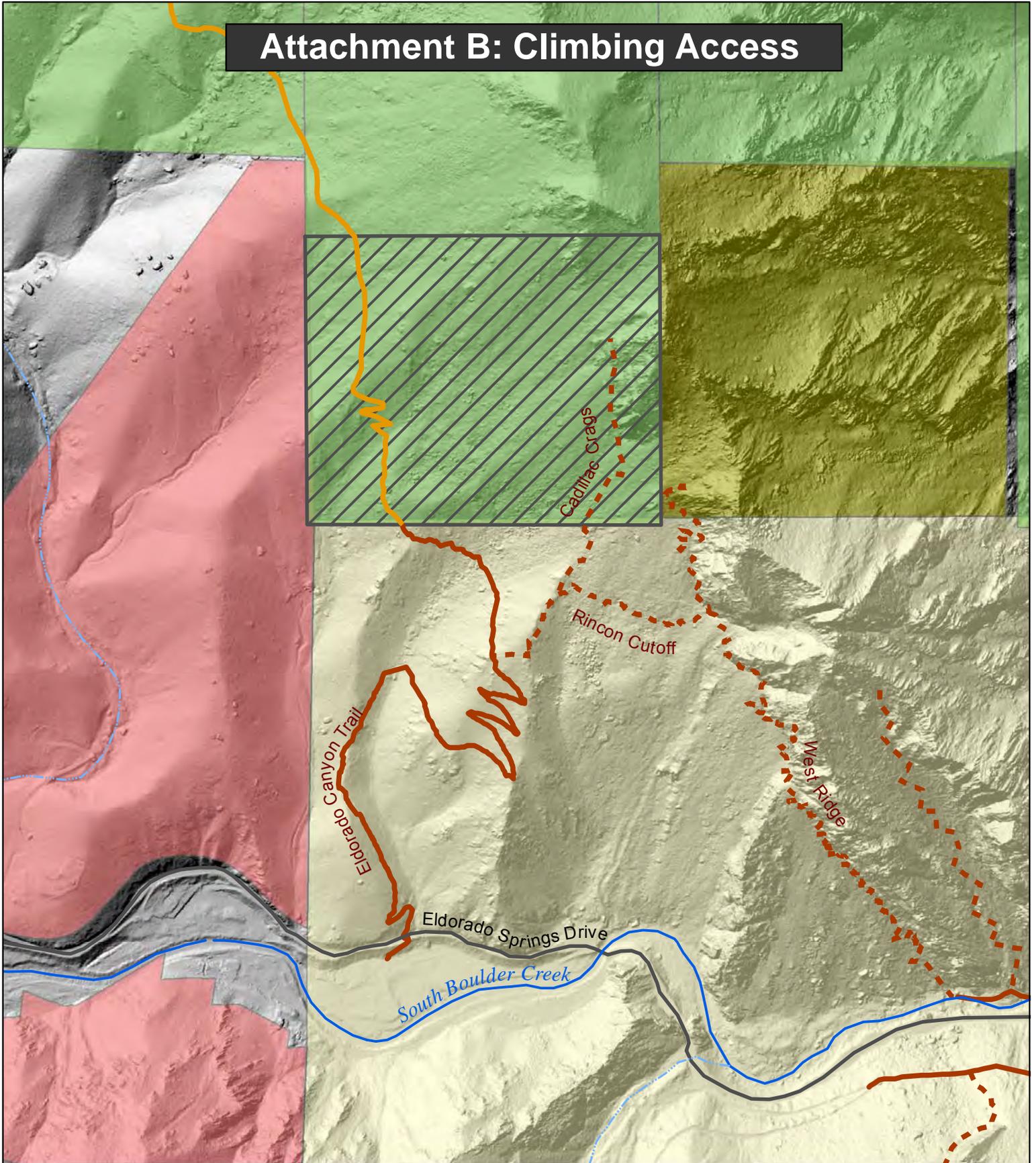


### Legend

- Railroad
- Lease Area
- CPW Trail
- CPW Climbing Access
- OSMP Land
- Boulder County Land
- Eldorado Canyon State Park
- Colorado Open Land CE
- BLM

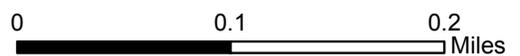


# Attachment B: Climbing Access



### Legend

- OSMP Trail
- CPW Trail
- CPW Climbing Access
- Lease Area
- OSMP Land
- Boulder County Land
- Eldorado Canyon State Park
- Colorado Open Land CE





**CITY OF BOULDER  
OPEN SPACE BOARD OF TRUSTEES**

**MEETING DATE: September 9, 2015**

**AGENDA TITLE:** Review the City Manager's 2016 proposed budget for the Open Space and Mountain Parks Department and recommend approval of the Operating and Capital Improvement Program Budgets and a portion of the Lottery Fund Capital Improvement Program Budget.

**PRESENTERS:** Open Space and Mountain Parks  
Tracy Winfree, Director  
Abbie Poniatowski, Acting Central Services Division Manager  
Lauren Kilcoyne, Finance Manager

**PURPOSE:**

This is a request for the Open Space Board of Trustees (OSBT) to:

Recommend that City Council approve the appropriation for 2016 of \$35,240,569 from the Open Space Fund and the General Fund to cover the 2016 Open Space and Mountain Parks (OSMP) Department expenditures and transfers as outlined in this memorandum and related attachments; and,

Recommend that City Council approve the allocation of \$355,300 of the city's Lottery Fund for OSMP expenditure for capital projects in 2016.

**2016 BUDGET OVERVIEW**  
(Prepared 8/24/2015)

<u><b>SOURCES OF FUNDS</b></u>	<u><b>Proposed 2016 Budget</b></u>	<u><b>%</b></u>
Net Sales Tax Income:	\$30,140,002	91.43%
Investment Income:	\$104,000	0.32%
Lease & Misc. Income:	\$822,978	2.50%
Voice & Sight Tag Program Revenue:	<u>\$227,000</u>	0.69%
Subtotal - OS Fund Sources of Funds:	<u>\$31,293,980</u>	94.93%
General Fund Appropriation for OSMP:	\$1,166,175	3.54%
General Fund Appropriation for RE Services:	\$148,889	0.45%
Lottery Fund CIP Appropriation for OSMP:	<u>\$355,300</u>	1.08%
Subtotal - Non-OS Fund Sources of Funds:	<u>\$1,670,364</u>	5.07%
Total Sources of OSMP Funds:	<u>\$32,964,344</u>	100.00%
<u><b>USES OF FUNDS</b></u>		
Personnel Expenditures:	\$10,359,312	29.40%
Non-Personnel Expenditures:	\$4,196,505	11.91%
Interdepartmental Charges:	<u>\$1,079,225</u>	3.06%
Subtotal - Management Budget:	<u>\$15,635,042</u>	44.37%
Cost Allocation Transfer to General Fund:	<u>\$1,577,657</u>	4.48%
Subtotal Operating Expenditures:	<u>\$17,212,700</u>	48.85%
Open Space Fund CIP:	\$12,295,300	34.89%
Lottery Fund CIP:	\$355,300	1.01%
Debt Service Payments:	<u>\$5,377,269</u>	15.26%
Subtotal CIP & Debt Pmt Expenditures:	<u>\$18,027,869</u>	51.15%
Total OSMP Uses of Funds (1)	<u><u>\$35,240,569</u></u>	100.00%
(1) Includes Transfer to the Fire Dept Budget of :	\$86,833	
Includes GF Funding for RE Services of:	\$148,889	

### **EXECUTIVE SUMMARY:**

The purpose of this agenda item is for the OSBT to meet its Charter requirement to “review the city manager's proposed budget as it relates to open space matters and submit its recommendations concerning said budget to the council.”

The recommended 2016 Budget reflects OSBT goals of maintaining both stewardship of present Open Space lands and preserving additional acres, within the financial sustainability of the Open Space Fund. The attached Open Space Fund Financial for 2015-2021 reflects this philosophy of long-term sustainability of the system and the funding that supports it. The attached Fund Financial models recommended expenditures for 2016 and thereafter which have not yet been approved by the City Council.

The recommended 2016 operating budget, including personnel and non-personnel expenditures and interdepartmental charges and cost allocation, is \$17,212,700. Debt service for 2016 is \$5,377,269 and stems from the 2014 property acquisition bond issue and Boulder Municipal Property Authority (BMPA) payments. The Lottery Fund Capital Improvement Program (CIP) funding for capital projects within the mountain backdrop is unchanged at \$355,300 for 2016. Finally, the recommended 2016 CIP budget for OSMP supports real estate, mineral rights and water rights acquisitions and continues funding for visitor infrastructure flood repairs and new projects. It also supports the replacement of 25 leased or retiring OSMP vehicles. In total, OSMP has budgeted \$12,295,300 for its 2016 CIP. The OSBT unanimously recommended this proposed CIP budget at its June meeting.

### **COMMUNITY SUSTAINABILITY ASSESSMENTS AND IMPACTS:**

- Environmental: OSMP is a significant community-based program that preserves open space land contributing to the environmental sustainability goal of the City Council.
- Economic: The OSMP program contributes to council’s economic sustainability goal because it provides the physical context for the diverse and vibrant economic system that supports services for residents. The land system and the quality of life it represents attract visitors and help businesses to recruit and retain quality employees.
- Social: The Open Space land system is accessible to all members of the community and therefore helps support council’s community sustainability goal because all residents “who live in Boulder can feel a part of and thrive in” this aspect of their community.

### **OTHER IMPACTS:**

- Fiscal: Sufficient funds are available in the Open Space Fund to cover the proposed 2016 Operating and Capital Improvement Program budgets as summarized in this memorandum and in the attached Open Space Fund Financial 2015–2021. There remains significant capacity in the fund financial for future, strategic additional investments and/or to respond to economic cycles. (See Attachment A.)
- Staff Time: The budget is the financial representation of the departmental work plan. Preparation and management of the budget are part of the normal work plan.

## ANALYSIS:

### Services and Operating Expenditures

#### **Background**

The department has based its 2016 Budget on revenue projections from the Budget Office for 2016 and future years through 2021. The 2016 Budget for OSMP has been prepared recognizing that both the Board and council have identified flood recovery as a top priority through 2017. Also prioritized are those planning and implementation efforts related to the North and West Trail Study Areas (TSA). Increases are proposed in standard staff and non-personnel expense to successfully achieve these priorities.

From 2016 to 2018, it is projected that sales tax revenue will increase, on average, 3.35 percent per year. Decreases are possible in 2019-2020, as explained below. The total combined revenue from sales and use tax collected by the city makes up approximately 91 percent of the department's revenue. The Open Space Fund sales tax base of 0.88 of a cent per dollar is made up of three components: 0.33 of a cent per dollar that will be reduced to 0.22 at the end of 2018, 0.15 of a cent per dollar that will sunset at the end of 2019, and 0.40 of a cent per dollar that has no sunset. Commencing January 2035, the 0.22 cent tax will be replaced with a tax of 0.10 cents without sunset, providing the department with 0.50 cent sales tax with no sunset.

#### **2016 Requests**

The following department priorities were presented to the Board at its May 2015 meeting.

#### **Department Project Priorities for 2016:**

1. **Continue Flood Recovery of Trails and Habitat** (likely to continue into 2017, includes county coordination);
2. **Submit Final North TSA Plan** to council for approval by mid 2016;
3. Following North TSA approval by council, **Begin Visitor Master Plan Update** to be slightly **Recast as Open Space Master Plan** – establishes policy guidance, priorities and measures of success across services and programs, and addresses overarching issues such as carrying capacity, night-time and temporal use;
4. **Implement Top Priorities of West TSA, North TSA, Agricultural Resource Management Plan** (adoption mid-2016), **and Forest and Grassland Management Plans**;
5. **Continue to Improve the Visitor Experience** – distinguish between new initiatives and existing services (New initiatives include such items as Voice and Sight program implementation and monitoring, recycling at trailheads, and dog waste composting. Existing efforts include current day-to-day outreach and education, volunteer programs.); and
6. **Develop Regional Trails** through strategic property acquisition, coordination with other agencies, and other avenues as needed (e.g., Eldorado to Walker Ranch, Joder and the Boulder Creek Path extension).

An increase in funding of \$1,067,500 is recommended for 2016 to fund the following:

- Thirteen positions: Seven of which will be implemented in the fourth quarter of 2015 via Supplemental Adjustment to Base (ATB), and six of which will be implemented in

2016. Of the six new 2016 positions, three are extensions of existing fixed-term positions, one is a new fixed-term position, one is a conversion of a fixed term to an ongoing full time equivalent (FTE), and one represents a conversion of a seasonal position to fixed term. Seven of the thirteen total positions are standard on-going FTEs and six are standard fixed term. The fixed-term positions are tied to either flood recovery, succession planning and/or areas that need additional assessment and capacity analysis. The standard ongoing positions are a result of an in-depth organizational assessment that included input from more than two-thirds of existing OSMP staff, information from bench mark natural lands management agencies, and guidance and input from the City Manager's Office and Human Resources. The organizational assessment, supported by a consultant with background in local, regional, state and regional government organizations, was prompted by internal staff insights and requests as well as the opportunity presented with a number of key senior-level vacancies.

- The thirteen position titles include:
  - Community Relations Officer
  - Real Estate Supervisor
  - Stewardship and Monitoring Supervisor
  - Ranger Supervisors (two positions)
  - Facilities Supervisor
  - Associate Planner
  - Administrative Specialist II or III (3-year fixed-term)
  - Cultural Resource Technician (3-year fixed-term)
  - Maintenance III Trails Specialist (2-year fixed-term)
  - Water Resources Technician (2-year fixed-term)
  - Junior Property Agent (2-year fixed-term)
  - Trail Contract and Project Manager (1-year fixed-term)
- Non-personnel operating increases reflect OSMP priorities and core services as identified in the 2016 Work Plan presented to the OSBT at its May meeting. For example, the trails seasonal funding and the Junior Ranger funding are included to appropriately reallocate their funding from the CIP to the operating budget as they are ongoing rather than one-time projects. Ongoing vehicle increases are consistent with citywide vehicle maintenance cost modeling and practices. Other increases deliver on existing commitments and covering actual costs, such as historical and expected stand-by costs for rangers. The list of 2016 non-personnel operating budget items is as follows:
  - The Agricultural Resources Management Plan implementation - \$15,000
  - Climate change adaptation - \$5,000
  - Ranger on call/stand-by increase - \$3,000
  - Seasonal Resource Information staff - \$55,000
  - Sign Group seasonal salary increase - \$38,500
  - Repair and maintenance of new CIP-funded vehicles - \$150,000
  - Increase in trails seasonal funding - \$237,154
  - Junior Ranger seasonal funding - \$177,500

These increases, with the recommended CIP, will allow the department to implement its organizational assessment, continue its flood recovery efforts, complete the North TSA and

Agricultural Resources Management Plans, continue West TSA Plan implementation and deliver on core services.

### **Changes in Staffing Levels**

For 2016, the city manager is recommending a total of 117.15 standard FTEs, 115.88 of which are funded through the Open Space Fund. This represents a net increase of 7.8 FTEs over 2015 as the additional new positions outlined above were implemented in the fourth quarter of 2015. Staff will continue to utilize available funding for seasonal and temporary workers in order to address other service needs across the department.

### **General Fund Transfer for Mountain Parks**

For 2015, the General Fund transfer for Mountain Parks is modeled at \$1,166,175, an increase of \$25,440 from the \$1,140,735 approved for 2015. As a point of reference, the transfer was \$1,241,722 in 2001, and was reduced to a low of \$921,381 in 2010.

### **Review of the Open Space Contingency Reserve Policy**

Approximately 91.43 percent of the Open Space Fund revenue is generated by sales tax and the program is limited in its ability to raise additional revenue from other tax levies or fees. Because of this situation, staff has recommended for cashflow planning purposes that a substantial contingency reserve be maintained.

As a result of new debt issued in 2014, the debt service increased in 2015. Moving forward, debt service is expected to decrease slightly each year through 2021 as debt payments are made. Total debt service in 2016 is anticipated to be \$5,377,269.

Staff recommends reserves totaling \$5,228,051 for 2016. This includes \$3,789,762 contingency and open space revenue bond reserves; \$242,000 for the 27<sup>th</sup> pay period in a future year; \$490,000 to fulfill Taxpayer Bill of Rights (TABOR) requirements for accrued benefits; and \$400,000 for potential property and casualty liability. OSMP has reserved \$300,000 for facility maintenance and \$6,289 for Federal Emergency Management Agency (FEMA) de-obligation.

In the past, OSMP has dedicated reserves for Vehicle Acquisition, South Boulder Creek Flow, and the IBM Connector Trail. In 2015, the funds for the IBM Connector Trail will be spent. In 2016, a CIP project totaling \$2,000,000 will deplete the South Boulder Creek reserves, while the \$300,000 in Vehicle Acquisition reserve will fund one-third of a total \$900,000 vehicle acquisition, \$750,000 of which is incorporated into the CIP.

### **Cost Allocation**

Cost allocation for OSMP in 2016 is \$1,577,657. This is an increase of \$228,956 from the \$1,348,701 in 2015. The cost allocation model is intended to reflect the department's utilization of services from other city departments that are not paid for directly.

A new model for calculating citywide cost allocation was implemented in 2014 and it provides for more transparency than the previous model.

### **Capital Improvement Program**

The 2016 CIP for the Open Space Fund was unanimously recommended at the OSBT meeting of June 15, 2015. In review, the recommended CIP totals \$12,295,300 and includes \$5,400,000 for land acquisition, \$200,000 for water rights acquisition, and \$100,000 for mineral rights acquisition. It also includes \$2,000,000 for South Boulder Creek Instream Flow, \$750,000 for the purchase of vehicles, and \$3,845,300 for various visitor infrastructures, agriculture, restoration and cultural resource projects. Of particular emphasis in CIP projects are flood recovery and TSA implementation (see Attachment B). Finally, the department's CIP includes continuation of its share of the Lottery Fund in the amount of \$355,300, represented in the Flood Engineered Trails and Foothills Nature Center projects.

### **Lottery Fund Allocation**

Lottery Fund revenues are evaluated and projected each year and appropriations are adjusted based on that projection. Consideration is given to maintaining sufficient reserves to offset any short-term funding shortfall. For 2016, OSMP is allocated \$355,300 of lottery funding and will supplement Open Space funding of two major CIP projects, labeled Flood Engineered Trails and Foothills Nature Center.

### **Relationship to Operating Budget**

OSMP continues to address its Visitor Master Plan (VMP) and the plan's identified needs through significant capital expenditure, as illustrated in the six-year CIP schedule. As previously noted, ongoing programs such as Junior Rangers and seasonal trails expenses are moved from the CIP, typically establishing one-time, stand-alone asset investments, to the Operating Budget, which consists of what are considered more ongoing investments. The VMP along with area and resource management plans provide the framework to prioritize and budget specific resource management actions. The 2015 and 2016 Work Plan prioritization processes also contributed to the 2016 proposed budget, which was a very strong and consistent recommendation from staff.

In 2015 the department initiated a reorganization plan that is reflected in requests presented in a 2015 Supplemental Adjustment to Base, as requested by the Executive Budget Team, and through the 2016 budget process. This reorganization will be fully implemented in 2016.

### **PUBLIC FEEDBACK:**

This item is being heard at this public meeting advertised in the *Daily Camera* on Sept. 6, 2015. On Aug. 6, 2015 the City Planning Board reviewed and approved the 2016 - 2021 CIP as recommended by staff. On Aug. 11, 2015 the City Council held its CIP study session. With regards to the 2016 operating budget, City Council study sessions are scheduled on Sept. 8 and 17, 2015. First and second readings of the 2016 budget and ordinances will be held on Oct. 6 and 20 respectively.

**STAFF RECOMMENDATION:**

The staff recommends and requests that the Open Space Board of Trustees pass the following motion:

That the Open Space Board of Trustees recommends that City Council approves the appropriation of \$35,240,569 in 2016 from the Open Space Fund and the General Fund and \$355,300 from the City's Lottery Fund CIP to cover the 2016 Open Space and Mountain Parks Department operating and CIP expenditures and transfers.

Submitted by:



Tracy Winfree, Director



Lauren Kilcoyne, Financial Services Manager

**ATTACHMENTS:**

- A. Open Space Fund Financial 2015-2021**
- B. Summary of OSMP Capital Improvements Program 2016-2021**

OPEN SPACE AND MOUNTAIN PARKS

	2014 Actual	2015 Revised	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	2022 Projected	2023 Projected	2024 Projected	2025 Projected	2026 Projected	2027 Projected	2028 Projected	2029 Projected	2030 Projected	2031 Projected	2032 Projected	2033 Projected	2034 Projected
<b>Beginning Fund Balance</b>	\$ 17,032,351	\$ 30,300,718	\$ 15,995,892	\$ 13,215,478	\$ 15,470,451	\$ 19,153,317	\$ 21,658,349	\$ 18,624,783	\$ 16,167,531	\$ 15,636,310	\$ 15,352,944	\$ 15,327,208	\$ 15,564,204	\$ 19,064,770	\$ 22,868,767	\$ 26,993,721	\$ 31,449,438	\$ 36,248,671	\$ 41,399,583	\$ 46,920,909	\$ 52,826,664
<b>Sources of Funds</b>																					
Net Sales Tax Revenue	\$ 28,425,675	\$ 29,286,214	\$ 30,140,002	\$ 31,216,301	\$ 32,331,488	\$ 29,301,107	\$ 24,436,628	\$ 25,310,661	\$ 26,188,941	\$ 27,097,697	\$ 28,037,987	\$ 29,010,905	\$ 30,017,584	\$ 31,059,194	\$ 32,136,948	\$ 33,252,100	\$ 34,405,948	\$ 35,599,834	\$ 36,835,149	\$ 38,113,328	\$ 39,435,861
FEMA Flood Reimbursement	89,839	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investment Income	95,131	101,247	104,000	107,120	110,334	113,644	117,053	120,565	124,181	127,907	131,744	135,696	139,767	143,960	148,279	152,728	157,309	162,029	166,889	171,896	177,053
Lease and Miscellaneous Revenue	712,242	439,109	822,978	681,932	702,389	723,461	745,165	767,520	790,546	814,262	838,690	863,850	889,766	916,459	943,953	972,271	1,001,439	1,031,483	1,062,427	1,094,300	1,127,129
Voice & Sight Tag Program Revenue	77,791	131,500	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000	227,000
Bond Proceeds - 2014	10,135,898	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General Fund Transfer	1,103,384	1,166,175	1,166,175	1,208,122	1,245,832	1,284,720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grants	105,313	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Sources of Funds</b>	\$ 40,745,272	\$ 31,124,245	\$ 32,460,155	\$ 33,440,475	\$ 34,617,043	\$ 31,649,932	\$ 25,525,846	\$ 26,425,745	\$ 27,330,668	\$ 28,266,866	\$ 29,235,421	\$ 30,237,452	\$ 31,274,117	\$ 32,346,613	\$ 33,456,180	\$ 34,604,099	\$ 35,791,697	\$ 37,020,346	\$ 38,291,465	\$ 39,606,524	\$ 40,967,043
<b>Uses of Funds</b>																					
General Operating Expenditures	\$ 10,731,098	\$ 15,262,996	\$ 15,672,843	\$ 16,804,075	\$ 17,173,764	\$ 17,551,587	\$ 17,937,722	\$ 18,332,352	\$ 18,882,322	\$ 19,448,792	\$ 20,032,256	\$ 20,633,223	\$ 21,252,220	\$ 21,889,787	\$ 22,546,480	\$ 23,222,875	\$ 23,919,561	\$ 24,637,148	\$ 25,376,262	\$ 26,137,550	\$ 26,921,677
Supplemental Operating	-	418,175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carryover/ATB Operating	-	82,707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Increase to 2016 base - operating increa	-	-	1,067,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cost Allocation	1,066,954	1,446,908	1,577,657	1,656,540	1,739,367	1,826,335	1,917,652	2,013,535	2,114,211	2,219,922	2,330,918	2,447,464	2,569,837	2,698,329	2,833,245	2,974,908	3,123,653	3,279,836	3,443,827	3,616,019	3,796,820
<b>CIP- Capital Enhancement</b>																					
Capital-Boulder Creek above 95th St.	-	-	500,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Flood Restoration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-East TSA	-	-	-	-	200,000	50,000	200,000	200,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-OSMP Facility Mods (Space Nec	14,597	-	200,000	200,000	200,000	100,000	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital- Flood Eng. Trails	570,940	-	417,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Goodhue Ditch Fish Passage	-	-	-	300,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-North TSA	50,000	50,000	100,000	200,000	200,000	100,000	50,000	50,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Innovations	-	-	-	75,000	175,000	100,000	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-OSMP Master Plan Update	-	-	252,000	200,000	100,000	100,000	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-S. Boulder Crrek at E.Boulder	-	-	-	300,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ditch Headgate Reconfiguration Flood	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-South Boulder Creek Instream FI	101,912	150,000	2,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-South TSA	-	-	-	-	-	-	200,000	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Visitor Infrastructure CIP	350,000	-	100,000	200,000	200,000	500,000	500,000	500,000	516,000	532,512	549,552	567,138	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Capital-Visitor Infrastructure CIP Carryov	575,584	600,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-West TSA	500,000	-	350,000	500,000	400,000	150,000	150,000	150,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-West TSA Carryover	73,561	494,971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>CIP- Capital Maintenance</b>																					
Capital-Agriculture Facilities	-	100,000	110,000	110,000	120,000	120,000	130,000	130,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Boulder and S. BoulderCreek	-	-	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Flood Restoration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Cultural Resources/Facility Restor.	-	60,000	-	100,000	100,000	100,000	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Farm Site Improvements	-	-	60,000	60,000	60,000	60,000	60,000	60,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital- Flood Trails	-	-	991,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital- Foothills Nature Center	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Hartnagle House Restoration	-	65,000	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-South Mesa Trailhead Bridge	-	-	60,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>CIP- Capital Planning Studies</b>																					
Radio System Analysis	-	-	5,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LIDAR/Aerial Imaging	34,406	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>CIP- Land Acquisition</b>																					
Capital-Real Estate Acquisition	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	5,400,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Capital-Real Estate Acquisition Carryove	273,867	3,444,322	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Real Estate Acquisition 2014 Bo	3,231,027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Real Estate Acq 2014 Bond Carryover	-	6,888,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Water Rights Acquisition	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Capital-Water Rights Acquisition Carryov	129,115	329,115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital-Mineral Rights Acquisition	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Capital-Mineral Rights Acquisition Carryc	361,184	461,184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>CIP- New Facility/Infrastructure</b>																					
Capital-Boulder Crk Bikepath Extension	-	-	500,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Debt Service - BMPA	2,091,148	1,701,487	1,587,507	986,926	760,283	661,746	661,682	593,655	-	-	-	-	-	-	-	-	-	-	-	-	-
Debt Service - Bonds & Notes	6,603,967	4,380,006	3,789,762	3,792,962	3,805,763	2,025,231	652,356	653,456	649,356	649,006	648,431	652,631	651,494	654,500	651,500	650,600	649,250	652,450	650,050	647,200	648,900
<b>Total Uses of Funds</b>	\$ 32,459,360	\$ 45,429,071	\$ 35,240,569																		

## Overview of Open Space & Mountain Parks Mission/Goals

The City of Boulder's Open Space and Mountain Parks Department (OSMP) preserves and protects the natural environment and land resources that characterize Boulder. We foster appreciation and use that sustain the natural values of the land for current and future generations. In 1986, Boulder residents approved a charter that requires OSMP to acquire, maintain, preserve, retain and use open space land for the following purposes:

- Preservation or restoration of natural areas characterized by or including terrain, geologic formations, flora, or fauna that are unusual, spectacular, historically important, scientifically valuable, or unique, or that represent outstanding or rare examples of native species
- Preservation of water resources in their natural or traditional state, scenic areas or vistas, wildlife habitats, or fragile ecosystems
- Preservation of land for passive recreational use, such as hiking, photography or nature studies, and, if specifically designated, bicycling, horseback riding or fishing
- Preservation of agricultural uses and land suitable for agricultural production
- Utilization of land for shaping the development of the city, limiting urban sprawl, and disciplining growth
- Utilization of non-urban land for spatial definition of urban areas
- Utilization of land to prevent encroachment on floodplains
- Preservation of land for its aesthetic or passive recreational value and its contribution to the quality of life of the community

## Funding Overview

Open Space and Mountain Parks' CIP projects are funded from two sources, the Open Space Fund and the Lottery Fund:

- Approximately 92 percent of Open Space Fund revenue derives from dedicated sales and use tax collections. There are three sales taxes that support the Open Space Fund: the 0.40% sales tax which has no sunset; the 0.33% sales tax which will be reduced to 0.22% on Jan. 1, 2019; and the 0.15% sales tax which expires Dec. 31, 2019.
- Open Space and Mountain Parks also expends Lottery Funds on CIP projects. The Lottery Fund derives its revenue from the Colorado Conservation Trust Fund. Lottery Funds are not restricted to OSMP.

## Department Priority Projects for 2016

While core service delivery continues throughout the year, OSMP also is pursuing high profile community initiatives in support of board and council goals. Those community initiatives translated into department priority projects are as follows:

- **Continue Flood Recovery of Trails and Habitat** (will continue into 2017, includes county coordination);
- **Submit Final North Trail Study Area (TSA) Plan** to council for approval by mid 2016;
- Following North TSA approval by council, **Begin Visitor Master Plan update to be recast as Open Space Master Plan** – establishes policy guidance, priorities and measures of success across services and programs, and addressing overarching issues such as night time and temporal use;

- **Implement Top Priorities of West TSA, North TSA, Agricultural Resource Management Plan, and Forest and Grassland Management Plans;**
- **Continue to Improve the Visitor Experience** – distinguish between new initiatives and existing services (New initiatives include such items as Voice and Sight program implementation and monitoring, recycling at trail heads, and dog waste composting. Existing efforts include current day-to-day outreach and education, volunteer programs.); and
- **Develop Regional Trails** through strategic property acquisition, coordination with other agencies, and other avenues as needed (e.g., Eldorado to Walker Ranch, Joder and the Boulder Creek Path extension)

## **Accomplishments and Highlights**

### **Projects to be Completed in 2015:**

#### Land and Visitor Services

- Repaired flood damage on Sanitas Valley Trail – graded and resurfaced
- Repaired flood damage on Chapman Drive – created water control structures, graded and resurfaced along with establishing a trailhead at Chapman Drive and State Highway 119
- Repaired flood damage on Bear Canyon road/trail – graded and resurfaced, installed a culvert in Bear Canyon Creek crossing
- Repaired flood damage to Chautauqua Meadow Trail – designed, graded and resurfaced the trail tread
- South Mesa Trailhead bridge – designed, built and installed a new bridge over South Boulder Creek at the South Mesa Trailhead
- South Boulder Creek West Trail – repaired and restored functionality
- Ertl Pond – installed water level device in dam and restored the trail over the dam
- Restored Eggleston #4 irrigation ditch
- South Boulder Creek Bridge – installed replacement bridge over South Boulder Creek at South Boulder Road
- Hedgecock Bridge – installed a replacement bridge over South Boulder Creek at the Hedgecock farmstead
- Gregory Canyon Access Road – graded and resurfaced (asphalt) the access road tread
- Lion’s Lair Trail – finished construction of this trail on the Wittemyer Property
- Joder Ranch – repaired and built an interim trail from US 36 to Olde Stage Road
- Flagstaff Drive Sediment Basin – designed, built and installed the second sediment catch basin on Flagstaff Drive
- Cherryvale South HVAC – designed and installed new HVAC system for Cherryvale South office building
- Agricultural fences – cleaned flood debris out of fences, repaired fences
- Improved and added structures to organic farmsteads

#### Ecological Systems

- Tall Oatgrass control – initiated grazing to manage tall oatgrass in the Shanahan Ridge area
- Weed management – used a Colorado State Department of Agriculture grant to map and manage 19 state-listed noxious weeds
- Bluebell Creek - restored two acres of Bluebell Creek by planting 300 trees and shrubs and seeding with native plant species

- Boulder Creek vegetation management – removed non-native Russian olive and crack willow and planted native trees and shrubs
- Boulder Creek restoration and relocation – restored flood-damaged stream channel and riparian area while providing the Green Ditch its water rights
- Boulder Creek/South Boulder Creek Confluence area – completed design of repairs of flood-damaged stream
- North TSA inventory report – completed resources inventory
- Trail repair support – coordinated with trails staff to design, build and repair trails while protecting natural resources
- Wildlife monitoring — continued to monitor wildlife populations as outlined in Ecosystem and Visitor Access Plans, in association with habitat improvement projects, and to learn more about post-flood responses
- OSMP Research Program — supported research projects conducted by other agencies and institutions to increase scientific knowledge of ecosystems on OSMP and assist with decision making
- Habitat restoration — improved habitat conditions for sensitive species like northern leopard frog and shrub-nesting birds
- Forest Management — thinned 165 acres of forested land in the mountain backdrop to restore forest health and reduce fire risk

#### Cultural Resources

- Hartnagle House was stabilized
- Foothills Nature Center design plan was produced and minor repairs/upgrades were implemented.
- Continued repair of historic buildings on farmsteads

#### Environmental Planning

- Draft North Trail Study Area Plan completed

### **Projects Expected for Completion in 2016:**

#### Land and Visitor Services

- Continue to repair and restore trails, trailheads, ditches and fences damaged in the September 2013 rainfall event
- Improve and add structures to organic farmsteads
- Add trail connections from Baseline Road to Chautauqua
- Design, build and install bridge across SBC in Greenbelt Meadows area

#### Ecological Systems

- Pollinator surveys - begin pollinator studies within the tall oatgrass grazing area on Shanahan Ridge
- CDOT wetland mitigation – create and restore 25 acres of wetlands as mitigation for wetland impacts associated with US36 Highway improvements
- Boulder Creek/South Boulder Creek Confluence area - complete restoration and repair of flood-damaged stream and riparian area
- Raptor monitoring program and volunteer services — improve data collection methodology for volunteer raptor monitoring program by developing online data entry
- Habitat restoration — improve habitat conditions for northern leopard frogs at Fancher ponds

- OSMP Research Program — support OSMP research program to address departmental-wide research questions; create request for proposals containing staff research priorities
- Forest Management - treat 200 acres of forested land in the mountain backdrop to restore forest health and reduce fire risk
- South Boulder Creek restoration – complete restoration of aquatic habitat on South Boulder Creek upstream of South Boulder Road

#### Cultural Resources

- Complete Hartnagle House renovation
- Complete Viele House water mitigation
- Complete Hunter Kolb House renovation

#### Environmental Planning

- North Trail Study Area Plan recommended by Open Space Board of Trustees and accepted by City Council. Initiate early action items.

### **Projects Starting in 2016, but Not Completed:**

#### Land and Visitor Services

- The plan is to complete all projects by year end, 2016.

#### Ecological Systems

- North TSA – begin resource protection measures identified in the North TSA
- Grassland Ecosystem Management Plan – implement resource conservation projects in the Grassland Management Area Plan
- Forest Ecosystem Management Plan – continue implementation of the FEMP

#### Cultural Resources

- Viele House renovations
- Foothills Nature Center renovations

### **Highlights of 2017-2021 Projects:**

#### Land and Visitor Services

- Completion of rainfall and flood damage repairs to all trails and trailheads
- Completion of trail and trailhead projects called for in the West TSA Plan
- Completion of trail, trailhead and agricultural projects called for in the North and East TSA Plans and in the Open Space Master Plan (revised Visitor Master Plan)
- Completion of agricultural projects called for in the Agricultural Management Plan
- Completion of the South Boulder Creek in-stream flow improvements in conjunction with the Gross Reservoir expansion memorandum of understanding
- Implement medium- and long-term office and work space plans

#### Ecological Systems

- Goodhue Ditch fish passage project – construct fish passage on the Goodhue Ditch diversion structure to improve habitat for native and sport fish in South Boulder Creek
- Riparian Area Restoration – complete restoration of streams and riparian areas impacted by flooding

#### Cultural Resources

- Repair and renovate major farmstead properties, including Viele/Van Vleet and Wright

#### Environmental Planning

- Open space and Mountain Parks Master Plan

## **Relationship to Guiding Principles**

CIP Guiding Principles:

All proposed projects in the 2016 – 2021 CIP are consistent with applicable guiding principles.

## **Open Space and Mountain Parks Budget Commitment and Guiding Principles**

*Open Space and Mountain Parks is committed to fiscal responsibility and sustainability.*

- Judiciously generating and investing funds
- Creating, optimizing and maintaining a budget which manages debt and plans for near- and long-term futures
- Maintaining financial transparency.

*These principles will guide the development and prioritization of the OSMP budget and work plan:*

### **SAFETY FIRST**

- OSMP will first address essential safety issues for visitors and staff

### **PLAY BY THE RULES**

- Comply with all (internal, local, state and federal) laws, regulations, policies, etc.

### **TAKE CARE OF WHAT WE HAVE**

- As top priority, restore and maintain valuable ecological systems, agricultural operations, trails and trailheads
- As additions are made to the system, address ongoing operation and maintenance needs
- Continue to innovate and advance efficiency in the restoration, protection, operation, investments in and maintenance of the OSMP system. Specifically, efficiencies will be sought through:
  - Investments in regular maintenance (taking care of what we have to extend life cycle), and
  - Reductions in resource waste and use.

### **STICK TO THE PLAN**

- Actions committed to in plans or agreements should be included in either short-, mid- or long-term budgets and work plans so staff can answer the question: “*When do you plan to take this action on this project?*”
- Strategically enhance visitor amenities, ecological systems and agricultural operations, prioritizing projects that will best achieve resource and master plan objectives.

### **LEVERAGE OTHER FUNDING**

- Leverage external funds, especially long-term funding, and capacity extending the ability of local dollars to implement our plans.
- Continue to involve community members as volunteers to advance the departmental mission and management objectives.
- Work with partner agencies to accomplish shared goals.

- Take no actions which would compromise the city's bond rating or ability to leverage debt.

## **ADAPT AND LEARN**

- Advance research and monitoring to increase the likelihood of success and better integrate principles of sustainability and resilience.

## **2016 Draft Capital Improvement Program (CIP)**

The draft CIP continues to include **flood-related recovery and habitat restoration** projects. Anticipated to be complete during 2017, flood recovery and restoration projects total \$2,058,300 million budgeted in 2016. As noted in prior work plan and budget updates and actions, the focus on flood recovery delays work in other areas, including adopted plans implementation.

Council requested that staff begin the update process for the Visitor Master Plan (VMP) and include addressing overarching issues. Since that time, the department and external consultants have identified the need for an **OSMP "Master Plan."** Staff is exploring ways to recast the VMP update as an opportunity to develop an OSMP Master Plan, continuing to address the City Council-identified overarching issues, and establishing a set of policies and priorities that help unite the department behind a set of shared goals, objectives and metrics that implement the voter-approved Open Space sections of the City Charter. Also, an OSMP Master Plan would inform and be clearly linked to the Boulder Valley Comprehensive Plan. As is typical for other city departments, master plans or strategic plans that could result in capital investment are included in the CIP. The OSMP Master Plan, including updates to the visitor element, is scheduled to start in 2016 and will continue into 2017. Other systems plan elements would be updated or refreshed thereafter, which is why there is an ongoing amount in the master plan line item.

Another important theme within the CIP is **taking care of existing infrastructure**, such as trail, trailhead and other visitor services infrastructure. A relatively recently formalized investment program in OSMP is maintenance and **management of historical and cultural assets** within the city's open space system. As the department has acquired properties, structures such as cabins, farm houses, barns and other facilities are included in those properties. In some cases, if structures are of no historical significance or are not needed to serve Open Space purposes, those properties or facilities can be demolished, or subdivided and sold. In other cases, those facilities and structures can be leased as part of maintaining historical and cultural uses such as agriculture. Some facilities and structures are considered a part of the historical and cultural fabric of the Open Space system. The department continues to evaluate this program; however, it appears there is a need to invest in structures to preserve safety, integrity and the potential historical and/or cultural value to the community.

**Regional partnerships** continue to be an important aspect of OSMP's work as a critical mass of adjacent open space and natural lands managers is connecting to the OSMP system. The draft 2016 CIP includes funding the Boulder Creek Path west extension, which was included in the Intergovernmental Agreement (IGA) recommended by OSBT and approved by council. OSMP's local match for that project is approximately \$500,000. The city's Transportation

Division is proposing \$50,000 in its 2016 CIP to help the city partner with Boulder County on this local match. An additional obligation in the 2016 CIP is a one-time \$2 million investment for the South Boulder Creek In-Stream Flow Improvements.

A continuing significant investment program is the **real estate acquisition** program, which also is connected to our regional partnerships. Eventually, as remaining strategic acquisitions largely complete the vision of the Open Space area, the department will need to move more and more toward stewardship of the system. The land system(s) will be similar in character as exists today ranging from natural lands management, striving to balance preservation of valuable and unique ecosystems with access and passive recreation; to agricultural and cultural lands that support livestock and local farming; to open lands providing a defining border and character for the Boulder community.

**OSMP Facility Modifications (Space Needs)**, a new line item in the CIP, responds to the need to address inadequate space and infrastructure to support OSMP staffing, vehicles, equipment and materials. A study is underway to develop a short-, mid- and long-term investment program to provide the space and facilities needed to support a quality set of OSMP services.

Finally, another new line item in the proposed OSMP CIP is **an innovations program** that allows the department to experiment with new types of facilities. An example is a design effort focused on “Biomimicry,” a blend of biological sciences and engineering such that the engineering learns from nature’s designs to create more resilient, efficient and effective infrastructure. This innovations program is slated to begin as flood recovery begins to taper.

Please note that the department continues to be in a state of transition. Staff is striving to establish a reasonable and responsive direction in the proposed 2016 – 2021 CIP. As leadership and the organization transitions there is ample opportunity to make adjustments in the out years of the CIP while the OSMP fund remains fiscally sound.

### **New Facilities or Infrastructure Projects**

- Flood repair projects in the Chautauqua area
- Riparian area flood damage restoration
- Farm site improvements on OSMP land
- OSMP facility modifications related to increasing space needs
- Restore the Goodhue Ditch fish passage
- Fund innovative capital projects including Biomimicry
- Project contract management of installation of South Mesa Trailhead bridge
- Provide funding contributing to western extension of the Boulder Creek Bike Path
- Open Space and Mountain Parks Master Plan. Proposed to improve clarity about Open Space and Mountain Parks initiatives, and improve integration with Boulder Valley Comprehensive Plan
- Rehabilitation and improvements to the Foothills Nature Center

### **Operation and Maintenance Impacts**

As new and rerouted trails are built along with new trailheads, the need for operations and maintenance funds will increase. The impact is slight in the near term and, in fact, may decrease since older infrastructure will be replaced with new. Also, staff has been striving to design and

build more sustainable trail systems such that less maintenance is required over time. For example, more sustainable trail design techniques proved to be effective during the September 2013 rain event with those trails requiring substantially less repair work. However, as trails and trailheads age they will need maintenance just as any aging facility does. Maintenance costs on the farmsteads will be needed to keep the buildings in usable condition.

It is anticipated additional funding will be required for operation and maintenance as the OSMP infrastructure expands. Current projections indicate that existing revenue sources for OSMP will be adequate to provide needed operation and maintenance funding.

### **Deferred Eliminated, or Changed Projects**

Due to the September 2013 rain event, other projects have been deferred, delayed and/or modified. For example, West TSA overall completion is being deferred by a few years. Some flood recovery projects are in the West TSA area, repairing trails and infrastructure in place or through re-routing will allow for more resilient infrastructure.

### **Unfunded Projects and Emerging Needs**

By developing an OSMP Master Plan, the department will develop a clear vision for its future and to determine if there are unfunded projects or emerging needs.

### **Board Action**

At its June 15, 2015 meeting, the Open Space Board of Trustees unanimously passed a motion approving the 2016 - 2021 OSMP CIP and recommending approval of the same by the Planning Board and City Council.