



**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:

ISSUE NO. \_\_\_\_

**TAX INCREASE FOR CAPITAL FACILITIES**

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

AND IN CONNECTION THEREWITH,

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

- UP TO \$ 8,700,000 FOR CAPITAL IMPROVEMENTS FOR THE BOULDER CIVIC AREA GENERALLY BOUNDED BY CANYON BLVD, ARAPAHOE AVE, 9<sup>TH</sup> STREET AND 13<sup>TH</sup> STREET,
- UP TO \$ 3,270,000 FOR CAPITAL IMPROVEMENTS IN THE UNIVERSITY HILL COMMERCIAL DISTRICT AND HIGH DENSITY RESIDENTIAL AREAS INCLUDING LIGHTING, IRRIGATION AND TO IMPROVE PUBLIC STREETS,
- UP TO \$ 5,125,000 FOR CAPITAL IMPROVEMENTS TO THE BOULDER CREEK PATH AND ITS ENVIRONS GENERALLY BETWEEN 3<sup>RD</sup> AND 17<sup>TH</sup> STREETS, INCLUDING LIGHTING AND PATH IMPROVEMENTS TO INCREASE SAFETY,
- UP TO \$ 600,000 FOR PUBLIC ART AND TO 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

## University Hill Residential Area Lighting Improvements

The University Hill residential area is roughly bounded by Broadway on the east, Baseline Road on the south, 9<sup>th</sup> Street on the west, and Arapahoe Avenue on the north (please see the shaded areas on the associated figure). Safety has been identified as a concern on the Hill, especially for pedestrians at night. Pedestrians have reported that they feel extremely unsafe walking on the residential streets' sidewalks. Safety issues include a feeling of "darkness" and not being able to see people or objects while walking on the sidewalks. Currently, the Hill residential neighborhoods are lighted at the street intersections with one Xcel Energy High Pressure Sodium (HPS) orange hued street light on a 30' pole, with additional mid-block streetlights on the longer north/south blocks, and occasionally on the shorter east/west blocks. No specific pedestrian lighting is provided on the sidewalks outside of the Hill commercial area. The numerous trees in the area are mature, and block much of the existing lighting from reaching the sidewalks.

Based on direction from Council, staff has developed scopes and initial cost estimates to install high efficiency Light Emitting Diode (LED) pedestrian-scale lighting and roadway lighting on the Hill, along with a control system to monitor the lights and identify any outages or other problems, as well as to dim the lights to minimize energy use during the lowest activity periods. Interest was expressed by Council to consider Photovoltaic (solar-powered) lighting. It was investigated for use on the Hill, but it is not viable due to the heavy tree cover that limits direct sunlight exposure throughout the Hill residential area.

As part of the improvements, existing Xcel Energy street lights would be replaced with city-owned lights to provide consistent, full-spectrum "white" light. Providing improved lighting throughout the entire Hill residential area (both the shaded "highest density" and "lower density" areas) is estimated to cost in the range of \$8-9 million. This was far outside of the potential budget given other needs. Therefore, two subsets of the entire Hill area have been broken out for Council consideration.

The first subset focuses lighting improvements on critical pedestrian corridors that were identified in a workshop held to obtain input from representatives of the CU administration, police department, and student government, the University Hill Neighborhood Association, and city staff members from the City Manager's Office, Police, Transportation, and the Downtown and University Hill Management District/Parking Services. These corridors (shown in yellow on the figure) link the areas of highest residential density on the Hill with the CU campus, the Hill commercial district, and downtown Boulder, which was identified as one of the most important pedestrian destinations for Hill residents. Installing continuous pedestrian-scale lighting on 14' poles at 70' to 90' spacing and improved intersection lighting with two fixtures on 30-35' poles on all of the identified critical corridors is estimated to cost \$2 million.

The second subset provides pedestrian-scale lighting and improved roadway lighting on additional streets (shown in orange on the figure) in the highest density residential areas on the Hill (shaded in red on the figure). On these streets, continuous pedestrian-scale lighting on 14' poles would be provided at somewhat wider 90' to 110' spacing, along with a single 30-35' street light at each intersection. Providing improved lighting on the indicated highest density

streets in addition to the critical pedestrian corridors would serve the highest concentrations of Hill residents, at an additional estimated cost of \$3.5 million.

The staff recommendation is to propose subset one for \$2.0 million. This could serve as a good pilot program and will provide significant improvements and information if subset two was considered in a later ballot measure.

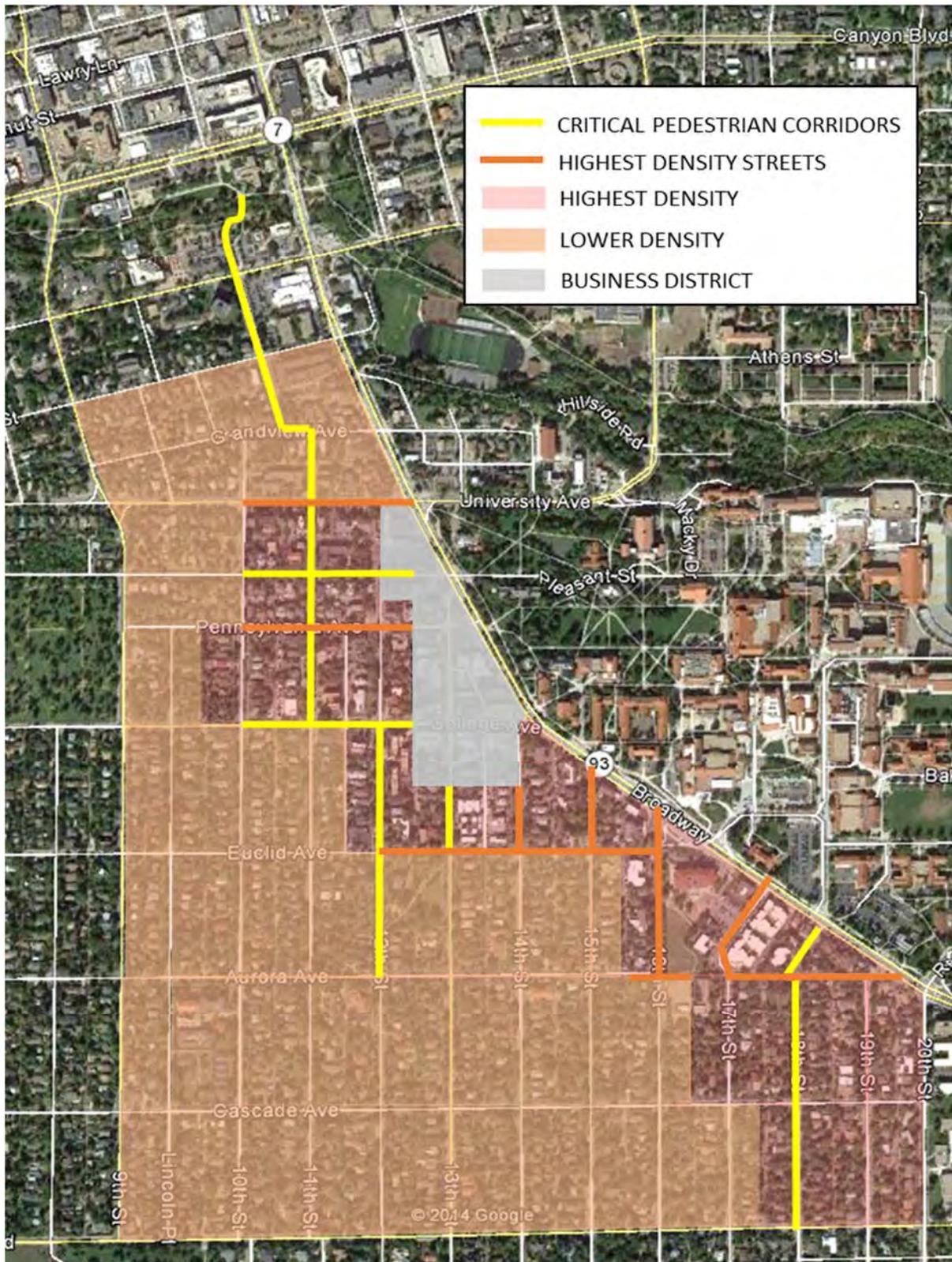
In addition to the one-time construction cost, it is important to note that there will be on-going Operation & Maintenance (O&M) costs associated with the additional lighting infrastructure. These continuing costs are estimated to equal approximately 2% of initial installation annually. Therefore, if the improved lighting on the critical pedestrian corridors was installed (subset one) at a cost of \$2 million, the annual cost to operate the new lighting would be expected to be approximately \$40,000 annually. If Council would propose the two subsets together would be \$5.5 million and the operating cost would be estimated at \$110,000 annually. It is felt that the new operating costs for subset one can be absorbed in the operating budget of the city and no new source of operating revenue will be needed.

**Attachments:**

B-1: University Hill Lighting Improvements

## SPECIFIC RECOMMENDATIONS PER AREA

The University Hill lighting is divided into areas as depicted below:



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To: Members of City Council

From: Jane Brautigam, City Manager  
David Driskell, Executive Director of Planning and Sustainability  
Jeff Dillon, Superintendent Parks and Recreation  
Paul Leef, Civic Area Project Manager  
Jody Tableporter, Civic Area Project Manager

Date: June 17, 2014

Subject: Pay as you Go (PAYG) Submission: Civic Area

## EXECUTIVE SUMMARY

Realizing Boulder’s aspirations for a new “Heart of the City” requires comprehensive Civic Area site redevelopment and associated funding. This memo outlines a proposed approach to redevelop the Civic Area site and identifies three essential, integrated sets of capital projects that fulfill critical first steps towards achieving the adopted Civic Area vision: Creek at the Core, Connections and Access, and Community Spaces. The memo provides a high level cost assessment for these Phase 1 capital investments to help inform Council discussions regarding the potential application of PAYG funding to this important community priority.

The first section of this memo provides context regarding the Civic Area, and in particular, the integrated and phased approach to implementation of the adopted vision, including near-term site investments, activation/events, and long term capital projects (e.g., a year-round Farmer’s Market, innovation center, multi-use event space, etc.).

### I. CONTEXT: OVERVIEW OF THE CIVIC AREA IMPLEMENTATION PLAN APPROACH

On Sep 3, 2013, City Council approved the vision plan for the Boulder Civic Area, a document that encapsulated eighteen months of input, engagement and aspirations of over 5,000 Boulder citizens. The vision plan established the goals, guiding principles and core themes for the Civic Area--components that now inform the implementation plan and are reflected in three integrated strands of work (explained in greater detail in the following section):

1. Activation
2. Near-Term Site Redevelopment
3. Long-Term Capital Projects

Underlying this approach is the belief that the Civic Area project will be successful if the community develops a sense of ownership through participation in events and witnesses a positive and sustained change in the area’s physical appearance and use – with near-term site improvements and activation helping to develop momentum, engender a sense that positive change is possible, and spurring potential interest and investment from external partners.

Following is an overview of the three work strands within the adopted Implementation Plan:

**1. Activation**

In the vision plan, the community identified the Civic Area as a place to “expand...cultural, arts, science, educational or entertainment amenities.” However, Boulder citizens have become unaccustomed and/or disinclined to use the Civic Area as their public front yard or to view it as a place for culture and arts: a role played by urban parks in other cities. The implementation plan proposes to change perceptions by bringing new activities and people back to the Civic Area for summer/fall events that engage a broad range of audiences. Once people are back in the Civic Area, enjoying new activities, new events, they will swell the ranks of those who see the area’s potential as the new heart of the city.

The strategy for summer/fall 2014 is to enhance partner events, particularly those that can create a splash, foster productive partnerships, pilot programs that relate to capital projects, and bring people to the Civic Area, and to market all area activities under a Civic Area umbrella. For example, for the successful Bot Joy mural event, the Civic Area events team added a 120-kid art class (with BMoCa) and established a Civic Area hashtag for social media.

In addition to Bot Joy, 2014 Civic Area events are being developed by the Civic Area events team (comprised of Civic Area project management and Parks and Rec staff) with the Dairy (Heritage Bike Parade), BMoCa (Game Changers) and the Library (Library Summer Festival). Parks and Recreation is leveraging existing partnerships to deliver Civic Area events associated with the Get Movin Challenge (bringing Yoga into the Park), Parks & Recreation Month and a volunteer-event occurring on Public Lands Day.

Also under consideration for 2014 or 2015 are events that will stretch the curation skills of the Civic Area team, including an Innovation Civic Area camp for teens, a Community Long Table and performance series. Although not technically an event, the Civic Area team is also engaging partners to help deliver a creek side interpretive exhibit.



## 2. Near-Term Site Redevelopment

The Near-Term Site Redevelopment is the subject of this PAYG memo; the context and proposed work plan (interventions, cost, phasing) are covered in detail in Section II, entitled “Near-Term Site Redevelopment/PAYG Submission.”

## 3. Long-Term Capital Projects

The vision plan outlines a number of significant capital investments that would fundamentally shape the Civic Area’s future, creating west and east “bookends” of facilities with a renovated and expanded park at the core. Examples of facility investments include a year-round market hall, a redeveloped senior center, a multi-use events space, and relocated municipal services. Extensive work is getting underway to take these key concepts to the next level of detailed planning, feasibility analysis and stakeholder discussions, with the aim of creating a short-list with suitable detail for consideration as part of a potential 2016 bond ordinance.

To complete this work, the Civic Area team will convene public/private partners to discuss potential Civic Area long-term capital investments in each of the following areas: the Arts, Local Foods, Event Space, Connections and Innovation/Services. The groups will convene bi-monthly for six months beginning this summer. To the extent that proposed projects are common to multiple working groups (e.g., innovation center, a subject for both Event Space and Service/Innovation) combined group meetings will be scheduled.

Appendix B contains additional detail on the focus of the individual work groups.

## II. NEAR-TERM SITE REDEVELOPMENT/PAYG SUBMISSION

### A. Context: Implement initial capital investments to redevelop the Civic Area in keeping with the adopted vision plan

The Civic Area today lacks identity as a unified public space. Both daily users and visitors experience it as a series of fragmented spaces (the library, bike path cut-through, Tea House, etc.) with very little sense of the area as a cohesive whole. As documented in the Civic Area visioning process and the resulting vision plan, the area falls short of its promise as a community destination and civic ‘heart’ with a special and coherent sense of place.

### B. Integrated delivery plan

PAYG funding is requested to substantially initiate an integrated and comprehensive redevelopment of the Civic Area. As envisioned in the adopted plan, the redeveloped Civic Area will have a “linear ‘green’ along Boulder Creek...providing natural beauty, ecological function and flood safety as well as recreational, art, and cultural opportunities.” The plan also outlines “a blend of indoor and outdoor facilities and spaces as an integral and important component of new programs for the Civic Area,” with

“access and mobility... improved so people can get to, round, within and through the Civic Area better.”

In accordance with the Civic Area Guiding Principles and best-practice design principles, the redevelopment will capitalize on the site’s unique natural assets, provide enhanced outdoor venues for community gatherings, and address connectivity issues that now isolate the Civic Area from adjacent areas of the city.

The focus is not on individual interventions (a piece of art or a new plaza) but on delivering substantial improvements across the site to create critical momentum toward reanimating Boulder’s civic heart.

The design work necessary to define in detail the proposed improvements will begin in Summer 2014.



What is outlined below is a first-level draft based on the adopted vision plan and subsequent staff team discussions, with order of magnitude cost estimates. Undoubtedly, detailed design work and community input will shape the specifics and likely alter the budget specifics. The focus at this point is to ensure that the estimated amounts are appropriate for the scale of work and change envisioned, as informed by the community vision plan’s principles and themes:

1. **The Creek at the Core:** The Creek is a symbol of what defines Boulder— outdoor space and nature—and it is located at the city’s urban core. Many cities need to re-create this type of urban park feature; in Boulder, it is not only present but serves as the cohesive thread across the entire Civic Area site.

As illustrated in the attached diagram (see items marked #1 in Appendix A) the individual interventions to deliver “the Creek at the Core” include: infrastructure to link the library and Creek; playgrounds, nature play areas and other improvements along both sides of the creek (between the library and municipal building and East of Broadway); and improvements in the area near the Gilbert White Memorial. The combined result is an enhanced and active natural environment at the core of the city that symbolizes Boulder’s unique lifestyle-- with areas designed to support play, recreation, socializing, contemplation and education.

2. **Community Spaces:** The adopted vision plan describes a Civic Area where people from all parts of the community gather, interact, and attend both planned and impromptu events (e.g., poetry readings, concerts, education, dance, etc.). Urban parks and civic spaces serve this vital role in numerous other cities.

To meet community aspirations, improvements are needed to the Civic Area’s infrastructure, and in particular to outdoor plazas and other community spaces to successfully host gatherings, performances and events. While new buildings and other indoor space improvements are addressed in the Long Term Capital Projects section, individual interventions proposed for the near-term include potential improvements to the Library Café/courtyard, the north library plaza, the north

municipal lawn, the sister cities plaza, and the areas/plazas adjacent to the Farmer's Market where power, lighting and other amenities are needed to support events.

Items marked #3 on the diagram in Appendix A highlight the proposed Community Space interventions. The intention is to invest in space improvements across the area to support multiple nodes of activity so that one area does not become better activated while another area becomes a place of neglect. Visitors will also stay longer and enjoy multiple activities that appeal to various members of a family or group. The plan also delivers the spaces needed for the growing indoor/outdoor programming aspirations of the library, BMoCA, and others.

3. **Connections and Access:** The Civic Area is not only internally disjointed, but it also suffers from a lack of physical connection to other parts of the city. One of the core tenets of the vision plan is to link the Civic Area more strongly with the rest of downtown, so that the two areas function as a unit to attract greater numbers of citizens and visitors; this will not occur without better connectivity.

In advance of the envisioned redevelopment of Canyon Boulevard, targeted interventions can improve the connectivity between the Civic Area and the rest of downtown and create a better front-door(s) to the Civic Area. Proposed connections and access projects include: gateway enhancements, way-finding, signage and lighting improvements. The gateways are marked as #2 on the site diagram in Appendix A. Other improvements like lighting and signage are distributed across the Civic Area site.

In summary, the Creek at the Core, Community Spaces and Connections/Access improvements work together as three legs of a stool: each element is essential, interrelated and contribute to a working whole. For example, Boulder Creek is the signature feature which unites the entire Civic Area; if improved on its own, without better community spaces, activation and access, the desired momentum toward achieving the full Civic Area vision will unlikely be achieved.

### C. Financial Implications

The estimated investment to deliver the integrated package of Creek at the Core, Community Spaces, Connections and Access is \$8.7 million. This is the proposed submission for the PAYG funding.

**Cost Break-Down:** The estimate is comprised of the following costs, which were developed for each of the three theme areas of proposed improvements. Cost estimates were first developed for specific anticipated components within each theme area (e.g., connecting the Library plaza to the Creek area) and verified at that level of detail. The summary below describes the components included in each theme, but provides only the “rolled up” cost estimate. The key reason for this approach is that the design work needed

to determine the specific package of improvements (which would inform more accurate cost estimates at the detailed level) has yet to occur. Importantly, that process will include substantial community input.

The staff team would like to avoid a process of “picking and choosing” specific project components to arrive at a desired budget amount before the actual design work is completed. The team is confident that the proposed budget amount is at the level necessary to achieve the desired impact in terms of improvements and transformation of the Civic Area.

If council would like to reduce the proposed amounts, the design process can certainly design to a lower level of expenditure, understanding that it will also have a lower level of overall impact (either through reducing the scope, scale or interrelationship of specific improvements, or by eliminating proposed components altogether).

- **Boulder Creek at the Core: \$4.425M**

This includes improvements to areas north and south of the creek for nature play, education, recreation and social activity, including: infrastructure to link the library and Creek; playgrounds and nature play areas and other improvements along both sides of the creek (between the library and municipal building and East of Broadway); and improvements in the area adjacent to the Gilbert White Memorial. The most substantial investment (~2.5 million) will be in transforming the south side of the creek and the library into a large state-of-the-art nature play area that will serve as a significant attraction for families and create a strong synergy with improvements currently underway at the library. Cost estimates for this and related “Creek at the Core” work include items such as asphalt removal, landforming, equipment investments, irrigation systems, pathways, furniture, extensive landscaping, lighting and signage.

- **Community Spaces: \$3.075M**

This includes enhanced or redesigned public spaces and plazas to support a variety of events and programs, along with associated infrastructure investments. Specific spaces that will be improved as part of this investment are expected to include: the Library café/courtyard, the north library plaza, the north municipal lawn, the sister cities plaza and areas/plazas adjacent to the Farmer’s Market. Cost estimates for this and related “Community Spaces” improvements include items such as surfacing replacement or refurbishment, seating, lighting, landscaping, irrigation, signage, art and providing access to electrical power to support food vending and performances.

- **Connectivity and Access: \$1.2M**

This includes improvements such as creating gateways (possibly via art) and related way-finding, pathway enhancements, signage and improved lighting across the site.

**Cost Phasing:** Due to the three year funding cycle associated with PAYG, the proposed improvements would be delivered in three phases of \$2.9M each. The goal is to deliver elements of the Creek at the Core, Community Spaces and Connectivity/Access themes in each of the three delivery years. The exact scope and prioritization will be influenced by the site design undertaken in 2014 and associated public engagement.

**Third Party Check:** The cost estimates summarized in this memo were cross-checked using: (1) historical data from Parks and Recreation projects and (2) conceptual cost estimates provided by American Civil Contractors. The estimates were found to be consistent between sources and provided reassurance regarding the overall required financing.

**Previous Civic Area Cost Estimates/Submissions:** Various figures have been cited previously in regards to the Civic Area redevelopment:

- **\$300,000 for “catalyst project:”** The 2014 CIP contained a request for a \$300,000 “catalyst” project that, among other things, was intended to phase in the long-term vision. That CIP financing will be used to commission consultants to work with staff and the community to transform the adopted vision plan for the park areas and public spaces to a concrete site development plan that will truly catalyze changes to the Civic Area. The Civic Area team will be retaining consultant support in June/July 2014 and launching the participatory design process shortly thereafter.
- **\$4.8 million Project Proposal:** The scope associated with the \$4.8M civic area budget included in the February Council memo was a placeholder prepared by one department. The proposal was limited in focus to a playground area south of the creek and some general signage, lighting and security improvements. The \$8.7M proposal represents a comprehensive view that reflects the aspirations in the vision plan, provides for a high degree of integration across the park, and was developed with partners, such as the Library, BMoCA and the Farmer’s Market. The new proposal, for example, seeks to: link the library to the Creek, while redeveloping the areas in-between; develop community spaces and plazas; and enhance gateways and connections across Canyon Boulevard. Achieving this greater vision necessitated a proposal for a larger investment.

#### D. Process

1. **Hire consultant.** Using 2014 CIP funding, a consulting team will be hired to lead the detailed site development planning of the Civic Area. The consultant will engage with key stakeholders as well as the broader community to develop the exact site development phasing and construction for 2015-2017, that would use PAYG funding. Projects designated for 2015 will be designed in sufficient level of detail to be “shovel ready” as funding becomes available.

- 2. Phased delivery.** As previously indicated, implementation of the overall site development plan can be phased over a three year period; each phase should ensure that elements of Creek at Core, Connections/Access and Community Places are delivered to achieve the integrated effect from site redevelopment, access and activation.



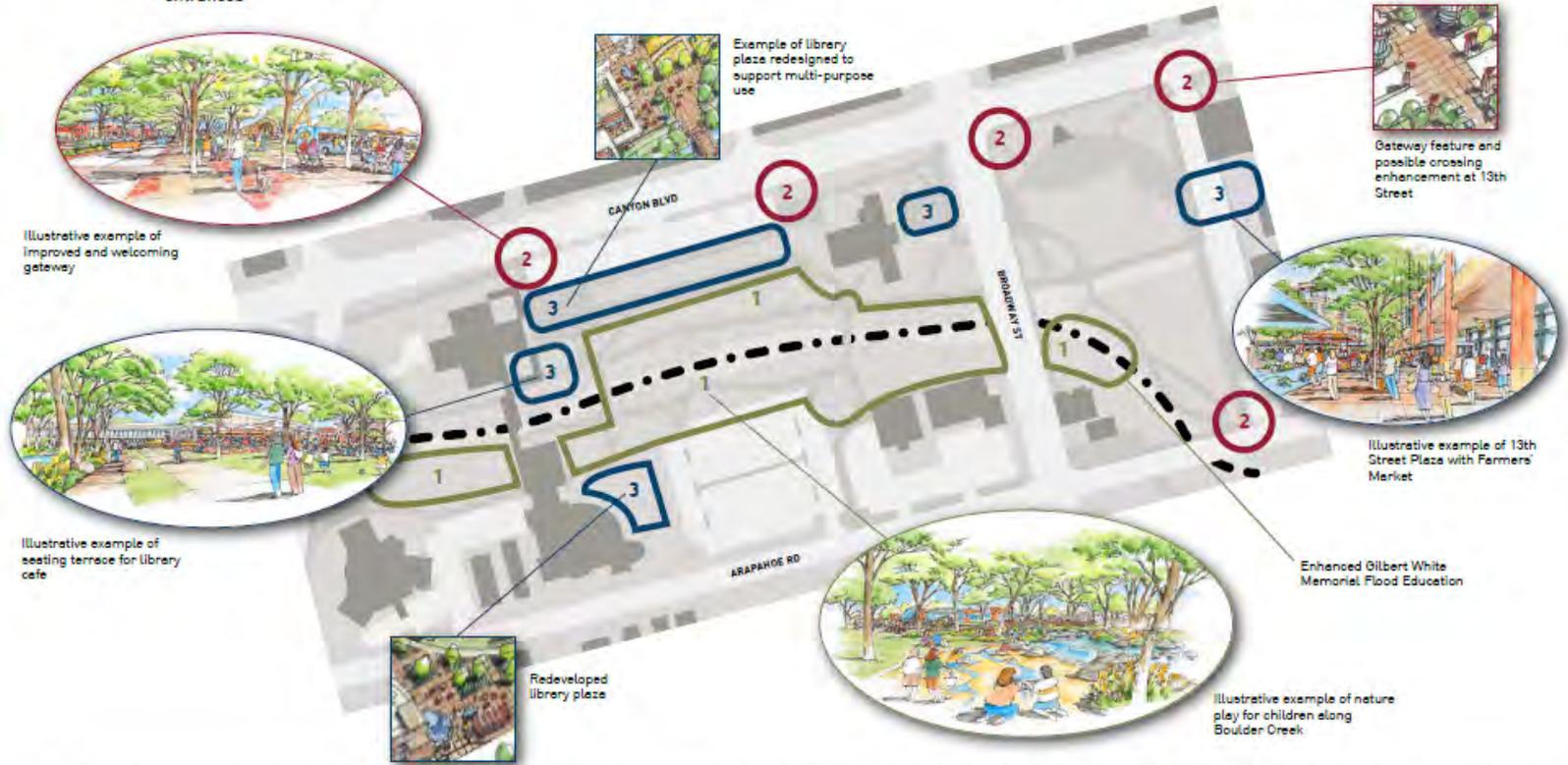
# BOULDER CIVIC AREA

Draft 05/19/14

**1. Boulder Creek at the Core:**  
Includes extensive, revitalized and redesigned play areas, nature, education, and attractive people space, linking with paths and library entrances

**2. Enhanced Connection and Access:**  
Includes possible improvements such as gateways, new signage, way-finding, crossings and art

**3. Platforms for Community Activity and Arts:**  
Includes enhanced or redesigned plaza and public spaces designed to support events and programs, farmers' market or others



*Note: The proposed improvements are not intended to function as stand-alone elements but rather as part of an integrated whole, whose impact together exceeds the sum of the parts. For example, the "Creek at the Core" will not activate the area by itself, and places for activity will not attract people without well designed connections and access.*

## APPENDIX B

### Focus of Long Term Capital Project Work Groups

**Food:** The vision plan includes the aspiration to “expand the Farmer’s Market as a vital component of the area” and “possibly expand it to year round (or extended season) local foods marketplace.” Topic for this group will include options for the Civic Area to support the local foods sector, including the evaluation of the Farmer’s Market expansion.

**Art:** The vision plan has a placeholder for more culture and arts and performance space at both the East End and West End. It also states the aspiration for the Civic Area to “expand...cultural, arts, science, educational or entertainment amenities that are otherwise lacking in the community.” The Art work group will do double-duty, therefore, addressing not only art-needs but the broader aspirations related to science, education and entertainment. Civic Area capital projects that might be discussed, for example, range from a performance venue to a curated performance season.

**Event Space:** In the vision plan, providing “new community meeting space and gathering places” is seen as essential to delivering the Civic Heart of Boulder. Since event space means different things to different people, this group will focus on determining the need and feasibility of delivering additional meeting space for organizations (e.g., the Civic Use Pad) as well as space that can serve multiple purposes, e.g., meeting space plus demonstration kitchen, etc.

The city will also begin internal, cross-function discussions about:

**Service and Innovation:** In the vision plan, the Civic Area serves as the “primary location for city management and government, including functional and interactive places for the community to interface and conduct city business and be creative.” The topics discussed in this work group, therefore, will include potential new municipal buildings and innovation center. Several studies will inform the Service and Innovation work group, including a new study that identifies options for the way the city works that inform the physical configuration of city offices and buildings. This effort will examine innovative new ways of improving and streamlining service delivery, improving efficiency and lowering operating costs. Additionally, the role of the City to facilitate “productive collisions” and enhance civic engagement through physical infrastructure is vitally important to strengthening creativity and long term community resilience.

**Connections:** The master plans seeks to: improve the Civic Area’s pedestrian and bicycle amenities, address surface lots and parking needs, improve wayfinding to/from downtown, reduce barrier effects across major thoroughfares, and re-establish a “new urban design and streetscape character for Canyon Boulevard – to make it more of a ‘boulevard’ with attractive landscaping that is comfortable for pedestrians, bicycles, and accessible by transit.” The Connections group will have a wide-ranging remit to address this list of interrelated objectives.

## Two Points of Clarification

It is very likely that the discussion in different groups will overlap. For instance, the event space group may very well discuss combined meeting and innovation space, the later being the purview of the Future Government group. The Civic Area program manager, who will be attending all group meetings, may call for combined group meetings to address shared topics, thereby tapping into a wide range of knowledge.

The assembled groups will also discuss programming. While the groups are being assembled primarily to discuss capital projects, the capital projects only make sense if the programs/activities provided therein draw a crowd. Accordingly, we will be advising potential project sponsors to do a program pilot to prove the concept well before any capital commitments are made, e.g., asking advocates of a science museum to run a pilot program to prove the communities' interest and need.

## APPENDIX C

### Existing Conditions of Thematic Areas and Examples of Possible Improvements



“Creek at the Core” Theme: Existing Conditions and Possible Directions





“Community Spaces” Theme: Existing Conditions and Illustrative Examples



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**PAYG options for the Civic Area  
Response to Questions from June 17 City Council Meeting**

1. Completing the Site Transformation (funded by PAYGo) before finalizing the Long-Term Capital projects.

In general, the Site Transformation projects focus on the redesign of the Civic Area ‘Park at the Core’ outdoor spaces (e.g., nature play along Boulder Creek, outdoor platforms for community activity, and signage and gateways for better connectivity). The Park at the Core also connects and supports the buildings envisioned for the periphery of the site, i.e., the long-term capital projects that will form the “west bookend” in the Library area and the “east bookend” along 13th Street.

The interface between the Site Transformation (Park at the Core) and the Long-Term Capital projects (East and West Bookends) will be critical to the area’s success. To ensure adequate attention to that interface and effective near-term investments, the selected Site Transformation consultants will be tasked with creating three options for options massing and use mix for the potential capital projects as part of the site redesign process, in a manner consistent with the adopted vision plan and informed by the 2014 input of the Long-Term Capital Project work groups. In areas where future building design and function are clear (e.g., the Library site), the design of the adjacent outdoor area will be finalized. In areas where building design and function may not be fully determined, flexibility in the design of the adjacent outdoor space will be retained.

The selected Site Transformation consultants will also analyze access and mobility considerations, service access, solar orientation and entry issues so that the near-term site improvements support longer term investments and overall site functionality and success.

2. Preliminary Work to Advance Civic Area Transportation Issues

The Transportation Division budgeted 2014 CIP funds to begin the Canyon Boulevard Complete Street study and is working closely with the Civic Area team to initiate and coordinate topographic site surveys. These surveys will provide base mapping for the upcoming design work related to Canyon Boulevard (the central piece of the connections study) and overall area site planning.

Transportation staff held a preliminary meeting with Colorado Department of Transportation Region 4 representatives to engage them in several initiatives, including Canyon Boulevard, Envision East Arapahoe, and the Regional Arterial Bus Rapid Transit planning for SH 119 and SH7. The Region 4 office has established a point person, Karen Schneiders, for the Canyon and Envision East Arapahoe processes. Staff intends to follow-up with more frequent dialogue to foster better understanding of the city’s urban design and multimodal goals. In the 4<sup>th</sup> quarter of 2014, the process to hire a consulting team for the Canyon Boulevard Connections study will begin. The study is expected to

start in early 2015. Another \$100,000 is proposed for the 2015 CIP to advance the Canyon Boulevard design work in anticipation of a potential 2016 bond package.

## Boulder Creek Path Improvements

The Boulder Creek Path is a multi-use concrete path parallel to the Boulder Creek riparian corridor. It stretches seven miles from east Boulder to the foothills on the west end of town. Use along the Boulder Creek Path is highest through the heart of the downtown municipal campus and during summer months with an average daily count of between 1,500 to 2,000 bikes per day. It is estimated that foot traffic through this stretch of the Boulder Creek path is comparable to daily bike traffic. Path users have expressed concern for personal safety due to a lack of pedestrian scale lighting and high potential for conflict between pedestrians and bicyclists.

Based on direction from Council, an interdepartmental team comprised of Transportation, Utilities and Parks has developed a scope and initial cost estimates to improve pedestrian lighting and better separate users on foot from users on wheels along the Boulder Creek corridor from 17<sup>th</sup> Street to Eben G. Fine Park. The total cost of the investments is estimated at \$5.125 million. The investments are listed in priority order from the staff team for Council's consideration. A brief description of each item is detailed below. A list of potential improvements offers several options that may be packaged together or advanced separately as follows:

### 1 Install Pedestrian-scale lighting

a. 17 <sup>th</sup> Street to 13 <sup>th</sup> Street continuous lighting	\$310,000
b. 13 <sup>th</sup> Street to 9 <sup>th</sup> Street continuous lighting	\$290,000
c. 9 <sup>th</sup> Street to 6 <sup>th</sup> Street non-continuous lighting	\$120,000
d. 6 <sup>th</sup> Street to Eben Fine Park non-continuous lighting	\$200,000
e. Eben Fine Park conflict area lighting	\$120,000

<b>Lighting Sub-total</b>	<b>\$1,040,000</b>
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### 2 Complete physical path improvements (in priority order)

a. Pedestrian path (6 <sup>th</sup> to east of Eben Fine Park)	\$275,000
b. East entrance to Eben Fine Park	\$100,000
c. pedestrian path (17 <sup>th</sup> to 13 <sup>th</sup> )	\$250,000
d. 6 <sup>th</sup> and 9 <sup>th</sup> streets underpass approaches	\$60,000
e. Interpretive signing	\$150,000
f. Crusher fine trail along north bank (9 <sup>th</sup> to Eben Fine)	\$50,000

<b>Pathway Improvement Subtotal</b>	<b>\$885,000</b>
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<b>3 Install new box culvert at Arapahoe/13<sup>th</sup> for path users</b>	<b>\$2,500,000</b>
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<b>4 Eben Fine Park stream bank restoration</b>	<b>\$700,000</b>
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<b>Boulder Creek Improvements Total</b>	<b>\$5,125,000</b>
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### Pedestrian lighting

The Boulder Creek Path is currently inconsistently lighted. There is continuous lighting on the University of Colorado (CU) property east of 17<sup>th</sup> Street. There are unlit segments between 17<sup>th</sup> Street and the municipal campus, and infrequent lighting west of the campus. There is a need to provide consistent lighting that is coordinated to the usage patterns to provide visibility and an increased sense of safety by all users.

It is recommended that city-owned, pedestrian-scale lighting (14' pole height) using high efficiency Light Emitting Diode (LED) light sources be installed throughout the Boulder Creek Path from 17<sup>th</sup> Street to Eben G. Fine Park. For continuous lighting in the highest use areas, pole spacing between 60' and 80' is proposed. In lower use areas, non-continuous lighting is proposed using pole spacing between 150' and 250'. At path conflict areas, LED lights on taller (18' to 20' height) poles are proposed. One of the known and anticipated concerns regarding added lighting includes impacts to wildlife habitat along riparian corridors. The importance of being sensitive to wildlife will be considered as a factor as the design proceeds. Being sensitive to adjacent property owners will also be important during final design. Lighting fixtures will be designed and located to minimize light trespass into the sensitive riparian areas next to the creek, and to minimize light trespass onto adjacent residential properties. A lighting control system will be provided to monitor the lights and identify any outages or other problems, as well as to dim the lights during late night low activity periods to minimize energy use during the lowest activity periods, which also is anticipated to lessen the impacts on wildlife. (Note: Photovoltaic (solar-powered) lighting was investigated for use on the Boulder Creek Path, but it is not viable due to the heavy tree cover that limits direct sunlight exposure.) Existing Xcel Energy lights along the corridor will be replaced with city-owned lights to provide consistent, full-spectrum "white" light along the corridor.

Lighting installation cost estimates for five distinct segments of the path are shown above. In addition to these one-time construction costs, it is important to note that there will be on-going Operation & Maintenance (O&M) costs associated with the additional lighting infrastructure. These continuing costs are estimated to equal approximately 2% of initial installation cost annually. Therefore, if the proposed lighting was installed in all five segments at a cost of \$1,040,000, the annual cost to operate the new lighting is expected to be approximately \$21,000. This new operating cost can be funded with current resources.

### Separated paths

The existing Boulder Creek multi-use path between 17<sup>th</sup> Street to Eben Fine Park varies in width from eight to 14 feet wide. City and national guidance recommends a 10 foot minimum multi-use path width and a wider path when high bike or pedestrian use is anticipated.

To better accommodate the volume and types of users through the downtown stretch, it is recommended that the existing multi-use path be striped as a two-way bikeway with pavement markings to serve bicyclists and other wheeled traffic. A separate pedestrian path would be constructed adjacent to existing path to accommodate pedestrians. The list of physical path

improvements is prioritized by segment. The cost estimate to provide a continuous separate pedestrian facility along Boulder Creek from Eben G. Fine Park to 17<sup>th</sup> Street is approximately \$885k, which includes approximately \$150k for interpretive signing.

#### Arapahoe Avenue Underpass Improvements

An additional \$2.5M improvement project is proposed at Arapahoe/13<sup>th</sup> Street to address sight distance, frequent path closures due to flooding, and personal safety. This project would construct a new box culvert to serve as a grade-separated pedestrian/bike underpass. The box culvert would be east of the existing bridge and the multi-use path currently under the bridge span would be removed. It is important to note that while this project is a higher priority than some other improvements, due to the significant process required it may take three to five years to complete. Also, staff prioritized this project lower due to the project cost relative to other Boulder Creek path components. Staff will continue to coordinate underpass design to include and/or not preclude potential future Civic Area improvements for possible flood mitigation, placemaking and connectivity.

#### Eben G. Fine Park - Bank Restoration

A stream bank restoration project in Eben G. Fine Park also is proposed to address multi-objective goals of the greenways program including erosion control, improved water quality, habitat and recreational access as well as enhanced park character. While this project is not exclusive to the path safety issues raised by Council, it would be a beneficial project to achieve multiple community goals in the Boulder Creek Greenway. This project is estimated to cost \$700k.

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## Pay As You Go - Funding for Arts

### Summary:

A “pay as you go” tax initiative is being discussed by City Council as a possibility to go before voters in the November 2014 election. Of those funds that would be raised, one option is that six hundred thousand dollars be assigned to the City of Boulder’s Public Art program. These funds will be used to enhance the city’s emerging public art program and fund key maintenance and restoration projects for the current public art collection. The following provides background regarding the specific projects.

### Public Art

a) New public art projects.

A series of public art projects to be installed at sites across the city. The goal is to maximize the affect across different neighborhoods and districts. The strategy in identifying sites, coordinating selection, and mobilizing projects will be to enhance city construction projects, visual environment initiatives, or other city priorities. The funds will be used for all costs associated with the selection, approval, design, installation, communications, and events associated with the commissioning of these new public artworks.

b) Key maintenance projects for the existing public art collection.

Several public art projects in the city’s inventory having been identified as in need of urgent repair, restoration, and conservation will be completed. These funds will be maximized by seeking matching dollars from the agencies that are responsible for each artwork identified for maintenance in this project.

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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

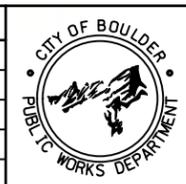
**Attachment G-4:** Collaborative Stewardship of the Colorado Chautauqua - Guiding Principles for Place Management and Fiscal Sustainability



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Print Date: 7/2/2014
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.



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As Constructed
No Revisions:
Revised:
Void:

<b>BASELINE RD. WEST-CHAUTAUQUA PARK PEDESTRIAN IMPROVEMENTS</b>			
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

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## 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:

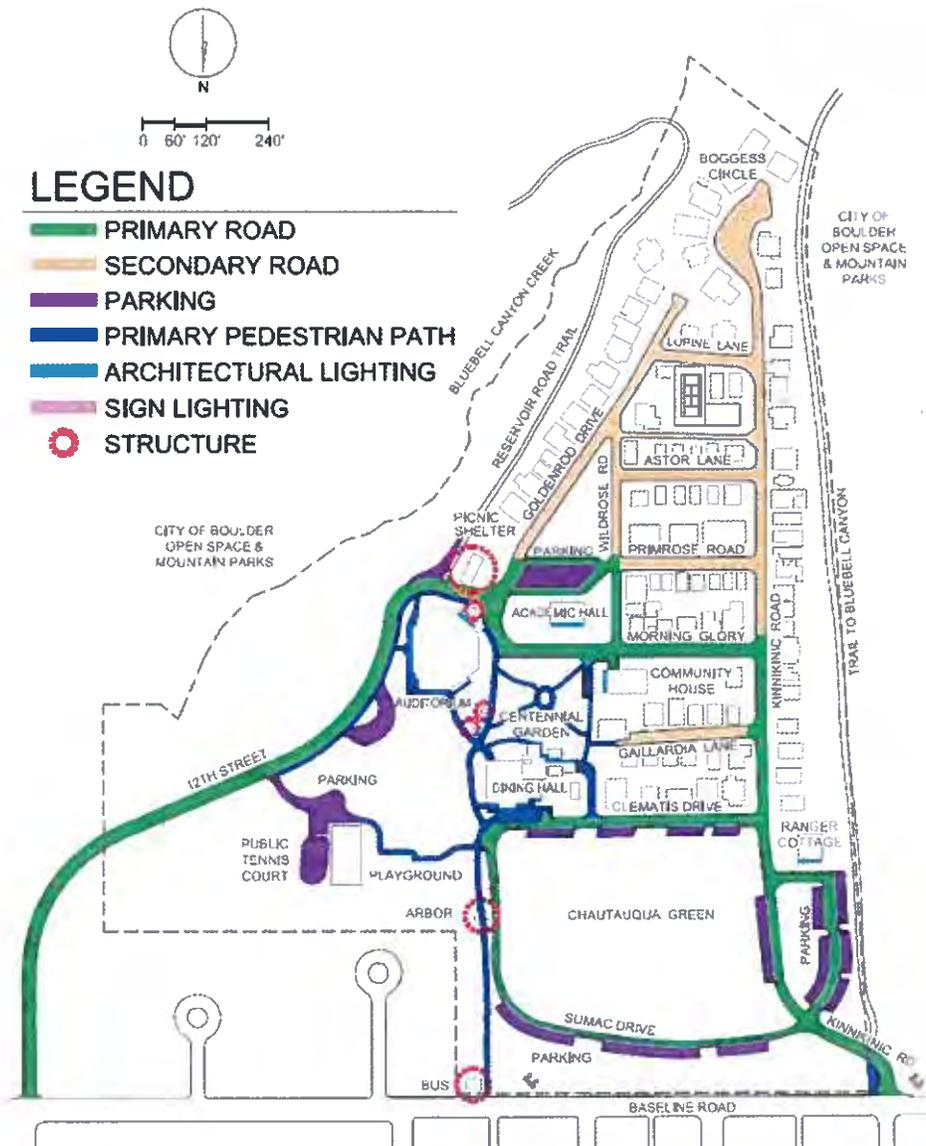
Maximum allowable light levels (illuminance in footcandles)	Building Entries: 5 Parking Lots: 5 Pedestrian Walkways: 3
Maximum uniformity ratio	15:1
Maximum lumen rating for full cutoff luminaires	14,000
Maximum lumen rating for cutoff and semi cutoff luminaires	1,250
Maximum lumen rating for unshielded 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.

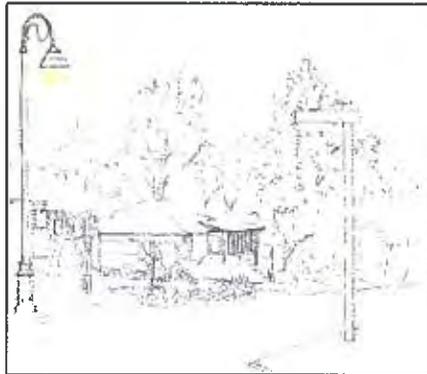
**Primary Roadways (Public)**

**EXISTING CONDITIONS:**



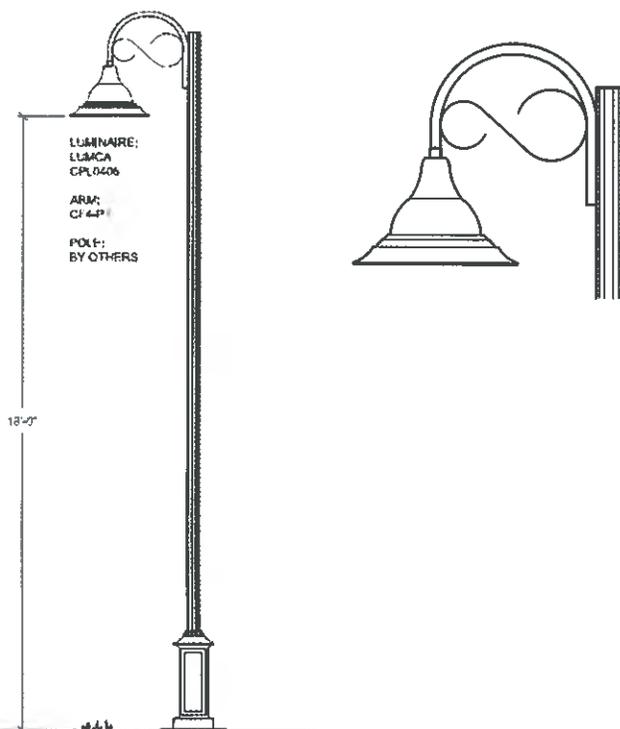
Currently, cobrahead luminaires with high pressure sodium lamps are mounted on wood poles for the majority of the street lighting. The poles are not consistently located at intersections or on the same side of the road.

**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.

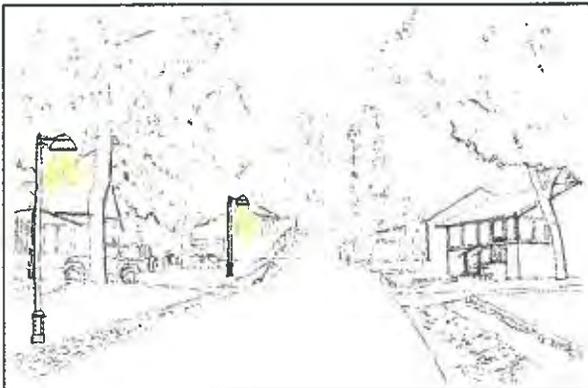
## Secondary Roadways (Residential)

### EXISTING CONDITIONS:



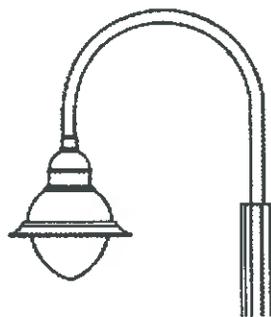
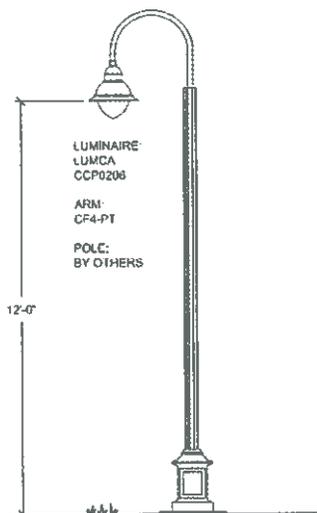
Currently, cobrahead luminaires with high pressure sodium lamps are mounted on wood poles for the majority of the secondary street lighting. Pole locations are not consistent. The remainder of the street lighting in residential streets comes from the porch lighting on the cabins.

### 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 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.

### 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.

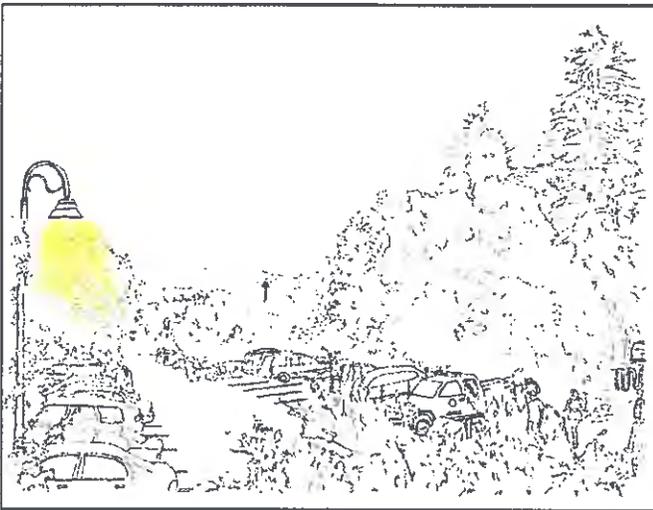
### Parking (Public)

#### EXISTING CONDITIONS:



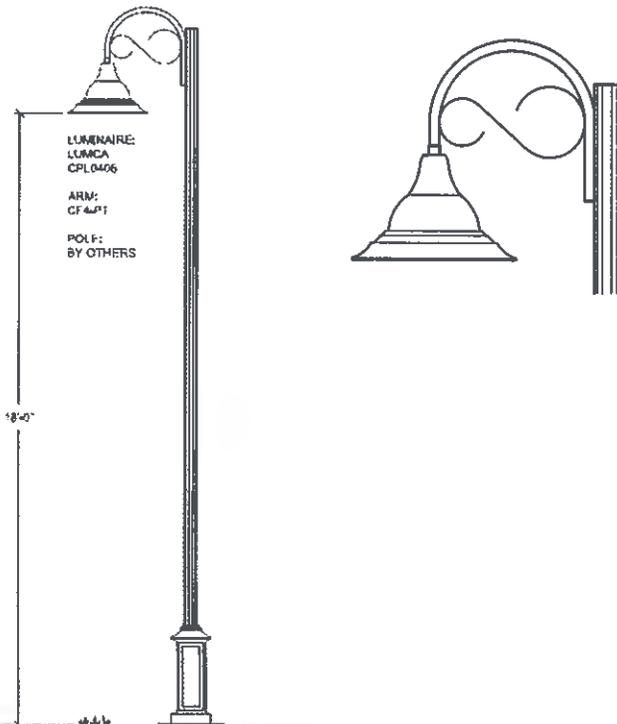
Currently, cobrahead luminaires with high pressure sodium lamps provide the lighting for parking lots. No specific lighting is provided for public parking in areas such as along the Chautauqua Green.

#### 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

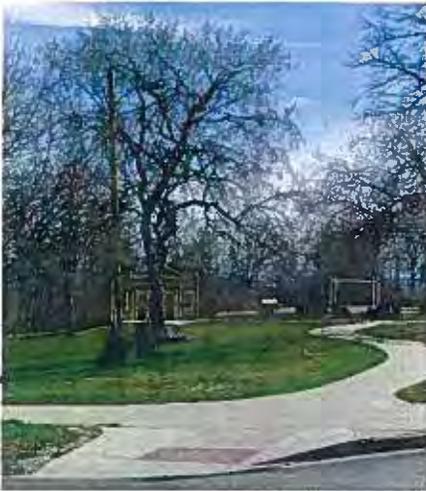


#### LUMINAIRE SPECIFICATIONS

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.

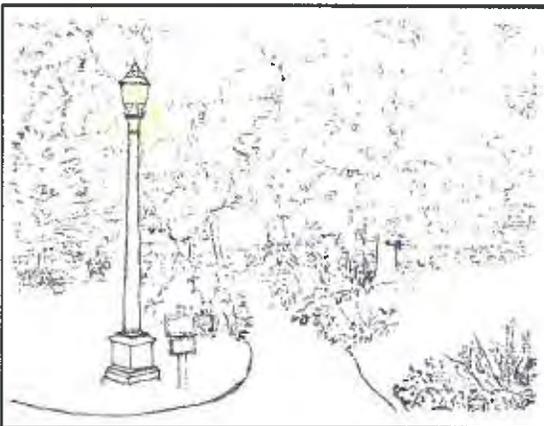
**Parks and Public Spaces**

**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.

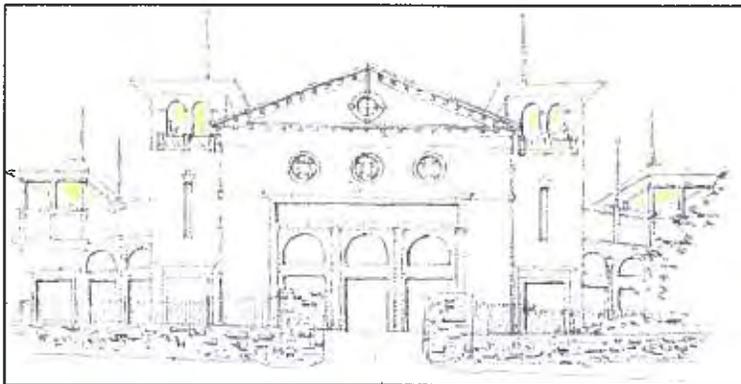
## Building Facades

### 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**



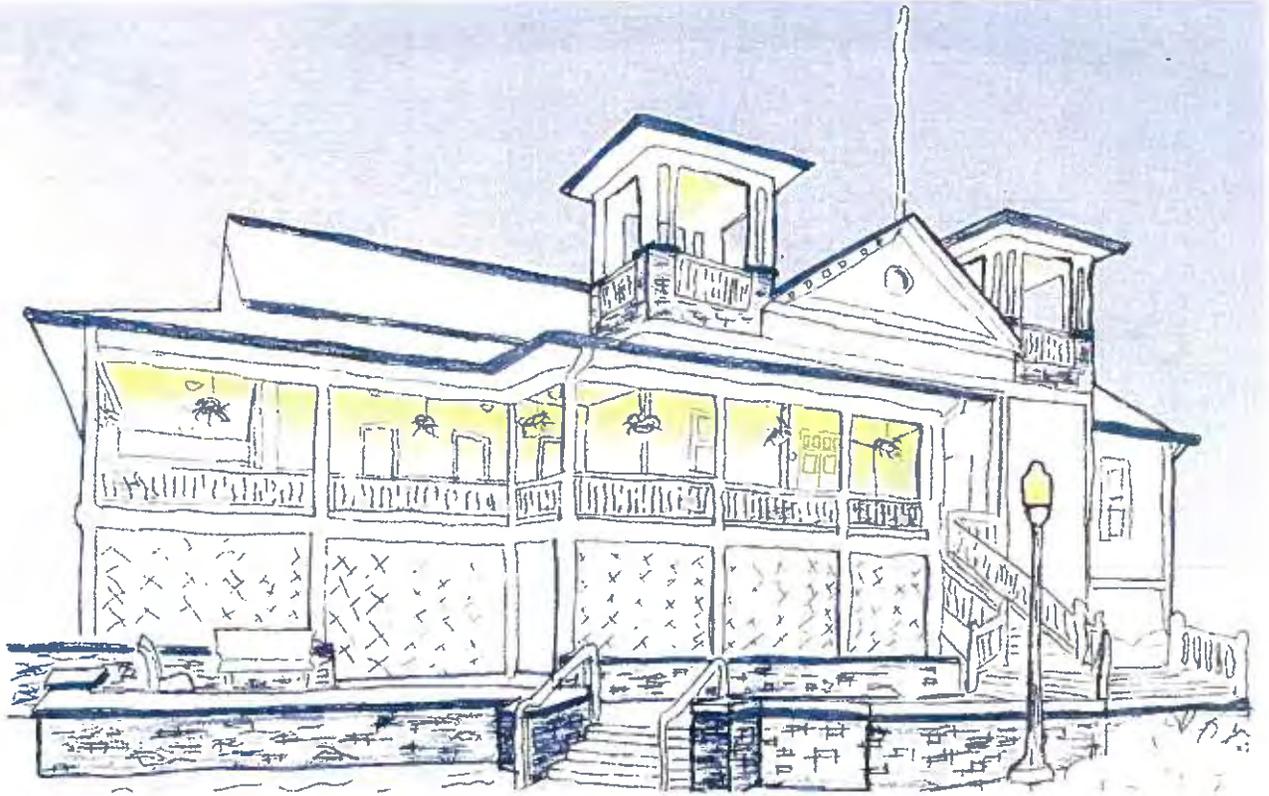
**Auditorium – Event Schedule**



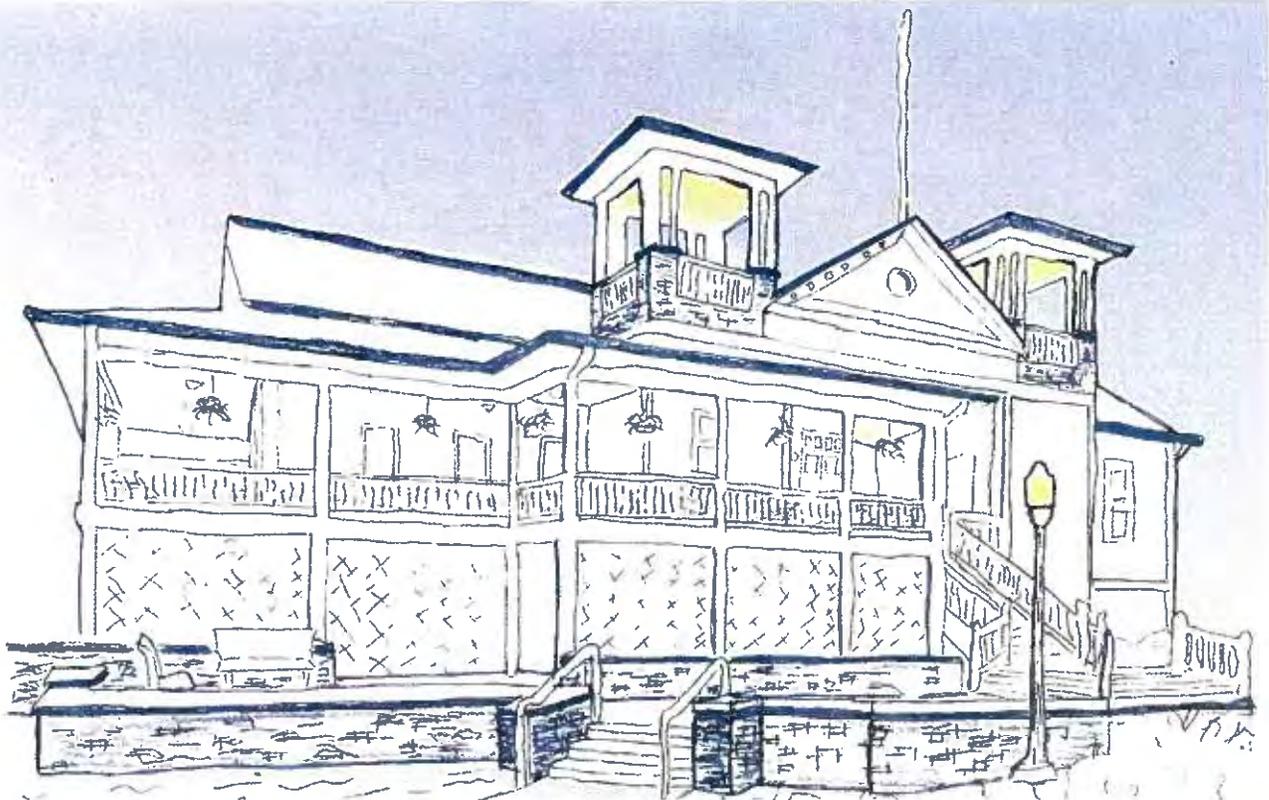
**Auditorium –Event Evenings**



**Auditorium –Event Evenings**



**Dining Hall – Open**



**Dining Hall – Closed**



**Academic Hall**



**Community House**

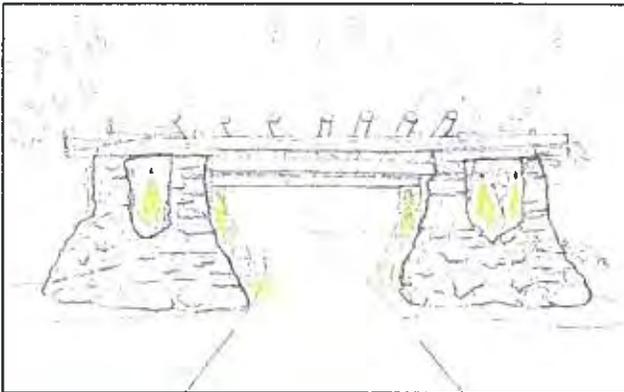
**Monuments/Structures**

**EXISTING CONDITIONS:**



Currently, very few structures are lit 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:**

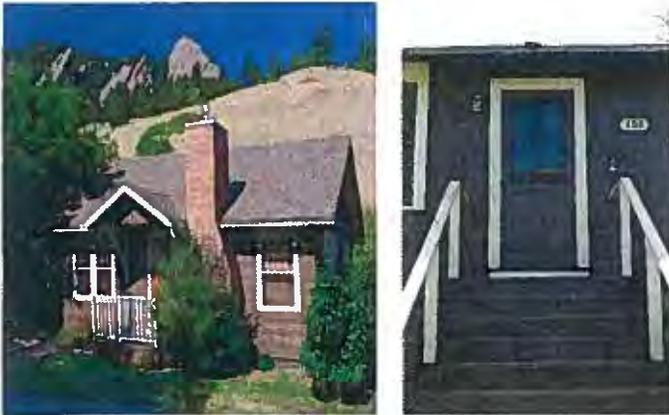


**LUMINAIRE SPECIFICATIONS:**

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.

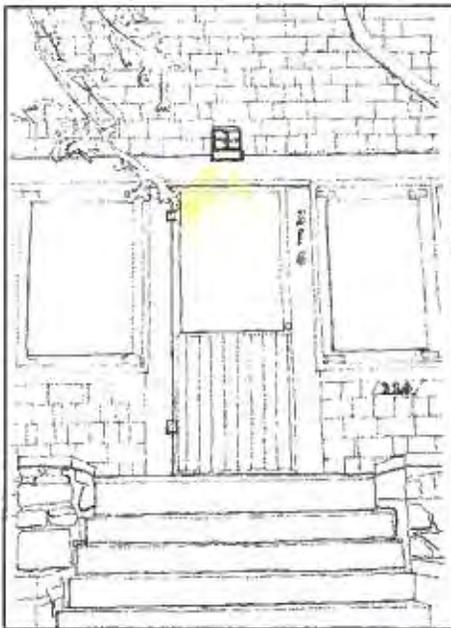
**Residential Exterior**

**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

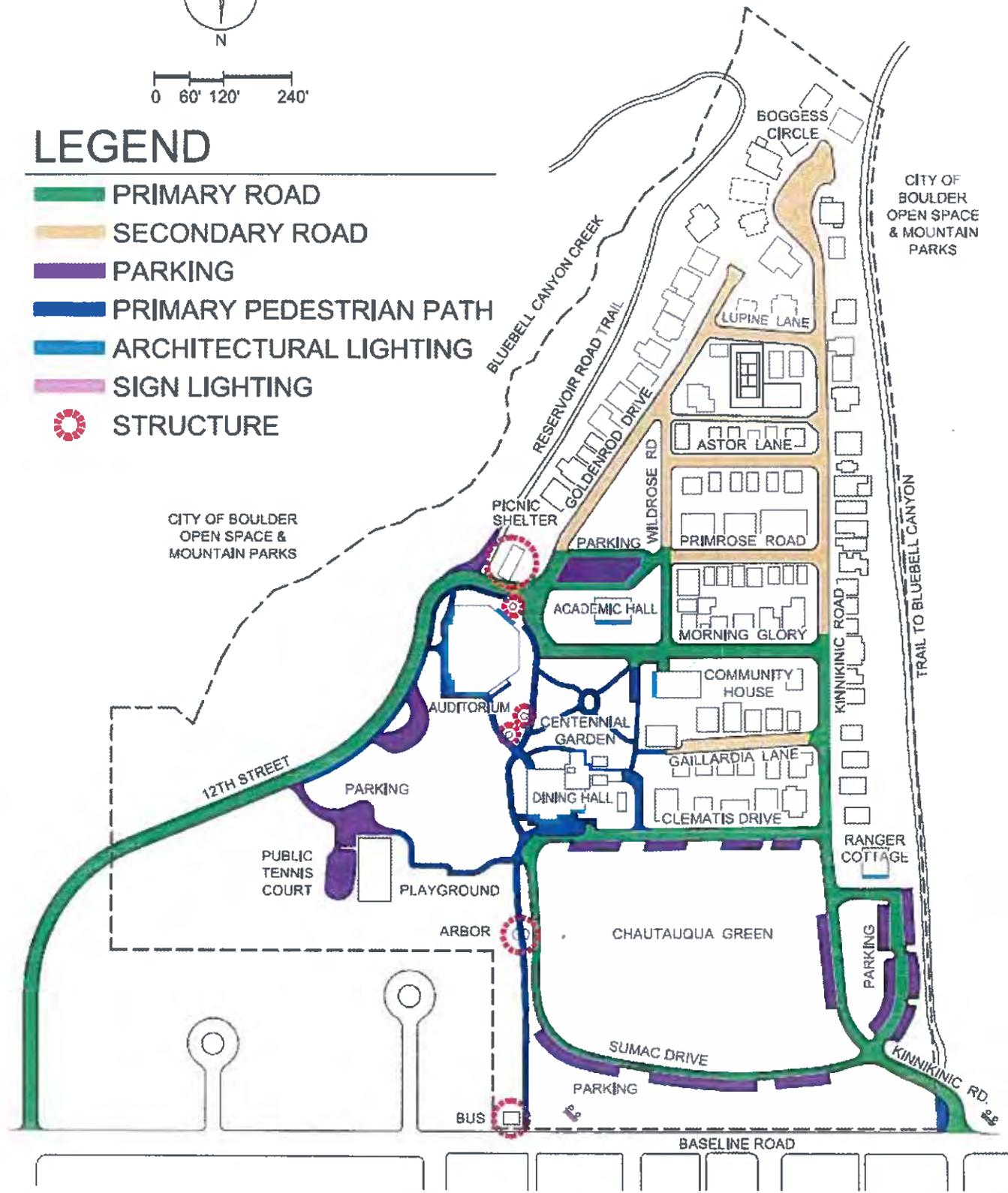
# Maps and Drawings



0 60' 120' 240'

## LEGEND

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



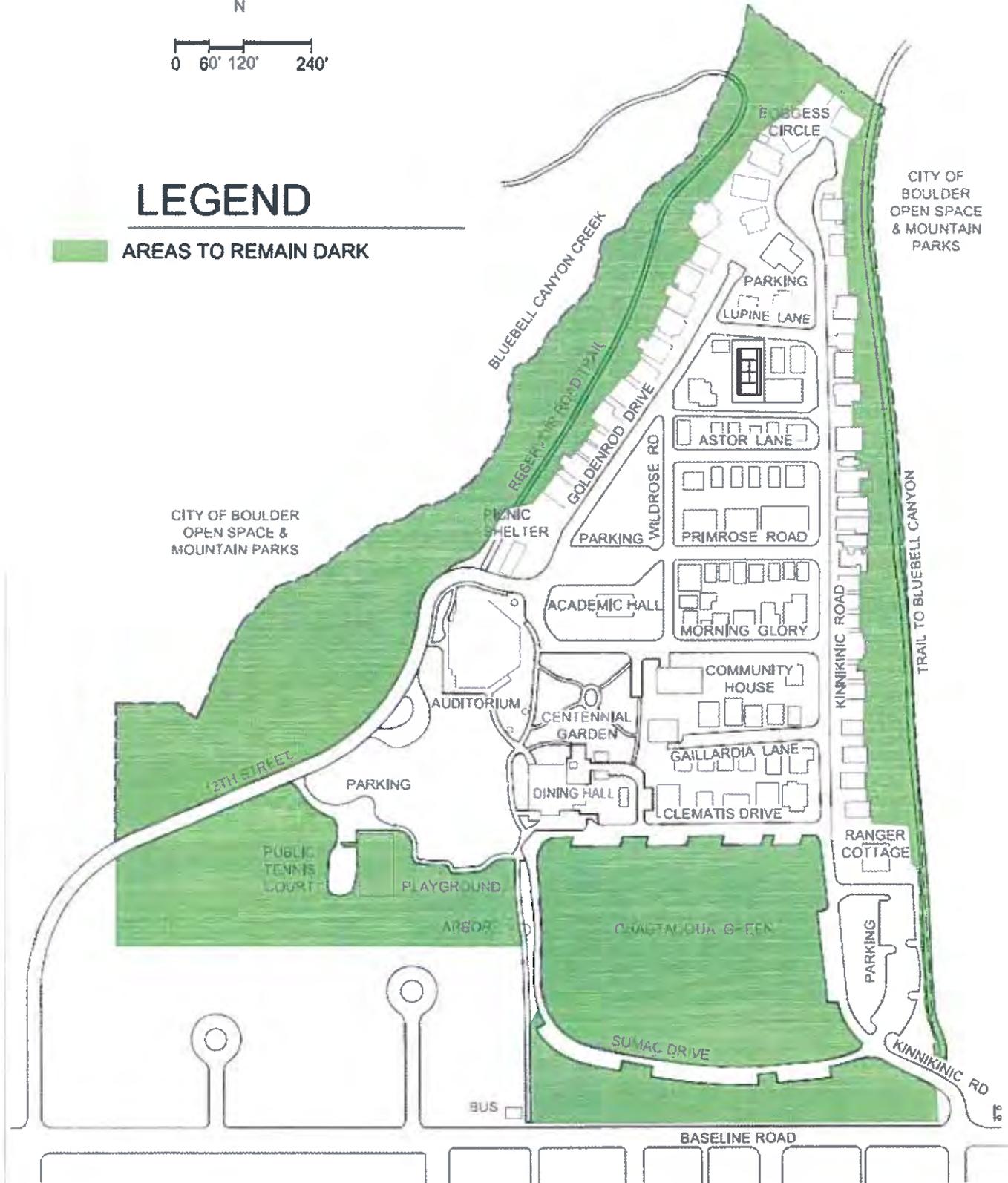
## AREA CLASSIFICATIONS

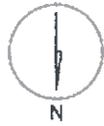


0 60' 120' 240'

# LEGEND

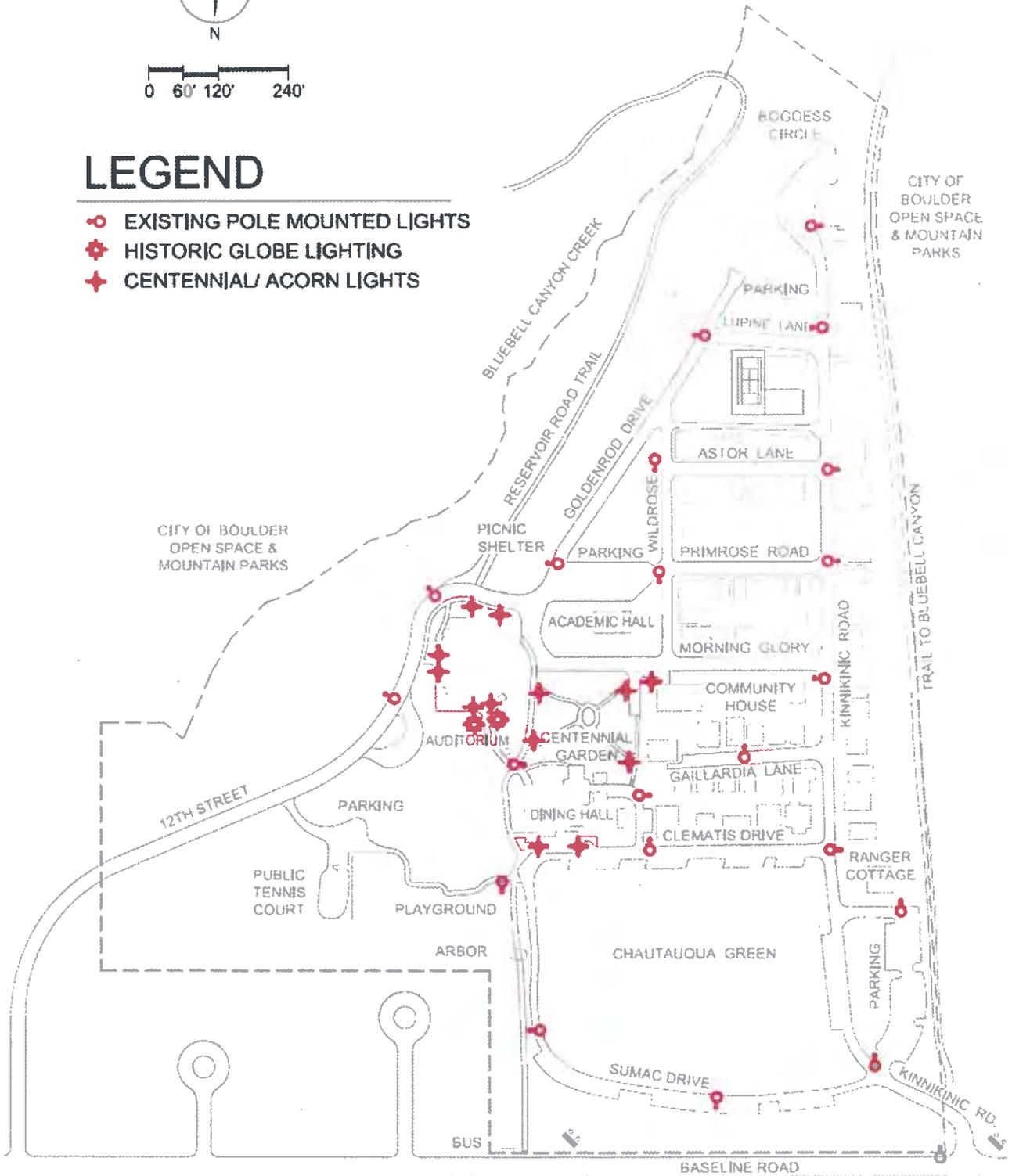
 AREAS TO REMAIN DARK



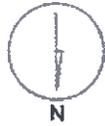


# LEGEND

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

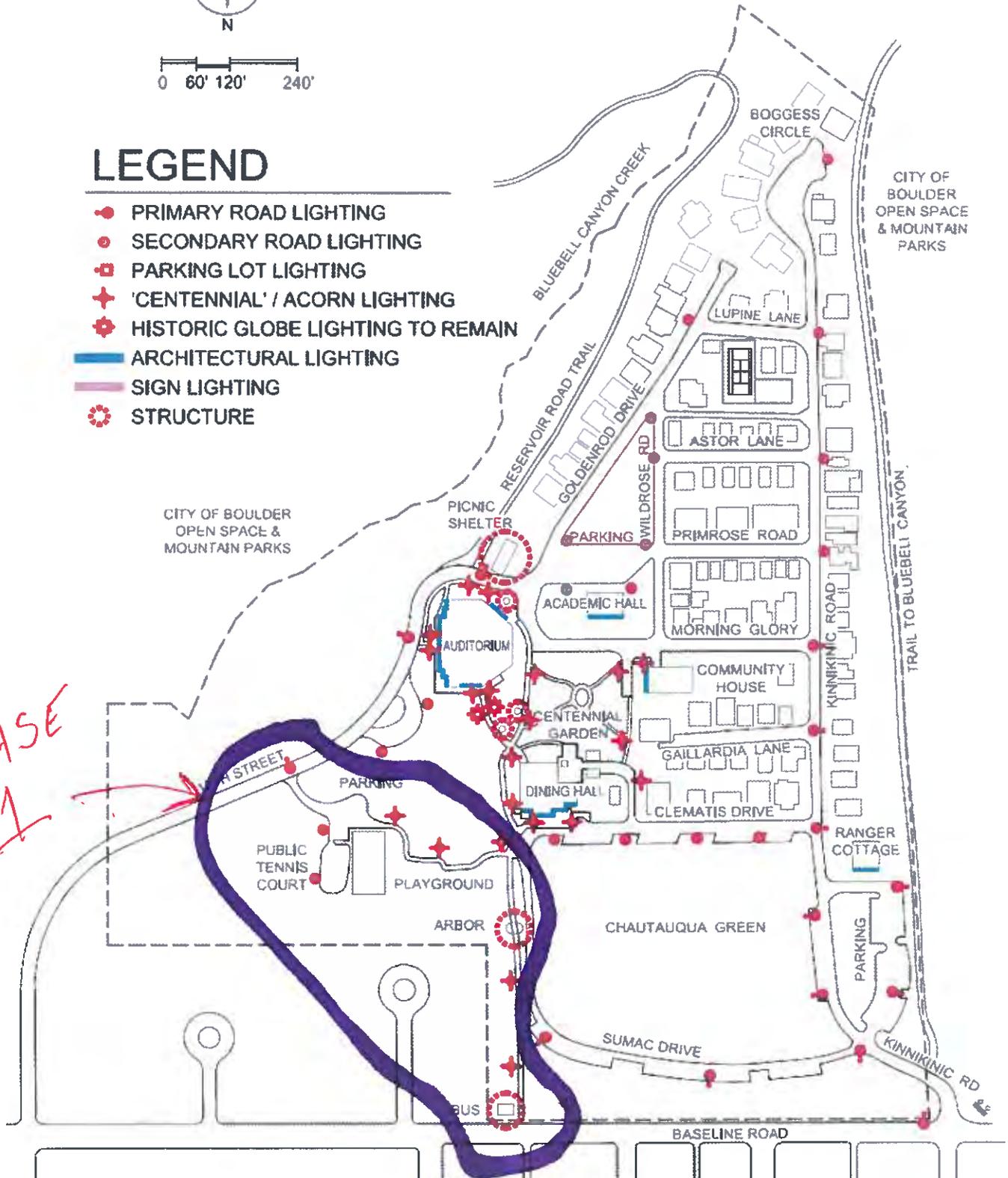


## EXISTING POLE MOUNTED LIGHTING LOCATIONS (APPROX.)



# 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



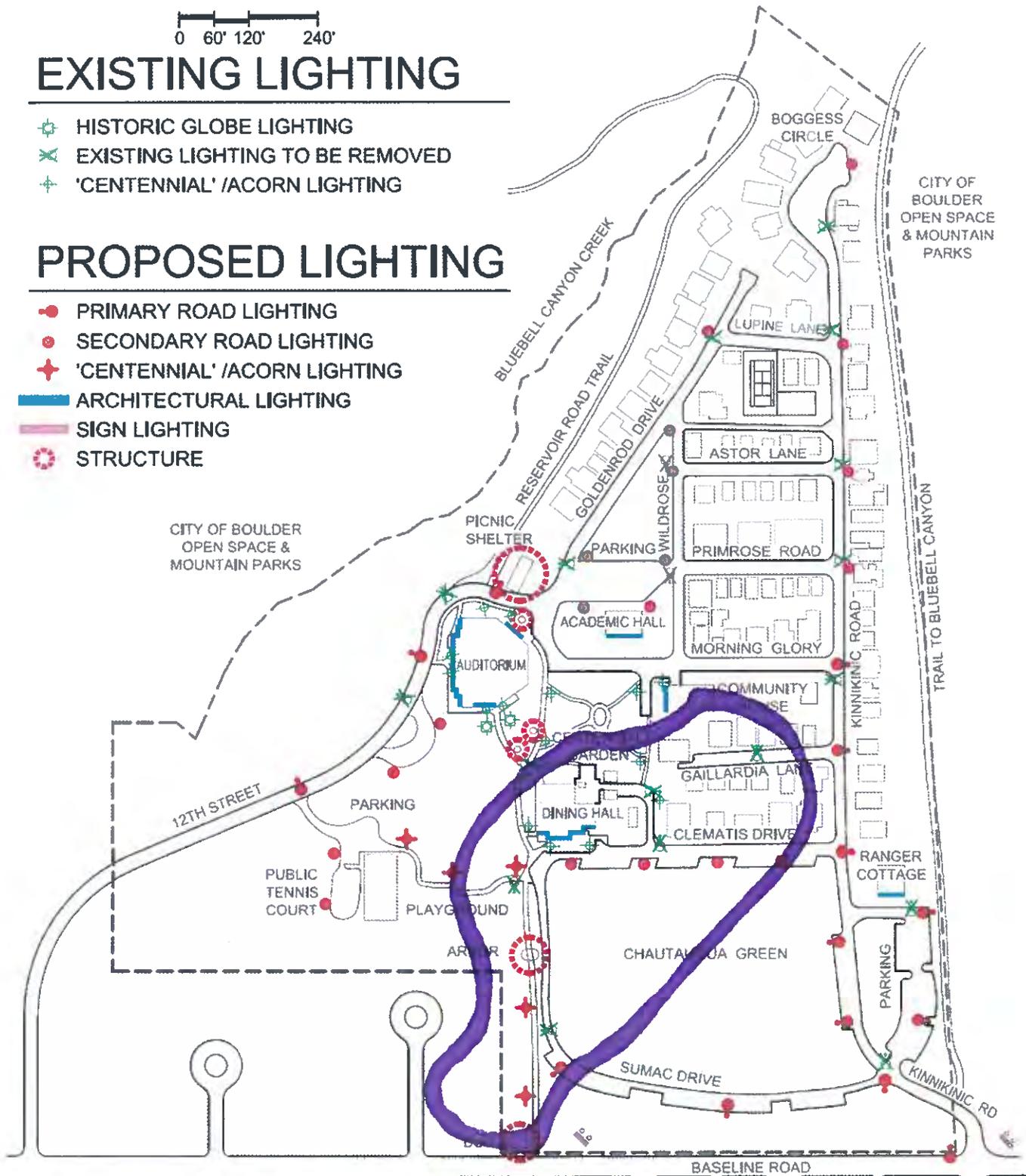
0 60' 120' 240'

# EXISTING LIGHTING

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

# PROPOSED LIGHTING

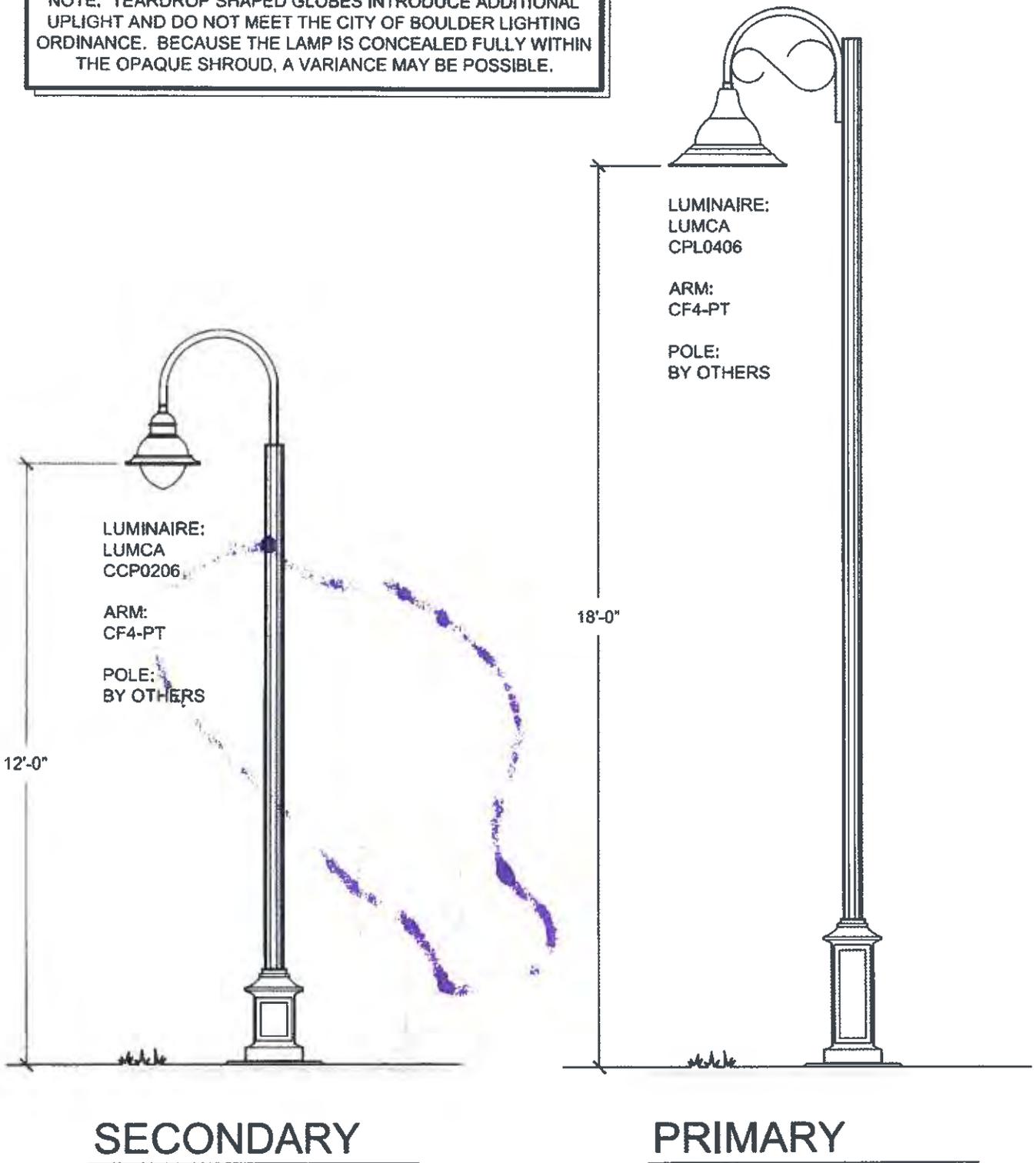
-  PRIMARY ROAD LIGHTING
-  SECONDARY ROAD LIGHTING
-  'CENTENNIAL' /ACORN LIGHTING
-  ARCHITECTURAL LIGHTING
-  SIGN LIGHTING
-  STRUCTURE



## 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.



## 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.



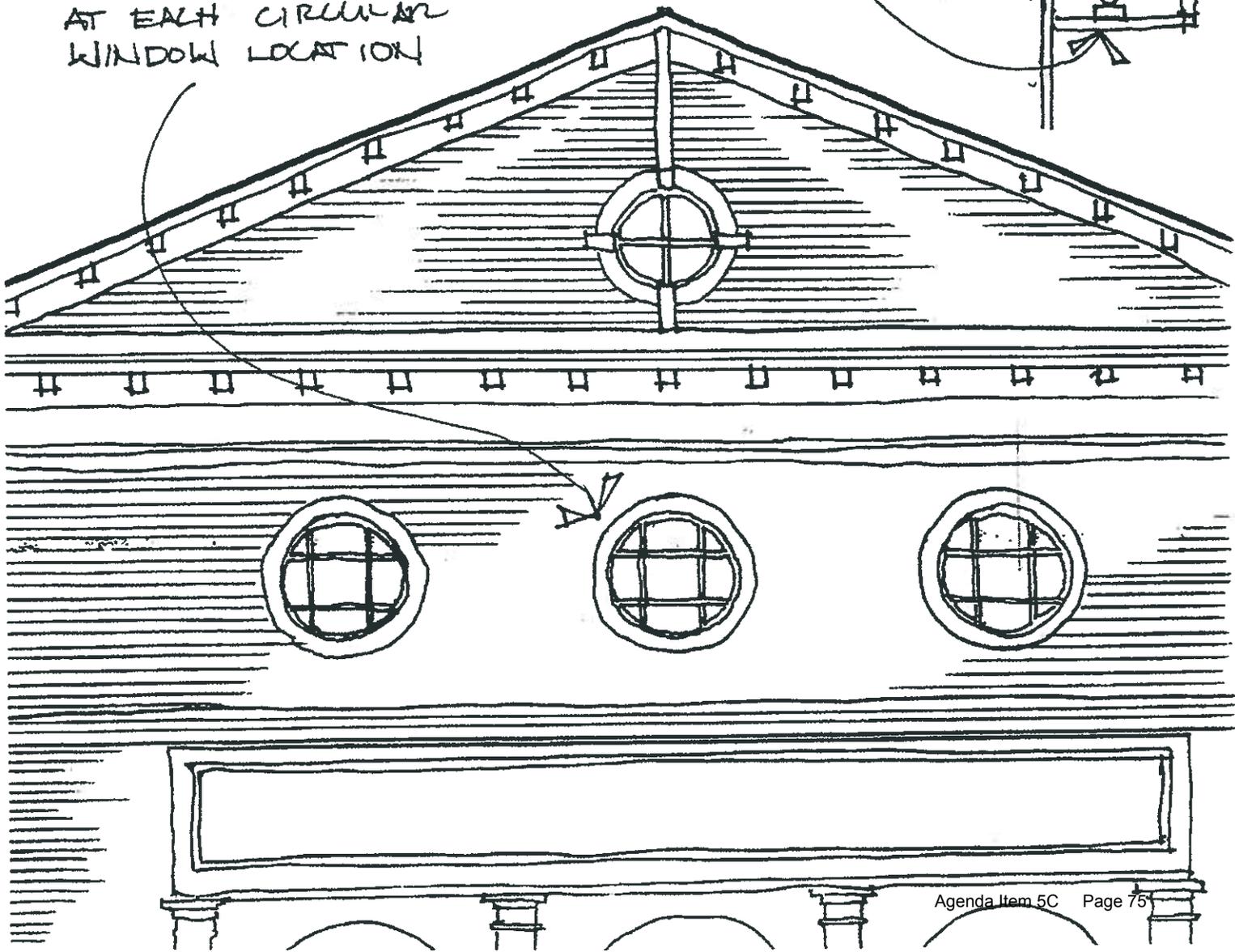
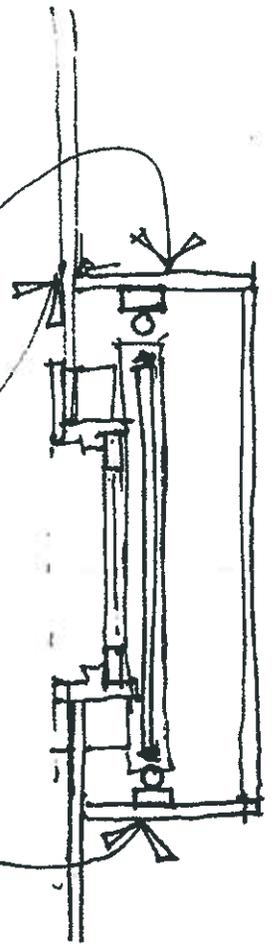
# "FALSE" LIGHTED WINDOW

BUILD A PLYWOOD BOX BEHIND EACH WINDOW

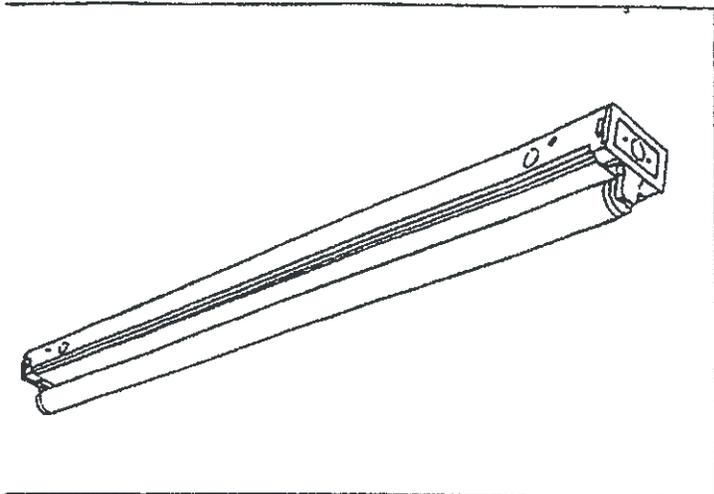
INSTALL A HINGE TO PERMIT LAMP REPLACEMENT

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: \_\_\_\_\_

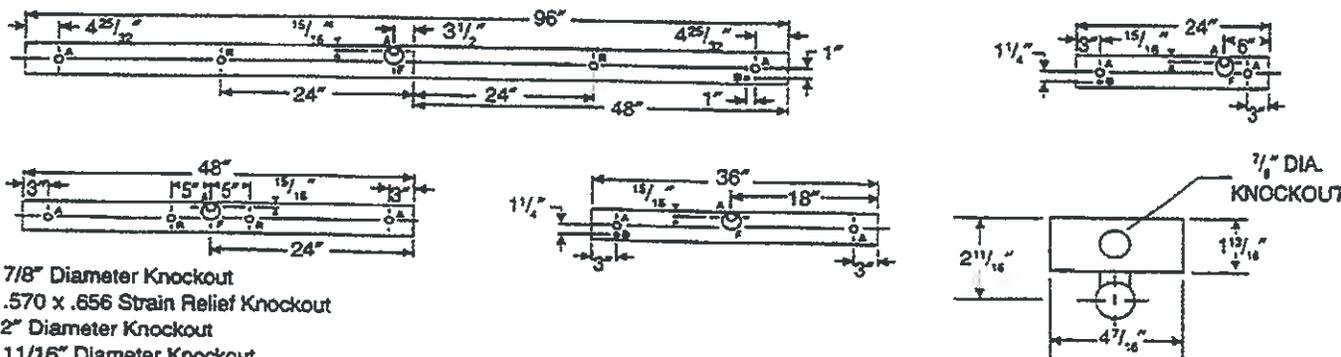
**FEATURES:**

- 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**

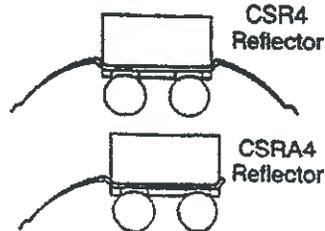
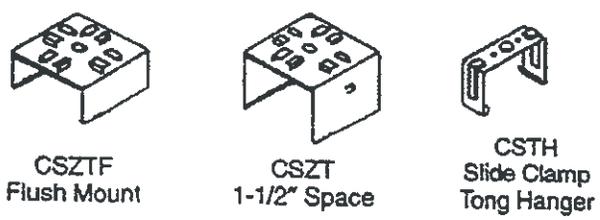


- A - 7/8" Diameter Knockout
- B - .570 x .656 Strain Relief Knockout
- F - 2" Diameter Knockout
- R - 1 1/16" Diameter Knockout

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

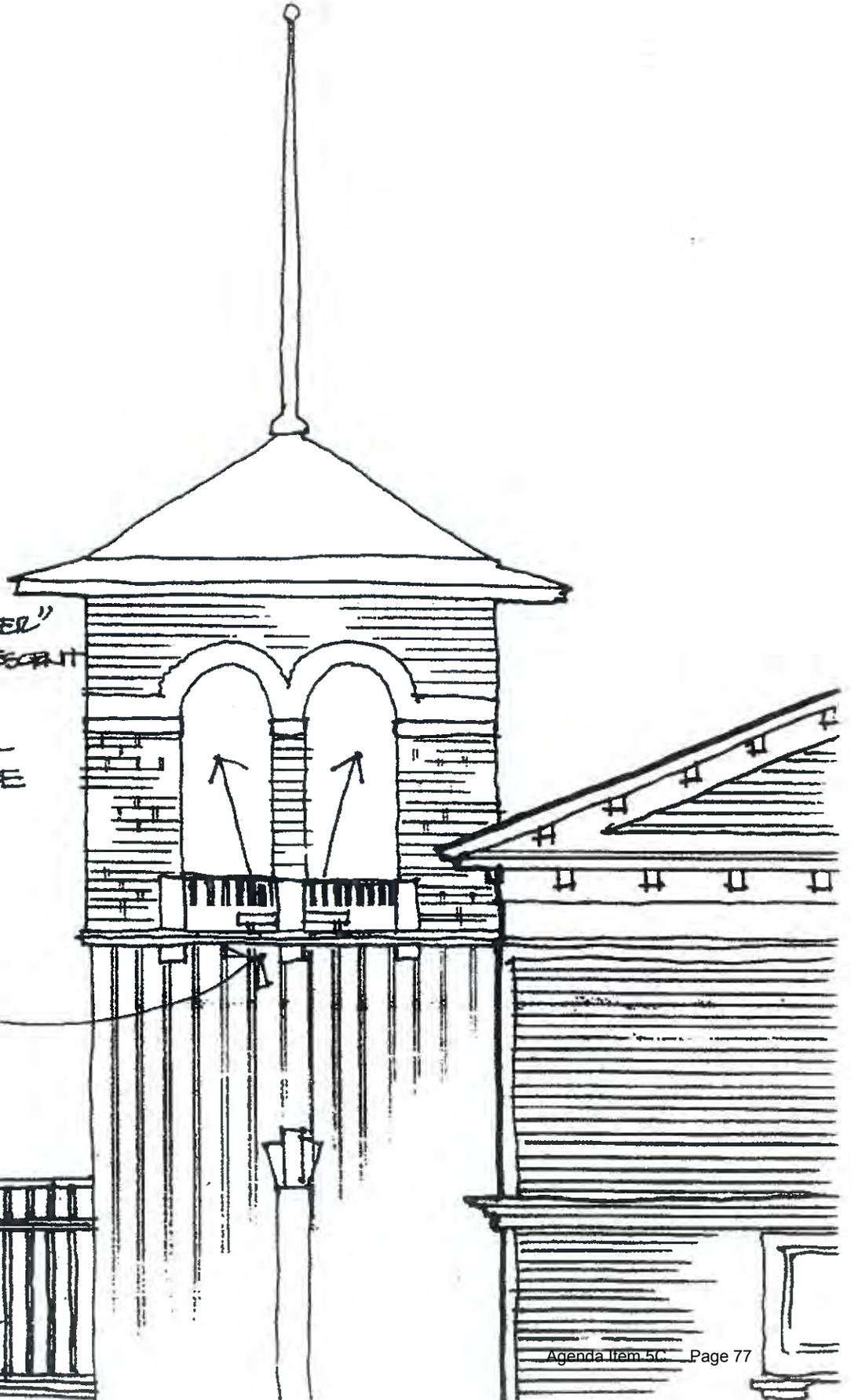
**Mounting Data**

**Accessories**



# UPLIGHTING FOR COPULA

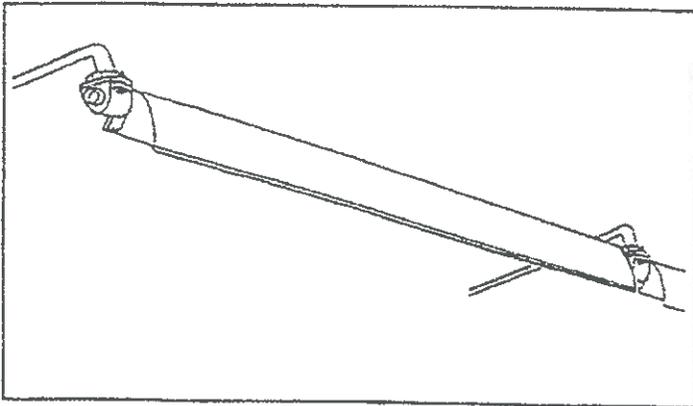
INSTALL "SIGNLIGHTER"  
ADJUSTABLE FLUORESCENT  
INSIDE RAILING.  
CONCEAL AS WELL  
AS POSSIBLE. USE  
ONE FOR EACH  
OPEN FACADE.



**SLA**

# Outdoor Sign and Poster Luminaire

## 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.

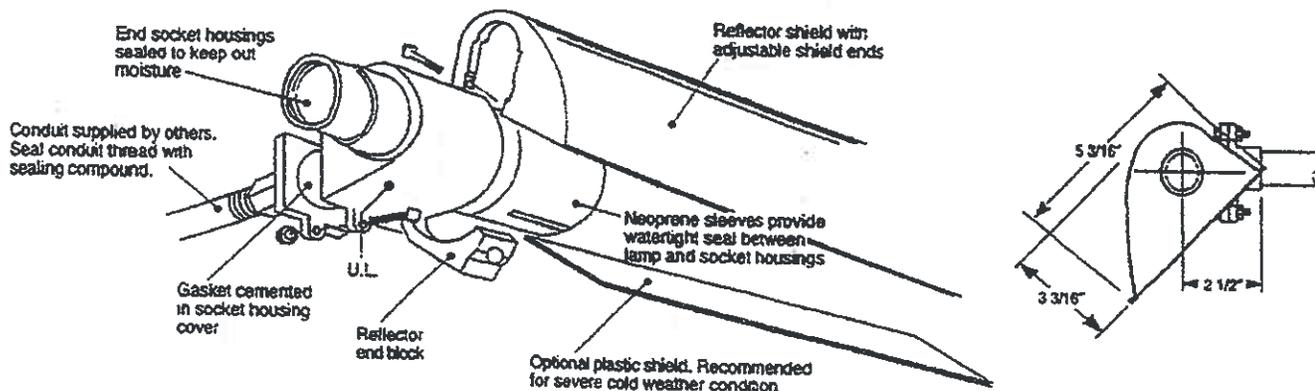
### APPLICATIONS:

- 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)

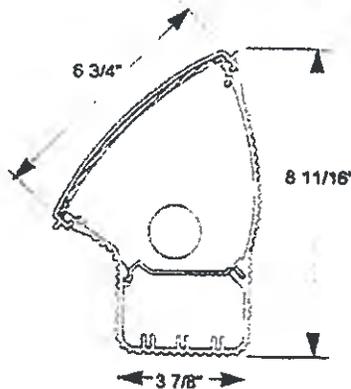
## PROJECTOR (Outdoor, Wet Location)

### FORUM PROJECTOR SERIES

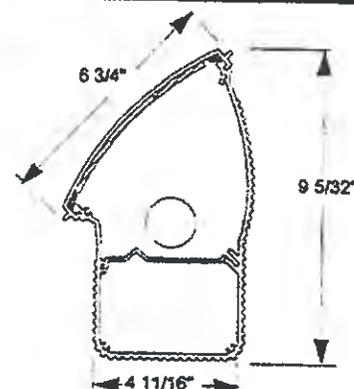
The PRO is a heavy duty, wet location, integral ballasted, floodlight with a high degree of beam control. The optics are designed to evenly illuminate vertical or horizontal surfaces.

**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

### 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

### 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.

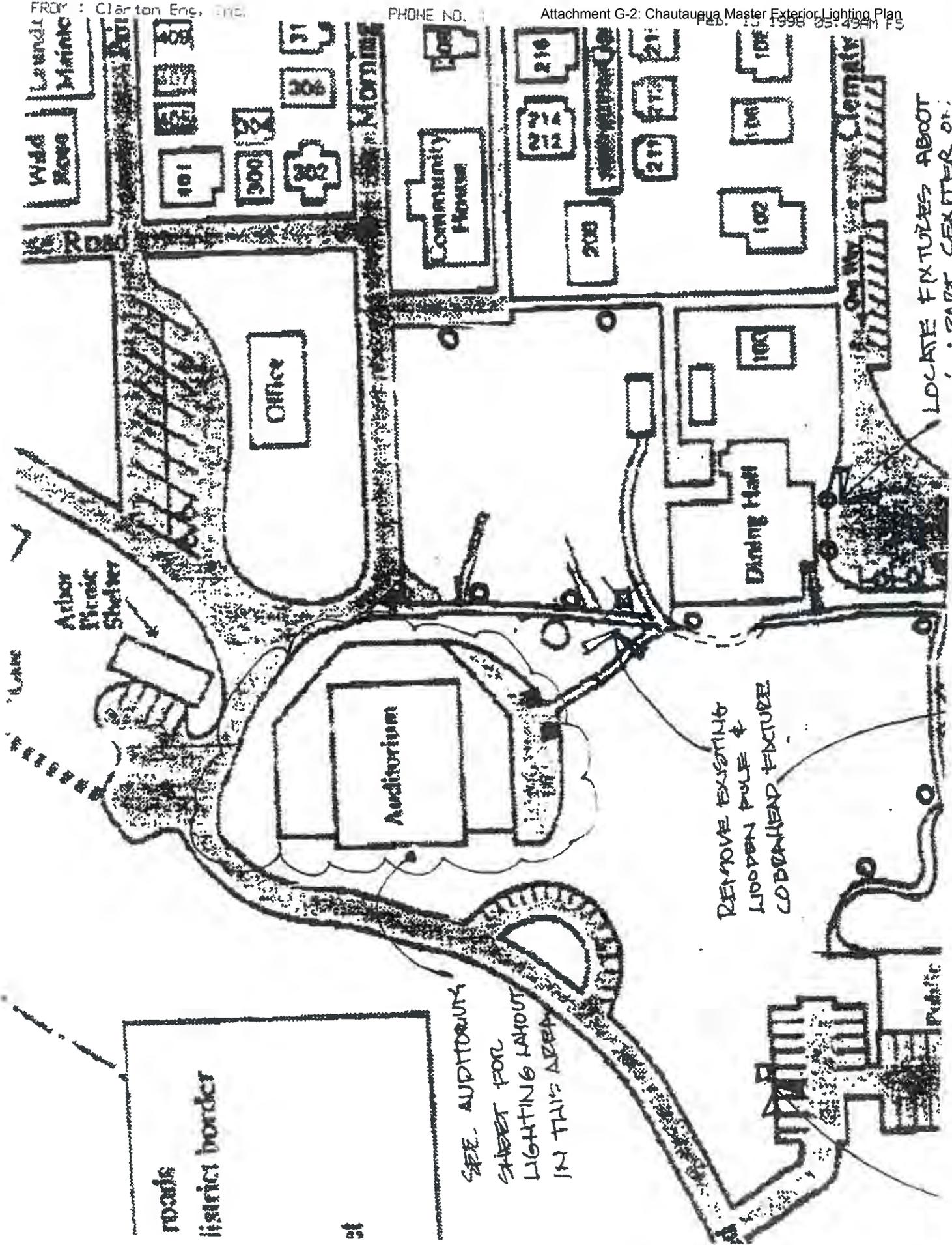
**Ballast:** Ballast shall be CBM/ETL certified Class P.

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

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	385
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	288
135	1220	277
125	1647	355
115	1688	385
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

FEB. 15 1998 05:49AM FS



roads district border

SEE AUDITORIUM SHEET FOR LIGHTING LAYOUT IN THIS AREA

REMOVE EXISTING LIPOON POLE & COBALT END 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

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**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.*

## Wayfinding: Overview



### 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

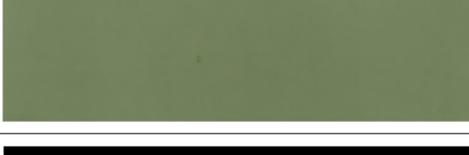
The scale of Chautauqua has stayed intimate over time, even as American vehicles, municipal codes, and habits call for larger roadways and greater caution. The goal with this wayfinding system is to strike a balance between making signage large enough to be legible and serve its purpose, while keeping 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**      

## 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

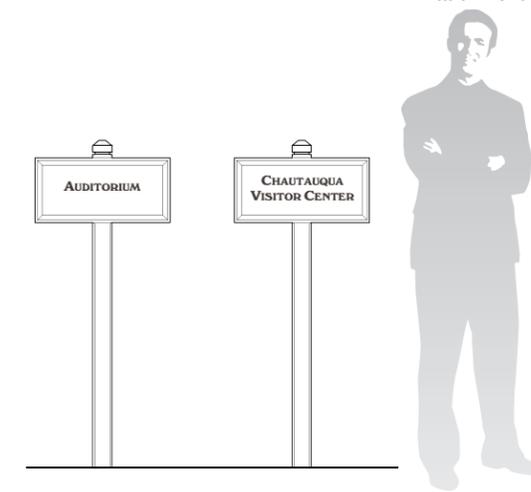
Provide visual orientation and destination locations. Placed in areas where visitors congregate or merge.

### Type C - Changeable Panels

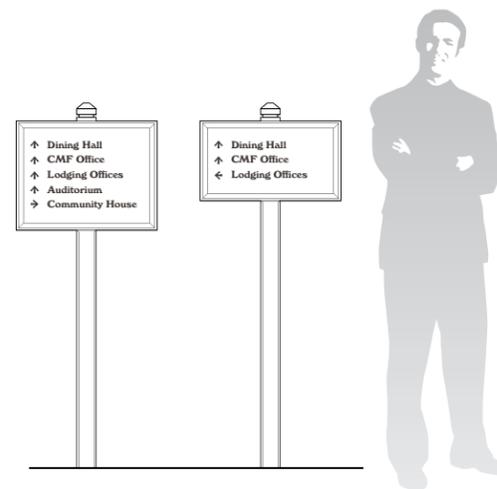
Provide seasonal or alternating information to visitors. Applied to any sign that requires a changeable messaging.



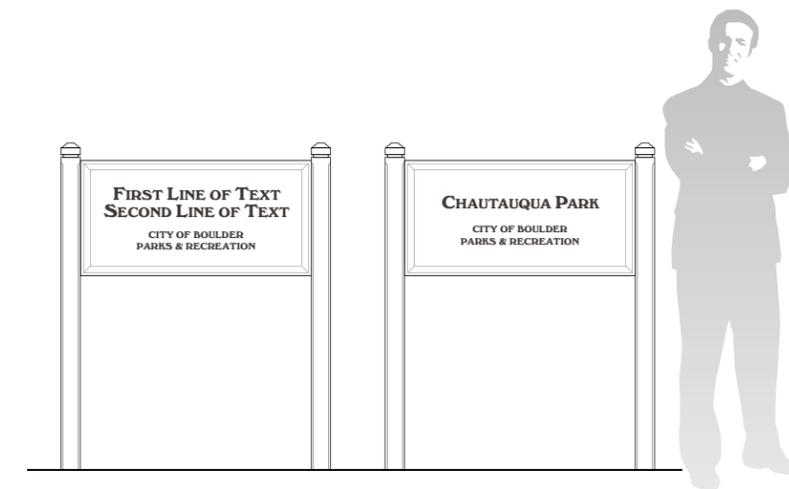
Type G



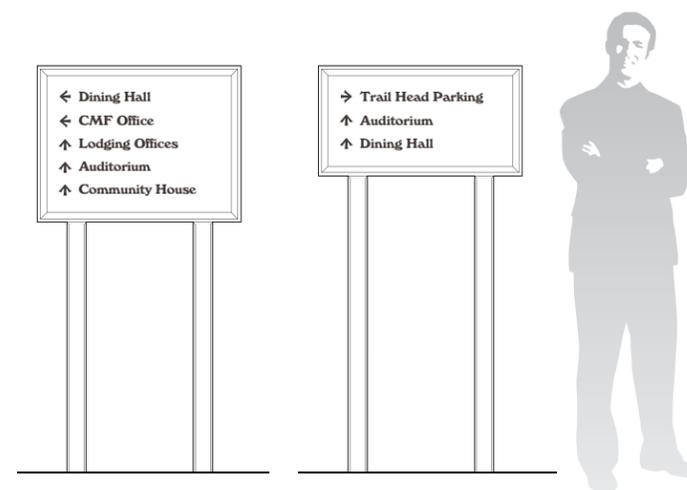
Types A1 and A2



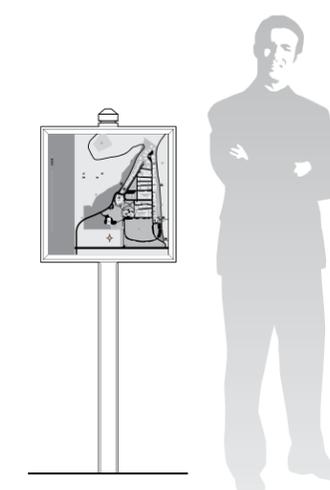
Types P1 and P2



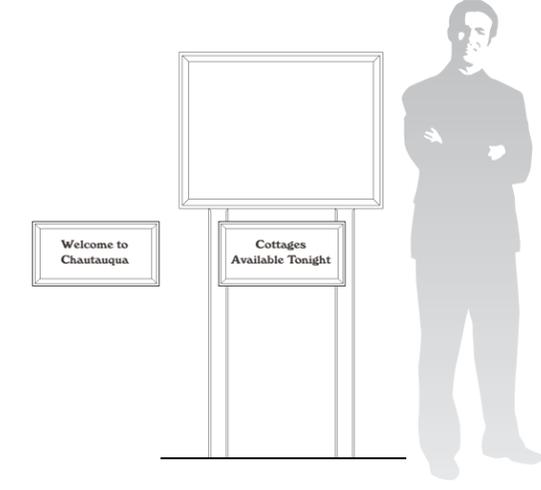
Types B1 and B2



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.*



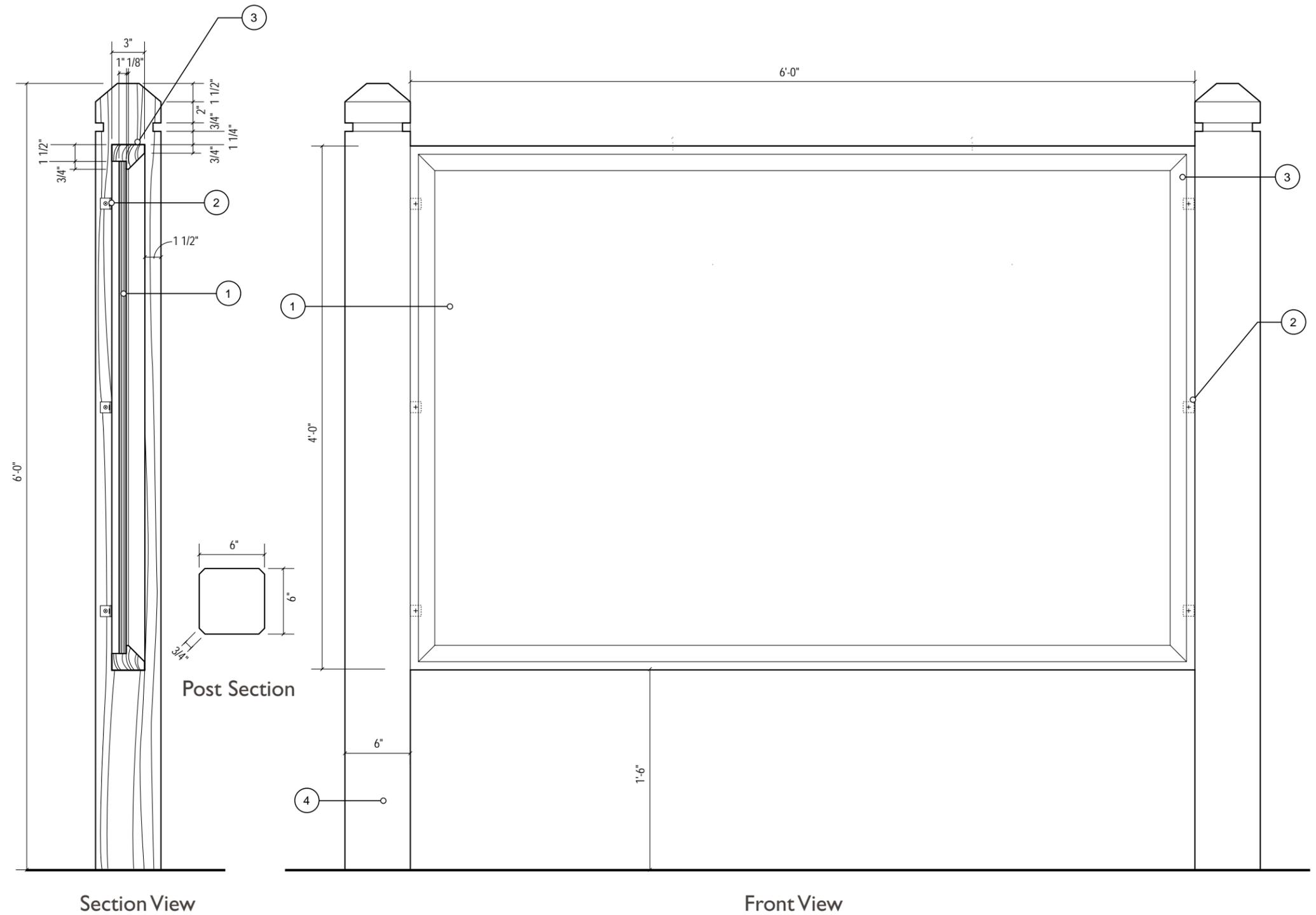
**Wayfinding:** Type G - Structure

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.*



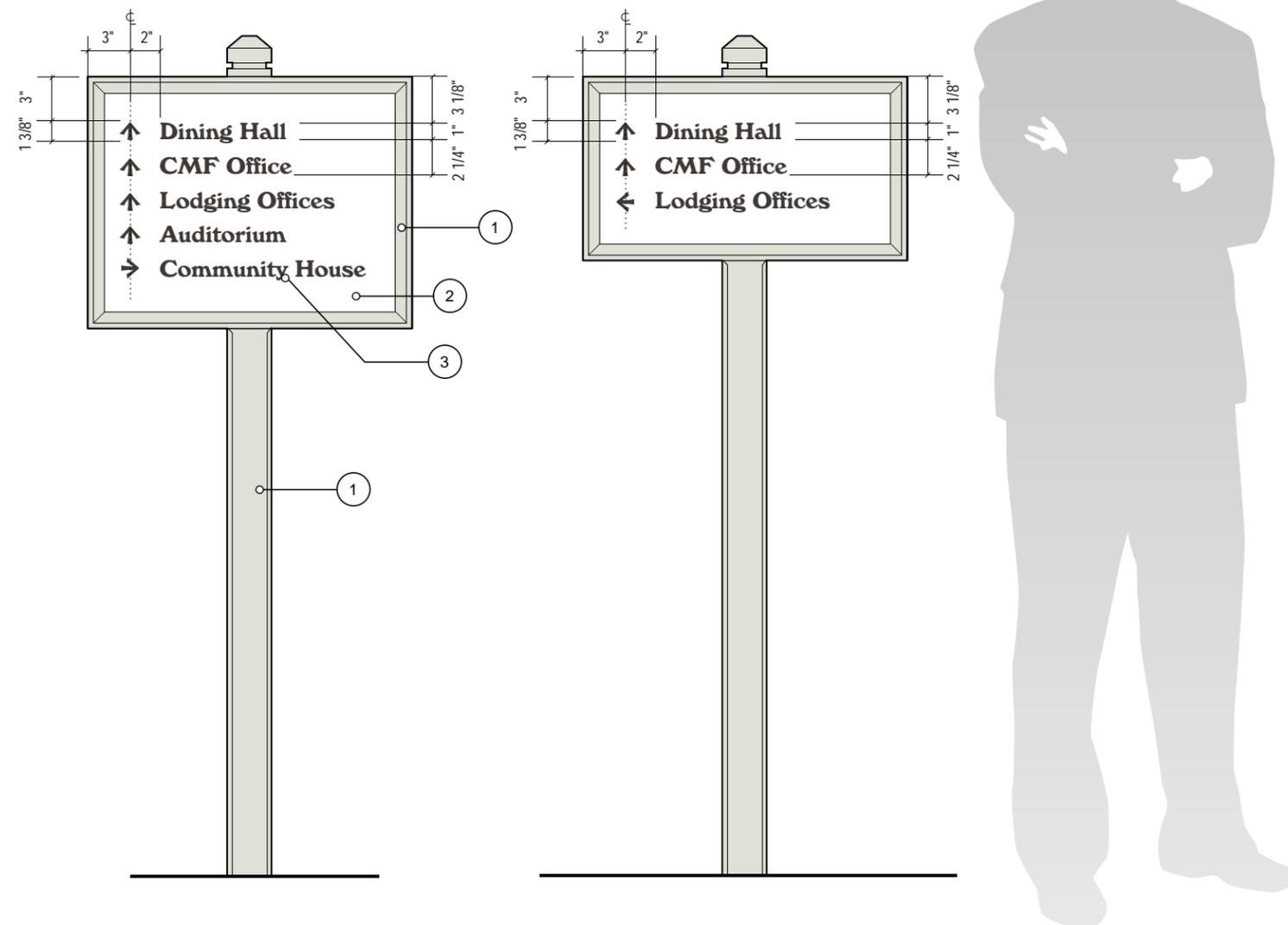
**Wayfinding:** Types P1 and P2 - Graphics

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.*



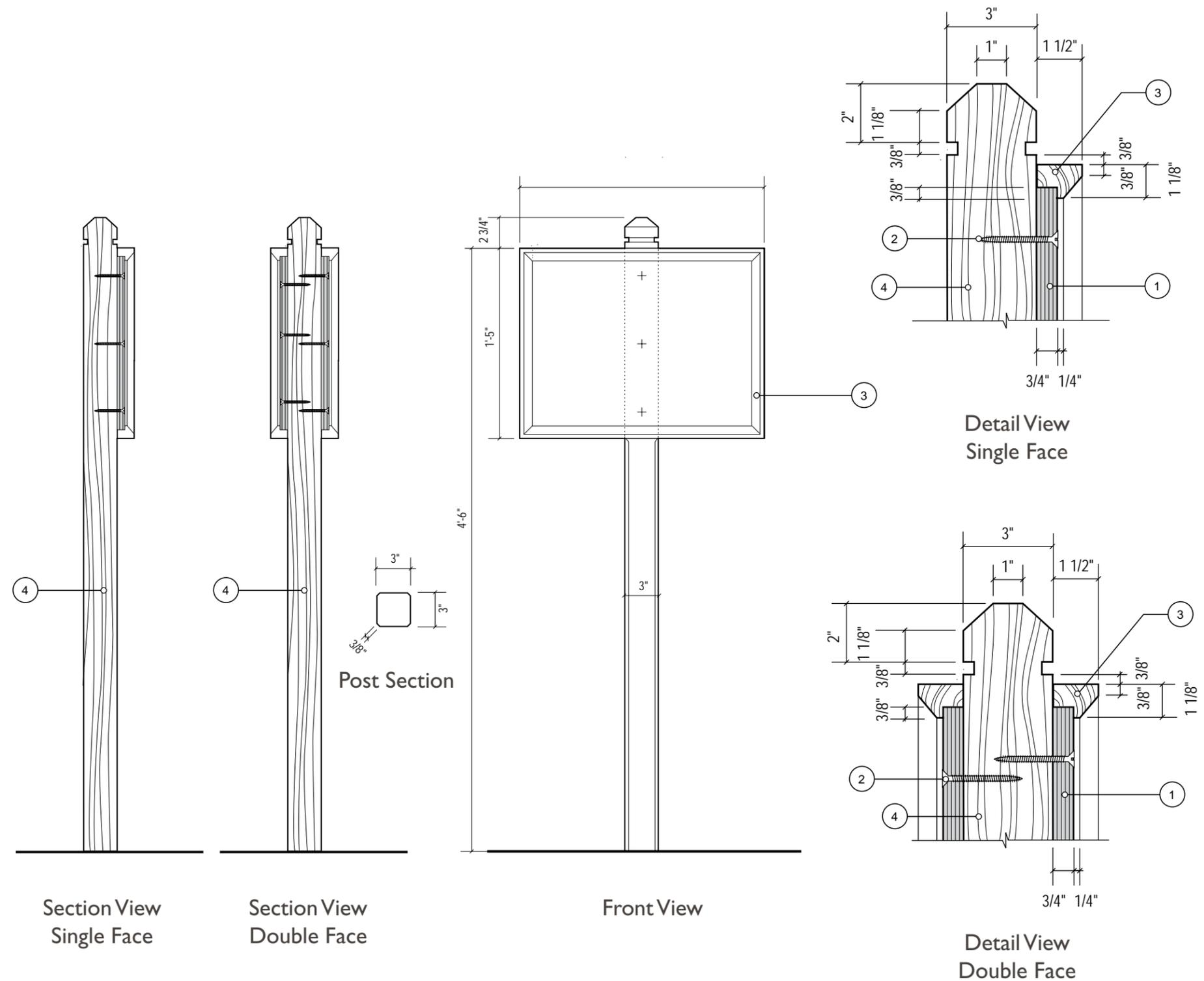
### Wayfinding: Type PI - Structure

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.*



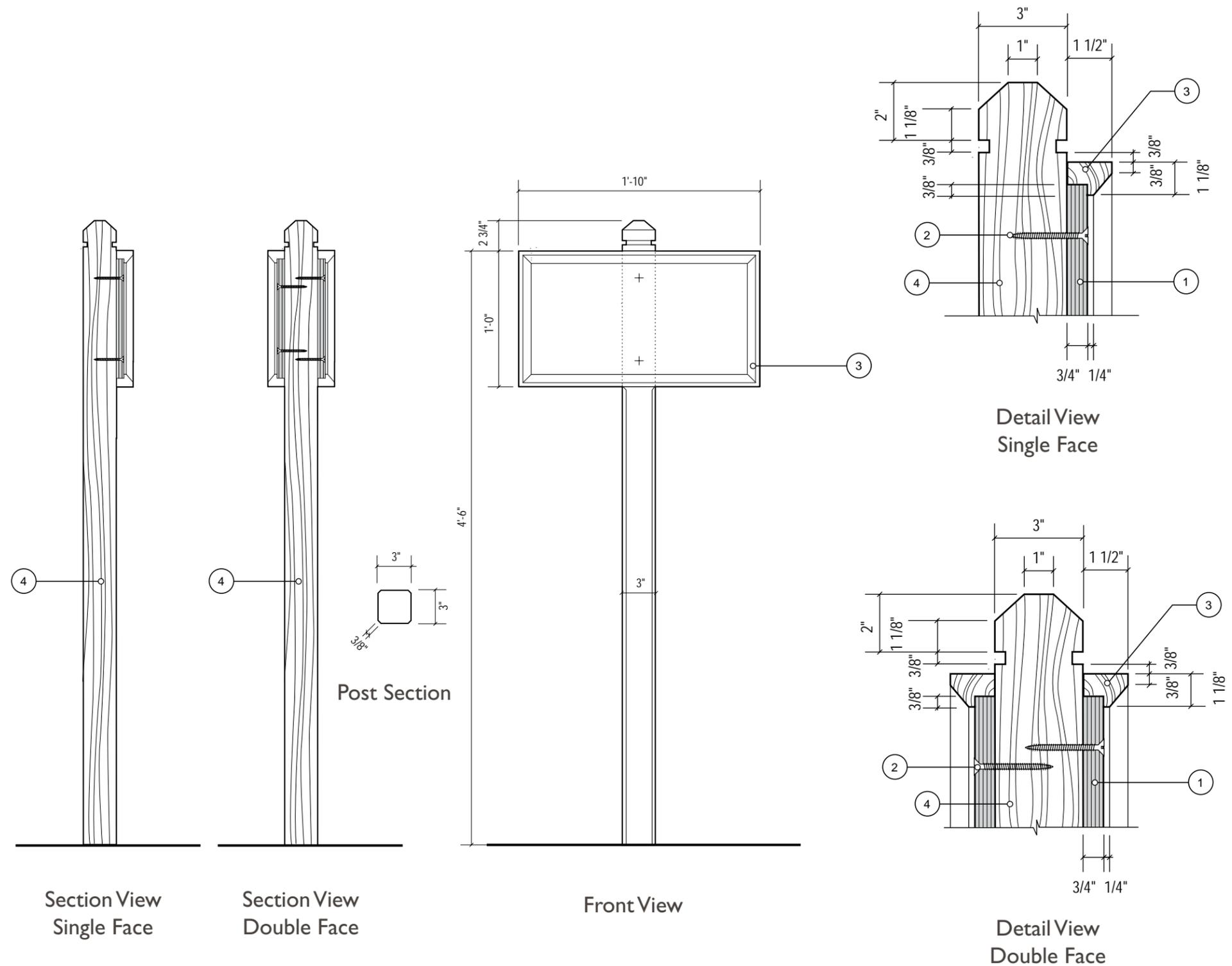
### Wayfinding: Type P2 - Structure

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

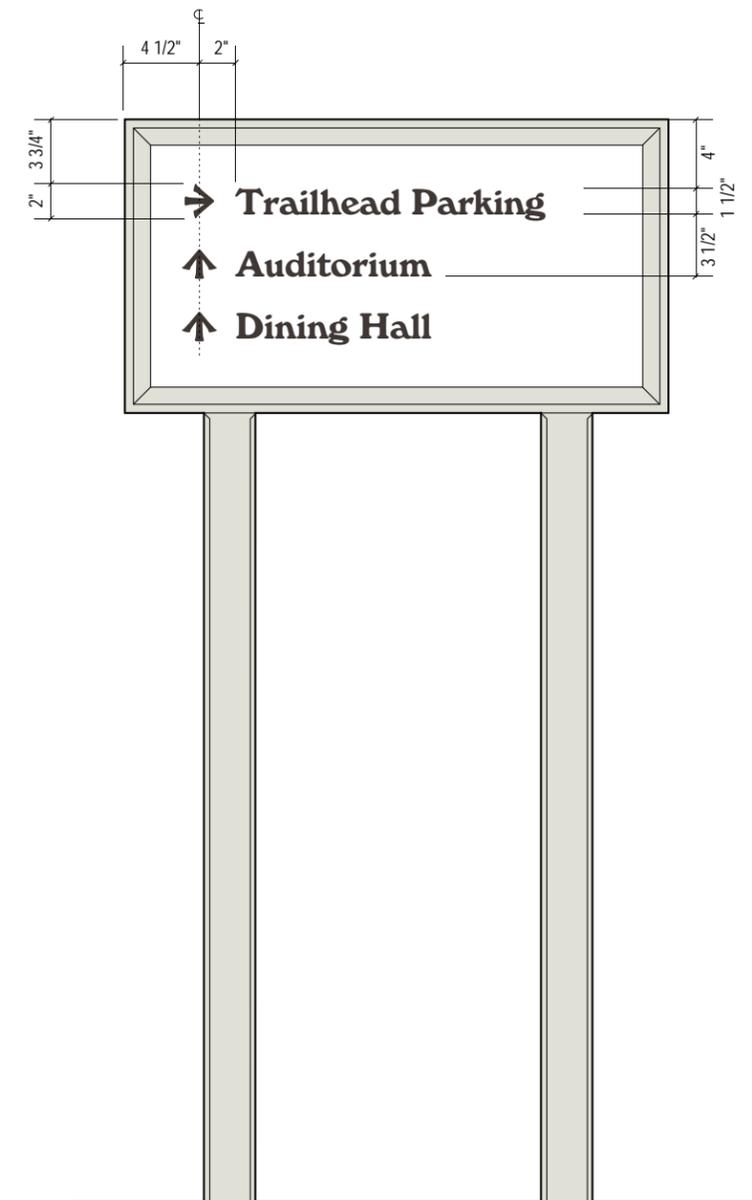
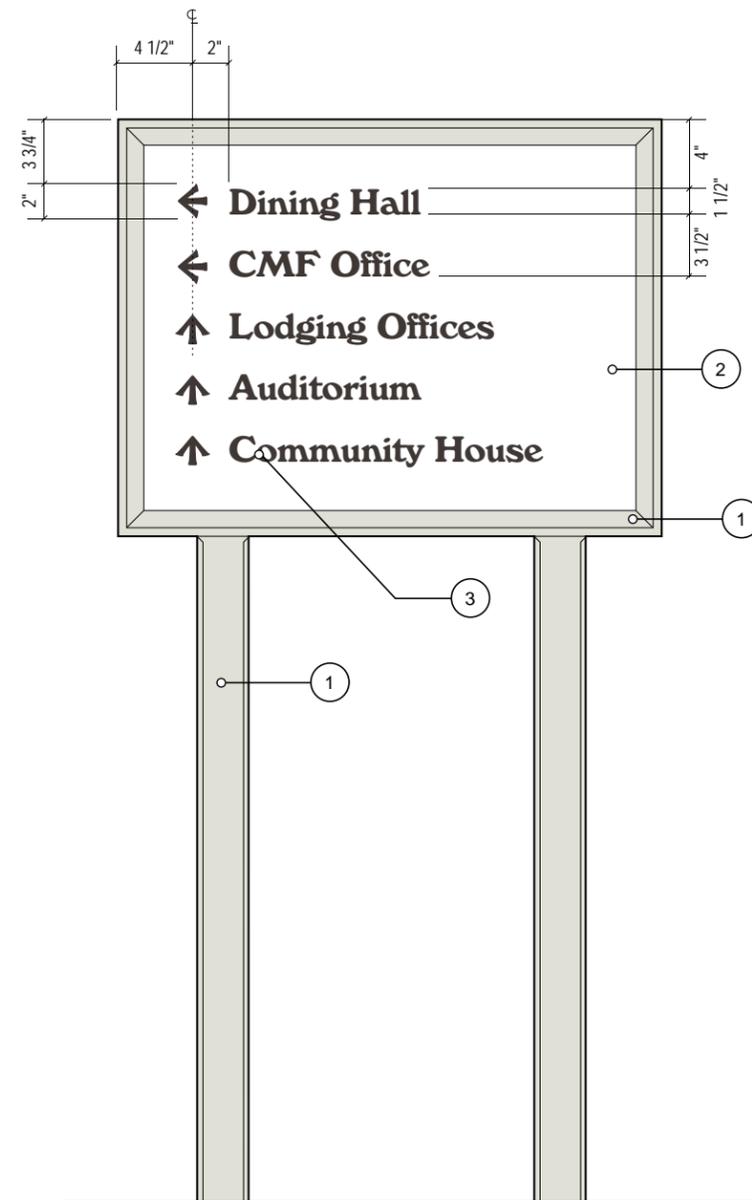
Vehicular directional signs include two size formats. The large format will accommodate four to five line items. The small format will accommodate one to three line items.

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.*

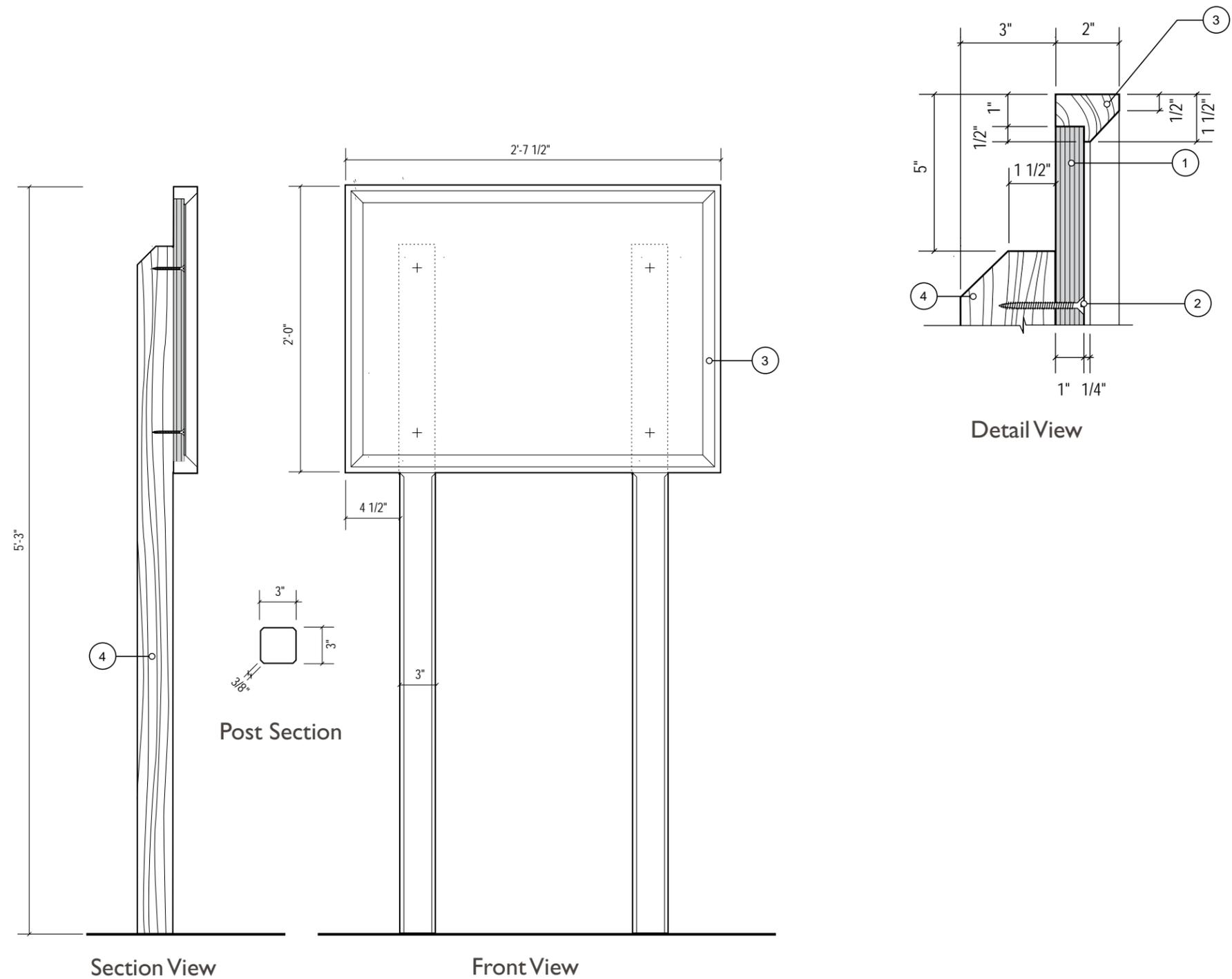


**Wayfinding:** Type VI - Structure

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.*



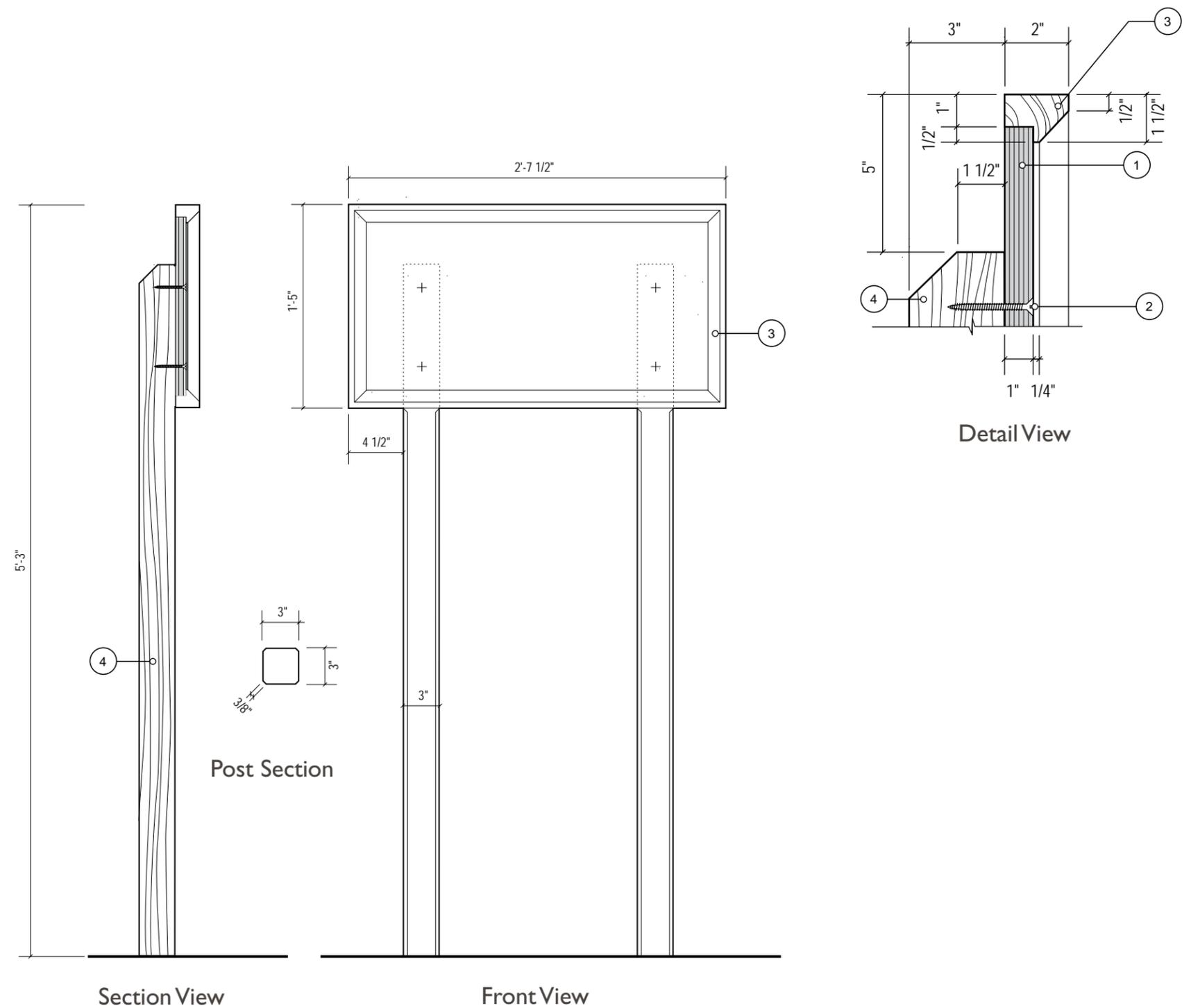
### Wayfinding: Type V2 - Structure

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.*



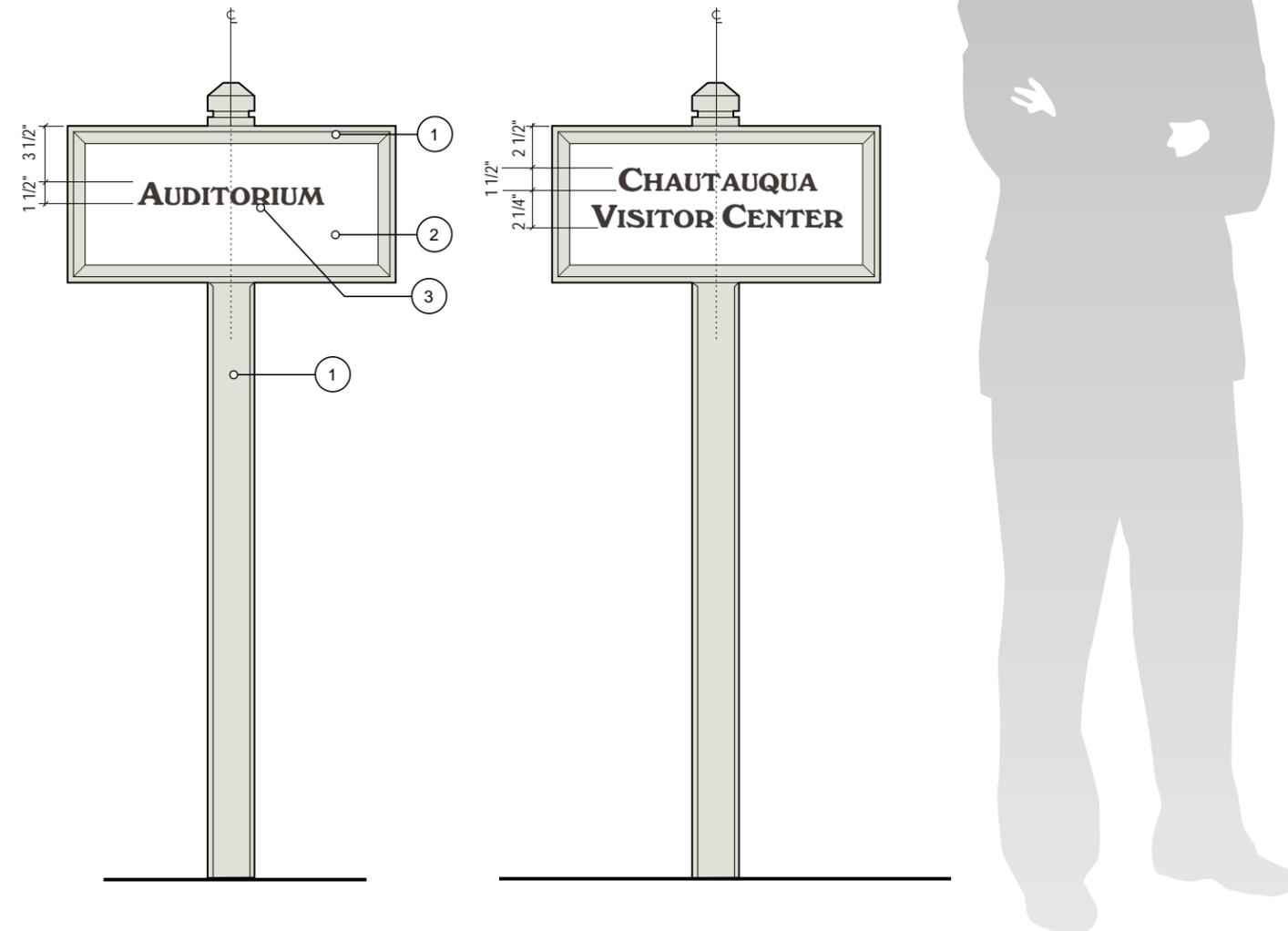
**Wayfinding:** Type A - Graphic Layout

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.*



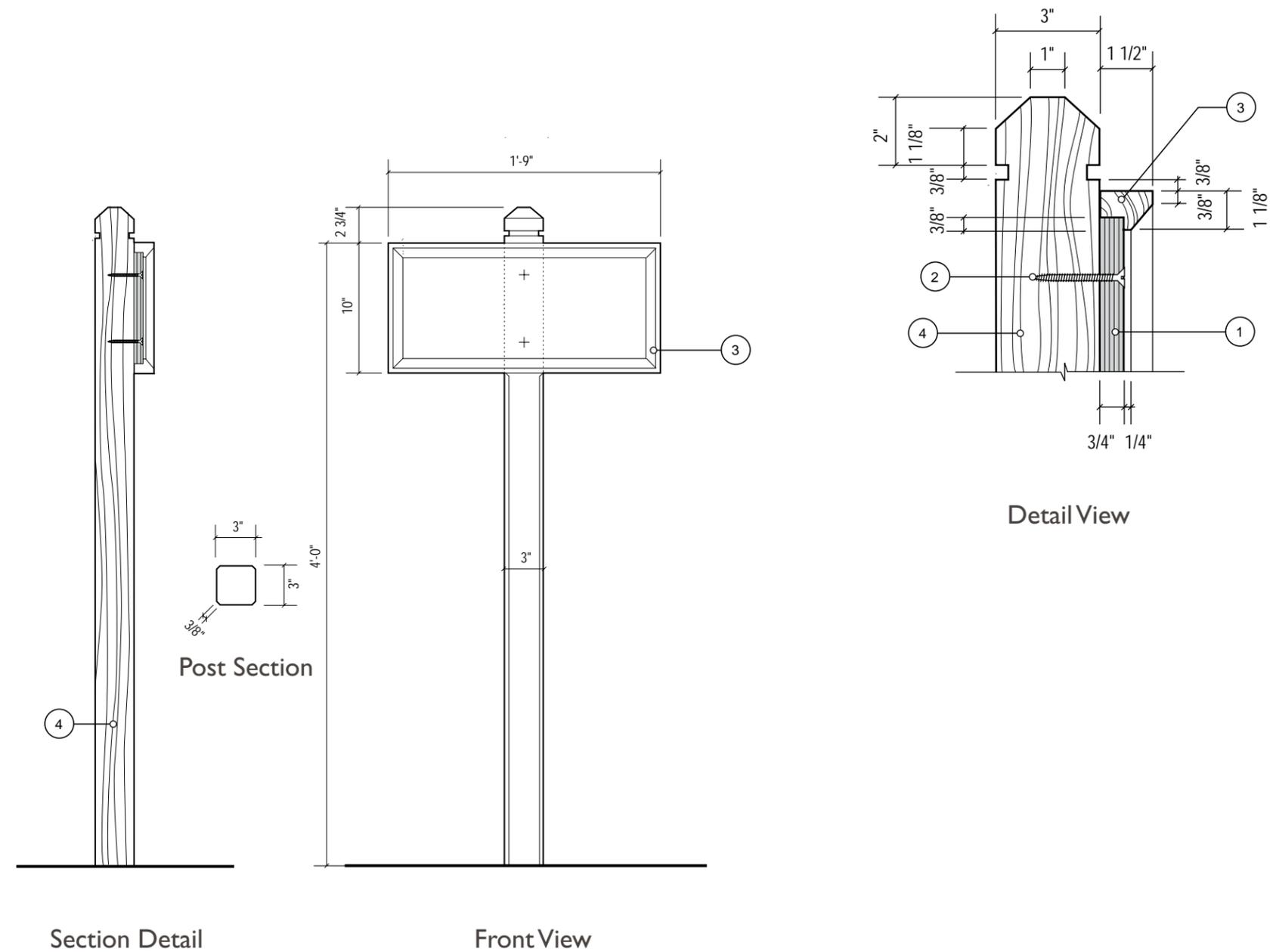
### Wayfinding: Type A - Structure

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.*



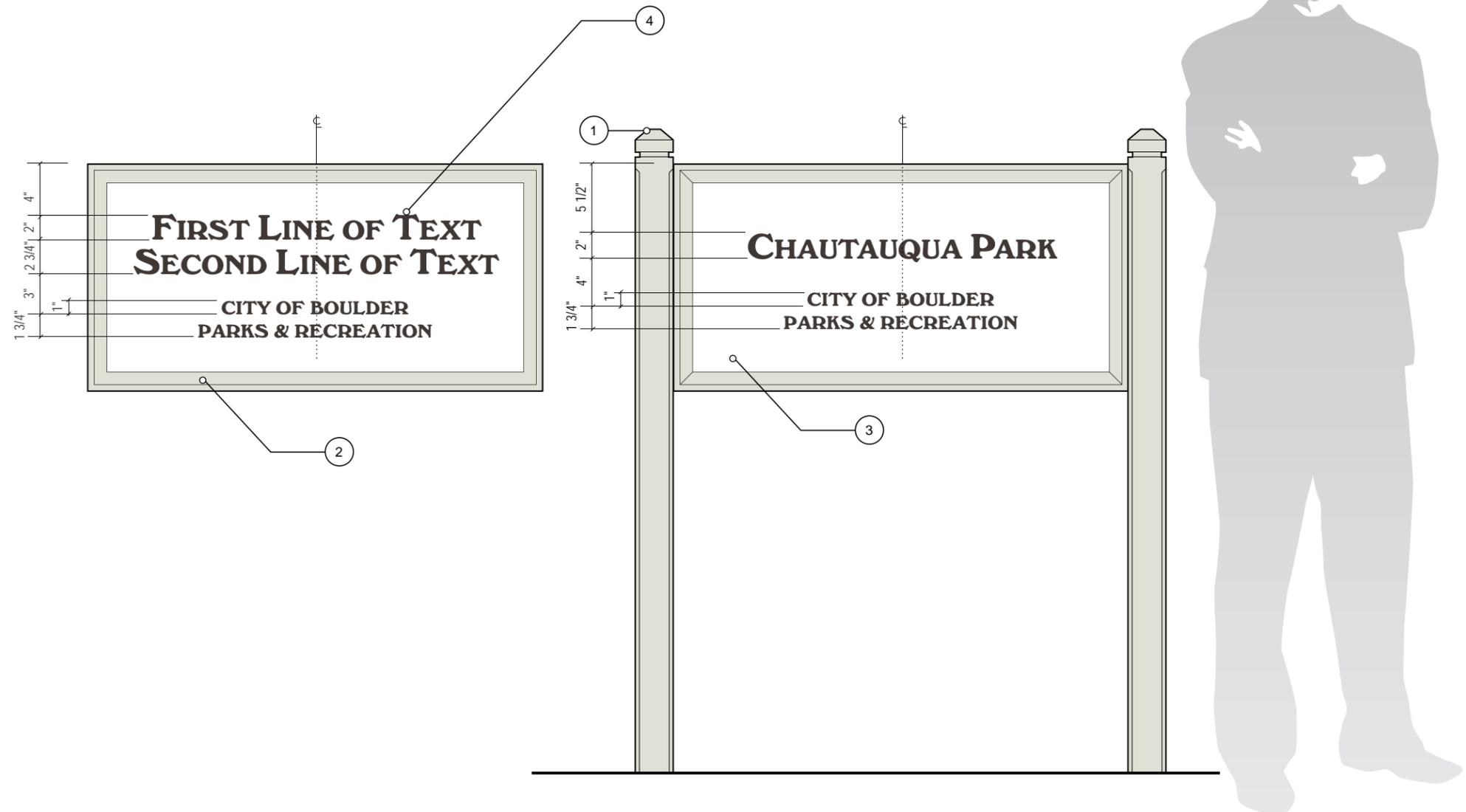
**Wayfinding:** Type B - Graphic Layout

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

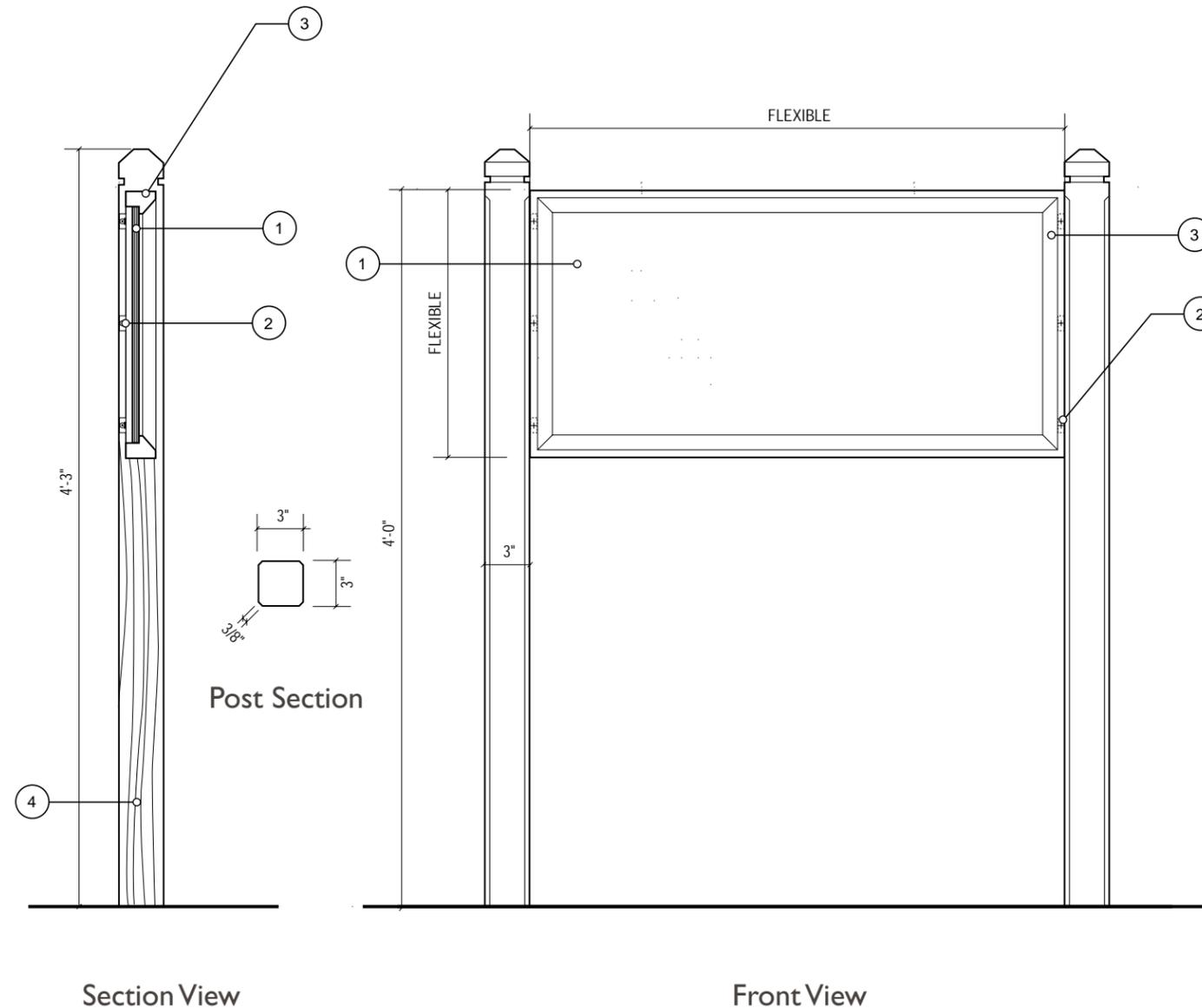
Area identity signs are to be placed parallel to vehicular routes Preferably at or near pedestrian access entries.

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.*

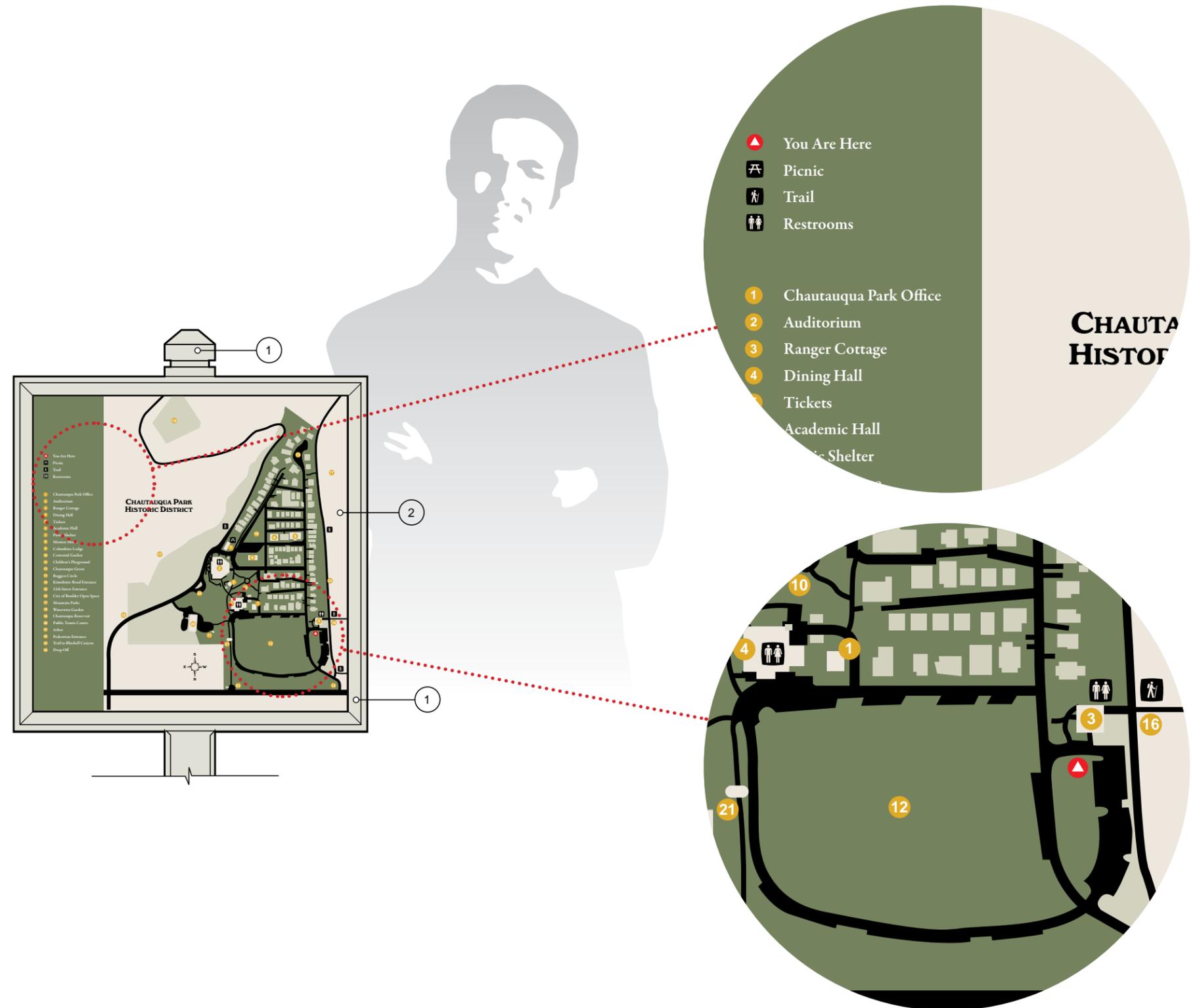


**Wayfinding:** Type D - Graphic Layout

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.*



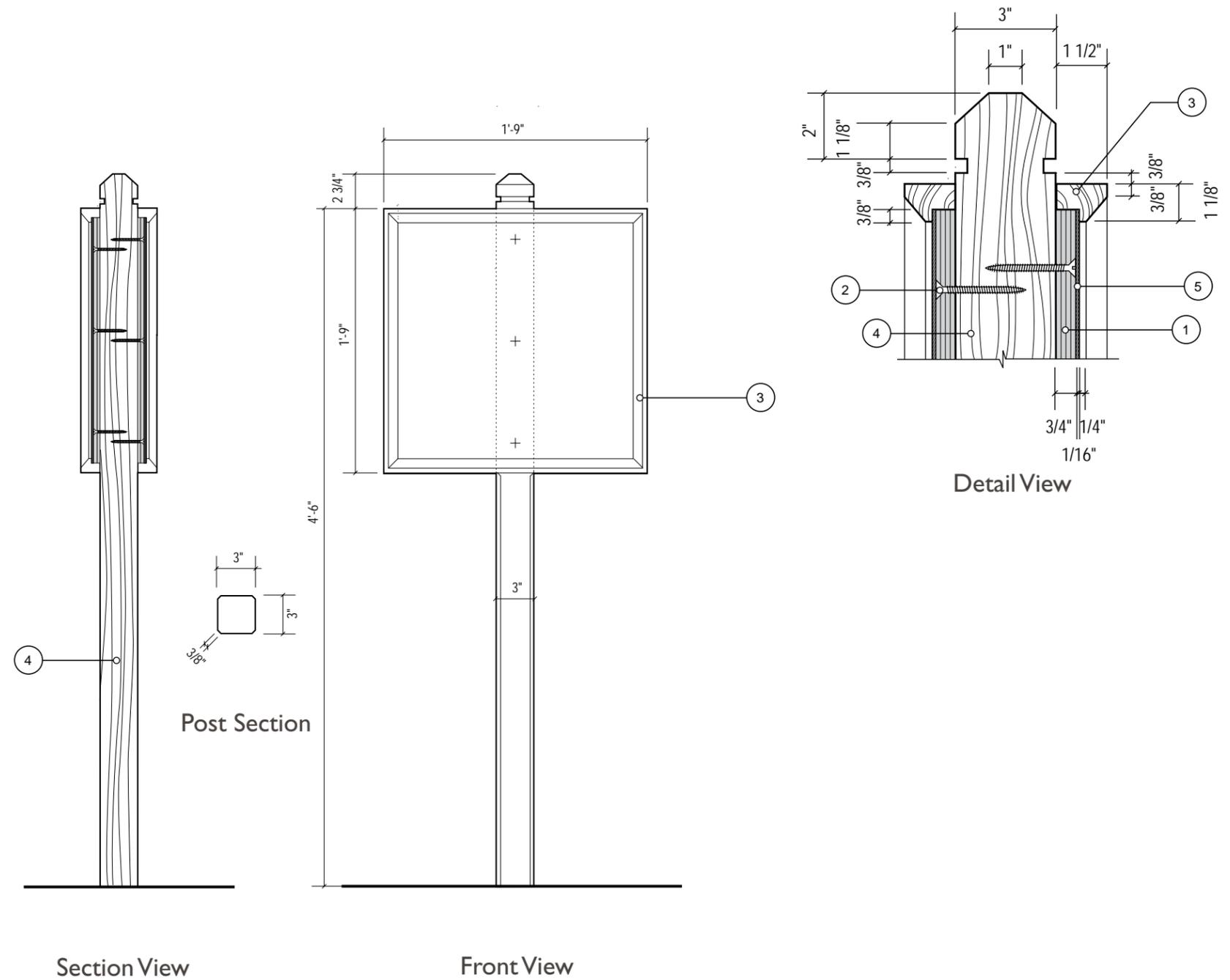
### Wayfinding: Type D - Structure

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.*



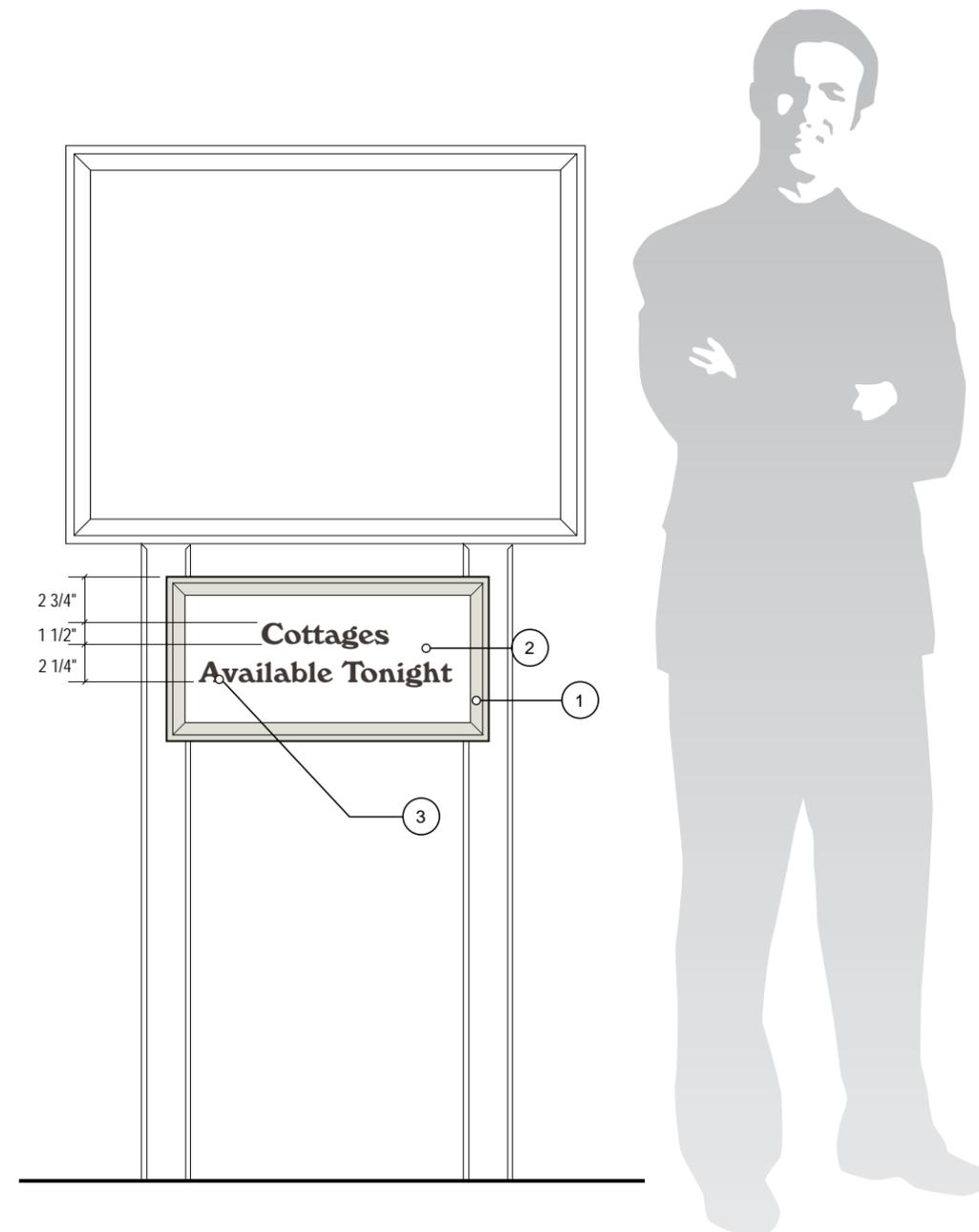
**Wayfinding:** Type C - Graphic Layout

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.*



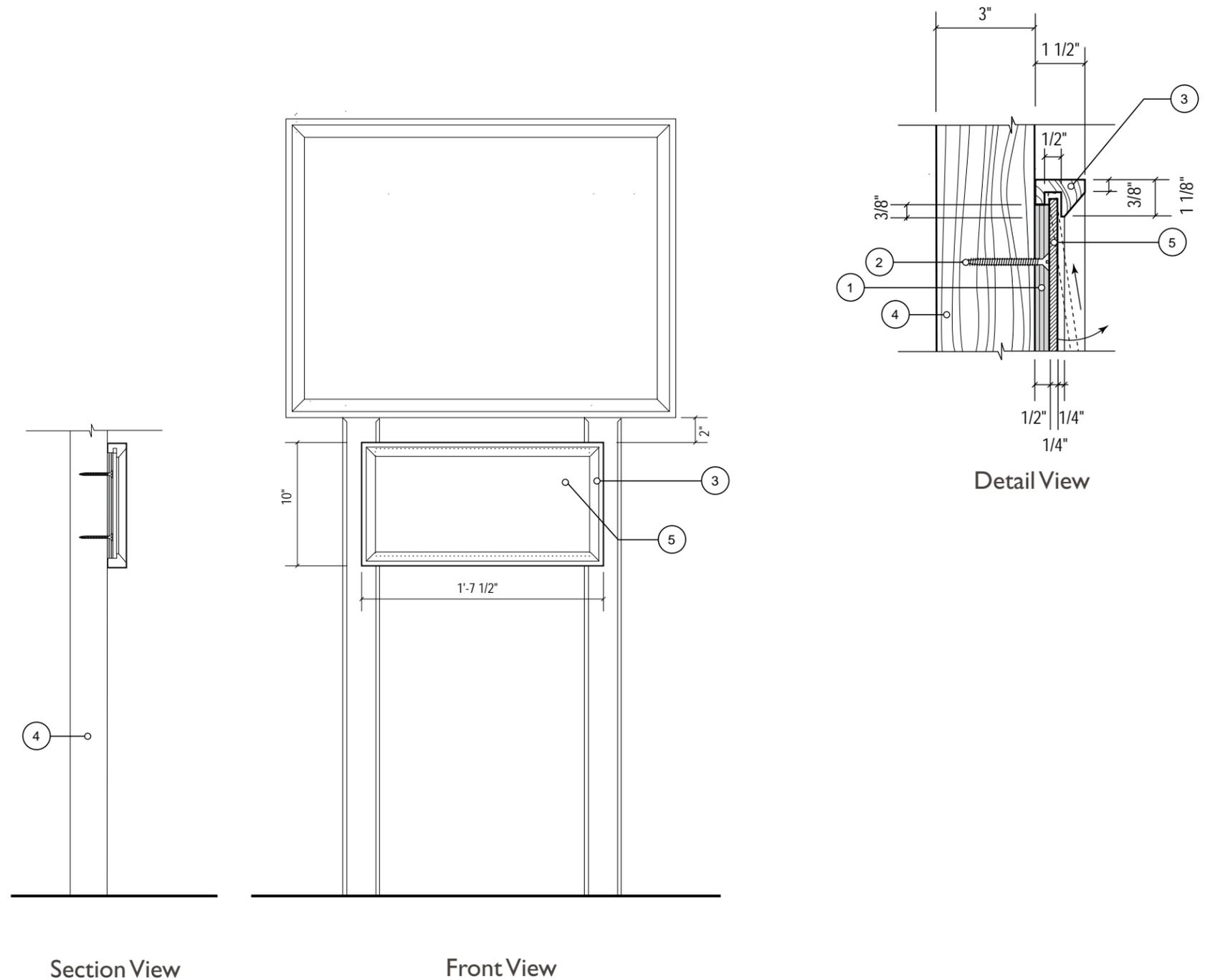
### Wayfinding: Type C - Structure

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.

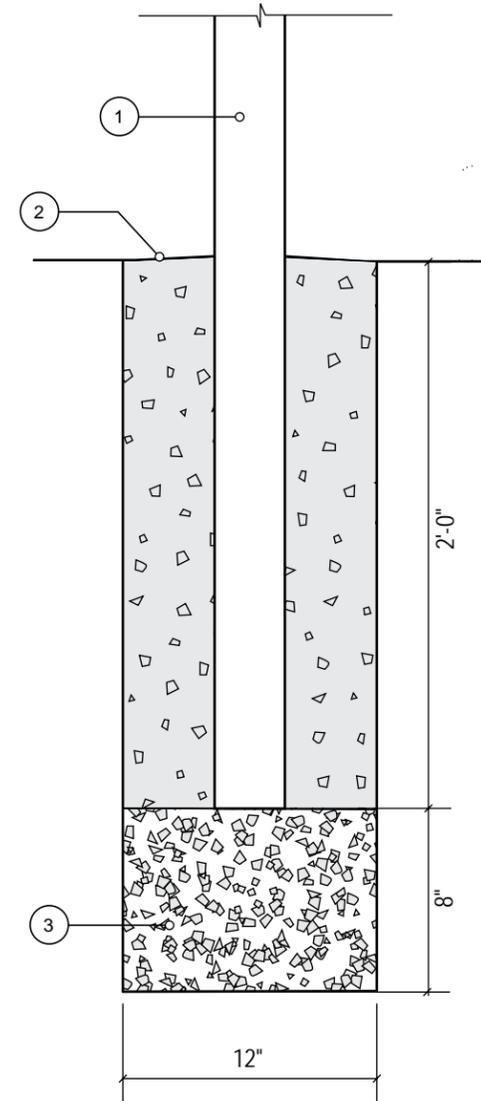
**NOTE:**

*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



## Interpretive: Overview



### 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.*

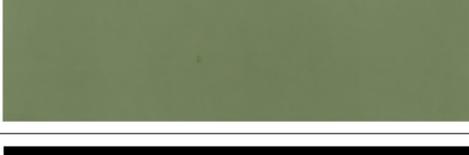
**Interpretive:** Color Palette

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.

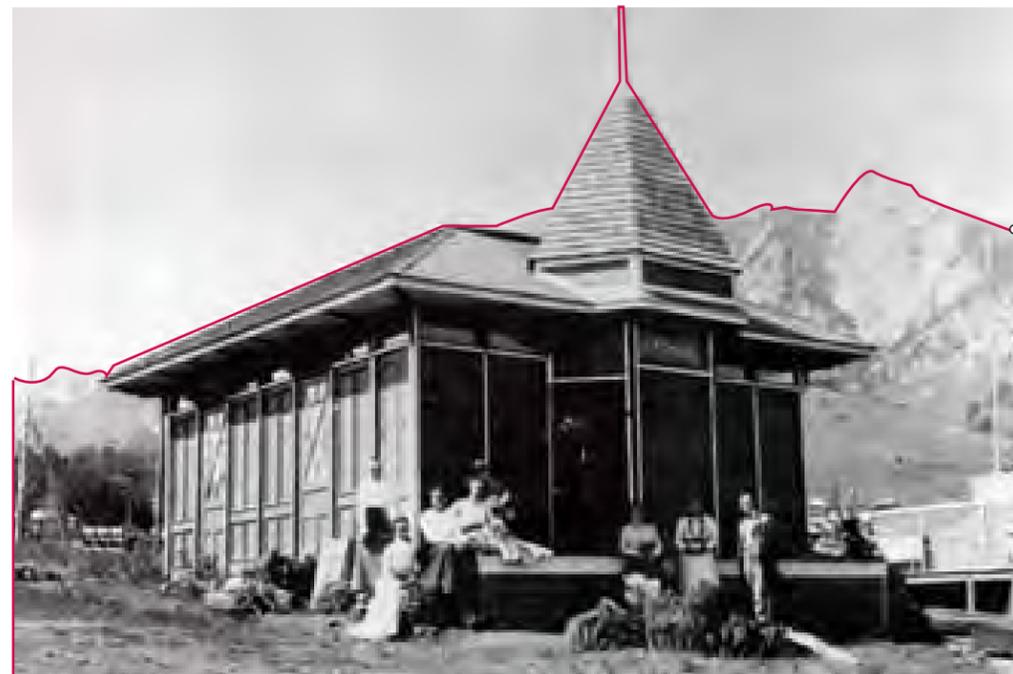
1. **Titles**  
Where existing, handwritten information on original photographs will be displayed.
2. **Tone of Photographs**  
B & W and color original photographs shall be scanned as color CMYK files to show warmth of original prints.
3. **Rules**  
Photographs shall generally include a 2-point rule 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 figurer shows location of break, not decorative element).



①



③



④

**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.

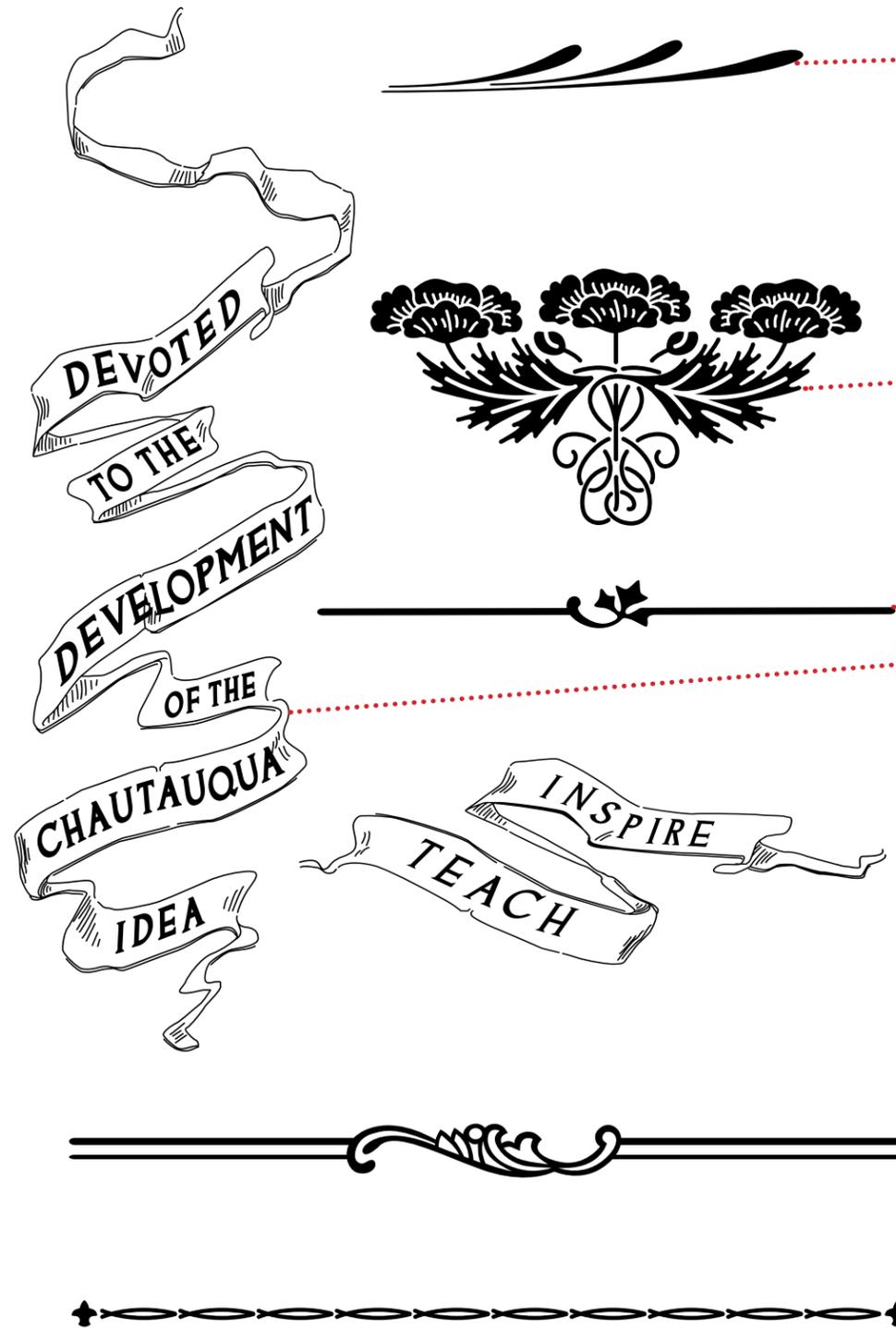


**Interpretive:** Flourishes, Rules, and Dingbats

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.



## Interpretive: Interpretive Writing

### 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

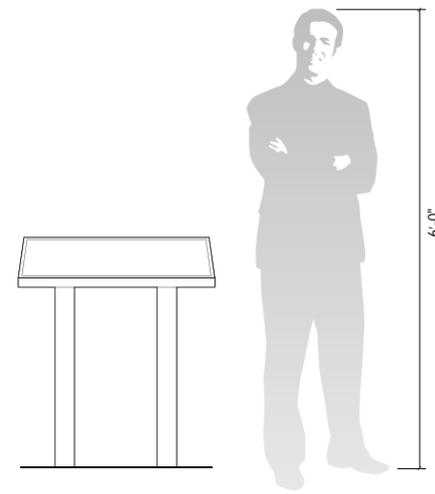
**Type E3**  
Sloper panel: large, wall mount

**Type E4**  
Sloper panel: small, wall mount

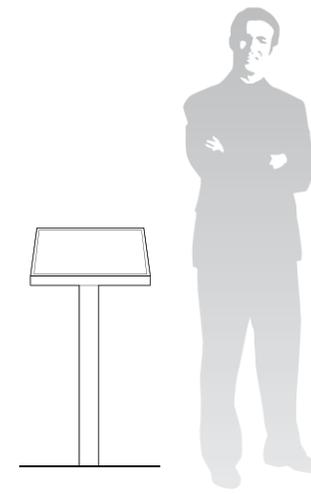
**Type E5**  
Flush wall mount: Vertical Panel

**Type E6**  
Flush wall mount: Horizontal Panel

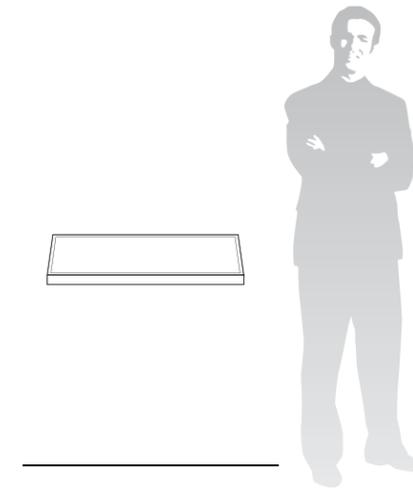
**Type E7, E8, E9, E10**  
Tour Locator, free-standing and adaptations to sign structures.



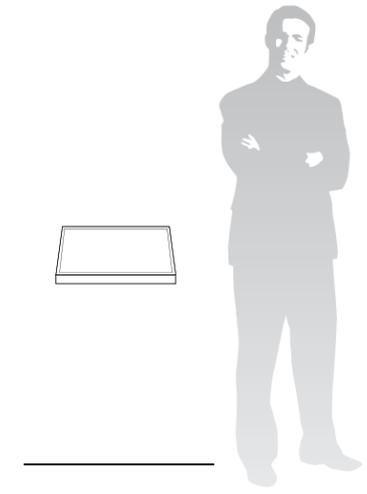
Type E1



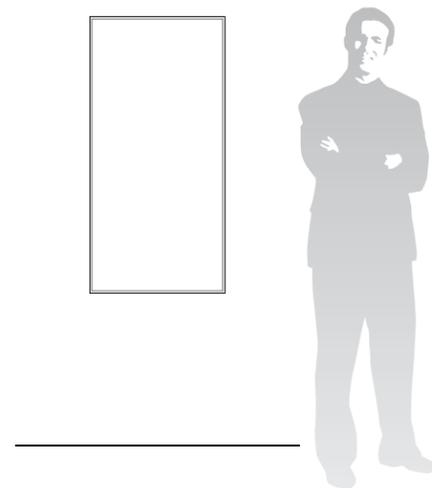
Type E2



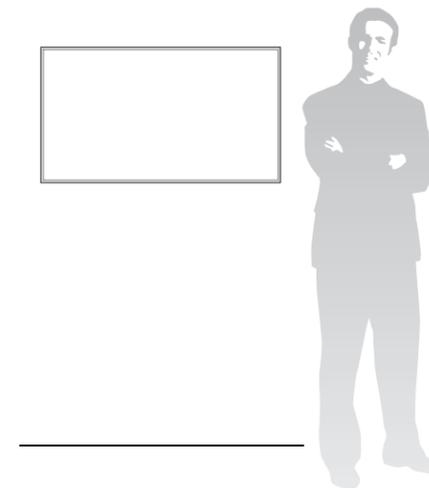
Type E3



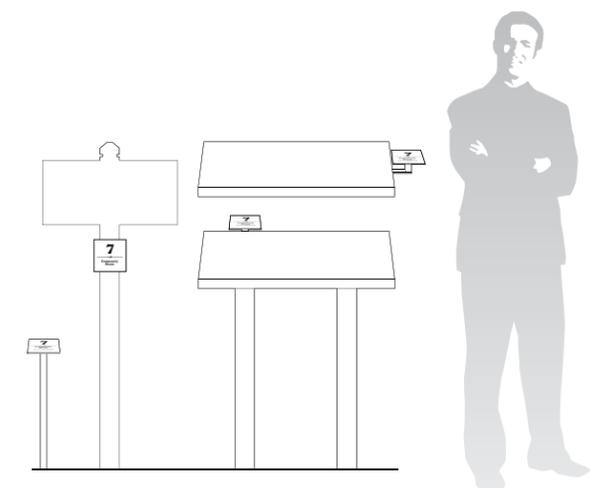
Type E4



Type E5



Type E6



Types E7, E8, E9, E10

**Interpretive:** Sloper - Typographic Sizing

**Fonts and Sizes:**

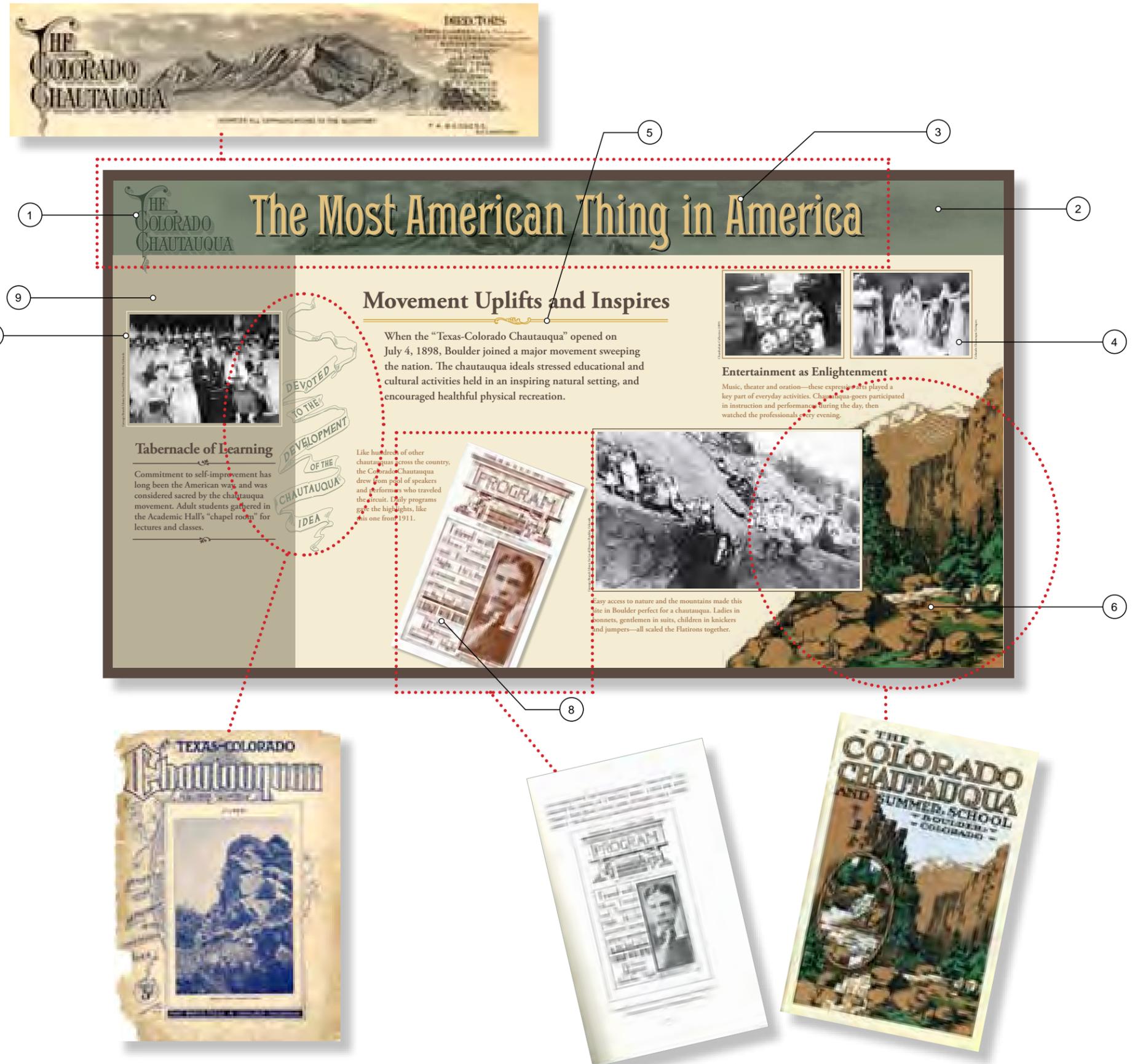
1. **Main Panel Title**  
Gable Antique Condensed 160 pt.  
Customized with a stepped drop shadow.
2. **Primary Header**  
Adobe Garamond Pro Bold 65 pt.
3. **Secondary Header**  
Adobe Garamond Pro Bold 41 pt.
4. **Caption Header**  
Adobe Garamond Pro Bold 33 pt.
5. **Primary Text**  
Adobe Garamond 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.

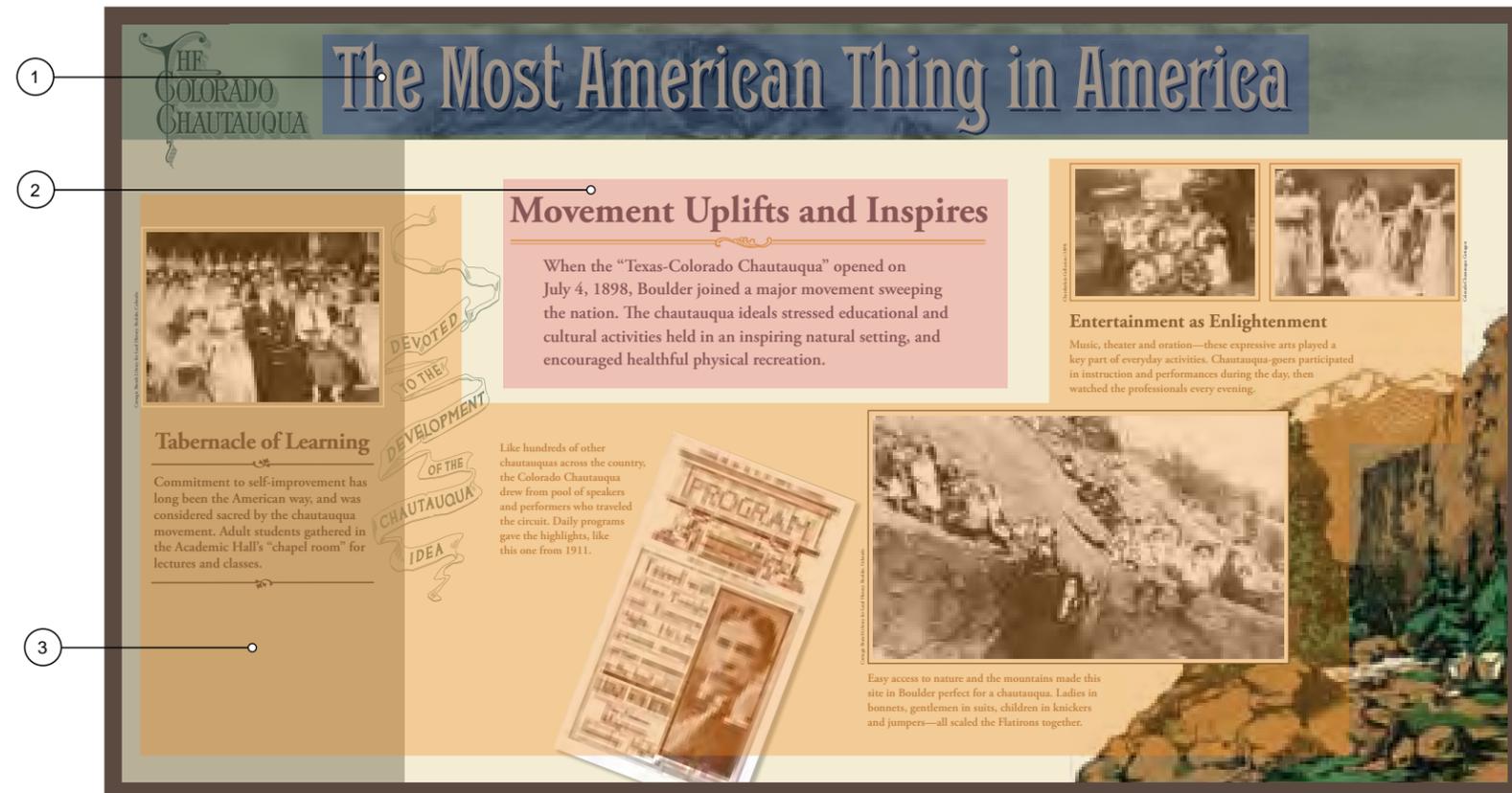
Copy Length - Up to 6 words

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

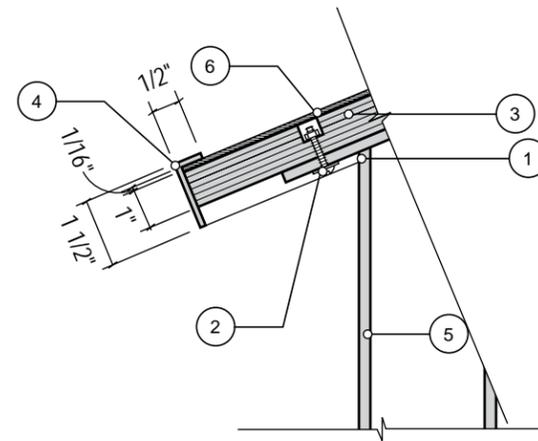
3. 3 Minute Message  
In-depth information for a more specialized read. Secondary storylines further enhance overall messaging.

Copy Length  
Secondary Text - Up to 45 words  
Caption Text - Up to 25 words

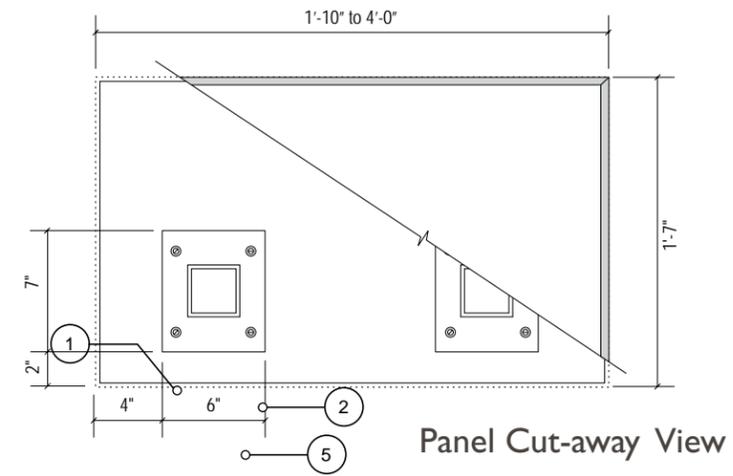


**Interpretive:** Type EI - Structure

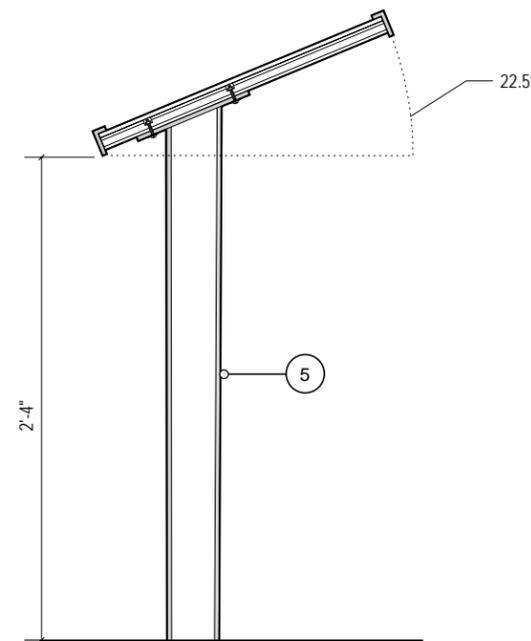
1. Painted 1/4" thick aluminum plate welded to post
2. Security hardware
3. 1" thick all-weather backer panel
4. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware, painted to match CL2725D Dissent
5. Painted aluminum 3" x 3" post, direct burial or as over-sleeve depending on mounting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



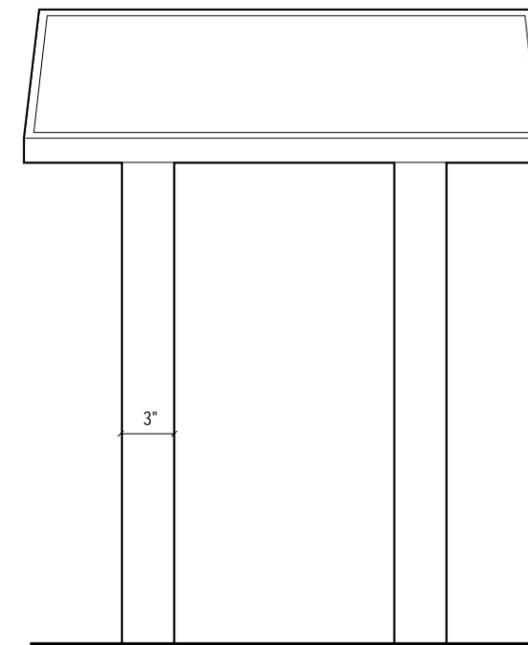
Detail View



Panel Cut-away View



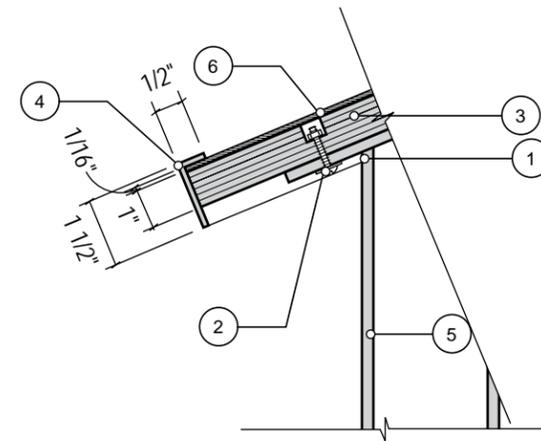
Section View



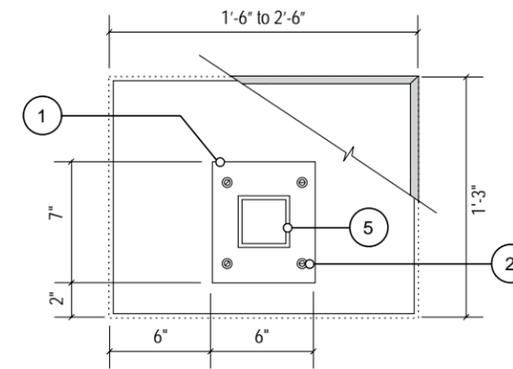
Front View

**Interpretive:** Type E2 - Structure

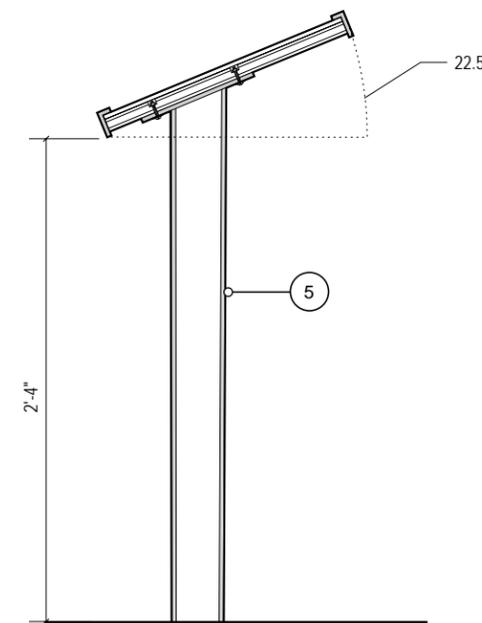
1. Painted 1/4" thick aluminum plate welded to post
2. Security hardware
3. 1" thick all-weather backer panel
4. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware, painted to match CL2725D Dissent
5. Painted aluminum 3" x 3" post, direct burial or as over-sleeve depending on mounting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



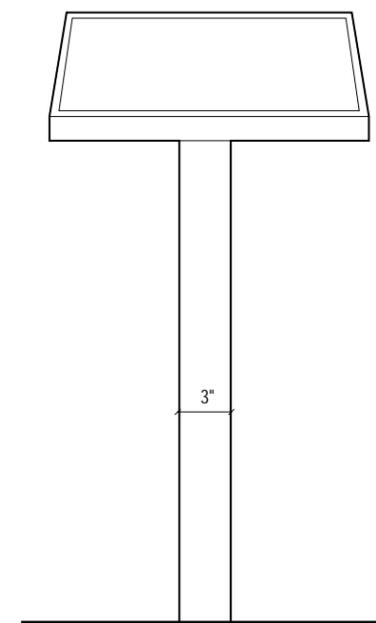
Detail View



Panel Cut-away View



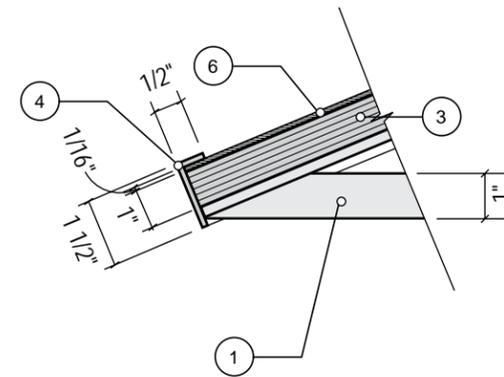
Section View



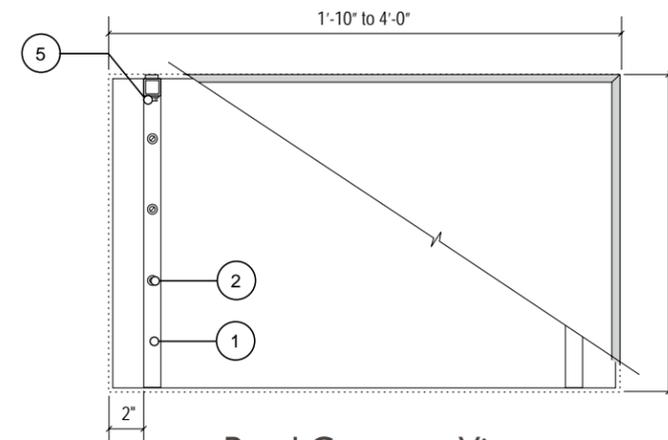
Front View

**Interpretive:** Type E3 - Structure

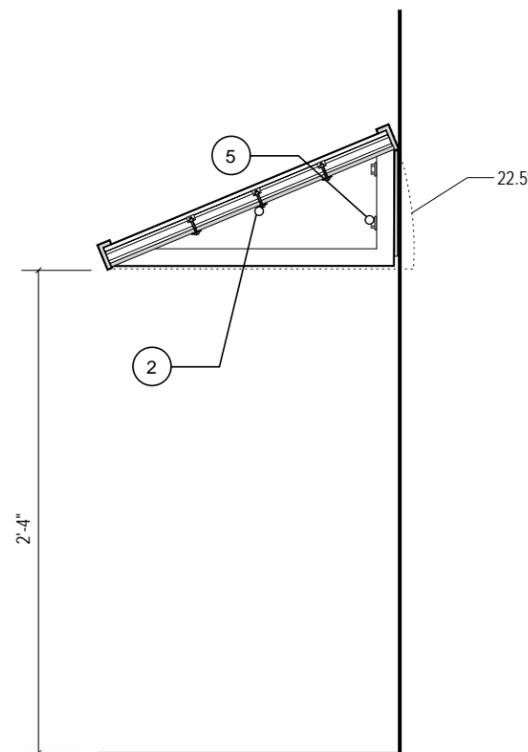
1. Painted aluminum 1" x 1" welded frame system, painted to match CL2725D Dissent
2. Security hardware
3. 1" thick all-weather backer panel
4. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware, painted to match CL2725D Dissent
5. Galvanized lag or bolt connection, painted cap to match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



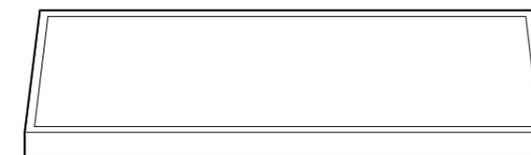
Detail View



Panel Cut-away View



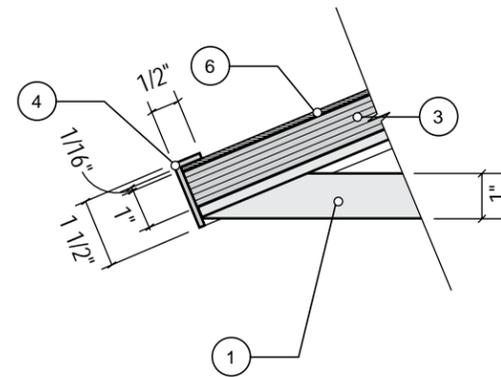
Section View



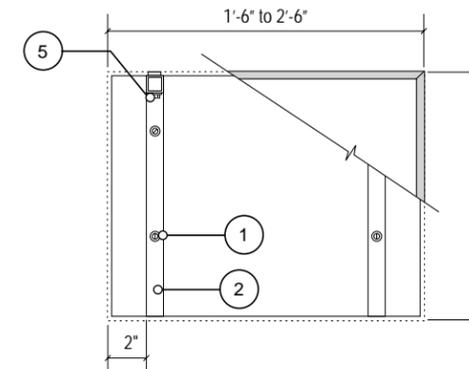
Front View

**Interpretive:** Type E4 - Structure

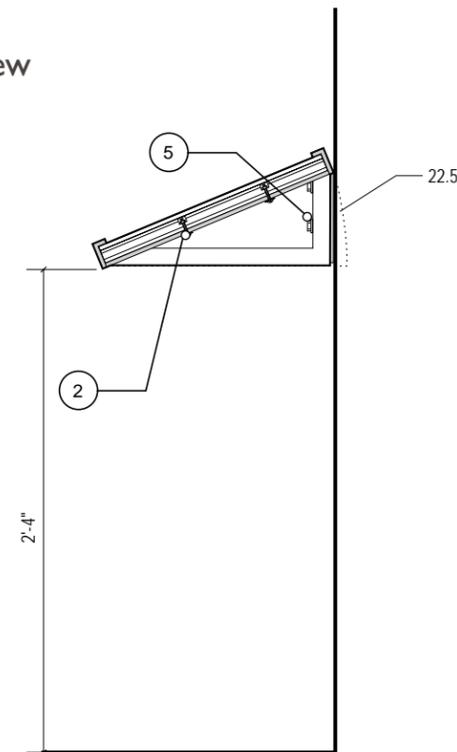
1. Painted aluminum 1" x 1" welded frame system, painted to match CL2725D Dissent
2. Security hardware
3. 1" thick all-weather backer panel
4. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware, painted to match CL2725D Dissent
5. Galvanized lag or bolt connection, painted cap to match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



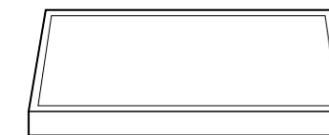
Detail View



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.

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.

### 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.

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:** 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**

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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.

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**1** (points to a bulletin cover)

**2** (points to a photo of campers)

**3** (points to a quote)

**4** (points to a large landscape photo)

**5** (points to a graphic)

**THE COLORADO CHAUTAUQUA Climbers Club Bulletin**  
**Second Edition**  
1912—BOULDER, COLO.—1912

**TEXAS-COLORADO Chautauquan**  
PLUME

**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**  
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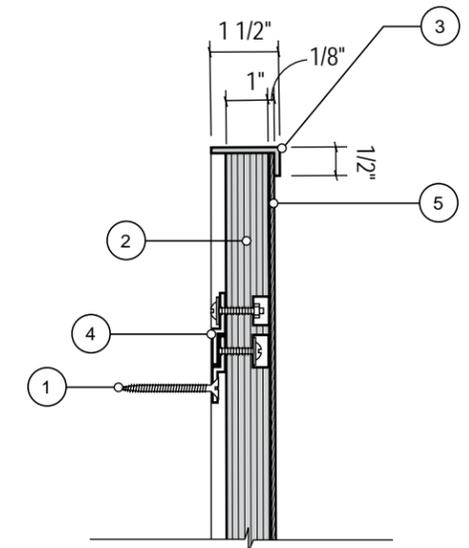
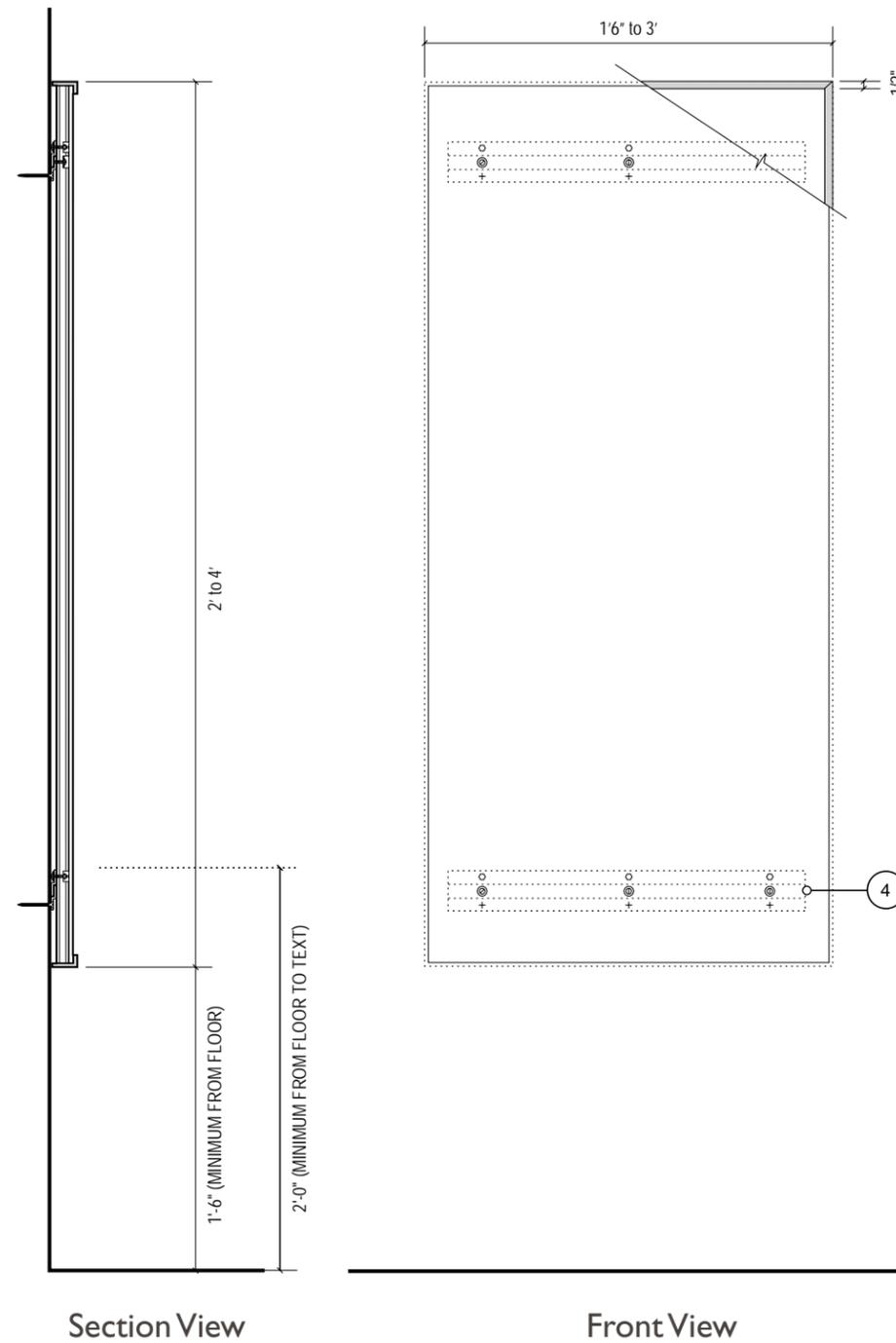
*INSPIRE*  
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**Interpretive:** Type E5 - Structure

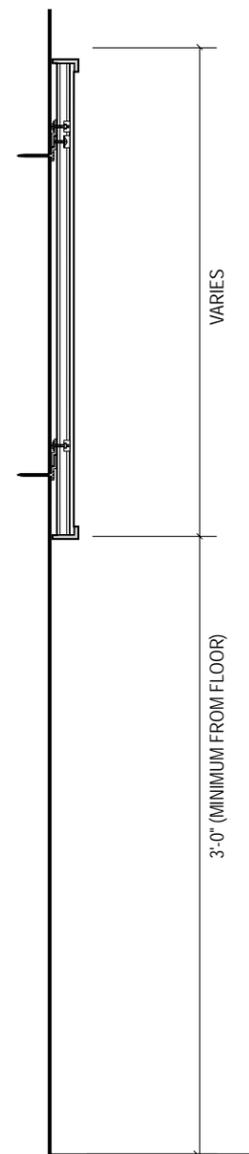
1. Attachment hardware, style depends on substrate
2. 1" thick all-weather backer panel
3. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware
4. Low-profile "Z" cleat
5. 4-color fiberglass embed digital exterior graphic



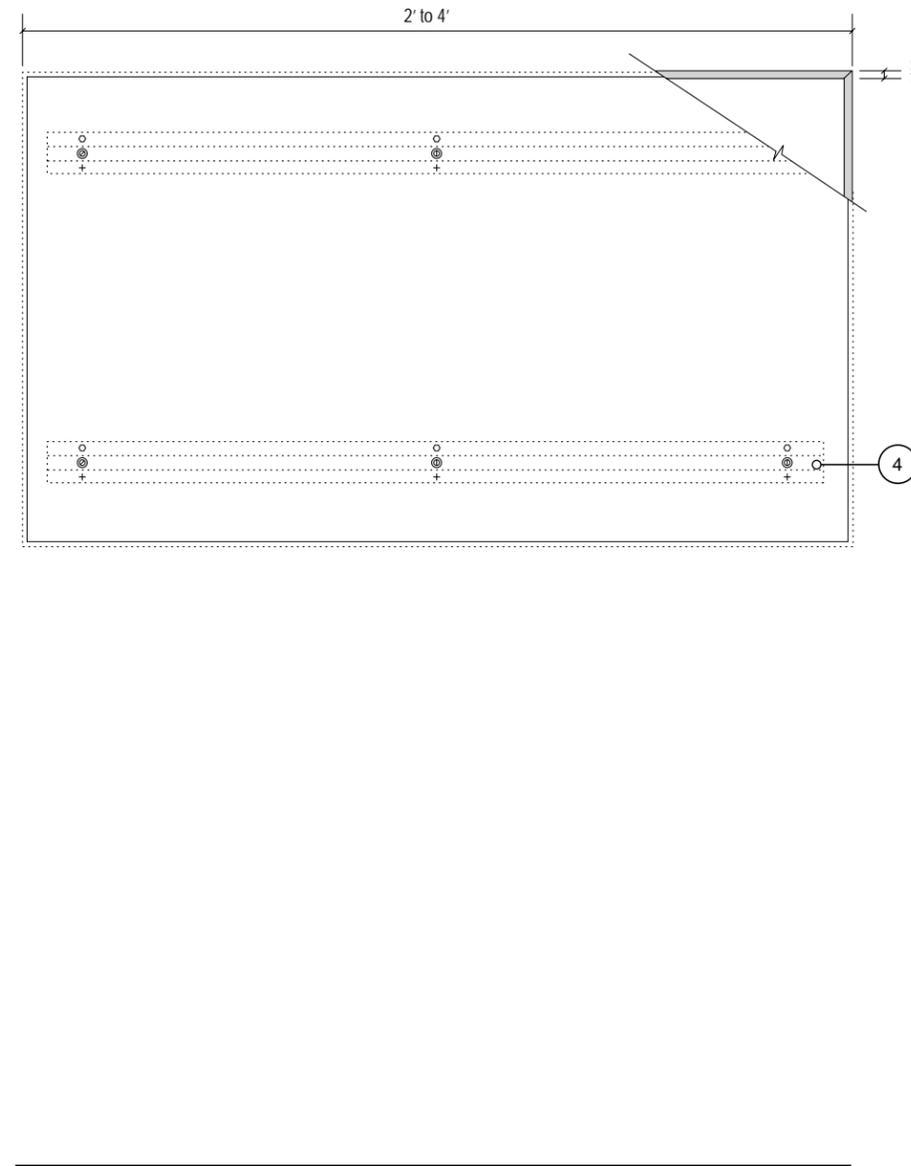
Detail View

**Interpretive:** Type E6 - Structure

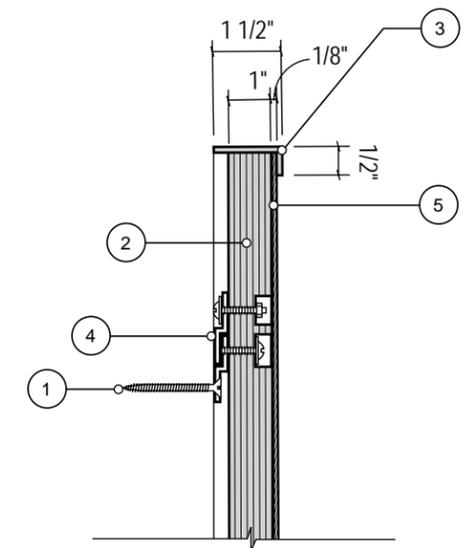
1. Attachment hardware, style depends on substrate
2. 1" thick all-weather backer panel
3. Painted 1/2" face x 1 1/2" side aluminum frame with security hardware
4. Low-profile "Z" cleat
5. 4-color fiberglass embed digital exterior graphic



Section View



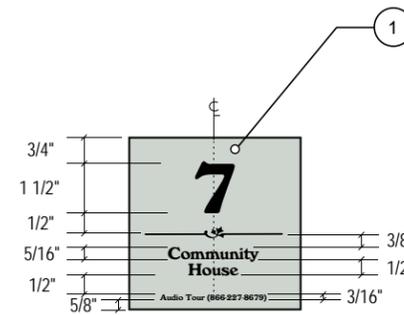
Front View



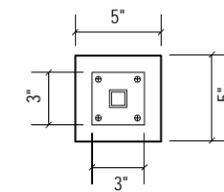
Detail View

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

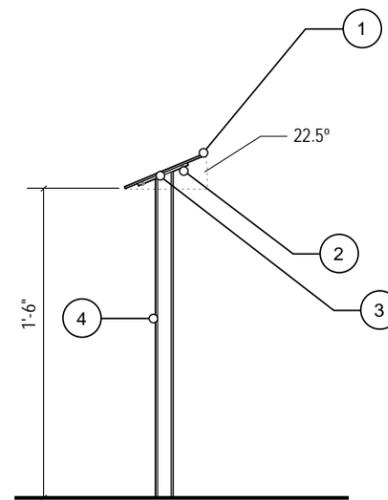
1. Porcelain enamel plate (or equivalent). Numeral and text to match black, background to match 8644M Seal Beach.
2. Integral protruding bolt secures aluminum backer plate to aluminum tubing with security nut.
3. 1/8" thick aluminum backer plate, coated with heavy enamel as buffer between aluminum and 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.



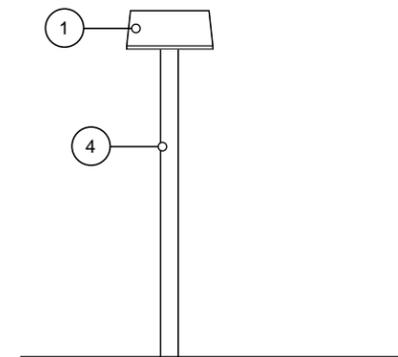
Detail View  
(Graphic)



Plan View



Section View

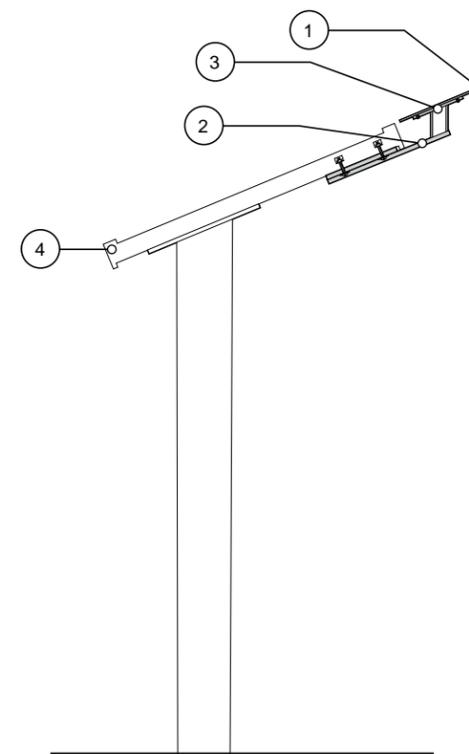


Front View

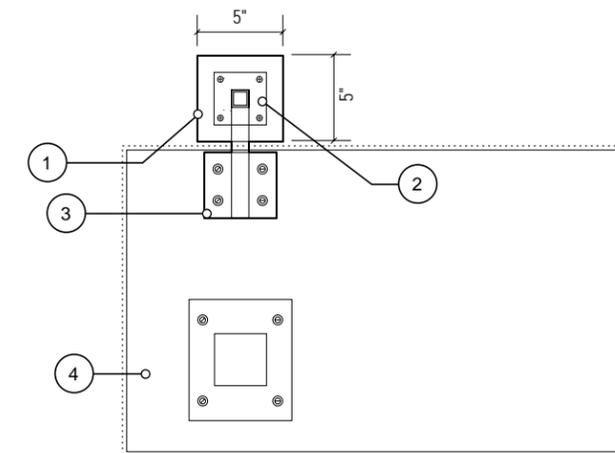


**Interpretive:** Type E8 - Structure & Graphic

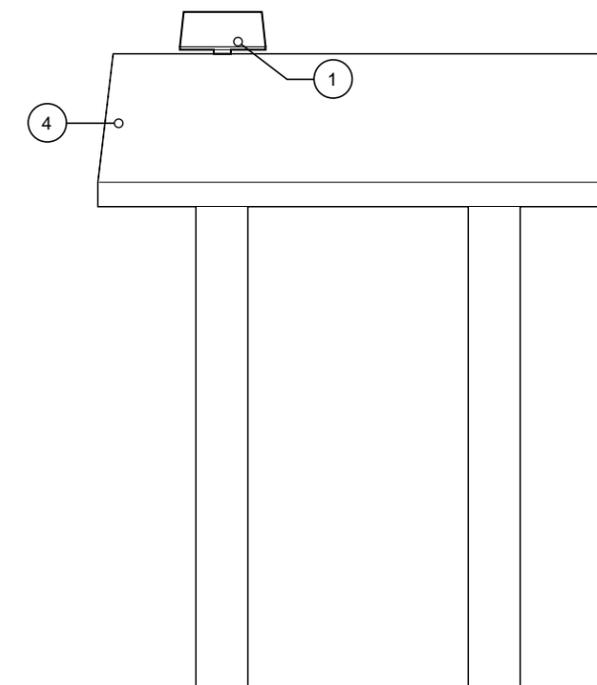
1. Porcelain enamel plate (or equivalent). Numeral and text to match black, background to match 8644M Seal Beach.
2. Mounting assembly. Consists of 1/8" thick aluminum plate and 1" x 1" square aluminum tube.
3. 1/8" thick aluminum backer plate, coated with heavy enamel as buffer between aluminum and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



Section View



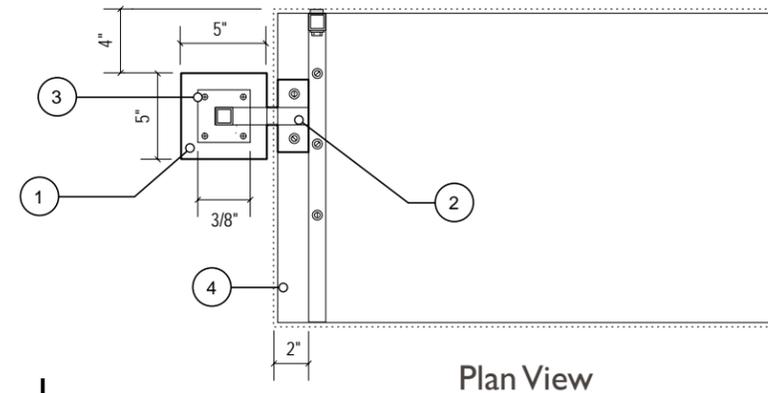
Plan View



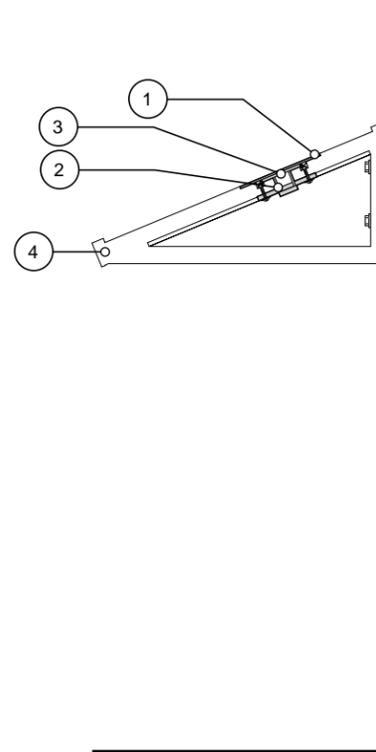
Front View

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

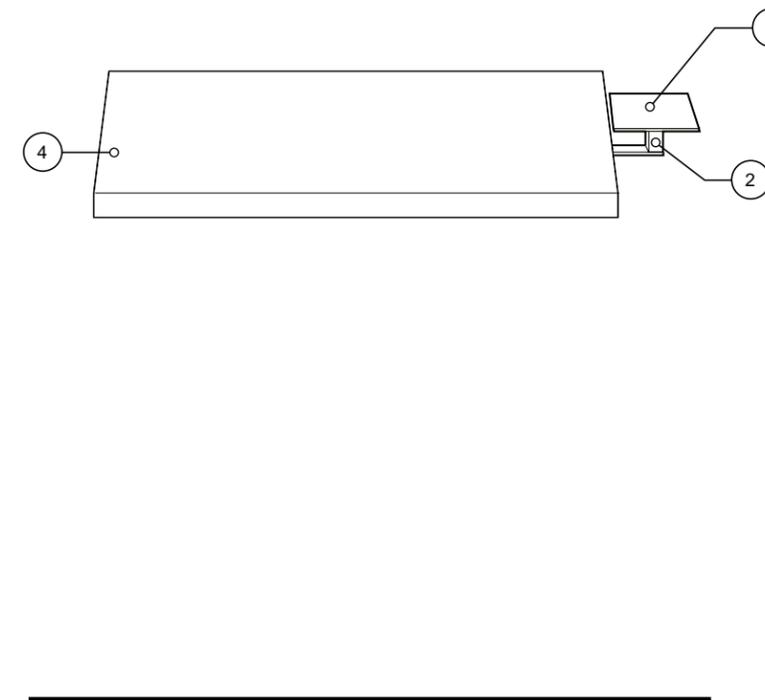
1. Porcelain enamel plate (or equivalent). Numeral and text to match black, background to match 8644M Seal Beach.
2. Mounting assembly. Consists of 1/8" thick aluminum plate and 1" x 1" square aluminum tube.
3. 1/8" thick aluminum backer plate, coated with heavy enamel as buffer between aluminum and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



Plan View



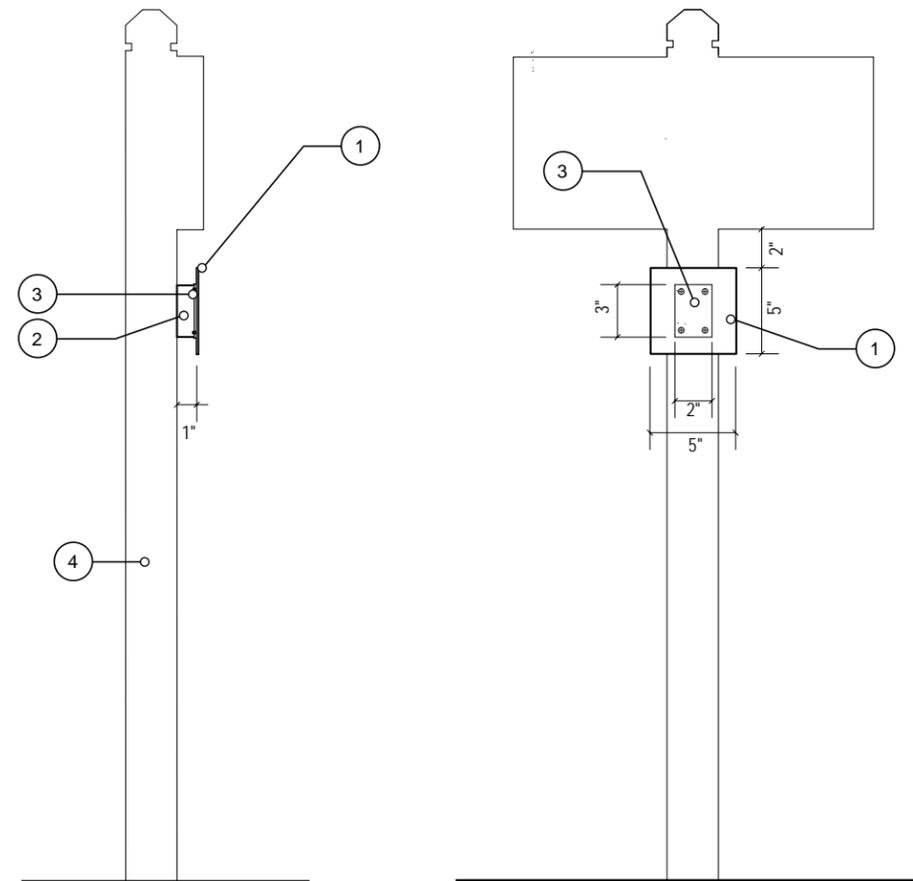
Section View



Front View

**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.

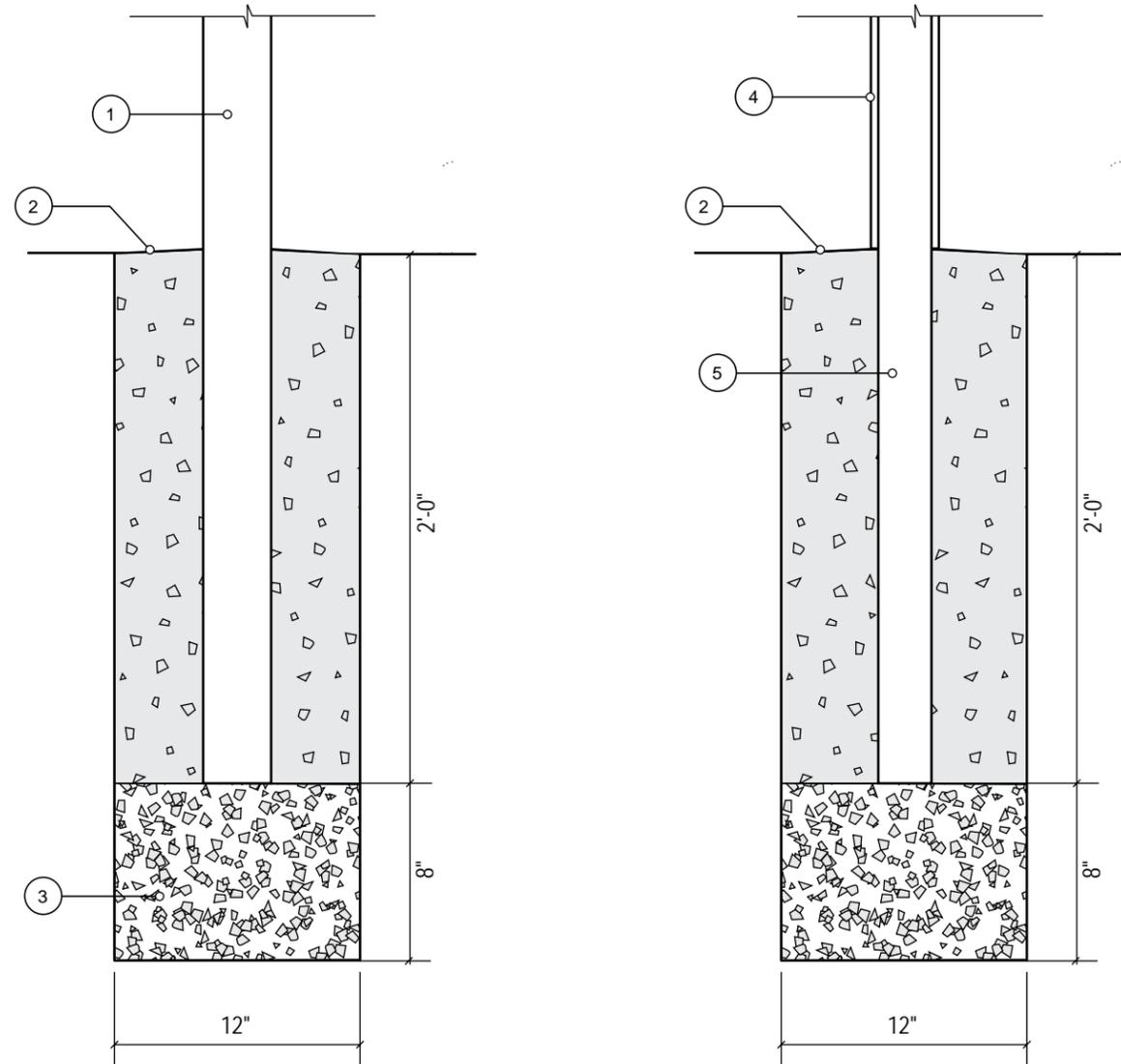


Section View

Front View

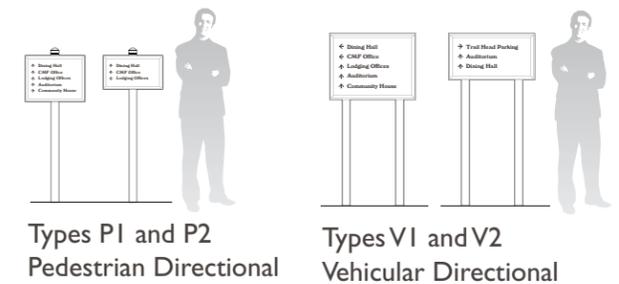
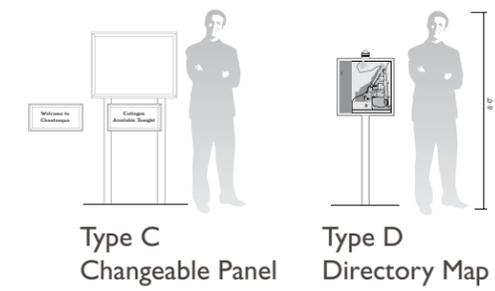
**Interpretive:** Installation

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



Over-sleeve Mounting Option

Locator Maps: Phase I Wayfinding Locations



Locator Maps: Phase I Interpretive Locations



Type E1  
Large Sloper  
Free-standing



Type E5  
Wall Mount  
Vertical

Locator Maps: Phase II Wayfinding Locations



Types P1 and P2  
Pedestrian Directional

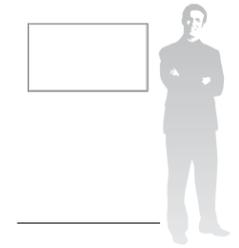


Type D  
Directory Map

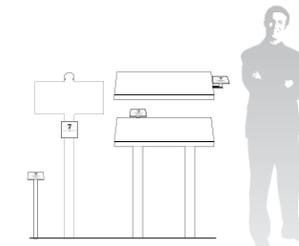
Locator Maps: Phase II Interpretive Locations



Type E1  
Large Sloper  
Free-standing

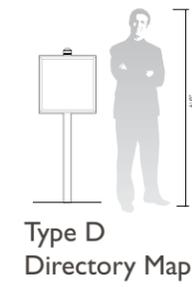


Type E6  
Flush Wall Mount  
Horizontal

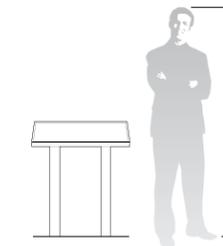


Type E7, E8, E9, E10  
Tour Locator

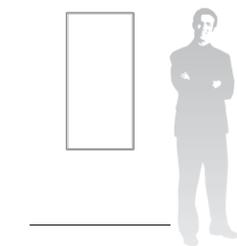
Locator Maps: Future Wayfinding Locations



Locator Maps: Future Interpretive Locations



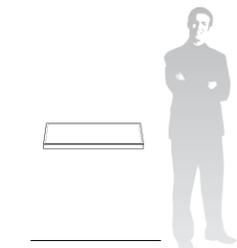
Type E1  
Large Sloper  
Free-standing



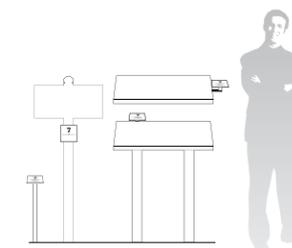
Type E5  
Wall Mount  
Vertical



Type E2  
Small Sloper  
Free-standing



Type E3  
Large Sloper  
Wall Mount



Type E7, E8, E9, E10  
Tour Locator

### **Dairy Center for the Arts**

The Dairy Center for Arts is requesting funding of \$4 million for improving two of the current theaters, including soundproofing, the addition of dressing rooms and the reconfiguration of one theater into a black box theater, as well as expansion and modernization of the building's lobby and façade, including an outdoor deck area as a special events space. The request would also include modernizing a hallway, reconfiguring administrative spaces to provide greater efficiency, and funding for lost operational revenues during the construction period (note: city staff does not recommend including funding for loss of revenue). A detailed plan and budget has been developed in concert with an architect, general contractor and acoustics consultant. With appropriate funding, this project is nearly ready to go.

The building the Dairy Center for the Arts is located in is owned by the City of Boulder. Staff has reviewed the proposed project. Subsequent to the June 17, 2014 Council meeting correspondence was received from the board of the Dairy Center for the Arts stating they were in agreement with removing the dollars for lost operating revenues during construction. The amount was approximately \$150,000.

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### **Museum of Boulder**

The Museum of Boulder has recently acquired the historic Masonic Lodge building at Broadway and Pine with plans to convert the building into an expanded museum that will accommodate larger displays, as well as Smithsonian-class traveling exhibits in a specially designed gallery. The museum's scope would be expanded to allow for science and technology exhibits, as well as enhanced programming and space for children. The Museum has embarked on an ambitious capital campaign to raise the \$8 million dollars needed for the renovation, and is requesting that the city provide \$4 million dollars of that total with the rest to be matched by the community. The museum commissioned an evaluation of the viability of a museum of this size and scope in Boulder, and found that it was likely to draw at least 55,000 visitors per year.

Staff feels the proposed Museum of Boulder will be a notable new addition to downtown Boulder and an exciting new cultural draw. The city and the Museum of Boulder have a broad understanding of the museum's potential financial impacts. Based on early economic impact analyses of expected museum visitors, the city should see some increased revenues but should not expect the museum to generate large new city revenues. Also, as is the case for many non-profit facilities, funding needs for operational expenses may be challenging, especially in early years. The intent of the proposed ballot measure is that city funding would be matched by private fundraising efforts in the spirit of a partnership and that city funding would not be expected to support ongoing operating expenses.

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

Item	Amount	Group Costs
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%**

Item	Amount	Group Costs
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>	24,300,000
Est. Revenue	24,300,000	24,300,000
Over/(Under)	-	-

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**Boulder Creek Pathway Underpass/Crossing west of 13<sup>th</sup> Street:**

Some members of Council asked staff to evaluate a less expensive alternative to mitigate the frequent flooding and subsequent path closures, and to address the safety concerns at the Boulder Creek west of 13th Street location instead of constructing the proposed underpass.

A less costly alternative that could be explored further includes installing a pump system to pump out the creek water from the path area during some low-level flooding events to keep the path open more days of the year (recognizing it would still flood and be closed during some high water events), and shifting the path on the south side of the Arapahoe farther to the south closer to the creek along the creek bank to help with site distance issues as people are entering and exiting the path at this location. During the design evaluation, with more information, other options may come to light that could also help with the flooding and safety issues. A suggested funding level to explore and implement the less costly feasible options is approximately \$500k. This amount would cover design, permitting and construction of a strategic set of improvements realizing that more extensive design and flood modeling will be required to vet potential alternatives.

Any construction alternatives in this area are very complex to design and implement because of the flood and wetland analysis and mitigation, and because of the known existing gravity flowing utilities including a privately owned irrigation ditch and a storm sewer pipe that both cross Arapahoe in this area. Any alternative, including the underpass scenario would require more extensive design work, flood modeling, and wetland analysis to assure that we are not adversely impacting the flood conveyance at this crossing, and that we can mitigate the wetland impacts. The proposed separate underpass for \$2.5 million, although the most expensive to construct, is a little less complicated if it is constructed outside of the existing channel as it would not lessen the current flood carrying capacity and would not impact wetland habitat.

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