

DOWNTOWN IOWA CITY. SCHEMATIC DESIGN . PEDESTRIAN MALL

December 3, 2014



PREPARED FOR CITY OF IOWA CITY

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Friday night concert at Weather Dance Fountain.



Mature canopy trees provide shade along the north section.

PROJECT BACKGROUND

The nationally renowned Pedestrian Mall is a truly unique asset and is the defining element for downtown Iowa City. It has been embraced by residents, students, alumni and visitors alike and has long been celebrated as a public gathering place for all ages from all walks of life. It has a strong foundation in place with successful locally-owned retail and restaurants, new residential uses, charming pedestrian scale buildings, and popular events.

With 40 years since its opening and nearly 25 years since the most recent improvements, the Pedestrian Mall needs a 'freshening up' of components to continue to attract unique businesses and to appeal to a wide variety of user groups.

The schematic design builds upon the Master Plan as adopted in March 2014 and successfully creates a series of unique secondary destinations that will appeal to a new generation of users. The Weather Dance Fountain performance space is strengthened with the addition of a permanent stage canopy and layers of lighting. Black Hawk Mini Park becomes more memorable with a significant public art piece, a play component, and intimate seating areas defined by new trees and expanded planting areas. Across the Pedestrian Mall, new lighting and furnishings, expanded planting areas with colorful, low maintenance ground plane plantings, and selective surfacing repairs will update and reinvigorate the Pedestrian Mall.

DESIGN PROCESS

The Pedestrian Mall Schematic Design Plan was prepared by a design team led by Genus Landscape Architects under contract with the City of Iowa City. The design team included ArtHouse Design (wayfinding and identity), Neumann Monson (permanent stage canopy), Schuler Shook (lighting design), Gary Johnson (certified arborist from University of Minnesota Department of Forest Resources), and MMS Consultants (survey and civil engineering). The work was overseen by a Client Committee comprised of members from the City of Iowa City, Summer of the Arts (SOTA), and the Iowa City Downtown District (ICDD). The project benefited from public input and review in late October. The project began in May 2014 and is expected to be completed in November.

CLIENT COMMITTEE

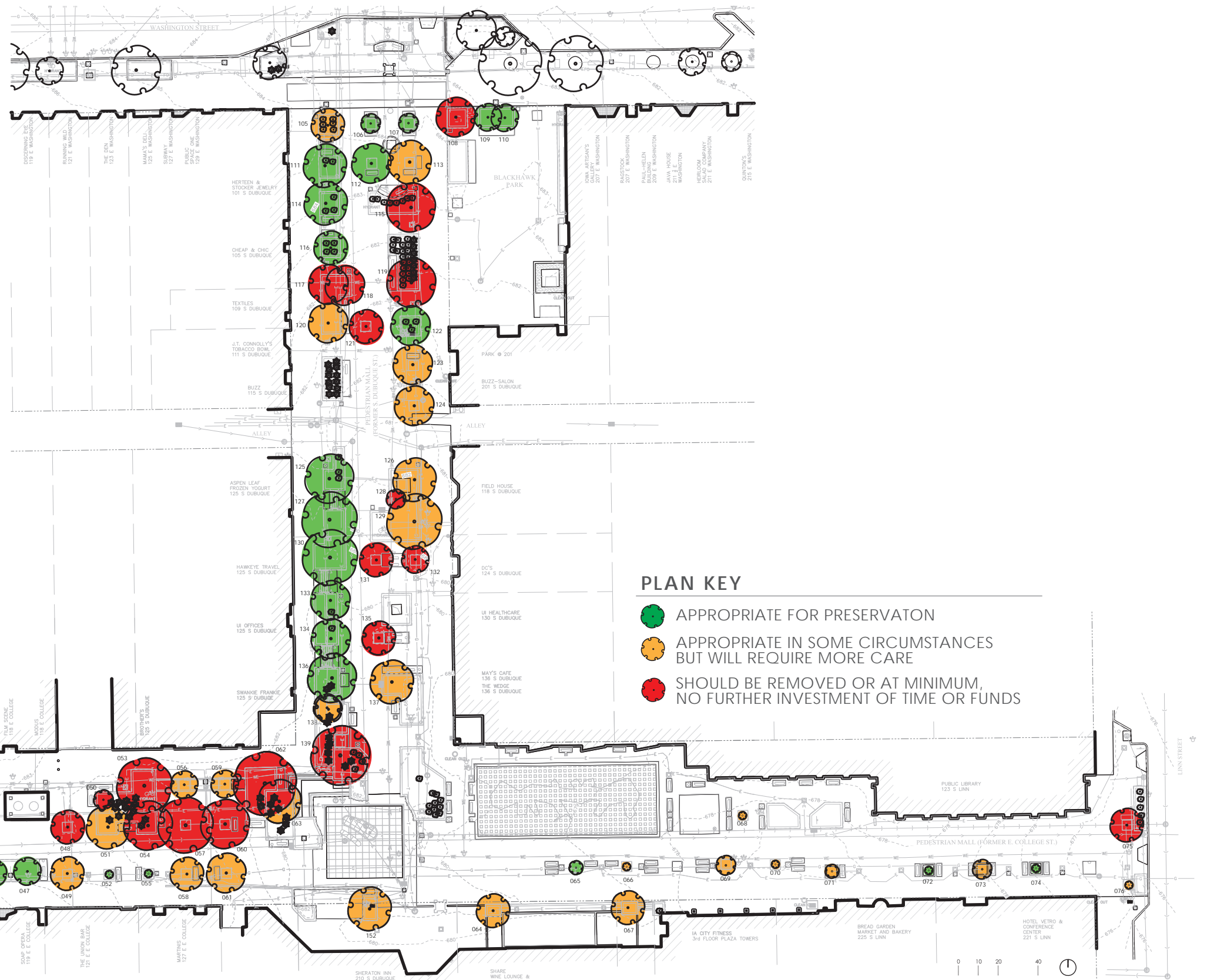
Geoff Fruin
Rick Fosse
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Mike Moran
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John Yapp
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Assistant City Manager
Director of Public Works
City Engineer, Public Works
Civil Engineer, Public Works
Supt. of Streets, Traffic Eng., Solid Waste
Director of Parks and Recreation
Superintendent of Parks and Forestry
Director of Transportation Services
Assistant Transportation Planner
Associate Director of Transportation Services
Transportation Planner
Executive Director, ICDD
Senior Maintenance Worker
Economic Development Administrator
Assoc. Executive Director, Summer of the Arts

EXISTING CONDITIONS AND SITE ANALYSIS

The site analysis phase built upon the information gathered during the master planning phase with special attention given to the existing trees, vaults, lighting, paving, and furnishings.

- Existing trees were evaluated by a certified arborist and rated according to their health and chances of surviving future construction. Of the existing eighty-seven trees, nineteen have been coded red.
- There are five existing vaults across the Pedestrian Mall. The vaults are currently in use and business owners would like them to remain.
- The existing globe lights are inefficient per today's lighting standards and are reaching the end of their serviceable life.
- The existing kiosks are showing signs of deterioration and are oversized for the context.
- The condition of the existing brick surfacing varies across the Pedestrian Mall. Some sections have been constructed with a 6" PCC sub-base and other sections are on 4" compacted aggregate base. Many sections are heaving and uneven and in need of repair or replacement.
- The majority of the limestone planter walls are leaning or separating.



PEDESTRIAN MALL SCHEMATIC DESIGN

- PLAN KEY
- 1

SALVAGED BRICK PAVERS [TYP.]

2

SEATING NODE WITH CONCRETE PAVING [TYP.]

3

RECYCLED GLASS PAVERS

4

PERMEABLE PAVERS

5

RESILIENT RUBBER SURFACING [PATTERN, AS SHOWN]

6

PRECAST PAVERS

7

CLAY BRICK PAVER BANDS [TYP.]

8

EXPANDED OR NEW TREE PLANTING AREA [4" LIMESTONE CURB, 15" LIMESTONE SEAT WALL, TYP.]

9

BICYCLE RACK [TYP.]

10

BENCH, PLAINWELL W/ CENTER ARM [TYP.]

11

INDIVIDUAL SEATS, PLAINWELL [TYP.]

12

BENCHMARK BENCH, 16 TOTAL [TYP.]

13

CUSTOM SOUND BENCH EQUIPPED WITH SPEAKERS

14

TRASH RECEPTACLE, SCARBOROUGH [TYP.]

15

MOVEABLE TABLES AND CHAIRS

16

'TICKLE MY KEYS' PIANO

17

EXISTING OUTDOOR CAFE

18

WAYFINDING KIOSK

19

NEW FEATURE PUBLIC ART LOCATION [TBD]

20

RELOCATED ART

21

GFCI RECEPTACE PEDESTAL [TYP.]

22

PEDESTRIAN LIGHT [TYP.]

23

OVERHEAD GATEWAY FEATURE W/ CATENARY LIGHTING

24

ACCENT TREE LIGHTING

25

OVERHEAD STRUCTURE AND OUTDOOR CAFE [WHITE SCREEN CAPABILITY, HARVEST TABLE, STAND-UP TABLES]

26

VENDOR CART [POTENTIAL LOCATION, TYP.]

27

STORY WALL WITH ACCENT LIGHTING [HEIGHT VARIES, 4.5'-6']

28

THRESHOLD WALL [3' HEIGHT]

29

WEATHERDANCE FOUNTAIN

30

EXISTING PLAYGROUND

31

RECYCLING STATION

32

WATER PLAY AREA AT ECOLAB

33

OUTDOOR CLASSROOM AT ECOLAB

34

VEGETABLE GARDENS

35

WOODEN BENCH, TRAPEZIO, +/-18' [TYP.]

36

WOOD TOTEM POLE PLAY ELEMENT [TYP.]



SCHEMATIC DESIGN GOALS

Three overarching goals informed the schematic design process.

1. Create a series of secondary destinations to further enrich the experience of the Pedestrian Mall.

- Entries become more welcoming with accent lighting, wayfinding kiosks, and new seating.
- Black Hawk Mini Park is reimagined with a feature public art piece and a series of diverse experiences that will appeal to multiple user groups.
- The Weather Dance Fountain and performance space is strengthened with a permanent stage canopy, unique lighting, and reconfigured seating.
- Enhanced opportunities for families and children are introduced at the Iowa City Public Library and at Black Hawk Mini Park.

2. Introduce a flexible, multi-layered lighting framework.

- New pedestrian pole lighting is introduced across the Pedestrian Mall and provides the functional and safety lighting.
- The accent lighting layer, or the 'decorative' layer includes illumination of select trees, artwork, Weather Dance fountain, and the 'story walls'.
- New structures are illuminated including the gateways at Linn and Clinton Street, the permanent stage canopy, and the wayfinding kiosks.

3. 'Freshen Up' and Reinvigorate the Pedestrian Mall.

- Updated wayfinding elements provide user orientation and celebrate Iowa City's unique literary history.
- New furnishings include varied seating types, trash receptacles and recycling stations.
- Surface repair as necessary to establish an even, and safe walking surface.
- Repair limestone planter walls.
- Enhance the tree planting program with new trees along the east section. Expanded planting areas across the Pedestrian Mall improve the long-term health of the tree and are planted with colorful, low maintenance ground plane plantings.
- Utility upgrades and drainage improvements at the east section. Enhanced electrical capacity supports vendors and events.

SUMMARY WEST			
EXISTING		PROPOSED	
BIKE CAPACITY	4 BIKE RACKS, 20-24 BIKES	BIKE CAPACITY	12 BIKE RACKS, 28-32 BIKES
BENCHES	20	BENCHES	13
TRASH RECEPTACLES	16	TRASH RECEPTACLES	13
TREES	34, REMOVE 7	TREES	34, W/ 29 OF 34 EXISTING
SUMMARY WEATHERDANCE FOUNTAIN			
EXISTING		PROPOSED	
BENCHES	9	BENCHES	NO STANDARD BENCHES
TRASH RECEPTACLES	7	TRASH RECEPTACLE	4
TREES	4, REMOVE 2	TREES	5, W/ 2 OF 5 EXISTING
SUMMARY EAST			
EXISTING		PROPOSED	
BENCHES	29	BENCHES	22 AND 12 INDIVIDUAL SEATS
TRASH RECEPTACLES	13	TRASH RECEPTACLES	9
TREES	13, REMOVE 9	TREES	15, W/ 4 OF 15 EXISTING
SUMMARY NORTH			
EXISTING		PROPOSED	
BENCHES	9	BENCHES	4 AND 3 SOUND BENCHES
TRASH RECEPTACLES	10	TRASH RECEPTACLES	9
TREES	14, REMOVE 3	TREES	15, W/ 11 OF 15 EXISTING
SUMMARY BLACK HAWK MINI PARK			
EXISTING		PROPOSED	
BENCHES	18	BENCHES	11, (2) 18' LONG, 32 MOVABLE
TRASH RECEPTACLES	8	TRASH RECEPTACLES	8
TREES	20, REMOVE 8	TREES	20, W/ 11 OF 20 EXISTING



The proposed gateway feature with catenary lighting creates a welcoming entry. The entry room is focused on a new, updated wayfinding kiosk and provides user orientation.

CLINTON STREET ENTRY AND WEST SECTION

The Clinton Street entry becomes more welcoming with a unique gateway feature with catenary lighting. New furnishings are reconfigured to create an entry room focused on one of four new wayfinding kiosks proposed across the Pedestrian Mall. The kiosk is internally illuminated effectively adding another layer of lighting at the entry. A 'story wall' tells the story of the people and events that have shaped Iowa City and defines the easterly edge of the entry room.

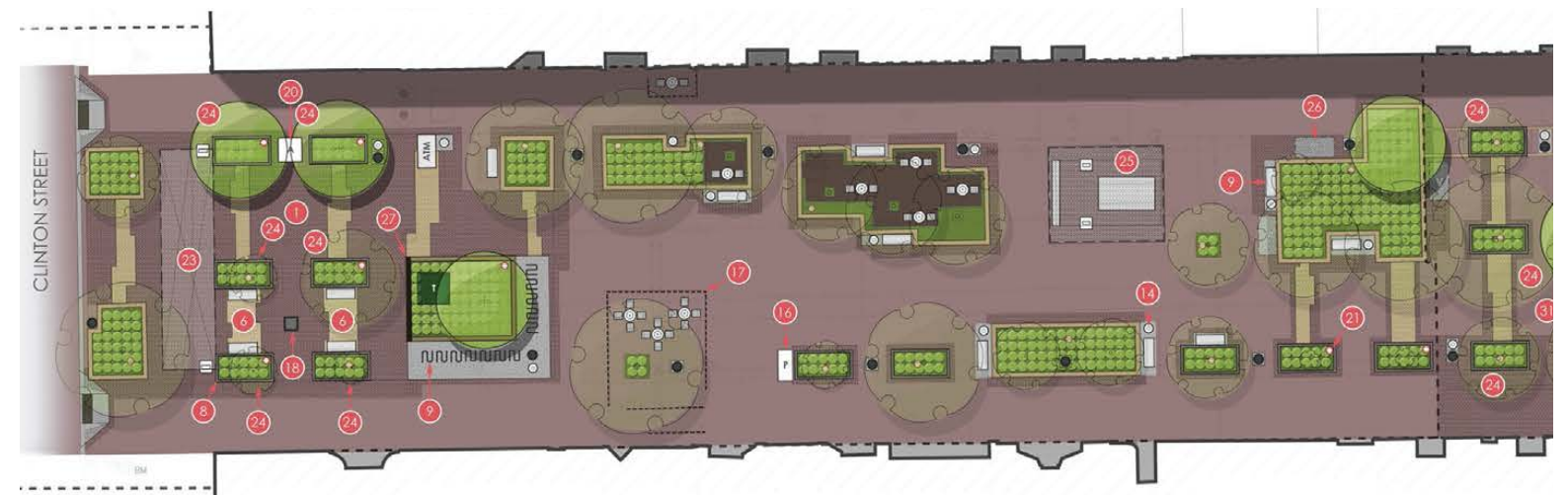
Continuing to the east, a new shade structure is proposed with detailing inspired by the permanent stage canopy at Weather Dance Fountain. The structure adds definition and shade to the community dining table which serves patrons of limited-service restaurants.

The majority of the existing trees are protected in place. Their long-term health is improved with enlarged planting areas. To complement the existing hardscape palette, limestone seat walls and limestone planter curbs define the enlarged planting pits. Colorful, low maintenance shrub and groundcover plantings add interest and seasonal color.

Surfacing improvements include the introduction of limestone-colored brick banding to effectively break up the existing fields of brick paving and to add a pedestrian scale. Within the larger fields of brick paving, repairs are made as necessary to establish an even, and safe walking surface. New sections of colored concrete are proposed at gathering nodes and beneath the benches, artwork, trash receptacles, and recycling stations.

PLAN KEY

- | | |
|--|---|
| 1 SALVAGED BRICK PAVERS [TYP.] | 21 GFCI RECEPTACE PEDESTAL [TYP.] |
| 6 PRECAST PAVERS | 23 OVERHEAD GATEWAY FEATURE W/ CATENARY LIGHTING |
| 8 EXPANDED OR NEW TREE PLANTING AREA
[4" LIMESTONE CURB, 15" LIMESTONE SEAT WALL, TYP.] | 24 ACCENT TREE LIGHTING |
| 9 BICYCLE RACK [TYP.] | 25 OVERHEAD STRUCTURE AND OUTDOOR CAFE
[WHITE SCREEN CAPABILITY, HARVEST TABLE, STAND-UP TABLES] |
| 14 TRASH RECEPTACLE, SCARBOROUGH [TYP.] | 26 VENDOR CART [POTENTIAL LOCATION, TYP.] |
| 16 'TICKLE MY KEYS' PIANO | 27 STORY WALL WITH ACCENT LIGHTING [HEIGHT VARIES, 4.5'-6'] |
| 17 EXISTING OUTDOOR CAFE | 31 RECYCLING STATION |





A new contemporary structure shades and defines a communal dining table.



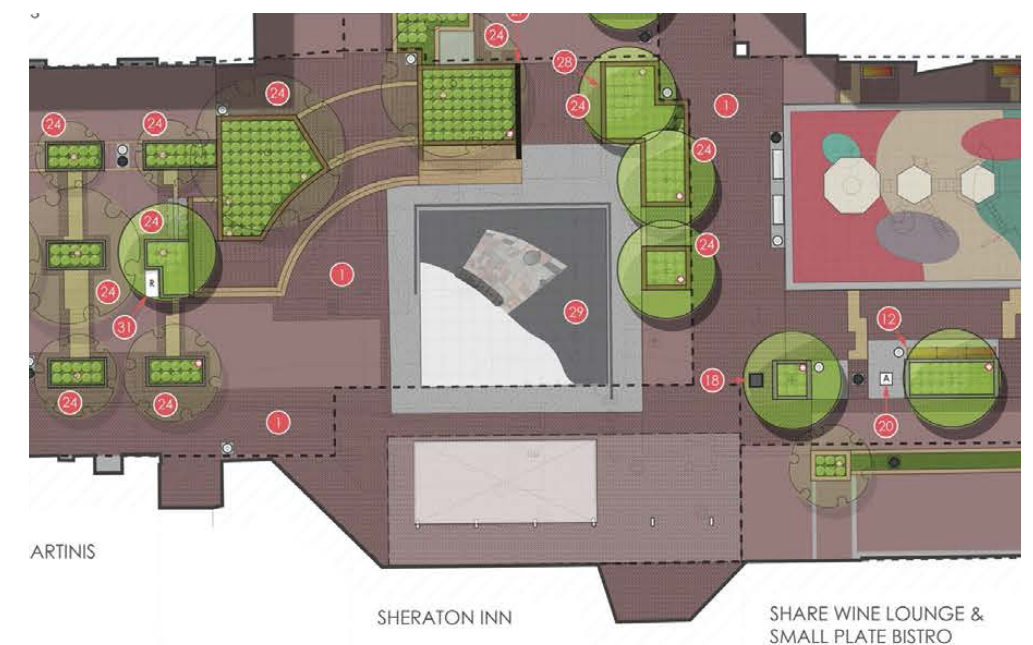
Reconfigured stepped seating improves views during performances.

WEATHER DANCE FOUNTAIN AND PERFORMANCE SPACE

At the heart of the Pedestrian Mall, the place-making qualities are strengthened through a number of design gestures. Existing stepped seating is reconfigured into a more traditional amphitheater layout. Gentle arcs embrace the stage and fountain and afford better views during performances. ADA-access is provided with a gently sloping walkway from the northwest corner of the amphitheater. The existing trees are protected in place and enhanced with up-lighting. Expanded planting areas afford ample room for colorful yet low maintenance shrub and groundcover planting areas.

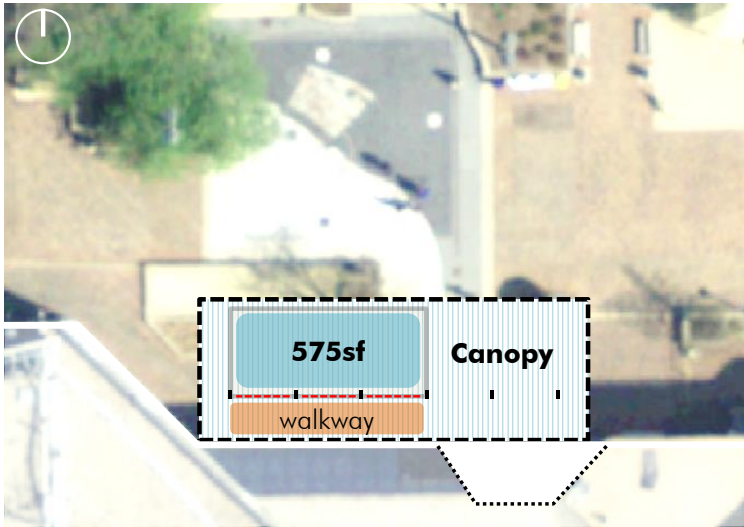
PLAN KEY

- 1 SALVAGED BRICK PAVERS [TYP.]
- 12 BENCHMARK BENCH, 16 TOTAL [TYP.]
- 18 WAYFINDING KIOSK
- 20 RELOCATED ART
- 24 ACCENT TREE LIGHTING
- 28 THRESHOLD WALL [3' HEIGHT]
- 29 WEATHERDANCE FOUNTAIN
- 31 RECYCLING STATION



PERMANENT STAGE + CANOPY

The permanent stage canopy has been designed to become a focal point of the Dubuque Street corridor and provides a primary destination for performance and activity within the Pedestrian Mall. The metal and glass canopy provides shelter and shading for an expanded, multipurpose stage below. The canopy offers integrated, adjustable lighting options for various uses, and can accommodate a range of outdoor performances and events.





LED architectural lights illuminate the canopy and will include the option of subtle color change to create a dynamic lighting environment.



Tree Uplighting Precedent



Fountain Lighting Precedent

LAYERS OF LIGHTING

The proposed layers of light will further enhance the memorable qualities of the space and will create a unique night-time environment in the heart of the Pedestrian Mall. The layers of light include functional lighting, accent lighting, and stage lighting. New pedestrian pole lights provide functional, safety lighting and provide overall illumination of the space. At the canopy, LED architectural lights and pedestrian down lights provide basic lighting. The second layer of light is the accent lighting layer, or the 'decorative' layer and highlights trees, 'story walls', and the fountain. Additionally, the LED architectural lights at the canopy include a subtle color change option to enhance special events. The stage canopy will also include a basic stage lighting component to enhance events such as Celebrate the Seasons, Music IC, and City of Literature performances.

CHILDREN’S PLAY ZONE AND LINN STREET ENTRY

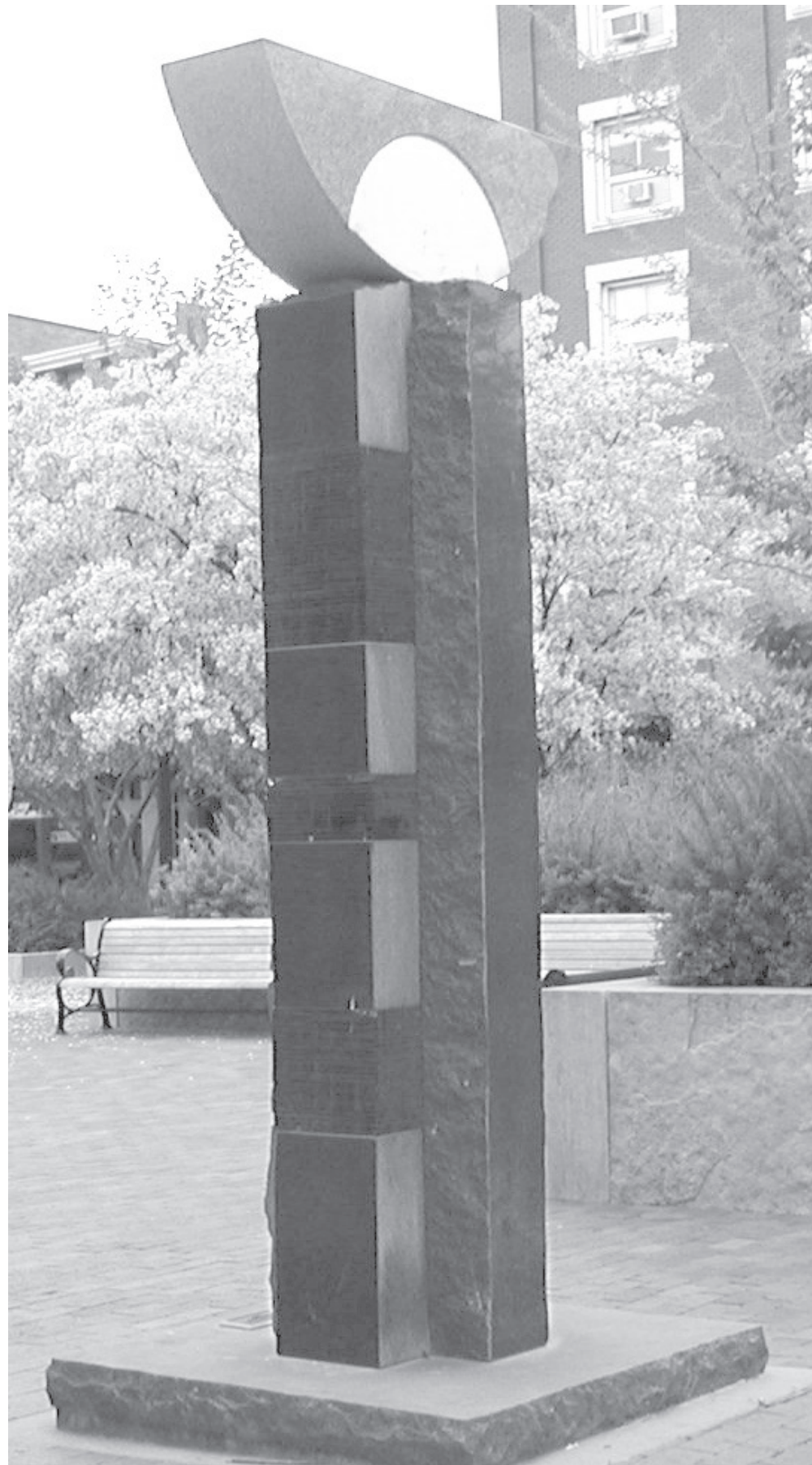
At the Linn Street entry to the Pedestrian Mall, a welcoming gateway feature with catenary lighting establishes a sense of arrival. To unify the proposed structures across the Pedestrian Mall, the gateway detailing is inspired by the permanent stage canopy. A new wayfinding kiosk at the entry will help users navigate to the various destinations across the Pedestrian Mall and downtown. Illuminated from within, the wayfinding kiosks will greatly enhance the experience of visiting downtown Iowa City.

As visitors continue into the Pedestrian Mall, public artwork and seating clusters are strategically placed between new shade trees. The 'ribbon of improvements' also introduces new, regularly spaced pedestrian lights. The children's play zone is expanded to the east with reconfigured urban garden plots sited to create a buffer between the play zone and the primary walkway. Three themed 'rooms' create opportunities for an outdoor classroom, interactive water play, and recycling exhibits. Approximately fifteen BenchMARK benches are re-located at the perimeter of the play zone.



At Linn Street, a gateway feature with catenary lighting creates a welcoming entry and establishes a sense of arrival.





Solar Marker



Balance in Place

NORTH SECTION

A new flexible program space, a 'Sound Garden,' is proposed along the north section of the Pedestrian Mall where a new type of public artwork is introduced: benches equipped with speakers share spoken work, sound art, or readings by local authors. The Sound Garden also celebrates existing artwork. 'Solar Marker' and 'Balance in Place' are relocated to the Sound Garden. Two of the existing *Acer saccharum* trees, both coded red by the certified arborist, are recommended for removal. Replacement trees are proposed but planted along the easterly edge of the Sound Garden to effectively open up the Dubuque Street view corridor. The space is further defined with accent tree lighting, a 'threshold wall', and new surfacing.



Fixed benches with speakers.

- PLAN KEY**
- 1 SALVAGED BRICK PAVERS [TYP.]
 - 13 CUSTOM SOUND BENCH EQUIPPED WITH SPEAKERS
 - 17 EXISTING OUTDOOR CAFE
 - 20 RELOCATED ART
 - 22 PEDESTRIAN LIGHT [TYP.]
 - 24 ACCENT TREE LIGHTING
 - 27 STORY WALL WITH ACCENT LIGHTING [HEIGHT VARIES, 4.5'-6']
 - 28 THRESHOLD WALL [3' HEIGHT]



BLACK HAWK MINI PARK

The Master Plan proposed a significant public art piece to anchor Black Hawk Mini Park and the north entry to the Pedestrian Mall. The public artist selection process is currently underway and it is hoped final selection can be made in early 2015. The signature art piece will greatly influence the overall design of Black Hawk Mini Park.

General strategies for the design of Black Hawk Mini Park follow.

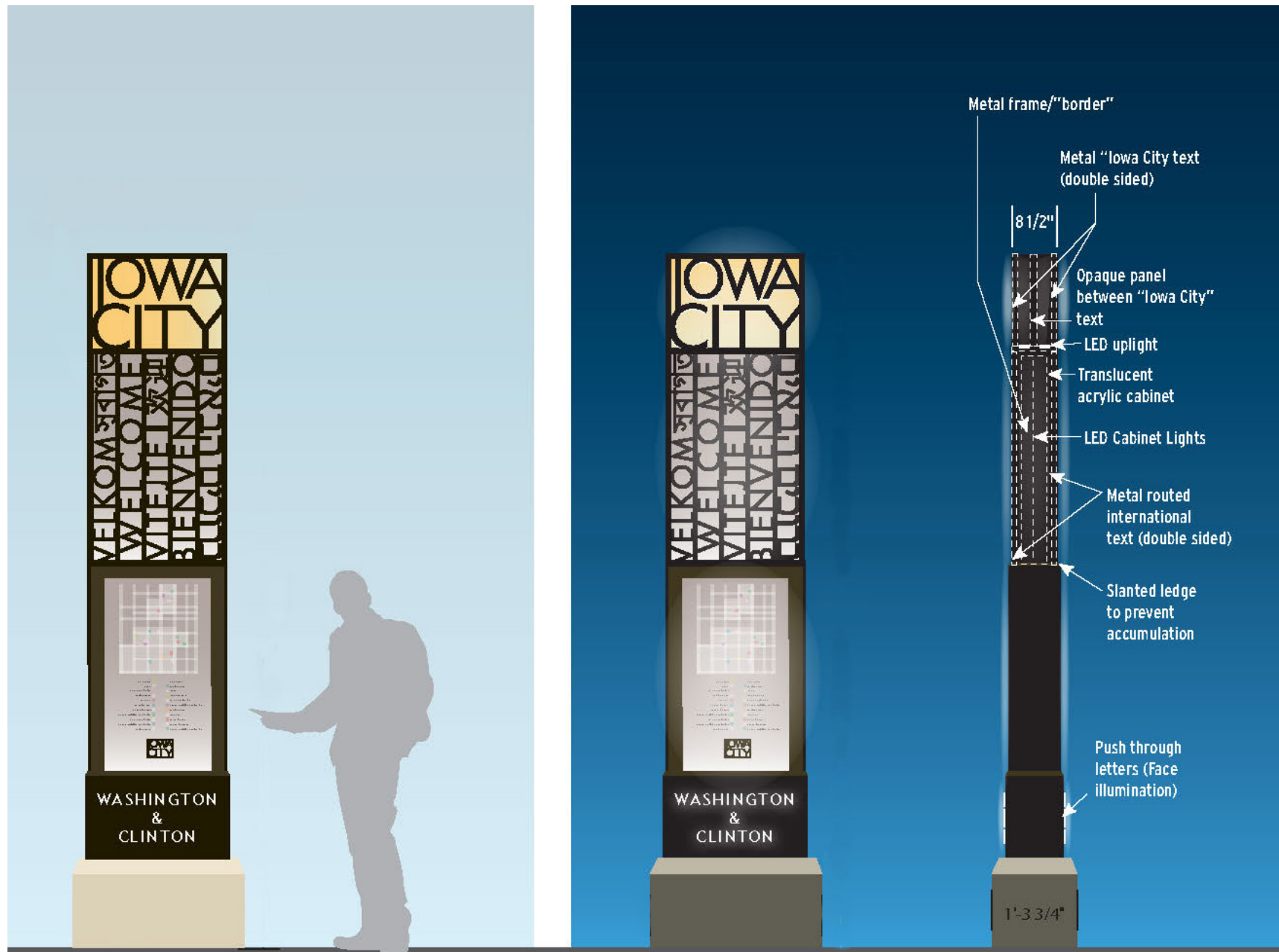
- Create a variety of experiences that will appeal to multiple user groups.
- Design interventions should celebrate the unique history of the Black Hawk Mini Park.
- Attract families to Black Hawk Mini Park with a play component.
- Introduce new canopy trees to define and shade seating areas.
- Offer a range of seating types including movable tables and chairs, limestone seat walls, and varied benches.



Colorful shrub and groundcover plantings define seating areas.



PLAN KEY	
1	SALVAGED BRICK PAVERS [TYP.]
2	SEATING NODE WITH CONCRETE PAVING [TYP.]
5	RESILIENT RUBBER SURFACING [PATTERN, AS SHOWN]
6	PRECAST PAVERS
7	CLAY BRICK PAVER BANDS [TYP.]
15	MOVEABLE TABLES AND CHAIRS
16	'TICKLE MY KEYS' PIANO
19	NEW FEATURE PUBLIC ART LOCATION [TBD]
24	ACCENT TREE LIGHTING
27	STORY WALL WITH ACCENT LIGHTING [HEIGHT VARIES, 4.5'-6']
35	WOODEN BENCH, TRAPEZIO, +/-18' [TYP.]
36	WOOD TOTEM POLE PLAY ELEMENT [TYP.]



WAYFINDING KIOSKS

The centerpiece of the wayfinding kiosk is the recurring “screen” of metal text. These language compositions are fresh and contemporary while bringing additional levels of meaning and communication to the signage elements. Being composed of alphabetical forms, they reinforce the “City of Literature” distinction while allowing for a welcoming and inclusive array of languages and messaging.

“Welcome” is woven into the screens in a broad spectrum of languages. English, Russian and Chinese represent the primary demographics. French, being the official language of the UN, was incorporated for its symbolic ties to the City of Literature designation. The remaining languages were chosen for their aesthetic richness and variety.

From a construction standpoint, the signage elements feature metal structures atop a precast base. The text screen is comprised of a single sheet of metal while internal LED illumination provides drama within the kiosk signs. Within these signs, a lighting hierarchy has been developed wherein the Iowa City text treatment receive primary billing via a dramatic uplight. The map components are illuminated from within the cabinet to provide an even glow, and the text screens receive subtle internal illumination for a third level of visual texture.

The kiosks are scaled for pedestrian use and are located at primary intersections and decision points.

INTERNATIONAL VERBIAGE - WELCOME

VELKOM
 স্বাগত
 WELCOME
 VÍTEJTE
 欢迎
 BIENVENIDO
 ברוכים הבאים

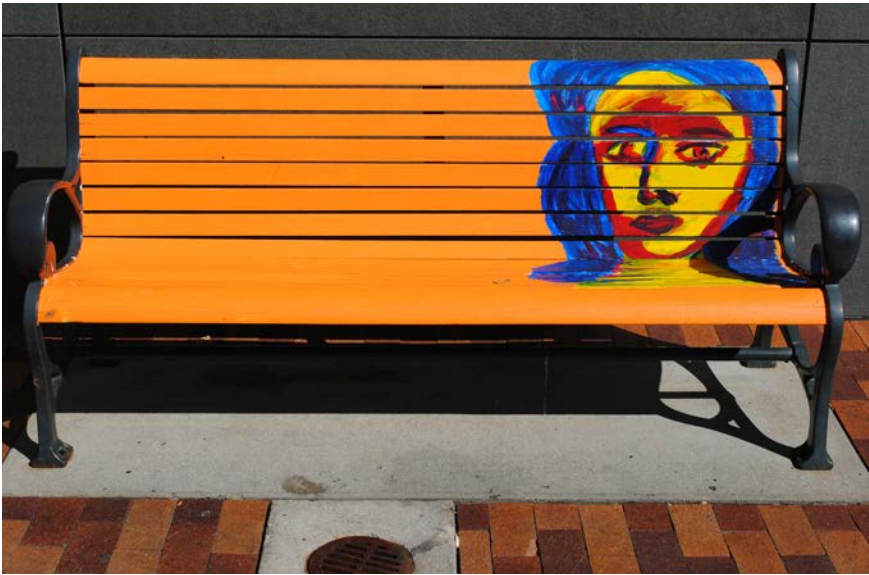
Slovak
 Bengali*
 English
 Czech
 Chinese
 Spanish
 Hebrew



TRASH RECEPTACLE
SCARBOROUGH, LANDSCAPE FORMS



RECYCLING SYSTEM
BIG BELLY RECYCLING SYSTEMS



BENCHMARK BENCHES
EXISTING BENCHES TO REMAIN IN SELECT LOCATIONS



BIKE RACKS
FLO, LANDSCAPE FORMS



UPDATED BENCHES
PLAINWELL, LANDSCAPE FORMS



LOG BENCHES
SEATING AND PLAY ELEMENT AT ECOLAB



WOOD BENCHES, +/- 18'
TRAPECIO, LANDSCAPE FORMS



MOVEABLE TABLES + CHAIRS
BISTRO COLLECTION, FERMOB



POLE OPTION 1 - CITY STANDARD
POLE OPTION 2 - ARCHITECTURAL AREA LIGHTING
LOUIS POULSEN LIGHTING

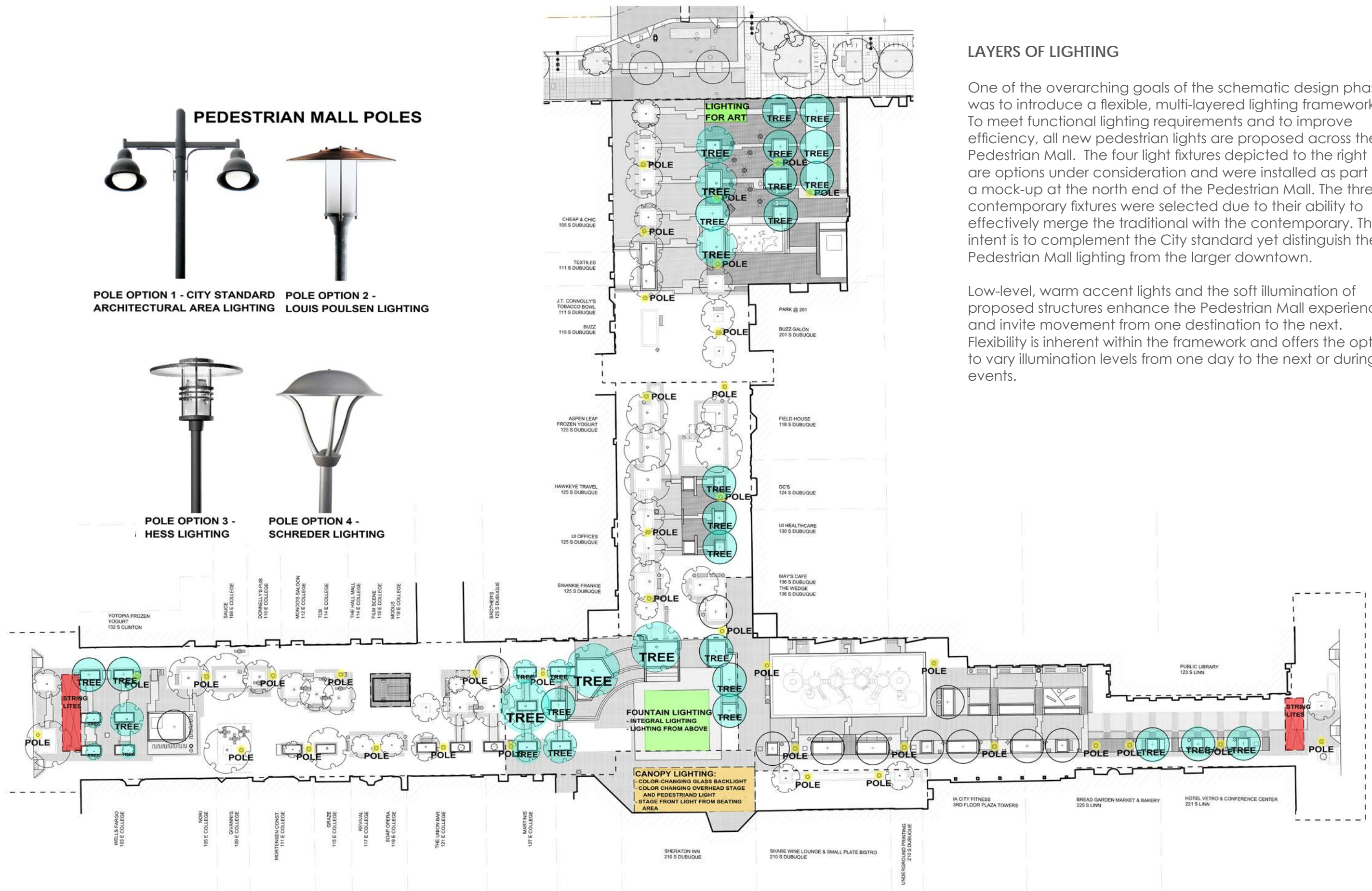


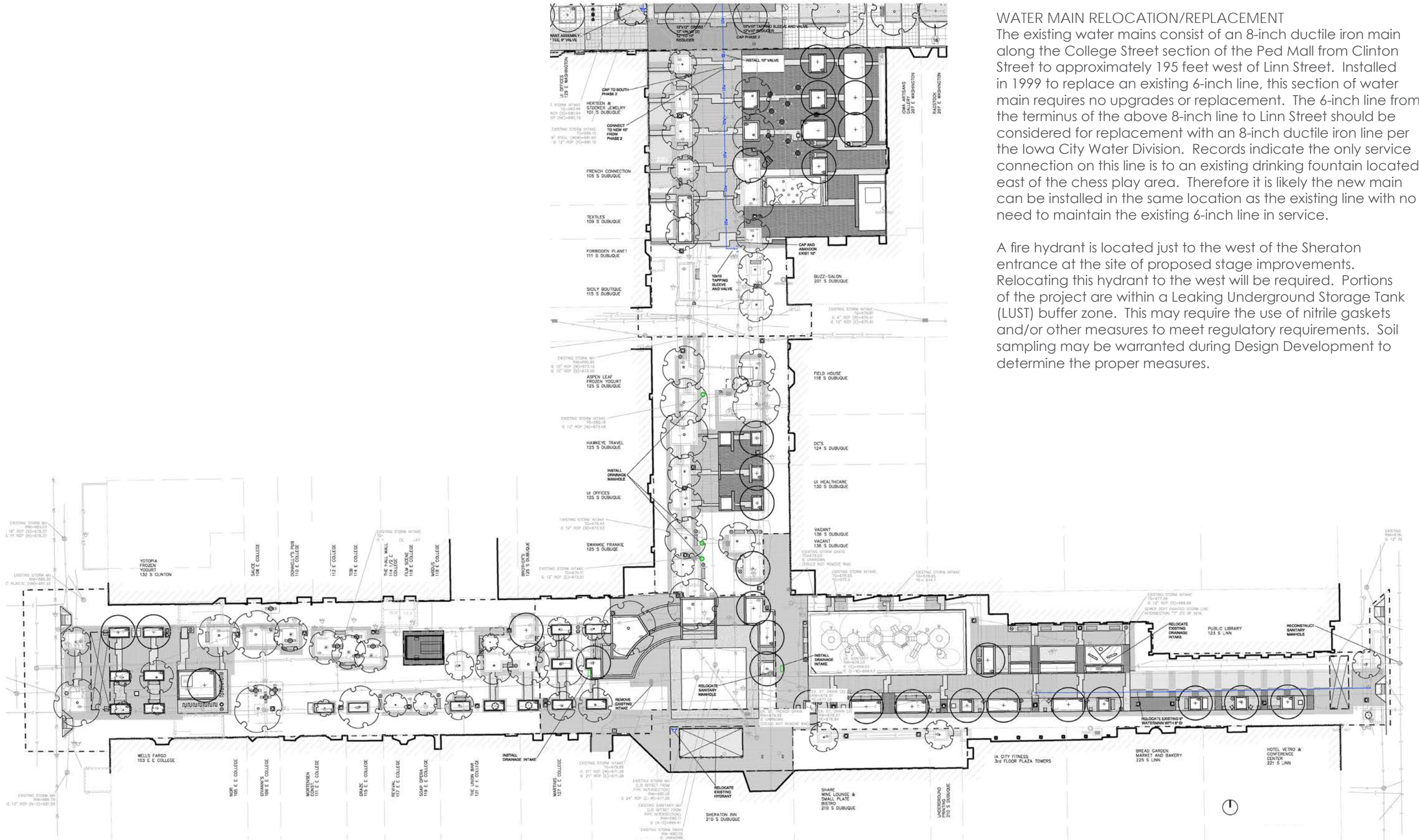
POLE OPTION 3 - HESS LIGHTING
POLE OPTION 4 - SCHREDER LIGHTING

LAYERS OF LIGHTING

One of the overarching goals of the schematic design phase was to introduce a flexible, multi-layered lighting framework. To meet functional lighting requirements and to improve efficiency, all new pedestrian lights are proposed across the Pedestrian Mall. The four light fixtures depicted to the right are options under consideration and were installed as part of a mock-up at the north end of the Pedestrian Mall. The three contemporary fixtures were selected due to their ability to effectively merge the traditional with the contemporary. The intent is to complement the City standard yet distinguish the Pedestrian Mall lighting from the larger downtown.

Low-level, warm accent lights and the soft illumination of proposed structures enhance the Pedestrian Mall experience and invite movement from one destination to the next. Flexibility is inherent within the framework and offers the option to vary illumination levels from one day to the next or during events.





UTILITY ANALYSIS

WATER MAIN RELOCATION/REPLACEMENT

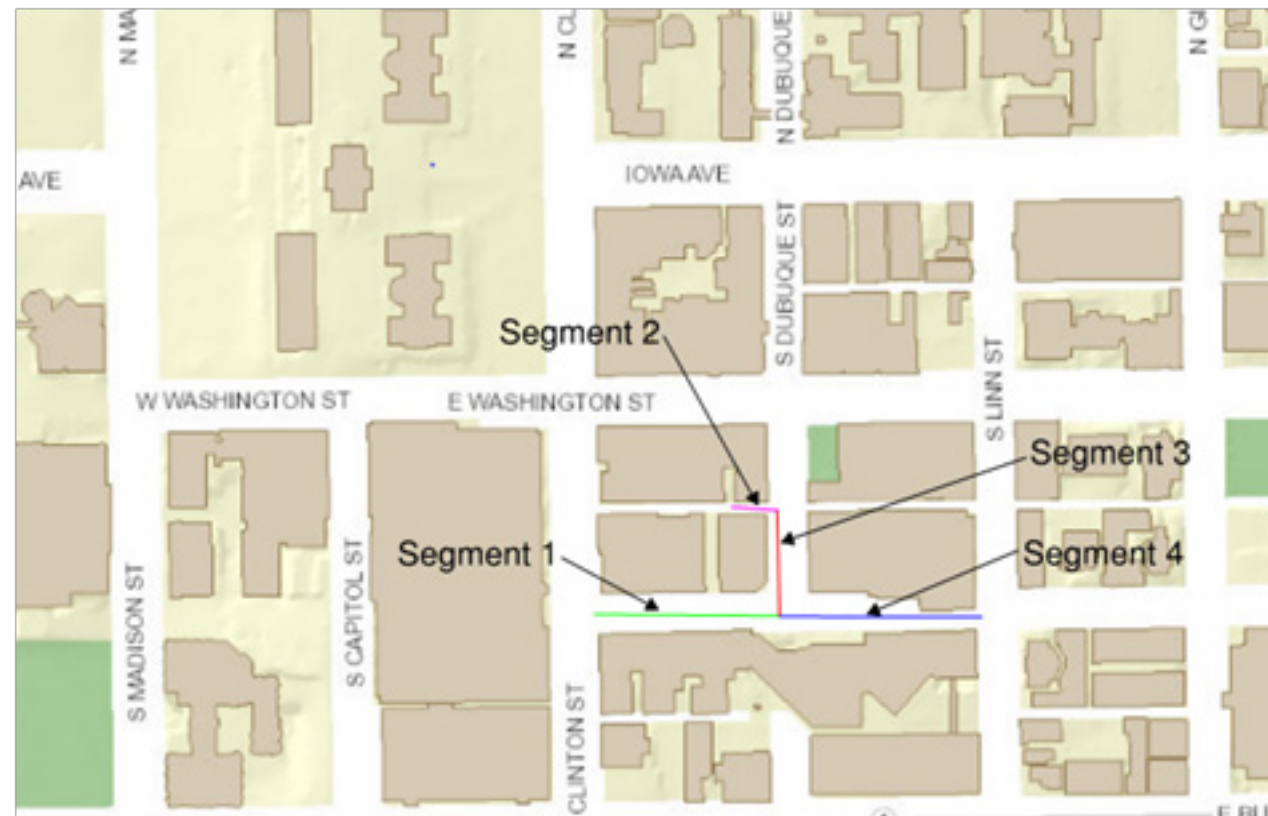
The existing water mains consist of an 8-inch ductile iron main along the College Street section of the Ped Mall from Clinton Street to approximately 195 feet west of Linn Street. Installed in 1999 to replace an existing 6-inch line, this section of water main requires no upgrades or replacement. The 6-inch line from the terminus of the above 8-inch line to Linn Street should be considered for replacement with an 8-inch ductile iron line per the Iowa City Water Division. Records indicate the only service connection on this line is to an existing drinking fountain located east of the chess play area. Therefore it is likely the new main can be installed in the same location as the existing line with no need to maintain the existing 6-inch line in service.

A fire hydrant is located just to the west of the Sheraton entrance at the site of proposed stage improvements. Relocating this hydrant to the west will be required. Portions of the project are within a Leaking Underground Storage Tank (LUST) buffer zone. This may require the use of nitrile gaskets and/or other measures to meet regulatory requirements. Soil sampling may be warranted during Design Development to determine the proper measures.

UTILITY ANALYSIS CONTINUED

STORM SEWER CAPACITY ANALYSIS

Each sewer reach was analyzed for the five-year recurrence. Video of the sewers was reviewed to identify the many roof drain connections in order to establish the contributing drainage areas. The storm sewer servicing the Ped Mall was divided up into four sections in order to analyze the capacity of the system for a five-year rainfall event. Using topographic data, site visits, and historical data, drainage areas were determined for each segment of the system.



Segment 1 – 18-inch RCP
The total flow to segment 1 is 8.40 cfs. Actual capacity of the segment could not be calculated since the upper end invert elevation was not measured because the manhole is buried in a planter. Capacity of the pipe will be greater than the runoff of 8.40 cfs at slopes greater than 0.60%. It is likely that this slope is present given that the surface elevation between the two manholes exceeds 1.6%.

Segment 2 – 12-inch RCP
The total flow to segment 2 is 7.92 cfs. Capacity of the segment could not be determined due to the upper end invert elevation being lower than the lower end invert elevation, resulting in negative slope.

Segment 3 – 15-inch RCP
The total flow to segment 3 is 10.53 cfs. The capacity of segment 3 is 6.55 cfs. An 18-inch pipe would have a capacity of 10.64 cfs.

Segment 4 – 24-inch RCP
The total flow to segment 4 is 24.69 cfs. The capacity of segment 4 is 33.33 cfs.

The section of 15-inch Segment 3 that is under capacity is located below the fountain structure making construction of a replacement line challenging. Consideration should be given during Design Development whether there is a worthwhile benefit to upgrading this section at significant cost, or accepting an increased occurrence of overland flow to downstream intakes.

The section of 15-inch Segment 3 that is under capacity is located below the fountain structure making construction of a replacement line challenging. Consideration should be given during Design Development whether there is a worthwhile benefit to upgrading this section at significant cost, or accepting an increased occurrence of overland flow to downstream intakes.

On Segment 3 there are three intakes that “tee” into the main storm sewer. No drainage manholes are located at these connections and video shows that the 12-inch intake leads protrude significantly into the 15-inch sewer. Debris, consisting in one case of a 2x4 wedged in the sewer, were noted. It is recommended that drainage manholes be installed at the three locations to improve hydraulics and provide maintenance access.

The existing intake to the west of the fountain will be located in the main open area in front of the proposed stage. It is recommended that this intake be relocated out of a high traffic area, likely to the north and west, and the proposed surface be suitably graded to provide positive drainage.

The entrance to the commercial space at the northeast corner of College and Dubuque is low and poses an ongoing drainage issue. With the proposed reconstruction of the planters west of the playground, an intake is recommended in this area. The intake would connect to the existing 24-inch Segment 4. The area should be re-graded to provide positive drainage to the proposed intake. The existing trench drains near the building entrance could be removed, eliminating a maintenance issue with leaves and debris plugging the trench drains.

The existing intake approximately 40 feet north of the entrance to the Bread Garden will need to be relocated to accommodate proposed improvements. The existing surface elevations on the Ped Mall east of the intake are above the entrance elevation of adjacent buildings. If a significant rainfall or plugging of the sewer were to occur, there is no overland flow route and the water could pond and reach the elevation of the building threshold before it would overflow to Linn Street. In order to convey the water overland through the Ped Mall without allowing water to enter any buildings (specifically the Bread Garden), it is recommended that during design of the surface improvements a minimum 1.10 foot x15 foot overland flow channel (measured from the lowest building entrance elevation) be incorporated into the improvements east of the intake draining to Linn Street.

As identified in the initial study, all lids and castings will be supplied/replaced with the standard City of Iowa City logo.

CITY OWNED FIBER, TRAFFIC CONTROL, AND ELECTRICAL
The City wishes to include conduit during construction to provide for fiber optic and traffic control installation. The proposed conduit runs are (3) 2-inch SDR 11 HDPE. Because of the multiple phasing for the Ped Mall improvements, and the preservation of significant amounts of existing surface, trenchless installation should be considered. The flexibility in locating conduit allows for adjustments to be made during final design and construction drawing preparation, and be coordinated with gas and electric relocations.

PRIVATE UTILITIES
Discussions regarding replacement and upgrades to private gas, electric and telecommunication utilities have been initiated. Further work with these entities will take place during design development.