

**KNOXVILLE
SOUTH WATERFRONT
PUBLIC IMPROVEMENTS**

KNOXVILLE, TENNESSEE
Lead Consultant

HOK ASSOCIATES

118 MARKET PLACE
CHAMBERLAIN, MA 02119
781.552.4000
781.552.4004
HOKMASS@HOK.COM

Massipain Overview/Urban Design
Chris Koger, Schematic
Cambridge, MA 02138
Tel: 617.354.5315

Massipain Overview/Transportation
Clayton Jackson
Orlando, FL 32801
Tel: 407.843.6552

Marine Engineering
Adriant & Nicol
Raleigh, NC 27609
Tel: 919.781.4526

Lighting Design
Lynn Parsons
Cambridge, MA 02140
Tel: 617.354.4502

Landscape Architecture
Rosa Forder
Knoxville, TN 37902
Tel: 865.637.1100

Benfield Richards
Knoxville, TN 37902
Tel: 865.637.7009

Civil Engineers
Cannon & Cannon
Knoxville, TN 37922
Tel: 865.670.8555

Wilbur Smith
1100 Mason Street, Suite 200
Knoxville, TN 37902
Tel: 865.883.4390

**NOT FOR
CONSTRUCTION**

05	Final SD package	06.04.08
06	Final SD package	12.21.07
07	In progress	11.13.07
08	In progress	10.23.07
09	In progress	10.23.07
10	In progress	09.04.07
11	In progress	07.23.07
12	In progress	07.17.07
13	In progress	06.12.07
14	Issue	Date

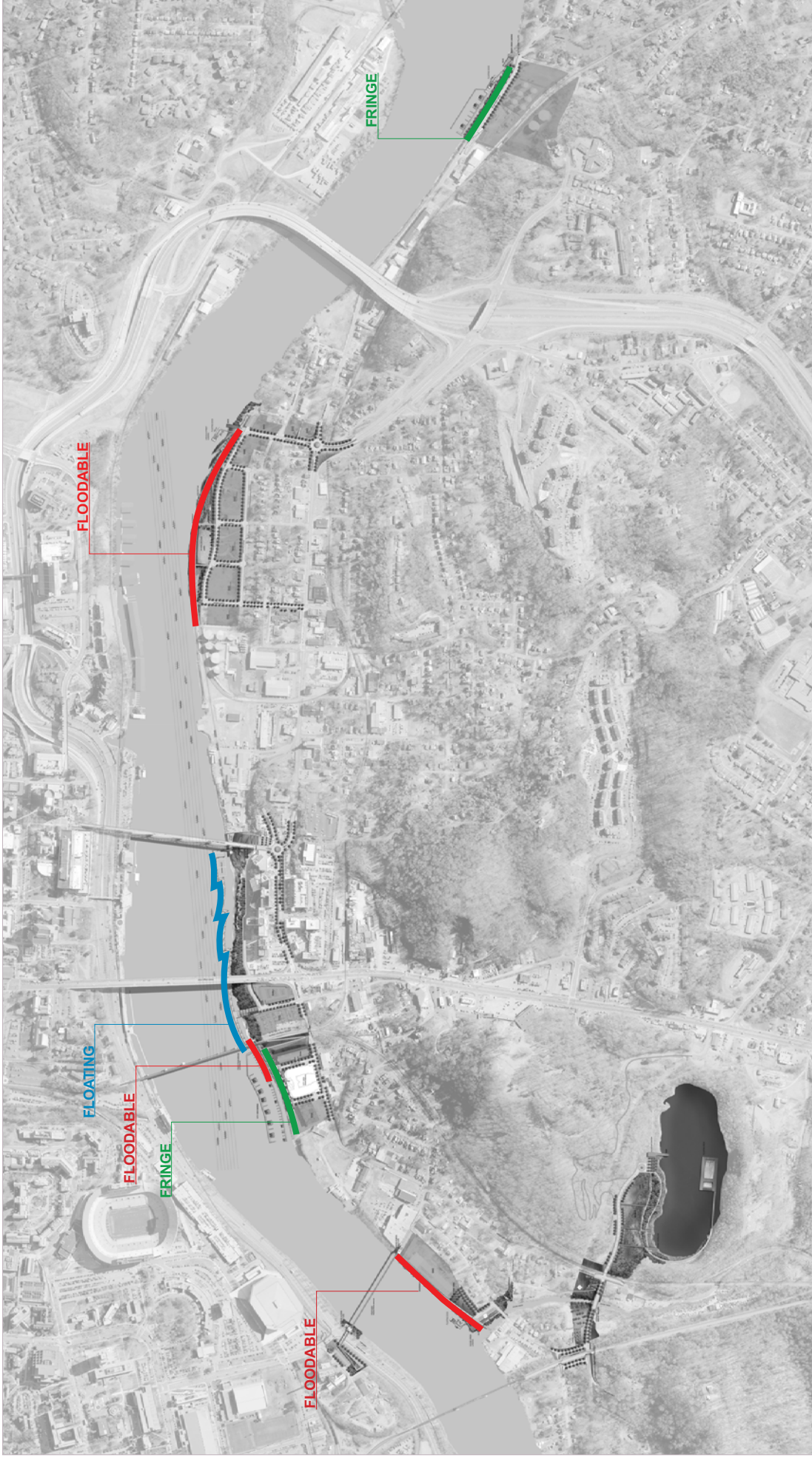


JOB NO. HAKSW 0701
Scale N 1:2.5

Date 04 June 2008

Title
**SCHEMATIC DESIGN
RIVERWALK TYPOLOGIES
PLAN**

Sheet No.
L501



FOR PROPOSED RIVERWALK LAYOUTS SEE DWGS. P1-12.L103
FOR RIVERWALK DETAILS SEE DWGS. L502-3

**KNOXVILLE
SOUTH WATERFRONT
PUBLIC IMPROVEMENTS**

KNOXVILLE, TENNESSEE
Lead Consultant

HOK ASSOCIATES

115 MADISON PIKE
CAMBRIDGE, MA 02139
781.552.0044
781.552.0047
HOK.COM

Masterplan Overview/Urban Design
Chris Koger, Senior
Cambridge, MA 02138
Tel: 617.354.5315

Masterplan Overview/Transportation
Claring Jackson
Orlando, FL 32801
Tel: 407.843.6552

Marine Engineering
Robert & Nicole
Raleigh, NC 27609
Tel: 919.781.4626

Lighting Design
Lynn Peters
Cambridge, MA 02142
Tel: 617.354.4502

Landscape Architecture
Rosa Foster
Knoxville, TN 37902
Tel: 865.637.1100

Benfield Richards
Knoxville, TN 37902
Tel: 865.637.7009

Civil Engineers
Cannon & Cannon
Knoxville, TN 37922
Tel: 865.670.8555

Wilbur Smith
1100 Mason Street, Suite 200
Knoxville, TN 37902
Tel: 865.853.4300

**NOT FOR
CONSTRUCTION**

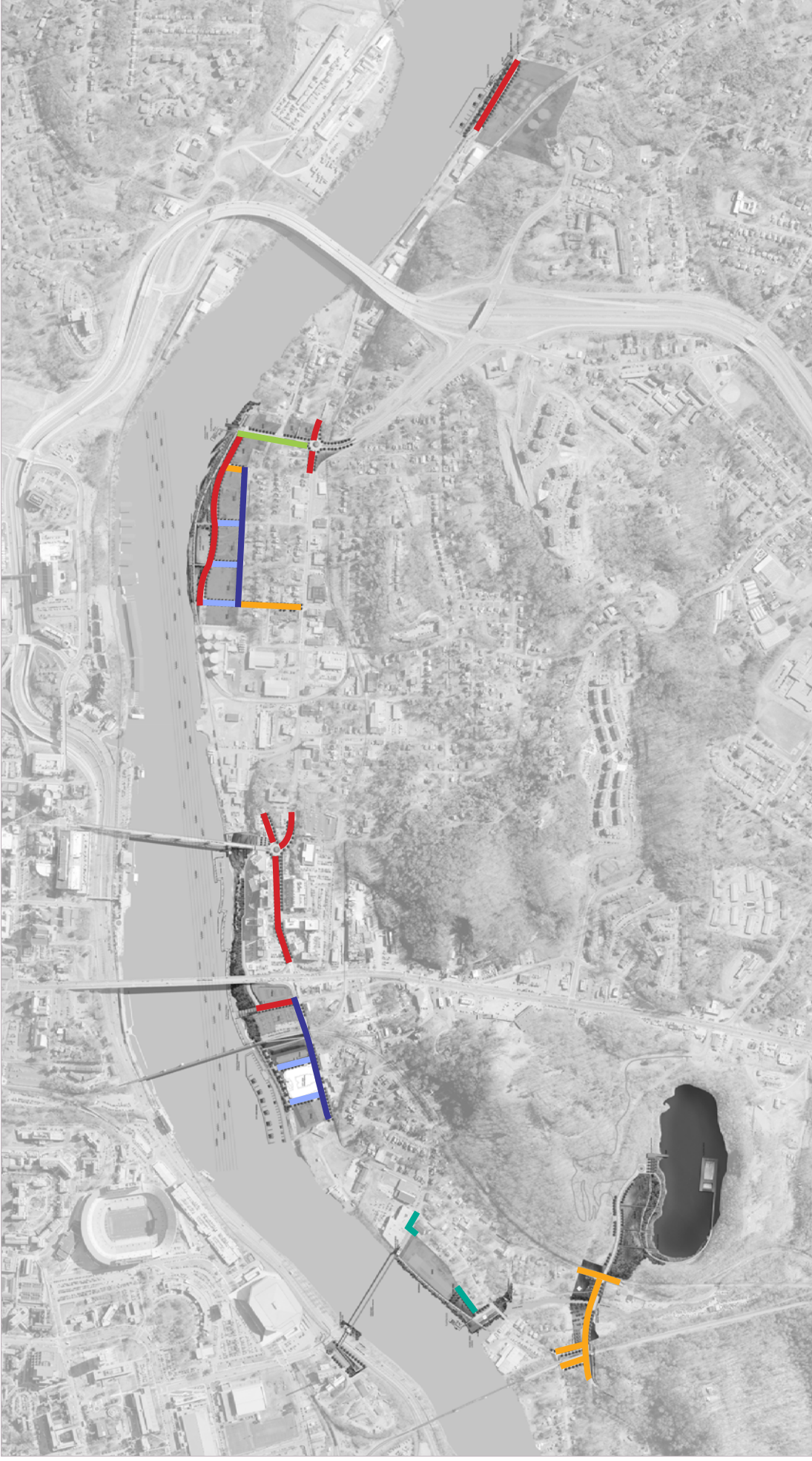
06 Final 50 package	06.04.08
06 Final 50 package	12.21.07
07 In progress	11.13.07
07 In progress	10.23.07
07 In progress	09.25.07
07 In progress	09.04.07
07 In progress	07.23.07
07 In progress	07.17.07
07 In progress	06.12.07
Issue	Date



JOB No. HANSH 0701
Scale N.T.S.
Date 04 June 2008

Title
**SCHEMATIC DESIGN
STREET TYPOLOGIES
PLAN**

Sheet No.
L504



STREET TYPOLOGIES

- ST-42-24-PL
- ST-50-30-PL
- ST-60-40-PL-2BL
- ST-56-36-PL
- RA-20-12
- NOT YET CODED / TO BE RECODED

FOR PROPOSED STREET LAYOUTS SEE DWGS. P1-12.L103
FOR STREET DETAILS SEE DWGS. L305 & 7

KNOXVILLE
SOUTH WATERFRONT
PUBLIC IMPROVEMENTS

KNOXVILLE, TENNESSEE
Lead Consultant



HOK ASSOCIATES
118 MARKET PLACE
CHAMBERLAIN, VA 23139
703.426.4000
813.651.0064
HOK.COM

Massipain Overview/Urban Design
Chris Koger, Sr. Architect
Cambridge, MA 02138
Tel: 617.354.5315

Massipain Overview/Transportation
Clayton Jackson
Orlando, FL 32801
Tel: 407.643.6552

Marine Engineering
Adriett & Nicol
Raleigh, NC 27609
Tel: 919.781.4526

Lighting Design
Lynn Parsons, Lead
Cambridge, MA 02140
Tel: 617.354.4502

Landscape Architecture
Rosa Forder, Lead
Knoxville, TN 37902
Tel: 865.637.1100

Benfield Richards
Knoxville, TN 37902
Tel: 865.637.7009

Civil Engineers
Cannon & Cannon
Knoxville, TN 37922
Tel: 865.670.8555

Wilbur Smith
1100 Mason Street, Suite 200
Knoxville, TN 37902
Tel: 865.883.4300

NOT FOR
CONSTRUCTION

06	Final SD package	06.04.08
06	Final SD package	12.21.07
07	In progress	11.13.07
08	In progress	10.23.07
09	In progress	09.04.07
02	In progress	07.23.07
01	In progress	06.12.07
	Issue	Date

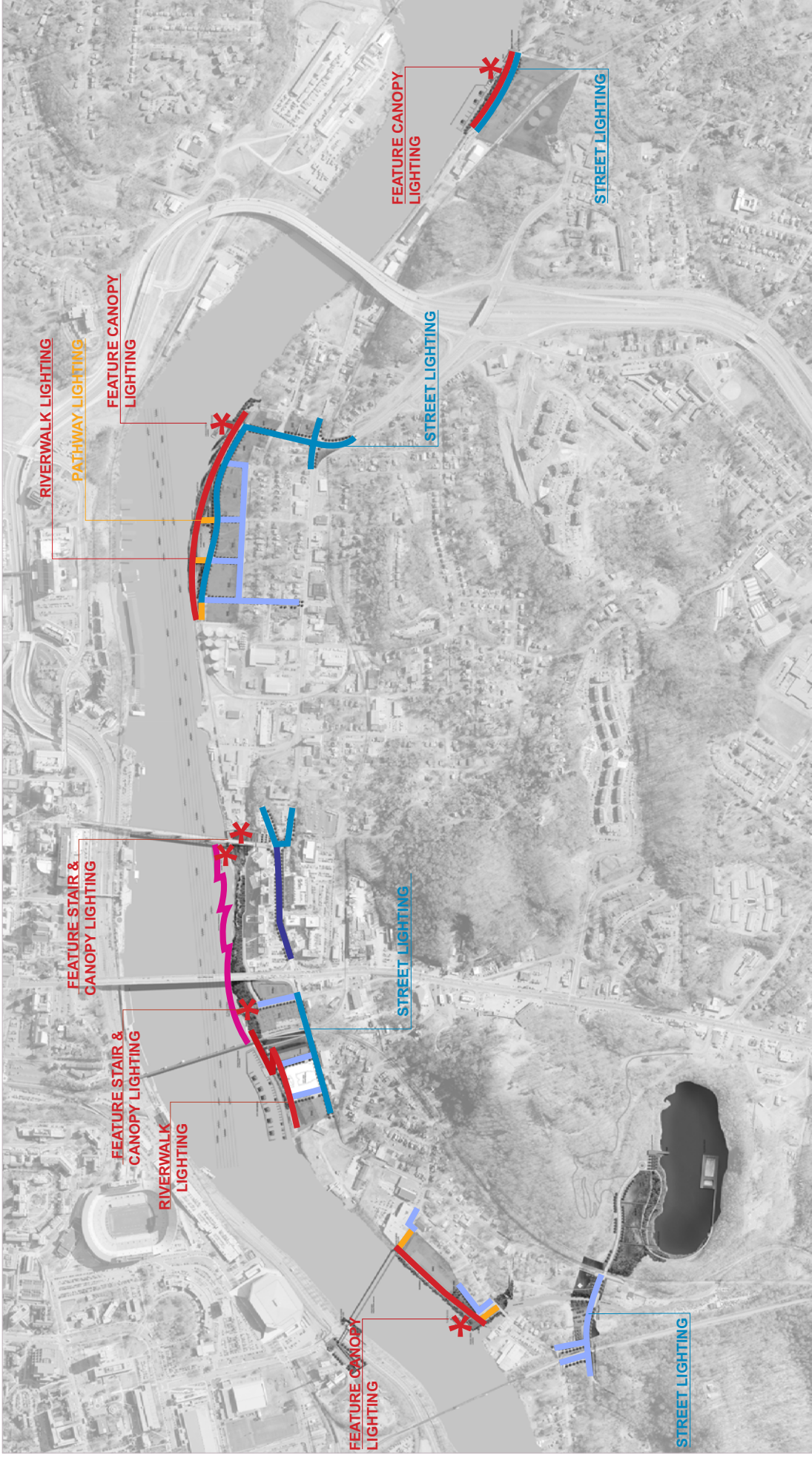


JOB NO.: HAKSW 0701
Scale:

Date: N 2.9
04 June 2008

Title:
SCHEMATIC DESIGN
LIGHTING TYPOLOGIES
PLAN

Sheet No.:
L500



LIGHTING TYPOLOGIES

- STREET LIGHTING (LIGHT TYPES G1, G1A, G1B, G2)
- SCHEME A
 - SCHEME B
 - SCHEME C
- FOR DETAILS OF LIGHTING SCHEME SEE STREET LIGHTING STANDARDS REPORT

FOR LIGHTING LOCATIONS SEE DWGS. P1-12.L103
FOR LIGHTING TYPE DETAILS SEE DWG. L 509
& LIGHTING STANDARDS REPORT

- PEDESTRIAN LIGHTING (LIGHT TYPES G3, G4, D1)
- FRINGE AND FLOODABLE RIVERWALK
 - FLOATING RIVERWALK
 - CONNECTING PATHWAY

FOR LIGHTING LOCATIONS SEE DWGS. P1-12.L103
FOR LIGHTING TYPE DETAILS SEE DWG. L 509

- FEATURE LIGHTING
* INCLUDES CANOPY STRUCTURE, DECK AND GUARDRAIL LIGHTING

KNOXVILLE
SOUTH WATERFRONT
PUBLIC IMPROVEMENTS

KNOXVILLE, TENNESSEE
Lead Consultant

H. J. B. ASSOCIATES

118 MADISON PIKE
CAMBRIDGE, MA 02139
781.451.8800
781.451.8804 x 7
HJB@HJB.COM

Masterplan Overview/Urban Design
Chris Krogger, Senior Architect
Cambridge, MA 02138
Tel: 617.354.5315

Masterplan Overview/Transportation
Claring Jackson
Orlando, FL 32801
Tel: 407.843.6552

Marine Engineering
Mottitt & Mottitt
Raleigh, NC 27609
Tel: 919.781.4526

Lighting Design
Lum Partners
Cambridge, MA 02142
Tel: 617.354.4502

Landscape Architecture
Rural Frontier
Knoxville, TN 37902
Tel: 865.637.1100

Benfield Richards
Knoxville, TN 37902
Tel: 865.637.7009

Civil Engineers
Cannon & Cannon
Knoxville, TN 37922
Tel: 865.670.6555

Willbur Smith
1100 Mason Street, Suite 200
Knoxville, TN 37902
Tel: 865.853.4300

NOT FOR CONSTRUCTION

05 Final SD package	06.04.08
06 Civil SD package	12.21.07
07 In progress	11.13.07
08 In progress	10.23.07
09 In progress	09.25.07
10 In progress	09.04.07
11 In progress	07.23.07
12 In progress	07.17.07
Issue	06.12.07
Date	

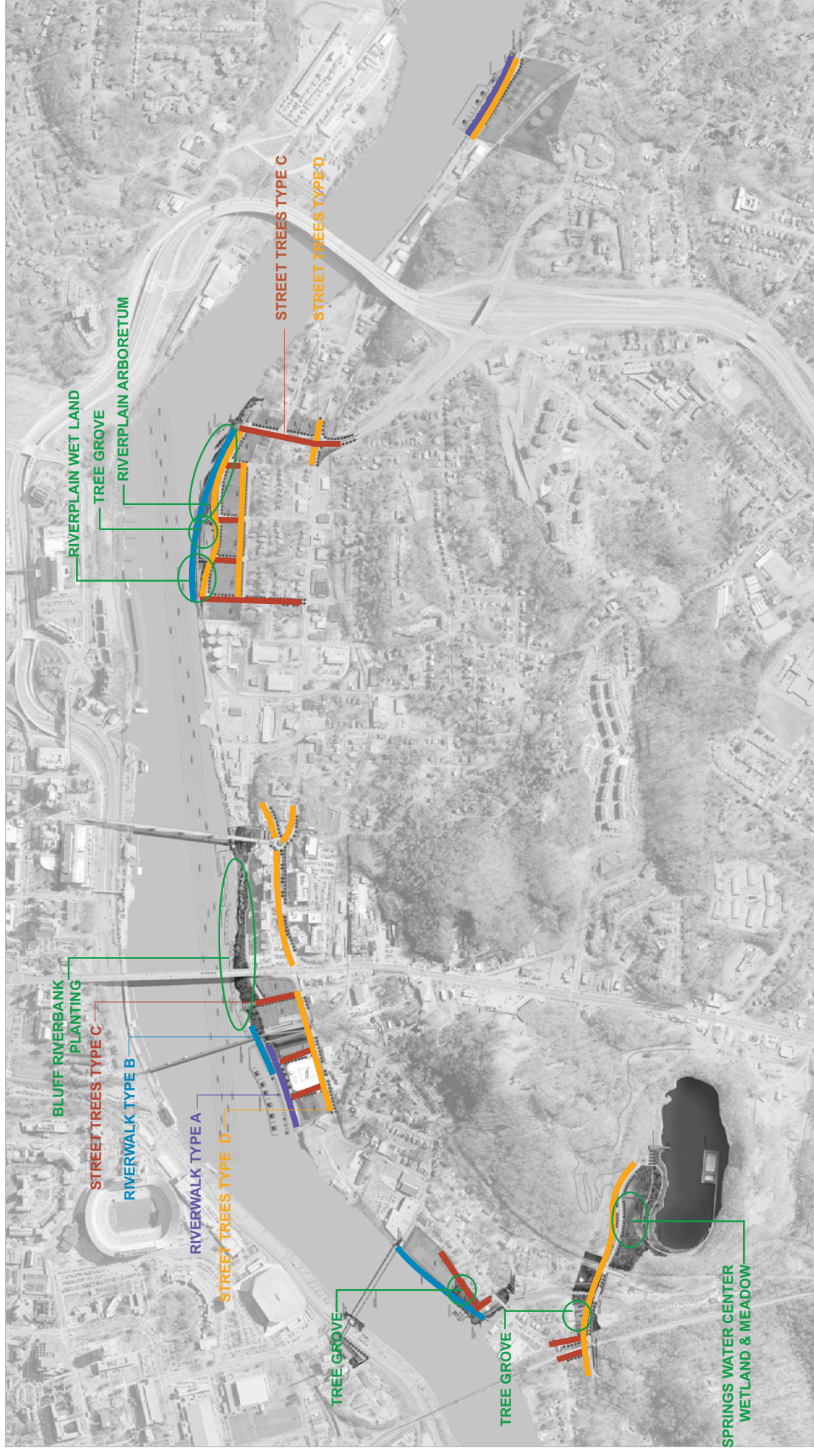
JOB No. HANSW 0701

Scale N.T.S.

Date 04 June 2008

**SCHEMATIC DESIGN
PLANTING TYPOLOGIES
PLAN**

Sheet No. L510



PLANTING TYPOLOGIES

RIVERWALK AND RIVERBANK

RIVERWALK TYPE A

- TREE SPECIES**
Tulip Poplar
Lacebark Elm
Red Pine
Dogwood
Redbud
Sourwood

- RIVERBANK PLANTINGS**
Virginia Sweetspire
Smooth Solomon's Seal
Indian Woodrats
Butternut
Silly Dogwood
Red-Osier Dogwood
Black Willow
Red Maple

RIVERWALK TYPE B

- TREE SPECIES**
Itea virginica
Polygonatum biflorum
Clematis integrifolia
Cornus canadensis
Cornus amomum
Acer glabrum

- RIVERBANK PLANTINGS**
Itea virginica
Polygonatum biflorum
Clematis integrifolia
Cornus canadensis
Cornus amomum
Acer glabrum

STREETS

STREET TREE TYPE C

- STREET TREES**
(Biomélie + Powerlines)
American Hornbeam
Leprechaun Ash
Imperial Honeylocust
Goldenrain Tree
Prunus virginiana
(Biomélie + No Powerlines)
Black tupelo
Hackberry
Shumard Oak
Jinquemontii Birch
Sycamore Honeylocust

- STREET TREE TYPE D**
Carpinus caroliniana
Fraxinus pennsylvanica 'Johnston'
Gleditsia tricanthos 'Impoco'
Koiweieria paniculata
Canada Red Chokecherry
Nyssa sylvatica
Celtis occidentalis
Quercus shumardii
Briella Jacquemontii
Gleditsia tricanthos 'Skycole'

BOSWALE PLANTING

- Columbia Sedge
New Zealand Sedge
Creeping Spikerush
Baltic Rush
Spreading Rush
Deer Fern
Low Oregon Grape
Creeping Lilyturf
Big Blue Lily turf

- Carex aperta
Carex acutiformis
Carex testacea
Carex tumilicola
Juncus balticus
Juncus patens
Blechnum spicant
Mahonia nervosa
Mahonia repens
Linopse muscan 'Big Blue'

ORNAMENTAL PLANTING

- ARBORETUM TREES**
Sassafras
Red Spruce
Cucumber Tree
Common Alder
GROVE TREES
Red Spruce
Sycamore
Lacebark Elm

- ORNAMENTAL PLANTING**
Creeping Lilyturf
Vincetoxicum
Penstemon
Fountain Grass
Pennisetum alopecuroides

NATIVE PLANTING

- WETLAND**
Virginia Sweetspire
Winterberry Holly
Butternut
Silly Dogwood
Red-Osier Dogwood
Black Willow
Sweet Gum
Sweetsberry

- MEADOW**
White Trippit clover
Perennial Ryegrass, Lim
Barnyard Grass
Kentucky Bluegrass
White Yarrow
Prairie Aster
Beechler Button
Purple Coneflower
Indian Blanket
Scalet flax
Prairie Coneflower
Black-eyed Susan

FOR PROPOSED TREE AND PLANTING LAYOUTS SEE DWGS. P4-12L103

**KNOXVILLE
SOUTH WATERFRONT
PUBLIC IMPROVEMENTS**

KNOXVILLE, TENNESSEE
Lead Consultant

ASSOCIATES
115 MADISON STREET
CAMBRIDGE, MA 02138
TEL: 617 552 4315
WWW.ASOCIATESINC.COM

Masterplan Overview/Urban Design
Chen Krieger Sternberg
Cambridge, MA 02138
Tel: 617 554 0315

Masterplan Overview/Transportation
Gilling-Jackson
Orlando, FL 32801
Tel: 407 643 6552

Marine Engineering
Moline & Nichol
Raleigh, NC 27609
Tel: 919 781 4628

Lighting Design
Lam Partners
Cambridge, MA 02140
Tel: 617 554 4502

Landscape Architecture
Road & Water
Knoxville, TN 37902
Tel: 865 637 1100

Brandstad Richies
Knoxville, TN 37902
Tel: 865 637 7009

Civil Engineers
Cannon & Cannon
Knoxville, TN 37902
Tel: 865 670 6555

Wilbur Smith
1100 Main Street, Suite 200
Knoxville, TN 37901
Tel: 865 963 4300

**NOT FOR
CONSTRUCTION**

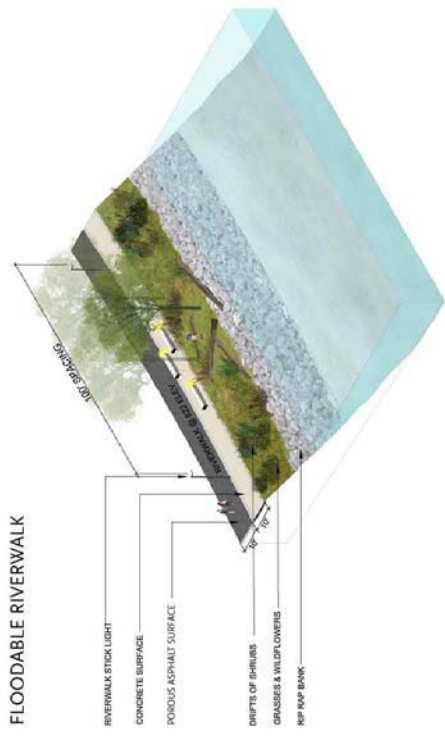
02 Final SD Package	06/04/08
03 Draft SD Package	12/21/07
07 In Progress	11/13/07
08 In Progress	10/07/07
09 In Progress	09/23/07
04 In Progress	08/04/07
03 In Progress	07/23/07
02 In Progress	07/17/07
01 In Progress	06/12/07
Issue	Date

JOB NO. HUKSHN 0701
Scale: N.T.S.
Date: 04 June 2008

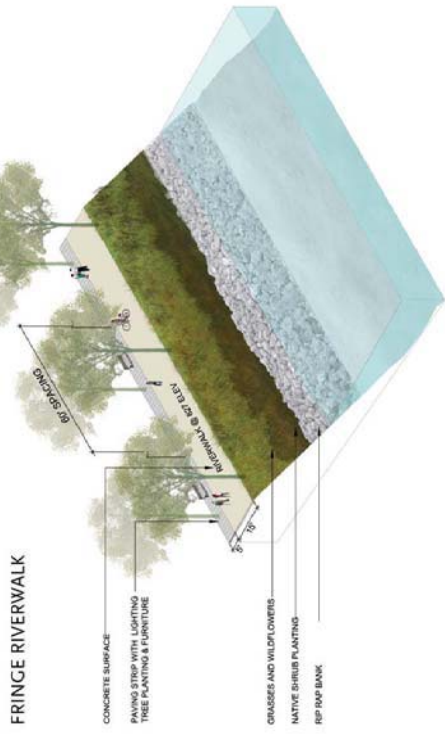
Title: **SCHEMATIC DESIGN**
RIVERWALK ANONOMETRICS

Sheet No. L502

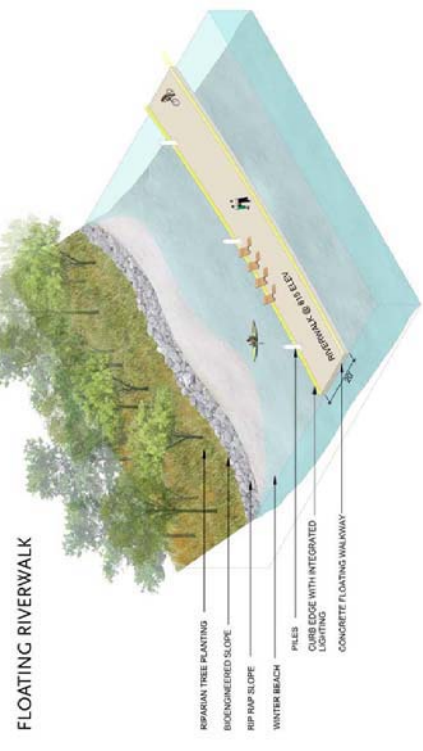
FLOODABLE RIVERWALK







FRINGE RIVERWALK








FLOATING RIVERWALK



RIVERWALK TYPOLOGIES - MATERIALS PAVEMENT & SURFACES

DESCRIPTION	OPTIONS	EXAMPLES
PEDESTRIAN PAVING TYPE 1 (FRINGE, FLOODABLE, FLOATING)	POROUS ASPHALT POROUS CONCRETE	
PEDESTRIAN PAVING TYPE 2 (FLOODABLE)	POROUS CONCRETE CONCRETE SPECIALTY CONCRETE (COLOR / TEXTURE) STABILIZED STONE AGGREGATE	
PEDESTRIAN PAVING TYPE 3 (FRINGE, PLAZA)	CONCRETE PAVERS POROUS CONCRETE PAVERS STONE PAVERS	
DECK (FLOODABLE, LANDINGS)	IPE WOOD ARSENIC-FREE PRESSURE-TREATED WOOD METAL GRATING	

FURNITURE

DESCRIPTION	OPTIONS	EXAMPLES
BENCH - ILLUMINATED (FLOODABLE)	CONCRETE & PLASTIC CONCRETE & PERFORATED METAL TIMBER	
BENCH WITH BACK (FRINGE)	CONCRETE TIMBER	
DECK CHAIRS (FLOATING)	TIMBER PLASTIC	
TRASH & RECYCLING BINS	METAL COATED METAL PLASTIC	
BIKE RACKS	METAL COATED METAL	

KNOXVILLE
SOUTH WATERFRONT
PUBLIC IMPROVEMENTS

Lead Consultant
KNOXVILLE, TENNESSEE

ASSOCIATES
118 MADISON FRUIT
CAMBRIDGE, MA 02139
TEL: 617 552 7700
WWW.ASSOCIATESINC.COM

MassPain Overview/Urban Design
Chris Kruger, Sieniewicz
4 Cambridge Center
Cambridge, MA 02138
Tel: 617 354 1515

MassPain Overview/Transportation
Clayton Jackson
1000 University Blvd
Orlando, FL 32801
Tel: 407 843 6552

Marine Engineering
Avalant & Morel
1000 University Street, Suite 100
Raleigh, NC 27609
Tel: 919 781 4826

Lighting Design
Lumo Partners
1000 University Blvd
Orlando, FL 32801
Tel: 407 354 4502

Landscape Architecture
Royal Parker
1000 University Blvd
Knoxville, TN 37902
Tel: 865 637 1100

Benefeld Richards
1000 University Blvd
Knoxville, TN 37902
Tel: 865 637 7009

Civil Engineers
Carson & Cannon
1000 University Blvd, Suite 110
Knoxville, TN 37902
Tel: 865 670 6555

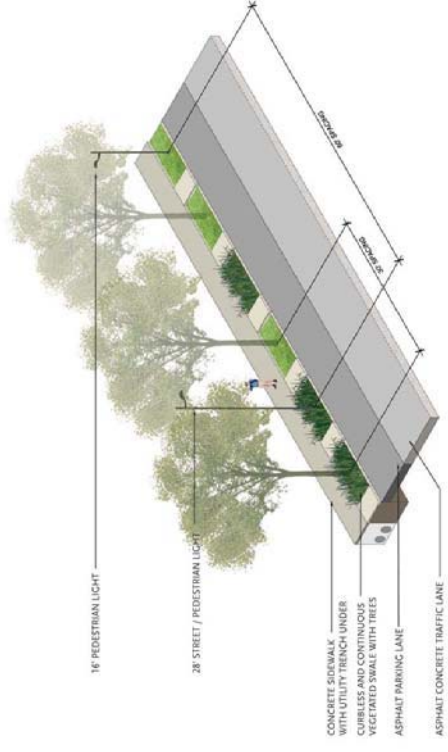
Wilbur Smith
1100 Mason Street, Suite 200
Knoxville, TN 37902
Tel: 865 863 4300

NOT FOR CONSTRUCTION

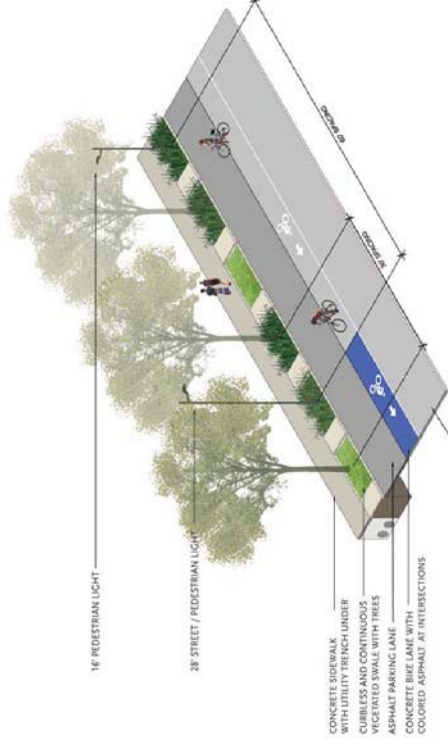
05	Final SD package	06.04.08
06	Final SD package	12.21.07
07	In progress	11.13.07
08	In progress	10.23.07
09	In progress	10.23.07
0A	In progress	09.04.07
0B	In progress	07.23.07
0C	In progress	07.17.07
01	In progress	06.12.07
	Issue	Date

JOB No. HASKIN 0701
Scale: N.T.S.
Date: 04 June 2008
Title: SCHEMATIC DESIGN
RIVERWALK MATERIALS PALETTE
Sheet No. L503

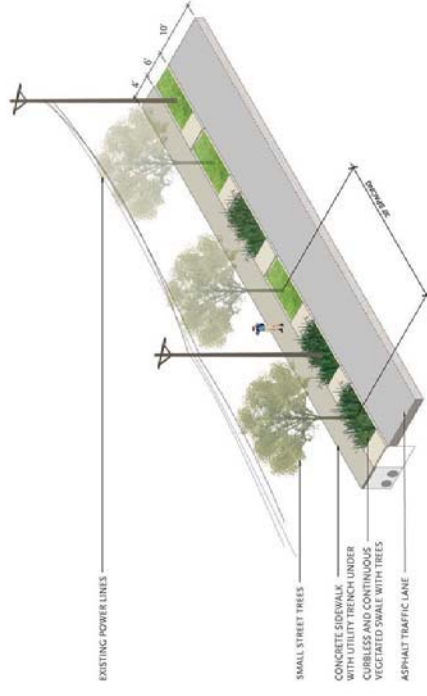
STREET WITH PARKING LANE



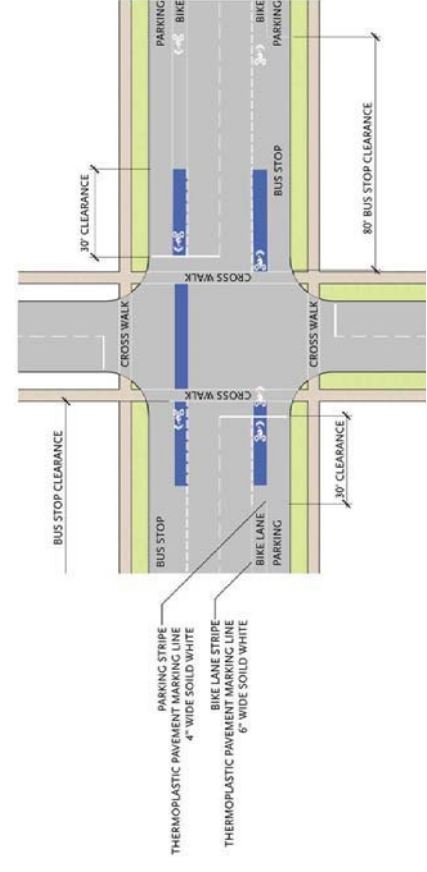
STREET WITH BIKE AND PARKING LANE



UPGRADED STREET



INTERSECTION WITH BIKE LANES



KNOXVILLE
SOUTH WATERFRONT
PUBLIC IMPROVEMENTS

KNOXVILLE, TENNESSEE
Lead Consultant

ASSOCIATES
115 MASSACHUSETTS
CAMBRIDGE, MA 02139
617 552 8200
MASSACHUSETTS

Masterplan Overview/Urban Design
Chen Krieger Sternberg
Cambridge, MA 02138
Tel: 617 554 0315

Masterplan Overview/Transportation
Gilling Jackson
Orlando, FL 32801
Tel: 407 643 6552

Marine Engineering
Moline & Nichol
1000 Main Street, Suite 190
Raleigh, NC 27609
Tel: 919 781 4626

Lighting Design
Lum Partners
Cambridge, MA 02140
Tel: 617 554 4502

Landscape Architecture
Roadworker
Knoxville, TN 37902
Tel: 865 637 1100

Benfield Richies
1000 Main Street, Suite 200
Knoxville, TN 37902
Tel: 865 637 7009

Civil Engineers
Cannon & Cannon
1100 Main Street, Suite 110
Knoxville, TN 37902
Tel: 865 670 6555

Wilbur Smith
1100 Main Street, Suite 200
Knoxville, TN 37902
Tel: 865 863 4300

NOT FOR CONSTRUCTION

02 Final SD Package	06.04.09
03 Draft SD Package	12.21.07
07 P progress	11.13.07
08 P progress	10.23.07
09 P progress	08.04.07
04 E progress	08.04.07
03 E progress	07.23.07
02 E progress	07.17.07
01 E progress	06.12.07
Issue	Date

JOB No. HUKSN 0701
Scale: N.T.S.
Date: 04 June 2009
Title: SCHEMATIC DESIGN
STREET AXONOMETRICS
Sheet No. L505

STREETSCAPE TYPOLOGIES - MATERIALS

PAVEMENT & SURFACES

DESCRIPTION	OPTIONS	EXAMPLES
PEDESTRIAN PAVING TYPE 1	CONCRETE POROUS CONCRETE	
VEHICULAR PAVING TYPE 4	ASPHALT	
VEHICULAR PARKING TYPE 5	ASPHALT POROUS ASPHALT ASPHALT WITH A RUMBLE STRIP TEXTURE AND CONTRASTING AGGREGATE FINISH TO TRAVEL LANE	
VEHICULAR PARKING TYPE 6	ASPHALT POROUS ASPHALT	
BIKE LANE TYPE 7	ASPHALT COLORED ASPHALT WITH RETROREFLECTIVE MARKINGS AT INTERSECTIONS	
STORMWATER PLANTER	TREE PLANTED BIOSWALE AND WIERS TO RETAIN 1 INCH OF STORMWATER FLUSH AND ALLOW PEDESTRIAN ACCESS FROM ROAD TO SIDEWALK PRE-CAST CONCRETE POURED-IN-PLACE CONCRETE	

KNOXVILLE
SOUTH WATERFRONT
PUBLIC IMPROVEMENTS

KNOXVILLE, TENNESSEE
Lead Consultant
HOK ASSOCIATES
118 MADISON FRUIT
CAMBRIDGE, MA 02139
Tel: 617 552 7000
Fax: 617 552 7001
HOK.COM

Missionplan Overview/Urban Design
Chen Kruger, Sieniewicz
Cambridge, MA 02138
Tel: 617 354 1515

Missionplan Overview/Transportation
Claring Jackson
Orlando, FL 32801
Tel: 407 843 6552

Marine Engineering
Aulicoff & Morel
Raleigh, NC 27609
Tel: 919 781 4826

Lighting Design
Luminaire
Cambridge, MA 02149
Tel: 617 354 4502

Landscape Architecture
Royal Foster
Knoxville, TN 37902
Tel: 865 537 1100

Benefeld Richies
Knoxville, TN 37902
Tel: 865 537 7009

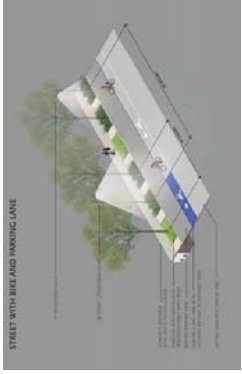


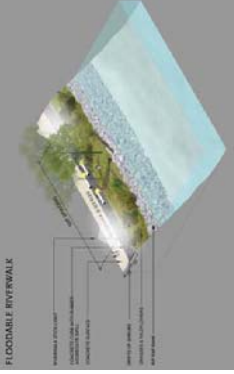


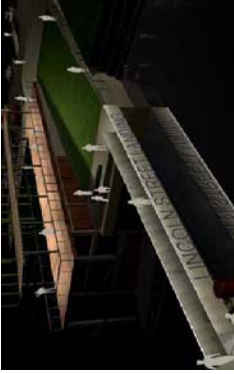


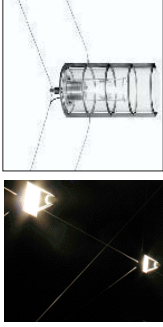
Civil Engineers
Carson & Cannon
Knoxville, TN 37922
Tel: 865 670 8555

Wilbur Smith
1100 Mason Street, Suite 200
Knoxville, TN 37902
Tel: 865 833 4300

NOT FOR
CONSTRUCTION

00	Final SD package	06.04.08
01	Final SD package	12.21.07
02	In progress	11.13.07
03	In progress	10.23.07
04	In progress	09.14.07
05	In progress	07.23.07
06	In progress	07.17.07
07	In progress	06.12.07
	Issue	Date

JOB No. HAKSNV 0701
Scale
Date: 04 June 2008
Title: SCHEMATIC DESIGN
STREET MATERIALS PALETTE
Sheet No. L-507

LIGHTING TYPE	DESCRIPTION	EXAMPLES
STREETS	G1 STREET LIGHT 28FT POLE WITH SINGLE HEAD METAL HALIDE	
	G1A STREET LIGHT 28FT POLE WITH DOUBLE HEAD METAL HALIDE	
	G2 PEDESTRIAN LIGHT 16 FT POLE WITH SINGLE MEAD METAL HALIDE	
PEDESTRIAN	G3 CUSTOM RIVERWALK PEDESTRIAN LIGHT 16 FT POLE WITH SINGLE HEAD METAL HALIDE	
	G4 PATHWAY LIGHT (PERPENDICULAR TO RIVER) 10FT METAL HALIDE DOWNLIGHT POLE	
D1	FLOATING DOCK PATH LIGHT FLOODLIGHT ANGLED TO ILLUMINATE ROCKFACE	
FEATURE LIGHTING	GUARDRAIL: ILLUMINATED LED STRIP RECESSED IN RAIL METAL MESH INTEGRATED WITH LED LIGHTS	
	STEPS: ILLUMINATED INSET LED LIGHTING STRIP OR DOTS	
	BENCH: ILLUMINATED COLOR CHANGING LED LAMP RECESSED IN OPAL LENSED STEP LIGHT	
	SHADE STRUCTURE: ILLUMINATED CATENARY LIGHTING	

**KNOXVILLE
SOUTH WATERFRONT
PUBLIC IMPROVEMENTS**

KNOXVILLE, TENNESSEE
Lead Consultant

ASSOCIATES
10 MARKET STREET
KNOXVILLE, TN 37902
615.621.0070
615.621.0044
www.associates.com

Masterplan Overview/Urban Design
Chan Krieger-Schneitz
8 Sharp Street
Knoxville, TN 37902
Tel: 615.254.5315

Masterplan Overview/Transportation
Claring Jackson
East Pine Street
Knoxville, TN 37902
Tel: 615.433.6552

Master Engineering
Moffatt & Nichol
1015 East Millbrook Street, Suite 100
Knoxville, TN 37902
Tel: 615.391.4620

Lighting Design
Lum Partners
84 Sherman Street
Knoxville, TN 37902
Tel: 615.254.4522

Landscape Architecture
Rood/Fowler
825 Gay Street
Knoxville, TN 37902
Tel: 615.637.1100

Roof/Field Details
518 Union Avenue
Knoxville, TN 37902
Tel: 625.257.7055

Civil Engineers
9724 Kingston Pike, Suite 110
Knoxville, TN 37902
Tel: 625.270.1025

Wilbur Smith
Street, Suite 200
Knoxville, TN 37921
Tel: 865.963.4300

**NOT FOR
CONSTRUCTION**

02 Final SD package	06.04.06
03 Final SD package	07.11.06
04 Final SD package	11.13.07
05 In progress	02.23.07
06 In progress	10.23.07
07 In progress	10.02.07
08 In progress	09.04.07
09 In progress	07.23.07
10 In progress	07.17.07
11 In progress	06.12.07
12 In progress	06.12.07

Scale: 1/4"=1'

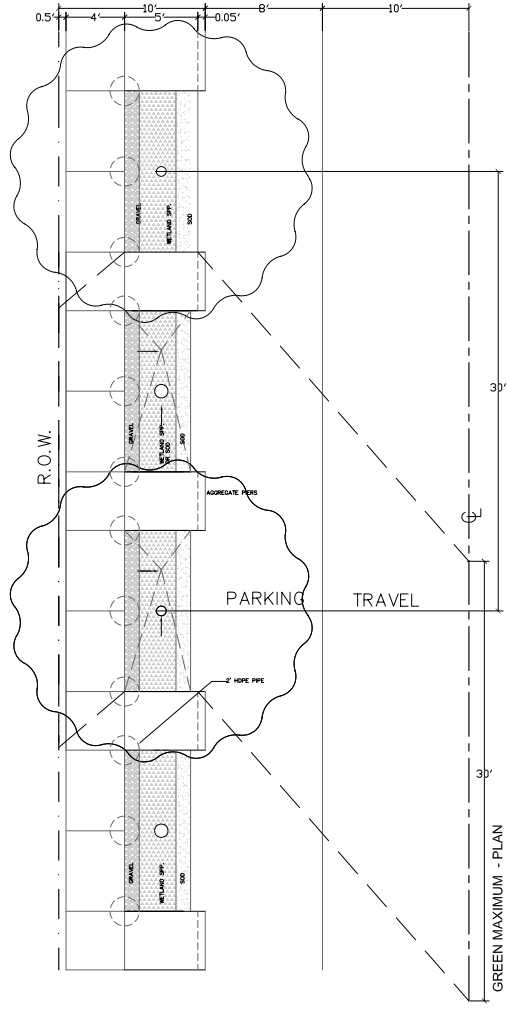
Job No. HAKSW 0701

Date: 4 June 2008

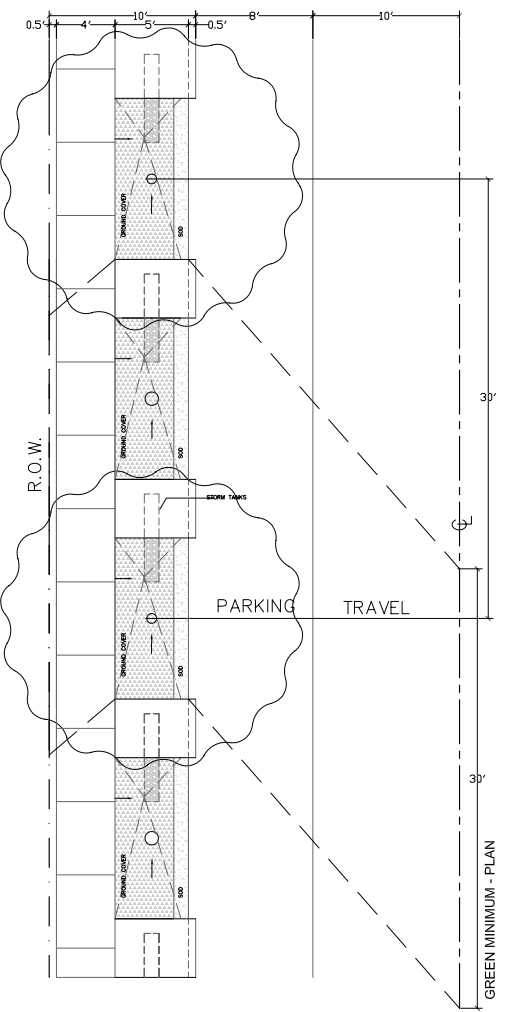
Title: SCHEMATIC DESIGN

Street Detailed Sections

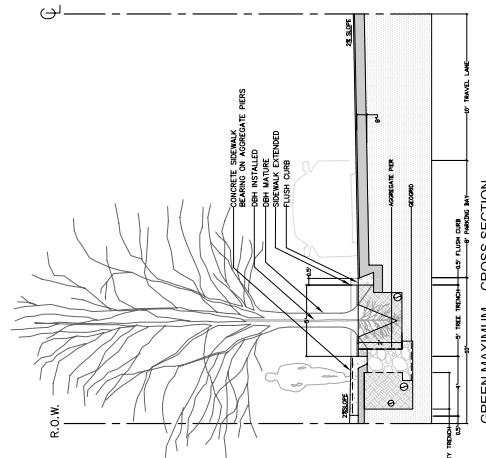
Sheet No. L506



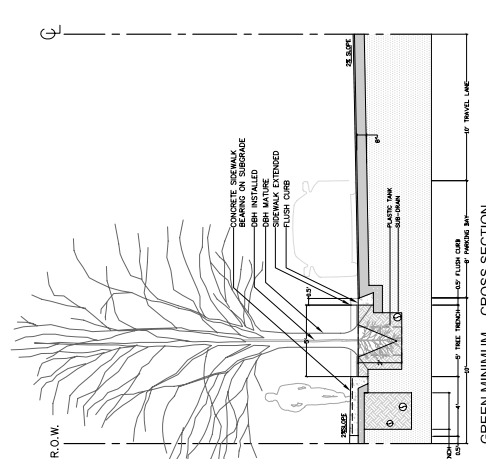
GREEN MAXIMUM - PLAN



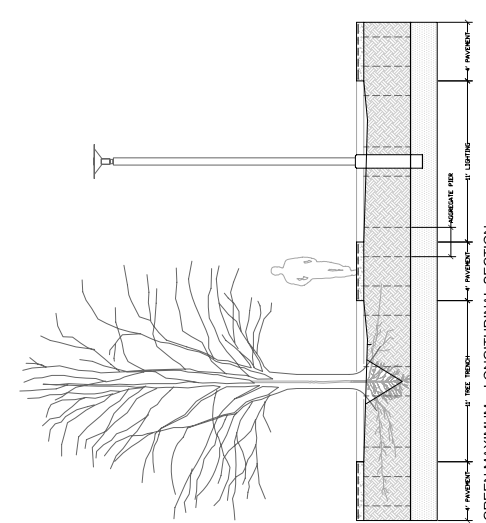
GREEN MINIMUM - PLAN



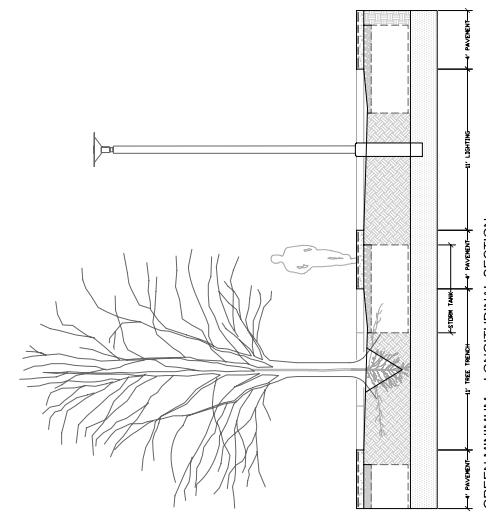
GREEN MAXIMUM - CROSS SECTION



GREEN MINIMUM - CROSS SECTION



GREEN MAXIMUM - LONGITUDINAL SECTION



GREEN MINIMUM - LONGITUDINAL SECTION

GREEN STREET
OPTION 2

GREEN STREET
OPTION 1