CITY OF CAMBRIDGE, MA

WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

ISSUED FOR BID

MAY 2012

PROJECT DESIGN TEAM

KLEINFELDER
Bright People. Right Solutions.

SEA
SEA CONSULTANTS INC.

MWH
285 SUMMER STREET, SUITE 200
BOSTON, MASSACHUSETTS 02210
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HDR
HDR ENGINEERING, INC.
695 ATLANTIC AVENUE, 2FL
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Jacobs Engineering Group, Inc.

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161 MASSACHUSETTS AVENUE, BOSTON MA 02115-3050
(PHONE) 617.536.0380 (FAX) 617.536.0626
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Irrigation Consulting, Inc.
Providing innovative design solutions for irrigation worldwide.
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COMMONWEALTH OF MASSACHUSETTS — JOHN J. STRUZZIERI No. 30434 — REGISTERED PROFESSIONAL ENGINEER — 5/18/12

COMMONWEALTH OF MASSACHUSETTS — DENNIS HOWARD CARR CIVIL No. 30912 — REGISTERED PROFESSIONAL ENGINEER — 5/21/2012

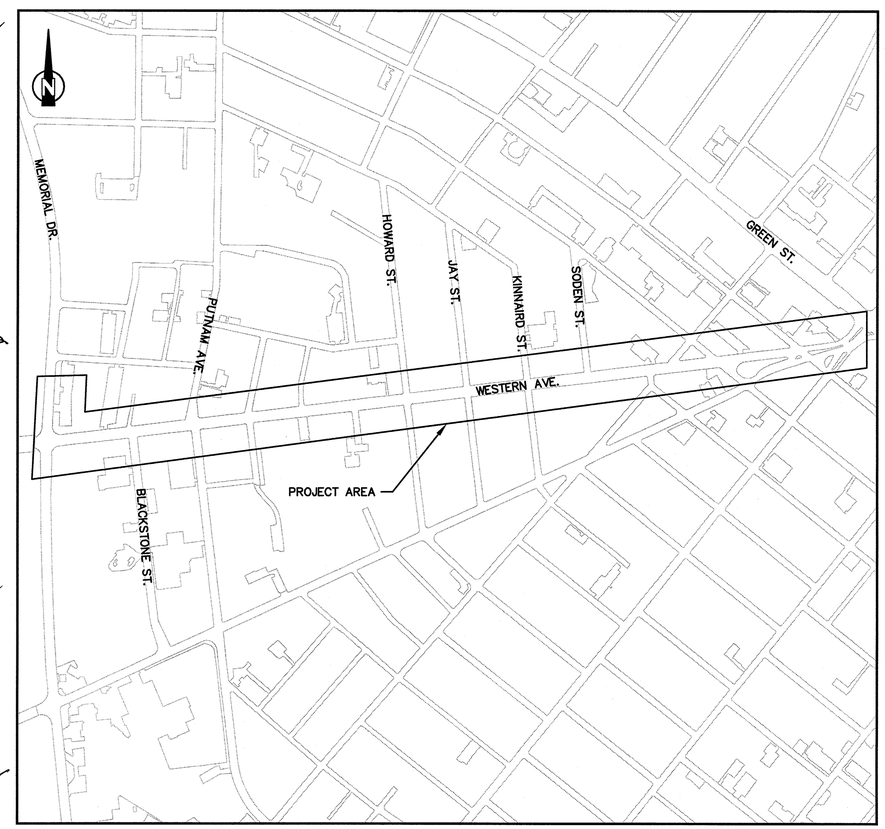
COMMONWEALTH OF MASSACHUSETTS — GERALD M. FRIEDMAN CIVIL No. 37076 — REGISTERED PROFESSIONAL ENGINEER — 5-22-12

COMMONWEALTH OF MASSACHUSETTS — RODNEY C. EMERY CIVIL No. 30796 — REGISTERED PROFESSIONAL ENGINEER — 5/24/12

COMMONWEALTH OF MASSACHUSETTS — RONALD W. BUIA No. 24820 — REGISTERED PROFESSIONAL ENGINEER — 5/22/12

MASSACHUSETTS — BRETTON WEBSTER SMITH — REGISTERED LANDSCAPE ARCHITECT — NO. 1312 — 5/22/12

JEFFREY R. BOWMAN — CERTIFIED — IRRIGATION DESIGNER — COMMERCIAL — 5/23/12



LOCUS PLAN
APPROX. SCALE: 1" = 300'

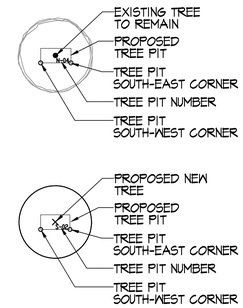
THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC

CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

PLOT DATE=5/4/2012 3:46:34 PM USER=CHRISTINE CLANCY FILENAME=G:_clients\Cambridge MA\2009143.01-A - Western Avenue\2.9 Drawings\Bid Set Drawings\G-1,G-2,G-3.dwg

MATERIALS PLAN NOTES:

1. MATERIALS PLAN PROVIDES MATERIAL DESCRIPTIONS, DETAIL REFERENCES AND GENERAL LAYOUT OF PAVING. SEE SS-12 FOR PAVEMENT ENLARGEMENTS .
2. PROVIDE CONTINUOUS CAULKED EXPANSION JOINTS WHEREVER EXTERIOR CONCRETE PAVING BASE ABUTS CURBS, WALLS AND OTHER SITE IMPROVEMENTS.
3. STAKE PROPOSED STRUCTURES, STAIRS, CURBS, WALLS, AND SITE ELEMENT LOCATIONS AND ELEVATIONS FOR ENGINEER'S APPROVAL PRIOR TO INSTALLATION OF FOUNDATIONS.
4. SEE PLANTING PLANS FOR LIMITS OF STRUCTURAL FILL AT CYCLE TRACK, ETC.
5. SEE PLANTING PLANS FOR LOCATIONS OF BOULDERS AND FLAT TOPPED BOULDER SEATING.
6. PLAN DETAIL IS INTENDED TO SHOW TYPICAL INTENT.
7. NEW CONCRETE SIDEWALK TO MEET AND BLEND WITH ABUTTING STAIRS OR PRIVATE WALKWAYS OR ADJACENT HARDSCAPE.
8. SEE SS-6 THROUGH SS-10 FOR PLANTER CURB LAYOUTS.
9. SEE SS-13 FOR TYPICAL CONCRETE SIDEWALK PATTERN ENLARGEMENTS.
10. SEE 2/SS-13 FOR TYPICAL BRICK STRIP PAVING PATTERN ENLARGEMENT.
11. SEE 3/SS-12 & 4/SS-12 FOR BRICK PAVING PATTERN ENLARGEMENTS AT WESTERN AVE.-PLEASANT STREET, AND WESTERN AVE.-AUBURN STREET PARKS.

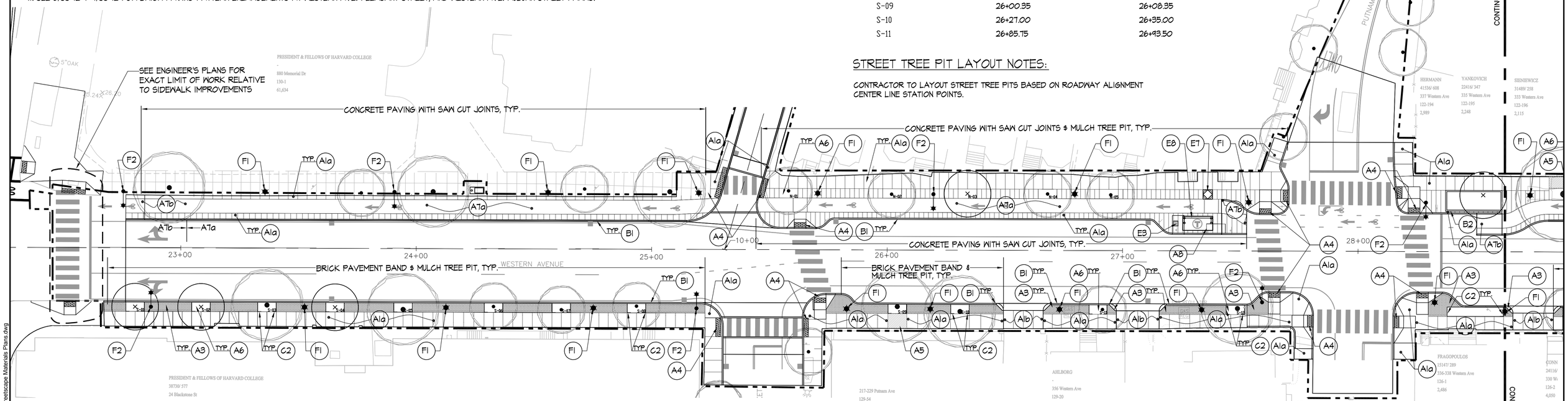


STREET TREE LAYOUT LEGEND (NORTH & SOUTH SIDES OF WESTERN AVE.)

TREE PIT NUMBER	SOUTH-WEST CORNER (FROM)	SOUTH-EAST CORNER (TO)
N-01	25+54.06	25+62.06
N-02	25+98.07	26+06.08
N-03	26+30.08	26+38.08
N-04	26+64.09	26+72.09
N-05	26+90.10	26+98.10
S-01	22+76.64	22+84.56
S-02	23+04.64	23+12.64
S-03	23+32.64	23+40.64
S-04	23+61.54	23+69.54
S-05	23+90.45	23+98.45
S-06	24+28.85	24+36.85
S-07	24+57.68	24+65.68
S-08	24+89.60	24+97.60
S-09	26+00.35	26+08.35
S-10	26+27.00	26+35.00
S-11	26+85.75	26+93.50

STREET TREE PIT LAYOUT NOTES:

CONTRACTOR TO LAYOUT STREET TREE PITS BASED ON ROADWAY ALIGNMENT CENTER LINE STATION POINTS.



1"= 20'-0" HORIZONTAL

0 20 50 100 FEET

MATERIALS LEGEND

SYM.	DESCRIPTION
A1a	CAST IN PLACE CONCRETE PAVING WITH SAW CUT JOINTS - PEDESTRIAN - SEE CIVIL ENGINEER DWGS FOR DETAILS
A1b	CAST IN PLACE CONCRETE PAVING WITH SAW CUT JOINTS - VEHICULAR - SEE CIVIL ENGINEER DWGS FOR DETAILS
A2	BRICK PAVEMENT ON CONCRETE BASE - SEE CIVIL ENGINEER DWGS FOR DETAILS
A3	BRICK PAVEMENT ON BIT. CONCRETE BASE - SEE CIVIL ENGINEER DWGS FOR DETAILS
A4	DETECTABLE WARNING PAVERS - SEE CIVIL ENGINEER DWGS
A5	RUBBER PAVING SURFACE - SEE CIVIL ENGINEER DWGS FOR DETAILS
A6 (1/SS-11) (2/SS-11)	AGED PINE BARK MULCH AT TREE PIT
A7a	PERVIOUS BIT. CONCRETE AT CYCLE TRACK - SEE CIVIL ENGINEER DWGS
A7b	BIT. CONCRETE AT CYCLE TRACK - SEE CIVIL ENGINEER DWGS
A8	CONCRETE PAD AT BUS SHELTER - SEE CIVIL ENGINEER DWGS
B1	GRANITE ROADWAY CURB - SEE CIVIL ENGINEER DWGS
B2 (3/SS-11) (5/SS-11)	GRANITE LANDSCAPE CURB - 6" WIDTH
C2 (2/SS-12)	STEEL EDGE
C3 (1/SS-12)	METAL LOOP AT PLANTER
D2 (4/SS-11) (5/SS-11)	GRANITE SEATING STONE
E1 (5/SS-19)	BICYCLE RACK
E3 (2/SS-21)	TRASH RECEPTACLE
E7	BRONZE INSET - SUPPLIED BY LANDSCAPE ARCHITECT / ARTIST - SEE BRONZE SPECIFICATION (TO BE INSTALLED BY CONTRACTOR IN PAVEMENT)
E8	BUS SHELTER - SEE CIVIL ENGINEER DWGS
F1	LIGHT TYPE I - SEE ELECTRICAL DWGS
F2	LIGHT TYPE II - SEE ELECTRICAL DWGS

ISSUED FOR BID

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MWH BOSTON MASSACHUSETTS

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WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS ARTHUR WEBSTER SHAW REGISTERED LANDSCAPE ARCHITECT NO. 6154

Scale	1"=20'-0"			
Date	May, 2012			
Job No.	2009143.01-A			
Designed by	CS			
Drawn by	YL			
Checked by	CS	No.	Description	Date
Approved by	CS	REVISIONS		

THE WORKS CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE MATERIALS & STREET TREE PIT LAYOUT PLAN-1

Sheet: SS-1

File No.

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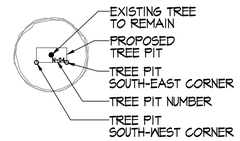
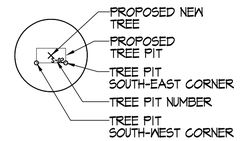




STREET TREE LAYOUT LEGEND (NORTH SIDE OF WESTERN AVE.)

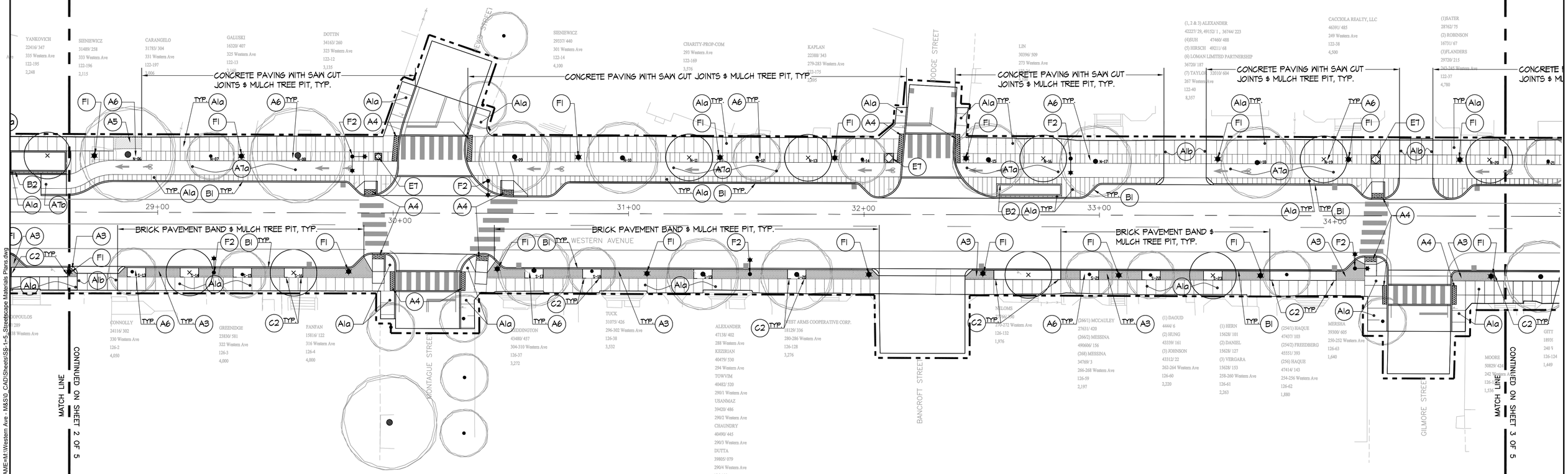
TREE PIT NUMBER	SOUTH-WEST CORNER (FROM)	SOUTH-EAST CORNER (TO)
N-06	28+81.10	28+93.10
N-07	29+17.72	29+25.93
N-08	29+54.65	29+62.85
N-09	30+46.85	30+54.93
N-10	30+93.29	31+01.29
N-11	31+21.60	31+29.69
N-12	31+49.87	31+57.96
N-13	31+72.11	31+80.18
N-14	31+94.30	32+02.40
N-15	32+48.29	32+56.20
N-16	32+72.01	32+79.90
N-17	32+93.73	33+03.64
N-18	33+62.93	33+70.93
N-19	33+91.08	33+99.15
N-20	34+61.49	34+69.49

STREET TREE LAYOUT LEGEND (SOUTH SIDE OF WESTERN AVE.)

TREE PIT NUMBER	SOUTH-WEST CORNER (FROM)	SOUTH-EAST CORNER (TO)
S-12	27+43.95	27+51.95
S-13	28+87.04	28+95.04
S-14	29+09.54	29+17.54
S-15	29+32.09	29+40.09
S-16	29+53.77	29+61.77
S-17	30+55.88	30+63.88
S-18	30+80.50	30+88.50
S-19	31+27.64	31+35.64
S-20	31+67.49	31+75.47
S-21	32+91.81	32+99.81
S-22	33+18.00	33+26.00
S-23	33+44.18	33+52.25

STREET TREE PIT LAYOUT NOTES:

CONTRACTOR TO LAYOUT STREET TREE PITS BASED ON ROADWAY ALIGNMENT CENTER LINE STATION POINTS.



1"= 20'-0" HORIZONTAL

0 20 50 100 FEET

ISSUED FOR BID

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[PHONE] 617.536.0380 [FAX] 617.536.0626
WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS ARTHUR WEBSTER SHAW No. 6367 REGISTERED LANDSCAPE ARCHITECT

Scale	1"=20'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE MATERIALS & STREET TREE PIT LAYOUT PLAN-2

Sheet: SS-2

File No.

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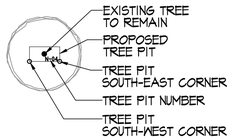
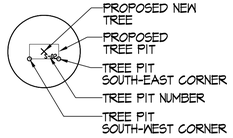




STREET TREE LAYOUT LEGEND (NORTH SIDE OF WESTERN AVE.)

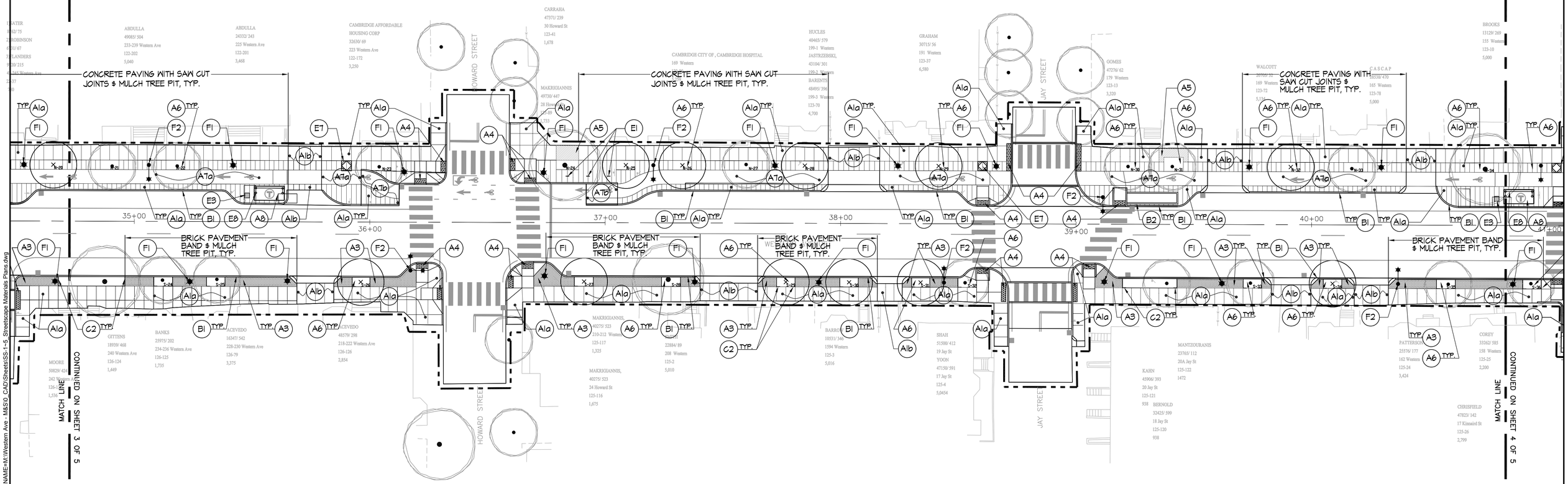
TREE PIT NUMBER	SOUTH-WEST CORNER (FROM)	SOUTH-EAST CORNER (TO)
N-21	34+85.44	34+93.44
N-22	35+13.37	35+21.37
N-23	36+00.57	36+09.02
N-24	36+79.12	36+88.63
N-25	37+04.64	37+12.64
N-26	37+28.64	37+36.64
N-27	37+56.65	37+64.65
N-28	37+80.64	37+88.64
N-29	38+37.31	38+45.64
N-30	39+18.64	39+26.89
N-31	39+37.21	39+45.46
N-32	39+86.93	39+95.12
N-33	40+13.54	40+21.72
N-34	40+69.10	40+77.29

STREET TREE LAYOUT LEGEND (SOUTH SIDE OF WESTERN AVE.)

TREE PIT NUMBER	SOUTH-WEST CORNER (FROM)	SOUTH-EAST CORNER (TO)
S-24	35+08.28	35+16.18
S-25	35+30.63	35+38.63
S-26	35+92.52	36+00.22
S-27	36+86.87	36+95.09
S-28	37+23.90	37+32.13
S-29	37+72.75	37+80.75
S-30	37+99.63	38+07.63
S-31	38+30.11	38+38.00
S-32	38+49.79	ADJACENT TO HANDICAP RAMP EDGE
S-33	39+70.93	39+78.93
S-34	40+04.98	40+12.98
S-35	40+53.05	40+61.18

STREET TREE PIT LAYOUT NOTES:

CONTRACTOR TO LAYOUT STREET TREE PITS BASED ON ROADWAY ALIGNMENT CENTER LINE STATION POINTS.



1"= 20'-0" HORIZONTAL

0 20 50 100 FEET

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WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS ARTHUR WEBSTER SHAW REGISTERED LANDSCAPE ARCHITECT

Scale	1"=20'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE MATERIALS & STREET TREE PIT LAYOUT PLAN-3

Sheet: SS-3

File No.

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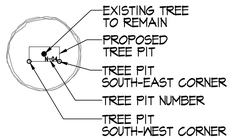
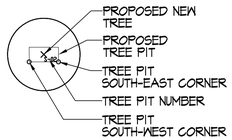




STREET TREE LAYOUT LEGEND (NORTH SIDE OF WESTERN AVE.)

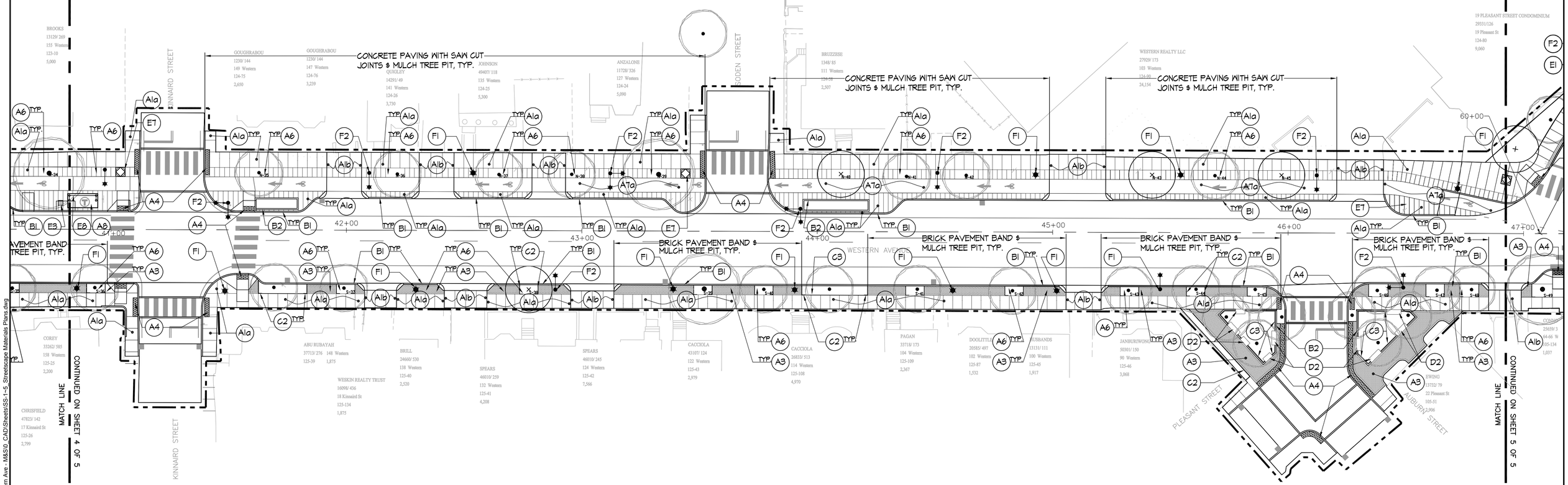
TREE PIT NUMBER	SOUTH-WEST CORNER (FROM)	SOUTH-EAST CORNER (TO)
N-35	41+58.80	41+66.80
N-36	42+16.59	42+24.72
N-37	42+60.17	42+68.45
N-38	42+93.04	43+00.10
N-39	43+27.64	43+35.79
N-40	44+05.87	44+13.93
N-41	44+34.08	44+42.13
N-42	44+58.25	44+66.30
N-43	45+38.17	45+46.02
N-44	45+65.64	45+73.48
N-45	45+93.13	46+00.96

STREET TREE LAYOUT LEGEND (SOUTH SIDE OF WESTERN AVE.)

TREE PIT NUMBER	SOUTH-WEST CORNER (FROM)	SOUTH-EAST CORNER (TO)
S-36	40+89.69	40+97.69
S-37	41+95.78	42+03.78
S-38	42+73.54	42+81.54
S-39	43+47.48	43+55.48
S-40	43+73.37	43+81.37
S-41	44+37.53	44+45.56
S-42	44+79.67	44+87.67
S-43	45+28.64	45+36.68
S-44	45+56.76	45+64.78
S-45	45+82.63	45+90.87
S-46	46+34.21	46+42.60
S-47	46+58.51	46+66.51
S-48	46+72.84	46+81.10

STREET TREE PIT LAYOUT NOTES:

CONTRACTOR TO LAYOUT STREET TREE PITS BASED ON ROADWAY ALIGNMENT CENTER LINE STATION POINTS.



1"= 20'-0" HORIZONTAL

0 20 50 100 FEET

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WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS JOHN WEBSTER DRIVE REGISTERED LANDSCAPE ARCHITECT NO. 604

Scale	1"=20'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE MATERIALS & STREET TREE PIT LAYOUT PLAN-4

Sheet: SS-4

File No.

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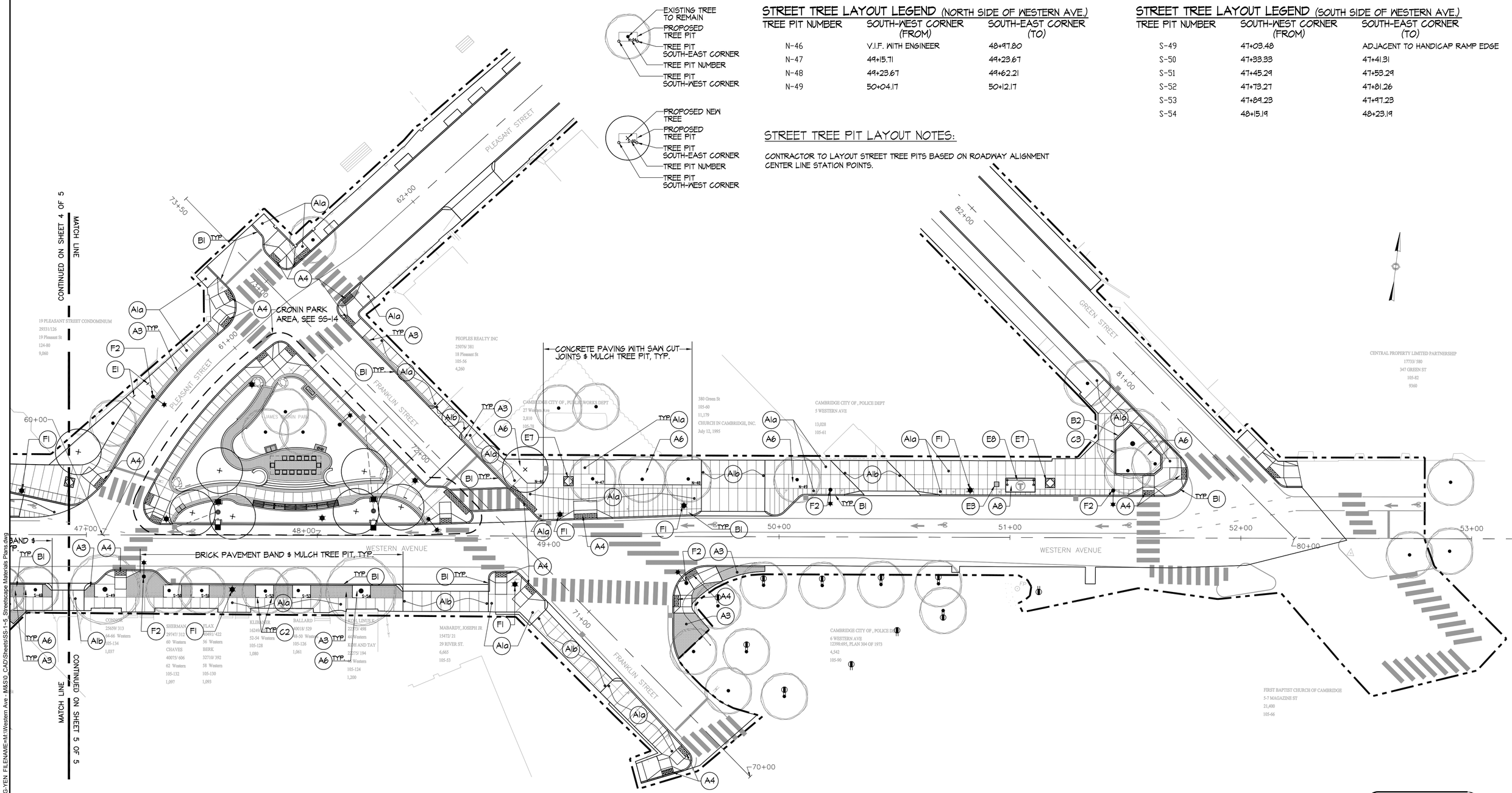

STREET TREE LAYOUT LEGEND (NORTH SIDE OF WESTERN AVE.)

TREE PIT NUMBER	SOUTH-WEST CORNER (FROM)	SOUTH-EAST CORNER (TO)
N-46	V.I.F. WITH ENGINEER	48+97.80
N-47	49+15.71	49+23.67
N-48	49+23.67	49+62.21
N-49	50+04.17	50+12.17

STREET TREE LAYOUT LEGEND (SOUTH SIDE OF WESTERN AVE.)

TREE PIT NUMBER	SOUTH-WEST CORNER (FROM)	SOUTH-EAST CORNER (TO)
S-49	47+03.48	ADJACENT TO HANDICAP RAMP EDGE
S-50	47+33.33	47+41.31
S-51	47+45.29	47+53.29
S-52	47+73.27	47+81.26
S-53	47+89.23	47+97.23
S-54	48+15.19	48+23.19

STREET TREE PIT LAYOUT NOTES:

CONTRACTOR TO LAYOUT STREET TREE PITS BASED ON ROADWAY ALIGNMENT CENTER LINE STATION POINTS.

1"= 20'-0" HORIZONTAL

0 20 50 100 FEET

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151 MASSACHUSETTS AVENUE, BOSTON MA 02115-3050
(PHONE) 617.536.0380 (FAX) 617.536.0626
WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS REGISTERED LANDSCAPE ARCHITECT

Scale	1"=20'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
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Approved by	CS

No.	Description	Date
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THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE MATERIALS & STREET TREE PIT LAYOUT PLAN-5

Sheet: SS-5

File No.

PLOT DATE=5/22/2012 3:20:13 PM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-1-5 Streetscape Materials Plans.dwg

*WESTERN AVENUE PLANT LIST:

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
4	AR RU	Acer rubrum 'October Glory'	October Glory Red Maple	3"-3½" Cal.	Matched Specimens
3	Gi Bi	Ginkgo biloba	Ginkgo	3"-3½" Cal.	Matched Specimens
10	QA PA	Quercus palustris	Pin Oak	3"-3½" Cal.	Matched Specimens
16	ZE SE	Zelkova serrata 'Green Vase'	'Green Vase' Japanese Zelkova	3"-3½" Cal.	Matched Specimens
SHRUBS					
76	Cs ar	Cornus sericea 'Arctic Fire'	Arctic Fire Red Twig Dogwood	18"-24" ht.	B&B or Cont.
52	Ro rd	Rosa 'Radkopink'	Double Pink Knockout Rose	18"-24" ht.	B&B or Cont.
39	Xa si	Xanthorhiza simplicissima	Yellowroot	12-15" ht.	B&B or Cont.
PERENNIALS, GROUNDCOVERS AND GRASSES					
37	cl ov	Calamagrostis x 'Overdam"	Overdam Feather Reed Grass	2 gal.	18"-24" O.C.
126	ch la	Chasmanthium latifolium	Northern Sea Oats	2 gal.	15"-18" O.C.
435	lir sp	Liriope spicata	Lilyturf	1 gal.	10"-12" O.C.
106	ne it	Nepeta racemosa 'Little Tech'	Little Tech Catmint	2 gal.	15"-18" O.C.
111	ru fu	Rudbeckia hirta	Black-eyed Susan	2 gal.	18"-24" O.C.

* DOES NOT INCLUDE PLANTING PLAN AND QUANTITIES FOR JAMES CRONIN PARK: PLANTING PLAN FOR JAMES CRONIN PARK CAN BE FOUND ON SHEET SS-15

WESTERN AVENUE STONE LIST:

QTY	SIZE	STONE PRODUCT
16	24" x 24" x 27"	GRANITE SEATING STONE - TYPE A
15	24" X 48" X 27"	GRANITE SEATING STONE - TYPE B
6	24" X 72" X 27"	GRANITE SEATING STONE - TYPE C

PLANTING LEGENDS:

EXISTING TREE TO REMAIN

HATCH AREA SHOWS LIMIT OF STRUCTURAL SOIL AREA

PLANTER LAYOUT PLAN NOTES:

1. PRIOR TO THE START OF ANY WORK THE CONTRACTOR SHALL MEET WITH THE OWNER AND ENGINEER TO REVIEW THE PROJECT SCOPE.

2. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE DUE TO CONSTRUCTION OPERATIONS INSIDE AND OUTSIDE OF THE PROPERTY LINE.

3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION. REPORT ANY DISCREPANCIES IN WRITING TO THE ENGINEER AND RECEIVE WRITTEN INSTRUCTIONS PRIOR TO PROCEEDING.

4. ANY ALTERATIONS TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE PROMPTLY REPORTED TO AND APPROVED BY THE ENGINEER BY THE CONTRACTOR AND RECORDED ON REPRODUCIBLE AS-BUILT DRAWINGS BY THE CONTRACTOR.

5. LINES ARE PARALLEL OR PERPENDICULAR TO LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE NOTED.

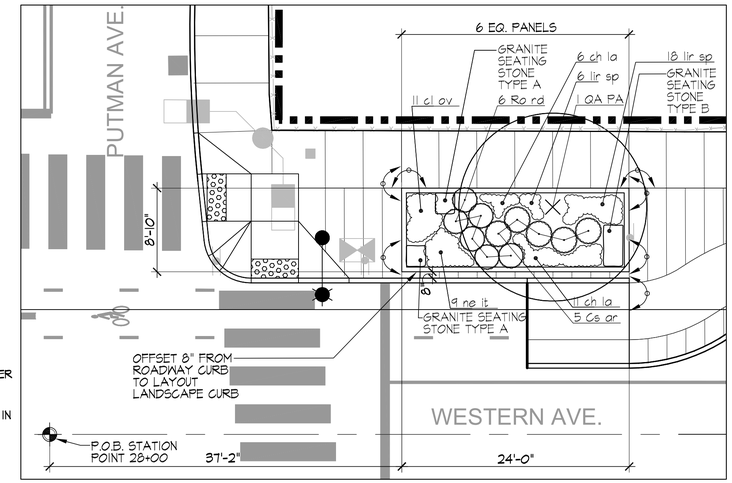
6. DIMENSIONS ARE TO JOINT CENTERLINE, WALL FACE, CURB FACE, PAVEMENT EDGE, CENTERLINE OF IMPROVEMENT OR AS OTHERWISE NOTED.

7. STAKE PROPOSED LANDSCAPE CURBS, AND SITE IMPROVEMENT LOCATIONS AND ELEVATIONS FOR THE ENGINEER'S APPROVAL PRIOR TO INSTALLATION.

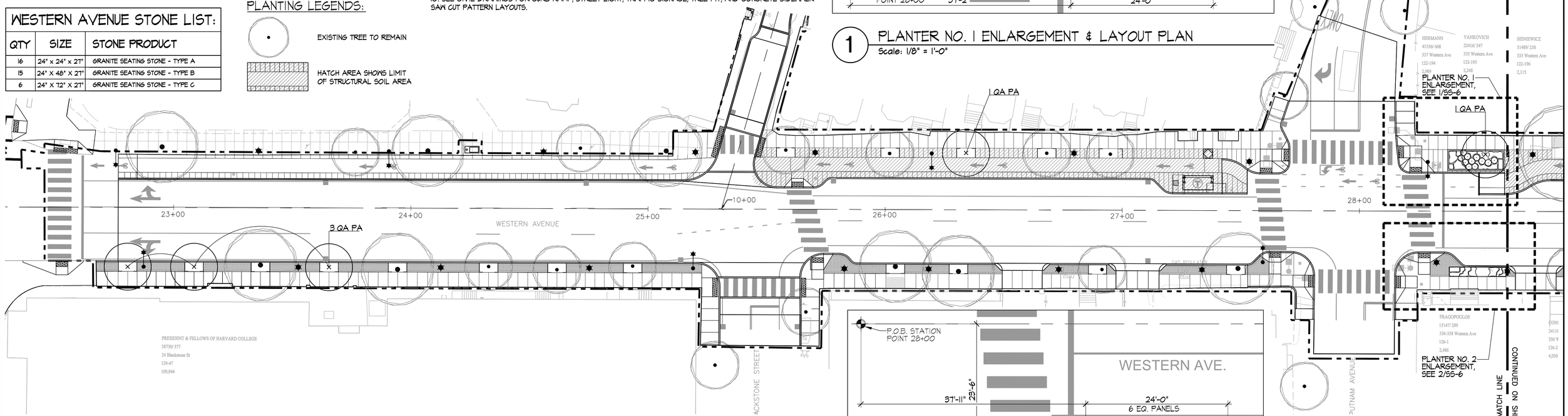
8. ENSURE PAVING PITCHES HAVE POSITIVE DRAINAGE AND WILL NOT POCKET WATER. NOTIFY ENGINEER BEFORE PLACING PAVEMENT WITH A PITCH GREATER THAN 4.8% OR LESS THAN 0.75%, OR HAS A CROSS SLOPE OF GREATER THAN 1.8%. RECEIVE WRITTEN INSTRUCTIONS PRIOR TO PROCEEDING.

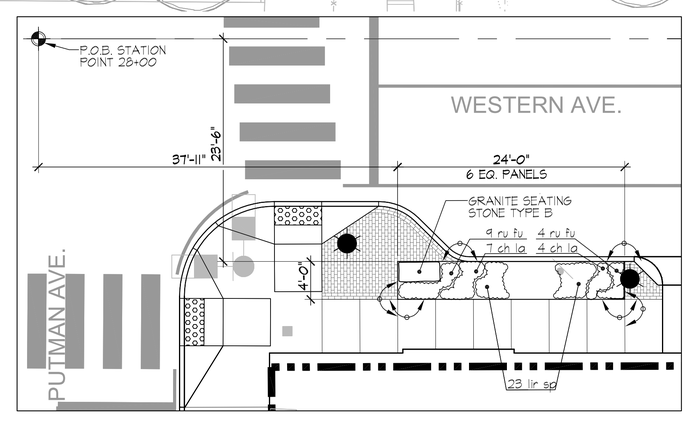
9. PROPOSED GRANITE SEATING, TREE AND PLANTING LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD WITH THE ENGINEER PRIOR TO INSTALLATION.

10. SEE CIVIL DRAWINGS FOR CURB RAMP, STREET LIGHT, TRAFFIC SIGNAGE, TREE PIT, AND CONCRETE SIDEWALK SAW CUT PATTERN LAYOUTS.



1 PLANTER NO. 1 ENLARGEMENT & LAYOUT PLAN
Scale: 1/8" = 1'-0"





2 PLANTER NO. 2 ENLARGEMENT & LAYOUT PLAN
Scale: 1/8" = 1'-0"

1"= 20'-0" HORIZONTAL
0 20 50 100 FEET

PLANTING NOTES:

1. ENGINEER TO APPROVE PLANT MATERIAL PRIOR TO DELIVERY TO SITE.

2. PLANT MATERIAL SHALL CONFORM TO "THE AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.

3. NO SUBSTITUTIONS OF PLANT SPECIES WITHOUT ENGINEER'S WRITTEN APPROVAL.

4. SUBSTITUTIONS OF PLANT SPECIES SHALL BE A PLANT OF EQUIVALENT OVERALL FORM, HEIGHT AND BRANCHING HABIT, FLOWER, LEAF AND FRUIT, COLOR AND TIME OF BLOOM, AS APPROVED OF BY ENGINEER.

5. LOCATE AND VERIFY UTILITY LINE LOCATIONS PRIOR TO STAKING AND REPORT CONFLICT TO ENGINEER.

6. PLANTING DEMOLITION DEBRIS, GARBAGE, LUMPS OF CONCRETE, STEEL AND OTHER MATERIALS DELETERIOUS TO PLANT'S HEALTH AS DETERMINED BY ENGINEER SHALL BE REMOVED FROM ALL PLANTING AREAS.

7. ALL PROPOSED BED LINES, TREE, AND SHRUB LOCATIONS SHALL BE STAKED OR LAID OUT IN THEIR APPROXIMATE LOCATION BY THE CONTRACTOR PRIOR TO ENGINEER'S ARRIVAL ON SITE FOR LAYOUT AND PLANTING REVIEW. REFER TO LAYOUT AND PLANTING SHEETS FOR LAYOUT INFORMATION. THE CONTRACTOR SHALL ADJUST THE LOCATIONS AS REQUESTED BY THE ENGINEER TO ACCOUNT FOR SUBSURFACE UTILITIES AND ANY OTHER FIELD CONDITIONS. FINAL LOCATIONS OF ALL PLANT MATERIAL MUST BE APPROVED BY THE ENGINEER PRIOR TO PLANTING.

8. NO PLANTING TO BE INSTALLED BEFORE ACCEPTANCE OF ROUGH AND FINE GRADING BY ENGINEER.

9. INSTALL PLANTS WITH ROOT FLARES FLUSH WITH FINISHED GRADE. IMMEDIATELY REPLANT PLANTS THAT SETTLE OUT OF PLUMB OR BELOW FINISHED GRADE.

10. PLANT UNDER FULL TIME SUPERVISION OF CERTIFIED ARBORIST, NURSERYMAN, OR ENGINEER. PROVIDE WRITTEN VERIFICATION OF CERTIFICATION AND/OR LICENSE FOR ENGINEER'S APPROVAL.

11. WATER PLANTS THOROUGHLY AFTER INSTALLATION, A MINIMUM OF TWICE WITHIN THE FIRST 24 HOURS.

12. REPAIR DAMAGE DUE TO OPERATIONS INSIDE AND OUTSIDE OF LIMIT OF WORK

13. SEE DETAIL SHEET SS-11 FOR STREET TREE PLANTING DETAILS; SEE SS-21 FOR SHRUB, PERENNIAL AND GROUNDCOVER PLANTING DETAILS.

14. SEE SPECIFICATIONS FOR STREETSCAPE TREE PROTECTION DETAILS.

15. SEE IRRIGATION PLANS I- THROUGH I- FOR IRRIGATION AT PLANTERS.

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WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS — ARNOLD WEBSTER SHAW — No. 618 — REGISTERED LANDSCAPE ARCHITECT

Scale	1"=20'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

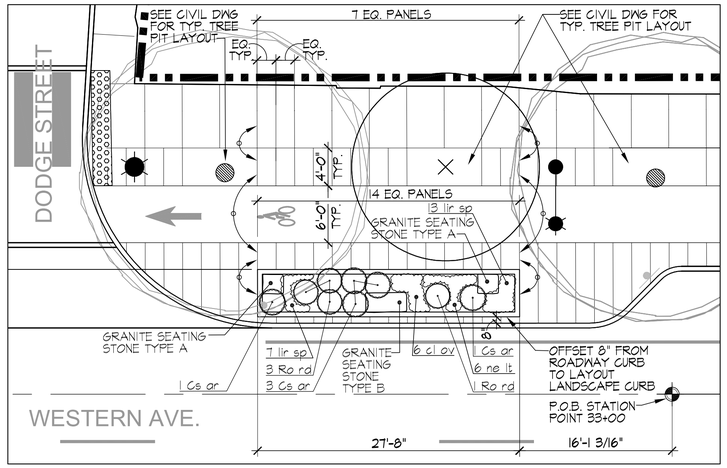
Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE PLANTING PLAN-1 & PLANTER ENLARGEMENT & LAYOUT PLAN

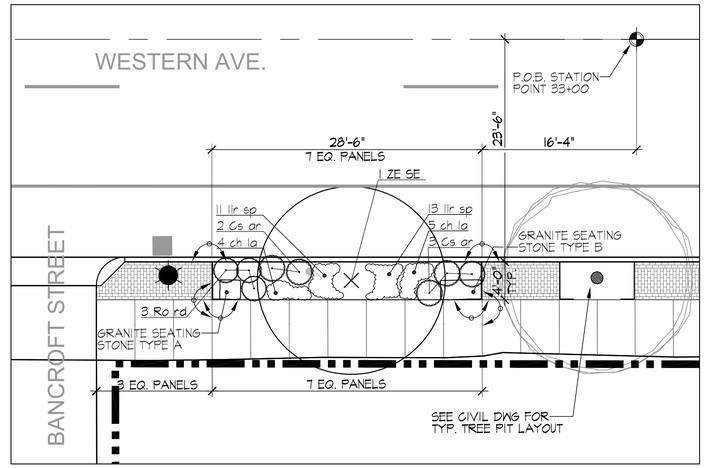
Sheet: SS-6

File No.

PLOT DATE=5/23/2012 3:21:31 PM USER=LIN TENG-YEN FILENAME=M:\Western Ave.- MASS\0_CAD\Sheets\SS-6-10_Streetscape Planting Plans.dwg



1 PLANTER NO. 3 ENLARGEMENT & LAYOUT PLAN
Scale: 1/8" = 1'-0"



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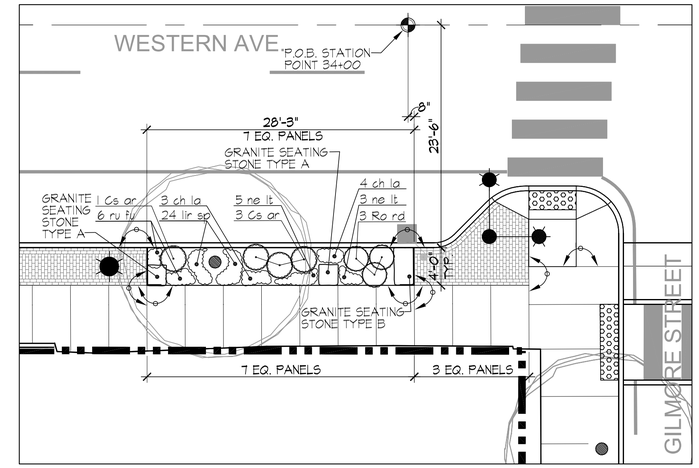

3 PLANTER NO. 5 ENLARGEMENT & LAYOUT PLAN
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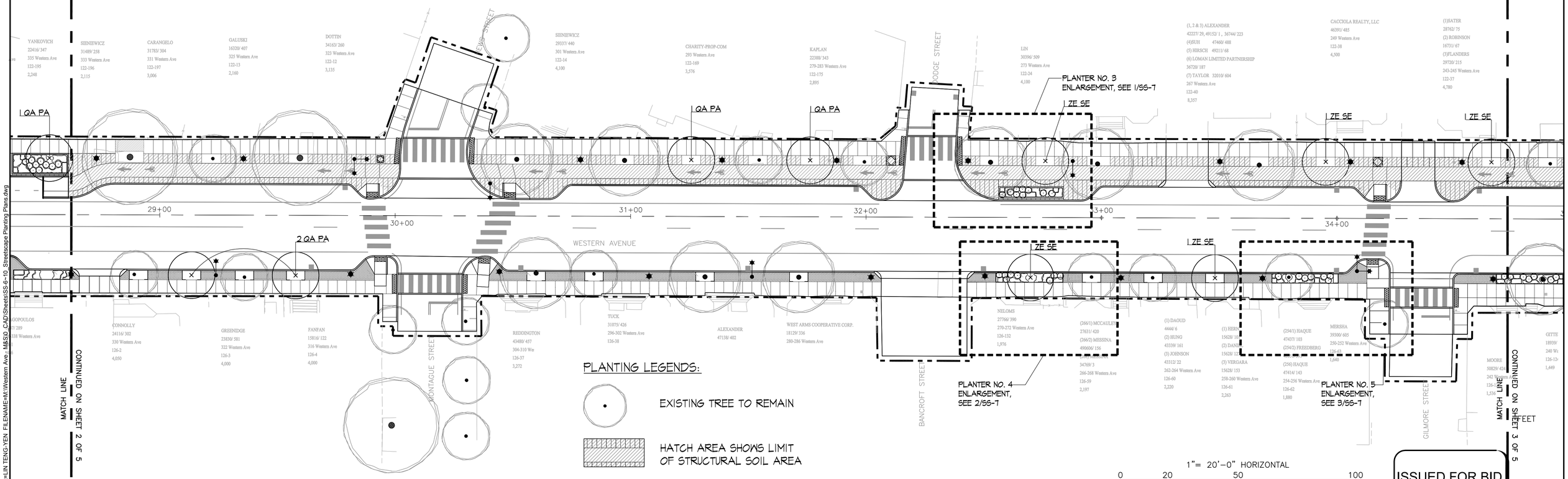

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WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS — KYNGAY WEBSTER SHEN — REGISTERED LANDSCAPE ARCHITECT

Scale	1"=20'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

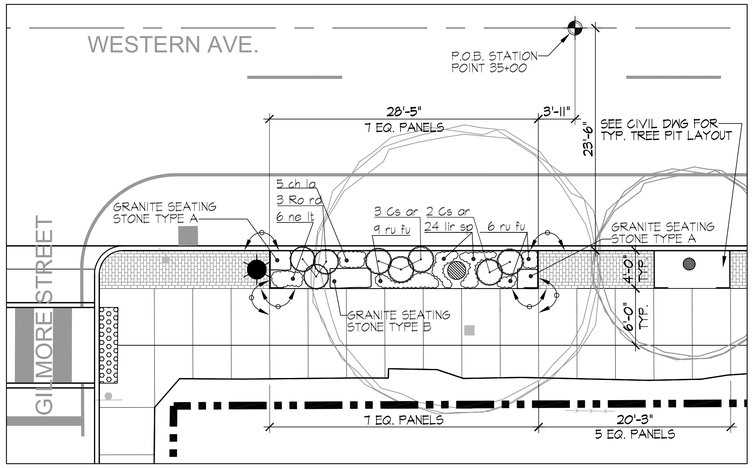
Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE PLANTING PLAN-2 & PLANTER ENLARGEMENT & LAYOUT PLAN

Sheet: SS-7

File No.



1 PLANTER NO. 6 ENLARGEMENT & LAYOUT PLAN
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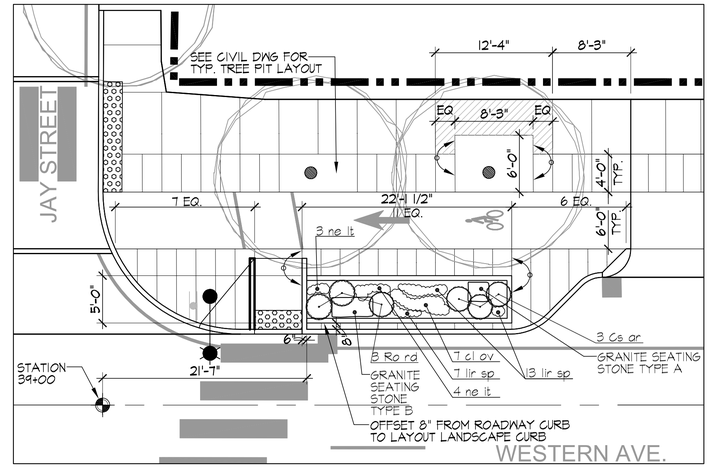

2 PLANTER NO. 6 ENLARGEMENT & LAYOUT PLAN
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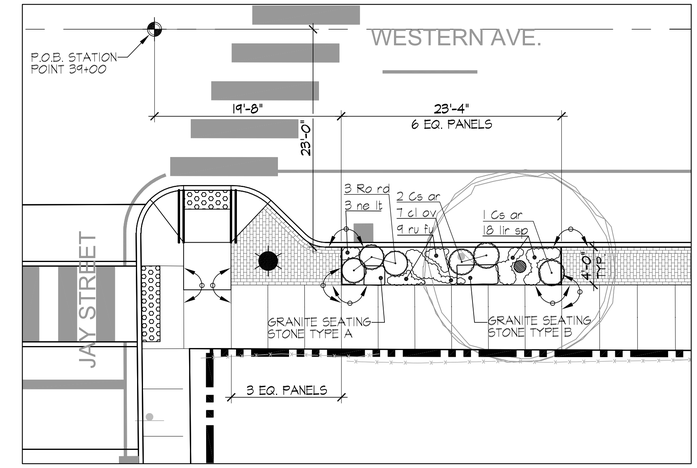

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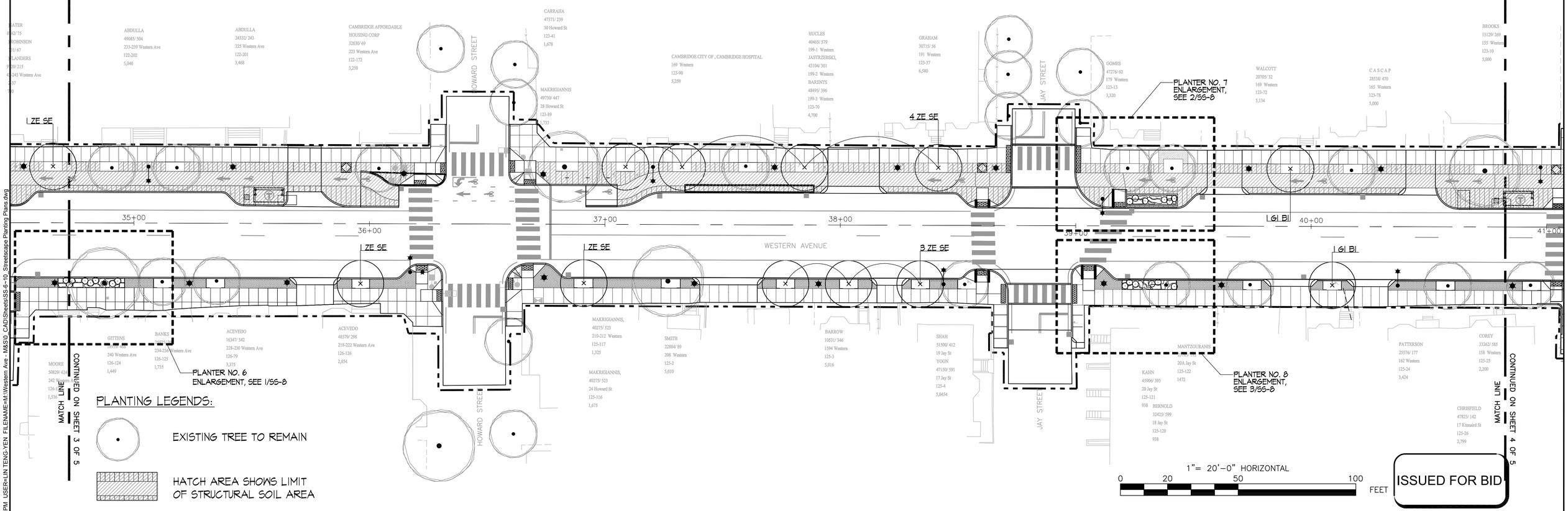

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LANDSCAPE ARCHITECTURE

MASSACHUSETTS · JOSEPH WEBSTER SHEA · REGISTERED LANDSCAPE ARCHITECT

Scale	1"=20'-0"			
Date	May, 2012			
Job No.	2009143.01-A			
Designed by	CS			
Drawn by	YL			
Checked by	CS	No.	Description	Date
Approved by	CS		REVISIONS	

THE WORKS · CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE PLANTING PLAN-3 & PLANTER ENLARGEMENT & LAYOUT PLAN

Sheet: SS-8

File No.

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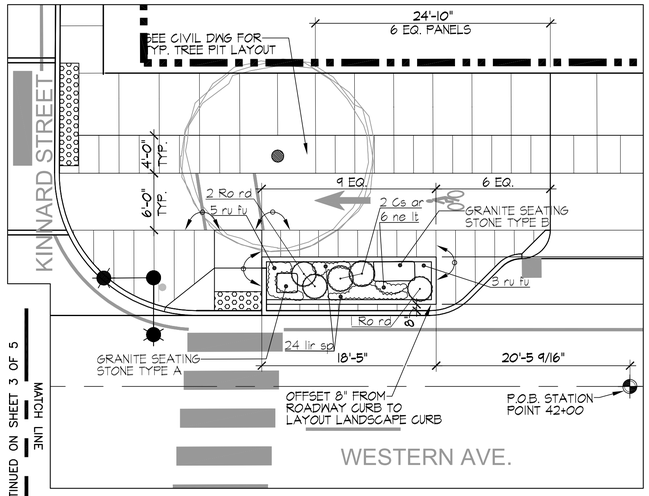

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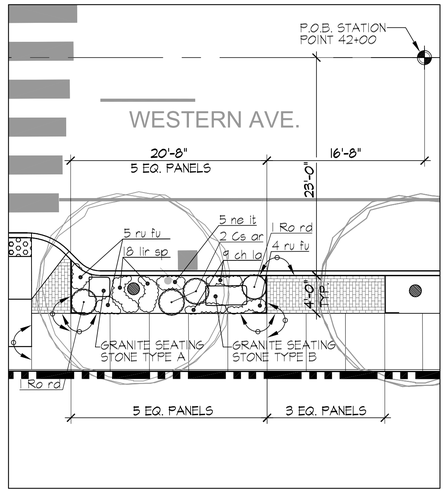

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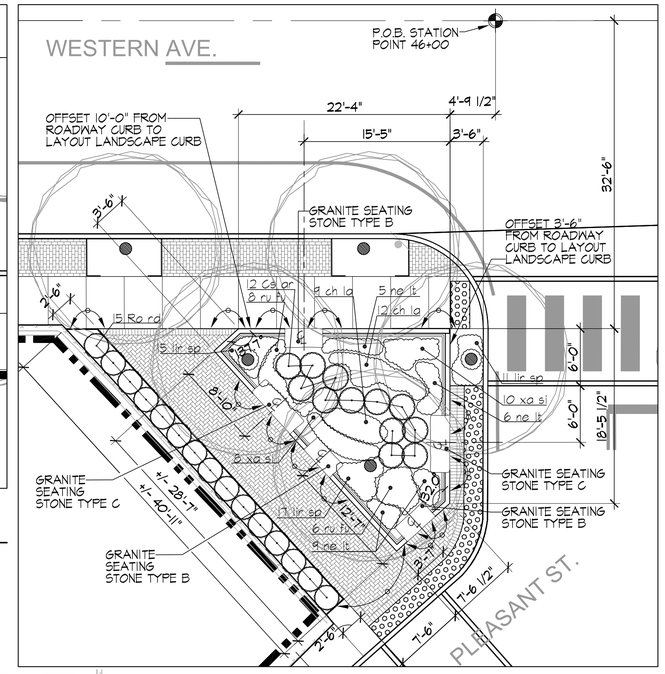

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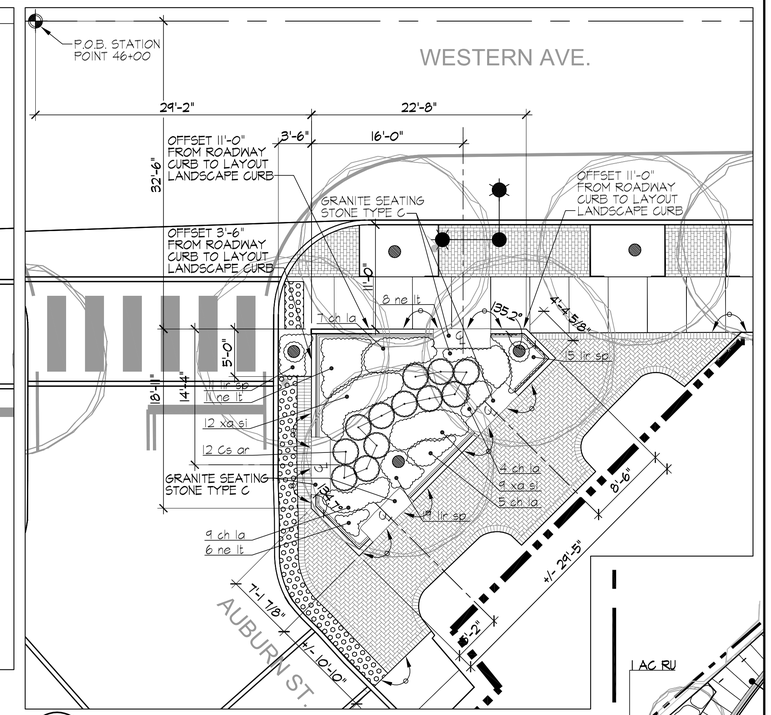

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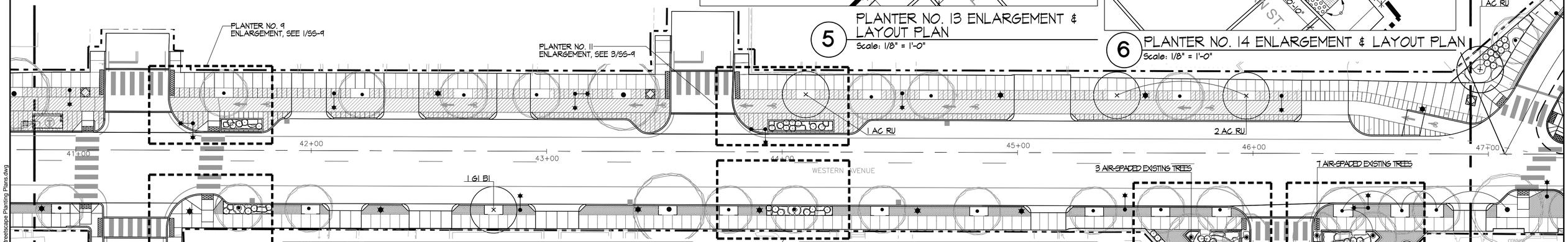
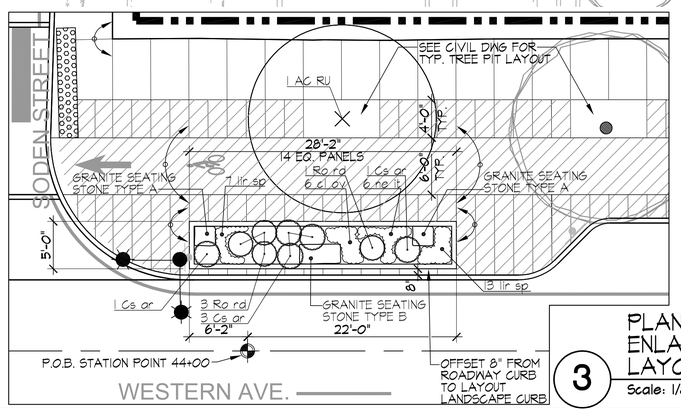
Scale: 1/8" = 1'-0"





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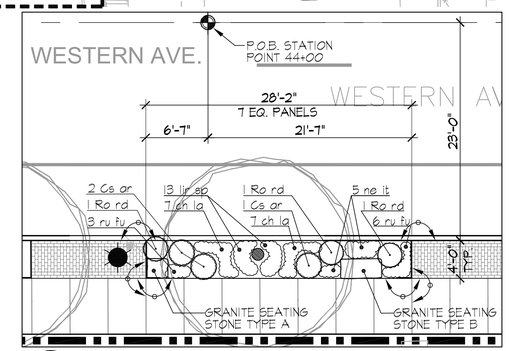

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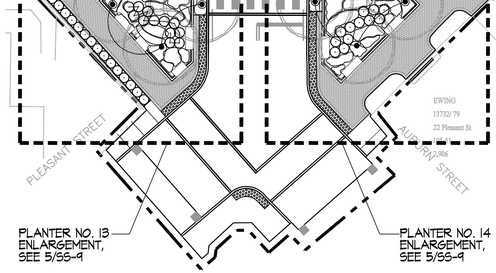

PLANTING LEGENDS:

EXISTING TREE TO REMAIN

HATCH AREA SHOWS LIMIT OF STRUCTURAL SOIL AREA

1"= 20'-0" HORIZONTAL
0 20 50 100 FEET

ISSUED FOR BID

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WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS CHERYL WEBSTER SHUE NO. 3167 REGISTERED LANDSCAPE ARCHITECT

Scale	1"=20'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE PLANTING PLAN-4 & PLANTER ENLARGEMENT & LAYOUT PLAN

Sheet: SS-9

File No.

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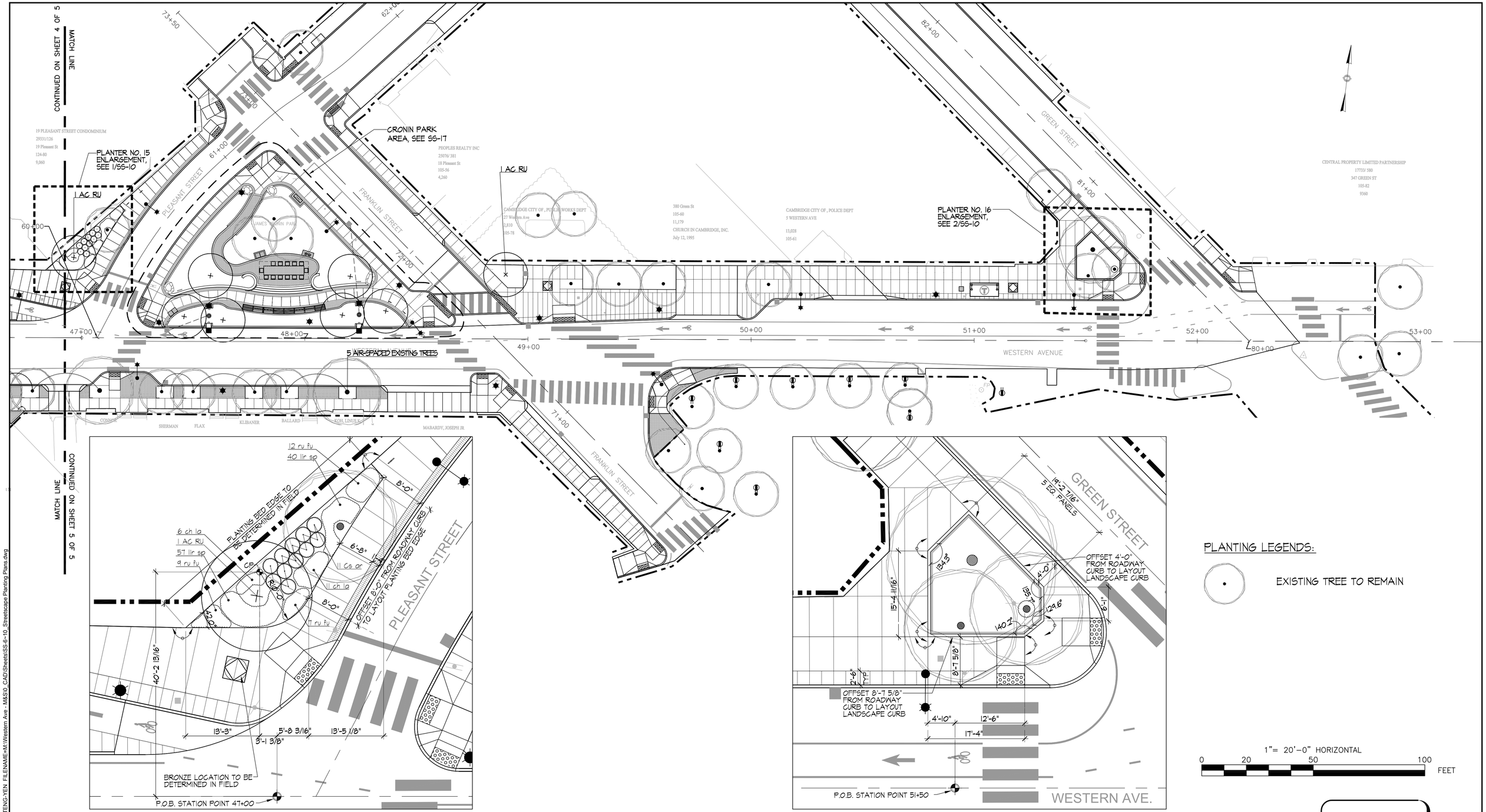

1 PLANTER NO. 15 ENLARGEMENT & LAYOUT PLAN

Scale: 1/8" = 1'-0"

2 PLANTER NO. 16 ENLARGEMENT & LAYOUT PLAN

Scale: 1/8" = 1'-0"

PLANTING LEGENDS:

EXISTING TREE TO REMAIN

1"= 20'-0" HORIZONTAL

0 20 50 100 FEET

ISSUED FOR BID

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WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS CENTRAL WESTERN ZONE REGISTERED LANDSCAPE ARCHITECT NO. 618

Scale	1"=20'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE PLANTING PLAN-5 & PLANTER ENLARGEMENT & LAYOUT PLAN

Sheet: SS-10

File No.

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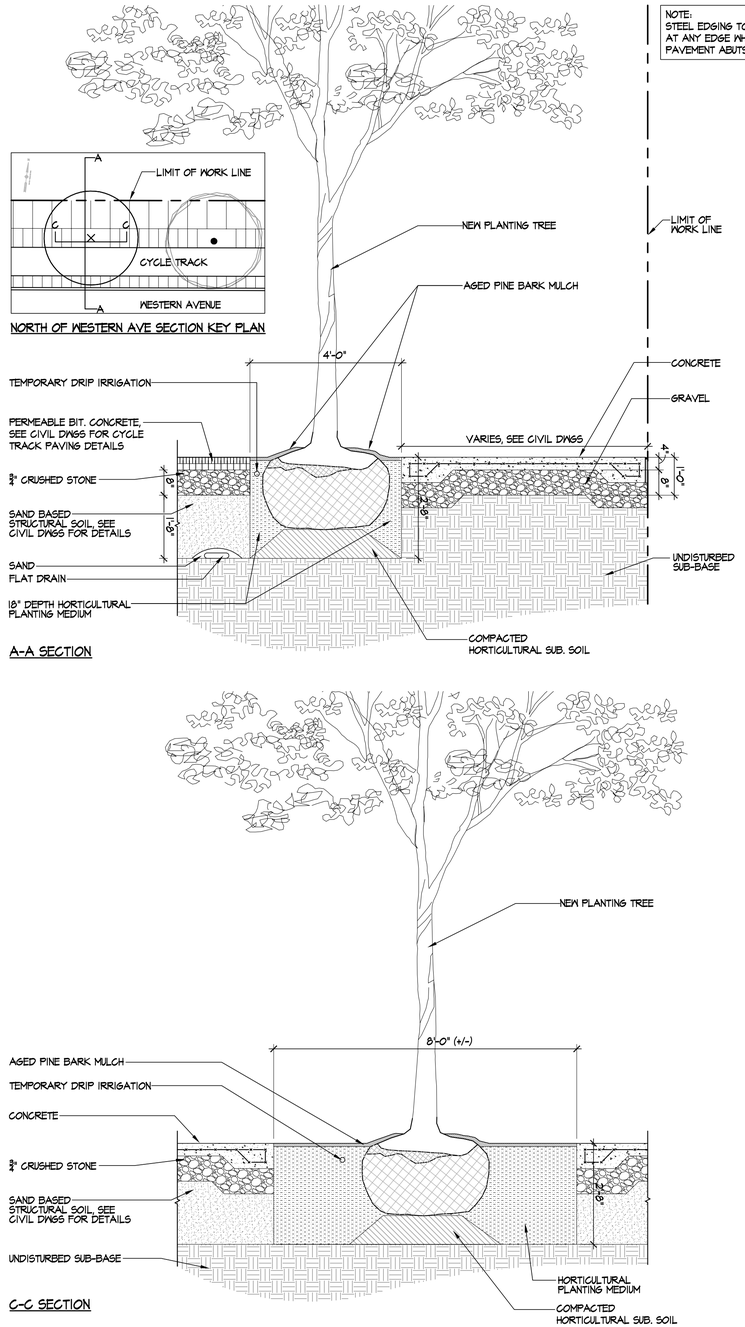
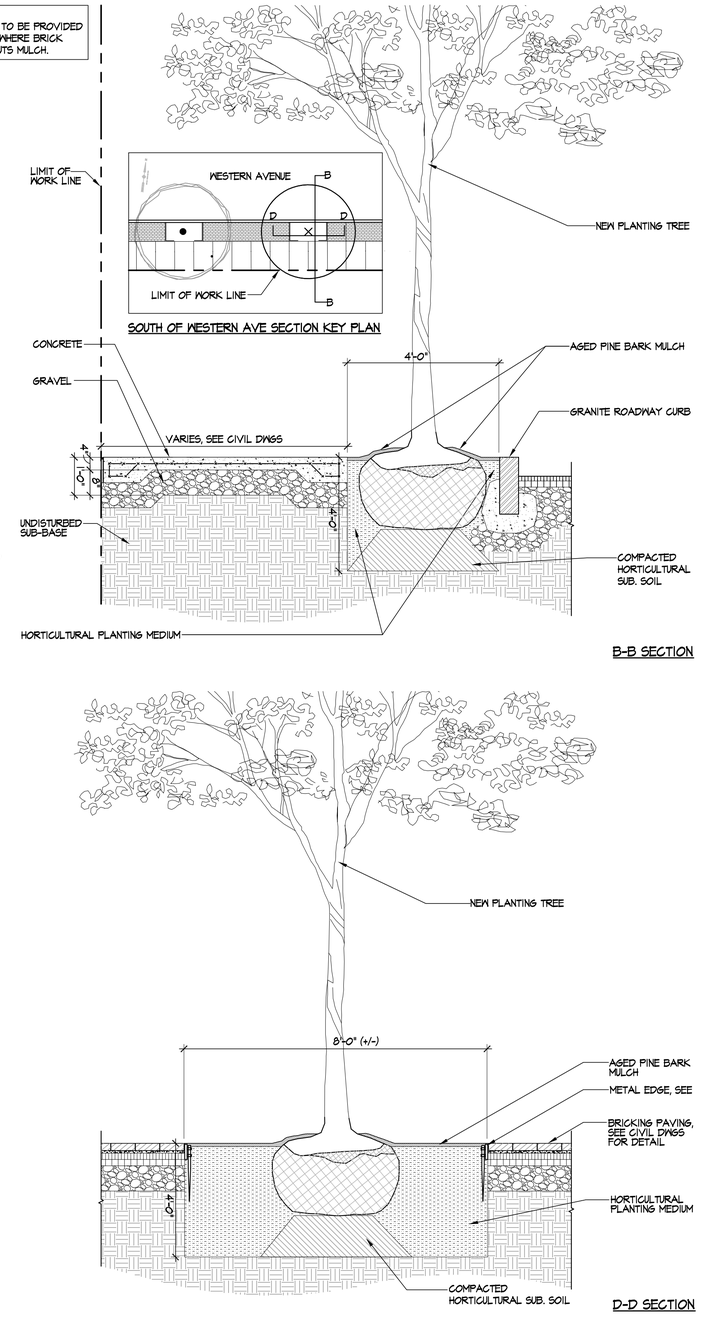


1 STREET TREE PLANTING AT NORTH SIDE WESTERN AVENUE, TYP

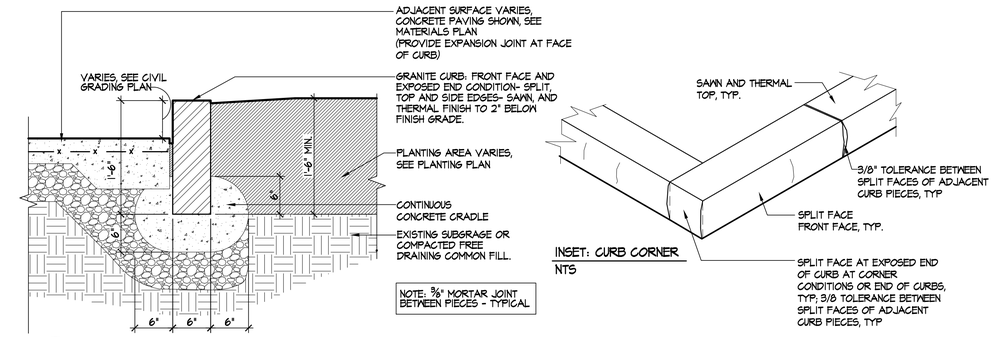
Scale: 1/2"=1'-0"

NOTE:
STEEL EDGING TO BE PROVIDED AT ANY EDGE WHERE BRICK PAVEMENT ABUTS MULCH.



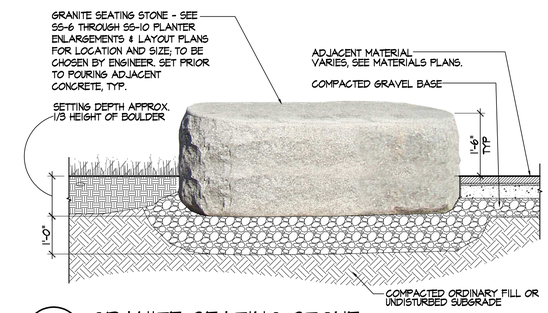
2 STREET TREE PLANTING AT SOUTH SIDE WESTERN AVENUE, TYP

Scale: 1/2"=1'-0"



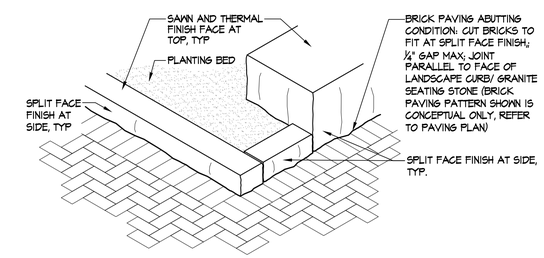
3 GRANITE LANDSCAPE CURB - 6" WIDTH

Scale: 1"=1'-0"



4 GRANITE SEATING STONE

Scale: Not to Scale



5 GRANITE SEATING STONE & LANDSCAPE GRANITE CURB - INTERFACE DETAILS

Scale: 1/2"=1'-0"

ISSUED FOR BID

KLEINFELDER Bright People. Right Solutions. · SEA — S E A CONSULTANTS INC.

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WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS — KRISTIN WEBSTER SHUM — No. 6147 — REGISTERED LANDSCAPE ARCHITECT

Scale	AS NOTED			
Date	May, 2012			
Job No.	2009143.01-A			
Designed by	CS			
Drawn by	YL			
Checked by	CS	No.	Description	Date
Approved by	CS		REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE DETAILS-1

Sheet: SS-11

File No.

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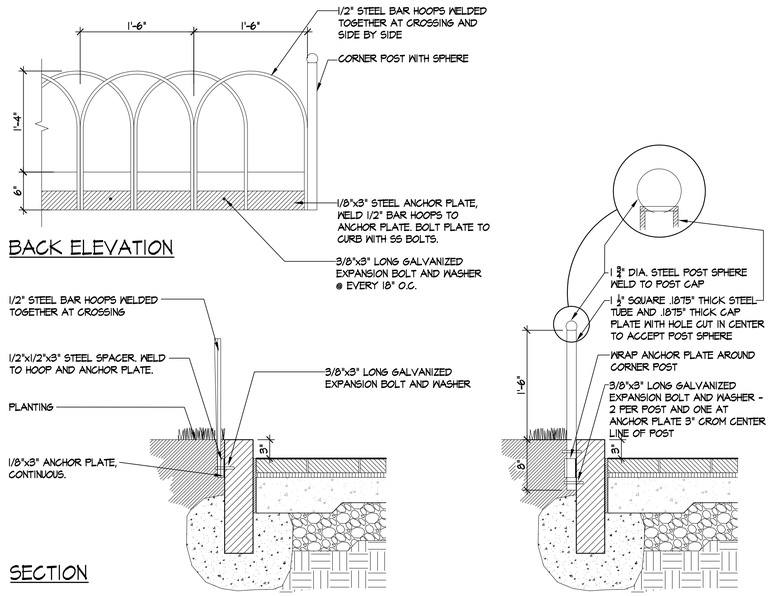
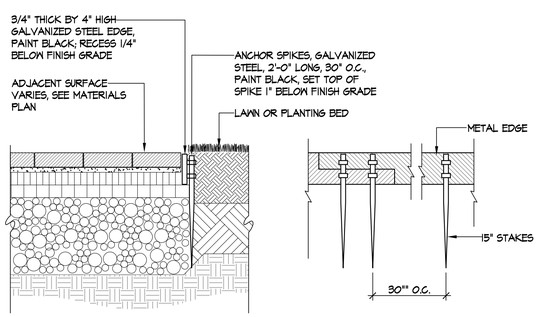
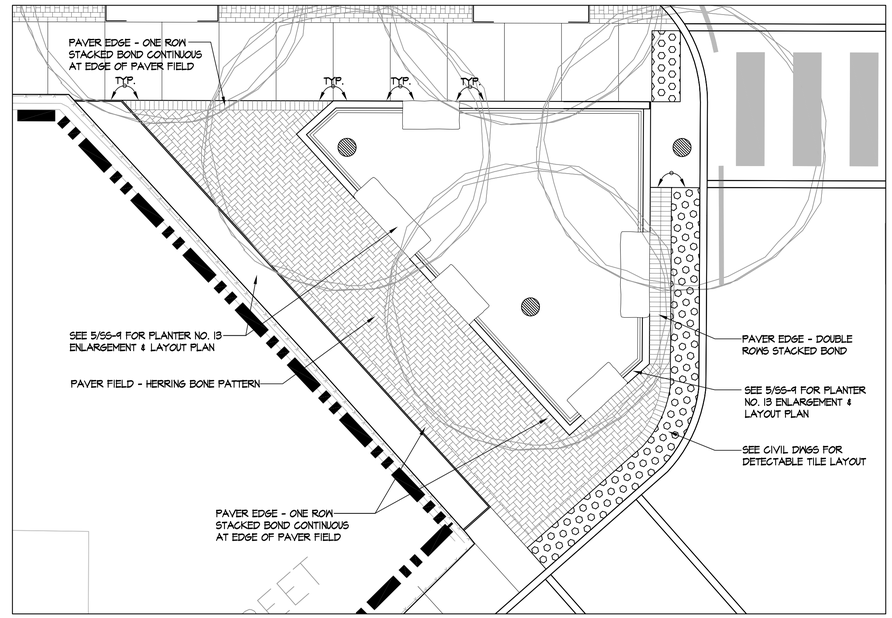


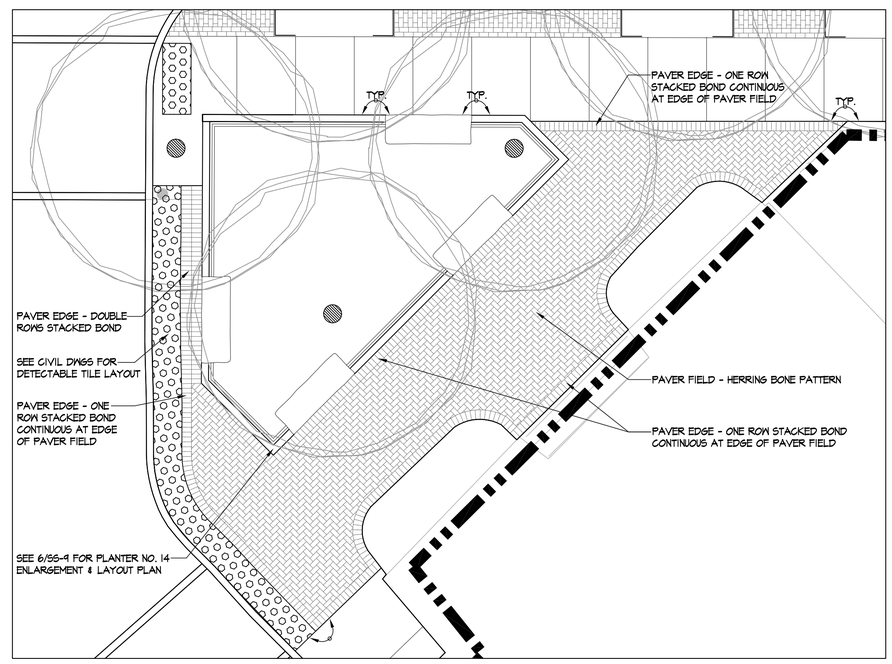
1 METAL LOOP AT PLANTER
Scale: 1"=1'-0"



2 METAL EDGING WITH ANCHORS
Scale: 1" = 1'-0"



3 PAVING ENLARGEMENT AT PLANTER NO. 13 AREA
Scale: 3/16"=1'-0"



4 PAVING ENLARGEMENT AT PLANTER NO. 14 AREA
Scale: 3/16"=1'-0"

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LANDSCAPE ARCHITECTURE

MASSACHUSETTS REGISTERED LANDSCAPE ARCHITECT

Scale	AS NOTED			
Date	May, 2012			
Job No.	2009143.01-A			
Designed by	CS			
Drawn by	YL			
Checked by	CS	No.	Description	Date
Approved by	CS		REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

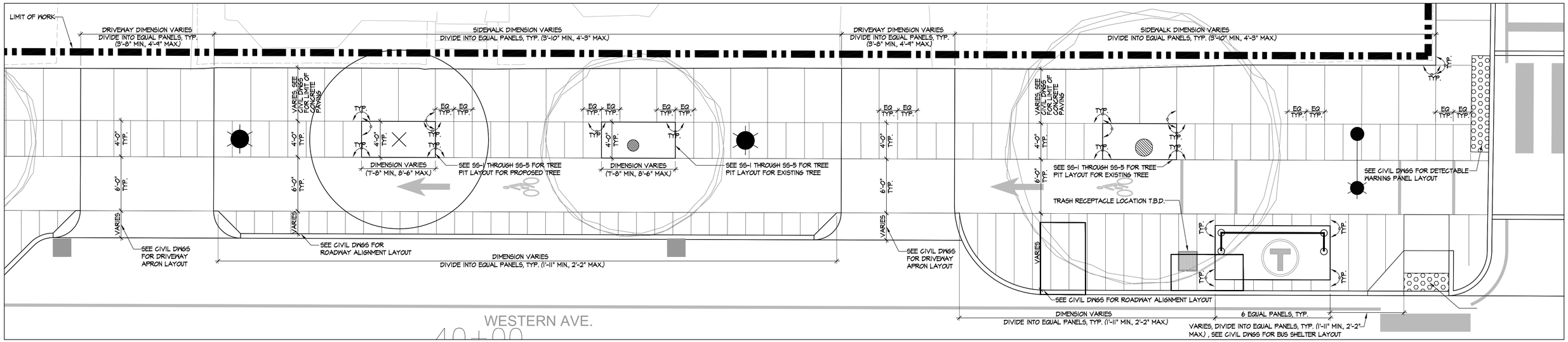
Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE DETAILS-2

Sheet: SS-12

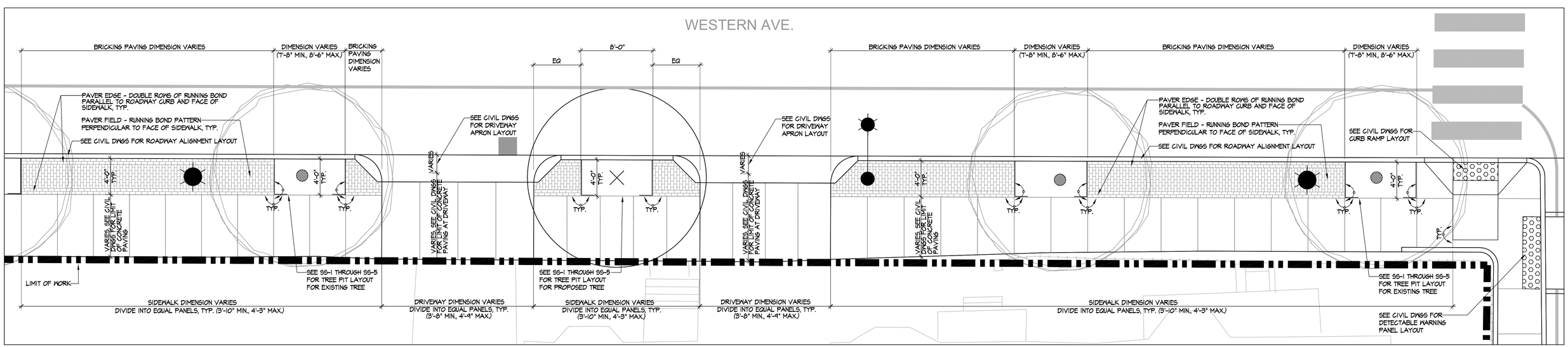
File No.

PLOT DATE=5/20/2012 12:05:52 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-12_Streetscape Details.dwg



1 TYPICAL CONCRETE SIDEWALK SAW CUT PATTERN ENLARGEMENT AT NORTH OF WESTERN AVENUE

Scale: 3/16"=1'-0"



2 TYPICAL CONCRETE SIDEWALK SAW CUT PATTERN AND BRICK PAVING ENLARGEMENT AT SOUTH OF WESTERN AVENUE

Scale: 3/16"=1'-0"

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LANDSCAPE ARCHITECTURE

MASSACHUSETTS ARTHUR WEBSTER SHAW REGISTERED LANDSCAPE ARCHITECT

Scale	AS NOTED
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

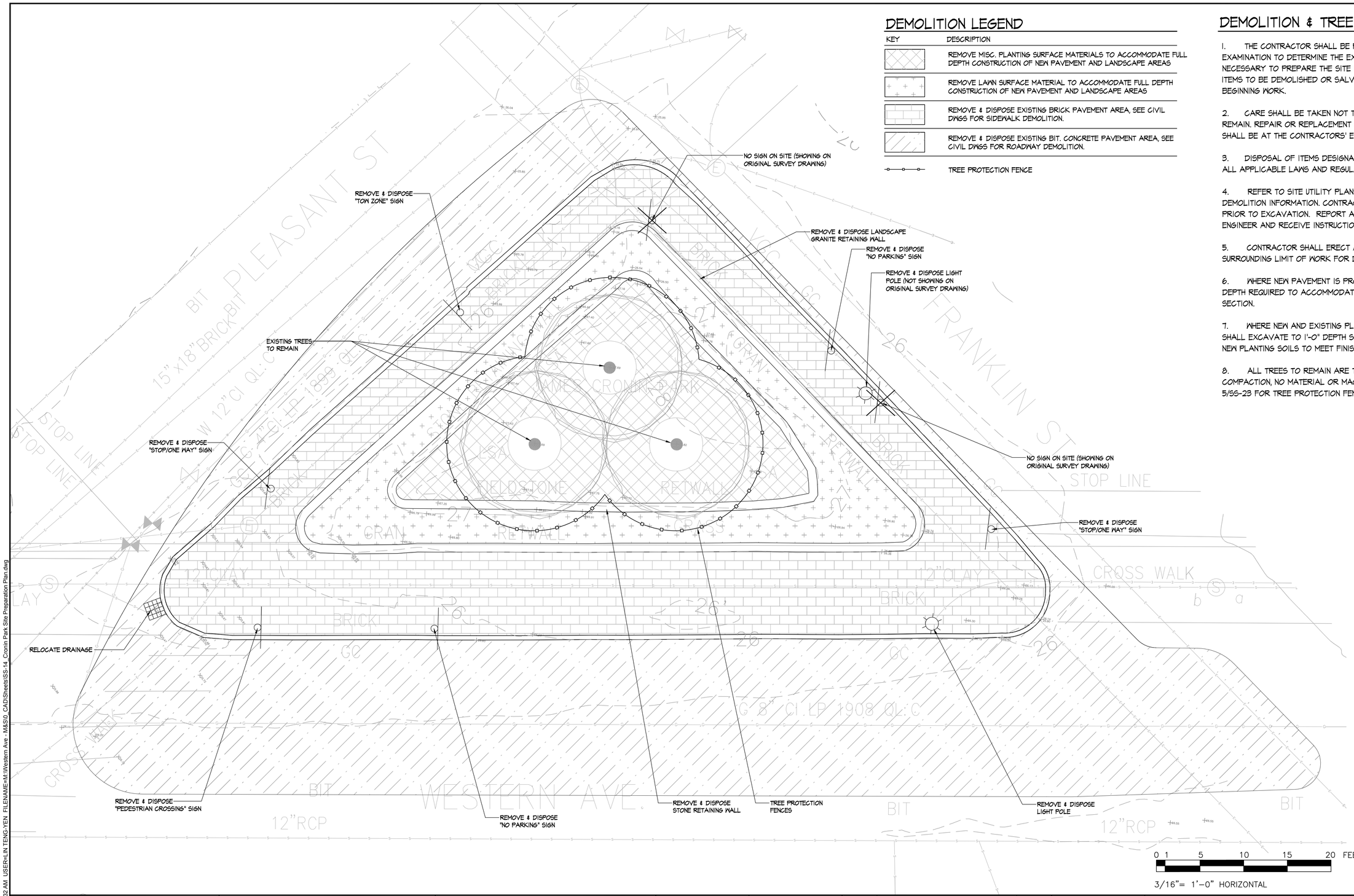
Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE DETAILS-3

Sheet: SS-13

File No.

PLOT DATE=5/20/2012 12:06:42 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-13_Streetscape Details.dwg



DEMOLITION LEGEND

KEY	DESCRIPTION
	REMOVE MISC. PLANTING SURFACE MATERIALS TO ACCOMMODATE FULL DEPTH CONSTRUCTION OF NEW PAVEMENT AND LANDSCAPE AREAS
	REMOVE LAWN SURFACE MATERIAL TO ACCOMMODATE FULL DEPTH CONSTRUCTION OF NEW PAVEMENT AND LANDSCAPE AREAS
	REMOVE & DISPOSE EXISTING BRICK PAVEMENT AREA, SEE CIVIL DWGS FOR SIDEWALK DEMOLITION.
	REMOVE & DISPOSE EXISTING BIT. CONCRETE PAVEMENT AREA, SEE CIVIL DWGS FOR ROADWAY DEMOLITION.
	TREE PROTECTION FENCE

DEMOLITION & TREE PROTECTION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A THOROUGH SITE EXAMINATION TO DETERMINE THE EXTENT OF DEMOLITION AND TREE PROTECTION NECESSARY TO PREPARE THE SITE FOR CONSTRUCTION AND SHALL VERIFY ALL ITEMS TO BE DEMOLISHED OR SALVAGED WITH THE ENGINEER PRIOR TO BEGINNING WORK.

2. CARE SHALL BE TAKEN NOT TO DAMAGE ANY ITEMS DESIGNATED TO REMAIN. REPAIR OR REPLACEMENT OF DAMAGED ITEMS DESIGNATED TO REMAIN SHALL BE AT THE CONTRACTORS' EXPENSE.

3. DISPOSAL OF ITEMS DESIGNATED TO BE REMOVED SHALL CONFORM TO ALL APPLICABLE LAWS AND REGULATIONS.

4. REFER TO SITE UTILITY PLANS FOR ALL UTILITY SITE PREPARATION AND DEMOLITION INFORMATION. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION. REPORT ANY DISCREPANCIES IN WRITING TO THE ENGINEER AND RECEIVE INSTRUCTIONS PRIOR TO PROCEEDING.

5. CONTRACTOR SHALL ERECT AND MAINTAIN CONSTRUCTION FENCING SURROUNDING LIMIT OF WORK FOR DURATION OF CONSTRUCTION OPERATIONS.

6. WHERE NEW PAVEMENT IS PROPOSED, CONTRACTOR SHALL EXCAVATE TO DEPTH REQUIRED TO ACCOMMODATE THE NEW FULL DEPTH PAVEMENT CROSS SECTION.

7. WHERE NEW AND EXISTING PLANTING BEDS ARE PROPOSED, CONTRACTOR SHALL EXCAVATE TO 1'-0" DEPTH SCARIFY BOTTOM OF EXCAVATION TO 2". ADD NEW PLANTING SOILS TO MEET FINISH GRADE.

8. ALL TREES TO REMAIN ARE TO BE PROTECTED DURING CONSTRUCTION. NO COMPACTION, NO MATERIAL OR MACHINERY STORAGE UNDER TREE CANOPY. SEE 5/SS-23 FOR TREE PROTECTION FENCE DETAIL.

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LANDSCAPE ARCHITECTURE

MASSACHUSETTS CHRIS WESTER CROSS NO. 6161 REGISTERED LANDSCAPE ARCHITECT

Scale	3/16"=1'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE - CRONIN PARK SITE PREPARATION PLAN

Sheet: SS-14

File No.

PLOT DATE=5/20/2012 12:07:32 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-14_Cronin Park Site Preparation Plan.dwg

MATERIALS PLAN NOTES

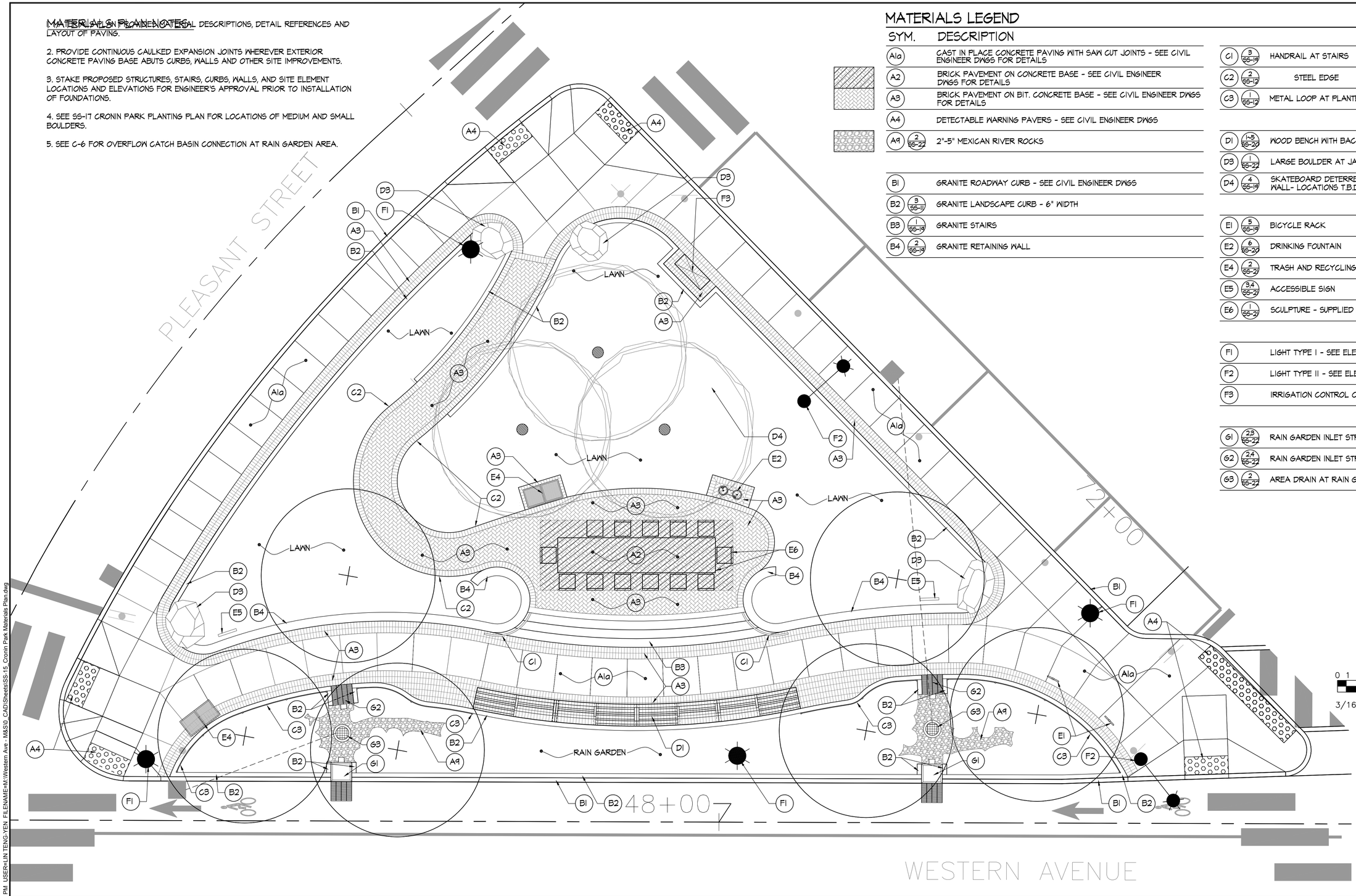
1. MATERIALS PLAN PROVIDES MATERIAL DESCRIPTIONS, DETAIL REFERENCES AND LAYOUT OF PAVING.

2. PROVIDE CONTINUOUS CAULKED EXPANSION JOINTS WHEREVER EXTERIOR CONCRETE PAVING BASE ABUTS CURBS, WALLS AND OTHER SITE IMPROVEMENTS.

3. STAKE PROPOSED STRUCTURES, STAIRS, CURBS, WALLS, AND SITE ELEMENT LOCATIONS AND ELEVATIONS FOR ENGINEER'S APPROVAL PRIOR TO INSTALLATION OF FOUNDATIONS.

4. SEE SS-17 CRONIN PARK PLANTING PLAN FOR LOCATIONS OF MEDIUM AND SMALL BOULDERS.

5. SEE C-6 FOR OVERFLOW CATCH BASIN CONNECTION AT RAIN GARDEN AREA.



MATERIALS LEGEND

SYM.	DESCRIPTION
A1a	CAST IN PLACE CONCRETE PAVING WITH SAW CUT JOINTS - SEE CIVIL ENGINEER DWGS FOR DETAILS
A2	BRICK PAVEMENT ON CONCRETE BASE - SEE CIVIL ENGINEER DWGS FOR DETAILS
A3	BRICK PAVEMENT ON BIT. CONCRETE BASE - SEE CIVIL ENGINEER DWGS FOR DETAILS
A4	DETECTABLE WARNING PAVERS - SEE CIVIL ENGINEER DWGS
A9	2/SS-22 2"-5" MEXICAN RIVER ROCKS
B1	GRANITE ROADWAY CURB - SEE CIVIL ENGINEER DWGS
B2	3/SS-11 GRANITE LANDSCAPE CURB - 6" WIDTH
B3	1/SS-19 GRANITE STAIRS
B4	2/SS-19 GRANITE RETAINING WALL
C1	3/SS-19 HANDRAIL AT STAIRS
C2	2/SS-19 STEEL EDGE
C3	1/SS-19 METAL LOOP AT PLANTER
D1	1-5/SS-20 WOOD BENCH WITH BACK
D3	1/SS-22 LARGE BOULDER AT JAMES CRONIN PARK
D4	4/SS-19 SKATEBOARD DETERRENT AT GRANITE RETAINING WALL- LOCATIONS T.B.D.
E1	5/SS-19 BICYCLE RACK
E2	6/SS-20 DRINKING FOUNTAIN
E4	2/SS-21 TRASH AND RECYCLING RECEPTACLE
E5	3,4/SS-21 ACCESSIBLE SIGN
E6	1/SS-21 SCULPTURE - SUPPLIED BY ARTIST - SEE ARTIST SPECIFICATION
F1	LIGHT TYPE I - SEE ELECTRICAL DWGS
F2	LIGHT TYPE II - SEE ELECTRICAL DWGS
F3	IRRIGATION CONTROL CABINET - SEE IRRIGATION DWGS
G1	2,3/SS-22 RAIN GARDEN INLET STRUCTURE, TYPE A
G2	2,4/SS-22 RAIN GARDEN INLET STRUCTURE, TYPE B
G3	2/SS-22 AREA DRAIN AT RAIN GARDEN AREA

0 1 5 10 15 20 FEET

3/16"= 1'-0" HORIZONTAL

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LANDSCAPE ARCHITECTURE

MASSACHUSETTS JAMES WEBSTER CRONIN REGISTERED LANDSCAPE ARCHITECT

Scale	3/16"=1'-0"			
Date	May, 2012			
Job No.	2009143.01-A			
Designed by	CS			
Drawn by	YL			
Checked by	CS	No.	Description	Date
Approved by	CS		REVISIONS	

THE WORKS CAMBRIDGE DEPARTMENT OF PUBLIC

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE - CRONIN PARK MATERIALS PLAN

Sheet: SS-15

File No.

PLOT DATE=5/21/2012 5:45:34 PM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-15_Cronin Park Materials Plan.dwg

LAYOUT PLAN NOTES:

1. PRIOR TO THE START OF ANY WORK THE CONTRACTOR SHALL MEET WITH THE OWNER, AND ENGINEER TO REVIEW THE PROJECT SCOPE.

2. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE DUE TO CONSTRUCTION OPERATIONS INSIDE AND OUTSIDE OF THE LIMIT OF WORK LINE.

3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION. REPORT ANY DISCREPANCIES IN WRITING TO THE ENGINEER AND RECEIVE WRITTEN INSTRUCTIONS PRIOR TO PROCEEDING.

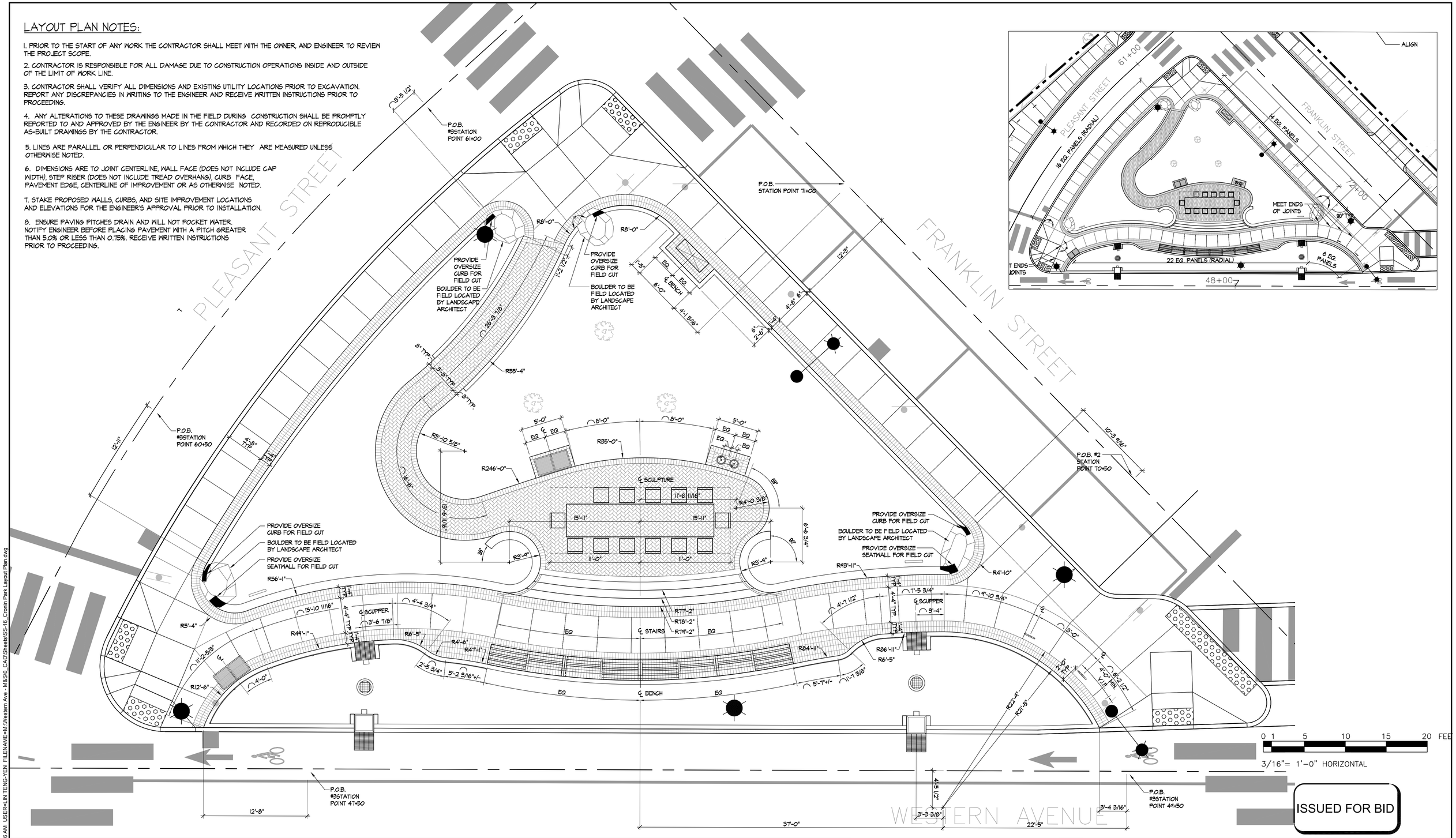
4. ANY ALTERATIONS TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE PROMPTLY REPORTED TO AND APPROVED BY THE ENGINEER BY THE CONTRACTOR AND RECORDED ON REPRODUCIBLE AS-BUILT DRAWINGS BY THE CONTRACTOR.

5. LINES ARE PARALLEL OR PERPENDICULAR TO LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE NOTED.

6. DIMENSIONS ARE TO JOINT CENTERLINE, WALL FACE (DOES NOT INCLUDE CAP WIDTH), STEP RISER (DOES NOT INCLUDE TREAD OVERHANG), CURB FACE, PAVEMENT EDGE, CENTERLINE OF IMPROVEMENT OR AS OTHERWISE NOTED.

7. STAKE PROPOSED WALLS, CURBS, AND SITE IMPROVEMENT LOCATIONS AND ELEVATIONS FOR THE ENGINEER'S APPROVAL PRIOR TO INSTALLATION.

8. ENSURE PAVING PITCHES DRAIN AND WILL NOT POCKET WATER. NOTIFY ENGINEER BEFORE PLACING PAVEMENT WITH A PITCH GREATER THAN 5.0% OR LESS THAN 0.75%. RECEIVE WRITTEN INSTRUCTIONS PRIOR TO PROCEEDING.



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LANDSCAPE ARCHITECTURE

MASSACHUSETTS — JONATHAN WEBSTER SHAW — No. 6167 — REGISTERED LANDSCAPE ARCHITECT

Scale	3/16"=1'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE - CRONIN PARK LAYOUT PLAN

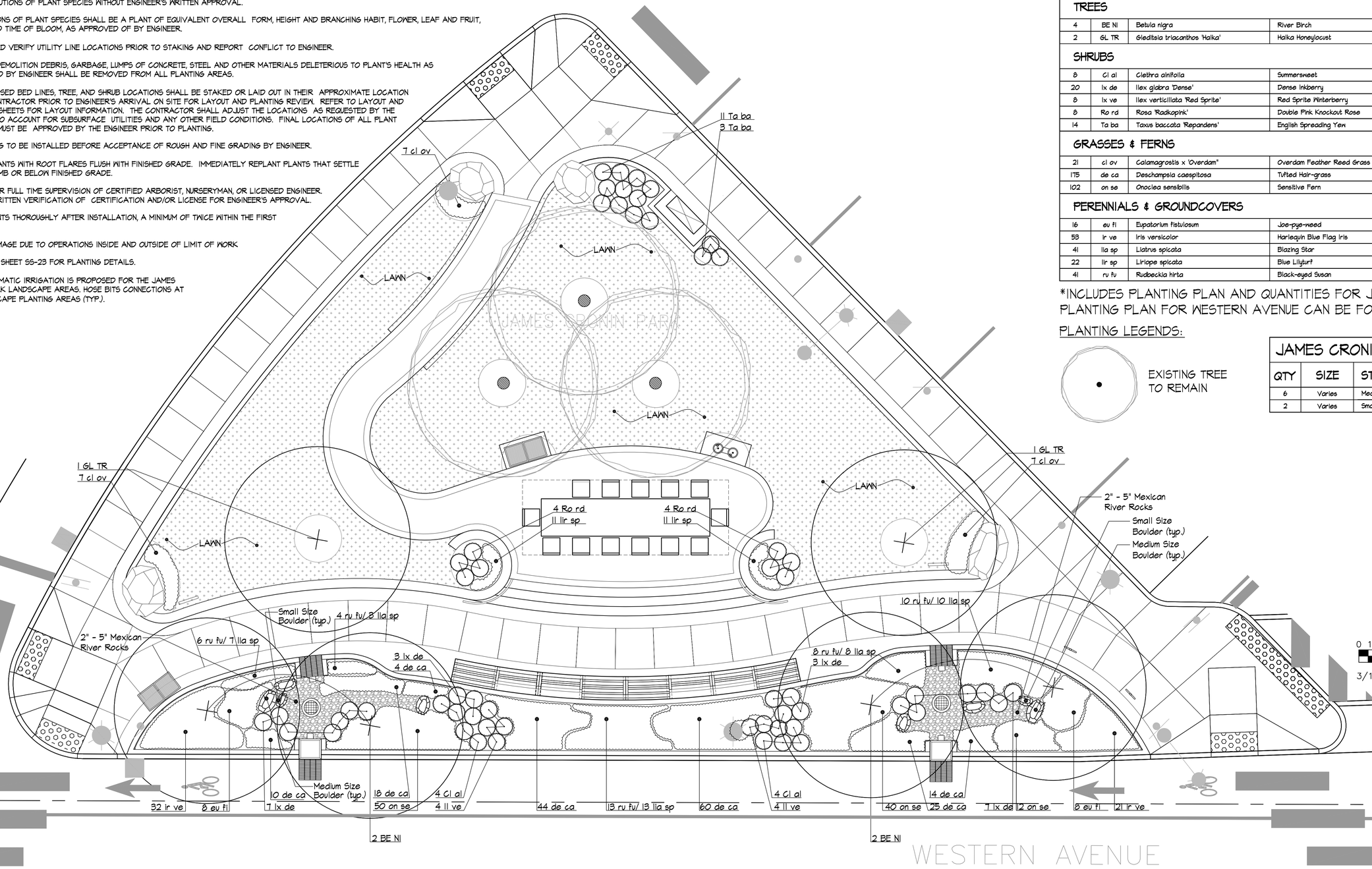
Sheet: SS-16

File No.

PLOT DATE=5/20/2012 12:13:16 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - MASW_CAD\Sheets\SS-16_Cronin Park Layout Plan.dwg

PLANTING NOTES:

1. ENGINEER TO APPROVE PLANT MATERIAL PRIOR TO DELIVERY TO SITE.
2. PLANT MATERIAL SHALL CONFORM TO "THE AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
3. NO SUBSTITUTIONS OF PLANT SPECIES WITHOUT ENGINEER'S WRITTEN APPROVAL.
4. SUBSTITUTIONS OF PLANT SPECIES SHALL BE A PLANT OF EQUIVALENT OVERALL FORM, HEIGHT AND BRANCHING HABIT, FLOWER, LEAF AND FRUIT, COLOR AND TIME OF BLOOM, AS APPROVED OF BY ENGINEER.
5. LOCATE AND VERIFY UTILITY LINE LOCATIONS PRIOR TO STAKING AND REPORT CONFLICT TO ENGINEER.
6. PLANTING DEMOLITION DEBRIS, GARBAGE, LUMPS OF CONCRETE, STEEL AND OTHER MATERIALS DELETERIOUS TO PLANT'S HEALTH AS DETERMINED BY ENGINEER SHALL BE REMOVED FROM ALL PLANTING AREAS.
7. ALL PROPOSED BED LINES, TREE, AND SHRUB LOCATIONS SHALL BE STAKED OR LAID OUT IN THEIR APPROXIMATE LOCATION BY THE CONTRACTOR PRIOR TO ENGINEER'S ARRIVAL ON SITE FOR LAYOUT AND PLANTING REVIEW. REFER TO LAYOUT AND PLANTING SHEETS FOR LAYOUT INFORMATION. THE CONTRACTOR SHALL ADJUST THE LOCATIONS AS REQUESTED BY THE ENGINEER TO ACCOUNT FOR SUBSURFACE UTILITIES AND ANY OTHER FIELD CONDITIONS. FINAL LOCATIONS OF ALL PLANT MATERIAL MUST BE APPROVED BY THE ENGINEER PRIOR TO PLANTING.
8. NO PLANTING TO BE INSTALLED BEFORE ACCEPTANCE OF ROUGH AND FINE GRADING BY ENGINEER.
9. INSTALL PLANTS WITH ROOT FLARES FLUSH WITH FINISHED GRADE. IMMEDIATELY REPLANT PLANTS THAT SETTLE OUT OF PLUMB OR BELOW FINISHED GRADE.
10. PLANT UNDER FULL TIME SUPERVISION OF CERTIFIED ARBORIST, NURSERYMAN, OR LICENSED ENGINEER. PROVIDE WRITTEN VERIFICATION OF CERTIFICATION AND/OR LICENSE FOR ENGINEER'S APPROVAL.
11. WATER PLANTS THOROUGHLY AFTER INSTALLATION, A MINIMUM OF TWICE WITHIN THE FIRST 24 HOURS.
12. REPAIR DAMAGE DUE TO OPERATIONS INSIDE AND OUTSIDE OF LIMIT OF WORK.
13. SEE DETAIL SHEET SS-23 FOR PLANTING DETAILS.
14. FULLY AUTOMATIC IRRIGATION IS PROPOSED FOR THE JAMES CRONIN PARK LANDSCAPE AREAS. HOSE BITS CONNECTIONS AT ALL LANDSCAPE PLANTING AREAS (TYP.).



0 1 5 10 15 20 FEET

3/16"= 1'-0" HORIZONTAL

JAMES CRONIN PARK PLANT LIST*:

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
TREES					
4	BE Nl	Betula nigra	River Birch	12'-14' ht.	Min. 3 Multi Stem
2	GL TR	Gleditsia triacanthos 'Halka'	Halka Honeylocust	4"-4 ½" cal.	Specimen
SHRUBS					
8	Cl al	Clethra alnifolia	Summersweet	18"-24" ht.	B&B or Cont.
20	Ix de	Ilex glabra 'Dense'	Dense Inkberry	18"-24" ht.	B&B or Cont.
8	Ix ve	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry	18"-24" ht.	B&B or Cont.
8	Ro rd	Rosa 'Radkopink'	Double Pink Knockout Rose	18"-24" ht.	B&B or Cont.
14	Ta ba	Taxus baccata 'Repandens'	English Spreading Yew	18"-24" ht.	B&B or Cont.
GRASSES & FERNS					
21	cl ov	Calamagrostis x 'Overdam'	Overdam Feather Reed Grass	3 gal.	18"-24" O.C.
175	de ca	Deschampsia caespitosa	Tufted Hair-grass	1 gal.	15"-18" O.C.
102	on se	Onoclea sensibilis	Sensitive Fern	1 gal.	15"-18" O.C.
PERENNIALS & GROUNDCOVERS					
16	eu fi	Eupatorium fistulosum	Joe-pye-weed	2 gal.	18"-24" O.C.
53	ir ve	Iris versicolor	Harlequin Blue Flag Iris	1 gal.	18"-24" O.C.
41	lia sp	Liatrus spicata	Blazing Star	2 gal.	18"-24" O.C.
22	lir sp	Liriope spicata	Blue Lilyturf	1 gal.	10"-12" O.C.
41	ru fu	Rudbeckia hirta	Black-eyed Susan	1 gal.	18"-24" O.C.

*INCLUDES PLANTING PLAN AND QUANTITIES FOR JAMES CRONIN PARK ONLY: PLANTING PLAN FOR WESTERN AVENUE CAN BE FOUND ON SHEET SS-6.

PLANTING LEGENDS:

EXISTING TREE TO REMAIN

JAMES CRONIN PARK STONE LIST:

QTY	SIZE	STONE PRODUCT
6	Varies	Medium Natural Stone Boulder
2	Varies	Small Natural Stone Boulder

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LANDSCAPE ARCHITECTURE

MASSACHUSETTS JAMES WEBSTER DRIVE JR. REGISTERED LANDSCAPE ARCHITECT

Scale	3/16"=1'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

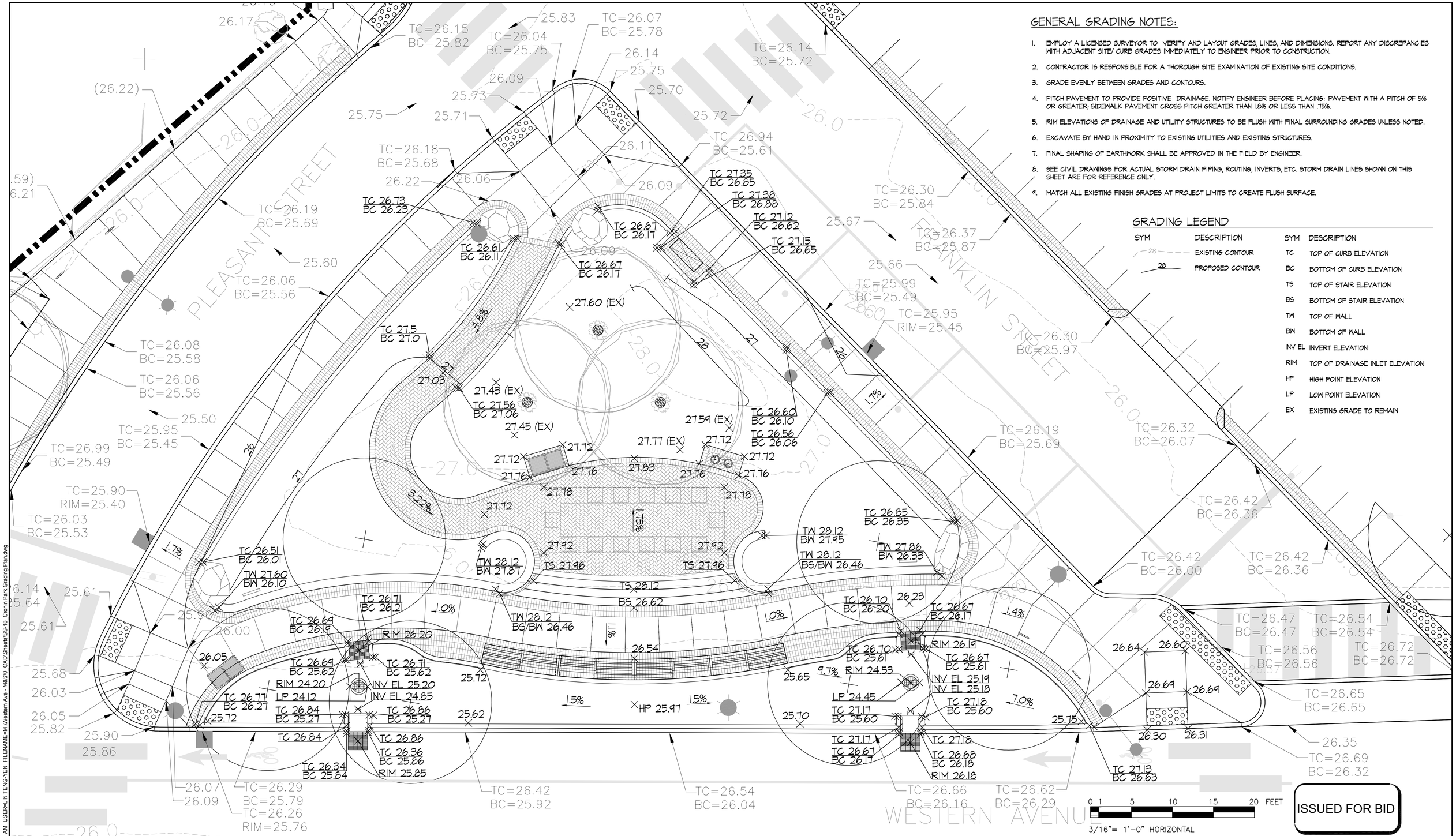
Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE - CRONIN PARK PLANTING PLAN

Sheet: SS-17

File No.

PLOT DATE=5/20/2012 12:13:59 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-17_Cronin Park Planting Plan.dwg



GENERAL GRADING NOTES:

1. EMPLOY A LICENSED SURVEYOR TO VERIFY AND LAYOUT GRADES, LINES, AND DIMENSIONS. REPORT ANY DISCREPANCIES WITH ADJACENT SITE/ CURB GRADES IMMEDIATELY TO ENGINEER PRIOR TO CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR A THOROUGH SITE EXAMINATION OF EXISTING SITE CONDITIONS.
3. GRADE EVENLY BETWEEN GRADES AND CONTOURS.
4. PITCH PAVEMENT TO PROVIDE POSITIVE DRAINAGE. NOTIFY ENGINEER BEFORE PLACING: PAVEMENT WITH A PITCH OF 5% OR GREATER; SIDEWALK PAVEMENT CROSS PITCH GREATER THAN 1.8% OR LESS THAN .75%.
5. RIM ELEVATIONS OF DRAINAGE AND UTILITY STRUCTURES TO BE FLUSH WITH FINAL SURROUNDING GRADES UNLESS NOTED.
6. EXCAVATE BY HAND IN PROXIMITY TO EXISTING UTILITIES AND EXISTING STRUCTURES.
7. FINAL SHAPING OF EARTHWORK SHALL BE APPROVED IN THE FIELD BY ENGINEER.
8. SEE CIVIL DRAWINGS FOR ACTUAL STORM DRAIN PIPING, ROUTING, INVERTS, ETC. STORM DRAIN LINES SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY.
9. MATCH ALL EXISTING FINISH GRADES AT PROJECT LIMITS TO CREATE FLUSH SURFACE.

GRADING LEGEND

SYM	DESCRIPTION	SYM	DESCRIPTION
28	EXISTING CONTOUR	TC	TOP OF CURB ELEVATION
28	PROPOSED CONTOUR	BC	BOTTOM OF CURB ELEVATION
		TS	TOP OF STAIR ELEVATION
		BS	BOTTOM OF STAIR ELEVATION
		TW	TOP OF WALL
		BW	BOTTOM OF WALL
		INV EL	INVERT ELEVATION
		RIM	TOP OF DRAINAGE INLET ELEVATION
		HP	HIGH POINT ELEVATION
		LP	LOW POINT ELEVATION
		EX	EXISTING GRADE TO REMAIN

ISSUED FOR BID

KLEINFELDER Bright People. Right Solutions. · SEA — SEA CONSULTANTS INC.

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LANDSCAPE ARCHITECTURE

MASSACHUSETTS CHRISTIAN WEBSTER SHUB NO. 618 REGISTERED LANDSCAPE ARCHITECT

Scale	3/16"=1'-0"
Date	May, 2012
Job No.	2009143.01-A
Designed by	CS
Drawn by	YL
Checked by	CS
Approved by	CS

No.	Description	Date
	REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

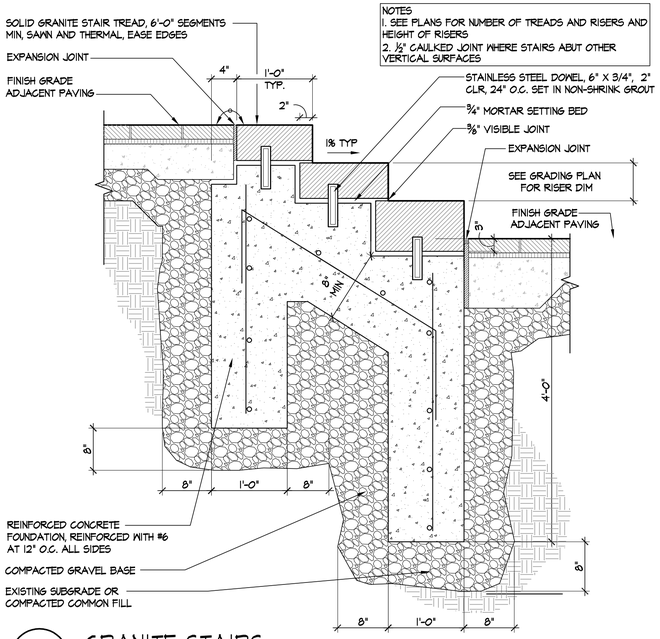
Drawing: STREETSCAPE - CRONIN PARK GRADING PLAN

Sheet: SS-18

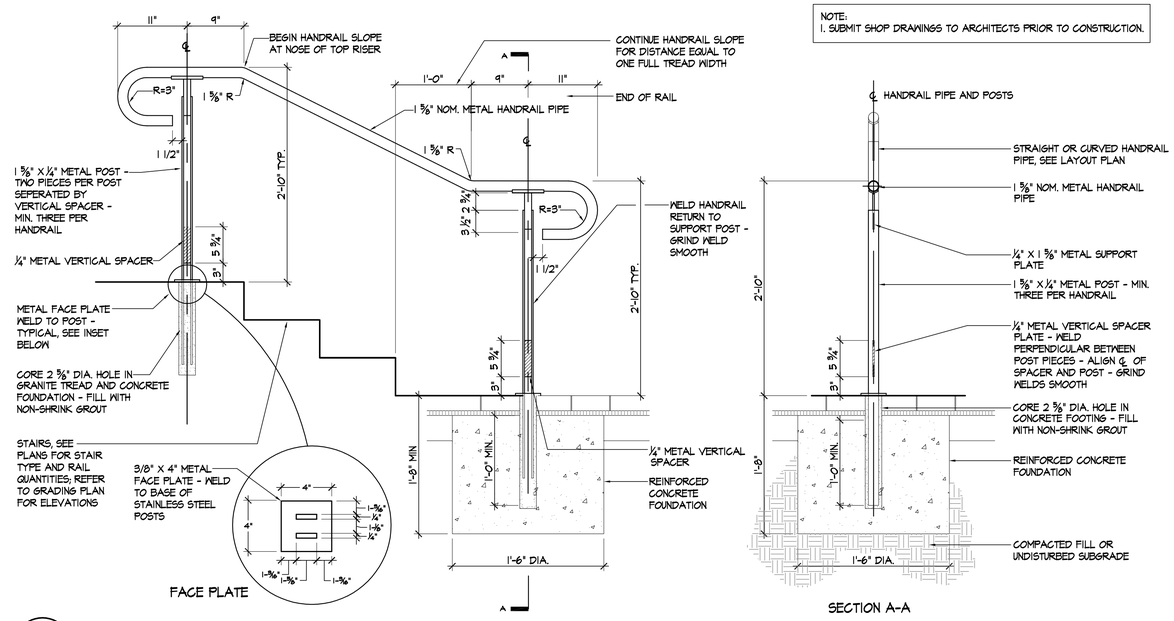
File No.

PLOT DATE=5/20/2012 12:14:41 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-18_Cronin Park Grading Plan.dwg

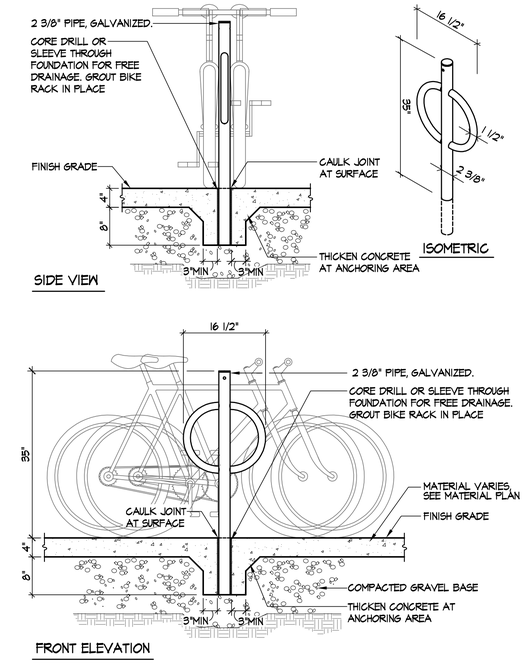
NOTES
1. SEE PLANS FOR NUMBER OF TREADS AND RISERS AND HEIGHT OF RISERS
2. ½" CAULKED JOINT WHERE STAIRS ABUT OTHER VERTICAL SURFACES



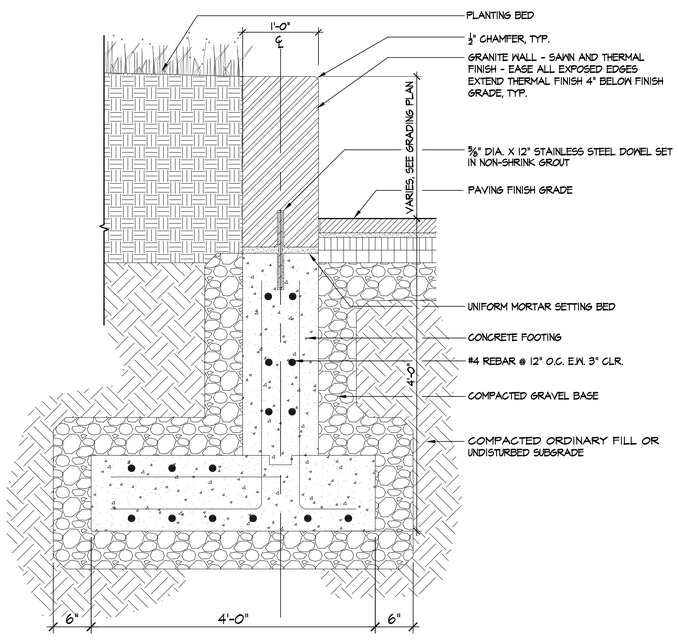
1 GRANITE STAIRS
Scale: 1"=1'-0"



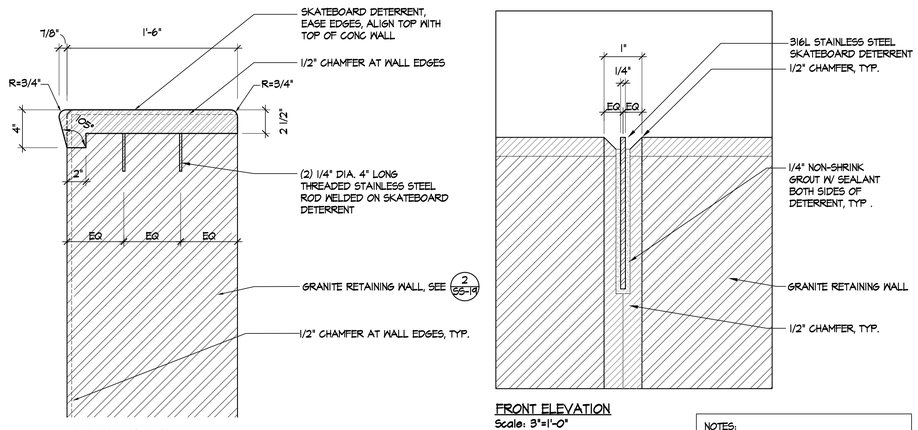
3 HANDRAIL AT STAIRS
Scale: 1"=1'-0"



5 BIKE RACK - CITY OF CAMBRIDGE STANDARD
Scale: 3/4"=1'-0"



2 GRANITE RETAINING WALL
Scale: 1"=1'-0"



NOTES:
SEE MATERIALS PLAN FOR LOCATION AND QUANTITY OF SKATEBOARD DETERRENTS

4 SKATEBOARD DETERRENT AT GRANITE RETAINING WALL
Scale: AS NOTED

ISSUED FOR BID

KLEINFELDER Bright People. Right Solutions. | SEA CONSULTANTS INC.

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HALVORSON DESIGN PARTNERSHIP
161 MASSACHUSETTS AVENUE, BOSTON MA 02115-3050
(PHONE) 617.536.0380 (FAX) 617.536.0626
WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

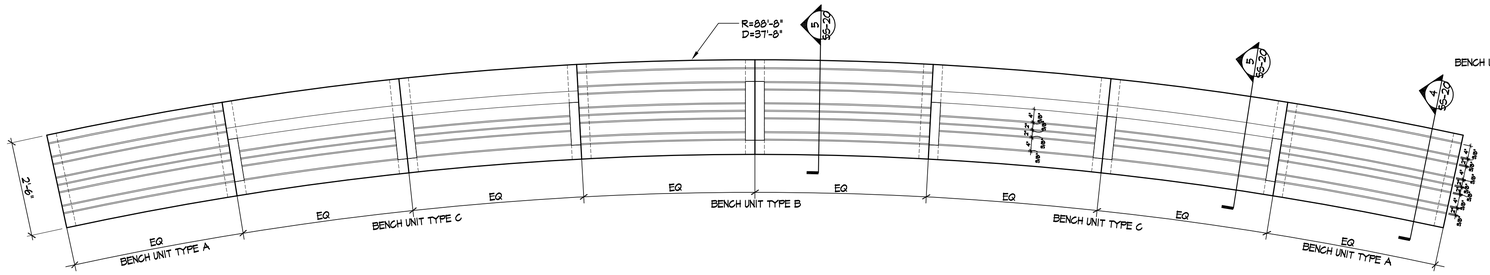
MASSACHUSETTS NORTH WEBSTER, OHIO REGISTERED LANDSCAPE ARCHITECT NO. 619

Scale	AS NOTED			
Date	May, 2012			
Job No.	2009143.01-A			
Designed by	CS			
Drawn by	YL			
Checked by	CS	No.	Description	Date
Approved by	CS		REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

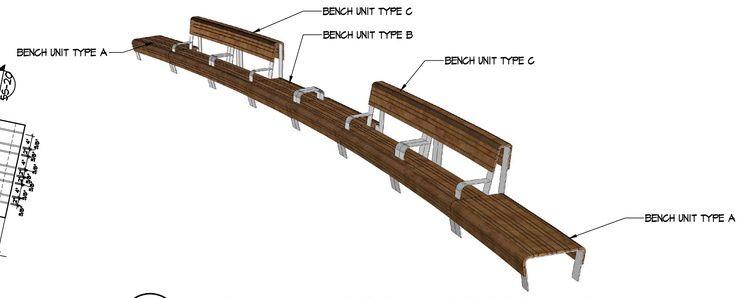
Client: CITY OF CAMBRIDGE, MA
Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT
Drawing: STREETSCAPE - CRONIN PARK DETAILS - 1
Sheet: SS-19
File No.

PLOT DATE=5/20/2012 12:16:20 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-19-23_Cronin Park Details.dwg



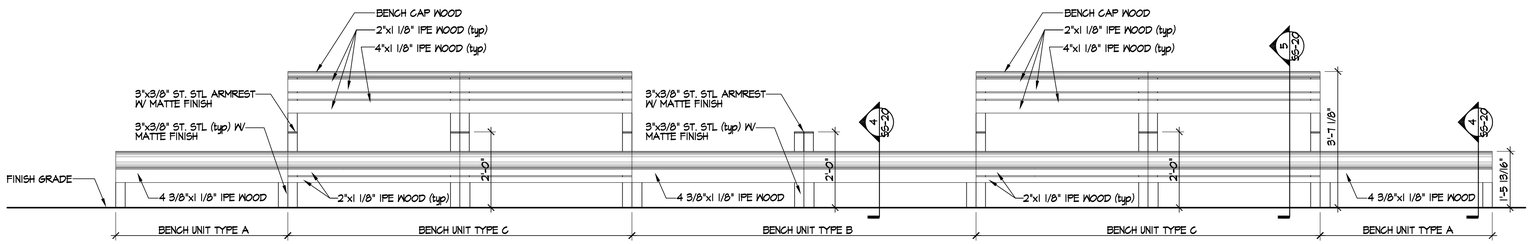
1 CUSTOM MADE BENCH, PLAN

Scale: 1/2"=1'-0"



2 CUSTOM MADE BENCH, PERSPECTIVE

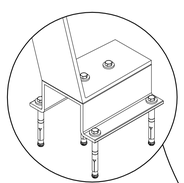
Scale: N.T.S.



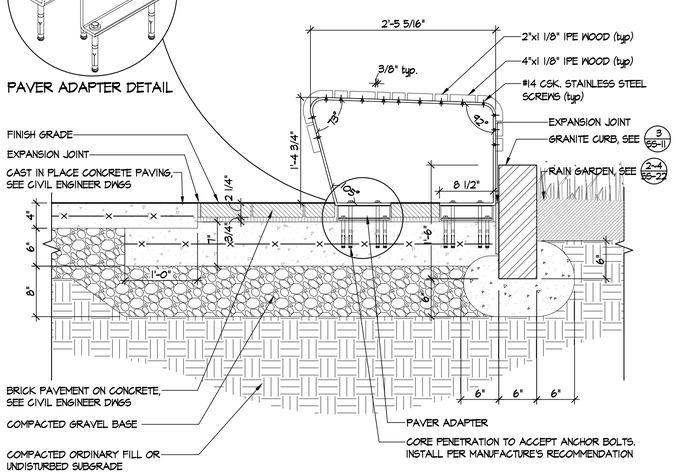
3 CUSTOM MADE BENCH, ELEVATION

Scale: 1/2"=1'-0"

NOTE:
1. CONTRACTOR TO PROVIDE COMPLETE BENCH SHOP DRAWINGS.
2. CONFIRM BENCH INSTALLATION METHOD WITH MANUFACTURER'S REQUIREMENTS.
3. COSTUME MADE BENCH FABRIC BY LANDSCAPEFORMS® OR APPROVED EQUAL.

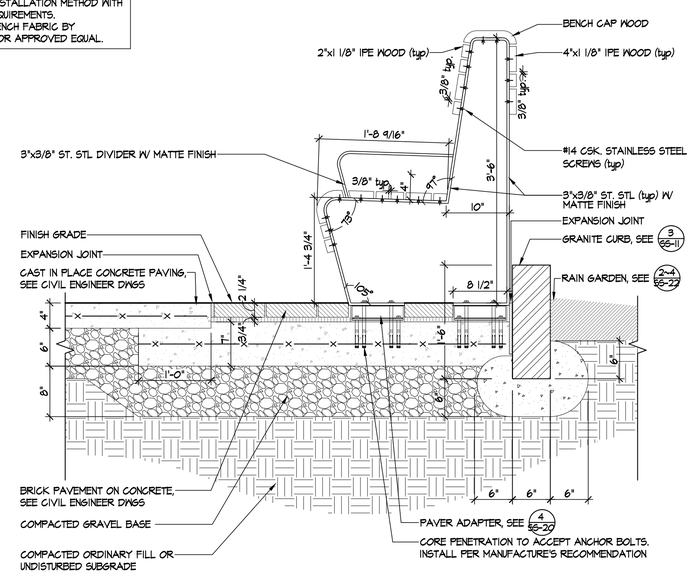


PAVER ADAPTER DETAIL



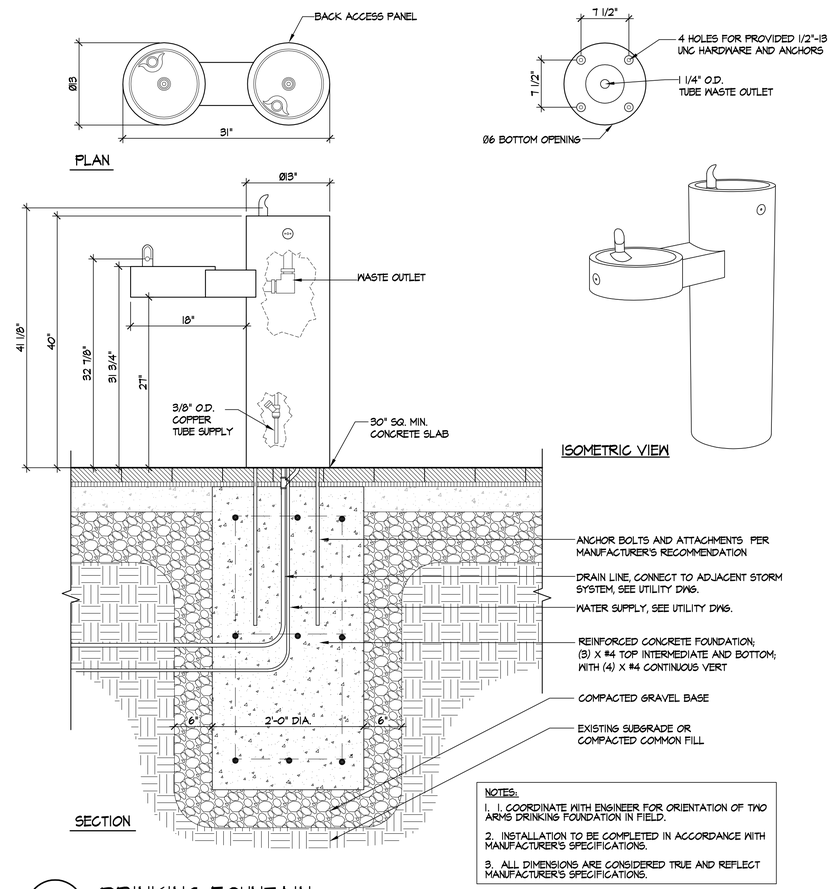
4 BENCH SECTION, UNIT TYPES A

Scale: 1"=1'-0"



5 BENCH SECTION, UNIT TYPES B & C

Scale: 1"=1'-0"



NOTES:
1. 1. COORDINATE WITH ENGINEER FOR ORIENTATION OF TWO ARMS DRINKING FOUNDATION IN FIELD.
2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.

6 DRINKING FOUNTAIN

Scale: N.T.S.

ISSUED FOR BID

KLEINFELDER Bright People. Right Solutions. · SEA — SEA CONSULTANTS INC.

MWH BOSTON MASSACHUSETTS

HALVORSON DESIGN PARTNERSHIP — LANDSCAPE ARCHITECTURE
161 MASSACHUSETTS AVENUE, BOSTON MA 02115-3050
(PHONE) 617.536.0380 (FAX) 617.536.0626
WWW.HALVORSONDESIGN.COM

MASSACHUSETTS — JONATHAN WEBSTER CRAFTS — NO. 1216 — REGISTERED LANDSCAPE ARCHITECT

Scale	AS NOTED			
Date	May, 2012			
Job No.	2009143.01-A			
Designed by	CS			
Drawn by	YL			
Checked by	CS	No.	Description	Date
Approved by	CS		REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

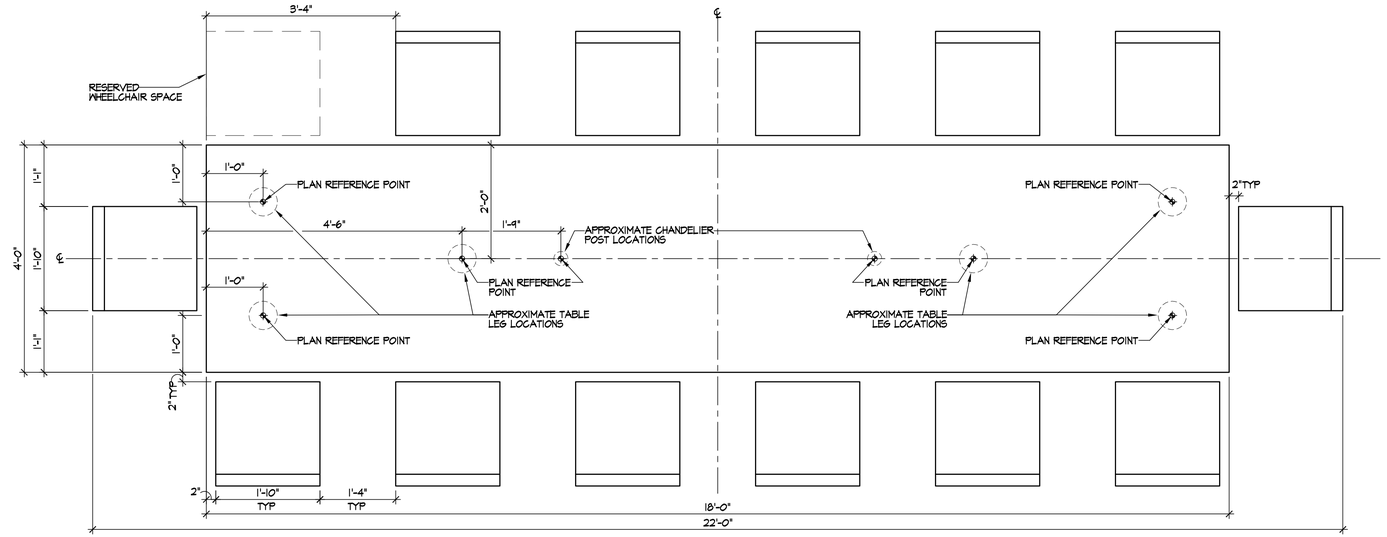
Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE - CRONIN PARK DETAILS - 2

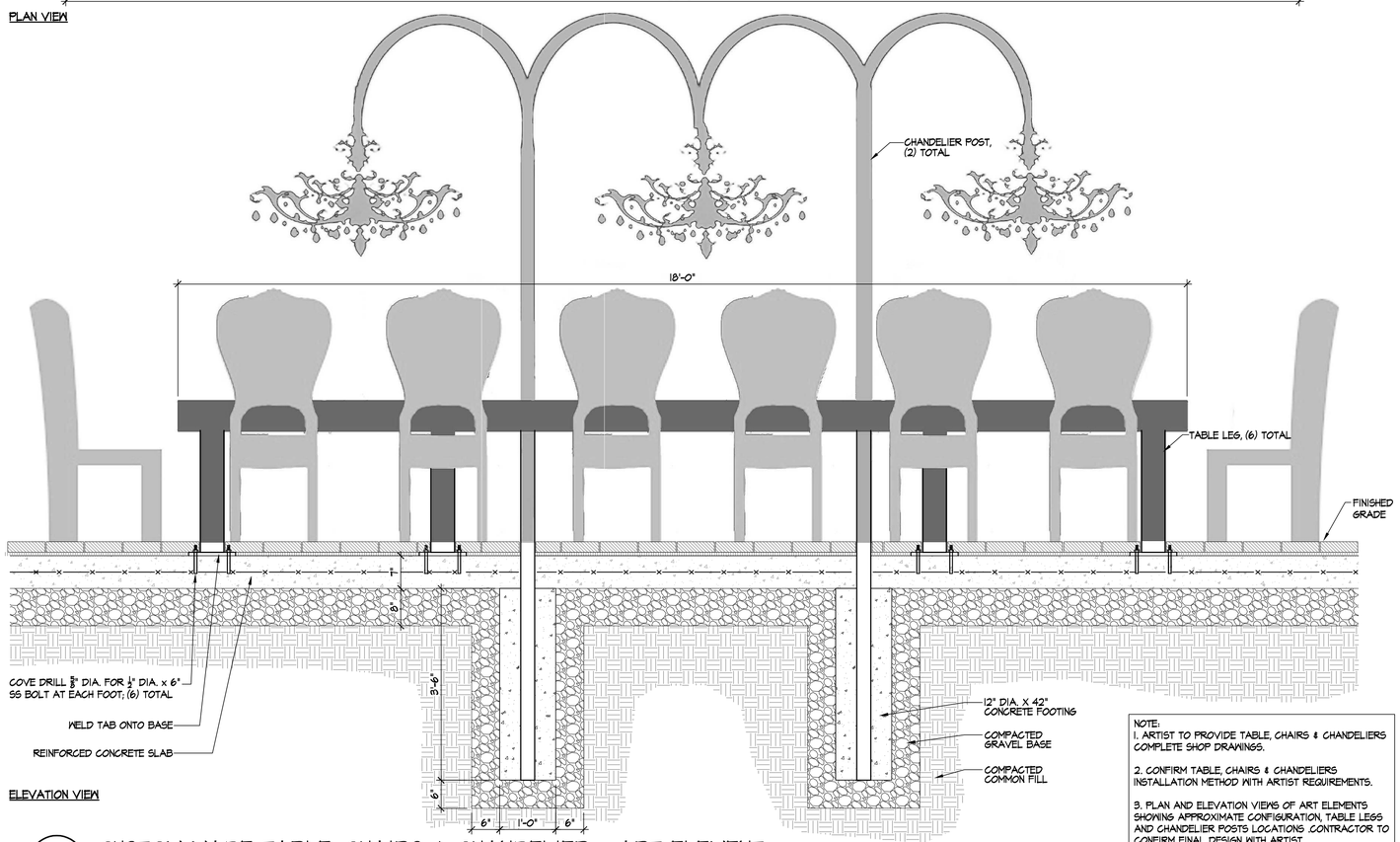
Sheet: SS-20

File No.

PLOT DATE=5/20/2012 12:16:41 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&SI\0_CAD\Sheets\SS-19-23_Cronin Park Details.dwg



PLAN VIEW



ELEVATION VIEW

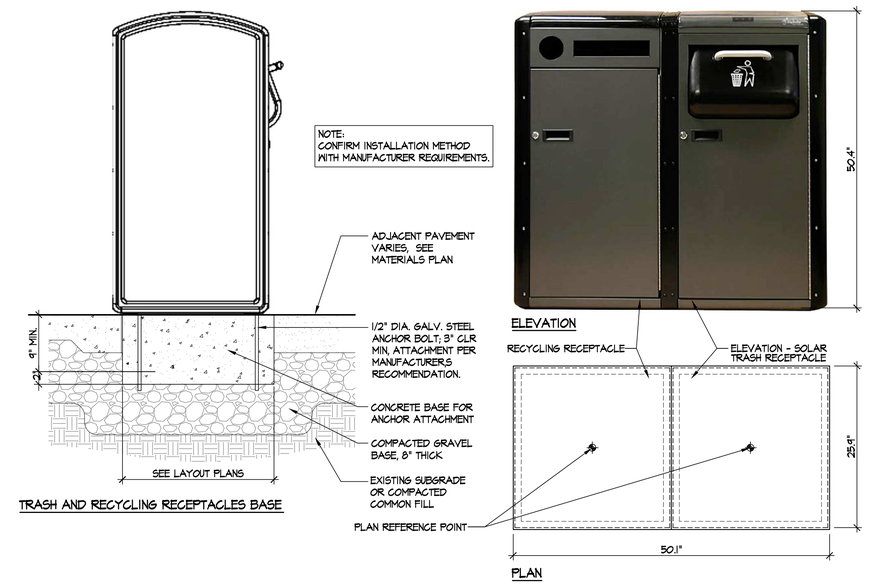
NOTE:
1. ARTIST TO PROVIDE TABLE, CHAIRS & CHANDELIERS COMPLETE SHOP DRAWINGS.

2. CONFIRM TABLE, CHAIRS & CHANDELIERS INSTALLATION METHOD WITH ARTIST REQUIREMENTS.

3. PLAN AND ELEVATION VIEWS OF ART ELEMENTS SHOWING APPROXIMATE CONFIGURATION, TABLE LEGS AND CHANDELIER POSTS LOCATIONS .CONTRACTOR TO CONFIRM FINAL DESIGN WITH ARTIST.

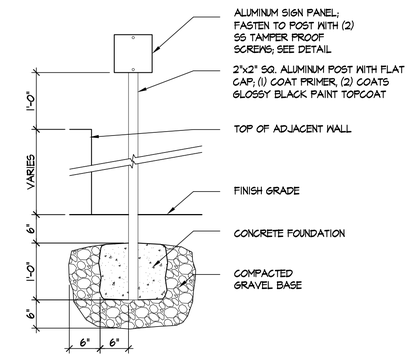
1 CUSTOM MADE TABLE, CHAIRS & CHANDELIER - ART ELEMENT

Scale: 3/4"=1'-0"



2 TRASH AND RECYCLING RECEPTACLES

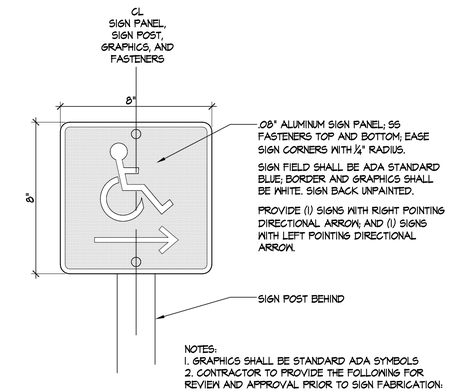
Scale: N.T.S.



NOTE:
1. LOCATE IN FIELD WITH LANDSCAPE ARCHITECT.

3 ADA DIRECTIONAL SIGN POST

Scale: 3/4"=1'-0"



NOTES:
1. GRAPHICS SHALL BE STANDARD ADA SYMBOLS
2. CONTRACTOR TO PROVIDE THE FOLLOWING FOR REVIEW AND APPROVAL PRIOR TO SIGN FABRICATION: SHOP DRAWING OF SIGN PANEL AND GRAPHICS FOR BOTH RIGHT AND LEFT DIRECTIONAL ARROW, PAINT COLOR CHIP SUBMITTAL

4 ADA DIRECTIONAL SIGN PANEL

Scale: 3"=1'-0"

ISSUED FOR BID

PLOT DATE=5/20/2012 12:17:01 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-19-23_Cronin Park Details.dwg

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(PHONE) 617.536.0380 (FAX) 617.536.0626
WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS JAMES WEBSTER DUNN REGISTERED LANDSCAPE ARCHITECT

Scale	AS NOTED			
Date	May, 2012			
Job No.	2009143.01-A			
Designed by	CS			
Drawn by	YL			
Checked by	CS	No.	Description	Date
Approved by	CS		REVISIONS	

THE WORKS CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

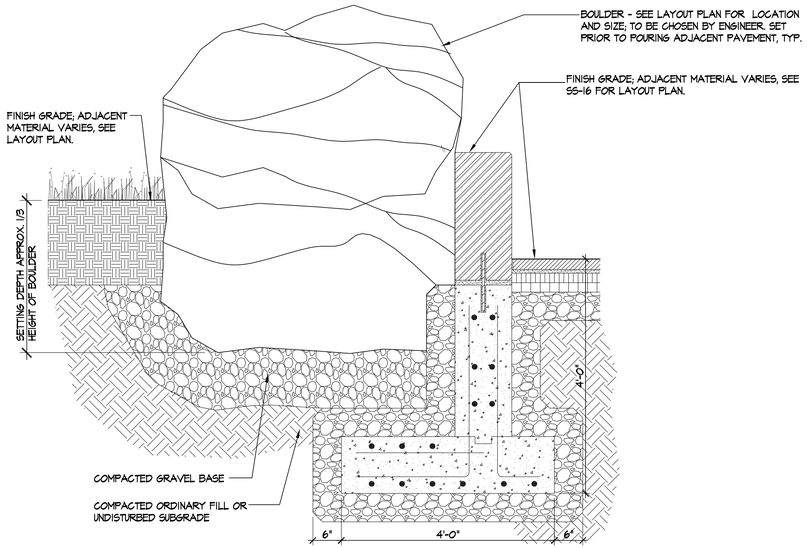
Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

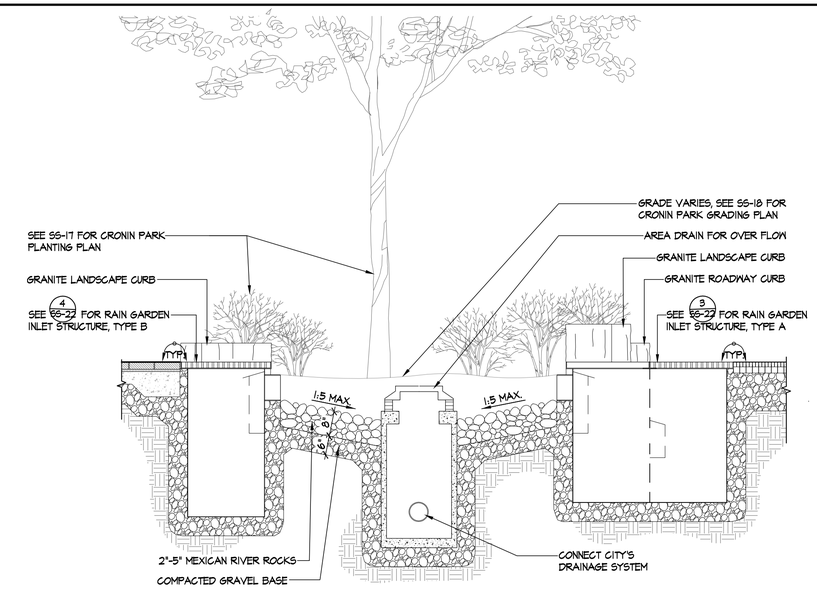
Drawing: STREETSCAPE - CRONIN PARK DETAILS - 3

Sheet: SS-21

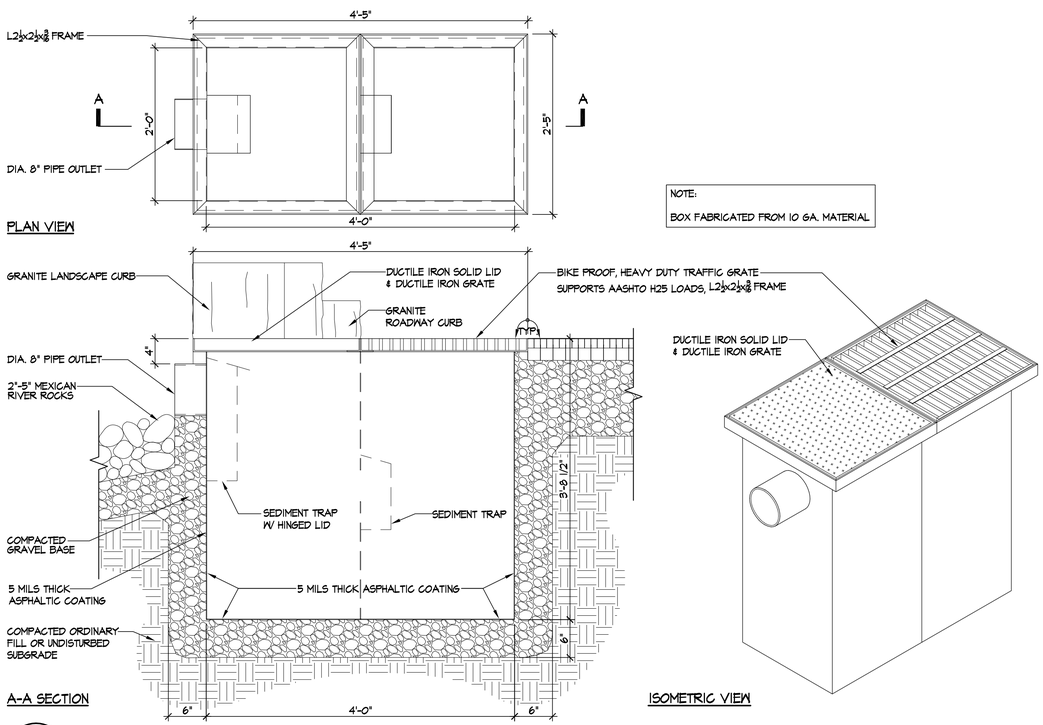
File No.



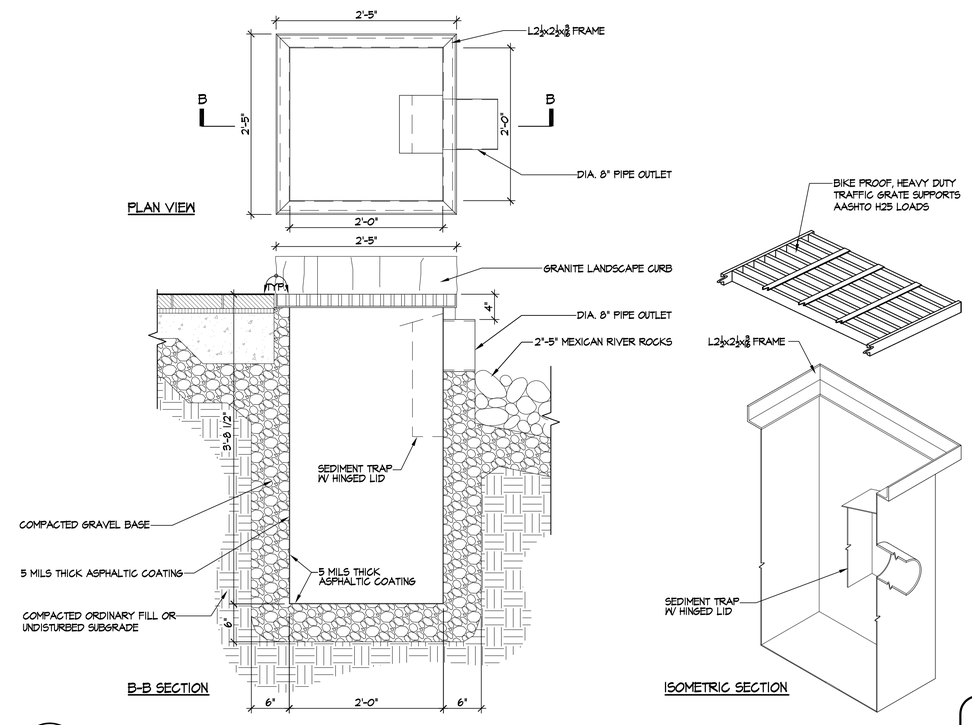
1 LARGE BOULDER AT JAMES CRONIN PARK
Scale: N.T.S.



2 CROSS SECTION AT RAIN GARDEN DRAINAGE AREA, TYP
Scale: 1/2"=1'-0"



3 RAIN GARDEN INLET STRUCTURE, TYPE A
Scale: 1"=1'-0"



4 RAIN GARDEN INLET STRUCTURE, TYPE B
Scale: 1"=1'-0"

ISSUED FOR BID

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LANDSCAPE ARCHITECTURE

MASSACHUSETTS JAMES WEBSTER DRIVE REGISTERED LANDSCAPE ARCHITECT

Scale	AS NOTED			
Date	May, 2012			
Job No.	2009143.01-A			
Designed by	CS			
Drawn by	YL			
Checked by	CS	No.	Description	Date
Approved by	CS		REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

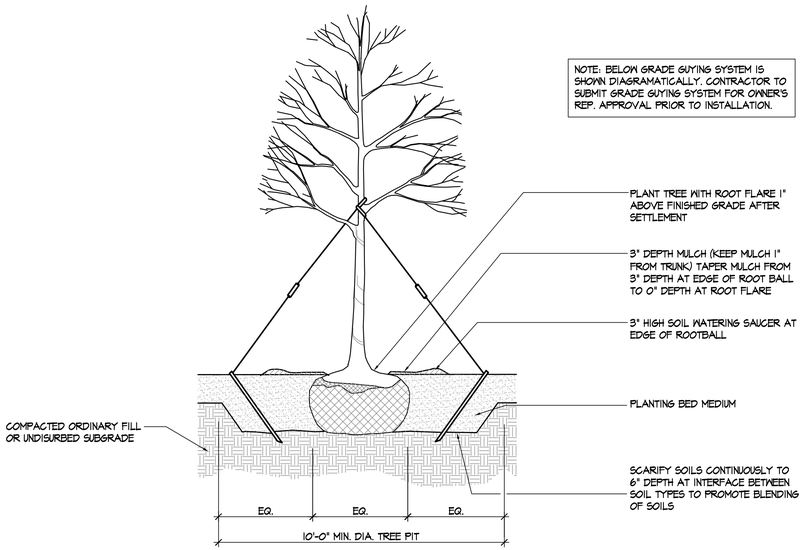
Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE - CRONIN PARK DETAILS - 4

Sheet: SS-22

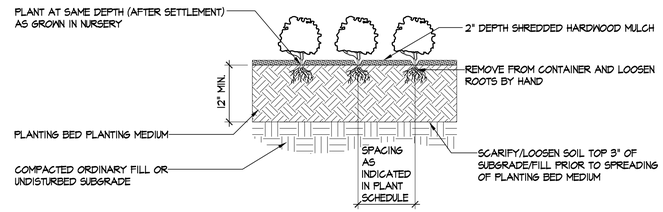
File No.

PLOT DATE=5/20/2012 12:17:24 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-19-23_Cronin Park Details.dwg



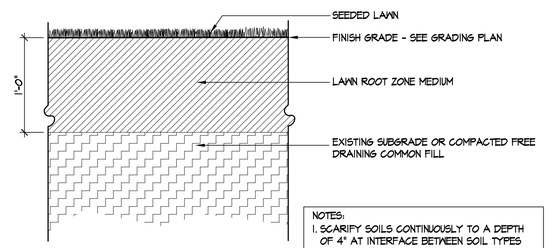
1 DECIDUOUS TREE PLANTING IN PLANT BED AT CRONIN PARK AREA

Scale: 3/8"=1'-0"



3 PERENNIAL GRASSES AND GROUNDCOVER PLANTING

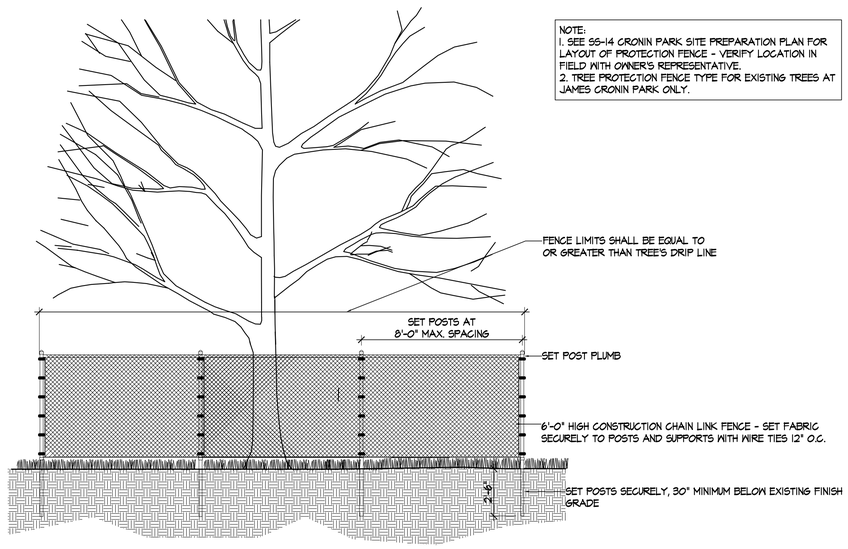
Scale: 3/4"=1'-0"



NOTES:
1. SCARIFY SOILS CONTINUOUSLY TO A DEPTH OF 4" AT INTERFACE BETWEEN SOIL TYPES AND LIFTS TO PROMOTE BLENDING OF SOILS.
2. SEE PLANTING SOIL PROFILES AND UNDERDRAINAGE PLAN FOR LANDSCAPE UNDERDRAINAGE PANEL PIPE LOCATIONS.
3. SEE CIVIL DWGS FOR LAYOUT, PITCH AND INVERT ELEVATIONS.

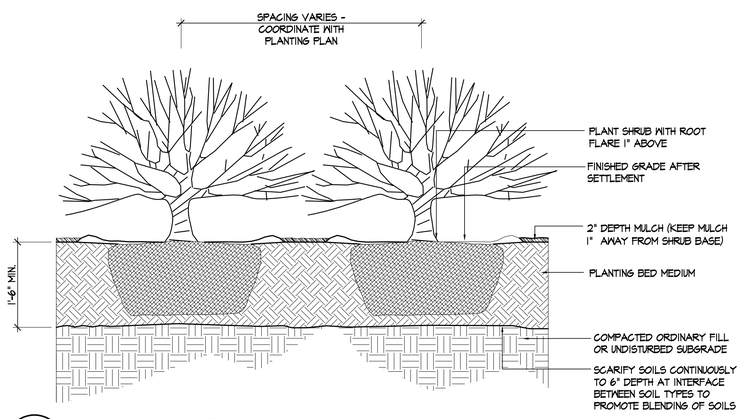
4 SODDED LAWN

Scale: N.T.S.



5 TREE PROTECTION FENCE AT JAMES CRONIN PARK

Scale: 1/4"=1'-0"



2 SHRUB PLANTING

Scale: 3/4"=1'-0"

ISSUED FOR BID

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(PHONE) 617.536.0380 (FAX) 617.536.0626
WWW.HALVORSONDESIGN.COM
LANDSCAPE ARCHITECTURE

MASSACHUSETTS ARTHUR WEBSTER SHAW REGISTERED LANDSCAPE ARCHITECT

Scale	AS NOTED			
Date	May, 2012			
Job No.	2009143.01-A			
Designed by	CS			
Drawn by	YL			
Checked by	CS	No.	Description	Date
Approved by	CS		REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

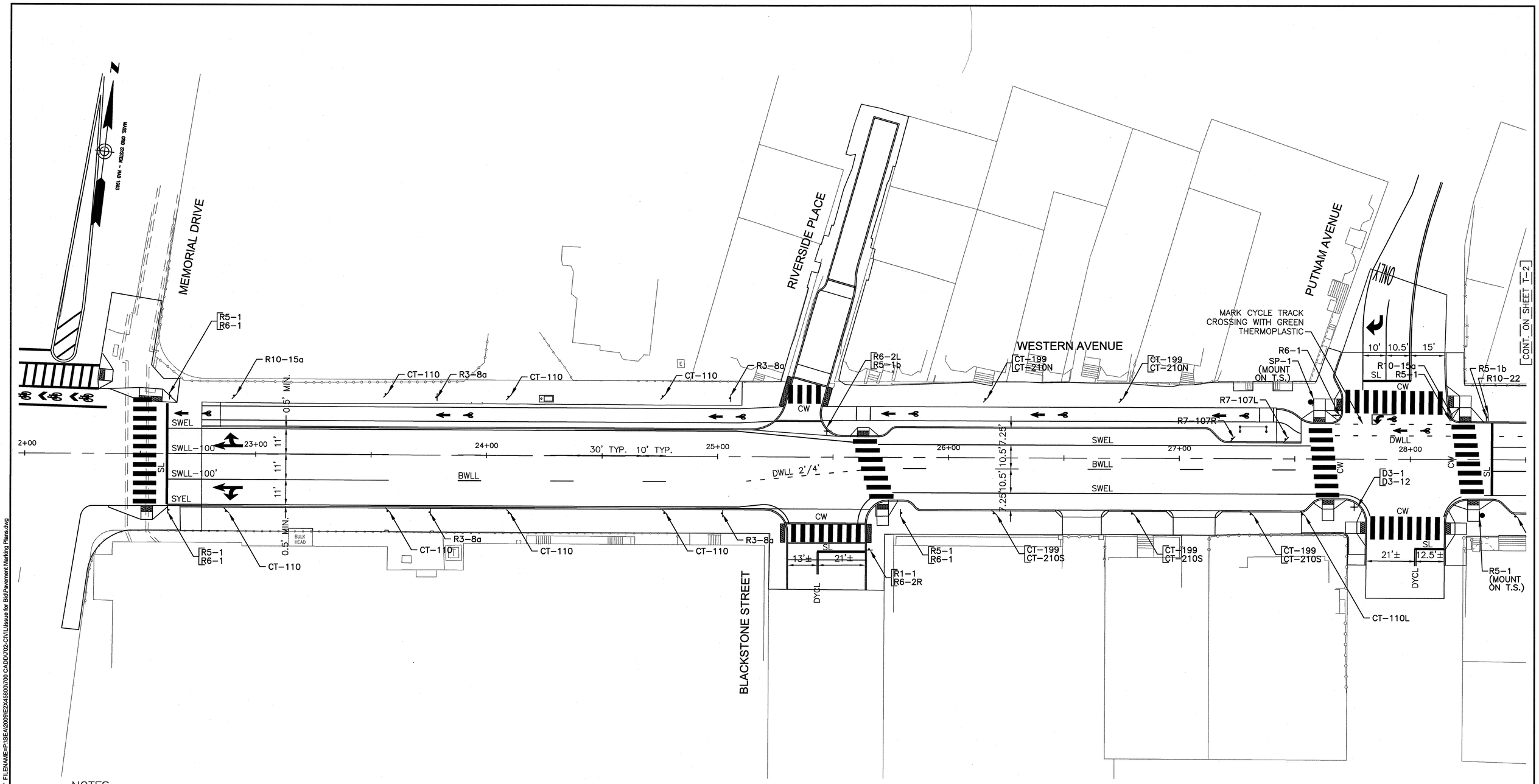
Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: STREETSCAPE - CRONIN PARK DETAILS - 4

Sheet: SS-23

File No.

PLOT DATE=5/20/2012 12:17:41 AM USER=LIN TENG-YEN FILENAME=M:\Western Ave - M&S\0_CAD\Sheets\SS-19-23_Cronin Park Details.dwg



NOTES:

1. ALL EXISTING SIGNS AND POSTS SHALL BE REMOVED AND STACKED.
2. ALL PROPOSED SIGNS SHALL BE LOCATED 2' CLEAR OF THE CYCLE TRACK.
3. SEE ROADWAY CONSTRUCTION PLANS FOR LIMIT OF WORK INFORMATION.

0 20 50 100 FEET

1" = 20' HORIZONTAL

ISSUED FOR BID

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MWH BOSTON MASSACHUSETTS

JACOBS Jacobs Engineering Group, Inc.

COMMONWEALTH OF MASSACHUSETTS RODNEY C. EMERY CIVIL No. 30756 REGISTERED PROFESSIONAL ENGINEER

Scale	AS NOTED			
Date	MAY, 2012			
Job No.				
Designed by	AJA			
Drawn by	AJA			
Checked by	PJV	No.	Description	Date
Approved by	RCE		REVISIONS	

THE WORKS CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

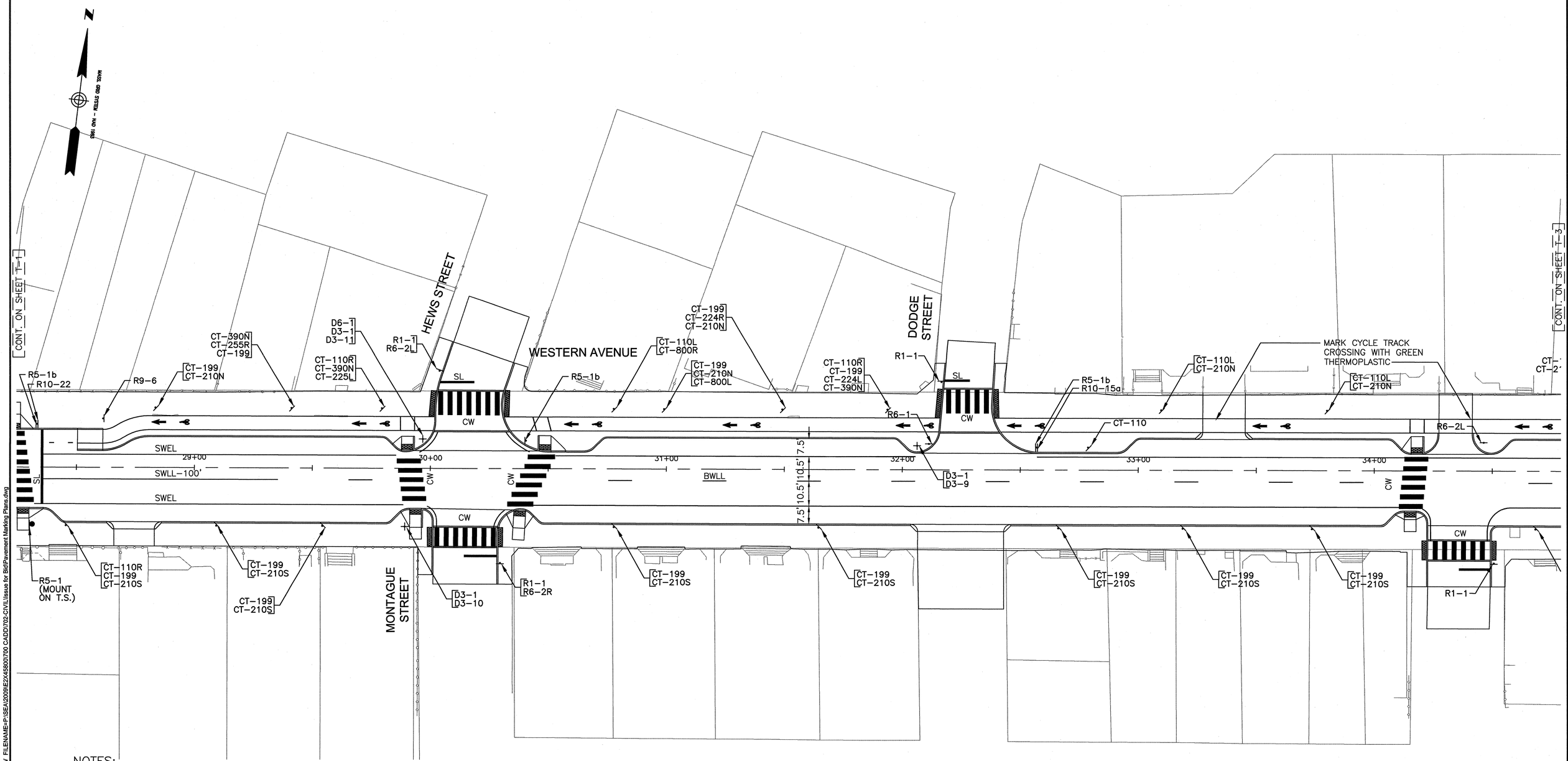
Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: TRAFFIC SIGNS AND PAVEMENT MARKINGS PLAN SHEET 1

Sheet: T-1

File No.

PLOT DATE=5/24/2012 1:55:30 PM USER=ARSENEAULT, ANDREW FILENAME=P:\SEA\2009\E2X48800\70 CADD\702-CIV\Issue for Bid\Pavement Marking Plans.dwg



NOTES:

1. ALL EXISTING SIGNS AND POSTS SHALL BE REMOVED AND STACKED.
2. ALL PROPOSED SIGNS SHALL BE LOCATED 2' CLEAR OF THE CYCLE TRACK.
3. SEE ROADWAY CONSTRUCTION PLANS FOR LIMIT OF WORK INFORMATION.

0 20 50 100 FEET

1" = 20' HORIZONTAL

ISSUED FOR BID

PLOT DATE=5/24/2012 1:56:45 PM USER=ARSENEAULT, ANDREW FILENAME=P:\SEA\2009\EZX45800\700 CADD\702-CIVIL\Issue for Bid\Pavement Marking Plans.dwg

KLEINFELDER Bright People. Right Solutions. ▪ SEA SEA CONSULTANTS INC.

MWH BOSTON MASSACHUSETTS

JACOBS Jacobs Engineering Group, Inc.

COMMONWEALTH OF MASSACHUSETTS RODNEY C. EMERY CIVIL No. 30798 REGISTERED PROFESSIONAL ENGINEER

Scale	AS NOTED			
Date	MAY, 2012			
Job No.				
Designed by	AJA			
Drawn by	AJA			
Checked by	PJV	No.	Description	Date
Approved by	RCE		REVISIONS	

THE WORKS CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

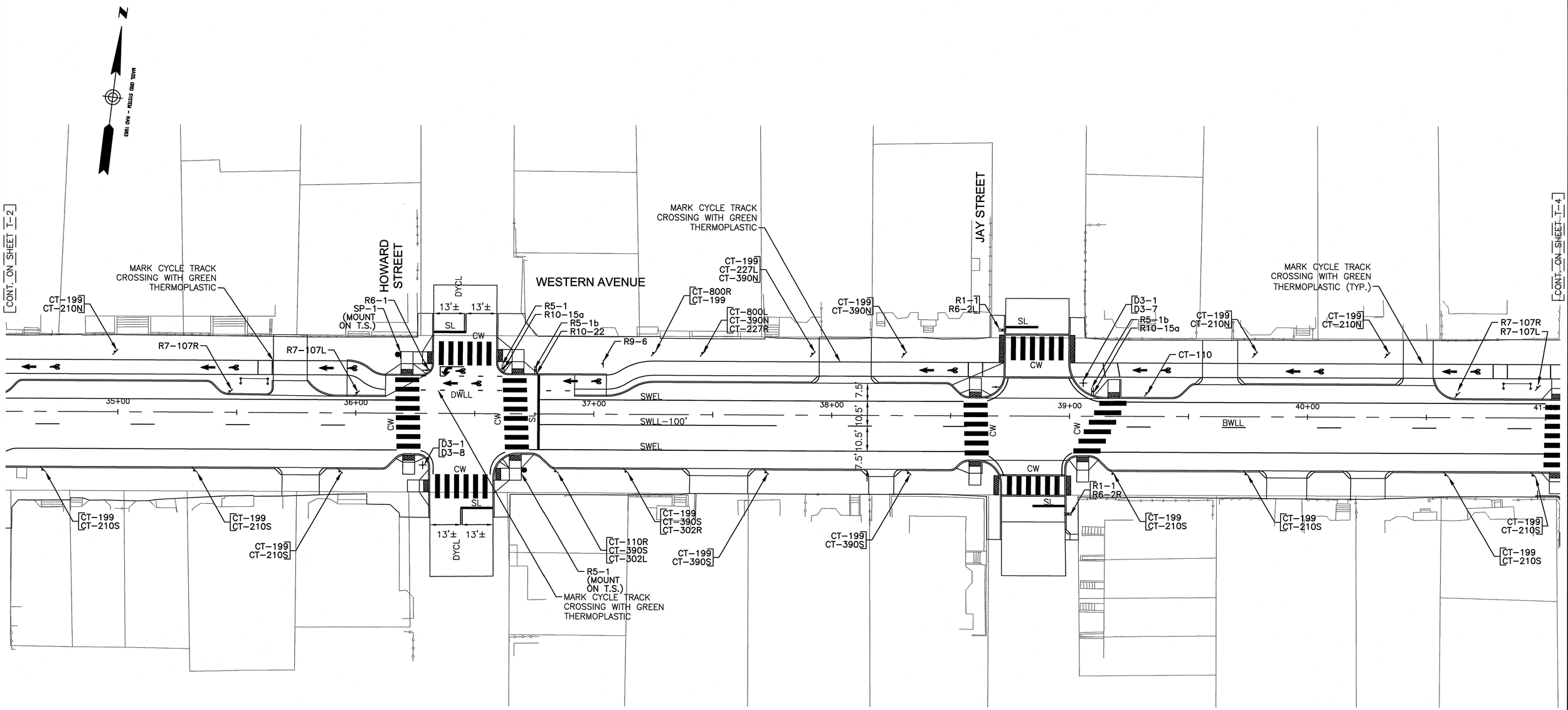
Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: TRAFFIC SIGNS AND PAVEMENT MARKINGS PLAN SHEET 2

Sheet: T-2

File No.



NOTES:

1. ALL EXISTING SIGNS AND POSTS SHALL BE REMOVED AND STACKED.
2. ALL PROPOSED SIGNS SHALL BE LOCATED 2' CLEAR OF THE CYCLE TRACK.
3. SEE ROADWAY CONSTRUCTION PLANS FOR LIMIT OF WORK INFORMATION.

0 20 50 100 FEET

1" = 20' HORIZONTAL

ISSUED FOR BID

KLEINFELDER Bright People. Right Solutions. ▪ SEA SEA CONSULTANTS INC.

MWH BOSTON MASSACHUSETTS

JACOBS Jacobs Engineering Group, Inc.

COMMONWEALTH OF MASSACHUSETTS ROGNEY C. EMERY CIVIL No. 30798 REGISTERED PROFESSIONAL ENGINEER

Scale	AS NOTED				
Date	MAY, 2012				
Job No.					
Designed by	AJA				
Drawn by	AJA				
Checked by	PJV	No.	Description	Date	
Approved by	RCE		REVISIONS		

THE WORKS CAMBRIDGE DEPARTMENT OF PUBLIC

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: TRAFFIC SIGNS AND PAVEMENT MARKINGS PLAN SHEET 3

Sheet: T-3

File No.

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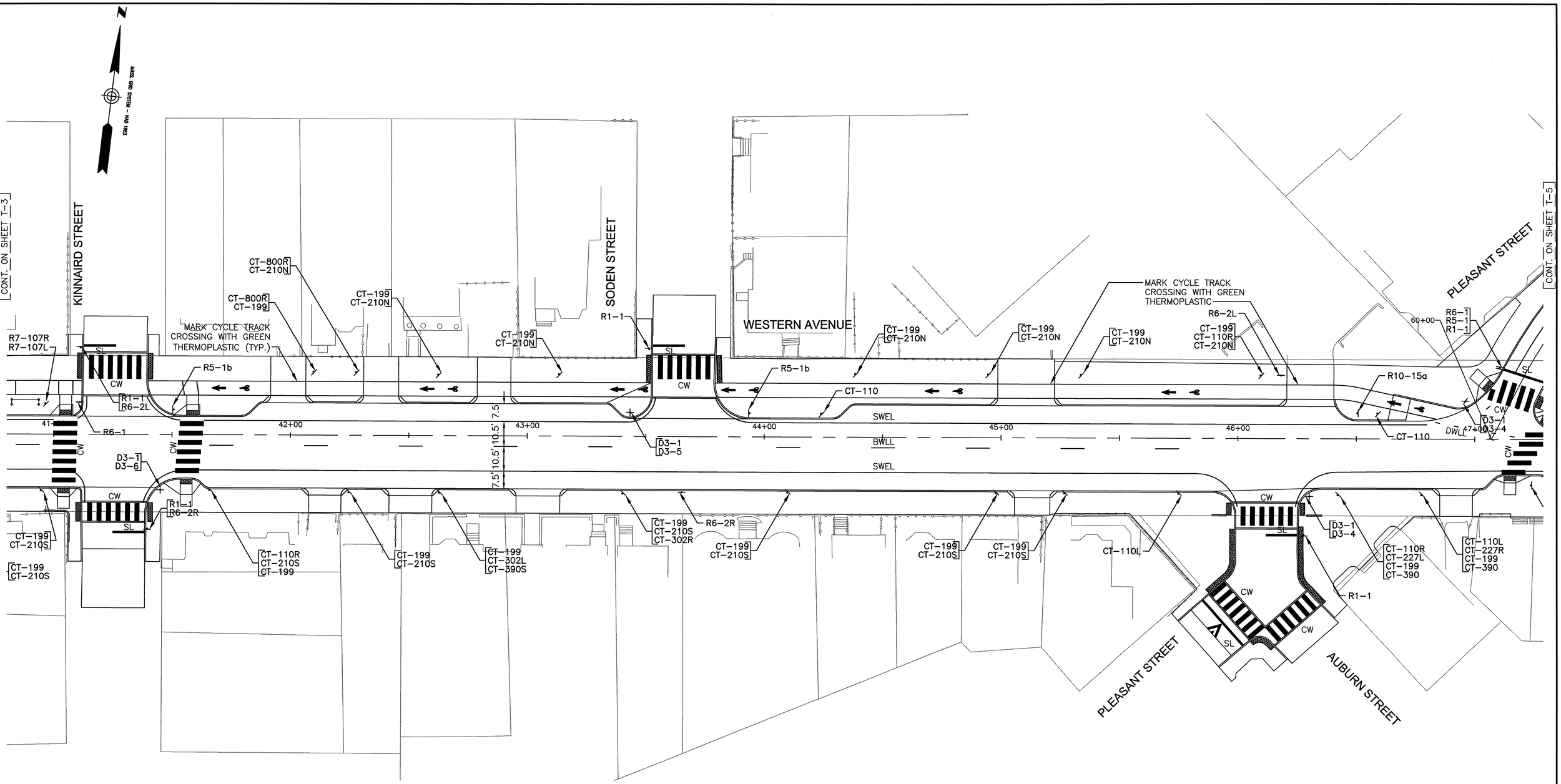

NOTES:

1. ALL EXISTING SIGNS AND POSTS SHALL BE REMOVED AND STACKED.
2. ALL PROPOSED SIGNS SHALL BE LOCATED 2' CLEAR OF THE CYCLE TRACK.
3. SEE ROADWAY CONSTRUCTION PLANS FOR LIMIT OF WORK INFORMATION.

0 20 50 100 FEET

1" = 20' HORIZONTAL

ISSUED FOR BID

KLEINFELDER Bright People. Right Solutions. | SEA CONSULTANTS INC.

MWH BOSTON MASSACHUSETTS

JACOBS Jacobs Engineering Group, Inc.

COMMONWEALTH OF MASSACHUSETTS ROONEY C. EMERY CIVIL No. 30786 REGISTERED PROFESSIONAL ENGINEER

Scale	AS NOTED			
Date	MAY, 2012			
Job No.				
Designed by	AJA			
Drawn by	AJA			
Checked by	PJV	No.	Description	Date
Approved by	RCE		REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: TRAFFIC SIGNS AND PAVEMENT MARKINGS PLAN SHEET 4

Sheet: T-4

File No.

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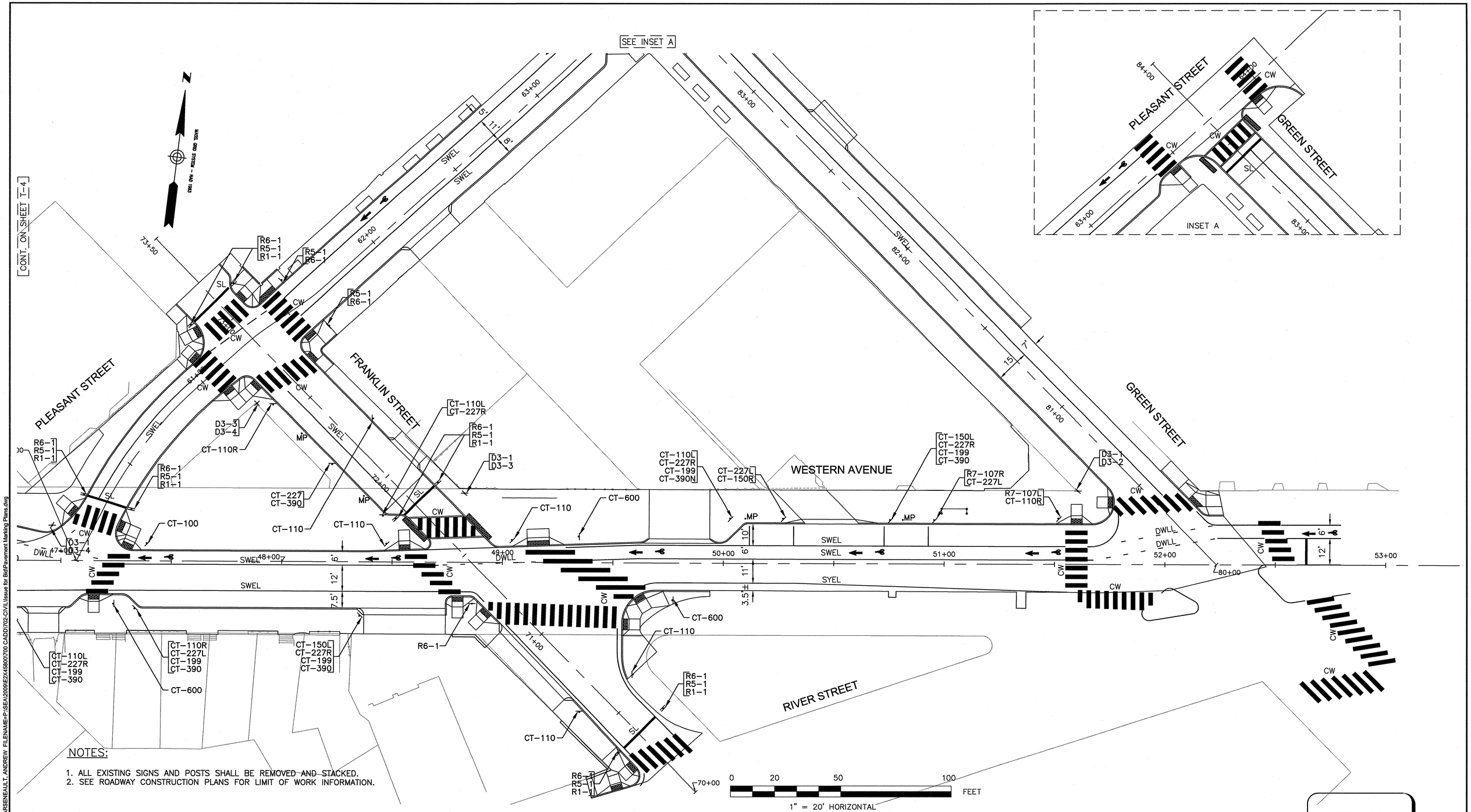

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MWH BOSTON MASSACHUSETTS

JACOBS Jacobs Engineering Group, Inc.

COMMONWEALTH OF MASSACHUSETTS ROONEY C. EMERY CIVIL No. 30706 REGISTERED PROFESSIONAL ENGINEER

Scale	AS NOTED			
Date	MAY, 2012			
Job No.				
Designed by	AJA			
Drawn by	AJA			
Checked by	PJV	No.	Description	Date
Approved by	RCE		REVISIONS	

THE WORKS — CAMBRIDGE DEPARTMENT OF PUBLIC WORKS

Client: CITY OF CAMBRIDGE, MA

Project: WESTERN AVENUE INFRASTRUCTURE IMPROVEMENTS PROJECT

Drawing: TRAFFIC SIGNS AND PAVEMENT MARKINGS PLAN SHEET 5

Sheet: T-5

File No.

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