

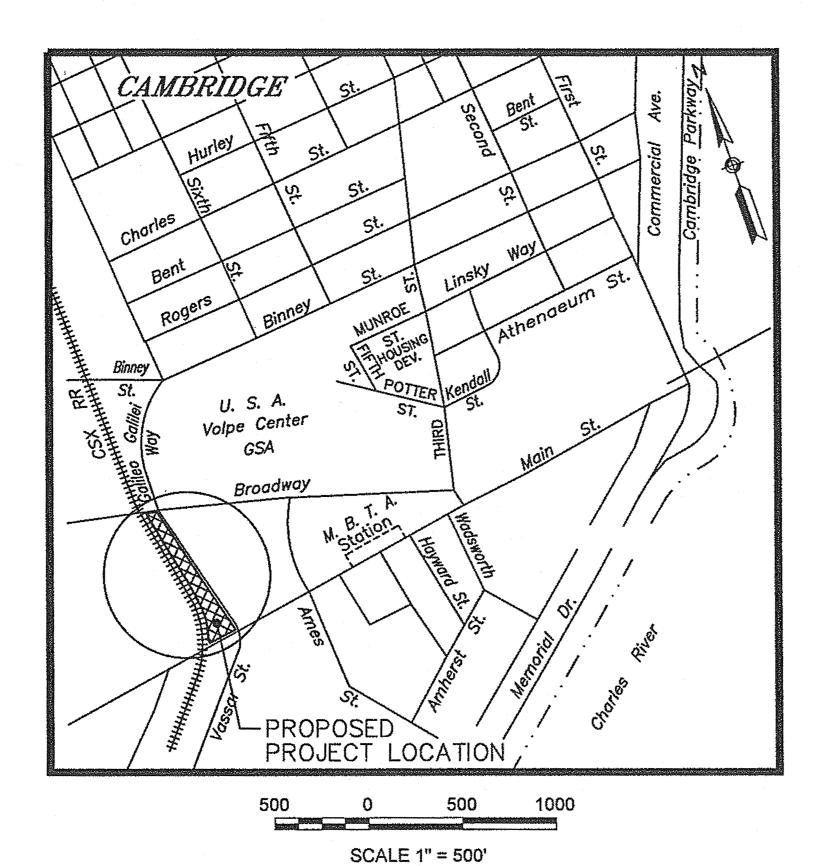
CAMBRIDGE REDEVELOPMENT AUTHORITY

GRAND JUNCTION PATH & PEDESTRIAN IMPROVEMENTS ALONG GALILEO GALILEI WAY

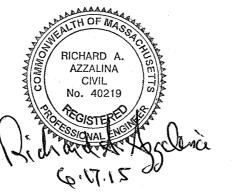
CONTRACT NO. 16



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LENGTH OF PROJECT = 741.32 FEET = 0.140 MILES

PREPARED BY:

FAY, SPOFFORD & THORNDIKE
ENGINEERS · PLANNERS · SCIENTISTS
5 BURLINGTON WOODS, BURLINGTON, MA 01803

JUNE 17, 2015

G-1

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<u>NOTES:</u>

1) BENCH MARK INFORMATION:

BENCH MARK USED:

TEMPORARY BENCH MARKS SET:

TBM-A: X-MARK SET ON THE SOUTH WEST BOLT OF LIGHT POLE 13 AT THE NORTHWEST CORNER OF FULKERSON STREET AND BINNEY STREET, AS SHOWN ON PLAN.

ELEVATION = 9.66

TBM-B: X-MARK SET ON THE SOUTH EAST BOLT OF LIGHT POLE 14 ON THE EAST SIDE OF GALILEO GALILEI WAY APPROXIMATELY 380' NORTH OF THE INTERSECTION OF GALILEO GALILEI WAY AND BROADWAY, AS SHOWN ON PLAN. ELEVATION = 10.18

TBM-C: X-MARK SET ON CAP NUT OF A HYDRANT AT THE SOUTHEAST CORNER OF GALILEO GALILEI WAY AND BROADWAY, AS SHOWN ON PLAN. ELEVATION = 10.72

TBM—E: X—MARK SET ON CAP NUT OF A HYDRANT ON THE EAST SIDE OF GALILEO GALILEI WAY APPROXIMATELY 220' NORTH OF THE INTERSECTION OF GALILEO GALILEI WAY AND MAIN STREET, AS SHOWN ON PLAN.

ELEVATION = 11.42 (VOID HYDRANT REPLACED)

TBM-F: X-MARK SET ON CAP NUT OF HYDRANT ON THE SOUTH SIDE OF MAIN STREET APPROXIMATELY 290' WEST OF THE INTERSECTION OF MAIN STREET AND GALILEO GALILEI WAY. ELEVATION = 10.02

2) ELEVATIONS REFER TO NAVD1988

- 3) CONTOUR INTERVAL EQUALS ONE (1) FOOT.
- 4) UTILITY INFORMATION SHOWN IS BASED ON BOTH A FIELD SURVEY AND THE LATEST PLANS OF RECORD. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM THE AFOREMENTIONED RECORD PLANS AND ARE APPROXIMATE ONLY. WE CANNOT ASSUME RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES THAT ARE OMITTED OR INACCURATELY SHOWN ON SAID RECORD PLAN, SINCE SUB—SURFACE UTILITIES CANNOT BE VISIBLY VERIFIED. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED AND THE ACTUAL LOCATION OF SUB—SURFACE STRUCTURES SHOULD BE DETERMINED IN THE FIELD. CALL, TOLL FREE, THE DIG SAFE CALL CENTER AT 1—888—344—7233 SEVENTY TWO HOURS PRIOR TO EXCAVATION.
- 5) THIS DOCUMENT IS AN INSTRUMENT OF SERVICE OF HARRY R. FELDMAN, INC. ISSUED TO OUR CLIENT FOR PURPOSES RELATED DIRECTLY AND SOLELY TO HARRY R. FELDMAN INC.'S SCOPE OF SERVICES UNDER CONTRACT TO OUR CLIENT FOR THIS PROJECT. ANY USE OR REUSE OF THIS DOCUMENT FOR ANY REASON BY ANY PARTY FOR PURPOSES UNRELATED DIRECTLY AND SOLELY TO SAID CONTRACT SHALL BE AT THE USER'S SOLE AND EXCLUSIVE RISK AND LIABILITY, INCLUDING LIABILITY FOR VIOLATION OF COPYRIGHT LAWS, UNLESS WRITTEN CONSENT IS PROVIDED BY HARRY R. FELDMAN, INC.
- 6) RECIPROCAL EASEMENT AGREEMENT BOOK 31324, PAGE 262, DOC. NO. 1137080, BOOK 38441, PAGE 415, DOC. NO. 1261130, BOOK 42362, PAGE 126 AND DOC. NO. 1315537 (AS SHOWN HEREON)
- 7) PROPERTY LINE TAKEN FROM A PLAN ENTITLED "LAND MAP, BOSTON AND ALBANY RAILROAD, GRAND JUNCTION BRANCH, STA. 79+20 TO STA. 105+60" SCALE 1"=50' DATED JUNE 30, 1915 AND KNOWN AS VALUATION MAP NUMBER V.1A.2B.

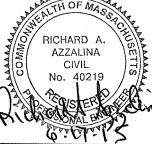
LEGEND:

©	·· CABLE TV MANHOLE	TCB TRAFF	IC CONTROL BOX
(i)	- DRAIN MANHOLE	R= RIM E	I FVATION
6	ELECTRIC MANHOLE	TT= TOP T	
	SEWER MANHOLE	WRW WOOD	
	TELEPHONE MANHOLE	8.75TR TOP C	
	TELECOMMUNICATIONS MANHOLE	15.50TC TOP C	
W	··· WATER MANHOLE		M OF CURB ELEVATION
×	STEAM MANHOLE	10.50TWTOP C	
Омн	- MANHOLF	9.5BW BOTTO	
	CATCH BASIN	BIT. BITUMI	
	CATCH BASIN—ROUND	CONC. CONCE	
eso	GAS SHUT OFF	CLF CHAIN	
	WATER SHUT OFF		
¥		INACCESS. INACCE	
	·· OBSERVATION WELL	MC METAL	
₩	" OBSERVATION WELL " UTUTY POLE	TYP. TYPICA	
ф	" UNLIT POLE	VGCVERTIC	
~ · · · · · · · · · · · · · · · · · · ·	·· ELECTRIC HANDHOLE	WIF WROUG	
	TRAFFIC SIGNAL	FND. FOUND	
	" IKAFFIC SIGNAL	REC RECOR	<i>2</i> D
		 	RAILROAD TRACKS
↔			CHAIN LINK FENCE
0 VP			WOOD FENCE
	· VENT PIPE · TRAFFIC HAND HOLE		WROUGHT IRON FENCE
	· TRAFFIC HAND HOLE · IRRIGATION CONTROL VALVE		
OTP	TRASH CONTAINER		GUARD RAIL
	MONUMENT	S	SEWER
	MONOMENT		DRAIN
(⁴ ()	DECIDUOUS TREE		COMBINED SEWER
			WATER
	COMPEDANC TREE	G	GAS
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	LIANDIOAD DALLO	E	ELECTRIC
	HANDICAP RAMP	······································	TELEPHONE
BOT.=	BOTTOM ELEVATION	ST	STEAM
	INVERT ELEVATION	E/PS	ELECTRIC PAINT STRIPE
	NO VISIBLE PIPES		WATER PAINT STRIPE
COBB		G/PS	GAS PAINT STRIPE
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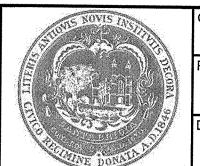


FAY, SPOFFORD & THORNDIKE

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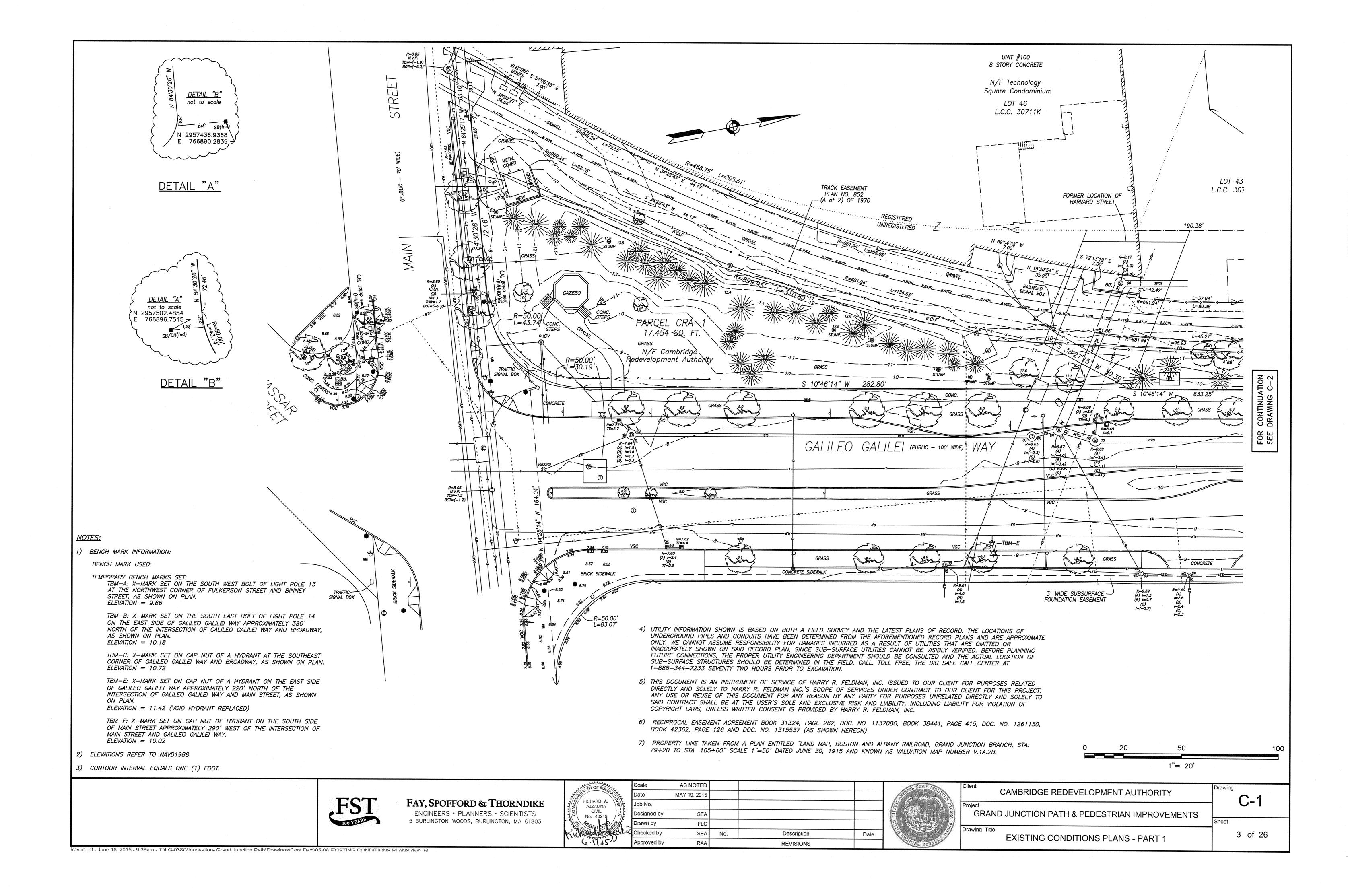
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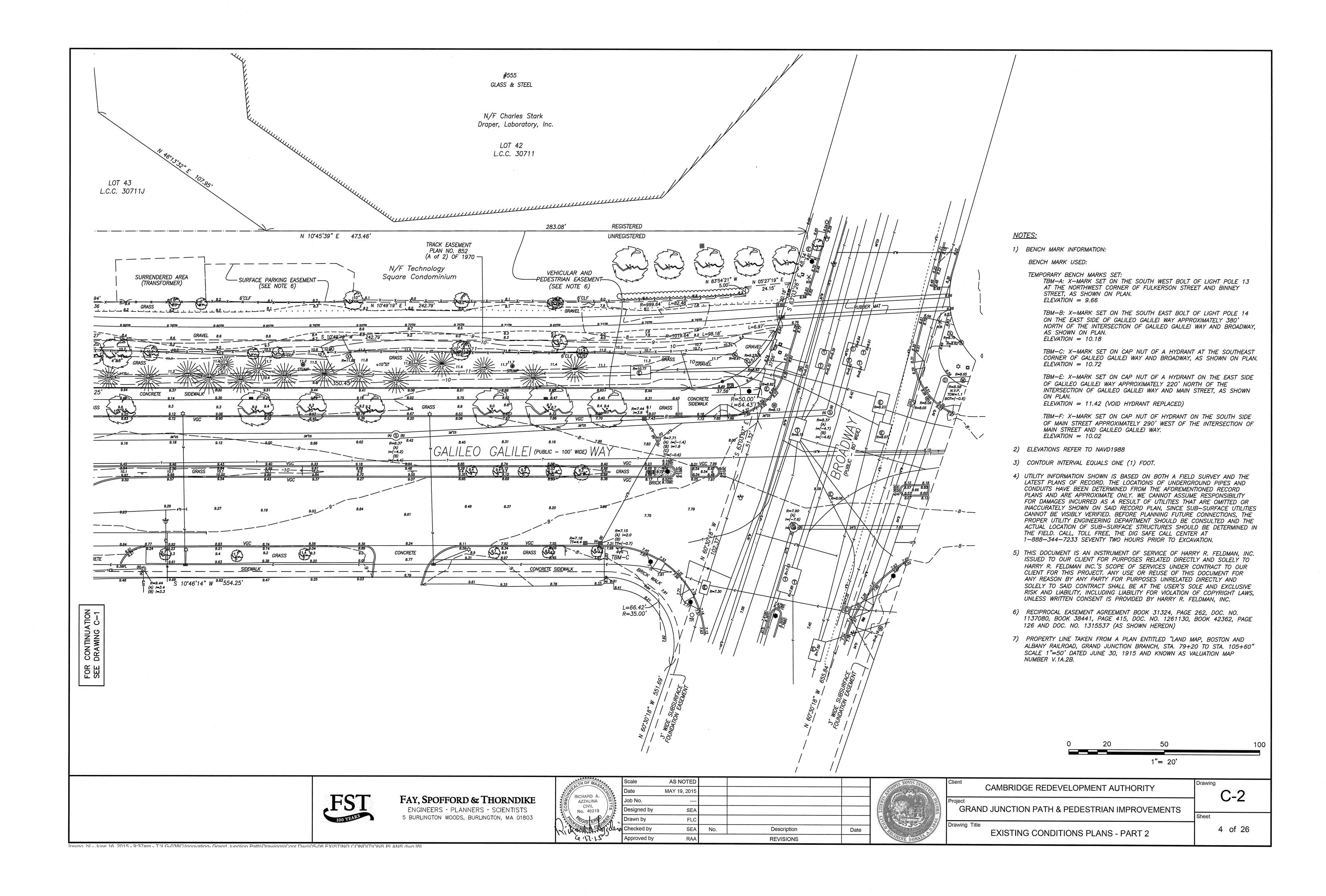
GRAND JUNCTION PATH & PEDESTRIAN IMPROVEMENTS

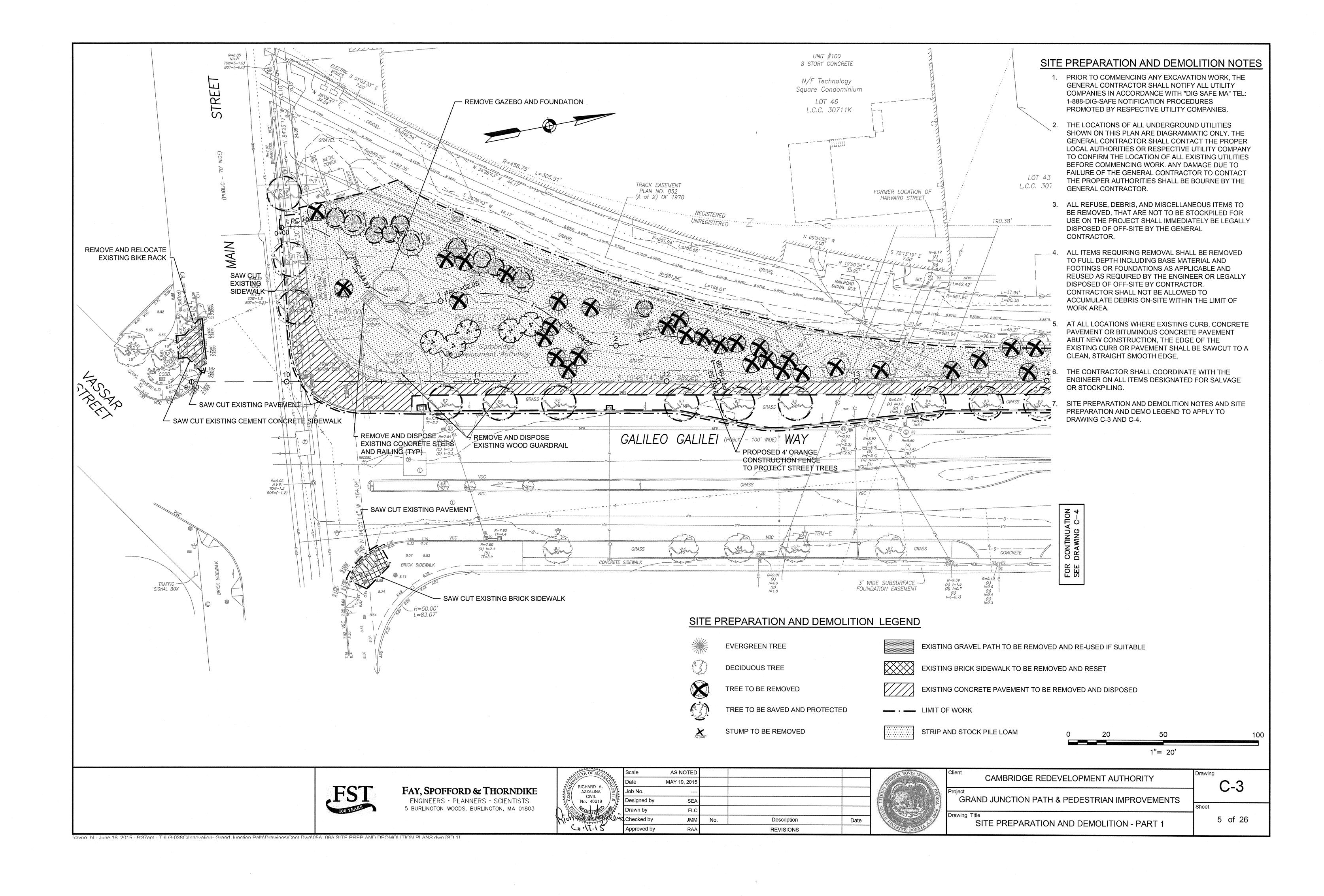
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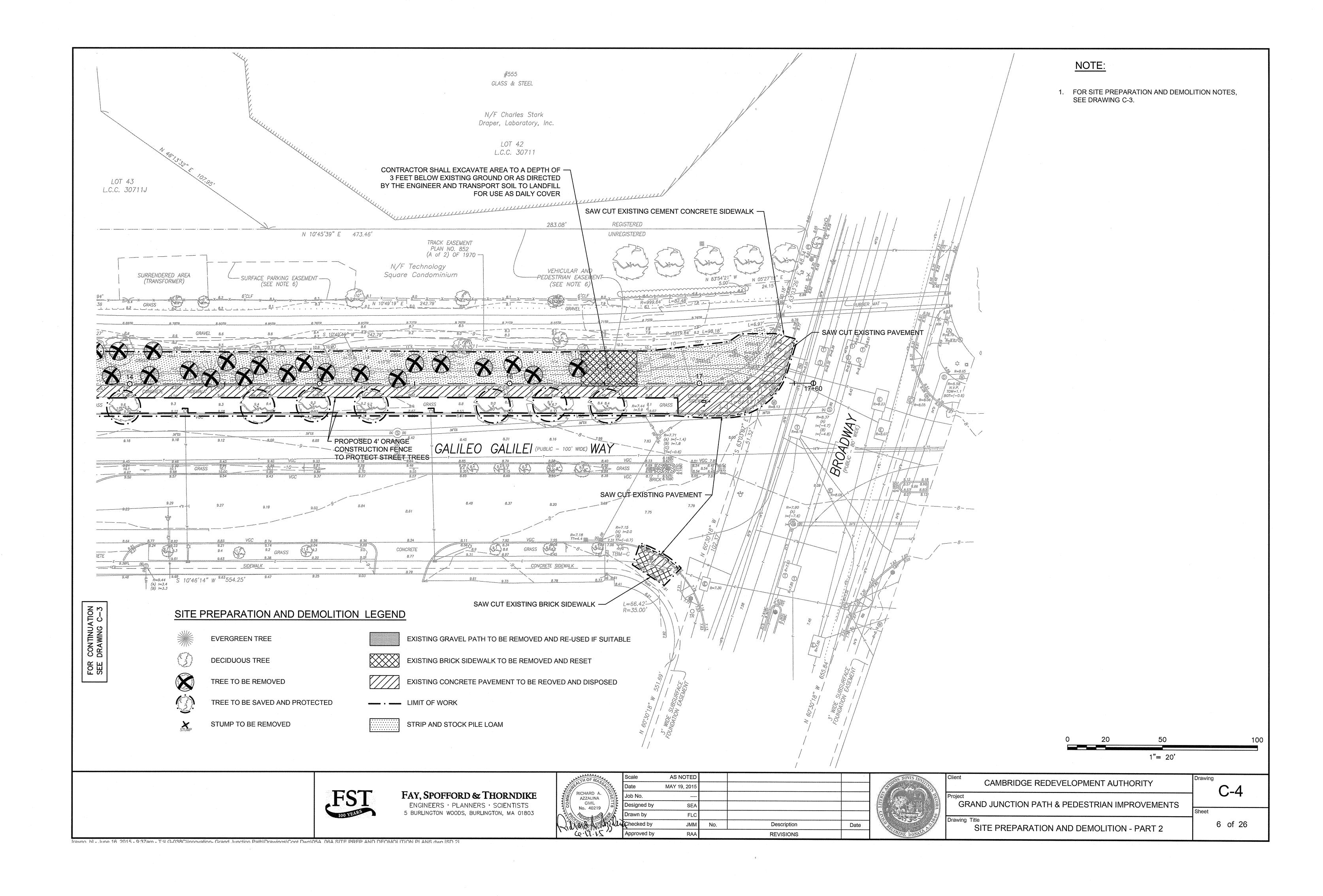
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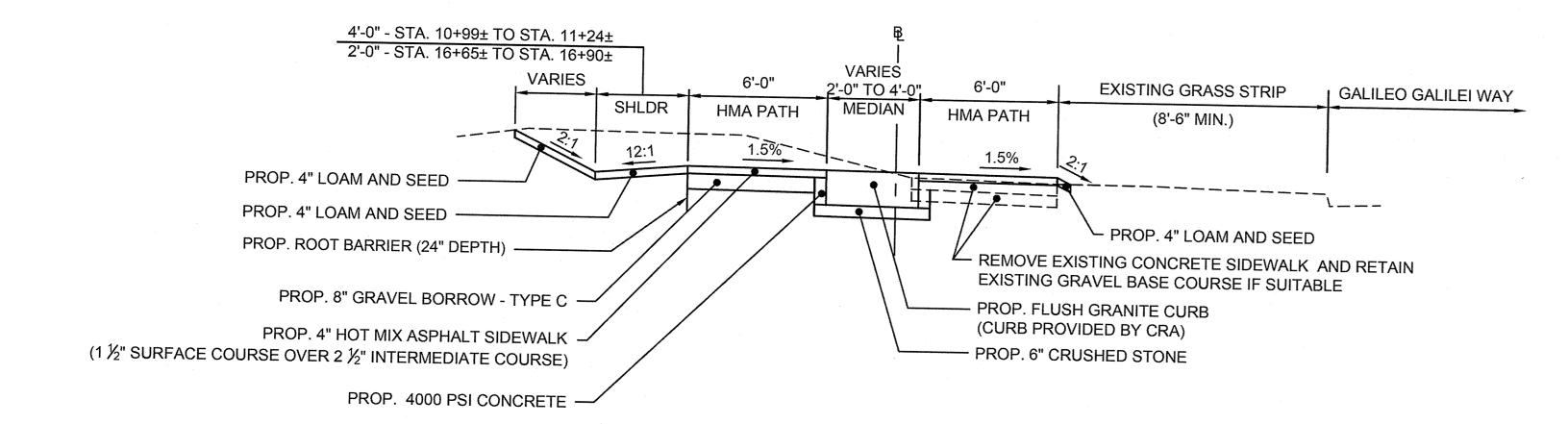
2 of 26



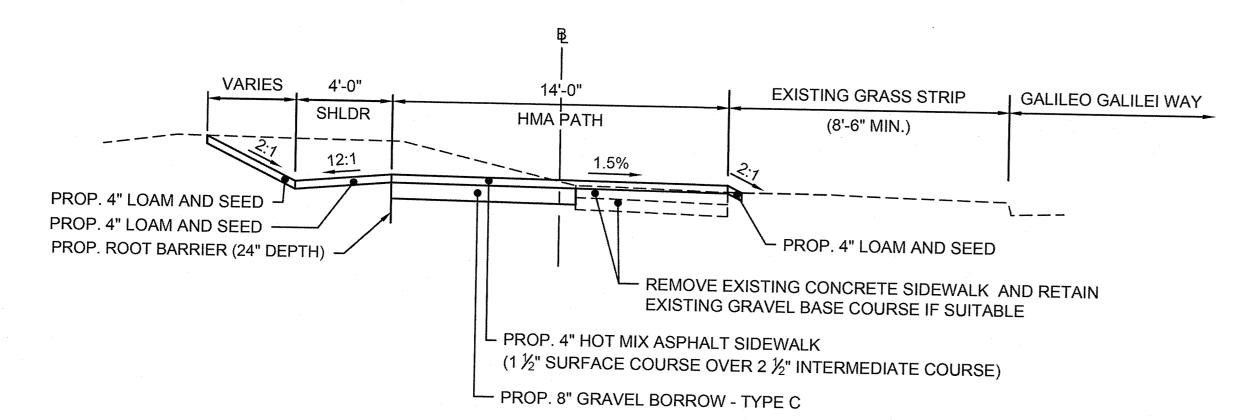




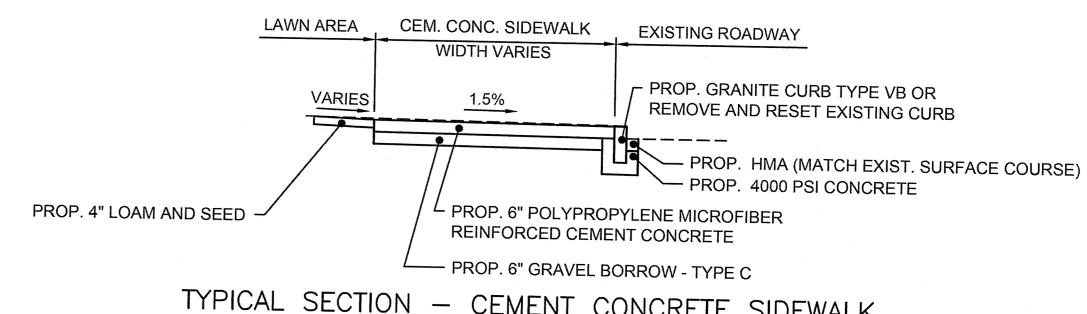




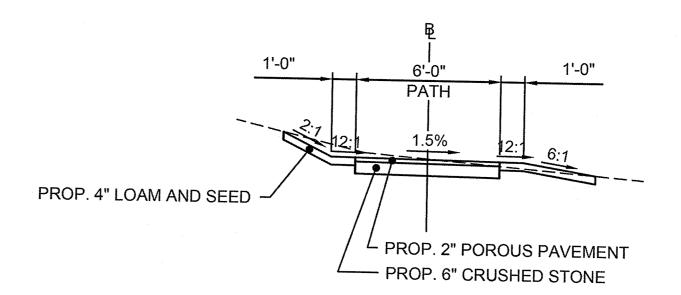
TYPICAL SECTION — HMA PATH WITH 4' WIDE FLUSH MEDIAN STA. $10+69\pm$ TO STA. $11+40\pm$ STA. $16+49\pm$ TO STA. $16+87\pm$ SCALE: 1"=4'



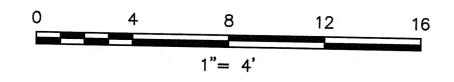
TYPICAL SECTION - 12' WIDE HMA PATH STA. $11+40\pm$ TO STA. $16+49\pm$ SCALE: 1" = 4'



TYPICAL SECTION — CEMENT CONCRETE SIDEWALK STA. $10+00\pm$ TO STA. $10+69\pm$ STA. $16+89\pm$ TO STA. $17+49\pm$ SCALE: 1"=4"



TYPICAL SECTION — POROUS PAVEMENT WALK STA. $0+11\pm$ TO STA. $2+60\pm$ SCALE: 1" = 4'



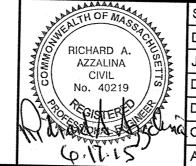


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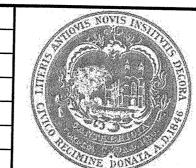
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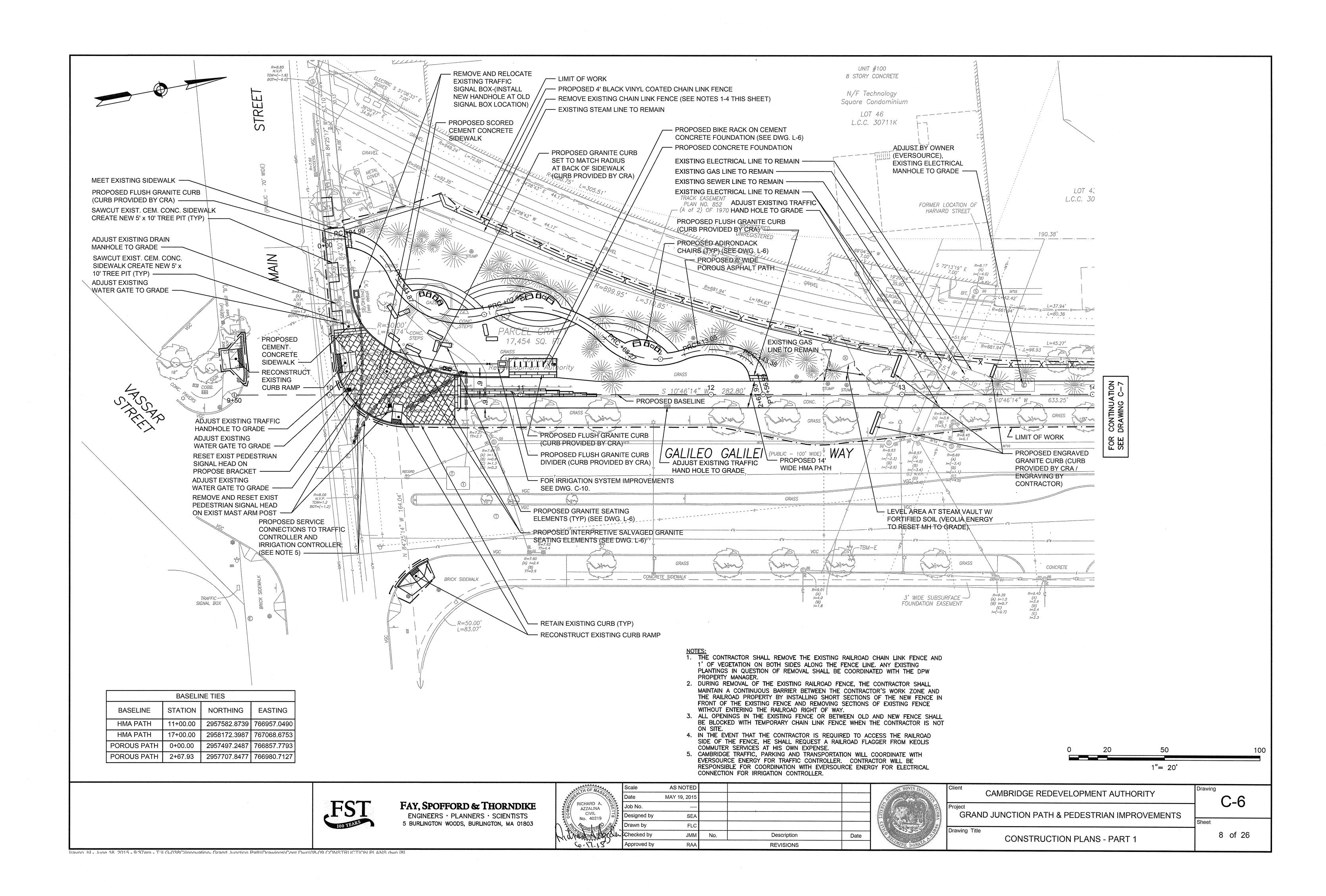
5 BURLINGTON WOODS, BURLINGTON, MA 01803

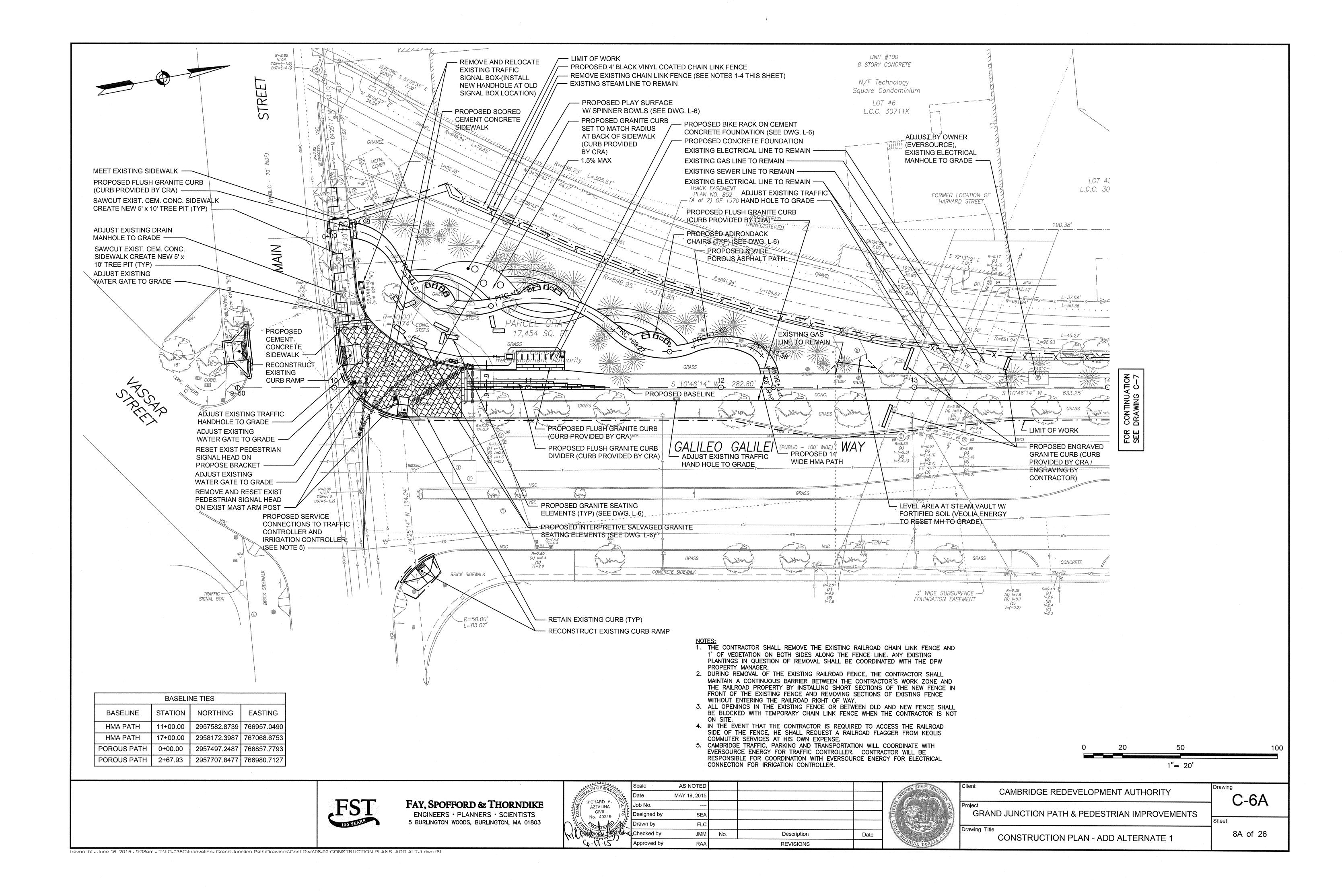


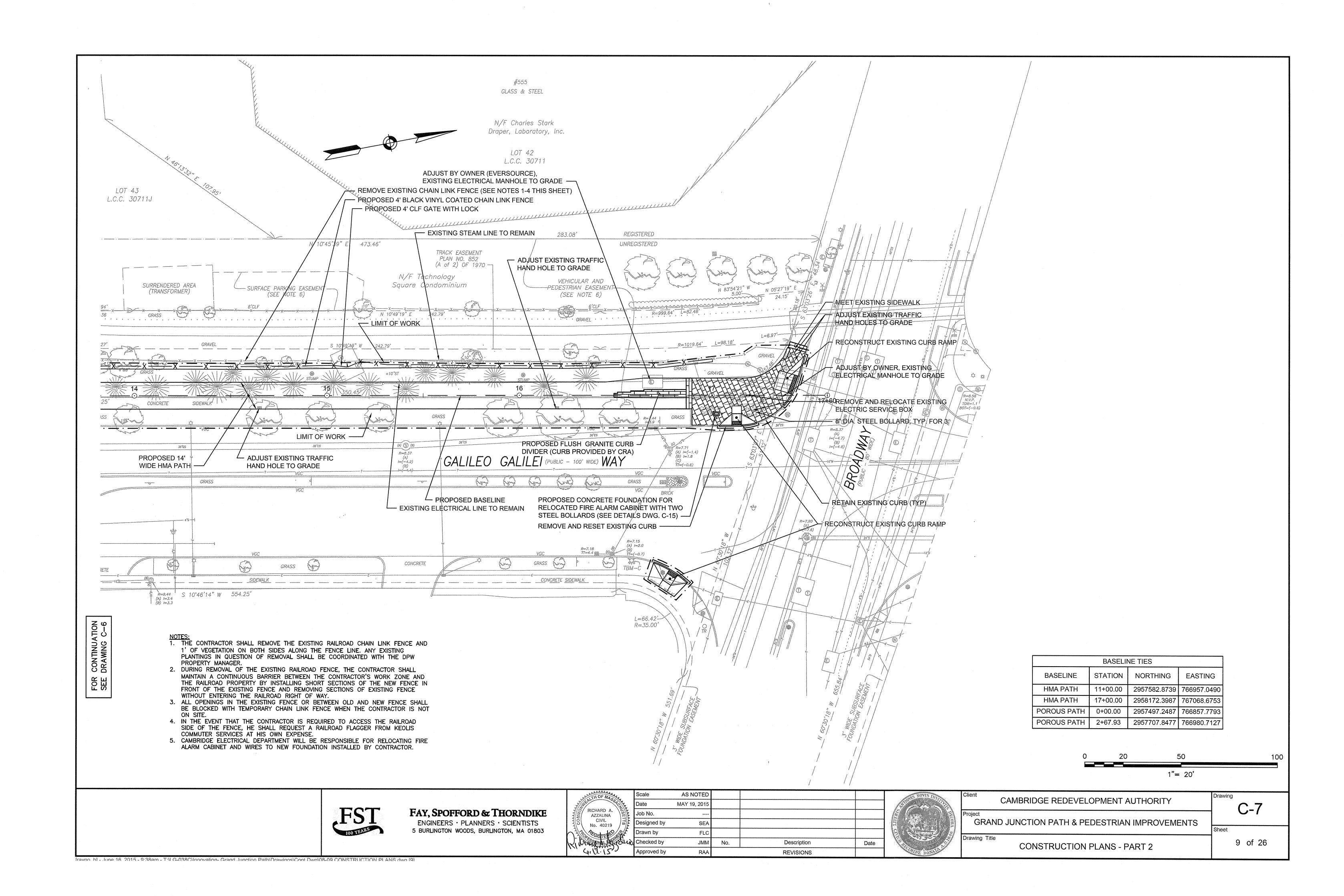
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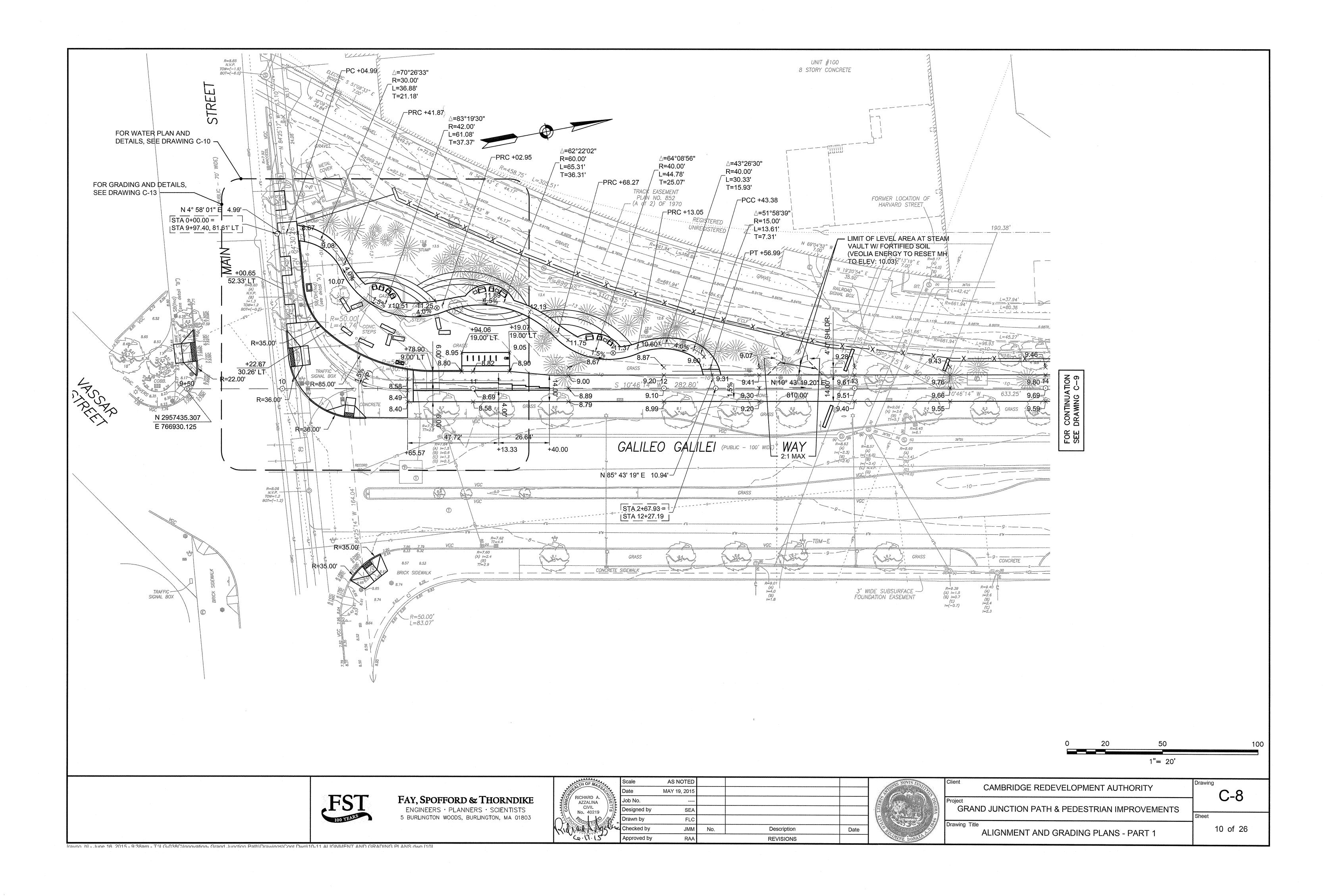


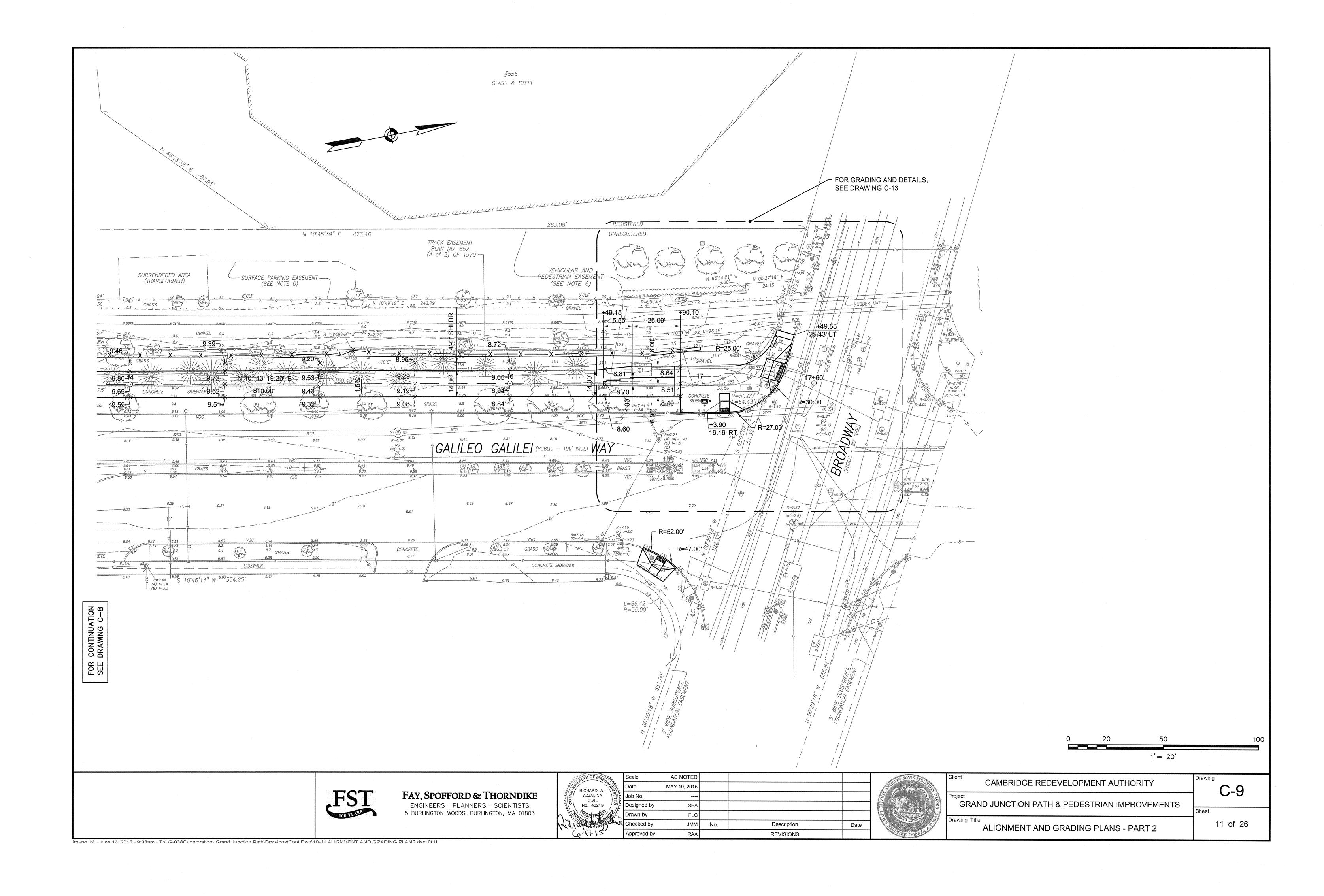
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	GRAND JUNCTION PATH & PEDESTRIAN IMPROVEMENTS	C-5
o/	Drawing Title TYPICAL SECTIONS	7 of 26

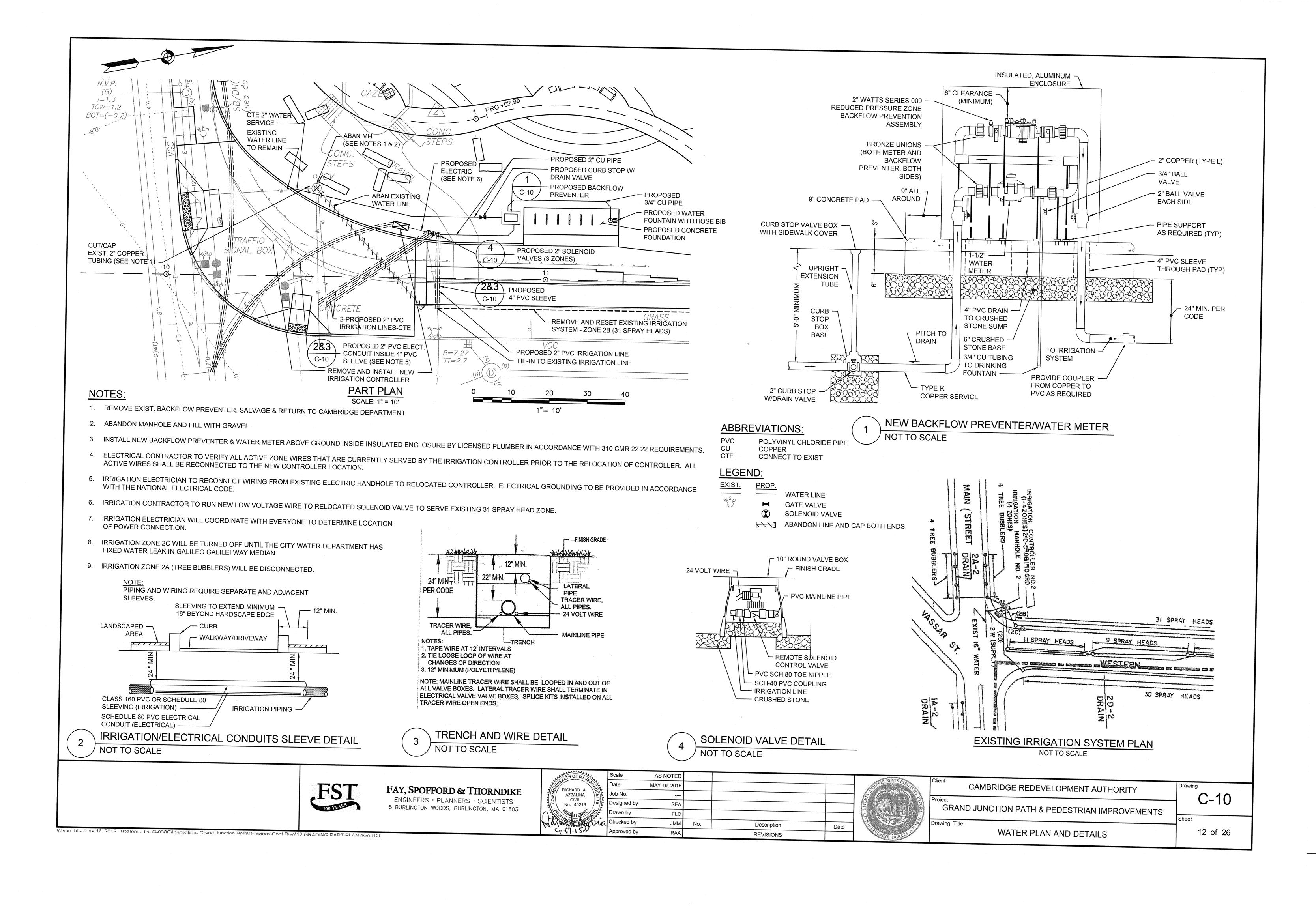


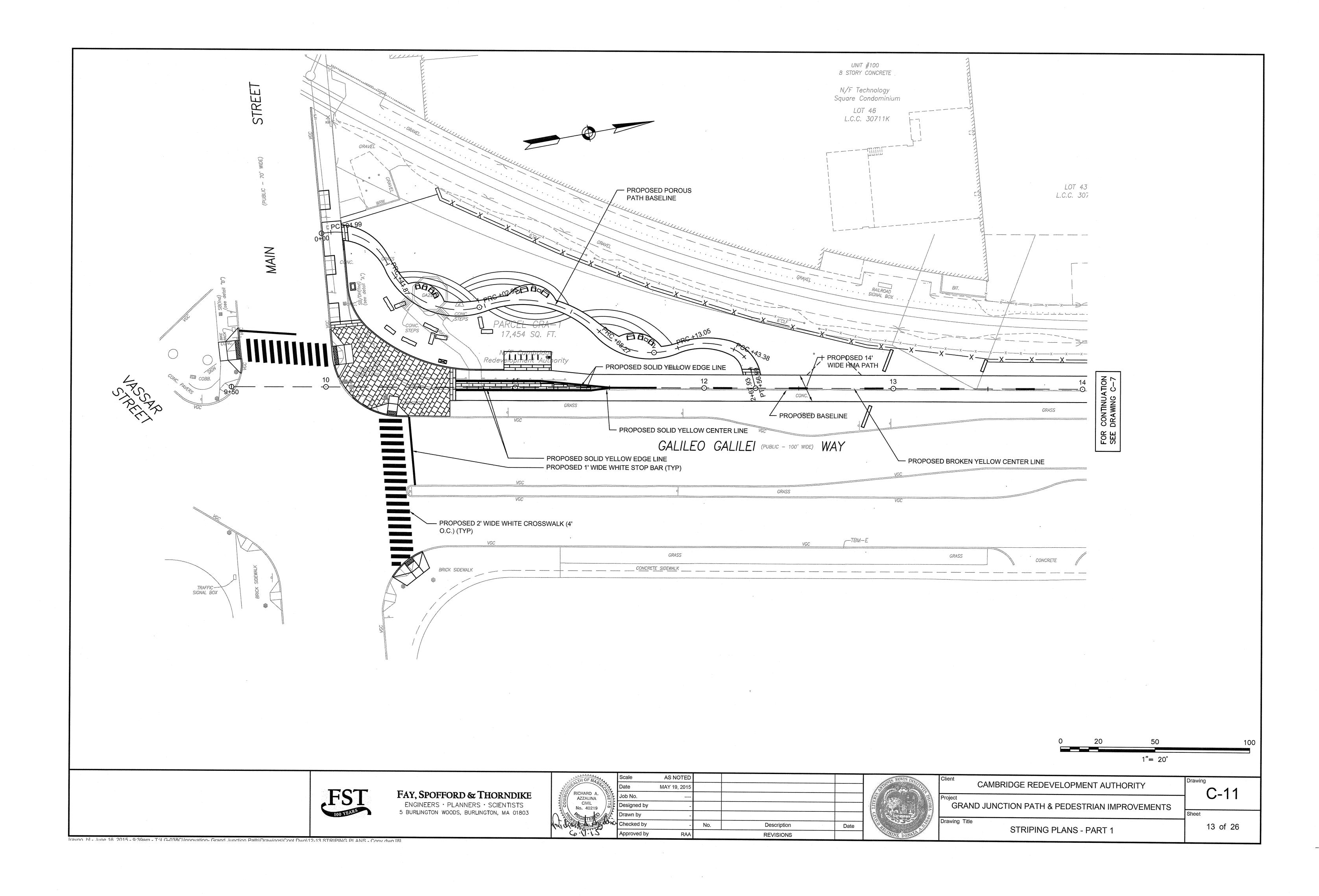


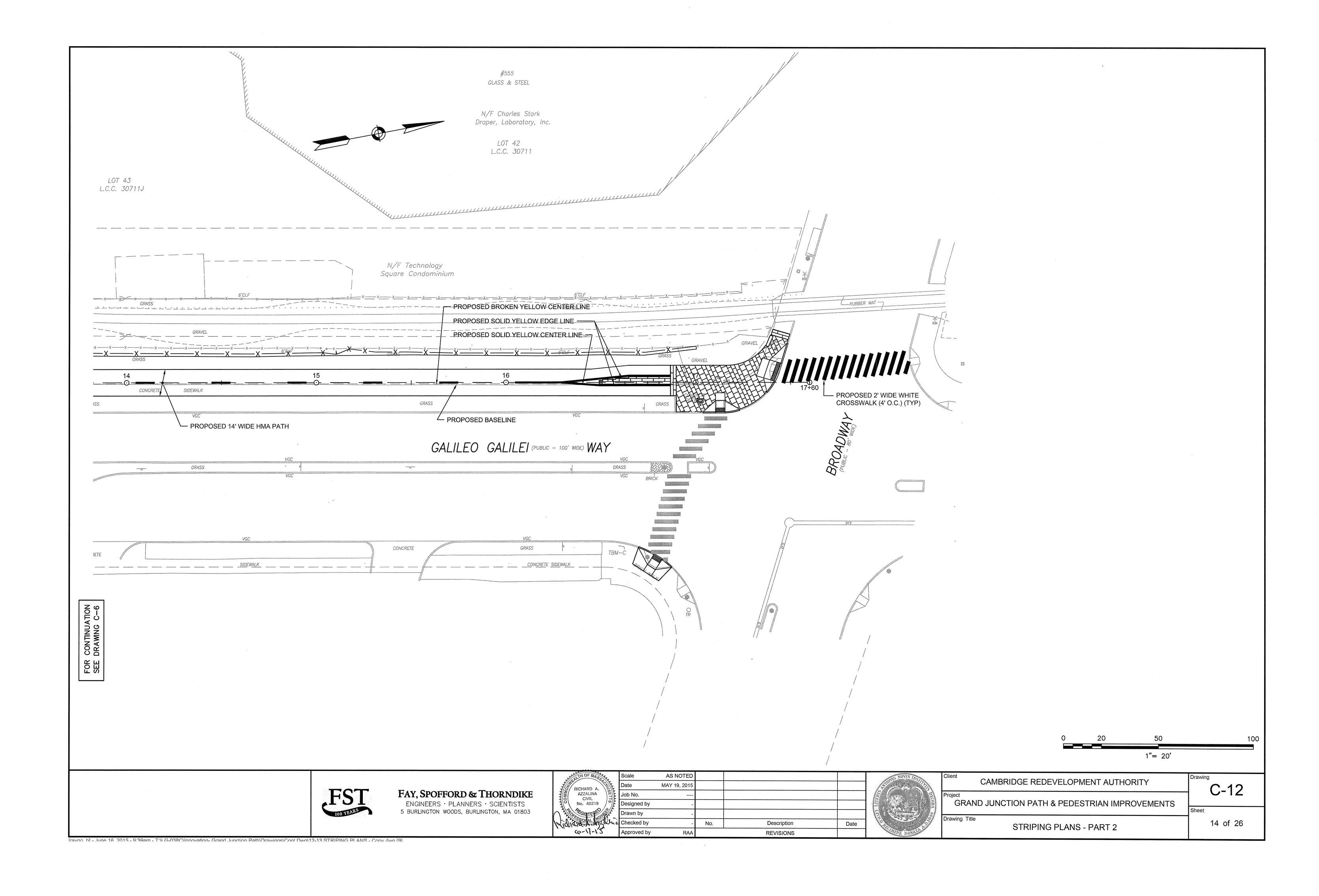


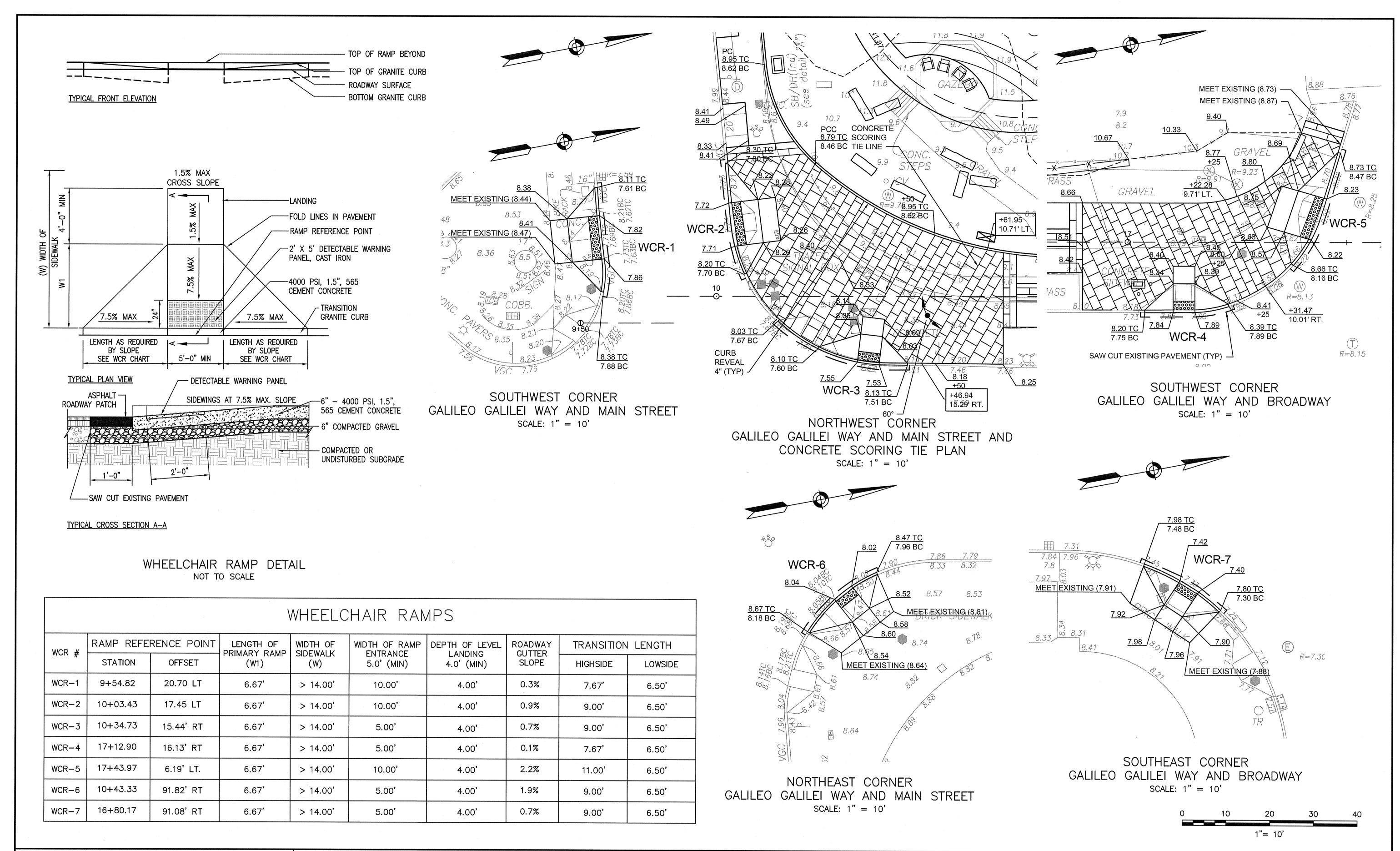








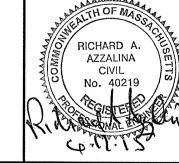






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ya	Checked by	JMM	No.	Description	Date	
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CAMBRIDGE REDI	EVELOPMENT AUTHORITY
Project GRAND JUNCTION PATH	& PEDESTRIAN IMPROVEMENTS
Drawing Title	PEDESTRIAN RAMP DETAILS

C-13

Sheet
15 of 26

G-038C\Innovation- Grand .lunction Path\Drawings\Cont Dwo\13 PEDESTRIAN RAMP DETAILS dwg I

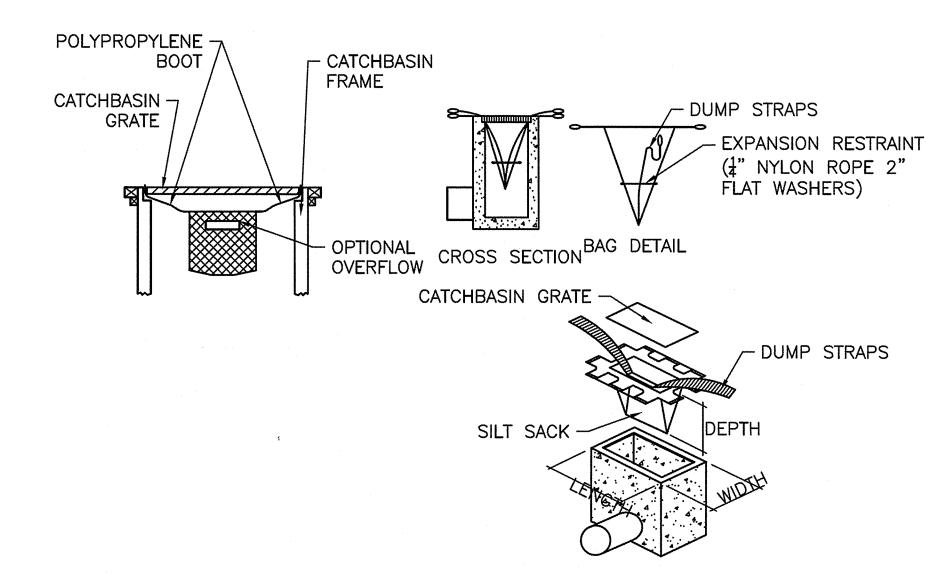
EROSION AND SEDIMENT CONTROL NOTES*

- 1. PRIOR TO ANY LAND DISTURBANCE ACTIVITIES COMMENCING ON THE SITE, THE DEVELOPER SHALL PHYSICALLY MARK LIMITS OF NO LAND DISTURBANCE ON THE SITE WITH TAPE, SIGNS, OR ORANGE CONSTRUCTION FENCE, SO THAT WORKERS CAN SEE THE AREAS TO BE PROTECTED. THE PHYSICAL MARKERS SHALL REMAIN IN PLACE UNTIL A CERTIFICATE OF COMPLETION HAS BEEN ISSUED.
- 2. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO SOIL DISTURBANCE. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
- 3. MINIMIZE TOTAL AREA OF DISTURBANCE AND PROTECT NATURAL FEATURES AND SOIL.
- 4. THE CONTRACTOR SHALL SEQUENCE ALL ACTIVITIES TO MINIMIZE SIMULTANEOUS AREAS OF DISTURBANCE. MASS CLEARINGS AND GRADING OF THE ENTIRE SITE SHALL BE AVOIDED.
- 5. MINIMIZE SOIL EROSION AND CONTROL SEDIMENTATION DURING CONSTRUCTION,
- 6. DIVERT UNCONTAMINATED WATER AROUND DISTURBED AREAS.
- 7. INSTALL AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND GOOD ENGINEERING PRACTICES OR THE 2012 EPA'S CONSTRUCTION GENERAL PERMIT.
- 8. PROTECT AND MANAGE ON AND OFF-SITE MATERIAL STORAGE AREAS (OVERBURDEN AND STOCKPILES OF DIRT, BORROW AREAS, OR OTHER AREAS USED SOLELY BY THE PERMITTED PROJECT ARE CONSIDERED A PART OF THE PROJECT).
- 9. COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS INCLUDING WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS, AND AIR QUALITY REQUIREMENTS, INCLUDING DUST CONTROL.
- 10. SEDIMENT SHALL BE REMOVED ONCE THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF THE EROSION CONTROL DEVICE. SEDIMENT SHALL BE REMOVED FROM SILT FENCE PRIOR TO REACHING THE LOAD—BEARING CAPACITY OF THE SILT FENCE WHICH MAY BE LOWER THAN 1/4 TO 1/2 THE HEIGHT.
- 11. SEDIMENT FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS SHALL BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT.
- 12. BMPS TO BE USED FOR INFILTRATION AFTER CONSTRUCTION SHALL NOT BE USED AS BMPS DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE BOARD. MANY INFILTRATION TECHNOLOGIES ARE NOT DESIGNED TO HANDLE THE HIGH CONCENTRATIONS OF SEDIMENTS TYPICALLY FOUND IN CONSTRUCTION RUNOFF, AND THUS MUST BE PROTECTED FROM CONSTRUCTION RELATED SEDIMENT LOADINGS.

- 13. SOIL STOCKPILES MUST BE STABILIZED OR COVERED AT THE END OF EACH WORKDAY. STOCKPILE SIDE SLOPES SHALL NOT BE GREATER THAN 2:1. ALL STOCKPILES SHALL BE SURROUNDED BY SEDIMENT CONTROLS.
- 14. FOR ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS AND AREAS WITHIN 50 FEET OF A BUILDING UNDER CONSTRUCTION, A PERIMETER SEDIMENT CONTROL SYSTEM SHALL BE INSTALLED AND MAINTAINED TO CONTAIN SOIL.
- 15. A TRACKING PAD OR OTHER APPROVED STABILIZATION METHOD SHALL BE CONSTRUCTED AT ALL ENTRANCE/EXIST POINTS OF THE SITE TO REDUCE THE AMOUNT OF SOIL CARRIED ONTO ROADWAYS AND OFF THE SITE.
- 16. ON THE CUT SIDE OF ROADS, DITCHES SHALL BE STABILIZED IMMEDIATELY WITH ROCK RIP—RAP OR OTHER NON—ERODIBLE LINERS, OR WHERE APPROPRIATE, VEGETATIVE MEASURES SUCH AS HYDROSEEDING OR JUTE MATTING.
- 17. PERMANENT SEEDING SHALL BE UNDERTAKEN IN THE SPRING FROM MARCH THROUGH MAY, AND IN LATE SUMMER AND EARLY FALL FROM AUGUST TO OCTOBER 15. DURING THE PEAK SUMMER MONTHS AND IN THE FALL AFTER OCTOBER 15, WHEN SEEDING IS FOUND TO BE IMPRACTICAL, APPROPRIATE TEMPORARY STABILIZATION SHALL BE APPLIED. PERMANENT SEEDING MAY BE UNDERTAKEN DURING THE SUMMER IF PLANS PROVIDE FOR ADEQUATE MULCHING AND WATERING.
- 18. ALL SLOPES STEEPER THAN 3:1 (H: V, 33.3%), AS WELL AS PERIMETER DIKES, SEDIMENT BASINS OR TRAPS, AND EMBANKMENTS MUST, UPON COMPLETION, BE IMMEDIATELY STABILIZED WITH SOD, SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES. AREAS OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST NOT BE DISTURBED.
- 19. TEMPORARY SEDIMENT TRAPPING DEVICES MUST NOT BE REMOVED UNTIL PERMANENT STABILIZATION IS ESTABLISHED IN ALL CONTRIBUTORY DRAINAGE AREAS.
- 20. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF REMOVAL.
- 21. PROPERLY MANAGE ON-SITE CONSTRUCTION AND WASTE MATERIALS.
- 22. PREVENT OFF-SITE VEHICLE TRACKING OF SEDIMENTS.
- 23. DUST SHALL BE CONTROLLED AT THE SITE.
- 24. ALL PREVIOUSLY DISTURBED LAND SHALL BE STABILIZED BY APPROVED METHODS AFTER 14 DAYS IF LEFT UNDISTURBED. THIS INCLUDES STOCKPILES, CONSTRUCTION ENTRANCES, GRADED AREAS AND OTHER CONSTRUCTION ACTIVITY RELATED CLEARING.
- 25. IF WORK IS HALTED OVER WINTER MONTHS THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILIZING THE AREA THROUGH GROUNDCOVER PRACTICES.

* FROM CITY OF CAMBRIDGE STANDARD SPECIFICATIONS AND DETAILS.

Iravno, bl.-. June 16, 2015 - 9:40am - T:\LG-038C\Innovation- Grand, Junction Path\Drawings\Cont Dwo\14-15-16 CONSTRUCTION DETAILS dwo [14]



THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS SHEET, OVERLAND AND CONCENTRATED FLOWS (NOT GREATER THAN 1 CFS). THE METHOD CAN DRAIN FLAT AREA TO STEEP SLOPES. INLET CAPACITY WILL DECREASE WITH THIS METHOD AND CONTRACTOR SHALL EXPECT FLOODING TO OCCUR DURING HIGH FLOW EVENTS.

INSPECTION SCHEDULE SHALL COMPLY WITH THE 2012 EPA CONSTRUCTION GENERAL PERMIT

MAINTENANCE SHALL OCCUR WHEN NECESSARY. SILT SACKS SHALL BE CLEANED ONCE THE BAG

INSPECTION SCHEDULE SHALL COMPLY WITH PERMIT

IS FILLED HALF WAY WITH DEBRIS. CONTRACTOR SHALL REMOVE SILT SACK AND PLACE NEW UNIT. DO NOT EMPTY SILT SACK CONTENTS INTO THE CATCHBASIN.

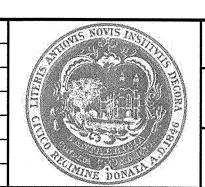
CATCH BASIN W/SILT SACK INLET PROTECTION

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FAY, SPOFFORD & THORNDIKE

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5 BURLINGTON WOODS, BURLINGTON, MA 01803

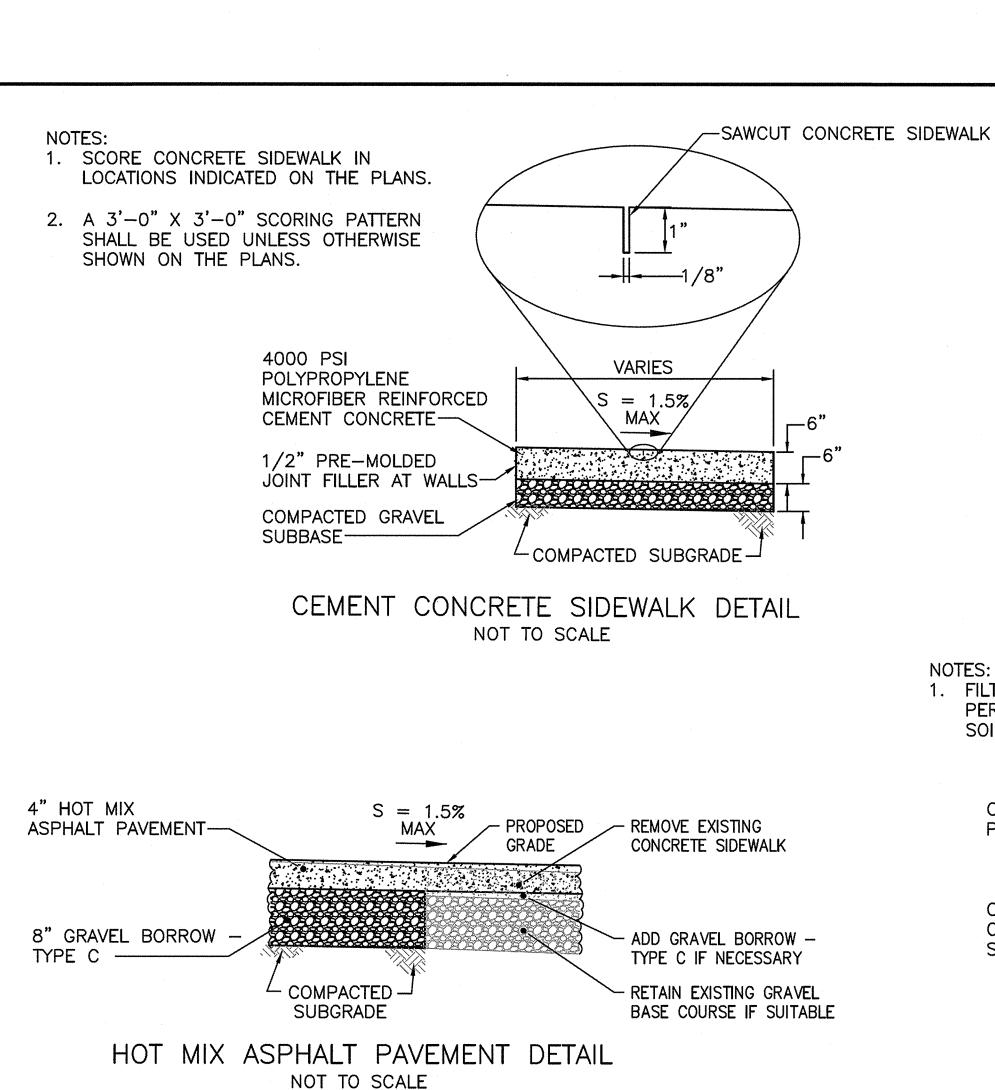
AS NOTED MAY 19, 201 RICHARD A. Job No. AZZALINA Designed by No. 40219 SEA Drawn by FLC Checked by JMM Description Date 21.11.0 Approved by **REVISIONS**



Client	CAMBRIDGE REDEVELOPMENT AUTHORITY
Project GR	AND JUNCTION PATH & PEDESTRIAN IMPROVEMEN
Drawing ⁻	CONSTRUCTION DETAILS - PART 1

Drawing C-14

16 of 26



-ROUND TOP OF CONC FILL

SAFETY BLACK

FINISHED GRADE

3'-6"

------6" (TYP.)

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STEEL BOLLARD DETAIL

NOT TO SCALE

- 6" GRAVEL BORROW - TYPE C

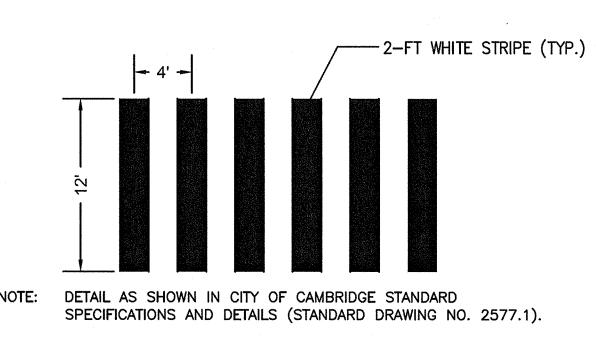
ELECTRIC

SERVICE BOX

CONC BASE-

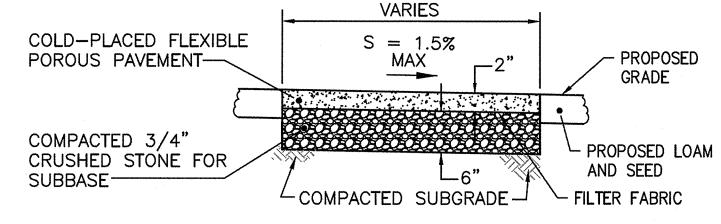
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SUBGRADE .

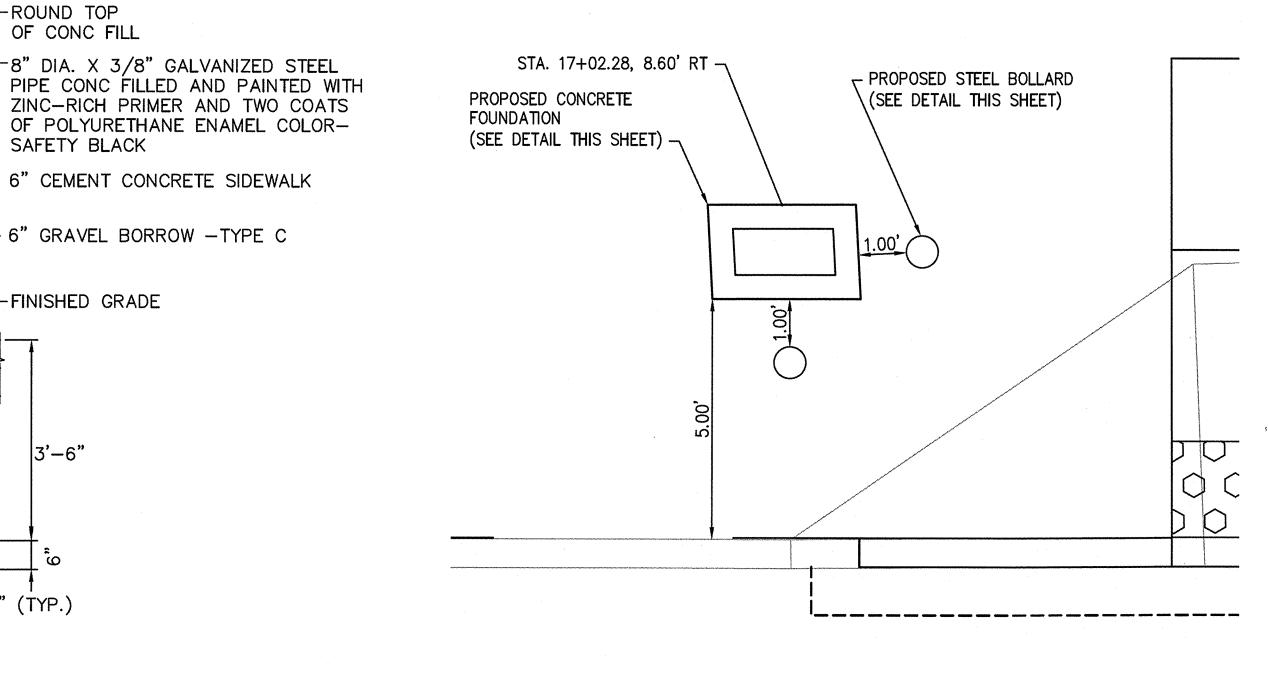


CAMBRIDGE STANDARD CROSSWALK DETAIL NOT TO SCALE

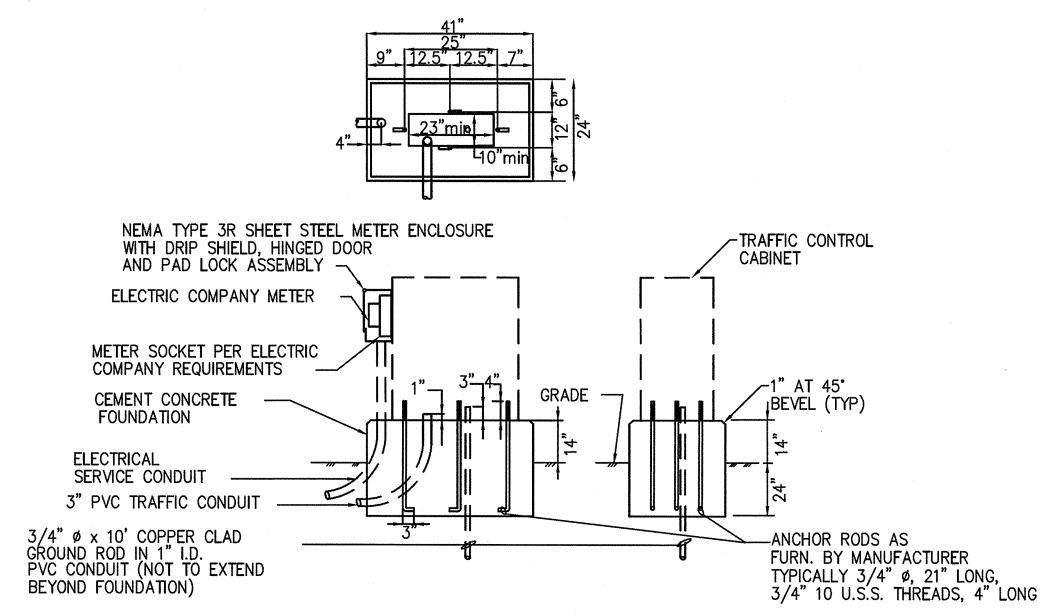
1. FILTER FABRIC MUSH HAVE PERMEABILITY GREATER THAN THE SOIL BELOW.



POROUS ASPHALT PAVEMENT DETAIL NOT TO SCALE



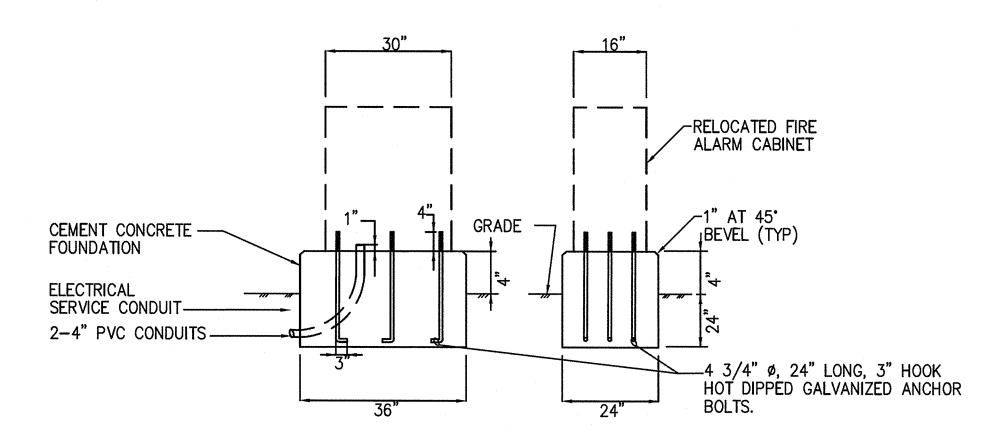
RELOCATED FIRE ALARM CABINET DETAIL NOT TO SCALE



FOUNDATION FOR BASE MOUNTED TRAFFIC SIGNAL CONTROL CABINET NOT TO SCALE

NOTES:

- SEE PLANS AND SPECIFICATIONS FOR SIZE, NUMBER OF CONDUITS AND MATERIALS. THE NUMBER AND SIZE OF CONDUITS SHALL BE AS REQUIRED TO PROVIDE A FULLY FUNCTIONING TRAFFIC SIGNAL SYSTEM. THE CONTRACTOR SHALL COORDINATE THESE REQUIREMENTS WITH THE CITY OF CAMBRIDGE, THE LATTER OF WHOM IS RESPONSIBLE FOR WIRING THE TRAFFIC SIGNALS TO THE NEW TRAFFIC CONTROL CABINET ASSEMBLY.
- 2. USE 4000 PSI 3/4" 610 LB CEMENT CONCRETE MASONRY FOR THE CEMENT CONCRETE FOUNDATION. 3. THE DIMENSIONS PROVIDED FOR THE FOUNDATION ARE CONSISTENT WITH THE CITY OF CAMBRIDGE STANDARDS. THE DIMENSIONS MAY VARY BASED ON THE CONTROL CABINET INSTALLED. THE CONTRACTOR SHALL CONSTRUCT A FOUNDATION CONSISTENT WITH THIS DETAIL AND CONSISTENT WITH THE CABINET TO BE INSTALLED.
- 4. PROVIDE 3' WIDE X 4" THICK CEMENT CONCRETE PAD ON CABINET DOOR SIDE DIRECTLY ADJACENT TO ENTIRE CONTROLLER FOUNDATION. THE PAD SHALL CONFORM TO CITY CEMENT CONCRETE SIDEWALK STANDARDS.



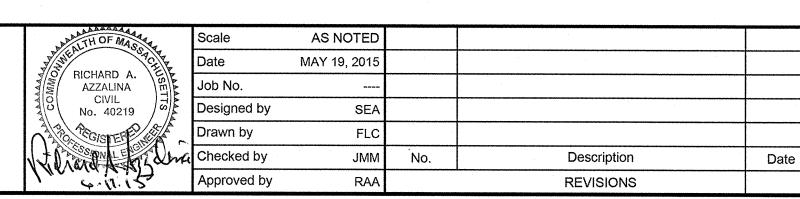
FOUNDATION FOR RELOCATED FIRE ALARM CONTROL CABINET NOT TO SCALE

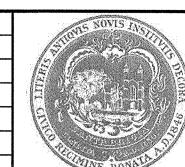
NOTES:

- 1. USE 4000 PSI 3/4" 610 LB CEMENT CONCRETE MASONRY FOR THE CEMENT CONCRETE FOUNDATION. 2. THE DIMENSIONS PROVIDED FOR THE CABINET AND FOUNDATION ARE CONSISTENT WITH THE CITY OF CAMBRIDGE STANDARDS. THE DIMENSIONS MAY VARY BASED ON THE CONTROL CABINET INSTALLED. THE CONTRACTOR SHALL CONSTRUCT A FOUNDATION CONSISTENT WITH THIS DETAIL AND CONSISTENT WITH THE CABINET TO BE
- INSTALLED. PROVIDE 3' WIDE X 4" THICK CEMENT CONCRETE PAD ON CABINET DOOR SIDE DIRECTLY ADJACENT TO ENTIRE CONTROLLER FOUNDATION. THE PAD SHALL CONFORM TO CITY CEMENT CONCRETE SIDEWALK STANDARDS.



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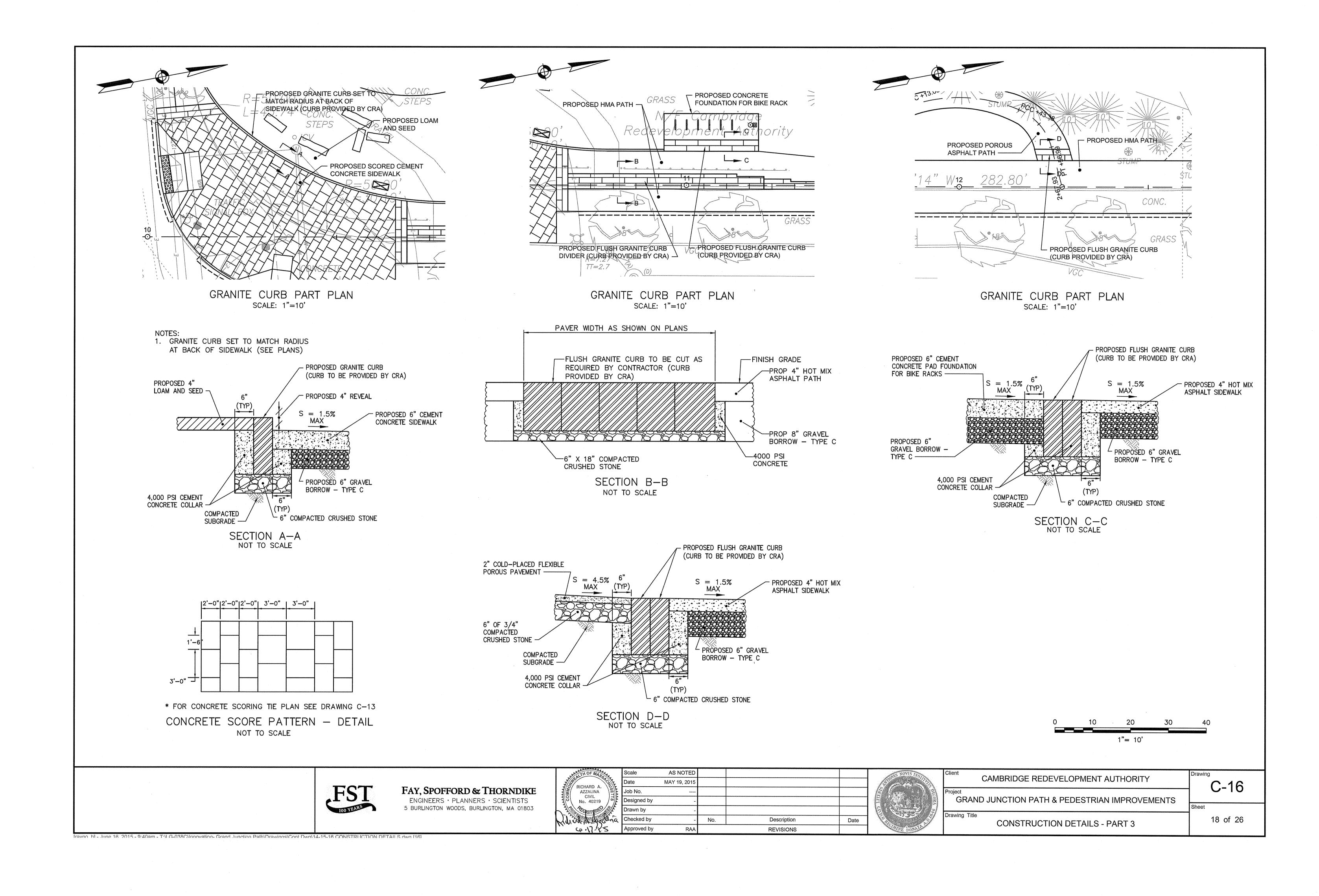


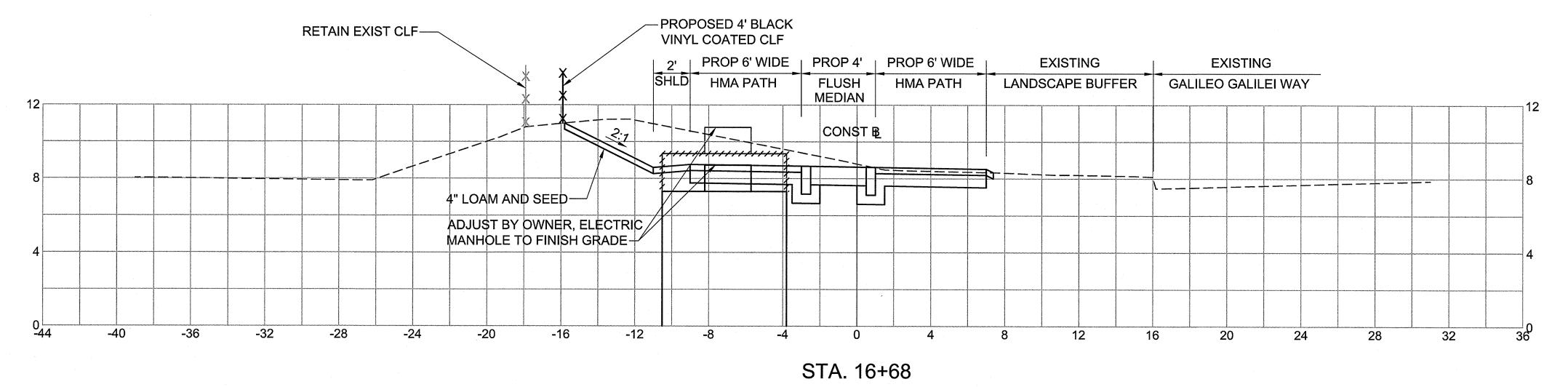
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	Project GRAND JUNCTION PATH & PEDESTRIAN IMPROVEMENTS
7	Drawing Title

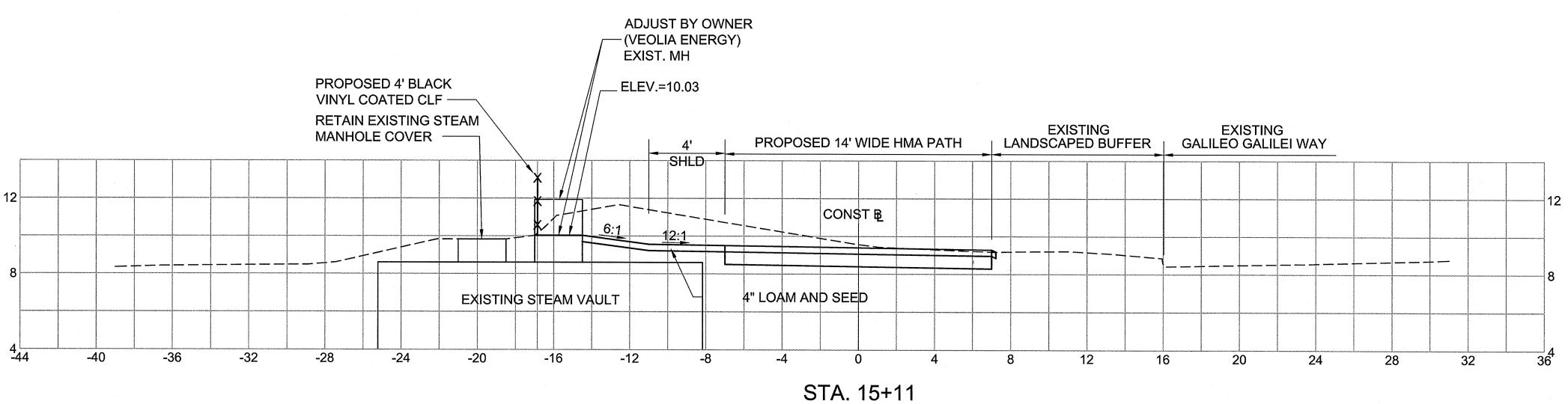
CONSTRUCTION DETAILS - PART 2

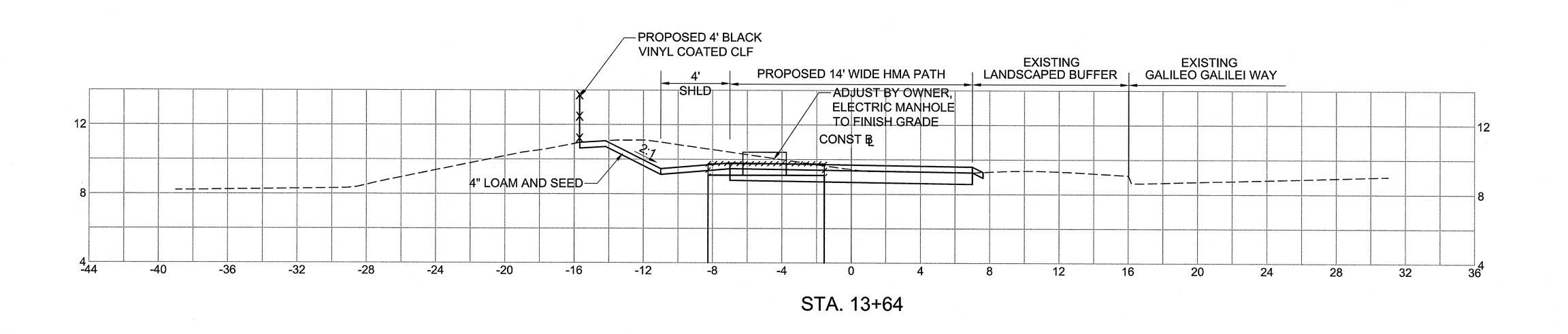
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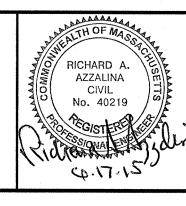




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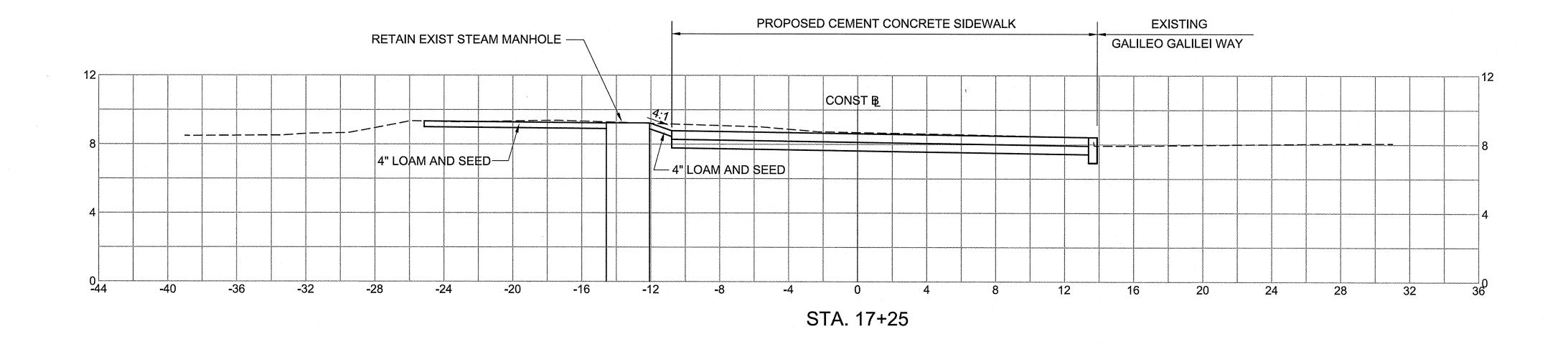
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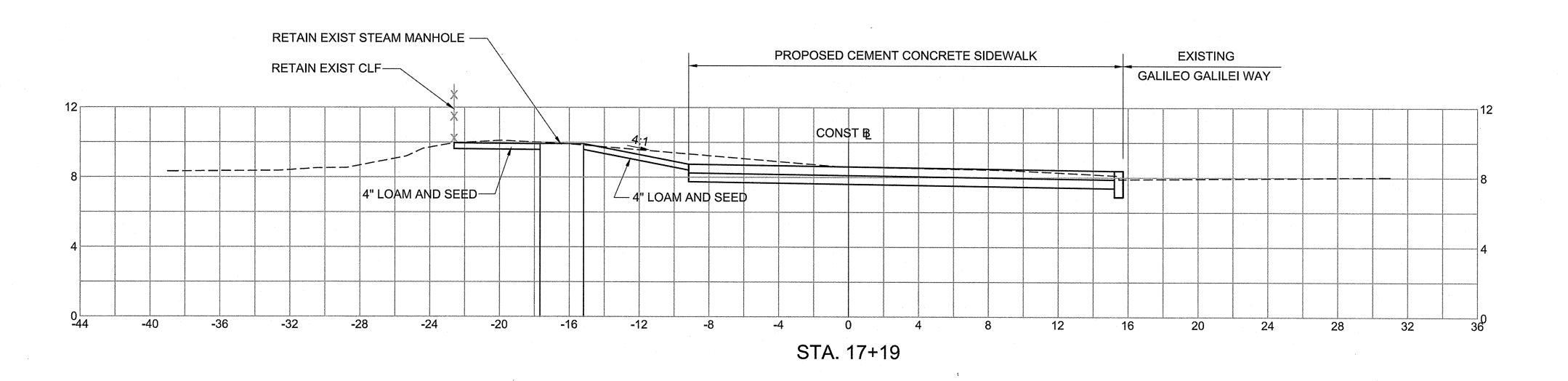
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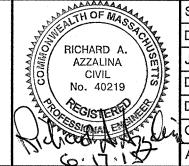




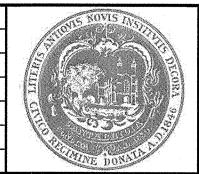


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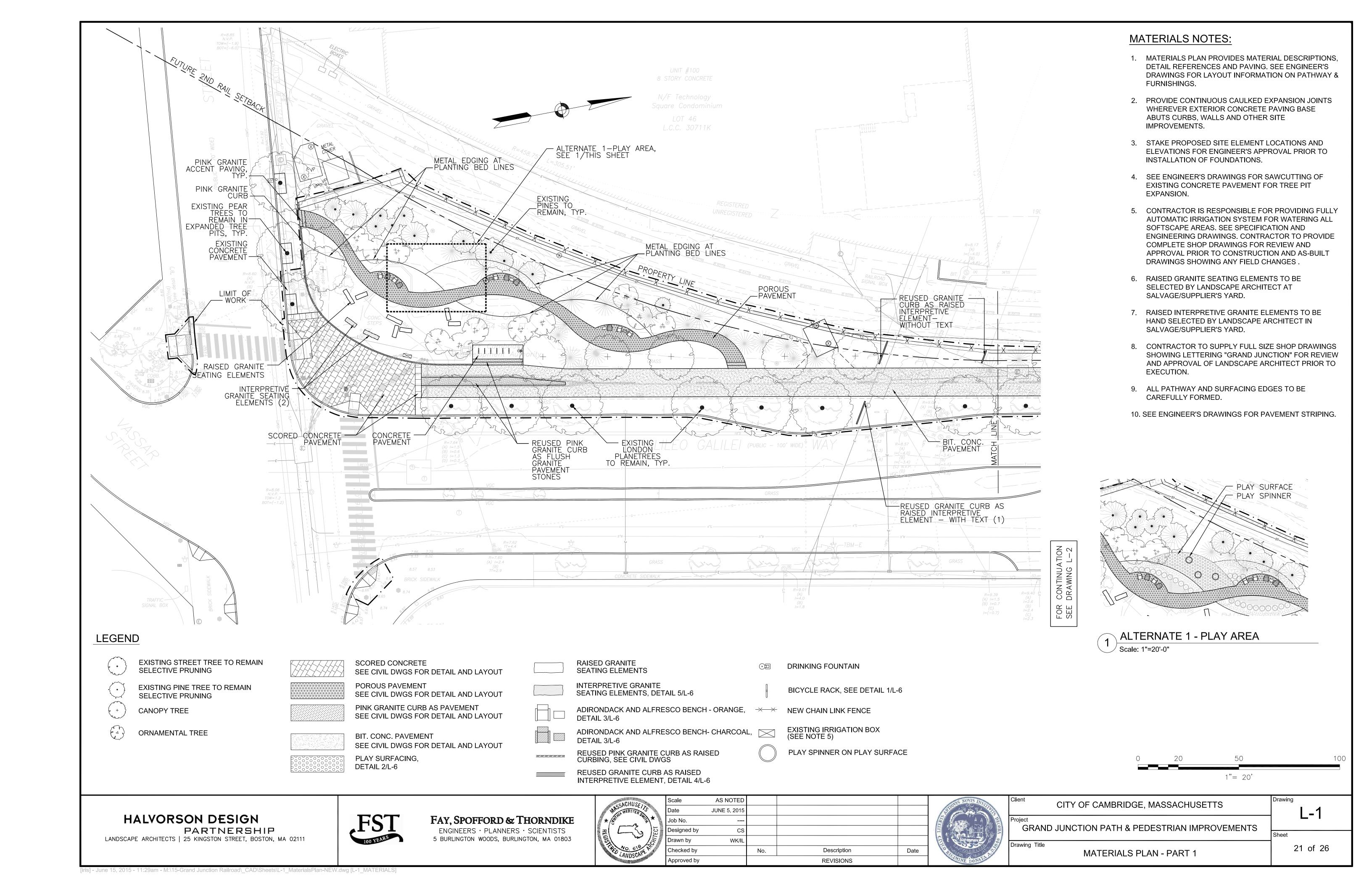
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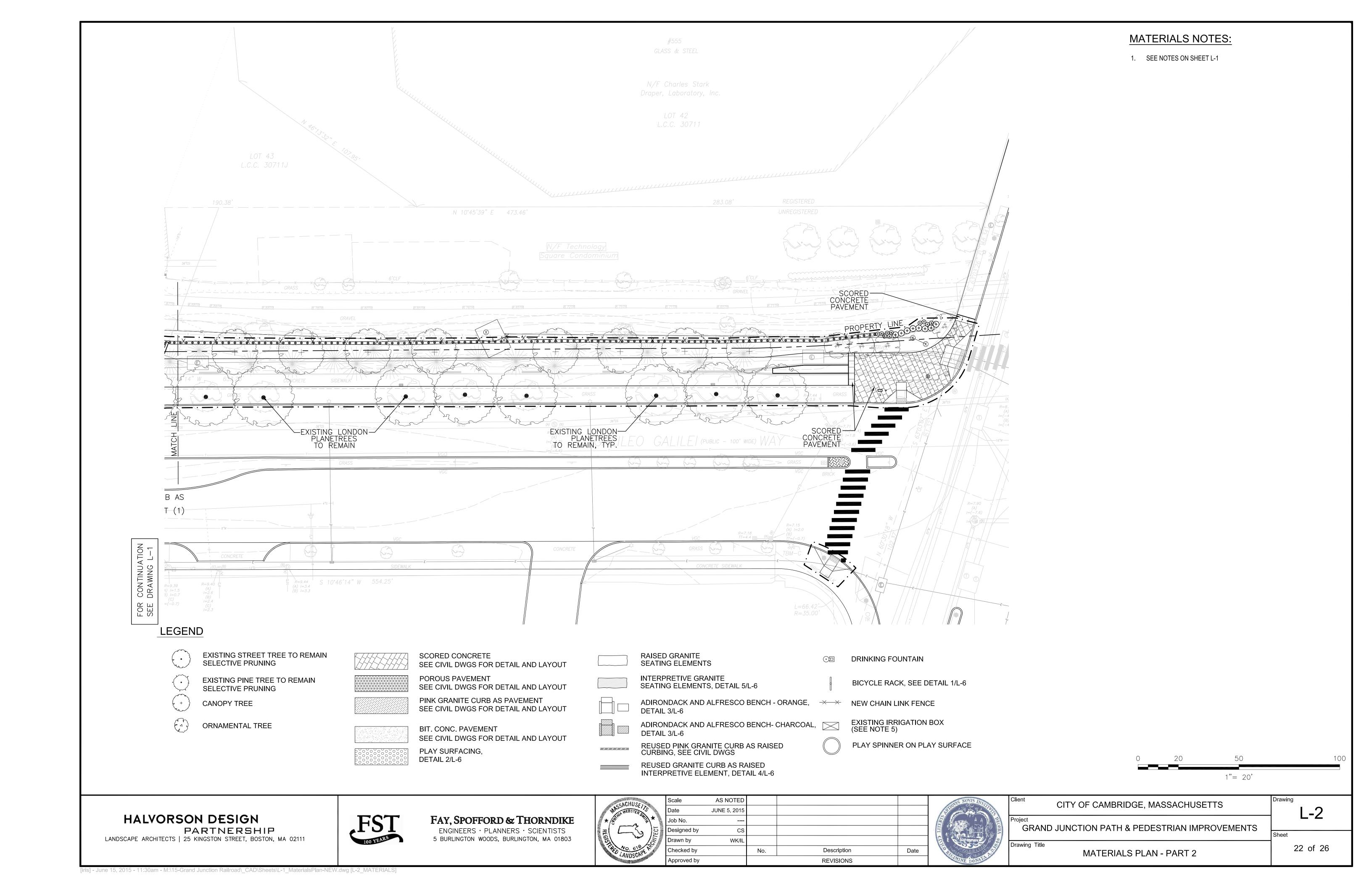


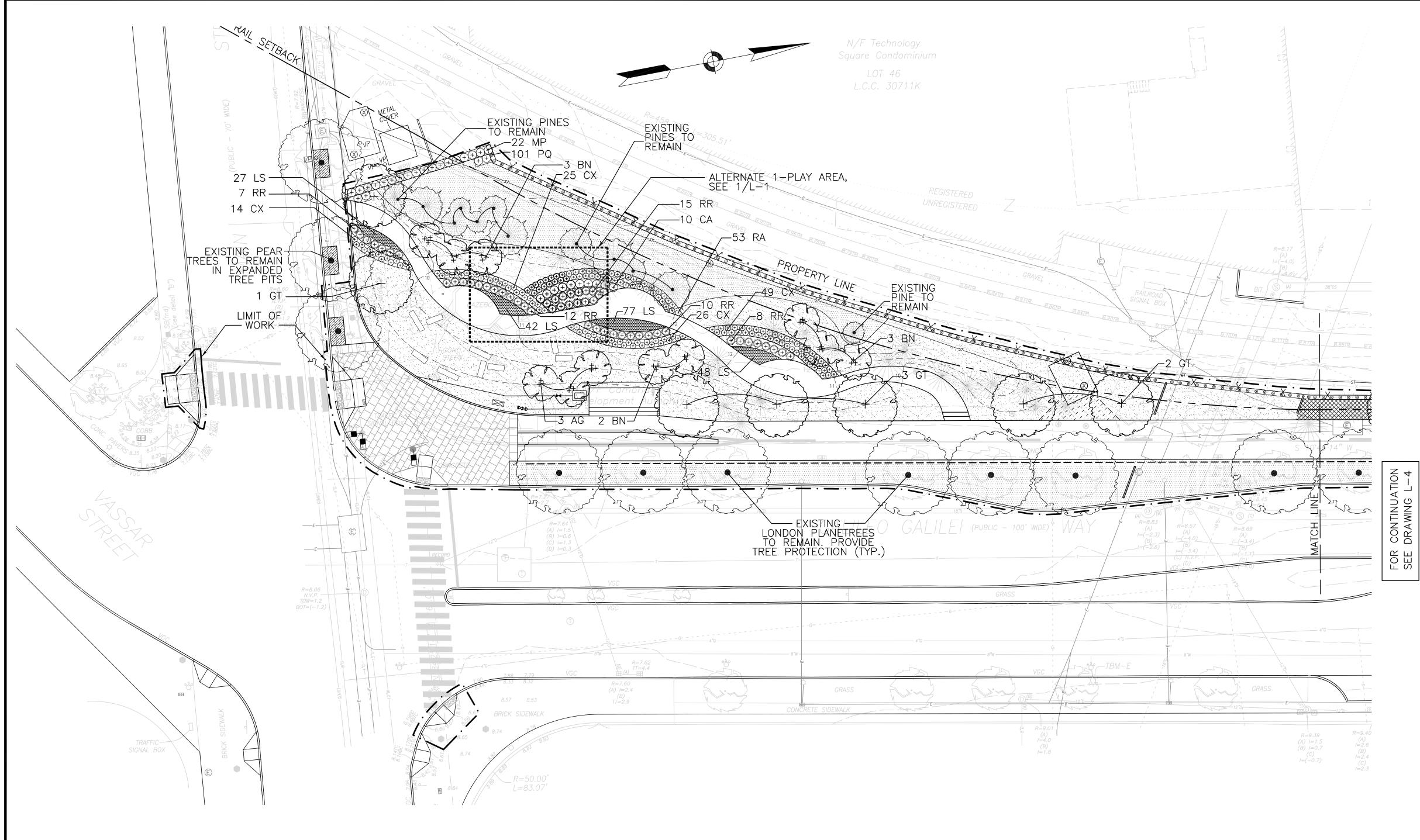
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CRITICAL SECTIONS - PART 2

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MASTER PLANT LIST	Γ
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TREES AND	TREES AND SHRUBS									
ITEM NO.	KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS				
	AG	3	AMELANCHIER X GRANDIFLORA	SERVICEBERRY	10-12' HT	CLUMP: 3-6 STEMS TYP.				
	BN	12	BETULA NIGRA 'HERITAGE'	RIVER BIRCH	10-12' HT	CLUMP: 3-6 STEMS TYP.				
	CA	18	CORNUS ALBA 'BAILHALO'	IVORY HALO DOGWOOD	24-30" HT	B&B				
	GT	15	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'	SHADEMASTER HONEYLOCUST	3" CAL	MATCHED SPECIMENS				
	MP	22	MYRICA PENSYLVANICA	BAYBERRY	24-30" HT	B&B				
	RA	63	RHUS AROMATICA 'GRO-LOW'	FRAGRANT SUMAC	#3 CONT.	B&B				
	RR	52	ROSA 'RADROZZ'	KNOCK OUT ROSE	#3 CONT.	B&B				

ORNAMENTAL GRASSES, PERENNIALS AND VINES										
ITEM NO.	KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS				
	CX	114	CALAMAGROSTIS X ACUTIFLORA 'KARL FORSTER'	FEATHER REED GRASS	#2 CONT.	TRIANGULAR SPACING 24" O.C.				
	LS	194	LIRIOPE SPICATA	CREEPING LILYTURF	#2 CONT.	TRIANGULAR SPACING 12" O.C.				
	PQ	219	PARTHENOCISSUS QUINQUEFOLIA 'MONHAM'	VARIEGATED VIRGINIA CREEPER	1 GAL	SPACING 36" O.C., TO BE TRAINED ON C.L. FENCE				
TURF										
ITEM NO.	KEY	AREA	TYPE							
		8953 SF	EXISTING TURF (LOOSEN UP, TOPDRESS AND OVE	ERSEED)						
		7318 SF	NEW TURF AREAS							
		2793 SF	NEW TURF AREAS AT SLOPE (SEE NOTE 16 AND 1	7)						
		200 SF	NEW TURF AREAS WITH FORTIFIED SOIL (5" LAWN	EW TURF AREAS WITH FORTIFIED SOIL (5" LAWN SOIL OVER GRAVEL BORROW)						
			MULCH (MULCH @ ALL SHRUB BEDS & TREE PIT Z	ONES)						

PLANTING NOTES:

- 1. LANDSCAPE ARCHITECT 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 LANDSCAPE ARCHITECT'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 LANDSCAPE ARCHITECT.
- 5. ALL PLANT MATERIAL TO BE LAID OUT ON SITE AT APPROXIMATE PROPOSED LOCATIONS PRIOR TO LANDSCAPE ARCHITECT'S ARRIVAL FOR LAYOUT REVIEW.
- PLANTING DEMOLITION DEBRIS, GARBAGE, LUMPS OF CONCRETE, STEEL AND OTHER MATERIALS DELETERIOUS TO PLANT'S HEALTH AS DETERMINED BY LANDSCAPE ARCHITECT SHALL BE REMOVED FROM ALL PLANTING AREAS.
- 7. ALL PROPOSED TREE LOCATIONS SHALL BE STAKED OR LAID OUT IN THEIR APPROXIMATE LOCATION BY THE CONTRACTOR. REFER TO LAYOUT AND PLANTING SHEETS FOR LAYOUT INFORMATION. THE CONTRACTOR SHALL ADJUST THE LOCATIONS AS REQUESTED BY THE LANDSCAPE ARCHITECT TO ACCOUNT FOR SUBSURFACE UTILITIES AND OTHER FIELD CONDITIONS. FINAL LOCATIONS OF ALL PLANTS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING.
- LOCATE AND VERIFY UTILITY LINE LOCATIONS PRIOR TO ANY STAKING OR DIGGING, AND REPORT CONFLICT TO LANDSCAPE ARCHITECT. NO PLANTING TO BE INSTALLED BEFORE ACCEPTANCE OF ROUGH GRADING.
- 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 LANDSCAPE ARCHITECT. PROVIDE WRITTEN VERIFICATION OF CERTIFICATION AND/OR LICENSE FOR LANDSCAPE ARCHITECT'S APPROVAL.
- 11. WATER PLANTS THOROUGHLY AFTER INSTALLATION, A MINIMUM OF TWICE WITHIN THE FIRST 24 HOURS.
- 12. REPORT ANY DAMAGE DUE TO OPERATIONS INSIDE AND OUTSIDE OF LIMIT OF WORK AND REPAIR ALL DAMAGE AS DIRECTED.
- 13. SEE DETAIL SHEET FOR PLANTING DETAILS.
- 14. ALL EXISTING TREES TO REMAIN ARE TO BE THOROUGHLY PROTECTED. (SEE ENGINEER'S DRAWINGS AND SPECS FOR TREE PROTECTION DETAILS.)
- 15. SEE SPEC FOR PLANTING MAINTENANCE.

(NOTES CONTINUE TO SHEET L-4)

LEGEND

EXISTING STREET TREE TO REMAIN

EXISTING PINE TREE TO REMAIN

PROPOSED CANOPY TREE

PROPOSED ORNAMENTAL TREE

— PROPOSED GRADING AT PLANTING AREA REFER TO CIVIL DRAWINGS FOR SPOT ELEVATION

1"= 20'

HALVORSON DESIGN

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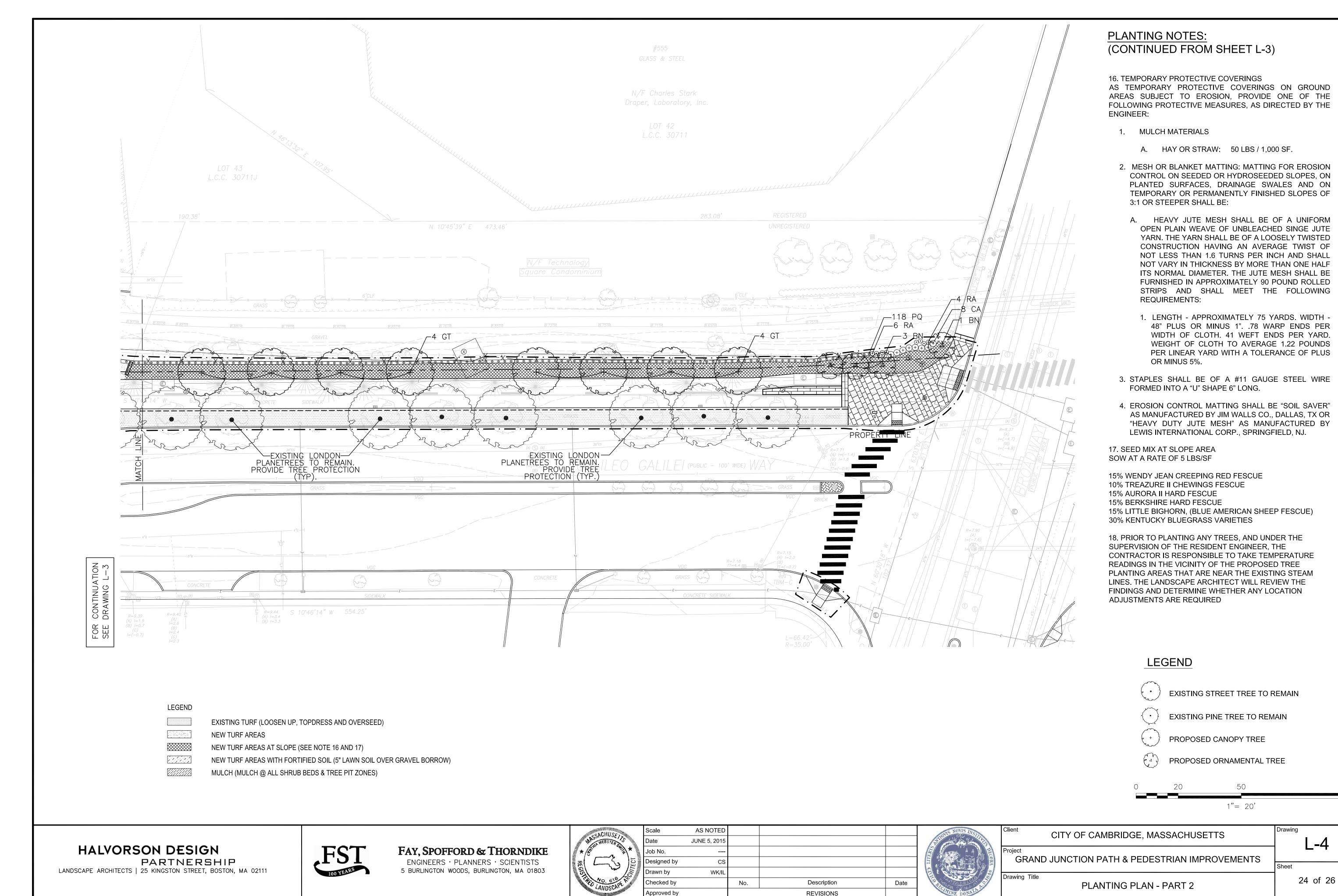
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PLANTING PLAN - PART 1

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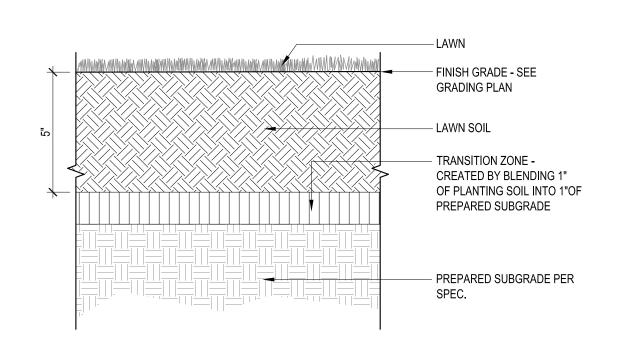
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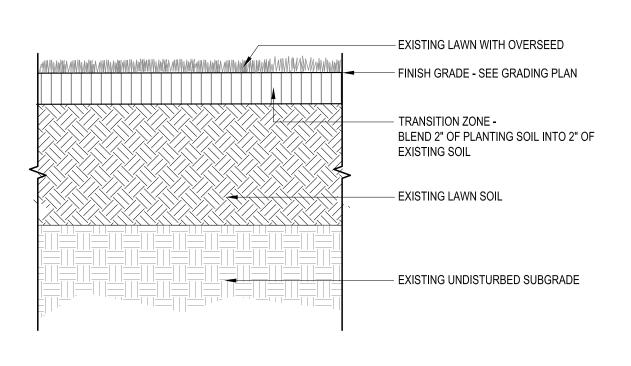
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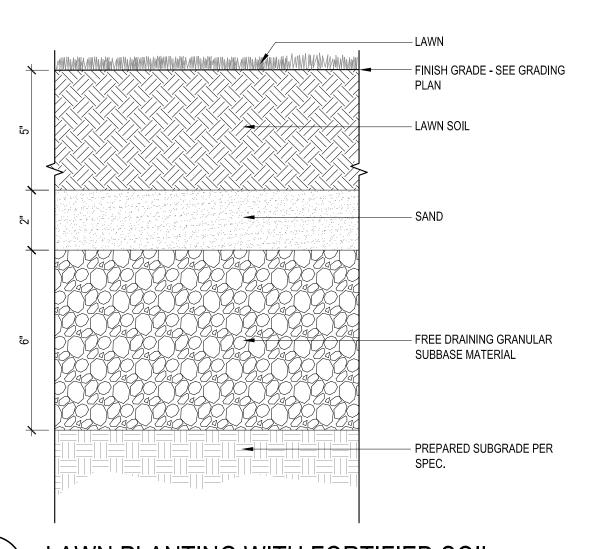


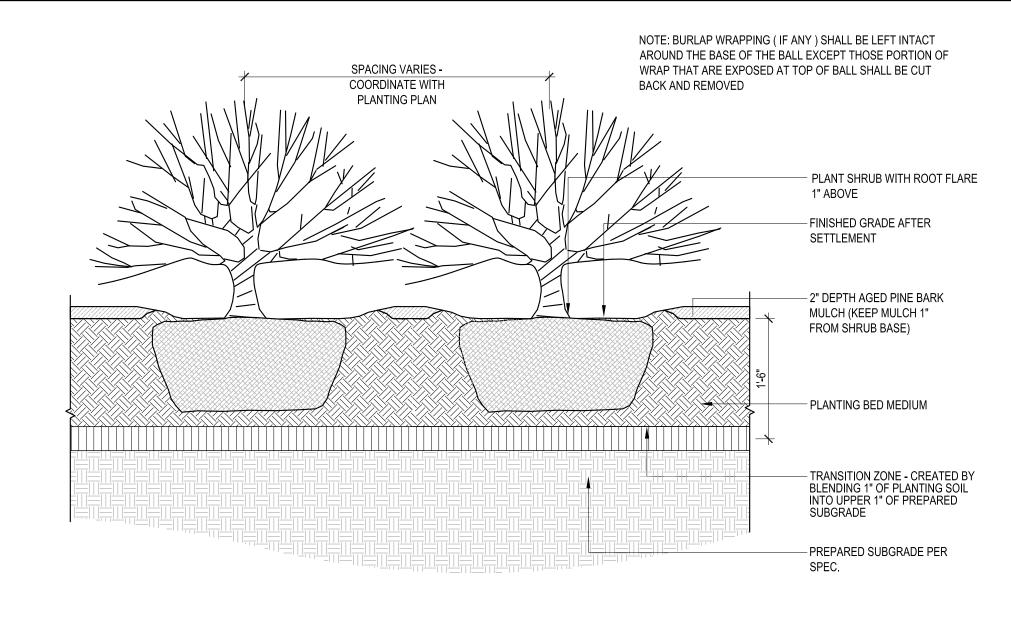
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1 LAWN PLANTING
Scale: N.T.S.

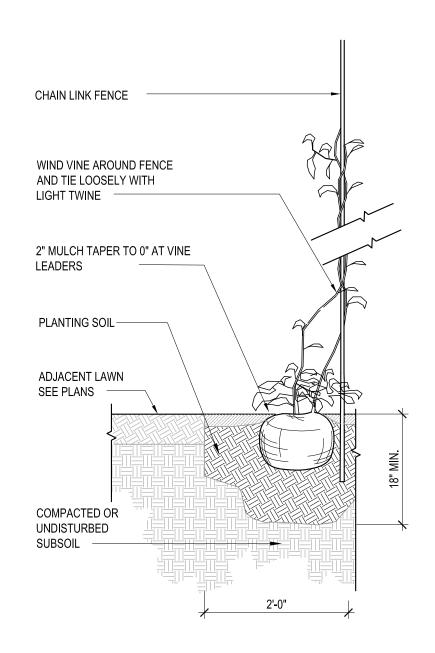
2 EXISTING LAWN PLANTING
Scale: N.T.S

LAWN PLANTING WITH FORTIFIED SOIL

Scale: N.T.S.

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

NOTE: BELOW GRADE GUYING SYSTEM IS SHOWN DIAGRAMATICALLY. CONTRACTOR TO SUBMIT GRADE GUYING SYSTEM FOR OWNER'S REP. APPROVAL PRIOR TO INSTALLATION. - PLANT TREE WITH ROOT FLARE 1" ABOVE FINISHED GRADE AFTER SETTLEMENT - 2" DEPTH AGED PINE BARK MULCH (KEEP MULCH 1" FROM TRUNK) TAPER MULCH FROM 3" DEPTH AT EDGE OF ROOT BALL TO 0" DEPTH AT ROOT FLARE PREPARED 3" HIGH SOIL WATERING SUBGRADE PER SAUCER AT EDGE OF SPEC. ROOTBALL ADJACENT PLANTING BED PLANTINGS OR SEEDED - PLANTING BED SOIL — TRANSITION ZONE -CREATED BY BLENDING 1" OF PLANTING SOIL INTO 1" OF PREPARED SUBGRADE PREPARED SUBGRADE PER BURLAP WRAPPING SHALL BE LEFT INTACT AROUND THE BASE OF THE BALL EXCEPT THOSE PORTION OF WRAP THAT ARE EXPOSED AT TOP OF BALL SHALL BE CUT BACK AND REMOVED



NOTE:

1. MESH OR BLANKET MATTING: MATTING FOR EROSION CONTROL ON SEEDED OR HYDROSEEDED SLOPES, ON PLANTED SURFACES, DRAINAGE SWALES
AND ON TEMPORARY OR PERMANENTLY FINISHED SLOPES OF 3:1 OR STEEPER SHALL BE:

A. HEAVY JUTE MESH SHALL BE OF A UNIFORM OPEN PLAIN WEAVE OF UNBLEACHED SINGE JUTE YARN. THE YARN SHALL BE OF A LOOSELY TWISTED CONSTRUCTION HAVING AN AVERAGE TWIST OF NOT LESS THAN 1.6 TURNS PER INCH AND SHALL NOT VARY IN THICKNESS BY MORE THAN ONE HALF ITS NORMAL DIAMETER. THE JUTE MESH SHALL BE FURNISHED IN APPROXIMATELY 90 POUND ROLLED STRIPS AND SHALL MEET THE FOLLOWING REQUIREMENTS:

1. LENGTH - APPROXIMATELY 75 YARDS. WIDTH - 48" PLUS OR MINUS 1". .78 WARP ENDS PER WIDTH OF CLOTH. 41 WEFT ENDS PER YARD. WEIGHT OF CLOTH TO AVERAGE 1.22 POUNDS PER LINEAR YARD WITH A TOLERANCE OF PLUS OR MINUS 5%.

2. STAPLES SHALL BE OF A #11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE 6" LONG.

3. EROSION CONTROL MATTING SHALL BE "SOIL SAVER" AS MANUFACTURED BY JIM WALLS CO., DALLAS, TX OR "HEAVY DUTY JUTE MESH" AS MANUFACTURED BY LEWIS INTERNATIONAL CORP., SPRINGFIELD, NJ.

LAWN - HYDROSEED BEFORE THE INSTALLATION OF BLANKET MATTING

JUTE MESH AT FINISH GRADE, STAPLE 24*0.C

LAWN SOIL

PREPARED SUBGRADE

5 TREE PLANTING
Scale: 3/8"=1'-0"

6 CLIMBING VINE PLANTING
Scale: 3/4"=1'-0"

 $\left(7\right)$

TURF AREA AT SLOPE
Scale: N.T.S.

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PARTNERSHIP

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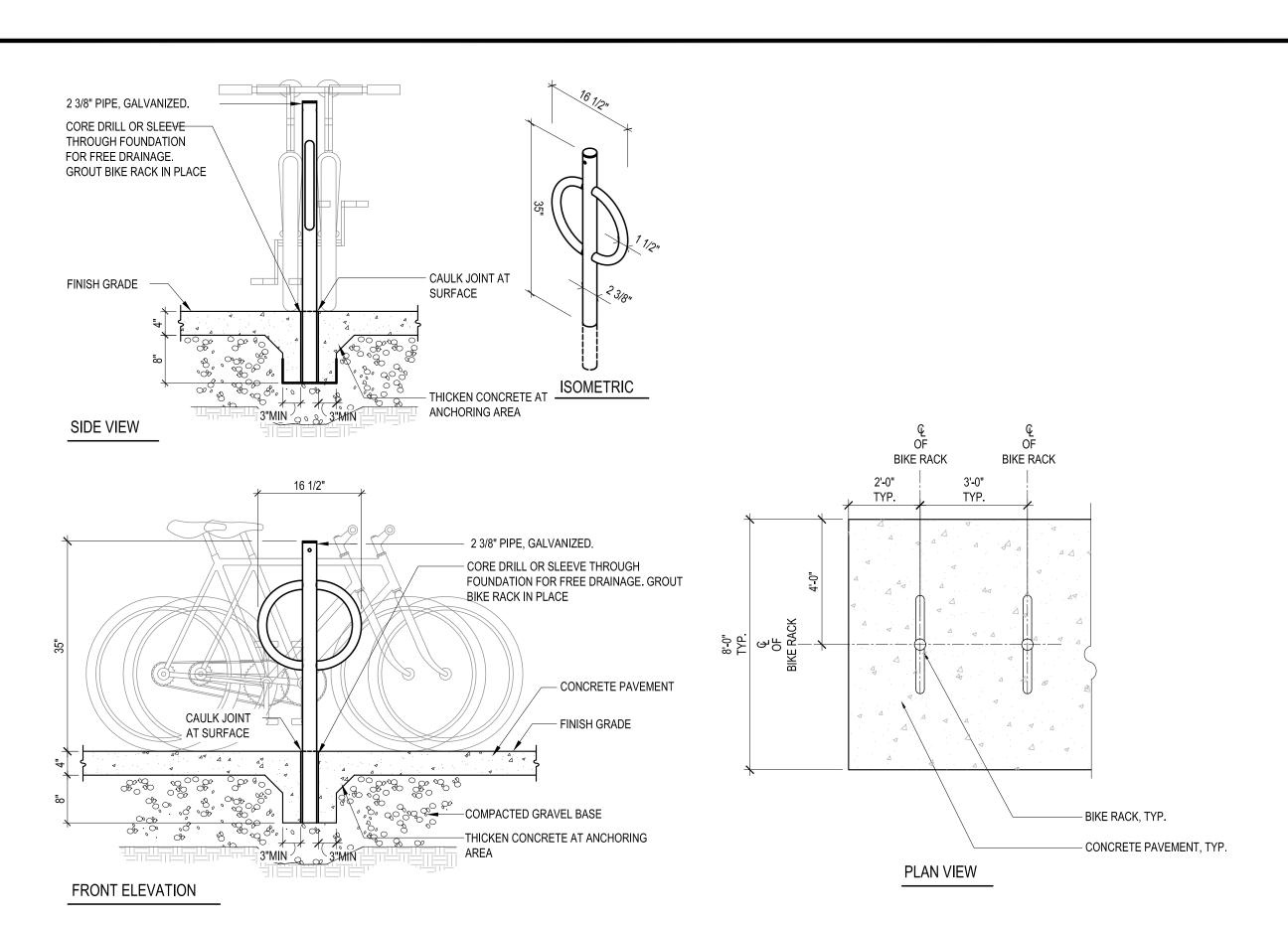
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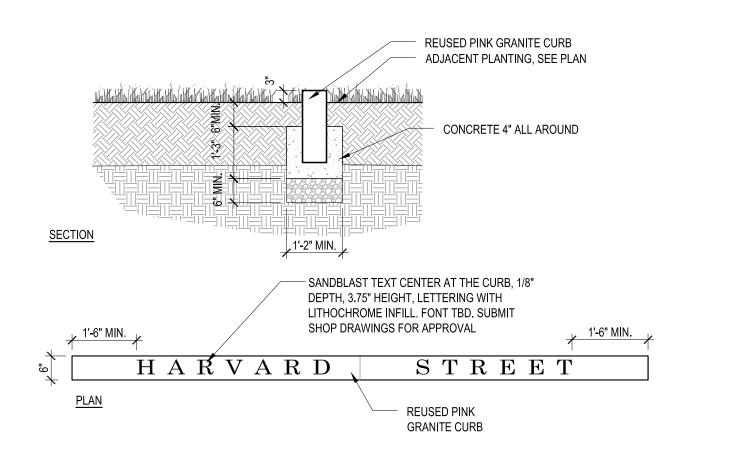
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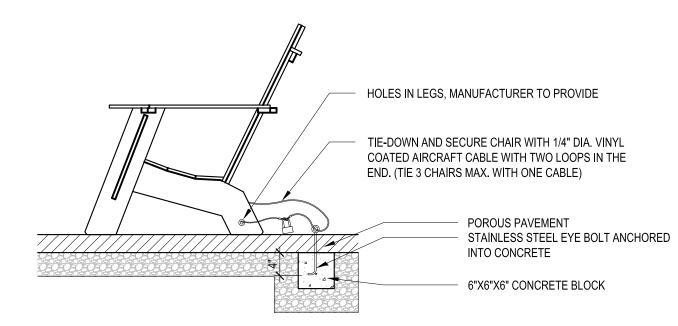
BIKE RACK -CITY OF CAMBRIDGE STANDARD Scale: 3/4"=1'-0"



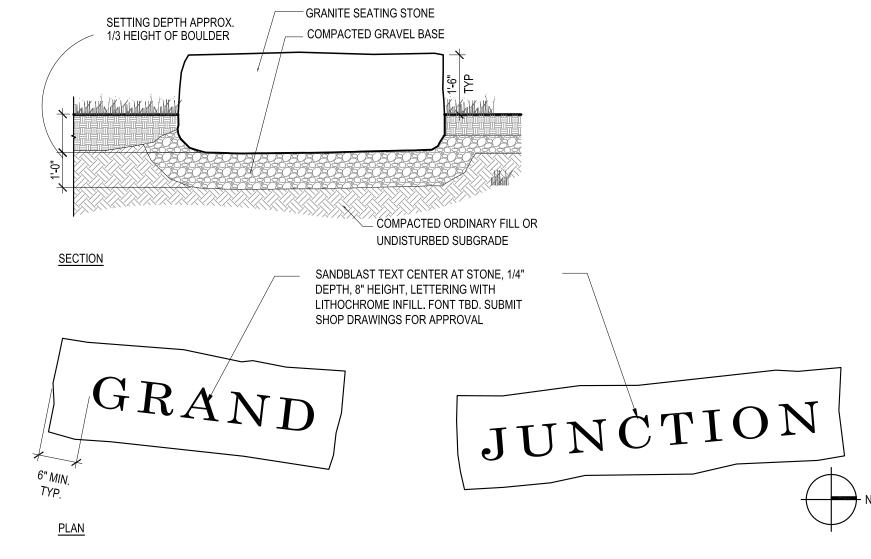
REUSED GRANITE CURB AS INTERPRETIVE ELEMENT Scale: NTS

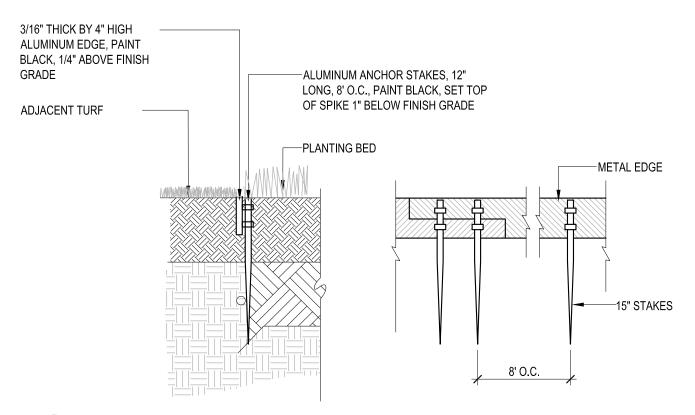
POURED IN PLACED COLORED (4 COLOR MIXTURE, COLOR TBD) WEARING SURFACE COURSE CONTINUOUS BITUMINOUS CONCRETE BASE COURSE -LAY IN 2 COURSES - COMPACTED GRAVEL BASE — PREPARED SUBGRADE

RESILIENT RUBBER PLAY SURFACE Scale: 1"=1'-0"



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





METAL EDGING WITH ANCHORS



INTERPRETIVE GRANITE SEATING ELEMENT Scale: 1/4"=1'-0"

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