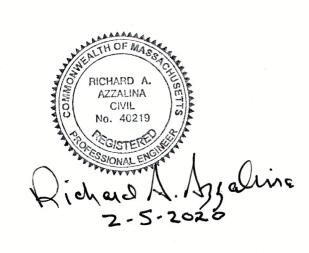


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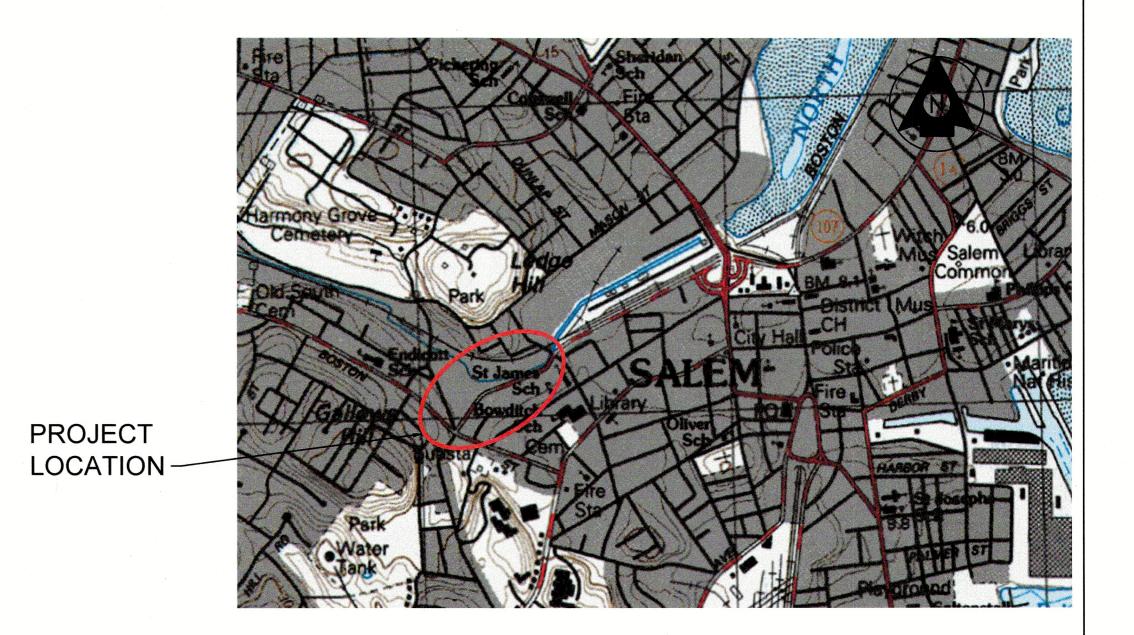
BRIDGE STREET RECONSTRUCTION PROJECT

LOCATION MAP



THE CURRENT EDITION OF MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, AS AMENDED, THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, WILL GOVERN.

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VICINITY MAP 1" = 1000'

CITY MAYOR KIMBERLEY DRISCOLL

CITY ENGINEER DAVID KNOWLTON, P.E.

FEBRUARY 5, 2019

## LEGEND AND ABBREVIATIONS

EXISTING:		PROPOSED:					
8	- TWO FOOT CONTOUR		BASELINE	EOP	EDGE OF PAVEMENT	PVC	POINT OF VERTICAL CURVATURE OR
10	TEN FOOT CONTOUR		CURB	EXIST	EXISTING	PVI	POINT OF VERTICAL INTERSECTION
+8.6	SPOT ELEVATION BITUMINOUS BERM		CITY APPROX. LAYOUT LINE	EXC	EXCAVATION	PVT	POINT OF VERTICAL TANGENCY
	GRANITE CURB		SAWCUT	F&C	FRAME AND COVER	PVMT	PAVEMENT
.   .   .   .   .   .   .   .	CONCRETE CURB	<b>H</b>	CATCH BASIN	F&G	FRAME AND GRATE	R	RADIUS OF CURVATURE, RIM OR RECOF
	<sup>│ `</sup> <b>VEGETATION LINE</b> — GUARDRAIL	<b>®</b>	DRAIN MANHOLE	FDN.	FOUNDATION	R&D	REMOVE AND DISPOSE
<del></del>	— METAL FENCE	Ŏ	CHANGE IN TYPE (CB TO DMH)	FLDSTN	FIELDSTONE	R&DBO	REMOVE AND DISPOSE BY OTHERS
XX	— WOOD FENCE ■ <b>WALL</b>	Ŏ.	HYDRANT	FND	FOUND	RCP	REINFORCED CONCRETE PIPE
	CRUSHED STONE		RAISED INTERSECTION PAVERS	GC	GRANITE CURB	RD	ROAD
	CONCRETE		FLUSH GRANITE CURB	GD	GROUND	RDWY	ROADWAY
<u>                                    </u>	<u> </u>		ASPHALT PAVEMENT BREAKLINE	GG	GAS GATE	REM	REMOVE
	MAILBOX	000000	DETECTABLE WARNING PANEL	GI	GUTTER INLET	RET	RETAIN
<b>△</b>	HANDICAP RAMP BOLLARD	0	SIGN POST	GIP	GALVANIZED IRON PIPE	RET WALL	RETAINING WALL
	STUMP	AADT	ANNUAL AVERAGE DAILY TRAFFIC	GRAN	GRANITE  GRANITE	RFA	RIVERFRONT AREA
	DECIDUOUS TREE	ABAN	ANNUAL AVERAGE DAILT TRAFFIC ABANDON	GRAV	GRAVEL		
	CONFERENCE TREE					ROW	RIGHT-OF-WAY
	CONIFEROUS TREE	ADJ	ADJUST DV OTHERS	GRD	GUARD	RR B*B	RAILROAD
———TEC——	- COMPILED COMMUNICATIONS LINE TELEPHONE MANHOLE	ADJBO	ADJUST BY OTHERS	HLSD	HEADLIGHT SIGHT DISTANCE	R&R	REMOVE AND RESET BY OTHERS
	- COMPILED GAS LINE	AP	ANGLE POINT	HDW	HEADWALL	R&RBO	REMOVE AND RESET BY OTHERS
	VENT	APPROX	APPROXIMATE	HMA	HOT MIX ASPHALT	R&S	REMOVE AND STACK
<b>©</b> ⊕	GAS DRIP GAS GATE	BIT	BITUMINOUS	HOR	HORIZONTAL	RT	RIGHT
OHW	— OVERHEAD WIRES	ВС	BOTTOM OF CURB	HYD	HYDRANT	SESD	SOUTH ESSEX SEWER DISTRICT
E	— COMPILED ELECTRIC LINE TRAFFIC LIGHT	BCD	BITUMINOUS CONCRETE DRIVEWAY	I OR INV	INVERT	SHLDR	SHOULDER
<b>\$</b>	STREET LIGHT	BCW	BITUMINOUS CONCRETE SIDEWALK	L	LENGTH OF CURVE	SL	STOP LINE - 12" WIDTH
<u>E</u>	ELECTRIC MANHOLE	BL	BASELINE	LP	LIGHT POLE	SMH	SEWER MANHOLE
-O-	FIRE ALARM BOX UTILITY POLE	BLDG	BUILDING	LST	LANDSCAPE TIMBER	SRW	STONE RETAINING WALL
Ŏ₁	UTILITY POLE WITH LIGHT	BLSF	BORDERING LAND SUBJECT TO FLOODING	LT	LEFT	ST	STREET
(	GUY WIRE — OBSERVED DRAIN LINE	ВО	BY OTHERS	MAG	MAGNETIC	STA	STATION
D	- OBSERVED DRAIN LINE - COMPILED DRAIN LINE	BOS	BOTTOM OF SLOPE	MAX	MAXIMUM	STK	STAKE OR STOCKADE FENCE
<b>©</b>	DRAIN MANHOLE	СВ	CATCH BASIN	MB	MAIL BOX	SSD	STOPPING SIGHT DISTANCE
(MW)	CATCH BASIN MONITORING WELL	CBCI	CATCH BASIN WITH CURB INLET	MH	MANHOLE	SW	SIDEWALK
———S——	— OBSERVED SEWER LINE	CEM	CEMENT	MHR	METAL HAND RAIL	Т	TANGENT DISTANCE OF CURVE/
s	COMPILED SEWER LINE	CI	CURB INLET	MIN	MINIMUM	TAN	TANGENT
	SEWER MANHOLE — COMPILED WATER LINE	CIP	CAST IRON PIPE	N/F	NOW OR FORMERLY	TEMP	TEMPORARY
	WATER GATE	CLF	CHAIN LINK FENCE	NIC	NOT IN CONTRACT	TC	TOP OF CURB
	HYDRANT WATER SERVICE	CL	CENTERLINE	NO.	NUMBER	TOS	TOP OF SLOPE
0	IRRIGATION CONTROL VALVE	C.L.	CITY LINE	NPV	NO PIPE VISIBLE	TYP	TYPICAL
(W)	WATER MANHOLE	CMP	CORRUGATED METAL PIPE	PC	POINT OF CURVATURE	UG	UNKNOWN GATE
	MANHOLE HANDHOLE	CP	CONCRETE PAD	PCC	POINT OF COMPOUND CURVATURE	UP	UTILITY POLE
	TERMINUS UNKNOWN	CSP	CORRUGATED STEEL PIPE	P.G.L.	PROFILE GRADE LINE	VAR	VARIES
A.G. BB	ABOVE GROUND BITUMINOUS BERM	CONC	CONCRETE	PI	POINT OF INTERSECTION	VERT	VERTICAL
BIT.	BITUMINOUS	CONT	CONTINUOUS	PKT	PICKET FENCE	VC	VERTICAL CURVE
CC	CONCRETE CURB	CONST	CONSTRUCTION	POC	POINT ON CURVE	VCP	VITREOUS CLAY PIPE
CI CLF	CAST IRON CHAINLINK FENCE	CRW	CONCRETE RETAINING WALL	POT	POINT ON TANGENT	WCR	WHEELCHAIR RAMP
CMP	CORRUGATED METAL PIPE	CW	CONCRETE WALK	PRC	POINT OF REVERSE CURVATURE	WG	WATER GATE
CONC. EOP	CONCRETE EDGE OF PAVEMENT	DHV	DESIGN HOURLY VOLUME	PROJ	PROJECT	WIF	WROUGHT IRON FENCE
FAB	FIRE ALARM BOX	DI	DROP INLET	PROP	PROPOSED	WIP	WROUGHT IRON PIPE
GC	GRANITE CURB	DIA	DIAMETER	PSI	POUNDS PER SQUARE INCH	WM	WATER METER/WATER MAIN
HDPE MAHW	HIGH DENSITY POLYETHYLENE MASS HIGHWAY	DIP	DUCTILE IRON PIPE	PT	POINT OF TANGENCY	WTL	WHITE TRANSVERSE LINE - 4' SPACE.
N.P.V.	NO PIPES VISIBLE	DWY	DRIVEWAY	PTH	PLANIMETER TO HERE	<b>.</b>	3:1 SLOPE, 4' WIDTH
PL PVC	PLASTIC POLYVINYL CHLORIDE	ELEV	ELEVATION			X-SECT	CROSS SECTION
7 70	, JETTINIE GIILOMBE					A OLOT	3.1000 02011011

# **SURVEY NOTES:**

- 1. THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY MERIDIAN ASSOCIATES, INC. (MAI) BETWEEN DECEMBER 30, 2016 & JANUARY 25, 2017 AND SUPPLEMENTED WITH AUTOCAD FILES DEPICTING RECENT PRIVATE DEVELOPMENT SITES INCLUDING THE SALEM COMMUNITY LIFE CENTER, 162 FEDERAL STREET AND RIVER ROCK RESIDENCES.
- 2. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILATION OF AVAILABLE PLANS OF RECORD. MERIDIAN ASSOCIATES, INC. DOES NOT WARRANTY NOR GUARANTEE THE LOCATION OF ALL UTILITIES DEPICTED OR NOT DEPICTED. THE CONTRACTOR, PRIOR TO COMMENCEMENT OF CONSTRUCTION. SHALL VERIFY THE LOCATION OF ALL UTILITIES AND CONTACT DIG SAFE AT 1-888-344-7233. TRAFFIC ELECTRIC CONDUIT IS NOT DEPICTED HEREON. AT THE TIME OF FINAL RELEASE OF THIS DRAWING MERIDIAN HAD NOT RECEIVED CONDUIT RECORDS OF SEWER. DRAIN OR WATER FROM THE CITY OF SALEM.
- 3. THE SUBJECT PREMISES IS LOCATED IN THE FOLLOWING FLOOD ZONES PER FEMA FLOOD INSURANCE RATE MAPS 25009C0418G & 25009C0419G DATED JULY 16. 2014: -ZONE X (UNSHADED), AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE
  - FLOODPLAIN: -ZONE X (SHADED), AREAS OF 0.2% ANNUAL CHANCE FLOODPLAIN; AREAS OF 1% ANNUAL CHANCE SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD;
  - FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 -ZONE AE, AREAS DETERMINED TO HAVE A BASE FLOOD ELEVATION (ELEV=10 NAVD 88)
- 4. THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- 5. THE ELEVATIONS DEPICTED HEREON WERE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). STARTING BENCHMARK: COMMONWEALTH OF MASSACHUSETTS HIGHWAY DEPARTMENT BENCHMARK 805C. MARK IS A BRASS RIVET SET IN A CONCRETE CHANNEL WALL ON BRIDGE STREET AT FLINT STREET. ELEVATION=9.58 FEET.
- 6. THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF RIGHT OF WAY OR EASEMENT LINES OR FOR TITLE INSURANCE PURPOSES. RIGHT OF WAY AND EASEMENT LINES DEPICTED HEREON. ARE APPROXIMATE ONLY. MAI DID NOT PERFORM A BOUNDARY RETRACEMENT SURVEY. RIGHT OF WAY LINES ARE PROVIDED BASED UPON LIMITED LAYOUT RECORDS, LAND PLANS RECOVERED AT SOUTH ESSEX REGISTRY OF DEEDS AND APPARENT OCCUPATION. PROPERTY LINES ARE APPROXIMATE ONLY AND COMPILED FROM CITY OF SALEM GIS.

# **GENERAL NOTES:**

- 1. HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)
- 2. ALL TRAFFIC SIGNAL HARDWARE (INCLUDING MAST ARMS, PULL BOXES, PEDESTALS & CONTROLLER BOXES), PARKING METERS, LIGHT/UTILITY POLES, FENCES, STONE BOUNDS, GRANITE BOUNDS, AND OTHER PROPERTY MARKERS ARE TO BE RETAINED AND PROTECTED UNLESS OTHERWISE NOTED ON PLANS. PULLBOXES ARE TO BE RETAINED AND ADJUSTED TO GRADE.
- 3. THE CONTRACTOR SHALL SAWCUT TO THE FULL PAVEMENT DEPTH AT LOCATIONS WHERE NEW FULL DEPTH PAVEMENT OR NEW SIDEWALK MEETS EXISTING PAVEMENT OR SIDEWALK, AT THE LOCATIONS SHOWN ON THE PLANS AND AS REQUIRED BY THE ENGINEER. PROPOSED WORK SHALL MATCH EXISTING LINE AND GRADE AT LIMITS OF
- 4. ALL AREAS OUTSIDE OF THE LIMIT OF WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 5. EXISTING TREES WITHIN THE LIMIT OF WORK SHALL BE RETAINED AND PROTECTED UNLESS OTHERWISE NOTED OR REQUIRED BY ENGINEER. IN THE EVENT THAT A PROPOSED CATCH BASIN IS WITHIN 6' OF AN EXISTING TREE, THE INFORMATION SHALL BE FURNISHED TO THE ENGINEER FOR RESOLUTION PRIOR TO INSTALLATION OF THE CATCH BASIN.
- 6. ALL GRANITE CURB, EDGING, AND CURB CORNERS THAT ARE TO BE REMOVED SHALL BE REMOVED AND STACKED OR DISCARDED AS REQUIRED BY THE ENGINEER. GRANITE CURB OR EDGING TO BE RESET SHALL NOT BE RANDOMLY MIXED WITH NEW CURB, BUT SHALL BE RESET SO AS TO GIVE A UNIFORM APPEARANCE.
- 7. ALL PROPOSED GRANITE CURB SHALL BE TYPE VB, UNLESS OTHERWISE NOTED.
- 8. ALL FLUSH CURB ENCOUNTERED AT DRIVEWAYS SHALL BE REMOVED AND RE-USED ELSEWHERE, DISPOSED, OR AS DIRECTED BY ENGINEER, UNLESS OTHERWISE NOTED,
- 9. ALL PROPOSED WHEELCHAIR RAMPS ARE TO CONFORM TO LATEST AAB AND ADA WHEELCHAIR RAMP STANDARDS.

- 10. A MINIMUM 36" PATH OF TRAVEL (EXCLUDING CURB) SHALL BE MAINTAINED PAST ALL OBSTRUCTIONS (EXISTING, RELOCATED, AND PROPOSED) ON THE SIDEWALK INCLUDING, BUT NOT LIMITED TO, UTILITY POLES, HYDRANTS, SIGNS SIGNALS, LIGHT POLES, TREES AND MAILBOXES. IF THERE IS A CONFLICT, THE INFORMATION SHALL BE FURNISHED TO THE ENGINEER FOR RESOLUTION PRIOR TO SIDEWALK RECONSTRUCTION.
- 11. ALL EXISTING CURB STOPS, VALVE BOXES, CASTINGS AND HYDRANTS, IN AREAS TO BE REPAVED SHALL BE PROTECTED AND ADJUSTED TO LINE AND GRADE BY THE CONTRACTOR, UNLESS OTHERWISE DIRECTED BY ENGINEER.
- 12. THE CONTRACTOR SHALL VERIFY ALL OUTLET GRADES OF DRAINAGE STRUCTURES PRIOR TO CONSTRUCTING ANY DRAINAGE MODIFICATIONS. CONTRACTOR TO CONFIRM LOCATION OF EXISTING UTILITIES WITH TEST PITS.
- 13. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- 14. THE CONTRACTOR SHALL ADJUST ALL MUNICIPAL UTILITY FRAMES AND COVERS AS REQUIRED. CONTRACTOR TO ARRANGE FOR INSPECTION OF ALL WORK ON PRIVATE UTILITIES WITH THE APPROPRIATE UTILITY COMPANY. IN THE EVENT ANY UTILITY COMPANY DOES NOT ALLOW THE CONTRACTOR TO MAKE THE ADJUSTMENTS, THE CONTRACTOR SHALL COORDINATE HIS WORK TO ALLOW FOR THE ADJUSTMENTS TO BE MADE BY THE UTILITY OR ITS DESIGNEE. THE EXPECTED UTILITIES INCLUDE BUT ARE NOT LIMITED TO: GAS, ELECTRIC, TELEPHONE, CATV, AND FIRE.
- 15. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS REQUIRED TO PERFORM THE WORK, INCLUDING ALL PERMITS REQUIRED BY THE CITY OF SALEM DEPARTMENT OF PUBLIC WORKS AND/OR WATER DEPARTMENT.
- 16. PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL COORDINATE ANY UTILITY RELOCATIONS WITH THE CITY OF SALEM DEPARTMENT OF PUBLIC WORKS AND ALL RESPECTIVE UTILITY AGENCIES. LOCATIONS FOR RELOCATED UTILITIES ARE TO BE DETERMINED BY THE RESPECTIVE UTILITY AGENCY IN CONSULTATION WITH THE SALEM DEPARTMENT OF PUBLIC WORKS.
- 17. CONTRACTOR SHALL FOLLOW CITY OF SALEM DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS WHERE APPLICABLE. ALL WORK DONE UNDER THIS CONTRACT SHALL BE COMPLETED IN CONFORMANCE TO MASSDOT "STANDARD SPECIFICATIONS FOR HIGHWAYS & BRIDGES" AND ANY UPDATES OR SUPPLEMENTAL SPECIFICATIONS PERTAINING THERETO, AND SPECIFICATIONS INCLUDED IN THIS CONTRACT.
- 18. WORK SHALL NOT EXTEND BEYOND EXISTING ROW UNLESS OTHERWISE NOTED ON PLANS OR AS REQUIRED BY ENGINEER.
- 19. INLETS AND OUTLETS FROM DRAINAGE STRUCTURES REMOVED SHALL BE PLUGGED WITH BRICK MASONRY NOT LESS THAN 8" IN THICKNESS, CONSISTENT WITH MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES SECTION 201. PIPES LARGER THAN 24" SHALL BE BACKFILLED WITH FLOWABLE FILL TO THE SATISFACTION OF THE CITY OF SALEM.
- 20. NO WORK SHALL TAKE PLACE ON PRIVATE PROPERTY WITHOUT A SIGNED RIGHT OF ENTRY AGREEMENT BETWEEN THE PROPERTY OWNER AND THE CITY.
- 21. WHEN FITTING GRANITE CURB OVER EXISTING UTILITIES AND OTHER OBSTRUCTIONS. NOTCHING AND CUTTING OF CURB SHALL TAKE PLACE WITH NO ADDITIONAL COST TO CITY.
- 22. CONTRACTOR SHALL PROVIDE A STAKED LAYOUT FOR THE ENGINEER TO REVIEW PRIOR TO COMMENCING SIDEWALK WORK. THE CONTRACTOR SHALL PROVIDE ALL CUT AND FILL HEIGHTS AT ALL BACK OF SIDEWALK, STEPS, WALLS, DRIVEWAYS. WALKWAYS. BUILDING ENTRANCES. UTILITY STRUCTURES. ETC. ALL DISCREPANCIES THAT WILL CAUSE THE SIDEWALK NOT TO BE COMPLIANT WILL BE BROUGHT TO THE ENGINEER'S ATTENTION.

ALL UNDERGROUND UTILITY DATA REPRESENTS RECORD

INFORMATION RECOVERED THROUGH RESEARCH WITHOUT

SURFACE DEMARCATION NOR SUBSURFACE VERIFICATION.

23. FOR ALL PAY REQUESTS, CONTRACTOR SHALL PROVIDE BACK UP STATING DATES INSTALLED. QUANTITY INSTALLED. CALCULATION ON QUANTITY. AND A MARKED UP DRAWING SHOWING LOCATION INSTALLED.



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Legend SEE SHEET 2 SEE THIS SHEET

Notes SEE SHEET 2

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CITY OF SALEM

Client/Project

BRIDGE STREET RECONSTRUCTION PROJECT

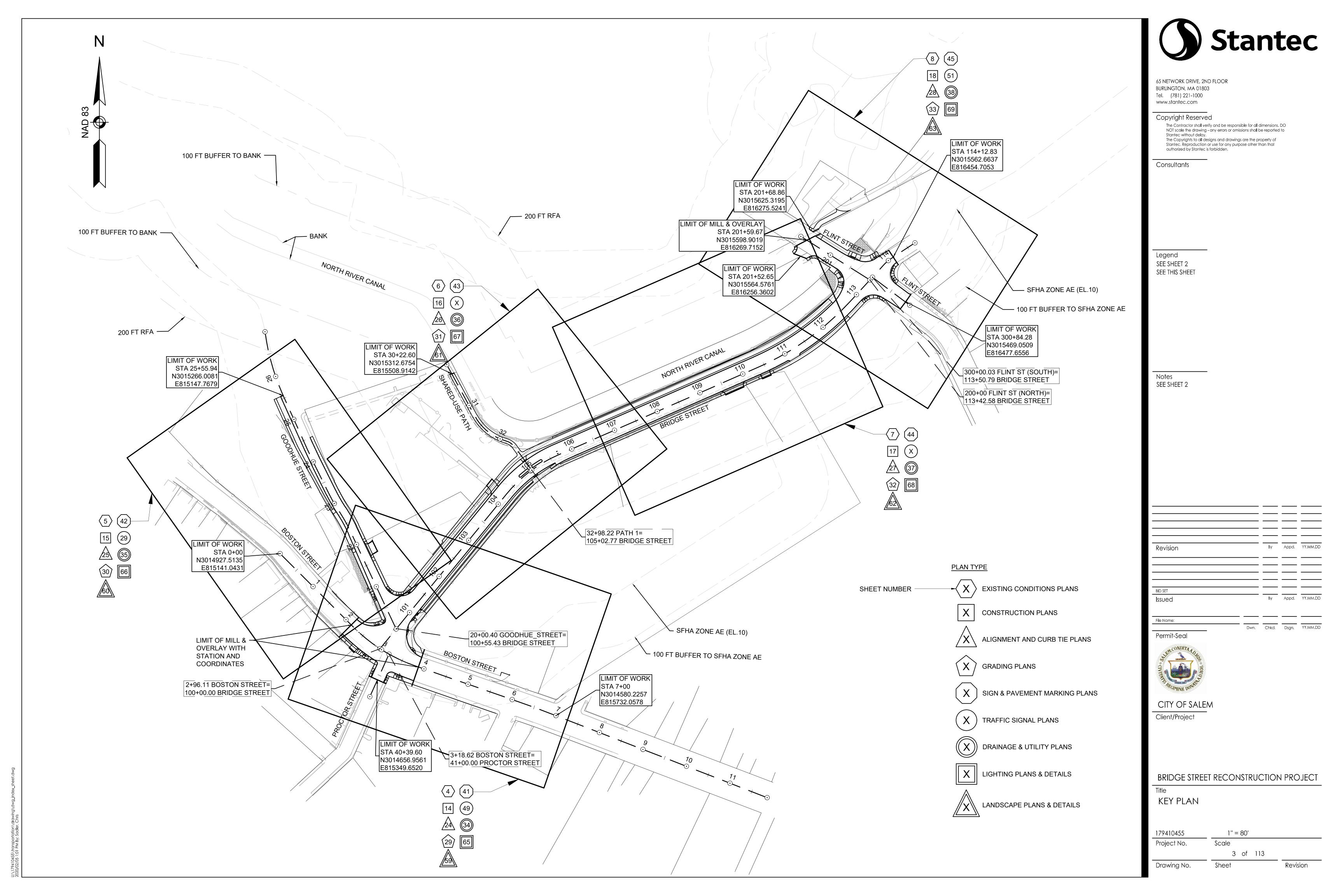
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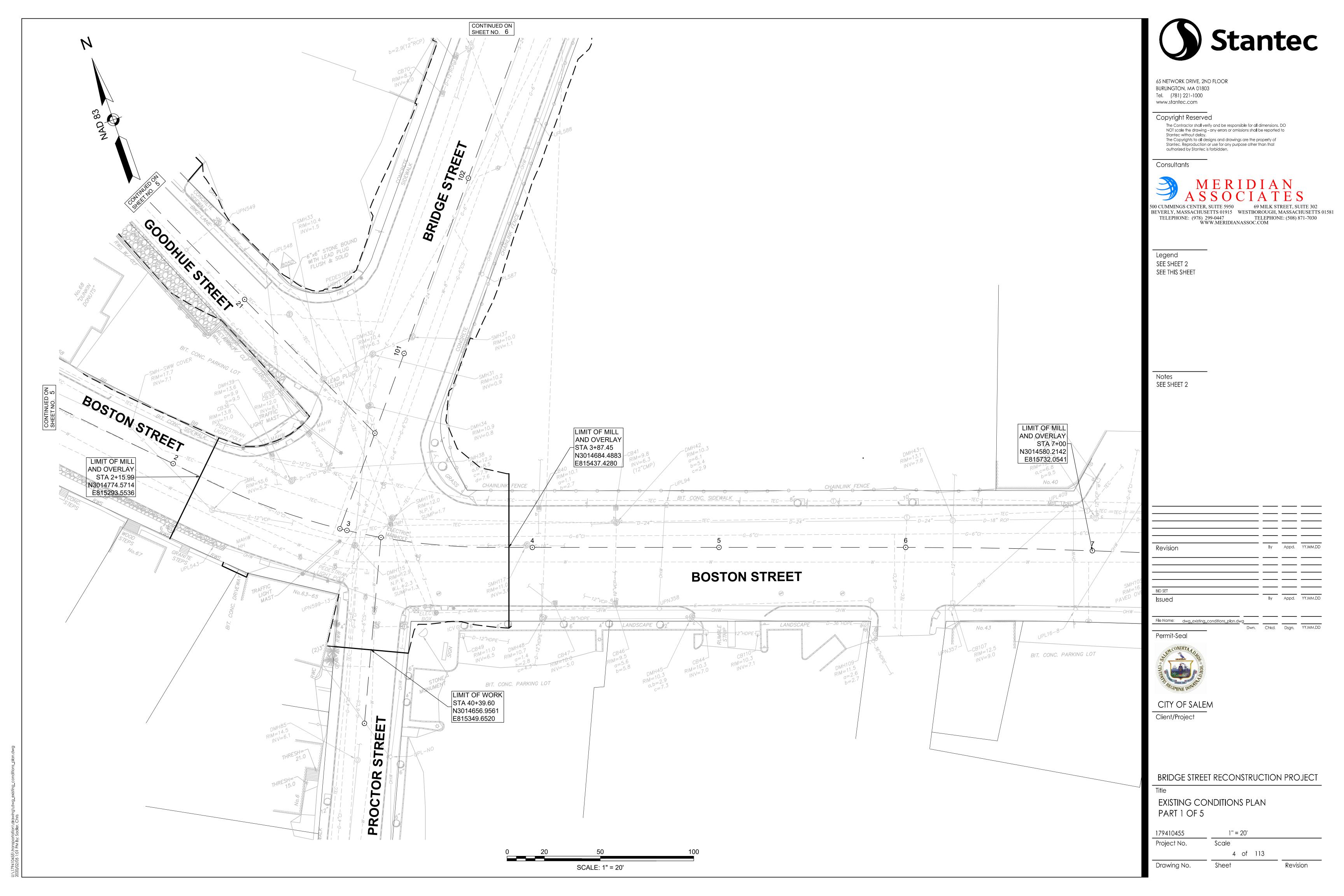
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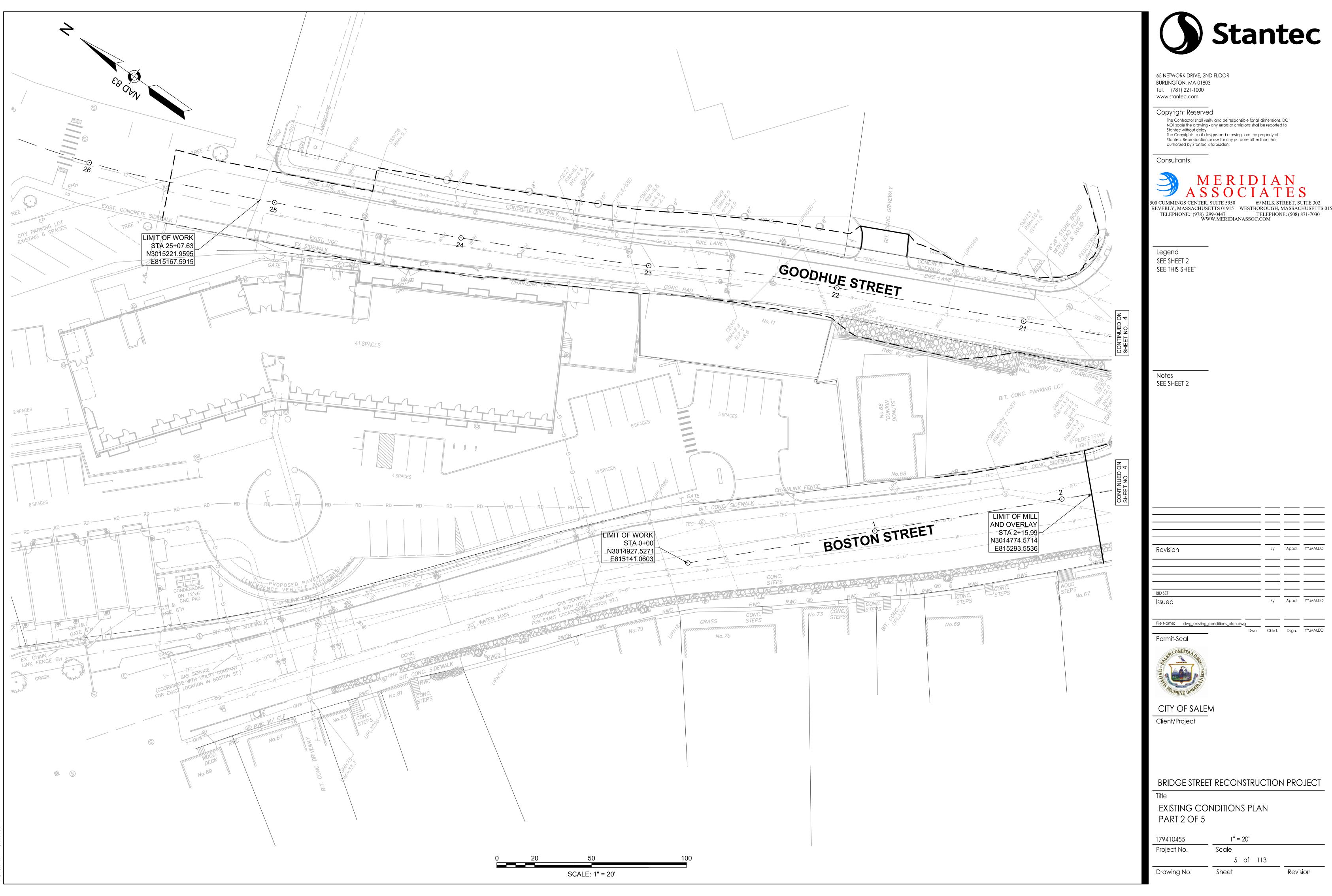
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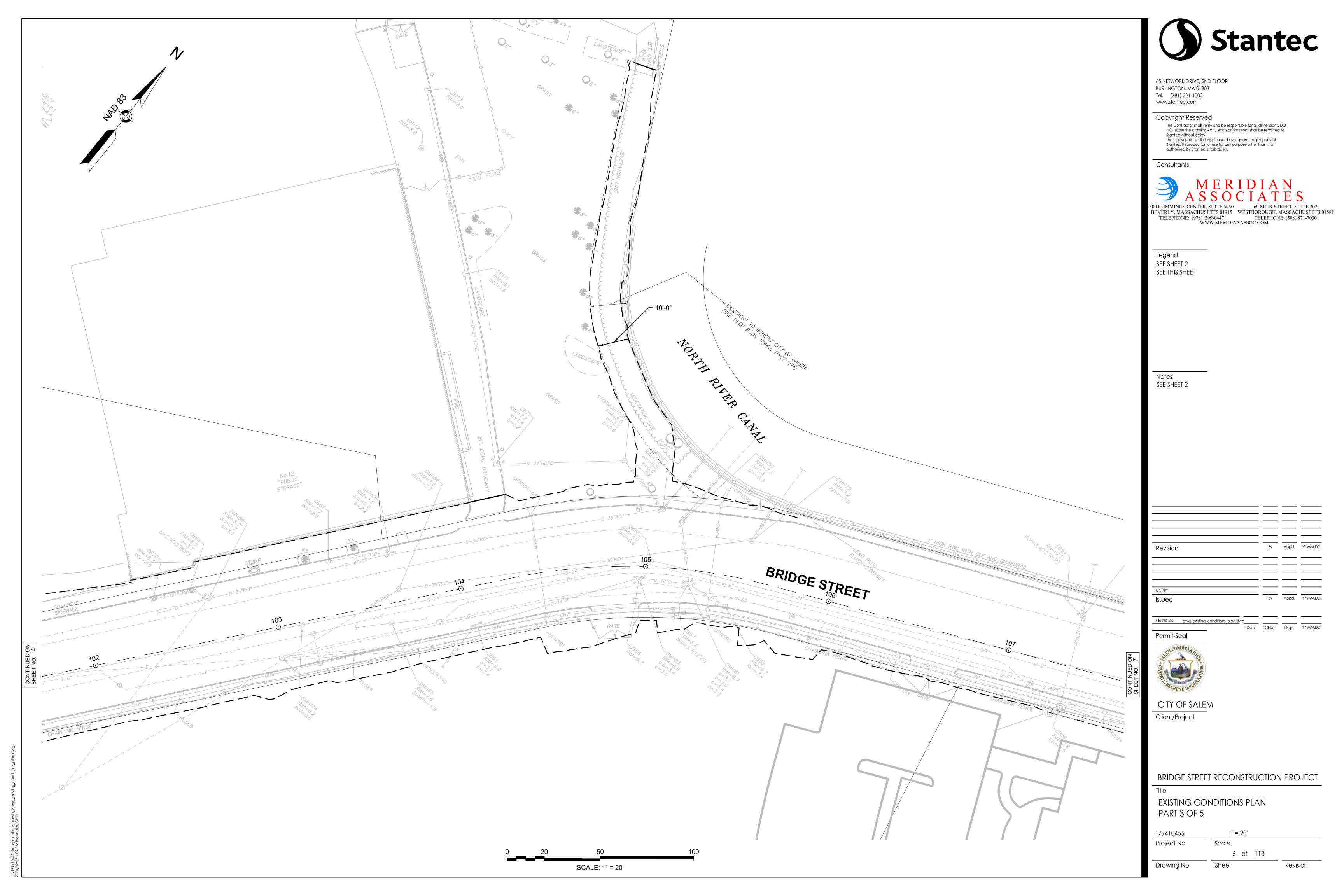
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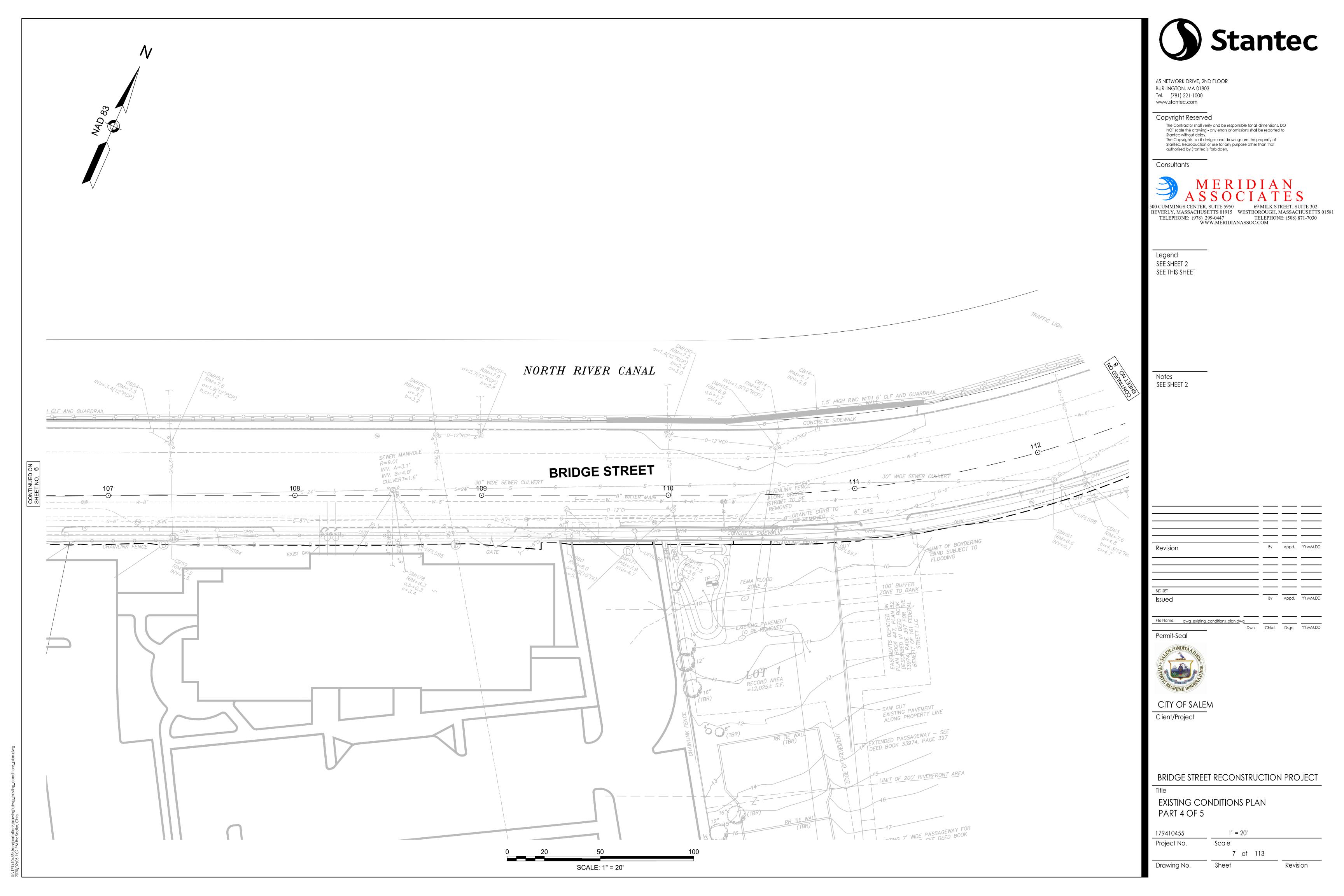


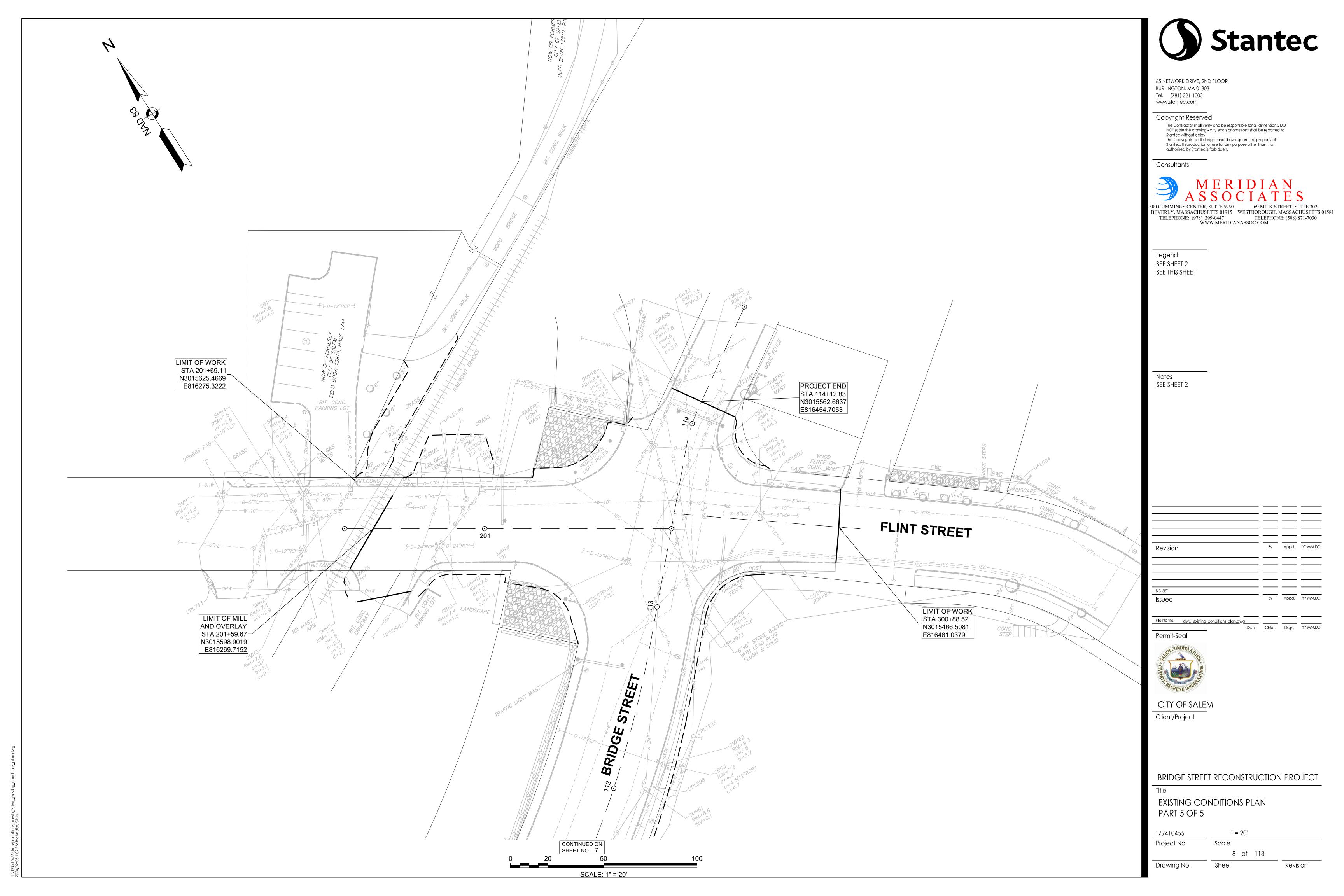


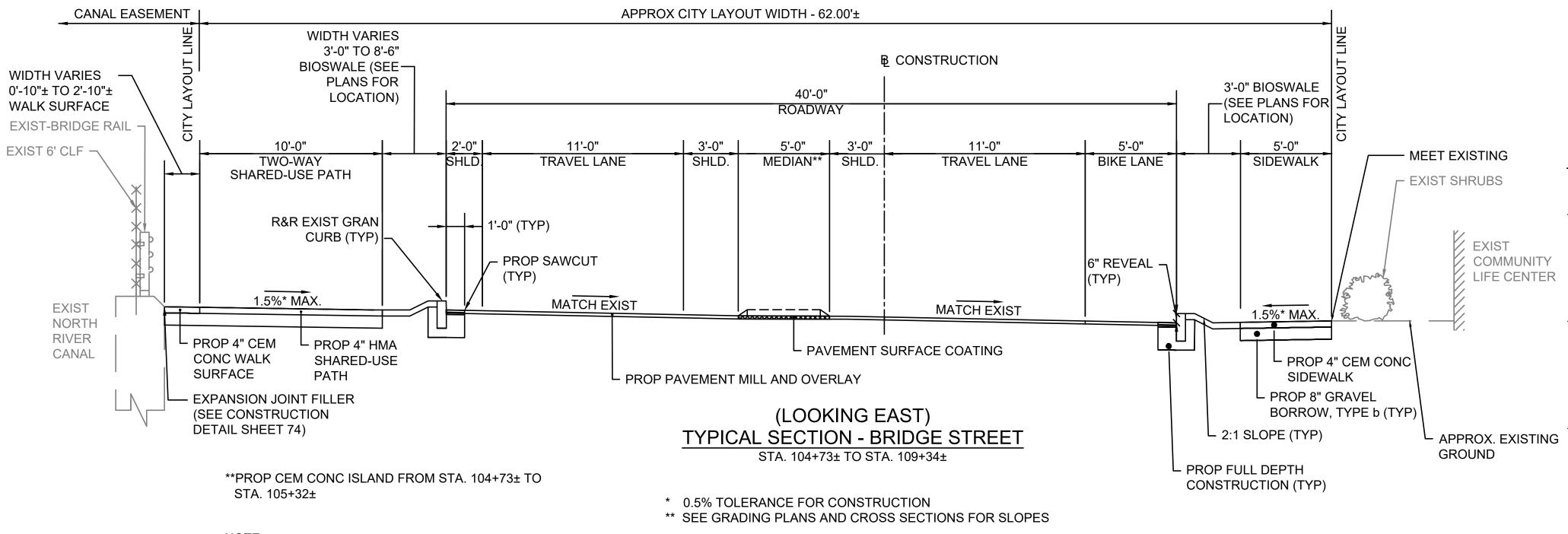


BEVERLY, MASSACHUSETTS 01915 WESTBOROUGH, MASSACHUSETTS 01581









APPROX CITY LAYOUT WIDTH - 62.00'±

37'-0"

ROADWAY

11'-0"

**TURN LANE** 

MATCH EXIST

\* 0.5% TOLERANCE FOR CONSTRUCTION

(LOOKING NORTH)

**TYPICAL SECTION - BRIDGE STREET** 

STA. 101+44± TO STA. 104+73±

\*\* SEE GRADING PLANS AND CROSS SECTIONS FOR SLOPES

PROP PAVEMENT MILL AND OVERLAY

11'-0"

TRAVEL LANE

- PROP SAWCUT

(TYP)

1'-0" (TYP)

**B** CONSTRUCTION

11'-0"

TRAVEL LANE

MATCH EXIST

6" REVEAL

(TYP)

PAVEMENT NOTES:

PAVEMENT MILL AND OVERLAY (BOSTON STREET):

SURFACE: 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER

MILLING: 2" MICROMILL

PAVEMENT MILL AND OVERLAY (BRIDGE STREET):

SURFACE: 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER

MILLING: 2" MICROMILL

PAVEMENT MILL AND OVERLAY (GOODHUE STREET):

SURFACE: 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER

MILLING: 2" MICROMILL

PAVEMENT MILL AND OVERLAY (FLINT STREET):

SURFACE: 2" SUPERPAVE SURFACE COURSE 12.5 (SSC-12.5) OVER

MILLING: 2" MICROMILL

PROPOSED CEMENT CONCRETE SIDEWALK / WHEELCHAIR RAMP / WALK SURFACE:

SURFACE: 4" CEMENT CONCRETE

AIR ENTRAINED 4000 PSI, 3/4", 610

ASE: 8" GRAVEL BORROW, TYPE b

EXISTING IN-SITU GRAVEL DETERMINED TO BE SUITABLE SHALL REMAIN

PROPOSED CEMENT CONCRETE DRIVEWAY:

SURFACE: 6" CEMENT CONCRETE

AIR ENTRAINED 4000 PSI, 3/4", 610

SE: 8" GRAVEL BORROW, TYPE b

EXISTING IN-SITU GRAVEL DETERMINED TO BE SUITABLE SHALL REMAIN

PROPOSED HOT MIX ASPHALT SIDEWALK / DRIVEWAY / SHARED USE PATH / CYCLE TRACK:

TRACK.

SURFACE: 2" SUPERPAVE SURFACE COURSE - 12.5 (SSC - 12.5) OVER

**EXISTING** 

GROUND

PROP 4" CEM CONC

BORROW, TYPE b (TYP)

SIDEWALK

└ PROP 8" GRAVEL

- PROP 4" CEMENT CONCRETE

DECORATIVE PAVEMENT

PROP 4" HMA CYCLE TRACK

(SEE SPECIFICATIONS)

- APPROX. EXISTING

- 2'-0"

**ACCENT** 

SIDEWALK

STRIP

3'-0" BIOSWALE

-(SEE PLANS FOR

CYCLE TRACK

1.5%\* MAX.

L 2:1 SLOPE

CONSTRUCTION (TYP)

- PROP FULL DEPTH

LOCATION)

INTERMEDIATE: 2" SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC - 12.5)

BASE: 8" GRAVEL BORROW, TYPE b

EXISTING IN-SITU GRAVEL DETERMINED TO BE SUITABLE SHALL

REMAIN

PROPOSED MEDIAN:

SURFACE: PAVEMENT SURFACE COATING\*\*\*

\*\*\* SEE SPECIFICATIONS FOR COLOR AND PATTERN

ASPHALT EMULSION FOR TACK COAT:

ASPHALT EMULSION FOR TACK COAT SHALL BE PLACED ON ALL MILLED SURFACES (APPLICATION RATE = 0.07 GAL/SY) AND BETWEEN ALL NEW PAVEMENT LAYERS (APPLICATION RATE = 0.05 GAL/SY).

NOTES:

- PROP 4" CEM

CONC WALK

EXPANSION JOINT FILLER

(SEE CONSTRUCTION DETAIL

SURFACE

SHEET 74)

WIDTH VARIES

WALK SURFACE

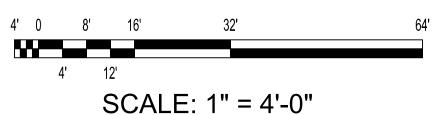
**EXIST** 

**PUBLIC** 

STORAGE

BUILDING

2'-0"± TO 5'-0"± -



1. MEET EXISTING ELEVATIONS AT BACK OF SIDEWALK
WHERE POSSIBLE WHILE MAINTAINING ADA
COMPLIANCE. EXISTING AND PROPOSED ELEVATIONS
ARE SHOWN ON THE GRADING PLANS WHERE BACK OF
SIDEWALK ELEVATIONS ARE NOT MET.

4' 12'
SCAL

SEE CONSTRUCTION PLANS FOR LIMITS OF

EXISTING BRIDGE RAIL AND EXISTING CLF.

4'-0" BIOSWALE (SEE PLANS FOR —

LOCATION)

R&R EXIST GRAN

CURB (TYP)

TWO-WAY

SHARED-USE PATH

1.5%\* MAX.

PATH

└ PROP 4" HMA

SHARED-USE



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Revision

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Legend

Notes

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CITY OF SALEM
Client/Project

BRIDGE STREET RECONSTRUCTION PROJECT

Chkd. Dsgn. YY.MM.DD

\_\_\_\_\_ Title

TYPICAL SECTIONS BRIDGE STREET PART 1 OF 2

179410455 1" = 4'-0"

Project No. Scale

Drawing No. Sheet Revision



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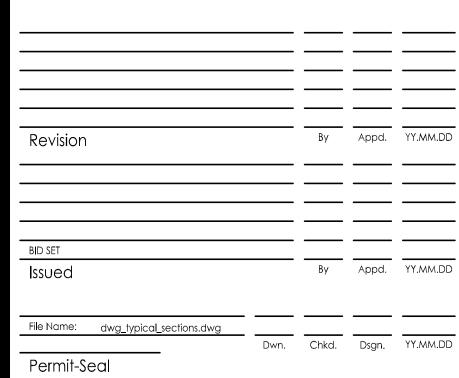
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BRIDGE STREET RECONSTRUCTION PROJECT

Title

Drawing No.

TYPICAL SECTIONS BRIDGE STREET PART 2 OF 2

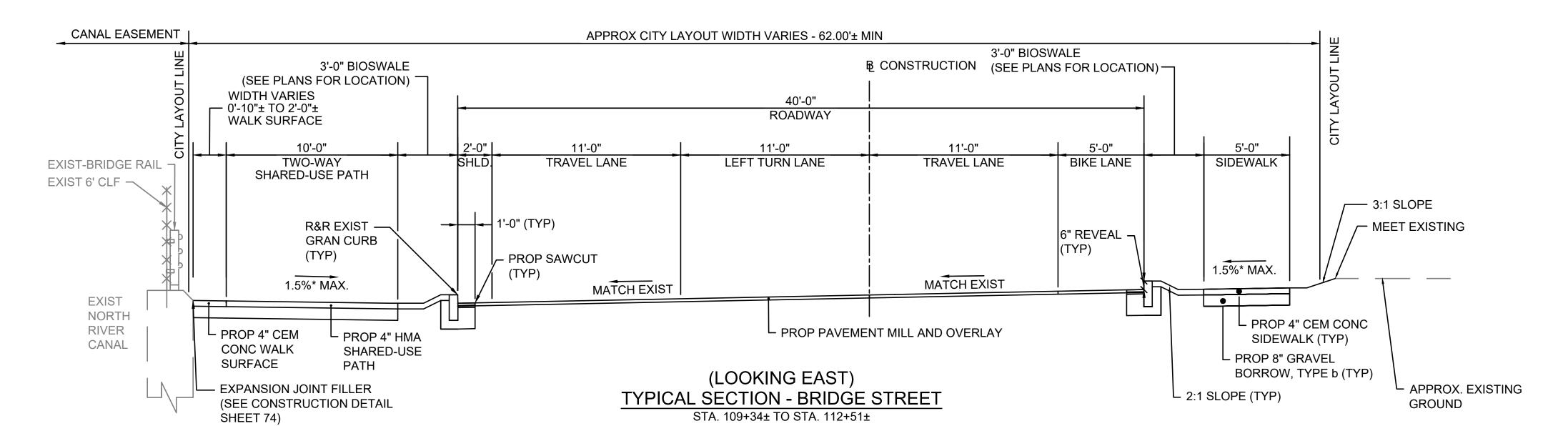
179410455 1" = 4'-0"

Project No. Scale

10 of 113 Sheet

Revision

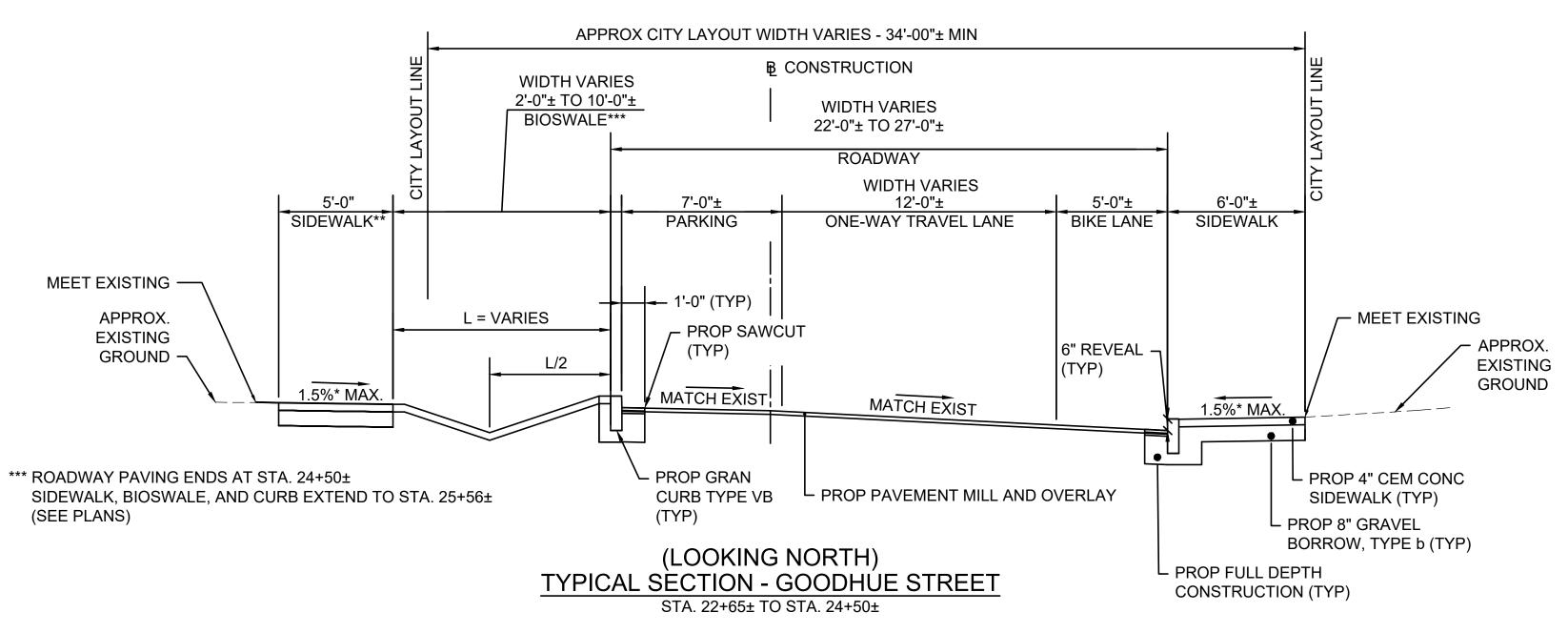
4' 0 8' 16' 32' 64'
4' 12'
SCALE: 1" = 4'-0"



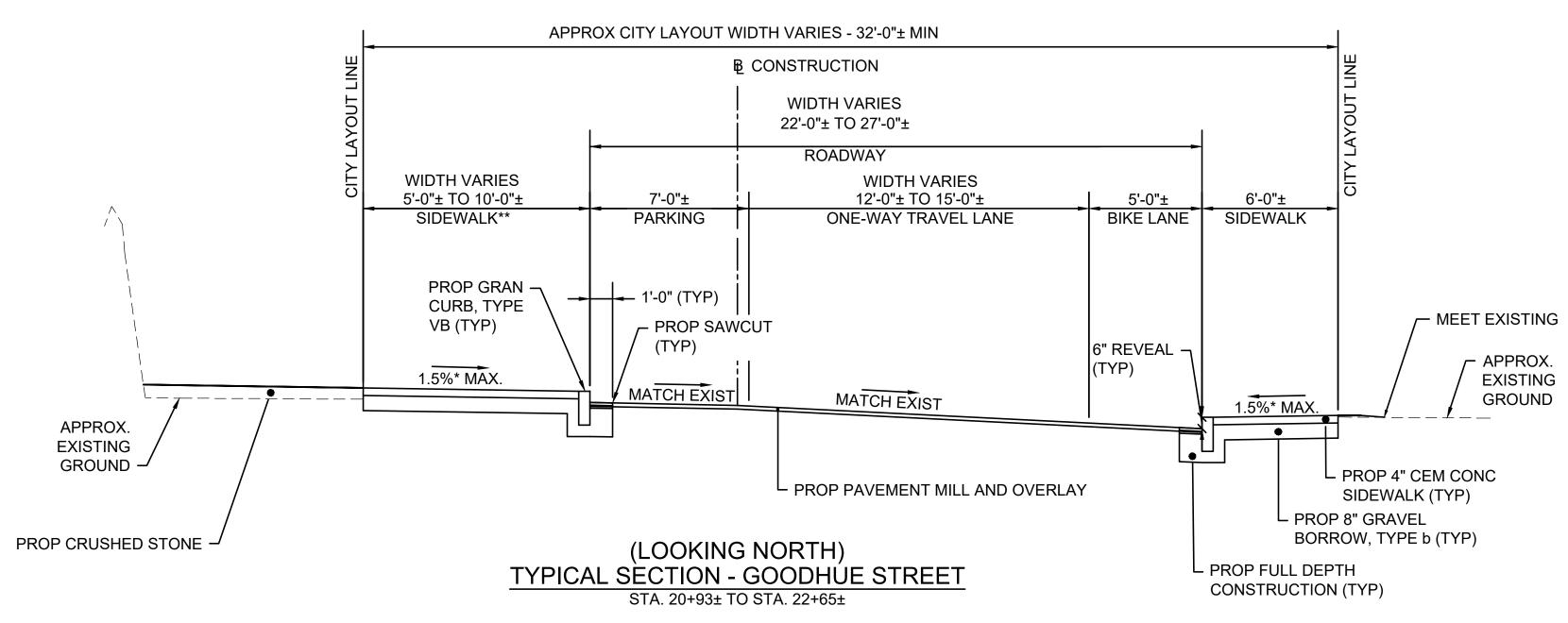
\* 0.5% TOLERANCE FOR CONSTRUCTION

\*\* SEE GRADING PLANS AND CROSS SECTIONS FOR SLOPES

1. MEET EXISTING ELEVATIONS AT BACK OF SIDEWALK WHERE POSSIBLE WHILE MAINTAINING ADA COMPLIANCE. EXISTING AND PROPOSED ELEVATIONS ARE SHOWN ON THE GRADING PLANS WHERE BACK OF SIDEWALK ELEVATIONS ARE NOT MET.



- \* 0.5% TOLERANCE FOR CONSTRUCTION
- \*\* SEE GRADING PLANS AND CROSS SECTIONS FOR SLOPES



- \* 0.5% TOLERANCE FOR CONSTRUCTION
- \*\* SEE GRADING PLANS AND CROSS SECTIONS FOR SLOPES



# NOTES:

1. MEET EXISTING ELEVATIONS AT BACK OF SIDEWALK WHERE POSSIBLE WHILE MAINTAINING ADA COMPLIANCE. EXISTING AND PROPOSED ELEVATIONS ARE SHOWN ON THE GRADING PLANS WHERE BACK OF SIDEWALK ELEVATIONS ARE NOT MET.



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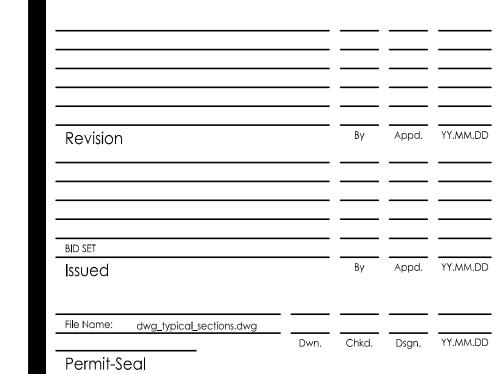
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BRIDGE STREET RECONSTRUCTION PROJECT

Title

TYPICAL SECTIONS
GOODHUE STREET

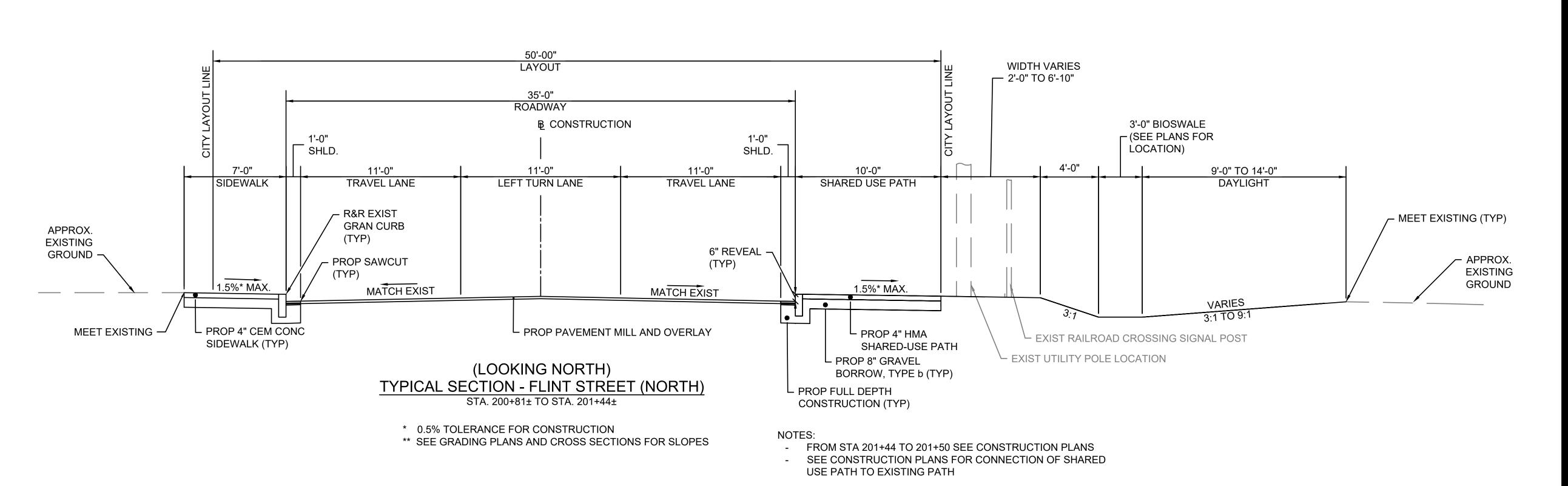
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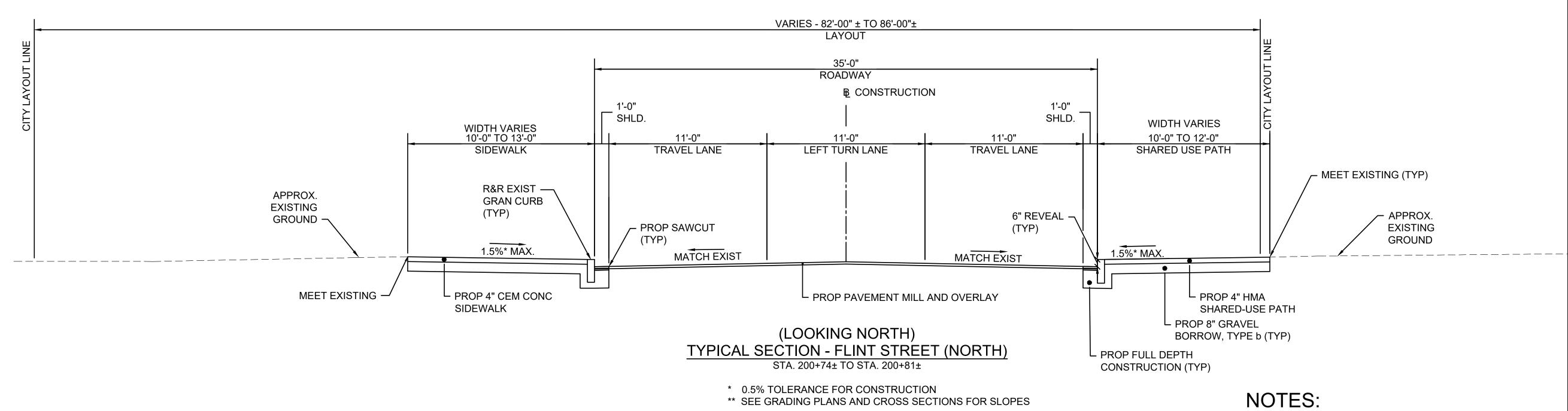
Project No. Scale

Drawing No. Sheet

eet Revision

U:\179410455\transportation\drawing\dwg\_typical\_secti 2020/02.05 1:02 PM By: Sadler. Chris





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By Appd. YY.MM.D

BID SET
Issued

By Appd. YY.MM.D

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BRIDGE STREET RECONSTRUCTION PROJECT

\_\_\_\_\_ Title

1. MEET EXISTING ELEVATIONS AT BACK OF SIDEWALK

COMPLIANCE. EXISTING AND PROPOSED ELEVATIONS ARE SHOWN ON THE GRADING PLANS WHERE BACK OF

WHERE POSSIBLE WHILE MAINTAINING ADA

SIDEWALK ELEVATIONS ARE NOT MET.

TYPICAL SECTIONS FLINT STREET

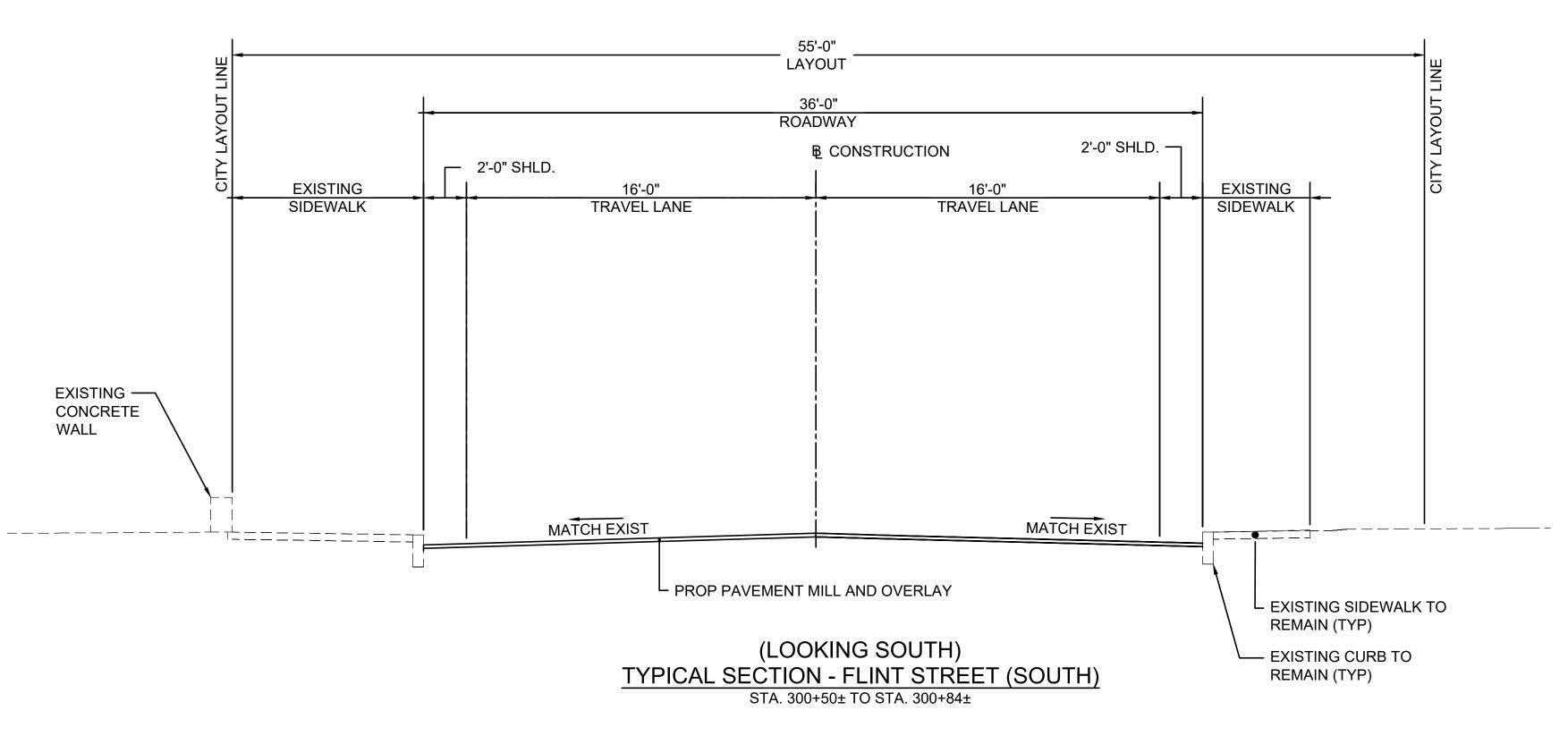
179410455 1" = 4'-0"

Project No. Scale

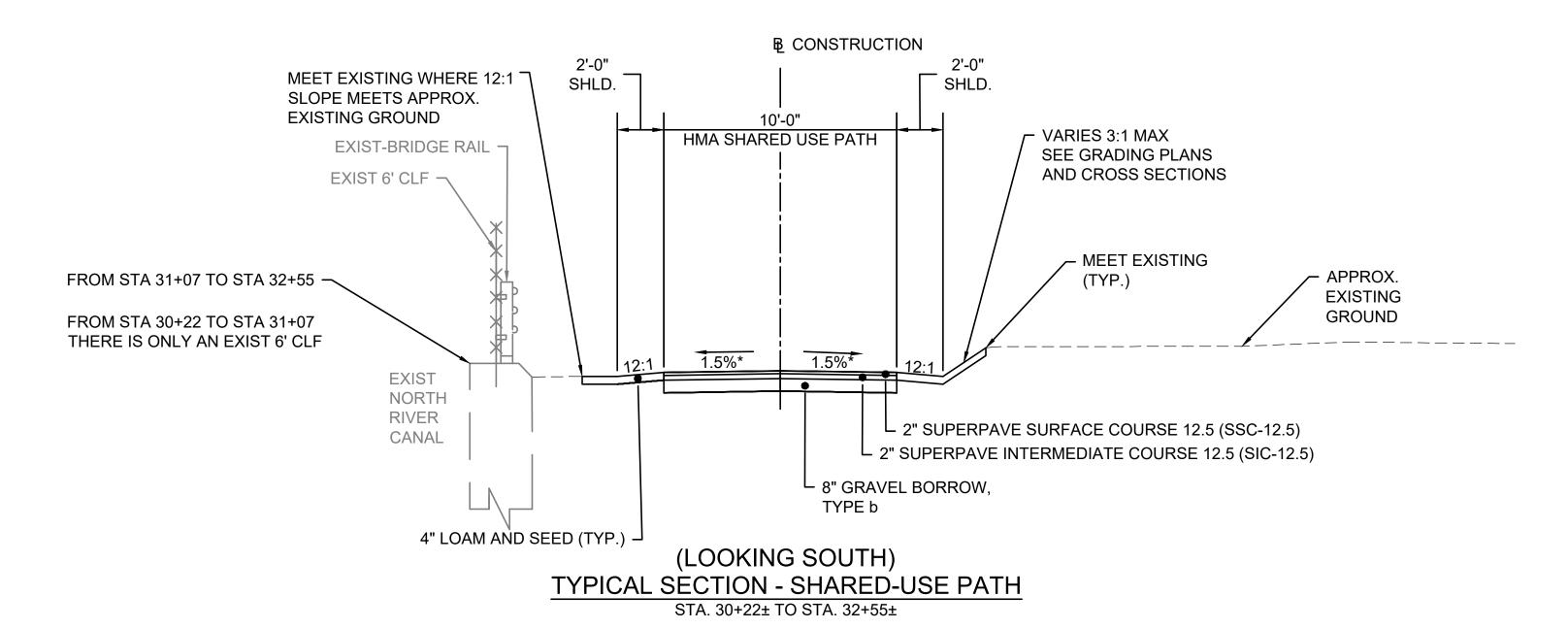
Drawing No. Sheet Revision

0455/Iransportation\arawing\awg\_1ypic '05 1:02 PM By: Sadler, Chris

0 8' 16' 32' 4' 12' SCALE: 1" = 4'-0"



- \* 0.5% TOLERANCE FOR CONSTRUCTION
- \*\* SEE GRADING PLANS AND CROSS SECTIONS FOR SLOPES



\* 0.5% TOLERANCE FOR CONSTRUCTION \*\* SEE GRADING PLANS AND CROSS SECTIONS FOR SLOPES





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File Name: dwg\_typical\_sections.dwg

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BRIDGE STREET RECONSTRUCTION PROJECT

TYPICAL SECTIONS FLINT STREET AND SHARED-USE PATH

179410455 Project No.

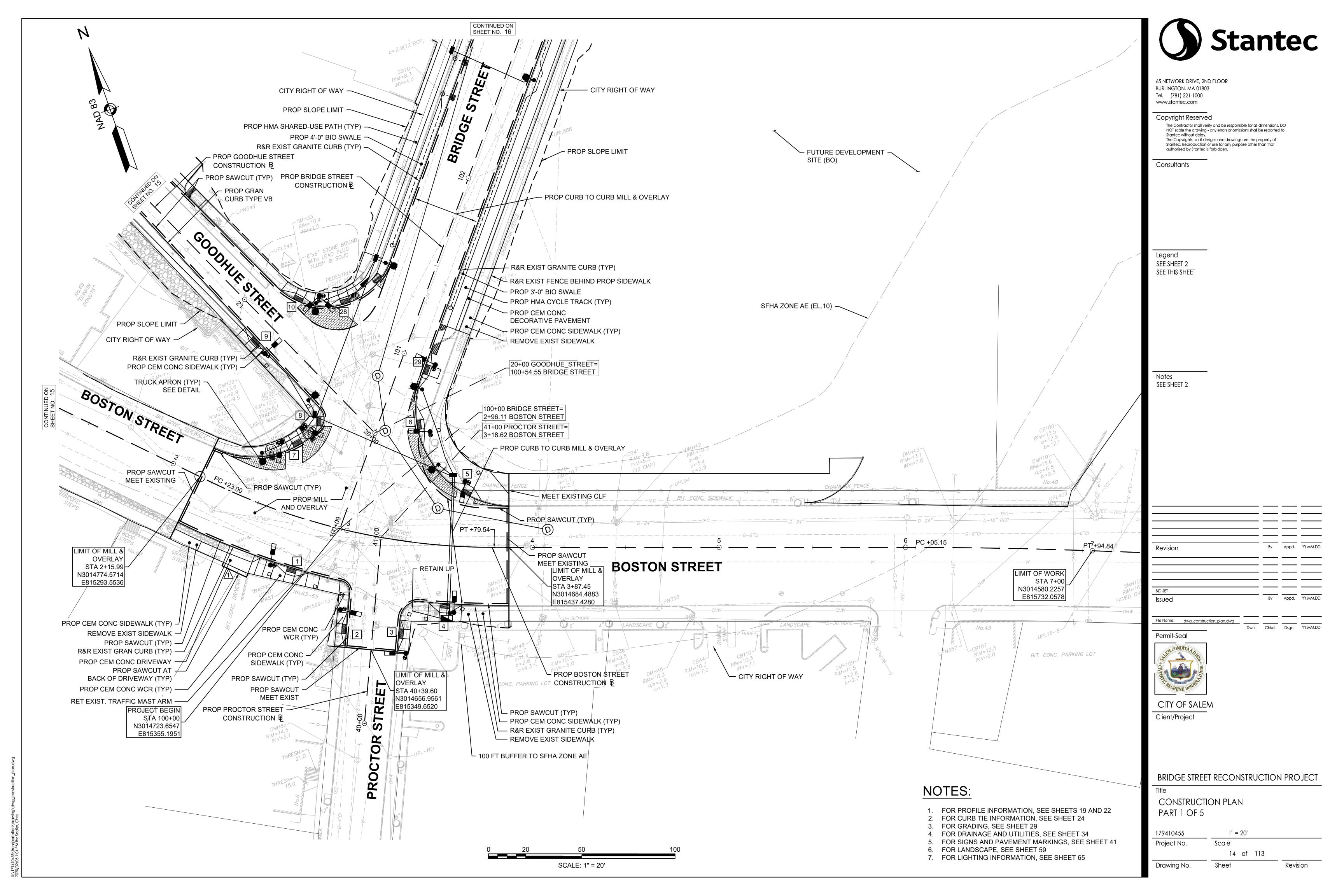
Scale 13 of 113

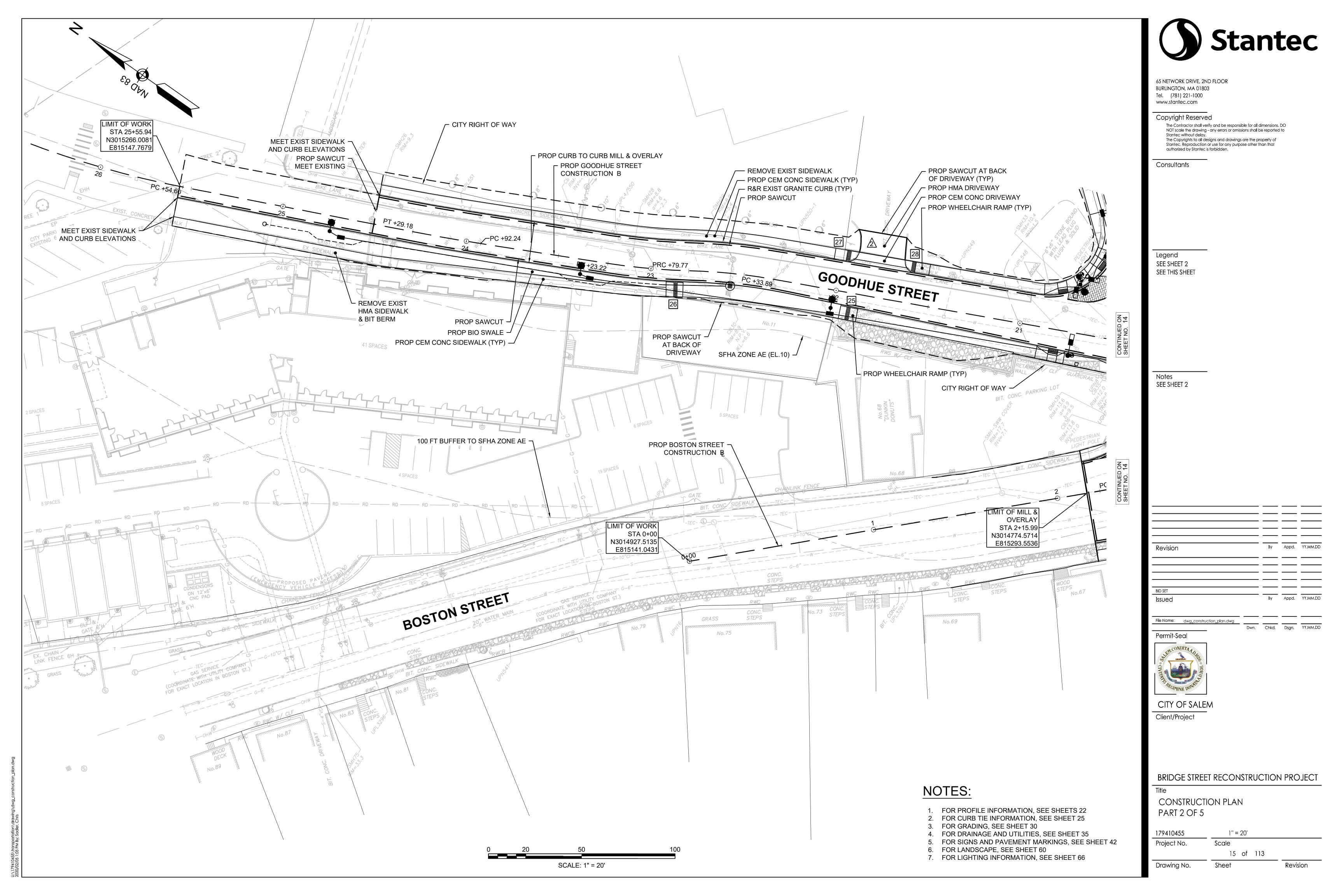
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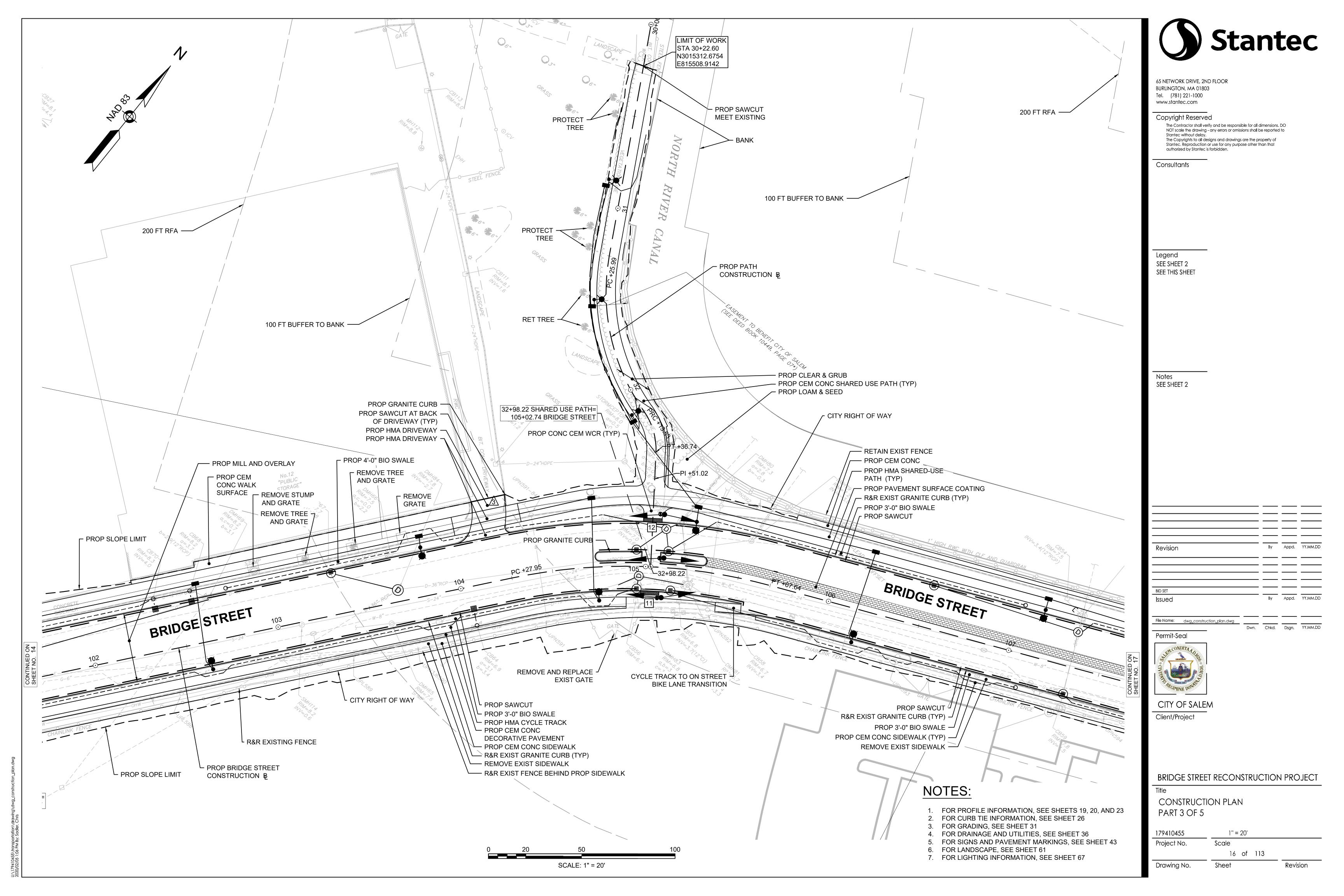
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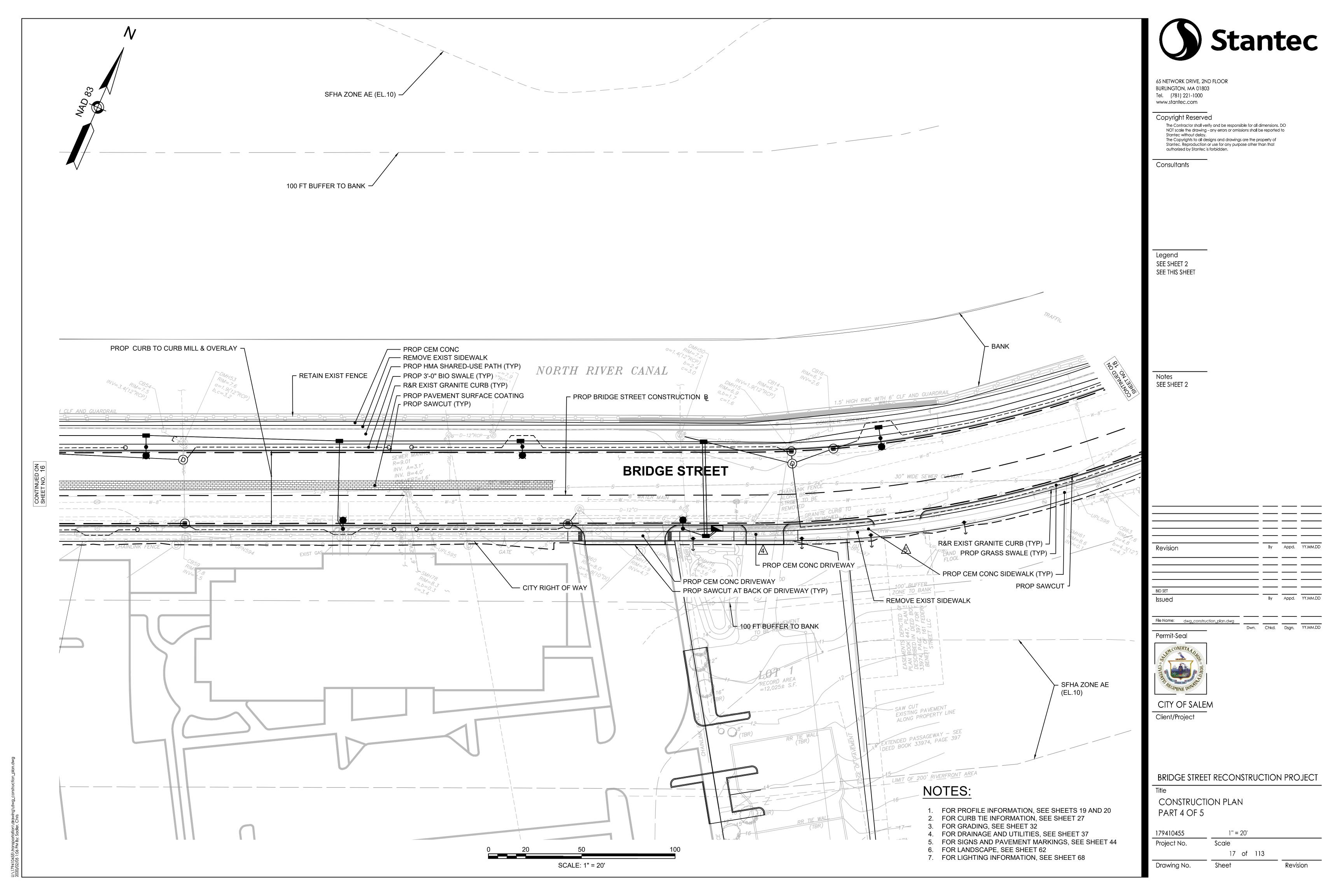
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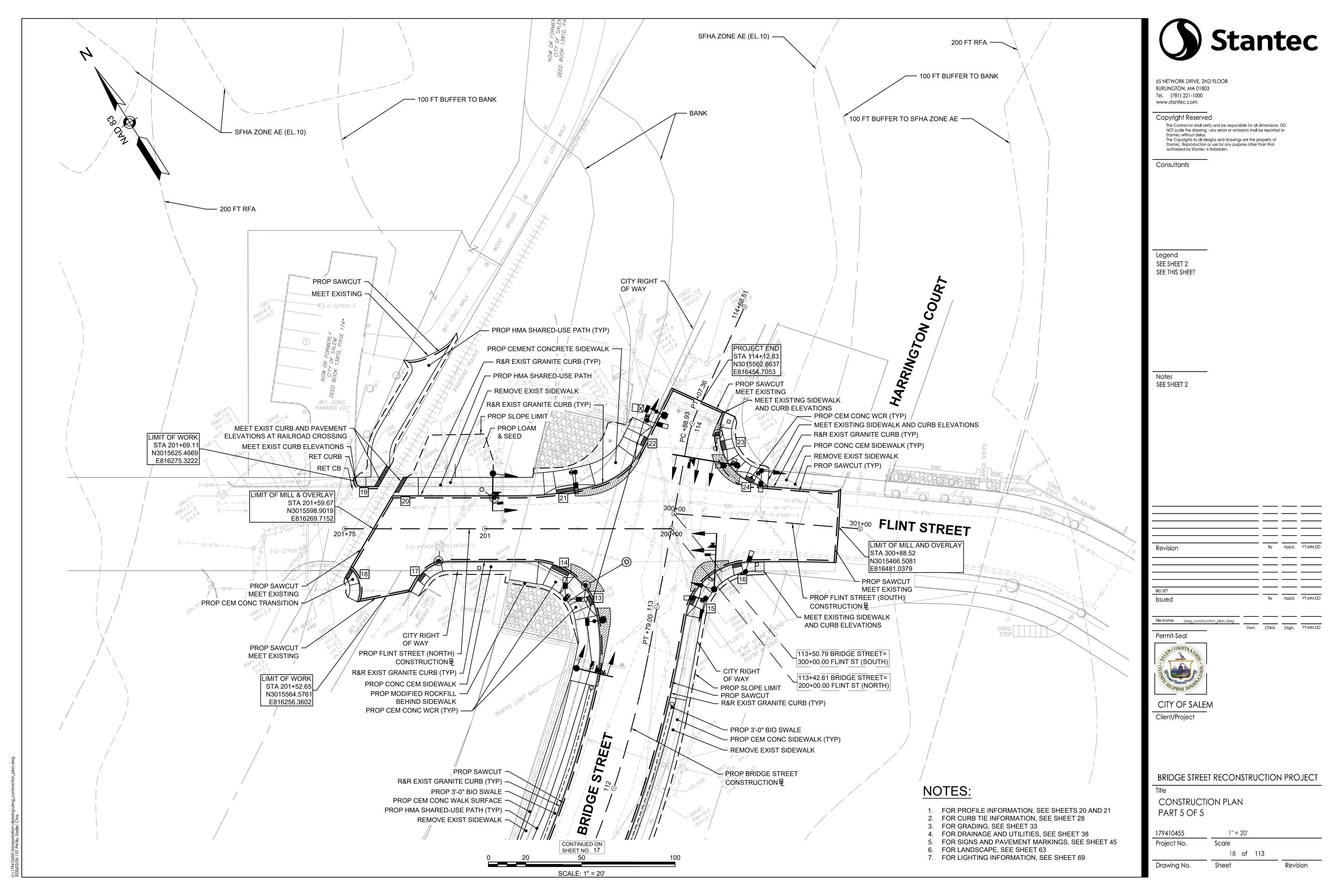
Revision

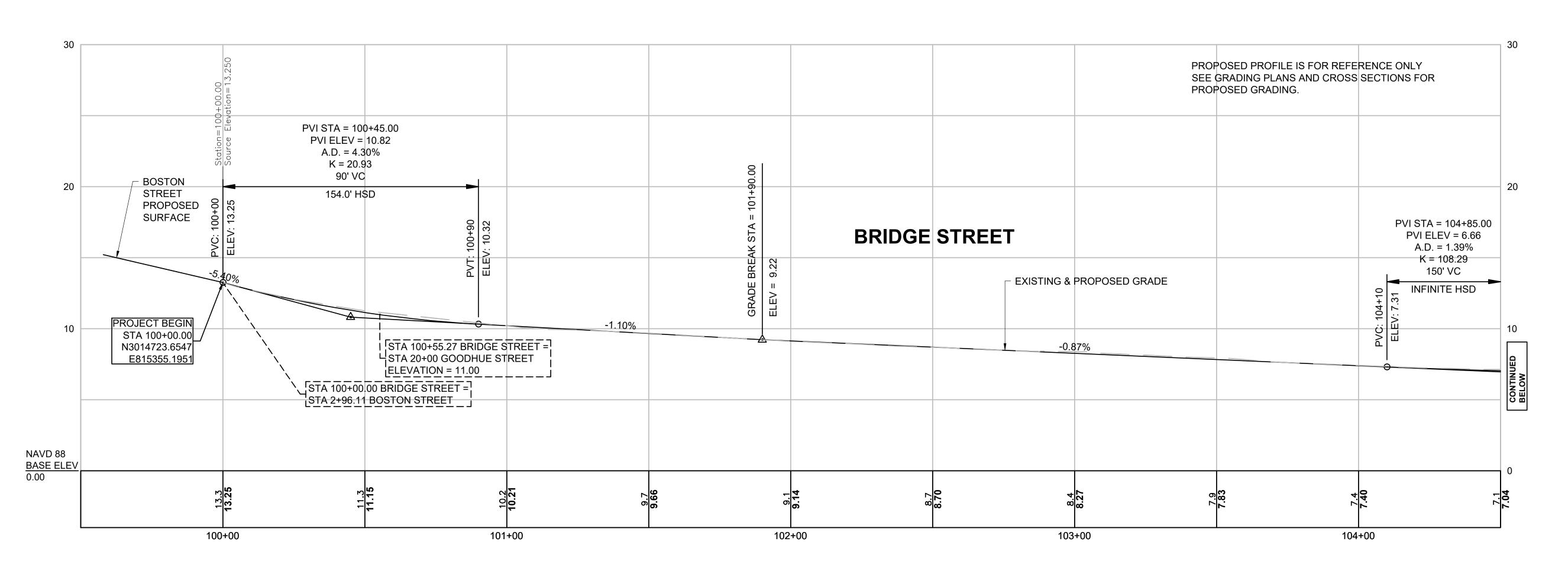


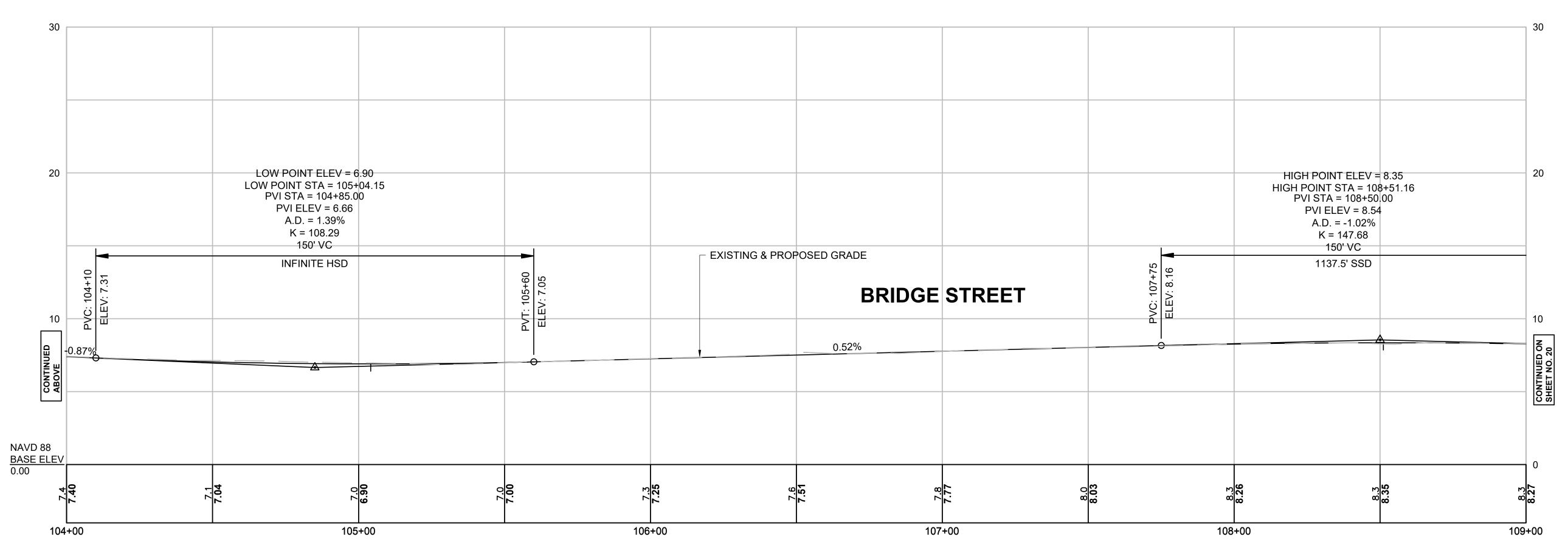














NOTES: 1. FOR CONSTRUCTION PLAN SEE SHEET 14, 16, AND 17.



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File Name: dwg\_profiles.dwg Dwn. Chkd. Dsgn. YY.MM.DD



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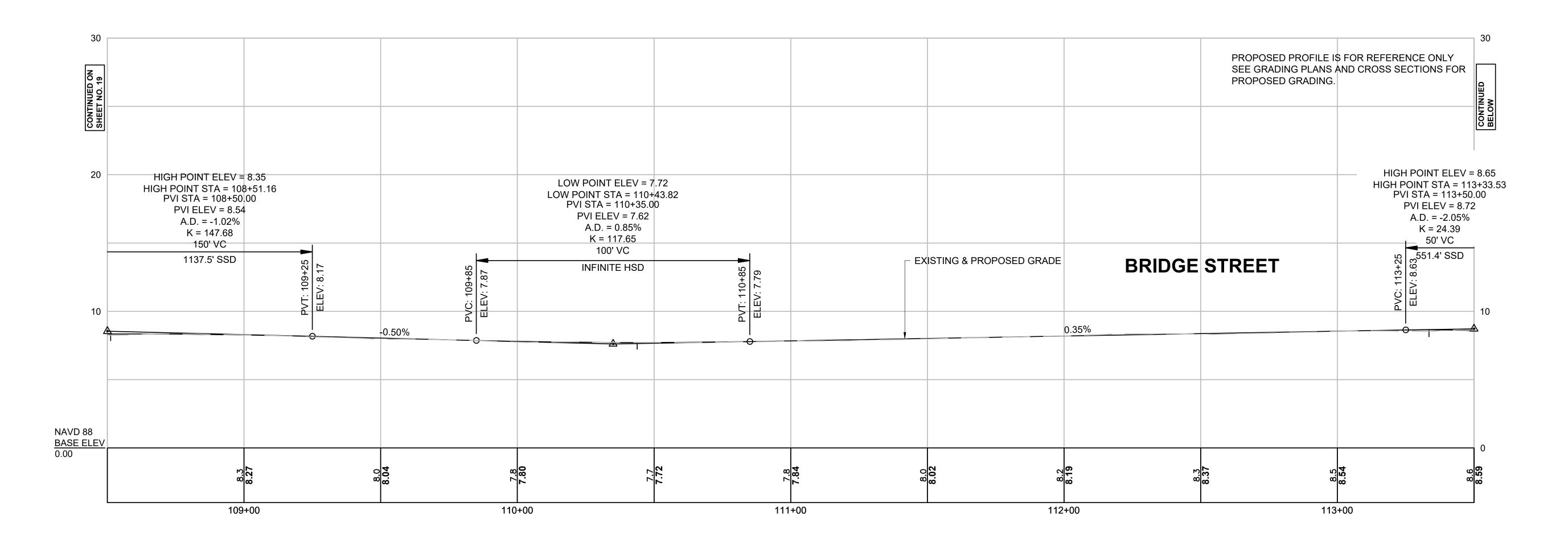
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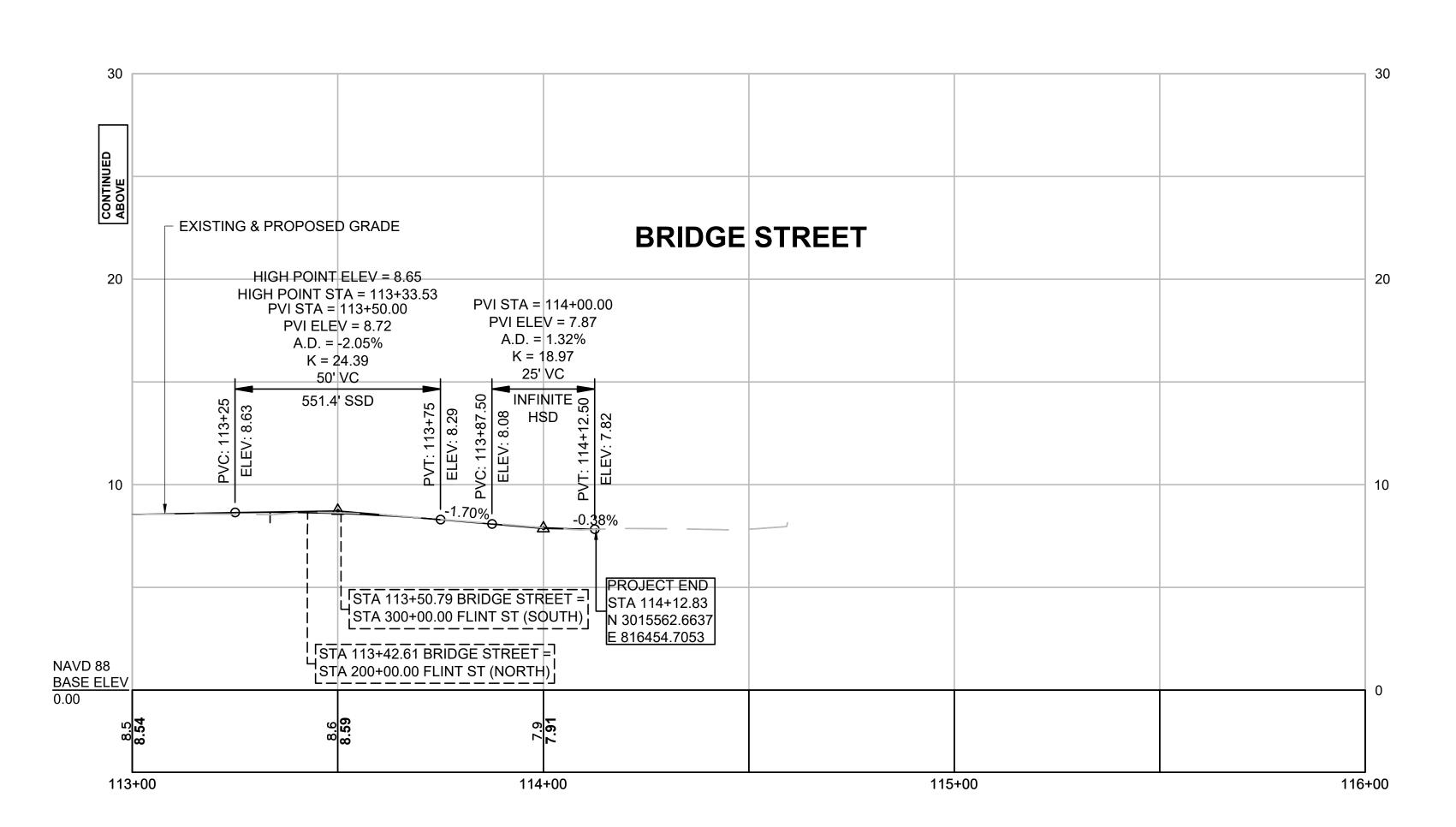
PROFILE - BRIDGE STREET PART 1 OF 2

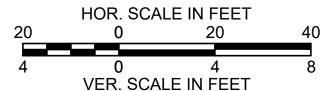
H:1" = 20' V:1"=4' 179410455 Scale Project No.

19 of 113 Sheet Drawing No.

Revision







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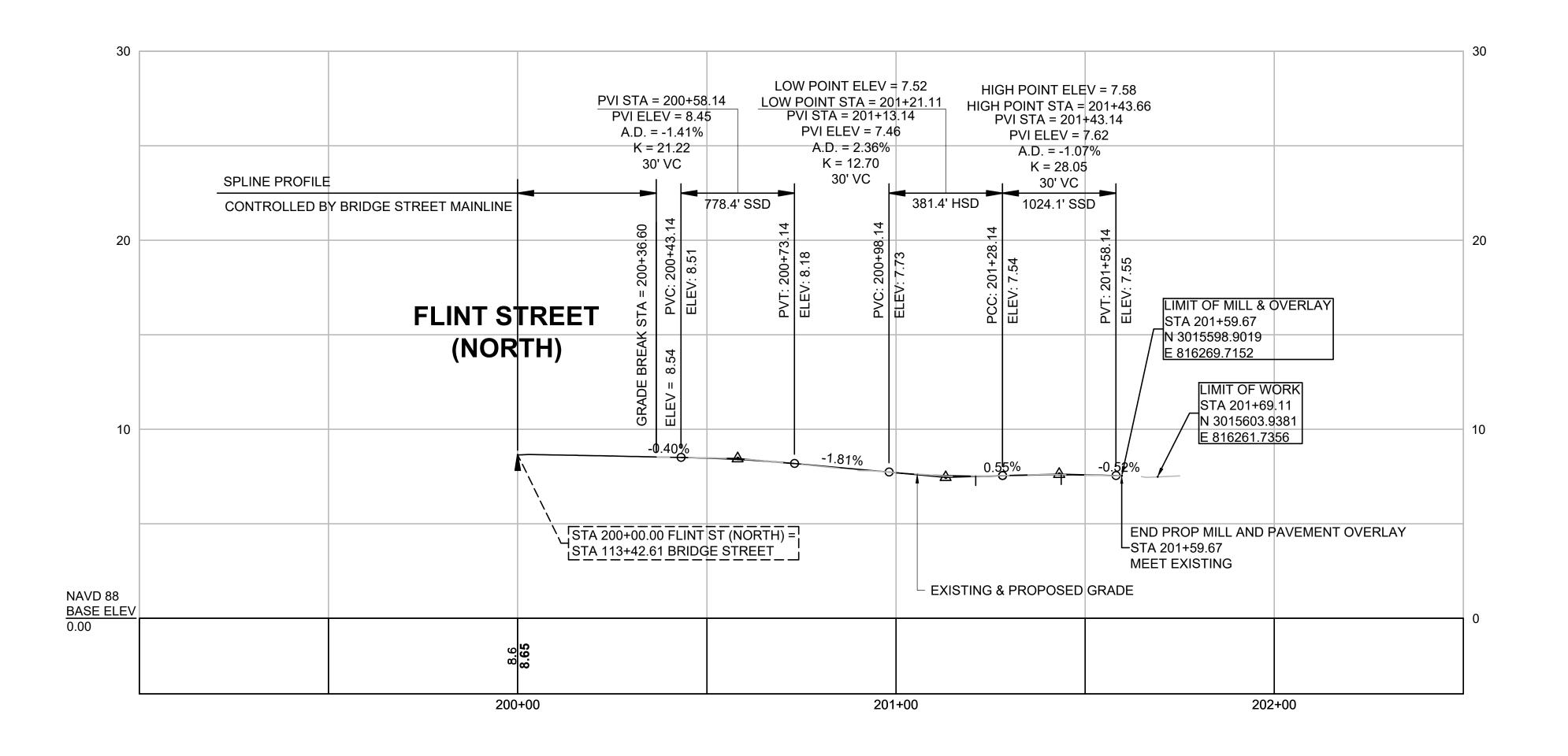
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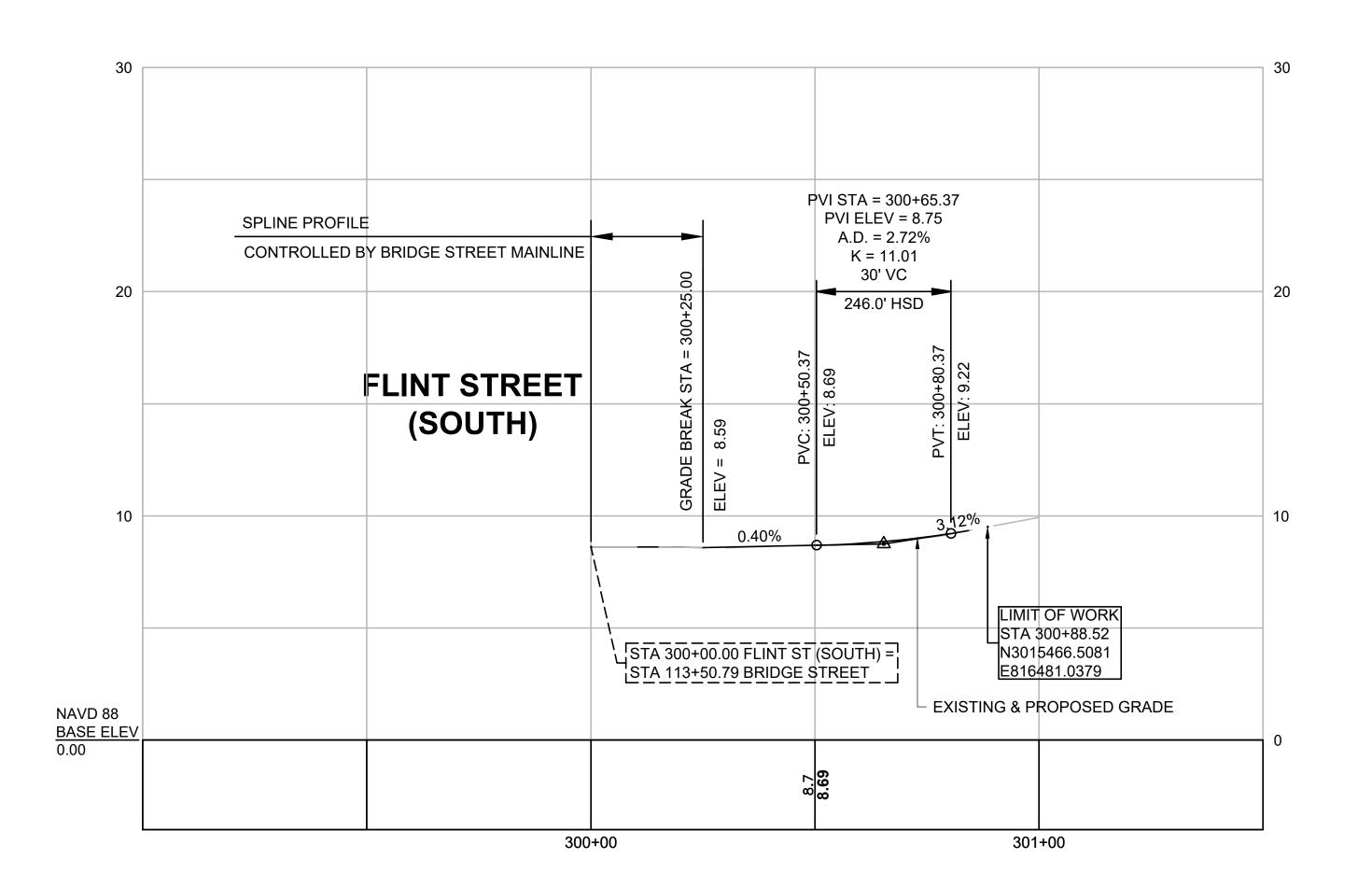
PROFILE - BRIDGE STREET PART 2 OF 2

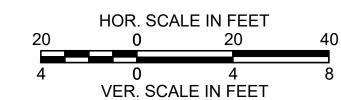
H:1" = 20' V:1"=4' 179410455 Scale Project No.

20 of 113 Drawing No.

Sheet Revision







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BRIDGE STREET RECONSTRUCTION PROJECT

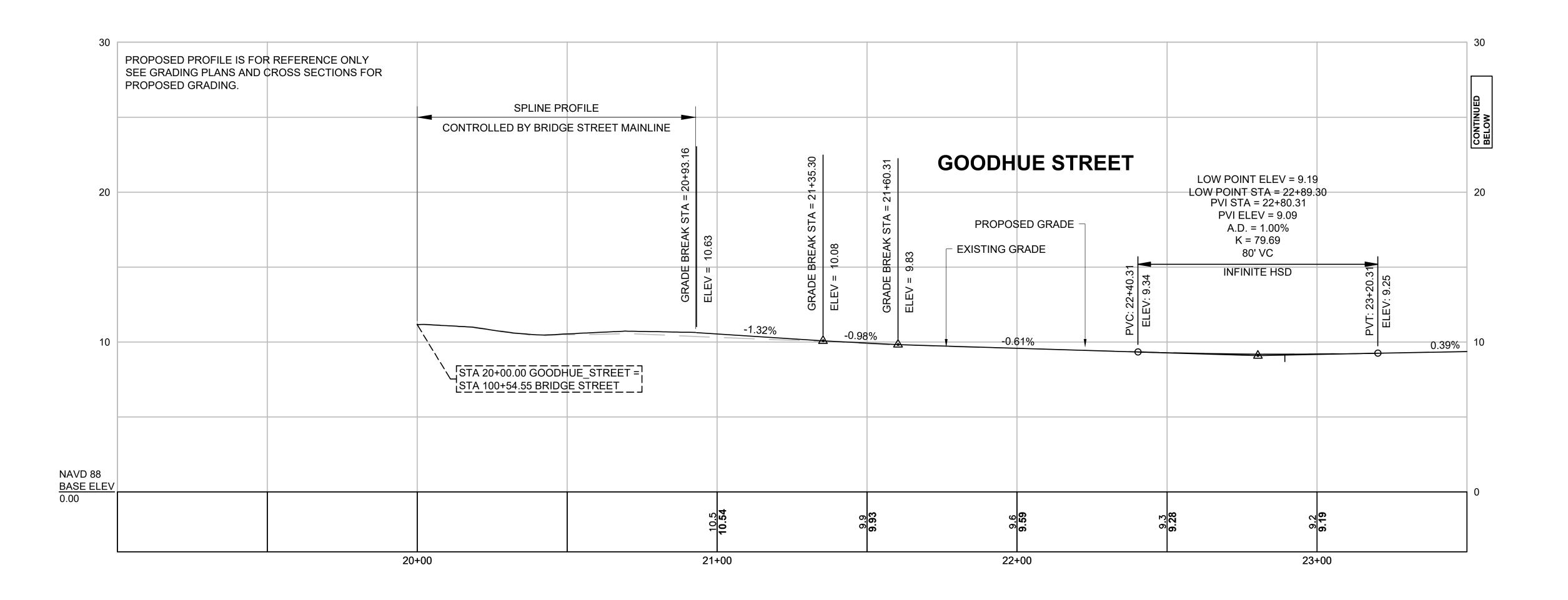
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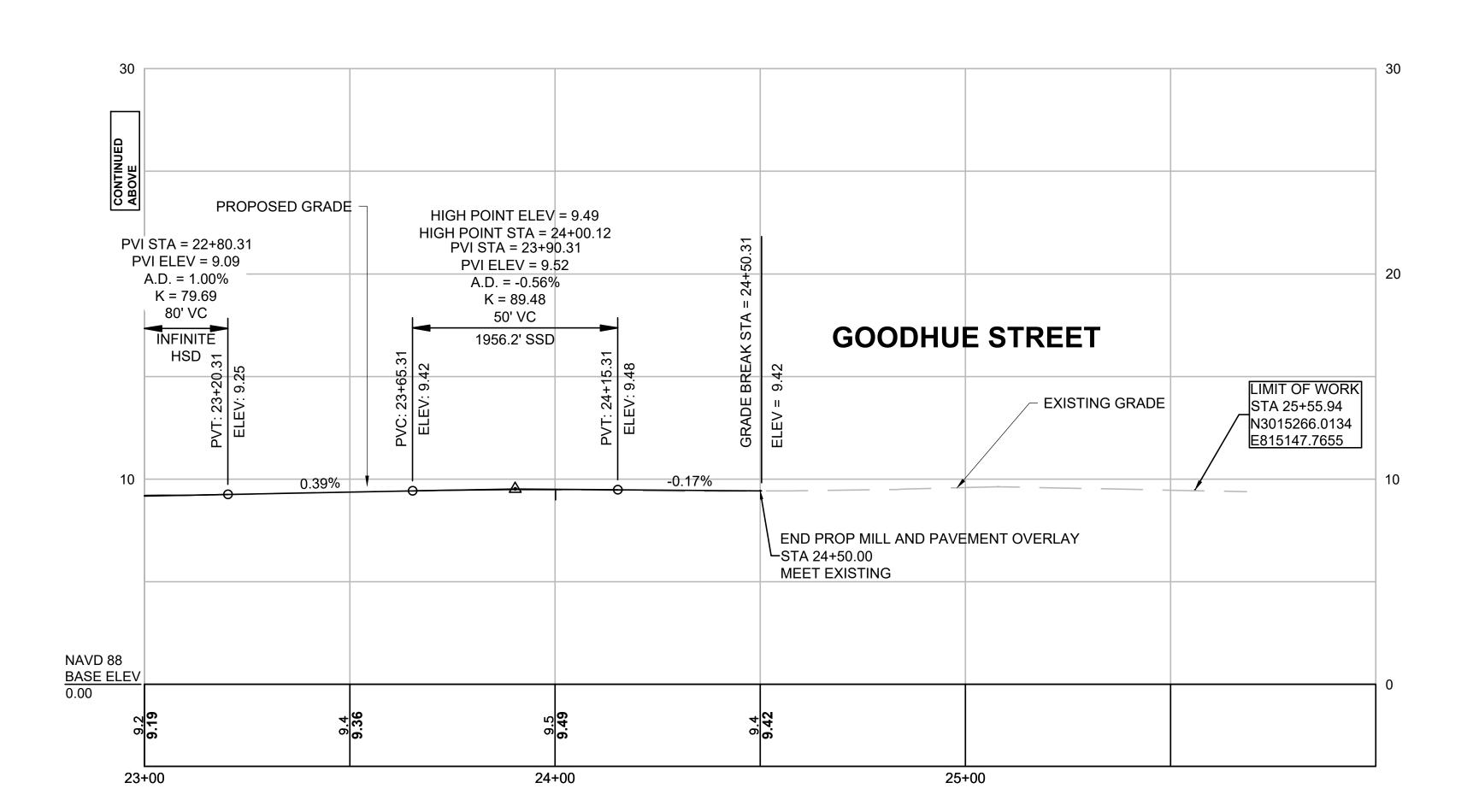
PROFILE - FLINT STREET

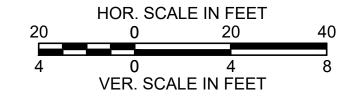
H:1" = 20' V:1"=4' 179410455 Scale

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Sheet Drawing No.







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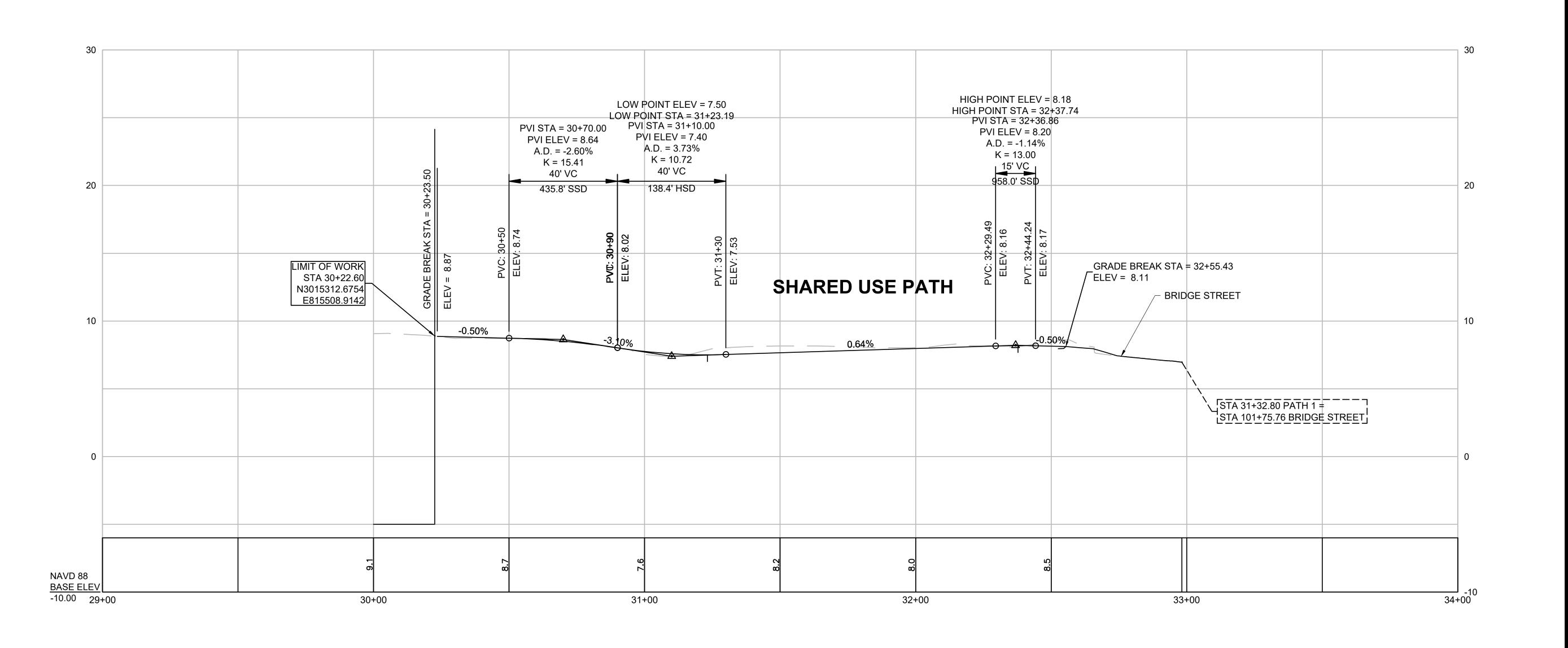
BRIDGE STREET RECONSTRUCTION PROJECT

PROFILE - GOODHUE STREET

H:1" = 20' V:1"=4' 179410455 Scale Project No.

22 of 113 Drawing No.

Sheet Revision





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BRIDGE STREET RECONSTRUCTION PROJECT

Title

PROFILE - PATH

179410455 H:1" = 20' V:1"=4'

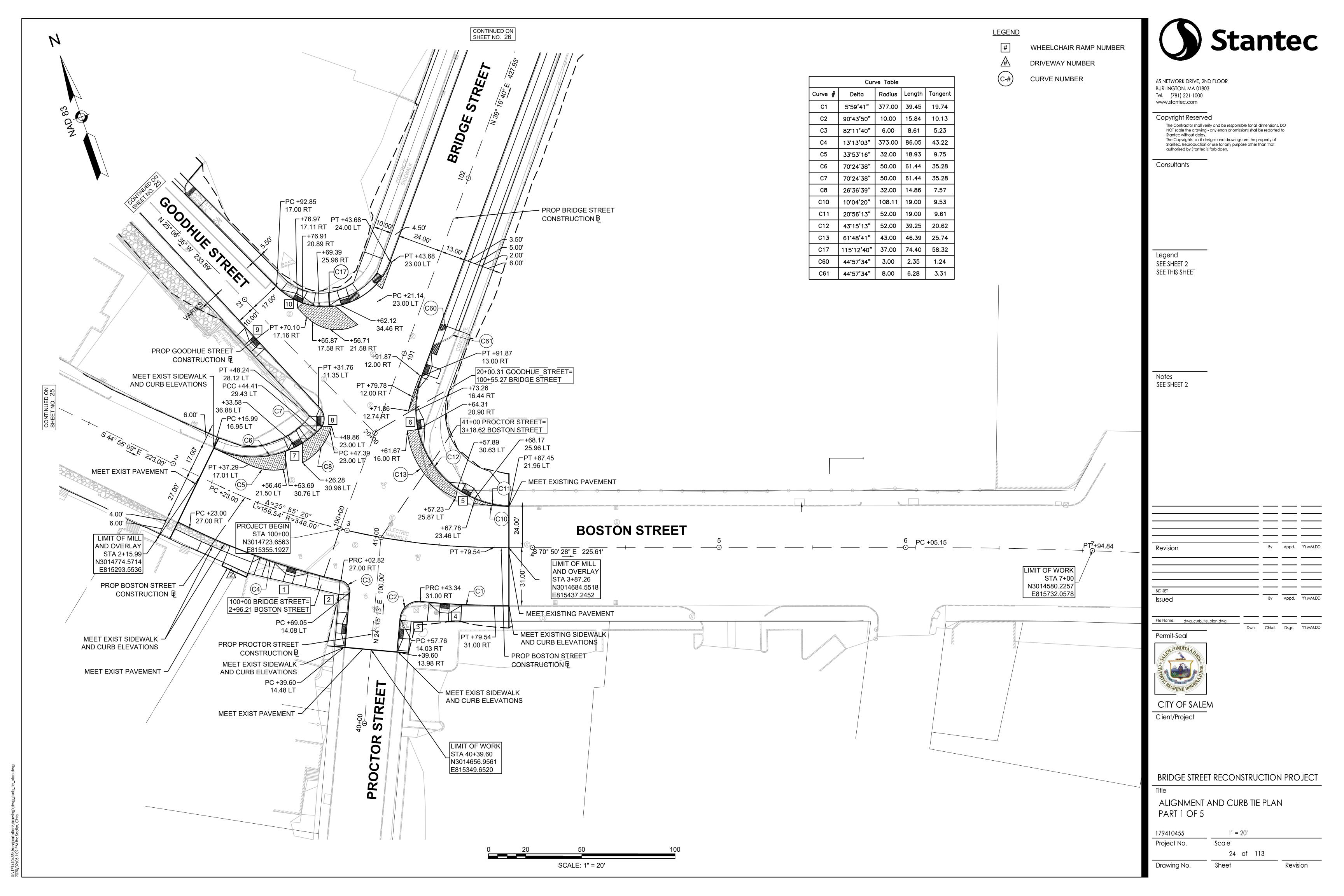
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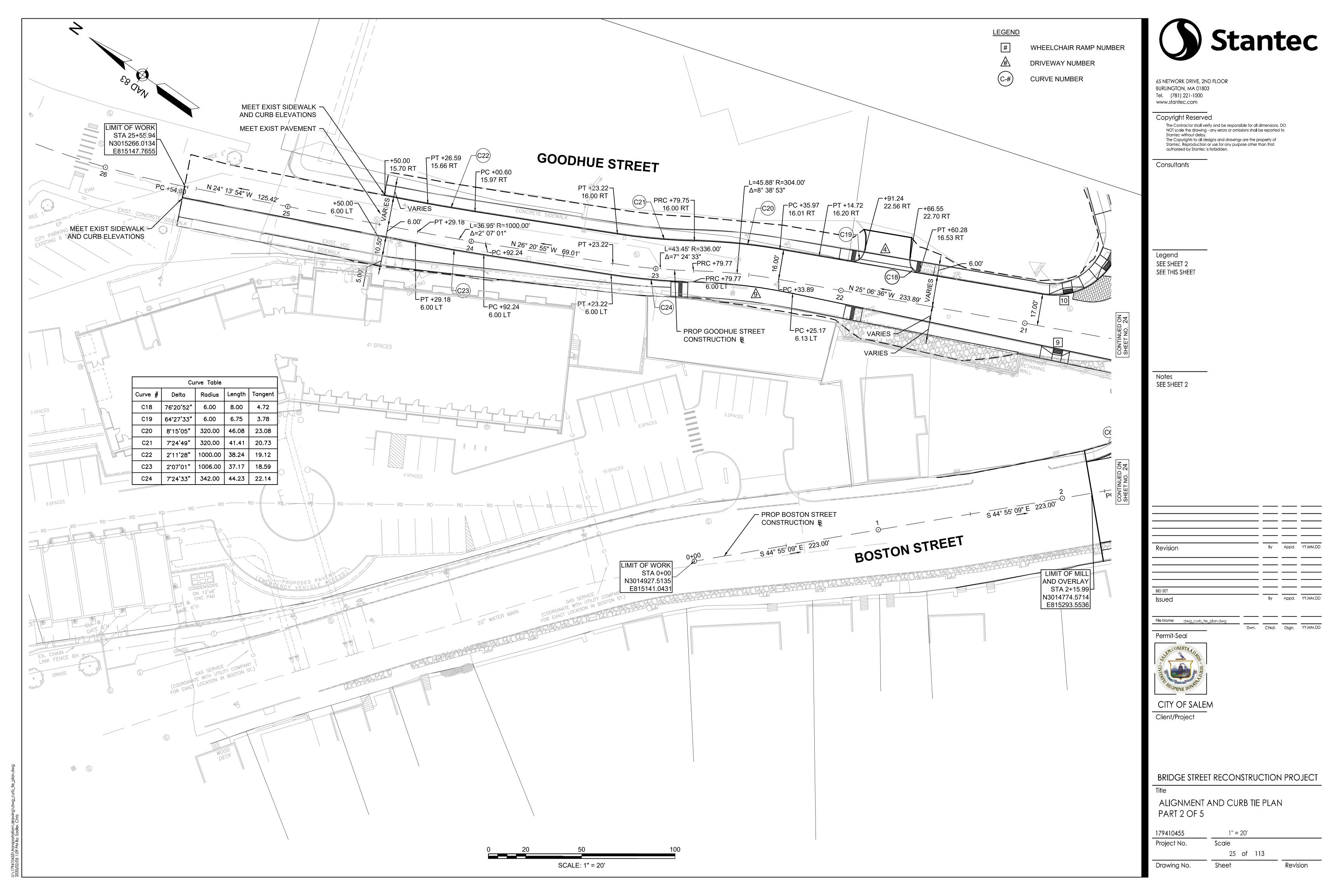
23 of 113

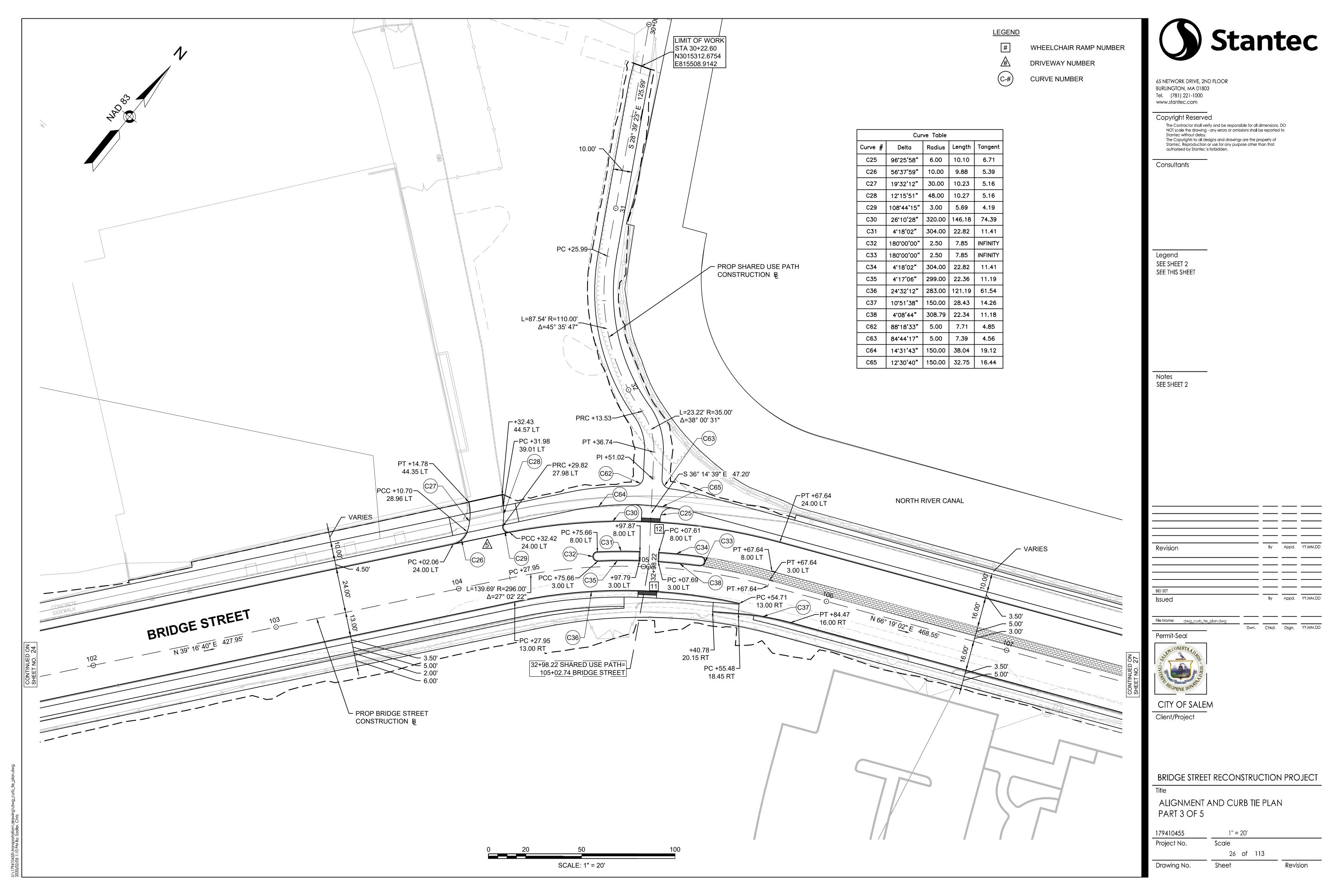
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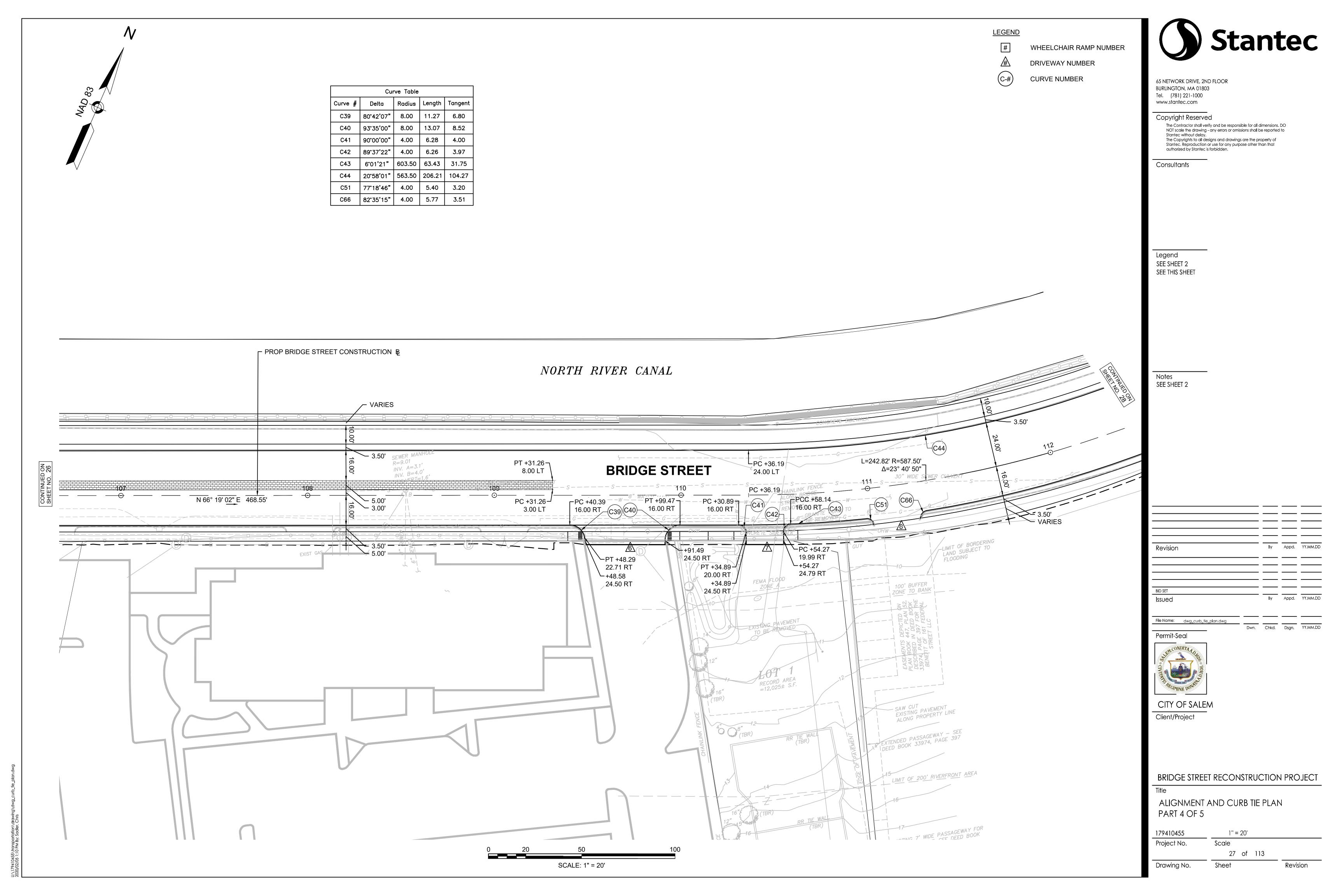
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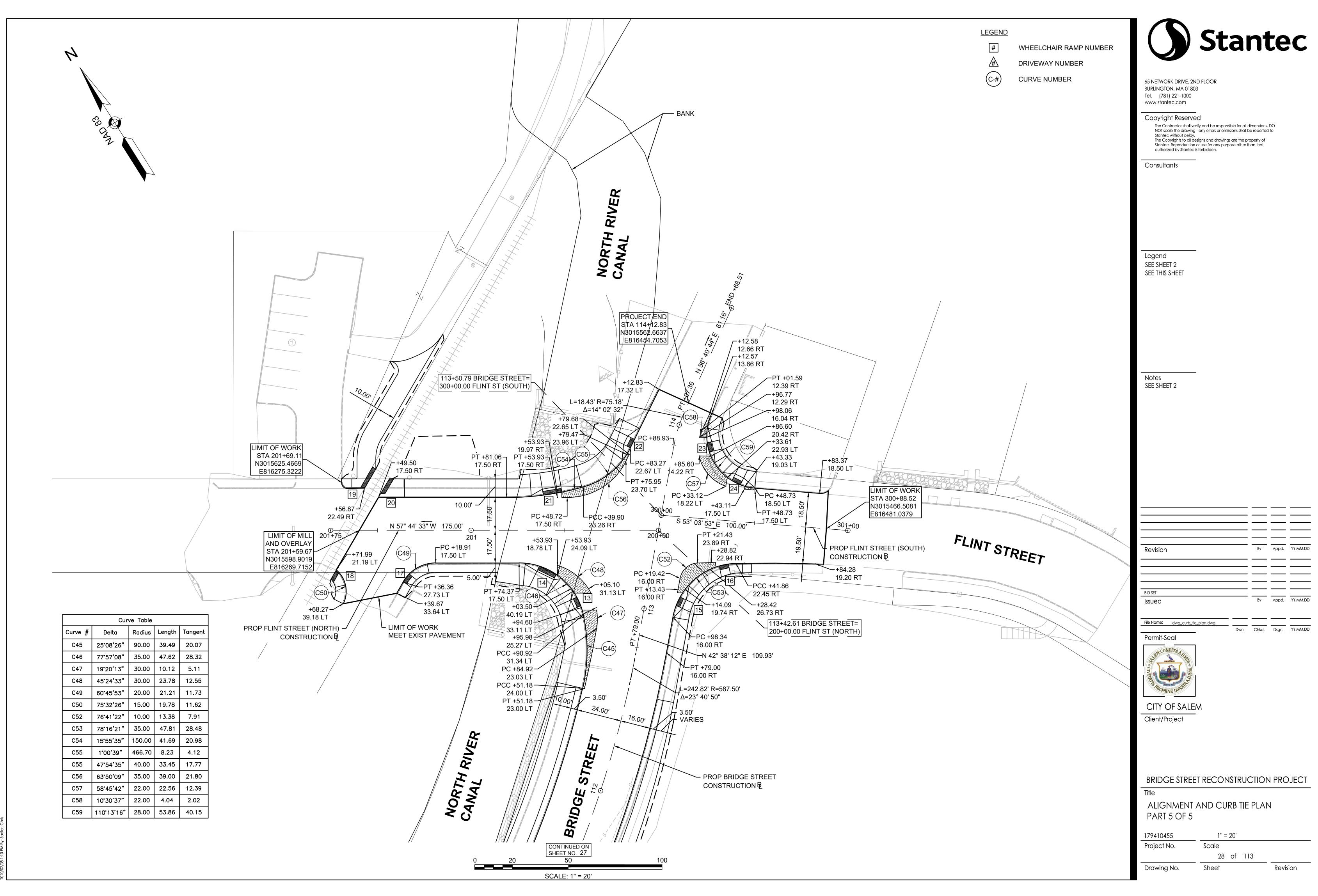
HOR. SCALE IN FEET
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4 0 4 8
VER. SCALE IN FEET



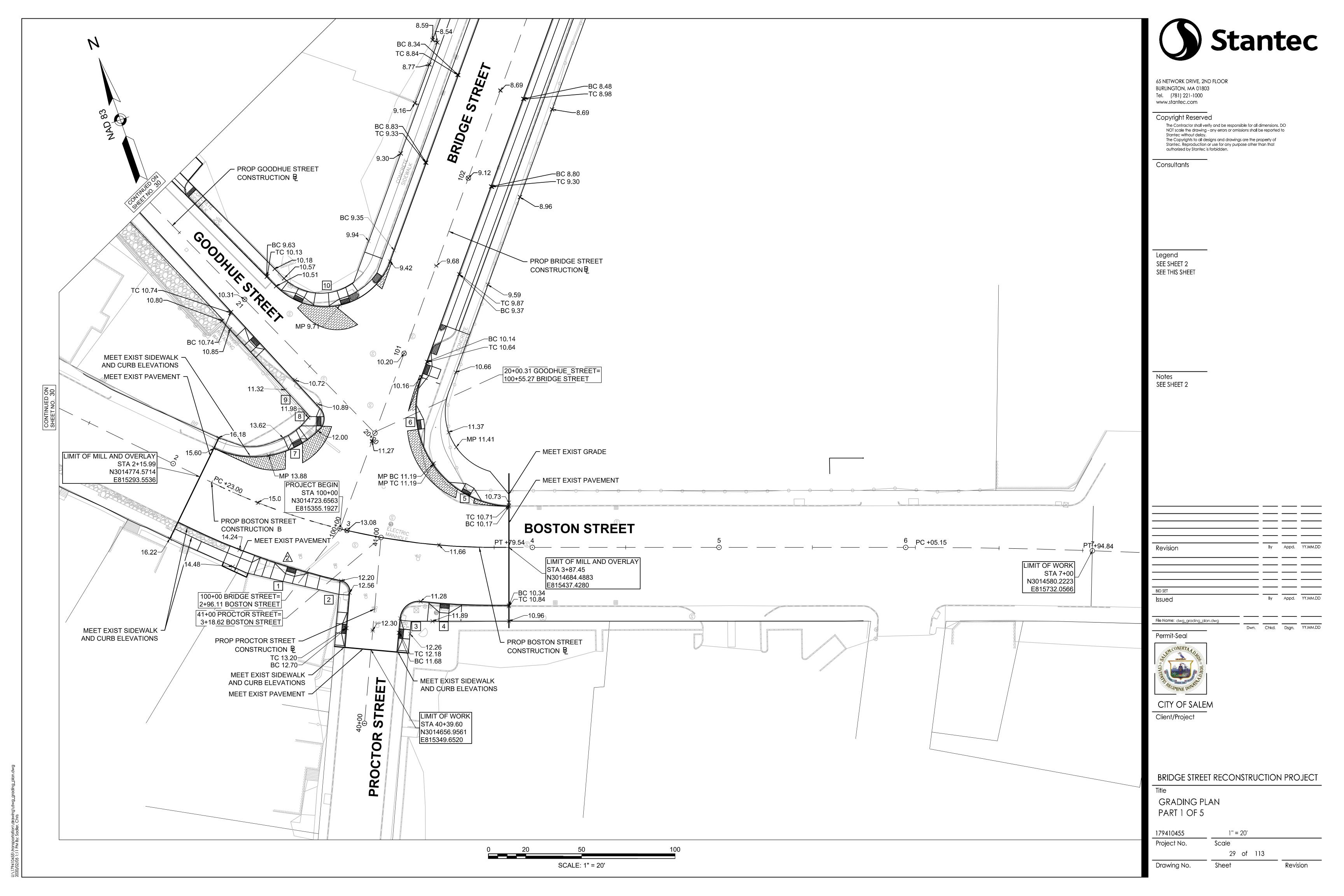


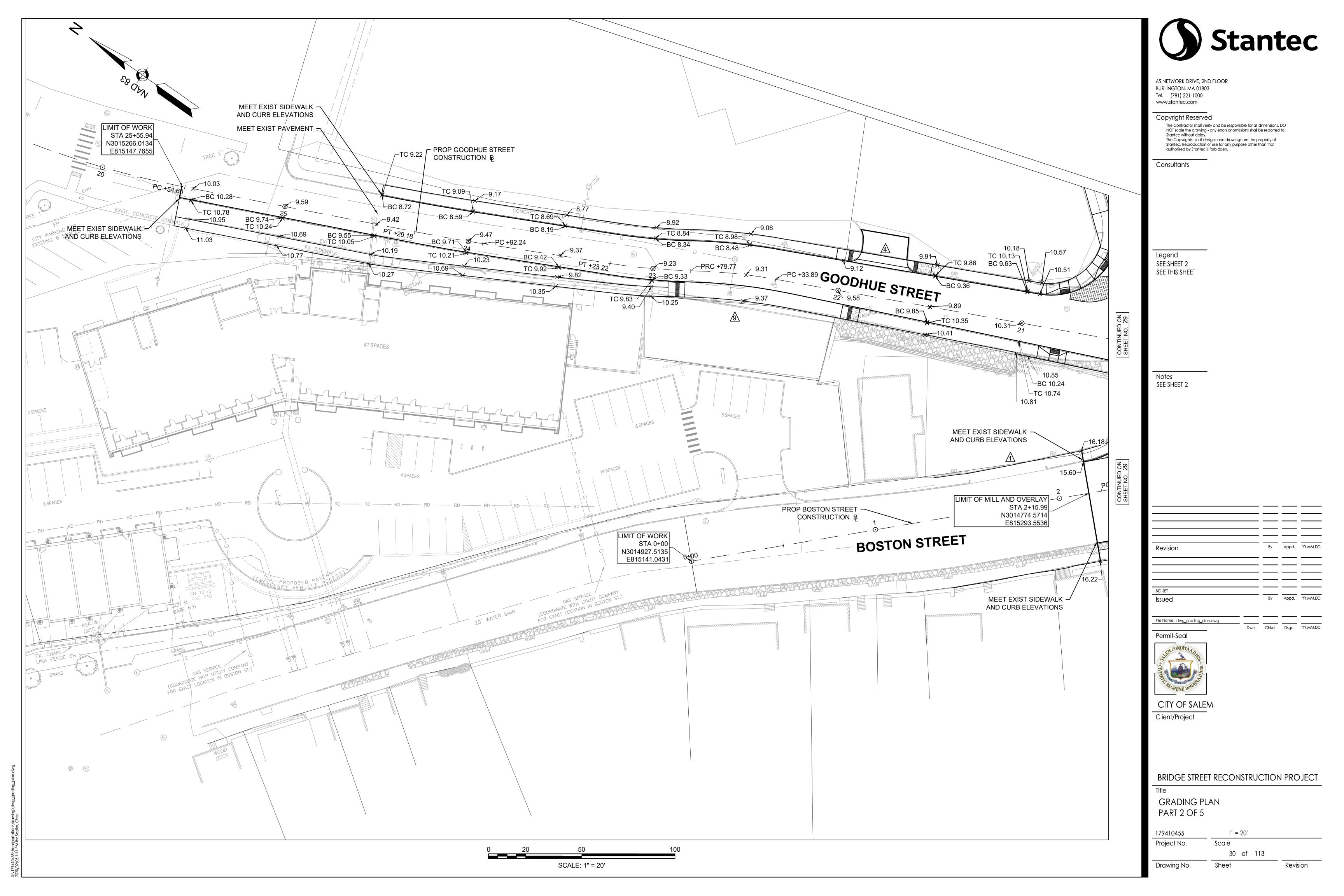


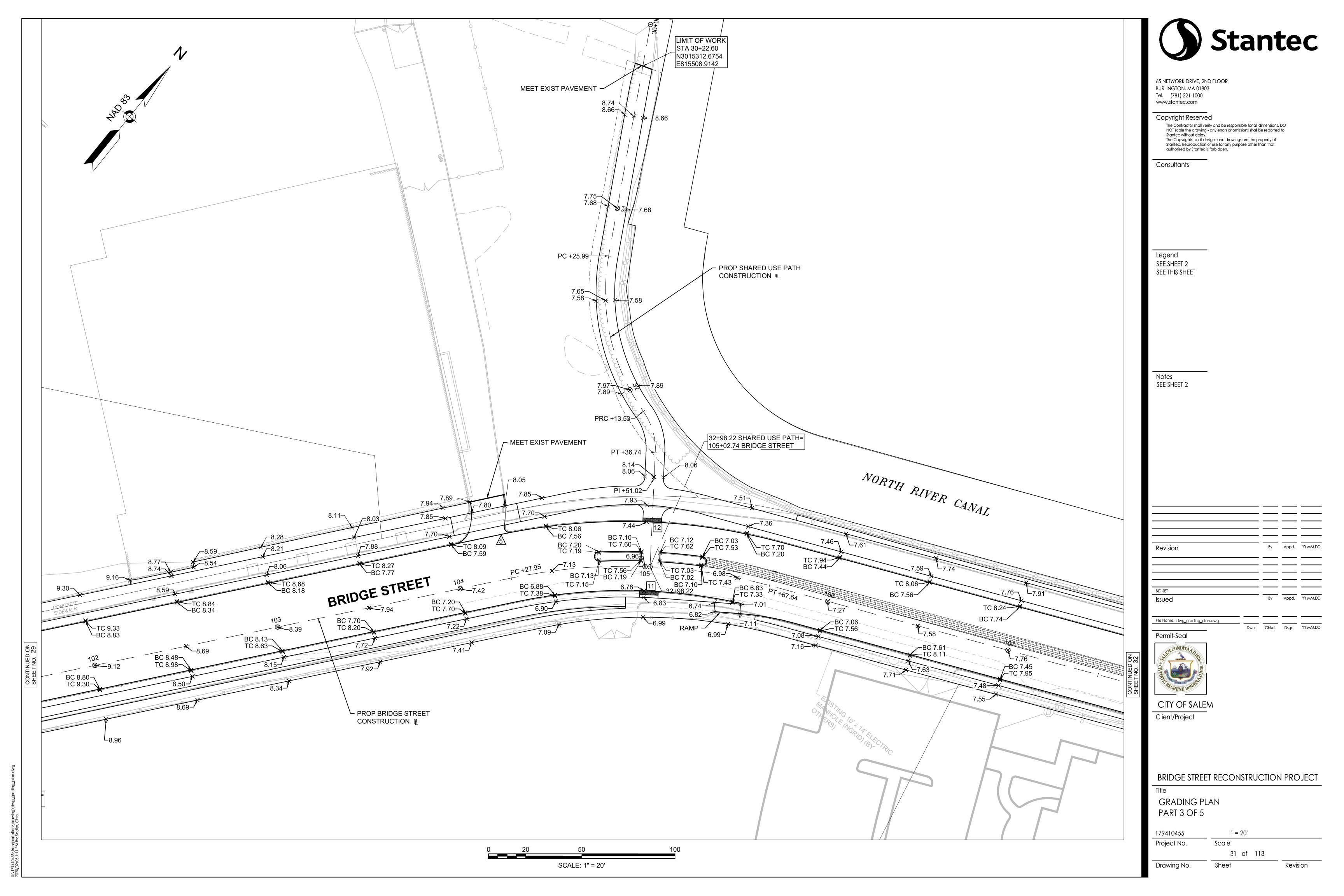


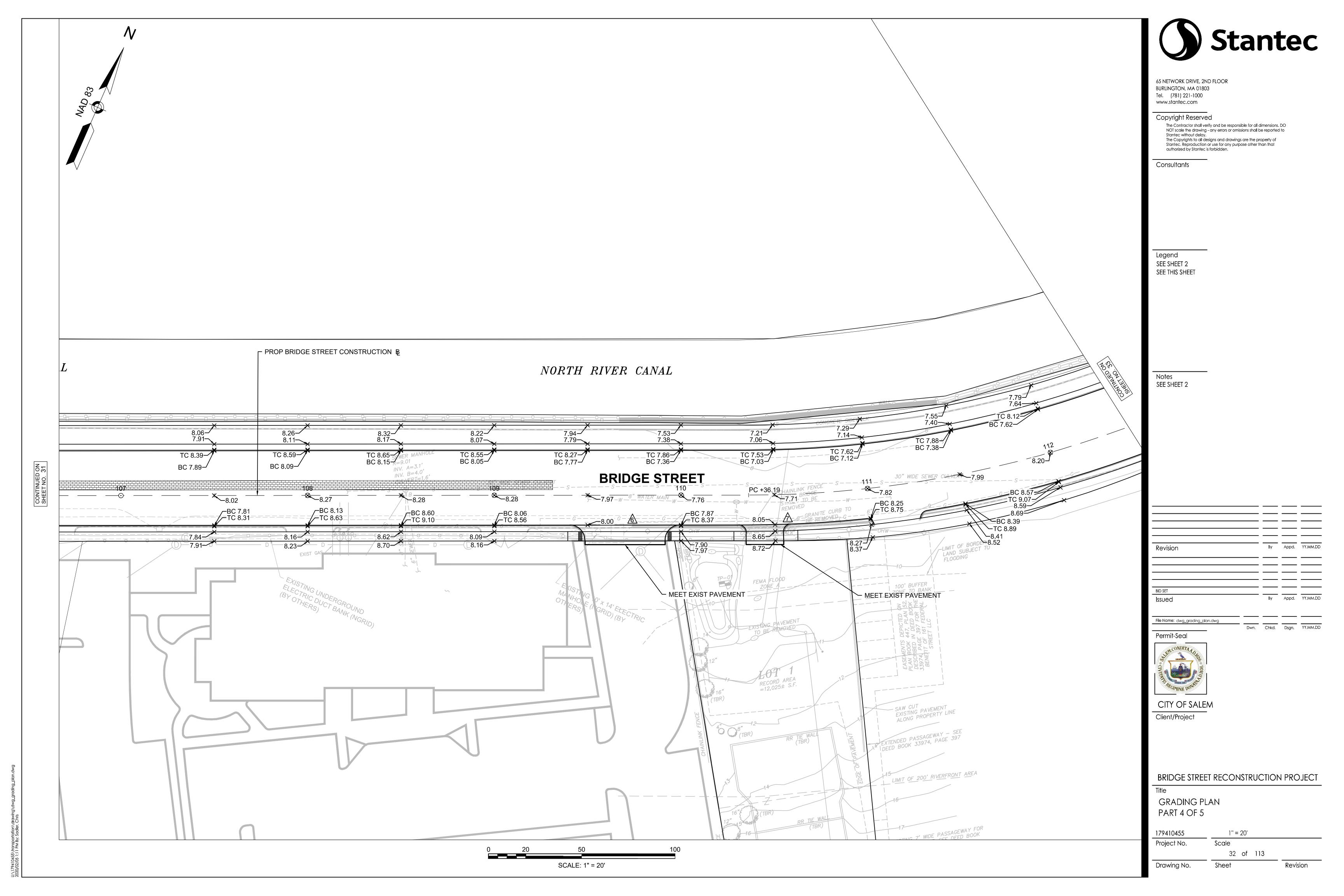


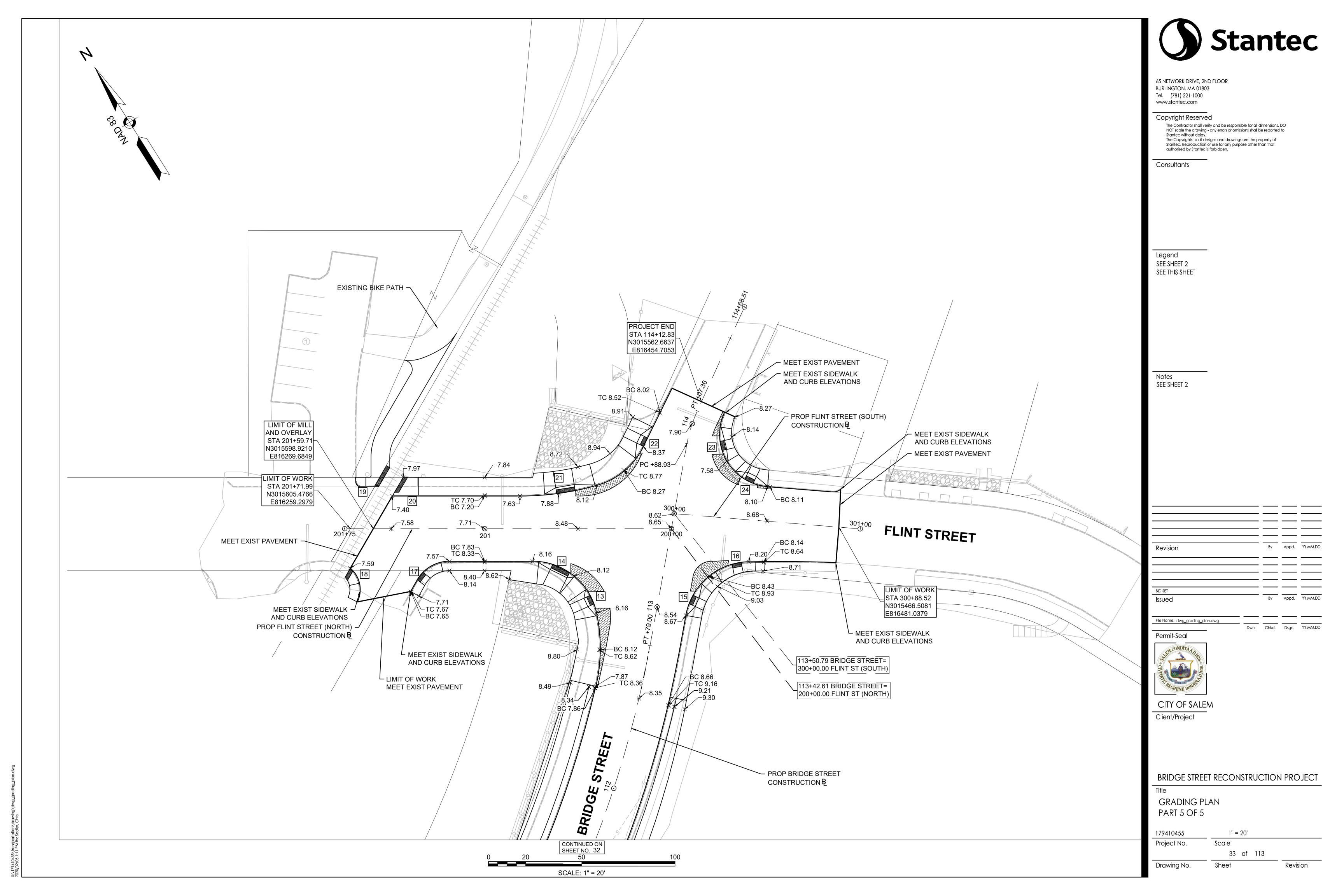
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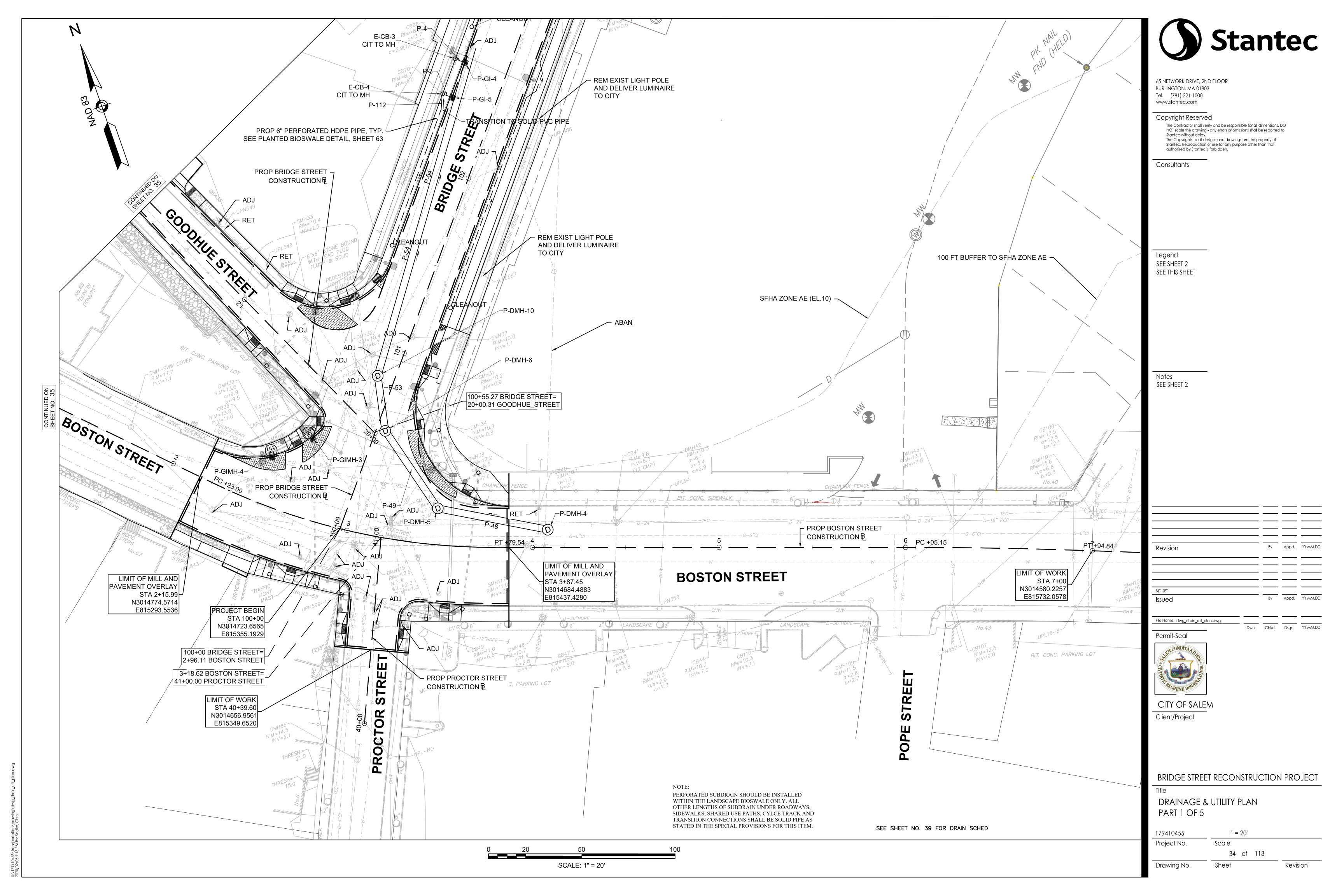


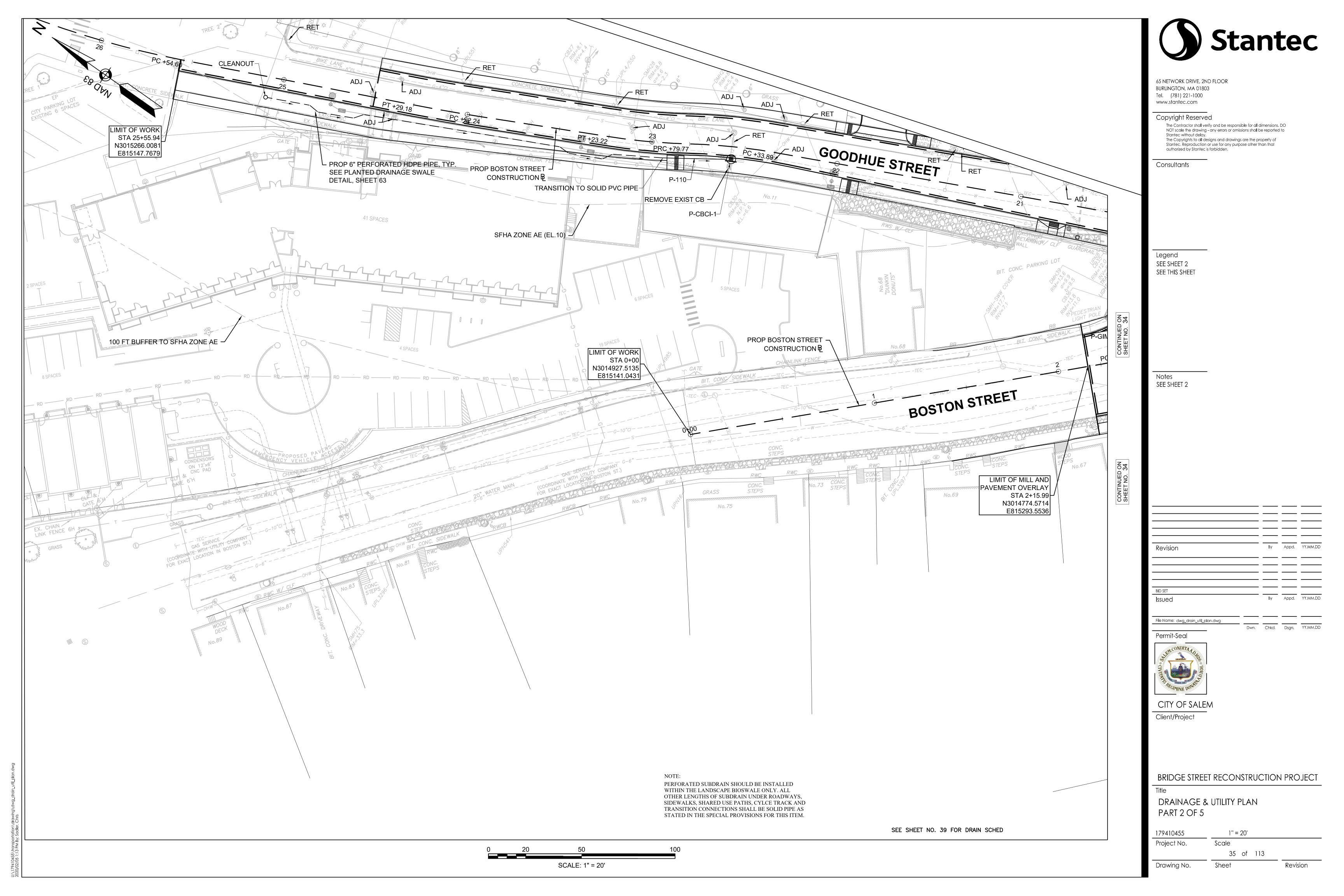


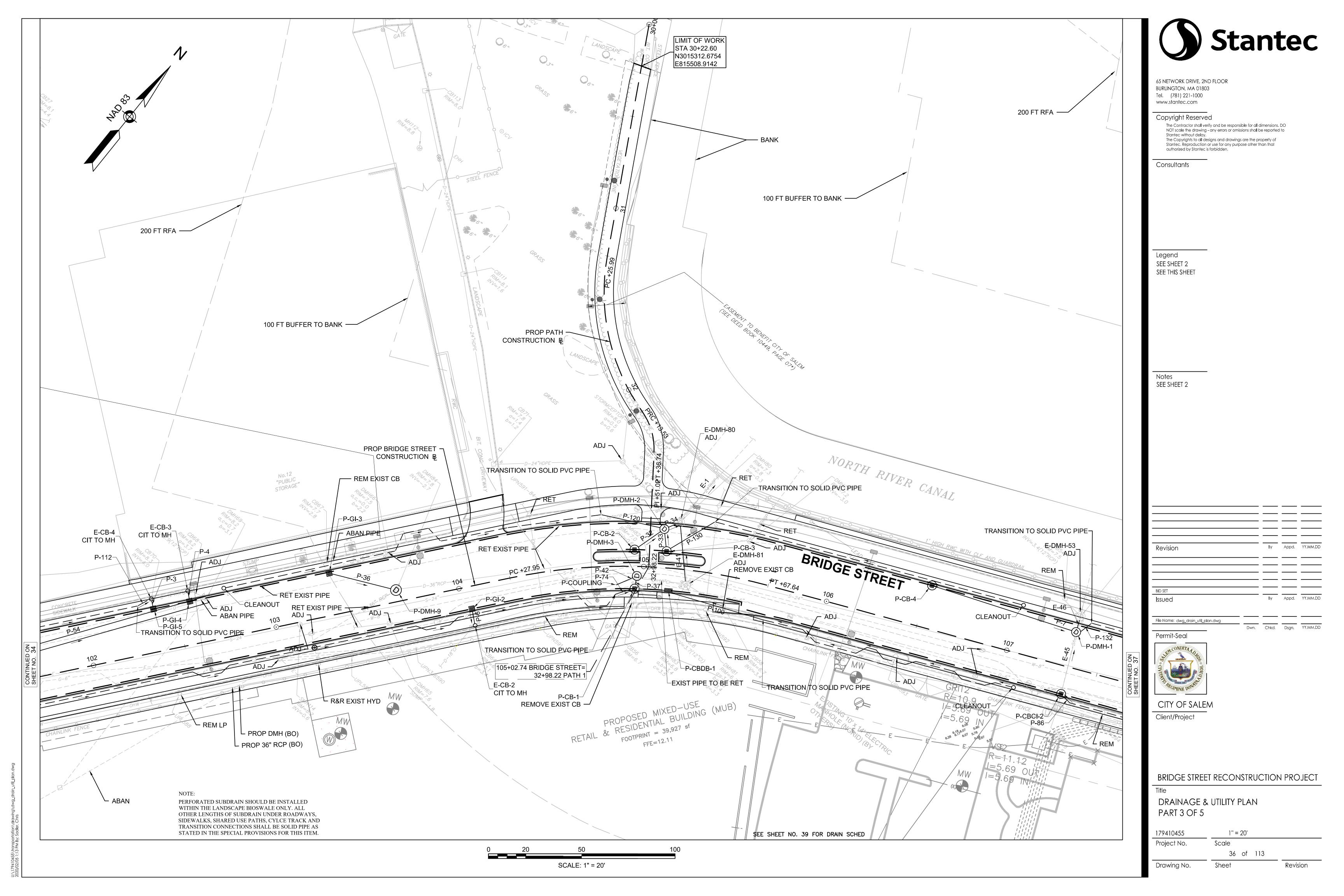




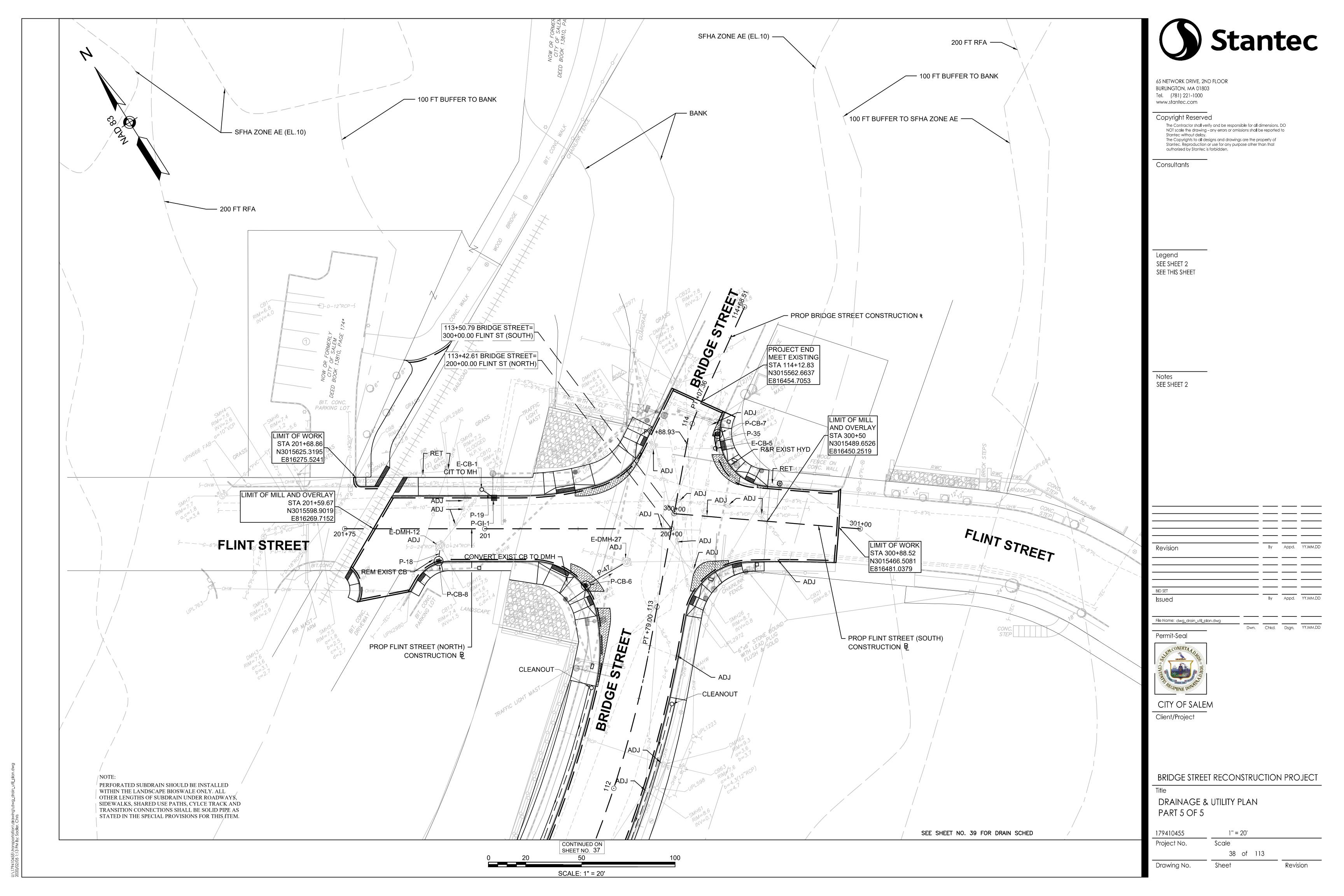












	DRAINAGE STRUCTURE TABLE								
NAME	STATION	OFFSET	INV. ELEV. IN	INV. ELEV. OUT	REMARKS				
E-CB-1	201+01.60	21.0 R	I=3.60' (P-GI-1)	IIV. ELEV. OOT	RETAIN EXISTING STRUCTURE AND PROVIDE NEW FRAME AND COVER				
E-CB-2	104+04.42	21.1 R	I=2.76' (P-GI-2)		RETAIN EXISTING STRUCTURE AND PROVIDE NEW FRAME AND COVER				
E-CB-3	102+57.60	28.7 L	I=4.04' (P-GI-4)		RETAIN EXISTING STRUCTURE AND PROVIDE NEW FRAME AND COVER				
E-CB-4	102+37.60	28.5 L	I=4.11' (P-GI-5)		RETAIN EXISTING STRUCTURE AND PROVIDE NEW FRAME AND COVER				
	113+89.28	15.4 R	I=4.10' (P-CB-7)						
E-CB-5			I=1.45' (P-CB-8)		RETAIN EXISTING STRUCTURE AND PROVIDE NEW FRAME AND COVER RETAIN EXISTING DMH				
E-DMH-12	201+23.85	9.3 L	, ,						
E-DMH-27	113+20.71	20.4 L	I=2.60' (P-CB-6)		RETAIN EXISTING DMH				
E-DMH-50	109+99.65	31.9 L	I=2.40' (P-DMH-11)		RETAIN EXISTING DMH				
E-DMH-53	107+33.47	28.0 L	I=3.40' (P-DMH-1)		RETAIN EXISTING DMH				
E-DMH-77	109+45.55	7.6 R	I=4.70' (P-CB-5)		RETAIN EXISTING DMH				
E-DMH-80	4+67.07	505.0 L	I=2.80' (E-DMH-81) I=2.80' (P-DMH-2)	I=2.14' (E-OUTFALL 1)	RETAIN EXISTING DMH PROVIDE NEW INLET CORE				
E-DMH-81	4+97.39	489.6 L	I=3.10' (P-DMH-3)	I=3.00' (E-DMH-80)	RETAIN EXISTING DMH				
P-CB-1	104+95.36	12.0 R	I=3.64' (P-CBDB-1)	I=3.53' (P-DMH-3)					
P-CB-2	104+94.92	8.9 L		I=2.95' (P-DMH-2)					
P-CB-3	105+11.61	8.9 L		I=2.98' (P-DMH-2)					
P-CB-4	106+52.36	23.0 L		I=3.84' (P-DMH-1)					
P-CB-5	109+39.37	15.5 R		I=4.80' (E-DMH-77)					
P-CB-6	113+04.39	39.7 L		I=3.10' (E-DMH-27)					
P-CB-7	113+99.04	14.7 R		I=4.18' (E-CB-5)					
P-CB-8	201+24.75	17.3 L		I=1.50' (E-DMH-12)					
P-CBCI-1	22+56.89	6.8 L							
P-CBCI-2	107+34.25	15.0 R		I=4.50' (P-DMH-1)					
P-CBCI-3	110+60.06	23.0 L		I=2.84' (P-DMH-11)					
P-CBCI-4	110+83.53	23.0 L		I=2.94' (P-DMH-11)					
P-CBDB-1	105+14.27	12.0 R		I=3.73' (P-CB-1)	DOUBLE CATCH BASIN WITH INLET				
P-DMH-1	107+33.34	19.2 L	I=3.35' (P-CB-4) I=3.25' (P-CBCI-2)	I=3.25' (E-DMH-53)	6 FT DIA				
P-DMH-2	105+09.67	20.7 L	I=2.86' (P-CB-2) I=2.94' (P-CB-3)	I=3.15' (E-DMH-80)	6 FT DIA				
P-DMH-3	4+79.17	470.1 L	I=3.50' (P-CB-1) I=3.40' (P-COUPLING)	I=3.40' (E-DMH-81)	6 FT-DIA				
P-DMH-4	4+08.26	9.5 L		I=1.30' (P-DMH-5)	6 FT-DIA				
P-DMH-5	3+47.50	19.5 L	I=1.22' (P-DMH-4)	I=1.20' (P-DMH-6)	6 FT-DIA				
P-DMH-6	100+57.59	4.8 R	I=1.14' (P-DMH-5)	I=1.10' (P-DMH-10)	6 FT-DIA				
P-DMH-9	103+66.87	6.2 L	I=3.26' (P-GI-3)		6 FT-DIA				
P-DMH-10	100+83.88	9.2 L	I=1.06' (P-DMH-6)	I=1.00' ()	6 FT-DIA				
P-DMH-11	110+60.28	16.4 L	I=2.80' (P-CBCI-4) I=2.80' (P-CBCI-3)	I=2.69' (E-DMH-50)					
P-GI-1	200+94.99	16.5 R		I=3.76' (E-CB-1)	GUTTER INLET				
P-GI-2	104+04.65	12.0 R		I=2.98' (E-CB-2)	GUTTER INLET				
P-GI-3	103+33.64	22.4 L		I=4.00' (P-DMH-9)	GUTTER INLET				
P-GI-4	102+57.45	23.0 L		I=4.19' (E-CB-3)	GUTTER INLET				
P-GI-5	102+37.60	23.0 L		I=4.22' (E-CB-4)	GUTTER INLET				
P-GIMH-3	100+42.36	33.4 L			CTE INV IN CTE INV OUT = 8.1				
P-GIMH-4	2+46.01	28.6 L			CTE INV IN CTE INV OUT = 11.0				

DIDE	DIDE LOCATION	PIPE TABLE	LENGTH	OL ODE
PIPE E-41	E-DMH-81 TO E-DMH-80	SIZE & TYPE  18" REINFORCED CONCRETE	LENGTH 30 LF	0.006
E-45	STA 105+24 TO 105+17 P-CBCI-2 TO P-DMH-1	12" REINFORCED CONCRETE	30 LF	0.037
E-46	STA 107+34 TO 107+33 P-DMH-1 TO E-DMH-53	12" REINFORCED CONCRETE	5 LF	
	STA 107+33 TO 107+33 P-GI-5 TO E-CB-4			-0.017
P-3	STA 102+38 TO 102+38	12" REINFORCED CONCRETE	2 LF	0.019
P-4	P-GI-4 TO E-CB-3 STA 102+57 TO 102+58	12" REINFORCED CONCRETE	2 LF	0.027
P-6	P-GI-2 TO E-CB-2 STA 104+05 TO 104+04	12" REINFORCED CONCRETE	5 LF	0.024
P-7	P-CB-4 TO P-DMH-1 STA 106+52 TO 107+33	12" REINFORCED CONCRETE	77 LF	0.006
P-8	P-CBCI-4 TO P-DMH-11 STA 110+84 TO 110+60	12" REINFORCED CONCRETE	19 LF	0.006
P-9	P-CBCI-3 TO P-DMH-11 STA 110+60 TO 110+60	12" REINFORCED CONCRETE	3 LF	0.006
P-10	P-DMH-11 TO E-DMH-50 STA 110+60 TO 110+00	12" REINFORCED CONCRETE	58 LF	0.005
P-18	P-CB-8 TO E-DMH-12 STA 201+25 TO 201+24	12" REINFORCED CONCRETE	4 LF	0.006
P-19	P-GI-1 TO E-CB-1 STA 200+95 TO 201+02	12" REINFORCED CONCRETE	4 LF	0.020
P-20	P-CB-5 TO E-DMH-77 STA 109+39 TO 109+46	12" REINFORCED CONCRETE	6 LF	0.010
P-32	P-CB-2 TO P-DMH-2 STA 104+95 TO 105+10	12" REINFORCED CONCRETE	15 LF	0.005
P-33	P-CB-3 TO P-DMH-2 STA 105+12 TO 105+10	12" REINFORCED CONCRETE	8 LF	0.003
P-34	P-DMH-2 TO E-DMH-80 STA 105+10 TO 105+17	12" REINFORCED CONCRETE	5 LF	0.038
P-35	P-CB-7 TO E-CB-5 STA 113+99 TO 113+89	12" REINFORCED CONCRETE	4 LF	0.010
P-36	P-GI-3 TO P-DMH-9 STA 103+34 TO 103+67	12" REINFORCED CONCRETE	33 LF	0.020
P-37	P-CB-1 TO P-DMH-3 STA 104+95 TO 104+96	12" REINFORCED CONCRETE	3 LF	0.005
P-38	P-DMH-3 TO E-DMH-81 STA 104+96 TO 105+24	18" REINFORCED CONCRETE	23 LF	0.011
P-39	P-CBDB-1 TO P-CB-1 STA 105+14 TO 104+95	12" REINFORCED CONCRETE	14 LF	0.005
P-42	P-COUPLING TO P-DMH-3 STA 104+85 TO 104+96	12" REINFORCED CONCRETE	10 LF	0.000
P-47	P-CB-6 TO E-DMH-27 STA 113+04 TO 113+21	12" REINFORCED CONCRETE	21 LF	0.020
P-48	P-DMH-4 TO P-DMH-5 STA 4+08 TO 3+48	36" REINFORCED CONCRETE	55 LF	0.001
P-49	P-DMH-5 TO P-DMH-6 STA 3+48 TO 3+09	36" REINFORCED CONCRETE	45 LF	0.001
P-53	P-DMH-6 TO P-DMH-10 STA 100+58 TO 100+84	36" REINFORCED CONCRETE	25 LF	0.001
P-54	P-DMH-10 TO STA 100+84 TO 102+67	36" REINFORCED CONCRETE	181 LF	0.001
	1 2 1 1 2 1 2 1 3 2 1 3 1			

	PIPE TABLE								
PIPE	PIPE LOCATION	SIZE & TYPE	LENGTH	INV OUT					
P-74	STA 104+85 TO 104+93	6" SCHEDULE 40 PVC	8 LF						
P-80	STA 110+63 TO 110+60	6" SCHEDULE 40 PVC	34 LF						
P-86	STA 107+40 TO 107+36	6" SCHEDULE 40 PVC	4 LF						
P-100	STA 105+70 TO 105+16	6" SCHEDULE 40 PVC	51 LF						
P-110	STA 101+69 TO 101+59	6" SCHEDULE 40 PVC	34 LF						
P-112	STA 102+30 TO 102+35	6" SCHEDULE 40 PVC	5 LF						
P-120	STA 104+79 TO 105+07	6" SCHEDULE 40 PVC	32 LF						
P-122	STA 109+34 TO 109+37	6" SCHEDULE 40 PVC	3 LF						
P-128	STA 110+52 TO 110+58	6" SCHEDULE 40 PVC	7 LF						
P-130	STA 105+34 TO 105+14	6" SCHEDULE 40 PVC	27 LF						
P-132	STA 107+40 TO 107+36	6" SCHEDULE 40 PVC	7 LF						
P-139	STA 110+97 TO 110+86	6" SCHEDULE 40 PVC	11 LF						



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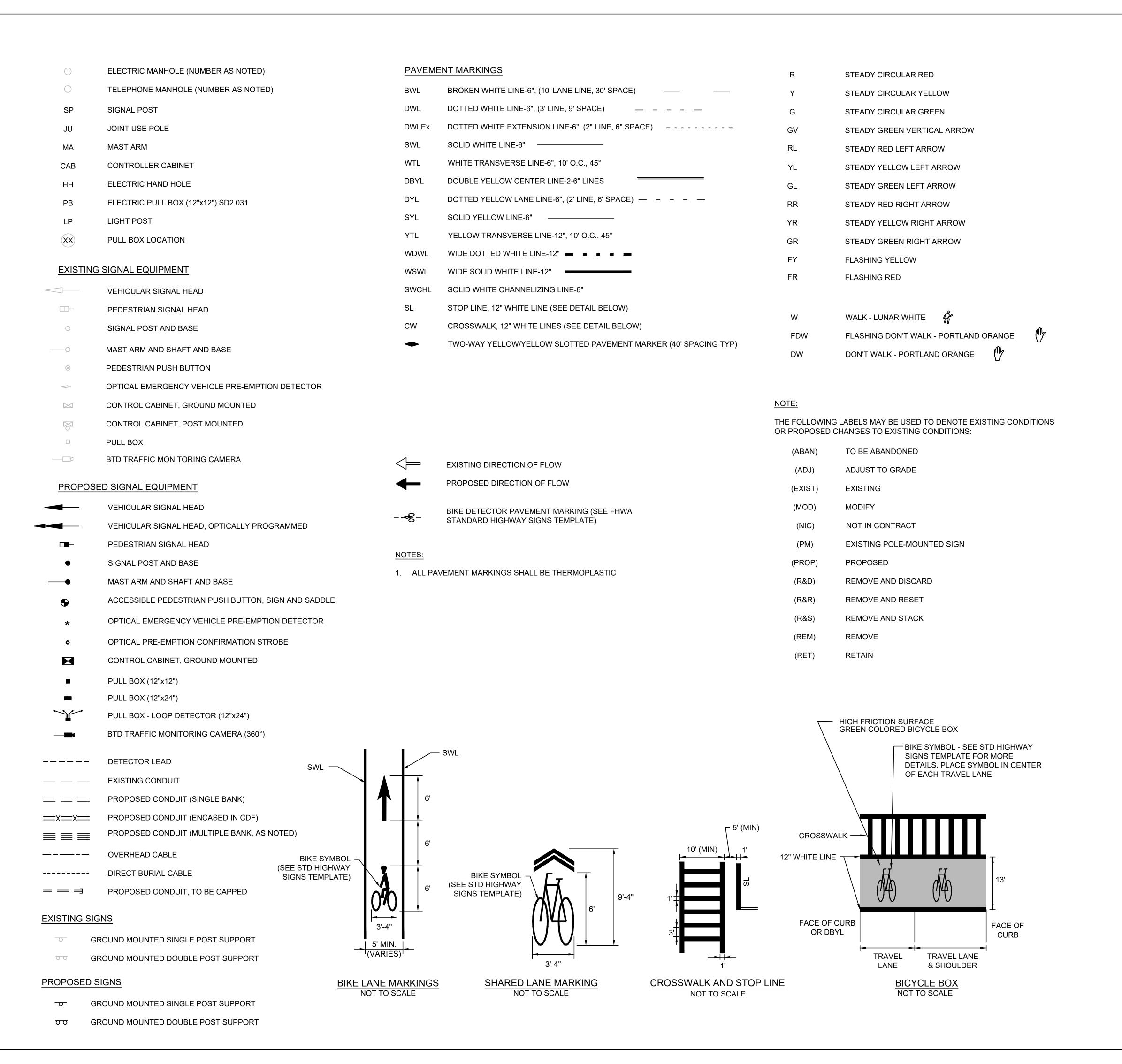
CITY OF SALEM Client/Project

BRIDGE STREET RECONSTRUCTION PROJECT

DRAINAGE PIPE & STRUCTURE SCHEDULE

179410455 NOT TO SCALE

Drawing No.





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Notes SEE SHEET 2

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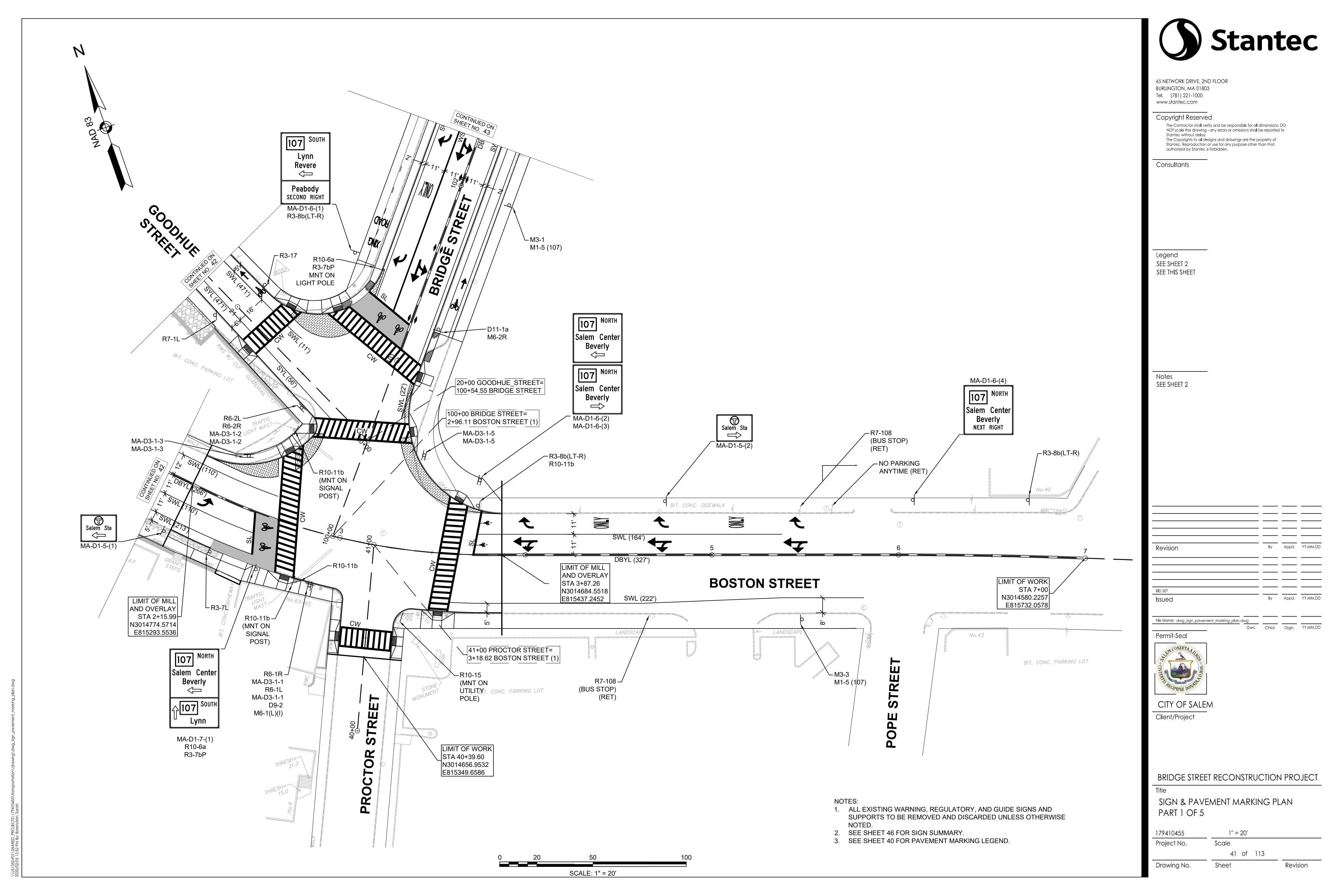
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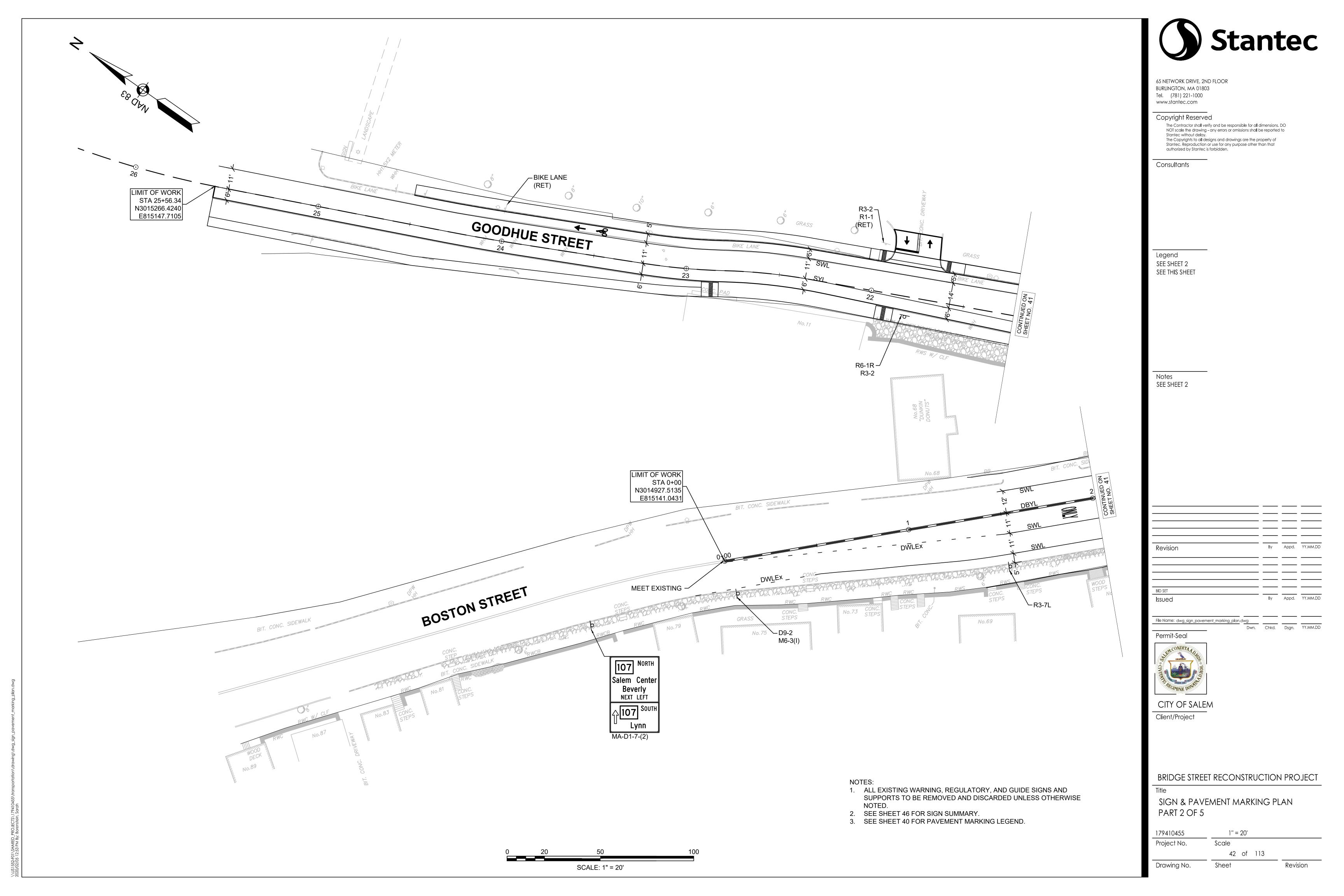
BRIDGE STREET RECONSTRUCTION PROJECT

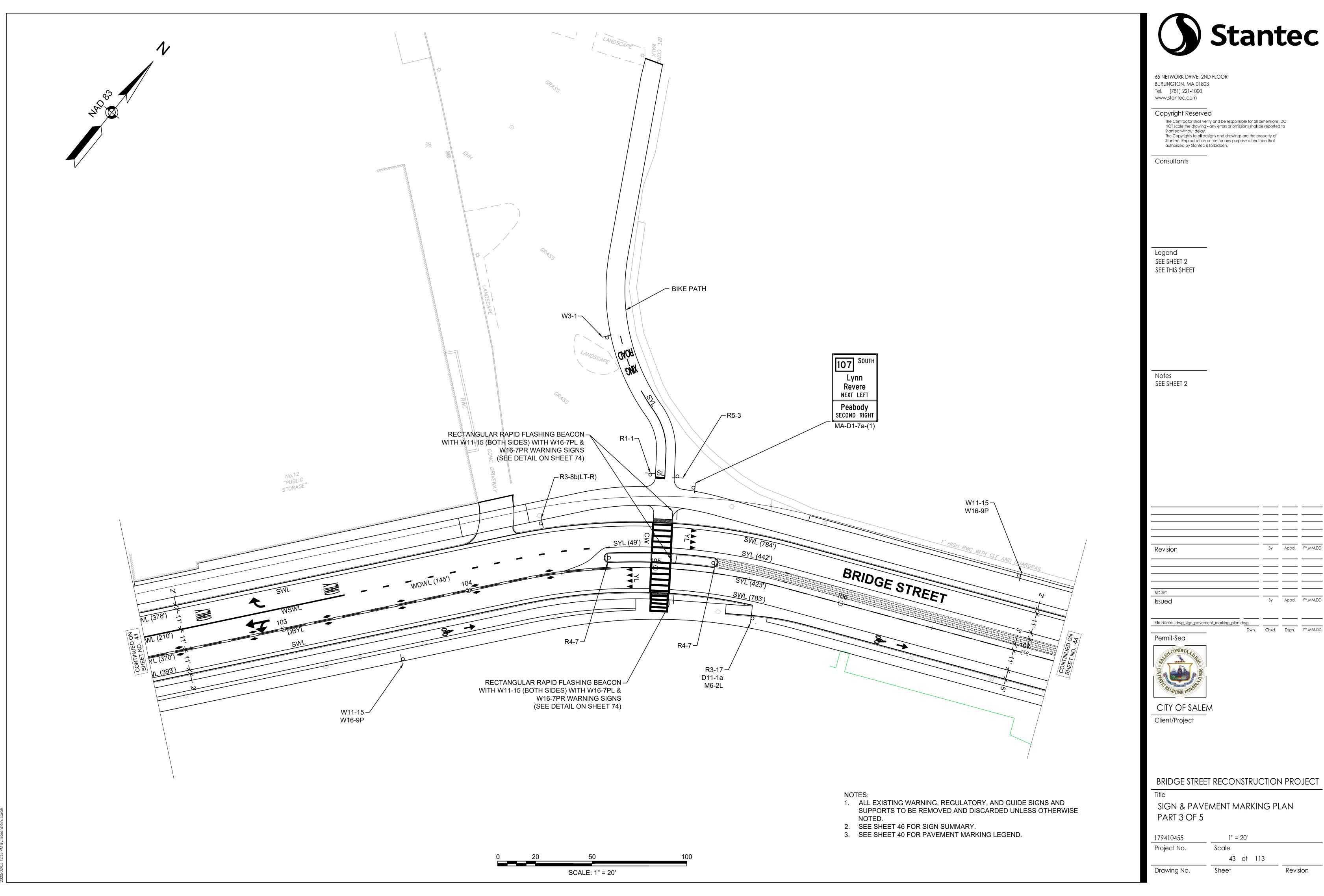
TRAFFIC LEGEND & ABBREVIATIONS

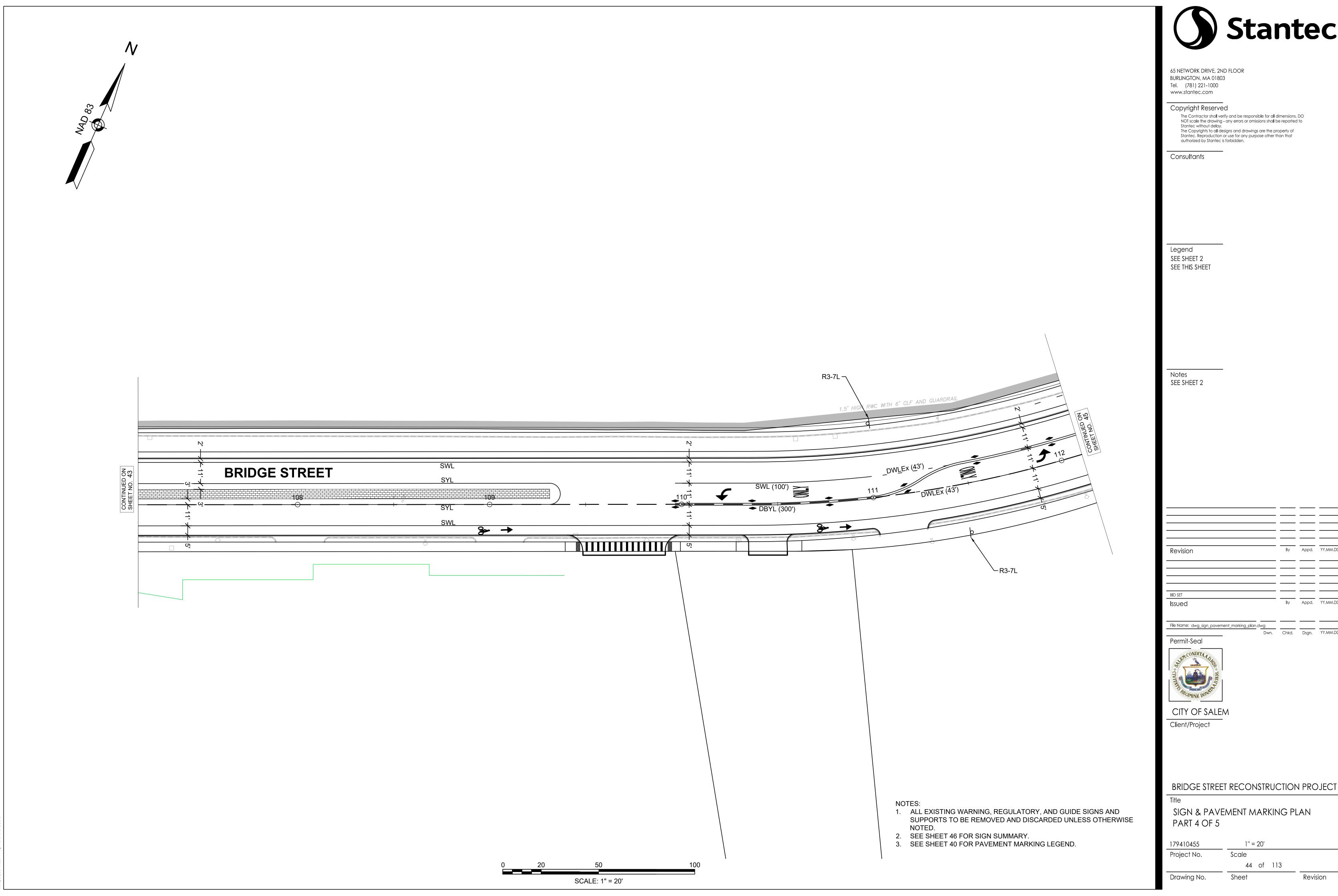
179410455 1'' = 20' Scale Project No.

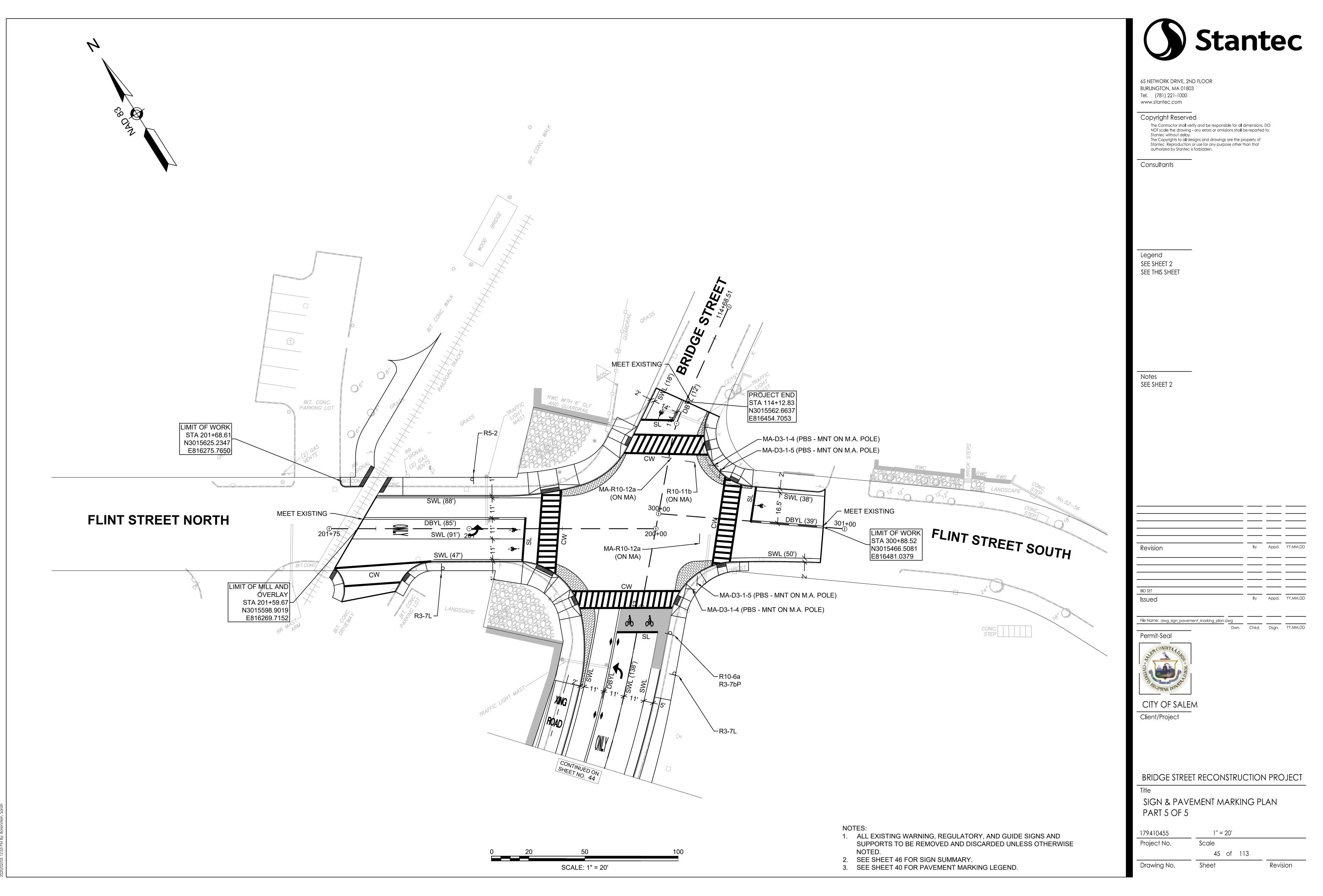
40 of 113 Drawing No. Sheet











\\US1552-F01\SHARED\_PROJECTS\179410455\transportation\drawing\dwg\_sign\_pavement\_mar

IDENTIFI-	SIZE O	F SIGN	2121		LEGE	ND DIM	IENS	IONS		NUMBER OF		COLOR		SUPPORT	AREA IN
CATION NUMBER	WIDTH	HEIGHT	SIGN	LETT HEIC		VERTIC SPACII		ARR	ROW	SIGNS REQUIRED	BACK- GROUND	LEGEND	BORDER	AND NUMBER REQUIRED	SQUARE FEET
R1-1	18"	18"	STOP	SE MUT		SEE MUTO			EE TCD	1	RED	WHITE	WHITE	1-P5 1	2.25
R3-2	24"	24"								1	WHITE	RED/ BLACK	BLACK	1-P5 1	4.00
R3-7bP	24"	12"	EXCEPT BICYCLES							3	WHITE	BLACK	BLACK	MOUNT 3 WITH R10-6a	6.00
R3-7L	30"	30"	LEFT LANE MUST TURN LEFT							3	WHITE	BLACK	BLACK	1-P5 3	18.75
R3-8b(LT-R)	36"	30"	ONLY							4	WHITE	BLACK	BLACK	1-P5 4	30.00
R3-17	24"	18"	BIKE LANE							2	BLACK WHITE	WHITE		1-P5 2	6.00
R5-2	24"	24"								1	WHITE	RED/ BLACK	BLACK	1-P5 1	4.00
R5-3	24"	24"	NO MOTOR VEHICLES							1	WHITE	BLACK	BLACK	1-P5 1	4.00
R6-1L	36"	12"	ONE WAY							2	WHITE	BLACK	BLACK	1-P5 2	6.00
R6-1R	36"	12"	ONE WAY							2	WHITE	BLACK	BLACK	MOUNT 1 WITH R3-2 MOUNT 1 WITH R6-1L	6.00
R10-6a	24"	36"	STOP HERE ON RED							3	WHITE	BLACK	BLACK	MNT 1 W/MA-D1-7-(1) MNT 1 WITH LIGHT POLE 1-P5 - 1	18.00
R10-11b	36"	36"	NO TURN ON RED							5	WHITE	BLACK	BLACK	MOUNT 3 ON SIGNAL POST MOUNT 1 ON MA MNT. 1 W/R3-8b	45.00
R10-15	30"	30"	TURNING POPULATION TO TO		,	•		ļ		1	WHITE/ YELLOW	RED/ BLACK	BLACK	MOUNT ON UTILITY POLE	6.25
MA-R10-12a	30"	36"	LEFT TURN YIELD ON FLASHING	SE MASS STE	DOT	SEE MASSE STDS	TOC		EE SDOT DS.	2	WHITE	BLACK/ YELLOW	BLACK	MOUNT 2 ON MA	15.00
W3-1	18"	18"		SE MUT		SEE MUTC			EE TCD	1	YELLOW	BLACK/ RED	BLACK	1-P5 1	2.25
W11-15	30"	30"								2	FLUOR. YELLOW	BLACK	BLACK	1-P5 2	12.50
W16-9P	24"	12"	AHEAD					,		2	FLUOR. YELLOW	BLACK	BLACK	MOUNT 2 WITH W11-15	4.00

IDENTIFI-	SIZE O	F SIGN	SIGN	SIGN LETTER VERTICAL APPOINT		NUMBER COLOR OF SIGNS BACK				SUPPORT AND NUMBER	AREA IN SQUARE				
CATION NUMBER	WIDTH	HEIGHT	CIGIT			SIGNS BACK- REQUIRED GROUND		LEGEND	BORDER	REQUIRED	FEET				
R4-7	24"	30"	7	SE MU <sup>-</sup>		SI MU <sup>-</sup>	EE TCD	SE Mu		2	WHITE	BLACK	BLACK	1-P5 2	10.00
R6-2L	24"	30"	ONE WAY							1	WHITE	BLACK	BLACK	1-P5 1	5.00
R6-2R	24"	30"	ONE WAY							1	WHITE	BLACK	BLACK	MOUNT 1 WITH R6-2L	5.00
R7-1L	12"	18"	NO PARKING ANY TIME			,				1	WHITE	RED	RED	1-P5 1	1.50



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File Name: dwg_sign_summary.dwg				
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

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CITY OF SALEM Client/Project

BRIDGE STREET RECONSTRUCTION PROJECT

TRAFFIC SIGN SUMMARY PART 1 OF 3

179410455

Sheet

46 of 113

NOT TO SCALE Project No. Scale

Drawing No.

IDENTIFI-	SIZE C	F SIGN		LEGE	END DIMENS	SIONS	NUMBER OF		COLOR		SUPPORT AND	AREA IN
CATION NUMBER	WIDTH	HEIGHT	SIGN	LETTER HEIGHT	VERTICAL SPACING		SIGNS REQUIRED	BACK- GROUND	LEGEND	BORDER	NUMBER REQUIRED	SQUARE FEET
D9-2	24"	24"		SEE MUTCD	SEE MUTCD	SEE MUTCD	2	BLUE	WHITE	WHITE	MNT 1 W/R6-1L 1-P5 1	8.00
D11-1a	18"	18"	Ø₹®				2	GREEN	WHITE	WHITE	1-P5 2	4.50
D11-2	18"	18"	*				1	GREEN	WHITE	WHITE	1-P5 1	2.25
MA-M1-5a	30"	24"	107				2	WHITE	BLACK	BLACK	1-P5 2	10.00
M3-1	24"	12"	NORTH				1	WHITE	BLACK	BLACK	MOUNT 1 WITH MA-M1-5a	2.00
M3-3	24"	12"	SOUTH				1	WHITE	BLACK	BLACK	MOUNT 1 WITH MA-M1-5a	2.00
M6-1(L)(I)	21"	15"					1	BLUE	WHITE	WHITE	MOUNT 1 WITH D9-2	2.19
M6-2L	21"	15"					1	GREEN	WHITE	WHITE	MOUNT 1 WITH D11-1a	2.19
M6-2R	21"	15"					1	GREEN	WHITE	WHITE	MOUNT 1 WITH D11-1a	2.19
M6-3(I)	21"	15"		<b>V</b>	•	•	1	BLUE	WHITE	WHITE	MOUNT 1 WITH D9-2	2.19
MA-D3-1-1	54"	12"	Proctor St	6D 4D	3" 5" 3" 3"	TOWN SEAL, 6"	2	GREEN REFL.	WHITE REFL.	WHITE REFL.	MOUNT 2 WITH R6-1L	9.00
MA-D3-1-2	60"	12"	GEAL Goodhue St	6D 4D	3" 5" 3" 3"	TOWN SEAL, 6"	2	GREEN REFL.	WHITE REFL.	WHITE REFL.	MOUNT 2 WITH R6-1L	10.00
MA-D3-1-3	48"	12"	Boston St	6D 4D	3" 5" 3" 3"	TOWN SEAL, 6"	2	GREEN REFL.	WHITE REFL.	WHITE REFL.	1-P5 1	8.00
MA-D3-1-4 (P.B.S.)	42"	12"	SEA Flint St	6D 4D	3" 5" 3" 3"	TOWN SEAL, 6"	2	GREEN REFL.	WHITE REFL.	WHITE REFL.	MOUNT 2 ON MAST ARM POLE	7.00
MA-D3-1-5	48"	12"	SEA Bridge St	6D 4D	3" 5" 3" 3"	TOWN SEAL, 6"	2	GREEN REFL.	WHITE REFL.	WHITE REFL.	1-P5 2	8.00
MA-D3-1-5 (P.B.S.)	48"	12"	SEAD Bridge St	6D 4D	3" 5" 3" 3"	TOWN SEAL, 6"	2	GREEN REFL.	WHITE REFL.	WHITE REFL.	MOUNT 2 ON MAST ARM POLE	8.00



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CITY OF SALEM Client/Project

BRIDGE STREET RECONSTRUCTION PROJECT

TRAFFIC SIGN SUMMARY PART 2 OF 3

179410455

NOT TO SCALE Scale

Sheet

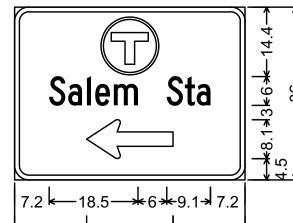
Revision

Project No.

Drawing No.

47 of 113

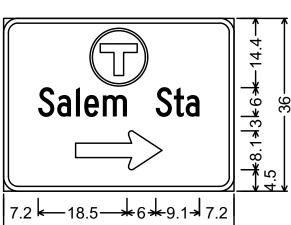




3.0" Radius, 1.0" Border, White on Green; [Salem Sta] C 2K;

Standard Arrow Custom 18.0" X 8.1" 180°:

	MA-D1-5-2	
4.0000'	3.0000'	12.00 SF
BACKGROUND	LEGEND	BORDER
GREEN REFL.	SILVER WHITE	SILVER WHITE

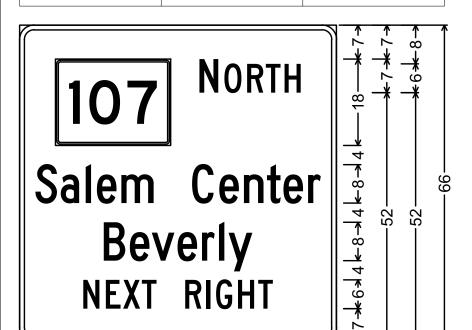


3.0" Radius, 1.0" Border, White on Green;

5.5000'	5.5000'	30.25 SF
BACKGROUND	LEGEND	BORDER

GREEN REFL. SILVER WHITE SILVER WHITE

[Salem Sta] C 2K; Standard Arrow Custom 18.0" X 8.1" 0°;

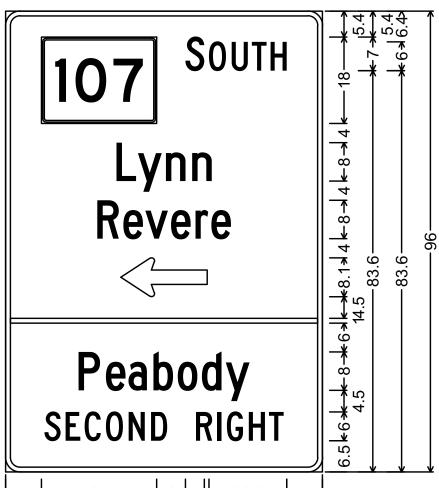


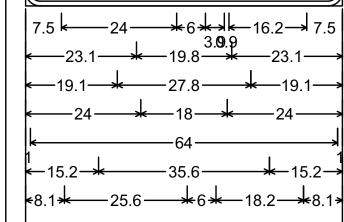
| 7.4 | -24 - +6 | 4 | -15.9 - 7.4 |-13.3 <del>\*</del> 15.2 <del>\*</del> 6 <del>\*</del> 18.2 <del>\*</del> 13.3 <del>·</del>

3.0" Radius, 1.0" Border, White on Green; State Highway 107 M1-5; [NORTH] C 2K; [Salem Center] C 2K;

[Beverly] C 2K; [NEXT RIGHT] C 2K;

	MA-D1-6-1	
5.50'	8.00'	44.00 SF
BACKGROUND	LEGEND	BORDER
GREEN REFL.	SILVER WHITE	SILVER WHITE





3.0" Radius, 1.0" Border, White on Green; State Highway 107 M1-5; [Revere] C 2K; [SOUTH] C 2K; [Lynn] C 2K; Standard Arrow Custom 18.0" X 8.1" 180°: [Peabody] C 2K; [SECOND RIGHT] C 2K;

5.5000'

BACKGROUND

MA-D1-7-1

8.8333'

LEGEND

GREEN REFL. | SILVER WHITE | SILVER WHITE

North

SOUTH | =

7.4 <del>| 24 | \* 6</del> **| 4** | <del>5</del> | 15.9 | 7.4

Salem Center

Beverly

Lynn

| k8.1 | k 24 | 4 k | k 16.2 | |

3.4 2 3.9 3.9 3.4

3.0" Radius, 1.0" Border, White on Green;

Standard Arrow Custom 18.0" X 8.1" 180°;

3.0" Radius, 1.0" Border, White on Green;

Standard Arrow Custom 18.0" X 8.1" 90°;

State Highway 107 M1-5; [SOUTH] C 2K; [Lynn] C 2K;

[NORTH] C 2K; [Salem Center] C 2K;

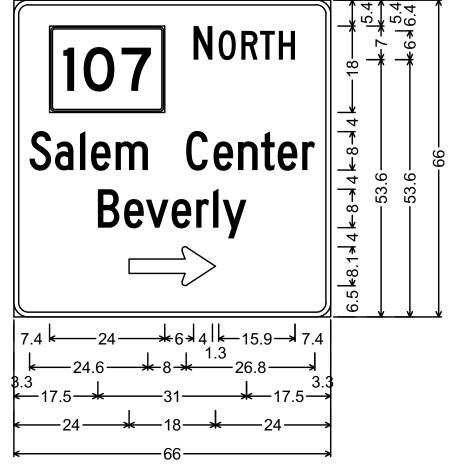
State Highway 107 M1-5;

[Beverly] C 2K;

48.58 SF

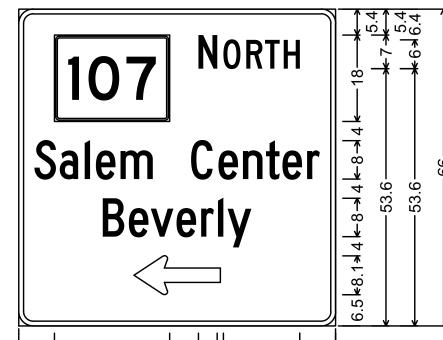
BORDER

	MA-D1-6-2	
5.5000'	5.5000'	30.25 SF
BACKGROUND	LEGEND	BORDER
GREEN REFL.	SILVER WHITE	SILVER WHITE



3.0" Radius, 1.0" Border, White on Green; State Highway 107 M1-5; [NORTH] C 2K; [Salem Center] C 2K; [Beverly] C 2K; Standard Arrow Custom 18.0" X 8.1" 0°;

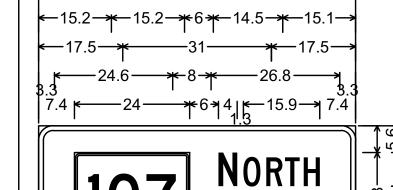
	MA-D1-6-3	
5.5000'	5.5000'	30.25 SF
BACKGROUND	LEGEND	BORDER
GREEN REFL.	SILVER WHITE	SILVER WHITE

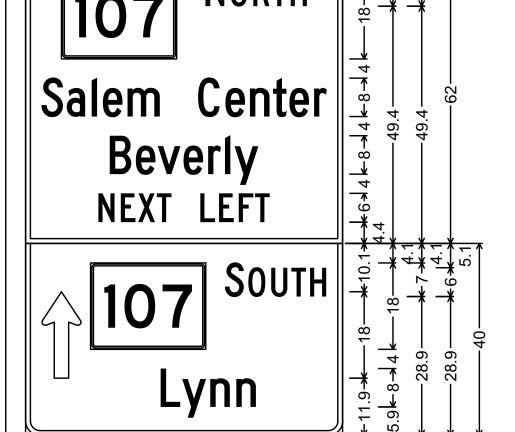


3.0" Radius, 1.0" Border, White on Green; State Highway 107 M1-5; [NORTH] C 2K; [Salem Center] C 2K; [Beverly] C 2K;

Standard Arrow Custom 18.0" X 8.1" 0°;







 $\begin{vmatrix} k_{8.1} & k_$ 3.0" Radius, 1.0" Border, White on Green; State Highway 107 M1-5; [NORTH] C 2K; [Salem Center] C 2K; [Beverly] C 2K; [NEXT LEFT] C 2K; 3.0" Radius, 1.0" Border, White on Green; Standard Arrow Custom 18.0" X 8.1" 90°; State Highway 107 M1-5; [SOUTH] C 2K; [Lynn] C 2K;

	MA-D1-7a-(1)	
5.0000'	7.5000'	37.50 SF
BACKGROUND	LEGEND	BORDER
GREEN REFL.	SILVER WHITE	SILVER WHITE

South Lynn Revere

Peabody SECOND RIGHT

**NEXT LEFT** 

4.5 -20.1 + 19.8 + 20.1 + 4.5 **←**16.1—**★** 27.8 **★** 16.1→ <del>-12.2 + 15.2 + 6 + 14.5 + 12.1 →</del> ——35.6——<del>\*</del>12.2→

3.0" Radius, 1.0" Border, White on Green; State Highway 107 M1-5; [SOUTH] C 2K; [Lynn] C 2K; [Revere] C 2K; [NEXT LEFT] C 2K; [Peabody] C 2K; [SECOND RIGHT] C 2K;

SHEET SUMMARY TOTAL AREA OF SIGNS

291.58 SF

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CITY OF SALEM Client/Project

BRIDGE STREET RECONSTRUCTION PROJECT

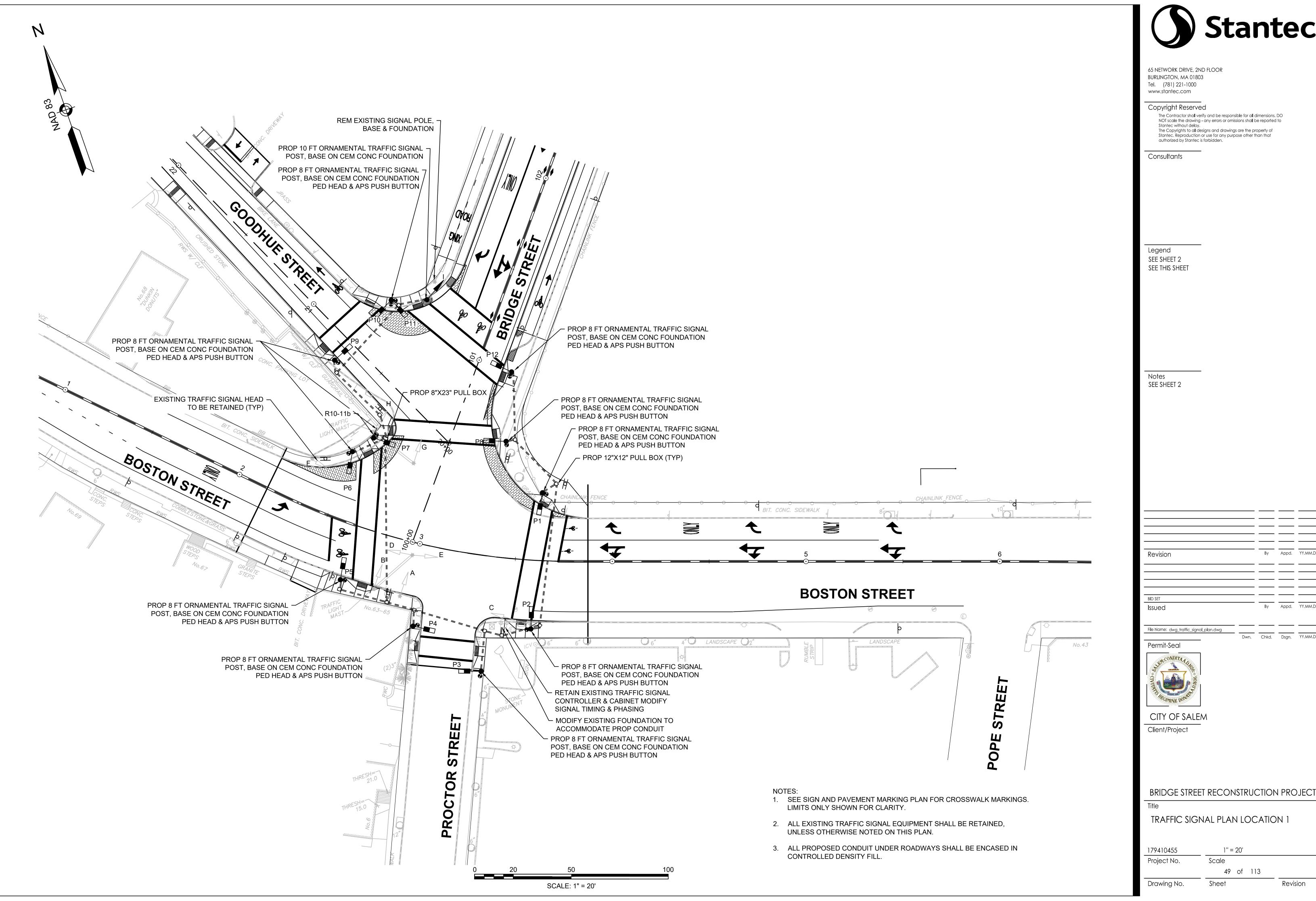
TRAFFIC SIGN SUMMARY PART 3 OF 3

179410455 NOT TO SCALE Scale Project No.

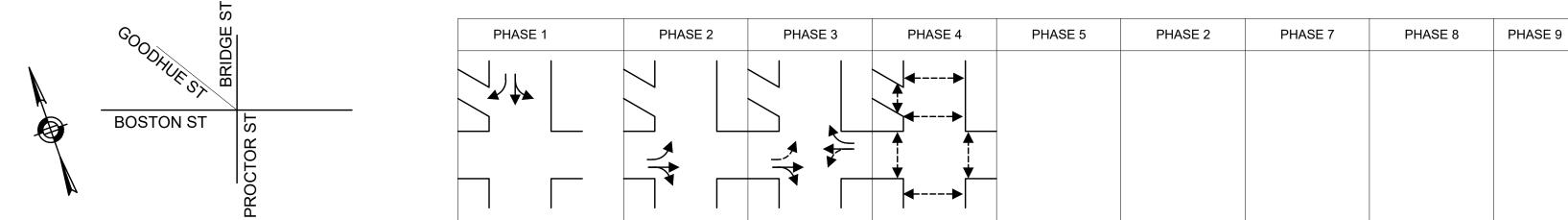
48 of 113

Drawing No.

Sheet





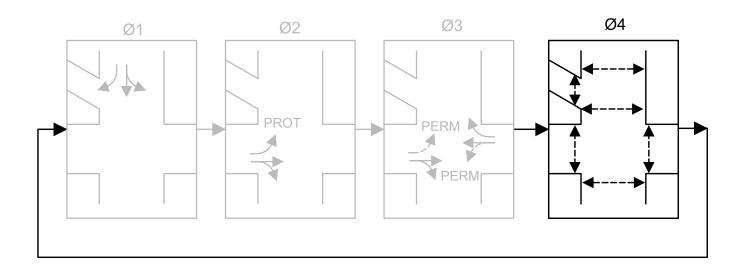


	<u> С</u>																													
SEQUENCE AND TIMING FOR FULL	_ ACTUATED CONTRO	DL (ISOLATED)																												
STREET	DIRECTION	HOUSINGS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	FLASH OPER.
BRIDGE STREET	SB	A,B	G	G	Υ	R	R	R	R	R	R	R	R	R	R															FR
BOSTON STREET	EB	С	R	R	R	R	G	G	G	G	Υ	R	R	R	R															FY
BOSTON STREET	EB	D	R	R	R	R	GL/G	YL/G	G	G	Υ	R	R	R	R															FY
BOSTON STREET	WB	E,F	R	R	R	R	R	R	R	G	Υ	R	R	R	R															FY
BRIDGE STREET	SB	G,H,I	G	Υ	R	R	R	R	R	R	R	R	R	R	R															FR
PEDESTRIAN	ALL	P1-P2	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W/FDV	/ FDW	DW															OUT
		P3-P4	DW	DW	DW			DW	DW	DW	DW		W/FDV																	OUT
		P5-P6	DW	DW	DW			DW	DW	DW	DW		W/FDV																	OUT
		P7-P8	DW	DW	DW			DW	DW	DW	DW		W/FDV																	OUT
		P9-P10	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W/FDV	/ FDW	DW															OUT
		P11-P12	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W/FDV	/ FDW	DW															OUT
						TIN	⊔ ∕IING IN	I SECO	NDS											-										
MINIMUM GREEN (INITIAL)				8			8			8																				
PASSAGE TIME (VEHICLE)				2			2			2																				1
MAXIMUM 1			37	3			20			30																				1
MAXIMUM 2			37	3			20			30																				1
YELLOW CLEARANCE				3	4			3			4																			
RED CLEARANCE						3.5			2.5			1.5																		IERGENCY
WALK (W)													7																	OR O
PEDESTRIAN CLEARANCE													15	3	1															∑ Ш
RECALL				0	FF			OFF			MAX			OFF																
MEMORY													LC	OCK (PE	ED)															

#### TECHNICAL NOTES

- 1. RETAIN EXISTING TRAFFIC SIGNAL PHASING.
- 2. ADD PEDESTRIAN PHASE (PHASE 4).
- 3. MAX 1 = 6 AM 10 AM M-F MAX 2 =ALL OTHER TIMES.

## PREFERENTIAL PHASING SEQUENCE



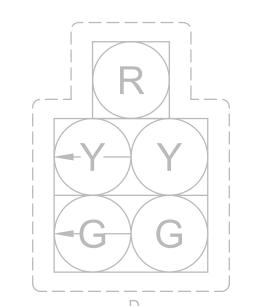
→ VEHICLE MOVEMENT

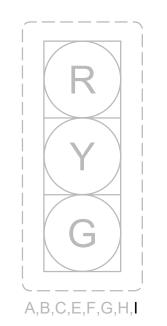
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PEDESTRIAN MOVEMENT - UPON PEDESTRIAN ACTUATION

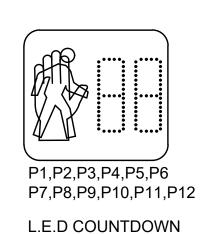
### MAJOR ITEM LIST QTY. DESCRIPTION 10-FT ORNAMENTAL TRAFFIC SIGNAL POST, ORNAMENTAL BASE, AND CEM CONC FOUNDATION 8-FT ORNAMENTAL TRAFFIC SIGNAL POST, ORNAMENTAL BASE, AND CEM CONC FOUNDATION PEDESTRIAN SIGNAL HEAD (L.E.D. WITH COUNTDOWN DISPLAY) ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON ASSEMBLY (ADA COMPLIANT) INCLUDING SIGN AND SADDLE 8"X23" PULL BOX (SD2.030) 12"X12" PULL BOX (SD2.031)

PLUS ALL NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIALS AND EQUIPMENT TO COMPLETE THE INSTALLATION

## SIGNAL FACES







PEDESTRIAN HEAD

- NOTES:

  1. VEHICLE SIGNAL HEADS A,B,C,D,E,F,G,H ARE EXISTING HEADS
- AND SHALL BE RETAINED.
- 2. VEHICLE SIGNAL HEAD "I" SHALL BE 12-IN L.E.D. EQUIPPED WITH CAP VISORS.
- 3. VEHICLE SIGNAL HEAD "I" SHALL BE EQUIPPED WITH 5-IN NON-LOUVERED BACKPLATES WITH 3-IN REFLECTORIZED YELLOW BORDER.
- 4. ALL PEDESTRIAN SIGNAL FACES SHALL BE 16-IN L.E.D. ONE-SECTION DUAL-DISPLAY WITH COUNTDOWN EQUIPPED WITH CAP VISORS.



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File Name: dwg_traffic_signal_timing_plan.dwg				
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CITY OF SALEM Client/Project

BRIDGE STREET RECONSTRUCTION PROJECT

TRAFFIC SIGNAL TIMING LOCATION 1

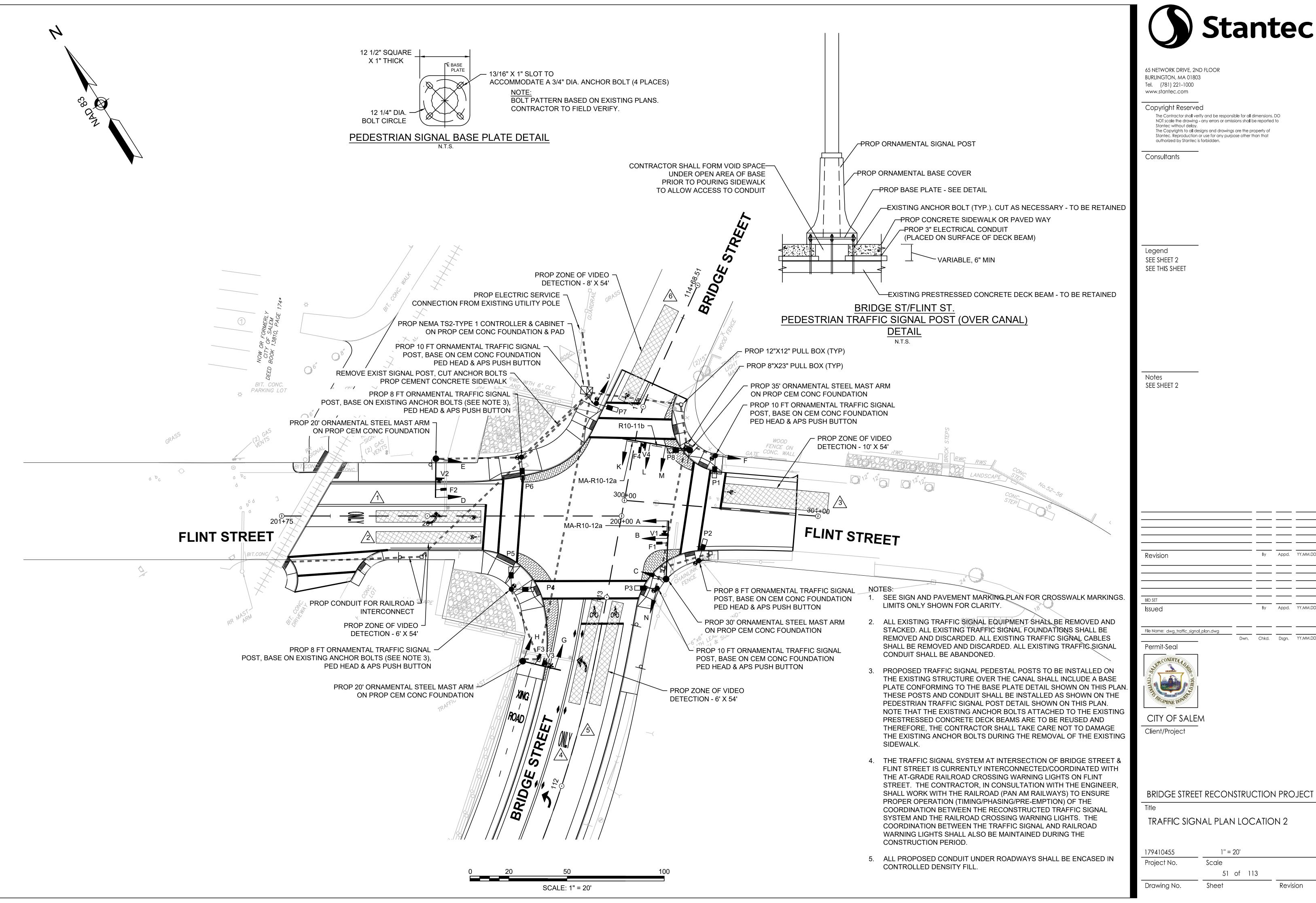
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179410455 Project No.

Drawing No.

Scale 50 of 113

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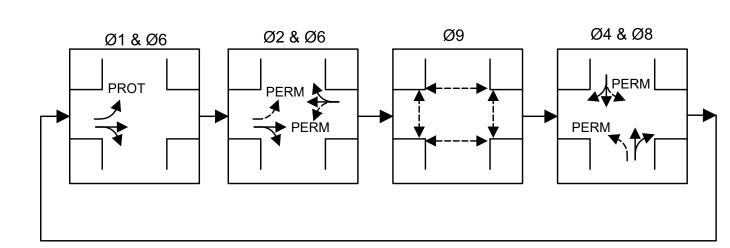
			1		I	1		ı				l		ı				1		ı				I		l	'		ı	
SEQUENCE AND TIMING FOR FULL ACTU	UATED CONTRO	DL (ISOLATED)																												
STREET	DIRECTION	HOUSINGS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	FLASH OPER.
FLINT STREET	EB	A	GL	YL	RL	RL	RL	RL				RL	RL	RL				FYL	YL	RL				RL	RL	RL	RL	RL	RL	FRL
FLINT STREET	EB	B,C	R	R	R	R	R	R				R	R	R				G	Υ	R				R	R	R	R	R	R	FR
FLINT STREET	WB	D,E	R	R	R	G	Υ	R				R	R	R				R	R	R				R	R	R	R	R	R	FR
BRIDGE STREET	NB	J	RL	RL	RL	RL	RL	RL				FYL	YL	RL				RL	RL	RL				RL	RL	RL	RL	RL	RL	FYL
BRIDGE STREET	NB	K,L,M	R	R	R	R	R	R				G	Υ	R				R	R	R				R	R	R	R	R	R	FY
BRIDGE STREET	SB	F,G,H	R	R	R	R	R	R				R	R	R				R	R	R				G	Υ	R	R	R	R	FY
PEDESTRIAN	ALL	P1-P8	DW	DW	DW	DW	DW	DW				DW	DW	DW				DW	DW	DW				DW	DW	DW	W	FDW	DW	OUT
			•			TIM	IING IN	SECO	NDS		•		•			•		•					•							
MINIMUM GREEN (INITIAL)			6			8						8						8						8						
PASSAGE TIME (VEHICLE)			2			2						2						2						2						
MAXIMUM 1			18			30						60						30						30						
MAXIMUM 2			8			20						60						20						40						
YELLOW CLEARANCE				3			3.5						4						3						4					}
RED CLEARANCE					3			2						1.5						3						1.5				RGENCY
WALK (W)																											7			ER(
PEDESTRIAN CLEARANCE																												12	3	EME
RECALL				OFF			OFF						MIN						OFF						MIN	_		OFF		
MEMORY			N	ON-LO	CK	N	ON-LO	CK				N	ON-LO	CK				N	ON-LO	CK				N	ON-LO	CK	L	OCK (P	ED)	

#### **TECHNICAL NOTES**

- 1. ANY PHASE NOT CALLED WILL BE SKIPPED. SIGNAL INDICATION WILL NOT CHANGE IF THE ASSIGNED RIGHT OF WAY DOES NOT CHANGE DURING THE NEXT PHASE CALLED.
- 2. THE RIGHT-OF-WAY MAY BE ASSIGNED TO ANY PHASE OR ANY COMBINATION OF NON-CONFLICTING PHASES. IF CALLS EXIST ON ALL PHASES, THE RIGHT-OF-WAY SHALL BE ASSIGNED IN ACCORDANCE WITH THE PREFERENTIAL PHASING SEQUENCE.
- 3. FLASHING OPERATION PER M.U.T.C.D. SECTION 4D.28 THROUGH SECTION 4D.31
- 4. MAX 1 = 6 AM 10 AM M-F MAX 2 = ALL OTHER TIMES
- 5. THE FLASHING YELLOW ARROW SHALL NOT DISPLAY AT THE SAME TIME AS THE STEADY GREEN ARROW.

EMERGENCY PREEMPTION SCHEDULE											
APPROACH	CHANNEL	PREEMPTION PHASE	NEXT PHASE CALLED								
EASTBOUND	F1	1 & 6	2 & 6								
WESTBOUND	F2	2 & 6	1 & 6								
SOUTHBOUND	F3	8	4 & 8								
NORTHBOUND	F4	4	4 & 8								

## PREFERENTIAL PHASING SEQUENCE



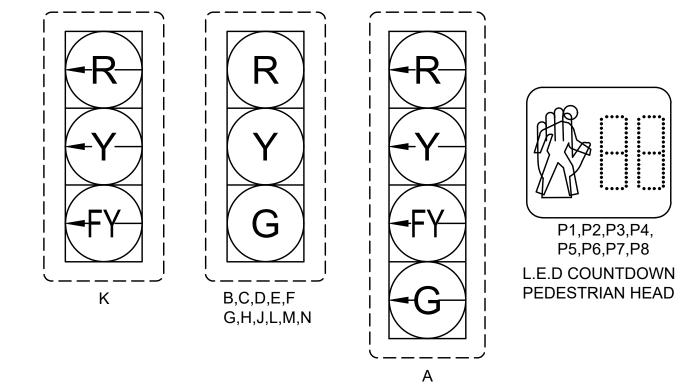
→ VEHICLE MOVEMENT

◆---- PEDESTRIAN MOVEMENT - UPON PEDESTRIAN ACTUATION

### **EMERGENCY VEHICLE PREEMPTION OPERATION:**

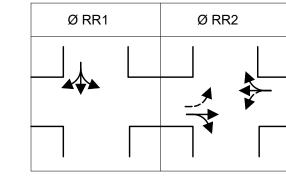
- 1. EMERGENCY VEHICLE PREEMPTION SHALL BE ACTUATED BY AN OPTICAL SIGNAL FROM AN OPTICAL EMITTED MOUNTED ON AN EMERGENCY VEHICLE AND RECEIVED BY AN OPTICAL DETECTOR LOCATED AT INTERSECTION. A SEPARATE RECEIVING DETECTOR IS REQUIRED FOR EACH DETECTED APPROACH.
- 2. PREEMPTION SIGNALS FROM MULTIPLE APPROACHES SHALL BE SERVICED ON A FIRST DETECTED FIRST SERVED BASIS.
- 3. IN RESPONSE TO A PREEMPTION SIGNAL RECEIVED AT AN INTERSECTION BY AN OPTICAL DETECTOR, THE CONTROLLER SHALL TIME THE CLEARANCE INTERVALS OF THE ACTIVE PHASE (IF DIFFERENT THAN TO BE SERVICED) AND ADVANCE TO AND/OR HOLD EMERGENCY VEHICLE PREEMPTION PHASE UNTIL PREEMPTION SIGNAL CEASES. THE CONTROLLER SHALL THEN TIME CLEARANCES AND SIMILARLY SERVICE OTHER EMERGENCY VEHICLE PREEMPTION SEQUENCES IN THE ORDER RECEIVED (IF RECEIVED) OTHERWISE, RESUME NORMAL PREFERENTIAL PHASE SEQUENCE.
- 4. PREEMPTION MINIMUM GREENS SHALL BE TEN SECONDS.
- 5. NORMAL CLEARANCES SHALL BE PROVIDED ON PHASES THAT ARE TERMINATED BY PREEMPTION DEMAND.
- 6. ACTUAL TIMING FOR PREEMPTION SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FIRE DEPARTMENT.
- 7. THE CONFIRMATION STROBE WILL ONLY BE ON WHEN THE PREEMPTED PHASE IS DISPLAYING A GREEN INDICATION

## SIGNAL FACES



### NOTES:

- 1. ALL VEHICLE SIGNAL FACES SHALL BE 12-IN L.E.D. EQUIPPED WITH CAP VISORS.
- 2. ALL VEHICLE SIGNAL FACE ASSEMBLIES SHALL BE BE EQUIPPED WITH 5-IN NON-LOUVERED BACKPLATES WITH 3-IN REFLECTORIZED YELLOW BORDER.
- 3. ALL PEDESTRIAN SIGNAL FACES SHALL BE 16-IN L.E.D.
  ONE-SECTION DUAL-DISPLAY WITH COUNTDOWN EQUIPPED
  WITH CAP VISORS.



#### RAILROAD PRE-EMPTION PHASING AND PRIORITY NOTES:

- 1. NORMAL VEHICLE AND PEDESTRIAN CLEARANCE SHALL BE PROVIDED ON PHASES THAT ARE TO BE TERMINATED BY RAILROAD PRE-EMPTION DEMAND.
- 2. IN RESPONSE TO A RAILROAD PRE-EMPTION SIGNAL RECEIVED AT THE INTERSECTION, THE CONTROLLER SHALL HOLD OR ADVANCE TO AND HOLD RAILROAD PRE-EMPTION PHASE RR1 UNTIL MAX OUT.
- 3. THE RAILROAD CROSSING WARNING LIGHTS SHALL BEGIN TO FLASH AFTER RAILROAD PRE-EMPTION PHASE RR1 MAX OUT
- 4. THE CONTROLLER SHALL THEN SERVICE RAILROAD PRE-EMPTION PHASE RR2 UNTIL THE RAIL ROAD PRE-EMPTION SIGNAL CEASES
- 5. THE TRAIN OPERATOR WILL WAIT 20 SECONDS AFTER THE BEGINNING OF THE RAILROAD CROSSING WARNING LIGHT SEQUENCE BEFORE ADVANCING THE TRAIN ONTO THE AT-GRADE CROSSING.
- 6. NORMAL TRAFFIC SIGNAL OPERATIONS SHALL RESUME, ONCE THE RAILROAD PRE-EMPTION SIGNAL CEASES.
- 7. THE CONTRACTOR, IN CONSULTATION WITH THE ENGINEER, SHALL WORK WITH THE RAILROAD (PAN AM RAILWAYS) TO ENSURE PROPER OPERATION (TIMING/PHASING/PRE-EMPTION) OF THE COORDINATION BETWEEN THE TRAFFIC SIGNAL AND THE RAILROAD CROSSING.

	MAJOR ITEM LIST
QTY.	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER (TS2, TYPE 1) TYPE 8DW W/ 8DW CABINET AND CEM CONC FOUNDATION
1	MALFUNCTION MANAGEMENT UNIT (CAPABLE OF FLASHING YELLOW ARROW)
2	20-FT ORNAMENTAL MAST ARM (STEEL), BASE, AND CEM CONC FOUNDATION
1	35-FT ORNAMENTAL MAST ARM (STEEL) WITH R10-12a SIGN, R10-11b SIGN, BASE, AND CEM CONC FOUNDATION
1	30-FT ORNAMENTAL MAST ARM (STEEL) WITH R10-12a SIGN, BASE, AND CEM CONC FOUNDATION
3	10-FT ORNAMENTAL TRAFFIC SIGNAL POST, ORNAMENTAL BASE, AND CEM CONC FOUNDATION
3	8-FT ORNAMENTAL TRAFFIC SIGNAL POST, ORNAMENTAL BASE, AND CEM CONC FOUNDATION
12	1-WAY 3-SECTION SIGNAL HEAD, 12-IN LED LENS (W/VISORS)
1	1-WAY 4-SECTION SIGNAL HEAD, 12-IN LED LENS (W/VISORS)
13	5-IN NON-LOUVERED BACKPLATE WITH 3-IN RETROREFLECTIVE YELLOW BORDER
8	PEDESTRIAN SIGNAL HEAD (L.E.D. WITH COUNTDOWN DISPLAY)
8	ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON ASSEMBLY (ADA COMPLIANT) INCLUDING SIGN AND SADDLE
1	EMERGENCY PRE-EMPTION CONFIRMATION STROBE
4	EMERGENCY PRE-EMPTION RECEIVER
1	EMERGENCY PRE-EMPTION PHASE SELECTOR
1	VIDEO DETECTION SYSTEM
1	ELECTRICAL SERVICE CONNECTION (UNDERGROUND)
3	12"X12" PULL BOX (SD2.031)
3	8"X23" PULL BOX (SD2.030)
PLUS A	LL NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS

PLUS ALL NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIALS AND EQUIPMENT TO COMPLETE THE INSTALLATION

	VIDEO DETECTOR OPERATION											
DETECT. NO.	ZONE SIZE	PROC. NO.	CHAN. NO.	Ø CALL.	Ø EXTEN.	MODE: A=PULSE B=PRES. C=CALL.	DELAY (SEC)	EXTEN. (SEC)				
$\triangle$	6' X 54'	1	1	1	1	В	0	0				
2	6' X 54'	1	2	6	6	В	0	0				
3	10' X 54'	2	1	2	2	В	0	0				
4	6' X 54'	2	2	4	4	В	0	0				
5	6' X 54'	3	1	4	4	В	0	0				
6	8' X 54'	3	2	8	8	В	0	0				



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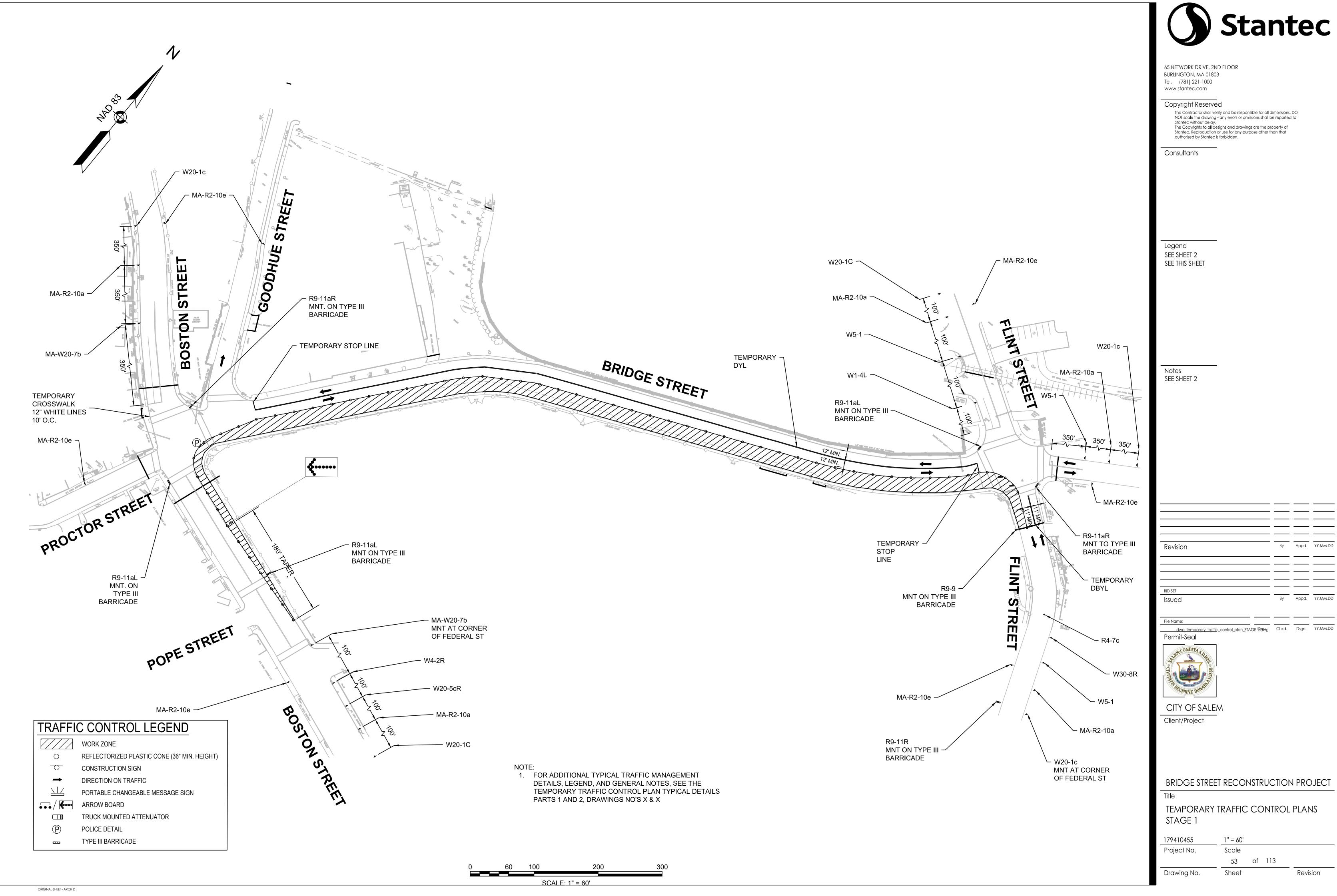
BRIDGE STREET RECONSTRUCTION PROJECT

Title

TRAFFIC SIGNAL TIMING LOCATION 2

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Project No. Scale

Drawing No. Sheet



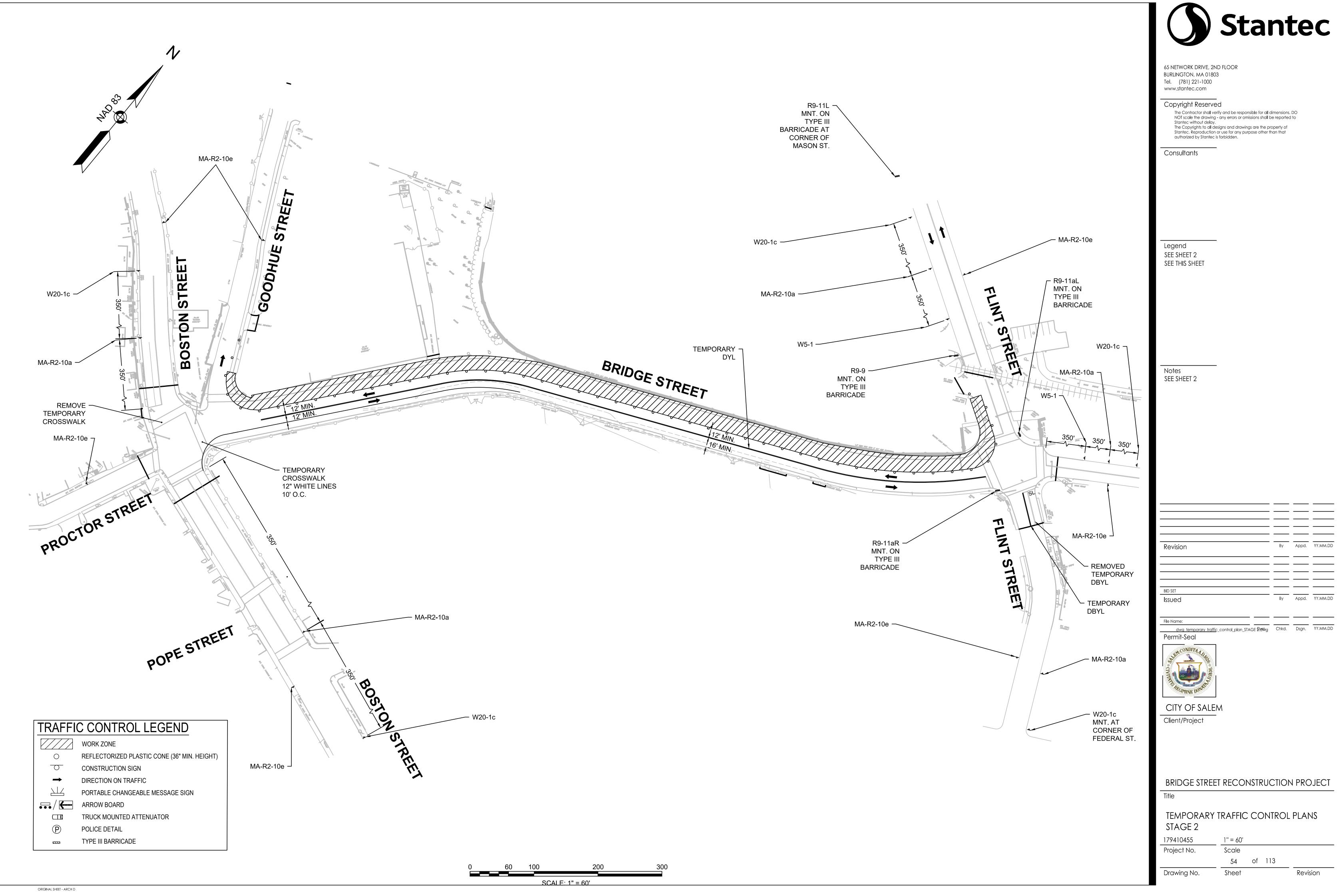


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TEMPORARY TRAFFIC CONTROL PLANS

1'' = 60' Scale 53 of 113 Revision





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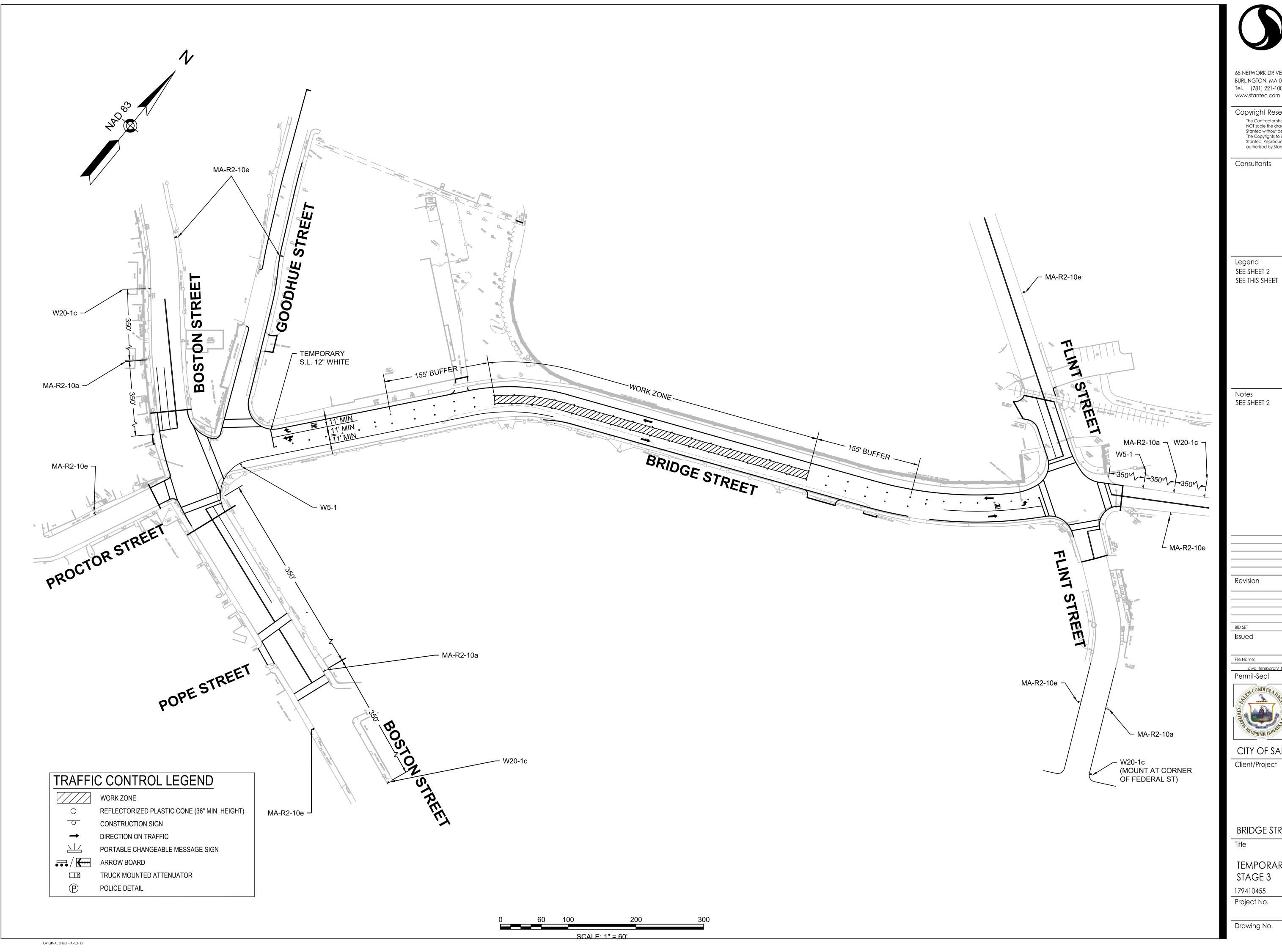
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TEMPORARY TRAFFIC CONTROL PLANS

1'' = 60' Scale

54 of 113 Revision





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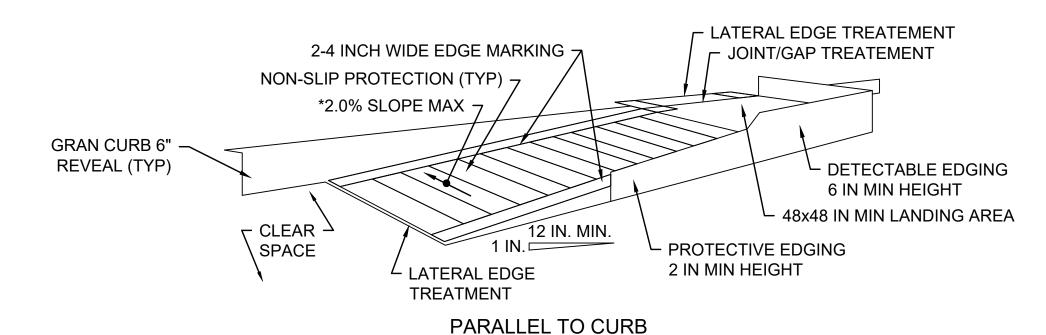
TEMPORARY TRAFFIC CONTROL PLANS STAGE 3

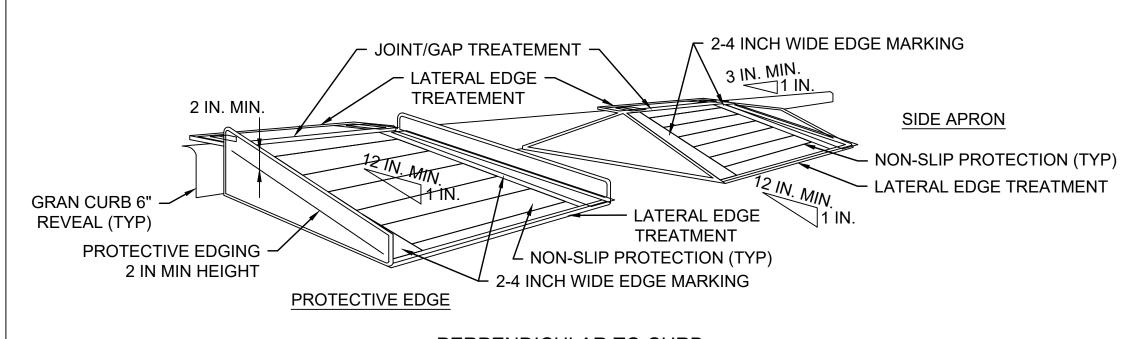
179410455 1'' = 60' Scale

55 of 113 Revision

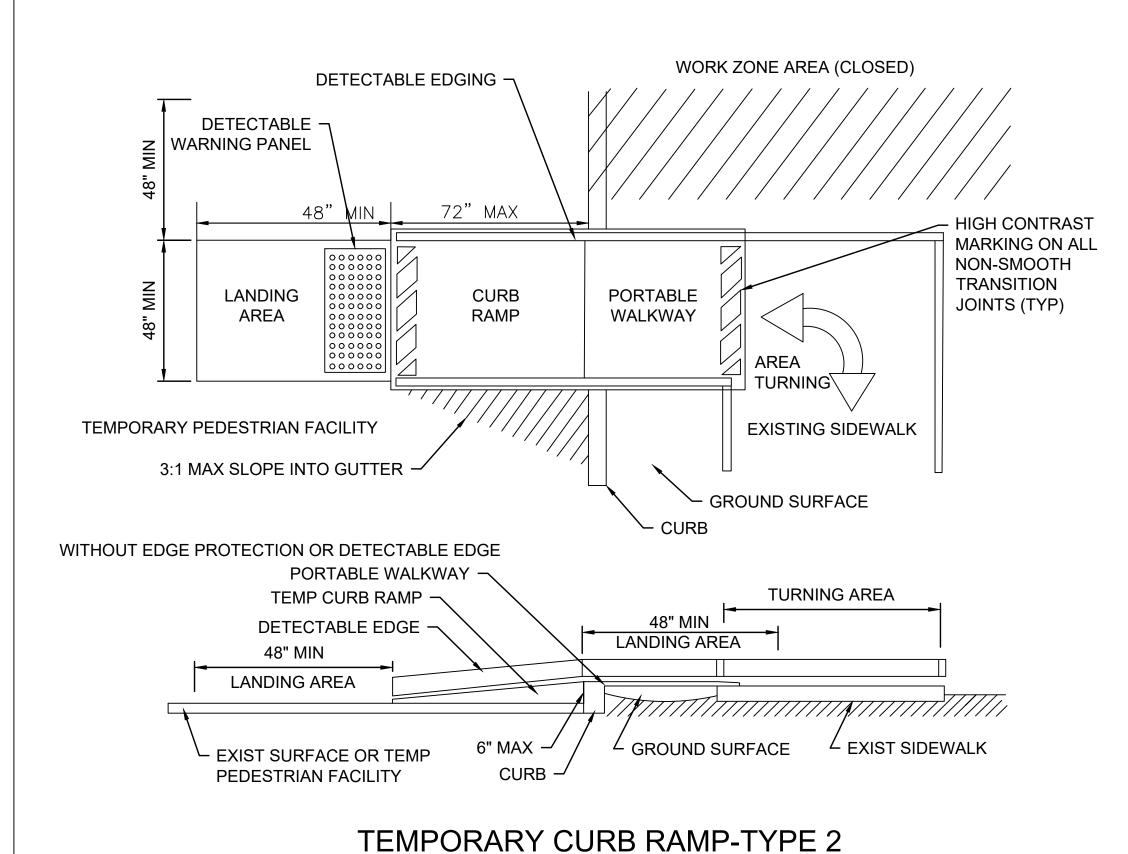
DROP OF 3 IN. OR MORE. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES

- DIRECTION (TURNS). 4. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%)
- MAX CROSS-SLOPE.
  - 5. CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
  - 6. THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A CONTRASTING COLOR 2 TO 4 IN. WIDE MARKING. THE MARKING IS OPTIONAL WHERE COLOR CONTRASTING EDGING IS USED.
  - WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
- LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH
- CHANGES BETWEEN SURFACE HEIGHTS SHOULD NOT EXCEED 0.5 IN. LATERAL EDGES SHOULD BE VERTICAL UP TO 0.25 IN. HIGH, AND BEVELED AT 1:2 BETWEEN 0.25 IN. AND 0.5 IN. HEIGHT.

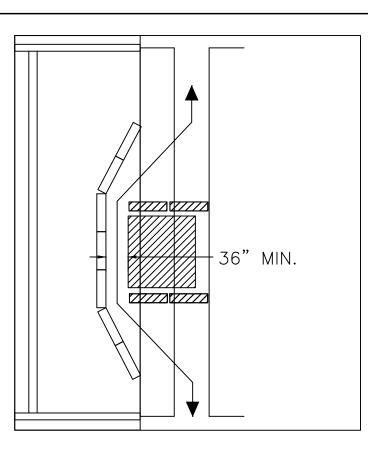


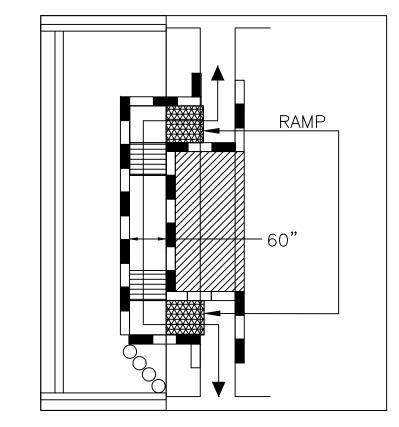


PERPENDICULAR TO CURB TEMPORARY CURB RAMP NOT TO SCALE



NOT TO SCALE





SIDEWALK

CLOSED

- HAND-TRAILING

2" GAP MIN.

2" GAP MAX.

**EDGE** 

PEDESTRIAN PATH

TEMPORARY BARRIER

- When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, temporary facilities shall be provided and they shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility.
- A pedestrian channelizing device that is detectable by a person with a visual disability traveling with the aid of a long cane shall be placed across the full width of the closed sidewalk.
- When used, temporary ramps shall comply with Americans with Disabilities Act (see Temporary Curb Ramp Detail, this sheet).
- The alternate pathway should have a smooth continuous hard surface for the entire length of the temporary pedestrian facility.
- The protective requirements of a TTC situation have priority in determining the need for temporary traffic barriers and their use in this situation should be based on engineering judgment.
- Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.

#### **AUDIBLE DEVICES**

EXIST SIDEWALK -

DEVICE

SIDEWALK

CLOSED

For long term sidewalk closures (at a minimum overnight) a form of speech messaging for pedestrians with visual disabilities shall be provided. Audible information devices such as detectable barriers or barricades and other passive pedestrian activation (motion activated) devices should be considered for these cases. These audible devices can be mountable or stand alone.

TYPE III BARRICADE -

WORK ZONE TO BE -

2. CONTROLS ONLY FOR PEDESTRIAN TRAFFIC ARE SHOWN. VEHICULAR TRAFFIC SHOULD

5. THE TEMPORARY SIDEWALK SHOULD BE A MINIMUM OF 4 FEET WIDE. IF THIS WALKWAY

6. JERSEY OR F-TYPE BARRIERS ARE NOT AN ACCEPTABLE PEDESTRIAN CHANNELIZING

TEMPORARY PEDESTRIAN WALKWAY

NOT TO SCALE

32" MIN.

7. PROVIDE TEMPORARY RAMPS TO ALLOW TRAVEL TO/FROM WALKWAY ON ROADWAY.

DETECTION PLATE

**CROSS SECTION VIEW** 

\*\* A MAXIMUM 2 INCH GAP BETWEEN THE BOTTOM OF

THE BOTTOM RAIL AND THE SURFACE MAY BE

· HAND-TRAILING

NOTES: \* THERE SHALL BE A 2 INCH GAP BETWEEN THE

USED TO PROVIDE DRAINAGE.

HAND-TRAILING EDGE AND ITS SUPPORT.

BYPASS IS TO BE USED IN CONJUCTION WITH THE PROPOSED LANE CLOSURE DETAILS

EXCEEDS 200 FEET IN LENGTH THEN A 5 FOOT X 5 FOOT PASSING ZONE SHALL BE

PROVIDED. (FOR SHORT TERM SETUPS < 10 HOURS, THIS CONDITION MAY BE WAIVED. A

NOTE WOULD NEED TO BE INCLUDED IN THE TTCP THAT STATES HOW THE CONTRACTOR

3. STREET LIGHTING SHOULD BE CONSIDERED WHEN LOCATING CONTROL DEVICES.

AND DURING CONSTRUCTION STAGING, AS REQUIRED BY THE ENGINEER

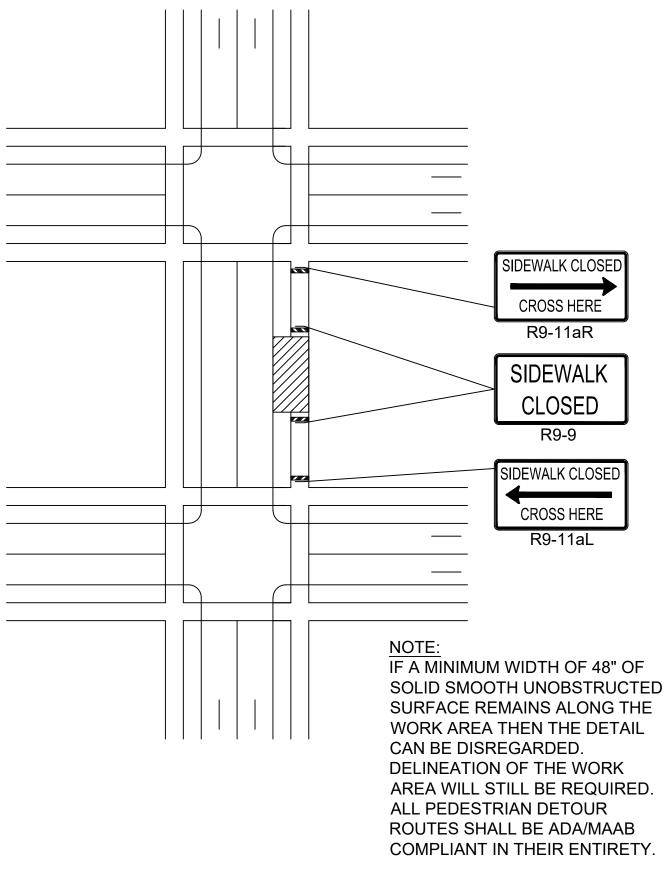
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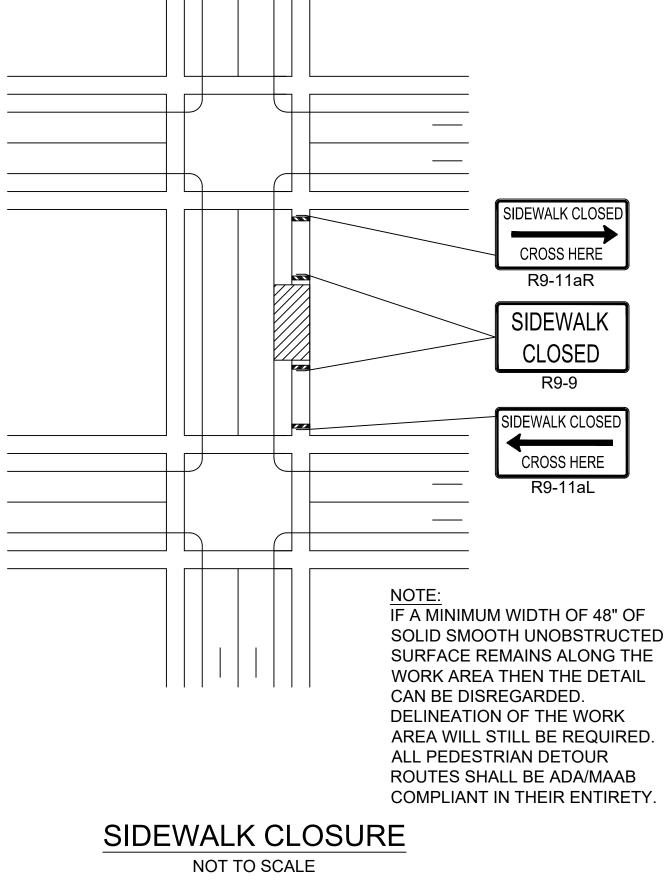
ADDITIONAL ADVANCE WARNING MAY BE NECESSARY

BE HANDLED AS SHOWN ELSEWHERE

SHOULD ADDRESS THIS ISSUE.)

8" MIN. HEIGHT





TEMPORARY MARKING FOR CROSSWALK LINES (CR0SS-HATCHING OPTIONAL) SIDEWALK CLOSED USE OTHER SIDE R9-10 CROSSWALK  $/W_{11-2}$ (OPTIONAL) USE OTHER SIDE 300 FT AHEAD R9-10 (100m)W11-2 W16-9p SIDEWALK CLOSE AHEAD CROSS HERE 300 FT (100m) AHEAD SIDEWALK CLOSED W11-2 W16-9p W11-2 W16-7pL SIDEWALK CLOSED AHEAD CROSS HERE

FOR LONG-TERM STATIONARY WORK, THE DOUBLE YELLOW CENTERLINE AND/OR LANE LINES SHOULD BE REMOVED BETWEEN THE CROSSWALK LINES.

PEDESTRIAN DETOUR PLAN NOT TO SCALE



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Revision

TEMPORARY TRAFFIC CONTROL PLAN TYPICAL DETAILS PART 1 OF 2

Sheet

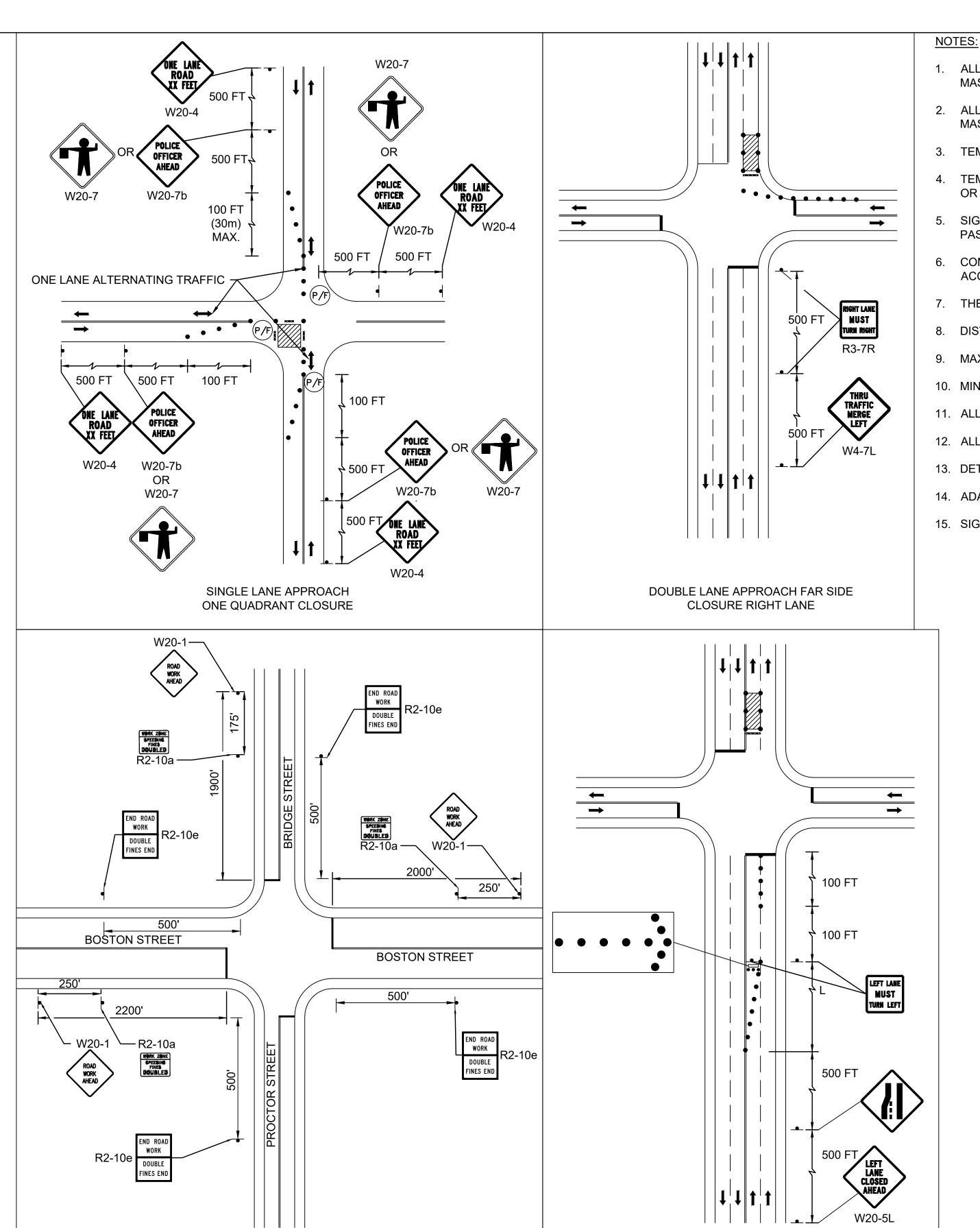
179410455	NOT TO SCALE
Project No.	Scale
	56 of 113

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PEDESTRIAN CHANNELIZING DEVICE NOT TO SCALE



ADVANCED SIGNING PLAN

TWO-LANE ROAD

SHOULDER CLOSED

DOUBLE LANE APPROACH FAR SIDE

**CLOSURE INSIDE LANE** 

NARROWS

W5-1

500 FT

<u>LEGEND</u>

**WORK ZONE** 

REFLECTORIZED DRUM

CONSTRUCTION SIGN

FLASHING ARROW BOARD

DIRECTION OF TRAFFIC FLOW

POLICE OFFICER OR FLAGGER

- 1. ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE 2009 "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, THE MASSACHUSETTS AMENDMENTS TO THE 2009 MUTCD, AND MASSDOT STANDARDS
- 2. ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE 2009 MUTCD, THE MASSACHUSETTS AMENDMENTS TO THE 2009 MUTCD, AND MASSDOT STANDARDS.
- 3. TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- 4. TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE ROADWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH LIGHTING DEVICES MOUNTED ON THEM, MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES."
- 6. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
- 7. THE FIRST FIVE PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH TYPE A LIGHTS.
- 8. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- 9. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- 10. MINIMUM LANE WIDTH IS TO BE 10 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- 11. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
- 12. ALL TEMPORARY WALKWAYS SHALL MEET ADA/AAB GUIDELINES.
- 13. DETAILS SHOWN ON THIS PLAN ARE NOT TO SCALE.

TYPE OF TAPER

ONE-LANE, TW0-WAY TRAFFIC TAPER

**MERGING TAPER** 

SHIFTING TAPER

SHOULDER TAPER

- 14. ADA COMPLIANT PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES. INCLUDING PEDESTRIAN GUIDANCE SYSTEMS AT WORK ZONES.
- 15. SIGN DISTANCES A AND B SHOULD BE 500 FT ALONG NEEDHAM STREET AND 350 FT ALONG OAK STREET AND CHRISTINA STREET.

TAPER LENGTH (L)

AT LEAST L

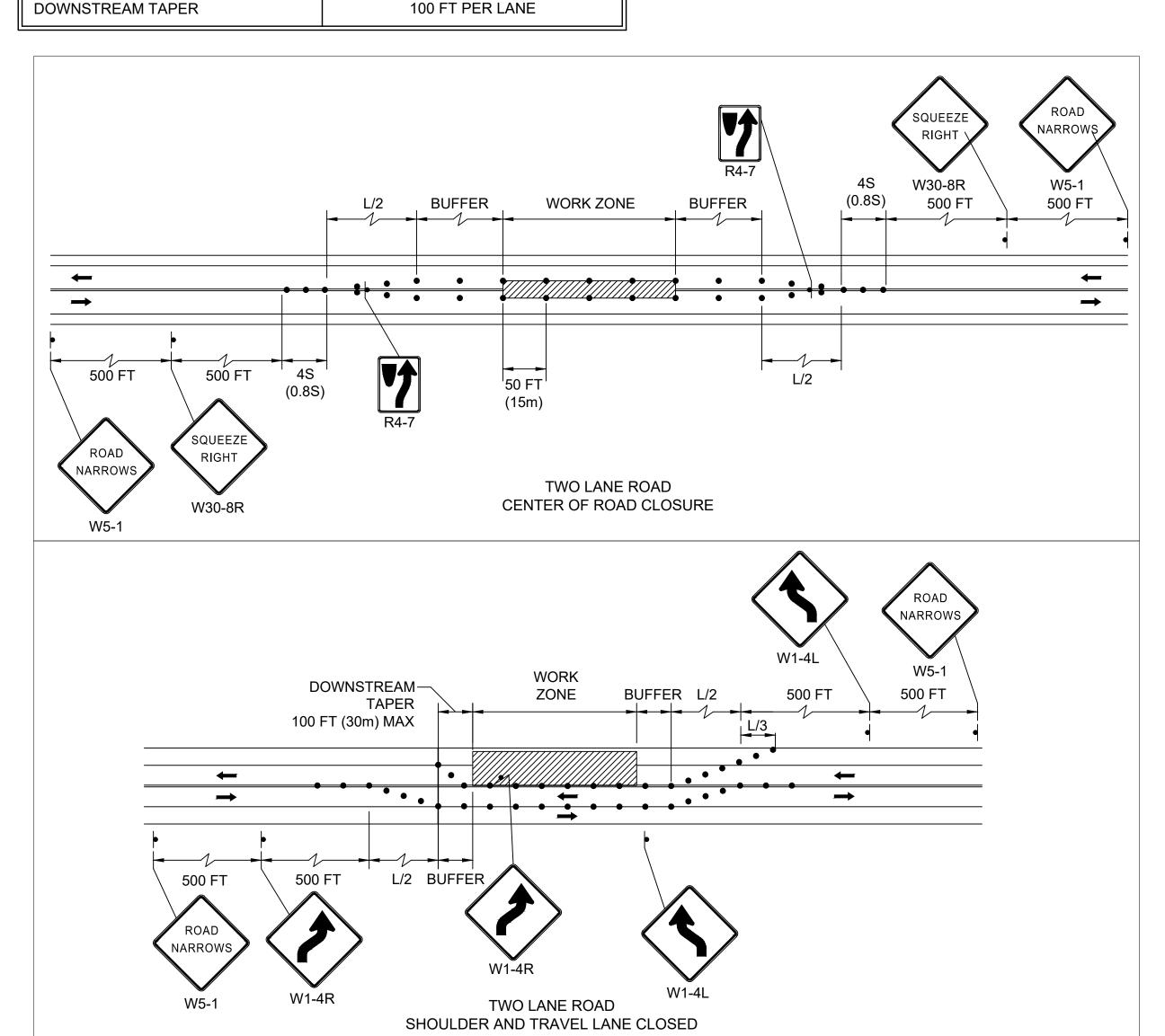
AT LEAST 0.5L

AT LEAST 0.33L

100 FT MAXIMUM

#### TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

SPEED LIMIT (S)	TAPER LENGTH (L)
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	L = WS





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BRIDGE STREET RECONSTRUCTION PROJECT

TEMPORARY TRAFFIC CONTROL PLAN TYPICAL DETAILS PART 2 OF 2

NOT TO SCALE 179410455 Scale 57 of 113 Drawing No. Revision

Sheet

IDENTIFI-	IDENTIFI- SIZE OF SIGN			LEGEND DIMENSIONS		NUMBER COLOR OF				AREA IN		
CATION NUMBER	WIDTH	HEIGHT	SIGN	LETTER HEIGHT	VERTICAL SPACING	ARROW	SIGNS REQUIRED	BACK- GROUND	LEGEND	BORDER	NUMBER REQUIRED	SQUARE FEET
MA-R2-10a	48"	36"	WORK ZONE SPEEDING FINES DOUBLED	SEE MASSDOT STDS.	SEE MASSDOT STDS.	SEE MASSDOT STDS.	5	SEE MASSDOT STDS.	SEE MASSDO <sup>T</sup> STDS.	SEE T MASSDOT STDS.		60.00
MA-R2-10e	36"	48"	END ROAD WORK DOUBLE FINES END	SEE MASSDOT STDS.	SEE MASSDOT STDS.	SEE MASSDOT STDS.	7	SEE MASSDOT STDS.	SEE MASSDO <sup>T</sup> STDS.	SEE T MASSDOT STDS.		84.00
MA-W20-7b	24"	18"	POLICE OFFICER AHEAD	SEE MASSDOT STDS.	SEE MASSDOT STDS.	SEE MASSDOT STDS.	2	SEE MASSDOT STDS.	SEE MASSDO <sup>T</sup> STDS.	SEE T MASSDOT STDS.		6.00
R4-7c	18"	30"	7	SEE MUTCD	SEE MUTCD	SEE MUTCD	1	SEE MUTCD	SEE MUTCD	SEE MUTCD		3.75
R9-9	24"	12"	SIDEWALK CLOSED				1					2.00
R9-11aR	24"	18"	SIDEWALK CLOSED  CROSS HERE				2					6.00
R9-11aL	24"	18"	SIDEWALK CLOSED  CROSS HERE				3					9.00
R9-11R	24"	24"	SIDEWALK CLOSED AHEAD CROSS HERE				1					4.00
R9-11L	24"	12"	SIDEWALK CLOSED AHEAD CROSS HERE				1					2.00
W1-4L	36"	36"					1					9.00
W4-2R	36"	36"					1					9.00
W5-1	36"	36"	ROAD				3					27.00
W20-1c	36"	36"	ROAD WORK AHEAD				5					45.00
W20-5cR	36"	36"	RIGHT LANE CLOSED AHEAD				1					9.00
W30-8R	36"	36"	SQUEEZE RIGHT	<b>V</b>	<b>V</b>	<b>V</b>	1	<b>V</b>	<b>V</b>	<b>\</b>		9.00



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BRIDGE STREET RECONSTRUCTION PROJECT

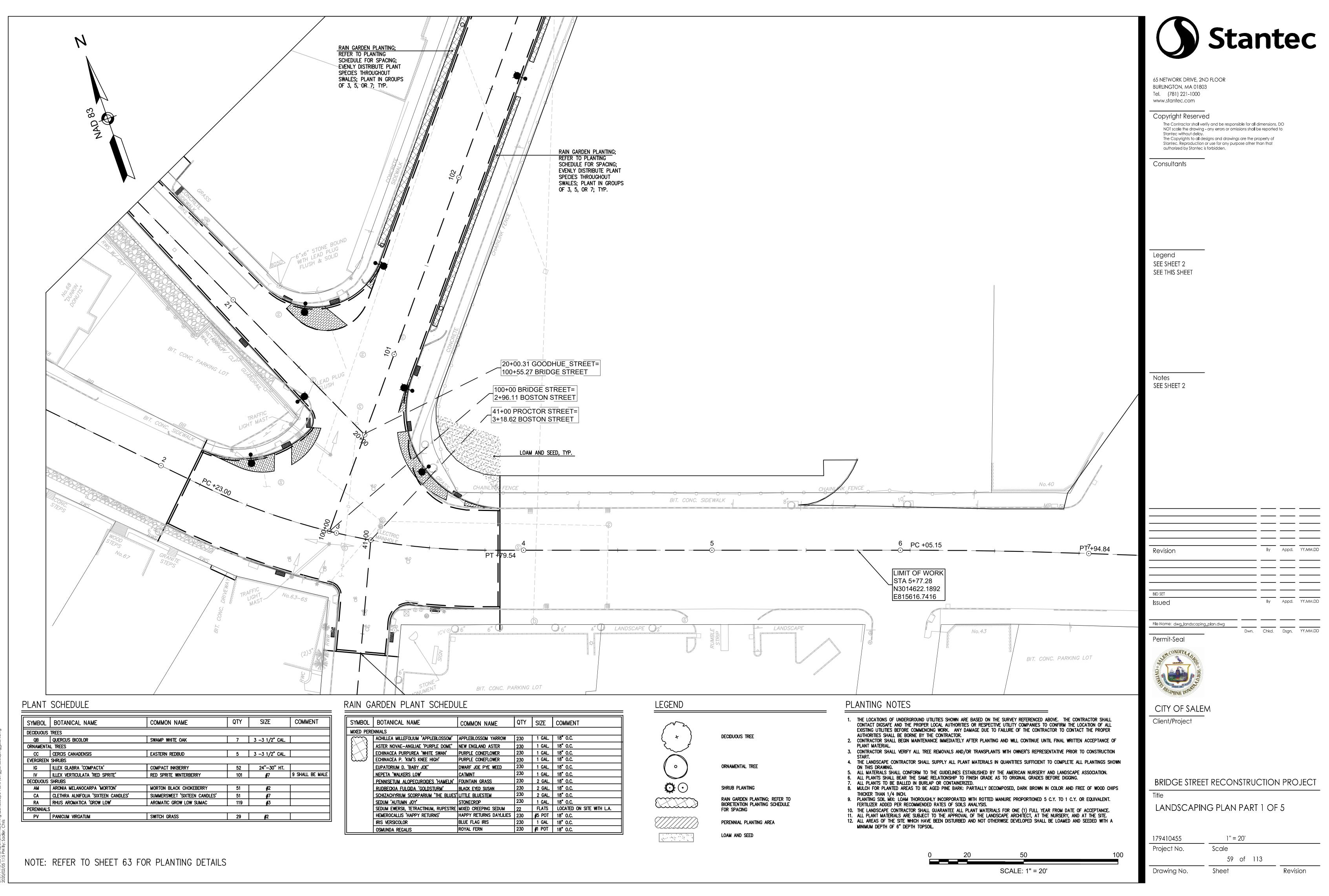
TEMPORARY TRAFFIC CONTROL PLAN CONSTRUCTION SIGN SUMMARY

Scale

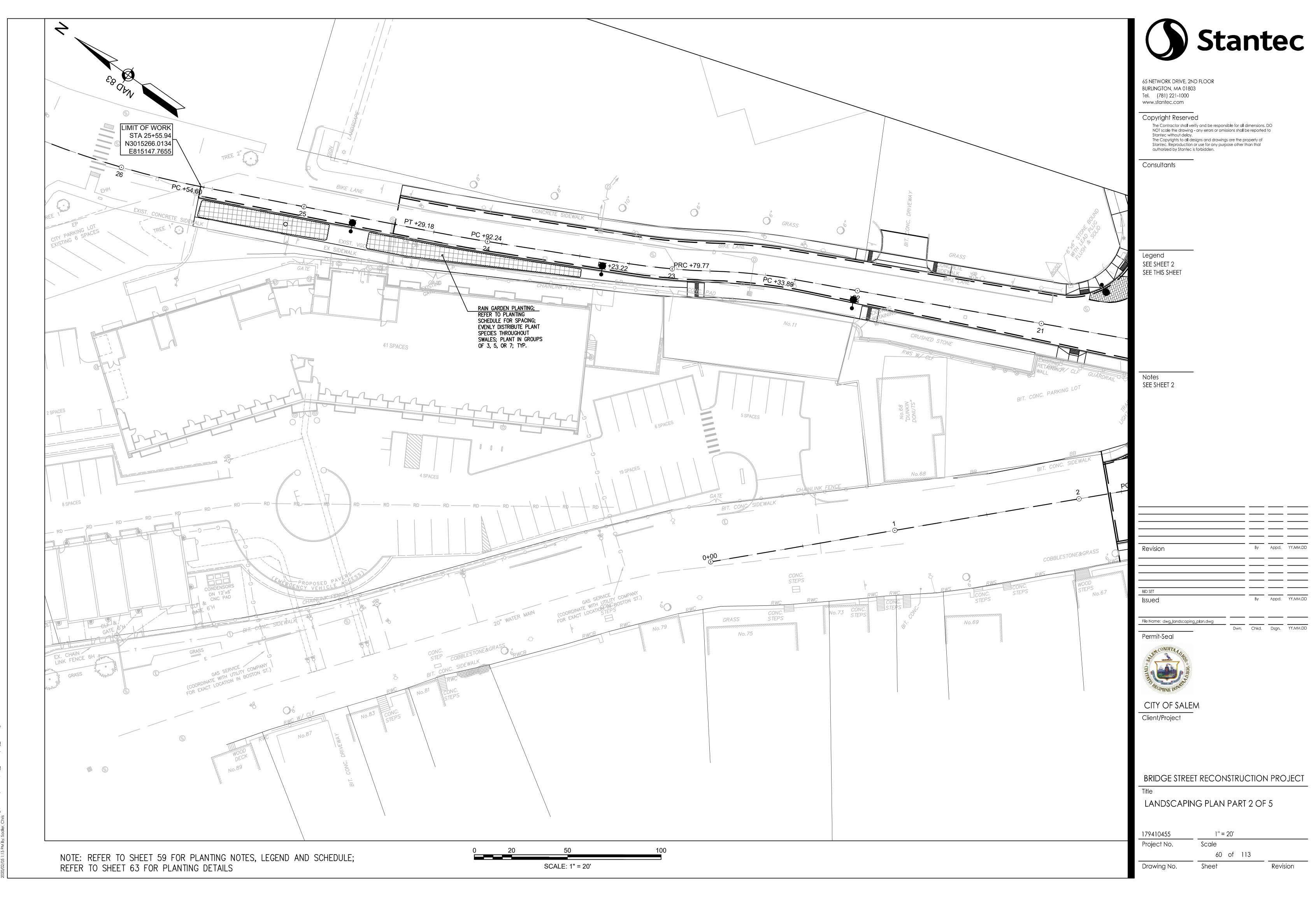
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Drawing No.

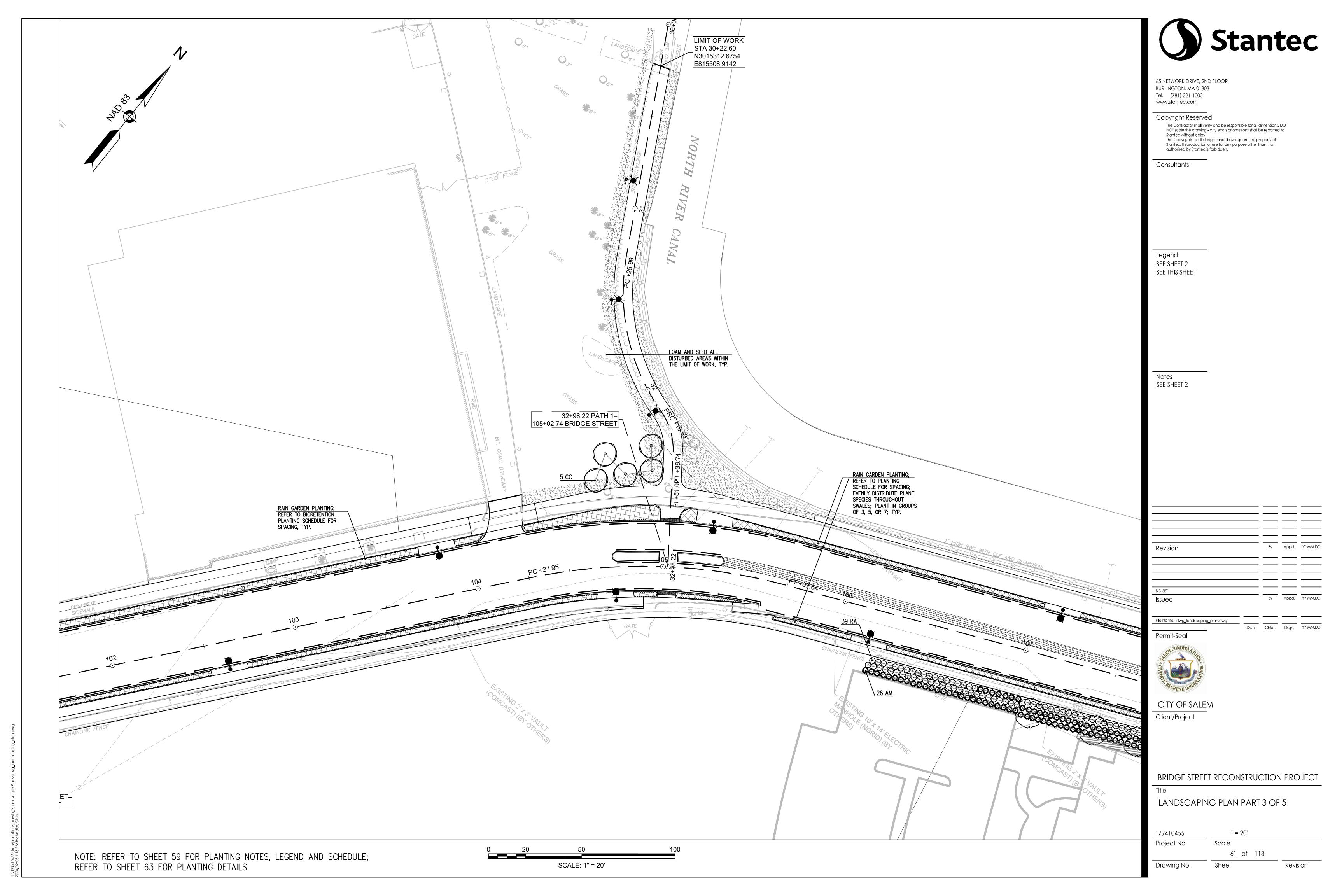
58 of 113

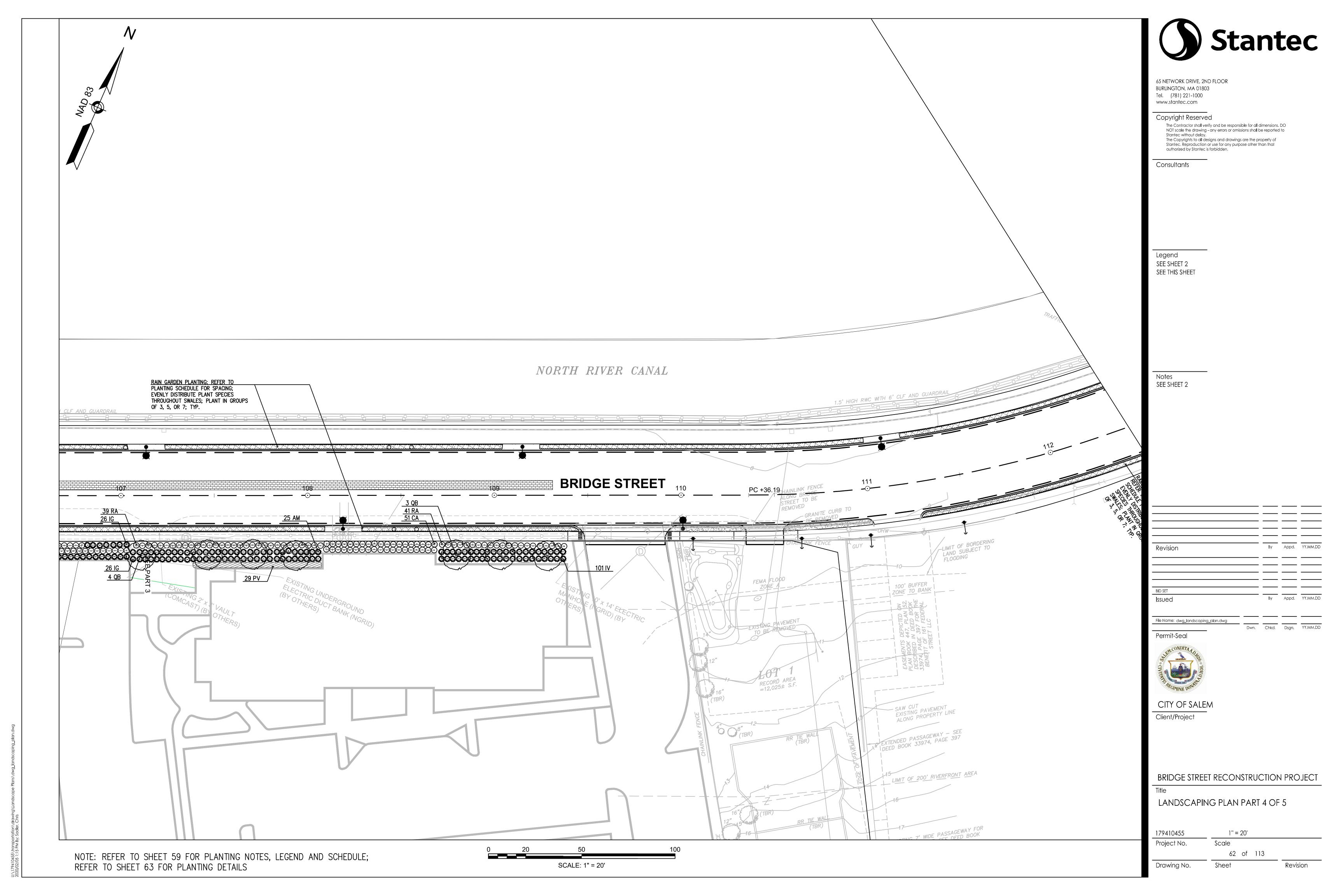


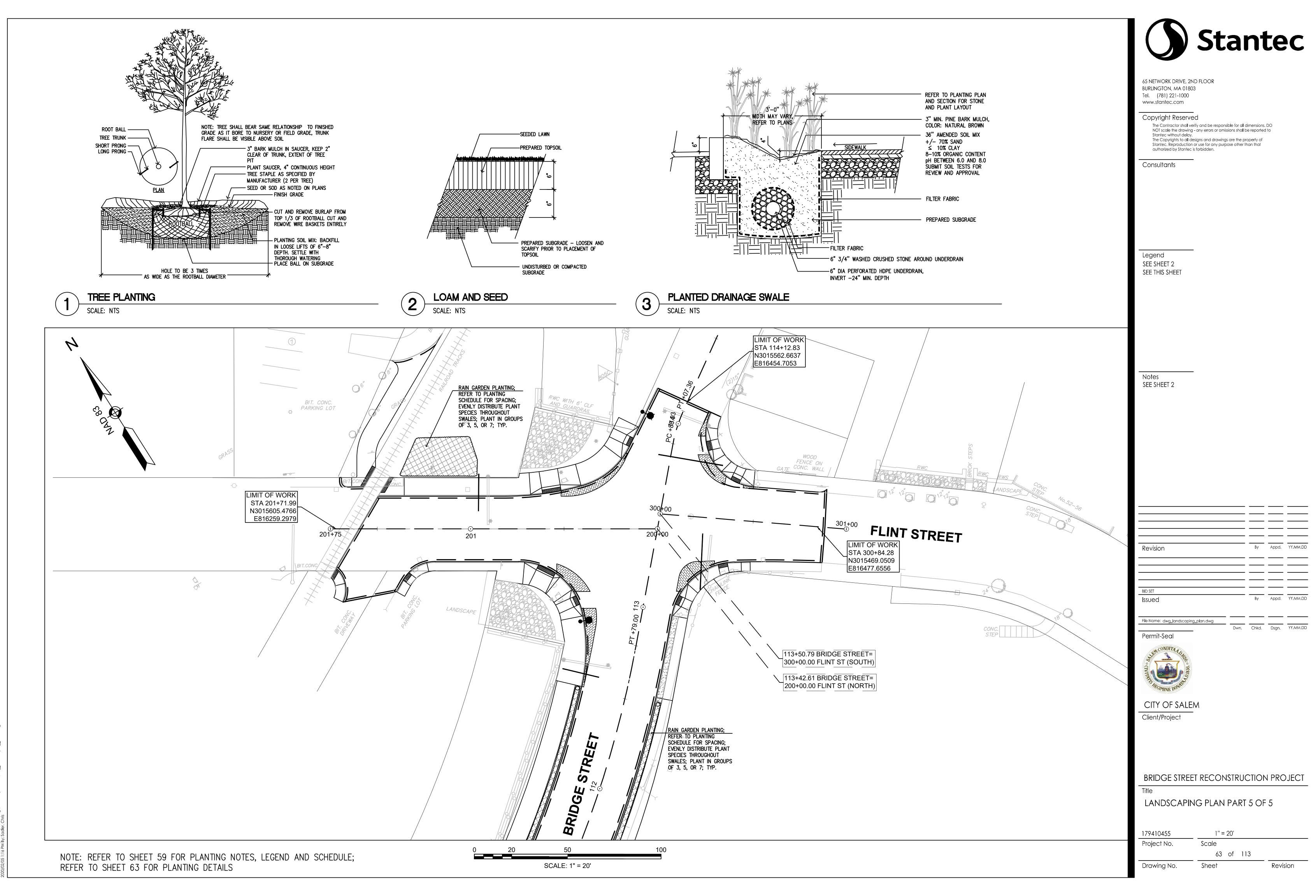
.\ 179410455\ transportation\ chawing\ | angscape Plans\ dwa | langscaping



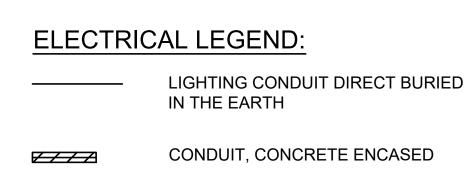
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CONDUIT TURNING DOWN SINGLE LUMINAIRE WITH LIGHT POLE --AND CONCRETE POLE FOUNDATION

LIGHTING CONTROL CABINET

PRE-CAST HANDHOLE

### **ABBREVIATIONS:**

**AMPERES** AFG ABOVE FINISHED GRADE **AWG** AMERICAN WIRE GAUGE CONDUIT CB CIRCUIT BREAKER **CKT** CIRCUIT **CIRCULAR MIL** FBO FURNISHED BY OTHERS Fc FOOT CANDLES GALVANIZED GND GROUND

GFI GROUND FAULT INTERRUPTER **IESNA** ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA KVA KILO VOLT AMPERES

LL "L" LEFT LT LIQUID TIGHT FLEXIBLE METAL CONDUIT LTG LIGHTING NIC NOT IN CONTRACT PVC POLYVINYL CHLORIDE

**RCPT** RECEPTACLE RIGID GALVANIZED STEEL RNC RIGID NON-METALLIC CONDUIT RT **RAIN TIGHT** 

SCHEDULE **SIDEWALK** UNFUSED **VOLTS** WATTS WEATHERPROOF

## **GENERAL NOTES:**

CONDUIT RUNS ARE DIAGRAMMATIC. COORDINATE CONDUIT RUNS WITH ALL OTHER EXISTING OR PROPOSED UNDERGROUND UTILITIES AND STRUCTURES.

PRIOR TO THE INSTALLATION OF PROPOSED LIGHTING, THE CONTRACTOR SHALL EXCAVATE TEST PITS AT LOCATIONS OF UTILITY CROSSINGS TO VERIFY DEPTHS AND LOCATIONS OF EXISTING PIPES, CONDUITS OR OTHER FACILITIES AND AS REQUIRED BY THE ENGINEER. WORK SHALL BE PAID FOR UNDER ITEM 141.1 TEST PIT FOR EXPLORATION.

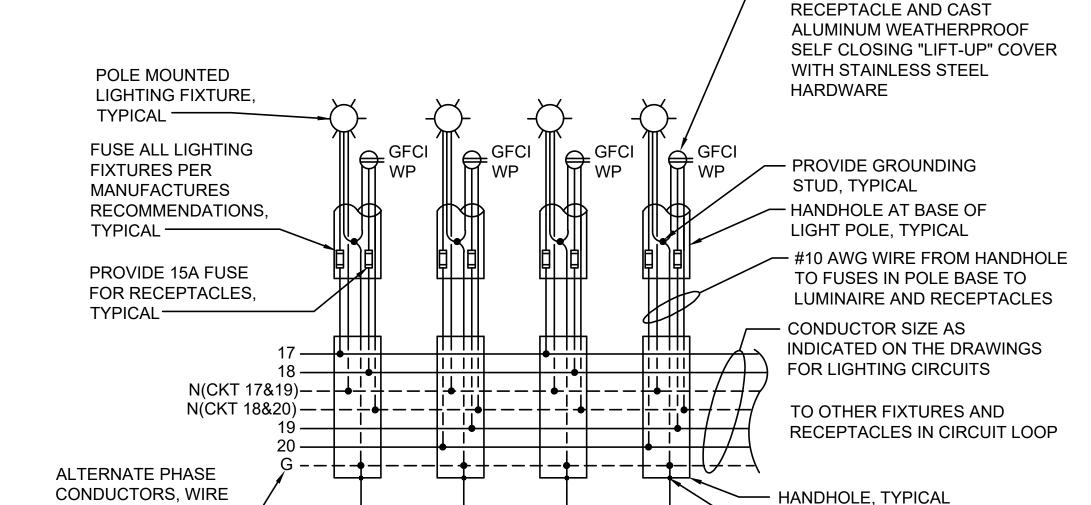
COORDINATE ELECTRIC SERVICE WITH ELECTRIC UTILITLY COMPANY (NATIONAL GRID). ALL WORK ASSOCIATED WITH THE ELECTRIC SERVICE MUST BE COMPLETED IN ACCORDANCE WITH ELECTRIC COMPANY STANDARDS.

ALL UTILITY BACK CHARGES ARE THE RESPONSIBILITY OF THE CONTRACTOR FOR ALL WORK PERTAINING TO THIS PROJECT. COORDINATE ALL PERMANENT AND TEMPORARY POWER WITH THE UTILITY.

ALL ELECTRICAL EQUIPMENT SHALL BE UL LISTED FOR ITS INTENDED USE.

PROVIDE GROUND CONDUCTOR IN EACH ELECTRICAL RACEWAY IN ACCORDANCE WITH THE CODE.

THE HOT LINE AND NEUTRAL CONDUCTORS IN THE POLE HANDHOLE SHALL HAVE AN APPROVED STREET LIGHT FUSE CONNECTOR.



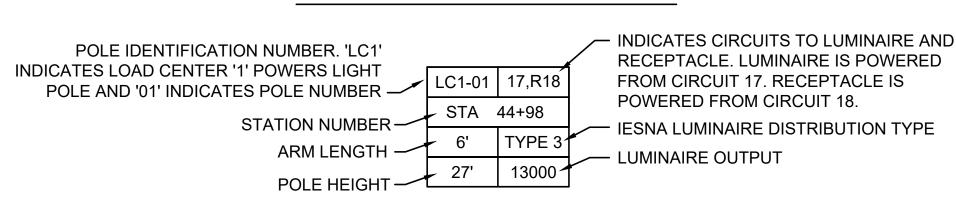
### TYPICAL LIGHT POLE CIRCUITING ONE-LINE DIAGRAM

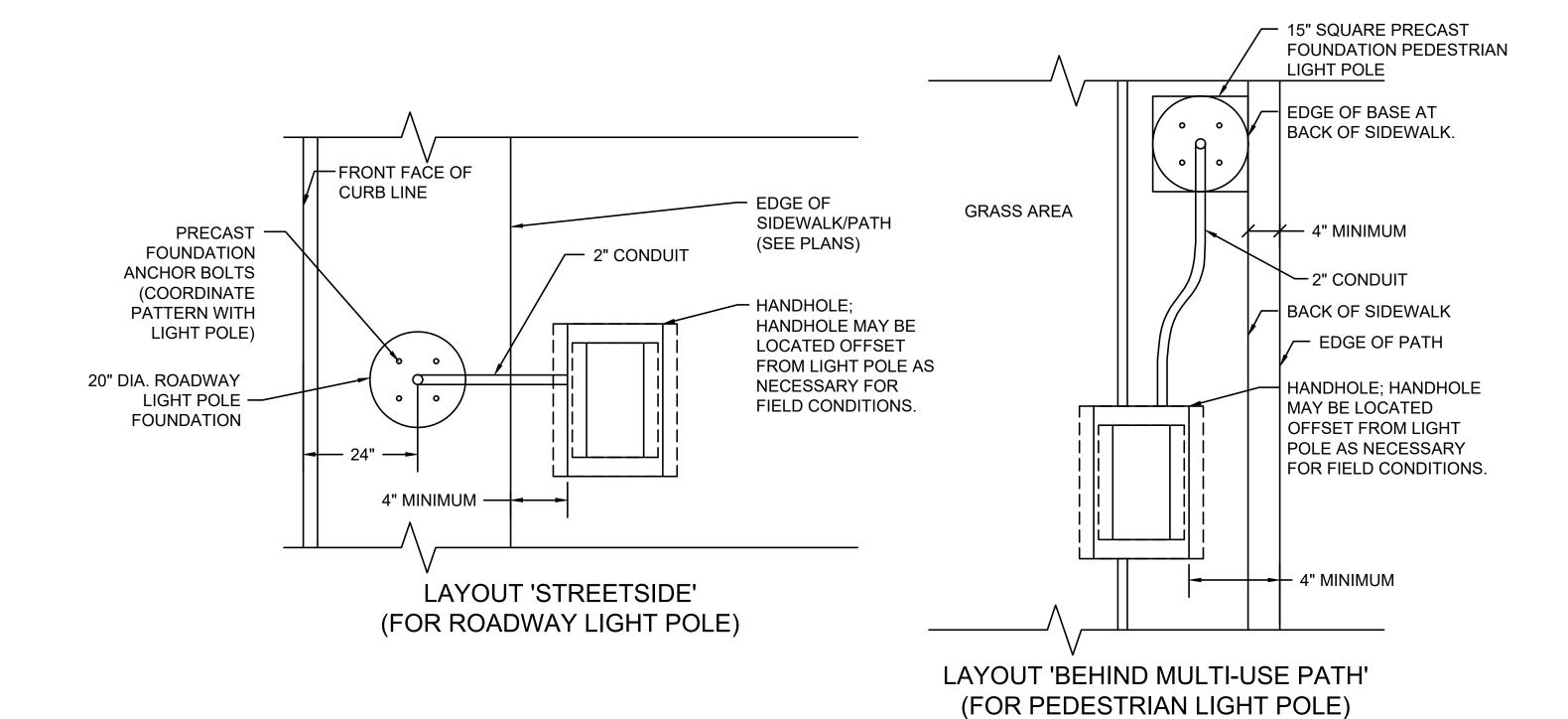
AS SHOWN ON THE

PLAN, TYPICAL —

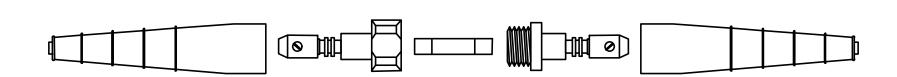
## LIGHT POLE WIRING NOT TO SCALE

### LUMINAIRE INFORMATION BOX





TYPICAL LIGHT POLE AND PULLBOX LAYOUT DETAILS NOT TO SCALE

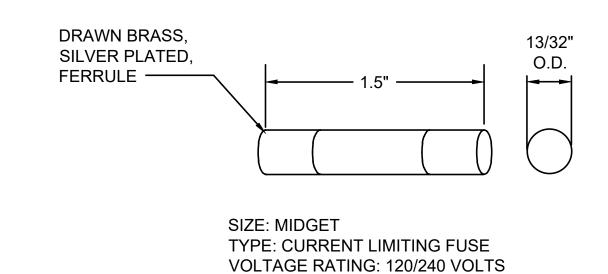


RATING: 600 VOLTS - 20 AMPS.			
FUSE SIZE: 1 1/2" x 13/32" O.D FERRULE 3/8"			
CONNECTOR SIZE: 8 1/2" x 7/8" O.D.			
CONNECTOR TYPE:	FUSE - QUICK DISCONNECT		
SET SCREW TYPE CONNECTION			
CONNECTOR MATERIAL:	MOLDED PLASTIC BODY WITH		
	RUBBER INSULATING BOOTS.		
CONDUCTOR SIZE:	LINE AND LOAD #2 AWG		
THROUGH #12 AWG			
REQUIRED FEATURES: WATERTIGHT NO TAPING OR			
SEALANT REQUIRED			
-FUSE HELD IN LOAD SIDE WHEN CONNECTOR IS DISCONNECTED.			
AASHTO COMPLIENT BREAKAWAY FUSE HOLDER.			
-PROVIDE APPROVED FUSE HOLDER WITH "DUMMY" ROD			

FUSE HELD IN LOAD SIDE WHEN CONNECTOR IS DISCONNECTED.

**BLANK FUSE FOR NEUTRALS** 

### STRAIGHT THRU CONNECTOR NOT TO SCALE



**EQUIPMENT** 

**FUSES** 

**USE: PROTECTION OF AREA LIGHTING** 



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PROVIDE ON ALL LIGHT POLES A

15 AMP GFI GENERAL PURPOSE

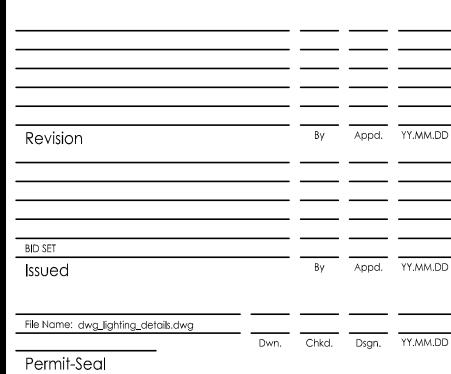
GROUND FRAME AND COVER IN

GROUND ROD IN HANDHOLE.

HANDHOLE, TYPICAL

Legend SEE SHEET 2 SEE THIS SHEET

Notes SEE SHEET 2





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BRIDGE STREET RECONSTRUCTION PROJECT

Drawing No.

LIGHTING LEGEND, ABBREVIATIONS & NOTES

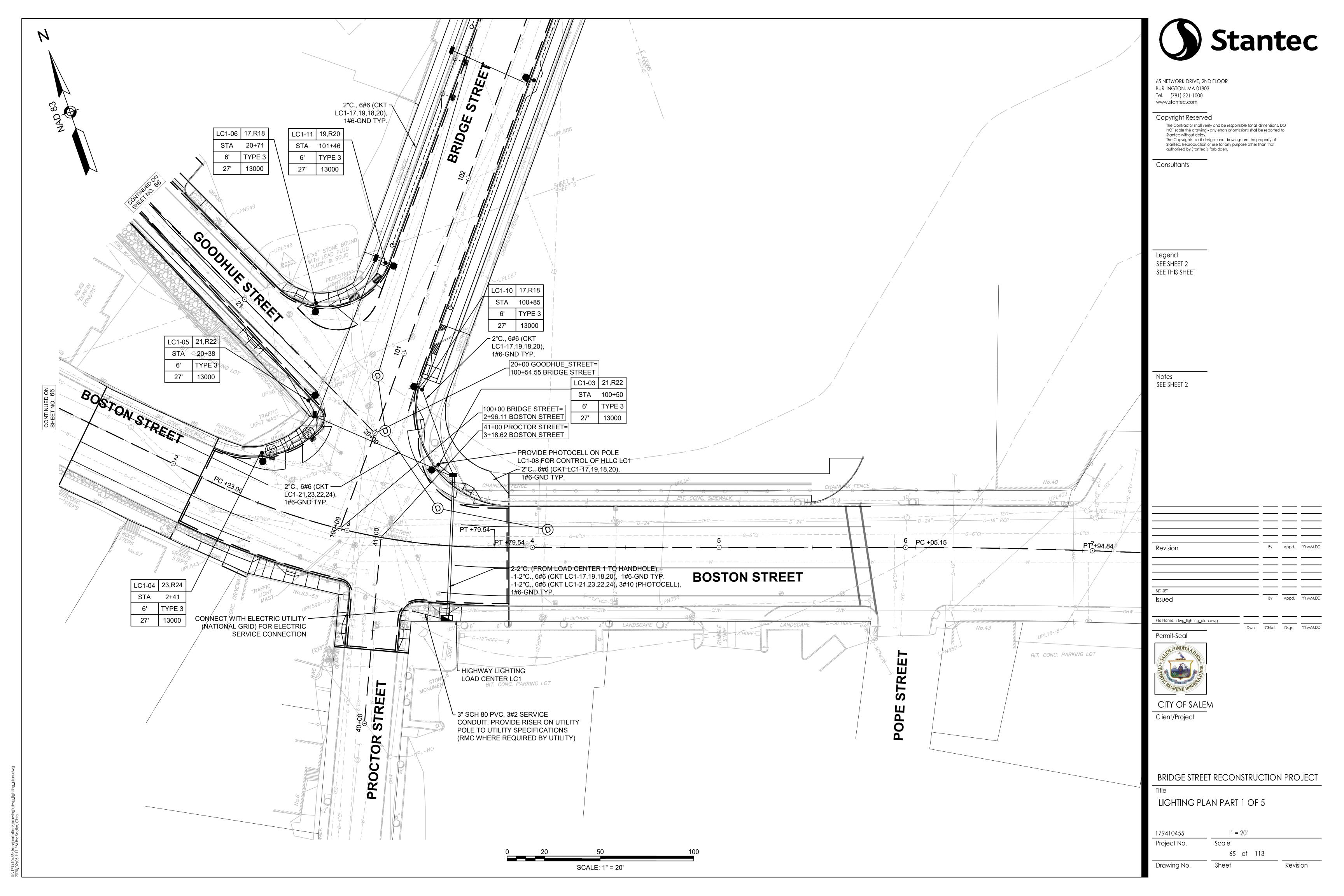
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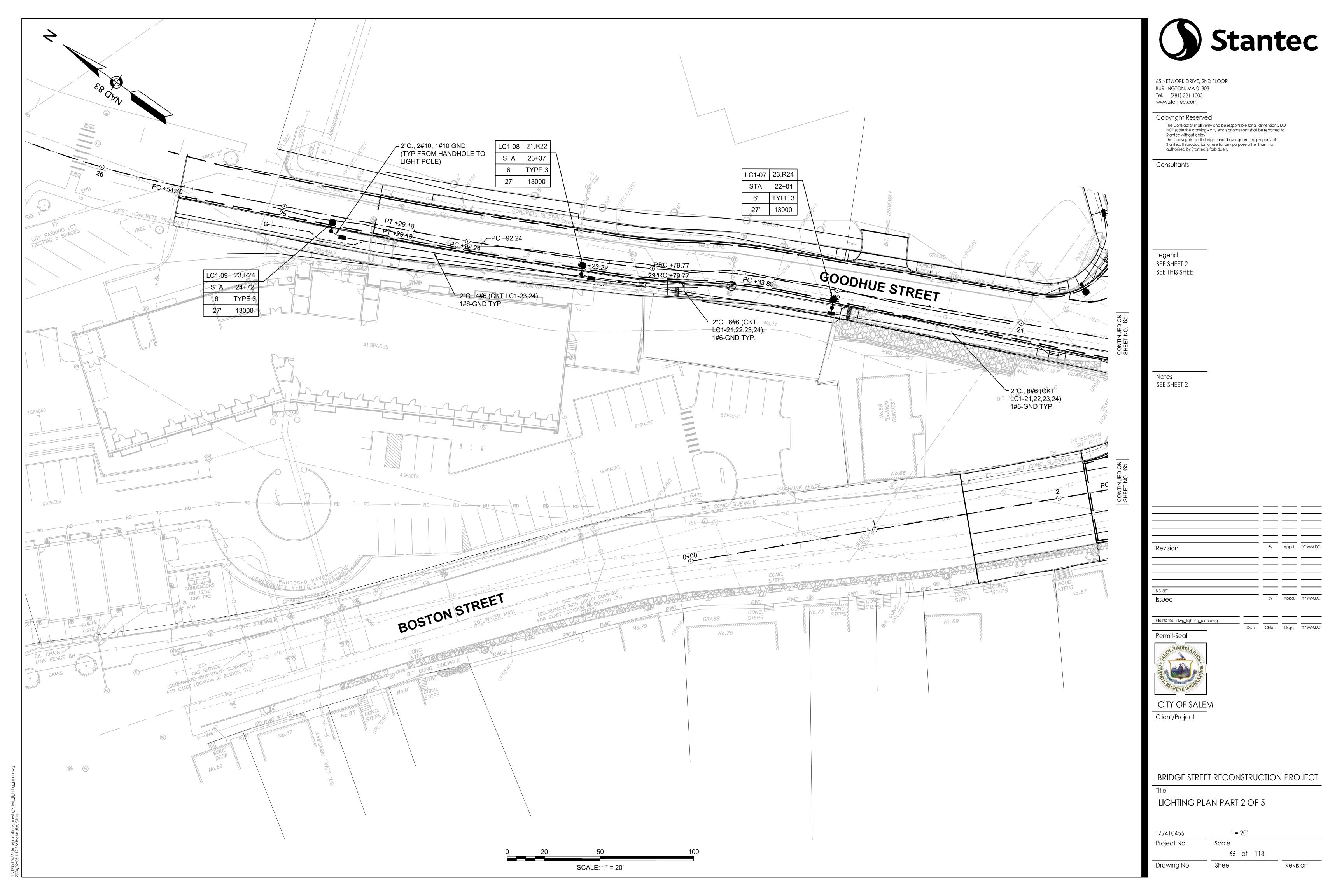
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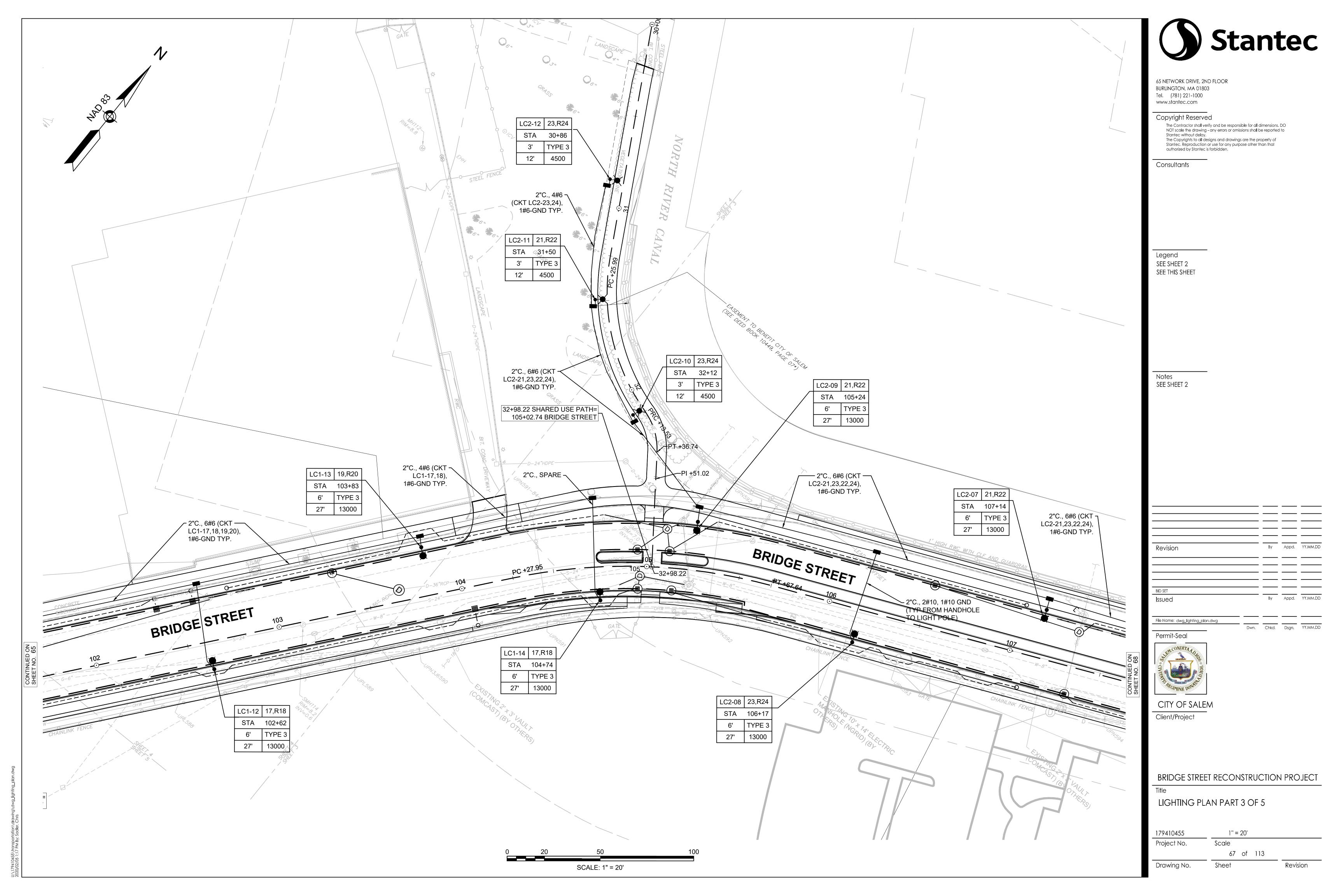
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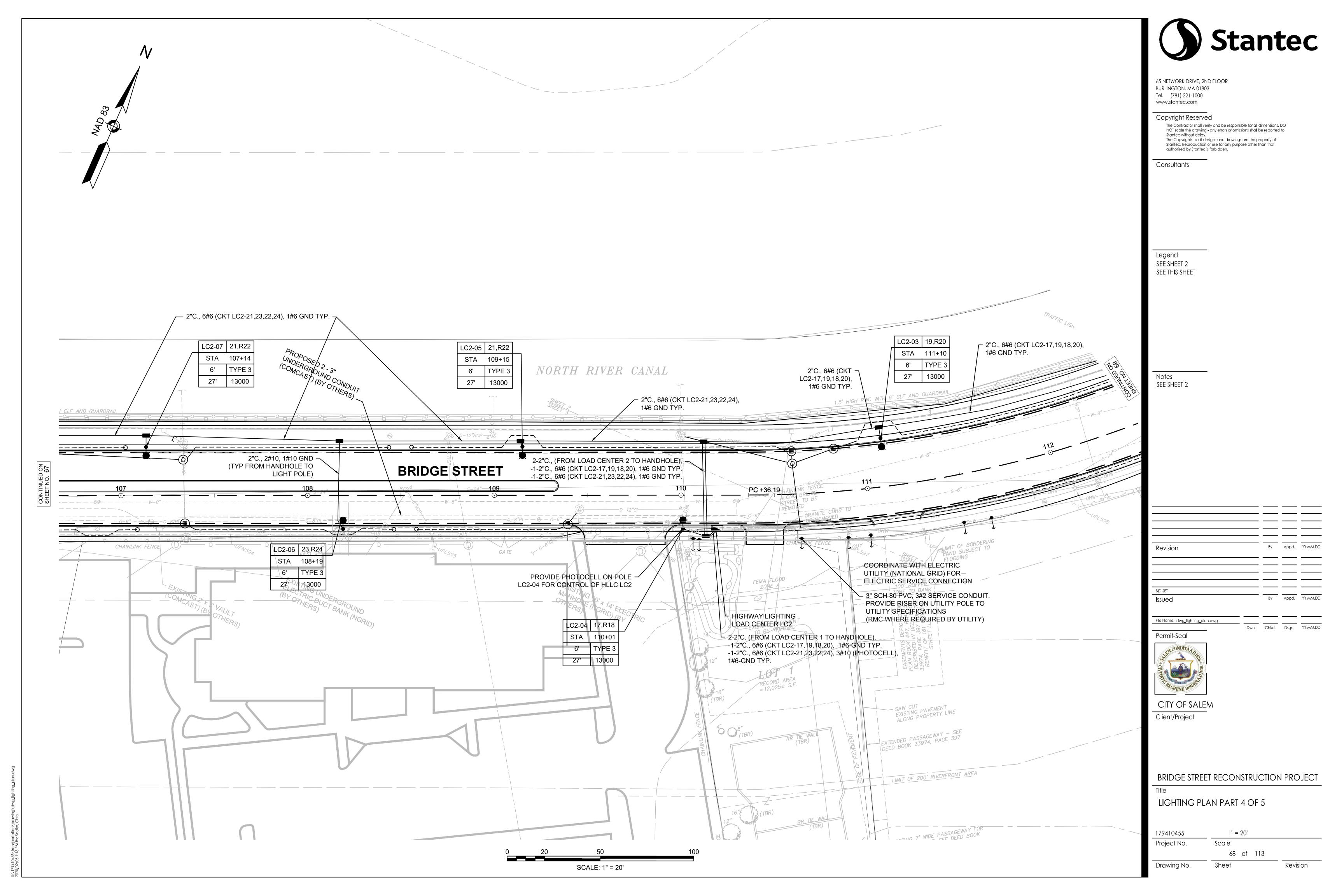
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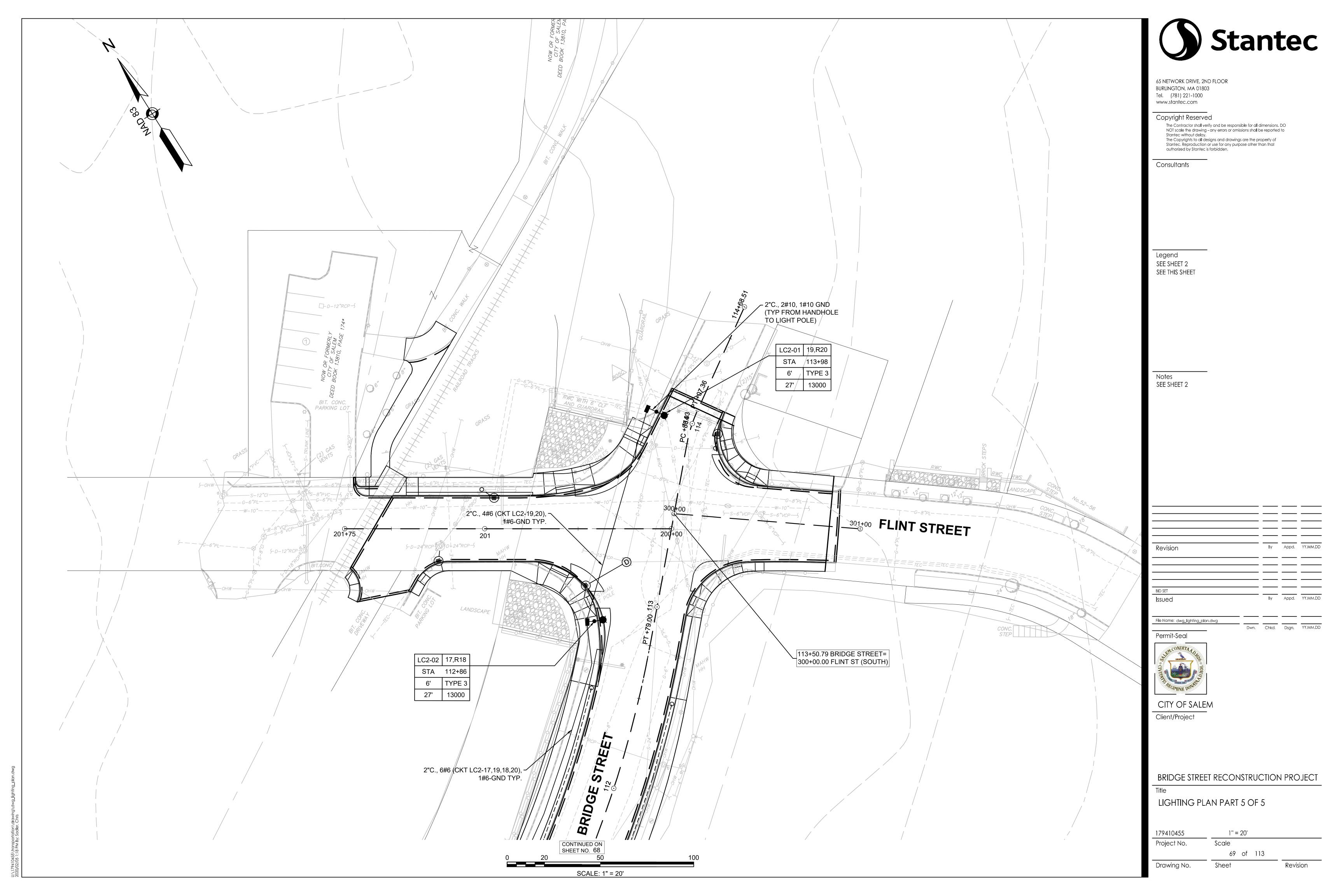
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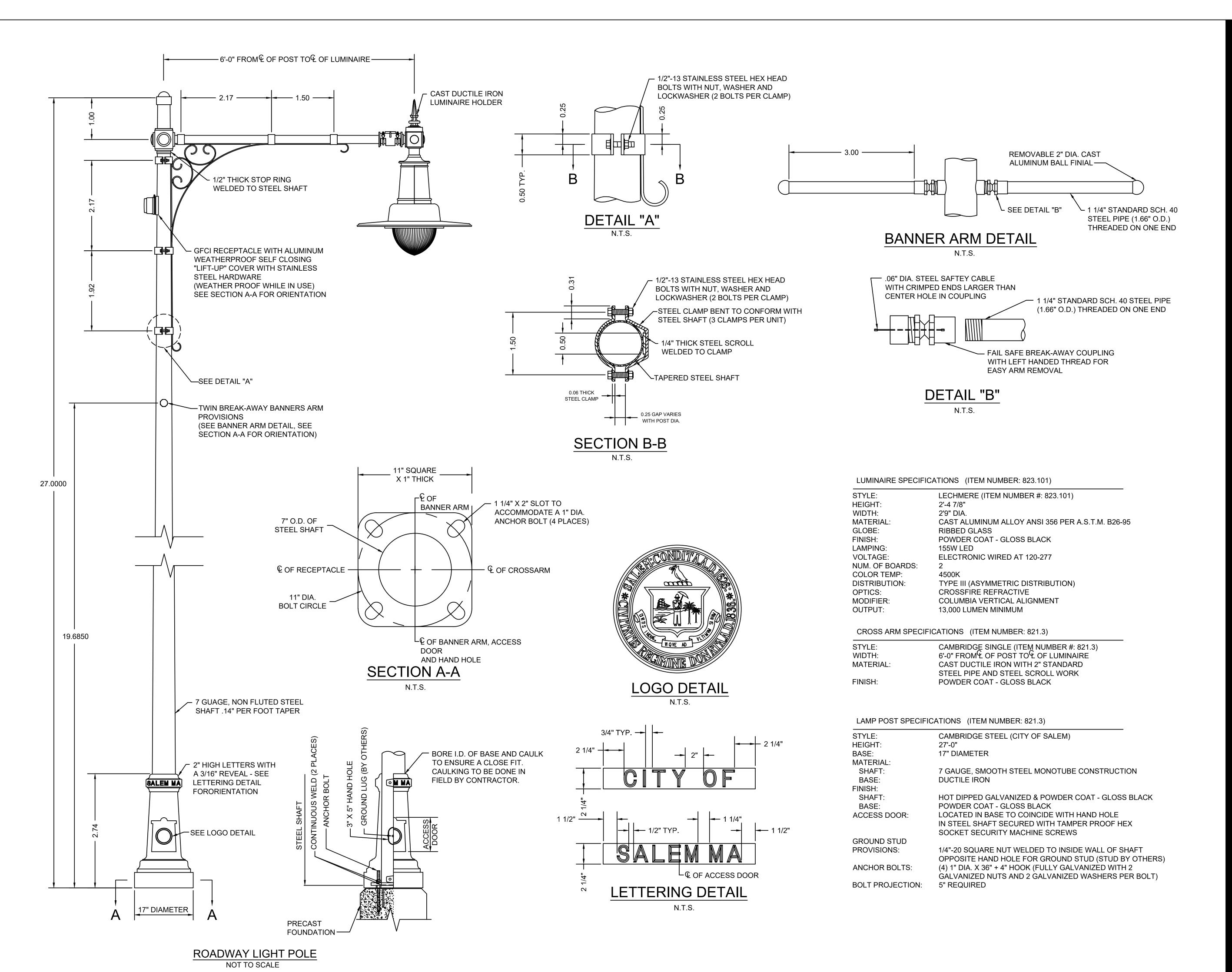












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BRIDGE STREET RECONSTRUCTION PROJECT

Title

LIGHTING DETAILS PART 1 OF 4

179410455 NOT TO SCALE
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TYPICAL TRENCH DETAILS FOR CONDUIT

NOT TO SCALE

PAVEMENT NOTES FOR TRENCH PATCHING:

FOR TRENCH CUTS WITHIN PAVED SURFACES, (MAINLINE AND LOCAL ROADS) WHERE SUCH TRENCH CUTS HAVE A DEPTH OF 4' OR LESS, CONTROLLED DENSITY FILL (CDF) FOR BACKFILL IS MANDATORY. CONTROLLED DENSITY FILL TYPE 2E, (FLOWABLE-EXCAVATABLE)SHALL MEET THE REQUIREMENTS OF SECTION M4.08.0.

@ 3" PITCH 1" DRAINAGE TROUGH INSULATED GROUNDING BUSHING - 2" CHAMFER - FINISHED GRADE 2" RGS — #3 SPIRALS @ 3" PITCH (TYP) -FOR VERTICAL REINFORCEMENT — 3" CL. TOP AND BOTTOM

GROUND ROD

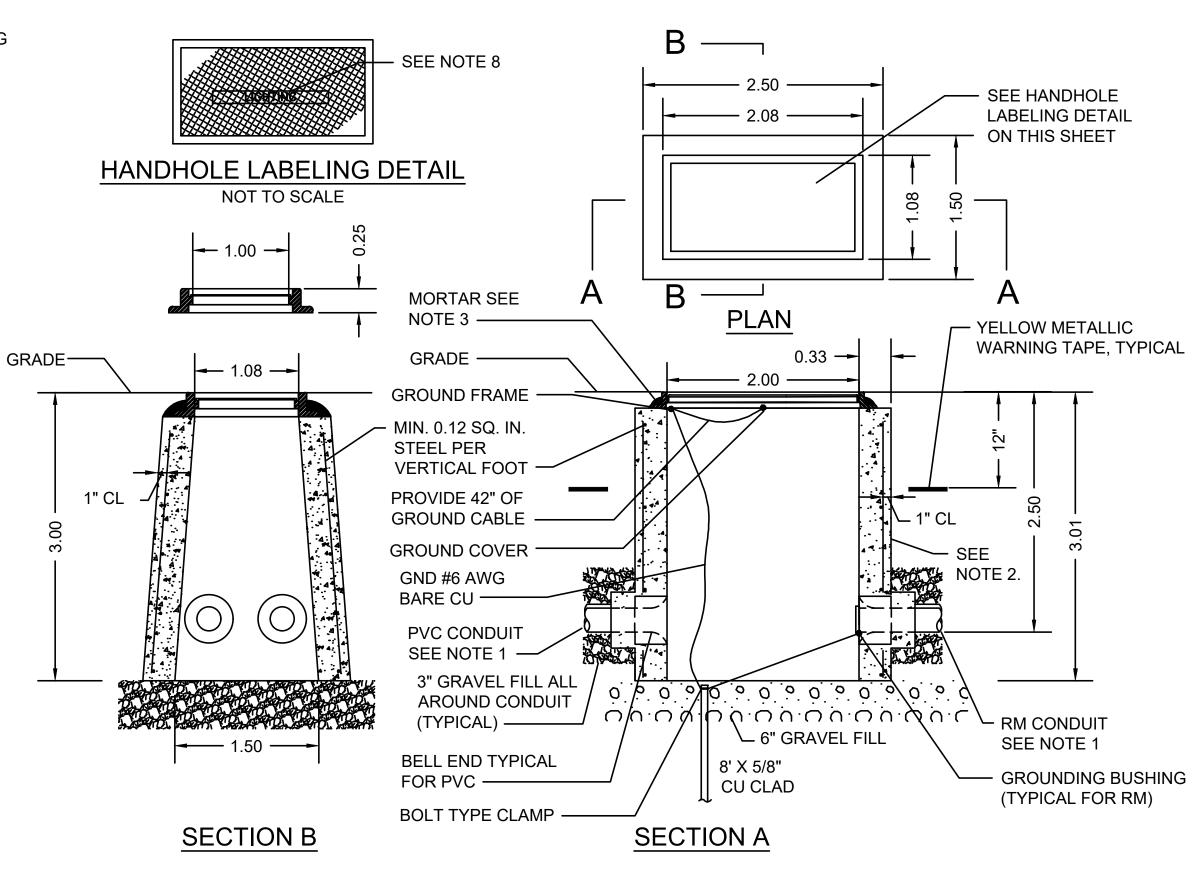
HANDHOLE WIRING DETAIL

NOT TO SCALE

### LIGHT STANDARD FOUNDATION NOTES:

- CEMENT CONCRETE FOR FOUNDATIONS TO BE 4000 PSI, 1.5", 565 CEMENT CONCRETE. REINFORCING STEEL: SEE M4.03.05 OF THE STANDARD SPECIFICATIONS
- 2. A MINIMUM SLOPE OF 1/8" PER FOOT FROM EDGE OF BASE PLATE TO FACE OF CONCRETE.
- THE ANCHOR BOLTS SHALL BE SUPPLIED BY THE LIGHT STANDARD MANUFACTURER. THE MANUFACTURER SHALL ALSO SUPPLY A TEMPLATE FOR SETTING THE BOLTS AND SHALL INDICATE THE NECESSARY PROJECTION.

HIGHWAY LIGHT STANDARD FOUNDATION



PRECAST CONCRETE ELECTRIC HANDHOLE SIZE 24 X 13 X 36 (SD2-022)

## **HANDHOLE NOTES:**

- ALL CONDUIT ENTERING HANDHOLES SHALL EXTEND INTO THE HANDHOLE CAVITY BY AT LEAST 2".
- ALL HANDHOLES SHALL BE PRECAST CONCRETE REINFORCED WITH STEEL, AND SHALL BE FREE OF CRACKS OR OTHER DEFECTS. CONCRETE FOR PRECAST CONCRETE HANDHOLES SHALL BE 5000 PSI, 3/8 IN., 660 CEMENT CONCRETE MASONRY. REINFORCING BARS SHALL CONFORM TO AASHTO DESIGNATION M31 (ASTM DESIGNATION A 615) GRADE 60. AND SHALL BE EPOXY COATED.
- CAST IRON FRAME SHALL BE MORTARED TO THE SURFACE OF THE PRECAST HANDHOLE.
- ALL CONDUIT INSTALLED IN HANDHOLES SHALL BE INSTALLED IN KNOCKOUTS PROVIDED IN THE BOX AND NO EXCESS KNOCKOUTS SHALL BE MADE. THE KNOCKOUTS ARE DESIGNED TO BE MADE PRIOR TO BACKFILLING AROUND THE HANDHOLES. AFTER THE CONDUIT HAS BEEN INSTALLED IN THE HANDHOLE, THE OPEN SPACE BETWEEN THE BOX AND THE CONDUIT WILL BE SEALED WITH CLASS B CEMENT CONCRETE MASONRY. ANY CONDUIT INSTALLED IN SUCH A MANNER AS TO BLOCK COMPLETE ACCESS TO ANY OTHER CONDUIT SHALL BE REMOVED AND RESET
- FOR THE EXACT NUMBER, SIZE, AND ORIENTATION OF THE CONDUITS ENTERING THE HANDHOLE, SEE PLAN SHEETS.
- CAST IRON HANDHOLE COVERS AND FRAMES SHALL BE PRODUCED BY THE SAME MANUFACTURER AND IN ACCORDANCE WITH MASSDOT SPECIFICATIONS.
- METAL HANDHOLE COVER AND FRAME ARE TO BE BONDED (GROUNDED). DRILL AND TAP FRAME FOR MECHANICAL GROUND LUG CONNECTION. INSTALL A SERVIT POST GROUNDING CONNECTOR SUITABLE TO ACCOMMODATE ONE BARE #6 CONDUCTOR. EXTEND #6 GROUND CONDUCTOR THROUGH FRAME LUG TO BOND COVER. PROVIDE 42" OF SLACK FROM FRAME LUG TO BOND COVER. EXOTHERMICALLY WELD GROUND CONDUCTOR TO COVER.
- FUNCTION DESIGNATION ON THE HANDHOLE SHALL BE LABELED AS FOLLOWS PER NEC ARTICLE 314.30D:

"LIGHTING" FOR LIGHTING CONDUIT



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BRIDGE STREET RECONSTRUCTION PROJECT

LIGHTING DETAILS PART 2 OF 4

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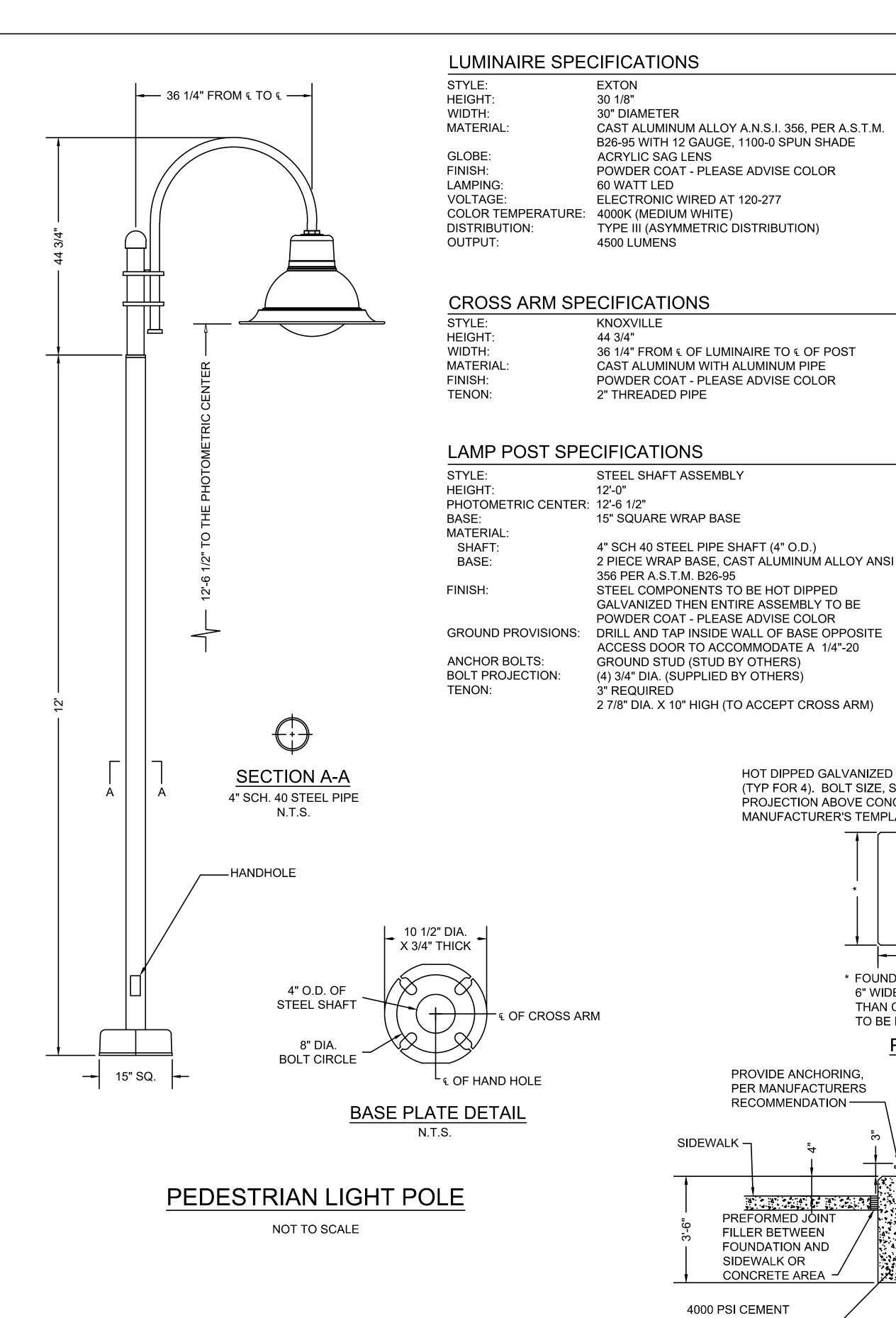
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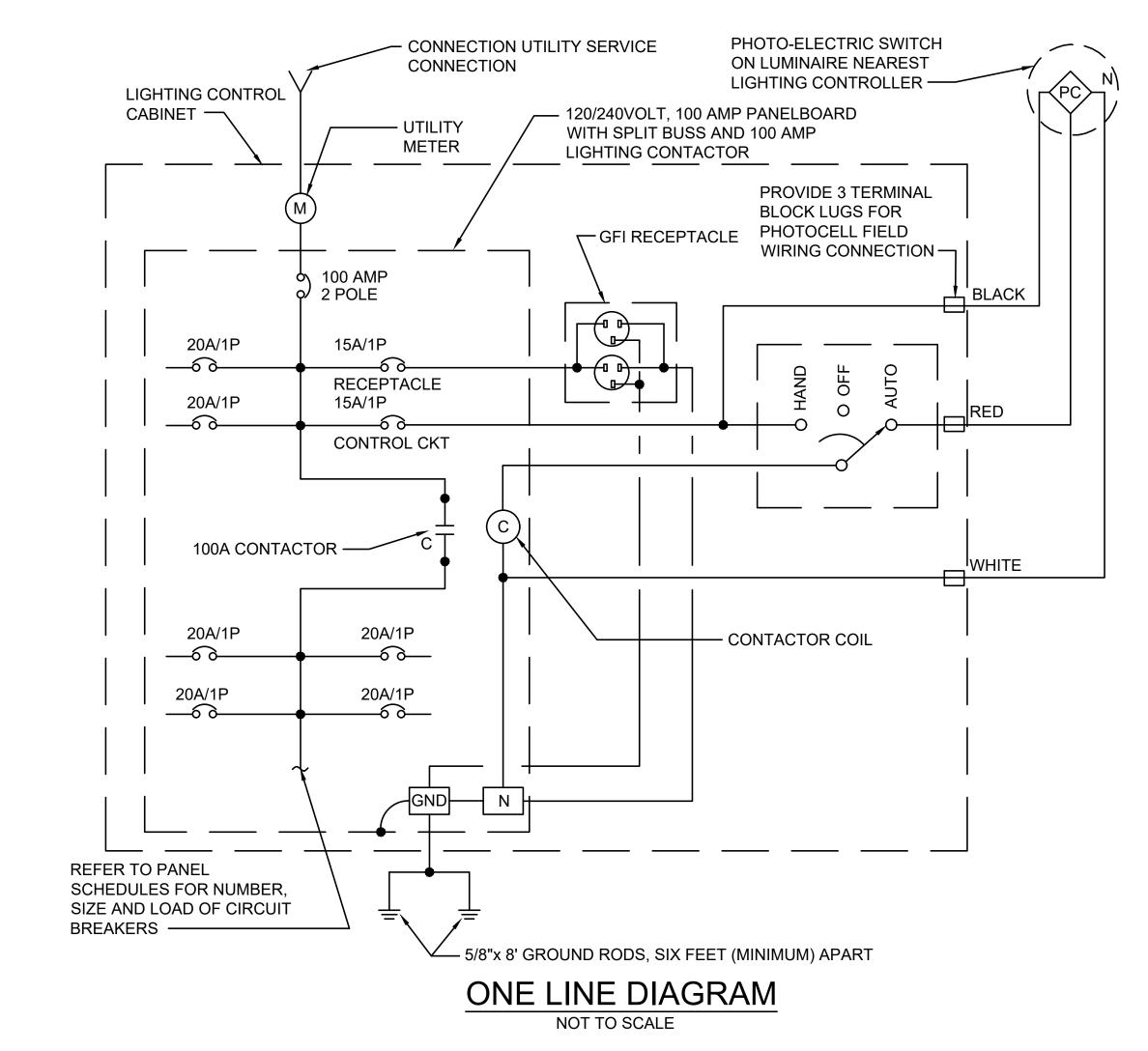
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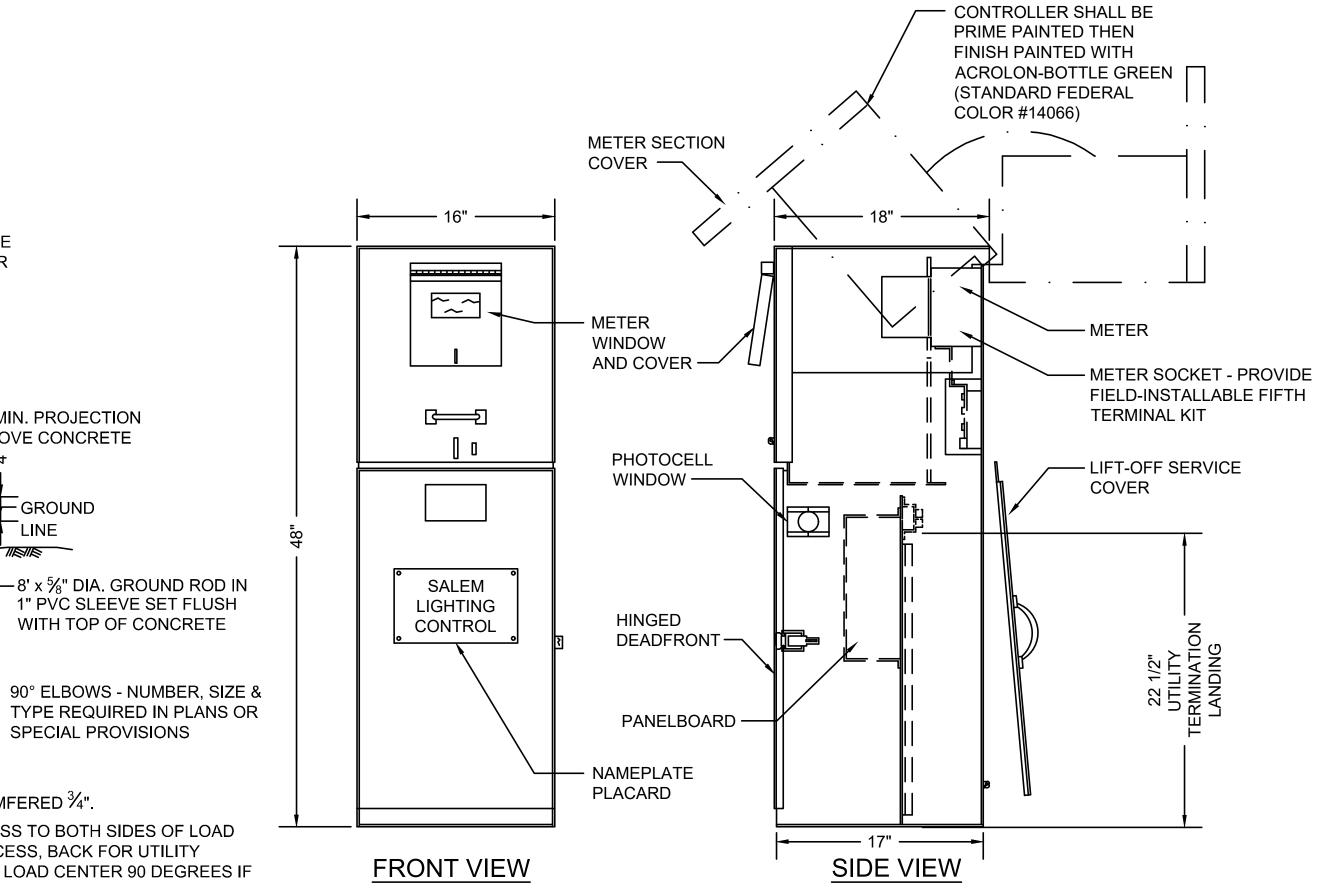
Revision

NOT TO SCALE

NOT TO SCALE







## **SECTION** NOTES:

ALL EXPOSED EDGES SHALL BE CHAMFERED  $\frac{3}{4}$ ".

HOT DIPPED GALVANIZED ANCHOR BOLT

**-** 80

\* FOUNDATION SHALL BE

THAN CABINET BASE

TO BE INSTALLED

**PLAN** 

. 1" MIN. PROJECTION

ABOVE CONCRETE

- GROUND

-8' x 5/8" DIA. GROUND ROD IN

1" PVC SLEEVE SET FLUSH

WITH TOP OF CONCRETE

SPECIAL PROVISIONS

6" WIDER AND LONGER

(TYP FOR 4). BOLT SIZE, SPACING AND

PROJECTION ABOVE CONCRETE PER

MANUFACTURER'S TEMPLATE -

PROVIDE ANCHORING

PER MANUFACTURERS

RECOMMENDATION —

PREFORMED JÖINT

FILLER BETWEEN

FOUNDATION AND

SIDEWALK OR CONCRETE AREA

4000 PSI CEMENT

CONCRETE-

SIDEWALK -

- CONTRACTOR SHALL MAINTAIN ACCESS TO BOTH SIDES OF LOAD CENTER. FRONT FOR CUSTOMER ACCESS, BACK FOR UTILITY ACCESS. CONTRACTOR MAY ROTATE LOAD CENTER 90 DEGREES IF NECESSARY TO MAINTAIN ACCESS.
- CONTRACTOR MUST MAINTAIN SIDEWALK CLEARANCE OF 3' MINIMUM AROUND CONCRETE FOUNDATION

# CONCRETE FOUNDATION FOR LIGHTING CONTROL CABINET

NOT TO SCALE

PROVIDE MILBANK CP3B51110A22SL1 MODIFIED WITH 100 AMP CONTACTOR, PHOTOCELL TERMINALS, FIFTH TERMINAL KIT FOR USE WITH RINGLESS METER SOCKETS (COORDINATE WITH ELECTRIC UTILITY FOR METER SOCKET REQUIREMENTS), MOUNTING BASE, ANCHOR BOLT KIT, GFCI RECEPTACLE, AND INTERNAL LIGHT FIXTURE OR EQUIVALENT BY MYERS POWER PRODUCTS. OR VIT STRONG BOX.

LIGHTING CONTROL CABINET DETAIL

NOT TO SCALE



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BRIDGE STREET RECONSTRUCTION PROJECT

LIGHTING DETAILS PART 3 OF 4

179410455 NOT TO SCALE Scale Project No.

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# PANELBOARD LC1-UNSWITCHED

UNSWITCHED LOADS ONLY

SHORT CIRCUIT BRACING: 10-KAIC CABINET: SURFACE

MAIN LUGS ONLY: 100A FEEDER SIZE: 3#2, 1#2-GND GROUND BAR

BUS: 120/240V, 1PH, 3W, 60HZ

BUS: 120/240V, 1PH, 3W, 60HZ

MAIN LUGS ONLY: 100A

PANEL LOCATION: GROVE ST STA 104+71 LT

	,					GIVOUND BAI						
LC	DAD SERVED	HP	<b>8</b> 4	VA B	CKT NO.	AB		CKT. NO.	<b>\$</b> 4	VA B	HP	LOAD SERVED
MAIN			ı		1	100A		2	50			CONTROL CKT
MAIN				-	3	100A		4		180		GFI RECEPTACLE
SPARE			ı		5	-6+60	<u>A00</u>	6	1			SWITCHED LOAD CENTER (BELOW)
SPARE				-	7		<u>A00</u>	8		-		SWITCHED LOAD CENTER (BELOW)
SPARE			ı		9	<u> </u>		10	ı			SPARE
SPACE				ı	11	]		12		-		SPACE
SPACE			ı		13			14	-			SPACE
SPACE				-	15			16		-		SPACE

# PANELBOARD LC1-SWITCHED

SWITCHED LOADS ONLY

### GROUND BAR

LOAD SERVED	HP	VA A	VA B	CKT NO.	NEUTRAL A B	CKT. NO.	VA A	VA B	HP	LOAD SERVED
LUMINIARES - LIGHT POLES 02,10,12,14		620		17	<u></u>		720			RECEPTACLES - LIGHT POLES 02,10,12,14
LUMINIARES - LIGHT POLES 01,11,13			465	19	<del></del>		RECEPTACLES - LIGHT POLES 01,11,13			
LUMINIARES - LIGHT POLES 03, 05, 08		465		21		22	540			RECEPTACLES - LIGHT POLE 03, 05, 08
LUMINAIRES - LIGHT POLES 04, 06, 07, 09			620	23	24			720		RECEPTACLES - LIGHT POLES 04, 06, 07, 09
SPARE		-		25	<u></u>	26	-			SPARE
SPACE			-	27	<u> </u>	28		-		SPACE
SPACE		-		29	<u> </u>	30	_			SPACE
SPACE			-	31		32		-		SPACE
VA A: 2395 VA B: 2525 TOTAL CONNECTED LOAD: 4920 VA							ALL B	RANCI	H C/B:	20 AMP TRIP UNLESS OTHERWISE NOTED

# PANELBOARD LC2-UNSWITCHED

UNSWITCHED LOADS ONLY

SHORT CIRCUIT BRACING: 10-KAIC

CABINET: SURFACE

PANEL LOCATION: GROVE ST STA 110+25 RT

FEEDER SIZE: 3#2, 1#2-GND				GROUNE	GROUND BAR					NEL LOCATION: GROVE ST STATTU+25 RT	
LOAD SERVED	A   B   NO.		INLOTI	CKT. NO.	VA A	VA B	HP	LOAD SERVED			
MAIN		-		1	100A		2	50			CONTROL CKT
MAIN			-	3	100A	<del>60</del>	4		180		GFI RECEPTACLE
SPARE		-		5		6100A	6	-			SWITCHED LOAD CENTER (BELOW)
SPARE			_	7		-60 <u>100A</u>	8		-		SWITCHED LOAD CENTER (BELOW)
SPARE		-		9		<del></del>	10	-			SPARE
SPACE			-	11	]	<u> </u>	12		-		SPACE
SPACE		-		13	] <b>-</b>		14				SPACE
SPACE			-	15	<u> </u>		16		-		SPACE

# PANELBOARD LC2-SWITCHED

SWITCHED LOADS ONLY

## GROUND BAR

LOAD SERVED	HP	VA A	VA B	CKT NO.			VA A	VA B	HP	LOAD SERVED
LUMINIARES - LIGHT POLES 02, 04		310		17	]—————————————————————————————————————	18	360			RECEPTACLES - LIGHT POLES 02, 04
LUMINIARES - LIGHT POLES 01, 03			310	19	]	20		360		RECEPTACLES - LIGHT POLES 01, 03
LUMINIARES - LIGHT POLES 05, 07, 09, 11,		525		21	]——fio——	22	720			RECEPTACLES - LIGHT POLES 05, 07, 09, 11,
LUMINIARES - LIGHT POLES 06, 08, 10, 12			430	23	]	24		720		RECEPTACLES - LIGHT POLES 06, 08, 10, 12
SPARE		-		25	]	26	-			SPARE
SPACE			_	27	<u> </u>	28		-		SPACE
SPACE		-		29	<del></del>	30	-			SPACE
SPACE			_	31		32		-		SPACE
VA A: 1915 VA B: 1820 TOTAL CONNECTED LOAD: 3735 VA							ALL B	RANCH	H C/B:	20 AMP TRIP UNLESS OTHERWISE NOTED



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Revision			Appd.	YY.MM.DD
		<u></u>		
BID SET			Appd.	YY.MM.DD
Issued  File Name: dwg_lighting_details.dwg				
	Dwn	Chkd	Dsan	YY.MM.DD



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LIGHTING DETAILS PART 4 OF 4

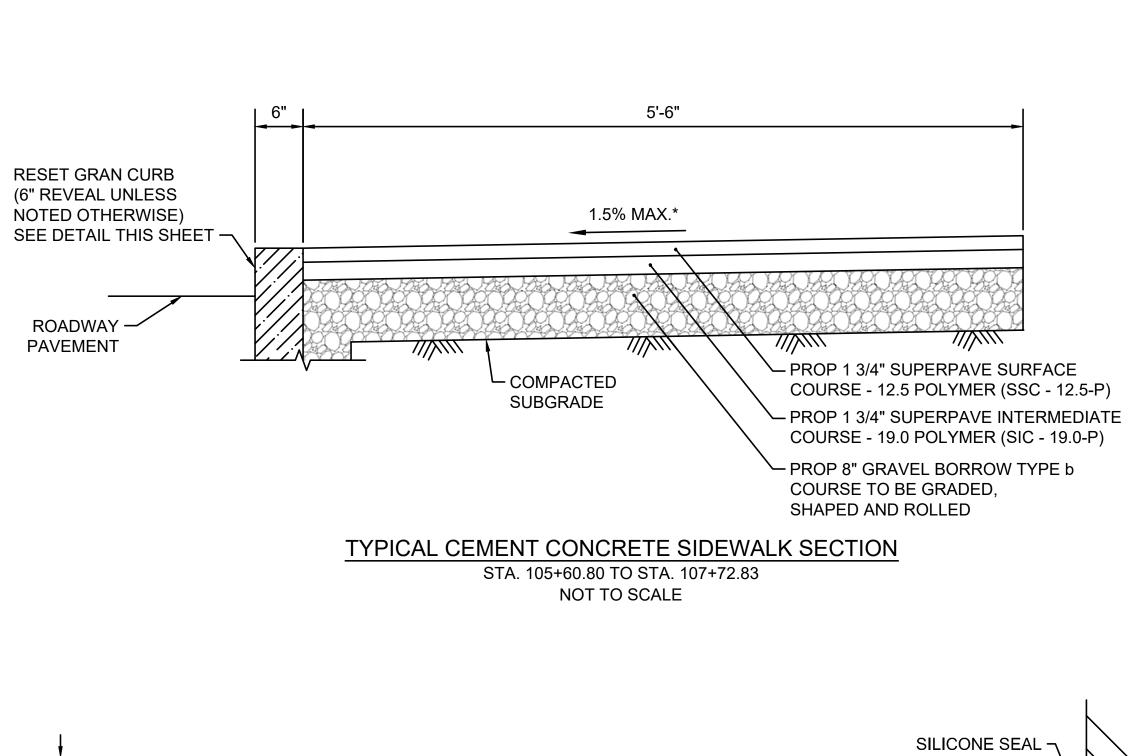
179410455

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Revision

Drawing No.

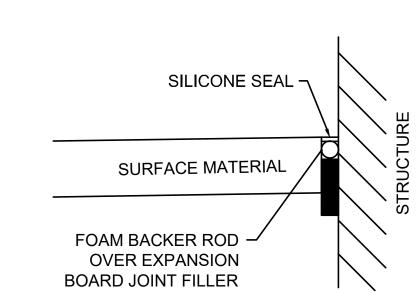


4' (MIN.)

CROSSWALK, STOP LINE, AND BICYCLE DETECTOR DETAIL

PROP ·

HMA (TYP)



### NOTES:

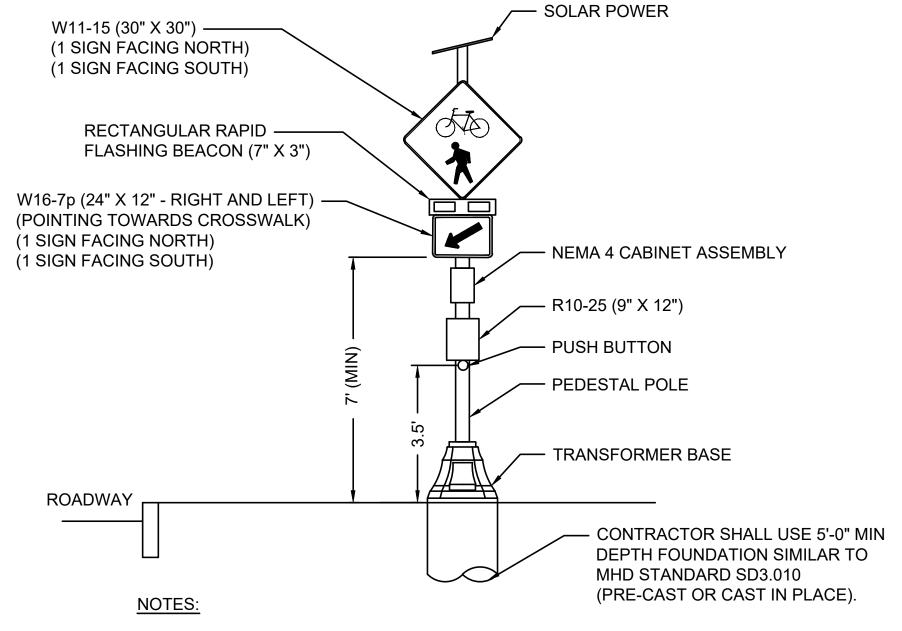
NOT TO SCALE

┌ GRAN

CURB

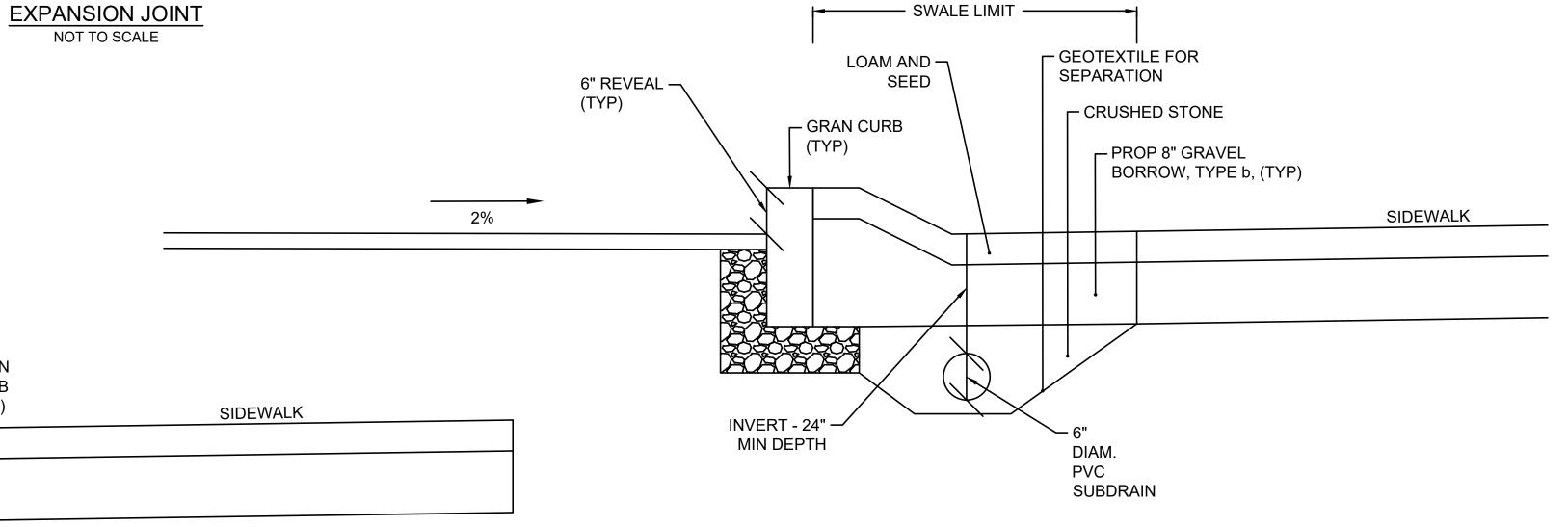
(TYP)

- THIS DETAIL SHALL BE USED ANYWHERE A PROPOSED CEM CONC OR HMA SURFACE ABUTS THE EDGE OF A STRUCTURE.
- WORK OF INSTALLING EXPANSION JOINT AND SILICONE CAULKING IS INCIDENTAL TO THE PROPOSED CONCRETE AND HMA WORK FOR ALL LOCATIONS.
- 3. SILICONE SEALER SHALL MEET ASTM D5893 STANDARD.



- THE BEACONS SHALL PROVIDE FLASHING OPERATION UPON PEDESTRIAN ACTUATION.
- 2. CONTROLLER SHALL BE POLE MOUNTED AND WIRELESS COMMUNICATION BETWEEN EACH FLASHING BEACON.
- 3. POWER SOURCE SHALL BE SOLAR POWER WITH BATTERY BACKUP
- 4. UPON ACTUATION, THE FLASHER SHALL FLASH FOR A DURATION OF 15 SECONDS.
- 5. THE CONTRACTOR SHALL DESIGN FOUNDATION.
- THE BEACON SHALL HAVE PEDESTRIAN CONFIMATION LIGHTS.

RECTANGULAR RAPID FLASHING BEACON AT STA 105+10 NOT TO SCALE



**SIDEWALK** 

NOT TO SCALE



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Drawing No.

CONSTRUCTION DETAILS PART 1 OF 4

179410455 NOT TO SCALE Project No.

Scale 74 of 113

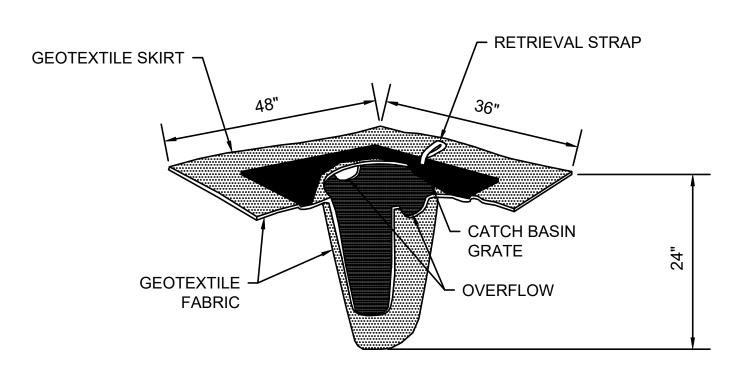
> Sheet Revision

**DECORATIVE SURFACE DETAIL** 

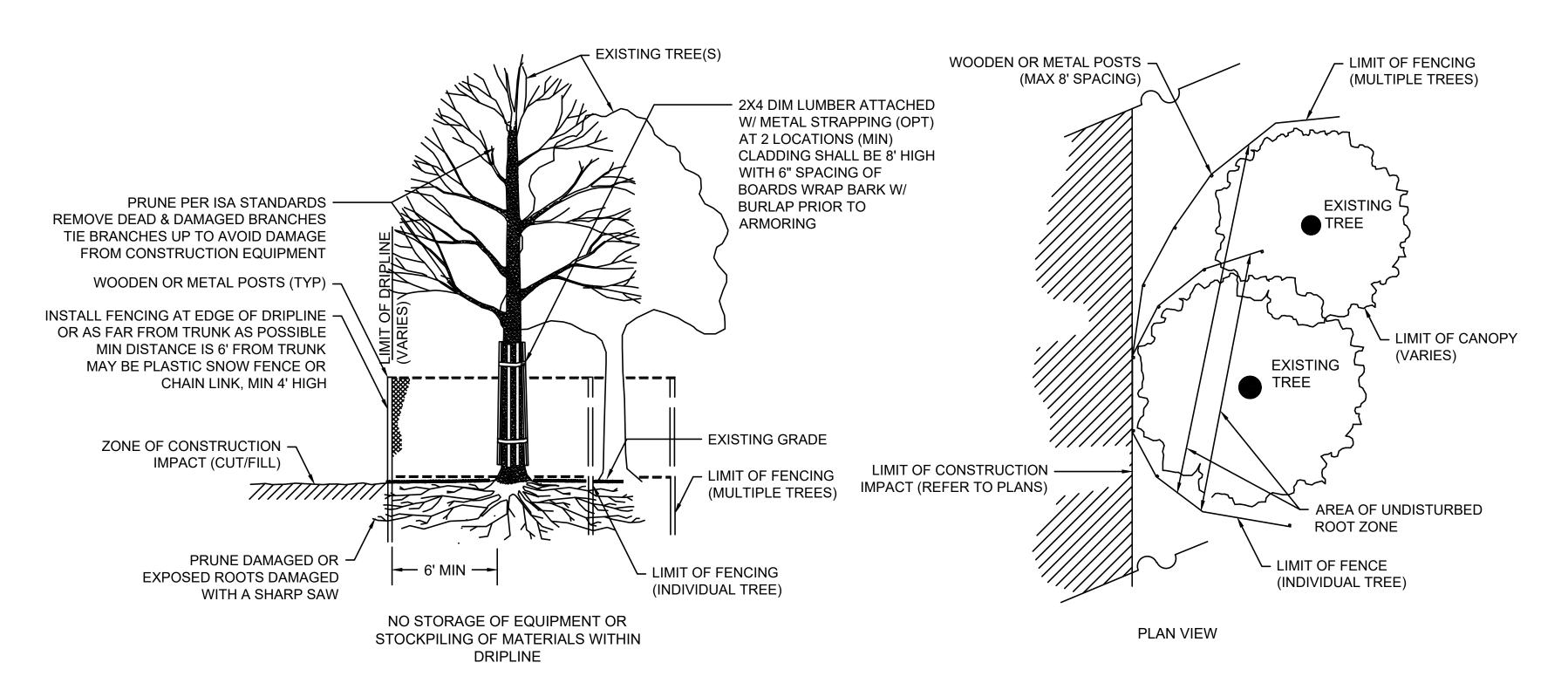
☐ DECORATIVE

SURFACE

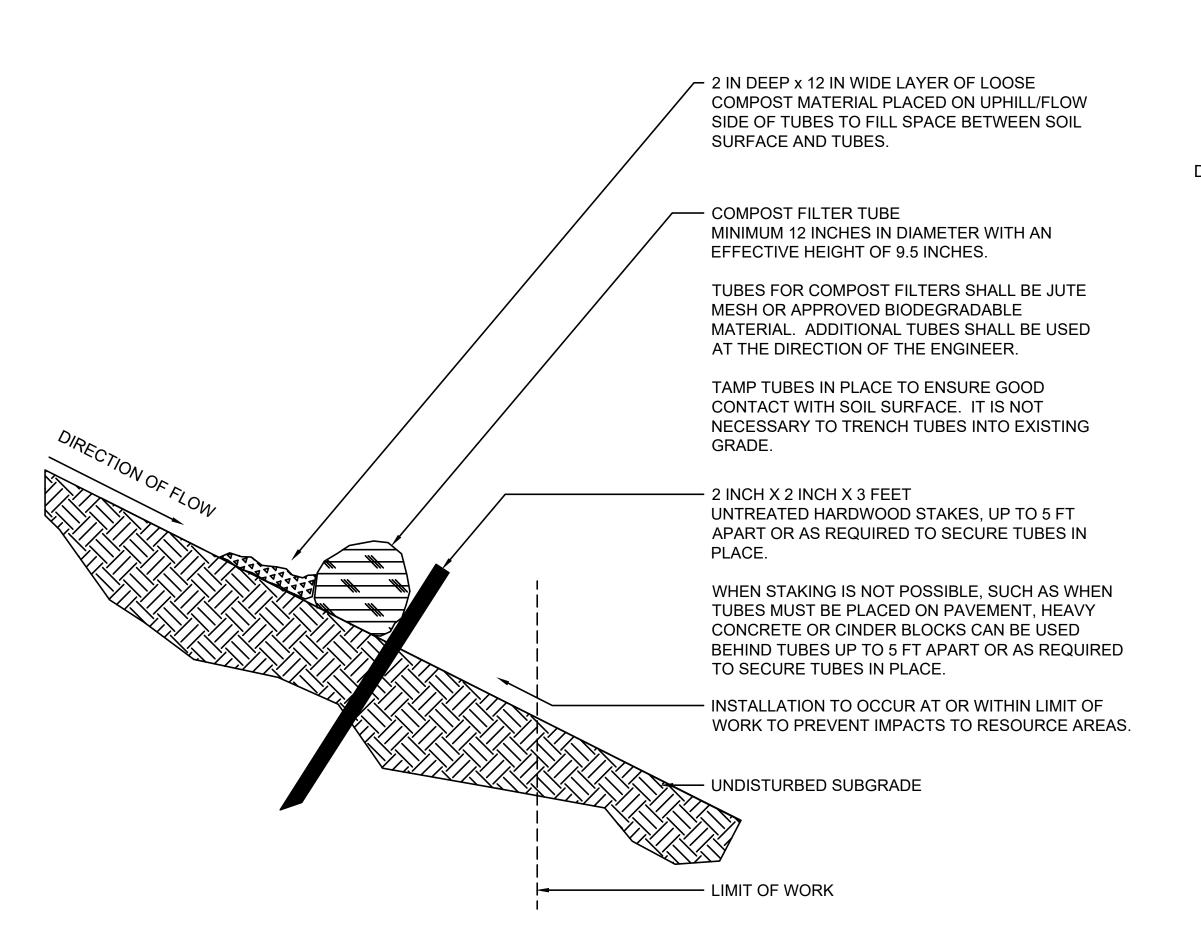
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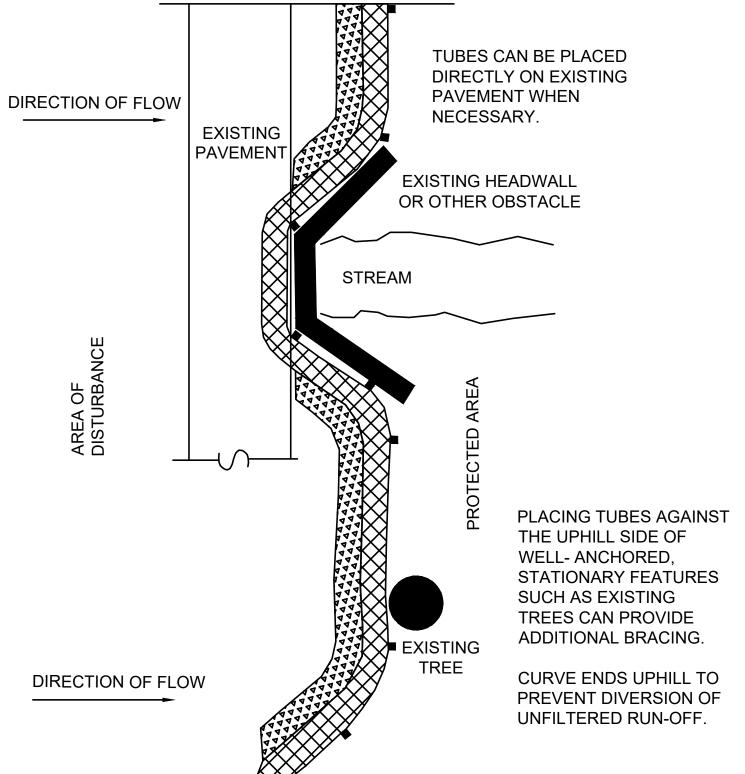


CATCH BASIN INSERT FOR SEDIMENT CONTROL (SILT SACK) NOT TO SCALE



TREE PROTECTION - EXISTING TREE(S) NOT TO SCALE

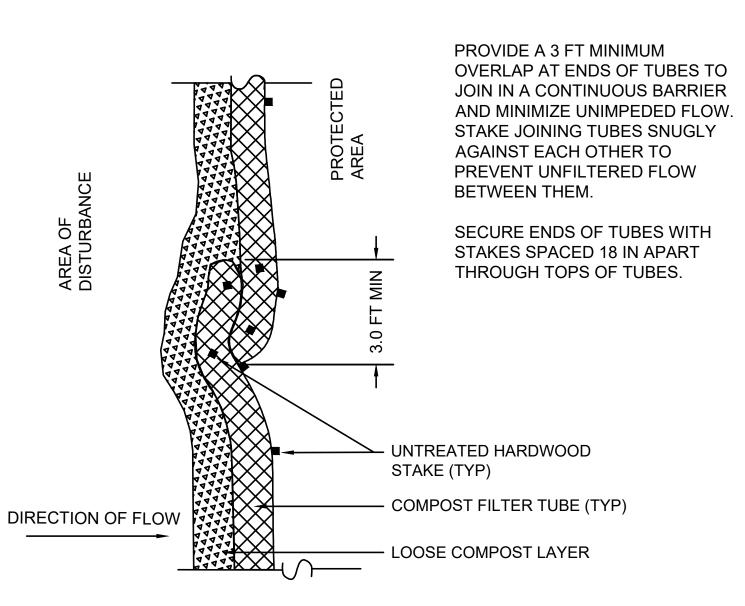




PLAN VIEW

### NOTES:

- PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
- 2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
- 3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
- 4. CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.



PLAN VIEW - JOIN DETAIL



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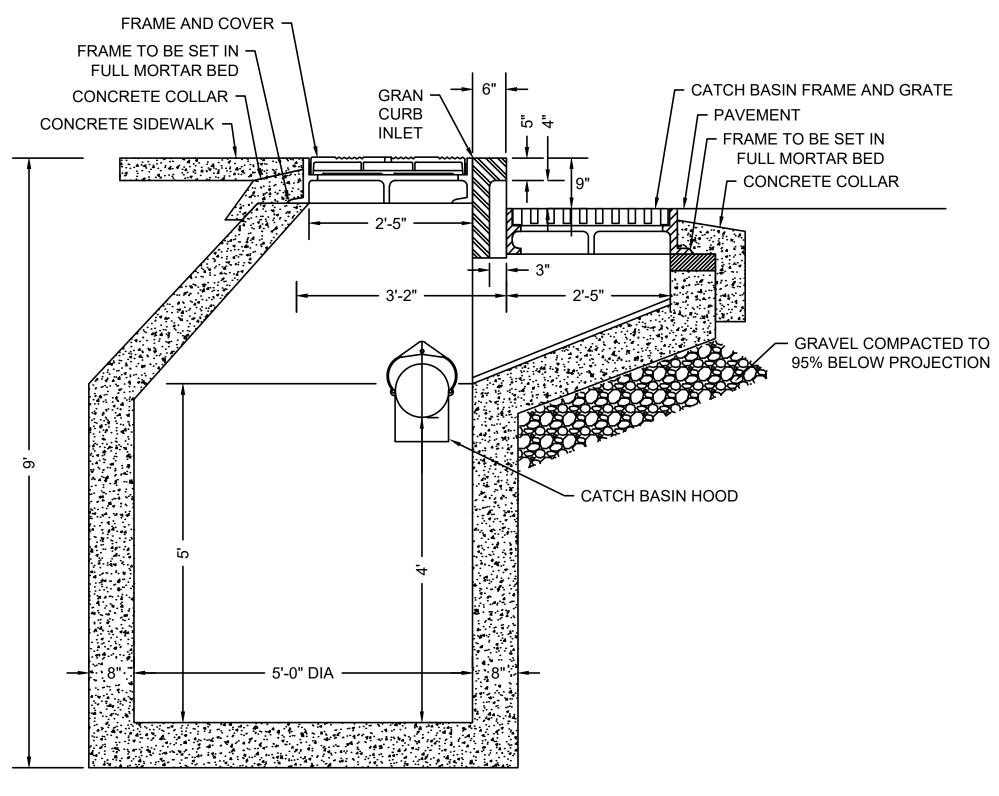
CONSTRUCTION DETAILS PART 2 OF 4

179410455 NOT TO SCALE Scale Project No.

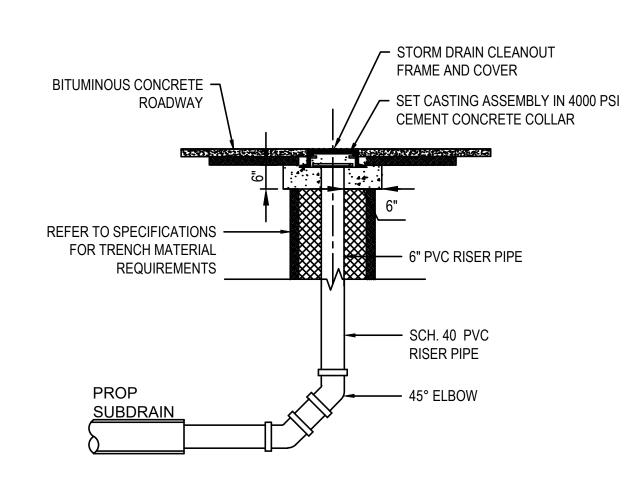
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Sheet

Drawing No.



2'-10" 2'-0" · > 7 PRECAST CONCRETE ✓ 15" DIAM. DROP **UP OPENING** PLAN VIEW

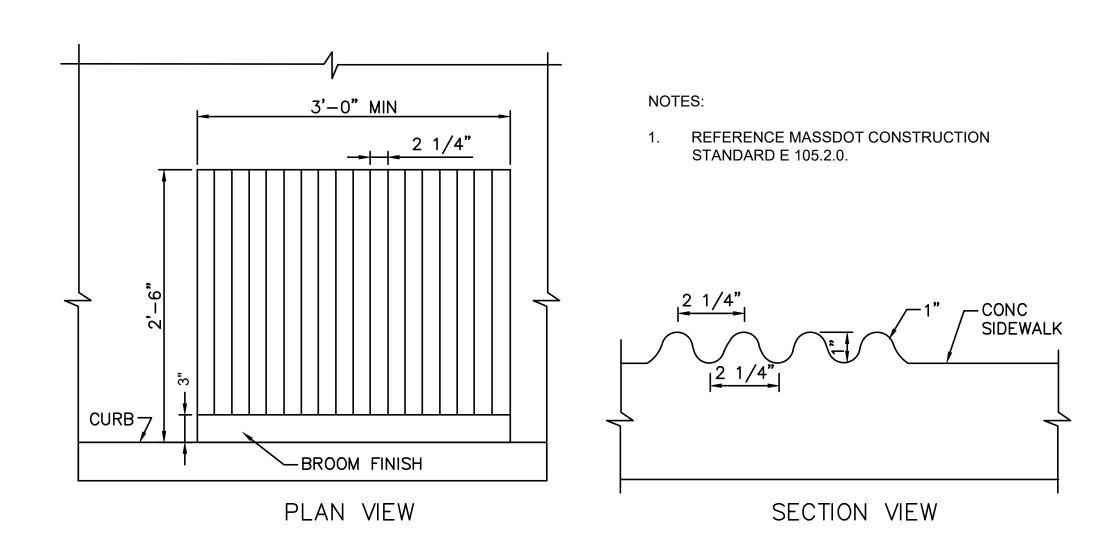


NOTE: ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.

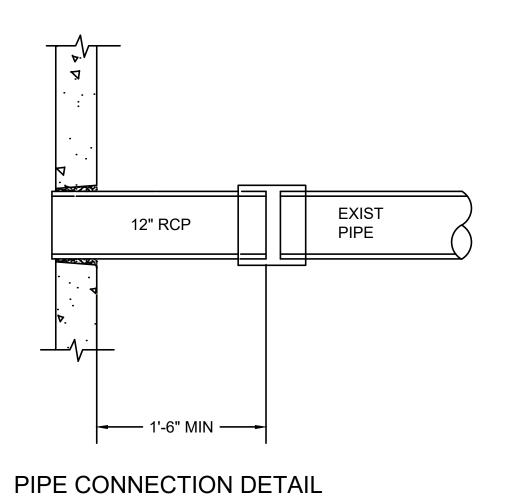
### SPECIAL MANHOLE - GUTTER INLET / MANHOLE STRUCTURE NOT TO SCALE

### **GUTTER INLET - SPECIAL (PRECAST)** NOT TO SCALE

### SUBDRAIN CLEANOUT DETAIL NOT TO SCALE







NOT TO SCALE

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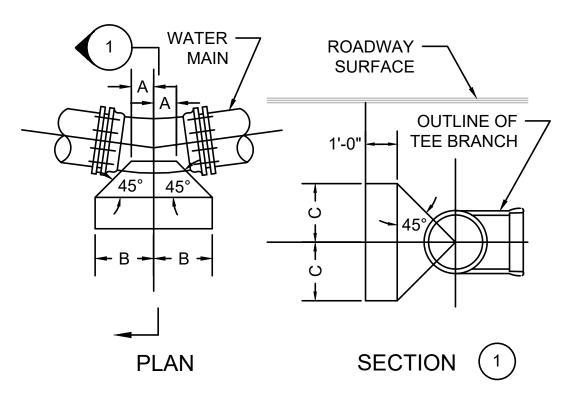
CONSTRUCTION DETAILS PART 3 OF 4

179410455 NOT TO SCALE Project No.

Drawing No.

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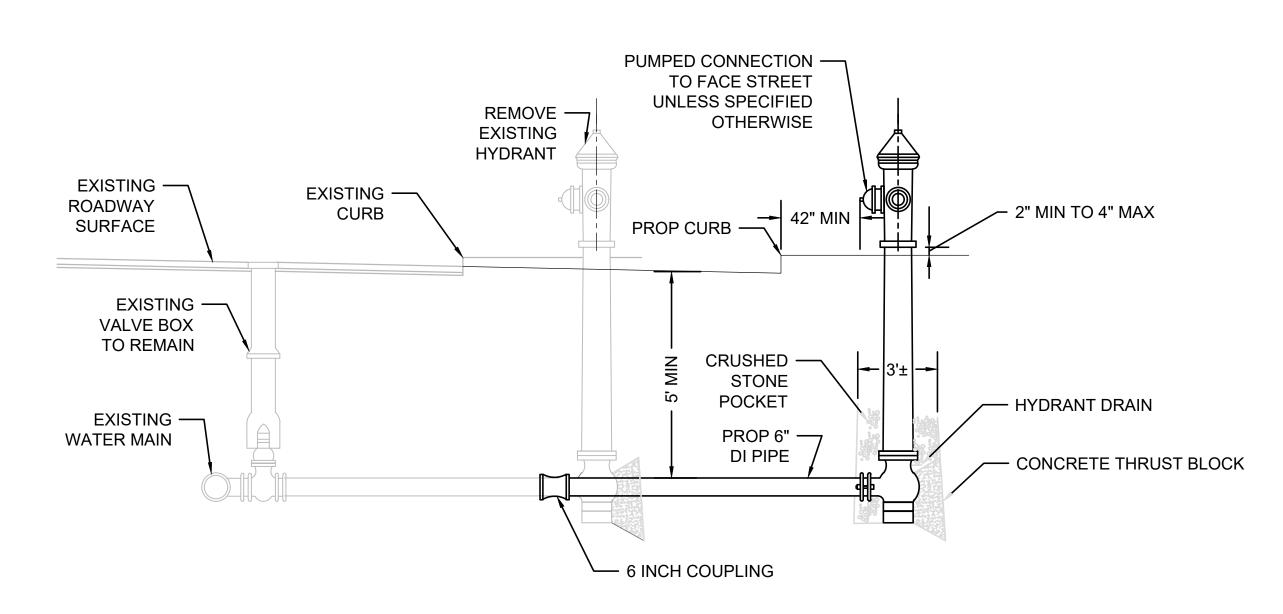
> Sheet Revision



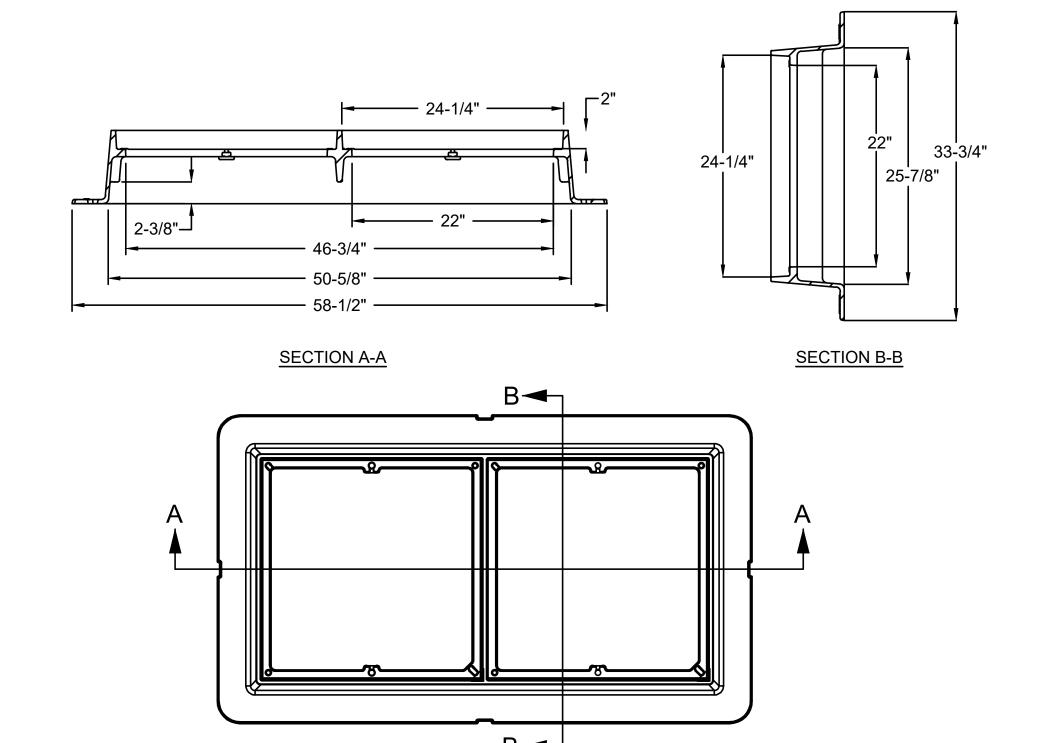
HORIZONTAL THRUST BLOCK SCHEDULE TABLE OF DIMENSIONS IN INCHES											
	<u>A</u>	<u>B</u>	<u>C</u>								
6" BEND											
1/32, 1/16	6	10	10								
1/8	6	14	14								
1/4	9	19	19								
10" BEND											
1/32, 1/16	6	14	14								
1/8	6	20	20								
1/4	9	27	27								
12" BEND											
1/32, 1/16	6	13	13								
1/8	6	18	18								
1/4	9	26	26								
20" BEND											
1/32, 1/16	12	22	22								
1/8	12	32	32								
1/4	12	42	42								
PLUG, TEE (BRANCH)											
6"	6	15	15								
8"	9	16	16								
12"	9	23	23								
16"	12	30	27								
20"	12	36	36								

### NOTES:

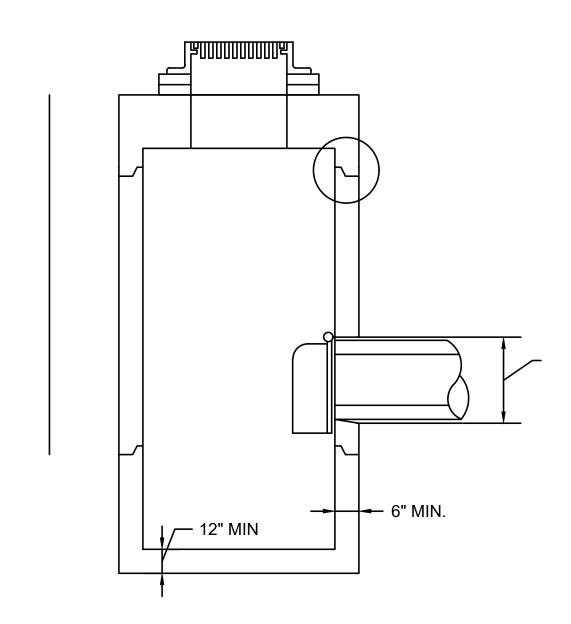
- REFER TO SPECIFICATIONS FOR MATERIAL REQUIREMENTS 2. SUBJECT TO FIELD MODIFICATION BY ENGINEER
  - THRUST BLOCK DETAIL NOT TO SCALE



FIRE HYDRANT AT EXISTING CONNECTION NOT TO SCALE



NOTE: DOUBLE FRAME AND GRATE SHALL BE DESIGNED FOR HS-20 LOADING



- 1. MIN 0.12 SQ. IN STEEL PER VERTICAL FOOT, PLACED ACCORDING TO
- AASHTO DESIGNATION M199, TYPICAL ALL SIDES ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING
   ALL GRATES SHALL BE ADA COMPLIANT.

SPECIAL CATCH BASIN - DOUBLE GRATE NOT TO SCALE



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File Name: dwg_construction_details.dwg				
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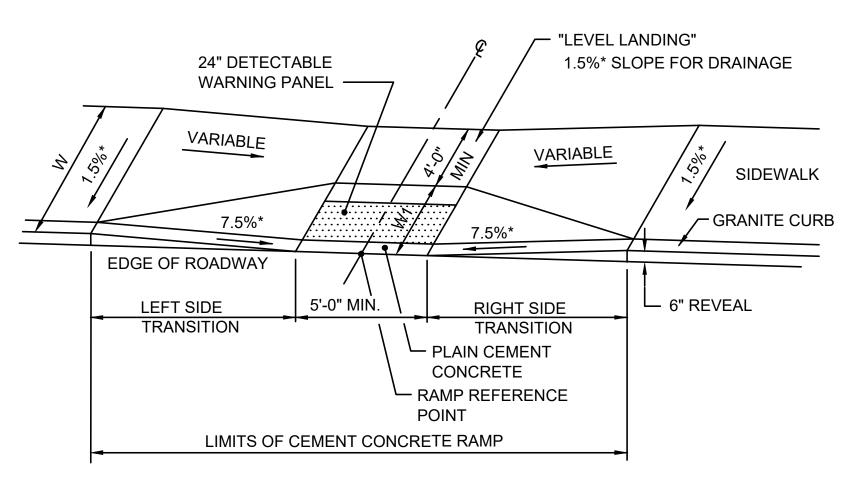
BRIDGE STREET RECONSTRUCTION PROJECT

CONSTRUCTION DETAILS PART 4 OF 4

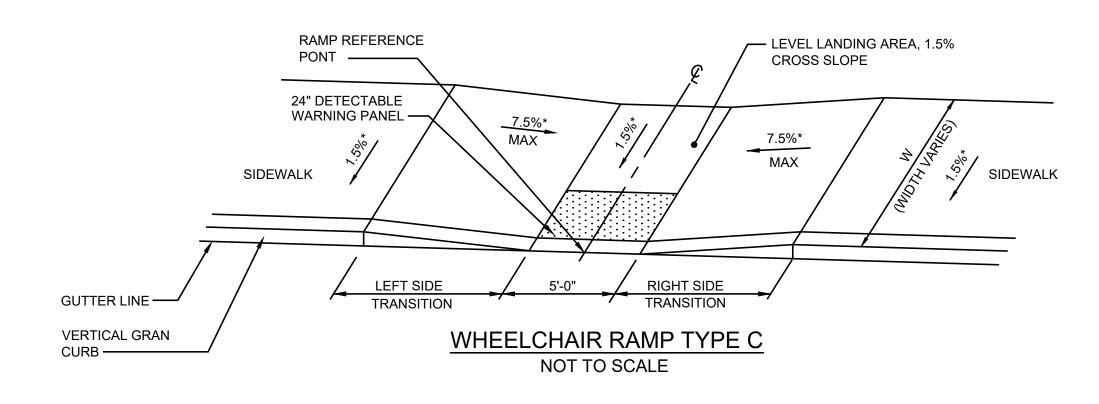
NOT TO SCALE 179410455 Scale Project No.

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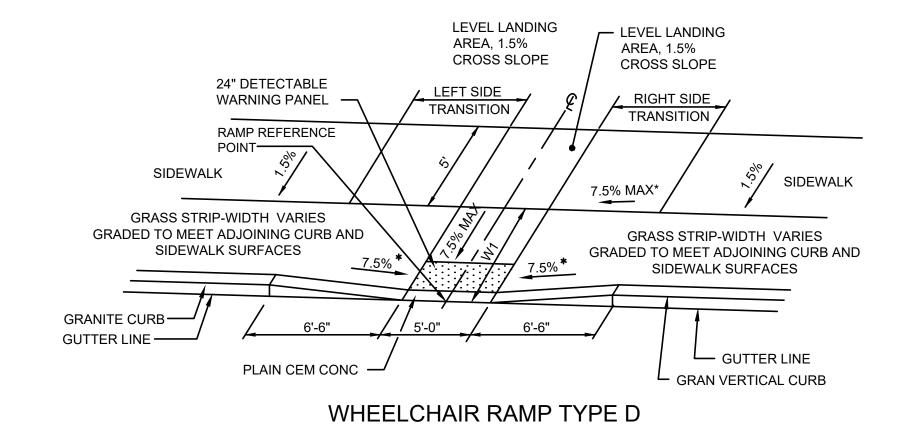
Sheet Revision



WHEELCHAIR RAMP - TYPE A NOT TO SCALE



					WHEELO	CHAIR RAMPS					
WCR#	TYPE -	RAMP RE	FERNCE POINT		WIDTH OF	RAMP LENGTH	WIDTH OF LEVEL	ROADWAY GUTTER	TRANSITIO	ON LENGTH	WIDTH OF RAMP
vvoix #	111 🗠	BASELINE	STATION	OFFSET	SIDEWALK (W)	(W1)	LANDING	SLOPE	LEFT SIDE	RIGHT SIDE	LEVELING
1	Α	BOSTON STREET	2+77.68	27.00' RT	VARIES	4.00'	5.00'	4.1%	6'-6"	7'-0" (3" REVEAL)	5'-0"
2	Α	PROCTOR STREET	40+49.49	14.01' LT	5.60'	2.50'	3.16'	1.4%	6'-6"	6'-3"	5'-0"
3	Α	PROCTOR STREET	40+49.61	14.01 RT	VARIES	2.50'	3.60'	2.30%	4'-8"	6'-5"	5'-0"
4	Α	BOSTON STREET	3+55.29	31.00' RT	VARIES	5.00'	VARIES	3.9	6'-6"	6'-0" (3" REVEAL)	5'-0"
5	Α	BOSTON STREET	3+62.74	28.18' LT	VARIES	5.00'	VARIES	1.1%	7'-11"	6'-9"	5'-0"
6	Α	BRIDGE STREET	100+66.49	19.61' RT	VARIES	VARIES	VARIES	0.90%	7'-10"	9'-6"	5'-0"
7	Α	BRIDGE STREET	100+34.34	36.21' LT	VARIES	VARIES	VARIES	7.0%	13'-5"	3'-3" (3" REVEAL)	5'-0"
8	Α	GOODHUE STREET	20+23.65	15.18' RT	VARIES	VARIES	VARIES	5.3%	4'-6" (3" REVEAL)	4'-9" (3" REVEAL)	5'-0"
9	Α	GOODHUE STREET	20+79.87	11.38' RT	6.86'	3.30'	3.50'	0.4%	3'-10' (3" REVEAL)	6'-6"	5'-0"
10	Α	GOODHUE STREET	20+79.75	19.66' LT	VARIES	3.32'	VARIES	1.2%	7'-9"	6'-6"	5'-0"
11	D	BRIDGE STREET	105+02.74	13.00' RT	VARIES	VARIES	VARIES	0.1%	0'-0"	0'-0"	10'-0"
12	D	BRIDGE STREET	105+02.74	24.00' LT	18.81'	8.81'	10.00'	0.1%	0'-0"	0'-0"	10'-0"
13	Α	BRIDGE STREET	112+97.57	34.97' LT	12.00'	3.50'	8.50'	1.5%	6'-6"	3'-10" (3" REVEAL)	5'-0"
14	Α	FLINT STREET (N)	200+58.93	21.09' LT	12.00'	3.00'	9.00'	0.6%	3'-3" (3" REVEAL)	7'-8"	10'-0"
15	Α	BRIDGE STREET	113+07.24	17.15' RT	8.11'	3.50'	VARIES	1.0%	7'-8"	6'-6"	5'-0"
16	С	FLINT STREET (S)	300+35.48	23.73' RT	5.67'	N/A	5.67'	0.60%	7'-6"	9'-10"	5'-0"
17	С	FLINT STREET (N)	201+34.72	25.25' LT	5.00'	N/A	5.00'	0.7%	11'-0"	7'-3"	5'-0"
18	С	FLINT STREET (N)	201+68.52	25.50' LT	5.50'	N/A	5.50'	N/A	10'-3"	N/A	N/A
19	С	FLINT STREET (N)	201+61.87	24.50' RT	VARIES	N/A	N/A	N/A	4'-9"	N/A	N/A
20	С	FLINT STREET (N)	201+42.03	23.50' RT	9.27'	N/A	N/A	N/A	N/A	13'-8"	N/A
21	А	FLINT STREET (N)	200+58.93	19.14' RT	12.00'	3.00'	9.00'	0.2%	6'-6"	11'-0"	10'-0"
22	Α	BRIDGE STREET	113+85.68	22.00' LT	12.00'	4.00'	8.00'	0.1%	7'-8"	6'-6"	5'-0"
23	Α	BRIDGE STREET	113+91.61	18.06' RT	VARIES	2.60'	VARIES	0.2%	7'-8"	6'-6"	5'-0"
24	Α	FLINT STREET (S)	300+38.46	20.45' LT	VARIES	4.00'	VARIES	2.6%	6'-6"	8'-0"	5'-0"
25	С	GOODHUE STREET	21+91.79	7.11' LT	VARIES	N/A	N/A	2.2%	4'-0"	3'-4"	N/A
26	С	GOODHUE STREET	22+86.49	6.00' LT	VARIES	N/A	N/A	7.6%	9'-11"	9'-4"	N/A
27	С	GOODHUE STREET	21+96.48	16.28' RT	VARIES	N/A	N/A	0.9%	6'-6"	N/A	N/A
28	С	GOODHUE STREET	21+61.29	16.53' RT	VARIES	N/A	N/A	0.7%	N/A	7'-8"	N/A



NOT TO SCALE

┌ 3/4" REVEAL 0" REVEAL ----DETECTABLE — 4'-0" 6'-0" ∕− 6" CURB REVEAL WARNING PANEL MIN. MIN. REFERENCE POINT ₽ RAMP OPENING-7.5% MAX\* 0" REVEAL -CLEAR PATH OF TRAVEL 3'-0" MIN. REQUIRED LANDING/TURNING AREA 1.5%\* LEVEL WITH STREET WHEELCHAIR RAMP TYPE E WIDTH VARIES NOT TO SCALE

### NOTES:

- 1. DETECTABLE WARNING PANELS SHALL BE INSTALLED ON ALL WHEELCHAIR RAMPS AND WHERE SHOWN ON THE DRAWINGS AS PER STANDARD DRAWING E 107.6.5R. DETECTABLE WARNING PANELS SHALL BE BRICK RED IN COLOR.
- 2. UTILITY POLES, LIGHT POLE FOUNDATIONS, MAIL BOXES, AND HYDRANTS THAT ARE TO BE RETAINED OR ADJUSTED SHALL BE REMOVED AND RESET IF FIELD CONDITIONS INDICATE THE CLEAR PATH OF TRAVEL ON THE PROPOSED SIDEWALK IS LESS THAN 36" IN WIDTH.
- 3. ADA/MA AAB REQUIREMENTS SHALL BE FOLLOWED.



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WHEELCHAIR RAMP AND DRIVEWAY DETAILS PART 2 OF 2

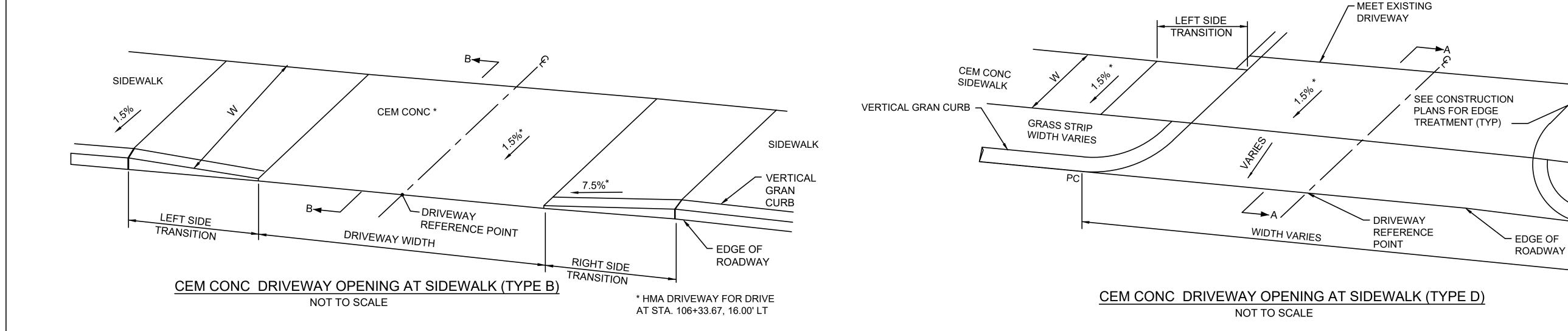
179410455 Project No.

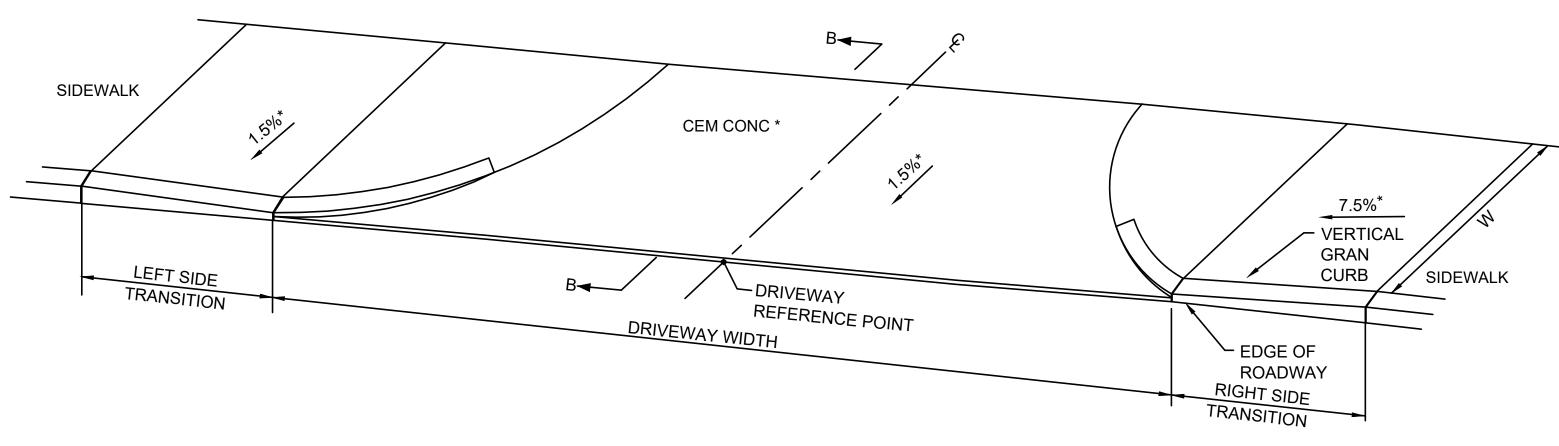
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Drawing No.





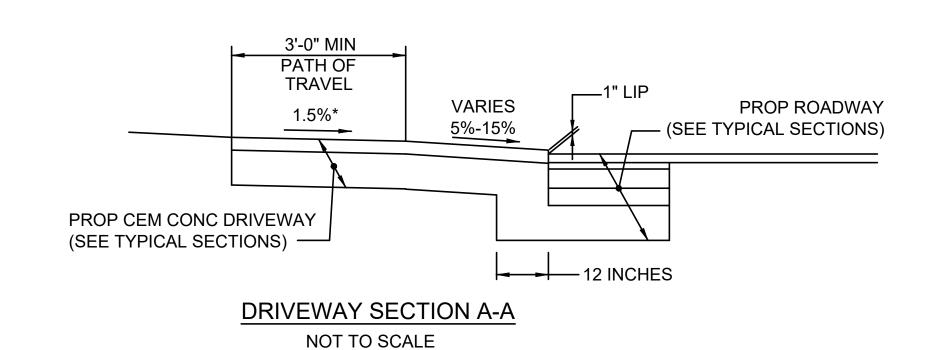
CEM CONC DRIVEWAY OPENING AT SIDEWALK (TYPE E) NOT TO SCALE

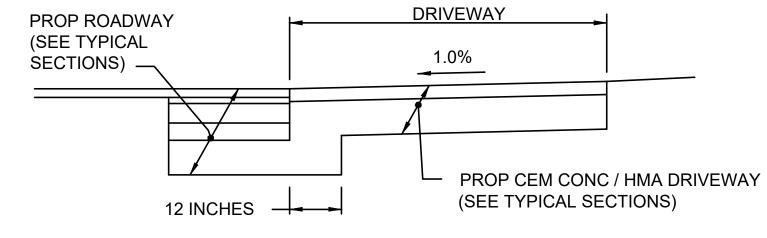
\* HMA DRIVEWAY FOR DRIVE AT STA. 106+33.67, 16.00' LT

	DRIVEWAY DETAILS												
DW#	TYPE	DRIVEWAY R	REFERENCE POIN	Т	RAMP LENGTH	WIDTH OF SIDEWALK	WIDTH OF	ROADWAY	TRANSITION LENGTH				
DVV#	TTPE	BASELINE	STATION O	OFFSET	(W1)	(W)	DRIVEWAY	GUTTER SLOPE	LEFT SIDE	RIGHT SIDE			
1	N/A	BOSTON STREET	2+51.52	27.00' RT	N/A	VARIES	14.00'	3.8%	3'-3" (3" REVEAL)	15'-0"			
2	E	GOODHUE STREET	21+78.42	16.00' RT	N/A	6.00'	41.70'	0.4%	6'-6"	7'-8"			
3	D	BRIDGE STREET	104+20.30	24.00' LT	N/A	10.00'	30.72'	0.4%	7'-8"	6'-6"			
4	D	BRIDGE STREET	109+69.95	16.00' RT	N/A	5.00'	59.08'	0.2%	6'-6"	7'-8"			
5	D	BRIDGE STREET	110+44.73	16.00' RT	N/A	5.00'	27.84'	0.3%	7'-8"	6'-6"			

### NOTES:

1. LEFT SIDE\RIGHT SIDE DETERMINED WHEN STANDING IN ROADWAY LOOKING AT RAMP OR DRIVEWAY. 2. SEE CONSTRUCTION PLANS FOR LOCATIONS OF DETECTABLE WARNING PANELS AT DRIVEWAYS. COST SHALL BE INCIDENTAL TO ITEM 701.1 CEMENT CONCRETE SIDEWALK AT DRIVEWAYS. DETECTABLE WARNING PANELS SHALL BE BRICK RED IN COLOR.





DRIVEWAY SECTION B-B NOT TO SCALE



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CEM CONC

SIDEWALK

RIGHT SIDE

TRANSITION

GRASS STRIP

WIDTH VARIES

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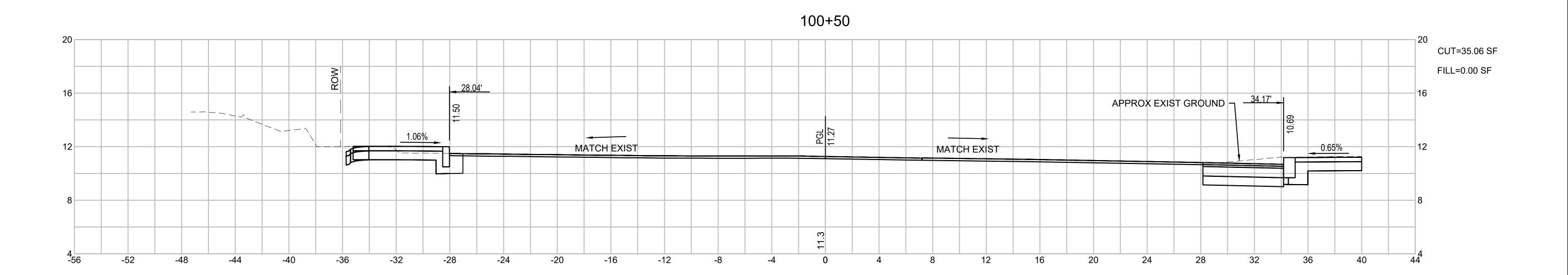
Drawing No.

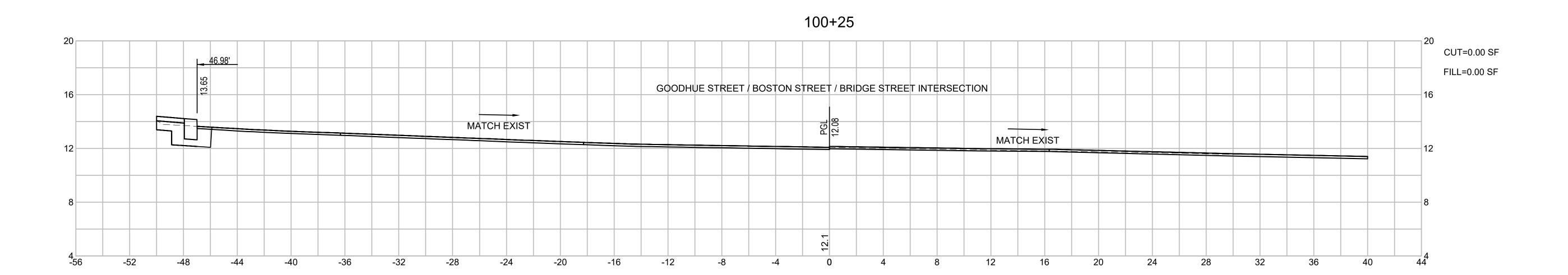
WHEELCHAIR RAMP AND DRIVEWAY DETAILS PART 2 OF 2

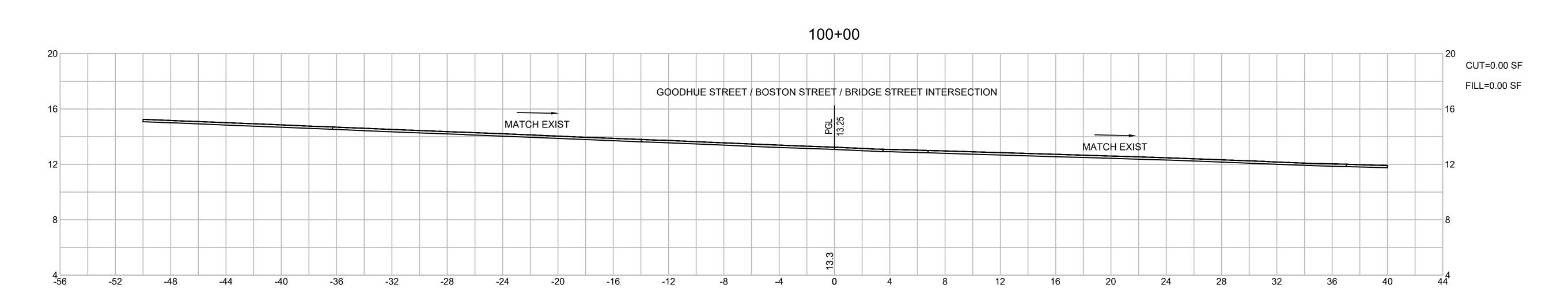
Revision

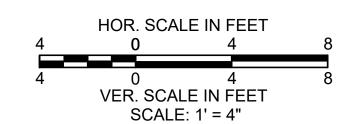
179410455 NOT TO SCALE Scale Project No.

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Tile Name: dwg\_cross\_sections\_bridge.dwg

Dwn. Chkd. Dsgn. YY.MM.DD

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CITY OF SALEM
Client/Project

BRIDGE STREET RECONSTRUCTION PROJECT

Title

CROSS SECTIONS BRIDGE STREET PART 1 OF 18

179410455 Project No.

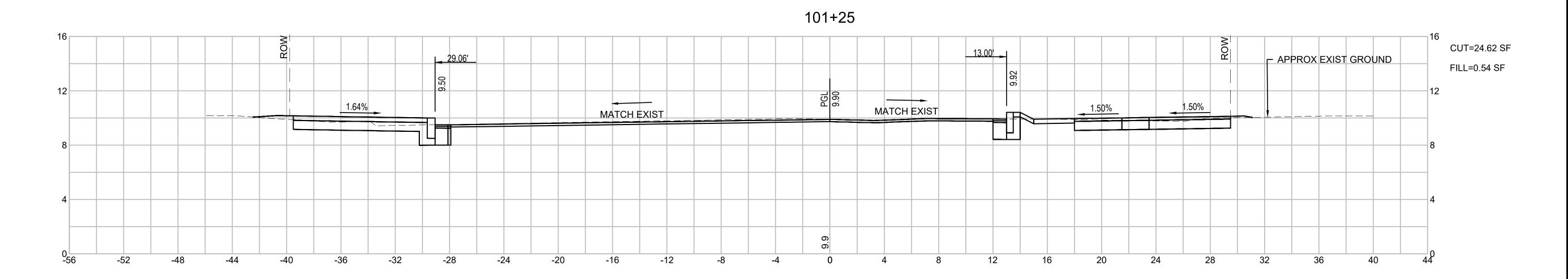
Drawing No.

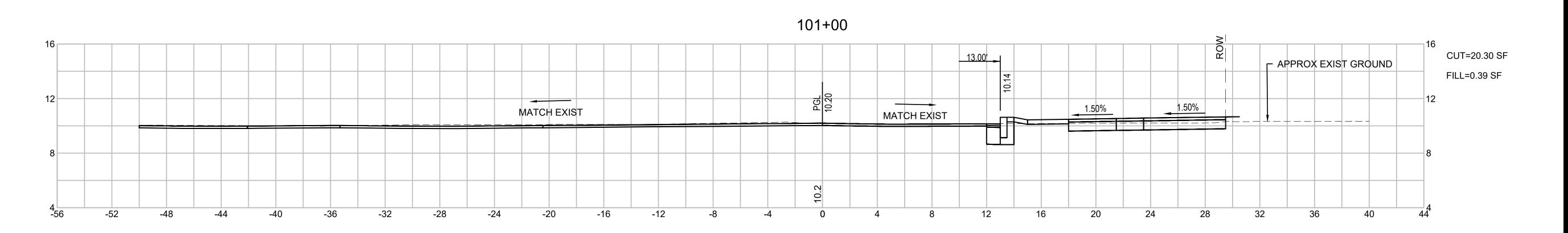
1" = 4'
Scale

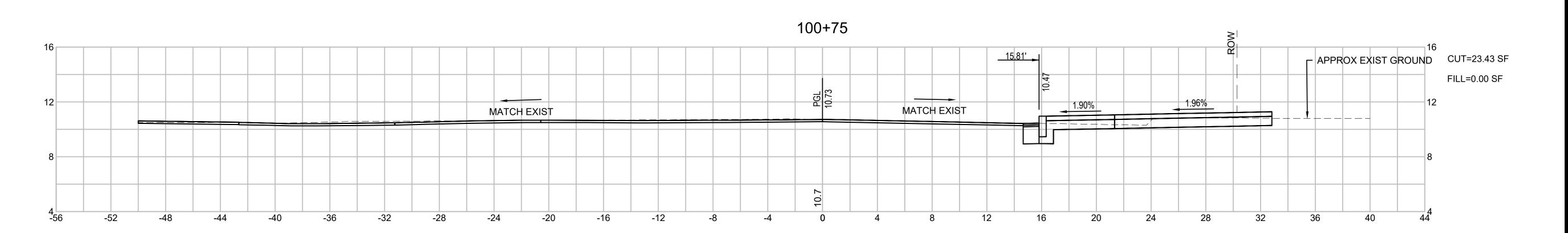
80 of 113

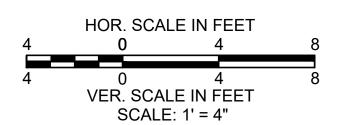
Revision

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BRIDGE STREET RECONSTRUCTION PROJECT

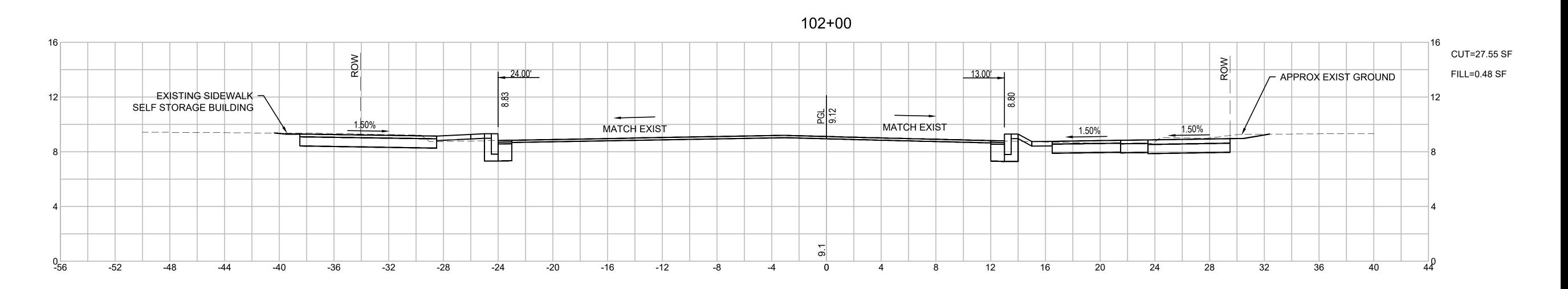
CROSS SECTIONS BRIDGE STREET PART 2 OF 18

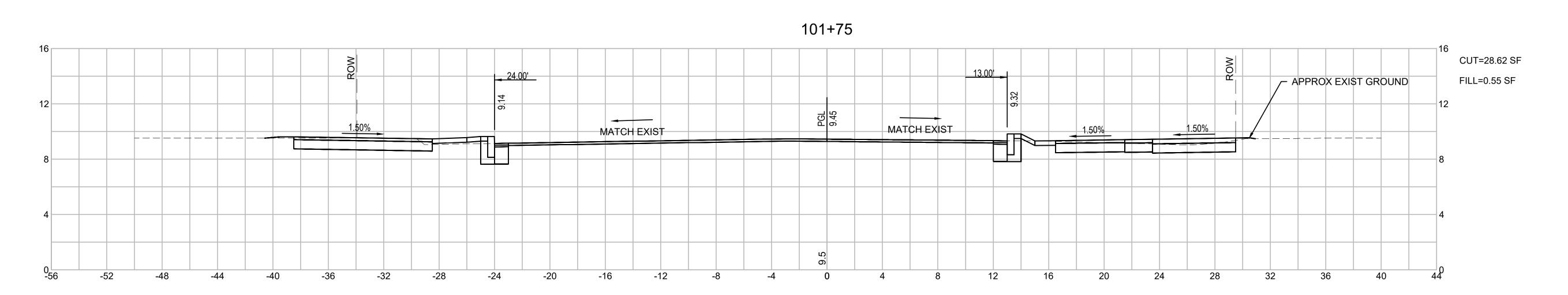
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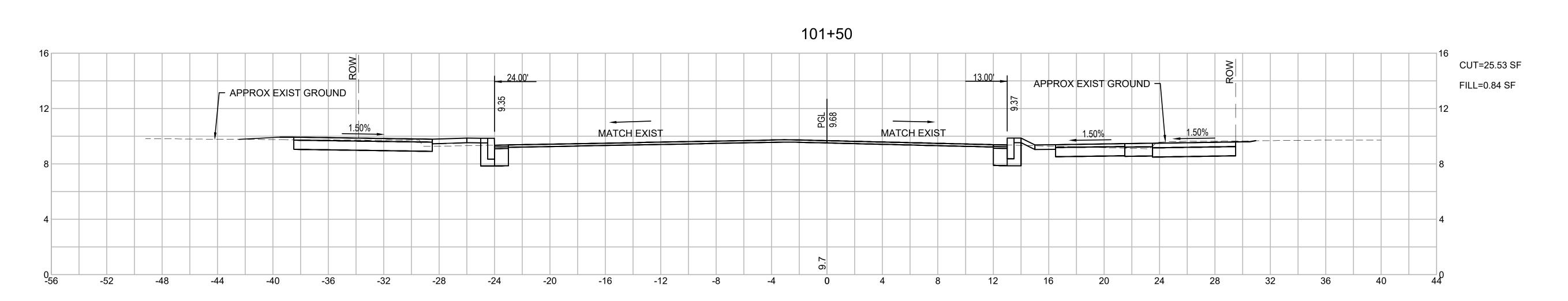
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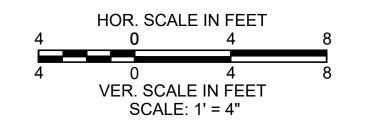
1'' = 4'

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BRIDGE STREET RECONSTRUCTION PROJECT

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CROSS SECTIONS BRIDGE STREET PART 3 OF 18

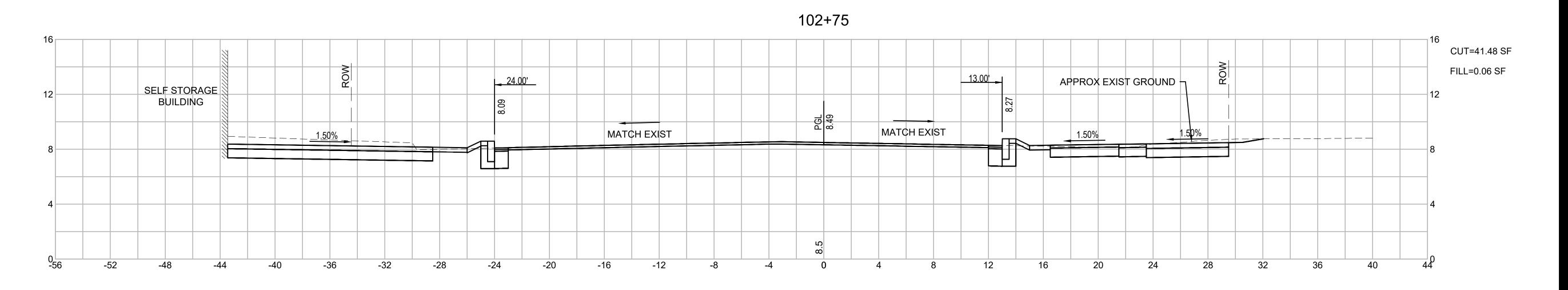
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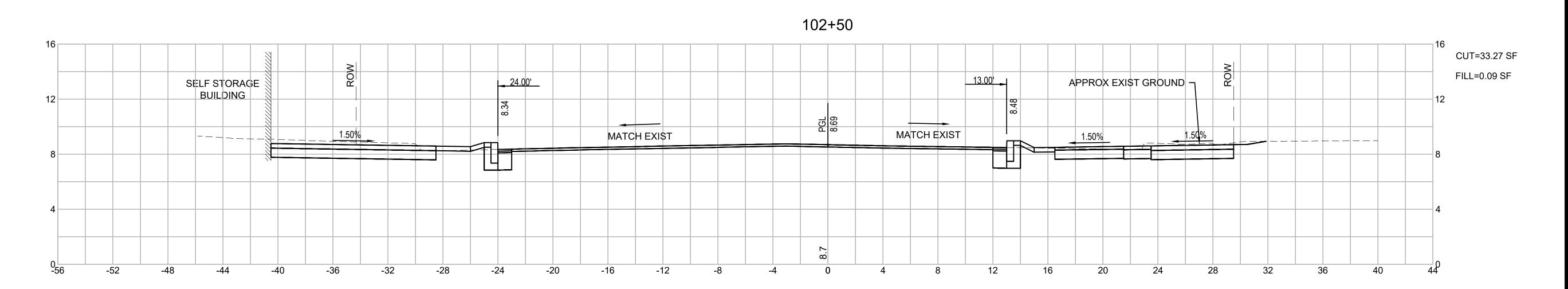
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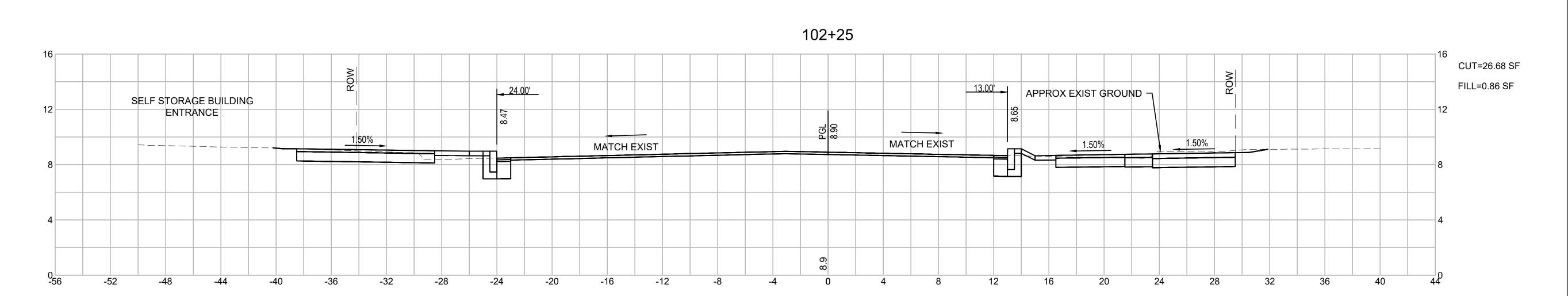
1" = 4'
Scale
82 of 113

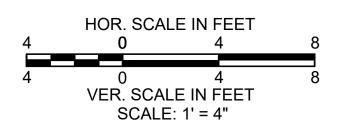
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BRIDGE STREET RECONSTRUCTION PROJECT

CROSS SECTIONS BRIDGE STREET PART 4 OF 18

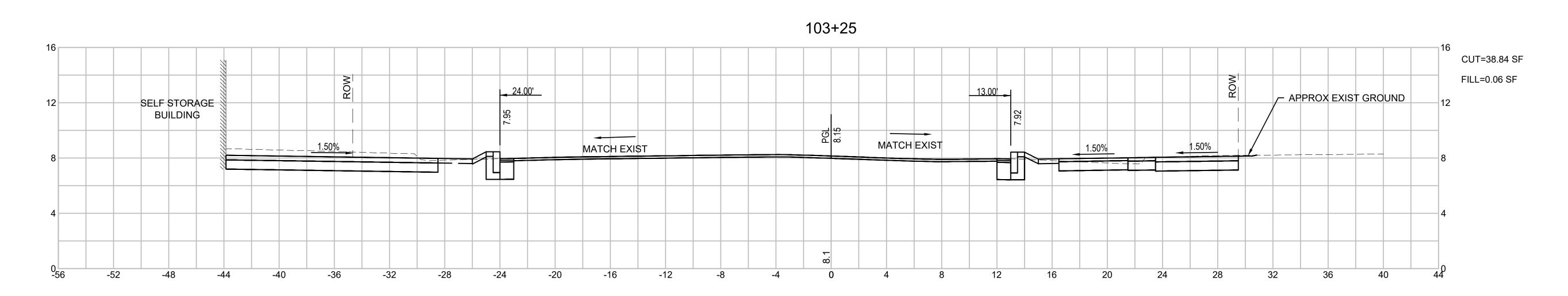
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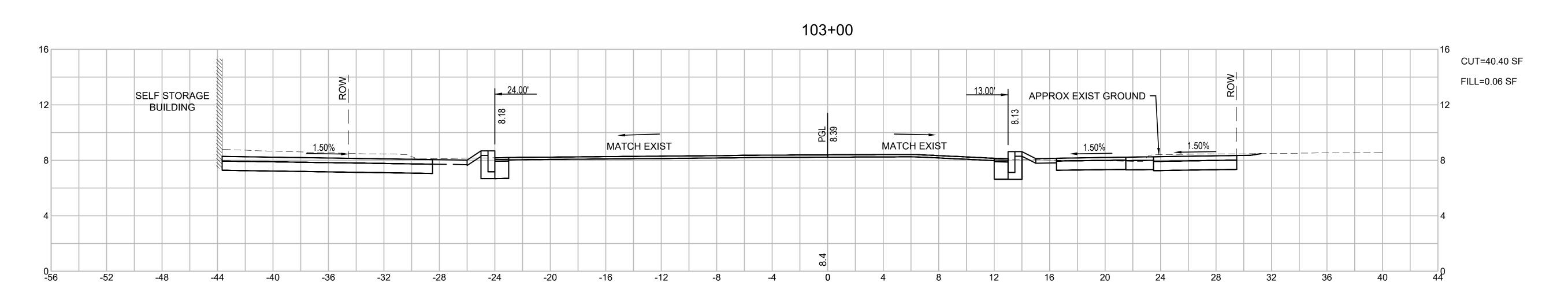
1'' = 4'

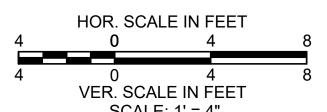
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Drawing No.

103+50 CUT=39.19 SF FILL=0.04 SF 24.00' SELF STORAGE BUILDING /- APPROX EXIST GROUND MATCH EXIST MATCH EXIST 1.50%









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File Name: dwg\_cross\_sections\_bridge.dwg



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BRIDGE STREET RECONSTRUCTION PROJECT

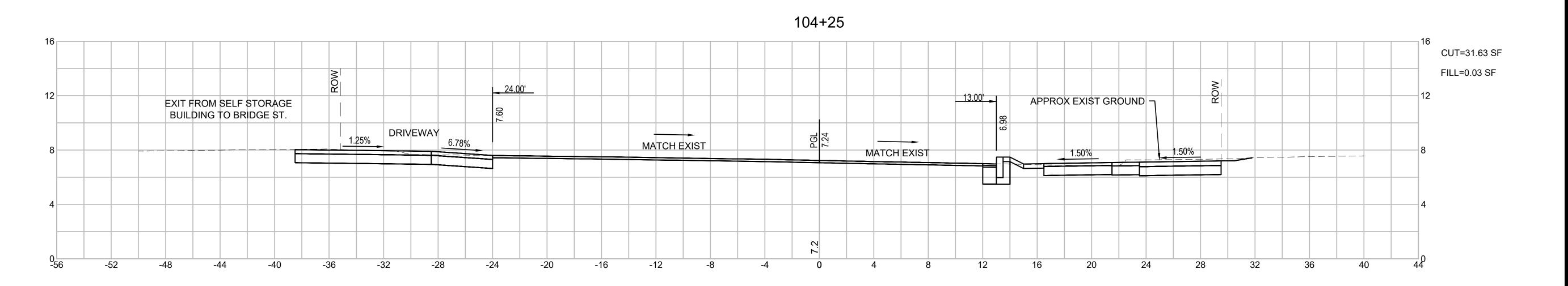
CROSS SECTIONS BRIDGE STREET PART 5 OF 18

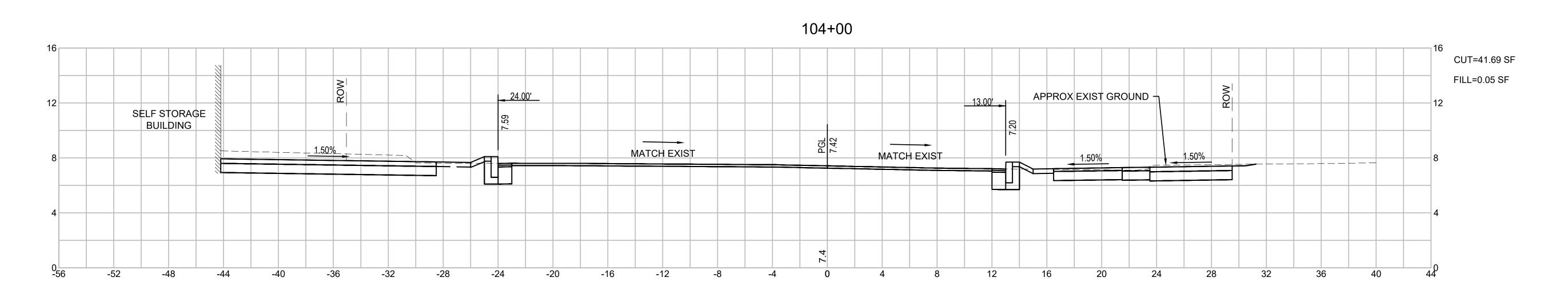
179410455 1'' = 4' Project No. Scale

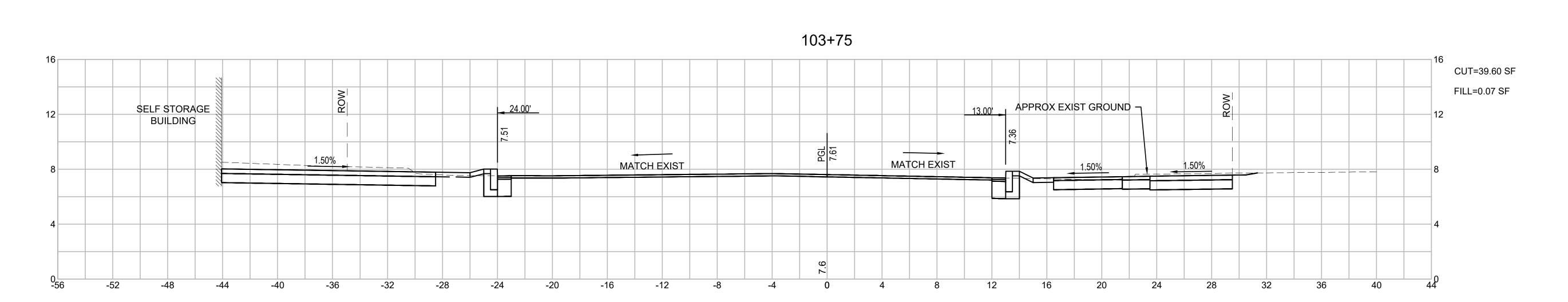
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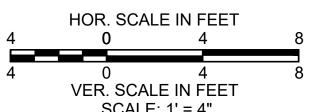
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VER. SCALE IN FEET SCALE: 1' = 4"











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CROSS SECTIONS BRIDGE STREET PART 6 OF 18

179410455

Drawing No.

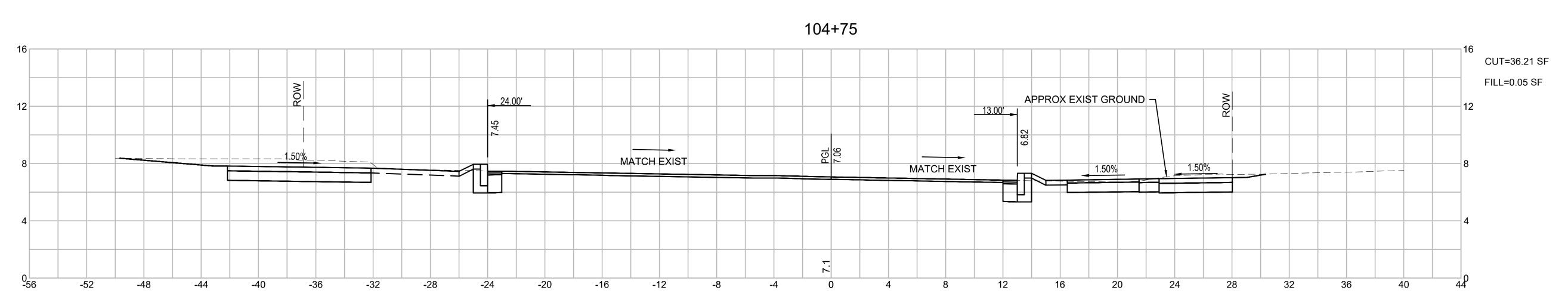
Scale 85 of 113

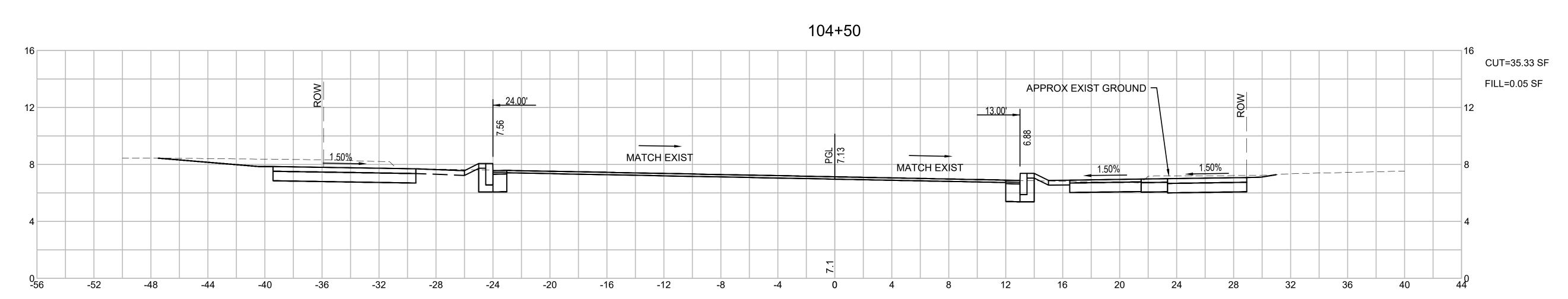
1'' = 4'

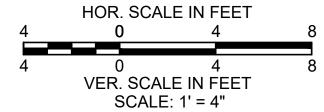
Revision

SCALE: 1' = 4"

# 105+00 CUT=37.95 SF FILL=0.00 SF APPROX EXIST GROUND -PROPOSED PATH LOCATION BIKE RAMP MATCH EXIST 1.50% MATCH EXIST -24 -12 -28









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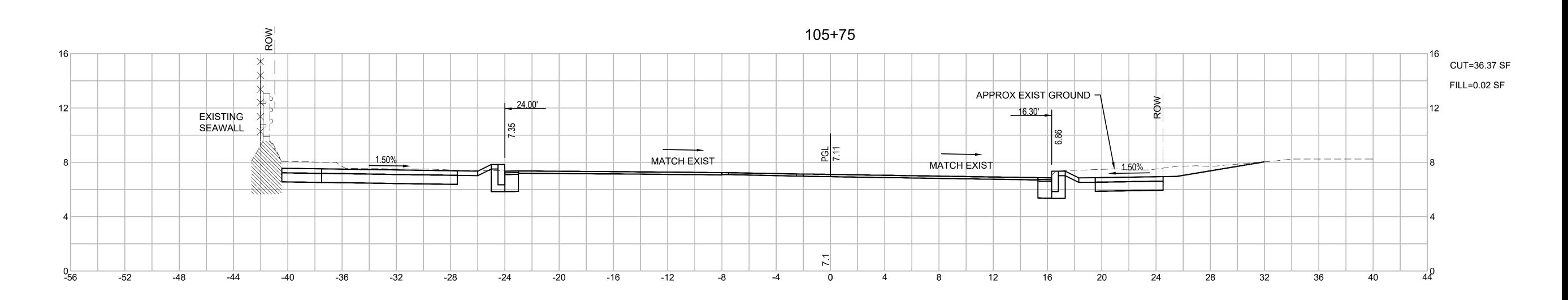
BRIDGE STREET RECONSTRUCTION PROJECT

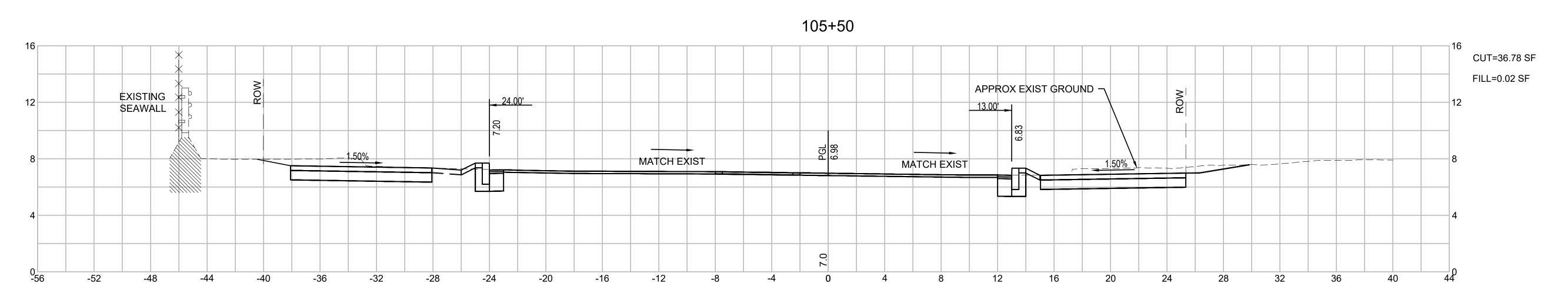
CROSS SECTIONS BRIDGE STREET PART 7 OF 18

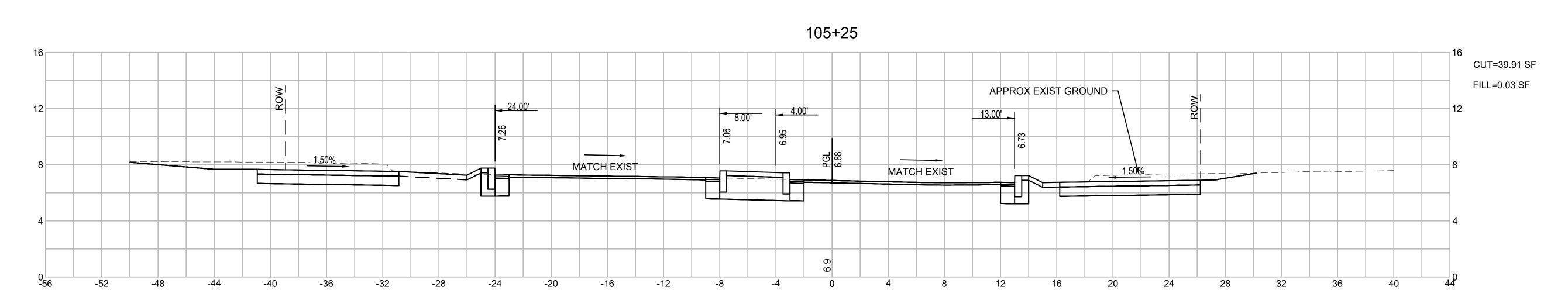
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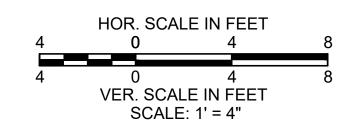
Drawing No.

1'' = 4' Scale 86 of 113











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BRIDGE STREET RECONSTRUCTION PROJECT

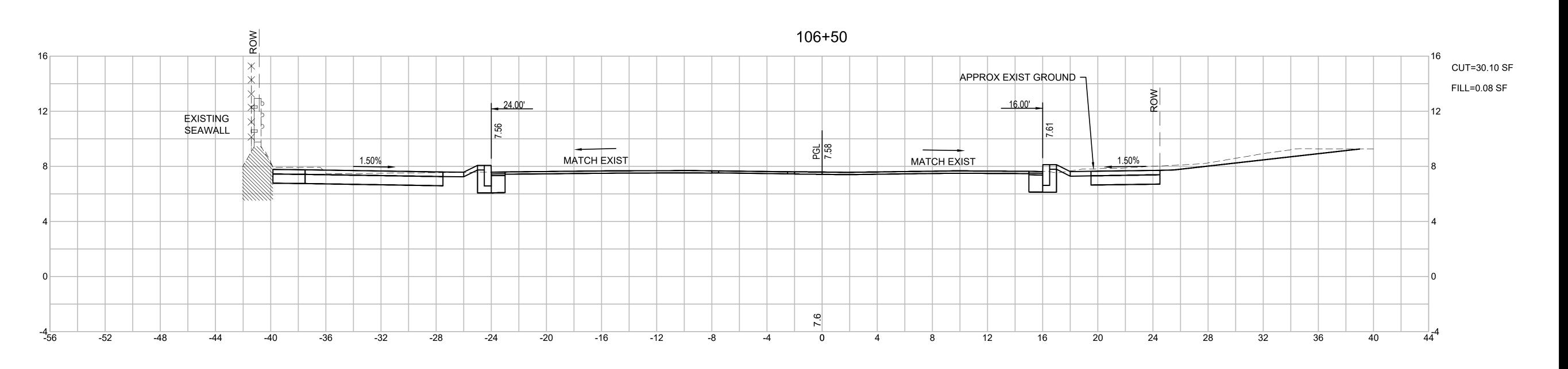
CROSS SECTIONS BRIDGE STREET PART 8 OF 18

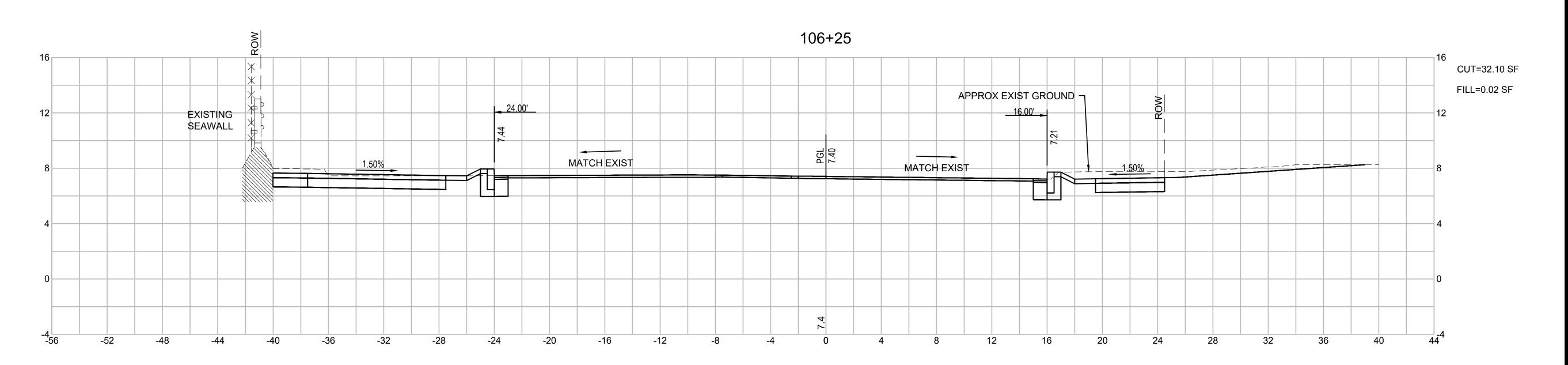
1'' = 4' Scale

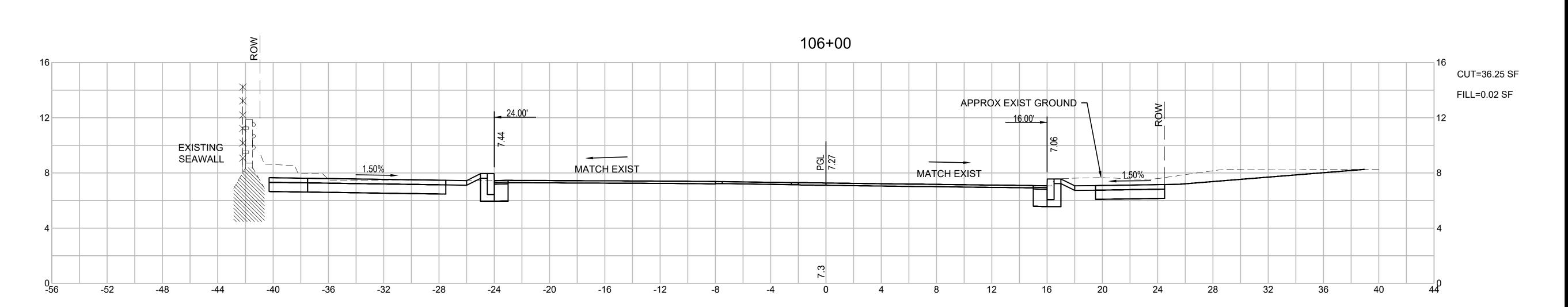
87 of 113

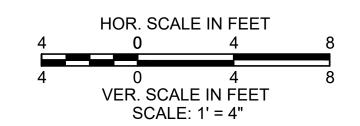
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BRIDGE STREET RECONSTRUCTION PROJECT

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CROSS SECTIONS BRIDGE STREET PART 9 OF 18

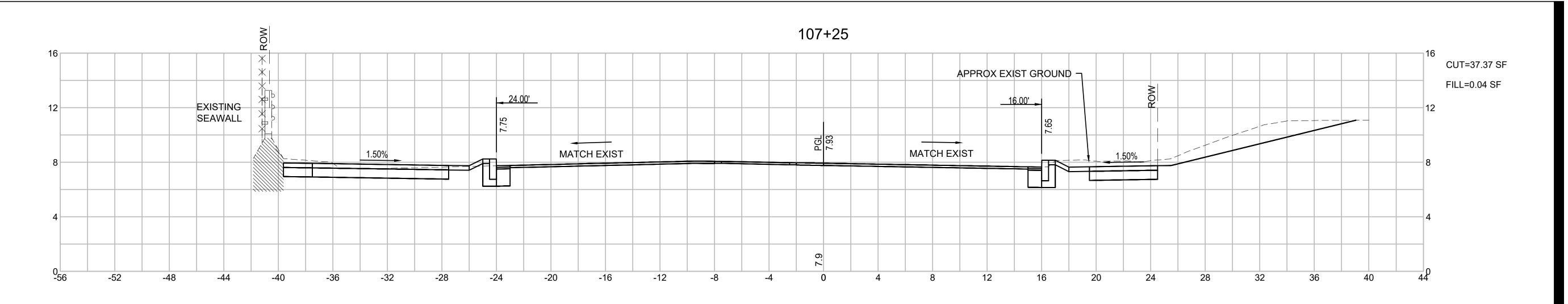
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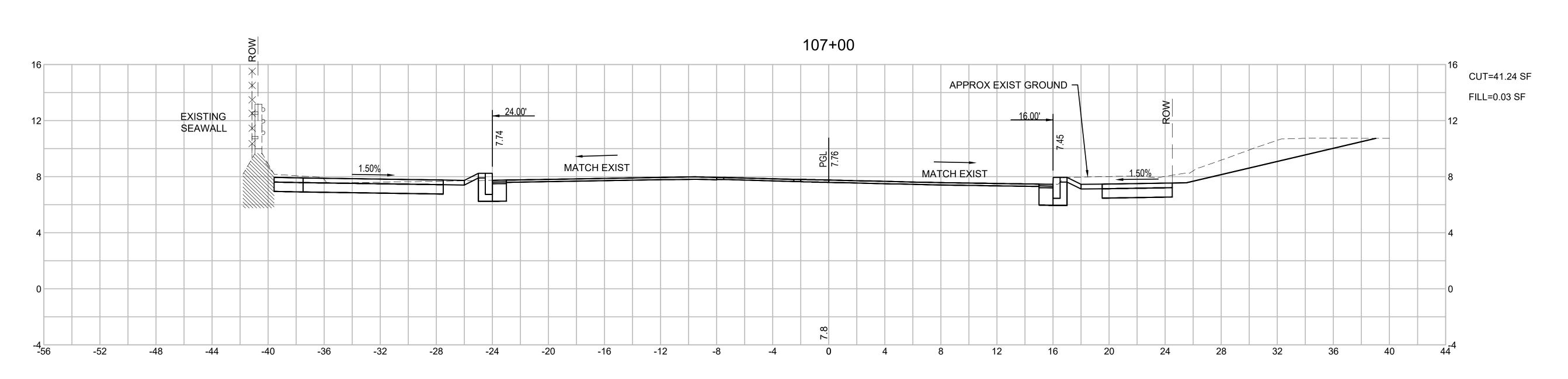
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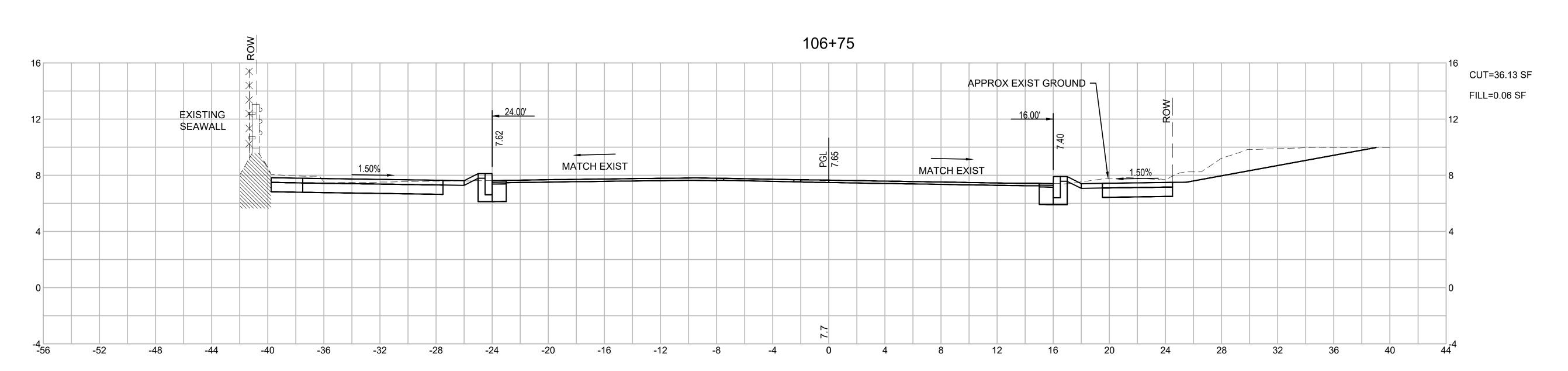
Scale 88 of 113

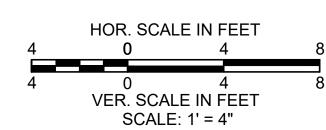
Drawing No. Sheet

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BRIDGE STREET RECONSTRUCTION PROJECT

Title

CROSS SECTIONS BRIDGE STREET PART 10 OF 18

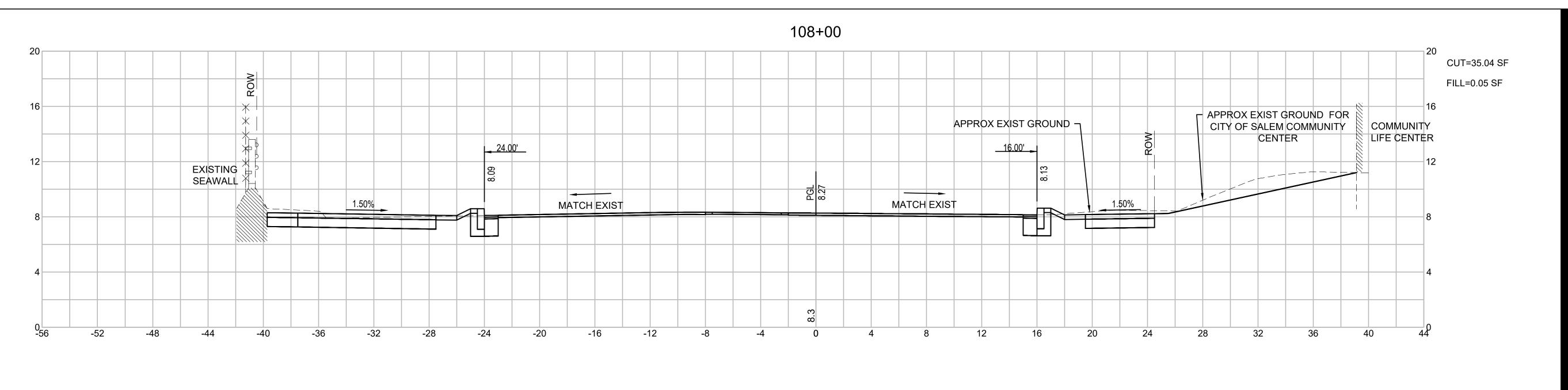
179410455 1" Project No. Scale

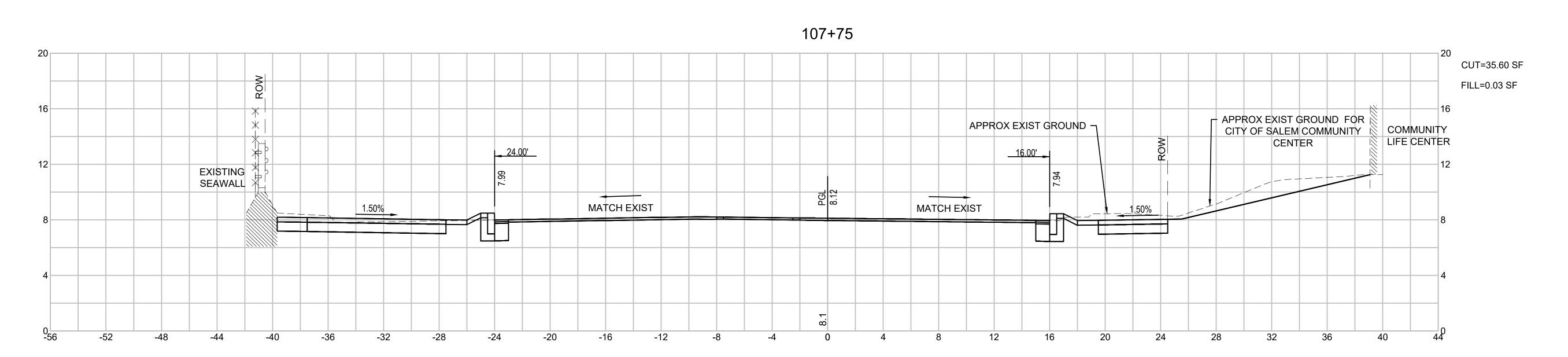
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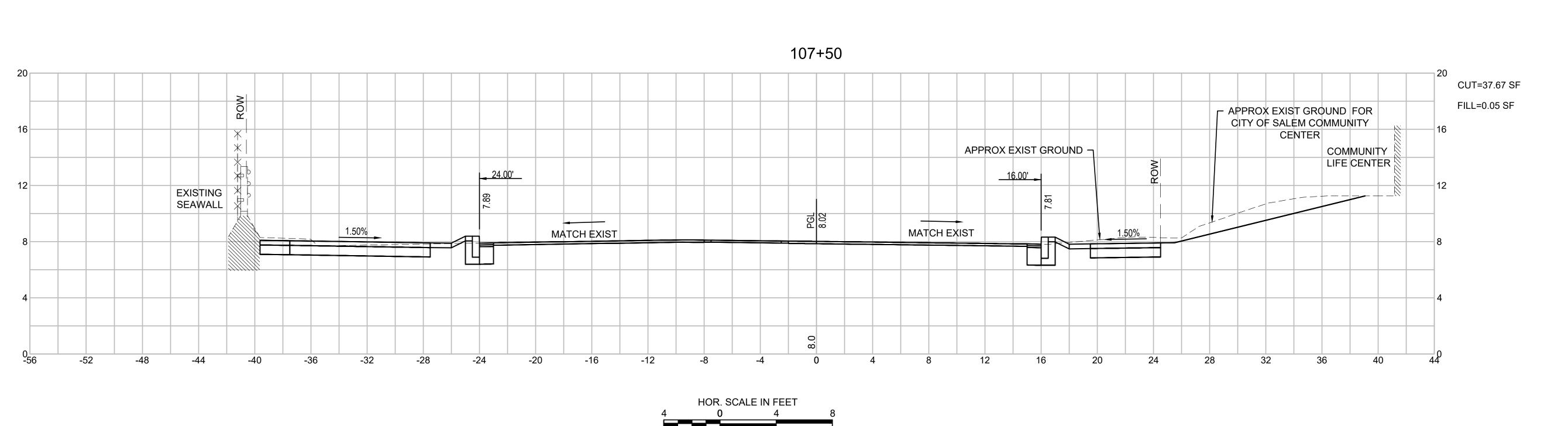
1" = 4'
Scale
89 of 113

Sheet Revision

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VER. SCALE IN FEET

SCALE: 1' = 4"



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BRIDGE STREET RECONSTRUCTION PROJECT

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CROSS SECTIONS BRIDGE STREET PART 11 OF 18

179410455 Project No.

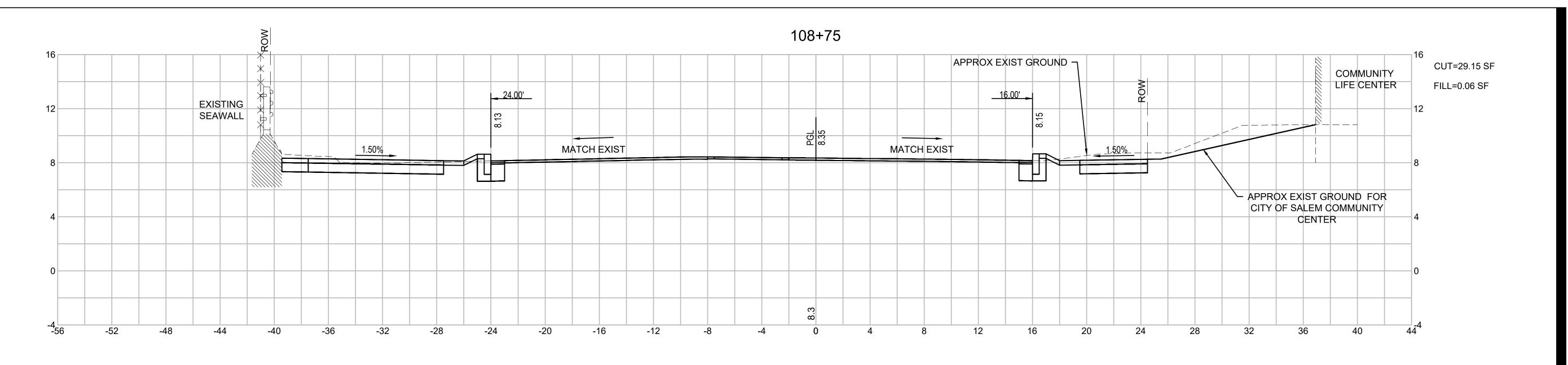
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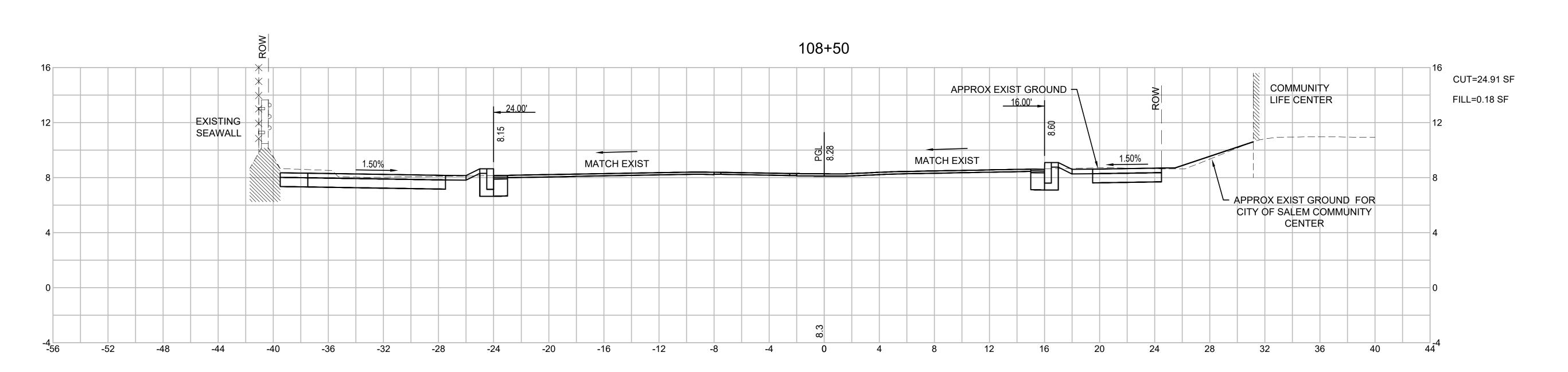
Scale 90 of 113

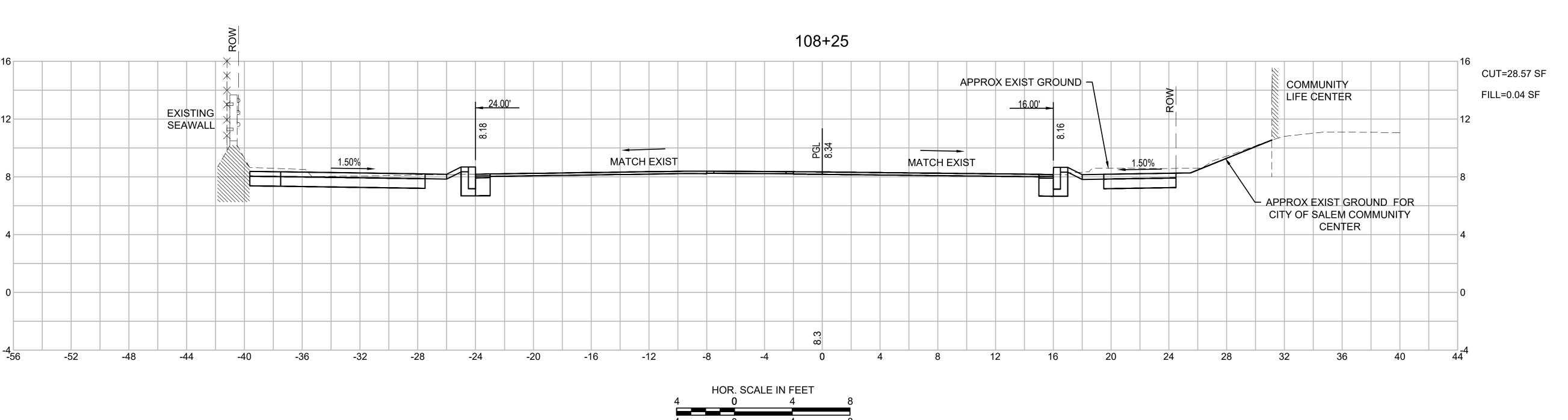
1'' = 4'

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BRIDGE STREET RECONSTRUCTION PROJECT

\_\_\_\_\_ Title

CROSS SECTIONS BRIDGE STREET PART 12 OF 18

179410455 Project No.

Drawing No.

Scale 91 of 113

1'' = 4'

neet Revision

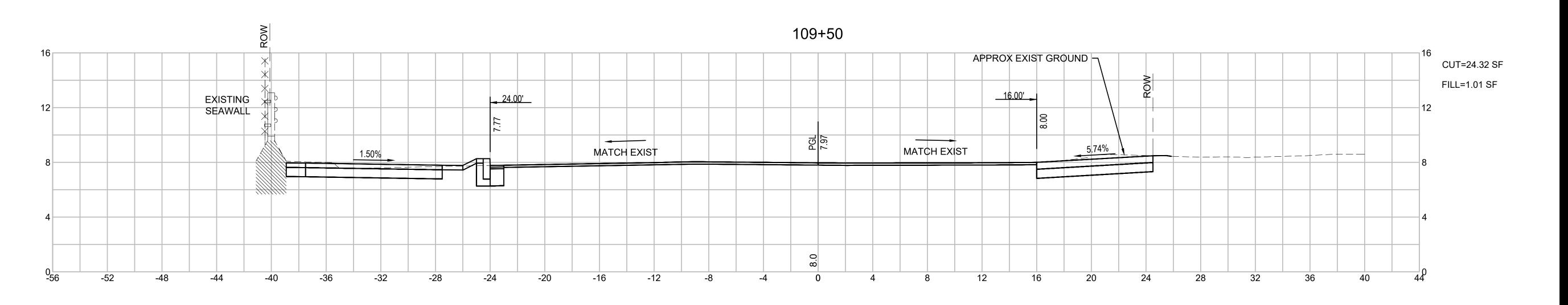
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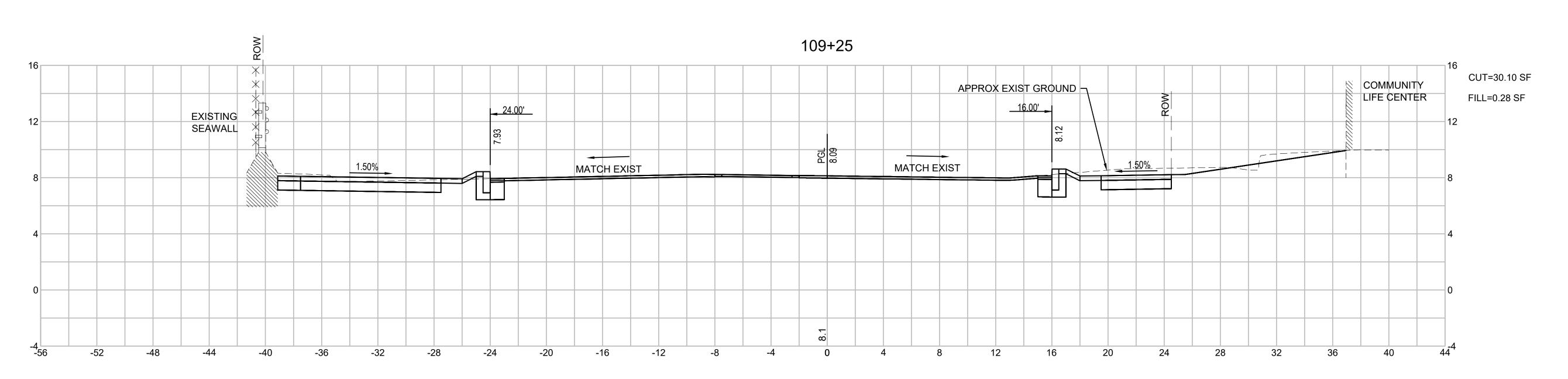
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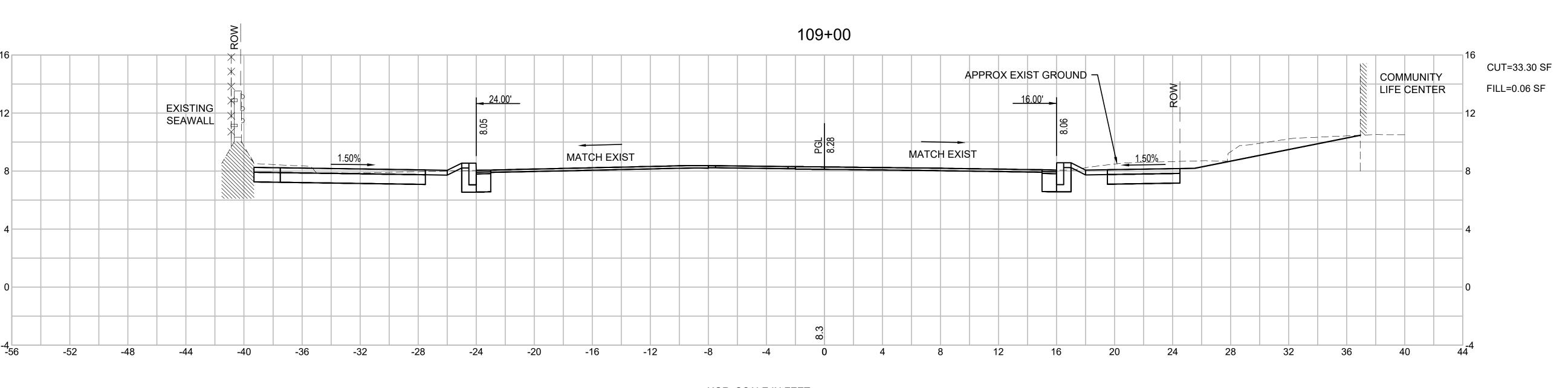
0 4 8

VER. SCALE IN FEET

SCALE: 1' = 4"









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BRIDGE STREET RECONSTRUCTION PROJECT

Title

Drawing No.

CROSS SECTIONS BRIDGE STREET PART 13 OF 18

179410455 1" = 4'

Project No. Scale

92 of 113
Sheet Revis

79410455\transportation\drawing\dwg\_cross\_sec 3/02/05 1:26 PM By: Sadler, Chris

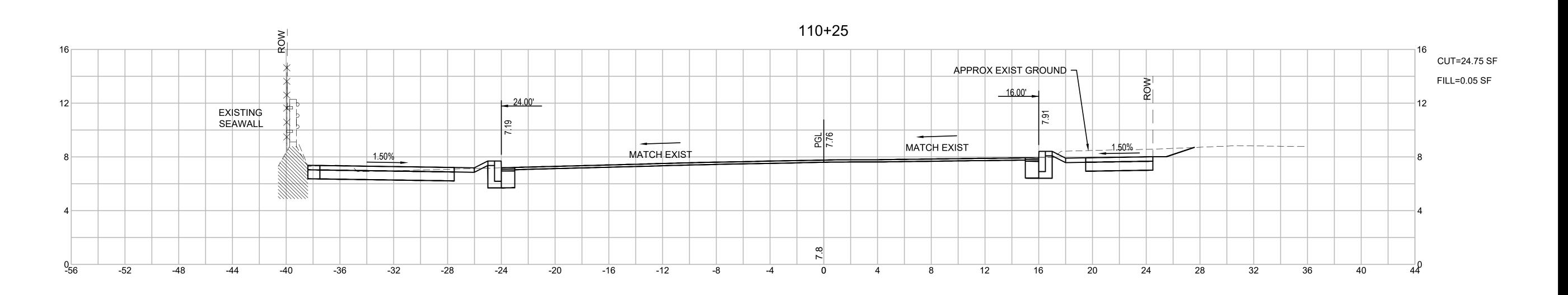
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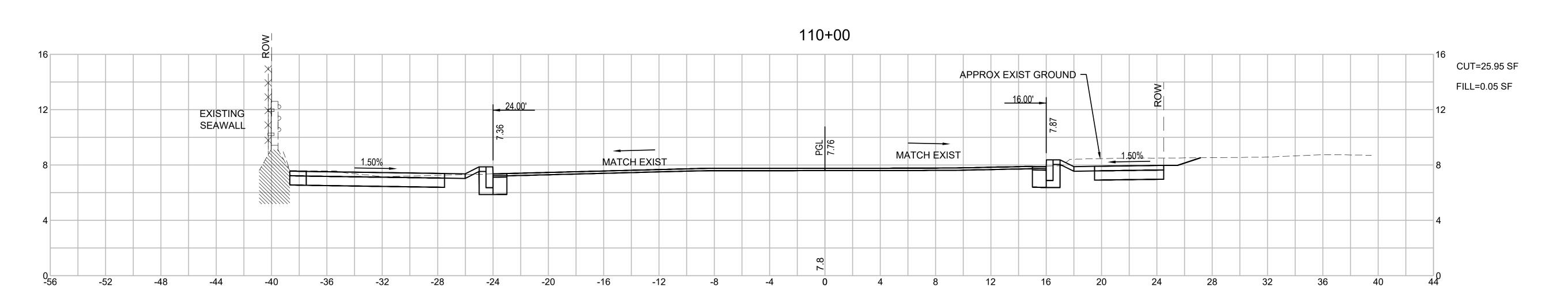
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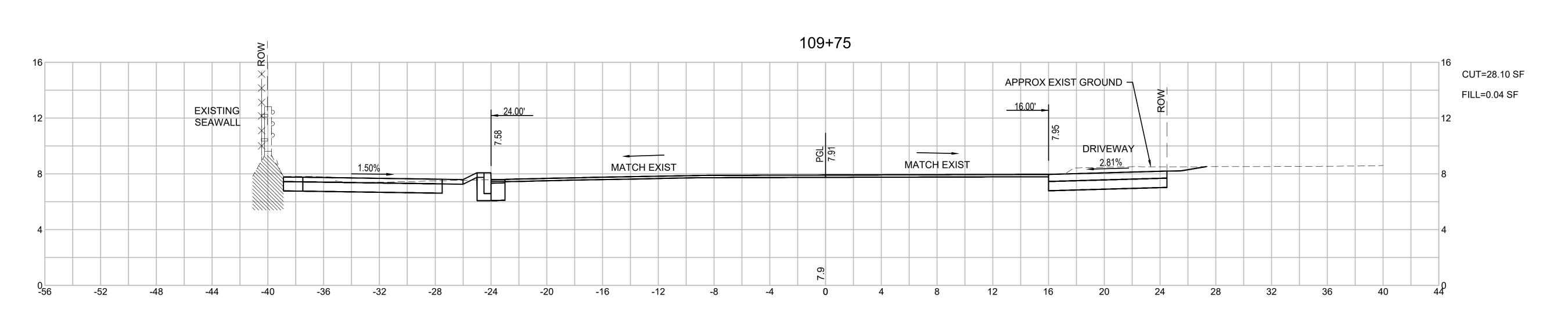
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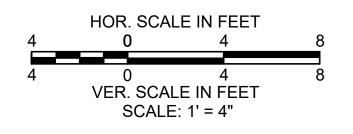
VER. SCALE IN FEET

SCALE: 1' = 4"











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BRIDGE STREET RECONSTRUCTION PROJECT

CROSS SECTIONS BRIDGE STREET PART 14 OF 18

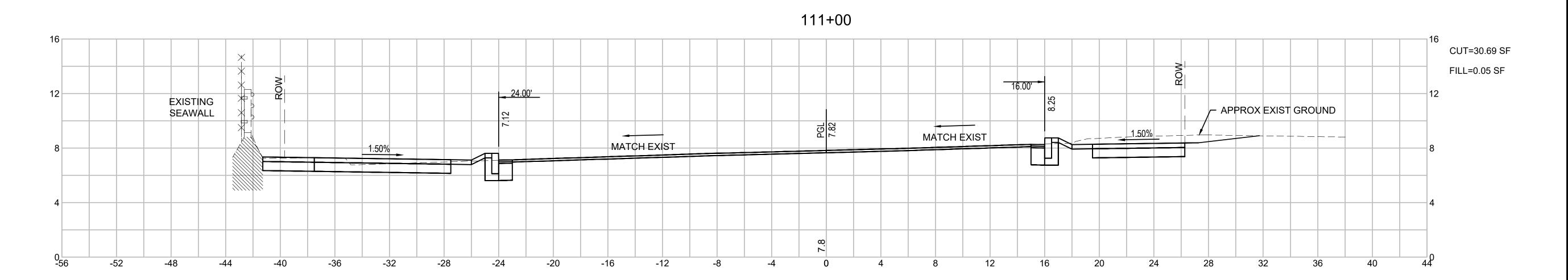
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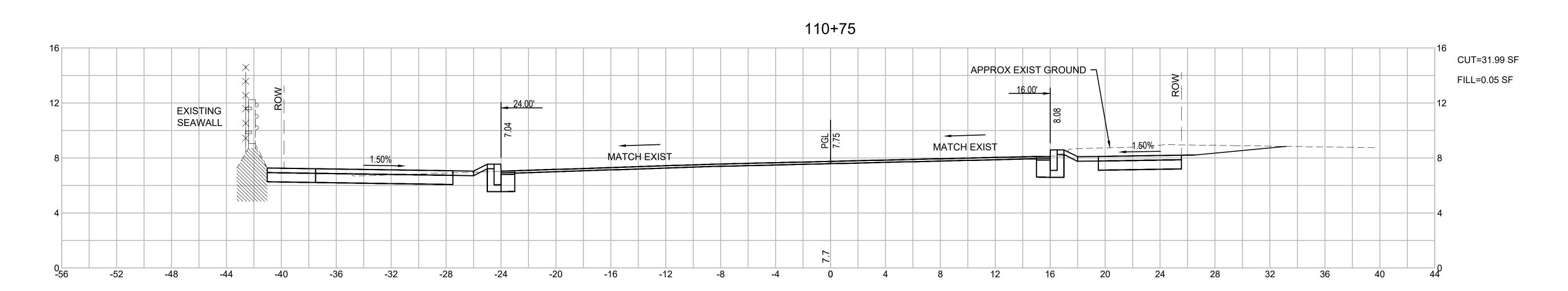
Scale 93 of 113

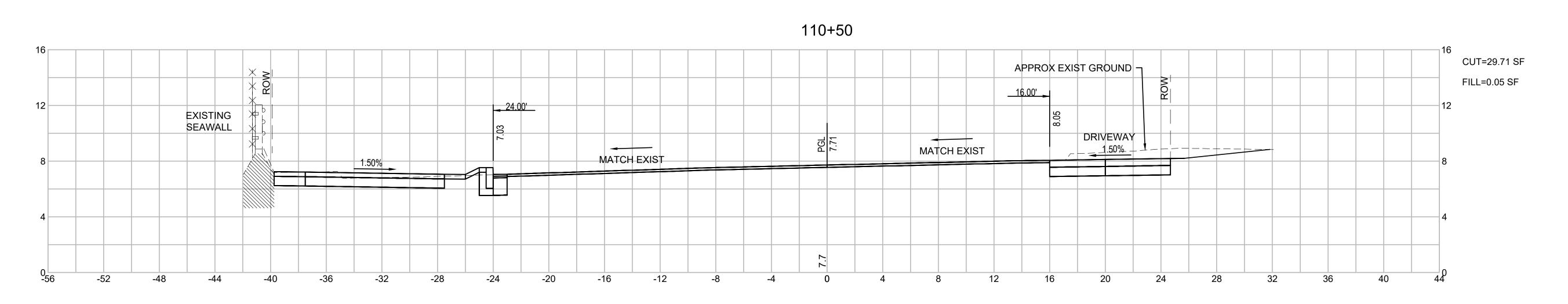
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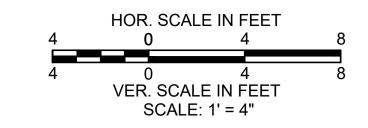
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BRIDGE STREET RECONSTRUCTION PROJECT

Title

CROSS SECTIONS BRIDGE STREET PART 15 OF 18

179410455 1'
Project No. Scale

Drawing No.

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1'' = 4'

Sheet Revision

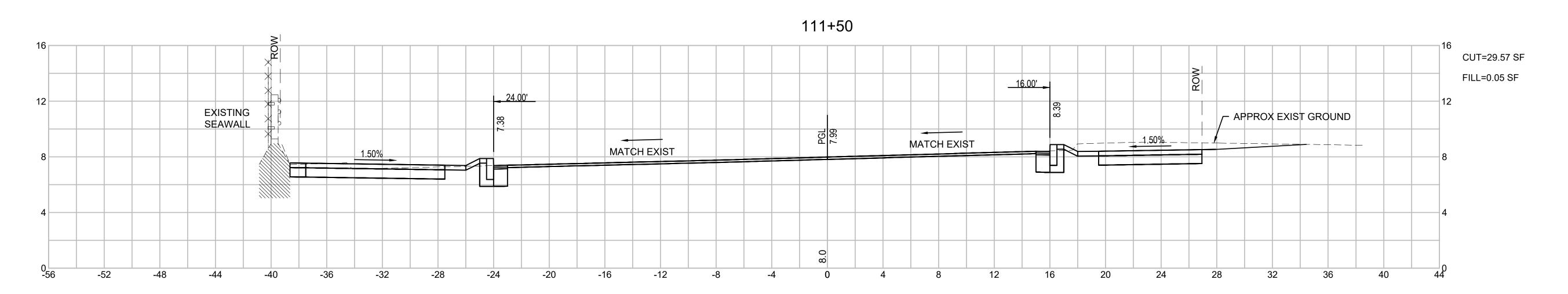
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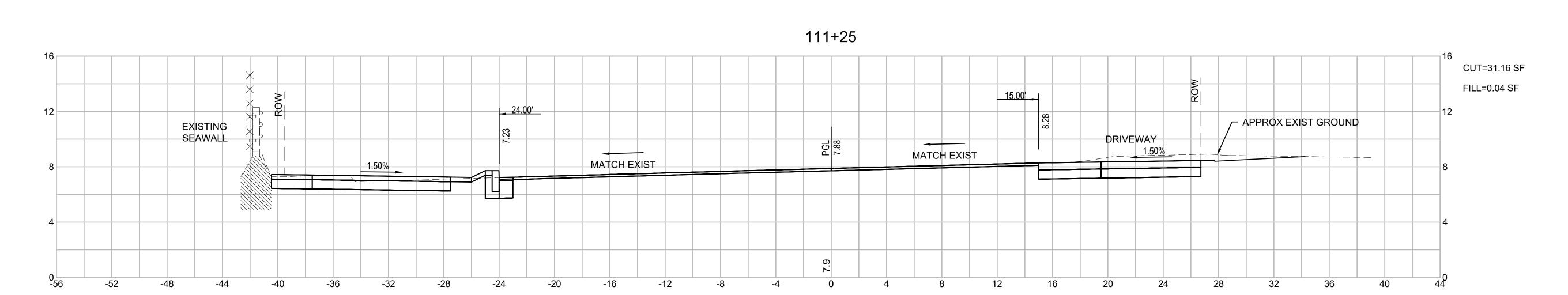
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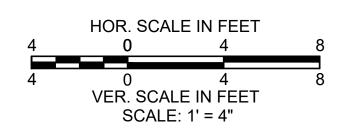
# 111+75 CUT=31.27 SF FILL=0.05 SF EXISTING /- APPROX EXIST GROUND SEAWALL \_\_ 1.50%\_\_ MATCH EXIST MATCH EXIST

-20

-12









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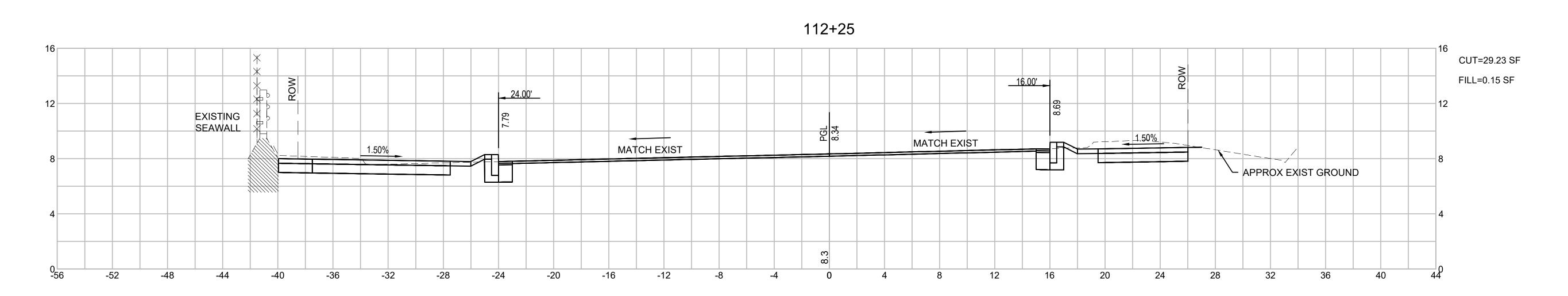
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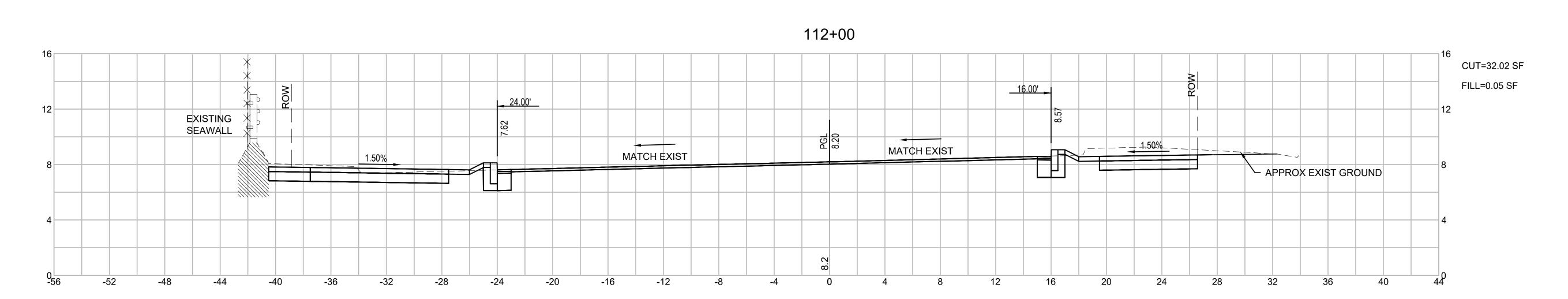
CROSS SECTIONS BRIDGE STREET PART 16 OF 18

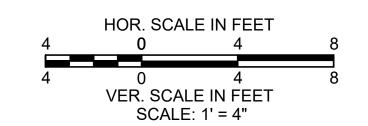
179410455

Drawing No.

1'' = 4' Scale 95 of 113









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BRIDGE STREET RECONSTRUCTION PROJECT

Title

CROSS SECTIONS BRIDGE STREET PART 17 OF 18

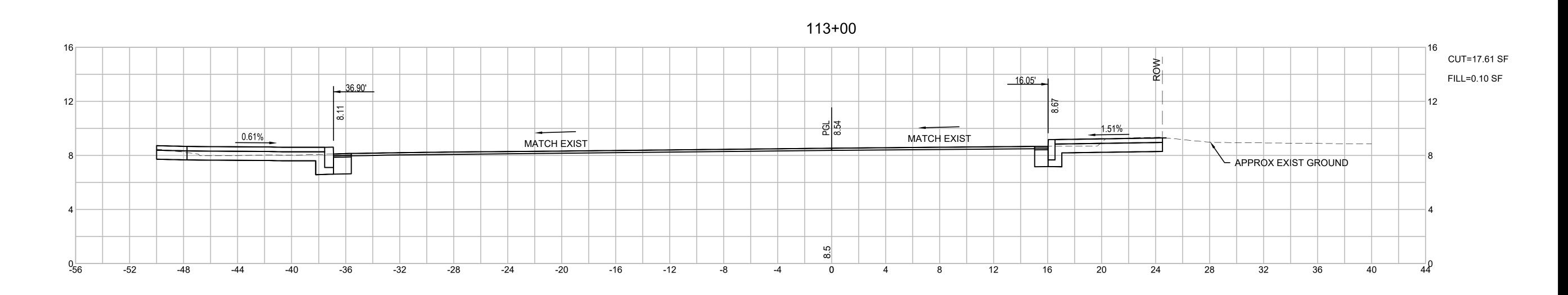
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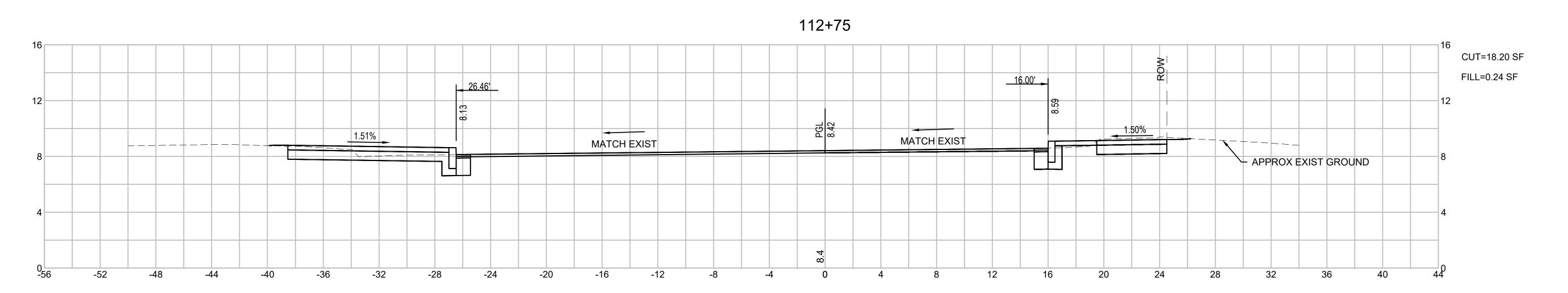
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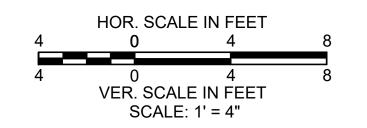
1" = 4'
Scale
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BRIDGE STREET RECONSTRUCTION PROJECT

Title

CROSS SECTIONS BRIDGE STREET PART 18 OF 18

179410455 1" Project No. Scale

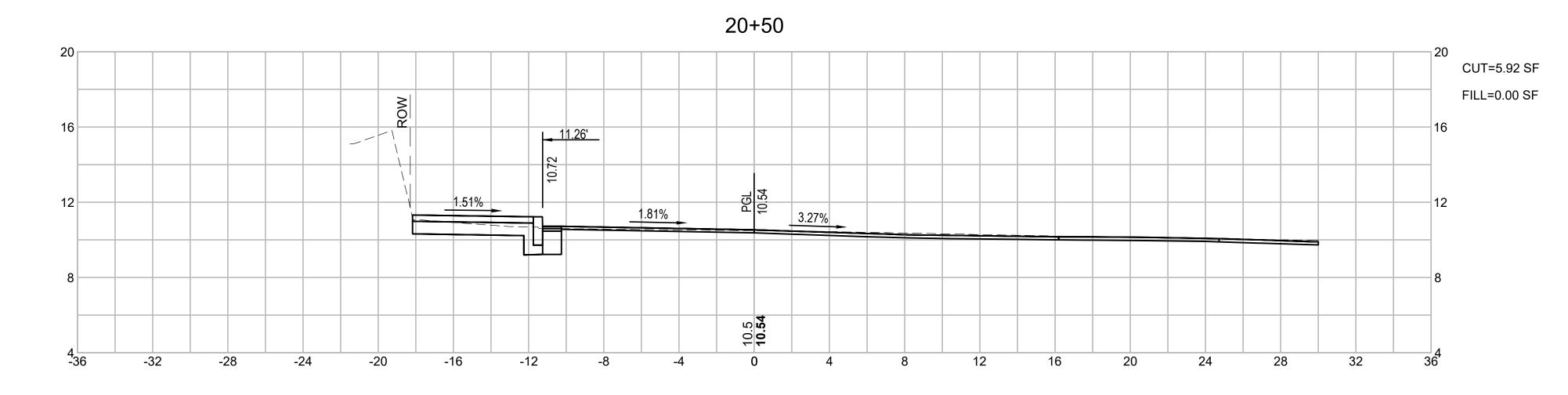
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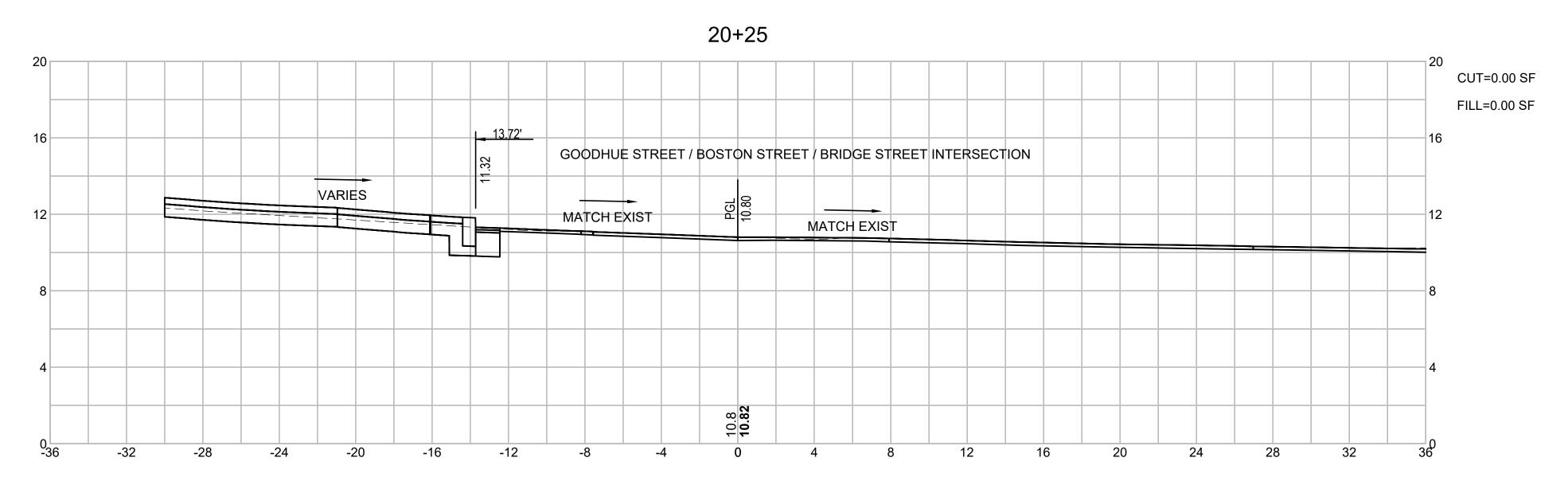
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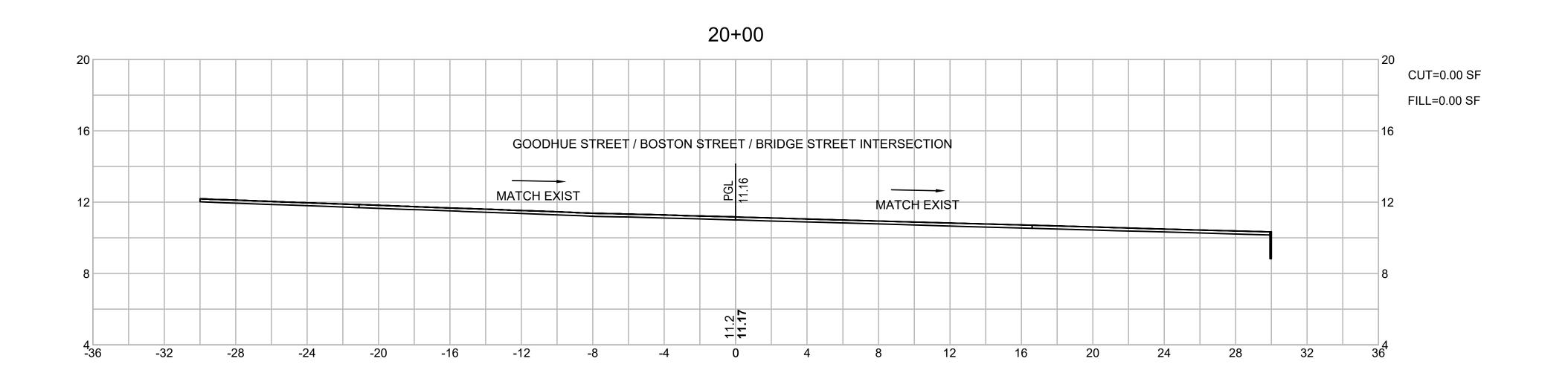
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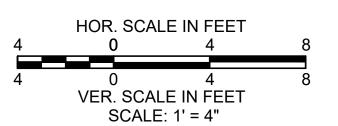
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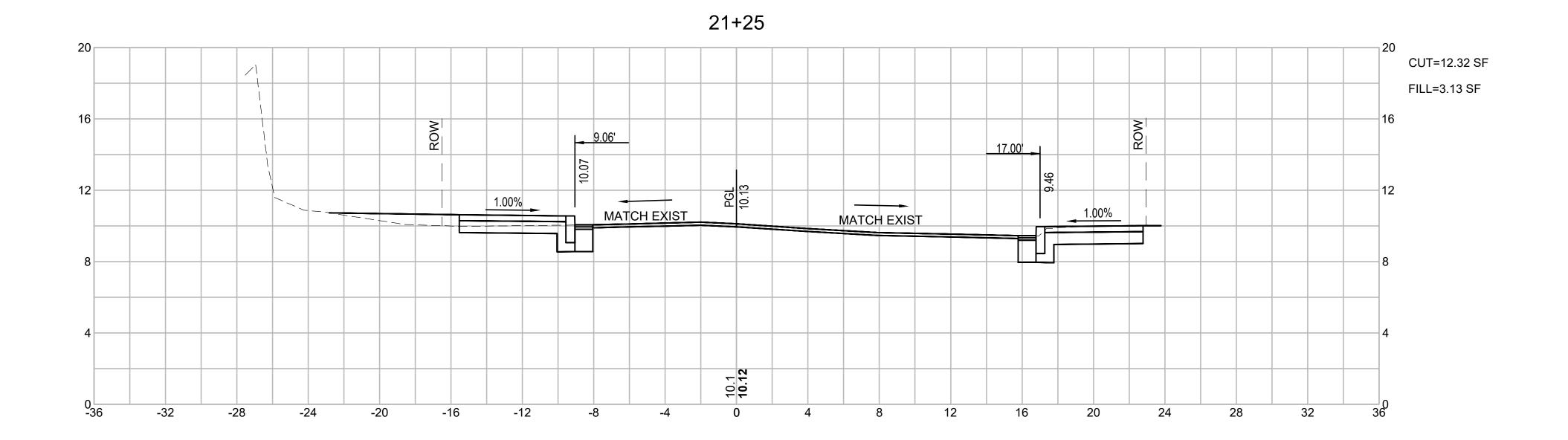
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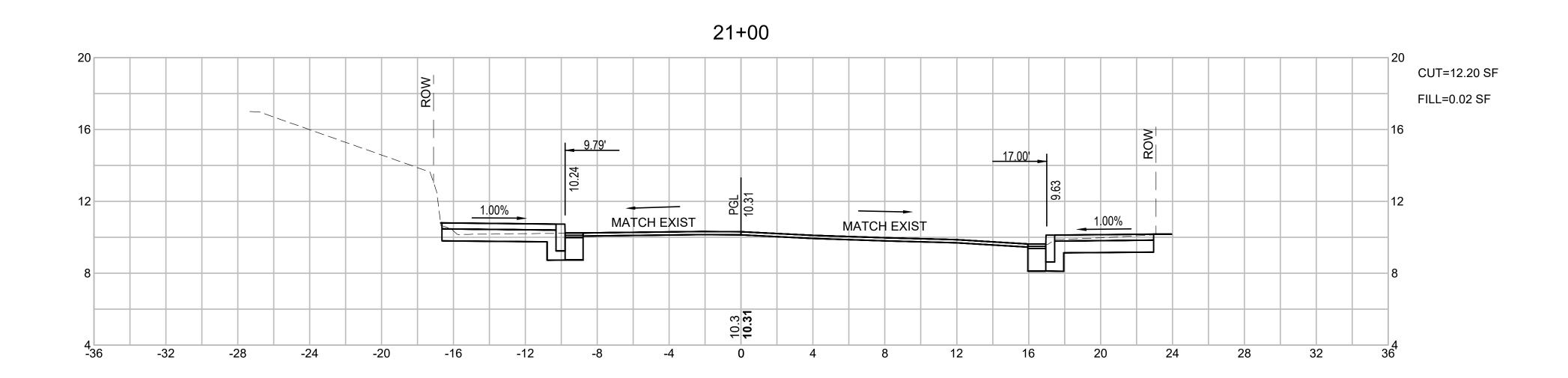
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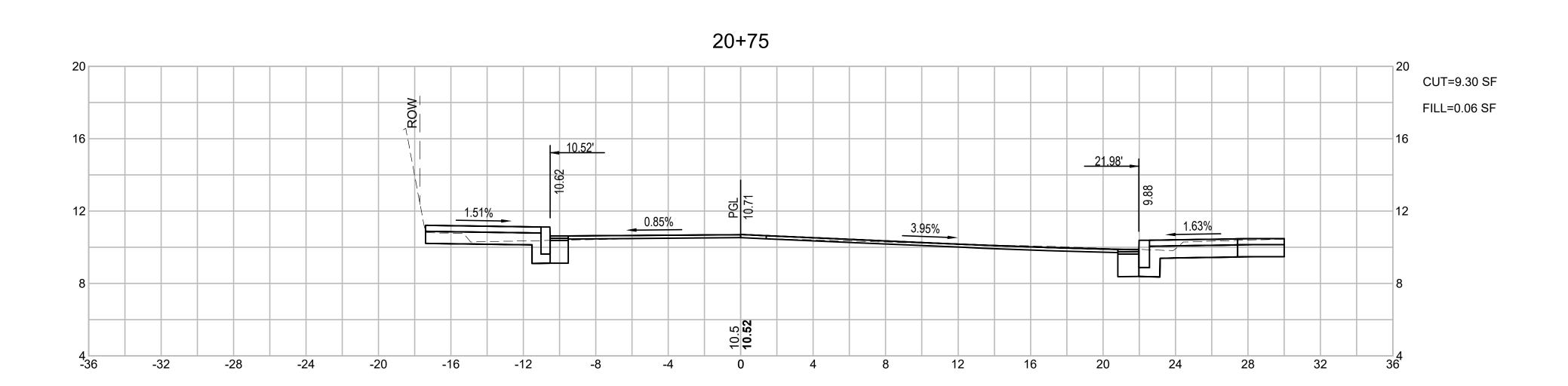
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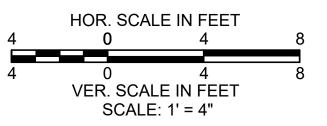
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1'' = 4'











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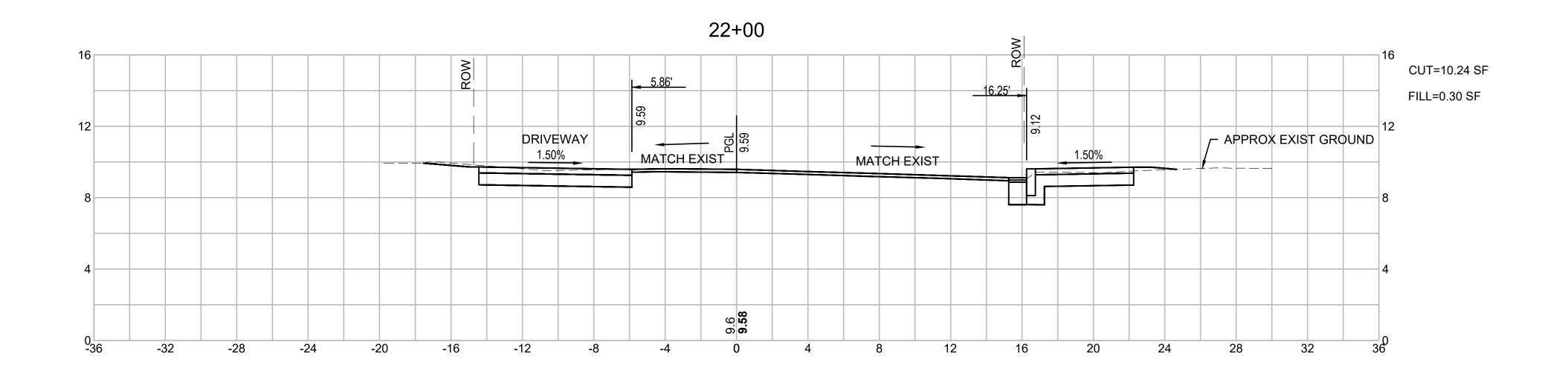
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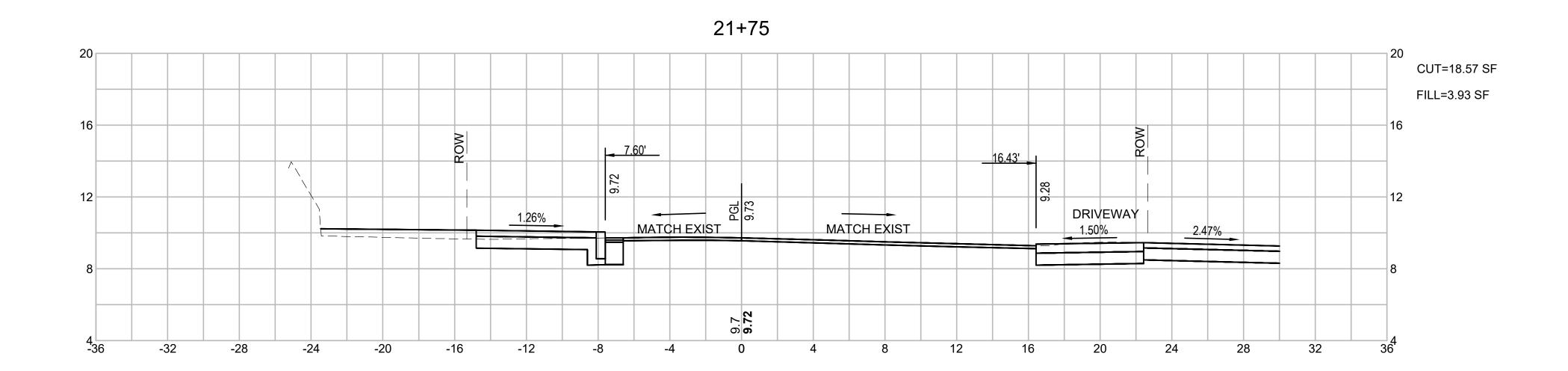
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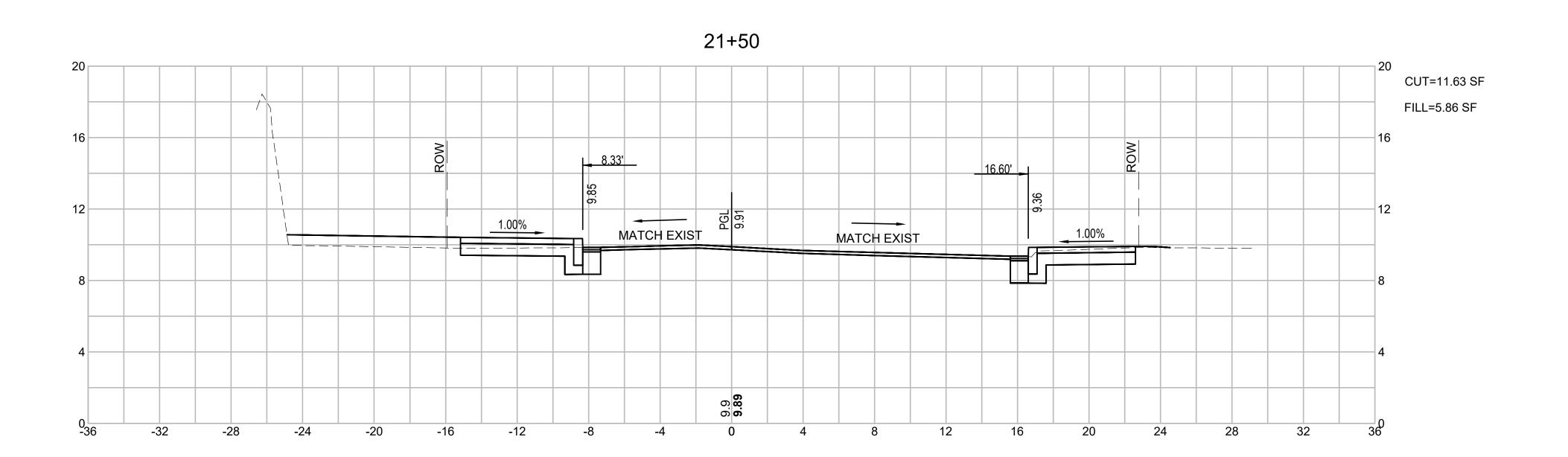
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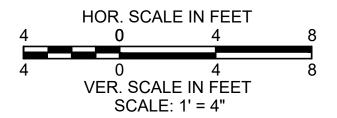
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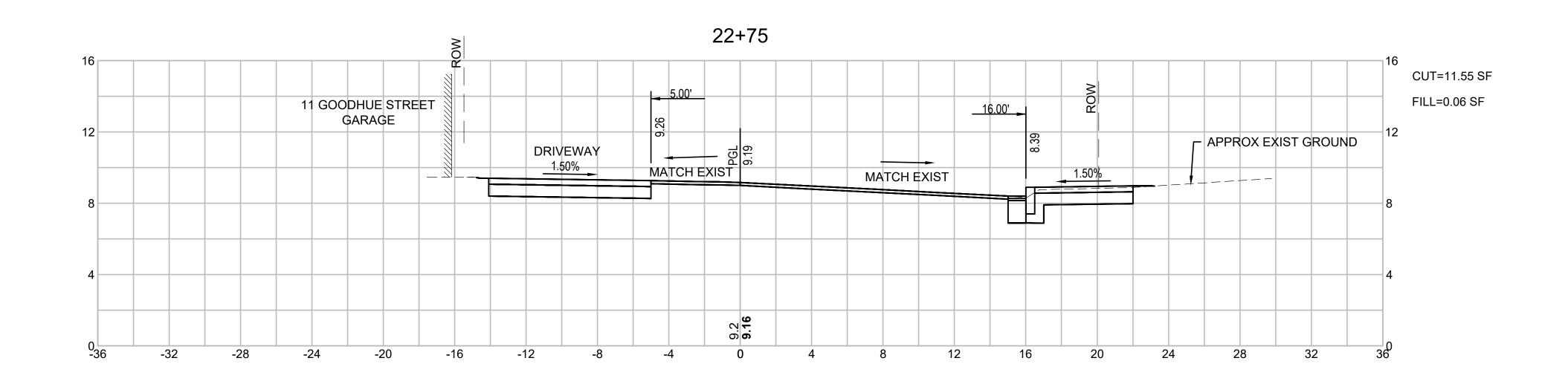
CROSS SECTIONS GOODHUE STREET PART 3 OF 8

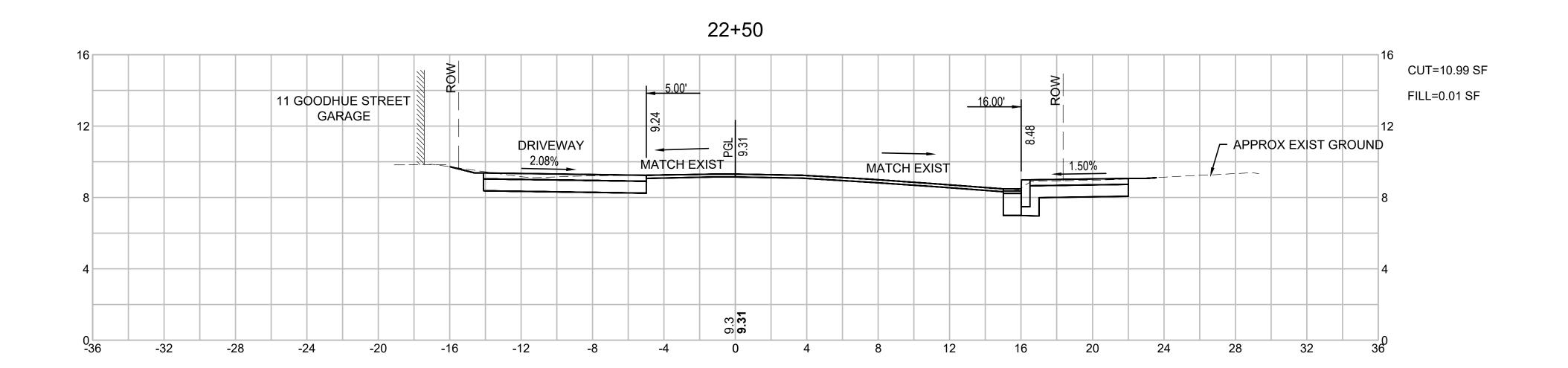
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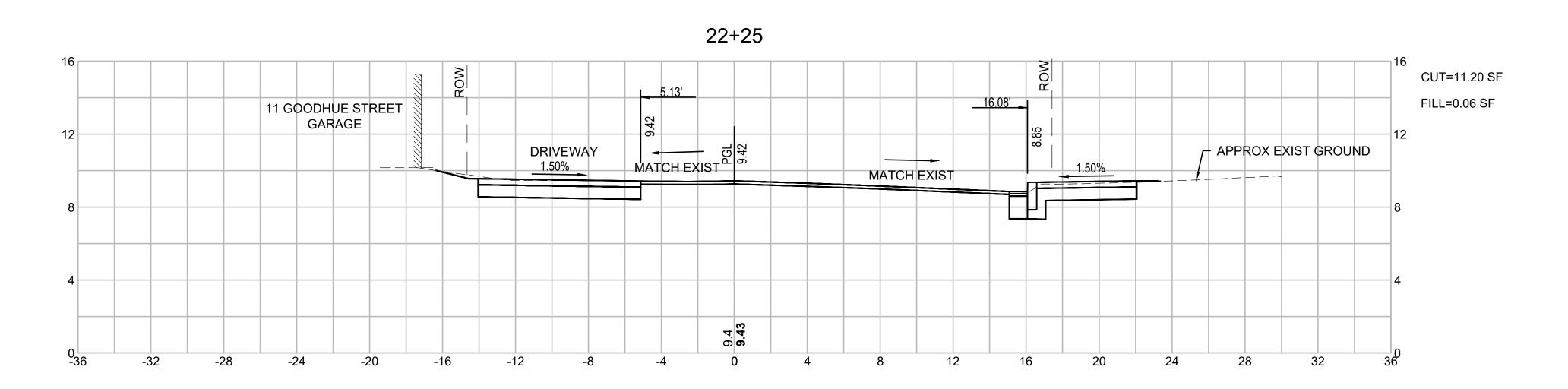
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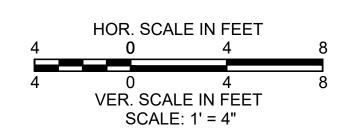
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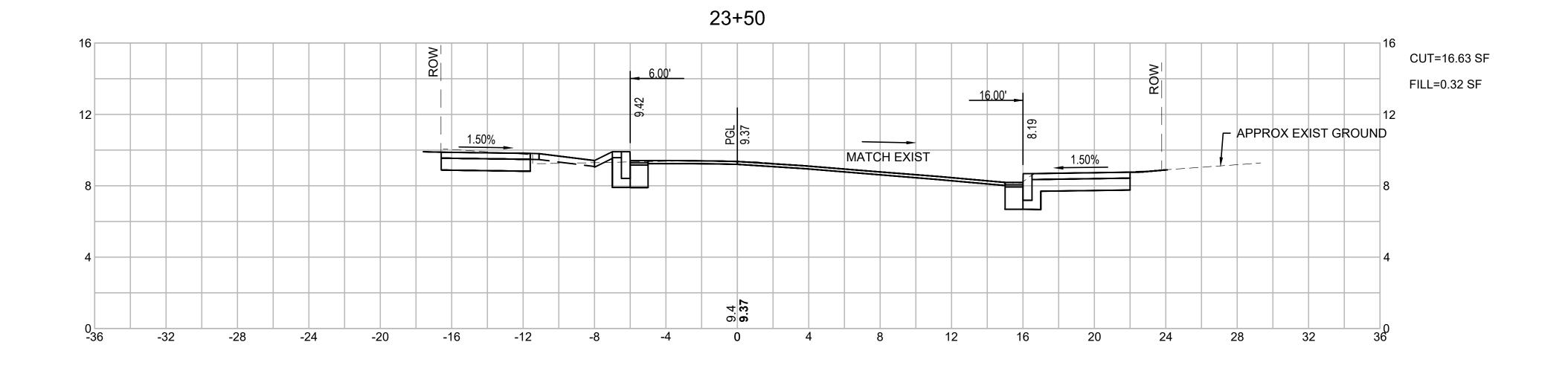
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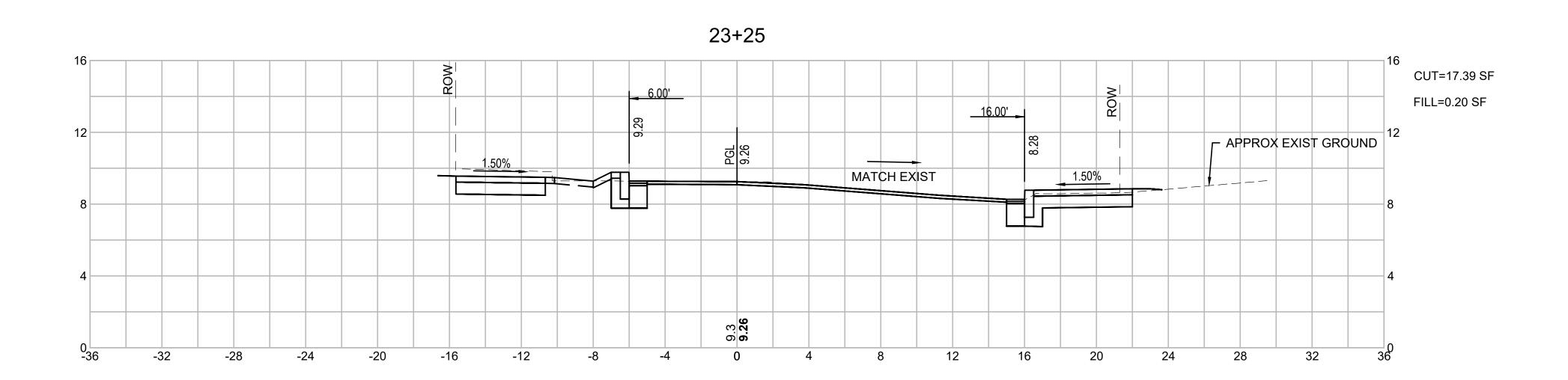
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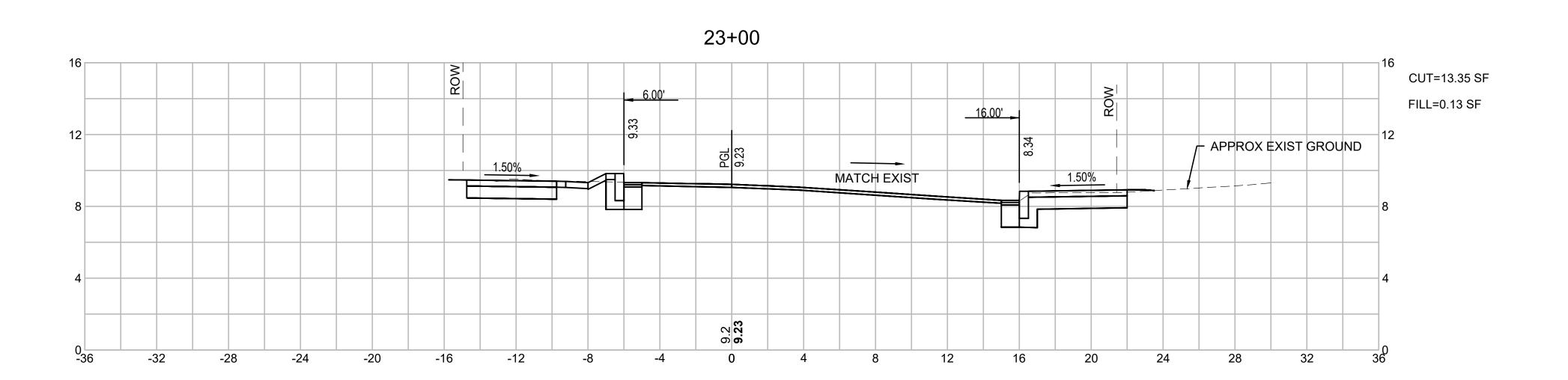
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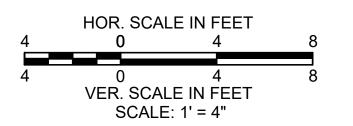
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CROSS SECTIONS GOODHUE STREET PART 5 OF 8

179410455 Project No.

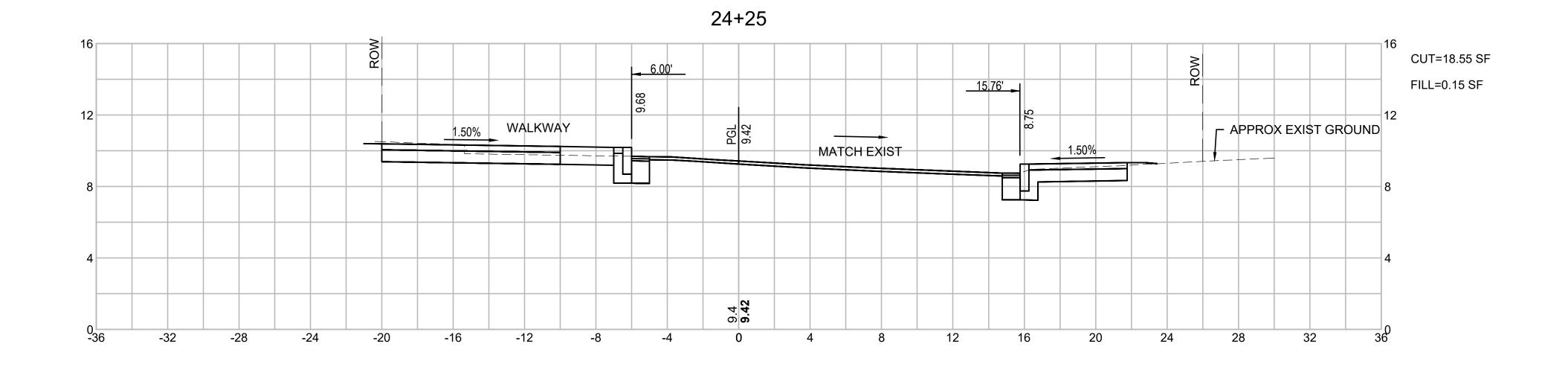
1" = 4'
Scale
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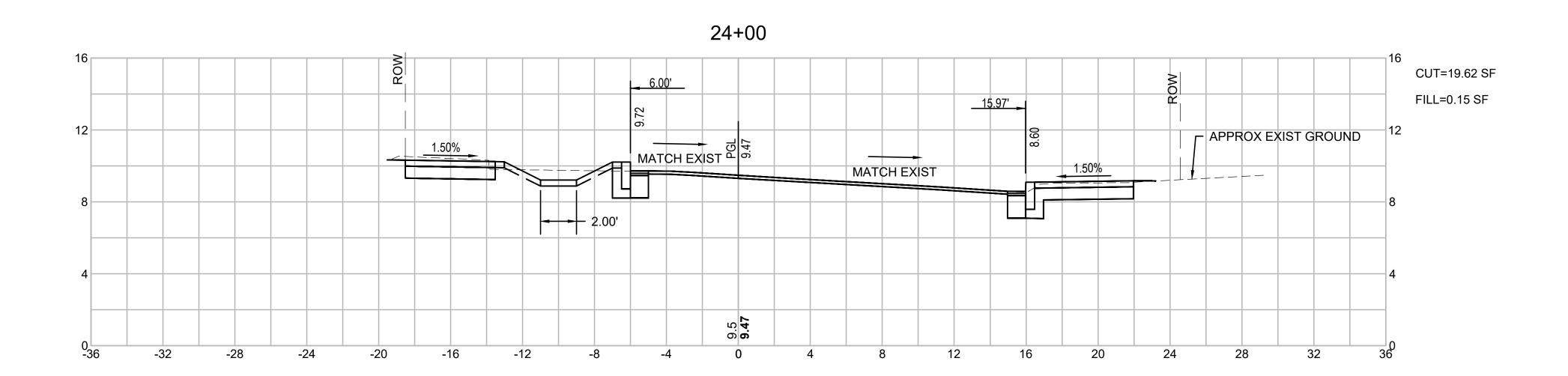
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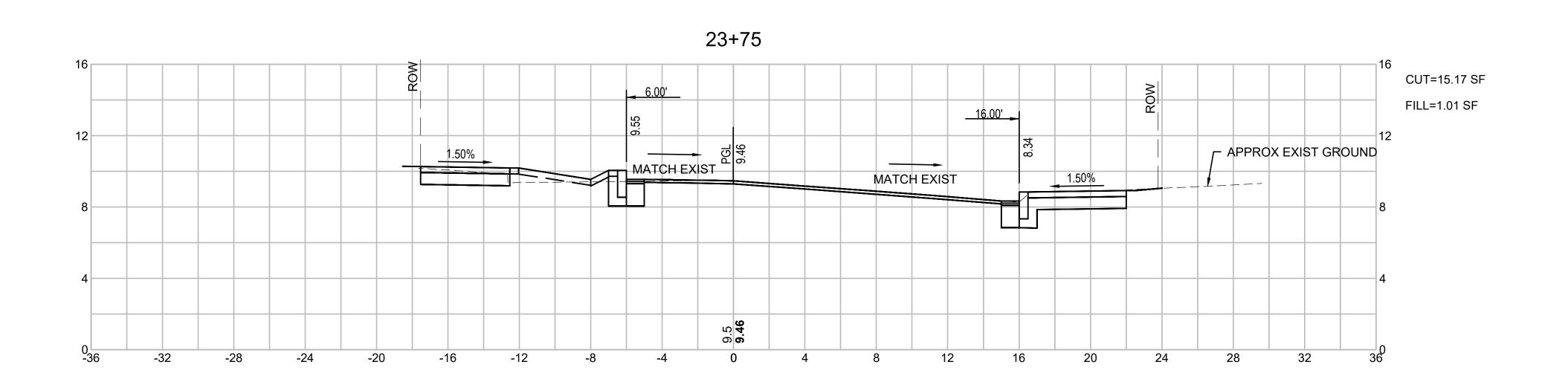
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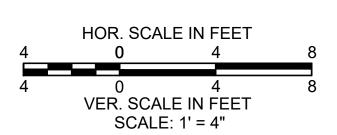
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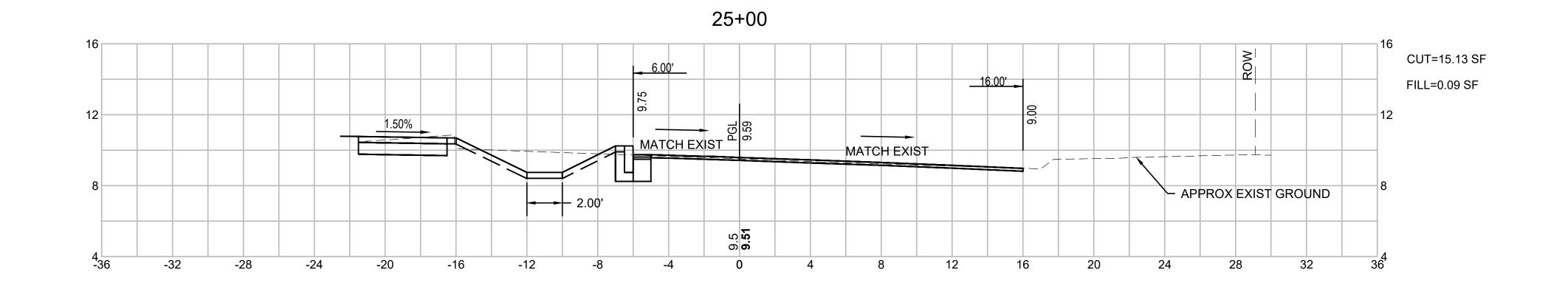
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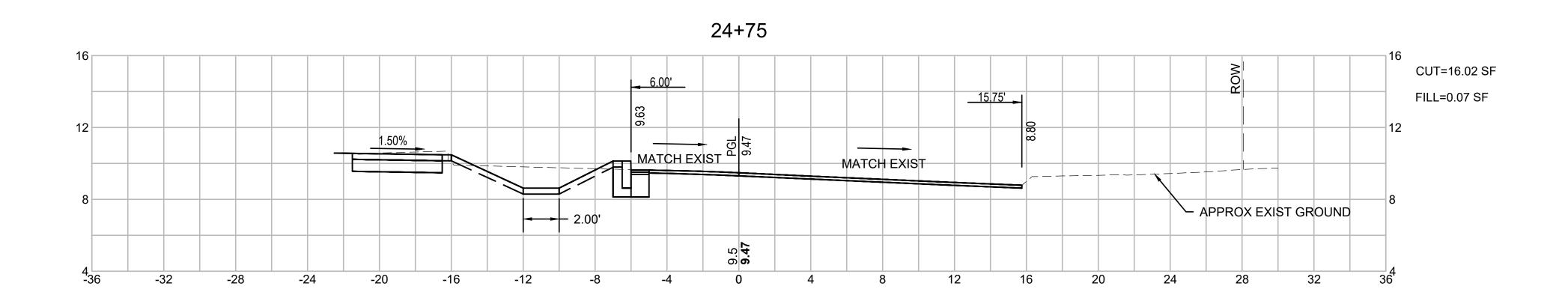
1'' = 4' 103 of 113

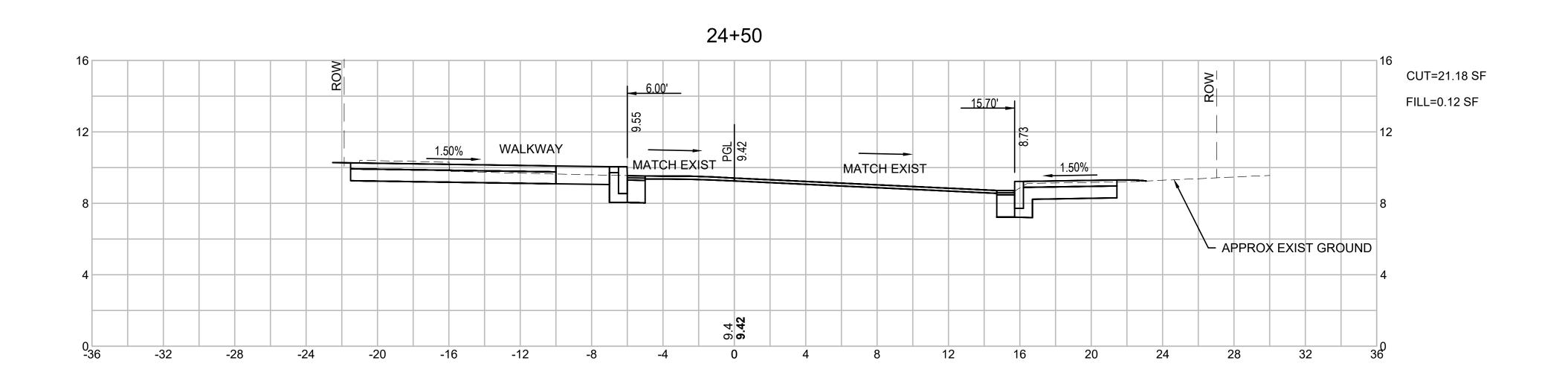
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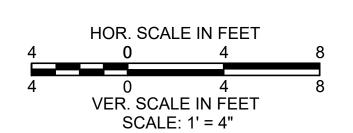
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CROSS SECTIONS GOODHUE STREET PART 7 OF 8

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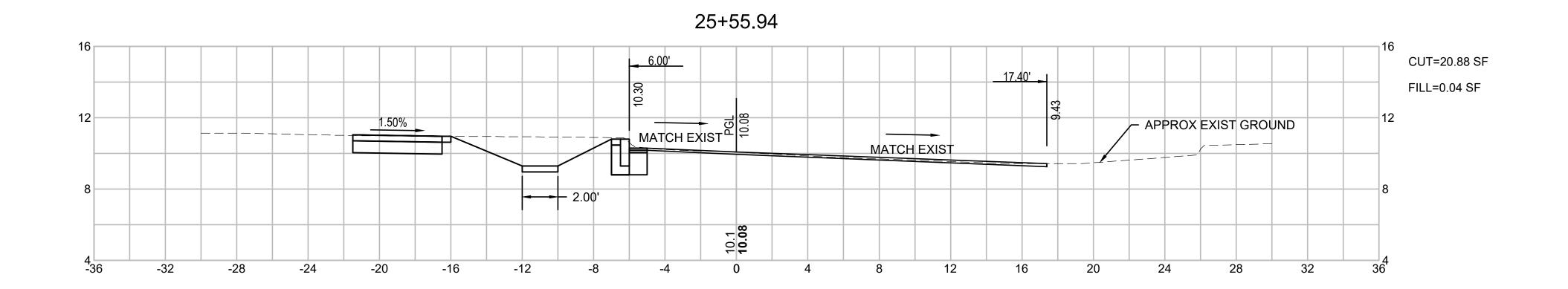
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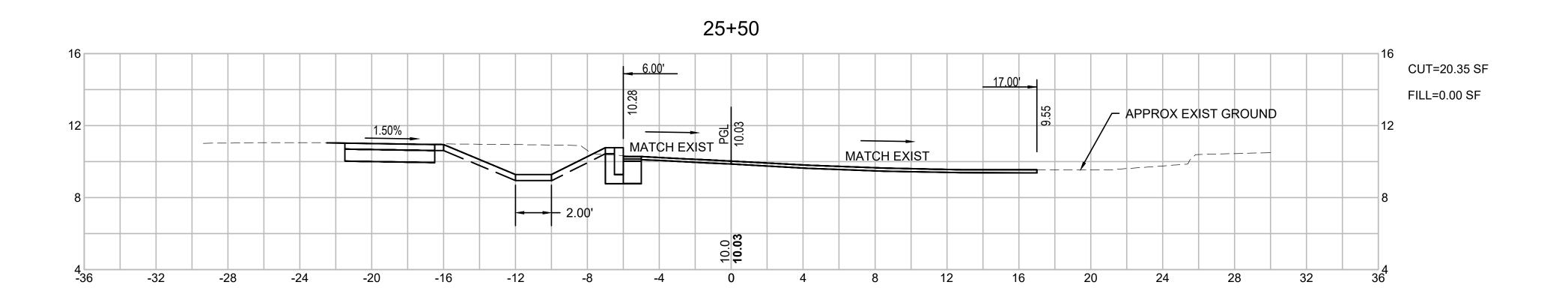
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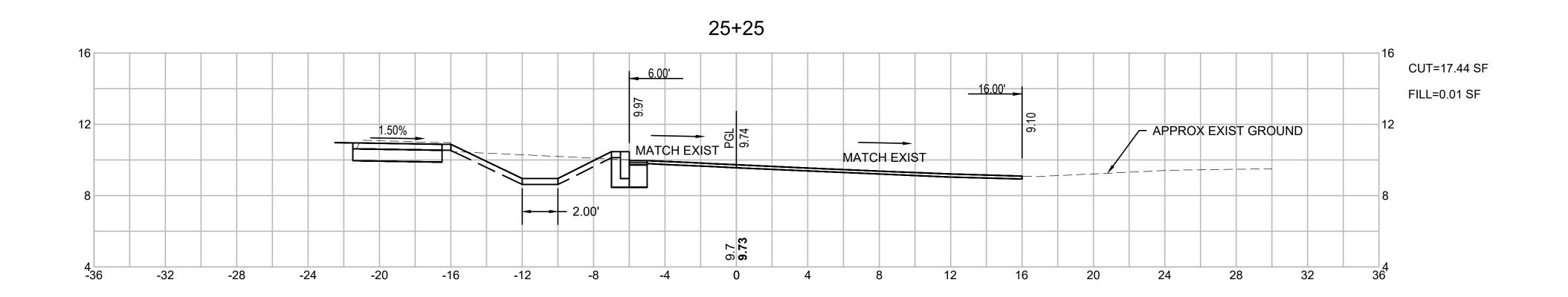
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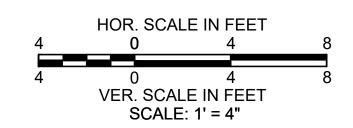
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CROSS SECTIONS GOODHUE STREET PART 8 OF 8

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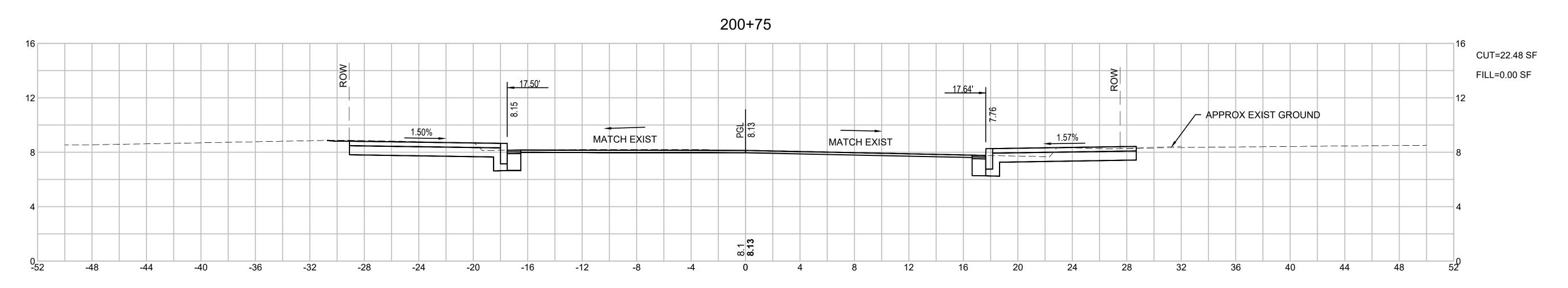
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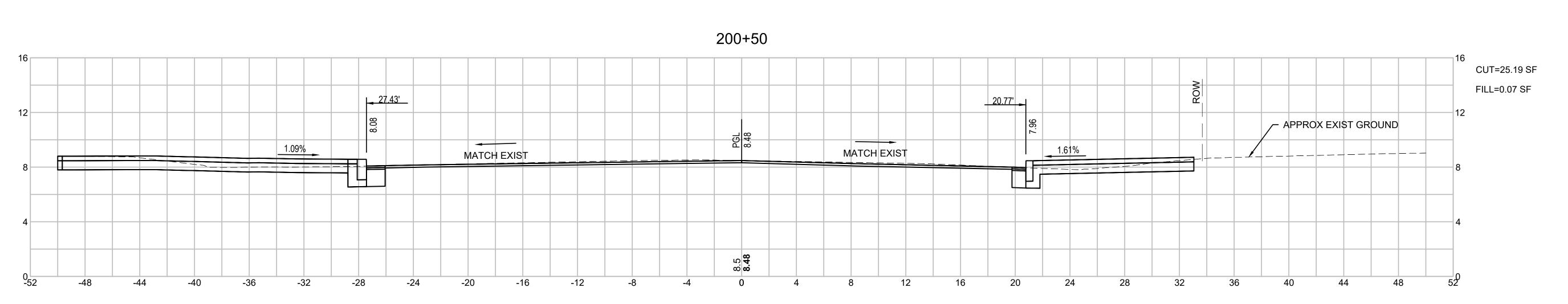
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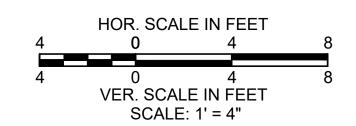
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CROSS SECTIONS NORTH FLINT STREET PART 1 OF 2

179410455 Project No.

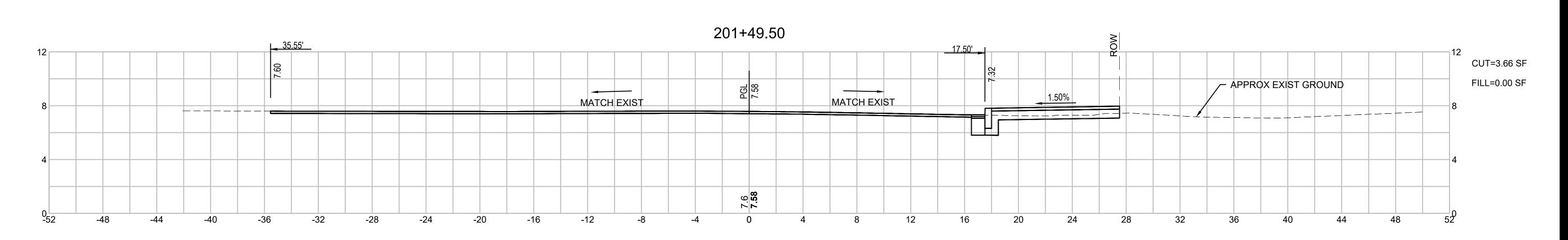
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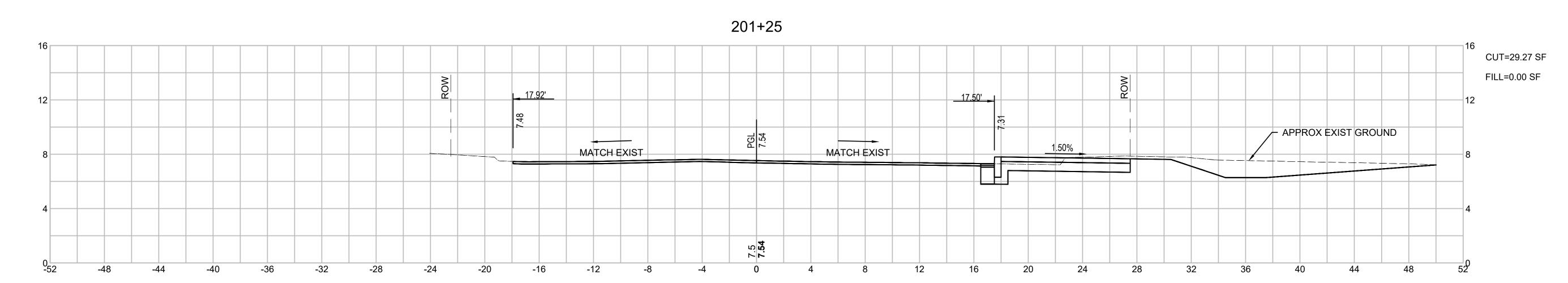
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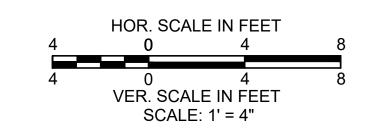
1'' = 4'

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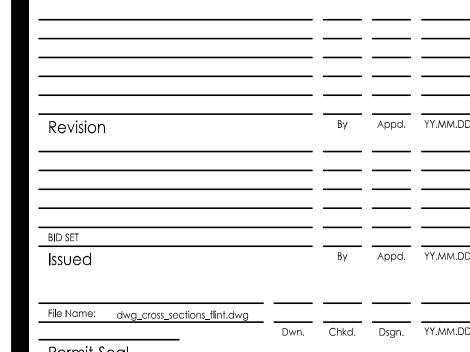
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CROSS SECTIONS NORTH FLINT STREET PART 2 OF 2

179410455 1" Project No. Scale

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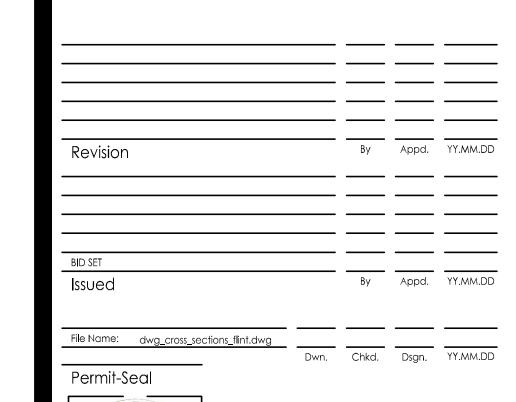
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CROSS SECTIONS SOUTH FLINT STREET PART 1 OF 2

179410455

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1'' = 4'

Sheet

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300+25

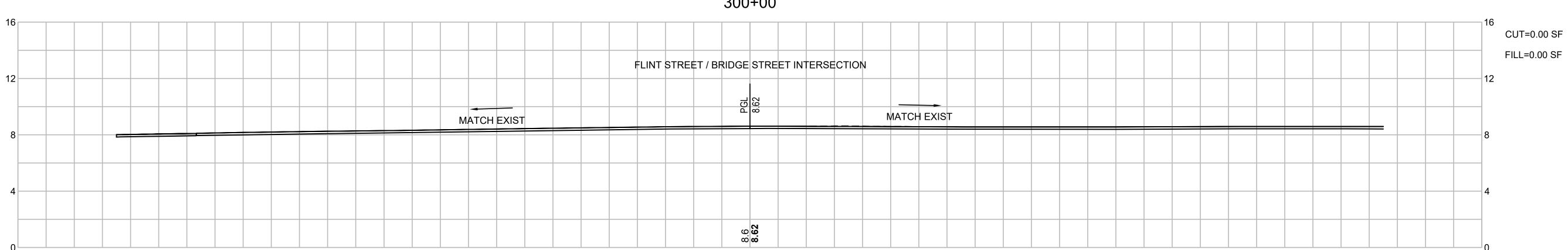
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MATCH EXIST

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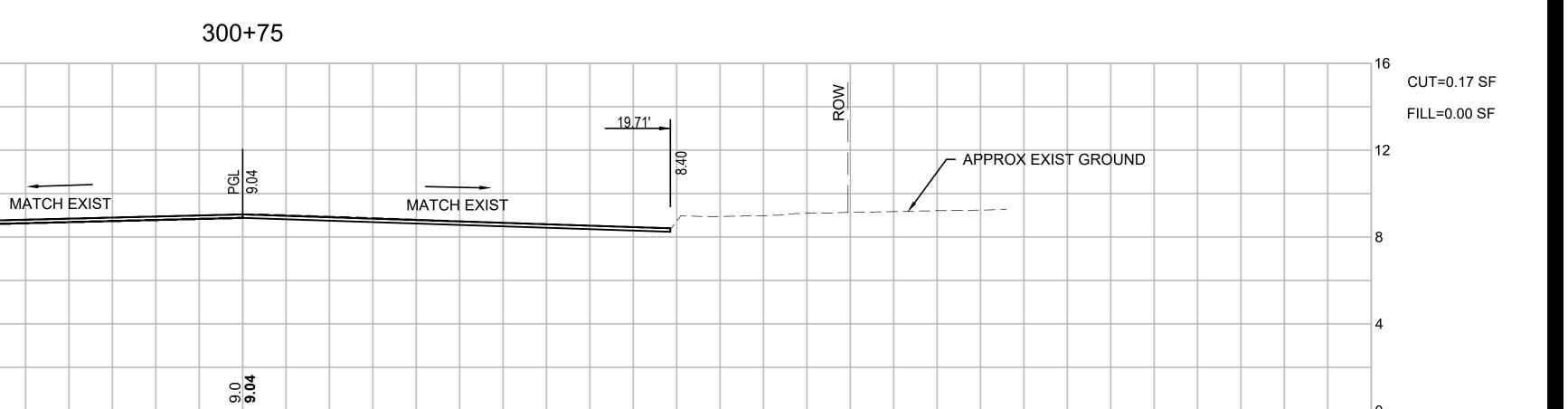
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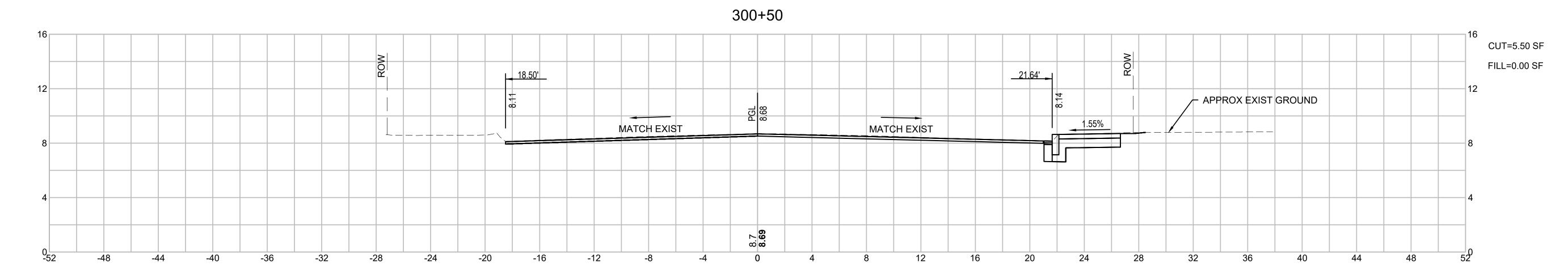
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CROSS SECTIONS SOUTH FLINT STREET PART 2 OF 2

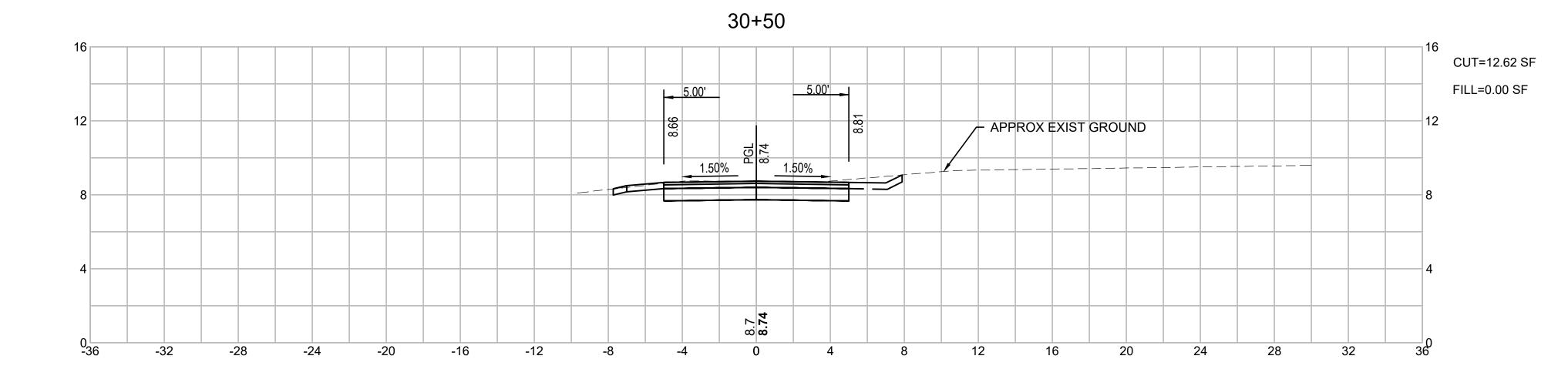
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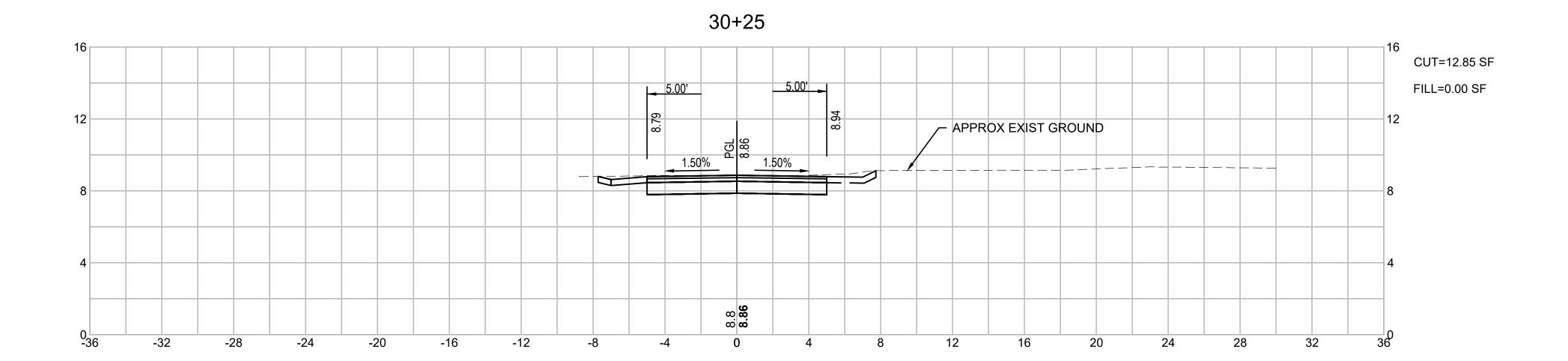
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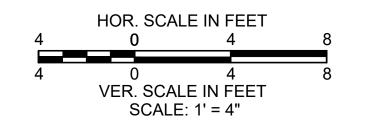
1'' = 4' Scale

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VER. SCALE IN FEET SCALE: 1' = 4"









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CROSS SECTIONS SHARED-USE PATH PART 1 OF 4

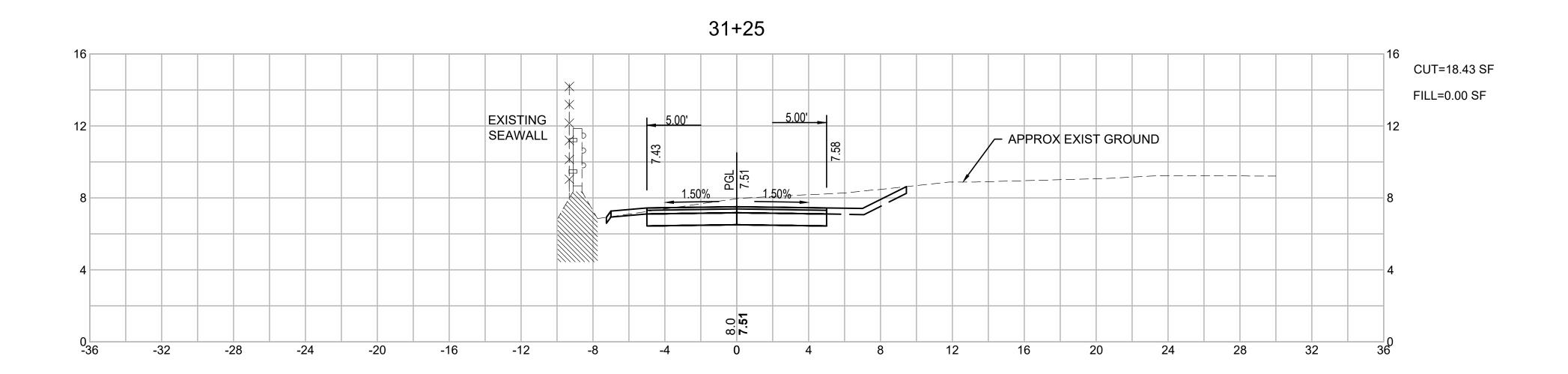
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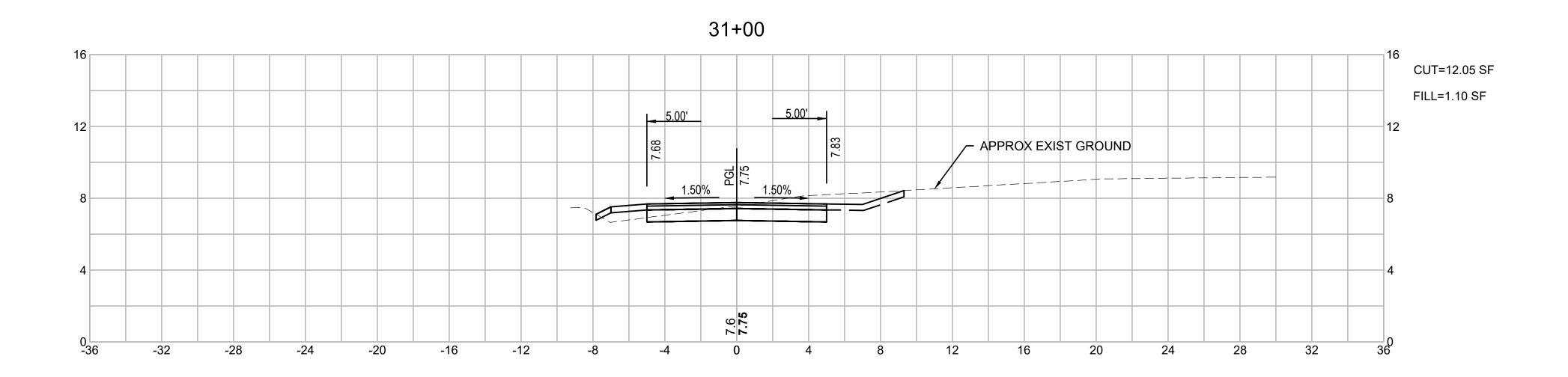
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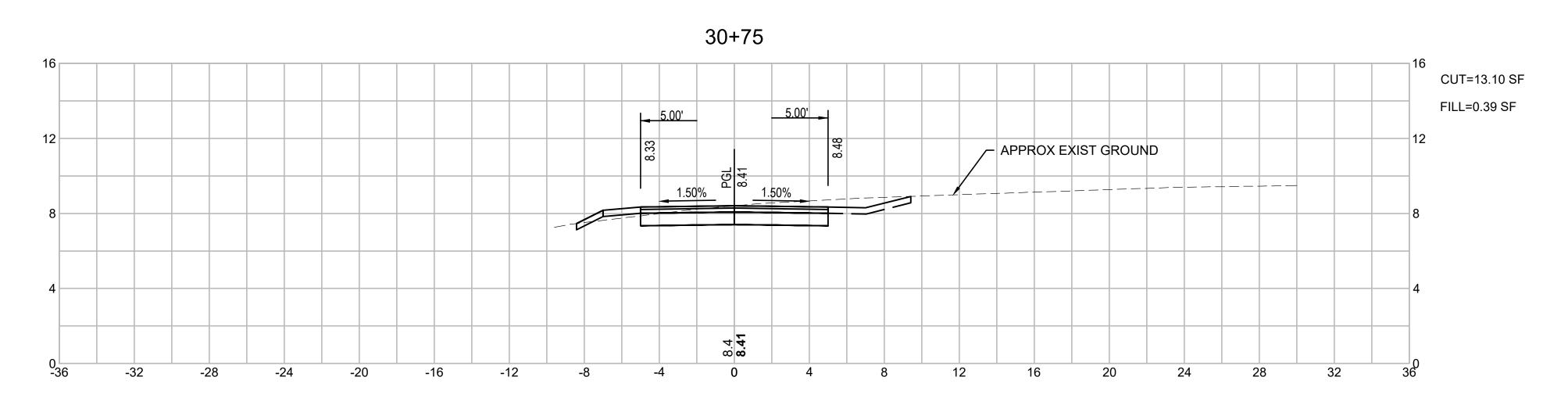
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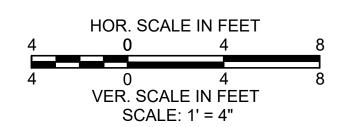
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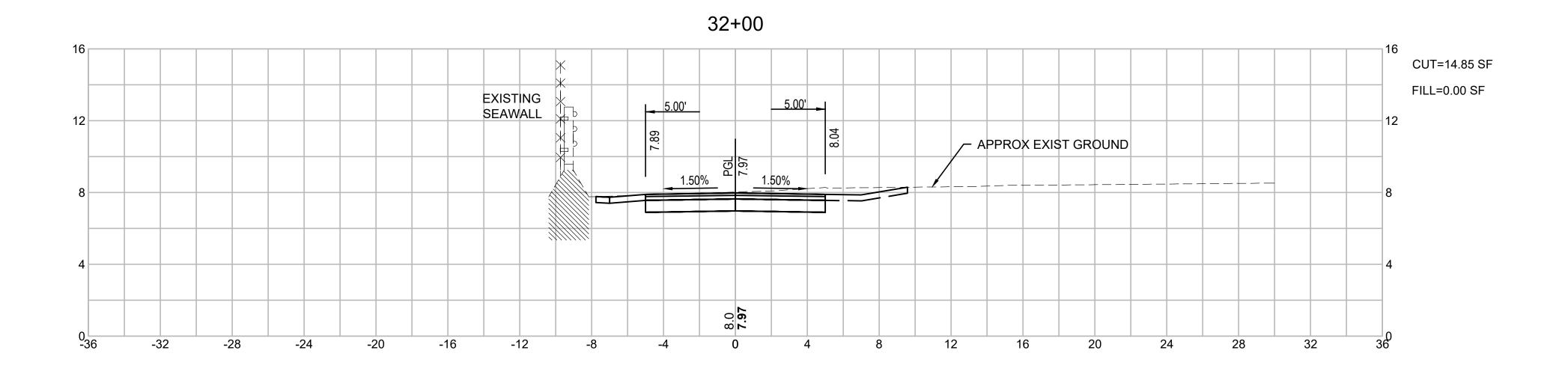
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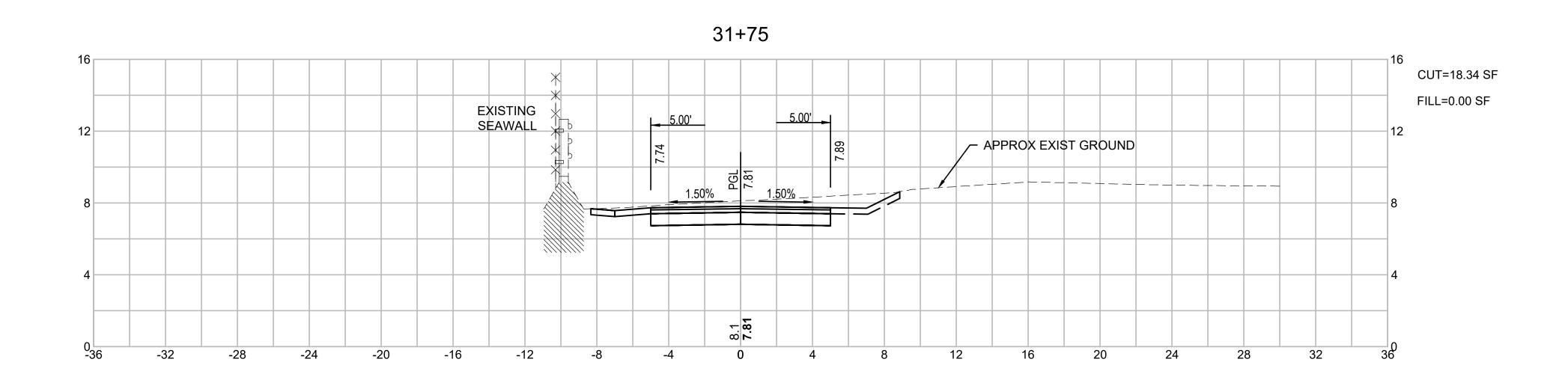
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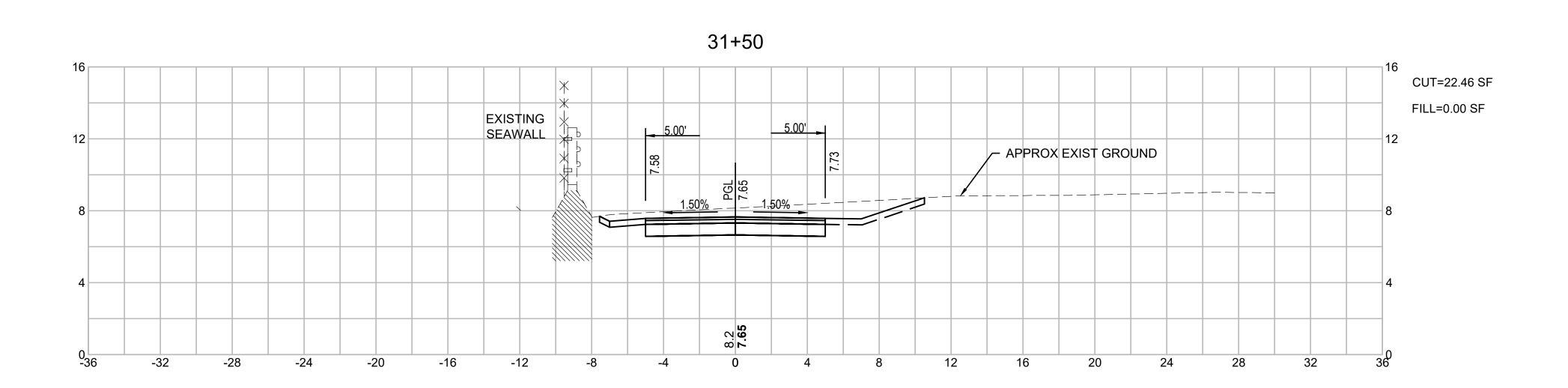
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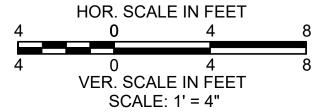
1'' = 4'

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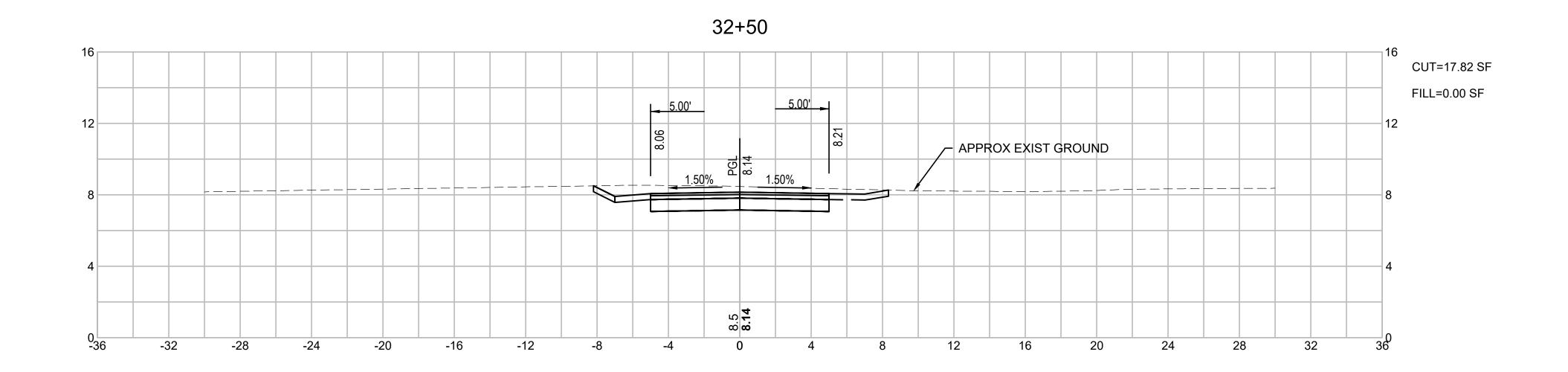
CROSS SECTIONS SHARED-USE PATH PART 3 OF 4

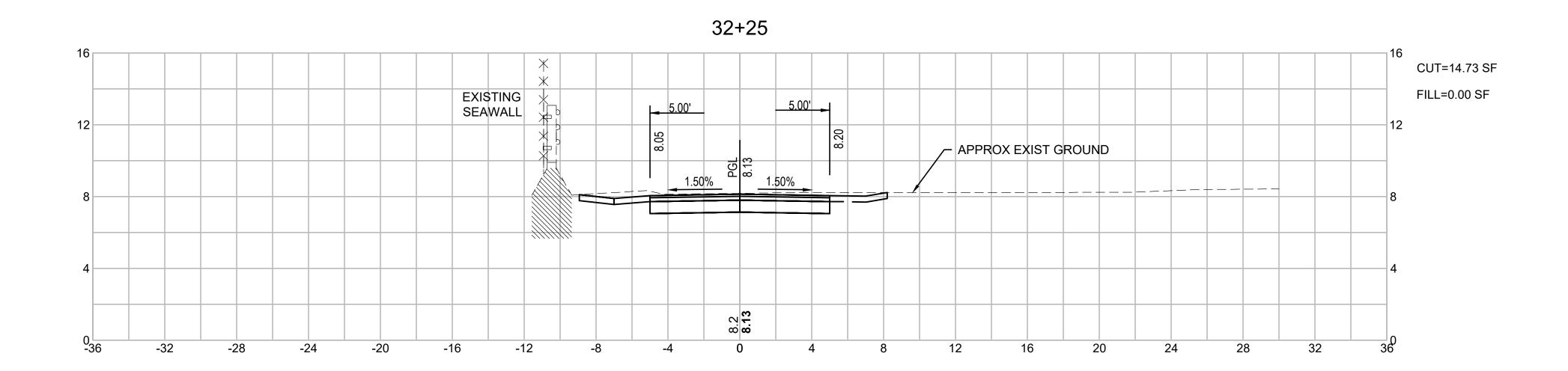
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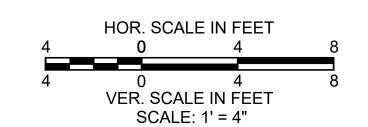
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1'' = 4'









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Client/Project

BRIDGE STREET RECONSTRUCTION PROJECT

CROSS SECTIONS SHARED-USE PATH PART 4 OF 4

179410455

1'' = 4' 113 of 113

Drawing No. Sheet Revision

Project No. Scale