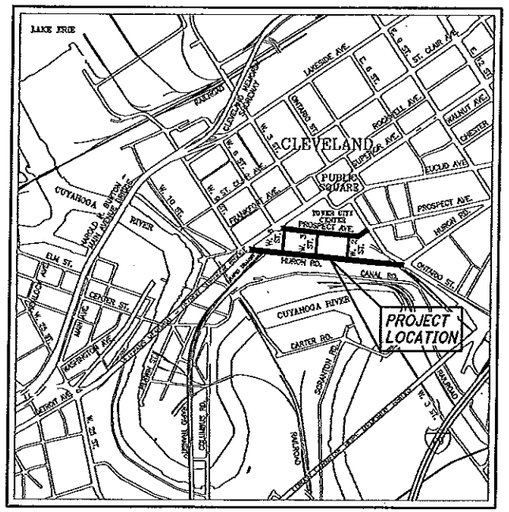
CUY - TOWER CITY BRIDGES
170425 PID - 95557
Dist 12 6/22/2017
Contract Proposal Available @
www.contracts.dot.state.oh.us/home



LOCATION MAP

LATITUDE: LONGITUDE:

SCALE IN FEET
0 1000 2000 3000 4000

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

(PROSPECT AVENUE)

CURRENT ADT (2017)	6630
DESIGN YEAR ADT (2029)	7020
DESIGN HOURLY VOLUME (2029)	702
DIRECTIONAL DISTRIBUTION	60%
TRUCKS (24 HOUR B&C)	7%
DESIGN SPEED	30 MPH
LEGAL SPEED	25 MPH
DESIGN FUNCTIONAL CLASSIFICATION: MINOR ARTERIAL	
NHS PROJECT	YES

DESIGN DESIGNATION

(HURON ROAD)

CURRENT ADT (2017)	15,400
DESIGN YEAR ADT (2029)	16,320
DESIGN HOURLY VOLUME (2029)	1470
DIRECTIONAL DISTRIBUTION	60%
TRUCKS (24 HOUR B&C)	4%
DESIGN SPEED	30 MPH
LEGAL SPEED	25 MPH
DESIGN FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR	
NHS PROJECT	NO

DESIGN EXCEPTIONS

NONE

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STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
FINAL PLANS

CUY-TOWER CITY BRIDGES

CITY OF CLEVELAND
CUYAHOGA COUNTY

INDEX OF SHEETS:

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
BP-7-1	7-18-14	MT-97.10	7-18-14	TC-41.20	10-18-13	800	4-21-17	ACCESS & WORK AGREEMENT RAISIN INDUSTRIES, LLC 3-29-17
		MT-99.20	7-19-13	TC-41.30	10-18-13	847	1-20-17	
		MT-101.60	1-20-17	TC-41.40	10-18-13			
		MT-105.10	7-19-13	TC-41.50	10-18-13			
		MT-110.10	7-19-13	TC-42.20	10-18-13			ACCESS & WORK AGREEMENT RHA 250, LLC 3-31-17
				TC-52.10	10-18-13			
				TC-52.20	7-15-16			
				TC-71.10	1-20-17			

PROJECT DESCRIPTION

REHABILITATION OF THE EXISTING PROSPECT AVENUE, HURON ROAD, WEST 2nd, WEST 3rd, AND WEST 6th STREET BRIDGES OVER GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY TRACKS BY REMOVAL OF THE EXISTING ROADWAY WATERPROOFING ASPHALT WEARING SURFACE, REMOVAL OF THE CONCRETE SIDEWALK WEARING SURFACE AND EXISTING WATERPROOFING, APPLY NEW WATERPROOFING TO EXISTING SIDEWALK STRUCTURAL SLAB AND MISCELLANEOUS PEDESTAL, PLACEMENT OF MICRO SILICA CONCRETE ROADWAY AND SIDEWALK WEARING SURFACE INCLUDING INTEGRAL CONCRETE CURB, NEW PARAPET CONSTRUCTION, REPLACEMENT OF ROADWAY AND SIDEWALK EXPANSION JOINTS, MISCELLANEOUS CONCRETE AND STRUCTURAL STEEL REPAIRS AND FIELD PAINTING, ABUTMENT PATCHING AND SEALING, MISCELLANEOUS DRAINAGE WORK.

PROJECT EARTH DISTURBED AREA:	0 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	NOT REQUIRED

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.
OHIO Utilities Protection SERVICE — Call Before You Dig 1-800-362-2764
(Non-members must be called directly)
OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988

2016 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEETS 22A AND 22B.

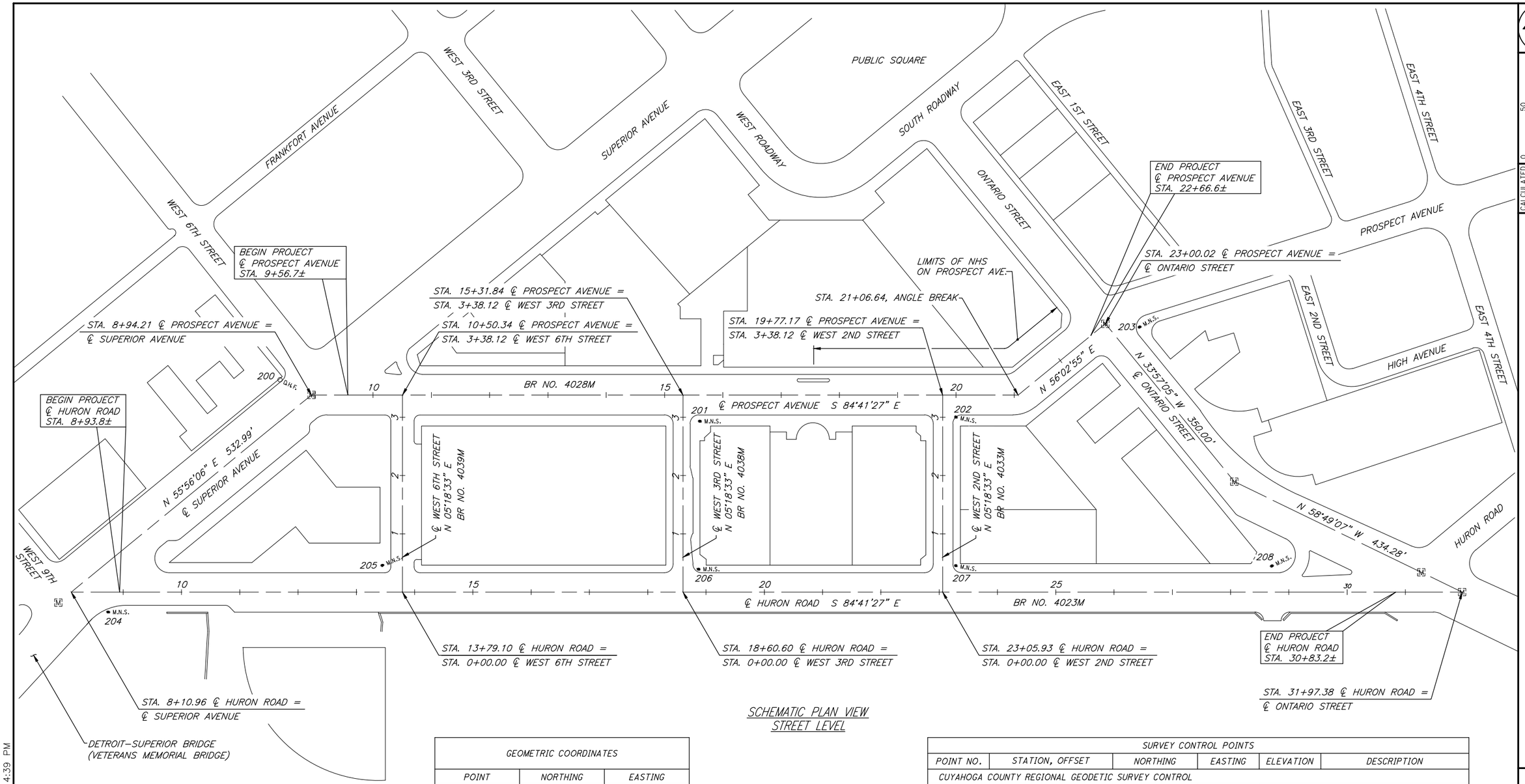
ENGINEERS SEAL:	ENGINEERS SEAL:
STATE OF OHIO MICAH M. PILAT 74876 REGISTERED PROFESSIONAL ENGINEER	STATE OF OHIO RONALD A. BENDER 31771 REGISTERED PROFESSIONAL ENGINEER
SIGNED:	SIGNED:
DATE: 10/24/16	DATE: 10/24/16

PLAN PREPARED BY:
EUTHENICS INC. CONSULTING ENGINEERS
8235 Mohawk Drive, Strongsville, OH

APPROVED _____ DATE 11-21-16 DISTRICT DEPUTY DIRECTOR

APPROVED _____ DATE 4/10-17 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E130751
PID NO. 95557
CONSTRUCTION PROJECT NO. -
RAILROAD INVOLVEMENT GCRTA
CUY-TOWER CITY BRIDGES
1 / 129



SCHEMATIC PLAN VIEW
STREET LEVEL

GEOMETRIC COORDINATES		
POINT	NORTHING	EASTING
℄ PROSPECT AVENUE		
Sta. 8+94.21	88888.36	85230.28
Sta. 10+50.34	88873.91	85385.73
Sta. 15+31.84	88829.36	85865.17
Sta. 19+77.17	88788.15	86308.59
Sta. 21+06.64	88776.17	86437.50
Sta. 23+00.02	88884.17	86597.91
℄ HURON ROAD		
Sta. 8+10.96	88589.81	84788.75
Sta. 13+79.10	88537.24	85354.45
Sta. 18+60.60	88492.69	85833.88
Sta. 23+05.93	88451.48	86277.30
Sta. 31+97.38	88368.99	87164.93

SURVEY CONTROL POINTS					
POINT NO.	STATION, OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
CUYAHOGA COUNTY REGIONAL GEODETIC SURVEY CONTROL					
O.M. 0117	WEST 6TH STREET & LAKESIDE AVENUE	90095.07	84488.49	642.724	3" BRASS DISK WITH PUNCH
O.M. 1030	WEST 6TH STREET & ST. CLAIR AVENUE	89504.48	84890.42	649.959	3" BRASS DISK WITH PUNCH
℄ PROSPECT AVENUE					
200		88919.37	85178.86	657.08	DRILL HOLE FOUND
201	15+60.55, 44.78' RT.	88782.11	85889.62	672.05	MAG NAIL SET
202	20+00.14, 37.74' RT.	88748.45	86327.97	671.73	MAG NAIL SET
203		88873.16	86655.93	668.59	MAG NAIL SET
℄ HURON ROAD					
204	8+73.95, 34.16' RT.	88549.97	84848.31	648.80	MAG NAIL SET
205	13+44.65, 46.05' LT.	88586.29	85324.41	661.92	MAG NAIL SET
206	18+87.12, 39.38' LT.	88529.44	85863.93	672.52	MAG NAIL SET
207	23+28.65, 45.50' LT.	88494.68	86304.13	672.37	MAG NAIL SET
208	28+70.98, 45.01' LT.	88444.01	86844.10	668.09	MAG NAIL SET

HORIZONTAL SCALE IN FEET
0 50 100
CALCULATED SAH
CHECKED RAB

SCHEMATIC PLAN

CUY-TOWER CITY BRIDGES

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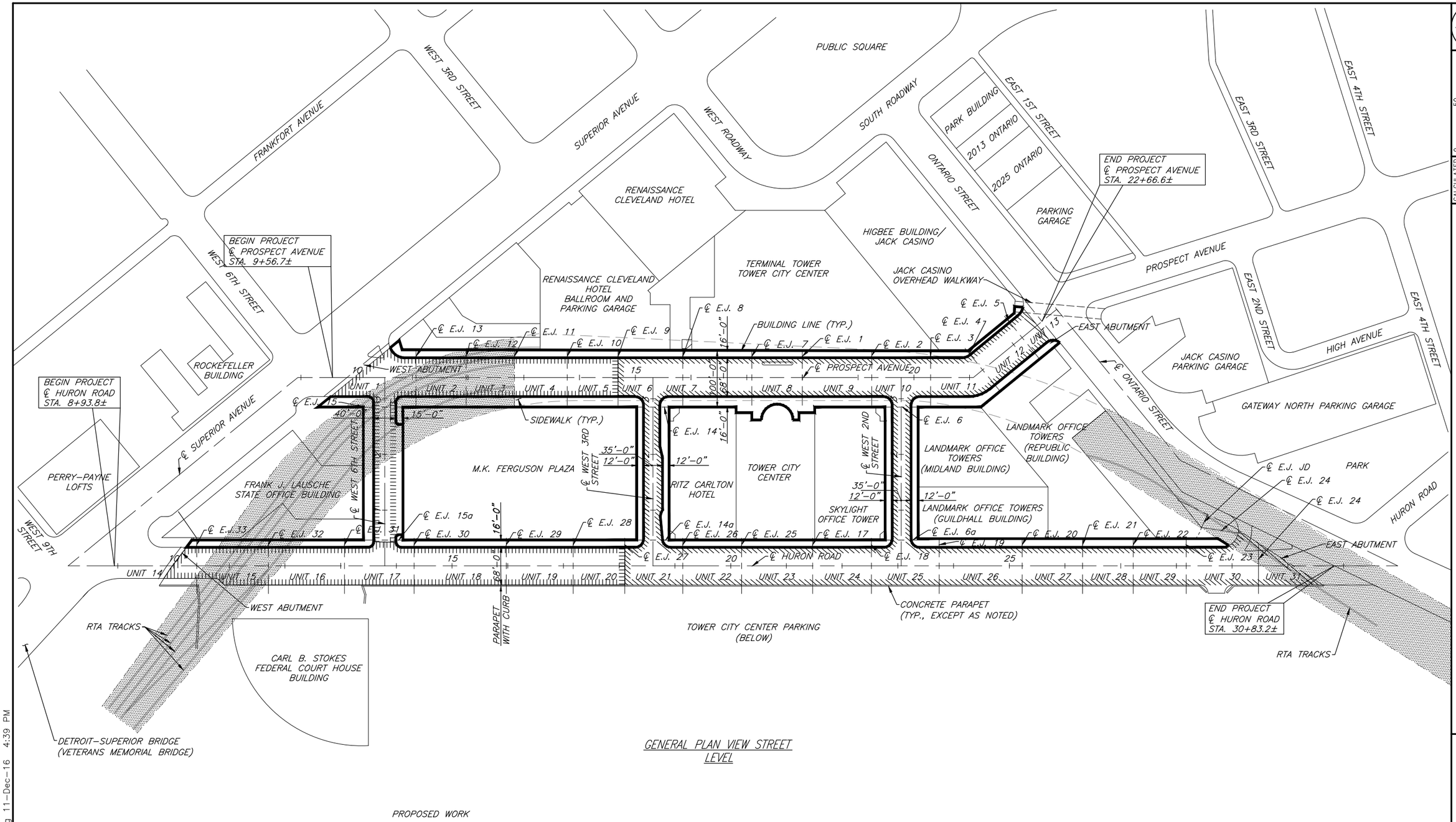

GENERAL PLAN VIEW STREET LEVEL

PROPOSED WORK

- EXISTING MICROSILICA CONCRETE OVERLAY, TREAT WITH SRS
- EXISTING 2 ½"± ASPHALT WEARING COURSE AND WATERPROOFING TO BE REMOVED AND REPLACED WITH 2 ⅛" MICROSILICA MODIFIED CONCRETE OVERLAY
- EXISTING 4 ½"± CONCRETE OVERLAY AND WATERPROOFING TO BE REMOVED AND REPLACED WITH 4" MICROSILICA MODIFIED CONCRETE OVERLAY

GCRTA TRACK CORRIDOR SHOWN DEPICTS TRACK DIRECTLY BELOW BRIDGE WITHOUT INTERMEDIATE FLOOR BETWEEN DECK AND TRACK LEVEL.

HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED MMP
CHECKED RAB

GENERAL PLAN-STREET LEVEL

CUY-TOWER CITY BRIDGES

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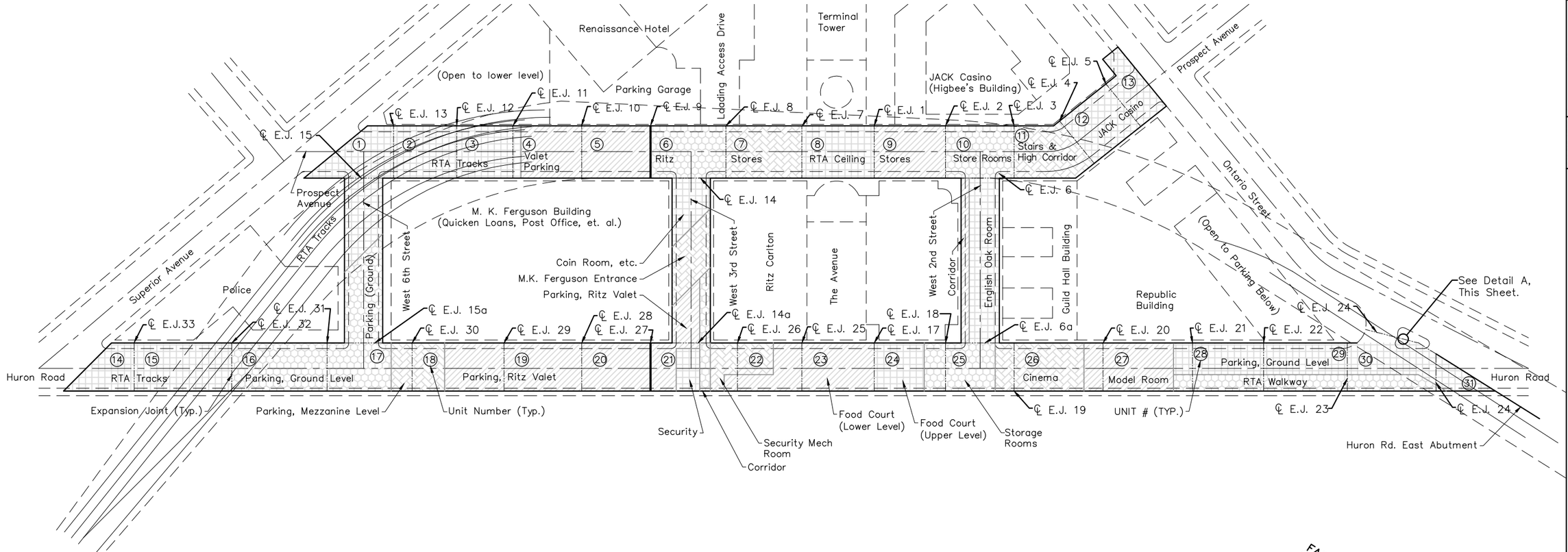

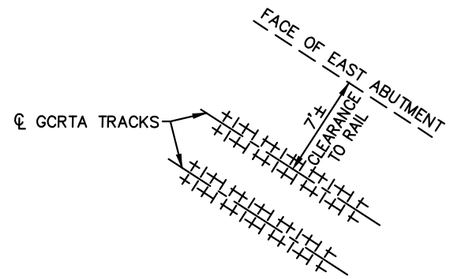

DETAIL A

NOTES:

DIFFERENT HATCHING PATTERNS USED TO DELINEATE THE LOCATIONS AND THE EXTENTS OF DIFFERING TOWER CITY, OCCUPANTS SPACES BELOW THE TOWER CITY BRIDGES.

FOR NOTES ON ACCESSING THE SPACES BELOW THE BRIDGE DECK FOR WORK, SEE SHEET 5.

CALCULATED MMP CHECKED RAB

GENERAL PLAN - LOWER LEVEL

CUY-TOWER CITY BRIDGES

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Joint Number	Units	Work from Beneath Anticipated	Worktype Anticipated	Space Below	Ceiling Type	Access from Beneath * (If necessary)
1	8 - 9	**Yes**	Painting and steel repair, repair access performed from above.	Walkway between The Avenue storefronts and RTA Concourse - East Side	Drop ceiling east of joint, rackel tile with drywall west of joint	By step-ladder through drop ceiling.
2	9 - 10	**Yes**	Painting and steel inspection	The Avenue stores, store rooms & service corridor	Areas with drop ceiling, areas with no ceiling	By step-ladder through drop ceiling if present, otherwise access is unobstructed by a ceiling.
3	10 - 11	**Yes**	Painting and steel inspection	Corridor between The Avenue and Horseshoe Casino service entrance	Areas of drywall and areas of rackel tile	In rackel tile areas, via ladder through access hatch. Otherwise remove drywall.
4	11 - 12	No	Steel inspection only	Horseshoe Casino service areas	Drop ceiling	By step-ladder through drop ceiling.
5	12 - 13	**Yes**	Painting and steel inspection	Horseshoe Casino service areas	None	Restricted by banks of utility conduits, but otherwise open.
6	W. 2nd St. - Unit 10	No	Steel inspection only	Corridor between The Avenue and Guild Hall Building	Drywall	Remove drywall.
6a	W. 2nd St. - Unit 25	No	None	The Avenue Food Court	None	*
7	7 - 8	**Yes**	Painting only	Walkway between storefronts and RTA Concourse - West Side	Drop ceiling west of joint, rackel tile with drywall below and east of joint	By step-ladder through drop ceiling.
8	6 - 7	**Yes**	Painting and steel repair, repair access performed from above.	The Avenue store rooms and service corridor.	Areas with rackel tile, areas with no ceiling	In rackel tile areas, via ladder through access hatch, otherwise unobstructed.
9	5 - 6	No	Steel inspection only	Ritz-Carlton valet parking & Ritz-Carlton service spaces	Areas with drop ceiling, areas with no ceiling	By step-ladder through drop ceiling if present, otherwise access is unobstructed by a ceiling.
10	4 - 5	**Yes**	Painting only	Ritz-Carlton valet parking	None	*
11	3 - 4	**Yes**	Painting and steel inspection	GCRTA Tracks & Access Road	None	*
12	2 - 3	**Yes**	Painting and steel repair	GCRTA Tracks & Access Road	None	*
13	1 - 2	**Yes**	Painting and steel repair	GCRTA Tracks & Access Road	None	*
14	W. 3rd St. - Unit 6	No	Steel inspection only	Ritz-Carlton service spaces, The Avenue service corridor	Areas with drop ceiling, areas with no ceiling and areas with access limited by drywall walls.	By step-ladder through drop ceiling if present, remove drywall if present, otherwise access is unobstructed by a ceiling.
14a	W. 3rd St. - Unit 21	No	None	Ritz-Carlton Valet Parking	None	*
15	W. 6th St. - Unit 1	**Yes**	Painting only	GCRTA Tracks	None	*
15a	W. 6th St. - Unit 17	No	None	Ground Level Parking & GCRTA Tracks	None	*
Expansion Joint #16 Does Not Exist						
17	23 - 24	**No**	Steel inspection only	The Avenue Food Court (upper and lower levels)	None	*
18	24 - 25	**Yes**	Painting and steel inspection	Mechanical Room (Room 85.70)	None	*
19	25 - 26	**Yes**	Painting and steel inspection	The Avenue corridor to GCRTA Walkway and Tower City Cinema Lobby & Projection Area	Drop ceiling in Tower City Cinema, drywall in corridor.	By lift or scaffolding in cinema, otherwise remove drywall.
20	26 - 27	**Yes**	Painting and steel inspection	The Avenue storage room and corridor to GCRTA Walkway.	No ceiling in storage room, drywall in corridor.	By lift or scaffolding in storage room, otherwise remove drywall.
21	27 - 28	**Yes**	Painting and steel inspection	Ground Level Parking & GCRTA Walkway	None	*
22	28 - 29	**Yes**	Painting, steel repair and steel inspection	Ground Level Parking & GCRTA Walkway	None	*
23	29 - 30	**Yes**	Painting and steel inspection	Ground Level Parking & GCRTA Walkway	None	*
24	30 - 31 & Ontario St.	**Yes**	Painting only	Ground Level Parking, GCRTA Walkway & GCRTA Tracks	None	*
25	22 - 23	No	Steel inspection only	The Avenue Food Court (upper and lower levels)	None	*
26	21 - 22	**Yes**	Painting only	The Avenue mechanical room	None	*
27	20 - 21	**Yes**	Painting and steel inspection	Ritz-Carlton Valet Parking	None	*
28	19 - 20	**Yes**	Painting, steel repair and steel inspection	Ritz-Carlton Valet Parking	None	*
29	18 - 19	**Yes**	Painting and steel inspection	Ritz-Carlton Valet Parking	None	*
30	17 - 18	**Yes**	Painting, steel repair and steel inspection	Mezzanine Level Parking	None	*
31	16 - 17	**Yes**	Painting only	Ground Level Parking	None	*
32	15 - 16	No	None	GCRTA Tracks	None	*
33	14 - 15	**Yes**	Painting and steel repair	State Office Bldg. Parking	None	*
JD	Sidewalk @ Huron Rd. & Ontario St.	No	New compression seal installed from above	GCRTA Tracks	None	*

NOTE:

* *ACCESS RESTRICTIONS ARE SUBJECT TO BE CHANGED BY THE OWNERS OF THE SPACES. THESE ARE TO BE VERIFIED DURING PRE-BID SITE VISIT AND WITH A REVIEW OF THE PROPERTY AGREEMENTS.*

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HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED MMP
CHECKED RAB

LOWER LEVEL ACCESS NOTES

CUY-TOWER CITY BRIDGES

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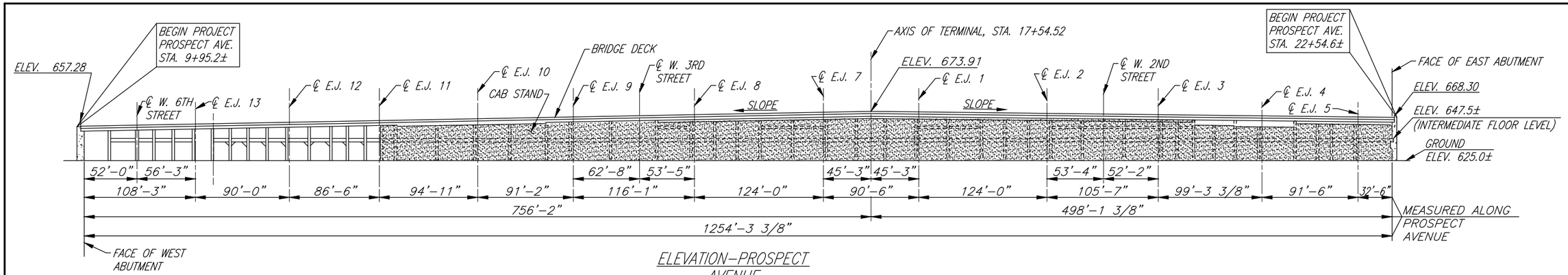
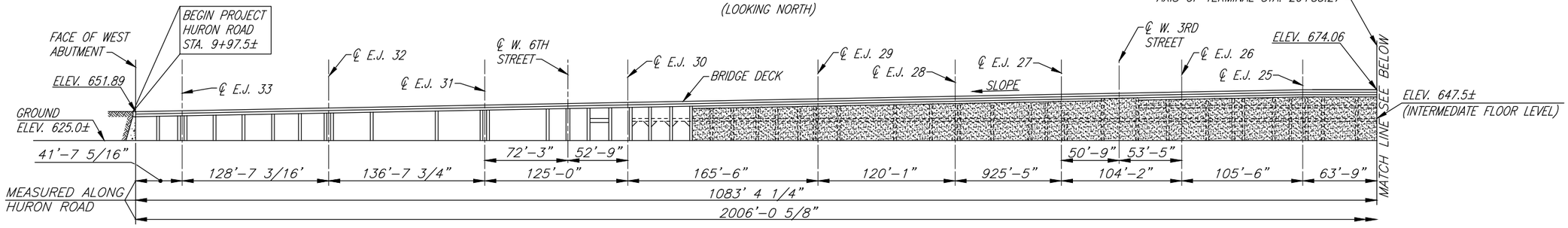
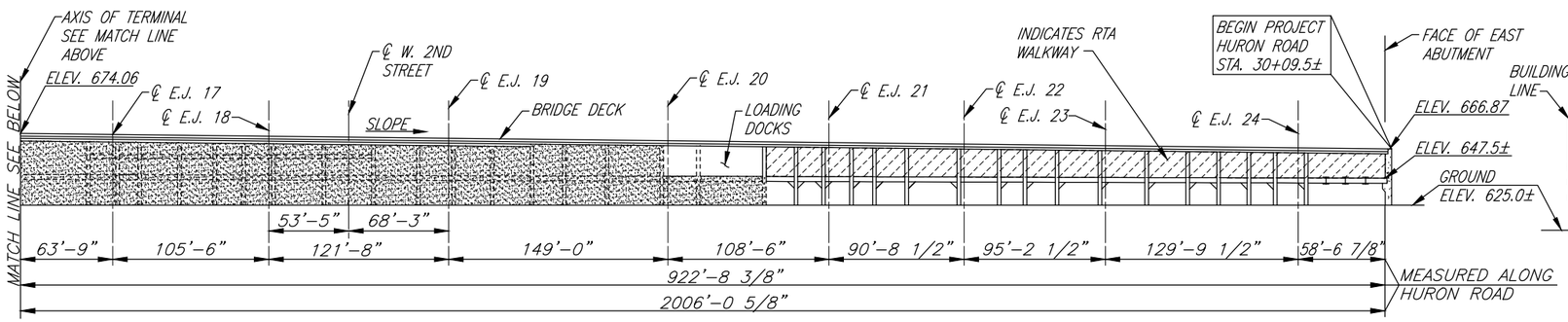


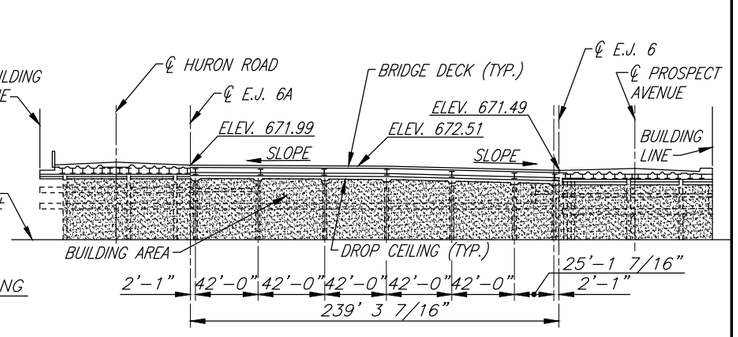
ELEVATION–PROSPECT AVENUE
(LOOKING NORTH)



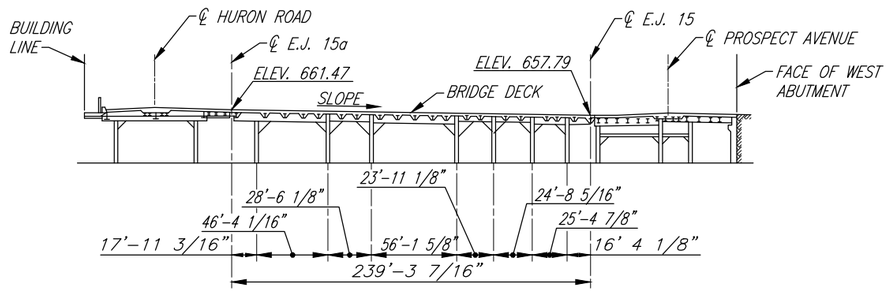
ELEVATION–HURON ROAD
(LOOKING NORTH)



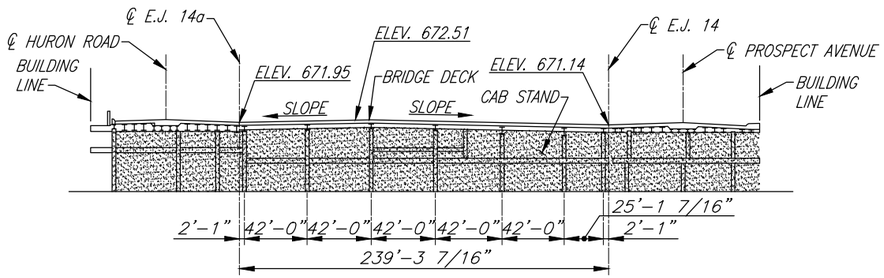
ELEVATION–HURON ROAD
(LOOKING NORTH)



ELEVATION–WEST 2nd STREET
(LOOKING WEST)



ELEVATION–WEST 6th STREET
(LOOKING WEST)



ELEVATION–WEST 3rd STREET
(LOOKING WEST)

INDICATES BUILDING AREAS OR STRUCTURAL SUPPORTS FOR BUILDING AREAS, THE REHABILITATION OF WHICH IS NOT INCLUDED IN THE SCOPE OF WORK FOR THIS PROJECT.

NOTES:

THIS DRAWING IS A SCHEMATIC ONLY AND IS INTENDED TO SHOW THE GENERAL LAYOUT AND APPROXIMATE WORK LIMITS. SEE DETAILED SHEETS FOR WORK TO BE PERFORMED.

DIMENSIONS SHOWN ARE FROM THE ORIGINAL CONSTRUCTION PLANS AND ARE FOR GENERAL REFERENCE ONLY. CONTRACTOR WILL BE RESPONSIBLE FOR MATCHING EXISTING ELEVATIONS AS REQUIRED TO PERFORM THE WORK.

HORIZONTAL SCALE IN FEET
0 50 100

CALCULATED RAB
CHECKED MMP

SCHEMATIC ELEVATIONS

CUY-TOWER CITY BRIDGES

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GENERAL NOTES

GENERAL NOTES

DESIGN SPECIFICATIONS

THESE STRUCTURES CONFORM TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS 17TH EDITION, AND THE ODOT BRIDGE DESIGN MANUAL, JANUARY 2004.

THE DESIGN DATA IS AS FOLLOWS:

DESIGN LOADING:	– HS20–44 CASE I AND ALTERNATE MILITARY LOADING.
CONCRETE:	– MICRO–SILICA MODIFIED CONCRETE. – CLASS QC2 CONCRETE – COMPRESSIVE STRENGTH 4,500 PSI (SUPERSTRUCTURE)
STRUCTURAL STEEL:	– ASTM A 709 GRADE 50, MINIMUM YIELD STRENGTH 50 KSI.
REINFORCING STEEL:	– ASTM A615 OR A996, GRADE 60, MINIMUM YIELD STRENGTH 60,000 PSI.
DECK PROTECTION METHOD:	– 2 7/8" MICRO–SILICA MODIFIED CONCRETE OVERLAY. – EPOXY COATED REINFORCING STEEL.
MONOLITHIC WEARING SURFACE:	– MONOLITHIC WEARING SURFACE IS ASSUMED FOR DESIGN PURPOSES TO BE 1" THICK.

SCOPE OF WORK

THE PROJECT INCLUDES REHABILITATING PORTIONS OF THE 5 BRIDGES OF THE TOWER CITY COMPLEX WHICH CONSIST OF THE FOLLOWING:

- HURON ROAD BRIDGE FROM SUPERIOR AVENUE TO ONTARIO STREET
- PROSPECT AVENUE BRIDGE FROM SUPERIOR AVENUE TO ONTARIO STREET
- WEST 6TH STREET BRIDGE OVER THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY FROM HURON ROAD TO PROSPECT AVENUE
- WEST 3RD STREET BRIDGE FROM HURON ROAD TO PROSPECT AVENUE
- WEST 2ND STREET BRIDGE FROM HURON ROAD TO PROSPECT AVENUE

THE WORK PRIMARILY CONSISTS OF THE FOLLOWING:

1. REPLACE ALL THIRTY FIVE (35) TRANSVERSE EXPANSION JOINTS IN THE ROADWAY, SIDEWALK, SAFETY CURB AND PARAPETS. TRANSVERSE JOINTS TO ABUT AND BE SEALED TO EXISTING BUILDING EXPANSION JOINTS.

2. REMOVE EXISTING ASPHALT WEARING SURFACES AND ELIMINATOR WATERPROOFING IN UNITS 4 THROUGH 13, 21 THROUGH 31, WEST 2ND AND WEST 3RD STREETS. SOUND TOP SURFACE OF CONCRETE AFTER ASPHALT WEARING SURFACE IS REMOVED AND REMOVE LOOSE AND UNSOUND CONCRETE.

3. PREPARE BRIDGE DECKS USING SCARIFICATION. CLEAN DECK OF ANY DUST AND DEBRIS, WATER BLASTING SHALL NOT BE USED. FLOOD DECK CONCRETE WITH HMWM. ADD BROADCAST SAND AS SPECIFIED. BEFORE AND DURING PLACEMENT OF HMWM, A MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT TO VERIFY THE CONTRACTOR'S PROPER PREPARATION AND PLACEMENT OF THE HMWM. OVERLAY DECKS IN UNITS 4 THROUGH 13, 21 THROUGH 31, WEST 2ND AND WEST 3RD STREETS WITH 2 7/8"± MICRO–SILICA MODIFIED CONCRETE.

4. REMOVE EXISTING 4" CONCRETE SIDEWALK SURFACE COURSE AND STEEL CURB PLATE INCLUDING BUT NOT LIMITED TO CONCRETE, CONCRETE PAVERS & STAMPED CONCRETE TO TOP OF CONCRETE DECK INCLUDING ANY EXISTING WATERPROOFING MATERIAL. SOUND TOP SURFACE OF CONCRETE DECK AFTER CONCRETE SURFACE COURSE REMOVAL AND REMOVE ANY LOOSE OR DAMAGED CONCRETE.

5. PREPARE SIDEWALK CONCRETE USING SCARIFICATION. CLEAN DECK OF ANY DUST AND DEBRIS, WATER BLASTING SHALL NOT BE USED. FLOOD SIDEWALK CONCRETE WITH HMWM. HMWM SEALING INCLUDES THE SURFACE OF ANY CONCRETE ENTRANCE DRIVES WHICH ARE NOT RECEIVING A MICRO–SILICA MODIFIED CONCRETE OVERLAY. ADD BROADCAST SAND AS SPECIFIED. BEFORE AND DURING PLACEMENT OF HMWM, A MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT TO VERIFY THE CONTRACTOR'S PROPER PREPARATION AND PLACEMENT OF THE HMWM. PLACE A LAYER OF TYPE B WATERPROOFING OVER SIDEWALK CONCRETE. OVERLAY WITH 4 INCHES OF MICRO–SILICA MODIFIED CONCRETE OVERLAY.,

6. REMOVE EXISTING CONCRETE SLAB AND SIDEWALK FULL DEPTH ADJACENT TO EXPANSION JOINTS AT LIMITED AREAS NOTED IN THE PLANS. REPLACE WITH MICRO–SILICA MODIFIED CONCRETE.

7. SOUND TOP SURFACES OF CONCRETE DECK IN UNITS 1 THROUGH 5, 14 THROUGH 20 AND WEST 3RD STREET AND REMOVE LOOSE AND UNSOUND CONCRETE. PATCH REMOVAL AREAS WITH MICRO–SILICA MODIFIED CONCRETE.

8. SEAL THE ENTIRE EXISTING MICRO–SILICA MODIFIED CONCRETE WEARING SURFACE AND SIDEWALK IN UNITS 1 THROUGH 5, 14 THROUGH 20 AND WEST 6TH STREET WITH HMWM RESIN TO SEAL THE CONCRETE SURFACE AS WELL AS THE CRACKS. BEFORE AND DURING PLACEMENT OF HMWM, A MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT TO VERIFY THE CONTRACTOR'S PROPER PREPARATION AND PLACEMENT OF THE HMWM.

9. PAINT AND REPAIR STEEL FRAMING WHERE NOTED ON THE PLANS.

10. REHABILITATE/REPLACE PARAPETS WHERE NOTED ON PLANS.

11. REPAIR/REPLACE DRAINAGE SYSTEM TO CATCH BASINS AND DOWNSPOUTS.

12. REPAIR CONCRETE ABUTMENT SURFACES.

13. INSTALL SIGNING AND PAVEMENT MARKINGS.

UTILITIES

LISTED BELOW ARE ALL UTILITIES WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE CONTACTS.

CITY OF CLEVELAND
DIVISION OF ENGINEERING AND CONSTRUCTION
601 LAKESIDE AVENUE, ROOM 518
CLEVELAND, OHIO 44114
CONTACT: THOMAS BOYER, P.E.
PHONE: (216) 664–2379
tboyer@city.cleveland.oh.us
CONTACT: BEN STOCK
PHONE: (216) 664–2384
bstock@city.cleveland.oh.us

CITY OF CLEVELAND
DIVISION OF WATER
1201 LAKESIDE AVENUE
CLEVELAND, OHIO 44114–1175
CONTACT: FRED ROBERTS
PHONE: (216) 664–2444 EXT. 4632
fred.roberts@clevelandwater.com
CONTACT: ANDREW KRAWCYZK
PHONE: (216) 664–2444 EXT. 5520
andrew.krawczyk@clevelandwater.com

CITY OF CLEVELAND
DIVISION OF WATER POLLUTION CONTROL
12302 KIRBY AVENUE
CLEVELAND, OHIO 44108
CONTACT: ELIE RAMY
PHONE: (216) 664–2756
ERamy@Clevelandwpc.com
CONTACT: ALEX CANCELLIERE
PHONE: (216) 420–7638

CITY OF CLEVELAND
DIVISION OF PUBLIC POWER
1300 LAKESIDE AVENUE
CLEVELAND, OHIO 44114
CONTACT: JAMES FERGUSON
PHONE: (216) 664–3922 EXT. 182
JFerguson@CPP.org
CONTACT: CHRISTOPHER HIRZEL
PHONE: (216) 664–3922 EXT. 115
CHirzel@CPP.org

GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
1240 WEST 6TH STREET
CLEVELAND, OHIO 44113
CONTACT: JAMES STOCK
PHONE: (216) 566–5036
JSTOCK@gcrta.org
ATTN.: LORIE BEABES
PHONE; (216) 771–4668
lbeabes@gcrta.org

AT&T OHIO, INC. (OBF)
13630 LORAIN ROAD – 3RD FLOOR
CLEVELAND, OHIO 44111
ATTN: HAROLD MAYNARD
PHONE: 216–476–6138
hm2147@att.com

AT&T CORP. LNS/METRO
C/O THAYER POWER AND COMMUNICATION
LINE CONSTRUCTION CO. LLC
950 FREEWAY DRIVE N.
COLUMBUS, OHIO 43229
CONTACT: CHRISTOPHER McCLOSKEY
PHOME: (614) 431–9292
chrismcclosley@thayerpc.com

AT&T CORP. LONG DISTANCE
C/O METROPOLITAN COMMUNICATIONS GROUP
155 COMMERCE PARK DRIVE SUITE #1
WESTERVILLE, OHIO 43082
CONTACT: BILL HARKNESS
PHONE: (770) 316–5309
bill.harkness@mcgfiber.com

CDT (CLE TRAFFIC)
601 LAKESIDE AVENUE
CLEVELAND, OHIO 44114
CONTACT: ANDY R. CROSS, P.E., PTOE
PHONE: (216) 664–3197
across@city.cleveland.oh.us

CRCP (CROWN CASTLE)
2000 CORPORATE DRIVE
CANONSBURG, PA 15317
CONTACT: DAVID ANTOL
PHONE: (724) 416–2180
david.antol@crowncastle.com

LEVEL 3 COMMUNICATIONS (LVTP)
1025 ELDORADO BOULEVARD
BROOMFIELD, CO 80021
CONTACT: MARVIN MUNCY
PHONE: (419) 304–5190
RELO@LEVEL3.COM
MARVIN.MUNCY@LEVEL3.COM

MCIP (MCI) (VERIZON)
2400 NORTH GLENVILLE DRIVE
RICHARDSON, TX 75082
CONTACT: DEAN BOYERS
DEAN.BOYERS@VERIZON.COM
CONTACT: JOHN BACHELDER
PHONE: (972) 729–632

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GENERAL NOTES

CUY-TOWER CITY BRIDGES

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GENERAL NOTES

UTILITIES (CONTINUED)

NXT (XO COMMUNICATIONS)
69000 SOUTHPOINT PARKWAY
BRECKSVILLE, OHIO 44141
3 SUMMIT PARK DRIVE, SUITE 750
INDEPENDENCE, OHIO 44131
CONTACT: DENNIS WAGNER
PHONE: (616) 295–2548
DWAGNER@TKNS.NET

TIME WARNER
8150 DOW CIRCLE
STRONGSVILLE, OHIO 44136
CONTACT: GARY NAUMANN
PHONE (216) 575–8016 EXT. 5033
GARY.NAUMANN@TWCABLE.COM

QSTP (QWEST COMMUNICATIONS) (CENTURY LINK)
700 WEST MINERAL
LITTLETON, CO 80120
CONTACT: GEORGE MCELVAIN
PHONE: (303) 992–9931
GEORGE.MCELVAIN@CENTURYLINK.COM
CONTACT: TOD LUMLEY
PHONE: (216) 618–6699

CO-OPERATION WITH UTILITIES

THE CONTRACTOR IS HEREBY NOTIFIED THAT HIS WORK SHALL BE SO SCHEDULED AND PERFORMED AS TO PROVIDE A MINIMUM OF INTERFERENCE WITH UTILITY SERVICE DURING CONSTRUCTION.

EXTREME CARE MUST BE EXERCISED BY THE CONTRACTOR NOT TO DAMAGE OR DISTURB ANY EXISTING UNDERGROUND UTILITIES DURING REMOVAL AND CONSTRUCTION OPERATIONS. ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE UTILITY OWNER AND ENGINEER. CONTRACTOR SHALL COORDINATE DIRECTLY WITH THE AFFECTED UTILITY COMPANY TO DETERMINE REPAIR METHOD.

IF BECAUSE OF CONSTRUCTION OPERATIONS IT IS NECESSARY TO INTERRUPT SUCH UTILITY SERVICE, A DESIGNATED REPRESENTATIVE OF THE OWNER OF THE UTILITY INVOLVED SHALL BE ADVISED, IN WRITING, NOT LESS THAN SEVEN (7) DAYS IN ADVANCE OF SUCH PROPOSED INTERRUPTION. WORK OF THIS TYPE SHALL BE SCHEDULED TO BE PERFORMED DURING PERIODS OF MINIMUM DEMAND, DAY OR NIGHT, ON THE UTILITY INVOLVED AND WITHIN THE TIME LIMIT ESTABLISHED BY THE OWNERS REPRESENTATIVE. PERIODS OF SHUTDOWN LONGER THAN THOSE ESTABLISHED AS THE MAXIMUM BY THE OWNER OF THE UTILITY INVOLVED WILL NOT BE PERMITTED. IF THE SHUTDOWNS OCCUR, THE CONTRACTOR WILL BE CONSIDERED LIABLE FOR ANY RESULTING DAMAGES.

OWNERS/CONTACTS

LISTED BELOW ARE THE REPRESENTATIVES FOR THE VARIOUS BUILDINGS/FACILITIES AFFECTED BY THE CONSTRUCTION. LIST IS ACCURATE AS OF 09/09/16. CONTRACTOR TO VERIFY AND UPDATE OWNER LIST BEFORE CONSTRUCTION COMMENCES.

CASIMER DANIEWSKI BEDROCK REAL ESTATE SERVICES, 313–373–8740
CASDANEWSKI@BEDROCKMGT.COM
THE AVENUE AT TOWER CITY
LOCATED THROUGHOUT THE PROJECT LIMITS

JIM MAIER TOWER CITY CENTER, 216–622–6230
JAMESMAIER@FORESTCITY.NET
M.K. FERGUSON BUILDING,
SKYLIGHT OFFICE TOWER
LOCATED THROUGHOUT THE PROJECT LIMITS

TIM DAVIS STATE OF OHIO, LAUSCHE BUILDING 216–787–3840
TIMOTHY.DAVIS@DAS.OHIO.GOV
UNITS 1, 14 THRU 17 AND WEST 6TH STREET

GREG PARADIS JACK CASINO 216–297–4928 GPARADIS@JACKENTERTAINMENT.COM
UNITS 11, 12 AND 13

TERRY MILLER SHERWIN WILLIAMS, 216–566–3177 TFMILLER@SHERWIN.COM
LANDMARK OFFICE TOWERS,
MIDLAND, GUILD HALL AND
REPUBLIC BUILDING
UNITS 10 THRU 13, 25 THRU 30 AND WEST 3RD STREET

NICK SISLAN HIGBEE BUILDING 216–704–2715 NSISLAN@QMANAGEMENTGRP.COM
UNITS 10 THRU 13

CARL DROZDOWSKI RITZ CARLTON HOTEL 216–623–1300
CARL.DROZDOWSKI@RITZCARLTON.COM
UNITS 6, 7, 21, 22 AND WEST 3RD STREET

ED AUEL RENAISSANCE HOTEL 216–312–0284 ED.AUEL@MARRIOTT.COM
UNITS 4 THRU 7

JOSH ITKIN MORTON'S STREAKHOUSE 216–621–6200 JITKIN@LDRY.COM
UNITS 9, 10 AND WEST 2ND STREET

JAMES STOCK GCRTA 216–566–5036 JSTOCK@GCRTA.ORG
UNITS 1 THRU 4, 14, 15, 16, 30, 31 AND WEST 6TH STREET

GREG DABRAN LINCOLN TAP HOUSE 216–348–0023 GREG@LINCOLNTAPHOUSE.COM
UNITS 8, 9 AND 10

KATHY LEASE GSA CARL B. STOKES U.S. COURT HOUSE 216–522–3352
KATHY.LEASE@GSA.GOV
UNITS 14–16

COOPERATION BETWEEN CONTRACTOR AND PROPERTY OWNERS

COMPLETE COOPERATION BETWEEN THE CONTRACTOR AND THE ADJOINING PROPERTY OWNERS IS ESSENTIAL. THE OWNERS SHALL DESIGNATE AN AUTHORIZED REPRESENTATIVE TO ACT ON THEIR BEHALF IN ALL MATTERS RELATING TO THE PERFORMANCE OR WORK ON THIS PROJECT. THE NAMES, PHONE NUMBERS AND AVAILABILITY OF THE REPRESENTATIVES SHALL BE SUPPLIED BY THE OWNERS TO THE CONTRACTOR.

CONTRACTOR NOTIFICATION

ENCROACHMENTS EXIST WITHIN THE RIGHT OF WAY. CONTRACTOR SHALL COORDINATE WITH GREG ESBER, CITY OF CLEVELAND (216–664–2460).

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON THIS PROJECT. SEE THE SCHEMATIC PLAN SHEET FOR A TABLE CONTAINING PROJECT CONTROL INFO.

USE THE FOLLOWING VERTICAL AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

VERTICAL POSITIONING

- *VERTICAL ELEVATIONS LISTED ARE RELATIVE TO THE NGVD29.*

HORIZONTAL POSITIONING

- *HORIZONTAL COORDINATES LISTED ARE PROJECT GROUND AND ARE RELATIVE TO THE CUYAHOGA COUNTY REGIONAL GEODETIC SURVEY.*

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

RIGHT OF WAY

RIGHT OF WAY ACQUISITION IS NOT REQUIRED FOR THIS PROJECT. THE BRIDGES ARE PUBLIC STREETS TRAVELING OVER PRIVATELY OCCUPIED SPACES, AND THERE ARE MAINTENANCE AGREEMENTS BETWEEN TOWER CITY AND THE CITY IN PLACE.

EXISTING STRUCTURE DATA - PROSPECT AVENUE (CITY BRIDGE NO. 4028M)

TYPE: *SIMPLE STEEL BEAMS AND CONTINUOUS RIVETED STEEL FLOOR BEAMS WITH REINFORCED CONCRETE DECK AND ABUTMENTS AND STEEL BENT PIERS*

SPANS: *13 UNITS AT 108'–3"±, 90'–0"±, 86'–6"±, 94'–11"±, 91'–2"±, 116'–1"±, 124'–0"±, 90'–6"±, 124'–0"±, 105'–7"±, 99'–3⅜"±, 91'–6"±, AND 32'–6"± CENTER TO CENTER EXPANSION JOINTS MEASURED ALONG CENTERLINE OF PROSPECT AVENUE*

ROADWAY: *68'–0" FACE TO FACE OF CURBS WITH TWO 16'–0" SIDEWALKS*

LOADING: *3 – 20 TON TRUCKS WITH A UNIFORM LOAD OF 800 POUNDS PER LINEAR FOOT*

SKEW: *50°–37'30"±, 10 @ 0°±, 38°–15'±*

WEARING SURFACE: *2½" MICRO–SILICA UNITS 1 THRU 5*
2½" ASPHALT CONCRETE UNITS 6 THRU 13

APPROACH SLABS: *NONE*

ALIGNMENT: *TANGENT*

DATE BUILT: *1930*

STRUCTURAL FILE NO.: *1870025*

EXISTING STRUCTURE DATA - HURON ROAD (CITY BRIDGE NO. 4023M)

TYPE: *SIMPLE STEEL BEAMS AND CONTINUOUS RIVETED STEEL FLOOR BEAMS WITH REINFORCED CONCRETE DECK AND ABUTMENTS AND STEEL BENT PIERS*

SPANS: *18 UNITS AT 41'–7 5/16"±, 128'–7 3/16"±, 136'–7¾"±, 125'–0"±, 165'–6"±, 120'–1"±, 92'–5"±, 104'–2"±, 105'–6"±, 63'–9"±, 105'–6"±, 121'–8"±, 149'–0"±, 108'–6"±, 90'–8½"±, 95'–2½"±, 129'–9½"± AND 58'–6⅞"± CENTER TO CENTER EXPANSION JOINTS MEASURED ALONG CENTERLINE OF HURON ROAD*

ROADWAY: *68'–0" FACE TO FACE OF CURBS WITH ONE 16'–0" SIDEWALK AND 2'–2" SAFETY CURB AND PARAPET*

LOADING: *3 – 20 TON TRUCKS WITH A UNIFORM LOAD OF 800 POUNDS PER LINEAR FOOT*

SKEW: *37°–33'±, 16 @ 0°±, 56°–30'±*

WEARING SURFACE: *2½" MICRO–SILICA UNITS 14 THRU 20*
2½" ASPHALT CONCRETE UNITS 21 THRU 31

APPROACH SLABS: *NONE*

ALIGNMENT: *TANGENT*

DATE BUILT: *1930*

STRUCTURAL FILE NO.: *1869442*

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GENERAL NOTES

CUY-TOWER CITY BRIDGES

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GENERAL NOTES

EXISTING STRUCTURE DATA - WEST 2ND STREET (CITY BRIDGE NO. 4033M)

TYPE: SIMPLE STEEL BEAM AND CONTINUOUS RIVETED STEEL GIRDERS WITH REINFORCED CONCRETE DECK AND STEEL BENT PIERS

SPANS: 2'–1"± CANTILEVER, 5 SPANS AT 42'–0"±, 2'–1"± CANTILEVER CENTER TO CENTER FLOOR BEAMS

ROADWAY: 35'–0" FACE TO FACE OF CURBS WITH TWO 12'–0" SIDEWALKS

LOADING: 3 – 20 TON TRUCKS WITH A UNIFORM LOAD OF 800 POUNDS PER LINEAR FOOT

SKEW: 0°±

WEARING SURFACE: 2½" ASPHALT CONCRETE

APPROACH SLABS: N/A

ALIGNMENT: TANGENT

DATE BUILT: 1930

STRUCTURAL FILE NO.: 1867245

EXISTING STRUCTURE DATA - WEST 3RD STREET (CITY BRIDGE NO. 38M)

TYPE: SIMPLE STEEL BEAM AND CONTINUOUS RIVETED STEEL GIRDERS WITH REINFORCED CONCRETE DECK AND STEEL BENT PIERS

SPANS: 2'–1"± CANTILEVER, 5 SPANS AT 42'–0"±, 2'–1"± CANTILEVER CENTER TO CENTER FLOOR BEAMS

ROADWAY: 35'–0" FACE TO FACE OF CURBS WITH TWO 12'–0" SIDEWALKS

LOADING: 3 – 20 TON TRUCKS WITH A UNIFORM LOAD OF 800 POUND PER LINEAR FOOT

SKEW: 0°±

WEARING SURFACE: 2½" ASPHALT CONCRETE

APPROACH SLABS: N/A

ALIGNMENT: TANGENT

DATE BUILT: 1930

STRUCTURAL FILE NO.: 1868403

EXISTING STRUCTURE DATA - WEST 6TH STREET (CITY BRIDGE NO. 4039M)

TYPE: SIMPLE STEEL BEAMS AND CONTINUOUS RIVETED STEEL FLOOR BEAMS WITH REINFORCED CONCRETE DECK AND STEEL BENT PIERS

SPANS: 17'–11 3/16"±, 46'–4 1/16"±, 28'–6 1/8"±, 56'–1 5/8"±, 23'–11 1/8"±, 24'–8 5/16"±, 25'–4 7/8"± AND 16'–4 1/8"± CENTER TO CENTER COLUMNS MEASURED ALONG CENTERLINE OF WEST 6TH STREET

ROADWAY: 40'–0" FACE TO FACE OF CURBS WITH TWO 15'–0" SIDEWALKS

LOADING: 3 – 20 TON TRUCKS WITH A UNIFORM LOAD OF 800 POUNDS PER LINEAR FOOT

SKEW: 0°±

WEARING SURFACE: 2½" MICRO–SILICA

APPROACH SLABS: N/A

ALIGNMENT: TANGENT

DATE BUILT: 1930

STRUCTURAL FILE NO.: 1868411

EXISTING TYPICAL SECTIONS

EXISTING TYPICAL SECTIONS HAVE BEEN DEVELOPED FROM FIELD SURVEYS AND RECORD PLANS, AND ARE BELIEVED TO REPRESENT THE WIDTH AND COMPOSITION OF THE EXISTING PAVEMENT, BUT ODOT OR THE CITY OF CLEVELAND DOES NOT GUARANTEE THE ACCURACY OF SAME.

UNDERSIDE OF DECK INSPECTION

THE UNDERSIDE OF THE DECK WAS INSPECTED IN THE FALL OF 2014.

THE INSPECTION WAS COMPLETED AT ARM'S LENGTH WHERE POSSIBLE AND WITH BINOCULARS EVERYWHERE ELSE. CRACKS THAT APPEARED TO BE A MINIMUM OF 1/8" WIDE WITH INDICATION OF WATER LEAKAGE WERE NOTED. TOWER CITY WILL BE RESPONSIBLE FOR UNDERSIDE OF DECK REPAIRS AS A SEPARATE TASK AFTER WORK UNDER THIS CONTRACT IS COMPLETED.

ACCESS TO THE SITE

IT IS INTENDED THAT THE WORK UNDER THIS PROJECT BE PERFORMED FROM WITHIN PUBLIC RIGHT OF WAY AT THE ROADWAY SURFACE LEVEL, EXCEPT FOR THE FOLLOWING:

1. CONCRETE REMOVAL FOR FULL DEPTH SLAB REPAIRS, FIELD PAINTING AND REPAIRS TO STRUCTURAL STEEL FRAMING MEMBERS WILL BE REQUIRED IN LIMITED AREAS THAT WILL REQUIRE FORMING AND FALSEWORK. SUCH AREAS WILL NEED TO BE ACCESSED FROM BENEATH THE BRIDGE DECKS BY THE CONTRACTOR.

2. PATCHING AND SEALING OF ABUTMENT SURFACES.

3. IF THE CONTRACTOR FEELS ADDITIONAL ITEMS WOULD BE COMPLETED EASIER BY ACCESS FROM BELOW THE STRUCTURE (SUCH AS PLACING THE POLY–FOAM BACKER ROD). THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMISSION FOR ANY ADDITIONAL ACCESS DESIRED.

THE AREA BELOW THE ROADWAY SURFACE IS OWNED BY BEDROCK REAL ESTATE SERVICES, JACK CASINO, THE RITZ–CARLTON HOTEL AND THE OHIO BUILDING AUTHORITY. IN ADDITION, THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY HAS LEASEHOLD IMPROVEMENTS UNDER CERTAIN AREAS OF THE BRIDGES. CONTACT INFORMATION FOR THESE ENTITIES IS LISTED ON SHEET 8. THE ACCESS COORDINATION CRITICAL PATH IS FIRST WITH TOWER CITY, A.K.A. BEDROCK, AND SECOND WITH THE RITZ CARLTON HOTEL. THE CITY HAS OBTAINED RIGHT OF ENTRY AGREEMENTS FROM THE PROPERTY OWNERS BELOW THE BRIDGES TO FACILITATE CONTRACTOR ACCESS TO THE UNDERSIDE OF THE DECKS. THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO THE BOUNDARIES SET FORTH IN THE AGREEMENTS. HE SHALL PERFORM HIS OPERATIONS IN A MANNER PRESCRIBED IN THESE AGREEMENTS AND RESTORE PRIVATE AREAS TO THE CONDITIONS EXISTING BEFORE WORK UNDER THE CONTRACT BEGAN. ACCESS TO THE AREA BELOW THE BRIDGE SHALL BE COORDINATED THROUGH THE OWNER'S REPRESENTATIVE AND RECEIVE PRIOR APPROVAL BEFORE ENCROACHMENT ONTO PRIVATE PROPERTIES. THE CONTRACTOR SHALL MEET ANY SECURITY AND SAFETY REQUIREMENTS THE PROPERTY OWNER PROVIDES. THE CONTRACTOR MUST PROVIDE THE OWNER'S REPRESENTATIVE AT LEAST SEVEN (7) DAYS NOTICE BEFORE BEGINNING WORK IN AN AREA, EXCEPT IN THE EVENT OF EMERGENCIES OR LIFE THREATENING SITUATIONS.

THE CONTRACTOR IS CAUTIONED TO FAMILIARIZE HIMSELF WITH THE AGREEMENTS. COPIES OF THE AGREEMENTS ARE ON FILE AT THE OFFICE OF THE CITY ENGINEER, CITY OF CLEVELAND, AND ARE AVAILABLE FOR VIEWING. THE ENTIRE COST OF ANY WORK AGREEMENT REQUIREMENTS WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE OTHER ITEMS OF WORK. THERE ARE A NUMBER OF AWNINGS OVERHANGING THE SIDEWALK ALONG THE PROJECT SITE. THE CONTRACTOR SHALL WORK AROUND THE AWNINGS. ANY DAMAGE TO THE AWNINGS SHALL BE REPAIRED/REPLACED BY THE CONTRACTOR AT HIS EXPENSE TO THE OWNER'S SATISFACTION.

LIMITATIONS OF OPERATIONS

1. NO WORK SHALL BE PERFORMED DURING THE FOLLOWING HOLIDAYS OR EVENTS: EASTER, MEMORIAL DAY, JULY 4TH, LABOR DAY AND SPECIAL EVENTS.

2. THE REMOVAL OF ASPHALT AND CONCRETE FROM THE BRIDGES DECKS WILL BE RESTRICTED AS FOLLOWS:

   - REMOVALS CONFINED TO A WEEKEND OR NIGHT SHIFT OPERATION AFTER THE RETAILS SHOPS CLOSE. SEE PARAGRAPH 3 FOR RESTRICTIONS OF NIGHT OPERATIONS ADJACENT TO THE RITZ CARLTON.

   - REMOVALS ABOVE THE GATEWAY CONNECTOR IN UNITS 26 THROUGH 31 MUST BE CONFINED TO PERIODS WHEN THE CONNECTOR IS CLOSED. THE USE OF THE WALKWAY IS CONTROLLED BY RTA. IN GENERAL, THE WALKWAY IS OPEN TWO HOURS BEFORE AND AFTER EVENTS AT QUICKEN LOANS ARENA AND PROGRESSIVE FIELD. THE CONTRACTOR SHALL CO–ORDINATE WITH GCRTA TO DETERMINE THE SCHEDULE OF EVENTS ON WHEN THE WALKWAY WILL BE OPEN.

   - REMOVALS CONFINED TO A NIGHT SHIFT OPERATION AFTER THE CINEMAS AND FOOD COURT HAVE CLOSED. SEE PARAGRAPH 3 FOR RESTRICTIONS OF NIGHT OPERATIONS ADJACENT TO THE RITZ CARLTON.

3. CONTRACTOR SHALL NOT USE CONSTRUCTION EQUIPMENT CAUSING EXCESSIVE NOISE, SUCH AS JACK HAMMERS, BETWEEN THE HOURS OF 11:00 P.M. AND 7:00 A.M. ADJACENT TO THE RITZ CARLTON HOTEL IN UNITS 6 THROUGH 9, 21 THROUGH 24, AND WEST 2ND STREET UNLESS APPROVED BY THE ENGINEER.

4. SEE SPECIAL REQUIREMENTS UNDER MAINTENANCE OF TRAFFIC.

5. SEE INTERIM DRAINAGE FOR REQUIREMENTS DURING CONSTRUCTION TO PREVENT WATER FROM ENTERING INTO THE INHABITED AREAS UNDER THE BRIDGE.

6. SEE ACCESS TO THE SITE FOR LIMITATIONS AND REQUIREMENTS FOR WORKING ON PRIVATE PROPERTY UNDER THE BRIDGE.

7. SEE GCRTA REQUIREMENTS FOR WORK OVER THEIR PROPERTY ON SHEET 10.

8. THE CONTRACTOR SHALL NOT REMOVE MORE OF THE EXISTING WEARING SURFACE OR EXPANSION JOINTS AT ANYTIME THAT HE CAN SATISFACTORILY COVER AND PROTECT FROM THE WEATHER.

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GENERAL NOTES

CUY-TOWER CITY BRIDGES

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GENERAL NOTES

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY HAVE TO BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, AND 513.04.

BASE CONTRACT BID PRICES UPON RECOGNITION OF THE UNCERTAINTY DESCRIBED ABOVE AND UPON A PREBID EXAMINATION TO THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT BASED WORK BASED ON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

THE RECORD PLANS OF THE EXISTING STRUCTURES ARE ON FILE AT:

CITY OF CLEVELAND
DIVISION OF ENGINEERING & CONSTRUCTION
601 LAKESIDE AVENUE
ROOM 518
CLEVELAND, OHIO 44114
TELEPHONE: 216-664-2381

AND ALSO MAY BE REVIEWED ONLINE AT:
http;//www.dot.state.oh.us/divisions/contractadmin/contracts/pages/designfiles.aspx

WATER SUPPLY

WATER WILL BE SUPPLIED TO THE CONTRACTOR AT THE NEAREST HYDRANT. THE COST OF THE WATER SUPPLY SHALL BE BORNE BY THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMIT FROM THE CITY OF CLEVELAND WATER DEPARTMENT. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE APPROVED STANDARD TIGHT HOSE AND FITTINGS WITH WHICH TO MAKE CONNECTIONS TO HYDRANTS AND OUTLETS. NO IMPROPER WASTEFUL OF UNDUE USE OF WATER WILL BE PERMITTED.

GCRTA REQUIREMENTS

FULL DEPTH SLAB AND STRUCTURAL STEEL PAINTING AND REPAIRS DONE AT OR ABOVE TRACK LEVEL AND WITHIN 10 FEET OF THE CENTERLINE OF GCRTA TRACKS IN UNITS 1, 2, 3, 14, 15, 16, 30, 31 AND WEST 6TH STREET SHALL BE COORDINATED WITH GCRTA PERSONNEL AND MUST COMPLY WITH THE FOLLOWING RTA SPECIFICATIONS:

SECTION 014500	–	SAFETY PROCEDURES
SECTION 015010	–	MAINTENANCE OF TRAFFIC AND RESUMPTION OF REVENUE SERVICE
SECTION 015020	–	STANDARD RAIL FLAGGING PROCEDURES

PRIOR TO THE START OF ANY WORK, THE CONTRACTOR MUST ENTER INTO AND EXECUTE A TEMPORARY RIGHT-OF-ENTRY AGREEMENT WITH THE GCRTA. INCLUDED IN THE TEMPORARY RIGHT-OF ENTRY AGREEMENT ARE THE REQUIREMENTS FOR INSURANCE COVERAGE. IN ADDITION TO STANDARD INSURANCE COVERAGES, THE CONTRACTOR SHALL CARRY ADDITIONAL LIABILITY INSURANCE COVERING RAILROAD PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE LIABILITY. ALL WORK OVER AND ADJACENT TO GCRTA SHALL BE COORDINATED WITH THE GCRTA PERSONNEL.

AFTER THE TEMPORARY RIGHT-OF-ENTRY HAS BEEN FULLY EXECUTED, AND PRIOR TO THE START OF ANY WORK, CONTRACTOR PERSONNEL MUST COMPLETE GCRTA CONTRACTOR RULEBOOK C TRAINING, OBTAIN GCRTA CONTRACTOR ID BADGES, AND BE ASSIGNED A GCRTA RADIO. THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY PERMIT FROM THE AUTHORITY PRIOR TO STARTING WORK WITHIN GCRTA RIGHT-OF-WAY. THE CONTRACTOR SHALL SUBMIT WEEKLY REQUESTS THROUGH THE GCRTA PROJECT MANAGER FOR APPROVAL TO WORK WITHIN GCRTA RIGHT-OF-WAY. THE CONTRACTOR SHALL SUBMIT WEEKEND SHUTDOWN REQUESTS AT LEAST EIGHT (8) WEEKS IN ADVANCE OF THE REQUESTED SHUTDOWN DATES. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DISRUPTIONS TO REGULAR, CONTINUOUS RAPID TRANSIT SERVICE CAUSED AS A RESULT OF CONSTRUCTION ACTIVITIES.

THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES WHEN TRAINS ARE OPERATING. A MINIMUM OF 15.75 FEET VERTICAL CLEARANCE AND A MINIMUM OF 6.5 FEET HORIZONTAL FROM THE CENTERLINE OF TRACK. A GCRTA APPROVED FLAGGER WILL BE REQUIRED WHEN WORKING WITHIN 10.0 FEET OF THE CENTERLINE OF AN ACTIVE TRACK. NO CONSTRUCTION ACTIVITY SHALL TAKE PLACE WITHIN RTA CLEARANCE LIMITS WHILE TRACK IS ACTIVE UNLESS A TEMPORARY STRUCTURE IS ERECTED TO PROTECT GCRTA TRAFFIC. DETAILS OF THE PROTECTIVE STRUCTURE SHALL BE PREPARED BY A PROFESSIONAL ENGINEER PER C&MS 501.05. AND SUBMITTED TO GCRTA FOR APPROVAL AT LEAST (30) THIRTY DAYS PRIOR TO STARTING ANY WORK. PROTECTIVE STRUCTURES SHALL BE DESIGNED FOR A MINIMUM LOADING OF 125 POUNDS PER SQUARE FOOT. THE COST OF PROTECTIVE STRUCTURES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM SPECIAL – STRUCTURES, MISC.: TEMPORARY FALSEWORK AND PROTECTIVE STRUCTURES.

FLAGGERS SHALL BE PROVIDED AND PAID FOR BY THE CONTRACTOR THROUGH COMPANIES WHO SUPPLY CERTIFIED FLAGGERS (OBTAIN LIST FROM GCRTA) IN ACCORDANCE WITH FLAGGING PROCEDURES, FLAGGER TRAINING, AND SET-UP OF WORK ZONES, SEE GCRTA STANDARD 015020 – STANDARD RAIL FLAGGING PROCEDURES. PAYMENT FOR GCRTA-CERTIFIED FLAGGERS SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND NO SEPARATE PAYMENT WILL BE MADE.

IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE WEEKEND OUTAGES WITH GCRTA MONTHS IN ADVANCE OF THE PROPOSED OUTAGE THREE (3) WEEKEND OUTAGES WILL BE PERMITTED SO THE CONTRACTOR CAN PERFORM ABUTMENT WALL PATCHING AND SEALING; AND, STRUCTURAL STEEL REPAIR AND PAINTING. THE WEEKEND OUTAGES TYPICALLY RUN FROM APPROXIMATELY 3:00 AM SATURDAY TO 1:00 AM MONDAY. AFTER SERVICE HOURS (APPROXIMATELY 1-HOUR OF TRACK TIME, BETWEEN ABOUT 1:30 AM AND 3:00 AM) AND SOME LIMITED ALTERNATE OPTIONS MAY BE AVAILABLE, EACH SHALL BE EVALUATED ON A CASE BY CASE BASIS. THE CONTRACTOR SHALL PLACE A FILTER FABRIC WRAP OVER THE GCRTA BALLAST WITHIN THE CONSTRUCTION LIMITS. THE FABRIC SHALL BE ATTACHED TO THE EXISTING TIES. DURING WORK, THE GCRTA SHALL BE PROTECTED FROM FALLING DEBRIS WITH PLYWOOD AND/OR OTHER SUITABLE MATERIAL. SUBMIT DETAILED DRAWINGS FOR THE PROTECTION PLAN TO THE GCRTA FOR APPROVAL.

CONTRACTOR'S RESPONSIBILITY AND GUARANTEE

THE CONTRACTOR HAS COMPLETE RESPONSIBILITY FOR THE CONSTRUCTION AND SERVICEABILITY OF THE EXPANSION JOINTS. THE CONTRACTOR SHALL GUARANTEE HIS WORK AND THAT OF HIS SUBCONTRACTORS FOR THE CONSTRUCTION OF THE EXPANSION JOINTS. THE PERIOD OF GUARANTEE SHALL CONTINUE FOR A PERIOD OF TWELVE (12) MONTHS AFTER ACCEPTANCE ACCORDING TO C&MS 109.12.

IF AT ANY TIME BEFORE OR DURING SAID PERIOD OF GUARANTEE THE EXPANSION JOINTS SHOW SIGNS OF LEAKING, ANY DEFECTS OR OMISSIONS BECOME APPARENT IN THE WORK, OR IF IT BECOMES APPARENT THAT ANY OF THE WORK IS NOT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, OR IF ANY OF THE WORK CONSTRUCTED UNDER THIS CONTRACT REQUIRES REPAIRS DUE TO DEFECTS IN MATERIALS OR WORKMANSHIP, OR FOR ANY OTHER CAUSE WHICH MAY BE ATTRIBUTED TO THE WORK WHICH IS BEING DONE OR HAS BEEN DONE BY THE CONTRACTOR, ALL AS DETERMINED BY THE DIRECTOR OR HIS AUTHORIZED REPRESENTATIVE, SUCH DIRECTOR OR REPRESENTATIVE WILL NOTIFY THE CONTRACTOR TO RECTIFY SUCH DEFECTS OR OMISSIONS, OR TO MAKE THE REPAIRS SO REQUIRED. THE CONTRACTOR'S LIABILITY WILL INCLUDE REPAIR OF ANY DAMAGES CAUSED BY THE LEAKING OF THE JOINTS TO THE SATISFACTION OF THE PROPERTY OWNER.

IF THE CONTRACTOR SHALL FAIL TO BEGIN TO RECTIFY SUCH DEFECTS OR OMISSIONS OR TO START SUCH REPAIRS WITHIN FIVE (5) DAYS FROM THE DATE OF SUCH NOTIFICATION, OR IF SUCH RECTIFICATION OR REPAIR WORK IS NOT MADE IN A MANNER SATISFACTORY TO THE DIRECTOR OR TO HIS REPRESENTATIVE, THE DIRECTOR SHALL HAVE THE RIGHT TO PURCHASE ANY NECESSARY MATERIALS, RENT ANY NECESSARY TOOLS AND EQUIPMENT AND TO EMPLOY SUCH OTHER PERSON OR PERSONS AS HE MAY DEEM PROPER TO MAKE SUCH REPAIRS, AND TO PAY THE EXPENSE THEREOF OUT THE MONIES THEN DUE, OR WHICH MAY THEREAFTER BECOME DUE TO THE CONTRACTOR.

IN CASE OF AN EMERGENCY THE DIRECTOR SHALL HAVE THE RIGHT TO PURCHASE ANY NECESSARY MATERIALS, RENT ANY NECESSARY TOOLS AND EQUIPMENT AND TO EMPLOY SUCH OTHER PERSON OR PERSONS AS HE MAY DEEM PROPER TO MAKE SUCH REPAIRS, AND TO PAY THE EXPENSE THEREOF OUT OF THE MONIES THEN DUE, OR WHICH MAY THEREAFTER BECOME DUE TO THE CONTRACTOR.

IF SUCH MONIES ARE NOT SUFFICIENT TO MEET SUCH EXPENSE, THE ADDITIONAL MONIES SHALL BE FURNISHED BY THE CONTRACTOR, AND IF HE REFUSES OR NEGLECTS TO PROVIDE THE NECESSARY MONIES, THEY SHALL BE PROVIDED BY HIS SURETIES OR DEDUCTED FROM MONIES DUE ON ANOTHER CONTRACT.

IF IT IS NECESSARY TO REMOVE ANY PART OF THE WORK TO RECTIFY DEFECTS OR OMISSIONS OR TO REPAIR DEFECTS IN MATERIALS OR WORKMANSHIP, OR IF ANY PART OF THE WORK BECOMES DAMAGED DUE TO SUCH RECTIFICATION OR REPAIRING, ALL SUCH SHALL BE REPLACED OR REPAIRED, ALL TO THE SATISFACTION OF THE DIRECTOR OR SAID REPRESENTATIVE. THE TWELVE (12) MONTH GUARANTEE PROVISIONS SHALL APPLY AGAIN TO ALL RECTIFIED OR REPAIRED WORK.

STRUCTURE DRAINAGE, MISC.: INTERIM DRAINAGE

THE CONTRACTOR SHALL, AT ALL TIMES DURING CONSTRUCTION, PROVIDE AND MAINTAIN AMPLE MEANS AND DEVICES TO PREVENT ANY WATER FROM ENTERING INTO THE INHABITED AREAS UNDER THE STRUCTURE.

THE CONTRACTOR SHALL CONSTRUCT A SYSTEM OF TEMPORARY BULKHEADS, COLLECTORS AND DRAINS AT THE UPGRADE SIDE OF ALL EXPANSION JOINTS AND AT OTHER OPENINGS IN THE DECK SLAB TO PREVENT WATER FROM ENTERING THE ENCLOSED AREAS THROUGH THE OPENINGS CUT IN THE DECK SLAB. THE WATER COLLECTED SHALL OUTLET INTO A NORMAL CLOSED DRAINAGE SYSTEM AND WILL NOT BE ALLOWED TO FALL FREE OR ACCUMULATE ON THE FLOOR OR CEILING BELOW.

DURING ASPHALT AND CONCRETE REMOVAL AND REPLACEMENT OF EXPANSION JOINTS OVER THE ENCLOSED AREAS THE CONTRACTOR MUST PROVIDE A COVERING, TENTS OR OTHER PROTECTION OF SOME TYPE OVER THE SLAB TO PREVENT THE ENTRANCE OF WATER THROUGH THE CONCRETE SLAB. THE CONTRACTOR SHALL NOT REMOVE MORE OF THE EXISTING WEARING SURFACE OR EXPANSION JOINTS AT ANY TIME THAT HE CAN SATISFACTORILY COVER AND PROTECT FROM THE WEATHER.

THE TEMPORARY DRAINAGE SYSTEM AND PROTECTIVE COVERING MUST REMAIN IN PLACE UNTIL THE WEARING SURFACE AND EXPANSION JOINT IS REPLACED. THE CONTRACTOR SHALL CLEAN AND FLUSH ADJACENT CATCH BASINS AND DOWNSPOUTS FROM SURFACE LEVEL TO TRACK LEVEL PRIOR TO OUTLETTING DRAINAGE COLLECTED DURING WORK ON EXPANSION JOINTS.

THE CONTRACTOR IS ADVISED TO EXERCISE EXTREME CARE WHEN WORKING OVER THE OAK ROOM BELOW WEST 2ND STREET AT PROSPECT AVENUE. THE WALLS AND CEILING ARE MADE OF IRREPLACEABLE MATERIALS. THE CEILING ART WORK IS ALL HAND PAINTED. RACKLE TILE IS SUSPENDED FROM THE BRIDGE DECK BEAMS AND FORMS A BARRIER BETWEEN THE BRIDGE DECK AND THE OAK ROOM CEILING. THE TILE IS WATERPROOFED TO COLLECT ANY WATER WHICH PENETRATES THE DECK. THE RACKLE TILE SUSPENSION SYSTEM ANCHORS SHALL BE THOROUGHLY CHECKED BY THE CONTRACTOR BEFORE REMOVAL OF THE ASPHALT AND CONCRETE FROM THE BRIDGE DECK ABOVE THE CEILING. THE CEILING HAS AN ESTIMATED VALUE OF $200,000. THE CONTRACTOR IS ALSO ADVISED TO EXERCISE EXTREME CARE WHEN WORKING OVER THE SUSPENDED CEILING OVER THE GCRTA GATEWAY CONNECTOR. EXTRA EFFORTS SHALL BE TAKEN TO PREVENT ANY WATER, DEBRIS OR MATERIALS FROM ENTERING THROUGH THE DECK TO MINIMIZE THE POSSIBILITY OF DAMAGE TO THE WALKWAY CONNECTOR.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR ACCEPTANCE IN ACCORDANCE WITH C&MS 501.05 HIS PROPOSED PLAN FOR INTERIM DRAINAGE FOR WORK OVER THE ENCLOSED AREAS AND HIS SPECIAL PROTECTION PLAN FOR WORK OVER THE OAK ROOM UNDER WEST 2ND STREET AND OVER THE SUSPENDED CEILING ABOVE THE GCRTA. PRIOR TO BEGINNING WORK IN THESE AREAS THE CONTRACTOR SHALL VIDEOTAPE THE OAK ROOM CEILING AND THE SUSPENDED CEILING ABOVE THE RTA CONNECTOR. SEE SPECIAL, MISC.: – PRECONSTRUCTION VIDEOGRAPHY.

THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE NECESSARY WATERPROOFING MEASURES TO ENSURE THAT NO DAMAGE TO THE OAK ROOM CEILING OCCURS. ANY DAMAGE TO THE CEILING SUSTAINED AFTER THE PRECONSTRUCTION VIDEO AND PRIOR TO ACCEPTANCE PER C&MS 109..12 SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR/REPLACE TO THE SATISFACTION OF THE OWNER.

THE LUMP SUM PRICE BID FOR STRUCTURE DRAINAGE, MISC.: INTERIM DRAINAGE, SHALL INCLUDE THE COST OF INSTALLING, MAINTAINING AND REMOVING THE ENTIRE DRAINAGE SYSTEM INCLUDING ALL MATERIALS, EQUIPMENT, TOOLS, DEVICES AND ALL LABOR NECESSARY TO COMPLETELY SEAL OFF THE ENCLOSED AREAS FROM THE ENTRANCE OF WATER DURING THE CONSTRUCTION PERIOD.

ITEM SPECIAL - PREMIUM ON SPECIAL OWNERS PROTECTIVE LIABILITY INSURANCE

THE CONTRACTOR SHALL CARRY ADDITIONAL LIABILITY AND PROPERTY DAMAGE INSURANCE IN THE AMOUNT OF $5,000,000 FOR OWNERS ADJACENT TO THE PROJECT SITE. THIS INSURANCE IS TO CONFIRM TO THE CITY STANDARD REQUIREMENTS NAMING THE STATE AND CITY AS ADDITIONAL INSURED.

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GENERAL NOTES

CUY-TOWER CITY BRIDGES

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GENERAL NOTES

ITEM SPECIAL - PREMIUM ON GCRTA RAILROAD'S PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE LIABILITY INSURANCE

THE CONTRACTOR SHALL CARRY ADDITIONAL LIABILITY AND PROPERTY DAMAGE LIABILITY IN THE AMOUNT OF $5,000,000 FOR THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY (GCRTA).

ITEM SPECIAL - SECURITY DURING CONSTRUCTION

ANY TIME THE DECK IS OPENED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL PROVIDE SECURITY AGAINST ANYONE ENTERING THE BUSINESS AREAS BELOW THRU THE OPENING. DURING NON-WORKING HOURS THE OPENING MUST BE ADEQUATELY SEALED OR SECURITY GUARDS PROVIDED TO PREVENT ACCESS TO THESE AREAS.THE ENGINEER RESERVES THE RIGHT TO REQUIRE THE USE OF A SECURITY GUARD BY THE CONTRACTOR.

THE CONTRACTOR SHALL CO-OPERATE AND CO-ORDINATE HIS SECURITY EFFORTS WITH THAT OF THE ADJACENT PROPERTY OWNERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR LOSS RESULTING FROM HIS LACK OF PROPER SECURITY MEASURES.

PAYMENT FOR SECURITY GUARD OR GUARDS, IF REQUIRED SHALL BE PER HOUR AT THE PRICE BID FOR ITEM SPECIAL – SECURITY DURING CONSTRUCTION. THIS ITEM SHALL BE EXEMPT FROM 104.02 OF THE CMS.

SPECIAL - MISC.: PRE-CONSTRUCTION VIDEOGRAPHY

PRIOR TO THE DELIVERY OF ANY MATERIALS OR SUPPLIES TO THE SITE, OR PRIOR TO THE BEGINNING OF ANY CONSTRUCTION WORK, THE CONTRACTOR SHALL PROVIDE PRE-CONSTRUCTION AUDIO-VIDEO RECORDING FOR THE PURPOSES OF ESTABLISHING THE SURFACE CONDITIONS EXISTING IN ALL AREAS AFFECTED BY THE WORK. VIDEO RECORDING SHALL INCLUDE, BUT NOT BE LIMITED TO DRIVEWAY APRONS, WALKS, PAVEMENTS, UTILITIES, ETC. IN ADDITION TO SURFACE CONDITIONS, VIDEO RECORDING SHALL INCLUDE THE OAK ROOM CEILING, THE SUSPENDED CEILING ABOVE THE RTA CONNECTOR AND THE CEILING TILE IN AREAS OF FULL DEPTH SLAB REPAIRS. SEE GENERAL NOTE: SPECIAL, REMOVAL AND REPLACEMENT OF CEILING TILE FOR UNDERDECK BRIDGE ACCESS. THE PRE-CONSTRUCTION VIDEOGRAPHY SHALL BE PERFORMED BY AN INDEPENDENT COMPANY HAVING HAD PREVIOUS EXPERIENCE IN SIMILAR TYPE OF WORK.

VIDEO RECORDING SHALL HAVE A MINIMUM RESOLUTION OF 1080P.

THE CONTRACTOR SHALL PROVIDE ONE COPY OF THE PRE-CONSTRUCTION VIDEOGRAPHY TO CITY OF CLEVELAND, ODOT AND ONE COPY FOR THEMSELVES. THE FULL COST OF FURNISHING ALL LABOR, MATERIALS AND EQUIPMENT TO PERFORM THE REQUIRED AUDIO VIDEO TAPING AS DESCRIBED HEREIN SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR PRE-CONSTRUCTION VIDEOGRAPHY.

SPECIAL - MISC.: RECORD DRAWINGS

GENERAL:

THE FOLLOWING SHALL APPLY AND BE PAID FOR UNDER THIS PAY ITEM.

CONTRACTOR SHALL MAINTAIN AND PROVIDE ODOT WITH RECORD DRAWINGS AS SPECIFIED HEREIN. RECORD DRAWINGS SHALL INCLUDE COMPLETE DOCUMENTATION OF FIELD REVISIONS TO THE CONTRACT DOCUMENTS.

FILING:

1. THE CONTRACTOR SHALL MAINTAIN IN HIS FIELD OFFICE IN A CLEAN, DRY, LEGIBLE CONDITION THE FOLLOWING: CONTRACT DRAWINGS, SPECIFICATIONS, ADDENDA, CONFORMING SHOP DRAWINGS, CHANGE ORDERS, OTHER MODIFICATIONS OF CONTRACT, TEST RECORDS, SURVEY DATA AND ALL OTHER DOCUMENTS PERTINENT TO THE CONTRACTOR'S WORK.
2. THE CONTRACTOR SHALL PROVIDE FILES AND RACKS FOR PROPER STORAGE AND EASY ACCESS. FILING SHALL BE ESTABLISHED IN A FORMAT ACCEPTABLE TO ODOT.
3. THE CONTRACTOR SHALL MAKE DOCUMENTS AVAILABLE AT ALL TIMES FOR INSPECTION BY ODOT OR THEIR REPRESENTATIVES.
4. RECORD DRAWINGS SHALL NOT BE USED FOR ANY OTHER PURPOSE AND SHALL NOT BE REMOVED FROM THERE FILED LOCATION WITHOUT ODOT'S APPROVAL.
5. THE CONTRACTOR SHALL KEEP ALL RECORDS CURRENT.
6. THE CONTRACTOR SHALL NOT PERMANENTLY CONCEAL ANY WORK UNTIL REQUIRED INFORMATION HAS BEEN RECORDED.
7. CONTRACT DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION INCLUDING
   A. HORIZONTAL AND VERTICAL LOCATIONS OF UNDERGROUND UTILITIES AND APPURTENANCES REFERENCED TO PERMANENT SURFACE IMPROVEMENTS.
   B. FIELD CHANGES OF DIMENSION AND DETAIL.
   C. CHANGES MADE BY CHANGE ORDER OR FIELD ORDER.
   D. DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS.
8. SPECIFICATIONS AND ADDENDA: LEGIBLY MARK EACH SECTION TO RECORD:
   A. MANUFACTURER, TRADE NAME, CATALOG NUMBER AND SUPPLIER OF EACH PRODUCT AND ITEM OF EQUIPMENT ACTUALLY INSTALLED.
   B. CHANGES MADE BY CHANGE ORDER OR FIELD ORDER.
   C. OTHER MATTERS NOT ORIGINALLY SPECIFIED.
9. RECORDS MUST BE KEPT CURRENT IN ELECTRONIC FORMAT AND FURNISHED AT ANY TIME THROUGHOUT THE PROJECT, UPON REQUEST.

MAINTENANCE:

1. THE CONTRACTOR SHALL MAINTAIN THE PROJECT DURING THE COURSE OF THE CONSTRUCTION INCLUDING THE PERIOD OF THE AS-BUILT CERTIFICATION AND SHALL NOTIFY THE ENGINEER A MINIMUM OF 2 WEEKS PRIOR TO COMPLETION.

2. THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF THE PROJECT UNTIL THE FINAL ACCEPTANCE OF THE RECORD DRAWINGS AND A DETERMINATION BY THE ENGINEER THAT NO ERRORS OR OMISSIONS HAVE BEEN MADE BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION. THE ENGINEER SHALL NOTIFY THE CONTRACTOR AS TO THE ACCEPTABILITY OR REJECTION OF THE CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL CORRECT ANY ERRORS/OMISSIONS PRIOR TO FINAL ACCEPTANCE OF THE RECORD DRAWINGS FOR THE PROJECT.

3. THE CONTRACTOR SHALL MAINTAIN SHOP DRAWINGS AND LEGIBLY ANNOTATE CHANGES MADE AFTER REVIEW.

RECORD RETENTION:

AS ODOT MAY LEGITIMATELY REQUEST FROM TIME TO TIME, THE CONTRACTOR AGREES TO MAKE AVAILABLE FOR INSPECTION AND/OR REPRODUCTION BY THE LPA OR ODOT, ALL RECORDS, BOOKS, AND DOCUMENTS OF ANY KIND AND DESCRIPTION GENERATED BY THE CONTRACTOR THAT RELATE TO THIS CONTRACT. THESE RECORDS MUST BE MADE AVAILABLE IN ELECTRONIC FORMAT.

SUBMITTALS:

A. THE CONTRACTOR SHALL ANNOTATE ALL RECORD DRAWING REVISIONS ONTO ELECTRONIC COPIES OF PLAN DRAWINGS PROVIDED BY THE ENGINEER USING AUTOCAD 2014 SOFTWARE, AS APPROVED BY THE ENGINEER. AT THE COMPLETION OF THE PROJECT, DELIVER ONE (1) MYLAR COPY, ONE (1) PAPER COPY, AND ONE (1) ELECTRONIC COPY IN AUTOCAD OF RECORD DRAWING ORIGINAL DOCUMENTS TO THE ENGINEER. HIGHLIGHT CHANGES WITH CLOUDS AND SHOW CHANGES ON A SEPARATE AUTOCAD LAYER.

B. PROVIDE TRANSMITTAL LETTER CONTAINING THE FOLLOWING INFORMATION:

1. DATE
2. PROJECT TITLE AND PROJECT NUMBER
3. CONTRACTOR'S NAME AND ADDRESS
4. TITLE AND NUMBER OF EACH DRAWING
5. CERTIFICATION BY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF OHIO AND PREQUALIFIED BY ODOT FOR BRIDGE PROJECTS.
6. SIGNATURE OF CONTRACTOR OR HIS AUTHORIZED REPRESENTATIVE.

PAYMENT:

PAYMENT FOR ALL THE ABOVE SHALL BE LUMP SUM UPON PROPER EXECUTION OF ALL WORK OF THIS ITEM AS DETERMINED BY THE ENGINEER.

ITEM SPECIAL - CLASS QC FS CONCRETE

A CONTINGENCY QUANTITY OF 50 CUBIC YARDS HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES TO BE USED WITH THE APPROVAL OF THE ENGINEER IN LIEU OF ITEM 847 CONCRETE OVERLAY TO MAINTAIN DRIVEWAY ACCESS TO LOADING DOCKS. REFER TO SUPPLEMENTAL SPECIFICATION 1126 FOR MIX DESIGN REQUIREMENTS.

ITEM SPECIAL - ASBESTOS ABATEMENT, REMOVAL OF MISCELLANEOUS HAZARDOUS MATERIALS

ITEM SPECIAL- ASBESTOS ABATEMENT AT SIDEWALKS

ITEM SPECIAL - ASBESTOS ABATEMENT (CONDUIT) INCIDENTALS

AN ASBESTOS SURVEY WAS CONDUCTED ON JANUARY 15, 2016 BY A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST FROM SOMAT ENGINEERING. 100 LINEAR FEET OF ASBESTOS MATERIAL CONDUITS AND 50 SQUARE FEET OF ASBESTOS EXPANSION MATERIAL IS A CONTINGENCY QUANTITY FOR RACM TO BE REMOVED. THE REMOVAL AND DISPOSAL OF ALL ASBESTOS CONTAINING MATERIAL WITHIN THE PROJECT WORK LIMITS DURING DEMOLITION OF THE BRIDGE MUST COMPLY WITH THE OHIO ADMINISTRATIVE CODE, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS AND THE NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS (NESHAP) STANDARDS FOR ASBESTOS.

A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM WITH SECTIONS I-IV, VI AND VII COMPLETED IS INCLUDED WITH THE BID PACKAGE. THE CONTRACTOR SHALL COMPLETE SECTIONS V, VII-VXIII OF THE FORM AND SUBMIT THE COMPLETED FORM TO THE LOCAL AIR AUTHORITY AT LEAST TEN (10) DAYS PRIOR TO THE DEMOLITION OF THE BRIDGE. THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER. THE LOCAL AIR AUTHORITY IS:

THE DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENT
1925 ST. CLAIR AVENUE
CLEVELAND, OHIO 44114
TELEPHONE: (216) 664-2300

THE CONTRACTOR SHALL PROVIDE AN INDIVIDUAL TRAINED IN THE PROVISIONS OF NESHAP THAT WILL BE ONSITE DURING REMOVAL OF THE ASBESTOS CONTAINING MATERIALS. IN ADDITION TO THE ASBESTOS CONTAINING MATERIAL IDENTIFIED IN THE ASBESTOS SURVEY REPORT, ANY ADDITIONAL NON-VISABLE ASBESTOS ENCOUNTERED WITHIN THE PROJECT LIMITS SHALL BE MONITORED BY THIS INDIVIDUAL.

THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE, SUBMIT AND COMPLY WITH OEPA NOTIFICATION FORM AND TO REMOVE, TRANSPORT AND DISPOSE OF THE MATERIALS CONTAINING ASBESTOS, LEAD OR OTHER HAZARDOUS MATERIALS FROM WITHIN THE PROJECT WORK LIMITS.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT BID PRICE FOR ITEM SPECIAL – ASBESTOS ABATEMENT, REMOVAL OF MISCELLANEOUS HAZARDOUS MATERIALS, ITEM SPECIAL– ASBESTOS ABATEMENT AT SIDEWALKS OR ITEM SPECIAL – ASBESTOS ABATEMENT (CONDUIT) INCIDENTALS. THESE ITEMS SHALL BE EXEMPT FROM SECTION 104.02 OF THE CMS.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE BID TO BE USED AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL – ASBESTOS ABATEMENT, REMOVAL OF MISCELLANEOUS HAZARDOUS MATERIALS: 300 HOURS

ITEM SPECIAL– ASBESTOS ABATEMENT AT SIDEWALKS: 50 SQ. FT.

ITEM SPECIAL – ASBESTOS ABATEMENT (CONDUIT) INCIDENTALS: 100 FT.

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GENERAL NOTES

CUY-TOWER CITY BRIDGES

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GENERAL NOTES

ITEM 202-CONCRETE PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

THIS WORK CONSISTS OF THE REMOVAL OF PORTIONS OF CONCRETE DECKS INCLUDING CONCRETE BLOCKOUTS AT EXPANSION JOINTS, FULL DEPTH SLAB REPAIRS, CONCRETE CURBED ISLANDS LOCATED AT HURON ROAD EAST ABUTMENT AND AT PROSEPCT AVENUE WEST ABUTMENT, AND AT STA. 17+50 AND STA. 20+75 ON THE NORTH SIDE OF PROSPECT AVENUE, AND CONCRETE FIREPROOFING ENCASEMENT FROM STEEL SUPPORTING SYSTEMS (BEAMS AND GIRDERS). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SUPPORTS UNDER PORTIONS OF THE STRUCTURE, DURING REMOVAL AND RECONSTRUCTION OPERATIONS, AS REQUIRED TO MAINTAIN A COMPLETELY STABLE STRUCTURE AT ALL TIMES. IF, IN THE OPINION OF THE ENGINEER, ADDITIONAL SUPPORTS ARE REQUIRED, THEY SHALL BE PROVIDED BY THE CONTRACTOR ENTIRELY AT HIS EXPENSE.

THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY PLATFORMS OR OTHER MEANS NECESSARY TO PERMIT ACCESS FOR INSPECTION.

ALL AREAS UNDER THE DECK MUST BE PROTECTED FROM FALLING DEBRIS. THE CONTRACTOR SHALL NOT PERMIT THE CONCRETE, STEEL OR OTHER ITEMS REMOVED TO DROP ONTO THE CEILING OF THE LOWER LEVELS, OVER THE GCRTA TRACKS OR ONTO ANY OTHER AREAS WHERE DAMAGE MAY RESULT FROM THE FALLING DEBRIS. MEANS SHALL BE PROVIDED FOR CATCHING BROKEN CONCRETE, STEEL AND OTHER MATERIALS REMOVED. THE CONTRACTOR SHALL SUBMIT DETAILS OF THE PROPOSED METHOD TO BE USED TO COLLECT THESE MATERIALS TO THE ENGINEER AS PART OF THE CONTRACTOR'S DEMOLITION PLAN SUBMITTED PER C&MS 501.05. ANY MATERIALS COLLECTED SHALL BE REMOVED PROMPTLY AND NOT ALLOWED TO ACCUMULATE.

EXTREME CARE MUST BE EXERCISED BY THE CONTRACTOR NOT TO DAMAGE OR BREAK ANY WINDOWS, DOORS, FACE OF BUILDING WALLS, COLUMNS, CANOPIES OR ANY FIXTURES ATTACHED TO THE BUILDING. ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE PROPERTY OWNER AND ENGINEER PER C&MS 107.10.

EXTREME CARE MUST BE TAKEN WHILE WORKING AROUND OR NEAR FIRE HYDRANTS, WATER LINES AND VALVES. THE FIRE HYDRANTS, WATER LINES, AND VALVES SHALL BE SUPPORTED DURING CONSTRUCTION AND IF DAMAGED PROVISIONS SHALL BE MADE TO PROVIDE FOR FIRE PROTECTION AS REQUIRED DURING REPAIRS.

PRIOR TO THE START OF ANY CONCRETE DECK REMOVAL THE LATERAL LIMITS OF EACH AREA SHALL BE SUITABLY MARKED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS PRIOR TO PERFORMING CORRECTIVE WORK, SUBMIT A CWP PER C&MS 501.05 D.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. PAVEMENT BREAKERS WILL NOT BE PERMITTED. FOR REMOVALS OVER STRUCTURAL MEMBERS (STEEL BEAMS AND STEEL GIRDERS), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G. FORM SUPPORTS, DROP CEILINGS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS PRIOR TO PERFORMING CORRECTIVE WORK, SUBMIT A CWP PER C&MS 501.05 D.

THE OUTLINE OF THE AREAS OF THE DECK SLAB TO BE REMOVED SHALL BE CUT TO A DEPTH OF THREE QUARTERS ($^3/_4$) OF AN INCH WITH AN APPROVED POWER SAW PRIOR TO THE USE OF PNEUMATIC HAMMERS.

EXCEPT WHERE NOTED ON THE PLANS, EXISTING REINFORCING STEEL SHALL NOT BE CUT FLUSH, BUT SHALL EXTEND A MINIMUM OF 30 BAR DIAMETERS BEYOND THE LIMITS OF CONCRETE REMOVAL TO SERVE AS DOWELS FOR THE REBUILT SLAB. CONCRETE SHALL BE CHIPPED AWAY FROM THE BAR AND THE BAR SANDBLASTED, IF REQUIRED.

DAMAGED AREAS OF REINFORCEMENT THAT ARE TO REMAIN SHALL BE CUT AND STRESS TRANSFER ACCOMPLISHED BY A MECHANICAL SPLICE. OTHER EXISTING REINFORCEMENT WITHIN THE REMOVAL LIMITS SHALL BE REMOVED AND DISPOSED OF.

CARE SHALL BE USED IN WORKING AROUND REINFORCING STEEL SO AS NOT TO LOOSEN OR DAMAGE THE STEEL, OR TO SHATTER THE CONCRETE AROUND IT, BEYOND THE REPAIR AREA. CARE SHALL ALSO BE TAKEN SO AS NOT TO DAMAGE THE TOP FLANGE OF THE STRUCTURAL STEEL MEMBERS DURING REMOVAL OPERATIONS.

PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH THE BARS TO REMAIN OR WITH STRUCTURAL STEEL, HAND TOOLS SHALL BE EMPLOYED FOR FINAL CLEANING.

PAYMENT SHALL BE MADE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE ACTUAL CONCRETE QUANTITY REMOVED AS DETERMINED BY THE ENGINEER FROM FIELD MEASUREMENTS. THE CONCRETE REMOVAL REQUIRED FOR THE SIDEWALK AND IN PATCHING EXISTING CONCRETE ABUTMENTS IS NOT INCLUDED UNDER THIS ITEM FOR PAYMENT BUT IS INCLUDED IN OTHER ITEMS. A CONTINGENCY QUANTITY OF 20 CUBIC YARDS HAS BEEN INCLUDED TO ACCOUNT FOR ADDITIONAL CONCRETE THAT MAY BE REQUIRED.

THE UNIT PRICE BID FOR THIS ITEM SHALL INCLUDE THE COST OF REMOVING AND THE DISPOSAL OF ALL REINFORCING STEEL, MISCELLANEOUS STRUCTURAL STEEL MEMBERS, INCLUDING END DAM FRAMING FOR TRANSVERSE EXPANSION JOINTS, PIPES, UTILITY DUCTS AND SUPPORTS, AND ANY OTHER MATERIAL EMBEDDED WITHIN OR ATTACHED DIRECTLY TO THE STRUCTURAL DECK, ENCOUNTERED WITHIN THE LIMITS OF REMOVAL AS STATED HEREIN.

CARE OF EXISTING STRUCTURES AND UTILITIES

ALL EXISTING BUILDINGS, BUILDING FACING, PLATE GLASS WINDOWS, METAL TRIM, AWNINGS, CANOPIES, FIRE STANDPIPES, ROADWAY SURFACES, RAMPS, PAVEMENTS CURBS, SIDEWALKS, PARKING AREAS, FENCES, PARKING METERS, MAILBOXES, SIGNS, SIGNAL POLES, LIGHT POLES, FIRE HYDRANTS, MANHOLES, MANHOLE COVERS, SEWERS, DRAINS, GAS LINES, WATER LINES, STEAM LINES, UTILITIES, RTA FACILITIES INCLUDING TRACK, ROAD BED, ELECTRIC SUPPLY LINES, FIXTURES AND SIGNALS, REMOVED OR DAMAGED DURING THE COURSE OF THE WORK SHALL BE REPLACED BY THE CONTRACTOR. ALL SUCH PRIVATELY AND PUBLICLY OWNED ITEMS SHALL BE REPLACED IN THE SAME MANNER AND OF EQUAL QUALITY AND DIMENSIONS AS EXISTED BEFORE THE COMMENCEMENT OF THE WORK IN ACCORDANCE WITH THE OWNERS REQUIREMENTS. ALL SUCH REPLACEMENTS SHALL BE PERFORMED AS SOON AS PRACTICABLE.

THE INFORMATION SHOWN ON THE CONTRACT DRAWINGS CONCERNING TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN REMOVING CONCRETE AND WORKING AROUND UTILITIES WHICH ARE TO REMAIN IN SERVICE AT THE EXISTING LOCATION DURING CONSTRUCTION. THE UTILITIES MUST BE PROTECTED AGAINST DAMAGE OR DISRUPTION. A REPRESENTATIVE OF THE UTILITY COMPANY SHALL BE PRESENT WHEN REMOVING CONCRETE FROM AROUND THE DUCTS. THE FULL COST FOR PROTECTION OF THESE UTILITIES, THAT ARE TO REMAIN IN PLACE, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK, THE COST OF WHICH SHALL HAVE BEEN INCLUDED IN OTHER ITEMS OF WORK.

ITEM 202 - STRUCTURAL STEEL PORTIONS OF STRUCTURE REMOVED, AS PER PLAN, AND ITEM SPECIAL - STEEL INSPECTION AT NON-ACCESSABLE LOCATIONS

REMOVAL SHALL CONFORM TO ITEM 202 WITH THE FOLLOWING MODIFICATIONS AND ADDITIONS:

A CAREFUL, DETAILED VISUAL INSPECTION HAS BEEN MADE OF ALL THE STRUCTURAL STEEL MEMBERS, WHERE ACCESS PERMITTED. BASED ON THIS INSPECTION MEMBERS OR PARTS OF MEMBERS WHICH WILL REQUIRE REPLACEMENT OR REPAIR HAVE BEEN IDENTIFIED ON THE PLANS.

THE CONTRACTOR SHALL PROVIDE THE NECESSARY EQUIPMENT PRIOR TO BEGINNING OF WORK FOR THE PURPOSE OF RE-EXAMINING THE EXISTING STRUCTURE AT LOCATIONS WHERE PLANS INDICATE THAT "NO INSPECTION ACCESS" WAS AVAILABLE. THE CONTRACTOR SHALL PROVIDE NECESSARY EQUIPMENT FOR CAMERA INSPECTION OF THE STEEL FROM ABOVE ONCE EXISTING EXPANSION JOINTS HAVE BEEN REMOVED. THE CONTRACTOR'S SUPERINTENDENT APPROVED REPRESENTATIVE SHALL ACCOMPANY THE ENGINEER AND CONSULTANT AT THIS TIME IN MAKING A DETAILED EXAMINATION OF THE REPAIRS TO BE MADE. THE EQUIPMENT SHALL BE FURNISHED FOR WHATEVER LENGTH OF TIME MAY BE NECESSARY TO CONDUCT THIS EXAMINATION. PAYMENT WILL BE MADE TO THE CONTRACTOR TO COVER ANY COSTS OF THIS INSPECTION, INCLUDING EQUIPMENT AND PERSONNEL UNDER THE LUMP SUM BID FOR ITEM SPECIAL – STEEL INSPECTION AT NON-ACCESSIBLE LOCATIONS.

THE PLANS SHOW ONLY REPAIRS CONSIDERED NECESSARY BASED ON FIELD INSPECTIONS WHICH HAVE BEEN MADE. BASED UPON THE ADDITIONAL INSPECTIONS AND CONDITIONS WHICH MAY BE DISCLOSED AS THE WORK PROGRESSES, THE ENGINEER MAY DETERMINE THAT ADDITIONAL MEMBERS OR PARTS OF MEMBERS ARE TO BE REMOVED OR REPAIRED. IN SUCH CASES ADDITIONAL PLANS WILL BE PREPARED BY THE CONSULTANT WITHIN TWO WEEKS AFTER INSPECTION AND THE CONTRACTOR SHALL PROCEED WITH ALL WORK AS DIRECTED.

STRUCTURAL STEEL MEMBERS DESIGNATED BY THE PLANS FOR REMOVAL MAY BE REMOVED BY THE METHODS OF THE CONTRACTOR'S SELECTION. CONTRACTOR SHALL SUBMIT ENGINEERED DRAWINGS PER C&MS SECTION 501.05 FOR ACCEPTANCE. CARE SHALL BE EXERCISED TO PREVENT DAMAGE TO THE REMAINING PORTION OF THE STRUCTURE INCLUDING THE ROOF DECK IN THE ENCLOSED AREAS. IN CASE OF DAMAGE TO THE EXISTING STRUCTURE, REPAIR OR REPLACEMENT SHALL BE MADE AT THE CONTRACTOR'S EXPENSE AND WITH THE APPROVAL OF THE ENGINEER.

THE REMOVAL OF STRUCTURAL STEEL, BEARING SEATS AND PLATES, SUPPORT ANGLES AND GUSSET PLATES SHALL BE INCLUDED IN THIS ITEM.

PAYMENT WILL BE MADE ON PLAN QUANTITY, EXCEPT THAT ADDITIONAL PAYMENT SHALL BE MADE FOR REMOVAL OF MEMBERS NOT INDICATED FOR REMOVAL ON THE PLANS, AT THE UNIT PRICE BID IN POUNDS FOR STRUCTURAL STEEL PORTIONS OF STRUCTURE REMOVED. A CONTINGENCY QUANTITY OF 1000 POUNDS HAS BEEN INCLUDED TO ACCOUNT FOR ADDITIONAL STEEL REMOVALS THAT MAY BE REQUIRED.

REMOVAL OF STRUCTURAL STEEL EMBEDDED WITHIN OR ATTACHED DIRECTLY TO THE CONCRETE DECK, INCLUDING END DAM FRAMING FOR EXPANSION JOINTS, CURB PLATES, FENCE SUPPORTS, UTILITY DUCT SUPPORTS AND OTHER MISCELLANEOUS STEEL SECTIONS SHALL NOT BE INCLUDED UNDER THIS ITEM, BUT SHALL BE PAID FOR UNDER OTHER ITEMS OF WORK. THE PAYMENT QUANTITY SHALL NOT INCLUDE EXISTING STRUCTURAL MEMBERS WHICH ARE REMOVED AND REUSED IN THE COMPLETED STRUCTURE. PAYMENT FOR THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE.

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GENERAL NOTES

ITEM 202 - REMOVAL MISC.: MISCELLANEOUS ITEMS

THE WORK INCLUDES THE FOLLOWING REMOVALS AND DISPOSALS TO BE PAID FOR UNDER THIS LUMP SUM ITEM:

1. WOOD/STEEL DECORATIVE PARAPET ON SOUTH SIDE OF HURON ROAD AT TOWER CITY CENTER. THE LARGE LETTERS SAYING "TOWER CITY CENTER" SHALL BE DELIVERED TO TOWER CITY CENTER.
2. CHAIN LINK FENCE, GUARD RAIL AND PORTABLE BARRIER ALONG SOUTH SIDE OF HURON ROAD AT STA. 28+70±.
3. CONTRACTOR TO REMOVE, STORE AND REINSTALL TRASH BINS/CANS AT ORIGINAL LOCATIONS.
4. CONTRACTOR TO CONTACT NEWSPAPER BOX VENDOR TO REMOVE.
5. CONTRACTOR TO CONTACT DESTINATION CLEVELAND TO REMOVE 2 FREE STANDING WAY-FINDING KIOSKS ON PROSPECT AVENUE BETWEEN W. 2ND AND W. 3RD.

NOT INCLUDED IN THIS ITEM:

THE CANOPY SUPPORTS AND CANOPY LOCATED ON THE NORTH SIDE OF PROSPECT AVENUE AT THE VALET SERVICE STATION, AND THE CANOPY AND METAL PATIO FENCES AT LINCOLN TAP HOUSE ENTRANCE ON PROSPECT AVENUE AND PATIO FENCE AT HARD ROCK CAFE ON HURON ROAD. THESE WILL BE REMOVED BY TOWER CITY CENTER.

DISPOSAL OF REMOVED MATERIALS

ALL STRUCTURAL METAL, PIPE, UTILITY FIXTURES, ETC., CUT OR REMOVED FROM THE STRUCTURE AND NOT REUSED SHALL, UNLESS OTHERWISE SPECIFIED, BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED BY HIM FROM THE SITE. PROPERTY OWNERS SHALL BE GIVEN THE OPTION TO TAKE POSSESSION OF SECONDARY DRAINAGE SYSTEMS REMOVED FROM THE STRUCTURE. IF DECLINED, MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.

ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING STEEL, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. A CONTINGENCY QUANTITY OF 1000 LBS. HAS BEEN USED.

REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

BLASTING WASTE CONTAINMENT

WASTE MATERIAL GENERATED BY ABRASIVE BLASTING OPERATIONS ON THE EXISTING CONCRETE SURFACES, INCLUDING DUST SHALL BE CONTAINED AND_PROPERLY DISPOSED OF. THE CONTRACTOR SHALL ERECT AN ENCLOSURE TO COMPLETELY SURROUND THE BLASTING OPERATIONS. THE ENCLOSURE SHALL BE CONSTRUCTED OF FLEXIBLE MATERIALS SUCH AS TARPAULINS OR CONTAINMENT SCREENS (SPECIFICALLY DESIGNED FOR THIS PURPOSE,) OR OF RIGID MATERIALS SUCH AS PLYWOOD. ALL MATERIALS SHALL BE FREE OF TEARS, CUTS OR HOLES. ALL SEAMS SHALL BE OVERLAPPED A MINIMUM OF (6") AND FASTENED TOGETHER AT (12") CENTERS, OR FASTENED AND OVERLAPPED IN A MANNER THAT INSURES A SEAL WHICH DOES NOT ALLOW OPENINGS BETWEEN THE SCREENS IN THE CONTAINMENT.

CARE SHALL BE TAKEN TO PREVENT THE WASTE MATERIAL GENERATED BY THE ABRASIVE BLASTING OPERATIONS FROM ENTERING INHABITED AREAS BELOW THE ROADWAY AND EXISTING DRAIN PIPES AND CATCH BASINS.

ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL PROTECTION LAWS, REGULATIONS AND ORDINANCES INCLUDING, BUT NOT LIMITED TO, AIR QUALITY WASTE CONTAINMENT AND WASTE REMOVAL MUST BE OBSERVED DURING THE PERFORMANCE OF THIS CONTRACT.

IN RESPECT TO ENFORCEMENT OF THE ABOVE MENTIONED LAWS, BIDDERS ARE ADVISED THAT VARIOUS GOVERNMENTAL BODIES HAVE THIS RESPONSIBILITY. IT IS THE RESPONSIBILITY OF THE BIDDERS TO COMPLY WITH THOSE LAWS AS ENFORCED BY THOSE VARIOUS GOVERNMENTAL BODIES.

THE COST FOR BLASTING WASTE CONTAINMENT ON EXISTING CONCRETE SURFACES AS REQUIRED HEREIN, SHALL BE CONSIDERED INCIDENTAL TO ANY ITEMS NEEDING BLASTING.

MECHANICAL CONNECTORS

AN APPROVED TYPE OF MECHANICAL CONNECTOR FOR REINFORCING BARS SHALL BE PROVIDED. INSTALLATION OF CONNECTORS SHALL CONFORM WITH MANUFACTURER'S RECOMMENDED PROCEDURES. MECHANICAL CONNECTORS SHALL DEVELOP AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRENGTH OF THE BAR. CONNECTORS USED WITH EPOXY COATED BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR WHICH OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY, AND UNIFORMITY MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS. CONNECTORS SHALL CONFORM WITH 509.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

ITEM 512 SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION)

APPLY A PERMANENT GRAFFITI COATING QUALIFIED ACCORDING TO SUPPLEMENT 1083 THAT IS COMPATIBLE WITH THE CONCRETE SEALER OVER WHICH IT IS APPLIED. APPLY THE GRAFFITI COATING IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. PAYMENT SHALL BE MADE AT THE SQUARE YARD PRICE BID FOR THIS ITEM.

ITEM 512 - SEALING OF CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN

THIS WORK SHALL CONSIST OF:

SEALING THE SURFACE OF THE EXISTING MICRO SILICA CONCRETE ROADWAY WEARING SURFACE IN UNITS 1-5 AND 14-20 AND WEST 6TH STREET.

SEALING THE FILL CONCRETE OR STRUCTURAL DECK IN THE ROADWAY AREAS OF UNITS 6-13 AND 21-31 BEFORE PLACEMENT OF THE NEW MICRO SILICA MODIFIED CONCRETE OVERLAY.

SEALING THE STRUCTURAL SLAB IN ALL THE SIDEWALK AREAS BEFORE PLACEMENT OF THE NEW MICRO-SILICA MODIFIED CONCRETE OVERLAY.

SEALING THE SURFACE OF ALL EXISTING CONCRETE LOADING DOCK ENTRANCES.

PLUGGING ANY ENCOUNTERED ABANDONED DRAINAGE TUBES OR PIPES SET IN CONCRETE DECK SLAB.

SEALING ALL CONCRETE COLD JOINTS, INTERFACES OR OTHER BREAKS IN THE POURED FINAL DECK SURFACE

THE WORK SHALL CONFORM TO ALL REQUIREMENTS SET FORTH IN THE ODOT CMS ITEM 512 WITH THE FOLLOWING MODIFICATIONS. IN ALL AREAS WHERE THE SEALING IS TO BE PERFORMED PRIOR TO POURING CONCRETE, THE HMWM SHALL BE COATED WITH BROADCAST SAND. A UNIFORM SURFACE IS NOT REQUIRED SO THE REQUIREMENT TO FILL SPALLS OR DECK IMPERFECTIONS IS WAIVED.

THIS WORK INCLUDES ALL MATERIALS EQUIPMENT LABOR AND INCIDENTALS NECESSARY TO FULLY PERFORM THE SEALING AND WILL BE PAID AT THE CONTRACT BID PRICE PER SQUARE YARDS OF DECK SEALED.

ITEM 512 - SEALING OF CONCRETE BRIDGE DECKS WITH SRS

THIS WORK SHALL CONSIST OF:

SEALING THE SURFACE OF THE EXISTING MICRO SILICA CONCRETE ROADWAY WEARING SURFACE IN UNITS 1-5 AND 14-20 AND WEST 6TH STREET.

THIS WORK INCLUDES ALL MATERIALS EQUIPMENT LABOR AND INCIDENTALS NECESSARY TO FULLY PERFORM THE SEALING AND WILL BE PAID AT THE CONTRACT BID PRICE PER SQUARE YARDS OF DECK SEALED.

ITEM 511 CONCRETE, MISC.: WATERSTOPS

THIS ITEM SHALL INCLUDE FURNISHING AND INSTALLING WATERSTOP SYSTEMS AT THE CONSTRUCTION JOINT BETWEEN NEW CONCRETE BLOCKOUTS AT EXPANSION JOINTS AND NEW OR EXISTING ADJACENT ROADWAY OR SIDEWALK CONCRETE AS SHOWN IN THE PLANS. WATERSTOPS SHALL CREATE A CONTINUOUS DIAPHRAGM TO PREVENT FLUID MIGRATION. WATERSTOPS SHALL EXTEND FOR THE FULL LENGTH OF THE EXPANSION JOINT AT EACH BLOCKOUT LOCATION.

QUALITY ASSURANCE: MANUFACTURER SHALL DEMONSTRATE FIVE YEARS (MINIMUM) CONTINUOUS, SUCCESSFUL EXPERIENCE IN PRODUCTION OF WATERSTOPS.

DELIVERY, STORAGE AND HANDLING: STORE WATERSTOPS UNDER TARPS TO PROTECT FROM OIL, DIRT, AND SUNLIGHT.

PRODUCTS:

A. AT LOCATIONS WHERE NEW EXPANSION JOINT BLOCKOUTS ABUT EXISTING ROADWAY OR SIDEWALK CONCRETE, PROVIDE FLEXIBLE PVC (POLYVINYL CHLORIDE) RETROFIT WATERSTOP SYSTEM INCLUDING WATERSTOP AND ALL ADHESIVES, FASTENERS AND CONNECTIONS, AS MANUFACTURED BY:

1. GREENSTREAK, PROFILE STYLE NUMBER 655 OR
2. DURAJOINT, TYPE 29 OR
3. APPROVED EQUAL

B. AT LOCATIONS WHERE NEW EXPANSION JOINT BLOCKOUTS ABUT NEW ROADWAY OR SIDEWALK CONCRETE, PROVIDE FLEXIBLE PVC (POLYVINYL CHLORIDE) WATERSTOP SYSTEM INCLUDING WATERSTOP AND ALL ADHESIVES, FASTENERS AND CONNECTIONS, AS MANUFACTURED BY:

1. GREENSTREAK; MODEL 782 OR
2. DURAJOINT, TYPE 11B OR
3. APPROVED EQUAL

C. THE PVC WATERSTOP SHALL BE EXTRUDED FROM AN ELASTOMERIC PLASTIC MATERIAL OF WHICH THE BASIC RESIN IS PRIME VIRGIN POLYVINYL CHLORIDE. THE PVC COMPOUND SHALL NOT CONTAIN ANY SCRAPPED OR RECLAIMED MATERIAL OR PIGMENT WHATSOEVER.

D. PERFORMANCE REQUIREMENTS AS FOLLOWS:

PROPERTY	TEST METHOD	REQUIRED LIMITS
WATER ABSORPTION	ASTM D 570	0.15% MAX
TEAR RESISTANCE	ASTM D 624	300 LB/IN MIN.
ULTIMATE ELONGATION	ASTM D 638	350% MIN.
TENSILE STRENGTH	ASTM D 638	2000 PSI MIN.
LOW TEMPERATURE BRITTLENESS	ASTM D 746	NO FAILURE AT -35°F
STIFFNESS IN FLEXURE	ASTM D 747	700 PSI MIN.
SPECIFIC GRAVITY	ASTM D 792	1.38 MAX.
HARDNESS, SHORE A	ASTM D 2240	79±3
TENSILE STRENGTH AFTER ACCELERATED EXTRACTION	CRD-C 572	1600 PSI MIN.
ELONGATION AFTER ACCELERATED EXTRACTION	CRD-C 572	300% MIN.
EFFECT OF ALKALIES AFTER 7 DAYS: WEIGHT CHANGE HARDNESS CHANGE	CRD-C 572	BETWEEN -0.10% / +0.25% +/- 5 POINTS

E. ACCESSORIES

1. PROVIDE FACTORY MADE WATERSTOP FABRICATIONS FOR ALL CHANGES OF DIRECTION, INTERSECTIONS, AND TRANSITIONS LEAVING ONLY STRAIGHT BUTT JOINT SPLICES FOR THE FIELD.
2. PROVIDE ALL ATTACHMENTS NECESSARY TO THE SYSTEM INCLUDING BUT NOT LIMITED TO ANCHOR BOLTS, EPOXY/ADHESIVE AND BATTEN BARS.
3. PROVIDE TEFLON COATED THERMOSTATICALLY CONTROLLED WATERSTOP SPLICING IRONS FOR FIELD BUTT SPLICES.

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GENERAL NOTES

CUY-TOWER CITY BRIDGES

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129

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GENERAL NOTES

ITEM 511 CONCRETE, MISC.: WATERSTOPS (CONTINUED)

INSTALLATION:

A. FIELD FABRICATE JOINTS IN WATERSTOPS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. LAPPING OF WATERSTOP, USE OF ADHESIVES, OR SOLVENTS SHALL NOT BE ALLOWED.

B. CENTER WATERSTOP IN JOINT AND SECURE WATERSTOP IN CORRECT POSITION USING EPOXY, ANCHOR BOLTS AND BATTEN BARS AS RECOMMENDED BY THE MANUFACTURER.

C. INSTALL IN LONGEST LENGTHS PRACTICABLE. SUPPORT AND PROTECT EXPOSED WATERSTOPS DURING PROGRESS OF THE WORK.

D. FIELD QUALITY CONTROL

1. WATERSTOP SPLICING DEFECTS WHICH ARE UNACCEPTABLE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
2. TENSILE STRENGTH LESS THAN 80 PERCENT OF PARENT SECTION.
3. MISALIGNMENT OF CENTERBULB, RIBS, AND END BULBS GREATER THAN 1/16 INCH.
4. BOND FAILURE AT JOINT DEEPER THAN 1/16 INCH OR 15 PERCENT OF MATERIAL THICKNESS.
5. MISALIGNMENT THAT REDUCES WATERSTOP CROSS SECTION MORE THAN 15 PERCENT.
6. VISIBLE POROSITY IN THE WELD.
7. BUBBLES OR INADEQUATE BONDING.
8. VISIBLE SIGNS OF SPLICE SEPARATION WHEN COOLED SPLICE IS BENT BY HAND AT A SHARP ANGLE.
9. CHARRED OR BURNT MATERIAL.

E. ENSURE REINFORCEMENT, INSERTS, WATERSTOPS, EMBEDDED PARTS, AND FORMED CONSTRUCTION JOINT DEVICES WILL NOT BE DISTURBED DURING CONCRETE PLACEMENT.

SHOP DRAWINGS: SHOP DRAWINGS OF WATERSTOP SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL IN ACCORDANCE WITH ITEM 501.

PAYMENT SHALL BE MADE AT THE LINEAR FOOT PRICE BID FOR THIS ITEM.

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

GENERAL: ALL REQUIREMENTS OF 513 APPLY TO SHOP FABRICATED MEMBERS. PERFORM WORK FOR FIELD FABRICATED MEMBERS, AS NOTED IN THE PLANS ACCORDING TO ITEM 513, EXCEPT AS MODIFIED HEREIN. THE DEPARTMENT WILL NOT REQUIRE THE CONTRACTOR PERFORMING FIELD FABRICATION TO BE PRE-QUALIFIED AS SPECIFIED IN SUPPLEMENT 1078. SUBMIT A WRITTEN LETTER OF MATERIAL ACCEPTANCE IN ACCORDANCE WITH 501.06, TO THE ENGINEER.

THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY TO ERECT ALL NEW STRUCTURAL STEEL AND MAKE REPAIRS TO THE EXISTING STEEL, AS INDICATED HEREIN AND AS SHOWN ON THE PLANS.

ALL MOMENT PLATES AND SPLICE PLATES CONNECTING MEMBERS DESIGNATED CVN SHALL ALSO SATISFY CVN REQUIREMENTS.

MATERIALS: STRUCTURAL STEEL SHALL BE ASTM A709, UNLESS OTHERWISE NOTED. BOLTED CONNECTIONS SHALL BE MADE WITH $^{7}/_{8}$"Ø OR 1"Ø HIGH-STRENGTH STEEL BOLTS, AS NOTED ON THE PLANS. HIGH STRENGTH BOLTS, NUTS AND WASHERS SHALL BE ASTM A-325 STEEL.

REPAIRS TO EXISTING STRUCTURAL STEEL: THE PLANS SHOW ONLY REPAIRS CONSIDERED NECESSARY BASED ON INSPECTIONS WHICH HAVE BEEN MADE. BASED UPON THE ADDITIONAL INSPECTIONS AND CONDITIONS WHICH MAY BE DISCLOSED AS THE WORK PROGRESSES, THE ENGINEER MAY DETERMINE THAT ADDITIONAL MEMBERS OR PARTS OF MEMBERS ARE TO BE REPLACED. IN SUCH CASES ADDITIONAL PLANS WILL BE PREPARED BY THE CONSULTANT AND PROVIDED TO THE CONTRACTOR WITHIN TEN (10) DAYS AND THE CONTRACTOR SHALL PROCEED WITH ALL WORK AS DIRECTED.

THE DIMENSIONS SHOWN ON THE EXISTING STRUCTURAL STEEL MEMBERS AND CONNECTIONS, IN CONJUNCTION WITH THE REPAIR AND REPLACEMENT DETAILS ARE FROM THE ORIGINAL AND REHABILITATION PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING HIS OWN MEASUREMENTS, BEFORE FABRICATION, TO INSURE THE VARIOUS PARTS OF THE WORK FIT TOGETHER INTO THE COMPLETED STRUCTURE.

NEW STRUCTURAL STEEL MEMBERS SHALL BE PAINTED IN ACCORDANCE WITH ITEMS 513 & 514. STEEL COMPONENTS TO BE BOLTED SHALL RECEIVE THE PRIME COAT ONLY IN THE SHOP, TO BE INCLUDED WITH ITEM 513. INTERMEDIATE AND FINISH COAT SHALL BE FIELD APPLIED WITH ITEM 514. ALL OTHER WELDED STEEL COMPONENTS, THE PRIME INTERMEDIATE AND FINISH COAT SHALL BE APPLIED IN THE FIELD AND INCLUDED WITH ITEM 514 FOR PAYMENT.

PAYMENT FOR THE WORK AS DESCRIBED HEREIN WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER POUND FOR ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN. THE UNIT PRICE BID SHALL INCLUDE THE FULL COST OF ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE WORK AS SHOWN ON THE PLANS AND SPECIFIED HEREIN. PAYMENT QUANTITY SHALL NOT INCLUDE EXISTING STRUCTURAL STEEL WHICH IS TO BE REMOVED AND REUSED IN THE COMPLETED STRUCTURE. PAYMENT FOR THIS WORK AND ANY OTHER WORK ON THE EXISTING STRUCTURAL STEEL NOT COVERED ELSEWHERE SHALL BE CONSIDERED AS INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE. A CONTINGENCY QUANTITY OF 500 POUNDS HAS BEEN INCLUDED TO ACCOUNT FOR ADDITIONAL STEEL REPAIRS THAT MAY BE REQUIRED.

INCLUDED IN THIS ITEM FOR PAYMENT ARE REPAIRS TO BEAM SEATS, BEARING PLATES, BEVEL PLATES, SUPPORT ANGLES, BRACES, STIFFENERS, COVER PLATES, CLIP ANGLES, FIELD DRILLING OF NEW AND EXISTING MEMBERS FOR BOLTED CONNECTIONS, BOLTS AND WELDING. REPAIRS TO BEAMS AND GIRDERS INCLUDING BOLTS AND WELDING SHALL BE INCLUDED WITH ITEM 513 – STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN FOR PAYMENT.

ITEM 513 - STRUCTURAL STEEL MISC.: RIVET REPLACEMENT

THIS ITEM SHALL INCLUDE REPLACEMENT OF RIVETS WITH HIGH STRENGTH BOLTS AS INDICATED ON THE PLANS FOR CATEGORY 2 STEEL REPAIRS. RIVETS SHALL BE REPLACED WITH HIGH STRENGTH BOLTS OF THE SAME SIZE AS THE REPLACED RIVET. BOLTS SHALL BE PLACED WITH THEIR HEADS ON THE OUTSIDE FACE OF THE EXTERIOR GIRDERS AND ON THE BOTTOM OF FLANGE PLATES. RIVETS SHALL BE REMOVED BY CUTTING OR DRILLING. TORCHING SHALL NOT BE PERMITTED. EACH RIVET SHALL BE REMOVED FROM THE ASSEMBLY AND REPLACED WITH A BOLT PRIOR TO THE REMOVAL OF THE NEXT RIVET.

IN ADDITION TO THE RIVETS INDICATED ON THE PLANS FOR REPLACEMENT AND AT THE DIRECTION OF THE ENGINEERING, THE CONTRACTOR SHALL REPLACE ANY LOOSE OR MISSING RIVETS ENCOUNTERED WITHIN THE STEEL REPAIR AREAS INDICATED ON THE PLANS. PAYMENT FOR ADDITIONAL RIVET REPLACEMENT SHALL BE MADE AT THE UNIT ITEM BID PRICE FOR ITEM 513 - STRUCTURAL STEEL MISC.: RIVET REPLACEMENT. A CONTINGENCY QUANTITY OF 10 RIVETS HAS BEEN INCLUDED TO ACCOUNT FOR ADDITIONAL REPLACEMENT THAT MAY BE REQUIRED. RIVETS TO BE REMOVED AS PART OF CATEGORY 3 AND 4 STEEL REPAIRS SHALL BE INCLUDED WITH ITEM 202 - STRUCTURAL STEEL PORTIONS OF STRUCTURE REMOVED, AS PER PLAN FOR PAYMENT.

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN

ALL DESIGNATED STEEL AREAS TO BE FIELD PAINTED SHALL BE PREPARED IN ACCORDANCE WITH SSPC SP-2 HAND TOOL CLEANING AND/OR SSPC SP-3 POWER TOOL CLEANING SPECIFICATIONS. THE INTENT IS TO REMOVE ALL LOOSE MILL SCALE, LOOSE RUST , LOOSE PAINT AND OTHER LOOSE DETRIMENTAL FOREIGN MATTER. AFTER REMOVAL OF LOOSE MATERIAL THE DESIGNATED AREAS SHALL BE HAND WASHED WITH A LIQUID SOLUBLE SALT REMOVER USING EITHER CHLOR*RID MANUFACTURED BY CHLOR*RID INTERNATIONAL, INC., HOLDTIGHT 102 MANUFACTURED BY HOLDTIGHT SOLUTIONS OR APPROVED EQUAL. THE SURFACE PREPARATION AND THE LIQUID SOLUBLE SALT REMOVER SOLUTION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S PRODUCT INFORMATION AND APPLICATION BULLETIN SHEETS. WASTE MATERIAL AND WATER GENERATED FROM THE SURFACE PREPARATION SHALL BE CONTAINED TO PREVENT CONTAMINATION OF AREAS BELOW.

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, AS PER PLAN

AREAS DESIGNATED TO BE FIELD PAINTED SHALL RECEIVE A PRIME COAT TO PREPARED STEEL SUBTRATES OF EITHER MACROPOXY 920 PRE-PRIME, PENETRATING EPOXY PRIMER AT A DRY FILM THICKNESS OF 1.5 – 2.0 MILS, MANUFACTURED BY SHERWIN – WILLIAMS, CARBOMASTIC 15 – LOW STRESS MASTIC EPOXY, MANUFACTURED BY CARBOLIME COMPANY OR APPROVED EQUAL.

ITEM 516 - STRUCTURAL STEEL EXPANSION JOINTS, AS PER PLAN

THE WORK REQUIRED UNDER THIS ITEM CONSISTS OF FURNISHING AND INSTALLING TOP ACCESS EXPANSION JOINTS SYSTEMS AT THE TRANSVERSE BRIDGE JOINTS, IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS, HERIN SPECIFIED AND/OR AS DIRECTED BY THE ENGINEER.

A. DESCRIPTION: WORK FOR THE ROADWAY AND SIDEWALK EXPANSION JOINTS INCLUDES FURNISHING AND INSTALLING THE EXPANSION JOINT SYSTEM MATERIAL WITHIN THE EXPANSION JOINT AREA BLOCK-OUT INCLUDING SEALANTS, SURFACE PRIMERS, JOINT ARMORS, BOLTS, JOINT ANCHORS, SEALS, ADHESIVES, LUBRICANTS AND ALL OTHER ITEMS AS MAY BE REQUIRED TO COMPLETE THE INSTALLATION AS SHOWN ON THE PLANS OR REQUIRED HEREIN.

B. MATERIALS:

1. ROADWAY AND SIDEWALK EXPANSION JOINT SHALL BE WABO FABROSPAN AS MANUFACTURERED BY WATSON BOWMAN ACME CORP.

i. THE ROADWAY AND SIDEWALK EXPANSION JOINT SYSTEM SHALL CONFORM TO WABO FABROSPAN AS MANUFACTURED BY WATSON BOWMAN ACME CORP., 95 PINEVIEW DRIVE AMHERST, NY 14228.
ii. THE TOP ACCESS JOINT SYSTEM SHALL BE DESIGNED FOR TRAFFIC LOADINGS AND IMPACTS IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, WITH 2015 AND 2016 INTERIM REVISIONS.
iii. STEEL ELEMENTS OF JOINT ARMORING USED TO MECHANICALLY LOCK THE ELASTOMERIC SEAL SHALL BE ASTM A 709, GRADE 50.
iv. WELDED JOINTS IN STEEL COMPONENTS SHALL BE WATERTIGHT, COMPLETE PENETRATION WELDS. GRIND FLUSH ALL WELDS IN CONTACT WITH THE SEAL.
v. COAT ALL STEEL PARTS OF THE JOINT ASSEMBLY ACCORDING TO ODOT CMS 516.
vi. ELASTOMERIC SEAL: MATERIAL SHALL BE FLEXIBLE, NON-REINFORCED EXTRUDED NEOPRENE COMPOUND EXHIBITING THE PHYSICAL PROPERTIES LISTED IN THE BELOW.

PROPERTY	TEST METHOD	REQUIRED LIMITS
TENSILE STRENGTH	ASTM D412	13.8 MPA
ELONGATION @ BREAK	ASTM D412	250% MIN
HARDNESS, TYPE A DUROMETER	ASTM D2240 MODIFIED	55 ± 5
OVEN AGING 70 HRS @ 212°F TENSILE STRENGTH ELONGATION HARDNESS	ASTM D573	 20% LOSS MAX 20% LOSS MAX 10 TO +10 POINTS
OIL SWELL, 70 HRS @ 104°F	ASTM D471	45%
OZONE RESISTANCE, 70 HRS @ 104°F 20% STRAIN, 300 PPHM, IN AIR	ASTM D1149 METHOD B	NO CRACKS
LOW TEMPERATURE STIFFENING 7 DAYS @ 14°F HARDNESS (TYPE A DUROMETER)	ASTM D2240	0 TO +15 POINTS
COMPRESSION SET, 70 HRS @ 212°F	ASTM D395 METHOD B	40%

CALCULATED MMP
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GENERAL NOTES

CUY-TOWER CITY BRIDGES

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GENERAL NOTES

ITEM 516 - STRUCTURAL STEEL EXPANSION JOINTS, AS PER PLAN (CONTINUED)

vii. THE ELASTOMERIC SEAL SHALL BE SUPPLIED AND INSTALLED IN ONE CONTINUOUS LENGTH.

viii. LUBRICANT ADHESIVE: ELASTOMERIC SEAL SHALL BE INSTALLED UTILIZING A ONE PART MOISTURE CURING POLYURETHANE AND AROMATIC HYDROCARBON SOLVENT MIXTURE WHICH COMPLIES WITH ASTM D4070.

ix. ALL STEEL BOLTS SHALL BE ZINC PHOSPHATE COATED. THE THREADED PORTION OF BOLTS AND THE UNDERSIDE OF THE BOLT HEADS SHALL BE COATED WITH AN ANITSEIZE COMPOUND PRIOR TO INSTALLATION.

x. ANTISEIZE COMPOUND SHALL BE CONFORM TO MIL-A-907D.

2. CONCRETE: CLASS QC 2 CONCRETE WITH QC/QA SUPERSTRUCTURE, SHALL BE USED IN THE BLOCKOUT AREA AND FOR FULL DEPTH DECK REPLACEMENT AT THE EXPANSION JOINTS.

3. SEALANTS : JOINT SEALANT SHALL BE HIGH MOLECULAR WEIGHT METHACRYLATE (HMWM), PER 705.15.

4. SILICONE CAULK SHALL CONFORM TO FEDERAL SPECIFICATIONS TT-S-001543A OR APPROVED EQUAL.

C. INSTALLATION: INSTALLATION SHALL BE AS PER MANUFACTURER'S DETAILED INSTALLATION INSTRUCTIONS AND AS INDICATED BELOW.

1. JOINT ASSEMBLIES SHALL BE COMPLETELY SHOP ASSEMBLED (EXCEPT FOR FINAL SEALS). THE TEMPORARY JOINT SEAL THAT SHIPS WITH THE JOINT SHALL REMAIN IN THE EXPANSION JOINT UNTIL THE JOINT IS COMPLETE ACROSS THE ENTIRE BRIDGE DECK AND SIDEWALK. ONLY AT THIS POINT CAN THE FINAL SEAL BE INSTALLED.

2. TOP ACCESS JOINT SYSTEM SHALL BE SET TO THE PROPER WIDTH FOR THE AMBIENT TEMPERATURE AT THE TIME OF INSTALLATION. PROPERLY ALIGN ALL STEEL ELEMENTS PRIOR TO WELDING OPERATIONS TO ENSURE PROPER JOINT PERFORMANCE AND WATERTIGHTNESS.

3. THE MANUFACTURER INSTRUCTIONS FOR THE PROPER INSTALLATION OF THE JOINT SYSTEM SHALL BE ENTERED ON THE SHOP DRAWINGS. SHOP DRAWINGS, WHICH LACK MANUFACTURER INSTALLATION INSTRUCTION, MAY BE RETURNED WITHOUT APPROVAL. TOP ACCESS JOINT SYSTEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS ALONG WITH THE ADVICE OF THEIR QUALIFIED REPRESENTATIVE.

4. TEMPORARY SUPPORTS: THE FABRICATOR SHALL DESIGN AND INSTALL TEMPORARY SUPPORTS TO RESIST SHIPPING, ERECTION AND CONSTRUCTION FORCES WITHOUT DAMAGE TO THE STEEL ARMOR OR COATING. THESE SUPPORST SHALL BE ADJUSTABLE IN THE FIELD TO ACCOUNT FOR VARIABLE TEMPERATURE SETTINGS. INSTALL SUPPORTS AFTER THE FABRICATION AND COATING IS COMPLETE.

5. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ODOT CMS 511 AND AS RECOMMENDED BY THE MANUFACTURER. CONTRACTOR TO ENSURE FULL CONSOLIDATION OF BLOCKOUT CONCRETE, PARTICULARLY IN THE AREA UNDER THE STEEL ANGLES AND AROUND JOINT ANCHORAGE.

6. DECK SLAB AND SIDEWALK SHALL BE FINISHED BY METHODS APPROVED BY THE ENGINEER. THE SIDEWALK FINISH TEXTURE SHALL MATCH THAT OF THE ADJACENT SIDEWALK. CURING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. ALL FIELD SPLICES OF EXPANSION JOINT MATERIALS SHALL BE AS PER THE MANUFACTURER'S RECOMMENDATIONS AND DETAILS SHOWN ON THE PLANS.

8. PROTECT THE SYSTEM AND ITS COMPONENTS DURING CONSTRUCTION. SUBSEQUENT DAMAGE TO THE EXPANSION JOINT SYSTEM WILL BE REPAIRED AT THE GENERAL CONTRACTOR'S EXPENSE.

D. SHOP DRAWINGS - PRIOR TO THE FABRICATION OR ORDERING OF MATERIAL UNDER THIS ITEM, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE COMPLETE LAYOUT AND DETAILS OF THE ENTIRE BLOCKOUT AREA FOR BOTH THE MATERIALS FURNISHED UNDER THIS ITEM AND THE SUPPORTING MATERIAL FURNISHED UNDER ITEM 513. THE SUBMITTAL SHALL INCLUDE MATERIAL SELECTION AND PROPERTIES; COMPLETE LAYOUT OF EACH JOINT, INCLUDING DIMENSIONS AND DETAILS BASED ON FIELD DIMENSIONS; EXPANSION JOINT INFORMATION INCLUDING CONNECTION ATTACHMENTS, SPLICES, FASTENERS AND ACCESSORIES; AND INSTALLATION DETAILS INCLUDING HANDLING PROCEDURES, LIFT POINTS, AND MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURE FOR ACHIEVING REQUIRED BOLT TENSION. AT THE DISCRETION OF THE ENGINEER, THE MANUFACTURER MAY BE REQUIRED TO FURNISH A REPRESENTATIVE SAMPLE OF MATERIAL TO BE SUPPLIED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED, PROFESSIONAL ENGINEER.

E. TESTING - AFTER THE JOINT IS FULLY INSTALLED, FLOOD THE DECK WITH WATER IN THE AREA OF THE JOINT TO A MINIMUM DEPTH OF 1.5 INCHES FOR A MINIMUM OF TWENTY FOUR (24) HOURS TO TEST FOR LEAKAGE. IF LEAKAGE OCCURS, THE CONTRACTOR SHALL LOCATE AND MAKE THE NECESSARY REPAIRS TO CORRECT THE PROBLEM WITH METHODS AS APPROVED BY THE MANUFACTURER'S REPRESENTATIVE AND THE ENGINEER. UPON COMPLETION OF THE REPAIRS, THE JOINT SHALL BE SUBJECTED TO THE INITIAL WATER TEST ONCE AGAIN. TESTING WILL REQUIRE CLOSURE OF THE ROAD. THE CONTRACTOR SHALL COORDINATE WITH CITY OF CLEVELAND DIVISION OF TRAFFIC AND OTHER STAKEHOLDERS TO SCHEDULE THIS CLOSURE.

F. MEASUREMENT - THE QUANTITY FOR EXPANSION JOINT PAYMENT SHALL BE THE ACTUAL LINEAR FEET MEASURED ALONG THE CENTERLINE OF THE JOINT, BUILDING LINE TO BUILDING LINE OR BUILDING LINE TO FACE OF PARAPET.

G. PAYMENT - THE UNIT BID PRICE PER LINEAR FOOT OF EXPANSION JOINTS SHALL INCLUDE THE TOTAL COST OF ALL LABOR, EQUIPMENT, MATERIALS AND TOOLS NECESSARY TO INSTALL THE EXPANSION JOINT SYSTEM AND ALL ITEMS CONTAINED WITHIN THE EXPANSION JOINT BLOCKOUT AREAS AS SHOWN ON THE PLANS AND SPECIFIED HERIN. CONCRETE AND REINFORCING STEEL WITHIN THE BLOCKOUT AREA, SIDEWALK COVER PLATE, AND ROUND POLY FOAM JOINT FILLER WITHIN THE OPENING ARE PAID FOR SEPARATELY. THE QUANTITY TO BE PAID SHALL BE THE HORIZONTAL LENGTH OF EXPANSION JOINT FOR EACH JOINT TYPE INSTALLED.

PAYMENT SHALL BE MADE AT THE UNIT BID PRICE PER LINEAR FOOT FOR THE FOLLOWING ITEMS:

ITEM 516 - STRUCTURAL STEEL ROADWAY EXPANSION JOINTS, AS PER PLAN

ITEM 516 - STRUCTURAL STEEL SIDEWALK EXPANSION JOINTS, AS PER PLAN

ITEM SPECIAL - ROUND POLY FOAM, 3 1/2" THICK

FURNISH AND INSTALL POLYURETHANE FOAM JOINT FILLER AS NOTED ON THE PLANS AND BELOW:

MATERIAL: JOINT FILLER SHALL BE SOFT, BI-CELL POLYURETHANE FOAM BACKER ROD WITH NON-STICK CLOSED CELL SKIN AND HIGH MOISTURE RESISTANCE.

SIZE: SELECT ROUND JOINT FILLER DIAMETER APPROXIMATELY 30% LARGER THAN JOINT OPENING WIDTH.

INSTALLATION: JOINT SHOULD BE CLEAN, DRY AND FREE OF OBSTRUCTIONS. COMPRESS JOINT FILLER INTO JOINT. INSTALL USING A BLUNT PROBE OR PLAIN FACED ROLLER AVOIDING STRETCHING, PUNCTURE OR TEARING OF THE FILLER MATERIAL. INSTALL TO MINIMUM DEPTH AS SHOWN ON THE PLANS.

PAYMENT SHALL BE MADE AT THE LINEAR FOOT PRICE BID FOR THIS ITEM.

ITEM 516 - SPECIAL - STRUCTURAL JOINT OR JOINT SEALER, MISC: PREFORMED COMPRESSION SEAL

THE WORK REQUIRED UNDER THIS ITEM CONSISTS OF FURNISHING AND INSTALLING A WATERPROOF EXPANSION JOINT SYSTEMS AT SIDEWALK EXPANSION JOINT JD, IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS, HEREIN SPECIFIED AND/OR AS DIRECTED BY THE ENGINEER.

A. DESCRIPTION: WORK FOR SIDEWALK EXPANSION JOINT JD INCLUDES FURNISHING AND INSTALLING ALL MATERIAL WITHIN THE EXPANSION JOINT AREA BLOCK-OUT INCLUDING CONCRETE BLOCKOUTS, SEALANTS, SURFACE PRIMERS AND ALL OTHER ITEMS AS MAY BE REQUIRED TO COMPLETE THE INSTALLATION AND SHOWN ON THE PLANS OR REQUIRED HEREIN.

B. MATERIALS:

1. SIDEWALK EXPANSION JOINT SYSTEM: EXPANSION JOINT OF THE SIZE AND CONFIGURATION SHOWN ON THE PLANS SHALL BE A PREFORMED, PRE-COMPRESSED, SELF-EXPANDING, SEALANT SYSTEM WITH SILICON PRE-COATED SURFACE. JOINT SYSTEM SHALL BE TRAFFIC DURABLE AND WATERTIGHT. SYSTEM SHALL PERFORM WATERPROOFING, TRAFFIC BEARING AND MOVEMENT-ACCOMMODATION FUNCTIONS AS THE RESULT OF A SINGLE INSTALLATION AND WITHOUT THE ADDITION OF GUTTERS, VAPOR BARRIERS, BLADDERS, OR OTHER DEVICES SUSPENDED BENEATH OR WITHIN THE SYSTEM IN ANY WAY. FOAM SEALS MUST BE SUPPLIED PRECOMPRESSED TO LESS THAN THE JOINT SIZE.

SEALANT SYSTEM SHALL BE COMPRISED OF THREE COMPONENTS:

A. CELLULAR POLYURETHANE FOAM IMPREGNATED WITH HYDROPHOBIC 100% ACRYLIC, WATER-BASED EMULSION, FACTORY COATED WITH HIGHWAY-GRADE, FUEL RESISTANT SILICONE;

i. IMPREGNATION AGENT TO HAVE PROVEN NON-MIGRATORY CHARACTERISTICS.

ii. SILICONE COATING TO BE HIGHWAY-GRADE, LOW-MODULUS, FUEL RESISTANT SILICONE APPLIED TO THE IMPREGNATED FOAM SEALANT AT A WIDTH GREATER THAN MAXIMUM ALLOWABLE JOINT EXTENSION AND WHICH WHEN CURED AND COMPRESSED WILL FORM A BELLOWS.

B. FIELD-APPLIED EPOXY ADHESIVE PRIMER,

C. FIELD-INJECTED SILICONE SEALANT BANDS.

EXPANSION JOINT MATERIAL SHALL BE CAPABLE OF MOVEMENTS OF +50%, -50% (100% TOTAL) OF NOMINAL MATERIAL SIZE. DEPTH OF SEALS SHALL BE AS RECOMMENDED BY MANUFACTURER.

ALL CANDIDATES SHALL BE CERTIFIED IN WRITING TO BE:

A. CAPABLE OF WITHSTANDING 150°F (65°C) FOR 3 HOURS WHILE COMPRESSED DOWN TO THE MINIMUM OF MOVEMENT CAPABILITY DIMENSION OF THE BASIS OF DESIGN PRODUCT (-50% OF NOMINAL MATERIAL SIZE) WITHOUT EVIDENCE OF ANY BLEEDING OF IMPREGNATION MEDIUM FROM THE MATERIAL;

B. THAT THE SAME MATERIAL AFTER THE HEAT STABILITY TEST AND AFTER FIRST BEING COOLED TO ROOM TEMPERATURE WILL SELF-EXPAND TO THE MAXIMUM OF MOVEMENT CAPABILITY DIMENSION OF THE BASIS-OF-DESIGN PRODUCT (+50% OF NOMINAL MATERIAL SIZE) WITHIN 24 HOURS AT ROOM TEMPERATURE 68°F (20°C).

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GENERAL NOTES

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GENERAL NOTES

ITEM 516 - SPECIAL - STRUCTURAL JOINT OR JOINT SEALER, MISC: PREFORMED COMPRESSION SEAL (CONTINUED)

THE SIDEWALK EXPANSION JOINT SYSTEM SHALL CONFORM TO:

A. EMSEAL DSM AS MANUFACTURED BY EMSEAL JOINT SYSTEMS LTD., 25 BRIDLE LANE, WESTBOROUGH, MA 01581;

B. NYSTROM PARKING DECK COMPRESSION SEAL (PDM) AS MANUFACTURED BY NYSTROM BUILDING PRODUCTS, 9300 73RD AVENUE NORTH, MINNEAPOLIS, MN 55428;

C. OR APPROVED EQUAL.

2. CONCRETE: CLASS QC 2 CONCRETE, BRIDGE DECK WITH QC/QA SHALL BE USED IN THE BLOCKOUT AREA ABUTTING THE EXPANSION JOINTS.

C. INSTALLATION: INSTALLATION SHALL BE AS PER MANUFACTURER'S DETAILED INSTALLATION INSTRUCTIONS AND AS INDICATED BELOW.

1. THE CONTRACTOR SHALL PROVIDE PROPERLY FORMED AND PREPARED EXPANSION JOINT OPENINGS CONSTRUCTED TO THE EXACT DIMENSIONS AND ELEVATIONS SHOWN ON MANUFACTURER'S STANDARD SYSTEM DRAWINGS OR AS SHOWN ON THE CONTRACT DRAWINGS. DEVIATIONS FROM THESE DIMENSIONS WILL NOT BE ALLOWED WITHOUT THE WRITTEN CONSENT OF THE ENGINEER OF RECORD.

2. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ODOT CMS 511 AND AS RECOMMENDED BY THE MANUFACTURER.

3. SIDEWALK SHALL BE FINISHED MY METHODS APPROVED BY THE ENGINEER. THE SIDEWALK FINISH TEXTURE SHALL MATCH THAT OF THE ADJACENT SIDEWALK. CURING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

4. A MINIMUM OF TWO (2) DAYS SHALL BE REQUIRED AFTER THE BLOCKOUT CONCRETE IS PLACED TO INSTALL THE EXPANSION JOINT MATERIAL.

5. THE CONTRACTOR SHALL CLEAN THE JOINT OPENING OF ALL CONTAMINANTS IMMEDIATELY PRIOR TO INSTALLATION OF EXPANSION JOINT SYSTEM. REPAIR SPALLED, IRREGULAR OR UNSOUND JOINT SURFACES USING ACCEPTED INDUSTRY PRACTICES FOR REPAIR OF THE SUBSTRATES IN QUESTION. REMOVE PROTRUDING ROUGHNESS TO ENSURE JOINT SIDES ARE SMOOTH. ENSURE THAT THERE IS SUFFICIENT DEPTH TO RECEIVE THE FULL DEPTH OF THE SIZE OF THE FOAM SEAL BEING INSTALLED.

6. SEALANT SYSTEM SHALL BE INSTALLED INTO MANUFACTURER'S STANDARD FIELD-APPLIED EPOXY ADHESIVE. NO DRILLING, OR SCREWING, OR FASTENERS OF ANY TYPE ARE PERMITTED TO ANCHOR THE SEALANT SYSTEM INTO THE SUBSTRATE.

7. SYSTEM TO BE INSTALLED BY QUALIFIED SUB-CONTRACTORS ONLY ACCORDING TO DETAILED PUBLISHED INSTALLATION PROCEDURES AND/OR IN ACCORDANCE WITH JOB-SPECIFIC INSTALLATION INSTRUCTIONS OF MANUFACTURER'S FIELD TECHNICIAN.

8. THE EXPANSION JOINT SYSTEM IS TO BE INSTALLED SLIGHTLY RECESSED FROM THE SURFACE SUCH THAT WHEN THE FIELD-APPLIED INJECTION BAND OF SILICONE IS INSTALLED BETWEEN THE SUBSTRATES AND THE FOAM-AND-SILICONE-BELLOWS, THE SYSTEM WILL BE ESSENTIALLY FLUSH WITH THE SUBSTRATE SURFACE.

9. CHANGES IN PLANE AND DIRECTION AT CURBLINES AND PARAPETS SHALL BE EXECUTED USING FACTORY-FABRICATED UNIVERSAL 90 DEGREE TRANSITION ASSEMBLIES. TRANSITIONS SHALL BE WARRANTED TO BE WATERTIGHT AT INSIDE AND OUTSIDE CORNERS THROUGH THE FULL MOVEMENT CAPABILITIES OF THE PRODUCT.

10. ALL FIELD SPLICES OF EXPANSION JOINT MATERIALS SHALL BE AS PER THE MANUFACTURER'S RECOMMENDATIONS AND DETAILS SHOWN ON THE PLANS.

11. PROTECT THE SYSTEM AND ITS COMPONENTS DURING CONSTRUCTION. SUBSEQUENT DAMAGE TO THE EXPANSION JOINT SYSTEM WILL BE REPAIRED AT THE GENERAL CONTRACTOR'S EXPENSE. AFTER WORK IS COMPLETE, CLEAN EXPOSED SURFACES WITH A SUITABLE CLEANER THAT WILL NOT HARM OR ATTACK THE FINISH.

D. SHOP DRAWINGS: PRIOR TO THE FABRICATION OR ORDERING OF MATERIAL UNDER THIS ITEM, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE COMPLETE LAYOUT AND DETAILS OF THE ENTIRE BLOCKOUT AREA FOR BOTH THE MATERIALS FURNISHED UNDER THIS ITEM AND THE SUPPORTING MATERIAL FURNISHED UNDER ITEM 513. THE SUBMITTAL SHALL INCLUDE MATERIAL SELECTION; COMPLETE LAYOUT OF EACH JOINT, INCLUDING DIMENSIONS AND DETAILS BASED ON FIELD DIMENSIONS, AND EXPANSION JOINT INFORMATION.

E. TESTING: AFTER THE JOINT IS INSTALLED, FLOOD THE DECK WITH WATER IN THE AREA OF THE JOINT TO A MINIMUM DEPTH OF 1.5 INCHES FOR A MINIMUM OF TWENTY FOUR (24) HOURS TO TEST FOR LEAKAGE. IF LEAKAGE OCCURS, THE CONTRACTOR SHALL LOCATE AND MAKE THE NECESSARY REPAIRS TO CORRECT THE PROBLEM WITH METHODS AS APPROVED BY THE MANUFACTURER'S REPRESENTATIVE AND THE ENGINEER. UPON COMPLETION OF THE REPAIRS, THE JOINT SHALL BE SUBJECTED TO THE INITIAL WATER TEST ONCE AGAIN.

F. MEASUREMENT: THE QUANTITY FOR EXPANSION JOINT PAYMENT SHALL BE THE ACTUAL LINEAR FEET MEASURED ALONG THE CENTERLINE OF THE JOINT, FACE TO FACE OF CURB FOR ROADWAY JOINT AND FACE OF CURB TO THE BUILDING LINE FOR SIDEWALK JOINT.

G. PAYMENT: THE UNIT BID PRICE PER LINEAR FOOT OF THIS ITEM SHALL INCLUDE THE TOTAL COST OF ALL LABOR, EQUIPMENT, MATERIALS AND TOOLS NECESSARY TO INSTALL THE COMPRESSION SEAL AS SHOWN ON THE PLANS AND SPECIFIED HEREIN.

PAYMENT SHALL BE MADE AT THE UNIT BID PRICE PER LINEAR FOOT FOR THE FOLLOWING ITEM:

ITEM 516 - SPECIAL - STRUCTURAL JOINT OR JOINT SEALER, MISC: PREFORMED COMPRESSION SEAL

ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS AS NECESSARY TO PERFORM CATEGORY 3 & 4 STEEL REPAIRS. SEE SHEETS 77-87 FOR REPAIR LIMITS.

THE CONTRACTOR SHALL SUBMIT CONSTRUCTION PLANS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL.

EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS.

THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: SILICONE SEAL

THE WORK REQUIRED UNDER THIS ITEM CONSISTS OF FURNISHING AND INSTALLING AN ELASTOMERIC SILICONE BRIDGE JOINT SEAL OVER EXISTING AND PROPOSED JOINT MATERIALS AT LOCATIONS WHERE NEW SIDEWALK EXPANSION JOINTS MEET EXISTING BUILDING EXPANSION JOINTS. WORK SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS, HERIN SPECIFIED AND/OR AS DIRECTED BY THE ENGINEER.

A. DESCRIPTION: PROVIDE AND INSTALL AN ELASTOMERIC BRIDGE JOINT SEAL THAT IS CAPABLE OF ACCOMMODATING MOVEMENTS AS SHOWN IN THE CONTRACT PLANS. THE BRIDGE JOINT SEAL SHALL BE A RAPID CURE, TWO COMPONENT SILICONE SEAL. THE SILICONE SEAL SHALL BE DESIGNED TO ACCEPT +100% / -50% OF THE JOINT INSTALLATION OPENING AND BOND TO THE JOINT INTERFACE WITHOUT THE USE OF ANY PRIMERS.

B. MATERIALS:

1. THE SILICONE SEAL SHALL CONFORM TO:
   I. WABO SILICONESEAL AS MANUFACTURED BY WATSON BOWMAN ACME CORP., 95 PINEVIEW DRIVE AMHERST, NY 14228; OR
   II. GRANOR DC-902-RCS AS MANUFACTURED BY DOW CORNING CORP., 2200 W. SALZBURG RD., PO BOX 994, AUBURN MI 48611

2. THE CONTRACTOR SHALL FURNISH A MANUFACTURER'S CERTIFICATION THAT THE MATERIALS PROPOSED HAVE BEEN PRE-TESTED AND WILL MEET THE REQUIREMENTS AS SET FORTH IN THE SPECIFICATION.

3. MATERIAL SHALL BE A COLD APPLIED, TWO COMPONENT, SELF-LEVELING, LOW MODULUS SILICONE SEALANT EXHIBITING THE PHYSICAL PROPERTIES LISTED IN THE TABLE BELOW. WHEN PROPERLY MIXED, THE SEALANT CURES RAPIDLY TO FORM A WELL-BONDED ELASTOMERIC SEAL.

AS SUPPLIED PROPERTIES	PART A	PART B
COLOR	WHITE	GRAY
EXTRUSION RATE (ASTM C 1183)	200-600 ML/MIN.	200-600 ML/MIN.

MIXED PROPERTIES	TEST METHOD	REQUIREMENT
LEVELING	ASTM C639	SELF LEVELS
TACK FREE TIME	ASTM C679	60 MIN. MAX
JOINT ELONGATION	ASTM D5329 (1)(2)	600% MIN.
JOINT MODULUS, 100% EXTENSION	ASTM D5329 (1)(2)	15 PSI MAX.
CURE EVALUATION	ASTM D5893	PASS @ 4HR MAX
ULTIMATE ELONGATION	ASTM D 412 DIE C(1)	1000% MIN.
STRESS AT 150% ELONGATION	ASTM D 412 DIE C(1)	25 PSI MAX.
SHORE HARDNESS, 00	ASTM C 661 (1)	40 - 80
SPECIFIC GRAVITY	ASTM D 792 (1)	1.20 - 1.40

NOTES:
(1) SPECIMENS CURED AT 77 ± 3°F. AND 50 ± 5% R.H. FOR 7 DAYS.
(2) SPECIMENS SIZE IS ½" WIDE BY ½" DEEP BY 2" LONG.

CALCULATED MMP CHECKED RAB

GENERAL NOTES

CUY-TOWER CITY BRIDGES

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GENERAL NOTES

ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: SILICONE SEAL (CONTINUED)

C. INSTALLATION: INSTALLATION SHALL BE AS PER MANUFACTURER'S DETAILED INSTALLATION INSTRUCTIONS AND AS INDICATED BELOW.

1. THE CONTRACTOR SHALL SUBMIT PRODUCT INFORMATION AND NECESSARY DETAILS AFTER THE AWARD OF THE CONTRACT. AT THE DISCRETION OF THE ENGINEER, THE MANUFACTURER MAY BE REQUIRED TO FURNISH A REPRESENTATIVE SAMPLE OF MATERIAL TO BE SUPPLIED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS

2. ANY PATCHING MATERIALS MUST BE APPROVED PRIOR TO USE FROM THE BRIDGE JOINT SEAL MANUFACTURER. BRIDGE JOINT SEAL SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE CONTRACT PLANS.

D. PAYMENT - THE UNIT BID PRICE PER LINEAR FOOT OF SILICONE SEAL, AS PER PLAN SHALL INCLUDE THE TOTAL COST OF ALL LABOR, EQUIPMENT, MATERIALS AND TOOLS NECESSARY TO INSTALL THE SILICONE SEAL, INCLUDING ANY MISCELLANEOUS PATCHING, AS SHOWN ON THE PLANS AND SPECIFIED HERIN. THE QUANTITY TO BE PAID SHALL BE THE HORIZONTAL LENGTH OF EXISTING AND PROPOSED EXPANSION JOINT COVERED BY THE SILICONE SEAL.

PAYMENT SHALL BE MADE AT THE UNIT BID PRICE PER LINEAR FOOT FOR THE FOLLOWING ITEM:

ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: SILICONE SEAL

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

ITEM 519 SHALL BE USED TO PATCH EXISTING CONCRETE PARAPETS AND ABUTMENT SURFACES. REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. ALL FORMED CONCRETE SURFACES SHALL RECEIVE A RUBBED FINISH PER C&MS ITEM 511.15 B. A CONTINGENCY QUANTITY OF 1000 SQ. FT. HAS BEEN INCLUDED TO BE USED AS DIRECTED BY THE ENGINEER

ITEM SPECIAL- PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO-SILICA MODIFIED CONCRETE

THIS ITEM SHALL CONSIST OF ALL LABOR AND MATERIALS NECESSARY TO PATCH THE EXISTING MICRO-SILICA MODIFIED CONCRETE OVERLAY ON UNITS 1-5, 14-20 AND WEST 6TH STREET. THIS ITEM SHALL CONFORM TO ALL THE REQUIREMENTS OF ITEM 519 OF THE C&MS WITH THE FOLLOWING EXCEPTION, THE CONCRETE USED TO PATCH SHALL BE MICRO-SILICA MODIFIED CONCRETE. A CONTINGENCY QUANTITY OF 250 SQ. YD. HAS BEEN INCLUDED TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM SPECIAL- PATCHING CONCRETE STRUCTURE, BRIDGE DECKS WITH QC2 CONCRETE

THIS ITEM SHALL CONSIST OF ALL LABOR AND MATERIALS NECESSARY TO PATCH THE EXISTING CONCRETE BRIDGE DECKS IN AREAS WHERE THE EXISTING ASPHALT OVERLAY HAS BEEN REMOVED. THIS ITEM SHALL CONFORM TO ALL THE REQUIREMENTS OF ITEM 519 OF THE C&MS. A CONTINGENCY QUANTITY OF 800 SQ. FT. HAS BEEN INCLUDED TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 607 - FENCE MISC.: NEW FENCE TO MATCH EXISTING

THIS ITEM SHALL CONSIST OF THE FENCE POSTS, FENCE RAILS, CHAIN LINK FENCE FABRIC, BASE PLATES, ANCHOR BOLTS, LABOR AND ANY INCIDENTAL MATERIALS NECESSARY TO INSTALL FENCING ON THE NEW SECTIONS OF PARAPET. ALL FENCE WORK OUTSIDE OF THE AREAS OF NEW PARAPET WILL NOT BE PAID UNDER THIS ITEM AND WILL BE COVERED IN ITEM 512 - FENCE MISC.: EXISTING FENCE REPAIRS. THE CONTRACTOR IS TO MAKE EVERY EFFORT TO MATCH THE NEW FENCE TO THE EXISTING FENCING ON THE PARAPET TO GIVE A SEAMLESS APPEARANCE. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL SUBMIT FENCE SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE CONTRACT BID PRICE PER LINEAR FOOT OF ITEM 607 -FENCE MISC.: NEW FENCE TO MATCH EXISTING.

ITEM 607 - FENCE MISC.: EXISTING FENCE REPAIRS

THIS ITEM SHALL CONSIST OF ALL MINOR AND COSMETIC REPAIRS TO THE EXISTING FENCE ON THE PARAPET ALONG THE SOUTH SIDE OF HURON ROAD. THESE REPAIRS INCLUDE, BUT ARE NOT LIMITED TO SEALING CRACKS IN FENCE POSTS AND RAILS, PAINTING FENCE FABRIC AND SUPPORTS, AND REATTACHING ANY AREAS OF LOOSE CHAIN LINK FENCE FABRIC. PRIOR TO PAINTING, REMOVE ALL LOOSE COATINGS, RUST, DEBRIS, ETC. BY HAND TOOL AND/OR POWER TOOL CLEANING IN ACCORDANCE WITH SSPC - SP2 AND/OR SP3. AREAS TO BE PAINTED SHALL FIRST RECEIVE A PRIME COAT OF MACROPOXY 646 FAST CURE EPOXY, MANUFACTURED BY SHERWIN-WILLIAMS, CARBOMASTIC 15 - LOW STRESS MASTIC MANUFACTURED BY CARBOLINE COMPANY OR APPROVED EQUAL. FINISH COAT SHALL BE HIGH SOLIDS POLYURETHANE MANUFACTURED BY SHERWIN-WILLIAMS, CARBOTHANE 134HG MANUFACTURED BY CARBOLINE COMPANY OR APPROVED EQUAL. FINAL COLOR TO BE A GLOSS BLACK. THIS ITEM DOES NOT AUTHORIZE ANY REPLACEMENT OF THE EXISTING FENCE POSTS OR FENCE FABRIC.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE CONTRACT BID LUMP SUM AMOUNT FOR ITEM 512 - FENCE MISC.: EXISTING FENCE REPAIRS.

ITEM 608 - CURB RAMPS, AS PER PLAN

THIS ITEM SHALL CONSIST OF ALL WORK NECESSARY TO INSTALL THE NEW CURB RAMPS, REGRADE THE EXISTING CURB RAMPS OR REMOVE THE EXISTING CURB RAMPS. THE CURB RAMP GEOMETRY IS TO BE FIELD DETERMINED AFTER THE UTILITY DUCTS AND REINFORCING STEEL ARE LOCATED BENEATH EACH RAMP. RAMPS ARE TO BE DESIGNED TO BEST MEET THE CITY STANDARD CURB RAMP DRAWINGS. THE ITEM INCLUDES ALL LABOR AND MATERIALS, INCLUDING TRUNCATED DOMES, NECESSARY TO INSTALL THE CURB RAMPS. THE MICRO-SILICA MODIFIED CONCRETE OVERLAY MATERIAL FOR THE CURB RAMP IS PAID FOR UNDER ITEM 847 - MICRO-SILICA MODIFIED CONCRETE SIDEWALK OVERLAY, AS PER PLAN. THIS WORK INCLUDES ANY ANY NECESSARY REMOVAL OR REPAIR TO THE STRUCTURAL CONCRETE SLAB BELOW THE EXISTING SIDEWALK OVERLAY.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE CONTRACT BID PRICE FOR ITEM 608 - CURB RAMPS, AS PER PLAN PER EACH INSTALLED.

ITEM 619 - FIELD OFFICE, TYPE C, AS PER PLAN

THE FOLLOWING REVISIONS TO THE EQUIPMENT SUPPLIED WITH THE TYPE C FIELD OFFICE, AS SPECIFIED IN TABLE 619.02-1, FIELD OFFICE SHALL APPLY:

THE BROADBAND INTERNET CONNECTION MUST MEET A MINIMUM UPLOAD SPEED OF 5 MBPS.

ALL OTHER FIELD OFFICE ITEMS SUPPLIED SHALL MEET THE REQUIREMENTS OF A TYPE C FIELD OFFICE.

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS IN ITEM 623, THE CONTRACTOR AFTER REMOVAL OF THE EXISTING ASPHALT WEARING SURFACE IN UNITS 4 THROUGH 13, 21 THROUGH 31 AND WEST 2ND STREET AND WEST 3RD STREET, THE CONTRACTOR SHALL PERFORM A FULL SURVEY OF THE TOP OF THE CONCRETE DECK ELEVATIONS. ELEVATIONS SHALL BE TAKEN AT THE TOP OF CURB, GUTTER LINE, ROADWAY CROWN AND AT THE MIDPOINT BETWEEN THE GUTTER LINE AND CROWN AT THE SAME STATION LOCATION AS SHOWN ON THE PAVEMENT ELEVATION TABLES IN THE PLANS. THE SURVEY DATA WILL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

THE SURVEY ELEVATIONS WILL BE COMPARED TO THE PLAN ELEVATIONS TO CONFIRM THE THICKNESS OF THE MICRO-SILICA CONCRETE OVERLAY. ADJUSTMENTS TO THE FINAL PAVEMENT ELEVATION WILL BE MADE AS REQUIRED TO PROVIDE FOR THE ROADWAY CROSS SLOPE AND 2 1/2 INCH THICKNESS OF MICRO-SILICA OVERLAY. FINAL TOP OF PAVEMENT ELEVATIONS WILL BE PROVIDED TO THE CONTRACTOR WITHIN SEVEN (7) DAYS OF RECEIVING TOP OF CONCRETE ELEVATIONS. THE QUANTITY OF MICRO-SILICA OVERLAY WILL BE BASED ON THE ADJUSTED ELEVATIONS. PAYMENT FOR THE SURVEY WILL BE INCLUDED IN ITEM 623.

ITEM 847 - MICRO-SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN, 4 1/4" THICK

THIS ITEM SHALL CONSIST OF THE PLACING OF THE MICRO-SILICA MODIFIED CONCRETE OVERLAY FROM THE BUILDING JOINT TO THE EDGE OF THE ROADWAY. WORK COVERED UNDER THIS ITEM INCLUDES THE PLACEMENT OF MICRO-SILICA MODIFIED CONCRETE CURBS, SETTING GALVANIZED COATED 6X6 D4XD4 WWF AND NO. 5 REINFORCING BAR AND ALL LABOR, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THE WORK. THE WWF IS TO BE SET WITH 1.5 INCHES OF SURFACE COVER AND IS TO HAVE A YIELD STRENGTH (FY) OF 60,000 PSI.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE CONTRACT BID PRICE FOR SQUARE YARDS OF MICRO-SILICA MODIFIED CONCRETE OVERLAY, 4 1/4" THICK INSTALLED.

ITEM 847 - WEARING COURSE REMOVED, ASPHALT, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE REMOVAL OF THE EXISTING ASPHALT WEARING COURSE AND INCLUDES THE COMPLETE REMOVAL AND PROPER DISPOSAL OF THE EXISTING MEMBRANE WATERPROOFING.

THE CONTRACTOR SHALL PERFORM A TEST PATCH OF HIS CHOSEN METHOD OF REMOVAL TO BE VERIFIED BY THE ENGINEER. COST OF THIS TEST PATCH IS CONSIDERED INCIDENTAL TO THIS ITEM.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE CONTRACT BID PRICE FOR ITEM 847 -WEARING COURSE REMOVED, ASPHALT, AS PER PLAN PER SQUARE YARDS REMOVED.

ITEM 847 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN

THIS ITEM SHALL CONSIST OF THE REMOVAL OF THE EXISTING CONCRETE SIDEWALK OVERLAY INCLUDING CURBS AND INCLUDES THE REMOVAL AND PROPER DISPOSAL OF THE EXISTING MEMBRANE WATERPROOFING AND 1/8 INCH PROTECTION BOARD. THE EXISTING BUILDING JOINTS ARE NOT TO BE DAMAGED WHILE PERFORMING THIS WORK, HAND CHIP AS NECESSARY. ANY DAMAGE TO THE BUILDING JOINTS IS TO BE REPAIRED SOLELY AT THE CONTRACTOR'S EXPENSE. THERE ARE UTILITY CONDUITS EMBEDDED IN THE SIDEWALK STRUCTURAL SLAB. CONTRACTOR TO TAKE CARE NOT TO DAMAGE THESE CONDUITS. ANY DAMAGE CAUSED TO THE UTILITY CONDUITS IS TO BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE. EXISTING TRAFFIC AND LIGHT POLES, MANHOLE CASTINGS PULL BOXES AND OTHER PERMANENT SIDEWALK PENETRATION ITEMS ARE TO BE LEFT IN PLACE AND NOT DISTURBED. REMOVAL SHALL BE PERFORMED UP TO THE LIMITS OF THE PERMANENT SIDEWALK PENETRATION ITEM, HAND CHIP AS NECESSARY.

THE CONTRACTOR SHALL PERFORM A TEST PATCH OF HIS CHOSEN METHOD OF REMOVAL TO BE VERIFIED BY THE ENGINEER. COST OF THIS TEST PATCH IS CONSIDERED INCIDENTAL TO THIS ITEM.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE CONTRACT BID PRICE FOR ITEM 847 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN, PER SQUARE YARDS REMOVED. PAYMENT FOR HAND CHIPPING WILL BE MADE UNDER THE CONTINGENCY QUANTITY FOR ITEM 847 - HAND CHIPPING.

ITEM 847 - MICRO-SILICA MODIFIED CONCRETE OVERLAY, (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN

THIS ITEM SHALL CONSIST OF ANY ADDITIONAL MATERIAL REQUIRED TO POUR THE BRIDGE DECKS TO THE REQUIRED ELEVATIONS SHOWN IN THE PLANS.

ALSO INCLUDED IN THIS ITEM IS THE REMOVAL OF ANY LOOSE CONCRETE DISCOVERED DURING CHAIN DRAGGING OPERATIONS. LOOSE CONCRETE IS TO BE REMOVED BY CHIPPING AND ALL AREAS ARE TO BE BLOWN CLEAN. PATCHING OF THESE AREAS BEFORE POURING THE DECK IS NOT NECESSARY, BUT CAN BE PERFORMED AT THE CONTRACTOR'S DISCRETION. PATCHING SHALL BE ACCOMPLISHED WITH A MICRO-SILICA MODIFIED CONCRETE AND SHALL BE PERFORMED PRIOR TO SEALING THE EXISTING BRIDGE DECK WITH HMWM. IN THE EVENT THAT A PATCH RUNS THE FULL DEPTH OF THE FILL CONCRETE, THE WATERPROOFING LAYER BELOW THE FILL CONCRETE IS NOT TO BE DISTURBED. THE EXISTING FILL CONCRETE CONTAINS WELDED WIRE MESH, THIS DOES NOT NEED TO BE REMOVED OR REPLACED IF ENCOUNTERED.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE CONTRACT BID PRICE FOR ITEM 847 - MICRO-SILICA MODIFIED CONCRETE OVERLAY, (VARIABLE THICKNESS), AS PER PLAN, PER CUBIC YARDS PLACED.

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CUY-TOWER CITY BRIDGES

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GENERAL NOTES

ITEM SPECIAL - CHAIN DRAG CONCRETE DECK SURFACES

THIS WORK SHALL CONSIST OF SUPPLYING THE LABOR AND EQUIPMENT TO CHAIN DRAG EXISTING CONCRETE SURFACES TO OUTLINE DELAMINATED AREAS. THE ENGINEER WILL ACCOMPANY THE CONTRACTOR AND MARK ALL EXPOSED AREAS FOR PATCHING AND JOINT SEALING. ALL EXISTING MICRO-SILICA DECK SURFACES, FILL CONCRETE WITHIN THE ROADWAY AFTER REMOVAL OF THE ASPHALT WEARING SURFACE AND SIDEWALK SURFACES AFTER REMOVAL OF THE EXISTING SIDEWALK WEARING COURSE SHALL BE CHAIN DRAGGED. THE COST OF THIS ITEM IS CONSIDERED INCIDENTAL TO ITEM 847, MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS) MATERIAL ONLY, AS PER PLAN.

ITEM SPECIAL - REMOVAL AND REPLACEMENT OF CEILING TILE FOR UNDERSIDE BRIDGE ACCESS

THREE AREAS OVER ENCLOSED SPACES AT EXPANSION JOINTS 1 AND 8 AS SHOWN ON THE PLANS ARE DESIGNATED FOR FULL DEPTH SLAB REMOVAL IN ORDER TO COMPLETE STEEL REPAIRS. IN ADDITION THERE ARE A NUMBER OF LOCATIONS THAT WERE IN-ACCESSABLE DURING THE PLAN DEVELOPMENT BRIDGE INSPECTION THAT MAY REQUIRE FULL DEPTH SLAB REMOVAL TO ACCESS STEEL REPAIRS. THESE LOCATIONS WILL BE DETERMINED BY THE ENGINEER AFTER REMOVAL OF THE EXPANSION JOINT AND CAMERA INSPECTION BY THE CONTRACTOR. TO COMPLETE THE DECK REMOVAL AND STEEL REPAIRS OVER THESE ENCLOSED SPACES WILL REQUIRE THE REMOVAL OF CEILING TILE.

PAYMENT FOR THE REMOVAL AND REPLACEMENT OF THE CEILING TILE WILL BE MADE AT THE CONTRACT UNIT PRICE BID PER SQUARE FOOT FOR THIS ITEM. THE NEW TILE INSTALLATION HAS TO MEET THE APPROVAL OF THE OWNER. A CONTINGENCY QUANTITY OF 1000 SQUARE FEET HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES.

SPRAY-APPLIED FIRE PROOFING

FIREPROOFING MEETING THE FOLLOWING REQUIREMENTS SHALL BE APPLIED TO STRUCTURAL STEEL IN AREAS WHERE EXISTING FIREPROOFING HAS BEEN REMOVED TO PERFORM STEEL REPAIRS AS INDICATED IN THE PLANS.

QUALITY ASSURANCE: INSTALLER SHALL BE CERTIFIED, LICENSED, OR OTHERWISE QUALIFIED BY FIREPROOFING MANUFACTURER AS EXPERIENCED AND WITH SUFFICIENT TRAINED STAFF TO INSTALL MANUFACTURER'S PRODUCTS ACCORDING TO SPECIFIED REQUIREMENTS.

PRODUCTS:

A. PERFORMANCE REQUIREMENTS
   1. ASSEMBLIES: PROVIDE FIREPROOFING, INCLUDING AUXILIARY MATERIALS, ACCORDING TO REQUIREMENTS OF EACH FIRE-RESISTANCE DESIGN AND MANUFACTURER'S WRITTEN INSTRUCTIONS.
   2. FIRE-RESISTANCE DESIGN: INDICATED ON DRAWINGS, TESTED ACCORDING TO ASTM E 119 OR UL 263; TESTING BY A QUALIFIED TESTING AGENCY. IDENTIFY PRODUCTS WITH APPROPRIATE MARKINGS OF APPLICABLE TESTING AGENCY.
      a. STEEL MEMBERS ARE TO BE CONSIDERED UNRESTRAINED UNLESS SPECIFICALLY NOTED OTHERWISE.
   3. VOC CONTENT: APPLIED TOPCOAT PRODUCTS SHALL COMPLY WITH VOC CONTENT LIMITS OF AUTHORITIES HAVING JURISDICTION.
   4. ASBESTOS: PROVIDE PRODUCTS CONTAINING NO DETECTABLE ASBESTOS.

B. SPRAYED FIRE-RESISTIVE MATERIALS
   1. SPRAYED FIRE-RESISTIVE MATERIAL: MANUFACTURER'S STANDARD, FACTORY-MIXED, LIGHTWEIGHT, DRY FORMULATION, COMPLYING WITH INDICATED FIRE-RESISTANCE DESIGN, AND MIXED WITH WATER AT PROJECT SITE TO FORM A SLURRY OR MORTAR BEFORE CONVEYANCE AND APPLICATION.
      a. APPLICATION: DESIGNATED FOR EXTERIOR USE BY A QUALIFIED TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
      b. BOND STRENGTH: MINIMUM 150-LBF/SQ. FT. COHESIVE AND ADHESIVE STRENGTH BASED ON FIELD TESTING ACCORDING TO ASTM E 736.
      c. THICKNESS: AS REQUIRED FOR FIRE-RESISTANCE DESIGN INDICATED, MEASURED ACCORDING TO REQUIREMENTS OF FIRE-RESISTANCE DESIGN OR ASTM E 605, WHICHEVER IS THICKER, BUT NOT LESS THAN 0.375 INCH.
      d. COMBUSTION CHARACTERISTICS: ASTM E 136.
      e. SURFACE-BURNING CHARACTERISTICS: COMPLY WITH ASTM E 84.
      f. CORROSION RESISTANCE: NO EVIDENCE OF CORROSION ACCORDING TO ASTM E 937.
      g. DEFLECTION: NO CRACKING, SPALLING, OR DELAMINATION ACCORDING TO ASTM E 759.
      h. EFFECT OF IMPACT ON BONDING: NO CRACKING, SPALLING, OR DELAMINATION ACCORDING TO ASTM E 760.
      i. AIR EROSION: MAXIMUM WEIGHT LOSS OF 0.025 G/SQ. FT. IN 24 HOURS ACCORDING TO ASTM E 859.

C. AUXILIARY MATERIALS
   1. PROVIDE AUXILIARY MATERIALS THAT ARE COMPATIBLE WITH FIREPROOFING AND SUBSTRATES AND ARE APPROVED BY UL OR ANOTHER TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION FOR USE IN FIRE-RESISTANCE DESIGNS INDICATED.
   2. SUBSTRATE PRIMERS: PRIMERS APPROVED BY FIREPROOFING MANUFACTURER FOR THE REQUIRED FIRE-RESISTANCE DESIGN.
   3. BONDING AGENT: PRODUCT APPROVED BY FIREPROOFING MANUFACTURER.
   4. TOPCOAT: SUITABLE FOR APPLICATION OVER APPLIED FIREPROOFING; OF TYPE RECOMMENDED IN WRITING BY FIREPROOFING MANUFACTURER FOR EACH FIRE-RESISTANCE DESIGN.

EXECUTION:

A. EXAMINATION - EXAMINE SUBSTRATES SUBSTRATES, AREAS, AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR SUBSTRATES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK AND ACCORDING TO EACH FIRE-RESISTANCE DESIGN.

B. PREPARATION
   1. COVER OTHER WORK SUBJECT TO DAMAGE FROM FALLOUT OR OVERSPRAY OF FIREPROOFING MATERIALS DURING APPLICATION.
   2. PRIME SUBSTRATES WHERE INCLUDED IN FIRE-RESISTANCE DESIGN AND WHERE RECOMMENDED IN WRITING BY FIREPROOFING MANUFACTURER UNLESS COMPATIBLE SHOP PRIMER HAS BEEN APPLIED AND IS IN SATISFACTORY CONDITION TO RECEIVE FIREPROOFING.

C. APPLICATION
   1. CONSTRUCT FIREPROOFING ASSEMBLIES THAT ARE IDENTICAL TO FIRE-RESISTANCE DESIGN INDICATED AND PRODUCTS AS SPECIFIED, TESTED, AND SUBSTANTIATED BY TEST REPORTS; FOR THICKNESS, PRIMERS, SEALERS, TOPCOATS, FINISHING, AND OTHER MATERIALS AND PROCEDURES AFFECTING FIREPROOFING WORK.
   2. COMPLY WITH FIREPROOFING MANUFACTURER'S WRITTEN INSTRUCTIONS FOR MIXING MATERIALS, APPLICATION PROCEDURES, AND TYPES OF EQUIPMENT USED TO MIX, CONVEY, AND APPLY FIREPROOFING; AS APPLICABLE TO PARTICULAR CONDITIONS OF INSTALLATION AND AS REQUIRED TO ACHIEVE FIRE-RESISTANCE RATINGS INDICATED.
   3. SPRAY APPLY FIREPROOFING TO MAXIMUM EXTENT POSSIBLE. AFTER THE SPRAYING OPERATION IN EACH AREA, COMPLETE THE COVERAGE BY TROWEL APPLICATION OR OTHER PLACEMENT METHOD RECOMMENDED IN WRITING BY FIREPROOFING MANUFACTURER.
   4. DO NOT INSTALL ENCLOSING OR CONCEALING CONSTRUCTION UNTIL AFTER FIREPROOFING HAS BEEN APPLIED, INSPECTED, AND TESTED AND CORRECTIONS HAVE BEEN MADE TO DEFICIENT APPLICATIONS.

D. FIELD QUALITY CONTROL
   1. SPECIAL INSPECTIONS: ENGAGE A QUALIFIED SPECIAL INSPECTOR TO PERFORM THE FOLLOWING SPECIAL INSPECTIONS:
      a. TEST AND INSPECT AS REQUIRED BY THE IBC, SUBSECTION 1705.13, "SPRAYED FIRE-RESISTANT MATERIALS."
   2. FIREPROOFING WILL BE CONSIDERED DEFECTIVE IF IT DOES NOT PASS TESTS AND INSPECTIONS.
      a. REMOVE AND REPLACE FIREPROOFING THAT DOES NOT PASS TESTS AND INSPECTIONS, AND RETEST.
      b. APPLY ADDITIONAL FIREPROOFING, PER MANUFACTURER'S WRITTEN INSTRUCTIONS, WHERE TEST RESULTS INDICATE INSUFFICIENT THICKNESS, AND RETEST.
   3. PREPARE TEST AND INSPECTION REPORTS.

E. CLEANING, PROTECTING, AND REPAIRING
   1. CLEANING: IMMEDIATELY AFTER COMPLETING SPRAYING OPERATIONS IN EACH CONTAINABLE AREA OF PROJECT, REMOVE MATERIAL OVERSPRAY AND FALLOUT FROM SURFACES OF OTHER CONSTRUCTION AND CLEAN EXPOSED SURFACES TO REMOVE EVIDENCE OF SOILING.
   2. REPAIR FIREPROOFING DAMAGED BY OTHER WORK BEFORE CONCEALING IT WITH OTHER CONSTRUCTION.
   3. REPAIR FIREPROOFING BY REAPPLYING IT USING SAME METHOD AS ORIGINAL INSTALLATION OR USING MANUFACTURER'S RECOMMENDED TROWEL-APPLIED PRODUCT.

SUBMITTALS: SHALL BE IN ACCORDANCE TO ITEM 501 AND SHALL INCLUDE THE FOLLOWING:

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
B. PRODUCT CERTIFICATES.
C. EVALUATION REPORTS.
D. FIELD QUALITY-CONTROL REPORTS.

PAYMENT: PAYMENT TO FURNISH AND INSTALL SPRAY APPLIED FIREPROOFING SHALL BE INCLUDED WITH APPLICABLE ITEM 513 - STRUCTURAL STEEL, LEVEL UF AS PER PLAN OR ITEM 513 - STRUCTURAL STEEL, LEVEL 3.

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CUY-TOWER CITY BRIDGES

18
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ITEM 614 - MAINTAINING TRAFFIC

MAINTENANCE OF TRAFFIC SHALL INCLUDE MAINTAINING SAFE PEDESTRIAN TRAFFIC, MAINTAINING TEMPORARY CONCRETE BARRIERS AND BARRICADES, AND MAINTAINING SAFE VEHICULAR ACCESS AND VALET SERVICES TO ALL BUSINESS, RETAIL AND DELIVERY ENTRANCES. PROVISION MUST BE MADE FOR THE SAFE PASSAGE OF POLICE, FIRE AND EMERGENCY VEHICLES AT ALL TIMES. VEHICULAR/TRUCK ACCESS MUST BE MAINTAINED FOR DELIVERIES TO EACH ENTRANCE/DELIVERY DOOR SPECIFIED IN THE VARIOUS CONSTRUCTION PHASES. A MINIMUM LANE WIDTH OF 11 FEET AND A MINIMUM 20 FOOT RADIUS TURN-OUT SHALL BE PROVIDED.

FOUR (4) PHASES OF CONSTRUCTION TO BE COMPLETED IN TWO CONSTRUCTION SEASONS ARE SHOWN ON THE MAINTENANCE OF TRAFFIC DRAWINGS. THE MAXIMUM PERMISSIBLE SHUT-DOWN TIME PER PHASE EXCLUSIVE OF HOLIDAYS OR SPECIAL EVENT WEEKENDS IS INDICATED BELOW. WORK SHALL OCCUR ON PHASE 3A WITHIN THE PHASE 3 TIME FRAME. THE WEARING SURFACE SHALL BE COMPLETED IN A WORK PHASE AND THE ROAD OPEN TO TRAFFIC BEFORE STARTING WORK ON A SUBSEQUENT PHASE.

THE CONTRACTOR SHALL PROVIDE FIFTEEN (15) DAYS WRITTEN NOTICE TO ODOT, CITY OF CLEVELAND, DIVISION OF TRAFFIC ENGINEERING, THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY, AND THE REPRESENTATIVES FOR THE VARIOUS BUILDINGS/FACILITIES AFFECTED BY THE CONSTRUCTION, BEFORE CLOSING ANY EXISTING TRAFFIC LANES. BUSES WILL BE RELOCATED FROM PROSPECT AVENUE TO PUBLIC SQUARE UNTIL PROSPECT AVENUE REPAIRS ARE TOTALLY COMPLETED. RELOCATION TO BE SET BY GCRTA.

ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE OHIO MANUAL OF TRAFFIC CONTROL DEVICES. ALL SIGNS, SUPPORTS PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR.

EXISTING TRAFFIC CONTROL DEVICES (SIGNS AND/OR TRAFFIC SIGNALS), LOCATED WITHIN THE WORK AREA, WHICH ARE REQUIRED FOR INTERIM OR PERMANENT TRAFFIC CONTROL, SHALL BE RELOCATED TO POINTS APPROVED BY THE ENGINEER. APPROPRIATE TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED, IN COMPLIANCE WITH THE OMUTCD, AT ALL TIMES WHILE TRAFFIC IS MAINTAINED. THE COST OF RELOCATION, IF REQUIRED, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 – MAINTAINING TRAFFIC, AS PER PLAN.

NO ROAD SHALL BE CLOSED UNTIL DEEMED NECESSARY BY THE ENGINEER. THE PLACEMENT OF THE SIGNS AND THE DRUMS SHALL BE MADE SIMULTANEOUSLY. NO DRUMS SHALL BE PLACED WITHOUT PROPER SIGNAGE IN PLACE. SIGNS SHALL BE COVERED OR REMOVED FROM THE VIEW OF TRAFFIC WHENEVER THEY ARE NOT APPLICABLE. DETOUR PLANS ARE INCLUDED FOR PROSPECT AVENUE AND HURON ROAD. SEE SHEETS AND .

THE CONTRACTOR SHALL DIVERT TRAFFIC FROM NORMAL CHANNELS BY THE USE OF PLASTIC DRUMS, CONES AND/OR TUBULAR MARKERS, FLASHING ARROW BOARDS COMPLYING WITH ODOT CMS 614, TRAFFIC SIGNS AND PAVEMENT MARKINGS AS SHOWN ON THESE PLANS. PAYMENTS FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 – MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED IN THE PLAN.

CONSTRUCTION SEQUENCE

CONSTRUCTION SEASON 1

THE CONTRACTOR WILL PROCURE ALL THE NECESSARY JOINTS TO COMPLETE PHASES 1 AND 2. THE CONTRACTOR MAY NOT COMMENCE WORK ON ANY PHASE UNTIL ALL OF THE EXPANSION JOINTS NECESSARY TO COMPLETE THAT PHASE HAVE BEEN PROCURED.

CONSTRUCTION SEASON 2

PRIOR TO PHASE 1, TOWER CITY CENTER SHALL REMOVE THE CANOPY, SUPPORTS, AND PLANTERS LOCATED ON THE NORTH SIDE OF PROSPECT AVENUE AT STA. 17+50 IN FRONT OF TOWER CITY CENTER. THE CONTRACTOR SHALL REMOVE THE CONCRETE ISLANDS AT STA. 17+50 AND STA. 20+75. THE CONTRACTOR SHALL ADD TEMPORARY PAVEMENT IN THOSE AREAS WHERE REQUIRED. VALET SERVICE TO TOWER CITY CENTER SHALL BE MAINTAINED FROM WEST 3RD STREET AT PROSPECT AVENUE DURING PHASE 1 AND 2 CONSTRUCTION. JIM MAIER OF TOWER CITY CENTER TO COORDINATE.

PRIOR TO PHASE 2, TOWER CITY CENTER SHALL REMOVE THE CANOPY, SUPPORTS AND THE PATIO FENCE LOCATED ON THE NORTH SIDE OF PROSPECT AVENUE BETWEEN STA. 17+75 TO STA. 19+00.

THE CONTRACTOR SHALL PROVIDE TOWER CITY CENTER WITH 30 DAYS NOTICE IN ORDER FOR THEM TO COMPLETE THE REMOVALS.

PHASE 1 - CONSTRUCTION SEASON 2

THE CONTRACTOR SHALL COMPLETE WORK ON THE SOUTH SIDE OF PROSPECT AVENUE, WEST 2ND STREET AND WEST 6TH STREET IN 120 CALENDAR DAYS. ONE WAY TRAFFIC SHALL BE MAINTAINED EASTBOUND. ACCESS SHALL BE MAINTAINED TO THE DELIVERY DOORS AT UNIT 18 ON HURON ROAD WHILE COMPLETING WORK ON WEST 6TH STREET. TWO WAY TRAFFIC ON WEST 6TH STREET SHALL BE MAINTAINED WITH THE USE OF FLAGGERS. ONE LANE OF TRAFFIC ON WEST 2ND STREET SHALL BE MAINTAINED IN NORTHBOUND DIRECTION ONLY. TRAFFIC TO BE LIMITED TO VALET SERVICE AND DELIVERIES ONLY.

THE CONTRACTOR MUST PROVIDE AT A MINIMUM FOR THE FOLLOWING ACCESS DURING PHASE 1 CONSTRUCTION:

1. VALET ACCESS TO MORTON'S AND HYDE PARK RESTAURANTS ALONG WEST 2ND STREET OR PROSPECT AVENUE. ACCESS TO MORTON'S MAY BE CLOSED FROM MIDNIGHT TO 2:00 P.M.
2. PEDESTRIAN ACCESS MUST BE MAINTAINED TO A MINIMUM OF THREE DOORWAYS THAT SERVICE THE HYDE PARK RESTAURANT, MIDLAND BUILDING AND REPUBLIC BUILDING ALONG THE SOUTH SIDE OF PROSPECT AVENUE BETWEEN WEST 2ND STREET AND ONTARIO STREET. ACCESS TO THE HANDICAP ACCESSIBLE DOORWAY SHALL BE MAINTAINED AT ALL TIMES AS ONE OF THE THREE.
3. ACCESS TO VALET PARKING RAMPS ON WEST 6TH STREET.

PHASE 2 - CONSTRUCTION SEASON 2

THE CONTRACTOR SHALL COMPLETE WORK ON THE NORTH SIDE OF PROSPECT AVENUE IN 120 CALENDAR DAYS. ONE WAY TRAFFIC SHALL BE MAINTAINED EASTBOUND.

THE CONTRACTOR MUST PROVIDE AT A MINIMUM FOR THE FOLLOWING ACCESS DURING PHASE 2 CONSTRUCTION:

1. VEHICULAR ACCESS TO THE RENAISSANCE CLEVELAND HOTEL ENTRANCE DOCK RAMP ON THE NORTH SIDE OF PROSPECT CAN BE CLOSED FROM 6:00 P.M. TO 6:00 A.M. WEEKDAYS AND AFTER 1:00 P.M. ON SATURDAY FOR WEEKEND SHUTDOWN WITH THE OWNERS APPROVAL.
2. VEHICULAR ACCESS TO THE DELIVERY DOORS AT TERMINAL TOWER AND HIGBEE'S DEPARTMENT STORE ALONG NORTH SIDE OF PROSPECT AVENUE. ACCESS MUST BE MAINTAINED TO AT LEAST TWO OF THE THREE TERMINAL TOWER DELIVERY DOORS AT ALL TIMES. HIGBEE'S REQUIRES ACCESS TO ALL FOUR OF THEIR DELIVERY DOORS FROM 6:00 A.M. TO 8:00 P.M. ON WEEKDAYS AND 6:00 A.M. TO 2:00 P.M. ON SATURDAY. COMPLETE SHUTDOWN MAY BE PERMITTED OUTSIDE OF THESE TIMES WITH THE OWNER'S APPROVAL.

CONSTRUCTION SEASON 3

PRIOR TO PHASE 3, TOWER CITY CENTER SHALL REMOVE THE PATIO FENCE IN FRONT OF HARD ROCK CAFE BETWEEN STA. 21+86 TO STA. 22+48 AND THE CONTRACTOR SHALL PROCURE ALL JOINTS NECESSARY TO COMPLETE PHASES 3, 3A AND 4.

THE CONTRACTOR SHALL PROVIDE TOWER CITY CENTER WITH 30 DAYS NOTICE IN ORDER FOR THEM TO COMPLETE THE REMOVALS.

PHASE 3 AND 3A - CONSTRUCTION SEASON 3

IN PHASE 3 THE CONTRACTOR SHALL COMPLETE WORK ON THE NORTH SIDE OF HURON ROAD BETWEEN UNITS 14 THRU 25 AND WEST 3RD STREET IN 120 DAYS. ONE WAY TRAFFIC SHALL BE MAINTAINED EASTBOUND.

IN PHASE 3A THE CONTRACTOR SHALL COMPLETE WORK ON THE NORTH SIDE OF HURON ROAD BETWEEN UNITS 26 THRU 28 IN 30 CALENDAR DAYS. THE PHASE 3A CONSTRUCTION SHALL BE COMPLETED WITHIN THE 120 DAYS ALLOTTED FOR PHASE 3. THE CONTRACTOR MUST MAINTAIN ACCESS TO THE LOADING DOCKS ALONG WEST 6TH STREET WHILE WORKING ALONG HURON ROAD IN FRONT OF DELIVERY DOORS AT UNIT 18.
THE CONTRACTOR MUST PROVIDE AT A MINIMUM FOR THE FOLLOWING ACCESS DURING PHASES 3 AND 3A CONSTRUCTION:

1. THE THREE DOORWAYS (FOUR BAYS) IN UNIT 28 ARE FOR ACCESS TO A 460 CAR PARKING GARAGE. VEHICULAR ACCESS MUST BE MAINTAINED TO AT LEAST TWO OF THE THREE DOORWAYS AT ALL TIMES.
2. THE DELIVERY DOORS IN UNITS 26 AND 27 SERVICE THE MIDLAND BUILDING, GUILD HALL BUILDING AND REPUBLIC BUILDING ARE SUBJECT TO NUMEROUS DELIVERIES THROUGHOUT THE DAY AND NIGHT. VEHICULAR ACCESS MUST BE MAINTAINED AT ALL TIMES WITH BRIEF PERIODS OF SHUTDOWN COORDINATED WITH THE BUILDING OWNERS. THE DUMPSTER DOOR AND DRIVE APRON MUST BE ACCESSED EVERY OTHER DAY. COORDINATE WITH THE BUILDING OWNER.
3. THE THREE EXIT DOORS THAT SERVICE EMERGENCY EGRESS IN UNITS 26, 27, AND 28 MUST BE KEPT CLEAR AT ALL TIMES.
4. ONE WEEKEND CLOSURE (7:00 P.M. FRIDAY TO 7:00 A.M. MONDAY) OF THE GARAGE AND DELIVERY DOORS WILL BE PROVIDED TO CONSTRUCT THE CONCRETE WEARING SURFACE IN THIS AREA. FIFTEEN (15) DAYS NOTICE MUST BE PROVIDED TO THE OWNER PRIOR TO THE SCHEDULED SHUTDOWN.
5. VEHICULAR ACCESS TO THE DRIVE FOR THE LOTTERY DOCK DOOR AT THE STATE OFFICE BUILDING OFF HURON ROAD. THE ENTRANCE DRIVE CAN BE CLOSED FROM 7:00 PM TO 7:00 AM WEEKDAYS AND FROM 7:00 PM FRIDAY UNTIL 7:00 AM MONDAY.
6. VEHICULAR ACCESS TO RITZ CARLTON VALET SERVICE AND ENTRANCE AT WEST 3RD STREET.

PHASE 4 - CONSTRUCTION SEASON 3

CONTRACTOR SHALL COMPLETE WORK ON THE SOUTH SIDE OF HURON ROAD WITHIN 120 DAYS. ONE WAY TRAFFIC SHALL BE MAINTAINED EASTBOUND.

COORDINATION

THE ENGINEER AND THE CONTRACTOR SHALL WORK WITH THE LOCAL BUSINESS OWNERS TO ENSURE ACCESS TO ALL PROPERTIES AT ALL TIMES. HOWEVER, SOME INCONVENIENCES WILL OCCUR. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE COORDINATION OR PROVIDING ACCESS TO THE BUSINESSES AND RESIDENCES.

CONSTRUCTION TRAFFIC

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY.

PORTABLE CHANGEABLE MESSAGE SIGNS

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, FOUR (4) CHANGEABLE MESSAGE SIGNS (PCMS), ON SITE, WITH A MINIMUM LEGIBILITY DISTANCE OF 475 FEET, FOR THE DURATION OF THE PROJECT.

EACH SIGH SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONING DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. PCMS TRAILERS SHALL BE DELINEATED ON A PERMANENT BASIS BY AFFIXING CONSPICUITY TAPE CONFORMING TO ODOT 614.03, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PCMS SHALL BE LOCATED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM TRAFFIC.

ALL MESSAGES TO BE DISPLAYED ON THE PCMS WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE PCMS SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD.

THE PCMS SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF ODOT 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND/OR THE CITY TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC.

THE CONTRACTOR ALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THE PCMS FOR THE DURATION OF THE PROJECT.

PAYMENT OR THIS ITEM, INCLUDING, BUT NOT LIMITED TO ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE. AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE PAID FOR UNDER ITEM 614 – PORTABLE CHANGEABLE MESSAGE SIGNS.

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MAINTENANCE OF TRAFFIC GENERAL NOTES

MAINTENANCE

CUY-TOWER CITY BRIDGES

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MAINTENANCE OF TRAFFIC GENERAL NOTES

CUY-TOWER CITY BRIDGES

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

IN ORDER TO PROVIDE FOR LOCAL ACCESS, LONGITUDINAL VERTICAL FACES ABUTTING DRIVES SHALL BE TEMPORARILY RAMPED. TRANSVERSE VERTICAL FACES SHALL BE TEMPORARILY RAMPED A MINIMUM OF TEN (10) FEET IN LENGTH AND SHALL BE WARNED WITH "BUMP" (W8-1) SIGNS IN ADVANCE OF THE RAMPED AREAS.

WHEN CONSTRUCTION IS ADJACENT TO DRIVES MAINTAIN ACCESS TO DRIVES BY ONLY CONSTRUCTING THE PORTIONS OF THE ROADWAY NOT IN CONFLICT WITH THE DRIVES. ADDITIONAL CONSTRUCTION JOINTS SHALL BE ALLOWED BY THE ENGINEER.

IN ORDER TO PROVIDE FOR LOCAL ACCESS, LONGITUDINAL VERTICAL FACES ABUTTING ALL TEMPORARY RAMPING SHALL BE INSTALLED, AT THE DIRECTION OF THE ENGINEER, USING ITEM 614 – ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

PAYMENT FOR THE ABOVE DESCRIBED WORK SHALL BE PAID UNDER ITEM 614 – ASPHALT CONCRETE FOR MAINTENANCE OF TRAFFIC

EXISTING PAVEMENT DISPOSAL/CASTING ADJUSTMENT

THE EXISTING ASPHALT PAVEMENT WEARING COURSE AND CONCRETE BASE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ONCE THEY ARE REMOVED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DELINEATE ANY CASTINGS THAT MAY PROTRUDE ABOVE THE EXISTING CONCRETE BASE. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT MATERIAL IN THE VICINITY OF THESE CASTINGS TO PROVIDE AN ADEQUATE RAMP AROUND THE CASTINGS. IN NO CASE SHALL THE CASTING REMAIN EXPOSED WITHOUT PROPER PROTECTION.

TEMPORARY NO PARKING SIGNS

EXISTING ON-STREET PARKING WHICH CONFLICTS WITH PROPOSED CONSTRUCTION OR WITH PROCEDURES FOR MAINTENANCE OF TRAFFIC SHALL BE TEMPORARILY PROHIBITED. THE CONTRACTOR SHALL SUPPLY AND ERECT R7-1-12 "NO PARKING" SIGNS AT LOCATIONS AND INTERVALS DETERMINED BY THE ENGINEER. PAYMENT FOR THE TEMPORARY SIGNS, POSTS AND SUBSEQUENT REMOVAL SHALL BE PAID PER THE LUMP SUM BID FOR ITEM 614 – MAINTAINING TRAFFIC.

INSTALLATION OF PAVEMENT MARKINGS

THE CONTRACTOR MAY REDUCE THE NUMBER OF THROUGH TRAFFIC LANES BY 50%, AS DIRECTED BY THE ENGINEER, IN ORDER TO REMOVED PAVEMENT MARKINGS, OR TO INSTALL WORK ZONE OR PERMANENT PAVEMENT MARKINGS. HE SHALL LIMIT THE AFOREMENTIONED CLOSURE TO BETWEEN THE HOURS OF 9:00 A.M. AND 3:30 P.M., UNLESS OTHERWISE APPROVED BY THE ENGINEER.

ALL WORK ZONE PAVEMENT MARKINGS AND SIGNS REQUIRED FOR A PARTICULAR LANE CLOSURE OR TRAFFIC PATTERN SHALL BE INSTALLED ON A SINGLE WORK DAY, AND THE CORRESPONDING TRAFFIC PATTERN SHALL BE IMPLEMENTED IMMEDIATELY. IN ADDITION, THE REQUIREMENTS OF ODOT 614.11 SHALL APPLY.

PEDESTRIAN ACCESS

DURING TEMPORARY CLOSURE OR RELOCATION OF SIDEWALKS AND OTHER PEDESTRIAN FACILITIES, TEMPORARY FACILITIES SHALL BE PROVIDED. THESE FACILITIES SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING FACILITY. PEDESTRIAN SIDEWALK CLOSURES, CROSSWALK CLOSURES, AND PEDESTRIAN DETOURS OR BYPASSES SHALL BE INSTALLED ACCORDING TO O.M.U.T.C.D. TYPICAL APPLICATIONS TA-28, FIGURE 6H-28 AND TA-29, FIGURE 6H-29. CONTRACTOR TO SUBMIT STAMPED ACCESS PLANS TO ENGINEER FOR APPROVAL. PAYMENT FOR THIS ITEM IS CONSIDERED INCIDENTAL TO ITEM 614 – MAINTAINING TRAFFIC.

LIQUIDATED DAMAGES

THE ALLOWED CONSTRUCTION PERIOD FOR EACH PHASE SHALL BEGIN ON THE DAY OF THE FIRST LANE RESTRICTION FOR THAT PHASE AND EXTEND THE NUMBER OF ALLOTTED DAYS. THE END OF THIS PERIOD WILL BE CONSIDERED AN INTERIM COMPLETION DATE FOR WHICH LIQUIDATED DAMAGES WILL BE ASSESSED PER C&MS 108.07. AN AMOUNT OF $1,400 PER DAY WILL BE ASSESSED FOR EACH CALENDAR DAY OF OVERRUN BEYOND THE 120 DAYS PER PHASE.

WORK ZONE MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS ON PROSPECT AVENUE, HURON ROAD, W. 2ND STREET, W. 3RD STREET, W. 6TH STREET AND ONTARIO STREET PER THE REQUIREMENTS OF CMS 614.04 AND 614.11.

THE FOLLOWING ESTIMATED QUANTITIES HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC:

ITEM 614, WORK ZONE EDGE LINE, CLASS 1, 642 PAINT	0.65 MI.
ITEM 614, WORK ZONE LANE LINE, CLASS 1, 642 PAINT	0.56 MI.
ITEM 614, WORK ZONE STOP LINE, CLASS 1, 642 PAINT	122 FT.
ITEM 614, WORK ZONE CROSSWALK LINE, CLASS 1, 642 PAINT	500 FT.
ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT	250 FT.
ITEM 614, WORK ZONE LANE ARROW, CLASS 1, 642 PAINT	4 EA.
ITEM 614, WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE 1	0.64 MI.
ITEM 614, WORK ZONE LANE LINE, CLASS 1, 740.06, TYPE 1	0.54 MI.
ITEM 614, WORK ZONE STOP LINE, CLASS 1, 740.06, TYPE 1	74 FT.
ITEM 614, WORK ZONE CROSSWALK LINE, CLASS 1, 740.06 TYPE 1	805 FT.
ITEM 642, WORK ZONE CHANNELIZING LINE, CLASS 1, 740.06 TYPE 1	420 FT.
ITEM 614, WORK ZONE DOTTED LINE, CLASS 1, 740.06, TYPE 1	320 FT.
ITEM 642, WORK ZONE LANE ARROW, CLASS 1, 740.06, TYPE 1	4 EA.

TEMPORARY MAINTENANCE OF EXISTING SIGNALS

INCIDENTAL TO THE REQUIREMENTS FOR MAINTAINING TRAFFIC IN ACCORDANCE WITH 614.03, EXISTING TRAFFIC SIGNALS AT THE INTERSECTIONS OF PROSPECT AVENUE WITH SUPERIOR AVENUE, WEST 3RD STREET, AND ONTARIO STREET, AND HURON ROAD WITH SUPERIOR AVENUE, WEST 6TH STREET AND ONTARIO STREET SHALL BE TEMPORARILY MAINTAINED BY THE CONTRACTOR UNTIL THE CONSTRUCTION ALONG PROSPECT AVENUE AND HURON ROAD IS COMPLETED.

THE CONTRACTOR SHALL SUBMIT THE TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN, INCLUDING VEHICULAR SIGNAL CONFIGURATION (12" LENS), AT EACH INTERSECTION FOR EACH PHASING OF THE MAINTENANCE OF TRAFFIC TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTATION. THE PLAN SHALL ALSO INCLUDE THE BAGGING OF EXISTING SIGNAL HEADS NOT IN USE. THE TEMPORARY VEHICULAR SIGNAL HEADS MUST "LINE UP" WITH THE TEMPORARY ROADWAY APPROACH LANES UNLESS OTHERWISE APPROVED BY THE ENGINEER. THE ENGINEER WILL ESTABLISH THE CYCLE LENGTH AND TIMING DURING THE MAINTENANCE OF TRAFFIC. TEMPORARY TRAFFIC SIGNAL LOCATIONS ARE INCLUDED WITH THE MAINTENANCE OF TRAFFIC PLANS.

THE CONTRACTOR MAY USE WOODEN STRAIN POLES WITH GUY WIRES AS AN ALTERNATE TO ODOT TYPE TC 81.10 SIGNAL POLES. THE CONTRACTOR SHALL SUBMIT DESIGN CALCS TO DEMONSTRATE THAT ALTERNATE WOODEN POLES ARE EQUIVALENT IN STRENGTH TO ODOT TYPE TC-81.10 DESIGN NUMBERS LISTED IN THIS TABLE. WOOD POLES SHALL BE BASED ON A CALCULATED BASE MOMENT AT 3% SAG.

ANY FAILURE OR MALFUNCTION OF THE TEMPORARY SIGNAL INSTALLATION AT THE TWO INTERSECTIONS SHALL BE REPAIRED AND CORRECTED WITHIN 4 HOURS OF NOTIFICATION AT THE CONTRACTOR'S COST. ALL COSTS TO MAINTAIN TRAFFIC DURING THE OUTAGE, INCLUDING LAW ENFORCEMENT OFFICERS TO DIRECT TRAFFIC SHALL BE ASSESSED TO THE CONTRACTOR.

ANY COSTS FOR THE TEMPORARY MAINTENANCE OF EXISTING SIGNALS, INCLUDING TEMPORARY SUPPORT POLES, TEMPORARY VEHICULAR SIGNAL HEADS, TEMPORARY WIRING, TEMPORARY MESSENGER WIRE, TEMPORARY CONTROLLER, CABINET, POWER SERVICE, ETC. SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 – MAINTAINING TRAFFIC.

REPLACEMENT SIGN

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED BUT GOOD CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE REPLACEMENT SIGN SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM-614 MAINTAINING TRAFFIC, AS PER PLAN.

REPLACEMENT DRUMS

THE ITEMS WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 – MAINTAINING TRAFFIC, AS PER PLAN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENT OF THE ORIGINAL DRUM.

ITEM 642 - REMOVAL OF PAVEMENT MARKING

THIS ITEM SHALL BE USED TO REMOVE EXISTING PAVEMENT MARKINGS WHICH ARE IN CONFLICT WITH THE TEMPORARY OR FINAL MARKINGS AS SHOWN ON THE TRAFFIC MAINTENANCE PLANS. PAYMENT SHALL BE BASED UPON THE ACTUAL LENGTH REMOVED (GAPS SHALL NOT BE INCLUDED IN THE MEASURED LENGTH). THE CONTRACTOR SHALL USE WATER BLASTING AS A MEANS OF REMOVING PAVEMENT MARKINGS. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE BID SCHEDULE TO BE USED AS OUTLINED ABOVE:

ITEM 642 – REMOVAL OF PAVEMENT MARKING	6,700 FT.
ITEM 642 – REMOVAL OF PAVEMENT MARKING	27 EACH

ITEM 630 - COVERING OF SIGN

WHERE DIRECTED BY THE ENGINEER OR WHERE THE PLANS CALL FOR SIGNS TO BE COVERED, THE CONTRACTOR SHALL DO SO IN SUCH A MANNER AS TO AVOID DAMAGING THE PERMANENT SIGN WHEN THE COVER IS REMOVED. THE COVER SHALL BE TOTALLY OPAQUE. THE USE OF ADHESIVE TAPE APPLIED DIRECTLY TO A SIGN FACE IS STRICTLY PROHIBITED.

PAYMENT FOR THIS ITEM IS CONSIDERED TO ITEM 614-MAINTAINING TRAFFIC.

FOR INFORMATION ONLY

WORK ZONE SIGNS

	D3-1	G20-2		R3-1-24	R3-2-24	R3-H8bH-36	R3-H8bj-36	R3-H8bn-36	R3-H8bp	R3-H8cc-48	R3-5R-30	R6-1R-36	R6-1L-36	R11-2-48		W1-4bR-36	W4-2L-36	W4-2R-36	W12-1-30	W20-1-36	W20-5C-36	W20-5L-30	W20-5R-30	W20-5L-36		SPECIAL 48"X36"	TYPE A WARN LIGHT	TYPE B WARN LIGHT	FAP, TYPE A
PHASE 1&2	8	4			5	2						3		1			1		1	4	1	1	1	1		1	5	1	
PHASE 3&4	10	5		3	2		2	2	2	2	1		2	3		1	1	1		5		1				1	8	3	1

FOR INFORMATION ONLY

DETOUR SIGNS

	D3-1		M4-8a-24	M4-9-30	M4-9R-30	M4-9L-30	M4-H9bR-30	M4-H9bL-30	M4-10L-48	M4-10R-48		R11-2-48		W20-2-36	W20-3-36											TYPE A WARN LIGHT	TYPE B WARN LIGHT	
PROSPECT	31		1	6	2	1	1	2	1	1		1		4	4											8	1	
HURON	24		1	3	1	2	1	1	1	1		1		4	4											8	1	

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ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) MAY, WITH PRE-APPROVAL FROM THE ENGINEER, BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER.

THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS WITH PATROL CAR REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	300 HOURS

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE (CONTINUED)

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR LEOS WITH:

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SAFETY
DIVISION OF POLICE
1300 ONTARIO STREET
CLEVELAND, OHIO 44114
PH: (216) 623-5000

NOTIFICATION

THE CONTRACTOR SHALL NOTIFY IN WRITING THE FOLLOWING AGENCIES AT LEAST TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION, AND AT LEAST SEVENTY-TWO (72) HOURS BEFORE IMPLEMENTING ANY SUBSTANTIAL CHANGES IN TRAFFIC PATTERNS OR CLOSING OF ANY STREET TO TRAFFIC:

CITY OF CLEVELAND:		
DIVISION OF ENGINEERING AND CONSTRUCTION		(216) 664-2381
DIVISION OF STREETS		(216) 664-2150
DIVISION OF TRAFFIC ENGINEERING		(216) 664-3194
CITY OF CLEVELAND DEPARTMENT OF PUBLIC SAFETY:		
DIVISION OF EMERGENCY MEDICAL SERVICES (EMS)		(216) 664-2099
DIVISION OF FIRE		(216) 664-6356
DIVISION OF POLICE		(216) 623-5179
ODOT PUBLIC INFORMATION OFFICE		(216) 584-2007
CLEVELAND MUNICIPAL SCHOOL DISTRICT		(216) 574-8000
GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY (RTA)		(216) 566-5133
CLARK SMITH	CSMITH@GCRTA.ORG	
JOEL FREILICH	JFREILICH@GCRTA.ORG	
LORIE BEABES	LBEABES@ GCRTA.ORG	
JAMES STOCK	JSTOCK@GCRTA.ORG	

THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ANY TEMPORARY BUS STOPS WITH THE RTA.

ITEM 614 - MAINTAINING TRAFFIC, MISC.: PORTABLE TRAFFIC SIGNALS

PORTABLE TRAFFIC SIGNALS ARE TO BE UTILIZED IN THE PROJECT DURING MOT PHASE 1 AT THE EAST END OF PROSPECT AVENUE, AND DURING MOT PHASE 4 AT THE EAST END OF HURON ROAD. THE CONTRACTOR SHALL PROVIDE SIGNAL EQUIPMENT SELECTIONS, SIGNAL CONTROL AND TIMING DESIGN TO THE ENGINEER FOR APPROVAL PRIOR TO MOVING TRAFFIC INTO THE PREVIOUSLY NOTED MOT PHASES.

PAYMENT FOR THE THE SIGNALS AND ALL ASSOCIATED LABOR AND INCIDENTALS REQUIRED TO INSTALL THEM SHALL BE MADE AT THE CONTRACT BID PRICE PER DAY FOR MAINTAINING TRAFFIC MISC.: PORTABLE TRAFFIC SIGNALS.

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MAINTENANCE OF TRAFFIC GENERAL NOTES

CUY-TOWER CITY BRIDGES

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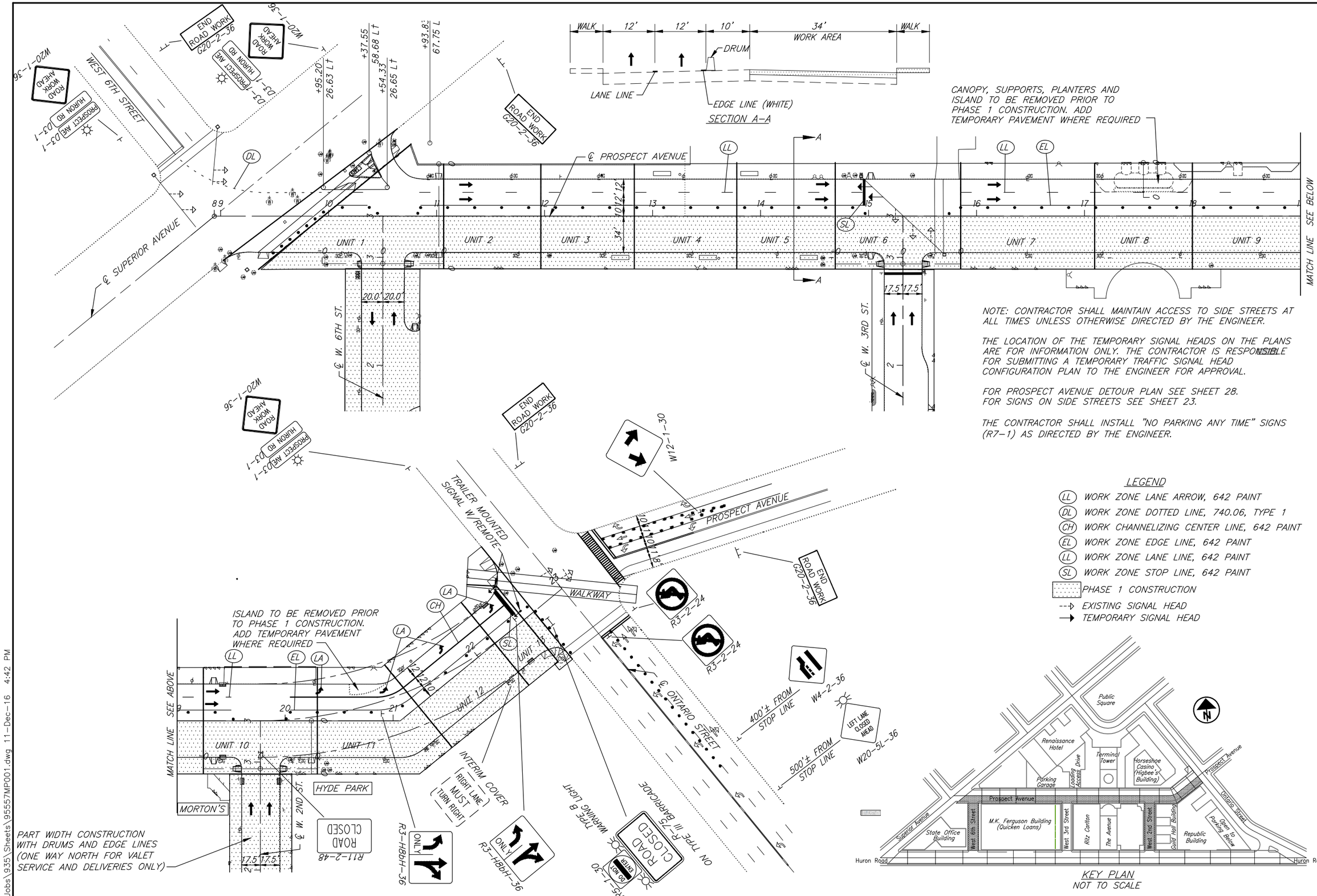
END ROAD WORK G20-2-36
ROAD WORK AHEAD W20-1-36
HURON RD
PROSPECT AVE D3-1
WEST 6TH STREET
+37.55 58.68 L
+54.33 26.65 L
+93.83 67.75 L
+95.20 26.63 L
WALK 12' 12' 10' 34' WORK AREA WALK
DRUM
LANE LINE
EDGE LINE (WHITE)
SECTION A-A
CANOPY, SUPPORTS, PLANTERS AND ISLAND TO BE REMOVED PRIOR TO PHASE 1 CONSTRUCTION. ADD TEMPORARY PAVEMENT WHERE REQUIRED
℄ PROSPECT AVENUE
℄ SUPERIOR AVENUE
UNIT 1
UNIT 2
UNIT 3
UNIT 4
UNIT 5
UNIT 6
UNIT 7
UNIT 8
UNIT 9
MATCH LINE SEE BELOW
℄ W. 6TH ST.
℄ W. 3RD ST.
20.0' 20.0'
17.5' 17.5'
NOTE: CONTRACTOR SHALL MAINTAIN ACCESS TO SIDE STREETS AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
THE LOCATION OF THE TEMPORARY SIGNAL HEADS ON THE PLANS ARE FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A TEMPORARY TRAFFIC SIGNAL HEAD CONFIGURATION PLAN TO THE ENGINEER FOR APPROVAL.
FOR PROSPECT AVENUE DETOUR PLAN SEE SHEET 28.
FOR SIGNS ON SIDE STREETS SEE SHEET 23.
THE CONTRACTOR SHALL INSTALL "NO PARKING ANY TIME" SIGNS (R7-1) AS DIRECTED BY THE ENGINEER.
W12-1-30
TRAILER MOUNTED SIGNAL W/REMOTE
PROSPECT AVENUE
WALKWAY
ISLAND TO BE REMOVED PRIOR TO PHASE 1 CONSTRUCTION. ADD TEMPORARY PAVEMENT WHERE REQUIRED
MATCH LINE SEE ABOVE
UNIT 10
UNIT 11
UNIT 12
HYDE PARK
MORTON'S
℄ W. 2ND ST.
PART WIDTH CONSTRUCTION WITH DRUMS AND EDGE LINES (ONE WAY NORTH FOR VALET SERVICE AND DELIVERIES ONLY)
ROAD CLOSED R11-2-48
R3-H8bH-36
INTERIM COVER MUST [RIGHT LANE] [TURN RIGHT]
TYPE B WARNING LIGHT
ON TYPE III BARRICADE
ROAD CLOSED
R5-1-30
DO NOT ENTER
℄ ONTARIO STREET
R3-2-24
400'± FROM STOP LINE
500'± FROM STOP LINE
W4-2-36
LEFT LANE CLOSED AHEAD
W20-5L-36
END ROAD WORK G20-2-36
LEGEND
LL WORK ZONE LANE ARROW, 642 PAINT
DL WORK ZONE DOTTED LINE, 740.06, TYPE 1
CH WORK CHANNELIZING CENTER LINE, 642 PAINT
EL WORK ZONE EDGE LINE, 642 PAINT
LL WORK ZONE LANE LINE, 642 PAINT
SL WORK ZONE STOP LINE, 642 PAINT
PHASE 1 CONSTRUCTION
EXISTING SIGNAL HEAD
TEMPORARY SIGNAL HEAD
Public Square
Renaissance Hotel
Terminal Tower
Horseshoe Casino (Higbee's Building)
Parking Garage
Loading Access Drive
Prospect Avenue
Ontario Street
Superior Avenue
State Office Building
West 8th Street
M.K. Ferguson Building (Quicken Loans)
West 3rd Street
Ritz Carlton
The Avenue
West 2nd Street
Guild Hall Building
Republic Building
Open to Parking Below
Huron Road
KEY PLAN
NOT TO SCALE
HORIZONTAL SCALE IN FEET
CALCULATED JEN
CHECKED DTB
PROSPECT AVENUE
MAINTENANCE OF TRAFFIC PHASE 1
CUY-TOWER CITY BRIDGES
22
129
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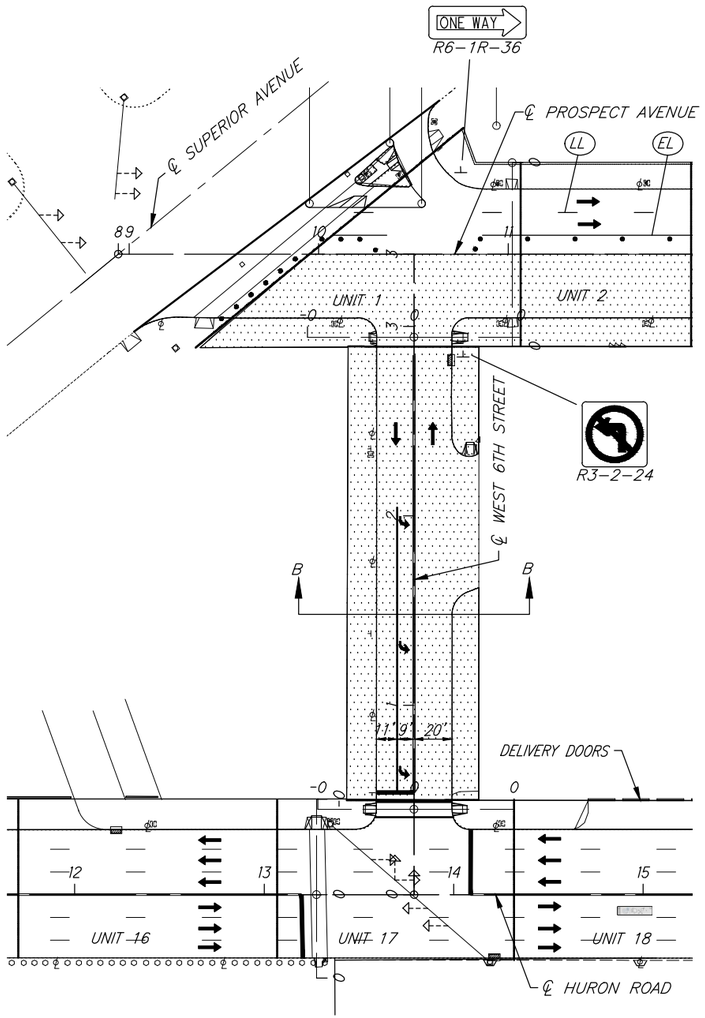
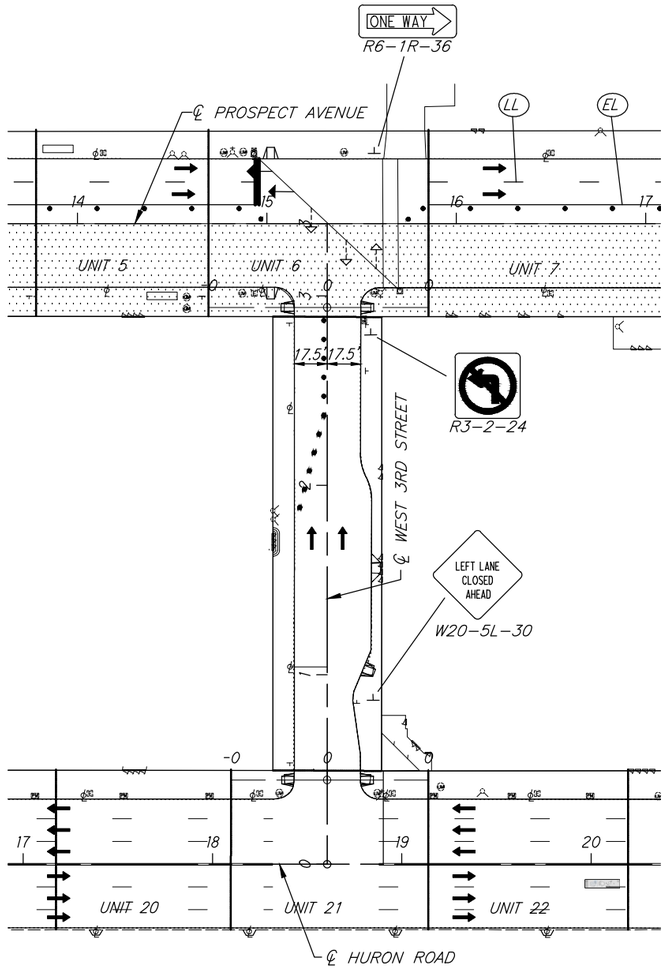
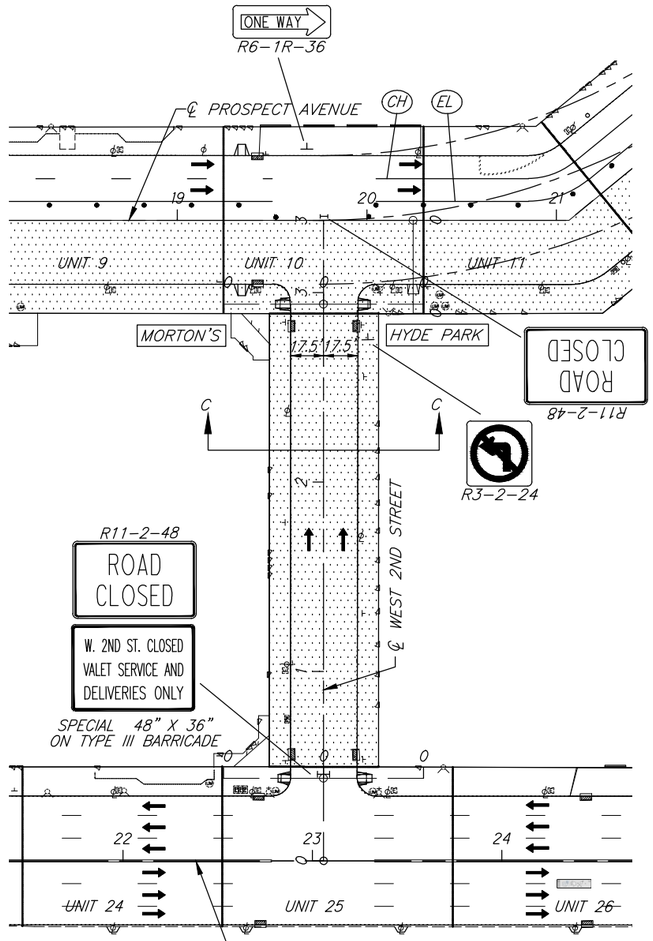






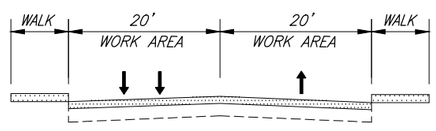
NOTE: CONTRACTOR SHALL MAINTAIN ACCESS TO SIDE STREETS AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE LOCATION OF THE TEMPORARY SIGNAL HEADS ON THE PLANS ARE FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A TEMPORARY TRAFFIC SIGNAL HEAD CONFIGURATION PLAN TO THE ENGINEER FOR APPROVAL.

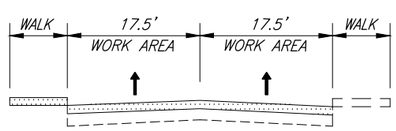
THE CONTRACTOR SHALL INSTALL "NO PARKING ANY TIME" SIGNS (R7-1) AS DIRECTED BY THE ENGINEER.

LEGEND

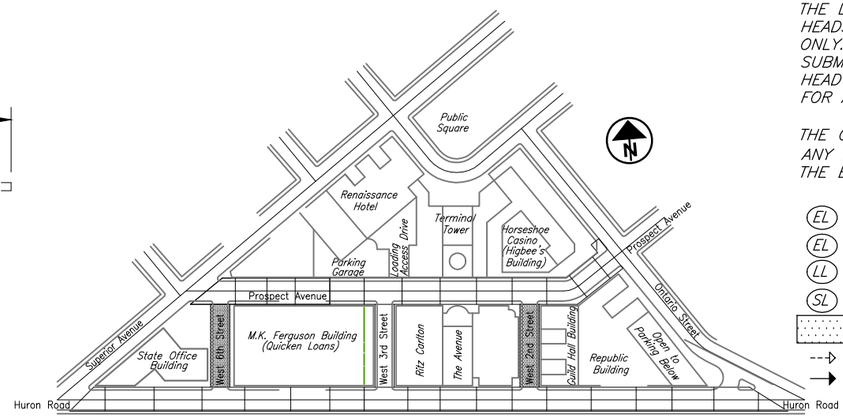
- (EL) WORK ZONE CHANNELIZING LINE, 642 PAINT
- (EL) WORK ZONE EDGE LINE, 642 PAINT
- (LL) WORK ZONE LANE LINE, 642 PAINT
- (SL) WORK ZONE STOP LINE, 642 PAINT
- PHASE 1 CONSTRUCTION
- --> EXISTING SIGNAL HEAD
- → TEMPORARY SIGNAL HEAD



SECTION B-B
PART WIDTH CONSTRUCTION
WITH DRUMS AND EDGE LINES



SECTION C-C
PART WIDTH CONSTRUCTION
WITH DRUMS AND EDGE LINES



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JEN
CHECKED DTB

WEST 2ND AND 6TH STREET
MAINTENANCE OF TRAFFIC PHASE 1

CUY-TOWER CITY BRIDGES

23
129

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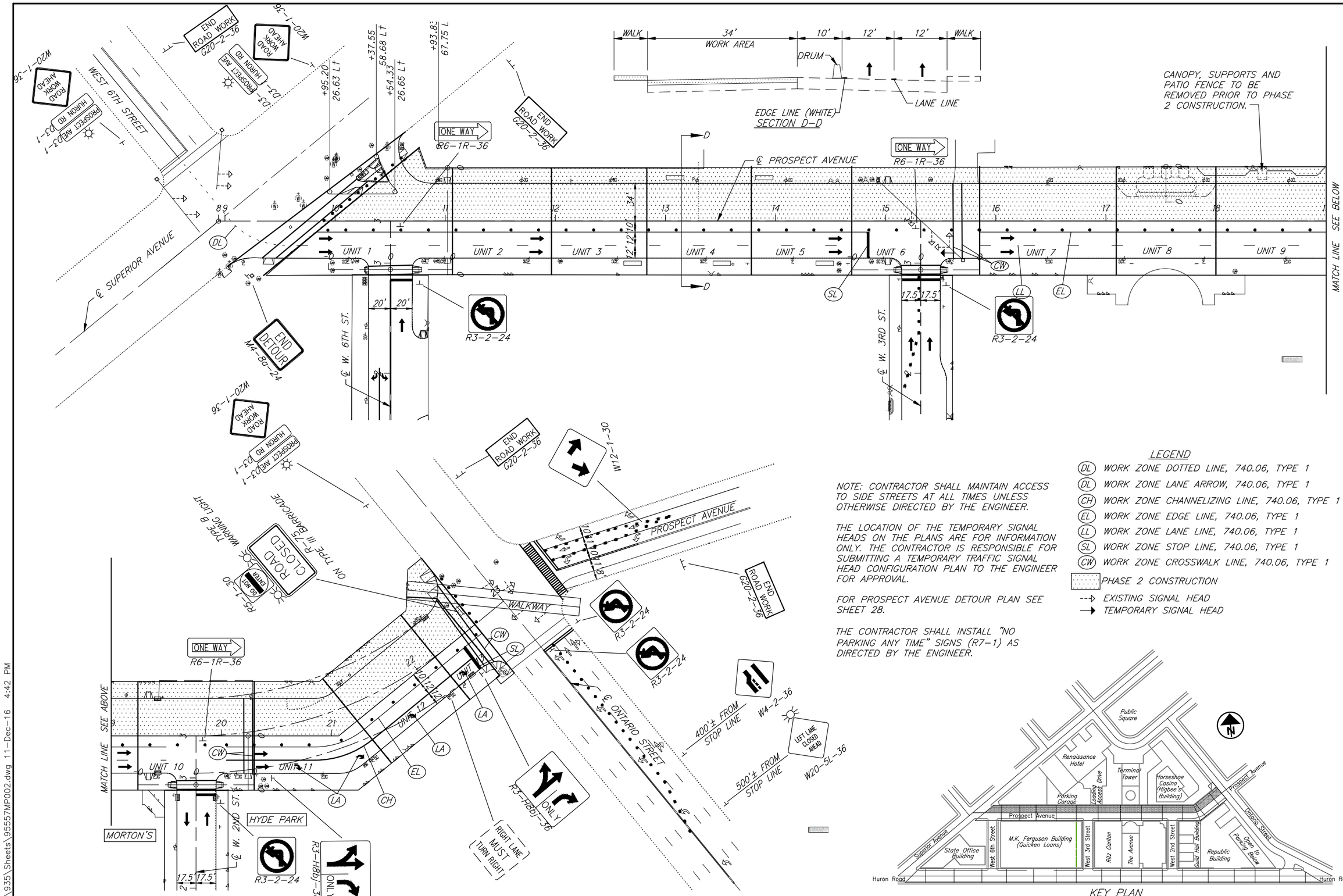

NOTE: CONTRACTOR SHALL MAINTAIN ACCESS TO SIDE STREETS AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE LOCATION OF THE TEMPORARY SIGNAL HEADS ON THE PLANS ARE FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A TEMPORARY TRAFFIC SIGNAL HEAD CONFIGURATION PLAN TO THE ENGINEER FOR APPROVAL.

FOR PROSPECT AVENUE DETOUR PLAN SEE SHEET 28.

THE CONTRACTOR SHALL INSTALL "NO PARKING ANY TIME" SIGNS (R7-1) AS DIRECTED BY THE ENGINEER.

LEGEND

- (DL) WORK ZONE DOTTED LINE, 740.06, TYPE 1
- (DL) WORK ZONE LANE ARROW, 740.06, TYPE 1
- (CH) WORK ZONE CHANNELIZING LINE, 740.06, TYPE 1
- (EL) WORK ZONE EDGE LINE, 740.06, TYPE 1
- (LL) WORK ZONE LANE LINE, 740.06, TYPE 1
- (SL) WORK ZONE STOP LINE, 740.06, TYPE 1
- (CW) WORK ZONE CROSSWALK LINE, 740.06, TYPE 1
- PHASE 2 CONSTRUCTION
- --> EXISTING SIGNAL HEAD
- → TEMPORARY SIGNAL HEAD

KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET 0 20 40 80

CALCULATED JEN CHECKED DTB

PROSPECT AVENUE
MAINTENANCE OF TRAFFIC PHASE 2

CUY-TOWER CITY BRIDGES

24
129

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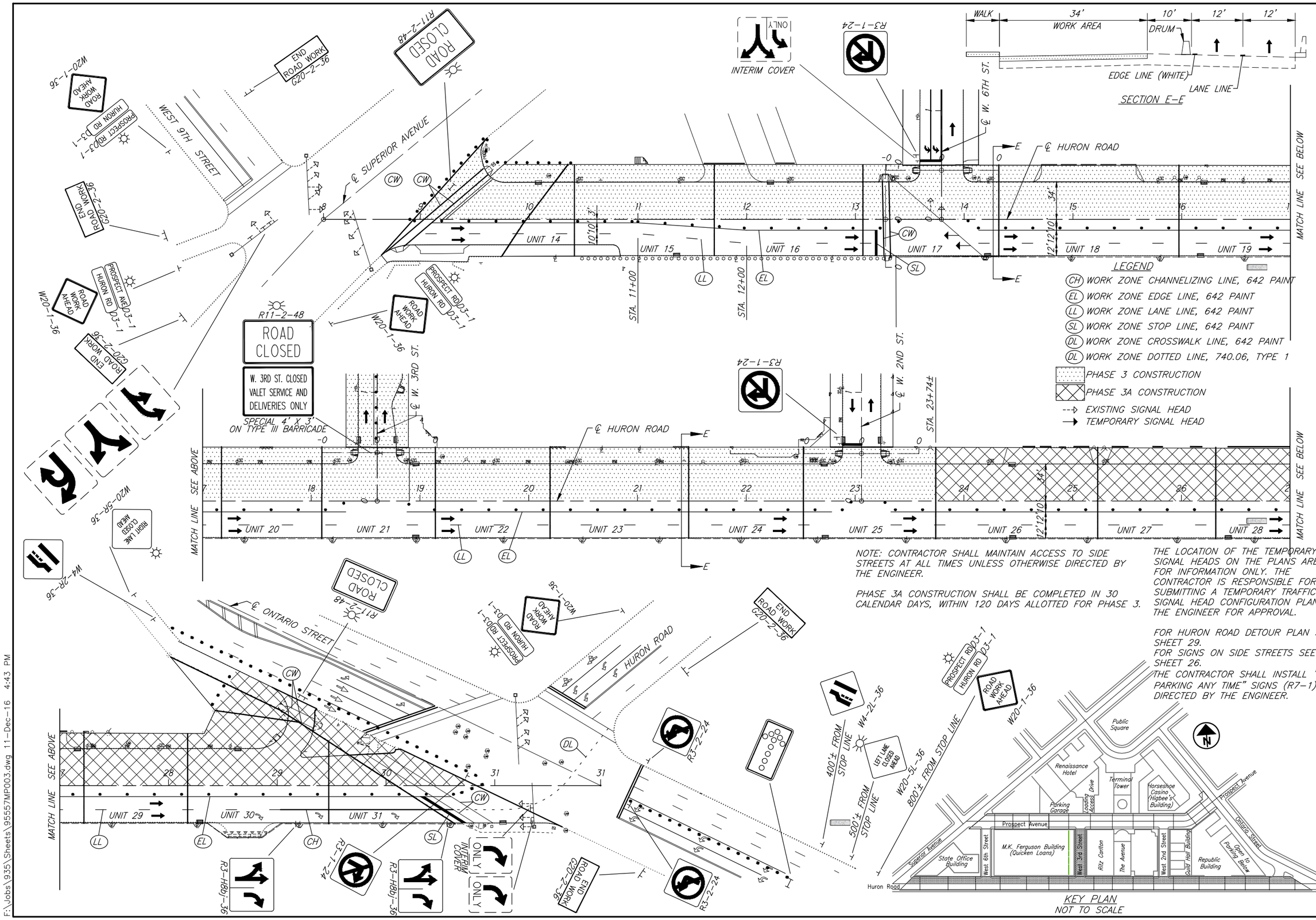

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JEN
CHECKED DTB

HURON ROAD AND WEST 3RD STREET MAINTENANCE OF TRAFFIC PHASE 3 AND 3A

CUY-TOWER CITY BRIDGES

25
129

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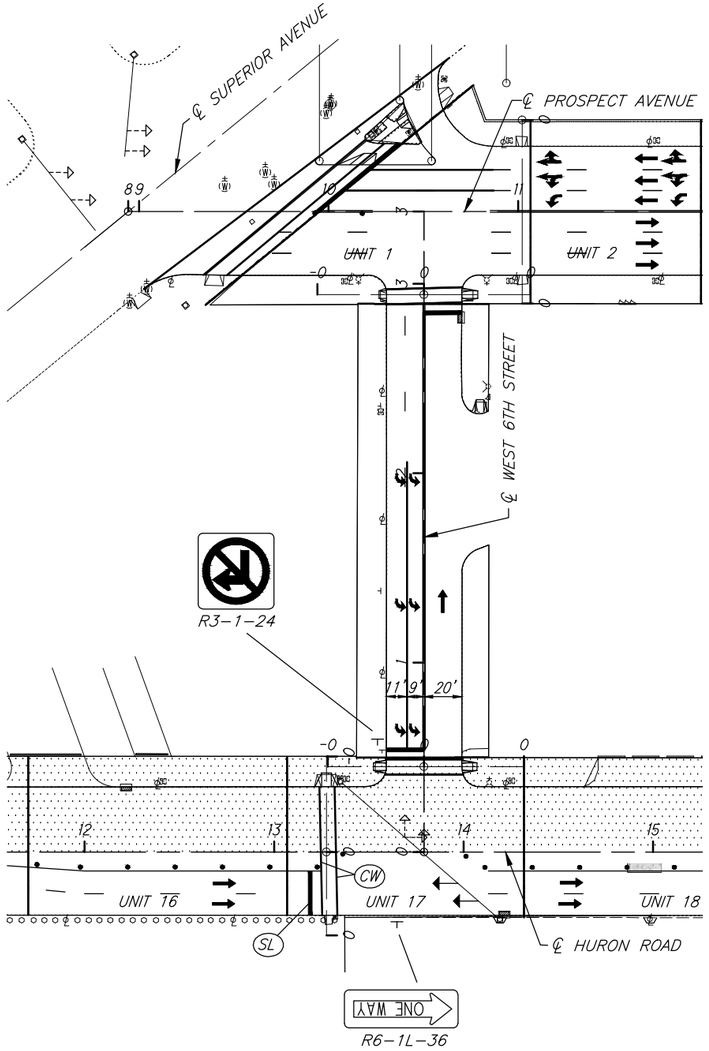
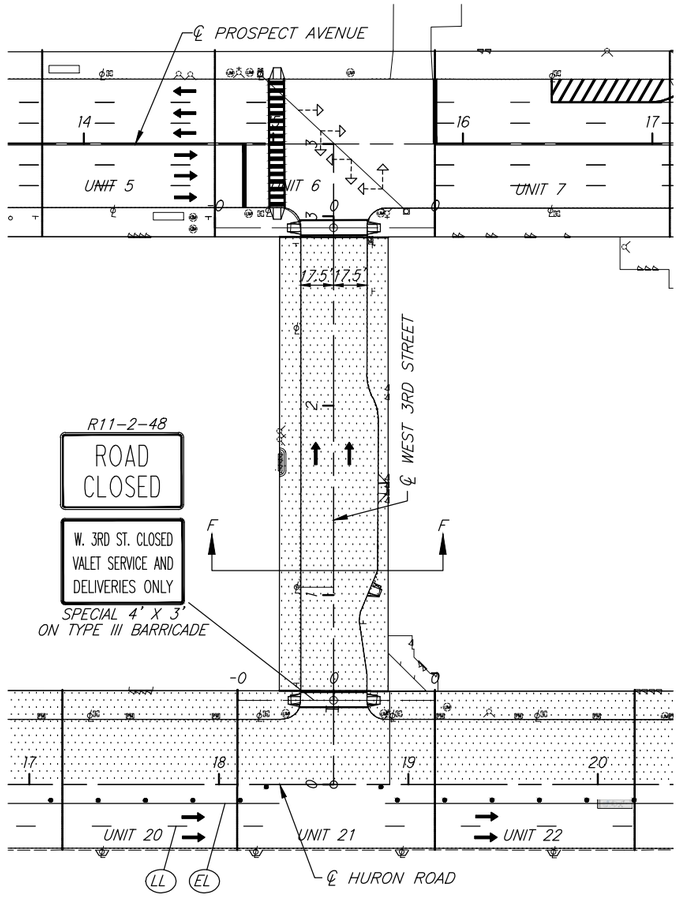
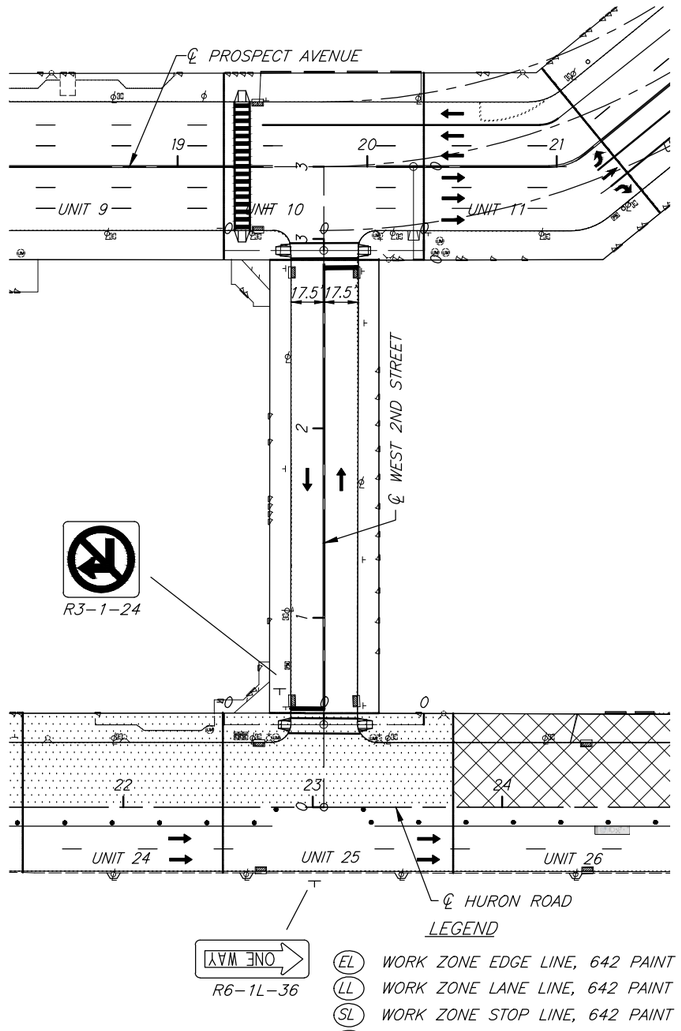
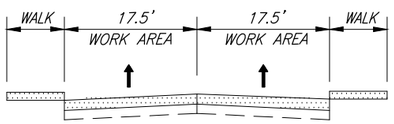
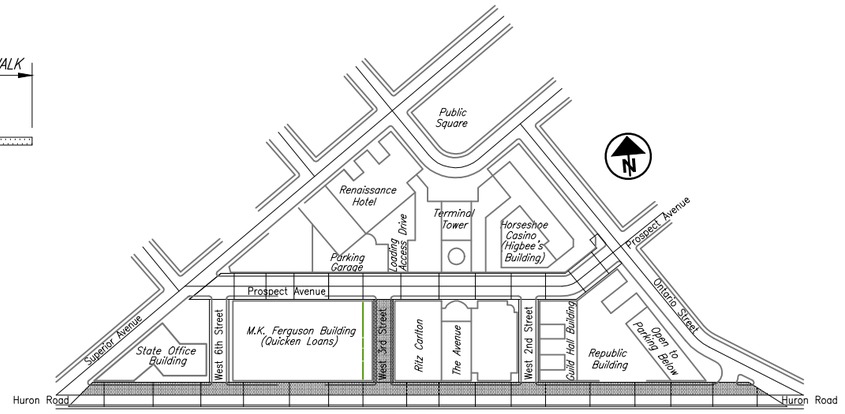








SECTION F–F
PART WIDTH CONSTRUCTION
WITH DRUMS AND EDGE LINES



KEY PLAN
NOT TO SCALE

LEGEND

- (EL) WORK ZONE EDGE LINE, 642 PAINT
- (LL) WORK ZONE LANE LINE, 642 PAINT
- (SL) WORK ZONE STOP LINE, 642 PAINT
- (CW) WORK ZONE CROSSWALK LINE, 642 PAINT
- PHASE 3 CONSTRUCTION
- PHASE 3A CONSTRUCTION
- --> EXISTING SIGNAL HEAD
- → TEMPORARY SIGNAL HEAD

NOTE: CONTRACTOR SHALL MAINTAIN ACCESS TO SIDE STREETS AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE ENGINEER. INSTALL PERMANENT PAVEMENT MARKINGS ON PROSPECT AVENUE, WEST 2ND STREET AND WEST 6TH STREET.

THE LOCATION OF THE TEMPORARY SIGNAL HEADS ON THE PLANS ARE FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A TEMPORARY TRAFFIC SIGNAL HEAD CONFIGURATION PLAN TO THE ENGINEER FOR APPROVAL.

THE CONTRACTOR SHALL INSTALL "NO PARKING ANY TIME" SIGNS(R7-1) AS DIRECTED BY THE ENGINEER.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JEN
CHECKED DTB

WEST 3RD STREET MAINTENANCE OF TRAFFIC PHASE 3 AND 3A

CUY-TOWER CITY BRIDGES

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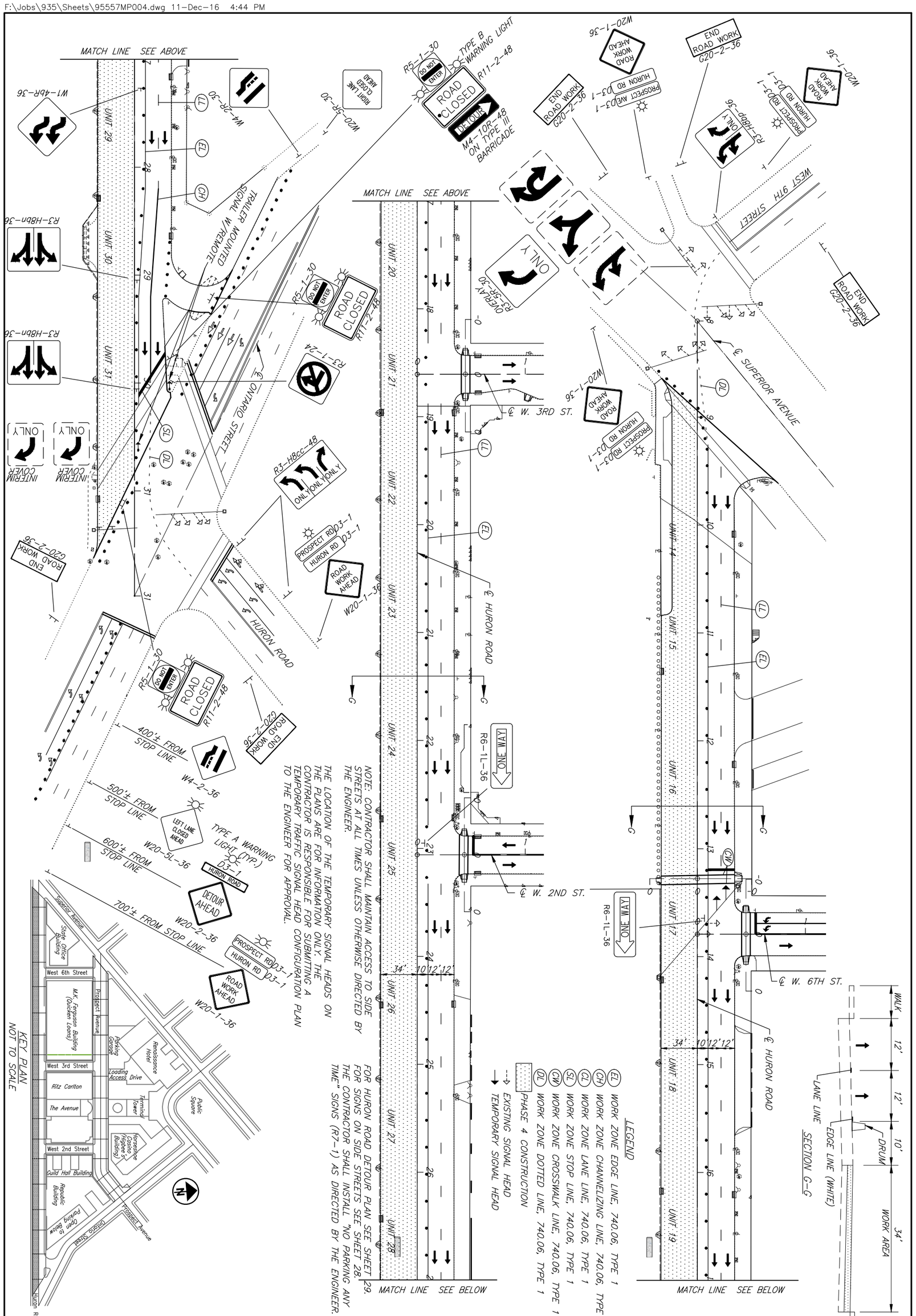

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129

CUY-TOWER CITY BRIDGES

HURON ROAD
MAINTENANCE OF TRAFFIC PHASE 4

CALCULATED JEN
CHECKED DTB

HORIZONTAL SCALE IN FEET
0 20
10 40

N

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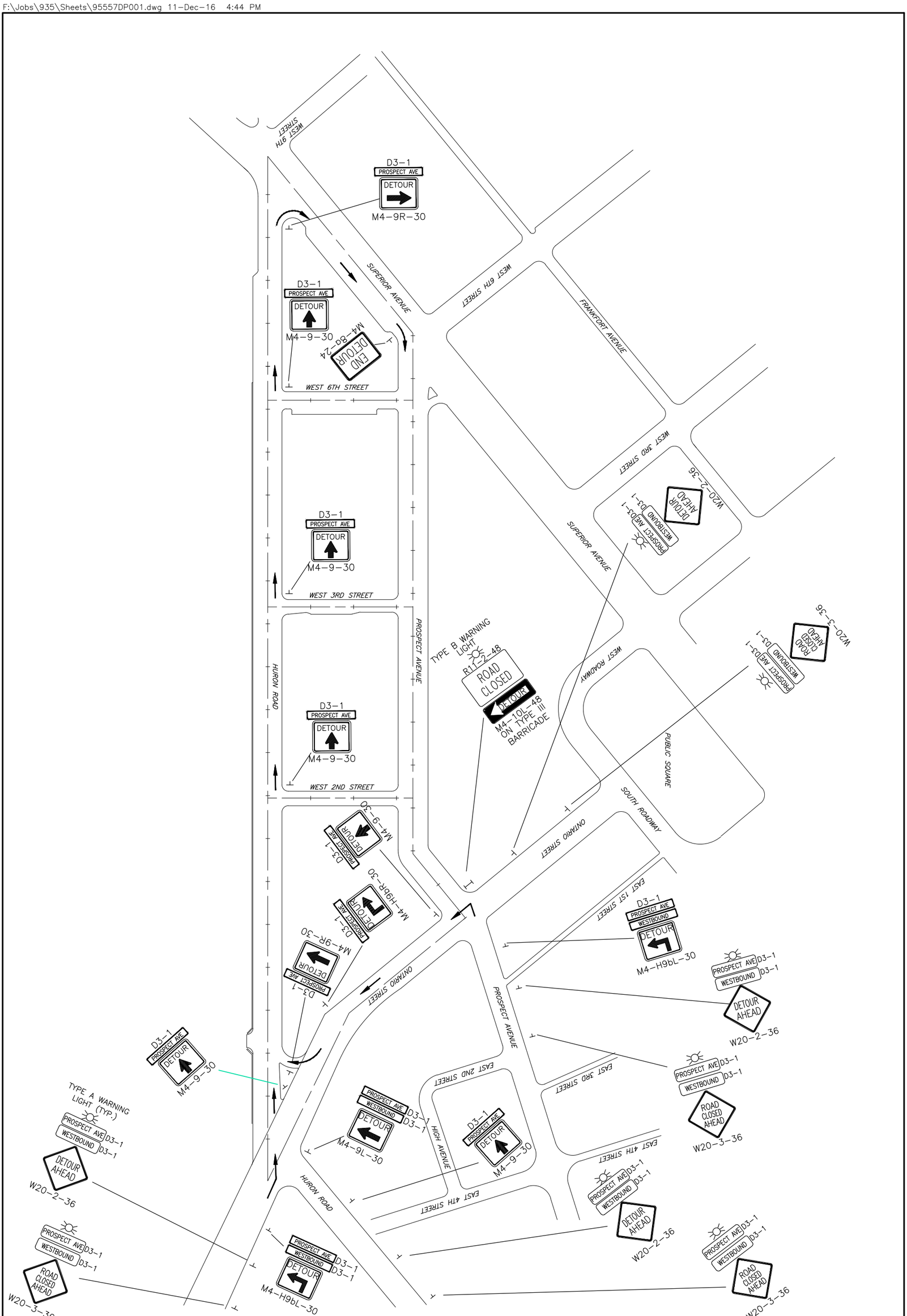

28 / 129	CUY-TOWER CITY BRIDGES	DETOUR PLAN - PROSPECT AVENUE	CALCULATED JEN / CHECKED RAB	0 50 100 200 HORIZONTAL SCALE IN FEET

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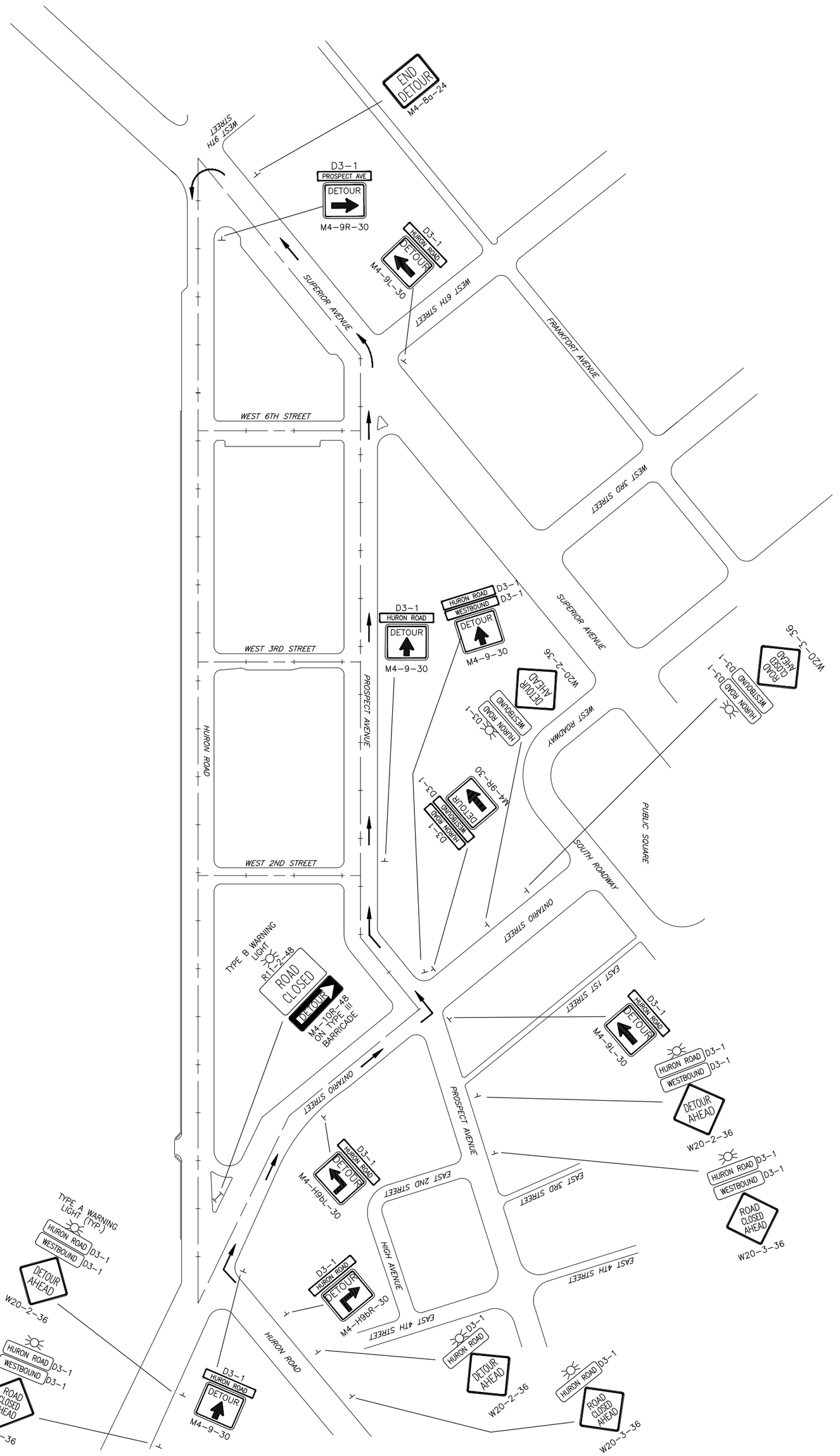

129 / 29	CUY-TOWER CITY BRIDGES	DETOUR PLAN - HURON ROAD	CALCULATED JEN / CHECKED RAB	0 50 100 200 HORIZONTAL SCALE IN FEET

GENERAL SUMMARY

SHEET NUMBER									PARTICIPATION		ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	AS PER PLAN SHEET NUMBERS
		18	19	20	21	41	43	46	49	01/MPO/BR	02/MPO/BR						
																ROADWAY	
						369	116	739	596	1820		202	23500	1,820	SY	WEARING COURSE REMOVED	
										10000*		SPECIAL	61199820	10000*	LB	MISCELLANEOUS METAL	103
																PAVEMENT	
						30	10	60	50	150		407	10000	150	GAL	TACK COAT	
						13	4	26	20	63		441	50000	63	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG64-22	
						18	6	36	29	89		441	50200	89	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448)	
						102				102		609	54001	102	SY	6" CONCRETE TRAFFIC ISLAND, AS PER PLAN	42, 49, 96, 97
																MAINTENANCE OF TRAFFIC	
					300					300		614	11110	300	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
												614	12420	LS	LS	DETOUR SIGNING	
										*30		614	13000	*30	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
										64		614	18600	64	SNMT	PORTABLE CHANGEABLE MESSAGE BOARD	
			0.56							0.56		614	20100	0.56	MILE	WORK ZONE LANE LINE, CLASS 1, 642 PAINT	
			0.54														
			0.65							0.54		614	20200	0.54	MILE	WORK ZONE LANE LINE, CLASS 1, 740.06, TYPE 1	
										0.65		614	22100	0.65	MILE	WORK ZONE EDGE LINE, CLASS 1, 642 PAINT	
			0.64							0.64		614	22200	0.64	MILE	WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE 1	
			250							250		614	23200	250	FT	WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT	
			420							420		614	23400	420	FT	WORK ZONE CHANNELIZING LINE, CLASS 1, 740.06, TYPE 1	
			320							320		614	24400	320	FT	WORK ZONE DOTTED LINE, CLASS 1, 740.06, TYPE 1	
			122							122		614	26200	122	FT	WORK ZONE STOP LINE, CLASS 1, 642 PAINT	
			74							74		614	26400	74	FT	WORK ZONE STOP LINE, CLASS 1, 740.06, TYPE 1	
			500							500		614	27200	500	FT	WORK ZONE CROSSWALK LINE, CLASS 1, 642 PAINT	
			805							805		614	27400	805	FT	WORK ZONE CROSSWALK LINE, CLASS 1, 740.06, TYPE 1	
			4							4		614	30200	4	EACH	WORK ZONE ARROW, CLASS 1, 642 PAINT	
			4							4		614	30400	4	EACH	WORK ZONE ARROW, CLASS 1, 740.06, TYPE 1	
			6700							6700		642	30000	6700	FT	REMOVAL OF PAVEMENT MARKING	
			27							27		642	30020	27	EACH	REMOVAL OF PAVEMENT MARKING	
										240		614	18040	240	DAY	MAINTAINING TRAFFIC, MISC.: PORTABLE TRAFFIC SIGNALS	21
																TRAFFIC CONTROL	
										156		630	02101	156	FT	GROUND MOUNTED SUPPORT, NO. 2 POST, AS PER PLAN	121
										89.5		630	03101	89.5	FT	GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN	121
										2		630	08004	2	FT	ONE WAY SUPPORT, NO. 3 POST	
										8		630	08600	8	EACH	SIGN POST REFLECTOR	121
										13		630	79500	13	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
										164		630	80100	164	SF	SIGN, FLAT SHEET	
										46		630	84900	46	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
										10		630	85100	10	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
										23		630	86003	23	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, AS PER PLAN	121
										3		630	86275	3	EACH	REMOVAL OF GROUND MOUNTED PIPE SUPPORT AND REERECTION, AS PER PLAN	121
											23	630	97700	23	EACH	SIGNING, MISC.: PARKING METER POST	121
										0.13		646	10000	0.13	MILE	EDGE LINE, 4"	
										1.59		646	10100	1.59	MILE	LANE LINE, 4"	
										0.71		646	10200	0.71	MILE	CENTER LINE	
										1,364		646	10300	1,364	FT	CHANNELIZING LINE, 8"	
										2,364		646	10301	2,364	FT	CHANNELIZING LINE, 8", AS PER PLAN	121
										473		646	10400	473	FT	STOP LINE	
										931		646	10500	931	FT	CROSSWALK LINE	
										1,975		646	10501	1,975	FT	CROSSWALK LINE, AS PER PLAN	121
										244		646	10600	244	FT	TRANSVERSE/DIAGONAL LINE	
										66		646	20300	66	EACH	LANE ARROW	
										486		646	20502	486	FT	DOTTED LINE, 4"	
										1		809	69101	1	EACH	STOP BAR RADAR DETECTION, AS PER PLAN	121
																FOR STRUCTURE QUANTITIES SEE SHEETS 32-36	

* CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER

CALCULATED AJM
CHECKED RAB

GENERAL SUMMARY

CUY-TOWER CITY BRIDGES

REVISION	DATE
1	6/8/2017

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GENERAL SUMMARY

SHEET NUMBER										PARTICIPATION			ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	AS PER PLAN SHEET NUMBERS
		18	19	20						01/MPO/BR	02/MPO/BR							
																	ITEMS OF WORK	
										50*			511	52100	50*	CY	CLASS QCFS CONCRETE	11
										LS			518	63300	LS	LS	STRUCTURE DRAINAGE, MISC.: INTERIM DRAINAGE	10
										50*			SPECIAL	69070100	50*	SF	ASBESTOS ABATEMENT AT SIDEWALKS	11
										100*			SPECIAL	69070120	100*	FT	ASBESTOS ABATEMENT (CONDUIT) INCIDENTALS	11
																		10
										LS			SPECIAL	69098400	LS	LS	PREMIUM ON SPECIAL OWNERS PROTECTIVE LIABILITY INSURANCE	10
										LS			SPECIAL	69098400	LS	LS	PREMIUM ON GCRTA RAILROAD'S PROTECTIVE LIABILITY INSURANCE	11
										LS			SPECIAL	69098400	LS	LS	RECORD DRAWINGS	11
										LS			SPECIAL	69098400	LS	LS	PRECONSTRUCTION VIDEOGRAPHY	11
										200			SPECIAL	69098600	200	HR	SECURITY GUARD	11
										300*			SPECIAL	69098600	300*	HRS	ASBESTOS ABATEMENT, REMOVAL OF MISCELLANEOUS HAZARDOUS MATERIALS	11
																	INCIDENTALS	
										LS			108	10000	LS	LS	CPM PROGRESS SCHEDULE	
										LS			614	11000	LS	LS	MAINTAINING TRAFFIC	19
										30			619	16021	30	MONTH	FIELD OFFICE, TYPE C, AS PER PLAN	17
										LS			623	10001	LS	LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	17
										LS			624	10000	LS	LS	MOBILIZATION	

* CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER

CALCULATED AJM
CHECKED RAB

GENERAL SUMMARY

CUY-TOWER CITY BRIDGES

31
129

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PROSPECT AVENUE – CLEVELAND BRIDGE NUMBER 4028M

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	PARTICIPATION 01/MPO/BR	PARTICIPATION 02/MPO/BR		TOTAL	UNIT	DESCRIPTION	ABUTMENT	SUPERSTRUCTURE	GENERAL	CONTINGENCY	AS PER PLAN SHEET NUMBERS
STRUCTURES												
202	11301	89			89	CY	CONCRETE PORTIONS OF STRUCTURE REMOVED, AS PER PLAN		79		*10	12
202	11401	2418			2418	LB	STRUCTURAL STEEL PORTIONS OF STRUCTURE REMOVED, AS PER PLAN		1950		*468	12
202	30800		24		24	SY	TRAFFIC ISLAND REMOVED		24			
202	30900	5			5	SY	PORTION OF TRAFFIC ISLAND REMOVED		5			
202	98000		LS		LS	LS	REMOVAL MISC.: MISCELLANEOUS ITEMS			LS		13
202	98100	12			12	EACH	REMOVAL MISC.: SCUPPER CLEANING		12			103
202	98200	614			614	FT	REMOVAL MISC.: DOWNSPOUT CLEANED AND TELEVISED		614			103
509	10000	14724			14724	LB	EPOXY COATED REINFORCING STEEL		12724		*2000	
509	20001	850			850	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN		700		*150	13
510	10000	212			212	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT		212			
511	21522	115			115	CY	CLASS QC2 CONCRETE, WITH QC/QA, SUPERSTRUCTURE		95		*20	
511	81100	2456			2456	FT	CONCRETE, MISC.: WATERSTOPS		2456			13–14
512	10000	1204			1204	SY	SEALING OF CONCRETE SURFACES (EPOXY URETHANE)	949	255			
512	10001	164			164	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)	164				13, 120
512	10050	3682			3682	SY	SEALING OF CONCRETE SURFACES (NON–EPOXY)		3682			
512	10301	5969			5969	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN		5969			13
512	10400	5545			5545	SY	TREATING OF CONCRETE BRIDGE DECKS WITH SRS		5545			13
512	10600	141			141	FT	CONCRETE REPAIR BY EPOXY INJECTION	141				
512	44400	4273			4273	SY	TYPE B WATERPROOFING		4023		*250	
513	10201	1692			1692	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN		1392		*300	14
513	10260	707			707	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3		707			
513	95020	LS			LS	LS	STRUCTURAL STEEL MISC.: STEEL INSPECTION AT NON–ACCESSIBLE LOCATIONS					13
514	00051	3222			3222	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN		3222			14
514	00057	3120			3120	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, AS PER PLAN		3120			14
514	00060	3222			3222	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT		3222			
514	00066	3222			3222	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT		3222			
516	10000	9			9	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL		9			16
516	12201	816			816	FT	STRUCTURAL STEEL EXPANSION JOINT, ROADWAY, AS PER PLAN		816			14–15
516	12201	409			409	FT	STRUCTURAL STEEL EXPANSION JOINT, SIDEWALK, AS PER PLAN		409			14–15
516	13000	43			43	SF	1/4" PREFORMED EXPANSION JOINT FILLER		43			
SPECIAL	51614010	507			507	FT	POURED POLYURETHANE JOINT SEAL		507			45
516	14600	381			381	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: COVER PLATE FOR SIDEWALK		381			60
516	14600	97			97	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: SILICONE SEAL		97			16–17
516	47001	LS			LS	LS	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN		LS			16
518	12201	2			2	EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN		2			103
518	12500	2			2	EACH	SCUPPER, MISC.: SCUPPER REHABILITATION		2			103
518	51100	18			18	FT	8" PIPE DOWNSPOUT, INCLUDING SPECIALS		18			
SPECIAL	51910000	50			50	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO–SILICA MODIFIED CONCRETE				*50	17
519	11101	862			862	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	712			*150	17
SPECIAL	51911600	200			200	SF	PATCHING CONCRETE STRUCTURE, BRIDGE DECKS WITH QC2 CONCRETE				*200	17
SPECIAL	53000200	LS			LS	LS	STRUCTURES; TEMPORARY FALSEWORK AND PROTECTIVE STRUCTURES			LS		10
SPECIAL	53000200	LS			LS	LS	STRUCTURES; REMOVAL AND REPLACEMENT OF CEILING TILE FOR UNDERSIDE BRIDGE ACCESS		LS			18
607	98000	8			8	FT	FENCE, MISC.: EXISTING FENCE REPAIRS		8			17
608	52001	600			600	SF	CURB RAMP, AS PER PLAN		600			17
609	54001	30	24		54	SY	6" CONCRETE TRAFFIC ISLAND, AS PER PLAN		54			96
SPECIAL	69098100	1228			1228	FT	ROUND POLY FOAM, 3 1/2" THICK		1228			15
847	10000	6576			6576	SY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, 2 7/8" THICK		6576			
847	10001	3967			3967	SY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN, 4 1/4" THICK		3967			17
847	20001	50			50	CY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, (VARIABLE THICKNESS) MATERIAL ONLY, AS PER PLAN		50			17
847	30000	LS			LS	LS	TEST SLAB			LS		
847	30301	6613			6613	SY	WEARING COURSE REMOVED, ASPHALT, AS PER PLAN		6613			17
847	30401	4023			4023	SY	EXISTING CONCRETE OVERLAY, REMOVED, AS PER PLAN		4023			17
847	50000	50			50	SY	HAND CHIPPING				*50	

* CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER

CALCULATED AJM
CHECKED RAB

ESTIMATED QUANTITIES - PROSPECT AVENUE

CUY-TOWER CITY BRIDGES

REVISION	DATE
1	6/8/2017

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HURON ROAD – CLEVELAND BRIDGE NUMBER 4023M

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	PARTICIPATION 01/MPO/BR	PARTICIPATION 02/MPO/BR	TOTAL	UNIT	DESCRIPTION	ABUTMENT	SUPERSTRUCTURE	GENERAL	CONTINGENCY	AS PER PLAN SHEET NUMBERS
STRUCTURES											
202	11301	108		108	CY	CONCRETE PORTIONS OF STRUCTURE REMOVED, AS PER PLAN		98		*10	12
202	11401	868		868	LB	STRUCTURAL STEEL PORTIONS OF STRUCTURE REMOVED, AS PER PLAN		700		*168	12
202	30800	62		62	SY	TRAFFIC ISLAND REMOVED		62			
202	98200	1503		1503	FT	REMOVAL MISC.: REMOVE STEEL CURB PLATE		1503			
202	98000		LS	LS	LS	REMOVAL MISC.: MISCELLANEOUS ITEMS		LS			13
202	98100	16		16	EACH	REMOVAL MISC.: SCUPPER CLEANING		16			103
202	98200	893		893	FT	REMOVAL MISC.: DOWNSPOUT CLEANED AND TELEVISED		893			103
509	10000	22050		22050	LB	EPOXY COATED REINFORCING STEEL		20550		*1500	
509	20001	744		744	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN		600		*144	13
510	10000	880		880	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT		880			
511	21522	168		168	CY	CLASS QC2 CONCRETE, WITH QC/QA, SUPERSTRUCTURE		148		*20	
511	81100	3186		3186	FT	CONCRETE, MISC.: WATERSTOPS		3186			13–14
512	10000	2552		2552	SY	SEALING OF CONCRETE SURFACES (EPOXY URETHANE)	810	1742			
512	10001	117		117	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)	117				13, 120
512	10050	2645		2645	SY	SEALING OF CONCRETE SURFACES (NON–EPOXY)		2645			
512	10301	15037		15037	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN		15037			13
512	10400	4469		4469	SY	TREATING OF CONCRETE BRIDGE DECKS WITH SRS		4469			13
512	10600	129		129	FT	CONCRETE REPAIR BY EPOXY INJECTION	129				
512	44400	2754		2754	SY	TYPE B WATERPROOFING		2754			
513	10201	599		599	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN		499		*100	14
513	10260	80		80	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3		80			
513	95020	LS		LS	LS	STRUCTURAL STEEL, MISC.: STEEL INSPECTION AT NON–ACCESSIBLE LOCATIONS		LS			13
513	95030	29		29	EACH	STRUCTURAL STEEL, MISC.: RIVET REPLACEMENT		24		*5	14
514	00051	4477		4477	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN		4447			14
514	00057	4458		4458	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, AS PER PLAN		4458			14
514	00060	4477		4477	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT		4477			
514	00066	4477		4477	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT		4477			
516	10000	48		48	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL		48			16
516	12201	1207		1207	FT	STRUCTURAL STEEL EXPANSION JOINT, ROADWAY, AS PER PLAN		1207			14–15
516	12201	357		357	FT	STRUCTURAL STEEL EXPANSION JOINT, SIDEWALK, AS PER PLAN		357			14–15
516	13000	30		30	SF	1/4" PREFORMED EXPANSION JOINT FILLER		30			
SPECIAL	51614010	360		360	FT	POURED POLYURETHANE JOINT SEAL		360			45
516	14600	323		323	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: COVER PLATE FOR SIDEWALK		323			60
516	14600	75		75	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: SILICONE SEAL		75			16–17
516	14600	28		28	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: PREFORMED COMPRESSION SEAL		28			16
516	47001	LS		LS	LS	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN		LS			16
518	12500	2		2	EACH	SCUPPER, MISC.: SCUPPER REHABILITATION		2			103
518	51100	40		40	FT	8" PIPE DOWNSPOUT, INCLUDING SPECIALS		40			
SPECIAL	51910000	50		50	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO–SILICA MODIFIED CONCRETE				*50	17
519	11101	716		716	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	916			*200	17
SPECIAL	51911600	200		200	SF	PATCHING CONCRETE STRUCTURE, BRIDGE DECKS WITH QC2 CONCRETE				*200	17
SPECIAL	53000200	LS		LS	LS	STRUCTURES; TEMPORARY FALSEWORK AND PROTECTIVE STRUCTURES			LS		10
SPECIAL	53000200	LS		LS	LS	STRUCTURES; REMOVAL AND REPLACEMENT OF CEILING TILE FOR UNDERSIDE BRIDGE ACCESS			LS		18
607	98000	241		241	FT	FENCE, MISC.: NEW FENCE TO MATCH EXISTING		241			17
607	98000	56		56	FT	FENCE, MISC.: EXISTING FENCE REPAIRS		56			17
608	52001	280		280	SF	CURB RAMP, AS PER PLAN		280			17
609	54001	62		62	SY	6" CONCRETE TRAFFIC ISLAND, AS PER PLAN		62			96
SPECIAL	69098100	1564		1564	FT	ROUND POLY FOAM, 3 1/2" THICK		1564			15
847	10000	9113		9113	SY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, 2 7/8" THICK		9113			
847	10001	2755		2755	SY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN, 4" THICK		2755			17
847	20001	62		62	CY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, (VARIABLE THICKNESS) MATERIAL ONLY, AS PER PLAN		62			17
847	30000	LS		LS	LS	TEST SLAB			LS		
847	30301	9116		9116	SY	WEARING COURSE REMOVED, ASPHALT, AS PER PLAN		9116			17
847	30401	2783		2783	SY	EXISTING CONCRETE OVERLAY, REMOVED, AS PER PLAN		2783			17
847	50000	50		50	SY	HAND CHIPPING				*50	

* CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER

CALCULATED AJM
CHECKED RAB

ESTIMATED QUANTITIES - HURON ROAD

CUY-TOWER CITY BRIDGES

REVISION	DATE
1	6/8/2017

33
129

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WEST 2ND STREET – CLEVELAND BRIDGE NUMBER 4033M

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	PARTICIPATION 01/MPO/BR	PARTICIPATION 02/MPO/BR		TOTAL	UNIT	DESCRIPTION	ABUTMENT	SUPERSTRUCTURE	GENERAL	CONTINGENCY	AS PER PLAN SHEET NUMBERS
STRUCTURES												
202	11301		2		2	CY	CONCRETE PORTIONS OF STRUCTURE REMOVED, AS PER PLAN			2		12
202	98100	4			4	EACH	REMOVAL MISC.: SCUPPER CLEANING		4			103
202	98200	174			174	FT	REMOVAL MISC.: DOWNSPOUT CLEANED AND TELEVISED		174			103
509	10000	1064			1064	LB	EPOXY COATED REINFORCING STEEL		1014		*50	
509	20001	50			50	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN					13
511	21522	7			7	CY	CLASS QC2 CONCRETE, WITH QC/QA, SUPERSTRUCTURE		7			
511	81100	236			236	FT	CONCRETE, MISC.: WATERSTOPS		236			13–14
512	10050	522			522	SY	SEALING OF CONCRETE SURFACES (NON–EPOXY)		522			
512	10301	1569			1569	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN		1569			13
512	44400	569			569	SY	TYPE B WATERPROOFING		569			
513	10201	500			500	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN				*500	14
513	95020	LS			LS	LS	STRUCTURAL STEEL, MISC.: STEEL INSPECTION AT NON–ACCESSIBLE LOCATIONS		LS			13
514	00051	80			80	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN		80			14
514	00057	80			80	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, AS PER PLAN		80			14
514	00060	80			80	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT		80			
514	00066	80			80	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT		80			
516	12201	70			70	FT	STRUCTURAL STEEL EXPANSION JOINT, ROADWAY, AS PER PLAN		70			14–15
516	12201	48			48	FT	STRUCTURAL STEEL EXPANSION JOINT, SIDEWALK, AS PER PLAN		48			14–15
516	13000	2			2	SF	1/4" PREFORMED EXPANSION JOINT FILLER		2			
SPECIAL	51614010	24			24	FT	POURED POLYURETHANE JOINT SEAL		24			45
516	14600	43			43	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: COVER PLATE FOR SIDEWALK		43			60
516	14600	9			9	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: SILICONE SEAL		9			16–17
516	47001	LS			LS	LS	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN		LS			16
SPECIAL	51910000	50			50	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO–SILICA MODIFIED CONCRETE				*50	17
SPECIAL	51911600	200			200	SF	PATCHING CONCRETE STRUCTURE, BRIDGE DECKS WITH QC2 CONCRETE				*200	17
SPECIAL	53000200	LS			LS	LS	STRUCTURES; TEMPORARY FALSEWORK AND PROTECTIVE STRUCTURES		LS			10
SPECIAL	53000200	LS			LS	LS	STRUCTURES; REMOVAL AND REPLACEMENT OF CEILING TILE FOR UNDERSIDE BRIDGE ACCESS		LS			18
608	52001	80			80	SF	CURB RAMP, AS PER PLAN		80			17
SPECIAL	69098100	118			118	FT	ROUND POLY FOAM, 3 1/2" THICK		118			15
847	10000	916			916	SY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, 2 7/8" THICK		916			
847	10001	560			560	SY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN, 4 1/4" THICK		560			17
847	20001	11			11	CY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, (VARIABLE THICKNESS) MATERIAL ONLY, AS PER PLAN		11			17
847	30000	LS			LS	LS	TEST SLAB			LS		
847	30301	918			918	SY	WEARING COURSE REMOVED, ASPHALT, AS PER PLAN		918			17
847	30401	563			563	SY	EXISTING CONCRETE OVERLAY, REMOVED, AS PER PLAN		563			17
847	50000	50			50	SY	HAND CHIPPING				*50	

* CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER

CALCULATED AJM
CHECKED RAB

ESTIMATED QUANTITIES – WEST 2nd STREET

CUY–TOWER CITY BRIDGES

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WEST 3RD STREET – CLEVELAND BRIDGE NUMBER 4038M

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	PARTICIPATION 01/MPO/BR	PARTICIPATION 02/MPO/BR		TOTAL	UNIT	DESCRIPTION	ABUTMENT	SUPERSTRUCTURE	GENERAL	CONTINGENCY	AS PER PLAN SHEET NUMBERS
STRUCTURES												
202	11301		2		2	CY	CONCRETE PORTIONS OF STRUCTURE REMOVED, AS PER PLAN			2		12
202	98100	4			4	EACH	REMOVAL MISC.: SCUPPER CLEANING		4			103
202	98200	155			155	FT	REMOVAL MISC.: DOWNSPOUT CLEANED AND TELEVISED		155			103
509	10000	1178			1178	LB	EPOXY COATED REINFORCING STEEL		1178			
509	20001	550			550	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN				*550	13
511	21522	16			16	CY	CLASS QC2 CONCRETE, WITH QC/QA, SUPERSTRUCTURE		16			
511	81100	236			236	FT	CONCRETE, MISC.: WATERSTOPS		236			13–14
512	10050	470			470	SY	SEALING OF CONCRETE SURFACES (NON–EPOXY)		470			
512	10301	1627			1627	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN, AS PER PLAN		1627			13
512	44400	518			518	SY	TYPE B WATERPROOFING		518			
513	10201	500			500	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN				*500	14
513	95020	LS			LS	LS	STRUCTURAL STEEL MISC.: STEEL INSPECTION AT NON–ACCESSIBLE LOCATIONS		LS			13
516	12201	70			70	FT	STRUCTURAL STEEL EXPANSION JOINT, ROADWAY, AS PER PLAN		70			14–15
516	12201	45			45	FT	STRUCTURAL STEEL EXPANSION JOINT, SIDEWALK, AS PER PLAN		45			14–15
516	13000	1			1	SF	1/4" PREFORMED EXPANSION JOINT FILLER		1			
SPECIAL	51614010	11			11	FT	POURED POLYURTETHANE JOINT SEAL		11			45
516	14600	45			45	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: COVER PLATE FOR SIDEWALK		45			60
516	14600	9			9	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: SILICONE SEAL		9			16–17
516	47001	LS			LS	LS	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN		LS			16
518	12500	3			3	EACH	SCUPPER, MISC.: SCUPPER REHABILITATION		3			103
518	51100	24			24	FT	8" PIPE DOWNSPOUT, INCLUDING SPECIALS		24			
SPECIAL	51910000	50			50	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO–SILICA MODIFIED CONCRETE				*50	17
SPECIAL	51911600	200			200	SF	PATCHING CONCRETE STRUCTURE, BRIDGE DECKS WITH QC2 CONCRETE				*200	17
SPECIAL	53000200	LS			LS	LS	STRUCTURES; TEMPORARY FALSEWORK AND PROTECTIVE STRUCTURES		LS			10
SPECIAL	53000200	LS			LS	LS	STRUCTURES; REMOVAL AND REPLACEMENT OF CEILING TILE FOR UNDERSIDE BRIDGE ACCESS		LS			18
608	52001	40			40	SF	CURB RAMP, AS PER PLAN		40			17
SPECIAL	69098100	115			115	FT	ROUND POLY FOAM, 3 1/2" THICK		115			15
847	10000	970			970	SY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, 2 7/8" THICK		970			
847	10001	509			509	SY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN, 4" THICK		509			17
847	20001	11			11	CY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, (VARIABLE THICKNESS) MATERIAL ONLY, AS PER PLAN		11			17
847	30000	LS			LS	LS	TEST SLAB		LS			
847	30301	972			972	SY	WEARING COURSE REMOVED, ASPHALT, AS PER PLAN		972			17
847	30401	512			512	SY	EXISTING CONCRETE OVERLAY, REMOVED, AS PER PLAN		512			17
847	50000	50			50	SY	HAND CHIPPING				*50	

* CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER

CALCULATED AJM
CHECKED RAB

ESTIMATED QUANTITIES – WEST 3rd STREET

CUY–TOWER CITY BRIDGES

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WEST 6TH STREET – CLEVELAND BRIDGE NUMBER 4039M

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	PARTICIPATION 01/MPO/BR	PARTICIPATION 02/MPO/BR		TOTAL	UNIT	DESCRIPTION	ABUTMENT	SUPERSTRUCTURE	GENERAL	CONTINGENCY	AS PER PLAN SHEET NUMBERS
STRUCTURES												
202	11301		2		2	CY	CONCRETE PORTIONS OF STRUCTURE REMOVED, AS PER PLAN			2		12
202	98100	2			2	EACH	REMOVAL MISC.: SCUPPER CLEANING		2			103
202	98200	69			69	FT	REMOVAL MISC.: DOWNSPOUT CLEANED AND TELEVISED		69			103
509	10000	1386			1386	LB	EPOXY COATED REINFORCING STEEL		1386			
509	20001	200			200	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN				*200	13
511	21522	14			14	CY	CLASS QC2 CONCRETE, WITH QC/QA, SUPERSTRUCTURE		14			
511	81100	280			280	FT	CONCRETE, MISC.: WATERSTOPS		280			13–14
512	10050	600			600	SY	SEALING OF CONCRETE SURFACES (NON–EPOXY)		600			
512	10400	1787			1787	SY	TREATING OF CONCRETE BRIDGE DECKS WITH SRS		1787			13
512	44400	643			643	SY	TYPE B WATERPROOFING		643			
513	10201	500			500	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN				*500	14
513	95020	LS			LS	LS	STRUCTURAL STEEL MISC.: STEEL INSPECTION AT NON–ACCESSIBLE LOCATIONS		LS			13
514	00051	792			792	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN		792			14
514	00057	792			792	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, AS PER PLAN		792			14
514	00060	792			792	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT		792			
514	00066	792			792	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT		792			
516	12201	80			80	FT	STRUCTURAL STEEL EXPANSION JOINT, ROADWAY, AS PER PLAN		80			14–15
516	12201	58			58	FT	STRUCTURAL STEEL EXPANSION JOINT, SIDEWALK, AS PER PLAN		58			14–15
516	13000	4			4	SF	1/4" PREFORMED EXPANSION JOINT FILLER		4			
SPECIAL	51614010	39			39	FT	POURED POLYURETHANE JOINT SEAL		39			45
516	14600	58			58	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: COVER PLATE FOR SIDEWALK		58			60
516	14600	199			199	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: SILICONE SEAL		199			16–17
516	47001	LS			LS	LS	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN		LS			16
518	12500	2			2	EACH	SCUPPER, MISC.: SCUPPER REHABILITATION		2			103
518	51100	16			16	FT	8" PIPE DOWNSPOUT, INCLUDING SPECIALS		16			
SPECIAL	51910000	50			50	SY	PATCHING CONCRETE BRIDGE DECK OVERLAY WITH MICRO–SILICA MODIFIED CONCRETE				*50	17
SPECIAL	53000200	LS			LS	LS	STRUCTURES; TEMPORARY FALSEWORK AND PROTECTIVE STRUCTURES		LS			10
SPECIAL	53000200	LS			LS	LS	STRUCTURES; REMOVAL AND REPLACEMENT OF CEILING TILE FOR UNDERSIDE BRIDGE ACCESS					18
608	52001	40			40	SF	CURB RAMP, AS PER PLAN		40			17
SPECIAL	69098100	138			138	FT	ROUND POLY FOAM, 3 1/2" THICK		138			15
847	10001	634			634	SY	MICRO–SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN, 4" THICK		634			17
847	30000	LS			LS	LS	TEST SLAB		LS			
847	30401	636			636	SY	EXISTING CONCRETE OVERLAY, REMOVED, AS PER PLAN		636			17
847	50000	50			50	SY	HAND CHIPPING				*50	

* CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER

CALCULATED AJM
CHECKED RAB

ESTIMATED QUANTITIES – WEST 6th STREET

CUY–TOWER CITY BRIDGES

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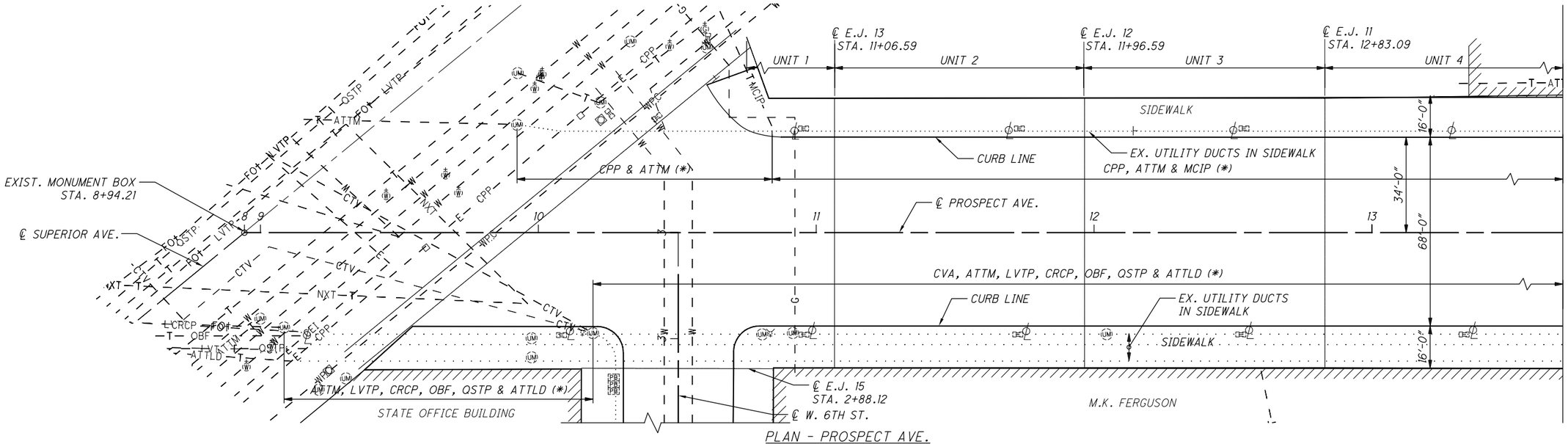
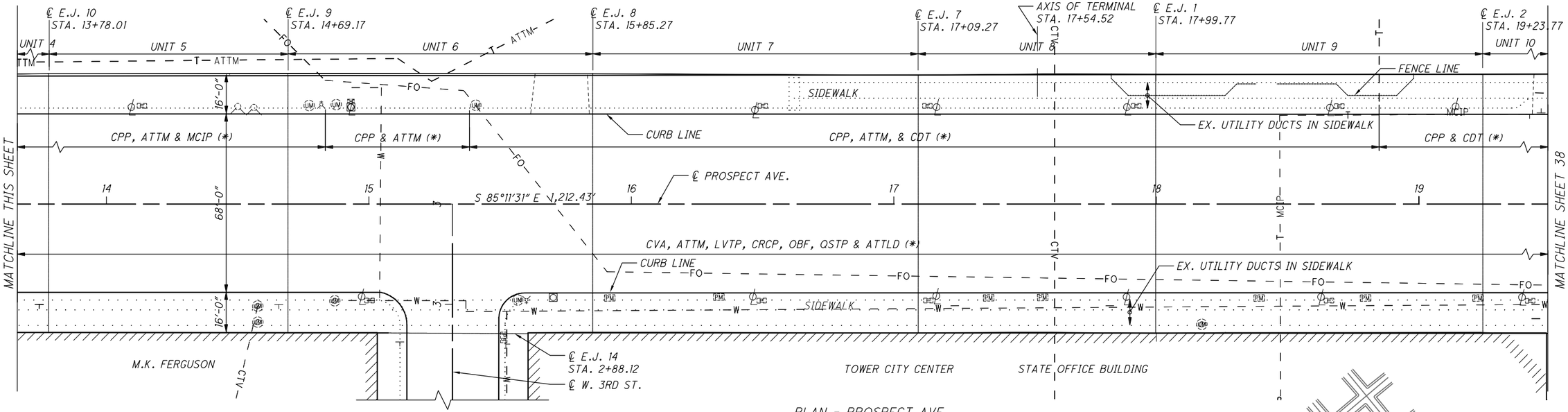


PLAN - PROSPECT AVE.



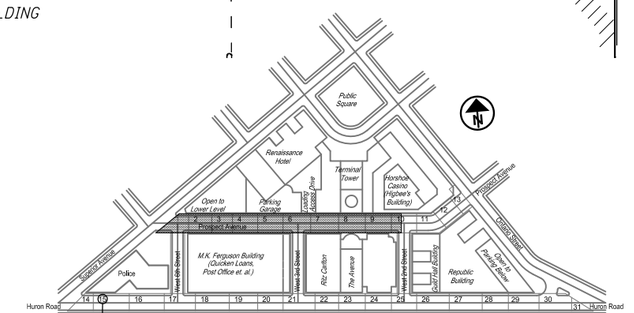
PLAN - PROSPECT AVE.

(*) UTILITIES IN SIDEWALK DUCTS

LEGEND

—E—CPP	CLEVELAND PUBLIC POWER (CPP)
—E—CEI	ILLUMINATING COMPANY (CEI)
—T—MCIP	MCI/VERIZON (MCIP)
—W—	CLEVELAND WATER (CWDP)
—LVTP—FO†—	LEVEL 3 COMMUNICATIONS (LVTP)
—CRCP—FO†—	CROWN CASTLE (CRCP)
—G—	DOMINION EAST OHIO (DEO)
—O—	CLEVELAND THERMAL (CLTP)
—T—CDT	CLEVELAND TRAFFIC (CDT)
—CTV—	TIME WARNER (CVA)
—T—ATTM	AT&T LNS/METRO
—T—ATTLD	AT&T LONG DISTANCE
—OBF —FO†—	AT&T OHIO
—T—NXT	XO COMMUNICATIONS (NXT)
—T—QSTP	CENTURY LINK (QSTP)
—FO—	ZAYO FIBER (ZAYO)
—WPC —	CLEVELAND WATER POLLUTION CONTROL (WPC)

- EXISTING MANHOLE
- EXISTING LIGHT POLE
- EXISTING PARKING METER
- EXISTING PAPER BOX
- EXISTING PULL BOX
- EXISTING FIRE HYDRANT
- EXISTING TRASH BIN



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET

CALCULATED EIW
CHECKED SMK

SCHEMATIC UTILITY PLAN
PROSPECT AVENUE

CUY - TOWER CITY BRIDGES

37
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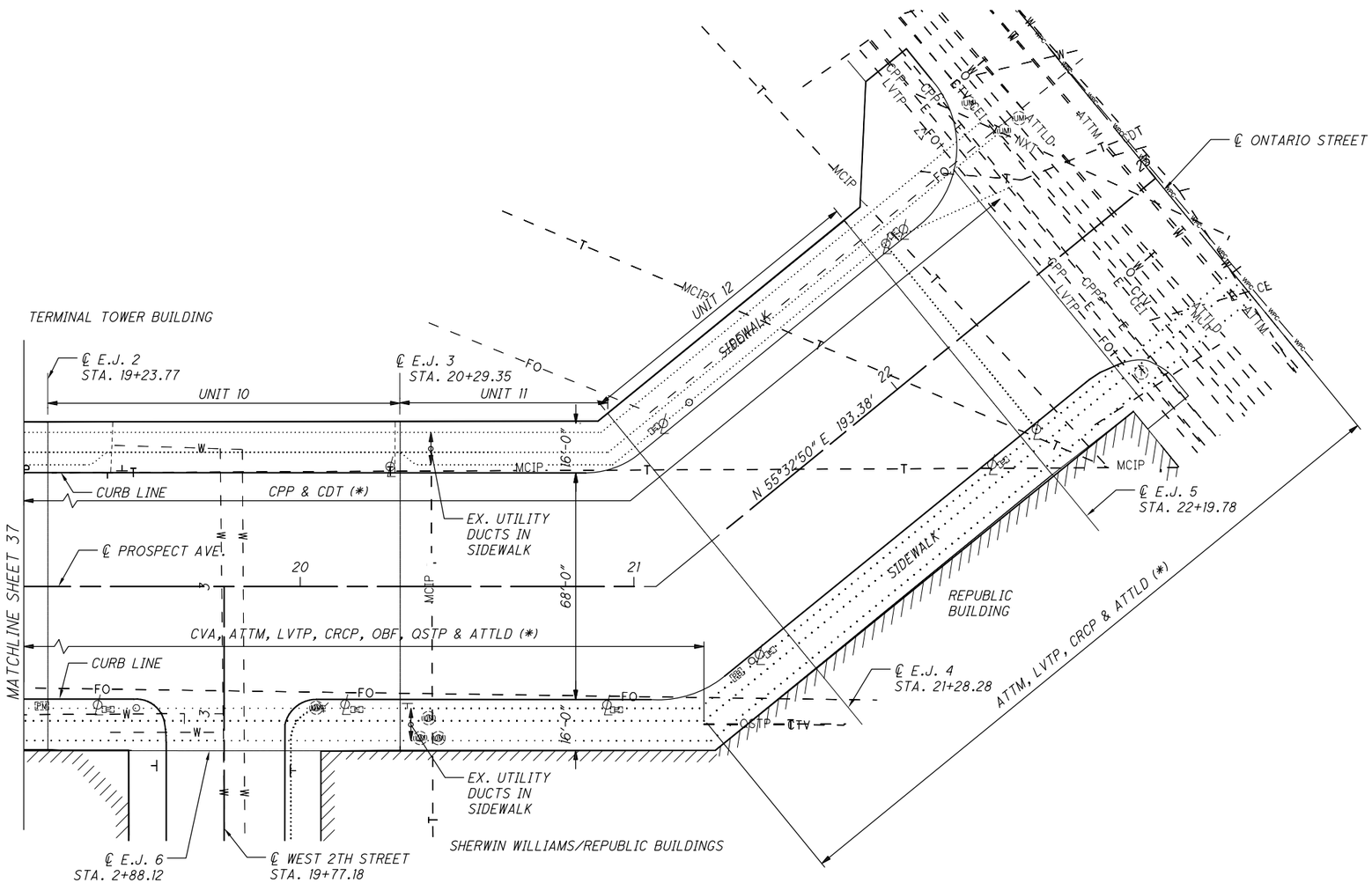
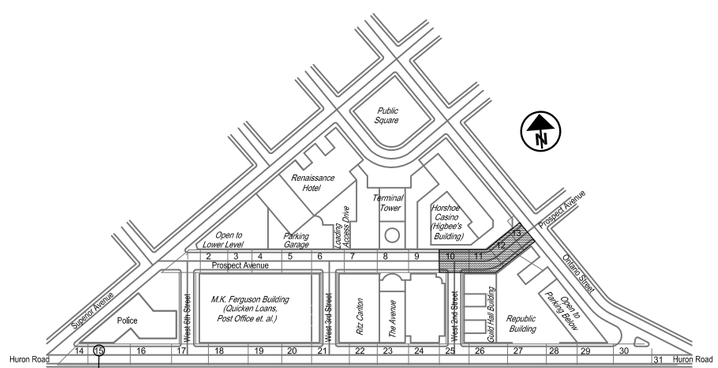


PLAN - PROSPECT AVE.

(*) UTILITIES IN SIDEWALK DUCTS



KEY PLAN
NOT TO SCALE

LEGEND

— — — —E—CPP	CLEVELAND PUBLIC POWER (CPP)
— — — —E—CEI	ILLUMINATING COMPANY (CEI)
— — — —T—MCIP	MCI/VERIZON (MCIP)
— — — —W— —	CLEVELAND WATER (CWDP)
— — —LVTP —FO†—	LEVEL 3 COMMUNICATIONS (LVTP)
— — —CRCP—FO†—	CROWN CASTLE (CRCP)
— — — —G— —	DOMINION EAST OHIO (DEO)
— — — —O— —	CLEVELAND THERMAL (CLTP)
— — — —T—CDT	CLEVELAND TRAFFIC (CDT)
— — — —CTV— —	TIME WARNER (CVA)
— — — —T—ATTM	AT&T LNS/METRO
— — — —T—ATTLD	AT&T LONG DISTANCE
— — —OBF —FO†—	AT&T OHIO
— — — —T—NXT	XO COMMUNICATIONS (NXT)
— — — —T—QSTP	CENTURY LINK (QSTP)
— — — — —FO—	ZAYO FIBER (ZAYO)
— — — —WPC —	CLEVELAND WATER POLLUTION CONTROL (WPC)

- EXISTING MANHOLE
- EXISTING LIGHT POLE
- EXISTING PARKING METER
- EXISTING PAPER BOX
- EXISTING PULL BOX
- EXISTING FIRE HYDRANT
- EXISTING TRASH BIN

HORIZONTAL SCALE IN FEET

CALCULATED EIW
CHECKED SMK

SCHEMATIC UTILITY PLAN
PROSPECT AVENUE

CUY - TOWER CITY BRIDGES

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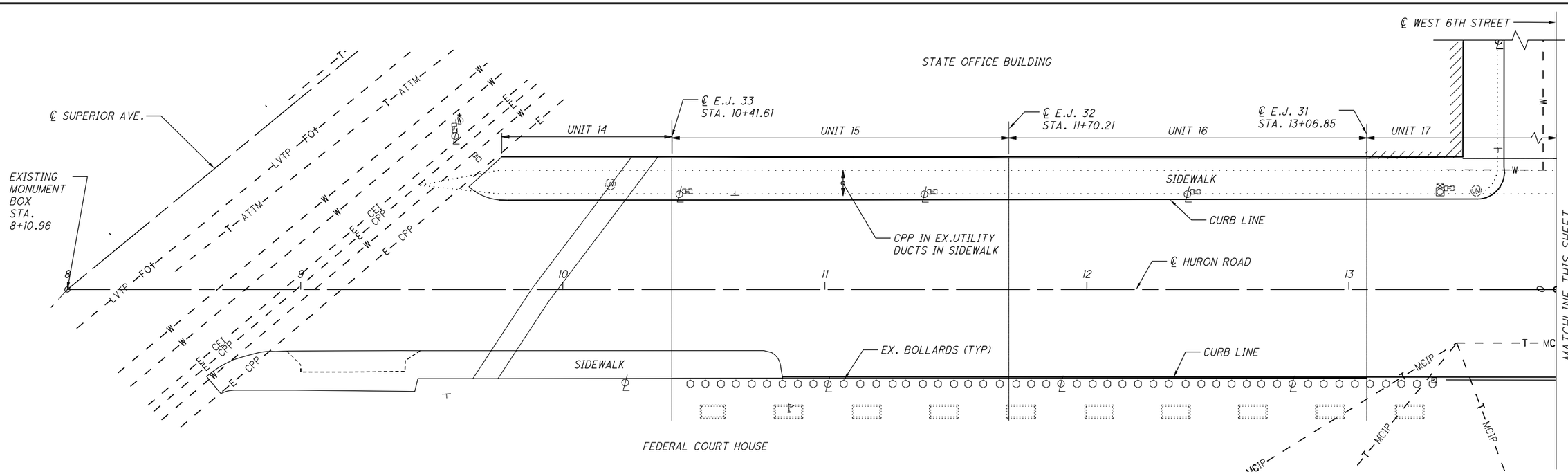
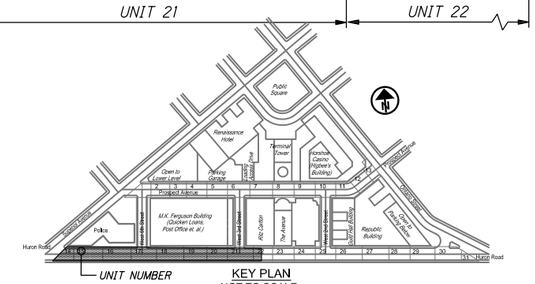


LEGEND

—E—CPP	CLEVELAND PUBLIC POWER (CPP)
—E—CEI	ILLUMINATING COMPANY (CEI)
—T—MCIP	MCI/VERIZON (MCIP)
—W—	CLEVELAND WATER (CWDP)
—LVTP—FO†—	LEVEL 3 COMMUNICATIONS (LVTP)
—CRCP—FO†—	CROWN CASTLE (CRCP)
—G—	DOMINION EAST OHIO (DEO)
—O—	CLEVELAND THERMAL (CLTP)
—T—CDT	CLEVELAND TRAFFIC (CDT)
—CTV—	TIME WARNER (CVA)
—T—ATTM	AT&T LNS/METRO
—T—ATTLD	AT&T LONG DISTANCE
—OBF—FO†—	AT&T OHIO
—T—NXT	XO COMMUNICATIONS (NXT)
—T—QSTP	CENTURY LINK (QSTP)
—FO—	ZAYO FIBER (ZAYO)
—WPC—	CLEVELAND WATER POLLUTION CONTROL (WPC)

PLAN - HURON ROAD

- EXISTING MANHOLE
- EXISTING LIGHT POLE
- EXISTING PARKING METER
- EXISTING PAPER BOX
- EXISTING PULL BOX
- EXISTING FIRE HYDRANT
- EXISTING TRASH BIN

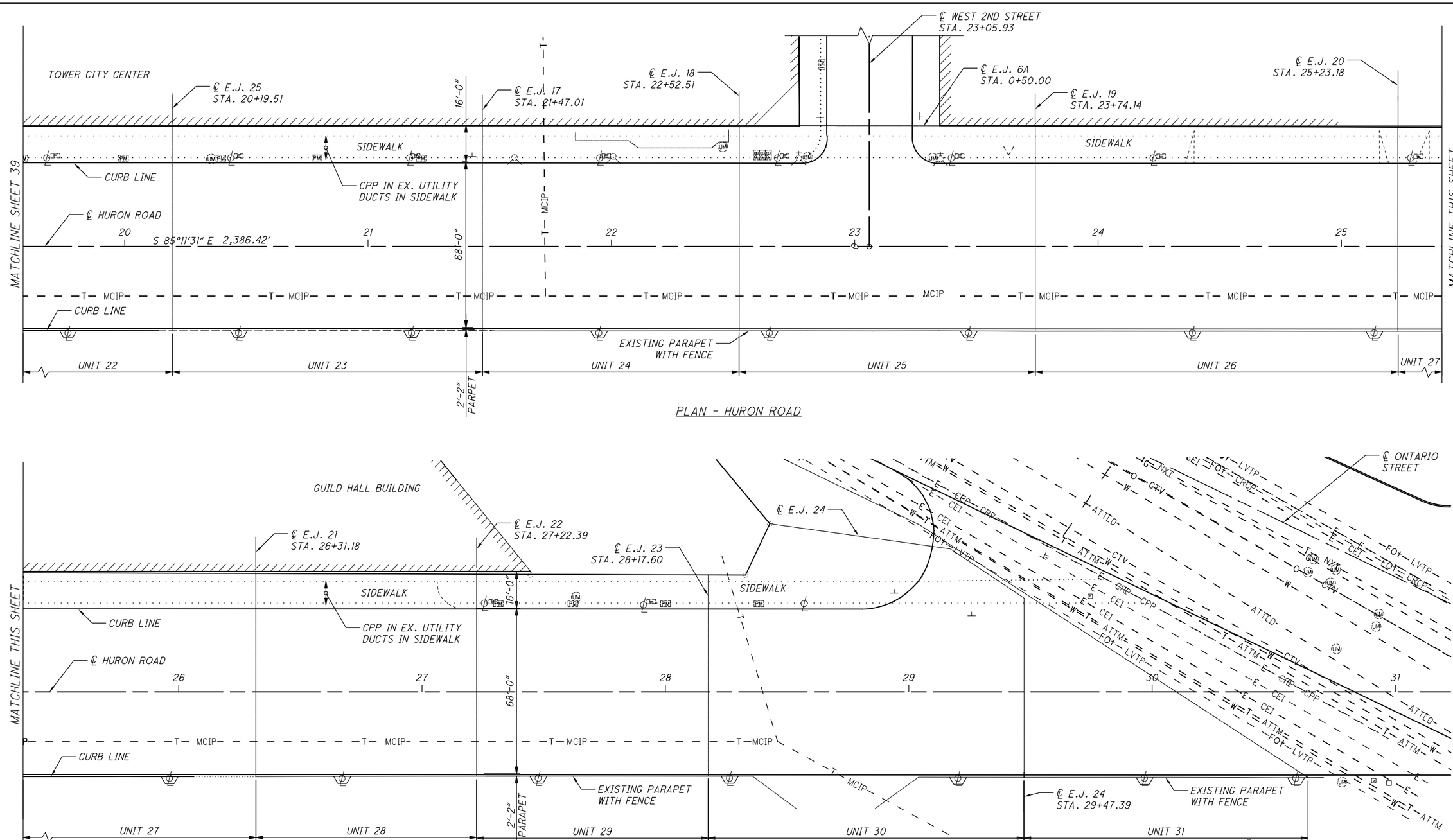


HORIZONTAL SCALE IN FEET

CALCULATED EIW
CHECKED SMK

SCHEMATIC UTILITY PLAN
HURON ROAD

CUY - TOWER CITY BRIDGES

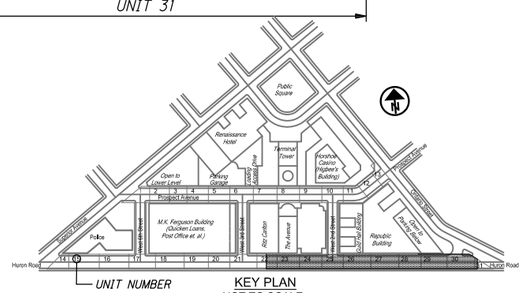


LEGEND

—E—CPP	CLEVELAND PUBLIC POWER (CPP)
—E—CEI	ILLUMINATING COMPANY (CEI)
—T—MCIP	MCI/VERIZON (MCIP)
—W—	CLEVELAND WATER (CWDP)
—LVTP—FO†—	LEVEL 3 COMMUNICATIONS (LVTP)
—CRCP—FO†—	CROWN CASTLE (CRCP)
—G—	DOMINION EAST OHIO (DEO)
—O—	CLEVELAND THERMAL (CLTP)
—T—CDT	CLEVELAND TRAFFIC (CDT)
—CTV—	TIME WARNER (CVA)
—T—ATTM	AT&T LNS/METRO
—T—ATTLD	AT&T LONG DISTANCE
—OBF—FO†—	AT&T OHIO
—T—NXT	XO COMMUNICATIONS (NXT)
—T—QSTP	CENTURY LINK (QSTP)
—FO—	ZAYO FIBER (ZAYO)
—WPC—	CLEVELAND WATER POLLUTION CONTROL (WPC)

PLAN - HURON ROAD

- EXISTING MANHOLE
- EXISTING LIGHT POLE
- EXISTING PARKING METER
- EXISTING PAPER BOX
- EXISTING PULL BOX
- EXISTING FIRE HYDRANT
- EXISTING TRASH BIN



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET
0 ** ** ** **

CALCULATED EIW
CHECKED SMK

SCHEMATIC UTILITY PLAN
HURON ROAD

CUY - TOWER CITY BRIDGES

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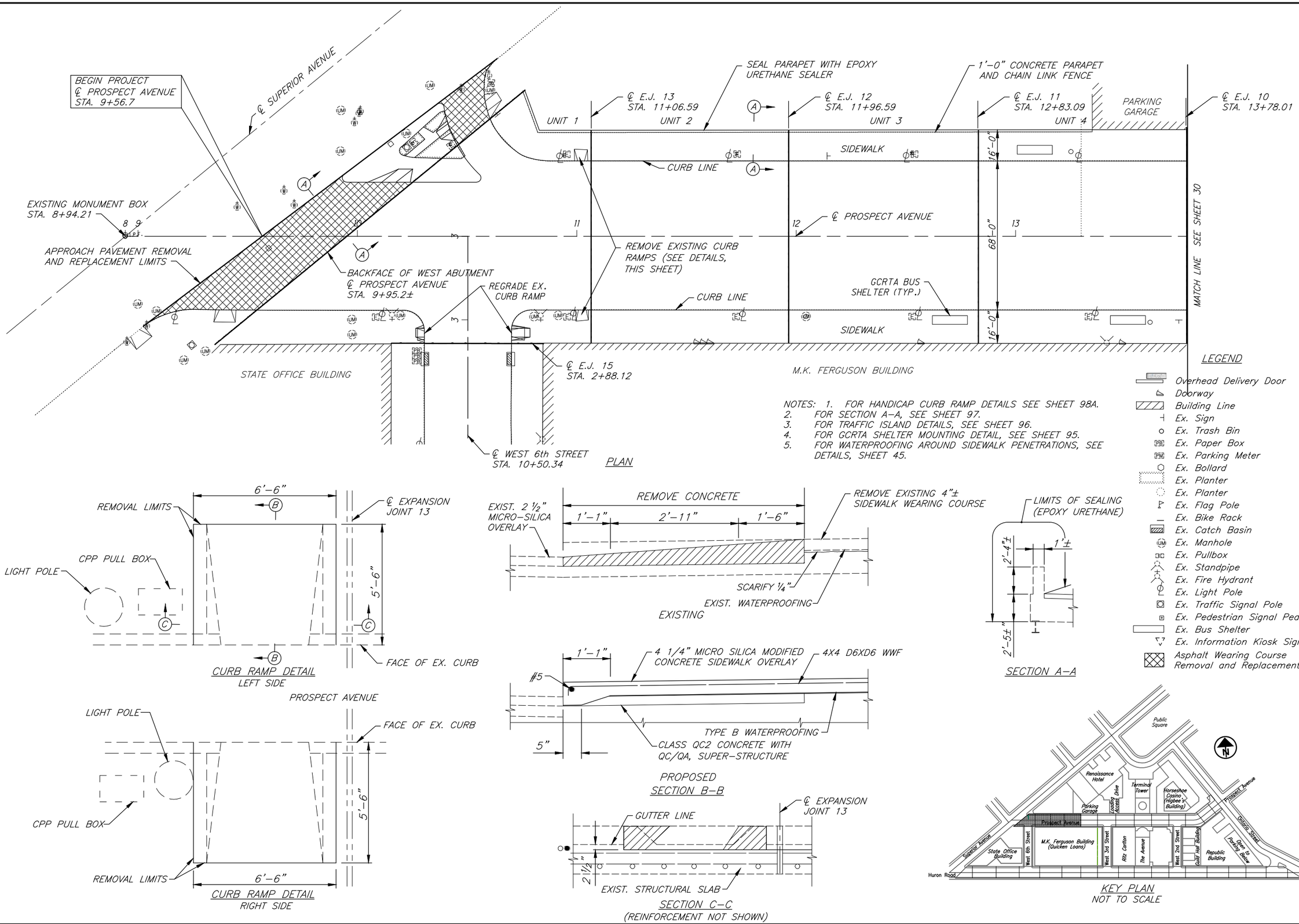

NOTES:
1. FOR HANDICAP CURB RAMP DETAILS SEE SHEET 98A.
2. FOR SECTION A–A, SEE SHEET 97.
3. FOR TRAFFIC ISLAND DETAILS, SEE SHEET 96.
4. FOR GCRTA SHELTER MOUNTING DETAIL, SEE SHEET 95.
5. FOR WATERPROOFING AROUND SIDEWALK PENETRATIONS, SEE DETAILS, SHEET 45.

LEGEND

- Overhead Delivery Door
- Doorway
- Building Line
- Ex. Sign
- Ex. Trash Bin
- Ex. Paper Box
- Ex. Parking Meter
- Ex. Bollard
- Ex. Planter
- Ex. Planter
- Ex. Flag Pole
- Ex. Bike Rack
- Ex. Catch Basin
- Ex. Manhole
- Ex. Pullbox
- Ex. Standpipe
- Ex. Fire Hydrant
- Ex. Light Pole
- Ex. Traffic Signal Pole
- Ex. Pedestrian Signal Pedestal
- Ex. Bus Shelter
- Ex. Information Kiosk Sign
- Asphalt Wearing Course Removal and Replacement

CURB RAMP DETAIL
LEFT SIDE

CURB RAMP DETAIL
RIGHT SIDE

EXISTING

PROPOSED
SECTION B–B

SECTION C–C
(REINFORCEMENT NOT SHOWN)

SECTION A–A

KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RAB
CHECKED MMP

PROSPECT AVENUE DECK PLAN

CUY-TOWER CITY BRIDGES

41
129

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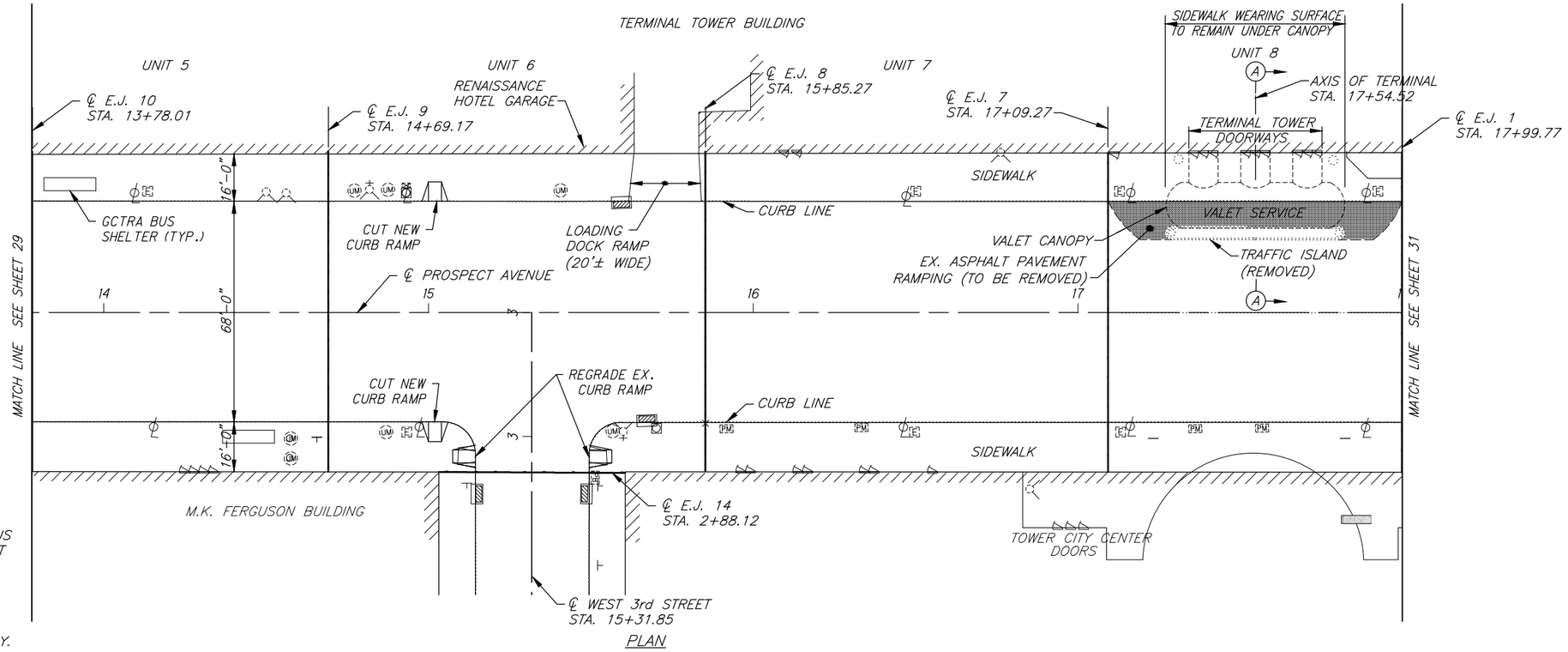
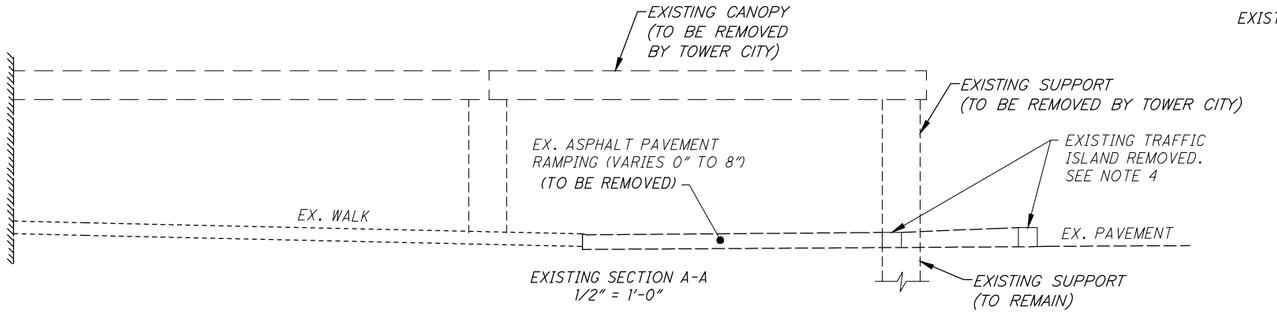
- Overhead Delivery Door
- Doorway
- Building Line
- Ex. Sign
- Ex. Trash Bin
- Ex. Paper Box
- Ex. Parking Meter
- Ex. Bollard
- Ex. Planter
- Ex. Planter
- Ex. Flag Pole
- Ex. Bike Rack
- Ex. Catch Basin
- Ex. Manhole
- Ex. Pullbox
- Ex. Standpipe
- Ex. Fire Hydrant
- Ex. Light Pole
- Ex. Traffic Signal Pole
- Ex. Pedestrian Signal Pedestal
- Ex. Bus Shelter
- Ex. Information Kiosk Sign

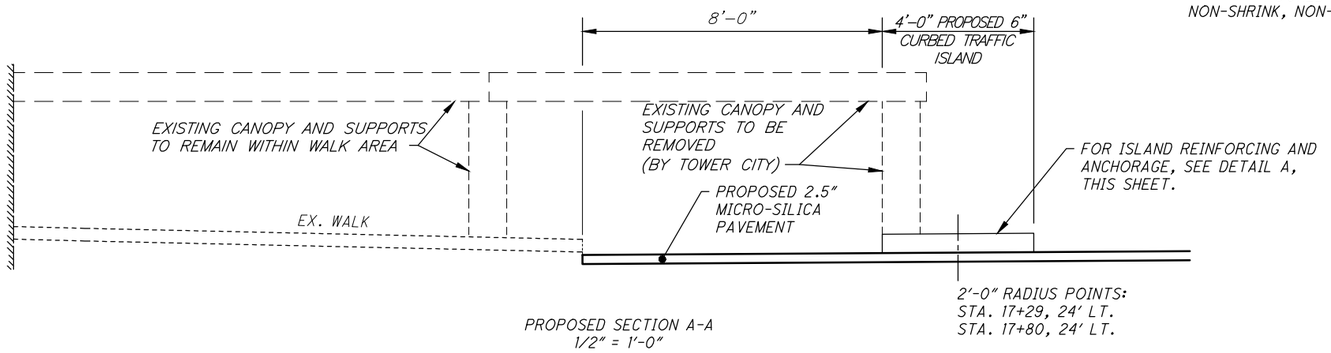
NOTE:
1. FOR HANDICAP CURB RAMP DETAILS SEE SHEET 98A.
2. SEE ITEM 202 – REMOVAL MISC.: MISCELLANEOUS ITEMS, SHEET 13 FOR DESCRIPTION OF WORK AT VALET SERVICE.
3. FOR GCRTA SHELTER MOUNTING DETAILS, SEE SHEET 95.
4. WITHIN CURBED ISLAND ARE FOUNDATION PEDESTALS FOR CANOPY SUPPORTS. THESE ARE NOT TO BE DAMAGED OR DISTURBED IN ANY WAY. WATERPROOF ALONE SUPPORTS IN ACCORDANCE WITH DETAILS ON SHEET45.
5. FOR WATERPROOFING AROUND SIDEWALK PENETRATIONS. SEE DETAILS, SHEET 45.



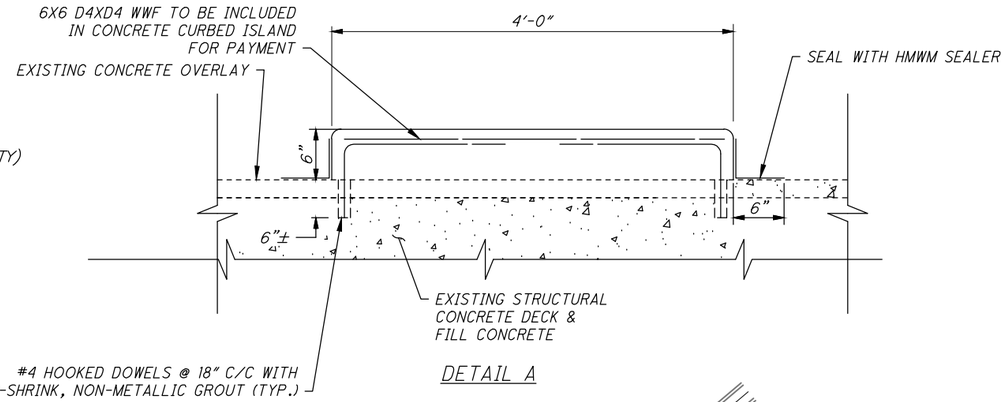
PLAN



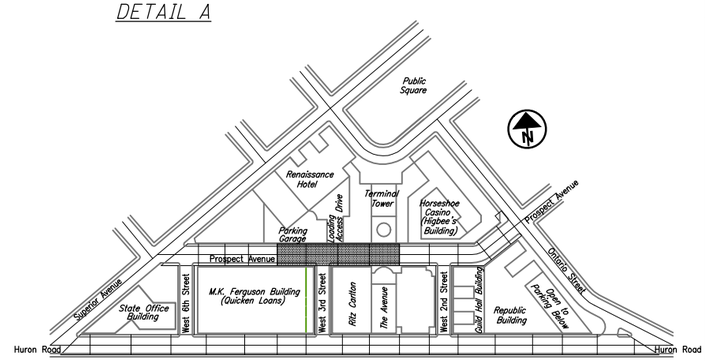
EXISTING SECTION A-A
1/2" = 1'-0"



PROPOSED SECTION A-A
1/2" = 1'-0"



DETAIL A



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RAB
CHECKED MMP

PROSPECT AVENUE DECK PLAN

CUY-TOWER CITY BRIDGES

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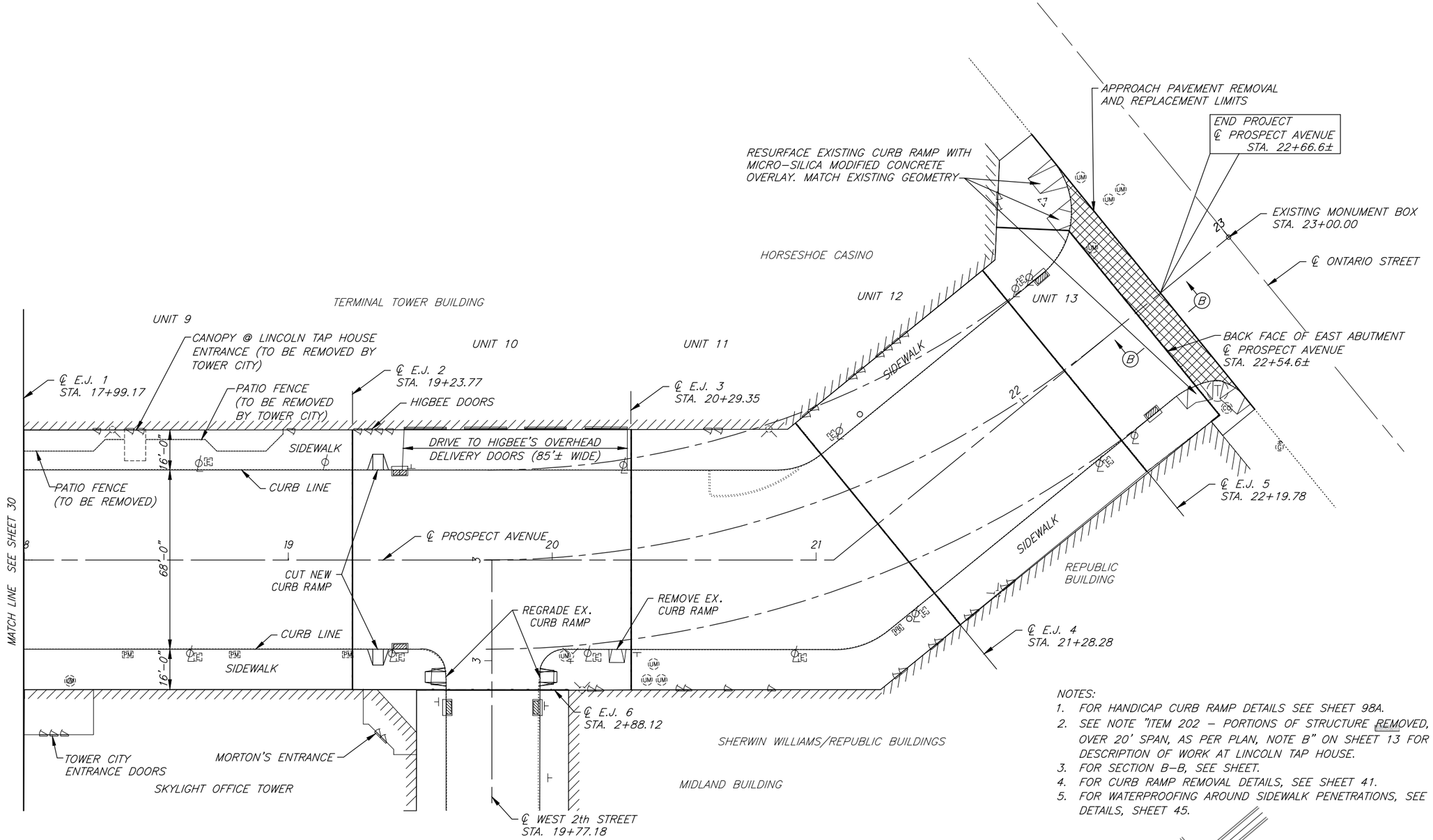
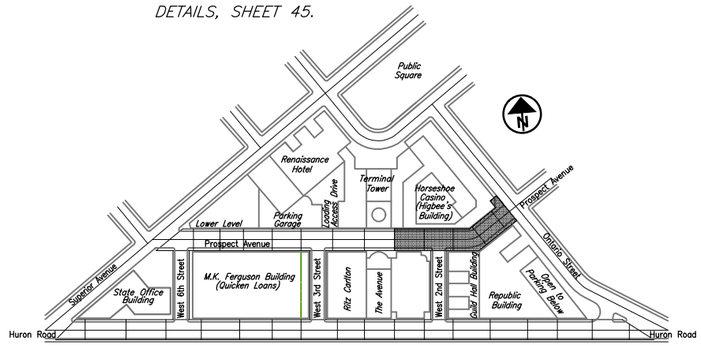


PLAN

NOTES:

1. FOR HANDICAP CURB RAMP DETAILS SEE SHEET 98A.
2. SEE NOTE "ITEM 202 – PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN, NOTE B" ON SHEET 13 FOR DESCRIPTION OF WORK AT LINCOLN TAP HOUSE.
3. FOR SECTION B–B, SEE SHEET.
4. FOR CURB RAMP REMOVAL DETAILS, SEE SHEET 41.
5. FOR WATERPROOFING AROUND SIDEWALK PENETRATIONS, SEE DETAILS, SHEET 45.



KEY PLAN
NOT TO SCALE

LEGEND

- Overhead Delivery Door
- Doorway
- Building Line
- Ex. Sign
- Ex. Trash Bin
- Ex. Paper Box
- Ex. Parking Meter
- Ex. Bollard
- Ex. Planter
- Ex. Planter
- Ex. Flag Pole
- Ex. Bike Rack
- Ex. Catch Basin
- Ex. Manhole
- Ex. Pullbox
- Ex. Standpipe
- Ex. Fire Hydrant
- Ex. Light Pole
- Ex. Traffic Signal Pole
- Ex. Pedestrian Signal Pedestal
- Ex. Bus Shelter
- Ex. Information Kiosk Sign
- Asphalt Wearing Course Removal and Replacement

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RAB
CHECKED MMP

PROSPECT AVENUE DECK PLAN

CUY-TOWER CITY BRIDGES

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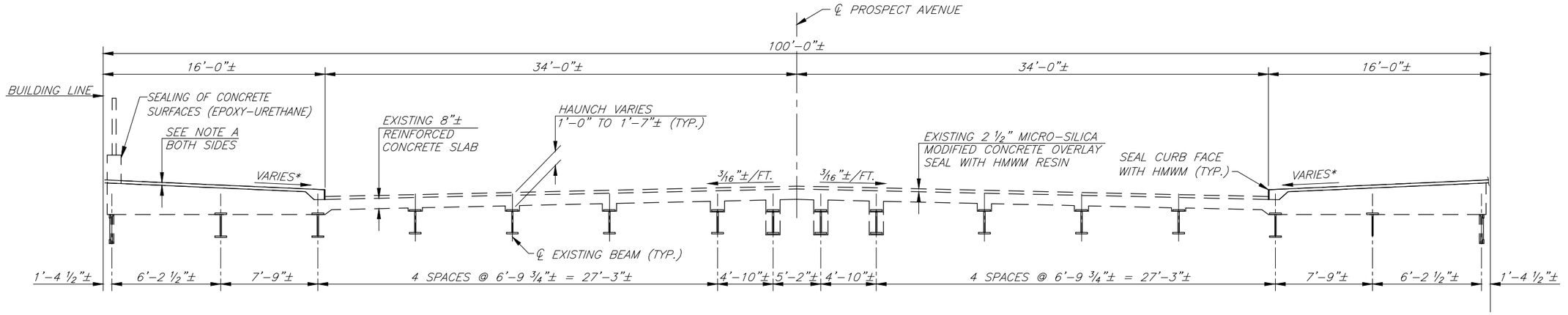
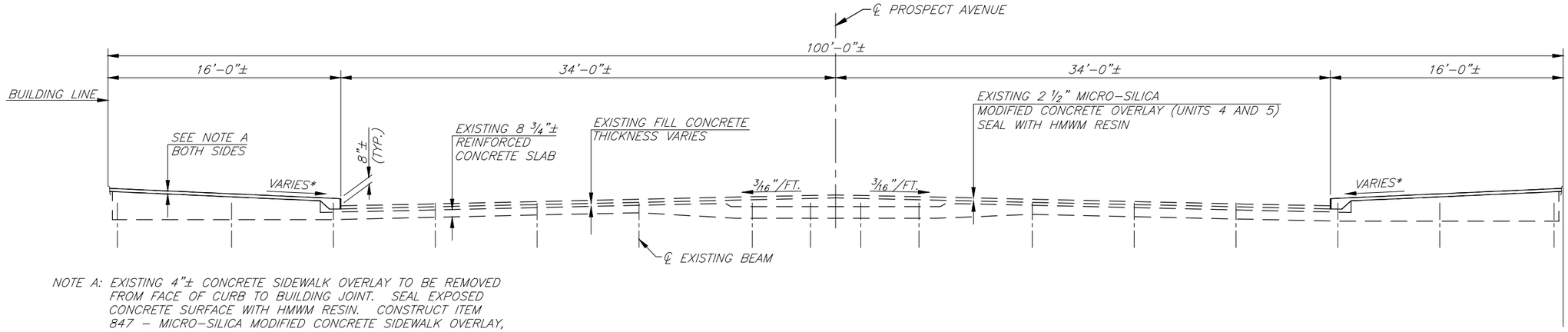


PROSPECT AVENUE TRANSVERSE SECTION
UNITS 1 THRU 3



NOTE A: EXISTING 4"± CONCRETE SIDEWALK OVERLAY TO BE REMOVED FROM FACE OF CURB TO BUILDING JOINT. SEAL EXPOSED CONCRETE SURFACE WITH HMWM RESIN. CONSTRUCT ITEM 847 – MICRO–SILICA MODIFIED CONCRETE SIDEWALK OVERLAY, AS PER PLAN. 4 X 4 D6XD6 WWF TO BE INCLUDED IN SIDEWALK OVERLAY FOR PAYMENT. SEAL TOP OF NEW SIDEWALK OVERLAY WITH NON–EPOXY SEALER.

PROSPECT AVENUE TRANSVERSE SECTION
UNITS 4 AND 5

* FOR PAVEMENT AND TOP OF CURB ELEVATION SEE SHEETS 55-58.

NOTES:

1. SEE SHEET 54 FOR LOCATION OF UTILITY DUCTS IN SIDEWALK.
2. SEE EXISTING AND PROPOSED CURB DETAILS ON SHEET 45.

HORIZONTAL SCALE IN FEET
0 ## ## ##

CALCULATED MMP
CHECKED RAB

PROSPECT AVENUE
TYPICAL SECTIONS

CUY-TOWER CITY BRIDGES

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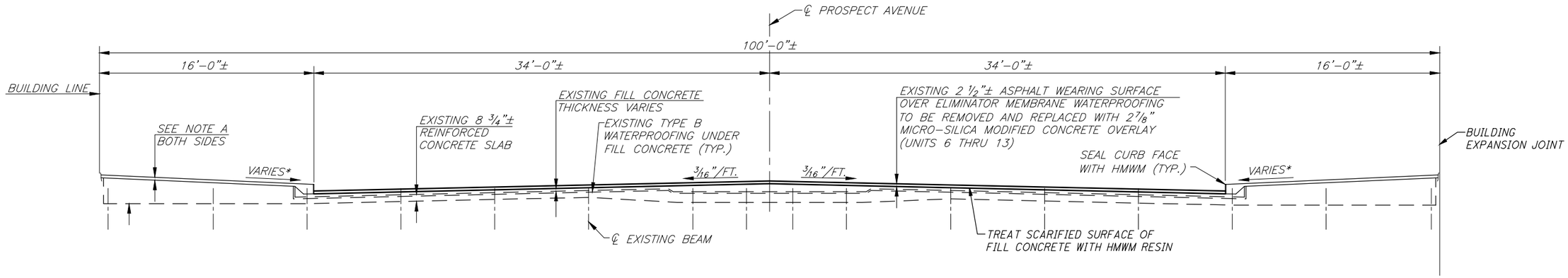
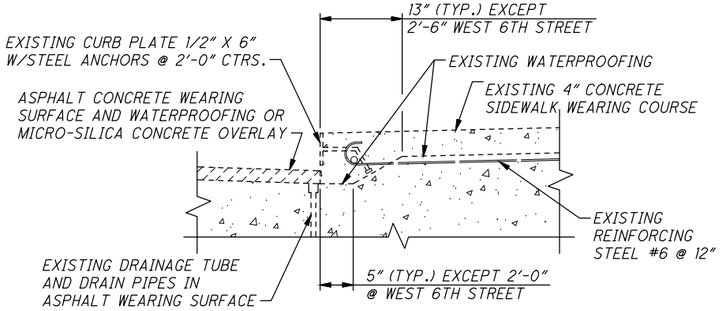


NOTE A: EXISTING 4"± CONCRETE SIDEWALK OVERLAY TO BE REMOVED FROM FACE OF CURB TO BUILDING JOINT. SEAL EXPOSED CONCRETE SURFACE WITH HMWM RESIN. INSTALL NEW TYPE B WATERPROOFING ON SIDEWALK AREA. CONSTRUCT ITEM 847 – MICRO-SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN. 4 X 4 D6XD6 WWF TO BE INCLUDED IN OVERLAY FOR PAYMENT. SEAL TOP OF NEW SIDEWALK WITH NON-EPOXY SEALER.

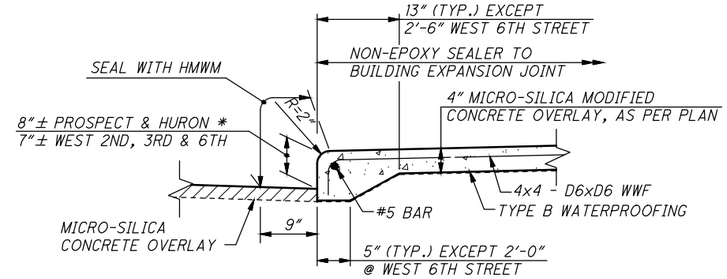
PROSPECT AVENUE TRANSVERSE SECTION
UNITS 6 THRU 13

NOTES:
SEE SHEET 38 FOR LOCATION OF UTILITY DUCTS IN SIDEWALK.



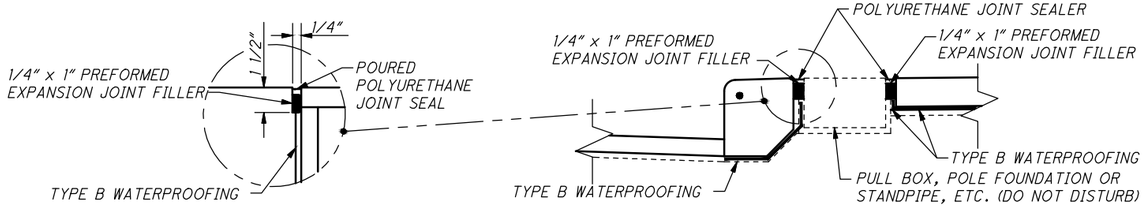
NOTE: REMOVE EXISTING CURB PLATE AND ANCHORS, SIDEWALK WEARING COURSE AND WATERPROOFING. CUT EXISTING REINFORCING.

TYPICAL EXISTING CURB DETAIL

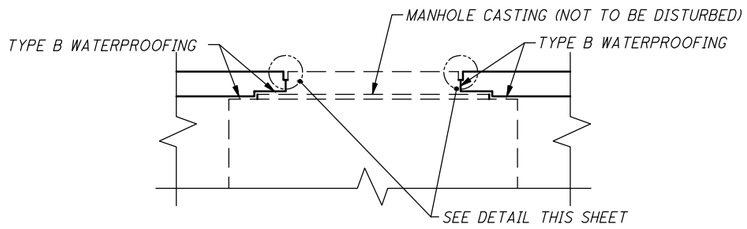


NOTE: NO. 5 BAR AND 4X4 - D6xD6 WWF INCLUDED WITH MICRO-SILICA MODIFIED CONCRETE OVERLAY FOR PAYMENT. 4 X 4 - D6 X D6 WELDED WIRE FABRIC TO BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.

PROPOSED CURB DETAIL



DETAILS AT SIDEWALK WEARING COURSE PENETRATIONS



NOTE:
1. WWF TO BE HOT-DIPPED GALVANIZED PER ASTM A123. ELECTRO-GALVANIZED WWF IS NOT PERMITTED.

* FOR PAVEMENT AND TOP OF CURB ELEVATION SEE SHEETS 55-58.

HORIZONTAL SCALE IN FEET
0 ** ** **
CALCULATED MMP
CHECKED RAB

PROSPECT AVENUE
TYPICAL SECTIONS

CUY-TOWER CITY BRIDGES

45
129

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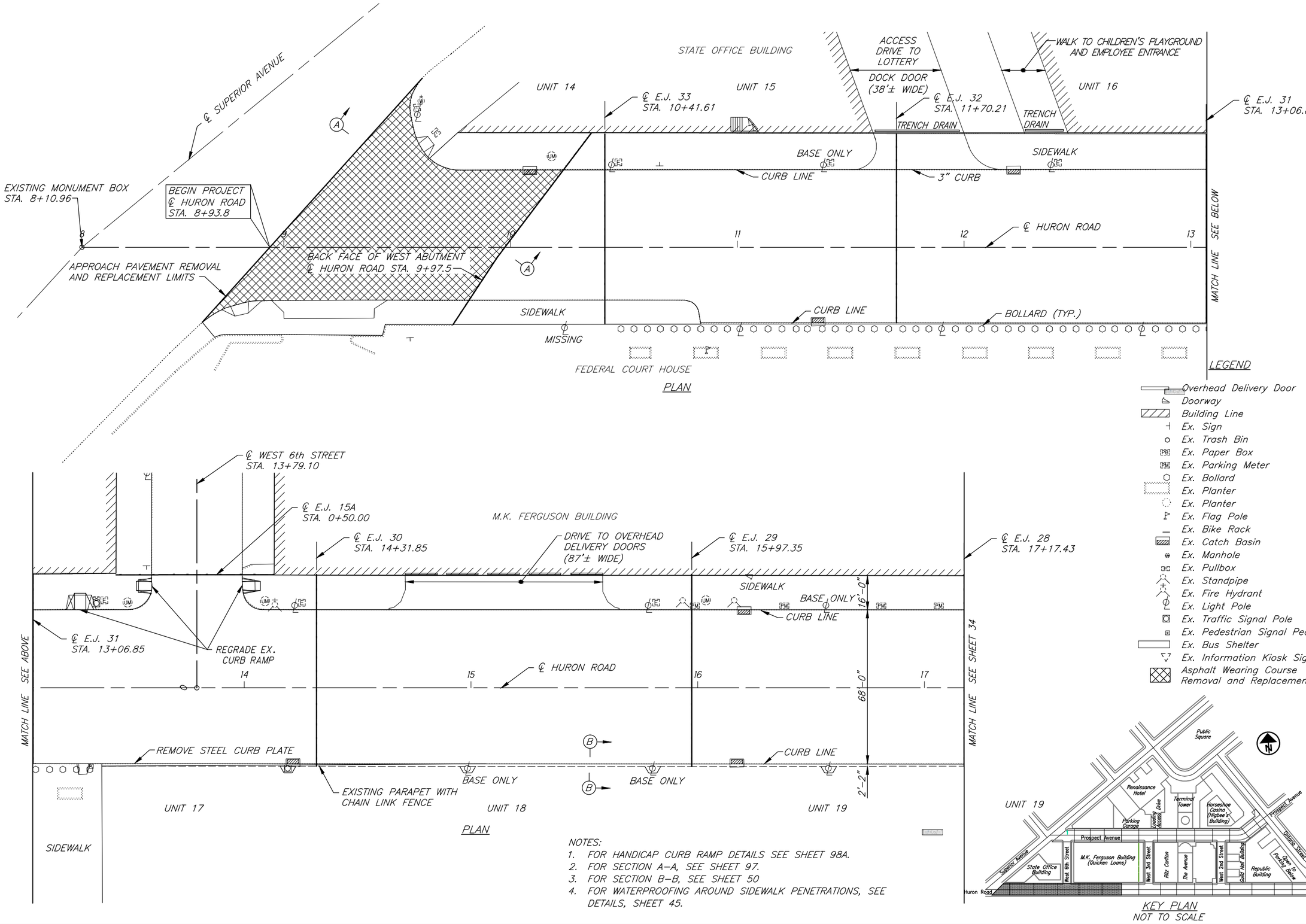
℄ SUPERIOR AVENUE
EXISTING MONUMENT BOX
STA. 8+10.96
BEGIN PROJECT
℄ HURON ROAD
STA. 8+93.8
APPROACH PAVEMENT REMOVAL
AND REPLACEMENT LIMITS
BACK FACE OF WEST ABUTMENT
℄ HURON ROAD STA. 9+97.5
STATE OFFICE BUILDING
UNIT 14
UNIT 15
UNIT 16
ACCESS
DRIVE TO
LOTTERY
DOCK DOOR
(38'± WIDE)
WALK TO CHILDREN'S PLAYGROUND
AND EMPLOYEE ENTRANCE
℄ E.J. 33
STA. 10+41.61
℄ E.J. 32
STA. 11+70.21
℄ E.J. 31
STA. 13+06.85
TRENCH
DRAIN
TRENCH DRAIN
BASE ONLY
SIDEWALK
CURB LINE
3" CURB
℄ HURON ROAD
MATCH LINE SEE BELOW
SIDEWALK
CURB LINE
BOLLARD (TYP.)
MISSING
FEDERAL COURT HOUSE
PLAN
LEGEND
Overhead Delivery Door
Doorway
Building Line
Ex. Sign
Ex. Trash Bin
Ex. Paper Box
Ex. Parking Meter
Ex. Bollard
Ex. Planter
Ex. Planter
Ex. Flag Pole
Ex. Bike Rack
Ex. Catch Basin
Ex. Manhole
Ex. Pullbox
Ex. Standpipe
Ex. Fire Hydrant
Ex. Light Pole
Ex. Traffic Signal Pole
Ex. Pedestrian Signal Pedestal
Ex. Bus Shelter
Ex. Information Kiosk Sign
Asphalt Wearing Course
Removal and Replacement
℄ WEST 6th STREET
STA. 13+79.10
℄ E.J. 15A
STA. 0+50.00
M.K. FERGUSON BUILDING
℄ E.J. 30
STA. 14+31.85
DRIVE TO OVERHEAD
DELIVERY DOORS
(87'± WIDE)
℄ E.J. 29
STA. 15+97.35
℄ E.J. 28
STA. 17+17.43
SIDEWALK
BASE ONLY
CURB LINE
16'-0"
℄ E.J. 31
STA. 13+06.85
REGRADE EX.
CURB RAMP
℄ HURON ROAD
MATCH LINE SEE ABOVE
MATCH LINE SEE SHEET 34
68'-0"
REMOVE STEEL CURB PLATE
CURB LINE
BASE ONLY
BASE ONLY
EXISTING PARAPET WITH
CHAIN LINK FENCE
2'-2"
UNIT 17
UNIT 18
UNIT 19
SIDEWALK
PLAN
NOTES:
1. FOR HANDICAP CURB RAMP DETAILS SEE SHEET 98A.
2. FOR SECTION A–A, SEE SHEET 97.
3. FOR SECTION B–B, SEE SHEET 50
4. FOR WATERPROOFING AROUND SIDEWALK PENETRATIONS, SEE DETAILS, SHEET 45.
Public Square
Renaissance Hotel
Terminal Tower
Horseshoe Casino (Higbee's Building)
Parking Garage
Loading Docks
Drive
Prospect Avenue
Ontario Street
Superior Avenue
State Office Building
West 6th Street
M.K. Ferguson Building (Quicken Loans)
West 3rd Street
Attic Carlton
The Avenue
West 2nd Street
Court Hall Building
Republic Building
Open to Parking Below
Huron Road
KEY PLAN
NOT TO SCALE
HORIZONTAL SCALE IN FEET
0 10 20 40
CALCULATED RAB
CHECKED MMP
HURON ROAD
DECK PLAN
CUY-TOWER CITY BRIDGES
46
129
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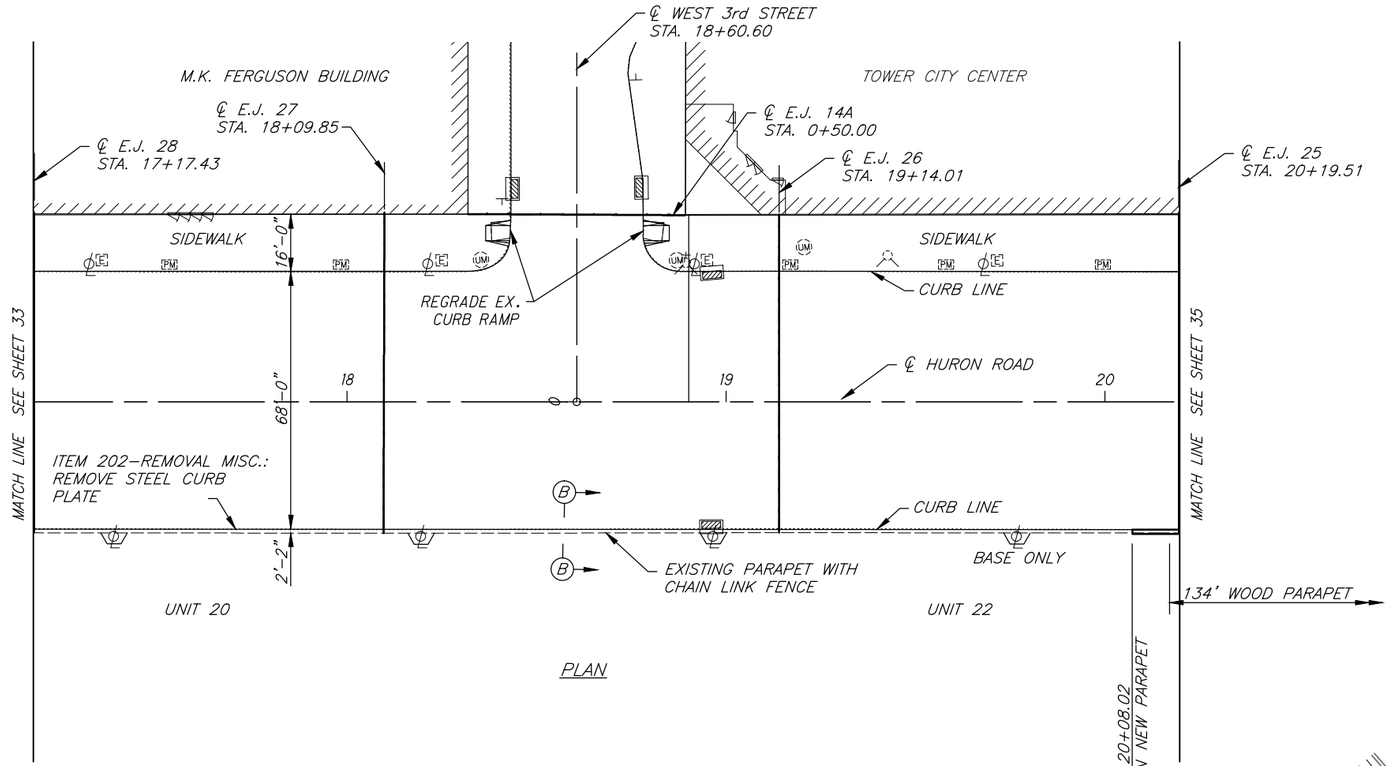


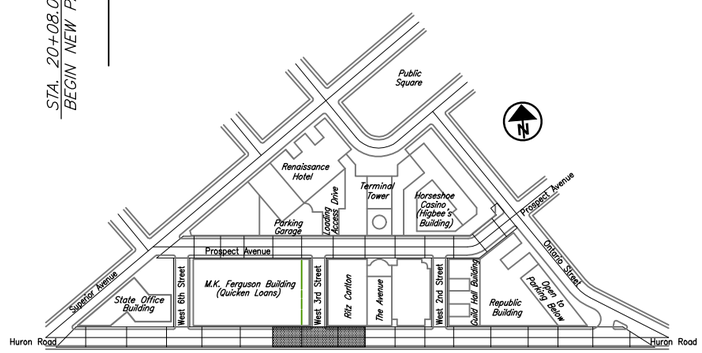
PLAN

NOTES:

1. FOR HANDICAP CURB RAMP DETAILS SEE SHEET 98A.
2. FOR SECTION B-B, SEE SHEET 50.
3. FOR PARAPET DETAILS, SEE SHEET 99.
4. FOR WATERPROOFING AROUND SIDEWALK PENETRATIONS, SEE DETAILS, SHEET 45.

LEGEND

- Overhead Delivery Door
- Doorway
- Building Line
- Ex. Sign
- Ex. Trash Bin
- Ex. Paper Box
- Ex. Parking Meter
- Ex. Bollard
- Ex. Planter
- Ex. Planter
- Ex. Flag Pole
- Ex. Bike Rack
- Ex. Catch Basin
- Ex. Manhole
- Ex. Pullbox
- Ex. Standpipe
- Ex. Fire Hydrant
- Ex. Light Pole
- Ex. Traffic Signal Pole
- Ex. Pedestrian Signal Pedestal
- Ex. Bus Shelter
- Ex. Information Kiosk Sign



KEY PLAN
NOT TO SCALE

REVISION	DATE
1	6/8/2017

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RAB
CHECKED MMP

HURON ROAD
DECK PLAN

CUY-TOWER CITY BRIDGES

47
129

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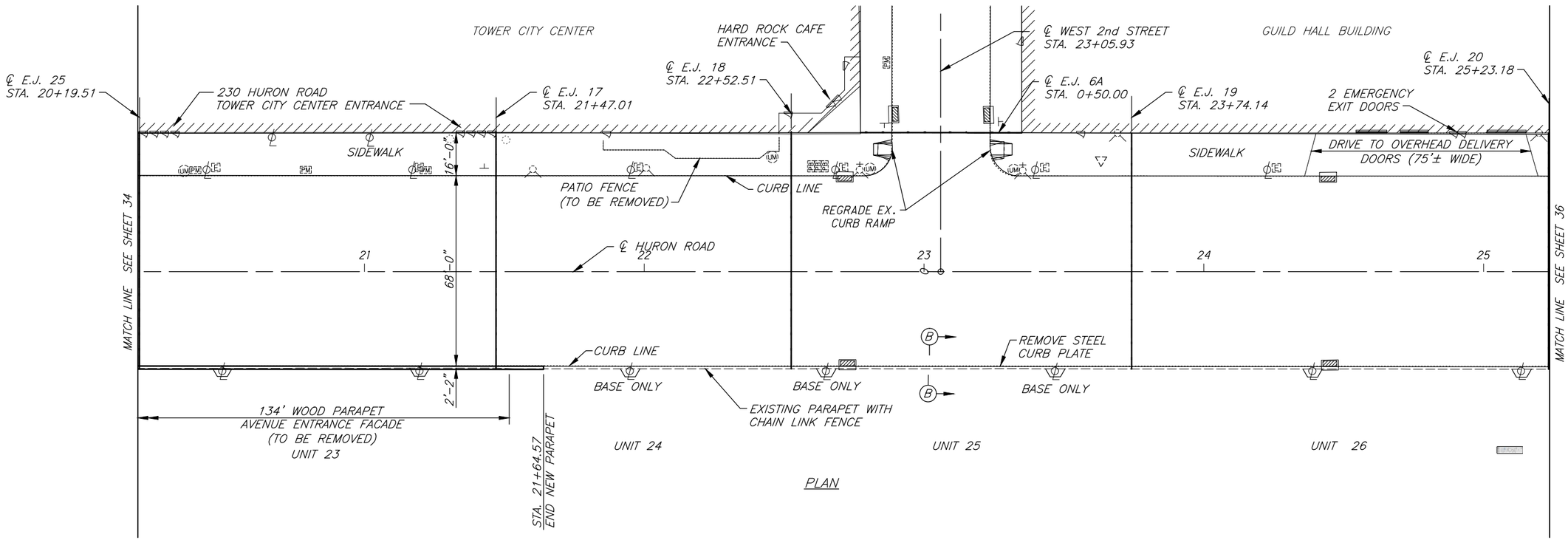
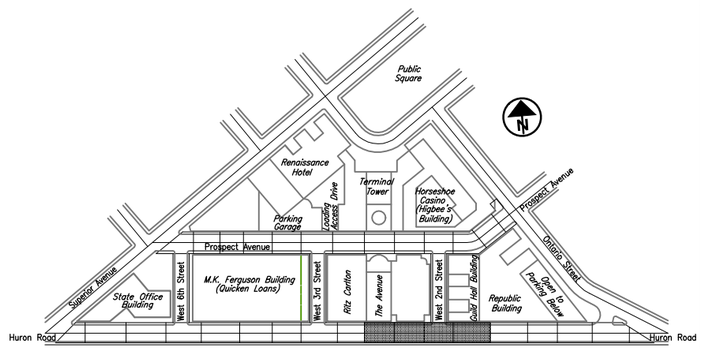


PLAN

NOTE:
1. FOR HANDICAP CURB RAMP DETAILS SEE SHEET 98A.
2. SEE NOTE "ITEM 202 – REMOVAL, MISC.: MISCELLANEOUS ITEMS ON SHEET 13 FOR REMOVAL OF PATIO FENCE".
3. FOR SECTION B–B, SEE SHEET 50.
4. FOR NEW PARAPET DETAILS, SEE SHEET 99.
5. FOR WATERPROOFING AROUND SIDEWALK PENETRATIONS, SEE DETAILS, SHEET 45.

LEGEND

- Overhead Delivery Door
- Doorway
- Building Line
- Ex. Sign
- Ex. Trash Bin
- Ex. Paper Box
- Ex. Parking Meter
- Ex. Bollard
- Ex. Planter
- Ex. Planter
- Ex. Flag Pole
- Ex. Bike Rack
- Ex. Catch Basin
- Ex. Manhole
- Ex. Pullbox
- Ex. Standpipe
- Ex. Fire Hydrant
- Ex. Light Pole
- Ex. Traffic Signal Pole
- Ex. Pedestrian Signal Pedestal
- Ex. Bus Shelter
- Ex. Information Kiosk Sign



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

CALCULATED RAB CHECKED MMP

HURON ROAD DECK PLAN

CUY-TOWER CITY BRIDGES

48
129

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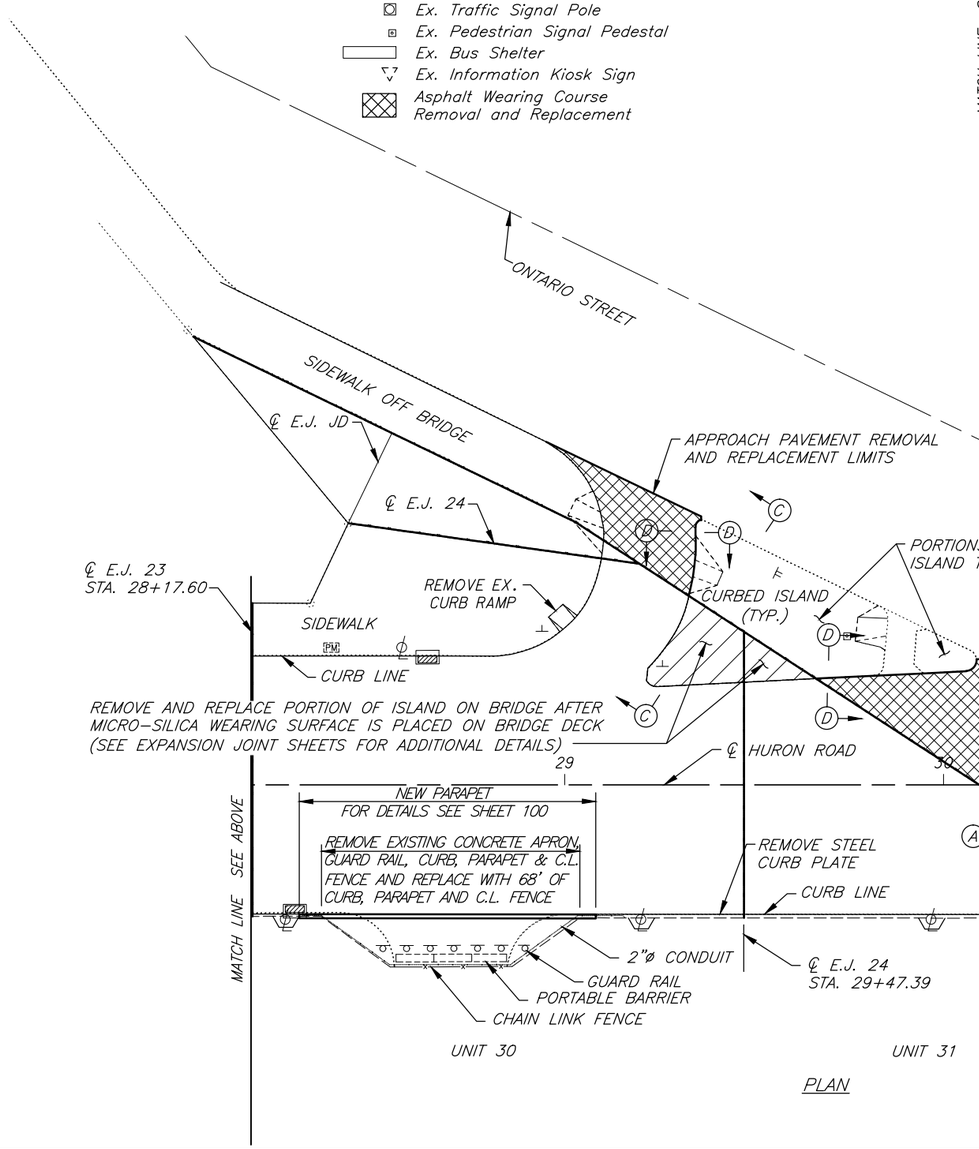
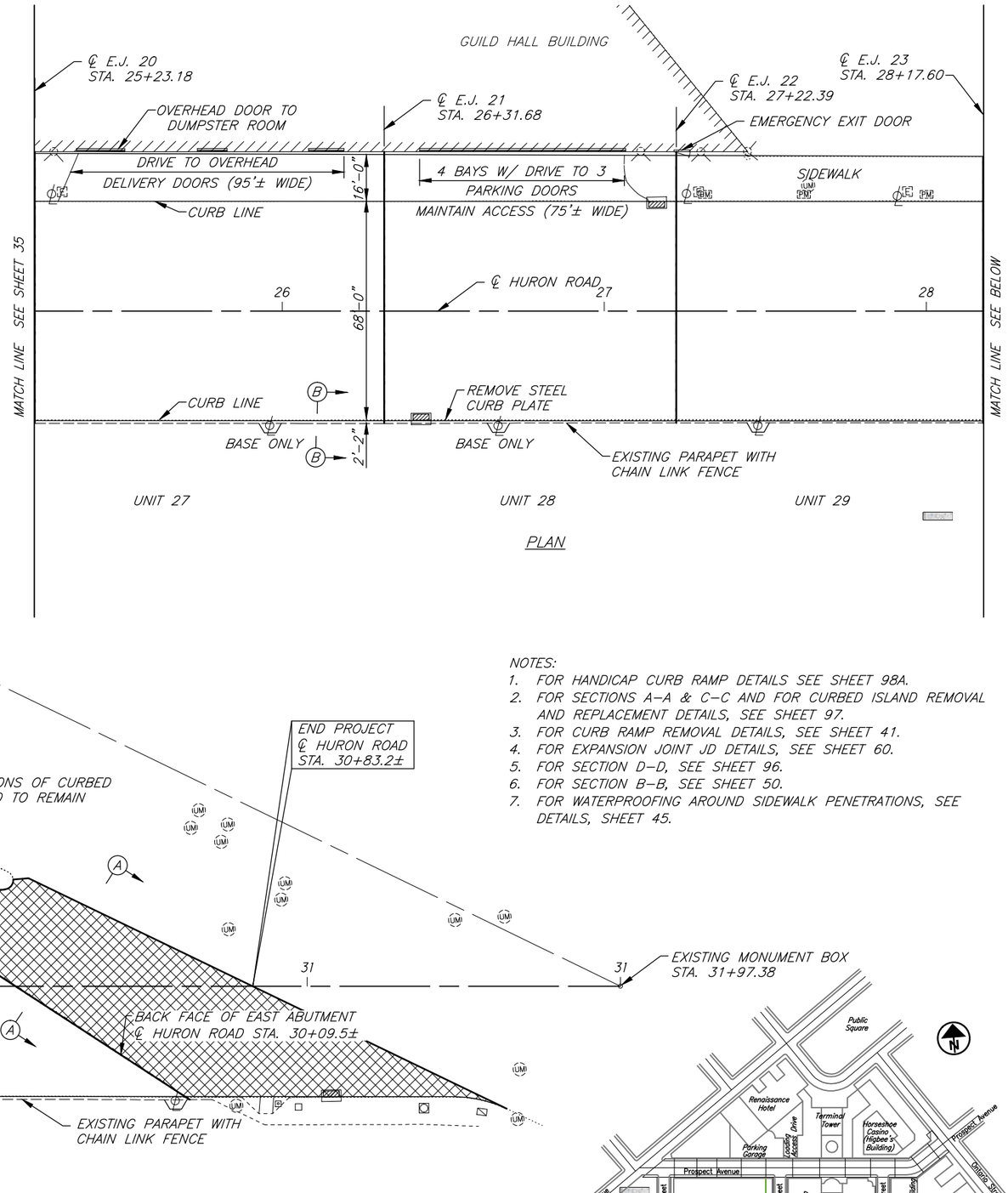
LEGEND

- Overhead Delivery Door
- Doorway
- Building Line
- Ex. Sign
- Ex. Trash Bin
- Ex. Paper Box
- Ex. Parking Meter
- Ex. Bollard
- Ex. Planter
- Ex. Planter
- Ex. Flag Pole
- Ex. Bike Rack
- Ex. Catch Basin
- Ex. Manhole
- Ex. Pullbox
- Ex. Standpipe
- Ex. Fire Hydrant
- Ex. Light Pole
- Ex. Traffic Signal Pole
- Ex. Pedestrian Signal Pedestal
- Ex. Bus Shelter
- Ex. Information Kiosk Sign
- Asphalt Wearing Course Removal and Replacement



PLAN



PLAN

NOTES:

1. FOR HANDICAP CURB RAMP DETAILS SEE SHEET 98A.
2. FOR SECTIONS A–A & C–C AND FOR CURBED ISLAND REMOVAL AND REPLACEMENT DETAILS, SEE SHEET 97.
3. FOR CURB RAMP REMOVAL DETAILS, SEE SHEET 41.
4. FOR EXPANSION JOINT JD DETAILS, SEE SHEET 60.
5. FOR SECTION D–D, SEE SHEET 96.
6. FOR SECTION B–B, SEE SHEET 50.
7. FOR WATERPROOFING AROUND SIDEWALK PENETRATIONS, SEE DETAILS, SHEET 45.

KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

CALCULATED RAB | CHECKED MMP

HURON ROAD DECK PLAN

CUY-TOWER CITY BRIDGES

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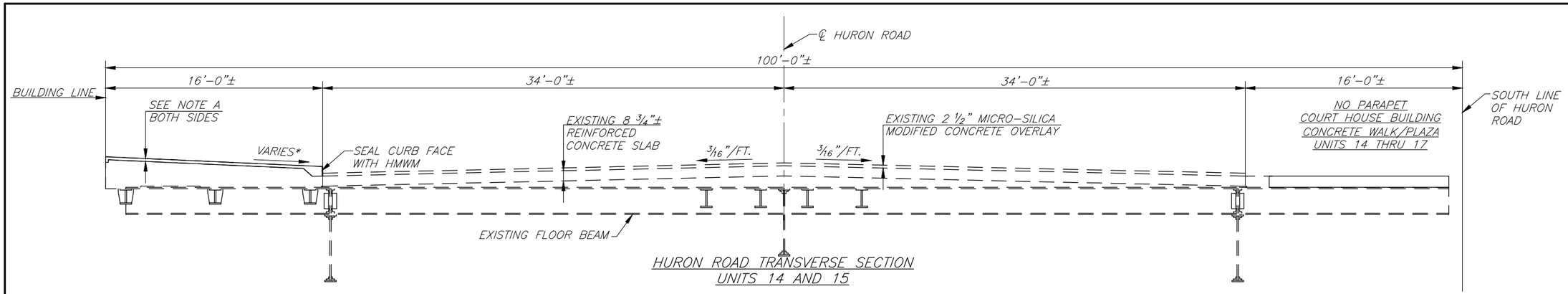
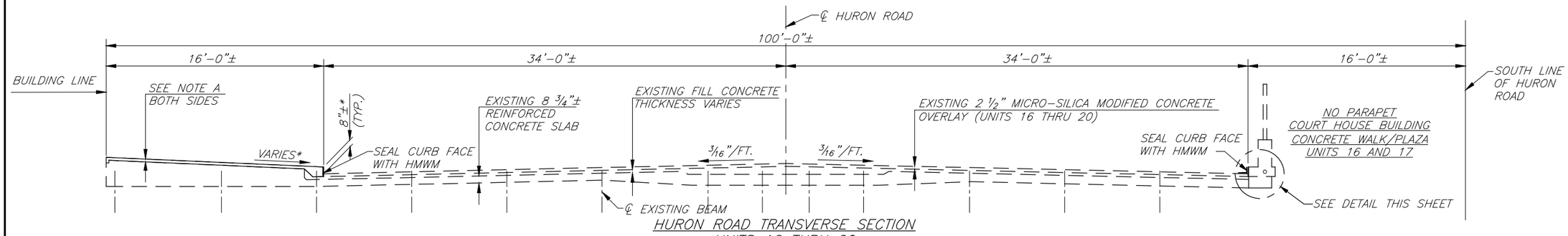
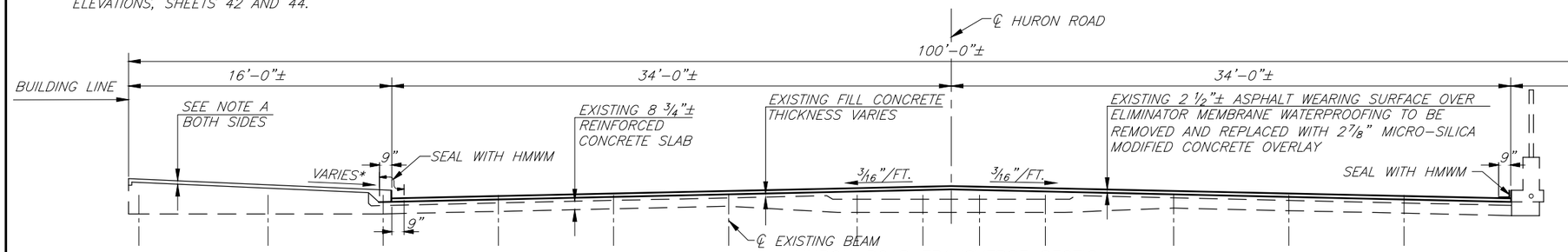


HURON ROAD TRANSVERSE SECTION
UNITS 14 AND 15



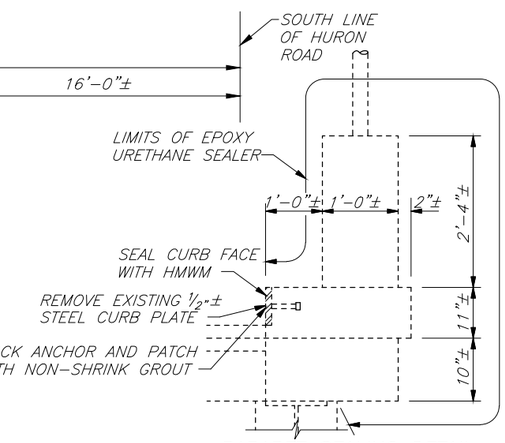
HURON ROAD TRANSVERSE SECTION
UNITS 16 THRU 20

* SEE PAVEMENT AND TOP OF CURB ELEVATIONS, SHEETS 42 AND 44.

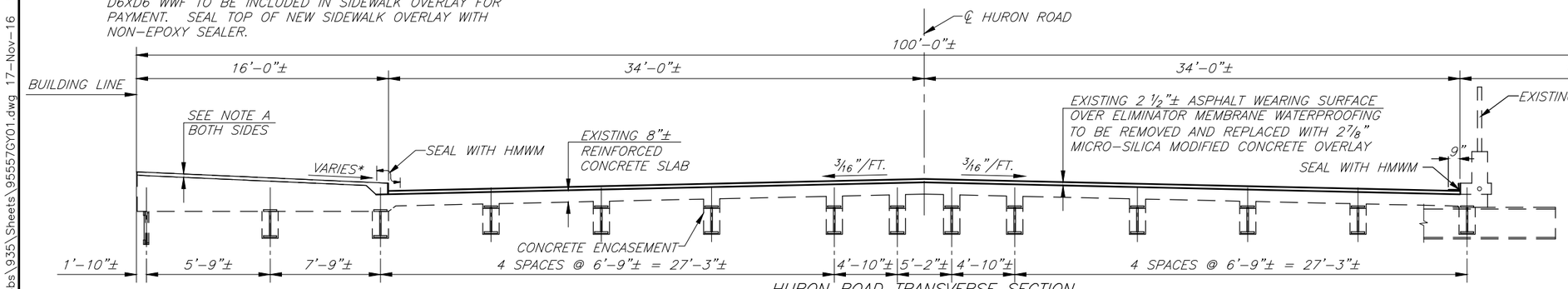


HURON ROAD TRANSVERSE SECTION
UNITS 21 THRU 26

NOTE A: EXISTING 4"± CONCRETE SIDEWALK OVERLAY TO BE REMOVED FROM FACE OF CURB TO BUILDING JOINT. SEAL EXPOSED CONCRETE SURFACE WITH HMWM RESIN. CONSTRUCT ITEM 847 – MICRO–SILICA MODIFIED CONCRETE SIDEWALK OVERLAY, AS PER PLAN. 4 X 4 D6XD6 WWF TO BE INCLUDED IN SIDEWALK OVERLAY FOR PAYMENT. SEAL TOP OF NEW SIDEWALK OVERLAY WITH NON–EPOXY SEALER.



PARAPET SEALING DETAIL



HURON ROAD TRANSVERSE SECTION
UNITS 27 THRU 31

NOTES:
1. SEE SHEET 54 FOR LOCATION OF UTILITY DUCTS IN SIDEWALK.
2. SEE EXISTING AND PROPOSED CURB DETAILS ON SHEET 45.

HORIZONTAL SCALE IN FEET
0 ** ** **

CALCULATED MMP
CHECKED RAB

HURON ROAD
TYPICAL SECTIONS

CUY-TOWER CITY BRIDGES

50
129

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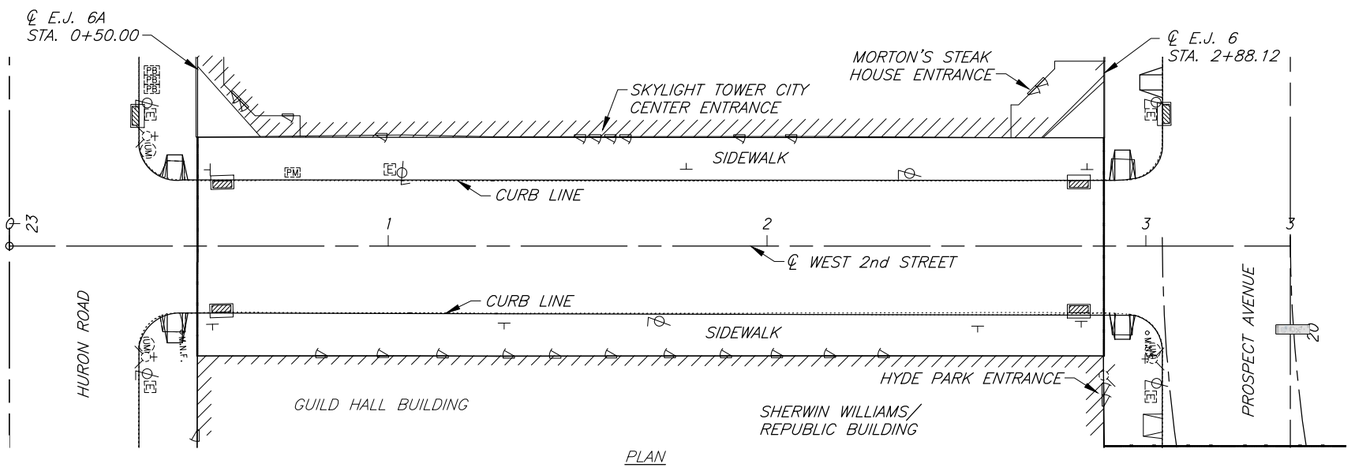
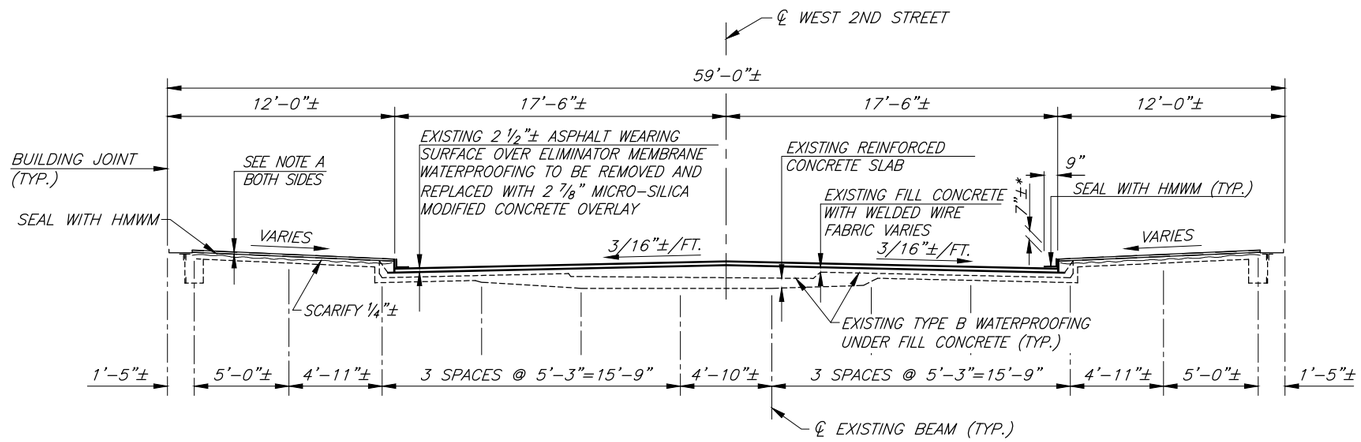


PLAN



WEST 2ND STREET TRANSVERSE SECTION

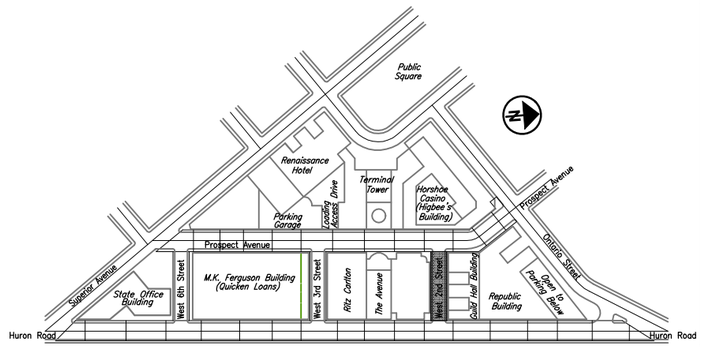
NOTE A: EXISTING 4"± CONCRETE SURFACE COURSE AND EXISTING WATERPROOFING TO BE REMOVED FROM FACE OF CURB TO BUILDING JOINT. SEAL EXPOSED CONCRETE SURFACE WITH HMWM. INSTALL NEW TYPE B WATERPROOFING ON SIDEWALK AREA. CONSTRUCT ITEM 847–MICRO–SILICA MODIFIED CONCRETE OVERLAY, AS PER PLAN. 4 X 4 D6 X D6 WWF TO BE INCLUDED IN SIDEWALK OVERLAY. SEAL TOP OF NEW SIDEWALK WITH NON–EPOXY SEALER.

NOTES:

1. SEE EXISTING AND PROPOSED CURB DETAILS ON SHEET 45.
2. FOR HANDICAP CURB RAMP DETAILS SEE SHEET 87.
3. FOR PAVEMENT ELEVATIONS AND TOP OF CURB ELEVATIONS SEE SHEET 58.
4. FOR WATERPROOFING AROUND SIDEWALK PENETRATIONS, SEE DETAILS, SHEET 45.

LEGEND

- Overhead Delivery Door
- Doorway
- Building Line
- Ex. Sign
- Ex. Trash Bin
- Ex. Paper Box
- Ex. Parking Meter
- Ex. Bollard
- Ex. Planter
- Ex. Planter
- Ex. Flag Pole
- Ex. Bike Rack
- Ex. Catch Basin
- Ex. Manhole
- Ex. Pullbox
- Ex. Standpipe
- Ex. Fire Hydrant
- Ex. Light Pole
- Ex. Traffic Signal Pole
- Ex. Pedestrian Signal Pedestal
- Ex. Bus Shelter
- Ex. Information Kiosk Sign



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

CALCULATED RAB
CHECKED MMP

WEST 2ND STREET DECK PLAN AND TYPICAL SECTIONS

CUY-TOWER CITY BRIDGES

51
129

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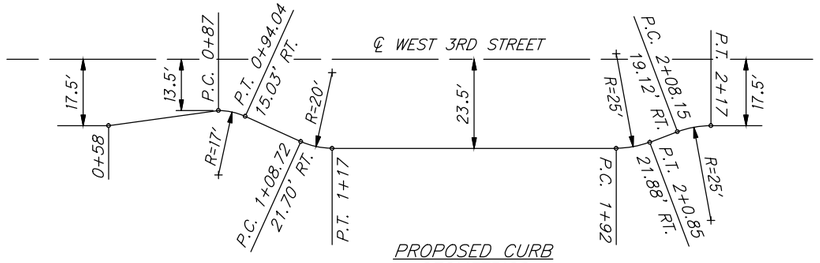
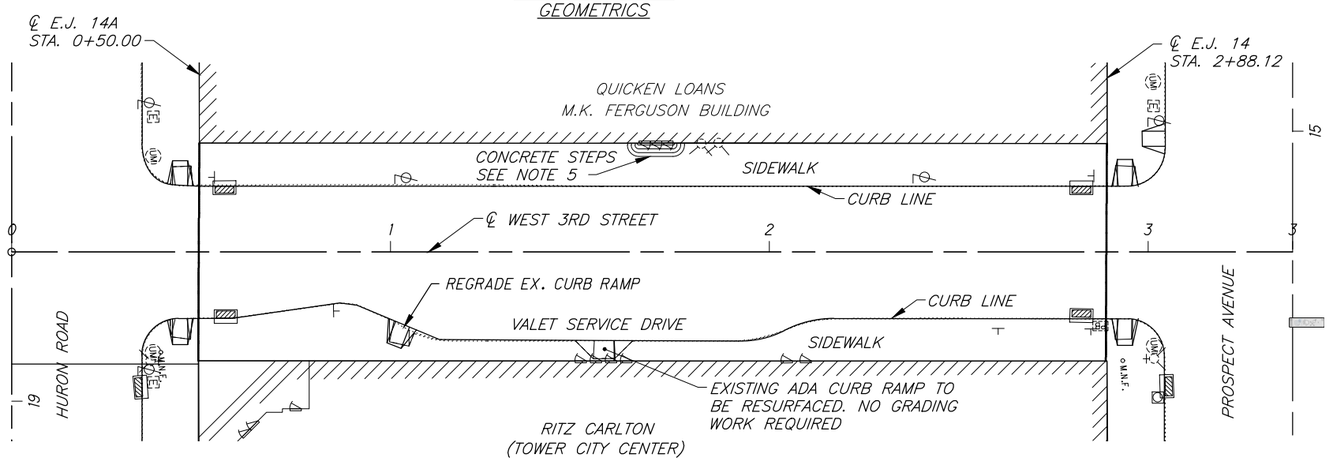
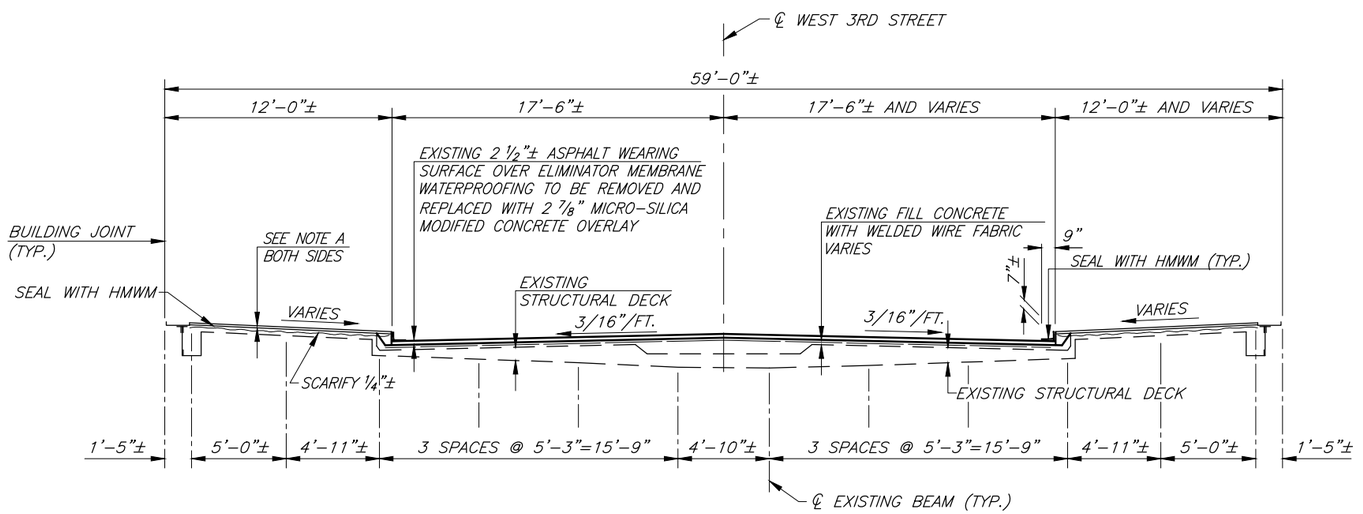


PROPOSED CURB GEOMETRICS



PLAN



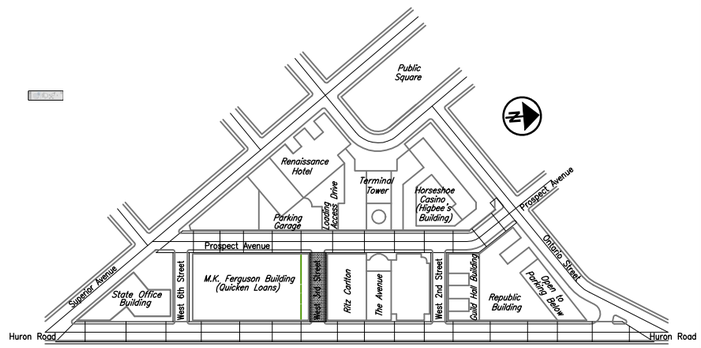
WEST 3RD STREET TRANSVERSE SECTION

NOTE A: EXISTING 4"± CONCRETE SURFACE COURSE TO BE REMOVED FROM FACE OF CURB TO BUILDING JOINT AND REPLACED WITH ITEM 847 MICRO-SILICA MODIFIED CONCRETE SIDEWALK OVERLAY, AS PER PLAN. 4X4 D6XD6 WWF TO BE INCLUDED IN SIDEWALK SURFACE COURSE FOR PAYMENT.

LEGEND

- Overhead Delivery Door
- Doorway
- Building Line
- Ex. Sign
- Ex. Trash Bin
- Ex. Paper Box
- Ex. Parking Meter
- Ex. Bollard
- Ex. Planter
- Ex. Planter
- Ex. Flag Pole
- Ex. Bike Rack
- Ex. Catch Basin
- Ex. Manhole
- Ex. Pullbox
- Ex. Standpipe
- Ex. Fire Hydrant
- Ex. Light Pole
- Ex. Traffic Signal Pole
- Ex. Pedestrian Signal Pedestal
- Ex. Bus Shelter
- Ex. Information Kiosk Sign

NOTES:
1. SEE EXISTING AND PROPOSED CURB DETAILS ON SHEET 45.
2. FOR HANDICAP CURB RAMP DETAILS SEE SHEET 98A.
3. FOR PAVEMENT AND TOP OF CURB ELEVATIONS SEE SHEETS 55-58.
4. FOR WATERPROOFING AROUND SIDEWALK PENETRATIONS, SEE DETAILS, SHEET 45.
5. CONCRETE STEPS ARE NOT TO BE DISTURBED. CONTRACTOR TO CAREFULLY CHIP UP TO STEPS AND POUR ALONG STEP EDGES. JOINT TO BE SEALED WITH HMWM.



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET: 0, 10, 20, 40

CALCULATED RAB | CHECKED MMP

WEST 3RD STREET DECK PLAN AND TYPICAL SECTION

CUY-TOWER CITY BRIDGES

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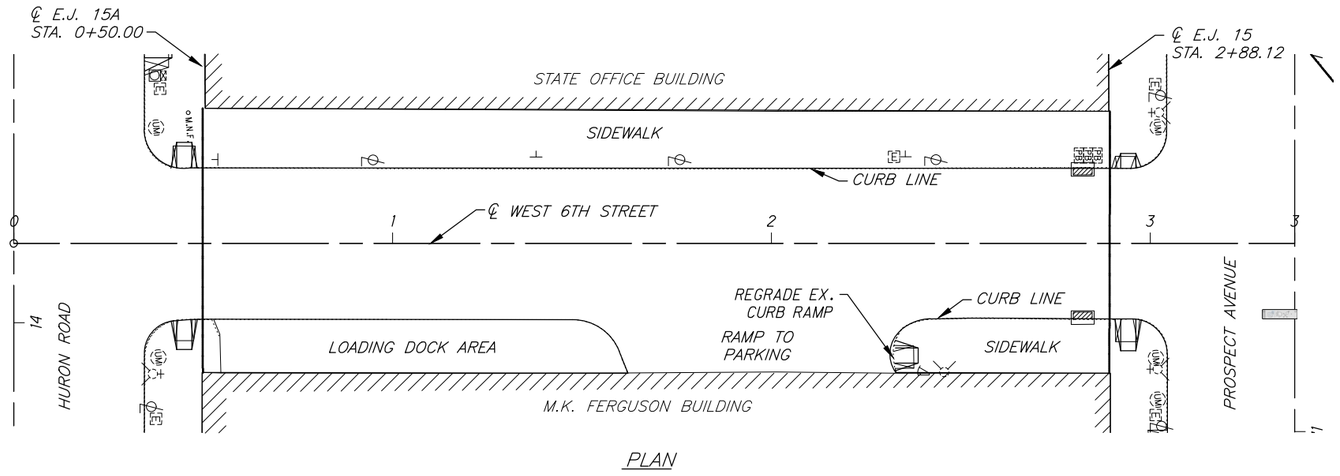
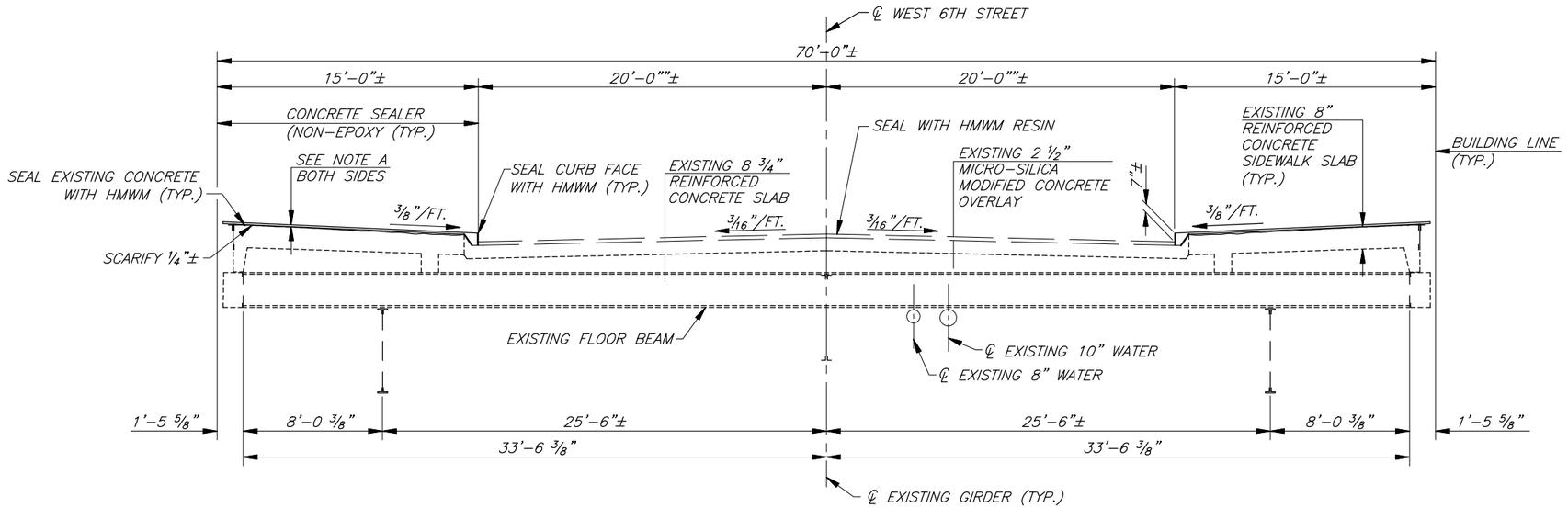


PLAN



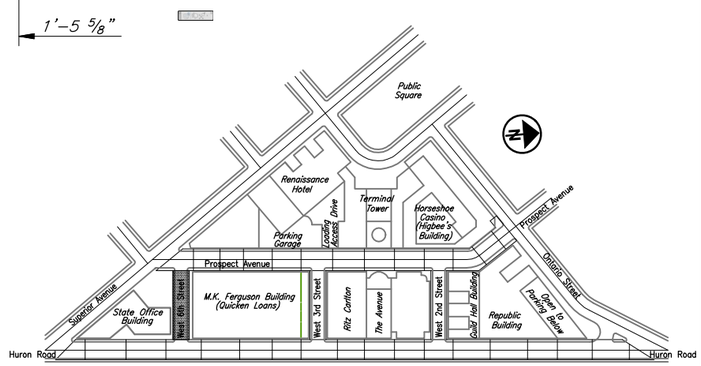
WEST 6TH STREET TRANSVERSE SECTION

NOTE A: EXISTING 4"± CONCRETE SURFACE COURSE TO BE REMOVED FROM FACE OF CURB TO BUILDING JOINT AND REPLACED WITH ITEM 847 MICRO-SILICA MODIFIED CONCRETE SIDEWALK OVERLAY, AS PER PLAN. 4X4 D6XD6 WWF TO BE INCLUDED IN SIDEWALK SURFACE COURSE FOR PAYMENT.

NOTES:
1. SEE EXISTING AND PROPOSED CURB DETAILS ON SHEET 45.
2. FOR HANDICAP CURB RAMP DETAILS SEE SHEET 98A.
3. FOR WATERPROOFING AROUND SIDEWALK PENETRATIONS, SEE DETAILS, SHEET 45.

LEGEND

- Overhead Delivery Door
- Doorway
- Building Line
- Ex. Sign
- Ex. Trash Bin
- Ex. Paper Box
- Ex. Parking Meter
- Ex. Bollard
- Ex. Planter
- Ex. Planter
- Ex. Flag Pole
- Ex. Bike Rack
- Ex. Catch Basin
- Ex. Manhole
- Ex. Pullbox
- Ex. Standpipe
- Ex. Fire Hydrant
- Ex. Light Pole
- Ex. Traffic Signal Pole
- Ex. Pedestrian Signal Pedestal
- Ex. Bus Shelter
- Ex. Information Kiosk Sign



KEY PLAN
NOT TO SCALE

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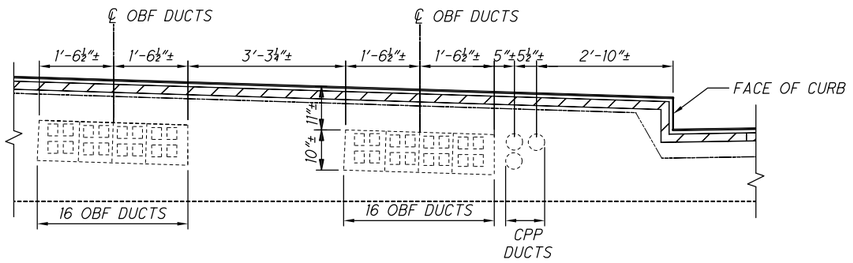
HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED RAB
CHECKED MMP

WEST 6TH STREET DECK PLAN AND TYPICAL SECTION

CUY-TOWER CITY BRIDGES

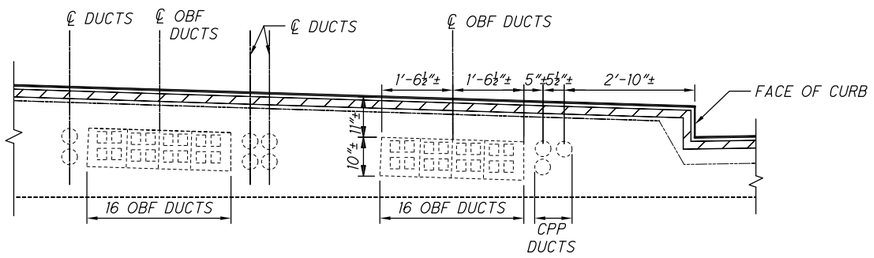
53
129



PROSPECT AVE. - SOUTH SIDEWALK

EJ 1, 7-13

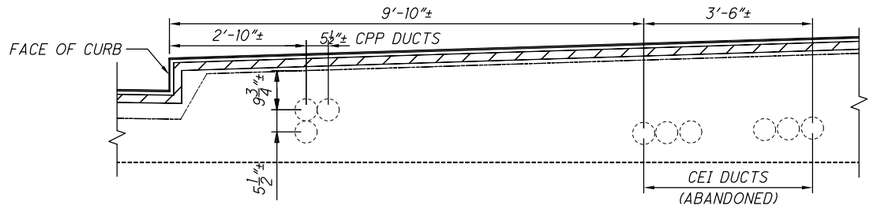
UTILITIES:
-AT&T OHIO, INC (OBF) - 32 DUCTS
-AT&T CORP LNS/METRO (ATTM) - 2 LINES IN OBF DUCTS
-AT&T CORP LONG DISTANCE (ATTLD) - 1 LINE IN OBF DUCT
-CROWN CASTLE (CRCP)
-LEVEL 3 COMMUNICATIONS (LVTP) - 2 LINES
-CENTURY LINK (QSTP)
-TIME WARNER (CVA)



PROSPECT AVE. - SOUTH SIDEWALK

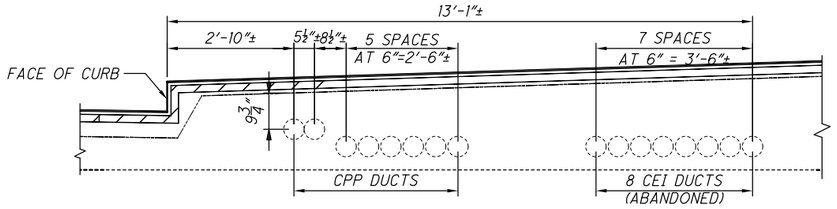
EJ 2-5

UTILITIES:
-AT&T OHIO, INC (OBF) - 32 DUCTS
-AT&T CORP LNS/METRO (ATTM) - 2 LINES IN OBF DUCTS
-AT&T CORP LONG DISTANCE (ATTLD) - 1 LINE IN OBF DUCT
-CROWN CASTLE (CRCP)
-LEVEL 3 COMMUNICATIONS (LVTP) - 2 LINES
-CENTURY LINK (QSTP)
-TIME WARNER (CVA)



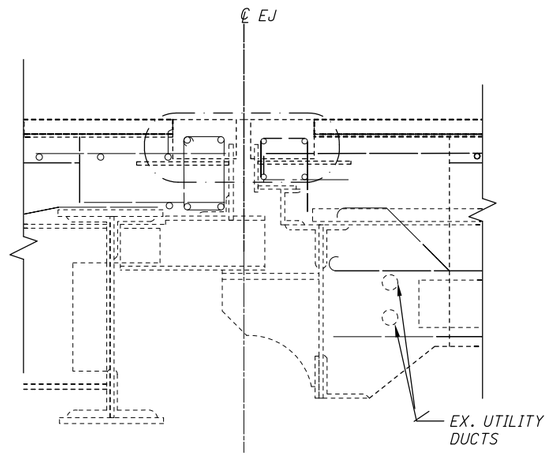
PROSPECT AVE. - NORTH SIDEWALK

UTILITIES:
-CLEVELAND PUBLIC POWER (CPP)
-CLEVELAND TRAFFIC (CDT)
-AT&T CORP LNS/METRO (ATTM) (IN ABANDONED CEI DUCT)
-MCI/VERIZON (MCIP) (IN ABANDONED CEI DUCT)

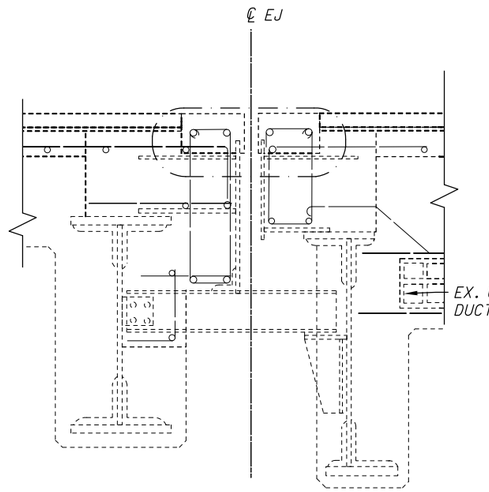


HURON ROAD - NORTH SIDEWALK

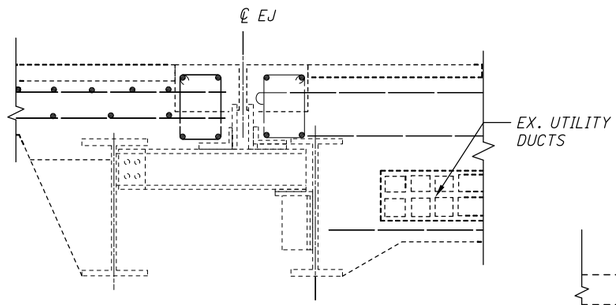
UTILITIES:
-CLEVELAND PUBLIC POWER (CPP)



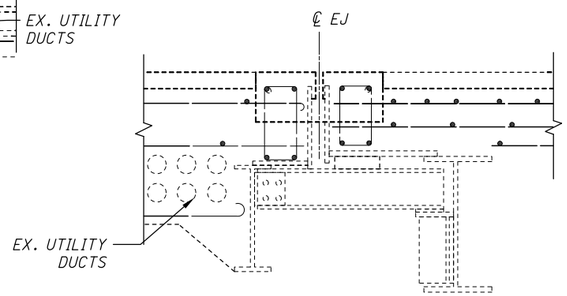
EJ 6: WEST 2ND STREET AT PROSPECT AVE AND HURON ROAD



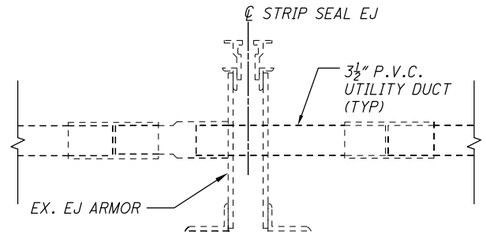
EJ 14: WEST 3RD STREET AT PROSPECT AVE AND HURON ROAD



EJ 15: WEST 6TH STREET AT PROSPECT AVE



EJ 15: WEST 6TH STREET AT HURON ROAD



EXISITNG TYPICAL EXPANSION JOINT

NOTE

1. EXTREME CARE MUST BE EXERCISED BY THE CONTRACTOR NOT TO DAMAGE OR DISTURB ANY EXISTING UNDERGROUND UTILITIES DURING REMOVAL AND CONSTRUCTION OPERATIONS. ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE UTILITY OWNER AND ENGINEER. CONTRACTOR SHALL COORDINATE DIRECTLY WITH THE AFFECTED UTILITY COMPANY TO DETERMINE REPAIR METHOD.

HORIZONTAL SCALE IN FEET
0 ** ** **

CALCULATED MJD
CHECKED SMK

UTILITY DETAILS

CUY - TOWER CITY BRIDGES

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CONCRETE BRIDGE DECK ELEVATIONS - PROSPECT AVENUE											
LEFT					CENTERLINE		RIGHT				
COMMENTS	EX. ELEV (FACE OF BUILDING)	EX. ELEV (TOP OF CURB)	EX. ELEV (GUTTER)	LANE CROSS SLOPE (%)	STATION	EX. ELEV	LANE CROSS SLOPE (%)	EX. ELEV (GUTTER)	EX. ELEV (TOP OF CURB)	EX. ELEV (FACE OF BUILDING)	COMMENTS
					9+54.26			656.86	657.39	657.67	BEGIN WALK REPLACEMENT BEGIN MICRO-SILICA PAVEMENT
					9+95.20	657.28	0.47	657.12			BEGIN MICRO-SILICA PAVEMENT
					10+00.00	657.36	0.62	657.15	657.61	657.93	
	659.36	658.45	658.28	1.65	11+00.00	658.84	1.56	658.31	658.91	659.38	
℄ E.J. 13	659.58	659.13	658.43	1.59	11+06.59	658.97	1.59	658.43	659.11	659.57	℄ E.J. 13
℄ E.J. 12	662.32	662.82	661.07	1.68	11+96.59	661.64	1.62	661.09	661.80	662.33	℄ E.J. 12
	662.41	661.92	661.17	1.65	12+00.00	661.73	1.56	661.20	661.90	662.43	
℄ E.J. 11	664.84	664.38	663.70	1.47	12+83.09	664.20	1.44	663.71	664.38	664.86	℄ E.J. 11
	665.38	664.89	664.21	1.44	13+00.00	664.70	1.41	664.22	664.90	665.37	
℄ E.J. 10	667.84	667.24	666.55	1.59	13+78.01	667.09	1.56	666.56	667.28	667.76	℄ E.J. 10
	669.01	667.90	667.22	1.50	14+00.00	667.73	1.50	667.22	667.94	668.41	
℄ E.J. 9	670.55	669.98	669.32	1.41	14+69.17	669.80	1.53	669.28	669.98	670.48	℄ E.J. 9

CONCRETE BRIDGE DECK ELEVATIONS - HURON ROAD										
LEFT					CENTERLINE		RIGHT			
COMMENTS	EX. ELEV (FACE OF BUILDING)	EX. ELEV (TOP OF CURB)	EX. ELEV (GUTTER)	LANE CROSS SLOPE (%)	STATION	EX. ELEV	LANE CROSS SLOPE (%)	EX. ELEV (GUTTER)	EX. ELEV (TOP OF CURB)	COMMENTS
					9+74.69					BEGIN WALK REPLACEMENT
					9+81.63			651.12	651.53	BEGIN WALK REPLACEMENT BEGIN MICRO-SILICA PAVEMENT
BEGIN MICRO-SILICA PAVEMENT					9+97.50	651.89				BEGIN MICRO-SILICA PAVEMENT
					10+00.00	651.96	1.37	651.64	652.06	
BEGIN WALK REPLACEMENT BEGIN MICRO-SILICA PAVEMENT		652.79	652.20		10+23.99					
BEGIN WALK REPLACEMENT	653.36				10+36.25					
℄ E.J. 33	653.51	653.31	652.64	1.53	10+41.61	653.16	1.18	652.76	653.24	℄ E.J. 33
	654.70	654.70	654.24	1.50	11+00.00	654.75	1.50	654.24	654.87	
℄ E.J. 32	657.27	656.42	656.15	1.50	11+70.21	656.66	1.65	656.10	656.83	℄ E.J. 32
	657.24	657.26	656.90	1.68	12+00.00	657.47	1.65	656.91	657.64	
	660.04	660.31	659.63	1.74	13+00.00	660.22	1.62	659.67	660.38	
℄ E.J. 31	660.88	660.52	659.81	1.79	13+06.85	660.42	1.65	659.86	660.56	℄ E.J. 31
	WITHIN WEST 6TH STREET INTERSECTION				14+00.00	662.85	1.18	662.45	663.11	
℄ E.J. 30	664.53	664.01	663.27	1.68	14+31.85	663.84	1.53	663.32	663.97	℄ E.J. 30
EX. DRIVE APRON	666.18		665.10	1.68	15+00.00	665.67	1.47	665.17	665.96	
℄ E.J. 29	668.96	668.46	667.77	1.56	15+97.35	668.30	1.50	667.79	668.52	℄ E.J. 29
	669.02	668.51	667.83	1.56	16+00.00	668.36	1.53	667.84	668.87	
	671.01	670.52	669.84	1.74	17+00.00	670.43	1.71	669.85	670.60	
℄ E.J. 28	671.36	670.87	670.19	1.44	17+17.43	670.68	1.44	670.19	670.90	℄ E.J. 28
	672.30	671.65	670.99	1.41	18+00.00	671.47	1.29	671.03	671.73	
℄ E.J. 27	672.41	671.74	671.09	1.47	18+09.71	671.59	1.35	671.13	671.83	℄ E.J. 27

NOTE:
CONTRACTOR SHALL MATCH ELEVATIONS AT EXISTING BUILDING JOINTS.

CALCULATED SAH
CHECKED RAB

BRIDGE DECK ELEVATIONS - CONCRETE PAVEMENT

CUY-TOWER CITY BRIDGES

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BRIDGE DECK ELEVATIONS - ASPHALT SURFACE														
LEFT						CENTERLINE			RIGHT					
COMMENTS	EX. ELEV			PR. ELEV	LANE CROSS SLOPE (%)	STATION	PR. ELEV	EX. ELEV	LANE CROSS SLOPE (%)	PR. ELEV	EX. ELEV			COMMENTS
	FACE OF BLD	TOP OF CURB	GUTTER	GUTTER						GUTTER	GUTTER	TOP OF CURB	FACE OF BLD	
℄ E.J. 27	672.41	671.76	671.09	671.09	1.46%	18+09.71	671.59	671.59	1.37%	671.13	671.13	671.83	671.83	℄ E.J. 27
WEST 3RD STREET	-	-	671.63	671.40	1.56%	18+36.00	671.93	671.86	1.56%	671.40	671.41	672.07	672.07	
WEST 3RD STREET	-	-	-	671.63	1.56%	18+62.00	672.16	672.23	1.56%	671.63	671.66	672.30	672.30	
WEST 3RD STREET	-	672.50	672.02	671.89	1.56%	18+88.00	672.42	672.37	1.56%	671.89	671.88	672.61	672.61	
℄ E.J. 26	673.12	672.80	672.14	672.19	1.56%	19+14.01	672.72	672.65	1.56%	672.19	672.20	672.92	672.92	℄ E.J. 26
	673.45	673.04	672.45	672.42	1.56%	19+40.00	672.95	672.82	1.56%	672.42	672.48	673.14	673.14	
	673.80	673.31	672.75	672.67	1.56%	19+67.00	673.20	673.07	1.56%	672.67	672.71	673.37	673.37	
	674.13	673.61	672.99	672.94	1.56%	19+93.00	673.47	673.31	1.56%	672.94	672.96	673.61	673.61	
℄ E.J. 25	674.42	673.89	673.23	673.23	1.56%	20+19.51	673.76	673.69	1.56%	673.23	673.17	673.91	673.91	℄ E.J. 25
	674.39	674.11	673.50	673.42	1.56%	20+51.00	673.95	673.92	1.56%	673.42	673.42	674.07	674.07	
	674.37	674.23	673.62	673.55	1.56%	20+83.00	674.08	674.06	1.56%	673.55	673.53	674.21	674.21	
	674.34	674.10	673.51	673.42	1.56%	21+15.00	673.95	673.99	1.56%	673.42	673.41	674.08	674.08	
℄ E.J. 17	674.31	673.87	673.18	673.25	1.56%	21+47.01	673.78	673.71	1.56%	673.25	673.23	673.97	673.97	℄ E.J. 17
	674.14	673.60	672.97	672.94	1.56%	21+73.00	673.47	673.45	1.56%	672.94	673.00	673.61	673.61	
	673.92	673.31	672.70	672.64	1.56%	22+00.00	673.17	673.19	1.56%	672.64	672.70	673.31	673.31	
	673.71	673.05	672.48	672.38	1.56%	22+26.00	672.91	672.94	1.56%	672.38	672.44	673.05	673.05	
℄ E.J. 18	673.49	672.77	672.12	672.15	1.56%	22+52.51	672.68	672.64	1.56%	672.15	672.13	672.86	672.86	℄ E.J. 18
WEST 2ND STREET	-	-	671.97	671.88	1.56%	22+83.00	672.41	672.30	1.56%	671.88	671.85	672.55	672.55	
WEST 2ND STREET	-	-	-	671.64	1.56%	23+13.00	672.17	672.05	1.56%	671.64	671.63	672.31	672.31	
	672.66	671.99	671.34	671.36	1.56%	23+44.00	671.89	671.80	1.56%	671.36	671.39	672.06	672.06	
℄ E.J. 19	672.07	671.69	671.01	671.12	1.56%	23+74.28	671.65	671.64	1.56%	671.12	671.12	671.88	671.88	℄ E.J. 19
	671.90	671.49	670.85	670.88	1.56%	23+99.00	671.41	671.39	1.56%	670.88	670.95	671.61	671.61	
	671.72	671.29	670.69	670.68	1.56%	24+24.00	671.21	671.20	1.56%	670.68	670.78	671.41	671.41	
EX. DRIVE APRON	671.54	-	670.52	670.52	1.57%	24+49.00	671.05	670.96	1.56%	670.52	670.55	671.19	671.19	
EX. DRIVE APRON	671.36	-	670.34	670.34	1.57%	24+74.00	670.87	670.77	1.56%	670.34	670.37	671.01	671.01	
EX. DRIVE APRON	671.19	-	670.19	670.19	1.51%	24+98.00	670.70	670.58	1.56%	670.17	670.20	670.84	670.84	
℄ E.J. 20	671.01	670.67	669.96	669.96	1.70%	25+23.18	670.54	670.40	1.56%	670.01	669.96	670.68	670.68	℄ E.J. 20
EX. DRIVE APRON	670.81	-	669.78	669.78	1.48%	25+50.00	670.28	670.15	1.56%	669.75	669.76	670.42	670.42	
EX. DRIVE APRON	670.60	-	669.59	669.59	1.24%	25+77.00	670.01	669.96	1.56%	669.48	669.48	670.15	670.15	
EX. DRIVE APRON	670.39	-	669.40	669.40	1.39%	26+05.00	669.87	669.76	1.56%	669.34	669.37	670.01	670.01	
℄ E.J. 21	670.18	-	669.15	669.15	1.71%	26+31.68	669.73	669.64	1.56%	669.20	669.09	669.87	669.87	℄ E.J. 21

NOTE:

CONTRACTOR SHALL MATCH ELEVATIONS AT EXISTING BUILDING JOINTS.

CALCULATED SAH
CHECKED RAB

BRIDGE DECK ELEVATIONS - PROSPECT AVENUE

CUY-TOWER CITY BRIDGES

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BRIDGE DECK ELEVATIONS - SIDE STREETS

COMMENTS	LEFT					CENTERLINE			RIGHT					COMMENTS
	EX. ELEV			PR. ELEV	LANE CROSS SLOPE (%)	STATION	PR. ELEV	EX. ELEV	LANE CROSS SLOPE (%)	PR. ELEV	EX. ELEV			
	FACE OF BLD	TOP OF CURB	GUTTER	GUTTER						GUTTER	GUTTER	TOP OF CURB	FACE OF BLD	
WEST 6TH STREET - CONCRETE SURFACE														
℄ E.J. 15a	662.12	661.73	661.11			0+49.88		661.47			661.43	662.09	663.28	℄ E.J. 15a
	661.14	661.37	660.73			0+73.00		661.07			661.02	-	662.35	
	660.59	661.00	660.33			0+97.00		660.69			660.59	-	661.72	
	660.26	660.63	659.93			1+21.00		660.30			660.17	-	661.10	
	660.17	660.24	659.58			1+45.00		659.90			659.77	-	660.65	
	659.78	659.85	659.24			1+69.00		659.51			659.48	-	659.71	
	659.39	659.46	658.89			1+93.00		659.14			658.98	-	659.18	
	659.02	659.08	658.51			2+17.00		658.77			658.60	-	658.73	
	658.65	658.71	658.11			2+41.00		658.38			658.17	658.36	659.14	
	658.28	658.37	657.71			2+65.00		657.96			657.96	658.48	659.05	
℄ E.J. 15	658.32	658.14	657.52			2+89.79		657.79			657.48	658.18	658.95	℄ E.J. 15
WEST 3RD STREET - ASPHALT SURFACE														
℄ E.J. 14a	672.66	672.30	671.62	671.77	1.56%	0+49.40	672.04	672.02	1.56%	671.77	671.68	672.40	672.80	℄ E.J. 14a
	672.71	672.45	671.85	671.87	1.56%	0+73.00	672.14	672.14	1.56%	671.90	671.99	672.52	672.75	GUTTER OFFSET: 15.4'
	672.76	672.64	672.07	672.06	1.56%	0+97.00	672.33	672.35	1.56%	672.07	672.26	672.75	672.70	GUTTER OFFSET: 16.5'
	672.81	672.77	672.14	672.31	1.56%	1+21.00	672.58	672.39	1.56%	672.40	672.49	673.02	672.66	GUTTER OFFSET: 23.3'
	672.86	672.59	671.98	672.08	1.56%	1+45.00	672.36	672.25	1.56%	672.17	672.35	672.75	672.61	GUTTER OFFSET: 23.3'
EX. STEPS	-	672.37	671.77	671.83	1.56%	1+69.00	672.10	672.04	1.56%	671.92	672.11	672.46	672.56	GUTTER OFFSET: 23.3'
	672.50	672.13	671.53	671.60	1.56%	1+93.00	671.88	671.83	1.56%	671.69	672.03	672.25	627.51	GUTTER OFFSET: 23.3'
	672.26	671.91	671.25	671.34	1.56%	2+17.00	671.61	671.56	1.56%	671.34	671.41	671.94	672.52	
	672.05	671.72	670.93	671.17	1.56%	2+41.00	671.44	671.29	1.56%	671.17	671.18	671.79	672.33	
	671.83	671.58	670.67	671.03	1.56%	2+65.00	671.30	671.15	1.56%	671.03	670.97	671.65	672.15	
℄ E.J. 14	671.61	671.46	670.77	670.96	1.56%	2+88.95	671.23	671.10	1.56%	670.96	670.93	671.62	672.00	℄ E.J. 14
WEST 2ND STREET - ASPHALT SURFACE														
℄ E.J. 6a	673.36	672.50	671.79	671.81	1.56%	0+49.63	672.08	671.90	1.56%	671.81	671.62	672.29	672.83	℄ E.J. 6a
	673.20	672.53	671.82	671.88	1.56%	0+73.00	672.15	672.02	1.56%	671.88	671.90	672.39	672.91	
	673.06	672.63	672.03	672.04	1.56%	0+97.00	672.31	672.23	1.56%	672.04	672.16	672.62	673.00	
	673.14	672.79	672.18	672.20	1.56%	1+21.00	672.47	672.37	1.56%	672.20	672.3	672.78	673.14	
	673.08	672.87	672.26	672.28	1.56%	1+45.00	672.55	672.50	1.56%	672.28	672.38	672.85	673.17	
	672.94	672.91	672.26	672.33	1.56%	1+69.00	672.60	672.47	1.56%	672.33	672.4	672.92	673.14	
	672.80	672.71	672.02	672.14	1.56%	1+93.00	672.41	672.27	1.56%	672.14	672.19	672.73	672.96	
	672.67	672.49	671.82	671.90	1.56%	2+17.00	672.17	672.04	1.56%	671.90	671.91	672.47	672.73	
	672.56	672.3	671.56	671.66	1.56%	2+41.00	671.93	671.81	1.56%	671.66	671.63	672.19	672.49	
	672.47	672.11	671.32	671.43	1.56%	2+65.00	671.70	671.51	1.56%	671.43	671.32	671.92	672.24	
℄ E.J. 6	672.53	671.91	671.26	671.31	1.56%	2+88.90	671.58	671.55	1.56%	671.31	671.18	671.88	671.99	℄ E.J. 6

NOTE:
CONTRACTOR SHALL MATCH ELEVATIONS AT EXISTING BUILDING JOINTS.

CALCULATED SAH
CHECKED RAB

BRIDGE DECK ELEVATIONS - HURON ROAD

CUY-TOWER CITY BRIDGES

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BRIDGE DECK ELEVATIONS - SIDE STREETS

LEFT						CENTERLINE			RIGHT					
COMMENTS	EX. ELEV			PR. ELEV	LANE CROSS SLOPE (%)	STATION	PR. ELEV	EX. ELEV	LANE CROSS SLOPE (%)	PR. ELEV	EX. ELEV			COMMENTS
	FACE OF BLD	TOP OF CURB	GUTTER	GUTTER						GUTTER	GUTTER	TOP OF CURB	FACE OF BLD	
WEST 6TH STREET - CONCRETE SURFACE														
℄ E.J. 15a	662.12	661.73	661.11			0+49.88		661.47			661.43	662.09	663.28	℄ E.J. 15a
	661.14	661.37	660.73			0+73.00		661.07			661.02	-	662.35	
	660.59	661.00	660.33			0+97.00		660.69			660.59	-	661.72	
	660.26	660.63	659.93			1+21.00		660.30			660.17	-	661.10	
	660.17	660.24	659.58			1+45.00		659.90			659.77	-	660.65	
	659.78	659.85	659.24			1+69.00		659.51			659.48	-	659.71	
	659.39	659.46	658.89			1+93.00		659.14			658.98	-	659.18	
	659.02	659.08	658.51			2+17.00		658.77			658.60	-	658.73	
	658.65	658.71	658.11			2+41.00		658.38			658.17	658.36	659.14	
	658.28	658.37	657.71			2+65.00		657.96			657.96	658.48	659.05	
℄ E.J. 15	658.32	658.14	657.52			2+89.79		657.79			657.48	658.18	658.95	℄ E.J. 15
WEST 3RD STREET - ASPHALT SURFACE														
℄ E.J. 14a	672.66	672.30	671.62	671.77	1.04%	00+49.40	671.95	672.02	1.04%	671.77	671.68	672.40	672.80	℄ E.J. 14a
	672.71	672.45	671.85	671.96	1.04%	00+73.00	672.14	672.14	1.04%	671.98	671.99	672.52	672.75	GUTTER OFFSET: 15.4'
	672.76	672.64	672.07	672.15	1.04%	00+97.00	672.33	672.35	1.04%	672.16	672.26	672.75	672.70	GUTTER OFFSET: 16.5'
	672.81	672.77	672.14	672.32	1.04%	01+21.00	672.51	672.39	1.04%	672.41	672.49	673.02	672.66	GUTTER OFFSET: 23.3'
	672.86	672.59	671.98	672.10	1.04%	01+45.00	672.28	672.25	1.04%	672.19	672.35	672.75	672.61	GUTTER OFFSET: 23.3'
EX. STEPS	-	672.37	671.77	671.84	1.04%	01+69.00	672.03	672.04	1.04%	671.93	672.11	672.46	672.56	GUTTER OFFSET: 23.3'
	672.50	672.13	671.53	671.62	1.04%	01+93.00	671.80	671.83	1.04%	671.71	672.03	672.25	627.51	GUTTER OFFSET: 23.3'
	672.26	671.91	671.25	671.34	1.04%	02+17.00	671.52	671.56	1.04%	671.34	671.41	671.94	672.52	
	672.05	671.72	670.93	671.17	1.04%	02+41.00	671.35	671.29	1.04%	671.17	671.18	671.79	672.33	
	671.83	671.58	670.67	671.03	1.04%	02+65.00	671.21	671.15	1.04%	671.03	670.97	671.65	672.15	
℄ E.J. 14	671.61	671.46	670.77	670.96	1.04%	02+88.95	671.14	671.10	1.04%	670.96	670.93	671.62	672.00	℄ E.J. 14
WEST 2ND STREET - ASPHALT SURFACE														
℄ E.J. 6a	673.36	672.50	671.79	671.81	1.04%	00+49.63	671.99	671.90	1.04%	671.81	671.62	672.29	672.83	℄ E.J. 6a
	673.20	672.53	671.82	671.88	1.04%	00+73.00	672.06	672.02	1.04%	671.88	671.90	672.39	672.91	
	673.06	672.63	672.03	672.04	1.04%	00+97.00	672.22	672.23	1.04%	672.04	672.16	672.62	673.00	
	673.14	672.79	672.18	672.20	1.04%	01+21.00	672.38	672.37	1.04%	672.20	672.30	672.78	673.14	
	673.08	672.87	672.26	672.28	1.04%	01+45.00	672.46	672.50	1.04%	672.28	672.38	672.85	673.17	
	672.94	672.91	672.26	672.33	1.04%	01+69.00	672.51	672.47	1.04%	672.33	672.40	672.92	673.14	
	672.80	672.71	672.02	672.14	1.04%	01+93.00	672.32	672.27	1.04%	672.14	672.19	672.73	672.96	
	672.67	672.49	671.82	671.90	1.04%	02+17.00	672.08	672.04	1.04%	671.90	671.91	672.47	672.73	
	672.56	672.3	671.56	671.66	1.04%	02+41.00	671.84	671.81	1.04%	671.66	671.63	672.19	672.49	
	672.47	672.11	671.32	671.43	1.04%	02+65.00	671.61	671.51	1.04%	671.43	671.32	671.92	672.24	
℄ E.J. 6	672.53	671.91	671.26	671.31	1.04%	02+88.90	671.49	671.55	1.04%	671.31	671.18	671.88	671.99	℄ E.J. 6

℄ PROSPECT AVENUE						
0+20.83	P.T.	670.30	℄ WEST 3RD STREET	671.31	P.T.	0+20.83
0+12.97	MID. PT.	670.55		671.18	MID. PT.	0+12.97
0+05.12	P.C.	670.80		671.05	P.C.	0+05.12
0+00.00	E.J. 14	670.96		670.96	E.J. 14	0+00.00
DISTANCE	GEOMETRIC LOCATION	PR. ELEV (GUTTER)		PR. ELEV (GUTTER)	GEOMETRIC LOCATION	DISTANCE
0+21.15	E.J. 14a	671.77		671.77	E.J. 14a	0+21.15
0+15.71	P.T.	671.67		671.80	P.T.	0+15.71
0+07.85	MID. PT.	671.54		671.85	MID. PT.	0+07.85
0+00.00	P.C.	671.40		671.89	P.C.	0+00.00
℄ HURON ROAD						

℄ PROSPECT AVENUE						
0+20.92	P.T.	671.56	℄ WEST 2ND STREET	670.78	P.T.	0+20.92
0+12.97	MID. PT.	671.47		670.97	MID. PT.	0+12.97
0+05.12	P.C.	671.38		671.17	P.C.	0+05.12
0+00.00	E.J. 6	671.31		671.31	E.J. 6	0+00.00
DISTANCE	GEOMETRIC LOCATION	PR. ELEV (GUTTER)		PR. ELEV (GUTTER)	GEOMETRIC LOCATION	DISTANCE
0+21.34	E.J. 6a	671.81		671.81	E.J. 6a	0+21.34
0+15.71	P.T.	671.84		671.71	P.T.	0+15.71
0+07.85	MID. PT.	671.87		671.58	MID. PT.	0+07.85
0+00.00	P.C.	671.91		671.44	P.C.	0+00.00
℄ HURON ROAD						

NOTE:
CONTRACTOR SHALL MATCH ELEVATIONS AT EXISTING BUILDING JOINTS.

CALCULATED SAH
CHECKED RAB

BRIDGE DECK ELEVATIONS - SIDE STREETS

CUY-TOWER CITY BRIDGES

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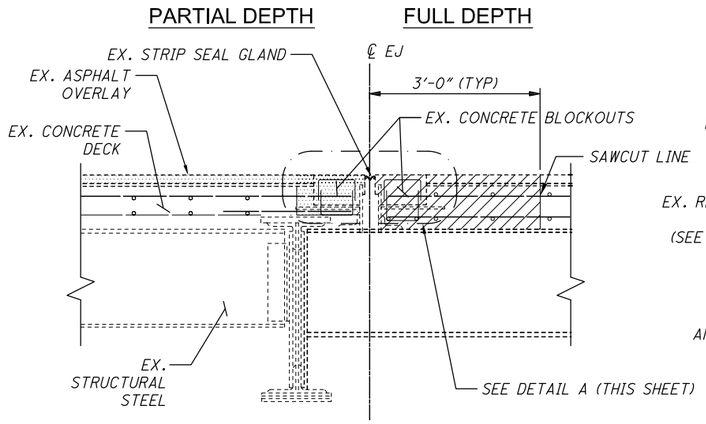
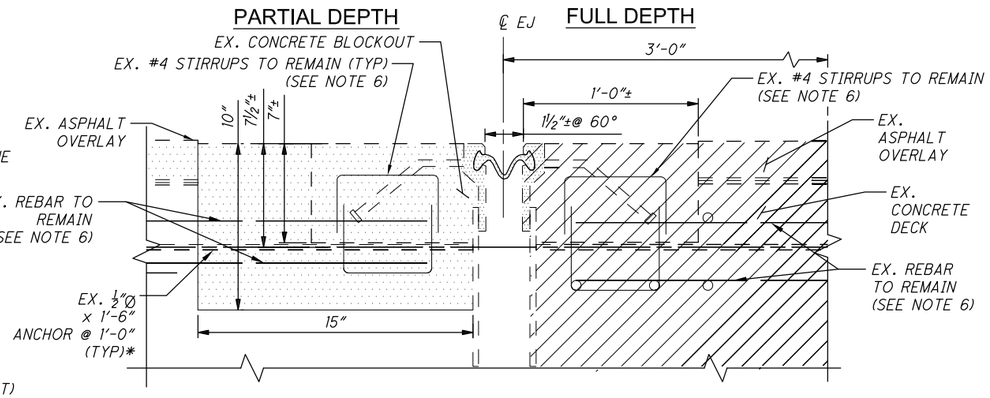


EXISTING ROADWAY EXPANSION JOINT REMOVAL



DETAIL A

ALL EXISTING REBARS TO REMAIN.
* EXISTING ANCHOR TO BE REMOVED IN FULL DEPTH DECK REPLACEMENT AREAS. EXISTING ANCHOR TO REMAIN IN PARTIAL DEPTH REPLACEMENT AREAS

LEGEND

- REMOVAL - PARTIAL CONCRETE DEPTH REPLACEMENT
- REMOVAL - FULL CONCRETE DECK DEPTH REPLACEMENT
- PROPOSED CONCRETE
- EJ EXPANSION JOINT

NOTES:

1. EXPANSION JOINT SYSTEM TO BE WABO FABROSPAN AS MANUFACTURERED BY WATSON BOWMAN ACME CORP

2. SELECT POLY FOAM JOINT FILLER DIAMETER TO BE 30% LARGER THAN JOINT OPENING. PAYMENT FOR JOINT FILLER TO BE INCLUDED WITH ITEM 516 - PREFORMED EXPANSION JOINT FILLER, MISC: ROUND POLY FOAM, AS PER PLAN

3. STEEL CLAMPING BAR SEGMENTS SHALL BE 4'-3" TO 6'-6" LONG. FOR STAGED EXPANSION JOINT CONSTRUCTION, STEEL CLAMPING BAR SHALL TERMINATE A MINIMUM OF 4" FROM EXPOSED END OF STEEL ARMOURING. GAP BETWEEN ADJACENT CLAMPING BARS SHALL NOT EXCEED ⅛". STEEL CLAMPING BAR SEGMENTS SHALL BE FIELD WELDED AFTER INSTALLATION. SEE SHEET 76 FOR CLAMPING BAR DETAILS AND INSTALLATION.

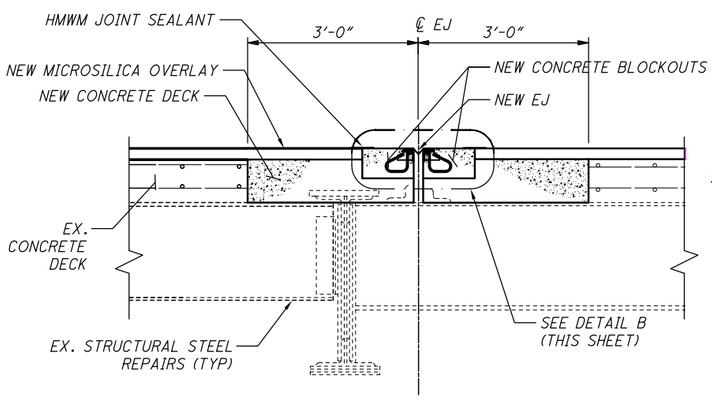
4. ALL CLAMPING BARS SHALL PREFERABLY BE ONE PIECE THROUGH ANY CHANGE IN DIRECTION BUT AT CURB THEY MAY BE OF MORE THAN ONE PIECE. EACH SUCH PIECE SHALL HAVE A MINIMUM OF 2 CLAMPING BOLTS.

5. FOR DETAILS OF SIDEWALK EXPANSION JOINT REPAIRS SEE SHEETS 60 & 61.

6. EXISTING REINFORCEMENT TO REMAIN VARIES BY LOCATION. FOR EXISTING AND PROPOSED REINFORCING DETAILS IN CONCRETE DECK AND CONCRETE BLOCKOUTS SEE SHEETS 66-75 AND 92-94.

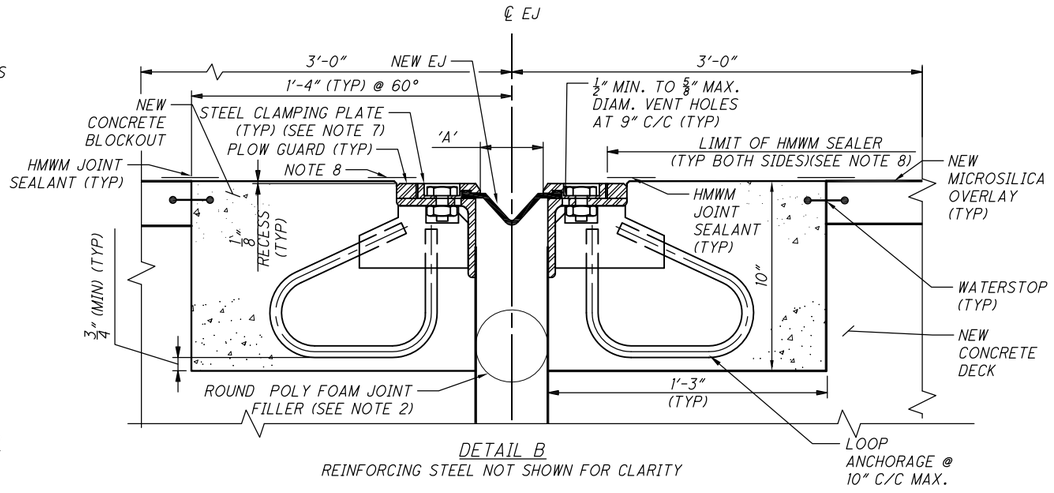
7. SEE SHEET 60 FOR STEEL CLAMPING PLATE DETAIL.

8. HMWM SEAL ALL JOINTS AND CONCRETE INTERFACES INCIDENTAL TO ITEM 516 - STRUCTURAL STEEL EXPANSION JOINTS, AS PER PLAN. CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PREVENT HMWM SEALER FROM FLOWING PAST THE LIMIT INDICATED ON THE DETAILS. UNDER NO CIRCUMSTANCES SHALL IT BE ACCEPTABLE FOR SEALER TO FILL THE GAP BETWEEN PLOW GUARD AND CLAMPING PLATE OR COUNTERBORED BOLT HOLE.



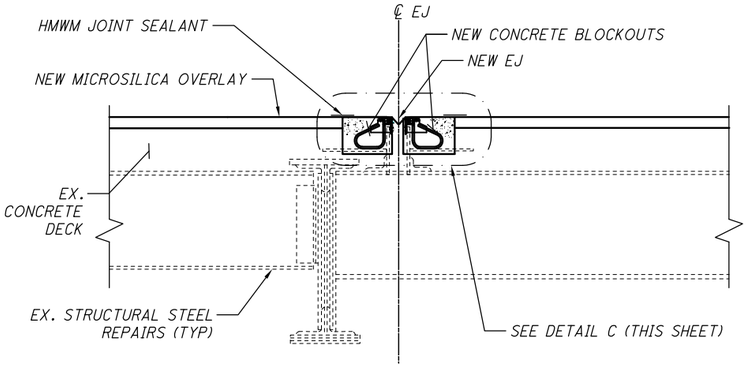
TYPICAL FULL DEPTH ROADWAY EXPANSION JOINT REPAIR

(AT CURBLINE ONLY AT LOCATIONS SHOWN ON SHEETS 77-87)

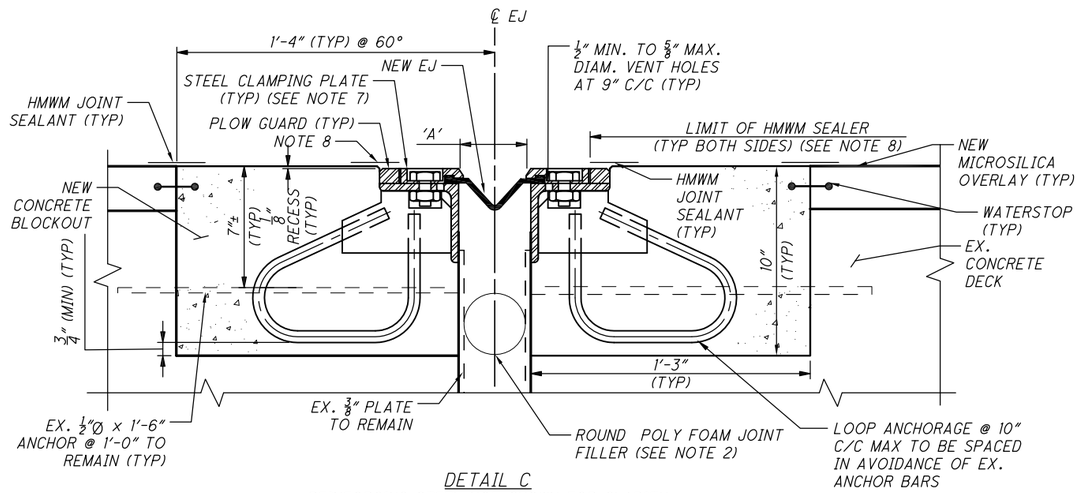


DETAIL B

REINFORCING STEEL NOT SHOWN FOR CLARITY



TYPICAL PARTIAL DEPTH ROADWAY EXPANSION JOINT REPAIR



DETAIL C

REINFORCING STEEL NOT SHOWN FOR CLARITY

MINIMUM REQUIRED JOINT OPENING SIZES	
TEMPERATURE(°F)	DIMENSION 'A' (in.)
-10	3 1/8
0	3
10	2 3/4
20	2 5/8
30	2 1/2
40	2 3/8
50	2 1/4
60	2
70	1 7/8
80	1 3/4
90	1 5/8
100	1 1/2
110	1 1/2

HORIZONTAL SCALE IN FEET

CALCULATED EIW CHECKED SMK

ROADWAY EXPANSION JOINT DETAILS

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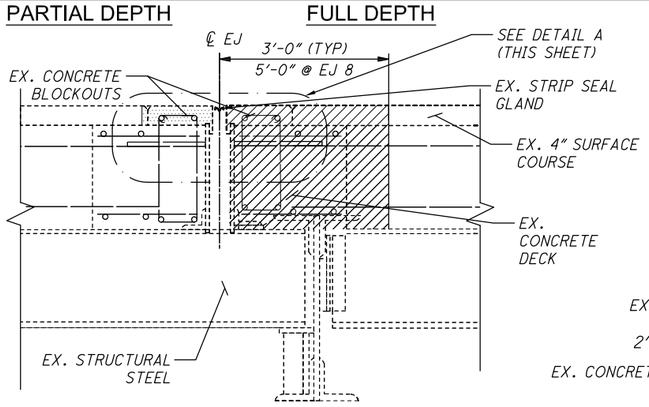
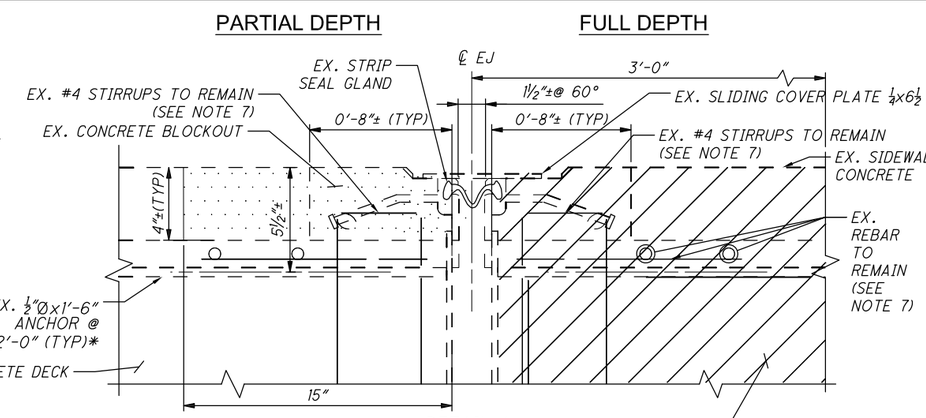


EXISTING SIDEWALK EXPANSION JOINT REMOVAL

TYPICAL FOR EJ 1-33, FOR EJ JD, SEE SHEET 61.



DETAIL A

* EXISTING ANCHOR TO BE REMOVED IN FULL DEPTH DECK REPLACEMENT AREAS. EXISTING ANCHOR TO REMAIN IN PARTIAL DEPTH REPLACEMENT AREAS

LEGEND

- REMOVAL - PARTIAL CONCRETE DEPTH REPLACEMENT
- REMOVAL - FULL CONCRETE DECK DEPTH REPLACEMENT
- PROPOSED CONCRETE
- EJ EXPANSION JOINT

NOTES:

1. EXPANSION JOINT SYSTEM TO BE WABO FABROSPAN AS MANUFACTURERED BY WATSON BOWMAN ACME CORP

2. SELECT POLY FOAM JOINT FILLER DIAMETER TO BE 30% LARGER THAN JOINT OPENING. PAYMENT FOR JOINT FILLER TO BE INCLUDED WITH ITEM 516 - PREFORMED EXPANSION JOINT FILLER, MISC: ROUND POLY FOAM, AS PER PLAN.

3. STEEL CLAMPING BAR SEGMENTS SHALL BE 4'-3" TO 6'-6" LONG. FOR STAGED EXPANSION JOINT CONSTRUCTION, STEEL CLAMPING BAR SHALL TERMINATE A MINIMUM OF 4" FROM EXPOSED END OF STEEL ARMOURING. GAP BETWEEN ADJACENT CLAMPING BARS SHALL NOT EXCEED ⅛". STEEL CLAMPING BAR SEGMENTS SHALL BE FIELD WELDED AFTER INSTALLATION. SEE SHEET 76 FOR CLAMPING BAR DETAILS AND INSTALLATION.

4. ALL CLAMPING BARS SHALL PREFERABLY BE ONE PIECE THROUGH ANY CHANGE IN DIRECTION BUT AT CURB THEY MAY BE OF MORE THAN ONE PIECE. EACH SUCH PIECE SHALL HAVE A MINIMUM OF 2 CLAMPING BOLTS.

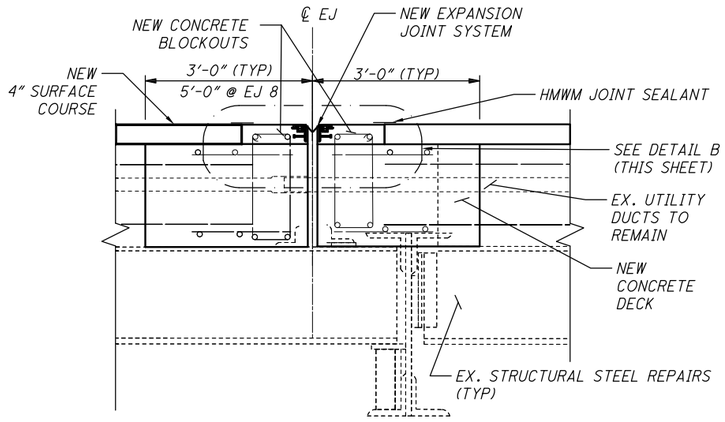
5. FOR EXPANSION JOINT OPENING DIMENSION 'A', SEE TABLE SHEET 59.

6. FOR DETAILS OF ROADWAY EXPANSION JOINT REPAIR SEE SHEET 59. FOR DETAILS OF SIDEWALK EXPANSION JOINT REPAIR AT EJ JD, SEE SHEET 61.

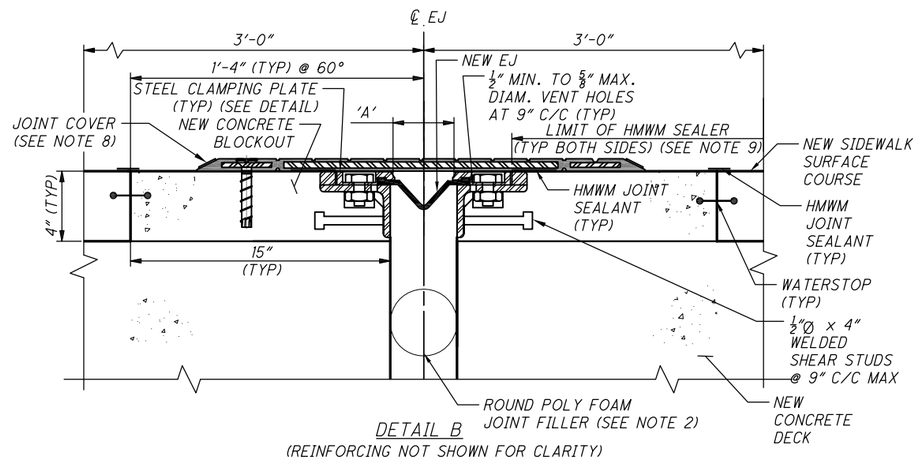
7. EXISTING REINFORCEMENT TO REMAIN VARIES BY LOCATION. FOR EXISTING AND PROPOSED REINFORCING DETAILS IN CONCRETE DECK AND CONCRETE BLOCKOUTS SEE SHEETS 66-75 AND 92-94.

8. SIDEWALK JOINT COVER SHALL BE WABO SAFETY FLEX AS MANUFACTURERED BY WATSON BOWMAN ACME CORP OR NYSTROM RCP: FLOOR-TO-FLOOR HEAVY DUTY SURFACE MOUNT EXPANSION JOINT SYSTEM AS MANUFACTURED BY NYSTROM BUILDING PRODUCTS OR APPROVED EQUAL. PAYMENT FOR SIDEWALK JOINT COVER SHALL BE INCLUDED WITH ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: COVER PLATE FOR SIDEWALK.

9. HMWM SEAL ALL JOINTS AND CONCRETE INTERFACES INCIDENTAL TO ITEM 516 - STRUCTURAL STEEL EXPANSION JOINTS, AS PER PLAN. CONTRACTOR SHALL USE ALL MEANS NECESSARY TO PREVENT HMWM SEALER FROM FLOWING PAST THE LIMIT INDICATED ON THE DETAILS. UNDER NO CIRCUMSTANCES SHALL IT BE ACCEPTABLE FOR SEALER TO FILL THE GAP BETWEEN PLOW GUARD AND CLAMPING PLATE OR COUNTERBORED BOLT HOLE.

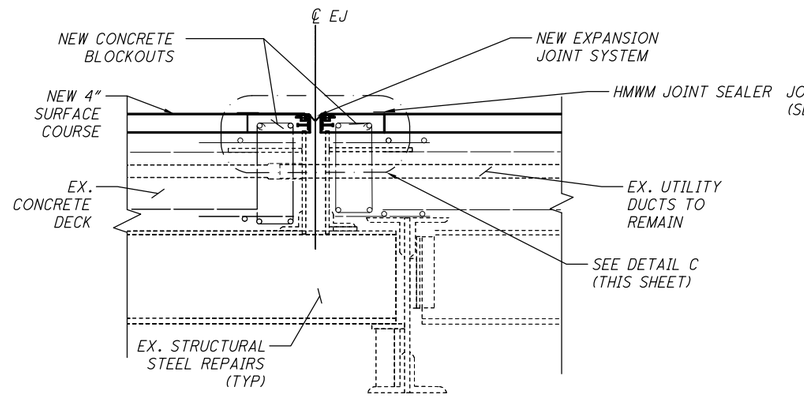


TYPICAL FULL DEPTH SIDEWALK EXPANSION JOINT REPAIR



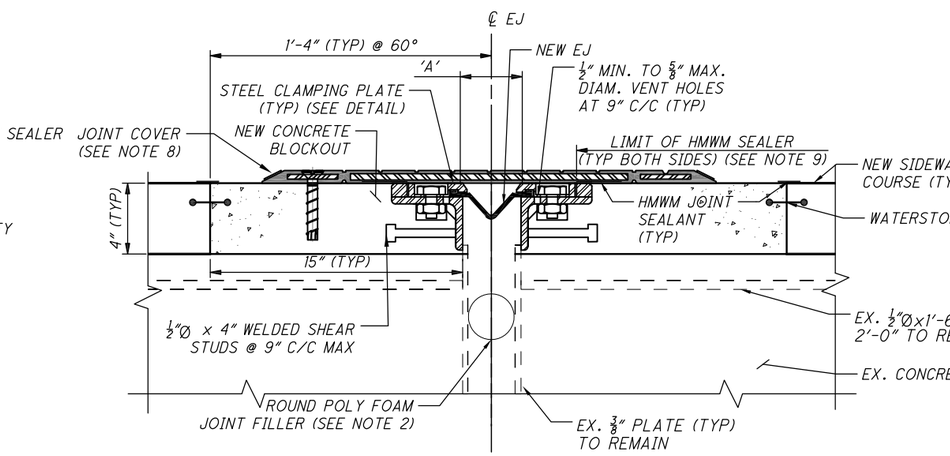
DETAIL B

(REINFORCING NOT SHOWN FOR CLARITY)



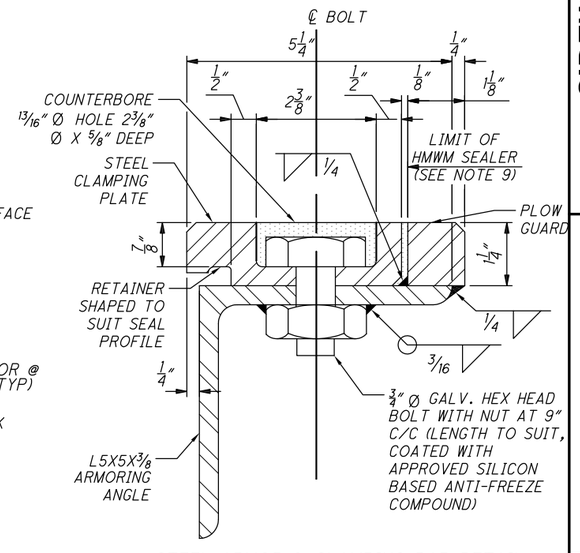
TYPICAL PARTIAL DEPTH SIDEWALK EXPANSION JOINT REPAIR

TYPICAL FOR EJ 1-33, FOR EJ JD, SEE SHEET 61.



DETAIL C

(REINFORCING NOT SHOWN FOR CLARITY)



STEEL ARMOR & CLAMPING BAR DETAIL

(TYPICAL FOR ALL ROADWAY AND SIDEWALK EXPANSION JOINTS)

HORIZONTAL SCALE IN FEET

CALCULATED EIW CHECKED SMK

SIDEWALK EXPANSION JOINT DETAILS

CUY - TOWER CITY BRIDGES

60
129

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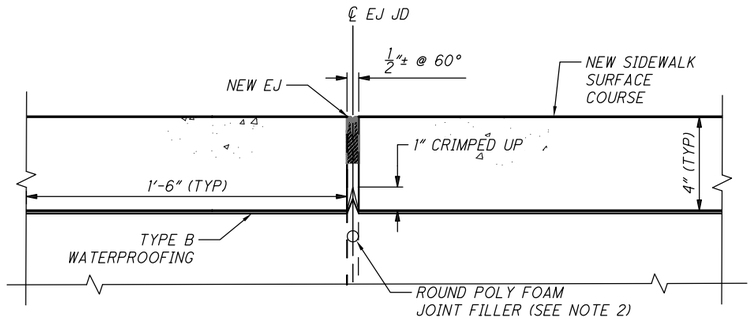

SIDEWALK EXPANSION JOINT REPAIR - EJ JD
LOOKING EAST

LEGEND

REMOVAL - PARTIAL CONCRETE DEPTH REPLACEMENT

PROPOSED CONCRETE

EJ EXPANSION JOINT

NOTES:

1. EXPANSION JOINT SYSTEM AT EJ JD TO BE EMSEAL DSM AS MANUFACTURED BY EMSEAL JOINT SYSTEMS, LTD. OR NYSTROM PARKING DECK COMPRESSION SEAL (PDM) AS MANUFACTURED BY NYSTROM BUILDING PRODUCTS OR APPROVED EQUAL.

2. SELECT POLY FOAM JOINT FILLER DIAMETER TO BE 30% LARGER THAN JOINT OPENING. PAYMENT FOR JOINT FILLER TO BE INCLUDED WITH ITEM 516 - PREFORMED EXPANSION JOINT FILLER, MISC: ROUND POLY FOAM, AS PER PLAN.

3. FOR DETAILS OF ROADWAY AND REMAINING SIDEWALK EXPANSION JOINT REPAIRS SEE SHEETS 59 & 60.

HORIZONTAL SCALE IN FEET
0 ** ** ** **

CALCULATED EIW
CHECKED SMK

SIDEWALK EXPANSION JOINT DETAILS

CUY - TOWER CITY BRIDGES

61
129

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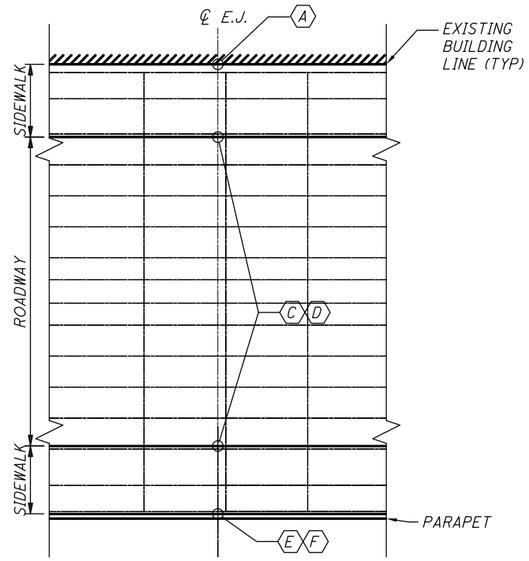
TYPICAL EXPANSION JOINT DETAIL TABLE

	EXPANSION JOINT	RELEVANT DETAILS ⬡	SHEET REFERENCE	
			PLAN VIEW	JOINT DETAILS
PROSPECT AVENUE	13	A,C,E	77	63,65
	12	A,C,E	77	63,65
	11	A,C,E	77	63,65
	10	A,C	77	63,65
	9	A,C	78	63,65
	8	A,C	78	63,65
	7	A,C	78	63,65
	1	A,D	79	63,65
	2	A,C	79	63,65
	3	A,C	79	63,65
	4	A,C	80	63,65
	5	A,C	80	63,65
	6	B,C	81	64,65
	14	B,C	81	64,65
	15	B,C	81	64,65
HURON ROAD	33	A,C,E	82	63,65
	32	A,C,F	82	63,65
	31	A,C,F	82	63,65
	30	A,C,F	82	63,65
	29	A,C,F	83	63,65
	28	A,C,F	83	63,65
	27	A,C,F	83	63,65
	26	A,C,F	84	63,65
	25	A,C,F	84	63,65
	24	A,C,E,F	86	63,65
	23	A,C,E,F	86	63,65
	22	A,C,F	86	63,65
	21	A,C,F	85	63,65
	20	A,C,F	85	63,65
	19	A,C,F	85	63,65
	18	A,C,F	84	63,65
	17	A,C,F	84	63,65
	15A	B,C	87	64,65
	14A	B,C	87	64,65
	6A	B,C	87	64,65

DETAILS DESCRIPTION

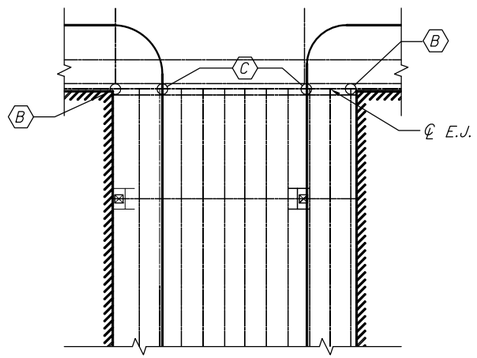
- ⬡A PROPOSED SIDEWALK TO EXISTING BUILDING
- ⬡B EXPANSION JOINT AT STREET INTERSECTION
- ⬡C PARTIAL DEPTH SIDEWALK TO ROADWAY
- ⬡D FULL DEPTH SIDEWALK TO ROADWAY
- ⬡E PARTIAL DEPTH SIDEWALK TO PARAPET
- ⬡F PARTIAL DEPTH ROADWAY TO PARAPET

1. FOR DETAILS A THROUGH F, SEE SHEETS 63 - 65



KEY PLAN - LOCATION OF TYPICAL EXPANSION JOINT DETAILS

FOR JOINT DETAILS SEE SHEET 63,65



KEY PLAN - LOCATION OF TYPICAL EXPANSION JOINT AT INTERSECTION DETAILS

FOR JOINT DETAILS SEE SHEET 64,65

FIRE PROOFING & SECONDARY DRAINAGE BY JOINT

	EJ	EXISTING FIRE PROTECTION	EXISTING SECONDARY DRAINAGE
PROSPECT AVENUE	13	NONE	NONE
	12	NONE	NONE
	11	NONE	NONE
	10	CONCRETE	DRIP PANS AT BEAM 16
	9	CONCRETE	NONE
	8	SPRAY-APPLIED	GUTTERS & FLASHING
	7	NONE	GUTTERS & FLASHING
	1	NONE	GUTTERS & FLASHING
	2	SPRAY-APPLIED	GUTTERS
	3	NONE	GUTTERS
	4	SPRAY-APPLIED	NONE
	5	SPRAY-APPLIED	NONE
	6	NONE	NONE
	14	SPRAY-APPLIED	NONE
	15	NONE	NONE
HURON ROAD	33	CONCRETE IN WEB	NONE
	32	CONCRETE IN WEB	NONE
	31	CONCRETE IN WEB	NONE
	30	NONE	NONE
	29	SPRAY-APPLIED AT REPAIRS	GUTTERS
	28	SPRAY-APPLIED AT REPAIRS	GUTTERS
	27	SPRAY-APPLIED AT REPAIRS	GUTTERS DRIP PAN AT BEAMS 6-7
	26	CONCRETE	GUTTERS
	25	SPRAY-APPLIED	DRIP PANS BEAMS 9-13
	24	SPRAY-APPLIED	DRIP PANS BEAMS 9-13
	23	CONCRETE	DRIP PANS
	22	CONCRETE	DRIP PANS
	21	CONCRETE	DRIP PAN BEAM 10
	20	CONCRETE	DRIP PANS BEAMS 12-14
	19	CONCRETE	DRIP PANS BEAM 12-14
	18	CONCRETE	NONE
	17	CONCRETE	NONE
	15A	NONE	NONE
	14A	SPRAY-APPLIED	NONE
	6A	CONCRETE	NONE

NOTES

1. CONTRACTOR SHALL REMOVE SECONDARY DRAINAGE SYSTEMS WHERE COMPONENTS CONFLICT WITH PROPOSED REPAIRS AS INDICATED ON THE PLANS. WHERE NECESSARY REMOVALS AFFECT A LARGER DRAINAGE SYSTEM, CONTRACTOR SHALL ENSURE THAT POSITIVE DRAINAGE WILL BE MAINTAINED IN THE SYSTEM AFTER REMOVALS HAVE BEEN COMPLETED. PAYMENT FOR REMOVAL OF PORTIONS OF SECONDARY DRAINAGE SYSTEMS SHALL BE INCLUDED WITH ITEM 202 - STRUCTURAL STEEL PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

2. CONTRACTOR SHALL REMOVE EXISTING FIRE PROTECTION WHERE IT CONFLICTS WITH PROPOSED REPAIRS AS INDICATED ON THE PLANS. FIRE PROTECTION SHALL BE REMOVED TO A CLEAN LINE NO MORE THAN 6" OUTSIDE OF THE REPAIR LIMITS. AT THE COMPLETION OF REPAIRS, AREAS IN WHICH FIRE PROTECTION WAS REMOVED SHALL BE COATED WITH SPRAY APPLIED FIRE PROOFING MATERIAL. PAYMENT SHALL BE INCLUDED WITH ITEMS AS FOLLOWS:

- REMOVAL OF EXISTING CONCRETE FIREPROOFING - ITEM 202 - CONCRETE PORTIONS OF SUPERSTRUCTURE REMOVED
- REMOVAL OF EXISTING SPRAY-APPLIED FIREPROOFING - ITEM 202 - STRUCTURAL STEEL PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.
- REPLACEMENT WITH NEW SPRAY-APPLIED FIREPROOFING - ITEM 513 - STRUCTURAL STEEL, AS PER PLAN.

3. SEE SHEET 77 FOR LEGEND AND ADDITIONAL NOTES.

HORIZONTAL SCALE IN FEET

CALCULATED MJD CHECKED SMK

EXPANSION JOINT DETAILS

CUY-TOWER CITY BRIDGES

62 / 129

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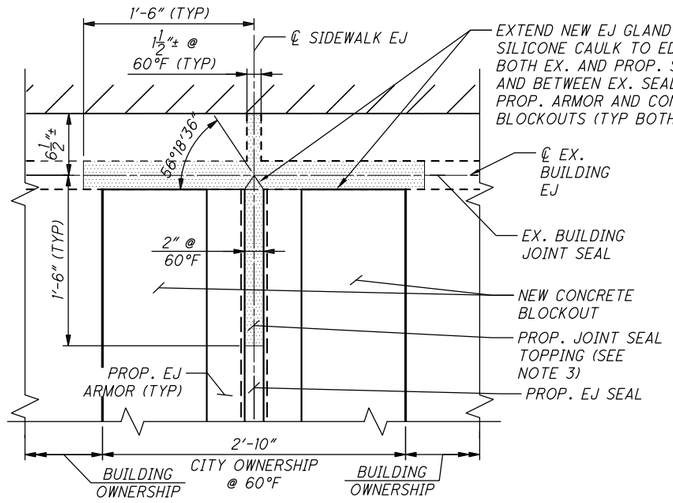
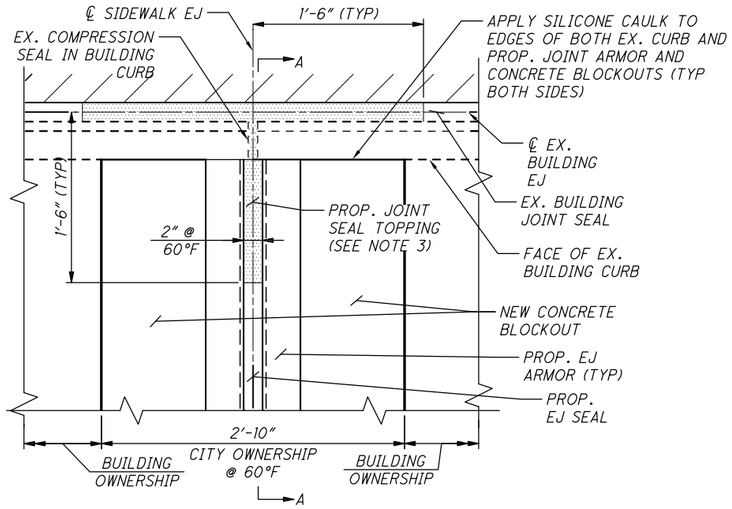


DETAIL A - COMPRESSION SEAL

PROPOSED SIDEWALK EJ TO EXISTING COMPRESSION SEAL BUILDING EJ CONNECTION



DETAIL A - COMPRESSION SEAL WITH CURB

PROPOSED SIDEWALK EJ TO EXISTING COMPRESSION SEAL BUILDING EJ CONNECTION

NOTES

1. FOR JOINT LOCATION SEE "TYPICAL EXPANSION JOINT TABLE" AND KEY PLAN ON SHEET 62

2. DETAILS PROVIDED ARE FOR INFORMATION ONLY FOR THE MOST COMMONLY ANTICIPATED EXISTING BUILDING JOINT CONDITIONS. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL DETAILING PROPOSED CONNECTION OF NEW SIDEWALK EXPANSION JOINTS TO EXISTING BUILDING JOINTS BASED ON EXISTING FIELD CONDITIONS.

3. AFTER INSTALLATION OF NEW SIDEWALK ARMORED EXPANSION JOINTS IS COMPLETE, THE CONTRACTOR SHALL INSTALL A SECONDARY SILICONE SEAL TOPPING OVER THE CONNECTION BETWEEN NEW SIDEWALK EXPANSION JOINTS AND EXISTING BUILDING EXPANSION JOINTS. THE SILICONE SEAL TOPPING WILL EXTEND FOR THE LIMITS SHOWN ON THE PLAN DETAILS. PAYMENT FOR SILICONE SEAL TOPPING WILL BE WITH ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: SILICONE SEAL.

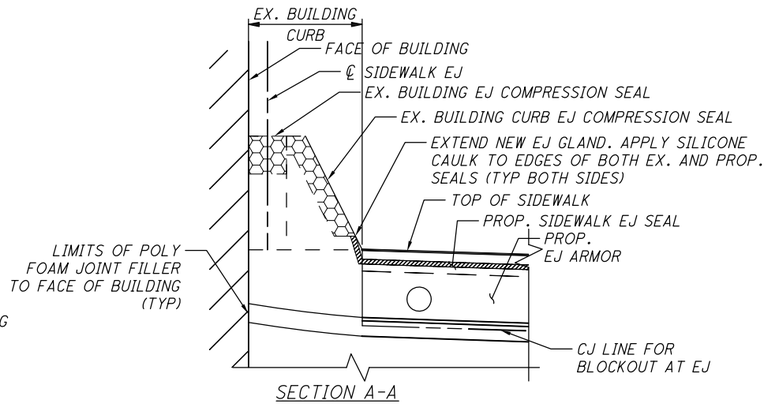
4. FOR MEETING OF NEW EJ 24 & EJ JD, SEE SECTION J-J ON SHEET 67.

LEGEND

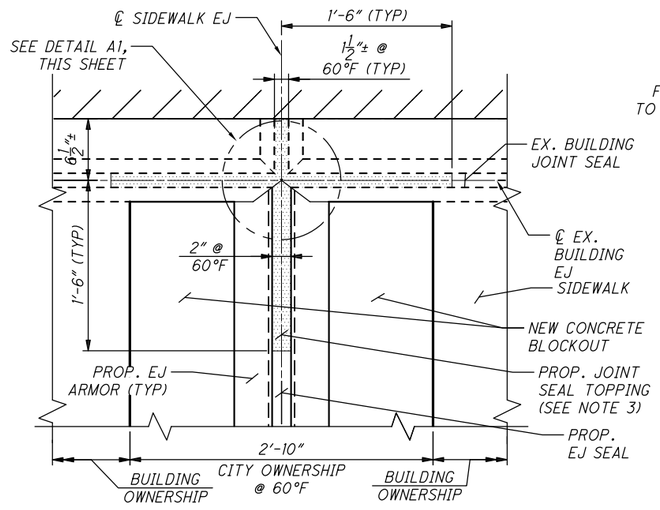
EJ EXPANSION JOINT

CJ CONSTRUCTION JOINT

PROP. JOINT TOPPING (SEE NOTE 3)

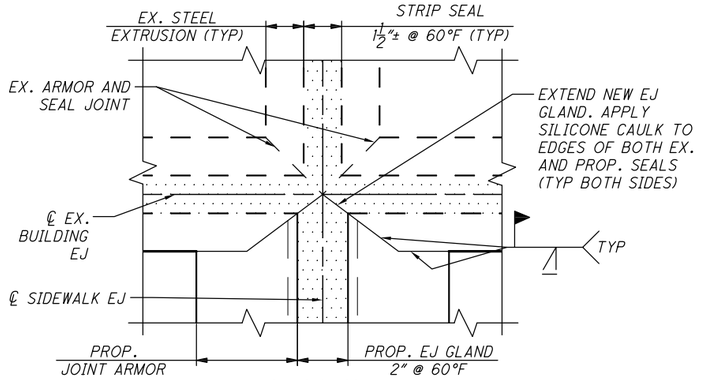


SECTION A-A

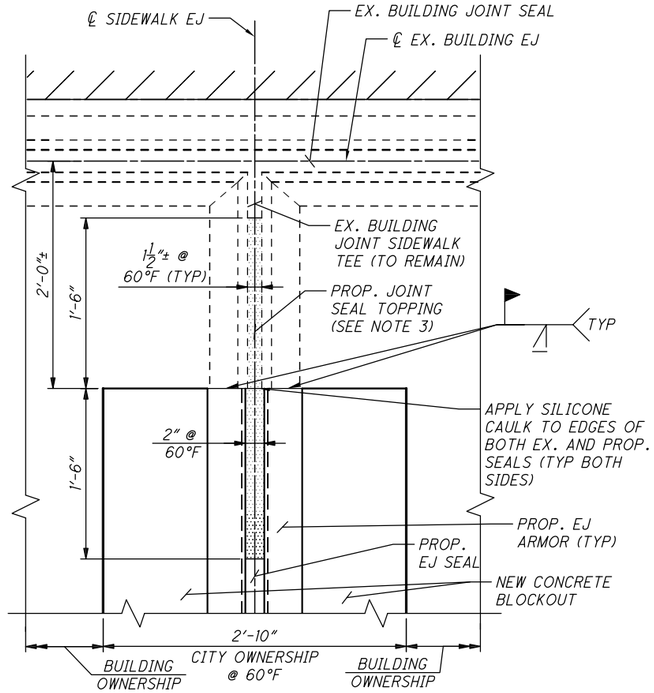


DETAIL A - STRIP SEAL

PROPOSED SIDEWALK EJ TO EXISTING STRIP SEAL BUILDING EJ CONNECTION



DETAIL A1



DETAIL A - MIGUTAN JOINT SYSTEM

PROPOSED SIDEWALK EJ TO EXISTING MIGUTAN BUILDING EJ CONNECTION

HORIZONTAL SCALE IN FEET

CALCULATED EIW CHECKED SMK

EXPANSION JOINT DETAILS

CUY - TOWER CITY BRIDGES

63
129

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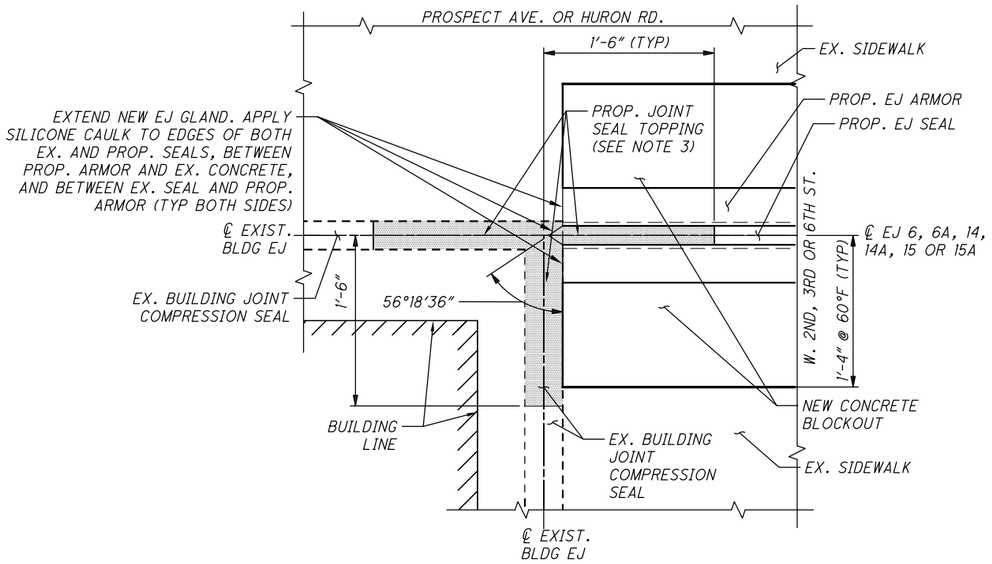
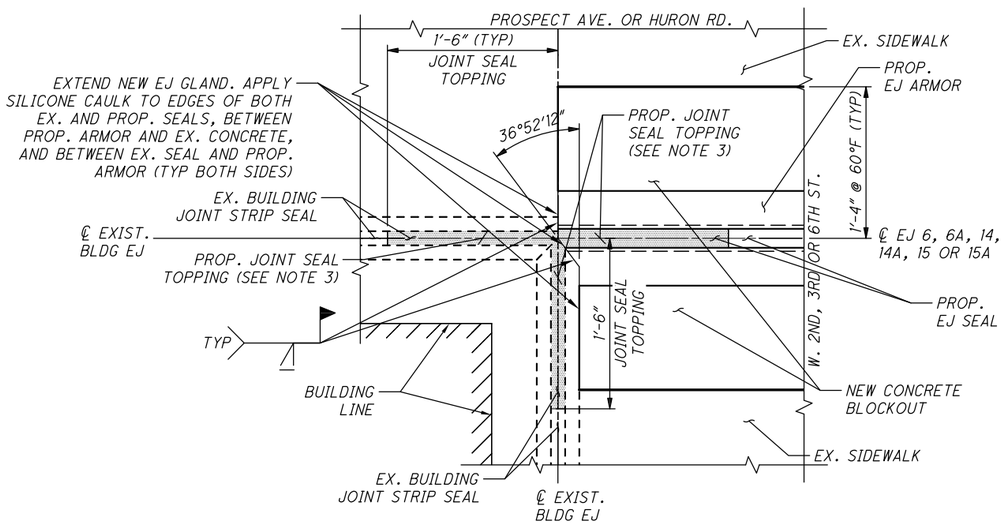


DETAIL B - COMPRESSION SEAL

EXPANSION JOINT AT STREET INTERSECTION



DETAIL B - STRIP SEAL

EXPANSION JOINT AT STREET INTERSECTION

NOTES

1. FOR JOINT LOCATION SEE "TYPICAL EXPANSION JOINT TABLE" AND KEY PLAN ON SHEET 62.

2. DETAILS PROVIDED ARE FOR INFORMATION ONLY FOR THE MOST COMMONLY ANTICIPATED EXISTING BUILDING JOINT CONDITIONS. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL DETAILING PROPOSED CONNECTION OF NEW SIDEWALK EXPANSION JOINTS TO EXISTING BUILDING JOINTS BASED ON EXISTING FIELD CONDITIONS.

3. AFTER INSTALLATION OF NEW SIDEWALK ARMORED EXPANSION JOINTS IS COMPLETE, THE CONTRACTOR SHALL INSTALL A SECONDARY SILICONE SEAL TOPPING OVER THE CONNECTION BETWEEN NEW SIDEWALK EXPANSION JOINTS AND EXISTING BUILDING EXPANSION JOINTS. THE SILICONE SEAL TOPPING WILL EXTEND FOR THE LIMITS SHOWN ON THE PLAN DETAILS. PAYMENT FOR SILICONE SEAL TOPPING WILL BE WITH ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: SILICONE SEAL.

LEGEND

EJ	EXPANSION JOINT
CJ	CONSTRUCTION JOINT
	PROP. JOINT TOPPING (SEE NOTE 3)

HORIZONTAL SCALE IN FEET
0 ** ** **

CALCULATED EIW
CHECKED SMK

EXPANSION JOINT DETAILS

CUY - TOWER CITY BRIDGES

64
129

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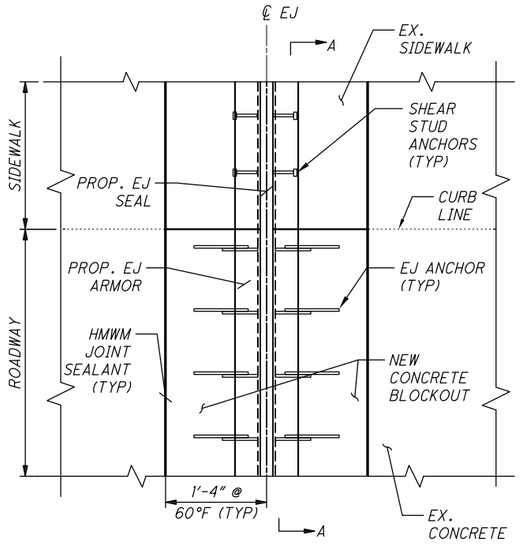
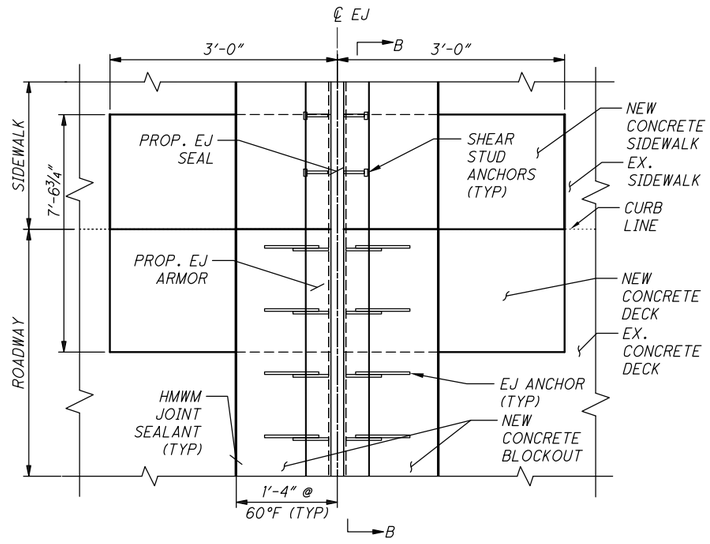


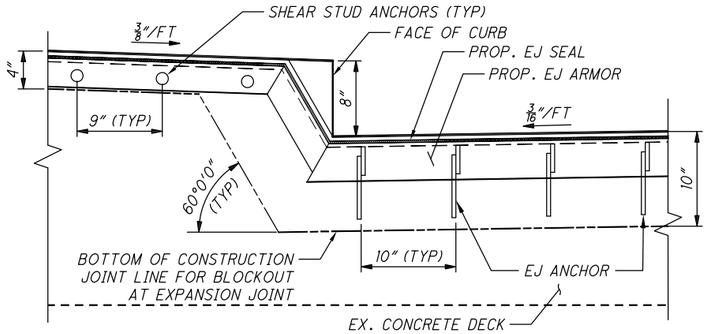
DETAIL C

PROPOSED PARTIAL DEPTH SIDEWALK EJ TO PARTIAL DEPTH ROADWAY EJ REPAIR



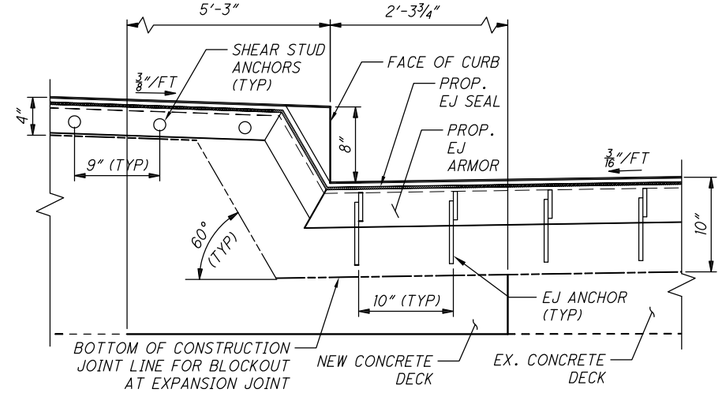
DETAIL D

PROPOSED FULL DEPTH SIDEWALK EJ TO FULL DEPTH ROADWAY EJ REPAIR - EJ 1



SECTION A-A

REINFORCING NOT SHOWN FOR CLARITY



SECTION B-B

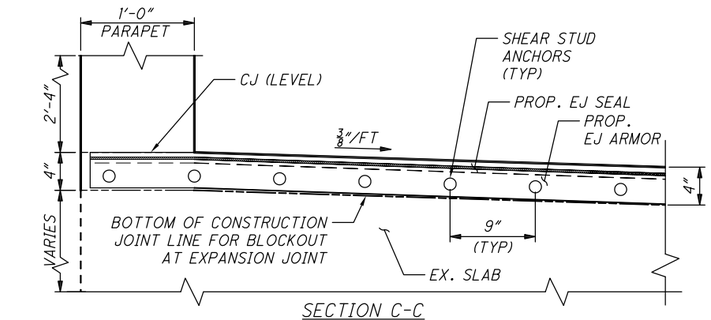
REINFORCING NOT SHOWN FOR CLARITY

DETAIL E

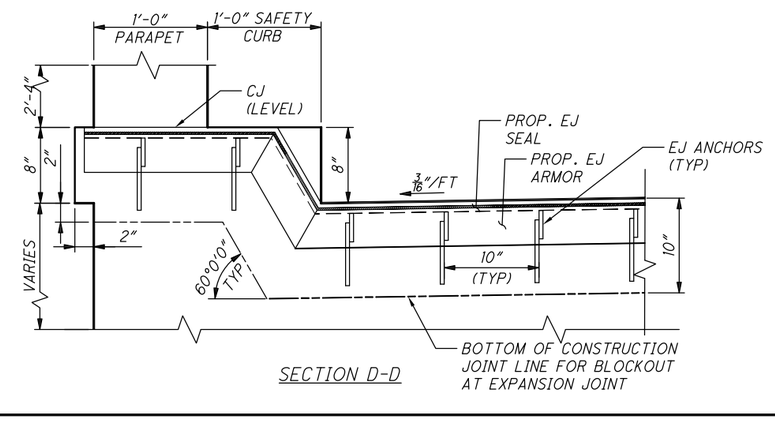
PARTIAL DEPTH SIDEWALK TO PARAPET
PROSPECT AVE NORTH AT EJ 11, 12, 13
HURON RD - NORTH SIDE AT EJ 23 & 24
HURON RD - SOUTH SIDE AT EJ 33

DETAIL F

PARTIAL DEPTH ROADWAY TO PARAPET
HURON RD - SOUTH SIDE AT EJ 17-32



SECTION C-C



SECTION D-D

NOTES

1. FOR JOINT LOCATION SEE "TYPICAL EXPANSION JOINT TABLE" AND KEY PLAN ON SHEET 62.

2. FOR SECTIONS E-E AND F-F AND PARAPET REINFORCING DETAILS, SEE SHEETS 66 & 67.

3. HMWM SEAL ALL JOINTS AND CONCRETE INTERFACES. PAYMENT IS INCIDENTAL TO ITEM 516 - STRUCTURAL STEEL EXPANSION JOINTS, AS PER PLAN.

LEGEND

EJ	EXPANSION JOINT
CJ	CONSTRUCTION JOINT

HORIZONTAL SCALE IN FEET
0

CALCULATED MJD
CHECKED SMK

EXPANSION JOINT DETAILS

CUY - TOWER CITY BRIDGES

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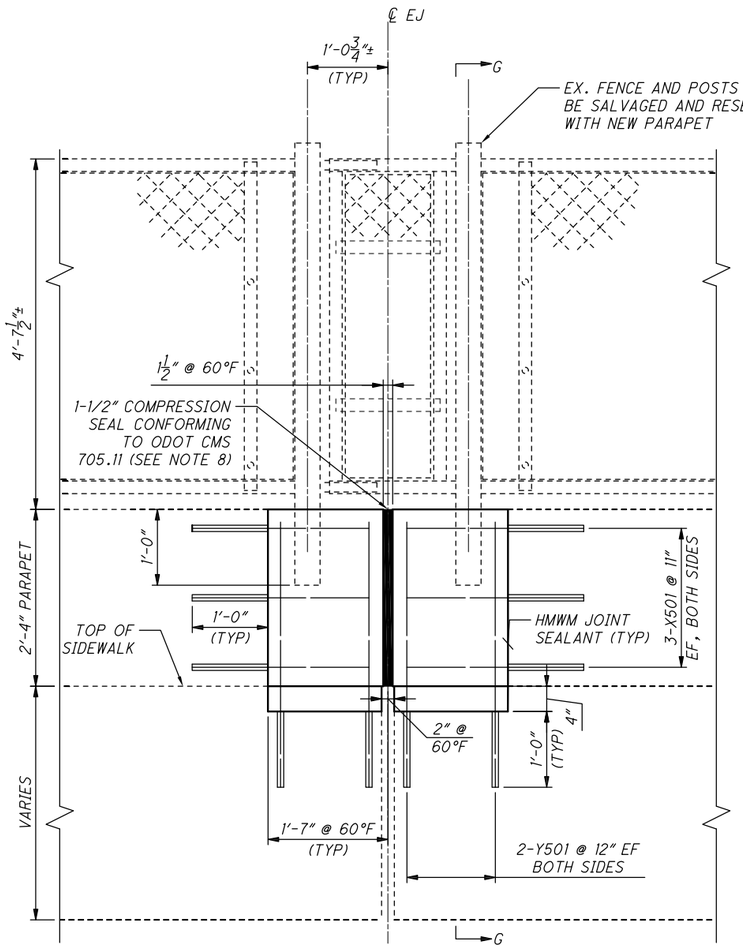
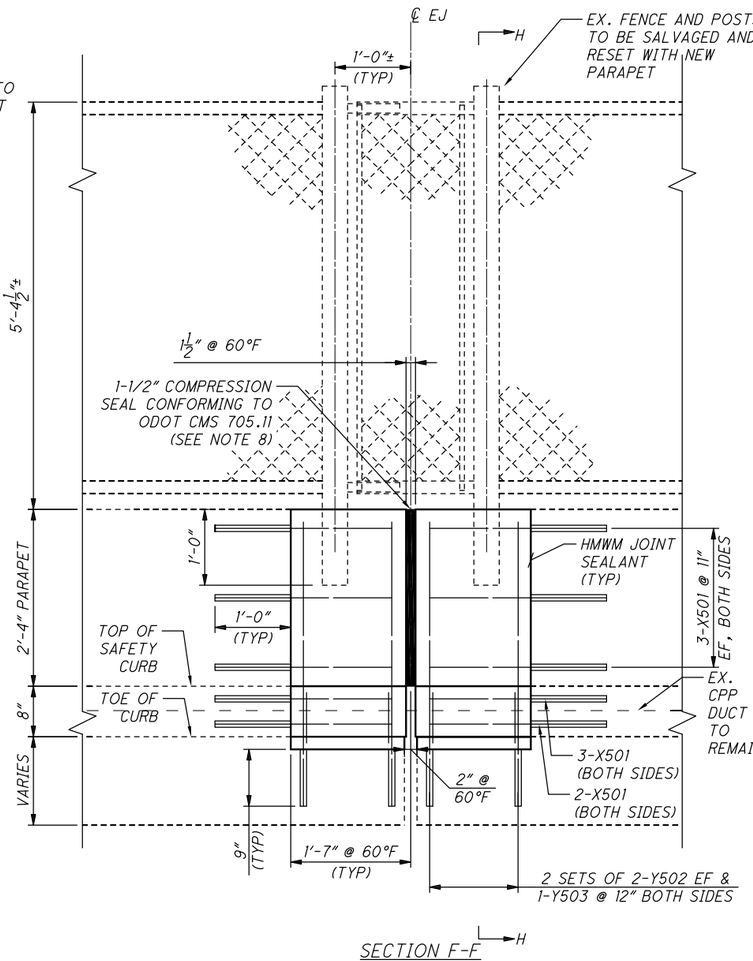


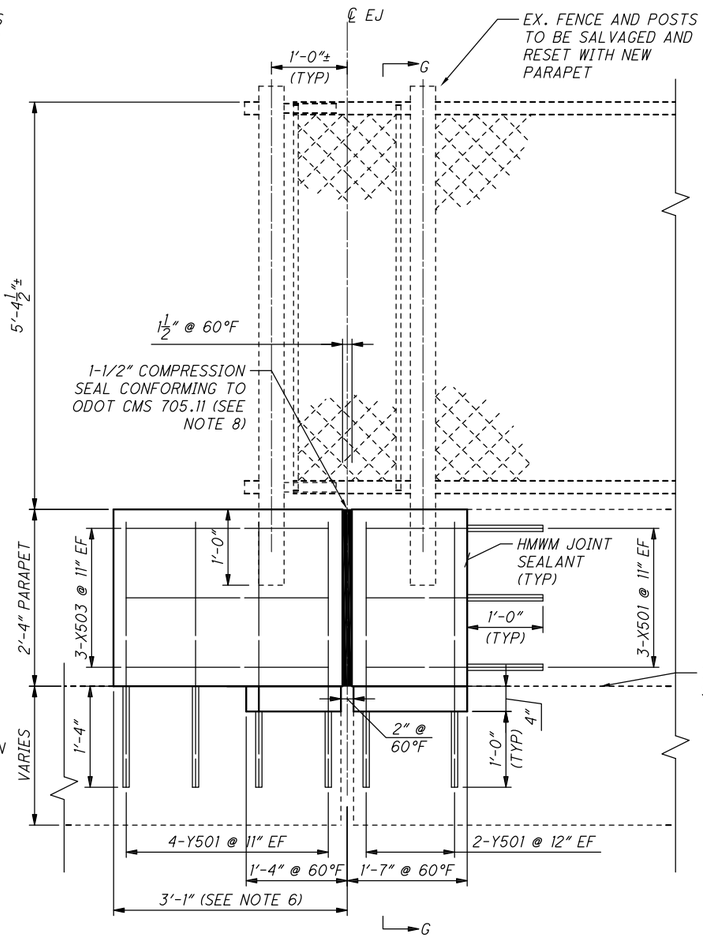
SECTION E-E

PROSPECT AVE NORTH AT EJ 11, 12, 13
HURON RD - NORTH SIDE AT EJ 23



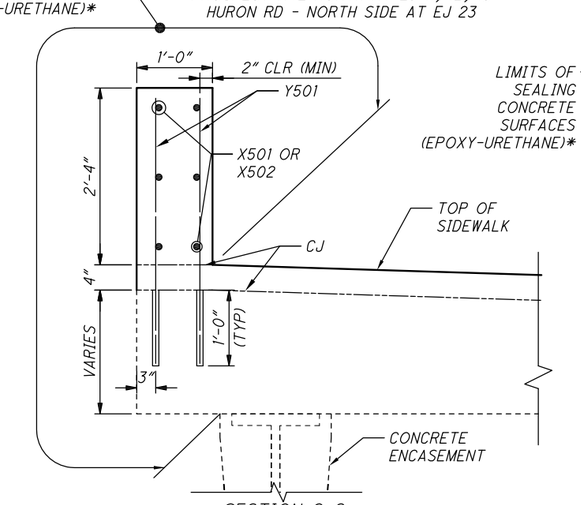
SECTION F-F

HURON RD - SOUTH SIDE AT EJ 18-24 & 26-30
FOR EJ 17 & 25, SEE SHEET 99



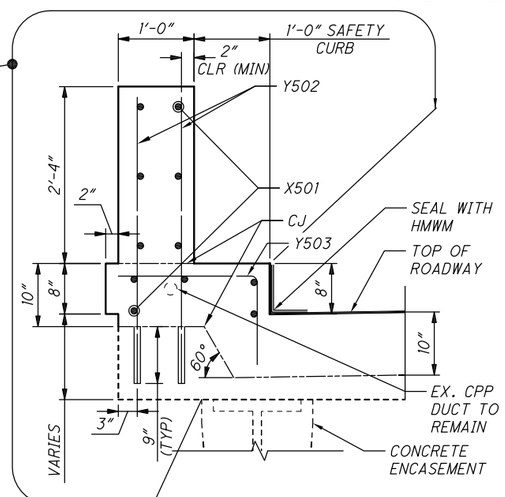
SECTION E-E

HURON RD - SOUTH SIDE AT EJ 33, LOOKING SOUTH



SECTION G-G

* IF NO CONCRETE ENCASEMENT AROUND BEAM, LIMITS OF SEALING SHALL BE TO BEAM FLANGE



SECTION H-H

* IF NO CONCRETE ENCASEMENT AROUND BEAM, LIMITS OF SEALING SHALL BE TO BEAM FLANGE

NOTES

1. FOR JOINT LOCATION SEE "TYPICAL EXPANSION JOINT TABLE" AND KEY PLAN ON SHEET 62.

2. FOR LOCATIONS OF SECTIONS E-E AND F-F, SEE SHEET 65.

3. CONTRACTOR SHALL REMOVE AND STORE EXISTING FENCING AND FENCE POSTS AT EXPANSION JOINTS WHERE SECTIONS OF PARAPETS WILL BE REPLACED. CONTRACTOR SHALL REPAIR THE PORTIONS OF FENCE REMOVED PER ITEM 607 - FENCE MISC: EXISTING FENCE REPAIRS. FENCING AND POSTS WILL BE RESET WITH NEW PARAPET SECTIONS AS INDICATED ON THE PLANS. PAYMENT FOR FENCE WORK SHALL BE INCLUDED WITH ITEM 607 - FENCE MISC: EXISTING FENCE REPAIRS.

4. EXISTING CPP DUCT IN SAFETY CURB SHALL BE PROTECTED AND MAINTAINED DURING CONSTRUCTION.

5. FOR PARAPET REINFORCING SCHEDULE AT EXPANSION JOINTS SEE SHEET 67.

6. LENGTH OF REPLACED PARAPET EAST OF EJ 33 SHALL MATCH THE LENGTH OF EXISTING PARAPET AT THAT LOCATION. CONTRACTOR SHALL FIELD VERIFY THIS DIMENSION PRIOR TO FABRICATION OF REINFORCEMENT AND ADJUST REINFORCEMENT LENGTH AS NECESSARY.

7. HMWM SEAL ALL JOINTS AND CONCRETE INTERFACES. PAYMENT IS INCIDENTAL TO ITEM 516 - STRUCTURAL STEEL EXPANSION JOINTS, AS PER PLAN.

8. SEE ODOT STANDARD DRAWING EXJ-2-81 FOR ADDITIONAL COMPRESSION SEAL DETAILS.

LEGEND

EJ EXPANSION JOINT

CJ CONSTRUCTION JOINT

HORIZONTAL SCALE IN FEET
0 ** ** **

CALCULATED EIW
CHECKED SMK

EXPANSION JOINT DETAILS

CUY - TOWER CITY BRIDGES

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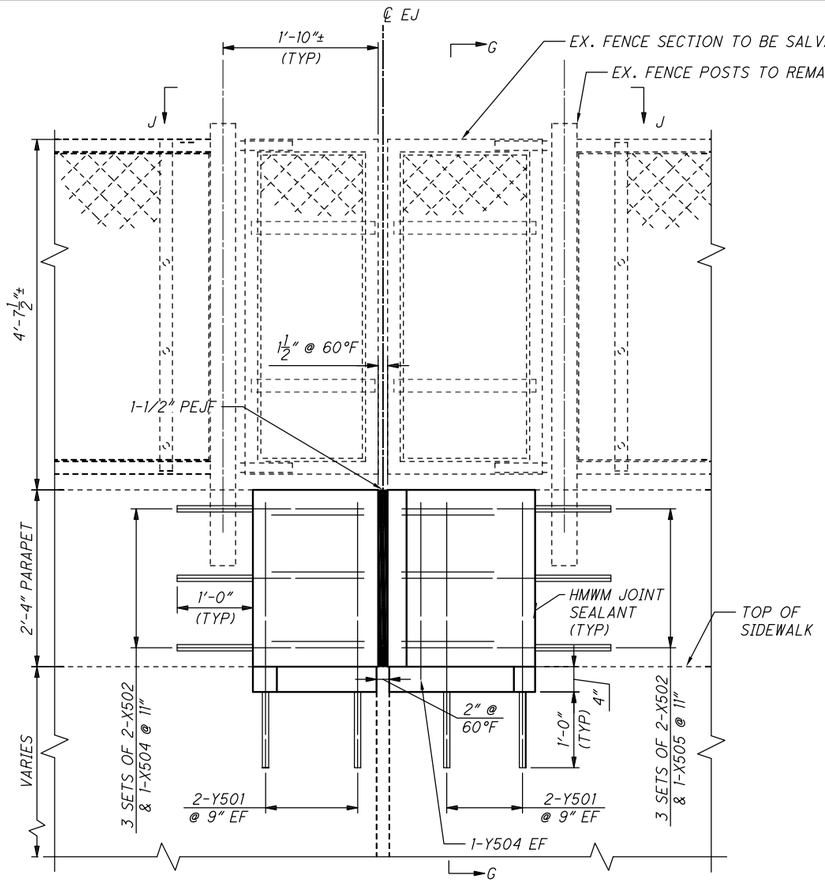
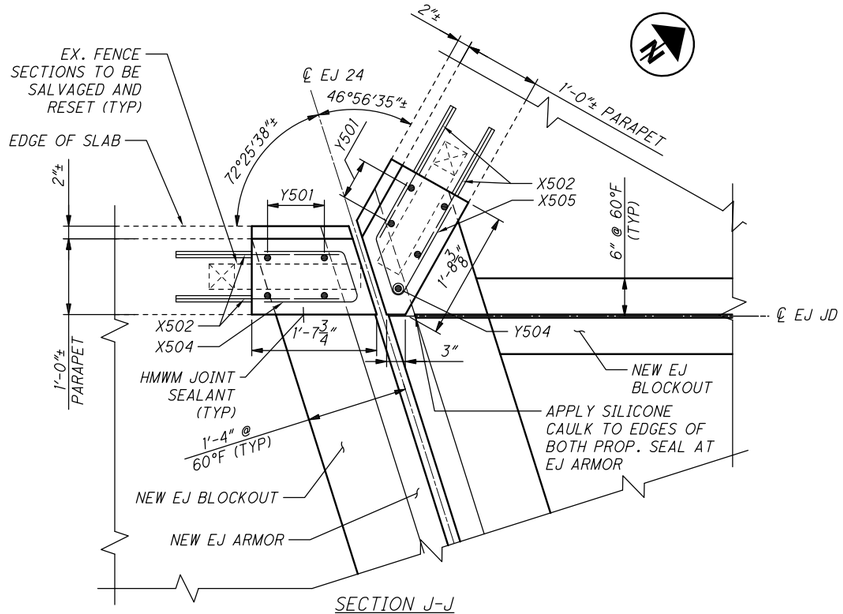


SECTION E-E

HURON RD - NORTH SIDE AT EJ 24



SECTION J-J

HURON RD - NORTH SIDE AT EJ 24

REINFORCEMENT SCHEDULE FOR PARAPETS

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSION A	B	C	D	E	R	INC
PROSPECT AVENUE											
X501	36	2'-4"	88	STR							
Y501	24	3'-6"	88	STR							
		TOTAL	176								
HURON ROAD											
X501	282	2'-4"	686	STR							
X502	12	2'-1"	26	STR							
X503	6	2'-8"	17	STR							
X504	3	2'-5"	8	28	0'-8"	0'-10"	1'-1"	3.16			
X505	3	3'-6"	11	28	0'-8"	1'-3"	1'-6"	1.07			
Y501	28	3'-6"	102	STR							
Y502	96	3'-9"	375	STR							
Y503	48	2'-10"	144	1	1'-10"	1'-2"					
Y504	1	2'-4"	2	STR							
		TOTAL	1371								

NOTES

1. FOR JOINT LOCATION SEE "TYPICAL EXPANSION JOINT TABLE" AND KEY PLAN ON SHEET 62.

2. FOR LOCATIONS OF SECTIONS E-E AND F-F, SEE SHEET 65.

3. FOR SECTION G-G, SEE SHEET 66.

4. CONTRACTOR SHALL REMOVE AND STORE EXISTING FENCING AND FENCE POSTS AT EXPANSION JOINTS WHERE SECTIONS OF PARAPETS WILL BE REPLACED. CONTRACTOR SHALL REPAIR THE PORTIONS OF FENCE REMOVED PER ITEM 607 - FENCE MISC: EXISTING FENCE REPAIRS. FENCING AND POSTS WILL BE RESET WITH NEW PARAPET SECTIONS AS INDICATED ON THE PLANS. PAYMENT FOR FENCE WORK SHALL BE INCLUDED WITH ITEM 607 - FENCE MISC: EXISTING FENCE REPAIRS.

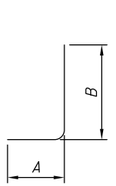
5. HMWM SEAL ALL JOINTS AND CONCRETE INTERFACES. PAYMENT IS INCIDENTAL TO ITEM 516 - STRUCTURAL STEEL EXPANSION JOINTS, AS PER PLAN.

6. FOR ADDITIONAL NOTES, SEE SHEET 75.

LEGEND

EJ EXPANSION JOINT

CJ CONSTRUCTION JOINT



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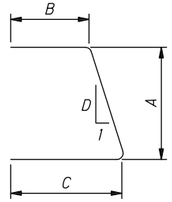

TYPE-28

HORIZONTAL SCALE IN FEET

0 ** ** **

CALCULATED EIW

CHECKED SMK

EXPANSION JOINT DETAILS

CUY - TOWER CITY BRIDGES

67
129

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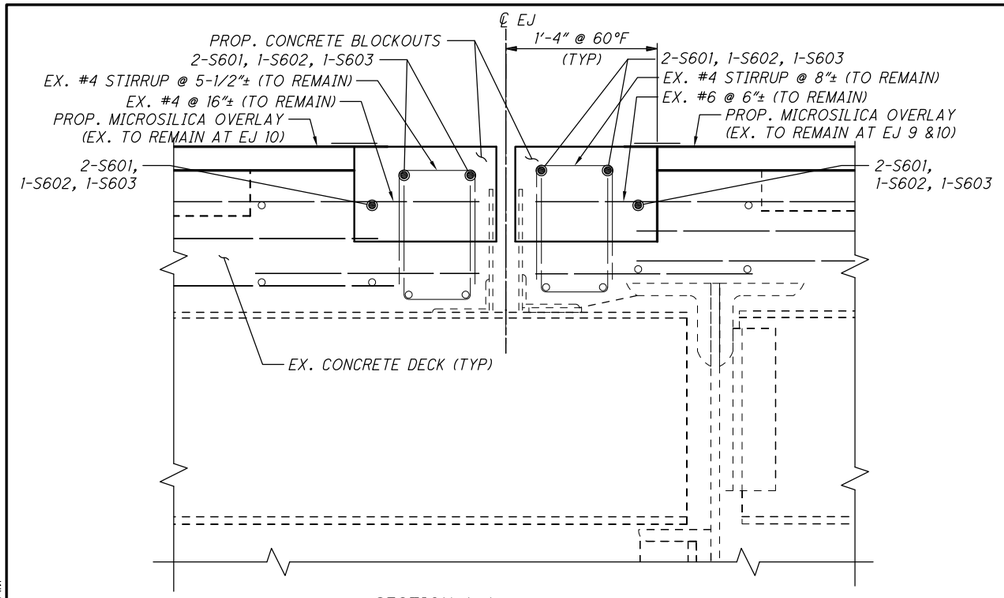
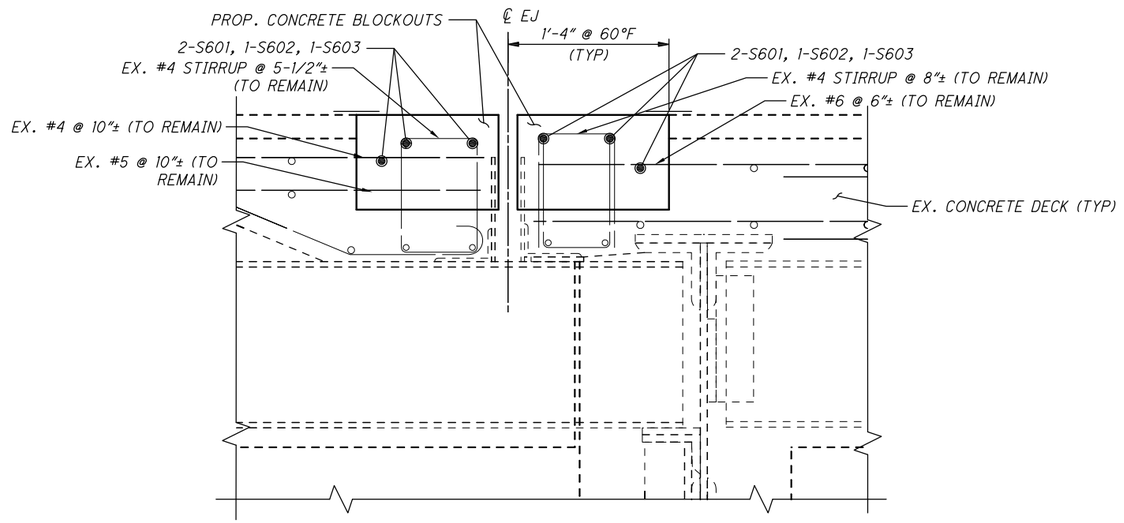


SECTION A-A

EJ 1, 2, 3, 4, 5, 7, 8, 9, 10

EX. REINFORCEMENT & STRUCTURAL STEEL BELOW BLOCKOUTS VARIES

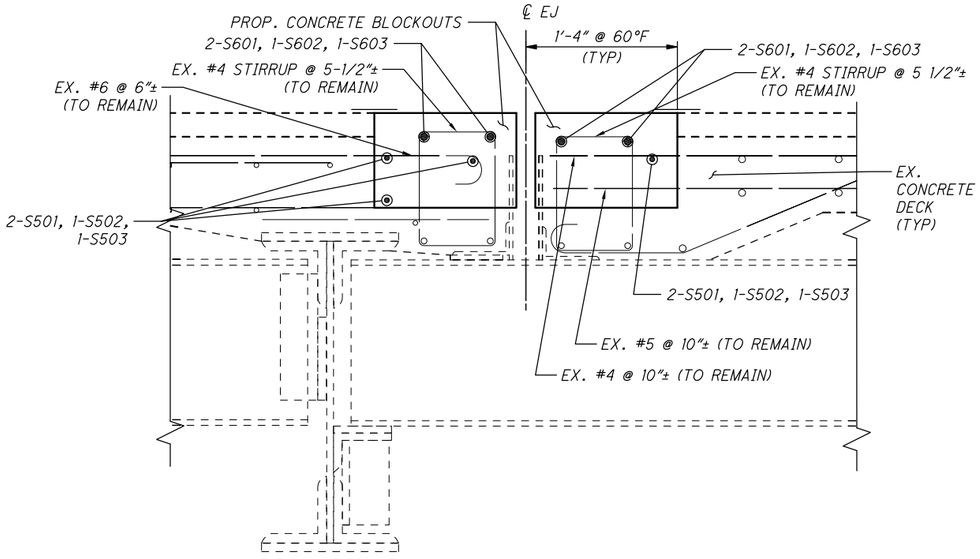
*FOR SLAB REINFORCEMENT AT FULL DEPTH REPLACEMENT LOCATIONS AT EJ 1, SEE SHEETS 92-94



SECTION B-B

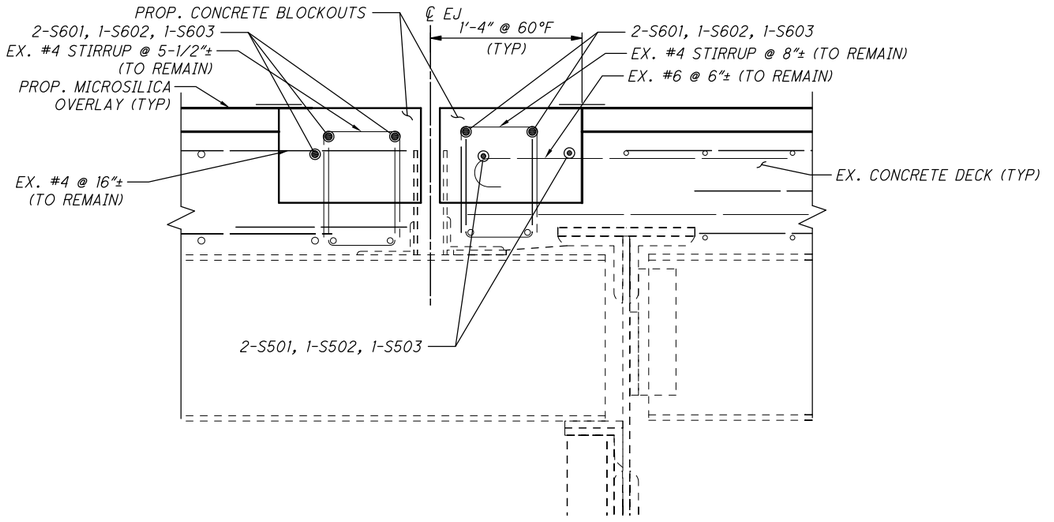
EJ 11

EX. REINFORCEMENT & STRUCTURAL STEEL BELOW BLOCKOUTS VARIES



SECTION C-C

EJ 12 & 13



SECTION D-D

EJ 17, 18, 25, 26, 27, 28, 29, 30

EX. REINFORCEMENT & STRUCTURAL STEEL BELOW BLOCKOUTS VARIES

NOTES

1. FOR EXPANSION JOINT SYSTEM DETAILS SEE SHEETS 59-60.

2. FOR LOCATIONS OF SECTION CUTS, SEE SHEETS 77-87.

3. FOR REINFORCING SCHEDULE, SEE SHEET 75.

LEGEND

EJ - EXPANSION JOINT

HORIZONTAL SCALE IN FEET

CALCULATED MJD
CHECKED EIW

ROADWAY EXPANSION JOINT REINFORCEMENT DETAILS

CUY - TOWER CITY BRIDGES

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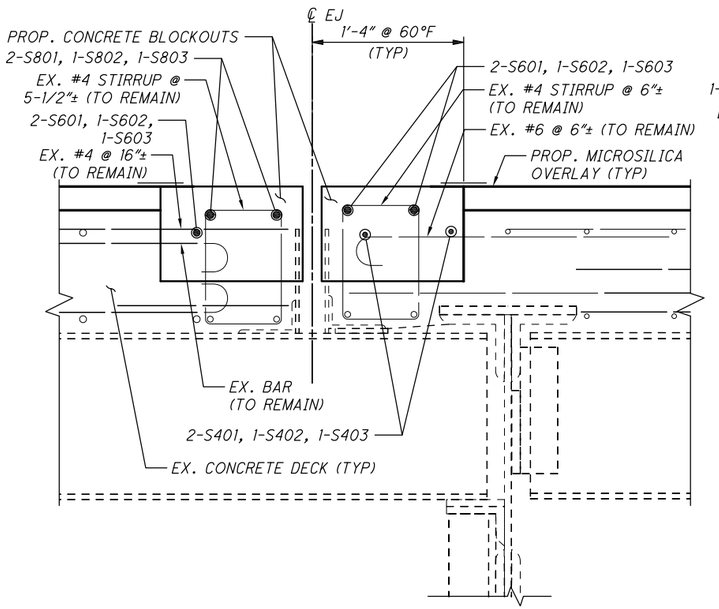
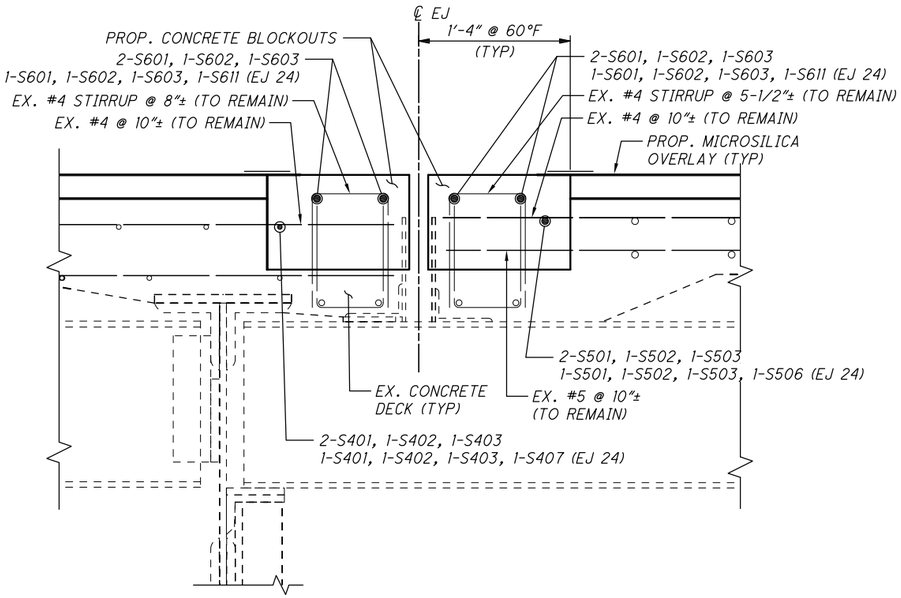


SECTION E-E

EJ 19, 20

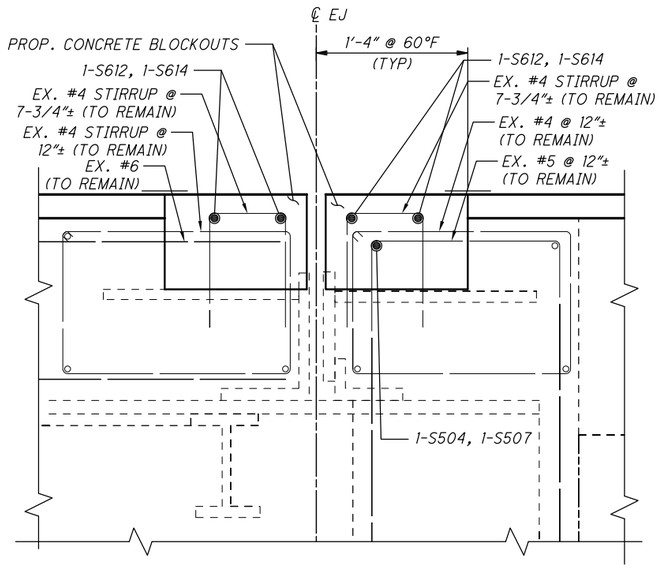
EX. REINFORCEMENT & STRUCTURAL STEEL BELOW BLOCKOUTS VARIES



SECTION F-F

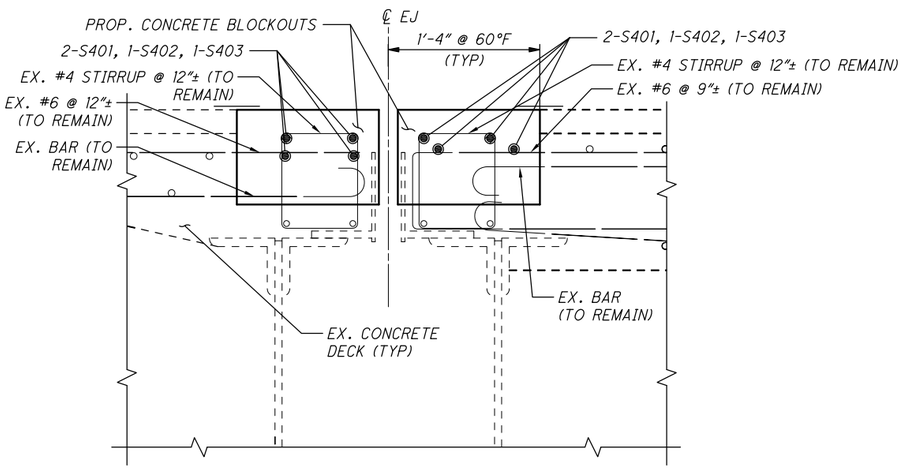
EJ 21, 22, 23, 24 (HURON MAINLINE)

EX. REINFORCEMENT & STRUCTURAL STEEL BELOW BLOCKOUTS VARIES



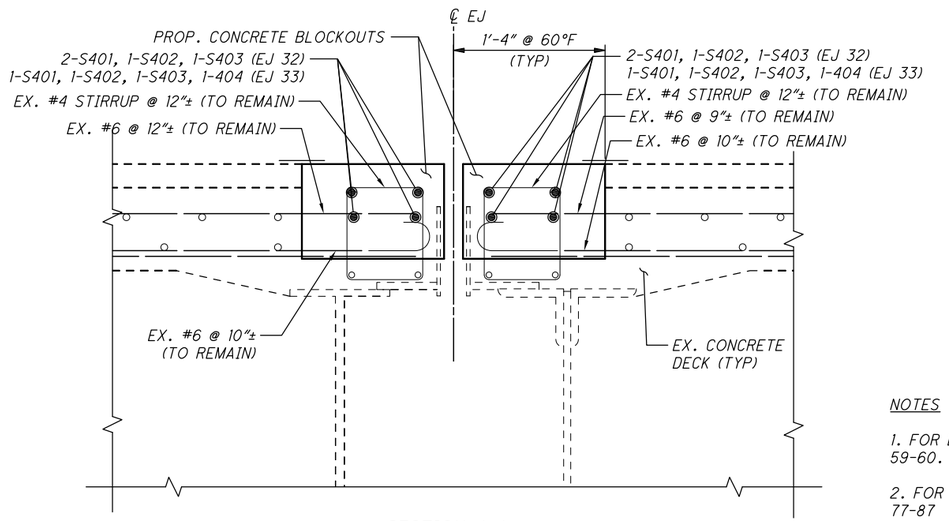
SECTION G-G

EJ 24 (TURNLANE)



SECTION H-H

EJ 31



SECTION J-J

EJ 32 & 33

NOTES

1. FOR EXPANSION JOINT SYSTEM DETAILS SEE SHEETS 59-60.
2. FOR LOCATIONS OF SECTION CUTS, SEE SHEETS 77-87
3. FOR REINFORCING SCHEDULE, SEE SHEET 75

LEGEND

EJ - EXPANSION JOINT

ROADWAY EXPANSION JOINT REINFORCEMENT DETAILS

HORIZONTAL SCALE IN FEET

CALCULATED MJD
CHECKED EIW

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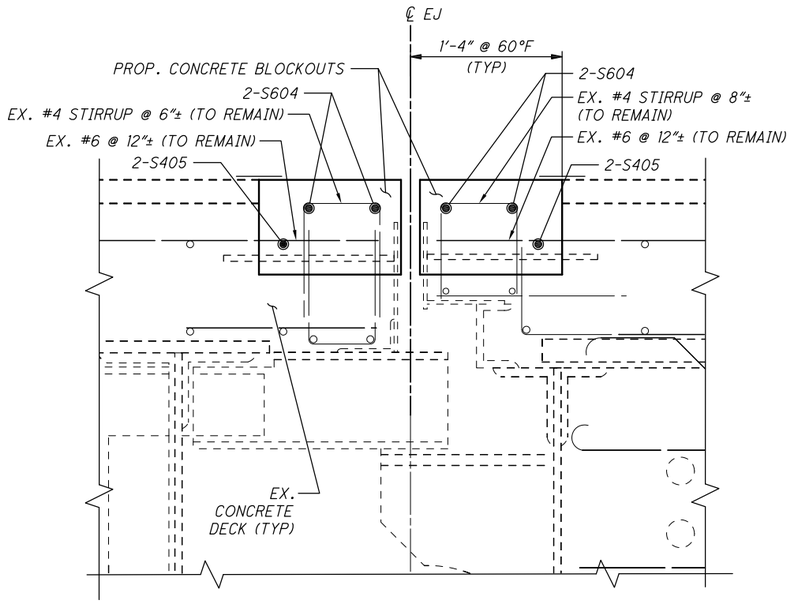
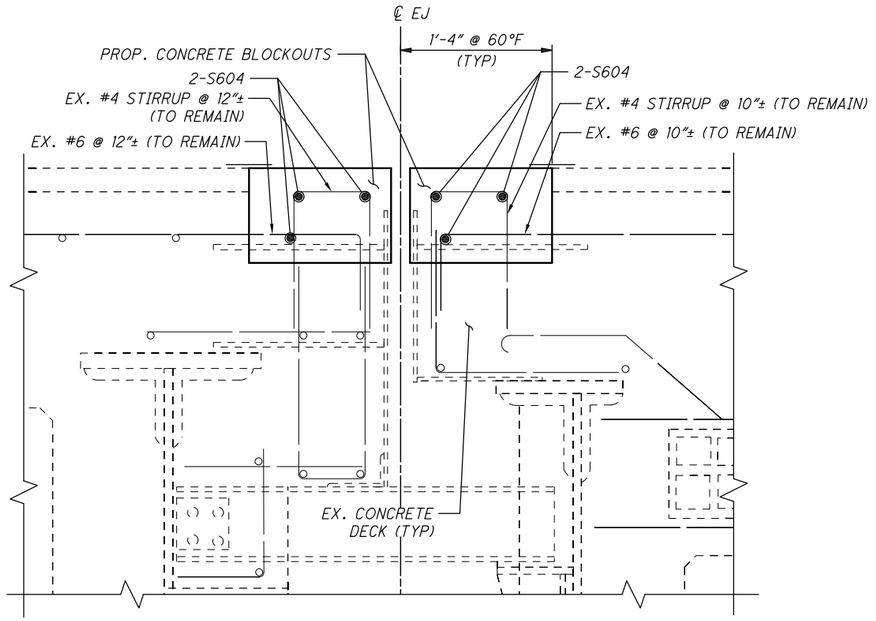
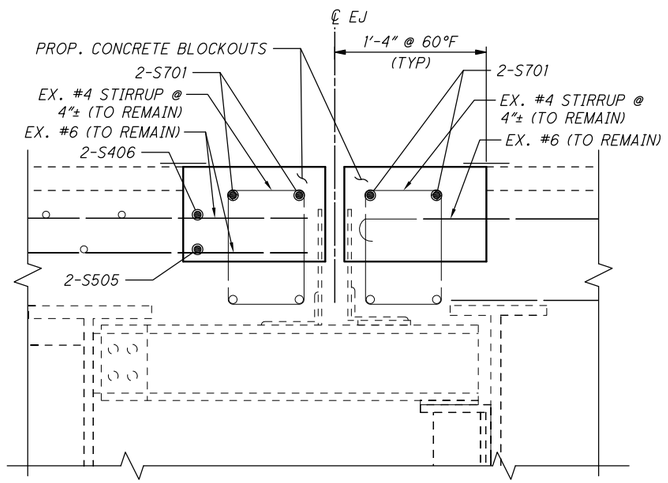


SECTION K-K
EJ 6 (LOOKING WEST)
EJ 6A (LOOKING EAST)

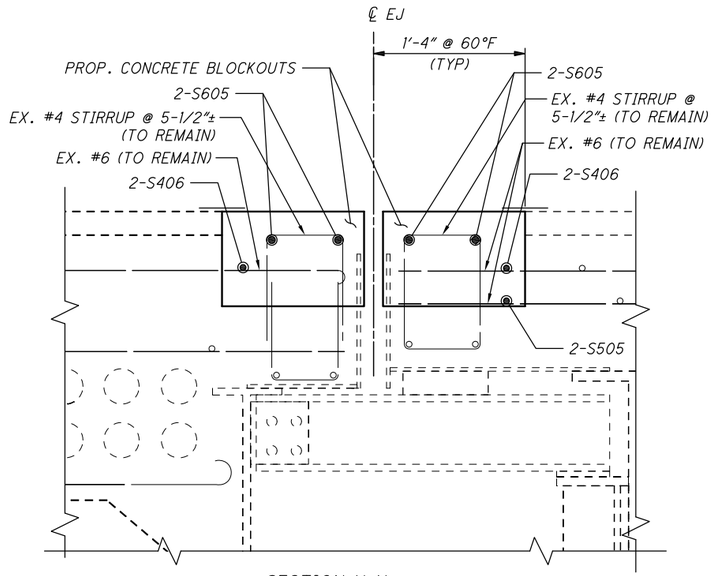


SECTION L-L
EJ 14 (LOOKING WEST)
EJ 14A (LOOKING EAST)

EX. REINFORCEMENT & STRUCTURAL STEEL BELOW
BLOCKOUTS VARIES



SECTION M-M
EJ 15 (LOOKING WEST)



SECTION N-N
15A (LOOKING EAST)

NOTES

1. FOR EXPANSION JOINT SYSTEM DETAILS SEE SHEETS 59-60.

2. FOR LOCATIONS OF SECTION CUTS, SEE SHEETS 77-87

3. FOR REINFORCING SCHEDULE, SEE SHEET 75

LEGEND

EJ - EXPANSION JOINT

OH - OPPOSITE HAND

HORIZONTAL SCALE IN FEET
0 ## ## ##

CALCULATED MJD
CHECKED EIW

ROADWAY EXPANSION JOINT REINFORCEMENT DETAILS

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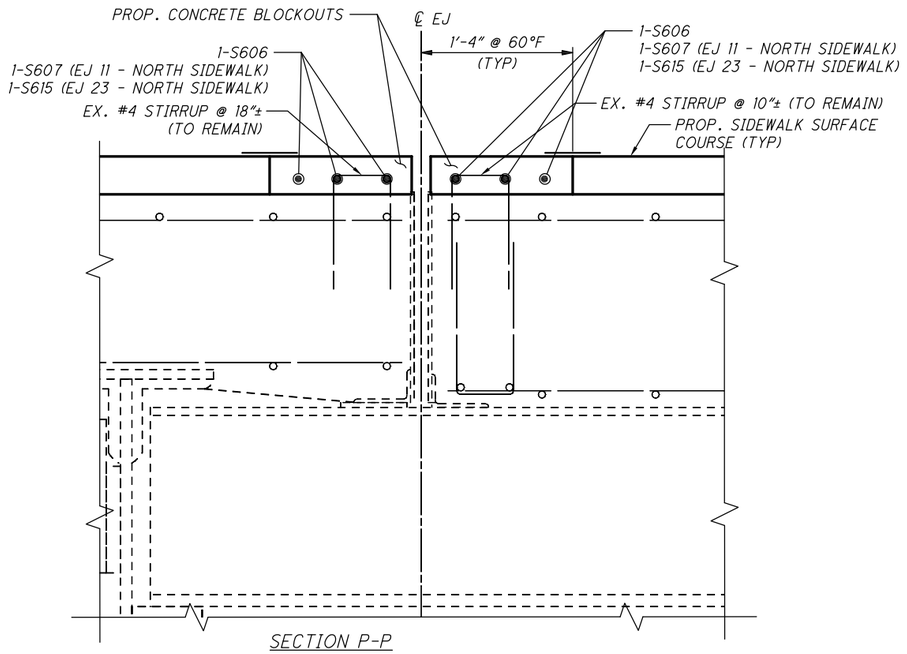
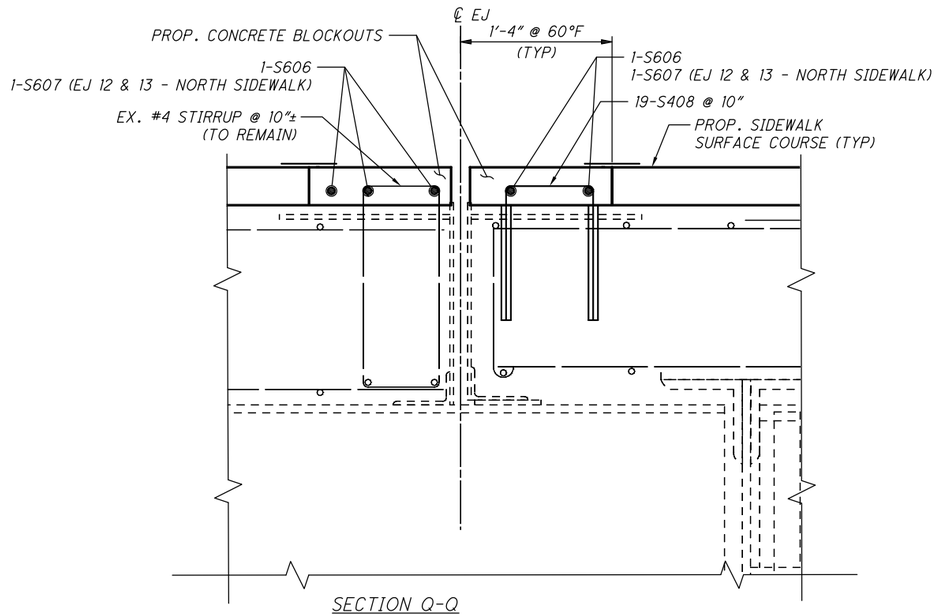


SECTION P-P

EJ 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 17, 18, 19, 21, 22, 23, 25, 26, 27, 28, 29, 30

EX. REINFORCEMENT & STRUCTURAL STEEL BELOW BLOCKOUTS VARIES

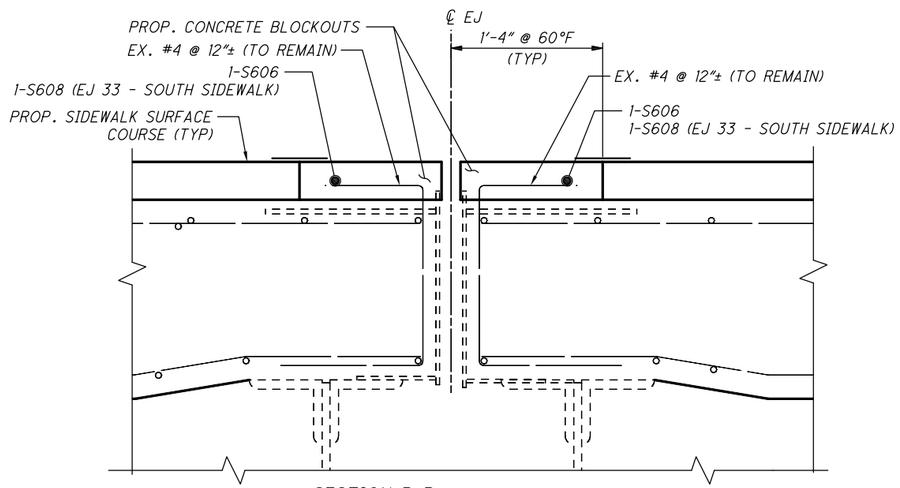
*FOR SLAB REINFORCEMENT AT FULL DEPTH REPLACEMENT LOCATIONS AT EJ 1 & 8 SEE SHEETS 92-94.



SECTION Q-Q

EJ 12, 13, 20

EX. REINFORCEMENT & STRUCTURAL STEEL BELOW BLOCKOUTS VARIES



SECTION R-R

EJ 31, 32, 33

EX. REINFORCEMENT & STRUCTURAL STEEL BELOW BLOCKOUTS VARIES

NOTES

1. FOR EXPANSION JOINT SYSTEM DETAILS SEE SHEETS 59-60.

2. FOR LOCATIONS OF SECTION CUTS, SEE SHEETS 77-87.

3. FOR REINFORCING SCHEDULE, SEE SHEET 75.

LEGEND

EJ - EXPANSION JOINT

HORIZONTAL SCALE IN FEET

CALCULATED MJD | CHECKED EIW

SIDEWALK EXPANSION JOINT REINFORCEMENT DETAILS

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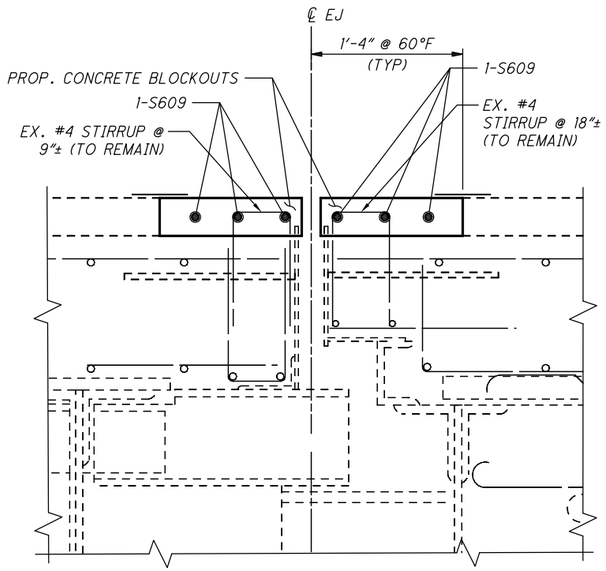
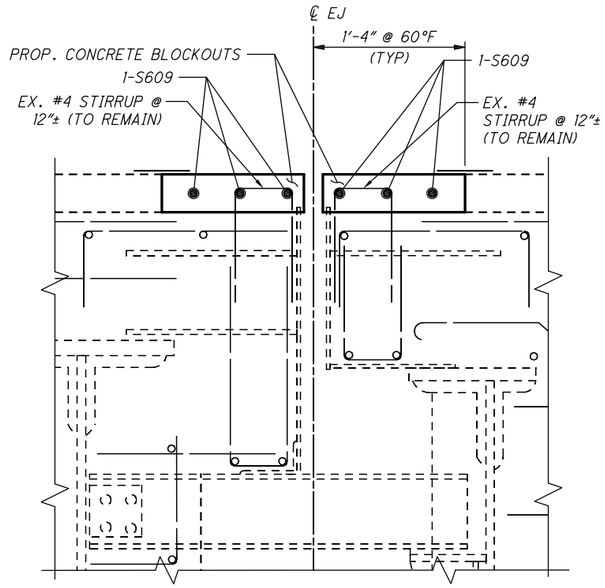
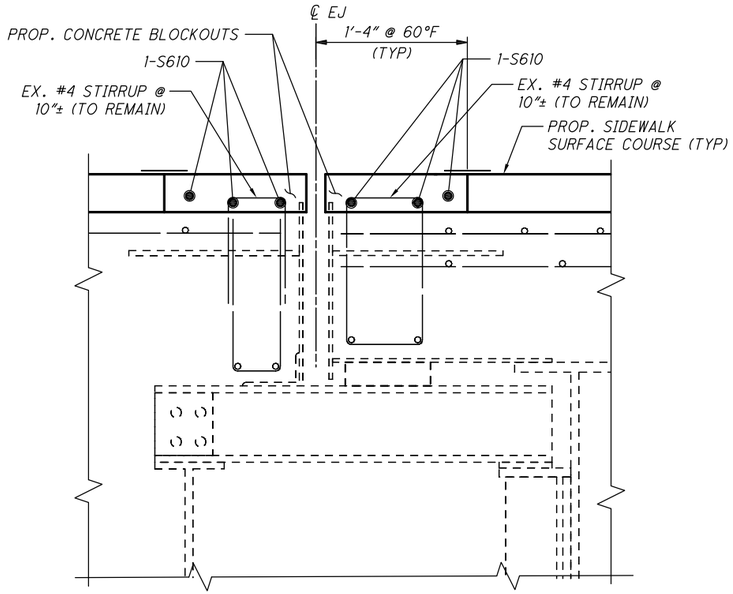


SECTION T-T
EJ 6 (LOOKING WEST)
EJ 6A (LOOKING EAST)

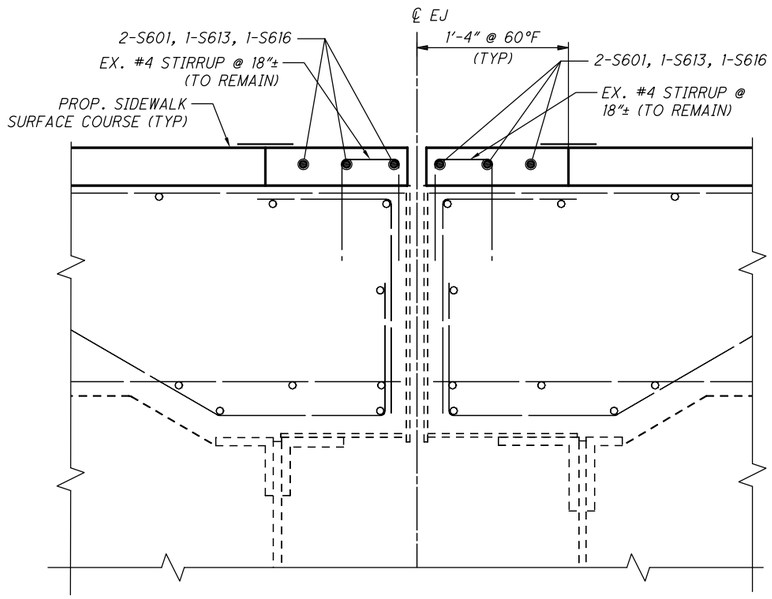


SECTION U-U
EJ 14 (LOOKING WEST)
EJ 14A (LOOKING EAST)

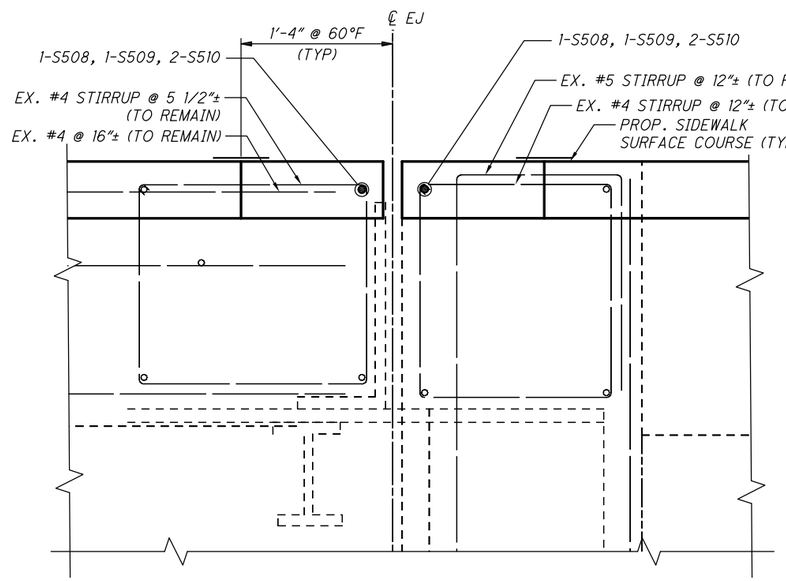
EX. REINFORCEMENT & STRUCTURAL STEEL BELOW BLOCKOUTS VARIES



SECTION V-V
EJ 15 (LOOKING WEST)
EJ 15A (LOOKING EAST)



SECTION R-R
EJ 24 (MAINLINE) (LOOKING WEST)



SECTION S-S
EJ 24 (TURNLANE) (LOOKING WEST)

NOTES

1. FOR EXPANSION JOINT SYSTEM DETAILS SEE SHEETS 59-60.

2. FOR LOCATIONS OF SECTION CUTS, SEE SHEETS 77-87.

3. FOR REINFORCING SCHEDULE, SEE SHEET 75.

LEGEND

EJ - EXPANSION JOINT

SIDEWALK EXPANSION JOINT REINFORCEMENT DETAILS

HORIZONTAL SCALE IN FEET
0 ## ## ##

CALCULATED MJD
CHECKED EIW

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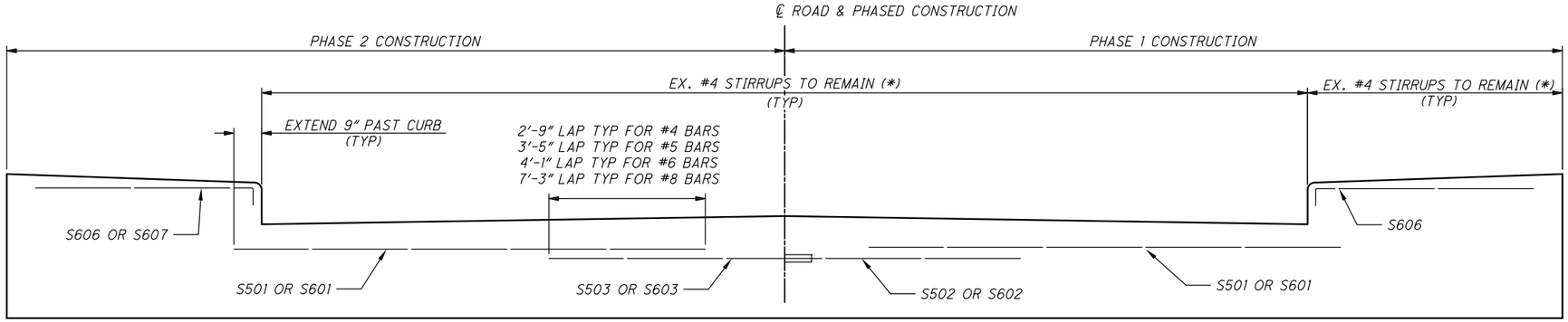
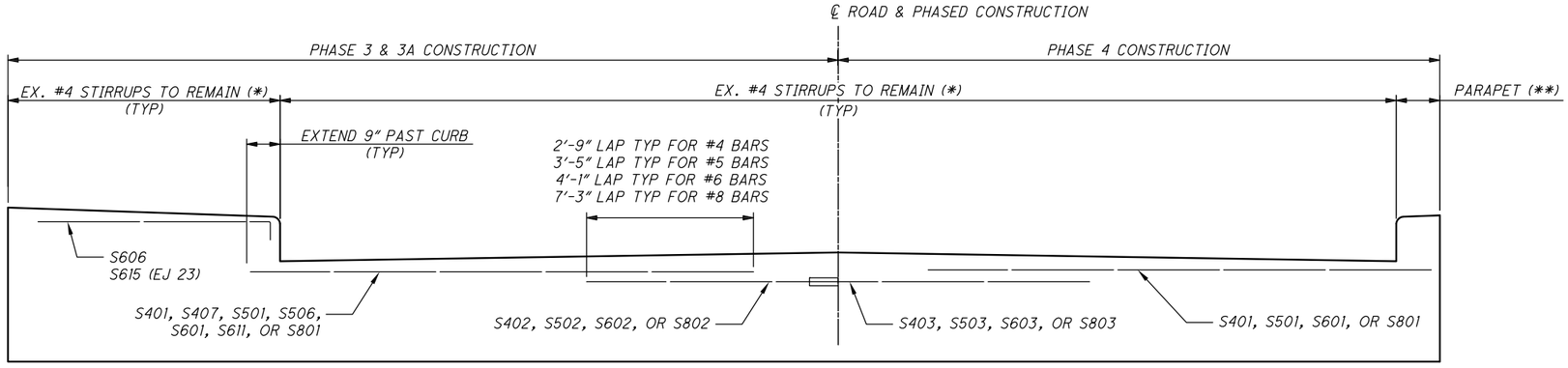


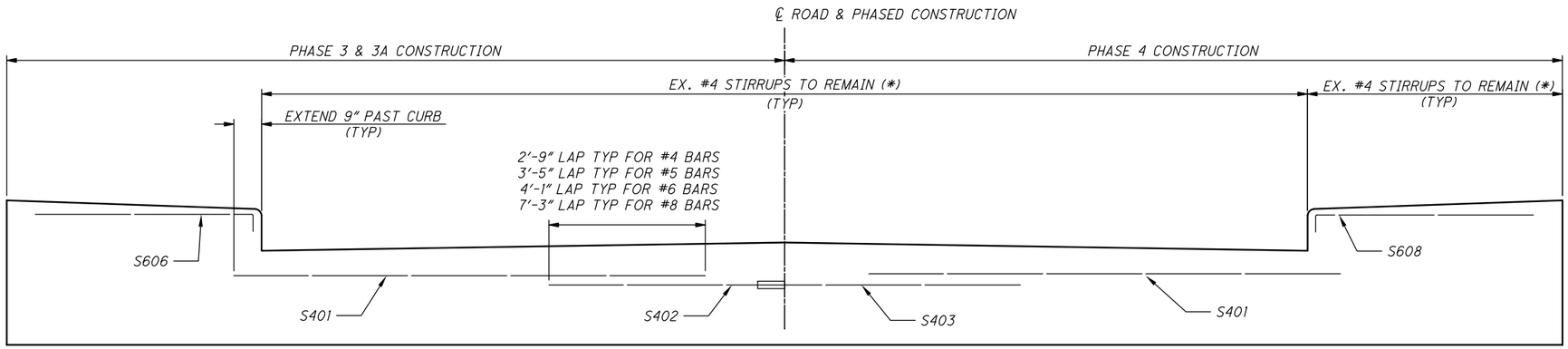
REINFORCEMENT PLACEMENT AT EXPANSION JOINT

PROSPECT AVE.
NOT DRAWN TO SCALE
* SEE SHEETS 68-72 FOR EX. STIRRUP SPACING



REINFORCEMENT PLACEMENT AT EXPANSION JOINT

HURON RD. MAINLINE (SEE BELOW FOR EJ 33)
NOT DRAWN TO SCALE
* SEE SHEETS 68-72 FOR EX. STIRRUP SPACING
** FOR PARAPET REPAIR AND REINFORCEMENT, SEE SHEETS 66, 67 & 99.



REINFORCEMENT PLACEMENT AT EXPANSION JOINT

HURON ROAD - EJ 33
NOT DRAWN TO SCALE
* SEE SHEETS 68-72 FOR EX. STIRRUP SPACING

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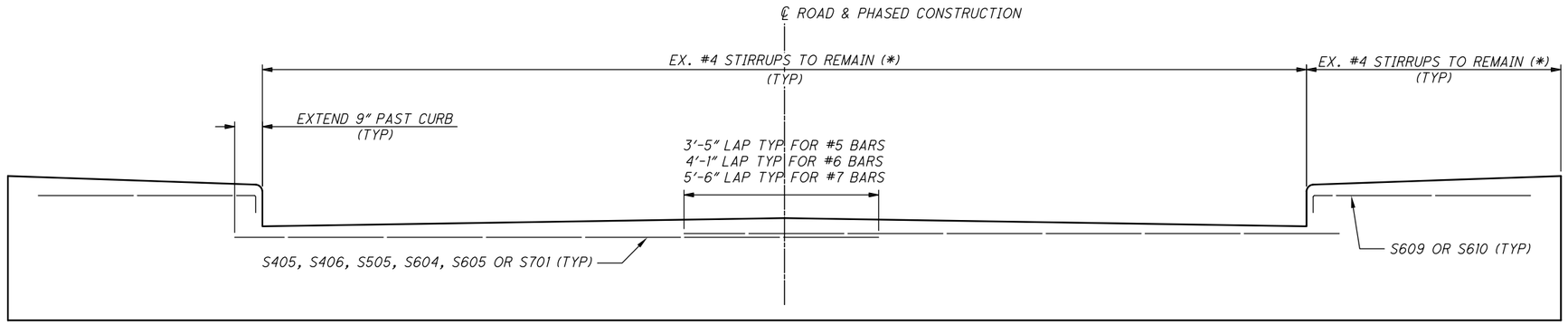
HORIZONTAL SCALE IN FEET
0 ** ** ** **

CALCULATED MJD
CHECKED EIW

EXPANSION JOINT REINFORCEMENT DETAILS

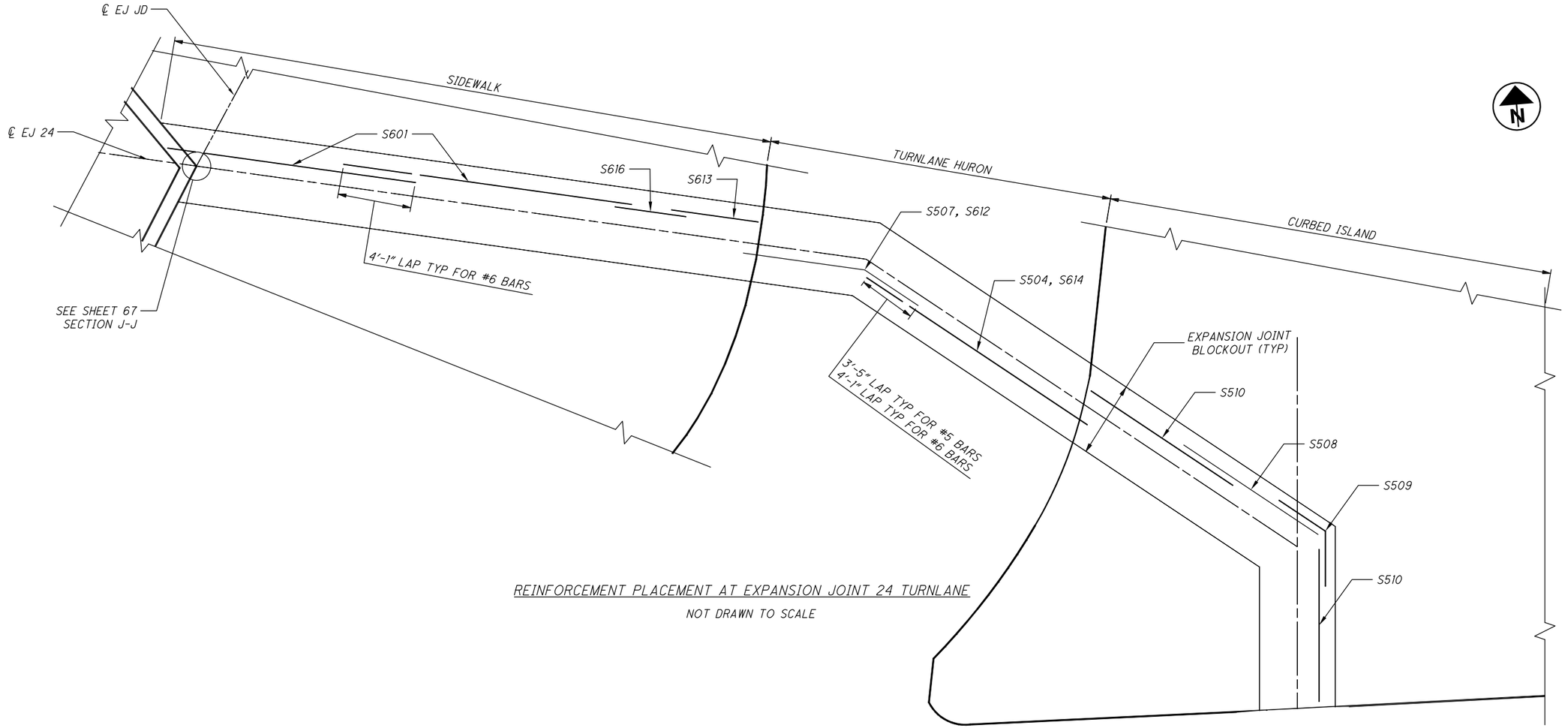
CUY - TOWER CITY BRIDGES



REINFORCEMENT PLACEMENT AT EXPANSION JOINT

W. 2ND STREET, W. 3RD STREET, W. 6TH STREET
NOT DRAWN TO SCALE

* SEE SHEETS 68-72 FOR EX. STIRRUP SPACING



REINFORCEMENT PLACEMENT AT EXPANSION JOINT 24 TURNLANE

NOT DRAWN TO SCALE

HORIZONTAL SCALE IN FEET

CALCULATED MJD
CHECKED EIW

EXPANSION JOINT REINFORCEMENT DETAILS

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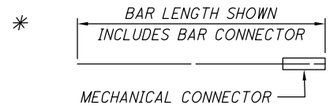
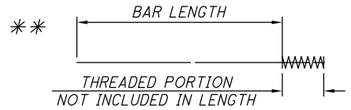
REINFORCING SCHEDULE											
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSION A	B	C	D	E	R	INC
PROSPECT AVENUE											
S408	76	2'-11"	148	2	1'-2"	9"	1'-2"				
S501	16	30'-0"	501	STR							
S502*	8	8'-2"	68	STR							
S503**	8	8'-2"	68	STR							
S601	136	30'-0"	6128	STR							
S602*	68	8'-10"	902	STR							
S603**	68	8'-10"	902	STR							
S606	124	15'-9"	2933	11	6"	14'-11"	1'-2"				
S607	16	16'-6"	397	11	6"	15'-8"	1'-2"				
		TOTAL	12047								
HURON ROAD											
S401	55	30'-0"	1102	STR							
S402*	32	7'-6"	160	STR							
S403**	32	7'-6"	160	STR							
S404	8	19'-6"	104	STR							
S407	1	23'-3"	16	STR							
S408	38	2'-11"	74	2	1'-2"	9"	1'-2"				
S501	39	30'-0"	1220	STR							
S502*	20	8'-2"	170	STR							
S503**	20	8'-2"	170	STR							
S504	1	18'-8"	19	STR							
S506	1	23'-3"	24	STR							
S507	1	12'-5"	13	19	8'-8"	3'-4"	1'-9"				
S508	2	11'-0"	21	STR							
S509	2	7'-8"	16	19	3'-6"	2'-5"	3'-5"				
S510	4	11'-6"	48	1	1'-2"	10'-5"					
S601	120	30'-0"	5407	STR							
S602*	62	8'-10"	823	STR							
S603**	62	8'-10"	823	STR							
S606	77	15'-9"	1822	11	6"	14'-11"	1'-2"				
S608	2	13'-0"	39	11	5"	12'-2"	1'-2"				
S611	4	23'-3"	140	STR							
S612	4	13'-0"	78	19	8'-8"	3'-11"	2'-0"				
S613	6	18'-8"	168	1	1'-2"	11'-0"					
S614	4	18'-8"	112	STR							
S615	6	15'-5"	139	11	5"	14'-7"	1'-2"				
S616	6	11'-2"	101	STR							
S801	8	30'-0"	641	STR							
S802*	4	12'-0"	128	STR							
S803**	4	12'-0"	128	STR							
		TOTAL	13869								

NOTES:

1. ALL REINFORCING STEEL SHALL BE EPOXY COATED. SEE STRUCTURE GENERAL NOTES FOR ADDITIONAL MATERIAL REQUIREMENTS.
2. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR.
3. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS UNLESS OTHERWISE NOTED.
4. BEND BARS CAREFULLY TO THE DIMENSIONS LISTED IN THE SCHEDULES AND/OR STANDARD BEND TABLE (CMS 509.05).
5. ALL BARS OF A GIVEN SERIES VARY BY A CONSTANT AMOUNT.
6. MECHANICAL CONNECTORS REQUIRED AS FOLLOWS:

* - BAR WITH PHASE 1 MECHANICAL CONNECTOR
** - BAR WITH PHASE 2 THREADED ENDS

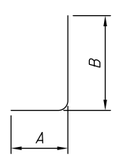




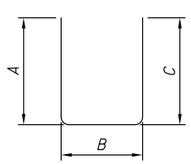
LEGEND:

S = SUPERSTRUCTURE
X,Y = PARAPETS

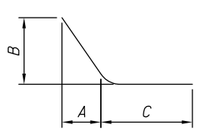
REINFORCING SCHEDULE											
MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSION A	B	C	D	E	R	INC
WEST 2ND STREET											
S405	8	19'-8"	105	STR							
S604	16	20'-4"	489	STR							
S609	24	11'-8"	421	11	4"	10'-11"	1'-1"				
		TOTAL	1014								
WEST 3RD STREET											
S604	24	20'-4"	733	STR							
S609	24	11'-8"	421	11	4"	10'-11"	1'-1"				
		TOTAL	1154								
WEST 6TH STREET											
S406	6	22'-2"	89	STR							
S505	4	22'-6"	94	STR							
S605	8	22'-10"	274	STR							
S610	24	14'-8"	529	11	5"	13'-11"	1'-1"				
S701	8	23'-6"	384	STR							
		TOTAL	1370								



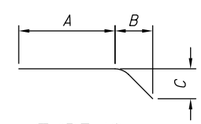
TYPE-1



TYPE-2



TYPE-11



TYPE-19

HORIZONTAL SCALE IN FEET
0 ** ** **

CALCULATED MJD
CHECKED EIW

EXPANSION JOINT REINFORCEMENT SCHEDULE

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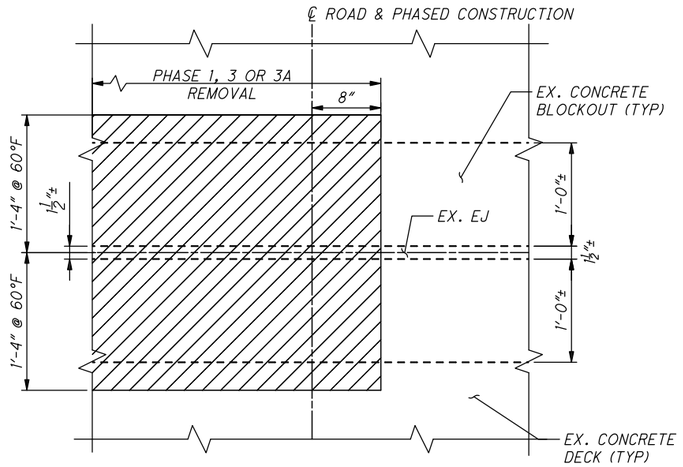
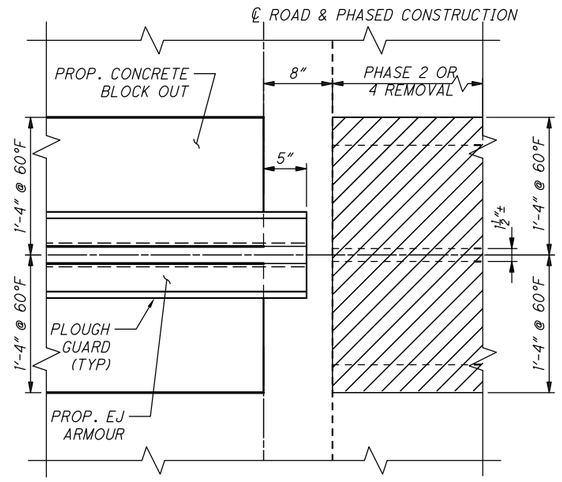


PHASE 1, 3 OR 3A - REMOVAL

PARTIAL DEPTH ROADWAY EXPANSION JOINT SHOWN
(FULL DEPTH & SIDEWALK AREAS SIMILAR)



PHASE 2 OR 4 - REMOVAL

PARTIAL DEPTH ROADWAY EXPANSION JOINT SHOWN
(FULL DEPTH & SIDEWALK AREAS SIMILAR)

LEGEND

ITEM 202, CONCRETE PORTIONS OF SUPERSTRUCTURE REMOVED, AS PER PLAN

EJ EXPANSION JOINT

NOTES

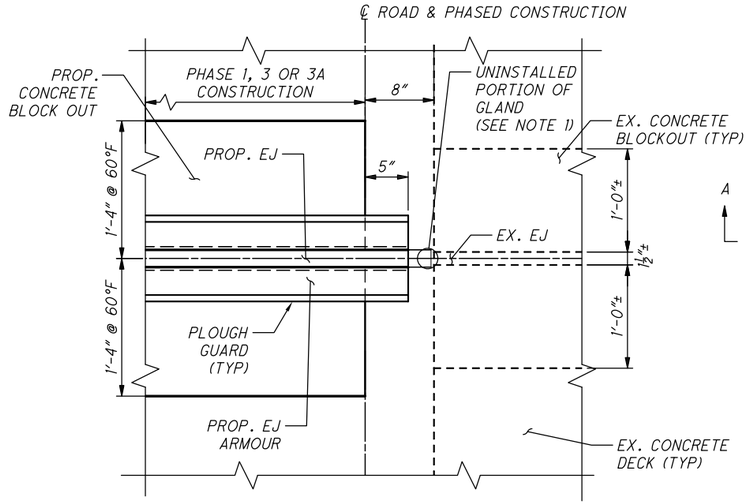
1. INSTALL JOINT MATERIALS PER MANUFACTURERS RECOMMENDATIONS. EXPANSION JOINT GLAND SHALL BE CONTINUOUS FOR THE FULL WIDTH OF THE ROADWAY. PLACE GLAND DURING PHASE 1, 3, OR 3A CONSTRUCTION. STORE REMAINING LENGTH OF UNINSTALLED GLAND IN THE CONSTRUCTION WORK ZONE.

THE UNINSTALLED PORTION OF THE GLAND SHALL NOT BE CUT OR TRIMMED AND SHALL BE PROTECTED FROM THE ELEMENTS ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS AS WELL AS FROM DAMAGE FROM CONSTRUCTION OPERATIONS.

2. CONTRACTOR SHALL ENSURE THAT NO WATER IS PERMITTED TO ENTER THE JOINT DURING CONSTRUCTION.

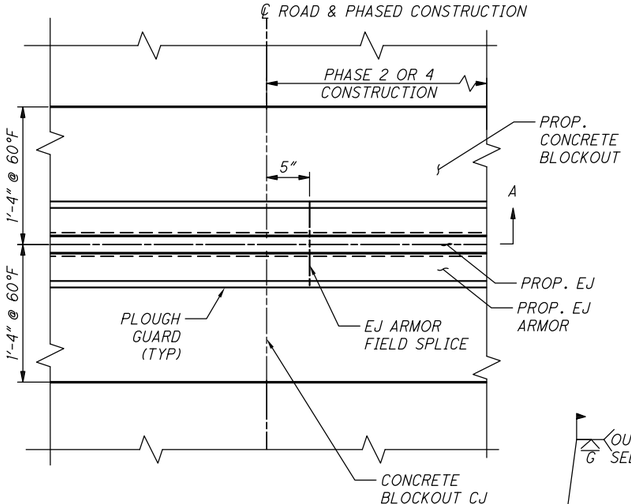
3. STEEL CLAMPING BAR SEGMENTS SHALL BE 4'-3" TO 6'-6" LONG, FOR STAGED EXPANSION JOINT CONSTRUCTION, STEEL CLAMPING BAR SHALL TERMINATE A MINIMUM OF 4" FROM EXPOSED END OF STEEL ARMORING. GAP BETWEEN ADJACENT CLAMPING BARS SHALL NOT EXCEED ⅛". STEEL CLAMPING BAR SEGMENTS SHALL BE WELDED AFTER INSTALLATION OF JOINT.

4. FOR EXPANSION JOINT DETAILS SEE SHEETS 59-75.



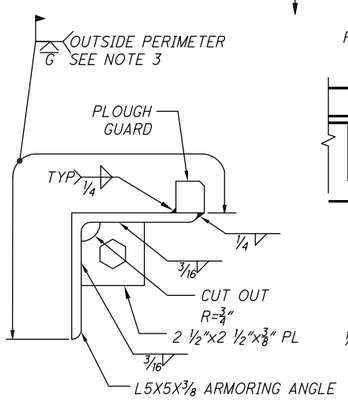
PHASE 1, 3 OR 3A - CONSTRUCTION

PARTIAL DEPTH ROADWAY EXPANSION JOINT SHOWN
(FULL DEPTH & SIDEWALK AREAS SIMILAR)

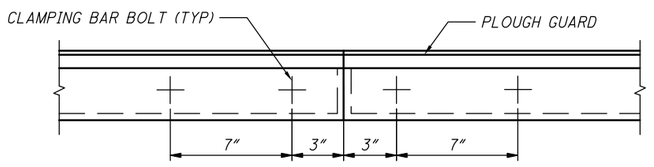


PHASE 2 OR 4 - CONSTRUCTION

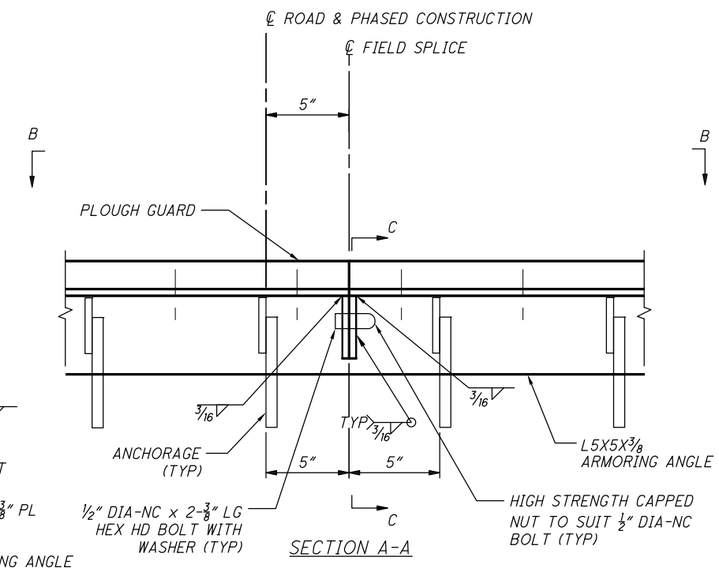
PARTIAL DEPTH ROADWAY EXPANSION JOINT SHOWN
(FULL DEPTH & SIDEWALK AREAS SIMILAR)



SECTION C-C



SECTION B-B



SECTION A-A

HORIZONTAL SCALE IN FEET

CALCULATED EIW
CHECKED SMK

EXPANSION JOINT PHASED CONSTRUCTION DETAILS

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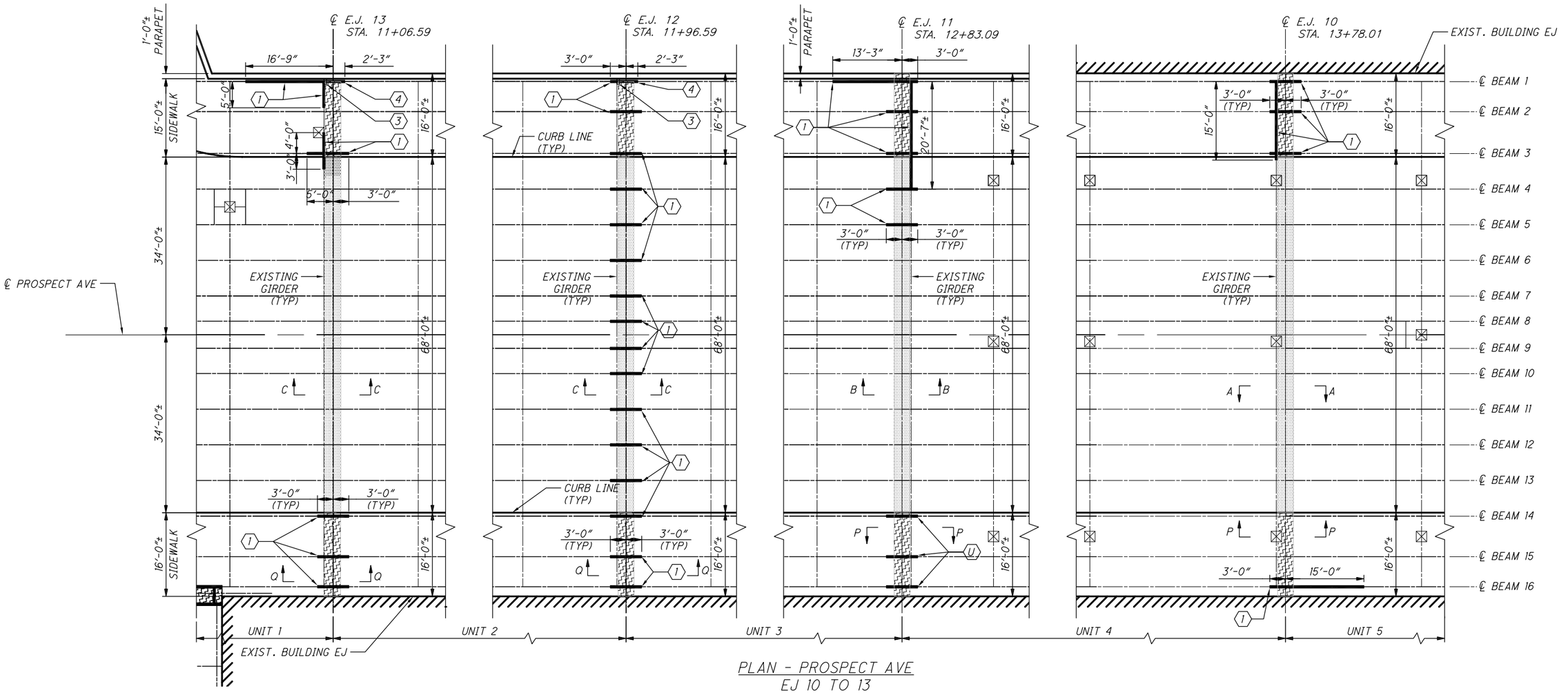


PLAN - PROSPECT AVE
EJ 10 TO 13

LEGEND

1	CATEGORY 1 STEEL REPAIR
2	CATEGORY 2 STEEL REPAIR
3	CATEGORY 3 STEEL REPAIR
4	CATEGORY 4 STEEL REPAIR
U	STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
	ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
	ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
☒	EXISTING COLUMN BELOW
EJ	EXPANSION JOINT

NOTES

1. CONTRACTOR SHALL COORDINATE UNDERSIDE ACCESS WITH GCRTA & ALL BUSINESS OWNERS PRIOR TO WORK.

2. FOR LOCATION AND TYPE OF EXISTING FIREPROOFING AND SECONDARY DRAINAGE SYSTEM AT EXPANSION JOINTS, SEE TABLE ON SHEET 62.

3. FOR EXPANSION JOINT DETAILS SEE SHEETS 59-76.

4. FOR STRUCTURAL STEEL REPAIR DETAILS SEE SHEETS 88-91.

5. FOR PHASED CONSTRUCTION SEE MAINTENANCE OF TRAFFIC PLANS, AND SHEET 76.

STEEL REPAIR CATEGORY DESCRIPTION

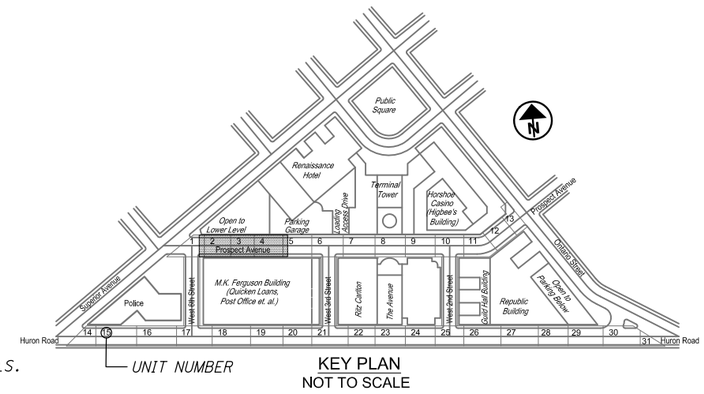
CATEGORY 1 - CLEAN AND PAINT EXISTING STEEL BEAMS, GIRDERS AND CONNECTIONS AT EXPANSION JOINTS AS INDICATED ON PLANS. LIMITS OF PAINTING SHALL BE THREE (3) FEET ON BOTH SIDES OF THE JOINT UNLESS NOTED OTHERWISE. GIRDER LENGTH AT THE JOINT SHALL ALSO BE CLEANED AND PAINTED AS NOTED ON THE PLANS.

CATEGORY 2 - REPLACEMENT OF EXISTING RIVETS AND BOLTS AS PER PLAN DETAILS.

CATEGORY 3 - REPAIR OR REPLACEMENT OF EXISTING STEEL CONNECTIONS AS PER PLAN DETAILS.

CATEGORY 4 - REPAIR OR REPLACEMENT OF EXISTING STRUCTURAL STEEL BEAMS AND/OR GIRDERS AS PER PLAN DETAILS.

CATEGORY U - EXISTING STEEL CONDITION UNKNOWN DUE TO NO INSPECTION ACCESS. VIDEO INSPECTION DURING CONSTRUCTION REQUIRED - SEE GENERAL NOTES.



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET

CALCULATED MJD
CHECKED SMK

PROSPECT AVENUE
EJ 10 TO 13

CUY-TOWER CITY BRIDGES

77
129

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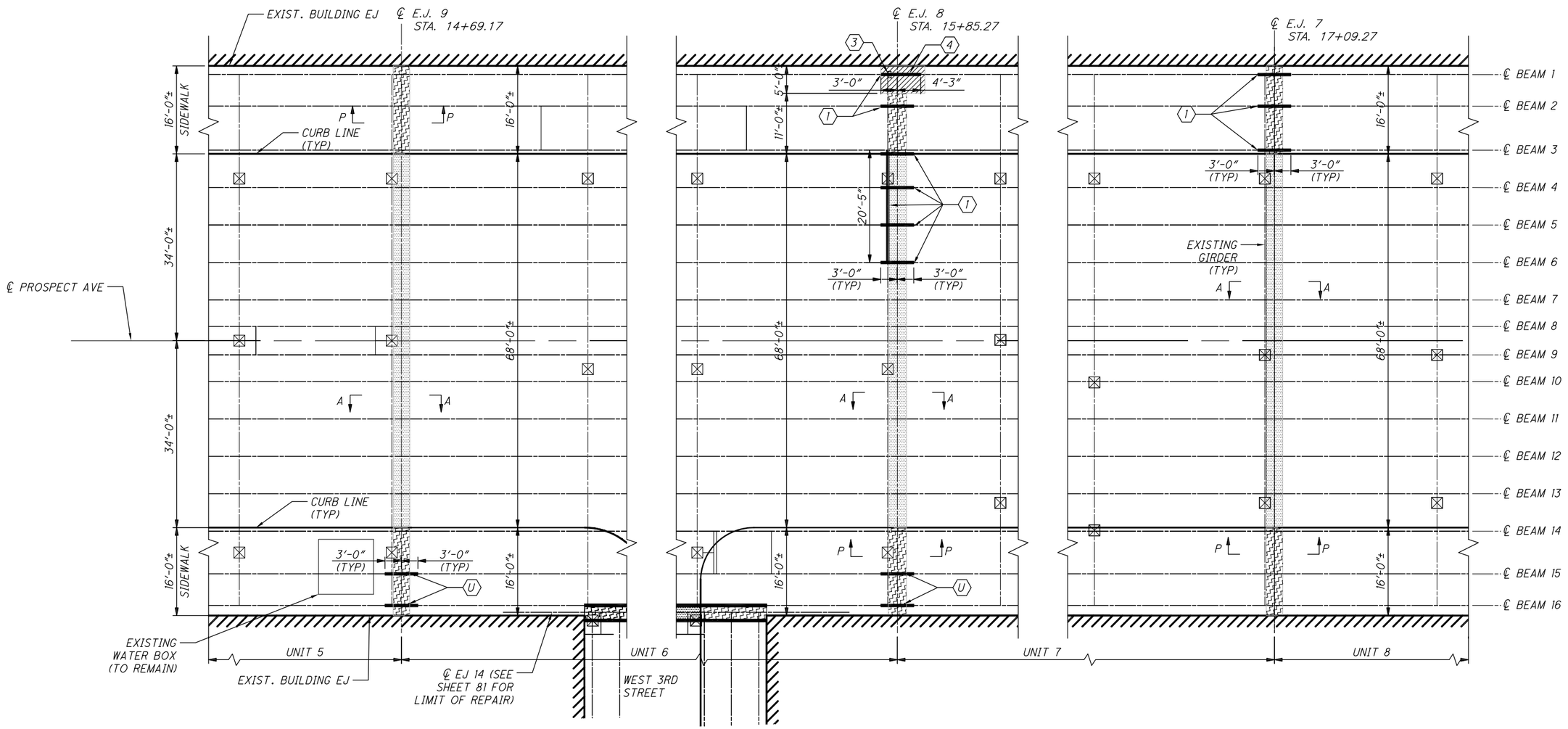


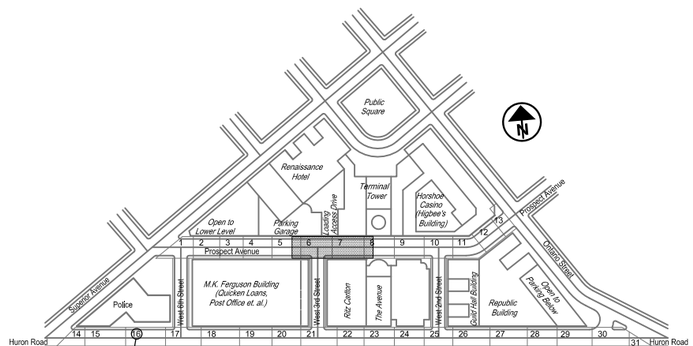
PLAN - PROSPECT AVE
EJ 7 TO EJ 9

LEGEND

- (1) CATEGORY 1 STEEL REPAIR
- (2) CATEGORY 2 STEEL REPAIR
- (3) CATEGORY 3 STEEL REPAIR
- (4) CATEGORY 4 STEEL REPAIR
- (U) STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
- ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
- ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
- EXISTING COLUMN BELOW
- EJ EXPANSION JOINT

NOTES

1. SEE SHEET 77 FOR ADDITIONAL NOTES.



HORIZONTAL SCALE IN FEET

CALCULATED MJD
CHECKED SMK

PROSPECT AVENUE
EJ 7 TO 9

CUY-TOWER CITY BRIDGES

78
129

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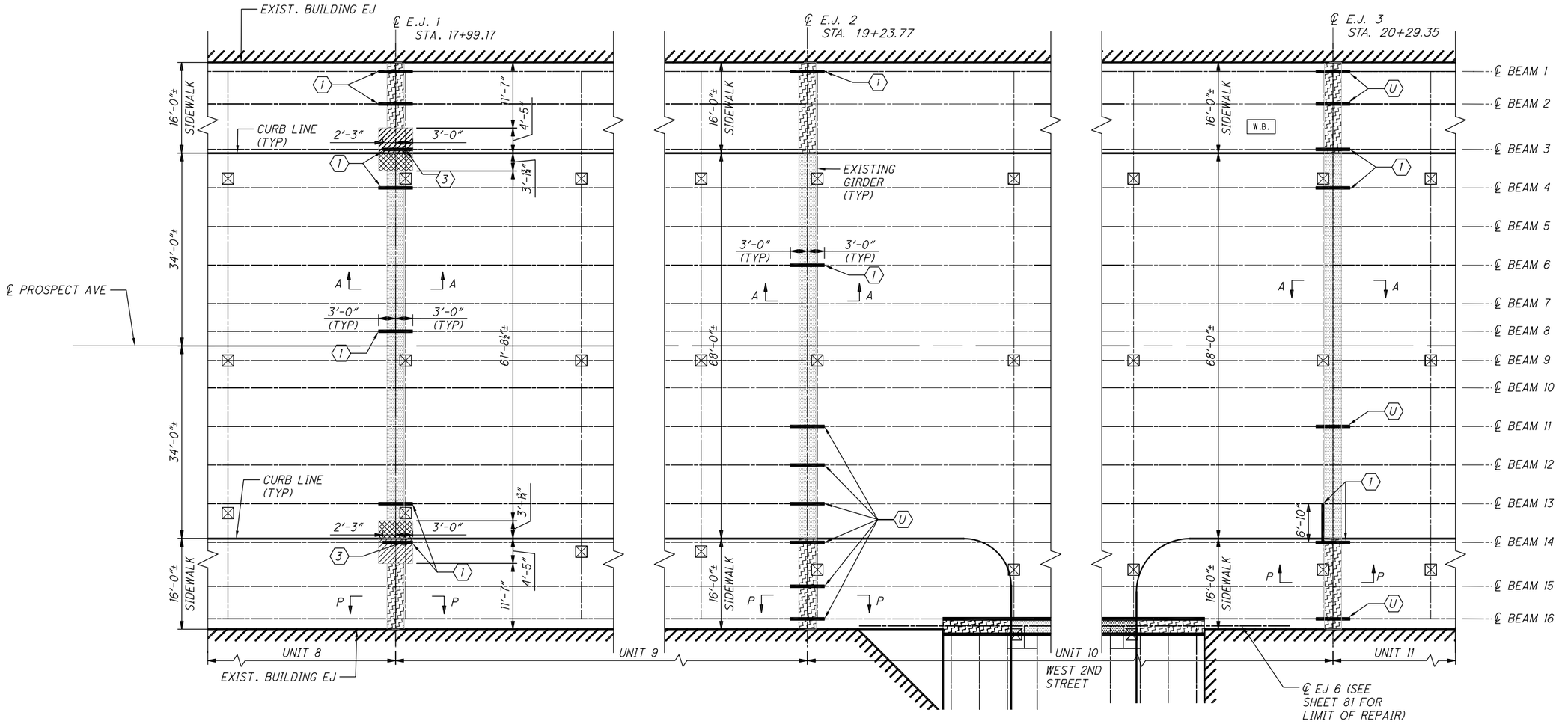


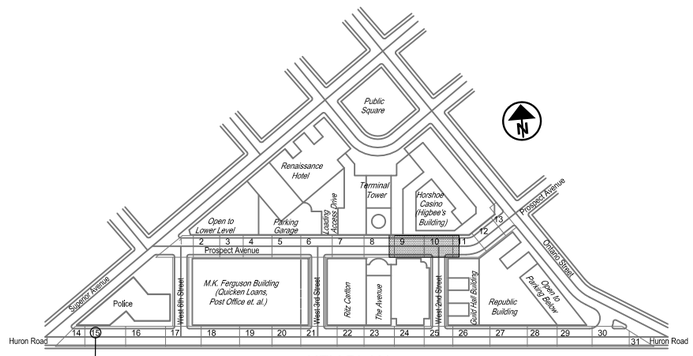
PLAN - PROSPECT AVE
EJ 1 TO EJ 3

LEGEND

1	CATEGORY 1 STEEL REPAIR
2	CATEGORY 2 STEEL REPAIR
3	CATEGORY 3 STEEL REPAIR
4	CATEGORY 4 STEEL REPAIR
U	STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
	ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
	ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
☒	EXISTING COLUMN BELOW
EJ	EXPANSION JOINT

NOTES

1. SEE SHEET 77 FOR ADDITIONAL NOTES.



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET
0 ** ** ** **

CALCULATED MJD
CHECKED SMK

PROSPECT AVENUE
EJ 1 TO 3

CUY-TOWER CITY BRIDGES

79
129

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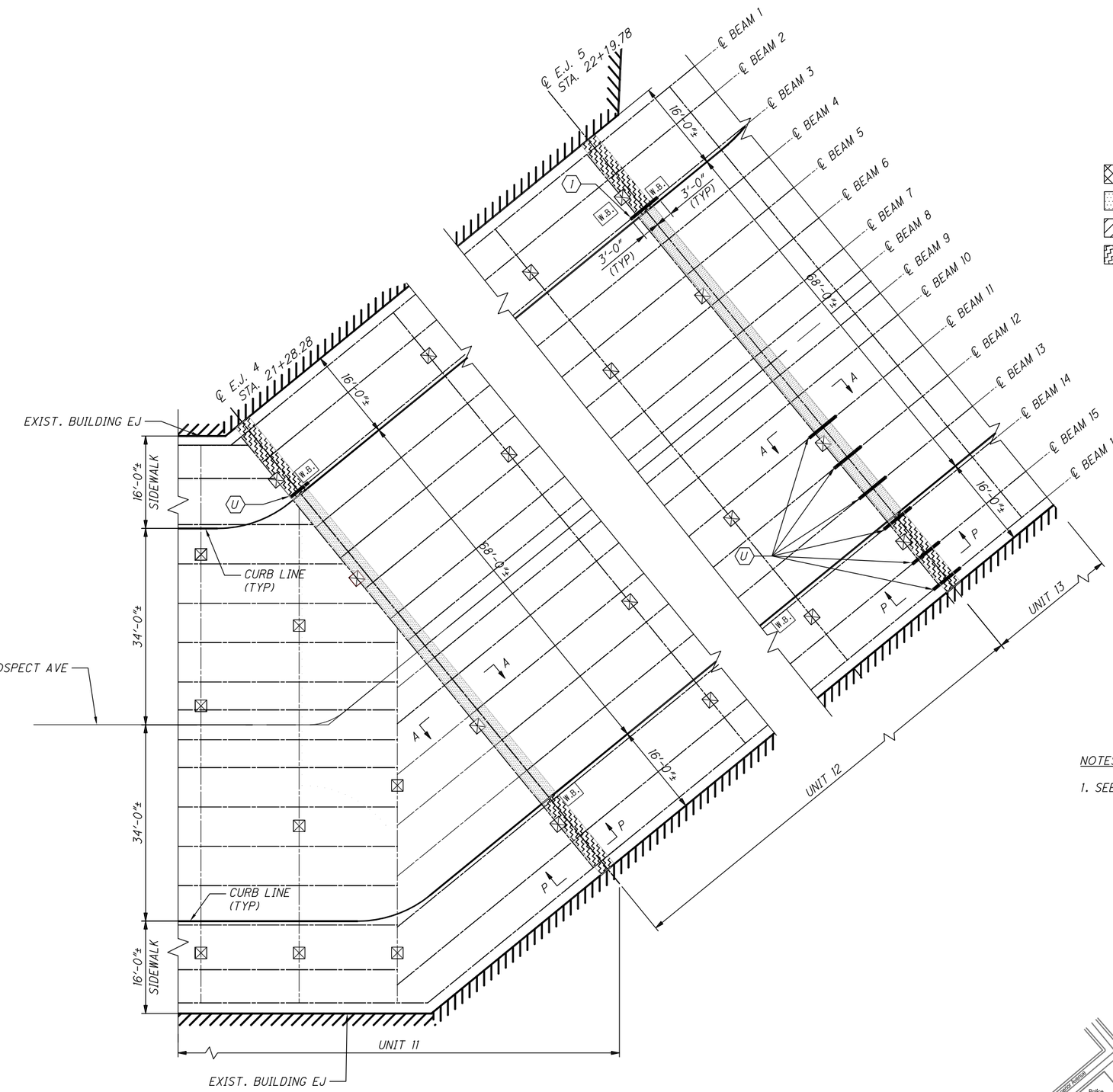


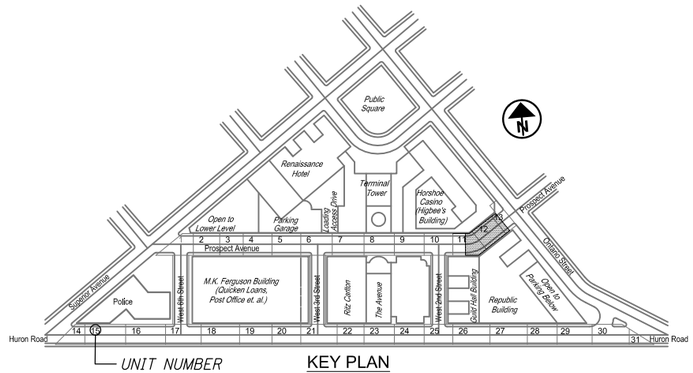
PLAN - PROSPECT AVE
EJ 4 & EJ 5

LEGEND

1	CATEGORY 1 STEEL REPAIR
2	CATEGORY 2 STEEL REPAIR
3	CATEGORY 3 STEEL REPAIR
4	CATEGORY 4 STEEL REPAIR
U	STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
	ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
	ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
⊠	EXISTING COLUMN BELOW
EJ	EXPANSION JOINT

NOTES

1. SEE SHEET 77 FOR ADDITIONAL NOTES.



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET
0 ** ** **

CALCULATED MJD
CHECKED SMK

PROSPECT AVENUE
EJ 4 & 5

CUY-TOWER CITY BRIDGES

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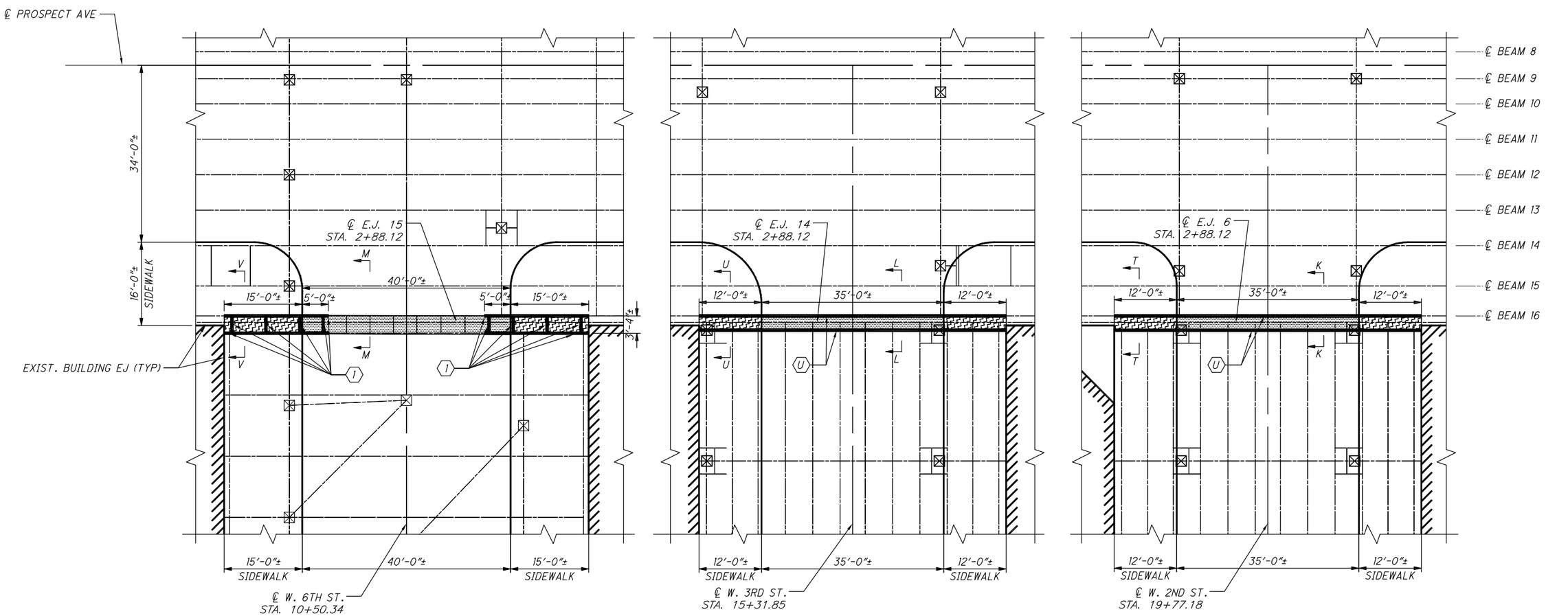


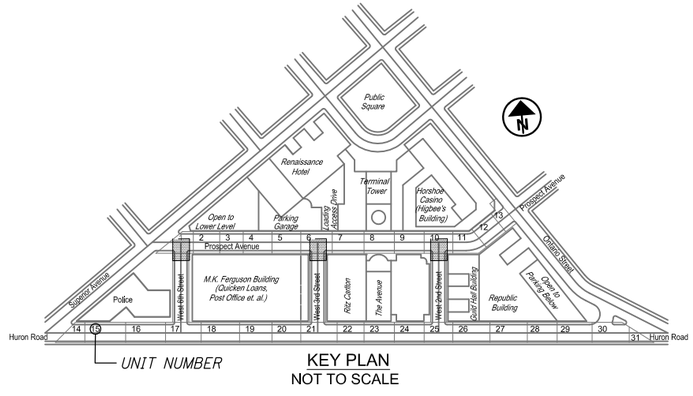
PLAN - W. 6TH, W. 2ND & W. 3RD AT PROSPECT AVE
EJ 6, 14 & 15

LEGEND

- 1 CATEGORY 1 STEEL REPAIR
- 2 CATEGORY 2 STEEL REPAIR
- 3 CATEGORY 3 STEEL REPAIR
- 4 CATEGORY 4 STEEL REPAIR
- U STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
- ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
- ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
- EXISTING COLUMN BELOW
- EJ EXPANSION JOINT

NOTES

1. SEE SHEET 77 FOR ADDITIONAL NOTES.



HORIZONTAL SCALE IN FEET
0 ** ** **

CALCULATED MJD
CHECKED SMK

W. 6TH, W. 3RD & W. 2ND AT PROSPECT AVE

CUY-TOWER CITY BRIDGES

81
129

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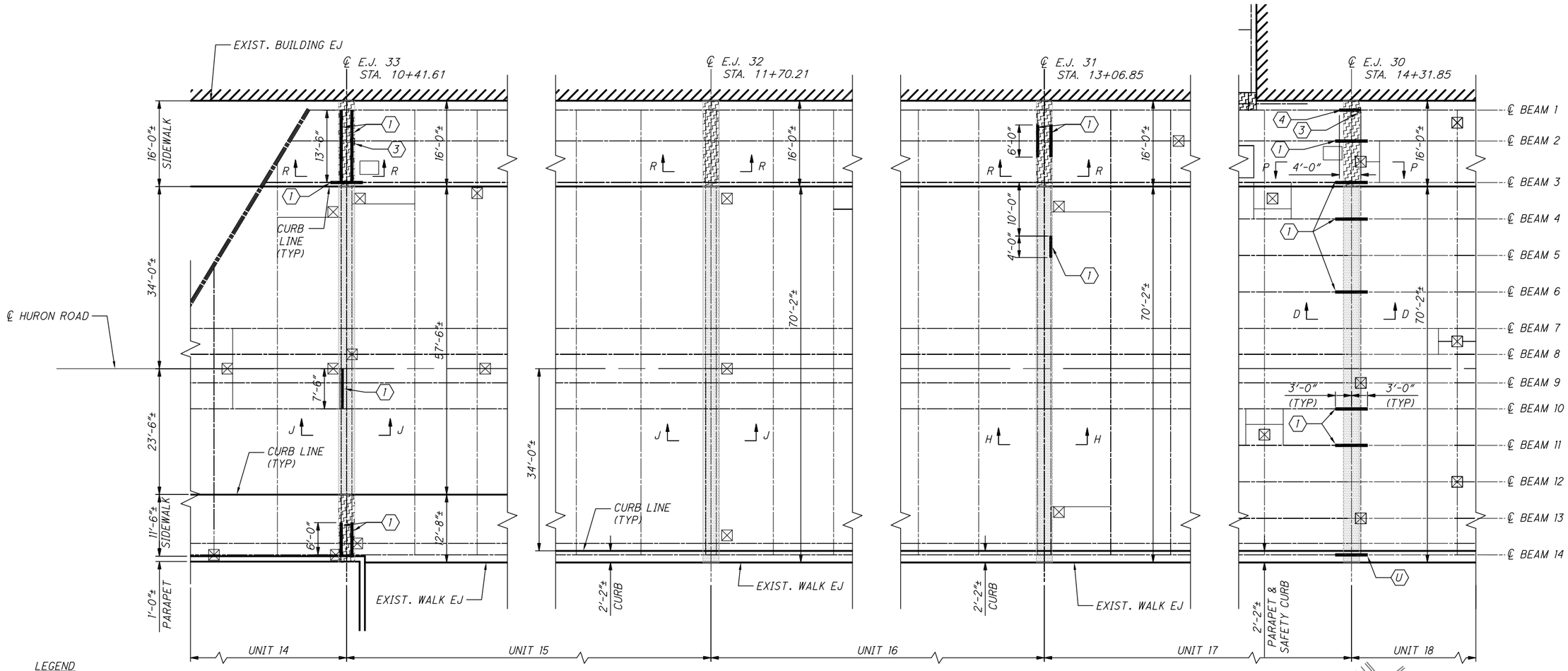


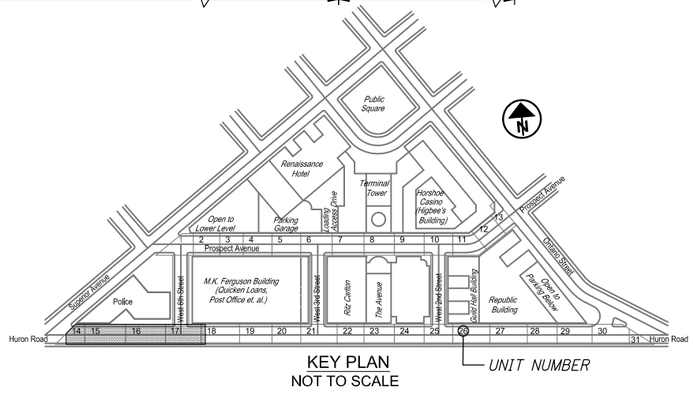
PLAN - HURON ROAD
EJ 30 TO EJ 33

LEGEND

- (1) CATEGORY 1 STEEL REPAIR
- (2) CATEGORY 2 STEEL REPAIR
- (3) CATEGORY 3 STEEL REPAIR
- (4) CATEGORY 4 STEEL REPAIR
- (U) STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
- ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
- ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
- ⊠ EXISTING COLUMN BELOW
- EJ EXPANSION JOINT

NOTES

1. SEE SHEET 77 FOR ADDITIONAL NOTES.



KEY PLAN
NOT TO SCALE

UNIT NUMBER

HORIZONTAL SCALE IN FEET
0 ** ** **

CALCULATED MJD
CHECKED SMK

HURON ROAD
EJ 30 TO 33

CUY-TOWER CITY BRIDGES

82
129

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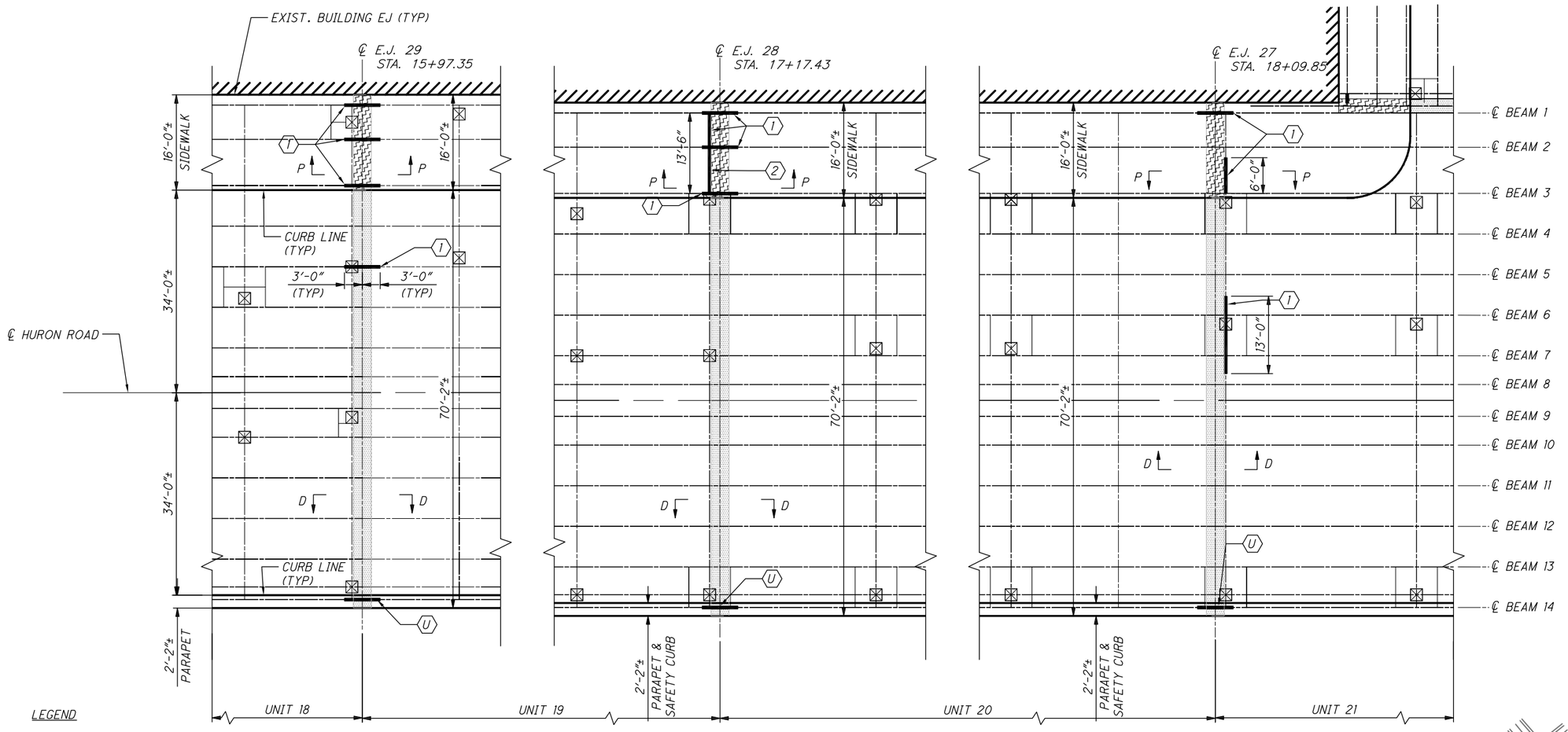


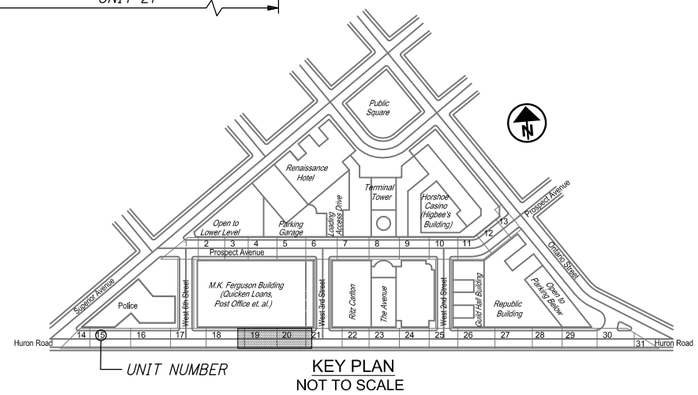
LEGEND

- 1 — CATEGORY 1 STEEL REPAIR
- 2 — CATEGORY 2 STEEL REPAIR
- 3 — CATEGORY 3 STEEL REPAIR
- 4 — CATEGORY 4 STEEL REPAIR
- U — STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
- ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
- ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
- EXISTING COLUMN BELOW
- EJ — EXPANSION JOINT

NOTES

1. SEE SHEET 77 FOR ADDITIONAL NOTES.

PLAN - HURON ROAD
EJ 27 TO EJ 29



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET

CALCULATED MJD
CHECKED SMK

HURON ROAD
EJ 27 TO 29

CUY-TOWER CITY BRIDGES

83
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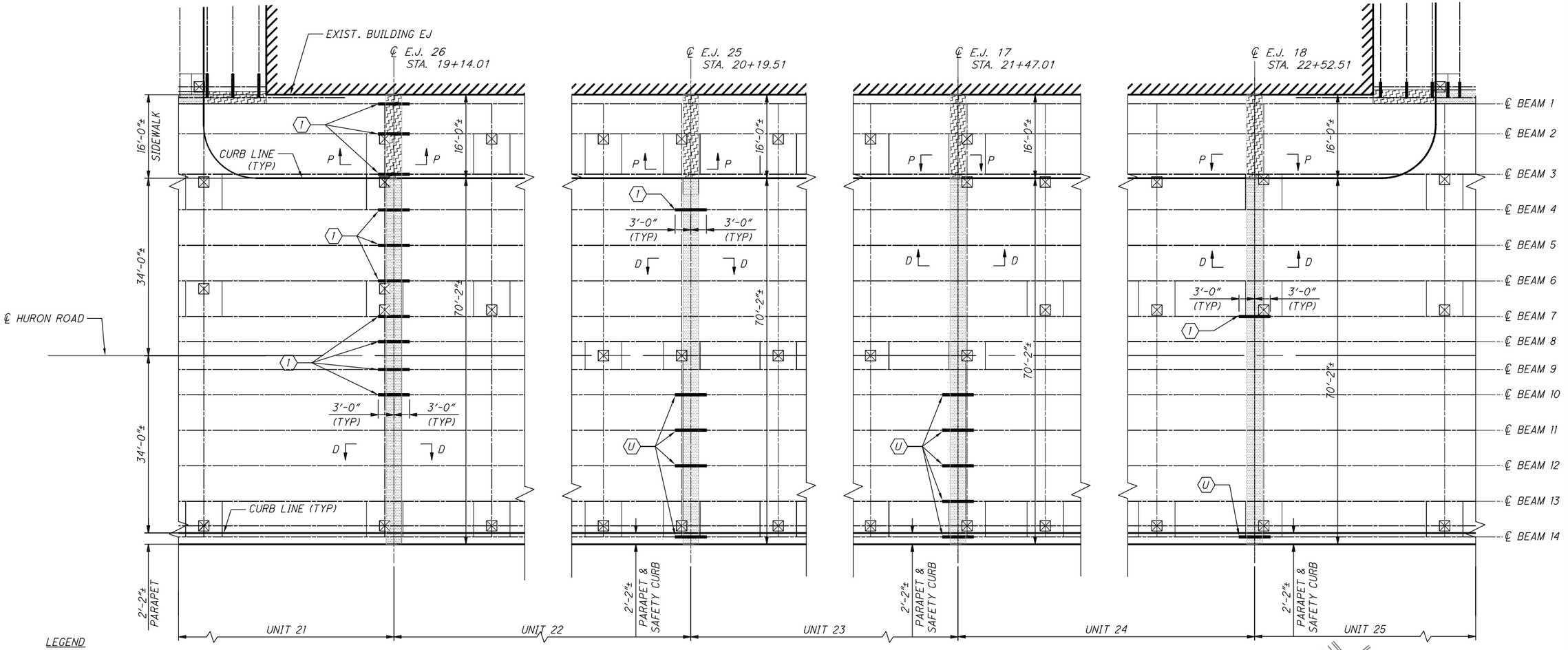


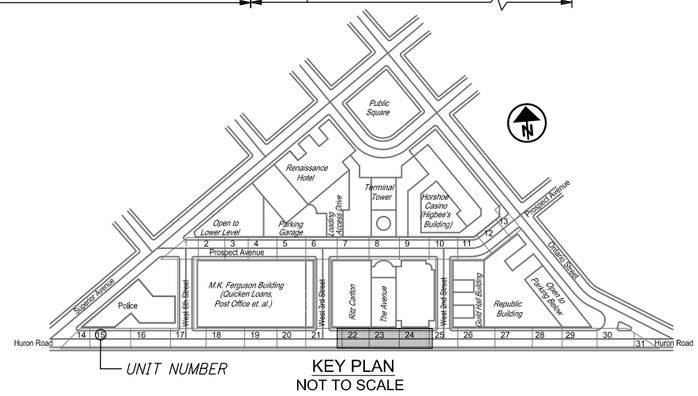
LEGEND

- ⟨1⟩ CATEGORY 1 STEEL REPAIR
- ⟨2⟩ CATEGORY 2 STEEL REPAIR
- ⟨3⟩ CATEGORY 3 STEEL REPAIR
- ⟨4⟩ CATEGORY 4 STEEL REPAIR
- ⟨U⟩ STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
- ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
- ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
- ⊠ EXISTING COLUMN BELOW
- EJ EXPANSION JOINT

NOTES

1. SEE SHEET 77 FOR ADDITIONAL NOTES.

PLAN - HURON ROAD
EJ 17, 18, 25 & 26



HORIZONTAL SCALE IN FEET

CALCULATED MJD
CHECKED SMK

HURON ROAD
EJ 17, 18, 25 & 26

CUY-TOWER CITY BRIDGES

84
129

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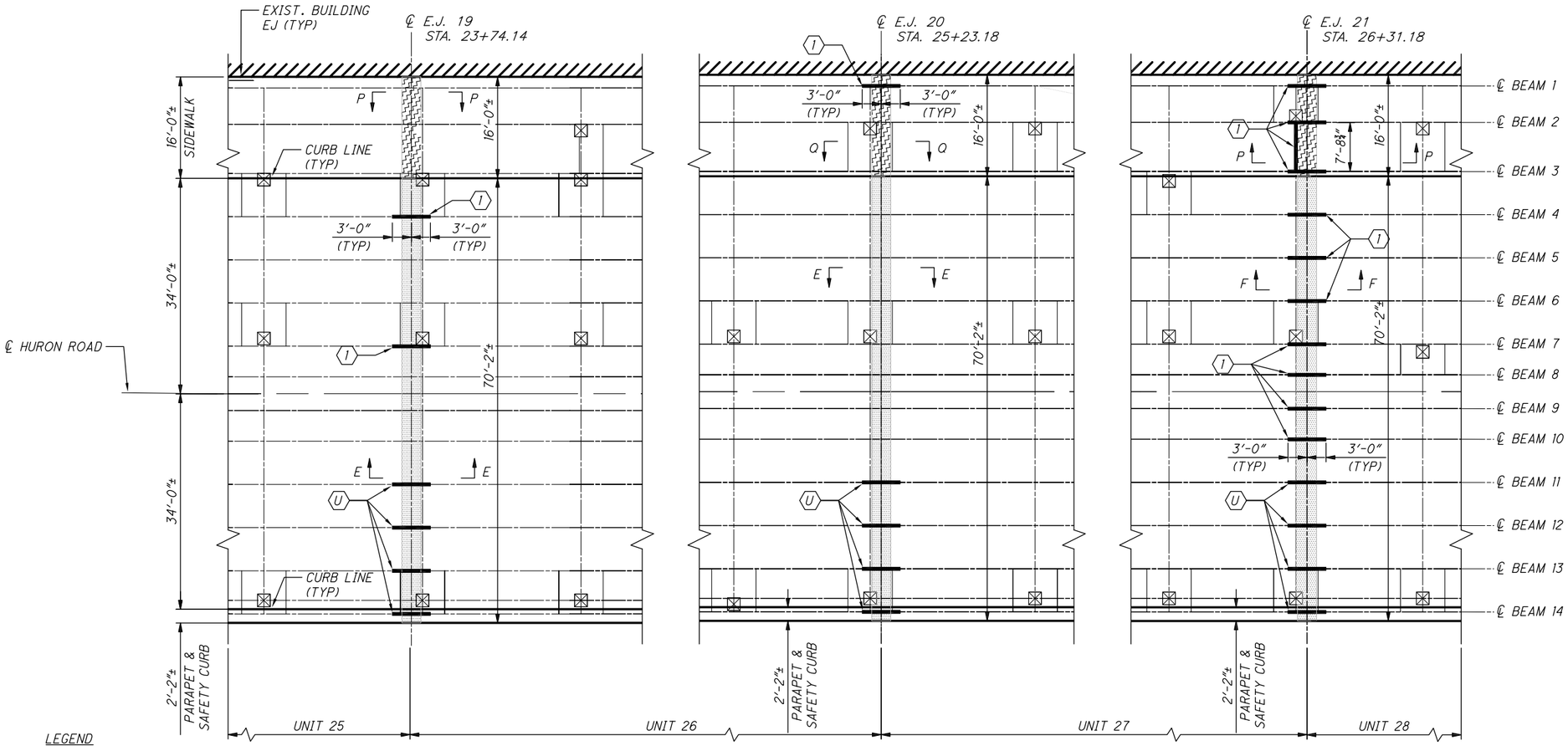


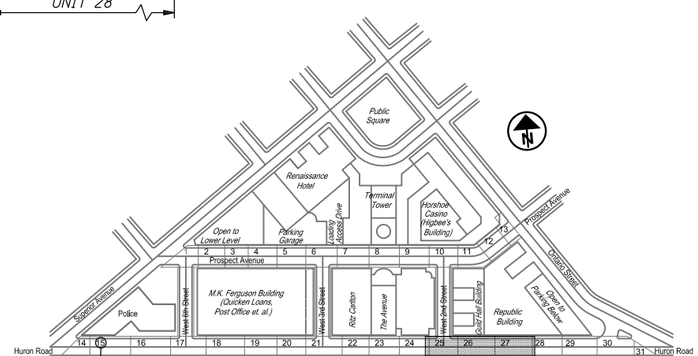
PLAN - HURON RD
EJ 19 TO EJ 21

LEGEND

- (1) CATEGORY 1 STEEL REPAIR
- (2) CATEGORY 2 STEEL REPAIR
- (3) CATEGORY 3 STEEL REPAIR
- (4) CATEGORY 4 STEEL REPAIR
- (U) STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
- ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
- ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
- SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
- EXISTING COLUMN BELOW
- EJ EXPANSION JOINT

NOTES

1. SEE SHEET 77 FOR ADDITIONAL NOTES.



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET

CALCULATED MJD
CHECKED SMK

HURON ROAD
EJ 19, 20 & 21

CUY-TOWER CITY BRIDGES

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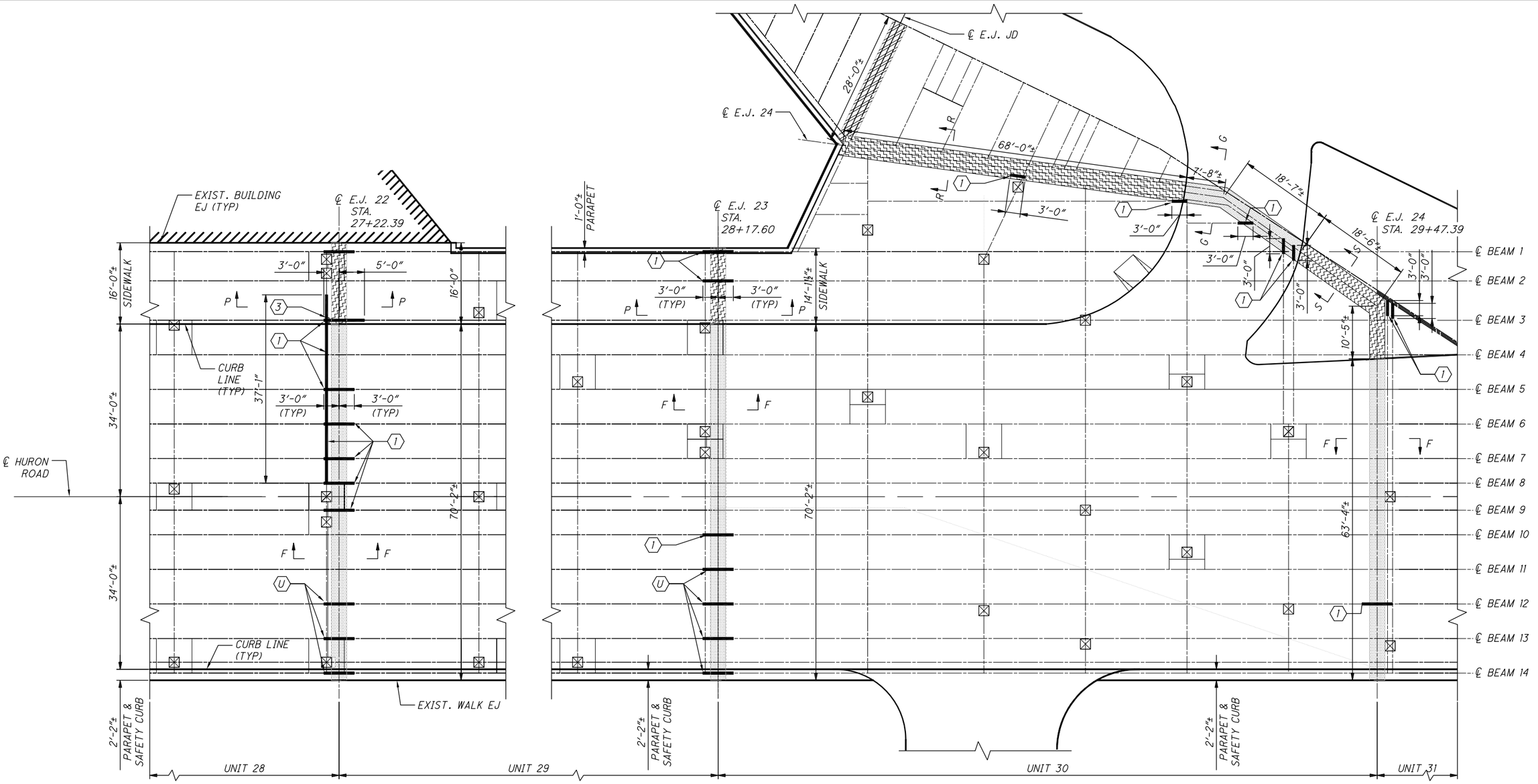


PLAN - HURON RD
EJ 22 TO EJ 24

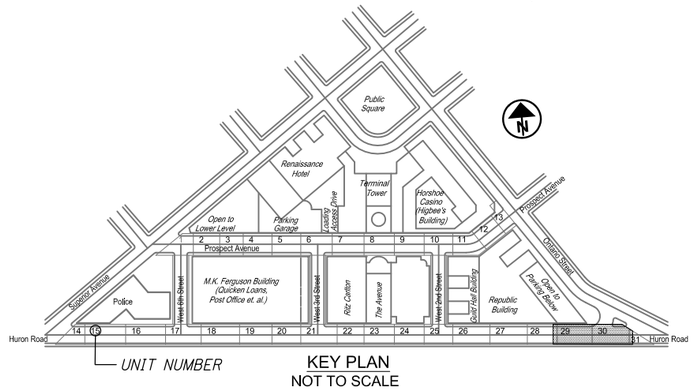
LEGEND

(1)	CATEGORY 1 STEEL REPAIR
(2)	CATEGORY 2 STEEL REPAIR
(3)	CATEGORY 3 STEEL REPAIR
(4)	CATEGORY 4 STEEL REPAIR
(U)	STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
⊠	EXISTING COLUMN BELOW
EJ	EXPANSION JOINT

	ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
	ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - COMPRESSION SEAL REPLACEMENT

NOTES

1. SEE SHEET 77 FOR ADDITIONAL NOTES.



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET

CALCULATED MJD
CHECKED SMK

HURON ROAD
EJ 22, 23 & 24

CUY-TOWER CITY BRIDGES

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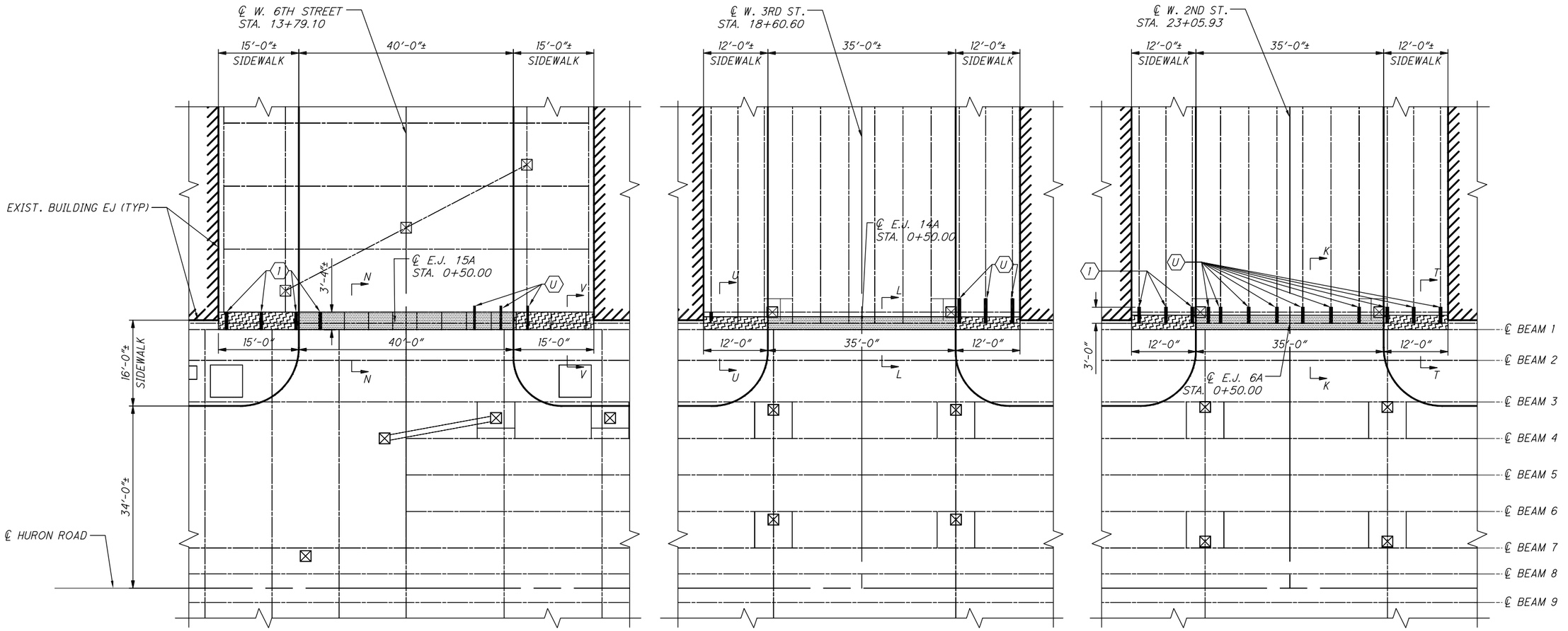


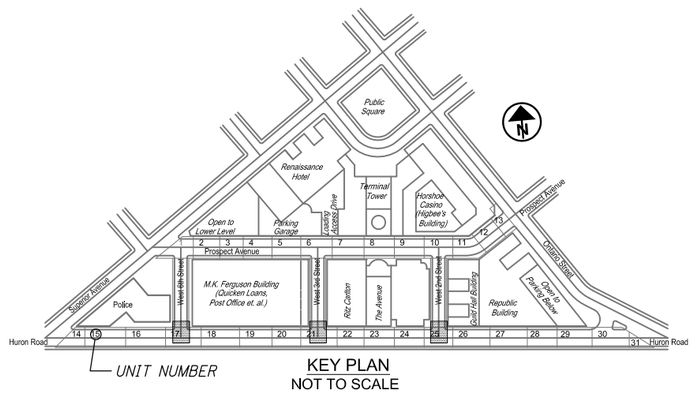
PLAN - W. 6TH, W 3RD & W. 2ND AT HURON ROAD
EJ 6A, 14A, AND 15A

LEGEND

1	CATEGORY 1 STEEL REPAIR
2	CATEGORY 2 STEEL REPAIR
3	CATEGORY 3 STEEL REPAIR
4	CATEGORY 4 STEEL REPAIR
U	STEEL REPAIR UNKNOWN (NO INSPECTION ACCESS)
	ROADWAY EXPANSION JOINT - FULL DEPTH REPAIR
	ROADWAY EXPANSION JOINT - PARTIAL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - FULL DEPTH REPAIR
	SIDEWALK EXPANSION JOINT - PARTIAL DEPTH REPAIR
	EXISTING COLUMN BELOW
EJ	EXPANSION JOINT

NOTES

1. SEE SHEET 77 FOR ADDITIONAL NOTES.



KEY PLAN
NOT TO SCALE

HORIZONTAL SCALE IN FEET
0 ** ** **

CALCULATED MJD
CHECKED SMK

W. 6TH, W. 3RD & W. 2ND AT HURON ROAD
EJ 6A, 14A & 15A

CUY-TOWER CITY BRIDGES

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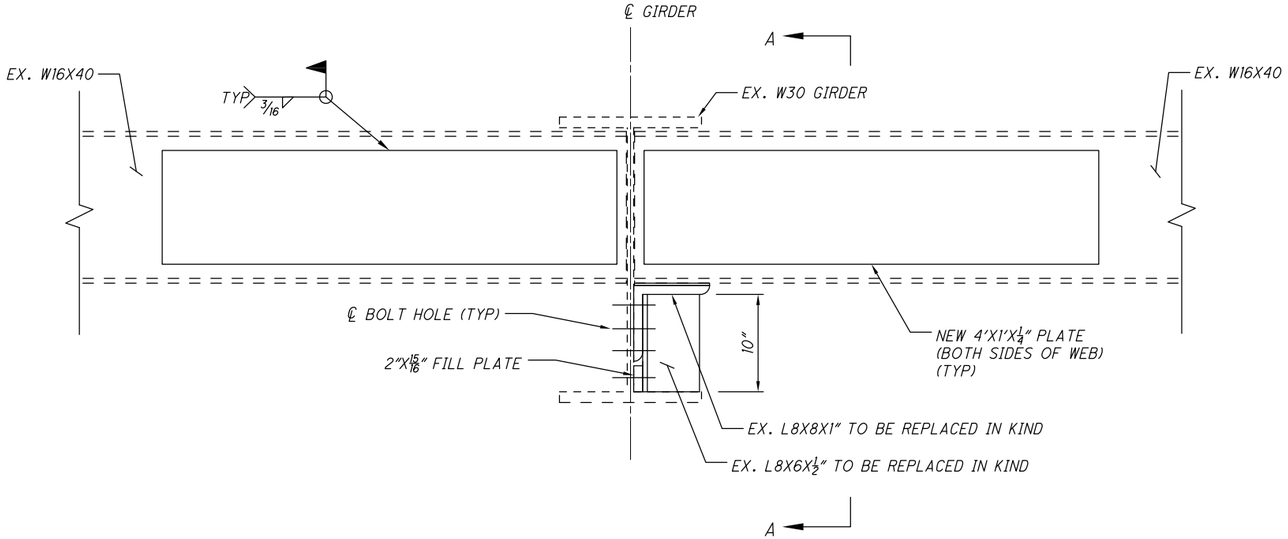
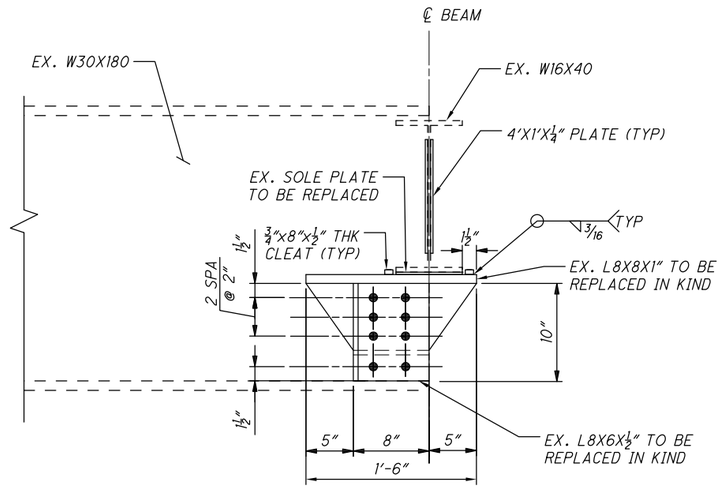


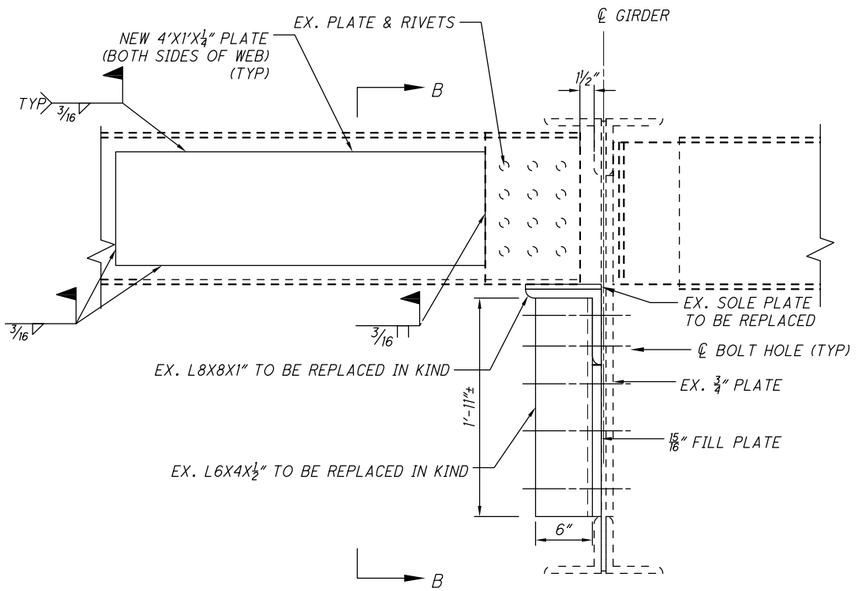
EJ 13 - CATEGORY 3 & 4 REPAIR DETAIL

LOOKING NORTH



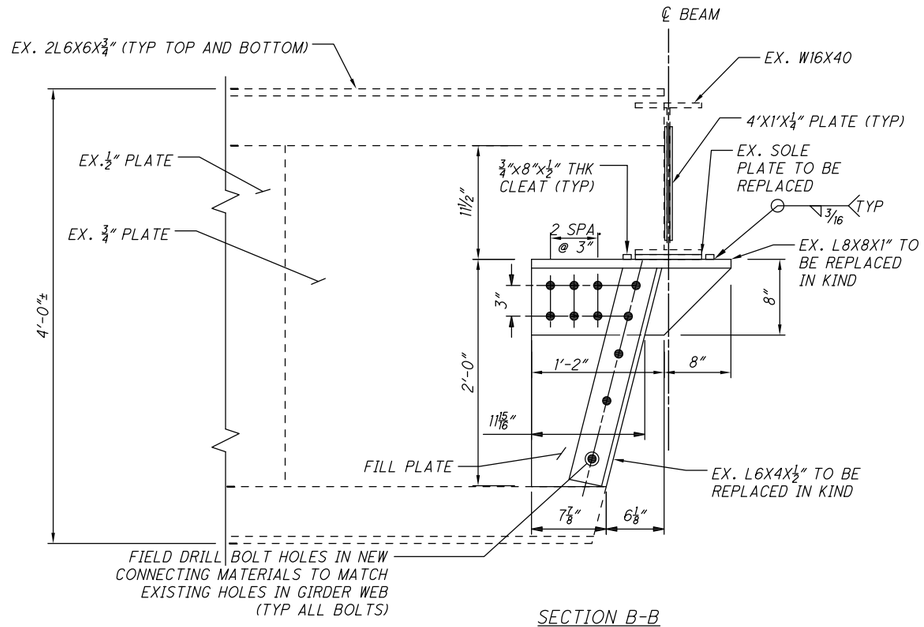
SECTION A-A

LOOKING WEST



EJ 12 - CATEGORY 3 & 4 REPAIR DETAIL

LOOKING SOUTH



SECTION B-B

LOOKING WEST

NOTES

1. ALL EXISTING AND PROPOSED DIMENSIONS AND MEMBER SIZES SHALL BE FIELD VERIFIED PRIOR TO FABRICATION.

2. EXISTING SOLE PLATES TO BE REPLACED SHALL MATCH THICKNESS AND BE TAPERED AS NECESSARY TO MATCH EXISTING BEAM SEAT ELEVATION AND SLOPE. LUBRICATE SOLE PLATES SIMILAR TO SLIDING BEARINGS PER ODOT CMS 516.07.

3. AT ALL LOCATIONS WHERE BEAM SEATS ARE REPAIRED OR REPLACED, CONTRACTOR SHALL TEMPORARILY SUPPORT BEAMS. FINAL BEAM SEAT ELEVATION AND BEAM SLOPE SHALL MATCH EXISTING. PAYMENT FOR TEMPORARY SUPPORT SHALL BE INCLUDED WITH ITEM 516 - JACKING & TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

4. REPAIRS TO BEAMS AND GIRDERS, INCLUDING; STEEL SHAPES, PLATES, BOLTS, AND WELDING SHALL BE PAID WITH ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3.

5. REPAIRS TO SUPPORTS AND CONNECTIONS, INCLUDING BEAM SEATS, BEARING PLATES, BEVEL PLATES, SUPPORT ANGLES, BRACES, STIFFENERS, COVER PLATES, CLIP ANGLES, BOLTS, AND WELDING SHALL BE PAID WITH ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN.

LEGEND

- 7/8"Ø A325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE

HORIZONTAL SCALE IN FEET

CALCULATED EIW CHECKED BCK

STEEL REPAIR DETAILS

CUY-TOWER CITY BRIDGES

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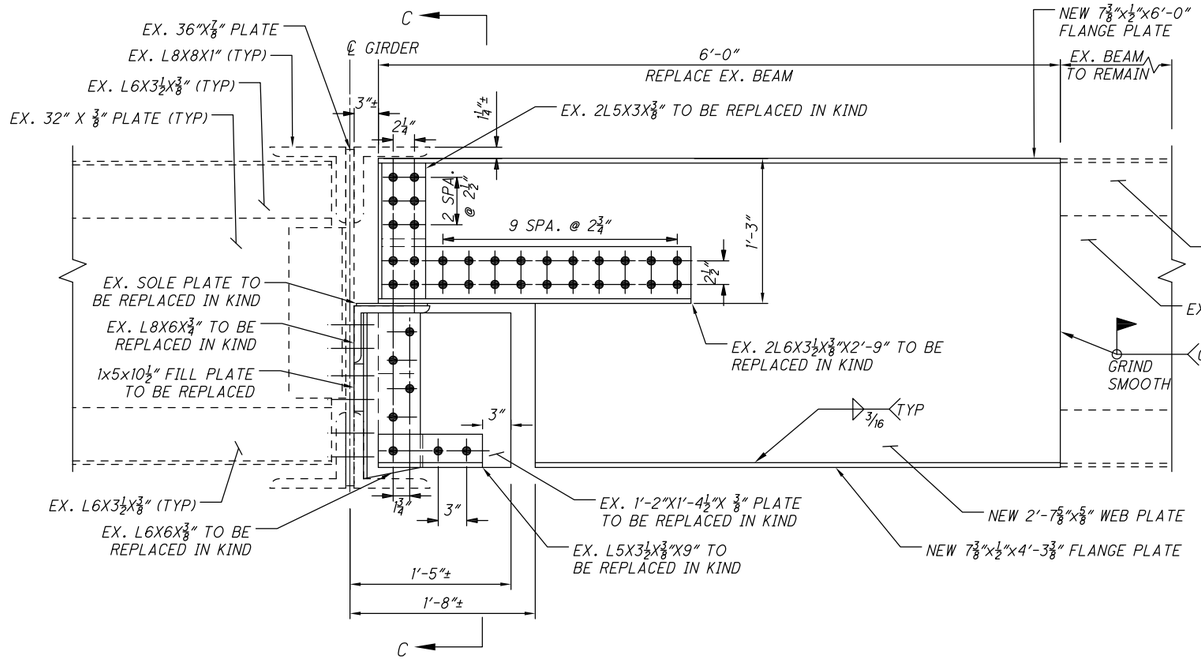
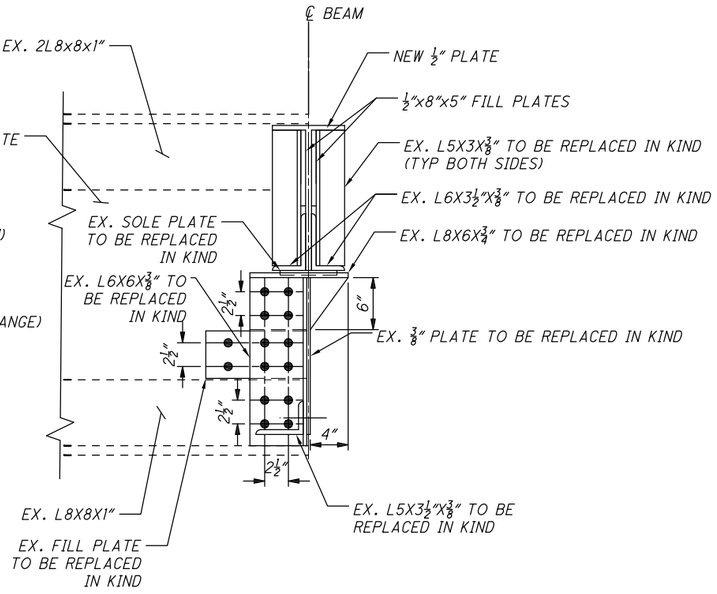


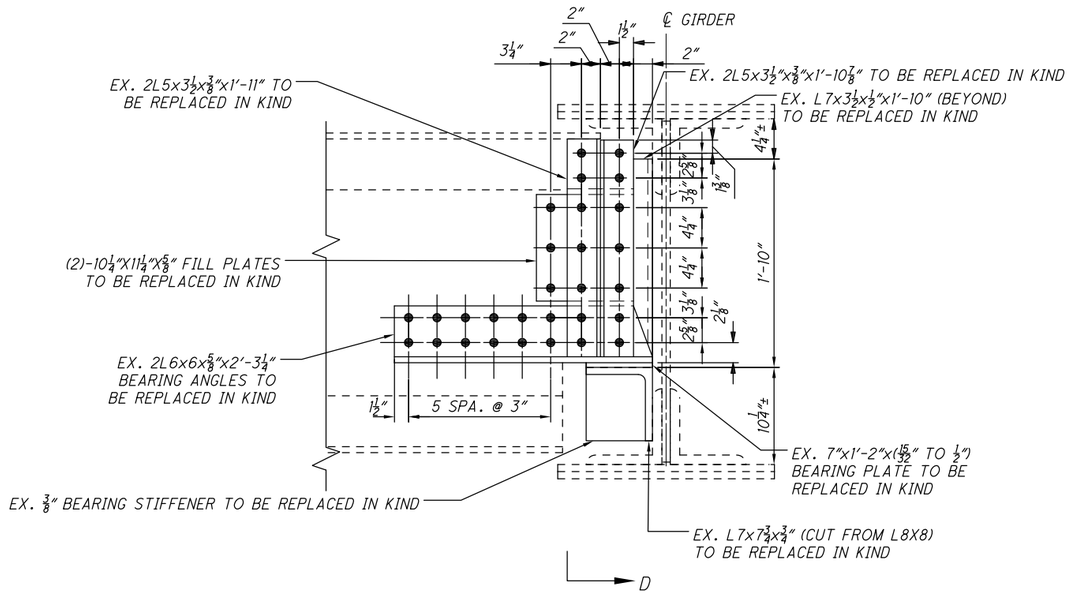
EJ 8 - CATEGORY 3 & 4 REPAIR DETAIL

LOOKING NORTH



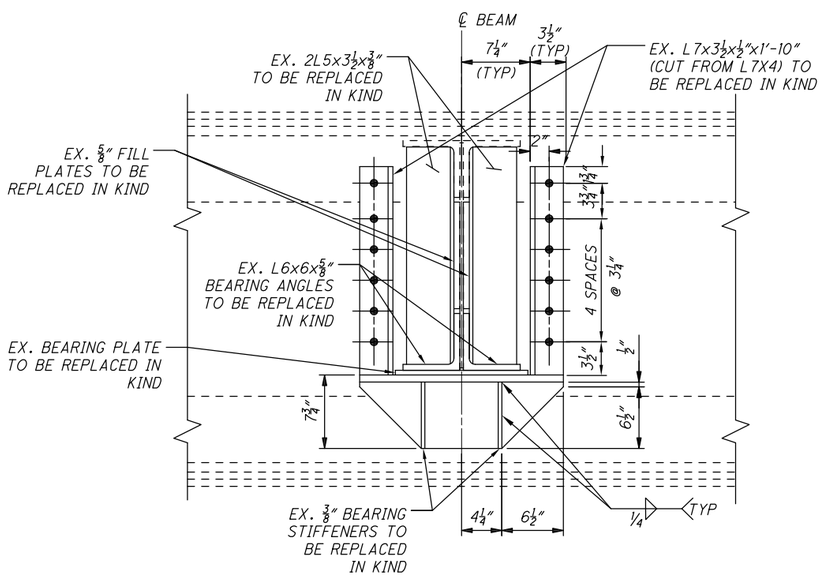
SECTION C-C

LOOKING WEST



EJ 1 - CATEGORY 3 REPAIR DETAIL

LOOKING NORTH
(TYPICAL 2 LOCATIONS)



SECTION D-D

LOOKING EAST

NOTES

1. ALL EXISTING AND PROPOSED DIMENSIONS AND MEMBER SIZES SHALL BE FIELD VERIFIED PRIOR TO FABRICATION.

2. EXISTING SOLE PLATES TO BE REPLACED SHALL MATCH THICKNESS AND BE TAPERED AS NECESSARY TO MATCH EXISTING BEAM SEAT ELEVATION AND SLOPE. LUBRICATE SOLE PLATES SIMILAR TO SLIDING BEARINGS PER ODOT CMS 516.07.

3. AT ALL LOCATIONS WHERE BEAM SEATS ARE REPAIRED OR REPLACED, CONTRACTOR SHALL TEMPORARILY SUPPORT BEAMS. FINAL BEAM SEAT ELEVATION AND BEAM SLOPE SHALL MATCH EXISTING. PAYMENT FOR TEMPORARY SUPPORT SHALL BE INCLUDED WITH ITEM 516 - JACKING & TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

4. REPAIRS TO BEAMS AND GIRDERS, INCLUDING; STEEL SHAPES, PLATES, BOLTS, AND WELDING SHALL BE PAID WITH ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3.

5. REPAIRS TO SUPPORTS AND CONNECTIONS, INCLUDING BEAM SEATS, BEARING PLATES, BEVEL PLATES, SUPPORT ANGLES, BRACES, STIFFENERS, COVER PLATES, CLIP ANGLES, BOLTS, AND WELDING SHALL BE PAID WITH ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN.

LEGEND

7/8"Ø A325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE

HORIZONTAL SCALE IN FEET

CALCULATED EIW CHECKED BCK

STEEL REPAIR DETAILS

CUY-TOWER CITY BRIDGES

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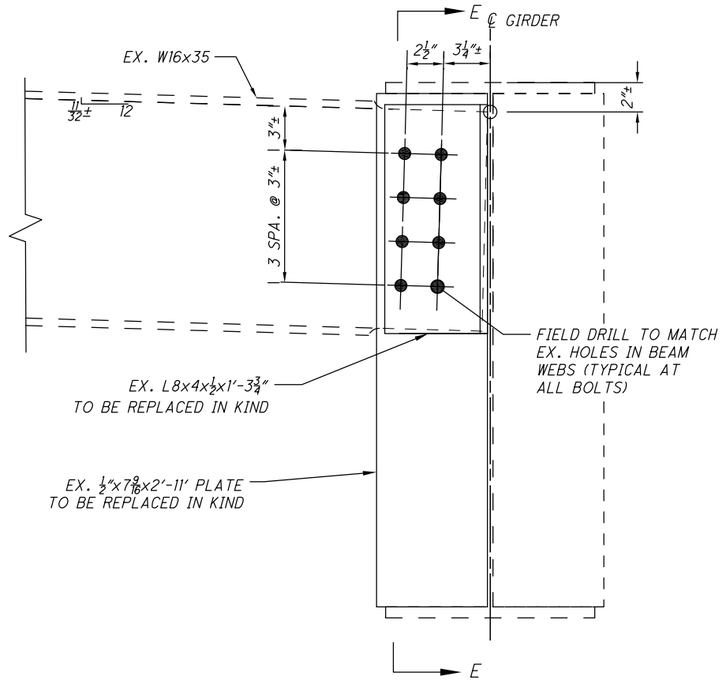
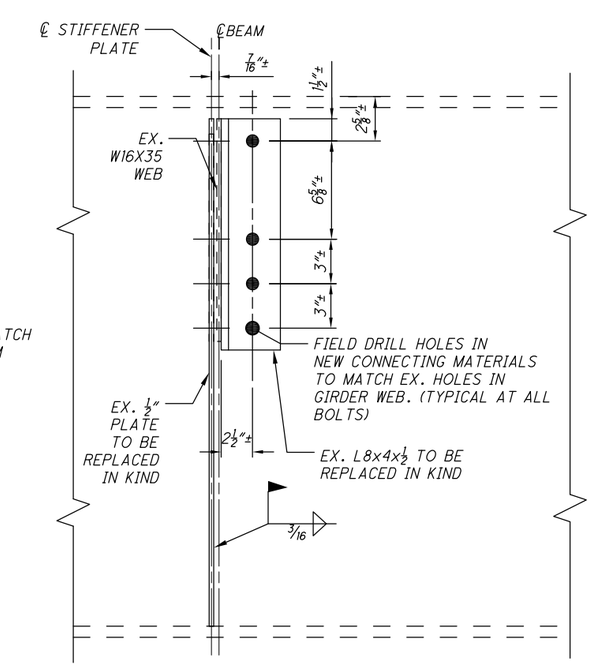


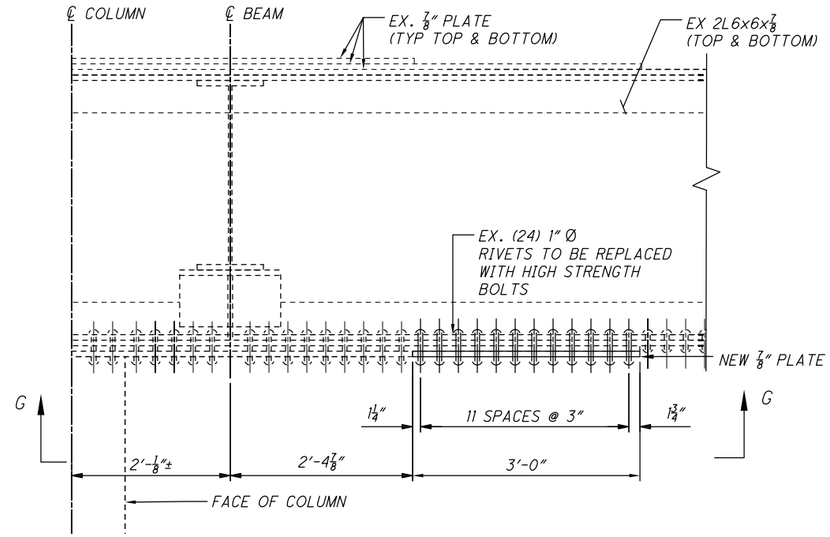
EJ 33 - CATEGORY 3 REPAIR DETAIL

LOOKING NORTH



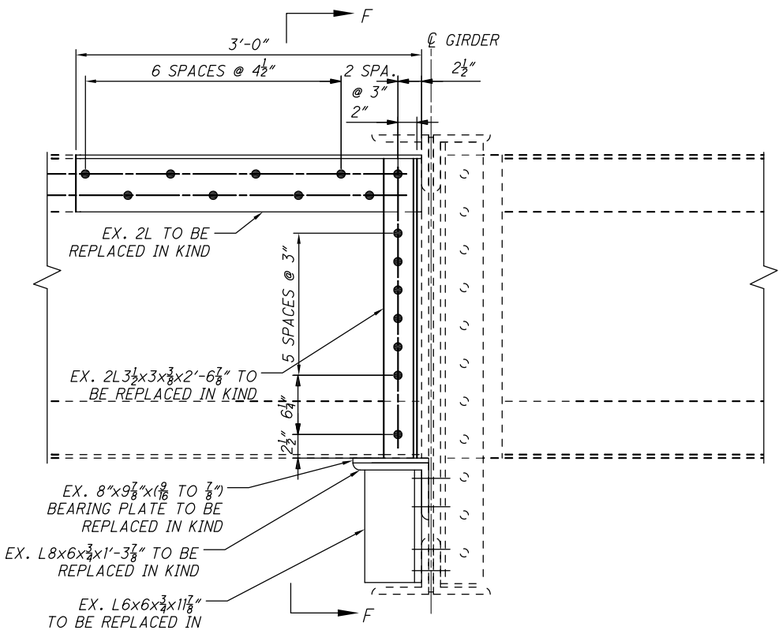
SECTION E-E

LOOKING WEST



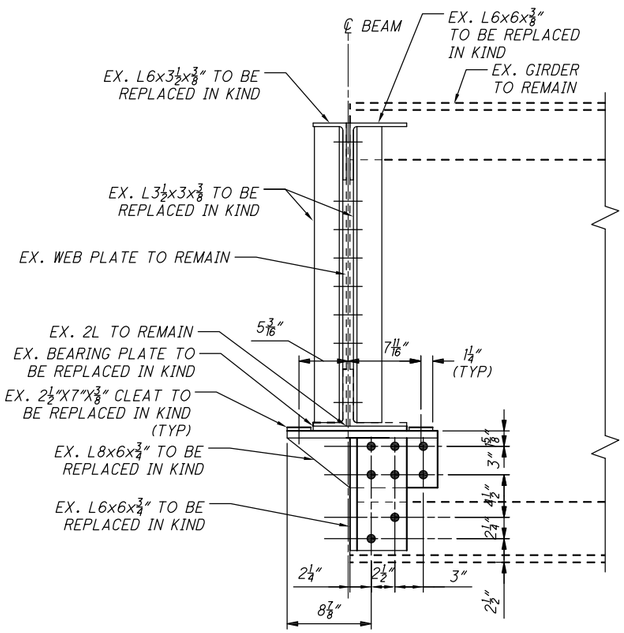
EJ 28 - CATEGORY 2 REPAIR DETAIL

LOOKING SOUTH



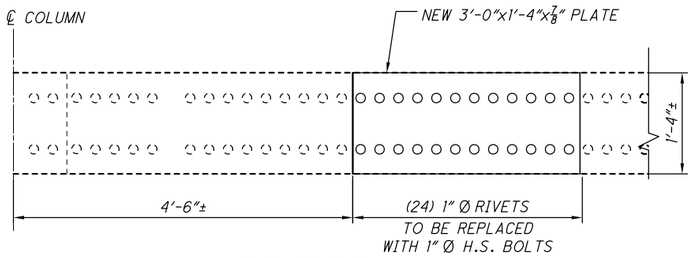
EJ 30 - CATEGORY 3 & 4 REPAIR DETAIL

LOOKING NORTH



SECTION F-F

LOOKING EAST



SECTION G-G

LEGEND

● ⅞"Ø A325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE

NOTES

1. ALL EXISTING AND PROPOSED DIMENSIONS AND MEMBER SIZES SHALL BE FIELD VERIFIED PRIOR TO FABRICATION.

2. EXISTING SOLE PLATES TO BE REPLACED SHALL MATCH THICKNESS AND BE TAPERED AS NECESSARY TO MATCH EXISTING BEAM SEAT ELEVATION AND SLOPE. LUBRICATE SOLE PLATES SIMILAR TO SLIDING BEARINGS PER ODOT CMS 516.07.

3. AT ALL LOCATIONS WHERE BEAM SEATS ARE REPAIRED OR REPLACED, CONTRACTOR SHALL TEMPORARILY SUPPORT BEAMS. FINAL BEAM SEAT ELEVATION AND BEAM SLOPE SHALL MATCH EXISTING. PAYMENT FOR TEMPORARY SUPPORT SHALL BE INCLUDED WITH ITEM 516 - JACKING & TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

4. REPAIRS TO BEAMS AND GIRDERS, INCLUDING; STEEL SHAPES, PLATES, BOLTS, AND WELDING SHALL BE PAID WITH ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3.

5. REPAIRS TO SUPPORTS AND CONNECTIONS, INCLUDING BEAM SEATS, BEARING PLATES, BEVEL PLATES, SUPPORT ANGLES, BRACES, STIFFENERS, COVER PLATES, CLIP ANGLES, BOLTS, AND WELDING SHALL BE PAID WITH ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN.

6. RIVET REPLACEMENT FOR CATEGORY 2 STEEL REPAIRS SHALL BE PAID WITH ITEM 513 - STRUCTURAL STEEL, MISC.: RIVET REPLACEMENT

HORIZONTAL SCALE IN FEET

CALCULATED EIW CHECKED BCK

STEEL REPAIR DETAILS

CUY-TOWER CITY BRIDGES

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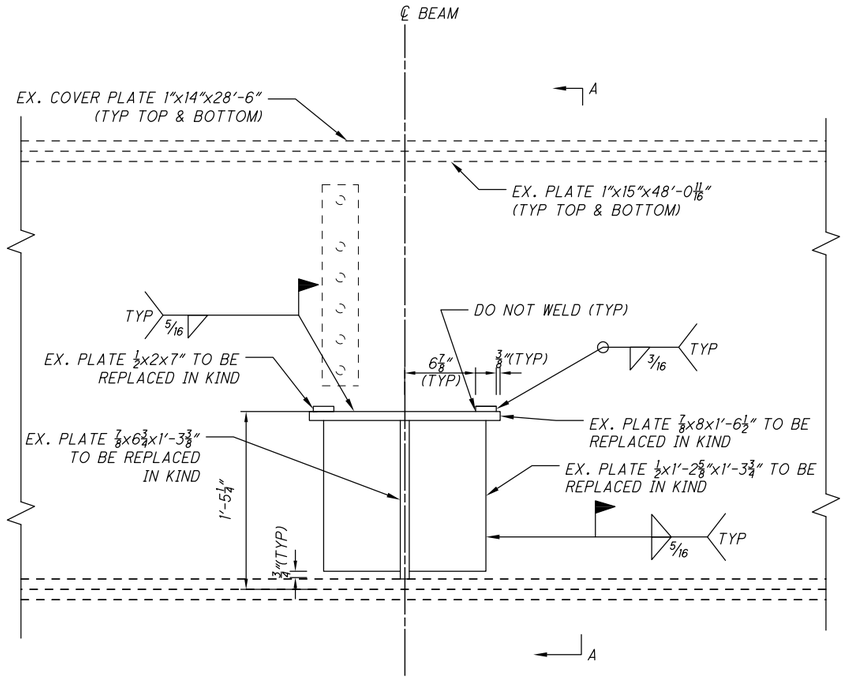
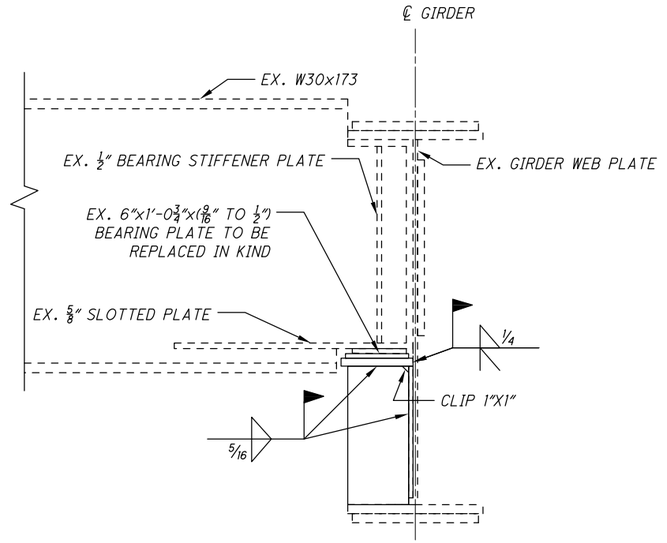


EJ 22 - CATEGORY 3 REPAIR DETAIL

EX. BEAM NOT SHOWN FOR CLARITY



SECTION A-A

LEGEND

● 7/8"Ø A325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE

NOTES

1. ALL EXISTING AND PROPOSED DIMENSIONS AND MEMBER SIZES SHALL BE FIELD VERIFIED PRIOR TO FABRICATION.

2. EXISTING SOLE PLATES TO BE REPLACED SHALL MATCH THICKNESS AND BE TAPERED AS NECESSARY TO MATCH EXISTING BEAM SEAT ELEVATION AND SLOPE. LUBRICATE SOLE PLATES SIMILAR TO SLIDING BEARINGS PER ODOT CMS 516.07.

3. AT ALL LOCATIONS WHERE BEAM SEATS ARE REPAIRED OR REPLACED, CONTRACTOR SHALL TEMPORARILY SUPPORT BEAMS. FINAL BEAM SEAT ELEVATION AND BEAM SLOPE SHALL MATCH EXISTING. PAYMENT FOR TEMPORARY SUPPORT SHALL BE INCLUDED WITH ITEM 516 - JACKING & TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

4. REPAIRS TO BEAMS AND GIRDERS, INCLUDING; STEEL SHAPES, PLATES, BOLTS, AND WELDING SHALL BE PAID WITH ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL 3.

5. REPAIRS TO SUPPORTS AND CONNECTIONS, INCLUDING BEAM SEATS, BEARING PLATES, BEVEL PLATES, SUPPORT ANGLES, BRACES, STIFFENERS, COVER PLATES, CLIP ANGLES, BOLTS, AND WELDING SHALL BE PAID WITH ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN.

HORIZONTAL SCALE IN FEET
0 ** ** **

CALCULATED EIW
CHECKED BCK

STEEL REPAIR DETAILS

CUY-TOWER CITY BRIDGES

91
129

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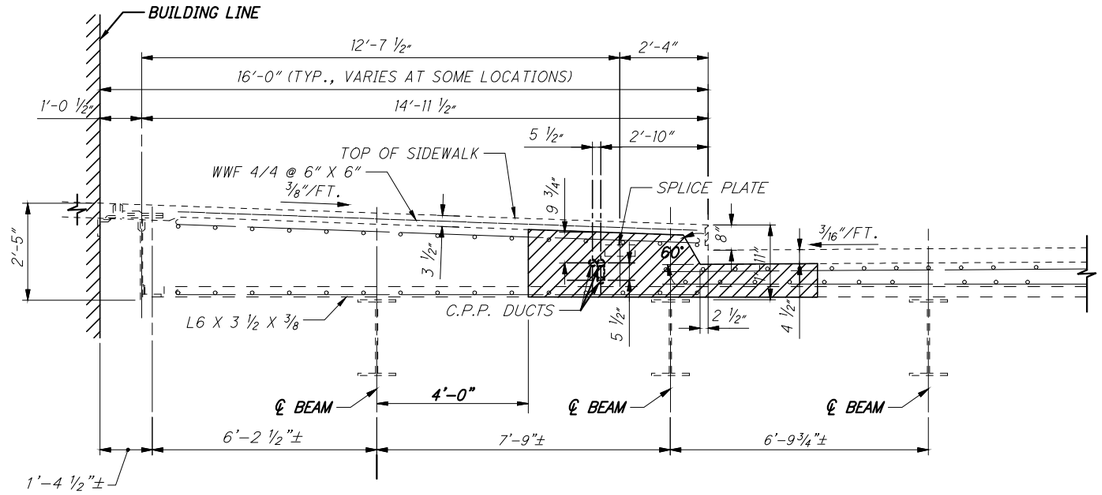
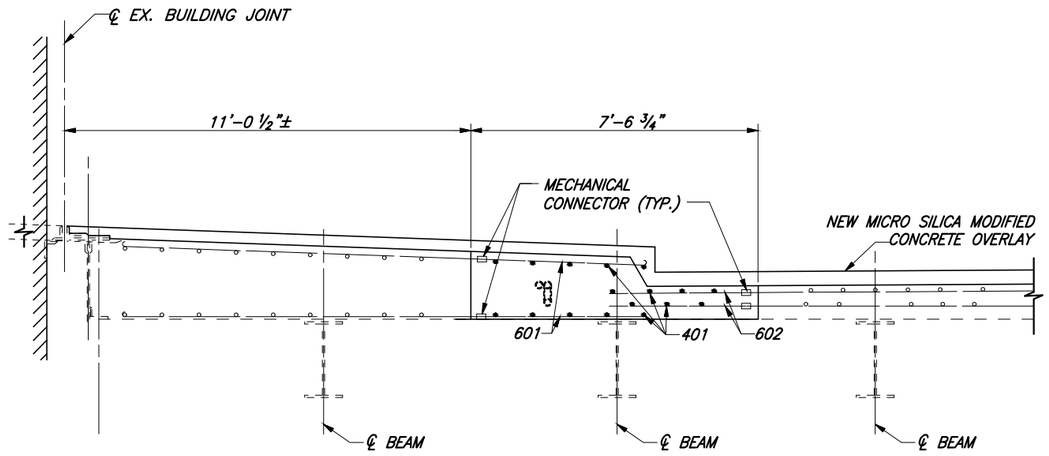
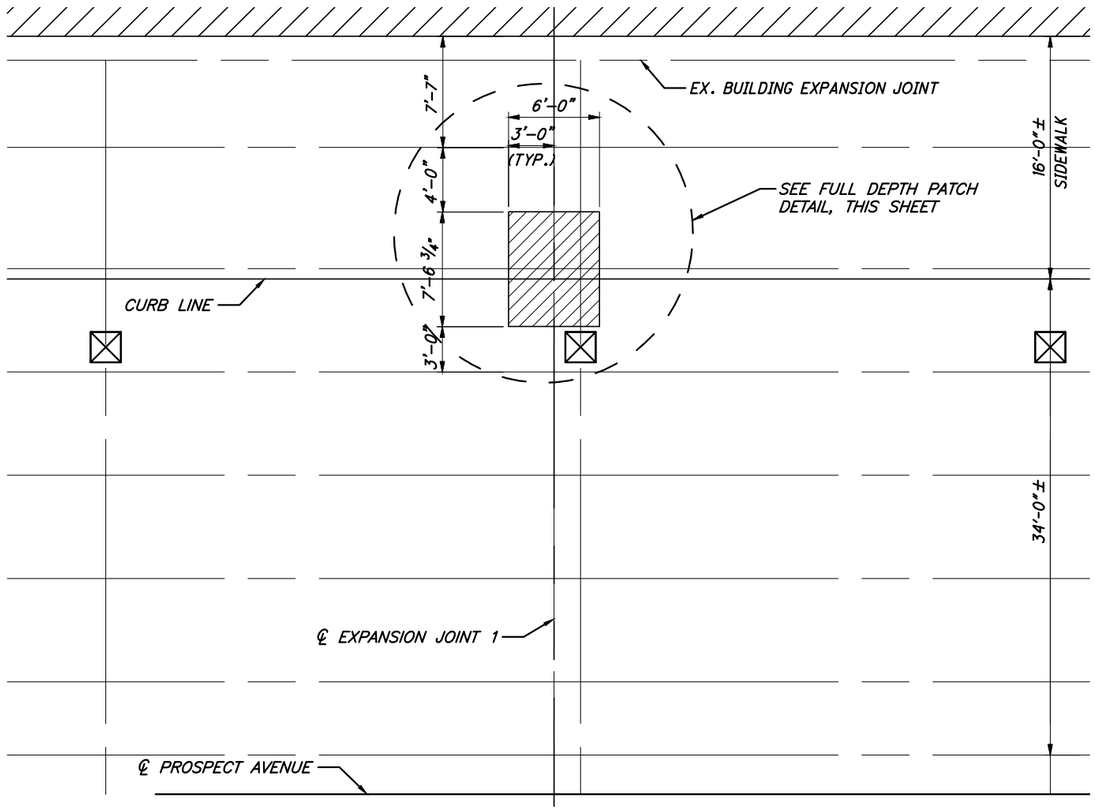


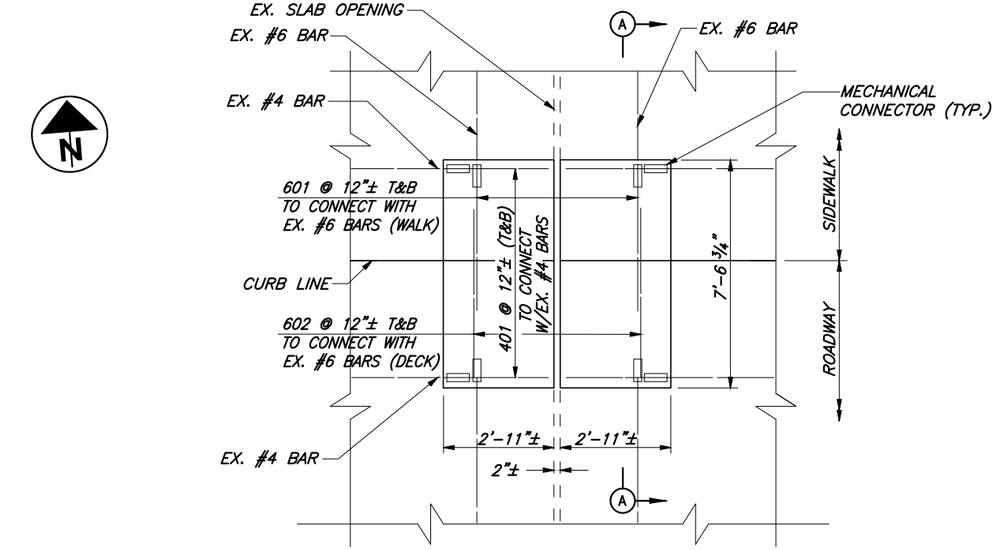
EXISTING EXPANSION JOINT 1
(PROSPECT AVENUE-NORTH)



SECTION A-A
EXPANSION JOINT 1
(PROSPECT AVENUE-NORTH)



PLAN VIEW



FULL DEPTH PATCH DETAIL

LIMITS OF FULL DEPTH REPAIR

NOTES:

1. ALL REBAR TO BE CONNECTED USING MECHANICAL CONNECTORS WHERE POSSIBLE.
2. IF EXISTING REINFORCING CANNOT BE USED WITH MECHANICAL CONNECTOR, DOWEL NEW BARS 12" INTO SOUND CONCRETE AND SET WITH A NON-SHRINK, NON-METALLIC GROUT.
3. HAND CHIP AROUND ALL UTILITY DUCTS. DUCTS ARE NOT TO BE DAMAGED.

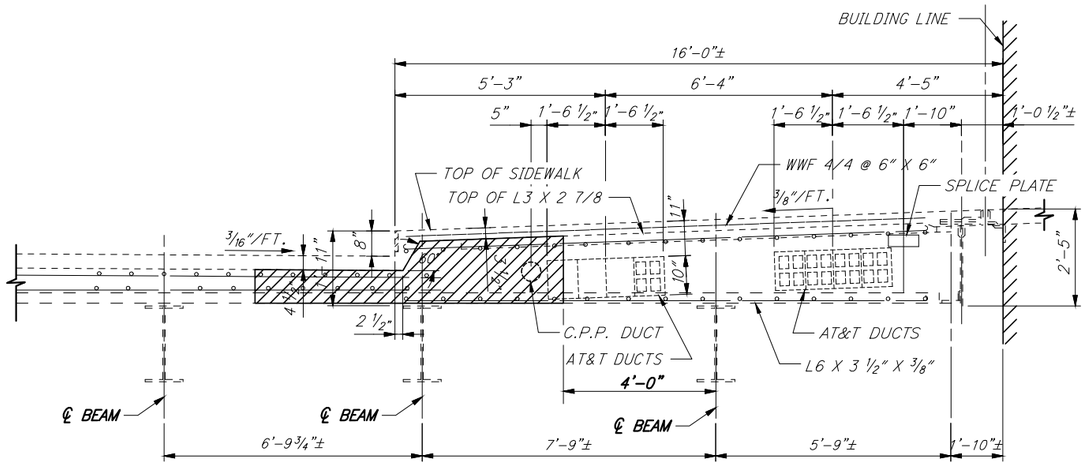
CALCULATED MMP
CHECKED AJM

PROSPECT AVENUE
FULL-DEPTH DECK REPAIRS

CUY-TOWER CITY BRIDGES

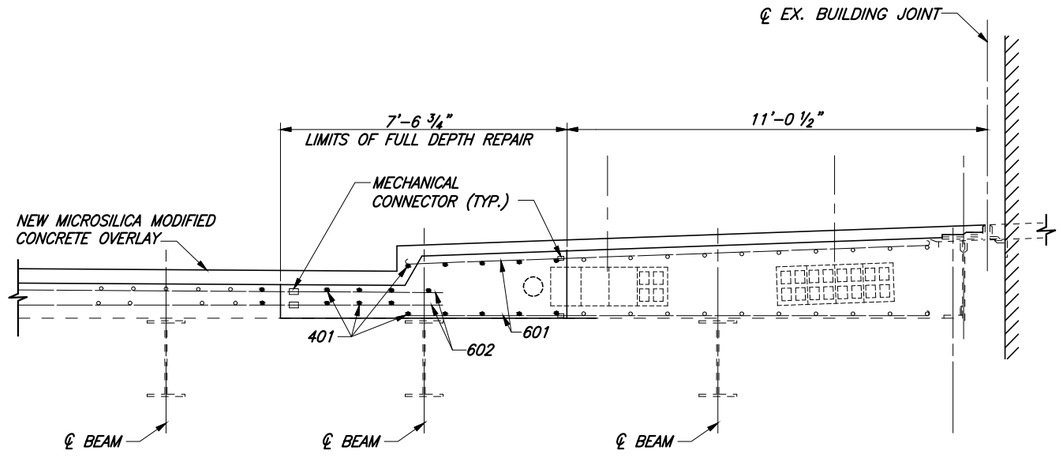
92
129

935\93460\sheets\95557MD005.dwg (2) PJK 12/4/15 PLOT 1"=1'

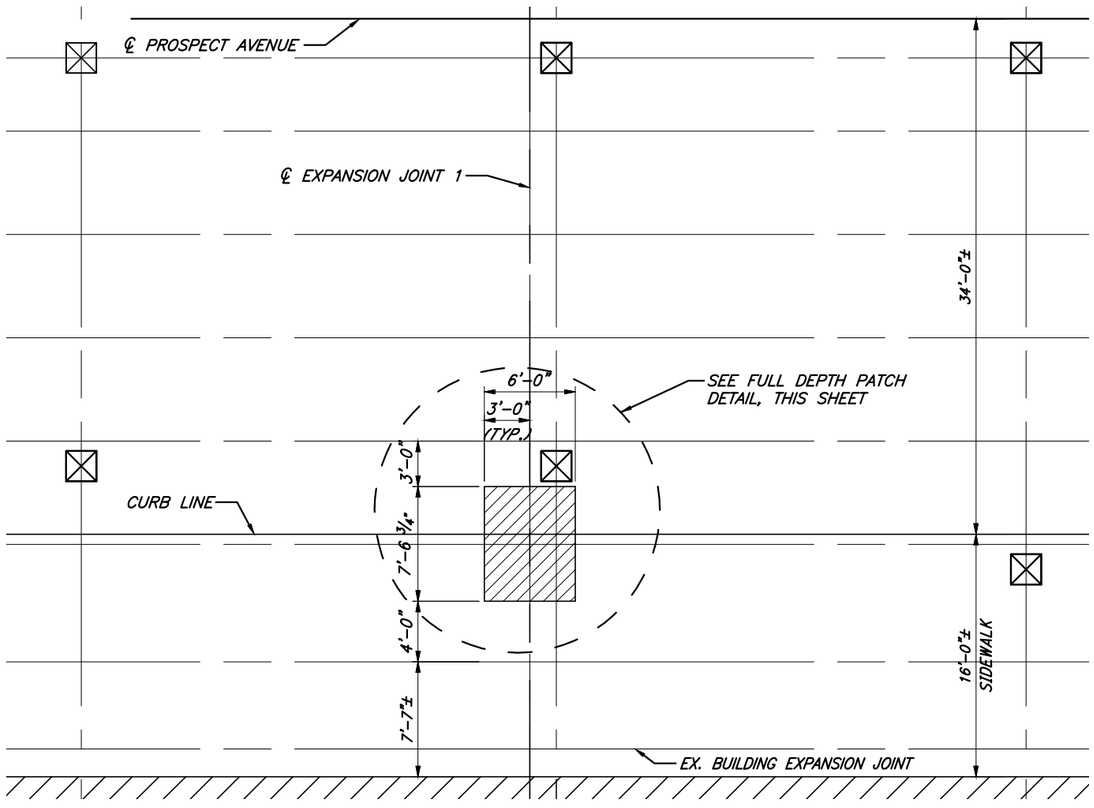


EXISTING EXPANSION JOINT 1
(PROSPECT AVENUE-SOUTH)

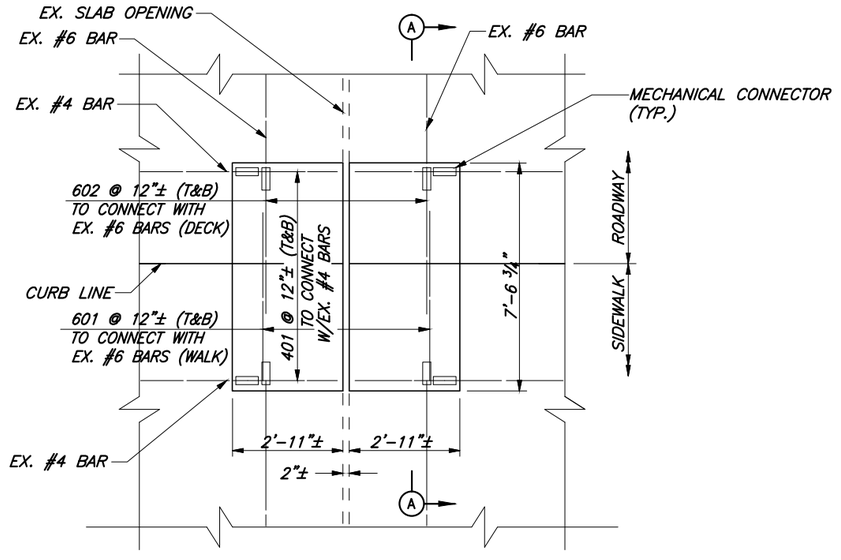
LIMITS OF FULL DEPTH REPAIR



SECTION A-A
EXPANSION JOINT 1
(PROSPECT AVENUE-SOUTH)



PLAN VIEW



FULL DEPTH PATCH DETAIL

NOTES:

1. ALL REBAR TO BE CONNECTED USING MECHANICAL CONNECTORS WHERE POSSIBLE.
2. IF EXISTING REINFORCING CANNOT BE USED WITH MECHANICAL CONNECTOR, DOWEL NEW BARS 12" INTO SOUND CONCRETE AND SET WITH A NON-SHRINK, NON-METALLIC GROUT.
3. HAND CHIP AROUND ALL UTILITY DUCTS. DUCTS ARE NOT TO BE DAMAGED.

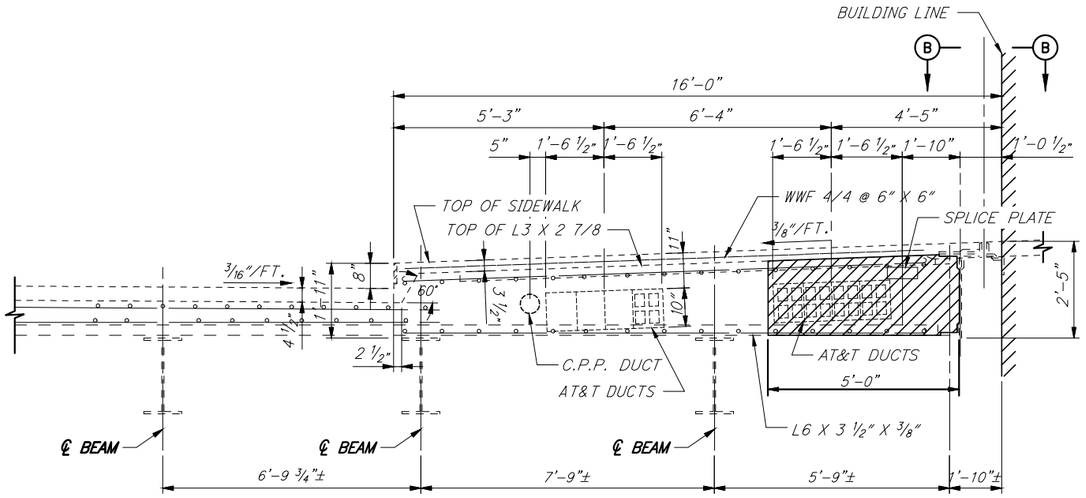
CALCULATED MMP
CHECKED AJM

PROSPECT AVENUE
FULL-DEPTH DECK REPAIRS

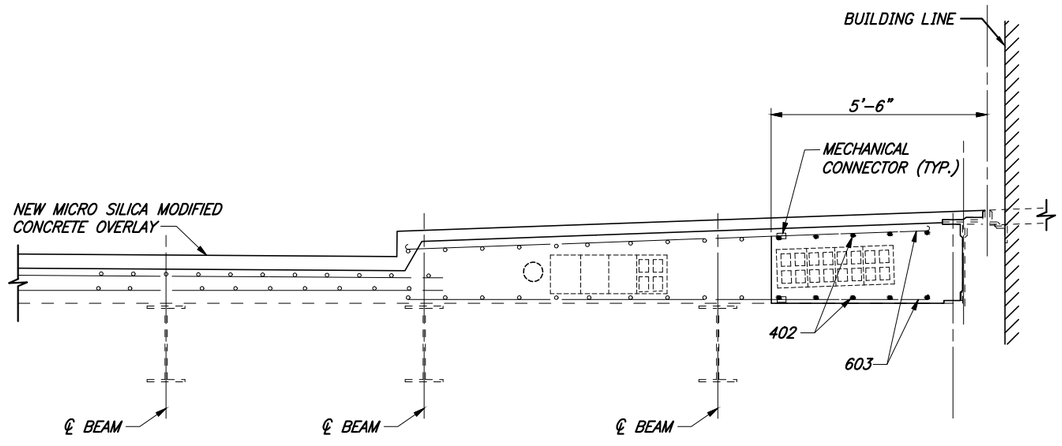
CUY-TOWER CITY BRIDGES

93
129

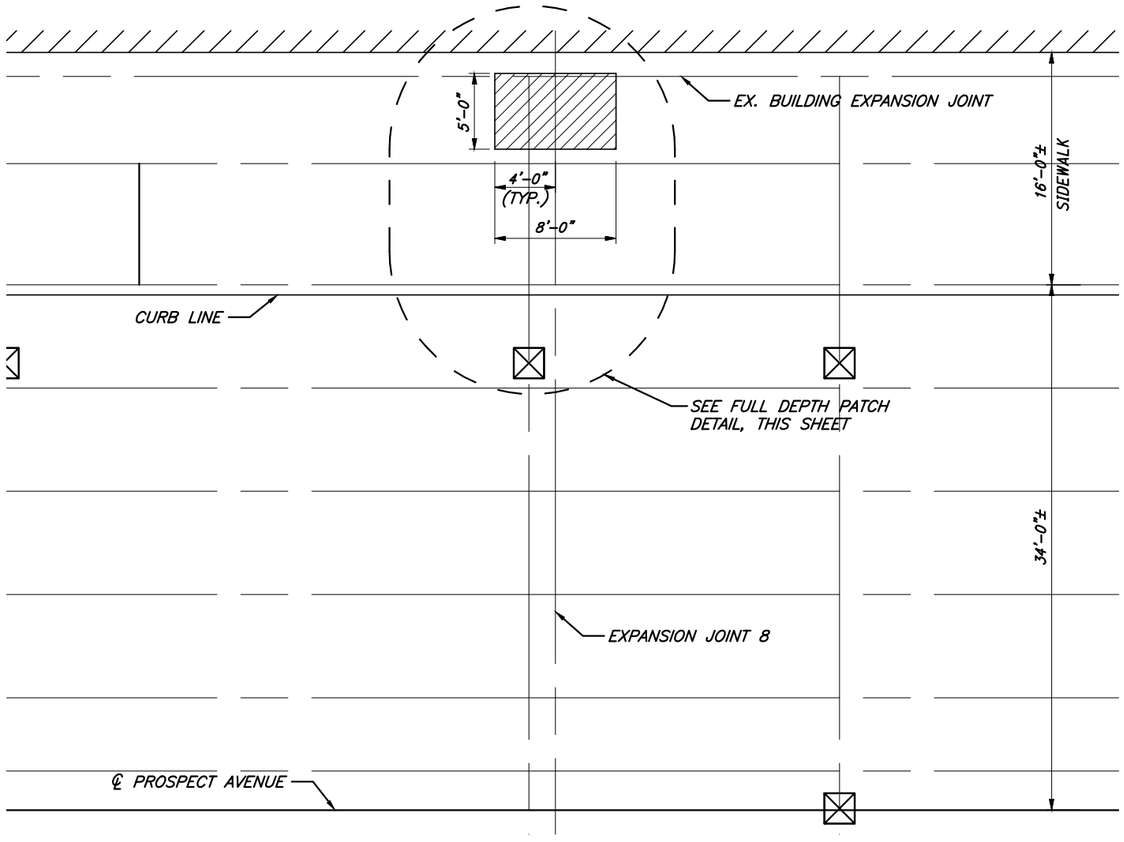
935\93460\sheets\95557N0005.dwg PJK 2/4/15 PLOT 1"=1'



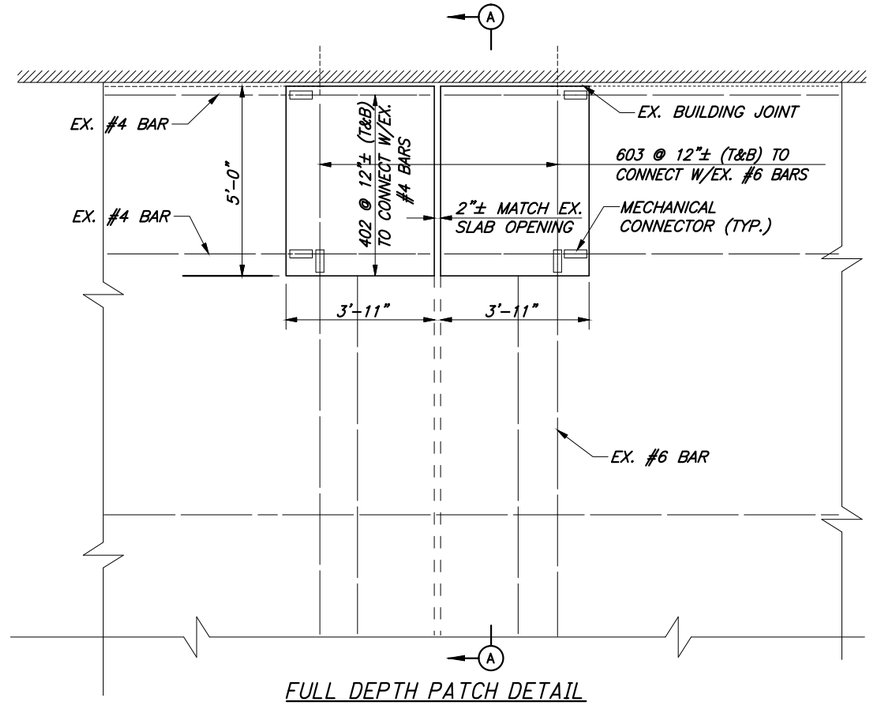
EXISTING EXPANSION JOINT 8
(PROSPECT AVENUE-NORTH)



SECTION A-A
EXPANSION JOINT 8
(PROSPECT AVENUE-NORTH)



PLAN VIEW



FULL DEPTH PATCH DETAIL

LIMITS OF FULL DEPTH REPAIR

NOTES:
1. ALL REBAR TO BE CONNECTED USING MECHANICAL CONNECTORS WHERE POSSIBLE.
2. IF EXISTING REINFORCING CANNOT BE USED WITH MECHANICAL CONNECTOR, DOWEL NEW BARS 12" INTO SOUND CONCRETE AND SET WITH A NON-SHRINK, NON-METALLIC GROUT.
3. HAND CHIP AROUND ALL UTILITY DUCTS. DUCTS ARE NOT TO BE DAMAGED.
4. FOR SECTION B-B SEE SHEET 67.

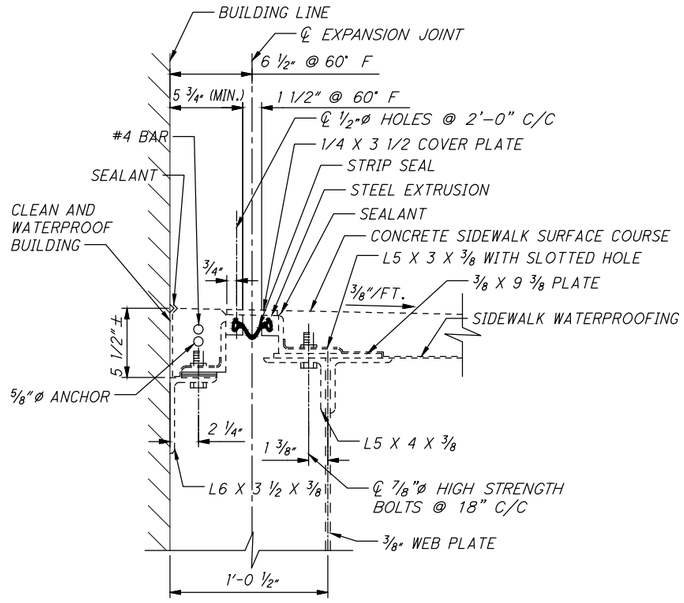
CALCULATED MMP
CHECKED AJM

PROSPECT AVENUE
FULL-DEPTH DECK REPAIRS

CUY-TOWER CITY BRIDGES

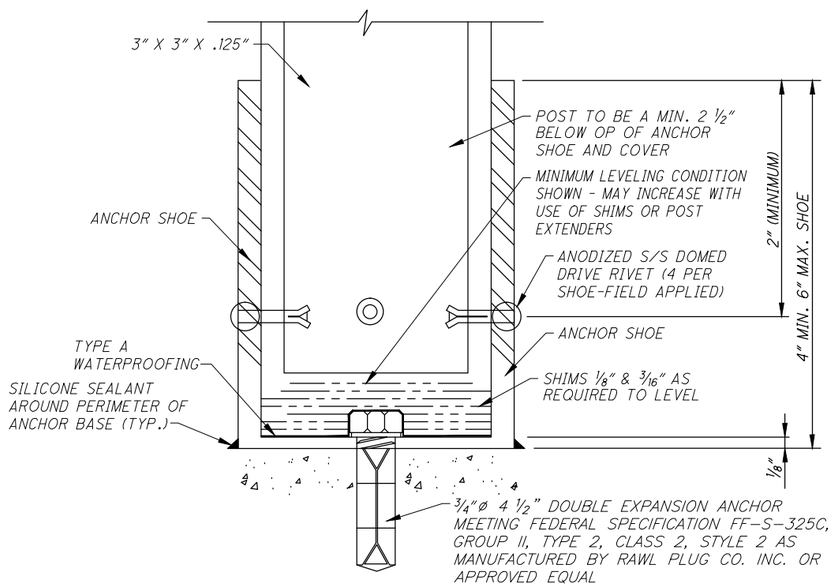
94
129

935\93460\sheets\9355570D005.dwg (3) PJK 12/4/15 PLOT 1"=1'



SECTION B-B
(FROM FULL DEPTH DECK REPAIR SECTION)

MARK	NUMBER			LENGTH	TYPE	WEIGHT (LBS.)	DIMENSIONS				
	NORTH	SOUTH	TOTAL				A	B	C	R	INCR.
FULL DEPTH REPAIRS											
401	23	23	46	2'-9"	STR	85					
402	10		10	3'-9"	STR	25					
601	12	12	24	4'-8"	STR	169					
602	12	12	24	3'-8"	STR	132					
602	8		8	4'-10"	STR	58					
				TOTAL		512					



MODIFIED GCRTA BUS SHELTER ANCHOR SYSTEM
NO SCALE

NOTES:

1. FOR FULL DEPTH DECK REPAIR SECTIONS, SEE SHEETS 92-94.
2. FOR SETION B-B, SEE SHEET 94.
3. GCRTA BUS SHELTER ANCHORAGE MODIFICATIONS TO BE USED WHEN REINSTALLING GCRTA BUS SHELTERS.

CALCULATED MMP
CHECKED AJM

MISCELLANEOUS DETAILS

CUY - TOWER CITY BRIDGES

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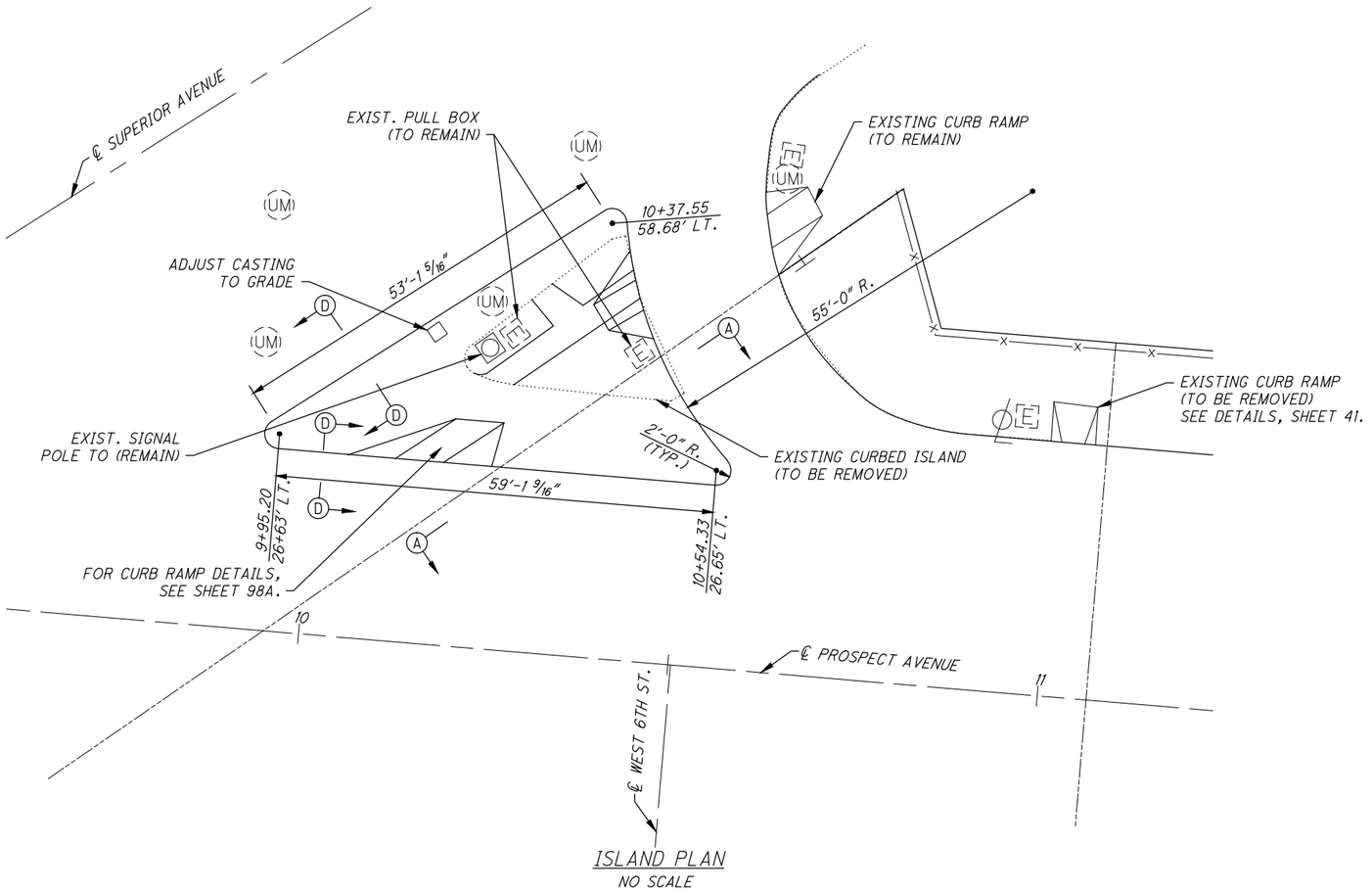
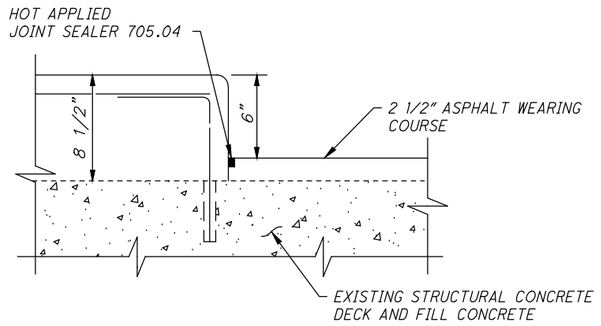
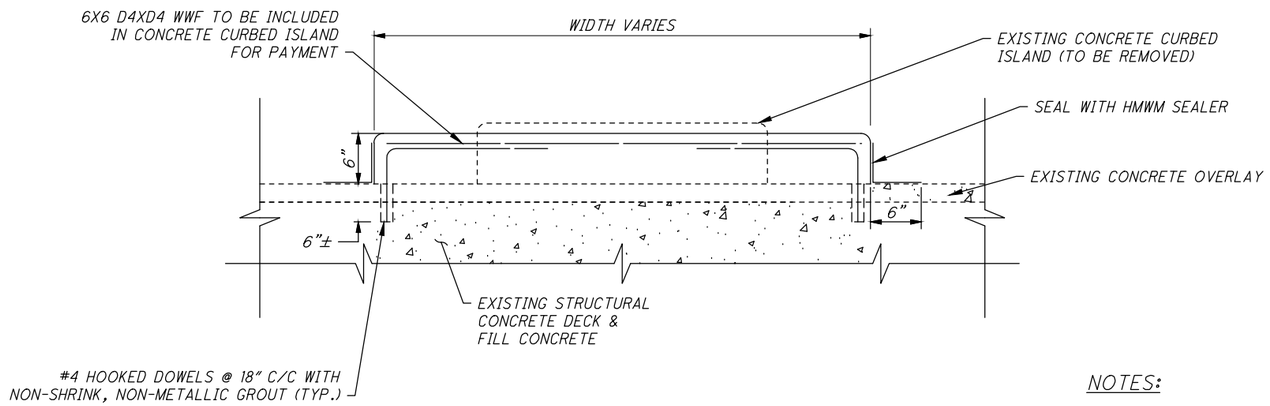


ISLAND PLAN
NO SCALE



SECTION D-D



SECTION A-A
PROSPECT AVE. EAST APPROACH ISLAND DETAIL

NOTES:

1. REMOVE THE EXISTING ASPHALT ROADWAY WEARING SURFACE TO THE TOP OF THE EXISTING CONCRETE PAVEMENT. REMOVE PORTIONS OF THE EXISTING CONCRETE CURBED ISLAND ON THE BRIDGE AS SHOWN ON THE DECK PLAN SHEET. THE PROPOSED ISLAND IS TO BE RECONSTRUCTED AS SHOWN ON THE PLAN.
2. WELDED WIRE FABRIC, #4 HOOKED DOWELS WITH NON-SHRINK, NON-METALLIC GROUT AND HMWM SEALING TO BE INCLUDED IN 6" CONCRETE TRAFFIC ISLAND, AS PER PLAN FOR PAYMENT.
3. FOR PAVEMENT ELEVATIONS, SEE SHEETS 55-58.

CALCULATED MMP
CHECKED RAB

PROSPECT AVENUE
EAST APPROACH ISLAND DETAIL

CUY - TOWER CITY BRIDGES

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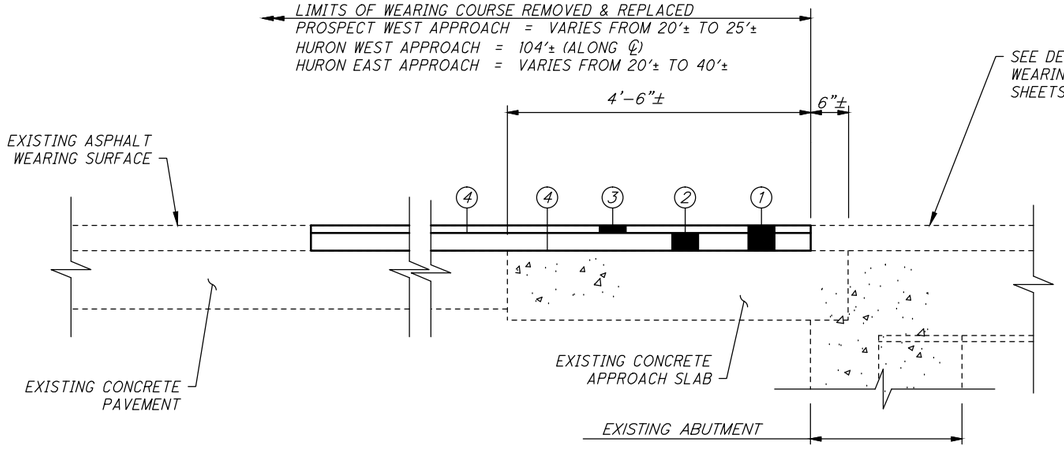
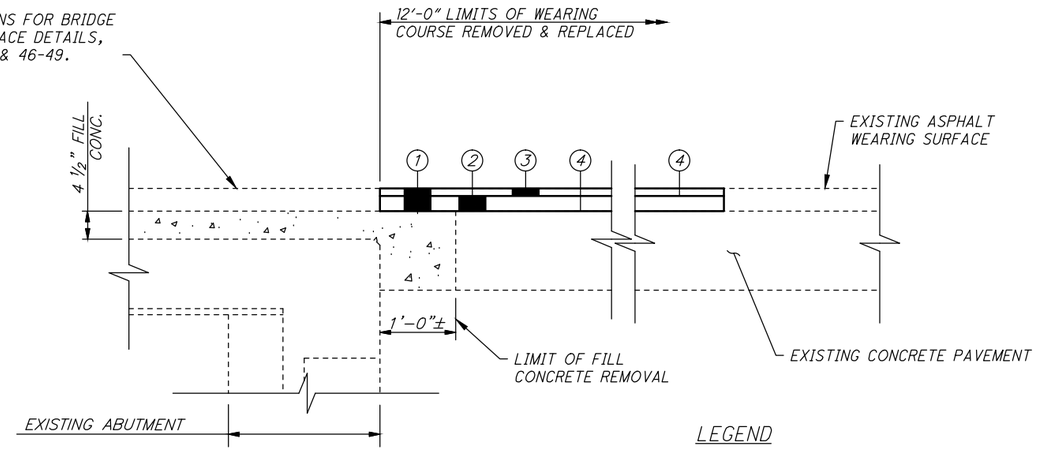


SECTION A-A

PROSPECT WEST APPROACH & HURON WEST AND EAST APPROACHES

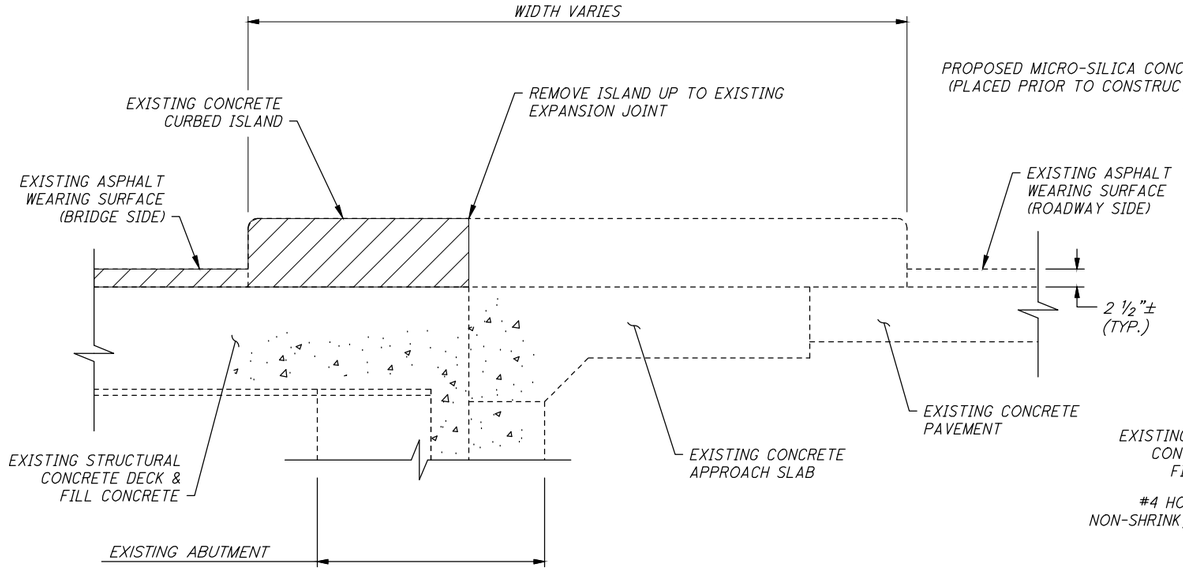


SECTION B-B

PROSPECT EAST APPROACH

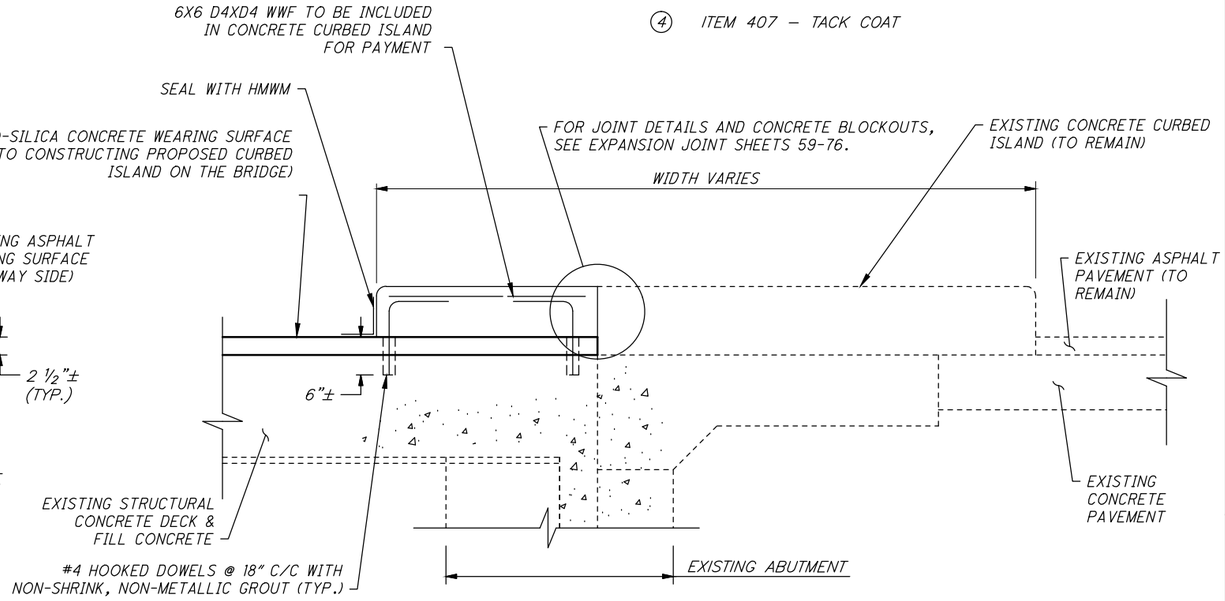
LEGEND

1. ITEM 202 – WEARING COURSE REMOVED
2. ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (448) (THICKNESS VARIES)
3. ITEM 441 – 1 ¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG64-22
4. ITEM 407 – TACK COAT



SECTION C-C - EXISTING

HURON EAST APPROACH CURBED ISLAND DETAILS



SECTION C-C - PROPOSED

HURON EAST APPROACH CURBED ISLAND DETAILS

NOTES:

1. REMOVE THE EXISTING ASPHALT ROADWAY WEARING SURFACE TO THE TOP OF THE EXISTING CONCRETE PAVEMENT. REMOVE PORTIONS OF THE EXISTING CONCRETE CURBED ISLAND ON THE BRIDGE AS SHOWN ON THE DECK PLAN SHEET. THE PROPOSED ISLAND IS TO BE RECONSTRUCTED IN THE SAME CONFIGURATION AS THE EXISTING ISLAND AND SHALL CONFORM AS TO HEIGHT & GEOMETRY.
2. FOR EXISTING AND PROPOSED EXPANSION JOINT AND CONCRETE BLOCKOUT DETAILS, SEE EXPANSION JOINT DETAILS, SHEETS 59-76.
3. WELDED WIRE FABRIC, #4 HOOKED DOWELS WITH NON-SHRINK, NON-METALLIC GROUT AND HMWM SEALING TO BE INCLUDED IN 6" CONCRETE TRAFFIC ISLAND, AS PER PLAN FOR PAYMENT.
4. FOR LOCATIONS OF SECTIONS A-A, B-B AND C-C, SEE HURON AND PROSPECT DECK PLANS, SHEETS 41-43 & 46-49.

CALCULATED LAB
CHECKED RAB

HURON ROAD / PROSPECT AVENUE APPROACHES

CUY - TOWER CITY BRIDGES

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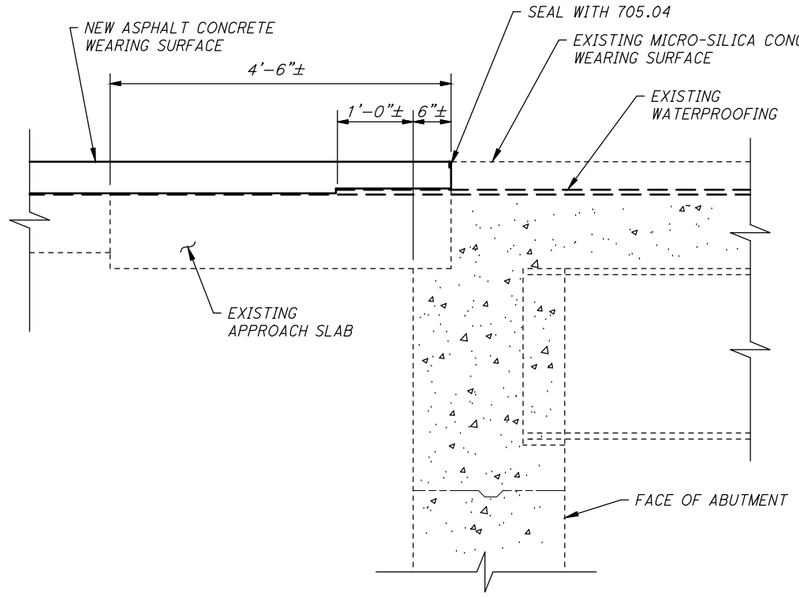
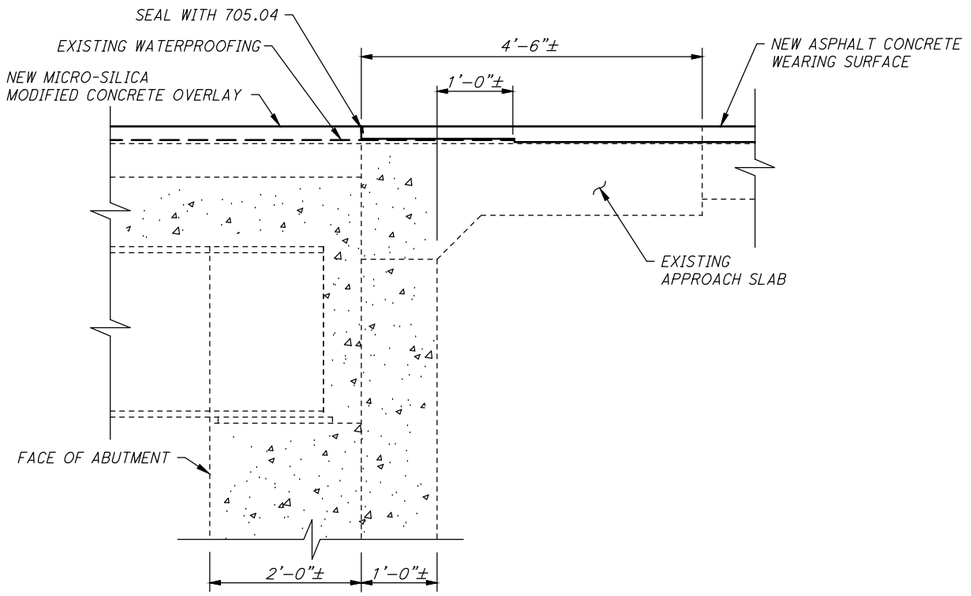
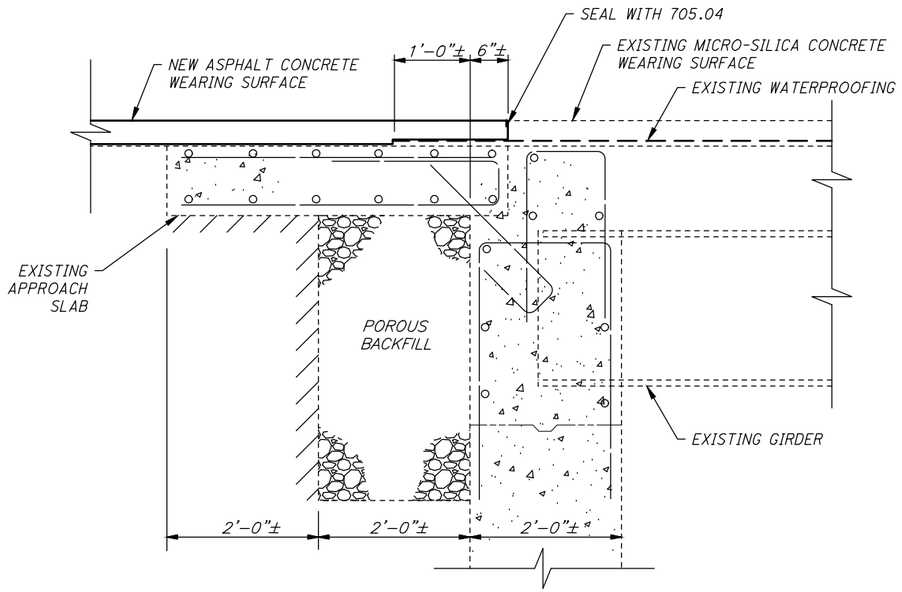


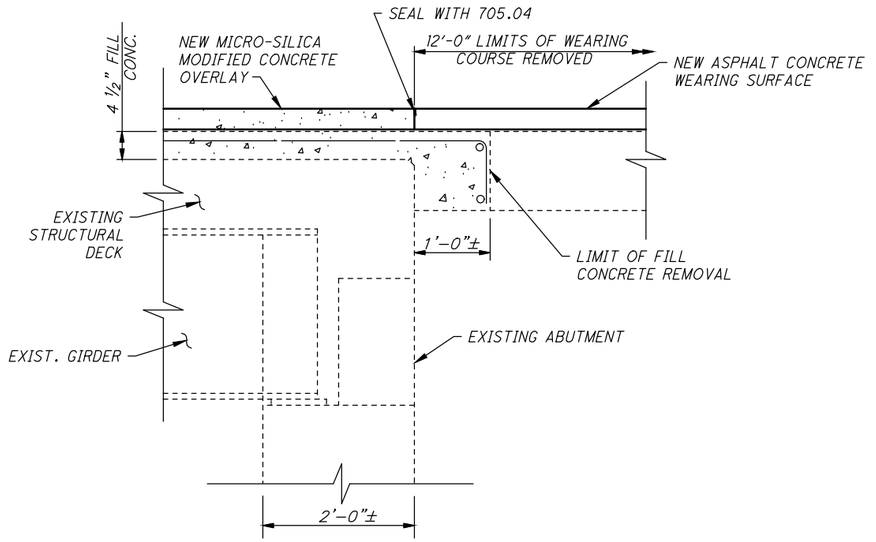
HURON ROAD WEST ABUTMENT
1" = 1'-0"



HURON ROAD EAST ABUTMENT
1" = 1'-0"



PROSPECT AVENUE WEST ABUTMENT
1" = 1'-0"



PROSPECT AVENUE EAST ABUTMENT
1" = 1'-0"

CALCULATED LAB
CHECKED MMP

HURON ROAD / PROSPECT AVENUE
MISCELLANEOUS DETAILS

CUY - TOWER CITY BRIDGES

98
129

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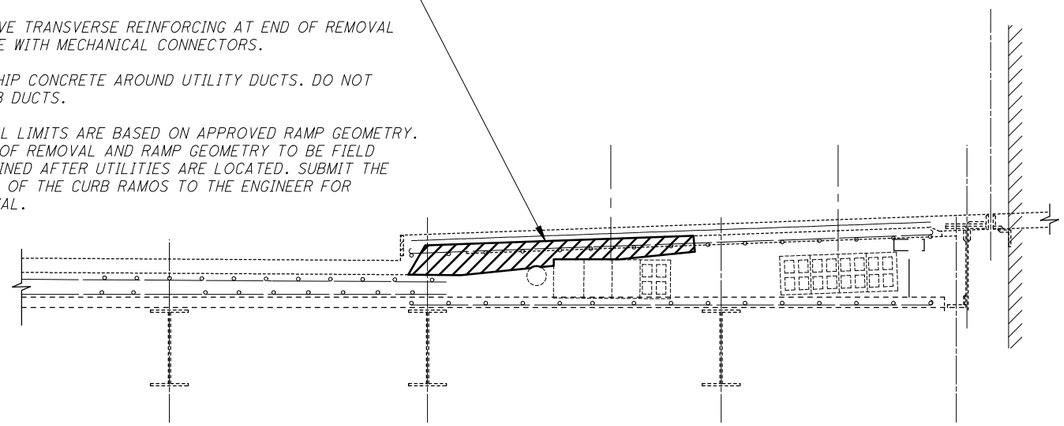
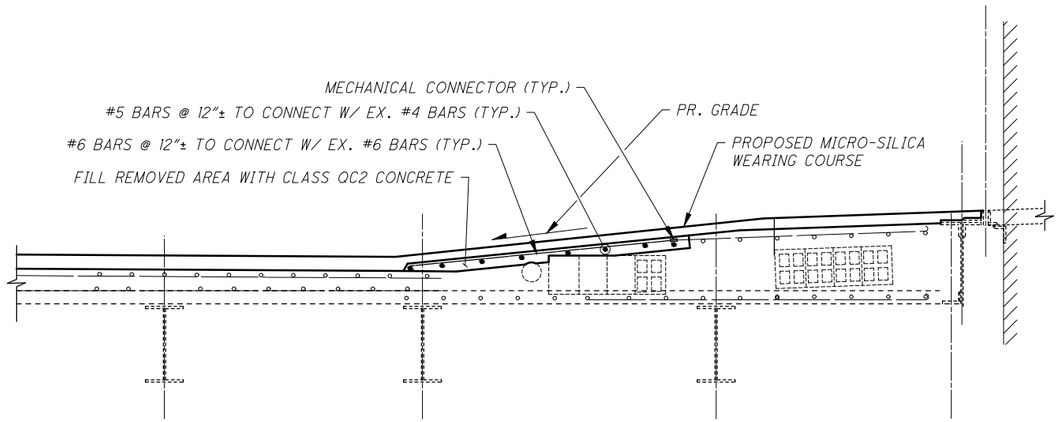
CURB RAMP DETAILS	
LOCATION	STATION, SIDE
PROSPECT AVENUE	
	10+15, LT.
	10+42, LT.
@ 6TH ST	2+94, LT.
@ 6TH ST	2+94, RT.
	11+02, LT.
	11+02, RT.
@ 3RD ST	2+94, LT.
@ 3RD ST	2+94, RT.
@ 2ND ST	2+94, LT.
@ 2ND ST	2+94, RT.
	15+02, LT.
	15+02, RT.
	19+34, LT.
	19+34, RT.
	20+24, RT.
HURON ROAD	
	13+28, LT.
	13+28, RT.
@ 6TH ST	0+45, LT.
@ 6TH ST	0+45, RT.
@ 3RD ST	0+45, LT.
@ 3RD ST	0+45, RT.
@ 2ND ST	0+44, LT.
@ 2ND ST	0+44, RT.
WEST 3RD STREET	
	1+03, RT.
WEST 6TH STREET	
	2+32, RT.

1. REMOVE STRUCTURAL SIDEWALK AND REINFORCING TO A DEPTH OF 4"± BELOW THE BOTTOM OF THE WEARING COURSE.
2. PRESERVE TRANSVERSE REINFORCING AT END OF REMOVAL FOR USE WITH MECHANICAL CONNECTORS.
3. HAND CHIP CONCRETE AROUND UTILITY DUCTS. DO NOT DISTURB DUCTS.
4. REMOVAL LIMITS ARE BASED ON APPROVED RAMP GEOMETRY. LIMITS OF REMOVAL AND RAMP GEOMETRY TO BE FIELD DETERMINED AFTER UTILITIES ARE LOCATED. SUBMIT THE LAYOUT OF THE CURB RAMOS TO THE ENGINEER FOR APPROVAL.



NEW CURB RAMP REMOVAL AREA
(PROSPECT AVE., SOUTH SIDE SHOWN, NORTH SIDE SIMILAR, OPPOSITE HAND.)



NEW CURB RAMP
(PROSPECT AVE., SOUTH SIDE SHOWN, NORTH SIDE SIMILAR, OPPOSITE HAND.)

NOTES:

1. FOR EXISTING CURB RAMPS BEING REGRADED, THE CONTRACTOR SHALL REMOVE 1 ½" OF THE STRUCTURAL DECK IN ORDER TO ACHIEVE THE PROPOSED CURB RAMP GRADE SHOWN. HOWEVER, THE CONTRACTOR SHALL EXERCISE CARE DURING THIS PROCESS TO ENSURE NO EXISTING REBAR IS IMPACTED.
2. FOR CURB RAMPS TO BE REMOVED, PLACE CONCRETE TO FILL CURB RAMP AFTER WEARING COURSE REMOVAL. AFTER PLACING FILL CONCRETE, CONSTRUCT WEARING COURSE AS NORMAL.
3. FOR CURB RAMP LOCATION PLAN VIEWS, SEE DECK PLANS, SHEETS 41-43, 46-49, 52 & 53.

CALCULATED SAH
CHECKED MMP

MISCELLANEOUS DETAILS - CURB RAMPS

CUY - TOWER CITY BRIDGES

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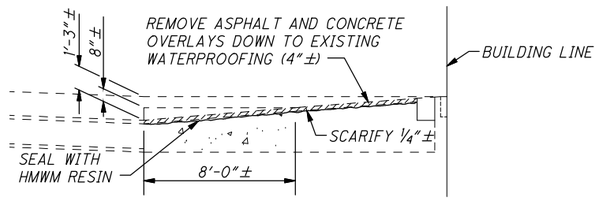
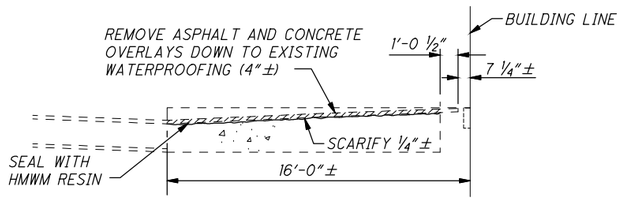
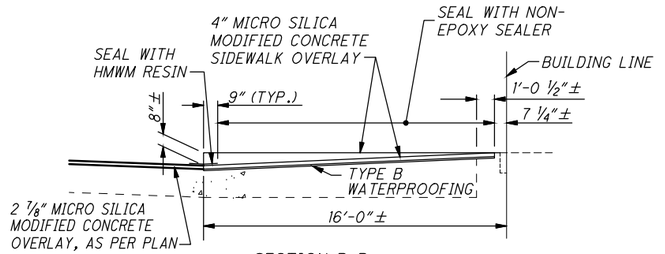


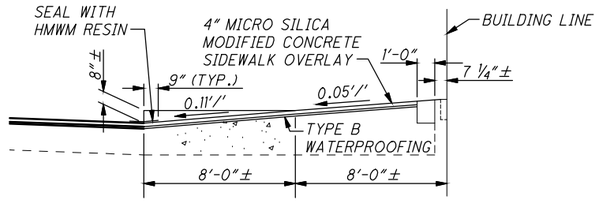
SECTION A-A
EXISTING



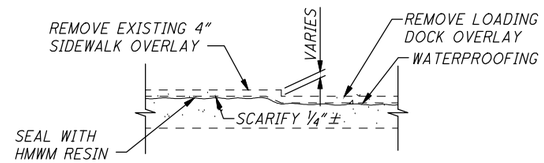
SECTION B-B
EXISTING HIGBEE'S LOADING DOCK



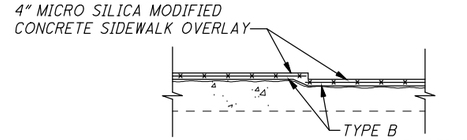
SECTION B-B
PROPOSED HIGBEE'S LOADING DOCK



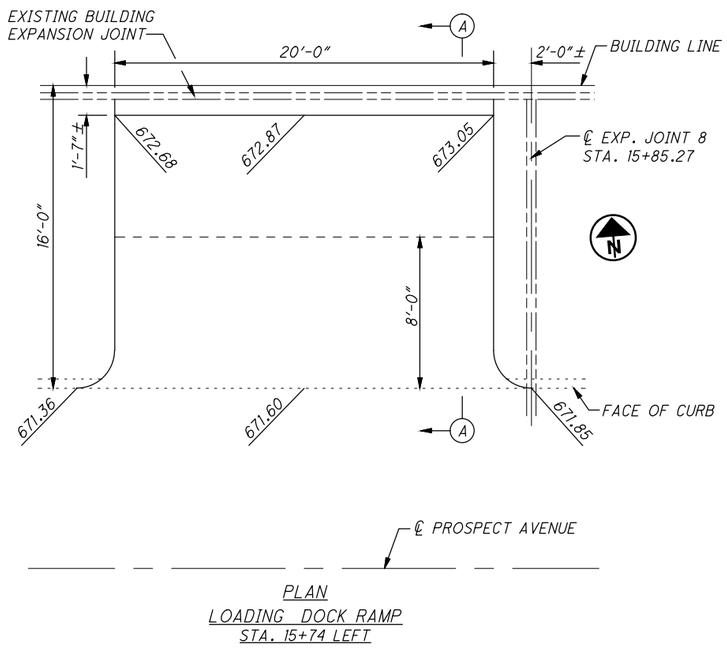
SECTION A-A
PROPOSED



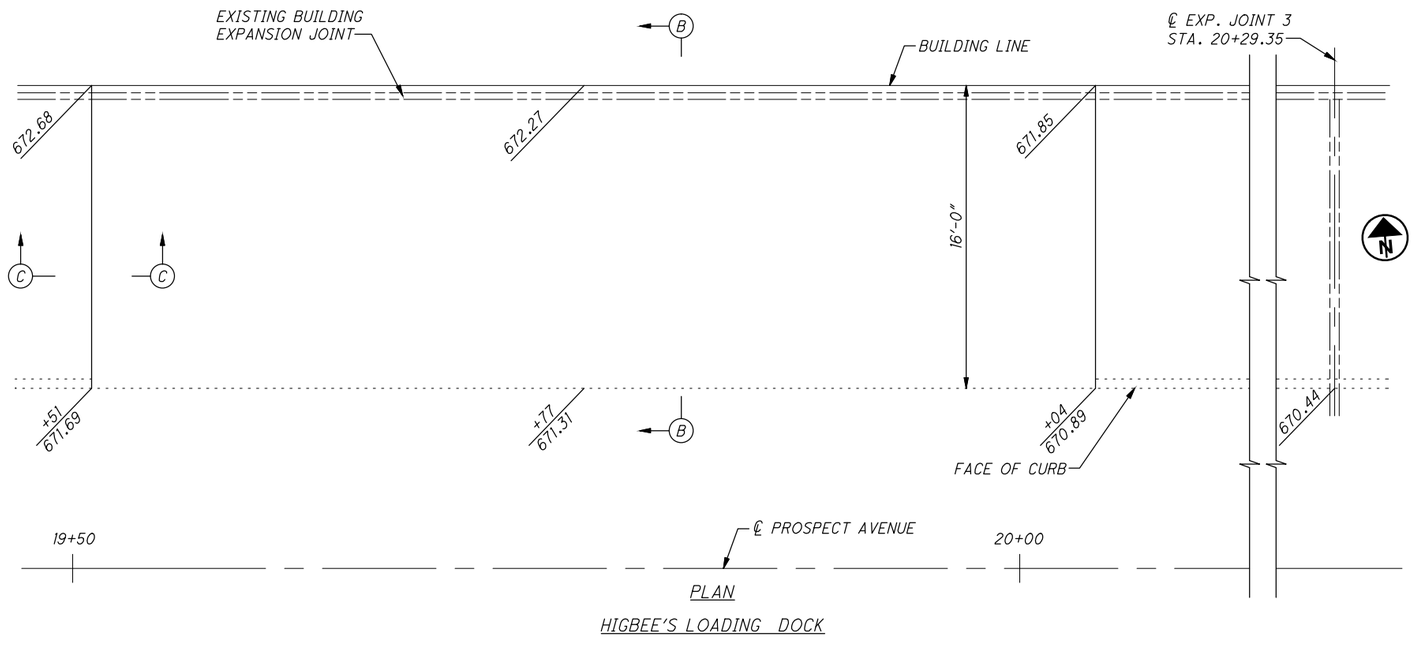
SECTION C-C
EXISTING



SECTION C-C
PROPOSED



PLAN
LOADING DOCK RAMP
STA. 15+74 LEFT



PLAN
HIGBEE'S LOADING DOCK

CALCULATED AJM
CHECKED MMP

MISCELLANEOUS DETAILS - DRIVE DETAILS

CUY - TOWER CITY BRIDGES

98B
129

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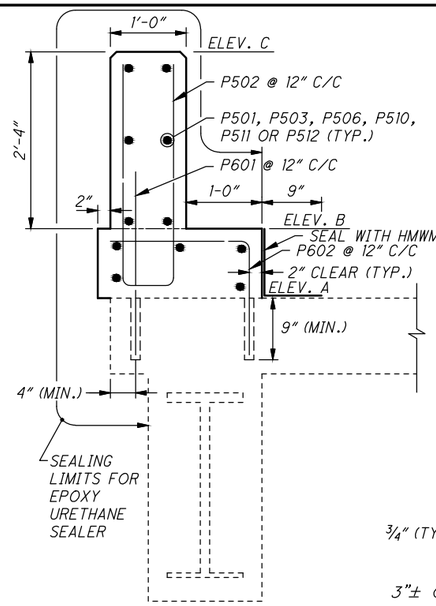
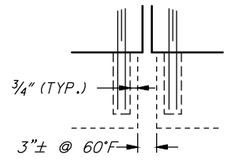
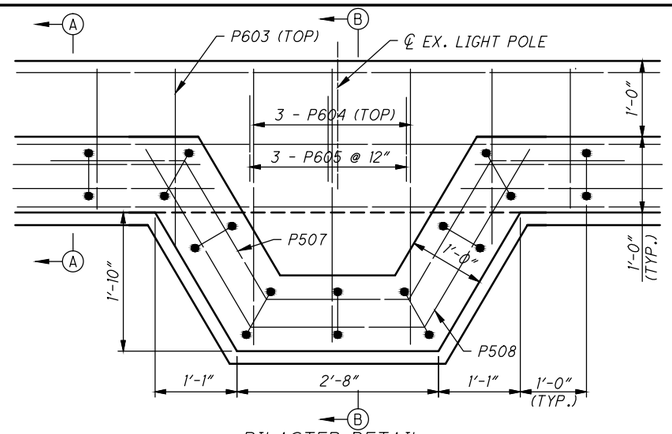


SECTION A-A
1" = 1'-0"



EXPANSION JOINT DETAIL
1" = 1'-0"



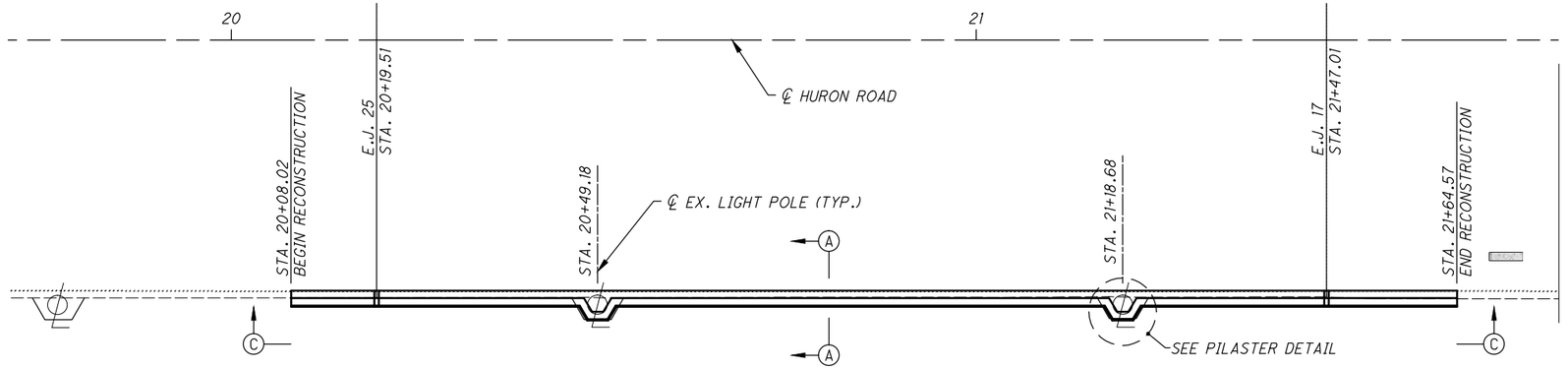
PILASTER DETAIL
1" = 1'-0"

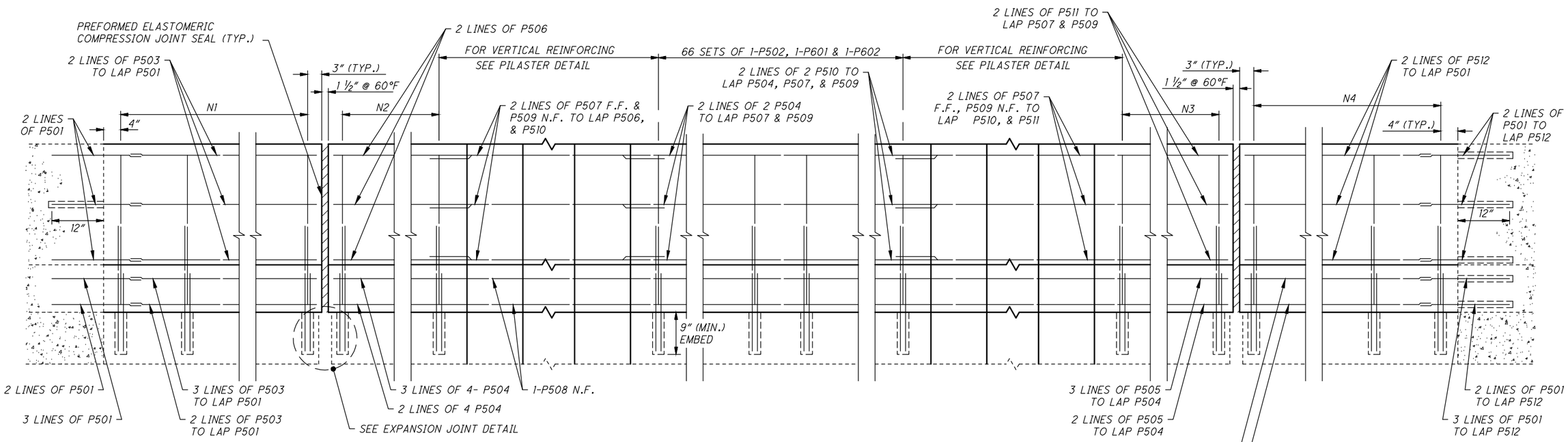
PARAPET ELEVATION TABLE				
STATION	PROPOSED ELEVATIONS			COMMENT
	GUTTER (A)	TOP OF CURB (B)	TOP OF PARAPET (C)	
20+08.02	673.09	673.75	676.08	BEGIN RECONSTRUCTION
20+19.51	673.23	673.91	676.24	E.J. 25
20+51.00	673.42	674.07	676.40	
20+83.00	673.55	674.21	676.54	
21+15.00	673.42	674.08	676.41	
21+47.01	673.25	673.97	676.30	E.J. 17
21+64.57	673.01	673.66	675.99	END RECONSTRUCTION

NOTE:

1. FOR FENCE DETAILS, SEE SHEET 101.
2. FOR SECTION B-B, SEE SHEET 101.
3. FOR REINFORCING SCHEDULE, SEE SHEET 100.

N1 12 SETS - P502, P601 & P602 @ 12" C/C = 10'-10"
N2 28 SETS - P502, P601 & P602 @ 12" C/C = 27'-0"
N3 26 SETS - P502, P601 & P602 @ 12" C/C = 25'-0"
N4 18 SETS - P502, P601 & P602 @ 12" C/C = 17'-0"





VIEW C-C

CALCULATED MMP
CHECKED AJM

HURON ROAD PARAPET DETAILS

CUY - TOWER CITY BRIDGES

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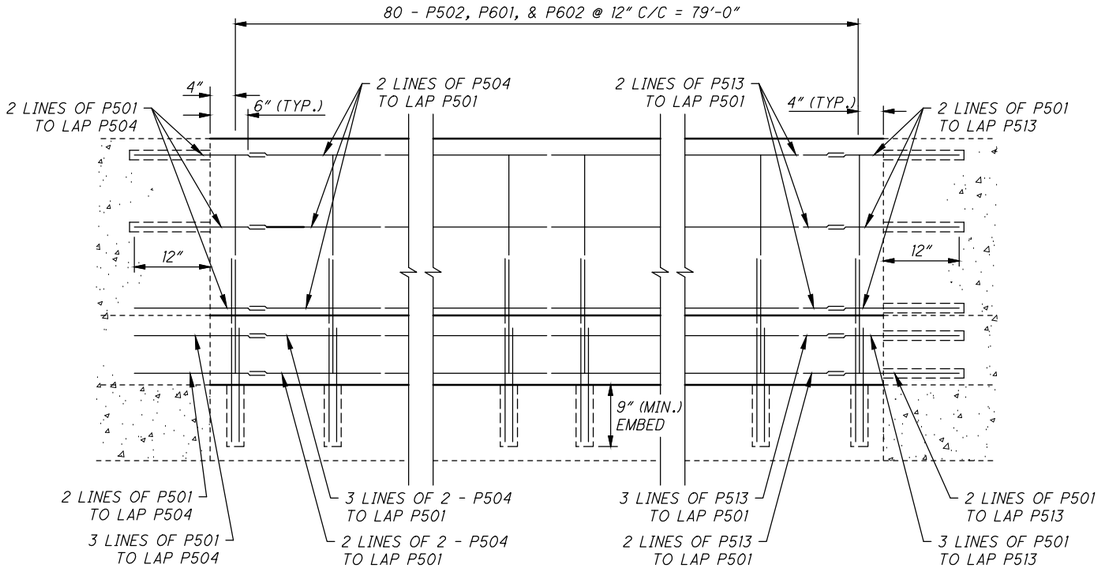
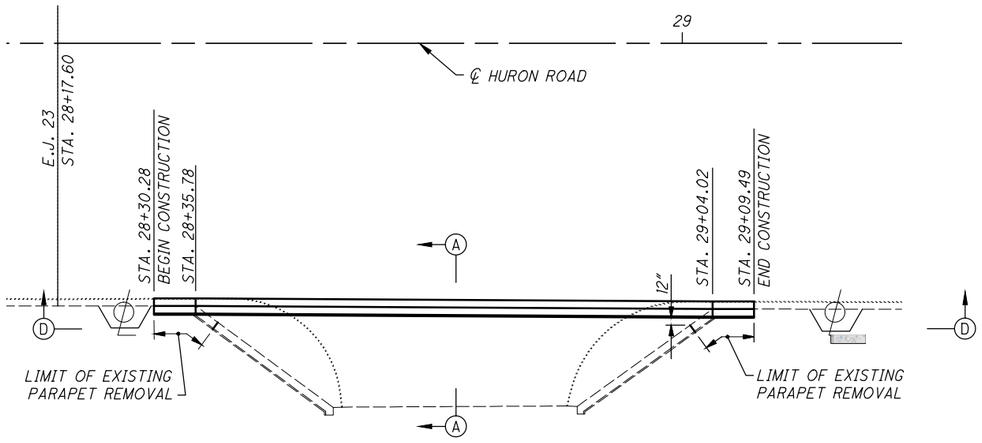
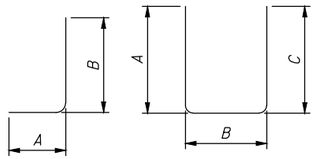


VIEW D-D
1" = 1'-0"



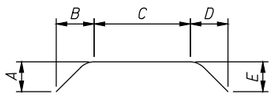
PARAPET ELEVATION TABLE				
STATION	PROPOSED ELEVATIONS			COMMENT
	GUTTER (A)	TOP OF CURB (B)	TOP OF PARAPET (C)	
28+30.28	667.97	668.70	671.03	BEGIN CONSTRUCTION
28+44.00	667.75	668.42	670.75	
28+70.00	667.49	668.16	670.49	
28+95.00	667.31	667.98	670.31	
29+09.49	667.31	667.98	670.31	END CONSTRUCTION

MARK	NUMBER	LENGTH	TYPE	WEIGHT (LBS.)	DIMENSIONS						
					A	B	C	D	E	R	INCR.
HURON ROAD PARAPETS											
P501	22	4'-0"	STR	92							
P502	244	5'-9"	2	1,464	2'-8"	8"	2'-8"				
P503	11	8'-10"	STR	102							
P504	20	30'-0"	STR	626							
P505	5	16'-9"	STR	88							
P506	6	27'-7"	STR	173							
P507	12	8'-10"	21	111	2'-0"	1'-1"	2'-5"	1'-10"			
P508	4	8'-11"	20	37	2'-8"	1'-8"	2'-8"	1'-8"	2'-8"		
P509	12	8'-0"	20	100	2'-5"	1'-4"	2'-6"	1'-4"	2'-5"		
P510	6	10'-6"	STR	66							
P511	6	26'-2"	STR	164							
P512	11	16'-10"	STR	193							
P513	11	23'-1"	STR	265							
P601	230	2'-1"	STR	719							
P602	230	2'-11"	1	1,007	1'-3"	1'-10"					
P603	4	3'-4"	1	20	1'-3"	2'-3"					
P604	6	4'-9"	1	43	1'-3"	3'-8"					
P605	6	2'-7"	1	24	1'-3"	2'-7"					
TOTAL				5,294							



TYPE-1

TYPE-2



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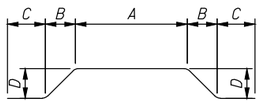

TYPE-21

NOTES:
1. FOR SECTION A-A, SEE SHEET 99.
2. FOR FENCE DETAILS, SEE SHEET 101.

CALCULATED MMP
CHECKED AJM

HURON ROAD
PARAPET DETAILS

CUY - TOWER CITY BRIDGES

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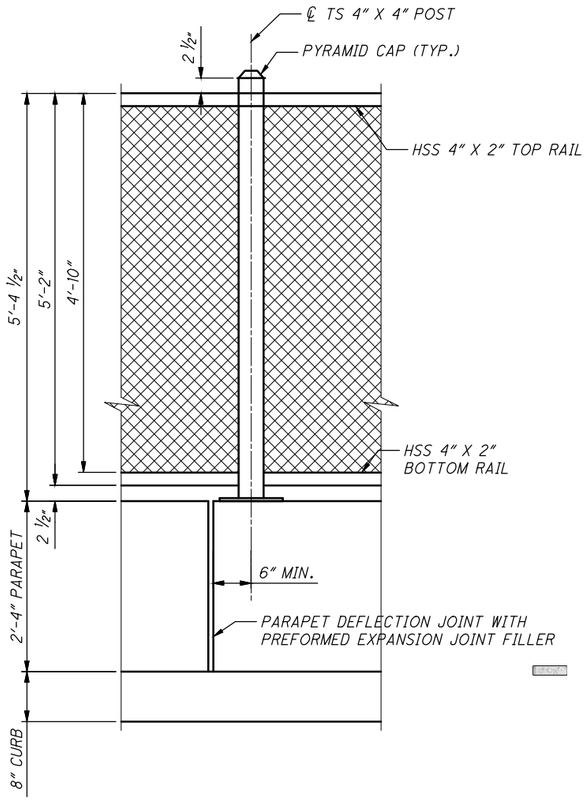
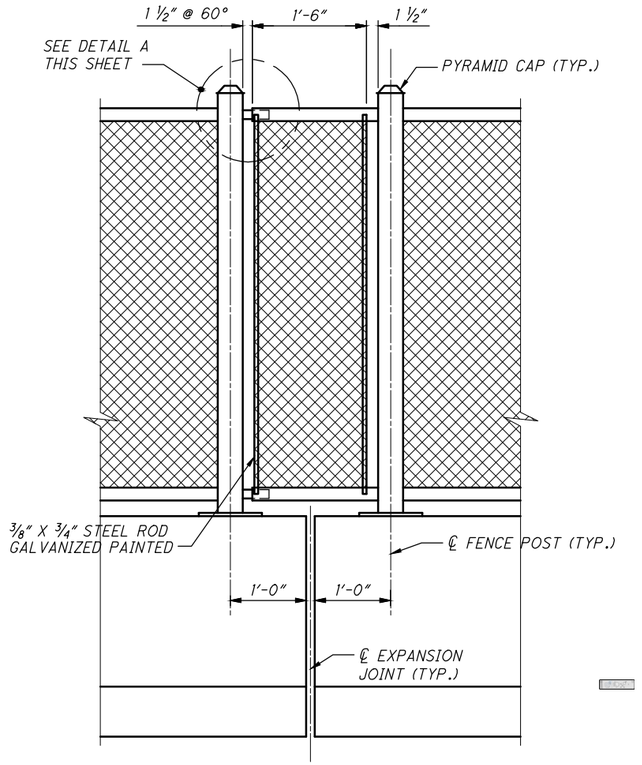
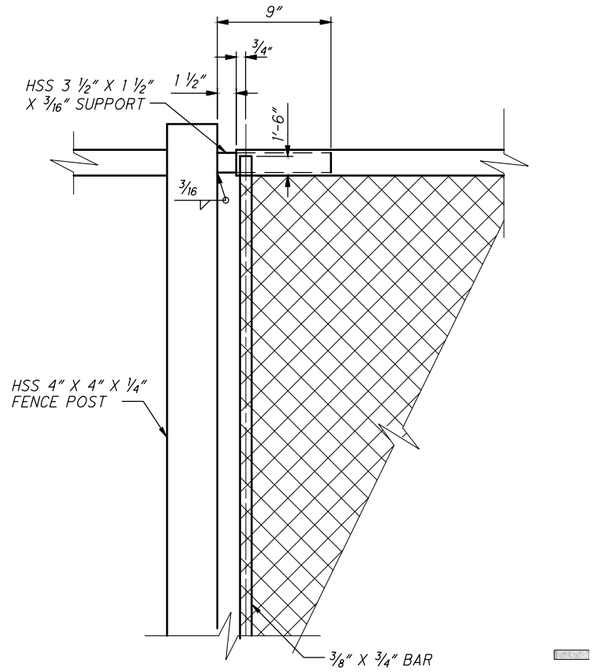


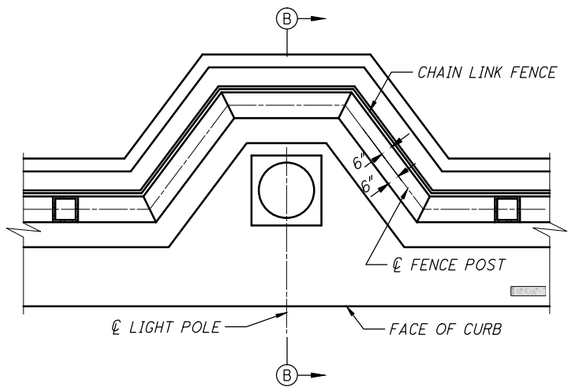
TYPICAL FENCE POST DETAIL



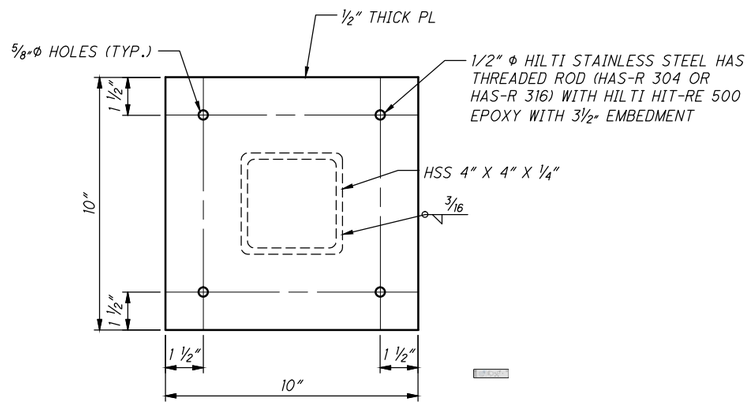
TYPICAL FENCE DETAIL AT EXPANSION JOINT



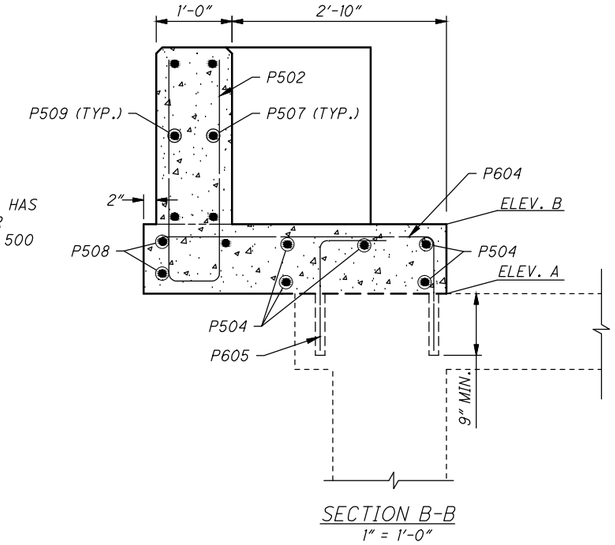
DETAIL A



TYPICAL FENCE DETAIL AT PILASTER



BASE PLATE DETAIL



SECTION B-B
1" = 1'-0"

NOTES:

1. FOR FENCE NOTES, SEE SHEET 17.
2. FOR PARAPET DETAILS, SEE SHEETS 99 & 100.

CALCULATED MMP
CHECKED AJM

HURON ROAD
PARAPET DETAILS

CUY - TOWER CITY BRIDGES

101
129

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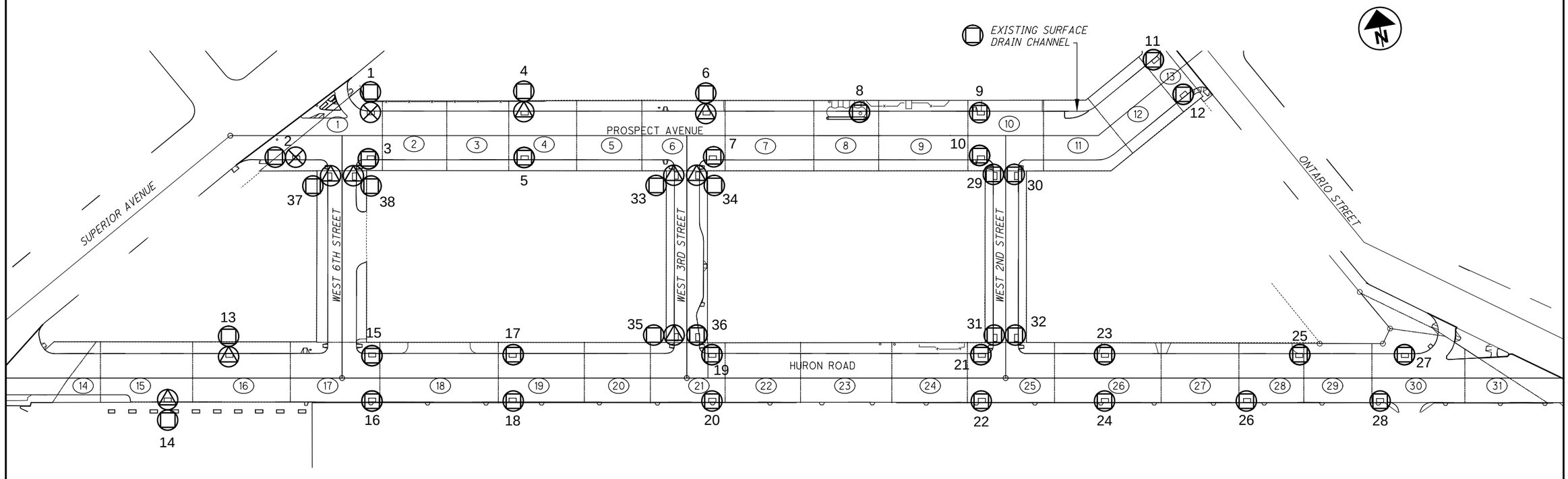

GENERAL PLAN

LEGEND

- EXISTING SCUPPER
- EXISTING SCUPPER TO BE REMOVED AND REPLACED, PER ITEM 518 - SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN
- EXISITING SCUPPER TO BE REHABILITATED, PER ITEM 518 - SCUPPER, MISC.: SCUPPER REHABILITATION
- EXISTING SCUPPERS TO BE CLEANED, PER ITEM 202 - REMOVAL MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE
- (#) STRUCTURE UNIT NUMBER
- # SCUPPER IDENTIFICATION NUMBER

NOTES

1. LOCATIONS OF RTA TRACKS, UNDER BRIDGE PARKING, AND LOCATIONS OF STORES, OFFICES, ETC. ARE NOT SHOWN FOR CLARITY. REFER TO GENERAL PLANS FOR STREET LEVEL AND LOWER LEVELS, SHEETS 3-4/129.
2. FOR TYPICAL SCUPPER REMOVAL AND REPLACEMENT DETAILS, SEE SHEET 105/129.
3. FOR TYPICAL SCUPPER REHABILITATION DETAILS, SEE SHEET 106/129.

CALCULATED IMF
CHECKED MJL

GENERAL PLAN - SCUPPERS

CUY-TOWER CITY BRIDGES

102
129

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REVIEW OF DRAINAGE FACILITIES:

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OWNERS, REPRESENTATIVES OF THE STATE, THE CITY OF CLEVELAND AND THE CONTRACTOR, ALONG WITH PRIVATE REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING DRAINAGE STRUCTURES THAT ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE CITY.

ALL NEW CONDUITS, INLETS, AND SCUPPER DRAINS CONSTRUCTED AS PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE OWNERS.

ALL EXISTING SCUPPERS AND DOWN SPOUTS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTORS'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 518 SCUPPER ITEMS.

ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING:

THIS ITEM SHALL INCLUDE CLEARING LODGED AND IMPACTED DEBRIS IN THE SCUPPER GRATE AND SCUPPER BOX BY USE OF VACUUM TRUCK OR OTHER APPROVED METHODS. THE CONTRACTOR SHALL USE REASONABLE CARE IN CLEANING AS TO NOT PUSH BLOCKAGE FURTHER DOWN THE DOWNSPOUT. DEBRIS SHALL BE DISPOSED PER ITEM 202.

PAYMENT FOR THIS ITEM SHALL BE AT THE UNIT BID PRICE PER EACH SCUPPER CLEANED FOR ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE:

THIS ITEM SHALL INCLUDE CLEARING LODGED AND IMPACTED DEBRIS IN THE DOWNSPOUTS FROM THE INLET TO GROUND LEVEL BY USE OF VACUUM TRUCK OR OTHER APPROVED METHODS. THE CONTRACTOR SHALL USE REASONABLE CARE IN CLEANING AS TO NOT PUSH BLOCKAGE FURTHER DOWN THE DOWNSPOUT.

THE CONTRACTOR SHALL TELEVISE THE CLEANED DOWNSPOUT TO ENSURE 90 PERCENT OPEN AREA IN THE DOWNSPOUTS, AND PROVIDE VIDEO DOCUMENTATION TO THE ENGINEER BEFORE THIS WORK SHALL BE CONSIDERED COMPLETE.

PAYMENT FOR THIS ITEM SHALL BE AT THE UNIT BID PRICE PER LINEAR FOOT OF DOWNSPOUT CLEANED AND TELEVISED FOR ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISED WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, DISPOSAL, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 518 - SCUPPERS INCLUDING SUPPORTS, AS PER PLAN:

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ALL NEW SCUPPER MATERIAL IN ACCORDANCE WITH THE DETAILS IN THE STRUCTURE PLANS AND THE MANUFACTURERS RECOMMENDATIONS. NEW SCUPPER BOXES SHOULD MATCH EXISTING SCUPPER DEPTH, AND ATTACH TO FRAME TYPE NOTED IN PLAN SHEET 105/133.

REMOVE EXISTING DOWNSPOUT PIPE TO NEAREST SOLID PIPE SECTION. EXISTING CUT END TO REMAIN SHALL BE CLEAN CUT AND FREE OF BURRS AND IMPERFECTIONS. CONNECT THE PROPOSED 8" GALVANIZED STEEL DOWNSPOUT TO THE EXISTING DOWNSPOUT TO REMAIN, AS PER METHODS DESCRIBED IN TO ODOT CMS 518.06.

PAYMENT FOR THIS ITEM SHALL BE AT THE UNIT BID PRICE PER EACH SCUPPER FOR ITEM 518 - SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 518 - SCUPPER, MISC.: SCUPPER REHABILITATION:

THIS ITEM CONSISTS OF REHABILITATING THE EXISTING SCUPPERS AND DOWNSPOUT CONNECTIONS WITHIN THE LIMITS DETAILED IN THE PLANS.

EXISTING SCUPPER STEEL SHOULD BE THOROUGHLY CLEANED OF DIRT, DUST AND ALL OTHER FOREIGN MATERIALS BY MEANS OF AIR UNDER PRESSURE, ABRASIVE BLASTING, OR ANY OTHER METHOD THAT PRODUCES SATISFACTORY RESULTS. THE EXISTING SCUPPER SHOULD BE REHABILITATED AS NEEDED TO ENSURE SECURE AND WATERTIGHT CONNECTIONS, AND SHOULD BE REINSTALLED TO ENSURE WATERTIGHT CONNECTIONS TO THE ADJACENT CONCRETE.

REMOVE EXISTING DOWNSPOUT PIPE TO NEAREST SOLID PIPE SECTION. EXISTING CUT END TO REMAIN SHALL BE CLEAN CUT AND FREE OF BURRS AND IMPERFECTIONS. CONNECT THE PROPOSED 8" GALVANIZED STEEL DOWNSPOUT TO THE REHABILITATED SCUPPER AND EXISTING DOWNSPOUT TO REMAIN, AS PER METHODS DESCRIBED IN ODOT CMS 518.06.

THE FOLLOWING QUANTITIES OF GALVANIZED STEEL DOWNSPOUT ATTACHED TO EACH REHABILITATION LOCATION ARE ASSUMED IN ADDITION TO THOSE NOTED ELSEWHERE IN THE PLANS:

SCUPPER I.D.	8" DOWNSPOUT (LF)
4	3'
6	3'
13	3'
14	3'
33	3'
34	3'
35	3'
37	3'
38	3'

PAYMENT FOR THIS ITEM SHALL BE AT THE UNIT BID PRICE PER EACH SCUPPER REHABILITATED FOR ITEM 518 - SCUPPER, MISC.: SCUPPER REHABILITATION WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, INCLUDING DOWNSPOUTS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL - MISCELLANEOUS METAL:

EXISTING SCUPPERS AND/OR DOWNSPOUT PIPES TO REMAIN MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SCUPPERS AND/OR DOWNSPOUT PIPES OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 518 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

SPECIAL, MISCELLANEOUS METAL 10,000 POUNDS

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING SCUPPERS AND/OR DOWNSPOUT PIPES. MATERIALS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW SCUPPERS AND/OR DOWNSPOUT PIPES AT THE EXPENSE OF THE CONTRACTOR.

CALCULATED IMF
CHECKED MJL

DRAINAGE NOTES

CUY-TOWER CITY BRIDGES

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SHEET NO.	UNIT	202			509		512		518			511
		WEARING COURSE REMOVED	REMOVAL MISC.: SCUPPER CLEANING	REMOVAL MISC.: DOWNSPOUT CLEAN AND TELEVISE	EPOXY COATED REINFORCING STEEL	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL	SEALING OF CONCRETE SURFACES (NON-EPOXY)	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN	SCUPPER, MISC.: SCUPPER REHABILITATION	8" PIPE DOWNSPOUT, INCLUDING SPECIALS	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE
		SY	EACH	FT	LB	LB	SY	SY	EACH	EACH	FT	CY
CUY-PROSPECT AVENUE- 4028M												
107	1		3	149	16	100	1	2	2		4	6
107	2											
107	3											
107	4	1	2	112	8	50	0.4	1		1	8	3
108	5											
108	6	1	2	66	8	50	0.4	1		1	6	3
108	7											
108	8		1	29								
109	9											
109	10		2	150								
109	11											
109	12											
109	13		2	108								
TOTALS CARRIED TO ESTIMATED QUANTITIES												
		2	12	614	32	200	2	4	2	2	18	12
CUY-HURON STREET- 4023M												
110	14											
110	15	1	1	19	8	50	0.4	1		1	8	3
110	16	1	1	49	8	50	0.4	1		1	14	3
110	17		2	100								
111	18											
111	19		2	94							14	
111	20											
111	21		2	117								
112	22											
112	23											
112	24											
112	25		2	118								
113	26		2	112								
113	27											
113	28		2	120							4	
113	29											
114	30		2	164								
114	31											
TOTALS CARRIED TO ESTIMATED QUANTITIES												
		2	16	893	16	100	1	2		2	40	6

SHEET NO.	UNIT	202			509		512		518			511
		WEARING COURSSE REMOVED	REMOVAL MISC.: SCUPPER CLEANING	REMOVAL MISC.: DOWNSPOUT CLEAN AND TELEVISE	EPOXY COATED REINFORCING STEEL	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL	SEALING OF CONCRETE SURFACES (NON-EPOXY)	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN	SCUPPER, MISC.: SCUPPER REHABILITATION	8" PIPE DOWNSPOUT, INCLUDING SPECIALS	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE
		SY	EACH	FT	LB	LB	SY	SY	EACH	EACH	FT	CY
117	W 2ND STREET		4	174								
TOTALS CARRIED TO ESTIMATED QUANTITIES												
			4	174								
116	W 3RD STREET	3	4	155	24	150	1	3		3	24	9
TOTALS CARRIED TO ESTIMATED QUANTITIES												
		3	4	155	24	150	1	3		3	24	9
115	W 6TH STREET	2	2	69	16	100	1	2		2	16	6
TOTALS CARRIED TO ESTIMATED QUANTITIES												
		2	2	69	16	100	1	2		2	16	6

CALCULATED IMF
CHECKED MJL

DRAINAGE SUBSUMMARY

CUY-TOWER CITY BRIDGES

104
129

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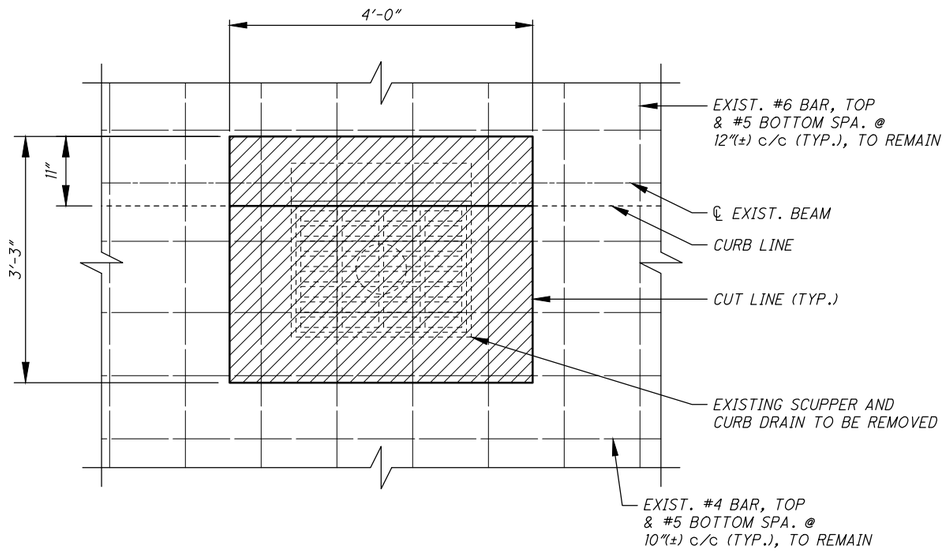
LEGEND

LIMITS OF REMOVAL, PER ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

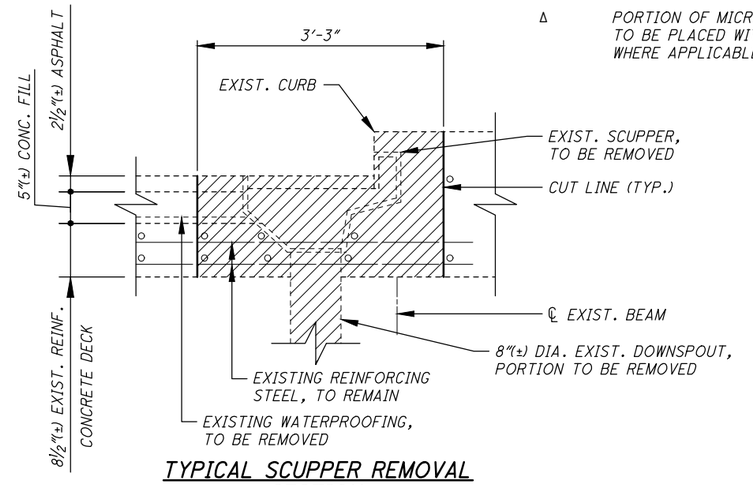
Ω NEENAH FOUNDARY R-3246-CL GRATE AND FRAME, EAST JORDAN IRON WORKS NO. 7035 OR APPROVED ALTERNATIVE, ATTACHED TO A COLLECTION BOX WITH AN 8" OUTLET PIPE

Δ PORTION OF MICROSILICA WEARING SURFACE TO BE PLACED WITH WEARING SURFACE REPAIRS, WHERE APPLICABLE

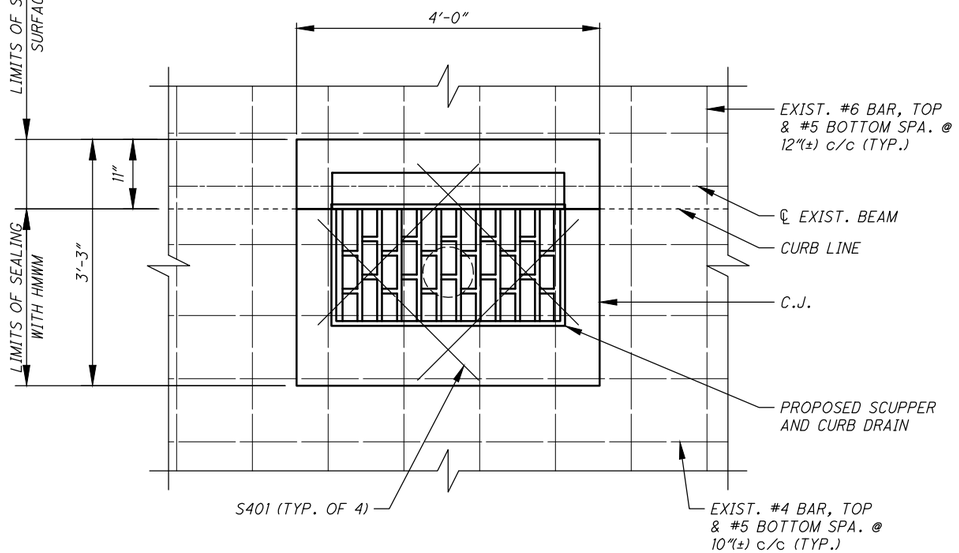


PLAN VIEW

SHOWING TYPICAL SCUPPER REMOVAL

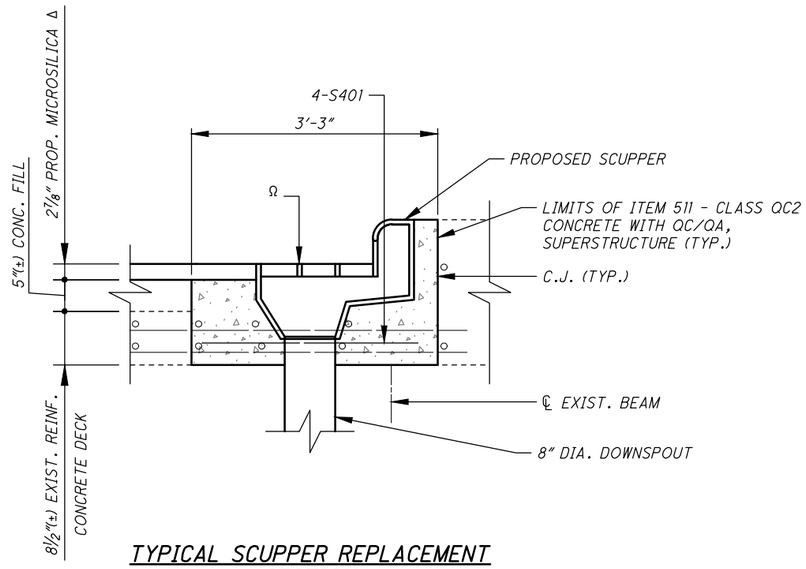


TYPICAL SCUPPER REMOVAL SECTION



PLAN VIEW

SHOWING TYPICAL SCUPPER REPLACEMENT



TYPICAL SCUPPER REPLACEMENT SECTION

REINFORCING STEEL LIST				
MARK	NO.	LENGTH	WEIGHT	TYPE
S401	4	3'-0"	8	STR

QUANTITY PER EACH SCUPPER REPLACEMENT

NOTES

1. DETAILS ON THIS SHEET APPLY TO SCUPPERS NUMBER 1 AND 2
2. EXERCISE CARE IN REMOVING EXISTING BRIDGE DECK CONCRETE TO NOT DAMAGE EXISTING REINFORCING STEEL. PRESERVE ALL EXISTING REINFORCING STEEL FOR FINAL CONSTRUCTION.
3. TRIM EXISTING REINFORCING STEEL TO REMAIN, AS DIRECTED BY THE ENGINEER TO FIT THE PROPOSED SCUPPER BOX.
4. A CONTINGENCY QUANTITY OF 50 LBS OF ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER TO REPLACE EXISTING DAMAGED OR DETERIORATED REINFORCING STEEL TO REMAIN AS SHOWN IN THE PLANS.
5. THE CONTRACTOR SHALL ENSURE THE CURB BOX IS PROPERLY SECURED TO PREVENT FUTURE DISPLACEMENT.

CALCULATED IMF
CHECKED MJL

SCUPPER REPLACEMENT DETAILS

CUY-TOWER CITY BRIDGES

105
129

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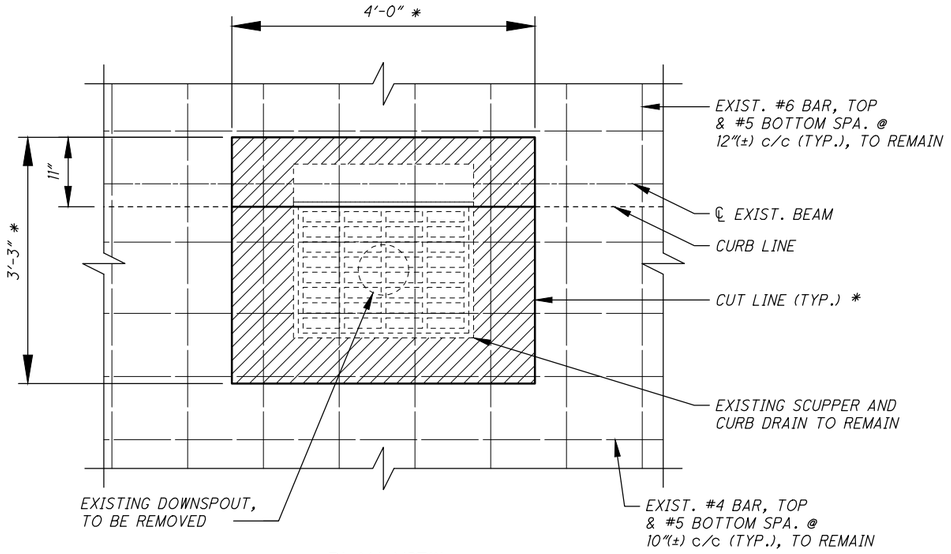


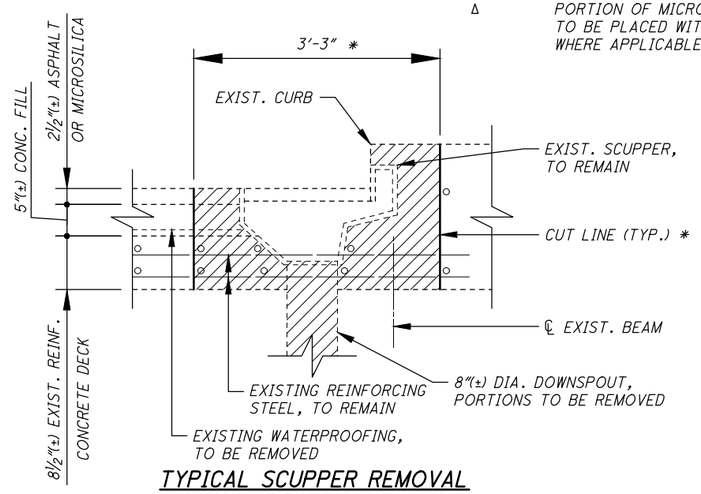
PLAN VIEW

SHOWING REMOVAL LIMITS
* - SEE NOTE 2

LEGEND

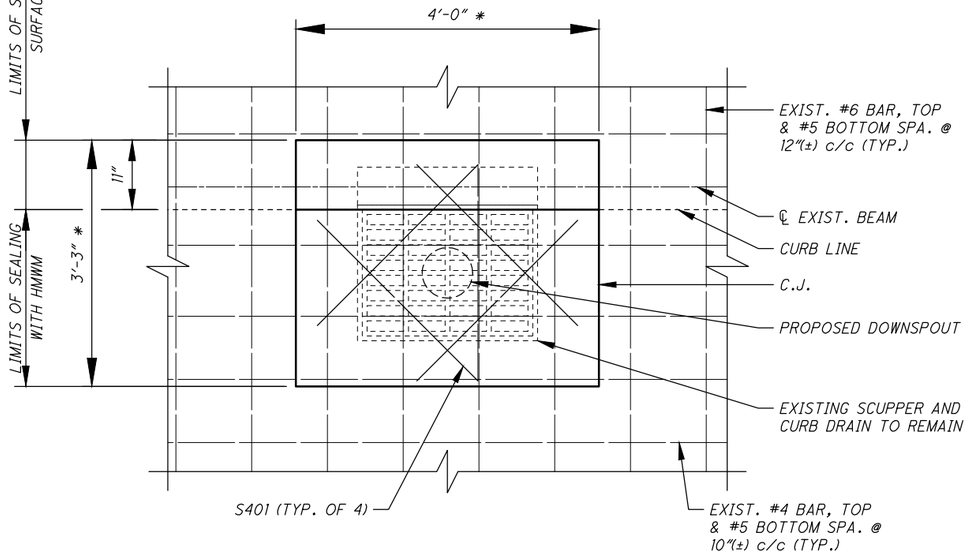
LIMITS OF REMOVAL PER ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FT SPAN, AS PER PLAN

Δ PORTION OF MICROSILICA WEARING SURFACE TO BE PLACED WITH WEARING SURFACE REPAIRS, WHERE APPLICABLE



TYPICAL SCUPPER REMOVAL SECTION

* - SEE NOTE 2

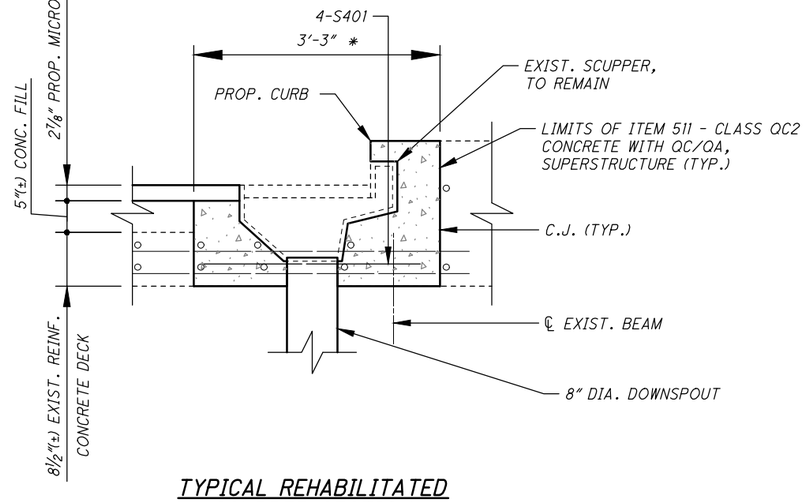


PLAN VIEW

SHOWING TYPICAL SCUPPER REHABILITATION
* - SEE NOTE 2

REINFORCING STEEL LIST				
MARK	NO.	LENGTH	WEIGHT	TYPE
S401	36	3'-0"	72	STR

QUANTITY PER EACH SCUPPER REHABILITATED



TYPICAL REHABILITATED SCUPPER SECTION

* - SEE NOTE 2

NOTES

1. DETAILS ON THIS SHEET APPLY TO SCUPPERS NUMBER 4, 6, 13, 14, 33, 34, 35, 37, AND 38.
2. EXERCISE CARE IN REMOVING EXISTING BRIDGE DECK CONCRETE TO NOT DAMAGE EXISTING REINFORCING STEEL. PRESERVE ALL EXISTING REINFORCING STEEL FOR FINAL CONSTRUCTION.
3. LIMITS OF REMOVAL SHALL EXTEND TO REMOVE UNSOUND CONCRETE.
4. A CONTINGENCY QUANTITY OF 50 LBS OF ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL HAS BEEN INCLUDED IN THE ESTIMATED QUANTITY TO BE USED AS DIRECTED BY THE ENGINEER TO REPLACE EXISTING DAMAGED OR DETERIORATED REINFORCING STEEL TO REMAIN AS SHOWN IN THE PLANS.
5. CONTRACTOR SHALL ENSURE THE CURB BOX IS PROPERLY SECURED TO PREVENT FUTURE DISPLACEMENT.

CALCULATED IMF
CHECKED MJL

SCUPPER REHABILITATION DETAILS

CUY-TOWER CITY BRIDGES

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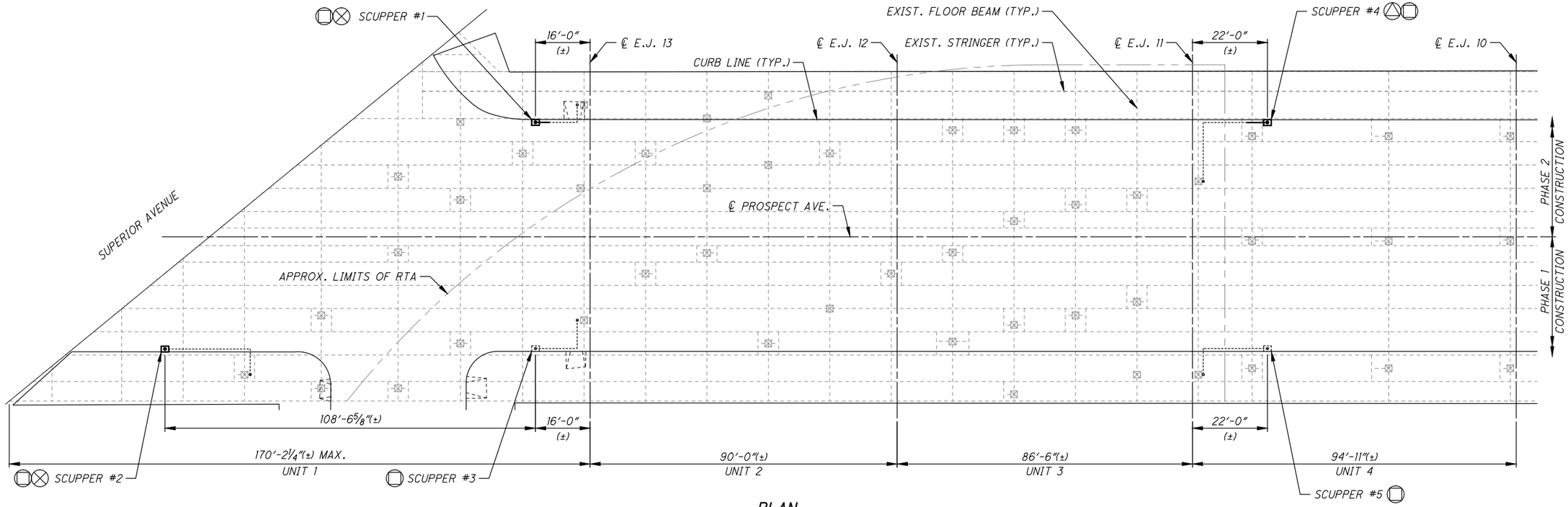
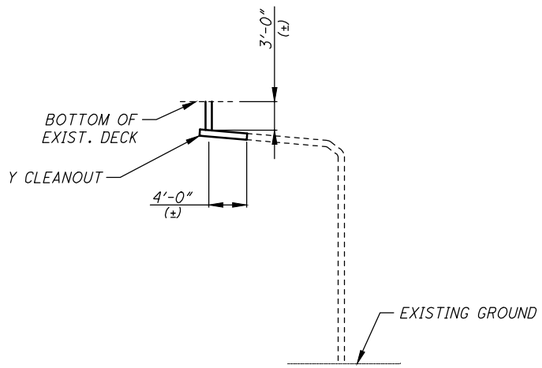
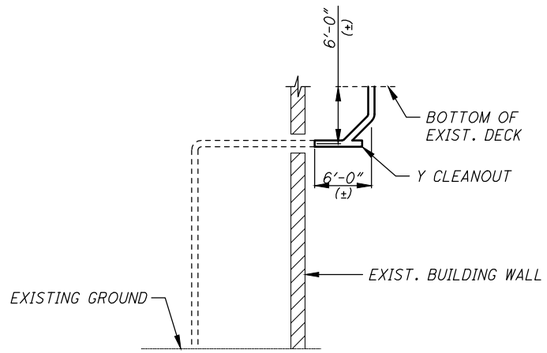


PLAN



ELEVATION - SCUPPER #1



ELEVATION - SCUPPER #4

LEGEND

		SHEET SUBTOTAL
⊗	EXISTING SCUPPER TO BE REMOVED AND REPLACED, PER ITEM 518 - SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN	2 EA.
△	EXISTING SCUPPER TO BE REHABILITATED, PER ITEM 518 - SCUPPER, MISC.: SCUPPER REHABILITATION	1 EA.
▢	EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE	5 EA.
≡≡≡	EXISTING 8" STEEL DOWNSPOUT TO REMAIN	
═══	PROPOSED 8" GALVANIZED STEEL DOWNSPOUT, TO REPLACE EXISTING PIPE	19 LF

NOTES

1. EXISTING DOWNSPOUTS AT SCUPPERS #1, #2, AND #4 TO BE CLEANED PER ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE, ONLY.
2. FOR TYPICAL SCUPPER REMOVAL AND REPLACEMENT DETAILS, SEE SHEET 105/129.
3. FOR TYPICAL SCUPPER REHABILITATION DETAILS, SEE SHEET 106/129.

HORIZONTAL SCALE IN FEET
0 8 16 32

CALCULATED IMF
CHECKED MJL

DRAINAGE REPAIR DETAILS
PROSPECT AVENUE (UNITS 1 - 4)

CUY-TOWER CITY BRIDGES

107
129

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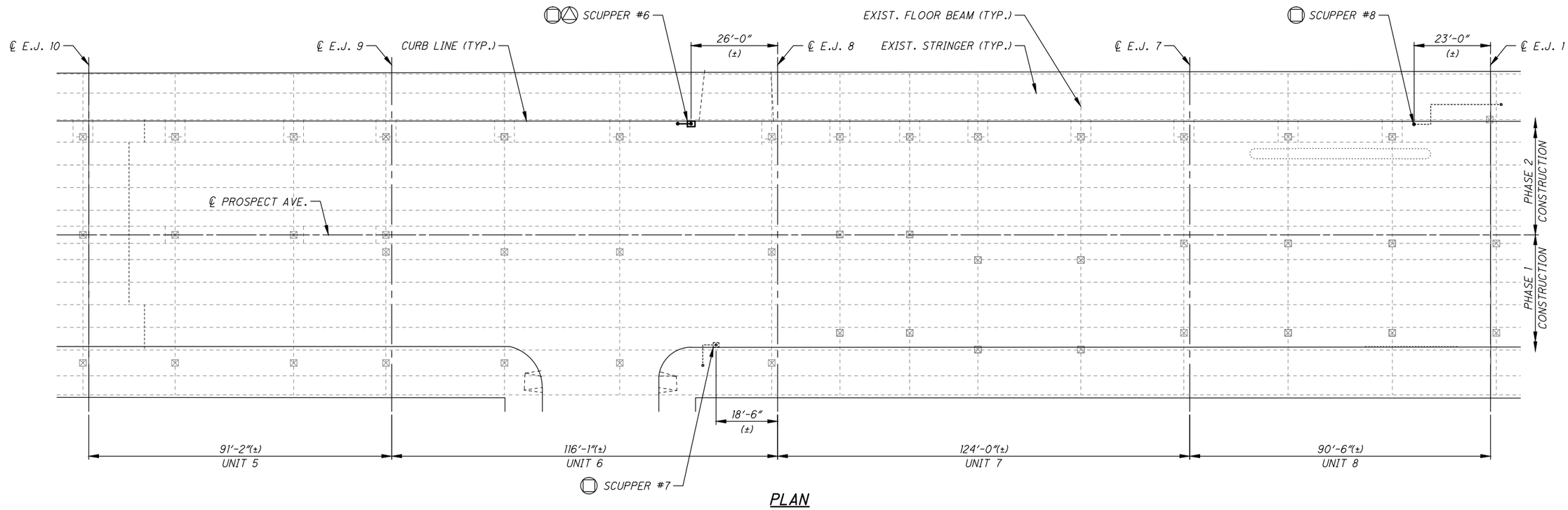
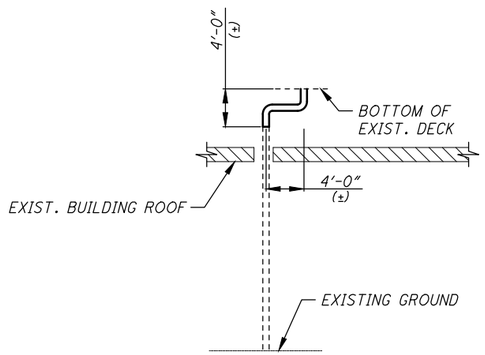


PLAN



ELEVATION - SCUPPER #6

LEGEND

		SHEET SUBTOTAL
△	EXISTING SCUPPER TO BE REHABILITATED, PER ITEM 518 - SCUPPER, MISC.: SCUPPER REHABILITATION	1 EA.
▢	EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE	3 EA.
:::	EXISTING 8″ STEEL DOWNSPOUT TO REMAIN	
═	PROPOSED 8″ GALVANIZED STEEL DOWNSPOUT, TO REPLACE EXISTING PIPE	8 LF

NOTES

1. FOR TYPICAL SCUPPER REHABILITATION DETAILS, SEE SHEET 106/129.

HORIZONTAL SCALE IN FEET
0 8 16 32

CALCULATED IMF
CHECKED MJL

DRAINAGE REPAIR DETAILS
PROSPECT AVENUE (UNITS 5 - 8)

CUY-TOWER CITY BRIDGES

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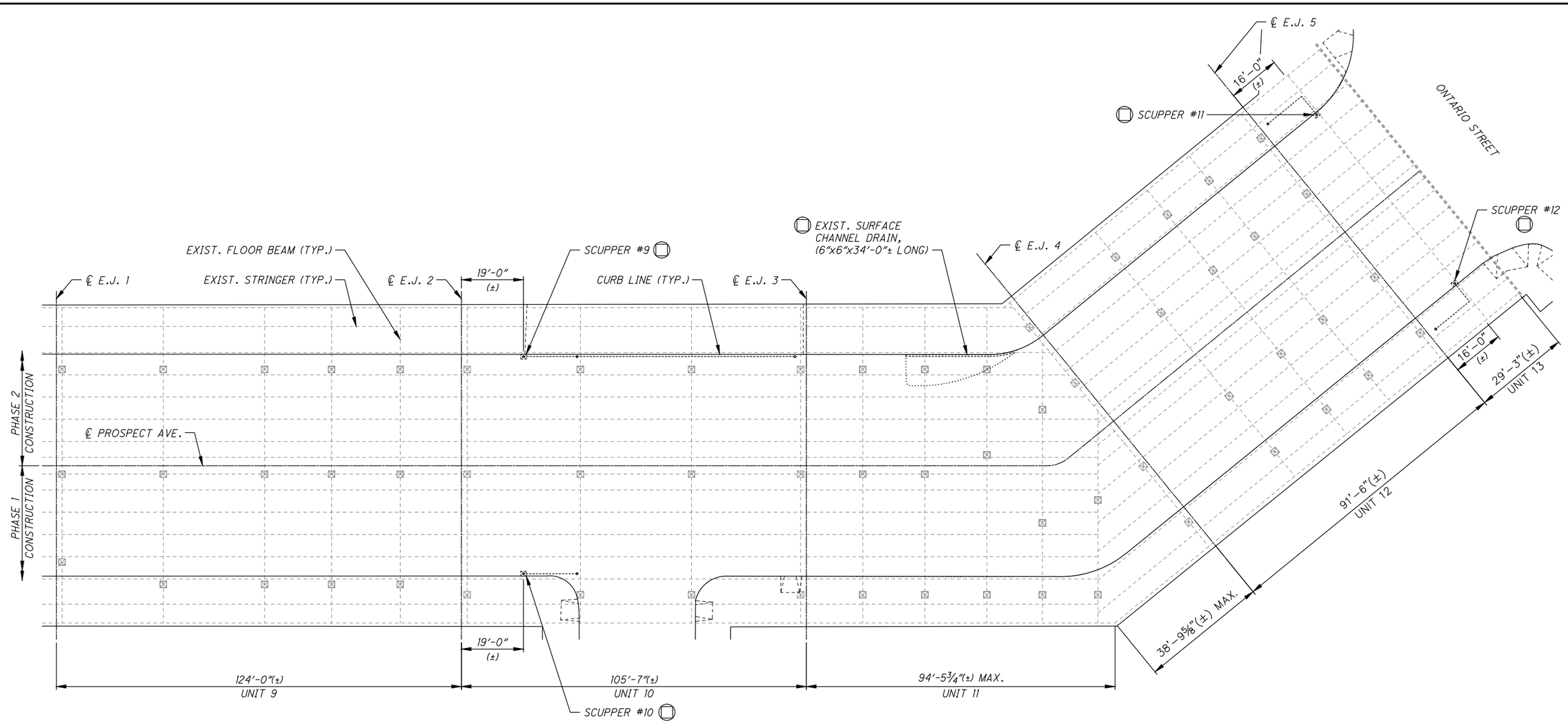

PLAN

LEGEND

		SHEET SUBTOTAL
◯	EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE	5 EA.

NOTES

1. EXISTING CHANNEL DRAIN IS ONLY TO BE CLEANED UNDER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING, THERE IS NO DOWNSPOUT PRESENT TO CLEAN.
2. FOR TYPICAL SCUPPER REHABILITATION DETAILS, SEE SHEET 106/129.

HORIZONTAL SCALE IN FEET
0 8 16 32

CALCULATED IMF
CHECKED MJL

DRAINAGE REPAIR DETAILS
PROSPECT AVENUE (UNITS 9 - 13)

CUY-TOWER CITY BRIDGES

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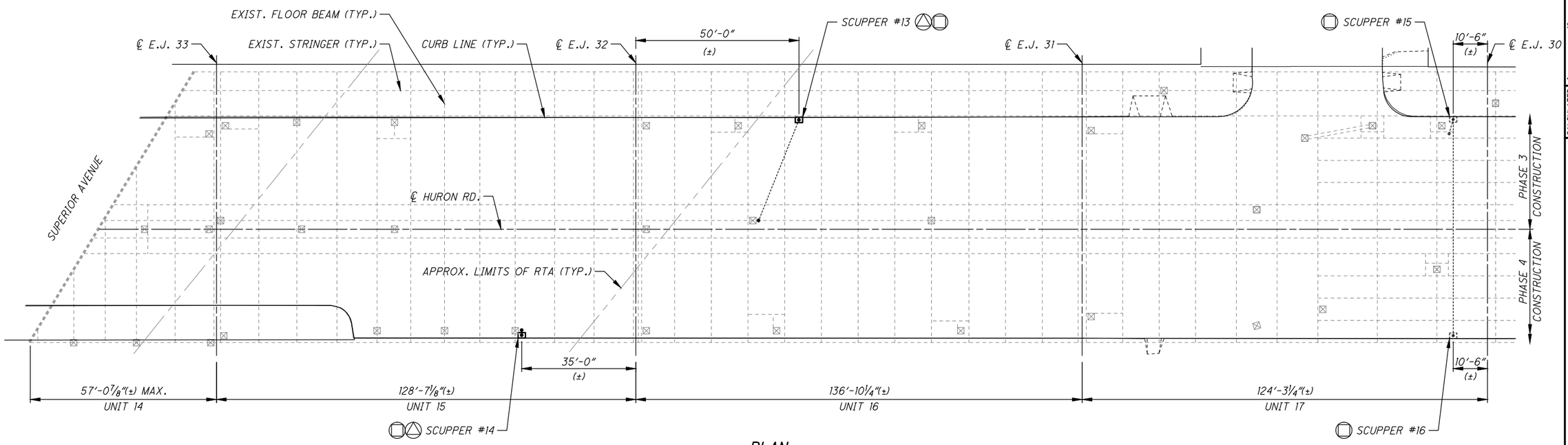
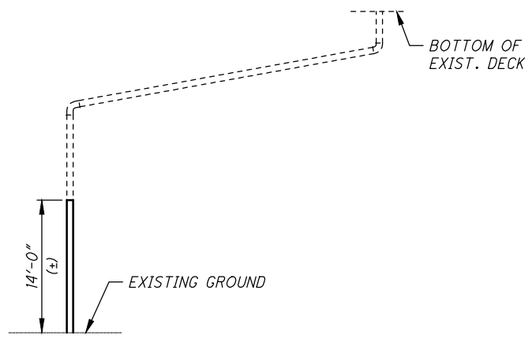
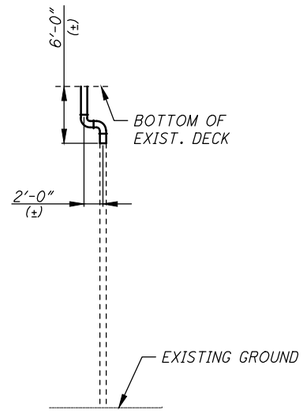


PLAN



ELEVATION - SCUPPER #13



ELEVATION - SCUPPER #14

LEGEND

		SHEET SUBTOTAL
△	EXISTING SCUPPER TO BE REHABILITATED, PER ITEM 518 - SCUPPER, MISC.: SCUPPER REHABILITATION	2 EA.
□	EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE	4 EA.
≡≡≡	EXISTING 8" STEEL DOWNSPOUT TO REMAIN	
═══	PROPOSED 8" GALVANIZED STEEL DOWNSPOUT, TO REPLACE EXISTING PIPE	20 LF

NOTES

1. FOR TYPICAL SCUPPER REHABILITATION DETAILS, SEE SHEET 106/129.

CALCULATED IMF
CHECKED MJL

HORIZONTAL SCALE IN FEET
0 8 16 32

DRAINAGE REPAIR DETAILS
HURON ROAD (UNITS 14 - 17)

CUY-TOWER CITY BRIDGES

110
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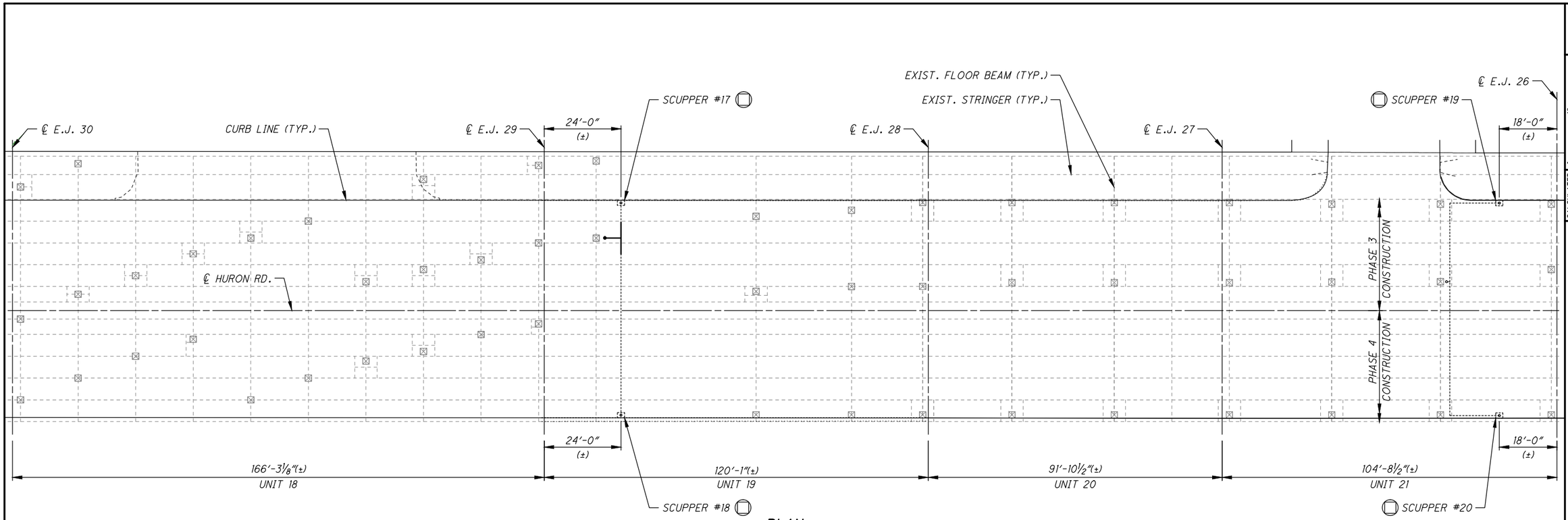
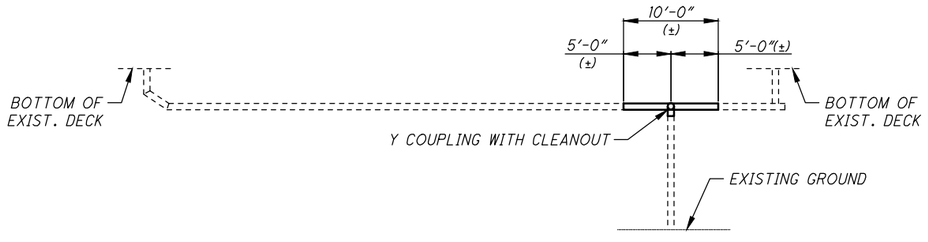


PLAN



ELEVATION - SCUPPER #18

ELEVATION - SCUPPER #17

LEGEND

		SHEET SUBTOTAL
◯	EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE	4 EA.
- - -	EXISTING 8" STEEL DOWNSPOUT TO REMAIN	
═	PROPOSED 8" GALVANIZED STEEL DOWNSPOUT, TO REPLACE EXISTING PIPE	10 LF

HORIZONTAL SCALE IN FEET
0 8 16 32

CALCULATED IMF
CHECKED MJL

DRAINAGE REPAIR DETAILS
HURON ROAD (UNIT2 18 - 21)

CUY-TOWER CITY BRIDGES

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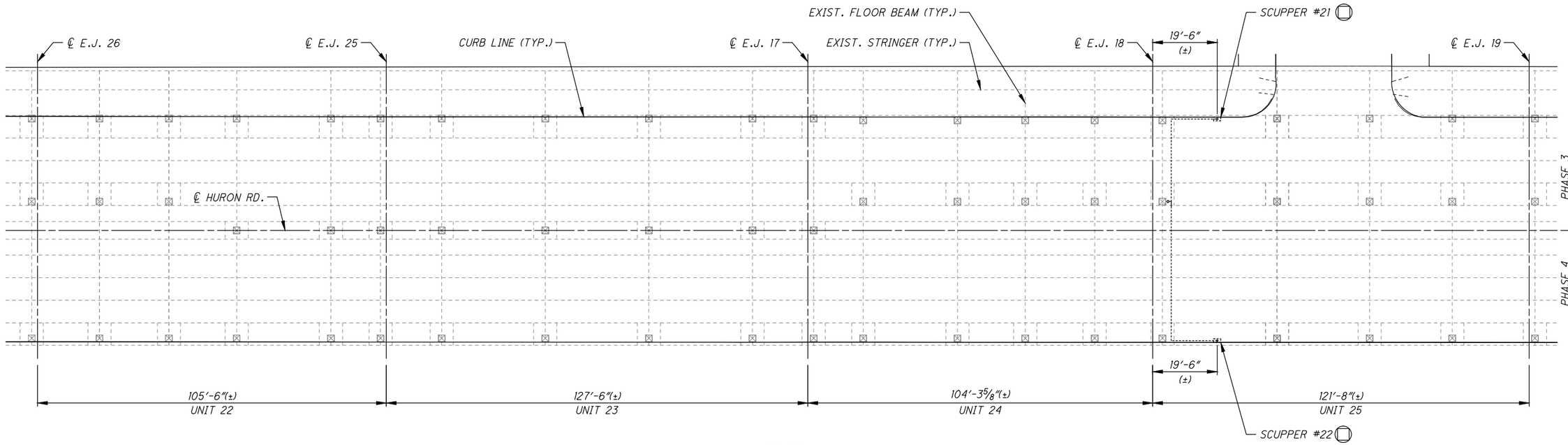

PLAN

LEGEND

		SHEET SUBTOTAL
▢	EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE	2 EA.

HORIZONTAL SCALE IN FEET
0 8 16 32

CALCULATED IMF
CHECKED MJL

DRAINAGE REPAIR DETAILS
HURON ROAD (UNITS 22 - 25)

CUY-TOWER CITY BRIDGES

112
129

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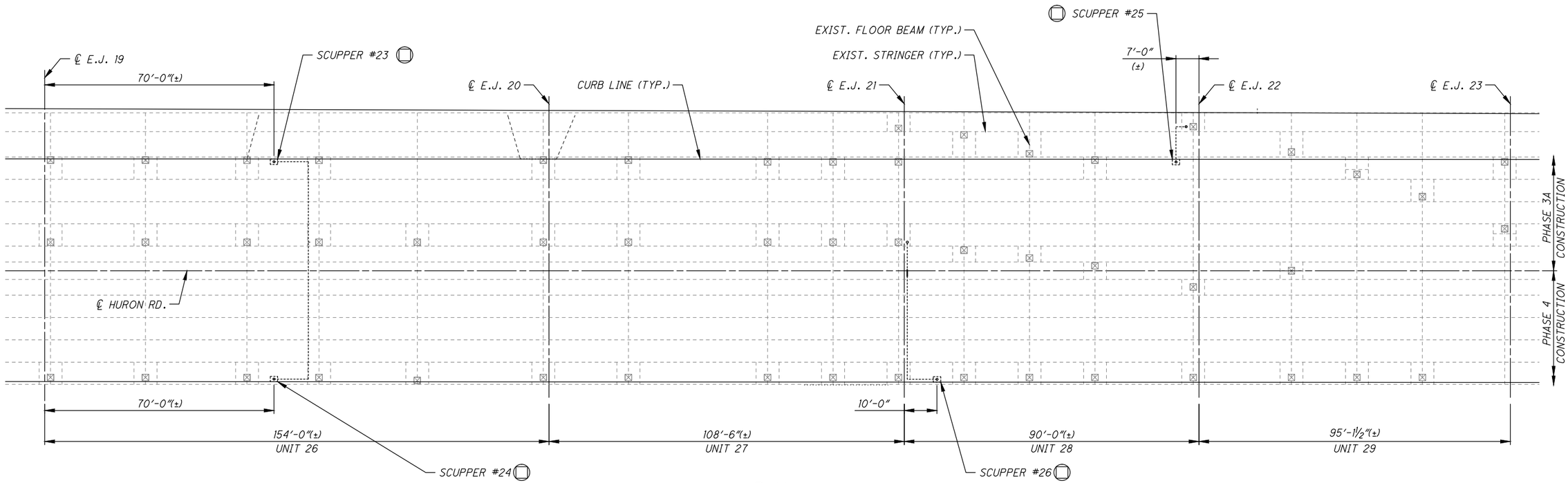
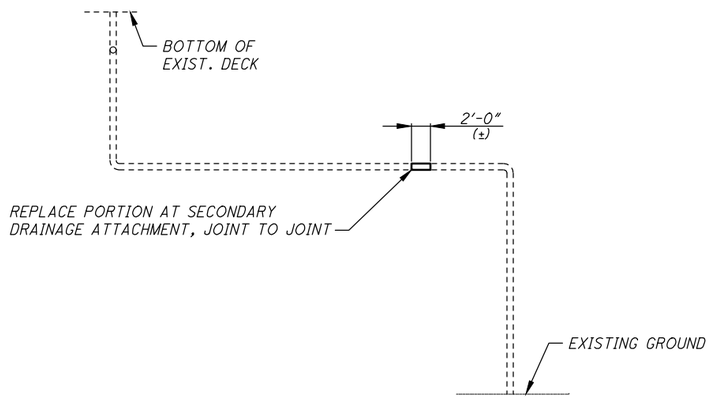


PLAN



ELEVATION - SCUPPER #26

LEGEND

		SHEET SUBTOTAL
▢	EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE	4 EA.
:::	EXISTING 8" STEEL DOWNSPOUT TO REMAIN	
═	PROPOSED 8" GALVANIZED STEEL DOWNSPOUT, TO REPLACE EXISTING PIPE	2 LF

HORIZONTAL SCALE IN FEET
0 8 16 32

CALCULATED IMF
CHECKED MJL

DRAINAGE REPAIR DETAILS
HURON ROAD (UNITS 26 - 29)

CUY-TOWER CITY BRIDGES

113
129

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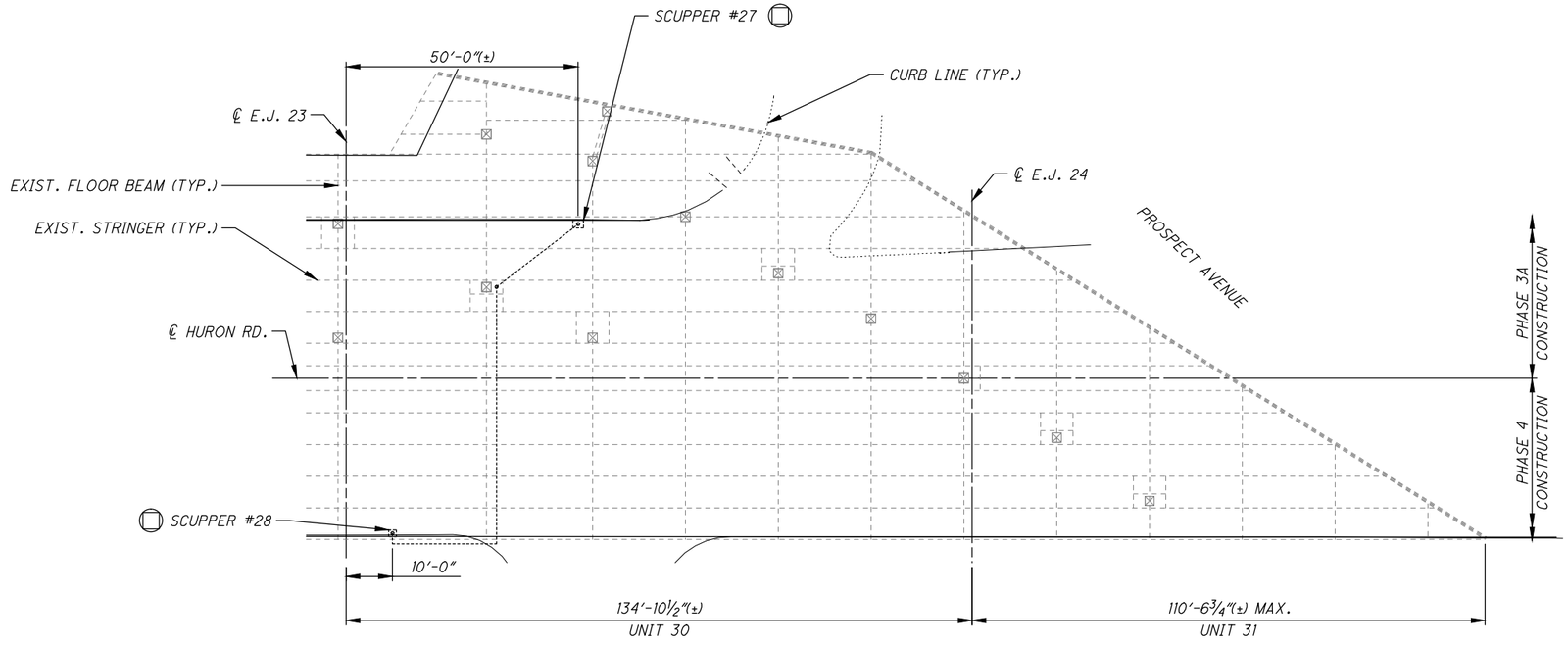

PLAN

LEGEND

		SHEET SUBTOTAL
▢	EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE	2 EA.

HORIZONTAL SCALE IN FEET
0 8 16 32

CALCULATED IMF
CHECKED MJL

DRAINAGE REPAIR DETAILS
HURON ROAD (UNITS 30 - 31)

CUY-TOWER CITY BRIDGES

114
129

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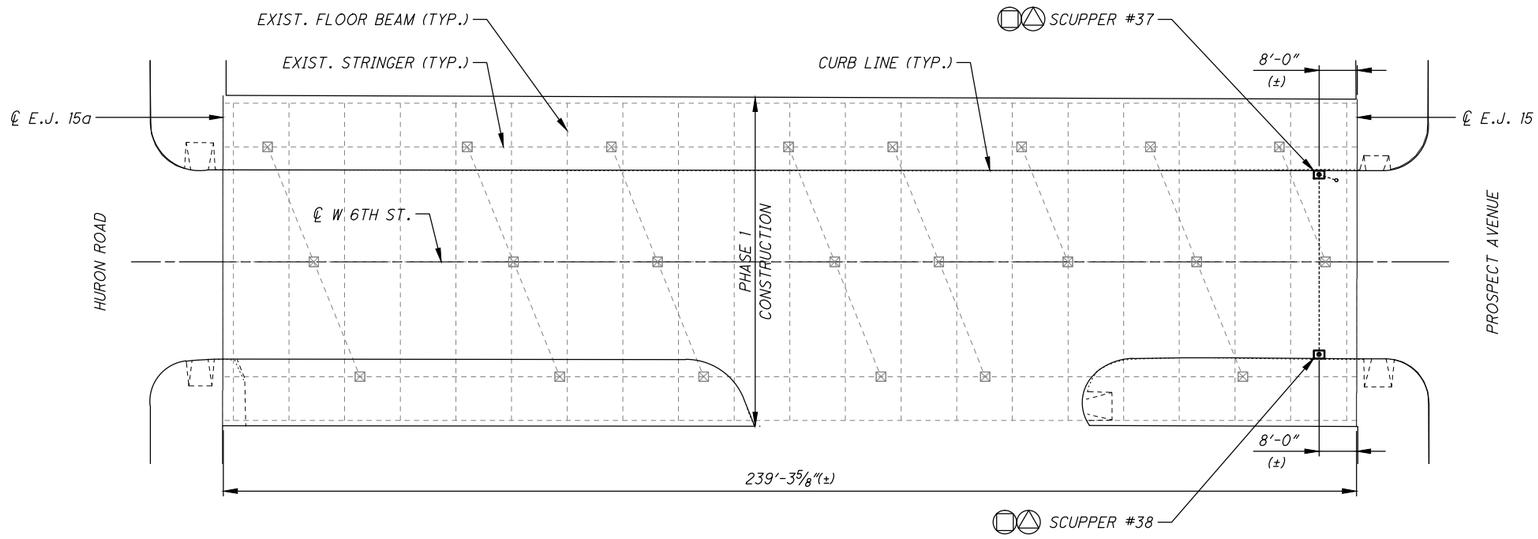

PLAN

LEGEND

		SHEET SUBTOTAL
△	EXISTING SCUPPER TO BE REHABILITATED, PER ITEM 518 - SCUPPER, MISC.: SCUPPER REHABILITATION	2 EA.
□	EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE	2 EA.

NOTES

1. FOR TYPICAL SCUPPER REHABILITATION DETAILS, SEE SHEET 106/129.

N

0 8 16 32
HORIZONTAL SCALE IN FEET

CALCULATED IMF
CHECKED MJL

DRAINAGE REPAIR DETAILS W. 6TH STREET

CUY-TOWER CITY BRIDGES

115
129

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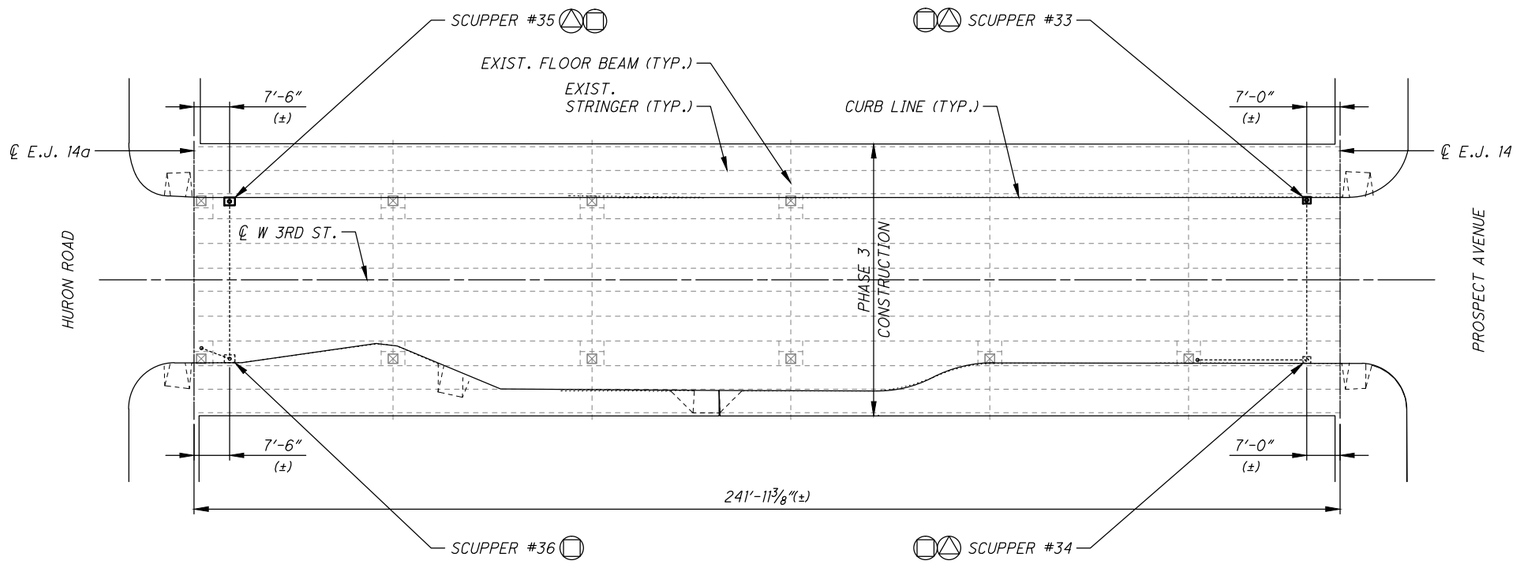

PLAN

LEGEND

	SHEET SUBTOTAL
EXISTING SCUPPER TO BE REHABILITATED, PER ITEM 518 - SCUPPER, MISC.: SCUPPER REHABILITATION	3 EA.
EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE	4 EA.

NOTES

1. FOR TYPICAL SCUPPER REHABILITATION DETAILS, SEE SHEET 106/129.

HORIZONTAL SCALE IN FEET
0 8 16 32

CALCULATED IMF
CHECKED MJL

DRAINAGE REPAIR DETAILS
W. 3RD STREET

CUY-TOWER CITY BRIDGES

116
129

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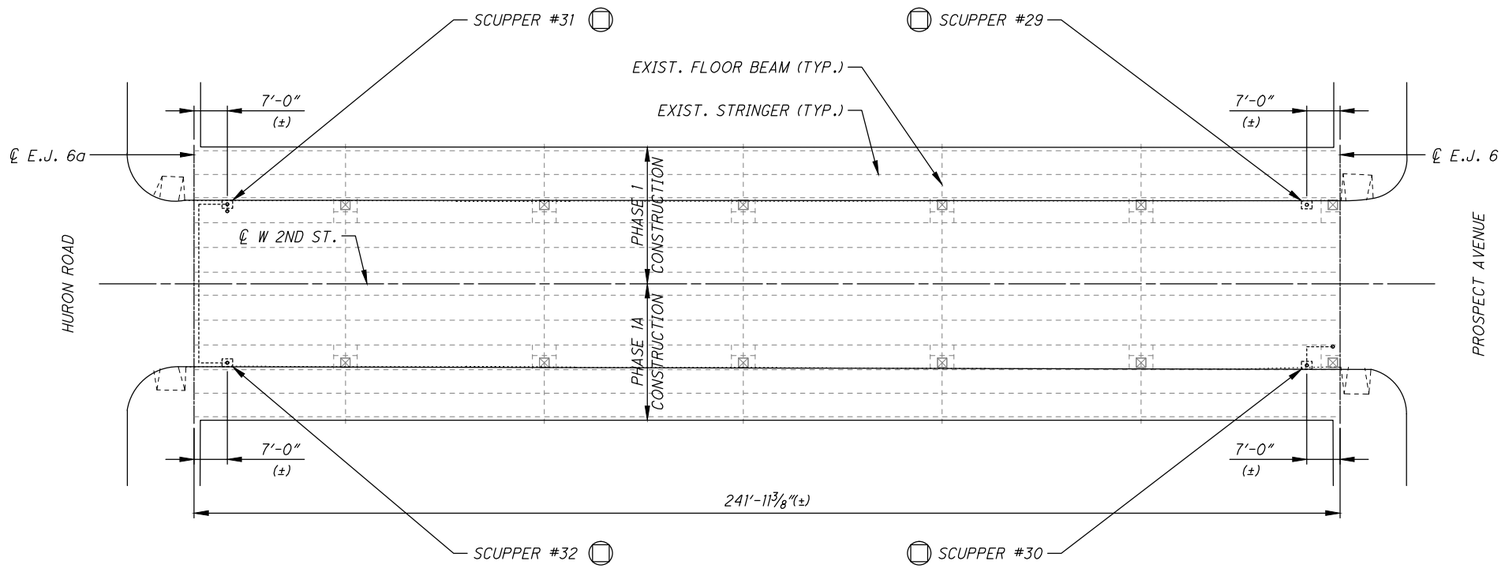

PLAN

LEGEND

EXISTING SCUPPER TO BE CLEANED, PER ITEM 202 - REMOVAL, MISC.: SCUPPER CLEANING & ITEM 202 - REMOVAL, MISC.: DOWNSPOUT CLEAN AND TELEVISE

SHEET SUBTOTAL

4 EA.

DRAINAGE REPAIR DETAILS W. 2ND STREET

CUY-TOWER CITY BRIDGES

CALCULATED IMF
CHECKED MJL

HORIZONTAL SCALE IN FEET
0 8 16 32

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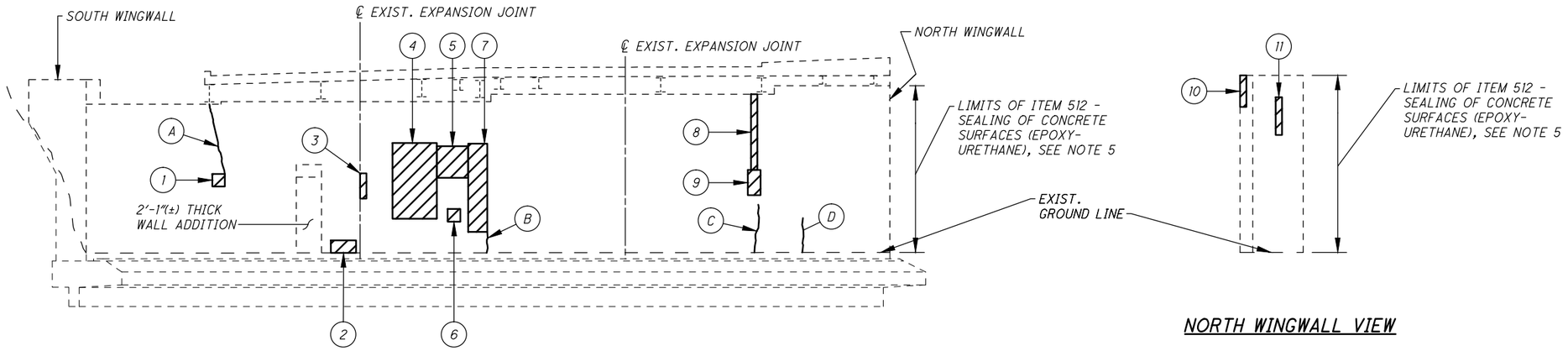


HURON ROAD - WEST ABUTMENT ELEVATION

NORTH WINGWALL VIEW

PATCHING QUANTITIES		
LOC.	WIDTH x HEIGHT	AREA (SF)
1	2'-0" x 2'-0"	4.00
2	4'-0" x 2'-0"	8.00
3	1'-0" x 4'-0"	4.00
4	7'-0" x 12'-0"	84.00
5	5'-0" x 5'-0"	25.00
6	2'-0" x 2'-0"	4.00
7	3'-0" x 14'-0"	42.00
8	1'-0" x 12'-0"	12.00
9	2'-0" x 4'-0"	8.00
10	1'-0" x 5'-0"	5.00
11	1'-0" x 6'-0"	6.00
TOTAL		202.00
ESTIMATE		402*

* - SEE NOTE 3

CRACK REPAIR QUANTITIES	
LOC.	LENGTH (FT)
A	10.00
B	2.00
C	4.00
D	3.00
TOTAL	19.00
ESTIMATE	69**

** - SEE NOTE 4

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY- URETHANE) QUANTITIES	
LOC.	AREA (SY)
W. ABUT.	282
TOTAL	282

ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION) QUANTITIES	
LOC.	AREA (SY)
W. ABUT.	117
TOTAL	117

LEGEND

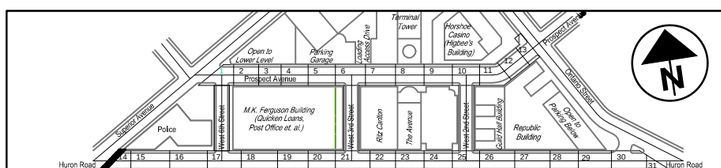
(#) CONCRETE REPAIR IDENTIFICATION

(X) CRACK REPAIR IDENTIFICATION

DELAMINATED CONCRETE, TO BE REPAIRED PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

NOTES

1. REPAIR ALL CRACKS PER ITEM 512 - CONCRETE REPAIR BY EPOXY INJECTION
2. A PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION AND CRACKS WAS PERFORMED IN AUGUST 2014. THE EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.
3. ESTIMATED PATCHING QUANTITY HAS BEEN INCREASED BY 200 SF TO ACCOUNT FOR FURTHER DETERIORATION.
4. ESTIMATED CRACK REPAIR QUANTITY HAS BEEN INCREASED BY 50 FT TO ACCOUNT FOR FURTHER DETERIORATION.
5. IN ADDITION TO THE LIMITS SHOWN, APPLY ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION) 10'-0" VERTICALLY FROM THE GROUND LINE.



KEY PLAN
NOT TO SCALE

HURON ROAD - WEST ABUTMENT

BRIDGE NO. CUY-HURON-4023M
HURON ROAD OVER VARIOUS PROPERTIES

CUY-TOWER CITY BRIDGES

DESIGNED	DRAWN	REVIEWED	DATE
IMF	IMF	PAT	11/9/15
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BPS		1869442	

118
129

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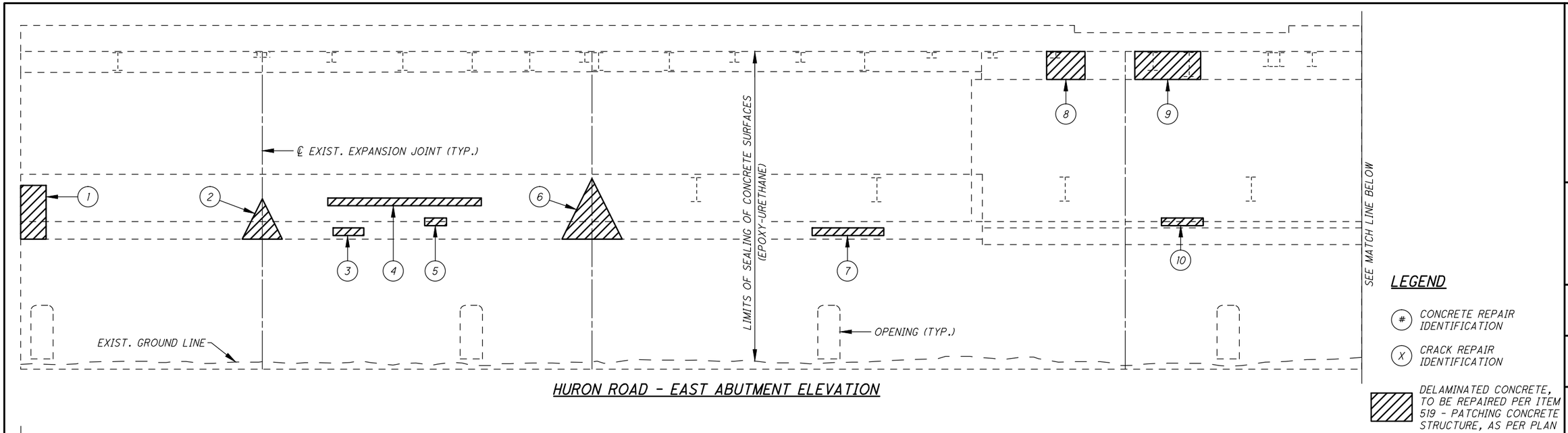
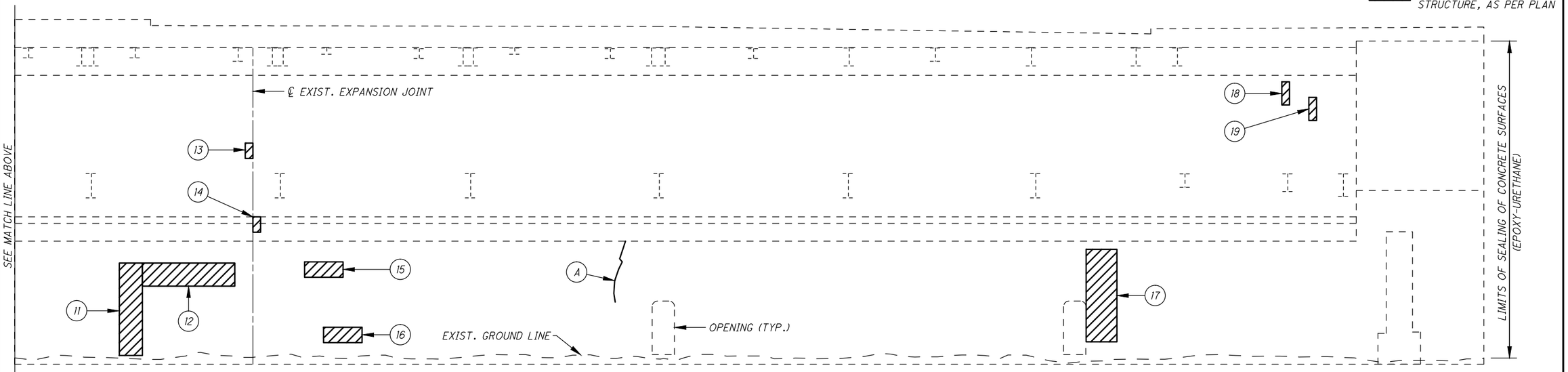


HURON ROAD - EAST ABUTMENT ELEVATION

LEGEND

- (#) CONCRETE REPAIR IDENTIFICATION
- (X) CRACK REPAIR IDENTIFICATION
- DELAMINATED CONCRETE, TO BE REPAIRED PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN



HURON ROAD - EAST ABUTMENT ELEVATION

PATCHING QUANTITIES					
LOC.	WIDTH x HEIGHT	AREA (SF)	LOC.	WIDTH x HEIGHT	AREA (SF)
1	3'-0" x 8'-0"	24.00	11	3'-0" x 12'-0"	36.00
2	4'-0" x 6'-0"	24.00	12	12'-0" x 3'-0"	36.00
3	4'-0" x 1'-0"	4.00	13	1'-0" x 2'-0"	2.00
4	24'-0" x 1'-0"	24.00	14	1'-0" x 2'-0"	2.00
5	2'-0" x 1'-0"	2.00	15	5'-0" x 2'-0"	10.00
6	4'-0" x 8'-0"	32.00	16	5'-0" x 2'-0"	10.00
7	9'-0" x 1'-0"	9.00	17	4'-0" x 12'-0"	48.00
8	5'-0" x 3'-0"	15.00	18	1'-0" x 3'-0"	3.00
9	8'-0" x 3'-0"	24.00	19	1'-0" x 3'-0"	3.00
10	6'-0" x 1'-0"	6.00	TOTAL		314.00
			ESTIMATE		514*

* - SEE NOTE 3

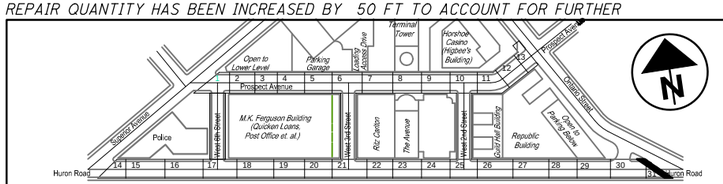
CRACK REPAIR QUANTITIES	
LOC.	LENGTH (FT)
A	10.00
TOTAL	10.00
ESTIMATE	60**

** - SEE NOTE 4

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY- URETHANE) QUANTITIES	
LOC.	AREA (SY)
E. ABUT.	528
TOTAL	528

NOTES

1. REPAIR ALL CRACKS PER ITEM 512 - CONCRETE REPAIR BY EPOXY INJECTION.
2. PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION AND CRACKS WAS PERFORMED BY VISUAL INSPECTION ONLY, IN AUGUST 2014. THE EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.
3. ESTIMATED PATCHING QUANTITY HAS BEEN INCREASED BY 200 SF TO ACCOUNT FOR FURTHER DETERIORATION AND DELAMINATION.
4. ESTIMATED CRACK REPAIR QUANTITY HAS BEEN INCREASED BY 50 FT TO ACCOUNT FOR FURTHER DETERIORATION.



KEY PLAN
NOT TO SCALE

DESIGNED	DRAWN	REVIEWED	DATE
IMF	IMF	PAT	11/9/15
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BPS		1869442	

HURON ROAD - EAST ABUTMENT
BRIDGE NO. CUY-HURON-4023M
HURON ROAD OVER VARIOUS PROPERTIES

CUY-TOWER CITY BRIDGES

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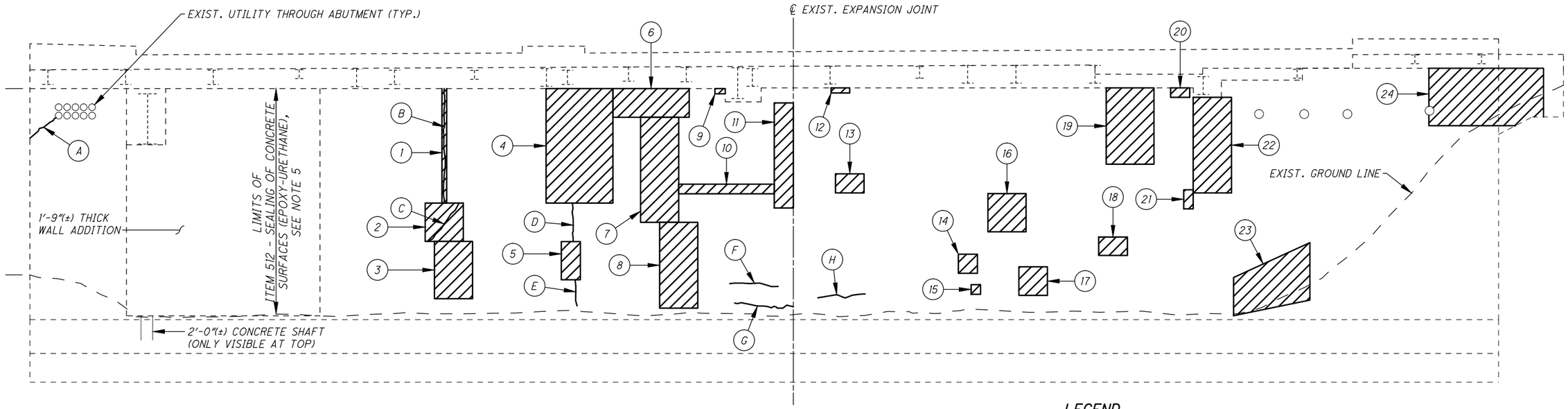


PROSPECT AVENUE - WEST ABUTMENT ELEVATION

LEGEND

(#) CONCRETE REPAIR IDENTIFICATION

(X) CRACK REPAIR IDENTIFICATION

DELAMINATED CONCRETE, TO BE REPAIRED PER ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN

PATCHING QUANTITIES					
LOC.	WIDTH x HEIGHT	AREA (SF)	LOC.	WIDTH x HEIGHT	AREA (SF)
1	0'-6" x 12'-0"	6.00	13	3'-0" x 2'-0"	6.00
2	4'-0" x 4'-0"	16.00	14	2'-0" x 2'-0"	4.00
3	4'-0" x 6'-0"	24.00	15	1'-0" x 1'-0"	1.00
4	7'-0" x 12'-0"	84.00	16	4'-0" x 4'-0"	16.00
5	2'-0" x 4'-0"	8.00	17	3'-0" x 3'-0"	9.00
6	8'-0" x 3'-0"	24.00	18	3'-0" x 1'-0"	3.00
7	4'-0" x 11'-0"	44.00	19	5'-0" x 8'-0"	40.00
8	4'-0" x 9'-0"	36.00	20	2'-0" x 1'-0"	2.00
9	1'-0" x 1'-0"	1.00	21	1'-0" x 2'-0"	2.00
10	10'-0" x 1'-0"	10.00	22	4'-0" x 10'-0"	40.00
11	2'-0" x 11'-0"	22.00	23	8'-0" x 5'-0"	40.00
12	2'-0" x 1'-0"	2.00	24	12'-0" x 6'-0"	72.00
			TOTAL		512.00
			ESTIMATE		712*

* - SEE NOTE 3

CRACK REPAIR QUANTITIES	
LOC.	LENGTH (FT)
A	4.00
B	12.00
C	5.00
D	4.00
E	4.00
F	4.00
G	6.00
H	2.00
TOTAL	41.00
ESTIMATE	91**

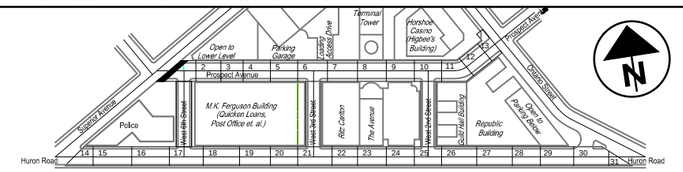
** - SEE NOTE 4

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY- URETHANE) QUANTITIES	
LOC.	AREA (SY)
W. ABUT.	556
TOTAL	556

ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION) QUANTITIES	
LOC.	AREA (SY)
W. ABUT.	164
TOTAL	164

NOTES

1. REPAIR ALL CRACKS PER ITEM 512 - CONCRETE REPAIR BY EPOXY INJECTION.
2. PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION AND CRACKS WAS PERFORMED IN AUGUST 2014. THE EXACT DIMENSIONS AND LOCATIONS OF REPAIRS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITIES.
3. ESTIMATED PATCHING QUANTITY HAS BEEN INCREASED BY 200 SF TO ACCOUNT FOR FURTHER DETERIORATION.
4. ESTIMATED CRACK REPAIR QUANTITY HAS BEEN INCREASED BY 50 FT TO ACCOUNT FOR FURTHER DETERIORATION.
5. IN ADDITION TO THE LIMITS SHOWN, APPLY ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION) 10'-0" VERTICALLY FROM GROUND LINE.
6. PROSPECT AVEUNE EAST ABUTMENT IS LOCATED IN RTA AND CASINO AREAS, INACCESSIBLE AT TIME OF PHYSICAL INSPECTION.



KEY PLAN
NOT TO SCALE

DESIGNED	DRAWN	REVIEWED	DATE
IMF	IMF	PAT	11/9/15
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BPS		1870025	

PROSPECT AVENUE - WEST ABUTMENT
BRIDGE NO. CUY-PROSPECT-4028M
PROSPECT AVENUE OVER VARIOUS PROPERTIES

CUY-TOWER CITY BRIDGES

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PARKING METER HEAD REMOVAL

THE CITY OF CLEVELAND SHALL REMOVE PARKING METER HEADS PRIOR TO THE CONTRACTOR INITIATING PROJECT CONSTRUCTION. IF METER HEADS ARE STILL PRESENT DURING THE START OF CONSTRUCTION, CONTACT CHAS McKNIGHT, CITY OF CLEVELAND, DIVISION OF PARKING SERVICES, AT (216)-551-7902.

ITEM 630 SIGNING, MISC.: PARKING METER POST

THE ITEM SHALL CONSIST OF FURNISHING AND INSTALLING GROUND MOUNTED SUPPORT, PIPE FOR THE USE OF PARKING METER POSTS.

THIS NOTE REQUIRES A GALVANIZED STEEL PIPE MOUNTED IN A GALVANIZED STEEL FLANGE AS SHOWN IN THE PARKING METER MOUNT DETAIL ON THIS SHEET. CONTRACTOR SHALL FURNISH A 2 INCH NOMINAL DIAMETER PIPE, 42 INCH IN LENGTH; 5/8 INCH ANCHOR BOLTS, 4 INCHES IN LENGTH; AND A 6 INCH FLANGE WITH MATERIALS CONFORMING TO ODOT CMS 711.01 AND GALVANIZING CONFORMING TO 711.02.

INSTALL EPOXY ANCHORING SYSTEM WITH THREADED RODS FOLLOWING THE MANUFACTURER'S SPECIFICATIONS. CARE SHALL BE TAKEN WHEN DRILLING THE HOLES FOR THE ANCHORING SYSTEM, NOT TO EXCEED 3 1/8" DEEP FROM THE EXISTING SIDEWALK SURFACE AND POSTS SHALL NOT BE CORED INTO THE SIDEWALK, BOTH ACTIONS MAY DAMAGE EXISTING WATERPROOFING. INSTALL EPOXY ANCHORING SYSTEM PRIOR TO SEALING CONCRETE SIDEWALK SUFACES.

INSTALL FLANGE USING GROUTED ANCHOR BOLTS, AFTER SEALING CONCRETE SIDEWALK SURFACES. INSTALL PIPE IN FLANGE AND FILL PIPE WITH MAGNACRETE, OR APPROVED EQUAL, INSURING THE PIPE IS LEVEL AND PLUMB. CAP PIPE FOR FUTURE INSTALLATION OF PARKING METER HEAD BY CITY OF CLEVELAND.

PAYMENT FOR ITEM 630 - SIGNING, MISC.: PARKING METER POST SHALL BE MADE AT THE UNIT PRICE FOR EACH PARKING METER POST INSTALLED INCLUDING THE MATERIALS FURNISHED BY THE CONTRACTOR MENTIONED IN THIS NOTE, AND INSTALLATION INCLUDING ANY INCIDENTALS. THE FOLLOWING ESTIMATED QUANTITY SHALL BE INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED IN THIS NOTE:

ITEM 630 SIGNING, MISC.: PARKING METER POST - 23 EACH.

ITEM 630 GROUND MOUNTED POST SUPPORTS, AS PER PLAN

THE CONTRACTOR SHALL USE A STANDARD NO. 2, NO. 3, OR A NO. 4 POST FOR ALL SIGNS THAT THE PLANS REQUIRE. THE CONTRACTOR SHALL USE A CITY OF CLEVELAND APPROVED SIGN BASE AND CONCRETE ANCHOR KIT TO SECURE THE POST TO THE PROPOSED SIDEWALK. THE SIGN BASE SHALL BE COMPATIBLE WITH THE SIZE OF THE SIGN AND BE ABLE TO WITHSTAND CONSTANT WIND SPEED OF NINETY (90) MILES PER HOUR AND GUSTS OF ONE-HUNDRED TWENTY (120) MILES PER HOUR.

THE SIGN BASE SHALL BE INSTALLED AS PER THE INSTALLATION PROCEDURE FOR ITEM 630 SIGNING, MISC.: PARKING METER POST, AS NOTED ON THIS SHEET, PRIOR TO SEALING OF CONCRETE SURFACES.

PAYMENT FOR ITEM 630 GROUND MOUNTED POST SUPPORTS, AS PER PLAN SHALL BE MADE AT THE UNIT PRICE BID FOR LINEAR FEET INSTALLED INCLUDING POST AND BASE MATERIALS AND ANY INCIDENTALS REQUIRED FOR PROPER INSTALLATION.

ITEM 630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, AS PER PLAN

THE CONTRACTOR SHALL REMOVE ALL GROUND MOUNTED POSTS THAT THE PLANS REQUIRE. THE CONTRACTOR MAY USE A METHOD OF REMOVAL OF HIS CHOOSING AT EACH INDIVIDUAL POST, BOUNDED BY THE STIPULATIONS ON THESE PLANS, AND THE ODOT CMS. THE CONTRACTOR SHALL BEAR RESPONSIBILITY OF ANY INCIDENTAL DAMAGE HE MAY CAUSE TO ANY PROPERTY BELONGING TO THE CITY OF CLEVELAND.

ITEM 630 REMOVAL OF GROUND MOUNTED PIPE SUPPORT AND REERECTION, AS PER PLAN

THE CONTRACTOR SHALL REMOVE ALL GROUND MOUNTED PIPES THAT THE PLANS REQUIRE. THE CONTRACTOR MAY USE A METHOD OF REMOVAL OF HIS CHOOSING AT EACH INDIVIDUAL POST, BOUNDED BY THE STIPULATIONS ON THESE PLANS, AND THE ODOT CMS. THE CONTRACTOR SHALL BEAR RESPONSIBILITY OF ANY INCIDENTAL DAMAGE HE MAY CAUSE TO ANY PROPERTY BELONGING TO THE CITY OF CLEVELAND.

THE REERECTION OF THESE POSTS SHALL FOLLOW THE INSTALLATION PROCEDURE OUTLINED ITEM 630 GROUND MOUNTED POST SUPPORTS, AS PER PLAN.

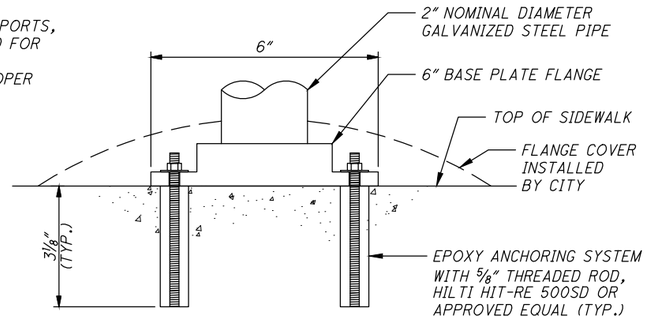
PAYMENT FOR ITEM 630 REMOVAL OF GROUND MOUNTED PIPE SUPPORT AND REERECTION, AS PER PLAN SHALL BE MADE AT THE UNIT PRICE BID PER EACH INSTALLED INCLUDING BASE MATERIALS AND ANY INCIDENTALS REQUIRED FOR PROPER INSTALLATION.

ITEM 646 - CHANNELIZING LINE, 8", AS PER PLAN

FOR THIS ITEM THE SPECIFICATIONS IN 644 AND 646 OF THE ODOT CMS ARE ALTERED TO REQUIRE A NON-CONTINUNOUS LINE. THE CHANNELIZING LINE, 8", AS PER PLAN SHALL BE A DASHED CHANNELIZING LINE WITH DASH SEGMENTS OF TWO (2) FEET FOLLOWED BY SIX (6) FEET OF GAP. THE LINE QUANTITY WILL BE MEASURED AS THE LENGTH OF COMPLETED MARKING, IN PLACE, INCLUDING THE GAPS.

ITEM 646 - CROSSWALK LINE, AS PER PLAN

THE CROSSWALK MARKING, AS PER PLAN ITEM DENOTES A "LADDER STYLE" CROSSWALK MARKING. THESE LINES SHALL BE PARALLEL TO THE DIRECTION OF TRAVEL AND TWENTY-FOUR (24) INCHES IN WIDTH. THE LINES SHALL BE SPACED AT LEAST SIX (6) FEET CENTER TO CENTER, SPACED TO AVOID STANDARD WHEEL TRACKS.



PARKING METER MOUNT DETAIL

NOTE: ITEM 630 GROUND MOUNTED POST SUPPORTS, AS PER PLAN AND ITEM 630 REMOVAL OF GROUND MOUNTED PIPE SUPPORT AND REERECTION SHALL FOLLOW A SIMILAR INSTALLATION PROCEDURE. DIMENSIONS SHALL BE AS PER SPECIFIC ITEM INSTALLED.

ITEM 809 - STOP-BAR RADAR DETECTION, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING ONE STOP BAR DETECTION UNIT CAPABLE OF INTERSECTION DETECTION CONTROL UTILIZING ABOVE GROUND DIGITAL WAVE RADAR TECHNIQUES. THE UNIT SHALL BE NON-INTRUSIVE. THE UNIT SHALL PROVIDE AT LEAST SIXTEEN DETECTION ZONES SIMULTANEOUSLY FOR INTERSECTION CONTROL. ONE UNIT SHALL BE PROVIDED FOR THE EASTBOUND APPROACH OF HURON ROAD TO ONTARIO STREET. THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING LIST OF FEATURES AND CAPABILITIES:

1. THE UNIT SHALL PROVIDE ACCURATE PRESENCE-DETECTION OF BOTH MOVING AND STOPPED VEHICLES.

2. THE UNIT SHALL BE MOUNTED IN A FORWARD-FIRE OR SIDE-FIRE POSITION, LOOKING AT EITHER APPROACHING OR DEPARTING TRAFFIC AND SHALL ONLY DETECT VEHICLES IN ONE DIRECTION OF TRAVEL.

3. THE UNIT SHALL BE TESTED TO MEET NEMA TS2 ENVIRONMENTAL STANDARDS AND MAINTAIN ACCURATE PERFORMANCE IN THE FOLLOWING OPERATING CONDITIONS:
   - RAIN UP TO 1 IN. (2.5 CM) PER HOUR
   - FREEZING RAIN
   - SNOW
   - WIND
   - DUST
   - FOG
   - CHANGING TEMPERATURE
   - CHANGING LIGHTING

4. THE RADAR DESIGN FOR EACH UNIT SHALL CONFORM TO THE FOLLOWING:
   - OPERATING FREQUENCY: 24.0-24.25 GHZ (K-BAND)
   - NO MANUAL TUNING TO CIRCUITRY
   - TRANSMITS MODULATED SIGNALS GENERATED DIGITALLY
   - NO TEMPERATURE-BASED COMPENSATION NECESSARY
   - BANDWIDTH STABLE WITHIN 1%
   - RF CHANNELS: 8
   - SELF-TEST FOR VERIFYING HARDWARE FUNCTIONALITY
   - DIAGNOSTICS MODE FOR VERIFYING SYSTEM FUNCTIONALITY

5. THE UNIT SHALL INCLUDE A SIMPLE SETUP ROUTINE THAT SHALL AUTOMATICALLY CONFIGURE AND CALIBRATE THE UNIT FOR PROPER OPERATION DURING INSTALLATION. THE UNIT SHALL ALSO BE CAPABLE OF BEING PROGRAMMED AND UPDATED FROM A LAPTOP COMPUTER OR OTHER PORTABLE PROGRAMMING DEVICE, SUCH AS A POCKET PC, VIA A LOCAL OR REMOTE ETHERNET CONNECTION USING VENDOR SUPPLIED SOFTWARE. THE SOFTWARE SHALL SUPPORT TCP/IP CONNECTIVITY, UNIT CONFIGURATION BACK-UP AND RESTORE, AND REAL-TIME TRAFFIC VISUALIZATION FOR PERFORMANCE VERIFICATION AND TRAFFIC DISPLAY. THE GRAPHICAL USER INTERFACE SHALL OPERATE ON A WINDOWS PLATFORM.

ITEM 809 - STOP-BAR RADAR DETECTION, AS PER PLAN (CONT.)

6. THE UNIT SHALL HAVE THE ABILITY TO UPGRADE FIRMWARE.

7. THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.

8. SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER, SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.

9. POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET. THE UNIT SHALL CONSUME LESS THAN 10 WATTS AND OPERATE FROM A DC INPUT BETWEEN 9 VDC AND 28 VDC. COMPLETE AND AUTOMATIC RECOVERY FROM A POWER FAILURE SHALL BE WITHIN 15 SECONDS AFTER RESUMPTION OF NORMAL POWER.

10. ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.

11. THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION, AND MAINTENANCE OF THE UNIT.

12. THE UNIT SHALL COME WITH A 2-YEAR MANUFACTURER SUPPLIED WARRANTY.

THERE ARE SIX (6) EXISTING POWER HEAD LOOP DETECTORS LOCATED AT THE EAST BOUND HURON ROAD STOP BAR AT THE INTERSECTION OF ONTARIO STREET. THESE DETECTORS AND THEIR DETECTOR UNITS SHOULD BE REMOVED.

IN THE CASE THAT IT IS NECESSARY TO REMOVE THE LOOP DETECTOR LEAD IN CABLE FOR THE LOOPS TO BE REMOVED FROM THE EXISTING CONDUITS TO MAKE ROOM FOR THE RADAR DETECTOR UNIT CABLE, THIS WORK SHALL ALSO BE INCLUDED IN THE UNIT COST FOR THIS ITEM. SEE BELOW FOR THE LOCATION OF THE DETECTION ZONES.

PAYMENT FOR ITEM 633 STOP BAR DETECTION RADAR SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT, AND CONNECTIONS TESTED AND ACCEPTED. THE FOLLOWING QUANTITY SHALL BE INCLUDED IN THE GENERAL SUMMARY:

ITEM 809 STOP-BAR RADAR DETECTION, AS PER PLAN 1 EACH.

RADAR DETECTION ZONE SUMMARY

DETECTOR	DETECTION ZONE*	DETECTION SIZE	PULSE OR PRESENCE	DELAY (seconds)	ASSOCIATED CONTROLLER PHASE	MOVEMENT	STATION FRONT CORNER NEAR CENTERLINE
R1	Z11	6X20	PRESENCE	3	4	EB	30+28, 2.5' RT
	Z12	6X20	PRESENCE	3	4	EB	30+03, 2.5' RT
	Z13	6X20	PRESENCE	3	4	EB RT	30+44, 13.5' RT
	Z14	6X20	PRESENCE	3	4	EB RT	30+19, 13.5' RT
	Z15	6X20	PRESENCE	10	4	EB RT	30+60, 25' RT
	Z16	6X20	PRESENCE	10	4	EB RT	30+35, 25' RT

* REPLACES LOOP DETECTORS L11-L16 ORIGINALLY INSTALLED AS SHOWN IN D12-TSG-FY2013, PID 88276.

CALCULATED JJG
CHECKED CRP

TRAFFIC GENERAL NOTES

CUY-TOWER CITY BRIDGES

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SHEET NO.	REFERENCE NO.	STATION	SIDE	CODE	SIZE (FEET)	630 GROUND MOUNTED SUPPORT, NO. 2 POST, APP FT	630 GROUND MOUNTED SUPPORT, NO. 3 POST, APP FT	630 ONE WAY SUPPORT, NO. 3 POST	630 SIGN POST REFLECTOR EACH	630 SIGN SUPPORT ASSEMBLY, POLE MOUNTED EACH	630 SIGN, FLAT SHEET SQ FT	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	630 REMOVAL OF GROUND MOUNTED SIGN AND REERECTION EACH	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, APP EACH	630 REMOVAL OF GROUND MOUNTED PIPE SUPPORT AND REERECTION, APP EACH
		PROSPECT													
127	S-1	10+92	LT	R3-H8a-48	4' X 2.5'					1	10.0				
				D3-1-54	4' X 0.7'					1	2.7				
	S-2	12+14	LT	SPECIAL	1' X 1.5'	10.5					1.5	1		1	
				SPECIAL	1' X 1.5'						1.5	1			
	S-3	12+50	LT	R3-H8a-48	4' X 2.5'					1	10.0				
				D3-1-54	4' X 0.7'					1	2.7				
	S-4	13+25	RT	SPECIAL	EXISTING								1		1
	S-5	13+74	RT	SPECIAL	EXISTING								1		1
	S-6	14+08	LT	R3-7R-30	2.5' X 2.5'					1	6.3				
	S-7	14+60	RT	SPECIAL	EXISTING								1		1
	S-7A	15+70	RT	SPECIAL	EXISTING					2			2		
	S-7B	19+14	LT	W11-2/W16-7P	EXISTING					2			2		
	S-7C	19+39	RT	W11-2/W16-7P	EXISTING					2			2		
	S-7D	19+06	RT	SPECIAL	EXISTING	9.0							1		
	S-8	20+32	RT	SPECIAL	1' X 1.5'	9.0					1.5	1		1	
				HURON											
128	S-9	10+66	LT	R3-H8a-48	4' X 2.5'	10.0					10.0	1		2	
	S-10	12+38	LT	R3-H8a-48	4' X 2.5'					1	10.0	1			
	S-11	21+43	LT	SPECIAL	1' X 1.5'	10.5					1.5	1		1	
				R7-108-12	1' X 1.5'						1.5	1			
	S-12	28+94	LT	R1-2-36	3' X 3'	10.5			1		3.9	1		1	
	S-13	29+26	LT	R5-1-30	2.5' X 2.5'		10.5		1		6.3	1		1	
				R1-2-36	3' X 3'				1		3.9	1			
		W. 6TH													
129	S-14	00+54	LT	R3-H8bq-36	3' X 2.5'		11.5				7.5	1		1	
				R7-1-12	1' X 1.5'						1.5	1			
	S-15	01+38	LT	R3-H8bq-36	3' X 2.5'		10.0				7.5	1		1	
	S-16	02+40	RT	R7-1-12	1' X 1.5'	9.5					1.5	1		1	
				R7-201ap-12	1' X 0.5'						0.5	1			
	S-17	02+83	RT	R1-1-30	2.5' X 2.5'		12.0		1		6.3	1		1	
				R7-1-12	1' X 1.5'						1.5	1			
				R7-201ap-12	1' X 0.5'						0.5	1			
		W. 3RD													
	S-18	00+54	LT	R7-1-12	1' X 1.5'	10.5					1.5	1		1	
				SPECIAL	1' X 1.5'						1.5	1			
	S-19	00+85	RT	R7-1-12	1' X 1.5'	12.0					1.5	1		1	
				SPECIAL	1' X 1.5'						1.5	1			
				SPECIAL	1' X 1.5'						1.5	1			
	S-20	02+60	RT	R7-1-12	1' X 1.5'	12.0					1.5	1		1	
				SPECIAL	1' X 1.5'						1.5	1			
				SPECIAL	1' X 1.5'						1.5	1			
	S-20A	02+41	LT	R7-1-12	1' X 1.5'					1	1.5	1			
	S-21	02+85	RT	R5-1-30	2.5' X 2.5'		10.0		1		6.3	1		1	
	S-22	02+86	LT	R6-1R-36	3' X 1'		11.0	2			3.0	1		1	
				R6-1L-36	3' X 1'						3.0	1			
				R5-1-30	2.5' X 2.5'				1		6.3	1			
	SUBTOTALS CARRIED TO SHEET 123					103.5	65.0	2	6	13	132.0	31	10	16	3

CALCULATED SA
CHECKED CRP

SIGNING SUBSUMMARY - 1

CUY-TOWER CITY BRIDGES

122
129

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SHEET NO.	REFERENCE NO.	STATION	SIDE	CODE	SIZE (FEET)	630 GROUND MOUNTED SUPPORT, NO. 2 POST, APP FT	630 GROUND MOUNTED SUPPORT, NO. 3 POST, APP FT	630 ONE WAY SUPPORT, NO. 3 POST	630 SIGN POST REFLECTOR EACH	630 SIGN SUPPORT ASSEMBLY, POLE MOUNTED EACH	630 SIGN, FLAT SHEET SQ FT	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	630 REMOVAL OF GROUND MOUNTED SIGN AND REERECTION EACH	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, APP EACH	630 REMOVAL OF GROUND MOUNTED PIPE SUPPORT AND REERECTION, APP EACH
		W. 2ND													
129				R1-1-30	2.5' X 2.5'				1		6.3	1			
	S-23	00+53	LT	R7-108-12	1' X 1.5'		13.0				1.5	1		1	
				R7-8-12	1' X 1.5'						1.5	1			
	S-24	00+54	RT	R7-1-12	1' X 1.5'	10.5					1.5	1		1	
				SPECIAL	1' X 1.5'						1.5	1			
	S-25	01+30	RT	SPECIAL	1' X 1.5'	9.0					1.5	1		1	
				R7-1-12	1' X 1.5'						1.5	1			
	S-26	01+79	LT	SPECIAL	1' X 1.5'	12.0					1.5	1		1	
				R7-108-12	1' X 1.5'						1.5	1			
	S-27	02+55	RT	R7-1-12	1' X 1.5'	10.5					1.5	1		1	
				SPECIAL	1' X 1.5'						1.5	1			
	S-28	02+83	RT	R1-1-30	2.5' X 2.5'		11.5		1		6.3	1		1	
				R7-1-12	1' X 1.5'						1.5	1			
	S-29	02+84	LT	R7-1-12	1' X 1.5'	10.5					1.5	1		1	
				SPECIAL	1' X 1.5'						1.5	1			
SUBTOTAL						52.5	24.5	0	2	0	32.0	15	0	7	0
SUBTOTAL FROM SHEET 122						103.5	65.0	2	6	13	132.0	31	10	16	3
TOTAL CARRIED TO GENERAL SUMMARY						156.0	89.5	2	8	13	164.0	46	10	23	3

CALCULATED SA
CHECKED CRP

SIGNING SUBSUMMARY - 2

CUY-TOWER CITY BRIDGES

123
129

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SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	646 EDGE LINE, 4" (WHITE) FT	LANE LINE, 4" FT	CENTER LINE, (DOUBLE SOLID) FT	CHANNELIZING LINE, 8" FT	CHANNELIZING LINE, 8", AS PER PLAN FT	STOP LINE FT	CROSSWALK LINE FT	CROSSWALK LINE, AS PER PLAN FT	TRANSVERSE/DIAGONAL LINE (WHITE) FT	LANE ARROW EACH	DOTTED LINE, 4" (WHITE) FT
	PROSPECT														
127	CW–1	9+72		RT & LT							409				
	SL–1	10+06		LT						55					
	CW–2	10+46		LT							74				
	SL–2	10+52		LT						16					
	CL–1	10+06	22+46	RT & LT			1240								
	LL–1	9+64	17+50	RT		786									
	LL–2	9+76	17+50	RT		774									
	CH–1	10+20	12+75	LT				255							
	CH–2	10+30	12+75	LT				245							
	CHD–1	12+75	14+94	LT					219						
	CHD–2	12+75	14+94	LT					219						
	LA–1	11+18		LT										3	
	LA–2	11+83		LT										3	
	LA–3	12+49		LT										3	
	LA–4	13+18		LT										3	
	LA–5	13+86		LT										3	
	SL–3	14+84		RT						34					
	CW–3	15+10		RT & LT								312			
	SL–4	15+90		LT						34					
	LL–3	15+90	16+46	LT		56									
	LL–4	15+90	22+33	LT		643									
	EL–1	16+46	17+84	LT	150										
	TL–1	16+46	17+21	LT									99		
	EL–2	17+21	18+86	LT	180										
	CHD–3	17+50	19+26	RT					176						
	CHD–4	17+50	19+26	RT					176						
	EL–3	18+95	19+26	LT	36										
	TL–2	18+95	19+26	LT									32		
	EL–4	19+42	22+33	LT	320										
	CW–4	19+42		RT&LT								312			
	CHD–5	20+00	20+50	RT					50						
	CHD–6	20+00	20+50	RT					50						
	TL–3	20+30	21+23	LT									83		
	LA–6	20+50		RT										3	
	CH–3	20+50	22+46	RT				196							
	CH–4	20+50	22+46	RT				196							
	LA–7	21+23		RT										3	
	LA–8	21+78		RT										3	
	TL–4	22+20	22+50	LT									30		
	LA–9	22+33		RT										3	
	SL–5	22+46		RT						35					
	CW–5	22+60		RT & LT								275			
SUBTOTALS CARRIED TO SHEET 126					686	2259	1240	892	890	174	483	899	244	27	0

CALCULATED IMF
CHECKED CRP

PAVEMENT MARKING SUBSUMMARY - 1

CUY-TOWER CITY BRIDGES

124
129

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SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	646 EDGE LINE, 4" (WHITE) FT	LANE LINE, 4" FT	CENTER LINE, (DOUBLE SOLID) FT	CHANNELIZING LINE, 8" FT	CHANNELIZING LINE, 8", AS PER PLAN FT	STOP LINE FT	CROSSWALK LINE FT	CROSSWALK LINE, AS PER PLAN FT	TRANSVERSE/DIAGONAL LINE (WHITE) FT	LANE ARROW EACH	DOTTED LINE, 4" (WHITE) FT
	HURON														
128	CW–6	9+02		LT&RT								380			
	CL–2	9+36	30+17	LT&RT			2081								
	LL–5	9+36	25+53	RT		1617									
	SL–6	9+36		LT						56					
	CH–5	9+48	11+17	LT				169							
	CH–6	9+61	11+17	LT				156							
	LA–10	9+85		LT										3	
	LA–11	10+51		LT										3	
	CHD–7	11+17	13+20	LT					203						
	CHD–8	11+17	13+20	LT					203						
	LA–12	11+17		LT										3	
	LL–6	11+08	25+53	RT		1445									
	LA–13	11+83		LT										3	
	LA–14	12+49		LT										3	
	SL–7	13+10		RT						34					
	CW–7	13+36		LT&RT								312			
	DL–1	13+69	14+48	LT&RT											118
	SL–8	14+09		LT						35					
	LL–7	14+09	30+02	LT		1593									
	LL–8	14+09	29+06	LT		1497									
	CHD–9	25+53	28+53	RT					300						
	CHD–10	25+53	28+53	RT					300						
	LA–15	26+72		RT										3	
	LA–16	27+38		RT										3	
	LA–17	28+04		RT										3	
	CH–7	28+53	30+56	RT					203						
	CH–8	28+53	30+39	RT					186						
	LA–18	28+70		RT										3	
	LA–19	29+64		RT										3	
	LA–20	30+02		RT										3	
	SL–9	30+17		RT						63					
	CW–8	30+41		LT&RT								384			
	DL–2	30+41	**	LT&RT											368
	SUBTOTALS CARRIED TO SHEET 126				0	6152	2081	325	1395	188	0	1076	0	33	486

** THIS PAVEMENT MARKING ENDS ON ONTARIO STREET

CALCULATED 1MF
CHECKED CRP

PAVEMENT MARKING SUBSUMMARY - 2

CUY-TOWER CITY BRIDGES

125
129

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SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	SIDE	646 EDGE LINE, 4" (WHITE) FT	LANE LINE, 4" FT	CENTER LINE, (DOUBLE SOLID) FT	CHANNELIZING LINE, 8" FT	CHANNELIZING LINE, 8", AS PER PLAN FT	STOP LINE FT	CROSSWALK LINE FT	CROSSWALK LINE, AS PER PLAN FT	TRANSVERSE/DIAGONAL LINE (WHITE) FT	LANE ARROW EACH	DOTTED LINE, 4" (WHITE) FT
	W. 6TH														
129	CW–9	0+41		LT&RT							81				
	SL–10	0+59		LT						22					
	CL–3	0+59	2+80	LT&RT			221								
	CH–9	0+59	2+06	LT				147							
	LA–21	0+65		LT										2	
	LA–22	1+25		LT										2	
	LA–23	1+85		LT										2	
	CHD–11	2+06	2+85	LT					79						
	SL–11	2+80		RT						18					
	CW–10	2+90		LT&RT							80				
	W. 3RD														
	CW–11	0+41		LT&RT							71				
	SL–12	2+80		LT&RT						35					
	CW–12	2+90		LT&RT							71				
	W. 2ND														
	CW–13	0+39		LT&RT							73				
	SL–13	0+57		LT						18					
	SL–14	2+80		RT						18					
	CW–14	2+90		LT&RT							72				
	CL–4	0+57	2+80	LT&RT			223								
SUBTOTAL					0	0	444	147	79	111	448	0	0	6	0
SUBTOTAL FROM PAGE 124					686	2259	1240	892	890	174	483	899	244	27	0
SUBTOTAL FROM PAGE 125					0	6152	2081	325	1395	188	0	1076	0	33	486
TOTALS CARRIED TO GENERAL SUMMARY					686	8411	3765	1364	2364	473	931	1975	244	66	486

CALCULATED 1MF
CHECKED CRP

PAVEMENT MARKING SUBSUMMARY - 3

CUY-TOWER CITY BRIDGES

126
129

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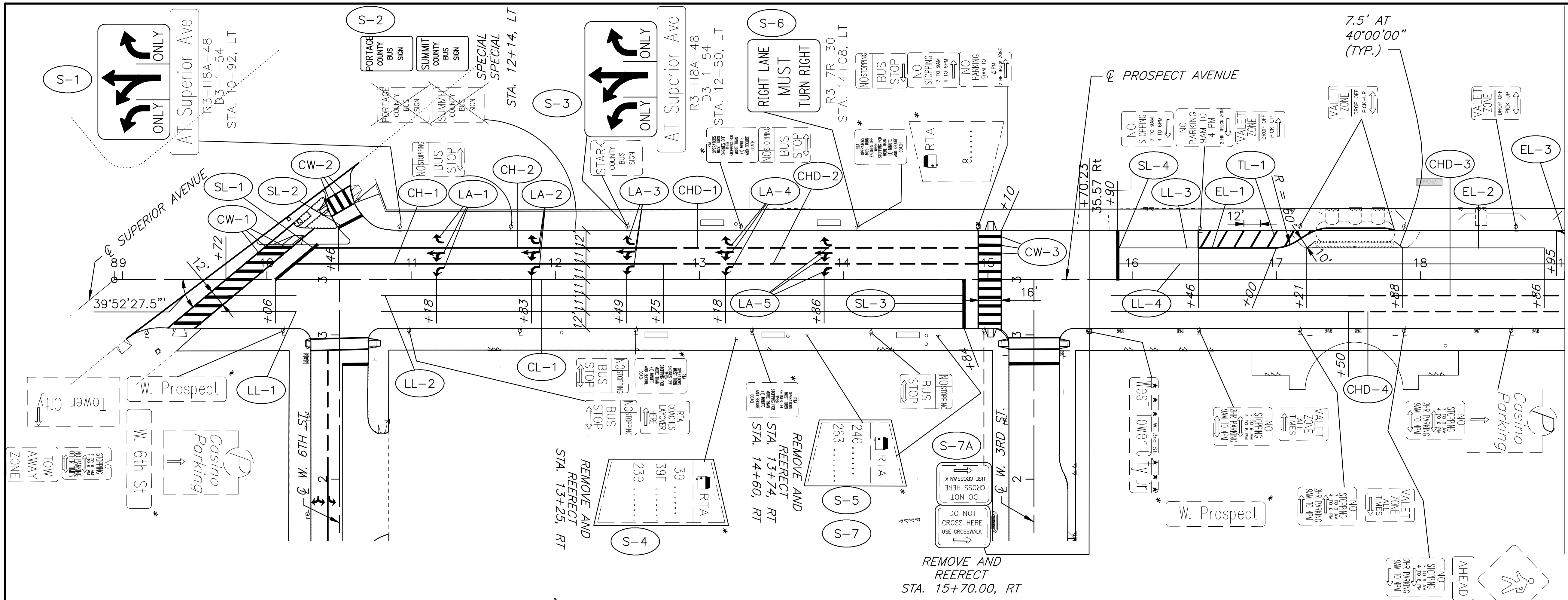
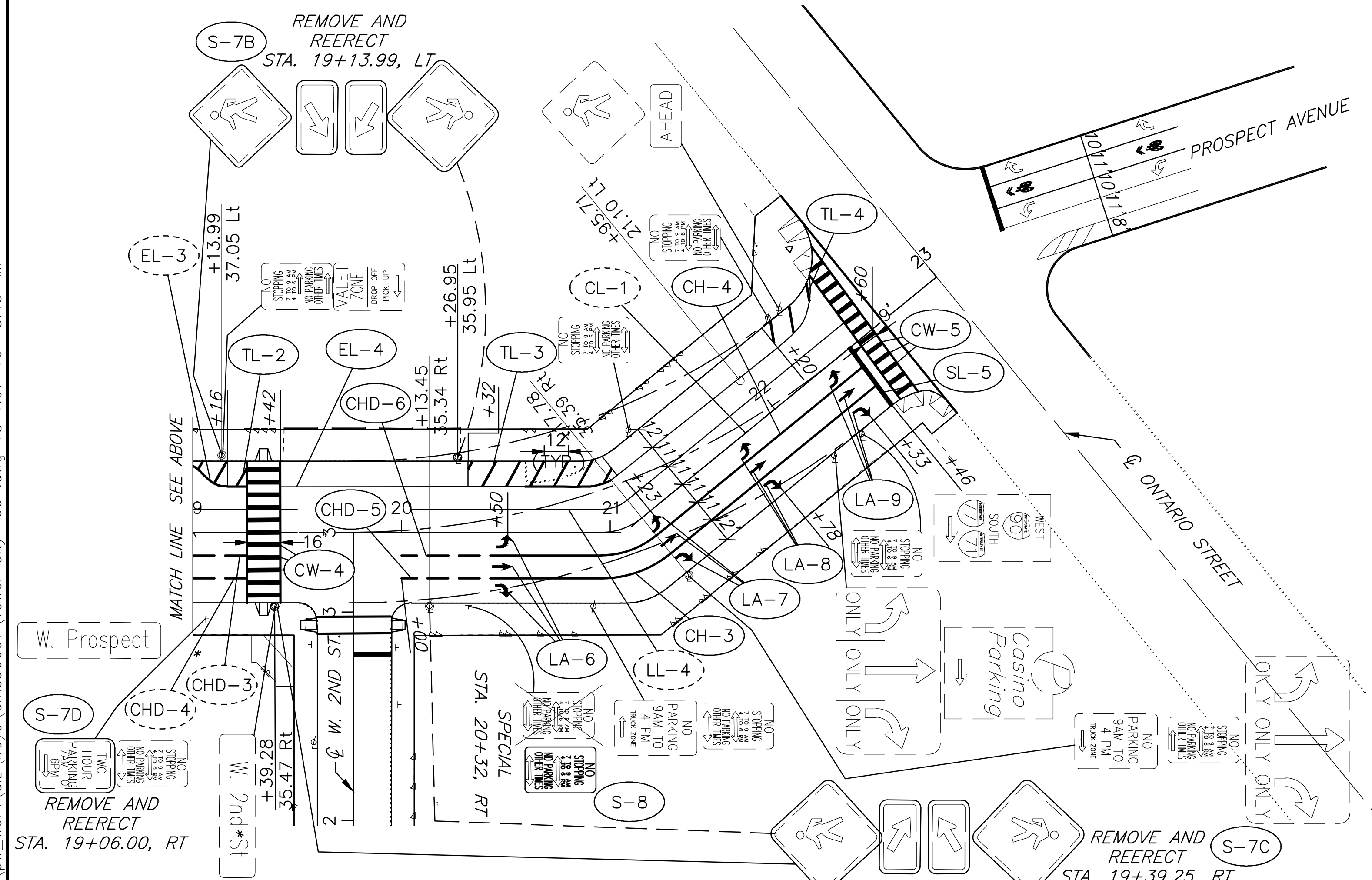




PARKING METER LEGEND

PM PARKING METER TO BE REMOVED AND REPLACED PER ITEM 630 SIGNING, MISC.: PARKING METER POST

PAVEMENT MARKING LEGEND

- (EL) EDGE LINE (WHITE)
- (LL) LANE LINE
- (CL) CENTER LINE
- (CH) CHANNELIZING LINE (WHITE)
- (CHD) CHANNELIZING LINE, DOTTED (WHITE)
- (SL) STOP LINE
- (CW) CROSSWALK LINE
- (TL) TRANSVERSE LINE (WHITE)
- (LA) LANE ARROW
- (DL) DOTTED LINE

CHANNELIZING LINE, DOTTED (TYPICAL)

3' — 9' — 3'

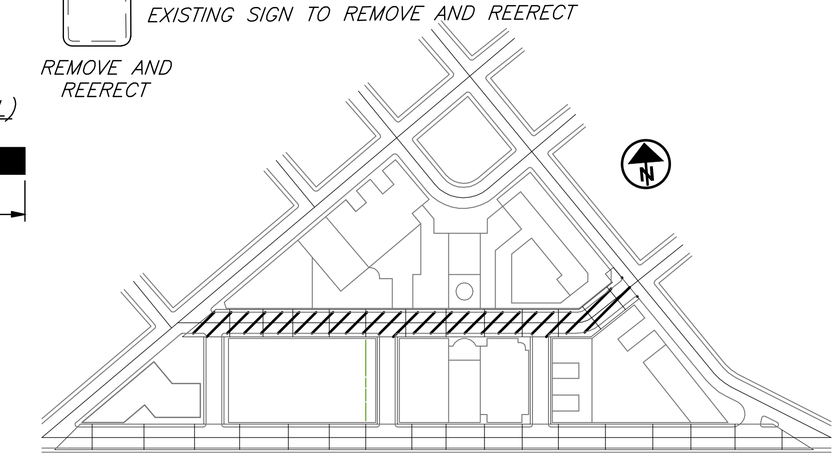
SIGN LEGEND

- * DOUBLE-FACED SIGN
- (S) SIGN
- EXISTING SIGN FOR REMOVAL AND DISPOSAL
- EXISTING SIGN TO REMAIN
- PROPOSED SIGN
- EXISTING SIGN TO REMOVE AND REERECT

REMOVE AND REERECT

PARKING METER LOCATIONS**
STA. 15+90, RT
STA. 16+34, RT
STA. 17+36, RT
STA. 17+56, RT
STA. 18+38, RT
STA. 18+78, RT

** LOCATIONS TO BE FIELD VERIFIED AND APPROVED BY CITY OF CLEVELAND



KEY PLAN
NOT TO SCALE

AREA SHOWN

HORIZONTAL SCALE IN FEET (0 20 40 80)

CALCULATED JJG
CHECKED CRP

PROSPECT AVENUE SIGN AND PAVEMENT MARKING PLAN

CUY-TOWER CITY BRIDGES

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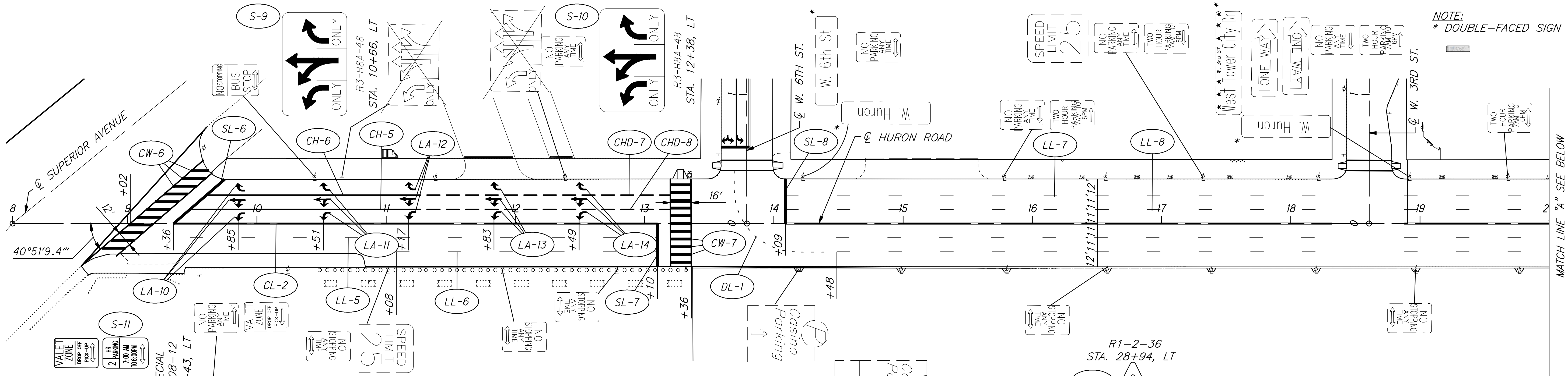
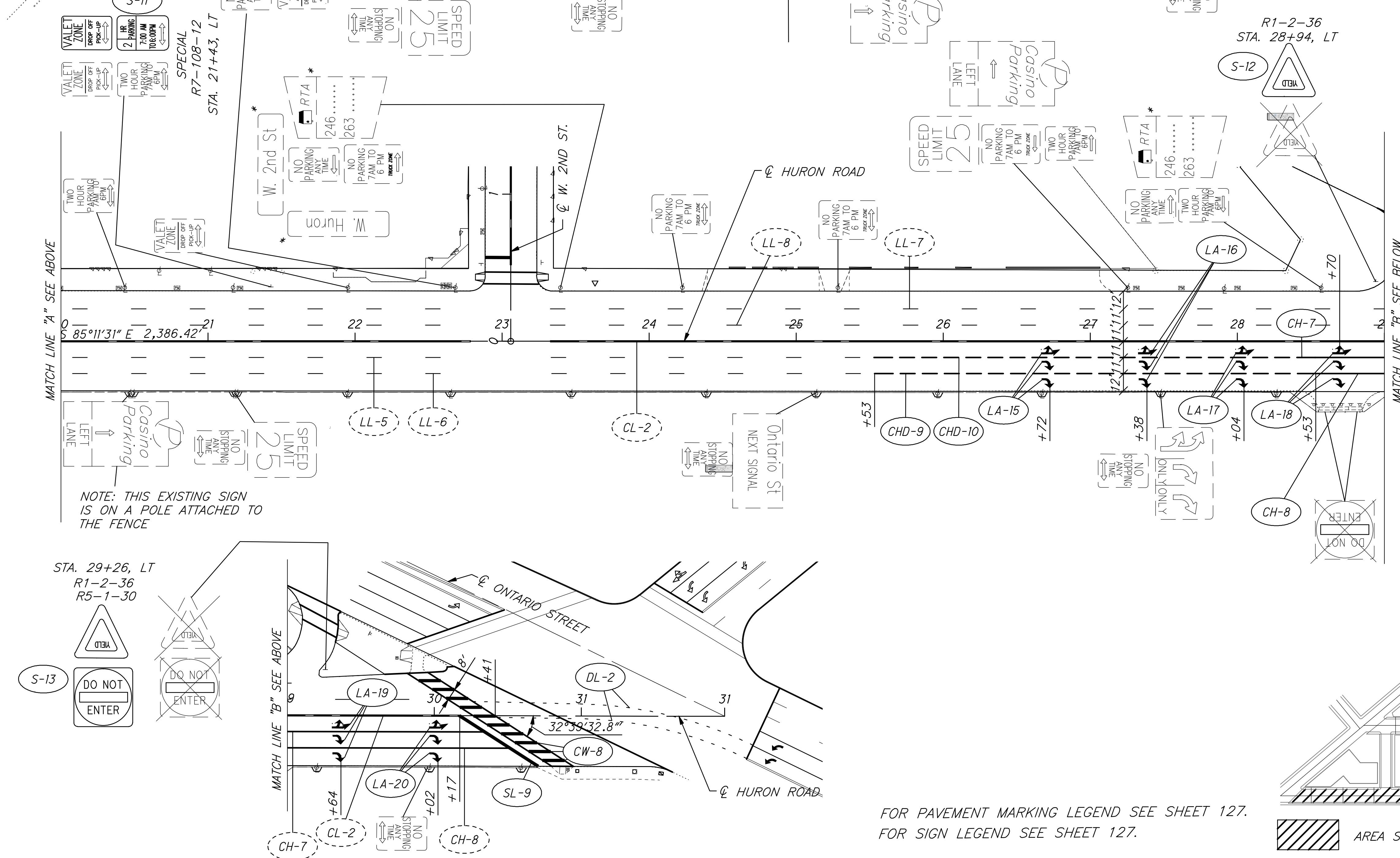
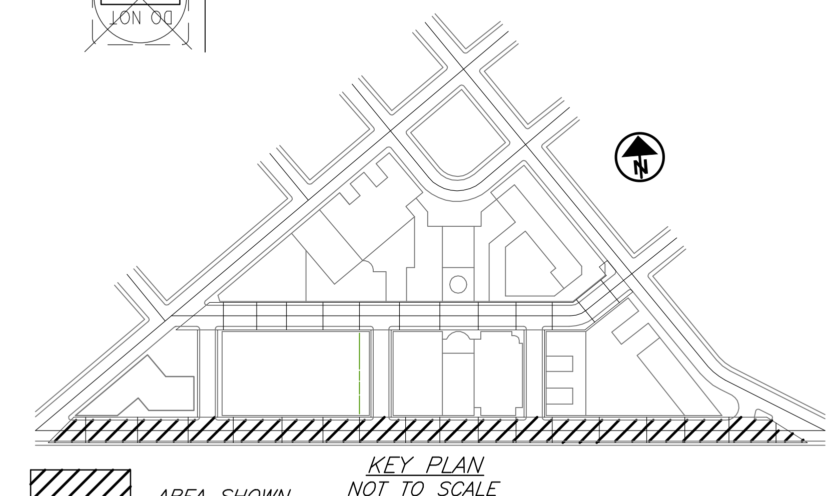




PARKING METER LOCATIONS**
STA. 16+00, LT
STA. 16+38, LT
STA. 16+82, LT
STA. 17+08, LT
STA. 17+56, LT
STA. 18+00, LT
STA. 19+16, LT
STA. 19+60, LT
STA. 20+00, LT
STA. 20+40, LT
STA. 20+80, LT
STA. 21+22, LT
STA. 27+32, LT
STA. 27+64, LT
STA. 28+00, LT
STA. 28+40, LT

** LOCATIONS TO BE FIELD VERIFIED AND APPROVED BY CITY OF CLEVELAND

FOR PAVEMENT MARKING LEGEND SEE SHEET 127.
FOR SIGN LEGEND SEE SHEET 127.



HORIZONTAL SCALE IN FEET 0 10 20 40

CALCULATED JJG
CHECKED CRP

HURON ROAD SIGN AND PAVEMENT MARKING PLAN

CUY-TOWER CITY BRIDGES

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NOTE:
* DOUBLE-FACED SIGN

℄ SUPERIOR AVENUE
℄ PROSPECT AVENUE
℄ WEST 6TH STREET
℄ WEST 3RD STREET
℄ WEST 2ND STREET
℄ HURON ROAD
Tower City

R3-H8bq-36
R7-1-12
STA. 0+54, LT

R3-H8bq-36
STA. 1+38, LT

R7-1-12
R7-201ap-12
STA. 2+40, RT

R1-1-30
R7-1-12
R7-201ap-12
STA. 2+83, RT

R6-1R-36
R6-1L-36
R5-1-30
STA. 2+86, LT

R7-1-12
STA. 2+41, LT

R5-1-30
STA. 2+85, RT

R7-1-12
SPECIAL
STA. 0+54, LT

R7-1-12
SPECIAL
SPECIAL
STA. 2+60, RT

R7-1-12
SPECIAL
SPECIAL
STA. 0+85, RT

R7-1-12
SPECIAL
STA. 2+84, LT

R7-1-12
SPECIAL
R7-108-12
STA. 1+79, LT

R7-1-12
SPECIAL
STA. 2+55, RT

R1-1-30
R7-1-12
STA. 2+83, RT

SPECIAL
STA. 1+30, RT

R7-1-12
SPECIAL
STA. 0+54, RT

R1-1-30
R7-108-12
R7-8-12
STA. 0+53, LT

PARKING METER LOCATIONS (WEST 2ND STREET)**
STA. 0+76, LT

** LOCATIONS TO BE FIELD VERIFIED AND APPROVED BY CITY OF CLEVELAND

FOR PAVEMENT MARKING LEGEND SEE SHEET 127.
FOR SIGN LEGEND SEE SHEET 127.

KEY PLAN
NOT TO SCALE
AREA SHOWN

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JJG
CHECKED CRP

WEST 2ND, 3RD AND 6TH STREET SIGN AND PAVEMENT MARKING PLAN

CUY-TOWER CITY BRIDGES

129
129

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SPECIAL PROVISIONS

ACCESS AND WORK AGREEMENT
RAISIN INDUSTRIES, LLC

FOR

CUY-TOWER CITY BRIDGES
PID: 95557

DATE: 03-29-17

Access and Work Agreement

between

RAISIN INDUSTRIES, LLC

and

CITY OF CLEVELAND

This Access and Work Agreement ("Access Agreement") is entered into this 29th day of MARCH, 2017, between Raisin Industries, LLC, an Ohio limited liability company ("Owner"), through its authorized officer, and the City of Cleveland ("City"), a municipal corporation of the State of Ohio, through its Director of Capital Projects, under the authority of Ordinance No. 1100-13, passed by the Cleveland City Council on September 30, 2013.

RECITALS:

A. Owner is the owner of certain real property located in the City of Cleveland, Cuyahoga County, Ohio and commonly known as The Avenue Shops at Tower City Center (the "Property"), contiguous with and affected by the condition of bridges within the area known as the Tower City Complex located on Huron Road, Prospect Avenue, West 2nd Street, West 3rd Street and West 6th Street in Cleveland, Ohio (collectively, the "Bridges"), portions of which require repairs (the "Project").

B. Under that certain Maintenance Agreement dated April 4, 1984 between the City and Owner's predecessor in interest, Tower City Properties (the "1984 Agreement"), the City is responsible, among other things, for maintaining certain specified portions of the Bridges and the improvements on, in and attached to them, and the Owner is obligated to permit the City's agents and employees onto the Owner's property (to the extent set forth therein) to carry out the City's responsibilities under such 1984 Agreement.

C. Under Ordinance No. 1100-13, the City has given consent to the Director of the Department of Transportation of the State of Ohio (the "ODOT"), on behalf of the City to construct the improvement of the repair of the Bridges pursuant to the plans, specifications and estimates approved by the State of Ohio, through the ODOT (collectively, the "Plans and Specifications").

D. The ODOT will construct the improvement of the repairs to the Bridges through a construction contract (the "Contract") that the ODOT will award to and enter into with a construction contractor ("Contractor") for that purpose.

E. In order to properly perform the repairs to the Bridges under the Contract, the City, the ODOT and the authorized employees and agents of each (including particularly, without limitation, the City's engineer, Euthenics, Inc.), prospective bidders and Contractor and its subcontractors (collectively, the "Access Parties") will require access to certain portions of the Property, subject to the terms and conditions of this Access Agreement.

In consideration of the mutual covenants and agreements of the parties contained in this Access Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Subject to the terms and conditions of this Access Agreement, Owner, by this Access Agreement, authorizes and permits the Access Parties, to enter upon those specific areas of the Property identified in Plan Sheet 5 (the "Lower Level Access Notes") and in the "Garage Accessways" Description, respectively, attached to and incorporated in this Access Agreement as Exhibits "A-1" and "A-2" (the "Project Area"), together with such other ingress and egress to the Property as is reasonably necessary in order for Contractor to perform the Project Work (as defined below), for the purposes of a pre-bid site visit, a pre-construction "walk-through" (both the pre-bid site visit and the "walk-through" to be scheduled by the ODOT with Owner upon at least seven (7) business days' advance written notice to Owner) and the performance, observation and inspection of the work necessary to repair the Bridges (the "Project Work"), as specified and described in the Plans and Specifications in accordance with, but not necessarily limited to, the Contract Documents (as defined in the ODOT Construction and Material Specifications (the "C&MS")). The ODOT will not permit Contractor to use, or permit its employees, agents, contractors, licensees or invitees to use (a) the Project Area for any purpose other than to conduct the Project Work, or (b) any portions of the Property outside of the Project Area for any purpose whatsoever.

2. Contractor shall provide the Owner at least seven (7) business days' advance written notice (the "Access Notice") before entering any part of the Project Area, including any tenant space to prepare for or perform the Project Work. If Contractor is not diligently pursuing

the completion of the Project Work for ten (10) consecutive days or more, the Contractor shall provide the Owner with an additional Access Notice before entering the Project Area. Before the start of the Project Work, Owner and, if Owner requests its assistance, the Contractor, shall meet with each of Owner's tenants into or around whose space(s) that Contractor will require access to perform, and shall advise each such tenant of the anticipated time(s), date(s), preparation required for, the Project Work that Contractor will perform in or around the tenant's space, and shall inform each tenant what changes or arrangements that Contractor reasonably needs in such space to perform its work there, provided, that any tenant shall not be charged any cost in connection therewith, except as provided in Section 3 below. The ODOT will work with Owner to schedule such meetings before the start of the Project Work. Owner and the Contractor shall reasonably cooperate with each other to coordinate access to and use of such tenant space(s), to facilitate Contractor's prompt and proper performance of the Project Work with minimum inconvenience, disturbance to or interference with the tenant's business operations and the operations of the Property, and to resolve any issue affecting such performance as described in the Contract Documents. To the extent possible, the Project Work in the Project Area shall take place during hours that the tenants of the Property are not open for business at the Property, provided, that the timing for performing any such Project Work shall be coordinated with Owner and its tenants prior to entering the Property. Owner shall make itself reasonably available to meet with the Contractor to discuss the Project Work and Owner shall use commercially reasonable efforts to coordinate meetings with Owner's tenants in order to facilitate the performance of the Project Work that Contractor will perform in or around such tenant's spaces.

3. Owner and/or each of its tenants that are affected by the Project Work shall be responsible, at its/their own cost and expense, for protecting all Owner's or tenant's property and

premises within the Project Area from damage by Contractor's reasonable performance of the Project Work within that Project Area in conformance with the Contract Documents and the Plans and Specifications, for the duration of Contractor's work in such portion of the Project Area that Contractor is working in, by whatever means they consider necessary including, at a minimum, relocating all movable property sufficiently away from the Project Area(s) in which Contractor will work so that it will not interfere with the Project Work, and by sufficiently covering and/or otherwise protecting all fixed property and premises in that Project Area, provided, however, that Contractor shall be fully responsible for all claims or damages that Owner and/or any tenant suffer as a result of the negligent or willful acts or omissions of Contractor or any of its employees, agents, affiliates, representatives or subcontractors in connection with the performance of the Project Work, provided, that Contractor shall not be liable for any claims or damages which result from deficiencies in the Plans and Specifications.

4. Contractor shall assume all risk of loss that it may incur which results from its access and entry into and use of the Project Area. Contractor shall comply with all laws, ordinances and other governmental regulations that apply to the use of the Project Area as contemplated under this Access Agreement. Contractor shall not commit or suffer to be committed any waste or nuisance upon the Project Area. Except as otherwise provided in this Access Agreement or as is reasonably necessary to perform the Project Work on a temporary basis, Contractor shall not construct or maintain any walls, fences, barriers, buildings or structures of any nature on the Property, or any portion thereof, without the prior written consent of Owner.

5. As part of its work, Contractor shall, except as is reasonably necessary to perform the Project Work, (a) keep the Project Area in which it is working including any of Owner's or a tenant's space and premises in a safe and sightly condition, clean and free of rubbish, debris and

other materials, provided, that if the Project Area is not (i) within a tenant space or (ii) on a portion of the Property which is accessible or observable by the public, Contractor may otherwise maintain the Project Area in accordance with good construction and commercial practices and (b) not damage, and to exercise due care to avoid damaging, the Project Area or a tenant space. Upon the completion of the Project Work or any portion thereof in any portion of the Project Area and otherwise if Contractor or any agent, employee, contractor, licensee or invitee of Contractor causes or permits any damage to the Property, including, but not limited to, any tenant space, Contractor shall, at its sole cost and expense, restore the Property to the same condition as existed prior to the damage or reimburse Owner for all costs incurred by Owner to restore the Property to the same condition as existed prior to the damage. If the Contractor fails to remedy any damage it causes to the Project Area or a tenant space or to restore the damaged Project Area or space to the condition that existed immediately prior to such damage, Owner may undertake such restoration and may seek reimbursement from the Contractor for the actual amount of all reasonable costs, expenses and fees that Owner incurs in restoration of the damaged Project Area or space to its condition that existed immediately prior to the damage, but excluding the cost of any improvements which are in addition to those which are necessary to restore the damaged Project Area or space to such condition. If Owner does not obtain the remedy or reimbursement it seeks from Contractor, it shall notify the ODOT who shall seek the damages, relief and reimbursement that Owner is seeking, as the case may be, from or against Contractor, on behalf of Owner. If Contractor fails to perform any obligation under this Access Agreement for which it is responsible and does not cure such failure within thirty (30) days after Owner notifies the ODOT and Contractor of such failure (provided, that if Contractor is diligently pursuing a cure of such failure upon the expiration of such thirty (30) day period and continues therefore to diligently pursue a

cure of such failure, such thirty (30) day period shall be extended for a reasonable period of time which shall not exceed sixty (60) days) unless a shorter cure period is otherwise set forth herein to cure such failure to perform, Owner may seek any relief Owner shall deem appropriate including, but not limited to, exercising any and all rights and remedies that Owner may have at law or in equity. Nothing in this Access Agreement shall be considered or construed to preclude or limit the Owner from any other form of relief, including but not limited to, exercising all rights and remedies which are available at law or in equity.

6. The ODOT shall cause Contractor to name Owner as an additional insured on the commercial general liability insurance policy that it procures and maintains under the Contract in accordance with Chapter 107 of the C&MS. Prior to Contractor entering the Property to perform the Project Work, the ODOT shall cause Contractor to deliver to Owner a certificate of insurance evidencing all of the coverages required under Chapter 107 of the C&MS including, but not limited to, such commercial general liability insurance policy (the "Certificate of Insurance").

7. The term of this Access Agreement (including the Contractor's authority to enter the Property and the Project Area) shall commence upon the delivery to the Owner of the Certificate of Insurance in the form that is required by Chapter 107 of the C&MS and will automatically terminate upon Final Acceptance of the Project, as provided in Chapter 109 of the C&MS.

8. Contractor shall perform the Project Work under terms of the Contract and in accordance with the Plans and Specifications prepared for the City by its design consultant, Euthenics, Inc. and as directed by ODOT, with respect to the Property and the Project Area. Contractor shall not file any mechanics' liens or materialman's liens to attach to the Property as a result of the Project Work. If Contractor files any lien against the Property, Owner may, in addition

to any other remedies Owner may have under this Access Agreement, but without obligation to do so, cause such lien to be discharged without inquiring as to the merits of such lien. All sums so advanced by Owner shall be paid by Contractor on demand and Owner may submit such demand to the ODOT to collect from Contractor.

9. Owner understands and acknowledges that the City, its officers, employees, or agents have no contractual privity or relationship with, or direct or indirect right of direction or control over, the Contractor or its conduct or activities on the Project. Accordingly, Owner hereby releases the City, its officers, employees, agents, and contractors from any damages or claims for damages resulting from the Contractor's negligence or willful misconduct in connection with the performance of the Project Work. Owner further understands and agrees that the Contractor which the ODOT will engage for the Project Work shall be an independent contractor and as such shall be solely responsible for any damages or claims for damages arising from its performance thereof and that Owner, for itself or on behalf of its tenants or affiliates, shall direct to the ODOT all claims against Contractor for damage or injury to property or persons, except as otherwise provided in this Access Agreement; and that all such claims shall be subject to Chapters 107 and 108 of the C&MS.

10. Owner further understands and agrees that the City neither has nor assumes any obligation to maintain or repair any part of the Bridges or the Project Area, except as expressly provided in the 1984 Agreement.

11. Any notice, request, certificate or other communication (each, a "Notice") required, referenced or authorized under this Access Agreement shall be written and shall be delivered either by personal delivery, or by prepaid certified mail, return receipt requested, or by express courier delivery service or electronic mail. Any Notice shall be considered delivered upon its actual

receipt or refusal of receipt by the intended recipient. Any Notice shall be sent to the representatives of the parties at the following addresses or to such other address or person as either party may hereafter designate for such purpose:

To Owner: Raisin Industries, LLC
630 Woodward Avenue
Detroit, Michigan 48226
Attention: James A. Ketai
Email: jimketai@bedrockdetroit.com

With copies to:

Raisin Industries, LLC
630 Woodward Avenue
Detroit, Michigan 48226
Attention: Howard N. Luckoff, Esq.
Email: howardluckoff@bedrockdetroit.com

-and-

Honigman Miller Schwartz and Cohn LLP
2290 First National Building
660 Woodward Avenue
Detroit, Michigan 48226
Attention: David J. Jacob, Esq.
Email: djacob@honigman.com

To the City: Director, Office of Capital Projects
Attention: Richard J. Switalski, Manager of Engineering & Construction
Room 518, City Hall
601 Lakeside Avenue
Cleveland, Ohio 44114-1077
Email: rswitalski@city.cleveland.oh.us

12. If any provision of this Access Agreement is invalid or unenforceable to any extent, the remainder of this Access Agreement will not be affected and may be enforced to the greatest extent permitted by law.

13. Miscellaneous.

A. This Access Agreement and the rights and obligations of the parties are governed by and will be interpreted, construed and enforced in accordance with the laws of the State of Ohio. This Access Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together shall constitute but one and the same agreement. Delivery by facsimile or electronic mail of a fully executed counterpart of this Access Agreement will be deemed a good and valid execution and delivery hereof.

B. This Access Agreement (including all exhibits and attachments) constitutes the entire agreement between the parties with respect to the subject matter of this Access Agreement, and all prior or contemporaneous agreements or understandings with respect to the subject matter of this Access Agreement are merged in this Access Agreement. No amendment or modification of this Access Agreement shall be valid or binding upon the parties unless it is made in writing, cites this Access Agreement, and is signed by Owner and by the City through their authorized officers.

C. Nothing contained in this Access Agreement shall be deemed to constitute the City, Contractor or Owner as partners in a partnership or joint venture for any purpose whatsoever.

D. Owner agrees that no representations or warranties of any type shall be binding on the City unless expressly set forth in this Access Agreement.

E. The terms, conditions and provisions of this Access Agreement shall be binding upon and shall inure to the benefit of Owner and the City and their respective successors and assigns.

F. This Access Agreement will not be recorded by the City. Nothing contained in this Access Agreement is intended to be a gift or dedication of any portion of the Property to the

general public or for any public use or purpose whatsoever. This Access Agreement is for the exclusive benefit of the City and Owner and its successors and assigns, and nothing in this Access Agreement, express or implied, confers upon any person, other than the City and Owner, any rights or remedies under or by reason of this Access Agreement.

The following documents are incorporated into this Access Agreement by either attachment or reference:

1. Exhibit "A-1" – Specifications Plan Sheet 5 (the "Lower Level Access Notes");
2. Exhibit "A-2" – Garage Accessway Description; and
3. ODOT Construction and Material Specifications.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK; SIGNATURES APPEAR ON FOLLOWING PAGE]

The parties hereto have executed or caused to be executed this Access Agreement on the date(s) indicated immediately below their respective signatures.

RAISIN INDUSTRIES, LLC,
an Ohio limited liability company

By: _____
James A. Ketal
Its: Authorized Representative

Date: _____, 2017

CITY OF CLEVELAND

_____
Matthew L. Spronz, Director
Office of Capital Projects

Date: March 29, 2017

The legal form and correctness
of this instrument is approved:

BARBARA A. LANGHENRY
Director of Law

By: _____
Jeffrey B. Marks
Assistant Director of Law

Date: 29 MARCH, 2017

LOWER LEVEL ACCESS NOTES

Joint Number	Units	Work from Beneath Anticipated	Worktype Anticipated	Space Below	Ceiling Type	Access from Beneath * (if necessary)
1	8 - 9	Yes	Painting and steel repair, repair access performed from above.	Walkway between The Avenue storefronts and RTA Concourse - East Side	Drop ceiling east of joint, racked tile with drywall west of joint	By step-ladder through drop ceiling.
2	9 - 10	Yes	Painting and steel inspection	The Avenue stores, store rooms & service corridor	Areas with drop ceiling, areas with no ceiling	By step-ladder through drop ceiling if present, otherwise access is unobstructed by a ceiling
3	10 - 11	Yes	Painting and steel inspection	Corridor between The Avenue and Horseshoe Casino service entrance	Areas of drywall and areas of racked tile	In racked tile areas, via ladder through access hatch. Otherwise remove drywall.
4	11 - 12	No	Steel inspection only	Horseshoe Casino service areas	Drop ceiling	By step-ladder through drop ceiling.
5	12 - 13	Yes	Painting and steel inspection	Horseshoe Casino service areas	None	Restricted by banks of utility conduits, but otherwise open.
6	W. 2nd St. - Unit 10	No	Steel inspection only	Corridor between The Avenue and Guild Hall Building	Drywall	Remove drywall.
6a	W. 2nd St. - Unit 25	No	None	The Avenue Food Court	None	Unobstructed
7	7 - 8	Yes	Painting only	Walkway between storefronts and RTA Concourse - West Side	Drop ceiling west of joint, racked tile with drywall below and east of joint	By step-ladder through drop ceiling.
8	6 - 7	Yes	Painting and steel repair, repair access performed from above.	The Avenue store rooms and service corridor.	Areas with racked tile, areas with no ceiling	In racked tile areas, via ladder through access hatch, otherwise unobstructed.
9	5 - 6	No	Steel inspection only	Ritz-Carlton valet parking & Ritz-Carlton service spaces	Areas with drop ceiling, areas with no ceiling	By step-ladder through drop ceiling if present, otherwise access is unobstructed by a ceiling.
10	4 - 5	Yes	Painting only	Ritz-Carlton valet parking	None	Unobstructed
11	3 - 4	Yes	Painting and steel inspection	GCRTA Tracks & Access Road	None	Unobstructed
12	2 - 3	Yes	Painting and steel repair	GCRTA Tracks & Access Road	None	Unobstructed
13	1 - 2	Yes	Painting and steel repair	GCRTA Tracks & Access Road	None	Unobstructed
14	W. 3rd St. - Unit 8	No	Steel inspection only	Ritz-Carlton service spaces, The Avenue service corridor	Areas with drop ceiling, areas with no ceiling and areas with access limited by drywall walls.	By step-ladder through drop ceiling if present, remove drywall if present, otherwise access is unobstructed by a ceiling.
14a	W. 3rd St. - Unit 21	No	None	Ritz-Carlton Valet Parking	None	Unobstructed
15	W. 6th St. - Unit 1	Yes	Painting only	GCRTA Tracks	None	Unobstructed
15a	W. 6th St. - Unit 17	No	None	Ground Level Parking & GCRTA Tracks	None	Unobstructed
Expansion Joint #16 Does Not Exist						
17	23 - 24	No	Steel inspection only	The Avenue Food Court (upper and lower levels)	None	Unobstructed
18	24 - 25	Yes	Painting and steel inspection	Mechanical Room (Room 35.70)	None	Unobstructed
19	25 - 26	Yes	Painting and steel inspection	The Avenue corridor to GCRTA Walkway and Tower City Cinema Lobby & Projection Area	Drop ceiling in Tower City Cinema, drywall in corridor.	By lift or scaffolding in cinema, otherwise remove drywall
20	26 - 27	Yes	Painting and steel inspection	The Avenue storage room and corridor to GCRTA Walkway.	No ceiling in storage room, drywall in corridor.	By lift or scaffolding in storage room, otherwise remove drywall
21	27 - 28	Yes	Painting and steel inspection	Ground Level Parking & GCRTA Walkway	None	Unobstructed
22	28 - 29	Yes	Painting, steel repair and steel inspection	Ground Level Parking & GCRTA Walkway	None	Unobstructed
23	29 - 30	Yes	Painting and steel inspection	Ground Level Parking & GCRTA Walkway	None	Unobstructed
24	30 - 31 & Ontario St	Yes	Painting only	Ground Level Parking, GCRTA Walkway & GCRTA Tracks	None	Unobstructed
25	22 - 23	No	Steel inspection only	The Avenue Food Court (upper and lower levels)	None	Unobstructed
26	21 - 22	Yes	Painting only	The Avenue mechanical room	None	Unobstructed
27	20 - 21	Yes	Painting and steel inspection	Ritz-Carlton Valet Parking	None	Unobstructed
28	19 - 20	Yes	Painting, steel repair and steel inspection	Ritz-Carlton Valet Parking	None	Unobstructed
29	18 - 19	Yes	Painting and steel inspection	Ritz-Carlton Valet Parking	None	Unobstructed
30	17 - 18	Yes	Painting, steel repair and steel inspection	Mezzanine Level Parking	None	Unobstructed
31	16 - 17	Yes	Painting only	Ground Level Parking	None	Unobstructed
32	15 - 16	No	None	GCRTA Tracks	None	Unobstructed
33	14 - 15	Yes	Painting and steel repair	State Office Bldg. Parking	None	Unobstructed
JD	Sidewalk @ Huron Rd. & Ontario St.	No	New compression seal installed from above	GCRTA Tracks	None	Unobstructed

NOTE:

* ACCESS RESTRICTIONS ARE SUBJECT TO BE CHANGED BY THE OWNERS OF THE SPACES. THESE ARE TO BE VERIFIED DURING PRE-BID SITE VISIT AND WITH A REVIEW OF THE PROPERTY AGREEMENTS.

CUY-TOWER CITY BRIDGES

5/129

Exhibit "A-1"

Garage Accessway Description

For work that needs to be performed from beneath the bridges, the contractor's primary access location into the spaces below the bridge deck will be via the Valet Parking entrance off of West 6th Street (in between Prospect and Huron). The contractor can enter into the Avenue Shops area via the corridor next to the Ritz-Carlton Loading dock. If the contractor is utilizing this entrance into the building and it is temporarily blocked, public access can still be maintained to the Avenue from these lots via the Valet entrance further south beneath West 3rd Street. For work performed over the parking areas below the bridge, the access would be as follows: Units 1-3 and 14, via the ramp down from Superior Avenue just northeast of Prospect Avenue. There is an access road that runs from this ramp and proceeds along the abutments and beneath the State Office Building. For Units 4-5, it would be the aforementioned ramp from West 6th Street. For the areas that are within the Lower Parking Lot (Units 15-18 & 27-31), the contractor can enter via the Tower City Parking Lot entrance off of Canal Road.

Reference: Sheet 4 of the CUY-Tower City Bridges Plans (PID# 95557)

Exhibit "A-2"

Ord. No. 1100-13.

By Council Members Cimperman, Miller, Cleveland and Kelley (by departmental request).

An emergency ordinance giving consent of the City of Cleveland to the Director of Transportation of the State of Ohio for the repair of the Tower City Bridge Complex; authorizing the Director of Capital Projects to enter into any relative agreements; to apply for and accept any gifts or grants for this purpose from any public or private entities; authorizing one or more contracts with consultants and agreements with public and private entities; and authorizing the Commissioner of Purchases and Supplies to acquire, accept, and record for right-of-way purposes any real property and easements necessary to make the improvement.

Whereas, this ordinance constitutes an emergency measure providing for the usual daily operation of a municipal department; now, therefore,

Be it ordained by the Council of the City of Cleveland:

Section 1. That it is declared to be in the public interest that the consent of the City of Cleveland is given to the Director of Transportation of the State of Ohio ("the State") to construct the following improvement under plans, specifications, and estimates approved by the State: repair of the Tower City Bridge Complex which consists of Huron Road, Prospect Avenue, West 6th Street, West 3rd Street, and West 2nd Street near Greater Cleveland Regional Transit Authority Rapid Transit Station (the "Improvement").

Section 2. That the City proposes to cooperate with the State in the cost of the Improvement by assuming and contributing the entire cost and expense of the Improvement, less the amount of federal funds allocated by the Federal Highway Administration, United States Department of Transportation. The City agrees to assume one hundred percent (100%) of the cost of preliminary engineering, right-of-way and environmental documentation. Also, the City agrees to assume and contribute 100% of the cost of any items included in the construction contract at the request of the City, which are determined by the State not eligible or made necessary by the Improvement.

Section 3. That the Director Capital Projects is authorized to enter into one or more agreements with the State necessary to complete the planning and construction of the Improvement, which agreements shall contain terms and conditions that the Director of Law determines shall best protect the public interest.

Section 4. That on completion of the Improvement, the City will:

(a) Maintain the Improvement according to the provisions of the statutes relating thereto and make ample financial and other provisions for the maintenance;

(b) Maintain the right-of-way and keep it free of obstruction in a manner satisfactory to the State and hold the right-of-way inviolate for public highway purposes.

Section 5. (a) That all existing streets and public rights-of-way within the City that are necessary for the Improvement shall be made available.

(b) That the City agrees that all right-of-way required for the described project will be acquired and/or made available under current State and federal regulations. The City also understands that right-of-way costs include eligible utility costs.

(c) That the installation of all utility facilities, relocation, and reimbursement on the right-of-way shall conform with the requirements of Title 23 CFR 645 and the ODOT Utilities Manual.

Section 6. That the Director of Capital Projects is authorized to enter into contracts with Ohio Department of Transportation ("ODOT") pre-qualified consultants for the preliminary engineering phase of the Improvement and to enter into contracts with the State necessary to complete the above described project. Upon the request of ODOT, the Director of Capital Projects is also authorized to assign all rights, title, and interests of the City to ODOT arising from any agreement with its consultant in order to allow ODOT to direct additional or corrective work, recover damages due to errors or omissions, and to exercise all other contractual rights and remedies afforded by law or equity.

Section 7. That the City agrees that if Federal Funds are used to pay the cost of any consultant contract, the City shall comply with 23 CFR 172 in the selection of its consultant and the administration of the consultant contract. Further, the City agrees to incorporate ODOT's "Specifications for Consulting Services" as a contract document in all of its consultant contracts. The City agrees to require, as a scope of services clause, that all plans prepared by the consultant must conform to ODOT's current design standards and that the consultant shall be responsible for ongoing consultant involvement during the construction phase of the Improvement. The City agrees to include a completion schedule acceptable to ODOT and to assist ODOT in rating the consultant's performance through ODOT's Consultant Evaluation System.

Section 8. That this Council requests the State to proceed with the Improvement.

Section 9. That the Director of Capital Projects is authorized to employ by contract or contracts one or more consultants or one or more firms of consultants for the purpose of supplementing the regularly employed staff of the several departments of the City of Cleveland in order to provide professional design, engineering and construction services necessary for the Improvement.

The selection of the consultants for the services shall be made by the Board of Control on the nomination of the Director of Capital Projects from a list of qualified consultants available for employment as may be determined after a full and complete canvass by the Director of Capital Projects for the purpose of compiling a list. The compensation to be paid for the services shall be fixed by the Board of Control. The contract or contracts shall be prepared by the Director of Law, approved by the Director of Capital Projects and certified by the Director of Finance.

Section 10. That the Director of Capital Projects is authorized to accept cash contributions from public or private entities, for infrastructure restoration costs associated with relocating, rehabilitating or reconstructing utility infrastructure for the Improvement. That the Director of Capital Projects is authorized to enter into agreements with the entities for this purpose.

Section 11. That, when appropriate, the Director of Capital Projects is authorized to enter into one or more contracts with the Greater Cleveland Regional Transit Authority, the Northeast Ohio Regional Sewer District and other entities to obtain services or to acquire property rights such as easements and licenses, necessary to construct the improvements described in this ordinance.

Section 12. That the Director of Capital Projects, when necessary, is authorized to cause payment to the Greater Cleveland Regional Transit Authority, and other entities or payment of any services which were necessary to construct the Improvement described in this ordinance.

Section 13. That, notwithstanding any provision of the Codified Ordinances of Cleveland, Ohio, 1976, to the contrary, the Commissioner of Purchases and Supplies is authorized to acquire, accept, and record for right-of-way purposes any real property and easements as is necessary to make the improvements described in this ordinance. The consideration to be paid for the property and easements shall not exceed fair market value.

Section 14. That the Director of Capital Projects is authorized to execute on behalf of the City all documents necessary to acquire, accept, and record the property and easements and to employ and pay all fees for title companies, surveys, escrows, appraisers, and all other costs necessary for the acquisition of the property and easements.

Section 15. That the Director of Capital Projects is authorized to enter into any agreements necessary to implement the Improvement.

Section 16. That the Director of Capital Projects is authorized to apply for and accept any gifts or grants for this purpose from any public or private entity; and that the Director is authorized to file all papers and execute all documents necessary to receive the funds under the grant; and that the funds are appropriated for the purposes described in this ordinance.

Section 17. That the cost of the contracts, payments, property acquisition, cash matches, and other expenditures authorized shall be paid from the fund or funds to which are credited any gift or grant proceeds accepted under this ordinance, cash matches, cash contributions accepted and appropriated under this ordinance, and Fund Nos. 20 SF 510, 20 SF 520, 20 SF 524, 20 SF 528, 20 SF 534, 20 SF 540, 20 SF 546, and 20 SF 554, RQS 0103, RL 2013-130.

Section 18. That the Clerk of Council is authorized and directed to transmit to the State three (3) certified copies of this ordinance immediately on its taking effect, and it shall become the basis for proceeding with the Improvement.

Section 19. That this ordinance is declared to be an emergency measure and, provided it receives the affirmative vote of two-thirds of all the members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise it shall take effect and be in force from and after the earliest period allowed by law.

Passed September 30, 2013.

Effective October 1, 2013.

SPECIAL PROVISIONS

ACCESS AND WORK AGREEMENT
RHA 250, LLC

FOR

CUY-TOWER CITY BRIDGES
PID: 95557

DATE: 03-31-17

Access and Work Agreement

between

RHA 250, LLC

and

CITY OF CLEVELAND

This Access and Work Agreement ("Access Agreement") is entered into this 31st day of March, 2017, between RHA 250, LLC, a Delaware limited liability company ("Owner"), through its authorized officer, and the City of Cleveland ("City"), a municipal corporation of the State of Ohio, through its Director of Capital Projects, under the authority of Ordinance No. 1100-13, passed by the Cleveland City Council on September 30, 2013.

RECITALS:

A. Owner is the owner of certain real property located in the City of Cleveland, Cuyahoga County, Ohio, which is currently being used as a first class hotel, commonly known as "The Ritz-Carlton Cleveland" (the "Property" or the "Hotel"), contiguous with and affected by the condition of bridges within the area known as the Tower City Complex located on Huron Road, Prospect Avenue, West 2nd Street, West 3rd Street and West 6th Street in Cleveland, Ohio (collectively, the "Bridges"), portions of which require repairs (the "Project").

B. Under that certain Maintenance Agreement dated April 4, 1984 between the City and Raisin Industries, LLC, an Ohio limited liability company, as successor-in-interest to Tower City Properties (the "1984 Agreement"), the City is responsible, among other things, for maintaining certain specified portions of the Bridges and the improvements on, in and attached to them, and the Owner is obligated to permit the City's agents and employees onto the Owner's property (to the extent set forth therein) to carry out the City's responsibilities under such 1984 Agreement.

C. Under Ordinance No. 1100-13, the City has given consent to the Director of the Department of Transportation of the State of Ohio (the "ODOT"), on behalf of the City, to construct the improvement of the repair of the Bridges pursuant to the plans, specifications and

estimates approved by the State of Ohio, through the ODOT (collectively, the "Plans and Specifications").

D. The ODOT will construct the improvement of the repairs to the Bridges through a construction contract (the "Contract") that the ODOT will award to and enter into with a construction contractor ("Contractor") for that purpose.

E. In order to properly perform the repairs to the Bridges under the Contract, the City, the ODOT and the authorized employees and agents of each (including particularly, without limitation, the City's engineer, Euthenics, Inc.), prospective bidders and Contractor and its subcontractors (collectively, the "Access Parties") will require access to certain portions of the Property, subject to the terms and conditions of this Access Agreement.

In consideration of the mutual covenants and agreements of the parties contained in this Access Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Subject to the terms and conditions of this Access Agreement, Owner, by this Access Agreement, authorizes and permits the Access Parties, to enter upon those specific areas of the Property identified in Plan Sheet 5 (the "Lower Level Access Notes") and in the "Garage Accessways" Description, respectively, attached to and incorporated in this Access Agreement as Exhibits "A-1" and "A-2" (the "Project Area"), together with such other ingress and egress to the Property as is reasonably necessary in order for Contractor to perform the Project Work (as defined below), for the purposes of a pre-bid site visit, a pre-construction "walk-through" (both the pre-bid site visit and the "walk-through" to be scheduled by the ODOT with Owner upon at least seven (7) business days' advance written notice to Owner) and the performance, observation and inspection of the work necessary to repair the Bridges, as specified and described in the Plans and Specifications in accordance with, but not necessarily limited to, the Contract Documents (as defined in the ODOT Construction and Material Specifications (the "C&MS")) (the "Project Work"). The ODOT will not permit Contractor to use, or permit its employees, agents, contractors, licensees or invitees to use (a) the Project Area for any purpose other than to conduct the Project Work, or (b) any portions of the Property outside of the Project Area for any purpose whatsoever.

2. Contractor shall provide the Owner at least seven (7) business days' advance written notice (the "Access Notice") before entering any part of the Project Area, including any

portion of the Hotel to prepare for or perform the Project Work. If Contractor is not diligently pursuing the completion of the Project Work for ten (10) consecutive days or more, the Contractor shall provide the Owner with an additional Access Notice before entering the Project Area. Before the start of the Project Work, Owner and, if Owner requests its assistance, the Contractor, shall meet with The Ritz-Carlton Hotel Company, L.L.C. ("Operator") and shall advise Operator of the anticipated time(s), date(s), preparation required for, the Project Work that Contractor will perform in or around the Hotel, and shall inform Operator what changes or arrangements that Contractor reasonably needs in the Project Area in the Hotel to perform its work there, provided, that neither Owner nor Operator shall be charged any cost in connection therewith, except as provided in Section 3 below. The ODOT will work with Owner to schedule such meetings before the start of the Project Work. Owner and the Contractor shall reasonably cooperate with each other to coordinate access to and use of the Project Area, to facilitate Contractor's prompt and proper performance of the Project Work with minimum inconvenience, disturbance to or interference with the Hotel's business operations and the operations of the Property, and to resolve any issue affecting such performance as described in the Contract Documents. To the extent possible, the Project Work in the Project Area shall take place during hours that are most convenient to, and will create the least amount of interference with, the operations of the Hotel as mutually determined by Operator and Contractor, provided, that the timing for performing any such Project Work shall be coordinated with Owner and Operator prior to entering the Property. Owner shall make itself reasonably available to meet with the Contractor to discuss the Project Work and Owner shall use commercially reasonable efforts to coordinate meetings with Operator in order to facilitate the performance of the Project Work that Contractor will perform in or around the Hotel.

3. Owner and/or Operator shall be responsible, at its own cost and expense, for protecting all Owner's or Operator's property within the Project Area from damage by Contractor's reasonable performance of the Project Work within that Project Area in conformance with the Contract Documents and the Plans and Specifications, for the duration of Contractor's work in such portion of the Project Area that Contractor is working in, by whatever means they consider necessary including, at a minimum, relocating all movable property sufficiently away from the Project Area(s) in which Contractor will work so that it will not interfere with the Project Work, and by sufficiently covering and/or otherwise protecting all fixed property and premises in that Project Area, provided, however, that Contractor shall be fully responsible for all claims or damages that Owner and/or Operator suffer as a result of the negligent or willful acts or omissions of Contractor or any of its employees, agents, affiliates, representatives or subcontractors in connection with the performance of the Project Work, provided, that Contractor shall not be liable for any claims or damages which result from deficiencies in the Plans and Specifications.

4. Contractor shall assume all risk of loss that it may incur which results from its access and entry into and use of the Project Area. Contractor shall comply with all laws, ordinances and other governmental regulations that apply to the use of the Project Area as contemplated under this Access Agreement. Contractor shall not commit or suffer to be committed any waste or nuisance upon the Project Area. Except as otherwise provided in this Access Agreement or as is reasonably necessary to perform the Project Work on a temporary basis, Contractor shall not construct or maintain any walls, fences, barriers, buildings or structures of any nature on the Property, or any portion thereof, without the prior written consent of Owner.

5. As part of its work, Contractor shall, except as is reasonably necessary to perform the Project Work, (a) keep the Project Area in which it is working including any of Owner's or a

tenant's space and premises in a safe and sightly condition, clean and free of rubbish, debris and other materials, provided, that if the Project Area is not (i) within the Hotel or (ii) on a portion of the Property which is accessible or observable by the public, Contractor may otherwise maintain the Project Area in accordance with good construction and commercial practices and (b) not damage, and exercise due care to avoid damaging, the Project Area or the Hotel. Upon the completion of the Project Work or any portion thereof in any portion of the Project Area and otherwise if Contractor or any agent, employee, contractor, licensee or invitee of Contractor causes or permits any damage to the Property, including, but not limited to, any portion of the Hotel, Contractor shall, at its sole cost and expense, restore the Property to the same condition as existed prior to the damage or reimburse Owner for all costs incurred by Owner to restore the Property to the same condition as existed prior to the damage. If the Contractor fails to remedy any damage it causes to the Project Area or the Hotel or any portion thereof or to restore the damaged Project Area or the Hotel or any portion thereof to the condition that existed immediately prior to such damage, Owner may undertake such restoration and may seek reimbursement from the Contractor for the actual amount of all reasonable costs, expenses and fees that Owner incurs in restoration of the damaged Project Area or the Hotel or any portion thereof to its condition that existed immediately prior to the damage, but excluding the cost of any improvements which are in addition to those which are necessary to restore the damaged Project Area or the Hotel or any portion thereof to such condition. If Owner does not obtain the remedy or reimbursement it seeks from Contractor, it shall notify the ODOT who shall seek the damages, relief and reimbursement that Owner is seeking, as the case may be, from or against Contractor, on behalf of Owner. If Contractor fails to perform any obligation under this Access Agreement for which it is responsible and does not cure such failure within thirty (30) days after Owner notifies the ODOT and

Contractor of such failure (provided, that if Contractor is diligently pursuing a cure of such failure upon the expiration of such thirty (30) day period and continues therefore to diligently pursue a cure of such failure, such thirty (30) day period shall be extended for a reasonable period of time which shall not exceed sixty (60) days) unless a shorter cure period is otherwise set forth herein to cure such failure to perform, Owner may seek any relief Owner shall deem appropriate including, but not limited to, exercising any and all rights and remedies that Owner may have at law or in equity. Nothing in this Access Agreement shall be considered or construed to preclude or limit the Owner from any other form of relief, including but not limited to, exercising all rights and remedies which are available at law or in equity.

6. The ODOT shall cause Contractor to name Owner as an additional insured on the commercial general liability insurance policy that it procures and maintains under the Contract in accordance with Chapter 107 of the C&MS. Prior to Contractor entering the Property to perform the Project Work, the ODOT shall cause Contractor to deliver to Owner a certificate of insurance evidencing all of the coverages required under Chapter 107 of the C&MS including, but not limited to, such commercial general liability insurance policy (the "Certificate of Insurance").

7. The term of this Access Agreement (including the Contractor's authority to enter the Property and the Project Area) shall commence upon the delivery to the Owner of the Certificate of Insurance in the form that is required by Chapter 107 of the C&MS and will automatically terminate upon Final Acceptance of the Project, as provided in Chapter 109 of the C&MS.

8. Contractor shall perform the Project Work under terms of the Contract and in accordance with the Plans and Specifications prepared for the City by its design consultant, Euthenics, Inc. and as directed by ODOT, with respect to the Property and the Project Area.

Contractor shall not file any mechanics' liens or materialman's liens to attach to the Property as a result of the Project Work. If Contractor files any lien against the Property, Owner may, in addition to any other remedies Owner may have under this Access Agreement, but without obligation to do so, cause such lien to be discharged without inquiring as to the merits of such lien. All sums so advanced by Owner shall be paid by Contractor on demand and Owner may submit such demand to the ODOT to collect from Contractor.

9. Owner understands and acknowledges that the City, its officers, employees, or agents have no contractual privity or relationship with, or direct or indirect right of direction or control over, the Contractor or its conduct or activities on the Project. Accordingly, Owner hereby releases the City, its officers, employees, agents, and contractors from any damages or claims for damages resulting from the Contractor's negligence or willful misconduct in connection with the performance of the Project Work. Owner further understands and agrees that the Contractor which the ODOT will engage for the Project Work shall be an independent contractor and as such shall be solely responsible for any damages or claims for damages arising from its performance thereof and that Owner, for itself or on behalf of its tenants or affiliates, shall direct to the ODOT all claims against Contractor for damage or injury to property or persons, except as otherwise provided in this Access Agreement; and that all such claims shall be subject to Chapters 107 and 108 of the C&MS.

10. Owner further understands and agrees that the City neither has nor assumes any obligation to maintain or repair any part of the Bridges or the Project Area, except as expressly provided in the 1984 Agreement.

11. Any notice, request, certificate or other communication (each, a "Notice") required, referenced or authorized under this Access Agreement shall be written and shall be delivered either

by personal delivery, or by prepaid certified mail, return receipt requested, or by express courier delivery service or electronic mail. Any Notice shall be considered delivered upon its actual receipt or refusal of receipt by the intended recipient. Any Notice shall be sent to the representatives of the parties at the following addresses or to such other address or person as either party may hereafter designate for such purpose:

To Owner: RHA 250, LLC
630 Woodward Avenue
Detroit, Michigan 48226
Attention: James A. Ketai
Email: jimketai@bedrockdetroit.com

With copies to:

RHA 250, LLC
630 Woodward Avenue
Detroit, Michigan 48226
Attention: Howard N. Luckoff, Esq.
Email: howardluckoff@bedrockdetroit.com

-and-

Honigman Miller Schwartz and Cohn LLP
2290 First National Building
660 Woodward Avenue
Detroit, Michigan 48226
Attention: David J. Jacob, Esq.
Email: djacob@honigman.com

To the City: Director, Office of Capital Projects
Attention: Richard J. Switalski, Manager of Engineering & Construction
Room 518, City Hall
601 Lakeside Avenue
Cleveland, Ohio 44114-1077
Email: rswitalski@city.cleveland.oh.us

12. If any provision of this Access Agreement is invalid or unenforceable to any extent, the remainder of this Access Agreement will not be affected and may be enforced to the greatest extent permitted by law.

13. Miscellaneous.

A. This Access Agreement and the rights and obligations of the parties are governed by and will be interpreted, construed and enforced in accordance with the laws of the State of Ohio. This Access Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together shall constitute but one and the same agreement. Delivery by facsimile or electronic mail of a fully executed counterpart of this Access Agreement will be deemed a good and valid execution and delivery hereof.

B. This Access Agreement (including all exhibits and attachments) constitutes the entire agreement between the parties with respect to the subject matter of this Access Agreement, and all prior or contemporaneous agreements or understandings with respect to the subject matter of this Access Agreement are merged in this Access Agreement. No amendment or modification of this Access Agreement shall be valid or binding upon the parties unless it is made in writing, cites this Access Agreement, and is signed by Owner and by the City through their authorized officers.

C. Nothing contained in this Access Agreement shall be deemed to constitute the City, Contractor or Owner as partners in a partnership or joint venture for any purpose whatsoever.

D. Owner agrees that no representations or warranties of any type shall be binding on the City unless expressly set forth in this Access Agreement.

E. The terms, conditions and provisions of this Access Agreement shall be binding upon and shall inure to the benefit of Owner and the City and their respective successors and assigns.

F. This Access Agreement will not be recorded by the City. Nothing contained in this Access Agreement is intended to be a gift or dedication of any portion of the Property to the general public or for any public use or purpose whatsoever. This Access Agreement is for the exclusive benefit of the City and Owner and its successors and assigns, and nothing in this Access Agreement, express or implied, confers upon any person, other than the City and Owner, any rights or remedies under or by reason of this Access Agreement.

The following documents are incorporated into this Access Agreement by either attachment or reference:

1. Exhibit "A-1" – Specifications Plan Sheet 5 (the "Lower Level Access Notes");
2. Exhibit "A-2" – Garage Accessway Description; and
3. ODOT Construction and Material Specifications.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK; SIGNATURES APPEAR ON FOLLOWING PAGE]

The parties hereto have executed or caused to be executed this Access Agreement on the date(s) indicated immediately below their respective signatures.

RHA 250, LLC,
a Delaware limited liability company

By: _____
James A. Ketai
Its: Authorized Representative

Date: March 31, 2017

CITY OF CLEVELAND

_____
Matthew L. Spronz, Director
Office of Capital Projects

Date: March 31, 2017

The legal form and correctness
of this instrument is approved:

BARBARA A. LANGHENRY
Director of Law

By: _____
Jeffrey B. Marks
Assistant Director of Law

Date: 31 MARCH, 2017

LOWER LEVEL ACCESS NOTES

CUY-TOWER CITY BRIDGES

Joint Number	Units	Work from Beneath Anticipated	Worktype Anticipated	Space Below	Ceiling Type	Access from Beneath * (If necessary)
1	8 - 9	Yes	Painting and steel repair, repair access performed from above.	Walkway between The Avenue storefronts and RTA Concourse - East Side	Drop ceiling east of joint, racked tile with drywall west of joint	By step-ladder through drop ceiling.
2	9 - 10	Yes	Painting and steel inspection	The Avenue stores, store rooms & service corridor	Areas with drop ceiling, areas with no ceiling	By step-ladder through drop ceiling if present, otherwise access is unobstructed by a ceiling.
3	10 - 11	Yes	Painting and steel inspection	Corridor between The Avenue and Horseshoe Casino service entrance	Areas of drywall and areas of racked tile	In racked tile areas, via ladder through access hatch. Otherwise remove drywall.
4	11 - 12	No	Steel inspection only	Horseshoe Casino service areas	Drop ceiling	By step-ladder through drop ceiling.
5	12 - 13	Yes	Painting and steel inspection	Horseshoe Casino service areas	None	Restricted by banks of utility conduits, but otherwise open.
6	W. 2nd St. - Unit 10	No	Steel inspection only	Corridor between The Avenue and Guild Hall Building	Drywall	Remove drywall.
6a	W. 2nd St. - Unit 25	No	None	The Avenue Food Court	None	Unobstructed
7	7 - 8	Yes	Painting only	Walkway between storefronts and RTA Concourse - West Side	Drop ceiling west of joint, racked tile with drywall below and east of joint	By step-ladder through drop ceiling.
8	6 - 7	Yes	Painting and steel repair, repair access performed from above.	The Avenue store rooms and service corridor.	Areas with racked tile, areas with no ceiling	In racked tile areas, via ladder through access hatch, otherwise unobstructed.
9	5 - 6	No	Steel inspection only	Ritz-Carlton valet parking & Ritz-Carlton service spaces	Areas with drop ceiling, areas with no ceiling	By step-ladder through drop ceiling if present, otherwise access is unobstructed by a ceiling.
10	4 - 5	Yes	Painting only	Ritz-Carlton valet parking	None	Unobstructed
11	3 - 4	Yes	Painting and steel inspection	GCRTA Tracks & Access Road	None	Unobstructed
12	2 - 3	Yes	Painting and steel repair	GCRTA Tracks & Access Road	None	Unobstructed
13	1 - 2	Yes	Painting and steel repair	GCRTA Tracks & Access Road	None	Unobstructed
14	W. 3rd St. - Unit 6	No	Steel inspection only	Ritz-Carlton service spaces, The Avenue service corridor	Areas with drop ceiling, areas with no ceiling and areas with access limited by drywall walls.	By step-ladder through drop ceiling if present, remove drywall if present, otherwise access is unobstructed by a ceiling.
14a	W. 3rd St. - Unit 21	No	None	Ritz-Carlton Valet Parking	None	Unobstructed
15	W. 6th St. - Unit 1	Yes	Painting only	GCRTA Tracks	None	Unobstructed
15a	W. 6th St. - Unit 17	No	None	Ground Level Parking & GCRTA Tracks	None	Unobstructed
Expansion Joint #16 Does Not Exist						
17	23 - 24	No	Steel inspection only	The Avenue Food Court (upper and lower levels)	None	Unobstructed
18	24 - 25	Yes	Painting and steel inspection	Mechanical Room (Room 65,70)	None	Unobstructed
19	25 - 26	Yes	Painting and steel inspection	The Avenue corridor to GCRTA Walkway and Tower City Cinema Lobby & Projection Area	Drop ceiling in Tower City Cinema, drywall in corridor.	By lift or scaffolding in cinema, otherwise remove drywall.
20	26 - 27	Yes	Painting and steel inspection	The Avenue storage room and corridor to GCRTA Walkway.	No ceiling in storage room, drywall in corridor.	By lift or scaffolding in storage room, otherwise remove drywall.
21	27 - 28	Yes	Painting and steel inspection	Ground Level Parking & GCRTA Walkway	None	Unobstructed
22	28 - 29	Yes	Painting, steel repair and steel inspection	Ground Level Parking & GCRTA Walkway	None	Unobstructed
23	29 - 30	Yes	Painting and steel inspection	Ground Level Parking & GCRTA Walkway	None	Unobstructed
24	30 - 31 & Ontario St.	Yes	Painting only	Ground Level Parking, GCRTA Walkway & GCRTA Tracks	None	Unobstructed
25	22 - 23	No	Steel inspection only	The Avenue Food Court (upper and lower levels)	None	Unobstructed
26	21 - 22	Yes	Painting only	The Avenue mechanical room	None	Unobstructed
27	20 - 21	Yes	Painting and steel inspection	Ritz-Carlton Valet Parking	None	Unobstructed
28	19 - 20	Yes	Painting, steel repair and steel inspection	Ritz-Carlton Valet Parking	None	Unobstructed
29	18 - 19	Yes	Painting and steel inspection	Ritz-Carlton Valet Parking	None	Unobstructed
30	17 - 18	Yes	Painting, steel repair and steel inspection	Mezzanine Level Parking	None	Unobstructed
31	16 - 17	Yes	Painting only	Ground Level Parking	None	Unobstructed
32	15 - 16	No	None	GCRTA Tracks	None	Unobstructed
33	14 - 15	Yes	Painting and steel repair	State Office Bldg. Parking	None	Unobstructed
30	Sidewalk @ Huron Rd. & Ontario St.	No	New compression seal installed from above	GCRTA Tracks	None	Unobstructed

NOTE:

* ACCESS RESTRICTIONS ARE SUBJECT TO BE CHANGED BY THE OWNERS OF THE SPACES. THESE ARE TO BE VERIFIED DURING PRE-BID SITE VISIT AND WITH A REVIEW OF THE PROPERTY AGREEMENTS.

Exhibit "A-1"

Garage Accessway Description

For work that needs to be performed from beneath the bridges, the contractor's primary access location into the spaces below the bridge deck will be via the Valet Parking entrance off of West 6th Street (in between Prospect and Huron). The contractor can enter into the Avenue Shops area via the corridor next to the Ritz-Carlton Loading dock. If the contractor is utilizing this entrance into the building and it is temporarily blocked, public access can still be maintained to the Avenue from these lots via the Valet entrance further south beneath West 3rd Street. For work performed over the parking areas below the bridge, the access would be as follows: Units 1-3 and 14, via the ramp down from Superior Avenue just northeast of Prospect Avenue. There is an access road that runs from this ramp and proceeds along the abutments and beneath the State Office Building. For Units 4-5, it would be the aforementioned ramp from West 6th Street. For the areas that are within the Lower Parking Lot (Units 15-18 & 27-31), the contractor can enter via the Tower City Parking Lot entrance off of Canal Road.

Reference: Sheet 4 of the CUY-Tower City Bridges Plans (PID# 95557)

Exhibit "A-2"

Ord. No. 1100-13.

By Council Members Cimperman, Miller, Cleveland and Kelley (by departmental request).

An emergency ordinance giving consent of the City of Cleveland to the Director of Transportation of the State of Ohio for the repair of the Tower City Bridge Complex; authorizing the Director of Capital Projects to enter into any relative agreements; to apply for and accept any gifts or grants for this purpose from any public or private entities; authorizing one or more contracts with consultants and agreements with public and private entities; and authorizing the Commissioner of Purchases and Supplies to acquire, accept, and record for right-of-way purposes any real property and easements necessary to make the improvement.

Whereas, this ordinance constitutes an emergency measure providing for the usual daily operation of a municipal department; now, therefore,

Be it ordained by the Council of the City of Cleveland:

Section 1. That it is declared to be in the public interest that the consent of the City of Cleveland is given to the Director of Transportation of the State of Ohio ("the State") to construct the following improvement under plans, specifications, and estimates approved by the State: repair of the Tower City Bridge Complex which consists of Huron Road, Prospect Avenue, West 6th Street, West 3rd Street, and West 2nd Street near Greater Cleveland Regional Transit Authority Rapid Transit Station (the "Improvement").

Section 2. That the City proposes to cooperate with the State in the cost of the Improvement by assuming and contributing the entire cost and expense of the Improvement, less the amount of federal funds allocated by the Federal Highway Administration, United States Department of Transportation. The City agrees to assume one hundred percent (100%) of the cost of preliminary engineering, right-of-way and environmental documentation. Also, the City agrees to assume and contribute 100% of the cost of any items included in the construction contract at the request of the City, which are determined by the State not eligible or made necessary by the Improvement.

Section 3. That the Director Capital Projects is authorized to enter into one or more agreements with the State necessary to complete the planning and construction of the Improvement, which agreements shall contain terms and conditions that the Director of Law determines shall best protect the public interest.

Section 4. That on completion of the Improvement, the City will:

(a) Maintain the Improvement according to the provisions of the statutes relating thereto and make ample financial and other provisions for the maintenance;

(b) Maintain the right-of-way and keep it free of obstruction in a manner satisfactory to the State and hold the right-of-way inviolate for public highway purposes.

Section 5. (a) That all existing streets and public rights-of-way within the City that are necessary for the Improvement shall be made available.

(b) That the City agrees that all right-of-way required for the described project will be acquired and/or made available under current State and federal regulations. The City also understands that right-of-way costs include eligible utility costs.

(c) That the installation of all utility facilities, relocation, and reimbursement on the right-of-way shall conform with the requirements of Title 23 CFR 645 and the ODOT Utilities Manual.

Section 6. That the Director of Capital Projects is authorized to enter into contracts with Ohio Department of Transportation ("ODOT") pre-qualified consultants for the preliminary engineering phase of the Improvement and to enter into contracts with the State necessary to complete the above described project. Upon the request of ODOT, the Director of Capital Projects is also authorized to assign all rights, title, and interests of the City to ODOT arising from any agreement with its consultant in order to allow ODOT to direct additional or corrective work, recover damages due to errors or omissions, and to exercise all other contractual rights and remedies afforded by law or equity.

Section 7. That the City agrees that if Federal Funds are used to pay the cost of any consultant contract, the City shall comply with 23 CFR 172 in the selection of its consultant and the administration of the consultant contract. Further, the City agrees to incorporate ODOT's "Specifications for Consulting Services" as a contract document in all of its consultant contracts. The City agrees to require, as a scope of services clause, that all plans prepared by the consultant must conform to ODOT's current design standards and that the consultant shall be responsible for ongoing consultant involvement during the construction phase of the Improvement. The City agrees to include a completion schedule acceptable to ODOT and to assist ODOT in rating the consultant's performance through ODOT's Consultant Evaluation System.

Section 8. That this Council requests the State to proceed with the Improvement.

Section 9. That the Director of Capital Projects is authorized to employ by contract or contracts one or more consultants or one or more firms of consultants for the purpose of supplementing the regularly employed staff of the several departments of the City of Cleveland in order to provide professional design, engineering and construction services necessary for the Improvement.

The selection of the consultants for the services shall be made by the Board of Control on the nomination of the Director of Capital Projects from a list of qualified consultants available for employment as may be determined after a full and complete canvass by the Director of Capital Projects for the purpose of compiling a list. The compensation to be paid for the services shall be fixed by the Board of Control. The contract or contracts shall be prepared by the Director of Law, approved by the Director of Capital Projects and certified by the Director of Finance.

Section 10. That the Director of Capital Projects is authorized to accept cash contributions from public or private entities, for infrastructure restoration costs associated with relocating, rehabilitating or reconstructing utility infrastructure for the Improvement. That the Director of Capital Projects is authorized to enter into agreements with the entities for this purpose.

Section 11. That, when appropriate, the Director of Capital Projects is authorized to enter into one or more contracts with the Greater Cleveland Regional Transit Authority, the Northeast Ohio Regional Sewer District and other entities to obtain services or to acquire property rights such as easements and licenses, necessary to construct the improvements described in this ordinance.

Section 12. That the Director of Capital Projects, when necessary, is authorized to cause payment to the Greater Cleveland Regional Transit Authority, and other entities or payment of any services which were necessary to construct the Improvement described in this ordinance.

Section 13. That, notwithstanding any provision of the Codified Ordinances of Cleveland, Ohio, 1976, to the contrary, the Commissioner of Purchases and Supplies is authorized to acquire, accept, and record for right-of-way purposes any real property and easements as is necessary to make the improvements described in this ordinance. The consideration to be paid for the property and easements shall not exceed fair market value.

Section 14. That the Director of Capital Projects is authorized to execute on behalf of the City all documents necessary to acquire, accept, and record the property and easements and to employ and pay all fees for title companies, surveys, escrows, appraisers, and all other costs necessary for the acquisition of the property and easements.

Section 15. That the Director of Capital Projects is authorized to enter into any agreements necessary to implement the Improvement.

Section 16. That the Director of Capital Projects is authorized to apply for and accept any gifts or grants for this purpose from any public or private entity; and that the Director is authorized to file all papers and execute all documents necessary to receive the funds under the grant; and that the funds are appropriated for the purposes described in this ordinance.

Section 17. That the cost of the contracts, payments, property acquisition, cash matches, and other expenditures authorized shall be paid from the fund or funds to which are credited any gift or grant proceeds accepted under this ordinance, cash matches, cash contributions accepted and appropriated under this ordinance, and Fund Nos. 20 SF 510, 20 SF 520, 20 SF 524, 20 SF 528, 20 SF 534, 20 SF 540, 20 SF 546, and 20 SF 554, RQS 0103, RL 2013-130.

Section 18. That the Clerk of Council is authorized and directed to transmit to the State three (3) certified copies of this ordinance immediately on its taking effect, and it shall become the basis for proceeding with the Improvement.

Section 19. That this ordinance is declared to be an emergency measure and, provided it receives the affirmative vote of two-thirds of all the members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise it shall take effect and be in force from and after the earliest period allowed by law.

Passed September 30, 2013.

Effective October 1, 2013.