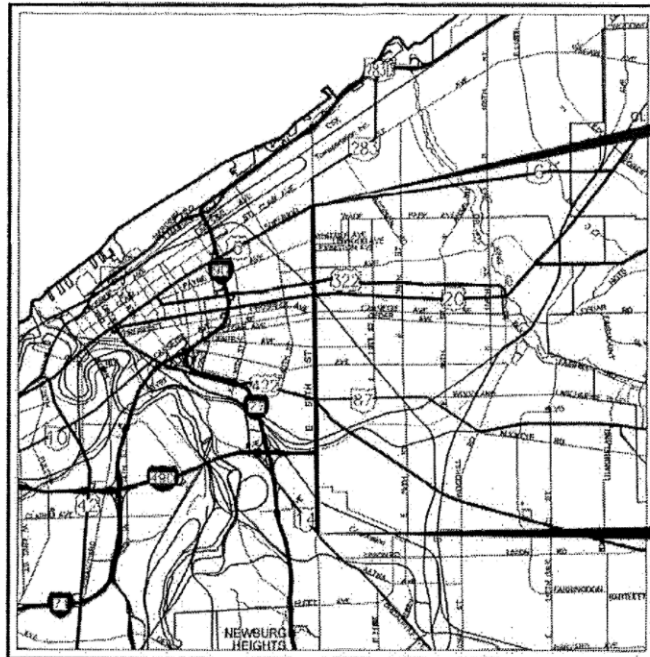




LOCATION MAP

LATITUDE: 41° 29' 32.73" N LONGITUDE: 81° 39' 06.05" W

SCALE IN MILES



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

DESIGN DESIGNATION

CURRENT ADT (2016)	15,108 (AVG)
DESIGN YEAR ADT (2036)	15,108 (AVG)
DESIGN SPEED	35 MPH
LEGAL SPEED	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
MINOR ARTERIAL	
NHS PROJECT	N/A

DESIGN EXCEPTIONS

NONE

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



ENGINEERS SEAL:



SIGNED: *[Signature]*
DATE: April 14, 2016

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CUY-E 55TH ST RESURFACING

CITY OF CLEVELAND
CUYAHOGA COUNTY

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PROJECT DESCRIPTION

RESURFACING OF APPROXIMATELY 3.5 MILES OF E. 55th STREET FROM BROADWAY AVENUE TO SUPERIOR AVENUE. WORK WILL INCLUDE MILLING OF EXISTING ASPHALT AND REPLACEMENT, ALONG WITH FULL AND PARTIAL DEPTH PAVEMENT REPAIRS, UTILITY CASTING ADJUSTMENTS, ADA COMPLIANT CURB RAMPS, LANDINGS, AND PAVEMENT MARKINGS THROUGHOUT THE PROJECT LENGTH.

PROJECT EARTH DISTURBED AREA: N/A*
EST. CONTRACTOR EARTH DISTURBED AREA: N/A*
NOTICE OF INTENT EARTH DISTURBED ARE: N/A*

* MAINTENANCE PROJECT

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.

STANDARD CONSTRUCTION DRAWINGS					SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-1.1	07/28/00	MT-95.31	07/18/14	TC-71.10	01/17/14	800 1/20/2017
BP-2.1	07/17/15	MT-95.32	07/18/14	TC-82.10	07/17/15	821 04/20/2012
BP-2.2	07/18/08	MT-95.50	10/16/15			832 01/17/2014
BP-2.5	07/19/13	MT-95.60	07/19/13			921 04/20/2012
BP-3.1	07/18/14	MT-97.10	07/18/14			
BP-4.1	07/19/13	MT-97.12	07/18/14			
BP-5.1	07/19/13	MT-99.20	07/19/13			
BP-6.1	07/19/13	MT-101.60	07/19/13			
BP-7.1	07/18/14	MT-101.90	07/17/15			
		MT-105.10	07/19/13			
		MT-110.10	07/19/13			
DM-1.2	01/18/13					
DM-4.3	01/15/16					
DM-4.4	01/15/16					

APPROVED
DATE 11-01-16 *[Signature]* DISTRICT DEPUTY DIRECTOR

APPROVED
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

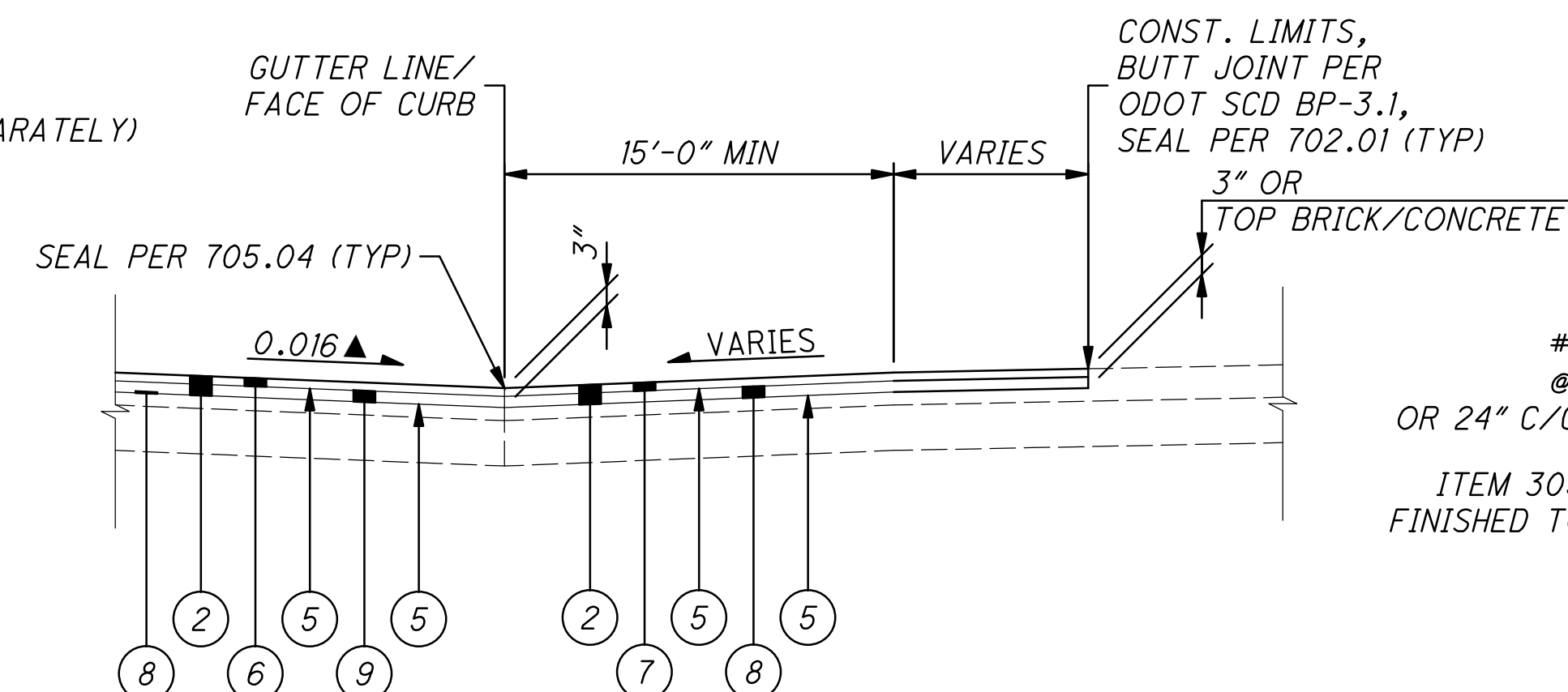


- ① ITEM 204 - SUBGRADE COMPACTION
- ② ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T = 3")
- ③ ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (0" MIN)
- ④ ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN
- ⑤ ITEM 407 - TACK COAT (0.10 GAL/SY)
- ⑥ ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN "A" (PG70-22M)
- ⑦ ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN "B" (PG64-22)
- ⑧ ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN (0" MIN TO 1.75" MAX) (PG64-22) AS DIRECTED BY THE ENGINEER
- ⑨ ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN (PG64-22M)
- ⑩ ITEM 451 - REINFORCED CONCRETE PAVEMENT, MISC.: 12" REINFORCED CONCRETE PAVEMENT, CLASS QC MS
- ⑪ ITEM 608 - 6" CONCRETE WALK, AS PER PLAN
- ⑫ ITEM 609 - CURB, TYPE 2-A, AS PER PLAN
- ⑬ ITEM 609 - CURB, TYPE 6, AS PER PLAN
- ⑭ ITEM 659 - SEEDING AND MULCHING
- ⑮ ITEM 659 - TOPSOIL (4" AVERAGE)
- ⑯ ITEM 202 - CURB REMOVED (INCLUDED IN ITEM 609 - CURB, TYPE 6, AS PER PLAN
- ▲ MATCH EXISTING, 0.02 PREFERRED, 0.016 MIN
- 0.02 PREFERRED, 0.01 MINIMUM
- ◆ WHERE SPECIFIED, WALK SHALL BE REMOVED AND REPLACED TO THE FIRST CONSTRUCTION JOINT, OR AS DIRECTED BY THE ENGINEER

STA. 1+98.00 (BROADWAY AVE.) TO STA. 15+92.00 (LUFKIN AVE.)
STA. 27+68.00 (TRUSCON AVE.) TO STA. 49+92.00 (SUSPEND WORK)
STA. 55+94.00 (RESUME WORK) TO STA. 77+32.00 (WOODLAND AVE.)
STA. 126+88.00 (CARNEGIE AVE.) TO 134+54.00 (SUSPEND WORK)

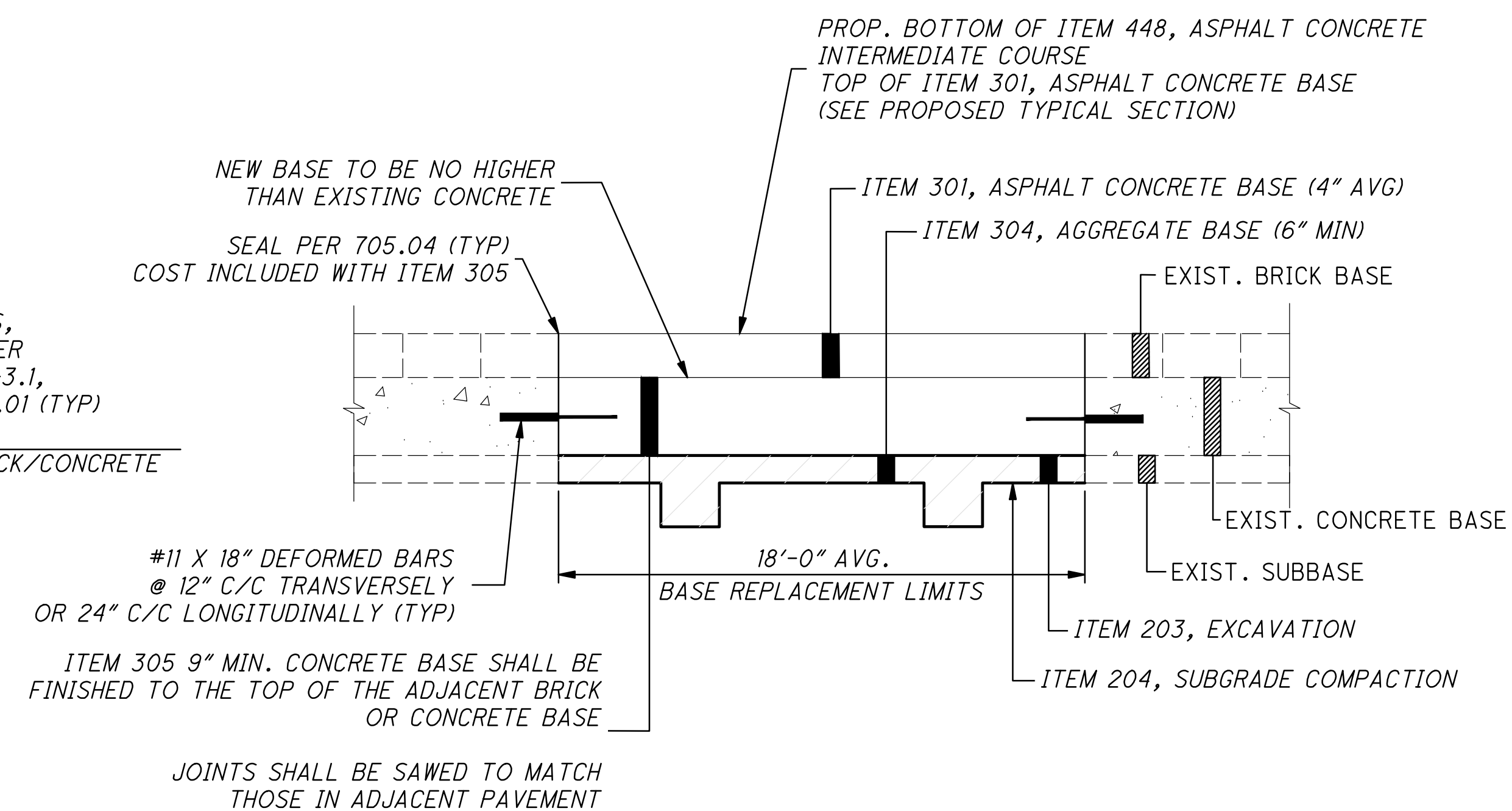


STA. 15+92.00 (LUFKIN AVE.) TO STA. 27+68.00 (TRUSCON AVE.)
STA. 27+32.00 (WOODLAND AVE.) TO STA. 90+60.00 (SCOVILL AVE.)
STA. 90+60.00 (SCOVILL AVE.) TO STA. 122+18.00 (SUSPEND WORK)
STA. 123+50.00 (RESUME WORK) TO STA. 126+88.00 (CARNEGIE AVE.)
STA. 137+76.00 (RESUME WORK) TO STA. 142+68.00 (SUSPEND WORK)
STA. 144+06.00 (RESUME WORK) TO STA. 185+41.00 (SUPERIOR AVE.)



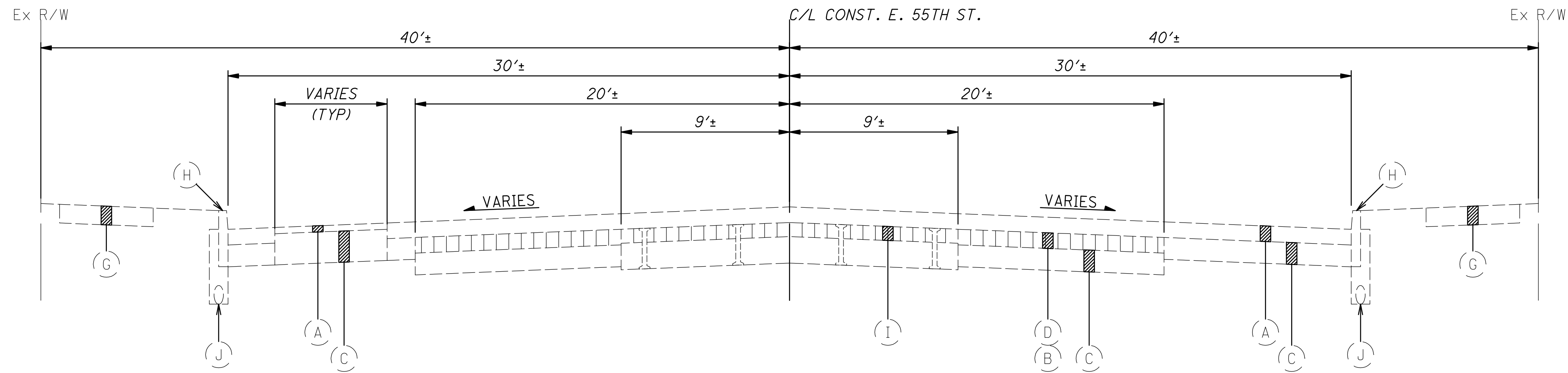
LOCATIONS VARY

NOT TO SCALE



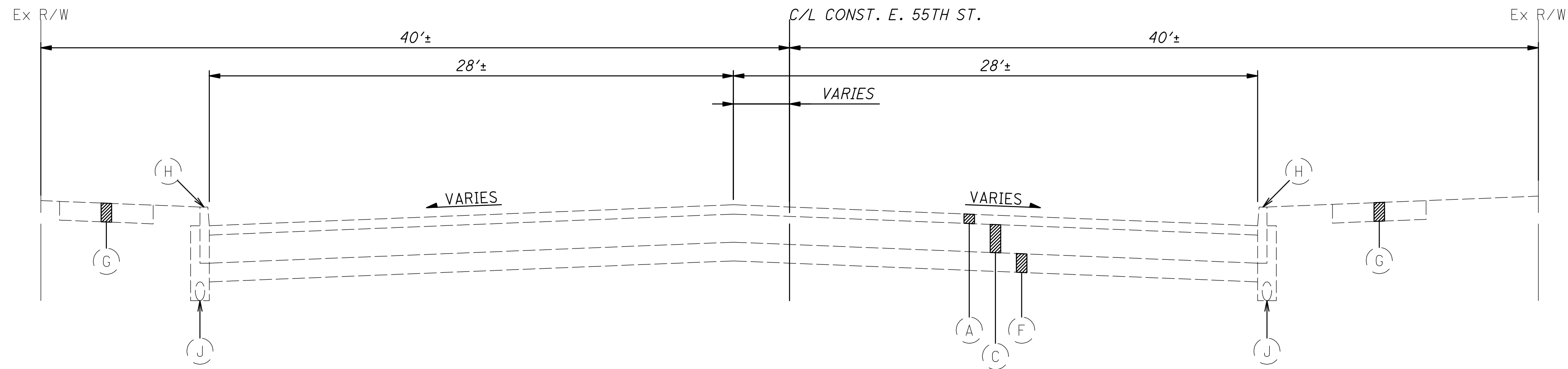
CROSS SECTION VIEW
NOT TO SCALE

FOR PROPOSED TYPICAL SECTIONS, SEE SHEET 2
FOR PAVEMENT REPAIR DETAILS, SEE SHEET 4



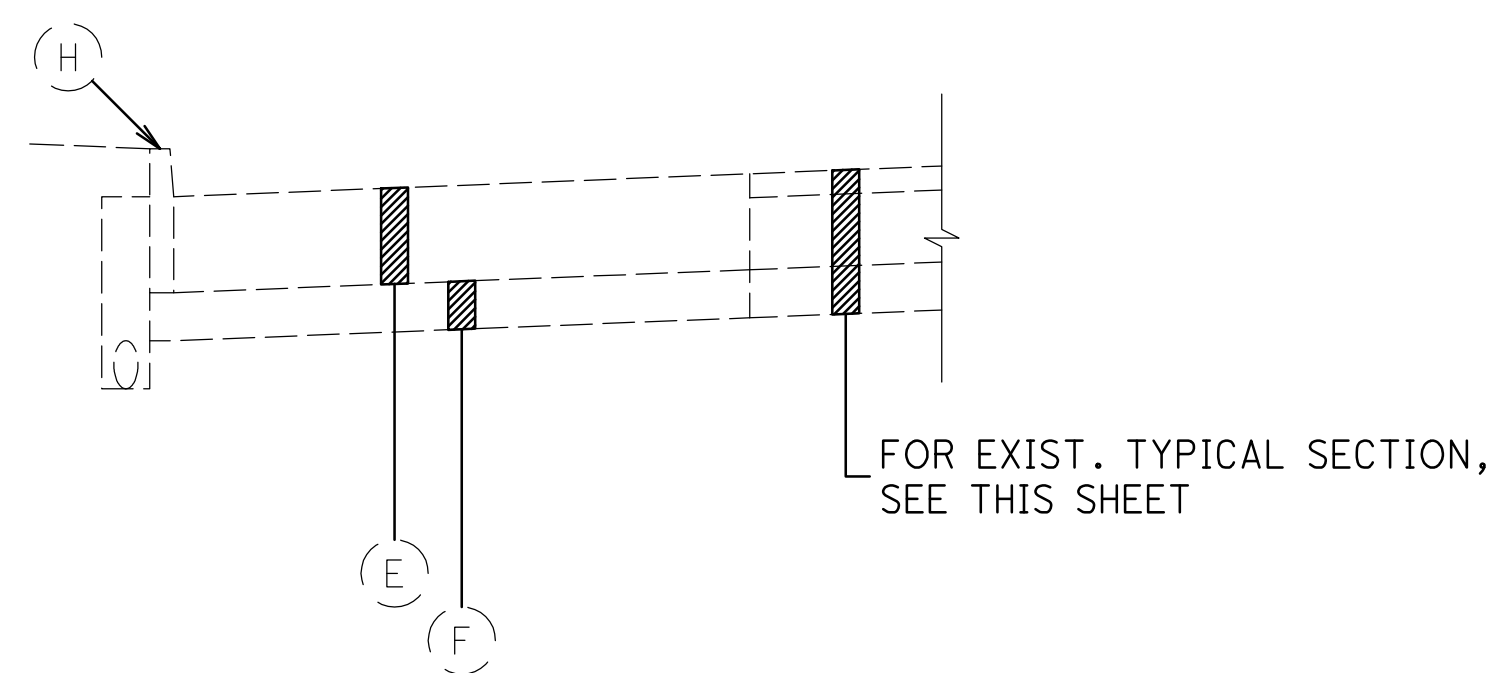
E. 55TH ST. - RESURFACING SECTION

STA. 1+98.00 (BROADWAY AVE.) TO STA. 15+92.00 (LUFKIN AVE.)
STA. 27+68.00 (TRUSCON AVE.) TO STA. 49+92.00 (SUSPEND WORK)
STA. 55+94.00 (RESUME WORK) TO STA. 77+32.00 (WOODLAND AVE.)
STA. 126+88.00 (CARNEGIE AVE.) TO 134+54.00 (SUSPEND WORK)



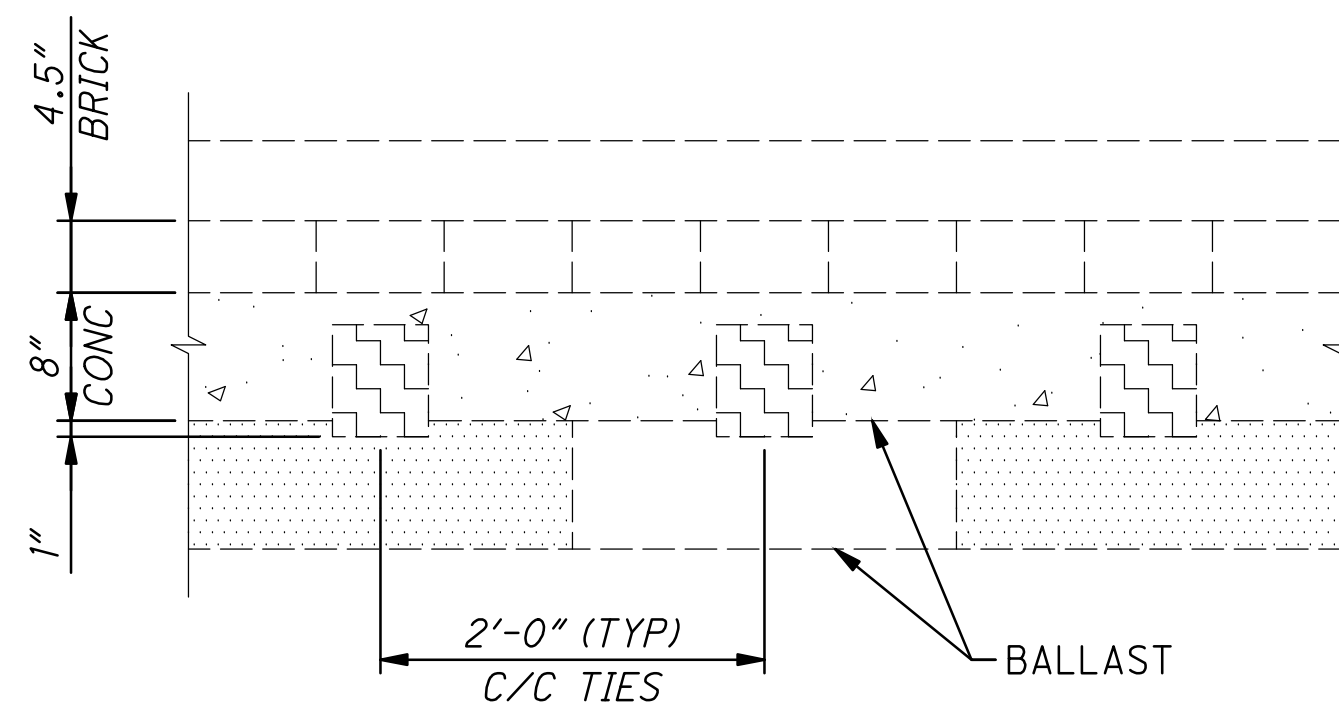
E. 55TH ST. - RESURFACING SECTION

STA. 15+92.00 (LUFKIN AVE.) TO STA. 27+68.00 (TRUSCON AVE.)
STA. 77+32.00 (WOODLAND AVE.) TO STA. 90+60.00 (SCOVILL AVE.)
STA. 90+60.00 (SCOVILL AVE.) TO STA. 122+18.00 (SUSPEND WORK)
STA. 123+50.00 (RESUME WORK) TO STA. 126+88.00 (CARNEGIE AVE.)
STA. 137+76.00 (RESUME WORK) TO STA. 142+68.00 (SUSPEND WORK)
STA. 144+06.00 (RESUME WORK) TO STA. 185+41.00 (SUPERIOR AVE.)



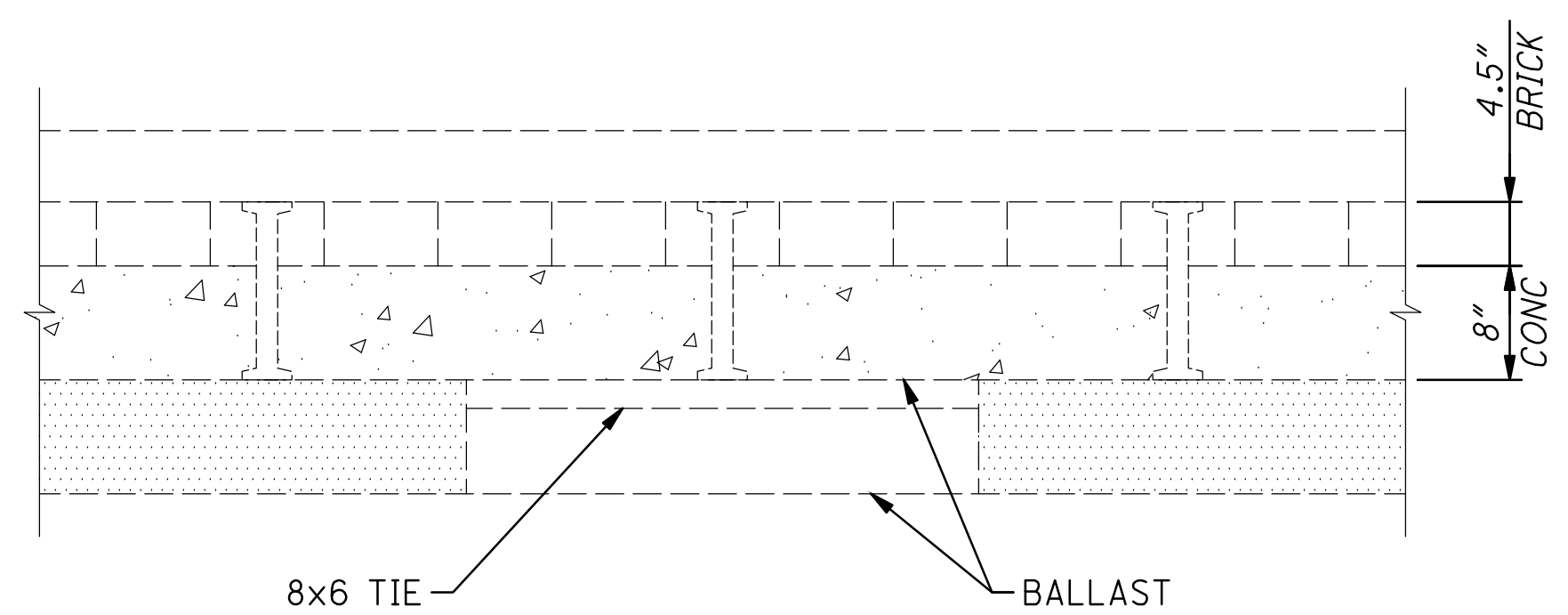
EXISTING BUS STOP LANE

LOCATIONS VARY



EXISTING BURIED TRACKS DETAIL

LONGITUDINAL VIEW
NOT TO SCALE



EXISTING BURIED TRACKS DETAIL

CROSS SECTION VIEW
NOT TO SCALE

EXISTING LEGEND

- (A) EXIST. 3" - 7.75" ASPHALT CONCRETE
- (B) EXIST. BRICK BASE
- (C) EXIST. 5" - 10.5" CONCRETE BASE
- (D) EXIST. 4.75" - 5.5" GRANITE BLOCK
- (E) EXIST. 12" REINFORCED CONCRETE PAVEMENT
- (F) EXIST. 6" AGGREGATE BASE
- (G) EXIST. CONCRETE/FLAGSTONE WALK
- (H) EXIST. SANDSTONE/GRANITE/CONCRETE CURB
- (I) EXIST. BURIED TRACKS (FOR DETAILS, SEE BELOW)
- (J) EXIST. 4" OR 6" UNDERDRAIN

CALCULATED
ERS
CHECKED
DEN

TYPICAL SECTIONS

CUY-E 55TH ST RESURF

3
103

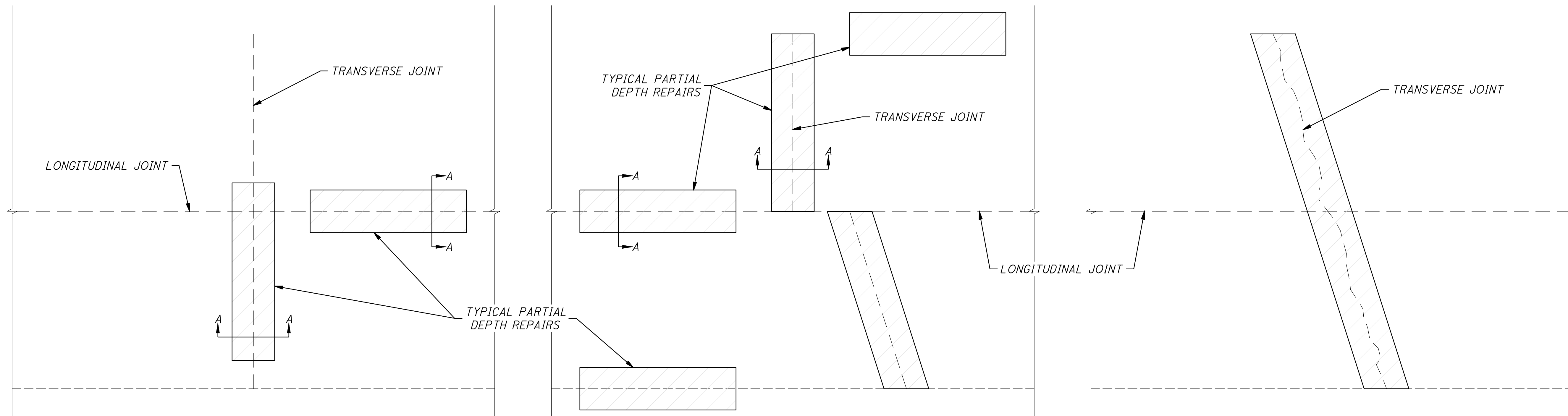
FOR PROPOSED TYPICAL SECTIONS, SEE SHEET 2
FOR EXISTING TYPICAL SECTIONS, SEE SHEET 3

CALCULATED
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CHECKED
DEN

TYPICAL SECTIONS

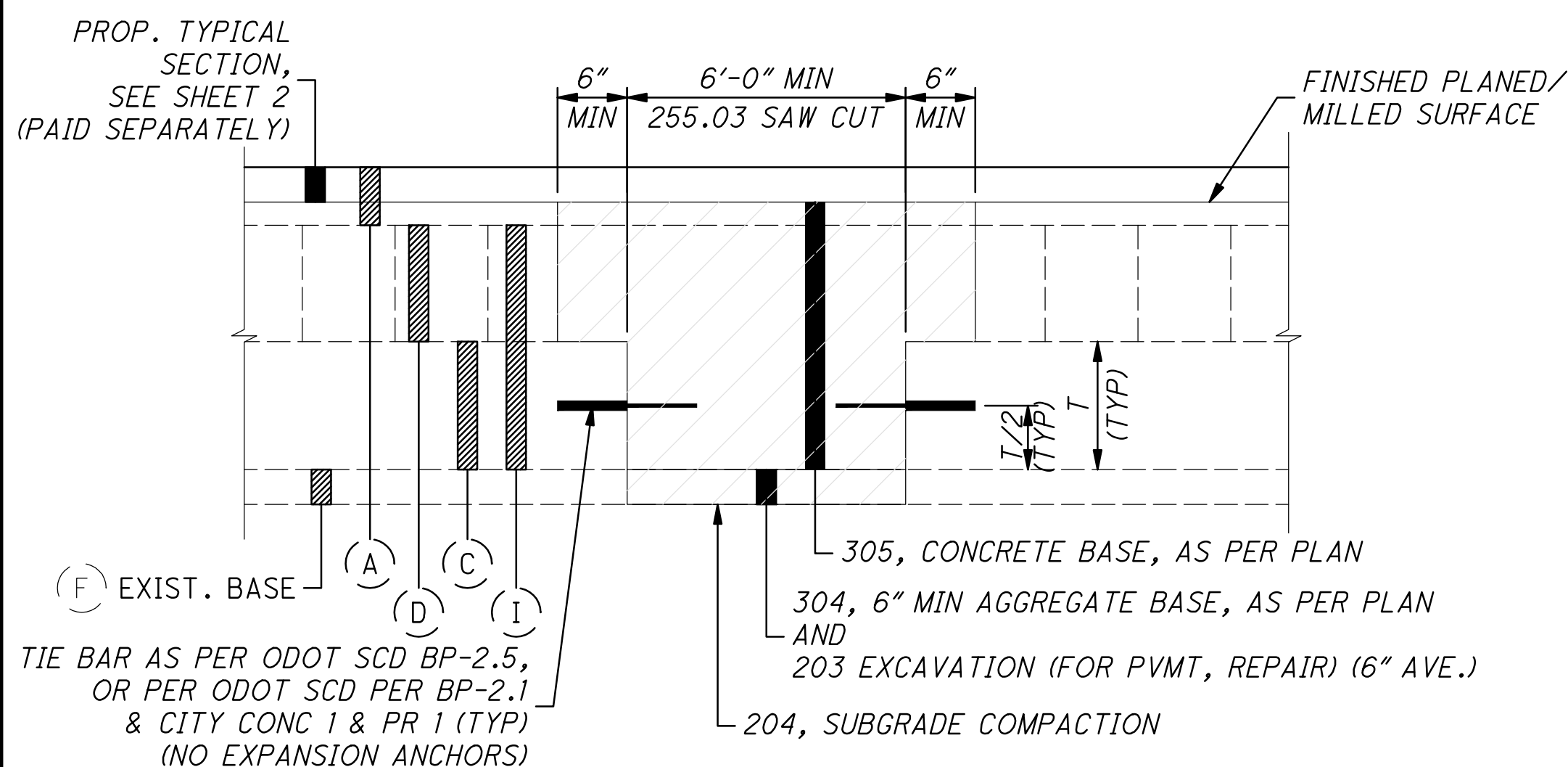
CUY-E 55TH ST RESURF

4
103

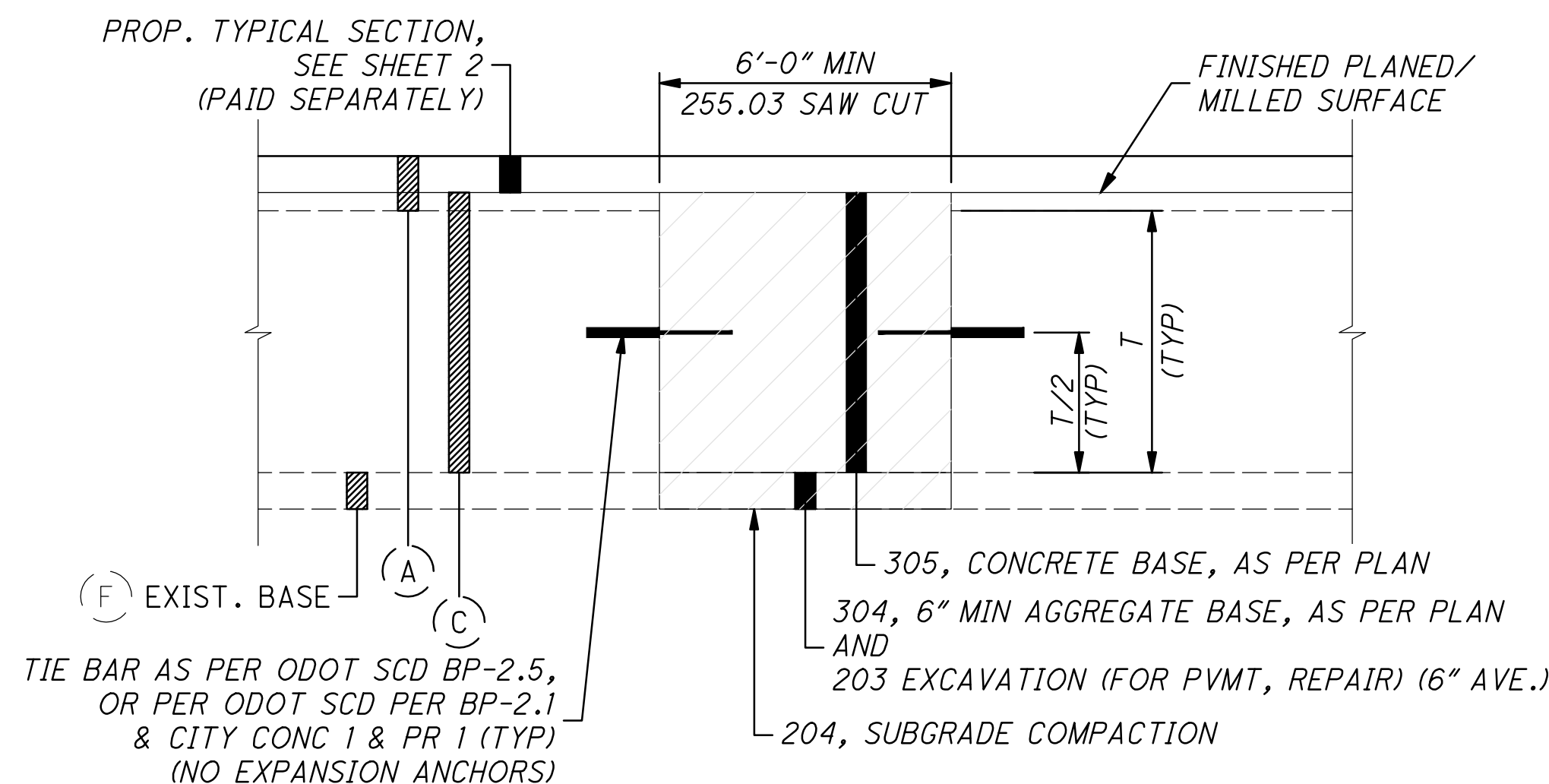


PAVEMENT REPAIR DETAILS PLAN VIEW

NOT TO SCALE



FULL DEPTH PAVEMENT REPAIR WITH BRICK BASE



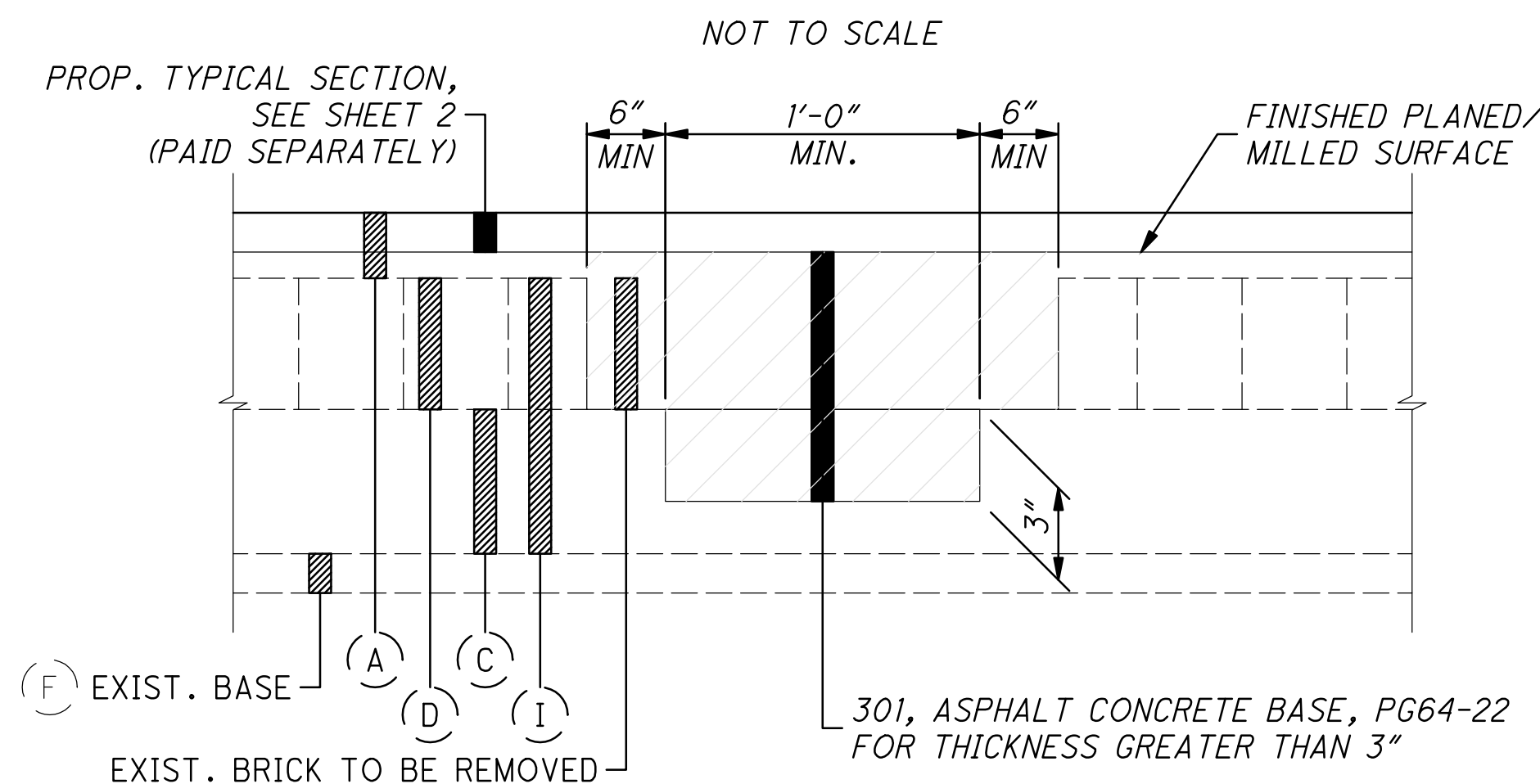
FULL DEPTH PAVEMENT REPAIR WITH CONCRETE BASE

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN

- PARTIAL DEPTH PAVEMENT REPAIRS SHALL CONSIST OF 3" ASPHALT OR CONCRETE REMOVAL AND REPLACEMENT WITH 3" OF ITEM 441, TYPE 2, (448) MATERIAL.
- PLACE AND COMPACT THE ABOVE ASPHALT CONCRETE REPLACEMENT MATERIALS (ITEM 301 AND ITEM 441) IN ONE OR MORE LIFTS IN ACCORDANCE WITH 252.04 OF THE SPECIFICATIONS.

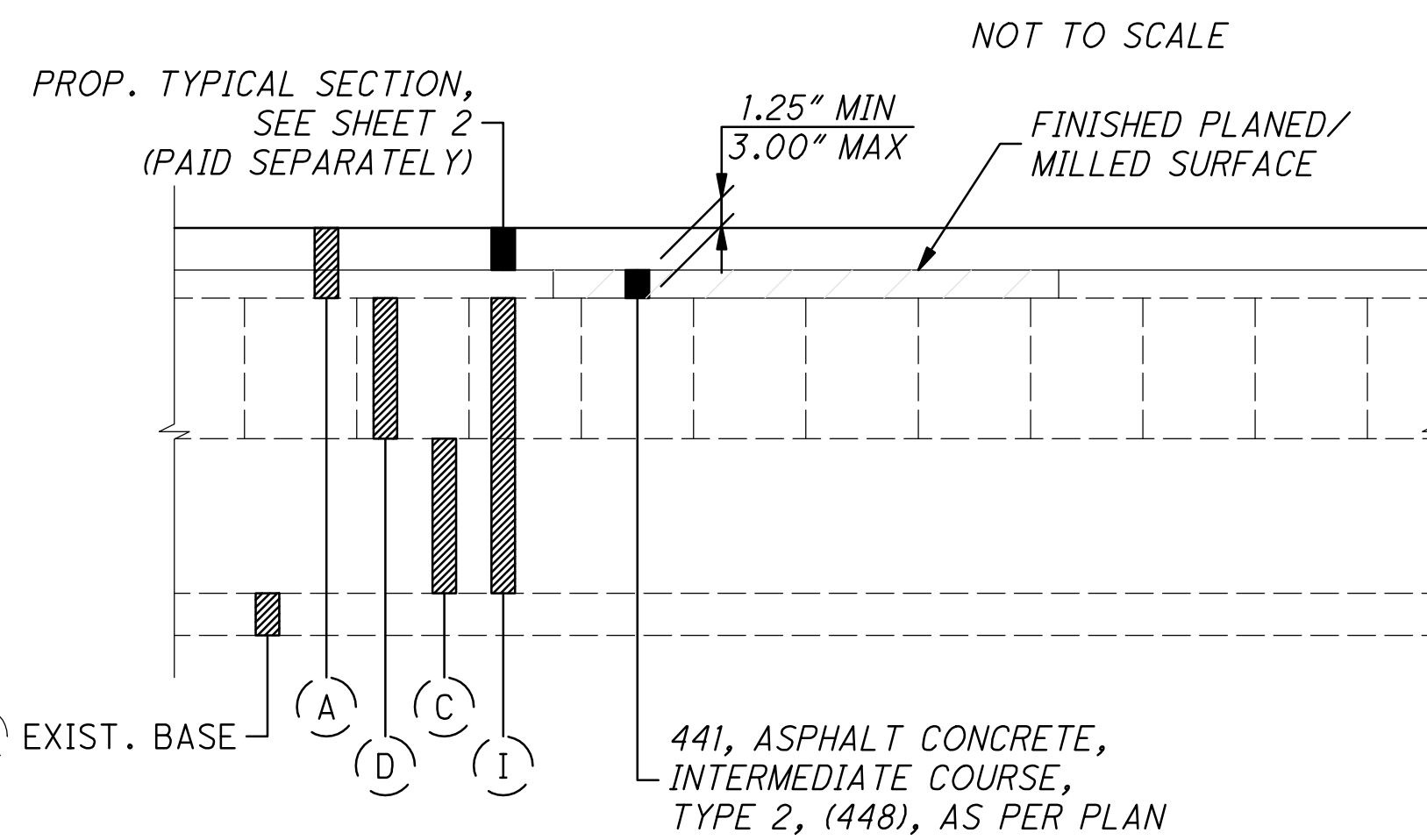
ITEM 255 - FULL DEPTH PAVEMENT REPAIR, AS PER PLAN

- FOR DOWEL SIZE AND SPACING, REFER ODOT SCD BP-2.1 & CITY OF CLEVELAND SCD CONC 1 & PR 1.
- REMOVE REMAINING ASPHALT AND CONCRETE/BRICK BASE UNDER ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT.



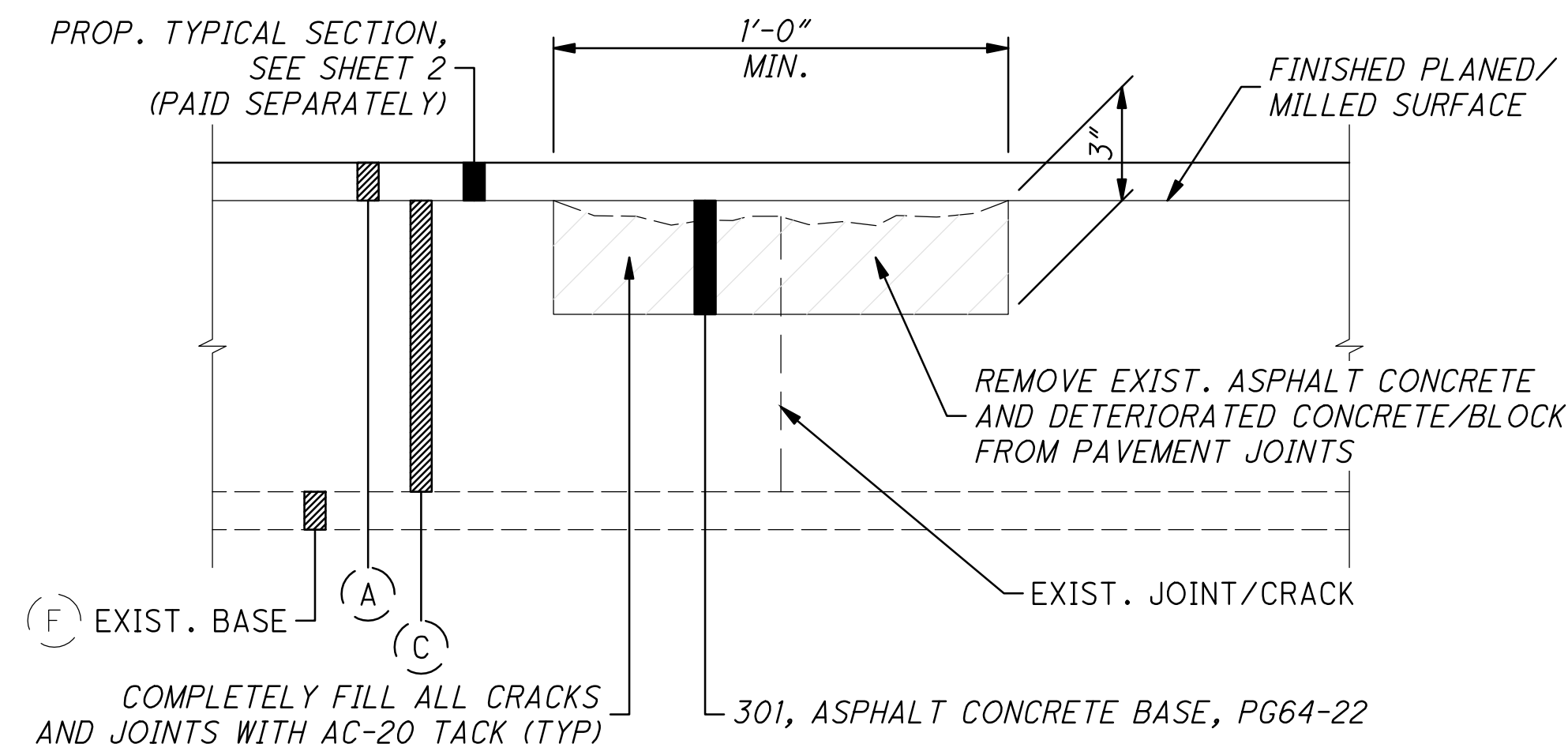
PARTIAL DEPTH PAVEMENT REPAIR WITH BRICK BASE REMOVED

NOT TO SCALE



PARTIAL DEPTH PAVEMENT REPAIR WITH BRICK BASE REMAIN

NOT TO SCALE



PARTIAL DEPTH PAVEMENT REPAIR WITH CONCRETE BASE

NOT TO SCALE

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GENERAL

PERMIT

IN THE CITY OF CLEVELAND, ALL PERMITS MUST BE OBTAINED FROM THE DIVISION OF ASSESSMENTS AND LICENSES PRIOR TO BEGINNING ANY WORK. PERMITS INCLUDE BUT ARE NOT LIMITED TO STREET OPENING PERMIT, OVERLOAD PERMIT, OBSTRUCTION PERMIT AND/OR SIDEWALK PERMIT AND MAY BE OBTAINED THROUGH THE FOLLOWING CONTACT:

TRAVIS EVANS
DEPARTMENT OF FINANCE
DIVISION OF ASSESSMENTS AND LICENSES
601 LAKESIDE AVENUE, ROOM 122
CLEVELAND, OHIO 44114
PHONE: (216) 664-2174
EMAIL: DALPERMITS@CITY.CLEVELAND.OH.US

ALL STREET OPENING REPAIRS, CURB REPAIRS, AND/OR SIDEWALK REPAIRS EITHER INCIDENTAL TO THE PROJECT OR PART OF THE PROJECT MUST BE PERFORMED IN ACCORDANCE TO CITY OF CLEVELAND STANDARDS. A COPY OF THE STANDARDS CAN BE OBTAINED FROM THE DIVISION OF ENGINEERING AND CONSTRUCTION BY CALLING (216) 664-2381.

ALL PERMITS, FEES AND CHARGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THEIR ASSOCIATED COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE PERTINENT WORK ITEMS. FOR BIDDING PURPOSES, FEES AND CHARGES MAY BE OBTAINED FROM THE DIVISION OF ASSESSMENTS AND LICENSES AT (216) 664-2174.

UTILITIES

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

AT&T OHIO
ATTN: ERIC JOHNSTON
13630 LORAIN AVE. RM 200
CLEVELAND, OH 44111
PHONE: (216) 476-6142
FAX: (216) 476-6016

BUCKEYE PIPELINE
ATTN: DONALD SAMALA
5002 BUCKEYE RD.
EMMAUS, PA 18049
PHONE: (484) 232-4303
FAX: (484) 232-4289

FIRST ENERGY/ILLUMINATING CO.
ATTN: TED RODER
6896 MILLER RD.
BRECKSVILLE, OH 44141
PHONE: (440) 717-6845
FAX: (440) 546-8780

WINDSTREAM OHIO
ATTN: RODGER MADDEM
1111 SUPERIOR AVE. E SUITE 500
CLEVELAND, OH 44114
PHONE: (440) 274-0209
FAX: (440) 260-0113

CITY OF CLEVELAND
DIVISION OF PUBLIC POWER
ATTN: CHRISTOPHER HIRZEL
1300 LAKESIDE AVE. ROOM 152
CLEVELAND, OH 44114
PHONE: (216) 664-3922
FAX: (216) 664-2972

TIME WARNER - WEST SIDE
ATTN: PAUL SILVESTRO
8150 DOW CR.
STRONGSVILLE, OH 44136
PHONE: (216) 575-8016
FAX: (440) 826-2940

TIME WARNER - EAST SIDE
ATTN: LOUIE RUBERTINO
7 SEVERANCE CR.
CLEVELAND HTS., OH 44118
PHONE: (216) 663-4001
FAX: (216) 581-3262

CITY OF CLEVELAND
DIVISION OF WATER
ATTN: FRED ROBERTS
1201 LAKESIDE AVE.
CLEVELAND, OH 44114

CITY OF CLEVELAND
WATER POLLUTION CONTROL
ATTN: ELIE RAMY
12302 KIRBY AVE.
CLEVELAND, OH 44108
PHONE: (216) 664-2756
FAX: (216) 664-3477

JOB 8 LLC
ATTN: JOHN BRUCE
800 WOODLANDS PKWY. SUITE 205
RIDGELAND, MS 39157

MCI
ATTN: AL GUEST
120 RAVINE ST.
AKRON, OH 44303

NORTHEAST OHIO REGIONAL
SEWER DISTRICT (NEORS)
ATTN: MARY MACIEJOWSKI
3900 EUCLID AVE.
CLEVELAND, OH 44115
PHONE: (216) 881-6600
FAX: (216) 881-2738

CENTURYLINK
ATTN: CHRIS STRAYER
8180 GREEN MEADOWS DR. N
LEWIS CENTER, OH 43035
PHONE: (330) 886-1299

GREATER CLEVELAND REGIONAL
TRANSIT AUTHORITY (GCRTA)
ATTN: HEATHER BATES
1240 W. 6TH ST.
CLEVELAND, OH 44113
PHONE: (216) 566-5084
FAX: (216) 431-6209

CONTINGENCY QUANTITIES

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

EXISTING TYPICAL SECTIONS

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

ELEVATION DATUM

ELEVATION SURVEY DATUM WAS NOT ESTABLISHED FOR THIS PROJECT.

DOMINION EAST OHIO
ATTN: BRYAN D. DAYTON
320 SPRINGSIDE DR. SUITE 320
AKRON, OH 44333

LEVEL 3 COMMUNICATIONS
ATTN: XAN RYPKEMA
1025 ELDORADO BLVD.
BROOMFIELD, CO 80021

G4S SECURE INTEGRATION
ATTN: CHARLIE KORDICH
4 WALKER WAY SUITE 1
ALBANY, NY 12205

XO COMMUNICATIONS
ATTN: DALE FERGUSON
815 SUPERIOR AVE. E SUITE 200
CLEVELAND, OH 44114
PHONE: (216) 619-3492
FAX: (216) 619-3684

WESTERN RESERVE COMMUNICATIONS
ATTN: LOWELL KATZ
2801 HAMILTON AVE.
CLEVELAND, OH 44114

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, WORK HOURS WILL BE RESTRICTED TO 7:00 AM TO 7:00 PM.

THE CONTRACTOR SHALL APPLY FOR A NOISE VARIANCE TO PERFORM NIGHT TIME PAVING. IN THE EVENT A NOISE VARIANCE IS NOT GRANTED BY THE DIRECTOR OF SAFETY, WORK SHALL COMMENCE DURING DAYTIME HOURS AT NO ADDITIONAL COST. ANY ADDITIONAL MAINTENANCE OF TRAFFIC COST WILL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN. NO SEPARATE PAYMENT WILL BE MADE.

DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT. THE NOISE LEVEL RESULTING FROM CONSTRUCTION SHALL BE WITHIN THE LIMITS SPECIFIED IN OSHA REGULATIONS AND ALL LOCAL ORDINANCES.

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 AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

ROADWAY

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEMS 202, 255, 452, 608, 609 ETC.
REMOVAL ITEMS, AS PER PLAN

THE COST OF REMOVING AND DISPOSING OF ITEMS PURSUANT TO ITEM 202.05 INCLUDING BUT NOT LIMITED TO PAVEMENT, CONCRETE, AGGREGATE BASE COURSE, WEARING COURSE, SIDEWALKS, CURBS AND DRIVEWAYS SHALL INCLUDE THE COST OF FULL DEPTH SAW CUTTING. NO SEPARATE PAYMENT SHALL BE MADE FOR FULL DEPTH SAW CUTTING FOR THE REMOVAL OF THESE ITEMS.

ITEMS 202 - PAVEMENT REMOVED, AS PER PLAN

ALL REQUIREMENTS FOR ITEM 202 - PAVEMENT REMOVED, SHALL APPLY EXCEPT AS MODIFIED HEREIN.

REMOVAL OF ALL BASE MATERIALS, INCLUDING BUT NOT LIMITED TO BRICK, BLOCK, CONCRETE, OR ASPHALT SHALL BE INCLUDED WITH THIS ITEM, OR AS DIRECTED BY THE ENGINEER. ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED TO PERFORM THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE UNIT BID PRICE OF ITEM 202 - PAVEMENT REMOVED, AS PER PLAN. NO SEPARATE PAYMENT SHALL BE MADE FOR REMOVAL OF BASE MATERIALS.

ITEM 202 - REMOVAL MISC.: TRACK REMOVED

IT IS ANTICIPATED THAT OLD STREETCAR TRACKS ARE BURIED UNDER THE EXISTING ASPHALT AND MAY REQUIRE REMOVAL AS A PART OF THIS PROJECT "AS DIRECTED BY THE ENGINEER". THE EXACT LOCATION, LIMITS, AND TYPE OF TRACK IS UNKNOWN.

THE UNIT PRICE BID PER SQUARE YARD FOR THIS ITEM SHALL INCLUDE THE REMOVAL AND DISPOSAL OF THE FULL DEPTH OF TRACK. THE LIMITS OF PAYMENT SHALL BE THE WIDTH OF RAILROAD TIE BY LENGTH OF RAIL REMOVAL. PAYMENT WILL INCLUDE SAW CUTTING, REMOVAL OF BRICK PAVERS, UNDERDRAINS, TIES, AND ANGLES OR OTHER HARDWARE, RAIL, BALLAST, AND THE BASE.

IN THE AREAS OF COMPLETE PAVEMENT REMOVAL AND REPLACEMENT, ANY PART OF THE TRACK WHICH IS BELOW THE PROPOSED SUBGRADE SHALL BE REMOVED AND REPLACED WITH ITEM 304 - AGGREGATE BASE.

ANY ADDITIONAL EXCAVATION OR EMBANKMENT REQUIRED BETWEEN THE BOTTOM OF THE TRACK BASE AND THE PROPOSED SUBGRADE WILL BE PAID FOR UNDER SEPARATE ITEMS.

THE DRAWINGS CONTAIN A DETAIL OF THE MOST PROBABLY TYPE OF TRACK, AS DETERMINED FROM THE RECORD DRAWINGS.

NO ADDITIONAL COMPENSATION FOR MINOR VARIATIONS IN THE EXISTING TRACK FEATURES, INCLUDING REMOVAL AND BACKFILL AND EXISTING UNDERDRAIN UNDER TRACKS WILL BE MADE.

THE FOLLOWING CONTINGENCY QUANTITIES ARE TO BE USED FOR AREAS DETERMINED AFTER ASPHALT PAVEMENT PLANING HAS BEEN PERFORMED AND THE EXTENTS OF THE TRACKS HAVE BEEN LOCATED IN THE FIELD AND "AS DIRECTED".

ITEM 202 - REMOVAL MISC.: TRACK REMOVED	2850 SY
ITEM 203 - EXCAVATION	475 CY
ITEM 304 - AGGREGATE BASE, AS PER PLAN (6" MIN)	475 CY
ITEM 305 - 9" CONCRETE BASE, CLASS OCI, AS PER PLAN	2850 SY
ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (4" AVG)	320 CY

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ROADWAY (CONT'D)

ITEM 623 - MONUMENT ASSEMBLY, AS PER PLAN

ANY PERSON, CONTRACTOR, UTILITY, OR GOVERNMENTAL AGENCY, HEREIN REFERRED TO AS THE CONTRACTOR, DISTURBING, REMOVING AND/OR REPLACING PAVEMENT IN THE CITY OF CLEVELAND'S PUBLIC RIGHT-OF-WAY SHALL PROVIDE INFORMATION AS TO THE TYPE OF WORK AND THE LIMITS OF THE WORK TO THE CITY OF CLEVELAND CHIEF SURVEYOR THRU ODOT PRIOR TO PERFORMING SUCH WORK. THE CHIEF SURVEYOR WILL DETERMINE WHICH MONUMENTS, IF ANY WILL BE AFFECTED BY THE WORK.

WHERE NEW MONUMENT ASSEMBLIES ARE TO BE CONSTRUCTED, THE CONTRACTOR SHALL FURNISH THE FOLLOWING FOR EACH ASSEMBLY AS DETAILED ON THE CITY OF CLEVELAND'S MONUMENT BOX & ASSEMBLIES STANDARD CONSTRUCTION DRAWING MB-IC: ONE(1) CLEVELAND MONUMENT BOX ASSEMBLY, ONE(1) ONE INCH DIAMETER EPOXY STEEL DEFORMED REINFORCING BAR THIRTY SIX INCHES (36") LONG, FLAT ON TOP WITH A ROUND POINTED END.

ALL MONUMENTS EXISTING AND PROPOSED MUST BE REFERENCED PRIOR TO CONSTRUCTION. A MINIMUM OF 3-REF. POINTS PER MONUMENT MUST BE USED AND MUST BE LOCATED OUTSIDE OF THE CONSTRUCTION ZONE (WORK AREA). CARE AND PROTECTIVE MEASURES SHALL BE EMPLOYED BY THE CONTRACTOR TO PRESERVE EXISTING MONUMENTS. ALL MONUMENTS DISTURBED AND/OR DESTROYED SHALL BE RESET AS DETAILED ON THE CITY OF CLEVELAND'S MONUMENT BOX & ASSEMBLIES STANDARD CONSTRUCTION DRAWING MB-IC. THE CONTRACTOR SHALL USE COMPETENT PERSONNEL AND SUITABLE EQUIPMENT FOR THE WORK REQUIRED BY THIS DETAIL SPECIFICATION. ALL WORK SHALL BE DONE BY SAID COMPETENT PERSONNEL UNDER DIRECT SUPERVISION OF A PROFESSIONAL SURVEYOR, LICENSED AND REGISTERED TO PRACTICE IN THE STATE OF OHIO. SAID SURVEYOR AND COMPETENT PERSONNEL SHALL BE HIRED BY THE CONTRACTOR.

PRIOR TO BEGINNING ANY WORK A COPY OF ALL SURVEY AND REFERENCE NOTES IS TO BE SENT THRU ODOT TO THE ATTENTION OF THE CHIEF SURVEYOR AT THE CITY OF CLEVELAND, DIVISION OF ENGINEERING AND CONSTRUCTION, 601 LAKESIDE AVE. ROOM 518, CLEVELAND, OH. 44114. (216) 664-2460.

FOR MONUMENTS OUTSIDE THE CONTRACTOR'S WORK AREA, BUT NEAR ENOUGH TO THE WORK AREA THAT MAY BE DISTURBED FOR ANY REASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT AS IF THE MONUMENT WERE ORIGINALLY INSIDE THE WORK AREA AS HEREIN SPECIFIED.

THE CONTRACTOR SHALL PERFORM ALL OTHER OPERATIONS NECESSARY TO COMPLETE THIS WORK ITEM SUCH AS PAVEMENT REMOVAL, EXCAVATION, SETTING THE BOX TO GRADE AND PAVEMENT REPLACEMENT. ALL WORK COMPLETED AND ACCEPTED SHALL BE PAID FOR BY THE UNIT PRICE BID FOR ITEM 623-MONUMENT BOX ASSEMBLIES, AS PER PLAN.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK DESCRIBED ABOVE, FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL - MONUMENT ASSEMBLY, AS PER PLAN 6 EACH

ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN

WHERE MONUMENT BOXES ARE BOTH SUITABLE FOR RE-USE AND CONFORM TO THE CITY OF CLEVELAND'S MONUMENT BOX & ASSEMBLIES STANDARD CONSTRUCTION DRAWING MB-IC, THEY SHALL BE ADJUSTED TO GRADE AS REQUIRED AND SPECIFIED. WHERE THE PLANS CALL FOR THE EXISTING MONUMENT BOXES TO BE REPLACED, THE CONTRACTOR SHALL REMOVE THE EXISTING MONUMENT BOX AND REPLACE IT AS DETAILED ON THE CITY OF CLEVELAND'S MONUMENT BOX & ASSEMBLIES STANDARD CONSTRUCTION DRAWING MB-IC; SET TO PROPER GRADE.

CARE SHALL BE TAKEN NOT TO DISTURB EXISTING MONUMENTS DURING PAVEMENT REMOVAL OPERATIONS. CONTRACTOR SHALL UTILIZE FULL-DEPTH SAW CUTS AROUND EXISTING MONUMENTS IN BASE REPAIR AREAS WHENEVER NECESSARY TO AVOID MONUMENT DAMAGE. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK.

IN ADDITION TO ADJUSTING THE CASTING VERTICALLY, THIS PAY ITEM SHALL INCLUDE CENTERING THE CASTING OVER THE EXISTING IRON PIN OR STONE. THE ENTIRE MONUMENT BOX CASTING SHALL BE ADJUSTED TO GRADE; NO INSERTS OR ADJUSTING RINGS WILL BE PERMITTED.

IF THE EXISTING IRON PIN OR STONE IS EITHER MISSING OR DAMAGED, A NEW MONUMENT ASSEMBLY SHALL BE INSTALLED AND PAID FOR AS ITEM 623- MONUMENT ASSEMBLY, AS PER PLAN.

ALL MONUMENTS EXISTING AND PROPOSED MUST BE REFERENCED PRIOR TO CONSTRUCTION. A MINIMUM OF 3-REF. PTS. PER MON. MUST BE USED AND MUST BE LOCATED OUTSIDE OF THE CONSTRUCTION ZONE (WORK AREA). CARE AND PROTECTIVE MEASURES SHALL BE EMPLOYED BY THE CONTRACTOR TO PRESERVE EXISTING MONUMENTS. ALL MONUMENTS DISTURBED AND/OR DESTROYED SHALL BE RESET AS DETAILED ON THE CITY OF CLEVELAND'S MONUMENT BOX & ASSEMBLIES STANDARD CONSTRUCTION DRAWING MB-IC. THE CONTRACTOR SHALL USE COMPETENT PERSONNEL AND SUITABLE EQUIPMENT FOR THE WORK REQUIRED BY THIS DETAIL SPECIFICATION. ALL WORK SHALL BE DONE BY SAID COMPETENT PERSONNEL UNDER DIRECT SUPERVISION OF A PROFESSIONAL SURVEYOR, LICENSED AND REGISTERED TO PRACTICE IN THE STATE OF OHIO. SAID SURVEYOR AND COMPETENT PERSONNEL SHALL BE HIRED BY THE CONTRACTOR.

PRIOR TO BEGINNING ANY WORK, A COPY OF ALL SURVEY AND REFERENCE NOTES IS TO BE SENT THRU ODOT TO THE ATTENTION OF THE CHIEF SURVEYOR AT THE CITY OF CLEVELAND, DEPARTMENT OF PUBLIC SERVICE, DIVISION OF ENGINEERING AND CONSTRUCTION, 601 LAKESIDE AVE. ROOM 518, CLEVELAND, OH. 44114. (216) 664-2460.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE UNDER ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN. THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE WORK DESCRIBED ABOVE:

ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN 6 EACH

ITEM 623 - MONUMENT, MISC.: MONUMENT REFERENCEING

IN ADDITION TO THE REQUIREMENTS OF ITEM 623 - MONUMENT ASSEMBLY, AS PER PLAN, THE FOLLOWING SHALL APPLY:

THIS ITEM SHALL CONSIST OF LOCATING AND REFERENCING ALL EXISTING ROADWAY AND/OR CENTERLINE MONUMENTS WITHIN THE LIMITS OF THE PROPOSED WORK FOR THE PURPOSES OF RESETTING/REESTABLISHING THEIR EXACT LOCATION IN THE EVENT THEY ARE DISPLACED OR DAMAGED DURING CONSTRUCTION. ALL WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A LICENSED SURVEYOR PROVIDED BY THE CONTRACTOR AND SHALL BE COMPLETED PRIOR TO THE START OF ANY PROXIMATE GRADING, PAYING OR OTHER SUCH OPERATIONS.

A THOROUGH SEARCH SHALL BE MADE TO LOCATE THE MONUMENTS WITHIN THE LIMITS OF THE PROPOSED WORK. UPON LOCATING THE EXISTING MONUMENTS, THE MONUMENT IRON PINS OR DRILL HOLES IN STONE (NOTE: IF MONUMENT BOX IS EMPTY, NOTIFY CITY OF CLEVELAND IMMEDIATELY) SHALL BE CAREFULLY EXPOSED AND REFERENCED TO NO LESS THAN THREE (3) PERMANENT OBJECTS. ANY EXISTING MONUMENTS THAT MIGHT REQUIRE REPLACEMENT SHALL BE NOTED. THE REFERENCES ALONG WITH ALL NOTATIONS SHALL BE DELIVERED TO THE ENGINEER IMMEDIATELY UPON COMPLETION. ADJUSTMENTS OR REPLACEMENTS OF MONUMENT BOXES OR ASSEMBLIES MAY NOT COMMENCE UNTIL THE REFERENCES HAVE BEEN CHECKED/VERIFIED AND APPROVED BY THE ENGINEER.

THE FOLLOWING ITEMS SHALL APPLY:
-DURABLE POINTS OUTSIDE OF THE CONSTRUCTION LIMITS: PK OR MAG NAILS IN POLES OR PAVEMENT, DRILL HOLES, IRON PINS, SPECIFICALLY DEFINED BUILDING CORNERS, ETC.
-SPECIFICALLY DEFINED AND LOCATABLE TO WITHIN 0.01 FEET.
-TIED TO EXISTING MONUMENT TO WITHIN 0.01 FEET. ERROR IS NOT TO EXCEED THIS AMOUNT.
-A MINIMUM OF THREE POINTS PER MONUMENT REFERENCED.
-LOCATE 100.00 FEET OR LESS FROM MONUMENT, WHERE POSSIBLE, SUCH THAT A STEEL TAPE MAY BE USED TO RE-ESTABLISH POSITION IF NECESSARY.

THE PER EACH UNIT PRICE PAYMENT FOR THIS WORK SHALL INCLUDE LOCATING THE MONUMENTS, CAREFULLY CLEANING OUT THE MONUMENT BOXES AND/OR EXPOSING THE MONUMENT PINS/POINTS, REFERENCING THE MONUMENTS AND ALL RELATED NOTATION.

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED IN THE SCHEDULE OF ITEMS FOR ALL MONUMENTS KNOWN TO EXIST OR INITIALLY FOUND/ENCOUNTERED WITHIN THE PROPOSED WORK LIMITS.

ITEM 623 - MONUMENT, MISC.: MONUMENT REFERENCING 48 EACH

ITEM 608 - TRUNCATED DOMES, AS PER PLAN

THE CONTRACTOR SHALL SAW CUT AT THE LIMITS OF THE EXISTING TRUNCATED DOME INSERT OR AT THE PROPOSED INSERT LOCATION. REMOVE ALL EXISTING CONCRETE AND INSERTS AS DIRECTED BY THE ENGINEER. FORM AND POUR NEW CONCRETE WALK PER DETAILS SHOWN ON THE CITY OF CLEVELAND STD DWG CR-1. INSERT RED TRUNCATED DOME TILE AS PER MANUFACTURER'S INSTRUCTIONS.

THE ITEM SHALL INCLUDE ALL SAW CUTTING REQUIRED TO REMOVE THE EXISTING TRUNCATED DOME, REMOVAL OF EXISTING TRUNCATED DOME, AND NEW TRUNCATED DOME TILE REQUIRED WHERE A COMPLETE ADA CURB RAMP LAYOUT IS NOT REQUIRED. DESIGN INTENT IS TO REPLACE EXISTING TRUNCATED DOME INSERTS WITH A RED TILE, AS PER CITY OF CLEVELAND CURB RAMP PROVISIONS.

PAYMENT FOR THIS ITEM IS MEASURED BY THE SQUARE FOOT AREA FOR TRUNCATED DOME TILE INSERT.

A CONTINGENCY QUANTITY FOR ITEM 608 - TRUNCATED DOMES, AS PER PLAN HAS BEEN CARRIED THROUGH TO THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 608 - TRUNCATED DOMES, AS PER PLAN 240 SF

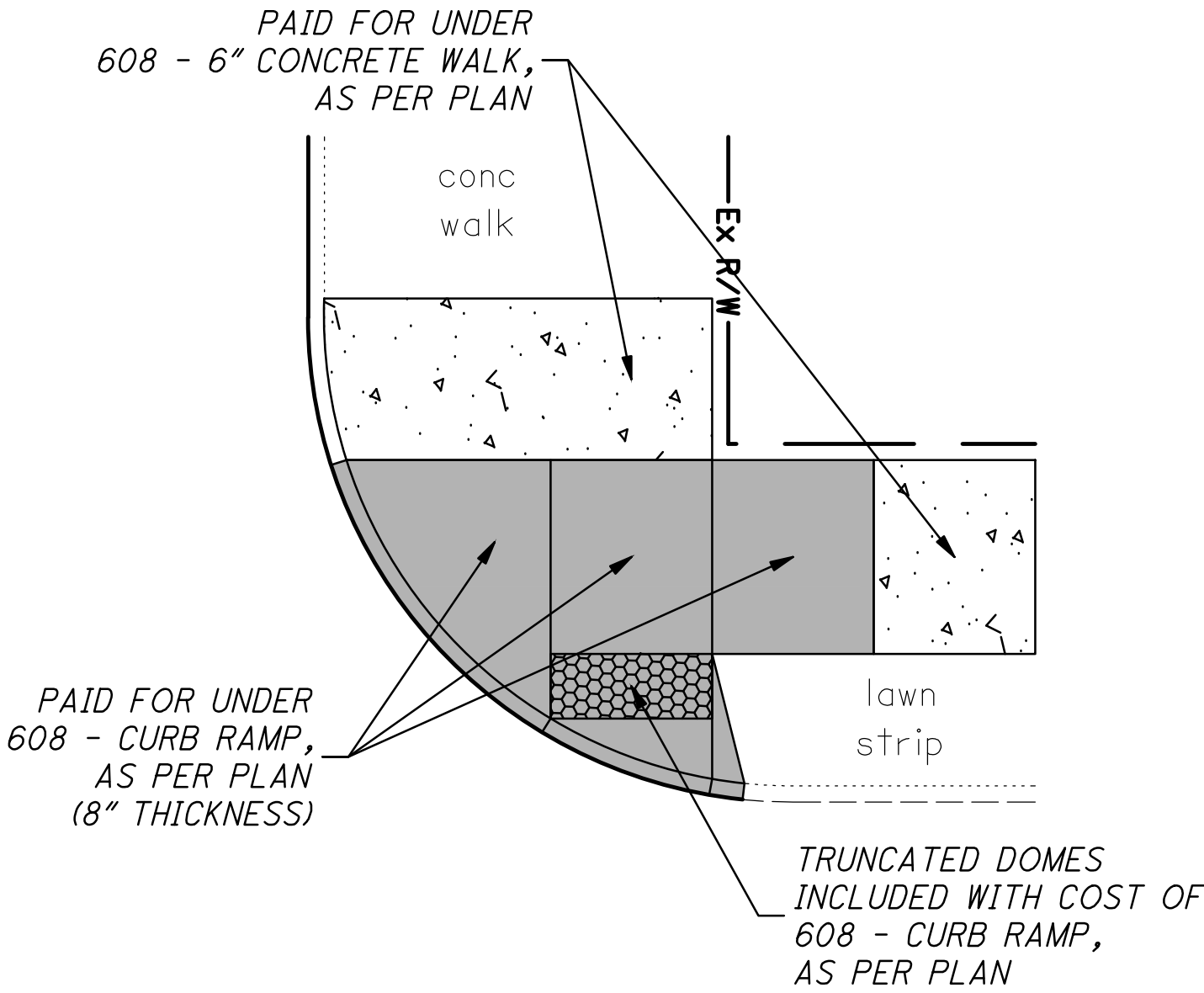
ITEM 608 - CURB RAMP, AS PER PLAN

UNDER THIS PAY ITEM, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT AND CONSTRUCTING AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANT CURB RAMPS AND LANDINGS THAT CONFORM TO THE CITY OF CLEVELAND CURB RAMP STANDARD DRAWINGS AND SPECIAL PROVISIONS. CITY OF CLEVELAND CURB RAMP STANDARD DRAWINGS, TYPE 1 THROUGH TYPE 11, SHALL BE USED AS A BASE FOR CONSTRUCTION OF THE CURB RAMPS. THE CURB RAMP TYPE IS SUBJECT TO ADJUSTMENT AND/OR CHANGE DUE TO FIELD CONDITIONS AND SHALL BE DETERMINED IN THE FIELD BASED ON BEST FIT TO FIELD CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING TYPE OF CURB RAMP PROPOSED IN THE PLANS. NO ADDITIONAL PAYMENT SHALL BE MADE IF THE CURB RAMP TYPE IS CHANGED OR FOR FIELD ADJUSTMENTS NECESSARY FOR THE COMPLETE INSTALLATION OF THE RAMP.

ANY NEWLY CONSTRUCTED CURB RAMP NOT MEETING ADA REQUIREMENTS WILL BE REMOVED AND REPLACED BY THE CONTRACTOR, AT THEIR COST, TO THE SATISFACTION OF THE CITY AND ODOT.

PAYMENT SHALL BE MEASURED IN SQUARE FEET FOR CURB RAMP AREAS AS INDICATED ON CITY OF CLEVELAND CURB RAMP STANDARD DRAWINGS, TYPE 1 THROUGH TYPE 11, THE CURB RAMPS PAY LIMITS DETAILS BELOW, AND AS INDICATED ON THE PLAN SHEETS. PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO CONSTRUCT THE NEW CURB RAMP, COMPLETE IN PLACE. PAYMENT INCLUDES EXISTING RAMP/SIDEWALK REMOVALS, SURVEYING, CONSTRUCTION LAYOUT, FORM WORK, REPLACEMENT OF 2" SCREENINGS BED, PLACEMENT OF SIDEWALK AND CURB CONCRETE FOR NEW RAMP, AND PLACEMENT OF NEW DETECTABLE WARNINGS WITHIN THE PROPOSED RAMP AREAS. ALL SAWCUTTING, APPURTENANCES, AND OTHER WORK NECESSARY FOR THE COMPLETE INSTALLATION OF THE RAMP IS CONSIDERED INCIDENTAL TO THIS ITEM. ALL TOPSOIL, SEEDING, AND MULCHING REQUIRED ADJACENT TO THE CURB RAMP SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. SEEDING MIX SHALL CONFORM TO ODOT CMS 659.08 HIGH QUALITY SEEDS, CLASS 1.

CURB RAMPS AT INTERSECTION CORNERS AND AT MIDBLOCK/T-INTERSECTION LOCATIONS ARE SHOWN ON THE PLANS FOR ESTIMATING PURPOSES. WORK BEYOND THE LIMITS OF THE CURB RAMP AREA SHALL BE PAID UNDER SEPARATE PAY ITEMS.



CURB RAMP PAY LIMITS DETAIL
N.T.S.

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ROADWAY (CONT'D)

ITEM 608 - 6" CONCRETE WALK, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 608 AND THE CONCRETE SPECIFICATIONS IN THESE PLANS, THE FOLLOWING SHALL APPLY:

THIS ITEM IS INTENDED FOR USE AS DIRECTED BY THE ENGINEER, TO REMOVE AND REPLACE STRUCTURALLY DEFICIENT SIDEWALK AND TO CORRECT TRIPPING HAZARDS. AREAS WHERE THIS APPLIES WILL INCLUDE ANY NECESSARY CONCRETE SIDEWALK ADJACENT TO INTERSECTION CORNERS WHERE NEW ADA CURB RAMPS ARE BEING INSTALLED. SPECIFIC LOCATIONS ARE NOT SHOWN IN THE PLANS, BUT AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR THIS PURPOSE.

ALL CONCRETE SHALL BE A MINIMUM OF 6" AND HAVE A 2" COMPACTED SCREENING BED WHICH MEETS THE REQUIREMENTS 703.10 (LIMITED TO CRUSHED STONE). THE COST OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO SAWCUT, REMOVE EXISTING WALK, EXCAVATE, PLACE AND COMPACT SCREENINGS BED, LAYOUT AND FORM WORK, AND PLACEMENT OF NEW CONCRETE WALK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - 6" CONCRETE WALK, AS PER PLAN.

WHEN DECORATIVE WALK IS ENCOUNTERED, CONTRACTOR SHALL REMOVE THE BRICK AND SALVAGE FOR REUSE. ANY DECORATIVE WALK OUTSIDE THE CURB RAMP AREA IS TO BE REINSTALLED.

PER 608.03(C), IT IS REQUIRED THAT 1/2 INCH THICK EXPANSION JOINT MATERIAL (705.03) BE INSTALLED BETWEEN THE WALK AND THE BACK OF CURB OR ANY OTHER FIXED OBJECT, IN ADDITION TO THE LOCATIONS SPECIFIED UNDER 608.03(C). TRANSVERSE EXPANSION JOINTS SHALL BE CONSTRUCTED AT INTERVALS OF NOT MORE THAT 25 TO 30 FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE EXPANSION JOINT FILLER (705.03) SHALL BE PLACED AT THE TRANSVERSE EXPANSION JOINTS FOR THE FULL DEPTH/WIDTH OF THE CONCRETE WALK AND SHALL BE TRULY NORMAL TO GRADE. THE TOP 1/2 INCH OF THE EXPANSION JOINT PLACED BETWEEN THE WALK AND BACK OF CURB SHALL BE SEALED WITH 705.04 JOINT SEALER.

UNLESS OTHERWISE REQUIRED BY MUNICIPAL STANDARDS/ORDINANCES, THE FINAL SURFACE SHALL BE TEXTURED BY USE OF AN ACCEPTED BROOM SO AS TO PRODUCE A UNIFORM, GRITTY, TRANSVERSE TEXTURE, AFTER WHICH, THE CONTRACTOR IS REQUIRED TO RETRACE THE PREVIOUSLY FORMED JOINTS AND OUTSIDE EDGES OF THE WALK. (I.E. PICTURE FRAME).

THE COST OF THE MATERIAL AND LABOR ASSOCIATED WITH THE ABOVE WORK IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - 6" CONCRETE WALK, AS PER PLAN.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 608 - 6" CONCRETE WALK, AS PER PLAN 10,000 SF

EROSION CONTROL

ITEM 659 - SEEDING AND MULCHING, CLASS 1

SEEDING AND MULCHING SHALL BE IN CONFORMANCE WITH ODOT CMS 659.07, HIGH QUALITY SEEDS, CLASS 1.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED THROUGH TO THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 659 - SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY) 200 SY

TEMPORARY SEDIMENT AND EROSION CONTROL

ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED HEREIN OR DIRECTED BY THE ENGINEER SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THESE CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER.

CONTRACTOR SHALL PLACE INLET PROTECTION ON ALL EXISTING OR PROPOSED CATCH BASINS DOWNSTREAM FROM UNSTABILIZED AREAS. REFER TO THE OHIO RAINWATER AND LAND DEVELOPMENT MANUAL, CHAPTER 6 FOR DETAILS.

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS PLACED BY THE CONTRACTOR WITH ENGINEERS' CONCURRENCE FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

ITEM 832 - EROSION CONTROL, AS PER PLAN 40,000 EACH

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 HOUSE AND FITTINGS WITH WHICH TO MAKE CONNECTIONS TO HYDRANTS AND OUTLETS. NO IMPROPER, WASTEFUL OR UNDUE USE OF WATER WILL BE PERMITTED.

DRAINAGE

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING SEWERS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS 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 CONTRACTOR'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 611 CONDUIT ITEMS.

STRUCTURES ADJUSTED TO GRADE, RECONSTRUCTED TO GRADE, OR REPLACE, AS PER PLAN

ALL ADJUSTMENT, RECONSTRUCTION OR REPLACED WORK, EXCEPT FOR THOSE STRUCTURES OWNED BY PRIVATE COMPANIES, SHALL BE PERFORMED BY THE CONTRACTOR, WHERE APPLICABLE. THE TIME BETWEEN RESETTING THE CASTINGS AND RESURFACING SHALL BE KEPT TO AN ABSOLUTE MINIMUM.

CASTINGS SHALL BE ADJUSTED OR RECONSTRUCTED TO GRADE IN ACCORDANCE WITH 611.10 USING CLAY BRICKS (704.01), CLEVELAND 650 CONCRETE MIX DESIGN AND/OR CONCRETE MORTAR, OR PER 638.18 AND AS SPECIFIED BELOW FOR SERVICE BOX AND VALVE BOX ADJUSTMENTS. MAXIMUM CONCRETE MORTAR THICKNESS IS 1-1/2 INCHES.

THE CONTRACTOR SHALL RESET EXISTING VALVE BOXES OR EXISTING CURB SHUT-OFF VALVE BOXES TO ESTABLISHED GRADE BY RAISING OR LOWERING THE EXISTING CASTINGS OR BY EITHER ADDING, DELETING OR CUTTING THE APPROPRIATE VALVE BOX STEM SECTIONS. IN RAISING OF THE CASTINGS, NO INSERTS WILL BE PERMITTED. ANY VALVE BOXES OR CURB SHUT-OFF VALVE BOXES FOUND TO BE DAMAGED OR UNSUITABLE FOR REUSE SHALL BE REPLACED BY THE CONTRACTOR AND PAID FOR UNDER ITEM SPECIAL - MISCELLANEOUS METAL. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY AS REQUIRED OR AS ORDERED TO COMPLETE THE ITEM.

ADJUST TO GRADE, RECONSTRUCT TO GRADE OR TOTAL REPLACEMENT WORK SHALL, WHERE REQUIRED, INCLUDE THE REMOVAL AND REPLACEMENT OF ANY EXISTING CONCRETE BLOCKOUT CURB, PAVEMENT AND/OR SIDEWALK BEHIND CATCH BASINS USING MODERATE-SETTING CONCRETE (CLASS MS) OR, IF APPROVED/DIRECTED BY THE ENGINEER, FAST-SETTING CONCRETE (CLASS FS). TO FACILITATE REMOVAL, THE BLOCKOUT PAVEMENTS SHALL BE SAWED FULL DEPTH ALONG THE LIMITS OF THEIR REMOVAL UNLESS OTHERWISE DESIGNATED/DIRECTED BY THE ENGINEER. UNLESS OTHERWISE APPROVED/DIRECTED BY THE ENGINEER, BLOCKOUT PAVEMENT, REINFORCING STEEL, JOINT MATERIAL AND LOAD TRANSFER DEVICES SHALL BE REPLACED/INSTALLED IN ACCORDANCE WITH THE CITY OF CLEVELAND STANDARD CONSTRUCTION DRAWING CONC-1 AND PR-1. ALL COSTS ASSOCIATED WITH THE BLOCKOUT REMOVALS/REPLACEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE PER EACH BID ITEMS.

ALL EXISTING CASTINGS FOR STRUCTURES TO BE ADJUSTED OR RECONSTRUCTED TO GRADE SHALL BE FIELD CHECKED AT THE TIME OF CONSTRUCTION AND MARKED SUITABLE FOR SALVAGE AND REUSE OR REPLACED AS DIRECTED BY THE ENGINEER. UNLESS OTHERWISE INDICATED ON THE PLAN. REPLACEMENT CASTINGS ARE PAID UNDER ITEM SPECIAL - MISCELLANEOUS METAL.

THE ENGINEER WILL DETERMINE THE ITEM 611 WORK REQUIRED BASED ON THE GUIDELINES STIPULATED BELOW:

1. "ADJUST TO GRADE, AS PER PLAN" SHALL INCLUDE ALL WORK SPECIFIED IN 611.10 AS NECESSARY TO RAISE THE EXISTING/NEW CASTING NO MORE THAN ONE (1) FOOT FROM ITS EXISTING ELEVATION OR TO LOWER THE EXISTING/NEW CASTING NO MORE THAN SIX (6) INCHES FROM ITS EXISTING ELEVATION. IN ADDITION, THIS ITEM WILL INCLUDE ANY SUPPORTING WALL REPAIR WORK NECESSARY, UP TO SIX (6) INCHES BELOW THE TOP OF THE EXISTING SUPPORTING WALL.

PAYMENT SHALL BE MADE UNDER THE APPROPRIATE STRUCTURE (ITEM 611) ADJUSTED TO GRADE.

2. "RECONSTRUCT TO GRADE, AS PER PLAN" SHALL INCLUDE ALL WORK SPECIFIED IN 611.10 AND SHALL ALSO INCLUDE EXISTING/NEW CASTINGS RAISED MORE THAN ONE (1) FOOT FROM THEIR EXISTING ELEVATION OR LOWERED MORE THAN SIX (6) INCHES FROM THEIR EXISTING ELEVATION. IN ADDITION, THIS ITEM WILL INCLUDE ANY SUPPORTING WALL REPAIR WORK NECESSARY, MORE THAN SIX (6) INCHES BELOW THE TOP OF THE EXISTING SUPPORTING WALL.

THE WORK LIMIT SHALL BE SPECIFIED BY THE ENGINEER AND PAYMENT SHALL BE MADE UNDER THE APPROPRIATE STRUCTURE (ITEM 611) RECONSTRUCTED TO GRADE.

ONLY ONE (1) OF THE ABOVE PAYMENT ITEMS MAY BE USED PER STRUCTURE. "RECONSTRUCT TO GRADE, AS PER PLAN" WORK SHALL NOT BE PERFORMED UNLESS SPECIFICALLY INDICATED IN THE PLANS OR OTHERWISE ORDERED BY THE ENGINEER. ANY SUCH WORK MADE NECESSARY DUE TO THE CONTRACTOR'S NEGLIGENT OPERATIONS, AS DETERMINED BY THE ENGINEER, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

EXISTING CASTINGS THAT ARE THE PROPERTY OF NORTHEAST OHIO REGIONAL SEWER DISTRICT (NEORS D) MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY MICHAEL ZAPIOR, MANAGER OF SSMO, AT 216-641-6000 OR zapiorm@neorsd.org OF THE REQUIRED TYPE, SIZE, AND STRENGTH (HEAVY) FOR THE PARTICULAR STRUCTURE IN QUESTION. NEORS D WILL PROVIDE THE MATERIAL. CONTRACTOR WILL INSTALL AND ADJUST TO GRADE. CASTING DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR. NEORS D KEEPS A SMALL NUMBER IN INVENTORY, AN ORDER REQUIRED SEVERAL WEEKS TO FULFILL; NOTIFY NEORS D AS SOON AS POSSIBLE IF NEW CASTINGS ARE NEEDED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	50 EACH
ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	25 EACH
ITEM 611 - MANHOLE, MISC.: ELECTRICAL MANHOLE ADJUSTED TO GRADE, AS PER PLAN (CLEVELAND PUBLIC POWER)	15 EACH
ITEM 611 - MANHOLE, MISC.: ELECTRICAL MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN (CLEVELAND PUBLIC POWER)	15 EACH
ITEM 638 - VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	100 EACH
ITEM 638 - SERVICE BOX ADJUSTED TO GRADE, AS PER PLAN	100 EACH
ITEM 638 - WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	50 EACH
ITEM 638 - WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	50 EACH
ITEM 638 - WATER WORK, MISC.: WATER MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	24 EACH
ITEM SPECIAL - MISC.: ELECTRICAL VAULT ADJUSTED TO GRADE (CLEVELAND PUBLIC POWER)	8 EACH
ITEM SPECIAL - MISC.: ELECTRICAL VAULT RECONSTRUCTED TO GRADE (CLEVELAND PUBLIC POWER)	8 EACH

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DRAINAGE (CONT'D)

EXISTING UNDERDRAINS

IT IS INTENDED NOT TO DISTURB THE EXISTING UNDERDRAINS DURING THE CURB AND PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS. ANY EXISTING UNDERDRAIN DAMAGED DURING THE REMOVAL OF EXISTING CURB AND PAVEMENT DUE TO THE CARELESSNESS OF THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.

EXISTING UNDERDRAINS WHICH THE ENGINEER DETERMINES ARE ADVERSELY AFFECTED (THROUGH NO FAULT OF THE CONTRACTOR) BY THE CONSTRUCTION OF THIS IMPROVEMENT OR ARE FOUND TO BE OTHERWISE UNSUITABLE SHALL BE REMOVED AND REPLACED IN KIND, AS DIRECTED BY THE ENGINEER.

THE COST FOR REMOVAL AND DISPOSAL OF EXISTING UNDERDRAIN PIPE IS INCLUDED UNDER THIS ITEM. NONE OF THE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

THE FOLLOWING CONTINGENCY QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 605 - 4" UNCLASSIFIED PIPE UNDERDRAINS 2,400 FT
ITEM 605 - 6" UNCLASSIFIED PIPE UNDERDRAINS 2,400 FT

ITEM 613 - LOW STRENGTH MORTAR BACKFILL (TYPE 1)

A CONTINGENCY QUANTITY FOR ITEM 613 - LOW STRENGTH MORTAR BACKFILL (TYPE 1) HAS BEEN CARRIED THROUGH TO THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 613 - LOW STRENGTH MORTAR BACKFILL (TYPE 1) 200 CY

ITEM SPECIAL - MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 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.

ITEM SPECIAL - MISCELLANEOUS METAL 160,000 LB

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

PAVEMENT

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS. IN NO CASE SHALL THE OVERLAY BE LESS THAN 3 INCHES. CONTRACTOR TO PROVIDE A MINIMUM TRANSVERSE CROSS SLOPE OF 1.6%. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AT GUTTER LINE.

CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING

WHERE NEW CONCRETE IS PLACED ADJACENT TO EXISTING CONCRETE, CONTRACTION JOINTS SHALL BE PROVIDED IN THE NEW CONCRETE SO AS TO FORM CONTINUOUS JOINTS WITH THOSE IN THE EXISTING CONCRETE.

THE MAXIMUM DISTANCE BETWEEN THE JOINTS IN THE NEW CONCRETE SHALL BE 15 FEET AND IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND CITY OF CLEVELAND STANDARD DRAWING CONC-1. IF NECESSARY, ADDITIONAL JOINTS SHALL BE PROVIDED IN THE NEW CONCRETE AT APPROXIMATELY EQUAL INTERVALS BETWEEN EXISTING JOINTS THAT EXCEED THE MAXIMUM SPACING.

ASPHALT CONCRETE SURFACE COURSE SEALING REQUIREMENTS

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND IN 401.15, AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL SEAL, WITH A CERTIFIED PG BINDER, THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INLETS.
- BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.
- FORWARD JOINT FOR DRIVEWAY ASPHALT AND TRAILING JOINT WHEN BUTTING TO EXISTING ASPHALT DRIVE.
- PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER ASPHALT INLAYS WHEN PAVEMENT REPAIRS/INLAYS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.
- ALL COLD TRANSVERSE CONSTRUCTION JOINTS PER 401.17.
- ALL COLD LONGITUDINAL JOINTS BETWEEN PAVED SHOULDERS AND GUARDRAIL ASPHALT.

THE MATERIAL USED SHALL BE A CERTIFIED 705.04 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN

AFTER THE WEARING COURSE IS REMOVED, THE CONTRACTOR SHALL CLEAN THE MILLED/PLANED SURFACE FOR INSPECTION BY THE ENGINEER. THE ENGINEER SHALL THEN IDENTIFY AREAS REQUIRING PARTIAL DEPTH PAVEMENT REPAIR. ALL APPLICABLE PROVISIONS OF ITEM 251, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY EXCEPT AS MODIFIED HEREIN.

251.02 REMOVAL OF EXISTING PAVEMENT

APPROVED REMOVAL METHODS SHALL SATISFACTORILY ESTABLISH A NEAT VERTICAL FACE ALONG THE ENTIRE PERIMETER OF THE REPAIR AREA IN ORDER TO SUBSEQUENTLY PERMIT THE PROPER PLACEMENT AND COMPACTION OF THE ASPHALT CONCRETE PATCHING MATERIAL, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. REMOVAL DEPTH SHALL BE THREE (3) INCHES AND THE REPLACEMENT MATERIAL SHALL BE ITEM 441 TYPE 2. FOR REMOVAL DEPTHS EXCEEDING THREE (3) INCHES, REPLACEMENT MATERIAL SHALL BE ITEM 301.

PARTIALLY EMBEDDED STEEL MESH EXPOSED SHALL BE WIRE-BRUSHED OR OTHERWISE CLEANED TO REMOVE ALL LOOSE RUST. LOOSENED OR TOTALLY EXPOSED WIRE MESH REINFORCING SHALL BE CUT AND REMOVED AS REQUIRED WITHOUT DISPLACEMENT OR DISRUPTION TO THE REINFORCEMENT AND/OR PAVEMENT TO REMAIN.

251.05 BASIS OF PAYMENT

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR PARTIAL DEPTH PAVEMENT REPAIR.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN 8400 SY

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

PLANE THE ASPHALT SURFACE PAVEMENT ACCORDING TO C&MS ITEM 254, UP TO A DEPTH OF 3", OR TO THE DEPTH OF THE EXISTING ASPHALT MATERIAL, WHICHEVER IS LESS. DEPTH OF PLANING SHALL NOT EXCEED THE DEPTH OF THE EXISTING ASPHALT COURSE TO BE REMOVED.

IN ADDITION, WHEN PLANING/MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAWCUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE, AS DETAILED ON THIS SHEET. METHOD OF REMOVAL OF REMAINING ASPHALT CONCRETE IS LEFT TO THE DISCRETION OF THE ENGINEER. PAYMENT FOR ALL LABOR, MATERIALS, AND EQUIPMENT ARE CONSIDERED INCIDENTAL TO ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE.

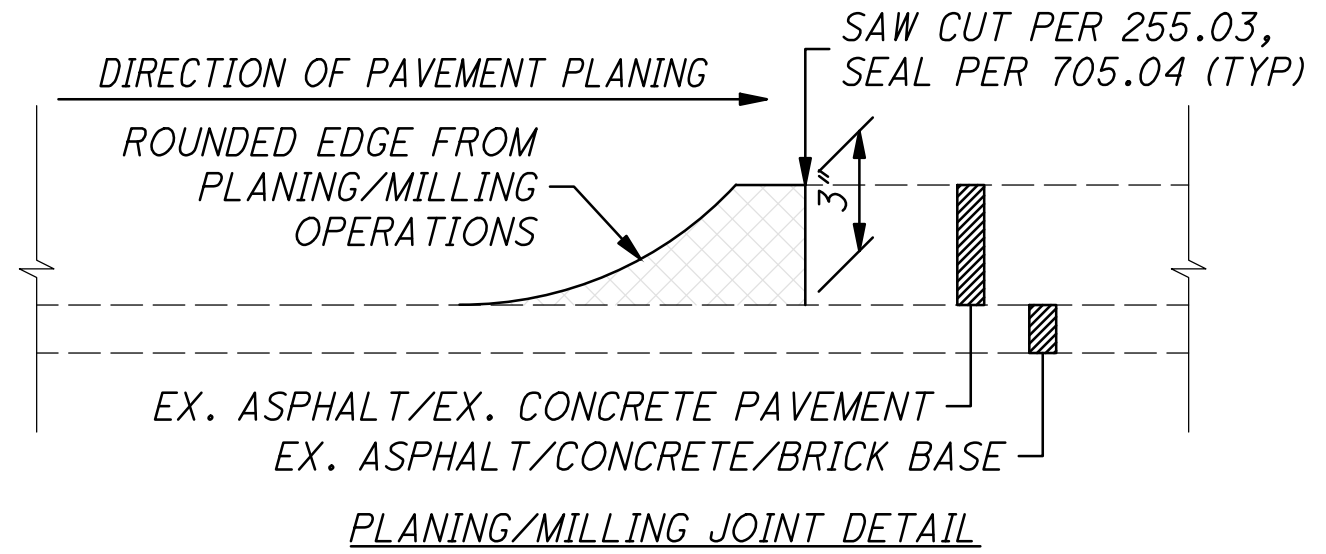
ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN

LOCATIONS FOR ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN ARE NOT SPECIFICALLY IDENTIFIED ON THE PLANS. WHERE CONCRETE PAVEMENT IS ENCOUNTERED IN AREAS OF UTILITY TRENCHES, VAULTS, OR OTHER AREAS NOT SPECIFICALLY IDENTIFIED IN THESE PLANS, THE CONTRACTOR SHALL PLANE THE PORTLAND CEMENT CONCRETE ACCORDING TO C&MS ITEM 254, UP TO A DEPTH OF 3", OR TO MATCH THE EXISTING SURFACE OF THE SURROUNDING ASPHALT CONCRETE PLANED/MILLED SURFACE, CREATING A CONTINUOUS CROSS SLOPE TO THE GUTTER. POSITIVE LONGITUDINAL DRAINAGE SHALL BE MAINTAINED.

IN ADDITION, WHEN PLANING/MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAWCUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE, AS DETAILED ON THIS SHEET. METHOD OF REMOVAL OF REMAINING PORTLAND CEMENT CONCRETE IS LEFT TO THE DISCRETION OF THE ENGINEER. PAYMENT FOR ALL LABOR, MATERIALS, AND EQUIPMENT ARE CONSIDERED INCIDENTAL TO ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN 5,700 SY



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PAVEMENT (CONT'D)

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN

WHEN THIS ITEM IS CALLED FOR ON THE PLANS OR IN THE PROPOSAL, ALL APPLICABLE PROVISION OF ITEM 255, AS SET FORTH IN THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATION, SHALL APPLY EXCEPT AS MODIFIED HEREIN AND AS OTHERWISE DETAILED OR SPECIFIED ON THE CITY OF CLEVELAND ENGINEER'S STANDARD CONSTRUCTION DRAWING PR-1 AND CONC-1.

CONCRETE SHALL BE ODOT CLASS QC MS AND IN ACCORDANCE WITH THE CITY OF CLEVELAND CONCRETE MIX DESIGN FOR CLASS QC MS CONCRETE, AS SPECIFIED IN THESE PLANS.

AFTER THE WEARING COURSE IS REMOVED, THE CONTRACTOR SHALL CLEAN THE MILLED/PLANED SURFACE FOR INSPECTION BY THE ENGINEER. THE ENGINEER SHALL IDENTIFY AREAS REQUIRING FULL DEPTH REMOVAL AND RIGID REPLACEMENT. THE FULL DEPTH RIGID PAVEMENT REMOVAL WORK SHALL INCLUDE THE REMOVAL OF DETERIORATED ASPHALT, BRICK, AND/OR CONCRETE PAVEMENT UNDER MILLED SURFACE. INCLUDING OLD UTILITY TRENCH AREAS, AND OTHER PAVEMENT PATCH AREAS ALONG THE MAINLINE, OF VARIOUS PAVEMENT COMPOSITIONS, REGARDLESS OF SHAPE OR SIZE. SEE DETAIL ON SHEET 4.

FULL DEPTH SAW CUTS SHALL BE MADE ALONG THE ENTIRE PERIMETER OF THE GENERALLY RECTANGULAR SHAPED REMOVAL AREAS, IN ORDER TO ESTABLISH NEAT VERTICAL FACES. THE COST OF ALL SAW CUTTING WORK SHALL BE CONSIDERED INCIDENTAL TO THIS PAY ITEM. THE CONTRACTOR SHALL USE APPROVED METHODS FOR REMOVAL OF THE FULL DEPTH PAVEMENT REPLACEMENT AREAS, THAT WILL MINIMIZE DAMAGE TO THE SURROUNDING AREA.

THE SUBGRADE SHALL BE CORRECTED PER 255.04 TAKING CARE TO THOROUGHLY COMPACT WITH PROPER MOISTURE CONTROL, USING TAMPERS OR ROLLERS AS NECESSARY TO ACHIEVE ACCEPTABLE COMPACTION. THE COST OF THIS SUBGRADE WORK IS INCLUDED WITH THIS PAY ITEM.

THE FULL DEPTH RIGID REPLACEMENT SHALL INCLUDE SAW CUTTING, REMOVAL OF ASPHALT, BRICK, CONCRETE BASE, AND SUBBASE, PLACEMENT OF NEW 304 AGGREGATE BASE (IF NECESSARY), DOWELS PER ODOT SCD BP-2.2 AND CITY OF CLEVELAND SCD CONC-1, AND PLACEMENT OF A CONCRETE PAVEMENT BASE COURSE AS SHOWN ON SHEET 4. IN ADDITION TO CMS SPECIFICATIONS, NO SLAG OF ANY KIND IS PERMITTED FOR USE AS 304 AGGREGATE BASE. THE TOP OF THE CONCRETE SHALL BE CONSTRUCTED TO THE SAME DEPTH AS THE CONCRETE BASE SURROUNDING THE REPAIR AREA, USING DOWEL BARS, AS SHOWN IN THE CITY OF CLEVELAND STANDARD CONSTRUCTION DRAWING PR-1. HOOK BOLTS OR #5X TIE BARS SHALL BE REQUIRED, AS PER ODOT SCD BP-2.1. IN ADDITION, DOWELS SHALL BE REQUIRED, AS PER ODOT SCD BP-2.2. NO EXPANSION ANCHORS WILL BE PERMITTED.

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR FULL DEPTH PAVEMENT REPAIRS AND ARE CARRIED TO THE GENERAL SUMMARY:

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN 6500 SY

ITEM 304 - AGGREGATE BASE, AS PER PLAN

FURNISH MATERIALS PER ODOT ITEM 703.17. USE OF GRANULATED SLAG, STEEL SLAG, AIR COOLED BLAST FURNACE SLAG, RECYCLED CONCRETE OR RECYCLED ASPHALT SHALL NOT BE PERMITTED.

ITEM 305, 608, AND 609 - CONSTRUCTION OF CONCRETE BASE PAVEMENT, DRIVEWAYS, SIDEWALKS, AND CURB, AS PER PLAN

CONSTRUCT COMPLETE IN PLACE CONCRETE ITEMS IN ACCORDANCE WITH THE ODOT CMS, EXCEPT AS MODIFIED BY GENERAL NOTE "CONCRETE DESIGN MIX (CLEVELAND 650)" AND OTHER GENERAL NOTES WITHIN THE PLAN SET. ALL COMPLETE IN PLACE ITEMS WILL INCLUDE THE REMOVAL OF THE ITEM PER SECTION 202.05 IN THE ODOT CMS.

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN "A"

THE BINDER FOR THIS ITEM SHALL BE PG70-22M.

THE COURSE VIRGIN AGGREGATE FOR THIS ITEM SHALL CONSIST OF A BLEND OF 60% MIN. AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE.

RECYCLED MATERIAL USED IN THE SURFACE COURSE SHALL BE LIMITED TO A MAXIMUM OF 10%.

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN "B"

THE BINDER FOR THIS ITEM SHALL BE PG64-22.

THE COURSE VIRGIN AGGREGATE FOR THIS ITEM SHALL CONSIST OF A BLEND OF 60% MIN. AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE.

RECYCLED MATERIAL USED IN THE SURFACE COURSE SHALL BE LIMITED TO A MAXIMUM OF 10%.

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN (0" MIN TO 1.75" MAX), AS DIRECTED BY THE ENGINEER

THE BINDER FOR THIS ITEM SHALL BE PG64-22.

RECYCLED MATERIAL IN THE INTERMEDIATE COURSES SHALL BE LIMITED TO A MAXIMUM OF 20%.

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN

THE BINDER FOR THIS ITEM SHALL BE PG64-22M.

RECYCLED MATERIAL IN THE INTERMEDIATE COURSES SHALL BE LIMITED TO A MAXIMUM OF 20%.

ITEM 451 - REINFORCED CONCRETE PAVEMENT, MISC.: 12" REINFORCED CONCRETE PAVEMENT, CLASS QC MS

ALL APPLICABLE PROVISION OF ITEM 451 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

CONCRETE SHALL BE ODOT CLASS QC MS AND IN ACCORDANCE WITH THE CITY OF CLEVELAND CONCRETE MIX DESIGN FOR CLASS QC MS CONCRETE, AS SPECIFIED IN THESE PLANS.

DRIVEWAY REPAIR OPERATIONS

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR DRIVEWAY APRON REPLACEMENT REQUIRED DUE TO RESURFACING OPERATIONS. THE COST OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO SAWCUT, REMOVE EXISTING DRIVE/PAVEMENT, EXCAVATE, COMPACT SUBGRADE, LAYOUT AND FORM WORK, AND PLACEMENT OF NEW CONCRETE PAVEMENT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR:

CONCRETE SHALL BE ODOT CLASS QC MS AND IN ACCORDANCE WITH THE CITY OF CLEVELAND CONCRETE MIX DESIGN FOR CLASS QC MS CONCRETE, AS SPECIFIED IN THESE PLANS.

ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS, AS PER PLAN 1200 SY

CONCRETE MIX DESIGN (CLEVELAND 650)

CAST-IN-PLACE CONCRETE SHALL BE PROVIDED IN ACCORDANCE WITH THE ODOT CMS EXCEPT THE MINIMUM CONTENT OF THE MIX SHALL BE 650 LBS. PER CUBIC YARD.

CONCRETE MIX DESIGN FOR CLASS QC MS CONCRETE

ALL APPLICABLE WORK ITEMS SHALL BE BID USING THE CONCRETE MIX DESIGN SPECIFIED IN THIS SECTION. UNDER THIS SECTION OF THESE SPECIFICATIONS THE CONTRACTOR IS REQUIRED TO SUBMIT A CONCRETE DESIGN MIX FOR CLASS QC MS CONCRETE, SEPARATE FROM THE DESIGN REQUIRED IN "CONCRETE MIX DESIGN (CLEVELAND 650)" AND AS HEREIN MODIFIED.

REQUIREMENT	DESCRIPTION
MINIMUM COMPRESSIVE STRENGTH	400 PSI MODULUS OF RUPTURE AS PER ASTM C-78 IN 24 HOURS. THE RESULTS OF THE 24 HOUR BEAM TEST SHALL BE FURNISHED IN ADDITION TO THE RESULTS OF THE TWENTY-EIGHT (28) DAY CYLINDER TESTS.
MINIMUM CEMENT CONTENT	800 LBS.; FLY ASH OR A ADDITIONAL AGGREGATE SHALL NOT BE USED AS A SUBSTITUTE FOR THE CEMENT
WATER CEMENT RATIO	0.43 MAXIMUM
CALCIUM CHLORIDE SHALL NOT BE USED IN THIS DESIGN MIX.	

PAYMENT FOR QC MS CONCRETE WILL BE AS A SURCHARGE TO THE UNIT PRICE PER CUBIC YARD. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM SPECIAL - MISC.: CONCRETE MIX DESIGN FOR CLASS QC MS CONCRETE 200 CY

THE ENGINEER WILL MARK IN THE FIELD THE AREAS THAT REQUIRE CONSTRUCTION USING CLASS QC MS CONCRETE. THESE MARKS WILL BE LIMITS OF THE PAYMENT FOR THE VARIOUS BID ITEMS USING CLASS QC MS CONCRETE.

IF THE CONTRACTOR CHOOSES TO PLACE CLASS QC MS CONCRETE OUTSIDE OF THE ENGINEER'S MARKS FOR THE CONTRACTOR'S OWN CONVENIENCE, THEN IT WILL BE MEASURED AND PAID FOR AS CONCRETE WHICH ONLY MEETS THE REQUIREMENTS OF "ITEM SPECIAL - CONCRETE MIX DESIGN".

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PAVEMENT (CONT'D)

ITEM 609 - CURB, TYPE 2-A, AS PER PLAN
ITEM 609 - CURB, TYPE 6, AS PER PLAN

THE CLASS QC CONCRETE FOR THE TYPE 2-A OR TYPE 6 CURB SHALL CONFORM TO THE REQUIREMENTS IN THE "CONCRETE MIX DESIGN (CLEVELAND 650)" GENERAL NOTE.

THIS ITEM INCLUDES THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR INTEGRAL CURB AND WALK AS PER ITEM 202 - REMOVAL ITEMS, AS PER PLAN, AND AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

EXISTING CURB HEIGHT VARIES FROM 3" TO 6". MATCH THE HEIGHT OF NEW CURB TO THE HEIGHT OF ADJACENT EXISTING CURB, AND TRANSITION TO FULL 6" CURB REVEAL AT A RATE OF 1" CURB HEIGHT PER FOOT OF CURB LENGTH.

TOPSOIL, SEEDING AND MULCHING REQUIRED ADJACENT TO THE CURB CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. SEEDING MIX SHALL CONFORM TO ODOT CMS 659.08 HIGH QUALITY SEEDS, CLASS 1.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO REPLACE DETERIORATED CURB, AS DIRECTED BY THE ENGINEER.

ITEM 609 - CURB, TYPE 2-A, AS PER PLAN	100 FT
ITEM 609 - CURB, TYPE 6, AS PER PLAN	1000 FT

INCIDENTALS

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

A TYPE B FIELD OFFICE IS REQUIRED FOR THIS PROJECT. THE FOLLOWING REVISIONS TO EQUIPMENT SUPPLIED WITH THE TYPE B FIELD OFFICE, AS SPECIFIED IN TABLE 619.02-1, FIELD OFFICE, SHALL APPLY: THE COPIER SUPPLIED MUST MEET THE REQUIREMENTS OF COPIER SUPPLIED WITH THE TYPE C FIELD OFFICE. THE BROADBAND INTERNET CONNECTION MUST MEET THE REQUIREMENTS OF THE MINIMUM DOWNLOAD SPEEDS SUPPLIED WITH THE TYPE C FIELD OFFICE. ALL OTHER FIELD OFFICE ITEMS SUPPLIED SHALL MEET THE REQUIREMENTS OF A TYPE B, FIELD OFFICE.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN	18 MONTHS
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ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

THIS ITEM OF WORK SHALL BE PERFORMED AS PER ODOT ITEM 623 AND AS MODIFIED BELOW:

A) CONTRACTOR SHALL FURNISH DIMENSIONS, MEASUREMENT, SKETCHES, ETC. NECESSARY TO DETERMINE PAY QUANTITIES. THIS WILL MAINLY APPLY TO CHANGE ORDERS, QUANTITIES TO BE USED AS DIRECTED AND DISPUTED PAYMENT QUANTITIES OR CALCULATIONS.

B) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY SURVEYING, CALCULATIONS AND/ OR LAYOUT NOT FURNISHED IN THE BID DOCUMENTS TO COMPLY WITH THE ENGINEER'S DIRECTION. CONTRACTOR SHALL PROVIDE CUT SHEETS, TEMPORARY BENCHMARKS, AND LAYOUT (INCLUDING STATIONING AND HUBS) AS DIRECTED BY THE ENGINEER OR THEIR REPRESENTATIVE. ALL STATIONING AND REFERENCE MARKS SHALL BE MAINTAINED AS DIRECTED BY THE ENGINEER OR THEIR REPRESENTATIVE.

C) THE CONTRACTOR SHALL USE COMPETENT PERSONNEL AND SUITABLE EQUIPMENT FOR THE LAYOUT WORK REQUIRED AND SHALL PROVIDE THAT IT BE DONE UNDER THE SUPERVISION OF A REGISTERED SURVEYOR, LICENSED TO PRACTICE IN THE STATE OF OHIO.

D) THE CONTRACTOR IS TO PROVIDE "AS-BUILT" DRAWINGS SHOWING ALL ELEVATIONS AND INVERTS, LOCATIONS OF ROADWAYS BOTH HORIZONTAL AND VERTICAL. THESE DRAWINGS AND/OR CAD DRAWINGS SHALL BE DRAWN ON MYLARS OR CAD FILES (IF AVAILABLE) PROVIDED BY THE CITY. THE INSPECTOR SHALL SIGN THE SHEETS VERIFYING THAT ALL CHANGES HAVE BEEN SHOWN ON THE "AS-BUILT" DRAWINGS. THE INSPECTOR IS NOT RESPONSIBLE FOR THE ACCURACY OF THE LOCATIONS OR ELEVATIONS. ALL ELEVATIONS AND LOCATIONS ARE TO BE CERTIFIED BY THE REGISTERED SURVEYOR, LICENSED TO PRACTICE IN THE STATE OF OHIO.

PAYMENT FOR THE ABOVE WORK SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN.

ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN

THE MAKING OF THIS IMPROVEMENT REQUIRES THAT EAST 55TH STREET BE PARTIALLY CLOSED TO THROUGH TRAFFIC.

LOCAL ACCESS TO ABUTTING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES THROUGH THE USE OF PARTIAL WIDTH CONSTRUCTION AND BY MAINTAINING ONE (1) OR TWO (2) LANES FOR NORTHBOUND TRAFFIC AND ONE (1) LANE FOR SOUTHBOUND TRAFFIC.

THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ALL ABUTTING PROPERTIES AT ALL TIMES. THE CONTRACTOR SHALL ALSO MAINTAIN ADEQUATE PEDESTRIAN WALKS AT ALL INTERSECTIONS AND ALONG ONE SIDE OF THE STREET AFFECTED BY CONSTRUCTION, AS DIRECTED BY THE ENGINEER.

TRAFFIC ON EAST 55TH STREET, RAMPS, SIDE STREETS, AND DRIVES SHALL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE APPROVED BY THE ENGINEER AND/OR DRIVE OWNER.

ALL CONSTRUCTION CONTROL DEVICES SHALL IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD). ALL SIGNS, SUPPORTS, WORK ZONE PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL.

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 OF EXISTING TRAFFIC CONTROL DEVICES, IF REQUIRED, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

ALL CONFLICTING SIGNS AND PAVEMENT MARKINGS, WHETHER INSIDE OR OUTSIDE THE WORK LIMITS, SHALL BE COVERED OR REMOVED WHERE APPLICABLE.

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.

THE CONTRACTOR SHALL DIVERT TRAFFIC FROM NORMAL CHANNELS BY THE USE OF PLASTIC DRUMS, FLASHING ARROW BOARDS COMPLYING WITH ODOT CMS 614, AND TRAFFIC SIGNS AND PAVEMENT MARKINGS.

PRIOR TO THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT THEIR MAINTENANCE OF TRAFFIC PLAN FOLLOWING THE SECTIONS AND PHASING INDICATED IN THE PLANS FOR REVIEW AND APPROVAL BY THE ENGINEER. THE MAINTENANCE OF TRAFFIC PLAN SHALL BE SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OHIO. SPECIFIC MAINTENANCE OF TRAFFIC DETAILS SHALL BE REQUIRED FOR THE FOLLOWING LOCATIONS:

- INTERSECTION OF EAST 55TH STREET AND INTERSTATE 490.
- INTERSECTION OF EAST 55TH STREET AND KINSMAN AVENUE/WOODLAND AVENUE.

WORK ZONE APPROACHES SHALL MATCH THE DETAILS SHOWN IN THE MOST RECENT VERSION OF THE OMUTCD, PART 6-TEMPORARY TRAFFIC CONTROL AND ODOT STANDARD CONSTRUCTION DRAWINGS. THESE ITEMS CAN BE FOUND ONLINE AT:

http://www.dot.state.oh.us/Divisions/Engineering/Roadway/DesignStandards/traffic/OhioMUTCD/Pages/OMUTCD2012_current_default.aspx

<http://www.dot.state.oh.us/Divisions/Engineering/Roadway/DesignStandards/traffic/SCD/Pages/default.aspx>

MERGING LENGTHS AND SHIFTING TAPER LENGTHS SHALL BE CALCULATED USING THE EQUATIONS SHOWN IN OMUTCD, SECTION 6C.08.

NO LATER THAN THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF A PERSON OR PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE CITY. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IMMEDIATELY.

PAYMENTS FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN (UNLESS SEPARATELY ITEMIZED IN THE PLAN).

WINTER TRAFFIC LIMITATION

ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC BETWEEN NOVEMBER 15 AND APRIL 15. NOVEMBER 15 SHALL BE CONSIDERED TO CONSTITUTE AN INTERIM COMPLETION DATE AND LIQUIDATED DAMAGES SHALL BE ASSESSED IN THE AMOUNT OF \$1,500 PER DAY FOR EACH CALENDAR DAY BEYOND NOVEMBER 15 OR BEFORE APRIL 15 THAT ALL LANES ARE NOT OPEN AND AVAILABLE TO TRAFFIC.

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 OF CLOSING OF ANY STREET TO TRAFFIC:

CITY OF CLEVELAND:
DIVISION OF ENGINEERING AND CONSTRUCTION P: (216) 664-2381 F: (216) 664-2289
DIVISION OF STREETS P: (216) 664-2510 F: (216) 664-2593
DIVISION OF TRAFFIC ENGINEERING P: (216) 664-3197 F: (216-664-2167

CITY OF CLEVELAND DEPARTMENT OF PUBLIC SAFETY:
DIVISION OF EMERGENCY MEDICAL SERVICES (EMS): P: (216) 664-2555 F: (216) 420-8373
DIVISION OF FIRE P: (216) 664-6800 F: (216) 664-6816
DIVISION OF POLICE P: (216) 623-5000 F: (216) 623-5584

CLEVELAND METROPOLITAN SCHOOL DISTRICT P: (216) 838-0953
E-MAIL: eric.taylor@clevelandmetroschools.org

OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 12 PUBLIC INFORMATION P: (216) 584-2005
E-MAIL: D12.Public.Information@dot.ohio.gov

GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY (RTA) SERVICE PLANNING MANAGER P: (216) 781-4547
FOR URGENT ASSISTANCE, CONTACT SERVICE QUALITY AT (216) 566-5110

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 PROTRUDE ABOVE THE EXISTING PAVEMENT 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 RAMPING OF VERTICAL SURFACES

IN ORDER TO PROVIDE FOR LOCAL ACCESS, LONGITUDINAL VERTICAL FACES ABUTTING DRIVES SHALL BE TEMPORARILY RAMPED. TRANSVERSE VERTICAL FACES EXPOSED TO TRAFFIC (SUCH AS IN INTERSECTIONS) 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 AREA IN BOTH DIRECTIONS.

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.

BEFORE RESURFACING OF THE PAVEMENT, THE TEMPORARY ASPHALT WEDGE SHALL BE REMOVED. THE COST OF REMOVAL SHALL BE CONSIDERED INCIDENTAL TO ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

THE FOLLOWING ESTIMATED QUANTITY IS FOR USE AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC:

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 600 CU. YD.

COORDINATION

THE ENGINEER AND THE CONTRACTOR SHALL WORK WITH THE LOCAL BUSINESS OWNERS AND RESIDENTS 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, TWO (2) PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS), ON SITE, WITH MINIMUM LEGIBILITY DISTANCES OF 475 FEET, TWO (2) WEEKS PRIOR TO PROJECT MOBILIZATION.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL 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 C&MS 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. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. 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 AWAY FROM ALL 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 CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, AND MESSAGE ADDITIONS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.

THE PCMS SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF ODOT C&MS 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 TWELVE (12) HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND/OR IN THE CITY TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE CITY DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON THIS CONTRACT.

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

PAYMENT FOR THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN, AND SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE OPERATIONS WITH THE CONTRACTOR'S ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THIS CONTRACT.

THE LAST PHASE OF THE OPPORTUNITY COORIDOR, CUY-490/10-2.09/19.28, PID 96833, PROJECT 17-3000, MAY BE UNDER CONSTRUCTION AT THE SAME TIME AS THIS CONTRACT. THE CONTRACTOR SHALL COOPERATE AND COORDINATE MAINTENANCE OF TRAFFIC AND WORK ACTIVITIES ON E. 55" ST.

CONSTRUCTION SEQUENCE

THE RESURFACING OF EAST 55TH STREET WITHIN THE LIMITS OF THE PROJECT SHALL BE ACCOMPLISHED IN THREE (3) CONSTRUCTION SECTIONS, AS OUTLINED BELOW:

- SECTION 1 – BROADWAY AVENUE TO BOWER AVENUE (SEE SHEET NO. 14)
- SECTION 2 – GRAND AVENUE TO CENTRAL AVENUE (SEE SHEET NO. 15)
- SECTION 3 – CENTRAL AVENUE TO SUPERIOR AVENUE (SEE SHEET NOS. 15 AND 16)

THE CONTRACTOR SHALL COMPLETE ALL WORK, EXCEPT FINAL PAVEMENT MARKING IN THE TRANSITION ZONE BETWEEN SECTIONS, IN A GIVEN CONSTRUCTION SECTION BEFORE BEGINNING ANY WORK IN A SUBSEQUENT SECTION, SUBJECT TO THE APPROVAL OF THE ENGINEER. NORMAL VEHICULAR TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BEYOND THE WORK LIMITS OF THE SECTION CURRENTLY UNDER CONSTRUCTION.

THE MAXIMUM NUMBER OF CONSECUTIVE CALENDAR DAYS ALLOWED FOR EACH CONSTRUCTION SECTION IS LIMITED TO THE FOLLOWING:

- CONSTRUCTION SECTION 1 – 90 CONSECUTIVE CALENDAR DAYS.
- CONSTRUCTION SECTION 2 – 180 CONSECUTIVE CALENDAR DAYS.
- CONSTRUCTION SECTION 3 – 120 CONSECUTIVE CALENDAR DAYS.

THE COUNTING OF CONSECUTIVE CALENDAR DAYS FOR EACH CONSTRUCTION SECTION WILL BEGIN WITH THE PLACEMENT OF THE FIRST TEMPORARY PAVEMENT MARKINGS FOR THAT SECTION, AND WILL END WITH THE COMPLETION OF THE INSTALLATION OF THE ASPHALT CONCRETE SURFACE COURSE. LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH CMS 108.07 FOR EACH CALENDAR DAY BEYOND THE CONSECUTIVE CALENDAR DAYS PROVIDED IN THIS NOTE.

CONSTRUCTION PHASING

WITHIN EACH CONSTRUCTION SECTION, WORK SHALL BE PERFORMED IN FOUR (4) PHASES.

PHASE A SHALL CONSIST OF WORK ON THE WEST SIDE OF EAST 55TH STREET, WITH TWO-WAY TRAFFIC BEING MAINTAINED ON THE EXISTING PAVEMENT ON THE EAST SIDE OF EAST 55TH STREET.

- A. INSTALL ALL TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED FOR THIS PHASE.
- B. PLANING OF THE EXISTING PAVEMENT.
- C. CURB, SIDEWALK, AND BASE REPAIR ON THE WEST SIDE OF EAST 55TH STREET, AS NECESSARY, AND INSTALLATION OF ANY CONCRETE BUS STOP PADS ON THE WEST SIDE.
- D. PLACING OF THE ASPHALT CONCRETE INTERMEDIATE COURSE.
- E. INSTALLATION OF ALL TEMPORARY TRAFFIC CONTROL DEVICES IN ORDER TO PROCEED TO PHASE B OF THIS CONSTRUCTION SECTION.
- F. INSTALLATION OF ADA COMPLIANT CURB RAMPS AND LANDINGS ON THE WEST SIDE OF EAST 55TH STREET.

PHASE B SHALL CONSIST OF WORK IN THE CENTER OF EAST 55TH STREET, WITH SOUTHBOUND TRAFFIC BEING MAINTAINED ON THE INTERMEDIATE COURSE INSTALLED UNDER PHASE A, AND NORTHBOUND TRAFFIC BEING MAINTAINED ON THE EXISTING PAVEMENT ON THE EAST SIDE OF EAST 55TH STREET.

- A. INSTALL ALL TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED FOR THIS PHASE.
- B. PLANING OF THE EXISTING PAVEMENT.
- C. BASE REPAIR IN THE CENTER OF EAST 55TH STREET, AS NECESSARY, AND INSTALLATION OF ANY CONCRETE BUS STOP PADS IN THE CENTER.
- D. PLACING OF THE ASPHALT CONCRETE INTERMEDIATE COURSE.
- E. INSTALLATION OF ALL TEMPORARY TRAFFIC CONTROL DEVICES IN ORDER TO PROCEED TO PHASE C OF THIS CONSTRUCTION SECTION.

PHASE C SHALL CONSIST OF WORK ON THE EAST SIDE OF EAST 55TH STREET, WITH TWO-WAY TRAFFIC BEING MAINTAINED ON THE INTERMEDIATE COURSE INSTALLED UNDER PHASES A AND B.

- A. INSTALL ALL TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED FOR THIS PHASE.
- B. PLANING OF THE EXISTING PAVEMENT.
- C. CURB, SIDEWALK, AND BASE REPAIR ON THE EAST SIDE OF EAST 55TH STREET, AS NECESSARY, AND INSTALLATION OF ANY CONCRETE BUS STOP PADS ON THE EAST SIDE.
- D. PLACING OF THE ASPHALT CONCRETE INTERMEDIATE COURSE.
- E. AFTER PLACING THE ASPHALT CONCRETE INTERMEDIATE COURSE, CLASS I WORK ZONE CENTER LINES AND LANE LINES SHALL BE PLACED AT THE SAME LOCATION AS THE FINAL MARKINGS.
- F. INSTALLATION OF ADA COMPLIANT CURB RAMPS AND LANDINGS ON THE EAST SIDE OF EAST 55TH STREET.

PHASE D SHALL CONSIST OF THE FOLLOWING WORK:

- A. THE CONTRACTOR SHALL THOROUGHLY CLEAN THE ASPHALT CONCRETE INTERMEDIATE COURSE.
- B. THE CONTRACTOR SHALL PLACE THE ASPHALT CONCRETE SURFACE COURSE IN A CONTINUOUS OPERATION FROM THE BEGINNING OF THE CONSTRUCTION SECTION TO THE END OF THE CONSTRUCTION SECTION, FULL WIDTH, FACE OF CURB TO FACE OF CURB TO MINIMIZE LONGITUDINAL COLD JOINTS UTILIZING ODOT STANDARD CONSTRUCTION DRAWINGS MT-95.31 OR MT-95.32, AS APPLICABLE, AND FLASHING ARROW BOARDS PER ODOT CMS 614 AND LEOS (LAW ENFORCEMENT OFFICERS) AS NEEDED. TO MINIMIZE THE IMPACTS TO THE TRAVELING PUBLIC AND REDUCE CONGESTION, THE ASPHALT CONCRETE SURFACE COURSE BETWEEN BESSEMER AVENUE AND SUPERIOR AVENUE MAY BE PLACED DURING NIGHT TIME HOURS BEGINNING AT 8:00 PM TO 6:00 AM MONDAY THROUGH THURSDAY, WITH THE APPROVAL OF THE LOCAL NOISE VARIANCE.
- C. AFTER PLACING THE ASPHALT CONCRETE SURFACE COURSE, CLASS II WORK ZONE CENTER LINES AND LANE LINES SHALL BE PLACED AT THE SAME LOCATION AS THE FINAL MARKINGS.
- D. PLACEMENT OF FINAL PAVEMENT MARKINGS ONCE THE ASPHALT CONCRETE SURFACE COURSE AGES SUFFICIENTLY TO PLACE THE FINAL ITEM 644 PAVEMENT MARKINGS, WITH THE EXCEPTION OF MARKINGS LOCATED IN THE TRANSITION ZONE BETWEEN SECTIONS

WORK ZONE PAVEMENT MARKINGS

FURNISHING, PLACING, AND REMOVAL AS NECESSARY OF ALL WORK ZONE PAVEMENT MARKINGS, AS WELL AS REMOVAL OF EXISTING CONFLICTING PAVEMENT MARKINGS, AS INDICATED IN THE CONSTRUCTION PHASING NOTE OR AS DIRECTED BY THE ENGINEER SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

DRIVEWAY ACCESS

THIS WORK SHALL BE IN CONJUNCTION WITH ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN AND ALL COSTS INCURRED FOR THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR THAT ITEM. NO ADDITIONAL PAYMENTS WILL BE MADE. ACCESS TO ALL PROPERTIES, INCLUDING RESIDENCES, BUSINESSES, AND INSTITUTIONAL BUILDINGS, SHALL BE MADE AVAILABLE AT ALL TIMES DURING CONSTRUCTION.

THE CONTRACTOR SHALL MAKE AVAILABLE DURING CONSTRUCTION, STEEL PLATES, BRIDGES, ASPHALT CONCRETE RAMPS, OR OTHER MEANS APPROVED BY THE ENGINEER TO PROVIDE FULL TIME (TWENTY-FOUR (24) HOURS, SEVEN (7) DAYS A WEEK) ACCESS TO DRIVEWAYS THAT REQUIRE IT. ALL DRIVEWAY CLOSURES AND/OR APRON WORK SHALL BE CONSTRUCTED IN ALTERNATING INTERVALS IN ORDER TO ELIMINATE ABUTTING PROPERTY OWNERS HAVING BOTH OF THEIR DRIVEWAYS CLOSED AT THE SAME TIME.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL, AT THE PRE-CONSTRUCTION MEETING, A PROPOSAL FOR PROVIDING ACCESS TO THE DRIVEWAYS.

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, ERECT, MAINTAIN, AND SUBSEQUENTLY REMOVE R7-1-12 "NO PARKING" SIGNS AT LOCATIONS DETERMINED BY THE CITY OF CLEVELAND TRAFFIC ENGINEER. PAYMENT FOR THIS WORK IS INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

RTA BUS STOP ACCESS

THIS WORK SHALL BE IN CONJUNCTION WITH ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN AND ALL COSTS INCURRED FOR THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC. NO ADDITIONAL PAYMENTS WILL BE MADE. ACCESS TO ALL GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY (GCRTA) BUS STOPS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

THE PROJECT SPONSOR OR CONTRACTOR SHOULD CONTACT GCRTA AND PROVIDE A WRITTEN NOTIFICATION FOURTEEN (14) DAYS PRIOR TO ANY CONSTRUCTION THAT WILL AFFECT NEARBY BUS STOPS OR SERVICE.

THE CONTRACTOR SHALL NOTIFY GCRTA AT LEAST FIVE (5) BUSINESS DAYS IN ADVANCE OF ALL STREET CLOSURES AFFECTING TRANSIT OPERATIONS REGARDLESS OF THE DURATION OF THE CLOSURE.

THE CONTRACTOR SHALL WORK WITH GCRTA TO ESTABLISH AN APPROVED TEMPORARY BUS STOP LOCATION.

GCRTA WILL PROVIDE AND POST THE APPROPRIATE TEMPORARY BUS STOP SIGNAGE.

THE CONTRACTOR SHALL NOTIFY GCRTA AT LEAST FIVE (5) BUSINESS DAYS IN ADVANCE OF CONSTRUCTION COMPLETION SO THAT PERMANENT BUS STOP SIGNS CAN BE RE-INSTALLED BY GCRTA.

CONTRACTOR MAY NOT REMOVE ANY BUS STOP SIGNS WITHOUT PRIOR AUTHORIZATION FROM GCRTA.

INSTALLATION OF PAVEMENT MARKINGS

THE CONTRACTOR MAY REDUCE THE NUMBER OF THROUGH TRAFFIC LANES BY 50%, AS DIRECTED BY THE ENGINEER, IN ORDER TO REMOVE PAVEMENT MARKINGS OR TO INSTALL WORK ZONE OR PERMANENT PAVEMENT MARKINGS. THE CONTRACTOR SHALL LIMIT THE AFOREMENTIONED CLOSURE TO BETWEEN THE HOURS OF 10:00 A.M. AND 3:00 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, AS DETAILED ON THE PLANS, SHALL BE IMPLEMENTED IMMEDIATELY. IN ADDITION, THE REQUIREMENTS OF 614.11(G) SHALL APPLY.

TRAFFIC SIGNING

ADVANCE TRAFFIC SIGNING, INCLUDING ANY DETOUR SIGNING, CONSTRUCTION WORK ZONE APPROACH SIGNING, BARRICADES, AND SIGNS ON BARRICADES BEYOND THE WORK LIMITS SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN, AND SHALL INCLUDE FURNISHING, ERECTING, MAINTAINING, AND REMOVING THE SIGNS, INCLUDING SUPPORTS.

REPLACEMENT SIGN

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR 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 REPLACEMENT SIGNS SHALL BE MADE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

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 OMUTCD TYPICAL APPLICATIONS TA-28 AND TA-29.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER AND CALCIUM CHLORIDE FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER	200 M GAL
ITEM 616, CALCIUM CHLORIDE	80 TON

WORKSITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A CERTIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE CERTIFIED FROM ONE OF THE FOLLOWING ORGANIZATIONS:

- 1. AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION (ATSSA), PHONE NUMBER 1-800-272-8772, CERTIFIED TRAFFIC CONTROL SUPERVISOR (TCS).
- 2. NATIONAL HIGHWAY INSTITUTE, DESIGN AND OPERATION OF WORK ZONE TRAFFIC CONTROL, PHONE NUMBER 1-703-235-0500.
- 3. THE OHIO CONTRACTORS ASSOCIATION, TRAFFIC CONTROL SUPERVISOR (OCA/TCS) WORK ZONE CLASS, ONLY IF TAKEN AFTER MAY 5, 2004, PHONE NUMBER 1-800-229-1388.
- 4. OHIO LABORERS’ TRAINING, TRAFFIC CONTROL SUPERVISORS CLASS, PHONE NUMBER 1-740-599- 7915.

A COPY OF EACH WTS' CERTIFICATION AND 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY. EACH WTS SHALL HAVE A WTS CERTIFICATION CONTAINING THE DATE OF ISSUE AND SHALL BE FROM ANY OF THE APPROVED ORGANIZATIONS. AT THE TIME OF THE PRECONSTRUCTION CONFERENCE, THE WTS CERTIFICATION DATE OF ISSUE SHALL BE WITHIN THE 5 YEARS PRIOR TO THE ORIGINAL COMPLETION DATE OF THE PROJECT.

THE WTS POSITION HAS THE RESPONSIBILITY OF MONITORING TRAFFIC CONTROL DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE DUTIES OF THE WTS ARE AS FOLLOWS:

- 1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS, AND BE ABLE TO BE ON SITE FOR ALL EMERGENCY TRAFFIC CONTROL NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF AND BE PREPARED TO EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TRAFFIC CONTROL DEVICES.
- 2. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TRAFFIC CONTROL MANAGEMENT IS DISCUSSED.
- 3. BE AVAILABLE FOR MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST OR WITHIN 36 HOURS.
- 4. COORDINATE A TRAFFIC INCIDENT MANAGEMENT MEETING EACH YEAR BEFORE CONSTRUCTION WORK BEGINS WITH ODOT AND THE SAFETY FORCES THAT WILL RESPOND TO INCIDENTS ON THE PROJECT. ITEMS TO BE DISCUSSED WILL BE THE:
 - a. TRAFFIC INCIDENT MANAGEMENT PLAN (TIMP);
 - b. EMERGENCY RESPONSE AND NOTIFICATION;
 - c. PROJECT WORK/PHASING CONCERNS (E.G., RAMP CLOSURES); AND
 - d. RESPONDERS' CONCERNS.
- 5. BE AWARE OF, AND COORDINATE IF NECESSARY, ALL TRAFFIC CONTROL OPERATIONS, INCLUDING THOSE OF SUBCONTRACTORS AND SUPPLIERS.
- 6. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). A WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE THEY ARE ON THE PROJECT.
- 7. COORDINATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS WORK ZONE TRAFFIC CONTROL.
- 8. ENSURE COMPLIANCE WITH THE CONTRACT DOCUMENTS FOR SIGNS, BARRICADES, TEMPORARY CONCRETE BARRIER, PAYEMENT MARKINGS, PORTABLE MESSAGE SIGNS, AND OTHER TRAFFIC CONTROL DEVICES ON A DAILY BASIS; AND FACILITATE ANY CORRECTIVE ACTION NECESSARY.
- 9. NOTIFY THE CONTRACTOR OF THE NEED FOR CLEANING AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES, INCLUDING THE COVERING AND REMOVAL OF INAPPLICABLE SIGNS.
- 10. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TRAFFIC CONTROL DEVICES AND/OR TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, A WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:
 - a. INITIAL TRAFFIC CONTROL SETUP (DAY AND NIGHT REVIEW).
 - b. DAILY TRAFFIC CONTROL SETUP AND REMOVAL.
 - c. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TRAFFIC CONTROL SETUP.
 - d. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA.
 - e. REMOVAL OF TRAFFIC CONTROL DEVICES AT THE END OF A PHASE OR PROJECT.
 - f. ALL OTHER EMERGENCY TRAFFIC CONTROL NEEDS.
- 11. COMPLETE THE DEPARTMENT APPROVED LONG TERM INSPECTION FORM (CA-D-8) AFTER EACH INSPECTION AS REQUIRED IN # 10 AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORK DAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TRAFFIC CONTROL MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, ALONG WITH RECOMMENDED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THIS DOCUMENT CAN BE FOUND IN THE CURRENT REVISION OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION INSPECTION FORMS MANUAL.

- 12. VERIFY THAT ALL FLAGGING OPERATIONS ARE BEING CONDUCTED PER THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 13. HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND APPLICABLE STANDARDS AND SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.
- 14. IDENTIFY AND CONTACT ALL POSSIBLE RESPONSE PERSONNEL; PREPLAN AND KEEP AN UPDATED ROSTER WITH PHONE NUMBERS:
 - a. FEDERAL, STATE, AND LOCAL TRANSPORTATION AGENCIES (TRAFFIC MANAGEMENT CENTER);
 - b. REGIONAL, COUNTY OR LOCAL 911 DISPATCH; AND
 - c. TOWING AND RECOVERY PROVIDERS.
- 15. COMPLY WITH THE PROVISIONS OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS.
- 16. PROPOSE A RESPONSE/ACTION PLAN TO:
 - a. ESTABLISH ALTERNATE ROUTE PLANS PER THE PROVIDED ODOT PLAYBOOK;
 - b. REMOVE TRAFFIC DEMAND FROM IMPACTED ROADWAY(S);
 - c. DIVERT TRAFFIC TO ROUTES THAT CAN ACCOMMODATE DEMANDS;
 - d. DETOUR TRAFFIC AWAY FROM SENSITIVE AREAS (SUCH AS SCHOOLS, HOSPITALS, ETC.);
 - e. DISCUSS METHODS OF DETERMINING A STAGING AREA FOR RESPONDERS WITHIN OR NEAR THE CONSTRUCTION ZONE; AND
 - f. DISCUSS METHODS OF DEVELOPING INGRESS AND EGRESS SITES WITHIN THE CONSTRUCTION ZONE.

THE RESPONSE/ACTION PLAN SHALL BE SUBMITTED TO ODOT FOR ACCEPTANCE BEFORE THE CONTRACTOR'S FIRST DAY OF WORK.

- 17. PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS IN INCIDENT DETECTION AND VERIFICATION:
 - a. CALL 911/ NOTIFY TRAFFIC MANAGEMENT CENTER AND PROVIDE THE FOLLOWING:
 - i. LOCATION-INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL.
 - ii. NUMBER AND TYPE OF VEHICLES INVOLVES.
 - iii. ESTIMATED EXTENT OF DAMAGE OR INJURY.
 - iv. ESTIMATED NUMBER OF PATIENTS INVOLVED.
 - v. ANY POTENTIAL HAZARDOUS CONDITIONS.
 - vi. THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE.
 - b. INITIATE TRAFFIC MANAGEMENT / PROVIDE TRAFFIC CONTROL.
 - c. ASSIST MOTORIST WITH DISABLED VEHICLES.
 - d. RECOMMEND ROADWAY REPAIR NEEDS.
 - e. PROVIDE REPAIR RESOURCES.
- 18. ATTEND POST-INCIDENT DEBRIEFINGS IF REQUIRED.

THE DEPARTMENT WILL DEDUCT THE PRORATED DAILY AMOUNT OF THE UNIT PRICE BID FOR THE WTS FOR ANY DAY ON WHICH THE CONTRACTOR FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. SHOULD THE CONTRACTOR'S FAILURE TO PERFORM ANY OF THE DUTIES DESCRIBED ABOVE RESULT IN A MAINTENANCE OF TRAFFIC SAFETY ISSUE, THE DEPARTMENT WILL DEDUCT THE PRORATED DAILY AMOUNT FOR ITEM 614 MAINTENANCE OF TRAFFIC FROM THE CONTRACTOR'S NEXT SCHEDULED ESTIMATE.

IF THREE OR MORE FAILURES TO PERFORM THE DUTIES SET FORTH ABOVE OCCUR, THE WTS SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05.

PAYMENT FOR THIS WORK IS INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

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 ODOT 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.

WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

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 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.

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES AND PROVIDE 72 HOURS ADVANCE NOTICE WITH:

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

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 QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 500 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

TEMPORARY MAINTENANCE OF EXISTING TRAFFIC SIGNALS

INCIDENTAL TO THE REQUIREMENTS FOR MAINTAINING TRAFFIC IN ACCORDANCE WITH 614.03, EXISTING TRAFFIC SIGNALS WITHIN THE PROJECT LIMITS SHALL BE TEMPORARILY MAINTAINED UNTIL THE PROJECT IS COMPLETE AND THE EXISTING OPERATION CAN BE RESTORED.

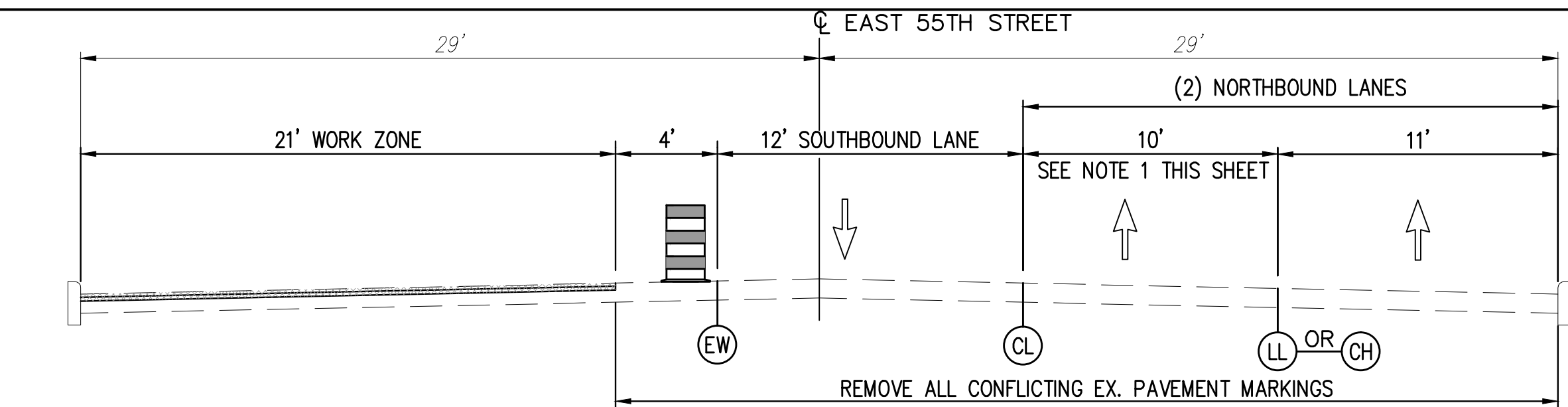
THE EXISTING SIGNAL HEADS (OR ADDITIONAL TRAFFIC SIGNAL HEADS SUPPLIED BY THE CONTRACTOR) SHALL BE POSITIONED SO AS TO PROVIDE A MINIMUM OF TWO TRAFFIC SIGNAL HEADS OVER THE PORTION OF THE ROADWAY USED BY EACH DIRECTION OF TRAFFIC. THE NUMBER, LOCATION, VISIBILITY, AND HEIGHT OF ALL TRAFFIC SIGNALS SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OMUTCD).

ANY COSTS FOR THE TEMPORARY MAINTENANCE OF EXISTING TRAFFIC SIGNALS SHALL BE INCLUDED IN THE LUMP SUM COST BID FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

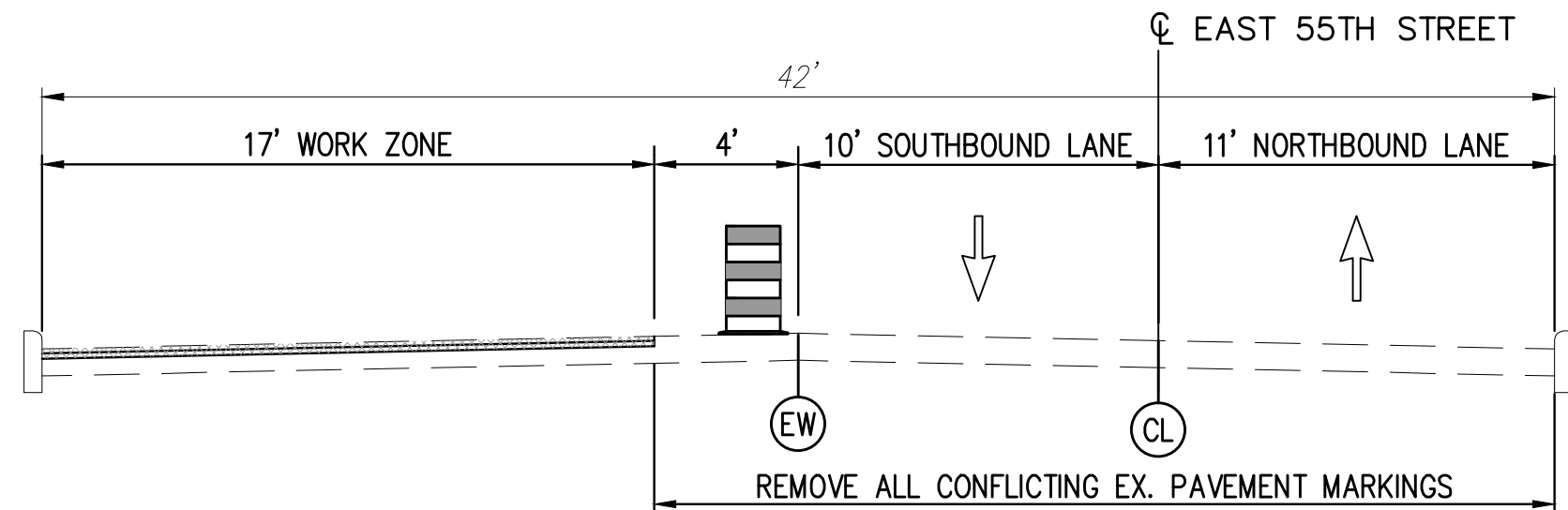
FAILURE TO COMPLY

IF THERE IS ANY FAILURE TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL, AS OUTLINED IN THESE PLANS AND NOTES OR WITH THE PROVISIONS OF THE OMUTCD, THE ROADWAY IN THE VICINITY OF THE WORK AREA SHALL NOT BE CONSIDERED IN A CONDITION FOR SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC. ANY FAILURE TO KEEP THE ROADWAY IN THE VICINITY OF THE WORK AREA IN A CONDITION FOR THE SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC SHALL BE CONSIDERED A BREACH OF CONTRACT. WORK SHALL BE SUSPENDED UNTIL THE CONTRACTOR COMPLIES WITH THE PROVISIONS OF THE AFOREMENTIONED ITEMS.

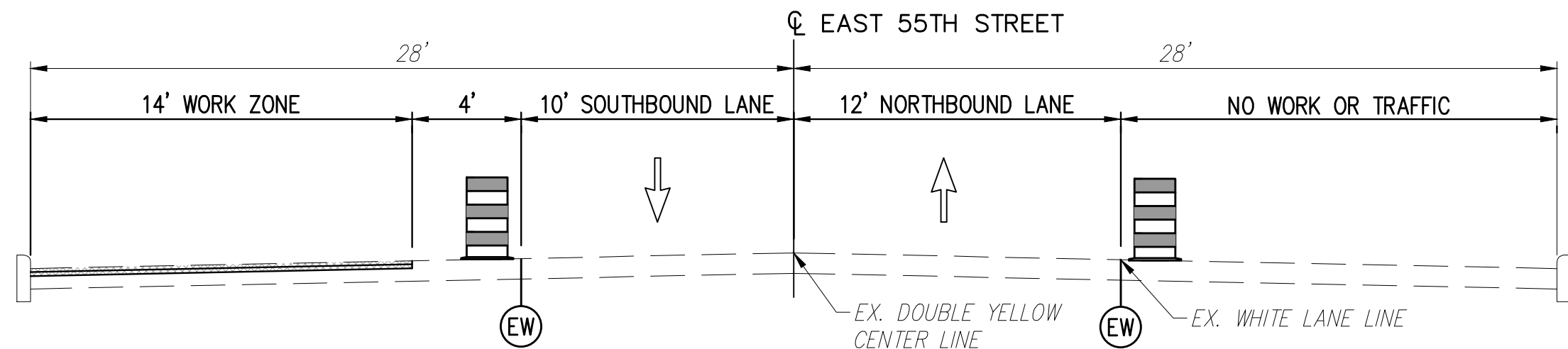
P:\Jobs\6105 GPD - E 55th MOT\2000\Drawings\Plans\MOT Sections.dwg 08-Mar-16 8:32 AM



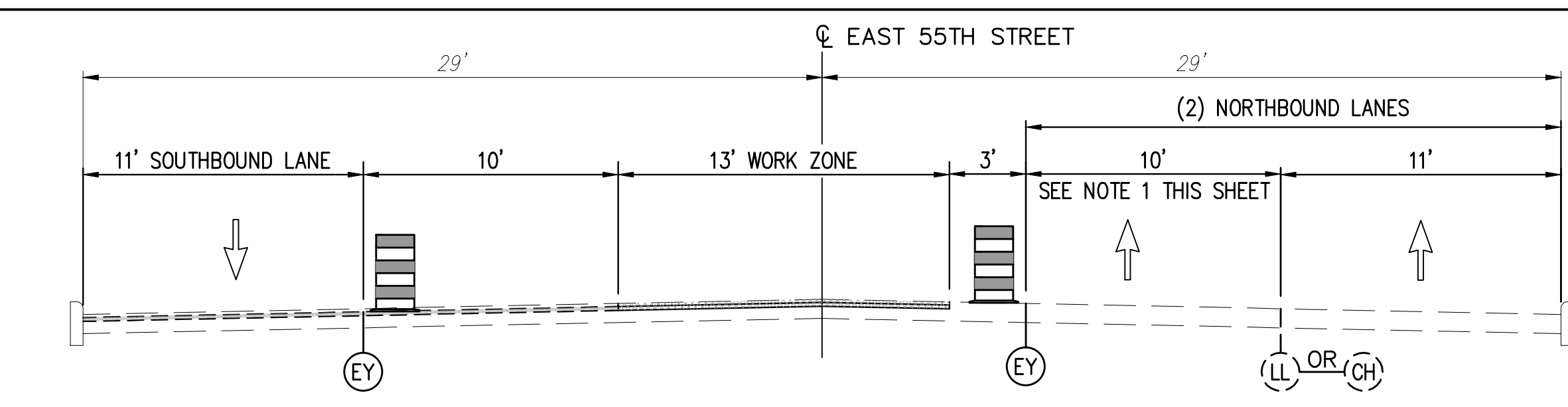
TRUSCON AVENUE TO BOWER AVENUE/I-490



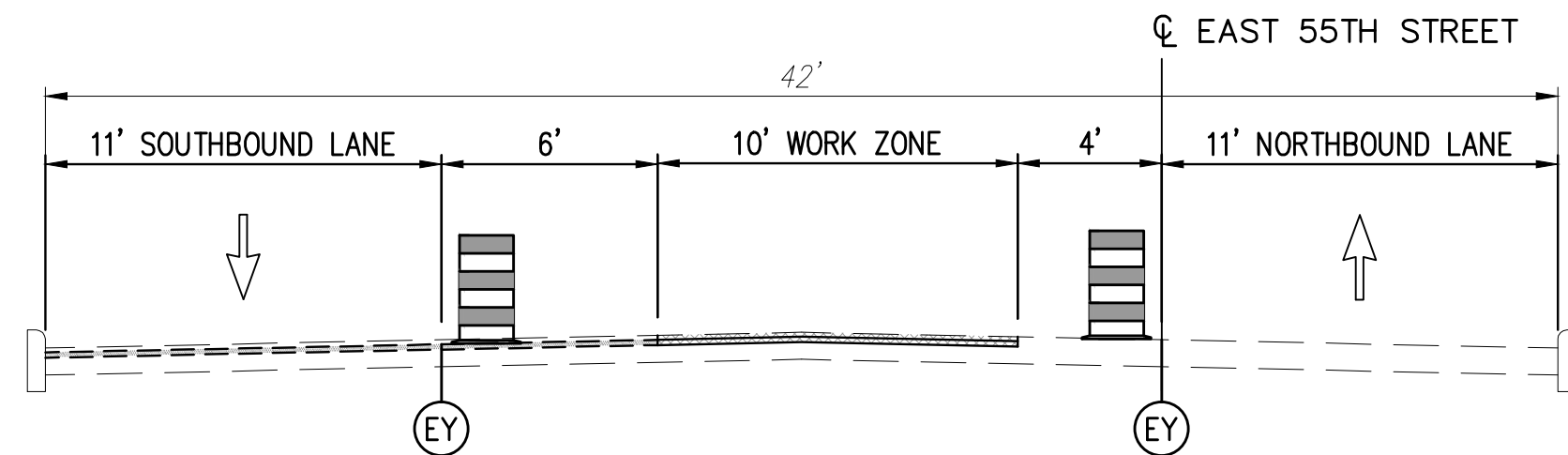
LUFKIN AVENUE TO TRUSCON AVENUE



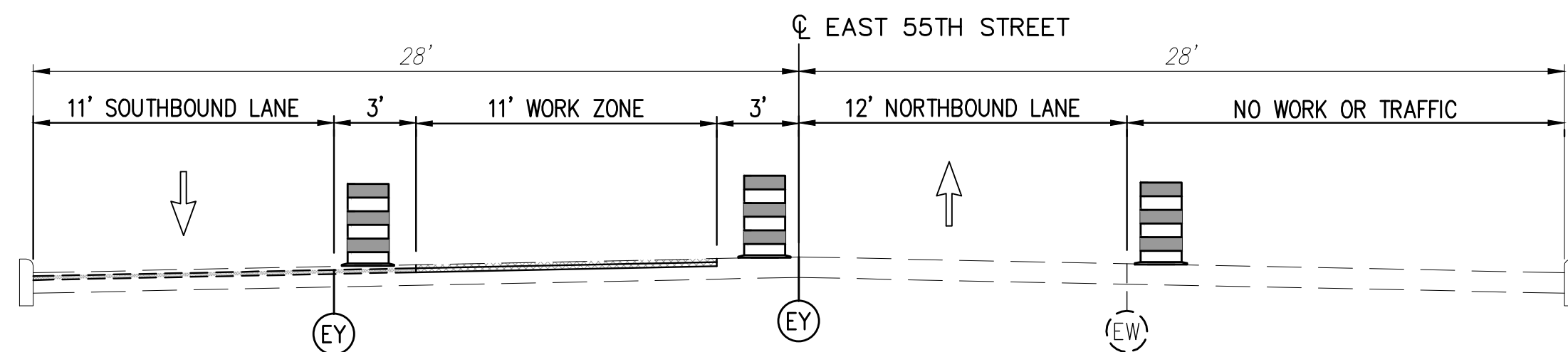
BROADWAY AVENUE TO LUFKIN AVENUE
CONSTRUCTION SECTION 1 - PHASE A



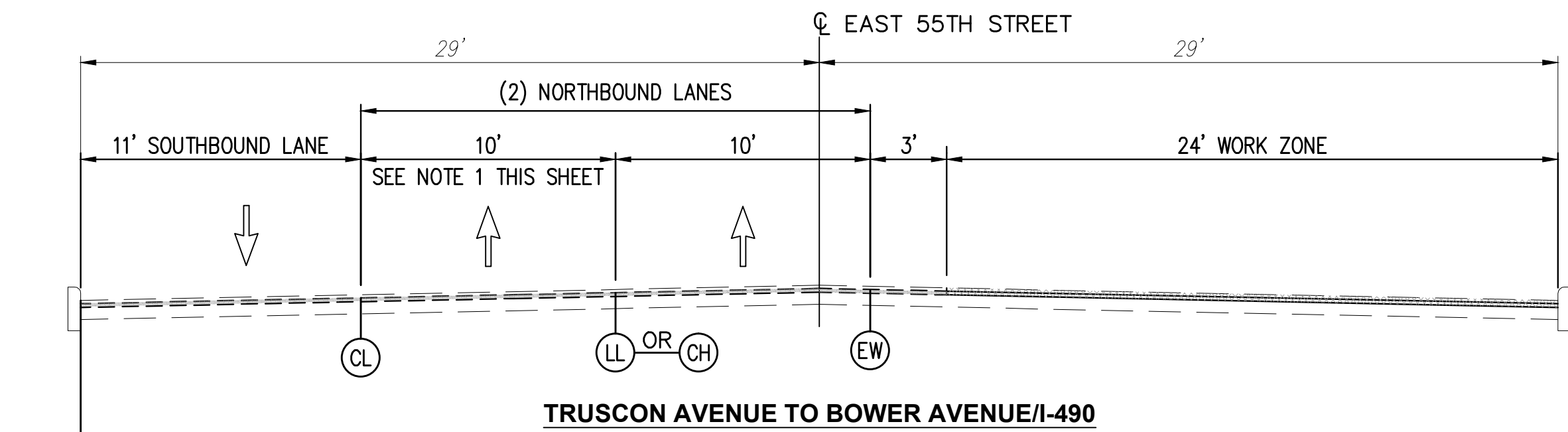
TRUSCON AVENUE TO BOWER AVENUE/I-490



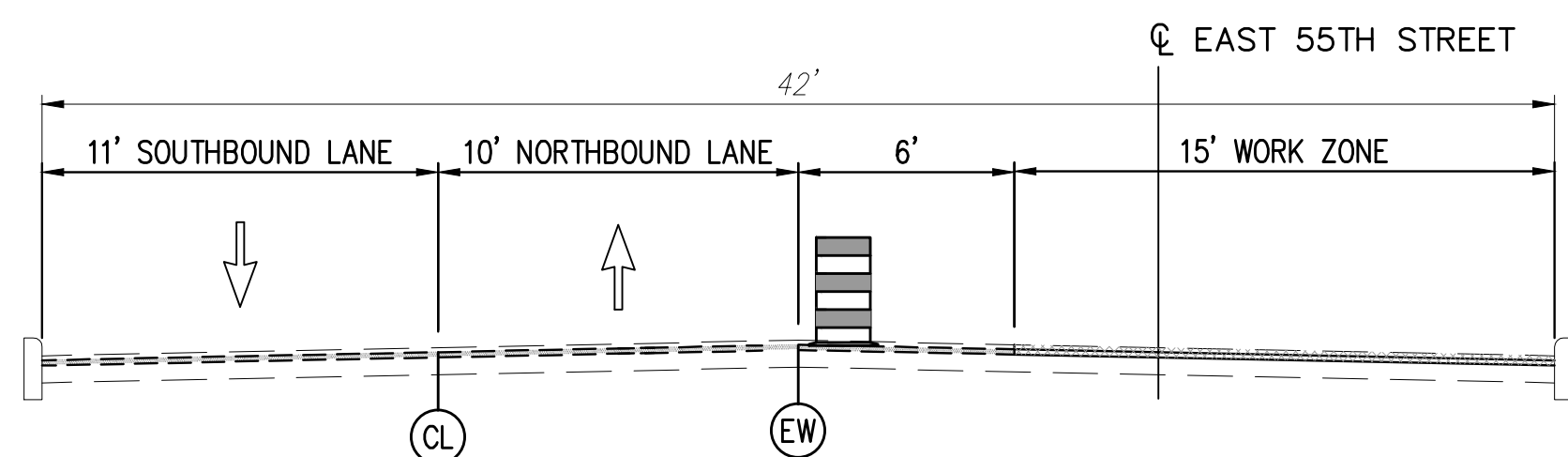
LUFKIN AVENUE TO TRUSCON AVENUE



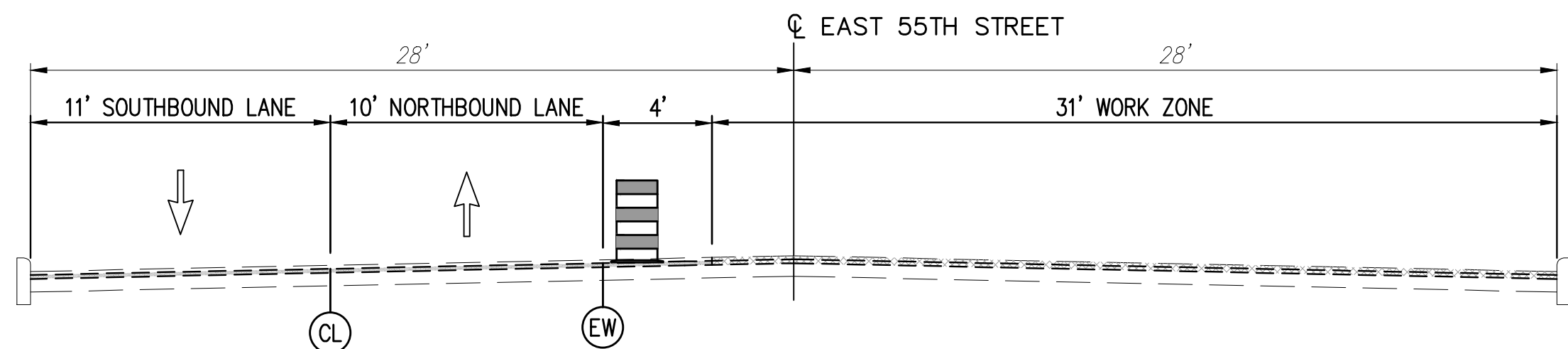
BROADWAY AVENUE TO LUFKIN AVENUE
CONSTRUCTION SECTION 1 - PHASE B



TRUSCON AVENUE TO BOWER AVENUE/I-490



LUFKIN AVENUE TO TRUSCON AVENUE



BROADWAY AVENUE TO LUFKIN AVENUE
CONSTRUCTION SECTION 1 - PHASE C

LEGEND

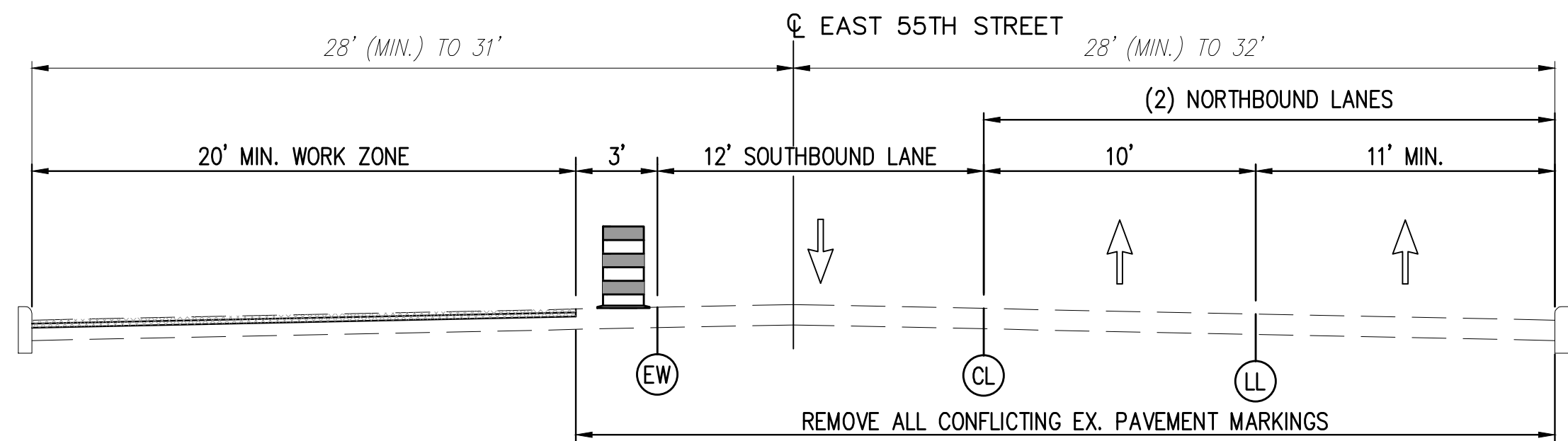
- WORK ZONE
- ASPHALT CONCRETE INTERMEDIATE COURSE
- DRUM (CONFORMING TO SECTION 6F.67 OF THE OMUTCD)
- WORK ZONE PAVEMENT MARKING INSTALLED AS PART OF THAT PHASE
- WORK ZONE PAVEMENT MARKING INSTALLED AS PART OF PREVIOUS PHASE
- * = WORK ZONE PAVEMENT MARKING TYPE
- EW = WORK ZONE EDGE LINE, WHITE
- EY = WORK ZONE EDGE LINE, YELLOW
- CL = WORK ZONE CENTER LINE, DOUBLE YELLOW
- LL = WORK ZONE LANE LINE
- CH = WORK ZONE CHANNELIZING LINE

NOTES:

- BETWEEN BRAGG AVENUE AND BOWER AVENUE/INTERSTATE 490, THE LEFT NORTHBOUND LANE IS TO BE SIGNED AND STRIPED AS LEFT TURN ONLY.

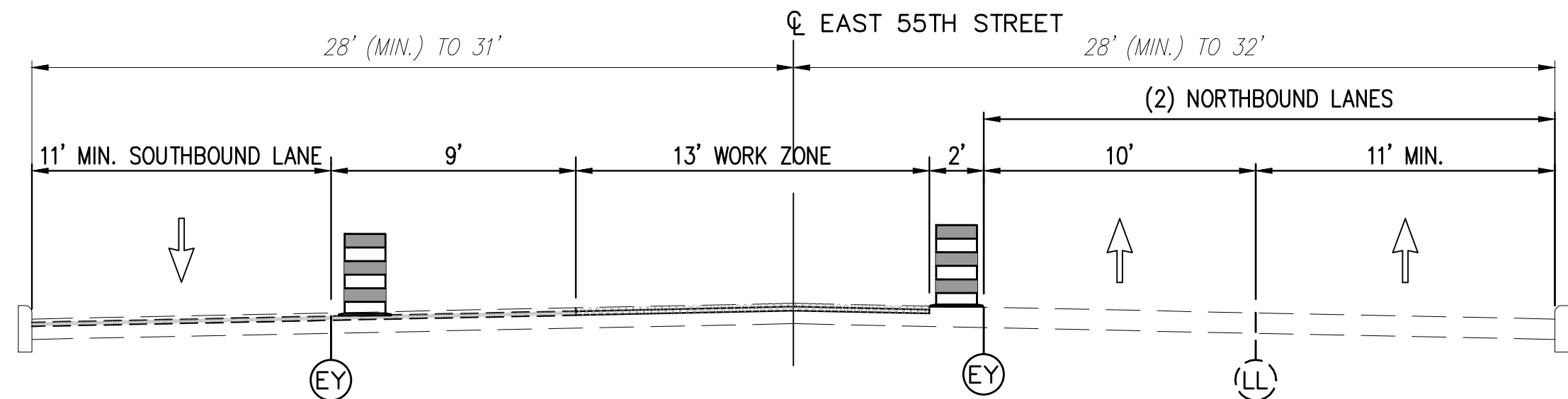
CONSTRUCTION SECTION 1 CASTINGS
WITHIN WORK ZONE BY PHASE

PHASE	PUBLIC CASTINGS	PRIVATE CASTINGS	TOTAL
A	41	32	73
B	25	2	27
C	96	29	125



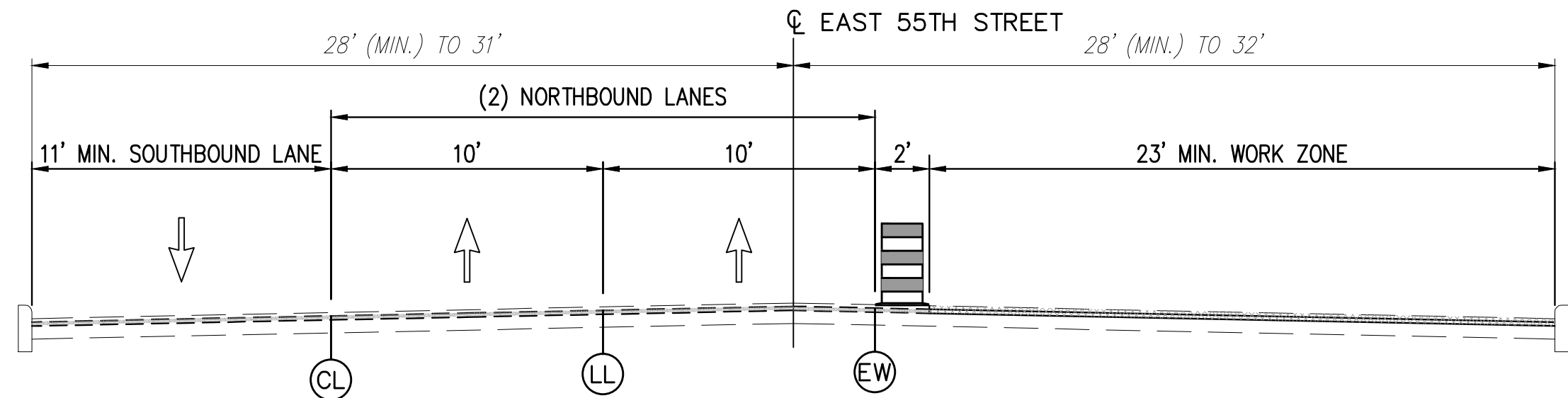
GRAND AVENUE TO CENTRAL AVENUE

CONSTRUCTION SECTION 2 - PHASE A



GRAND AVENUE TO CENTRAL AVENUE

CONSTRUCTION SECTION 2 - PHASE B

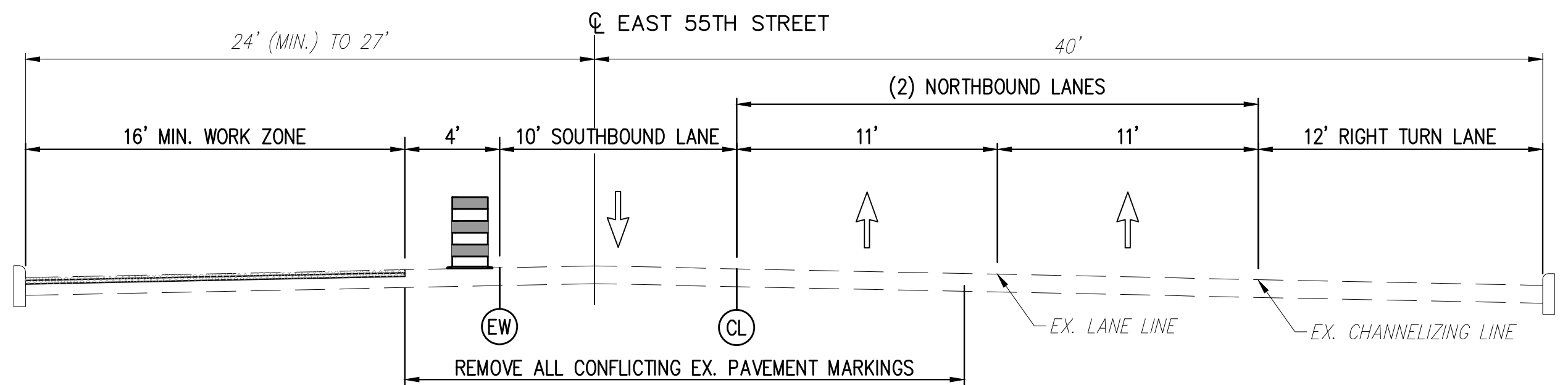


GRAND AVENUE TO CENTRAL AVENUE

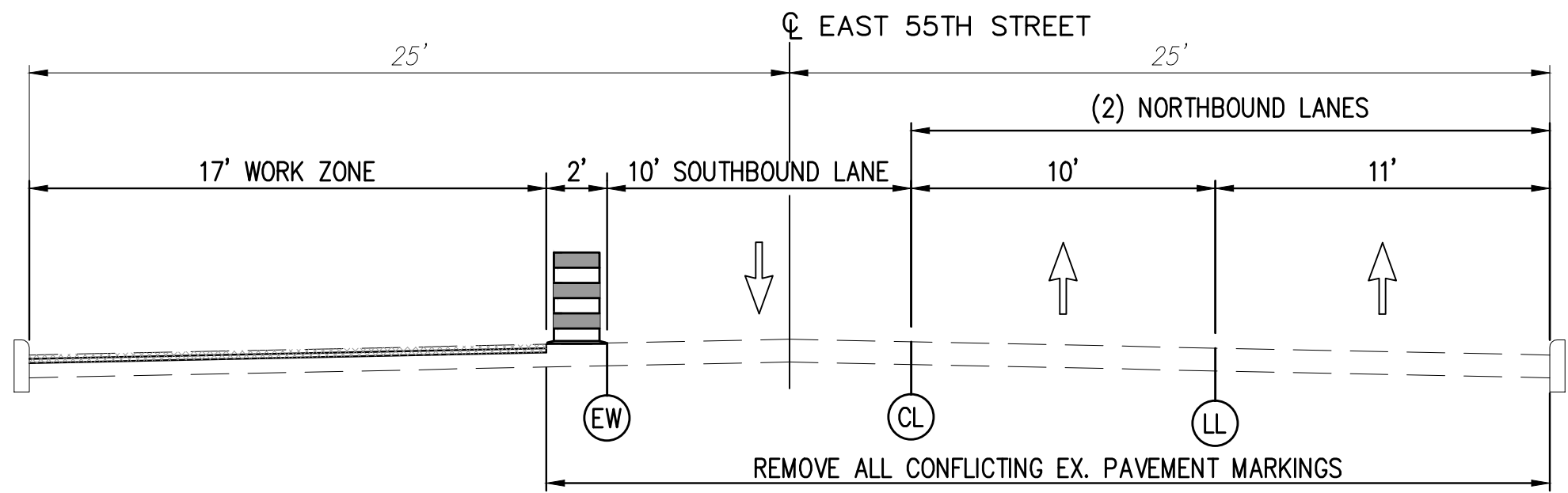
CONSTRUCTION SECTION 2 - PHASE C

CONSTRUCTION SECTION 2 CASTINGS
WITHIN WORK ZONE BY PHASE

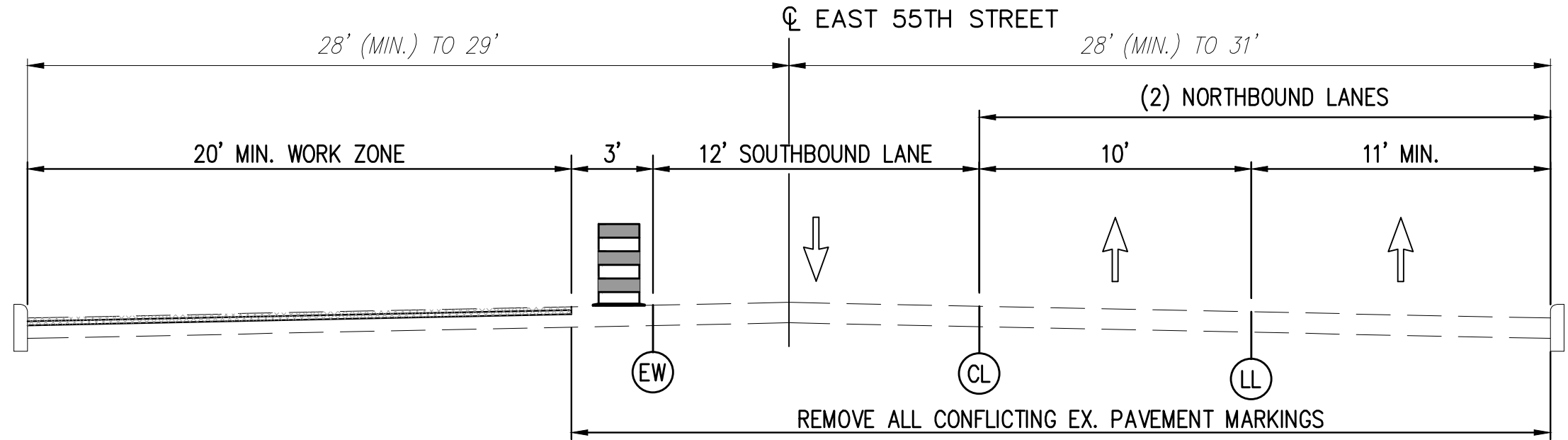
PHASE	PUBLIC CASTINGS	PRIVATE CASTINGS	TOTAL
A	71	43	114
B	31	2	33
C	98	31	129



150' (±) NORTH OF EUCLID AVENUE TO CHESTER AVENUE



EUCLID AVENUE TO 150' (±) NORTH OF EUCLID AVENUE (UNDER RAILROAD OVERPASS)

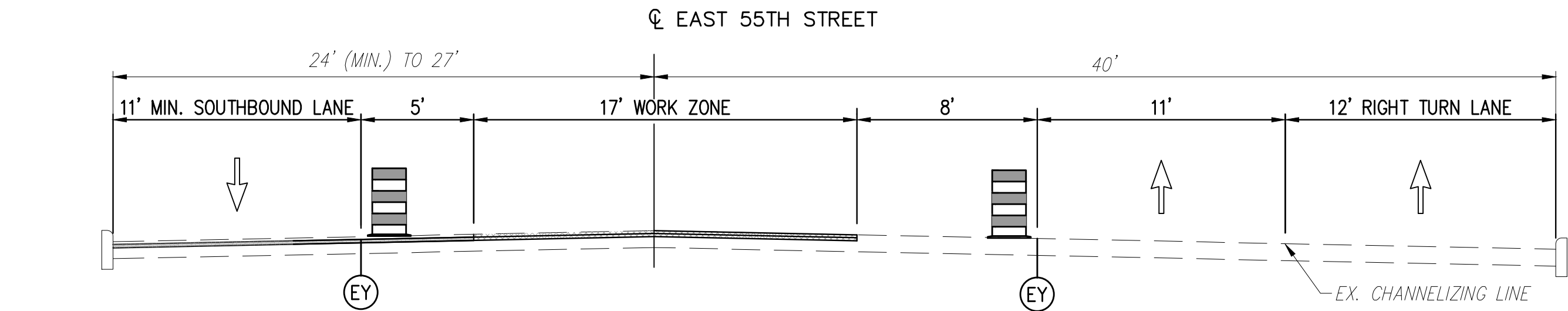


CHESTER AVENUE TO SUPERIOR AVENUE
CENTRAL AVENUE TO EUCLID AVENUE

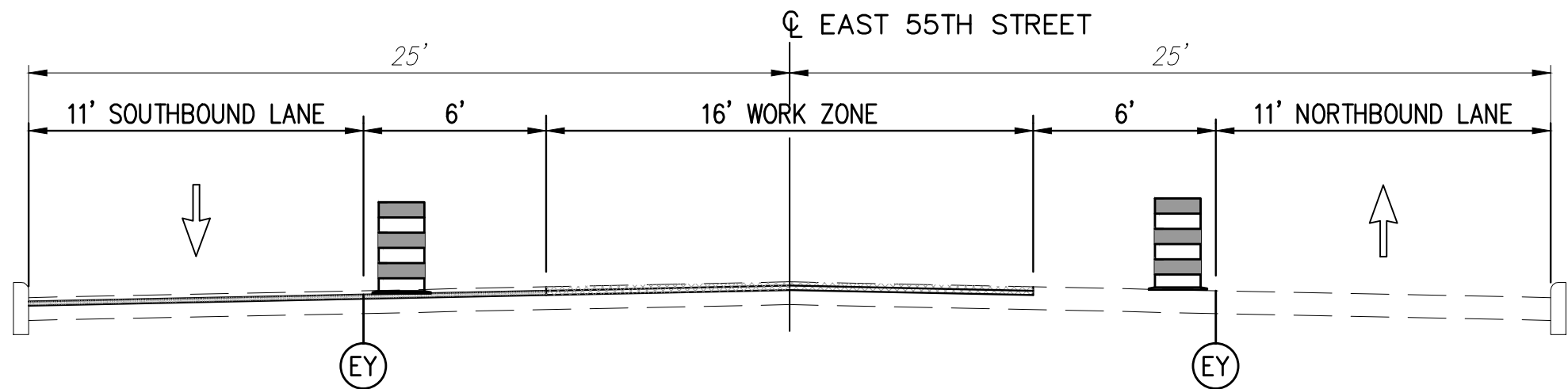
CONSTRUCTION SECTION 3 - PHASE A

LEGEND

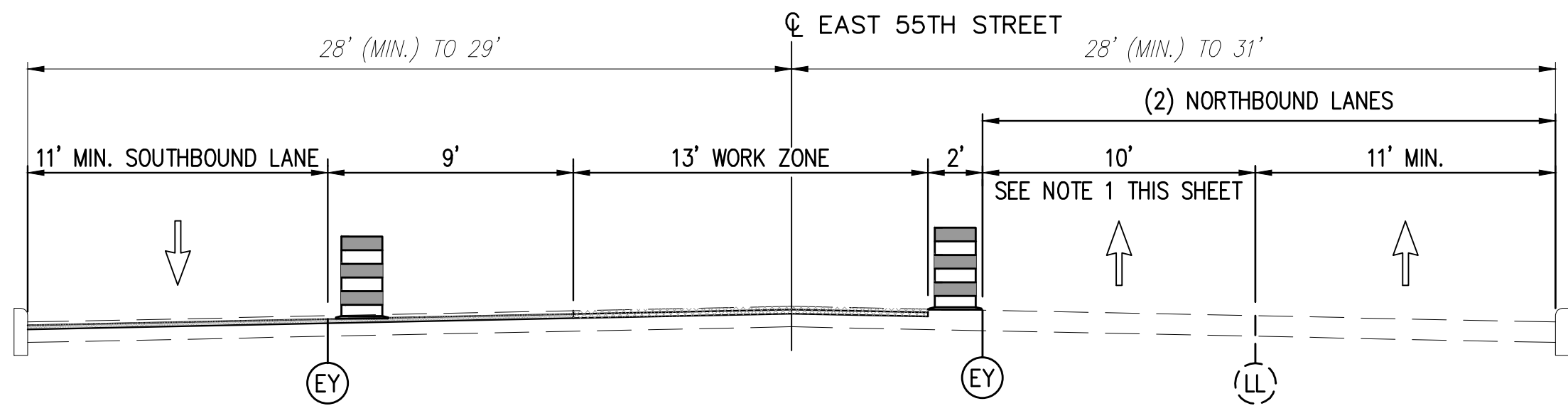
- WORK ZONE
- ASPHALT CONCRETE INTERMEDIATE COURSE
- DRUM (CONFORMING TO SECTION 6F.67 OF THE OMTCD)
- WORK ZONE PAVEMENT MARKING INSTALLED AS PART OF THAT PHASE
- WORK ZONE PAVEMENT MARKING INSTALLED AS PART OF PREVIOUS PHASE
- * = WORK ZONE PAVEMENT MARKING TYPE
- EW = WORK ZONE EDGE LINE, WHITE
- EY = WORK ZONE EDGE LINE, YELLOW
- CL = WORK ZONE CENTER LINE, DOUBLE YELLOW
- LL = WORK ZONE LANE LINE
- CH = WORK ZONE CHANNELIZING LINE



150'±) NORTH OF EUCLID AVENUE TO CHESTER AVENUE

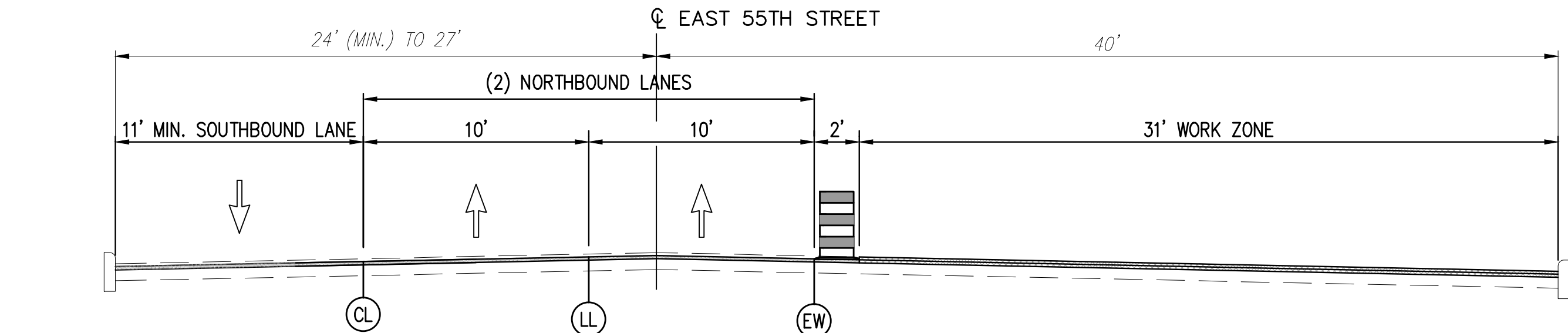


EUCLID AVENUE TO 150'±) NORTH OF EUCLID AVENUE (UNDER RAILROAD OVERPASS)

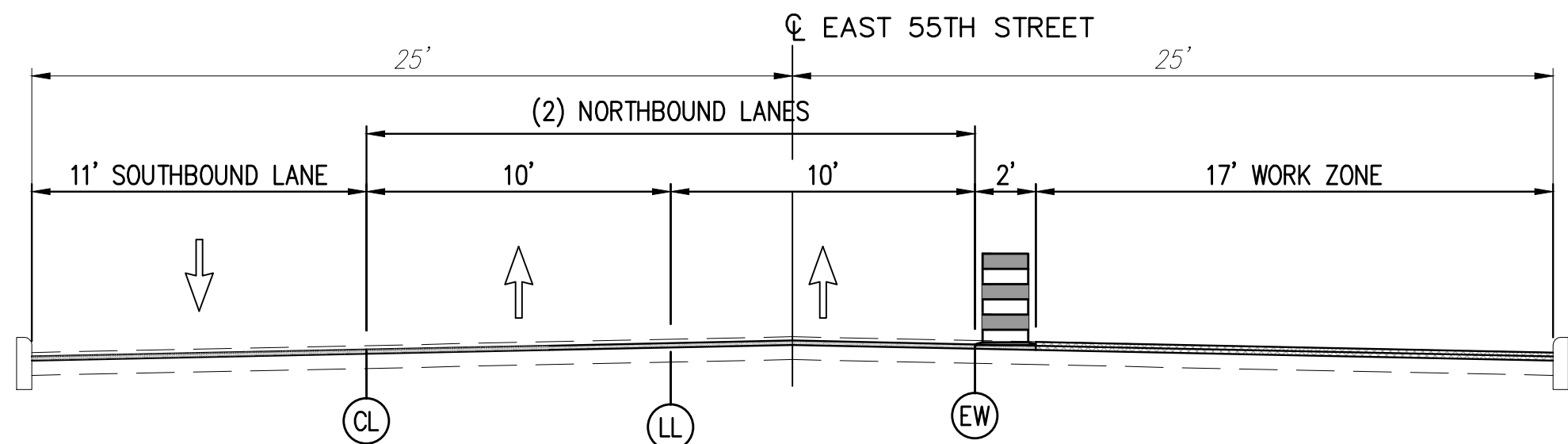


CHESTER AVENUE TO SUPERIOR AVENUE
CENTRAL AVENUE TO EUCLID AVENUE

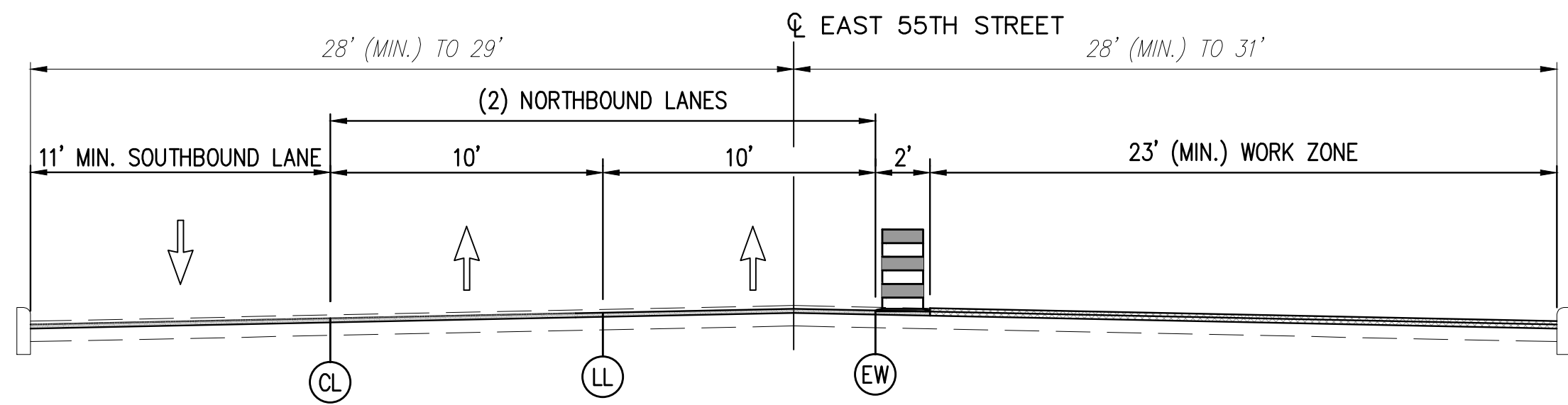
CONSTRUCTION SECTION 3 - PHASE B



150'±) NORTH OF EUCLID AVENUE TO CHESTER AVENUE



EUCLID AVENUE TO 150'±) NORTH OF EUCLID AVENUE (UNDER RAILROAD OVERPASS)



CHESTER AVENUE TO SUPERIOR AVENUE
CENTRAL AVENUE TO EUCLID AVENUE

CONSTRUCTION SECTION 3 - PHASE C

LEGEND

- WORK ZONE
- ASPHALT CONCRETE INTERMEDIATE COURSE
- DRUM (CONFORMING TO SECTION 6F.67 OF THE OMUTCD)
- WORK ZONE PAVEMENT MARKING INSTALLED AS PART OF THAT PHASE
- WORK ZONE PAVEMENT MARKING INSTALLED AS PART OF PREVIOUS PHASE
- * = WORK ZONE PAVEMENT MARKING TYPE
- EW = WORK ZONE EDGE LINE, WHITE
- EY = WORK ZONE EDGE LINE, YELLOW
- CL = WORK ZONE CENTER LINE, DOUBLE YELLOW
- LL = WORK ZONE LANE LINE
- CH = WORK ZONE CHANNELIZING LINE

NOTES:

- DURING PHASE B ONLY, THE LEFT NORTHBOUND LANE AT THE APPROACH TO EUCLID AVENUE IS TO BE SIGNED AND STRIPED AS LEFT TURN ONLY.

CONSTRUCTION SECTION 3 CASTINGS
WITHIN WORK ZONE BY PHASE

PHASE	PUBLIC CASTINGS	PRIVATE CASTINGS	TOTAL
A	86	44	130
B	52	1	53
C	89	57	146

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SHEET NUMBER												PARTICIPATION		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	6	7	8	9	10	19	20	21	22	23	24								
ROADWAY																			
LS														201	11000	LS		CLEARING AND GRUBBING	5
							406	245		83				202	23001	734	SY	PAVEMENT REMOVED, AS PER PLAN	5
2850														202	98300	2850	SY	REMOVAL MISC.: TRACK REMOVED	5
475							69	42		14				203	10000	600	CY	EXCAVATION	5
							406	245		83				204	10000	734	SY	SUBGRADE COMPACTION	
		10000				39495								608	13001	49495	SF	6" CONCRETE WALK, AS PER PLAN	5, 7, 9
						12055								608	52001	12055	SF	CURB RAMP, AS PER PLAN	5, 6, 9
	240					30								608	98000	270	SF	WALKWAY, MISC.: TRUNCATED DOMES	5, 6, 9
	6													SPECIAL	623E38501	6	EACH	MONUMENT ASSEMBLY, AS PER PLAN	6
	6					43								623	39501	49	EACH	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	6
	48													623	40900	48	EACH	MONUMENT, MISC.: MONUMENT REFERENCING	6
EROSION CONTROL																			
						10								659	00300	10	CY	TOP SOIL (4" AVERAGE)	
		200				79								659	00500	279	SY	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)	7
		40000												832	30001	40000	EACH	EROSION CONTROL, AS PER PLAN	7
DRAINAGE																			
			2400											605	05200	2400	FT	4" UNCLASSIFIED PIPE UNDERDRAINS	8
			2400											605	13300	2400	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	8
						190								611	98631	190	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	7
		50												611	98635	50	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	7
						153								611	99655	153	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	7
		25												611	99661	25	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	7
		15												611	99690	15	EACH	MANHOLE, MISC.: ELECTRICAL MANHOLE ADJUSTED TO GRADE, AS PER PLAN (CPP)	7
		15												611	99690	15	EACH	MANHOLE, MISC.: ELECTRICAL MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN (CPP)	7
		8												SPECIAL	690E98000	8	EACH	MISC.: ELECTRICAL VAULT ADJUSTED TO GRADE (CPP)	7
		8												SPECIAL	690E98000	8	EACH	MISC.: ELECTRICAL VAULT RECONSTRUCTED TO GRADE (CPP)	7
			200											613	41250	200	CY	LOW STRENGTH MORTAR BACKFILL (TYPE I)	8
			160000											SPECIAL	611E99820	160000	LB	MISCELLANEOUS METAL	8
PAVEMENT																			
			8400											251	01001	8400	SY	PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN	8
							31225	37079	37252	3929	3810			254	01001	113295	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T = 3")	8
			5700											254	01011	5700	SY	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (VARIES)	8
				6500										255	10161	6500	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN	5, 9
320														301	46000	320	CY	ASPHALT CONCRETE BASE, PG64-22	5
475							69	42		14				304	20001	600	CY	AGGREGATE BASE, AS PER PLAN	5, 9
2850														305	13011	2850	SY	9" CONCRETE BASE, CLASS QCI, AS PER PLAN	5, 9
							6290	7458	7494	812	786			407	10000	22840	GAL	TACK COAT (0.10 GAL/SY)	
							1116	1305	1313					441	50101	3734	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN "A", PG70-22M	9
										150	144			441	50101	294	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN "B", PG64-22	9
							247	282	283	208	197			441	50201	1217	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN (0" MIN), AS DIRECTED	9
							1564	1825	1836					441	50301	5225	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN, PG64-22M	9
							406	245		83				451	20000	734	SY	REINFORCED CONCRETE PAVEMENT, MISC.: 12" REINFORCED CONCRETE PAVEMENT, CLASS QC MS	9
				1200		470								452	12051	1670	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS, AS PER PLAN	5, 9
					100	505								609	14001	605	FT	CURB, TYPE 2-A, AS PER PLAN	5, 9, 10
					1000	1581								609	26001	2581	FT	CURB, TYPE 6, AS PER PLAN	5, 9, 10
				200										SPECIAL	690E98700	200	CY	MISC.: CONCRETE MIX DESIGN FOR CLASS QC MS CONCRETE	9
WATER WORK																			
						7								638	10400	7	EACH	FIRE HYDRANT ADJUSTED TO GRADE	
		100				196								638	10801	296	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	7
		100												638	10901	100	EACH	SERVICE BOX ADJUSTED TO GRADE, AS PER PLAN	7
		50				24								638	98000	74	EACH	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	7
		50				25								638	98000	75	EACH	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	7
		24												638	98000	24	EACH	WATER WORK, MISC.: WATER MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	7

GENERAL SUMMARY

CUY-E 55TH ST RESURF

17
103

GENERAL SUMMARY



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SHEET NO.	STATION TO STATION		SIDE	LENGTH (L)	AVERAGE WIDTH (W)	SURFACE AREA (A) (A = L x W)	CADD GENERATED AREA	202	203	204	254	304	407	407	441	441	441	441	451
								PAVEMENT REMOVED, AS PER PLAN	EXCAVATION	SUBGRADE COMPACTION	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T = 3")	6" AGGREGATE BASE, AS PER PLAN	TACK COAT (0.10 GAL/SY)	TACK COAT (0.10 GAL/SY)	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN "A"	1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN "B"	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN (10" MIN TO 1.75" MAX)	1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN	REINFORCED CONCRETE PAVEMENT, MISC.: 12" REINFORCED CONCRETE PAVEMENT, CLASS OC MS
	E 55TH ST			FT	FT	SF	SF	SY	CY	SY	SY	CY	GAL	GAL	CY	CY	CY	CY	SY
25	1+98	3+15	LT	117	20	2340	2300	-	-	-	256	-	26	26	9	-	2	13	-
25	3+15	3+43	LT	28	23	644	650	-	-	-	73	-	8	8	3	-	1	4	-
25	3+43	6+00	LT	257	26	6682	6673	-	-	-	742	-	75	75	26	-	6	37	-
25	1+98	3+00	RT	102	30	3060	3065	-	-	-	341	-	35	35	12	-	3	17	-
25	3+00	4+00	RT	100	16	1600	1600	-	-	-	178	-	18	18	7	-	2	9	-
25	4+00	6+00	RT	200	30	6000	6000	-	-	-	667	-	67	67	24	-	5	33	-
26	6+00	11+00	LT	500	26	13000	13000	-	-	-	1445	-	145	145	51	-	11	71	-
26	6+00	11+00	RT	500	30	15000	15000	-	-	-	1667	-	167	167	58	-	12	82	-
27	11+00	14+24	LT	324	26	8424	8425	-	-	-	937	-	94	94	33	-	7	46	-
27	14+24	15+89	LT	165	23	3795	3790	-	-	-	422	-	43	43	15	-	3	21	-
27	15+89	16+00	LT	11	20	220	225	-	-	-	25	-	3	3	1	-	1	2	-
27	11+00	12+98	RT	198	30	5940	5940	-	-	-	660	-	66	66	23	-	5	33	-
27	12+98	14+24	RT	126	17	2142	2145	-	-	-	239	-	24	24	9	-	2	12	-
27	14+24	16+00	RT	176	32	5632	5930	-	-	-	659	-	66	66	23	-	5	33	-
27	12+98	14+45	RT	147	13	1911	1925	214	36	214	-	36	-	-	8	-	2	11	214
28	16+00	21+00	LT	500	20	10000	10000	-	-	-	1112	-	112	112	39	-	8	55	-
28	16+00	21+00	RT	500	22	11000	11000	-	-	-	1223	-	123	123	43	-	9	60	-
29	21+00	25+68	LT	468	20	9360	9360	-	-	-	1040	-	104	104	37	-	8	51	-
29	25+68	26+00	LT	32	20.75	664	665	-	-	-	74	-	8	8	3	-	1	4	-
29	21+00	21+77	RT	77	22	1694	1695	-	-	-	189	-	19	19	7	-	2	10	-
29	21+77	23+38	RT	161	20	3220	3220	-	-	-	358	-	36	36	13	-	3	18	-
29	23+38	25+68	RT	230	22	5060	5070	-	-	-	564	-	57	57	20	-	4	28	-
29	25+68	26+00	RT	32	10	320	305	-	-	-	34	-	4	4	2	-	1	2	-
29	25+68	26+00	RT	32	13	416	415	47	8	47	-	8	-	-	2	-	1	3	47
30	26+00	27+68	LT	168	25.25	4242	4240	-	-	-	472	-	48	48	17	-	4	23	-
30	27+68	28+00	LT	32	29	928	925	-	-	-	103	-	11	11	4	-	1	5	-
30	28+00	29+00	LT	100	17	1700	1700	-	-	-	189	-	19	19	7	-	2	10	-
30	29+00	31+00	LT	200	29	5800	5800	-	-	-	645	-	65	65	23	-	5	32	-
30	26+00	27+00	RT	100	12	1200	1185	-	-	-	132	-	14	14	5	-	1	7	-
30	27+00	28+00	RT	100	28	2800	2805	-	-	-	312	-	32	32	11	-	3	16	-
30	28+00	31+00	RT	300	29	8700	8700	-	-	-	967	-	97	97	34	-	7	47	-
30	26+00	27+00	RT	100	13	1300	1300	145	25	145	-	25	-	-	6	-	2	8	145
31	31+00	36+00	LT	500	29	14500	14500	-	-	-	1612	-	162	162	56	-	12	79	-
31	31+00	36+00	RT	500	29	14500	14500	-	-	-	1612	-	162	162	56	-	12	79	-
32	36+00	41+00	LT	500	29	14500	14500	-	-	-	1612	-	162	162	56	-	12	79	-
32	36+00	41+00	RT	500	29	14500	14500	-	-	-	1612	-	162	162	56	-	12	79	-
33	41+00	46+00	LT	500	29	14500	14500	-	-	-	1612	-	162	162	56	-	12	79	-
33	41+00	46+00	RT	500	29	14500	14500	-	-	-	1612	-	162	162	56	-	12	79	-
34	46+00	48+06	LT	206	25	5150	5165	-	-	-	574	-	58	58	20	-	4	28	-
34	48+06	49+19	LT	113	39	4407	4400	-	-	-	489	-	49	49	17	-	4	24	-
34	49+19	49+38	LT	19	34	646	645	-	-	-	72	-	8	8	3	-	1	4	-
34	49+38	49+92	LT	51	29	1472	1475	-	-	-	164	-	17	17	6	-	2	8	-
34	46+00	49+92	RT	393	29	11397	11410	-	-	-	1268	-	127	127	45	-	9	62	-
35	55+94	56+00	LT	8	29	232	240	-	-	-	27	-	3	3	1	-	1	2	-
35	55+94	56+00	RT	3	29	87	85	-	-	-	10	-	1	1	1	-	1	1	-
36	56+00	61+00	LT	500	29	14500	14500	-	-	-	1612	-	162	162	56	-	12	79	-
36	56+00	61+00	RT	500	29	14500	14500	-	-	-	1612	-	162	162	56	-	12	79	-
TOTALS CARRIED TO GENERAL SUMMARY								406	69	406	31225	69	3145	3145	1116		247	1564	406
20 103																			

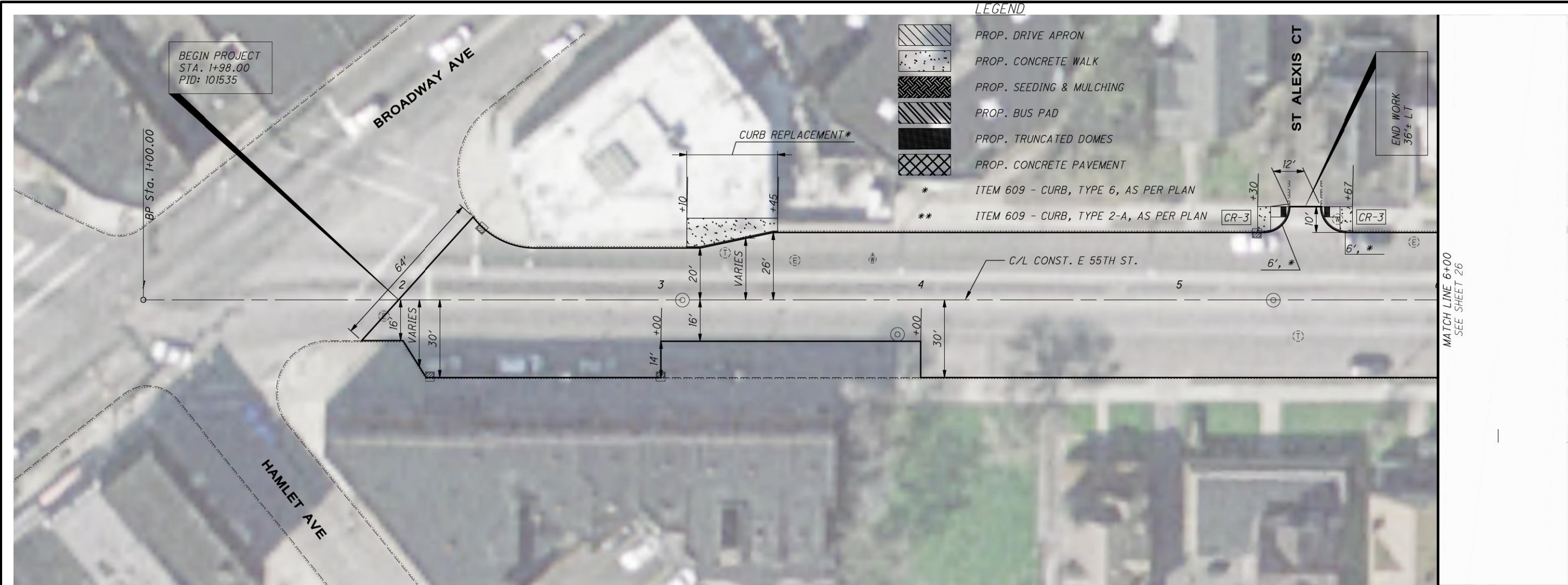
PAVEMENT CALCULATIONS

$$\frac{22}{103}$$

$$\frac{23}{103}$$

O:\2015\2015201\06\roadway\sheets\101535GP100.dwg 10-Mar-16 8:20 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	25	0+00.00	6+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	25	0+00.00	6+00.00	LT / RT																		
	25	0+00.00	6+00.00	LT / RT		395																
	25	0+00.00	6+00.00	LT / RT			105			7												
	25	0+00.00	6+00.00	LT / RT																		
	25	0+00.00	6+00.00	LT / RT																		
	25	3+10.00	3+45.00	LT						35												
	25	0+00.00	6+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						395	105		42	4	3				1	1						



CUY-E 55TH ST RESURF

PLAN - E 55TH ST
BEGIN PROJECT TO STA. 6+00



25
103

O:\2015\2015201\06\roadway\sheets\101535GP100.dwg 10-Mar-16 8:20 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	26	6+00.00	11+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	26	6+00.00	11+00.00	LT / RT																		
	26	6+00.00	11+00.00	LT / RT		400																
	26	6+00.00	11+00.00	LT / RT			790			46												
	26	6+00.00	11+00.00	LT / RT																		
	26	6+00.00	11+00.00	LT / RT																		
	26	6+00.00	11+00.00	LT / RT																		
	26	6+00.00	11+00.00	LT / RT																		
	26	6+00.00	11+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						400	790			46	3	4	1		2							



PLAN - E 55TH ST
STA. 6+00 TO STA. 11+00

CUY-E 55TH ST RESURF

26
103

CALCULATED
EPS

CHECKED
DEN

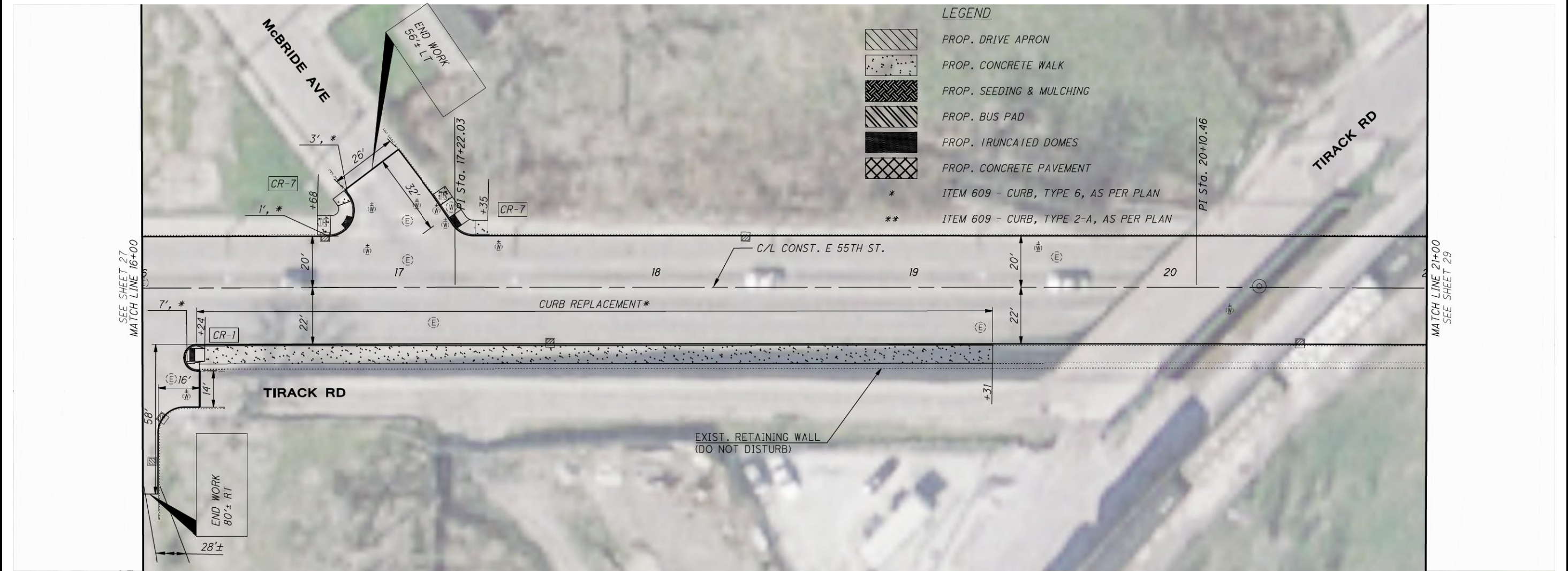
0 20 40
HORIZONTAL
SCALE IN FEET

O:\2015\2015201\06\roadway\sheets\101535GP100.dwg 10-Mar-16 8:20 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	27	11+00.00	16+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	27	11+00.00	16+00.00	LT / RT																		
	27	11+00.00	16+00.00	LT / RT		785																
	27	11+00.00	16+00.00	LT / RT			465			8												
	27	11+00.00	16+00.00	LT / RT																		
	27	11+00.00	16+00.00	LT / RT					147													
	27	11+00.00	16+00.00	LT / RT																		
	27	11+00.00	16+00.00	LT / RT														4	35			
TOTALS CARRIED TO SUBSUMMARY						785	465		147	8	5	6	1		7			4	35			

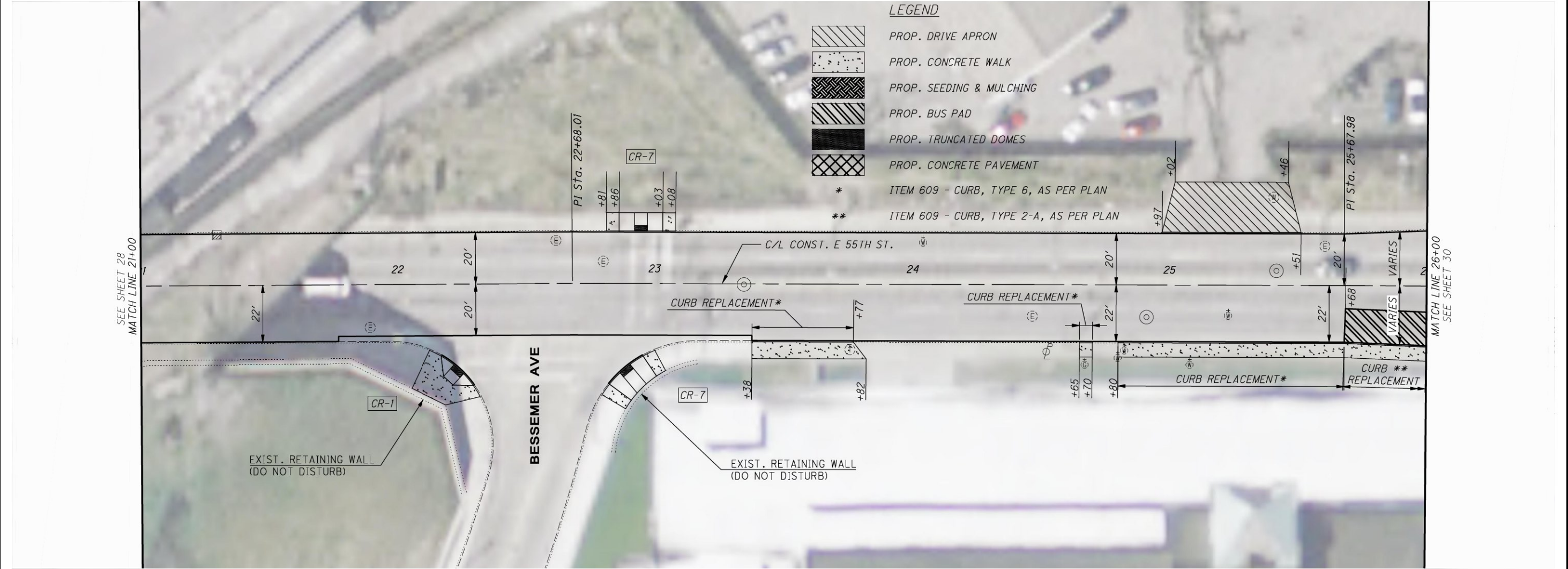


REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	28	16+00.00	21+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	28	16+00.00	21+00.00	LT / RT																		
	28	16+00.00	21+00.00	LT / RT		2290																
	28	16+00.00	21+00.00	LT / RT			230			9												
	28	16+00.00	21+00.00	LT / RT																		
	28	16+00.00	21+00.00	LT / RT																		
	28	16+00.00	21+00.00	LT / RT						311												
	28	16+00.00	21+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						2290	230		320	6	1				9	1						



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REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	29	21+00.00	26+00.00	LT / RT							1	3			5	1						
	29	21+00.00	26+00.00	LT / RT	107																	
	29	21+00.00	26+00.00	LT / RT		1385																
	29	21+00.00	26+00.00	LT / RT			375															
	29	23+38.00	23+77.00	RT					39													
	29	24+65.00	24+70.00	RT					5													
	29	24+80.00	25+68.00	RT					88													
	29	25+68.00	26+00.00	RT					32													
TOTALS CARRIED TO SUBSUMMARY					107	1385	375		32	132	1	3			5	1						



PLAN - E 55TH ST
STA. 21+00 TO STA. 26+00

CUY-E 55TH ST RESURF

29
103

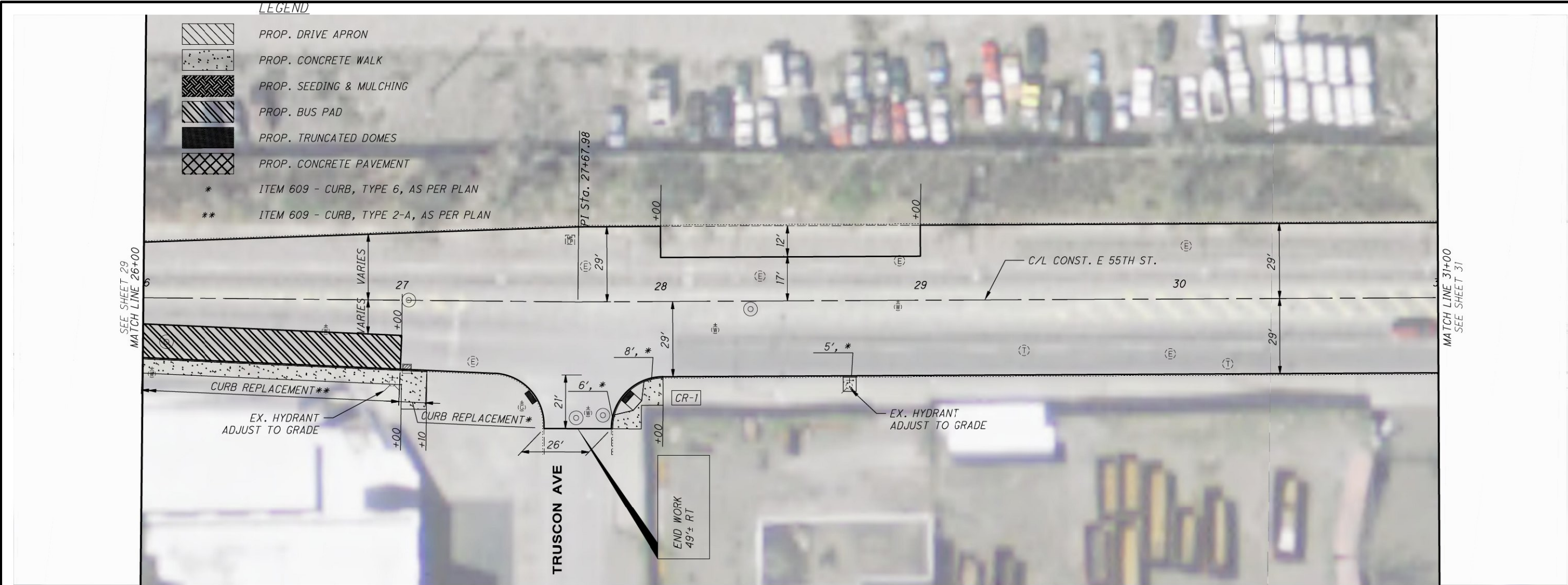
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0 20 40
HORIZONTAL
SCALE IN FEET

N

O:\2015\2015201\06\roadway\sheets\101535GP100.dwg 10-Mar-16 8:20 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	30	26+00.00	31+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	30	26+00.00	31+00.00	LT / RT																		
	30	26+00.00	31+00.00	LT / RT		885																
	30	26+00.00	31+00.00	LT / RT			80	10		15												
	30	26+00.00	27+00.00	RT					100													
	30	67+00.00	27+10.00	RT						10												
	30	26+00.00	31+00.00	LT / RT																		
	30	26+00.00	31+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						885	80	10	100	25	1	5		2	5							



CUY-E 55TH ST RESURF

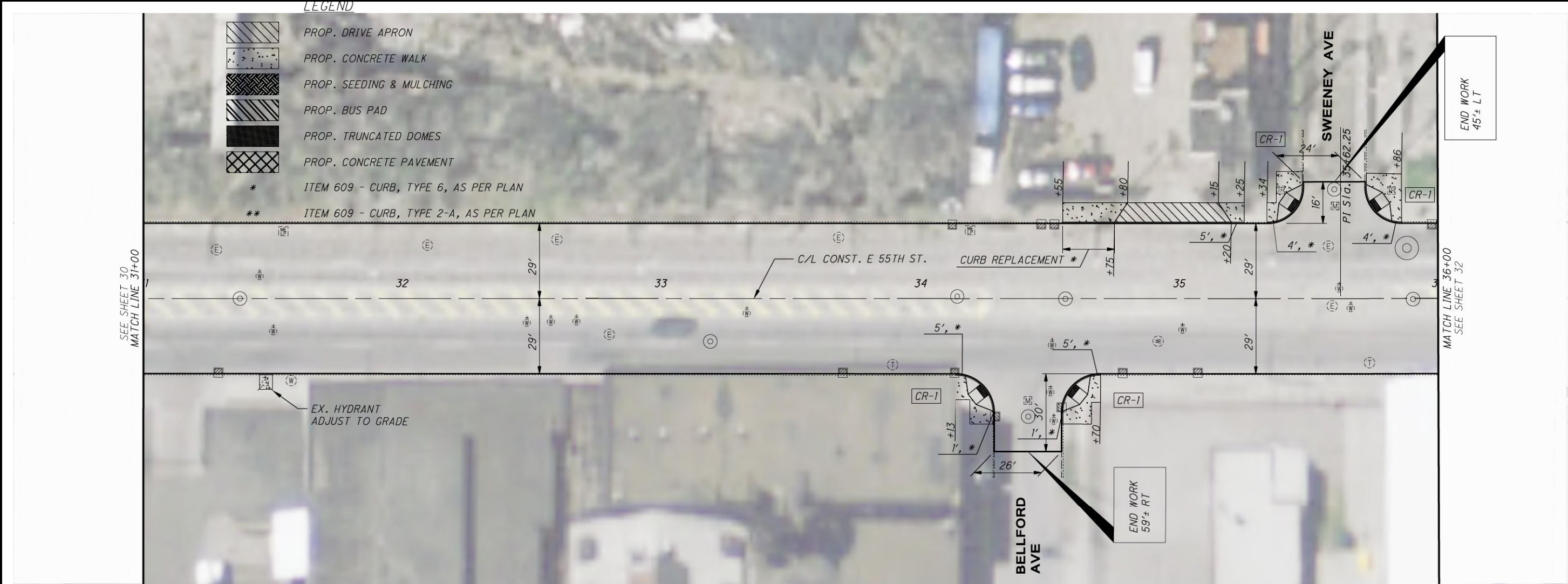
PLAN - E 55TH ST
STA. 26+00 TO STA. 31+00



30
103

O:\2015\2015201\06\roadway\sheets\101535GP100.dwg 10-Mar-16 8:20 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659		
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)		
	31	31+00.00	36+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY		
	31	31+00.00	36+00.00	LT / RT	35																
	31	31+00.00	36+00.00	LT / RT		760															
	31	31+00.00	36+00.00	LT / RT			320			24											
	31	34+55.00	34+75.00	LT						20											
	31	31+00.00	36+00.00	LT / RT																	
	31	31+00.00	36+00.00	LT / RT																	
	31	31+00.00	36+00.00	LT / RT																	
TOTALS CARRIED TO SUBSUMMARY					35	760	320		44	11	8	2	1	12	1						





CALCULATED ERS	CHECKED DEN	 HORIZONTAL SCALE IN FEET	
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PLAN - E 55TH ST
STA. 36+00 TO STA. 41+00

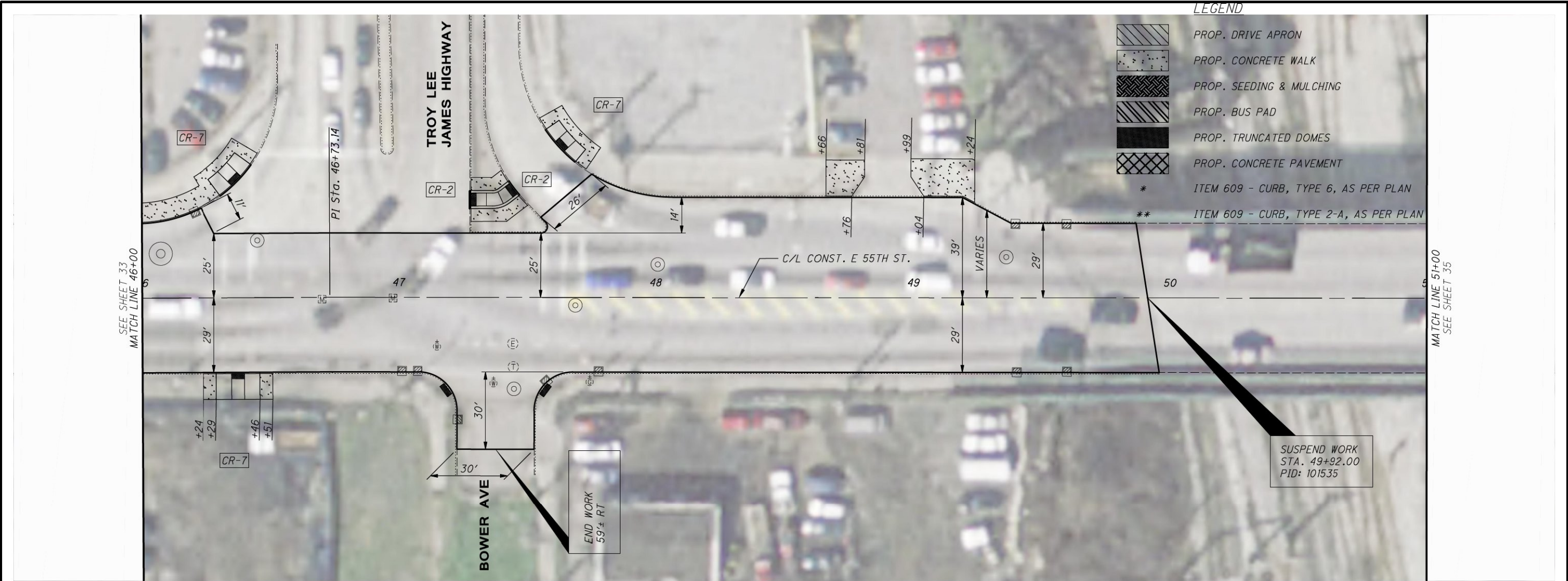
32
103



	PLAN - E 55TH ST STA. 41+00 TO STA. 46+00
	CUY-E 55TH ST RESURF

O:\2015\2015201\06\roadway\sheets\101535GP100.dwg 10-Mar-16 8:21 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	34	46+00.00	51+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	34	46+00.00	51+00.00	LT / RT																		
	34	46+00.00	51+00.00	LT / RT		1340																
	34	46+00.00	51+00.00	LT / RT			550															
	34	46+00.00	51+00.00	LT / RT				20														
	34	46+00.00	51+00.00	LT / RT																		
	34	46+00.00	51+00.00	LT / RT																		
	34	46+00.00	51+00.00	LT / RT																		
	34	46+00.00	51+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						1340	550	20			10	6	2		2							



PLAN - E 55TH ST
STA. 46+00 TO STA. 51+00

CUY-E 55TH ST RESURF

34
103

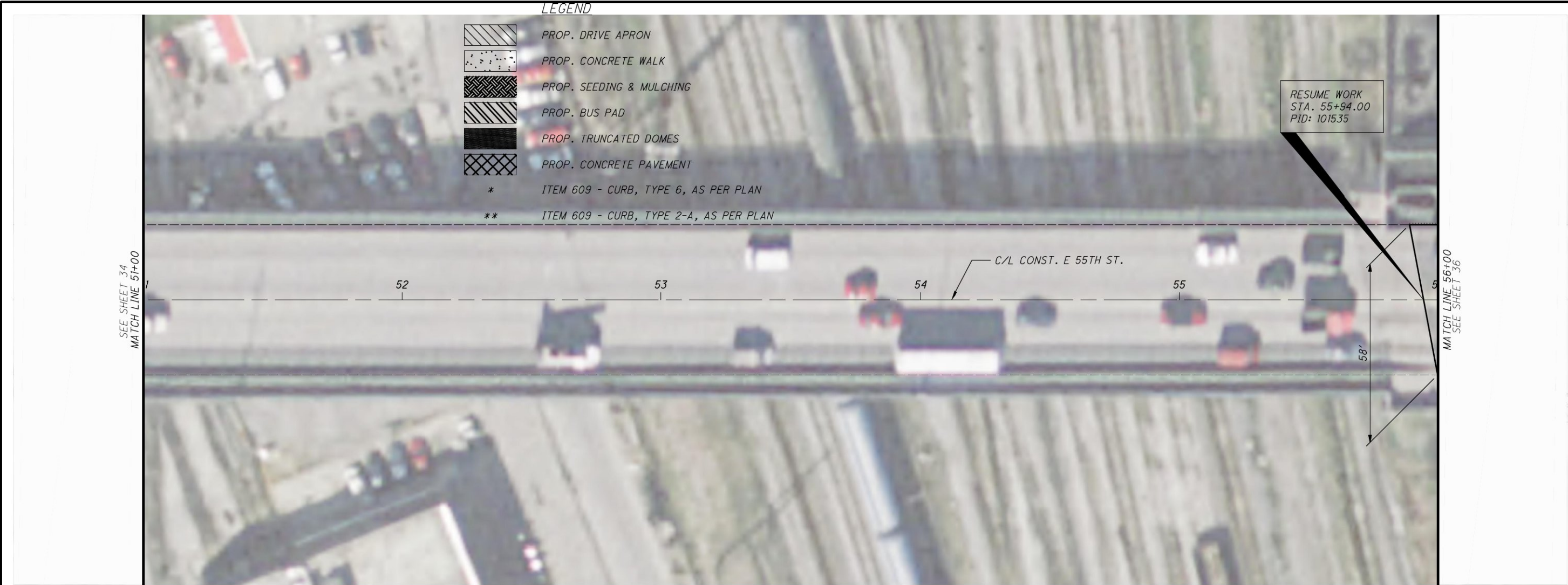
CALCULATED
EPS

CHECKED
DEN

0 20 40
HORIZONTAL
SCALE IN FEET

O:\2015\2015201\06\roadway\sheets\101535GP200.dwg 10-Mar-16 8:25 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN SY	6" CONCRETE WALK, AS PER PLAN SF	CURB RAMP, AS PER PLAN SF	WALKWAY, MISC.: TRUNCATED DOMES SF	CURB, TYPE 2-A, AS PER PLAN FT	CURB, TYPE 6, AS PER PLAN FT	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN EACH	FIRE HYDRANT ADJUSTED TO GRADE EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN EACH	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN EACH	TOPSOIL (4" AVERAGE) CY	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY) SY			
	35	51+00.00	56+00.00	LT/ RT																		
	35	51+00.00	56+00.00	LT/ RT																		
	35	51+00.00	56+00.00	LT/ RT																		
	35	51+00.00	56+00.00	LT/ RT																		
	35	51+00.00	56+00.00	LT/ RT																		
	35	51+00.00	56+00.00	LT/ RT																		
	35	51+00.00	56+00.00	LT/ RT																		
	35	51+00.00	56+00.00	LT/ RT																		
	35	51+00.00	56+00.00	LT/ RT																		
TOTALS CARRIED TO SUBSUMMARY																						



CALCULATED
EVS

CHECKED
DEN

PLAN - E 55TH ST
STA. 51+00 TO STA. 56+00

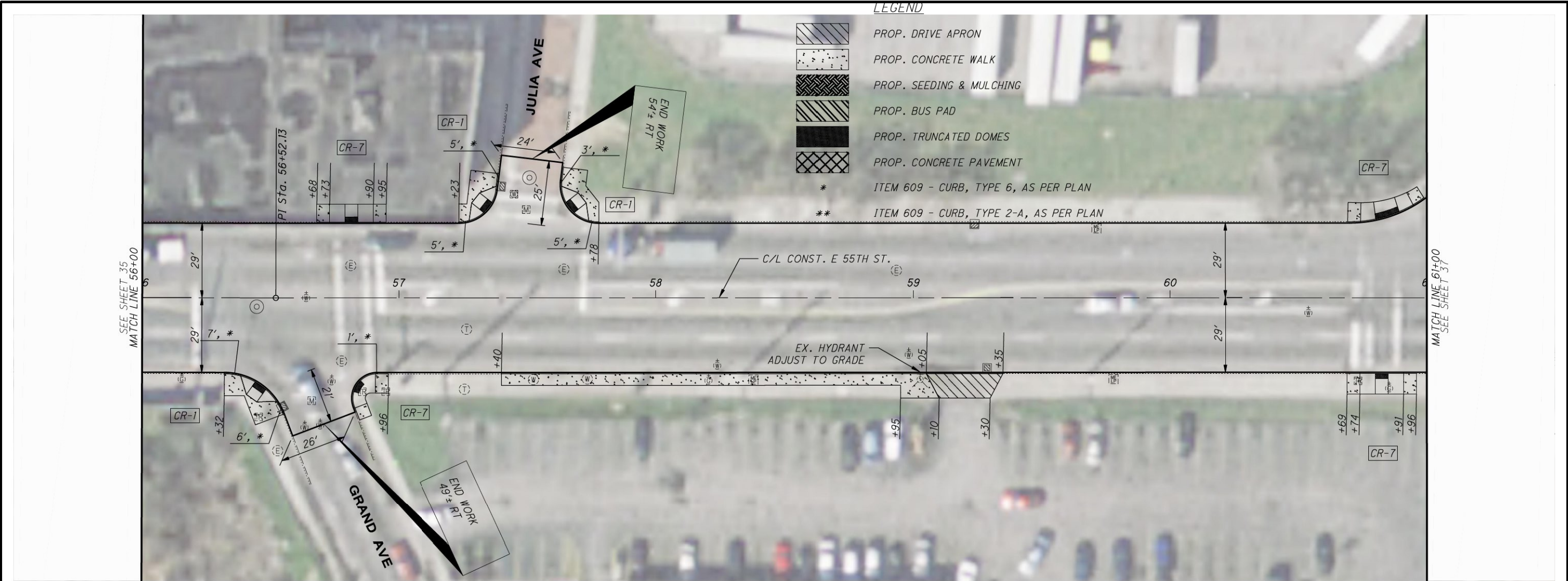
CUY-E 55TH ST RESURF

35
103

0 20 40
HORIZONTAL
SCALE IN FEET

O:\2015\2015201\06\roadway\sheets\101535GP200.dwg 10-Mar-16 8:25 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN SY	6" CONCRETE WALK, AS PER PLAN SF	CURB RAMP, AS PER PLAN SF	WALKWAY, MISC.: TRUNCATED DOMES SF	CURB, TYPE 2-A, AS PER PLAN FT	CURB, TYPE 6, AS PER PLAN FT	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN EACH	FIRE HYDRANT ADJUSTED TO GRADE EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN EACH	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN EACH	TOPSOIL (4" AVERAGE) CY	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY) SY			
	36	56+00.00	61+00.00	LT / RT							4	2	2	1	7	2	1					
	36	56+00.00	61+00.00	LT / RT	27																	
	36	56+00.00	61+00.00	LT / RT		1515																
	36	56+00.00	61+00.00	LT / RT			735		32													
	36	56+00.00	61+00.00	LT / RT																		
	36	56+00.00	61+00.00	LT / RT																		
	36	56+00.00	61+00.00	LT / RT																		
	36	56+00.00	61+00.00	LT / RT																		
	36	56+00.00	61+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY					27	1515	735		32	4	2	2	1	7	2	1						



PLAN - E 55TH ST
STA. 56+00 TO STA. 61+00

CUY-E 55TH ST RESURF

36
103

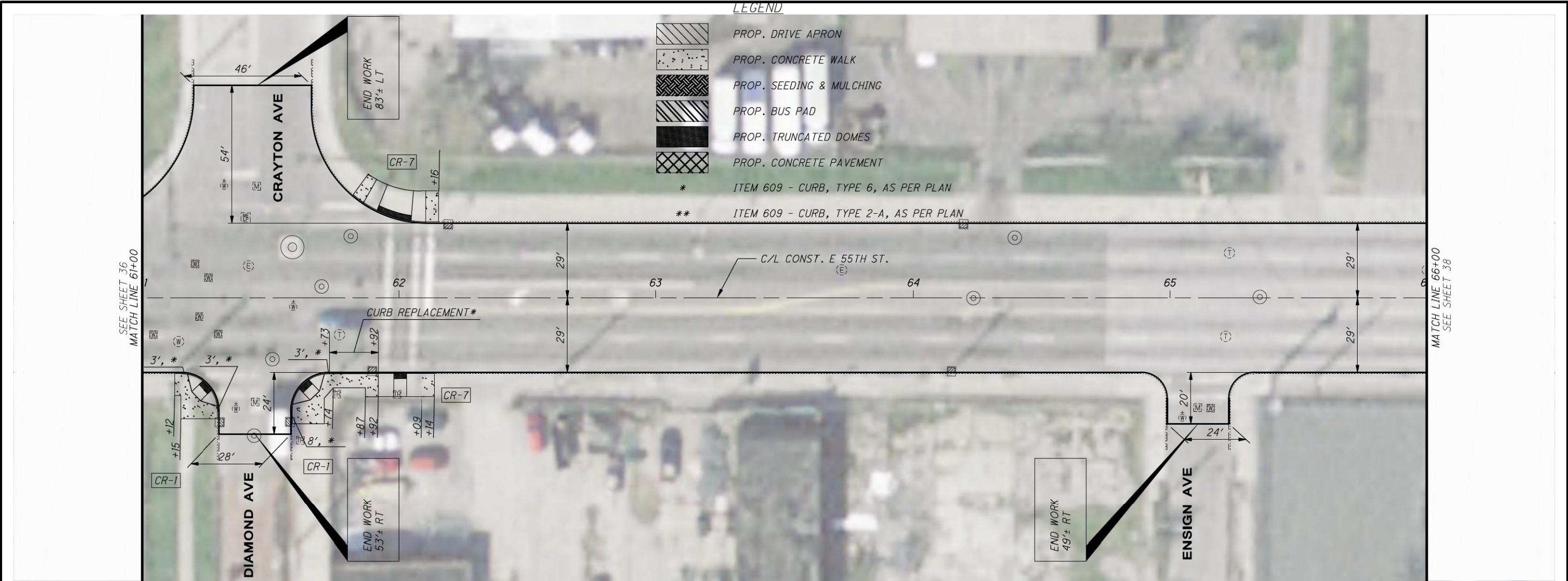
CALCULATED
EPS

CHECKED
DEN

0 20 40
HORIZONTAL
SCALE IN FEET

O:\2015\2015201\06\roadway\sheets\101535GP200.dwg 10-Mar-16 8:25 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	37	61+00.00	66+00.00	LT / RT							6	8	3		4	1	6					
	37	61+00.00	66+00.00	LT / RT																		
	37	61+00.00	66+00.00	LT / RT		590																
	37	61+00.00	66+00.00	LT / RT			600			17												
	37	61+73.00	61+92.00	RT						19												
	37	61+00.00	66+00.00	LT / RT																		
	37	61+00.00	66+00.00	LT / RT																		
	37	61+00.00	66+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						590	600			36	6	8	3		4	1	6					



CALCULATED
EPS
CHECKED
DEN

PLAN - E 55TH ST
STA. 61+00 TO STA. 66+00

CUY-E 55TH ST RESURF

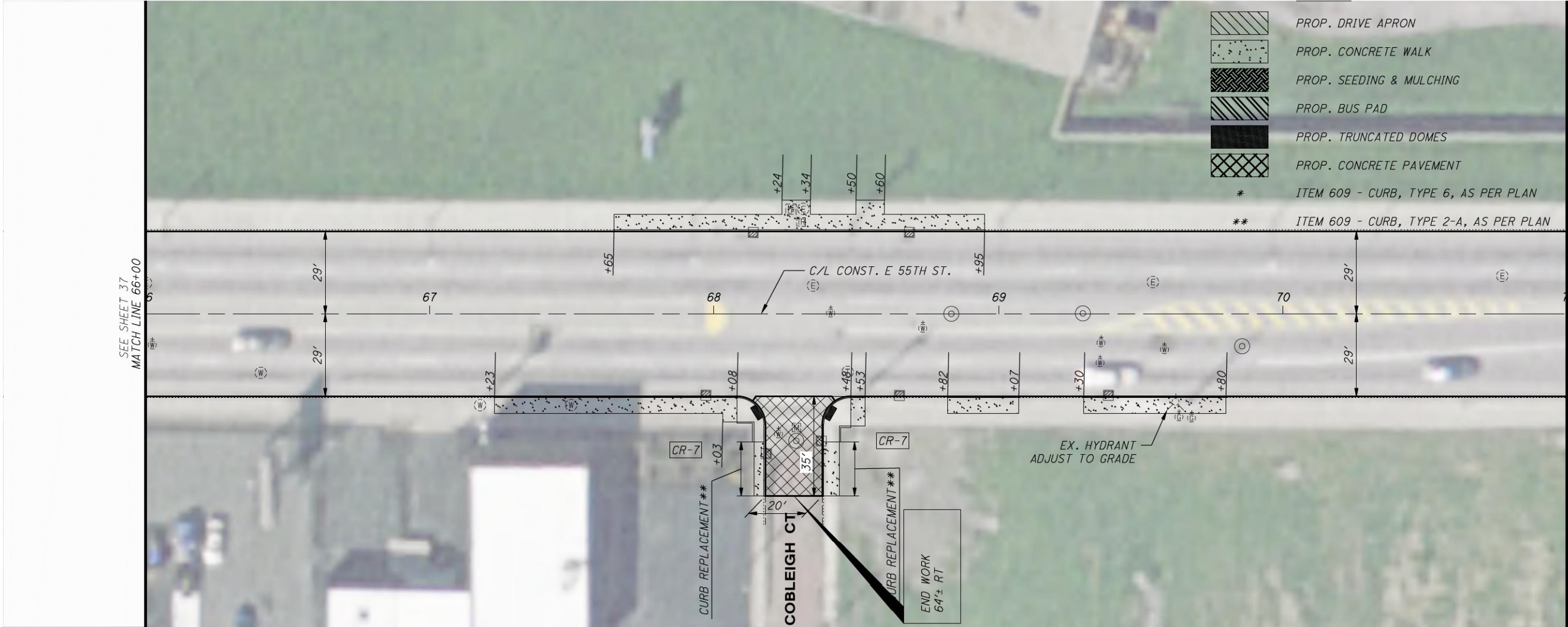
37
103

N

0 20 40
HORIZONTAL
SCALE IN FEET

O:\2015\2015201\06\roadway\sheets\101535GP200.dwg 10-Mar-16 8:25 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN SY	6" CONCRETE WALK, AS PER PLAN SF	CURB RAMP, AS PER PLAN SF	WALKWAY, MISC.: TRUNCATED DOMES SF	CURB, TYPE 2-A, AS PER PLAN FT	CURB, TYPE 6, AS PER PLAN FT	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN EACH	FIRE HYDRANT ADJUSTED TO GRADE EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN EACH	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN EACH	TOPSOIL (4" AVERAGE) CY	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY) SY			
	38	66+00.00	71+00.00	LT / RT							7	4	1	1	7	2						
	38	66+00.00	71+00.00	LT / RT																		
	38	66+00.00	71+00.00	LT / RT		1940																
	38	66+00.00	71+00.00	LT / RT			230															
	38	66+00.00	71+00.00	LT / RT																		
	38	66+00.00	71+00.00	LT / RT					36													
	38	66+00.00	71+00.00	LT / RT																		
	38	66+00.00	71+00.00	LT / RT																		
	38	66+00.00	71+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						1940	230		36		7	4	1	1	7	2						



PLAN - E 55TH ST
STA. 66+00 TO STA. 71+00

CUY-E 55TH ST RESURF

38
103

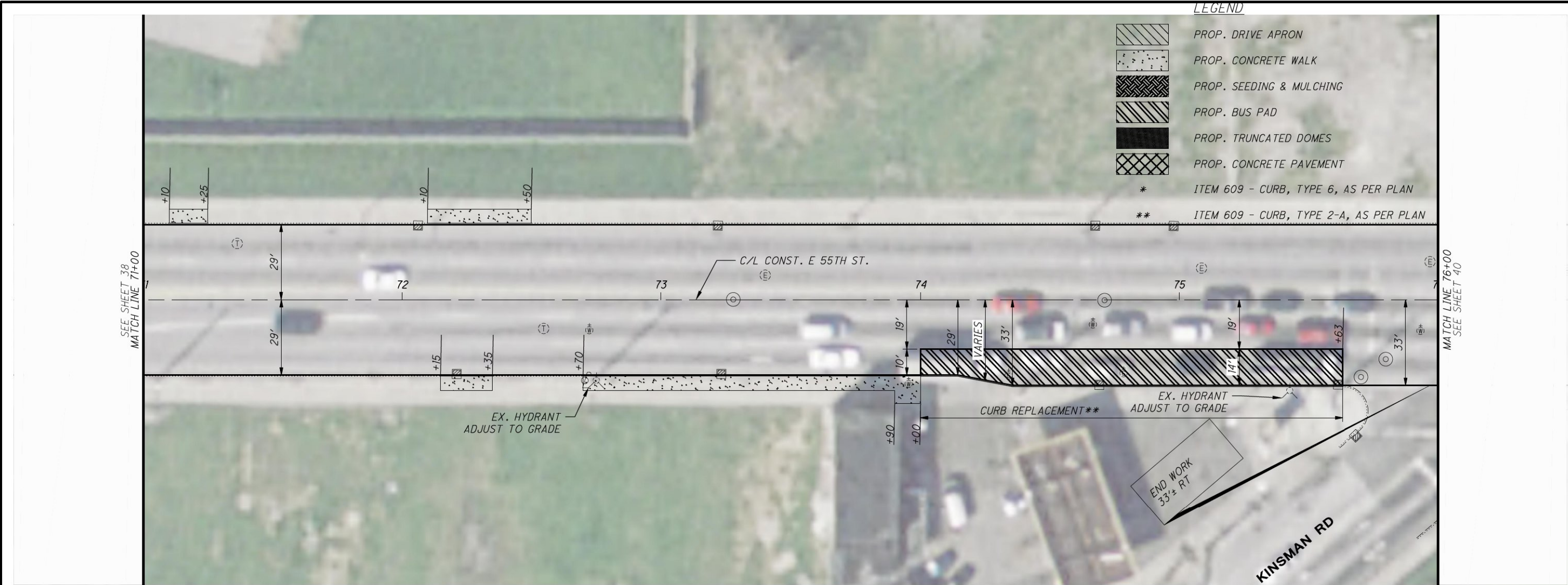
CALCULATED
EPS

CHECKED
DEN

0 20 40
HORIZONTAL
SCALE IN FEET

O:\2015\2015201\06\roadway\sheets\101535GP200.dwg 10-Mar-16 8:26 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	39	71+00.00	76+00.00	LT / RT							8	4		1	4							
	39	71+00.00	76+00.00	LT / RT																		
	39	71+00.00	76+00.00	LT / RT		1180																
	39	71+00.00	76+00.00	LT / RT																		
	39	71+00.00	76+00.00	LT / RT																		
	39	74+00.00	75+63.00	RT					164													
	39	71+00.00	76+00.00	LT / RT																		
	39	71+00.00	76+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						1180			164		8	4		1	4							

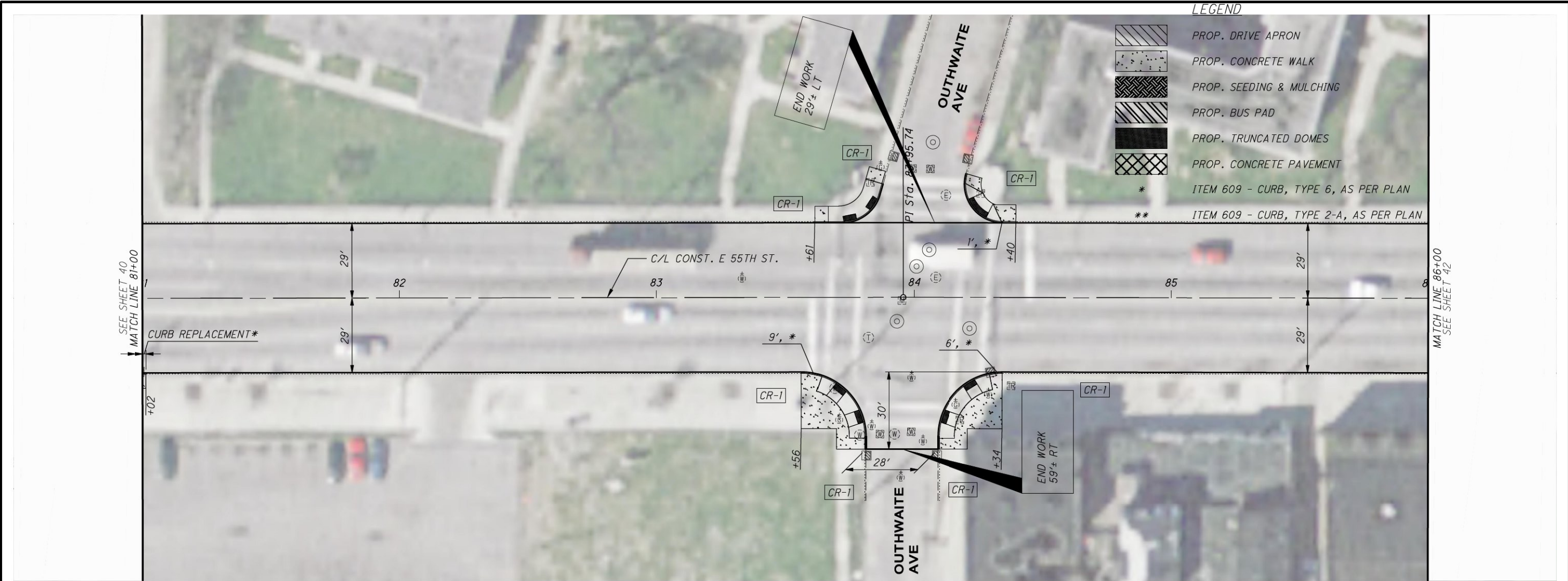




	PLAN - E 55TH ST STA. 76+00 TO STA. 81+00
	CUY-E 55TH ST RESURF

O:\2015\2015201\06\roadway\sheets\101535GP200.dwg 10-Mar-16 8:26 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	41	81+00.00	86+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	41	81+00.00	86+00.00	LT / RT																		
	41	81+00.00	86+00.00	LT / RT		775																
	41	81+00.00	86+00.00	LT / RT			660			16												
	41	81+00.00	81+02.00	RT						2												
	41	81+00.00	86+00.00	LT / RT																		
	41	81+00.00	86+00.00	LT / RT																		
	41	81+00.00	86+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						775	660			18	3	4	1		5	3	2					



PLAN - E 55TH ST
STA. 81+00 TO STA. 86+00

CUY-E 55TH ST RESURF

41
103

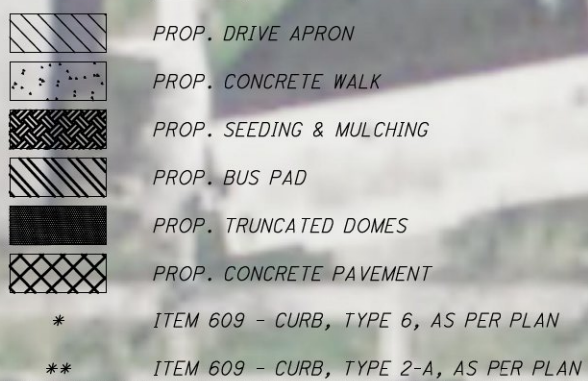
CALCULATED
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CHECKED
DEN

HORIZONTAL
SCALE IN FEET
0 20 40

O:\2015\2015201\06\roadway\sheets\101535GP200.dwg 10-Mar-16 8:26 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659		
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)		
	42	86+00.00	91+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY		
	42	86+00.00	91+00.00	LT / RT							6	4	1		5		1				
	42	86+00.00	91+00.00	LT / RT		1150															
	42	86+00.00	91+00.00	LT / RT			405			46											
	42	86+00.00	91+00.00	LT / RT																	
	42	86+00.00	91+00.00	LT / RT																	
	42	86+00.00	91+00.00	LT / RT																	
	42	86+00.00	91+00.00	LT / RT																	
	42	86+00.00	91+00.00	LT / RT														1	7		
TOTALS CARRIED TO SUBSUMMARY						1150	405			46	6	4	1		5		1	1	7		





O:\2015\2015201\06\roadway\sheets\101535GP200.dwg 10-Mar-16 8:26 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	44	96+00.00	101+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	44	96+00.00	101+00.00	LT / RT																		
	44	96+00.00	101+00.00	LT / RT		770																
	44	97+41.89	97+51.03	LT					10													
	44	96+00.00	101+00.00	LT / RT																		
	44	96+00.00	101+00.00	LT / RT																		
	44	96+00.00	101+00.00	LT / RT																		
	44	96+00.00	101+00.00	LT / RT																		
	44	96+00.00	101+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						770			10	10	9	2		8	2	1						



CUY-E 55TH ST RESURF

PLAN - E 55TH ST
STA. 96+00 TO STA. 101+00

44
103

O:\2015\2015201\06\roadway\sheets\101535GP300.dwg 10-Mar-16 8:30 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	45	101+00.00	106+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	45	101+00.00	106+00.00	LT / RT							2	3										
	45	101+00.00	106+00.00	LT / RT																		
	45	101+00.00	106+00.00	LT / RT																		
	45	101+00.00	106+00.00	LT / RT																		
	45	101+00.00	106+00.00	LT / RT																		
	45	101+00.00	106+00.00	LT / RT																		
	45	101+00.00	106+00.00	LT / RT																		
	45	101+00.00	106+00.00	LT / RT																		
	45	101+00.00	106+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY											2	3			2							



CALCULATED
E.P.S.

CHECKED
DEN

PLAN - E 55TH ST
STA. 101+00 TO STA. 106+00

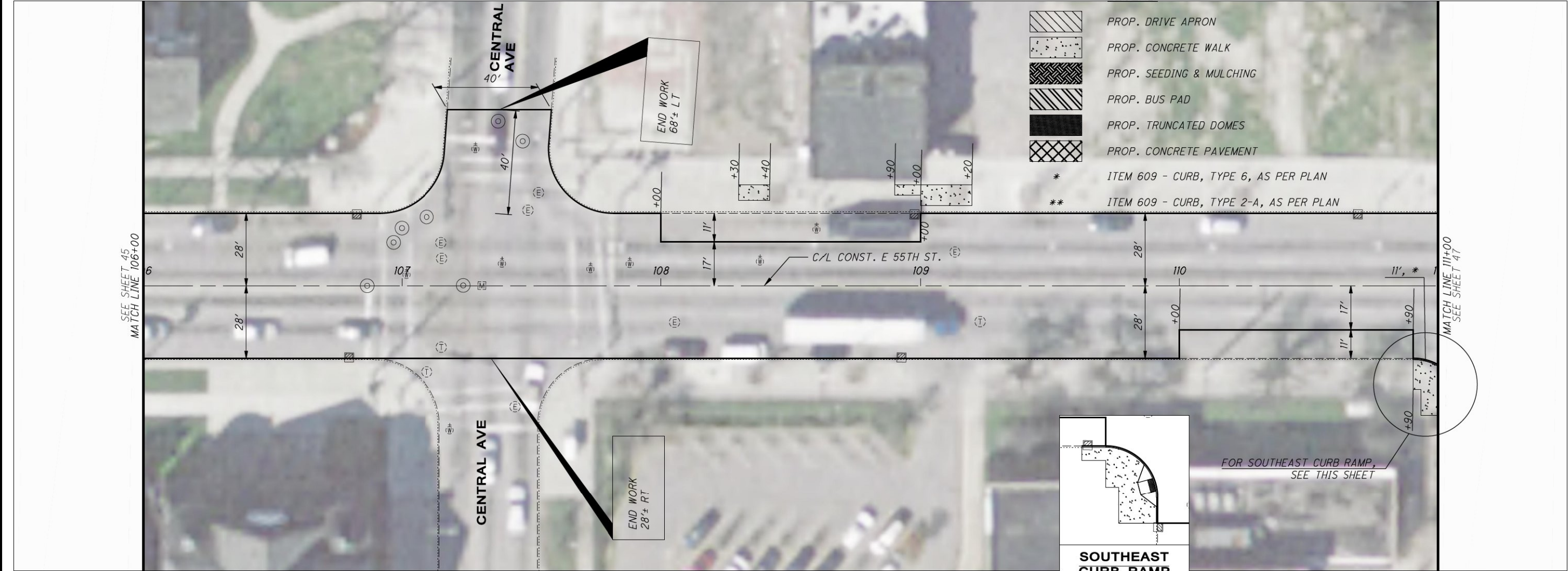
CUY-E 55TH ST RESURF

45
103

0 20 40
HORIZONTAL
SCALE IN FEET

O:\2015\2015201\06\roadway\sheets\101535GP300.dwg 10-Mar-16 8:31 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	46	106+00.00	111+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	46	106+00.00	111+00.00	LT / RT																		
	46	106+00.00	111+00.00	LT / RT		445																
	46	106+00.00	111+00.00	LT / RT					11													
	46	106+00.00	111+00.00	LT / RT																		
	46	106+00.00	111+00.00	LT / RT																		
	46	106+00.00	111+00.00	LT / RT																		
	46	106+00.00	111+00.00	LT / RT																		
	46	106+00.00	111+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						445			11	4	7	1		6								

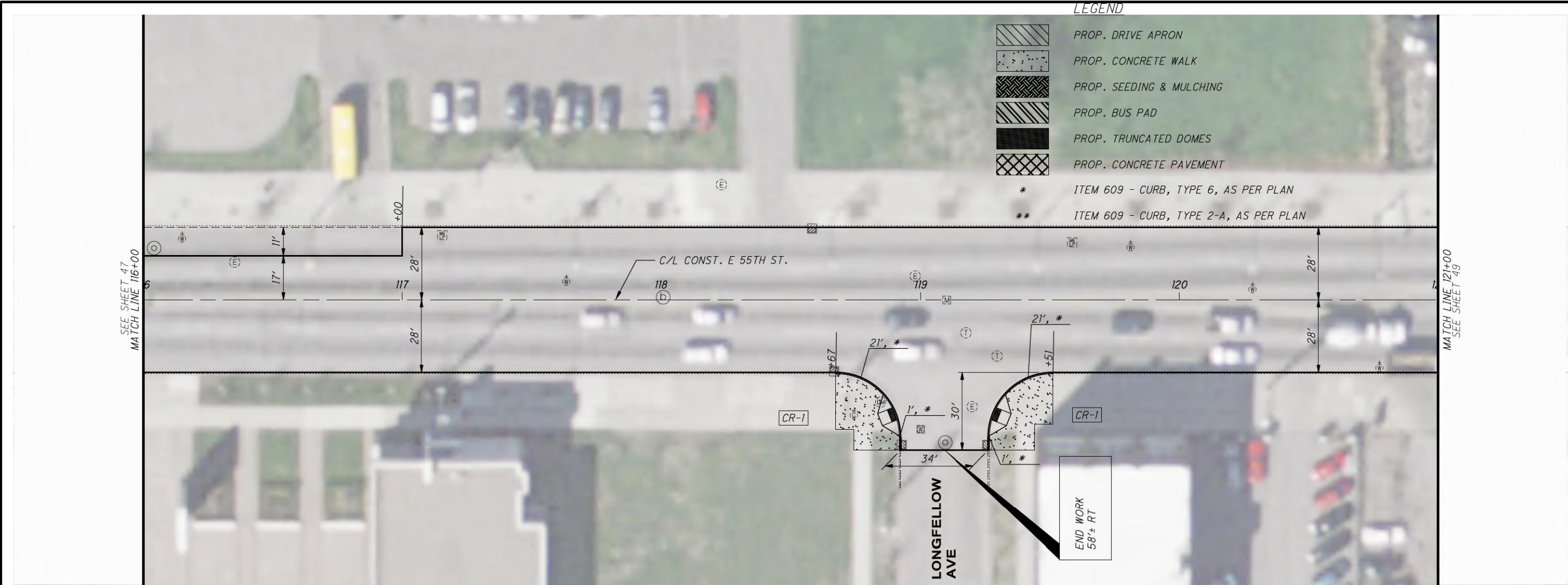




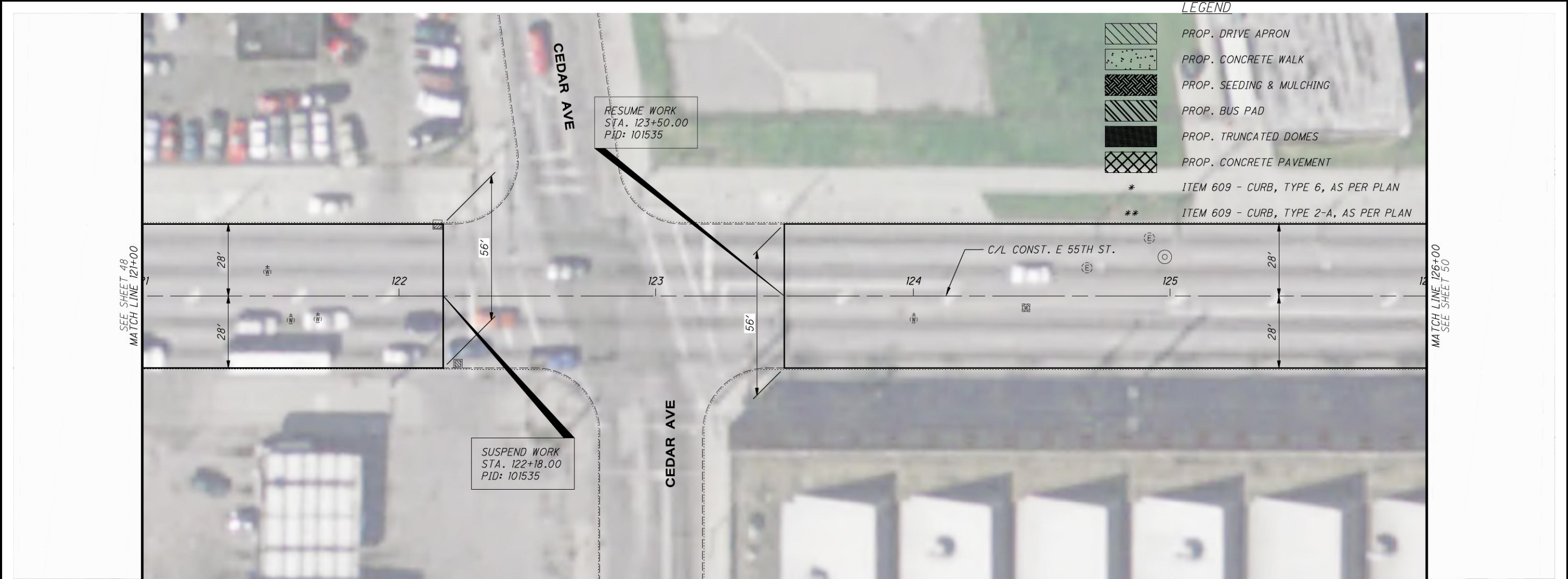
	CUY-E 55TH ST RESURF	PLAN - E 55TH ST STA. 111+00 TO STA. 116+00

O:\2015\2015201\06\roadway\sheets\101535GP300.dwg 10-Mar-16 8:31 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	48	116+00.00	121+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	48	116+00.00	121+00.00	LT / RT																		
	48	116+00.00	121+00.00	LT / RT		930																
	48	116+00.00	121+00.00	LT / RT			160			44												
	48	116+00.00	121+00.00	LT / RT																		
	48	116+00.00	121+00.00	LT / RT																		
	48	116+00.00	121+00.00	LT / RT																		
	48	116+00.00	121+00.00	LT / RT																		
	48	116+00.00	121+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						930	160		44	4	2	1		4		1						

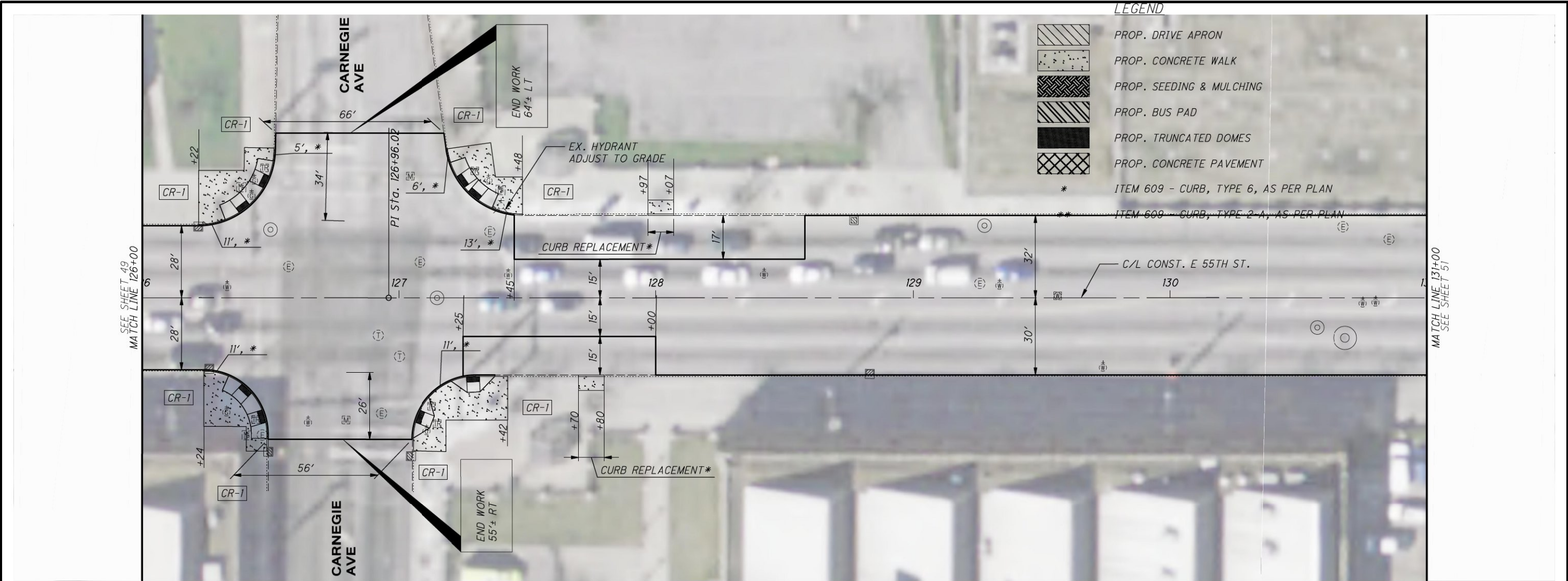


REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	49	121+00.00	126+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	49	121+00.00	126+00.00	LT / RT																		
	49	121+00.00	126+00.00	LT / RT																		
	49	121+00.00	126+00.00	LT / RT																		
	49	121+00.00	126+00.00	LT / RT																		
	49	121+00.00	126+00.00	LT / RT																		
	49	121+00.00	126+00.00	LT / RT																		
	49	121+00.00	126+00.00	LT / RT																		
	49	121+00.00	126+00.00	LT / RT																		
	49	121+00.00	126+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY											1	1			4		1					



O:\2015\2015201\06\roadway\sheets\101535GP300.dwg 10-Mar-16 8:31 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	50	126+00.00	131+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	50	126+00.00	131+00.00	LT / RT							6	5	2	1	8		1					
	50	126+00.00	131+00.00	LT / RT		1645																
	50	126+00.00	131+00.00	LT / RT			675			62												
	50	127+70.00	127+80.00	RT						10												
	50	127+97.00	128+07.00	LT						10												
	50	126+00.00	131+00.00	LT / RT																		
	50	126+00.00	131+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						1645	675			82	6	5	2	1	8		1					



LEGEND

PROP. DRIVE APRON

PROP. CONCRETE WALK

PROP. SEEDING & MULCHING

PROP. BUS PAD

PROP. TRUNCATED DOMES

PROP. CONCRETE PAVEMENT

*

ITEM 609 - CURB, TYPE 6, AS PER PLAN

**

ITEM 609 - CURB, TYPE 2-A, AS PER PLAN

CALCULATED

EPS

CHECKED

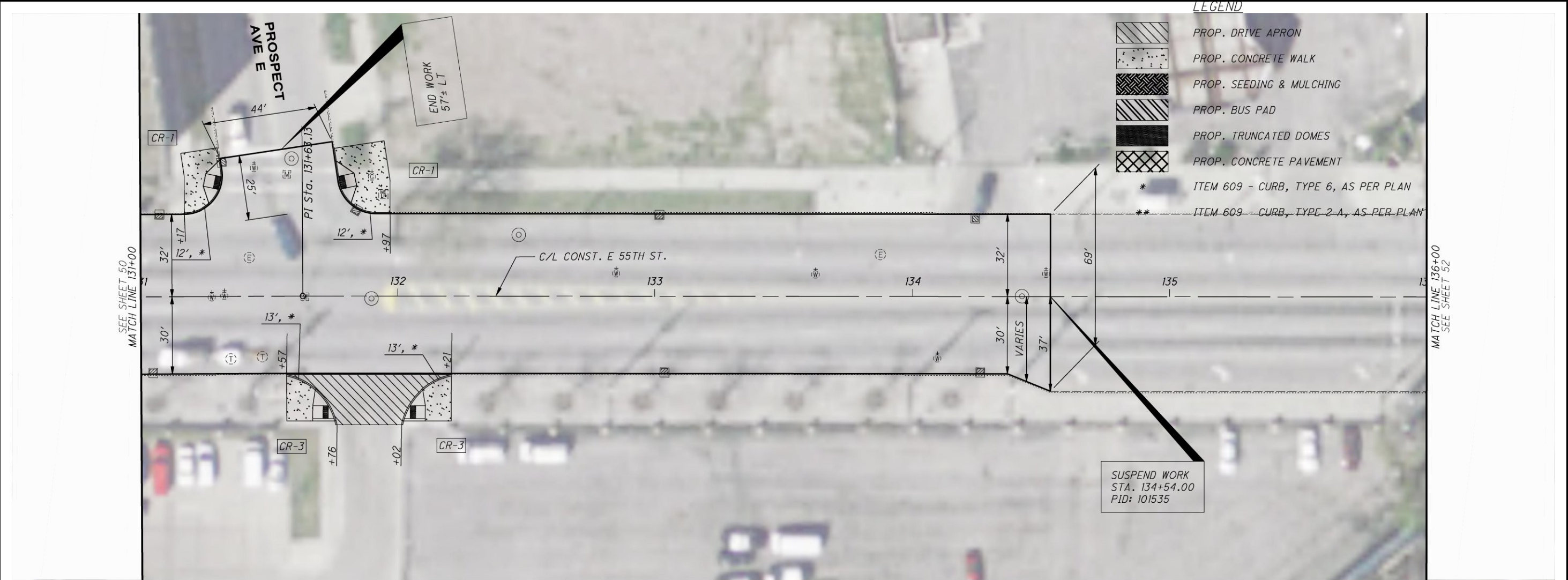
DEN

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0 20 40

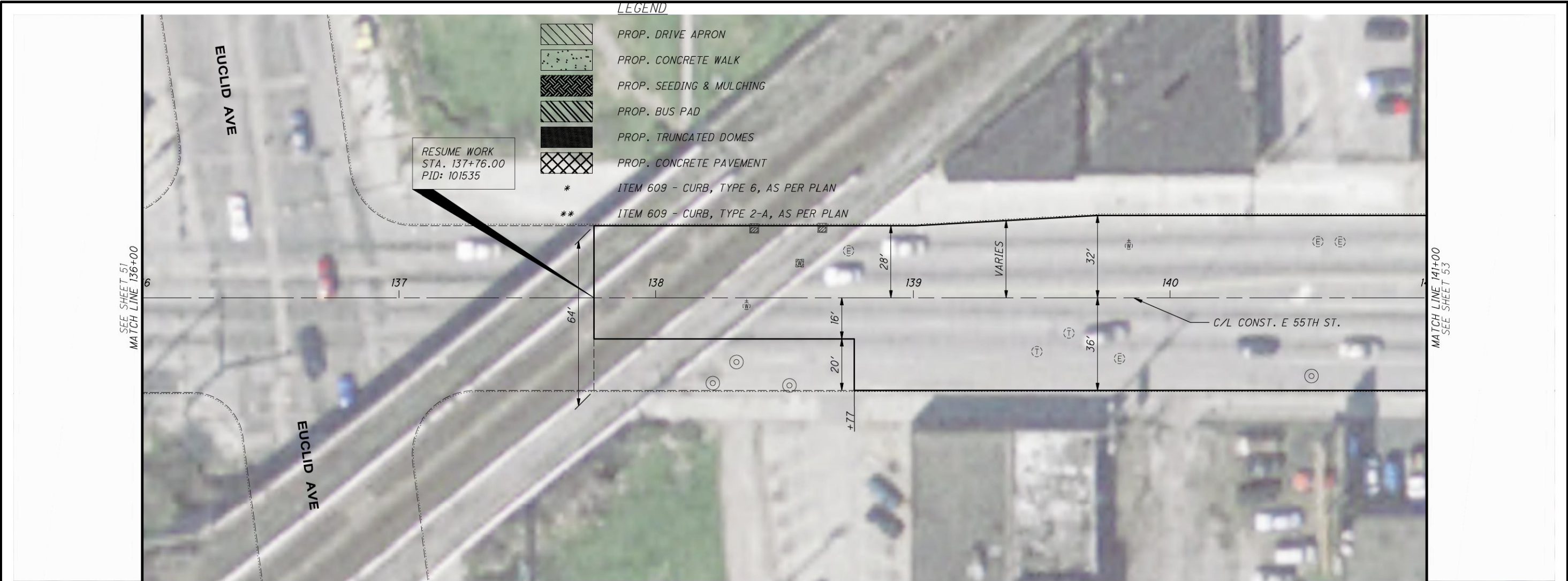
HORIZONTAL SCALE IN FEET

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	51	131+00.00	136+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	51	131+00.00	136+00.00	LT / RT	80																	
	51	131+00.00	136+00.00	LT / RT		980																
	51	131+00.00	136+00.00	LT / RT			310		26	24												
	51	131+00.00	136+00.00	LT / RT																		
	51	131+00.00	136+00.00	LT / RT																		
	51	131+00.00	136+00.00	LT / RT																		
	51	131+00.00	136+00.00	LT / RT																		
	51	131+00.00	136+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY					80	980	310		26	24	8	4	2		7							



O:\2015\2015201\06\roadway\sheets\101535GP300.dwg 10-Mar-16 8:31 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	52	136+00.00	141+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	52	136+00.00	141+00.00	LT / RT							2	1										
	52	136+00.00	141+00.00	LT / RT																		
	52	136+00.00	141+00.00	LT / RT																		
	52	136+00.00	141+00.00	LT / RT																		
	52	136+00.00	141+00.00	LT / RT																		
	52	136+00.00	141+00.00	LT / RT																		
	52	136+00.00	141+00.00	LT / RT																		
	52	136+00.00	141+00.00	LT / RT																		
	52	136+00.00	141+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY											2	1			2		1					



CALCULATED
EPS

CHECKED
DEN

PLAN - E 55TH ST
STA. 136+00 TO STA. 141+00

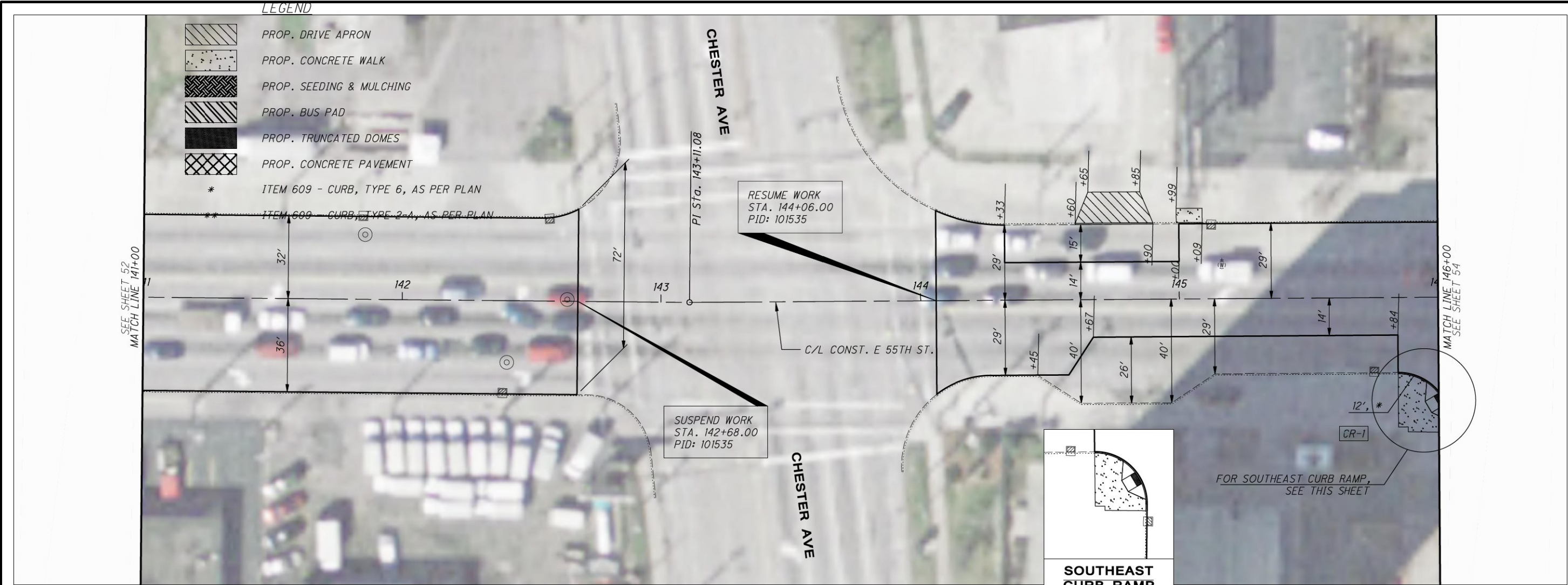
CUY-E 55TH ST RESURF

52
103

0 10 20 40
HORIZONTAL
SCALE IN FEET

O:\2015\2015201\06\roadway\sheets\101535GP300.dwg 10-Mar-16 8:31 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	53	141+00.00	146+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	53	141+00.00	146+00.00	LT / RT	34																	
	53	141+00.00	146+00.00	LT / RT		315																
	53	141+00.00	146+00.00	LT / RT			50			12												
	53	141+00.00	146+00.00	LT / RT																		
	53	141+00.00	146+00.00	LT / RT																		
	53	141+00.00	146+00.00	LT / RT																		
	53	141+00.00	146+00.00	LT / RT																		
	53	141+00.00	146+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY					34	315	50			12	4	3			1							



CUY-E 55TH ST RESURF

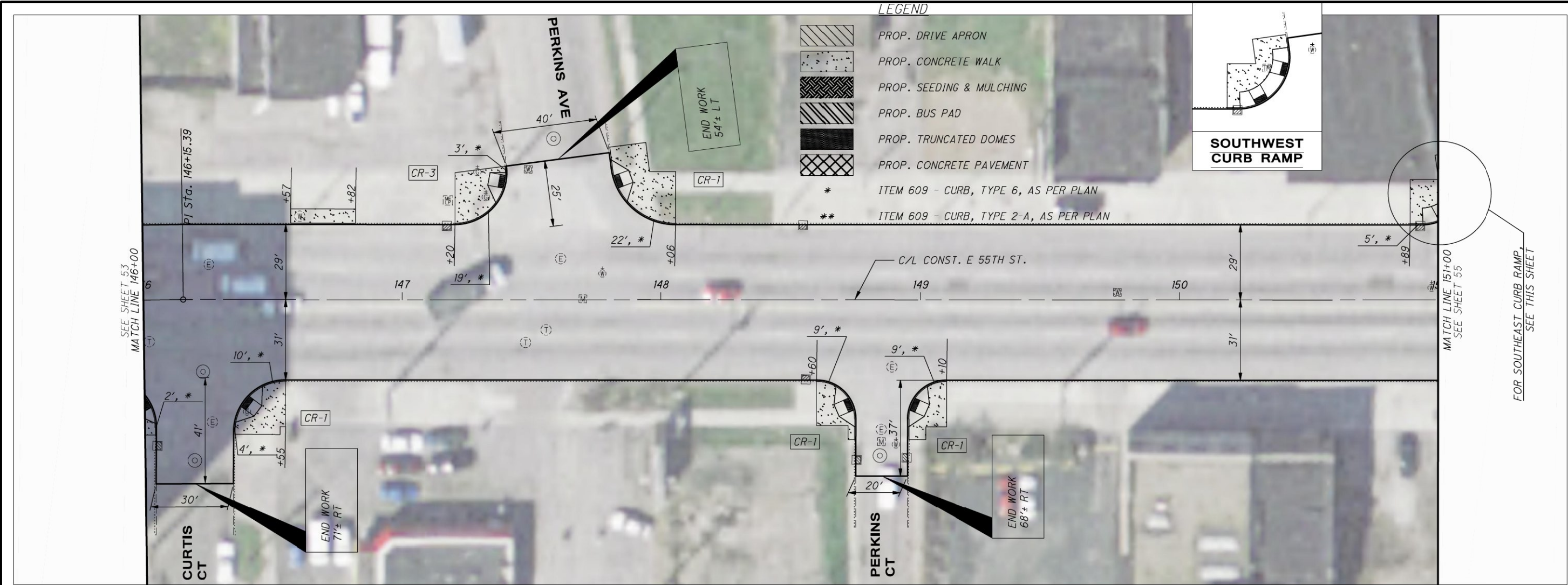
PLAN - E 55TH ST
STA. 141+00 TO STA. 146+00



53
103

O:\2015\2015201\06\roadway\sheets\101535GP300.dwg 10-Mar-16 8:31 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	54	146+00.00	151+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	54	146+00.00	151+00.00	LT / RT																		
	54	146+00.00	151+00.00	LT / RT		1600																
	54	146+00.00	151+00.00	LT / RT			450			83												
	54	146+00.00	151+00.00	LT / RT																		
	54	146+00.00	151+00.00	LT / RT																		
	54	146+00.00	151+00.00	LT / RT																		
	54	146+00.00	151+00.00	LT / RT																		
	54	146+00.00	151+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						1600	450			83	7	3	2		3	1	2					



PLAN - E 55TH ST
STA. 146+00 TO STA. 151+00

CUY-E 55TH ST RESURF

54
103

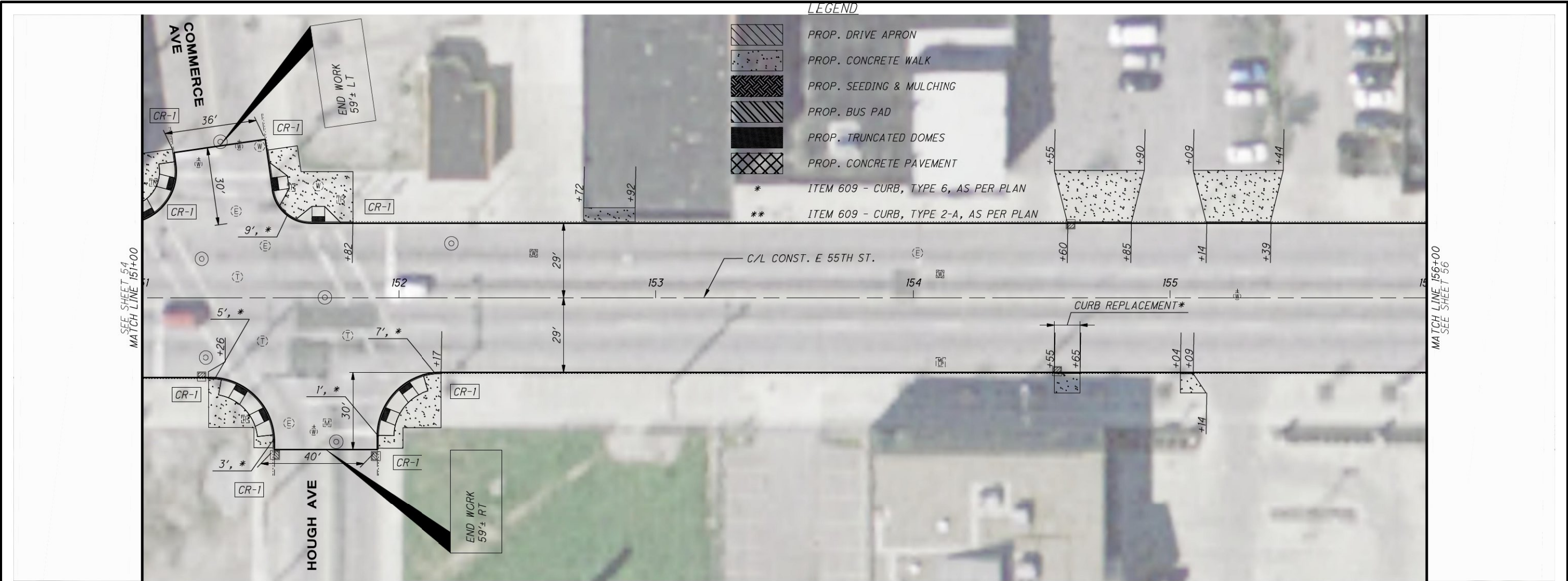
CALCULATED
ERS
CHECKED
DEN

0 20 40
HORIZONTAL
SCALE IN FEET

N

O:\2015\2015201\06\roadway\sheets\101535GP400.dwg 10-Mar-16 8:38 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	55	151+00.00	156+00.00	LT / RT							5	6	1		4	2	2					
	55	151+00.00	156+00.00	LT / RT																		
	55	151+00.00	156+00.00	LT / RT		2660																
	55	151+00.00	156+00.00	LT / RT			675			20												
	55	154+55.00	154+65.00	RT						10												
	55	151+00.00	156+00.00	LT / RT																		
	55	151+00.00	156+00.00	LT / RT																		
	55	151+00.00	156+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						2660	675			30	5	6	1		4	2	2					



PLAN - E 55TH ST
STA. 151+00 TO STA. 156+00

CUY-E 55TH ST RESURF

55
103

CALCULATED
EPS
CHECKED
DEN

HORIZONTAL
SCALE IN FEET
0 20 40



CALCULATED	CHECKED	
ERS	DEN	



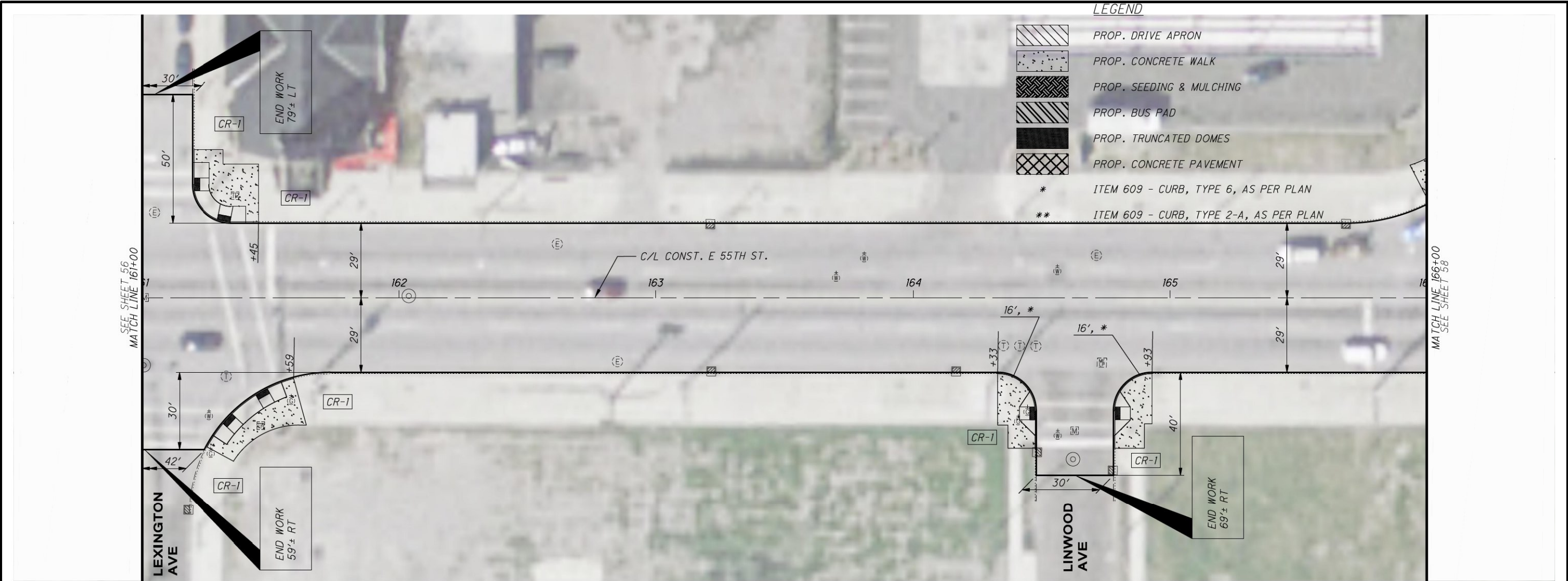
HORIZONTAL
SCALE IN FEET

PLAN - E 55TH ST
STA. 156+00 TO STA. 161+00

56
103

O:\2015\2015201\06\roadway\sheets\101535GP400.dwg 10-Mar-16 8:39 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	57	161+00.00	166+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	57	161+00.00	166+00.00	LT / RT							6	3	2		5							
	57	161+00.00	166+00.00	LT / RT		1360																
	57	161+00.00	166+00.00	LT / RT			585			32												
	57	161+00.00	166+00.00	LT / RT																		
	57	161+00.00	166+00.00	LT / RT																		
	57	161+00.00	166+00.00	LT / RT																		
	57	161+00.00	166+00.00	LT / RT																		
	57	161+00.00	166+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						1360	585			32	6	3	2		5							



PLAN - E 55TH ST
STA. 161+00 TO STA. 166+00

CUY-E 55TH ST RESURF

57
103

CALCULATED
EFS

CHECKED
DEN

HORIZONTAL
SCALE IN FEET
0 20 40

O:\2015\2015201\06\roadway\sheets\101535GP400.dwg 10-Mar-16 8:39 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN SY	6" CONCRETE WALK, AS PER PLAN SF	CURB RAMP, AS PER PLAN SF	WALKWAY, MISC.: TRUNCATED DOMES SF	CURB, TYPE 2-A, AS PER PLAN FT	CURB, TYPE 6, AS PER PLAN FT	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN EACH	FIRE HYDRANT ADJUSTED TO GRADE EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN EACH	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN EACH	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN EACH	TOPSOIL (4" AVERAGE) CY	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY) SY			
	58	166+00.00	171+00.00	LT / RT							5	5			5							
	58	166+00.00	171+00.00	LT / RT																		
	58	166+00.00	171+00.00	LT / RT		1505																
	58	166+00.00	171+00.00	LT / RT			510			32												
	58	166+00.00	171+00.00	LT / RT																		
	58	166+00.00	171+00.00	LT / RT																		
	58	166+00.00	171+00.00	LT / RT																		
	58	166+00.00	171+00.00	LT / RT																		
	58	166+00.00	171+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						1505	510		32	5	5				5							



PLAN - E 55TH ST
STA. 166+00 TO STA. 171+00

CUY-E 55TH ST RESURF

58
103

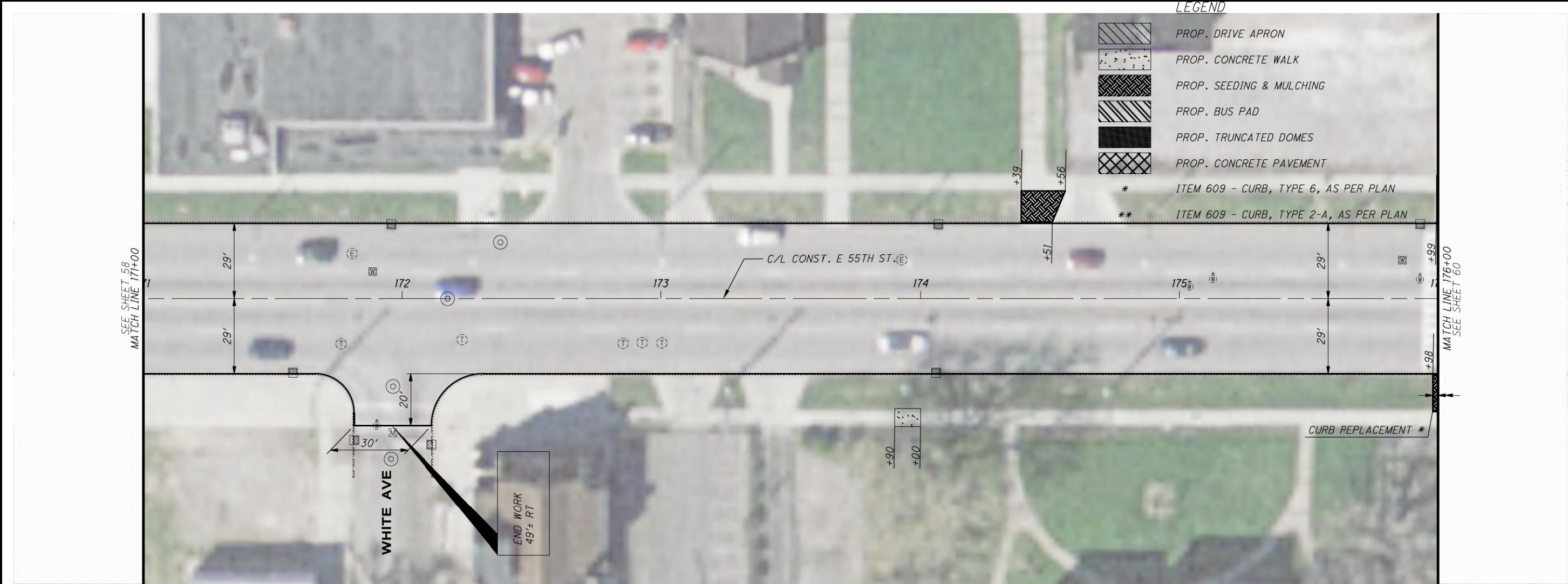
CALCULATED
ERS

CHECKED
DEN

0 20 40
HORIZONTAL
SCALE IN FEET

O:\2015\2015201\06\roadway\sheets\101535GP400.dwg 10-Mar-16 8:39 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	59	171+00.00	176+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	59	171+00.00	176+00.00	LT / RT																		
	59	171+00.00	176+00.00	LT / RT		85																
	59	171+00.00	176+00.00	LT / RT																		
	59	171+00.00	176+00.00	LT / RT																		
	59	171+00.00	176+00.00	LT / RT																		
	59	171+00.00	176+00.00	LT / RT						3												
	59	171+00.00	176+00.00	LT / RT														3	24			
TOTALS CARRIED TO SUBSUMMARY						85				3	7	3	1		4		2	3	24			



CALCULATED
EPS
CHECKED
DEN

PLAN - E 55TH ST
STA. 171+00 TO STA. 176+00

CUY-E 55TH ST RESURF

59
103

N

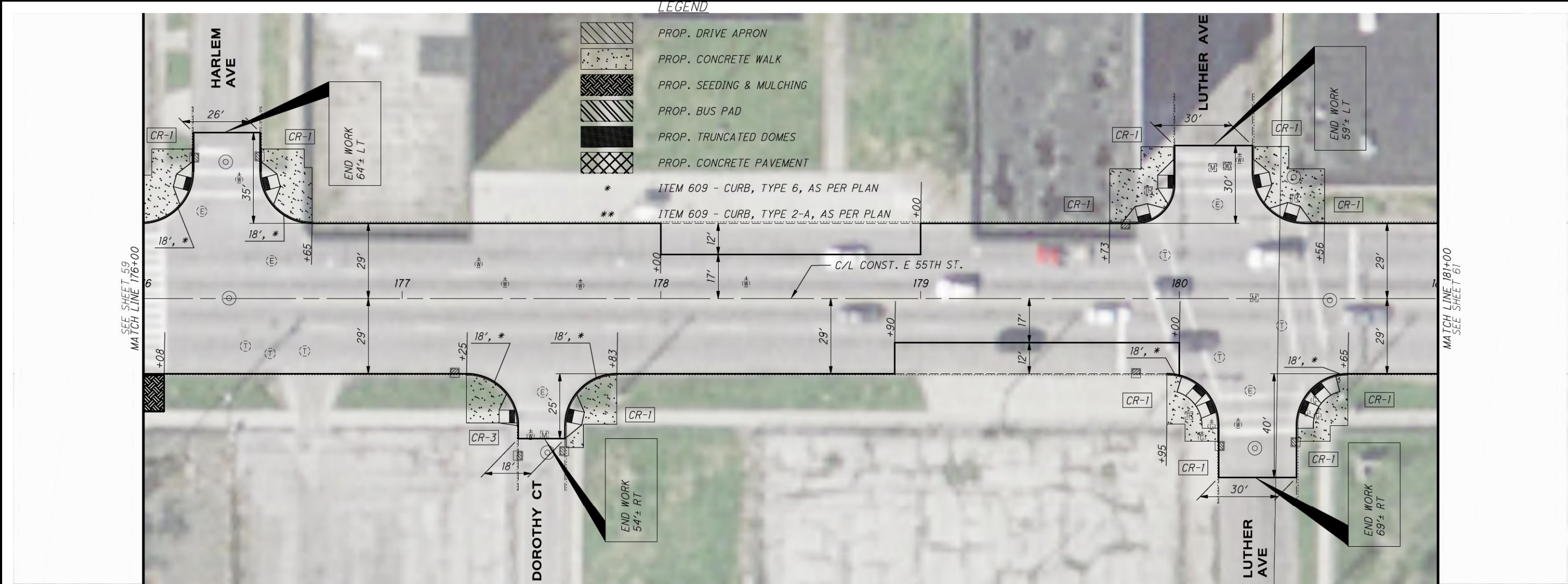
0 20 40

HORIZONTAL
SCALE IN FEET

59
103

O:\2015\2015201\06\roadway\sheets\101535GP400.dwg 10-Mar-16 8:39 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	60	176+00.00	181+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	60	176+00.00	181+00.00	LT / RT																		
	60	176+00.00	181+00.00	LT / RT		2615																
	60	176+00.00	181+00.00	LT / RT			930			84												
	60	176+00.00	181+00.00	LT / RT																		
	60	176+00.00	181+00.00	LT / RT																		
	60	176+00.00	181+00.00	LT / RT																		
	60	176+00.00	181+00.00	LT / RT																		
	60	176+00.00	181+00.00	LT / RT														2	13			
TOTALS CARRIED TO SUBSUMMARY						2615	930			84	8	6	3		8		1	2	13			



PLAN - E 55TH ST
STA. 176+00 TO STA. 181+00

CUY-E 55TH ST RESURF

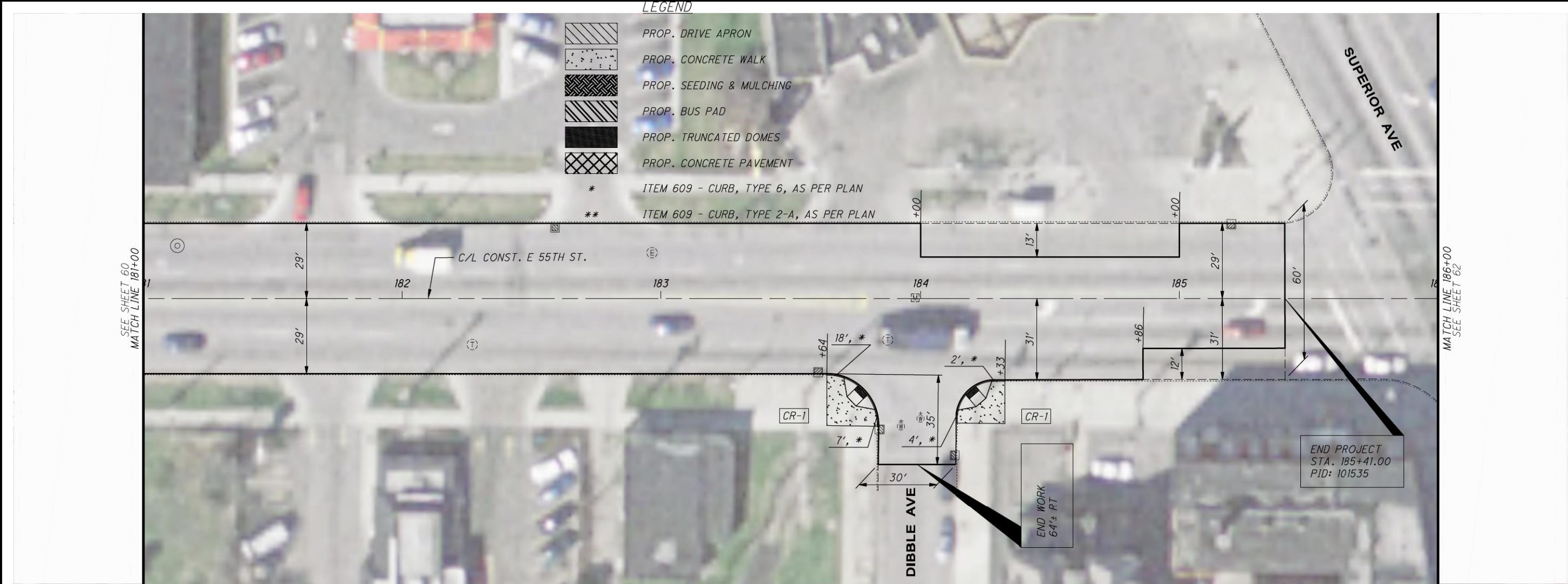
60
103

CALCULATED
EPS
CHECKED
DEN

0 20 40
HORIZONTAL
SCALE IN FEET

O:\2015\2015201\06\roadway\sheets\101535GP400.dwg 10-Mar-16 8:39 AM

REF. NO.	SHEET NO.	STATION		SIDE	452	608	608	608	609	609	611	611	623	638	638	638	638	659	659			
		FROM	TO		8" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC MS, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	WALKWAY, MISC.: TRUNCATED DOMES	CURB, TYPE 2-A, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	FIRE HYDRANT ADJUSTED TO GRADE	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER MANHOLE ADJUSTED TO GRADE, AS PER PLAN	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE, AS PER PLAN	TOPSOIL (4" AVERAGE)	SEEDING AND MULCHING, CLASS 1 (HIGH QUALITY)			
	61	181+00.00	186+00.00	LT / RT	SY	SF	SF	SF	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	CY	SY			
	61	181+00.00	186+00.00	LT / RT							5	1	1		2							
	61	181+00.00	186+00.00	LT / RT		420																
	61	181+00.00	186+00.00	LT / RT			160		20													
	61	181+00.00	186+00.00	LT / RT																		
	61	181+00.00	186+00.00	LT / RT																		
	61	181+00.00	186+00.00	LT / RT																		
	61	181+00.00	186+00.00	LT / RT																		
	61	181+00.00	186+00.00	LT / RT																		
TOTALS CARRIED TO SUBSUMMARY						420	160		20	5	1	1		2								



CALCULATED
EPS

CHECKED
DEN

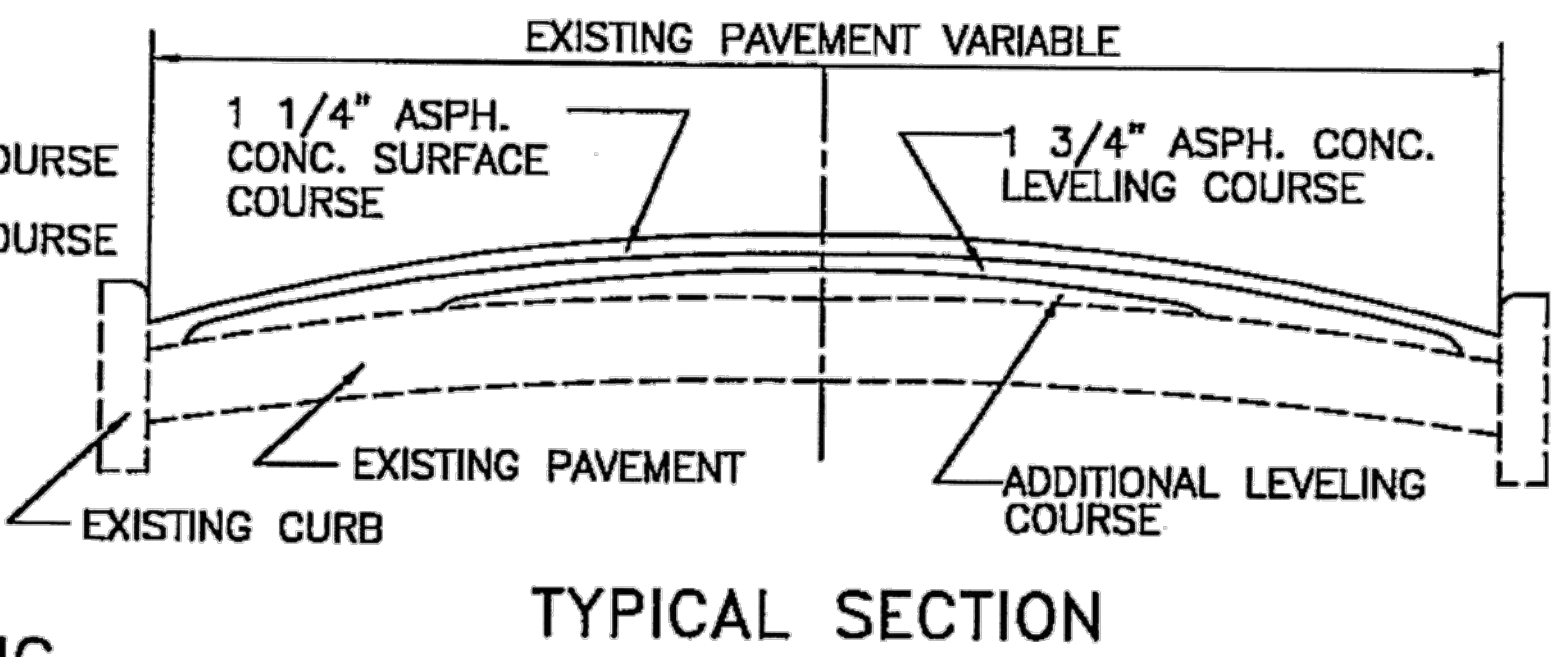
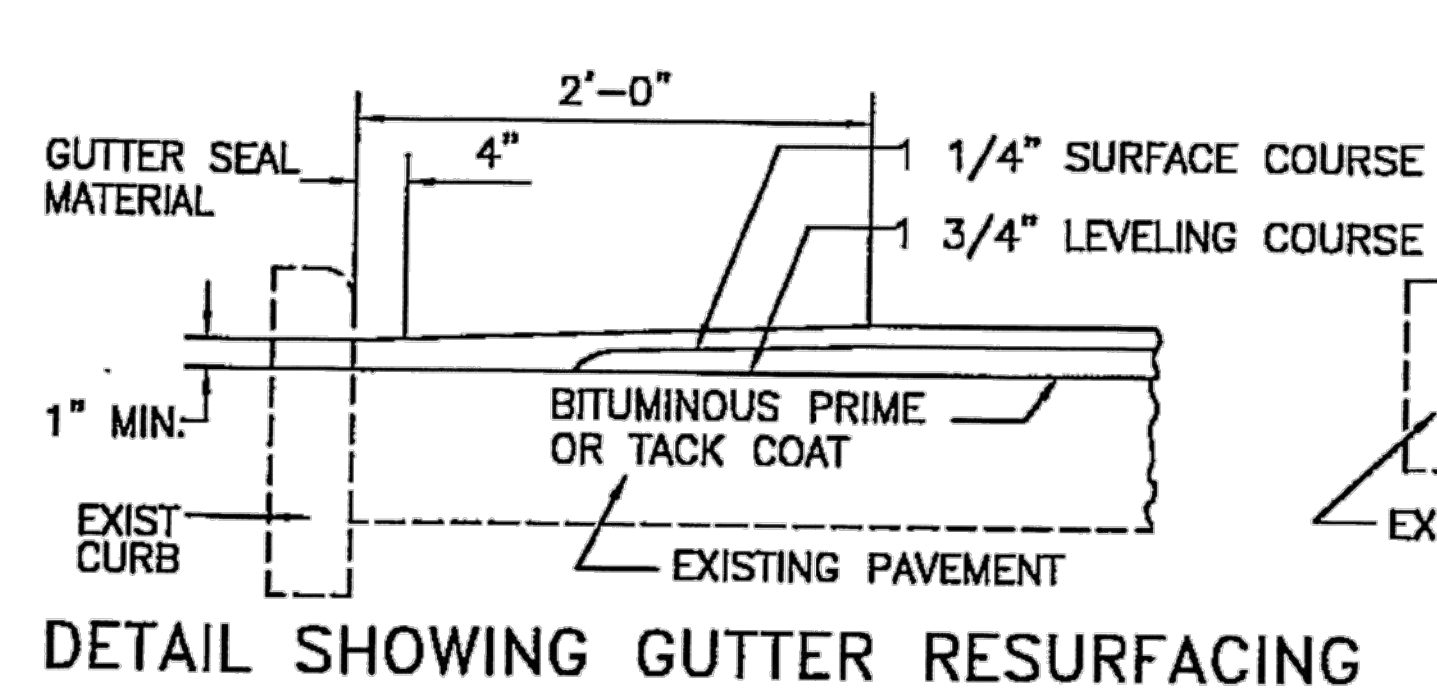
PLAN - E 55TH ST
STA. 181+00 TO STA. 186+00

CUY-E 55TH ST RESURF

61
103

0 20 40
HORIZONTAL
SCALE IN FEET

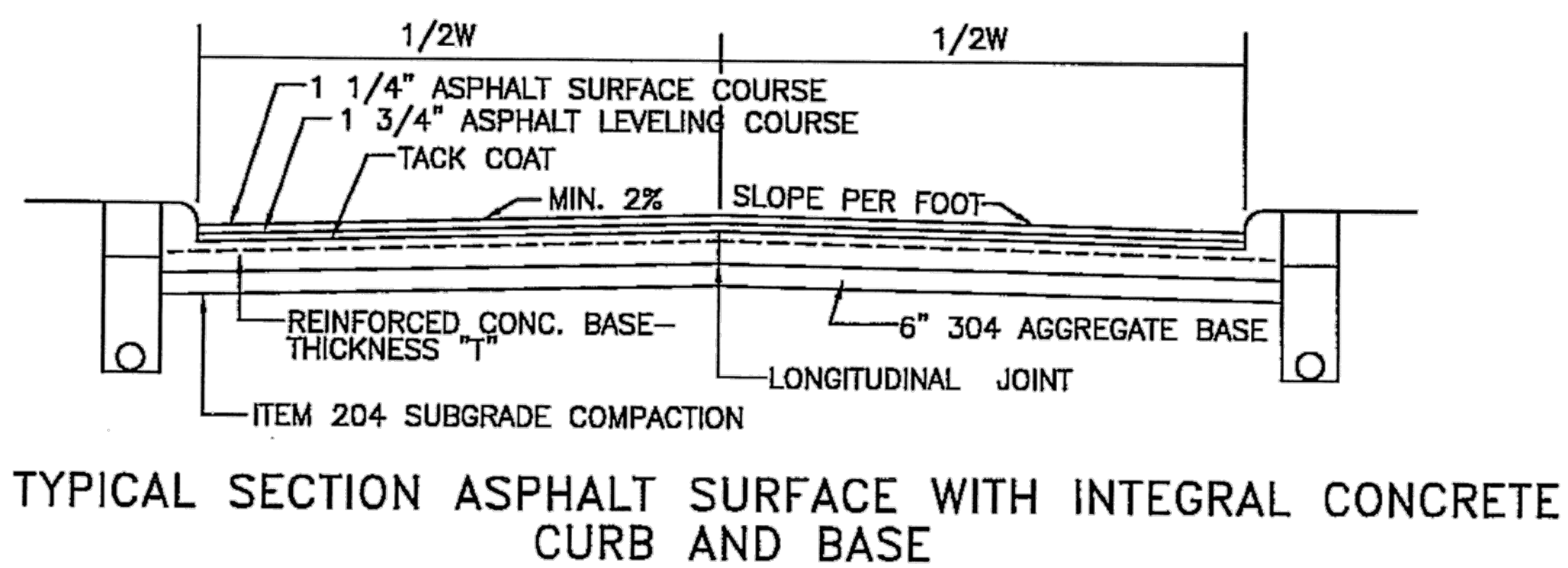
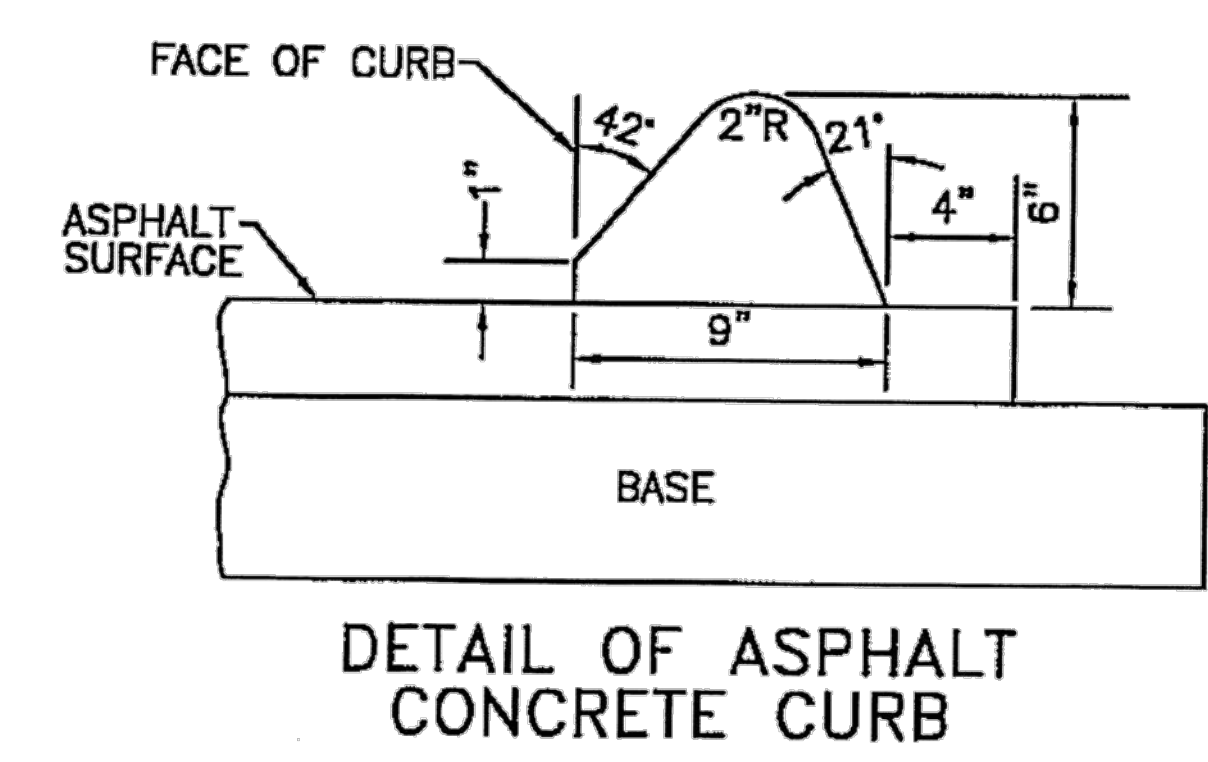
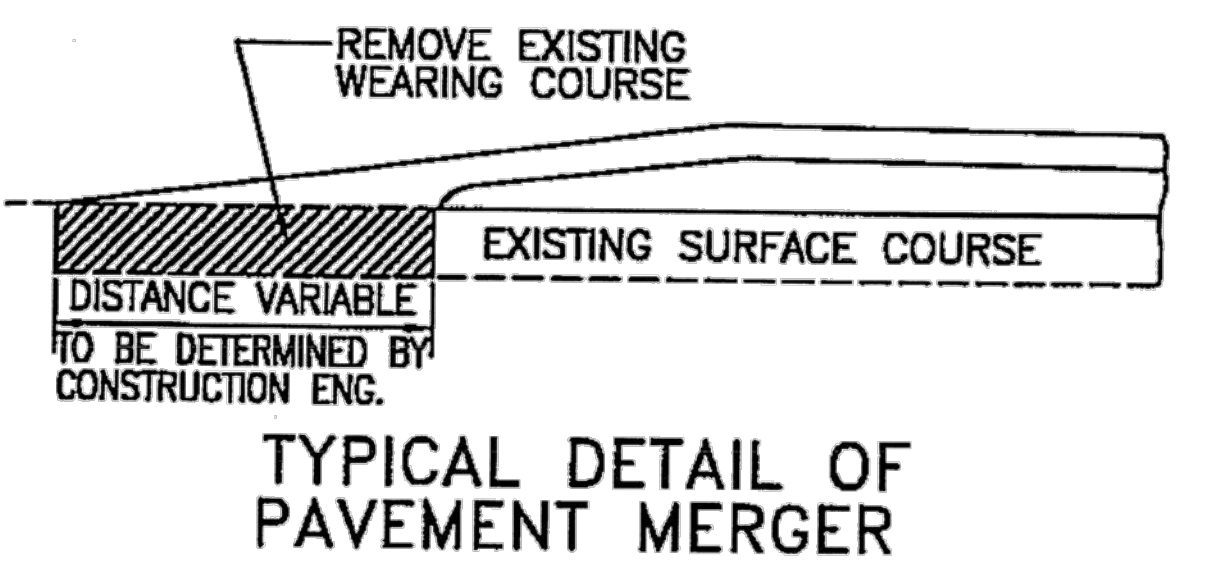
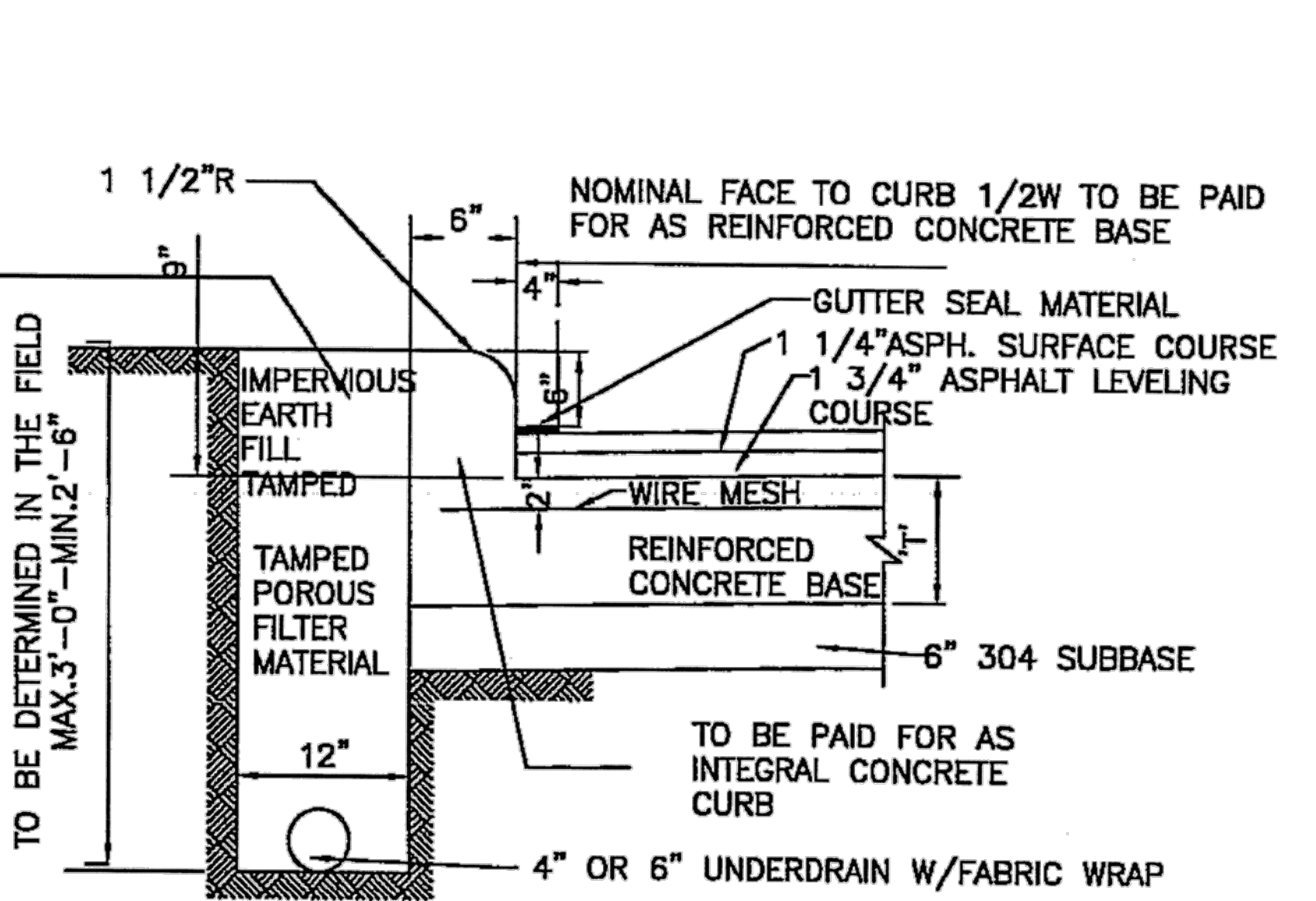
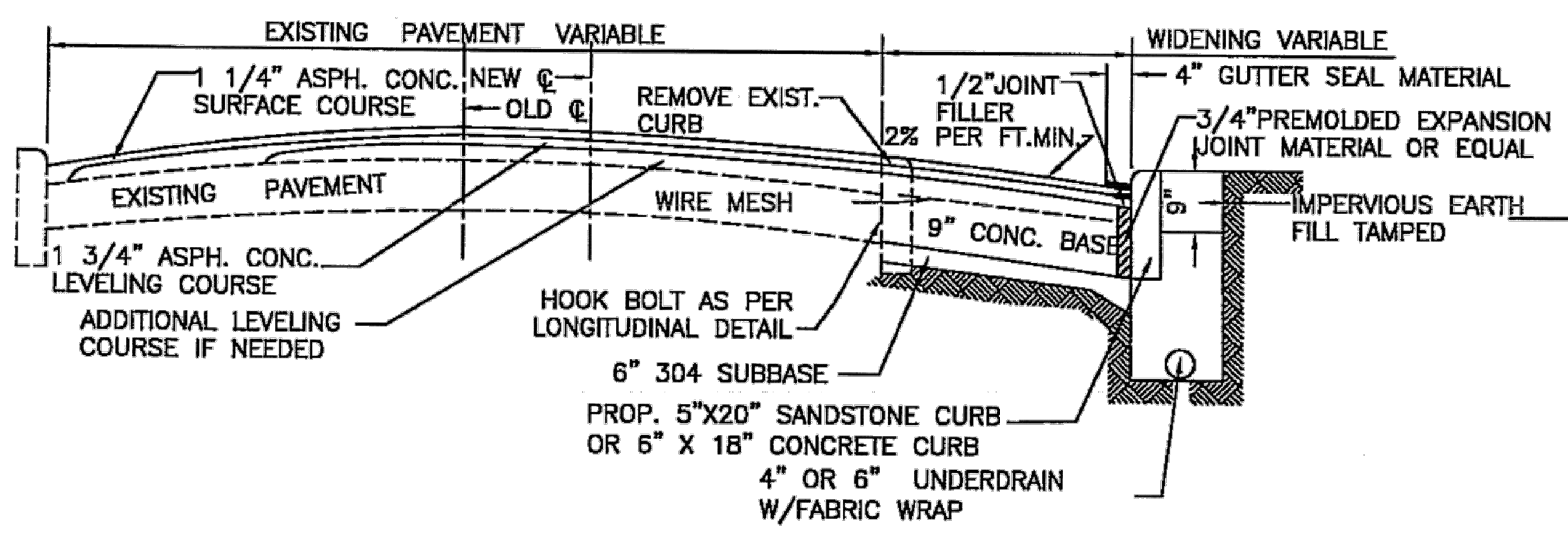
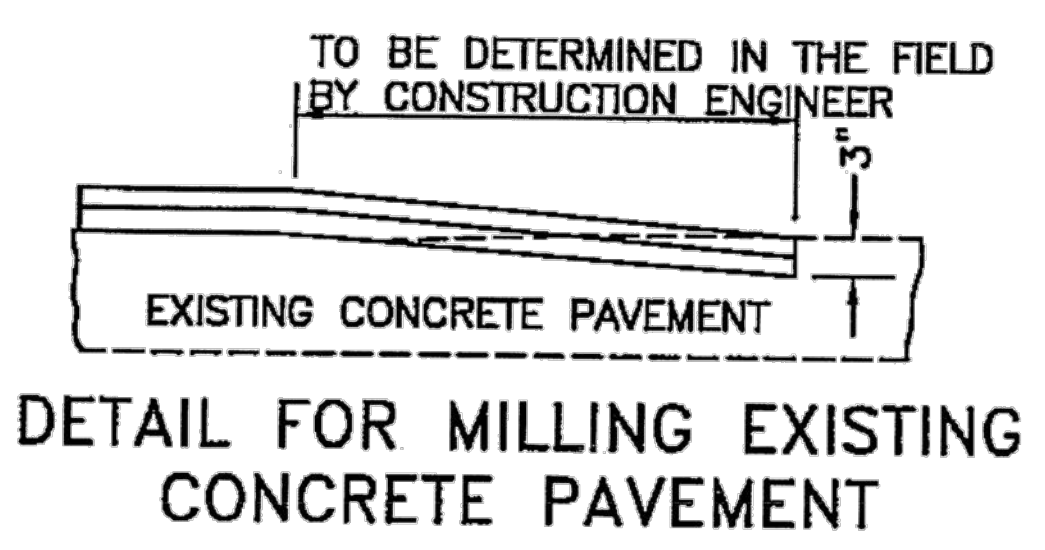
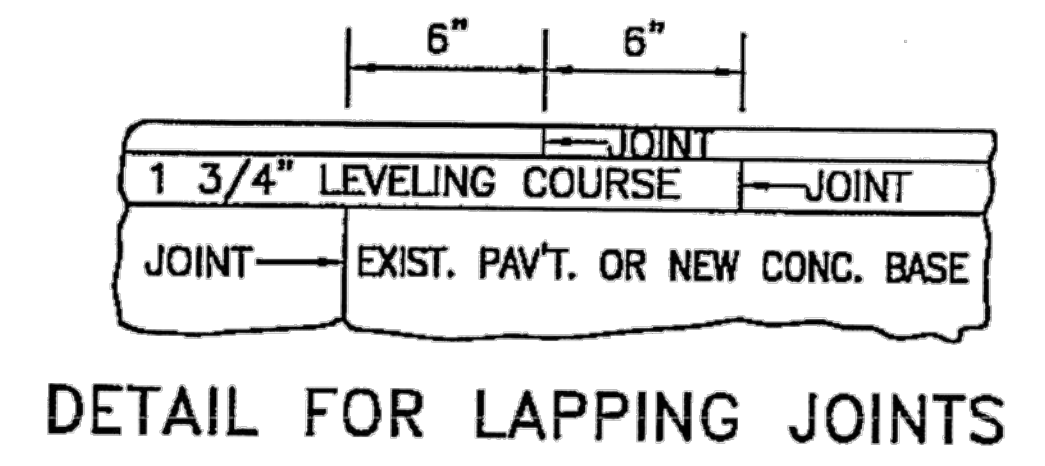




NOTES

SURFACE COURSE AS PER 448 TYPE I HEAVY TRAFFIC
LEVELING COURSE AS PER 448 TYPE II HEAVY TRAFFIC
ADDITIONAL LEVELING COURSE AS PER 448 TYPE II HEAVY TRAFFIC
BITUMINOUS TACK COAT AS PER 407 & SPECIAL
9" CONCRETE BASE AND INTEGRAL CONCRETE CURB & BASE AS PER 305 & SPECIAL AND 609.04
IF REQUIRED 12 INCH (W4) X 6 INCH (W8.5) EPOXY COATED REINFORCING MESH MEETING ODOT 709.14
AGGREGATE BASE AS PER 304 & SPECIAL
JOINT FILLER AS PER 705.04 (HOT APPLIED)

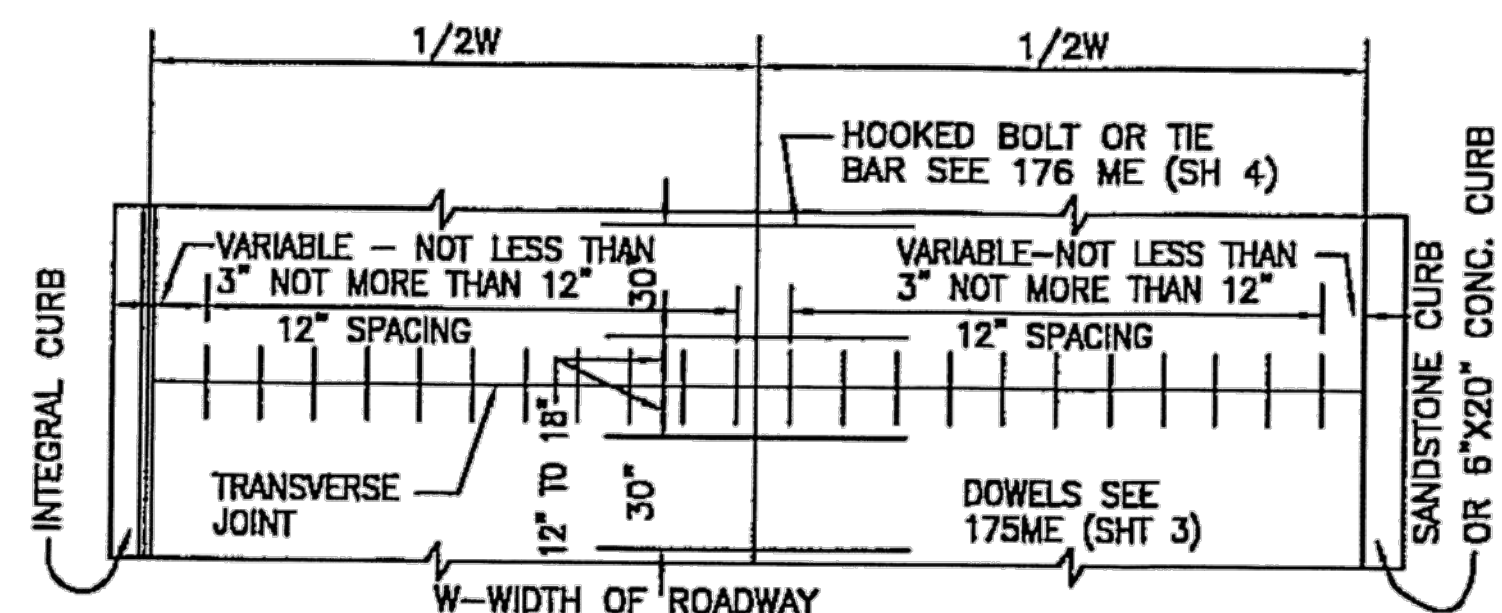
GUTTER SEAL MATERIAL SAME TYPE OF ASPHALT CEMENT USED IN THE ASPHALT CONCRETE
PREMOLDED EXPANSION JOINT MATERIAL AS PER 705.03 NO. 8 TAMPED POROUS FILTER MATERIAL, LIMESTONE OR GRAVEL
UNDERDRAIN AS PER 605 & SPECIAL
INTEGRAL CONCRETE CURB AND BASE JOINT DETAIL SHALL BE AS SHOWN ON DRAWING 644 M SHEETS 4 & 5 (LONGITUDINAL) AND 175 ME SHEET 6 (TRANSVERSE).



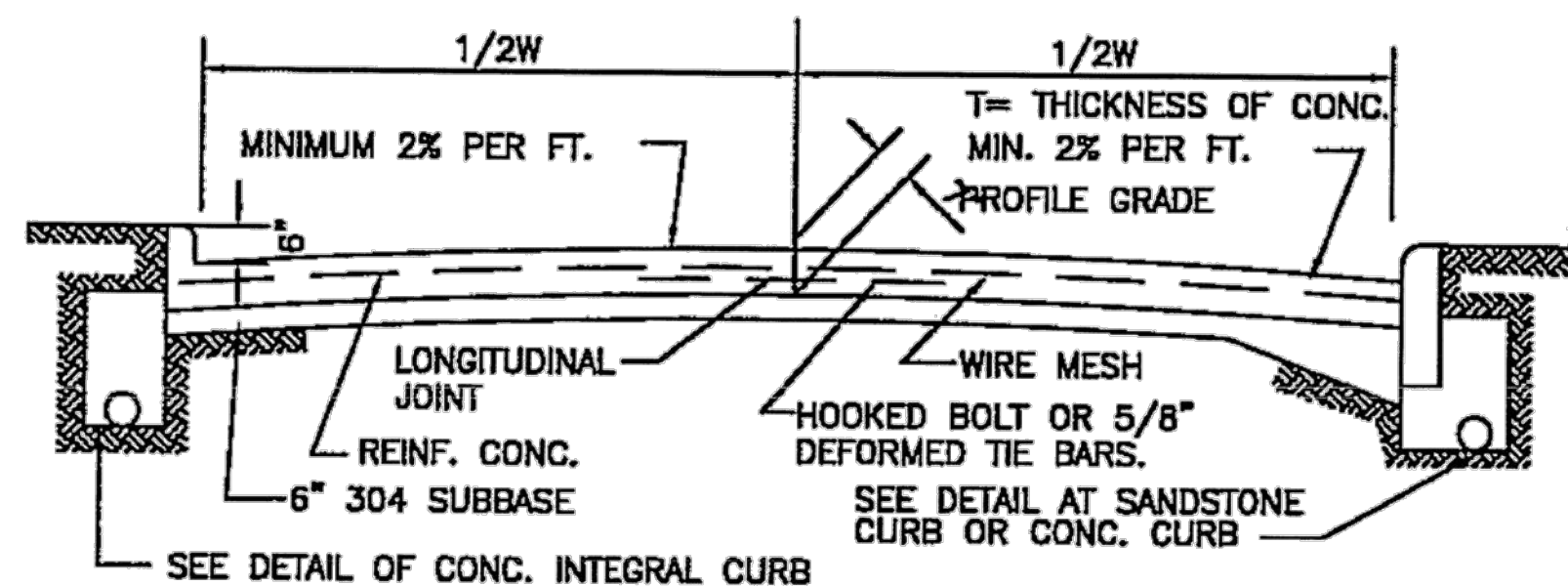
CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
ASPHALT RESURFACING AND ASPHALT SURFACE ON REINFORCED CONCRETE BASE
NOT TO SCALE
DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: *[Signature]* DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION
FILE NO ASPH 1 SHEET 1/1 ②

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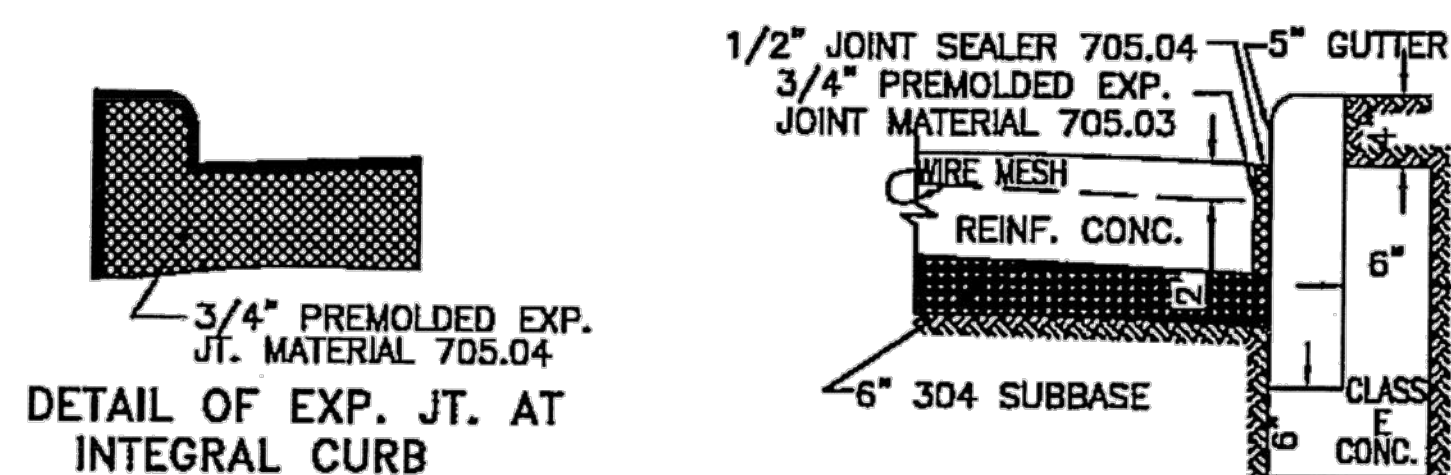
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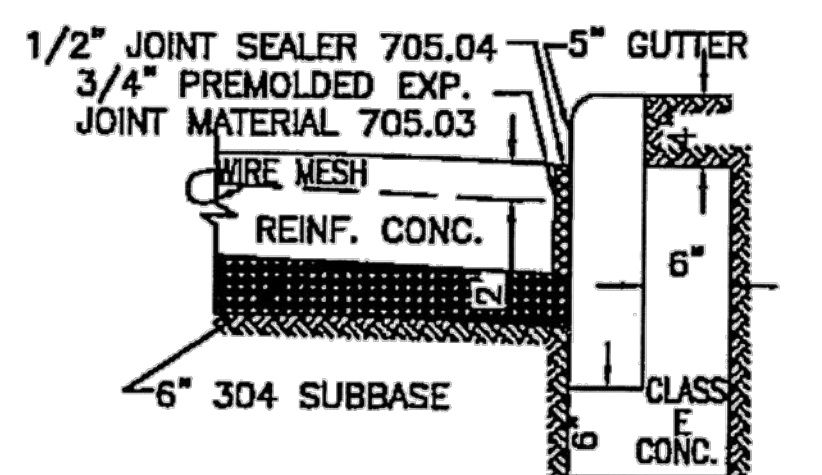
TYPICAL PLAN OF PAVEMENT



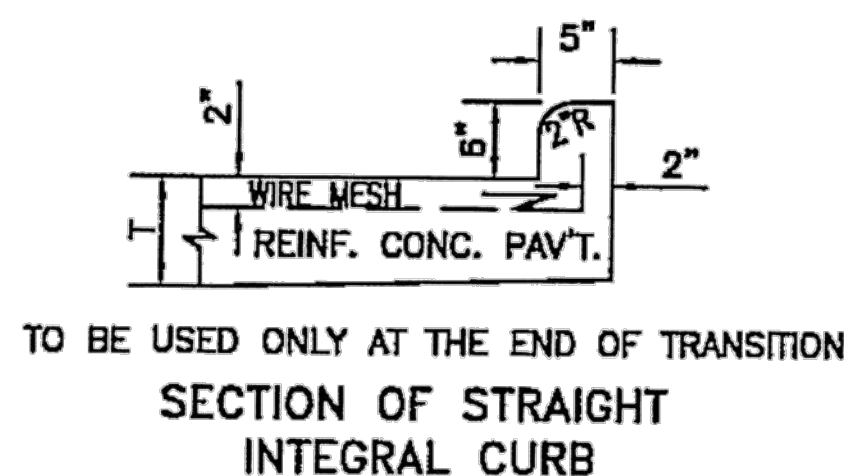
TYPICAL SECTION OF PAVEMENT



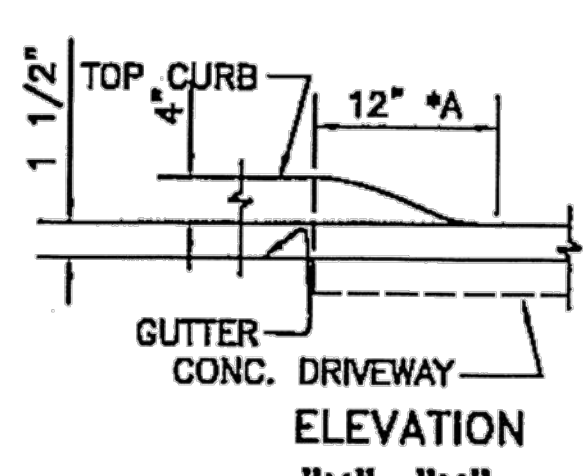
DETAIL OF EXP. JT. AT INTEGRAL CURB



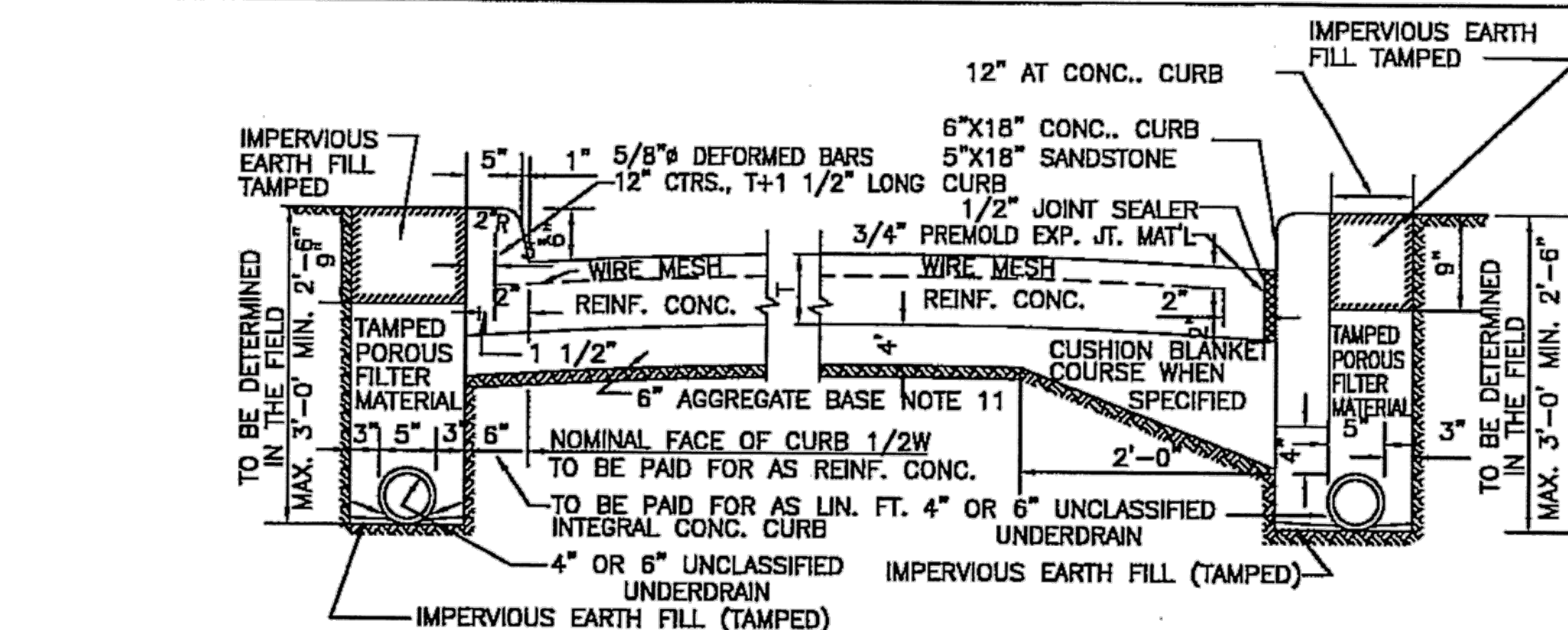
DETAIL OF CONC. BACKING AT STONE CUT TO RADIUS CURB (25' RADIUS & UNDER)



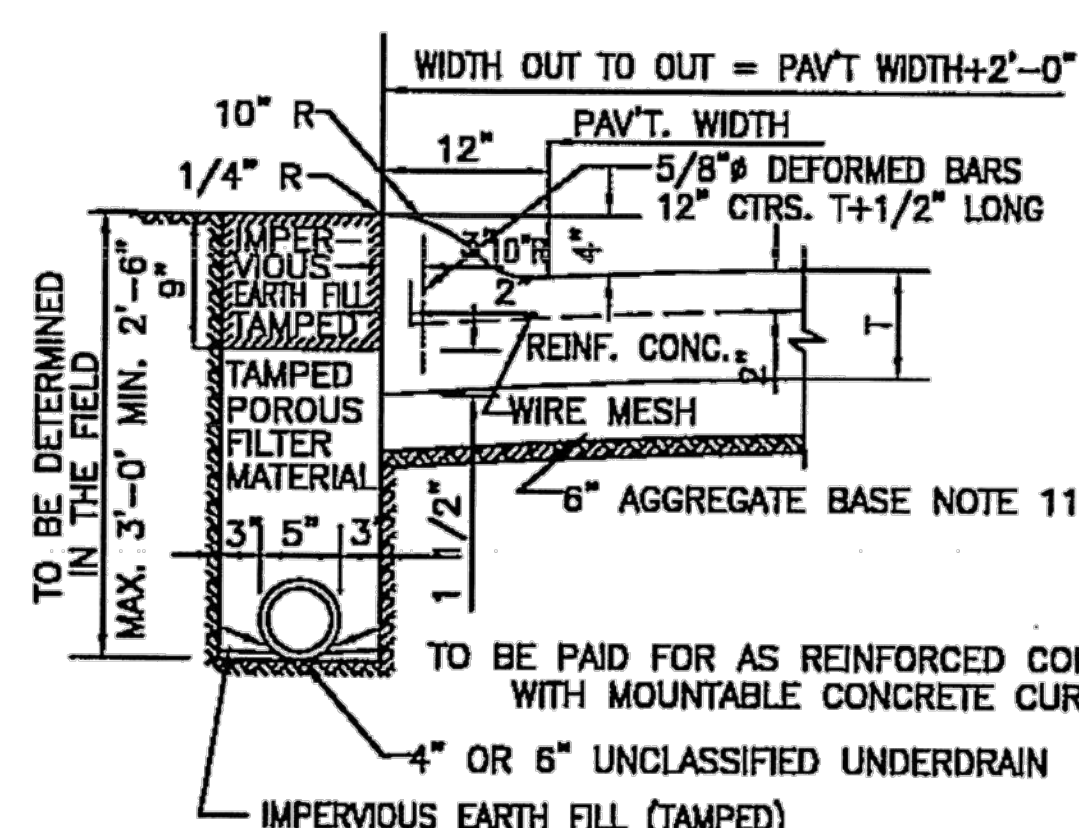
TO BE USED ONLY AT THE END OF TRANSITION
SECTION OF STRAIGHT INTEGRAL CURB



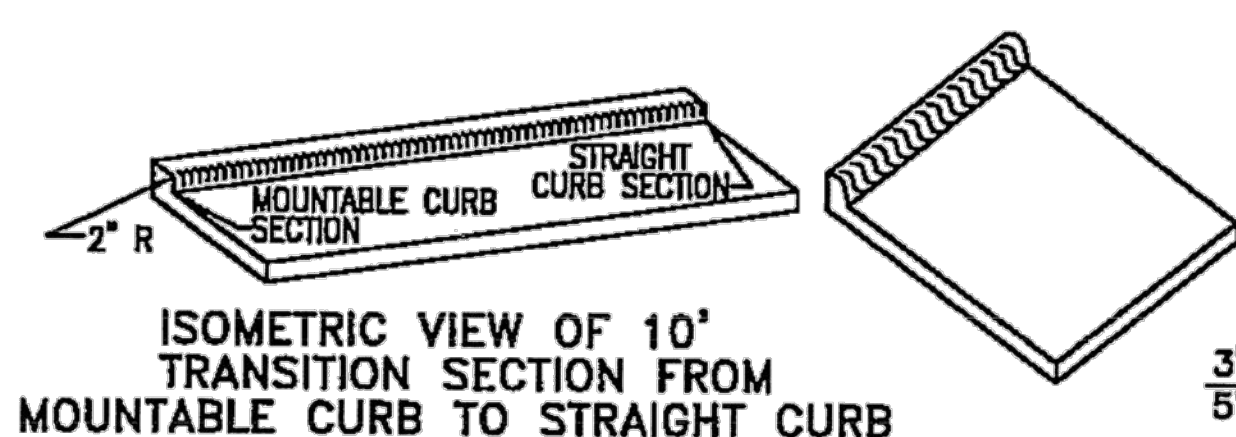
*A - 1:12 MAX., IF IN AN UNOBSTRUCTED SIDEWALK AREA



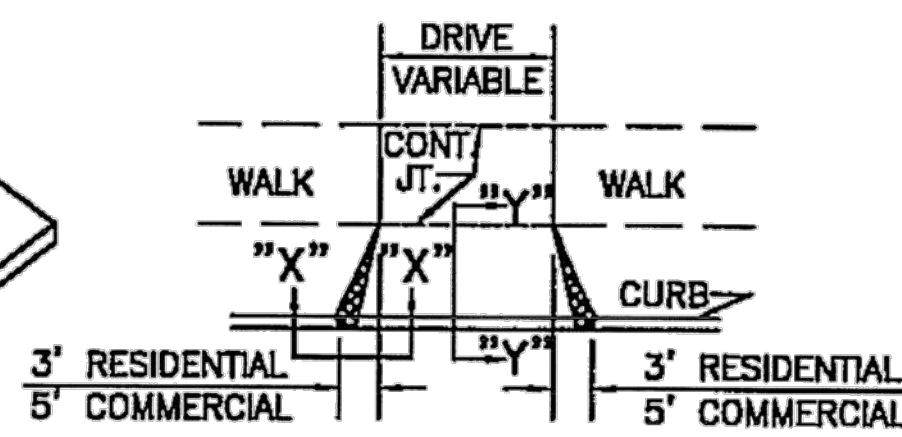
DETAIL OF CONC. INTEGRAL CURB DETAIL OF SANDSTONE CURB



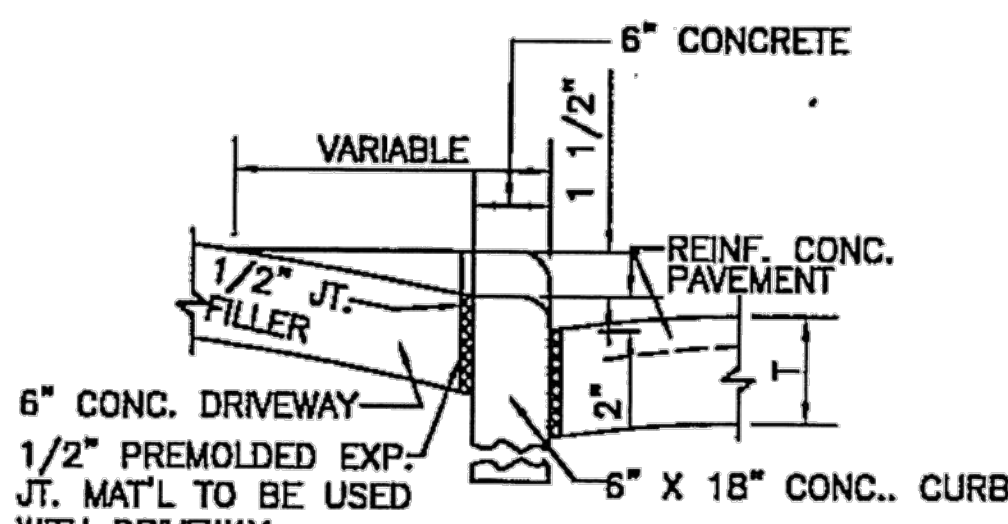
DETAIL OF CONC. MOUNTABLE CURB



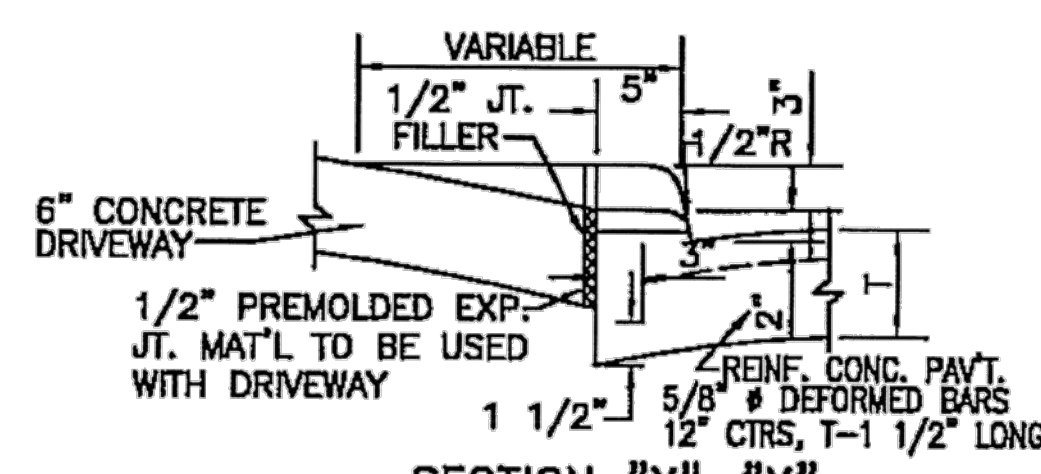
ISOMETRIC VIEW OF 10' TRANSITION SECTION FROM MOUNTABLE CURB TO STRAIGHT CURB



TYPICAL CONC. DRIVEWAY DETAIL



SECTION "Y"-"Y"



SECTION "Y"-"Y" (INTEGRAL CURB)

NOTES:

1. REINFORCED CONCRETE PAVEMENT SHALL MEET THE REQUIREMENTS OF 451 AND SPECIAL CONCRETE SHALL MEET THE REQUIREMENTS OF CITY OF CLEVELAND 650 MIX.
2. IF THE CURB IS PLACED AFTER THE PAVEMENT, OMIT THE ASPHALT EXPANSION JOINT AND PAVE FULL WIDTH. FILL THE VOID BETWEEN THE CURB & EXP. JOINT WITH DRY SAND TO 1/2" FROM THE CONCRETE SURFACE. THE REMAINING 1/2" SHALL BE FILLED WITH JOINT FILLER AS PER 705.04 (HOT APPLIED JOINT FILLER).
3. TRANSITION FROM STANDARD CURB SECTION TO DROP CURB SECTION TO BE MADE IN 12".
4. CONCRETE FOR CURB WHICH IS TO BE INTEGRAL WITH THE CONCRETE BASE OR PAVEMENT SHALL BE PLACED WHILE THE CONCRETE IS PLASTIC.
5. TRANSVERSE JOINT IN THE PAVEMENT SHALL EXTEND THROUGH CURBS.
6. CONTRACTION JOINT (IMPRESSED OR SAWED) SHALL BE PLACED AT MAXIMUM OF 17' CENTERS.
7. PAVEMENT JOINT ASSEMBLIES SHALL BE AS PER 451.02 (709.13).
8. LONGITUDINAL JOINT SHALL BE 5/8" X 30" DEFORMED EPOXY BAR AS PER 451.02 & 709.00 OR 2- 7/8" X 8" EPOXY HOOK BOLTS PLACED AT 30" CENTERS. TRANSVERSE JOINT SHALL BE AS SHOWN ON DRAWING 175 ME (SHEET 6).
9. STEEL FOR TIE BARS, HOOK BOLTS AND DOWEL BARS SHALL MEET THE REQUIREMENTS OF 451.02.
10. 12 INCH (W4) X 6 INCH (W8.5) EPOXY COATED REINFORCING MESH MEETING ODOT 709.14
11. AGGREGATE BASE AS PER 304 & SPECIAL
12. HOT APPLIED JOINT SEALER AS PER 705.04.
13. PREFORMED EXPANSION JOINT MATERIAL AS PER 705.03.
14. TAMPED POROUS FILTER MATERIAL AS PER 605.
15. UNCLASSIFIED PIPE UNDERDRAIN AS PER 707.31 OR 707.41.

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
CONSTRUCTION DETAILS OF REINFORCED CONCRETE PAVEMENT
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

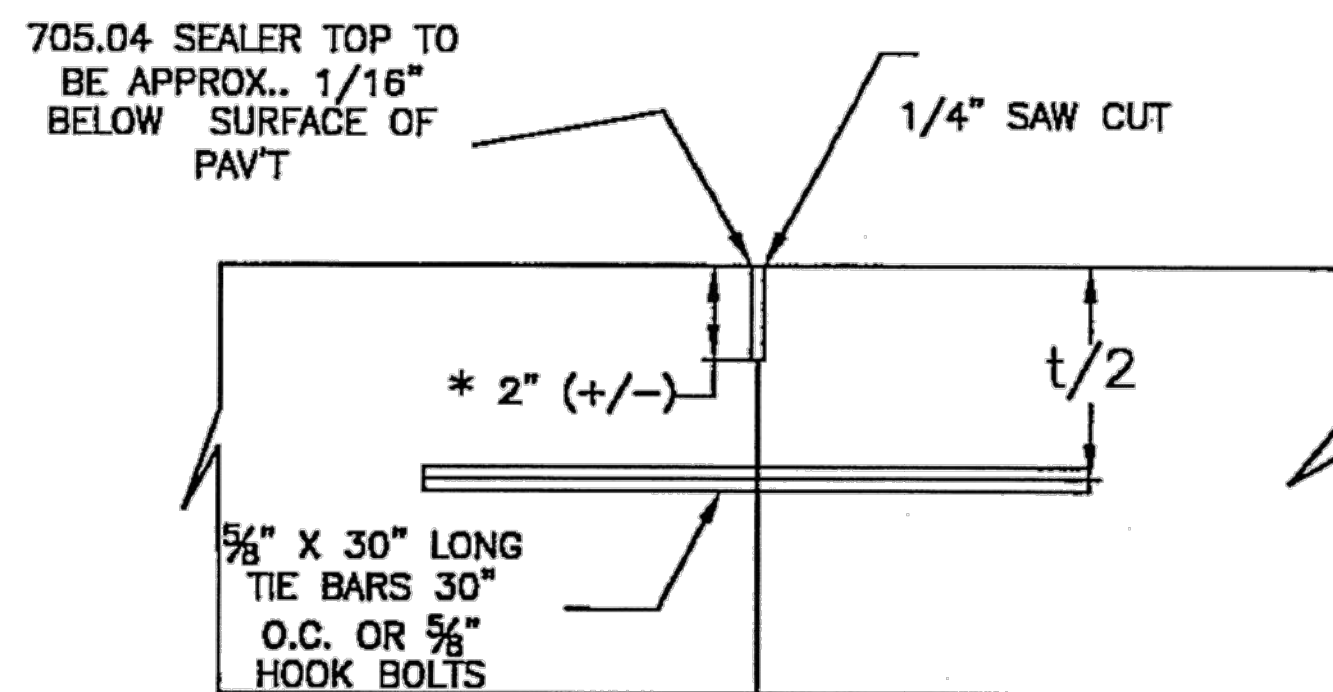
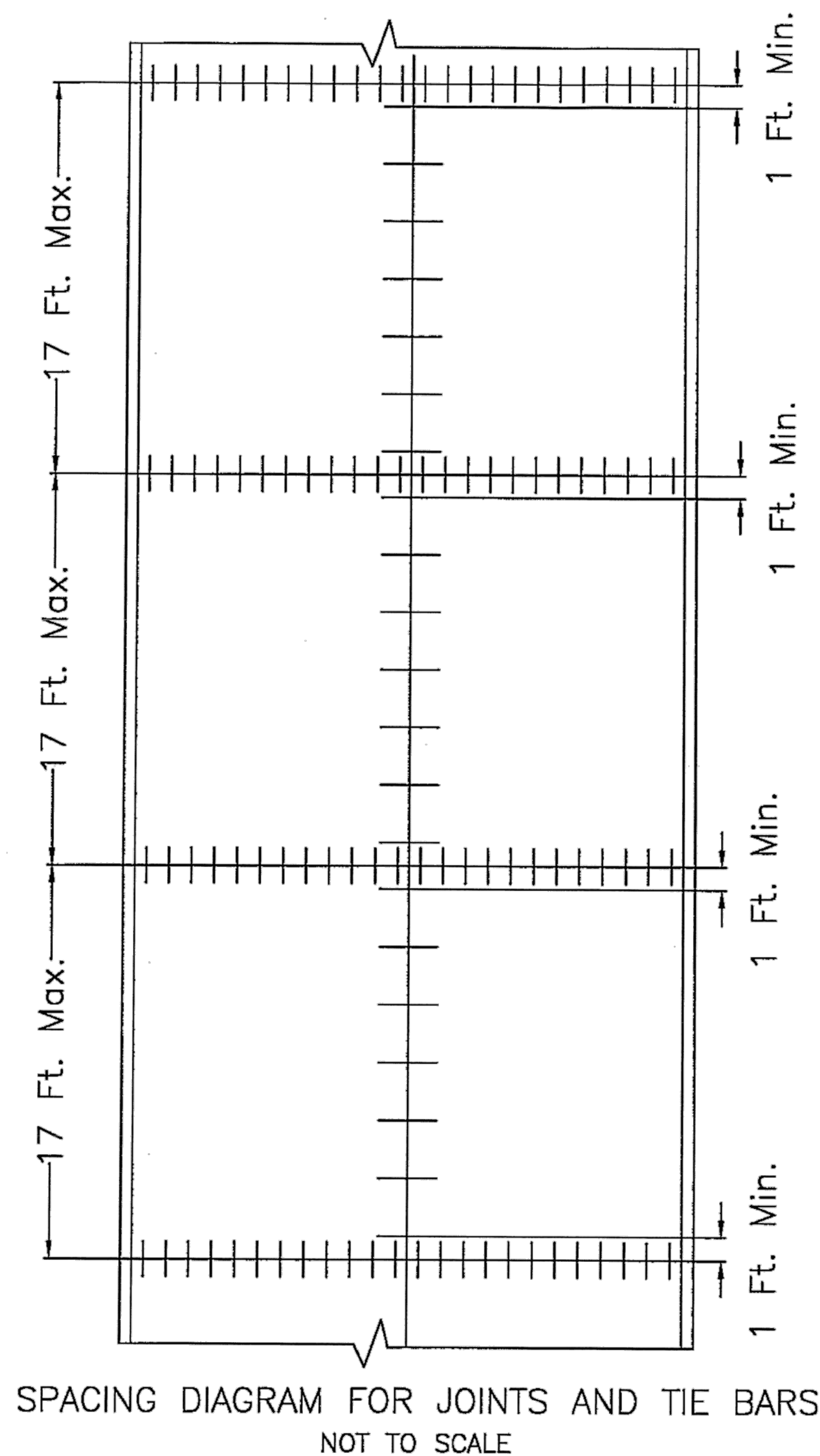
APPROVED: *[Signature]* DATE: 7-8-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

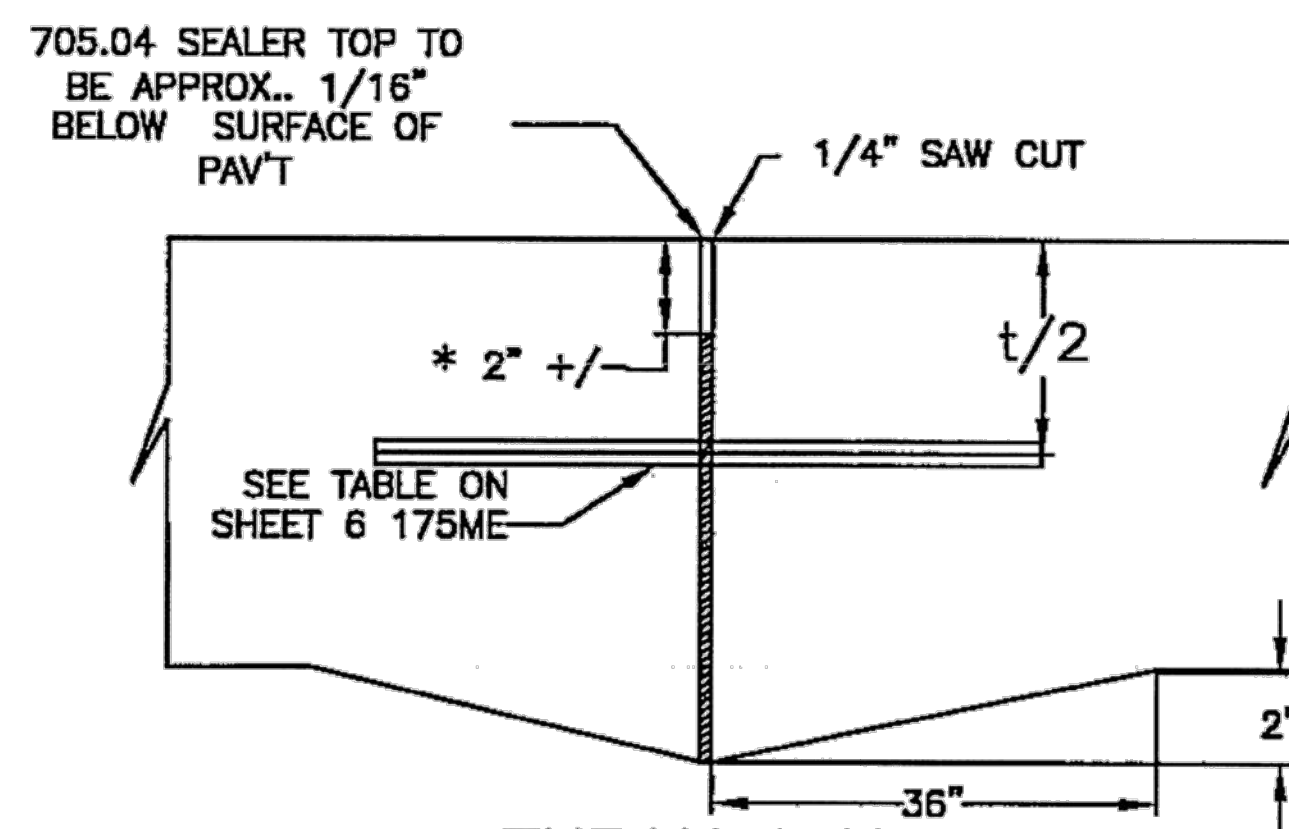
FILE NO.: CONC 1 SHEET 1/4

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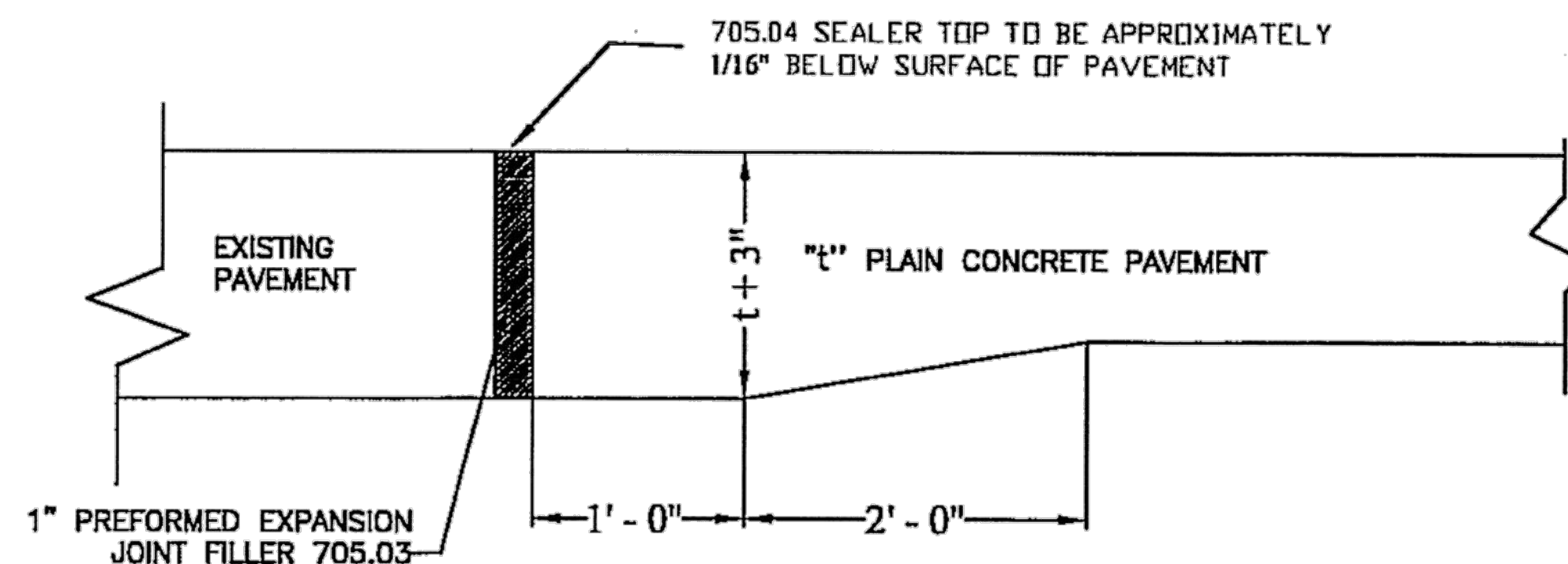
LONGITUDINAL



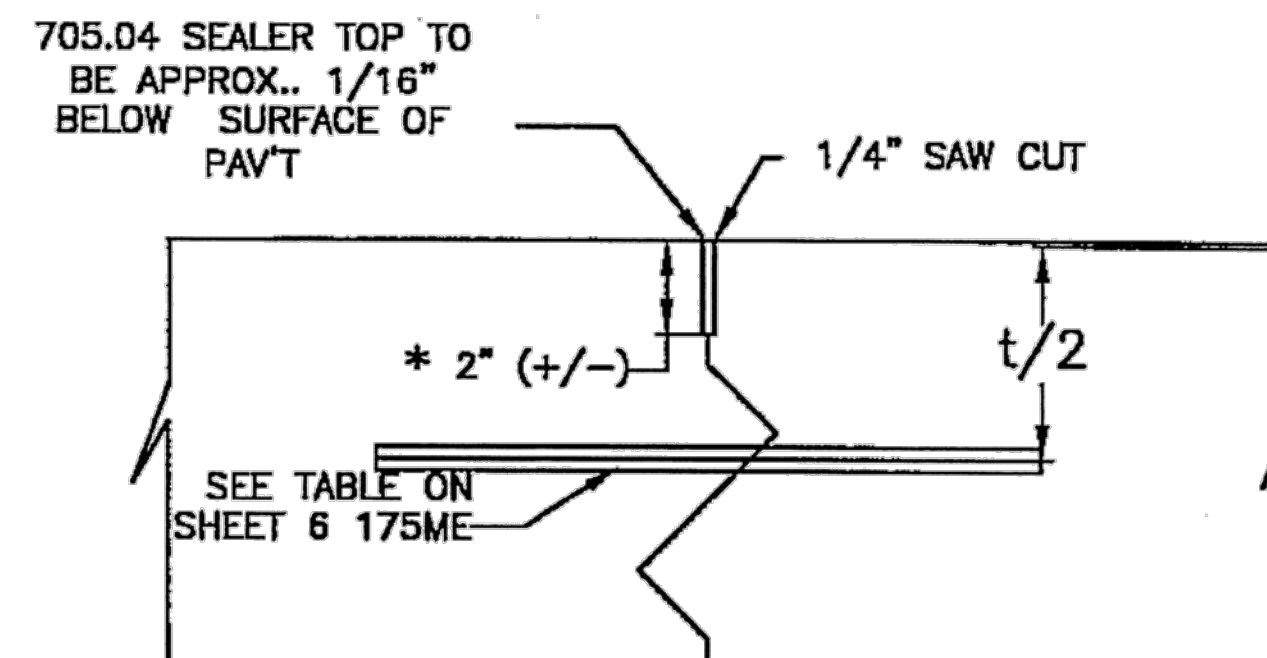
EXPANSION
(THICKENED)

DOWELS - ALL DOWELS, HOOK BOLTS AND TIE BARS
SHALL BE EPOXY COATED (709.00), AS PER
PLAN OR DIRECTION OF THE ENGINEER

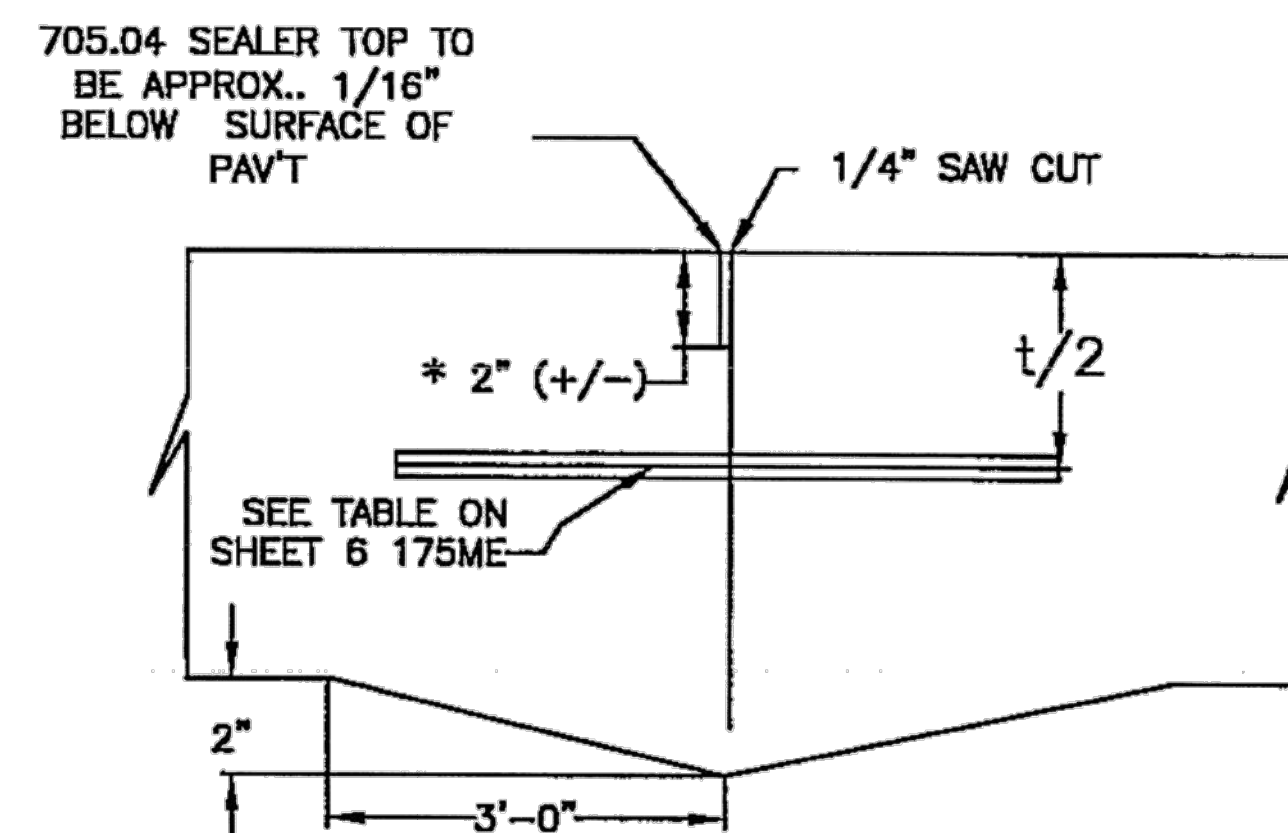
* IF CONCRETE IS THICKER THAN 8" USE 2/4
FOR THE JOINT DEPTH



BUTT JOINT
(THICKENED)



CONTRACTION

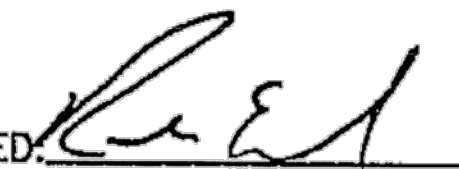


CONSTRUCTION
(THICKENED)

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWINGS
TYPICAL CONSTRUCTION
DETAILS FOR PLAIN
CONCRETE PAVEMENT
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED:  DATE: 7-6-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. : CONC 1

SHEET 2/4

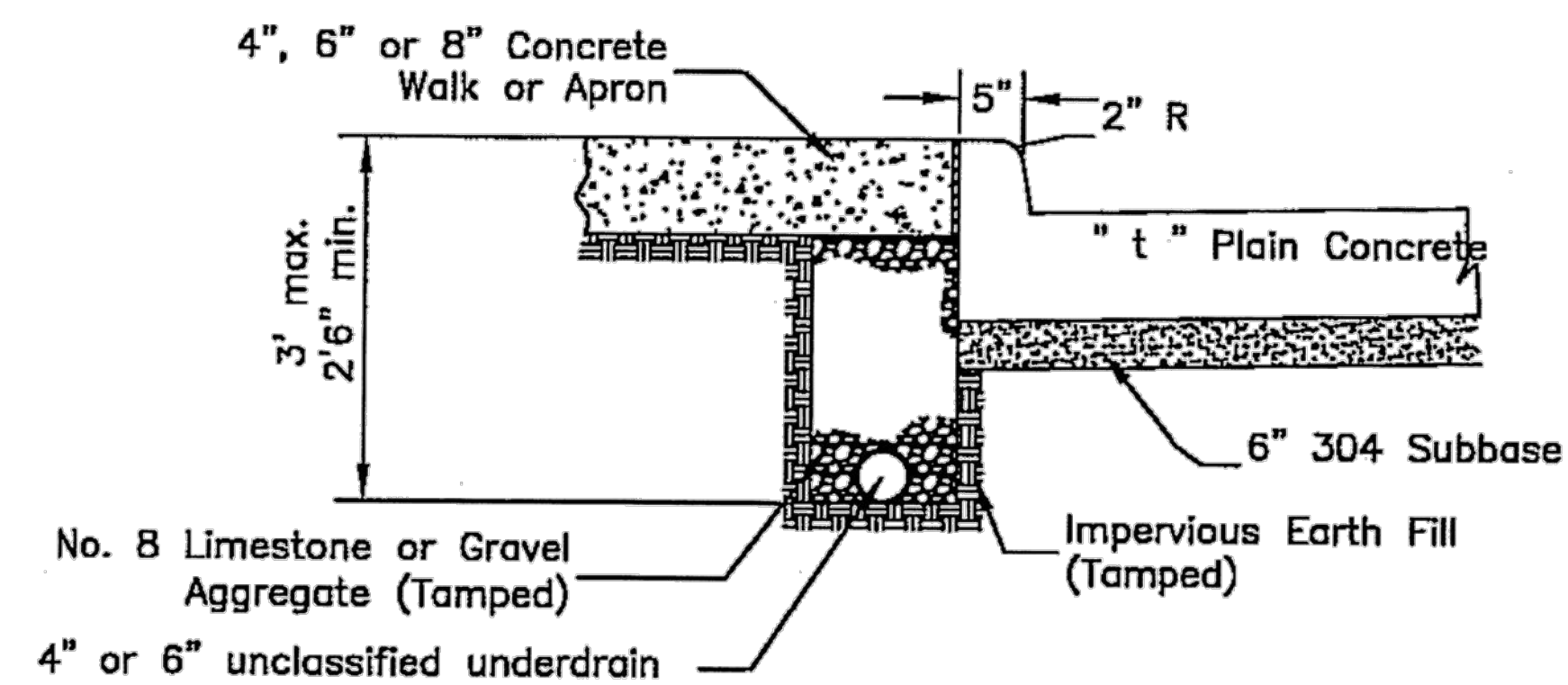
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MISCELLANEOUS DETAILS

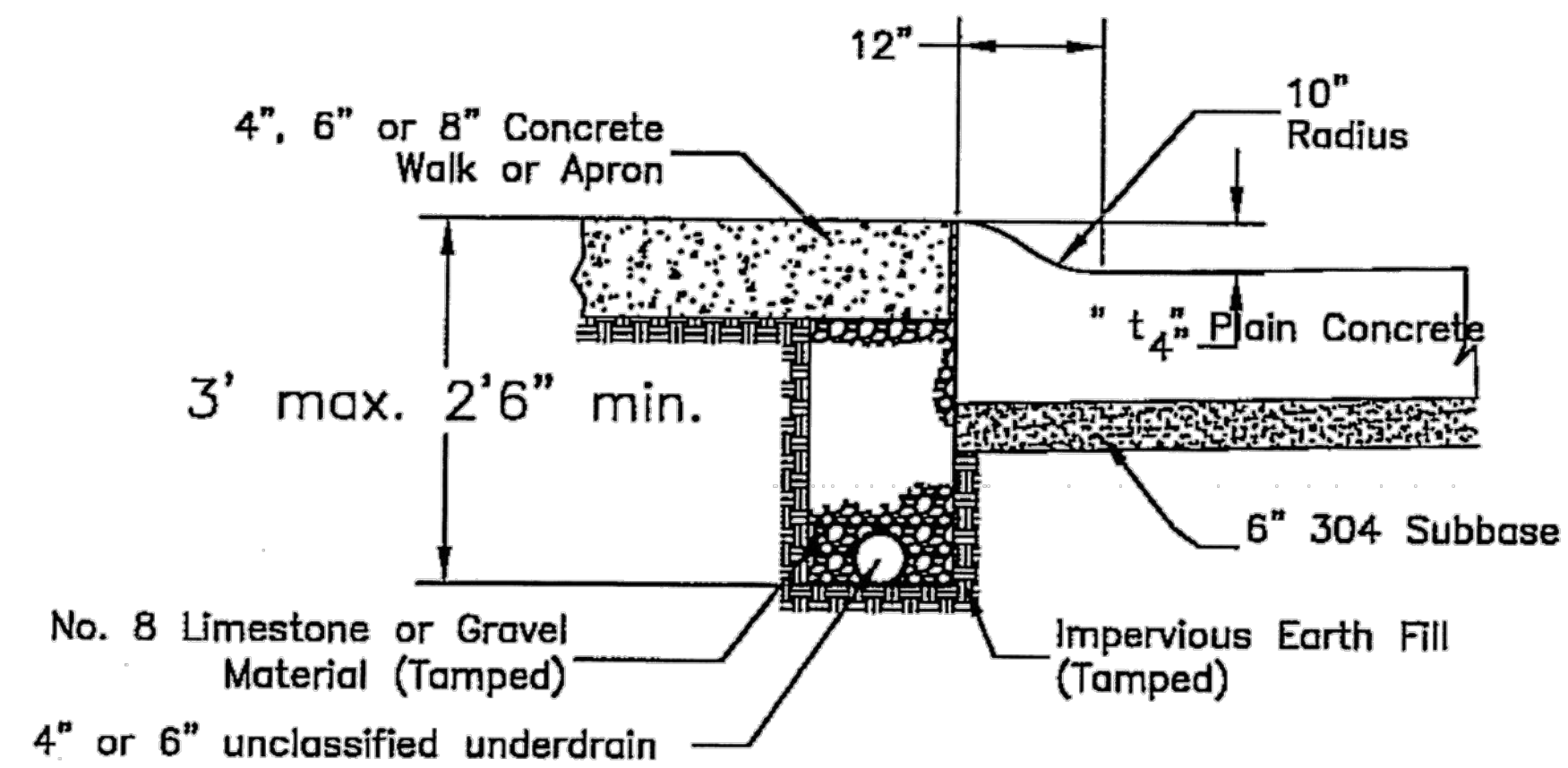
CUY-E 55TH ST RESURF

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103

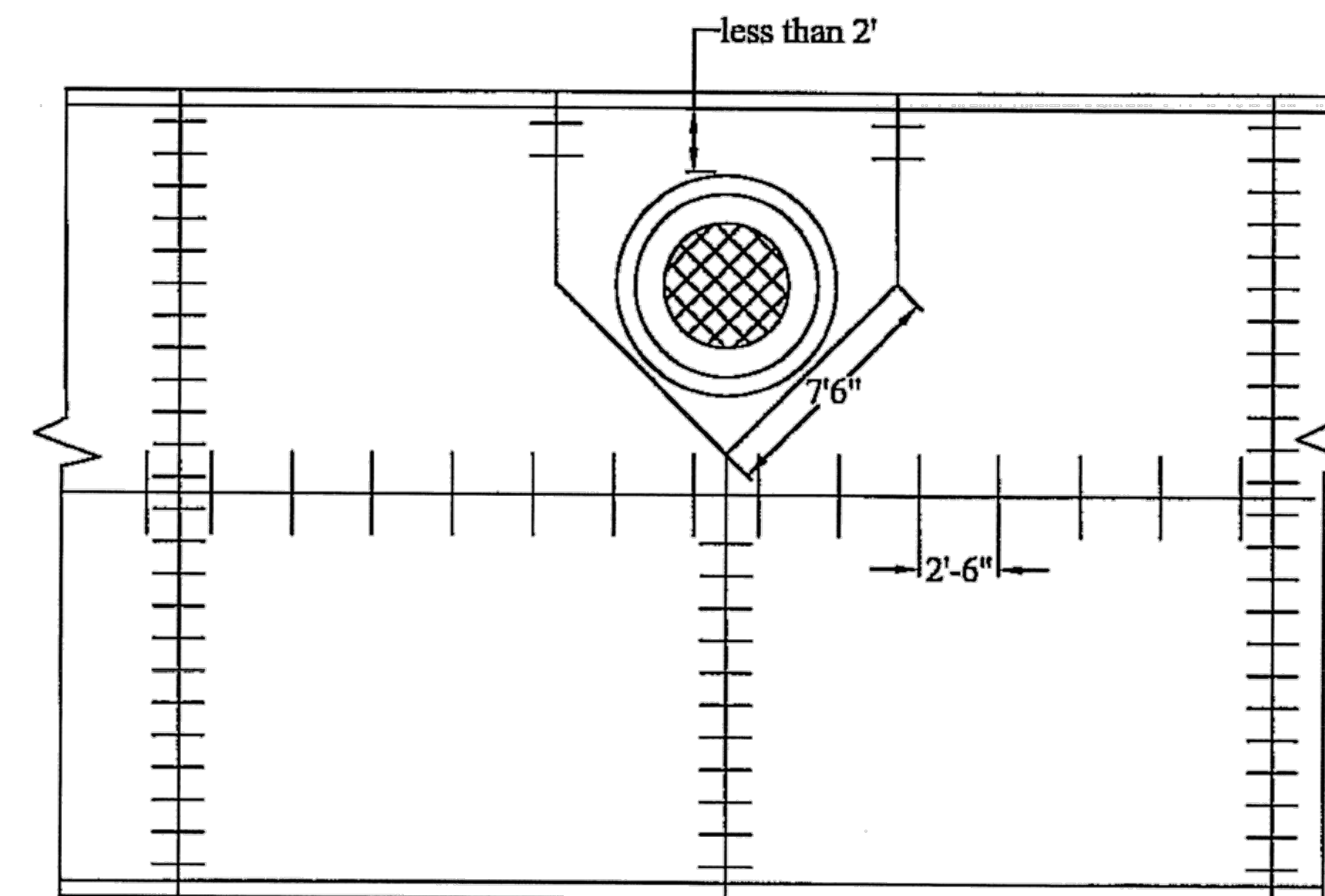
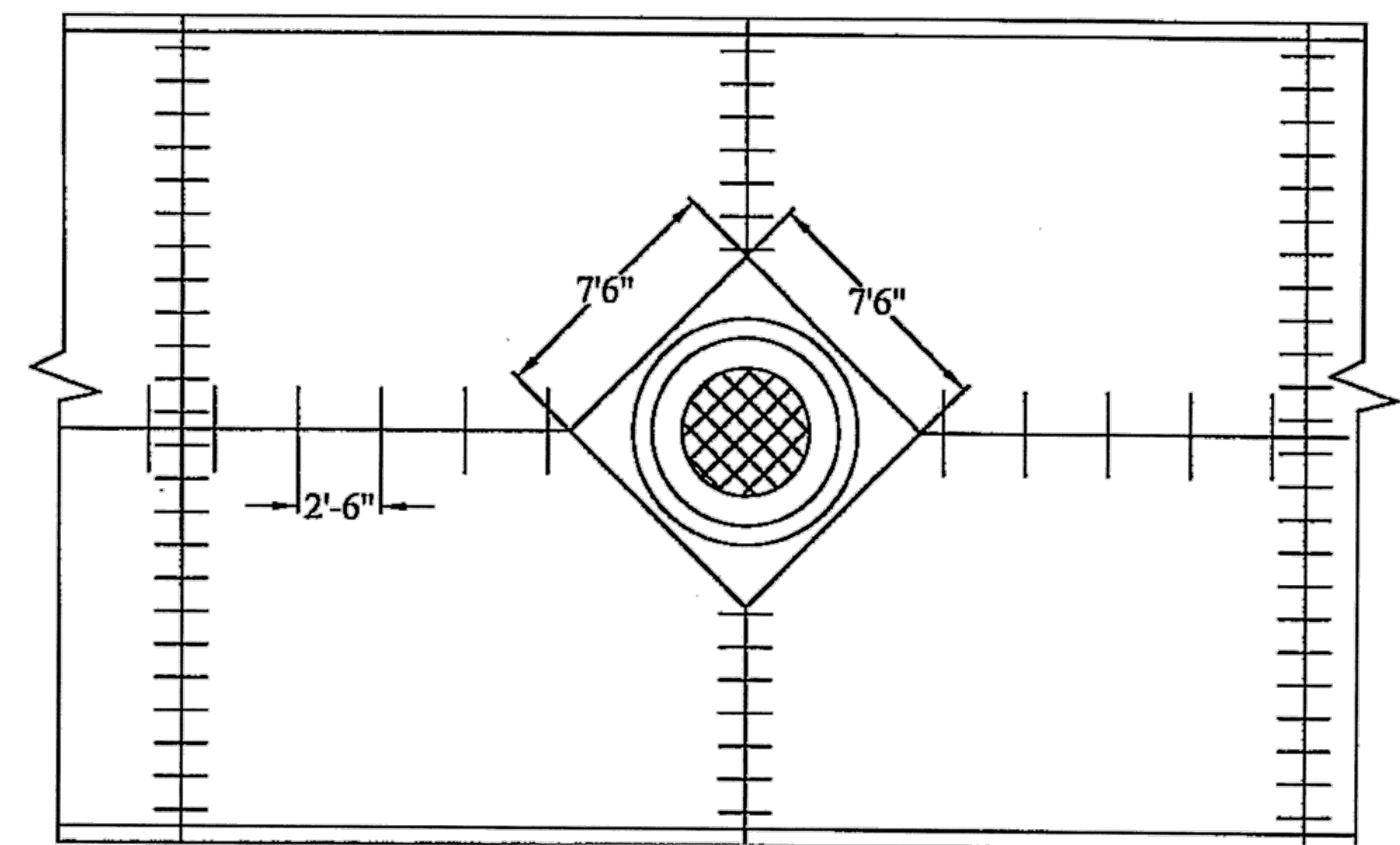
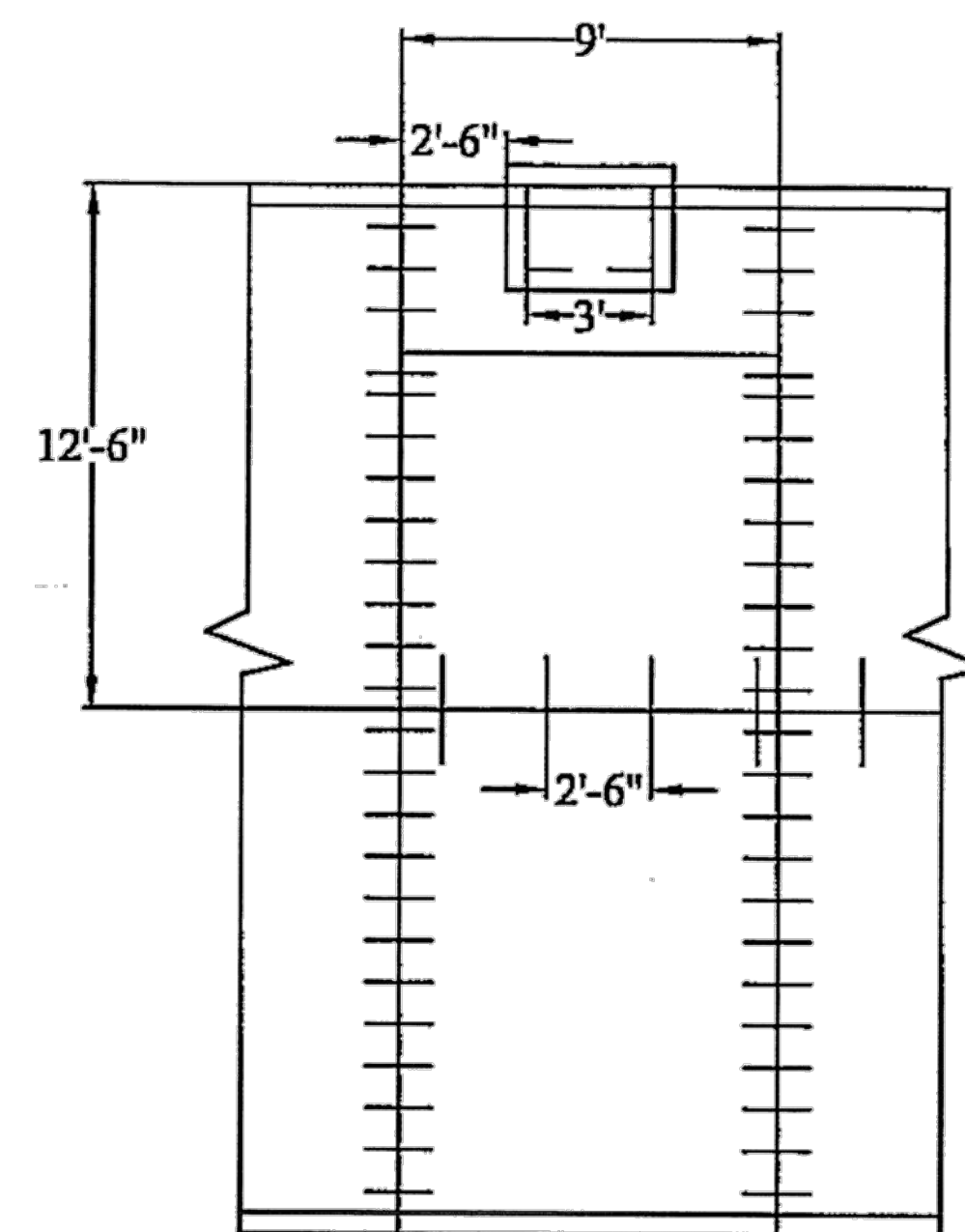
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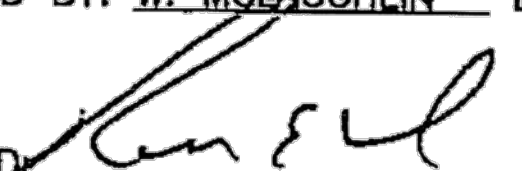
DETAIL OF CONCRETE INTEGRAL CURB
NOT TO SCALE



DETAIL OF CONCRETE MOUNTABLE CURB
(NOT TO SCALE)

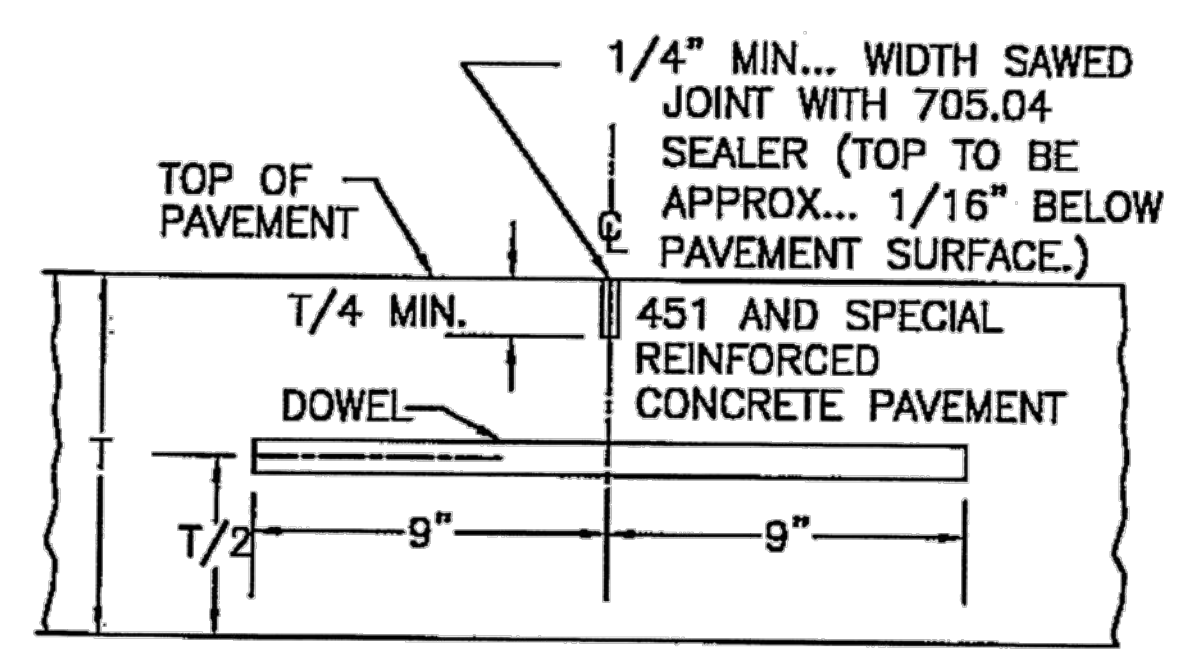


TYPICAL BOXOUTS FOR MANHOLES AND CATCH BASINS

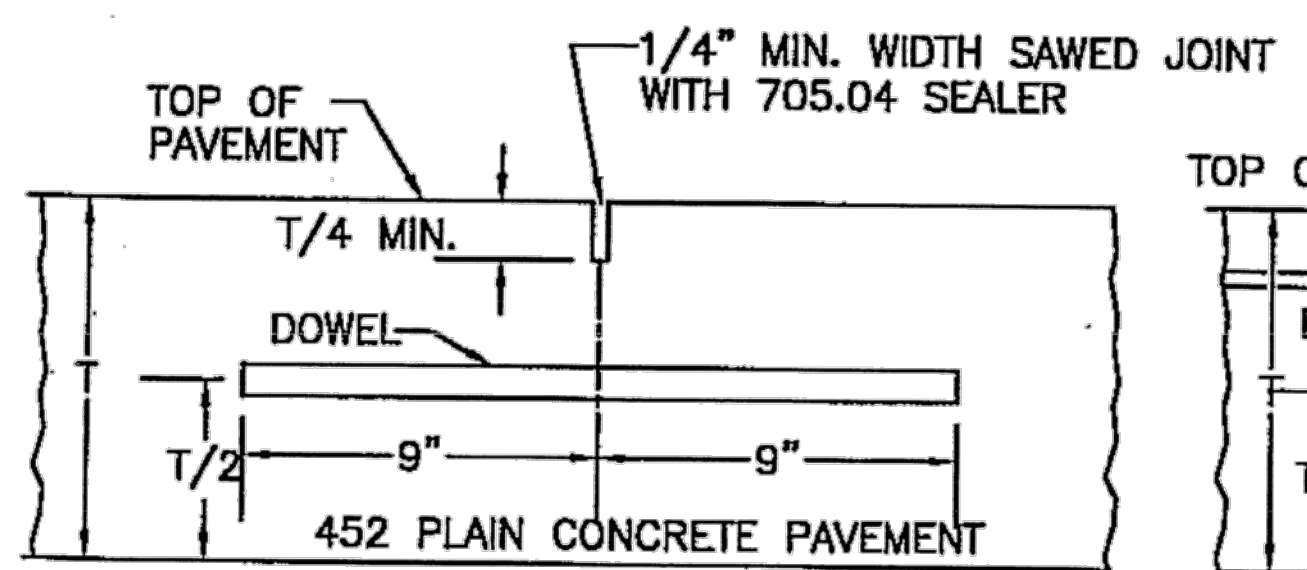
CITY OF CLEVELAND		
DEPARTMENT OF PUBLIC SERVICE		
DIVISION OF ENGINEERING & CONSTRUCTION		
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE		
STANDARD CONSTRUCTION DRAWING		
TYPICAL CONSTRUCTION		
DETAILS FOR PLAIN		
CONCRETE PAVEMENT		
NOT TO SCALE		
DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08		
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08		
APPROVED:  DATE: 7-6-08		
COMMISSIONER OF ENGINEERING & CONSTRUCTION		
FILE NO. : CONC 1	SHEET 3/4	5

TRANSVERSE JOINTS

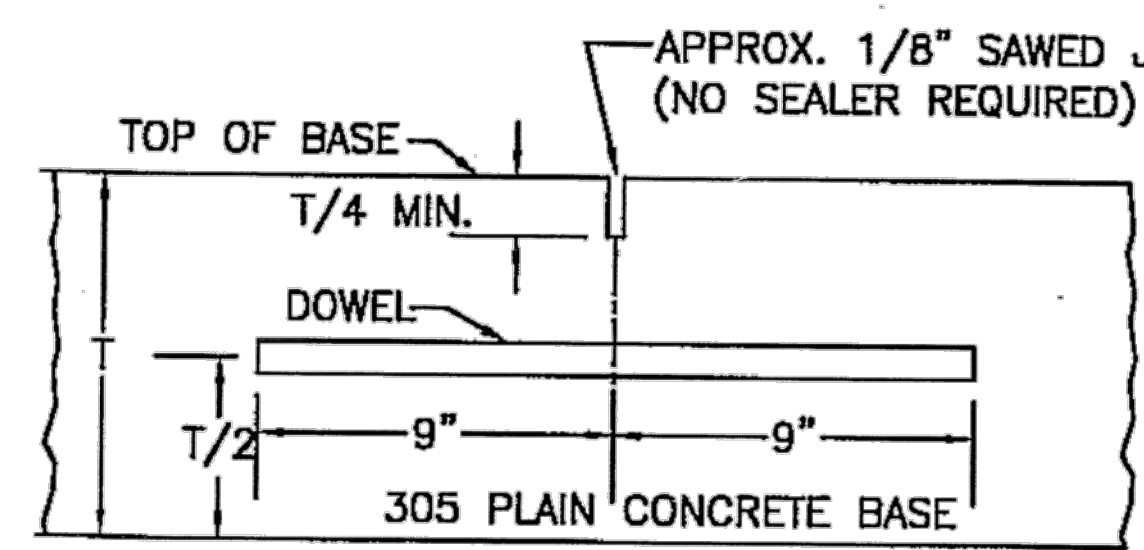
CONTRACTION JOINTS



SECTION-451 AND SPECIAL (PAVEMENT)

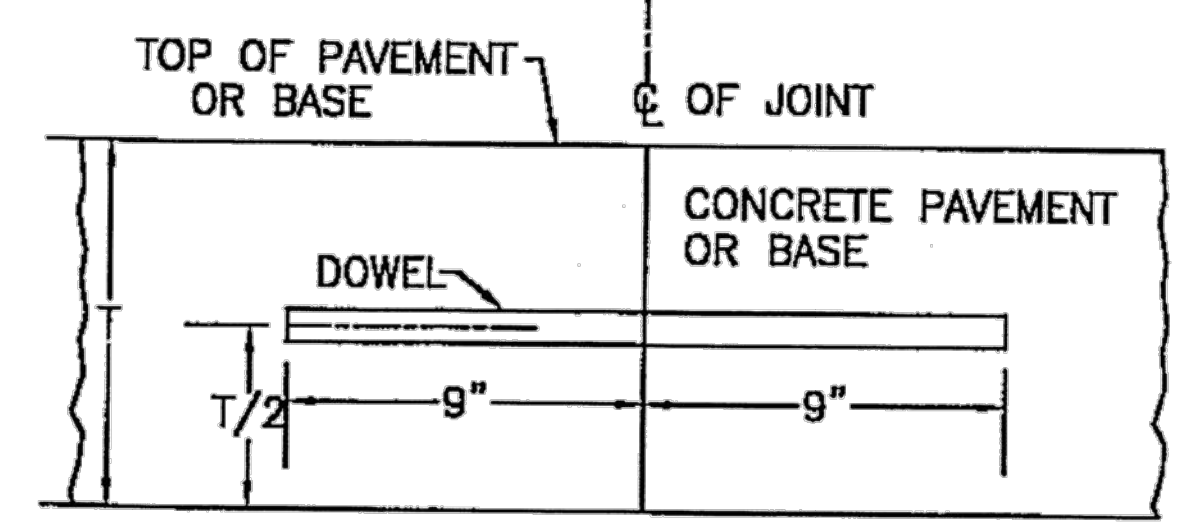


SECTION-452 PLAIN CONCRETE (PAVEMENT)



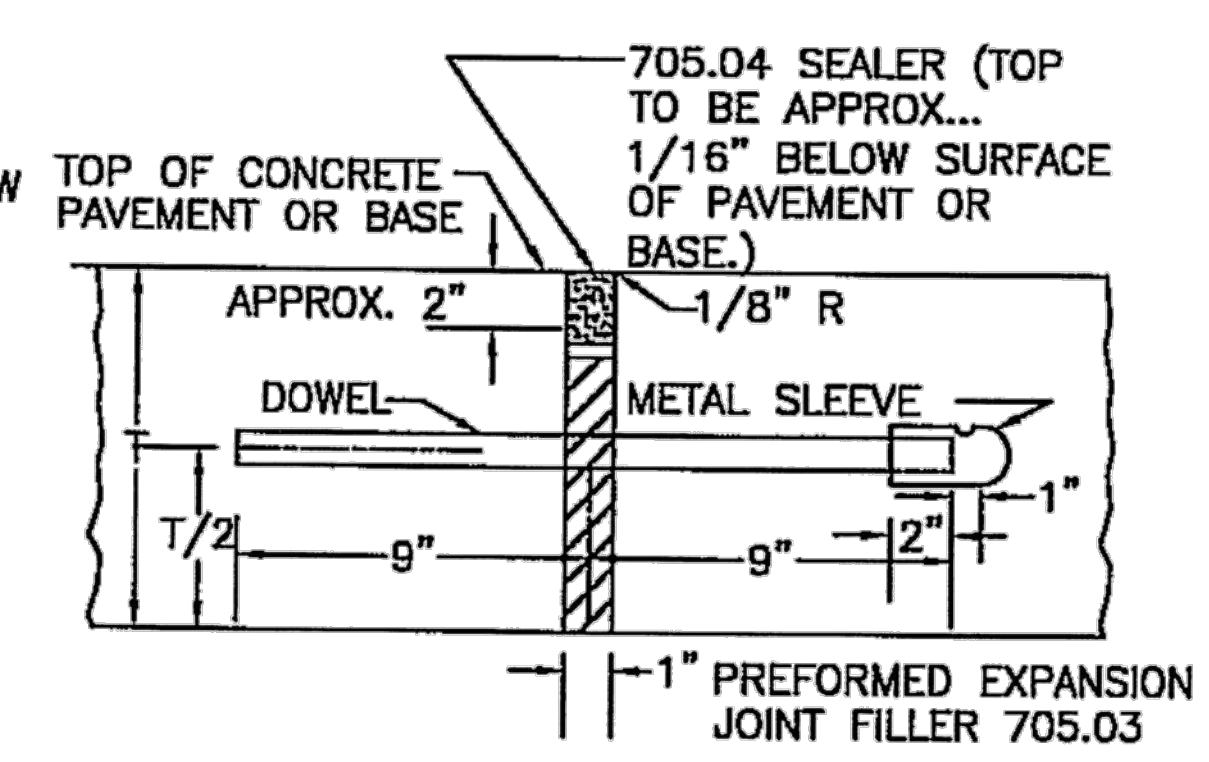
SECTION-305 AND SPECIAL (BASE)

CONSTRUCTION JOINT

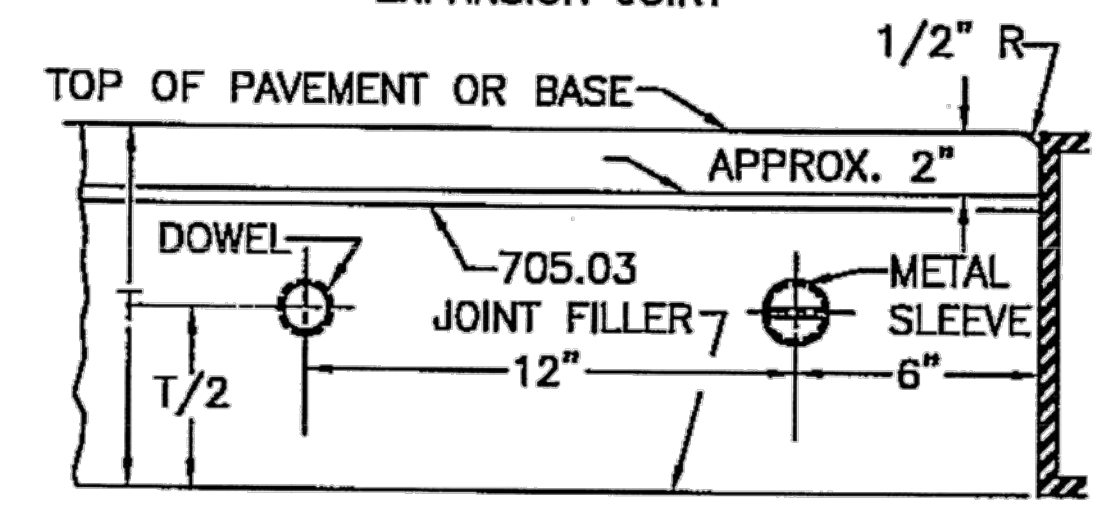


SECTION THROUGH CONSTRUCTION JOINT

EXPANSION JOINT



SECTION THROUGH EXPANSION JOINT



SIDE ELEVATION OF EXPANSION JOINT

ASSEMBLY: NOTES AND DETAILS SHOWN ON THIS DRAWING SHALL BE CONSIDERED IN CONJUNCTION WITH AND SUPPLEMENTAL TO THE PERTINENT SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE PAVEMENTS AND BASES, AND INCIDENTALS RELATED THERETO.

ALL JOINTS SHALL BE CONSTRUCTED NORMAL TO THE CENTERLINE OF THE PAVEMENT LANE UNLESS OTHERWISE DIRECTED.

WHERE DOWELS ARE SPECIFIED THEY SHALL BE ROUND, STRAIGHT STEEL BARS OF THE SIZE INDICATED IN THE FOLLOWING TABLE, AND SHALL BE EPOXY COATED ODOT 709.13. DOWELS SHALL BE SPACED AT 12" CENTERS, BEGINNING 6" FROM THE LONGITUDINAL JOINT.

BASKET SUPPORTS SHALL BE USED FOR POSITIONING OF THE DOWEL BARS AS SPECIFIED IN THE FOLLOWING TABLE, PROVIDE A FUSION-BONDED EPOXY COATED BASKET DOWEL ASSEMBLY. REPAIR UNCOATED AREAS WITH SURFACE PREPARATION AND PATCHING MATERIAL EQUIVALENT TO THE ORIGINAL EPOXY COATING.

DOWEL SIZE	
THICKNESS OF PAVEMENT	DIAMETER OF DOWEL
8" OR LESS	1"
9"	1 1/8"
10"	1 1/4"
OVER 10"	AS SHOWN ON PLANS

ASSEMBLY: EACH JOINT ASSEMBLY USED TO HOLD DOWELS IN POSITION SHALL BE CONTINUOUS BETWEEN LONGITUDINAL JOINTS OR BETWEEN LONGITUDINAL JOINT AND PAVEMENT EDGE.

THE ASSEMBLY SHALL BE FIRMLY HELD IN PROPER POSITION BY AT LEAST EIGHT 1/2" STEEL PINS DRIVEN AT AN ANGLE TO BRACE THE ASSEMBLY FROM LATERAL AND VERTICAL DISPLACEMENT DURING THE PLACING OF THE CONCRETE. THESE PINS SHALL BE AT LEAST 18" IN LENGTH. TWO OF THESE PINS SHALL BE DRIVEN OPPOSITE EACH OTHER AT EACH END OF THE ASSEMBLY AND THE REMAINING PINS SHALL BE DRIVEN IN STAGGERED POSITIONS ON EACH SIDE OF THE ASSEMBLY. IN EXCEPTIONAL CASES WHERE IT IS IMPRACTICAL TO USE THE 18" LENGTH PINS, SUCH AS WHERE HARDPAN OR ROCK IS ENCOUNTERED, THE ENGINEER MAY AUTHORIZE USE OF SHORTER PINS PROVIDED THE ASSEMBLY IS HELD FIRMLY. WHERE THE ASSEMBLY IS PLACED ON GRANULAR MATERIAL WHICH MAY ALLOW SETTLEMENT OR DISTORTION OF THE ASSEMBLY, A MINIMUM OF 6 STEEL PLATES, EACH HAVING A BEARING AREA OF APPROXIMATELY 25 SQUARE INCHES AND A CROSS-SECTION WHICH WILL NOT BEND UNDER THE IMPOSED LOAD, SHALL BE PLACED UNDER THE ASSEMBLY. ONE PLATE SHALL BE USED AT EACH OF THE FOUR END PINS. THE REMAINING PLATES SHALL BE SPACED UNIFORMLY ON EACH SIDE OF THE ASSEMBLY. THE METHOD OF STAKING AND PLACING BEARING PLATES SHALL BE APPROVED BY THE ENGINEER.

DOWEL SPACING IS SHOWN FOR PAVEMENT LANES OF EVEN FOOT WIDTHS. WHERE OTHER WIDTHS ARE SPECIFIED, STANDARD CAGES MAY BE USED WITH DOWEL SPACINGS ADJUSTED AS FOLLOWS:

THE 6" DOWEL SPACING SHALL BE MAINTAINED AT THE LONGITUDINAL JOINT. THE SPACING AT THE OUTER EDGE OF THE LANE MAY BE INCREASED UP TO 12". WHERE AN ODD WIDTH OF LANE OCCURS, A DOWEL SHALL BE PLACED 6" FROM THE OUTER EDGE OF THE LANE IF THE STANDARD CAGE WOULD PROVIDE FOR A SPACE EXCEEDING 12". SUCH A DOWEL SHALL BE HELD RIGIDLY IN PROPER POSITION BY A METHOD SATISFACTORY TO THE ENGINEER, OR A DOWEL CAGE OF GREATER LENGTH THAN REQUIRED MAY BE USED BY CUTTING THE ASSEMBLY AND SPLICING TO ATTAIN THE REQUIRED LENGTH.

THIS DRAWING IS INTENDED FOR USE WITH A UNIFORM DEPTH PAVEMENT. WHEN THE PROJECT INVOLVES THE PLACING OF VARIABLE DEPTH PAVEMENT, THE JOINT COMPONENTS SHALL BE HELD IN PLACE IN ACCORDANCE WITH THE METHOD SHOWN IN THE PLAN OR AS APPROVED BY THE ENGINEER.

EXPANSION JOINTS: EXPANSION JOINT FILLER SHALL BE PLACED AT 90° TO THE DOWELS, BOTH HORIZONTALLY AND VERTICALLY, SHALL BE HELD RIGIDLY IN POSITION BY THE USE OF A METAL CAP WHICH SHALL BE REMOVED AT SUCH A TIME IN THE FINISHING OPERATION THAT WILL ENABLE THE BEST WORKMANSHIP IN FINISHING THE JOINT TO THE DIMENSIONS SPECIFIED. JOINT FILLER SHALL BE CONTINUOUS FOR THE FULL WIDTH OF EACH LANE.

SMOOTH DOWELS SHALL BE USED, AND FREE MOVEMENT SHALL BE PROVIDED BY APPLYING A COATING OF AN OIL SUCH AS S.A.E. 140 OR OTHER APPROVED "BOND BREAKING" MATERIAL JUST PRIOR TO PLACING THE CONCRETE. ONE FREE END OF EACH DOWEL SHALL BE EQUIPPED, AFTER COATING, WITH A METAL SLEEVE APPROXIMATELY 3" LONG, DESIGNED WITH CRIMPED END AND OVERLAPPING SEAMS, FITTING CLOSELY AROUND THE DOWEL. EACH SLEEVE SHALL BE PROVIDED WITH A DEPRESSION OR INTERIOR PROJECTION TO ACT AS A STOP FOR THE DOWEL, SUFFICIENTLY DISTANT FROM THE CRIMPED END TO ALLOW 1" FOR LONGITUDINAL DOWEL MOVEMENT WITH PAVEMENT EXPANSION. IN LIEU OF THIS REQUIREMENT, ANY OTHER MEAN MAY BE USED IF APPROVED BY THE ENGINEER.

CONTRACTION JOINTS: DOWELS SHALL BE USED IN CONTRACTION JOINTS IN 451 AND SPECIAL REINFORCED CONCRETE PAVEMENT. THEY SHALL BE SMOOTH BARS, AND FREE MOVEMENT SHALL BE PROVIDED BY APPLYING A COATING OF AN OIL SUCH AS S.A.E. 140 OR OTHER "BOND-BREAKING" MATERIAL JUST PRIOR TO PLACING THE CONCRETE.

CONTRACTION JOINTS OF THE TYPE SPECIFIED SHALL BE SPACED IN ACCORDANCE WITH THE FOLLOWING TABLE:

CONTRACTION JOINT SPACING	
TYPES OF PAVEMENT OR BASE	MAXIMUM SPACING BETWEEN JOINTS
451 AND SPECIAL REINFORCED CONCRETE PAVEMENT	17'-0"
305 AND SPECIAL CONCRETE BASE	17'-0"
452 PLAIN CONCRETE PAVEMENT	17'-0"

CONSTRUCTION JOINTS: EITHER SMOOTH OR DEFORMED DOWELS SHALL BE USED IN CONSTRUCTION JOINTS IN ALL PORTLAND CEMENT CONCRETE PAVEMENT AND BASE. DOWELS SHALL BE THOROUGHLY CLEANED OF ALL OIL OR OTHER SUBSTANCE THAT WOULD BREAK THE BOND BETWEEN THE STEEL AND CONCRETE. THE JOINT SHALL BE FORMED BY USING A 2" MINIMUM THICKNESS WOOD BULKHEAD OR EQUAL, WITH OPENINGS PROVIDED FOR DOWEL BARS SPACED AT INTERVALS NOT TO EXCEED 12" AS DIRECTED. THE BULKHEAD SHALL BE SHAPED TO FIT THE TYPICAL SECTION OF THE PAVEMENT OR BASE, AND DOWELS SHALL BE HELD RIGIDLY IN POSITION DURING THE PLACING OF THE CONCRETE. THE CONCRETE SHALL BE CAREFULLY FINISHED SO AS TO PROVIDE A NEAT, TIGHT FITTING JOINT THAT WILL NOT REQUIRE SEALING.

CONSTRUCTION JOINTS IN REINFORCED CONCRETE PAVEMENT SHALL NOT BE LOCATED AT A CONTRACTION JOINT, NOR SHALL THEY BE LOCATED CLOSER THAN 10' TO ANY OTHER PARALLEL JOINT. IN PLAIN CONCRETE PAVEMENT OR BASE, THEY SHALL NOT BE LOCATED CLOSER THAN 5' TO ANOTHER PARALLEL JOINT.

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
PAVEMENT JOINTS

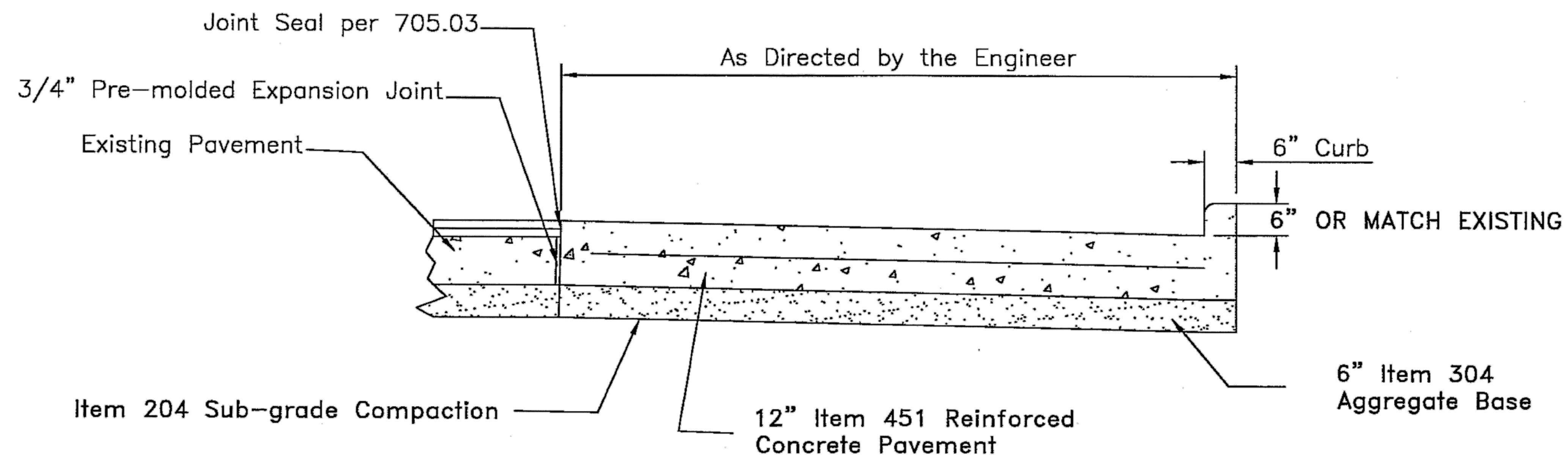
DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: *[Signature]* DATE: 7-8-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO.: CONC 1 SHEET 4/4



The work performed under this item will be paid for per square yard under item "Concrete Bus Pad" includes:

- 1 - Full depth sawcutting, removal of existing pavement including subbase.
- 2 - Excavation and embankment required to achieve proper subgrade.
- 3 - Item 304 - Aggregate Base
- 4 - Item 451 - 12" Reinforced Concrete Pavement Joint spacing 17 feet maximum and minimum 5 feet.
12 inch (W4) X 6 inch (w8.5) epoxy coated reinforcing mesh meeting ODOT 709.14
- 5 - Item 604 - Integral Concrete curb as per plan
- 6 - All incidental items to install Concrete Bus pad in-place as per detail shown herein.

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
TYPICAL CONSTRUCTION
DETAILS FOR BUS PAD
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

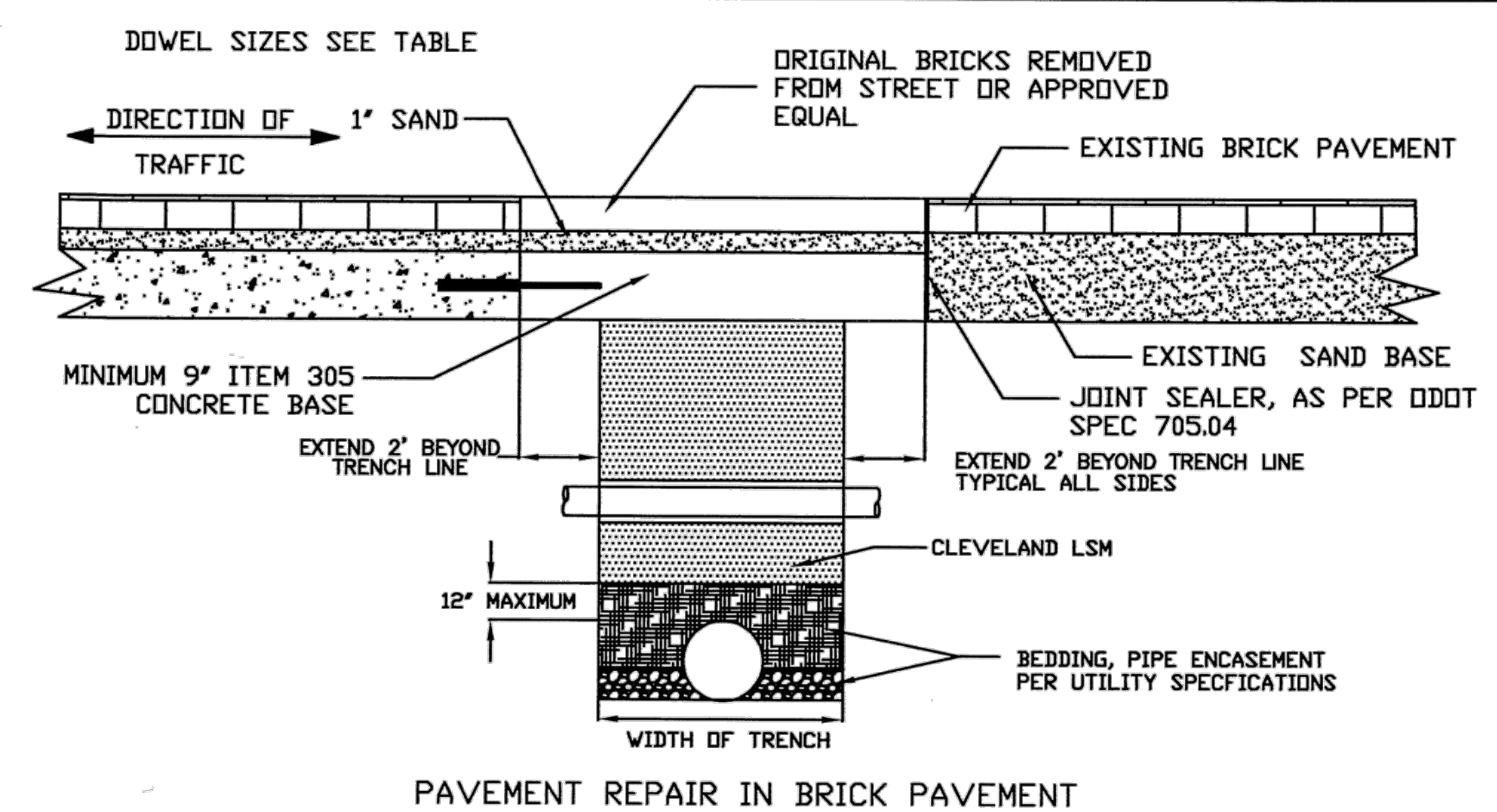
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: [Signature] DATE: 4/14/08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. : BP 1 SHEET 1/1

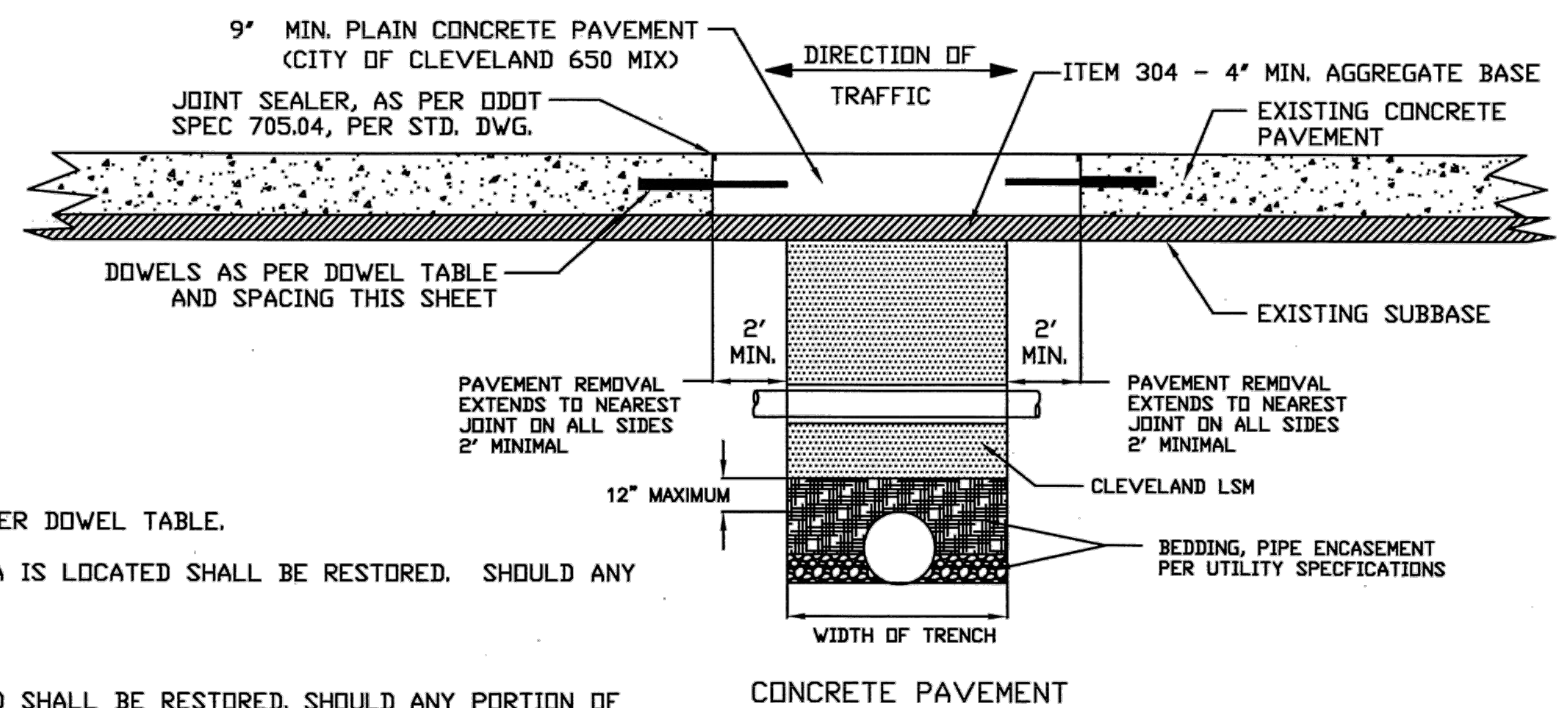
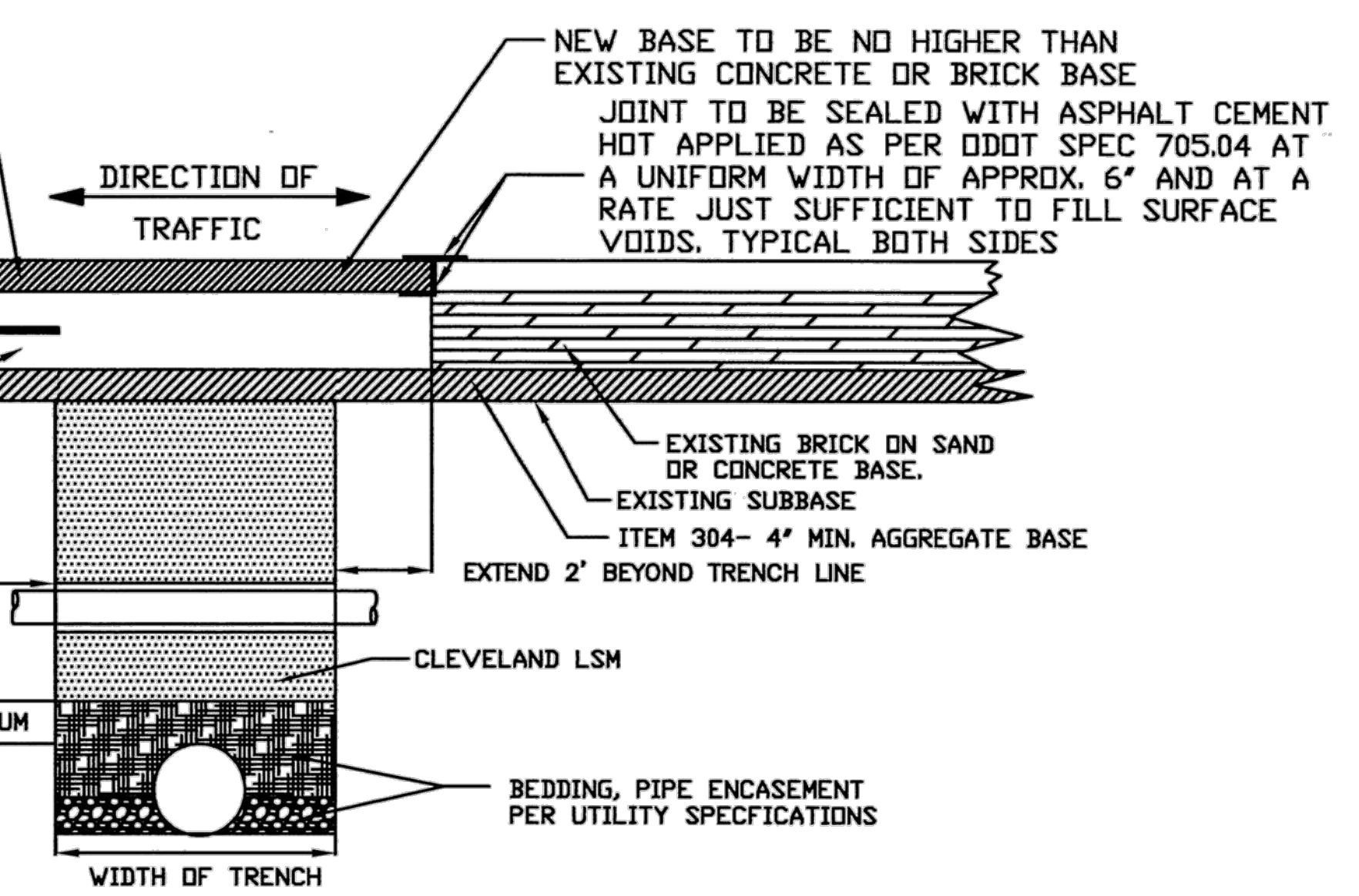
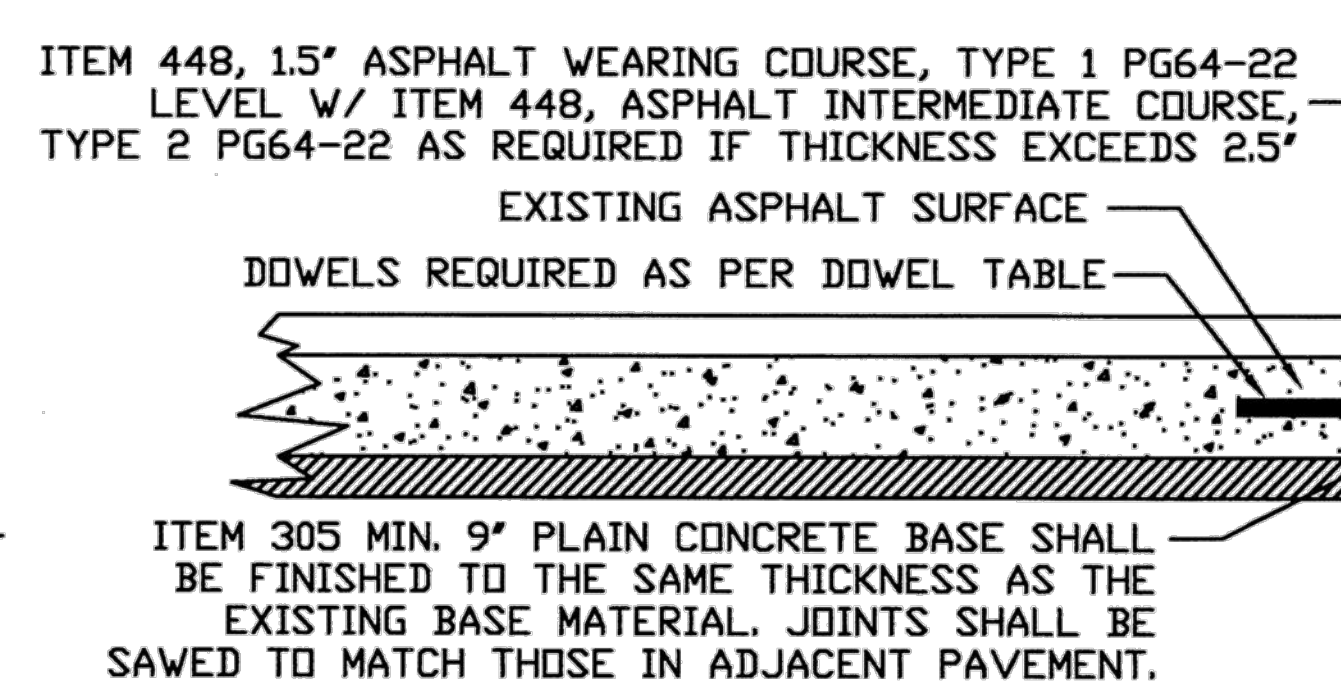
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DOWEL TABLE	
PAVEMENT THICKNESS	DIAMETER OF DOWELS
8" OR LESS	1"
9"	1 1/8"
10"	1 1/4"
OVER 10"	AS DIRECTED
DOWELS SHALL BE SPACED EVERY 30'	

NOTES:

- ALL PAVEMENT OPENINGS SHALL BE SAWED FULL DEPTH AND HAVE SMOOTH VERTICAL FACES. DOWELS SHALL BE REQUIRED, AS PER DOWEL TABLE.
- CONCRETE REPAVING SHALL BE PERFORMED IN SUCH A MANNER THAT THE ENTIRE LANE AND/OR SLAB IN WHICH THE REPAIR AREA IS LOCATED SHALL BE RESTORED. SHOULD ANY PORTION OF THE REPAIR AREA EXTEND INTO AN ADJACENT LANE AND/OR SLAB, THAT LANE OR SLAB SHALL ALSO BE REPAVED.
- EXTEND OVERCUT IN LONGITUDINAL DIRECTION TWO FEET (2') ONTO UNDISTURBED SUBGRADE.
- ASPHALT RESURFACING SHALL BE PERFORMED IN SUCH A MANNER THAT THE ENTIRE LANE IN WHICH THE REPAIR AREA IS LOCATED SHALL BE RESTORED. SHOULD ANY PORTION OF THE REPAIR AREA EXTEND INTO AN ADJACENT LANE, THAT LANE SHALL ALSO BE RESURFACED. THE RESURFACING SHALL TAKE PLACE FROM BEGINNING PROJECT TO END PROJECT (I.E. WORK LIMITS). FOR PAVEMENTS WITH A WIDTH OF 40' OR LESS A LANE SHALL BE CONSIDERED 1/2 THE PAVEMENT WIDTH.
- BRICKS REMOVED FROM A REPAIR SHALL BE STORED IN A SAFE PLACE BY THE CONTRACTOR FOR REUSE. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING ANY BRICKS THAT ARE STOLEN OR DAMAGED AT NO COST TO THE CITY.
- ALL NEW BRICKS SUPPLIED BY THE CONTRACTOR MUST FIRST BE APPROVED BY THE CITY BEFORE THEY ARE USED.
- SAWCUTTING: ALL PARTIAL BRICKS SHALL BE SAWCUT. FURTHER, NO BRICK WILL BE PERMITTED TO BE CUT, FOR REPLACEMENT, TO A LENGTH LESS THAN ONE-HALF ITS ORIGINAL LENGTH. THIS MAY REQUIRE SAWCUTTING OF ADJACENT UNDISTURBED BRICKS).
- THE PERIMETER FACES OF THE EXISTING BASE MATERIAL SHALL BE CUT BACK TO AS NEARLY VERTICAL ORIENTATION AS POSSIBLE. IF SHEARING OF THE ADJACENT BASE RESULTS, THE CONTRACTOR SHALL REMOVE ADDITIONAL BRICK AND BASE AS SHOWN IN THE DETAIL.
- THE MAXIMUM WIDTH OF A BRICK MORTAR JOINT SHALL BE 1/2" THIS RESTRICTION WILL ALSO APPLY TO THE PERIMETER OF A REPAIR AREA, WHERE THE ROWS MAY NOT BE PARALLEL TO ONE ANOTHER.
- MORTARING OF JOINTS: ALL JOINTS SHALL BE MORTARED WITH A 50/50 MIXTURE BY VOLUME OF SAND /CEMENT, TO PROVIDE FOR A FLUSH FINISH. THIS MAY REQUIRE MORE THAN ONE APPLICATION; FURTHER MECHANICAL VIBRATION WILL BE REQUIRED FOR COMPACTION.
- ALL BACKFILL MATERIALS USED UNDER ANY PAVEMENTS SHALL BE CLEVELAND LSM PLACED FROM THE INITIAL ONE FOOT OVER THE TOP OF UTILITIES, TO THE SUBGRADE.
- TO PREVENT FLOTATION AND ENTRY OF FLOWABLE FILL INTO ANY OTHER AREASCOVER ALL JOINTS IN CLAY PIPE IN THE TRENCH AREA WITH POLYETHYLENE MATERIAL BEFORE POURING FLOWABLE FILL. REPAIR TECHNIQUES SHALL BE IN ACCORDANCE WITH THE UTILITY COMPANY'S STANDARD REPAIR PROCEDURES.



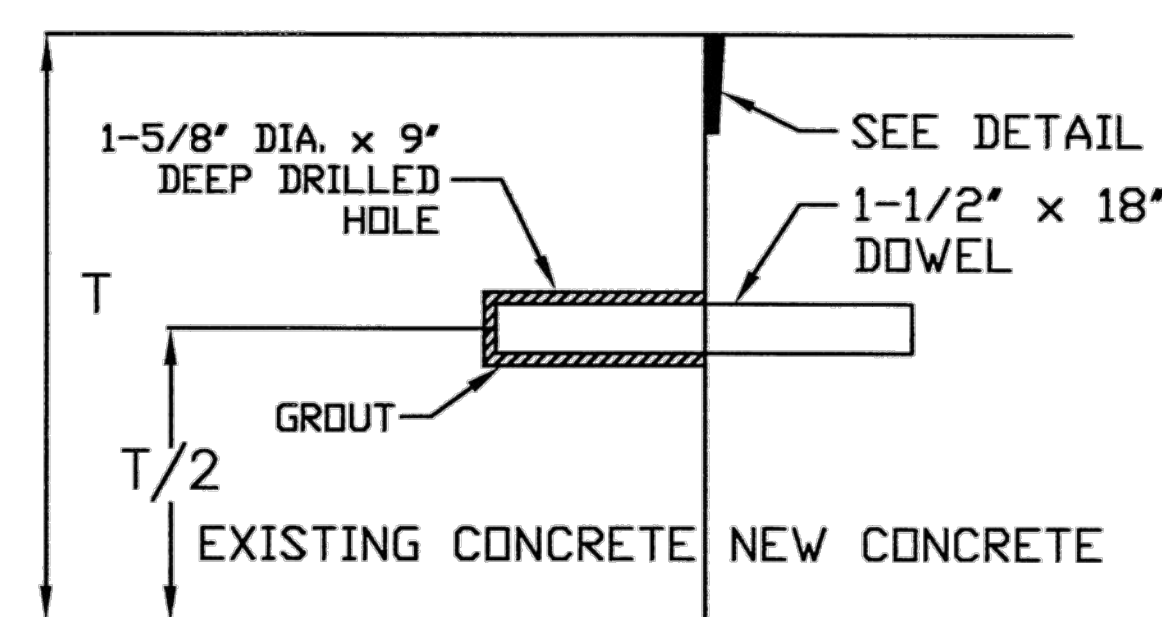
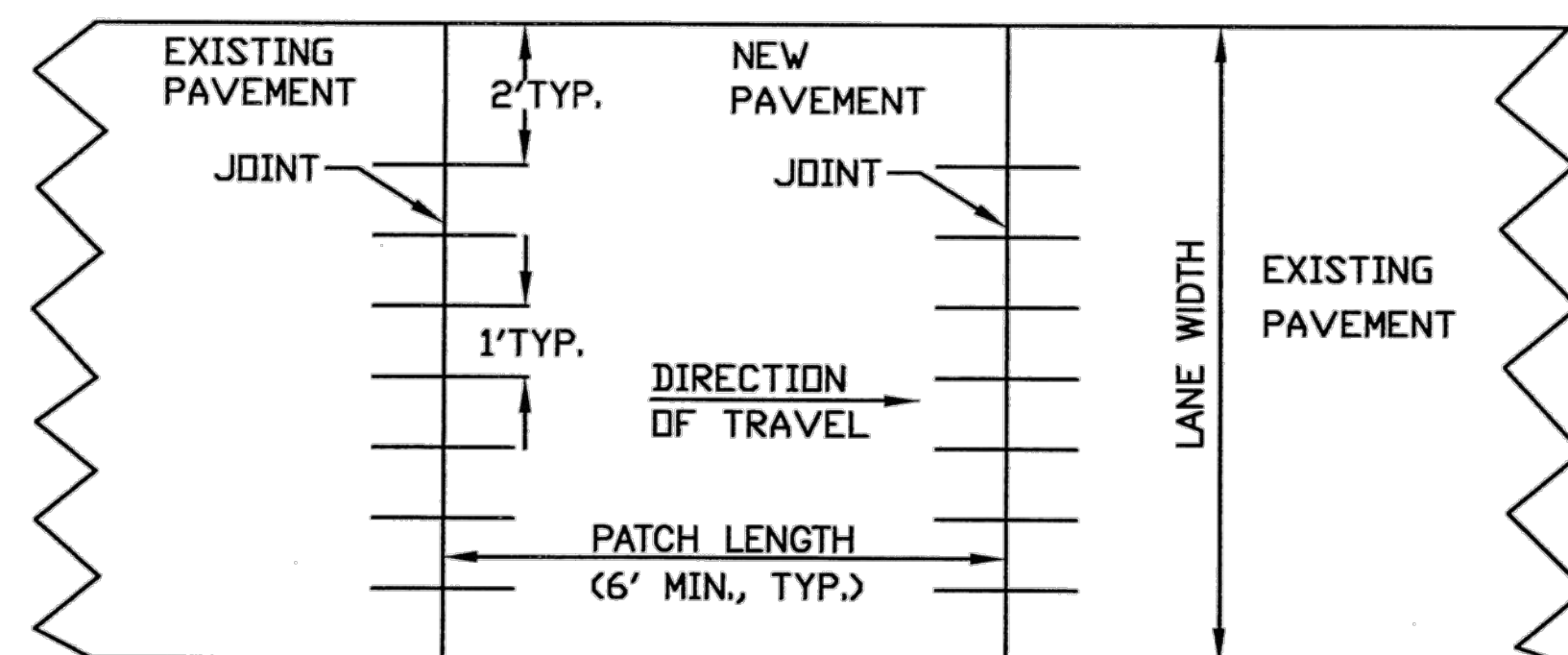
REVISED 8/3/09

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
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NOT TO SCALE

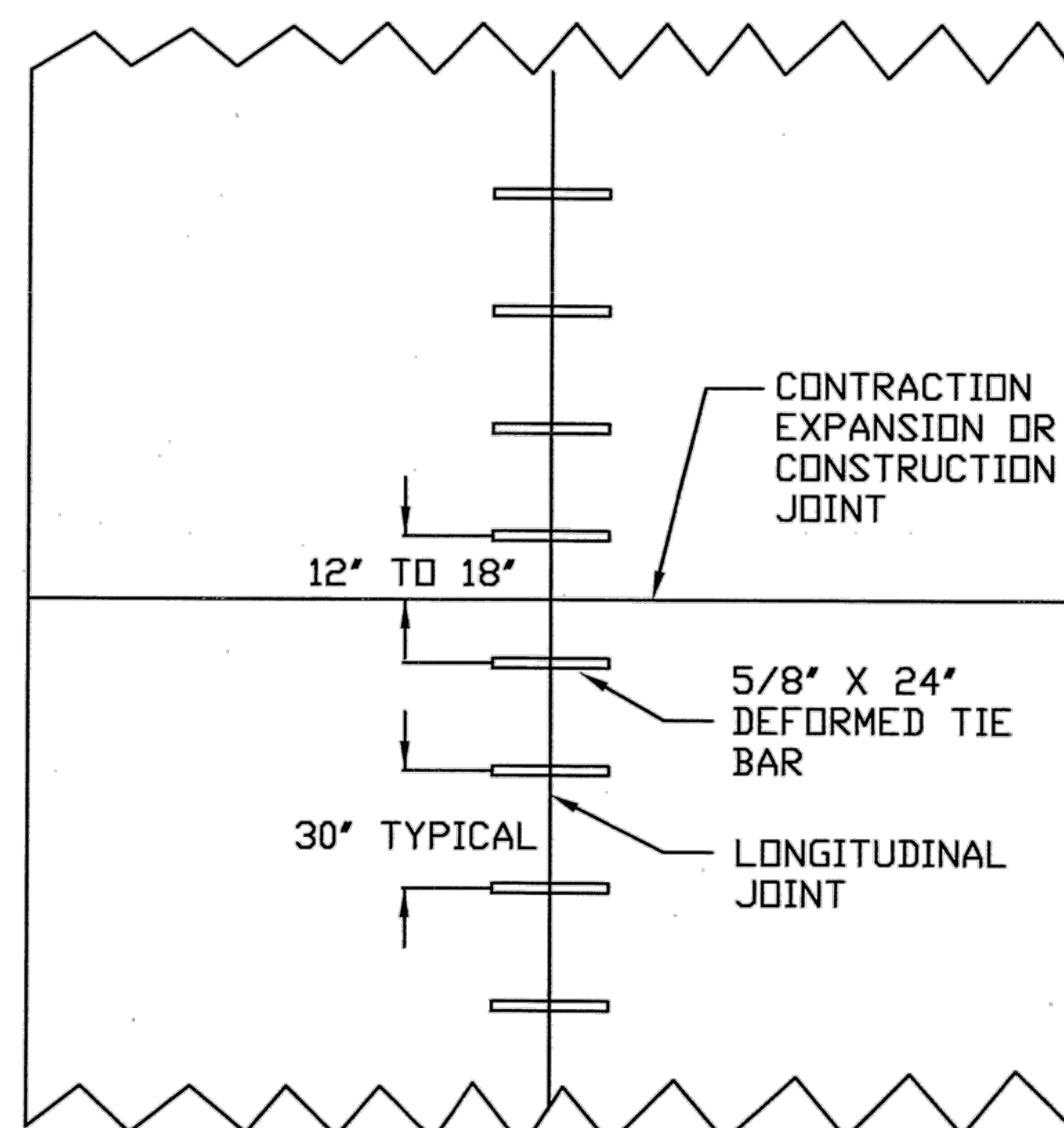
DRAWN BY: R. PIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: [Signature] DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

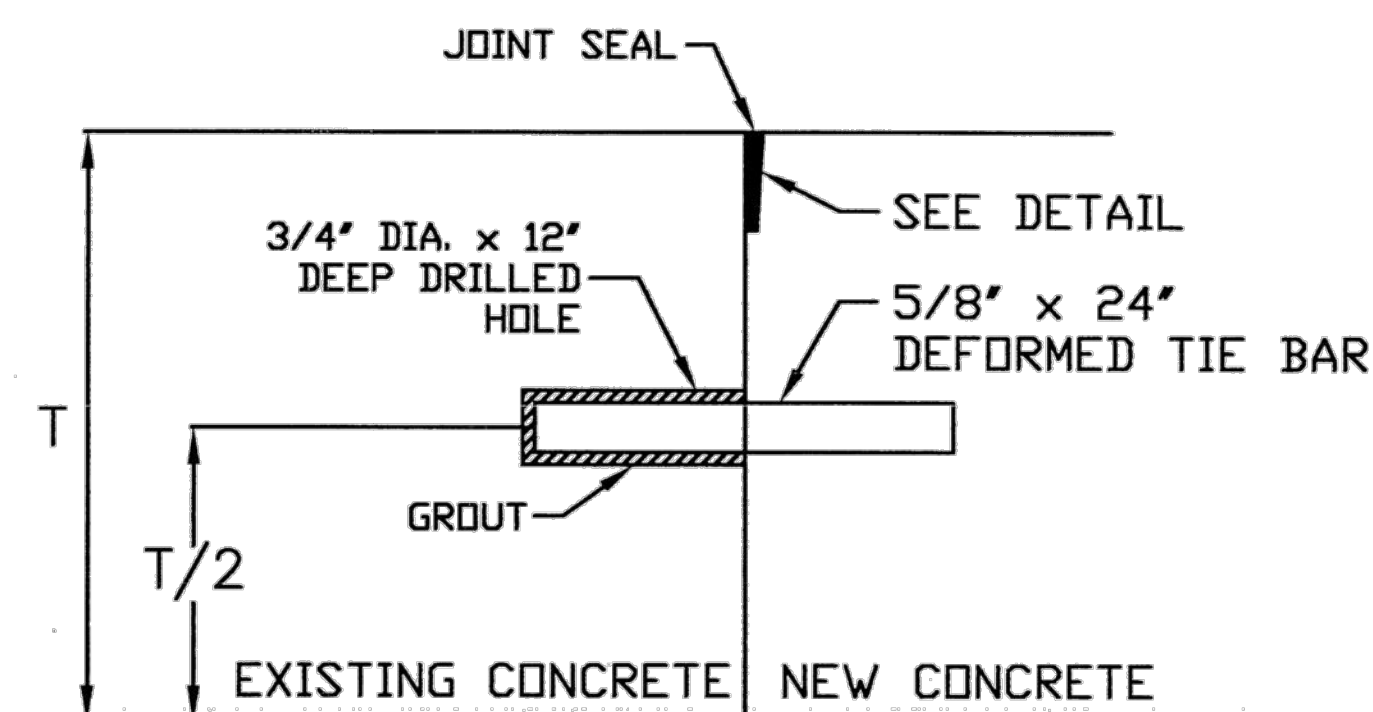
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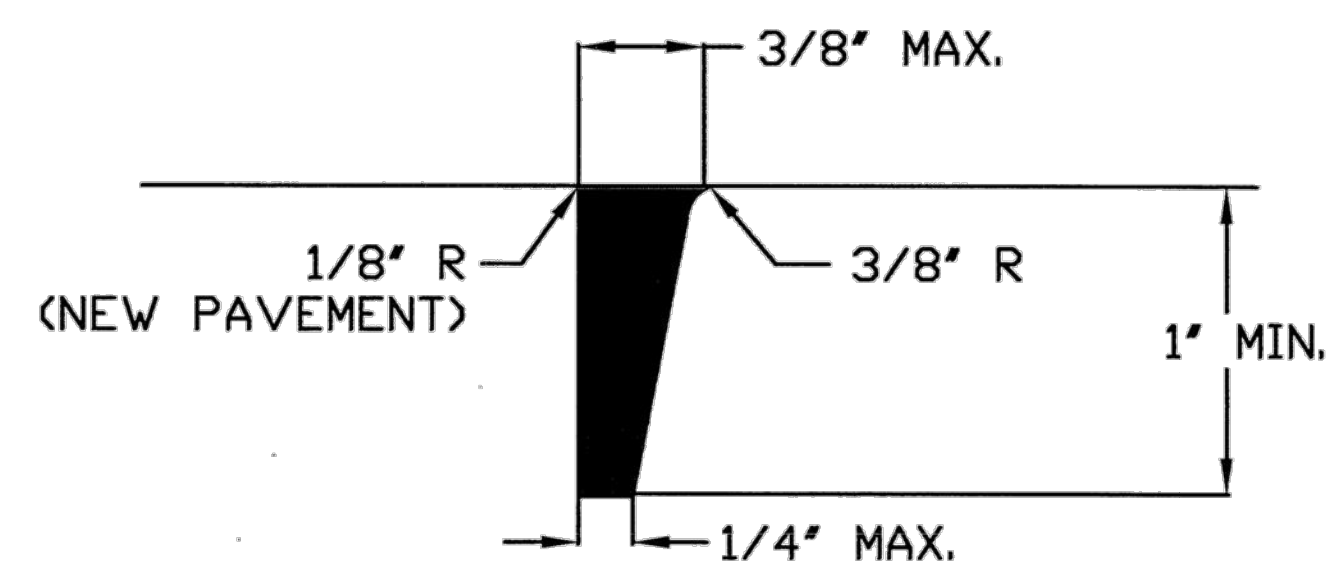
SECTION THROUGH TRANSVERSE JOINT



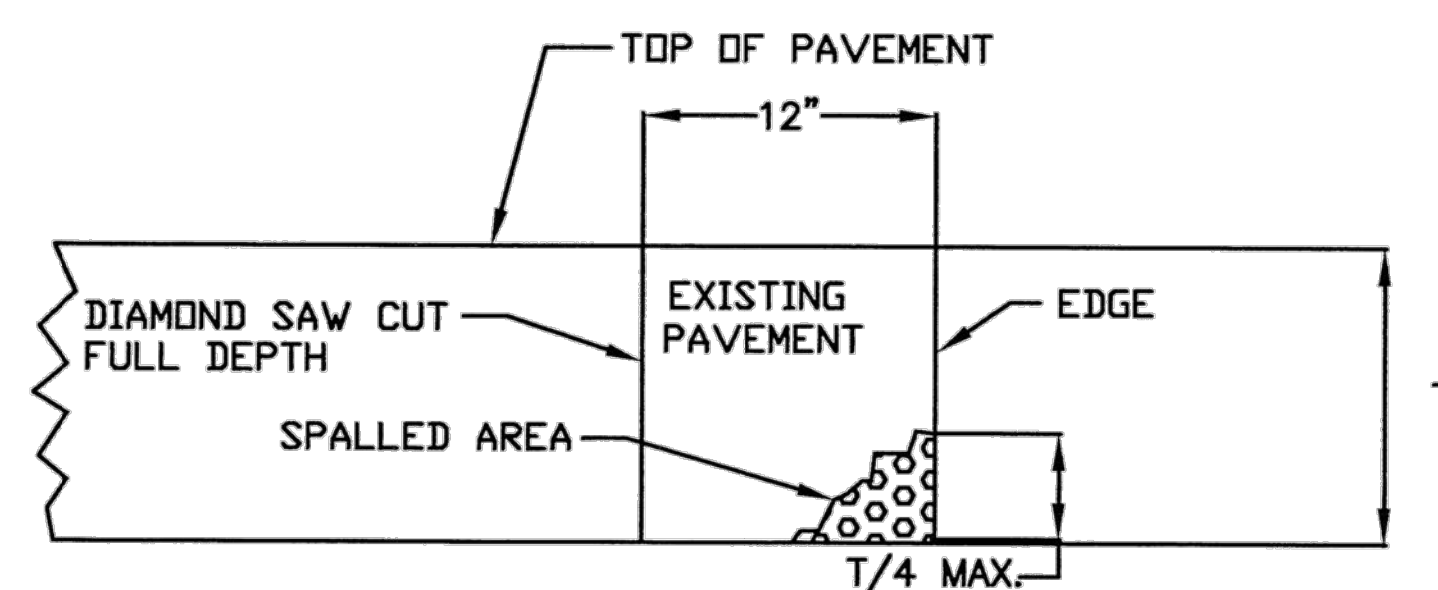
TIE BAR SPACING



TYPE D (DRILLED TIED LONGITUDINAL) JOINT



GROOVE & SEAL DETAIL



ADDITIONAL PAVEMENT REMOVAL

NOTES:

1. ALL JOINTS SHALL BE CONSTRUCTED NORMAL TO THE CENTERLINE OF THE PAVEMENT LANE.
2. ALL DOWEL HOLES SHALL BE DRILLED BY A MECHANICAL DEVICE THAT WILL ALLOW INDEPENDENT ADJUSTMENT OF ALL DRILL SHAFTS IN THE HORIZONTAL AND VERTICAL DIRECTION. THE DEVICE SHALL BE CAPABLE OF DRILLING A MINIMUM OF THREE HOLES AT ONE TIME.
3. ALL SMOOTH DOWELS SHALL BE COATED WITH A THIN LAYER OF OIL OR OTHER "BOND-BREAKING" MATERIAL AFTER THEY HAVE BEEN INSTALLED IN THE EXISTING PAVEMENT AND JUST PRIOR TO PLACING THE PATCH. ALL DOWELS SHALL BE PLACED PARALLEL TO THE PAVEMENT SURFACE AND THE CENTERLINE OF THE PAVEMENT LANE.
4. ADDITIONAL PAVEMENT REMOVAL: IF AFTER THE REMOVAL OF THE PAVEMENT FROM THE AREA TO BE REPAIRED, THE FACE OF THE REMAINING PAVEMENT IS SPALLED OF DETERIORATED FOR A HEIGHT GREATER THAN ONE-FOURTH (1/4) THE THICKNESS OF THE RIGID PAVEMENT, ADDITIONAL REMOVAL SHALL BE MADE AS SHOWN.
5. LONGITUDINAL JOINT: FOR PATCHES 10 FEET OR GREATER IN LENGTH THE LONGITUDINAL JOINT SHALL BE CONSTRUCTED AS PER STANDARD DRAWING. SPACING OF THE TIE BARS SHALL BE NO MORE THAN 30" NOR LESS THAN 24".
6. TYPE D (DRILLED TIED LONGITUDINAL) JOINT: TYPE D JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ODOT SPEC. 255.05. GROUT SHALL MEET THE REQUIREMENTS OF ODOT SPEC. 255.02. THE USE OF 5/8" EXPANSION ANCHORS, FF-S-325, GROUP VIII, TYPE I OF GROUP II, TYPE 4, CLASS I MAY BE USED IN LIEU OF THE 5/8" x 24" DEFORMED TIE BAR AND SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. THE USE OF SELF DRILLING EXPANSION SHIELD ANCHORS, FF-S-325, GROUP III, TYPE I (A) AND (C) SHALL NOT BE PERMITTED.
7. SEALING JOINTS: SAWED OR HAND FORMED JOINTS SHALL BE SEALED WITH ODOT 705.04 JOINT SEALER.

REVISED 8/3/09

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STREET OPENING REPAIR
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: *[Signature]* DATE: 4/14/08

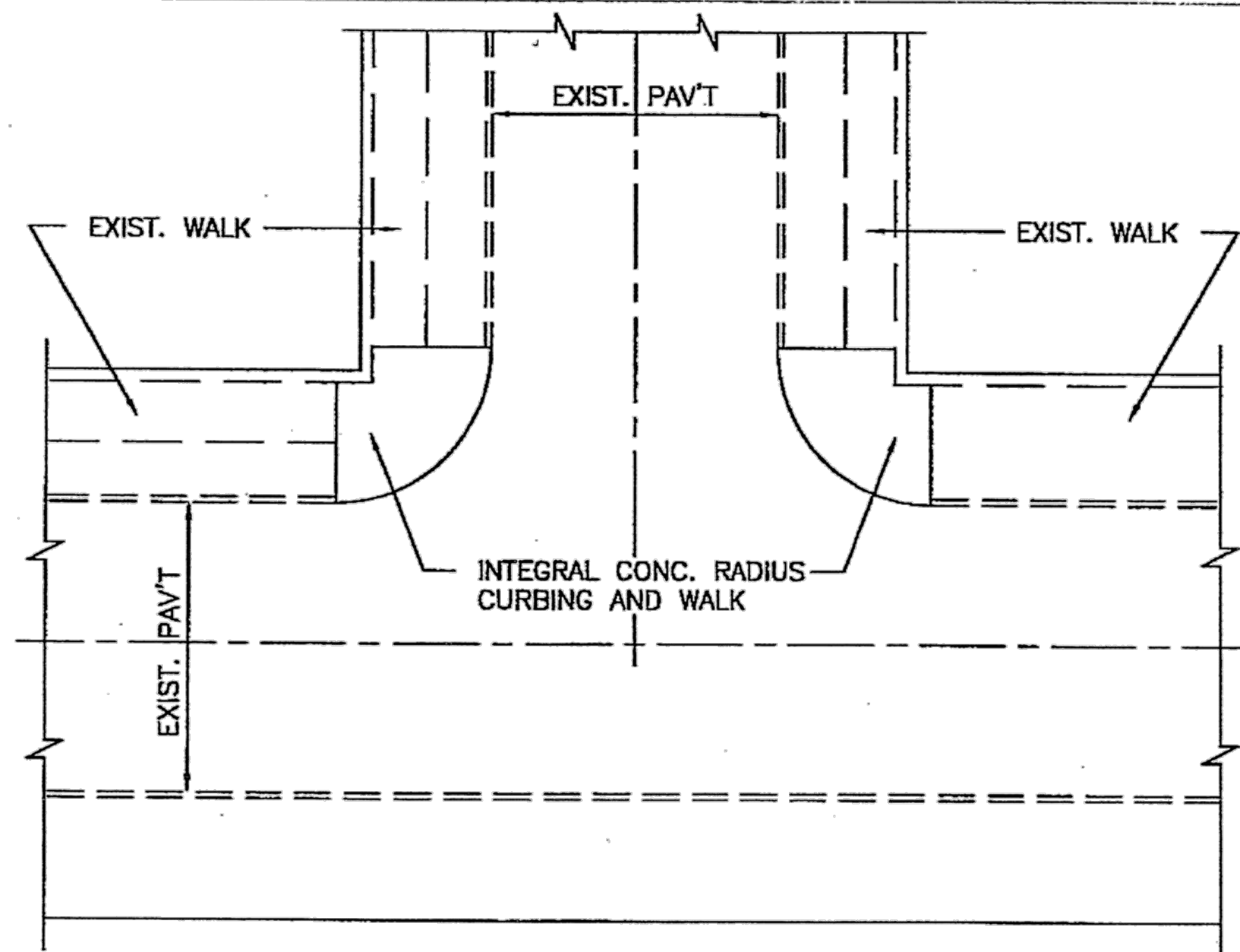
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO.: PR 1

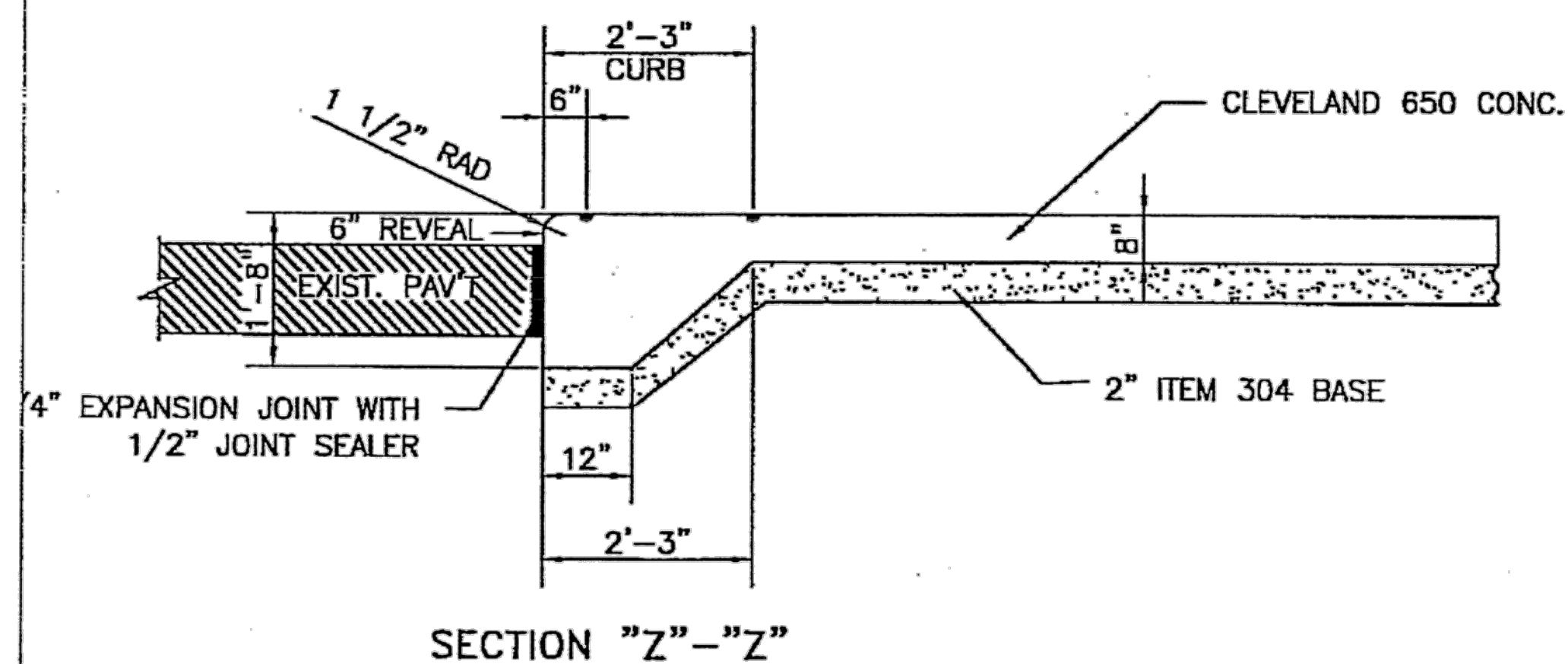
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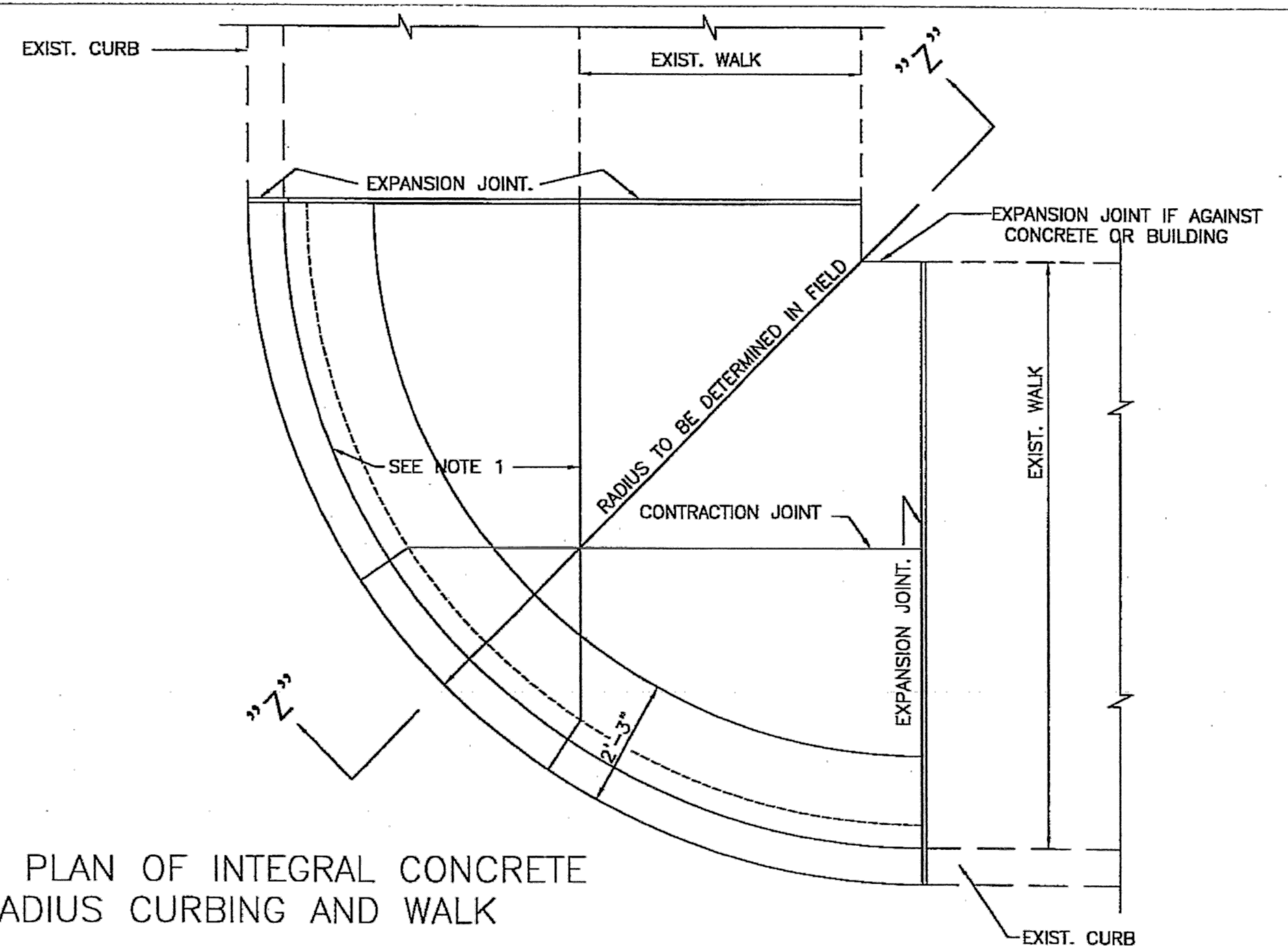
TYPICAL PLAN SHOWING INTEGRAL
CONCRETE RADIUS CURBING AND WALK



DETAIL PLAN OF INTEGRAL CONCRETE
RADIUS CURBING AND WALK

NOTES

- 1- THE WALK SURFACE SHALL BE CUT INTO SLABS NOT LONGER THAN SIX FEET ON ANY ONE SIDE BY JOINTING IMMEDIATELY BEFORE FINISHING. JOINTS SHALL BE FORMED 6" FROM THE EDGE OF ANY THICKENED SECTION. THESE JOINTS ARE TO BE 1/4" DEEP WITH EDGES ROUNDED TO A 1/4" RADIUS.
- 2- NUMBER OF RAMPS (1 OR 2) IS DEPENDENT ON FIELD CONDITIONS AND NUMBER OF REQUIRED PEDESTRIAN CROSSINGS.
- 3- ALL REQUIRED HANDICAP RAMPS, LAYOUT, AND CONCRETE SHALL BE INCLUDED IN THE PER SQ. FT. OR LUMP SUM BID ITEM FOR:
"INTEGRAL RADIUS CURBING AND RAMP WITH STAMPED TRUNCATED DOMES"
OR
"INTEGRAL RADIUS CURBING AND RAMP WITH ARMOR TILES" AS INDICATED IN THE SCHEDULE OF ITEMS.



CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
DETAIL PLAN FOR INTEGRAL CONCRETE RADIUS CURBING &
WALK
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

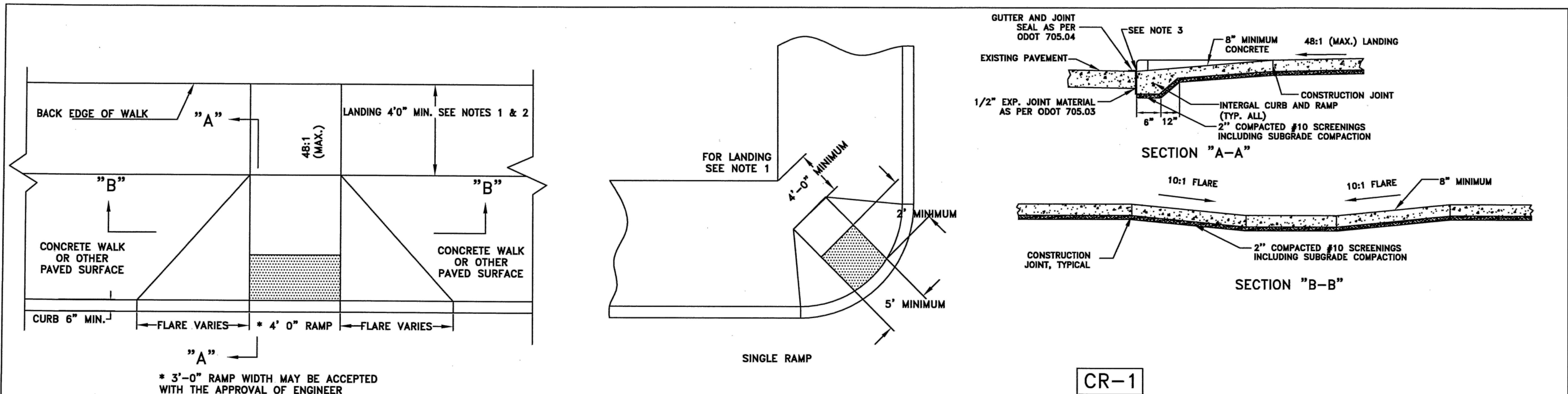
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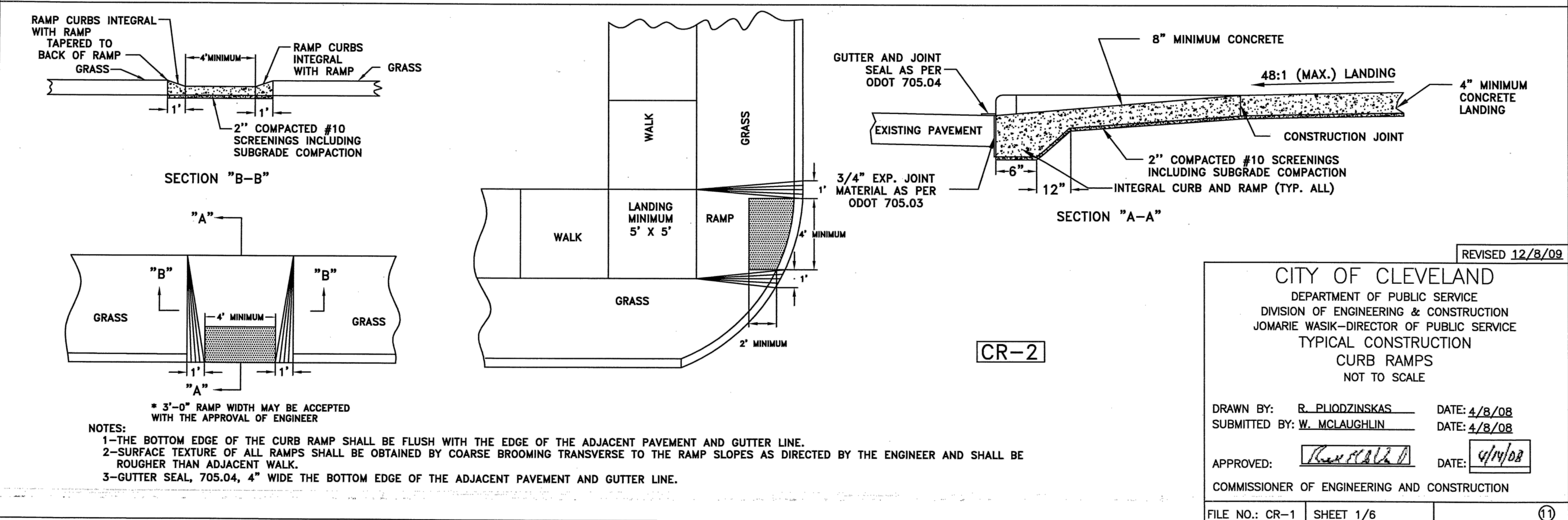
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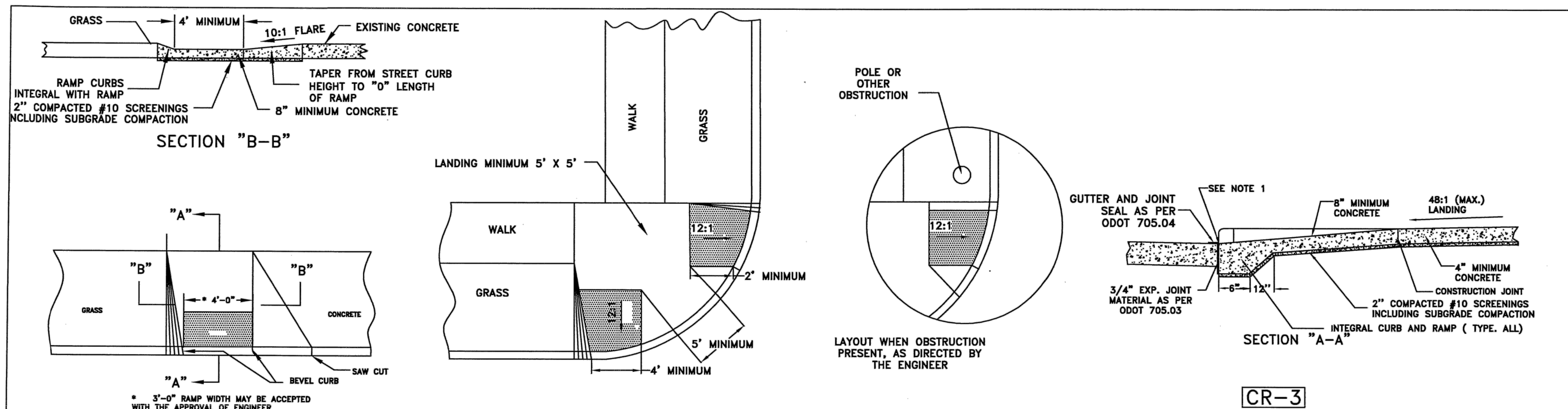
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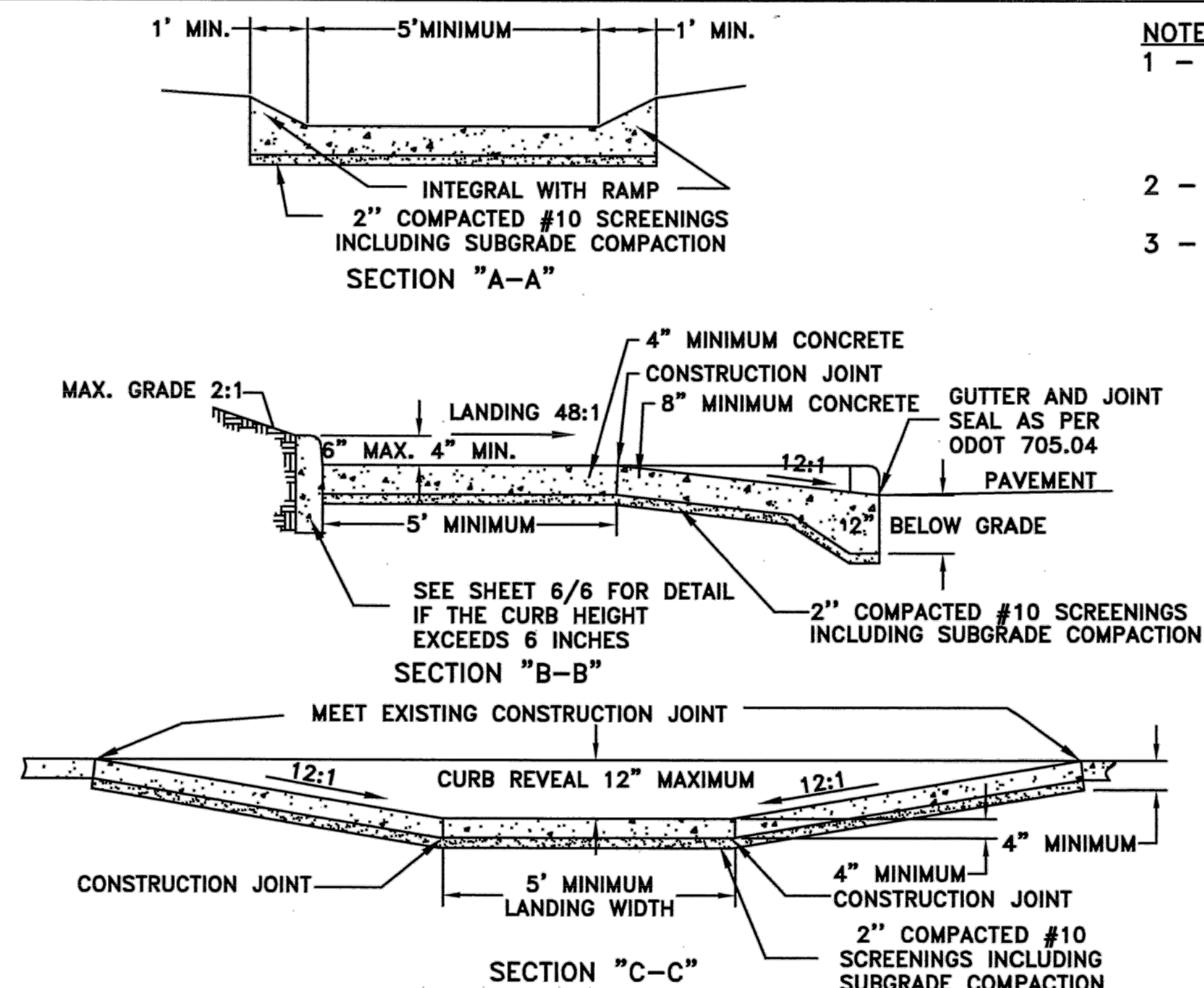
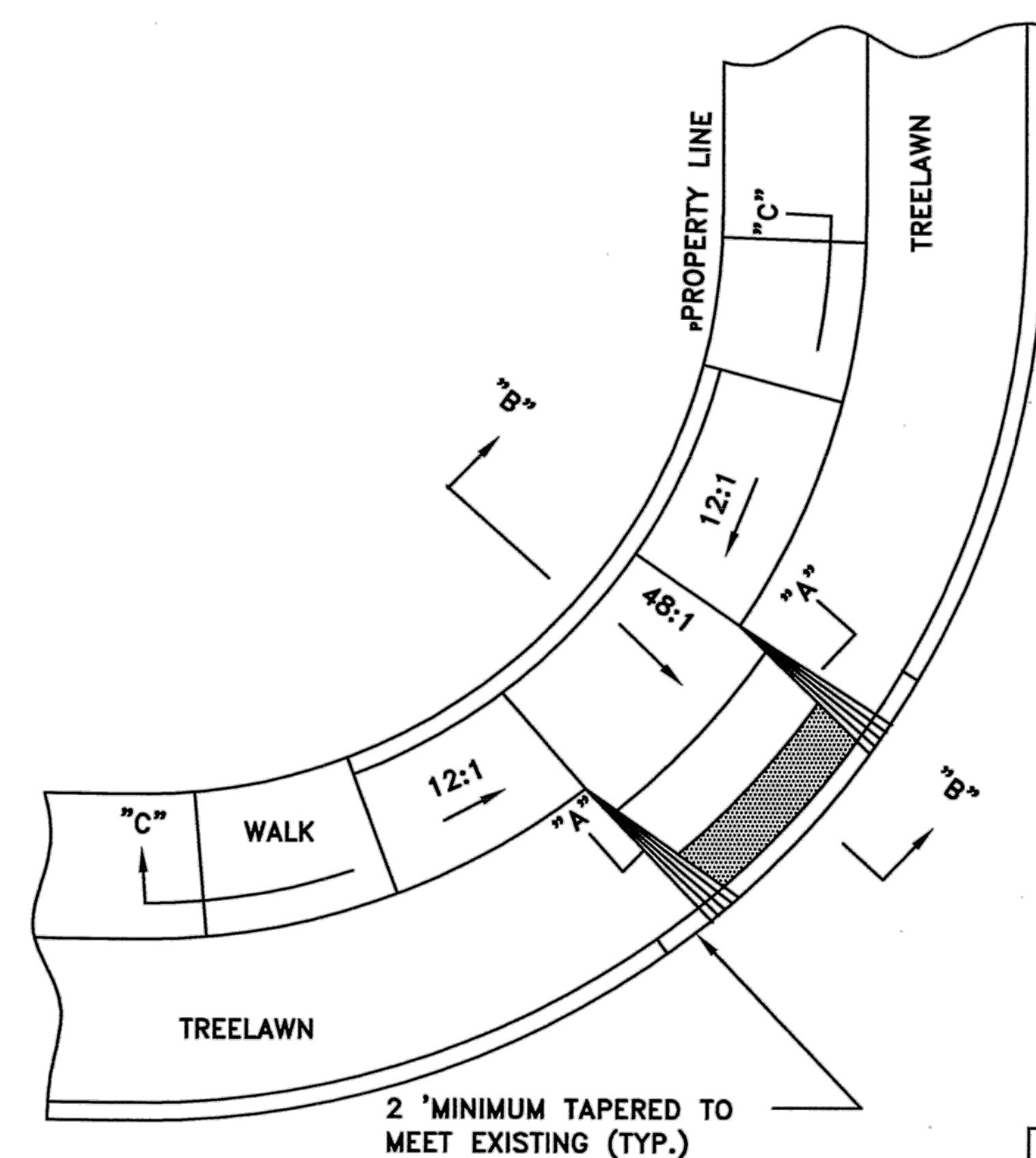


- NOTES:
- 1) MAY BE REDUCED TO 3'-0" IN EXISTING SIDEWALK IF THE LANDING IS CONSTRAINED ALONG THE BACK EDGE.
 - 2) WHERE THE LANDING IS LESS THAN 4'-0", THE RAMP FLARE SHALL BE INCREASED TO 12:1.
 - 3) GUTTER SEAL, 705.04, 4" WIDE THE BOTTOM EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.
 - 4) SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.





- NOTES:**
- 1-THE BOTTOM EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.
 - 2-SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.
 - 3-BARRIER CURB INSTALLATION ONLY WHEN ADJACENT OBSTACLE PRESENT AND AS DIRECTED BY THE ENGINEER



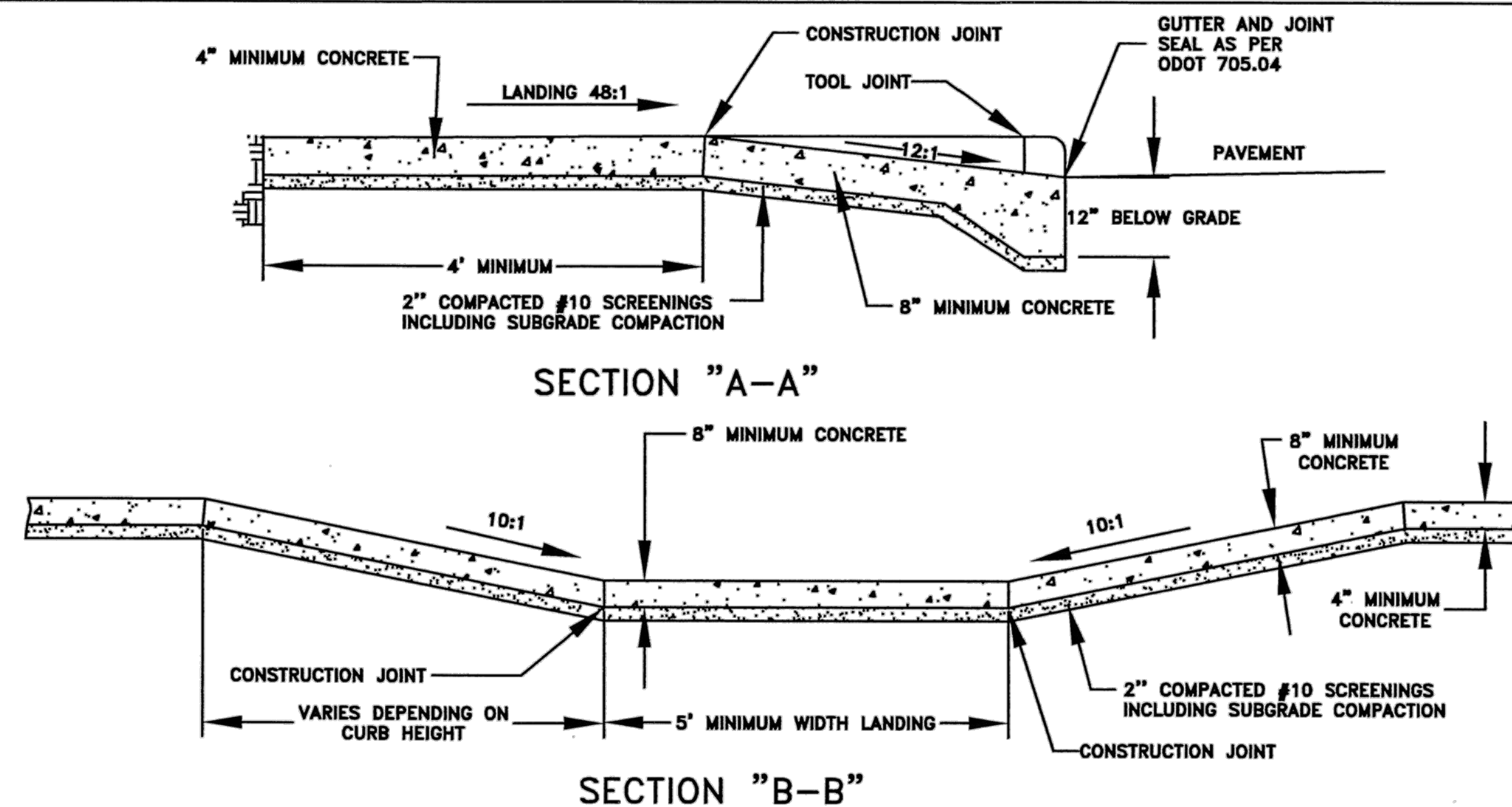
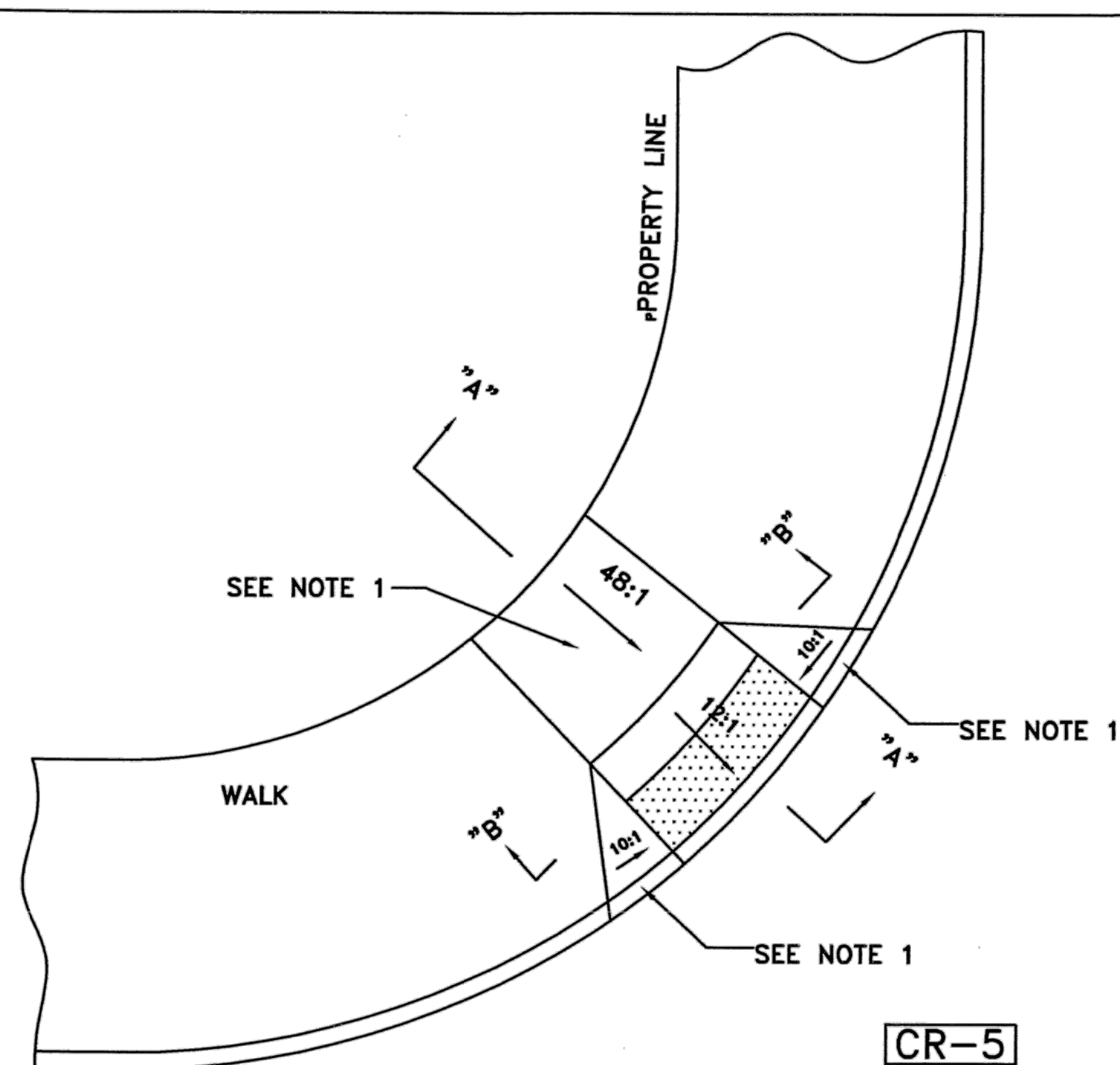
- NOTES:**
- 1 - WHERE A ROLLED CURB EXCEEDS SIX INCHES ABOVE THE WALK, THE CONTRACTOR SHALL INSTALL TYPE "6" CURB (6" X 18"). ROLLED CURB SHALL BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.
 - 2 - THE BOTTOM EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.
 - 3 - SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.

REVISED 12/8/09

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
TYPICAL CONSTRUCTION
CURB RAMPS
NOT TO SCALE

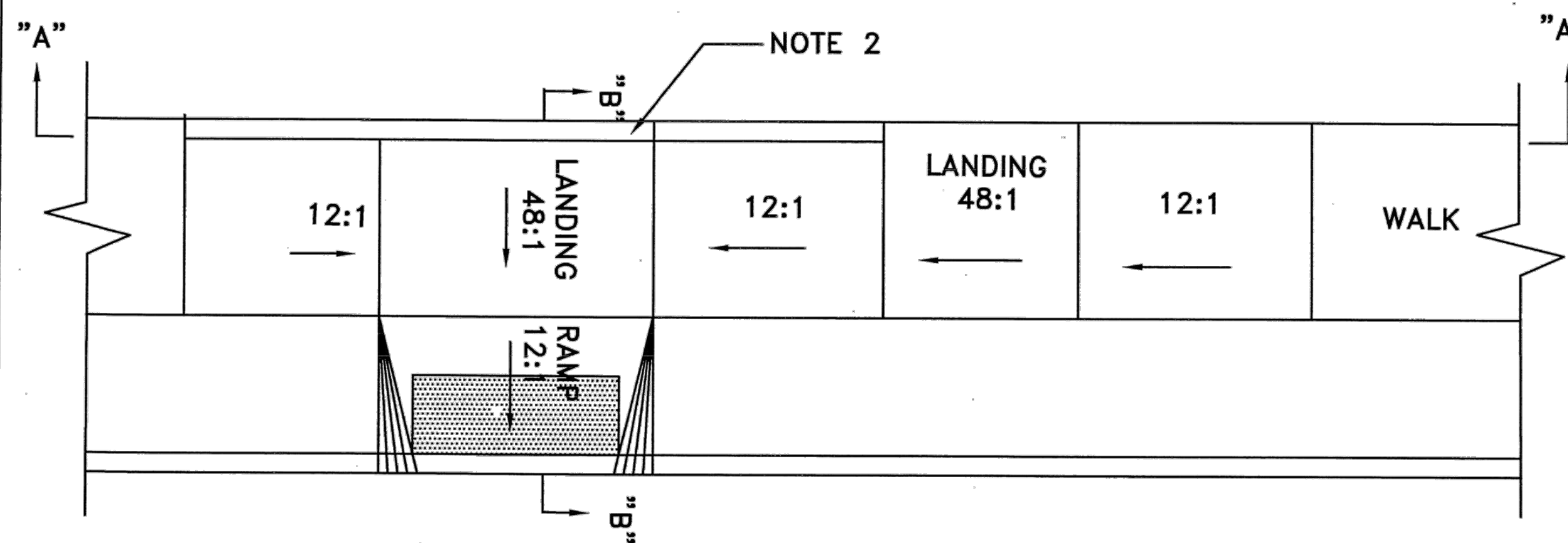
DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: [Signature] DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

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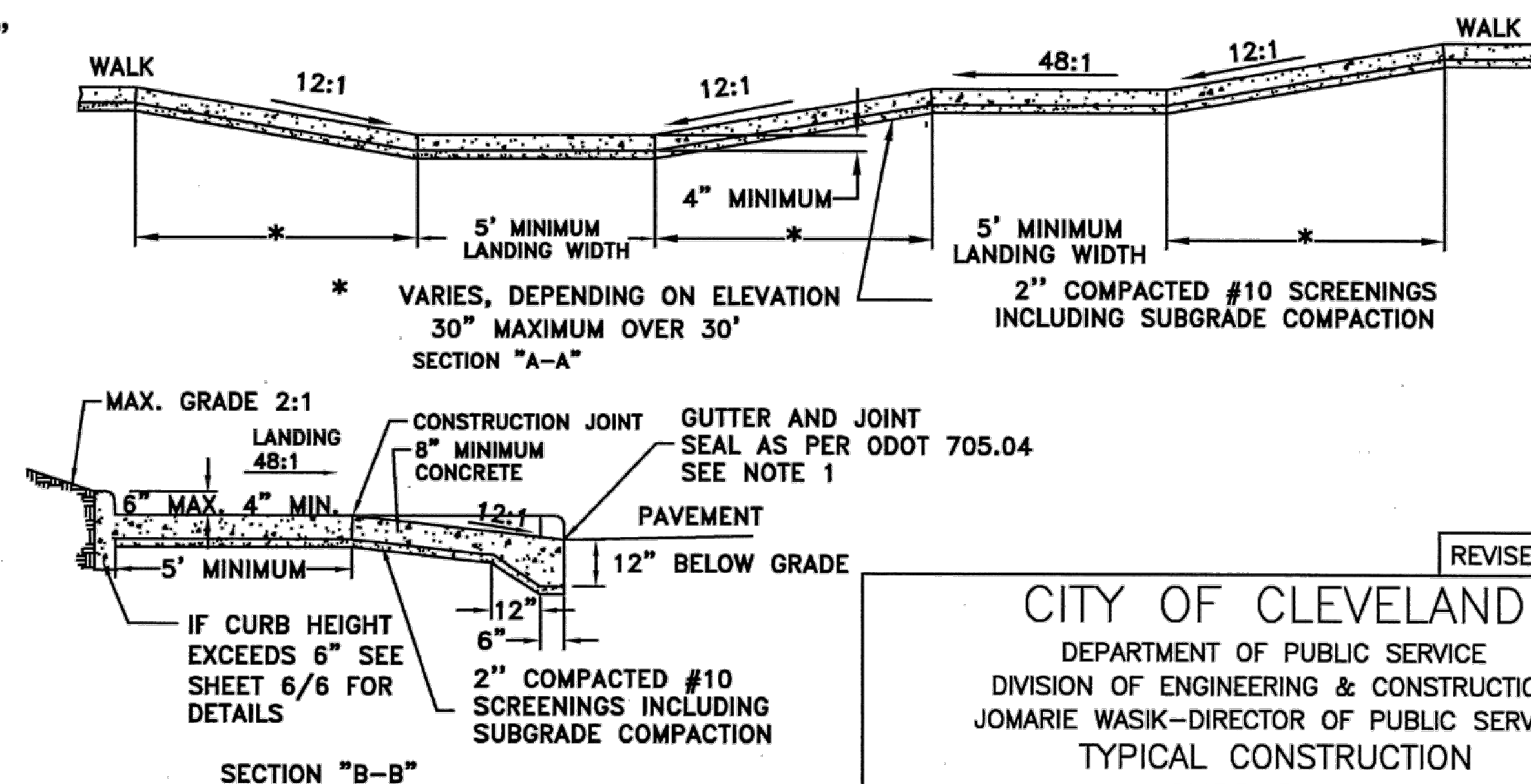
NOTES:

- 1 - WHERE THE LANDING IS LESS THAN 4'-0" THE RAMP FLARE SHALL BE INCREASED TO 12:1.
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- 3 - THE BOTTOM EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT OR GUTTER LINE.
- 4 - GUTTER SEAL, 705.04, 6" WIDE THE BOTTOM EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.



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REVISED 12/8/09

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
TYPICAL CONSTRUCTION
CURB RAMPS
NOT TO SCALE

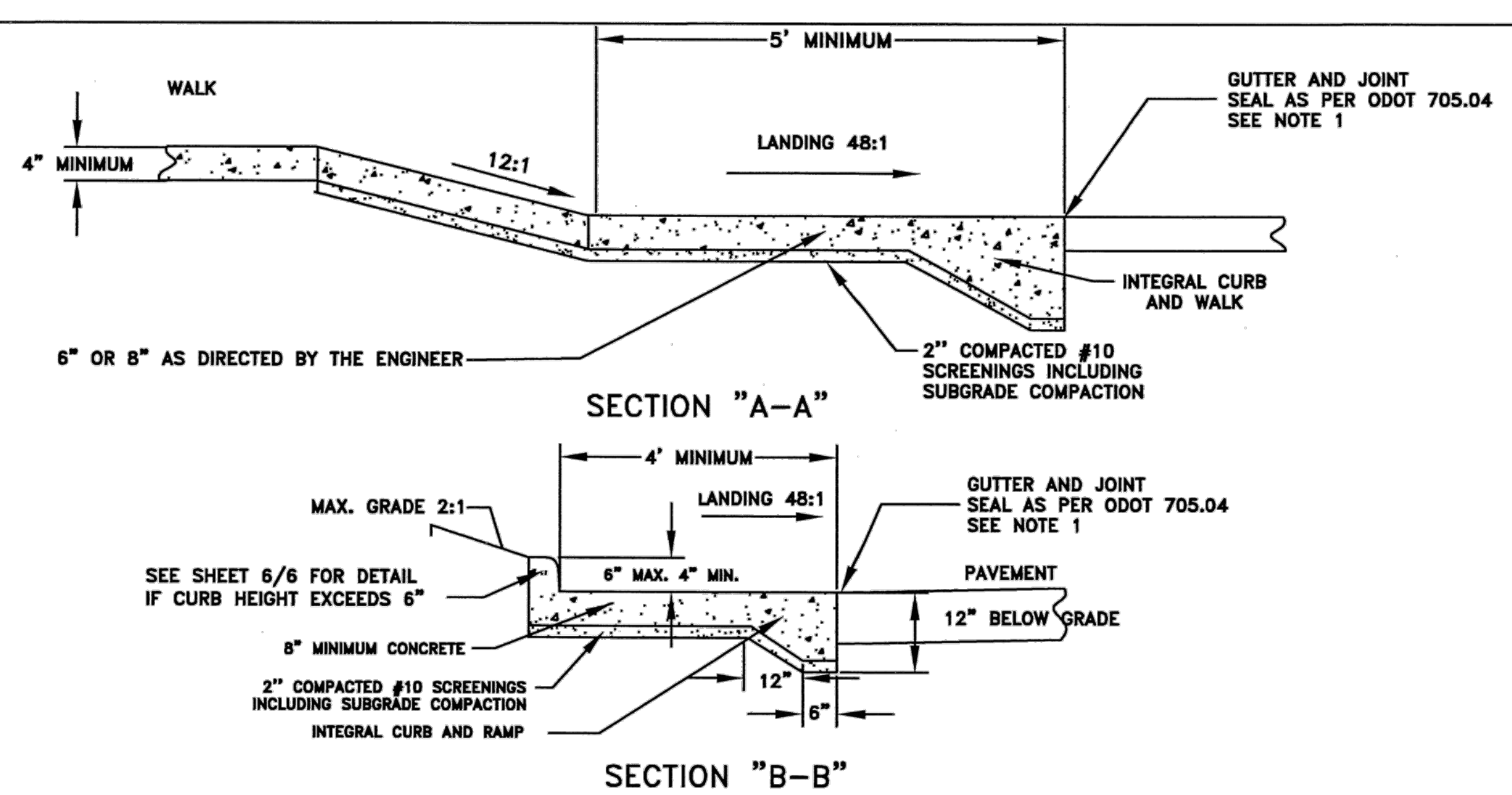
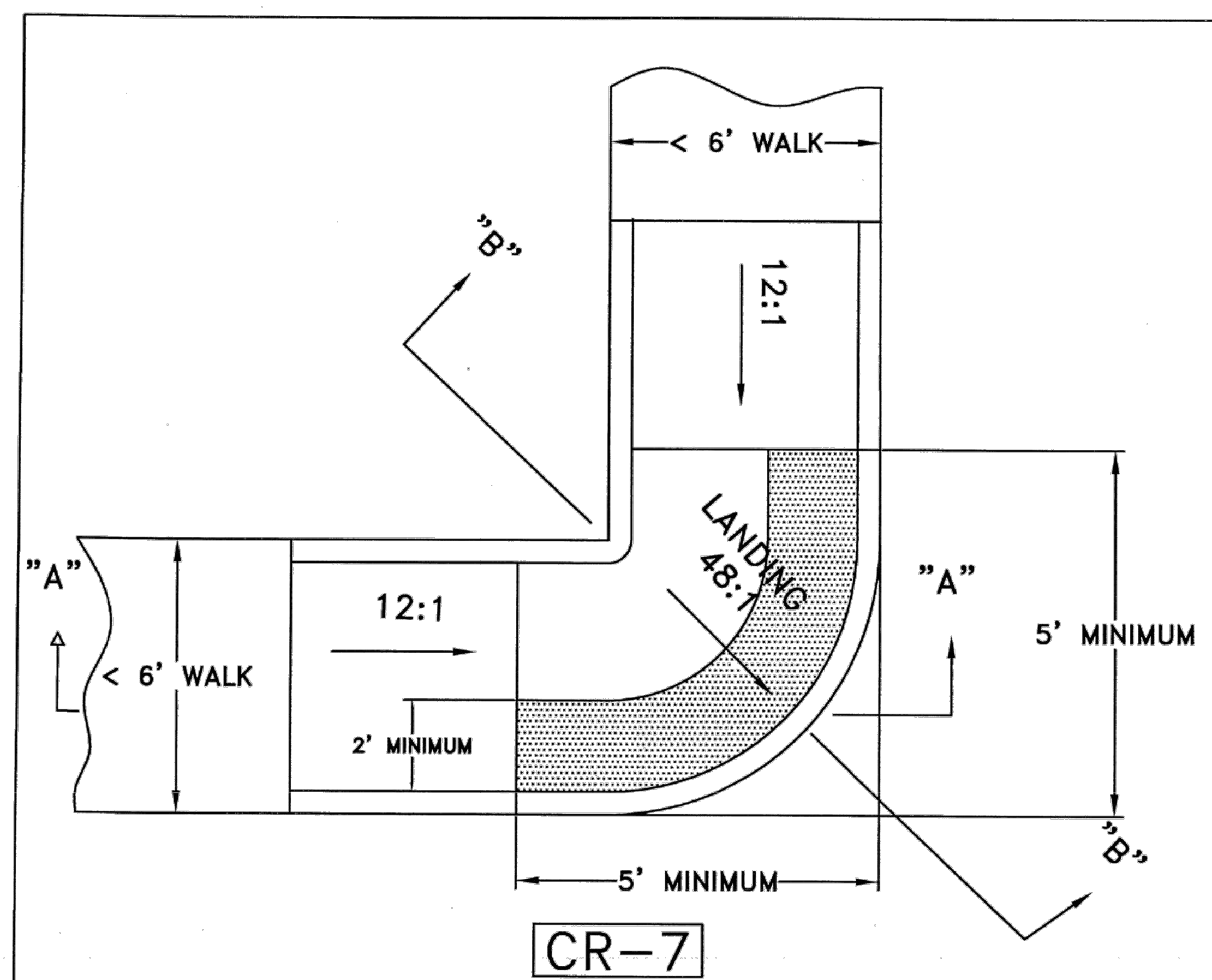
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APPROVED: [Signature] DATE: 4/14/08

COMMISSIONER OF ENGINEERING AND CONSTRUCTION

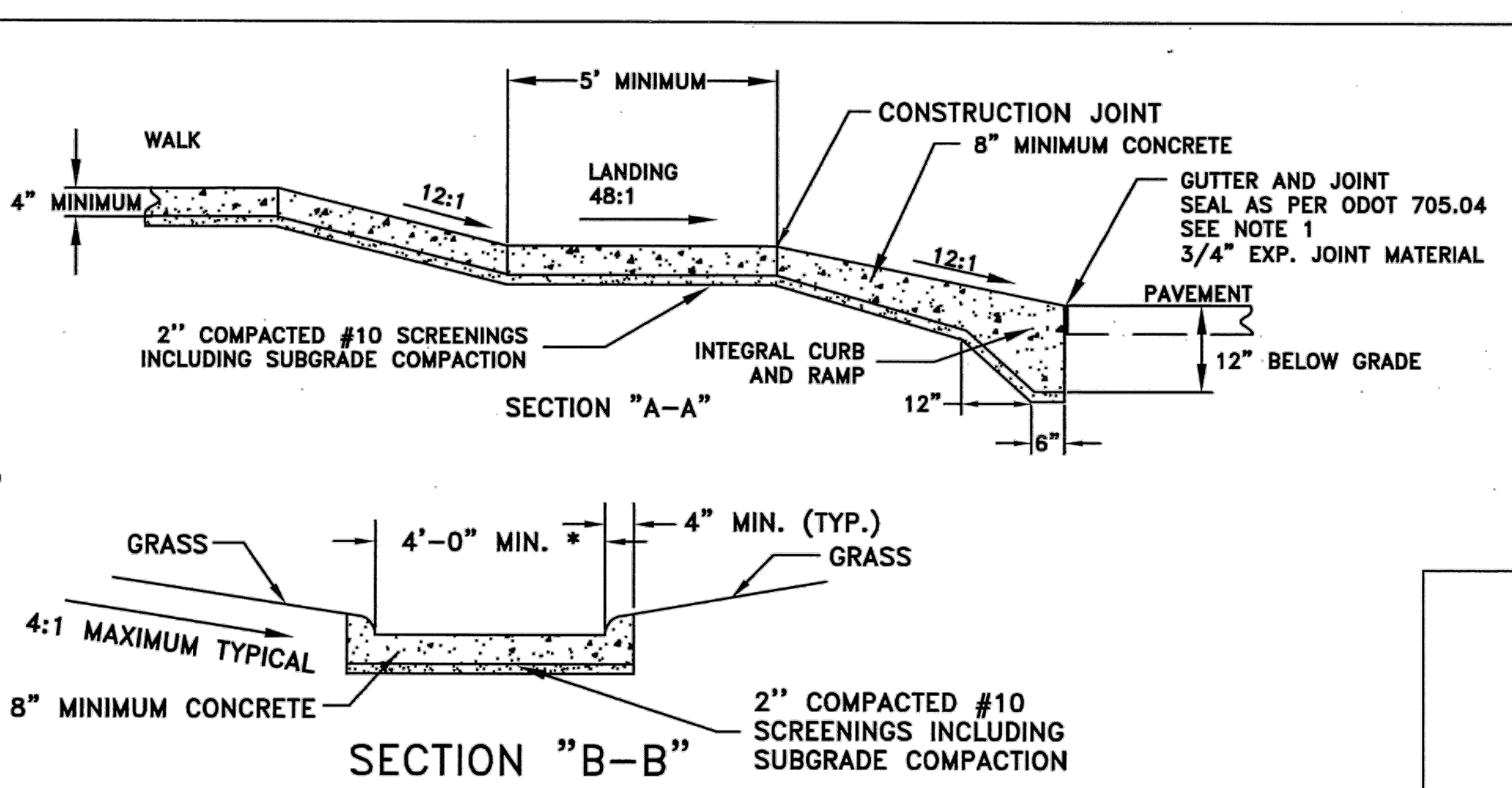
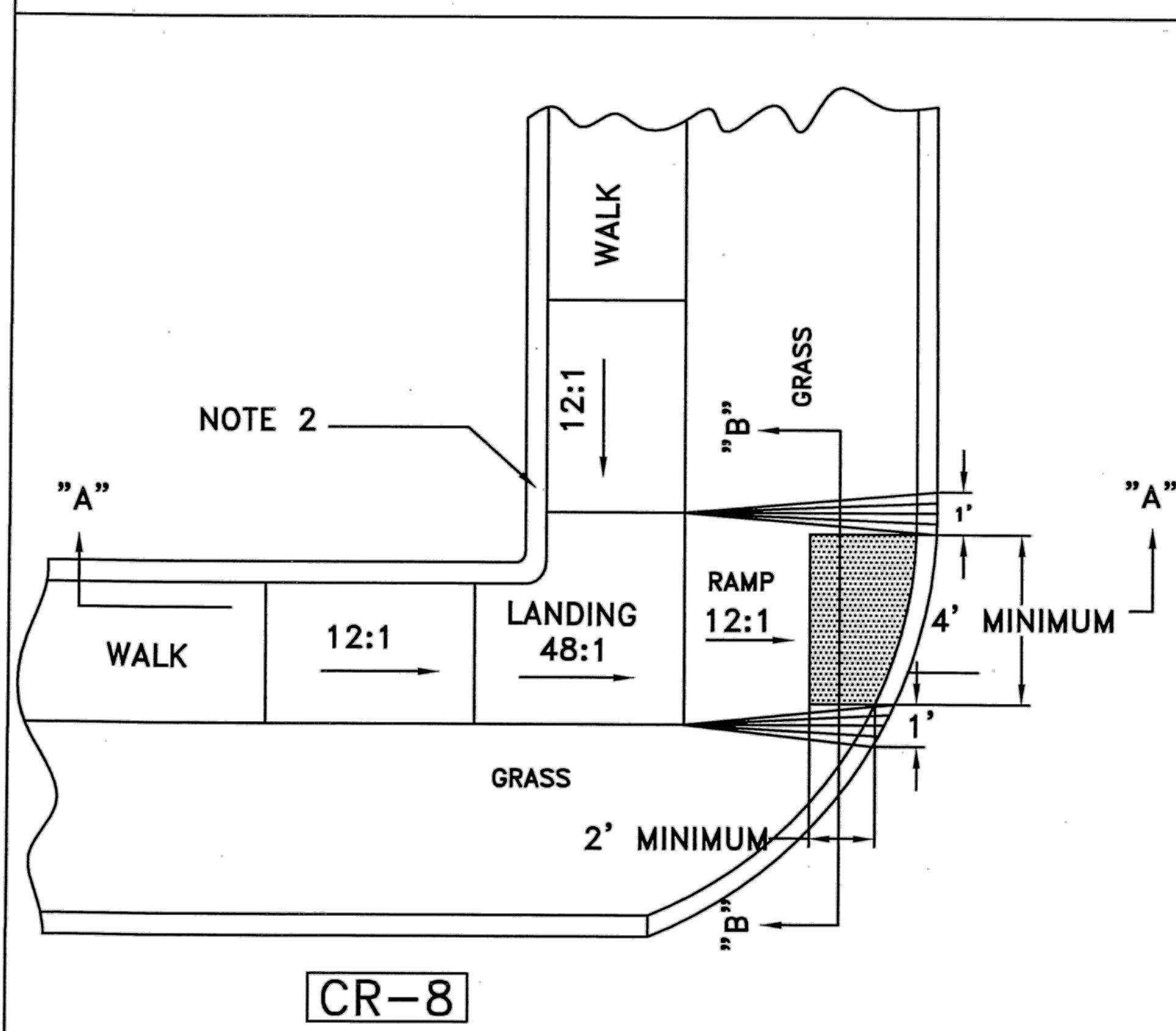
FILE NO.: CR 1 SHEET 3/6

13



NOTES:

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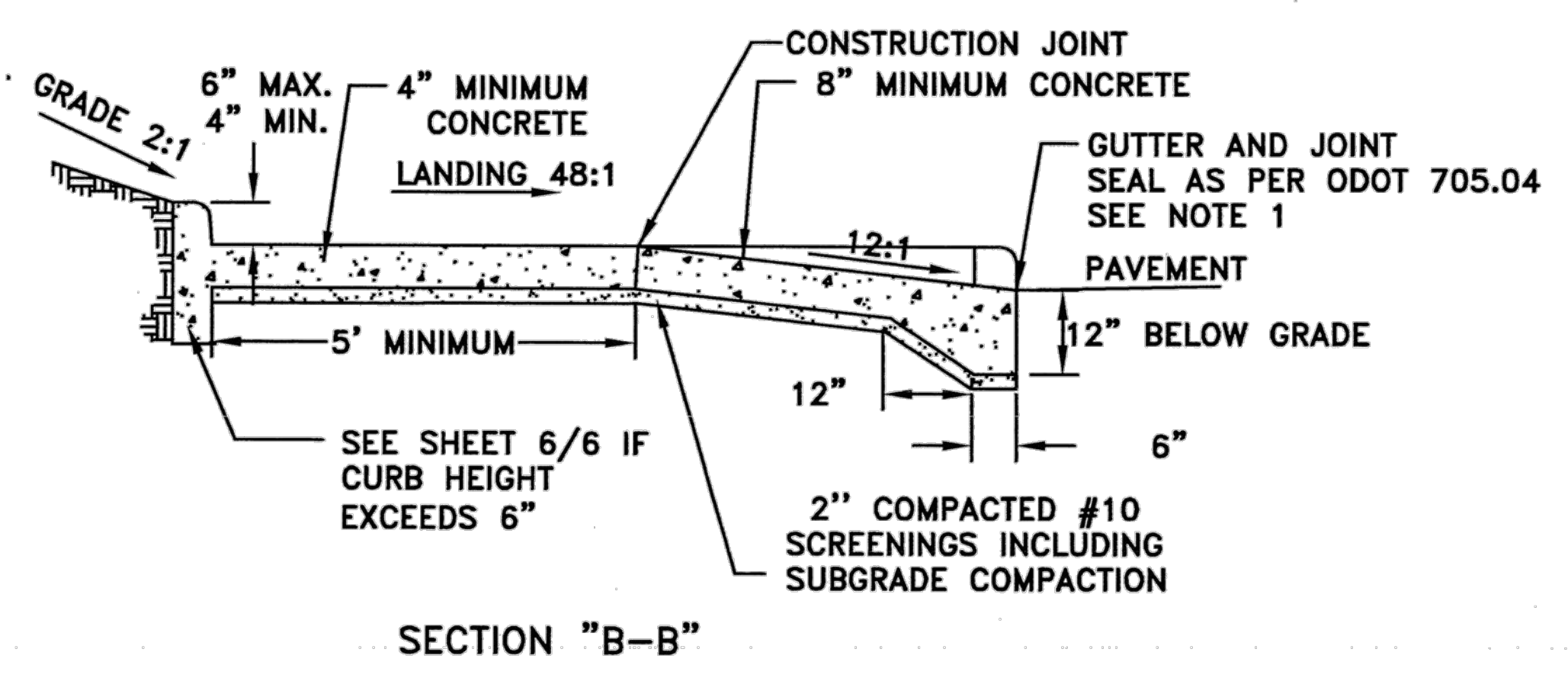
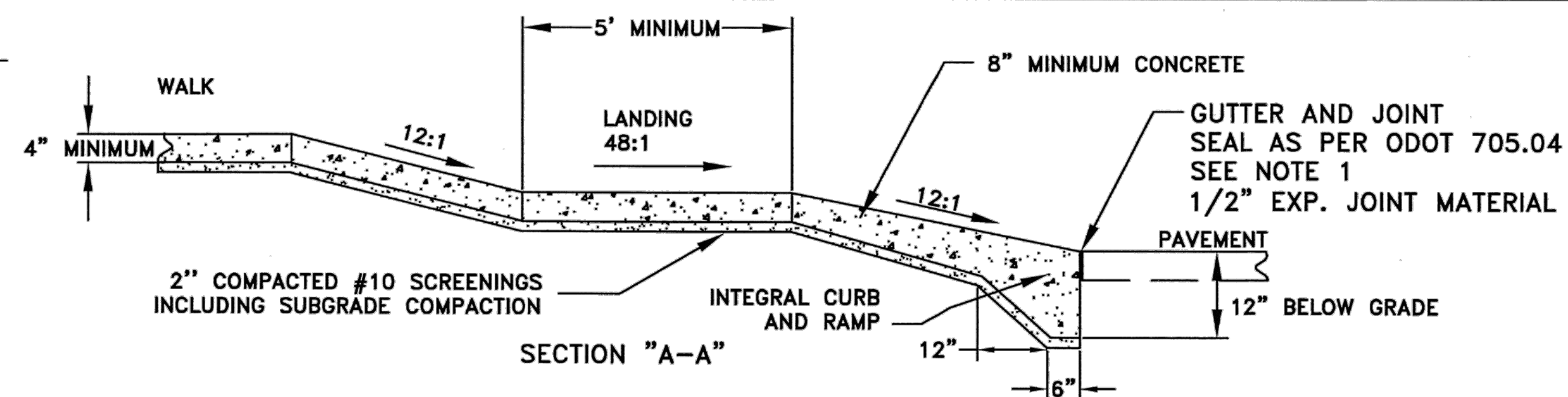
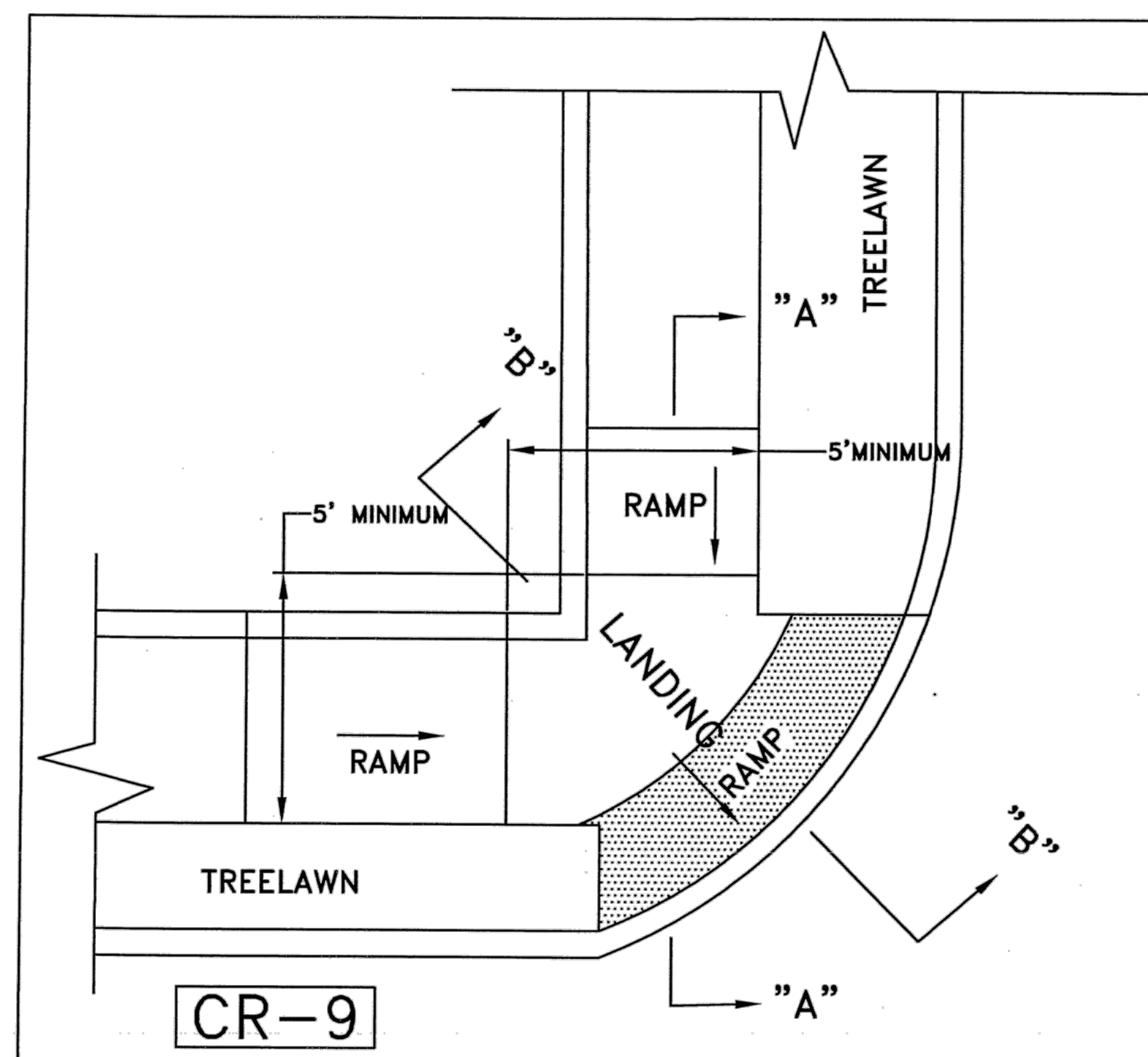
CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
TYPICAL CONSTRUCTION
CURB RAMPS
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: *[Signature]* DATE: 4/14/08
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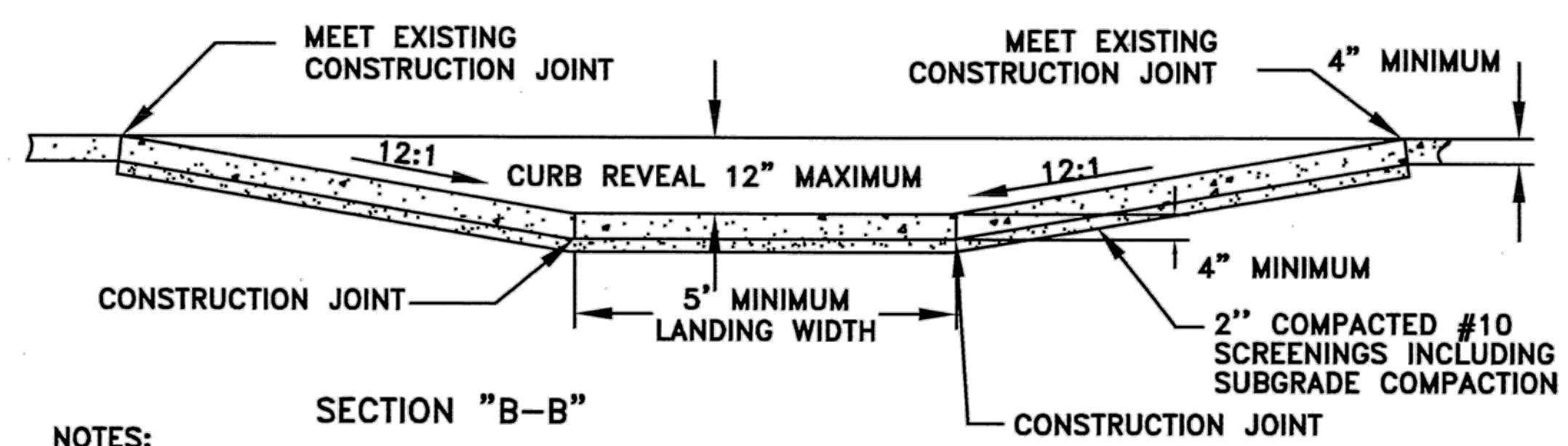
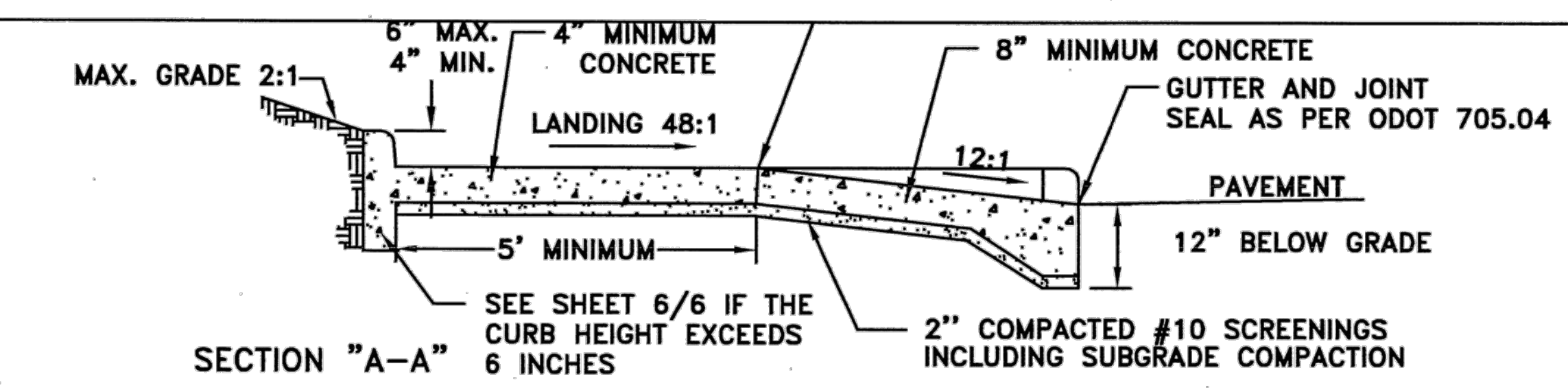
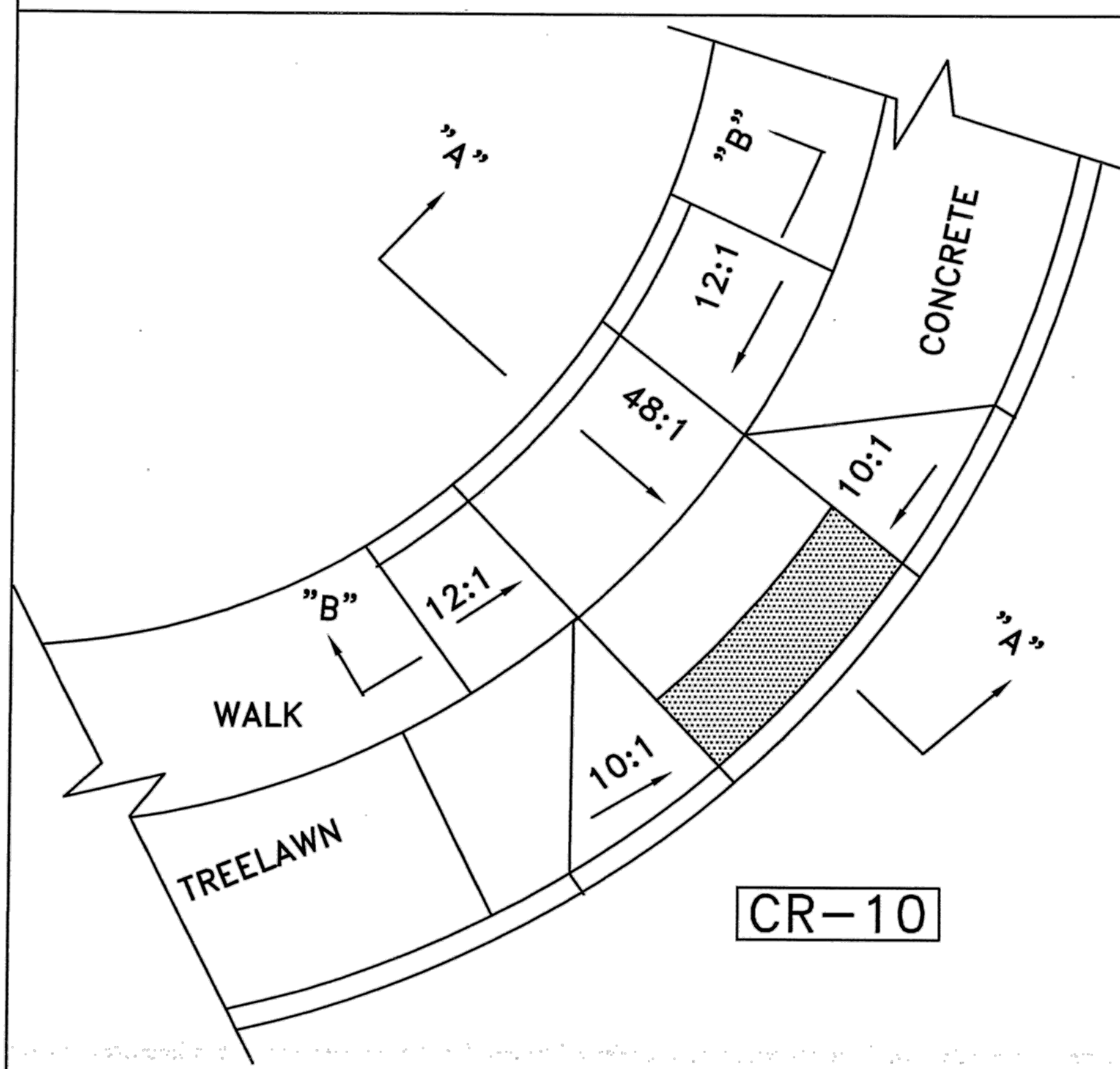
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NOTES:

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JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE

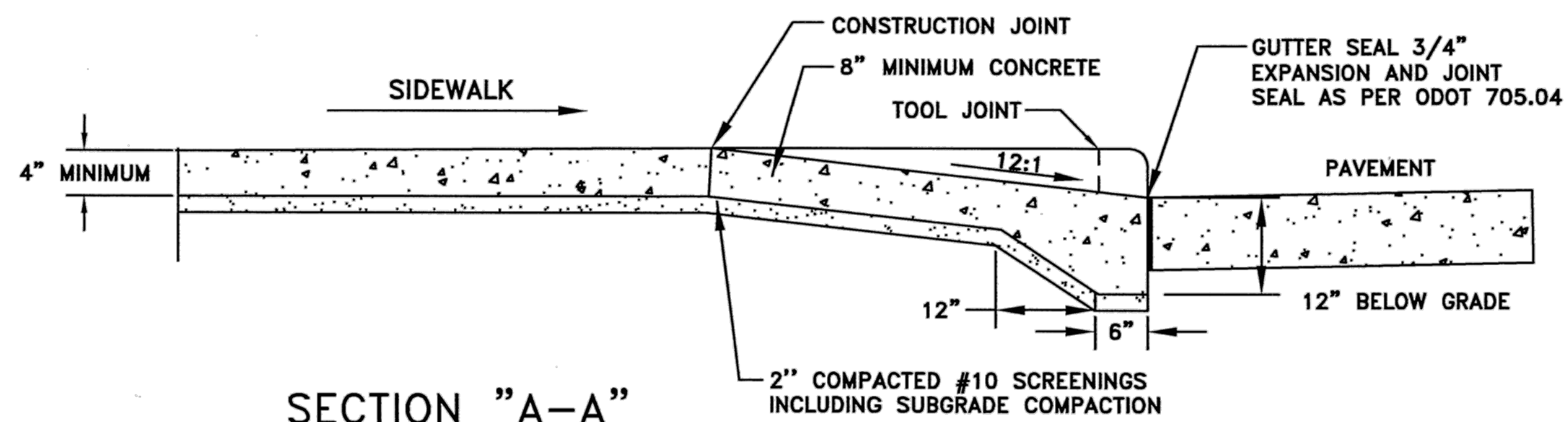
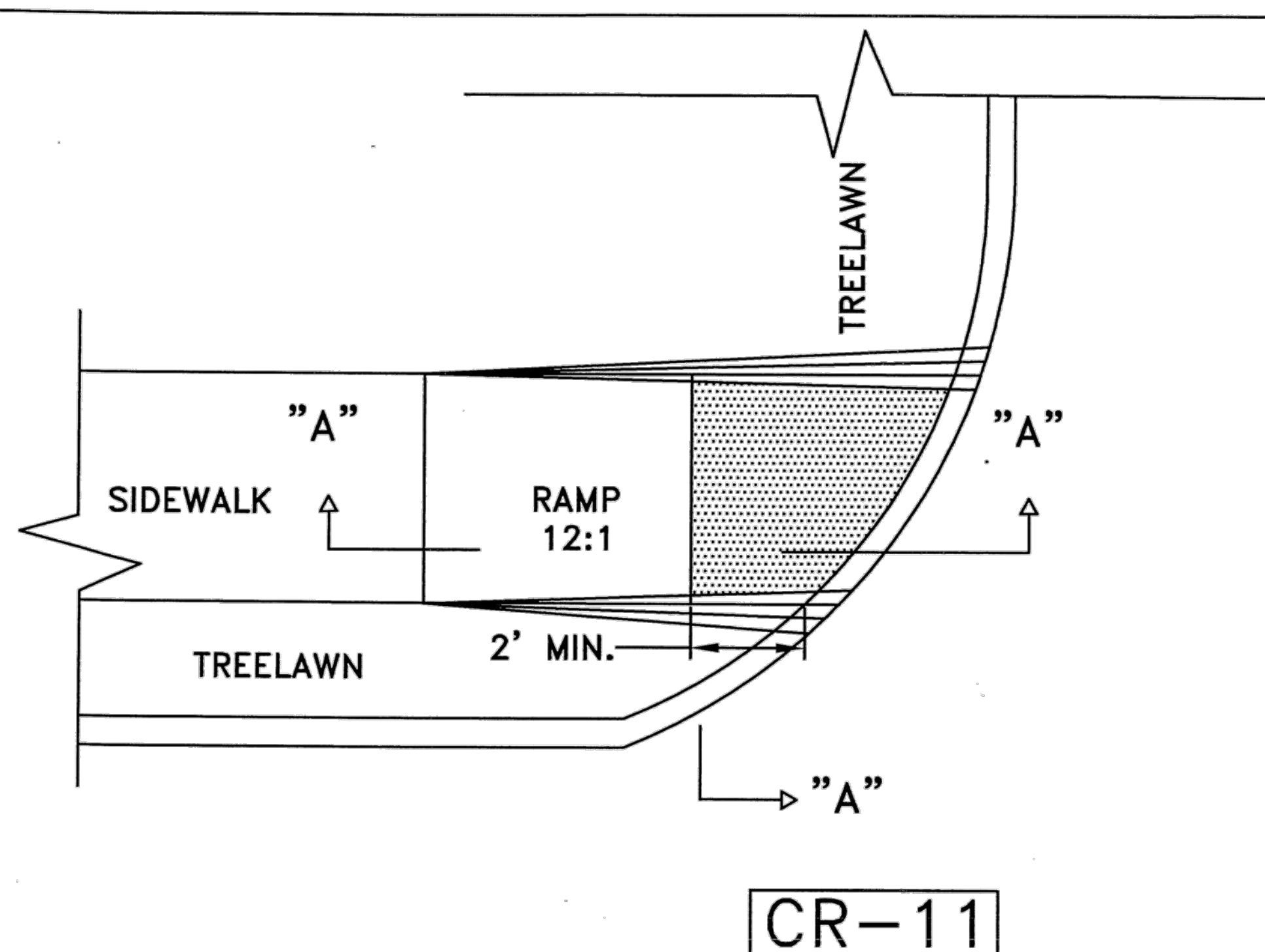
TYPICAL CONSTRUCTION
CURB RAMPS
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

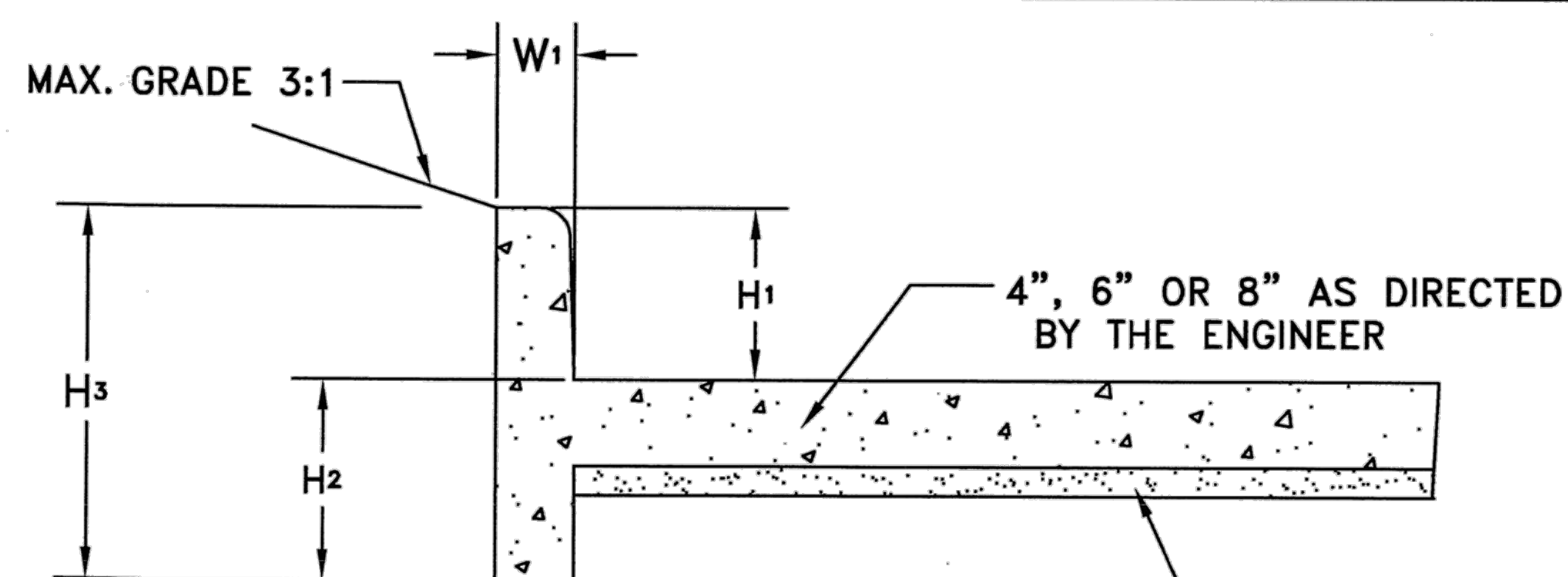
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- 4 - THIS DETAIL SHALL ONLY BE USED TO RETROFIT EXISTING CURB RAMPS AND SHALL NOT BE USED FOR NEW CURB RAMP CONSTRUCTION.



H ₁	W ₁	H ₂	H ₃
6"	6"	6"	12"
8"	6"	10"	18"
10"	8"	12"	22"
12"	10"	12"	24"

NOTES:

- 1 - WHERE A ROLLED CURB EXCEEDS SIX INCHES ABOVE THE WALK, THE CONTRACTOR SHALL INSTALL CURB PER THIS DETAIL. ROLLED CURB SHALL BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.

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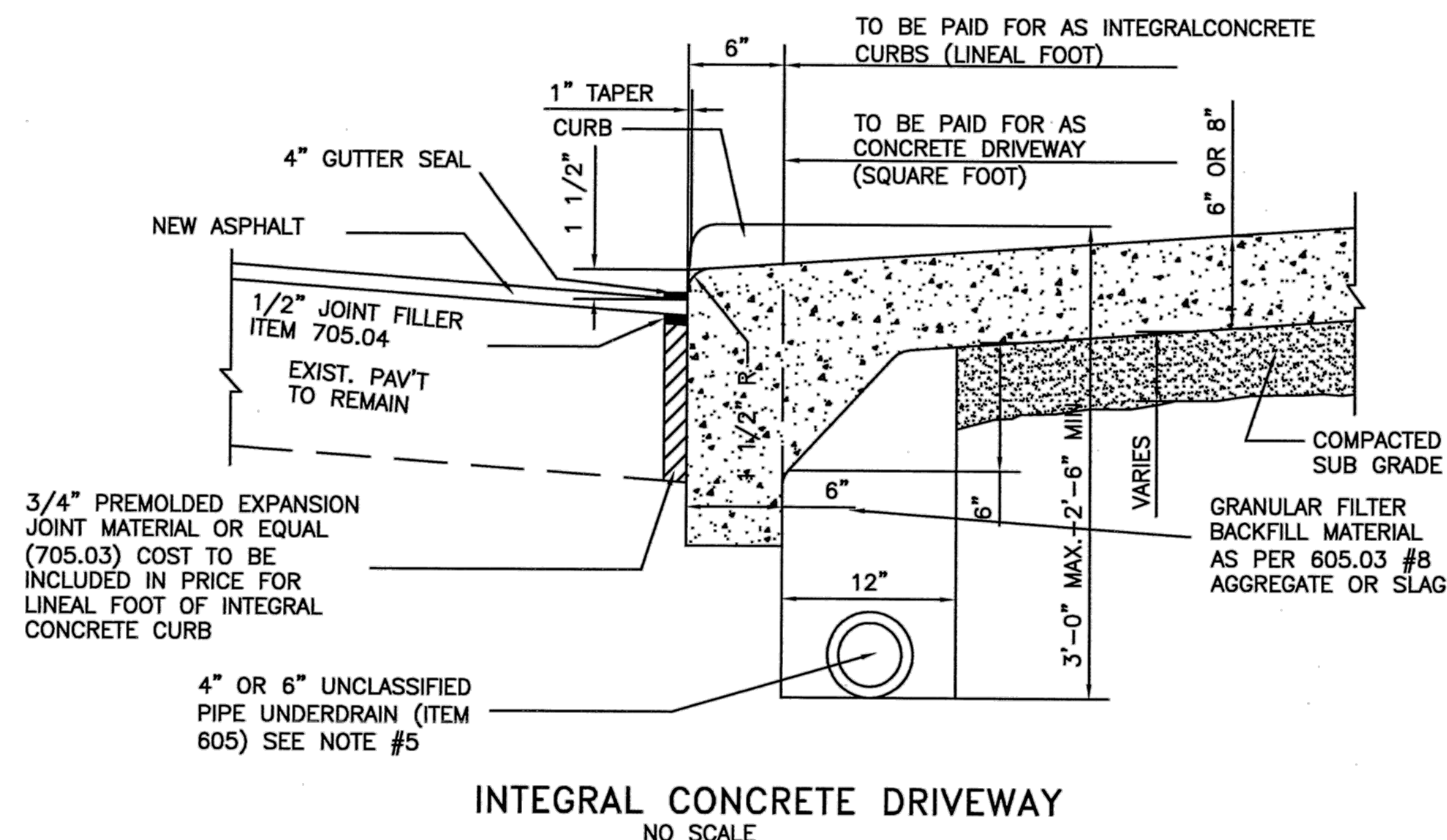
CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
TYPICAL CONSTRUCTION
CURB RAMPS & ROLLED CURB DETAIL
NOT TO SCALE

SUBMITTED BY: R. PLIODZINSKAS DATE: 4/8/08
W. MCLAUGHLIN DATE: 4/8/08

DATE: 4/14/08

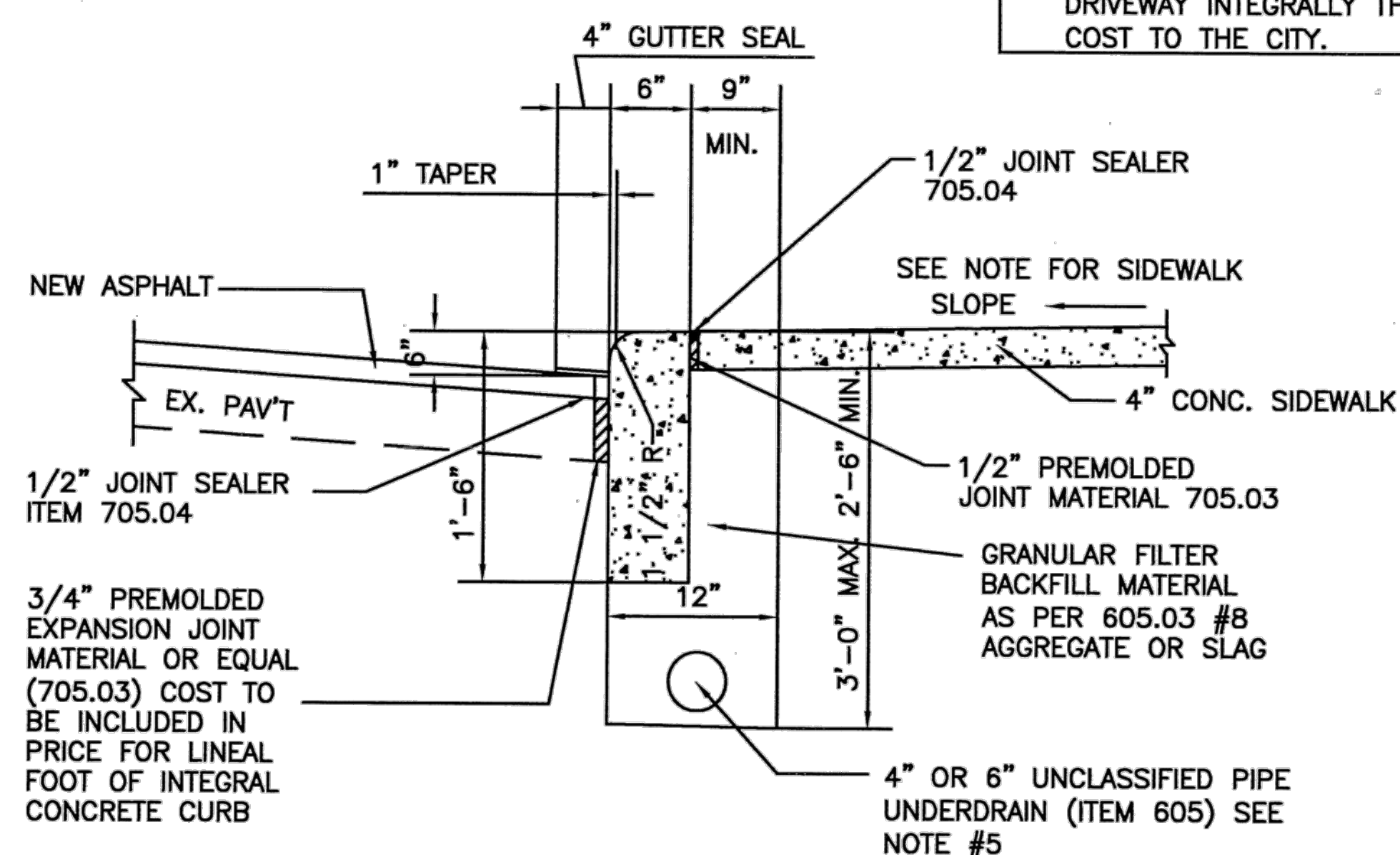
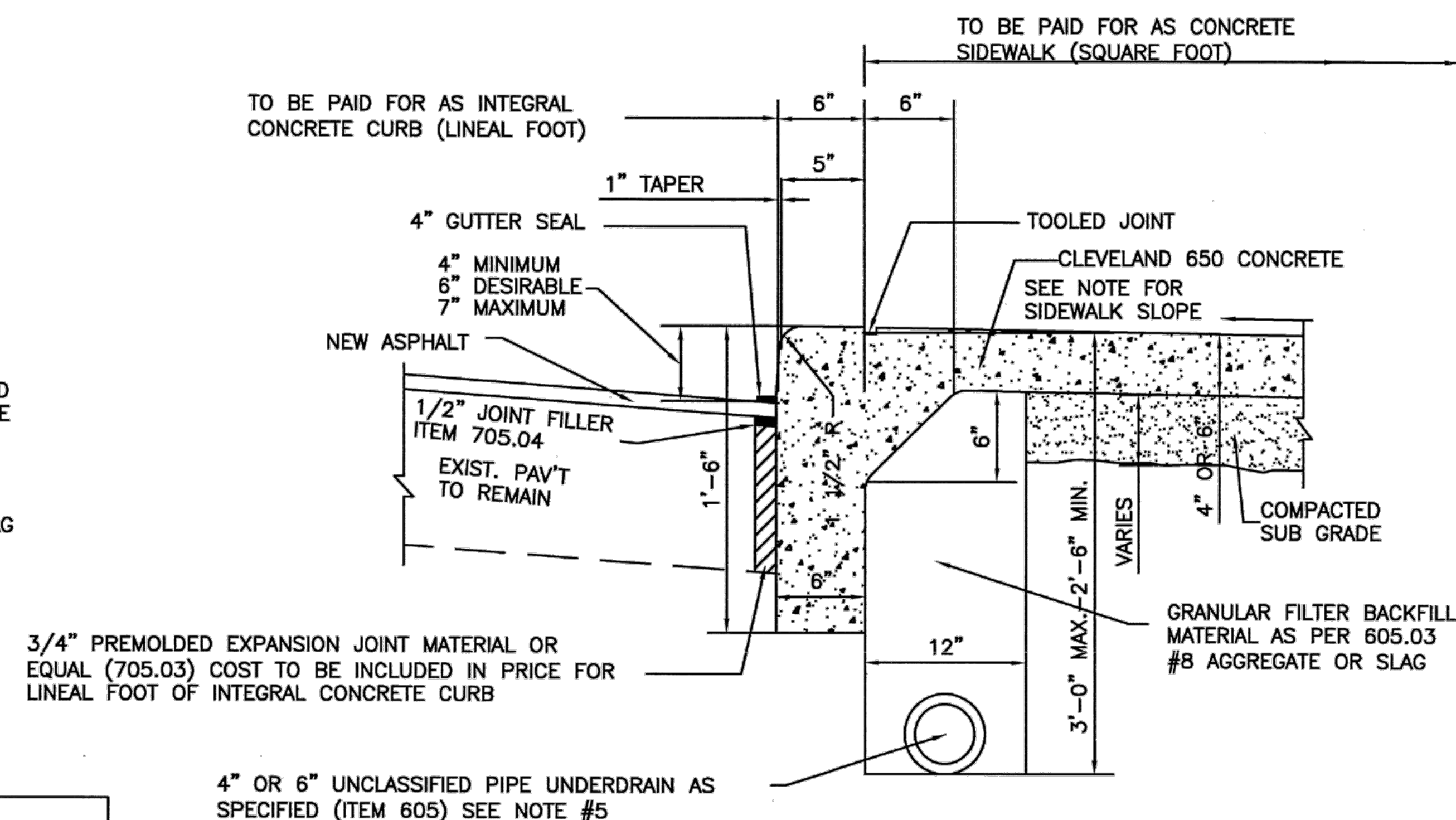
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO.: CR 1 SHEET 6/6



OPTIONAL DETAIL

THE CONTRACTOR MAY USE THIS DETAIL IF GRANTED PERMISSION TO POUR THE CURB AND SIDEWALK OR DRIVEWAY INTEGRALLY THERE SHALL BE NO ADDITIONAL COST TO THE CITY.



NOTES:

- SAND BACKFILL AS REQUIRED TO ACHIEVE PROPOSED SUB GRADE. COST TO BE INCLUDED IN UNIT PRICE BID PER SQUARE FOOT OF SIDEWALK OR CONCRETE DRIVEWAY.
- TRANSVERSE CONTRACTION JOINTS (5' CTRS) AND EXPANSION JOINTS TO BE CONSTRUCTED AS DIRECTED BY THE ENGINEER. JOINTS SHALL BE TOOLED 5" FROM THE STREET FACE OF THE CURB. 1/4" DEEP WITH EDGES ROUNDED TO A 1/4" RADIUS. COST TO BE INCLUDED IN PRICE PER SQUARE FOOT OF SIDEWALK OR CONCRETE DRIVEWAY.
- TRANSITION FROM STANDARD CURB SECTION TO DROP CURB SECTION TO BE MADE IN 18" DISTANCE FROM DRIVEWAY.
- SLOPE SHALL BE PROVIDED AS NEEDED TO DRAIN SIDEWALK AND TREELAWN AREA. 1/8" / FT. MIN. (1/4" / FT. DESIRABLE AND 5/8" / FT. MAX.) IF THE EXISTING CONDITIONS RESULT IN A UNIFORM SLOPE GREATER THAN 1/4" / FT. THEN THE SLOPE IN THE TREELAWN AREA MAY EXCEED THE MAX. AS NEEDED TO PROVIDE A SIDEWALK SLOPE OF 1/4" / FT. THE SLOPE IN THE WALK AREA OF DRIVE APRONS MUST NOT EXCEED ADA REQUIREMENTS OF 1/4" / FT. CROSS SLOPE.
- UNDERDRAINS TO BE INSTALLED IN AREAS WHERE CURB IS TO BE REPLACED. THE UNDERDRAIN SHALL BE CONSTRUCTED SO AS TO MATCH THE LOCATION OF ANY EXISTING UNDERDRAIN TO REMAIN. UNDERDRAIN SHALL OUTLET AT CATCH BASIN. UNDERDRAINS SHALL HAVE FILTER FABRIC WRAP OR TRENCH IS WRAPPED WITH FILTER FABRIC AS SPECIFIED.

REVISED 12/3/09

CITY OF CLEVELAND

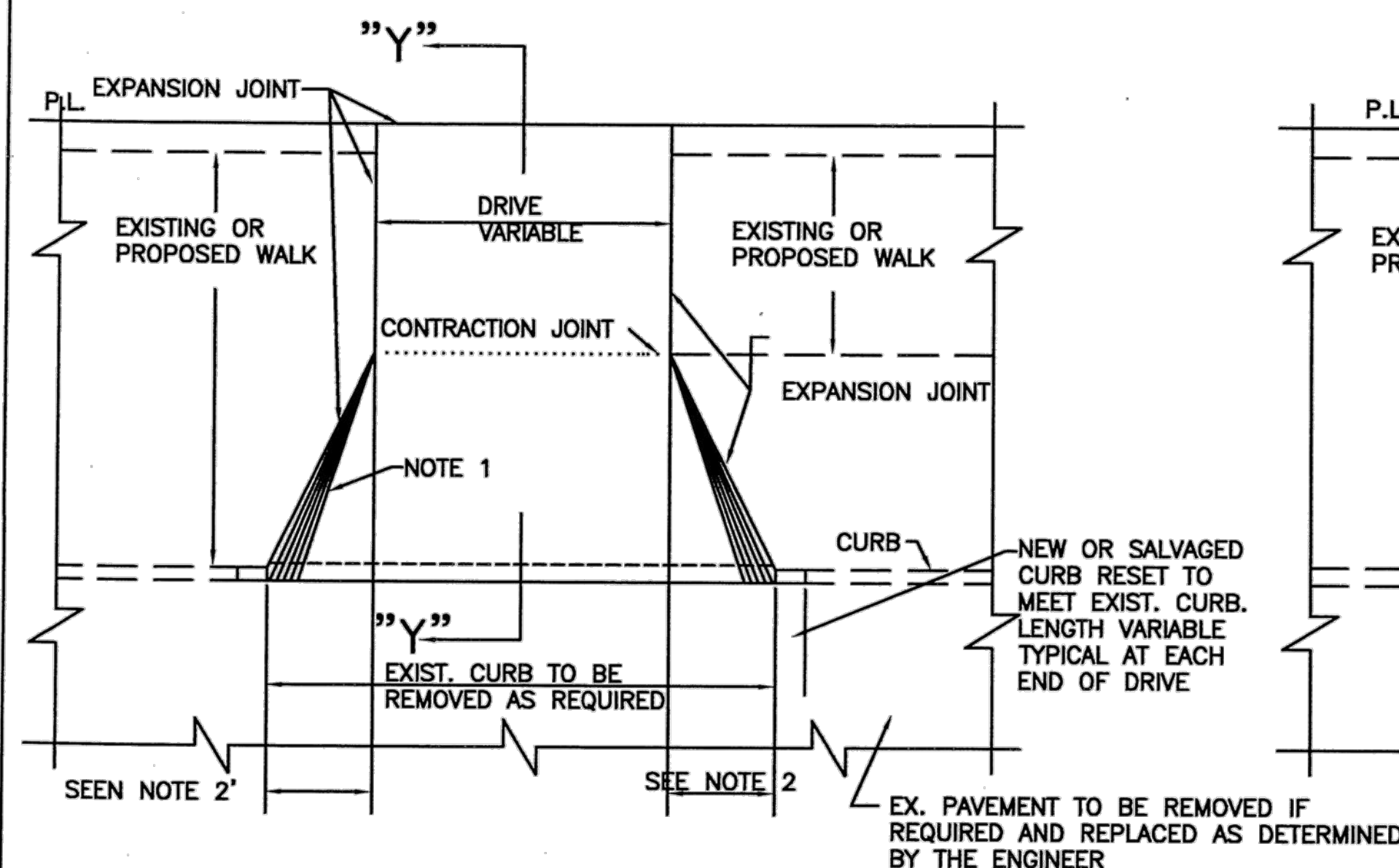
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
CURB DETAILS
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: [Signature] DATE: 4/14/08

COMMISSIONER OF ENGINEERING AND CONSTRUCTION

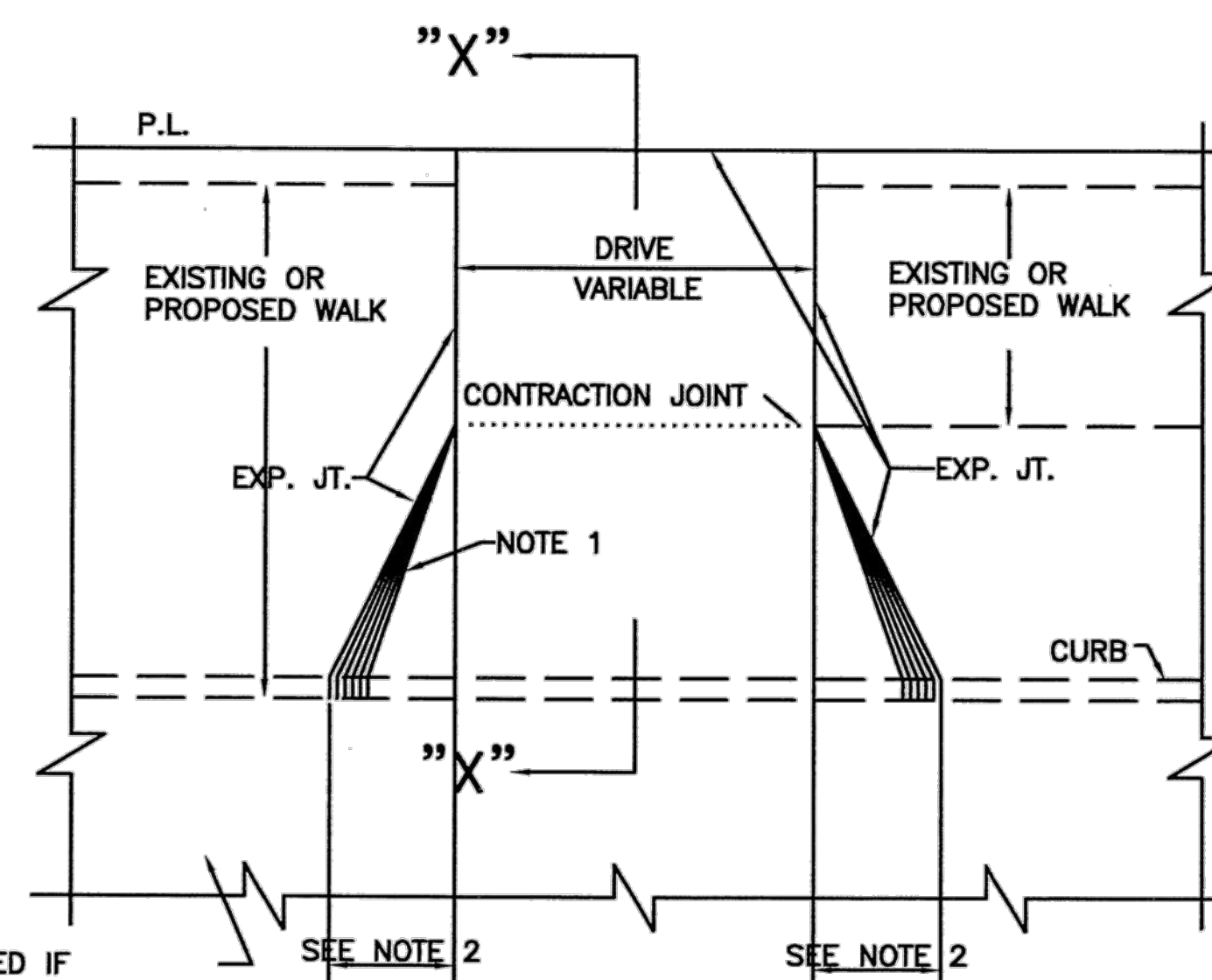
FILE NO. CD 1 SHEET 1/3

17



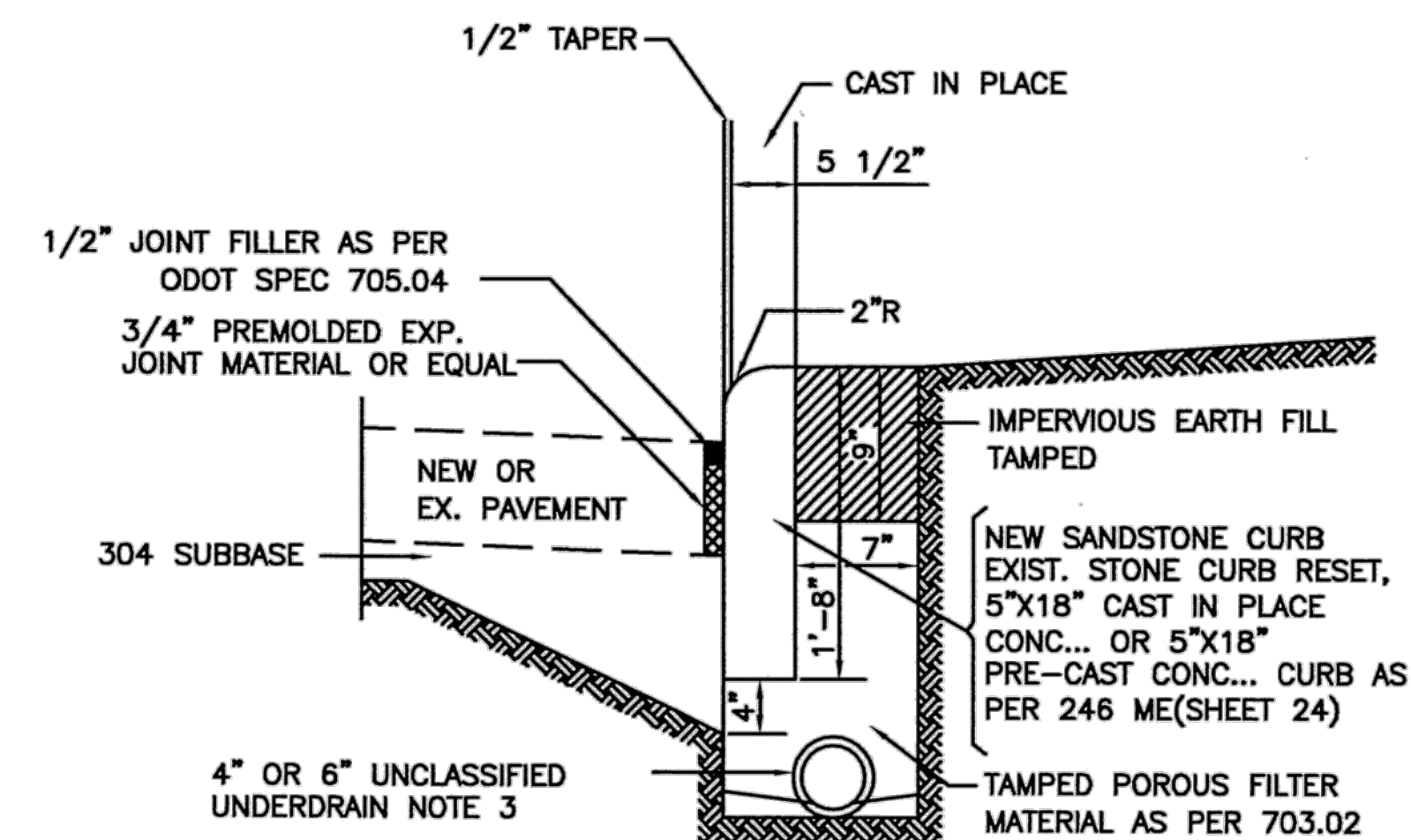
PLAN FOR NEW DRIVE WITH
INTEGRAL CONCRETE CURB

NOT TO SCALE



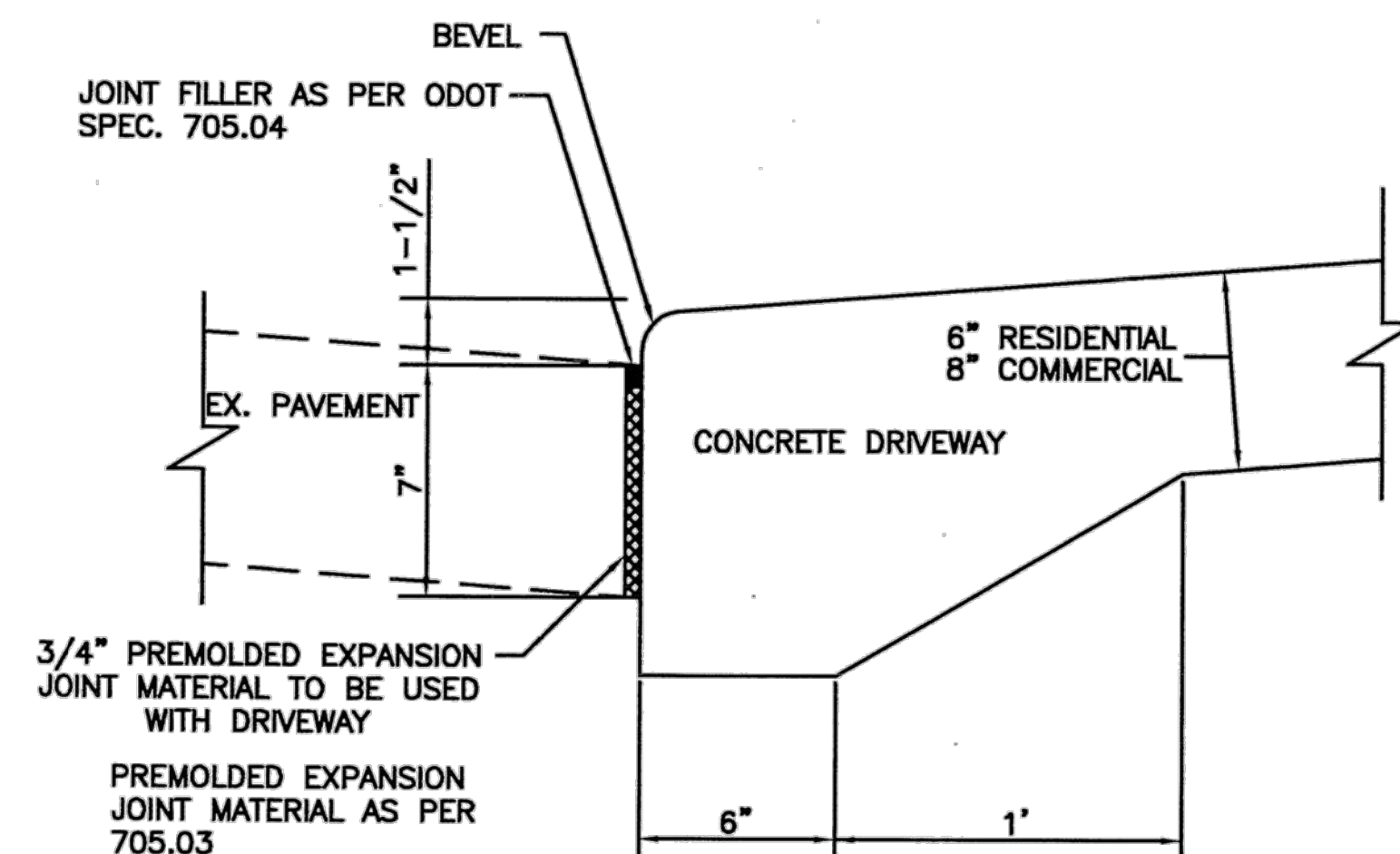
PLAN FOR NEW DRIVE WITH
CURB CUT

NOT TO SCALE



TYPICAL CURB CONSTRUCTION DETAIL

NOT TO SCALE

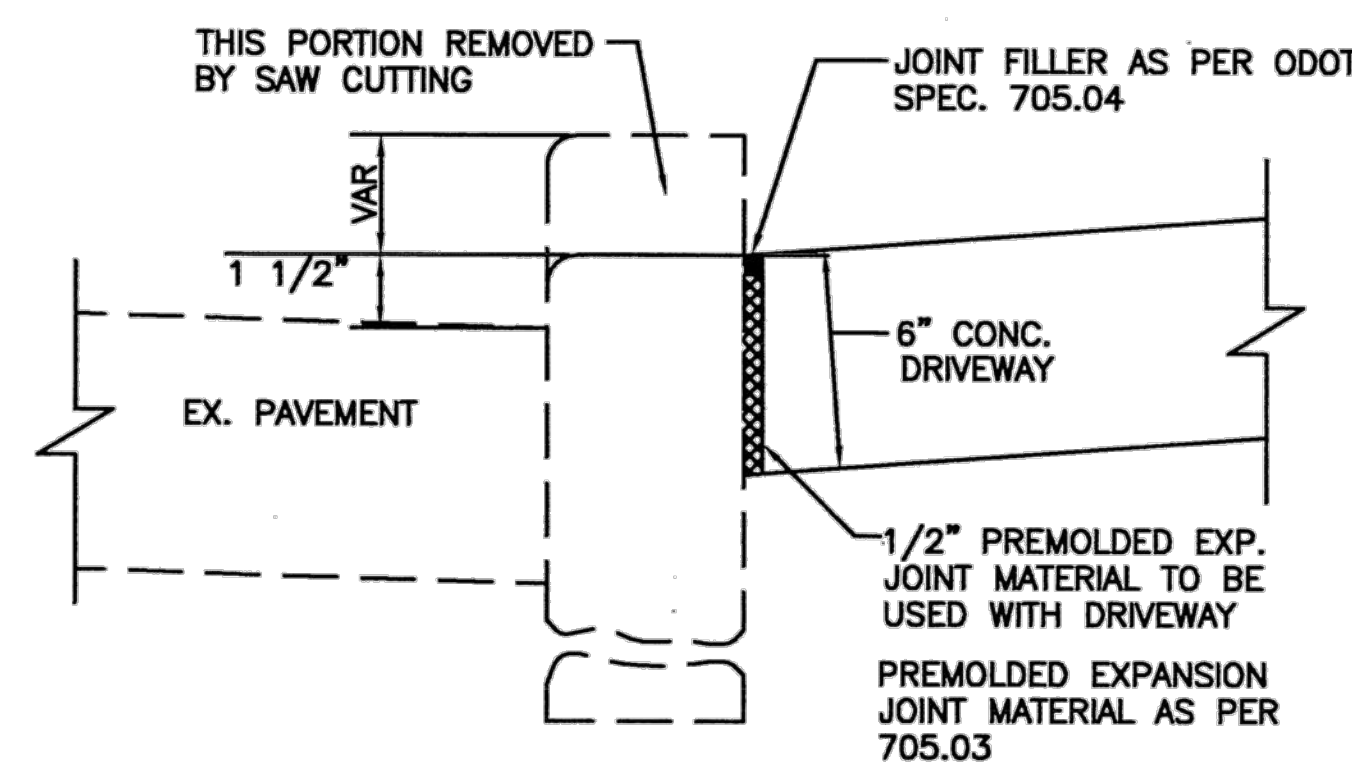


SECTION "Y"- "Y"

NOT TO SCALE

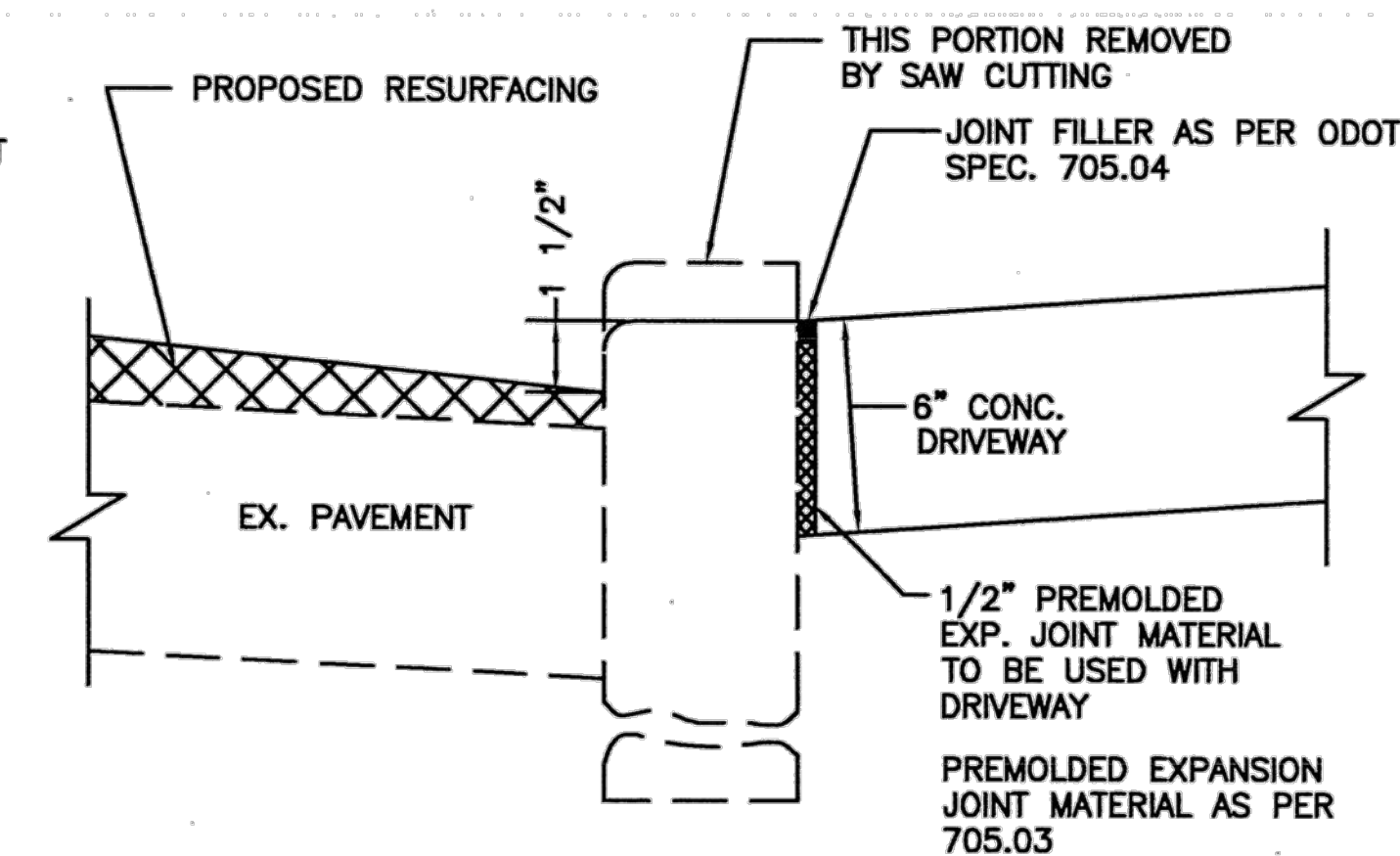
NOTES:

- 1 - ON STREETS WITH NARROW TREELAWSNS AND SIDEWALKS OR WITH APPROVAL OF THE ENGINEER THE FOLLOWING DETAIL MAY BE USED.
- 2 - APRON FLARES ARE 3' FOR RESIDENTIAL AND 5' COMMERCIAL
- 3 - UNDERDRAINS SHALL HAVE FILTER FABRIC WRAP OR TRENCH IS WRAPPED WITH FILTER FABRIC AS SPECIFIED.



SECTION "X"- "X"

SHOWING PROPOSED DRIVE
GUTTER WITHOUT RESURFACING
NOT TO SCALE



SECTION "X"- "X"

SHOWING PROPOSED DRIVE
GUTTER WITH RESURFACING
NOT TO SCALE

REVISED 8/3/09

CITY OF CLEVELAND

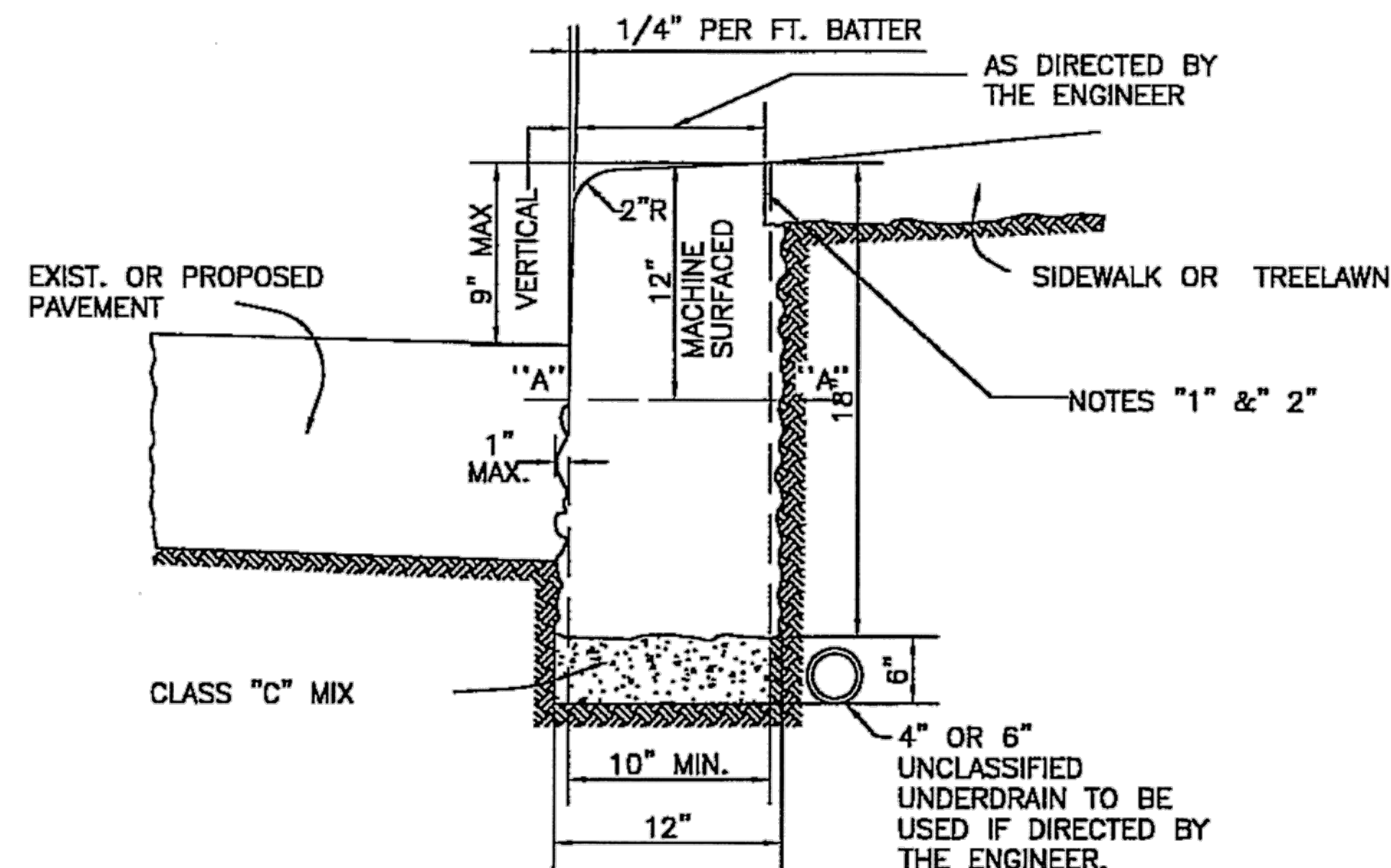
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK - DIRECTOR OF PUBLIC SERVICE
STANDARD PLAN OF
TYPICAL CURB & DETAILS
AT DRIVEWAYS
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: [Signature] DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO. CD 1 SHEET 2/3

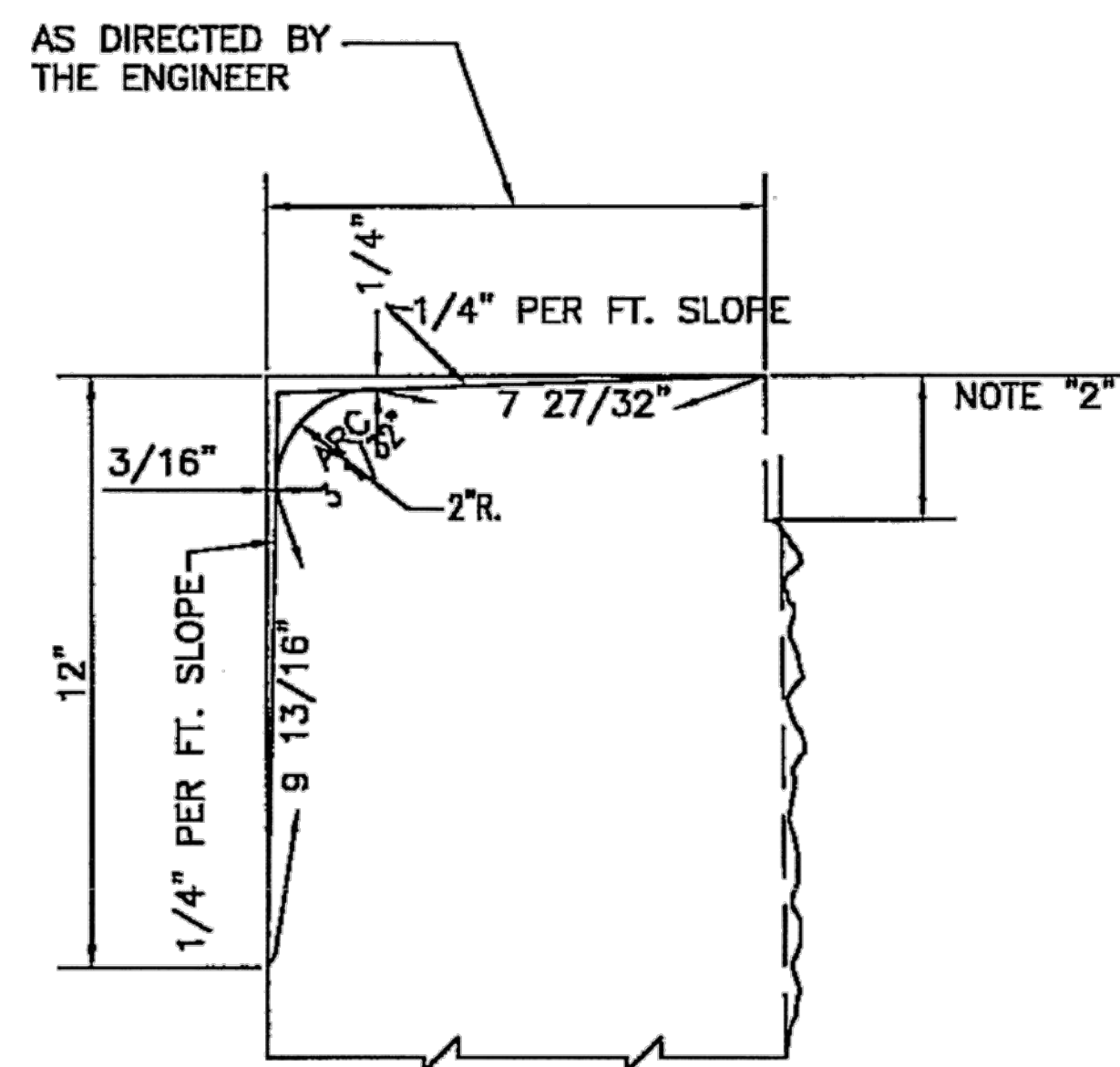
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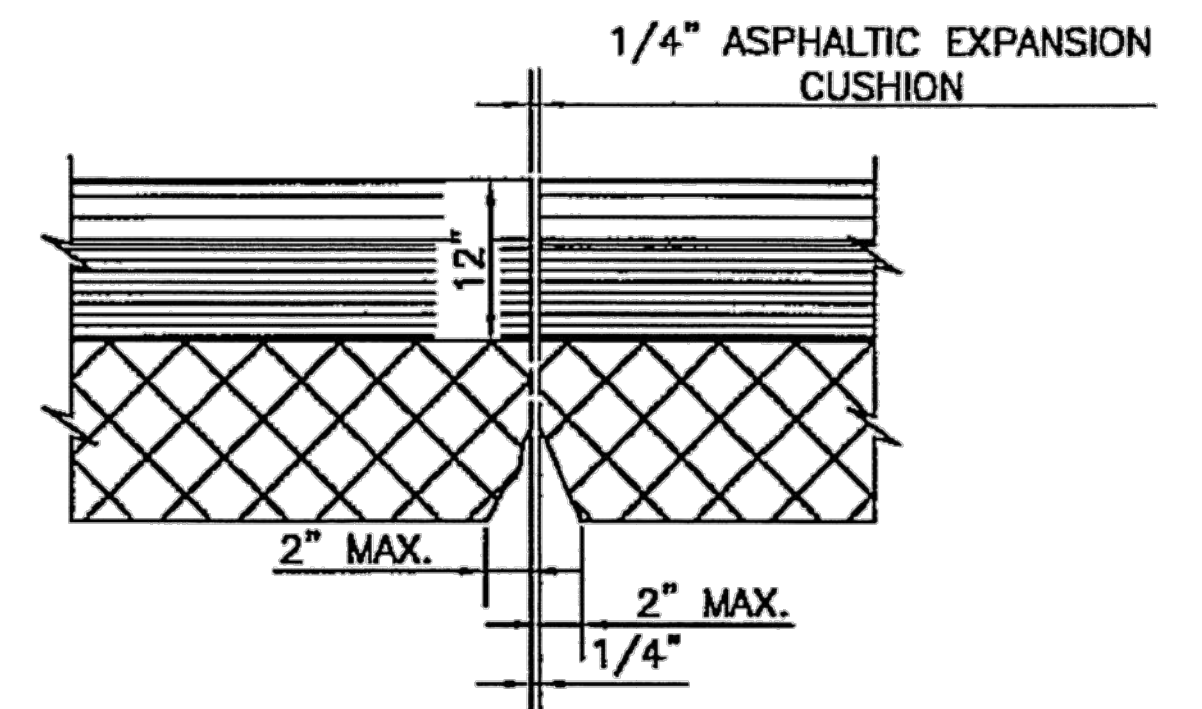


CURB TO BE USED ON STRAIGHT SECTION

TOP FACE AND ENDS OF CURB ABOVE LINE "A"-"A" ARE TO BE MACHINED.
ALSO BACK OF CURB 1" FROM TOP AS SHOWN.



DETAIL OF CURB CUTTING



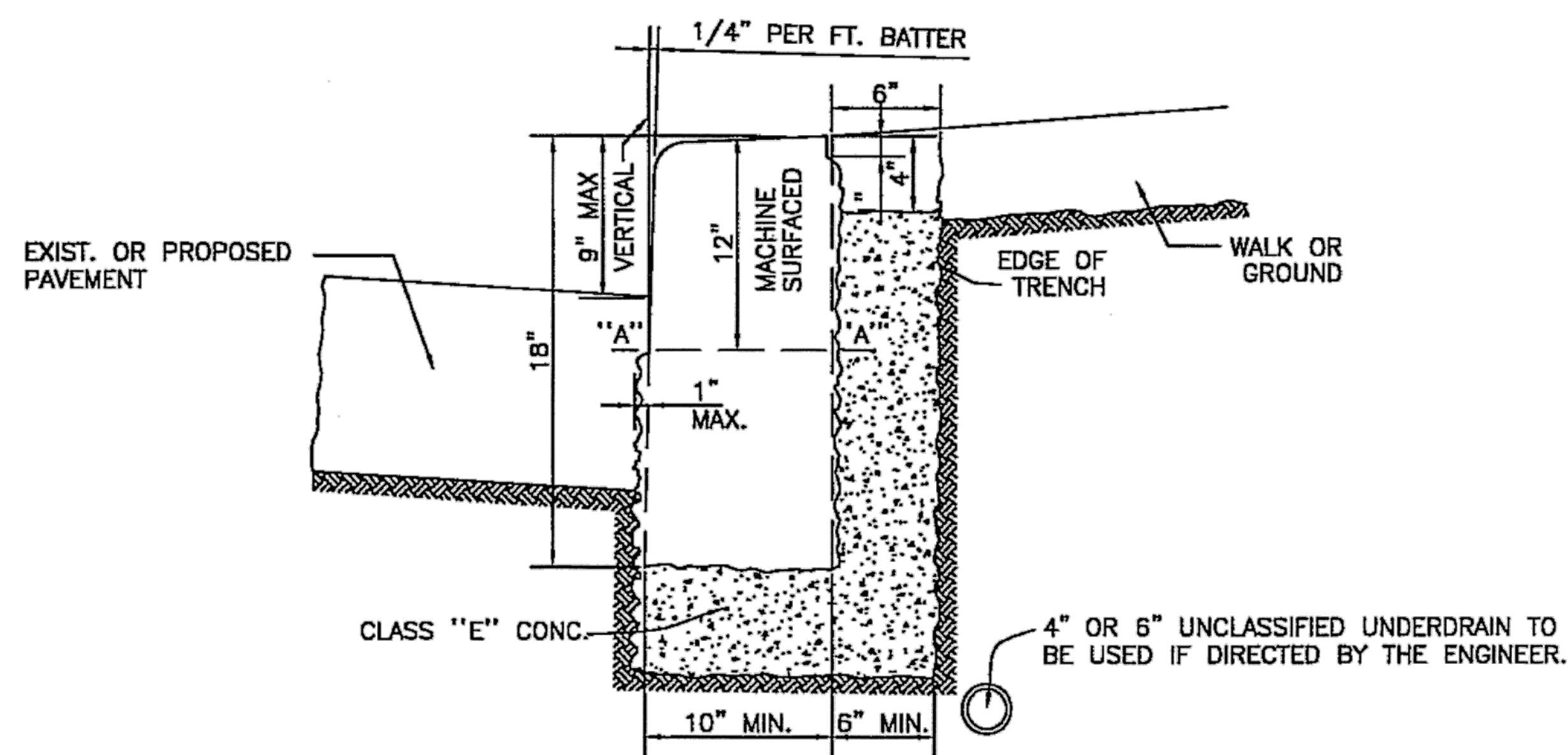
ELEVATION SHOWING CURB JOINT
SECTION "A" - "A"

NOTES

CURB SHALL BE SET IN AND BACKED WITH A MINIMUM OF CLASS "C" CONCRETE AS SHOWN. THE ENTIRE CURB TRENCH IS TO BE COMPLETELY FILLED WITH CONCRETE UP TO THE LEVEL SHOWN ON THE SECTION. SEE STANDARD SPECIFICATIONS.

CURB TO BE LIGHT GRAY GRANITE TO MATCH EXISTING CURBING IN MALL. LENGTH TO BE 4"-6" WITH CLOSURE STONE NOT LESS THAN 3' LONG.

- 1 - EXPANSION JOINT NOT SHOWN
- 2 - 6" MINIMUM, INCREASE IF REQUIRED TO MATCH EXISTING WALK OR APRON THICKNESS
- 3 - FOR 8" OR 12" MALL CURBING DECREASE OR INCREASE THE THICKNESS DIMENSIONS AND TOLERANCES BY 2"



CURB DETAIL TO BE USED ON ALL CURVED SECTIONS

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD DETAILS SHOWING GRANITE CURBING
NOT SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: *Russell* DATE: 4/14/08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CR 1

SHEET 3/3

19

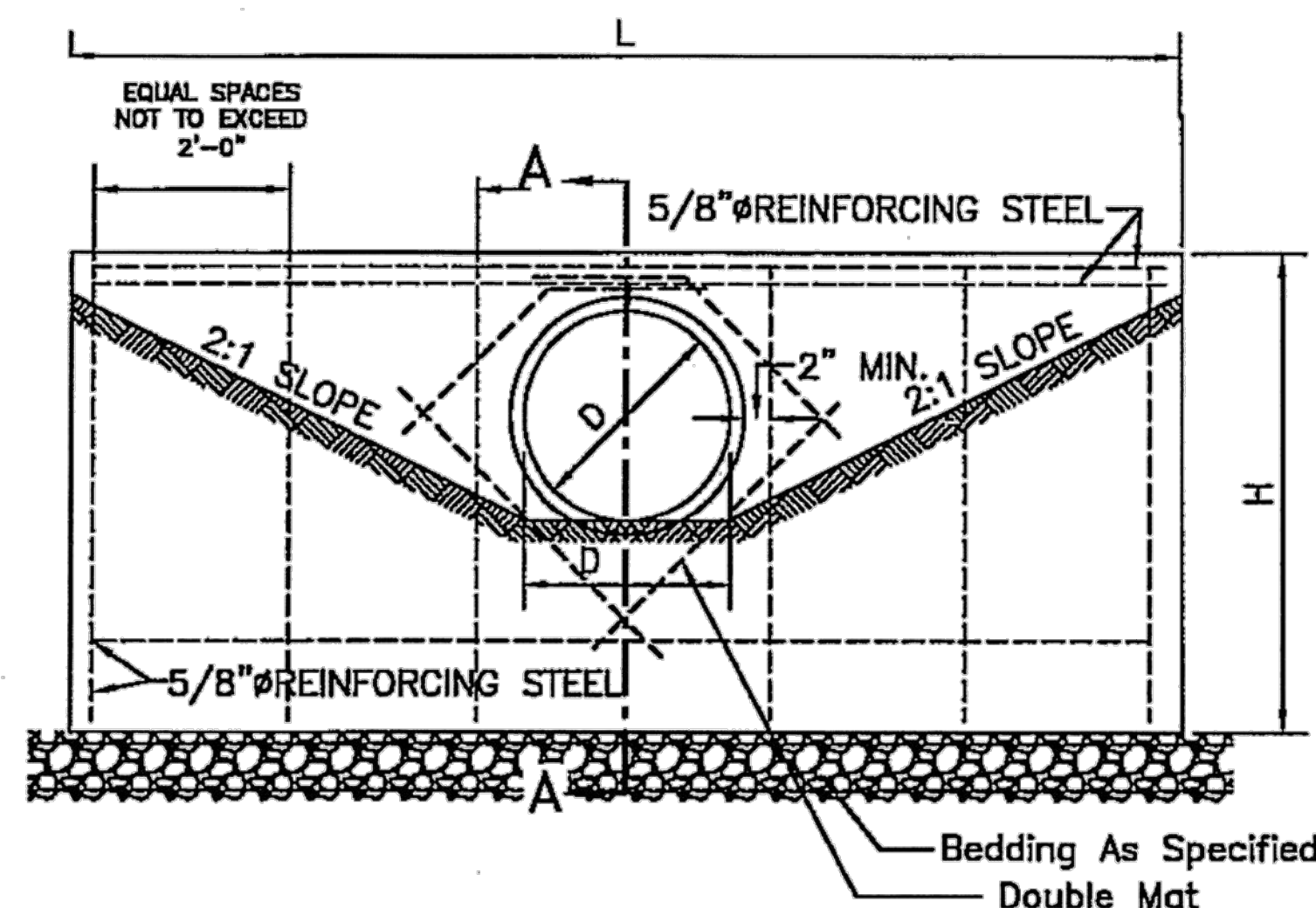
MISCELLANEOUS DETAILS

CUY-E 55TH ST RESURF

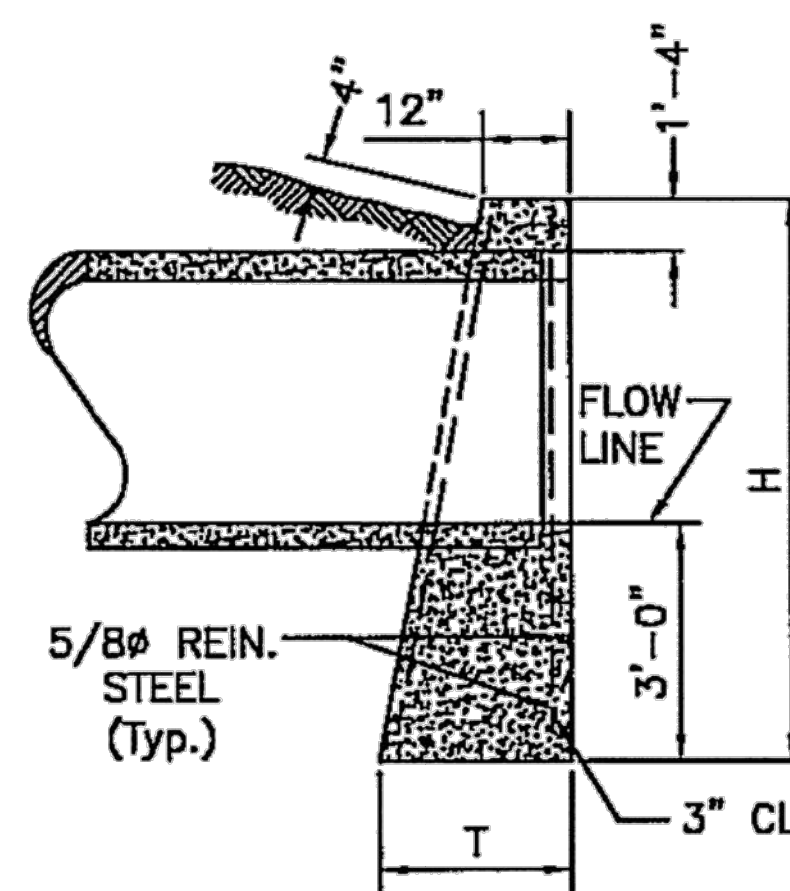
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103

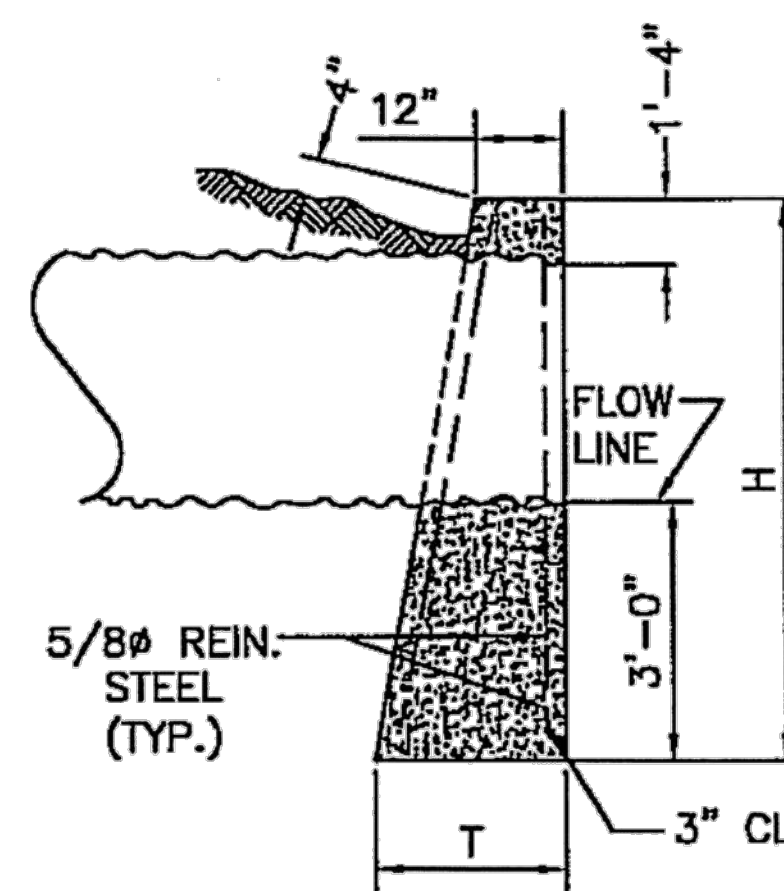
CALCULATED
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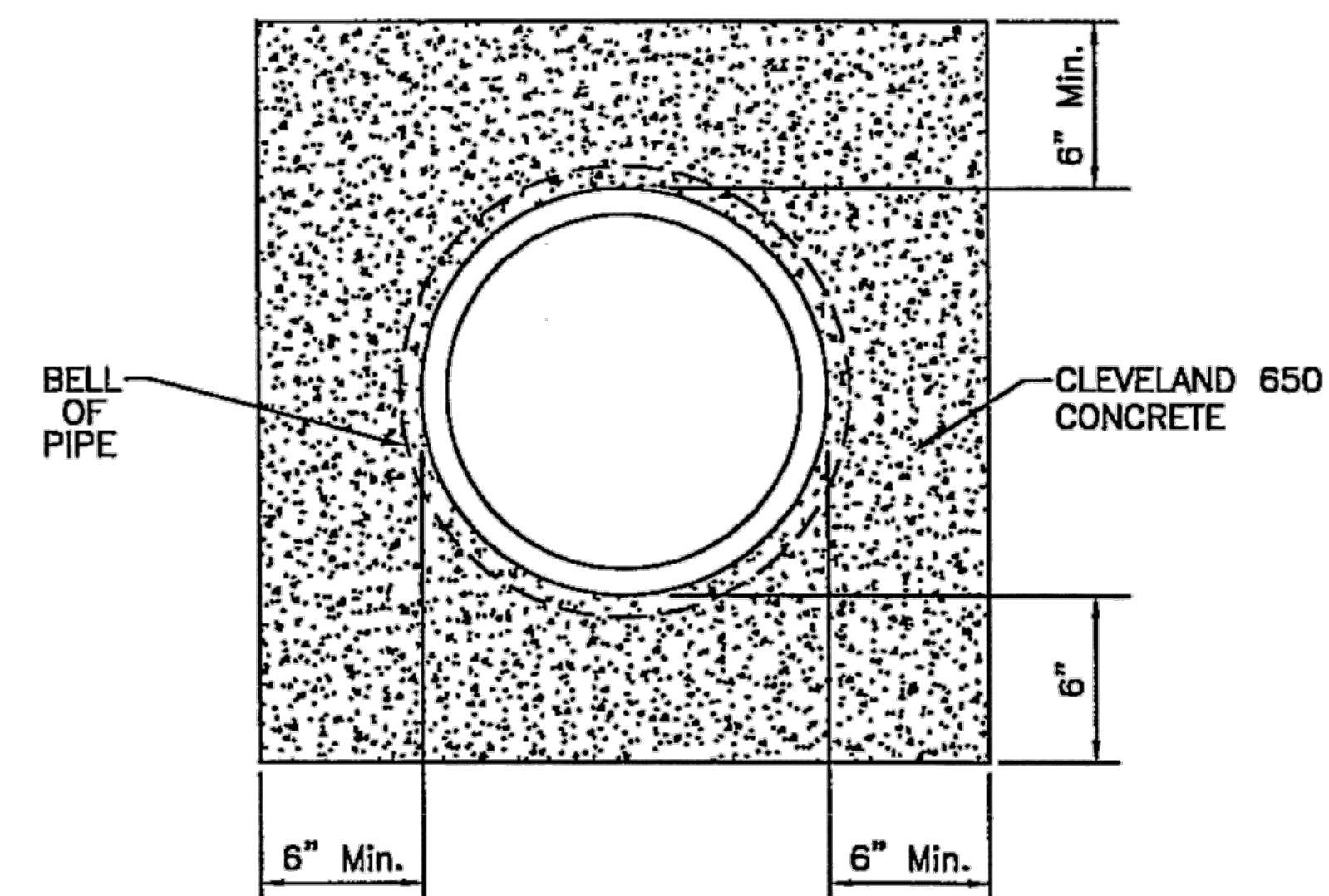
HEADWALL ELEVATION
NOTE: ALL REINFORCEMENT IS TO BE EPOXY COATED



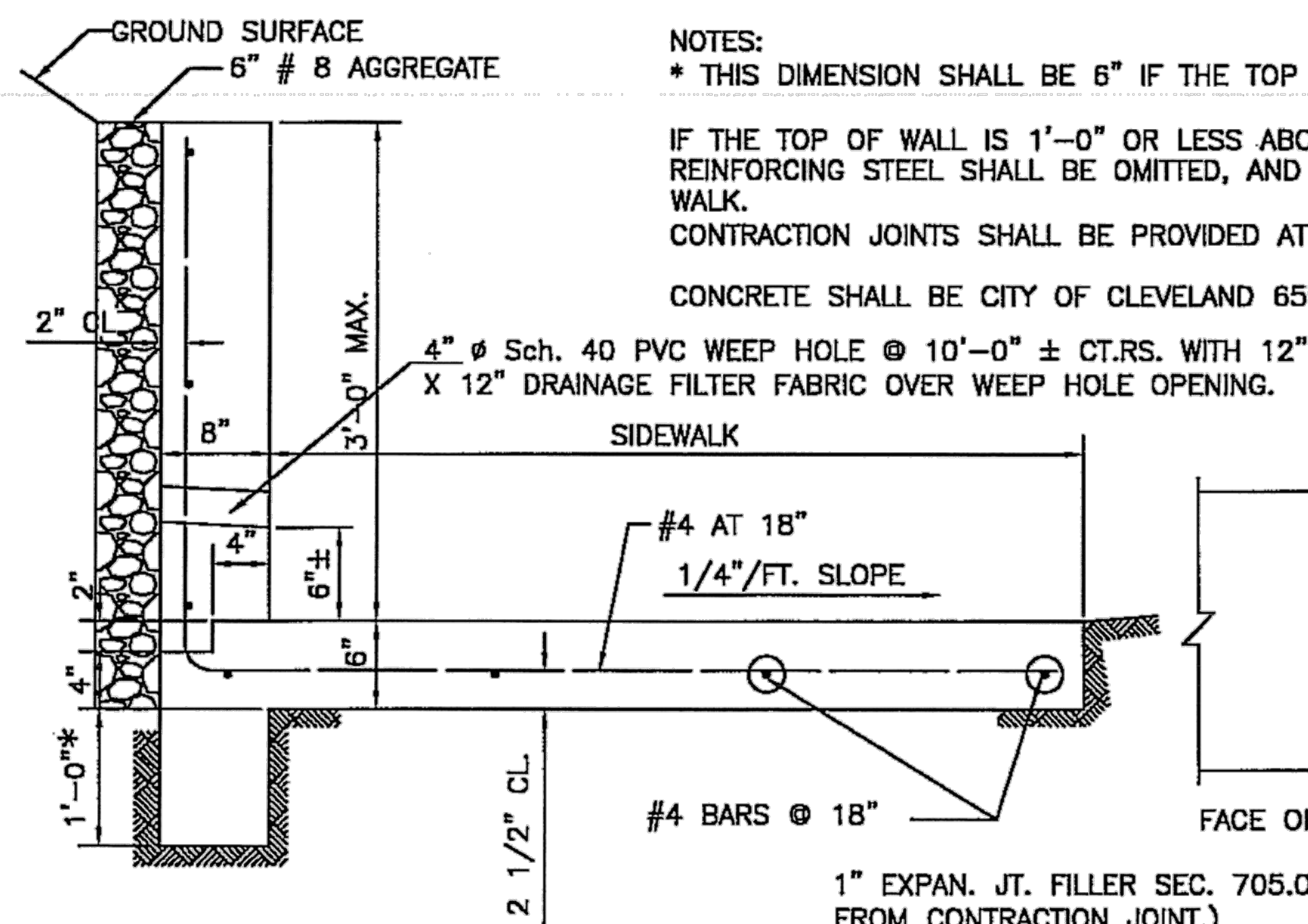
SECTION A-A
RIGID PIPE



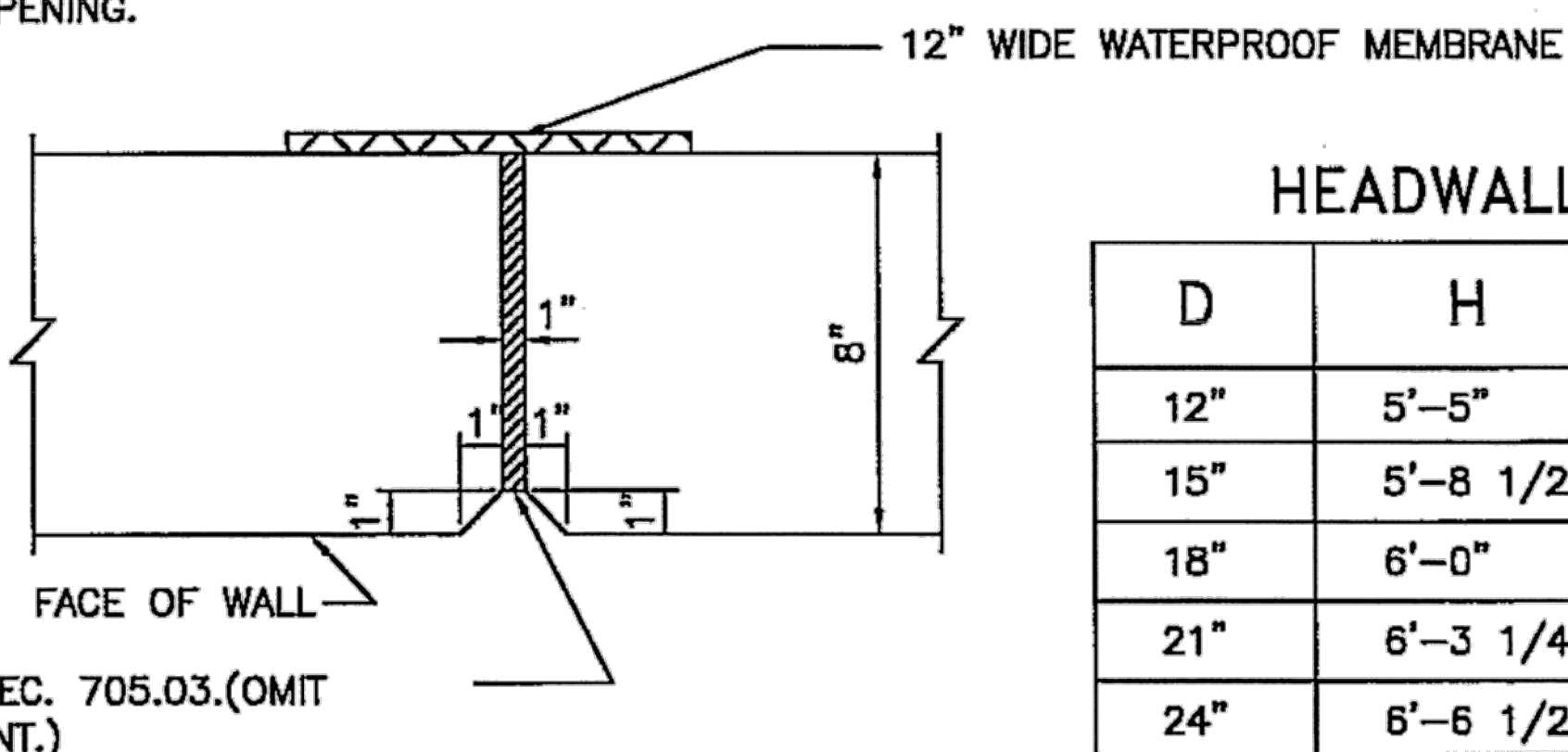
SECTION A-A
CORRUGATED PIPE



STANDARD SECTION OF PIPE SEWER
INCASED IN 6" CONCRETE
NOTE: 6" IF FORMED, OTHERWISE EXTEND TO UNDISTURBED EARTH



DETAIL FOR CONCRETE WALL & SIDEWALK
NOTE: ALL REINFORCEMENT IS TO BE EPOXY COATED



DETAIL OF EXPANSION JOINT AND CONTRACTION JOINT

HEADWALL DIMENSIONS

D	H	L	T
12"	5'-5"	5'-6"	1'-9"
15"	5'-8 1/2"	5'-9"	1'-11"
18"	6'-0"	6'-0"	2'-0"
21"	6'-3 1/4"	7'-0"	2'-2"
24"	6'-6 1/2"	8'-0"	2'-5"
27"	6'-10 1/2"	9'-0"	2'-8"
30"	7'-1 1/2"	10'-0"	2'-11"
36"	7'-8"	12'-0"	3'-2"

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK- DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
MISCELLANEOUS CONCRETE CONSTRUCTION DETAILS
NO SCALE

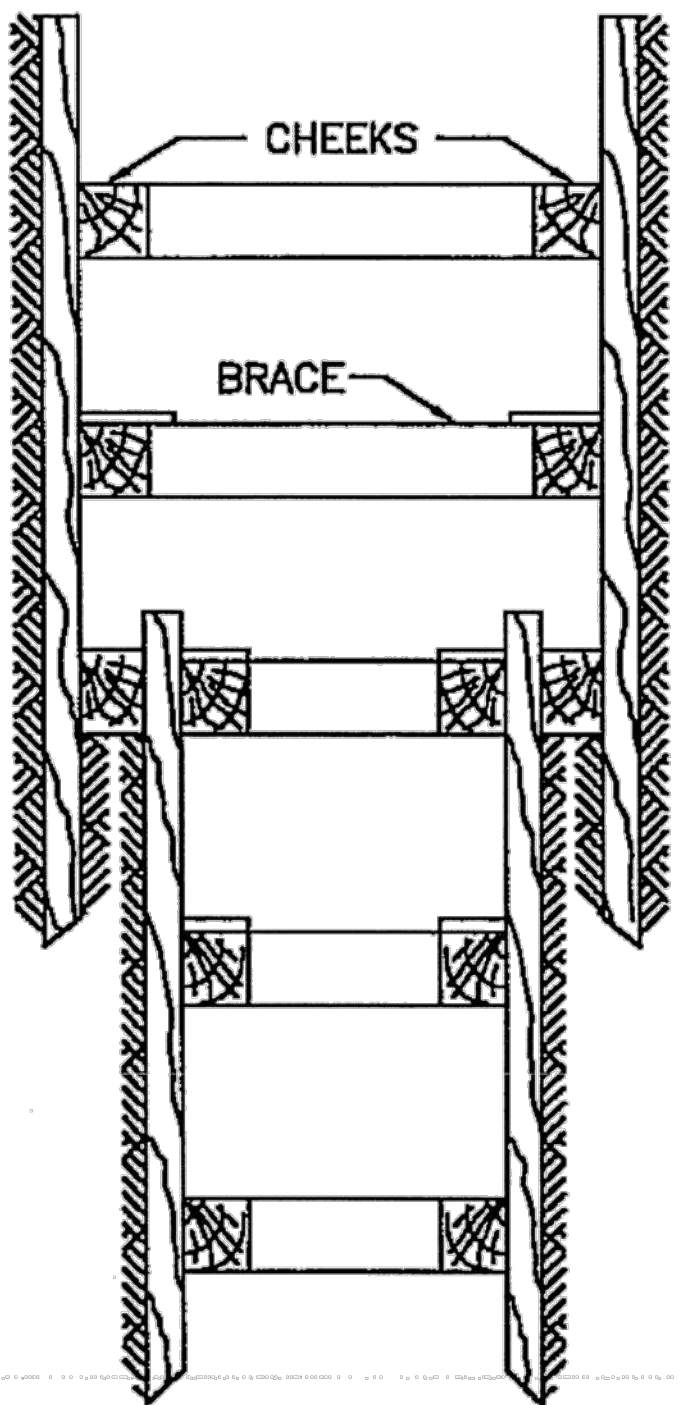
DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

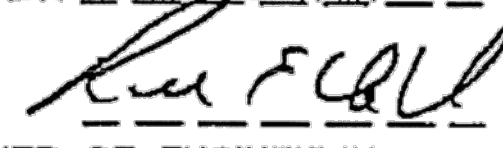
APPROVED: *[Signature]* DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

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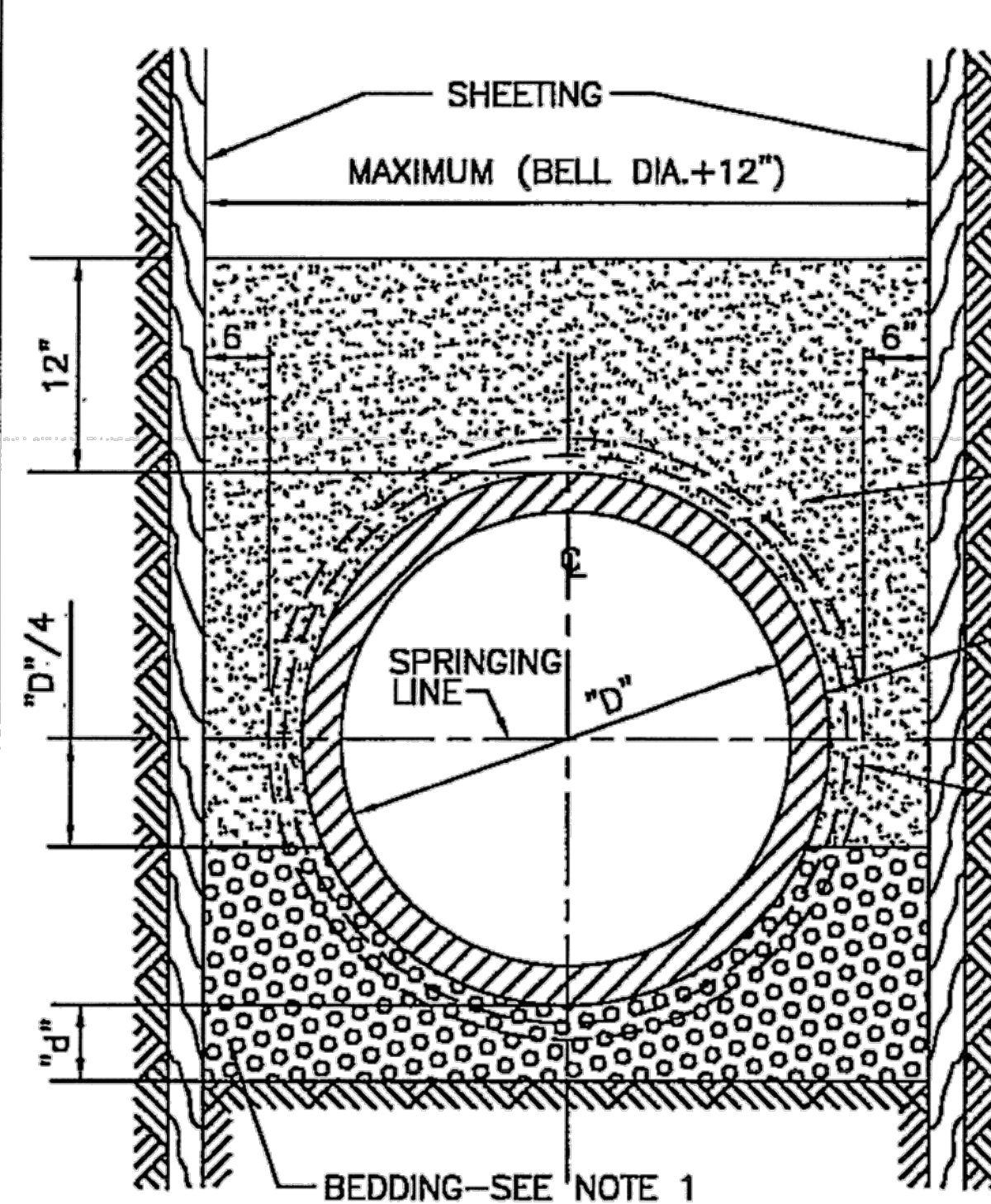
DEPTH OF TRENCH IN FEET	2 IN. SHEETING FEET BOARD MEAS.	SIZE OF SEWERS																						
		12" 15" 18"	21" 24" 27"	30" 33" 36" #2C BR. #3C BR.	42" 48" #4C BR. #5C BR. #6C BR.	54" 60" #7C BR. #8C BR. #9C BR.	66" #10C BR. #11C BR. #12C BR.	72" 78" #13C BR. #14C BR. #15C BR.	84"	90" 96"	102"	108" 114"	120"											
		WIDTH OF TRENCH IN FEET (SEE NOTE)																						
		3	4	5	6	7	8	9	10	11	12	13	14											
		SIZE OF BRACES AND CHEEKS IN INCHES																						
		6x6	6x6	6x6	6x6	8X8	6x6	8X8	6x6	8X8	6x6	8X8	6x6	8X8	6x6	8X8	6x6	8X8	6x6	8X8	6x6		8X8	
6	24	15	16	18	20	34	21	36	22	39	24	42	25	44	27	47	28	50	30	52	31	55	TWO SETS OF BRACES	
8	32	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
10	40	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
12	48	27	28	28	29	51	30	52	30	53	31	55	32	56	33	57	33	59	34	60	35	61	THREE SETS OF BRACES	
14	56	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
16	64	34	35	36	37	65	38	67	38	68	39	70	40	71	41	73	41	74	42	76	43	77	2 SETS OF SHEETING FOUR SETS OF BRACES	
18	80	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
20	88	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
22	96	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
24	104	43	44	45	46	80	46	81	47	83	48	84	49	86	49	87	50	89	51	90	52	92	FIVE SETS OF BRACES	
26	112	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
28	120	43	44	45	46	80	46	81	47	83	48	84	49	86	49	87	50	89	51	90	52	92	FIVE SETS OF BRACES	



- NOTES:
- 1 - THE MIN. TRENCH WIDTH IS DETERMINED AS PER DWG. ME 146 AND IS THE TRENCH WIDTH AT THE TOP OF THE SEWER OR AT THE TOP OF THE UTILITY BEING INSTALLED AS PER OWNING UTILITIES REQUIREMENTS.
- 2 - THIS CHART SHOWS MINIMUM SHEETING & BRACING REQUIREMENTS. CONTRACTOR SHALL SUBMIT A SHEETING & BRACING SCHEDULE, COMPLETE WITH CALCULATIONS, DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OHIO

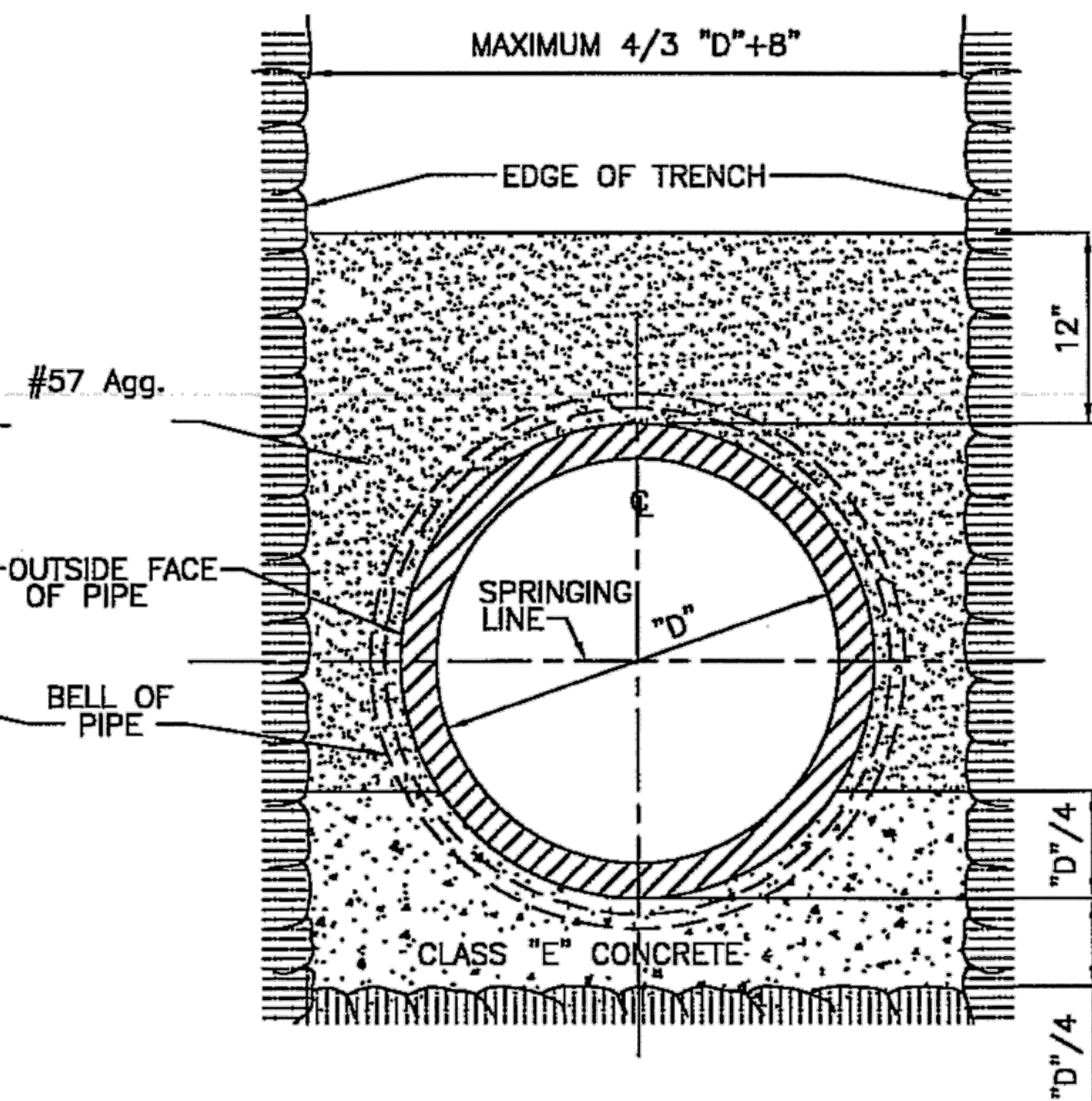
CITY OF CLEVELAND	
DEPARTMENT OF PUBLIC SERVICE	
DIVISION OF ENGINEERING & CONSTRUCTION	
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE	
STANDARD CONSTRUCTION DRAWING	
SHEETING & BRACING CHART	
NOT TO SCALE	
DRAWN BY: R. PLIODZINSKAS	DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN	DATE: 4/8/08
APPROVED: 	DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION	
FILE NO. : 164ME	21

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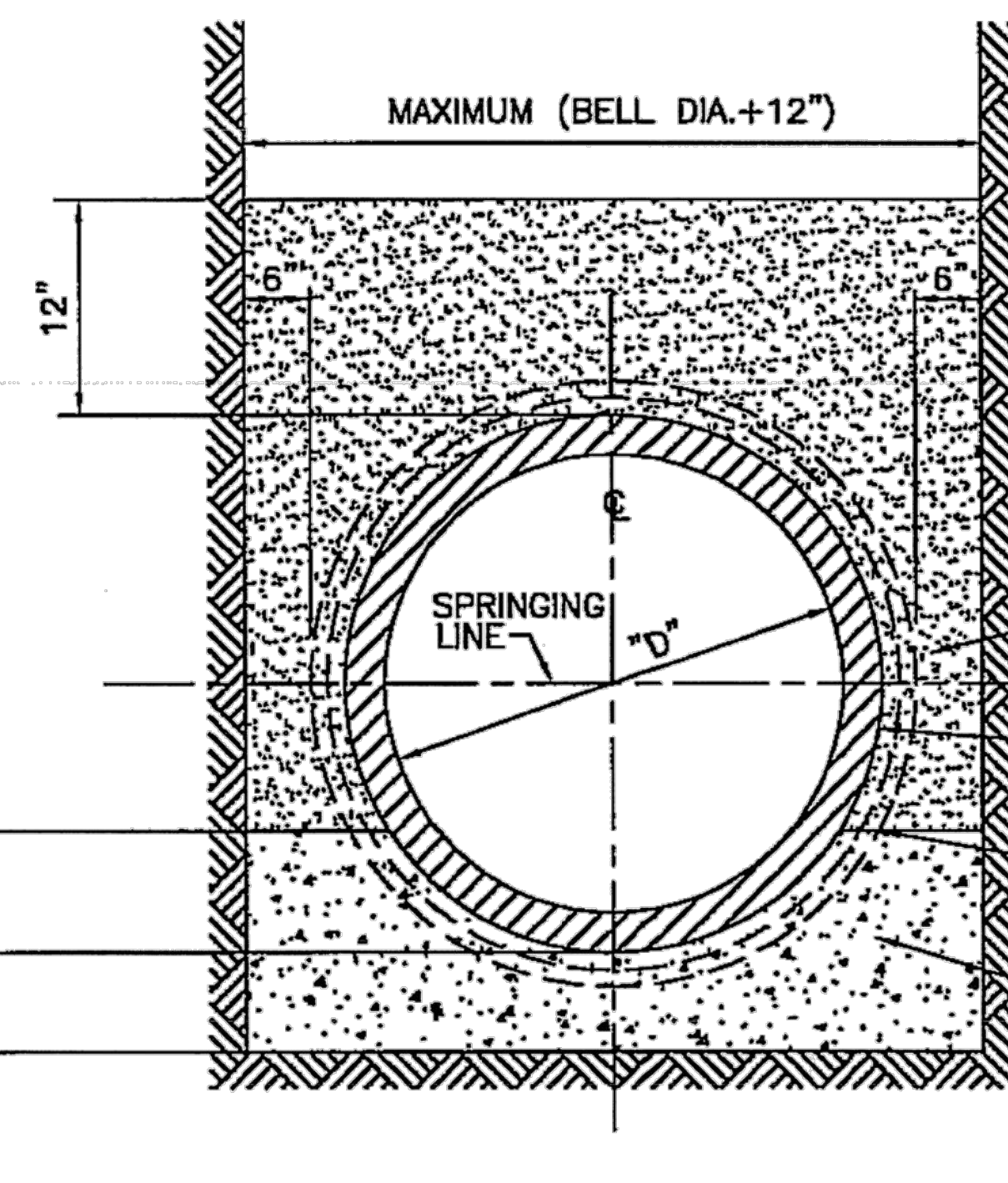
TYPICAL SECTION

PIPE SEWERS IN
ORDINARY EARTH BEDDING



TYPICAL SECTION

PIPE SEWER IN ROCK
AND OR SHALE
WHERE DIRECTED



TYPICAL SECTION

PIPE SEWER IN
CONCRETE CRADLE

NOTES:

1. THE PIPE BEDDING MATERIAL SHALL BE COARSE NATURAL AGGREGATE COMPLYING WITH 703.01 WITH THE FOLLOWING PROVISIONS:

- (A) 4" BEDDING DEPTH "d" OF NO. 57 GRANULAR MATERIAL FOR 8" TO 24" PIPE
- (B) 6" BEDDING DEPTH "d" OF NO. 5 GRANULAR MATERIAL FOR 27" TO 60" PIPE
- (C) 8" BEDDING DEPTH "d" OF NO. 4 GRANULAR MATERIAL FOR PIPE SIZES GREATER THAN 60". THE MINIMUM DEPTH OF THE BEDDING SHALL BE 2" BELOW THE PIPE BELLS, IF ANY, BUT IN NO CASE SHALL THE BEDDING BE LESS THAN 8"
- (D) SERVICE CONNECTIONS SHALL HAVE A 3" MINIMUM BEDDING DEPTH OF NO. 57 GRANULAR MATERIAL.

2. TRENCH BACKFILL SHALL IN PAVED AREAS SHALL BE CLEVELAND 50 LSM AND OUTSIDE OF PAVED AREAS ORIGINAL TRENCH EXCAVATION MAY BE USED, PROPERLY COMPACTED.

THOROUGHLY COMPACTED
#57 AGGREGATE
OUTSIDE FACE OF PIPE
BELL OF PIPE
CLASS "E" CONCRETE

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD TRENCH FOR PIPE SEWERS
NOT TO SCALE

DRAWN BY: R. PIJODZINSKAS DATE: 8/28/07
SUBMITTED BY: W. MCLAUGHLIN DATE: 8/28/07

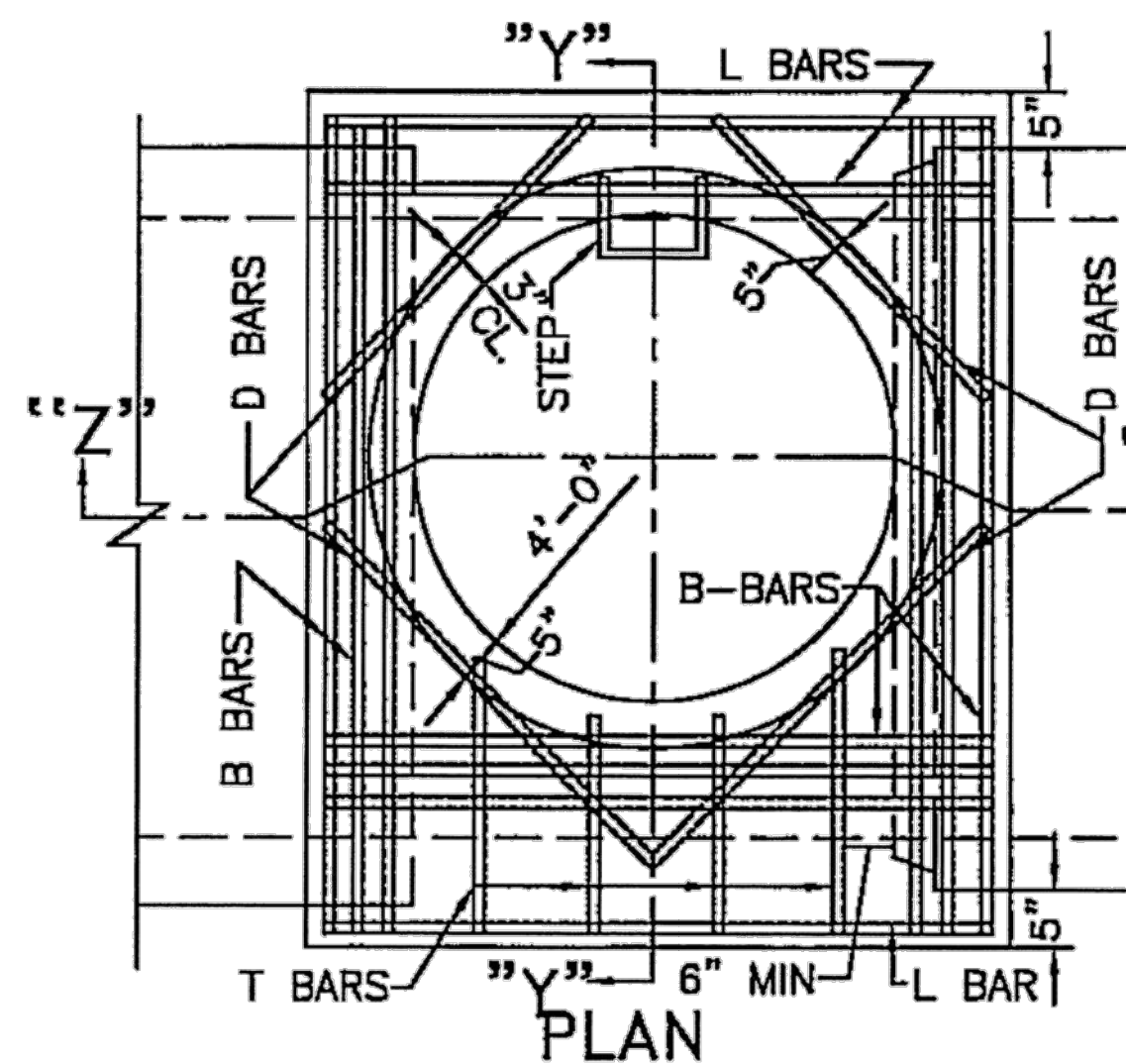
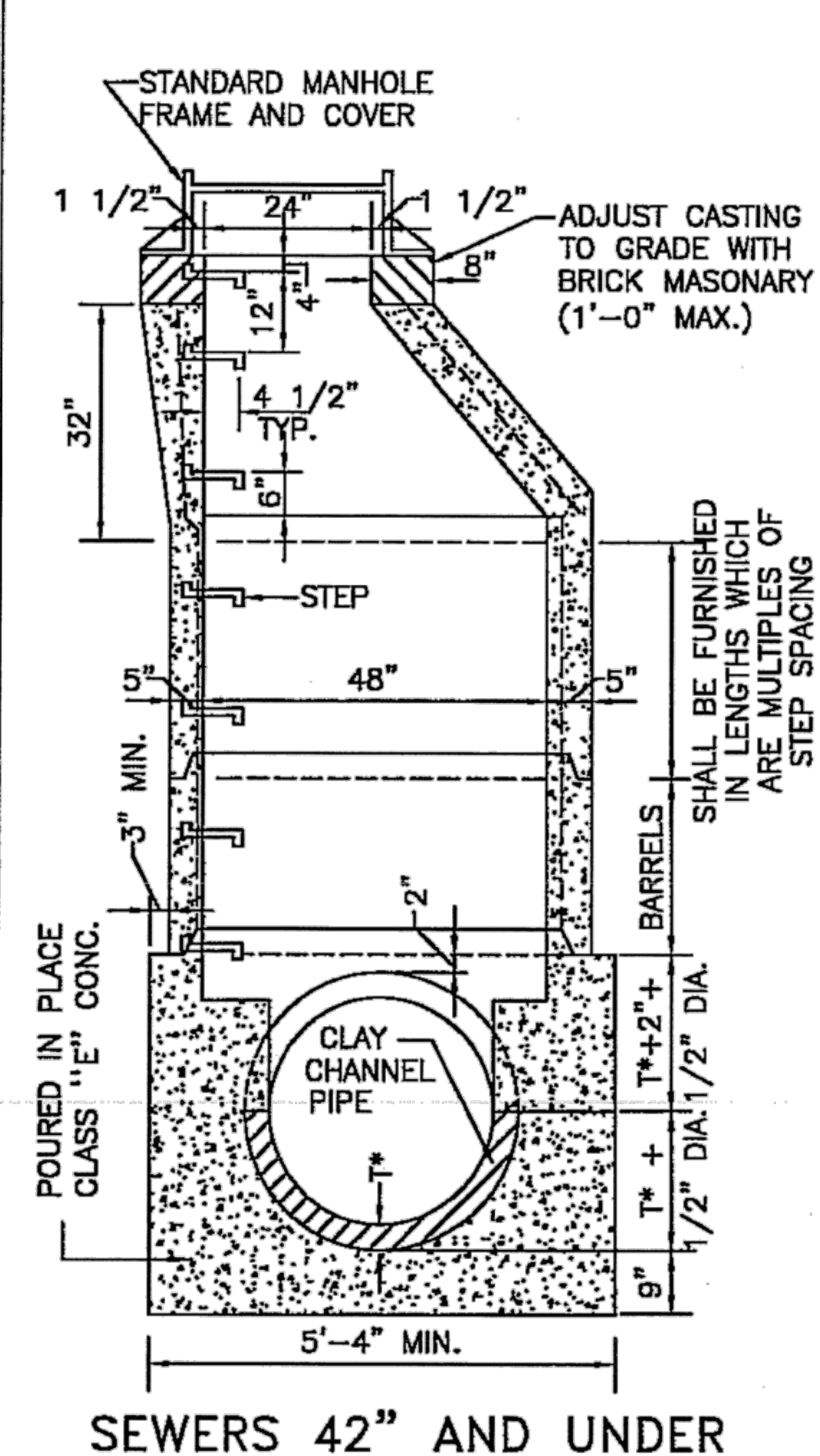
APPROVED: *R. WASIK* DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. 146-ME

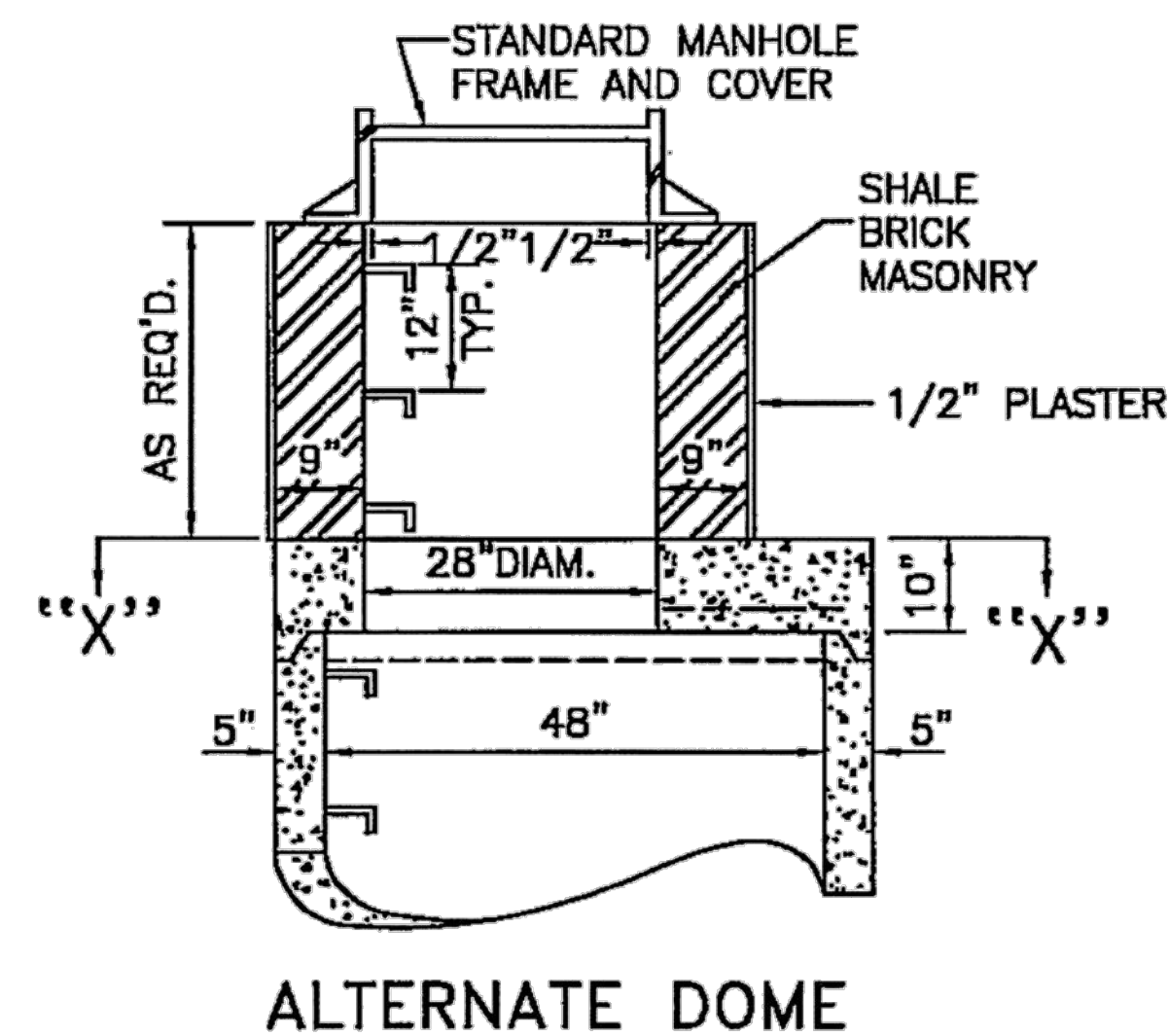
SHEET 22

22

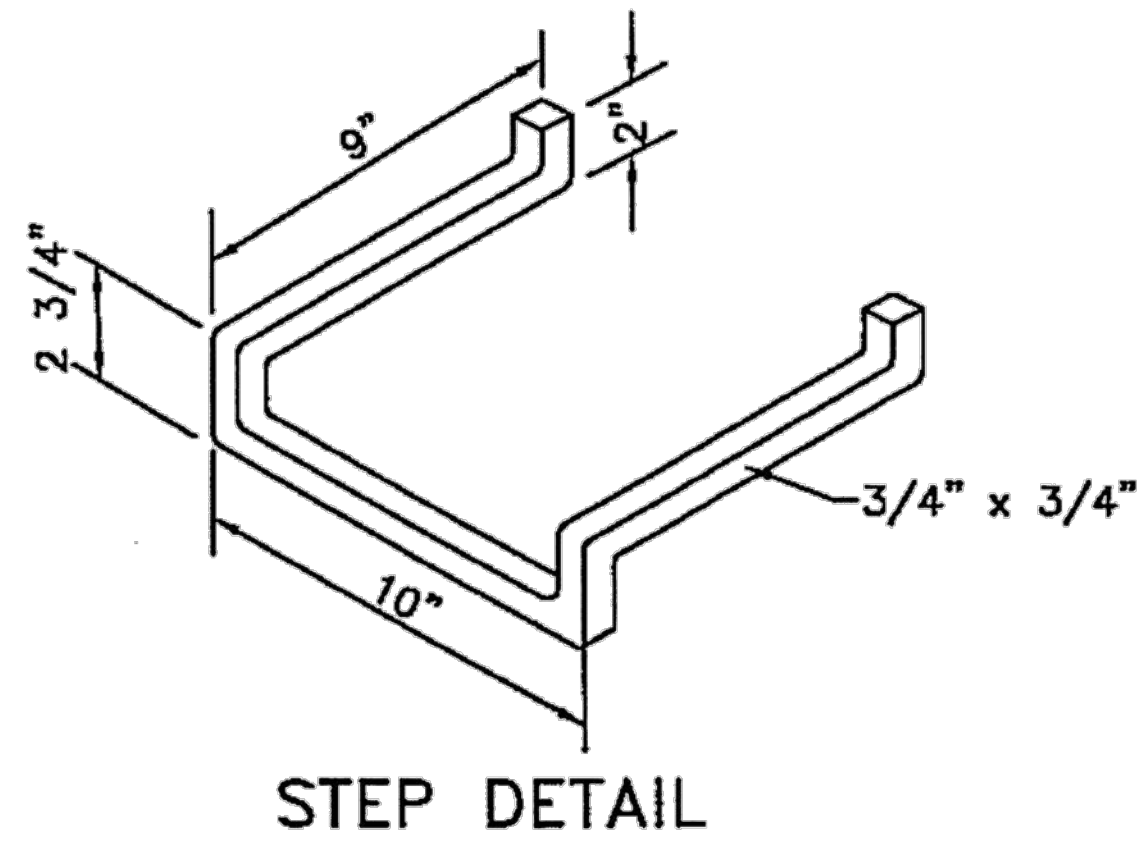
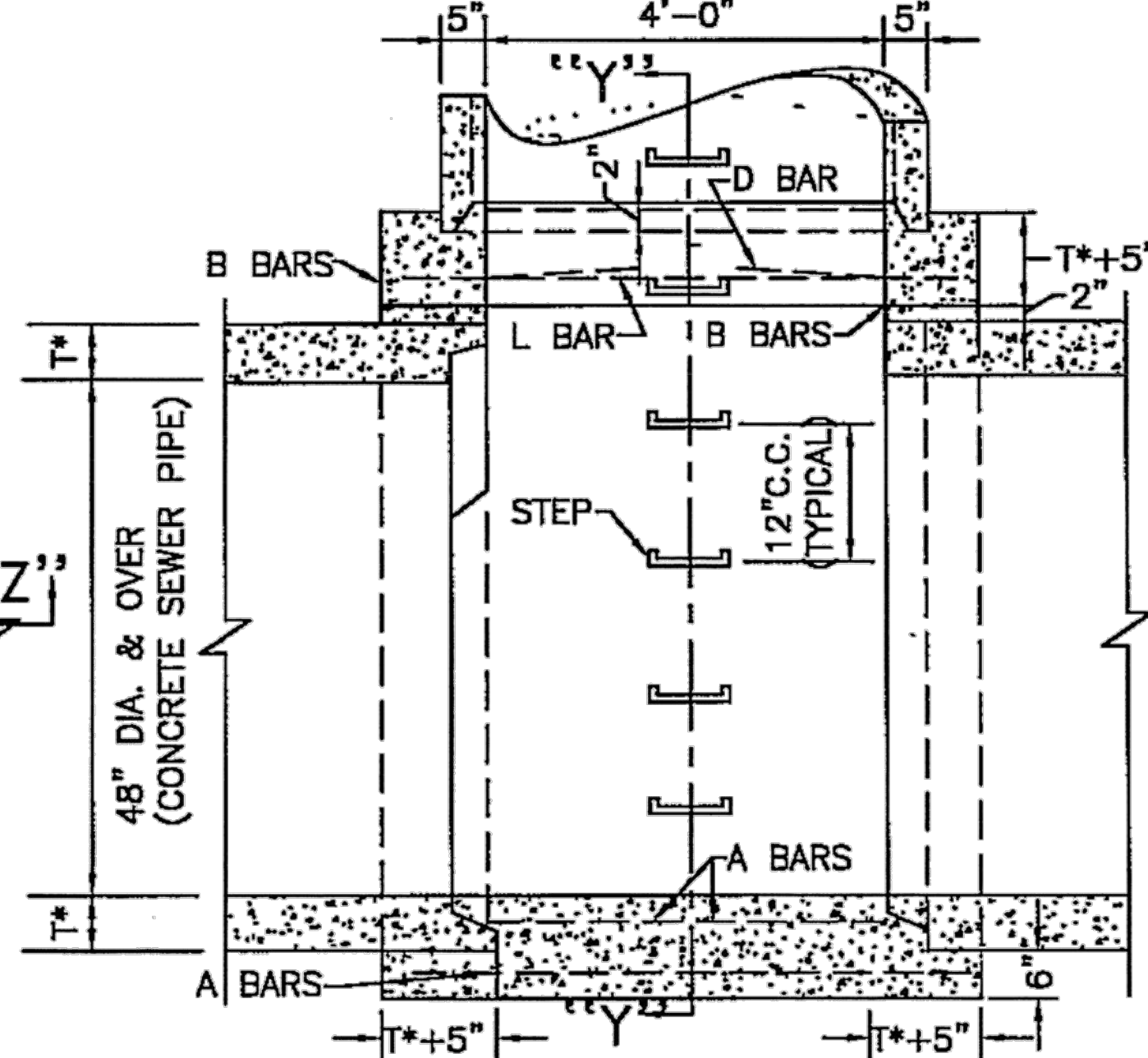
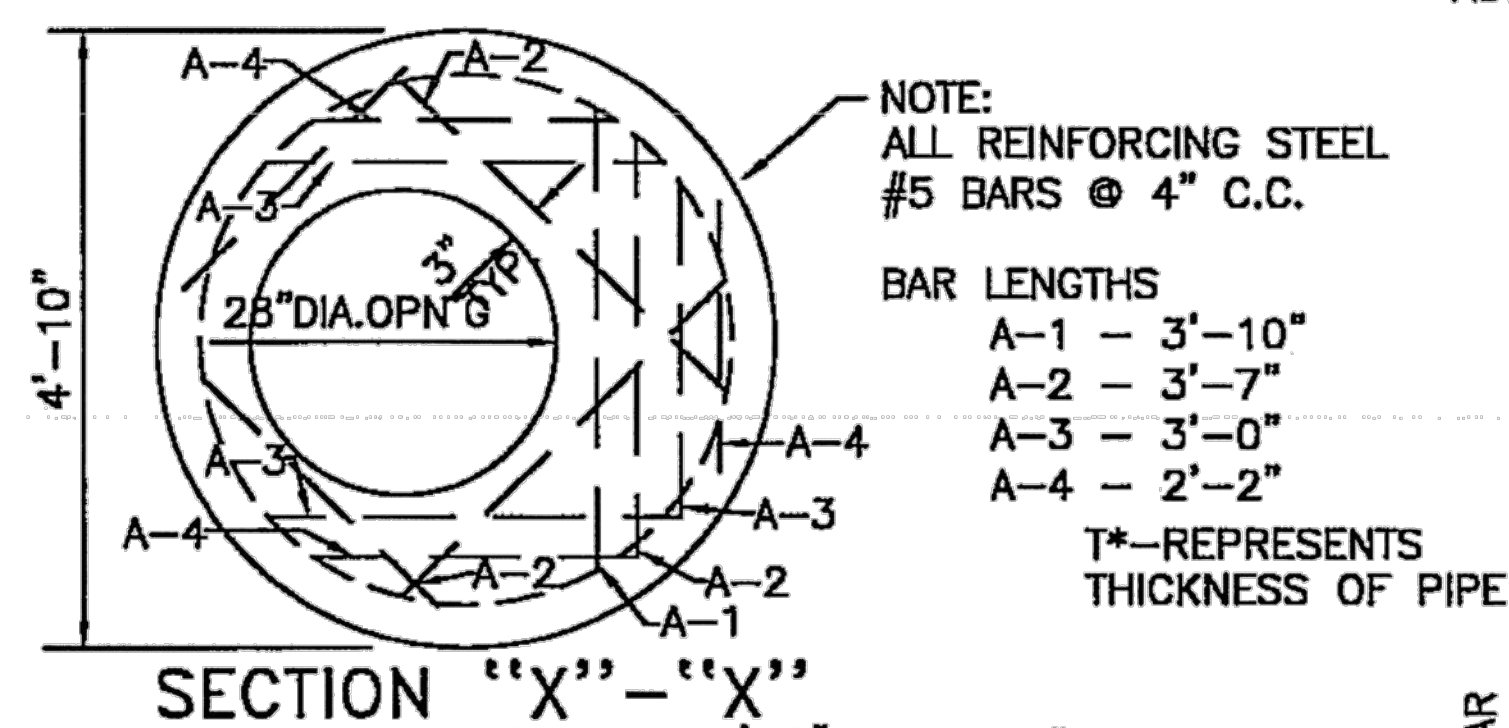
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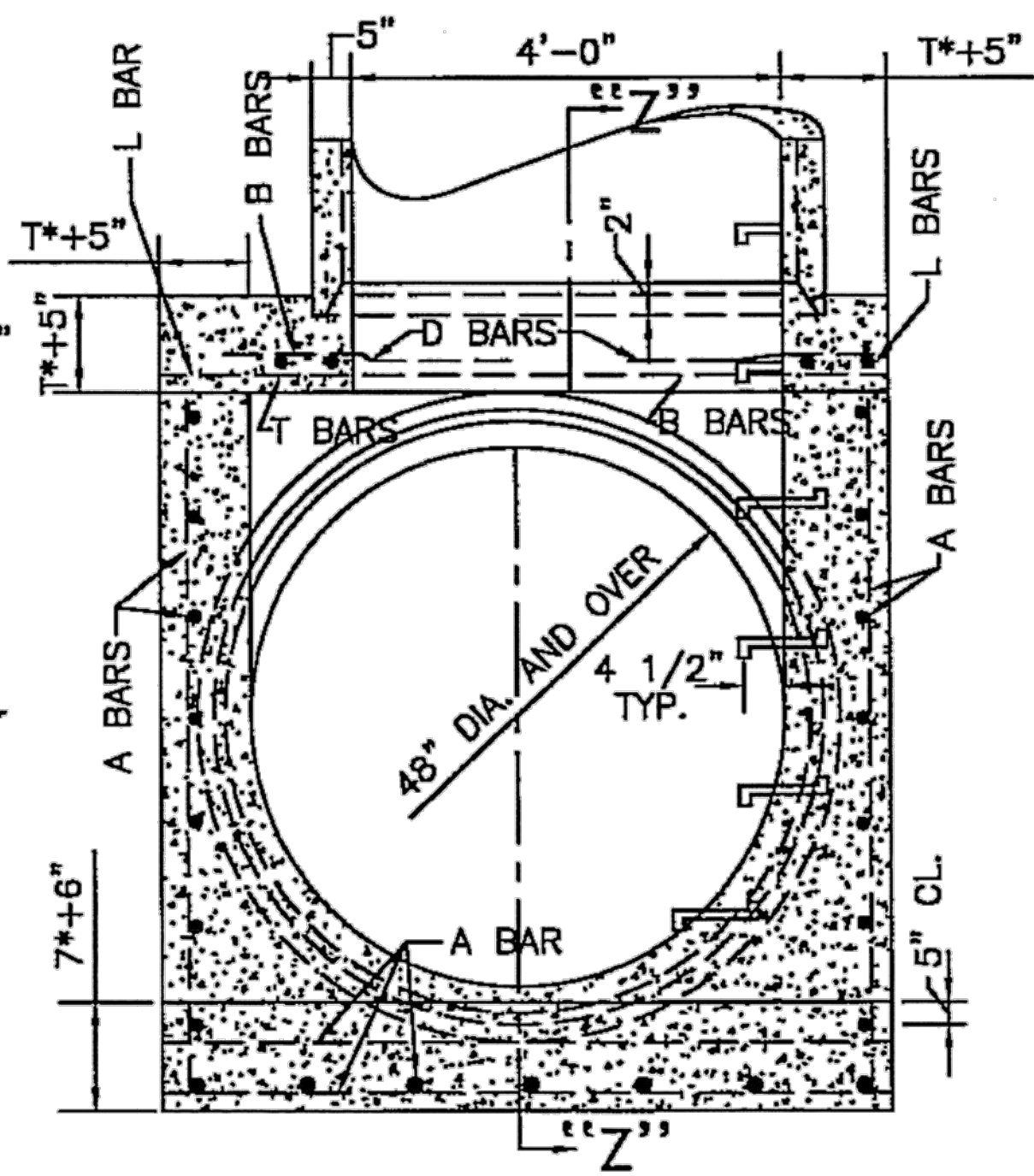
CONNECTION BOX FOR PRECAST MANHOLES ON SEWERS 48" AND OVER



ALTERNATE DOME



NOTE: STEPS SHALL BE CAST IRON AS PER ASTM A 48 CLASS 30 GRAY IRON OR ALUMINUM AS PER ASTM B 221,6061-T6



NOTES:

NO HOLES FOR 12" INLET OR CATCH BASIN CONNECTIONS SHALL BE CUT IN ANY SECTION LESS THAN 36" MANHOLE BARREL NOT MORE THAN 2 INLET CONNECTIONS SPACED 2± FEET APART HORIZONTALLY PERMITTED IN 3 OR 4 FOOT MANHOLE SECTIONS.

ALL JOINTS AND PIPE OPENINGS IN THE MANHOLE SHALL BE THOROUGHLY CALKED WITH 1:3 CEMENT MORTAR HAVING A 1/2" MINIMUM THICKNESS.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS SHALL COMPLY WITH THE REQUIREMENTS OF ASTM DESIGNATION C 478-06a: MINIMUM WALL THICKNESS SHALL BE 5 INCHES.

CONNECTION BOXES FOR SEWERS 48" AND OVER IN DIAMETER SHALL BE REINFORCED AS SHOWN AND AS SPECIFIED BELOW:

- A) BARS SHALL BE SPACED AT 12" CENTERS IN BOTH DIRECTIONS.
- B) BARS SHALL BE SPACED AT 3" CENTERS IN BOTH DIRECTIONS.
A, B & L BARS SIZES:
5/8" DIA. FOR 48" TO 60" SEWERS.
3/4" DIA. FOR 66" TO 78" SEWERS.
7/8" DIA. FOR 84" TO 96" SEWERS.
- C) T BARS SHALL BE 5/8" DIA. SPACED AT 12" CENTERS.
- D) BARS SHALL BE 5/8" DIAMETER EPOXY COATED REINFORCING STEEL SHALL HAVE 2" CLEARANCE EXCEPT WHERE OTHERWISE SPECIFIED.
- E) STANDARD MANHOLE FRAME AS PER A-503 (SHEET 61) AND COVER AS PER A-605 (SHEET 62) OR A-695 (SHEET 63)

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
DETAIL PLAN OF PRECAST CONCRETE MANHOLE
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 8/28/07
SUBMITTED BY: W. MCLAUGHLIN DATE: 8/28/07
APPROVED: [Signature] DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. MH 1 SHEET 1/1

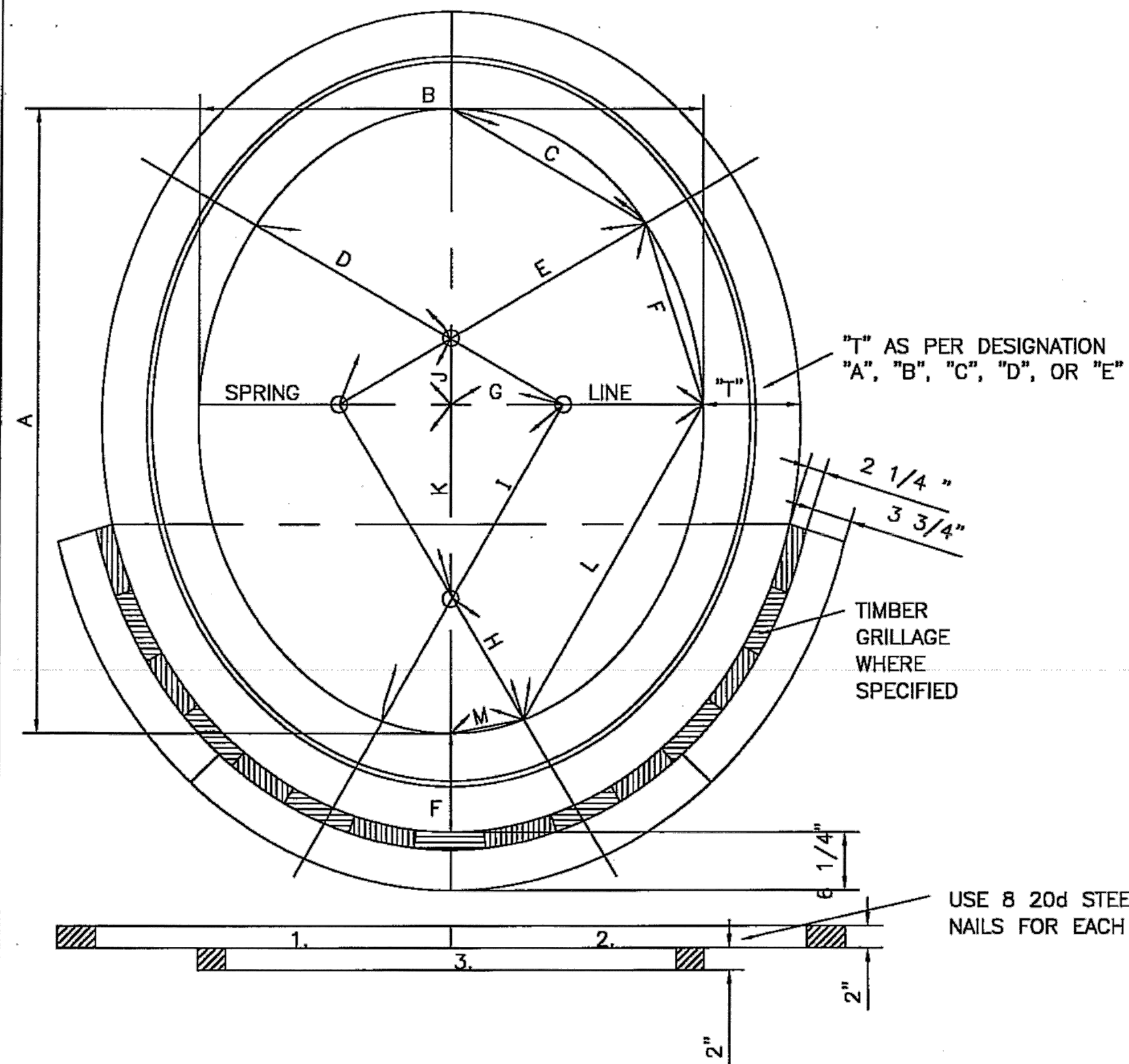
23

MISCELLANEOUS DETAILS

CUY-E 55TH ST RESURF

84
103

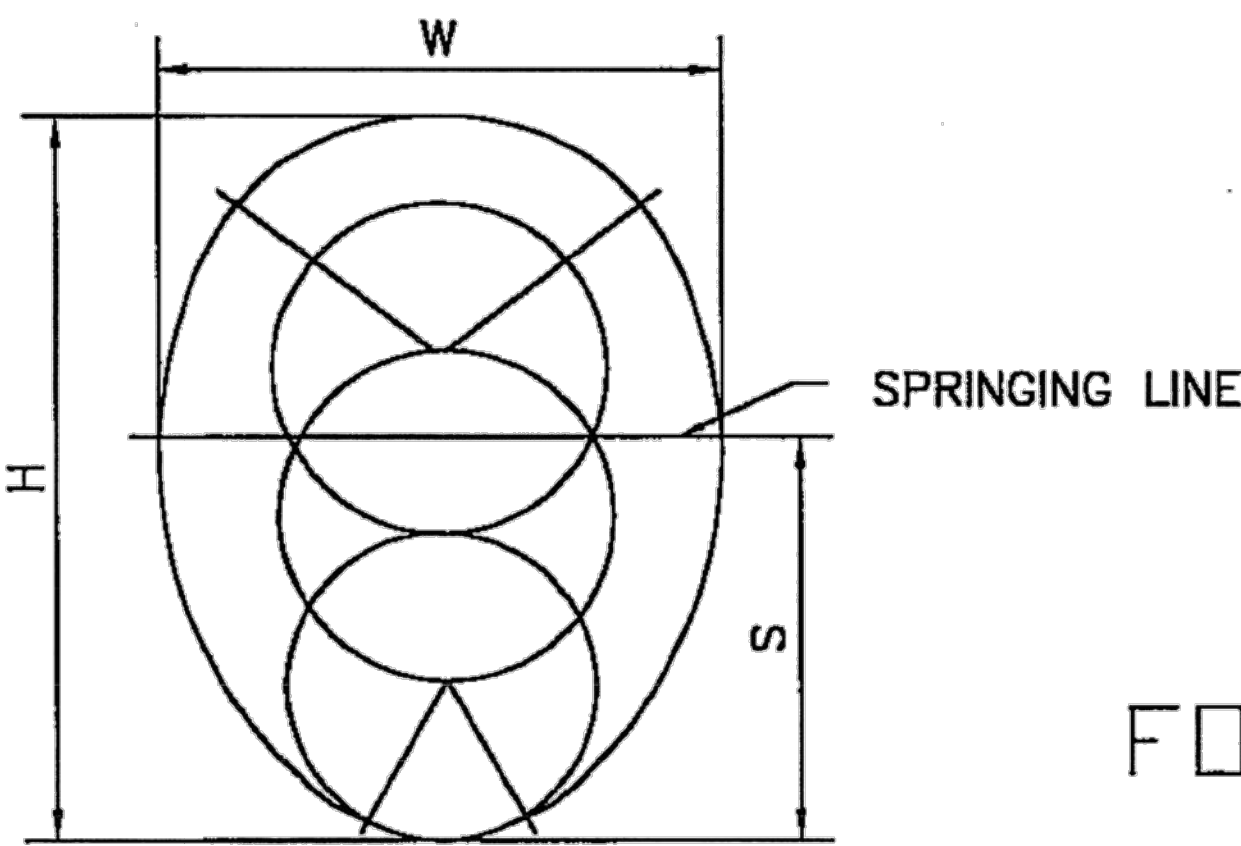
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EGG SHAPED SEWERS					NO.	H FEET	W FEET	S FEET	AREA SQ. FT.	NO.	H FEET	W FEET	S FEET	AREA SQ. FT.
2	2.25	1.94	1.28	3.41	8	5.12	4.04	2.71	16.00	15	7.79	6.14	4.12	36.99
3	2.75	2.23	1.64	4.75	9	5.54	4.37	2.93	18.72	16	8.13	6.41	4.30	40.32
4	3.23	2.54	1.70	6.35	10	5.94	4.69	3.14	21.54	17	8.47	6.68	4.47	43.71
5	3.74	2.95	1.98	8.55	11	6.33	4.99	3.35	24.46	18	8.79	6.94	4.65	47.17
6	4.23	3.34	2.23	10.90	12	6.71	5.29	3.55	27.47	19	9.12	7.19	4.82	50.70
7	4.69	3.70	2.48	13.39	13	7.08	5.58	3.74	30.57	20	9.43	7.44	4.98	54.29
					14	7.44	5.87	3.93	33.74					

TYPES OF EGG SHAPED SEWERS

- "A"—1 RING OF BRICK ALL AROUND.
- "B"—1 RING OF BRICK ALL AROUND & 1 RING EXTRA ON ARCH.
- "C"—2 RINGS OF BRICK ALL AROUND .
- "D"—2 RINGS OF BRICK ALL AROUND & 1 RING EXTRA ON ARCH.
- "E"—3 RINGS OF BRICK ALL AROUND.



FOR RECORD ONLY

TABULAR DIMENSIONS FOR EGG SHAPED SEWERS NO.2 TO NO. 8													
NO.	A	B	C	D	E	F	G	H	I	J	K	L	M
2	2'-3"	1'-11 1/4"					6 3/8"	9"	1'-6"		6 3/8"		
3	2'-9"	2'-2 3/4"					10 5/8"	9"	2'-0"		10 5/8"		
4	3'-2 3/4"	2'-6 5/8"	1'-2 1/8"	1'-2 1/8"	1'-10 1/2"	11 1/2"	7 3/16"	8 1/8"	1'-10 1/2"	4 1/16"	12 3/16"	1'-10 1/2"	4 1/4"
5	3'-9"	2'-11 3/8"	1'-4 3/8"	1'-4 3/8"	2'-1 7/8"	1'-1 3/8"	8 3/16"	9 1/2"	2'-1 7/8"	4 3/4"	1'-2 1/4"	2'-1 7/8"	4 7/8"
6	4'-2 3/4"	3'-4"	1'-6 1/2"	1'-6 1/2"	2'-5 1/4"	1'-3 1/8"	9 1/4"	10 3/4"	2'-5 1/4"	5 3/8"	1'-4 1/8"	2'-5 1/4"	5 1/2"
7	4'-8 1/4"	3'-8 3/8"	1'-8 1/2"	1'-8 1/2"	2'-8 1/2"	1'-4 3/4"	10 5/16"	11 7/8"	2'-8 1/2"	5 15/16"	1'-5 13/16"	2'-8 1/2"	6 1/8"
8	5'-1 1/2"	4'-0 1/2"	1'-10 1/2"	1'-10 1/2"	2'-11 1/2"	1'-6 1/4"	11 1/4"	1'-1"	2'-11 1/2"	6 1/2"	1'-7 1/2"	2'-11 1/2"	6 3/4"

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE

DIVISION OF ENGINEERING & CONSTRUCTION

JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE

STANDARD CONSTRUCTION DRAWING

STANDARD PLAN FOR EGG SHAPED SEWERS

DIMENSIONS & AREAS

NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS

DATE: 4/8/08

SUBMITTED BY: W. McLAUGHLIN

DATE: 4/8/08

APPROVED: [Signature]

DATE: 7-8-08

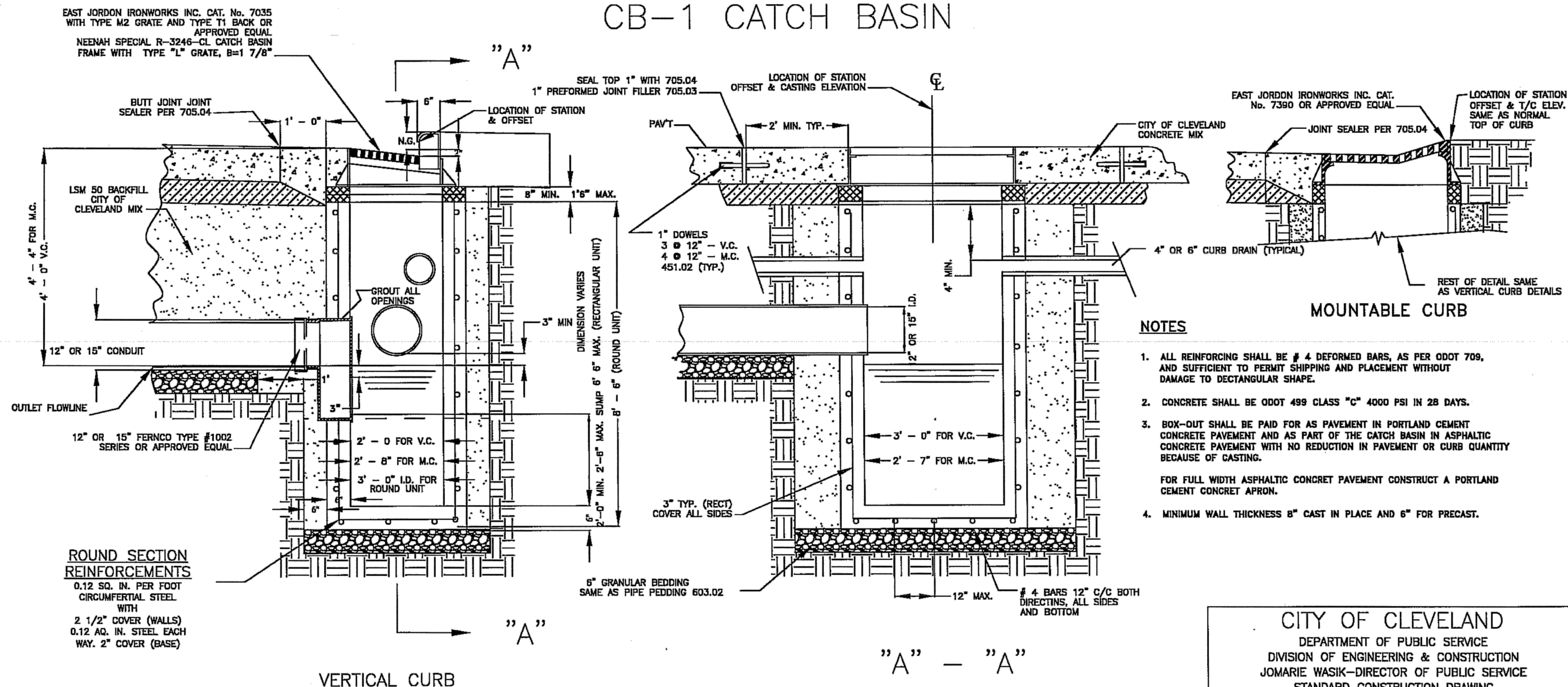
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. 73M

24

6

CB-1 CATCH BASIN



LEGEND

V.C. = VERTICAL CURB
M.C. = MOUNTABLE CURB
T/C = TOP OF CASTING
N.G. = NORMAL GUTTER

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD DETAIL FOR
RECTANGULAR CATCH BASIN
NOT TO SCALE

REVISED BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: *[Signature]* DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB-1

SHEET 1/7

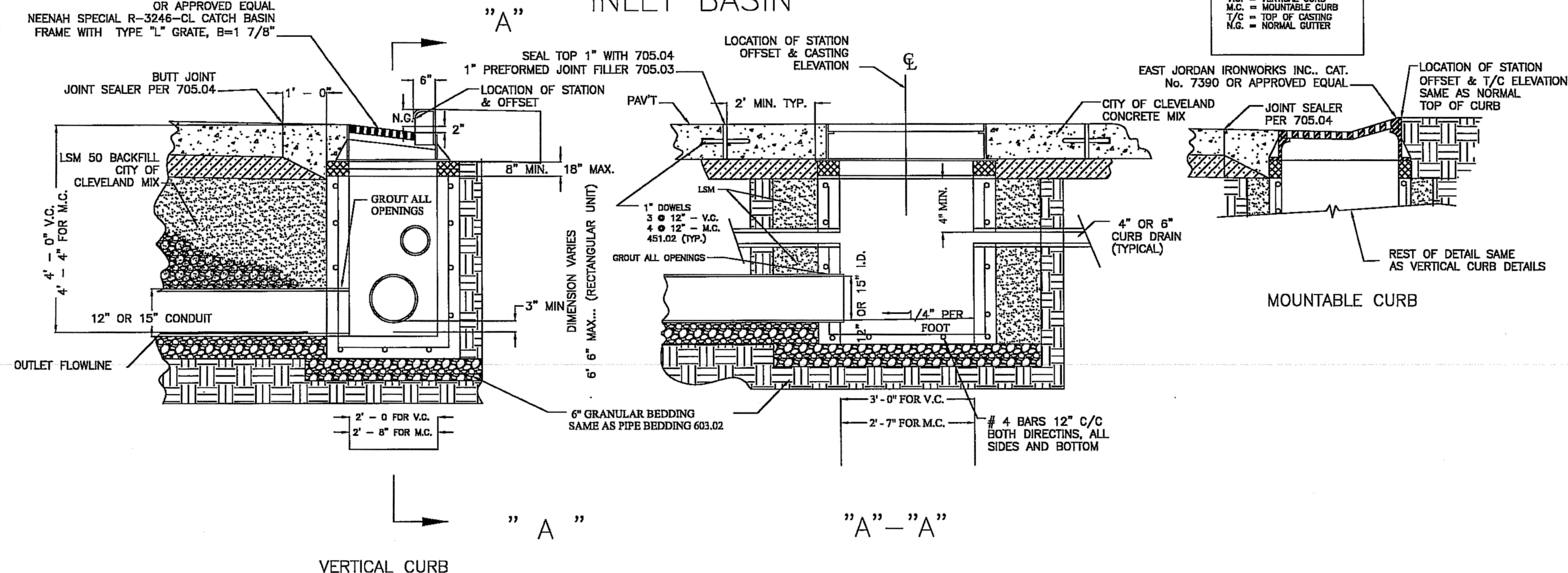
26

EAST JORDAN IRONWORKS INC... CAT. No. 7035
WITH TYPE M2 GRATE AND TYPE T1 BACK
OR APPROVED EQUAL
NEENAH SPECIAL R-3246-CL CATCH BASIN
FRAME WITH TYPE "L" GRATE, B=1 7/8"

INLET BASIN

LEGEND

V.C. = VERTICAL CURB
M.C. = MOUNTABLE CURB
T/C = TOP OF CASTING
N.G. = NORMAL GUTTER



NOTES

- ALL REINFORCING SHALL BE # 4 DEFORMED BARS, AS PER ODOT 709, AND SUFFICIENT TO PERMIT SHIPPING AND PLACEMENT WITHOUT DAMAGE TO RECTANGULAR SHAPE.
- CONCRETE SHALL BE ODOT 499 CLASS "C" 4000 PSI IN 28 DAYS.
- BOX-OUT SHALL BE PAID FOR AS PAVEMENT IN PORTLAND CEMENT CONCRETE PAVEMENT AND AS PART OF THE CATCH BASIN IN ASPHALTIC CONCRETE PAVEMENT WITH NO REDUCTION IN PAVEMENT OR CURB QUANTITY BECAUSE OF CASTING.
- FOR FULL WIDTH ASPHALTIC CONCRETE PAVEMENT- CONSTRUCT A PORTLAND CEMENT CONCRETE APRON.
- MINIMUM WALL THICKNESS 8" FOR CAST IN PLACE AND 6" FOR PRECAST

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD RECTANGULAR PRECAST CONCRETE
INLET BASIN
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

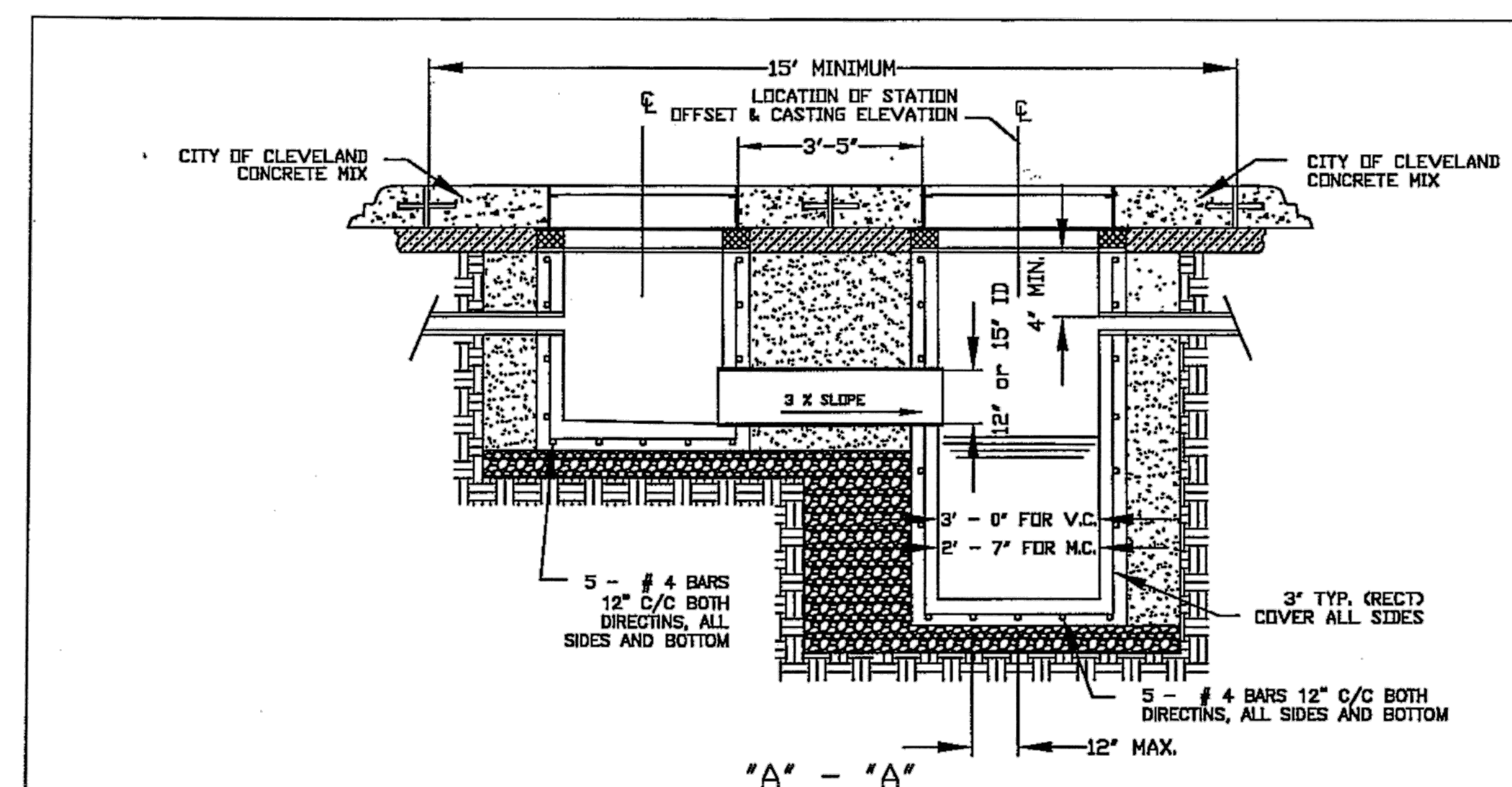
APPROVED: *[Signature]* DATE: 7-8-09

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB-1

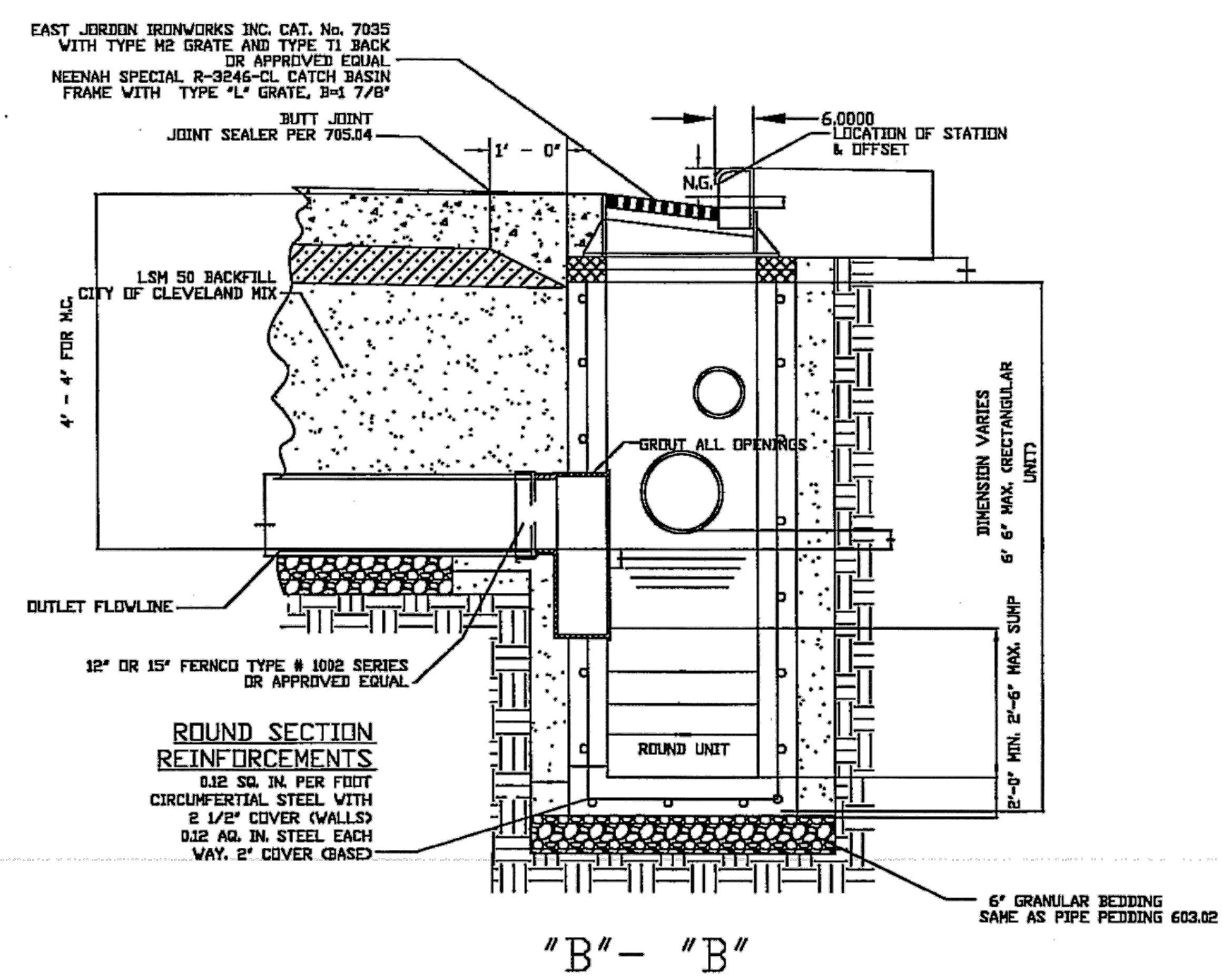
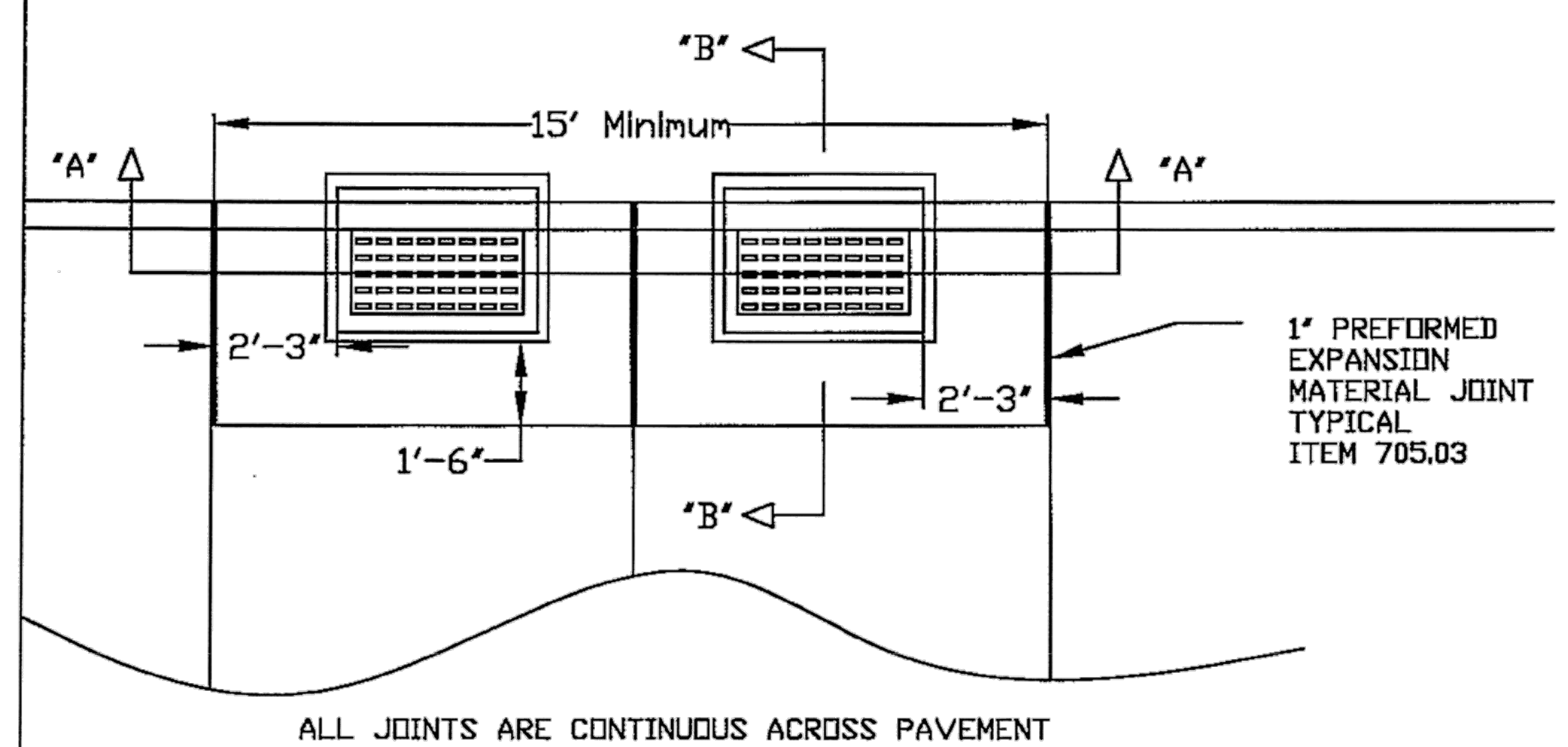
SHEET 2/7

27



NOTES

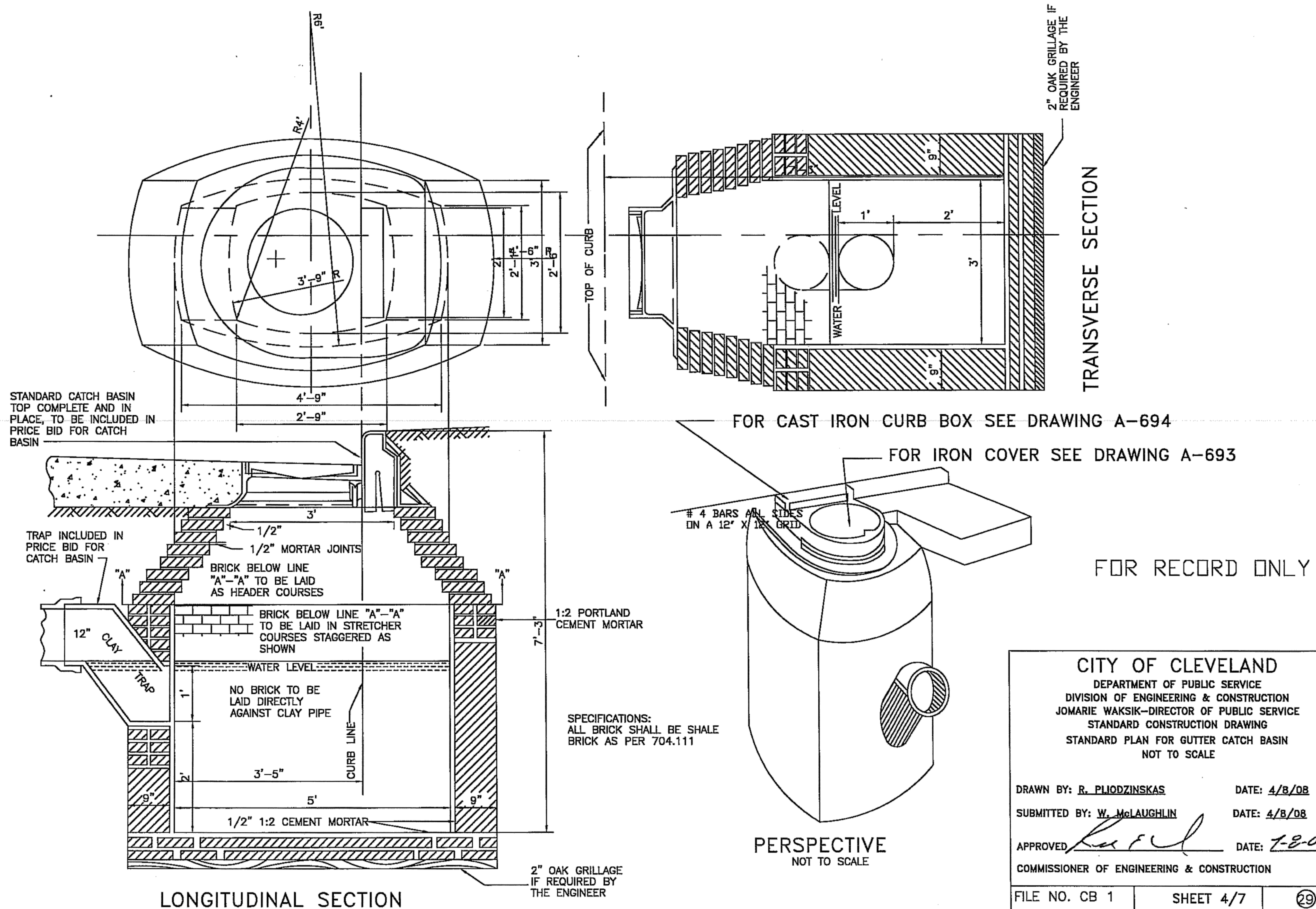
1. THE CATCH BASIN SHALL BE SET AT THE LOW POINT OF A SAG VERTICAL CURVE OR AT THE POINT WHERE THE GRADE OF THE STREET CHANGES FROM NEGATIVE TO POSITIVE OR DOWNSTREAM FROM THE INLET BASIN.
2. THE CONCRETE BETWEEN THE CASTINGS SHALL BE SLOPED TO MATCH THE SLOPE OF THE CASTINGS.
3. REFER TO CB-1 AND IB-1 FOR FULL DETAILS AND DIMENSIONS.
4. PIPE BETWEEN BASINS SHALL BE EXTRA STRENGTH VCP PIPE AND IS INCLUDED IN THE BID TIEM FOR TWIN BASIN CB-3.
5. DOWEL SPACING AND SIZE SHALL BE AS FOLLOWS:
1" DOWELS-
3 @ 12" - V.C.
4 @ 12" - M.C.
451.02 (TYP.)
6. MINIMUM WALL THICKNESS 8" FOR CAST IN PLACE AND 6" FOR PRECAST



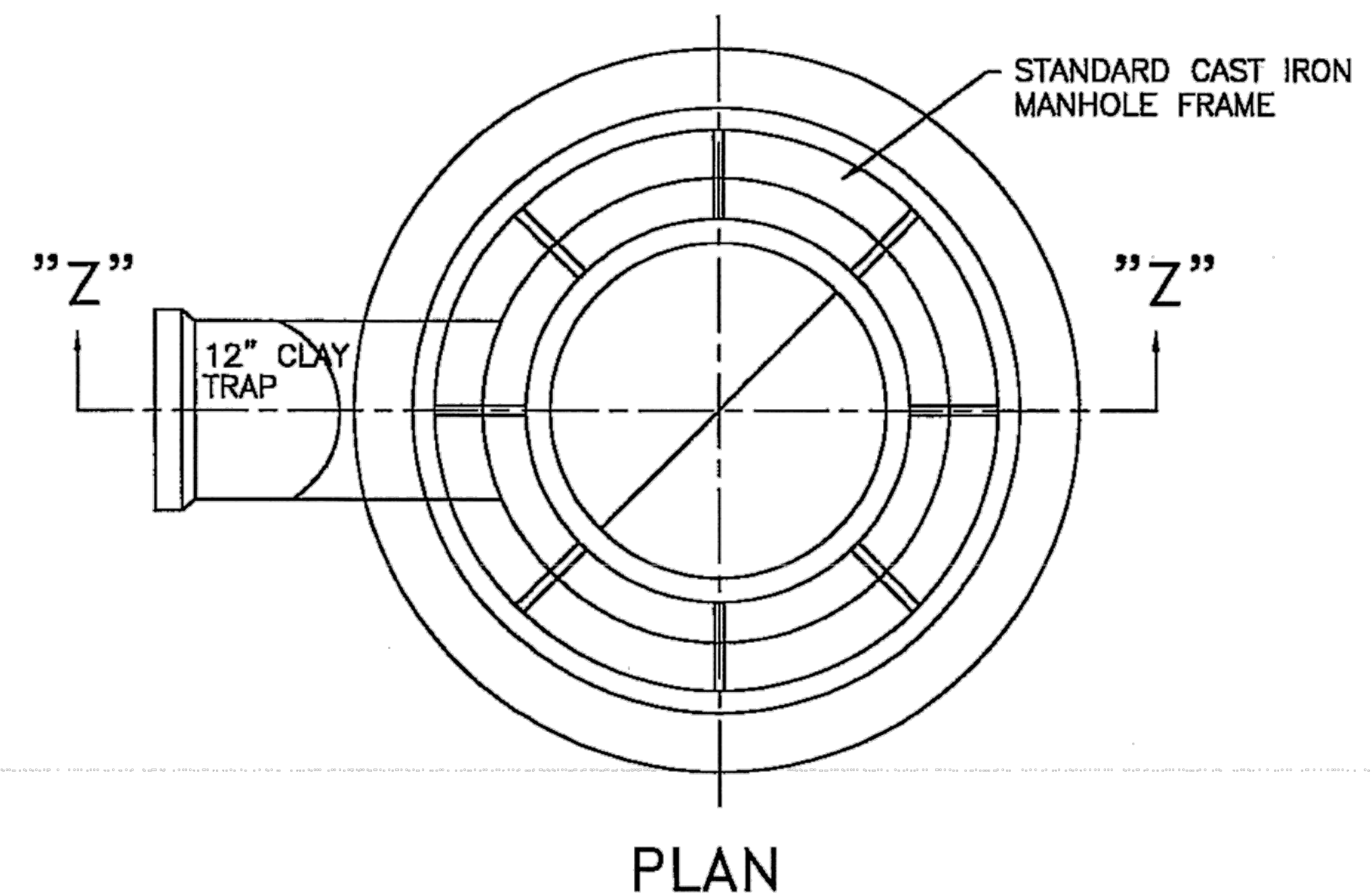
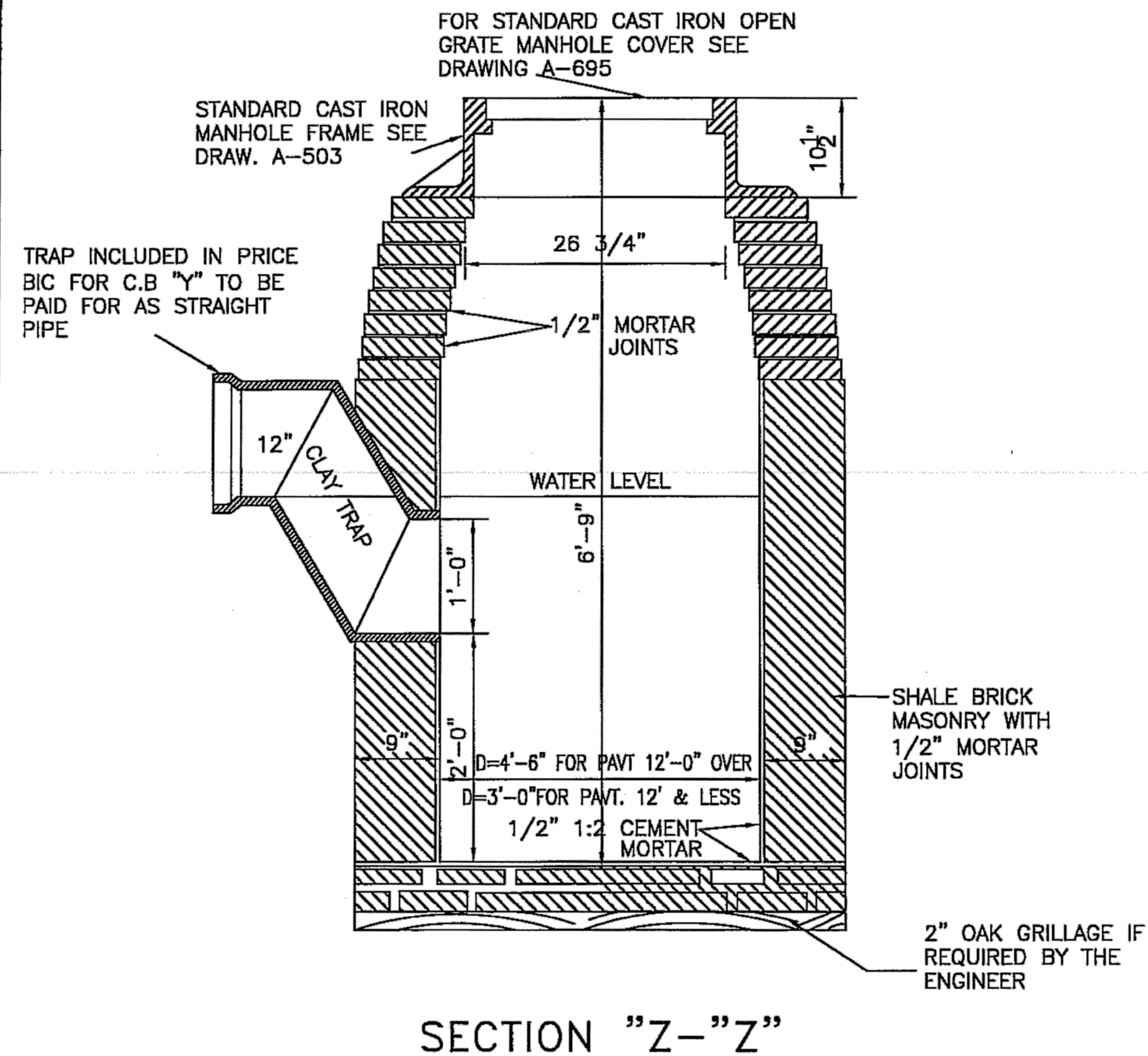
CITY OF CLEVELAND
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
DETAILS FOR
TWIN BASIN - CB-3
NOT TO SCALE
DRAWN BY: R. PLIODZINSKAS
SUBMITTED BY: W. MCLAUGHLIN
DATE: 4/8/08
DATE: 4/8/08
APPROVED: *R. FULL* DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION
FILE NO. CB 1 SHEET 3/7 (28)

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MORTAR SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT (701.04) TO TWO PARTS SAND (SEE 703.03) BY VOLUME.

FOR RECORD ONLY

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC
SERVICE STANDARD PLAN FOR PARK STYLE
CATCH BASIN
NOT TO SCALE
DRAWN BY: R. PLIODZINSKAS DATE: 8/28/07
SUBMITTED BY: W. McLAUGHLIN DATE: 8/28/07
APPROVED: *[Signature]* DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB 1

SHEET 5/7

30

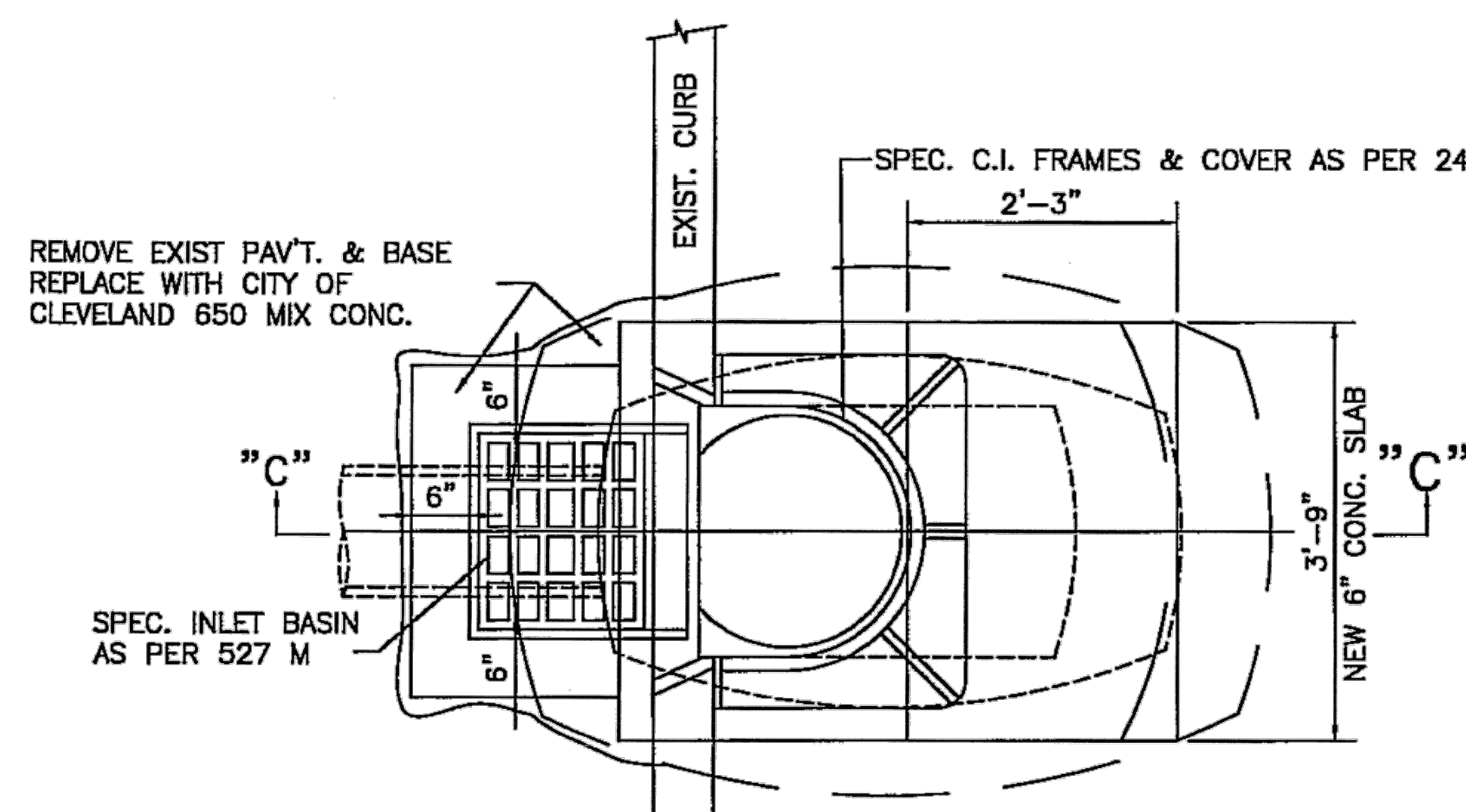
MISCELLANEOUS DETAILS

CUY-E 55TH ST RESURF

91
103

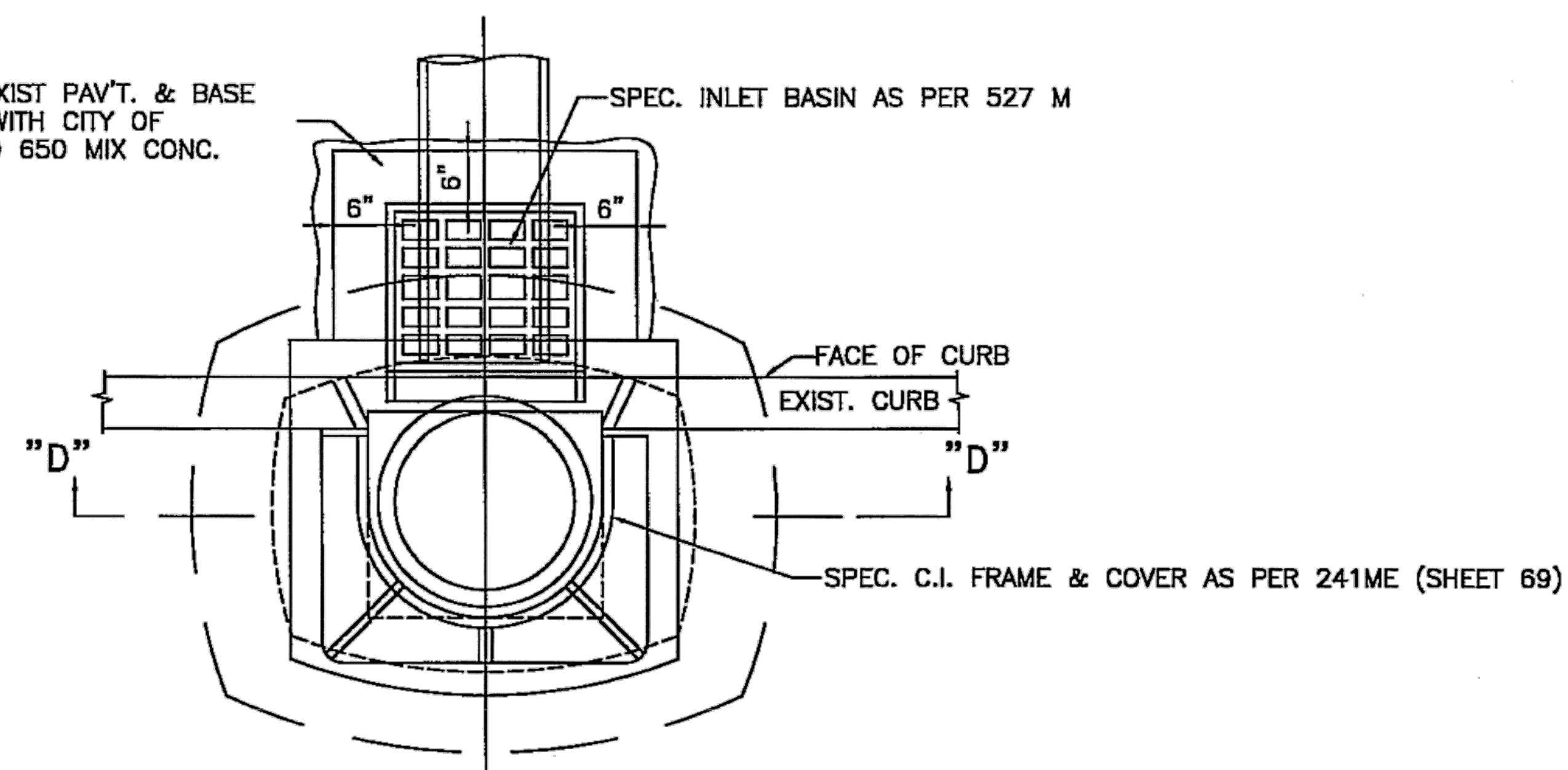
CALCULATED
JMB
CHECKED
DEN

DETAIL "A"

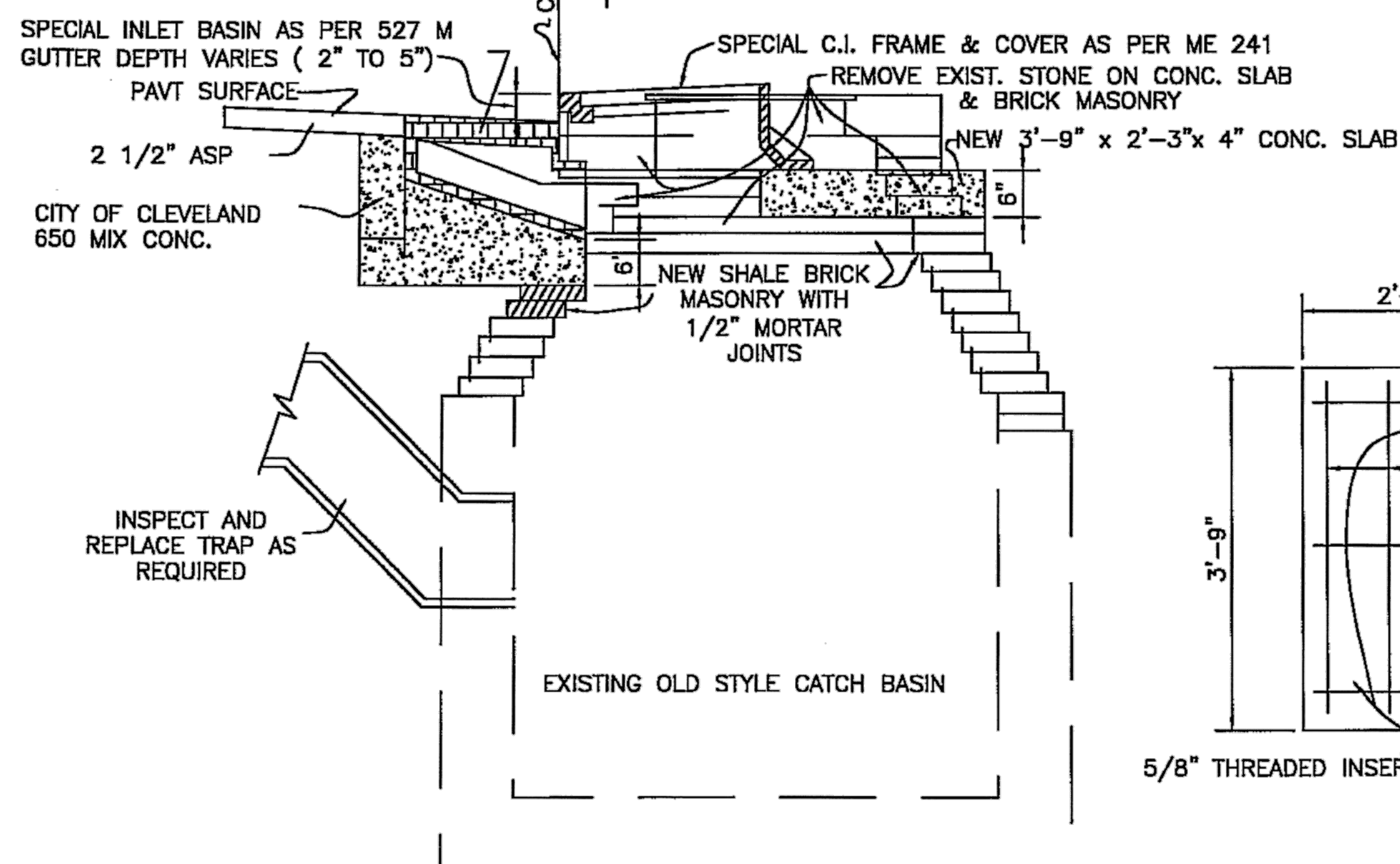


PLAN OF CATCH BASIN WITH SPECIAL INLET

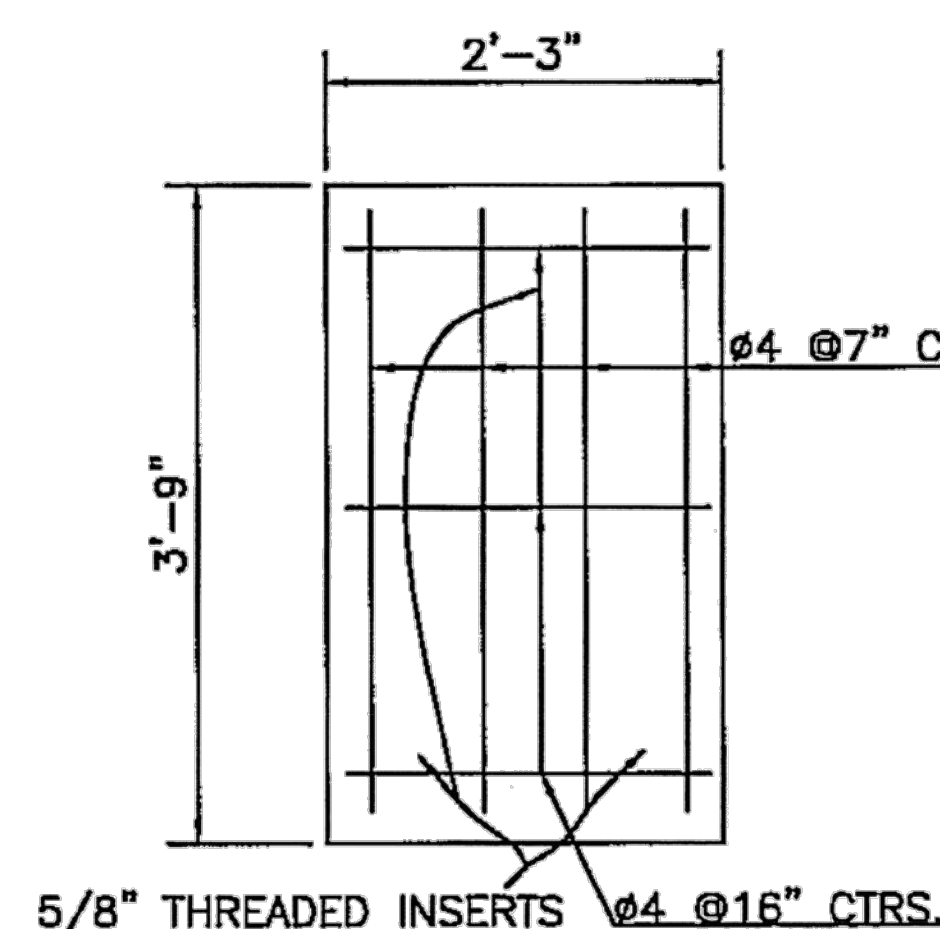
DETAIL "B"



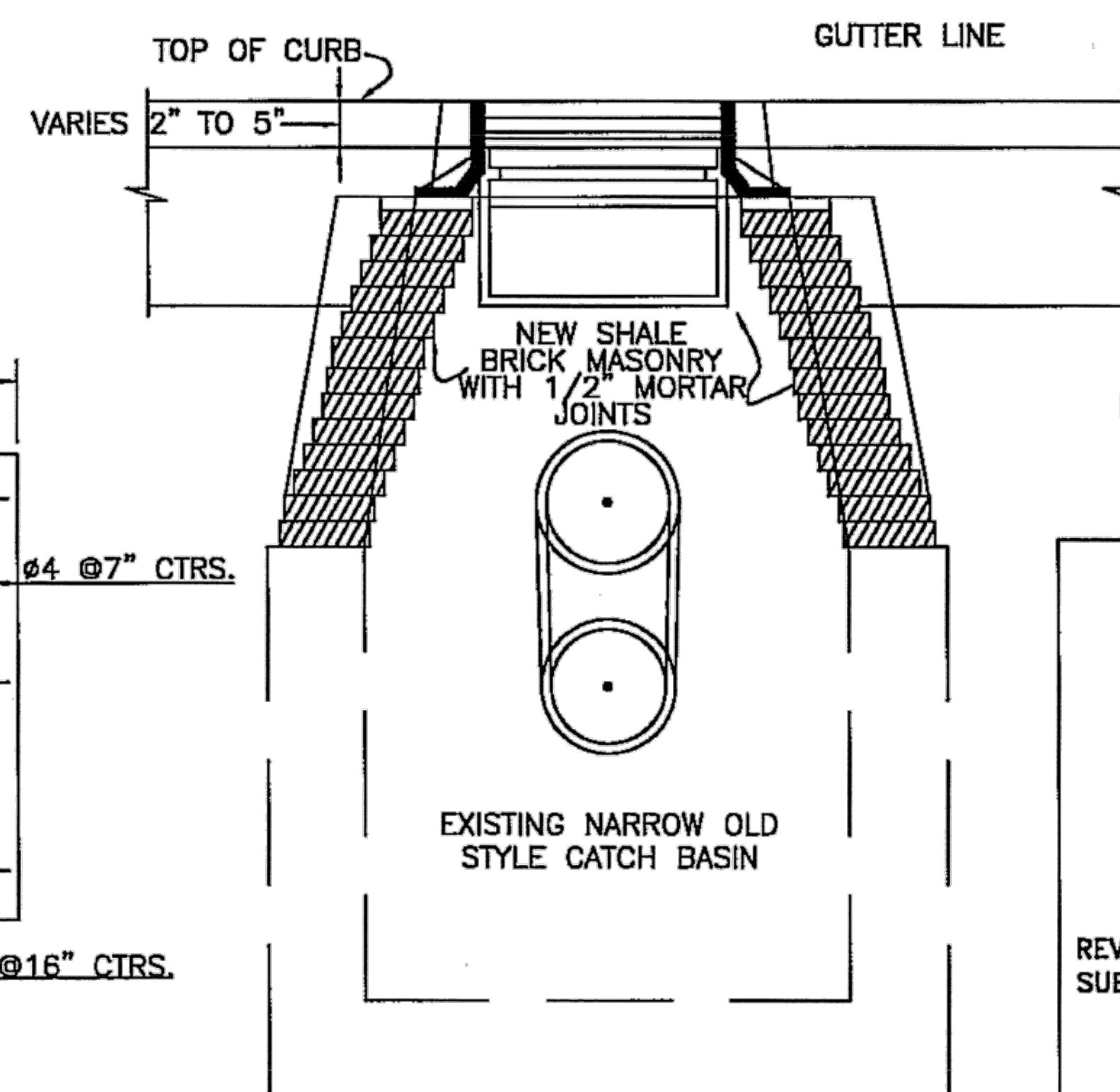
PLAN OF NARROW CATCH BASIN WITH SPECIAL INLET



SECTION "C"-"C"



PLAN OF 6" CONCRETE SLAB



SECTION "D"-"D"

MORTAR SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT (SEC. 701.04) TO TWO PARTS OF SAND (SEC. 703.03) BY VOLUME.

NOTE: THIS PLAN TO BE USED FOR OLD STYLE CATCH BASIN RECONSTRUCTION AT LOCATIONS WITH DEFICIENT DEPTH OF GUTTER

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
PLAN FOR REBUILDING OLD STYLE CATCH BASIN
NOT TO SCALE

REVISED BY: R. PLIODZINSKAS
SUBMITTED BY: W. MC LAUGHLIN

DATE: 4/8/08
DATE: 4/8/08

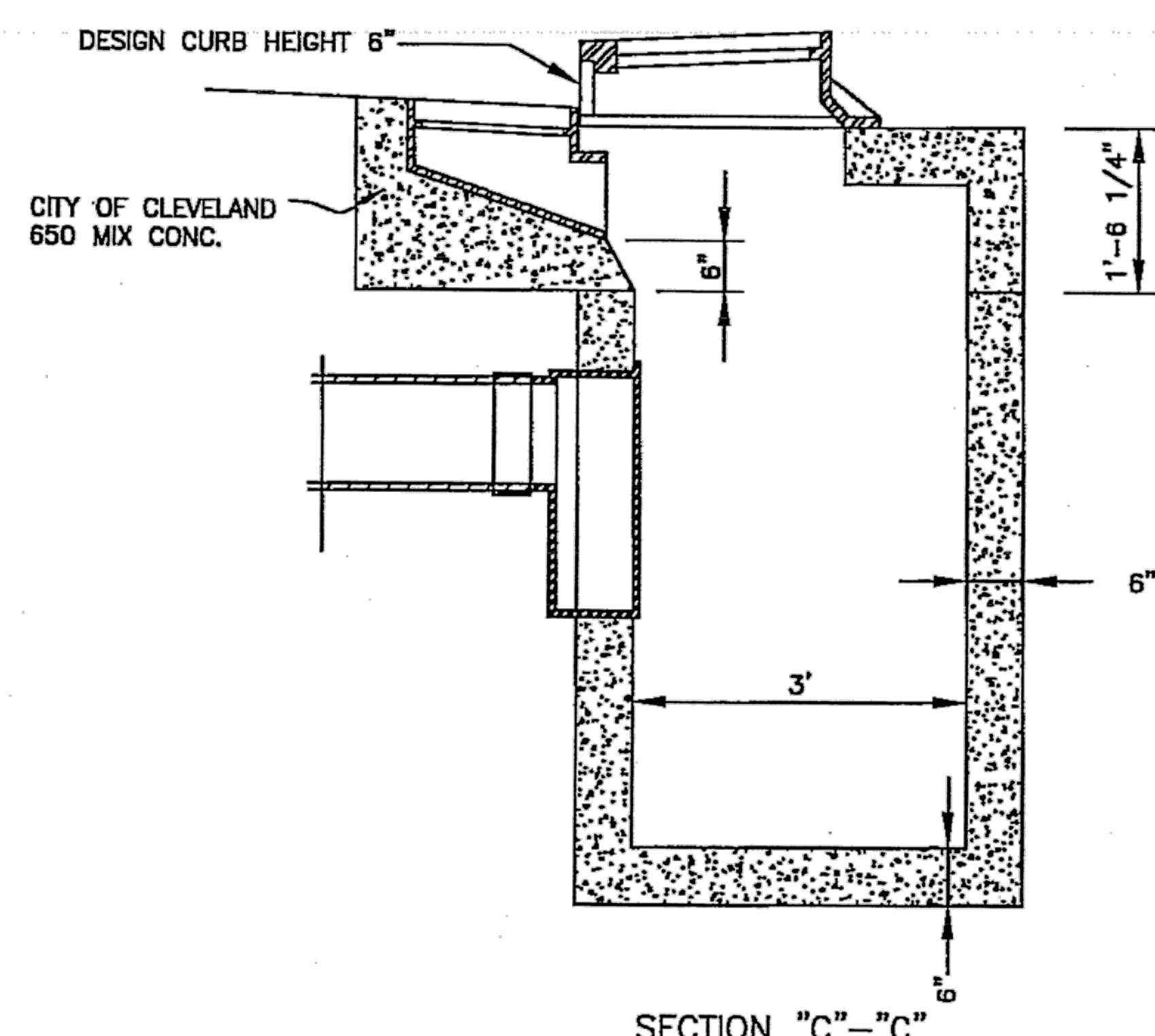
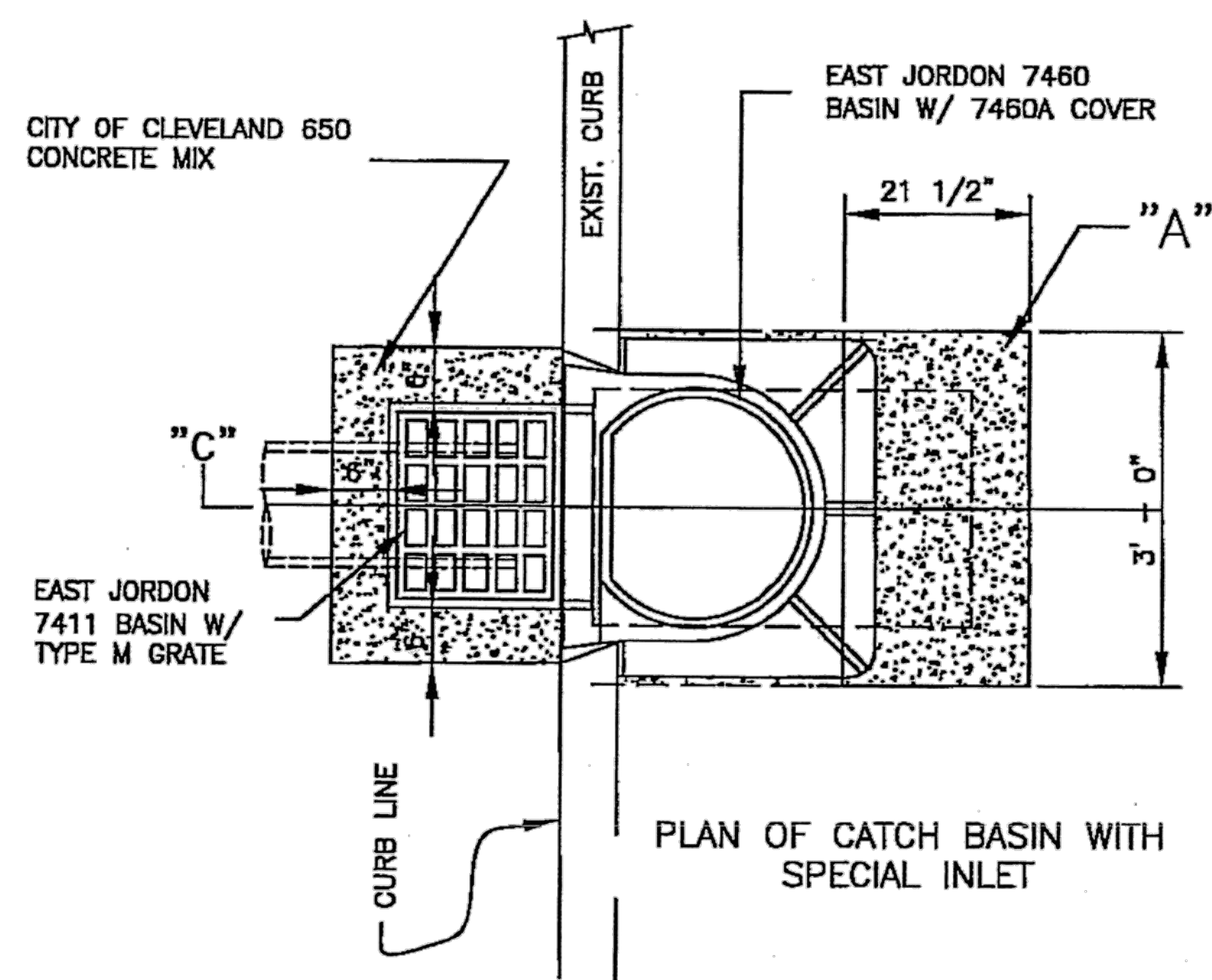
APPROVED: *[Signature]*
COMMISSIONER OF ENGINEERING & CONSTRUCTION

DATE: 7-8-08

FILE NO. CB 1 SHEET 5/7

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SETTING METHOD "A"

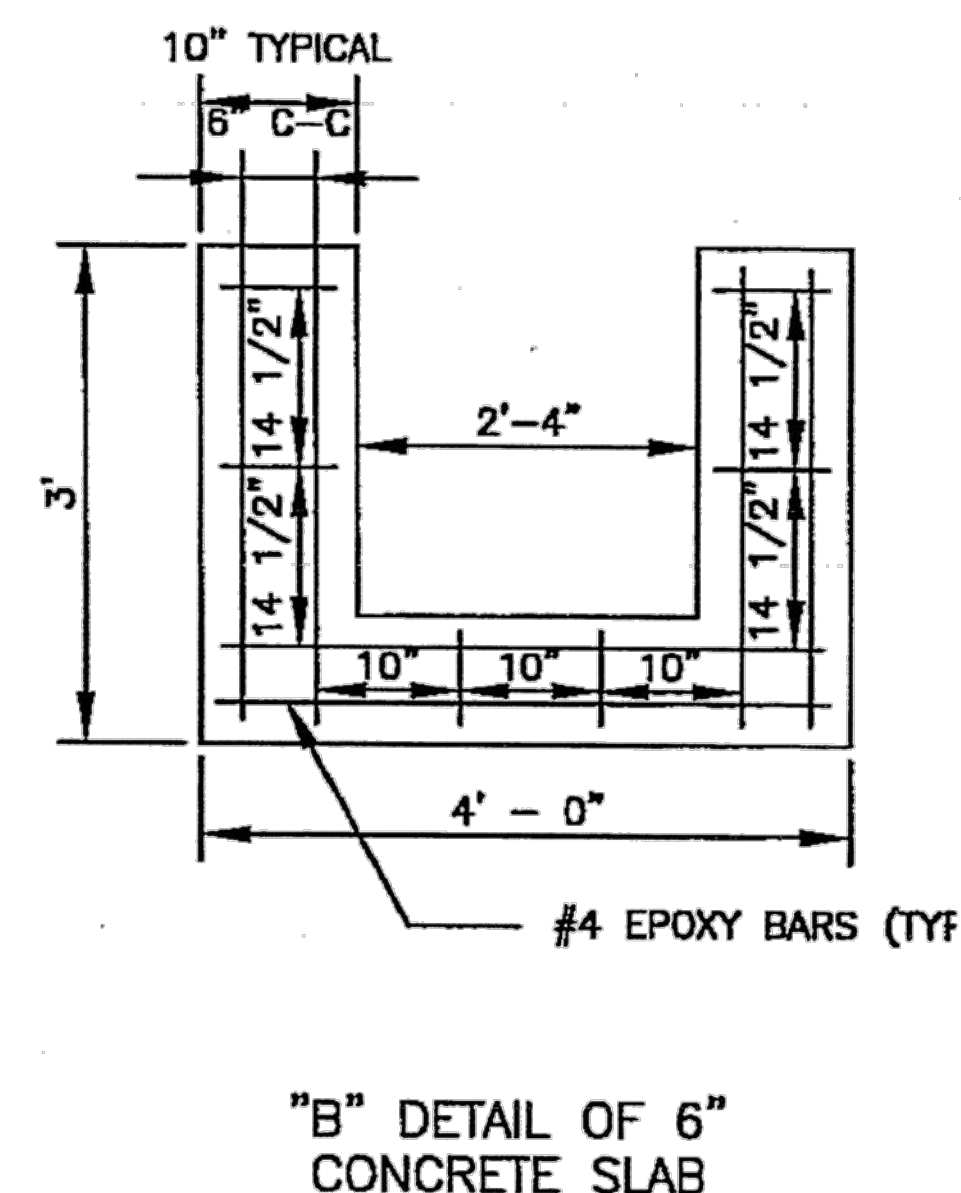
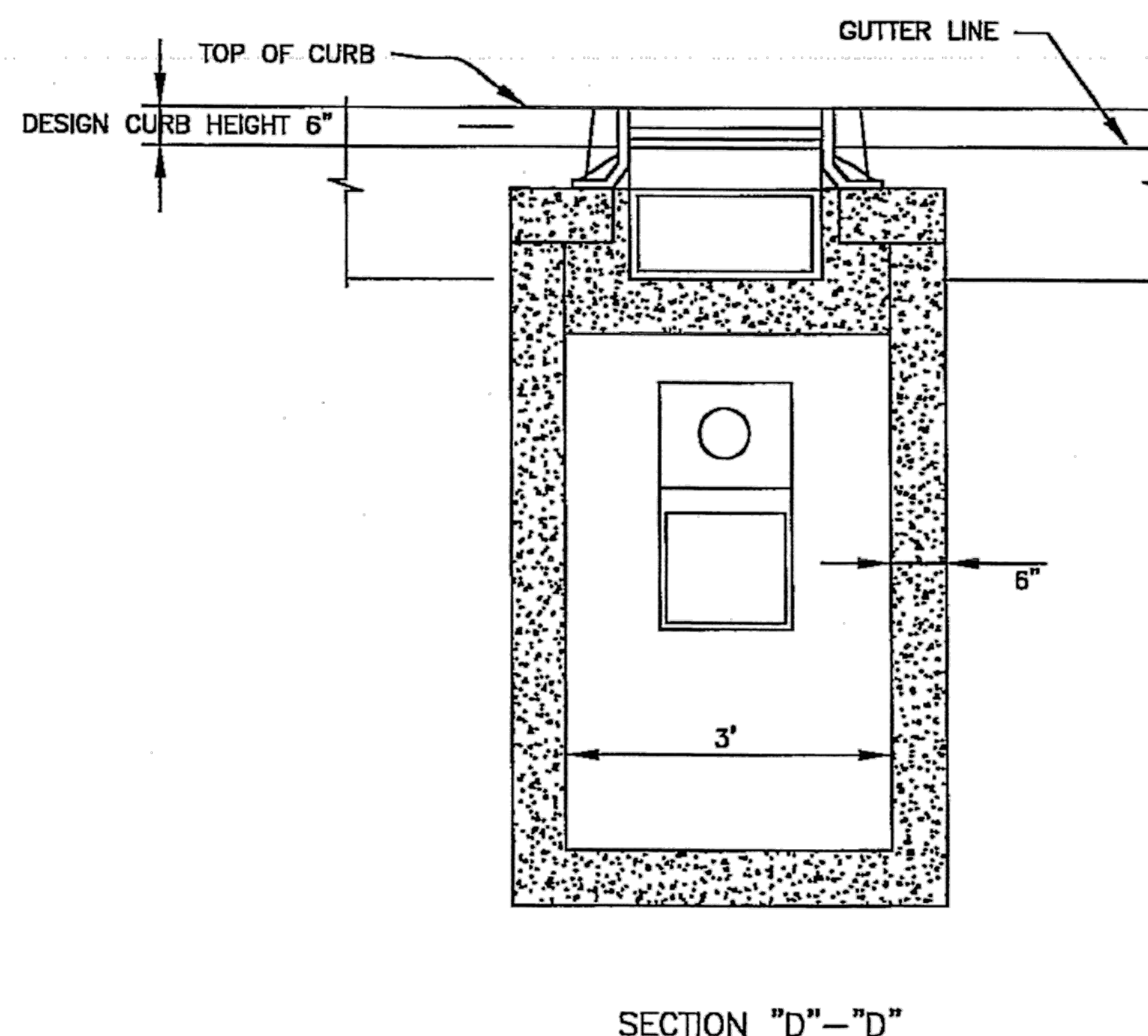
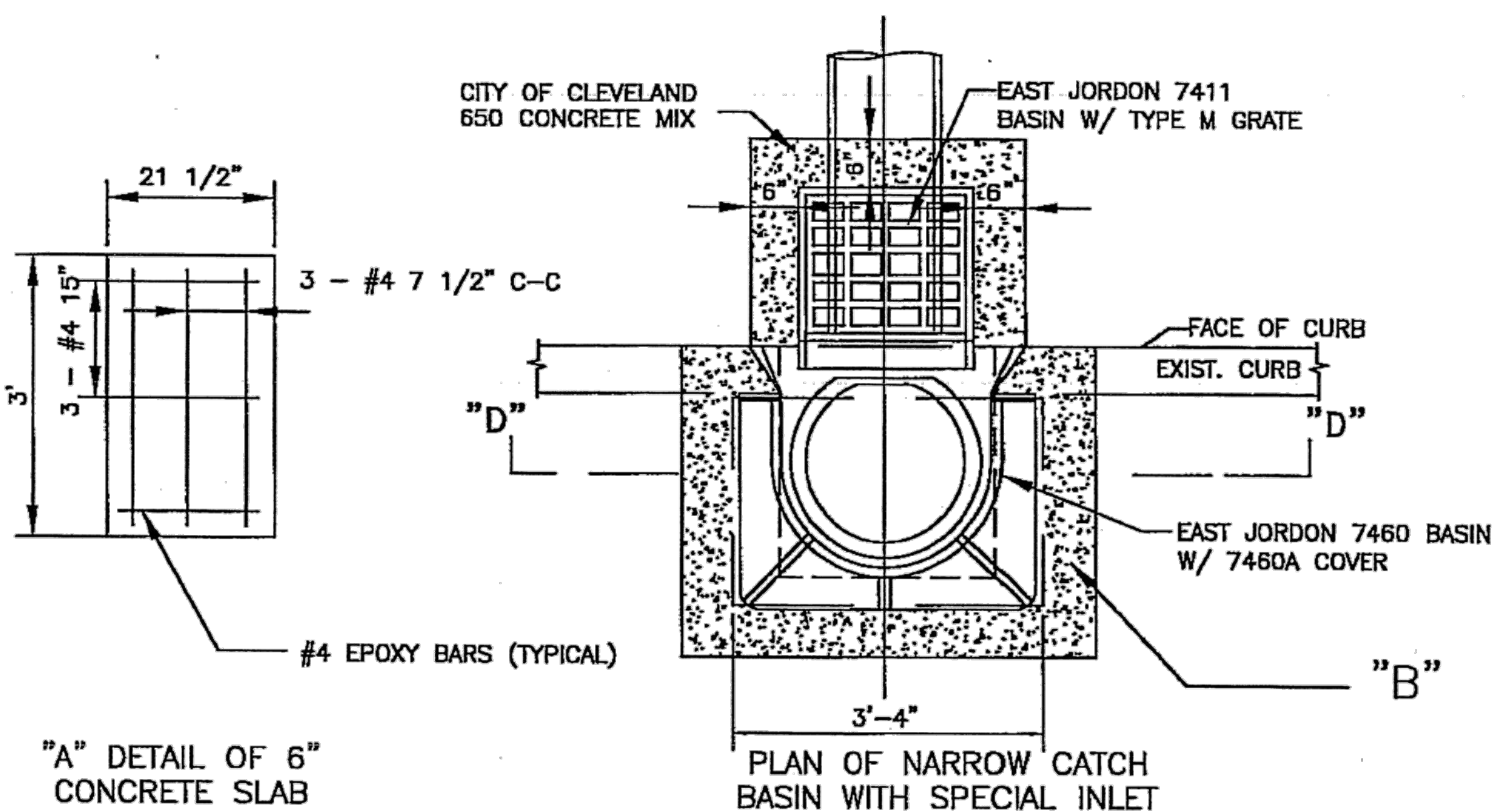


NOTE:
THIS CATCH BASIN TO BE USED FOR CONSTRUCTION AT LOCATIONS WHICH PREVENT THE INSTALLATION OF A CB-1 IN THE ROADWAY, AS DIRECTED BY THE ENGINEER.

CATCH BASIN BASE DIMENSIONS ON DRAWING CB-1, ONLY RECTANGULAR BASIN SHALL BE ALLOWED.

THIS DETAIL FOR STREETS WITH VERTICAL CURB ONLY

SETTING METHOD "B"



CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
PLAN FOR CATCH BASIN 2
NOT TO SCALE

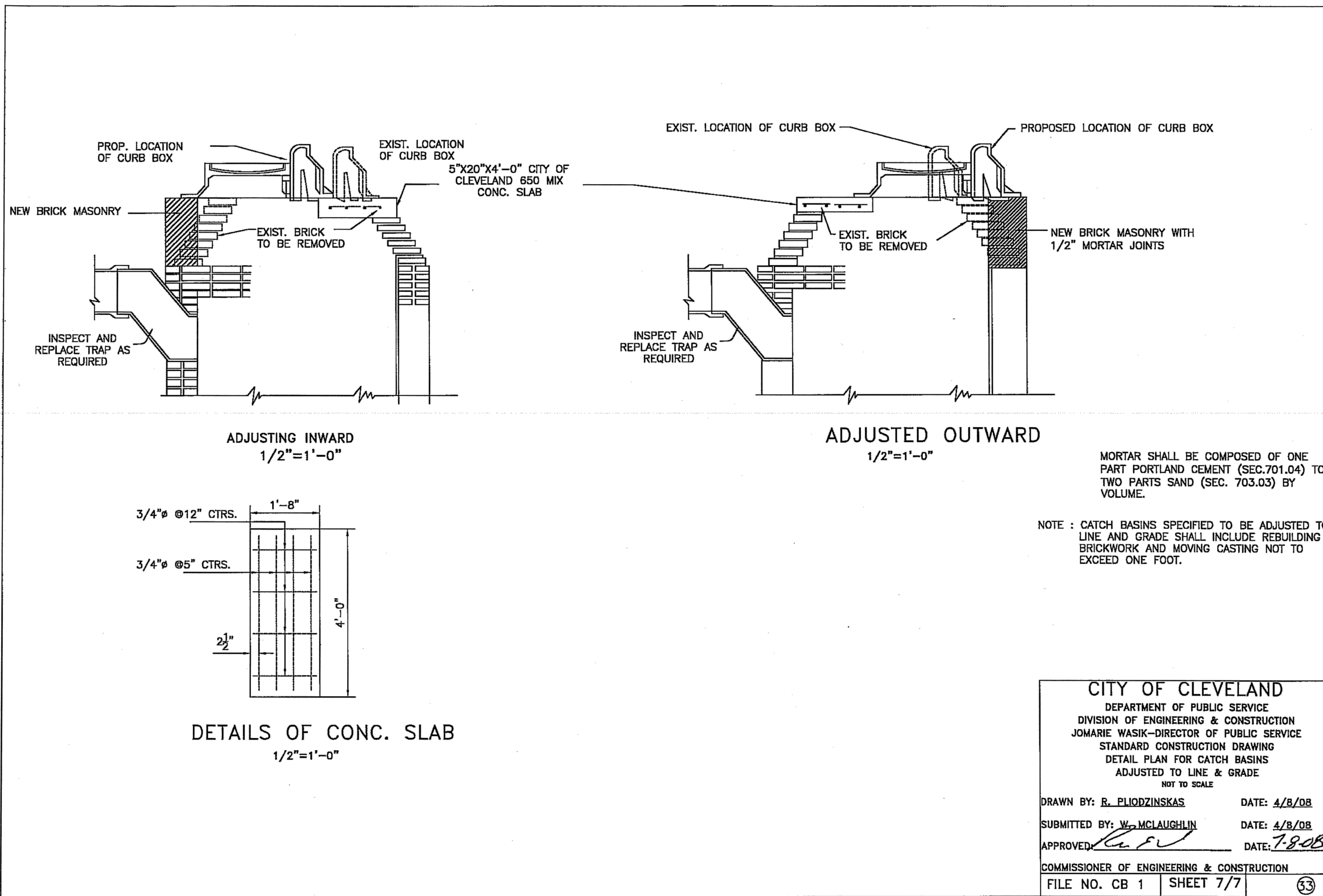
REVISED BY: R. PLIODZINSKAS
SUBMITTED BY: W. MC LAUGHLIN

DATE: 4/8/08
DATE: 4/8/08

APPROVED: *[Signature]*
COMMISSIONER OF ENGINEERING & CONSTRUCTION

DATE: 7-8-08

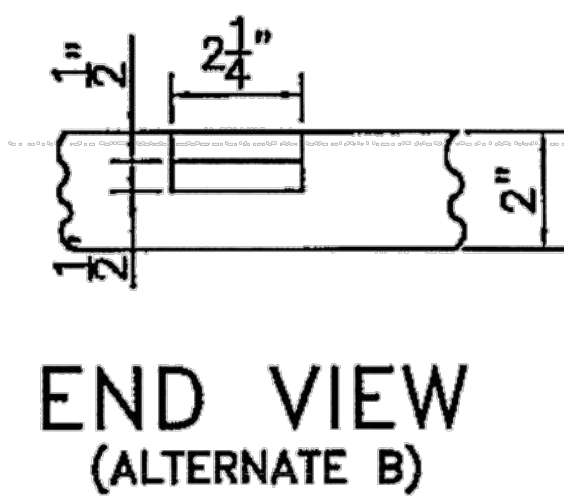
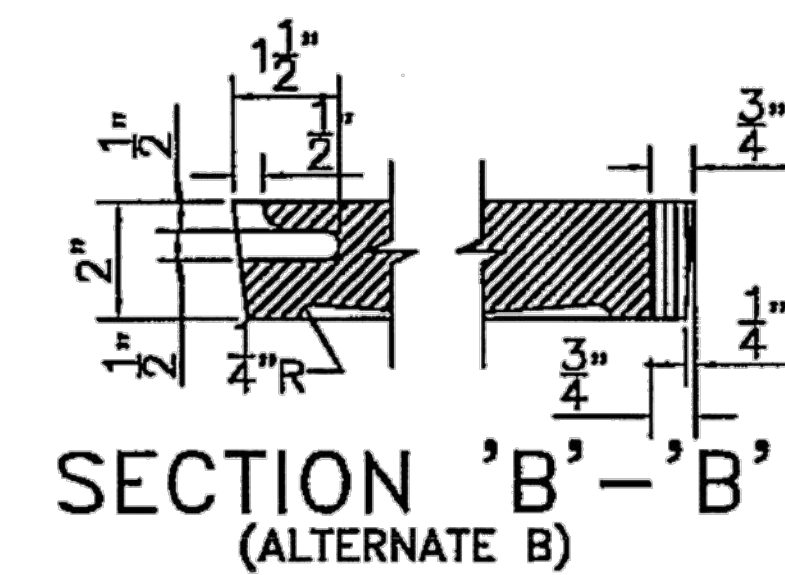
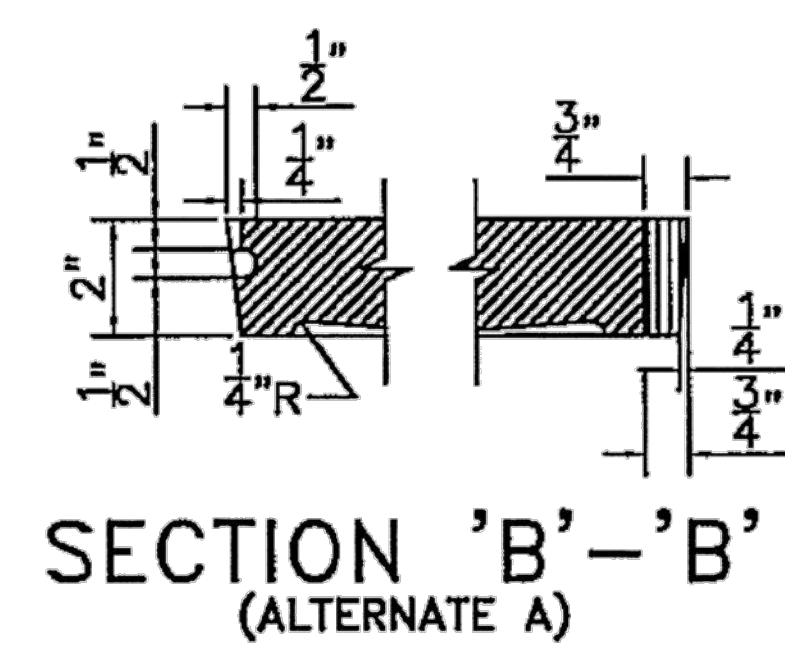
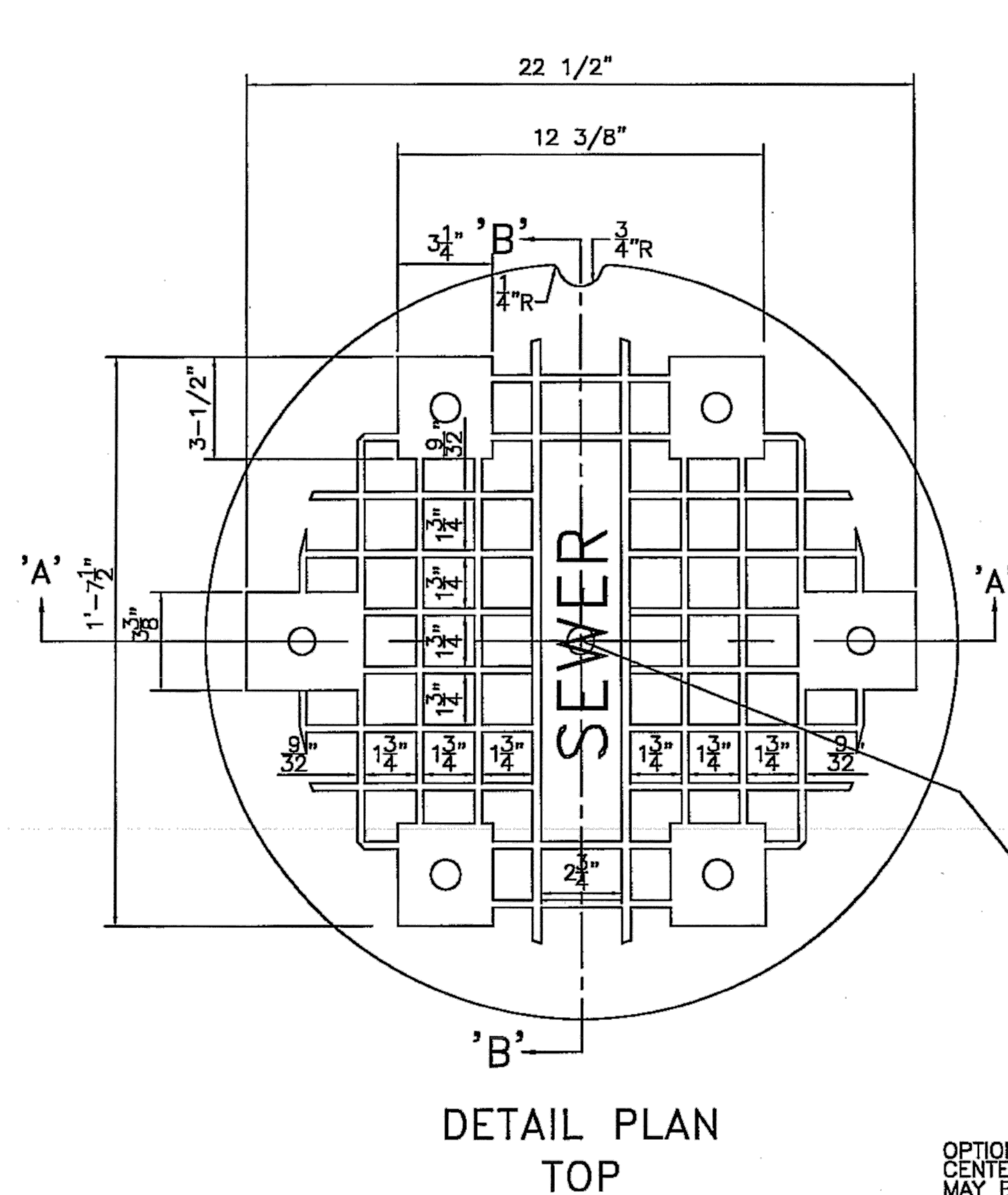
FILE NO. CB-1 SHEET 6/7



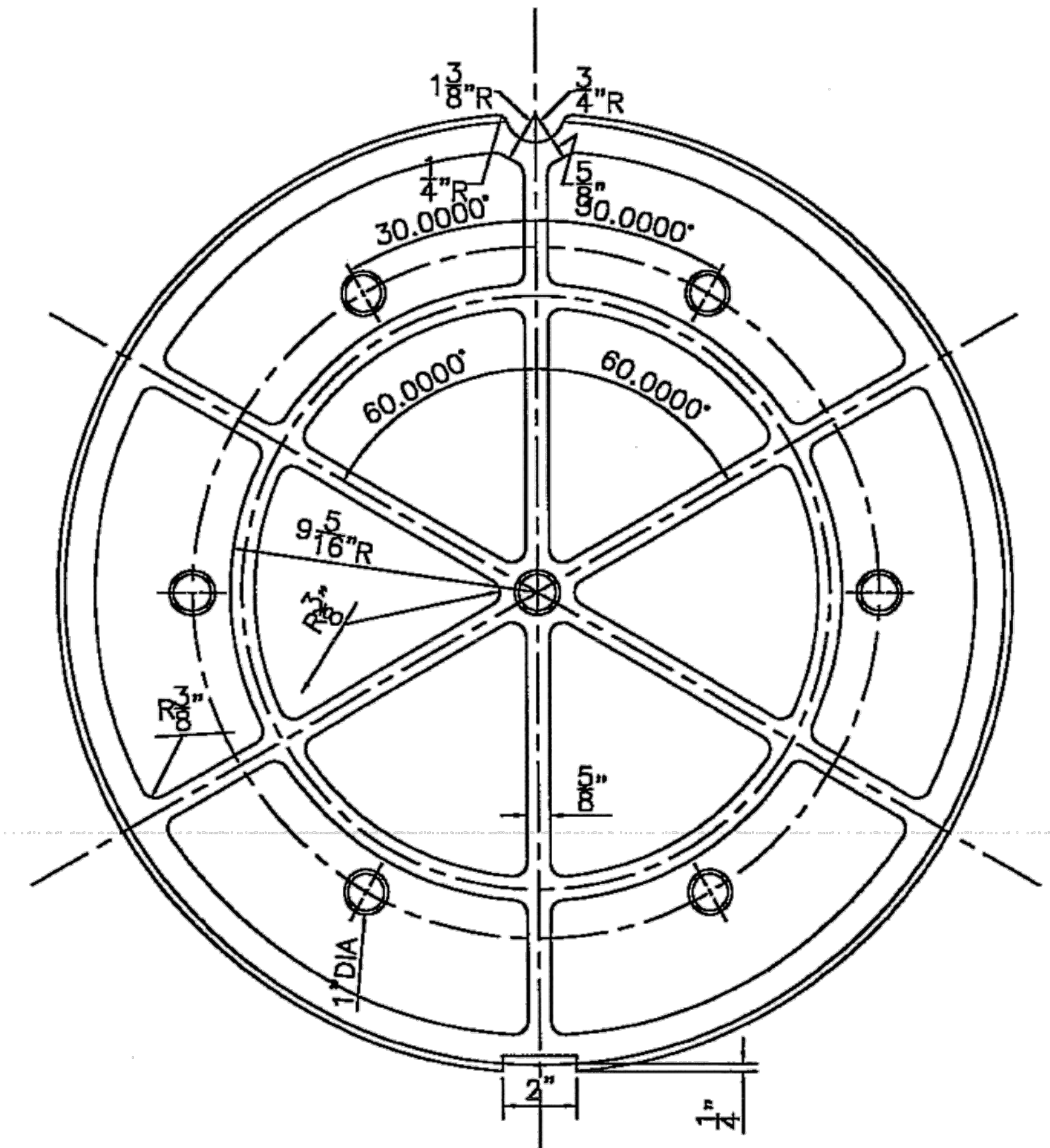


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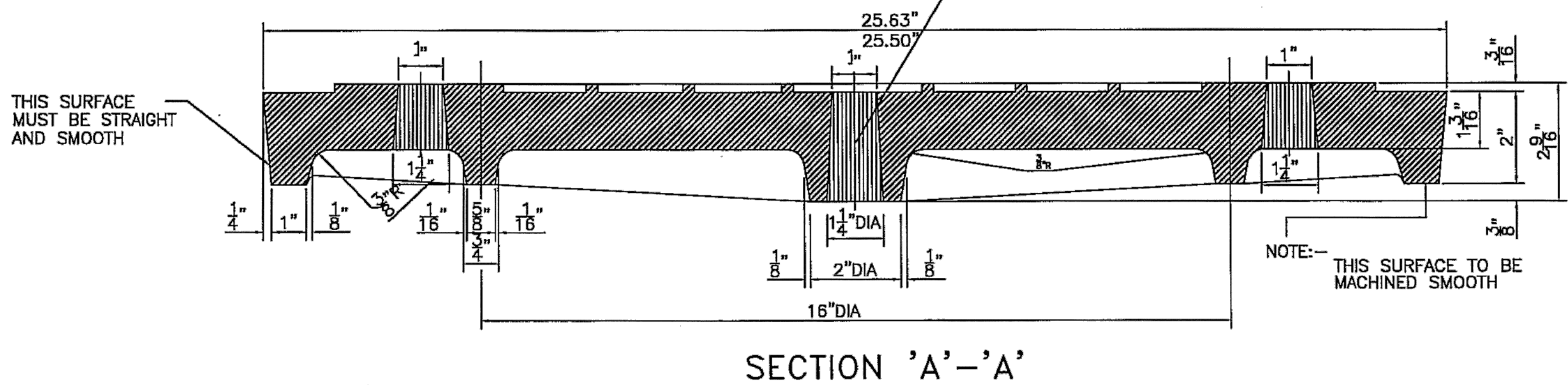


FRAME COVERS
NEENAH # R-1729 VENTED
EAST JORDON # 1700 TYPE "M" VENTED



DETAIL PLAN
BOTTOM

MINIMUM WEIGHT OF COVER - 195 POUNDS



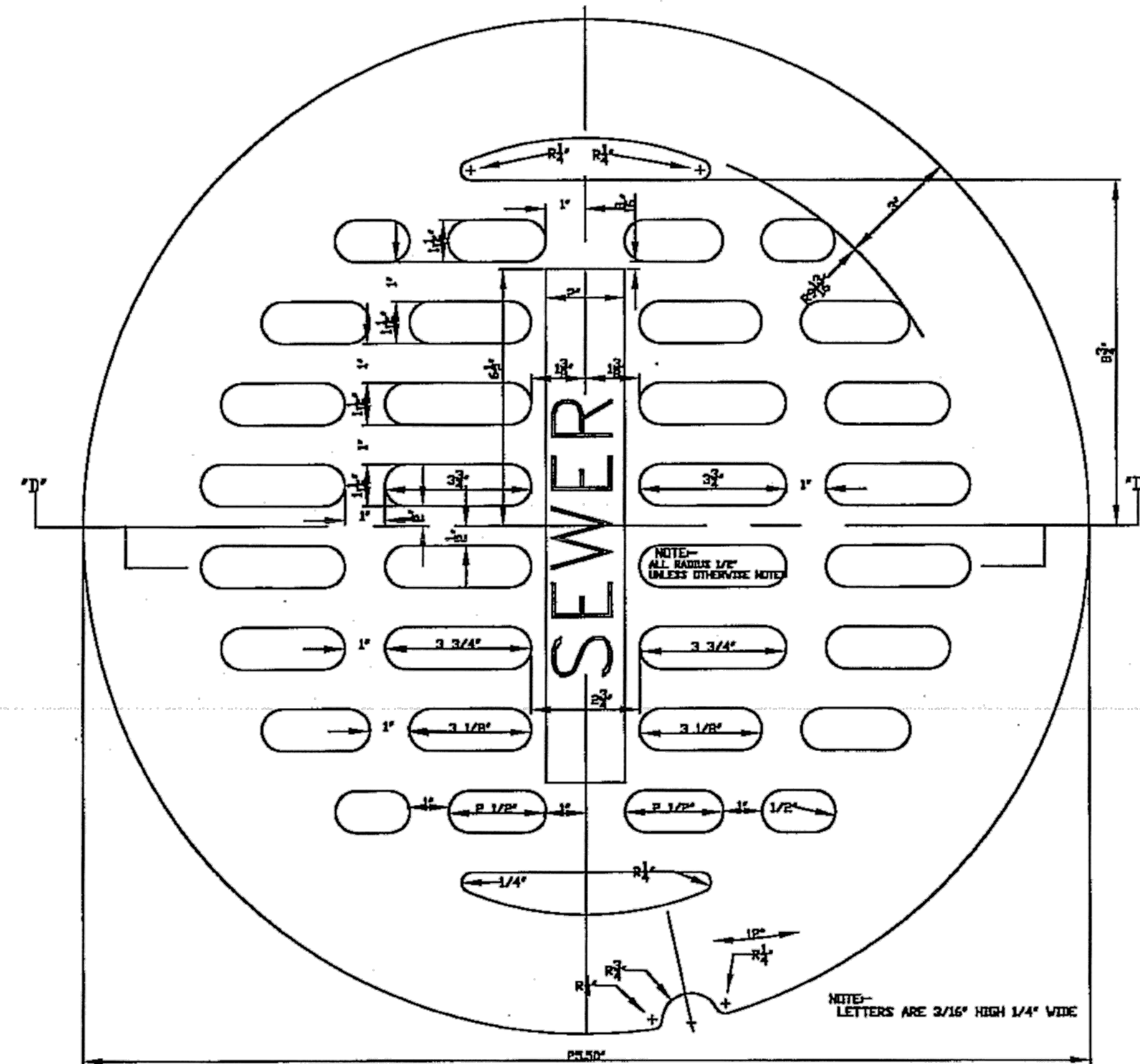
SECTION 'A'-A'

CITY OF CLEVELAND DEPARTMENT OF PUBLIC SERVICE DIVISION OF ENGINEERING & CONSTRUCTION JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE STANDARD CONSTRUCTION DRAWING STANDARD CAST IRON MANHOLE COVER NOT TO SCALE	
REVISED BY: R. PLIODZINSKAS	DATE: 4/8/08
SUBMITTED BY: W. McLAUGHLIN	DATE: 4/8/08
APPROVED: <i>[Signature]</i>	DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION	
FILE NO. A-605	35

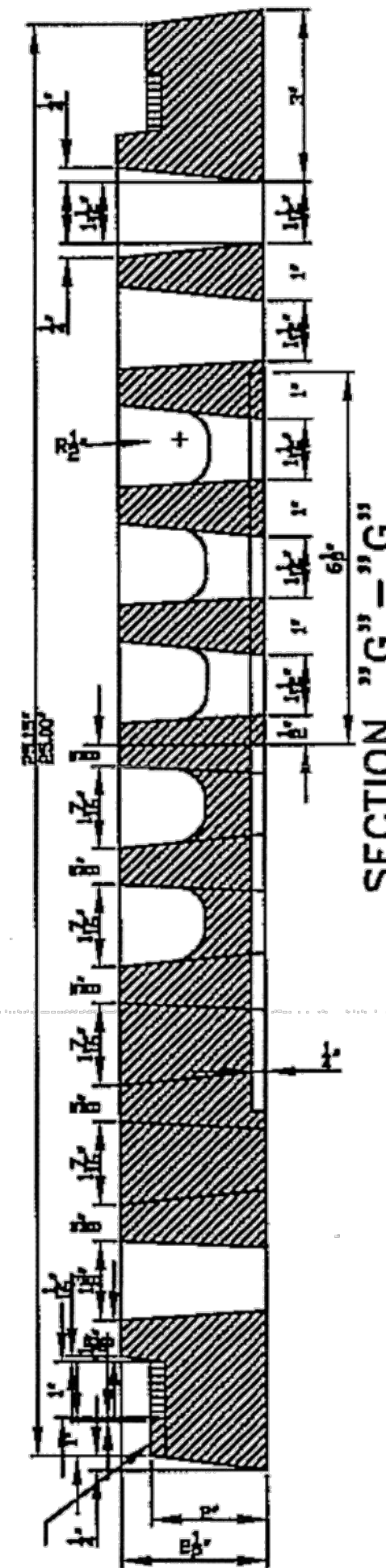
MISCELLANEOUS DETAILS

CUY-E 55TH ST RESURF

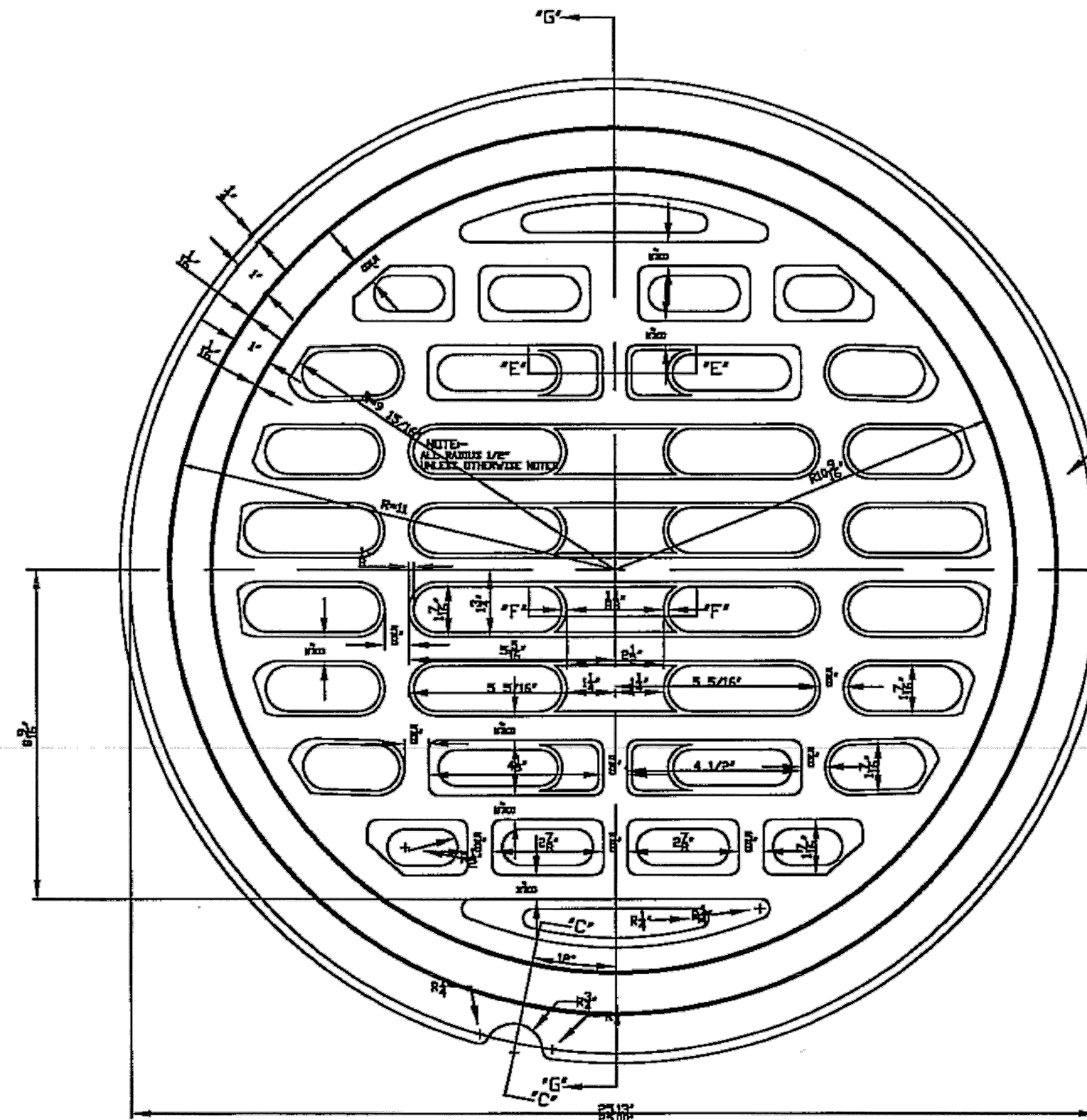
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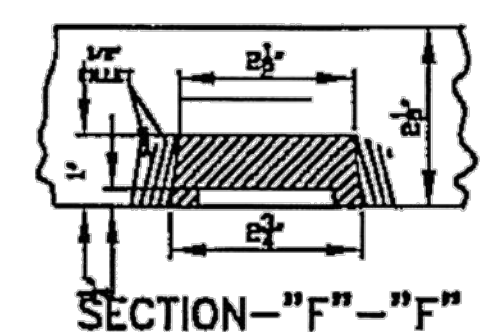
PLAN OF TOP



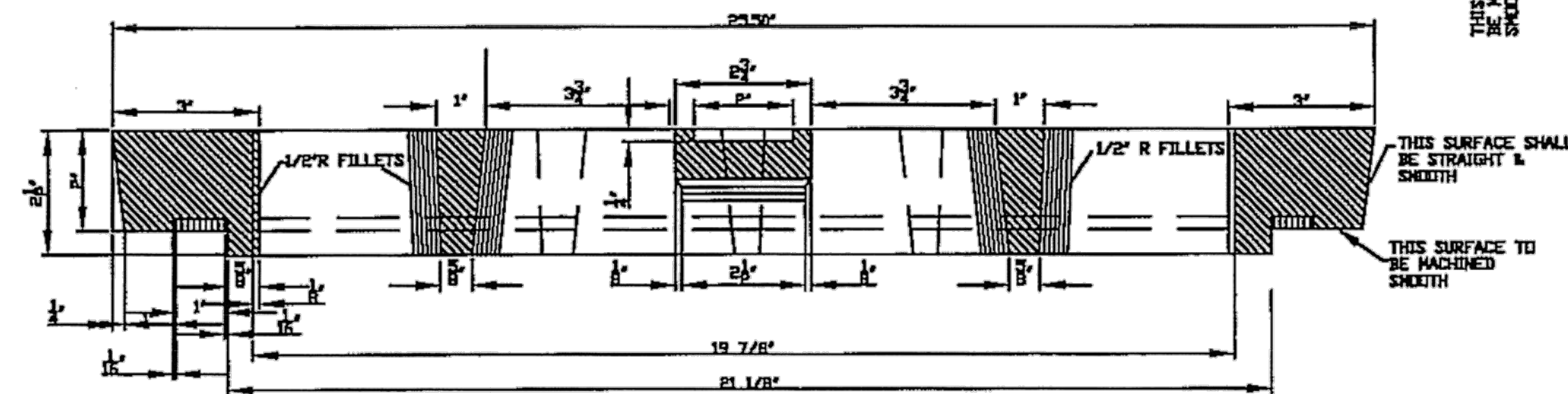
SECTION "G"-"G"



PLAN OF BOTTOM

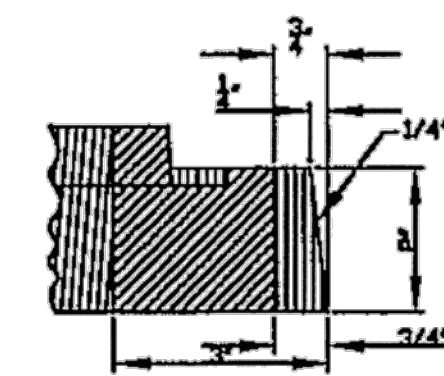


SECTION "F"-"F"

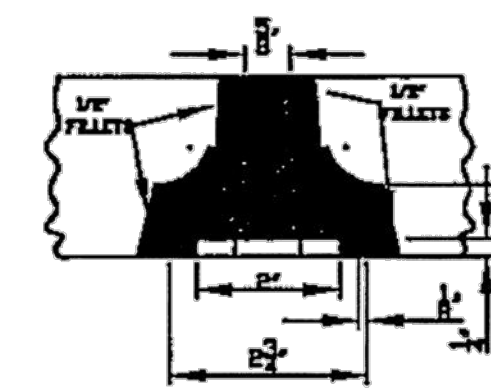


SECTION "D"-"D"

FRAME COVER
EAST JORDON # 1700 TYPE 'M' FLAT COVER

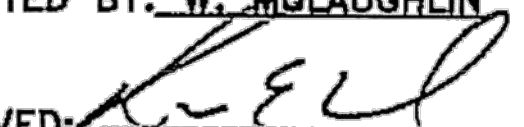


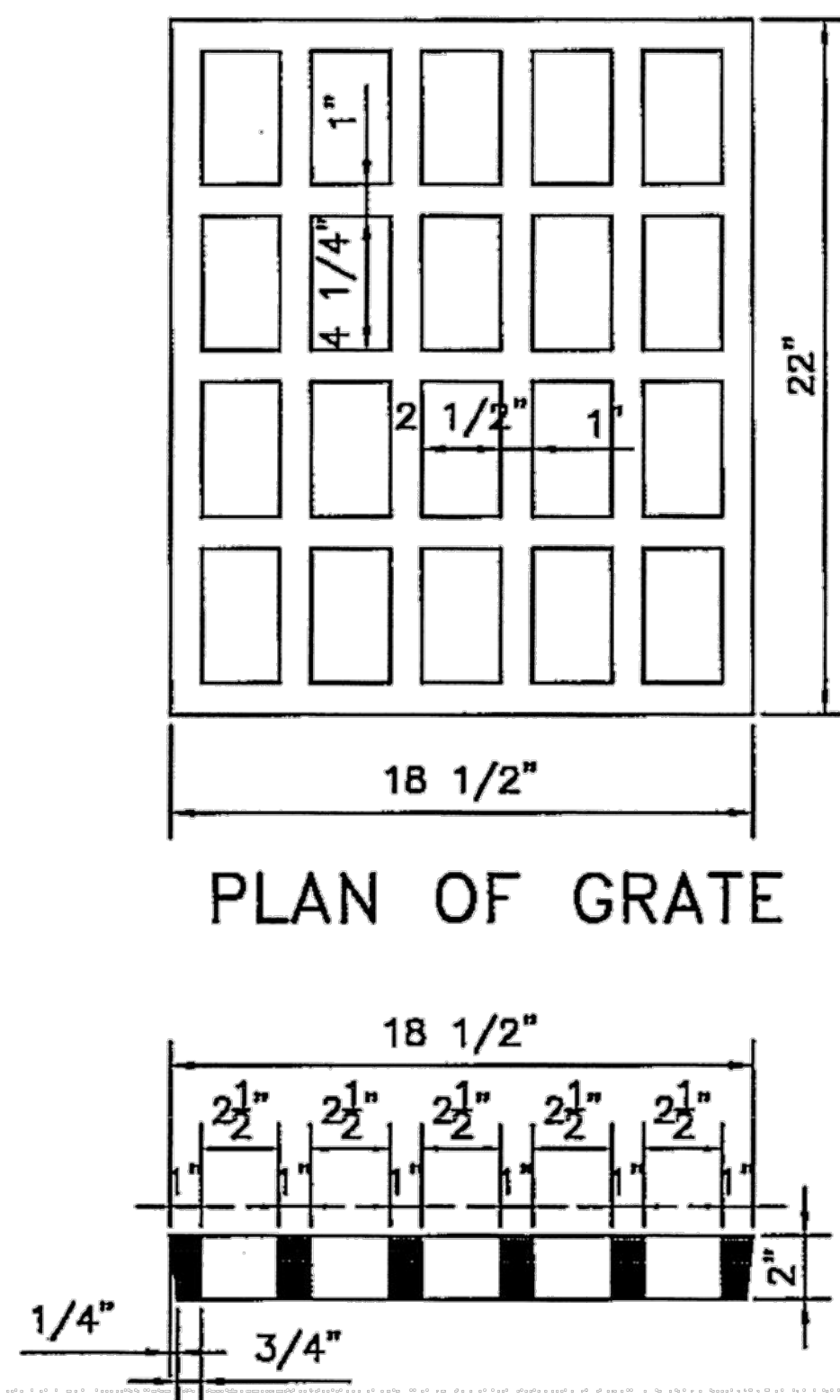
SECTION "C"-"C"



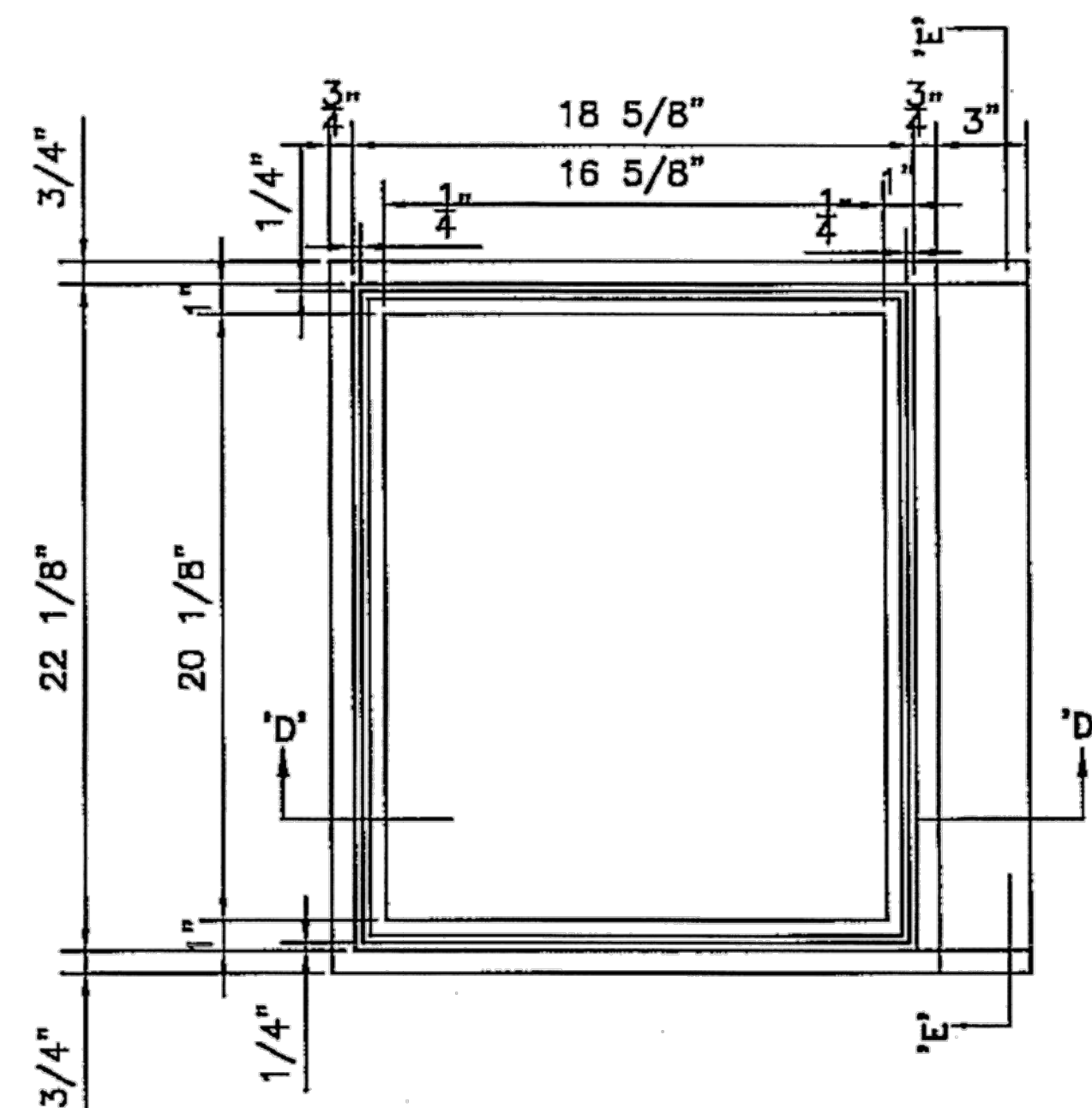
SECTION "E"-"E"

EXCEPT WHERE LIMITS ARE NOTED-A
CASTING VARIATION ON 1/8" PER FOOT
PERMITTED

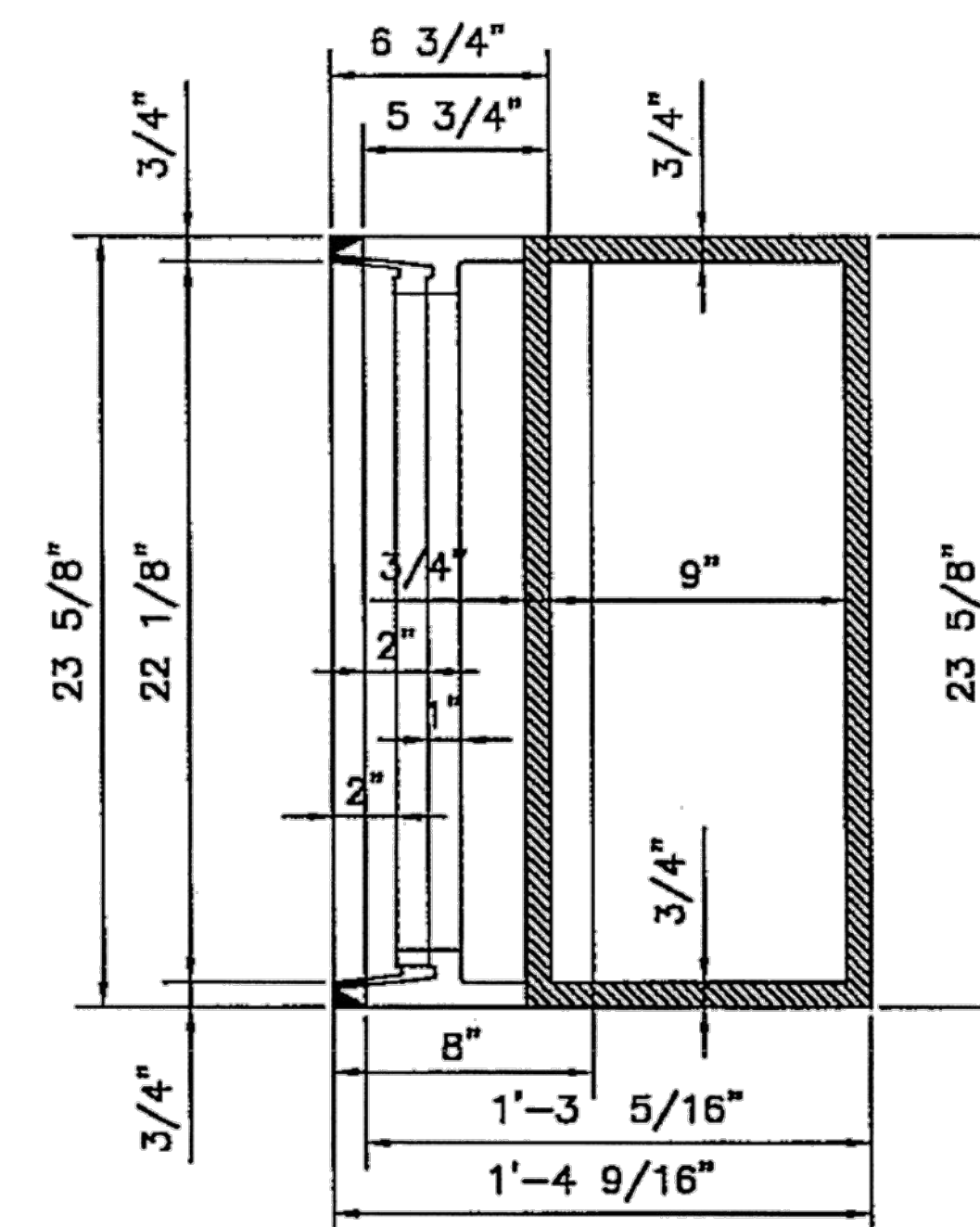
CITY OF CLEVELAND	
DEPARTMENT OF PUBLIC SERVICE	
DIVISION OF ENGINEERING & CONSTRUCTION	
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE	
STANDARD CONSTRUCTION DRAWING	
STANDARD CAST IRON MANHOLE COVER	
NOT TO SCALE	
REVISED BY: R. PLIODZINSKAS	DATE: 4/8/08
SUBMITTED BY: W. McLAUGHLIN	DATE: 4/8/08
APPROVED: 	DATE: 7-2-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION	
FILE NO. A-695	(36)



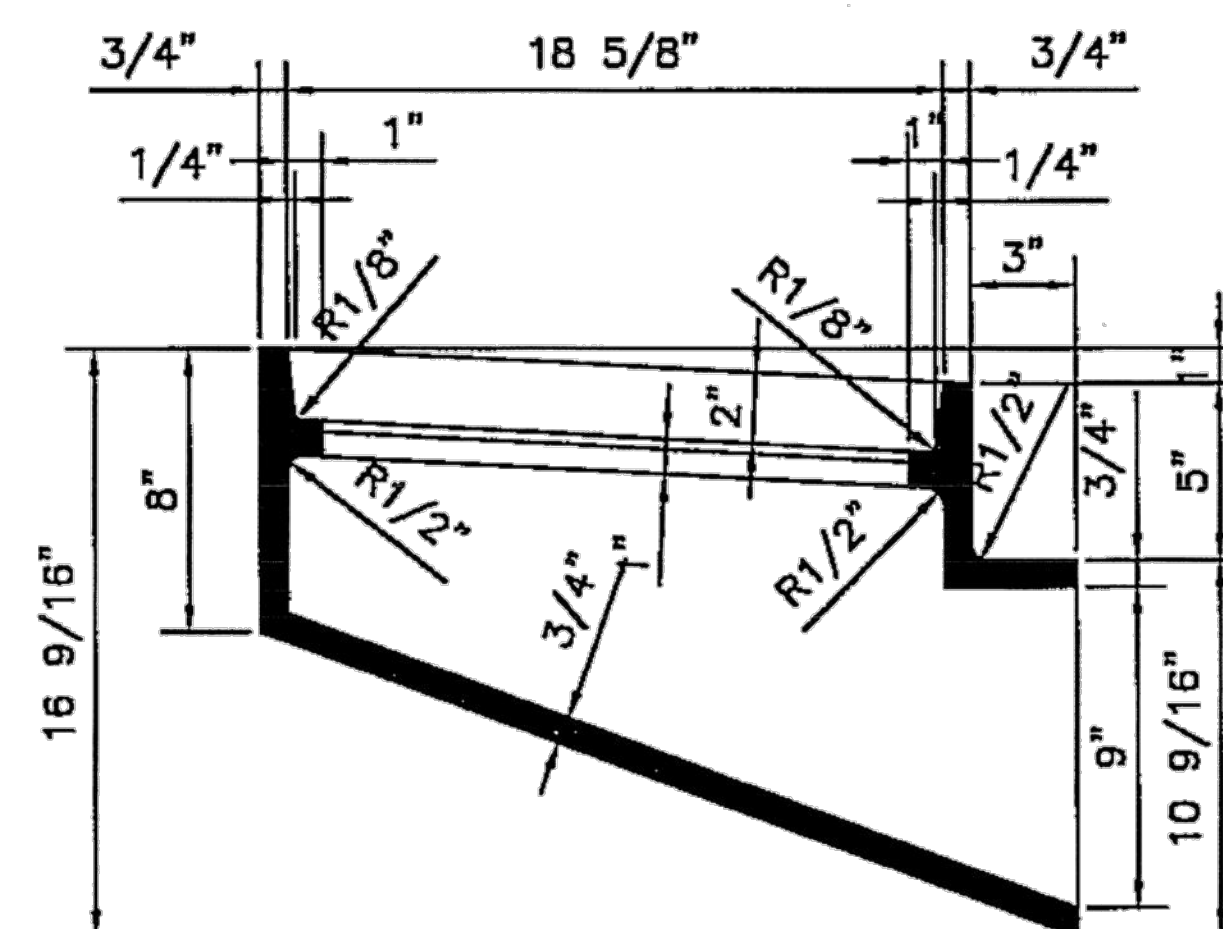
SECTION 'C'-'C'



PLAN OF INLET BASIN



SECTION 'E'-'E'



SECTION 'D'-'D'

MINIMUM WEIGHT OF GRATE - 90 POUNDS
MINIMUM WEIGHT OF FRAME - 330 POUNDS

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
DETAIL PLAN FOR SPECIAL
CAST IRON INLET BASIN
NOT TO SCALE

REVISED BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. McLAUGHLIN DATE: 4/8/08

APPROVED: [Signature] DATE: 7-8-02

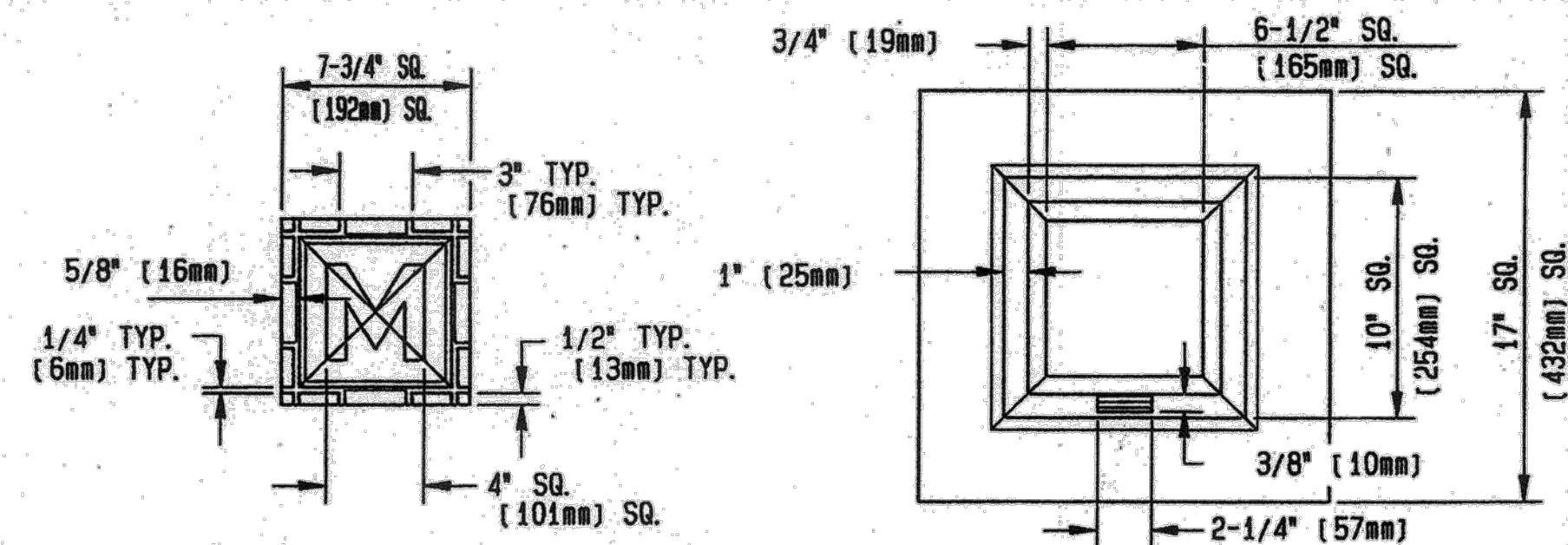
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB 1

37

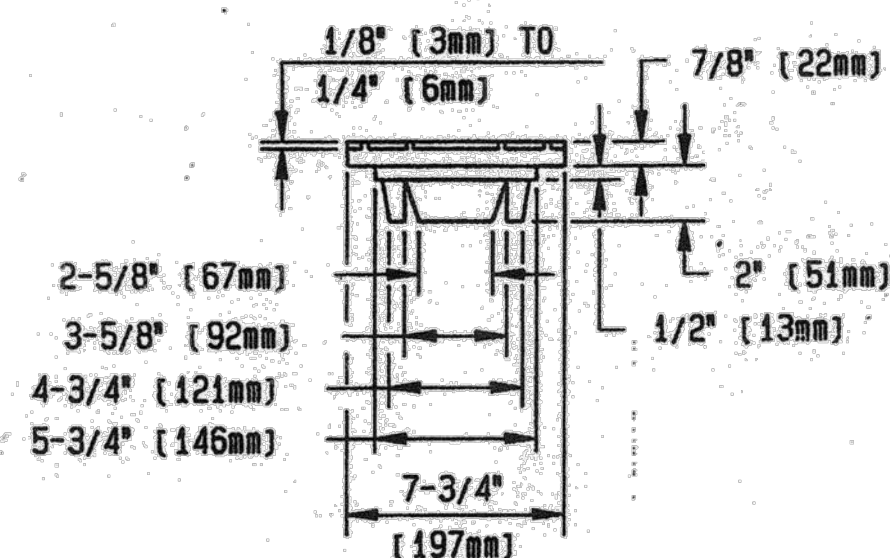
EAST JORDON IRON WORKS
CATCH BASIN CURB INLET # 7411
GRATE # 7411M

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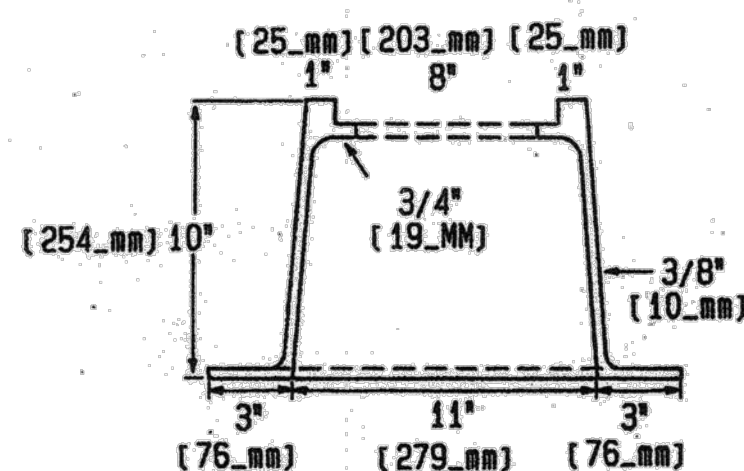


PLAN OF COVER

PLAN OF FRAME

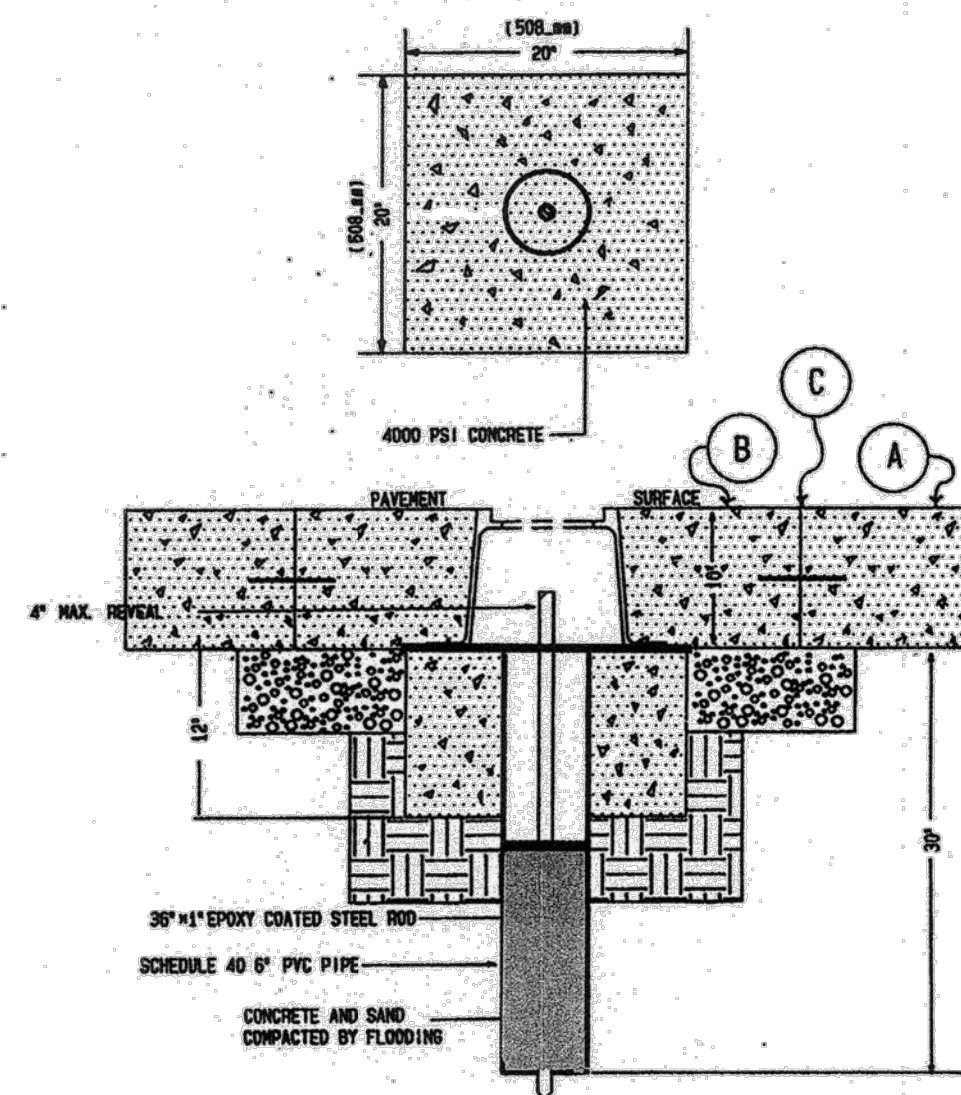


SIDE VIEW OF COVER

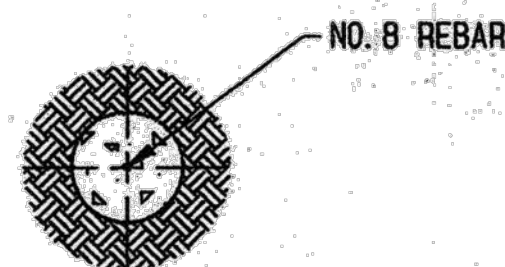


SECTION OF FRAME

MONUMENT ASSEMBLY SECTION

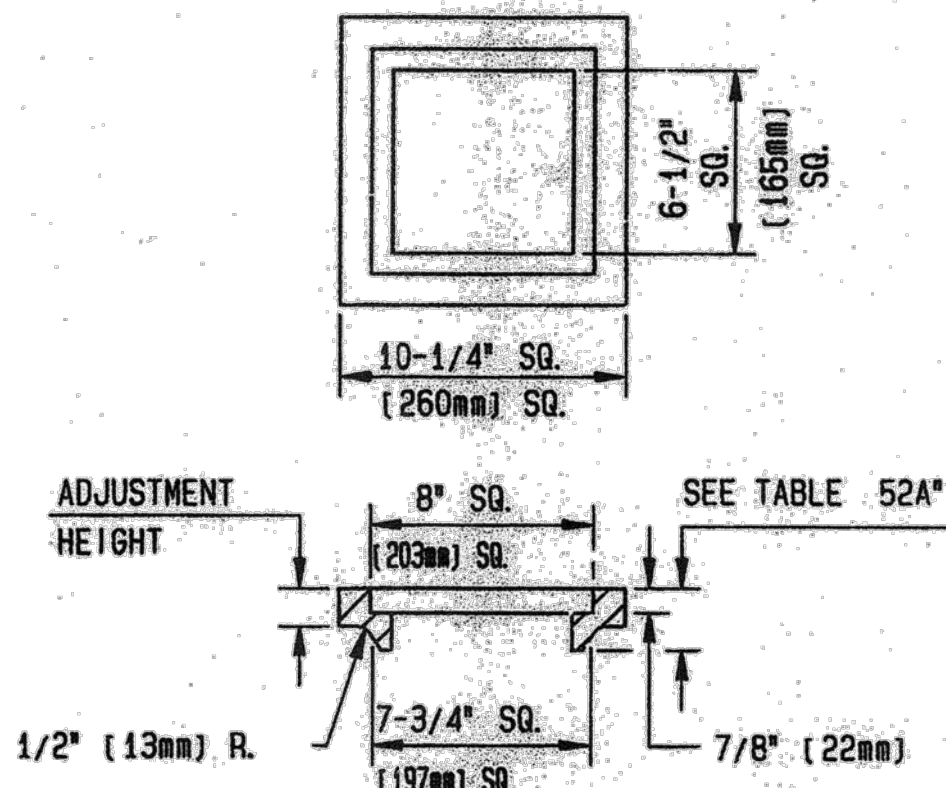


ROADWAY MONUMENT ASSEMBLY



RIGHT OF WAY MONUMENT

- (A) NEW OR EXISTING PAVEMENT, A.P.P.
- (B) NEW 3" ASPHALT OVER 7" CONCRETE OR 10" CONCRETE AS DETERMINED BY THE ABUTTING PAVEMENT.
- (C) 4" GUTTER SEAL AS PER ODOT 404.13 FOR ASPHALT SURFACES OR JOINT SEALER AS PER ODOT 451.13 FOR CONCRETE SURFACE DO NOT SEAL THE COVER TO FRAME



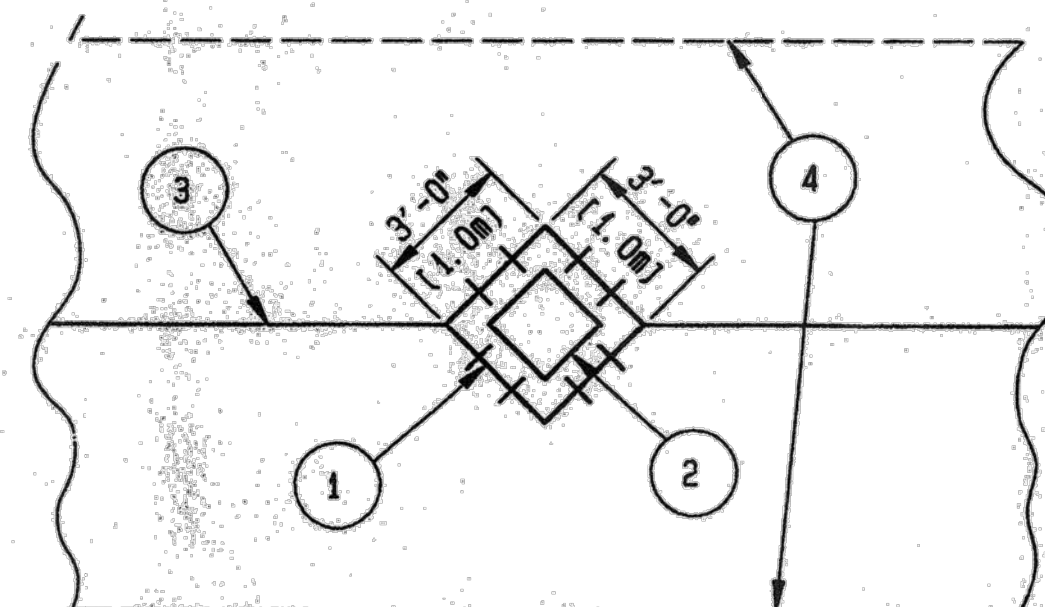
ADJUSTING RING

* SEE NOTE BELOW

NOTE: ADJUSTING RING IS TO BE TACK WELDED TO THE FRAME BY AT LEAST TWO (2) POINTS OF AN APPROVED METHOD.

ADJUSTMENT HEIGHT	DIMENSION 52A	MINIMUM HEIGHTS
1-1/8" (29mm)	2" (51mm)	14-LBS. (6.4kg)
1-1/2" (38mm)	2-3/8" (60mm)	20-LBS. (9.1kg)
2-1/2" (64mm)	3-3/8" (86mm)	27-LBS. (12.2kg)
3" (76mm)	3-7/8" (98mm)	30-LBS. (13.6kg)
3-1/2" (89mm)	4-3/8" (111mm)	32-LBS. (14.5kg)

* NOTE: USE OF ADJUSTING RING(S) MUST BE APPROVED BY THE CITY SURVEY SECTION



- (1) MONUMENT ASSEMBLY BLOCK OUT OR FULL DEPTH SAW CUT CONSTRUCTION JOINT. W/12" (305mm) LONG 1-1/4" (32mm) DIA. DOWELS. (BY CONTRACTOR), MAY BE OMITTED IF THE EXISTING CONCRETE BASE, IF ANY IS LESS THAN 6" IN THICKNESS.
- (2) MONUMENT BOX (BY CONTRACTOR)
- (3) TYPICAL LONGITUDINAL JOINT
- (4) NEW CONCRETE OR ASPHALT OVER CONCRETE PAVEMENT, OR EXISTING PAVEMENT.

TYPICAL BLOCK OUT IN NEW RIGID PAVEMENT, OR MINIMUM FULL DEPTH SAW CUT IN EXISTING PAVEMENT.

NOTES

CASTINGS SHALL MINIMALLY MEET THE REQUIREMENTS OF 604.02-711.12, A.S.T.M. A 48, CLASS 35 GRAY IRON OR 711.13 DUCTILE IRON. THE ASSEMBLY SHALL BE ESSENTIALLY THE SAME AND EQUALLY AS STRONG AS THOSE SHOWN HEREON.

MINIMUM HEIGHTS:

FRAME 94 LBS. (42.6 kg)
COVER 16 LBS. (7.3 kg)

PROVIDED THEY COMPLY WITH THE SPECIFICATIONS, DETAILS, DIMENSIONS AND MINIMUM HEIGHTS, EAST JORDAN NO. 8360 OR APPROVED EQUAL CASTINGS ARE ACCEPTABLE.

BEARING AREAS SHALL BE FINISHED AS TO PROVIDE A FIRM AND EVEN SEAT. NO PROJECTION SHALL EXIST ON THE BEARING AREAS AND THE COVER SHALL SEAT IN ITS FRAME WITHOUT ROCKING.

PRIOR TO CONSTRUCTION OF PAVEMENT, THE FRAME SHALL BE SET TO GRADE IN SUCH A MANNER THAT WILL PREVENT ANY PAVEMENT MATERIAL FROM ENTERING THE CASTING.

CONTACT CITY OF CLEVELAND SURVEY DEPT. AT (216) 664-2460, AT LEAST TWO (2) WEEKS PRIOR TO THE DISTURBANCE OF ANY EXISTING MONUMENTS.

ALL MONUMENTS ARE TO BE SET UNDER THE DIRECTION OF A REGISTERED SURVEYOR. (REF. O.A.C. 4733-37-03)

WHERE CLEVELAND REGIONAL GEODETIC SURVEY (C.R.G.S.) MONUMENT ASSEMBLIES ARE MARKED ON THE PLANS TO BE ABANDONED, THE CONTRACTOR SHALL CAREFULLY REMOVE AND STORE THE MONUMENT CASTINGS AND BRONZE C.R.G.S. MARKERS FOR SALVAGE BY THE COUNTY. THE CONTRACTOR SHALL ALSO NOTIFY THE REGIONAL GEODETIC SURVEY OFFICE AT (216) 348-3846, SO THAT THE MONUMENT CASTINGS AND BRONZE C.R.G.S. MARKERS MAY BE PICKED UP. PAYMENT SHALL BE MADE UNDER ITEM 202-MONUMENT ASSEMBLY ABANDONED, C.R.G.S. MONUMENT.

ITEM 202- MONUMENT ASSEMBLY ABANDONED, C.R.G.S. MONUMENT

ITEM 604- CITY OF CLEVELAND MONUMENT BOX

ITEM 604- CITY OF CLEVELAND ROADWAY

MONUMENT ASSEMBLY

ITEM 604- CITY OF CLEVELAND RIGHT OF WAY

MONUMENT

ITEM 604- MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN (ONLY WHEN EXISTING MONUMENT BOX CONFORMS TO MB-1C AND IS SUITABLE FOR REUSE)

LEGEND

- CONCRETE, 4000P.S.I. AS PER CONCRETE MIX
- SAND (703.02), COMPACTED AS REQUIRED
- SUBBASE/AGGREGATE BASE PER THE PLANS. (6" MINIMUM; INCREASE, IF REQUIRED, TO MATCH THE BOTTOM OF THE NEW OR EXISTING SUBBASE)
- UNDISTURBED EARTH OR SUITABLE BACKFILL AND FIRM FOUNDATION IN ACCORDANCE WITH 604.04 AND TO THE SATISFACTION OF THE ENGINEER.

CITY OF CLEVELAND

MONUMENT BOX & ASSEMBLIES

STANDARD CONSTRUCTION DRAWING

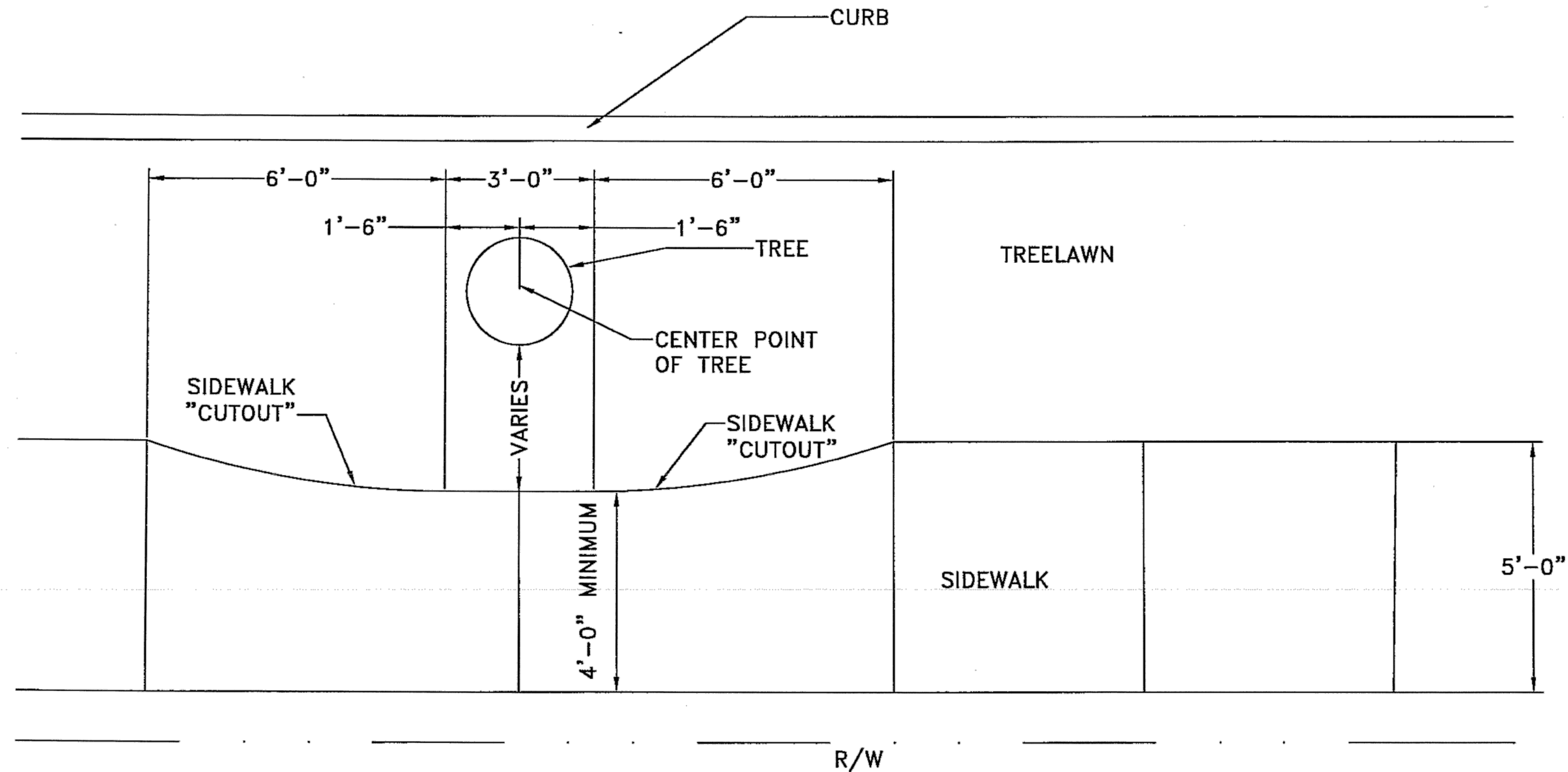
MB-1C

APPROVED: LIE DATE: 10-15-14

REVISIONS
UPDATED:
01/05/11

UPDATED:
10/15/14

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NOTES:
THIS DETAIL IS TO BE USED ONLY AT THE DIRECTION OF THE ENGINEER WITH
CONSULTATION WITH THE DIVISION OF URBAN FORESTRY.

CITY OF CLEVELAND		
DEPARTMENT OF PUBLIC SERVICE		
DIVISION OF ENGINEERING & CONSTRUCTION		
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE		
STANDARD CONSTRUCTION DRAWING		
TYPICAL CONSTRUCTION DETAIL		
SIDEWALK TREE BUMPOUT		
NOT TO SCALE		
DRAWN BY: <u>R. PLIODZINSKAS</u> DATE: <u>4/8/08</u>		
SUBMITTED BY: <u>W. MCLAUGHLIN</u> DATE: <u>4/8/08</u>		
APPROVED: <u>[Signature]</u> DATE: <u>4/14/08</u>		
COMMISSIONER OF ENGINEERING & CONSTRUCTION		
FILE NO. TP 1	SHEET 1/2	39

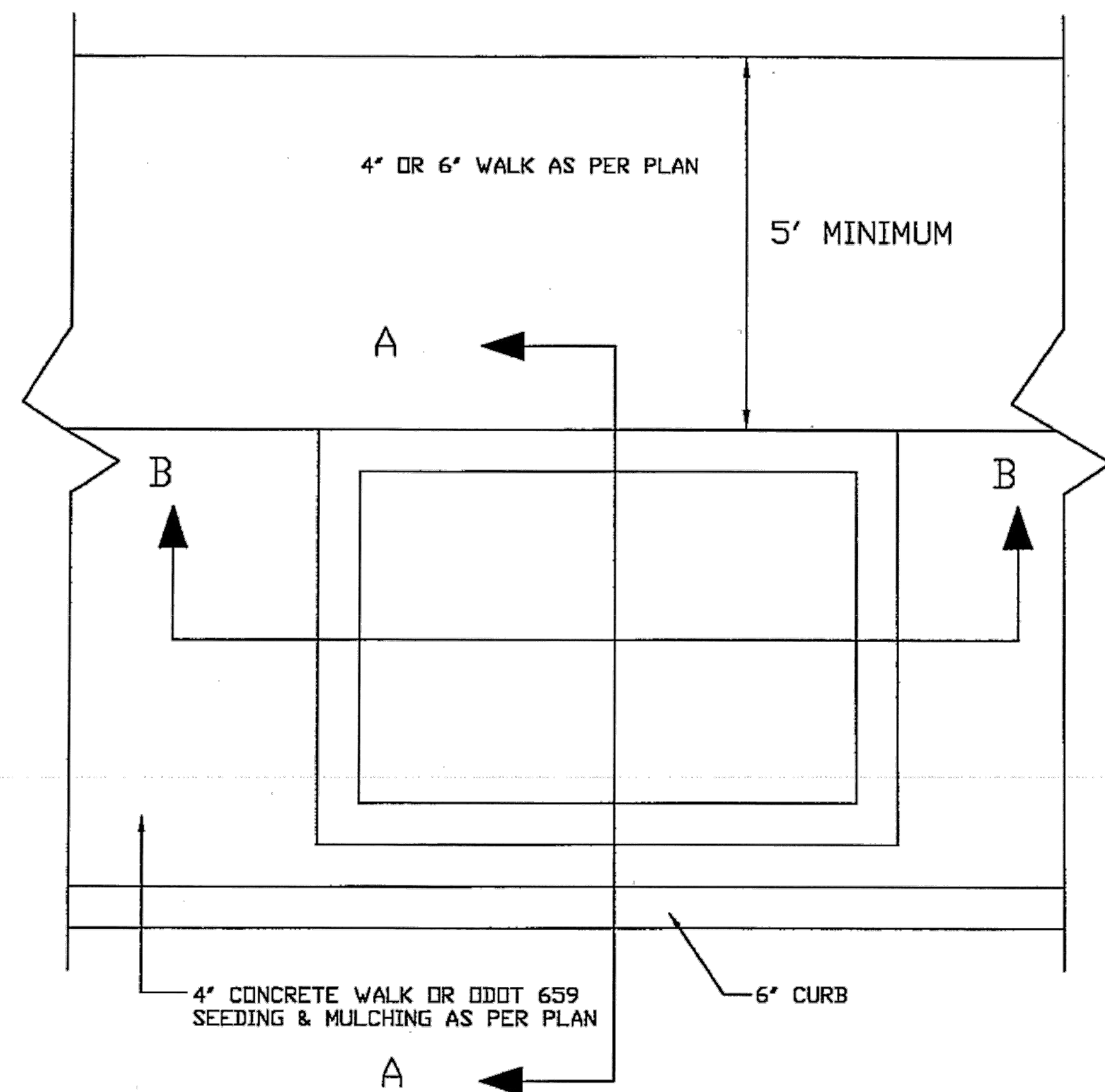
MISCELLANEOUS DETAILS

CUY-E 55TH ST RESURF

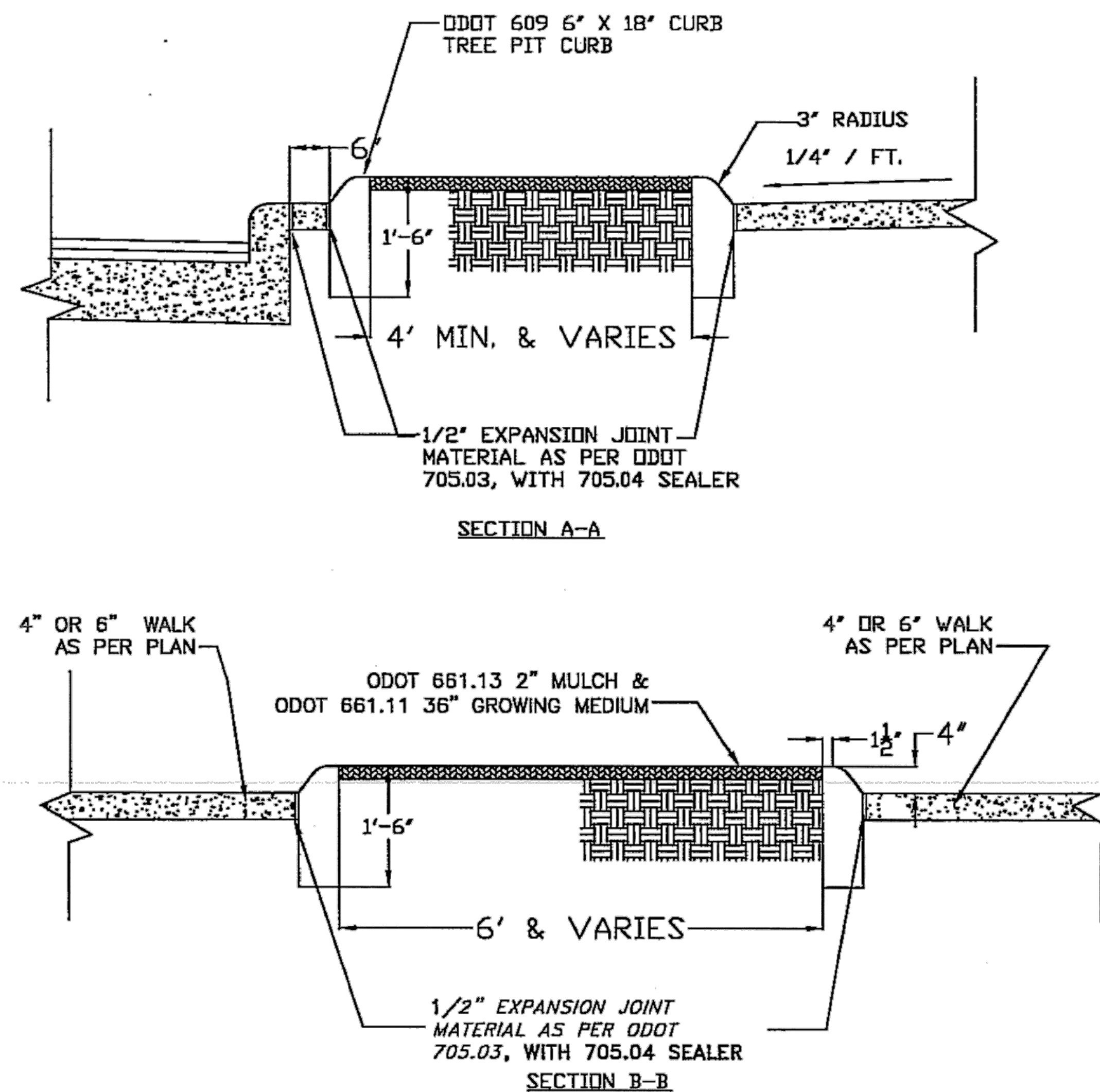
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- NOTE:
- 1 - 6" THICK SIDEWALK IN BUSINESS DISTRICTS
 - 2 - CONTRACTOR SHALL OBTAIN APPROVAL FROM THE DIVISION OF URBAN FORESTRY FOR SPACING REQUIREMENTS AND TREE SPECIES.
 - 3 -



CITY OF CLEVELAND		
DEPARTMENT OF PUBLIC SERVICE		
DIVISION OF ENGINEERING & CONSTRUCTION		
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE		
STANDARD CONSTRUCTION DRAWING		
TREE PIT		
NOT TO SCALE		
DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08		
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08		
APPROVED: <i>R. Wasik</i> DATE: 4/14/08		
COMMISSIONER OF ENGINEERING & CONSTRUCTION		
FILE NO. TP 1	SHEET 2/2	40

MISCELLANEOUS DETAILS

CUY-E 55TH ST RESURF

101
103

CALCULATED
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LAYOUT OF PAVEMENT MARKINGS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE VARIOUS FINAL PAVEMENT MARKINGS, INCLUDING LOCATION OF NO PASSING ZONES, CENTER LINES, LANE LINES, AND LANE ARROWS ON THE FINAL SURFACE COURSE, IN ACCORDANCE WITH SECTION 641.06.

THE TABLE TO THE LEFT PROVIDES ESTIMATED QUANTITIES BASED ON THE PRESENT LOCATIONS OF THE EXISTING PAVEMENT MARKINGS WITHIN THE PROJECT LIMITS.

INSTALLATION OF PERMANENT PAVEMENT MARKINGS

THE FINAL PAVEMENT MARKINGS SHALL BE PLACED WITHIN 72 HOURS AFTER THE FINAL SURFACE COURSE IS COMPLETE.

"NO PARKING ANY TIME" (R7-1) SIGNS FURNISHED AND INSTALLED

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS WORK:

132 FEET
11 EACH
33 SQ FT
21 EACH



