

STATE OF OHIO
 DEPARTMENT OF TRANSPORTATION
CUY-42-16.62
UTILITY
 CITY OF CLEVELAND
 CUYAHOGA COUNTY

PROJECT DESCRIPTION

WORK SHALL CONSIST OF BORING OR JACKING A NEW 36" CONDUIT UNDER I-90, WEST OF THE WEST 25TH STREET OVERPASS, THE INSTALLATION OF CONCRETE ENCASED CONDUITS AND CLEVELAND PUBLIC POWER MANHOLES.

PROJECT EARTH DISTURBED AREA: 0.09 ACRES
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.13 ACRES
 NOTICE OF INTENT EARTH DISTURBED AREA: N/A

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2016 SPECIFICATIONS

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

I HEREBY APPROVED THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT FOR THE SIDE ROADS AS DESCRIBED ON SHEET 5. AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

FEDERAL PROJECT NO.
E160 (777)

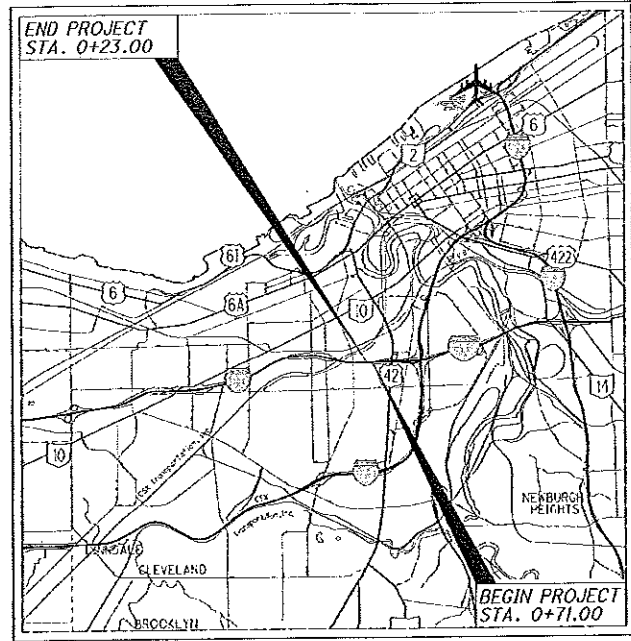
PID NO.
101856

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
N/A

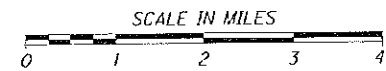
CUY-42-16.62
UTILITY

1
14



LOCATION MAP

LATITUDE: N 41°28'25" LONGITUDE: W 81°42'10"



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

DESIGN DESIGNATION

CURRENT ADT (20)	N/A
DESIGN YEAR ADT (20)	N/A
DESIGN HOURLY VOLUME (20)	N/A
DIRECTIONAL DISTRIBUTION	N/A
TRUCKS (24 HOUR B&C)	N/A
DESIGN SPEED	N/A
LEGAL SPEED	N/A
DESIGN FUNCTIONAL CLASSIFICATION:	
N/A	
NHS PROJECT	N/A

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES
 CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.

Call Before You Dig
1-800-362-2764

(Non-members must be called directly)

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE
1-800-925-0988

PLAN PREPARED BY:

AECOM

1300 EAST 9TH STREET, SUITE 500
 CLEVELAND, OH 44114

INDEX OF SHEETS:

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ODOT STANDARD CONSTRUCTION DRAWINGS				CITY OF CLEVELAND STANDARD CONSTRUCTION DRAWINGS		SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	7/18/14	MT-98.11	7/18/14	PR-1	8/3/09	800	01-20-17		
BP-4.1	7/19/13	MT-98.20	7/18/14	CD-1	12/3/09	832	1/17/14		
		MT-98.22	7/18/14						
F-1.1	7/19/13								
F-3.4	7/19/13								
RM-4.2	4/18/14								
DM-4.3	1/15/16								
DM-4.4	1/15/16								

ENGINEERS SEAL:

SIGNED: *Michael A. Woodring*
 DATE: NOVEMBER 3, 2016

APPROVED: *M. S. Ke*
 DATE: 11-30-16 DISTRICT DEPUTY DIRECTOR

APPROVED: *Sammy Whaley*
 DATE: 12-27-16 DIRECTOR, DEPARTMENT OF TRANSPORTATION

CUY - US 42-16.62 Utility
 174003 PID - 101856
 Dist 12 3/2/2017
 Contract Proposal Available @ www.
 Contracts.dot.state.oh.us/home

K:\Projects\NO\DDC1160441799_GIS\516101717\Documents\161016 - 2017_GES\Task_3 - CUY -

GENERAL

UTILITIES

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

CHARTER COMMUNICATIONS
8179 DOW CIRCLE
STRONGSVILLE, OHIO 44136
ATTN.: GARY NAUMANN, SUPERVISOR
PHONE: (216) 575-8016 EXT. 5033
EMAIL: gary.naumann@charter.com

AT&T
13630 LORAIN AVENUE 2ND FLOOR
CLEVELAND, OHIO 44111
ATTN.: JAMES JANIS, DESIGN MANAGER
PHONE: (216) 476-6142
FAX: (216) 476-6013
EMAIL: pj8191@att.com

CEI FIRST ENERGY
6896 MILLER ROAD
BRECKSVILLE, OHIO 44141
ATTN.: TED RADER, DESIGN SUPERVISOR
PHONE: (440) 546-8738
EMAIL: rader.t@firstenergycorp.com

DOMINION EAST OHIO GAS COMPANY
320 SPRINGSIDE DRIVE, SUITE 320
AKRON, OHIO 44333
ATTN.: K. AARON CONANT
PHONE: (330) 664-2451
EMAIL: k.aaron.conant@dom.com

CITY OF CLEVELAND
DIVISION OF CLEVELAND PUBLIC POWER (MELP)
1300 LAKESIDE AVENUE
CLEVELAND, OHIO 44114
ATTN.: CHRIS HIRZEL
PHONE: (216) 664-3922 EXT. 115
FAX: (216) 664-2972
EMAIL: chirzel@cpp.com
ATTN.: DALE TURKOVICH
PHONE: (440) 799-9331
EMAIL: dturkovich@hotmail.com

CITY OF CLEVELAND
DIVISION OF TRAFFIC ENGINEERING
601 LAKESIDE AVENUE
CLEVELAND, OHIO 44114
ATTN.: DIMITRI SZYNAL
PHONE: (216) 402-9278
EMAIL: Dszynal@City.Cleveland.Oh.us

CITY OF CLEVELAND
DIVISION OF WATER POLLUTION CONTROL
12302 KIRBY ROAD
CLEVELAND, OHIO 44108
ATTN.: RACHID ZOGHAIB
PHONE: (216) 664-3785
EMAIL: rzoghaib@clevelandwpc.com
ATTN.: ELIE RAMY
PHONE: (216) 664-2756
EMAIL: eramy@clevelandwpc.com

CITY OF CLEVELAND
DIVISION OF WATER
1201 LAKESIDE AVENUE
CLEVELAND, OHIO 44114
ATTN.: ANDREW KRAWCZYK, CONSULTING ENGINEER
PHONE: (216) 664-2444 EXT. 5520
FAX: (216) 664-2378
EMAIL: andrew.krawczyk@ClevelandWater.com
ATTN.: FRED ROBERTS
PHONE: (216) 664-2444 EXT. 5590
EMAIL: fred.roberts@ClevelandWater.com

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O. R.C.

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.

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.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ODOT PROJECTS. SEE BELOW FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

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

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE-NORTH ZONE
COMBINED SYSTEM: 1.00000000 (PRJ. IS IN GRID COORDINATES)

ORIGIN OF COORDINATE SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 823.

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT-OF-WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS) A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED OF THE AREA. USE OF THE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS, AS DEFINED ABOVE, WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

WORK ADJACENT TO DOMINION EAST OHIO GAS LINES IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LATERAL AND SUBJACENT SUPPORT OF DOMINION'S PIPELINE(S), IN COMPLIANCE TO 29 CFR, PART 1926, SUBPART P, (SAFE EXCAVATION & SHORING). ONE-FOOT MINIMUM VERTICAL AND HORIZONTAL CLEARANCE MUST BE MAINTAINED BETWEEN DOMINION EAST OHIO'S (DEO) EXISTING PIPELINE(S) AND ALL OTHER IMPROVEMENTS. EXTREME CARE SHOULD BE TAKEN NOT TO HARM ANY DEO FACILITY (PIPELINES, ETC.) OR APPURTENANCE (PIPE COATING, TRACER WIRE, CATHODIC PROTECTION TEST STATION WIRES & DEVICES, VALVE BOXES, ETC.). DEO FACILITIES MUST BE PROTECTED WITH A TARP DURING BRIDGE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE AND LIABLE FOR ENSURING THAT ALL DEO EXISTING FACILITIES, ABOVE AND BELOW GROUND, REMAIN UNDAMAGED, ACCESSIBLE AND IN WORKING ORDER. THE CROSSING OF DEO'S PIPELINE WITH ANOTHER STEEL FACILITY MAY CREATE A POTENTIAL CORROSION ISSUE FOR THE PROPOSED FACILITY AND THE EXISTING DEO FACILITY. PLEASE CONTACT DOMINION'S CORROSION DEPARTMENT: DAVE CUTLIP (330-266-2121), RICK MCDONALD (330-266-2122), OR AL HUMRICHOUER (330-478-3757).

DEO = THE EAST OHIO GAS COMPANY, dba DOMINION EAST OHIO, 1-800-362-7557.

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

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, DO NOT OPERATE POWER-OPERATED CONSTRUCTION - TYPE DEVICES BETWEEN THE HOURS OF 9 PM AND 7 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME AND DEVICES 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.

EROSION CONTROL

SEEDING AND MULCHING THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659, SOIL ANALYSIS TEST	2 EACH
ITEM 659, TOPSOIL	50 CY
ITEM 659, SEEDING AND MULCHING, CLASS 2	450 SY
ITEM 659, REPAIR SEEDING AND MULCHING	23 SY
ITEM 659, COMMERCIAL FERTILIZER	0.06 TON
ITEM 659, LIME	0.09 ACRE
ITEM 659, WATER	2 MGAL

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

PAVEMENT

CURB, MISC.: CITY OF CLEVELAND CONCRETE CURB

CONSTRUCT ALL CURB TO BE REPLACED PER THE CITY OF CLEVELAND STANDARD CONSTRUCTION DRAWING CD-1.

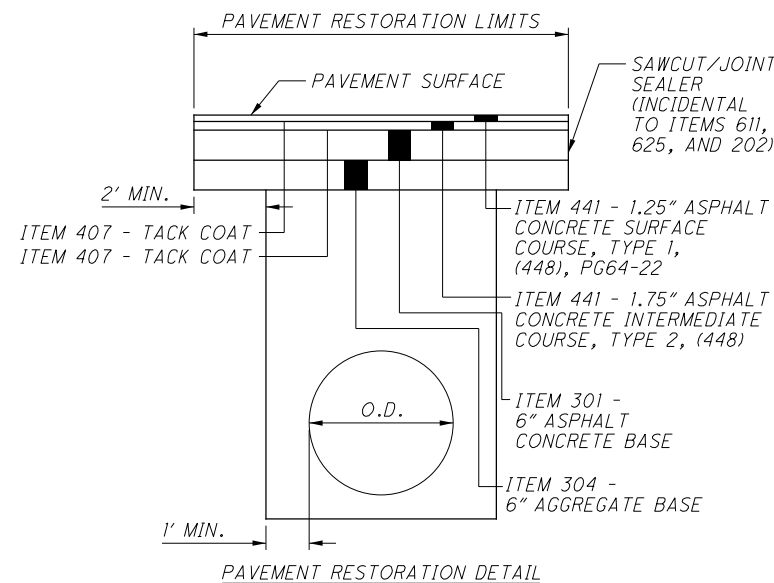
PAVEMENT RESTORATION FOR UTILITY INSTALLATIONS

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR PAVEMENT RESTORATION FOLLOWING THE INSTALLATION OF CONDUIT UNDER ITEM 625.

ITEM 301 - 6" ASPHALT CONCRETE BASE	20 CY
ITEM 304 - 6" AGGREGATE BASE	20 CY
ITEM 407 - TACK COAT	14 GAL
ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, 448, PG64-22	5 CY
ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	6 CY

THE QUANTITIES ARE BASED ON THE PAVEMENT BUILDUP SHOWN IN THE PAVEMENT RESTORATION DETAIL BELOW. THE PAVEMENT RESTORATION WIDTH THAT INCLUDED THE TRENCH WIDTH PLUS ONE FOOT ON EACH SIDE OF THE TRENCH AS SHOWN IN THE PAVEMENT RESTORATION DETAIL.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.



DRAINAGE

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE A PROPOSED CONDUIT TO CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILIZES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

ITEM 611 - CONDUIT BORED OR JACKED

WHERE IT IS SPECIFIED THAT A CONDUIT BE INSTALLED BY THE METHOD OF BORING OR JACKING, NO TRENCH EXCAVATION SHALL BE CLOSER THAN 20 FEET TO THE EDGE OF PAVEMENT. PROVIDE A 0.50 INCH UNGALVANIZED CASING PIPE CONFORMING TO 748.06 THAT HAS JOINTS WITH A CIRCUMFERENTIAL FULLY PENETRATING B-U4B WELD THAT IS PERFORMED BY AN ODOT APPROVED FIELD WELDER. HYDROSTATIC TESTING IS NOT REQUIRED FOR THE CASING PIPE. (12") - 5" CONDUITS SHALL BE INSTALLED WITHIN THE STEEL CASING PIPE AND THE VOIDS FILLED WITH LOW STRENGTH MORTAR BACKFILL PER ODOT CMS 613. SEE DETAIL X - X, SHEET 9 . PAYMENT FOR THE 5" CONDUITS AND THE LSM SHALL BE INCLUDED IN ITEM 625 - CONDUIT, CONCRETE ENCASED, AS PER PLAN.

ELECTRIC

ITEM 625 - CONDUIT, CONCRETE ENCASED, AS PER PLAN

THE CONTRACTOR SHALL PROVIDE (12)-5" CONDUITS CONFORMING TO 725.051. WHEN OUTSIDE THE BORING OR 5" JACKING LIMITS, THESE CONDUITS SHALL BE ENCASED IN CONCRETE PER 625.12 AND THE DETAILS WITHIN THE PLAN SET. WHEN WITHIN THE CONDUIT BORED OR JACKED LIMITS, THESE 5" CONDUITS SHALL BE ENCASED IN ITEM 613 LOW STRENGTH MORTAR BACKFILL AND THE DETAILS WITHIN THE PLAN SET. THE COST FOR ALL LABOR AND MATERIALS REQUIRED FOR THE COMPLETE INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID PER FOOT OF ITEM 625 - CONDUIT, CONCRETE ENCASED, AS PER PLAN.

SANITARY

ITEM 611 - CONDUIT, MISC.: BRICK SEWER CONCRETE REINFORCEMENT

THE CONTRACTOR SHALL PROVIDE CONCRETE REINFORCEMENT AS REQUIRED FOR THE BRICK MAIN SEWER AT THE LOCATIONS OF CONFLICT SHOWN ON THE PLAN AND PROFILE SHEET. THE REINFORCEMENT WILL CONSIST OF NO LESS THAN 6" CONCRETE (3,000 PSI). IN GENERAL, REINFORCEMENT IS REQUIRED WITHIN THE LIMITS OF THE PROPOSED CPP VAULTS, BETWEEN THE VAULT AND THE EXISTING BRICK SEWER. HOWEVER, WPC NEEDS TO BE CONTACTED BY THE CONTRACTOR TO BE PRESENT ONSITE WHEN THE WORK TAKES PLACE FOR EACH VAULT. HAND DIGGING WILL BE REQUIRED TO EXPOSE THE MAIN SEWER AND DETERMINE THE ACTUAL PROXIMITY OF THE VAULT TO THE SEWER. BASED ON THE FINDINGS, WPC WILL CONFIRM THE ACTUAL LIMITS OF THE REINFORCEMENT REQUIRED. ADDITIONALLY, THE CONTRACTOR SHOULD PROCEED WITH CAUTION WHEN WORKING IN THE PROXIMITY OF THE EXISTING SEWER. SHOULD ANY DAMAGE OCCUR TO THE EXISTING SEWER, THE CONTRACTOR IS RESPONSIBLE FOR THE SEWER REPAIR. THE COST FOR ALL LABOR AND MATERIALS REQUIRED FOR THE COMPLETE INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD OF ITEM 611 - CONDUIT, MISC.: BRICK SEWER CONCRETE REINFORCEMENT.

CLEVELAND WATER POLLUTION CONTROL COORDINATION

CONTACT CLEVELAND WATER POLLUTION CONTROL AT (216) 664-2756 OR (216) 420-7638 FOR ANY SEWER RELATED ISSUES ENCOUNTERED DURING CONSTRUCTION.

CALCULATED
JEM
CHECKED
MAW

GENERAL NOTES

CUY-42-16.62
UTILITY

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ITEM 614, MAINTAINING TRAFFIC

WORK SHALL CONSIST OF BORING OR JACKING A NEW 36" CONDUIT UNDER I-90, WEST OF THE WEST 25TH STREET OVERPASS, THE INSTALLATION OF CONCRETE ENCASED CONDUITS AND CLEVELAND PUBLIC POWER MANHOLES.

WHENEVER A LANE IS CLOSED, RAMP SIGNING SHALL BE ADDRESSED AS PER MT-98.11 AND MT-98.20 AND MT-98.22.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

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 BROADBAND INTERNET CONNECTION MUST MEET A MINIMUM UPLOAD SPEED OF 5 MB PER SECOND.

ALL OTHER FIELD OFFICE ITEMS SUPPLIED SHALL MEET THE REQUIREMENTS OF A TYPE B, FIELD OFFICE

ODOT D12 NOTIFICATION PRIOR TO WORK

THE CONTRACTOR SHALL NOTIFY THE ODOT PUBLIC INFORMATION OFFICE STAFF TWO (2) WEEKS PRIOR TO BEGINNING WORK. CONTACT AMANDA MCFARLAND, PUBLIC INFORMATION OFFICER, (216) 589-2005.

ODOT D12 PERMITTED LANE CLOSURES

LANE CLOSURES MAY ONLY BE IMPLEMENTED AT THE TIMES PERMITTED BY ODOT'S, PERMITTED LANE CLOSURE WEB SITE, WHICH IS LOCATED ON ODOT'S WEB SITE AT:

[HTTP://WWW.DOT.STATE.OH.US/DISTRICTS/D12/HIGHWAYMANAGEMENT/PERMITTEDLANECLOSURES.ASPX](http://www.dot.state.oh.us/districts/d12/highwaymanagement/permittedlane closures.aspx)

ALL NOTES ON THE PERMITTED LANE CLOSURE TIMES SHALL BE PART OF THE PROJECT. THE LATEST REVISION, 14 DAYS PRIOR TO THE BID DATE, WILL BE IN EFFECT FOR THIS JOB.

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.

CALCULATED
JEM
CHECKED
MAW

MAINTENANCE OF TRAFFIC GENERAL NOTES

CUY-42-16.62
UTILITY

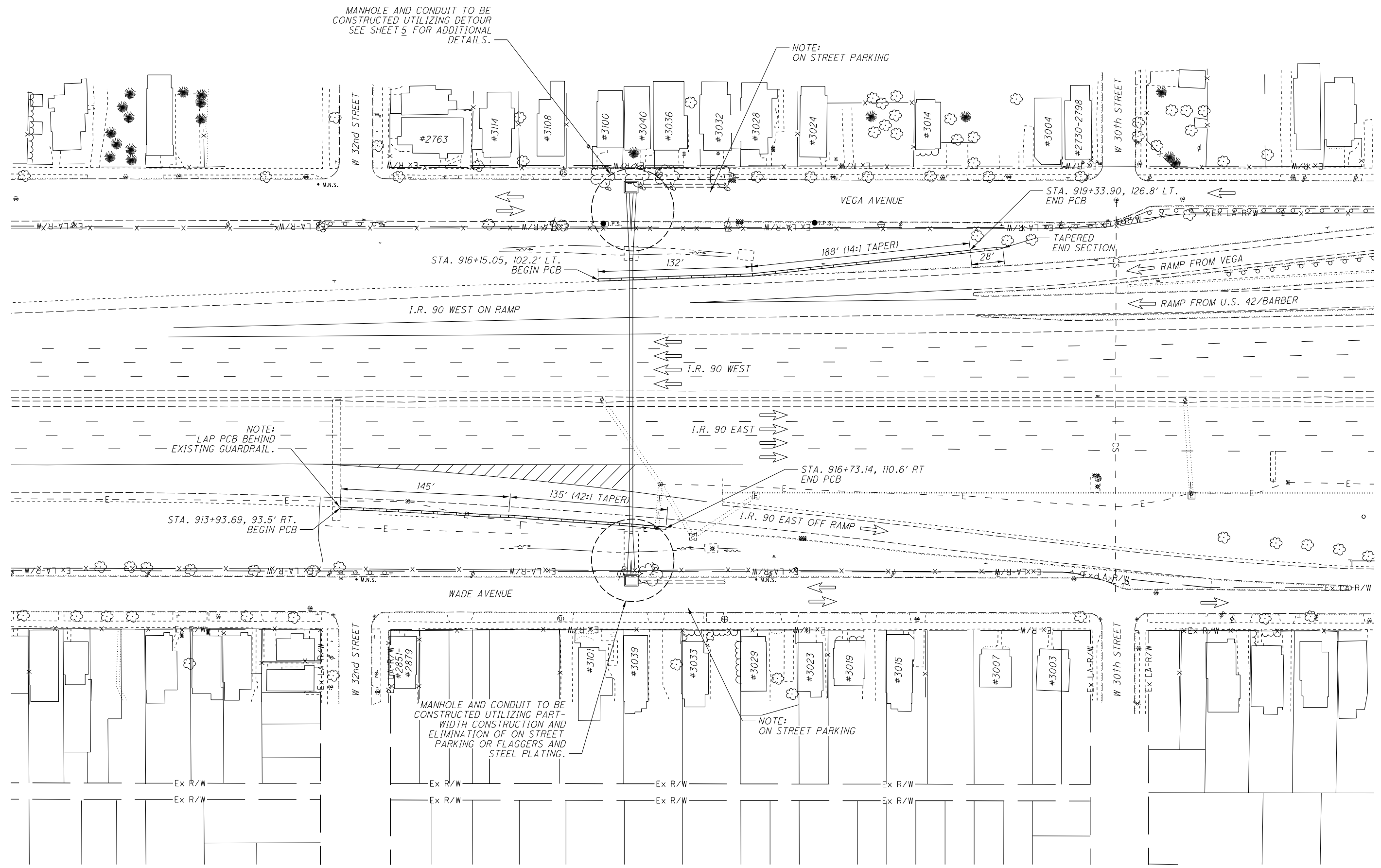
LEGEND:
← DIRECTION OF TRAFFIC

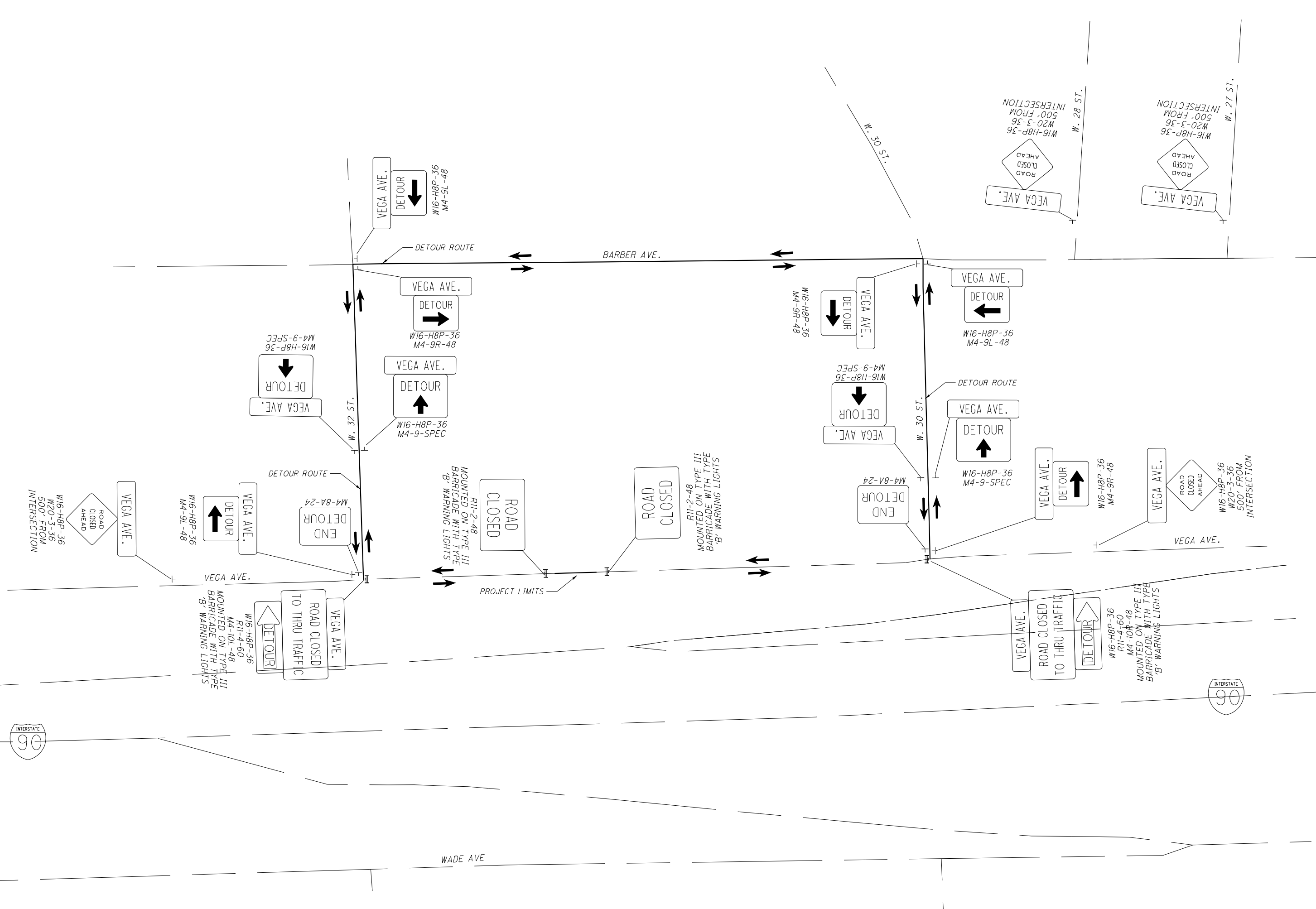
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0 40 80
HORIZONTAL
SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN

CUY-42-16.62
UTILITY





CALCULATED
KAF
CHECKED
MEP

0 25 50 100
HORIZONTAL
SCALE IN FEET

DETOUR PLAN - VEGA AVENUE

**CUY-42-16.62
UTILITY**

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SHEET NUMBER				PARTICIPATION	ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS	2	4								
				01/IMS/OT	201	11000	LS		ROADWAY CLEARING AND GRUBBING	
120				01/IMS/OT	202	23000	120	SY	PAVEMENT REMOVED	
87				01/IMS/OT	202	30000	87	SF	WALK REMOVED	
75				01/IMS/OT	202	32000	75	FT	CURB REMOVED	
26				01/IMS/OT	202	35101	26	FT	PIPE REMOVED, 24" AND UNDER, AS PER PLAN	8
75				01/IMS/OT	202	75000	75	FT	FENCE REMOVED	
205				01/IMS/OT	203	10000	205	CY	EXCAVATION	
205				01/IMS/OT	203	20000	205	CY	EMBANKMENT	
75				01/IMS/OT	607	23000	75	FT	FENCE, TYPE CLT	
87				01/IMS/OT	608	10000	87	SF	4" CONCRETE WALK	
									EROSION CONTROL	
	2			01/IMS/OT	659	00100	2	EACH	SOIL ANALYSIS TEST	
	50			01/IMS/OT	659	00300	50	CY	TOPSOIL	
	450			01/IMS/OT	659	00510	450	SY	SEEDING AND MULCHING, CLASS 2	
	23			01/IMS/OT	659	14000	23	SY	REPAIR SEEDING AND MULCHING	
	0.06			01/IMS/OT	659	20000	0.06	TON	COMMERCIAL FERTILIZER	
	0.09			01/IMS/OT	659	31000	0.09	ACRE	LIME	
	2			01/IMS/OT	659	35000	2	MGAL	WATER	
5000				01/IMS/OT	832	30000	5000	EACH	EROSION CONTROL	
									PAVEMENT	
	20			01/IMS/OT	301	46000	20	CY	ASPHALT CONCRETE BASE, PG64-22	
	20			01/IMS/OT	304	20000	20	CY	AGGREGATE BASE	
	14			01/IMS/OT	407	10000	14	GAL	TACK COAT	
	5			01/IMS/OT	441	50000	5	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
	6			01/IMS/OT	441	50300	6	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
	75			01/IMS/OT	609	98000	75	FT	CURB, MISC.: CITY OF CLEVELAND CONCRETE CURB	2
									SANITARY SEWER	
31				01/IMS/OT	611	00900	31	FT	6" CONDUIT, TYPE B , 706.08 OR 748.01	
1				01/IMS/OT	611	97200	1	EACH	CONDUIT, MISC.: CONDUIT CORING	8
2				01/IMS/OT	611	97200	2	EACH	CONDUIT, MISC.: TEST TEE	8
18.8				01/IMS/OT	611	97600	18.8	CY	CONDUIT, MISC.: BRICK SEWER CONCRETE REINFORCEMENT	2
									ELECTRICAL	
234				01/IMS/OT	611	96600	234	FT	CONDUIT, BORED OR JACKED: 36" O.D., 748.06	
2				01/IMS/OT	611	99690	2	EACH	MANHOLE, MISC.: CPP STANDARD 8'X10'X9' MH	9
335				01/IMS/OT	625	25803	335	FT	CONDUIT, CONCRETE ENCASED, AS PER PLAN	2
60				01/IMS/OT	625	29000	60	FT	TRENCH	
60				01/IMS/OT	625	29400	60	FT	TRENCH IN PAVED AREA	
300				01/IMS/OT	625	36000	300	FT	PLASTIC CAUTION TAPE	
									MAINTENANCE OF TRAFFIC	
				01/IMS/OT	614	12420	LS		DETOUR SIGNING	
	628			01/IMS/OT	622	41000	628	FT	PORTABLE BARRIER, 32"	
									INCIDENTALS	
				01/IMS/OT	614	11000	LS		MAINTAINING TRAFFIC	
				01/IMS/OT	619	16011	4	MNTH	FIELD OFFICE, TYPE B, AS PER PLAN	3
				01/IMS/OT	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
				01/IMS/OT	624	10000	LS		MOBILIZATION	

CALCULATED
JEM
CHECKED
MAW

GENERAL SUMMARY

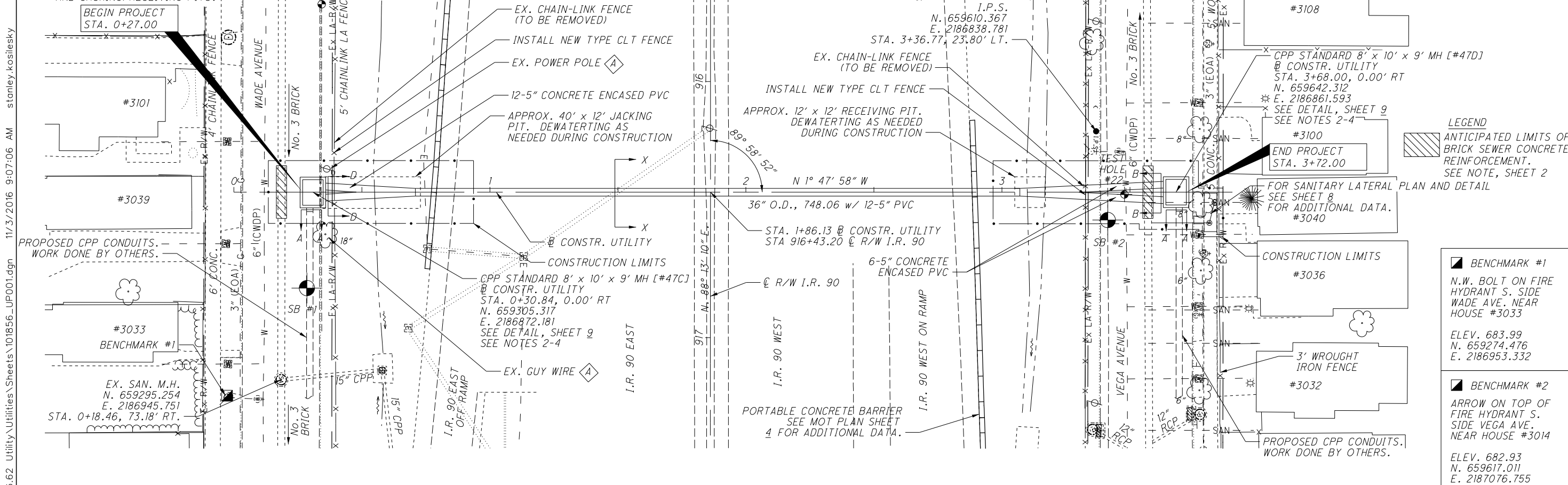
**CUY-42-16.62
UTILITY**

NOTES:

1. ALL QUANTITIES HAVE BEEN CARRIED DIRECTLY TO THE GENERAL SUMMARY FOR SECTION X-X OF CONCRETE ENCASED SEE SHEET 9.
2. CONTRACTOR SHALL COORDINATE WITH THE CPP CONTRACTOR.
3. CONTRACTOR SHALL INSTALL CPP MHS FIRST IN THE SEQUENCE OF CONSTRUCTION.
4. OPEN TRENCH EXCAVATION REQUIRED BETWEEN CPP MHS AND JACKING/RECEIVING PITS.

DIAMOND NOTES:

CEI TO RELOCATE SECONDARY POLE 30 FT. EAST TO AVOID JACK-BORE PIT DURING CONSTRUCTION. THE SECONDARY WIRE WILL REMAIN OVER EXCAVATION BUT WILL BE INSTALLED HIGHER ON THE POLE. CONTRACTOR TO COORDINATE ACTIVITIES.

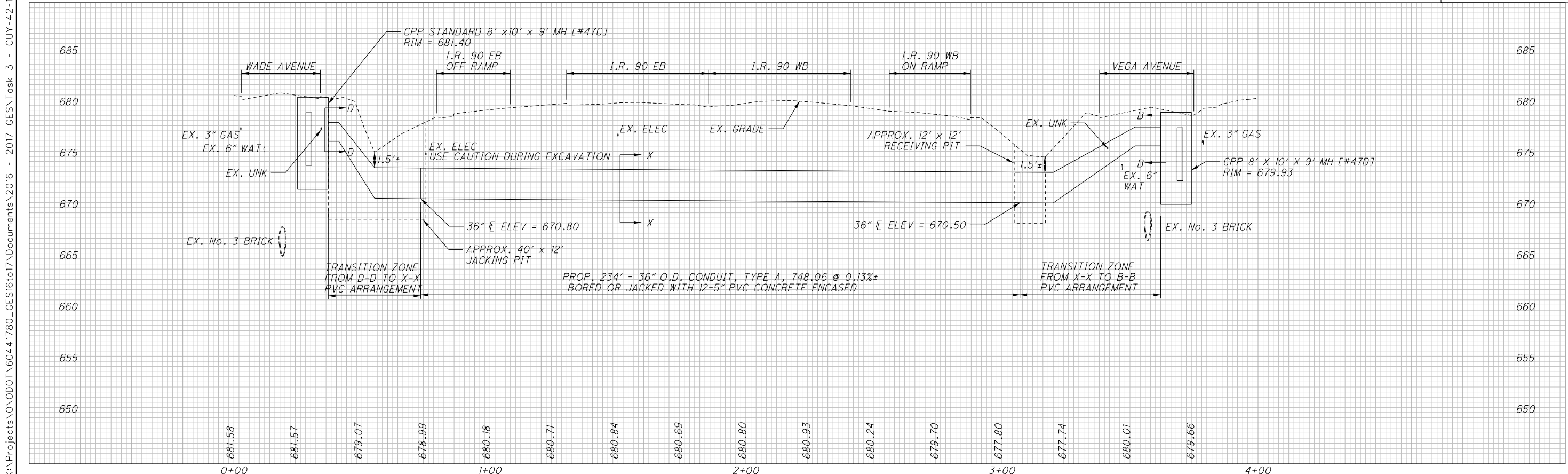


LEGEND

ANTICIPATED LIMITS OF BRICK SEWER CONCRETE REINFORCEMENT. SEE NOTE, SHEET 2

BENCHMARK #1
 N.W. BOLT ON FIRE HYDRANT S. SIDE WADE AVE. NEAR HOUSE #3033
 ELEV. 683.99
 N. 659274.476
 E. 2186953.332

BENCHMARK #2
 ARROW ON TOP OF FIRE HYDRANT S. SIDE VEGA AVE. NEAR HOUSE #3014
 ELEV. 682.93
 N. 659617.011
 E. 2187076.755

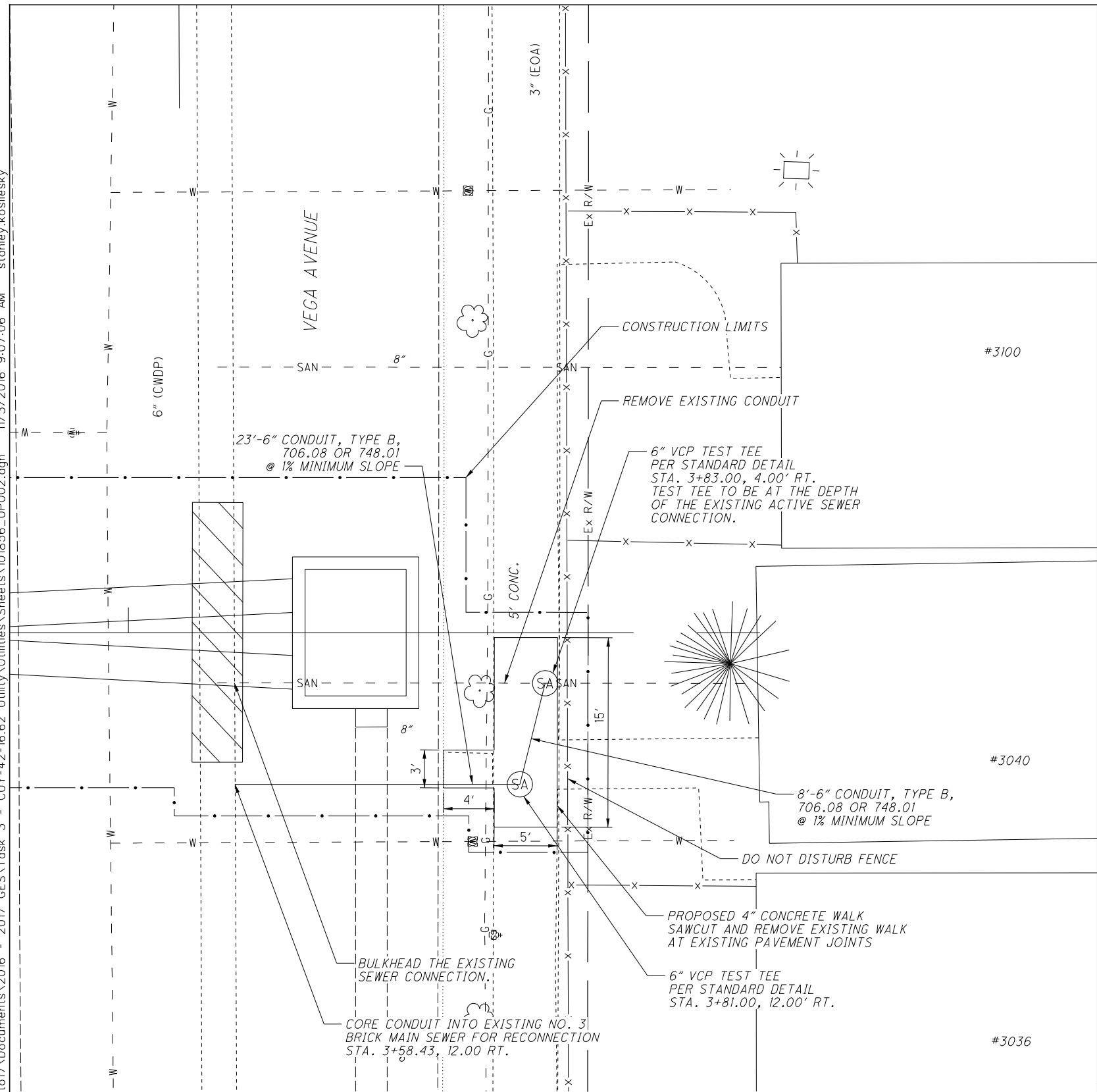


**PLAN AND PROFILE
CONSTRUCTION UTILITY**

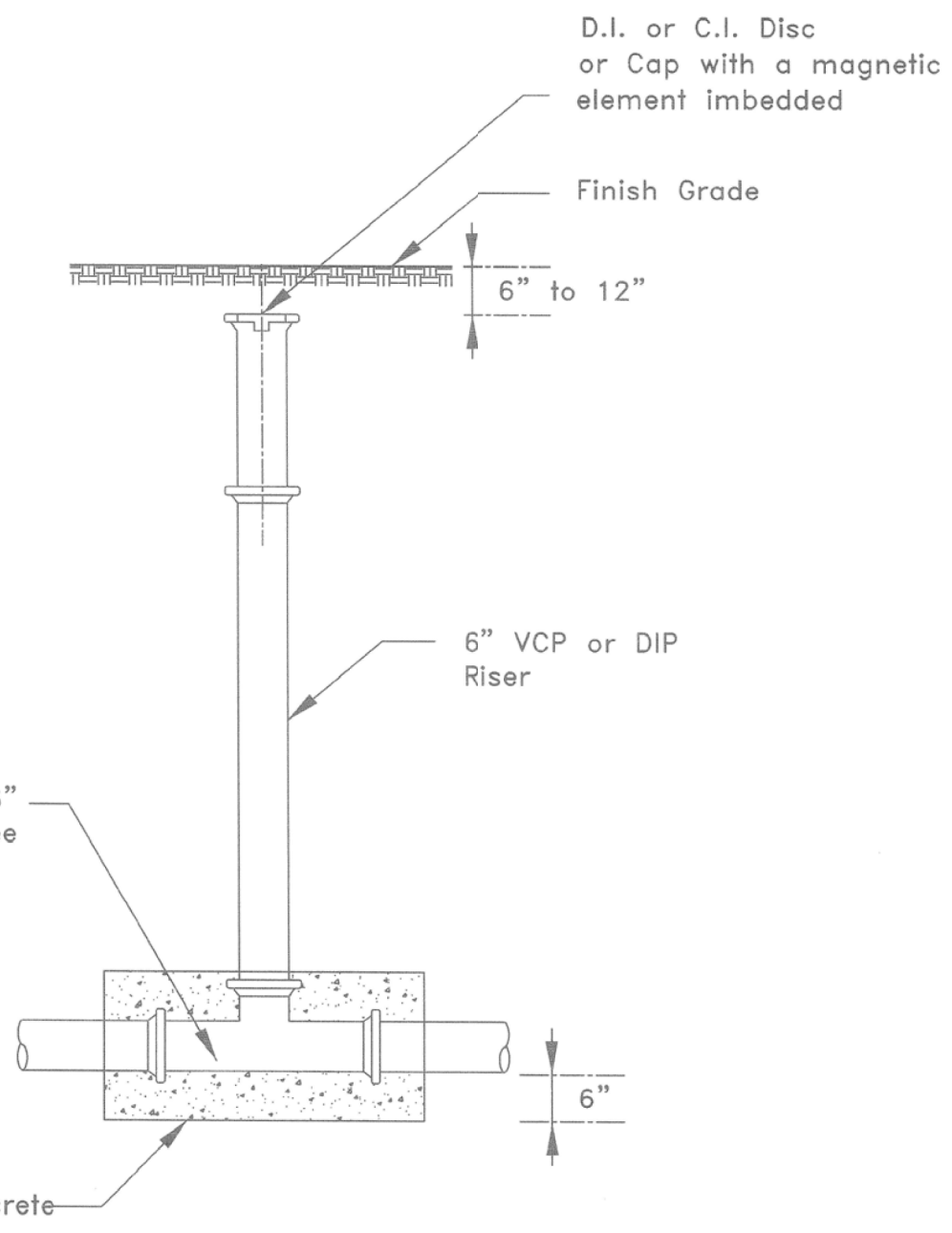
**CUY-42-16.62
UTILITY**

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CITY OF CLEVELAND
 DIVISION OF WATER POLLUTION CONTROL
 TEST TEE DETAIL
 (No scale)



CALCULATED
 SDK
 CHECKED
 AKM

0 5 10
 2.5
 HORIZONTAL
 SCALE IN FEET

PLAN AND DETAIL
 PROPOSED SANITARY LATERAL-3040 VEGA AVE.

NOTES:

1. THE SEWER SERVICE SHALL REMAIN ACTIVE DURING ALL CONSTRUCTION ACTIVITIES. CONTRACTOR MUST CALL THE CITY OF CLEVELAND DIVISION OF WATER POLLUTION CONTROL (WPC) AT (216)-664-2756 OR (216)-420-7638 TO COORDINATE THE SEWER CONNECTION RELOCATION.
- 2.

SANITARY

ITEM 611 - CONDUIT, MISC.: CONDUIT CORING

CORE DRILL A HOLE IN THE EXISTING NO. 3 BRICK MAIN SEWER FOR INSTALLATION OF SANITARY LATERAL TO ENSURE A CLEAN, ROUND, SMOOTH HOLE. ADDITIONALLY, THE CONTRACTOR SHOULD PROCEED WITH CAUTION WHEN WORKING IN THE PROXIMITY OF THE EXISTING SEWER. SHOULD ANY DAMAGE OCCUR TO THE EXISTING SEWER, THE CONTRACTOR IS RESPONSIBLE FOR THE SEWER REPAIR.

THE COST FOR ALL LABOR AND MATERIALS REQUIRED FOR THE COMPLETE INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF ITEM 611 - CONDUIT, MISC.: CONDUIT CORING.

ITEM 202 - PIPE REMOVED, 24" AND UNDER, AS PER PLAN

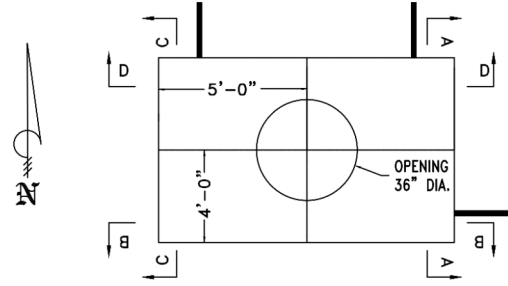
PIPE REMOVED SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 202 AND SHALL ADDITIONALLY INCLUDE THE WORK OF INSTALLING THE BULKHEAD ONTO THE EXISTING SEWER CONNECTION TO BE ABANDONED.

THE COST FOR ALL LABOR AND MATERIALS REQUIRED FOR THE COMPLETE REMOVAL AND INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID PER FOOT OF ITEM 202 - PIPE REMOVED, 24" AND UNDER, AS PER PLAN.

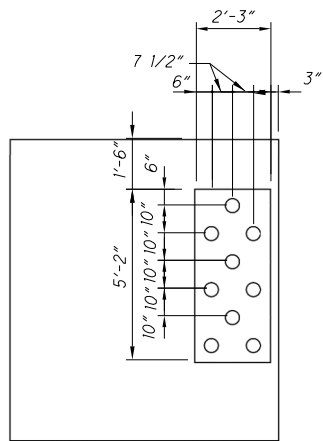
CUY-42-16.62
 UTILITY

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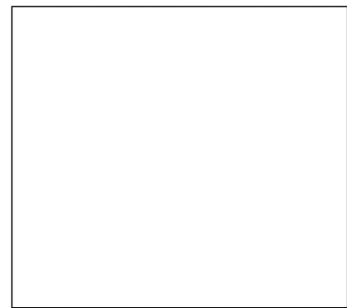
8'-0" WIDE 10'-0" LONG 9'-0" H.R. NECK: 2'-6" COVER: AS SHOWN
 LOCATION: WADE AVE., APPROX. 415' W. OF W. 30 ST. NEW MH 47C



- REQUIREMENTS:**
- 3-WINDOWS
 - 1-36" Ø ROOF OPENING
 - 21-5" PVC FLARED BELL ENDS
 - 6-PULLING IRONS
 - 1-9" PRECAST NECK RING
 - 1-3" PRECAST CAP RING
 - 1-12" Ø SUMP HOLE
 - 1-36" Ø COVER AND CASTING
 - EJIW # 1585 W/HOLES



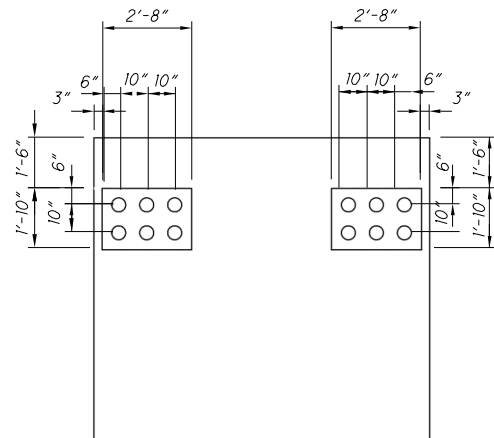
SECTION A-A



SECTION B-B

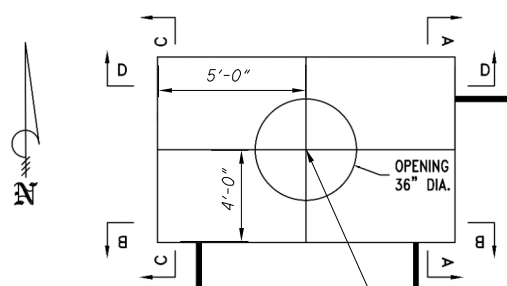


SECTION C-C

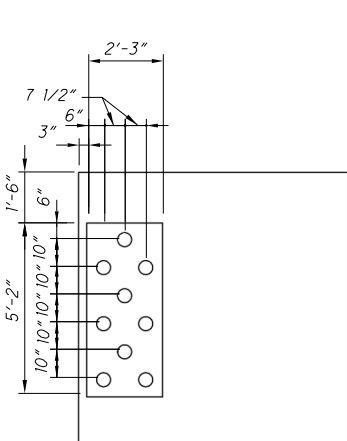


SECTION D-D

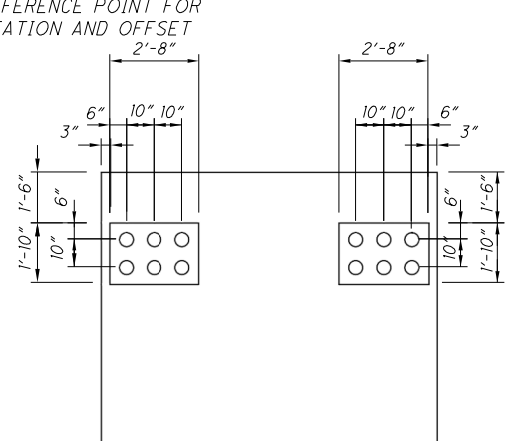
8'-0" WIDE 10'-0" LONG 9'-0" H.R. NECK: 2'-6" COVER: AS SHOWN
 LOCATION: VEGA AVE., APPROX. 415' W. OF W. 30 ST. NEW MH 47D



- REQUIREMENTS:**
- 3-WINDOWS
 - 1-36" Ø ROOF OPENING
 - 21-5" PVC FLARED BELL ENDS
 - 6-PULLING IRONS
 - 1-9" PRECAST NECK RING
 - 1-3" PRECAST CAP RING
 - 1-12" Ø SUMP HOLE
 - 1-36" Ø COVER AND CASTING
 - EJIW # 1585 W/HOLES



SECTION A-A



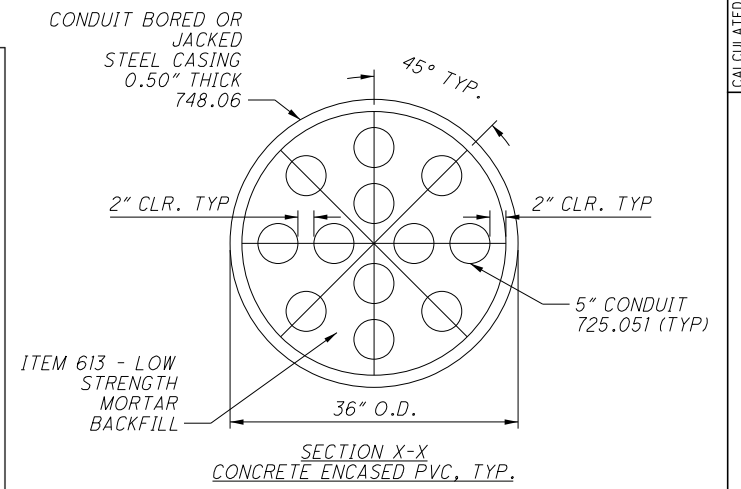
SECTION B-B



SECTION C-C



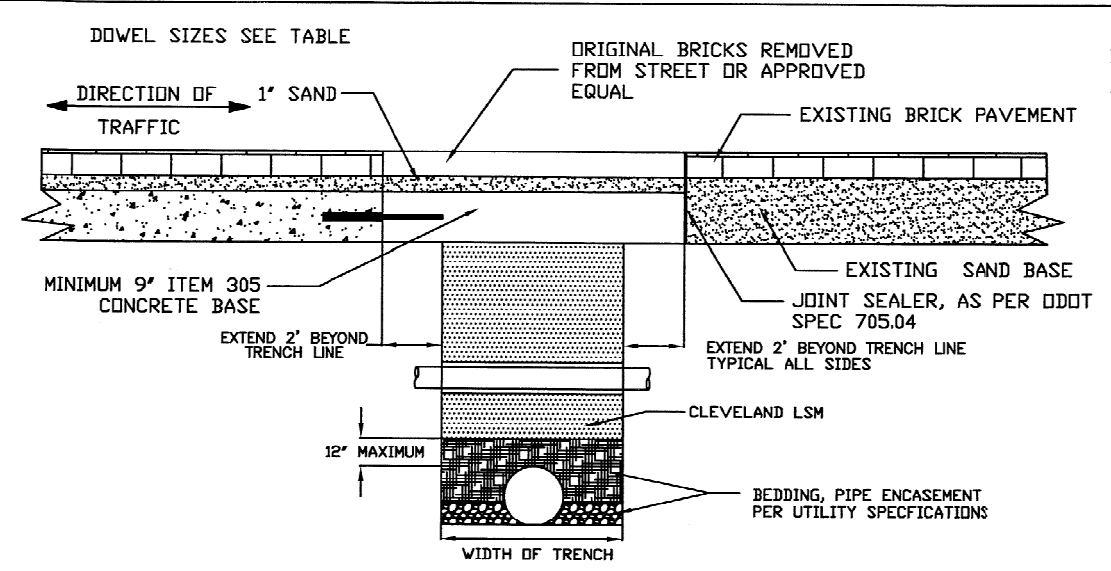
SECTION D-D



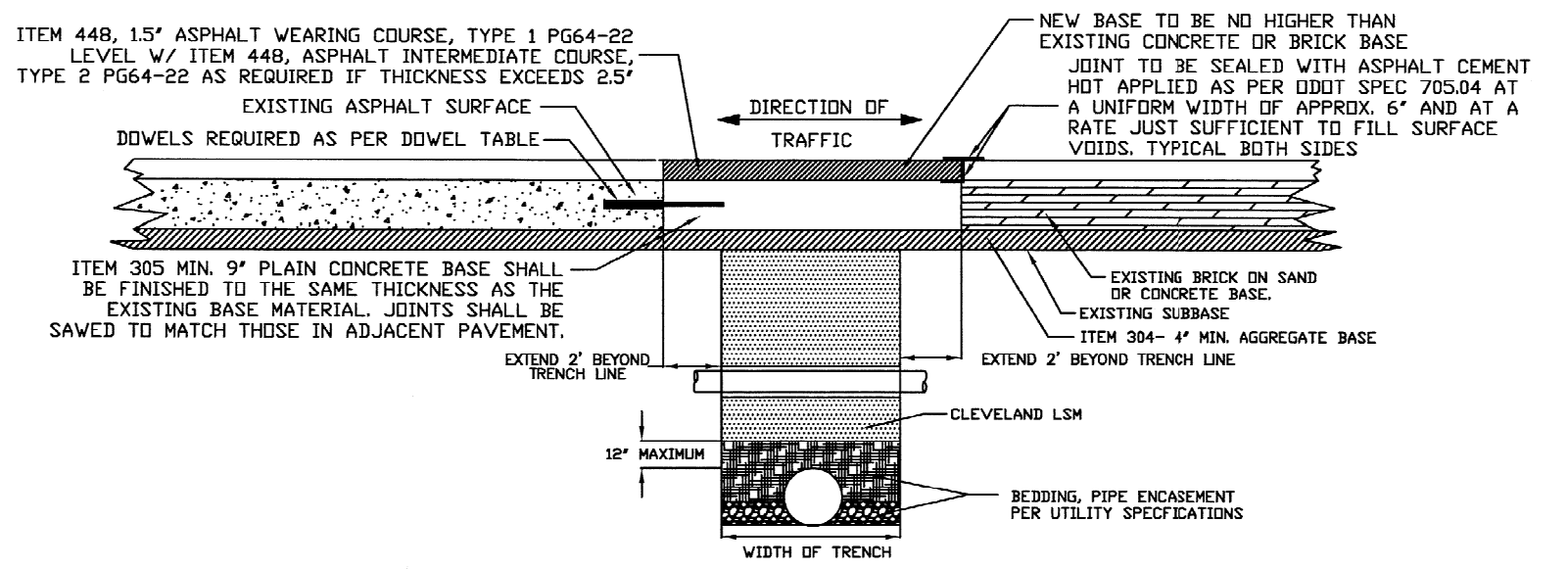
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MISCELLANEOUS DETAILS

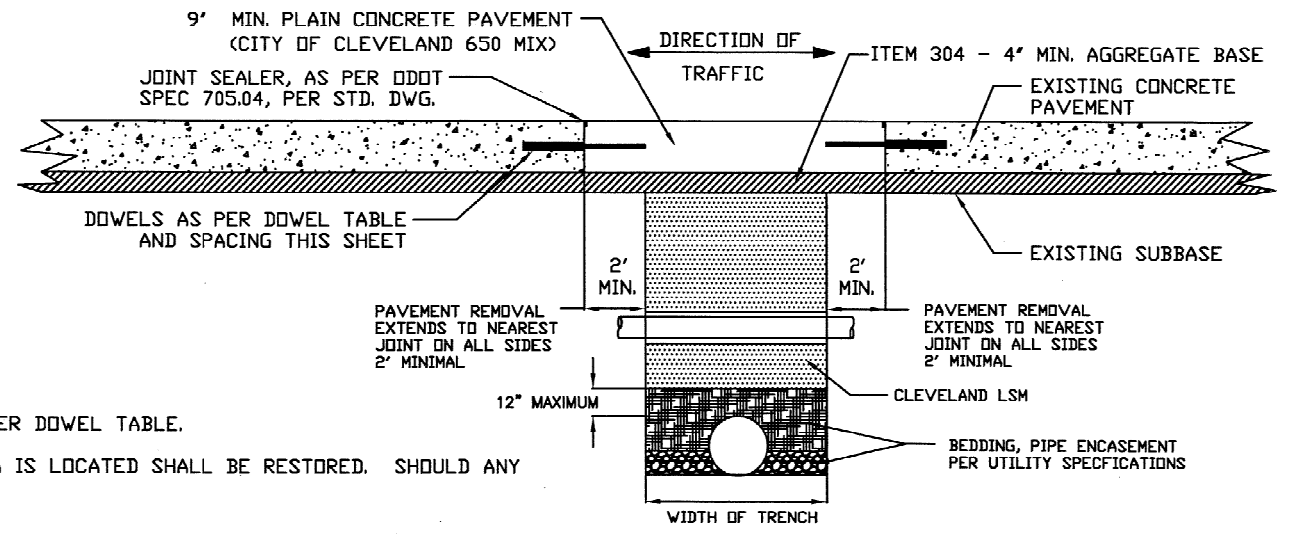
CUY-42-16.62
 UTILITY



PAVEMENT REPAIR IN BRICK PAVEMENT



ASPHALT ON CONCRETE OR BRICK BASE



CONCRETE PAVEMENT

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 BRICK(S).
- 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 AREAS COVER 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

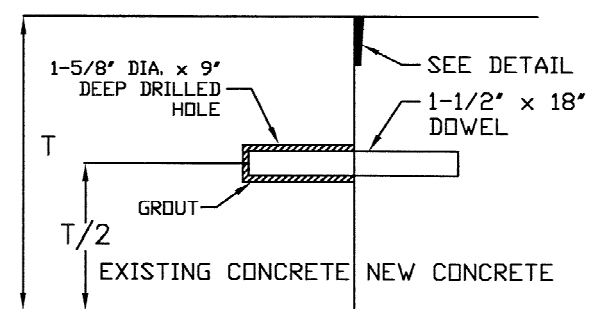
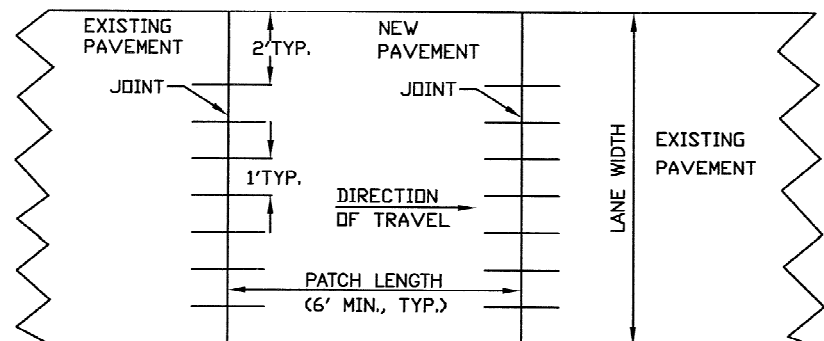
CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STREET OPENING REPAIR-SUPPLEMENTAL
NOT TO SCALE

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

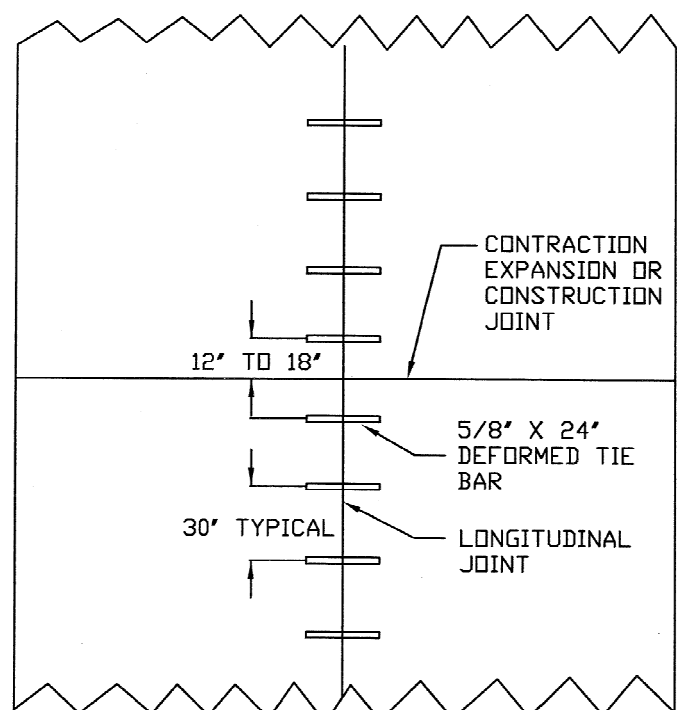
APPROVED: [Signature] DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO. : PR 1 SHEET 1/2 (8)

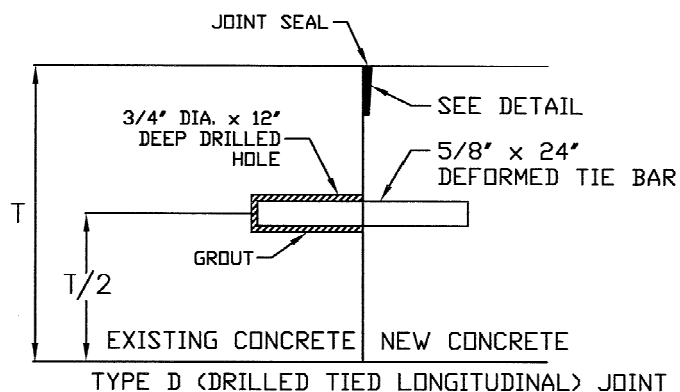
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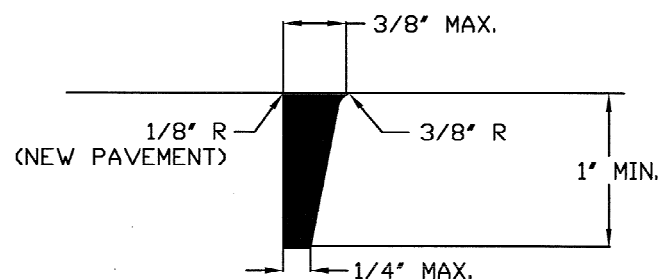
SECTION THROUGH TRANSVERSE JOINT



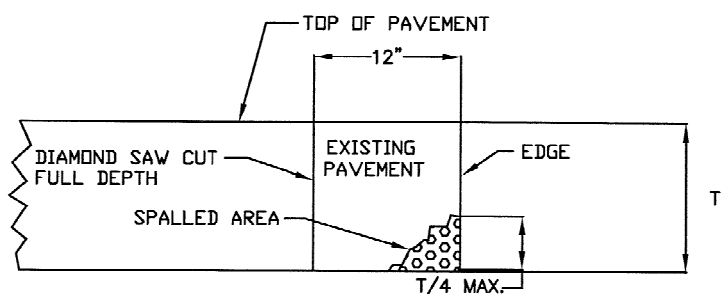
TIE BAR SPACING



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

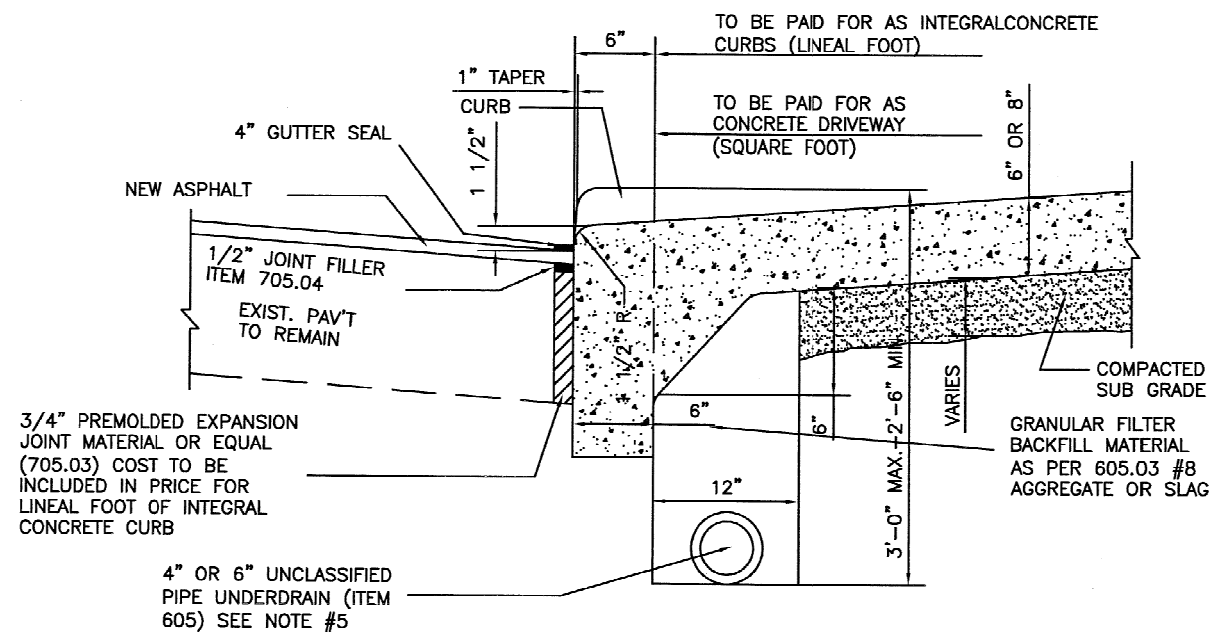
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MISCELLANEOUS DETAILS

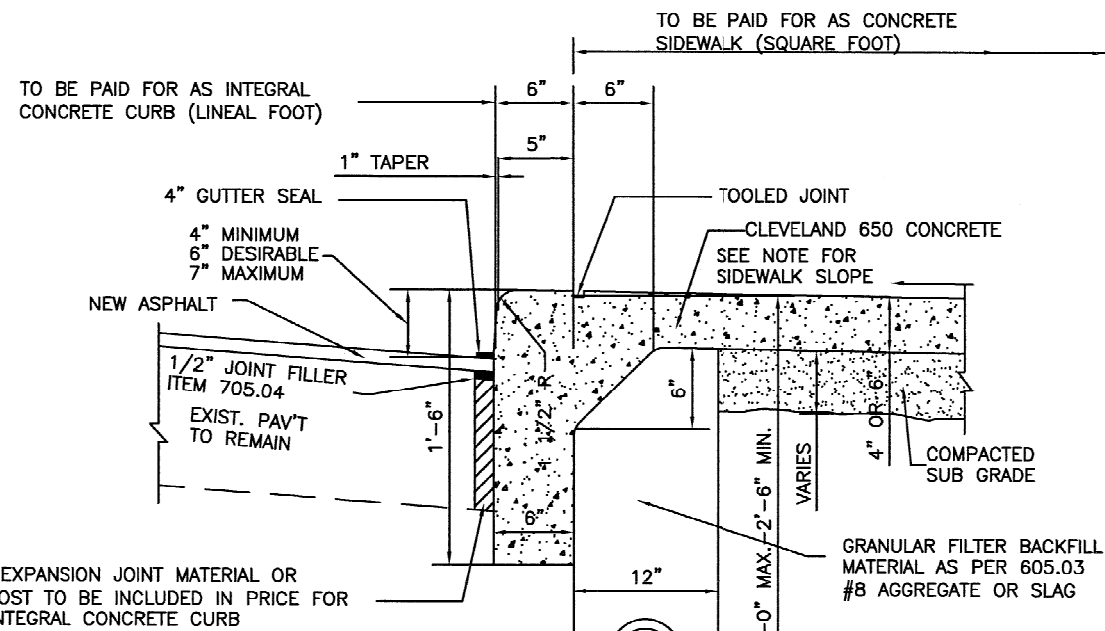
CUY-42-16.62
UTILITY

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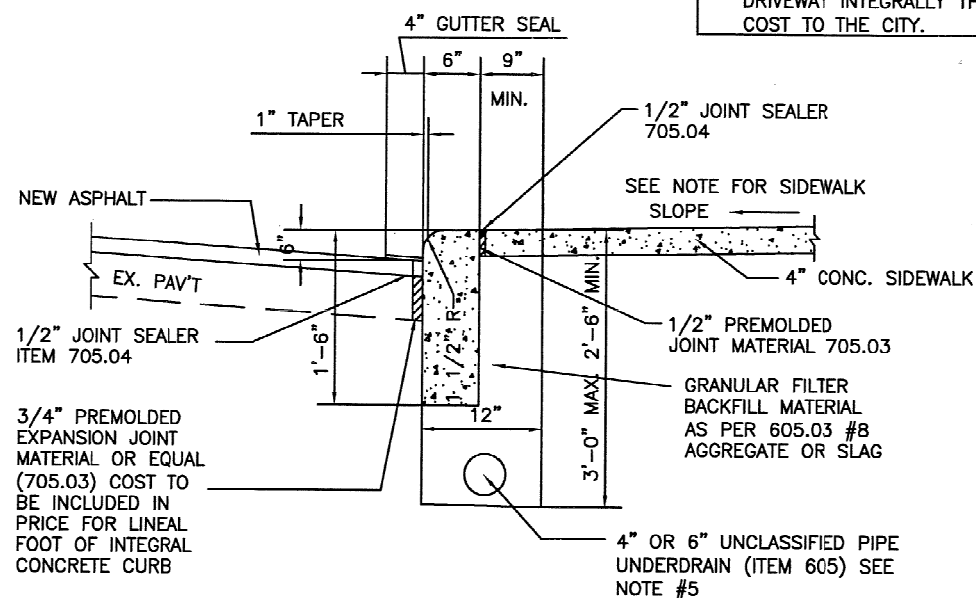
INTEGRAL CONCRETE DRIVEWAY
NO SCALE



INTEGRAL CONCRETE CURB & WALK
NO SCALE

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.



CAST-IN-PLACE CONCRETE CURB
NO SCALE

NOTES:

1. 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.
2. 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.
3. TRANSITION FROM STANDARD CURB SECTION TO DROP CURB SECTION TO BE MADE IN 18" DISTANCE FROM DRIVEWAY.
4. SLOPE SHALL BE PROVIDED AS NEEDED TO DRAIN SIDEWALK AND TREETLAWN 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 TREETLAWN 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.
5. 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

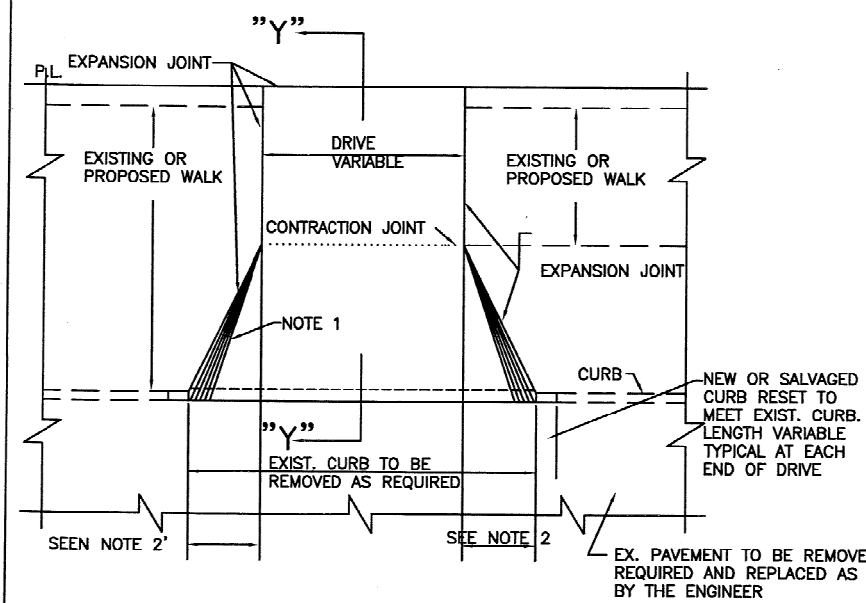
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MISCELLANEOUS DETAILS

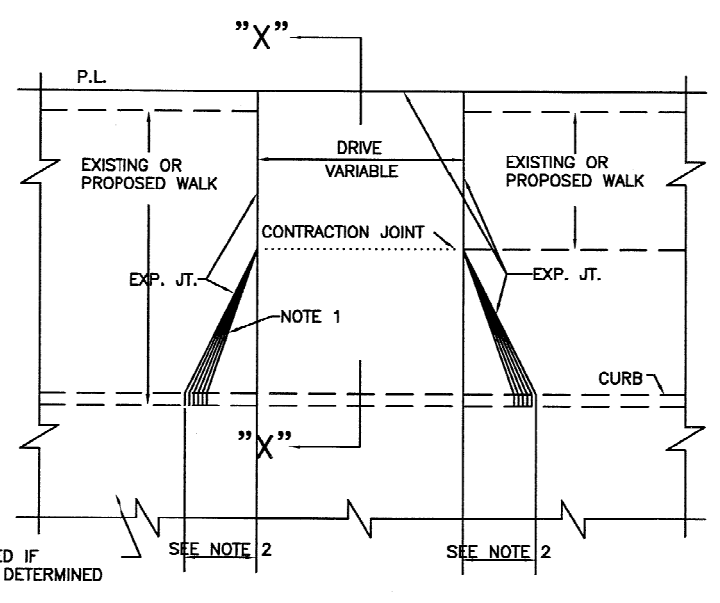
CUY-42-16.62
UTILITY

CALCULATED
SDK
CHECKED
MAW

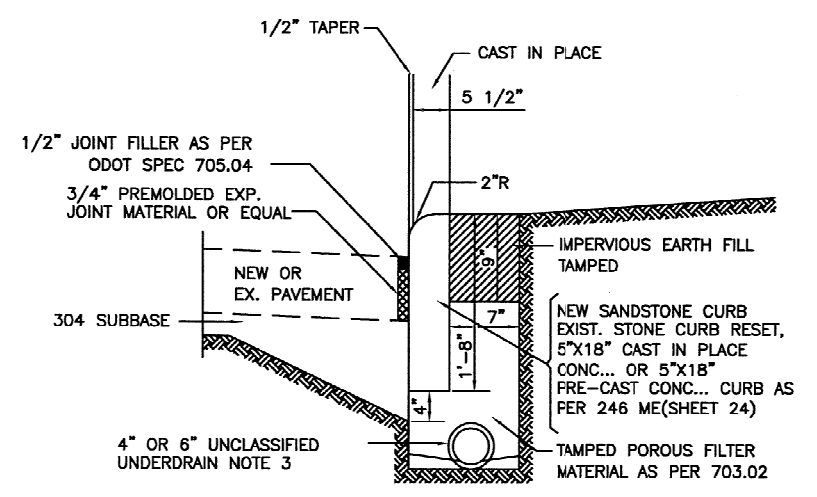
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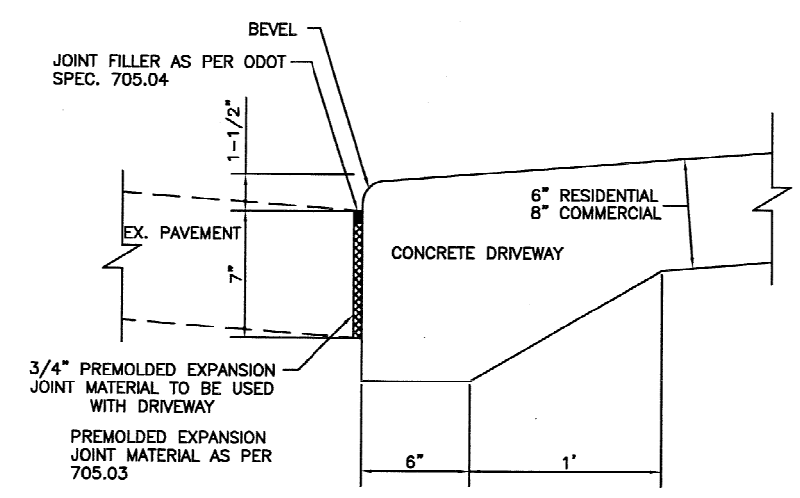
PLAN FOR NEW DRIVE WITH INTEGRAL CONCRETE CURB
NOT TO SCALE



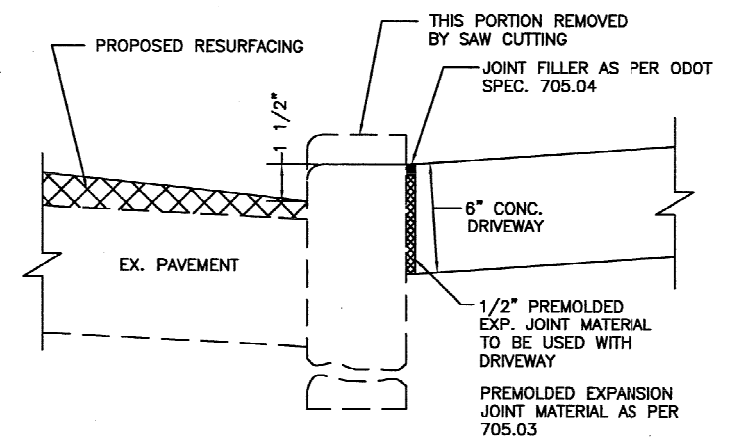
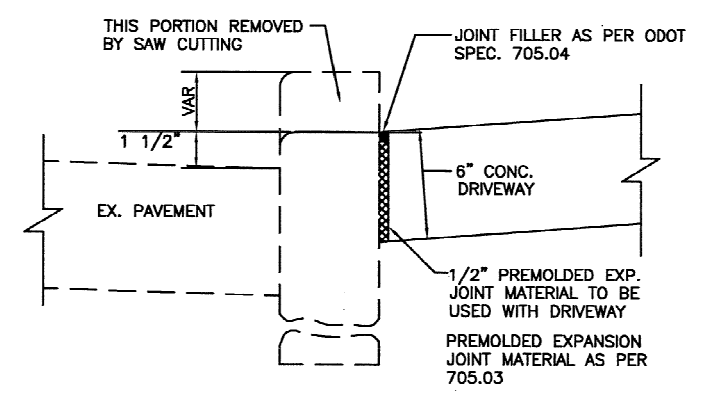
PLAN FOR NEW DRIVE WITH CURB CUT
NOT TO SCALE



TYPICAL CURB CONSTRUCTION DETAIL
NOT TO SCALE



- NOTES:**
- 1 - ON STREETS WITH NARROW TREELAWNS 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.



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

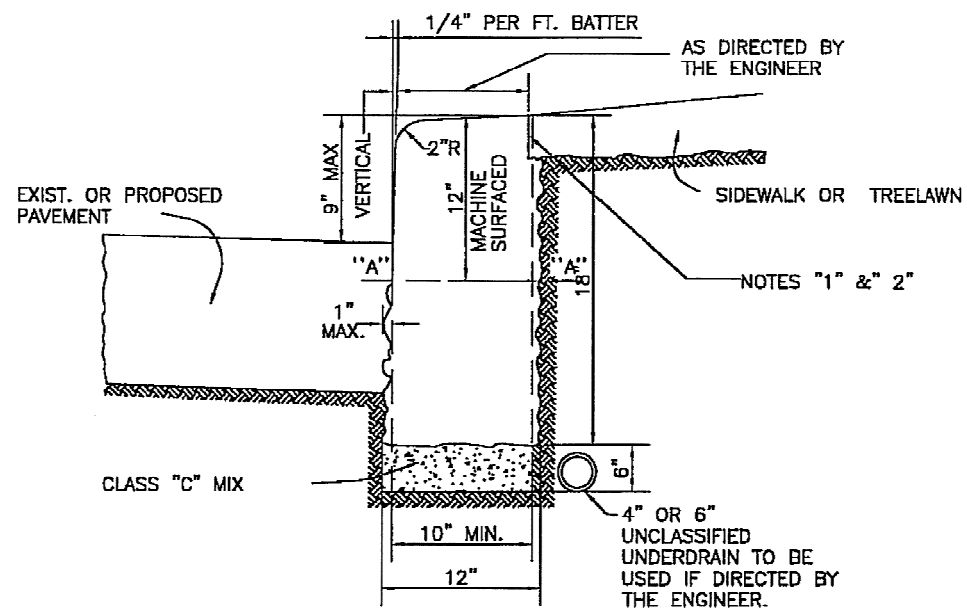
DRAWN BY: E. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: [Signature] DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO. CD 1 SHEET 2/3 (18)

MISCELLANEOUS DETAILS

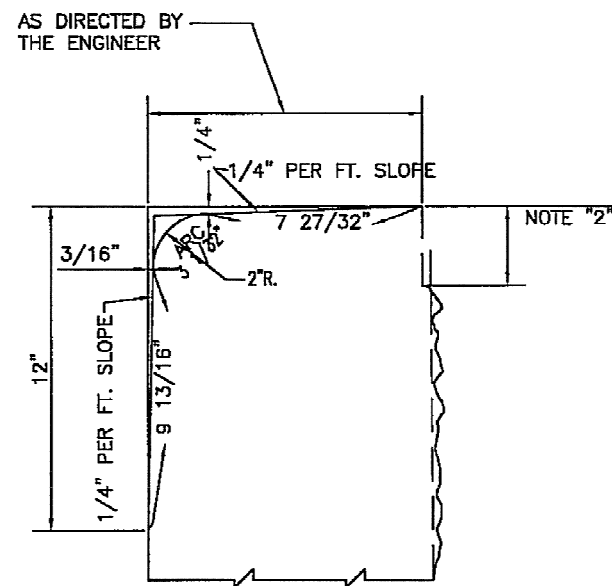
CUY-42-16.62 UTILITY

K:\Projects\0\ODOT\60441780_GES\16to17\Documents\2016 - 2017 GES\Task 3 - CUY-42-16.62 Utility\Roadway\Sheets\101856_GM001.dgn 11/3/2016 9:07:33 AM stanley.koslesky

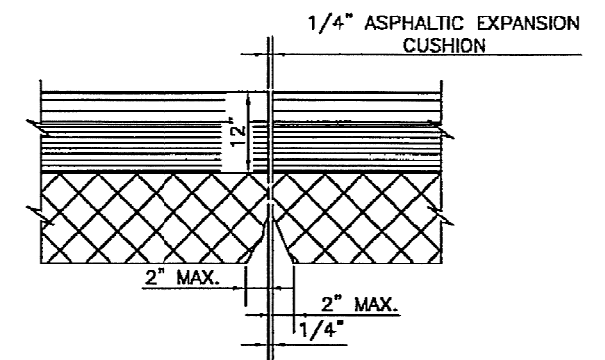


CURB TO BE USED ON STRAIGHT SECTION

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



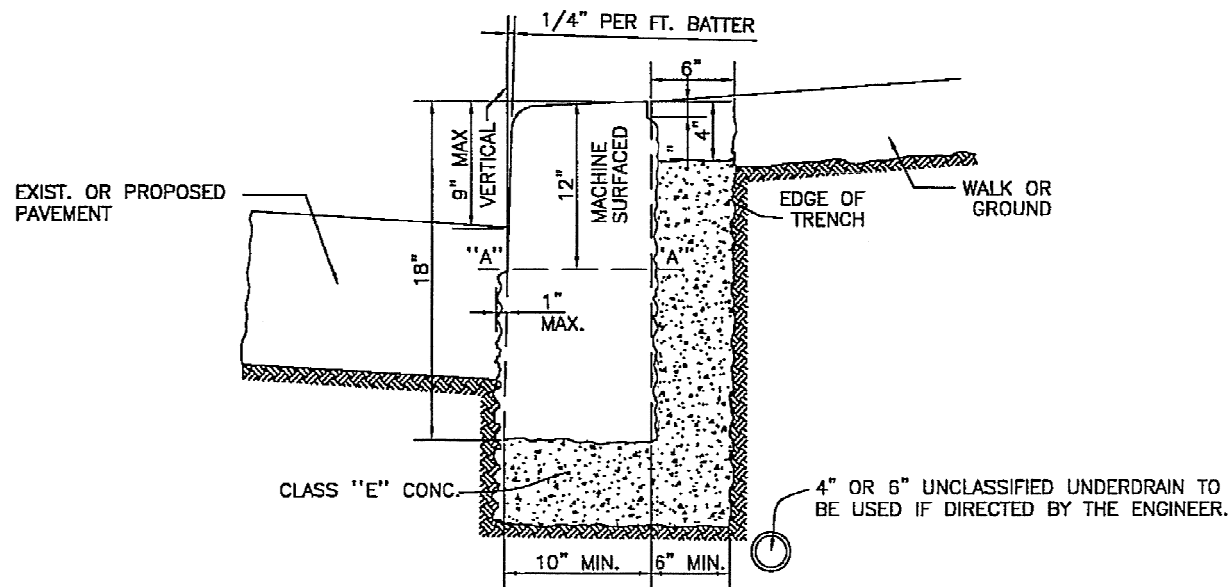
ELEVATION SHOWING CURB JOINT SECTION "A" - "A"

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

COMMISSIONER OF ENGINEERING & CONSTRUCTION
FILE NO. CR 1 SHEET 3/3

MISCELLANEOUS DETAILS

CUY-42-16.62
UTILITY