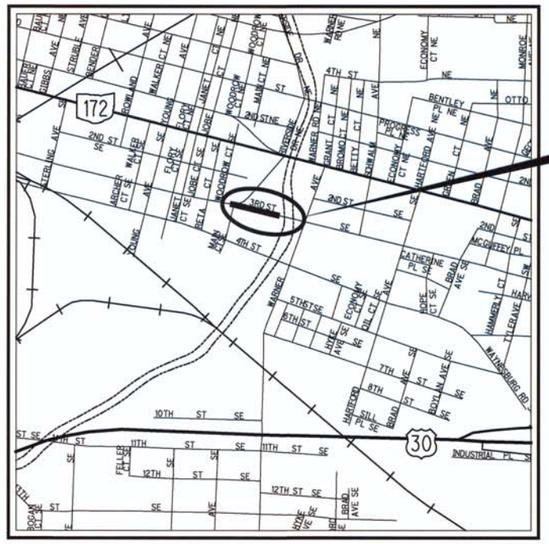
CITY OF CANTON
ENGINEER'S OFFICE

STA-3RD ST. S.E.

CITY OF CANTON

STARK COUNTY



LOCATION MAP

LATITUDE: 40°47'37" N LONGITUDE: 81°21'29" W

SCALE IN MILES

0 1/8 1/4 1/2 3/4

N

PORTION TO BE IMPROVED

INTERSTATE & DIVIDED HIGHWAY

UNDIVIDED STATE & FEDERAL ROUTES

OTHER ROADS

DESIGN DESIGNATION

CURRENT ADT (2019)	200
DESIGN YEAR ADT (2039)	250
DESIGN HOURLY VOLUME (2039)	25
DIRECTIONAL DISTRIBUTION	100%
TRUCKS (24 HOUR B&C)	0%
DESIGN SPEED	25 MPH
LEGAL SPEED	25 MPH

DESIGN FUNCTIONAL CLASSIFICATION:
URBAN LOCAL

INDEX OF SHEETS:

PROJECT DESCRIPTION

REMOVAL OF A DEFICIENT BRIDGE OVER THE MIDDLE BRANCH OF NIMISHILLEN CREEK AND INSTALLATION OF A NEW PEDESTRIAN BRIDGE. EXISTING APPROACH WILL BE CUL-DE-SAC ON EXISTING VERTICAL ALIGNMENT. INTERSECTION MODIFICATION ON 3RD ST. S.E. AT RIVERSIDE DR. S.E. INTERSECTION ENHANCEMENTS ON 3RD ST. S.E. AT WARNER AVE. ALL ASSOCIATED MINOR UTILITY WORK, GRADING, DRAINAGE, AND TRAFFIC CONTROL.

PROJECT LENGTH 0.12 MILE.

PROJECT EARTH DISTURBED AREA:	0.800 ACRES
ESTIMATED CONTRACTOR EARTH DISTRUBED AREA:	0.125 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	0.925 ACRES

2016 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET 11.

CITY OFFICIALS

APPROVED _____

DATE _____ CANTON CITY ENGINEER

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL
1-800-362-2764
(TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: **1-800-925-0988**

PREPARED AND RECOMMENDED BY:

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD OHIO 44902
PHONE: (419) 524-0074 FAX: (419) 524-1812

ENGINEERS SEAL:

STATE OF OHIO — PATRICK BOWMAN — 71371 — REGISTERED PROFESSIONAL ENGINEER

SIGNED: Patrick Bowman
DATE: 2-6-19

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
BP-1.1	7-28-00	CB-1.1	7-20-18	RM-1.1	7-18-14	MT-97.10	7-18-14	TC-41.20	10-18-13	800	1-18-19	NWP #3 -
BP-2.1	7-17-15	CB-2.1	7-20-18	RM-5.1	7-18-14	MT-101.60	1-20-17	TC-41.30	10-18-13	832	10-19-18	
BP-2.2	7-18-08	CB-2.2	7-20-18	RM-5.2	1-18-19	MT-101.90	7-21-17	TC-42.20	10-18-13	902	12-31-12	
BP-3.1	7-18-14	CB-2.3	1-15-16			MT-105.10	7-19-13	TC-52.10	10-18-13			
BP-4.1	7-19-13	CB-3.2	1-15-16	LA-1.1	10-15-10	MT-110.10	7-19-13	TC-52.20	7-20-18			
BP-5.1	1-18-19			LA-1.2	1-16-09			TC-61.30	1-20-17			
BP-7.1	7-20-18	DM-1.1	7-21-17					TC-71.10	1-19-18			
		DM-1.2	1-18-13									
F-1.1	7-19-13	DM-4.3	1-15-16									
		DM-4.4	1-15-16									
MGS-1.1	1-19-18											
MGS-2.1	1-19-18	MH-1.1	1-15-16									
MGS-4.2	7-19-13	MH-1.2	1-15-16									

FEDERAL PROJECT NO. E120 (673)

PID NO. 91972

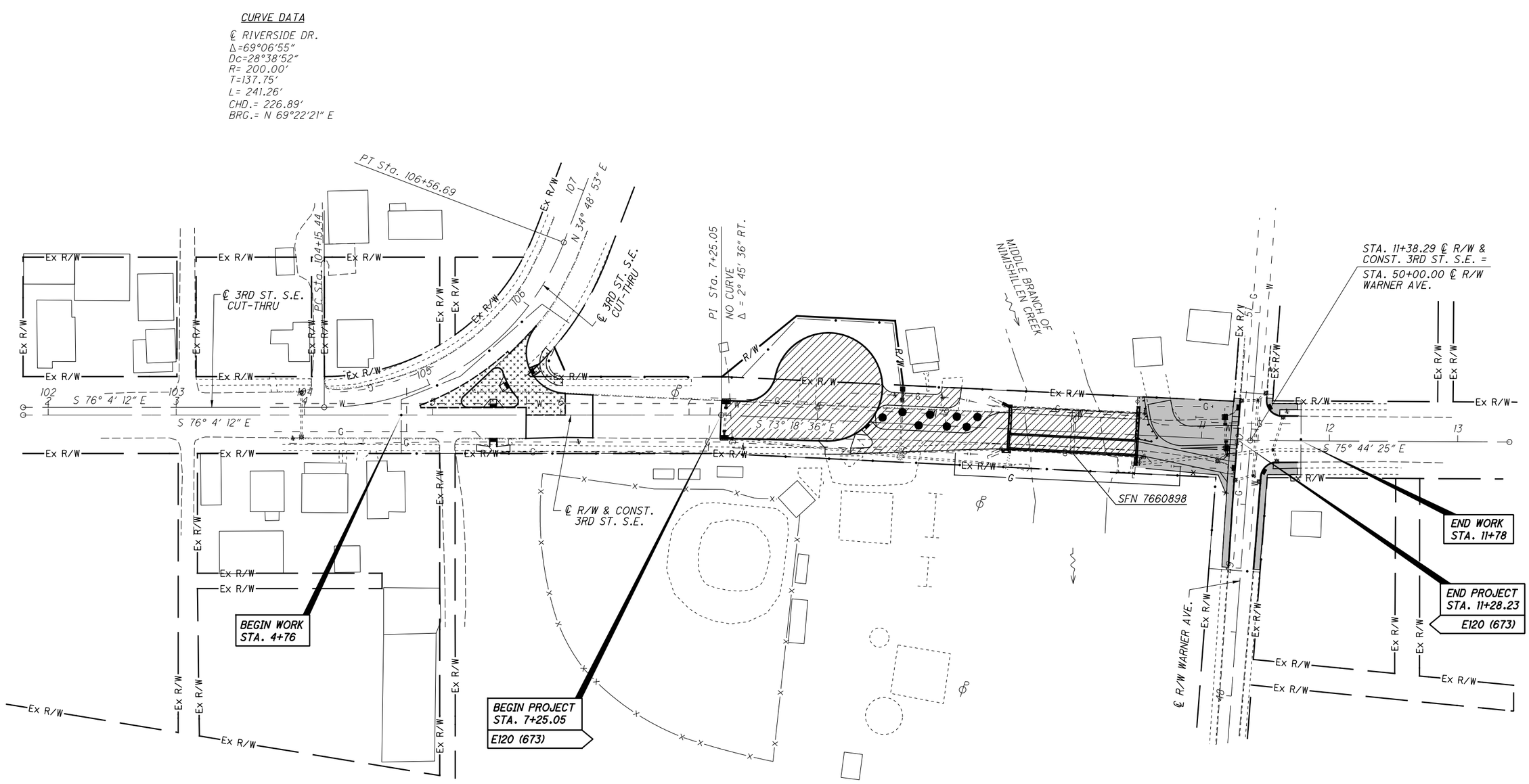
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

STA-3RD ST. S.E.

1 / 59

F:\2013\113016 3rd St Bridge\91972\roadway\sheets\91972GT100.dgn 2/6/2019 2:06:59 PM REL5



MAINTENANCE OF TRAFFIC LEGEND

- PHASE 1 (EST. 30 DAYS)
- PHASE 2 (EST. 60 DAYS)
- PHASE 3 (EST. 30 DAYS)

HORIZONTAL SCALE IN FEET
0 20 40 80

CALCULATED PRS
CHECKED MES

SCHEMATIC PLAN

STA-3RD ST. S.E.

2
59

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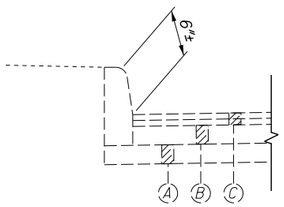
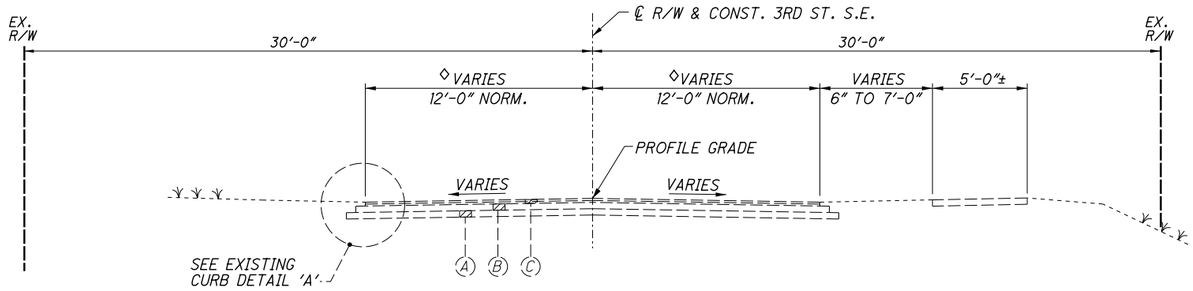


CURB DETAIL 'A'

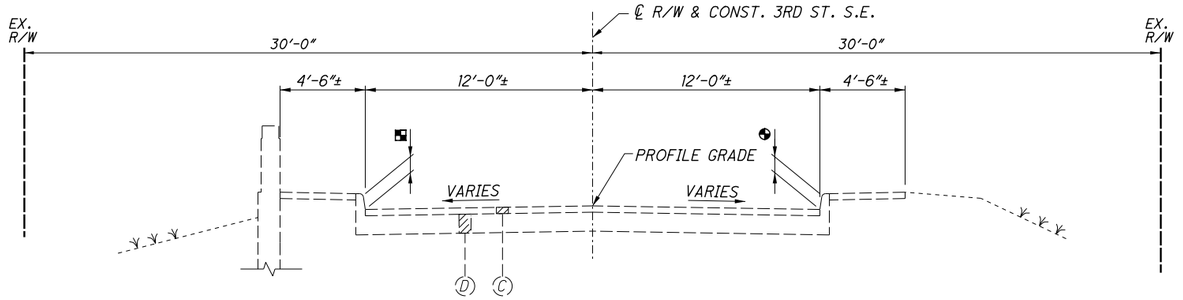
STA. 8+00 TO STA. 9+35.60



EXISTING NORMAL TYPICAL SECTION

STA. 5+73.00 TO STA. 9+36.63 = 363.63 FT.
STA. 10+64.54 TO STA. 11+28.25 = 63.71 FT.

◇ WIDTH VARIES TO MEET INTERSECTION
12'-6"± LT. TO 16'-0"± LT. STA. 10+64.54 TO STA. 11+18.62
12'-6"± RT. TO 18'-0"± RT. STA. 10+64.54 TO STA. 11+12.16



■ VARIES - 14½" TO 4½" LT. & RT.

◔ VARIES - 14½" TO 8½" LT. & RT.

EXISTING APPROACH SLAB TYPICAL SECTION

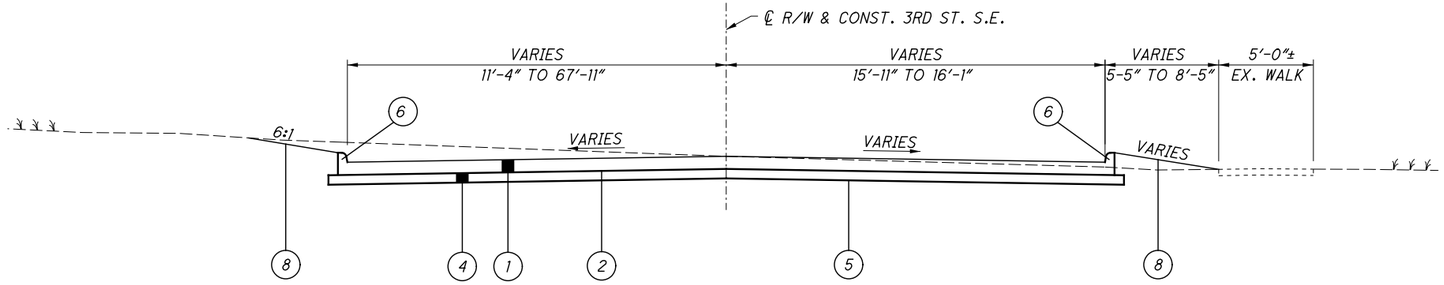
■ STA. 9+36.63 TO STA. 9+51.63 = 15.00 FT.
◔ STA. 10+49.54 TO STA. 10+64.54 = 15.00 FT.

EXISTING LEGEND

(A) CONCRETE BASE (5"± THK.)
(B) BRICK PAVEMENT
(C) ASPHALT (AVG. 4"± THK.)
(D) APPROACH SLAB (12"± THK.)

EXISTING TYPICAL SECTION

STA -3RD ST. S.E.



CUL-DE-SAC TYPICAL SECTION

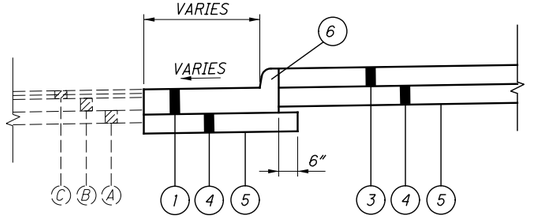
3RD ST. S.E. STA. 7+28.88 TO STA. 8+49.98 = 121.10 FT.
TOTAL = 121.10 FT.

EXISTING LEGEND

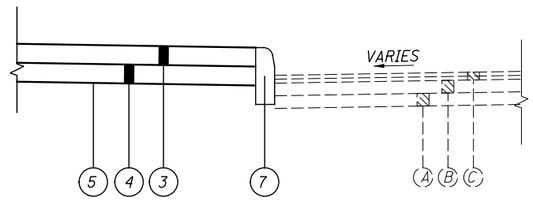
- (A) CONCRETE BASE (5"± THK.)
- (B) BRICK PAVEMENT
- (C) ASPHALT (AVG. 4"± THK.)

LEGEND

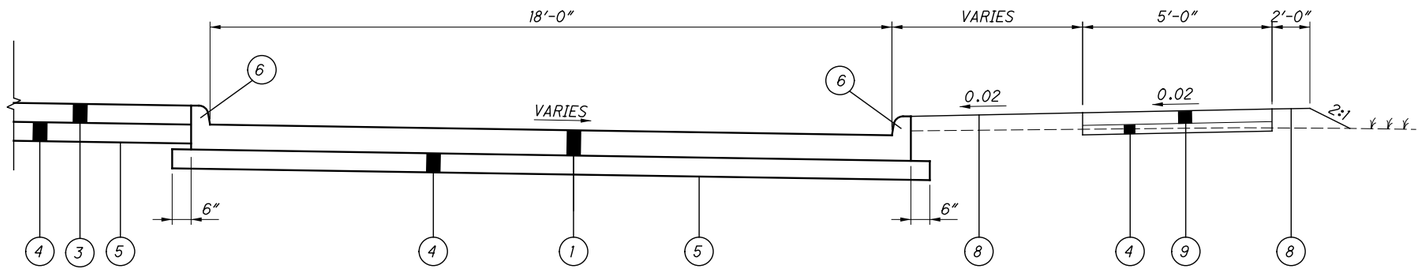
1	452	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1
2	407	TACK COAT
3	609	6" CONCRETE TRAFFIC ISLAND
4	304	6" AGGREGATE BASE
5	204	SUBGRADE COMPACTION
6	609	CURB, TYPE 2 A
7	609	CURB, TYPE 6
8	659	SEEDING AND MULCHING
9	608	4" CONCRETE WALK



RIVERSIDE DR.

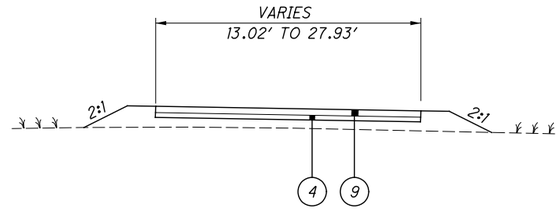


3RD ST. S.E.



CHANNELIZED RIGHT TURN LANE

INTERSECTION DETAILS



SIDEWALK DETAIL

3RD ST. S.E

STA. 8+45.85 TO ST. 9+51.62 = 108.77 FT
STA. 10+48.34 TO STA. 11+17.68 = 69.34 FT
TOTAL = 178.11 FT.

CALCULATED PRS
CHECKED MES

PROPOSED TYPICAL SECTIONS

STA-3RD ST. S.E.

PROJECT SPECIFICATIONS/REQUIREMENTS

ALL WORK REQUIRED TO COMPLETE THIS IMPROVEMENT SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS/REQUIREMENTS OF THE CITY OF CANTON AND THE LATEST EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, EXCEPT AS HEREIN AMENDED. IN THE CASE OF A CONFLICT BETWEEN THE CITY OF CANTON AND THE OHIO DEPARTMENT OF TRANSPORTATION SPECIFICATIONS/REQUIREMENTS, THE CITY OF CANTON REQUIREMENTS WILL TAKE PRECEDENCE, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

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

NATURAL GAS DIST./TRANS.

DOMINION EAST OHIO GAS
320 SPRINGSIDE DR.
AKRON, OHIO 44333
330-664-2541
ATTN: KEVIN BIRT
RELOCATION@DOM.COM
EMERGENCY NO.
1-800-521-4400

TELEPHONE

AT&T
50 WEST BOWER STREET
AKRON, OHIO 44308
ATTN: CINDY ZUCHEGNO
330-384-3561
CC1541@ATT.COM
EMERGENCY NO. - 24 HRS
1-800-572-4545 OPTION#4

COMMUNICATIONS CABLE

CHARTER (SPECTRUM)
5520 WHIPPLE AVE. N.W.
NORTH CANTON, OHIO 44720
330-633-9203
ext. 216-555-4261
ATTN.: MIKE MEYER
216-618-2528(CELL)

ELECTRIC

AMERICAN ELECTRIC POWER
301 CLEVELAND AVENUE S.W.
P.O. BOX 24400
CANTON, OHIO 44701-4400
330-438-7739
ATTN: MICHAEL ALLMAN
330-312-6981 (CELL)
ATTN: KEITH SCHALMO
330-438-7720
EMERGENCY NO.
1-800-672-2017

SANITARY AND STORM SEWER

CITY ENGINEER'S OFFICE
2436-30TH ST. N.E.
CANTON, OHIO 44705
ATTN.: DAN MOEGLIN
330-489-3381

WATER

CANTON WATER DEPT.
2664 HARRISBURG RD. N.E.
CANTON, OHIO 44708
ATTN.: BRENT BURRIER OR
LEWI MILLER
330-489-3310

THE CITY ENGINEER'S OFFICE IS TO BE CONTACTED DIRECTLY FOR SANITARY AND STORM SEWER FACILITIES LOCATION: 330-489-3381.

THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C., FIELD OBSERVATIONS, FROM EXISTING RECORDS, AND/OR FROM THE OWNERS OF THE RESPECTIVE UTILITIES. THE INFORMATION AS SHOWN IN BELIEVED TO BE CORRECT; HOWEVER, THE COMPLETENESS AND ACCURACY OF THIS INFORMATION CANNOT BE GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT ALL THE VARIOUS UTILITY COMPANIES (PUBLIC AND PRIVATE) TO VERIFY THE EXISTENCE, LIMITS AND/OR LOCATION OF ANY UTILITIES WHICH MAY BE ALONG THE ROUTE OR WITHIN THE VICINITY OF THIS IMPROVEMENT.

PROTECTION OF UTILITIES

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT AND SUPPORT EXISTING UTILITIES ENCOUNTERED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS AS APPROVED BY THE OWNERS OF THE UTILITY AND THE CITY ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE TO CLOSELY COORDINATE THEIR WORK WITH ALL UTILITY COMPANIES; ANY POTENTIAL DELAYS WILL NOT BE THE RESPONSIBILITY OF THE CITY.

THE CONTRACTOR SHOULD EXPECT A MINIMUM ONE SANITARY SEWER LATERAL, ONE ROOF DRAIN, ONE WATER SERVICES, AND ONE GAS SERVICE FOR EACH LOT. ANY OF THE ABOVE UTILITIES DAMAGED DUE TO THE CONTRACTOR'S WORK SHALL BE RESTORED TO THE UTILITY OWNER S SATISFACTION AT THE CONTRACTOR S EXPENSE, UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS.

MAINTENANCE OF UTILITY SERVICES

THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN UTILITY SERVICES AT ALL TIMES.

WATER SERVICE MAY BE INTERRUPTED FOR LIMITED PERIODS (4 HOURS MAXIMUM) DURING CONNECTION BETWEEN EXISTING WATER LINES AND RELOCATED/NEW WATER MAINS WHICH CANNOT BE COMPLETED OTHERWISE. NO SHUT DOWN SHALL OCCUR WITHOUT WRITTEN PERMISSION OF THE CITY OF CANTON WATER DEPARTMENT. PROPERTY OWNERS AFFECTED BY APPROVED INTERRUPTED SERVICE SHALL BE NOTIFIED 48 HOURS IN ADVANCE BY THE CONTRACTOR.

STORM SEWER AND SANITARY SEWER SERVICES SHALL BE MAINTAINED WITHOUT INTERRUPTION, UNLESS APPROVED BY THE CITY ENGINEER.

IN THE EVENT THAT CONSTRUCTION DISRUPTS THE FLOW OF A SANITARY SEWER, THE CONTRACTOR SHALL IMMEDIATELY RECTIFY THE DISRUPTED SEWER BY EITHER TEMPORARILY FLUMING WITH MATERIALS ACCEPTABLE TO THE ENGINEER OR BYPASSING WITH PUMPS. COST OF MAINTAINING AND REPAIR OF SANITARY SEWERS DISTURBED BY CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS.

CONTINGENCY QUANTITIES

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

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 7:00 PM AND 7:00 AM. IN ADDITION, 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.

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

HORIZONTAL DATUM

BEARINGS TRANSFERRED BY RTK GLOBAL POSITIONING TRAVERSE ORIGINATING ON THE OHIO STATE PLANE COORDINATE SYSTEM, NAD83(2007), NORTH ZONE, AND ARE BASED ON SCGRS MONUMENT CAN-10-01 AND CAN-16-03 PUBLISHED VALUES.

VERTICAL DATUM

ELEVATIONS WERE TRANSFERRED TO THE PROJECT SITE BY RTK GLOBAL POSITIONING TRAVERSE ORIGINATING ON THE OHIO STATE PLANE COORDINATE SYSTEM, NAD83(2007), NORTH ZONE, NORTH AMERICAN VERTICAL DATUM OF 1988, AND ARE BASED ON SCGRS MONUMENT CAN-10-01 PUBLISHED VALUES.

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

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

PROJECT CONTROL

POSITIONING METHOD: RTK VRS GPS
MONUMENT TYPE: 5/8"X30" REBAR WITH CAP

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: GEOID03

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83(2007)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONIC CONFORMAL
COORDINATE SYSTEM: OHIO STATE PLAN NORTH ZONE
COMBINED SCALE FACTOR: 0.999906327
PROJECT ADJUSTMENT FACTOR: 1.000093681
ORIGIN OF COORDINATE SYSTEM: X=0, Y=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 CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

CONTROL POINTS

STATION	OFFSET	PROJECT GROUND COORDINATES PAF 1.000093681		PROJECT GRID COORDINATES NAD83(2007)		DESCRIPTION	
		NORTH(Y)	EAST(X)	NORTH(Y)	EAST(X)		
PROJECT CONTROL							
7+56.31	37.14' LT.	412,782.0252	2,284,673.6177	412,743.3590	2,284,459.6073	BENCHMARK #1	SV910
5+55.38	30.16' LT.	412,825.5495	2,284,475.5838	412,786.8792	2,284,261.5919	5/8"X30" REBAR WITH TRAVERSE CAP SET	SV1
9+16.50	10.34' RT.	412,690.5371	2,284,813.4230	412,651.8795	2,284,599.3994	MAG NAIL SET	SV2
9+63.38	46.14' RT.	412,642.7843	2,284,848.0446	412,604.1311	2,284,634.0178	5/8"X30" REBAR WITH TRAVERSE CAP SET	SV4
11+25.21	17.44' LT.	412,657.2073	2,285,021.3137	412,618.5527	2,284,807.2707	5/8"X30" REBAR WITH TRAVERSE CAP SET	SV3
11+58.36	41.89' LT.	412,672.4024	2,285,058.6106	412,633.7465	2,284,844.5640	BENCHMARK #2	SV909
EXISTING CENTERLINE ROW & CONSTR. 3RD STREET S.E.							
1+80.55	℄	412,886.5076	2,284,104.5148	412,847.8313	2,283,890.5559	PI	CLX4
7+25.05	℄	412,755.4244	2,284,633.0074	412,716.7604	2,284,419.0656	PI	CLX5
11+38.29	℄	412,636.7456	2,285,028.8332	412,598.093	2,284,814.7890	PI	CLX6
EXISTING CENTERLINE ROW 3RD STREET S.E. CUT-THRU							
101+80.55	℄	412,892.3311	2,284,105.9592	412,853.6542	2,283,892.0001	PI	CLX104
104+15.44	℄	412,835.7844	2,284,333.9408	412,797.1128	2,284,119.9604	PC	
105+53.19	℄	412,802.6221	2,284,467.6422	412,763.9536	2,284,253.6493	PI	
106+56.69	℄	412,915.7173	2,284,546.2887	412,877.0382	2,284,332.2884	PT	CLX103
U.S. SURVEY FEET							

CALCULATED MES
CHECKED PRS

GENERAL NOTES

STA-3RD ST. S.E.

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN

UNLESS SPECIFICALLY DESIGNATED "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS AS APPROVED BY THE ENGINEER UNDER THE LUMP SUM BID FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN. ALL PROVISIONS AS SET FORTH IN THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS UNDER THIS ITEM SHALL BE ADHERED TO.

THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE TOTAL NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS	SUBTOTAL
18"		10	10
			10

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE ADJACENT PROPERTY OWNERS WILL REVIEW AND RECORD, INCLUDING PROJECT VIDEO TAPING, ALL PERSONAL PROPERTY ITEMS WITHIN THE PROJECT LIMITS (SEE ALSO CITY OF CANTON ENGINEERING STANDARDS FOR INFRASTRUCTURE CONSTRUCTION). PERSONAL PROPERTY INCLUDES SUCH ITEMS AS SIGNING, LANDSCAPING PLANTS, LANDSCAPING IRRIGATION SYSTEMS, PAVEMENT, PARKING LOT LIGHTING, AND THE UNDERGROUND PLUMBING AND OR CABLING CONNECTING THESE SYSTEMS. NOTATIONS WILL BE MADE AS TO THE FUNCTIONALITY OF THE VARIOUS MECHANICAL AND ELECTRICAL SYSTEMS. A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT A REVIEW OF THE PERSONAL PROPERTY ITEMS WILL BE MADE TO ENSURE THAT THEY ARE FUNCTIONING AT THE SAME CAPACITY AS NOTED PRIOR TO THE CONSTRUCTION.

THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO MODIFY THE PERSONAL PROPERTY ITEM.

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

ALL COSTS INCLUDING LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS TO PERFORM THIS WORK AS APPROVED BY THE ENGINEER SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN.

EXPLORATORY BORINGS

EXPLORATORY SOIL BORING INFORMATION IS NOT THE RESPONSIBILITY OF THE CITY OF CANTON. IT IS THE CONTRACTOR RESPONSIBILITY TO REVIEW ANY AND ALL INFORMATION AVAILABLE. IF CONTRACTOR REQUESTS TO DRILL AND OR EXCAVATE WITHIN THE CITY S R/W, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AT LEAST 3 WORKING DAYS PRIOR TO THIS WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY NOTIFICATION, AS SPECIFIED, ALL TRAFFIC CONTROL, PREMIUM BACKFILL, AND COMPACTION AND RESTORATION, AS NECESSARY.

ITEM SPECIAL - PIPE CLEANOUT

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER CMS 105.16 AND CMS 105.17. THE CONDUIT SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - PIPE CLEANOUT. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE NOTED WORK AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL - PIPE CLEANOUT, 24" AND UNDER 50 FT.

WATER WORK

ALL PROPOSED WATER WORK SHALL BE CONSTRUCTED IN THE PRESENCE OF AN ON SITE INSPECTOR AND SHALL BE COORDINATED AND APPROVED BY THE MUNICIPAL UTILITIES OF THE CITY OF CANTON. ALL ASSOCIATED COST TO PERFORM THIS COORDINATION, CONSTRUCT, AND ACQUIRE THE CITY OF CANTON APPROVAL OF THE PROPOSED WATER WORK CONSTRUCTION IS TO BE INCLUDED IN UNIT PRICES BID FOR ITEM 638.

CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING WATER FACILITIES PRIOR TO CONSTRUCTION UNDER ITEMS 611 AND 605.

THE FOLLOWING QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR WATER WORK ITEMS THAT MAY BE DISCOVERED DURING THE PROPOSED CONSTRUCTION.

ITEM 638 - VALVE BOX ADJUSTED TO GRADE 3 EACH

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.
2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS SHALL BE AS DIRECTED BY THE ENGINEER. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO SECTION 704.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS).

   IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.
3. COMPACT THE SUBGRADE ACCORDING TO C&MS 204.03.
4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE SHALL BE AS DIRECTED BY THE ENGINEER. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

   PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO C&MS 204.06.
5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO C&MS 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.
6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO CMS 204.06 TO VERIFY STABILITY.
7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204 - EXCAVATION OF SUBGRADE.

EARTHWORK FOR PROJECT TRANSITION

A CONTINGENCY OF ITEM 203 - EMBANKMENT AND ITEM 203 - EXCAVATION IS BEING PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER TO TAPER THE EARTHWORK INTO THE EXISTING AT THE BEGIN/END OF THE PROJECT.

ITEM 203 - EXCAVATION 25 CY

ITEM 203 - EMBANKMENT 25 CY

UNSUITABLE SUBGRADE

ALTHOUGH NO SPECIFIC LOCATIONS ARE IDENTIFIED FOR THE UNSUITABLE SUBGRADE WITHIN PROJECT LIMITS, CONTINGENCY ITEMS OF WORK ARE SET UP. WHERE UNSUITABLE SUBGRADE IS FOUND DURING CONSTRUCTION OF THE PROPOSED ROADWAY, THE CONTRACTOR SHALL, UNDER THE DIRECTION OF THE ENGINEER, OVER-EXCAVATE THE UNSUITABLE SUBGRADE MATERIAL AND REPLACE IT WITH ITEM 204 - GRANULAR MATERIAL, TYPE B (LIMESTONE) AND GEOTEXTILE FABRIC. THE LIMITS OF THE OVER-EXCAVATION SHALL BE THE EXTENTS OF THE UNSUITABLE MATERIAL TO A MAXIMUM DEPTH OF 36" BELOW THE TOP OF THE PROPOSED SUBGRADE AND 18" BEYOND THE EDGE OF PAVEMENT AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL DRAIN THE OVER-EXCAVATED AREA TO AN UNDERDRAIN, CATCH BASIN OR PIPE.

AN ESTIMATED QUANTITY OF EXCAVATION, GRANULAR MATERIAL, TYPE B (LIMESTONE) AND GEOTEXTILE FABRIC HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 204 - EXCAVATION OF SUBGRADE 50 CY

ITEM 204 - GRANULAR MATERIAL, TYPE B (LIMESTONE) 50 CY

ITEM 204 - GEOTEXTILE FABRIC 100 SY

ITEM 204 - PROOF ROLLING

PROOF ROLLING SHALL BE PERFORMED IN ACCORDANCE WITH ITEM 204 AND BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 204 - SUBGRADE COMPACTION.

ITEM 607 - FENCE, MISC.: DECORATIVE FENCE (GROUND MOUNTED)

THIS ITEM SHALL CONFORM TO THE DETAILS SHOWN ON SHEET 8 AS APPROVED BY THE CITY.

ITEM 607 - FENCE, MISC.: DECORATIVE FENCE (ABUTMENT MOUNTED)

THIS ITEM SHALL CONFORM TO THE DETAILS SHOWN ON SHEET 47-51 AS APPROVED BY THE CITY.

TOPSOIL

TOPSOIL SHALL BE STRIPPED FROM AREAS TO BE EXCAVATED OR FILLED. ADDITIONAL MATERIAL REQUIRED TO FILL THE TOPSOIL STRIP AREA IN EMBANKMENT AREAS, TOPSOIL STRIPPING AND ANY STOCKPILING INCLUDING ANY LABOR, EQUIPMENT, AND MATERIAL SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT BID FOR ITEM 203 - EXCAVATION OR ITEM 203 - EMBANKMENT. NO ADDITIONAL COMPENSATION WILL BE PROVIDED.

SEEDING AND MULCHING

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

ITEM 659 - TOPSOIL	115	CY
ITEM 659 - SEEDING AND MULCHING	1030	SY
ITEM 659 - COMMERCIAL FERTILIZER	1	TON
ITEM 659 - LIME	1	ACRES
ITEM 659 - WATER	6	M GAL
ITEM 659 - REPAIR SEEDING AND MULCHING	52	SY

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.

SEEDING AND MULCHING OF LAWNS

IN ADDITION TO "AREAS IN FRONT OF RESIDENCES" REFERRED TO IN ODOT C&MS 659.10, THE SPECIAL PREPARATION SHALL BE EXTENDED TO ENCOMPASS ALL LAWNS AND/OR LAWN-LIKE AREAS AS DETERMINED BY THE ENGINEER.

CALCULATED MES
CHECKED PRS

GENERAL NOTES

STA-3RD ST. S.E.

EROSION CONTROL

ITEMS 601 AND 670 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES OF THESE ITEMS WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

ITEM 832 - EROSION CONTROL

PRIOR TO CONSTRUCTION, THE CONTRACTOR IS TO PREPARE AND HAVE APPROVED A STORM WATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH SS 832. AN ELECTRONIC FILE IN MICROSTATION FORMAT OF THE PROJECT SITE PLAN WILL BE PROVIDED FOR THE CONTRACTOR'S USE.

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

ITEM 832 - STORM WATER POLLUTION PREVENTION INSPECTIONS		LS
ITEM 832 - STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		LS
ITEM 832 - EROSION CONTROL	10000	EACH

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES 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 TO BE CONNECTED, 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.

PRESERVATION AND RESTORATION OF DISTURBED FEATURES

EXISTING DRIVES, BERMS, LAWNS, PAVEMENTS, CURBS, SIDEWALKS, SIGNS, MAILBOXES, FENDS, RETAINING WALLS, LANDSCAPING ITEMS, OR OTHER APPURTENANCES DISTURBED DURING CONSTRUCTION BUT NOT SPECIFICALLY DESIGNATED FOR REMOVAL/REPLACEMENT SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO DISTURBANCE AND TO THE COMPLETE SATISFACTION OF THE CITY ENGINEER.

RESTORATION OF EXISTING ROADWAYS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY, TOWNSHIP, COUNTY, AND/OR OTHER AGENCIES HAVING AUTHORITY. COST FOR THE RESTORATION OF THESE ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE SPECIFIED IN THE PLANS OR SPECIFICATIONS. NO PUBLIC ROADWAY SHALL BE DISTURBED WITHOUT PRIOR WRITTEN APPROVAL FROM THE GOVERNING AGENCY AND ACQUISITION OF NECESSARY PERMIT.

SALVAGED CASTINGS

WHEN DIRECTED BY THE CITY ENGINEER, ALL METAL CASTINGS SHALL BE CAREFULLY REMOVED AND STORED ON SITE OR DELIVERED TO A LOCATION DESIGNATED BY THE CITY ENGINEER.

PLUG EXISTING CONDUIT

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING CONDUIT TO BE ABANDONED.

BULKHEADS SHALL CONSIST OF BRICK AND/OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

PAYMENT FOR PLUGGING OF EXISTING CONDUIT FOR ABANDONMENT SHALL BE INCLUDED IN THE UNIT BID OF THE VARIOUS ITEMS OF THE PROJECT.

CONSTRUCTION LAYOUT

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT UTILIZING PERTINENT PLAN DATA. THE CITY ENGINEER WILL NOT BE RESPONSIBLE FOR STAKING HORIZONTAL OR VERTICAL CONTROL. CONSTRUCTION LAYOUT SHALL BE IN ACCORDANCE WITH ODOT 623 CONSTRUCTION LAYOUT STAKES.

AT THE CITY ENGINEER'S REQUEST, THE CONTRACTOR SHALL MAKE AVAILABLE ALL SURVEY FIELD NOTES FOR REVIEW.

EXISTING MONUMENTATION

THE CONTRACTOR SHALL PRESERVE ALL CORNERSTONES, IRON PINS, CONCRETE MONUMENTS AND/OR ANY TYPE OF LAND MONUMENT. THE CONTRACTOR SHALL HAVE ALL MONUMENTS IN THE PROXIMITY OF THE WORK REFERENCED. THE CONTRACTOR SHALL REPLACE/RESET ANY DISTURBED OR DAMAGED MONUMENTS AND SHALL FURNISH A CERTIFICATION BY A REGISTERED SURVEYOR THAT THE MONUMENTS HAVE BEEN RESTORED.

INSPECTION

FOLLOWING THE PRE-CONSTRUCTION MEETING(S) AND ESTABLISHMENT OF AN APPROVED SCHEDULE, THE CONTRACTOR SHALL GIVE A MINIMUM OF 48 HOUR NOTICE BEFORE STARTING ANY WORK ON THIS PROJECT AND SHALL KEEP THE CITY INFORMED OF HIS/HER CONSTRUCTION SCHEDULE. ALL WORK REQUIRED FOR THIS IMPROVEMENT SHALL BE SUBJECT TO INSPECTION BY THE CITY OF CANTON OR THEIR DESIGNATED REPRESENTATIVE. NO WORK SHALL BE PERFORMED WITHOUT AN AUTHORIZED INSPECTOR PRESENT, UNLESS OTHERWISE APPROVED.

EASEMENTS AND RIGHT-OF-WAY

THE CONTRACTOR SHALL STAY WITHIN THE DESIGNATED PROPERTIES, EASEMENT, AND/OR RIGHT-OF-WAY PROVIDED FOR THE PROJECT AT ALL TIMES. NO MATERIAL SHALL BE STORED NOR ANY WORK PERFORMED ON PRIVATE PROPERTY UNLESS OTHERWISE APPROVED. DISTURBANCE OF EXISTING FEATURES AND/OR IMPROVEMENTS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AND AS APPROVED BY THE CITY ENGINEER/PROPERTY OWNER.

SUITABLE OF SITE

THE CITY OF CANTON SHALL NOT BE RESPONSIBLE FOR THE TYPE AND/OR SUITABILITY OF THE MATERIAL UNDERLYING THE PROJECT SITE. THE CONTRACTOR MUST APPRAISE THEMSELVES OF ANY EXISTING SITE CONDITIONS WHICH MAY AFFECT THEIR BID OR THE PERFORMANCE OF THE REQUIRED WORK. THE CONTRACTOR SHALL PERFORM ANY INVESTIGATIONS AND/OR TESTING NECESSARY TO ADEQUATELY DETERMINE/ESTIMATE TO THEIR SATISFACTION ALL SITE CONDITIONS WHICH COULD AFFECT THE PERFORMANCE OF THE PROPOSED IMPROVEMENTS. THIS COULD INCLUDE, BUT NOT BE LIMITED TO, UNSUITABLE AND/OR UNSTABLE SOIL/SUBSURFACE CONDITIONS, ROCK, WATER (PERCHED OR FREE), SPRINGS, ETC.

REFER TO CITY STANDARD DRAWING NO. 19 FOR ADDITIONAL DETAILS.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY, REPRESENTATIVES OF THE CITY AND THE CONTRACTOR, ALONG WITH OTHER 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 CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE CITY AND THE CONTRACTOR.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED OR ADJUSTED 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 CITY.

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 BID FOR THE PERTINENT 611 CONDUIT ITEMS.

EXISTING UNDERDRAINS

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS ENCOUNTERED DURING CONSTRUCTION.

PROVIDE AN OUTLET PER STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 611 - 6" CONDUIT, TYPE F	25	FT.
ITEM 605 - 6" UNCLASSIFIED PIPE UNDERDRAINS	25	FT.

UNRECORDED STORM WATER DRAINAGE

FURNISH A CONTINUANCE FOR ALL UNRECORDED STORM WATER DRAINAGE, SUCH AS ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK. FURNISH EITHER AN OPEN CONTINUANCE OR AN UNOBSTRUCTED CONTINUANCE BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEEDED CONDUIT TO REPLACE OR EXTEND AN EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

ITEM 611 - 12" CONDUIT, TYPE B, FOR DRAINAGE CONNECTION	25	FT.
ITEM 611 - 12" CONDUIT, TYPE C, FOR DRAINAGE CONNECTION	25	FT.

ITEM 611 - CATCH BASIN FOR POSITIVE DRAINAGE

FOR ISOLATED AREAS OF STANDING WATER IN THE TREE LAWN/PAVEMENT AREA THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER TO PROVIDE AN INLET FOR AND CONNECT THEM TO THE DRAINAGE SYSTEM:

ITEM 611 - CATCH BASIN, NO. 2-2B	1	EACH
ITEM 611 - CATCH BASIN, NO. 6	1	EACH
ITEM 611 - 12" CONDUIT, TYPE C	25	FT.

CALCULATED MES
CHECKED PRS

GENERAL NOTES

STA-3RD ST. S.E.

ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2

CURB JOINTS SHALL BE SEALED WITH HOT APPLIED JOINT SEALER, PER ODOT C&MS ITEM 705.04.

UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS

FURNISH A CONTINUANCE FOR ALL UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS SUCH AS SANITARY, WASTE-WATER, CURTAIN/GRADIENT DRAINS, AND FOUNDATION FLOOR DRAINS DISTURBED BY THE WORK. FURNISH AN UNOBSTRUCTED CONTINUANCE OF THE UNRECORDED ACTIVE SANITARY SEWER CONNECTIONS TO THE SATISFACTION OF THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT. ALL SANITARY AND SANITARY WASTE-WATER CONTINUANCE MAY ALSO REQUIRE A NPDES PERMIT FROM THE OHIO ENVIRONMENTAL PROTECTION AGENCY. REPORT ALL CONTINUANCE TO THE LOCAL HEALTH DEPARTMENT.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.42, 707.43, 707.44, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35, 706.01, 706.02, OR 706.08 WITH JOINTS AS PER 706.11 OR 706.12.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

ITEM 611 - 12" CONDUIT, TYPE B, FOR SANITARY 25 FT.

ITEM 611 - CATCH BASIN, NO. 3

THESE ITEMS SHALL BE CONSTRUCTED USING BICYCLE SAFE GRATES.

MANHOLE NO. 3 OR WATER VALVE COVERS

THE CONTRACTOR SHALL TAKE SPECIAL CARE IN MAKING SURE THE MANHOLE COVERS AND WATER VALVE COVERS ARE PLACED FLUSH WITH THE PROPOSED SIDEWALK/ROADWAY SURFACE AS APPROVED BY THE ENGINEER. IF ANY LOCATIONS ARE DETERMINED TO BE DEFICIENT TO THE SPECIFIED REQUIREMENTS, THE CONTRACTOR SHALL PERFORM APPROPRIATE CORRECTIVE MEASURES TO MAKE THIS CONDITION MEET THE MINIMUM ACCEPTED REQUIREMENTS LISTED HEREIN. ANY CORRECTIVE MEASURE REQUIRED WILL BE PERFORMED AT NO ADDITIONAL PROJECT COST AND BE APPROVED BY THE ENGINEER PRIOR TO ACCEPTANCE.

ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN

THE MANHOLE SHALL HAVE NEW HEAVY DUTY CASTING INCLUDING COVER. THE HEAVY DUTY CASTING INCLUDING COVER SHALL BE INCLUDED WITH ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN.

ITEM SPECIAL - MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIALS 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 1000 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.

PAVING AT INTERSECTING ROADS

THE CROSS SLOPE OF THE PROPOSED PAVEMENT SHALL BE TRANSITIONED TO MEET THE INTERSECTING ROAD PAVEMENT ON EACH SIDE OF ALL INTERSECTING ROADS BEGINNING 50 FEET FROM THE INTERSECTING ROAD UNLESS OTHERWISE DETAILED IN THE PLANS.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STD. CONST. DWG. BP-3.1.

ITEM 407 - NON-TRACKING TACK COAT

THE ENGINEER SHALL ADJUST THE RATE OF APPLICATION IN THE FIELD OF ITEM 407 - NON-TRACKING TACK COAT AS NEEDED. FOR ESTIMATING PURPOSES ONLY, THE PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE FOR THESE ITEMS. SEE CMS TABLE 407.06-1 FOR THE RANGE OF APPLICATION RATES. DO NOT ORDER MATERIALS FOR THESE ITEMS UNLESS AUTHORIZED BY THE ENGINEER.

ITEM 407 - NON-TRACKING TACK COAT 0.06 GAL/SQ YD

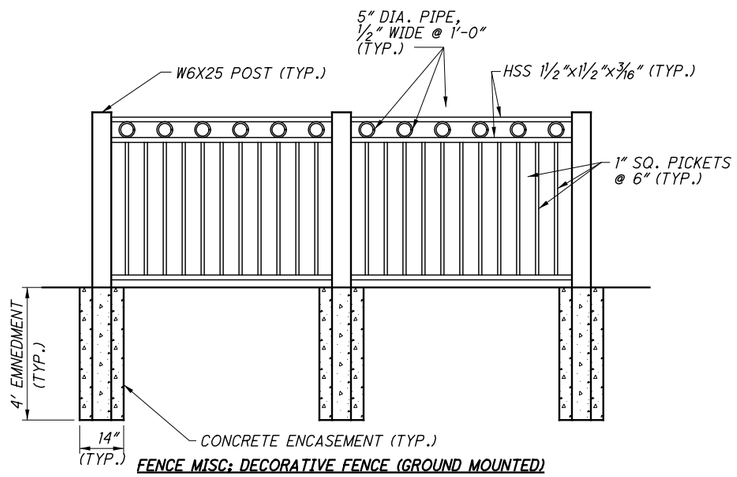
PROFILE AND ALIGNMENT

THE INTENT OF THE PROPOSED PAVEMENT RESURFACING IS TO UTILIZE THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT UNLESS OTHERWISE DETAILED IN THE PLANS. THE PROPOSED ASPHALT CONCRETE OVERLAY SHALL HAVE A MINIMUM THICKNESS OF 1¾ INCHES + 1¼ INCHES AS SHOWN ON THE TYPICAL SECTIONS.

THE PAVEMENT PLANING IS INTENDED TO REMOVE ALL ASPHALT DOWN TO THE EXISTING APPROACH SLAB CONCRETE SURFACE. 3"± IS THE AVERAGE DEPTH ANTICIPATED. AN ESTIMATED QUANTITY OF ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, (PG 64-22) HAS BEEN INCLUDED BELOW FOR AREAS WHERE THE EXISTING ASPHALT PAVEMENT IS THICKER THAN THE AVERAGE 3"± THICKNESS. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 1, (448), AS PER PLAN, (PG 64-22) 5 CY

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN 200 SY



FENCE MISC: DECORATIVE FENCE (GROUND MOUNTED)

CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING

WHERE NEW CONCRETE IS PLACED ADJACENT TO EXISTING CONCRETE, PROVIDE CONTRACTION JOINTS IN THE NEW CONCRETE TO FORM CONTINUOUS JOINTS WITH THOSE IN THE EXISTING CONCRETE.

THE MAXIMUM DISTANCE BETWEEN THE JOINTS IN THE NEW CONCRETE ARE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2, IF NECESSARY, ADDITIONAL JOINTS MAY BE PROVIDED IN THE NEW CONCRETE AT APPROXIMATELY EQUAL INTERVALS BETWEEN EXISTING JOINTS THAT EXCEED THE MAXIMUM SPACING.

REMOVAL/REPLACEMENT OF UNSUITABLE MATERIAL

THE CONTRACTOR SHALL UNDERCUT AND REPLACE UNSUITABLE MATERIAL ENCOUNTERED DURING INSTALLATION OF THE PROPOSED UTILITIES AND ROADWAY IN ACCORDANCE WITH CITY STANDARD DRAWING NO. 19.

PAVEMENT STANDARDS

PAVEMENTS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE CITY STANDARD DRAWINGS AND SPECIFICATIONS (LISTED BELOW) AND ODOT SPECIFICATIONS, UNLESS SPECIFIED OTHERWISE ON THE PLANS.

EXISTING STREET NAME AND TRAFFIC CONTROL SIGNS

WHERE WORK REQUIRES THE MOVEMENT OF EXISTING SIGNS (STOP SIGNS, SPEED LIMIT SIGNS, NO PARKING SIGNS, ETC.) THE CONTRACTOR IS REQUIRED TO MAINTAIN THE FUNCTION OF ALL TRAFFIC CONTROL SIGNS. ALL SIGNS REMOVED BY THE CONTRACTOR SHALL BE STORED ON SITE AND REINSTALLED BY THE CONTRACTOR.

NEW STREET NAME AND TRAFFIC CONTROL SIGNS

ALL STREET NAME AND TRAFFIC CONTROL SIGNS SHALL COME COMPLETE AND BE MADE IN ACCORDANCE WITH THE CITY OF CANTON SIGN AND PAINT DEPARTMENT SPECIFICATIONS. GENERALLY, ALL SIGNS SHALL HAVE HI-INTENSITY SHEETING AND BE MADE WITH .080 50/52 ALUMINUM. STREET NAME SIGNS SHALL BE MADE WITH WHITE UPPER AND LOWER CASE LETTERING ON GREEN BACKGROUND USING 9 BLANKS, BE DOUBLE SIDED W/RADIUS CORNERS AND HAVE 6 NAME AND 3 SUFFIXES. ALL SIGN RELATED HARDWARE IS TO BE INCLUDED, SUCH AS 6 HEAVY DUTY U-CHANNEL CAPS AND STREET NAME CROSSES.

FOR SUBDIVISION DEVELOPMENTS, ALL PERMANENT STREET NAME SIGNS AND TRAFFIC CONTROL SIGNS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

RELEASE OF RETAINER/BONDS

PRIOR TO THE RELEASE OF RETAINER/CONSTRUCTION BOND BY THE CITY OF CANTON, THE CONTRACTOR SHALL HAVE COMPLETE THE ENGINEER'S PROJECT PUNCHLIST AND SUBMIT FINAL WAIVER OF LIEN, IN ACCORDANCE WITH CITY SS 01-00.

ENVIRONMENTAL COMMITMENTS

THE SPECIFICATIONS SET FORTH IN THE MOST CURRENT VERSION OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, LOCATION AND DESIGN MANUAL AND STANDARD CONSTRUCTION DRAWINGS WILL BE USED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION. FOR CHANNEL PROTECTION USE NATIVE VEGETATION FOR EROSION CONTROL, OR, AT A MINIMUM, USE NATIVE VEGETATION IN COMBINATION WITH ROCK. ALL DISTURBED AREAS IN THE PROJECT VICINITY SHOULD BE MULCHED AND REVEGETATED WITH NATIVE PLANT SPECIES.

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

IN STREAM WORK RESTRICTIONS FOR NIMISHILLEN CREEK ARE FROM APRIL 15 THRU JUNE 30.

CALCULATED MES CHECKED PRS

GENERAL NOTES

STA-3RD ST. S.E.

ITEM 614 - MAINTAINING TRAFFIC

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND CONTROLLING TRAFFIC ON ALL STREETS AND ROADS AFFECTED BY CONSTRUCTION AND SHALL, PRIOR TO CONSTRUCTION, SUBMIT A CPM CONSTRUCTION SCHEDULE TO THE CITY OF CANTON FOR APPROVAL INDICATING DATES AND DURATION OF EACH STAGE/PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE CITY OF CANTON IN WRITING A MINIMUM OF 14 DAYS IN ADVANCE OF THE FIRST ANTICIPATED IMPACT TO THROUGH TRAFFIC OF A PORTION OF THE 3RD STREET IMPROVEMENT.

THE CONTRACTOR SHALL ALSO NOTIFY, IN WRITING, THE FOLLOWING AGENCIES AT LEAST FOURTEEN (14) DAYS PRIOR TO THE TIME WHEN THE DETOUR WILL BE IMPLEMENTED:

LOCAL FIRE DEPARTMENT(S)
CANTON SCHOOL DISTRICTS
STARK COUNTY SHERIFF
CITY OF CANTON ENGINEER
CITY OF CANTON POLICE DEPARTMENT

ALL CONSTRUCTION SIGNS AND TEMPORARY TRAFFIC CONTROL AND PROTECTION DEVICES SHALL BE ERECTED AND MAINTAINED IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND ODOT ITEM 614 - MAINTAINING TRAFFIC.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC & ADJACENT PROPERTY OWNERS. THE CONTRACTOR SHALL MINIMIZE THE AMOUNT OF TIME THE EXPOSED PLANED PAVEMENT IS USED AS THE ROADWAY TRAVEL SURFACE DUE TO THE POTENTIAL FOR DETERIORATION OF THE PAVEMENT AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND PHASING PLAN FOR THE PROPOSED WORK PRIOR TO CONSTRUCTION WHICH WILL LIMIT THE TIME FRAME THE PLANED SURFACE IS UTILIZED AS A TRAVEL SURFACE PRIOR TO THE PLACEMENT OF THE ASPHALT CONCRETE OVERLAY. THE SCHEDULE AND PHASING PLAN SHALL BE ACCEPTED BY THE CITY AND ENGINEER PRIOR TO THE COMMENCEMENT OF WORK FOR THE PROPOSED PAVEMENT. ADDITIONAL PAVEMENT DETERIORATION DUE TO A LENGTHY DURATION OF EXPOSED PLANED SURFACE SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

A. 3RD STREET PHASE 1

ONE LANE ONE WAY TRAFFIC WITH A MINIMUM 11 FOOT LANE SHALL BE MAINTAINED AT ALL TIMES WITH A WORK ZONE TRAFFIC SIGNAL OR FLAGGER BY MEANS OF USING EXISTING PAVEMENT AND TEMPORARY PAVEMENT TO CONSTRUCT PHASE 1. TRAFFIC SHALL BE MAINTAINED AS APPROVED BY THE ENGINEER. FULL DEPTH PAVEMENT SHALL BE CONSTRUCTED TO MEET THE EXISTING PAVEMENT.

SIDEWALK PHASE 1

THE SIDEWALK WILL REMAIN OPEN DURING PHASE 1.

B. 3RD STREET PHASE 2

ONE LANE ONE WAY TRAFFIC WITH A MINIMUM 11 FOOT LANE SHALL BE MAINTAINED AT ALL TIMES EXCEPT WHEN THROUGH TRAFFIC WILL NO LONGER BE PERMITTED IN THE PROJECT LIMITS WHEN THE VEHICULAR BRIDGE IS REMOVED AND THE CUL-DE-SAC IS CONSTRUCTED. LOCAL TRAFFIC AND ACCESS TO THE PARK SHALL BE MAINTAINED AT ALL TIMES.

SIDEWALK PHASE 2

THE SIDEWALK WILL BE CLOSED DURING PHASE 2. A DETOUR WILL BE PROVIDED. SEE SHEET 11 FOR PEDESTRIAN DETOUR.

B. 3RD STREET PHASE 3

TRAFFIC WEST OF NIMISHILLEN CREEK WILL BE MAINTAINED USING EXISTING PAVEMENT. LOCAL TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. WARNER AVENUE SE TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.

SIDEWALK PHASE 3

THE SIDEWALK WILL BE CLOSED DURING PHASE 3. A DETOUR WILL BE PROVIDED. SEE SHEET 11 FOR PEDESTRIAN DETOUR.

C. PEDESTRIAN ACCESS

PEDESTRIAN/TRAIL TRAFFIC WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES EXCEPT AS NOTED IN THE PLANS AND THIS MAINTAINING TRAFFIC GENERAL NOTE. WHEN WORK WILL RESTRICT A SIDEWALK/TRAIL AREA, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING PEDESTRIAN/TRAIL DETOUR ROUTES DURING CONSTRUCTION IN ACCORDANCE WITH ODOT STD. DWG. MT-110.10. THE PEDESTRIAN/TRAIL DETOUR ROUTE MUST BE APPROVED BY THE PROJECT ENGINEER PRIOR TO IMPLEMENTATION.

IT IS THE INTENT OF THIS PROJECT TO MINIMIZE IMPACT TO THE EXISTING UTILITIES. IN ADDITION TO ODOT C&MS 107.16 AND THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES TO LIMIT THE ACTUAL TIME THAT ANY UTILITY ADJUSTMENT REQUIRED TO CONSTRUCT 3RD STREET SE IMPROVEMENTS IS NECESSARY TO PREVENT ADVERSE IMPACTS TO THE UTILITY. THIS COORDINATION SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC AND SHALL BE INCLUSIVE OF ALL LABOR, TOOLS, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO COORDINATE WITH AND LIMIT CONFLICTS IN ACCORDANCE WITH THE UTILITY REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COMPENSABLE COST DUE TO THE UTILITY.

IF THE CONTRACTOR SO ELECTS, HE/SHE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN WILL BE PUT INTO EFFECT UNTIL THE APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE CITY/ODOT.

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

ITEM 410 - TRAFFIC COMPACTED SURFACE, TYPE A OR B 25 CY

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 25 CY

THE WORK ZONES AND CONTRACTOR'S EQUIPMENT SHALL BE SET UP AND OPERATED IN SUCH A MANNER THAT VEHICULAR INGRESS AND EGRESS SHALL BE PROVIDED AT ALL TIMES FOR PROPERTIES ADJACENT TO THE WORK. FOR ADDITIONAL REQUIREMENTS, SEE 107.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

ROAD WORK AHEAD (W20-1) SIGNS SHALL BE PLACED AT THE BEGINNING & END OF THE PROJECT ON MOUNT VERNON AVENUE AND ON ALL SIDEROADS IN THE PROJECT LENGTH, APPROXIMATELY 200 FEET IN ADVANCE OF THE WORK AREA.

END ROAD WORK (G20-2) SIGNS SHALL BE PLACED AT THE BEGINNING & END OF THE PROJECT AND ON SIDE ROADS APPROXIMATELY 100 FEET BEYOND THE WORK AREA.

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, TOOLS, EQUIPMENT, MATERIALS AND INCIDENTALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES AND CARRIED TO THE GENERAL SUMMARY:

ITEM 616 - WATER 10 M GAL

TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES AS PER THE OMUTCD. PLACEMENT OF PROPOSED SUB-BASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF THE WIDENING TRENCH, WHICH IS OPEN AT ANY ONE TIME, SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

SUSPENSION OF WORK

IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR MAINTENANCE OF TRAFFIC AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE OMUTCD, THE ENGINEER MAY SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS. NO COMPENSATION WILL BE PAID FOR SUSPENSION OF WORK.

LEE PARK PROTECTION AND ACCESS

ACCESS TO LEE PARK WILL BE MAINTAINED USING ALTERNATE ACCESS POINTS AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION FENCING ALONG PROPOSED CONSTRUCTION LIMITS AT LEE PARK PRIOR TO THE START OF CONSTRUCTION ACTIVITIES TO PROTECT THE PARK AND THE PUBLIC. THE CONTRACTOR SHALL PROVIDE AND INSTALL APPROPRIATE SIGNAGE TO ALERT LEE PARK USERS OF CONSTRUCTION ACTIVITIES, ACCESS RESTRICTIONS OR CLOSURES, AND TO DIRECT USERS TO SECONDARY PARK ACCESS POINTS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STAGE AND/OR STORE CONSTRUCTION EQUIPMENT AND/OR MATERIALS OUTSIDE OF THE PROPOSED CONSTRUCTION LIMITS IN PROXIMITY OF THE DEFINED BOUNDARIES OF LEE PARK. STAGING AND/OR STORAGE OF CONSTRUCTION EQUIPMENT AND/OR MATERIALS WITHIN LEE PARK IS PROHIBITED.

THE CONTRACTOR SHALL CLOSELY COORDINATE THE CONSTRUCTION SCHEDULE WITH THE CANTON PARKS AND RECREATION DEPARTMENT, CITY OF CANTON AND ODOT.

CALCULATED MES CHECKED PRS

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-3RD ST. S.E.

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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 C&MS 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.

IN ADDITION TO THE REQUIREMENT OF C&MS 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) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS; DURING TEAR DOWN PERIODS; DURING A TEMPORARY TRAFFIC SIGNAL INSTALLATION WHEN IMPLEMENTING THE ONE LANE, TWO WAY TRAFFIC CONDITION; DURING SUBSTANTIAL SHIFTS OF A CLOSURE POINT; OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

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 THE 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.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT IN ACCORDANCE WITH C&MS 614.03

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

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

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 16 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.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHT TIME 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, TOOLS, MATERIALS AND INCIDENTALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

FLASHING ARROW PANELS

WHEN FLASHING ARROW PANELS ARE UTILIZED FOR NIGHT LANE CLOSURES, SOLAR, ELECTRIC, OR BATTERY POWERED EQUIPMENT SHALL BE EXCLUSIVELY UTILIZED WHEN LOCATED WITHIN 300 FEET OF ANY RESIDENCE. DIESEL OR GASOLINE POWERED GENERATORS WILL NOT BE PERMITTED IN THESE AREAS, EXCEPT WHEN USED INTERMITTENTLY FOR THE SOLE PURPOSE OF CHARGING INTERNAL BATTERIES WHICH PROVIDE THE PRIMARY POWER FOR THE EQUIPMENT.

EQUIPMENT AND MATERIAL STORAGE

IN ORDER TO PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC, THE CONTRACTOR'S ATTENTION IS DIRECTED TO 614.035. IN ADDITION, THE FOLLOWING PROVISIONS SHALL APPLY:

1. ANY REMOVED ITEMS SHALL NOT BE STORED ON THE RIGHT OF WAY FOR MORE THAN FOURTEEN (14) DAYS.

2. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE CITY.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE LANE BIDIRECTIONAL TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES AND FOR PAVEMENT WIDENING OPERATIONS.

CALCULATED MES CHECKED PRS

MAINTENANCE OF TRAFFIC GENERAL NOTES

STA-3RD ST. S.E.

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59

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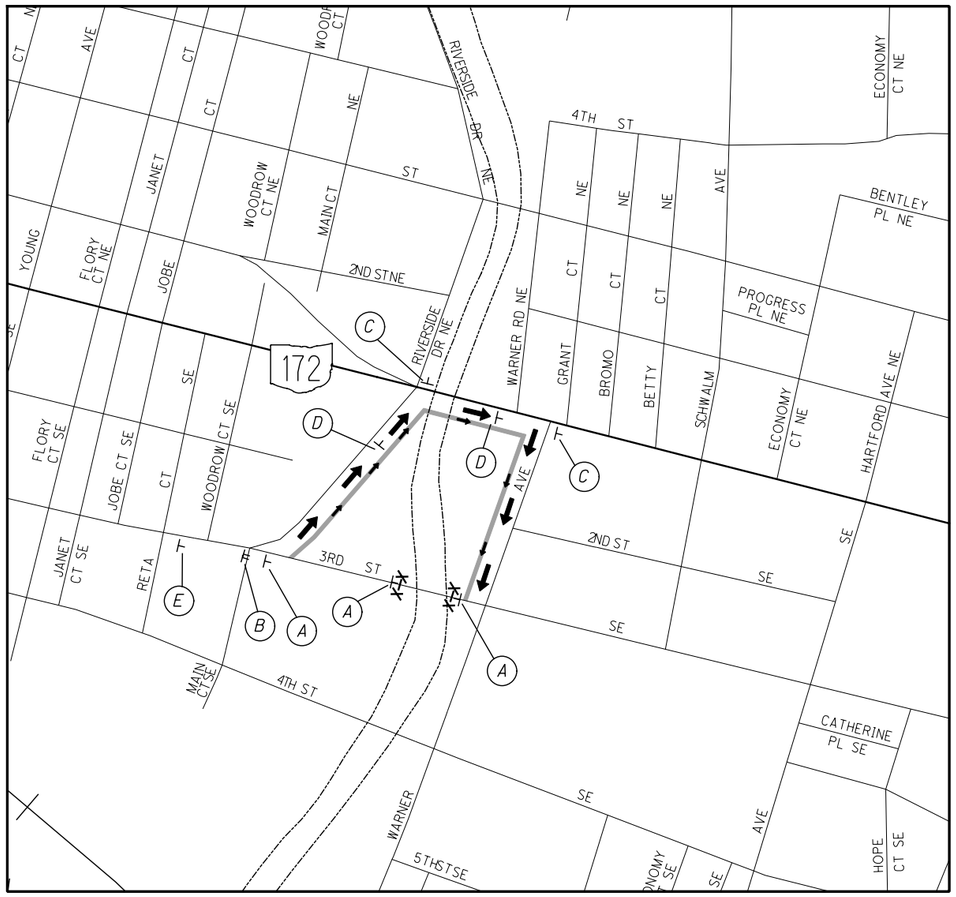


3RD ST. S.E. DETOUR ROUTE

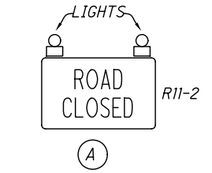
3RD ST. S.E. DETOUR

PEDESTRIAN DETOUR

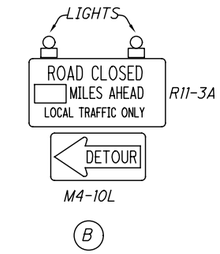
X–X DENOTES GATES & BARRICADES AS PER ODOT STD. DWG. MT-101.60

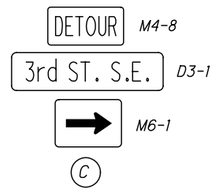
ITEM 614 DETOUR SIGNING

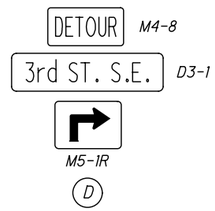
3RD ST. S.E.	LUMP SUM
TOTAL CARRIED TO GENERAL SUMMARY	LUMP SUM

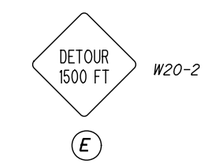


INSTALL IN ACCORDANCE WITH PART 6 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICE (TYP.)









ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 60 CONSECUTIVE DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN. LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH 108.07 FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

THE CONTRACTOR WILL PROVIDE, INSTALL, MAINTAIN, AND SUBSEQUENTLY REMOVE THE DETOUR SIGNING. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 DETOUR SIGNING. THE CONTRACTOR SHALL NOTIFY THE DISTRICT ROADWAY SERVICES MANAGER A MINIMUM OF TEN (10) DAYS IN ADVANCE OF THE SCHEDULED ROAD CLOSURE.

LOCAL TRAFFIC WILL BE MAINTAINED IN ACCORDANCE WITH MAINTENANCE OF TRAFFIC STAGE/PHASING MAP. ALL COORDINATION, SIGNING, DRUMS, AND OTHER MAINTENANCE OF TRAFFIC INCIDENTALS REQUIRED FOR THE WORK AS APPROVED BY THE ENGINEER INCLUDING LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

THE PROPOSED INTERSECTION WORK SHALL BE COMPLETED PRIOR TO CLOSING OF 3RD STREET IN ORDER TO MAINTAIN LOCAL ACCESS.

THE CONTRACTOR SHALL ALSO NOTIFY, IN WRITING, THE FOLLOWING AGENCIES AT LEAST FOURTEEN (14) DAYS PRIOR TO THE TIME WHEN THE DETOUR WILL BE IMPLEMENTED:

LOCAL FIRE DEPARTMENT(S)
CITY OF CANTON POLICE DEPARTMENT
CITY OF CANTON

THE CONTRACTOR SHALL PROVIDE, ERECT, MAINTAIN GATES AND BARRICADES AND ADVANCE WARNING SIGNS AT EACH END OF THE PROJECT AS PER DETAILS ON STANDARD CONSTRUCTION DRAWING MT-101.60.

LOCAL ACCESS:

ACCESS TO ALL DRIVES WITHIN THE WORK LIMITS OF THE PROJECT SHALL BE MAINTAINED AT ALL TIMES. THE FOLLOWING ITEMS MAY BE NEEDED TO MAINTAIN LOCAL TRAFFIC AS DIRECTED BY THE ENGINEER:

ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE A OR B

ITEM 616, WATER

PAYMENT FOR ALL LABOR AND MATERIALS WILL BE PERFORMED BY CHANGE ORDER.

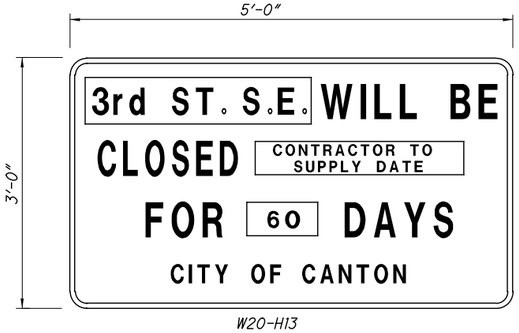
COOPERATION BETWEEN CONTRACTORS

SEPARATE CONTRACTORS WORKING WITHIN THE LIMITS OF THE PROJECT OR ON ADJACENT PROJECTS SHALL CONDUCT THEIR WORK WITHOUT INTERFERING WITH OR HINDERING THE PROGRESS OR COMPLETION OR WORK BEING PERFORMED BY OTHER CONTRACTORS AND SHALL COOPERATE WITH EACH OTHER AS DIRECTED BY THE ENGINEER.

NOTICE OF CLOSURE SIGNS

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST ONE WEEK IN ADVANCE OF THE SCHEDULED ROAD CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. THE SIGNS SHOULD BE ERECTED AT THE POINT OF CLOSURE.

PAYMENT FOR THESE SIGNS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC AND SHALL INCLUDE FURNISHING, ERECTING, MAINTAINING AND REMOVING THE SIGNS INCLUDING SUPPORTS.



W20-H13

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 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.

CALCULATED PRS CHECKED MES

MAINTENANCE OF TRAFFIC

STA-3RD. ST. S.E.

SHEET NUMBER										ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	5-8	9-10	15-19	20	20	21	31								
														ROADWAY	
	LS									201	11000	LS		CLEARING AND GRUBBING	
			947							202	23000	947	SY	PAVEMENT REMOVED	
			168							202	30000	168	SF	WALK REMOVED	
			640							202	32000	640	FT	CURB REMOVED	
				13						202	35100	13	FT	PIPE REMOVED, 24" AND UNDER	
				4						202	58100	4	EACH	CATCH BASIN REMOVED	
	50			167						SPECIAL	20270110	217	FT	PIPE CLEANOUT, 24" AND UNDER	6
	25				45		550			203	10000	620	CY	EXCAVATION	
	25		254				500			203	20000	779	CY	EMBANKMENT	
			1699		267					204	10000	1966	SY	SUBGRADE COMPACTION	
	50									204	13000	50	CY	EXCAVATION OF SUBGRADE	
	50									204	30010	50	CY	GRANULAR MATERIAL, TYPE B	
	100									204	50000	100	SY	GEOTEXTILE FABRIC	
			37.50							606	15050	37.5	FT	GUARDRAIL, TYPE MGS	
			2.00							606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
			74							607	20000	74	FT	FENCE, TYPE CL	
			10							607	98000	10	FT	FENCE, MISC.: DECORATIVE FENCE (GROUND MOUNTED)	6
			4000							608	10000	4000	SF	4" CONCRETE WALK	
			845							608	52000	845	SF	CURB RAMP	
			477							609	14000	477	FT	CURB, TYPE 2-A	
			308							609	26000	308	FT	CURB, TYPE 6	
			79							609	54000	79	SY	6" CONCRETE TRAFFIC ISLAND	
			1							623	39500	1	EACH	MONUMENT BOX ADJUSTED TO GRADE	
														EROSION CONTROL	
	2									659	00100	2	EACH	SOIL ANALYSIS TEST	
	115									659	00300	115	CY	TOPSOIL	
	1030									659	10000	1030	SY	SEEDING AND MULCHING	
	52									659	14000	52	SY	REPAIR SEEDING AND MULCHING	
	1									659	20000	1	TON	COMMERCIAL FERTILIZER	
	1									659	31000	1	ACRE	LIME	
	6									659	35000	6	MGAL	WATER	
	LS									832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
	LS									832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
	5000									832	30000	5000	EACH	EROSION CONTROL	
														DRAINAGE	
	25									605	13300	25	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
	25									611	01500	25	FT	6" CONDUIT, TYPE F	
	50			81						611	04400	131	FT	12" CONDUIT, TYPE B	
	50									611	04600	50	FT	12" CONDUIT, TYPE C	
	25									611	05100	25	FT	12" CONDUIT, TYPE E	
				12						611	05900	12	FT	15" CONDUIT, TYPE B	
				4						611	06100	4	FT	15" CONDUIT, TYPE C	
				2						611	98150	2	EACH	CATCH BASIN, NO. 3	
				2						611	98310	2	EACH	CATCH BASIN, NO. 5 WITH B GRATE	

CALCULATED MES
CHECKED PRS

GENERAL SUMMARY

STA-3RD ST. S.E.

SHEET NUMBER										ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	5-8	9-10	15-19	20	20	21	31								
														DRAINAGE CONTINUED	
	1									611	98370	1	EACH	CATCH BASIN, NO. 6	
	1			1						611	98470	2	EACH	CATCH BASIN, NO. 2-2B	
				5						611	98630	5	EACH	CATCH BASIN ADJUSTED TO GRADE	
				1						611	99660	1	EACH	MANHOLE RECONSTRUCTED TO GRADE	
	1000									SPECIAL	61199820	1000	LB	MISCELLANEOUS METAL	8
														PAVEMENT	
	200									253	01001	200	SY	PAVEMENT REPAIR, AS PER PLAN	8
			142							254	01000	142	SY	PAVEMENT PLANING, ASPHALT CONCRETE	
			284							304	20000	284	CY	AGGREGATE BASE	
			22							407	10000	22	GAL	TACK COAT	
			5.00							441	50000	5	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
	5									441	50201	5	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN	8
			7							441	50300	7	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
					105					452	10010	105	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
			1027		162					452	12010	1189	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	
														UTILITIES	
	3									638	10800	3	EACH	VALVE BOX ADJUSTED TO GRADE	
														TRAFFIC CONTROL	
			2.00							626	00110	2	EACH	BARRIER REFLECTOR, TYPE 2	
						252				630	03100	252	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
						3				630	08600	3	EACH	SIGN POST REFLECTOR	
						81				630	80100	81	SF	SIGN, FLAT SHEET	
						11				630	84900	11	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
						6				630	86002	6	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
						2				630	87500	2	EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL	
						0.04				644	00100	0.04	MILE	EDGE LINE, 4"	
						0.05				644	00300	0.05	MILE	CENTER LINE	
						257				644	00600	257	FT	CROSSWALK LINE	
						1				644	01300	1	EACH	LANE ARROW	
						17				644	20800	17	FT	YIELD LINE	

CALCULATED MES
CHECKED PRS

GENERAL SUMMARY

STA-3RD ST. S.E.

SHEET NUMBER										ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	5-8	9-10	15-19	20	20	21	31								
														STRUCTURE - SINGLE SPAN PREFABRICATED	
														SEE SHEET 41	
														MAINTENANCE OF TRAFFIC	
		25								410	12000	25	CY	TRAFFIC COMPACTED SURFACE, TYPE A OR B	
		16								614	11110	16	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
		LS								614	12420	LS		DETOUR SIGNING	
		25								614	13000	25	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
		10								616	10000	10	MGAL	WATER	
														MISCELLANEOUS	
										614	11000	LS		MAINTAINING TRAFFIC	
										623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
										624	10000	LS		MOBILIZATION	
										SPECIAL		LS		BID GUARANTY AND CONTRACT BOND	

CALCULATED MES
CHECKED PRS

GENERAL SUMMARY

STA-3RD ST. S.E.

LINE	DESCRIPTION	CALCULATION	QUANTITY
	FULL DEPTH PAVEMENT (CONCRETE)		
	RIVERSIDE DR. INTERSECTION		
1	STA 4+85.75 TO STA 6+03.35 =	**COMPUTER GENERATED AREA** =	1895.00 SF
	CUL DE SAC		
2	STA 7+25.05 TO STA 7+41.37 = 16.32 FT x (29.3 FT. + 29.1 FT.) / 2	=	476.54 SF
3	STA 7+41.37 TO STA 7+64.02 = 22.65 FT x (29.1 FT. + 43.1 FT.) / 2	=	817.66 SF
4	STA 7+64.02 TO STA 8+08.52 = 44.50 FT x (43.1 FT. + 42 FT.) / 2	=	1893.48 SF
5	STA 7+64.02 TO STA 8+49.50 = (3.14 X 42 ^ 2) X 0.75	=	4154.22 SF
6	SUM LINES 1 TO 5	=	9236.90 SF
	RESURFACING (ASPHALT)		
	RIVERSIDE DR. INTERSECTION		
7	STA 5+72.91 TO STA 6+01.93 = 29.02 FT x (18.2 FT. + 17.5 FT.) / 2	=	518.01 SF
8	STA 6+01.93 TO STA 6+03.35 = 1.42 FT x (17.5 FT. + 17.5 FT.) / 2	=	24.85 SF
9	STA 6+03.35 TO STA 6+25.00 = 21.65 FT x (34.1 FT. + 33.4 FT.) / 2	=	730.69 SF
10	SUM LINES 7 TO 9	=	1273.55 SF
	254 PAVEMENT PLANING, ASPHALT CONCRETE		
11	LINE 9	=	1273.55 SF
12	SUM LINES 11	=	1273.55 SF
13	LINE 12 = 1273.55 SF / 9	=	141.51 SY
		TOTAL CARRIED TO GENERAL SUMMARY =	**142 SY**
	407 TACK COAT (FOR MILLED SURFACE)		
14	LINE 12 = (1273.55 SF / 9) x 0.09 GAL / SY		12.74 GAL
		TOTAL CARRIED TO GENERAL SUMMARY =	**13 GAL**
	441 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22		
15	SUM LINE 12 = 1273.55 SF x (1 1/4 " / 12) / 27		4.91 CY
		TOTAL CARRIED TO GENERAL SUMMARY	**5 CY**
	407 TACK COAT (FOR NEW PAVEMENT)		
16	SUM LINE 12 = (1273.55 SF / 9) x 0.06 GAL / SY	=	8.49 GAL
		TOTAL CARRIED TO GENERAL SUMMARY =	**9 GAL**
	441 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22		
17	SUM LINE 12 = 1273.55 SF x (1 3/4 " / 12) / 27	=	6.88 CY
		TOTAL CARRIED TO GENERAL SUMMARY =	**7 CY**
	452 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1		
18	LINE 6	=	9236.90 SF
19	SUM LINES 18	=	9236.90 SF
20	LINE 19 = 9236.90 / 9	=	1026.32 SY
		TOTAL CARRIED TO GENERAL SUMMARY =	**1027 SY**
	304 6" AGGREGATE BASE		
21	LINE 6		
22	ADDITIONAL FOR STEP = 504.40 FT X (6 " / 12) X 2	=	9236.90 SF
23	UNDER SIDEWALK LINE 62	=	504.4 SF
24	UNDER CURB RAMP LINE 72	=	3999.08 SF
25	UNDER TRAFFIC ISLAND LINE 80	=	844.84 SF
26	SUM LINES 21 TO 25	=	702.20 SF
27	LINE 26 = 15287.42 SF X (6 " / 12) / 27	=	15287.42 SF
		=	283.1 CY
		TOTAL CARRIED TO GENERAL SUMMARY =	**284 CY**
	204 SUBGRADE COMPACTION		
28	LINE 26 = 15287.42 SF / 9	=	1698.6 SY
		TOTAL CARRIED TO GENERAL SUMMARY =	**1699 SY**

CONTINUED ON NEXT SHEET

CALCULATED MES
CHECKED ALP

CALCULATIONS

STA-3RD ST. S.E.

LINE	DESCRIPTION	CALCULATION														QUANTITY
	609 CURB, TYPE 6															
	3RD STREET S.E.															
29	STA. 5+27.13	TO STA	5+62.04											=		34.90 FT.
	WARNER RD															
30	STA. 49+00.00	TO	50+31.90	LT.										=		131.90 FT.
31	STA. 49+00.00	TO	49+72.30	RT.										=		72.30 FT.
32	STA. 49+72.30	TO	49+84.40	RT.	RADIUS									=		16.30 FT.
33	STA. 11+56.41	TO	11+75.00	RT.	3RD STREET STATION									=		18.60 FT.
34	STA. 11+61.35	TO	11+75.00	LT.	3RD STREET STATION									=		13.70 FT.
35	STA. 50+20.70	TO	50+34.10	RT.	RADIUS									=		19.70 FT.
36	SUM LINES 29	TO	35											=		307.40 FT.
													TOTAL CARRIED TO GENERAL SUMMARY	=		**308 FT.**
	609 CURB, TYPE 2A															
	3RD STREET S.E. TRAFFIC ISLAND															
37	STA. 5+22.47	TO STA	5+66.59	ALONG FACE OF CURB ON TRAFFIC ISLAND										=		87.40 FT.
	3RD STREET S.E. RIGHT TURN LANE															
38	STA. 5+80.66	TO	6+03.35	LT.	ALONG FACE OF CURB ON OUTSIDE OF RIGHT TURN LANE									=		71.90 FT.
	CUL-DE-SAC															
39	STA. 7+28.92	TO	8+07.34	RT										=		78.40 FT.
40	STA. 7+28.92	TO	7+41.37	LT.										=		12.50 FT.
41	STA. 7+41.37	TO	8+49.48											=		226.80 FT.
42	SUM LINES 37	TO	41											=		477.00 FT.
													TOTAL CARRIED TO GENERAL SUMMARY	=		**477 FT.**
	608 4" CONCRETE WALK															
43	STA 5+88.08	TO STA	6+01.29	LT.	40.90 FT	x	(5	FT. +	5	FT.) /	2			=		204.50 SF
44	STA 8+20.02	TO STA	8+40.11	RT.	20.09 FT	x	(4.4	FT. +	4.4	FT.) /	2			=		88.40 SF
45	STA 8+40.11	TO STA	8+51.38	RT.	11.27 FT	x	(4.4	FT. +	4.4	FT.) /	2			=		49.59 SF
46	STA 8+34.81	TO STA	8+50.17	RT.	15.36 FT	x	(10	FT. +	11.3	FT.) /	2			=		163.58 SF
47	STA 8+42.50	TO STA	8+50.17	RT.									COMPUTER GENERATED AREA	=		85.25 SF
48	STA 8+50.17	TO STA	9+15.93	RT.	65.76 FT	x	(18.7	FT. +	13	FT.) /	2			=		1042.30 SF
49	STA 9+15.93	TO STA	9+27.45	RT.	11.52 FT	x	(13	FT. +	18.6	FT.) /	2			=		182.02 SF
50	STA 9+27.45	TO STA	9+46.04	LT / RT	18.59 FT	x	(18.6	FT. +	27.9	FT.) /	2			=		432.22 SF
51	STA 9+46.04	TO STA	9+47.69	LT / RT	1.65 FT	x	(27.9	FT. +	27.9	FT.) /	2			=		46.04 SF
52	STA 9+47.69	TO STA	9+51.62	RT.	3.93 FT	x	(10.3	FT. +	10	FT.) /	2			=		39.89 SF
53	STA 10+48.34	TO STA	11+17.68	RT.	69.34 FT	x	(10	FT. +	10	FT.) /	2			=		693.40 SF
54	STA 11+56.06	TO STA	11+75.00	RT.	18.94 FT	x	(4.7	FT. +	5.1	FT.) /	2			=		92.81 SF
55	STA 11+61.42	TO STA	11+75.00	LT.	13.58 FT	x	(4.8	FT. +	4.8	FT.) /	2			=		65.18 SF
	ALONG WARNER RD															
56	STA 49+00.00	TO STA	49+66.40	LT.	66.40 FT	x	(4.7	FT. +	5.1	FT.) /	2			=		325.36 SF
57	STA 49+88.66	TO STA	50+18.02	LT.	29.36 FT	x	(5	FT. +	4.9	FT.) /	2			=		145.33 SF
58	STA 49+00.00	TO STA	49+70.58	RT.	70.58 FT	x	(4.5	FT. +	4.7	FT.) /	2			=		324.67 SF
59	STA 49+70.58	TO STA	49+74.02	RT.	3.44 FT	x	(4.7	FT. +	0	FT.) /	2			=		8.08 SF
60	STA 50+29.92	TO STA	50+33.32	RT.	3.40 FT	x	(0	FT. +	4.2	FT.) /	2			=		7.14 SF
61	STA 50+33.32	TO STA	50+34.11	RT.	0.79 FT	x	(4.2	FT. +	4.2	FT.) /	2			=		3.32 SF
62	SUM LINES 43	TO	61											=		3999.08 SF
													TOTAL CARRIED TO GENERAL SUMMARY	=		**4000 SF**
	608 CURB RAMP															
	3RD STREET															
63	STA 5+34.26	TO STA	5+60.26	RT. (	26.00 FT	x	5	FT) + (	6	FT X	6.5	FT)		=		169.00 SF
64	STA 5+47.29	LT. (	5	FT X	6	FT) +	2	X (	6	FT X	5	FT / 2)		=		60.00 SF
65	STA 5+58.00	LT. (	5.25	FT X	6	FT) +	2	X (	6	FT X	5	FT / 2)		=		61.50 SF
66	STA 5+78.00	LT. (	7.5	FT +	5.9	FT) /	2	X (	9.2	FT +	7.4	FT / 2)		=		55.61 SF
67	STA 8+38.00	LT. (	10	FT X	6	FT) +	2	X (	6	FT X	6	FT / 2)		=		96.00 SF
	ALONG WARNER RD															
68	STA 49+66.40	TO STA	49+88.9	LT. (	22.5	FT X	5	FT) + (	10	FT X	5.4) + 19.84 + 13.34			=		199.68 SF
69	STA 49+70.60	TO STA	49+83.8	RT.									COMPUTER GENERATED AREA	=		64.00 SF
70	STA 50+17.70	TO STA	50+31.9	LT.	14.2	FT X (	4.9	+	4.6	) FT /	2			=		67.45 SF
71	STA 50+21.60	TO STA	50+33.3	RT									COMPUTER GENERATED AREA	=		71.60 SF
72	SUM LINES 63	TO	71											=		844.84 SF
													TOTAL CARRIED TO GENERAL SUMMARY	=		**845.00 SF**

CONTINUED ON NEXT SHEET

CALCULATED MES
CHECKED ALP

CALCULATIONS

STA-3RD ST. S.E.

LINE	DESCRIPTION	CALCULATION												QUANTITY	
	606 GUARDRAIL, TYPE MGS														
73	STA 10+53.79	TO STA	10+60.91										=	37.50	FT
74	SUM LINES 73												=	37.50	FT
												TOTAL CARRIED TO GENERAL SUMMARY	=	**37.50**	**FT**
	606 ACNHOR ASSEMBLY, MGS TYPE T														
75	STA 10+53.79												=	1.00	EACH
76	STA 10+60.91												=	1.00	EACH
77	SUM LINES 75	TO	76										=	2.00	EACH
												TOTAL CARRIED TO GENERAL SUMMARY	=	**2.00**	**EACH**
	626 BARRIER REFLECTOR, TYPE 2														
78	STA 10+53.79	TO STA	10+60.91	=	37.50	FT /	50					(1 AT BEGINNING AND 1 AT END MINIMUM)	=	2.00	EACH
79	SUM LINES 78												=	2.00	EACH
												TOTAL CARRIED TO GENERAL SUMMARY	=	**2.00**	**EACH**
	609 6" CONCRETE TRAFFIC ISLAND														
80	STA 5+22.47	TO STA	5+66.59										=	702.20	SF
81	LINE 80	=	702.2	SF /	9								=	78.02	SY
82	SUM LINES 81												=	78.02	SY
												TOTAL CARRIED TO GENERAL SUMMARY	=	**79.00**	**SY**
	202 PAVEMENT REMOVED														
83	STA 4+85.75	TO STA	5+60.00	=								COMPUTER GENERATED AREA	=	484.20	SF
84	STA 5+62.04	TO STA	5+72.96	=	10.92	FT X (	12.1	+	12.1	) /	2		=	132.13	SF
85	STA 5+72.96	TO STA	6+03.35	=	30.39	FT X (	18	+	16.6	) /	2		=	525.75	SF
86	STA 7+28.88	TO STA	8+00.85	=	71.97	FT X (	29.2	+	26	) /	2		=	1986.37	SF
87	STA 8+00.85	TO STA	8+51.66	=	50.81	FT X (	26	+	24.4	) /	2		=	1280.41	SF
88	STA 8+51.66	TO STA	9+36.63	=	84.97	FT X (	24.4	+	24.3	) /	2		=	2069.02	SF
89	STA 10+64.54	TO STA	10+74.96	=	10.42	FT X (	25.2	+	26	) /	2		=	266.75	SF
90	STA 10+74.96	TO STA	11+18.62	=	43.66	FT X (	26	+	34.4	) /	2		=	1318.53	SF
91	STA 11+18.62	TO STA	11+28.23	=	9.61	FT X (	36.8	+	57.2	) /	2		=	451.67	SF
92	SUM LINES 83	TO	91										=	8514.84	SF
93	LINE 92	=	8514.84	SF	/	9							=	946.09	SY
												TOTAL CARRIED TO GENERAL SUMMARY	=	**947**	SY
	659 EMBANKMENT														
94	STA 7+28.88	TO STA	9+51.63	=	222.75	FT	x (24	FT. +	24	FT.) /	2		=	5346.00	SF
95	SUM LINES 84												=	132.13	SF
96	SUM LINE 94	AND	95										=	5478.13	SF
97	LINE 96			=	5478.13	SF X (	15	" /	12	) /	27		=	253.62	CY
												TOTAL CARRIED TO GENERAL SUMMARY	=	**254**	**CY**

CONTINUED ON NEXT SHEET

CALCULATED MES
CHECKED ALP

CALCULATIONS

STA-3RD ST. S.E.

LINE	DESCRIPTION	CALCULATION												QUANTITY
	202 WALK REMOVED													
98	STA 5+33.59	TO STA	6+01.29	LT. =	67.7	FT	X (	4.9	FT. +	4.9	FT.) /	2	=	331.73 SF
99	STA 5+62.84	TO STA	5+91.80	LT. =	35	FT	X (	4.9	FT. +	4.9	FT.) /	2	=	171.50 SF
100	STA 9+35.58	TO STA	9+51.63	LT =	16.05	FT	x (	4	FT. +	4	FT.) /	2	=	64.20 SF
101	STA 10+49.51	TO STA	10+54.60	LT =	5.09	FT	x (	4	FT. +	4	FT.) /	2	=	20.36 SF
102	STA 11+17.19	TO STA	11+29.13	LT =								COMPUTER GENERATED AREA	=	49.10 SF
103	STA 11+61.42	TO STA	11+75.00	LT =	13.58	FT	x (	4.5	FT. +	4.8	FT.) /	2	=	63.15 SF
104	STA 5+34.26	TO STA	5+60.26	RT =	26.00	FT	x (	4.9	FT. +	4.9	FT.) /	2	=	127.40 SF
105	STA 8+20.02	TO STA	9+51.63	RT =	131.61	FT	x (	4.4	FT. +	4.2	FT.) /	2	=	565.92 SF
106	STA 10+48.37	TO STA	10+54.58	RT =	6.21	FT	x (	4	FT. +	3.7	FT.) /	2	=	23.91 SF
107	STA 11+56.06	TO STA	11+75.00	RT =	18.94	FT	x (	4.7	FT. +	5.1	FT.) /	2	=	92.81 SF
108	SUM LINES 98	TO	107	=	1510.08	SF			/	9			=	167.79 SY
												TOTAL CARRIED TO GENERAL SUMMARY	=	**168 SY**
	202 CURB REMOVED													
109	STA 5+32.08	TO STA	5+80.66	LT.									=	69.00 FT
110	STA 5+32.08	TO STA	6+03.35	LT.									=	71.30 FT
111	STA. 7+30.00	TO STA	9+50.50	LT.									=	220.50 FT.
112	STA. 11+16.00	TO STA	11+29.00	LT.									=	21.00 FT.
113	STA. 11+50.72	TO STA	11+75.00	LT.									=	33.00 FT.
114	STA 5+44.29	TO STA	5+50.29	RT.									=	6.00 FT
115	STA 9+36.64	TO STA	9+50.38	RT.									=	13.70 FT
116	STA. 10+49.59	TO STA	10+57.14	RT.									=	7.60 FT.
117	STA. 11+12.56	TO STA	11+26.88	RT.									=	20.00 FT.
118	STA. 11+46.95	TO STA	11+56.38	RT.									=	15.50 FT.
119	STA. 11+56.38	TO STA	11+75.00	RT.									=	18.60 FT.
	WARNER ROAD													
120	LEFT												=	71 FT.
121	RIGHT												=	72.4 FT.
122	SUM LINES 109	TO	121										=	639.60 FT.
												TOTAL CARRIED TO GENERAL SUMMARY	=	**640 FT.**
	607 FENCE, TYPE CL													
123	STA. 10+58.07	TO STA	11+14.53	RT.									=	56.50 FT.
124	STA. 11+14.53	TO STA	11+21.76	RT.									=	17.00 FT.
125	SUM LINES 123	TO	124										=	73.50 FT.
												TOTAL CARRIED TO GENERAL SUMMARY	=	**74 FT.**
	607 FENCE, MISC.: DECORATIVE FENCE (GROUND MOUNTED)													
126	STA. 10+51.00	TO STA	10+61.00	RT.									=	10.00 FT.
127	SUM LINES 126												=	10.00 FT.
												TOTAL CARRIED TO GENERAL SUMMARY	=	**10 FT.**
	623 MONUMENT BOX ADJUSTED TO GRADE													
128	STA. 5+53.19												=	1.00 EACH
129	SUM LINES 128												=	1.00 EACH
												TOTAL CARRIED TO GENERAL SUMMARY	=	**1 EACH**

CONTINUED ON NEXT SHEET

CALCULATED MES
CHECKED ALP

CALCULATIONS

STA-3RD ST. S.E.

LINE	DESCRIPTION	CALCULATION	QUANTITY
	EROSION CONTROL		
	659 SEEDING AND MULCHING		
1	TOTAL SEEDING AND MULCHING FROM PLAN	=	1030.00 SY
2	LINE 1	=	1030.00 SY
		TOTAL CARRIED TO GENERAL NOTES =	**1030 SY**
	659 REPAOR SEEDING AND MULCHING		
3	LINE 2 = 1030.00 SY X 5%	=	51.5 SY
		TOTAL CARRIED TO GENERAL NOTES =	**52 SY**
	659 TOPSOIL		
4	LINE 2 = 1030.00 SY X 111 CY / 1000 SY	=	114.33 CY
		TOTAL CARRIED TO GENERAL NOTES =	**115 CY**
	659 COMMERCIAL FERTILIZER		
5	LINE 2 = 1030.00 SY X 1 TON / 7410 SY)	TOTAL 659 =	0.14 TON
		TOTAL CARRIED TO GENERAL NOTES =	**1 TON**
	659 LIME		
6	LINE 2 = 1030.00 SY / 4840 SY PER ACRE)	TOTAL 659 =	0.21 ACRE
		TOTAL CARRIED TO GENERAL NOTES =	**1 ACRE**
	659 WATER		
7	LINE 2 = 1030.00 SY X 0.0027 M GAL / SY X 2 APPLICATIONS)	TOTAL 659 =	5.56 MGAL
		TOTAL CARRIED TO GENERAL NOTES =	**6 MGAL**
	659 SOIL ANALYSIS TEST		
8	LINE 4 = 114.33 CY X 1.00 TEST / 10000 CY (MINIMUM OF 2 TESTS)	TOTAL 659 =	0.01 EACH
		TOTAL CARRIED TO GENERAL NOTES =	**2 EACH**

CALCULATED MES
CHECKED ALP

CALCULATIONS

STA-3RD ST. S.E.

19
59

DRAINAGE SUBSUMMARY

SHEET NO.	REFERENCE	STATION FROM	STATION TO	SIDE	202 PIPE REMOVED, 24" AND UNDER	202 CATCH BASIN REMOVED	202 SPECIAL - PIPE CLEANOUT, 24" AND UNDER	611 12" CONDUIT, TYPE B	611 15" CONDUIT, TYPE B	611 15" CONDUIT, TYPE C	611 CATCH BASIN, NO. 3	611 CATCH BASIN, NO. 5 WITH B GRATE	611 CATCH BASIN, NO. 6	611 CATCH BASIN ADJUSTED TO GRADE	611 CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	611 MANHOLE RECONSTRUCTED TO GRADE
		FROM	TO		FT	EACH	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH
36		7+27.96		RT		1.0		4.0		4.0	1.0					
36		7+28.60		LT		1.0		4.0			1.0					
36		7+27.96	7+28.60	LT/RT			28.0									
36		7+27.96	8+66.04	RT			138.1									
36		8+66.04	8+79.91	RT				20.0								
36		8+65.59		LT									1.0			
36		8+65.59	8+66.04	LT/RT				53.0								
36		11+17.50		LT	4.0	1.0			4.0			1.0				
36		11+20.00		RT					8.0			1.0				
36		11+13.50	11+20.52	RT	9.0	1.0										
36		11+20.52		RT												1.0
36		11+27.89		RT										1.0		
36		11+29.85		LT										1.0		
36		11+45.40		RT										1.0		
36		11+59.04		RT										1.0		
36		11+63.73		LT										1.0		
				TOTAL	13.0	4.0	166.1	81.0	12.0	4.0	2.0	2.0	1.0	5.0	0	1.0
TOTALS CARRIED TO GENERAL SUMMARY					13	4	167	81	12	4	2	2	1	5	0	1

DRIVEWAY SUBSUMMARY

SHEET NO.	REFERENCE	STATION	SIDE	DRIVE AREA (COMPUTER AREA)	203 EXCAVATION	452 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1	452 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1	204 SUBGRADE COMPACTION
				SF	CY	SY	SY	SY
36		8+17.42	RT	252.0	4.7		28.0	28.0
36		8+75.00	RT	155.9	2.9	17.3		17.3
36		9+03.29	LT	789.1	14.6	87.7		87.7
36		10+72.41	LT	1198.0	22.2		133.1	133.1
			TOTAL	2395.0	44.4	105.0	161.1	266.1
TOTALS CARRIED TO GENERAL SUMMARY					45	105	162	267

CALCULATED MES
CHECKED PRS

SUBSUMMARIES

STA-3RD ST. S.E.

TRAFFIC CONTROL SUBSUMMARY

SHEET NO.	REFERENCE	STATION FROM	STATION TO	SIDE	CODE	SIZE IN x IN	630 GROUND MOUNTED SUPPORT, NO. 3 POST FT	630 SIGN POST REFLECTOR EACH	630 SIGN, FLAT SHEET SF	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL EACH	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL EACH	630 REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL EACH	644 EDGE LINE, 4" MILE	644 CENTER LINE MILE	644 CROSSWALK LINE FT	644 LANE ARROW EACH	644 YIELD LINE FT
35		4+85.75	5+54.80	LT									80.4	69.05	48		
35		5+54.80	5+87.11	LT									58.2	32.31	40.0		17.0
35		5+72.77	5+87.11	RT									14.3				
35		5+87.11	6+25.00										37.89	37.89		1.0	
35-36		6+25.00	7+41.37											116.37			
36		11+27.50	11+47.50	RT											41.0		
36		11+29.00	11+51.00	LT											42.0		
36		11+47.50	11+55.40	LT/RT											86.0		
35		105+35.50	105+19.00	RT	W1-8L	18 x 24	12.5		3.00	1	1						
35		105+46.00		LT	R5-1	30 x 30	13.0		6.30								
35		105+76.00		LT	R6-2R	24 x 30	13.0		5.00								
35		105+56.22	106+00.00	RT	W1-8L	18 x 24	12.5		3.00	1	1						
35		105+74.72		RT	W1-8L					1	1						
35		6+13.48	6+00.00	RT	R7-1D	12 x 18	12.0		1.50	1		1					
36		7+03.93		RT	W3-1					1	1						
36		8+23.74		RT	R12-H5					1		1					
36		11+07.46		RT	R1-1					1	1						
					3 WAY					1							
36		11+13.77	11+13.77	LT	R1-1	30 x 30	13.0	1.0	6.30	1	1						
					R6-2R					1							
					R5-1					1							
					SPECIAL	24 x 24			4.00								
36			11+20.00	LT	R6-1R	36 x 12	25.0		3.00								
				LT	R6-1L	36 x 12			3.00								
36			11+21.00	LT	OM1-1	18 x 18	12.0		2.30								
35			4+85.00	RT	W14-1	30 x 30	13.0		6.30								
36			9+30.00	LT/RT	OM4-1	18 x 18	12.0		2.30								
36			9+30.00	LT/RT	OM4-1	18 x 18	12.0		2.30								
36			9+30.00	LT/RT	OM4-1	18 x 18	12.0		2.30								
36			10+52.00	LT/RT	OM4-1	18 x 18	12.0		2.30								
36			10+52.00	LT/RT	OM4-1	18 x 18	12.0		2.30								
36			10+52.00	LT/RT	OM4-1	18 x 18	12.0		2.30								
35			5+75.00	LT	R1-2	36 x 36	32.0	2.0	9.00								
					R6-2R	24 x 30			5.00								
35			5+35.00	LT	R1-6	12 x 36	7.5		3.00								
35			5+35.00	RT	R1-6	12 x 36	7.5		3.00								
35			5+63.00	LT	W1-8R	18 x 24	6.5		3.00								
						TOTAL	251.5	3.0	80.5	11.0	6.0	2.0	198.8	255.6	257.0	1.0	17.0
						COVERT FEET TO MILES WHERE APPLICABLE							0.04	0.05			
TOTALS CARRIED TO GENERAL SUMMARY							**252**	**3**	**81**	**11**	**6**	**2**	**0.04**	**0.05**	**257**	**1**	**17**

CALCULATED MES
CHECKED PRS

SUBSUMMARIES

STA-3RD ST. S.E.

CROSS REFERENCES	
3-4	TYPICAL SECTIONS
32-33	INTERSECTION DETAILS
35-36	TRAFFIC CONTROL

ROADWAY LEGEND

- PLANING AND RESURFACING (THK. = 3")
- FULL DEPTH PAVEMENT (8" - 452 ON 6" - 304)
- (*) DO NOT DISTURB
- (**) TO BE RELOCATED BY OTHERS
- (M) MONUMENT BOX ADJUSTED TO GRADE
- CONSTRUCTION LIMITS

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

CALCULATED PRS | CHECKED MES

PT STA. 106+56.69

℄ RIVERSIDE DR. S.E.

PC Sta. 104+15.44

2 STORY FRAME RES.

ASPHALT

MATTHEW W. WEIDA PPN 221119

PPN 221118

EX. UTILITY POLE

SAW CUT (TYP.)

BUTT JOINT AS PER BP-3.1

℄ R/W & CONST. 3RD ST. S.E.

30'

STA. 7+00

MATCHLINE

BEGIN WORK STA. 4+76

STA. 3+97.65, 17.25' RT.
EX. CB
TOP OF GRATE EL. 1033.12
℄ 12" (N.) EL. 1028.12

STA. 4+09.89, 33.04' LT.
EX. ST. MH
TOP OF COVER EL. 1034.05
℄ 18" (W.) EL. 1027.77
℄ 18" (N.E.) EL. 1027.77

STA. 3+97.65, 17.56' LT.
EX. CB
TOP OF GRATE EL. 1033.07
℄ 12" (S.) EL. 1027.72
℄ 18" (N.E.) EL. ?

STA. 5+09.38, 10.01' RT.
EX. SAN. MH
TOP OF COVER EL. 1033.05
℄ 8" (W.) EL. 1024.33
℄ 18" (N.E.) EL. 1023.57
℄ 18" (S.W.) EL. 1023.57

STA. 5+10.76, 25.28' LT.
EX. SAN. MH
TOP OF COVER EL. 1032.55
℄ 18" (E.) EL. 1023.53
℄ 18" (S.) EL. 1023.49
℄ 18" (N.) EL. 1023.48

EX. GAS

EX. 4" WATER LINE

EX. 8" SAN.

EX. 18" SAN.

1,040 / 1,035 / 1,030 / 1,025 / 1,020 / 1,015 / 1,010 / 1,005

1,033.36 | 1,033.30 | 1,033.23 | 1,033.14 | 1,033.12 | 1,033.02 | 1,032.95 | 1,032.78 | 1,033.31 | 1,033.21 | 1,033.16 | 1,033.05 | 1,032.87

4 5 6 7

PLAN AND PROFILE
STA. 2+00.00 TO STA. 7+00.00
STA-3RD ST. S.E.

22
59

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CROSS REFERENCES	
3-4	TYPICAL SECTIONS
32-33	INTERSECTION DETAILS
34	DRIVE DETAILS
35-36	TRAFFIC CONTROL

BEGIN PROJECT
STA. 7+25.05
E120 (673)

END PROJECT
STA. 11+28.23
E120 (673)

END WORK
STA. 11+78

STA. 11+38.29 ℄ R/W & CONST. 3RD ST. S.E. = STA. 50+00.00 ℄ R/W WARNER AVE.

B.M.#1: STA. 7+56.31, 37.14' LT.
SET ⅝" x 42" REBAR WITH BM CAP
ELEV. = 1034.01

B.M.#2: STA. 11+58.36, 41.89' LT.
SET CHISELED SQUARE IN S.E. COR. TOP CONC. STEP AT RESIDENT NO. 222 WARNER
ELEV. = 1033.63

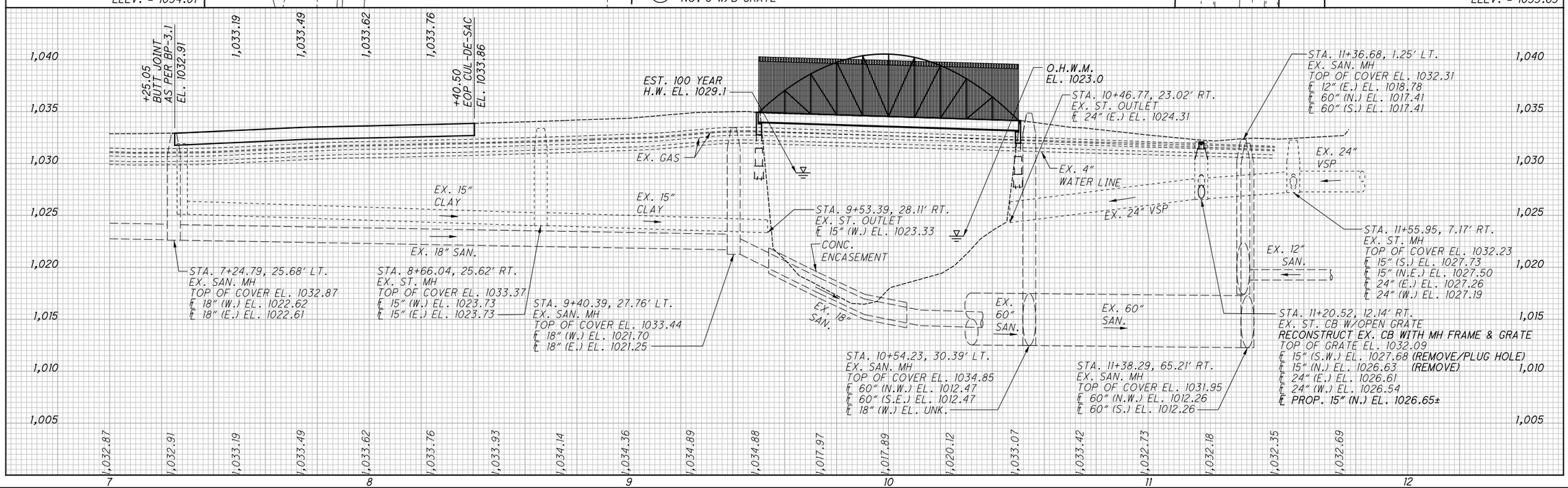
ROADWAY LEGEND

- (*) DO NOT DISTURB
- (**) TO BE RELOCATED BY OTHERS
- (CD) NEW CONCRETE DRIVE
- (2) NEW CATCH BASIN NO. 2-2B
- (5) NEW CATCH BASIN NO. 5 W/B GRATE
- (GR) GUARDRAIL, TYPE MGS
- (CA) CATCH BASIN ADJUSTED TO GRADE
- (SA) SANITARY MH ADJUSTED TO GRADE
- (VA) VALVE BOX ADJUSTED TO GRADE
- —•— CONSTRUCTION LIMITS

PAVEMENT LEGEND

PAVEMENT REMOVED

VACANT LAND
JAMES SR. &
LUCY MOORE
PPN 238899
D.V. 3713,
PG. 148



PLAN AND PROFILE
STA. 7+00.00 TO STA. 12+00.00
STA-3RD ST. S.E.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED PRS
CHECKED MES

23
59

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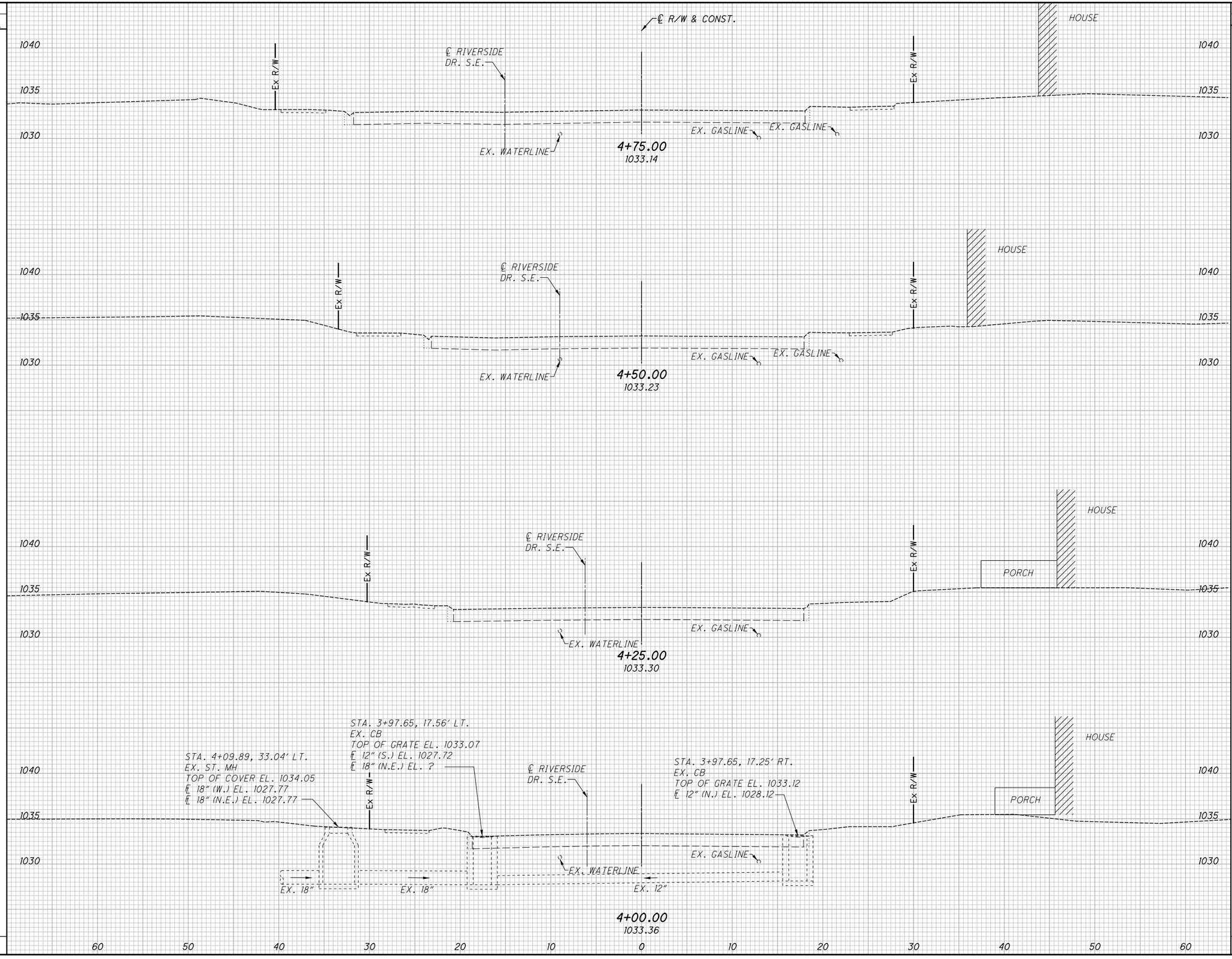
SEEDING	
END WIDTH	SQ. YDS.

END AREA	
CUT	FILL

VOLUME	
CUT	FILL

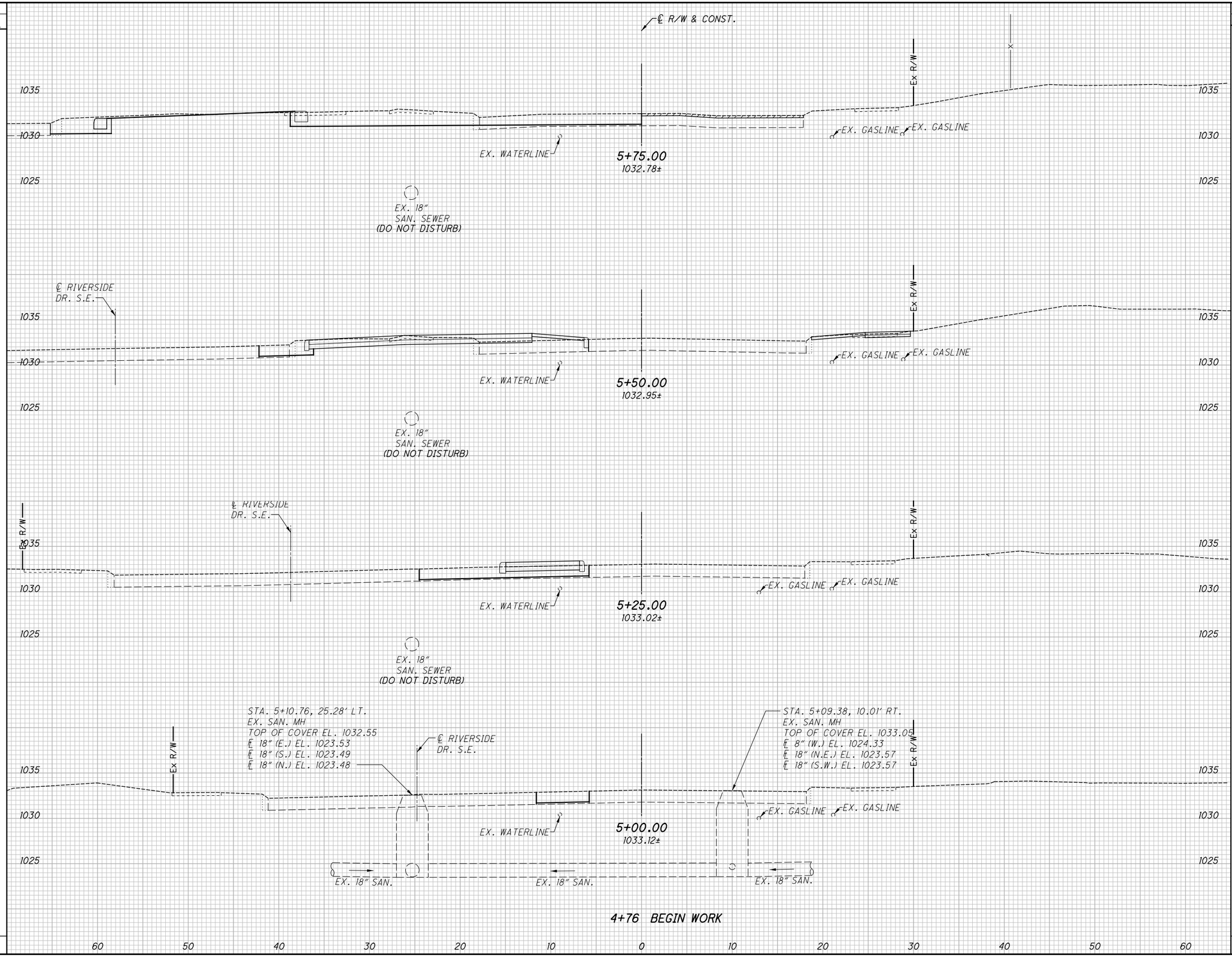
CALCULATED MES
CHECKED PRS



CROSS SECTIONS
STA. 4+00.00 TO STA. 4+75.00

STA-3RD. ST. S.E.

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
34	5		
		29	5
28	5		
		18	5
10	5		
		6	3
3	0		
		53	13

CALCULATED MES
CHECKED PRS

CROSS SECTIONS
STA. 5+00.00 TO STA. 5+75.00

STA-3RD. ST. S.E.

25
59

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SEEDING END WIDTH	SEEDING SQ. YDS.

	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
STA. 6+25 SUSPEND EARTHWORK	0	0		
			6	3
	11	5		
			21	5
STA. 5+75	34	5		
			27	8

CALCULATED MES
CHECKED PRS

CROSS SECTIONS
STA. 6+00.00 TO STA. 6+75.00

STA-3RD. ST. S.E.

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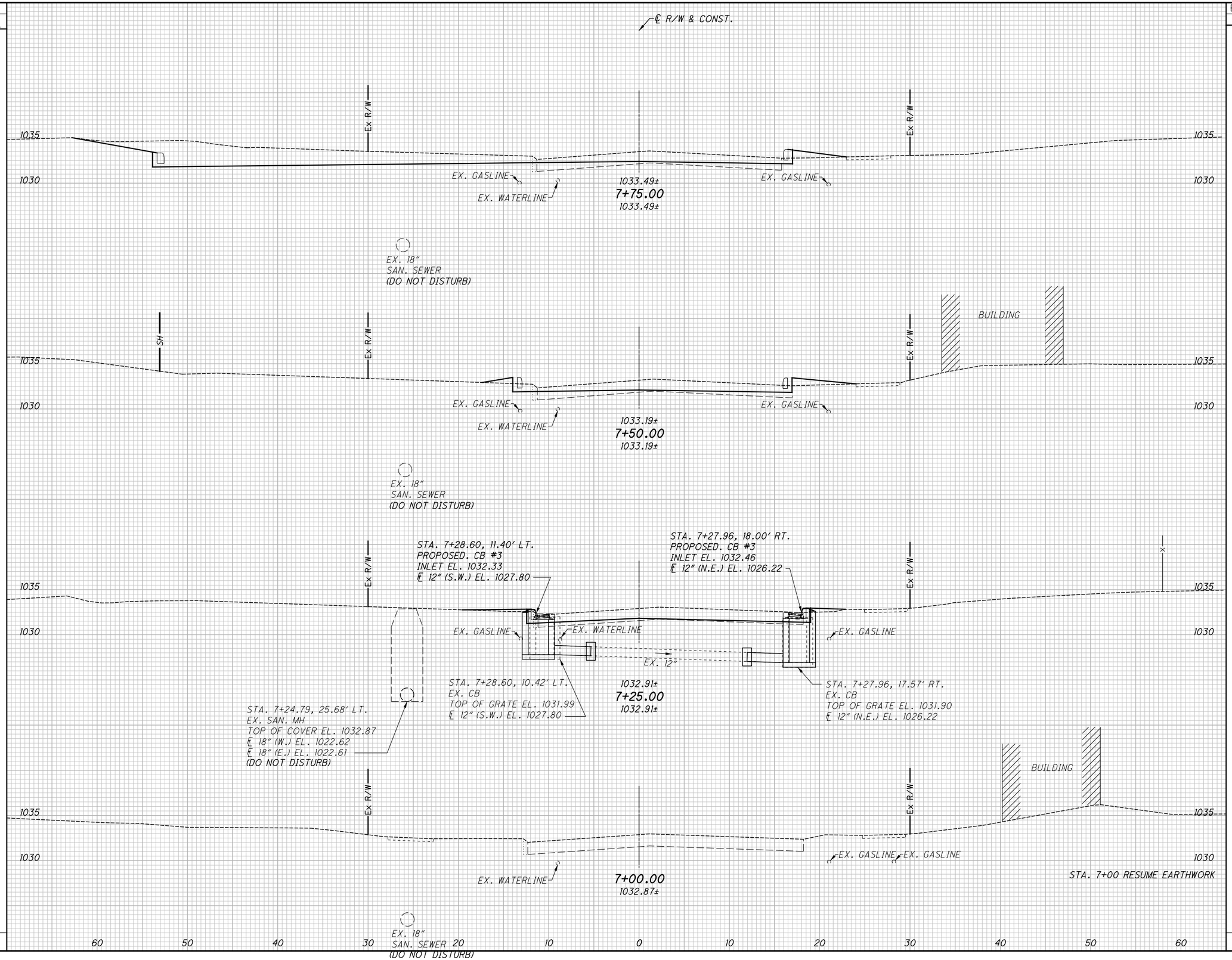
SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
88	5		
		47	5
13	6		
		12	4
13	2		
		6	1
0	0		
		65	10

CALCULATED MES
CHECKED PRS

CROSS SECTIONS
STA. 7+00.00 TO STA. 7+75.00
STA-3RD. ST. S.E.

27
59

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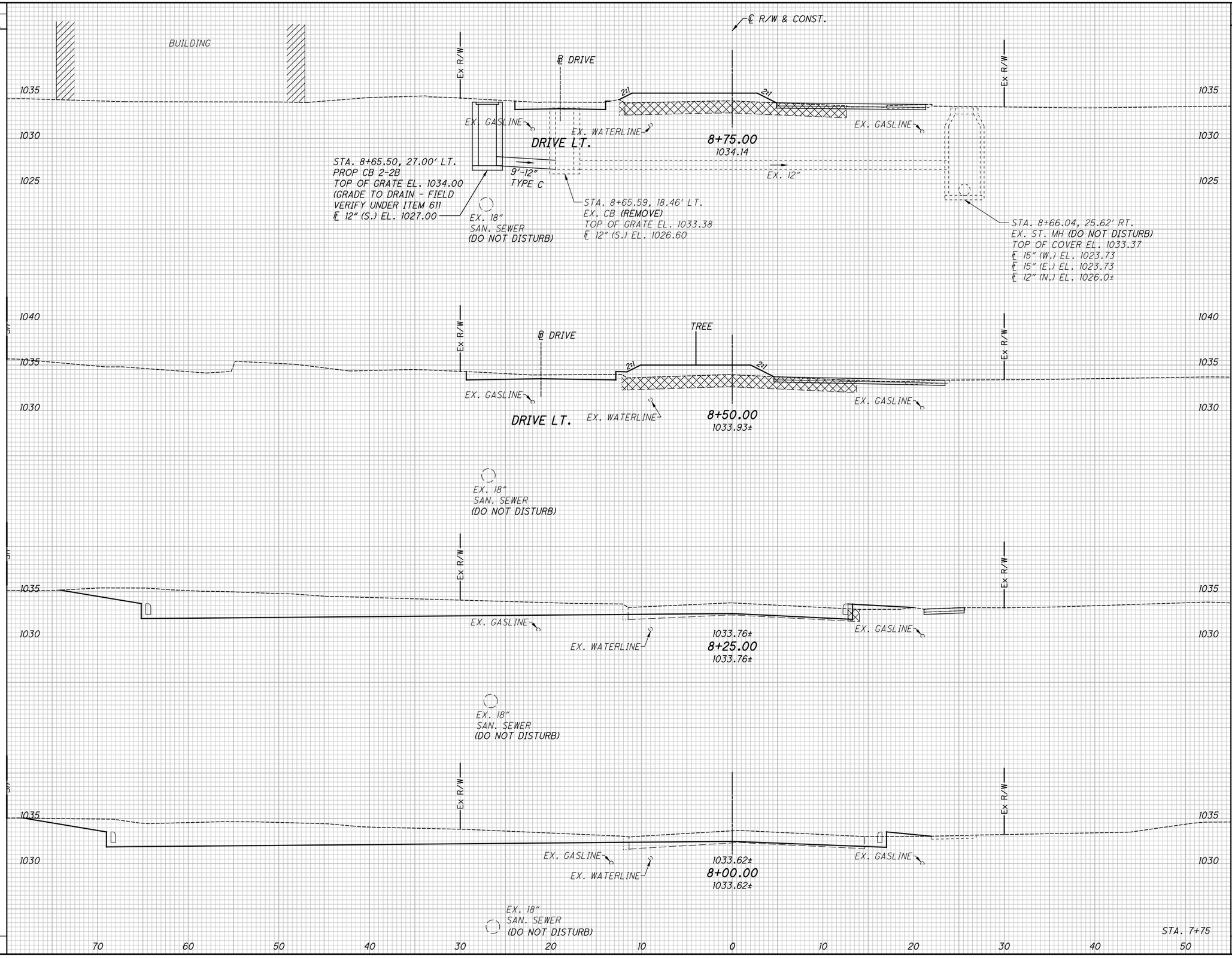
SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
15	52		
		16	49
19	53		
		73	27
138	5		
		126	5
134	5		
		103	5
88	5		
		318	86

CALCULATED MES
CHECKED PRS

CROSS SECTIONS
STA. 8+00.00 TO STA. 8+75.00

STA-3RD. ST. S.E.

28
59

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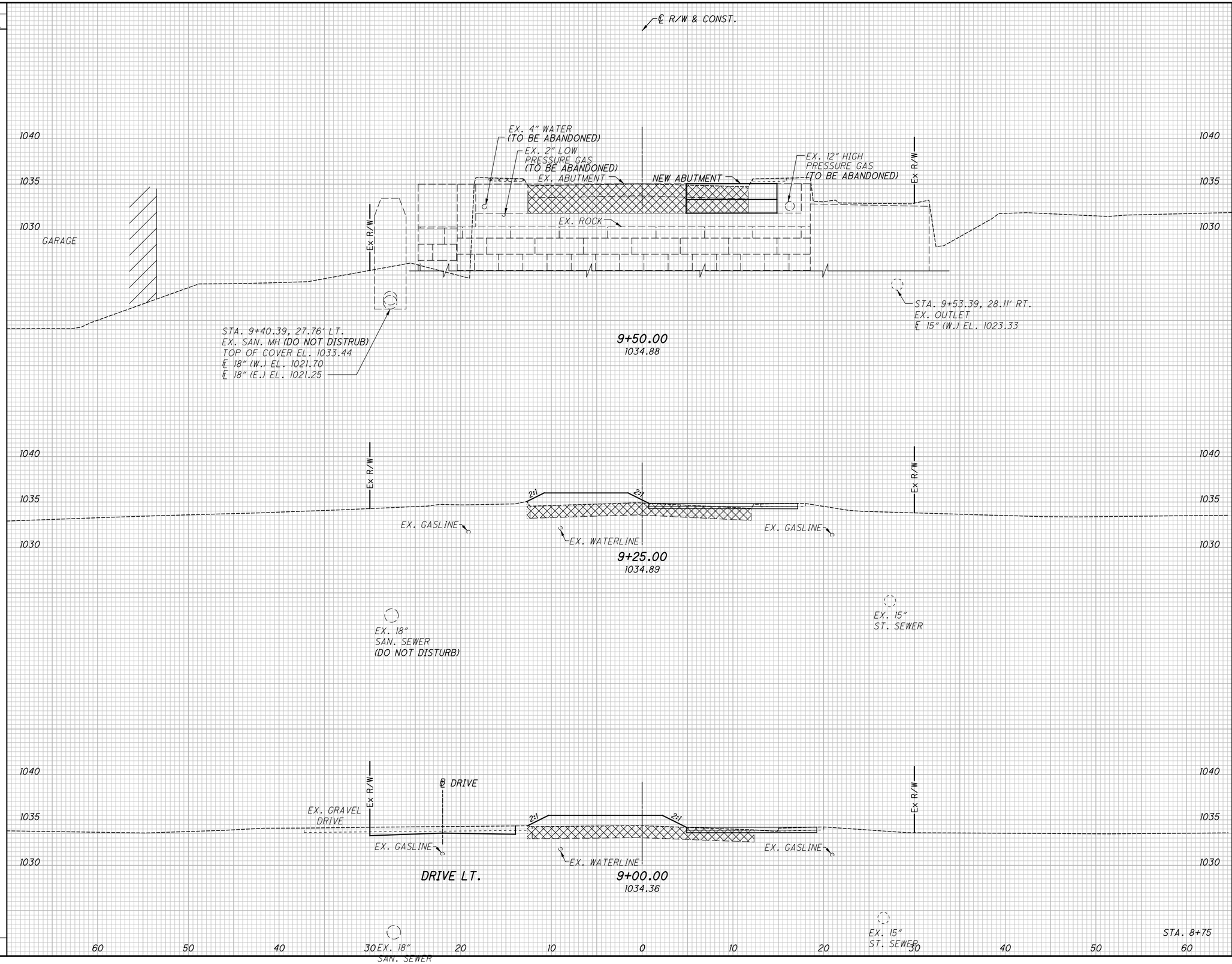
SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	76		
		4	60
7	52		
		12	50
19	55		
		16	50
15	52		
		32	160

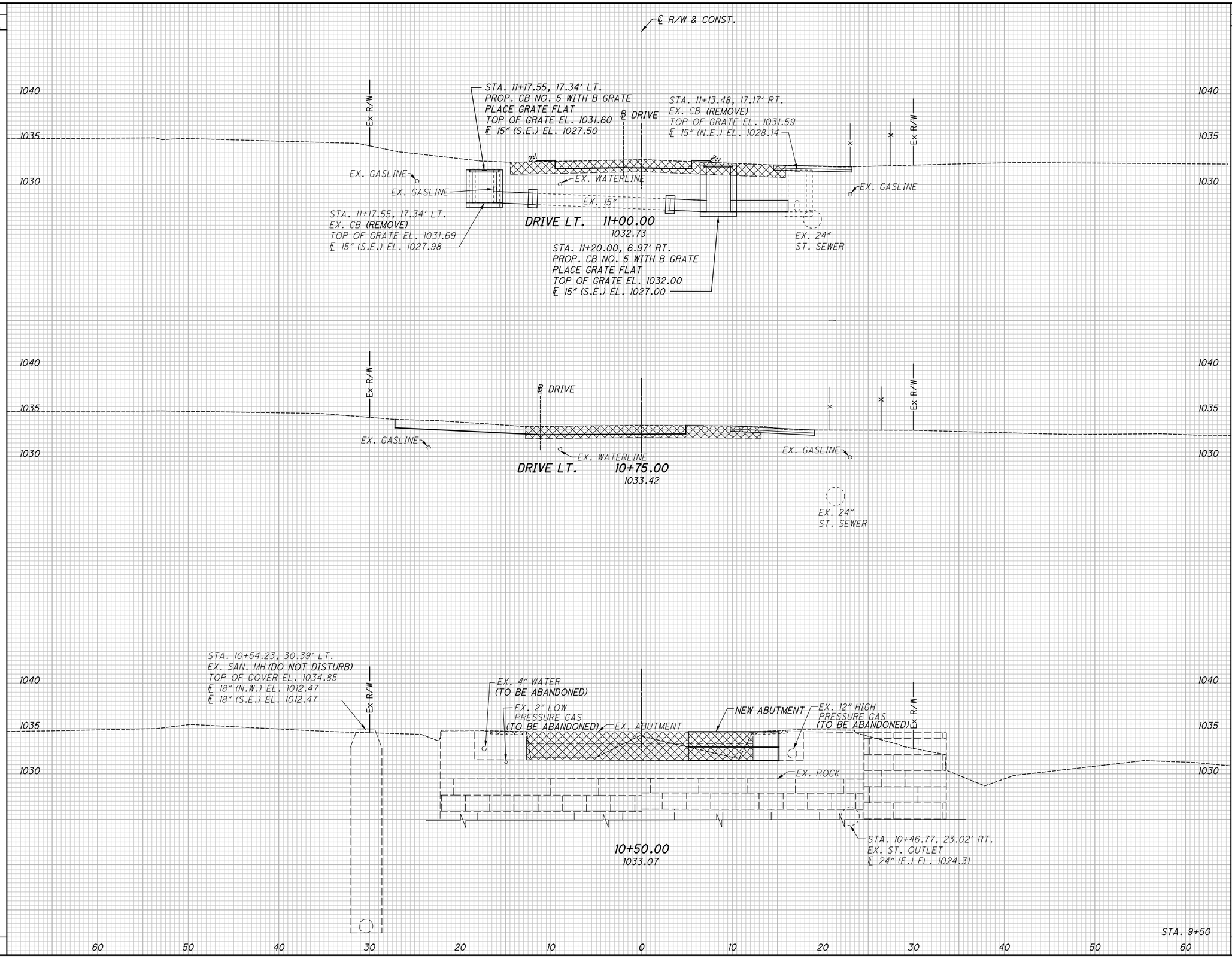
CALCULATED MES
CHECKED PRS

CROSS SECTIONS
STA. 9+00.00 TO STA. 9+50.00

STA-3RD. ST. S.E.

29
59

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
20	41		
		19	36
20	36		
		10	55
0	82		
		0	74
0	76		
		29	165

CALCULATED MES
CHECKED PRS

CROSS SECTIONS
STA. 10+50.00 TO STA. 11+00.00
STA-3RD. ST. S.E.

30
59

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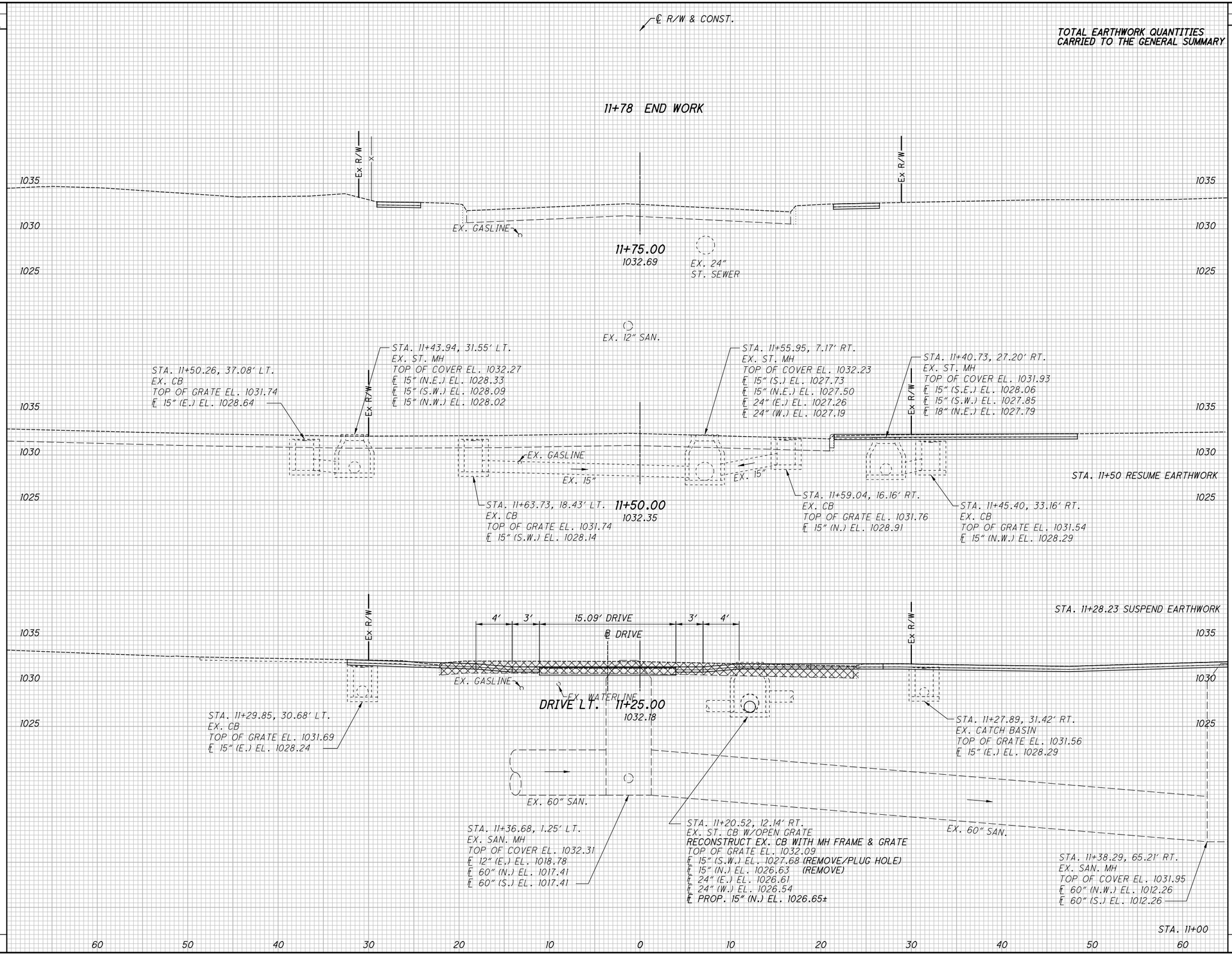
SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		550	500
0	0		
		1	1
6	5		
		11	5
16	5		
0	0		
		1	4
8	62		
		13	48
20	41		
		26	58

CALCULATED MES
CHECKED PRS

CROSS SECTIONS
STA. 11+25.00 TO STA. 11+75.00
STA-3RD. ST. S.E.

ISLAND ELEVATIONS

(F) STA. 105+18.35, 20.02' RT.
℄ RIVERSIDE DR. S.E.
1032.75± F.C.
1033.25± B.C.

(G) STA. 5+27.13, 5.80' LT.
℄ R/W & CONST. 3RD ST. S.E.
1032.91± F.C.
1033.41± B.C.

(H) STA. 105+46.90, 14.95' RT.
℄ RIVERSIDE DR. S.E.
1032.29± F.C.
1032.79± B.C.

(I) STA. 105+51.52, 21.77' RT.
℄ RIVERSIDE DR. S.E.
1032.60± F.C.
1033.10± B.C.

(J) STA. 5+65.78, 14.17' LT.
℄ R/W & CONST. 3RD ST. S.E.
1032.70± F.C.
1033.20± B.C.

(K) STA. 5+62.13, 5.80' LT.
℄ R/W & CONST. 3RD ST. S.E.
1032.75± F.C.
1033.25± B.C.

RAD. = 32' AT RT. EDGE OF PAVEMENT
RAD. = 52' AT LT. EDGE OF PAVEMENT
Δ = 128°40'35"
ARC LENGTH AT E.P. = 71.87' (32' RAD.)
1/4 POINT LENGTH = 17.97'

(A) 1032.18± F.C. ME
1032.68± B.C.

(B) 1032.35± F.C.
1032.85± B.C.

(C) 1032.50± F.C.
1033.00± B.C.

(D) 1032.40± F.C.
1032.90± B.C.

(E) 1032.34± F.C. ME
1032.84± B.C.

P.O.T.
Ex R/W
P.O.F.
PC Sta. 104+15.44
℄ RIVERSIDE DR. S.E.
EX. CONC. PAVEMENT
EX. JOINT
CURB, TYPE 2A
EDGE LINE
EX. JOINT
EX. ASPHALT SURFACE WITH CONC. BASE
℄ R/W & CONST. 3RD ST. S.E.
EX. CONC. PAVEMENT
35' CURB, TYPE 6
ON-STREET PARKING
STA. 5+00, 6' RT.
END ON STREET PARKING
STA. 6+25, 12' RT.
125' LANE SHIFT
DESIGN SPEED = 35 MPH
CENTER LINE ON TANGENT
STA. 6+25 TO STA. 8+60
S 76° 04' 12" E
104
4
5
6
5'R.
10'
6'
5'
2'
18'
12'±
6'±
5.8'±
15.7'±
17.7'±
+91.6±
+84.3
+63.6±
+101.3
+27.13
+62.13
+72.9
12.75' R.
14.0'±
2.0'±
12.0'±
106
1031.53±
1031.74±
1031.83± ME
1031.90±
1032.01± ME
1032.17± ME
1032.11±
1032.24±
1032.50± ME
1032.62±
1032.77±
1032.91±
1033.16±
1032.96± ME
1032.83± ME
1032.99± ME
1033.23±
1033.14±
1033.12±
1032.90± ME
1033.02±
1032.83± ME
1032.95±
1032.87± ME
1032.29± ME
1033.32± ME
1033.13±
1033.31±
1033.21± ME
1032.55± ME
1032.72± ME
1032.67± ME
1032.83±
1032.64±

LEGEND

- PLANING AND RESURFACING (THK. = 3")
- FULL DEPTH PAVEMENT (8" 452 - NON-REINFORCED CONC. (6" 304 - AGGREGATE BASE)
- (A1) CURB RAMP TYPE A-1
- (A2) CURB RAMP TYPE A-2
- 000.00± EXISTING ELEVATION
- ME MEET EXISTING
- SAW CUT LINE
- 000.00 F.C. FACE OF CURB
- 000.00 B.C. BACK OF CURB
- [M] EXIST. MONUMENT BOX

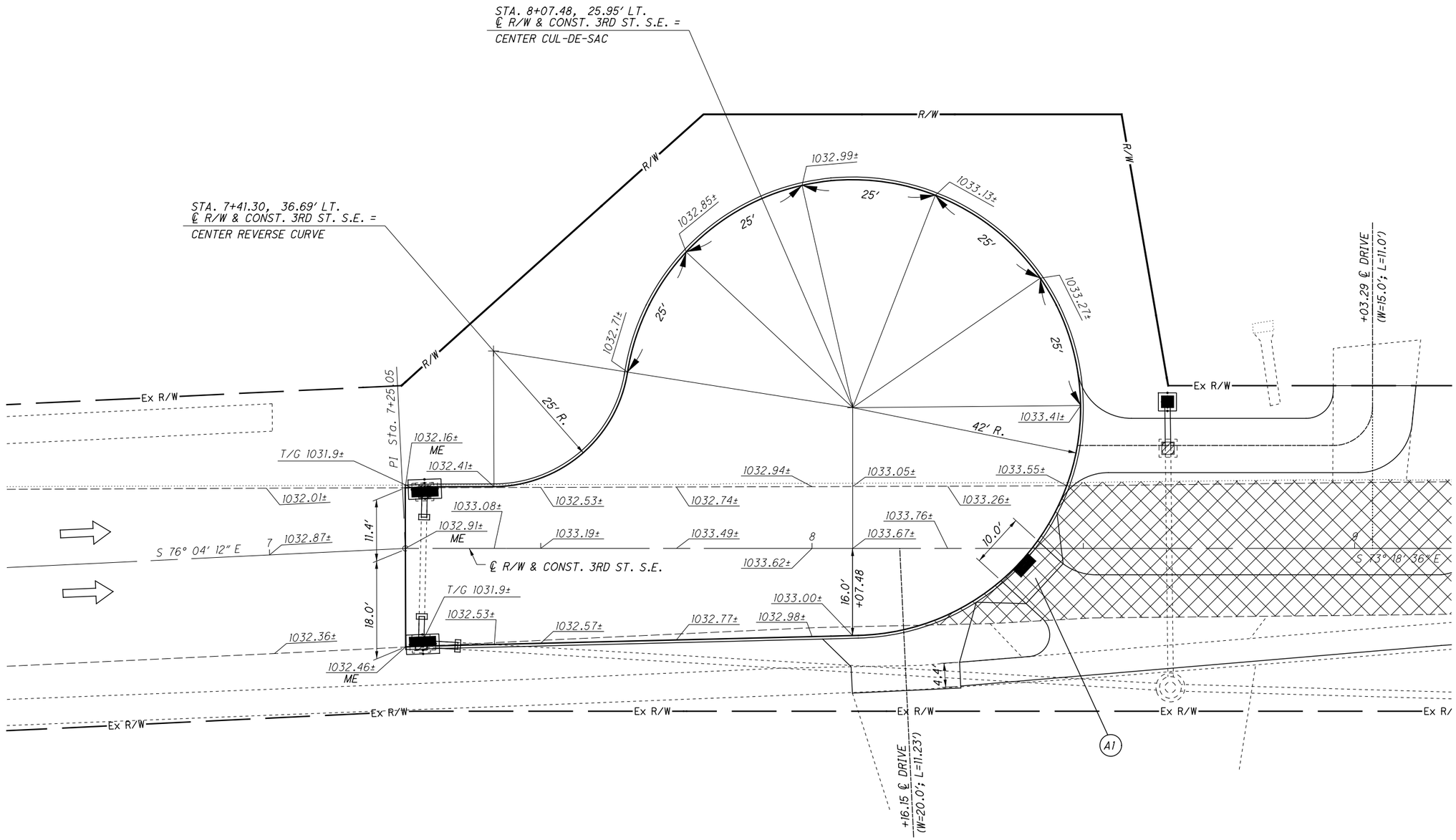
NOTE:
FOR TYPICAL SECTION SEE SHEET 4

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED PRS
CHECKED MES

INTERSECTION DETAIL

STA-3RD ST. S.E.



LEGEND

PAVEMENT REMOVED

A1 CURB RAMP TYPE A-1

000.00± EXISTING ELEVATION

ME MEET EXISTING

SAW CUT LINE

000.00 F.C. FACE OF CURB
000.00 B.C. BACK OF CURB

M EXIST. MONUMENT BOX

NOTE:
FOR TYPICAL SECTION SEE SHEET 4

HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED PRS
CHECKED MES

INTERSECTION DETAIL

STA-3RD ST. S.E.

33
59

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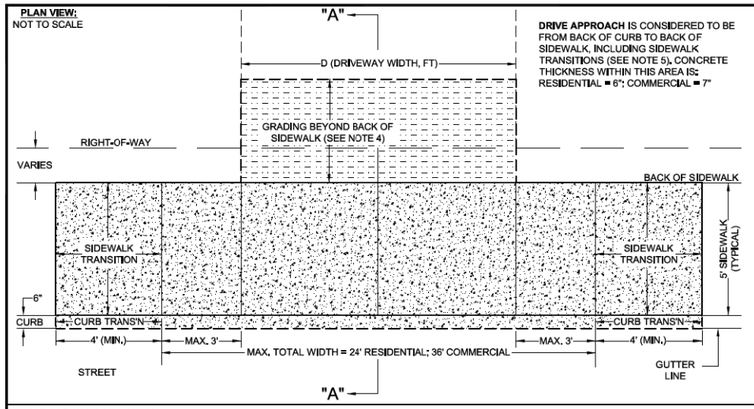
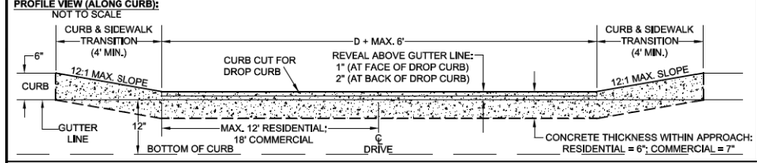
PLAN VIEW:
NOT TO SCALE

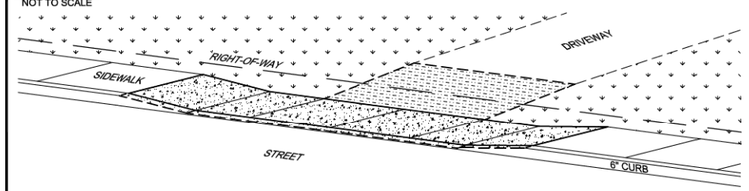


DRIVE APPROACH IS CONSIDERED TO BE FROM BACK OF CURB TO BACK OF SIDEWALK, INCLUDING SIDEWALK TRANSITIONS (SEE NOTE 5). CONCRETE THICKNESS WITHIN THIS AREA IS:
RESIDENTIAL = 6"; COMMERCIAL = 7"

PROFILE VIEW (ALONG CURB):
NOT TO SCALE

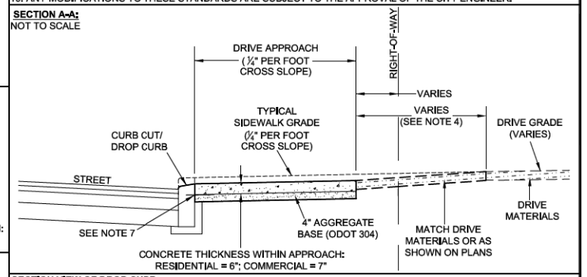


ISOMETRIC VIEW:
NOT TO SCALE

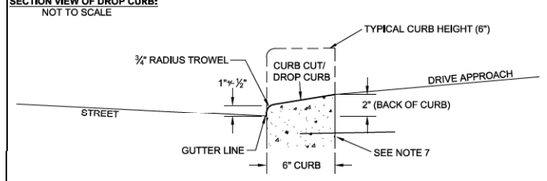


NOTES:
1. SIDEWALKS, CURBS, AND DRIVEWAYS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE CITY OF CANTON SPECIFICATIONS FOR THE CONSTRUCTION, REPAIR, AND REPLACEMENT OF SIDEWALKS, CURBS, AND DRIVEWAYS.
2. ODOT REFERENCES ARE FROM THE CURRENT ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS. ANY DISCREPANCIES SHALL BE SUBJECT TO THE CITY'S ENGINEER'S DISCRETION.
3. ALTERNATIVE DESIGNS MAY BE APPROVED OR REQUIRED BY THE CITY ENGINEER FOR COMMERCIAL DRIVES.
4. GRADE AS APPROPRIATE OR IN ACCORDANCE WITH PLANS TO PROVIDE ADEQUATE TRANSITION TO DRIVEWAY AND YARD. FOR CITY PROJECTS, GRADING AND MATERIALS SHALL BE PAID UNDER APPROPRIATE DRIVE RESTORATION ITEMS, ETC.
5. FOR CITY PROJECTS AND REIMBURSEMENT PROGRAM, DRIVE APPROACH PAY LIMITS SHALL CORRESPOND WITH DRIVE APPROACH LIMITS AS INDICATED HEREIN. DRIVE APPROACHES AND PAY LIMITS DO NOT INCLUDE ANY CONCRETE PORTION OF DRIVE BEYOND BACK OF SIDEWALK, OR ANY OTHER WORK NOT DIRECTLY RELATED TO THE CONSTRUCTION OF OF THE DRIVE APPROACH, THE COSTS ASSOCIATED WITH EXCAVATION, FORMING, GRADING, AND RESTORATION DIRECTLY RELATED TO THE DRIVE APPROACH AS WELL AS THE COSTS FOR THE CURB CUT/DROP CURB ARE INCIDENTAL TO THE COST OF THE DRIVE APPROACH.
6. DUE TO 1/4" PER FOOT CROSS SLOPE, BACK OF TYPICAL 5' SIDEWALK WITHIN APPROACH IS ONLY 3 ¼" ABOVE GUTTER LINE (EXCLUDING SIDEWALK TRANSITIONS). ALTERNATIVE DRIVE APPROACH OPTIONS MAY BE APPROVED OR REQUIRED WHEN DEPTH OF STORM WATER RUNOFF ALONG THE CURB IS ANTICIPATED TO RESULT IN EXCESSIVE PONDING WITHIN THE DRIVE APPROACH AREA OR CAUSE OTHER DRAINAGE PROBLEMS IN THE VICINITY.
7. CONNECT APRON TO CURB WITH DOWELS OR WIRE MESH. REFER TO CITY STANDARD DRAWING NO. 29 FOR COMBINED CURB AND SIDEWALK DETAILS.
8. PLACE 1/2" EXPANSION JOINTS AGAINST EXISTING CONCRETE DRIVES AND WALKS, BUILDING WALLS AND OTHER FIXED OBJECTS.
9. WHEN THE LOCATION OF THE DRIVE APPROACH IS UNKNOWN AT THE TIME OF CURB CONSTRUCTION, THE DROP MAY BE SAW-CUT WITH THE CITY ENGINEER'S APPROVAL.
10. ANY MODIFICATIONS TO THESE STANDARDS ARE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.

SECTION A-A:
NOT TO SCALE



SECTION VIEW OF DROP CURB:
NOT TO SCALE



OFFICE OF THE CITY ENGINEER
CANTON, OHIO
DANIEL J. MOEGLIN, P.E., CITY ENGINEER
2436 30th St. NE 44705 : 330-489-3381 : www.cantonohio.gov/engineering

APPROVED DATE: MAR. 2012

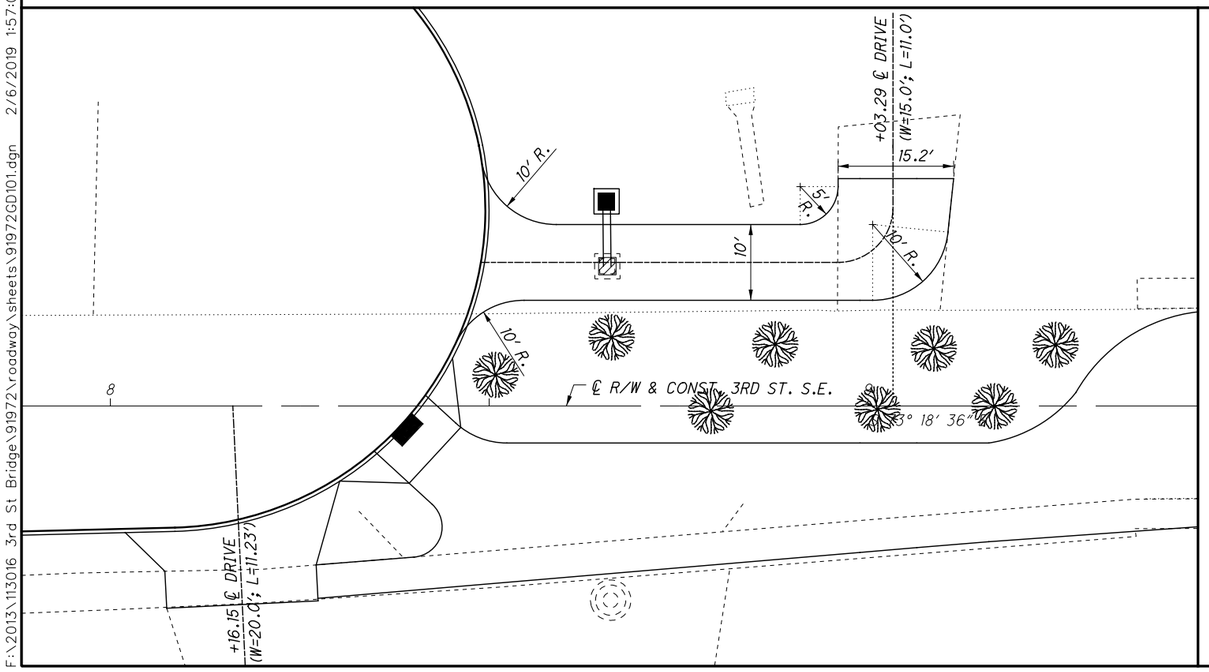
APPROVED BY: CDB, RMB, SLH

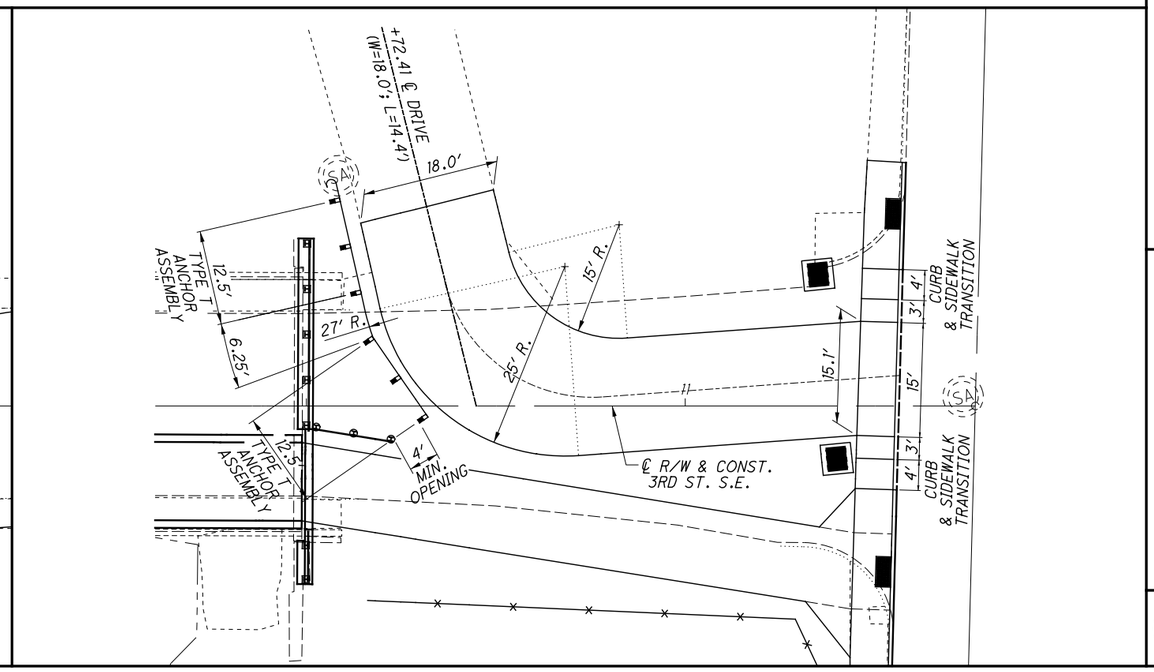
DRAWING FILE NAME: **ce_28.dwg**

REVISIONS

DESCRIPTION	DATE	BY
NOTE MODIFICATIONS	4/10/12	CDB
MINOR FORMAT EDIT	6/4/12	CDB
NOTE MODIFICATIONS	7/23/12	CDB
NOTE 7 MODIFICATIONS	8/15/2017	RMB

STANDARD DRAWING NO. 28
DRIVE APPROACH
WITH SIDEWALK AGAINST CURB
SHEET 1 OF 1





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HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED PRS
CHECKED MES

DRIVE DETAILS

STA-3RD ST. S.E.

34
59

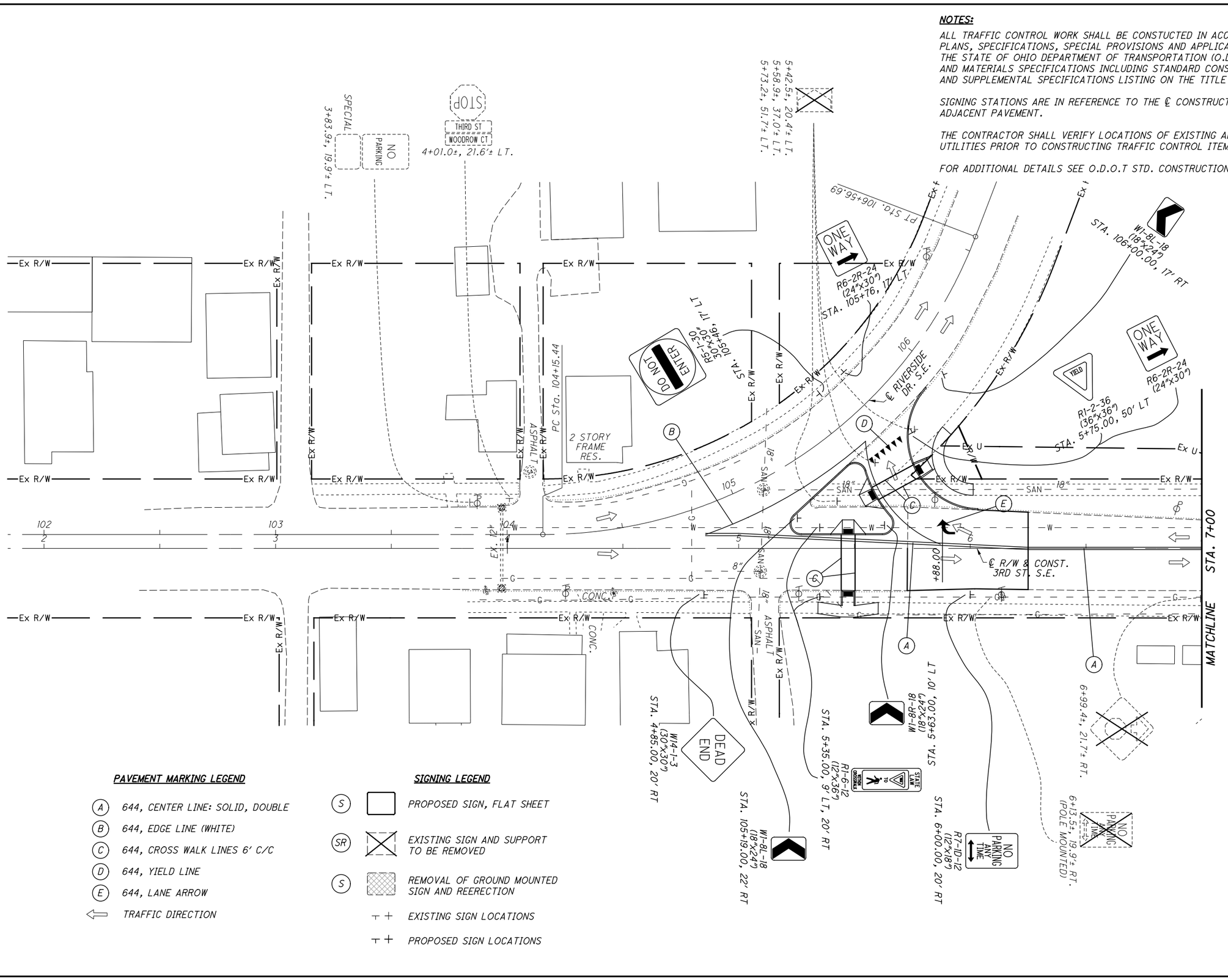
NOTES:

ALL TRAFFIC CONTROL WORK SHALL BE CONSTUCTED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, SPECIAL PROVISIONS AND APPLICABLE SECTIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION (O.D.O.T.) CONSTRUCTION AND MATERIALS SPECIFICATIONS INCLUDING STANDARD CONSTRUCTION DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS LISTING ON THE TITLE SHEET.

SIGNING STATIONS ARE IN REFERENCE TO THE ℄ CONSTRUCTION OF THE ADJACENT PAVEMENT.

THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING AND PROPOSED UTILITIES PRIOR TO CONSTRUCTING TRAFFIC CONTROL ITEMS.

FOR ADDITIONAL DETAILS SEE O.D.O.T STD. CONSTRUCTION DWG. TC-42.20



PAVEMENT MARKING LEGEND

- (A) 644, CENTER LINE: SOLID, DOUBLE
- (B) 644, EDGE LINE (WHITE)
- (C) 644, CROSS WALK LINES 6' C/C
- (D) 644, YIELD LINE
- (E) 644, LANE ARROW
- TRAFFIC DIRECTION

SIGNING LEGEND

- (S) PROPOSED SIGN, FLAT SHEET
- (SR) EXISTING SIGN AND SUPPORT TO BE REMOVED
- (S) REMOVAL OF GROUND MOUNTED SIGN AND REERECTION
- EXISTING SIGN LOCATIONS
- PROPOSED SIGN LOCATIONS

N

0 10 20 40 HORIZONTAL SCALE IN FEET

CALCULATED PRS CHECKED MES

TRAFFIC CONTROL PLAN
STA. 2+00.00 TO STA. 7+00.00
STA-3RD ST. S.E.

35
59

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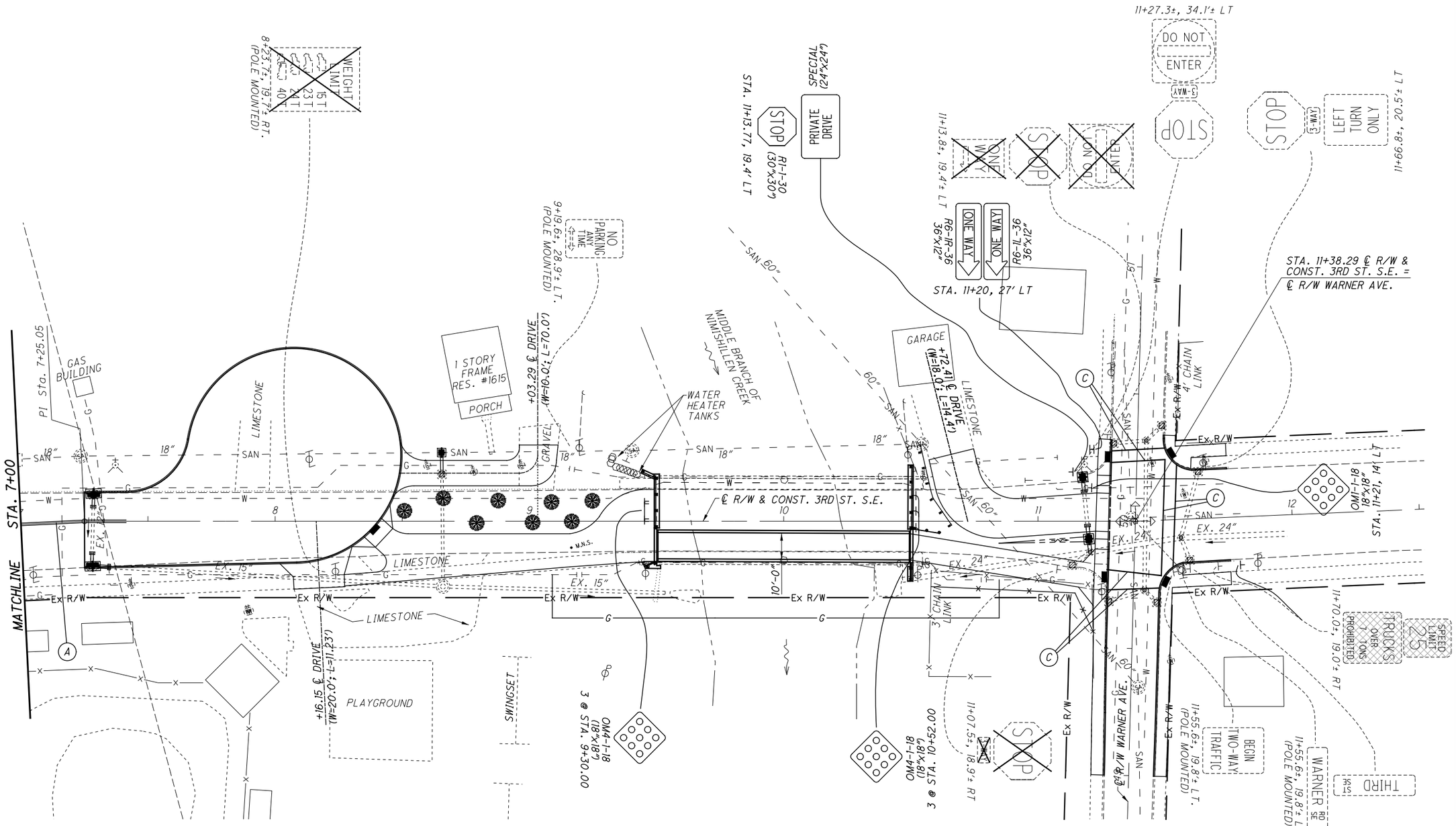

SIGNING LEGEND

- (S) ☐ — PROPOSED SIGN, FLAT SHEET
- (SR) ☒ — EXISTING SIGN AND SUPPORT TO BE REMOVED
- (S) ▨ — REMOVAL OF GROUND MOUNTED SIGN AND REERECTION
- ⊣+ — EXISTING SIGN LOCATIONS
- ⊣+ — PROPOSED SIGN LOCATIONS

*SEE SHEET 35 FOR MARKING LEGEND

NOTES:

ALL TRAFFIC CONTROL WORK SHALL BE CONSTUCTED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, SPECIAL PROVISIONS AND APPLICABLE SECTIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION (O.D.O.T.) CONSTRUCTION AND MATERIALS SPECIFICATIONS INCLUDING STANDARD CONSTRUCTION DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS LISTING ON THE TITLE SHEET.

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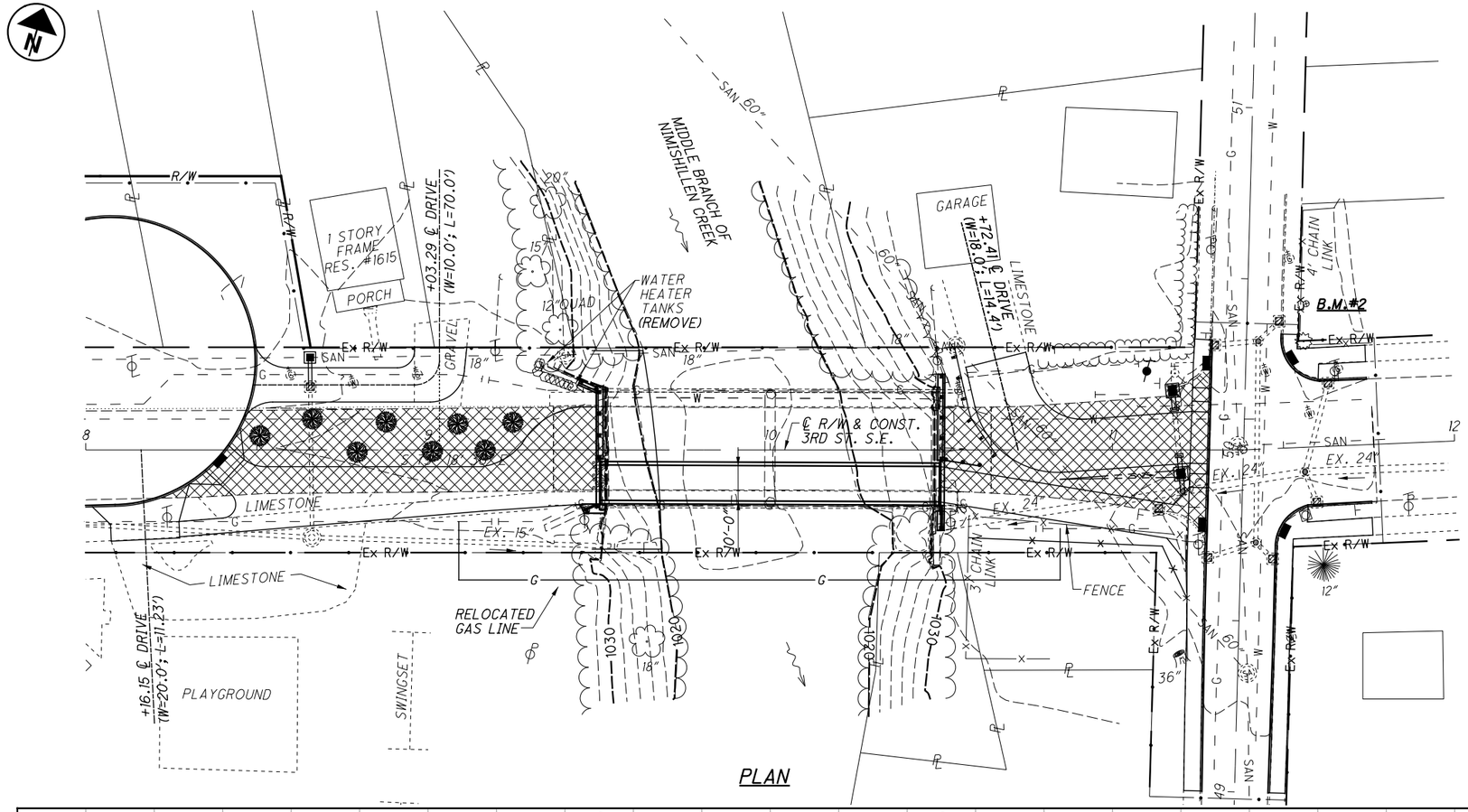
HORIZONTAL SCALE IN FEET
0 10 20 40

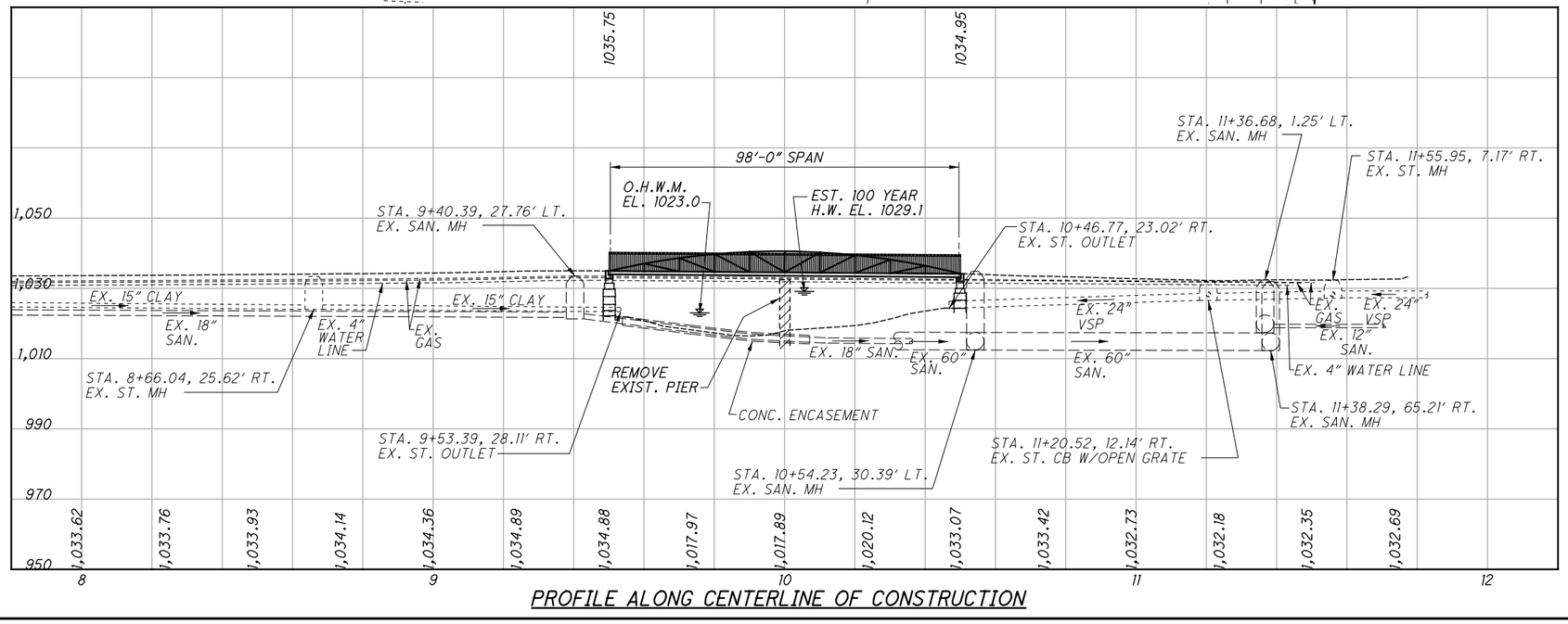
CALCULATED PRS
CHECKED MES

TRAFFIC CONTROL PLAN
STA. 7+00.00 TO STA. 12+00.00
STA-3RD ST. S.E.

36
59



PLAN



PROFILE ALONG CENTERLINE OF CONSTRUCTION

BENCHMARK DATA

BM #1 STA. 7+56.31, ELEV. 1034.01, OFFSET 37.14', LT.
BM #2 STA. 11+58.36, ELEV. 1033.63, OFFSET 41.89', LT.

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLAN SHEETS 23.

NOTES

EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

DESIGN TRAFFIC:
2019 ADT = 200 2019 ADTT = 0
2039 ADT = 250 2039 ADTT = 0

DIRECTIONAL DISTRIBUTION = 100%

LEGEND

HYDRAULIC DATA (4-22-82 SITE PLAN)

DRAINAGE AREA = 96 SQ. MILES
Q (20) = 4640 CFS
Q (100) = 7300 CFS V (100) = 8.4 FT/S

EXISTING STRUCTURE

TYPE: TWO SPAN NONCOMPOSITE PRESTRESSED CONCRETE BOX BEAMS ON CONCRETE AND STONE WALL ABUTMENTS WITH A REINFORCED CONCRETE CAPPED PILE PIER.

SPANS: 48'-4"± ; 48'-4"± C/C BEARINGS
ROADWAY: 24'-0"± T/T OF CURB WITH TWO - 4'-6" SIDEWALKS
LOADING: HS20 AND ALTERNATE MILITARY LOADING
SKEW: 0°±
APPROACH SLABS: 15' LONG
ALIGNMENT: TANGENT
WEARING SURFACE: ASPHALT CONCRETE
STRUCTURE FILE NUMBER: 7660898
DATE BUILT: 1982
DISPOSITION: REMOVE SUPERSTRUCTURE AND PIER

PROPOSED STRUCTURE

TYPE: PREFABRICATED POWDER COATED GALVANIZED THRU TRUSS WITH CORRUGATED STEEL DECKING AND ASPHALT WEARING SURFACE WITH STEEL RAILINGS AND REINFORCED CONCRETE SEATS AND BACKWALLS ON EXISTING ABUTMENTS
SPANS: 98'-0" C/C BEARINGS
BRIDGE WIDTH: 10'-0" F/F RAIL
LOADING: 90 PSF
SKEW: NONE
ALIGNMENT: TANGENT
CROWN: 0.007 FT/FT
WEARING SURFACE: CONCRETE
COORDINATES: LATITUDE 40° 47' 37" N
LONGITUDE 81° 21' 29" W

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DESIGNED	DRAWN	REVIEWED	DATE
BLN	RB		
CHECKED	REVISED	STRUCTURE FILE NUMBER	
dht			

STARK COUNTY
STA. 9+46.00
STA. 10+43.00

SITE PLAN
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.
PID No. 91972

1 / 18

37 / 59

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

SS 800 DATED 04-21-17

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 9TH EDITION 2017 SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, 2007.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2007.

DESIGN LOADING

0.090 KIPS/FT2 AND H15-44 VEHICLE

DESIGN DATA

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996, GRADE 60. MINIMUM YIELD STRENGTH 60,000 PSI

ITEM 511 - CLASS QC1 CONCRETE, ABUTMENT, AS PER PLAN

THE COARSE AGGREGATE SHALL BE NO. 57 LIMESTONE.

A CONCRETE AESTHETIC TREATMENT SYSTEM SHALL BE SUCH TO DUPLICATE CLOSELY THE APPEARANCE OF NATURAL SANDSTONE. THE CONCRETE AESTHETIC TREATMENT SYSTEM SHALL INCLUDE THE SURFACE FINISH, STAIN, AND FORMLINERS AND SHALL ALL BE FURNISHED BY THE SAME MANUFACTURER. THE SURFACE FINISH, STAINING AND FORMLINERS TO BE USED AT THE ABUTMENTS SHALL BE AS SHOWN IN THESE PLANS. ALL MATERIALS, SURFACE PREPARATION, STAINING AND TEST SAMPLES REQUIRED TO COMPLETE THIS WORK SHALL BE INCLUDED WITH THE ITEM 511 CLASS C CONCRETE PAY ITEM.

A RELEASING AGENT COMPATIBLE WITH THE FORMLINER AND WITH THE COLOR STAIN SHALL BE APPLIED TO THE FORMLINER SURFACE. THE RELEASING AGENT SHALL NOT BOND WITH THE CONCRETE OR ADVERSELY AFFECT THE CONCRETE. THE FORMLINER SHALL BE SUPPORTED AS NECESSARY TO PREVENT DEFORMATIONS OR AS PER MANUFACTURER'S RECOMMENDATIONS. HORIZONTAL LINES OF THE STONE PATTERN SHALL BE ALIGNED. COMPLETE SHOP DRAWINGS DETAILING THE STONE PATTERNS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO PLACING ANY CONCRETE WHERE THE FORMLINER IS TO BE USED. THE SHOP DRAWING SHALL SHOW PLAN, ELEVATION AND DETAILS TO SHOW OVERALL PATTERN, JOINT LOCATIONS, FORM TIE LOCATIONS AND OTHER SPECIAL CONSIDERATIONS. COMPLETE STONE PATTERNS SHALL BE DETAILED AROUND CORNERS ON THE SUBSTRUCTURE UNITS. THE FINISHED TEXTURE SHALL BE SIMILAR TO THAT OF RUBBED CONCRETE.

THE FORMLINER TO BE USED SHALL BE CUSTOM ROCK INTERNATIONAL (C.R.I.), STANDARD PATTERN FOR CONCRETE WALLS #1104 R2 OR AN APPROVED EQUAL MEETING THE DETAILS SHOWN IN THE PLANS FOR STAGGERED (INTERLOCKING) PATTERNS. THE AESTHETIC TREATMENT SYSTEM MANUFACTURER SHALL SUBMIT AT LEAST FIVE YEARS RELATED EXPERIENCE. THE AESTHETIC TREATMENT SYSTEM SHALL BE FURNISHED BY ONE OF THE FOLLOWING MANUFACTURERS OR AN APPROVED EQUAL:

CUSTOM ROCK INTERNATIONAL
ST. PAUL, MINNESOTA
WWW.CUSTOM-ROCK.COM

INCRETE SYSTEMS, INC.
TAMPA, FLORIDA
WWW.INCRETE.COM

THE STAIN SHALL BE APPLIED AT LEAST 28 DAYS AFTER PLACEMENT OF THE CONCRETE. SURFACE PREPARATION FOR STAIN AND APPLICATION REQUIREMENTS SHALL BE PER MANUFACTURER'S RECOMMENDATION. IF THE COATING FAILS TO ADHERE OR DOES NOT ATTAIN THE DESIRED APPEARANCE (AS DEMONSTRATED ON THE TEST SAMPLE), THE COATING SHALL BE COMPLETELY REMOVED AND REAPPLIED UNTIL THE DESIRED FINISH IS OBTAINED. THE AVERAGE THICKNESS OF THE COMPLETED COATING SHALL NOT EXCEED 1/8 INCH. THE FINAL STAIN COLOR SHALL BE AS DIRECTED BY THE ENGINEER BASED ON RESULTS OF THE TEST SAMPLE.

A PRECONSTRUCTION TEST SAMPLE SHALL BE CONSTRUCTED FOR APPROVAL BY THE ENGINEER. IF THE TEST SAMPLE DOES NOT MEET THE APPROVAL OF THE ENGINEER, THE RESULTS MAY BE GROUNDS TO REJECT THE PROPOSED FORMLINER AND/OR THE CONCRETE STAIN. THE TEST SAMPLE MUST PASS APPROVAL. FAILURE WILL REQUIRE PLACEMENT OF ANOTHER TEST SAMPLE. A FIVE FOOT HIGH BY EIGHT FOOT LONG TEST SAMPLE SHALL BE MADE. THE MINIMUM SAMPLE THICKNESS SHALL BE 9 INCHES AND SHOULD BE PLACED UPRIGHT AS PLACED ON THE STRUCTURE. THE TEST SAMPLE SHALL BE OF THE SAME CEMENT AND AGGREGATE SOURCE THAT WILL BE USED IN THE SUBSTRUCTURE UNITS AND CURED IN THE SAME MANNER. PLACEMENT SHALL BE DONE IN A MANNER TO DUPLICATE CONSTRUCTION METHODS THAT WILL BE USED IN THE FIELD. THE TEST SAMPLE SHALL BE CONSTRUCTED AT THE JOB SITE OR AN APPROVED SITE AGREED UPON BY THE ENGINEER. AFTER APPROVAL, THE CONCRETE TEST SAMPLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. TWO STAINS SHALL BE APPLIED TO THE TEST SAMPLE, ONE TO EACH HALF (FOUR FEET) OF THE EXPOSED SURFACES OF THE CONCRETE RECTANGULAR STONE AESTHETIC TREATMENT. THE COLOR OF EACH STAIN SHALL BE SIMILAR TO NATURAL SANDSTONE, EXCEPT THAT ONE STAIN SHALL BE A SLIGHTLY DARKER TINT THAN THE OTHER. SAMPLE COLORS (SWABS) SHALL BE SUBMITTED FOR APPROVAL TO THE ENGINEER PRIOR TO APPLYING THE STAINS TO THE TEST SAMPLE AND ALTERATIONS TO THE COLORS BASED ON THE APPEARANCE MAY BE NECESSARY AFTER THE TEST SAMPLE IS STAINED.

ITEM 513 STRUCTURAL STEEL MEMBERS, LEVEL 6, AS PER PLAN (PREFABRICATED TRUSS, 70 FEET SPAN)

MANUFACTURER'S QUALIFICATIONS

AISC CERTIFICATION:

THE MANUFACTURER SHALL BE AN APPROVED STEEL FABRICATOR UNDER THE AISC QUALITY MANAGEMENT SYSTEM CERTIFICATION PROGRAM AS AN ADVANCED STEEL BRIDGE FABRICATOR INCLUDING FRACTURE CRITICAL AND SOPHISTICATED PAINT SYSTEM ENDORSEMENTS, FOR A PERIOD OF AT LEAST FIVE (5) CONTINUOUS YEARS IMMEDIATELY PRECEDING THE BID OPENING.

EXPERIENCE:

THE MANUFACTURER SHALL HAVE DESIGNED AND MANUFACTURED AT LEAST TEN (10) PERMANENT PREMANUFACTURED STEEL TRUSS OR ROLLED BEAM BRIDGES OF APPROXIMATELY THE SAME SIZE AND CONFIGURATION AS THE PROPOSED BRIDGE DURING A PERIOD OF NOT MORE THAN FIVE (5) CONTINUOUS YEARS IMMEDIATELY PRECEDING THE BID OPENING. THE MANUFACTURER SHALL ALSO HAVE EXPERIENCE DESIGNING AND MANUFACTURING BRIDGES WITH ALL-BOLTED COMPONENT CONNECTIONS USING COMPUTER NUMERICALLY CONTROLLED (CNC) DRILLING EQUIPMENT AND SHOP BOLTING OPERATIONS.

QUALITY ASSURANCE:

QUALITY ASSURANCE OF SHOP DRAWINGS, MATERIAL TEST REPORTS, AND INSPECTION ACCORDING TO ODOT SUPPLEMENT 1078.
PRE-BID REPRESENTATIVE:
THE MANUFACTURER SHALL ASSIGN A LOCAL PRE-BID REPRESENTATIVE FOR THE PURPOSES OF ATTENDING PRE-BID MEETINGS AND PRE-CONSTRUCTION CONFERENCES. THIS REPRESENTATIVE SHALL BE AVAILABLE TO ASSIST IN DEFINING THE ENGINEERING SCOPE OF SERVICES AND PLANNED CONSTRUCTION ACTIVITIES ALONG WITH COORDINATING INFORMATION DURING THE PRE-BID PHASE.

GOVERNING CODES AND STANDARDS

THE BRIDGE SHALL BE DESIGNED IN ACCORDANCE WITH CURRENT, RECOGNIZED AND ACCEPTED SPECIFICATIONS FOR BRIDGE DESIGN AND CONSTRUCTION, INCLUDING ALL INTERIMS, AND AS STIPULATED IN AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR HIGHWAY BRIDGES, 7TH EDITION (2014) AND AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS 3RD EDITION (2010).
REFERENCE CODES AND STANDARDS

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), STEEL CONSTRUCTION MANUAL, THIRTEENTH EDITION.

AMERICAN WELDING SOCIETY (AWS) D1.5 BRIDGE WELDING CODE (USE AWS D1.1 FOR WELDING NOT COVERED IN AWS D1.5).

RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) SPECIFICATIONS FOR STRUCTURAL JOINT USING A325 OR A490 BOLTS (2004).

AASHTO/NSBA S2.1 STEEL BRIDGE FABRICATION GUIDE SPECIFICATIONS, 2ND EDITION.

BRIDGE CHARACTERISTICS AND REQUIREMENTS

SPAN:

1 SPAN

98 FT. C/C BEARINGS

WIDTH:

10 FT. RAIL/RAIL

SKEW:

NONE

FINISH:

HOT-DIP GALVANIZED ZINC

THE CROWN OF THE WEARING SURFACE SHALL BE AT 0.007 MINIMUM CROSS SLOPE IN EACH DIRECTION.

FLOORING/DECK:

ASPHALT DECK WITH GALVANIZED STAY-IN-PLACE FORMS.
MINIMUM DESIGN GIVEN IN PLANS WITH CONTRACTOR/TRUSS MANUFACTURE DECK DESIGN BASED ON FLOOR SYSTEM AND DESIGN LOADING.

BRIDGE RAILINGS:
MINIMUM DESIGN GIVEN IN PLANS WITH CONTRACTOR/ TRUSS MANUFACTURE DECK DESIGN BASED ON TRUSS ATTACHMENT SPACING AND DESIGN LOADING.

BEARINGS:

LAMINATED ELASTOMERIC BEARING PADS BENEATH LOAD PLATES AND/OR PTFE & STAINLESS STEEL SLIDING BEARINGS. ANCHOR BOLTS REQUIRED PER PLAN DETAILS AT EXPANSION AND FIXED ENDS.

EXPANSION JOINTS:

SLIDING ANGLE OR PLATE ON BACKWALL ANGLE.

BRIDGE STYLE IN SECTION:
THE TRUSS DESIGN SHALL BE A WELDED OR BOLTED HALF OR THROUGH-TRUSS. ONLY OPEN ROLLED OR WELDED TRUSS MEMBERS SHALL BE ALLOWED, NO TUBE SECTIONS SHALL BE USED.

BRIDGE STYLE IN ELEVATION:

THE TRUSS DESIGN SHALL BE A WELDED OR BOLTED TRUSS AND PRESENTED IN THE BIDDING DOCUMENTS. THE OWNER RESERVES THE RIGHT TO REJECT THE BID BECAUSE OF THE STYLE OR CONFIGURATION OF THE TRUSS.

THE TRUSSES SHALL EACH HAVE A POLYGONAL TOP CHORD, TWO DIAGONAL MEMBERS IN EACH TRUSS PANEL, AND A VERTICAL MEMBER AT EACH INTERIOR BOTTOM CHORD PANEL POINT. THE BOTTOM (TENSION) CHORD OF EACH TRUSS SHALL CONSIST OF TWO EQUAL-SIZED MEMBERS WITH ADEQUATE SECTION PROPERTIES TO PROVIDE REDUNDANCY.

THE MAXIMUM STRUCTURE DEPTH OF THE TRUSS (TOP OF DECK TO BOTTOM OF BOTTOM CHORD OR FLOOR BEAM) SHALL BE 1'-6" PER PLAN DETAILS.

THE PROFILE GRADE ACROSS THE BRIDGE SHALL MATCH THAT SHOWN ON THE SITE PLAN AS CLOSELY AS PRACTICAL. HOWEVER, ADJUSTMENTS AND MODIFICATIONS FOR CAMBER AND MANUFACTURING ARE ALLOWED TO FACILITATE ERECTION AND CONSTRUCTION. MOST IMPORTANT, SHALL BE A SMOOTH TRANSITION ON AND OFF OF THE STRUCTURE AND MAINTAINING AN ADEQUATE LONGITUDINAL DRAINAGE SLOPE ON EACH END OF THE DECK. CHANGES SHALL BE SUBMITTED FOR APPROVAL.

BRIDGE STYLE - TRUSS CONNECTIONS:

THE PREFERRED TRUSS CONNECTION TYPE (AS OUTLINED BELOW) SHALL BE BOLTED DOUBLE GUSSET PLATES AT THE CHORDS, ALTHOUGH WELDED CONNECTIONS ARE NOT PROHIBITED, BUT FIELD WELDING OF GALVANIZED MEMBERS OR COMPONENTS IS NOT ALLOWED.

THE TRUSS GIRDERS SHALL BE DESIGNED USING GUSSET PLATES ON EACH SIDE OF THE CHORD MEMBER AND HIGH STRENGTH STRUCTURAL FASTENERS (BOLTS) TO CONNECT WEB (DIAGONAL AND VERTICAL) MEMBERS TO THE CHORD MEMBERS. SHIM OR FILL PLATES SHALL BE USED WHERE WEB MEMBERS DO NOT DIMENSIONALLY FIT UP WITH THE LARGER CHORD MEMBERS.

ENGINEERING

LICENSURE:

THE ENGINEERING DESIGN OF THE BRIDGE SHALL BE PERFORMED BY, OR UNDER THE DIRECT SUPERVISION OF, A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF OHIO. THE DESIGN SHALL BE COMPLETED IN ACCORDANCE WITH RECOGNIZED ENGINEERING PRINCIPLES AND DESIGN PRACTICES AND WITH A STANDARD OF CARE COMMENSURATE WITH THE MANUFACTURER'S ROLE IN THE PROJECT.

DESIGN SPECIFICATION:

THE BRIDGE SHALL BE DESIGNED IN ACCORDANCE WITH:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 7TH EDITION (2014) INCLUDING ALL INTERIMS ADDITIONALLY, THE LIVE LOAD SHALL BE SPECIFIED AS:
PEDESTRIAN LIVE LOAD OF 90 PSF (SIDEWALKS AND PEDESTRIAN BRIDGES) &
H15-44 TRUCK.

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

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GENERAL NOTES - 1
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STA-3RD ST. S.E.
PID No. 91972

ANALYSIS:

THE STRUCTURAL ANALYSIS FOR THE BRIDGE SHALL INCLUDE, AT A MINIMUM, A TWO DIMENSIONAL ANALYSIS FOR GRAVITY DEAD LOADS AND MOVING LIVE (TRUCK) LOADS ON TRANSVERSE AND LONGITUDINAL MEMBERS, AS APPLICABLE. LOCATION OF AXLE LOADS, LANE LOADS, WHEEL LOADS; AND THE DISTRIBUTION OF WHEEL LOADS SHALL BE APPLIED AS SUCH TO PRODUCE THE MAXIMUM STRESS (OR APPLIED FORCE) IN THE MEMBER OR MEMBERS UNDER CONSIDERATION.

DUE TO THEIR CONFIGURATION, A U-FRAME ANALYSIS IS REQUIRED FOR HALF-THROUGH TRUSSES, TO CONFIRM THE TOP CHORD'S STABILITY BY COMPUTING THE RELATIVE STIFFNESS OF THE BRIDGE'S CROSS SECTIONAL MEMBERS TO DETERMINE THE RESISTANCE OF THE TOP CHORD MEMBERS TO BUCKLING. THE ANALYSIS SHALL FOLLOW E. C. HOLT, JR. AND R. M. BARNOFF'S RESEARCH PERFORMED FOR THE COLUMN RESEARCH COUNCIL, (1950-1957).

LOAD RATING:

A LOAD RATING OF THE BRIDGE'S SUPERSTRUCTURE SHALL BE SUPPLIED TO THE OWNER AFTER THE BRIDGE'S FABRICATION IS COMPLETE. REQUIREMENTS FOR THE LOAD RATING SHALL BE PER ODOT'S BRIDGE DESIGN MANUAL SECTION 900.

LOADS & LOAD COMBINATIONS:

ALL APPLICABLE DEAD AND LIVE LOADS SHALL BE APPLIED AND COMBINED AS SPECIFIED IN THE DESIGN SPECIFICATION. LONGITUDINAL FORCES FROM THERMAL EXPANSION AND CONTRACTION, AND VEHICLES; ALONG WITH LATERAL FORCES FROM WIND, FLOOD OR SEISMIC EVENTS SHALL BE COMPUTED AND COMBINED AS APPLICABLE AND IN ACCORDANCE WITH THE DESIGN SPECIFICATION.

GUSSET PLATES:

GUSSET PLATES SHALL BE ADEQUATELY DESIGNED TO TRANSFER MEMBER FORCES IN ACCORDANCE WITH GOVERNING SECTIONS OF THE DESIGN SPECIFICATIONS AND FHWA PUBLICATION NUMBER IF-09-014. ALL GUSSET PLATES SHALL HAVE 1" RADIUSED CORNERS, EXCEPT FOR THE LOWER CORNERS ALIGNED TOWARD THE MID-LINE OF THE BRIDGE. THEY SHALL BE SQUARE TO AID THEIR ORIENTATION DURING ASSEMBLY.

CAMBER & DEFLECTION:

CALCULATION OF THE BRIDGE'S DEAD AND LIVE LOAD DEFLECTION IS REQUIRED. LIVE LOAD DEFLECTION OF THE PRIMARY MEMBERS SHOULD BE LIMITED TO THE SPAN-TO-DEFLECTION RATIO OF L/600 UNLESS OTHERWISE SPECIFIED. DEAD LOAD DEFLECTION SHALL BE ACCOMMODATED BY FORMING CAMBER INTO THE UNLOADED GEOMETRY OF THE MEMBERS. PROFILE GRADE CURVATURE SHALL ALSO BE TAKEN INTO ACCOUNT WHEN DETERMINING THE FABRICATED (OR INDUCED) CAMBER OF THE MEMBERS. NO CAMBER ADJUSTMENT IS REQUIRED FOR SPANS OF LESS THAN 50 FT., EXCEPT THAT THEY BE FABRICATED WITH THEIR NATURAL MILL CAMBER AS "UP".

STAY-IN-PLACE FORMS FOR ASPHALT DECKS:

THE ASPHALT DECK SHALL BE DESIGNED IN ACCORDANCE WITH THE MINIMUM DESIGN GIVEN IN PLANS WITH CONTRACTOR/ TRUSS MANUFACTURER DECK DESIGN BASED ON FLOOR SYSTEM AND DESIGN LOADING.

RAILINGS:

RAILINGS SHALL BE DESIGNED TO PROVIDE A CONTINUOUS, SNAG-FREE ALIGNMENT ALONG THE BRIDGE'S EDGE OF ROADWAY. ADDITIONALLY THEY SHALL TRANSITION SMOOTHLY TO A GROUND MOUNTED RAILING SYSTEM EVENTUALLY TERMINATING AS DETAILED IN THE PLANS. THE RAILING SYSTEM SHALL BE DESIGNED TO MEET THE DIMENSIONAL REQUIREMENTS OF THE PLANS AND TO RESIST BICYCLE AND PEDESTRIAN VEHICULAR LOADS IN ACCORDANCE WITH THE LRFD DESIGN SECTIONS 13.8 AND 14.9.

DRAWING SUBMITTALS:

THE MANUFACTURER SHALL DESIGN THE PREFABRICATED BRIDGE(S) AND PREPARE DRAWINGS IN ACCORDANCE WITH THE FOLLOWING MINIMUM REQUIREMENTS. ENGINEERING DRAWINGS AND CALCULATIONS, SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE WHERE THE BRIDGE IS TO BE ERECTED, WILL BE SUBMITTED TO THE OWNER FOR APPROVAL WITHIN 4 WEEKS OF RECEIPT OF THE PURCHASE ORDER, AFTER RECEIVING ANSWERS TO REQUESTS FOR INFORMATION (RFI). SHOP DRAWINGS WILL BE SUPPLIED TO THE OWNER FOR APPROVAL BEFORE STARTING FABRICATION.

UNLESS OTHERWISE REQUESTED, AN ELECTRONIC VERSION OF THE SHOP DRAWINGS WILL BE SUBMITTED IN PORTABLE DOCUMENT FORMAT (.PDF) VIA EMAIL TO THE OWNER OR THE OWNER'S DESIGNATED CONTACT. AFTER FINAL APPROVAL BY THE OWNER, THE MANUFACTURER SHALL PROVIDE THE OWNER WITH TWO 24" X 36" PAPER COPIES OF THE ENGINEERING DRAWINGS. SETS OF THE AS-FABRICATED DRAWINGS (11" X 17") SHALL BE TRANSMITTED TO THE CONTRACTOR AT THE TIME OF BRIDGE DELIVERY.

MATERIALS & COMPONENTS

STEEL:

MEMBERS FOR VEHICULAR BRIDGES SHALL BE FABRICATED FROM DOMESTICALLY PRODUCED, WIDE FLANGE BEAM AND/OR CHANNEL SHAPES DESIGNATED ASTM A709 GRADE 50 AND STRUCTURAL STEEL PLATE DESIGNATED ASTM A709 GRADE 50, ALL PROVIDED BY AN AISC RECOGNIZED SUPPLIER.

STRUCTURAL FASTENERS:

ALL BOLTED CONNECTIONS SHALL UTILIZE ASTM A-325 HIGH STRENGTH BOLTS. GALVANIZED BOLTS SHALL BE A325 TYPE 1, HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A-153 SPECIFICATIONS.

ANCHOR BOLTS:

THE ANCHOR BOLTS SUPPLIED WITH ALL BRIDGE SYSTEMS SHALL BE ASTM A449 FULL THREAD STUDS HOT DIP GALVANIZED AS PER ASTM A153. EACH ANCHOR BOLT SHALL BE PROVIDED WITH ONE A563 GALVANIZED HEAVY HEX NUT AND ONE F436 GALVANIZED FLAT WASHER. TWO 1 INCH DIAMETER ANCHOR BOLTS SHALL BE USED AT EACH BEARING. THEY SHALL BE EMBEDDED A MINIMUM OF 12 INCHES INTO THE CONCRETE SEAT WITH NON-SHRINK GROUT.

BEARINGS:

SLIDING (PTFE) PLATES SHALL BE PER APPLICABLE LRFD DESIGN SECTION 14. ELASTOMERIC AND LAMINATED ELASTOMERIC BEARING PADS SHALL BE CUSTOM MOLDED FROM NEOPRENE OR NATURAL RUBBER. LAMINATED PADS SHALL BE REINFORCED WITH INTERNAL STEEL PLATES AND VULCANIZE-BONDED TO ALTERNATING LAYERS OF THE ELASTOMER DURING THE MOLDING PROCESS PER APPLICABLE LRFD DESIGN SECTION 14.

EXPANSION JOINTS:

THIS ITEM CONSISTS OF FURNISHING AND INSTALLING EXPANSION JOINTS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, THIS SPECIFICATION, AND THE MANUFACTURER'S RECOMMENDATIONS. IF NONE IS PREVIOUSLY DETERMINED, THE FOLLOWING SUGGESTED SPECIFICATIONS ARE OFFERED FOR INCLUSION INTO

THE PROJECT:

ARMORED SLIDING JOINT COMPRISED OF A DECK ATTACHED STEEL ANGLE OR PLATE, SLIDING OVER A STEEL ANGLE EMBEDDED INTO THE CONCRETE BACKWALL CONSTRUCTION WITH HEADED STUDS. ARMORED JOINTS SHALL BE HOT DIP GALVANIZED AS PER ASTM A123 AND DETAILED IN THE CONSTRUCTION PLANS.

STAY-IN-PLACE FORMS FOR ASPHALT DECKS:

THE STAY-IN-PLACE (SIP) CORRUGATED METAL DECKING FORMS SHALL HAVE A MINIMUM DEPTH OF 2". THE MINIMUM THICKNESS SHALL BE 20 GAGE AND SHALL HAVE G165 GALVANIZED COATING. THE MINIMUM LAYING WIDTH PER SHEET OF DECKING SHALL BE 34". THE SIP FORMS SHALL BE SUPPORTED BY SUPPORT ANGLES "FIELD WELDED" TO THE STRINGER BEAMS. SIP FORM SHALL BE ATTACHED TO SUPPORT ANGLES USING SELF-TAPPING SCREWS APPROVED BY THE SIP MANUFACTURER.

MANUFACTURING AND QUALITY CONTROL

ASPHALT DECKING:

THE ASPHALT DECK SHALL BE CONSTRUCTED BY THE CONTRACTOR. ASPHALT MATERIALS AND STRENGTHS SHALL BE NOTED IN THE ENGINEERING DRAWINGS. ASPHLAT SHALL BE FORMED, MIXED, PLACED, COMPACTED, AND FINISHED IN ACCORDANCE WITH THE 441 SPECIFICATION REFERENCED IN THE ENGINEERING DRAWINGS AND AS APPROVED BY THE OWNER IN THE FIELD.

CERTIFICATION MANUAL:

A CURRENT COPY OF THE AISC PROGRAM MANUAL DESCRIBING THE BRIDGE MANUFACTURER'S OPERATIONS AND PRACTICES SHALL BE MAINTAINED BY THE QUALITY CONTROL MANAGER FOR REVIEW BY DESIGNATED QUALITY CONTROL INSPECTORS. COPIES OF THE AISC CERTIFICATION MANUAL SHALL BE MADE AVAILABLE TO CUSTOMERS AND THEIR REPRESENTATIVES, UPON REQUESTS.

CLEANING AND SURFACE PREPARATION:

STEEL THAT IS TO BE FABRICATED SHALL BE CLEANED BY SOLVENT OR HAND TOOLS, OR SHOT BLASTED, AS NEEDED TO CLEAN AND REMOVE RUST AND MILL SCALE THAT MIGHT IMPEDE ACCURACY OF FIT-UP OR QUALITY OF FABRICATION PRIOR TO PROCESSING. STEEL TO BE GALVANIZED SHALL BE PREPARED IN ACCORDANCE WITH THE GALVANIZERS RECOMMENDATIONS.

CAMBERING:

THE BRIDGE SHALL BE CAMBERED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE DESIGN COMPUTATIONS TO OFFSET THE PREDICTED TOTAL DEAD LOAD DEFLECTION AND TO ACCOMMODATE THE PROFILE GRADE INDICATED IN THE CONTRACT DOCUMENTS. MECHANICAL (COLD) CAMBERING MAY BE USED WHERE PERMITTED BY THE APPLICABLE CONSTRUCTION SPECIFICATIONS AND THE OWNER'S CUSTOMARY PRACTICES. HEAT CAMBERING BY EXPERIENCED WORKERS MAY BE EMPLOYED, AS AN OPTIONAL METHOD.

WELDING:

ALL WELDING SHALL CONFORM TO THE AASHTO/AWS D1.5 BRIDGE WELDING CODE. WELDING OF TUBULAR CONNECTIONS IS COVERED IN THE AWS D1.1 WELDING CODE. ALL WELDING SHALL UTILIZE E70 OR E80 SERIES ELECTRODES. THE WELD PROCESS USED SHALL BE FLUX CORE ARC WELDING (FCAW) OR SHIELDED MANUAL ARC WELDING (SMAW) PER ANSI/AASHTO/AWS D1.5 "BRIDGE WELDING CODE". WELDING OPERATORS SHALL BE PROPERLY ACCREDITED AND EXPERIENCED. QUALIFICATIONS OF WELDERS SHALL BE MADE AVAILABLE UPON REQUEST.

PLATE & SHAPE CUTTING:

PLATE AND SHAPE CUTTING SHALL CONFORM TO METHODS SPECIFIED IN AASHTO/AWS D1.5 BRIDGE WELDING CODE SECTION 3 WORKMANSHIP. COMPUTER NUMERICALLY CONTROLLED (CNC) CUTTING EQUIPMENT SHALL BE UTILIZED AS A MANUFACTURING METHOD AS IT ALLOWS FOR HIGHLY ACCURATE DIMENSIONAL CUTTING ALONG WITH PRECISE AND RAPID SHOP OPERATIONS. EXCEPTIONS TO CNC PROCESSING SHOULD BE SUBMITTED IN WRITING TO THE OWNER FOR APPROVAL, PRIOR TO COMMENCING FABRICATION.

BOLT HOLES:

ALL BOLT HOLE FABRICATION FOR HIGH STRENGTH, SLIP CRITICAL BOLTED CONNECTIONS SHALL CONFORM TO THE WORKMANSHIP REQUIREMENTS OF THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) SPECIFICATIONS FOR STRUCTURAL JOINT USING A325 BOLTS. COMPUTER NUMERICALLY CONTROLLED (CNC) DRILLING EQUIPMENT SHALL BE UTILIZED AS A MANUFACTURING METHOD AS IT ALLOWS FOR HIGHLY ACCURATE HOLE LOCATION ALONG WITH PRECISE AND RAPID SHOP OPERATIONS. EXCEPTIONS TO CNC PROCESSING SHOULD BE SUBMITTED IN WRITING TO THE OWNER FOR APPROVAL, PRIOR TO COMMENCING FABRICATION.

BOLTING:

ALL SHOP AND FIELD BOLTING SHALL COMPLY WITH THE AASHTO CONSTRUCTION SPECIFICATIONS, SECTION 11 AND THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) SPECIFICATIONS FOR STRUCTURAL JOINTS USING A325 BOLTS. NUTS SHALL BE ASTM A563 GRADE DH AND WASHERS SHALL BE ASTM F436, OF CORRESPONDING FINISH. SHOP AND FIELD BOLTS SHALL BE TIGHTENED USING THE TURN-OF-NUT INSTALLATION METHOD (AASHTO 11.5.6.4.4 OR RCSC 8.2.1); OR BY A TENSION CONTROLLED (TC) WRENCH AND BOLT SYSTEM (ASTM F1852); OR BY USE OF DIRECT TENSION INDICATING (DTI) WASHERS.

ONLY A325 TYPE I HEX HEAD (HOT-DIP GALVANIZED, ASTM A153) BOLTS SHALL BE USED.

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GALVANIZED AND POWDER COATED STEEL COMPONENTS:

FABRICATED TRUSS ELEMENTS AND BOLTED BEAM CONNECTIONS SHALL BE INDIVIDUALLY HOT DIP GALVANIZED PRIOR TO ASSEMBLY TO ENSURE CORROSION PROTECTION HAS BEEN ACHIEVED BETWEEN ASSEMBLED ELEMENTS AND WITHIN TRUSS JOINT PLIES. THE ONLY EXCEPTION TO THIS SHALL BE FLOOR BEAM END-PLATE ASSEMBLIES WHICH, IF WELDED, SHALL REQUIRE SUPPLEMENTAL SEAL WELDS TO PREVENT PICKLING ACID LEAKAGE AFTER GALVANIZING.

ALL HOT-DIP GALVANIZING SHALL BE IN ACCORDANCE WITH ASTM A-123. DAMAGE TO HOT DIP GALVANIZED COATINGS RESULTING FROM WELDING, HANDLING, OR OTHER FACTORS SHALL BE REPAIRED IN ACCORDANCE WITH ASTM STANDARD PRACTICE A-780. ALL BOLTS AND FASTENERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM SPECIFICATION A-153. THE STEEL GALVANIZER OF THE BRIDGE ELEMENTS (OTHER THAN BRIDGE FLOORING) SHALL BE A MEMBER OF THE AMERICAN GALVANIZER'S ASSOCIATION AND SHALL PROVIDE THE BRIDGE OWNER A WRITTEN LIMITED WARRANTY AGAINST CORROSION OF THE SUPERSTRUCTURE COMPONENTS FOR A PERIOD OF NOT LESS THAN 35 YEARS. ALL GALVANIZED STEEL COMPONENTS SHALL BE SHOP POWDER COATED IN ACCORANCE WITH THE CITY OF CANTON REQUIREMENTS.

A PRECONSTRUCTION TEST SAMPLE SHALL BE SUBMITTED TO THE CITY FOR APPROVAL. IF THE TEST SAMPLE DOES NOT MEET THE APPROVAL OF THE CITY ENGINEER. THE TEST SAMPLE MUST PASS APPROVAL BY THE CITY PRIOR TO FABRICATION.

SHOP ASSEMBLY:

SHOP ASSEMBLY SHALL CONFORM TO AASHTO CONSTRUCTION SPECIFICATIONS AND AASHTO/NSBA S2.1 GUIDE SPECIFICATIONS. FOR BRIDGES SUCH AS TRUSSES, THE MANUFACTURER SHALL SHOP ASSEMBLE THE ENTIRE SPAN, TO CONFORM TO THE CAMBER AND BLOCKING REQUIREMENTS SHOWN IN THE ENGINEERING DRAWINGS IN AN UNLOADED, LAYDOWN PROCESS. IF THE SPAN IS TOO LONG FOR A COMPLETE SHOP ASSEMBLY, THE MANUFACTURER SHALL CHECK-ASSEMBLE A MINIMUM OF THREE ADJACENT SHIPPABLE UNITS OF THE BRIDGE, IN A SEQUENTIAL MANNER, TO ENSURE THAT AN ACCURATE FIT-UP OF ASSEMBLIES ARE POSSIBLE IN THE FIELD. COMPLEX FRAMING MEMBERS SUCH AS SKEWED FLOOR BEAMS SHALL ALSO BE CHECK-ASSEMBLED IN THE SHOP, TO ENSURE GEOMETRIC ACCURACY AND FIT-UP HAS BEEN ACHIEVED. STRINGERS BEAMS, TRANSVERSE BRACING AND ACCESSORY PIECES ARE NOT REQUIRED TO BE CHECK-ASSEMBLED TO THEIR PRIMARY MEMBERS UNLESS SPECIFIED IN THE CONTRACT DOCUMENTS.

SHOP INSPECTION:

EACH BRIDGE SHALL BE INSPECTED BY A QUALIFIED INSPECTOR PER ODOT SUPPLEMENT 1078. FOR ALL WELDED ASSEMBLIES THE INSPECTOR SHALL BE A CERTIFIED WELD INSPECTOR THAT IS QUALIFIED UNDER THE AWS QC-1 PROGRAM. EACH INSPECTION SHALL INCLUDE AS A MINIMUM REQUIREMENT THE FOLLOWING: REVIEW OF SHOP DRAWINGS, WELD PROCEDURES, WELDER QUALIFICATIONS AND WELD TESTING REPORTS, VISUAL INSPECTION OF WELDS AND VERIFICATION OF OVERALL DIMENSIONS AND GEOMETRY OF THE BRIDGE. NON DESTRUCTIVE TESTING OF WELDS SHALL BE PERFORMED BOTH PRIOR TO AND AFTER GALVANIZING. ALL WELDS SHALL BE VISUALLY INSPECTED 100%. ALL WELDS SHALL BE MAGNETIC PARTICLE TESTED FOR A MINIMUM LENGTH OR 12". WELDS OVER 12" LONG SHALL BE MAGNETIC PARTICLE TESTED AT LEAST 12" FOR EVERY 10' OF LENGTH. A REPORT OF THESE INSPECTIONS SHALL BE PROVIDED.

MATERIAL CERTIFICATION:

THE MANUFACTURER SHALL MAINTAIN A PROGRAM TO RECEIVE, INSPECT, RECORD AND TRACE MATERIALS USED IN THE BRIDGE. MATERIAL TEST REPORTS SHALL BE USED TO PROVE DOMESTICITY, AND DOCUMENT CHEMISTRY AND PHYSICAL TEST RECORDS. CERTIFICATES OF CONFORMANCE SHALL BE USED TO DOCUMENT COMPLIANCE WITH SPECIFICATIONS. TRACEABILITY SHALL BE MET BY HEAT AND LOT NUMBERS RECORDS FROM THE PRODUCING MILL OR SUPPLIER. THIS PROGRAM SHALL BE IN EVIDENCE BY THE MANUFACTURER'S AISC CERTIFICATION AND A WRITTEN COPY FOUND IN THE MANUFACTURER'S AISC CERTIFICATION MANUAL.

TRUSS ASSEMBLY RECORDS:

THE MANUFACTURER SHALL COMPLETE AND MAINTAIN A RECORD OF ASSEMBLY FOR EACH TRUSS BRIDGE, DOCUMENTING SPECIFIC PIECES, HEAT NUMBERS AND POSITIONS FOR TRUSS GIRDER MEMBERS, IN ACCORDANCE WITH THE MANUFACTURER'S AISC CERTIFICATION MANUAL.

SITE, DELIVERY & ERECTION

CONTRACTOR RESPONSIBILITY:

THE CONTRACTOR SHALL PROCURE ALL NECESSARY INFORMATION ABOUT THE SITE AND SOIL CONDITIONS. THE CONSTRUCTION OF THE BRIDGE ABUTMENTS AND/OR FOOTINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PERTINENT INFORMATION RELATED TO THE DESIGN AND PERFORMANCE OF THE BRIDGE SUPERSTRUCTURE SHALL BE MADE AVAILABLE TO THE BRIDGE MANUFACTURER UPON EXECUTION OF THE AGREEMENT. THE CONTRACTOR SHALL INSTALL THE ANCHOR BOLTS IN ACCORDANCE WITH THE BRIDGE MANUFACTURER'S ENGINEERING DRAWINGS AND RECOMMENDATIONS. ALL ROADWAY APPROACH WORK AND PAVING OF THE BRIDGE'S ROADWAY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL ELECTRICAL GROUNDING AND LIGHTNING PROTECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

DELIVERY:

DELIVERY OF THE BRIDGE WILL BE WITHIN AN AGREED PERIOD OF TIME AFTER APPROVAL OF ENGINEERING DRAWINGS (8 WEEKS). BEARING PLATES, ANCHOR BOLTS AND EXPANSION JOINTS CAN BE FURNISHED IN ADVANCE OF THE BRIDGE FOR INCORPORATION INTO THE ABUTMENT CONSTRUCTION, UPON RECEIPT OF A TIMELY REQUEST BY THE CONTRACTOR. DELIVERY OF THE BRIDGE SHALL BE COORDINATED BETWEEN THE MANUFACTURER OR THEIR SUPPLIER AND THE CONTRACTOR. THE SUPPLIER SHALL COMMUNICATE THIS INFORMATION TO THE MANUFACTURER DEPENDING ON THE AGREEMENT AND SUBSEQUENT RESPONSIBILITIES.

ERECTION:

THE MANUFACTURER WILL ADVISE THE CONTRACTOR OF THE ATTACHMENT POINTS AND OTHER NECESSARY INFORMATION REQUIRED TO INSTALL THE BRIDGE. THE METHOD AND SEQUENCE OF ERECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE INCLUDED IN THE AGREEMENT. UNLOADING, STABILIZATION, SPLICING, BOLTING, AND PROPER RIGGING AND LIFTING ARE THE RESPONSIBILITY OF THE CONTRACTOR.

TECHNICAL ASSISTANCE

THE SUCCESSFUL BIDDER THROUGH THE MANUFACTURER AND/OR SUPPLIER SHALL PROVIDE A QUALIFIED TECHNICAL ASSISTANT AT THE JOBSITE WHILE THE PRIMARY STRUCTURE COMPONENTS ARE INSTALLED. THE CONTRACTOR SHALL NOTIFY THE MANUFACTURER OR THEIR REPRESENTATIVE AT LEAST TWO WEEKS IN ADVANCE OF THE PLANNED INSTALLATION. THE TECHNICAL ASSISTANT SHALL HAVE AT LEAST FIVE (5) YEARS EXPERIENCE IN THE INSTALLATION OF SIMILAR BRIDGES.

THE MANUFACTURER SHALL PROVIDE AT THE TIME OF ORIGINAL SHIPMENT, A REINSTALLATION MANUAL FOR THE OWNER DETAILING THE DISASSEMBLY AND INSPECTION REQUIREMENTS OF MEMBERS, CONNECTIONS AND FASTENERS AND THE RECOMMENDATIONS FOR REUSE BASED ON CONDITIONS ASSESSED AFTER DISASSEMBLY. THE MANUAL SHALL INCLUDE CONDITION LOGS FOR RECORDING MEMBER AND CONNECTION CONDITIONS ONCE DISASSEMBLED.

MEASUREMENT AND PAYMENT

THE DESIGN, FABRICATION, MANUFACTURING AND ERECTION OF THE GALVANIZED STEEL TRUSS AND BEARINGS (INCLUDING ANCHOR BOLTS AND DOWEL HOLES) SHALL BE INCLUDED IN THIS WORK. ALSO INCLUDED IS CONSTRUCTING THE COLORED REINFORCED CONCRETE DECK AND SLIDING PLATE EXPANSION JOINTS. ALL ABUTMENT AND APPROACH WORK (INCLUDING APPROACH RAILING BEYOND THE BRIDGE LIMITS) ARE SEPARATE WORK ITEMS. THIS WORK SHALL BE PAID FOR BY ITEM 513 STRUCTURAL STEEL MEMBERS, LEVEL 6, AS PER PLAN (PREFABRICATED TRUSS, 70 FEET SPAN) AS A LUMP SUM ITEM.

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ESTIMATED QUANTITIES

CALCULATED JSB DATED 2/19
CHECKED _____ DATED _____

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	GEN'L	SEE SHEET
202	11200	LS		PORTIONS OF STRUCTURE REMOVED		LS	
202	22900	80	SY	APPROACH SLAB REMOVED		80	
202	23500	345	SY	WEARING COURSE REMOVED		345	
503	21100	LS		UNCLASSIFIED EXCAVATION		LS	
509	10000	1,913	LB	EPOXY COATED REINFORCING STEEL	1,913		
510	10000	112	EA	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	112		
511	45711	13	CY	CLASS QC1 CONCRETE, ABUTMENT, AS PER PLAN	13		2/18
513	10121	LS		STRUCTURAL STEEL MEMBERS, LEVEL 6, AS PER PLAN		LS	2/18
518	21200	30	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	30		
607	98000	61	FT	FENCE, MISC.: DECORATIVE FENCE (ABUTMENT MOUNTED)	61		

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ESTIMATED QUANTITIES
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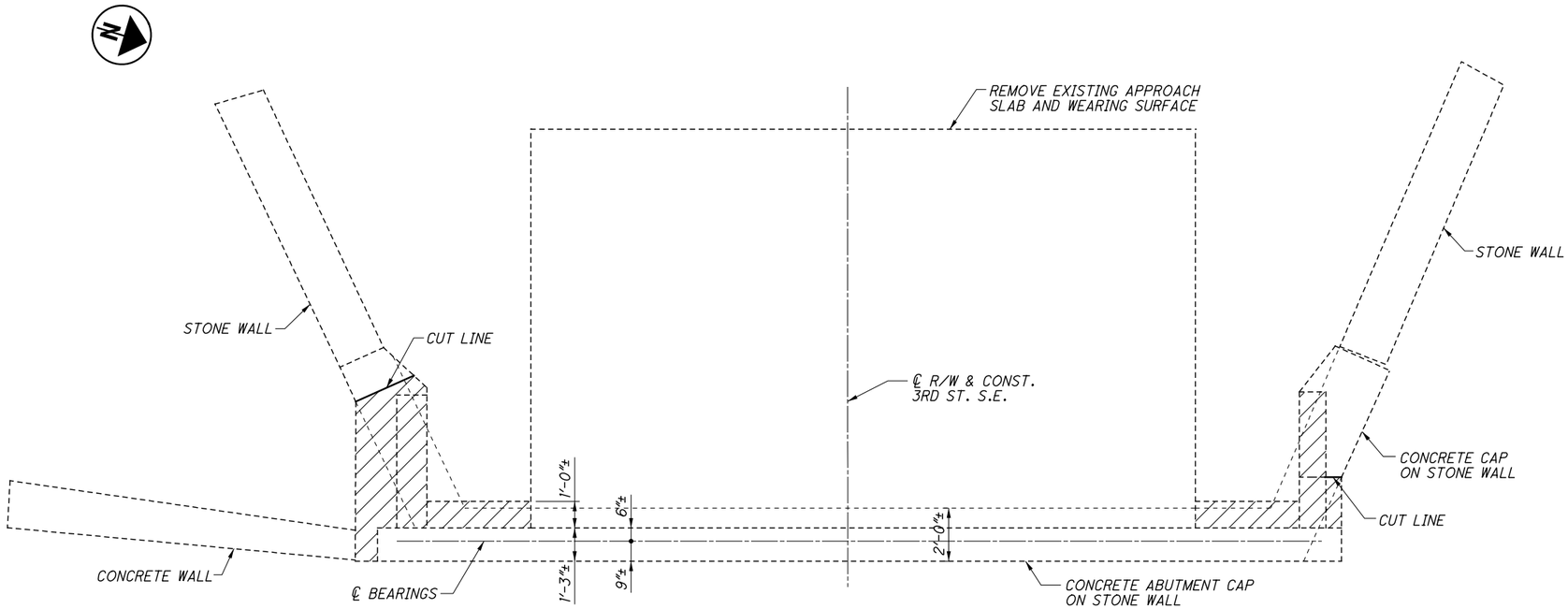
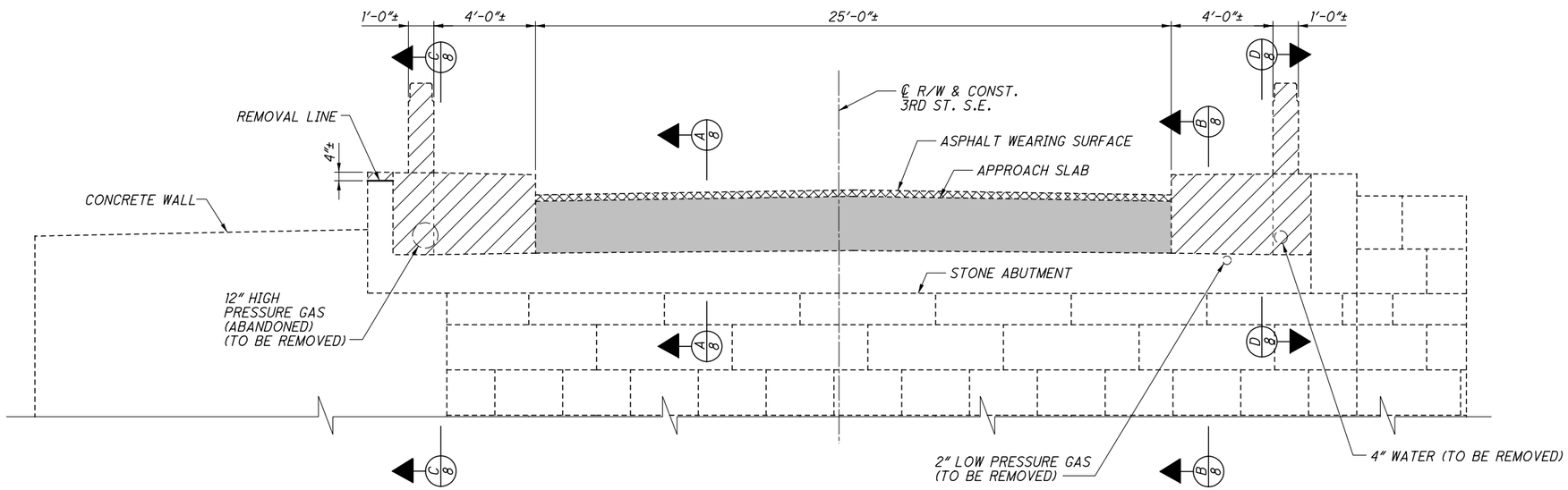


PLAN



ELEVATION

LEGEND

INDICATES MATERIAL TO BE REMOVED PER ITEM 202 - WEARING COURSE REMOVED.

INDICATES MATERIAL TO BE REMOVED PER ITEM 202 - APPROACH SLAB REMOVED.

INDICATES MATERIAL TO BE REMOVED PER ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN.

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REAR ABUTMENT REMOVAL DETAILS

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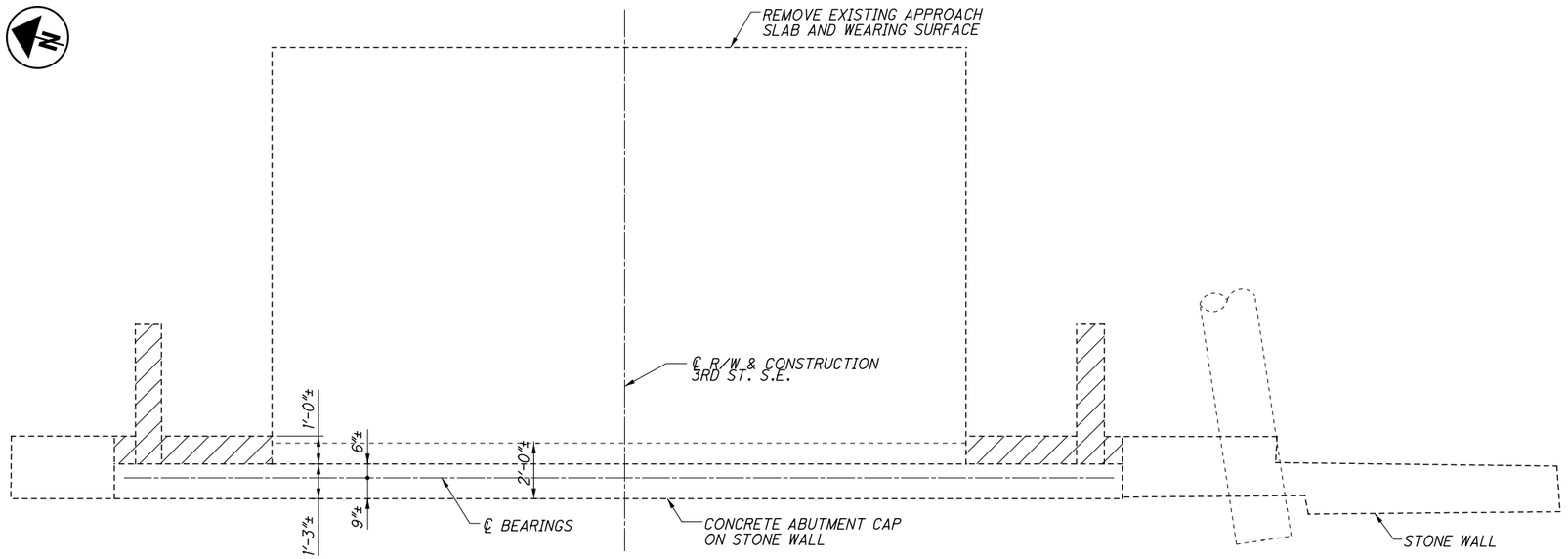
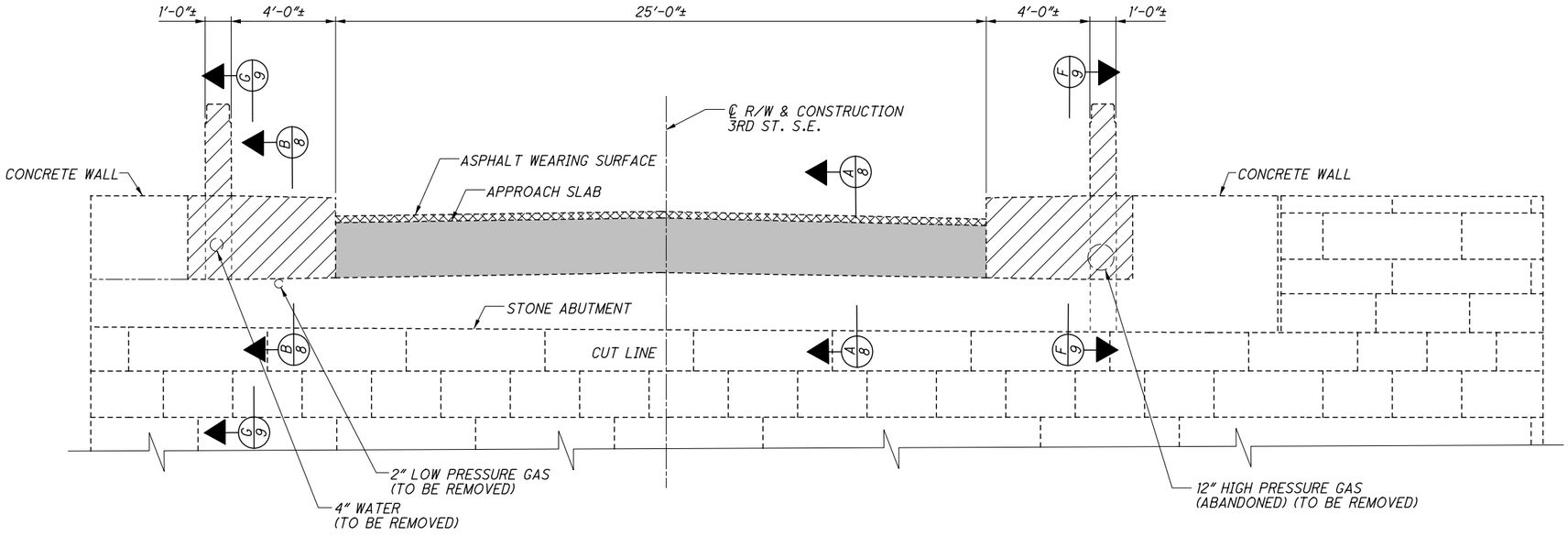


PLAN



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FORWARD ABUTMENT REMOVAL DETAILS

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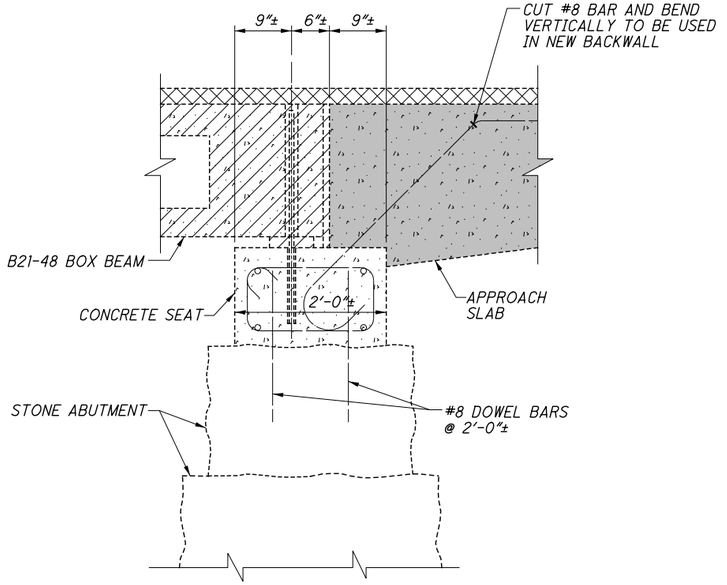
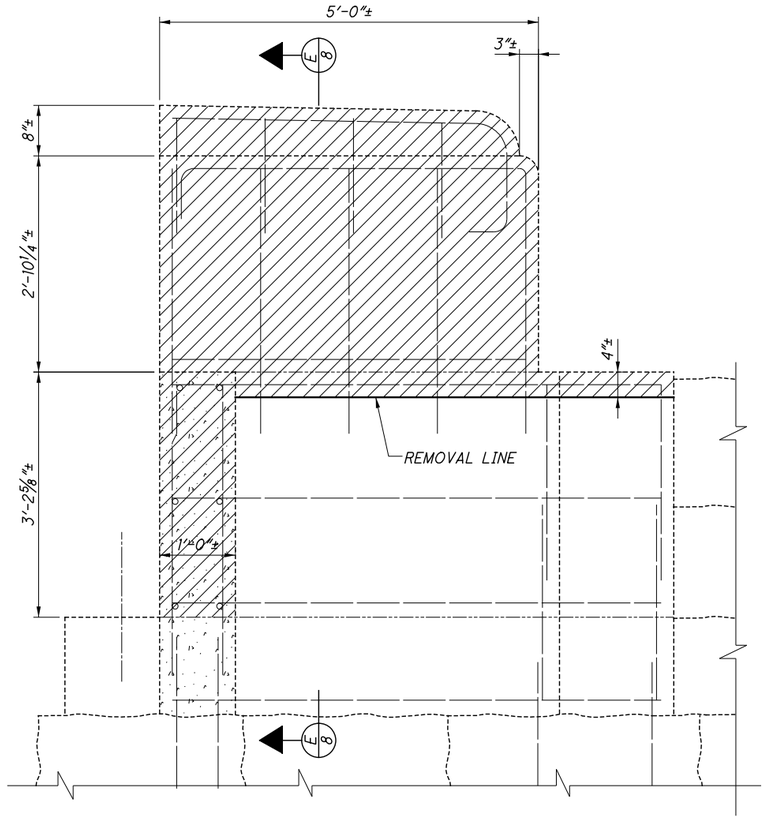
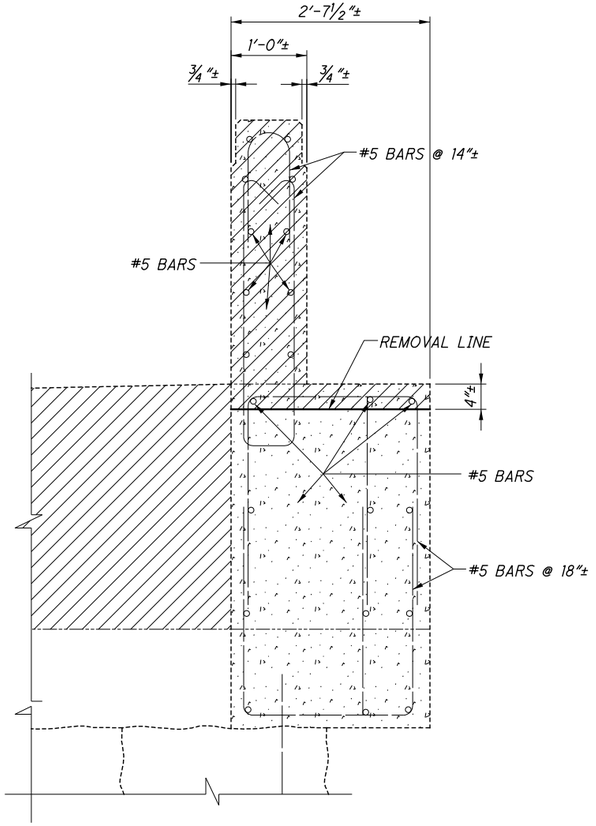


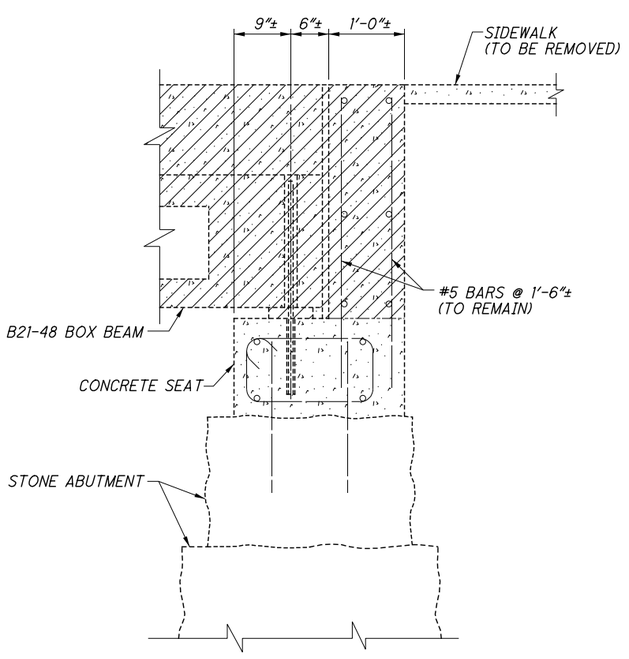
SECTION A-A



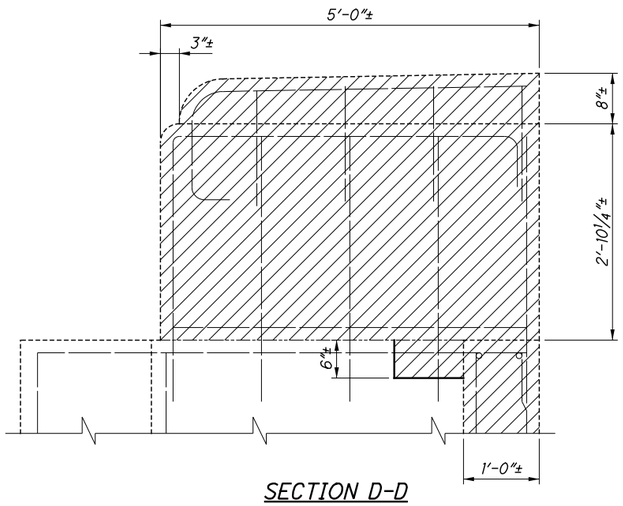
SECTION C-C



SECTION E-E



SECTION B-B



SECTION D-D

LEGEND

- INDICATES MATERIAL TO BE REMOVED PER ITEM 202 - WEARING COURSE REMOVED.
- INDICATES MATERIAL TO BE REMOVED PER ITEM 202 - APPROACH SLAB REMOVED.
- INDICATES MATERIAL TO BE REMOVED PER ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN.

NOTES

SECTIONS A-A & B-B: FOR LOCATIONS SEE SHEETS 6/18 AND 7/18.

SECTIONS C-C & D-D: FOR LOCATION SEE SHEET 6/18.

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DESIGNED	DRAWN	REVIEWED	DATE
BLN	RB		
CHECKED	REVISED		STRUCTURE FILE NUMBER
dht			

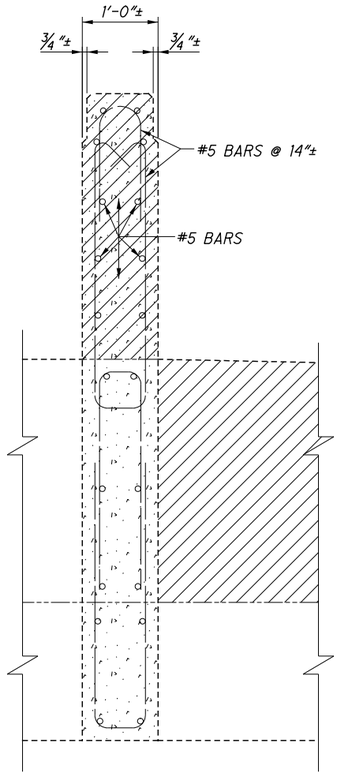
ABUTMENT REMOVAL SECTIONS - 1
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.
PID No. 91972

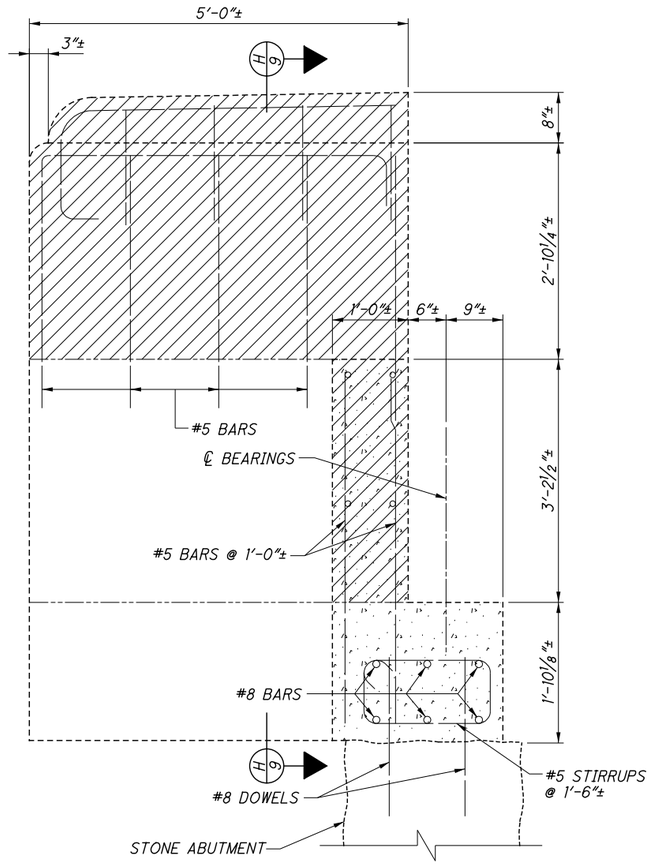
8 / 18

44
59

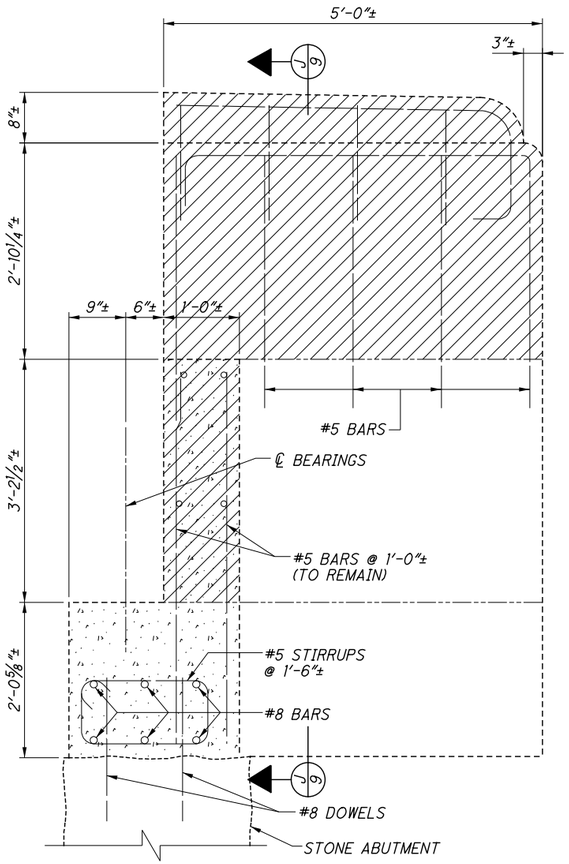
F:\2013\113016 3rd St Bridge\91972\structures\Sheets\91972RE004.dgn 2/6/19 2:57:47 PM JeremyBurns



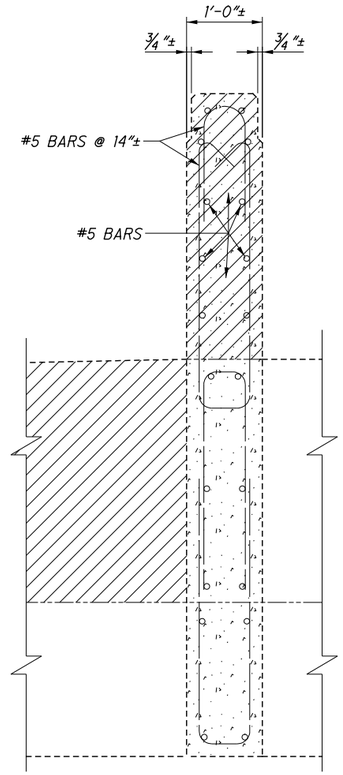
SECTION H-H



SECTION F-F



SECTION G-G



SECTION J-J

LEGEND

INDICATES MATERIAL TO BE REMOVED PER ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN.

NOTES

SECTIONS F-F & G-G: FOR LOCATIONS SEE SHEET 7/18.

F:\2013\113016 3rd St Bridge\91972\structures\Sheets\91972RE005.dgn 2/6/19 2:58:42 PM JeremyBurns

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DESIGNED	DRAWN	REVIEWED	DATE
BLN	JLS		
CHECKED	REVISED	STRUCTURE FILE NUMBER	
dht			

ABUTMENT REMOVAL SECTIONS - 2
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.
PID No. 91972

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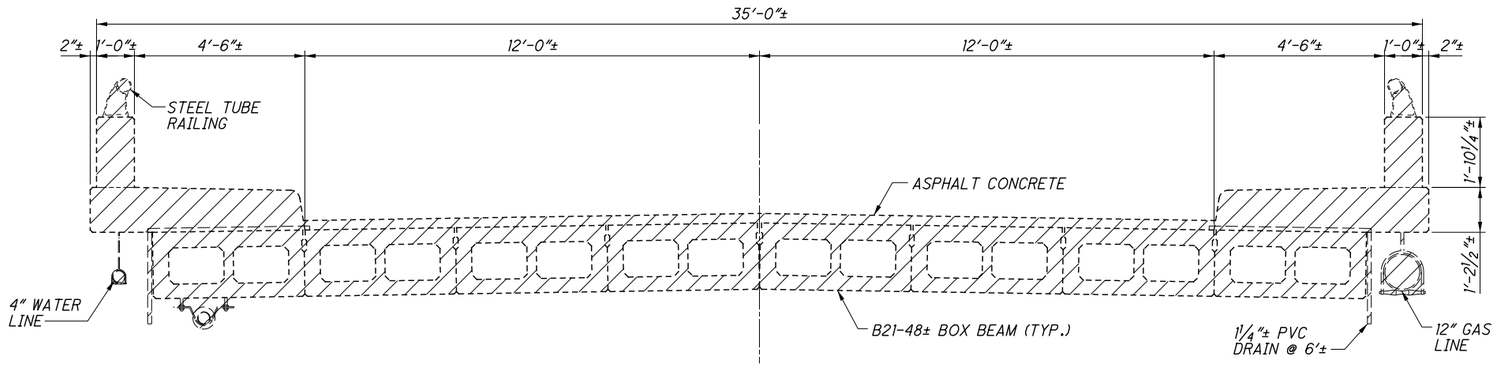
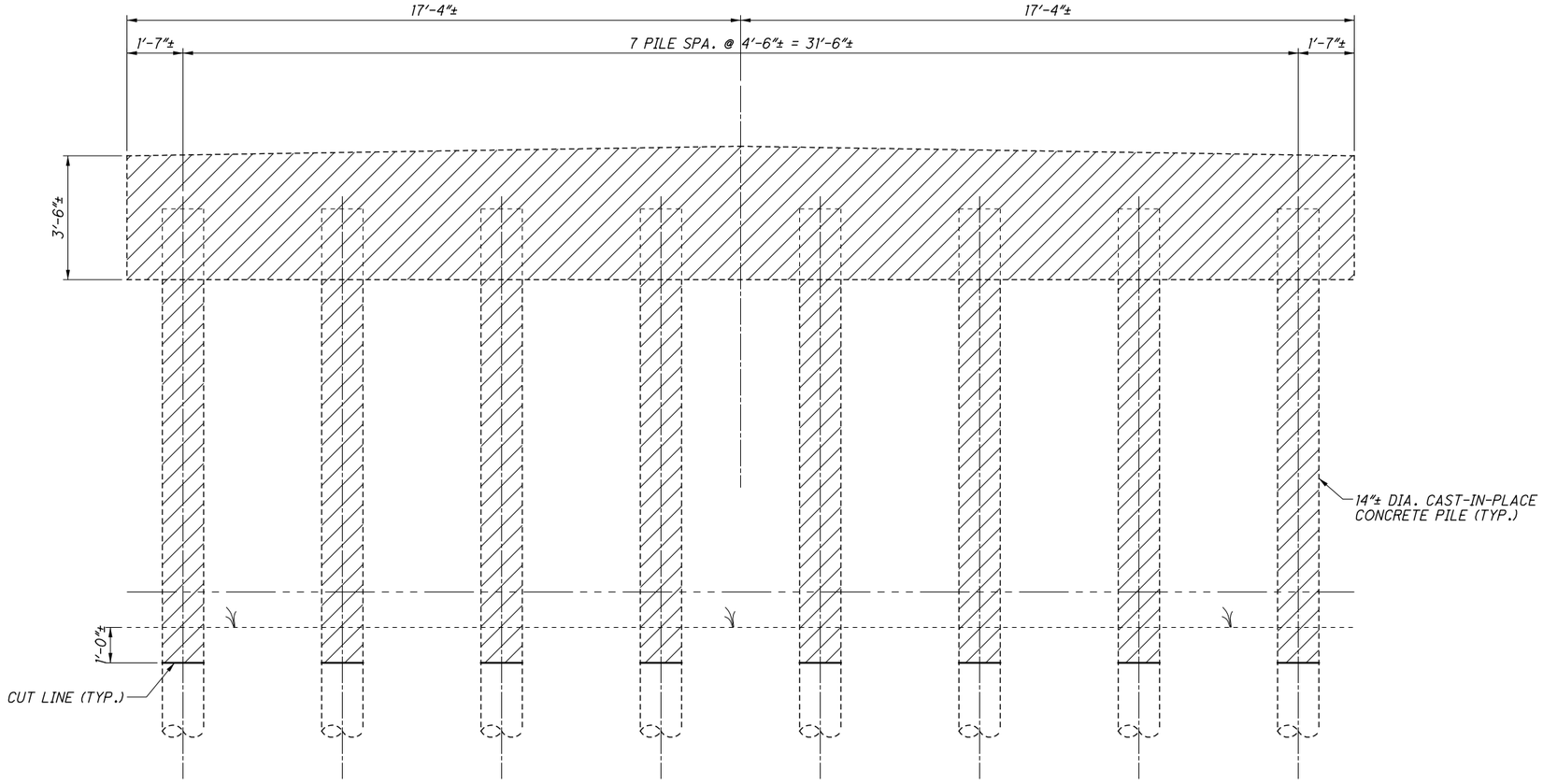
45
59



EXISTING TRANSVERSE SECTION



EXISTING PIER ELEVATION

LEGEND

INDICATES PORTIONS OF STRUCTURE REMOVED

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DESIGNED	DRAWN	REVIEWED	DATE
BLN	JLS		
CHECKED	REVISED		STRUCTURE FILE NUMBER
dht			

REMOVAL DETAILS
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.
PID No. 91972

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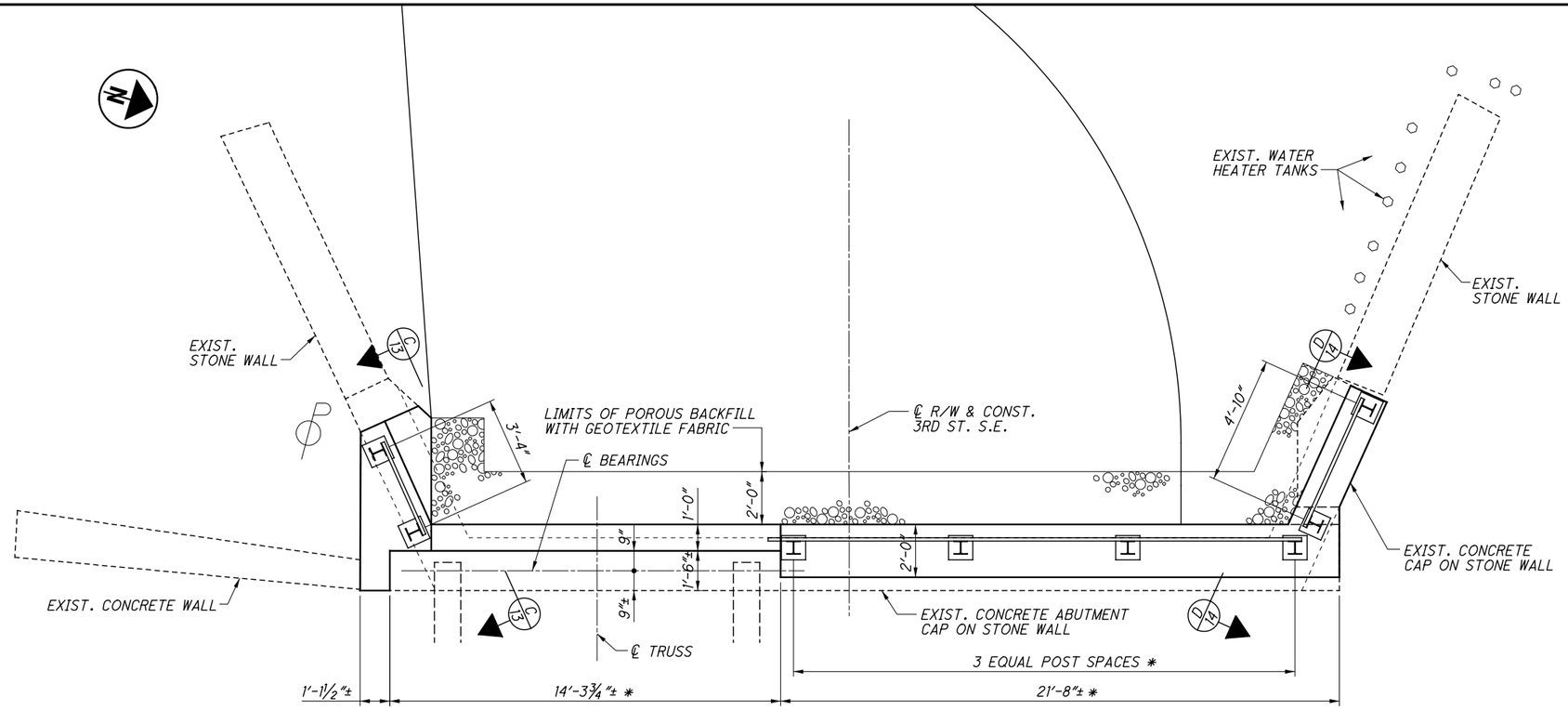
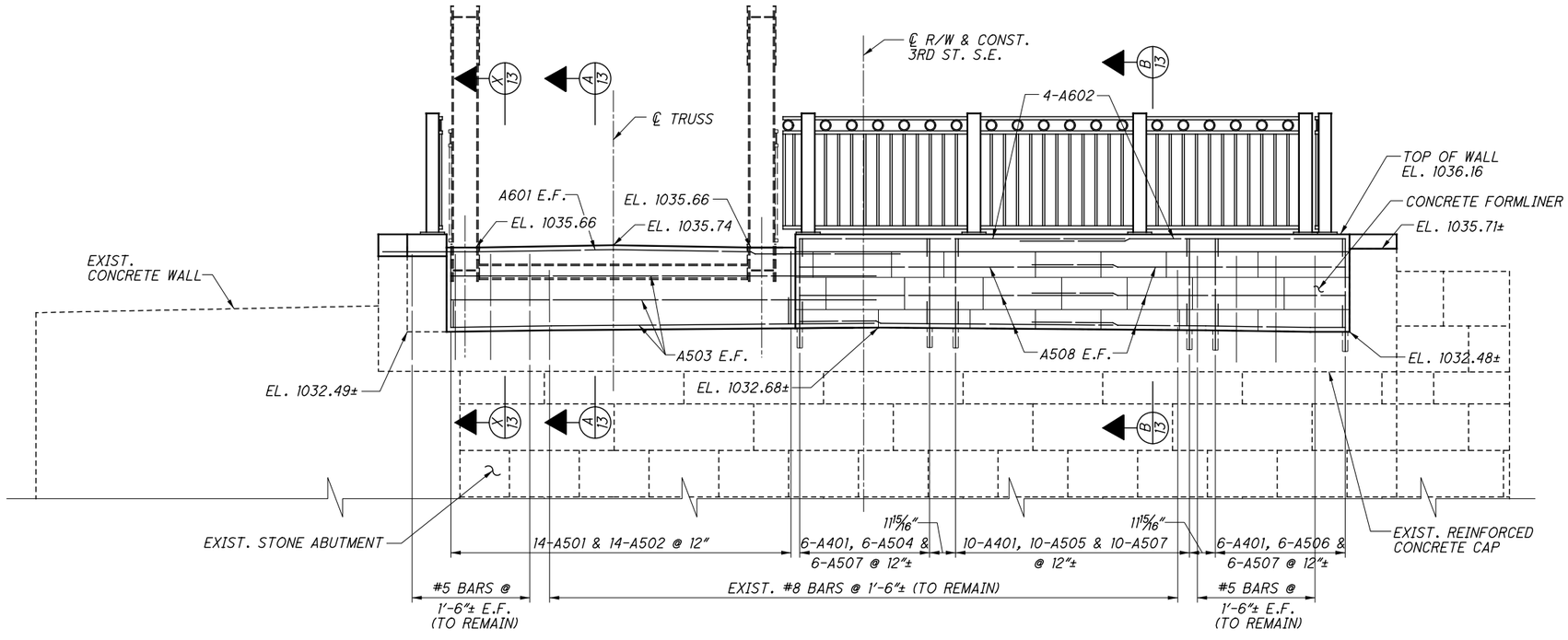
46
59

F:\2013\113016 3rd St Bridge\91972\structures\Sheets\91972RE001.dgn 2/6/19 2:59:26 PM JeremyBurns



PLAN



ELEVATION

* ACTUAL DIMENSIONS TO BE DETERMINED BY TRUSS DESIGN.

NOTES

REINFORCING STEEL SPLICE LENGTHS SHALL BE 2'-4" FOR VERTICAL #5 BARS, 3'-1" FOR HORIZONTAL #5 BARS, 3'-6" FOR VERTICAL #6 BARS AND 4'-0" FOR HORIZONTAL #6 BARS.

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DESIGNED	DRAWN	REVIEWED	DATE
BLN	RB		
CHECKED	REVISED		STRUCTURE FILE NUMBER
dht			

REAR ABUTMENT
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.
PID No. 91972

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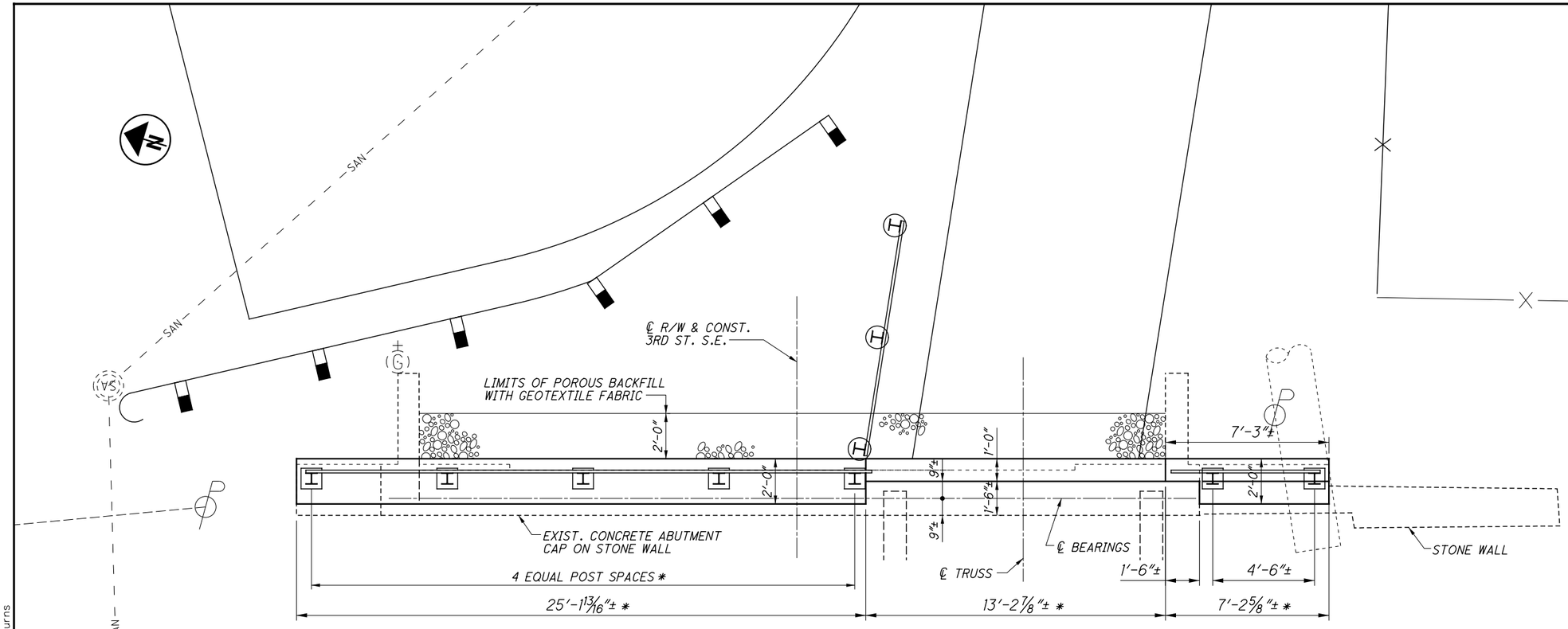
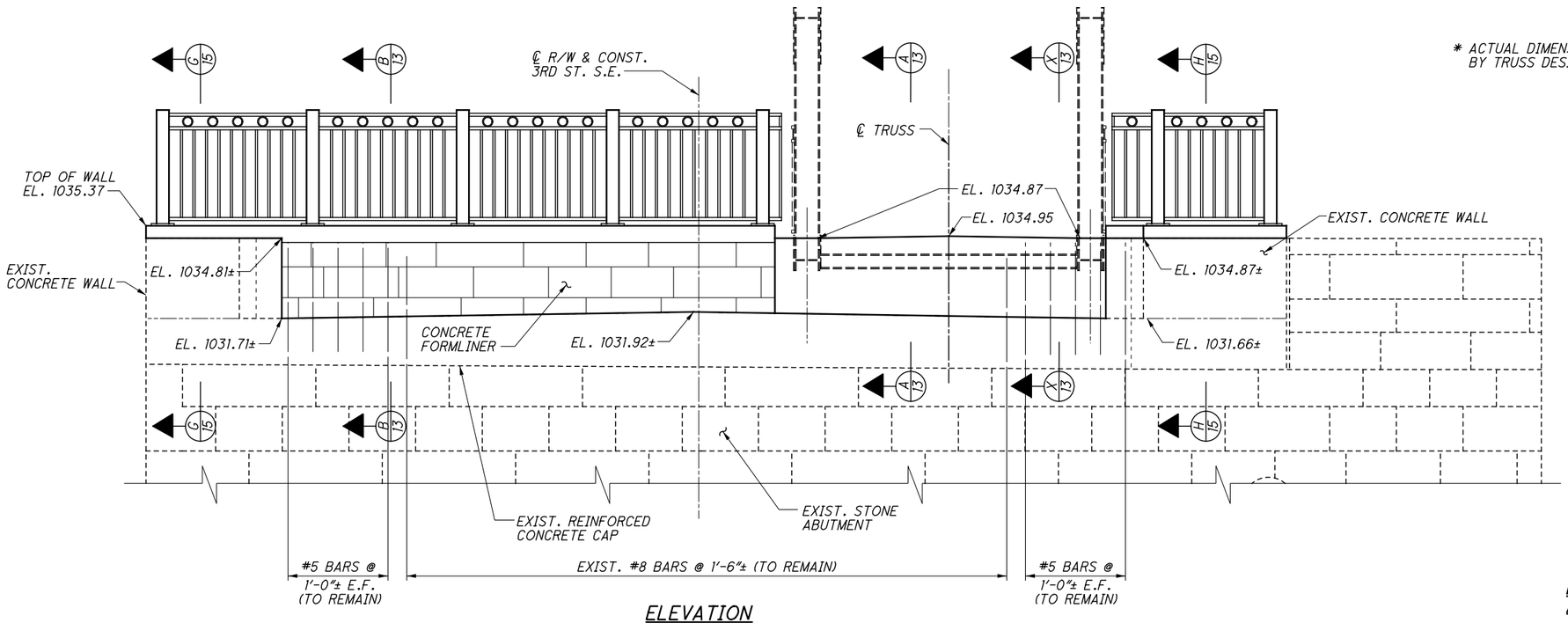


PLAN



ELEVATION

* ACTUAL DIMENSIONS TO BE DETERMINED BY TRUSS DESIGN.

NOTES

ADDITIONAL NOTES SEE SHEET 11/18.

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DESIGNED	DRAWN	REVIEWED	DATE
BLN	JLS		
CHECKED	REVISED		STRUCTURE FILE NUMBER
dht			

FORWARD ABUTMENT
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.
PID No. 91972

12/18

48
59

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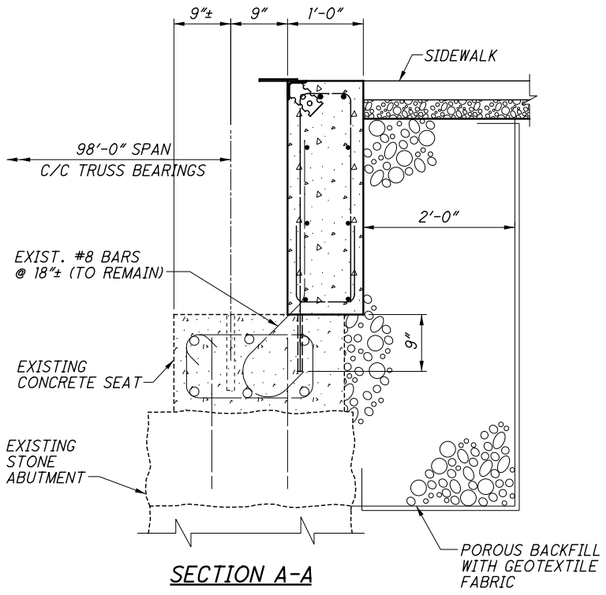
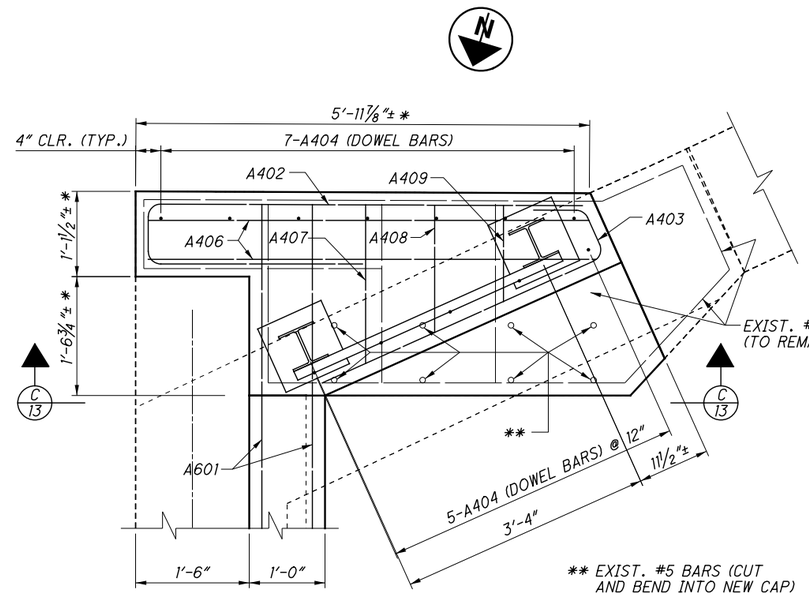
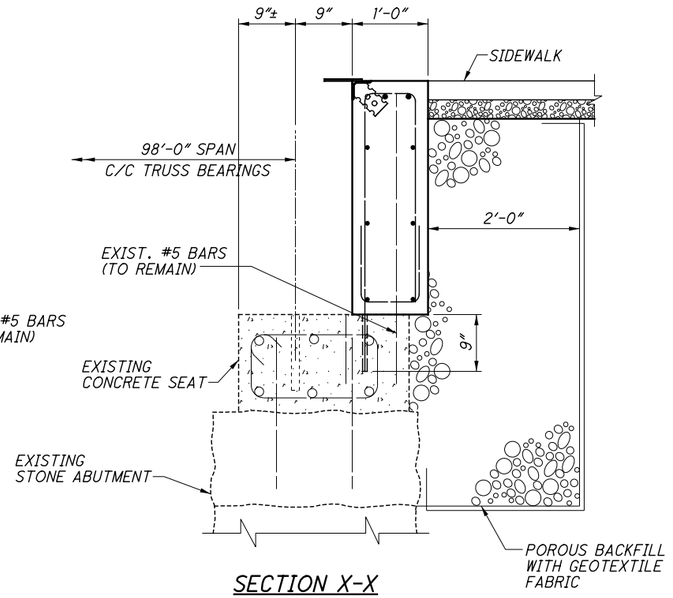


SECTION A-A



** EXIST. #5 BARS (CUT AND BEND INTO NEW CAP)

REAR ABUTMENT SOUTH WALL



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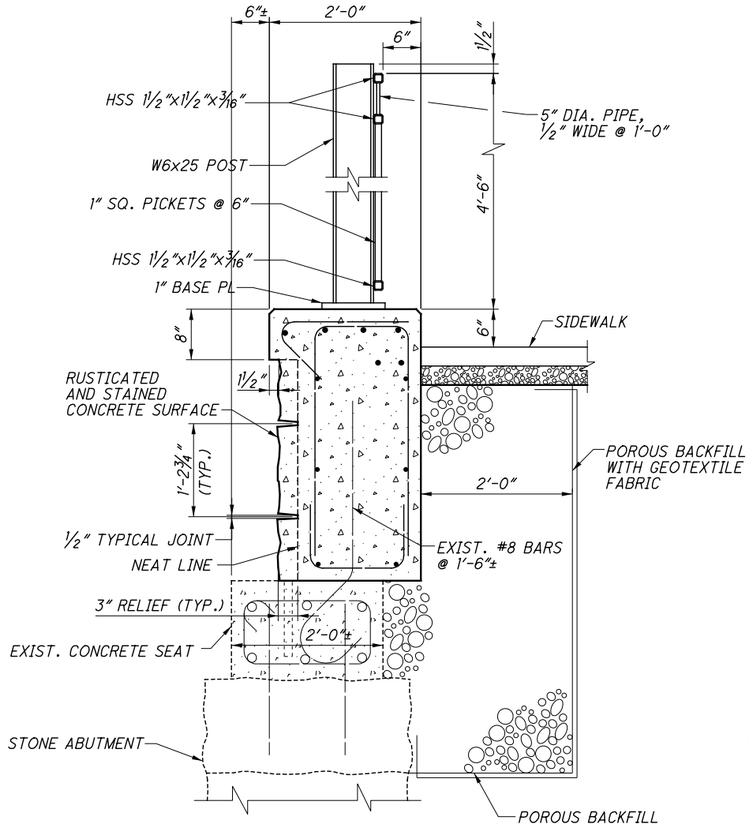
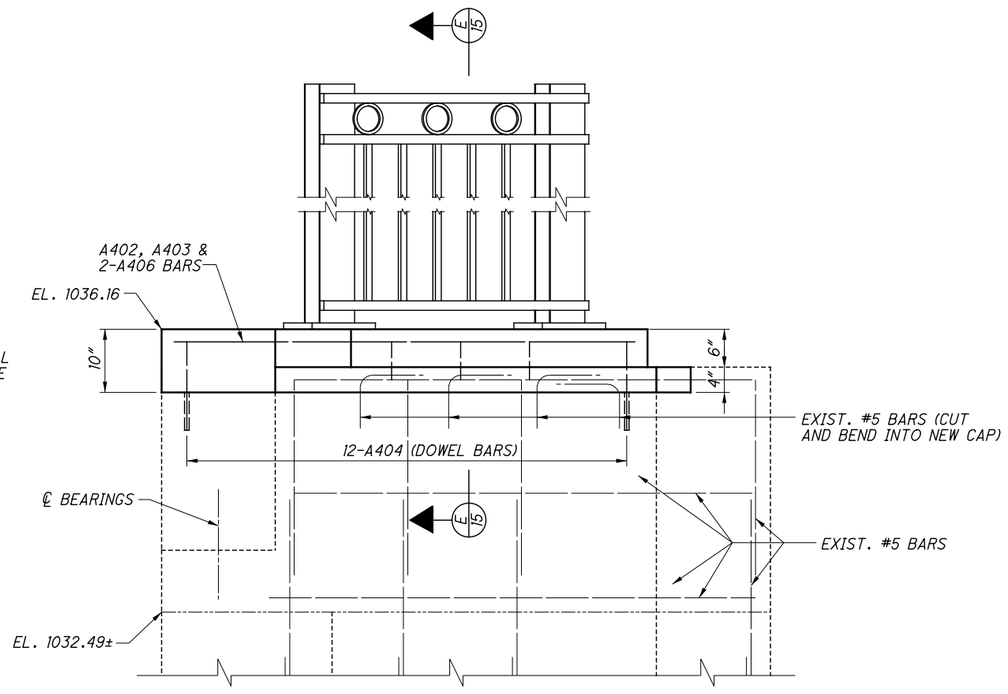


SECTION B-B



SECTION C-C

* - MATCH EXISTING

NOTES

SECTIONS A-A, B-B & X-X: *FOR LOCATIONS SEE SHEETS* 11/18 & 12/18.

ADDITIONAL NOTES: *SEE SHEET* 11/18.

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DESIGNED	DRAWN	REVIEWED	DATE
BLN	JLS		
CHECKED	REVISED		STRUCTURE FILE NUMBER
dht			

ABUTMENT SECTIONS - 1
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.
PID No. 91972

13 / 18

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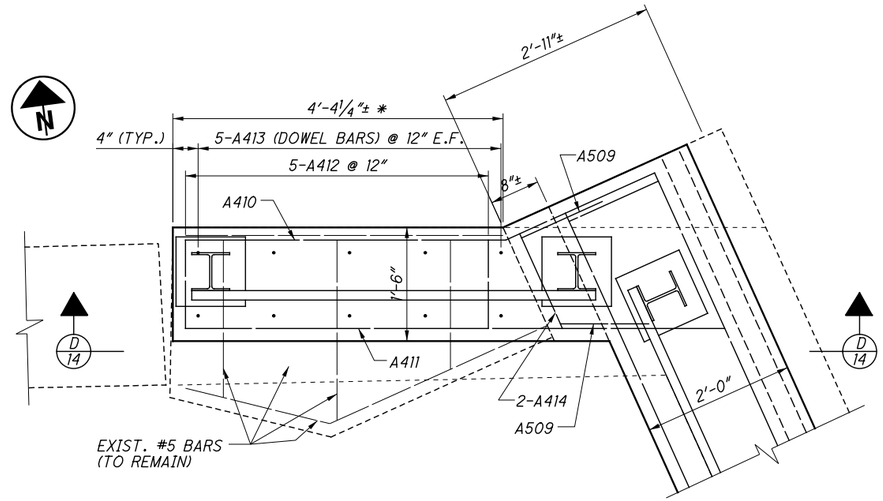
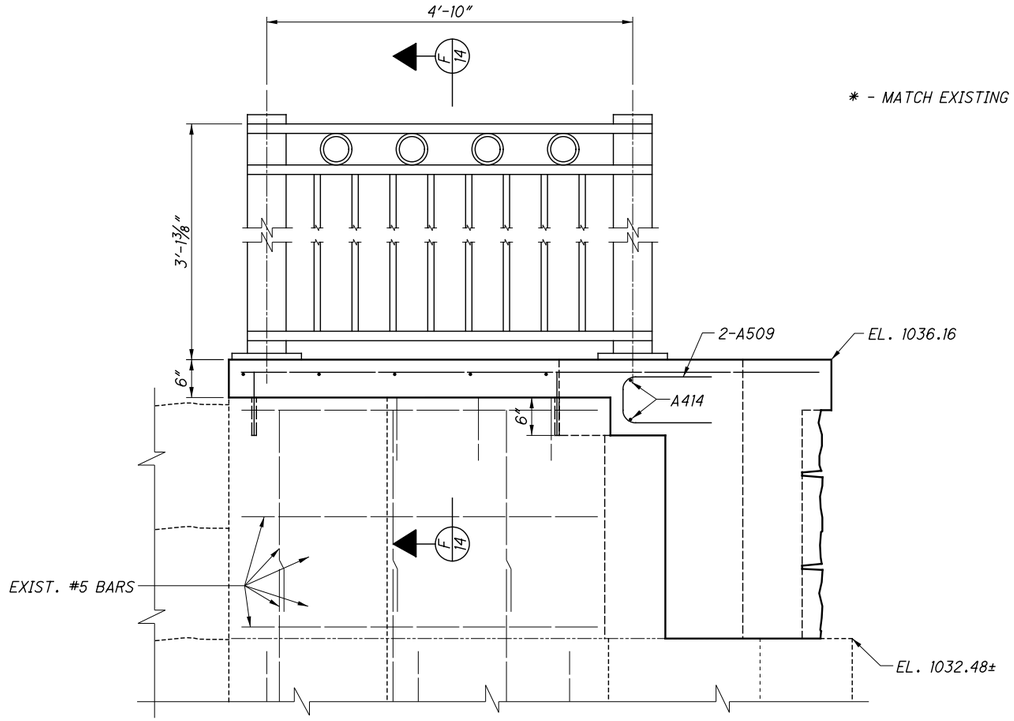
59

F:\2013\113016 3rd St Bridge\91972\structures\Sheets\91972AB004.dgn 2/6/2019 3:40:45 PM JeffSmith

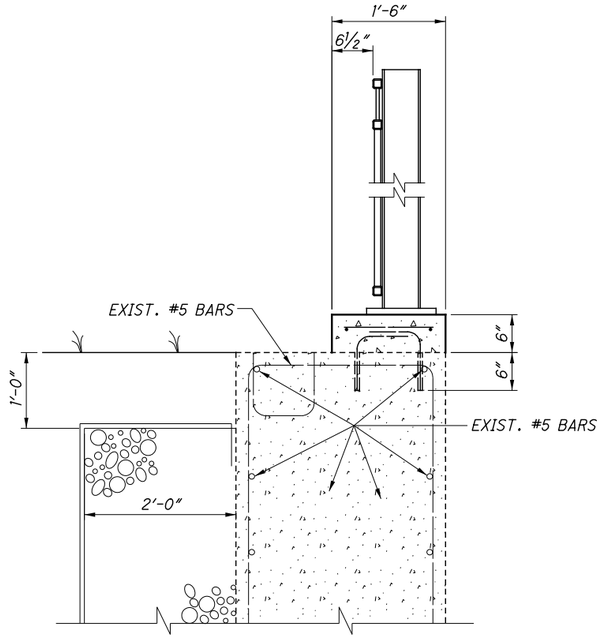


REAR ABUTMENT NORTH WALL



SECTION D-D

* - MATCH EXISTING



SECTION F-F

NOTES

ADDITIONAL NOTES: SEE SHEET 11/18.

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DESIGNED	DRAWN	REVIEWED	DATE
BLN	JLS		
CHECKED	REVISED		STRUCTURE FILE NUMBER
dht			

ABUTMENT SECTIONS - 2
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.
PID No. 91972

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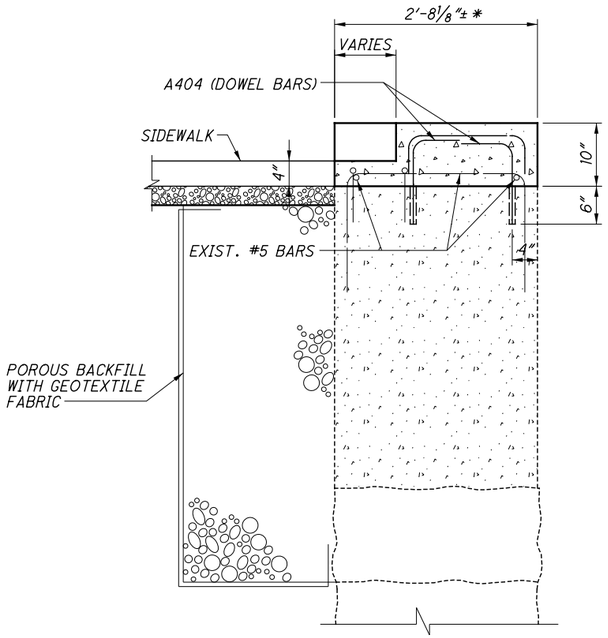
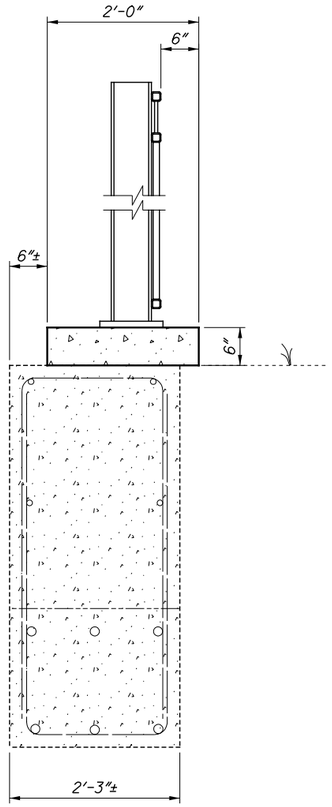
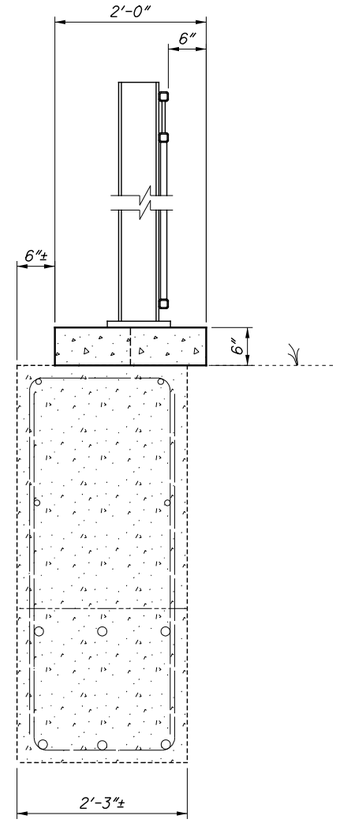


SECTION E-E

(RAILING NOT SHOWN)



SECTION G-G



SECTION H-H

NOTES

SECTION E-E: FOR LOCATION SEE SHEET 13/18.

SECTIONS G-G & H-H: FOR LOCATIONS SEE SHEET 12/18.

ADDITIONAL NOTES: SEE SHEET 11/18.

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DESIGNED	DRAWN	REVIEWED	DATE
BLN	JLS		
CHECKED	REVISED		
dht			

STRUCTURE FILE NUMBER

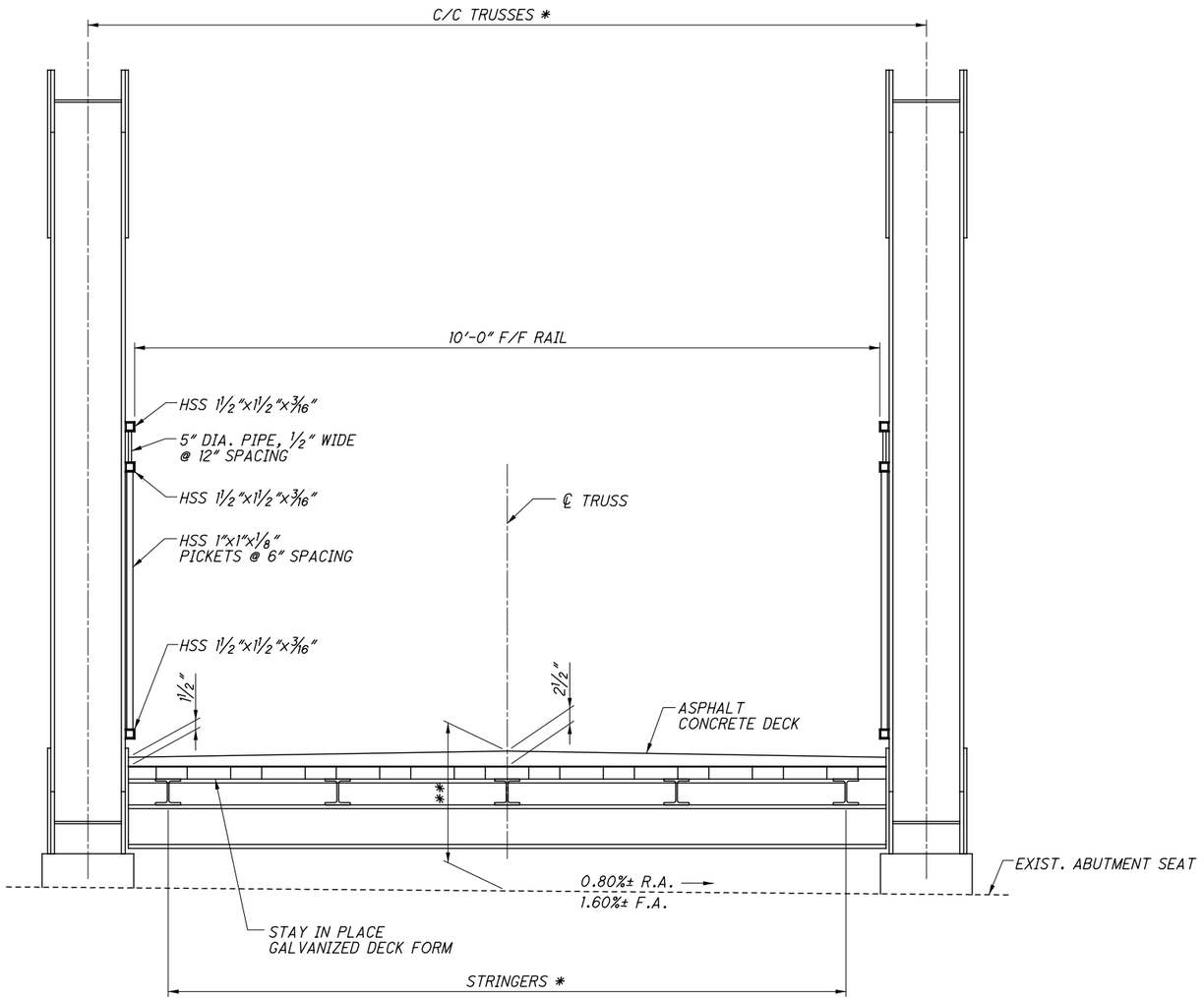
ABUTMENT SECTIONS - 3

3RD ST. S.E.

OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.

PID No. 91972



TRANSVERSE SECTION

LEGEND

* SPACING PER TRUSS MANUFACTURER

** 3'-0" MAXIMUM DEPTH AT ABUTMENTS, INCLUDING BEARINGS. STEEL SHIMS TO BE USED TO SET UNDER BEARINGS ON EXISTING SEATS (ESTIMATED MAXIMUM SHIM DEPTH IS 3½". IF STRUCTURE DEPTH IS LESS SO THAT SHIM DEPTH IS OVER 6", A REINFORCED CONCRETE BEARING PAD MAY BE CONSTRUCTED ON THE EXISTING SEAT.

NOTES

RAILING DETAILS: SEE SHEET 17/18.

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

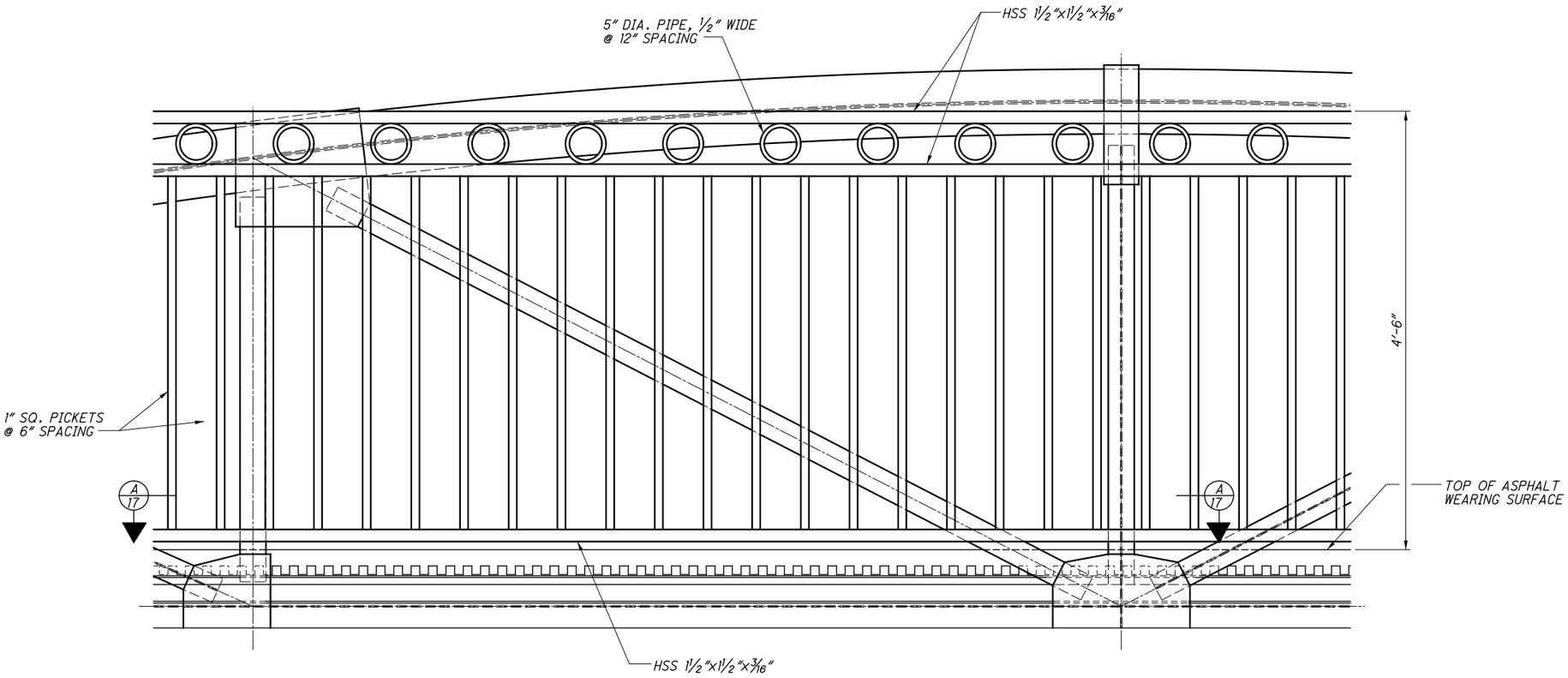
DESIGNED	DRAWN	REVIEWED	DATE
BLN	RB		
CHECKED	REVISED	STRUCTURE FILE NUMBER	
dht			

TRANSVERSE SECTION
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

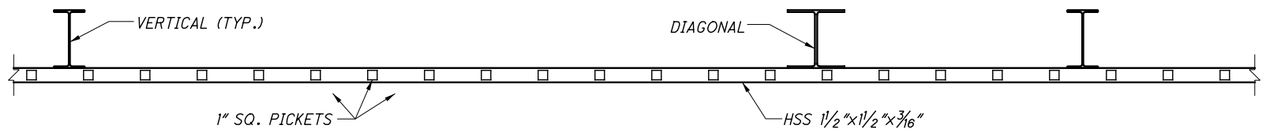
STA-3RD ST. S.E.
PID No. 91972

16/18

52/59



PARTIAL RAILING ELEVATION



SECTION A-A

F:\2013\113016 3rd St Bridge\91972\structures\Sheets\91972SD001.dgn 2/6/19 2:35:51 PM JeremyBurns

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

DESIGNED	DRAWN	REVIEWED	DATE
BLN	JLS		
CHECKED	REVISED	STRUCTURE FILE NUMBER	
dht			

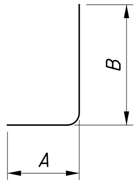
PARTIAL RAILING ELEVATION
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.
PID No. 91972

17 / 18

53
59

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS						
	REAR	FORWARD	TOTAL				A	B	C	D	E	R	INC
ABUTMENTS											CALCULATED ____ CHECKED ____		DATE ____ DATE ____
					TOTAL								



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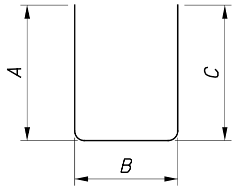

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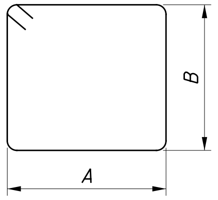

TYPE-3

NOTES

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST LETTER IDENTIFIES BAR LOCATION, THE NEXT DIGIT INDICATES THE BAR SIZE DESIGNATION, THE REMAINING DIGITS STATE THE SEQUENCE NUMBER.

EXAMPLE: A501
A = LOCATION OF THE BAR IN ABUTMENT
5 = BAR SIZE DESIGNATION
01 = SEQUENCE NUMBER

BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.

ALL REINFORCING STEEL TO BE EPOXY COATED.

RICHLAND ENGINEERING LIMITED
29 NORTH PARK STREET
MANSFIELD, OHIO 44902

REVIEWED DATE
STRUCTURE FILE NUMBER

DRAWN JLS
REVISED

DESIGNED BLN
CHECKED dht

REINFORCING STEEL LIST
3RD ST. S.E.
OVER MIDDLE BRANCH OF NIMISHILLEN CREEK

STA-3RD ST. S.E.
PID No. 91972

18/18

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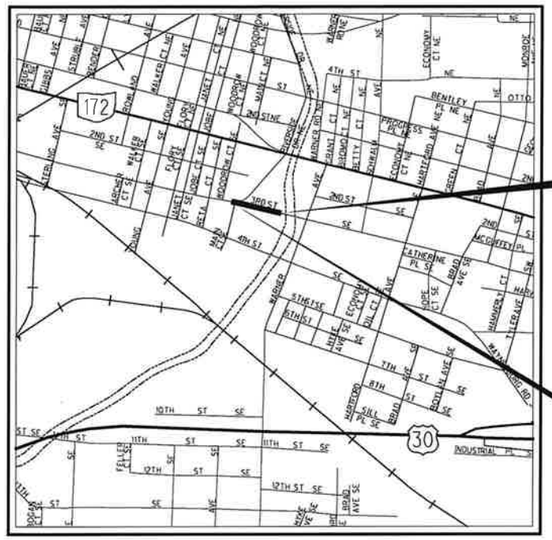
RIGHT OF WAY LEGEND SHEET STA-3RD ST. S.E.

CITY OF CANTON
STARK COUNTY
STATE OF OHIO



LOCATION MAP

LATITUDE: 40°47'37" N LONGITUDE: 81°21'29" W

SCALE IN MILES
0 1/8 1/4 1/2 3/4

N

PROJECT DESCRIPTION

REMOVAL OF A DEFICIENT BRIDGE OVER THE MIDDLE BRANCH OF NIMISHILLEN CREEK. INSTALLATION OF A PREFABRICATED PEDESTRIAN BRIDGE. EXISTING APPROACH WILL BE A CUL-DE-SAC ON EXISTING VERTICAL ALIGNMENT. INTERSECTION MODIFICATION AT 3RD ST. S.E. AND RIVERSIDE DR. S.E. MINOR UTILITY WORK AND DRAINAGE WORK.

PROJECT LENGTH 0.12 MILE.

INDEX OF SHEETS:

PLANS PREPARED BY:

FIRM NAME : RICHLAND ENGINEERING LIMITED
R/W DESIGNER: BRIAN BESECKER
R/W REVIEWER: ROBERT J. McAULEY
FIELD REVIEWER: ROBERT J. McAULEY
PRELIMINARY FIELD REVIEW DATE:
TRACINGS FIELD REVIEW DATE: 1/11/19
OWNERSHIP UPDATED BY: BRIAN BESECKER
DATE COMPLETED: 1/14/19
PLAN COMPLETION DATE: 1/15/19

UTILITY OWNERS

ELECTRIC
AEP-OHIO
301 CLEVELAND AVENUE S.W.
P.O. BOX 24400
CANTON, OHIO 44701
330-438-7762
ATTN: KEN HUOT

TELEPHONE
AT&T
50 WEST BOWER STREET
AKRON, OHIO 44308
330-384-2245
ATTN: RICH WILSON

CABLE
TIME WARNER CABLE
5520 WHIPPLE AVE. N.W.
NORTH CANTON, OHIO 44720
330-494-9200
ATTN.: RON FERDINAND
EXT.: 330-555-3003

SEWERS
CITY OF CANTON
CITY ENGINEER'S OFFICE
2436 30TH ST. N.E.
CANTON, OHIO 44705
330-489-3381
ATTN.: DAN MOEGLIN

GAS
DOMINION EAST OHIO GAS
320 SPRINGSIDE DR.
AKRON, OHIO 44333
330-664-2409
ATTN: MARY LONG

OIL
ENERVEST (FORMERLY BELDON & BLAKE)
125 S.R. 43
HEARTVILLE, OHIO 44652
330-877-6747
ATTN.: RICK KEPLER

WATER
CITY OF CANTON WATER DEPARTMENT
2664 HARRISBURG RD. N.E.
CANTON, OHIO 44708
330-489-3310
ATTN.: LEWI MILLER

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

MONUMENT LEGEND

- EXISTING R/W MONUMENT BOX
- O I.P.F. IRON PIN FOUND
- ● I.P.S. IRON PIN SET W/ ID CAP (5/8"X30" LONG REBAR WITH PLASTIC CAP STAMPED "RICHLAND ENGINEERING LIMITED")
- ◎ P.F. IRON PIPE FOUND

TYPES OF TITLE LEGEND:
WD = WARRANTY DEED

STRUCTURE KEY

- RESIDENTIAL
- COMMERCIAL
- OUT-BUILDING

CONVENTIONAL SYMBOLS

County Line
Township Line
Section Line
Corporation Line or
Fence Line (Ex) (Pr)
Center Line
Right of Way (Ex) Ex R/W
Right of Way (Pr) R/W
Standard Highway Ease.(Ex) Ex SH
Temporary Right of Way TMP
Channel Ease. (Pr) CH
Utility Ease. (Ex) Ex U
Railroad or
Guardrail (Ex) (Pr)
Construction Limits
Edge of Pavement (Ex)
Edge of Pavement (Pr)
Edge of Shoulder (Ex)
Edge of Shoulder (Pr)
Ditch / Creek (Ex)
Ditch / Creek (Pr)
Tree Line (Ex)
Ownership Hook Symbol , Example
Property Line Symbol , Example
Break Line Symbol , Example
Tree (Pr) , Tree (Ex) , Shrub (Ex)
Tree (Remove) , Shrub (Remove)
Evergreen (Ex) , Stump
Evergreen (Remove) , Stump (Remove)
Wetland (Pr) , Grass (Pr) , Aerial Target
Post (Ex) , Mailbox (Ex) , Mailbox (Pr)
Light (Ex) , Telephone Marker (Ex)
Fire Hydrant (Ex) , Water Meter (Ex)
Water Valve (Ex) , Utility Valve Unknown (Ex.)
Telephone Pole (Ex) , Power Pole (Ex)
Light Pole (Ex)

I, ROBERT J. MCAULEY, P. S. HAVE CONDUCTED A SURVEY OF THE EXISTING CONDITIONS FOR THE OHIO DEPARTMENT OF TRANSPORTATION IN 2013. THE RESULTS OF THAT SURVEY ARE CONTAINED HEREIN. THE HORIZONTAL COORDINATES EXPRESSED HEREIN ARE BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM NORTH ZONE ON NAD 83(86) DATUM. THE PROJECT COORDINATES (US SURVEY FEET) ARE RELATIVE TO STATE PLANE GRID COORDINATES (US SURVEY FEET) BY A PROJECT ADJUSTMENT FACTOR OF 1.000093681. AS A PART OF THIS PROJECT I HAVE REESTABLISHED THE LOCATIONS OF THE EXISTING PROPERTY LINES AND THE EXISTING CENTERLINE OF RIGHT OF WAY FOR PROPERTY TAKES CONTAINED HEREIN. AS A PART OF THIS PROJECT I HAVE ESTABLISHED THE PROPOSED PROPERTY LINES, CALCULATED THE GROSS TAKE, PRESENT ROADWAY OCCUPIED (PRO), NET TAKE AND NET RESIDUE; AS WELL AS PREPARED THE LEGAL DESCRIPTIONS NECESSARY TO ACQUIRE THE PARCELS AS SHOWN HEREIN. AS A PART OF THIS WORK I HAVE SET RIGHT OF WAY MONUMENTS AT THE PROPERTY CORNERS, PROPERTY LINE INTERSECTION, POINTS ALONG THE RIGHT OF WAY AND/OR ANGLE POINTS ON THE RIGHT OF WAY. ALL OF MY WORK CONTAINED HEREIN WAS CONDUCTED IN ACCORDANCE WITH OHIO ADMINISTRATIVE CODE 4733-37 COMMONLY KNOWN AS "MINIMUM STANDARDS FOR BOUNDARY SURVEYS IN THE STATE OF OHIO" UNLESS NOTED. THE WORDS I AND MY AS USED HEREIN ARE TO MEAN EITHER MYSELF OR SOMEONE WORKING UNDER MY DIRECT SUPERVISION.

ROBERT J. MCAULEY, PROFESSIONAL LAND SURVEYOR 7209

15 Jan 2019
DATE:

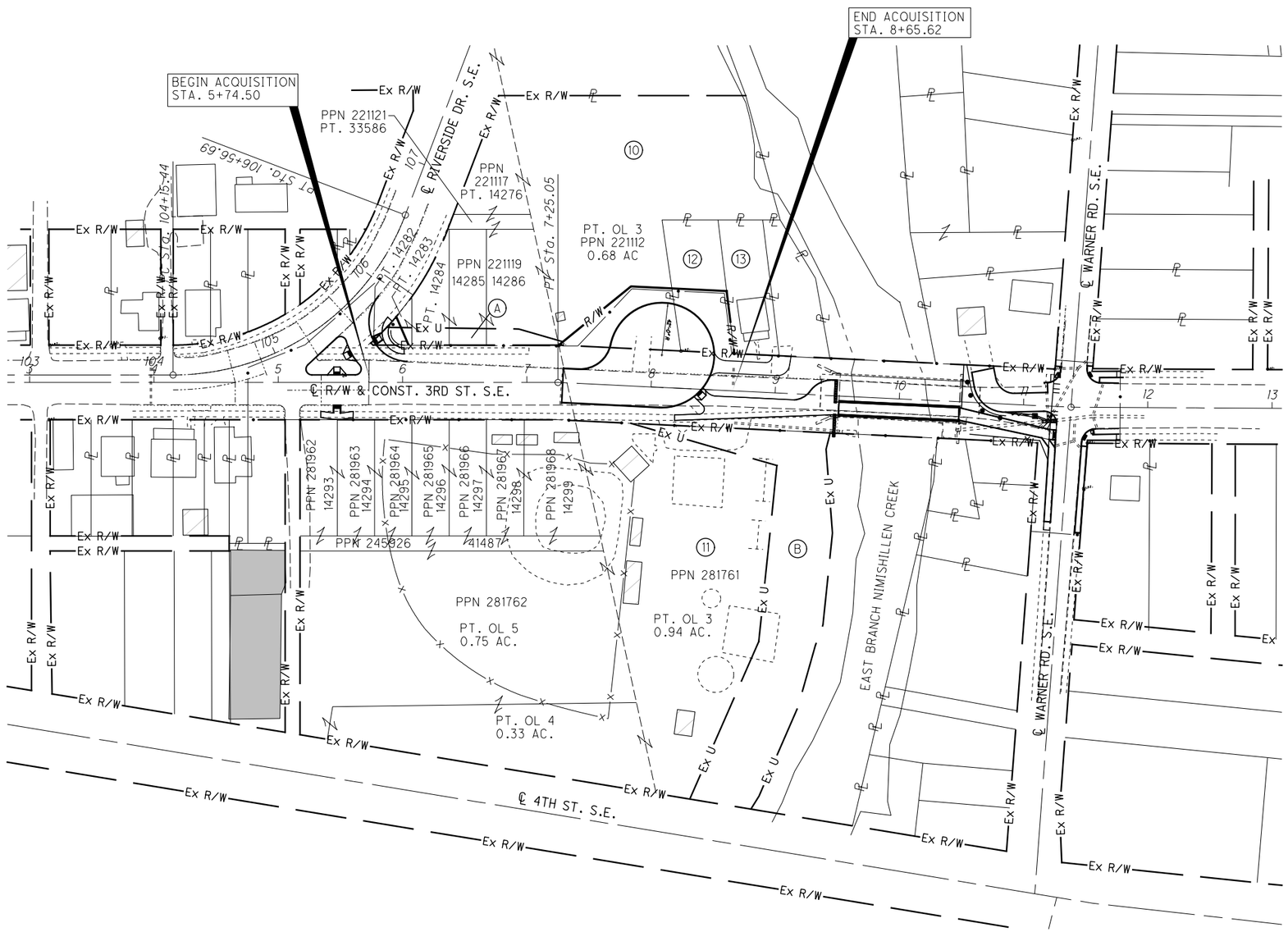
SURVEYORS SEAL

STATE OF OHIO
ROBERT J. McAULEY
7209
REGISTERED PROFESSIONAL SURVEYOR

FEDERAL PROJECT NO. E120 (673)
PID NO. 91972
CALCULATED BB CHECKED RJM
RIGHT OF WAY LEGEND SHEET
STA-3RD ST. S.E.
1 / 5
55 / 59

F:\2013\113016 3rd St Bridge\91972\row\sheets\91972RL001.dgn 1/14/2019 3:52:59 PM BrianBesecker

STATE OF OHIO
STARK COUNTY
MCKINLEY TOWNSHIP
CITY OF CANTON



⑩
MATTHEW W. WEIDA
INST. 200602270011155
3RD ST. S.E.

⑪
CITY OF CANTON
D.V. 1216, PG. 229
3RD ST. S.E.

⑫
STARK COUNTY LAND
REUTILIZATION CORPORATION
INST. 20150930039044
1613 3RD ST. S.E.
PPN 220820
32463

⑬
RAFE N. LAZAR
INST. 2002010894
1615 3RD ST. S.E.
PPN 220526
32464

Ⓐ OHIO POWER COMPANY EASEMENT
INST. 201405190017907

Ⓑ OHIO POWER COMPANY EASEMENT
INST. 201606020021217

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 1/15/19

HORIZONTAL SCALE IN FEET
0 25 50 100

PID NO. 91972

R/W DESIGNER BB
R/W REVIEWER RJM

PROPERTY MAP

STA-3RD ST. S.E.

2 / 5

56
59

F:\2013\113016 3rd St Bridge\91972\row\sheets\91972RM001.dgn 1/15/2019 2:20:08 PM BrianBesecker

TOTAL NUMBER OF :

2 OWNERSHIPS
3 PARCELS
0 TOTAL TAKES
0 OWNERSHIPS W/ STRUCTURES INVOLVED

NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE

GRANTEE:

ALL RIGHT OF WAY ACQUIRED IN THE NAME OF THE CITY OF CANTON UNLESS OTHERWISE SHOWN.

ALL AREAS IN ACRES

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD	AUDITOR'S PARCEL	RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUCTURE	NET RESIDUE LEFT	NET RESIDUE RIGHT	TYPE FUND	REMARKS	AS ACQUIRED BOOK	AS ACQUIRED PAGE
1-9	NOT USED															
10-WD2	MATTHEW W. WEIDA			221112	0.68	—	0.075	—	0.075		0.605	—		PT. OL 3		
				221117	0.06	—	—	—	—		0.06	—		PT. LOT 14296		
10-WD1			200602270011155	221118	0.15	—	0.008	—	0.008		0.142	—		PT. LOT 14282, PT. LOT 14283, PT. LOT 14284, LOT 14285		
				221119	0.11	—	—	—	—		0.11	—		LOT 14286		
				221121	0.03	—	—	—	—		0.03	—		PT. LOT 33586		
	TOTAL				1.03	—	0.083	—	0.083		0.947					
				245926	0.07	—	—	—	—		—	0.07		LOT 41487		
11	CITY OF CANTON			281761	1.27	—	—	—	—		—	1.27		PT. OL 3, PT. OL 4		
				281762	0.75	—	—	—	—		—	0.75		PT. OL 5		
				281962	0.06	—	—	—	—		—	0.06		LOT 14293		
			D.V. 1216, PG. 229	281963	0.06	—	—	—	—		—	0.06		LOT 14294		
				281964	0.06	—	—	—	—		—	0.06		LOT 14295		
				281965	0.06	—	—	—	—		—	0.06		LOT 14296		
				281966	0.06	—	—	—	—		—	0.06		LOT 14297		
				281967	0.06	—	—	—	—		—	0.06		LOT 14298		
				281968	0.10	—	—	—	—		—	0.10		LOT 14299		
	TOTAL				2.55							2.55				
12-WD	STARK COUNTY LAND REUTILIZATION CORPORATION		20150930039044	220820	0.099	—	0.050	—	0.050		0.049			LOT 32463, SHERIFF'S DEED		
13	RAFE N. LAZAR		2002010894	220526	0.083	—	—	—	—		0.083			LOT 32464		

TYPES OF TITLE LEGEND:
WD = WARRANTY DEED

* DENOTES RIGHT OF WAY ENCROACHMENT

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 1/15/19

FEDERAL PROJECT NO. E120 (673)

PID NO. 91972

STATE JOB NO.

R/W DESIGNER BB

R/W REVIEWER RJM

SUMMARY OF ADDITIONAL RIGHT OF WAY

STA-3RD ST. S.E.

3 / 5

57
59

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SCALE: 1" =20'

STATE OF OHIO
STARK COUNTY
MCKINLEY TOWNSHIP
CITY OF CANTON

℄ RIVERSIDE DR.
Δ=69°06'55"
Dc=28°38'52"
R= 200.00'
T=137.75'
L= 241.26'
CHD.= 226.89'
BRG.= N 69°22'21" E

PT STA. 106+56.69

N34°48'53"E

℄ RIVERSIDE DR. S.E.

PC Sta. 104+15.44

PT. 14281

PT. 14282

PT. 14283

PT. 14282

STA. 5+95.00
52.86' LT.

STA. 5+74.50
31.66' LT.

STA. 6+05.00
30.00 'LT.

STA. 6+07.55
30.00 'LT.

STA. 5+76.44
30.00 'LT.

STA. 105+53.19 P.I. ℄ RIVERSIDE DR. S.E.=
STA. 5+53.19, 6.00' LT. ℄ 3RD ST. S.E.

BEGIN ACQUISITION
STA. 5+74.50

STA. 7+00

MATCHLINE

S76°4'12"E

S76°4'12"E

N76°4'12"W

L1 N76°04'12"W 28.56'
L2 N35°23'28"W 2.55'
L3 S09°42'13"E 24.95'

CURVE 1
Δ= 7°09'46"
Dc=24°16'40"
R= 236.00'
T=14.77'
L= 29.50'
CHD.= 29.48'
BRG.= N 57°58'16" E

2 STORY FRAME RES.

VACANT LAND

PAVILION

BALL FIELD

MATTHEW W. WEIDA
INST. 200602270011155
3RD ST. S.E.

CITY OF CANTON
D.V. 1216, PG. 229
3RD ST. S.E.

OHIO POWER COMPANY EASEMENT
INST. 201405190017907

EX. UTILITY POLE
(TO BE RELOCATED
BY OTHERS)

℄ R/W & CONST. 3RD ST. S.E.

PPN		
221117	PT. 14276	
221121	PT. 33586	
221118	14284	
221118	14285	
221119	14286	
281962	14293	
281963	14294	
281964	14295	
281965	14296	
281966	14297	
281967	14298	
245926		
281762	PT. OL 5	

① - NEW DIVISION LINE

REV. BY	DATE	DESCRIPTION
DATE COMPLETED	1/15/19	

RIGHT OF WAY PLAN
STA. 2+50.00 TO STA. 7+00.00

STA-3RD ST. S.E.

PID NO. 91972

R/W DESIGNER BB
R/W REVIEWER RJM

HORIZONTAL SCALE IN FEET
0 10 20 40

4 / 5

58 / 59

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SCALE: 1" = 20'

STATE OF OHIO
STARK COUNTY
MCKINLEY TOWNSHIP
CITY OF CANTON

⑫ STARK COUNTY LAND REUTILIZATION CORPORATION
INST. 20150930039044
1613 3RD ST. S.E.
PPN 220820
32463

⑬ RAFE N. LAZAR
INST. 2002010894
1615 3RD ST. S.E.
PPN 220526
32464

⑩ MATTHEW W. WEIDA
INST. 200602270011155
3RD ST. S.E.

PPN 221117
PT. 14276

PPN 221121
33586

PPN 221112
PT. OL 3, 0.68 AC.

PPN 221119
14286

VACANT LAND

VACANT LAND

PT. 6341

PT. 6341
PT. 6342
PT. OL 274

FRANK G. & KATHERINE PENN
221 WARNER RD. S.E.
PPN 247473

PT. 6341
PT. 6342
PT. OL 274

7868

7869

RONALD E. STANG
222 WARNER RD. S.E.
PPN 232032
7870

RALH W. & DORIS A. SOLLBERGER
PPN 231647
32465

STA. 7+80.00
80.00' LT

STA. 8+12.92
80.00' LT

STA. 8+57.03
80.00' LT

STA. 7+25.05
30.00' LT

STA. 7+25.05
29.69' LT
1/2" PIPE FND.
S1°51'39"W, 0.33'

PI STa. 7+25.05

GAS BUILDING

① S73°18'36"E
32.92'

① S73°18'36"E
44.12'

I.P.S.

① N64°45'43"E
74.83'

10-WD2

12-WD

R=50.00'
L=42.93'
S5°43'50"W

S6°57'00"W
50.73'

1 STORY FRAME RES. #1615

PORCH

+03.29 ℄ DRIVE
(W=15.0'; L=11.07)

20"

15"

WOODS
12" QUAD

WATER HEATER TANKS

GARAGE

+72.41
℄ DRIVE
(W=18.0'; L=14.41)

LIMESTONE

4' CHAIN LINK

℄ R/W WARNER RD. S.E.

Ex R/W

N18°12'44"E

OHIO POWER COMPANY
EASEMENT
INST. 201405190017907

STA. 8+22.60
30.00' LT.

98.27'
N73°18'36"W

43.02'
N73°18'36"W

STA. 8+65.62
30.00' LT.
1/2" PIPE FND.

STA. 8+22.70
29.98' LT.
2" ROD FND.
S62°53'53"E, 0.10'

S76°4'12"E

S73°18'36"E

℄ R/W & CONST. 3RD ST. S.E.

MATCHLINE STA. 7+00

LIMESTONE

CRAVEL

SAN 60'

SAN 18"

Ex R/W

S73°18'36"E

STA. 11+38.29

EX. 24"

S75°44'25"E

EX. 15"

LIMESTONE

DOUGOUT

END ACQUISITION
STA. 8+65.62

Ex U

BLOCK BLDG.

PLAYGROUND

SWINGSET

WOODS

18"

3' CHAIN LINK

E. EARL MARTIN
PPN 229206
PT. 6342

JAMES SR & LUCY MOORE
PPN 238899
PT. 6341

PT. 6342
PT. 6343

EDDIE TAYLOR
1702 3RD ST. S.E.
PPN 205708
PT. 3833

12"

36"

EAST BRANCH NIMISHILLEN CREEK

OHIO POWER COMPANY EASEMENT
INST. 201606020021217

PPN 2810968

PPN 245926

PPN 281762

⑪ CITY OF CANTON
D.V. 1216, PG. 229
3RD ST. S.E.

PPN 281761
OL 3, 0.94 AC.

① - NEW DIVISION LINE

REV. BY	DATE	DESCRIPTION
DATE COMPLETED	1/15/19	

HORIZONTAL SCALE IN FEET
0 10 20 40

PID NO. 91972

R/W DESIGNER BB
R/W REVIEWER RJM

RIGHT OF WAY PLAN
STA. 7+00.00 TO STA. 12+00.00
STA-3RD ST. S.E.

5 / 5

59
59

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