TRANSPORTATION AND THE CITY OF CANTON, INCLUDING CHANGES AND

SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL, SHALL GOVERN THIS

IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE

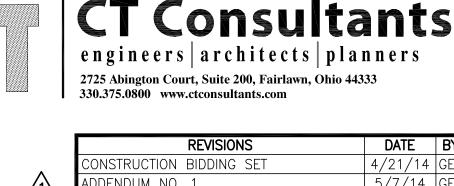
2013 SPECIFICATIONS

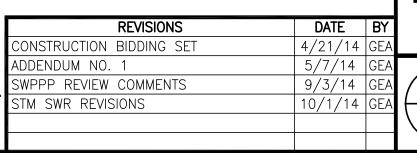
CITY OF CANTON

AS SET FORTH ON THE PLANS AND ESTIMATES.

CANTON CITY ENGINEER







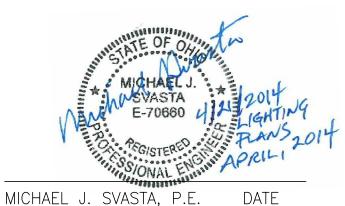


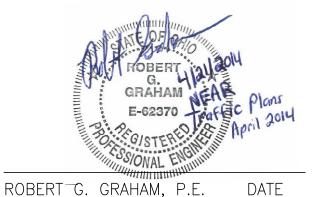
STA-0153-01.70

MAHONING ROAD NE ROADWAY IMPROVEMENTS G.P. 1103

TITLE SHEET
EXISTING CONDITIONS
SCHEMATIC PLAN
REFERENCE TIES
TYPICAL SECTIONS
GENERAL NOTES
MAINTENANCE OF TRAFFIC
MAINTENANCE OF TRAFFIC GENERAL NOTES 15-16
GENERAL SUMMARY
SUBSUMMARIES
STORM WATER POLLUTION PREVENTION PLAN - NOTES 41-43
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PR. SIGNAGE & PAVEMENT MARKING PLAN
ROADWAY GRADING PLAN
SIGNAL NOTES
SIGNAL SUBSUMMARY
SIGNAL PLANS
SIGNAL DETAILS
LIGHTING ESTIMATED QUANTITIES
STREET LIGHTING PLAN
LIGHTING CONTROL PANEL DETAILS
LIGHTING CONTROL PANEL SCHEDULES
LIGHTING DETAILS

SHEETS 1 THRU 82





SHEETS 97 THRU 108

PROJECT STA. 94+75

SHEET NUMBERS

4 THRU 8

LOCATION MAP

DESIGN DESIGNATION

DESIGN EXCEPTIONS

PAVEMENT CROSS SLOPE

DESIGN FEATURE

CURRENT ADT (2009)_______10411 VPD DESIGN YEAR ADT (2024)_________12703 VPD DESIGN HOURLY VOLUME______828 VPH

TRUCKS (24 HOUR B&C)________2%

DESIGN FUNCTIONAL CLASSIFICATION____________

DESIGN SPEED______35 MPH LEGAL SPEED______35 MPH

DIRECTIONAL DISTRIBUTION, D__________52%/48% (WB/EB)

APPROVAL DATE

--/--/---

MAHONING ROAD: A831102839 SUPERIOR AVENUE: A831102847 WINFIELD WAY: ROYAL AVENUE: A831102855 15TH STREET: A831102859 GRACE AVENUE: A831102864 A831102868 16TH STREET:

OUPS REFERENCE NUMBERS



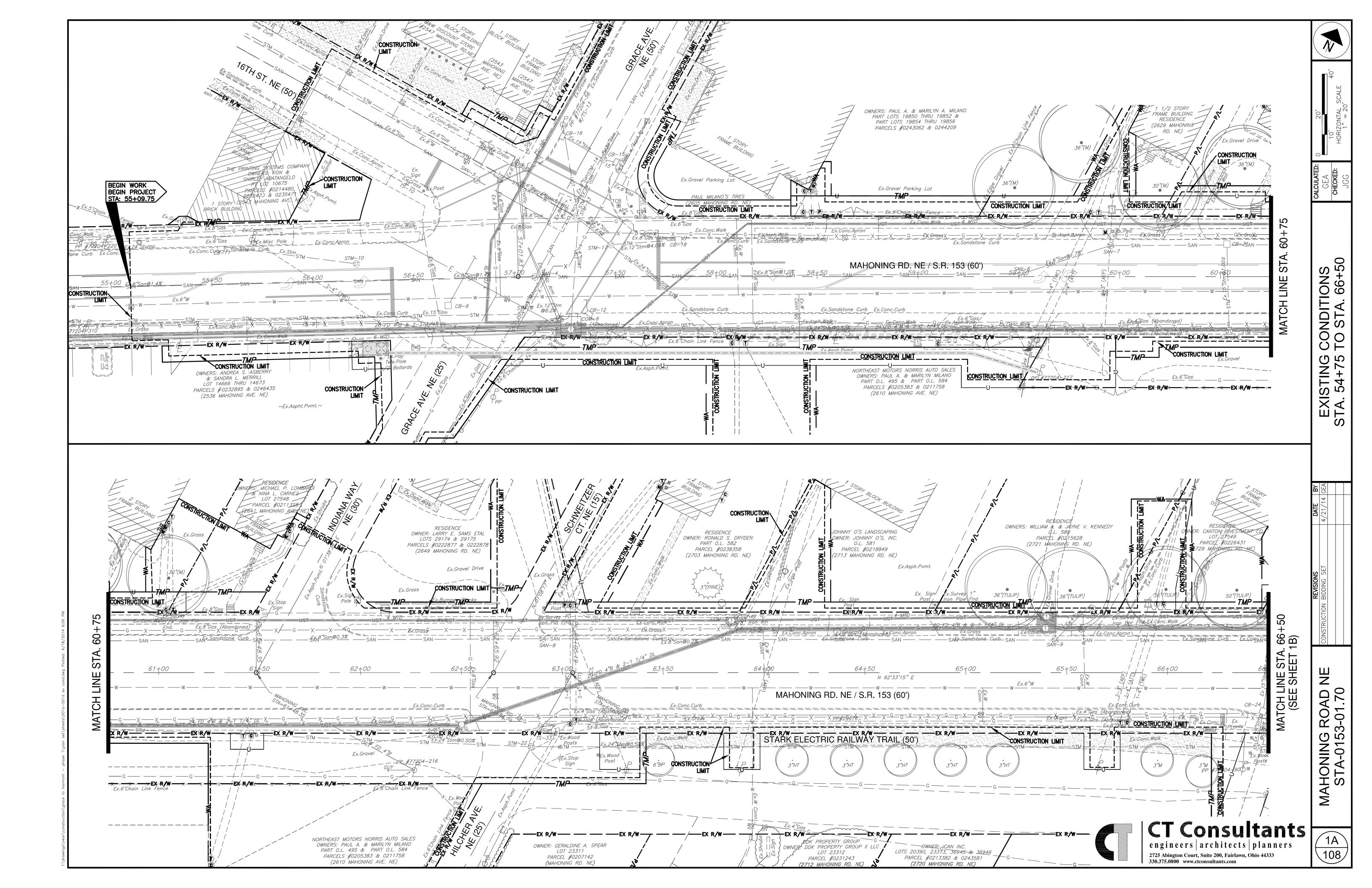
ODOT STANDARD CONSTRUCTION DRAWINGS SUPPLEMENTAL OHIO DEPARTMENT OF TRANSPORTATION CITY OF CANTON **SPECIFICATIONS** 7/19/2013 DM-1.1 1/18/2013 | TC-83.20 4/20/2012 | NO. 1 2/2012 | 800 1/18/2013 | MH-1.1 1/18/2013 | RM-1.1 3/2012 NO. 28 7/23/2012 NO. 45 7/19/2013 7/19/2013 | TC-85.10 | 10/16/2009 | NO. 4 7/18/2013 | DM-1.4 1/18/2013 | MH-1.2 1/18/2013 | RM-2.1 3/2012 NO. 29 3/2012 5/5/2009 BP - 2.57/19/2013 DM-4.3 1/18/2013 NO. 30 3/2012 NO. 61 4/2012 | 832 TC-21.20 1/18/2013 BP - 3.14/20/2012 DM-4.4 7/20/2012 6/29/2012 NO. 62 4/2012 NO. 10 12/2011 NO. 33 BP - 4.17/19/2013 MT-95.60 7/20/2012 TC-22.20 1/18/2013 NO. 12 12/2011 NO. 34 7/20/2012 NO. 63 3/2014 BP-5.1 7/20/2012 | TC-41.20 NO. 64 4/2012 1/19/2001 BP - 7.16/10/2013 NO. 40 2/2012 NO. 65 3/2014 1/19/2007 NO. 19 HL-30.21 10/21/2011 MT-101.60 7/20/2012 TC-42.20 1/21/2011 NO. 21 11/2011 NO. 41 2/2012 3/2012 NO. 42 2/2012 CB-1.1 1/18/2013 NO. 23 CB - 2.11/18/2013 7/24/2012 NO. 43 2/2012 NO. 24 CB - 2.31/18/2013 TC-71.10 10/19/2012 NO. 47 2/2012 TC-81.21 1/18/2013 3/2012 NO. 44 2/2012 1/16/2009 NO. 27

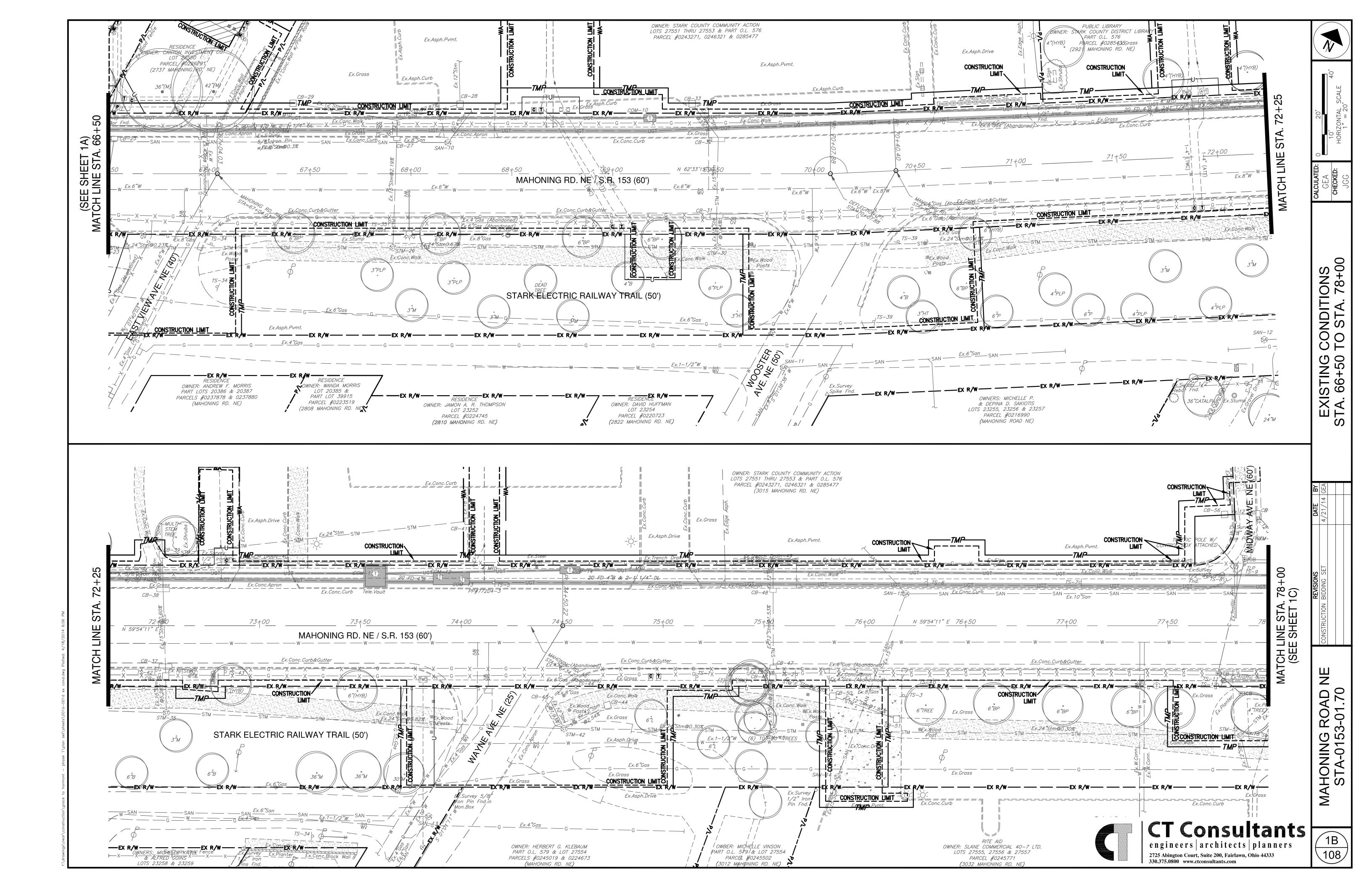
CITY OF CANTON

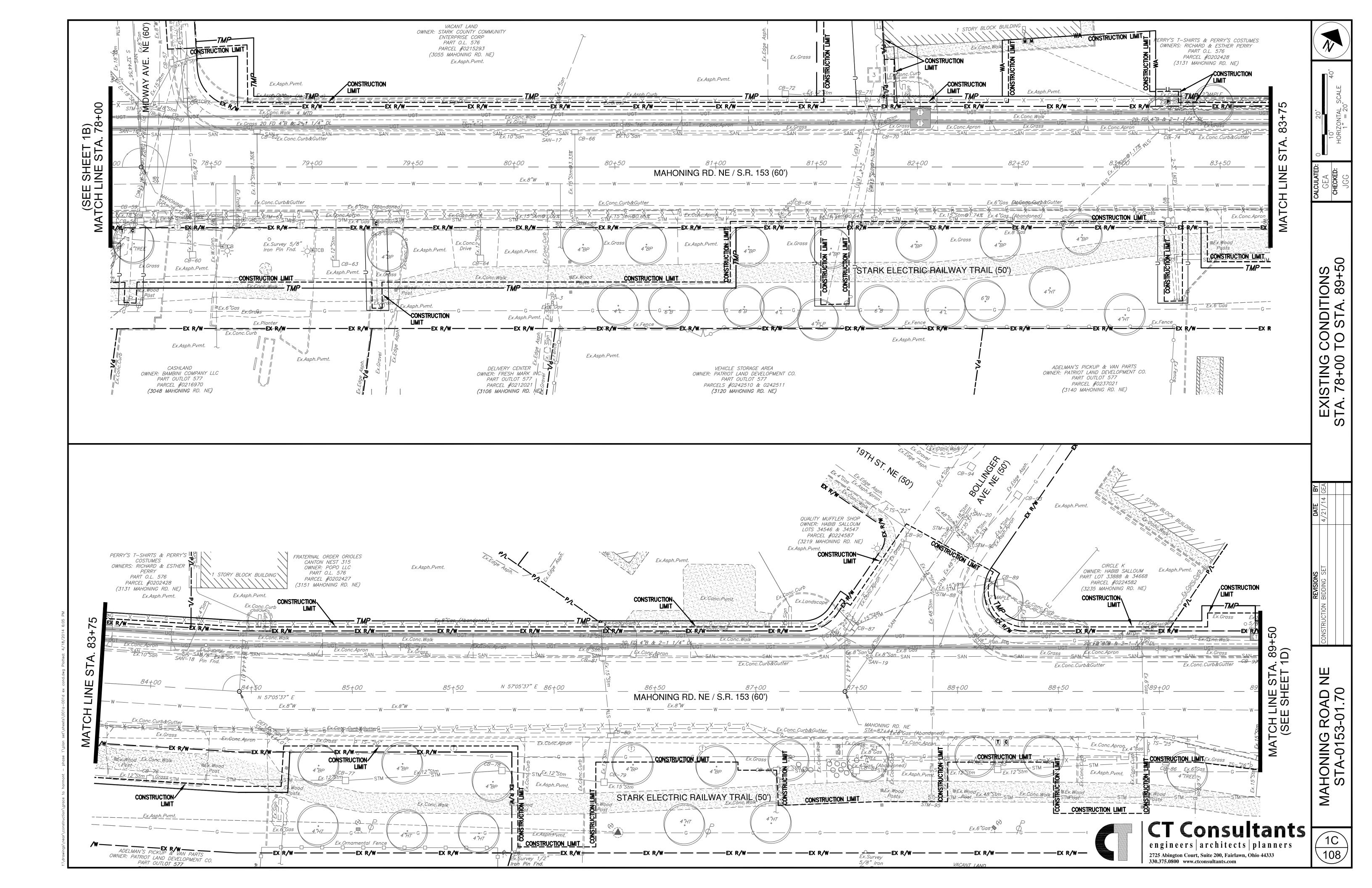
APRIL, 2014

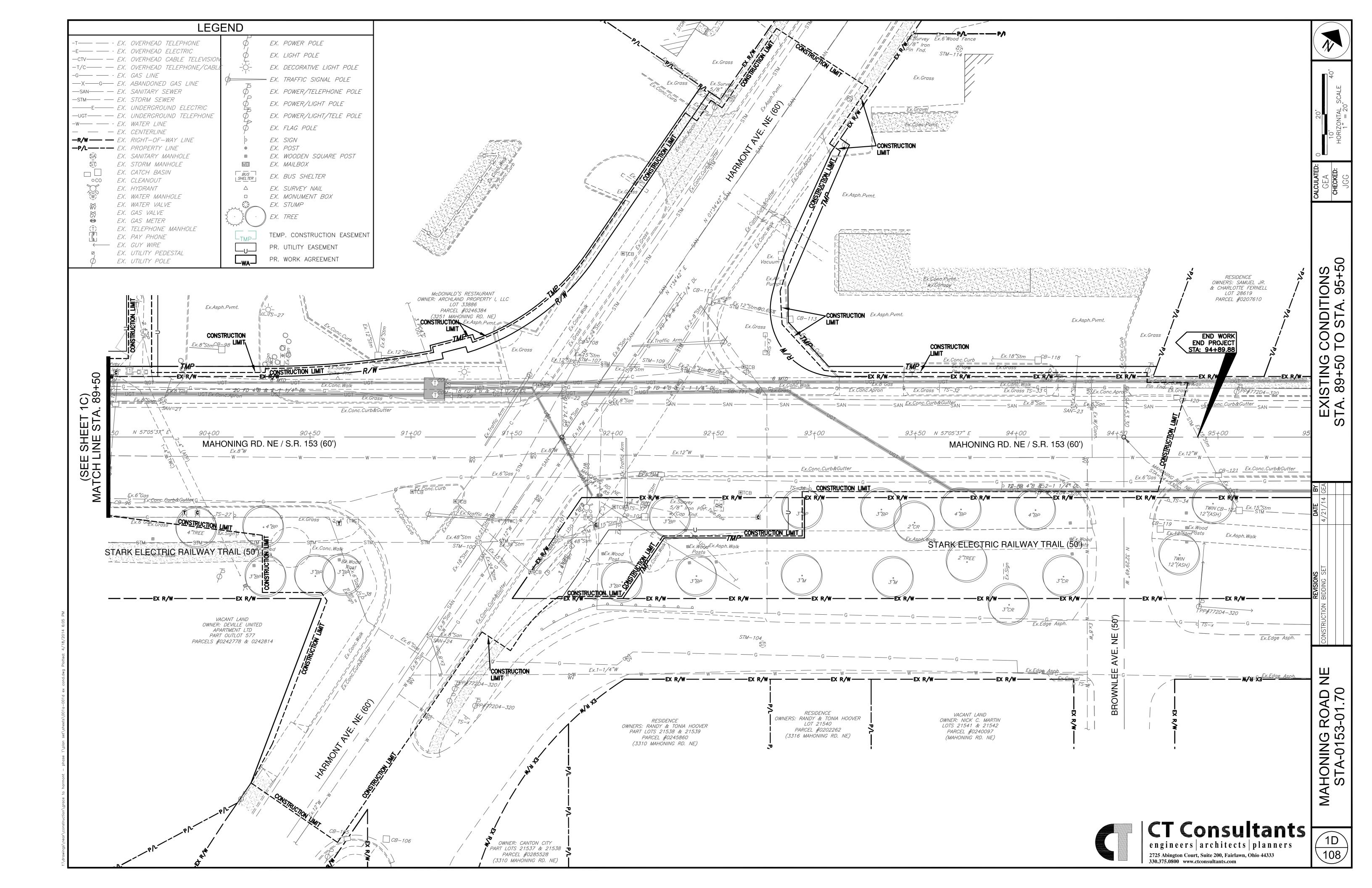
INDEX OF SHEETS

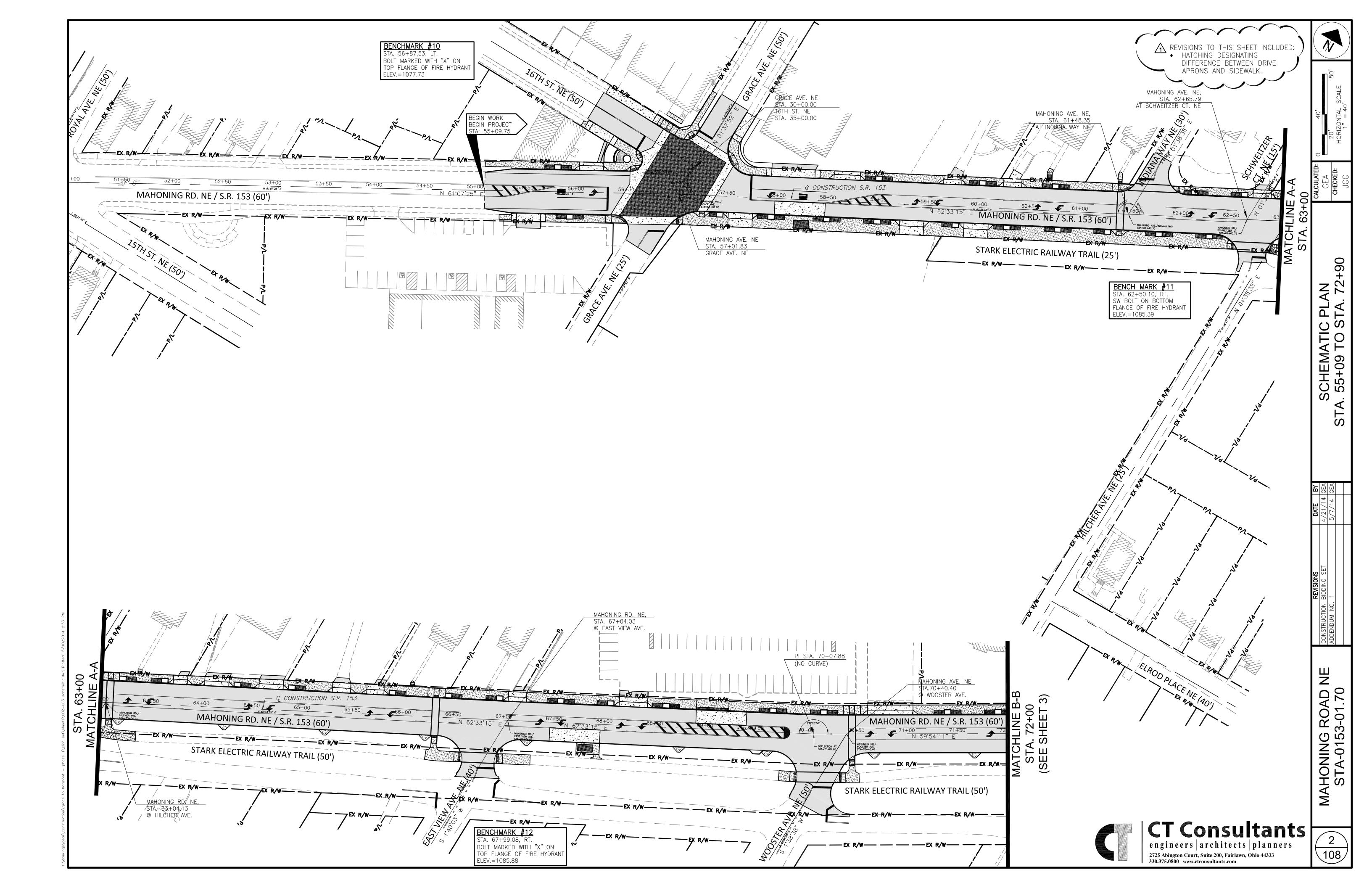
SHEETS 83 THRU 96

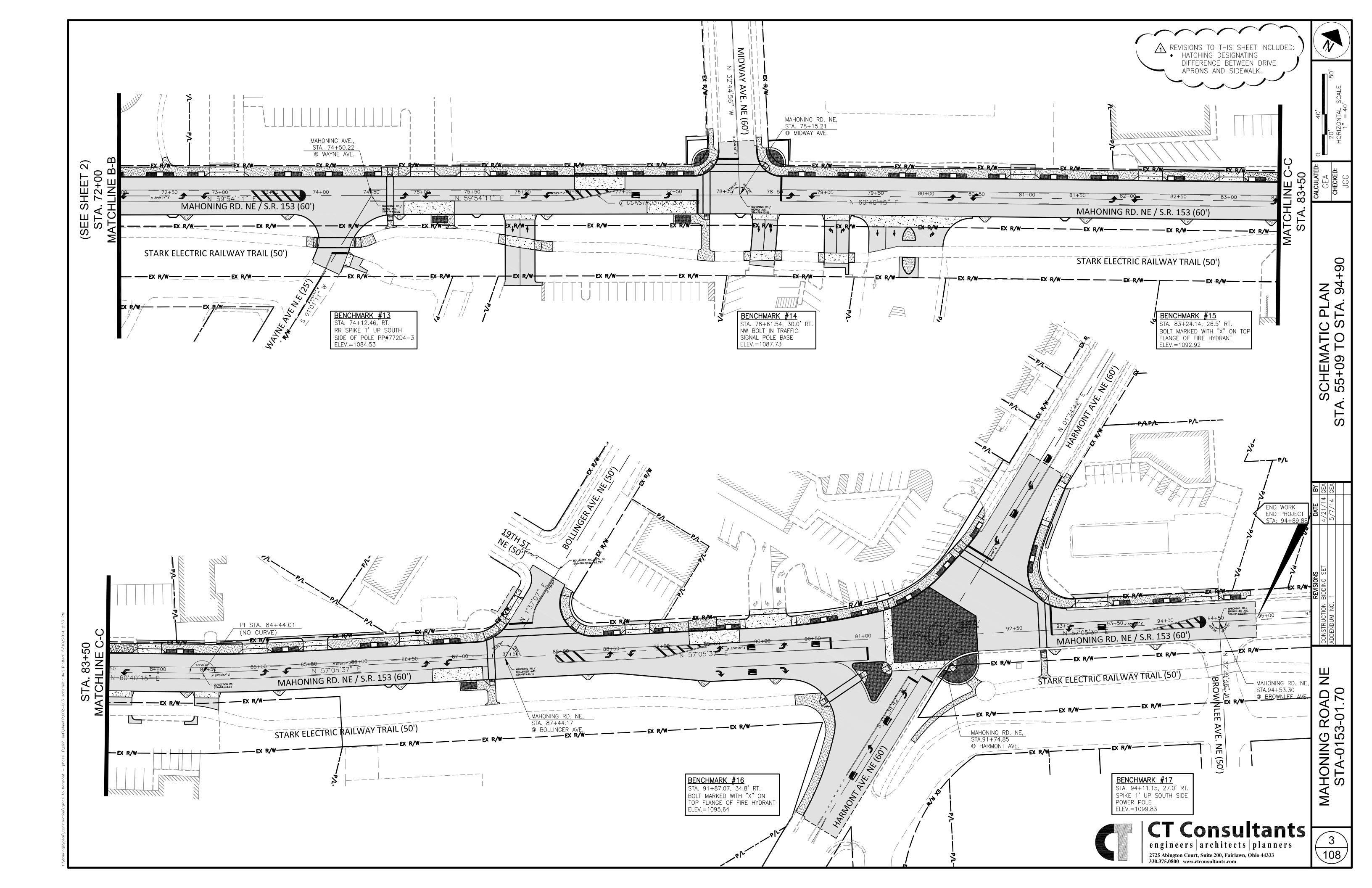






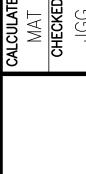




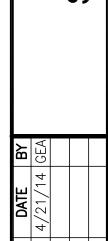


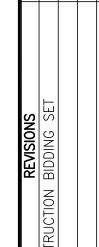




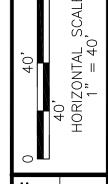




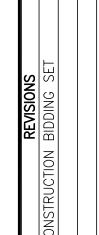


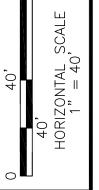


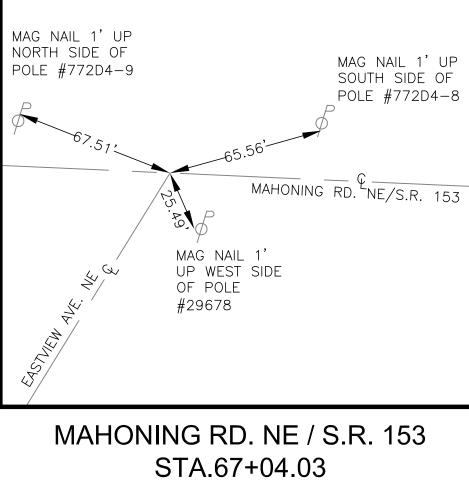












MAHONING RD. NE / S.R. 153 STA.61+48.35 AND STA.62+87.28

MAG NAIL 1'

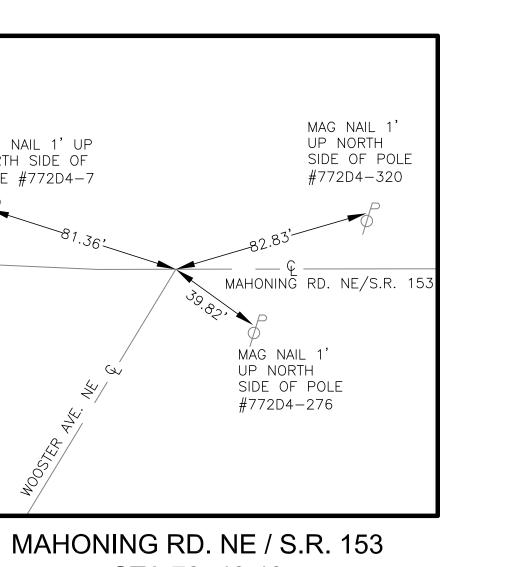
#772D-139

MAG NAIL 1'

UP SOUTHWEST SIDE OF POLE

UP NORTHWEST

SIDE OF POLE

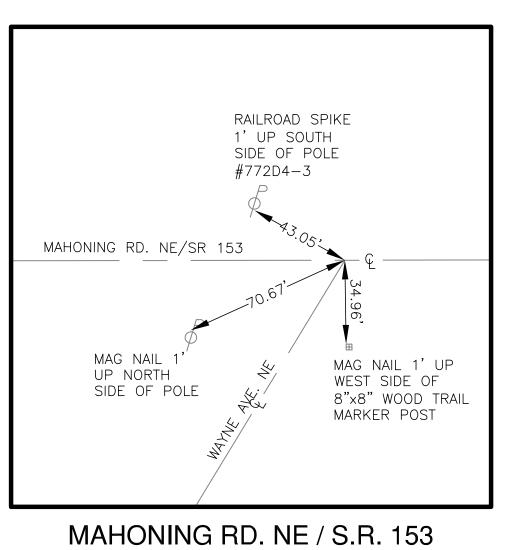


MAG NAIL 1

SIDE OF POLE

#772D4-276

UP NORTH



STA.74+50.22

MAHONING RD. NE / S.R. 153

STA.57+01.83

BOLT ON SOUTH SIDE TOP FLANGE OF FIRE HYDRANT

BOLT ON SOUT

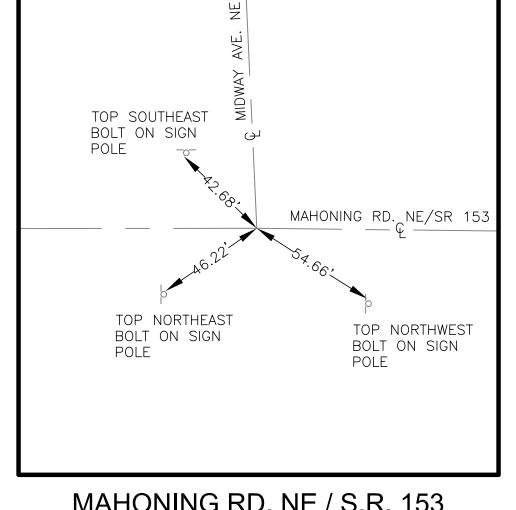
SIDE OF SIGN

POLE BASE

MAG NAIL 1' UP SOUTH SIDE OF POLE

#772D4-133 /

MAHONING RD. NE/S.R. 153



MAG NAIL 1' UP SOUTH SIDE OF POLE #772D4-137

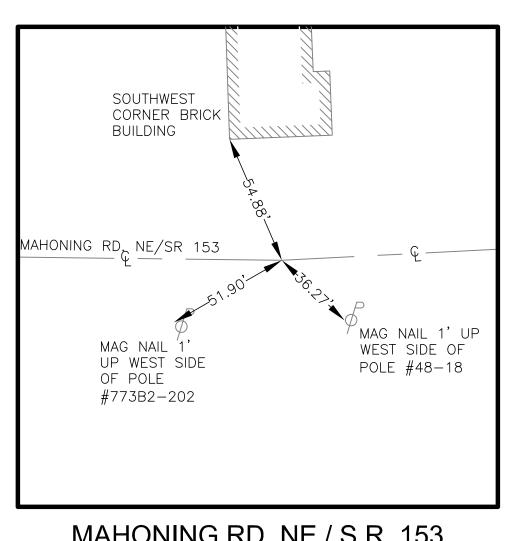
MAG NAIL 1' UP SOUTH SIDE OF POLE

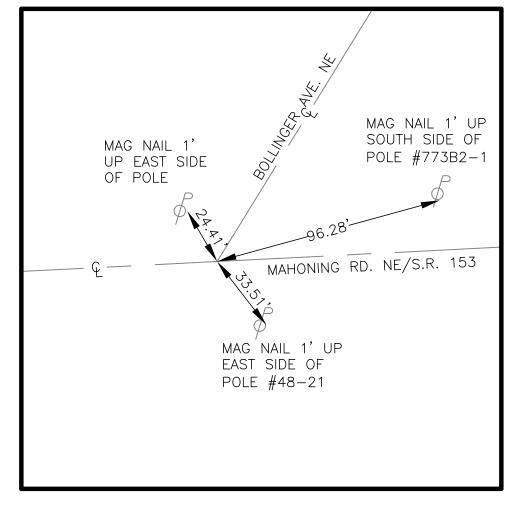
₽ #772D-38

MAHONING RD. NE

S.R. 153 _{99.29}

MAG NAIL 1' UP NORTHEAST SIDE OF POLE

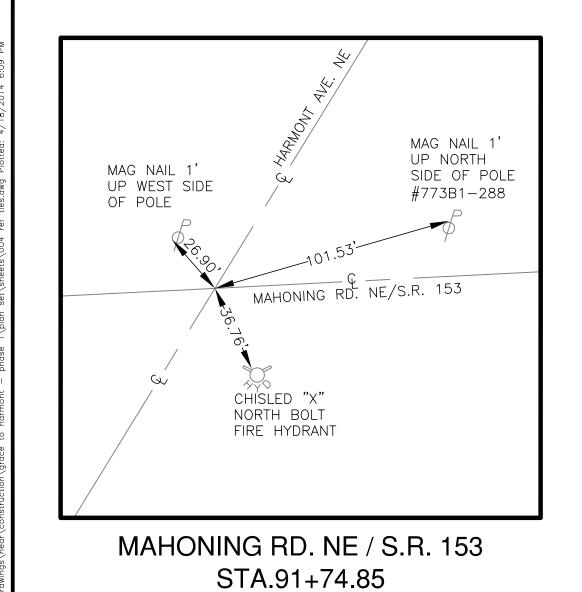




MAHONING RD. NE / S.R. 153 STA.78+15.21

MAHONING RD. NE / S.R. 153 STA.84+44.01

MAHONING RD. NE / S.R. 153 STA.87+44.17



STA.70+40.40

MAG NAIL 1'

#796C3-97

MAG NAIL 1'
UP SOUTHEAST
SIDE OF POLE
#796C3-98

MAG NAIL 1' UP NORTH SIDE OF

POLE #772D4-7

UP SOUTHEAST SIDE OF POLE

MAHONING RD, NE/S.R. 153

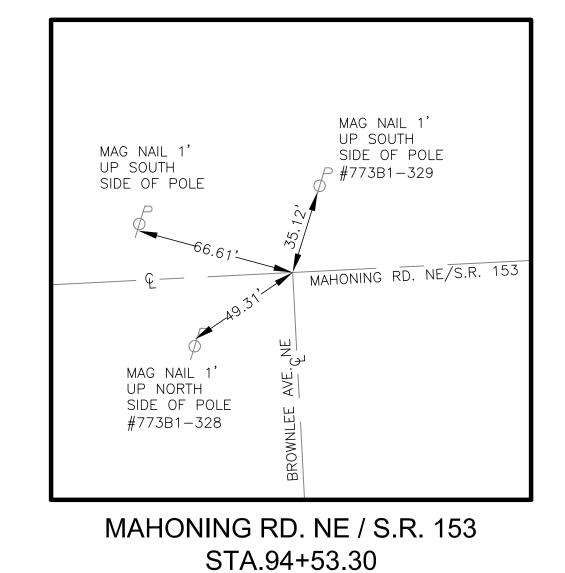
MAG NAIL 1'

SIDE OF POLE #796C3-99

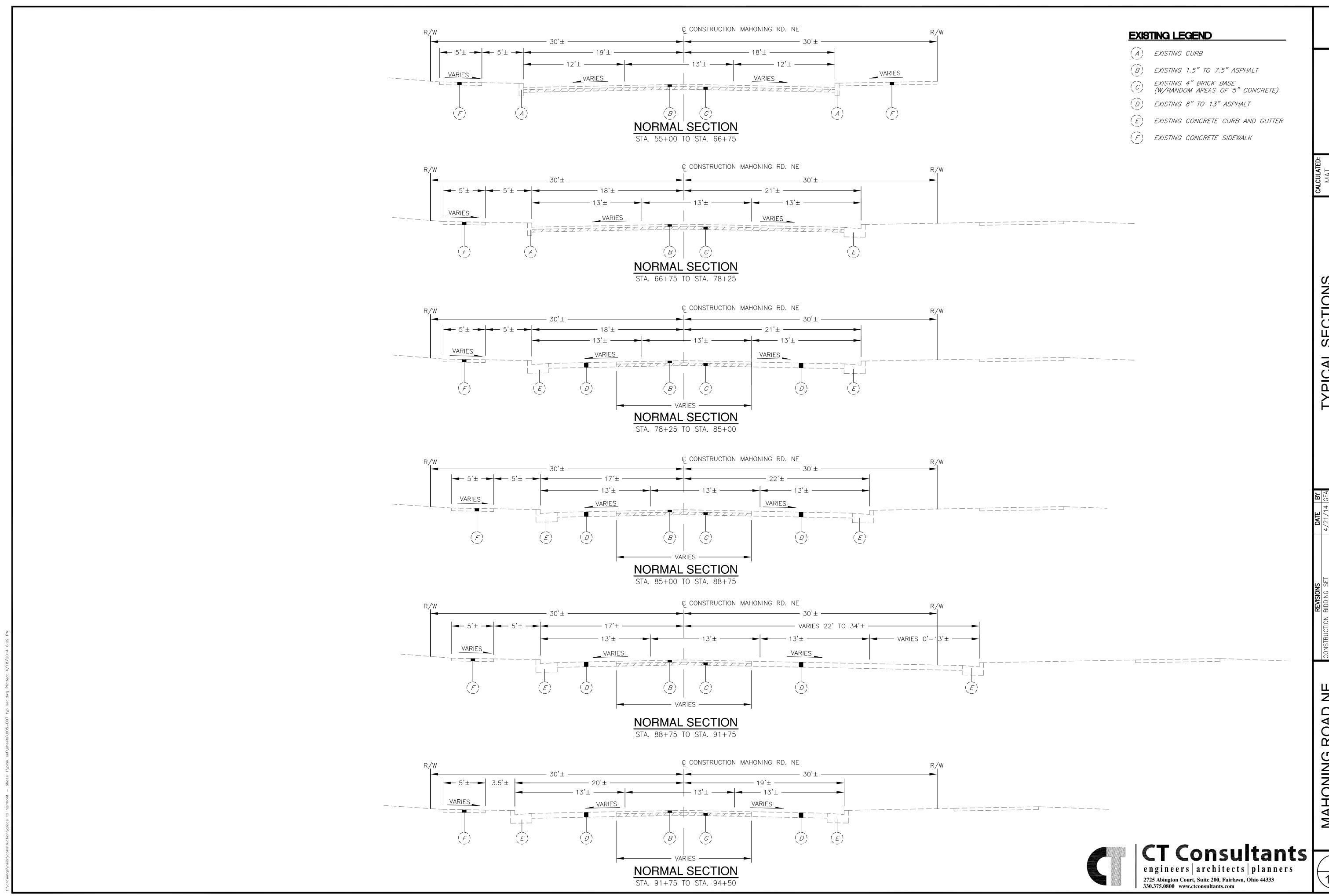
UP NORTH

MAHONING RD. NE / S.R. 153

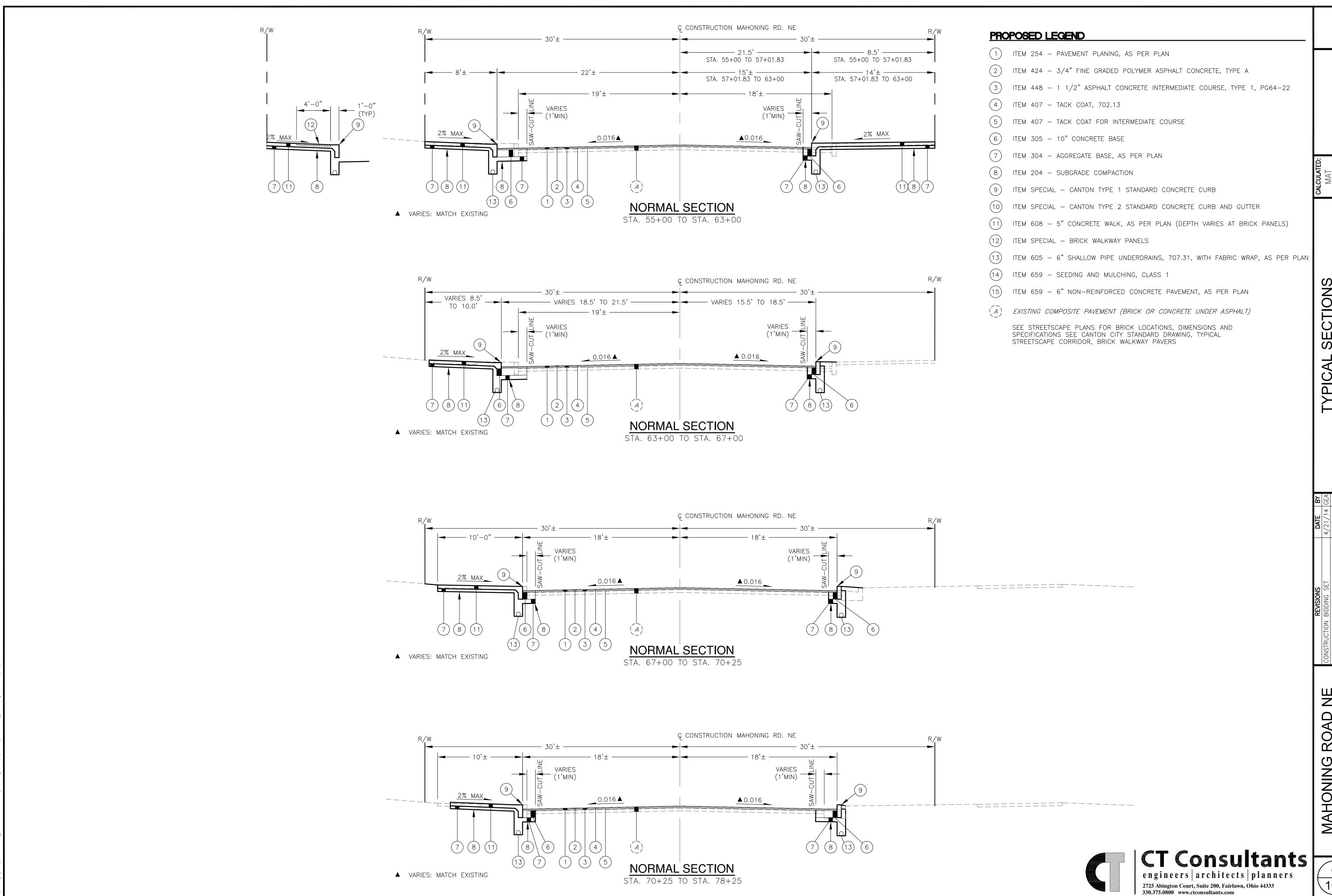
STA.50+63.19



	PROPOSED ALIGNMENT DATA														
PI STATION	NORTHING	EASTING	Δ	Dc	R	L	T	CH	E	PC STATION	NORTHING	EASTING	PT STATION	NORTHING	EASTING
MAHONING F	RD. NE S.R.	153													
57+01.83	419,937.70	2,289,798.14													
70+40.40	420,555.98	2,290,985.33													
78+15.21	420,944.52	2,291,655.68													
84+44.01	421,252.52	2,292,203.88													
91+74.85	421,649.56	2,292,817.46													
94+53.30	421,800.84	2,293,051.24													



TYPICAL SECTIONS A. 55+09 TO STA. 94-

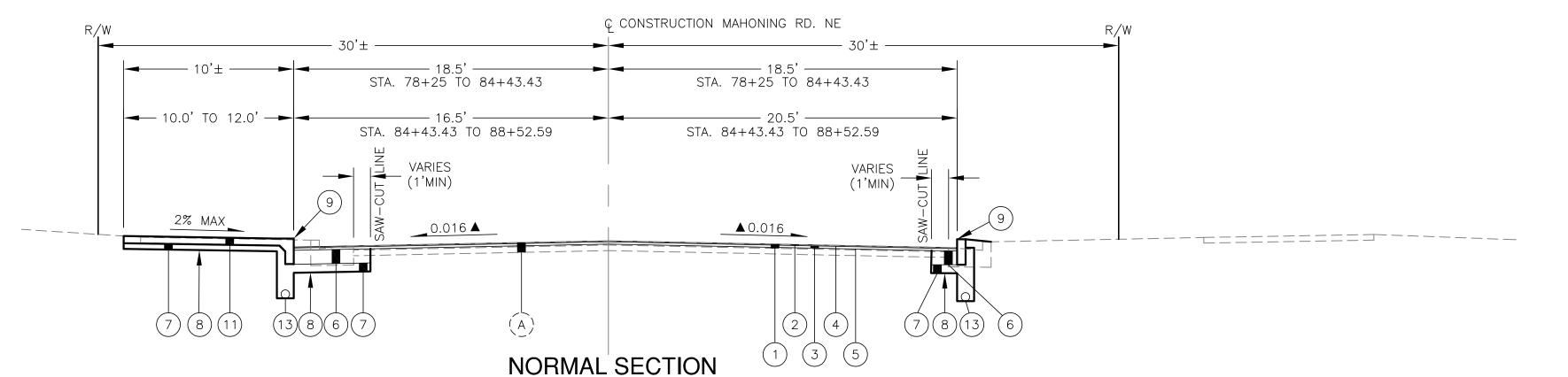


25 CTIONS STA. 78+ SE TO YPICAL 55+09 7

Ш MAHONING ROAD STA-0153-01.70

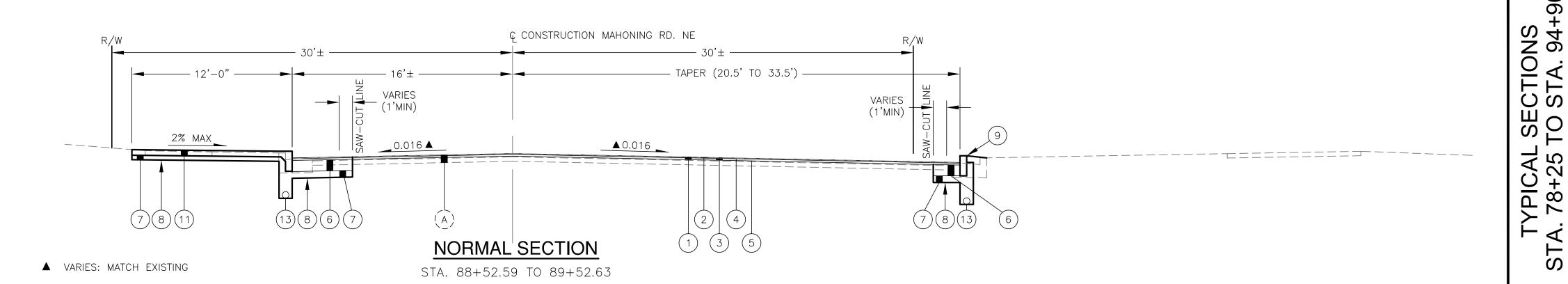
- (1) ITEM 254 PAVEMENT PLANING, AS PER PLAN
- 2 ITEM 424 3/4" FINE GRADED POLYMER ASPHALT CONCRETE, TYPE A
- ITEM 448 1 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
- (4) ITEM 407 TACK COAT, 702.13
- ITEM 407 TACK COAT FOR INTERMEDIATE COURSE
- (6) ITEM 305 10" CONCRETE BASE
- 7 ITEM 304 AGGREGATE BASE, AS PER PLAN
- 8 ITEM 204 SUBGRADE COMPACTION
- (9) ITEM SPECIAL CANTON TYPE 1 STANDARD CONCRETE CURB
- ITEM SPECIAL CANTON TYPE 2 STANDARD CONCRETE CURB AND GUTTER
- (11) ITEM 608 5" CONCRETE WALK, AS PER PLAN (DEPTH VARIES AT BRICK PANELS)
- 12) ITEM SPECIAL BRICK WALKWAY PANELS
- ITEM 605 6" SHALLOW PIPE UNDERDRAINS, 707.31, WITH FABRIC WRAP, AS PER PLAN
- 14) ITEM 659 SEEDING AND MULCHING, CLASS 1
- ITEM 659 6" NON-REINFORCED CONCRETE PAVEMENT, AS PER PLAN
- EXISTING COMPOSITE PAVEMENT (BRICK OR CONCRETE UNDER ASPHALT)

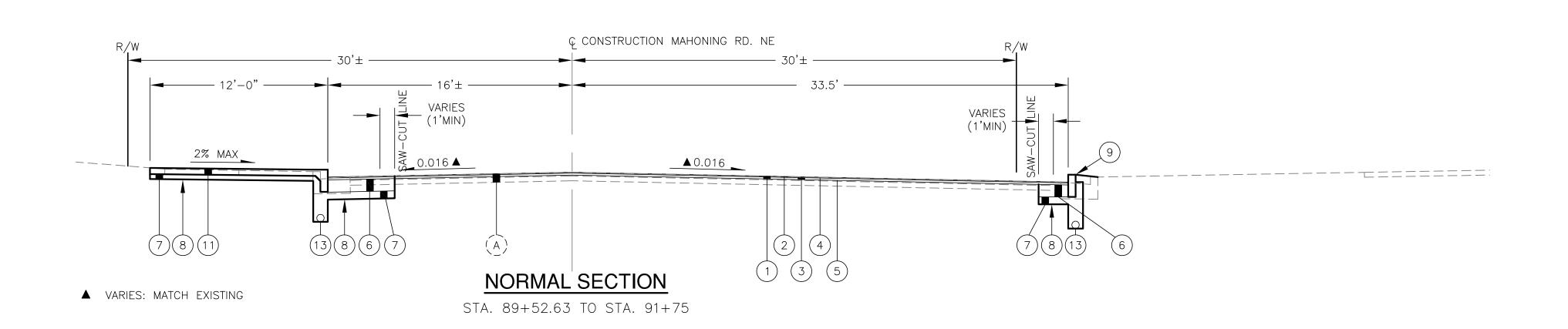
SEE STREETSCAPE PLANS FOR BRICK LOCATIONS, DIMENSIONS AND SPECIFICATIONS SEE CANTON CITY STANDARD DRAWING, TYPICAL STREETSCAPE CORRIDOR, BRICK WALKWAY PAVERS

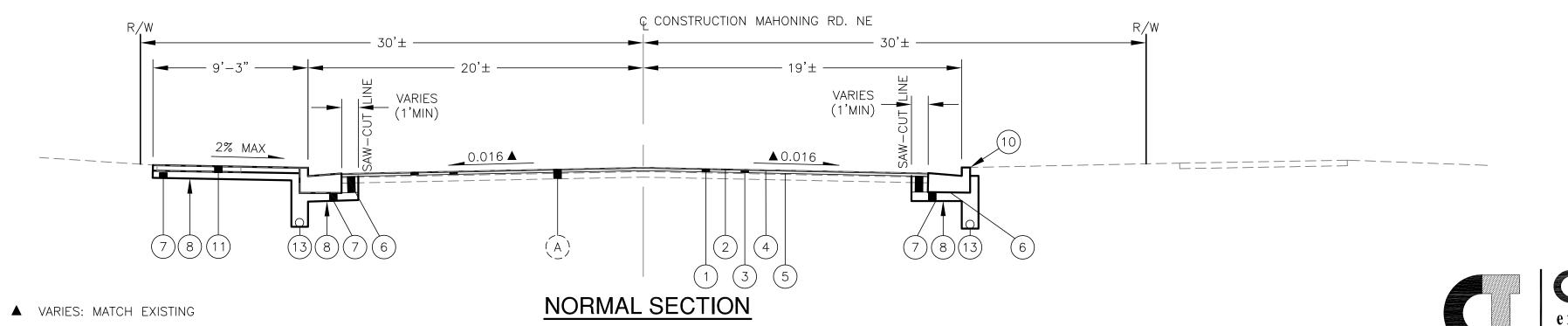


▲ VARIES: MATCH EXISTING

STA. 78+25 TO 88+52.59







STA. 91+75 TO 94+58

STA. 91+75 TO 92+89.86

Consultants engineers | architects | planners 2725 Abington Court, Suite 200, Fairlawn, Ohio 44333 330.375.0800 www.ctconsultants.com

MAHONING ROAD STA-0153-01.70

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THE CONTRACTOR SHALL COMPLY WITH THE CITY OF CANTON SUPPLEMENTAL SPECIFICATION 01-00 PROJECT DOCUMENTATION AND SUBMITTAL REQUIREMENTS.

(B) ADMINISTRATIVE REQUIREMENTS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL THE ADMINISTRATIVE DUTIES HEREIN CONTAINED.

THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION DRAWINGS ON SITE AT ALL TIMES.

THE CONTRACTOR SHALL PROVIDE A FIELD OFFICE IN ACCORDANCE WITH ODOT ITEM 619, TYPE "C".

THE CONTRACTOR SHALL DESIGNATE AN EMPLOYEE RESPONSIBLE FOR CORRESPONDENCE, NOTIFICATIONS AND SUBMITTALS PERTINENT TO THE PROJECT.

(C) PRECONSTRUCTION MEETING:

A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR, REPRESENTATIVES OF ALL UTILITY COMPANIES, THE CITY OF CANTON ENGINEERING DEPARTMENT AND THE CITY OF CANTON WATER DEPARTMENT IS REQUIRED FOR THIS PROJECT PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY. THE CITY ENGINEER WILL CONTACT ALL PARTIES TO ARRANGE A MEETING DATE.

PRIOR TO THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT A PROPOSED PROJECT CONSTRUCTION SCHEDULE TO THE CITY OF CANTON FOR APPROVAL. THE CONTRACTOR SHALL INFORM THE CITY OF CANTON, SARTA AND ODOT DISTRICT 4 EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

A SEPARATE PRE-CONSTRUCTION MEETING IS REQUIRED ON-SITE BETWEEN THE CONTRACTOR AND STARK SOIL & WATER CONSERVATION DISTRICT (SWCD). THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING THIS MEETING. NO LAND-DISTURBANCE ACTIVITIES MAY START UNTIL THIS MEETING HAS OCCURRED AND APPROVAL HAS BEEN GRANTED BY STARK SWCD.

(D) PROJECT SAFETY:

THE CONTRACTOR SHALL MAINTAIN A SAFE WORKING ENVIRONMENT AT ALL TIMES AND IS RESPONSIBLE FOR ENSURING THE SAFETY OF THE GENERAL PUBLIC AS WELL AS ALL CONSTRUCTION PERSONNEL.

THE CONTRACTOR SHALL PROPERLY SUPPORT AND/OR MAINTAIN ALL EXCAVATIONS PER APPLICABLE SAFETY REQUIREMENTS AND COMPLY WITH ALL OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) REGULATIONS.

APPROPRIATE BARRICADES, WARNING LIGHTS, SIGNS, FENCING, ETC. SHALL BE ERECTED AROUND THE CONSTRUCTION AREA DURING ALL NON-WORKING HOURS TO ALERT PERSONS OF THE POTENTIAL DANGER ASSOCIATED WITH THE AREA UNDER CONSTRUCTION AS WELL AS TO PREVENT ACCESS BY UNAUTHORIZED PERSONNEL TO THE CONSTRUCTION SITE/AREA.

THE CONTRACTOR SHALL ALERT ALL LOCAL EMERGENCY AGENCIES (FIRE, POLICE, AMBULANCE, ETC.) OF THE NATURE OF THE PROPOSED PROJECT PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. ACCESS FOR EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES.

(E) <u>UNDERGROUND UTILITIES:</u>

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS WERE OBTAINED BY FIELD OBSERVATIONS, FROM EXISTING RECORDS, AND/OR FROM THE OWNERS OF THE RESPECTIVE UTILITIES. THE INFORMATION AS SHOWN IS 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.

(F) <u>UTILITY NOTIFICATION:</u>

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING OPERATIONS ON THIS PROJECT, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE 1-800-362-2764 (CONTACT NON-MEMBERS DIRECTLY), AND THE OWNERS OF ANY OTHER UTILITIES (PUBLIC AND/OR PRIVATE) THAT MAY HAVE UTILITY LINES OR FACILITIES WITHIN THE VICINITY OF THIS PROJECT BUT WHO ARE NOT MEMBERS OF THE REGISTERED UTILITY PROTECTION SERVICE. THE MARKING AND/OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO WORKING DAYS AHEAD OF THE PLANNED CONSTRUCTION.

THE PRIMARY UTILITIES WITHIN THE PROJECT LIMITS AREA:

SANITARY AND STORM SEWER
CITY OF CANTON, CITY ENGINEER'S OFFICE
2436-30TH STREET N.E.
CANTON, OHIO 44705
PHONE: 330-489-3381
ATTN: DAN MOEGLIN, P.E., S.I.

WATER
CITY OF CANTON, WATER DEPARTMENT
2664 HARRISBURG ROAD N.E.
CANTON OHIO 44708

CANTON, OHIO 44708 PHONE: 330-489-3310 ATTN: LEWI MILLER

NATURAL GAS
DOMINION EAST OHIO GAS
320 SPRINGSIDE DRIVE
AKRON, OHIO 44333
PHONE: 330-664-2409
ATTN: MARY LONG
EMERGENCY PHONE: 800-521-4400

ELECTRIC

AMERICAN ELECTRIC POWER

301 CLEVELAND AVENUE S.W.

CANTON, OHIO 44701

PHONE: 330-438-7739

ATTN: DWIGHT PARRISH

EMERGENCY PHONE: 800-672-2017

TELEPHONE AT&T

50 WEST BOWERY STREET, 6TH FLOOR
AKRON, OHIO 44308
PHONE: 330-384-3561
ATTN: CINDY ZUCHEGNO
EMERGENCY PHONE: 800-572-4545, OPTION #4

CABLE TELEVISION
CABLE TIME WARNER CABLE
5520 WHIPPLE AVENUE NW
NORTH CANTON, OHIO 44720
PHONE: 330-494-9200
ATTN: JUSTIN FREUDEMAN
EXT. 330-555-3192

TRAFFIC INTERCONNECT
CITY OF CANTON, CITY ENGINEER'S OFFICE
2436-30TH STREET N.E.
CANTON, OHIO 44705
PHONE: 330-489-3381
ATTN: NICK LOUKAS, P.E.

(G) EXPLORATORY BORINGS:

EXPLORATORY SOIL BORING INFORMATION IS AVAILABLE FOR THIS PROJECT AND IS INCLUDED WITH THE BID SET BY REFERENCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL INFORMATION AVAILABLE. IF THE CONTRACTOR REQUESTS TO DRILL ADDITIONAL BORINGS AND/OR EXCAVATE WITHIN THE CITY'S RIGHT-OF-WAY, 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, TRAFFIC CONTROL, PREMIUM BACKFILL, AND COMPACTION AND RESTORATION, AS NECESSARY.

(H) <u>CONTINGENCY QUANTITIES:</u>

WHEN SPECIFIED ON PLANS OR SPECIFICATIONS, CONTINGENCY QUANTITIES ARE TO BE PERFORMED ONLY UNDER DIRECTION OF THE CITY ENGINEER. THE CONTRACTOR SHALL NOT ORDER ANY CONTINGENCY MATERIAL OR PERFORM ANY WORK UNTIL DIRECTED BY THE CITY ENGINEER. THE ACTUAL WORK LOCATION AND QUANTITIES FOR SUCH ITEMS SHALL BE DOCUMENTED BY THE CONTRACTOR AND THE CITY ENGINEER.

- (I) <u>SPECIAL NOTES FOR PARCELS 4 AND 5 ("PAUL MILANO'S</u> TIRES" AND "NORTHEAST MOTORS NORRIS AUTO SALES")
 - THE CONTRACTOR MUST COORDINATE ALL WORK
 AFFECTING PARCELS 4 AND 5 WITH THE PROPERTY
 OWNER, MR. PAUL MILANO (330-454-9694). THESE
 PARCELS INCLUDE "PAUL MILANO'S TIRES" AT 2605
 MAHONING ROAD NE AND "NORTHEAST MOTORS NORRIS
 AUTO SALES" AT 2610 MAHONING ROAD NE.

• THE PROPERTY OWNER WILL REMOVE THE BARB WIRE FROM THE EXISTING FENCE FOR THE DURATION OF THE PROJECT. THE PROPERTY OWNER WILL ALSO REMOVE PORTIONS OF EXISTING FENCE AND CREATE BOXED—OUT AREAS FOR ACCESS TO THE PROPOSED UTILITY PEDESTALS FROM THE PUBLIC RIGHT—OF—WAY. THIS WORK WILL BE COORDINATED WITH THE CONTRACTOR.

- THE CONTRACTOR SHALL INSTALL UTILITY CONDUITS, PAVEMENT RESTORATION AND NEW SIDEWALK IN A MANNER THAT DOES NOT DISTURB THE EXISTING CHAIN LINK FENCE ALONG THE NORTH, WEST AND EAST SIDE OF PARCEL 5 OR THE EXISTING CHAIN LINK FENCE ALONG THE SOUTH AND EAST SIDE OF PARCEL 4.
- THE CONTRACTOR SHALL PERFORM THE WORK IN THE UTILITY EASEMENTS (4-U AND 5-U) SO AS TO MINIMIZE THE DURATION OF OCCUPATION OF THE EASEMENT AND PERMIT THE PROPERTY OWNER TO OCCUPY THE EASEMENT AREA (AUTO SALES) WHEN WORK IS NOT BEING PERFORMED. UPON COMPLETION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL ENSURE THE GROUND IS GRADED UNIFORMLY WITH CRUSHED STONE PLACED ON DISTURBED AREAS UNTIL THE INSTALLATION OF PERMANENT SURFACE PAVEMENT.
- (J) SPECIAL NOTES FOR STARK ELECTRIC RAILWAY TRAIL (SERT)
 - SHORT DURATION CLOSURES/RESTRICTIONS OF THE TRAIL MAY BE NECESSARY TO PERFORM UTILITY CROSSINGS. IN SUCH INSTANCES, THE CONTRACTOR WILL USE APPROPRIATE MAINTENANCE OF TRAFFIC TECHNIQUES TO ENSURE THE SAFETY OF TRAIL USERS. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN A TEMPORARY PATH AROUND ANY SECTIONS OF THE TRAIL TO BE CLOSED FOR THE DURATION OF THE PROJECT, INSTALL APPROPRIATE CLOSURE AND DETOUR SIGNS IN AREAS THAT WILL BE VISIBLE TO USERS OF THE TRAIL, PRIOR TO CLOSURE, PROVIDE ADVANCE NOTICE WITHIN 48 HOURS PRIOR TO CLOSURE AND POST DETOUR SIGNS AT LOCATIONS ALONG THE TRAIL THAT MEET ALL LOCAL SPECIFICATIONS.
 - EXISTING TRAIL SIGNAGE OR OTHER APPURTENANCES DISTURBED DURING CONSTRUCTION BUT NOT SPECIFICALLY DESIGNATED FOR REMOVAL OR 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.
 - NO STAGING AND/OR STORAGE OF CONSTRUCTION EQUIPMENT AND/OR MATERIALS SHALL OCCUR BEYOND THE PROJECT CONSTRUCTION AREA WITHIN THE SERT TRAIL.
 - THE CONTRACTOR SHALL INSTALL TEMPORARY
 CONSTRUCTION FENCING ALONG THE PROPOSED
 CONSTRUCTION LIMITS ADJACENT TO THE SERT TRAIL
 PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL CLOSELY COORDINATE THE CONSTRUCTION SCHEDULE WITH ODOT, THE PROJECT SPONSOR AND THE CITY ENGINEER.

(K) <u>SPECIAL NOTE FOR PARCEL 40 ("MCDONALD'S")</u>

- AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR MUST MAINTAIN A MINIMUM OF ONE LANE OF MCDONALD'S ACCESS DRIVE ON MAHONING ROAD NE IN A FULLY ACCESSIBLE MANNER, AND THE HARMONT AVENUE NE ACCESS DRIVE MUST REMAIN FULLY ACCESSIBLE. PRIOR TO ANY MCDONALD'S MAHONING ROAD NE ACCESS DRIVE LANE CLOSURES, THE CONTRACTOR MUST CONTACT MCDONALD'S TO COORDINATE WHICH DIRECTION OF TRAFFIC SHALL BE MAINTAINED (I.E. INGRESS OR EGRESS).
- BOTH THE CONTRACTOR AND THE CITY ENGINEER MUST GIVE BOTH WRITTEN AND ORAL NOTICES TO THE PROPERTY OWNER AND TENANT AT LEAST 10 DAYS BEFORE BEGINNING ANY CONSTRUCTION OF THE ROADWAY IMPROVEMENT PROJECT OR ANY FACILITY INCIDENTAL THERETO WHICH MAY AFFECT THE MCDONALD'S PROPERTY. NOTICE SHALL BE SENT IN WRITING TO:

MCDONALD'S CORPORATION
ONE MCDONALD'S PLAZA
OAK BROOK, IL 60523
ATTN: DIRECTOR, US LEGAL DEPARTMENT 091
L/C: 034-1865

AND ORALLY TO MR. TODD SORG, MCDONALD'S USA, LLC VIA TELEPHONE AT (260) 271-3093.

II CONSTRUCTION INCIDENTALS

(A) PLAN DISCREPANCIES:

THESE CONSTRUCTION PLANS HAVE BEEN DEVELOPED FOR ELECTRONIC FIELD LAYOUT AND ARE BEING PROVIDED SOLELY AS A CONVENIENCE TO THE USER. ANY DISCREPANCIES DISCOVERED IN THE PLAN INFORMATION, OR BETWEEN THE PLAN AND ELECTRONIC DATA, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CITY ENGINEER SO THE APPROPRIATE ADJUSTMENTS MAY BE MADE PRIOR TO THE START OF CONSTRUCTION OR THE CONTINUATION OF THE SAME. THE DESIGN ENGINEER MAKES NO REPRESENTATION REGARDING FITNESS FOR ANY PARTICULAR PURPOSE, OR SUITABILITY FOR USE WITH ANY SOFTWARE OR HARDWARE. DUE TO THE EASILY ALTERABLE NATURE OF ELECTRONIC DOCUMENTS, THROUGH EITHER UNINTENTIONAL OR INTENTIONAL MEANS, THE DESIGN ENGINEER DOES NOT MAKE ANY EXPRESS OR IMPLIED WARRANTY FOR THE ACCURACY OR COMPLETENESS OF THIS INFORMATION AND THEREFORE, ACCEPTS NO LIABILITY FOR THE COMPLETENESS, CORRECTNESS OR READABILITY OF THE ELECTRONIC DATA. HARD COPIES (I.E., PRINTS, PAPER COPIES, ETC.) SHALL PREVAIL IN ANY DISPUTE OVER ACCURACY OR SUFFICIENCY OF ELECTRONIC DOCUMENTS.

FAILURE BY THE CONTRACTOR TO VERIFY AND/OR DETERMINE EXISTING INFORMATION AS INDICATED WILL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR ANY CHANGES NECESSARY TO COMPLETE THE WORK SPECIFIED WITHOUT ADDITIONAL COMPENSATION.

(B) VERIFICATION OF UNDERGROUND UTILITIES:

THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXISTENCE AS WELL AS THE ACTUAL LOCATION, ALIGNMENT, AND ELEVATIONS OF ALL EXISTING UTILITIES/FACILITIES WITHIN AND/OR ADJACENT TO THE GENERAL LIMITS OF THESE IMPROVEMENTS INCLUDING WATERLINES, SANITARY AND STORM SEWERS, GAS LINES, COMMUNICATION LINES/BANKS, ELECTRIC LINES, ETC. THIS MAY REQUIRE EXPLORATORY EXCAVATIONS TO BE PERFORMED BY THE CONTRACTOR FOR WHICH HE WILL NOT BE REIMBURSED. THE CONTRACTOR SHALL NOT ASSUME THAT EXISTING UTILITIES/CONDUITS WERE INSTALLED AT TYPICAL/STANDARD DEPTHS OR AT UNIFORM SLOPES/GRADES/DEPTHS BETWEEN ACCESS POINTS (CATCH BASINS, MANHOLES, JUNCTION CHAMBERS, ETC.)

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY OF CANTON, REPRESENTATIVES OF THE CITY OF CANTON AND THE CONTRACTOR 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 OF CANTON. ALL EXISTING SEWERS INSPECTED 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 CITY OF CANTON.

IF IT IS DETERMINED 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 CITY 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 THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE CITY 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.

(C) 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 AT A MINIMUM ONE SANITARY SEWER LATERAL, ONE ROOF DRAIN, ONE WATER SERVICE, 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.

THE CONTRACTOR SHALL BYPASS AND MAINTAIN THE FLOW IN EXISTING LIVE SANITARY OR STORM SEWERS DURING CONSTRUCTION AND THE METHOD EMPLOYED SHALL BE APPROVED BY THE RESPONSIBLE AGENCY. THIS COST SHALL BE INCLUDED IN THE PRICES BID FOR OTHER ITEMS OF WORK.

(D) MAINTENANCE OF UTILITY SERVICES:

THE CONTRACTOR SHALL MAINTAIN UTILITY SERVICES AT ALL TIMES WITHOUT INTERRUPTION, UNLESS APPROVED BY THE CITY ENGINEER.

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.

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.

THE CONTRACTOR SHALL CLEAN ALL STORM SEWERS, MANHOLES AND CATCH BASINS BEFORE ACCEPTANCE BY THE CITY OF CANTON.

(E) <u>ITEM 202 - PAVEMENT REMOVED</u>

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING BRICK PAVEMENT ENCOUNTERED WITHIN PROPOSED FULL DEPTH PAVEMENT REPLACEMENT AREAS AT LOCATIONS SHOWN ON THE TYPICAL SECTIONS AND ROADWAY PLAN SHEETS. PAVEMENT REMOVAL SHALL INCLUDE ALL EXISTING LAYERS FROM ASPHALT SURFACE TO BOTTOM OF BRICK.

(F) <u>ITEM 604 - CATCH BASIN ADJUSTED TO GRADE</u>

DUE TO THE EXTENSION OF NEW CURB AND SIDEWALK AT THE INTERSECTIONS, EXISTING CATCH BASINS ALONG THE EDGE OF ROADWAY WILL BE UNUSABLE. THE CONTRACTOR SHALL REMOVE THE EXISTING CASTING AND GRATE, ADJUST THE HEIGHT OF THE SUPPORTING WALLS, AND INSTALL AN ACCEPTABLE ADJUSTING DEVICE APPROVED BY THE CITY OF CANTON TO THE NEW SIDEWALK GRADE. AN ACCEPTABLE SOLID CAST IRON ACCESS COVER/HATCH AS APPROVED BY THE CITY OF CANTON SHALL BE FITTED ON THE TOP OF THE NEW CASTING AND SHALL BE FLUSH WITH THE TOP OF PROPOSED SIDEWALK ELEVATION. ALL EXISTING SEWER LATERALS WITHIN THE EXISTING DRAINAGE STRUCTURE SHALL NOT BE DISTURBED DURING THE ADJUSTMENT TO GRADE. ALL COST ASSOCIATED WITH REMOVING THE EXISTING CASTING AND GRATE, ADJUSTMENT OF EXISTING DRAINAGE STRUCTURE AND NEW SOLID COVERS SHALL BE INCLUDED UNDER THIS ITEM.

(G) CONSTRUCTION NOISE:

CONSTRUCTION NOISE ASSOCIATED WITH ANY IMPROVEMENT PROJECT SHALL BE LIMITED TO LEVELS COMMENSURABLE WITH ADJOINING LAND AND THEIR ASSOCIATED USAGE AS DETERMINED BY THE CITY ENGINEER. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICES SHALL NOT BE OPERATED BETWEEN THE HOURS OF 7:00 P.M. AND 7:00 A.M. UNLESS AUTHORIZED BY THE CITY.

(H) OPEN TRENCH CONSTRUCTION:

THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE LOCAL AND STATE SAFETY REGULATIONS, INCLUDING CODE OF FEDERAL REGULATIONS, PART 1926 (SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION), SUBPART P (EXCAVATIONS), FOR ALL APPLICABLE REQUIREMENTS AND RESPONSIBILITIES.

THE CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION AND TRENCHING PRACTICES.

PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER OF THE PROJECT'S ASSIGNED "COMPETENT PERSON" IN OSHA EXCAVATION STANDARDS.

THE CONTRACTOR SHALL COORDINATE ALL WORK TO BE PERFORMED WITH EACH RESPECTIVE UTILITY COMPANY, INCLUDING WORK BEING PERFORMED DIRECTLY BY THE UTILITY COMPANIES, FOR MAIN OR SERVICE CONNECTIONS, DISCONNECTIONS, RELOCATIONS, DEMOLITION AND INSPECTIONS. THE CONTRACTOR SHALL SECURE AND PAY FOR ANY PERMITS, FEES AND UTILITY COMPANY CHARGES.





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THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE THE NECESSARY LEVELS OF PROTECTION AND SAFEGUARDING OF ALL OPEN TRENCHES, WHEN WORK IS EITHER ACTIVE, COMPLETED AT THE END OF THE DAY OR SUSPENDED FOR ANY OTHER REASON. THIS INCLUDES TRENCH PROTECTION SUCH AS TRENCH BOXES, WOOD SHEETING AND BRACING, OR ANY OTHER METHOD DETERMINED BY THE CONTRACTOR TO MAINTAIN A SAFE WORKING ENVIRONMENT. ALL EXCAVATIONS SHALL COMPLY WITH APPLICABLE LAWS AND REGULATIONS.

ALL TRENCHES SHALL BE TOPPED WITH 4" OF ODOT ITEM 304 WITHIN ROADWAY PAVEMENTS WHEN THE ROADWAY WILL BE OPENED TO VEHICULAR TRAFFIC PRIOR TO PAVEMENT REPLACEMENT. THE TRENCH TOPPING MATERIAL SHALL BE COMPACTED AND FLUSH WITH THE EXISTING ADJOINING PAVEMENT.

(J) WORK COORDINATION WITH OTHERS

THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS WITH THE WORK FORCES OF UTILITY COMPANIES RELOCATING THEIR FACILITIES SO AS TO COMPLETE ALL SCHEDULED CONSTRUCTION ACTIVITIES WITHOUT UNDUE DELAY OR INTERFERENCE IN ACCORDANCE WITH ODOT ITEM 105.07. THE CONTRACTOR SHALL ARRANGE WITH OTHER WORK FORCES A MUTUALLY ACCEPTABLE WORK SCHEDULE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. THE CONTRACTOR SHALL PRESENT ANY UNRESOLVED SCHEDULE CONFLICTS WITH THE OTHER WORK FORCES IN WRITING TO THE CITY ENGINEER WITHIN TWO WORKING DAYS OF THE CONFLICT DISCOVERY. THE CITY ENGINEER WILL ATTEMPT CONFLICT RESOLUTION WITH THE OTHER WORK FORCES WITHIN TWO WORKING DAYS FOLLOWING RECEIPT OF THE CONTRACTOR'S NOTIFICATION. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS WITHIN THE PROJECT.

(H) <u>COORDINATION AND SCHEDULING OF WORK BETWEEN</u> <u>UTILITY RELOCATION PLANS AND ROADWAY PLANS</u>

ALL PHASES AND SCHEDULING OF WORK SHALL BE CLOSELY COORDINATED WITH THE CITY OF CANTON, ALL UTILITY COMPANIES, AND ANY PROPERTY OWNERS DIRECTLY AFFECTED (WHERE REQUIRED).

THESE DRAWINGS INDICATE THE APPROXIMATE DESIRED POSITION OF PROPOSED DUCT BANKS, PULLBOXES, RISER POLES, ETC. IF FIELD CONDITIONS ARE ENCOUNTERED WHICH MAKE THE ARRANGEMENTS INDICATED IMPOSSIBLE OR IMPRACTICAL, THE CONTRACTOR MUST SUBMIT A REQUEST FOR DEVIATION IN WRITING TO THE CITY ENGINEER WITH COPIES PROVIDED TO THE AFFECTED UTILITY COMPANY, INCLUDING ANY DRAWINGS, MARKUPS, SKETCHES, ETC. TO CLARIFY THE REQUEST. THE CONTRACTOR MAY NOT PROCEED WITH THE DEVIATION UNTIL THE REQUEST HAS BEEN ACCEPTED AND APPROVED IN WRITING BY THE CITY ENGINEER AND UTILITY COMPANY (IF REQUIRED).

UNLESS OTHERWISE DIRECTED, MAINTAIN CLEARANCES
BETWEEN NEW DUCT BANKS TO EXISTING OR PROPOSED
UNDERGROUND WATER MAINS, STORM SEWERS, SANITARY
SEWERS, POWER LINES, AND OTHER UTILITIES AS FOLLOWS:

- MAINTAIN CLEARANCES OF 18" (PREFERRED) / 12" (MINIMUM) VERTICAL AND 36" HORIZONTAL BETWEEN PROPOSED DUCT BANKS, PULLBOXES, RISER POLES, ETC. AND NEW AND/OR EXISTING WATER LINES.
- MAINTAIN CLEARANCES OF 18" (PREFERRED) / 12"
 (MINIMUM) VERTICAL AND 18" HORIZONTAL BETWEEN
 PROPOSED DUCT BANKS, PULLBOXES, RISER POLES,
 ETC. AND NEW AND/OR EXISTING STORM SEWERS AND
 SANITARY SEWERS.
- MAINTAIN MINIMUM CLEARANCES OF 12" VERTICAL AND 12" HORIZONTAL BETWEEN PROPOSED DUCT BANKS, PULLBOXES, RISER POLES, ETC. AND ANY OTHER EXISTING OR PROPOSED UNDERGROUND UTILITIES NOT LISTED ABOVE.

(I) <u>TESTING OF UTILITIES</u>

ALL NEWLY CONSTRUCTED WATERLINES AND SANITARY SEWERS (INCLUDING LATERALS) MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH APPLICABLE STANDARDS (AWWA, ETC.) PER THE OHIO ENVIRONMENTAL PROTECTION AGENCY, AND PER THE REQUIREMENTS OF THE CITY OF CANTON WATER AND ENGINEERING DEPARTMENTS.

SANITARY SEWERS SHALL BE TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY OF CANTON'S SUPPLEMENTAL SPECIFICATIONS:

02-00 TESTING FOR EXCESSIVE DEFLECTION FOR NON-PRESSURE THERMOPLASTIC SEWER PIPE

03-00 TESTING PRACTICES FOR LOW-PRESSURE AIR TESTING OF INSTALLED, NON-PRESSURE, THERMOPLASTIC SEWER PIPE (AS DIRECTED)

04-01 STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE AIR PRESSURE

SANITARY AND STORM SEWERS CONSTRUCTED WITH THIS PROJECT SHALL BE TELEVISED BY THE CONTRACTOR ONLY WHEN A PAY ITEM IS PROVIDED IN ACCORDANCE WITH CITY OF CANTON'S SUPPLEMENTAL SPECIFICATION:

05-01 SEWER TELEVISION INSPECTION AND DOCUMENTATION PROCEDURE

(J) PRESERVATION AND RESTORATION OF DISTURBED FEATURES:

EXISTING DRIVES, BERMS, LAWNS, PAVEMENTS, CURBS, SIDEWALKS, SIGNS, MAILBOXES, FENCES, RETAINING WALLS, LANDSCAPING ITEMS, OR OTHER APPURTENANCES DISTURBED DURING CONSTRUCTION BUT NOT SPECIFICALLY DESIGNATED FOR REMOVAL OR 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.

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, OR DELIVERY OF EQUIPMENT, MATERIALS OR SUPPLIES TO THE WORK SITE, THE CONTRACTOR SHALL PROVIDE A PRECONSTRUCTION DIGITAL COLOR AUDIO-VIDEO RECORDING OF THE ENTIRE PROJECT TO ESTABLISH THE EXISTING SURFACE CONDITIONS. THE VIDEO RECORDING SHALL BE OF PROFESSIONAL QUALITY THAT CLEARLY LOGS AN ACCURATE VISUAL DESCRIPTION OF THE EXISTING CONDITIONS AND THE AUDIO PORTION OF THE RECORDING SHALL PRODUCE THE COMMENTARY OF THE CAMERA OPERATOR WITH PROPER VOLUME, CLARITY AND BE FREE FROM DISTORTION. THE DIGITAL VIDEO AND ANY INSPECTION RECORDS SHALL BE TRANSFERRED TO A DVD WHEN COMPLETE. THE CONTRACTOR SHALL SUBMIT THE FINAL DVD TO THE CITY OF CANTON PRIOR TO CONSTRUCTION. COMMENTARY SHALL INCLUDE THE FOLLOWING ITEMS: 1) DATE AND TIME; 2) STREET NAME, LOCATION AND INTERSECTING STREETS AS THEY ARE CROSSED WITH OCCASIONAL ADDRESSES ALONG THE STREET; 3) COMMENTS ON THE CONDITIONS OF THE PAVEMENT, HOUSES, BUSINESSES AND/OR DRIVEWAYS AT THE TIME OF THE VIDEO; 4) ALL AREAS INVESTIGATED VISUALLY SHALL INCLUDE NOTATIONS MADE OF ITEMS NOT READILY VISIBLE BY VIDEO; AND 5) ANY OTHER PERTINENT ITEMS.

ALL COSTS ASSOCIATED WITH THE WORK, INCLUDING PROVIDING ALL MATERIALS, LABOR, EQUIPMENT, TESTING, AND ALL OTHER INCIDENTAL, MISCELLANEOUS AND RELATED ITEMS, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID.

RESTORATION OF EXISTING ROADWAYS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY, COUNTY, STATE 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 PERMITS.

"ADJUST TO GRADE" WORK FOR A MANHOLE OR CATCH BASIN INCLUDES BUILDING THE STRUCTURE UP TO GRADE OR REMOVING AND REBUILDING A PORTION OF THE STRUCTURE ALL WITHIN ONE FOOT CHANGE IN ELEVATION INCLUDING REMOVAL AND RESETTING OF THE CASTING. "RECONSTRUCT TO GRADE" WORK INCLUDES REMOVING AND REBUILDING A PORTION OF THE STRUCTURE GREATER THAN ONE FOOT IN HEIGHT, REPLACING MANHOLE STEPS, BOTTOM CHANNEL, LOOSE BRICKS, ETC. "ADJUST TO GRADE" OR "RECONSTRUCT TO GRADE" WORK INCLUDES THE REMOVAL AND REPLACEMENT OF ANY CONCRETE BLOCKOUT PAVEMENT AND REPLACEMENT OF DAMAGED PAVEMENT DOWELS OR OTHER LOAD TRANSFER DEVICES.

(K) <u>MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED</u>

ALL CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT OF WAY FOR SALVAGE BY THE CITY OF CANTON FORCES.

THE CONTRACTOR SHALL INSTALL A TEMPORARY WEDGE OF ASPHALT CONCRETE AROUND ANY CASTING EXPOSED TO VEHICULAR TRAFFIC HAVING AN ELEVATION DIFFERENTIAL GREATER THAN 1-1/4 INCH OR WHICH COULD CONSTITUTE A DRIVING HAZARD.

ALL EXISTING AND PROPOSED MANHOLE COVERS, VALVE BOXES, ETC., LOCATED WITHIN PEDESTRIAN RIGHT—OF—WAYS SHALL BE FLUSH MOUNTED WITH THE WALKING SURFACE.

PAVEMENT TO BE REMOVED SHALL BE SAWCUT AND REMOVED FULL DEPTH AT LIMITS OR EXISTING JOINTS AS SHOWN IN THE PLANS. ADDITIONAL SAWCUTS MAY BE DESIRED TO FACILITATE THE REMOVAL OF THE PAVEMENT, BUT THERE WILL BE NO EXTRA PAYMENT. PAVEMENT SHALL BE REMOVED WITHOUT DAMAGING OR UNDERMINING THE PAVEMENT TO REMAIN. IF ADJACENT PAVEMENT IS DAMAGED, THE CONTRACTOR SHALL MAKE ADDITIONAL SAWCUTS, REMOVE THE DAMAGED AREAS AND REPAIR AS NECESSARY WITH NO ADDITIONAL COMPENSATION.

(L) <u>CONSTRUCTION LAYOUT:</u>

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT STAKING INCLUDING HORIZONTAL AND VERTICAL CONTROL IN ACCORDANCE WITH ODOT 623. THESE PLANS HAVE BEEN DEVELOPED FOR ELECTRONIC LAYOUT STAKING. ANY DISCREPANCIES DISCOVERED IN THE PLAN INFORMATION, OR BETWEEN THE PLAN AND ELECTRONIC DATA, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER SO THE APPROPRIATE ADJUSTMENTS MAY BE MADE PRIOR TO THE START OF OR THE CONTINUATION OF CONSTRUCTION. THE ENGINEER MAKES NO REPRESENTATION REGARDING FITNESS FOR ANY PARTICULAR PURPOSE, OR SUITABILITY FOR USE WITH ANY SOFTWARE OR HARDWARE. DUE TO THE EASILY ALTERABLE NATURE OF ELECTRONIC DOCUMENTS, THROUGH EITHER UNINTENTIONAL OR INTENTIONAL MEANS, THE ENGINEER DOES NOT MAKE ANY EXPRESS OR IMPLIED WARRANTY FOR THE ACCURACY OR COMPLETENESS OF THIS INFORMATION AND THEREFORE, ACCEPTS NO LIABILITY FOR THE COMPLETENESS, CORRECTNESS OR READABILITY OF THE ELECTRONIC DATA. HARD COPIES (I.E., PRINTS, PAPER COPIES, ETC.) SHALL PREVAIL IN ANY DISPUTE OVER ACCURACY OR SUFFICIENCY OF ELECTRONIC DOCUMENTS.

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

(M) EXISTING MONUMENTATION:

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

THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER IF BURIED MONUMENTATIONS IS FOUND DURING PAVING OPERATIONS.

(N) <u>DEWATERING OPERATIONS:</u>

WHEN DEEMED NECESSARY, THE CONTRACTOR MAY INSTALL DEWATERING EQUIPMENT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

THE PROPOSED LOCATION OF WELL POINTS, HEADER PIPE, ELECTRICAL DISTRIBUTION, GENERATORS AND DISCHARGE PIPES, ETC. SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS FOR THE INSTALLATION AND SUBSEQUENT REMOVAL OF DEWATERING EQUIPMENT AS WELL AS PROPER WATER DISCHARGE PROCEDURES AS MAY BE REQUIRED PER STATE AND LOCAL GOVERNING AGENCIES.

INSTALLATION OF ALL ELECTRICAL EQUIPMENT, INCLUDING GROUNDING AND PROTECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

THE CONTRACTOR SHALL PROVIDE ALL COMBUSTIBLE ENGINE DRIVEN GENERATORS WITH "HOSPITAL GRADE" MUFFLERS. MUFFLERS SHALL BE RATED, AT A MAXIMUM OF 67 dB AT 23 FEET AWAY RUNNING FULL LOAD.

(0) <u>INSPECTION:</u>

FOLLOWING THE PRE-CONSTRUCTION MEETING AND ESTABLISHMENT OF AN APPROVED SCHEDULE, THE CONTRACTOR SHALL GIVE A MINIMUM 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.

(P) <u>WORK LIMITS</u>

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE CONTRACTOR SHALL PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES AS REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS. THE CONTRACTOR SHALL STAY WITHIN THE DESIGNATED PROPERTIES, EASEMENTS AND/OR RIGHT-OF-WAYS PROVIDED FOR THE PROJECT AT ALL TIMES. NO MATERIAL SHALL BE STORED NOR ANY WORK PERFORMED ON PRIVATE PROPERTY UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. THE CONTRACTOR MUST SUBMIT A WRITTEN REQUEST TO THE CITY ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

III EARTHWORK / SITE WORK

(A) EASEMENTS AND RIGHT-OF WAY:

THE CONTRACTOR SHALL STAY WITHIN THE DESIGNATED PROPERTIES, EASEMENTS, 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.

IT IS THE INTENT OF THE SLOPES AND SPOT GRADES NOTED ON THE PLANS TO PROVIDE POSITIVE DRAINAGE TO STORM WATER COLLECTION POINTS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES IMMEDIATELY TO THE DESIGN ENGINEER FOR RESOLUTION.

(B) SUITABILITY OF SITE:

ALL EXCAVATION IS CONSIDERED UNCLASSIFIED AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS, METHODS AND MATERIALS OF CONSTRUCTION TO COMPLETE CONSTRUCTION AS DESIGNED. THE CITY OF CANTON NOR THE DESIGN ENGINEER SHALL NOT BE RESPONSIBLE FOR THE TYPE AND/OR SUITABILITY OF THE MATERIAL UNDERLYING THE PROJECT SITE. THE CONTRACTOR SHALL PERFORM ANY INVESTIGATIONS OR TESTING NECESSARY TO ADEQUATELY DETERMINE OR ESTIMATE TO HIS SATISFACTION ANY SITE CONDITION WHICH COULD AFFECT HIS BID OR THE PERFORMANCE OF THE PROPOSED IMPROVEMENTS. THIS COULD INCLUDE, BUT NOT BE LIMITED TO, UNSUITABLE/UNSTABLE SOIL/SUBSURFACE CONDITIONS, ROCK, WATER (PERCHED OR FREE), SPRINGS, ETC.

THE INTENT OF THIS PROJECT IS TO UTILIZE ALL USEABLE MATERIALS EFFICIENTLY. ACTUAL FIELD CONDITIONS MAY REQUIRE DECISIONS ON MATERIAL HANDLING AND USAGE. THE CONTRACTOR IS RESPONSIBLE FOR MONITORING AND MAINTAINING SITE CONDITIONS.

EXCESS MATERIAL GENERATED FROM TRENCH EXCAVATION OPERATIONS SHALL BE INCORPORATED IN THE UNIT PRICE BID FOR EXCAVATION INCLUDING EMBANKMENT CONSTRUCTION.

AREAS OF EXPOSED PAVEMENT SUBGRADE SHALL BE MAINTAINED IN SUCH CONDITION THAT IT WILL BE WELL DRAINED AT ALL TIMES TO PREVENT PONDING OF WATER.

THE CONTRACTOR SHALL STRIP TOPSOIL FROM AREAS TO BE GRADED AND STOCKPILE IT PRIOR TO SITE GRADING OPERATIONS.

(C) REMOVAL/REPLACEMENT OF UNSUITABLE MATERIAL:

THE CONTRACTOR SHALL UNDERCUT AND REPLACE UNSUITABLE MATERIAL ENCOUNTERED DURING INSTALLATION OF THE PROPOSED UTILITIES OR ROADWAY WITH COMPACTED FILL OR STABILIZED IN PLACE UTILIZING CONVENTIONAL MEASURES SUCH AS DISCING, AERATION AND RECOMPACTION. ON—SITE MATERIAL MAY BE USED AS ENGINEERED FILL MATERIALS PROVIDED THEY ARE FREE OF ORGANIC MATTER, DEBRIS, EXCESSIVE MOISTURE, AND ROCK OR STONE FRAGMENTS 3" AND LARGER. OTHER MEANS OF STABILIZATION SHALL BE AT THE DISCRETION OF THE OWNER AND THE ENGINEER.

(D) ITEM 690 - SPECIAL - WORK INVOLVING SOLID WASTE

ENVIRONMENTAL STUDIES HAVE SHOWN THAT THERE IS THE POTENTIAL FOR ENCOUNTERING PETROLEUM CONTAMINATED MATERIAL AT THE FOLLOWING LOCATIONS:

1) SAVE—A—LOT/FAMILY DOLLAR, 2901 MAHONING RD. N.E. 2) QUALITY MUFFLER, 3219 MAHONING RD. N.E.

IN THE EVENT PETROLEUM CONTAMINATED SOILS ARE ENCOUNTERED, THE CONTRACTOR SHALL MANAGE THIS MATERIAL ACCORDING TO THE FOLLOWING NOTES.

ALL MATERIAL EXCAVATED BY THE CONTRACTOR AT THIS LOCATION MAY BE STOCKPILED IN AN AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE CITY ENGINEER. THE CITY ENGINEER MAY PERMIT TEMPORARY STORAGE OF THE EXCAVATED MATERIAL: 1) IN A LINED AND COVERED ROLL—OFF BOX; OR 2) ON AN IMPERMEABLE MEMBRANE THAT IS SURROUNDED BY BALES OF STRAW TO PREVENT THE SUSPECTED SOILS FROM COMING IN CONTACT WITH THE ORIGINAL SOILS. THE CITY ENGINEER MAY PERMIT THE CONTRACTOR TO DIRECT LOAD THE EXCAVATED CONTAMINATED MATERIAL INTO TRUCKS.

THE MATERIAL SHALL BE PROPERLY TESTED, TRANSPORTED AND DISPOSED OF IN A LICENSED (BY THE LOCAL HEALTH DEPARTMENT) AND PERMITTED (BY THE OHIO EPA) SOLID WASTE FACILITY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS TO TRANSPORT THE MATERIALS TO A LICENSED AND PERMITTED SOLID WASTE DISPOSAL FACILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING ANY ADDITIONAL SAMPLING AND ANALYSIS OF THIS MATERIAL AS MAY BE REQUIRED.

THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO PROPERLY HANDLE, STORE

(IF NECESSARY), TEST FOR DISPOSAL AND DISPOSE OF REGULATED MATERIALS, INCLUDING ANY REQUIRED PERMITS, APPROVALS OR FEES WITHIN THE LIMITS IDENTIFIED ABOVE.

IF ANY EXCAVATIONS WITHIN THE VICINITY OF THE FOLLOWING LOCATION REQUIRE DEWATERING FOR CONSTRUCTION PURPOSES, THE CONTRACTOR SHALL DEWATER, CONTAINERIZE AND SUBSEQUENTLY DISPOSE OF THE WATER BY A METHOD APPROVED BY THE CITY ENGINEER:

3) PERRY'S T-SHIRTS, 3147 MAHONING RD. NE

THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND/OR AUTHORIZATIONS REQUIRED TO STORE, TRANSPORT AND/OR DISPOSE OF THE WATER IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

IV ROADWAY / DRIVE APPROACHES / WALK / CURB

(A) PAVEMENT STANDARDS:

PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE CITY OF CANTON STANDARD DRAWINGS AND SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED.

(B) ASPHALT/CONCRETE:

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE OF BEGINNING WORK WHICH REQUIRES COMPACTION TESTING AND/OR PRE-POUR INSPECTION PRIOR TO PLACEMENT OF ASPHALT OR CONCRETE. WORK SHALL NOT PROCEED UNTIL TESTING AND/OR INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE CITY ENGINEER.

THE CONTRACTOR SHALL USE HIGH EARLY STRENGTH CONCRETE (QC-FS) FOR THE CONSTRUCTION OF ALL ACTIVE DRIVE APPROACHES AND APRONS.

(C) RESTRICTED WORK SCHEDULE:

NO CONCRETE FINISH WORK OR PERMANENT ASPHALT SHALL BE PLACED FROM NOVEMBER 15TH TO APRIL 15TH UNLESS WRITTEN APPROVAL IS GRANTED BY THE CITY ENGINEER.

(D) <u>DROP CURB AT DRIVEWAYS</u>

THE CONTRACTOR SHALL PROVIDE HAND FORMED DROP CURBS FOR ALL PROPOSED DRIVEWAYS AT THE TIME THE CONCRETE CURB IS POURED.

(E) <u>ITEM 424 — FINE GRADED POLYMER ASPHALT CONCRETE, TYPE A</u>

ITEM 703.05, DO NOT USE FINE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) ON ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

(F) ITEM 608 - 5" CONCRETE WALK

THE QUANTITY SHOWN ON GENERAL SUMMARY FOR ITEM 608 — 5" CONCRETE WALK, AS PER PLAN ASSUMES A UNIFORM DEPTH OF CONCRETE IN ALL CONCRETE WALK AREAS AND DOES NOT ACCOUNT FOR VARIABLE DEPTH AREAS ADJACENT TO WALKWAY PAVER PANEL AND RIGHT OF WAY, AS REQUIRED BY CITY OF CANTON STANDARD DRAWING NO. 40.

(G) <u>ITEM SPECIAL — MISC.: TREE GRATE</u>

TREE GRATES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF CANTON STANDARD DRAWING NO. 43.

PAYMENT FOR ITEM SPECIAL — MISC.: TREE GRATE SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH TREE GRATE INDICATED ON THE PLANS AND SHALL INCLUDE TREE GRATE, FRAME, CONCRETE COLLAR AND EXCAVATION AND CLEARING OF THE TREE PIT.

(H) ITEM SPECIAL - MISC.: 2-1/4" BRICK WALKWAY PAVERS

BRICK WALKWAY PAVERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF CANTON STANDARD DRAWING NO. 40. PAYMENT FOR ITEM SPECIAL — MISC.: 2—1/4" BRICK WALKWAY PAVERS SHALL BE MADE AT THE CONTRACT UNIT PRICE PER SQUARE FOOT OF BRICK WALKWAY PAVER AREAS INDICATED ON THE PLANS AND SHALL INCLUDE BRICK WALKWAY PAVERS AND 1—INCH SAND SETTING BED ON WATER SEAL.



ENERAL NOTE

REVISIONS DATE
BIDDING SET 4/21/14

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AH. S EACH MAJOR BRT BUS STOP SHALL INCLUDE A BUS SHELTER, BENCH, TRASH RECEPTABLE, BIKE RACK, STATION ID SIGN, AND HANGER BRACKET. THE COST FOR ALL CONCRETE PAVEMENT, CURBS, SIDEWALKS, BRICKS AND LIGHTING SHALL BE INCLUDED IN THE APPROPRIATE PAY ITEMS IN THE ROADWAY PLANS. PAYMENT FOR THE MAJOR BRT STOP ITEMS SHALL BE INCLUDED WITH ITEM SPECIAL — MISC.: TYPICAL MAJOR BRT STOP WITH SHELTER.

EACH MINOR BRT BUS STOP SHALL INCLUDE A STREET POLE WITH FINIAL AND DECORATIVE BASE, CURVED BENCH, TRASH RECEPTACLE, STATION ID SIGN AND HANGER BRACKET. THE COST FOR ALL CONCRETE PAVEMENT, CURBS, SIDEWALKS, BRICKS AND LIGHTING SHALL BE INCLUDED IN THE APPROPRIATE PAY ITEMS IN THE ROADWAY PLANS. PAYMENT FOR THE MINOR BRT STOP ITEMS SHALL BE INCLUDED WITH ITEM SPECIAL — MISC.: TYPICAL MINOR BRT STOP WITHOUT BUS SHELTER.

(J) ITEM SPECIAL - MISC.: BRICK BOX FORM

BRICK BOX FORMS SHALL BE CONSTRUCTED TO FACILITATE CONSTRUCTION OF THE BRICK WALKWAY PAVERS.

PAYMENT FOR ITEM SPECIAL — MISC.: BRICK BOX FORMS SHALL BE MADE AT THE CONTRACT UNIT PRICE PER SQUARE FOOT OF BRICK WALKWAY PAVER AREAS INDICATED ON THE PLANS.

(K) <u>CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING:</u>

WHERE NEW CONCRETE IS PLACED ADJACENT TO AND TIED TO EXISTING CONCRETE, THE CONTRACTION JOINT SPACING REQUIRED IN STANDARD CONSTRUCTION DRAWING BP-2.2 WILL BE WAIVED. CONSTRUCT CONTRACTION JOINTS IN THE NEW CONCRETE PAVEMENT TO FORM A CONTINUOUS LINE WITH ALL CONTRACTION JOINTS IN THE EXISTING CONCRETE PAVEMENT. INSTALL EXPANSION JOINTS IN THE NEW CONCRETE PAVEMENT TO FORM A CONTINUOUS LINE WITH ALL EXPANSION JOINTS IN THE EXISTING CONCRETE PAVEMENT.

(L) 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 STANDARD CONSTRUCTION DRAWING BP-3.1.

(M) ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR:

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE CITY OF CANTON. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 448 -ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG84-28. THE ASPHALT CONCRETE SHALL BE COMPACTED WITH A TYPE I PNEUMATIC TIRE ROLLER AND A STEEL WHEEL ROLLER AS PER 401.13. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE CITY OF CANTON SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. UNLESS OTHERWISE DIRECTED BY THE CITY OF CANTON, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING. ALSO, THIS ITEM SHALL COMMENCE WITHIN 7 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR.

(N) ITEM 252 - FULL DEPTH PAVEMENT SAWING

THE CONTRACTOR SHALL FULL DEPTH SAW CUT EXISTING BRICK PAVEMENT ENCOUNTERED ALONG PROPOSED FULL DEPTH PAVEMENT REPLACEMENT AREAS AT LOCATIONS SHOWN ON THE TYPICAL SECTIONS AND ROADWAY PLAN SHEETS. FULL DEPTH SAW CUTS SHALL INCLUDE ALL EXISTING LAYERS FROM ASPHALT SURFACE TO BOTTOM OF BRICK OR CONCRETE PAVEMENT.

(O) <u>ITEM 304 – AGGREGATE BASE</u>

GRANULATED SLAG SHALL NOT BE PERMITTED FOR THIS ITEM. ALL OTHER REQUIREMENTS OF SECTIONS 304 AND 703.17 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL STILL BE APPLICABLE.

V SANITARY SEWERS / STORM SEWERS

(A) <u>STANDARDS:</u>

ALL SANITARY/STORM SEWER CONDUITS AND APPURTENANCES SHALL BE CONSTRUCTED PER CITY OF CANTON STANDARD DRAWINGS AND SPECIFICATIONS AND ODOT SPECIFICATIONS, UNLESS SPECIFIED OTHERWISE.

(B) SANITARY

SANITARY GRAVITY MAIN SEWERS AND SERVICE CONNECTIONS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 IN ACCORDANCE WITH ASTM D-3034 WITH GASKET MATERIAL CONFORMING TO ASTM F-477 AND JOINTS TO ASTM D-3212.

SANITARY LATERAL CONNECTIONS:

- (1) ALL CONNECTIONS TO NEW OR EXISTING MAIN SEWER SHALL BE INSTALLED WITH A MANUFACTURED WYE, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
- (2) THE MINIMUM SLOPE SHALL BE 1/8" PER FT. (1%) AND THE MAXIMUM SHALL BE 1/4" PER FT. (2%) UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER

(C) MAINTAIN SEWAGE SERVICE:

MAINTAIN SANITARY SERVICE AT ALL TIMES DURING CONSTRUCTION, UNLESS APPROVED BY THE CITY ENGINEER. WHEN RECONNECTING LATERAL SERVICES, THE CONTRACTOR SHALL, IN ADVANCE OF INTERRUPTING SERVICE, NOTIFY THE CITY INSPECTOR, HOMEOWNER AND THE CITY ENGINEER. PATCH PIPE, AS NEEDED FOR INSTALLATION OF THE NEW SANITARY SEWER WHERE IT CROSSES UNDERNEATH EXISTING LATERALS, SHALL BE INSTALLED IN A MANNER TO LIMIT THE TIME OF INTERRUPTION.

(D) <u>DOWNSPOUT OUTLET AND GROUNDWATER DRAIN LINES:</u>

CONTINGENCY QUANTITIES FOR EITHER TWO (2)
DOWNSPOUT OUTLETS OR ONE (1) DOWNSPOUT OUTLET
AND ONE (1) GROUNDWATER DRAIN LINE SHALL BE
PROVIDED FOR EACH LOT AS DIRECTED BY THE CITY
ENGINEER. LOCATIONS OF PROPOSED DOWNSPOUT
OUTLETS AND GROUNDWATER DRAIN LINE CONNECTIONS
SHALL BE AS DIRECTED BY THE CITY ENGINEER.

ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

(E) ITEM SPECIAL - MISCELLANEOUS METAL:

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE CITY OF CANTON. 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 MATERIAL SHALL MEET ITEM 604 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE CITY OF CANTON.

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 CITY OF CANTON, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

(F) ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF BULKHEADS IN EXISTING CONDUIT AND FILLING THE AREA THUS SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE CITY ENGINEER.

BULKHEADS SHALL BE LOCATED AT THE LIMITS OF THE AREA TO BE FILLED AS INDICATED ON THE PLANS. THE BULKHEADS SHALL CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

THE FILL MATERIAL SHALL BE PUMPED INTO PLACE, OR PLACED BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT, AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS—SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH, SHALL BE FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED IN ACCORDANCE WITH THE PROVISIONS OF 203, OR IT MAY

(G) <u>ITEM 611 — (BY SIZE) CONDUIT, TYPE B, AS PER PLAN</u>
CONDUIT UNDER THIS PAY ITEM SHALL BE CONCRETE AS PER CMS 706 OR HDPE AS PER CMS 707.33.

VI LANDSCAPING:

(A) <u>INSTALLATION</u>

ALL PLANT MATERIAL SHALL BE INSTALLED ACCORDING TO ACCEPTED PLANTING PROCEDURES AND MEET CURRENT AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS.

THE CONTRACTOR SHALL MAINTAIN ALL PLANTING INCLUDING, BUT NOT LIMITED TO, WATERING, SPRAYING, MULCHING AND FERTILIZING UNTIL THE WORK IS ACCEPTED BY THE CITY.

SIZES SPECIFIED ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE INSTALLED. ANY PLANT SUBSTITUTION MUST BE APPROVED BY THE CITY.

ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE CITY BEFORE, DURING AND AFTER INSTALLATION. THE CITY RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL, FOR ANY REASON BEFORE OR AFTER IT IS INSTALLED. THE CONTRACTOR SHALL PROTECT ALL TREES, SHRUBS AND LANDSCAPING DURING CONSTRUCTION THAT ARE NOT DESIGNATED FOR REMOVAL. ANY TREE OR SHRUB (INCLUDING ROOTS) DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED BY THE CONTRACTOR WITH LIKE SPECIES AND SIZE WITH NO ADDITIONAL COMPENSATION.

AFTER THE TREE GRATES HAVE BEEN INSTALLED AT THE LOCATIONS INDICATED IN THE CONSTRUCTION PLANS, THE CONTRACTOR SHALL CONTACT AND MEET WITH THE CITY OF CANTON TO FINALIZE LOCATIONS FOR SPECIFIC TREE TYPES.

FINELY SHREDDED HARDWOOD BARK MULCH, NATURAL COLOR (NON-COLORED), IS REQUIRED FOR ALL PLANTINGS.

ALL DISTURBED AREAS SHALL RECEIVE SEED OR SOD (SEE PLANS FOR LOCATIONS). DO NOT INSTALL SEED OR SOD UNTIL ACCEPTANCE OF FINISH GRADE AND/OR THE IRRIGATION SYSTEM IS OPERATING PROPERLY. LAWN AREAS SHALL BE RESEEDED OR NEW SOD INSTALLED IF SATISFACTORY ESTABLISHMENT OF LAWN DOES NOT OCCUR.

(B) <u>WARRANTY</u>

THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF ACCEPTANCE BY THE CITY ENGINEER. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN OR DEFOLIATES PRIOR TO ACCEPTANCE SHALL BE REMOVED AND REPLACED WITH THE SAME SPECIES, QUANTITY AND SIZE AND MEET ALL PLANT LIST SPECIFICATIONS BEFORE OR AT THE END OF THE GUARANTEE PERIOD AT NO ADDITIONAL COST.

VIIIWATER MAIN / SERVICES:

- (A) WATER MAINS/SERVICES: ALL WATER MAINS, SERVICES AND APPURTENANCES SHALL BE DESIGNED AND CONSTRUCTED ACCORDING TO THE CITY OF CANTON WATER DEPARTMENT REQUIREMENTS AND SPECIFICATIONS IN EFFECT AT THE TIME OF CONSTRUCTION.
- (B) ALL WATER MAIN PIPE MATERIALS, FITTINGS, BENDS, VALVES, VALVE BOXES, MEGALUGS, GASKETS AND HYDRANTS WILL BE SUPPLIED BY THE CITY OF CANTON. THE CONTRACTOR WILL BE RESPONSIBLE FOR TRANSPORTING MATERIALS TO THE PROJECT SITE. BACKFILL, BEDDING, THRUST BLOCKING, ETC. AND ASSOCIATED LABOR IS THE RESPONSIBILITY OF THE CONTRACTOR.
- (C) WATER MAINS SHALL BE CLASS 53 (12-INCH AND UNDER) OR CLASS 54 (OVER 12-INCH) DUCTILE IRON, MEETING AWWA C151 WITH PUSH JOINTS. THE MINIMUM COVER OVER WATER MAINS SHALL BE 4 FEET-6 INCH FROM GROUND SURFACE TO THE BARREL OF THE PIPE. THE OUTSIDE SURFACE OF ALL DUCTILE IRON PIPE, FITTINGS AND APPURTENANCES SHALL BE SHOP COATED WITH EITHER A COAL TAR OR ASPHALT BASE BITUMINOUS MATERIAL. IF THE COATING MATERIAL IS FOUND TO BE DAMAGED PRIOR TO THE PIPE TRENCH BEING BACKFILLED, THE CONTRACTOR SHALL PROVIDE AN ADDITIONAL APPROVED MATERIAL AS REQUIRED TO REPAIR THE DAMAGES. THE CONTRACTOR SHALL HAVE SUFFICIENT COATING MATERIALS AVAILABLE AT THE JOB SITE PRIOR TO LAYING THE PIPE. THE INTERIOR OF ALL PIPES AND FITTINGS SHALL BE LINED WITH DOUBLE CEMENT MORTAR AND SEAL COATED IN COMPLETE CONFORMANCE WITH AWWA C104, OR THE LATEST REVISION. FITTINGS SHALL BE RATED FOR 250 PSI WORKING PRESSURE IN ACCORDANCE WITH AWWA C110. PIPE LENGTHS MAY BE DEFLECTED AT THE JOINT IF REQUIRED, AT ONE-HALF THE DEGREE RECOMMENDED BY THE MANUFACTURER.
- (D) VALVES SHALL MEET THE APPLICABLE AWWA C905
 STANDARDS AND THE FOLLOWING: ALL VALVES SHALL BE
 NON-RISING STEM, IRON BODY, RESILIENT WEDGE DISC.
 THE DESIGN OF THE THRUST COLLAR SHALL BE SUCH
 THAT THE THRUST COLLAR IS SEALED FROM LINE
 PRESSURE BY MEANS OF AN "O" RING SEAL. ALL VALVES
 SHALL BE FURNISHED WITH A TWO (2) INCH SQUARE
 OPENING NUT, OPEN RIGHT. ALL VALVES SHALL BE
 FURNISHED WITH MECHANICAL JOINT END CONNECTIONS.
 THE STEM SHALL BE PROTECTED FROM EXTERNAL GRIT BY
 A WEATHER SHIELD AND AN UPPER "O" RING. STEM

SHALL BE LUBRICATED. GATE COATING SHALL HAVE A MINIMUM THICKNESS OF 10 MILS. VALVE SHALL BE TESTED AT THE RATED WORKING PRESSURE OF 250 PSI WITH NO LEAKAGE. SHELL TEST OF 500 PSI SHALL BE APPLIED TO BODY WITH VALVE IN THE OPEN POSITION WITH NO LEAKAGE THROUGH THE METAL, STEM SEALS OR JOINTS. VALVE MUST HAVE TRADITIONAL STUFFING BOX. ALL BOLTING MATERIAL IN THE THRUST COLLAR AND BONNET SHALL BE #316 SS BOLTS. ALL VALVES WITH ACCESSORIES PACK (FLANGES, RUBBERS, NUTS, BOLTS).

- (E) DISINFECTION OF WATER MAINS SHALL BE IN ACCORDANCE WITH AWWA C651.
- (F) ALL WATER LINE PRESSURE TESTING SHALL CONFORM TO AWWA C600.
- (G) WATER MAINS SHALL BE INSTALLED AND BACKFILLED PER ODOT ITEM 638.
- (H) WATER LINES LOCATED WITHIN THE LIMITS OF OR WITHIN A 1/2 TO 1 SLOPE OF EXISTING AND/OR PROPOSED ROADWAYS, PARKING AREAS, BUILDINGS, SIDEWALKS AND/OR DRIVES SHALL BE INSTALLED AS TYPE B CONDUITS. ALL OTHER WATER MAINS SHALL BE INSTALLED AS TYPE C CONDUITS. BEDDING SHALL BE AS SPECIFIED, EXCEPT THAT SLAG WILL NOT BE PERMITTED.
- (I) ALL BENDS, FITTINGS, TEES, VALVES, DEAD ENDS, ETC. SHALL BE SECURED EQUAL. POURED—IN—PLACE CONCRETE THRUST BLOCKS SHALL ALSO BE PROVIDED AT/FOR EACH BENDS, FITTING, TEE, DEAD END, ETC. THIS BLOCKING SHALL BE CAREFULLY PLACED TO ENSURE IT IS POSITIONED PROPERLY TO WITHSTAND THE RESULTANT FORCES AT EACH BEND, FITTING, ETC. AND SHALL BEAR ON STABLE UNDISTURBED GROUND CAPABLE OF WITHSTANDING THE POTENTIAL LOADING. TIE RODS ARE TO BE 3/4 INCH DIAMETER. TWO TIE RODS ARE REQUIRED FOR AN 8 INCH PIPE, AND FOUR TIE RODS ARE REQUIRED FOR 12 INCH PIPE.
- (J) IN ADDITION TO THE RESTRAINT OF ALL BENDS, FITTINGS, TEES, VALVES, DEAD ENDS, ETC., THE CONTRACTOR SHALL ALSO SECURE/RESTRAIN ALL JOINTS FOR AT LEAST THREE (3) PIPE JOINTS (50 FEET MIN.) BEYOND EACH DEAD END, BEND, FITTING, VALVE, TEE, ETC. UTILIZING MEGALUGS, FIELD LOK GASKETS OR APPROVED EQUALS.
- (K) THE CONTRACTOR SHALL PROVIDE 18-INCH VERTICAL CLEARANCE BETWEEN PROPOSED WATERLINES AND ANY SANITARY SEWERS. WHEN 18-INCH CLEARANCE BETWEEN A WATERLINE AND A SANITARY SEWER CANNOT BE OBTAINED, THE CONTRACTOR SHALL PROVIDE CONCRETE ENCASEMENT AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE 12-INCH MINIMUM CLEARANCE BETWEEN WATERLINES AND STORM SEWERS; TEN (10) FOOT HORIZONTAL CLEARANCE BETWEEN WATERLINES/SERVICES AND SANITARY SEWERS; AND FOUR (4) FOOT HORIZONTAL CLEARANCE BETWEEN WATERLINES/SERVICES AND STORM SEWERS.
- (L) THE FIRE HYDRANT SETTING SHALL INCLUDE THE HYDRANT, ANCHOR TEE, VALVE, VALVE BOX, 6—INCH PIPING AND ALL FITTINGS NEEDED FOR PROPER INSTALLATION TO FINAL GRADE. FIRE HYDRANTS SHALL BE MUELLER A423 MEETING THE CITY OF CANTON WATER DEPARTMENT STANDARDS AND REQUIREMENTS. ALL COSTS FOR THE 6—INCH PIPING ASSOCIATED WITH THE INSTALLATION OF FIRE HYDRANTS SHALL BE INCLUDED WITH THE FIRE HYDRANT PAY ITEM. ALL HYDRANTS SHALL BE INSTALLED WITH THE PUMPER NOZZLE FACING THE STREET. ALL FIRE HYDRANT THREADS SHALL BE LUBRICATED WITH A FOOD GRADE LUBRICANT AND OPERATED UPON INSTALLATION.
- (M) ALL DUCTILE IRON PIPE, FITTINGS AND APPURTENANCES BURIED UNDERGROUND SHALL BE ENCASED WITH 8 MIL. POLYETHYLENE FILM CONFORMING TO AWWA C105.
- (N) THE CONTRACTOR SHALL TAKE ANY AND ALL NECESSARY PRECAUTIONS TO PROTECT AND MAINTAIN IN SERVICE, ANY EXISTING WATER MAINS EXPOSED DURING CONSTRUCTION.
- (O) ANY WATER SERVICE LINE THAT IS BROKEN, CUT OR OTHERWISE DAMAGED, SHALL BE REPLACED FROM THE CORPORATION STOP TO THE CURB STOP WITH A SINGLE PIECE OF PLASTIC LINE (DRISCOPLEX). NO SPLICING OF THE SERVICE LINE WILL BE PERMITTED.
- (P) SERVICE BRANCHES SHALL BE INSTALLED PER ODOT ITEM 638.16 WITH THE FOLLOWING EXCEPTION: WHEN A SERVICE BRANCH IS DISTURBED FOR LOWERING, RAISING, EXTENDING OR SHORTENING ON THE PROPERTY SIDE ON THE SERVICE STOP, IT SHALL BE REPLACED WITH NEW MATERIALS FROM THE CORPORATION STOP TO THE SERVICE STOP.
- (Q) IN A STREET IMPROVEMENT, NO EXISTING WATER CURB BOX WILL BE LEFT IN THE PAVEMENT, CURB AND GUTTER OR SIDEWALK. THE CURB BOX SHALL BE MOVED TO A SUITABLE LOCATION DETERMINED BY THE CANTON WATER DEPARTMENT. WHEN THE CURB BOX IS MOVED, ALL NEW MATERIAL SHALL BE USED FROM THE CORPORATION STOP TO THE CURB STOP WHICH IS A SINGLE PIECE OF PLASTIC SERVICE LINE (DRISCOPLEX). NO SPLICING OF THE SERVICE LINE IS PERMITTED. A NEW TAP (CORPORATION STOP) AND CURB STOP AND BOX MAY ALSO BE REQUIRED AS DETERMINED BY THE CANTON WATER DEPARTMENT.
- (R) WHEN AN EXISTING WATER MAIN MUST BE SHUT DOWN TO PERFORM WORK, THE PROPERTIES TO BE EFFECTED SHALL BE GIVEN A MINIMUM 24 HOUR NOTICE OF SAID SHUT DOWN. THE WORK WILL BE SCHEDULED AND COORDINATED TO MINIMIZE THE TIME THE MAIN IS OUT OF SERVICE.

- (S) THE CONTRACTOR SHALL NOTIFY THE CITY 48 HOURS IN ADVANCE OF ANY SHUT DOWN OF AN EXISTING MAIN. THE CONTRACTOR MAY NOT OPERATE ANY VALVES; VALVES MAY ONLY BE OPERATED BY CANTON WATER DEPARTMENT PERSONNEL. VALVES DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- (T) ALL VALVE BOXES WILL BE ADJUSTED TO FINAL GRADE OF SURROUNDING PAVEMENT OR FINISHED SURFACE TREATMENTS WHEN THE PROJECT IS COMPLETED.
- (U) PER CITY ORDINANCE "105.03 U.S. STEEL USAGE REQUIRED; EXCEPTIONS", ALL STEEL NECESSARY IN THE CONSTRUCTION OF ANY WORK SHALL BE STEEL THAT IS PRODUCED IN THE UNITED STATES UNLESS A SPECIFIC PRODUCT WHICH IS REQUIRED IS NOT PRODUCED BY MANUFACTURERS IN THE UNITED STATES IN WHICH EVENT THIS PROHIBITION DOES NOT APPLY.

IX POST CONSTRUCTION INCIDENTALS

(A) AS-BUILT DRAWINGS AND NOTES:

AS-BUILT REPRODUCIBLE MYLARS SHALL BE PROVIDED TO THE CITY OF CANTON BY THE DESIGN ENGINEER AT THE COMPLETION OF THE PROJECT. AS-BUILT INFORMATION CONSISTS OF POST-CONSTRUCTION FIELD SURVEY DATA OF THE LOCATION, FLOW LINE ELEVATIONS, AND TOP-OF-GRATE/RIM ELEVATIONS FOR ALL STORM AND SANITARY STRUCTURES CONSTRUCTED AND/OR IMPACTED BY THE PROJECT.

THE CONTRACTOR SHALL DOCUMENT IN WRITING ANY AND ALL INFORMATION PERTAINING TO ANY CONSTRUCTION THAT DEVIATES FROM THESE PLANS AND SHALL MAKE SUCH DOCUMENTATION AVAILABLE TO THE CITY ENGINEER.

(B) PROPOSED MONUMENTATION:

THE CONTRACTOR'S SURVEYOR SHALL NOTIFY THE CITY ENGINEER IN WRITING UPON THE COMPLETION OF MONUMENTS BEING SET AS PER PLAN OR RECORD PLAT.

(C) RELEASE OF RETAINER/BONDS:

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

UNDERGROUND CONDUIT ACRONYMS

PVC = POLYVINYL CHLORIDE

VCP = VITRIFIED CLAY PIPE RCP = REINFORCED CONCRETE PIPE

RCP = REINFORCED CONCRETE PIPE HDPE = HIGH-DENSITY POLYETHYLENE

CMP = CORRUGATED METAL PIPE

D.I. = DUCTILE IRON C.I. = CAST IRON

RIM = RIM ELEVATION
INV = INVERT ELEVATION

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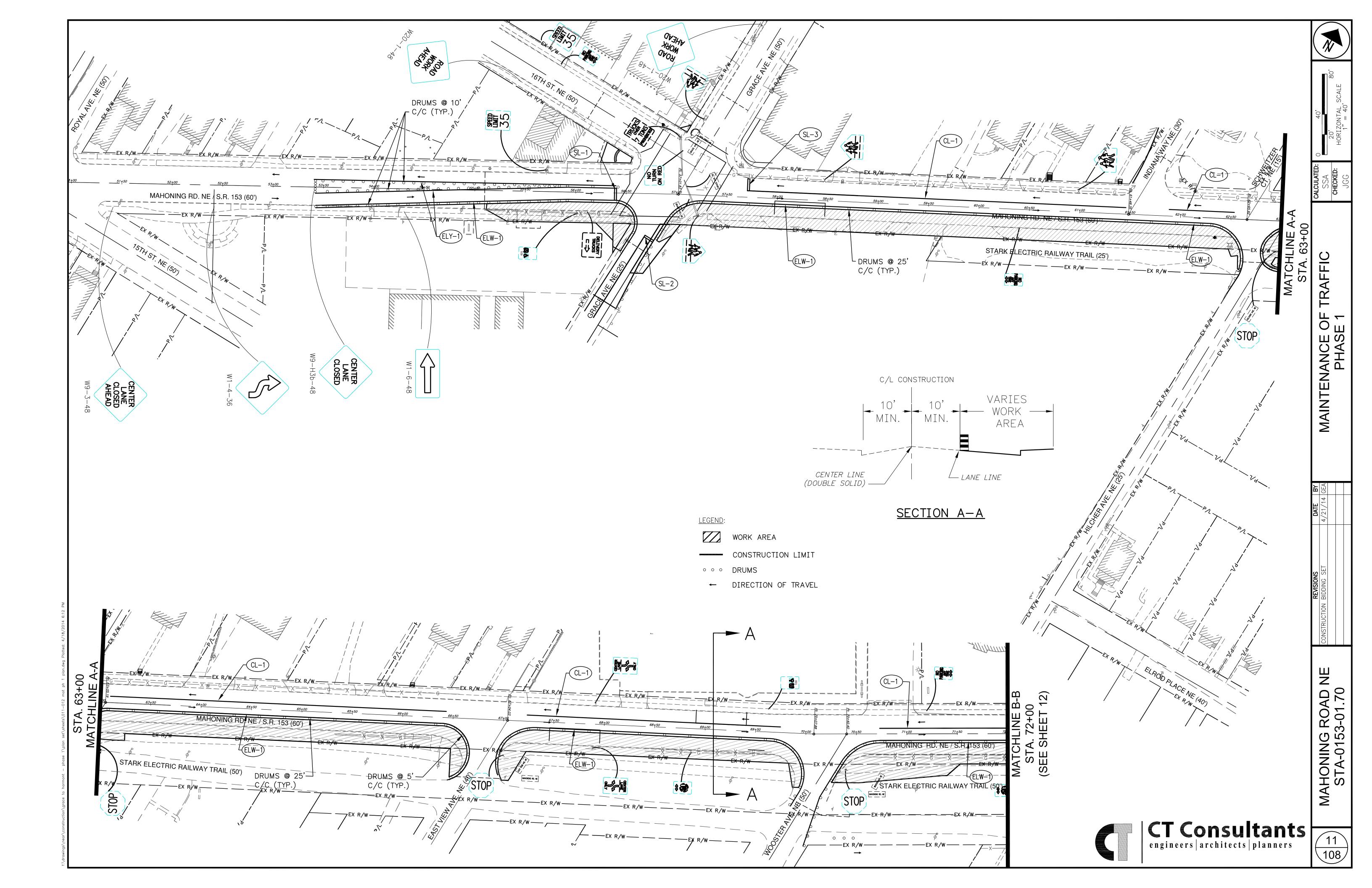
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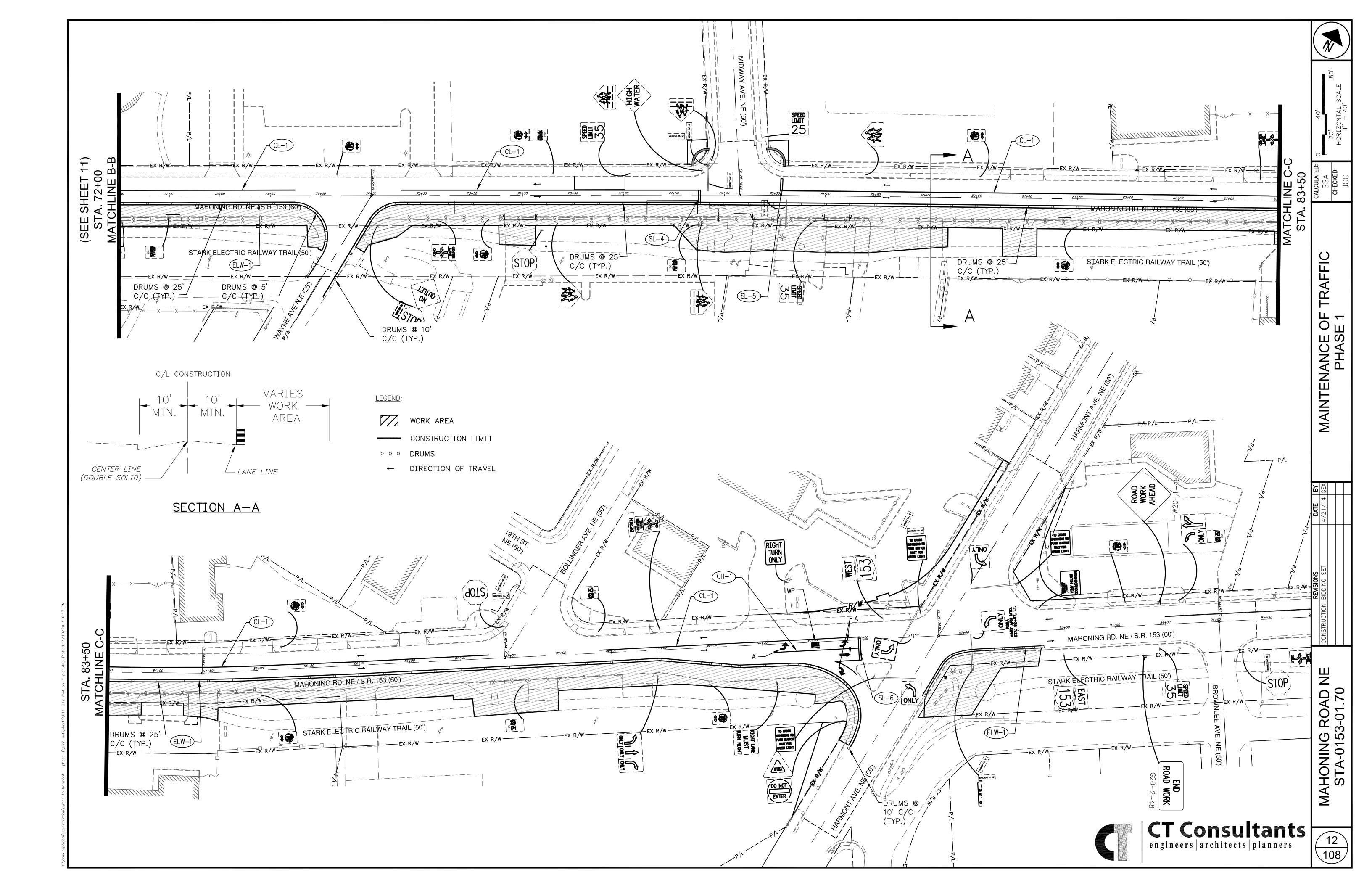
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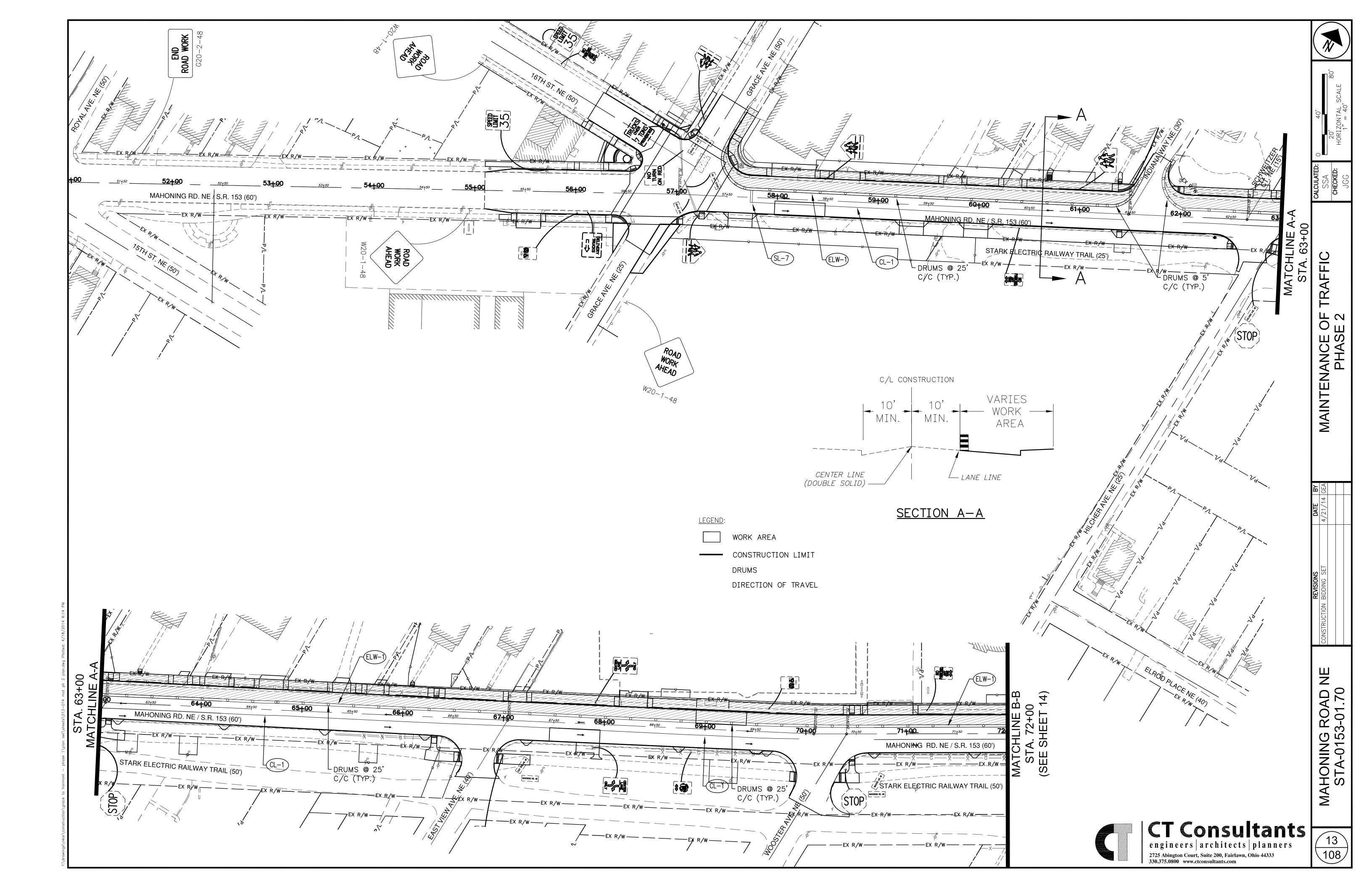
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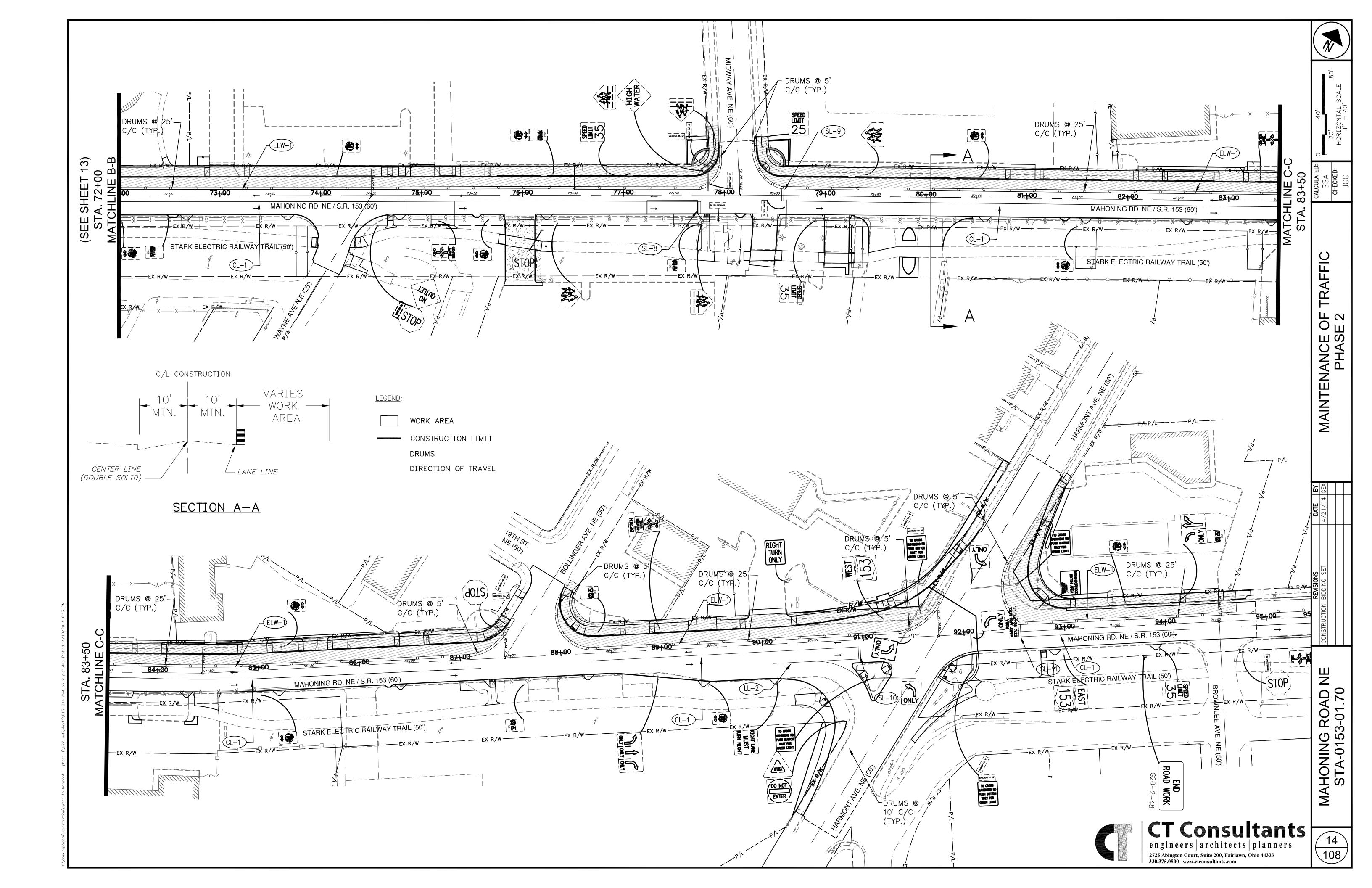
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ANY TEMPORARY ROADWAY CLOSING MUST BE APPROVED IN WRITING BY THE CITY TRAFFIC ENGINEER AND ANY OTHER PUBLIC AGENCY HAVING JURISDICTION. THE CONTRACTOR SHALL NOTIFY THE TRAFFIC ENGINEER AT LEAST 72 HOURS IN ADVANCE OF ANY SUCH CLOSINGS FOR PUBLICATION AND EMERGENCY AGENCY NOTIFICATION.

A MINIMUM OF ONE TEN (10) FOOT LANE OF TRAFFIC IN EACH DIRECTION ALONG MAHONING ROAD SHALL BE MAINTAINED AT ALL TIMES, BY EITHER THE USE OF THE EXISTING PAVEMENT OR NEW PAVEMENT.

TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC, THE LENGTH AND DURATION OF LANE CLOSURES, LANE RESTRICTIONS AND TIME RESTRICTIONS SHALL BE KEPT TO A MINIMUM OR AT THE DIRECTION OF THE CITY ENGINEER. LANE CLOSURES OR RESTRICTIONS WHERE NO WORK IS ANTICIPATED WITHIN A REASONABLE AMOUNT OF TIME SHALL NOT BE PERMITTED.

LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.

CONSTRUCTION IN A GIVEN PHASE MUST BE COMPLETED PRIOR TO BEGINNING THE NEXT PHASE, UNLESS APPROVED BY THE CITY ENGINEER. BRICK STREETSCAPE, TREE GRATES AND LANDSCAPING ITEMS DO NOT NEED TO BE COMPLETED PRIOR TO MOVING TO THE NEXT PHASE.

THE CONTRACTOR SHALL DIVERT TRAFFIC FROM NORMAL LANES BY PLASTIC SAFETY DRUMS OR CONES, TEMPORARY TRAFFIC SIGNS AND WORK ZONE PAVEMENT MARKINGS.

CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION ONE—HALF HOUR AFTER SUNSET OR ONE HALF—HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET. WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THE STANDARD CONSTRUCTION DRAWINGS.

LONGITUDINAL VERTICAL FACES ABUTTING ACTIVE DRIVE APRONS SHALL BE TEMPORARILY RAMPED TO PROVIDE LOCAL ACCESS. TRANSVERSE VERTICAL FACES SHALL BE TEMPORARILY RAMPED A MINIMUM LENGTH OF 10-FEET IN EACH DIRECTION WITH W8-1 "BUMP" WARNING SIGNS PLACED IN ADVANCE OF EACH RAMPED AREA.

PRIOR TO OPENING TO TRAFFIC, EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED OR PROTECTED WITH DRUMS OR PORTABLE CONCRETE BARRIER.

ONLY DURING OFF—PEAK PERIODS (i.e. ANY PERIOD OTHER THAN 6—8AM AND 3—6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ANY TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.

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

(B) PLACEMENT OF ASPHALT CONCRETE:

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

(C) RESIDENTIAL AND BUSINESS AREAS:

THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ABUTTING PROPERTIES DURING CONSTRUCTION. IN THE EVENT A DRIVE ACCESS NEEDS TO BE CLOSED, THE CONTRACTOR SHALL GIVE NOTICE OF CLOSURE AND DURATION TO THE PROPERTY OWNER 48 HOURS IN

ADVANCE. THE CONTRACTOR SHALL ARRANGE FOR ALTERNATE PARKING AND REASONABLE ACCESS FOR THOSE PROPERTY OWNERS AFFECTED BY DRIVE CLOSURES.

ITEM 614 - WORK ZONE PAVEMENT MARKINGS

ALL WORK ZONE PAVEMENT MARKINGS APPLIED TO THE EXISTING PAVEMENT OR THE COMPLETED INTERMEDIATE SURFACE COURSE SHALL BE 642 PAINT, CLASS 1, TYPE 2. NO WORK ZONE PAVEMENT MARKINGS SHALL BE APPLIED TO THE SURFACE COURSE. ALL CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED IN ACCORDANCE WITH CMS 614.11F1. WORK ZONE LINES SHALL BE A MINIMUM OF (4) INCHES IN WIDTH AND STOP LINES TWELVE (12) INCHES IN WIDTH.

WORK ZONE PAVEMENT MARKINGS SHALL BE APPLIED ONLY TO EXISTING PAVEMENT OR THE COMPLETED INTERMEDIATE SURFACE COURSE. NO WORK ZONE PAVEMENT MARKINGS SHALL BE APPLIED TO THE FINAL SURFACE COURSE. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.

(D) <u>ITEM 614 - BUSINESS ENTRANCE SIGN</u>

THE BUSINESS ENTRANCE (M4-H15) SIGN SHOULD BE PROVIDED AT EACH TEMPORARILY RELOCATED COMMERCIAL DRIVEWAY FOR WHICH THE RELOCATION IS NOT OBVIOUS TO THE MOTORIST. THE CITY ENGINEER SHALL DETERMINE WHETHER OR NOT THE DRIVEWAY RELOCATION IS OR IS NOT OBVIOUS AND WHETHER OR NOT A SIGN SHOULD BE PROVIDED. ONLY ONE SIGN PER BUSINESS SHALL BE PERMITTED.

THE SIGN SHALL BE 3 FEET WIDE BY 4 FEET TALL WITH 6" WHITE LETTERING ON A GREEN REFLECTIVE BACKGROUND WITH THE STANDARD M4—H15 LEGEND WITH THE WORD "BUSINESS" ON THE TOP LINE, EXCEPT UNDER UNUSUAL CIRCUMSTANCES WHERE IT MAY NOT BE INTUITIVE THAT A DRIVEWAY SERVES A SPECIFIC BUSINESS. IN SUCH UNUSUAL CASES, THE ACTUAL BUSINESS NAME MAY BE SUBSTITUTED FOR THE WORD "BUSINESS".

THE SIGN SHALL BE CLEARLY VISIBLE, IDENTIFY THE LOCATION OF THE DRIVEWAY AND BE POSITIONED AT 90 DEGREES TO THE DIRECTION OF TRAFFIC. THE SIGN MAY NEED TO BE MOVED FOR EACH PHASE OF THE MAINTENANCE OF TRAFFIC OPERATIONS.



WZ-SPECIAL BUSINESS-L

A WZ-SPECIAL BUSINESS-R SIGN IS SIMILAR TO THE SIGN SHOWN ABOVE EXCEPT THE ARROW POINTS TO THE RIGHT. AN INSTALLATION WILL INCLUDE BOTH A WZ SPECIAL BUSINESS SIGN ON A POST SUPPORT AS PER ODOT STANDARD DRAWING MT 105.11.

PAYMENT WILL BE MADE FOR EACH INSTALLATION WHICH INCLUDES INSTALLATION, MAINTENANCE, REPLACEMENT OF THE INSTALLATION SHOULD IT BECOME DAMAGED, AND SUBSEQUENT REMOVAL.

(E) TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

(F) 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.

(G) 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 DOUBLED 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.

(H) EXISTING TRAFFIC SIGNALS:

WHERE WORK REQUIRES INTERFERENCE WITH EXISTING SIGNALIZATION IN THE INTERSECTIONS, ALL WORK SHALL BE COORDINATED THROUGH THE CITY ENGINEER. THE CONTRACTOR SHALL NOT ALTER ANY SIGNALIZATION WITHOUT THE CITY ENGINEER'S AUTHORIZATION.

(I) TRAFFIC CONTROL PLAN:

THE CONTRACTOR SHALL SUBMIT TO THE CITY ENGINEER A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH CITY SUPPLEMENTAL SPECIFICATION 01-00. DETOURS, IF NECESSARY, SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO PLAN IMPLEMENTATION.

(J) <u>DETOUR NOTIFICATION</u>

THE CONTRACTOR SHALL ADVISE THE CITY OF CANTON (330-489-3031) A MINIMUM OF SEVEN (7) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTES SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR.

(K) <u>SIDE STREET CLOSURE</u>

SIDE STREET CONSTRUCTION SHALL BE PERFORMED DURING THE APPROPRIATE PHASE USING PART WIDTH CONSTRUCTION. ONE LANE OF TRAFFIC SHALL BE MAINTAINED IN EACH DIRECTION ON THE SIDE STREETS UNLESS OTHERWISE SHOWN ON THE PLANS OR WRITTEN PERMISSION IS OBTAINED FROM THE CITY.

INTERSECTING STREETS MAY BE CLOSED ONLY WITH WRITTEN APPROVAL FROM THE CITY ENGINEER. LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH SECTION 108.07 FOR EACH CALENDAR DAY THAT THE INTERSECTING STREET REMAIN CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. ALL CLOSED STREETS SHALL BE BARRICADED AT THE WORK LIMITS WITH GATES AND BARRICADES PER PLAN INSERTS AND SIGNED WITH A "ROAD CLOSED" (R11-2) SIGN MOUNTED ON THE BARRICADES. IN ADDITION, A "ROAD CLOSED AHEAD" (W20-3) SIGN SHALL BE INSTALLED AT THE FIRST INTERSECTION BEYOND THE WORK, AND/OR WHERE SHOWN ON THE PLANS. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND REMOVE ALL SIGNS AND BARRICADES REQUIRED FOR THIS PURPOSE.

(L) <u>OVERNIGHT TRENCH CLOSING</u>

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN THREE 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 CITY ENGINEER.

(M) <u>ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL</u> <u>CAR FOR ASSISTANCE, AS PER PLAN</u>

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD). A UNIFORMED LAW ENFORCEMENT OFFICER AND OFFICIAL PATROL CAR WITH WORKING TOP MOUNTED EMERGENCY FLASHING LIGHTS SHALL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

- FOR LANE CLOSURES: DURING INITIAL SET UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED.
- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- TRAFFIC IS REQUIRED.

 DURING PHASE CHANGES.
- DURING MODIFICATION, CLOSING OR MAINTAINING A SIGNALIZED INTERSECTION DURING REMOVAL OR INSTALLATION.

LAW ENFORCEMENT OFFICERS (LEOS) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEOS ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH:

CITY OF CANTON
ATTN: CHIEF DEAN McKIMM
221 THIRD STREET SW
CANTON, OHIO
PHONE: (330) 489-3111

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

IF CONTRACTOR WISHES TO UTILIZE LEOS FOR FLAGGING AND TRAFFIC CONTROL, OTHER THAN FOR THAT REQUIRED IN THESE PLANS, THEY MAY DO SO AT THEIR OWN EXPENSE, PAYMENT FOR THE EXCESS ABOVE THE CONTRACT REQUIREMENTS WILL BE INCLUDED UNDER ITEM 614 MAINTAINING TRAFFIC.

(N) <u>FLOODLIGHTING</u>

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ALONG MAHONING ROAD OR TO ANY RESIDENCE/BUSINESS. 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 AN OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

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

(O) MANHOLES AND VALVES

ALL CASINGS ENCOUNTERED SHALL BE SET TO GRADE AND PAID FOR UNDER VARIOUS ITEMS DESCRIBED ELSEWHERE IN THE ROADWAY GENERAL NOTES AND SPECIFICATIONS. ANY CASTINGS EXPOSED TO TRAFFIC HAVING AN ELEVATION DIFFERENTIAL GREATER THAN 1 1/4" SHALL HAVE A TEMPORARY WEDGE OF ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

(P) <u>UTILITY WORK</u>

EXCAVATIONS MADE FOR CONDUIT OR UTILITIES IN OPEN TRENCHES SHALL BE ADEQUATELY MAINTAINED AND PROTECTED AT ALL TIMES. THE USE OF METAL PLATES OVER OPEN TRENCHES IS ONLY PERMITTED IMMEDIATELY AFTER THE EXCAVATION IN ORDER TO MAINTAIN THE ROADWAY LANES TO TRAFFIC. UPON COMPLETING THE SUBSURFACE CONNECTIONS, THE OPENING SHALL BE RETURNED TO THE ROADWAY SURFACE LEVEL WITH APPROVED MATERIAL.

(Q) <u>TEMPORARY DRAINAGE</u>

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ADEQUATE DRAINAGE OF THE TRAVELED ROADWAYS DURING ALL PHASES OF CONSTRUCTION USING EXISTING DRAINAGE FACILITIES, TEMPORARY DRAINAGE FACILITIES. AND PERMANENT DRAINAGE FACILITIES.

(R) <u>TEMPORARY RAMPING OF VERTICAL SURFACES AT DRIVEWAYS</u>

IN ORDER TO PROVIDE FOR LOCAL ACCESS, LONGITUDINAL VERTICAL FACES ABUTTING DRIVES SHALL BE TEMPORARILY RAMPED AS DETAILED BELOW. TRANSVERSE VERTICAL FACES SHALL BE TEMPORARILY RAMPED A MINIMUM OF TEN FEED IN LENGTH AND TRAFFIC SHALL BE WARNED WITH W8-1 "BUMP' SIGNS IN ADVANCE OF THE RAMPED AREAS. THE GRADE BREAK SHALL NOT EXCEED A MAXIMUM OF 8 PERCENT AT EITHER END OF THE WEDGE.

ALL TEMPORARY RAMPING SHALL BE INSTALLED, AT THE DIRECTION OF THE ENGINEER, USING ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

WEDGE, MINIMUM APPLICATION
FOR MATERIAL

MIN LENGTH 10'
MAX. SLOPE = 12:1

EXISTING
PAVEMENT

ITEM 614- ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

WEDGE DETAIL FOR DRIVEWAY LOCATIONS

(S) ACCESS TO ABUTTING COMMERCIAL PROPERTIES

ALL DRIVE ACCESS LOCATIONS ALONG MAHONING ROAD SHALL BE MAINTAINED BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE BY THE ENGINEER. THE COMMERCIAL PROPERTIES ALONG MAHONING ROAD ARE DEPENDENT UPON CUSTOMER ACCESS DURING NORMAL BUSINESS HOURS. THEREFORE, ANY WORK ON A COMMERCIAL DRIVE THAT REQUIRES INTERFERENCE WITH ACCESS TO PROPERTY SHALL BE PERFORMED AFTER CLOSING TIME FOR THE AFFECTED PROPERTY, UNLESS PROVIDED OTHERWISE IN THIS NOTE. THE CONTRACTOR SHALL SCHEDULE THE DRIVEWAY CONSTRUCTION SUCH THAT ACCESS IS MAINTAINED BY MEANS OF THE EXISTING DRIVE, A TEMPORARY DRIVE OF MATERIAL APPROVED BY THE ENGINEER, OR THE PROPOSED DRIVE.

FOR COMMERCIAL PROPERTIES WITH TWO DRIVEWAYS WHERE INGRESS AND EGRESS IS AVAILABLE FOR BOTH OF THE DRIVEWAYS, THE CONTRACTOR SHALL PROVIDE ACCESS AT ALL TIMES TO ONE OF THE DRIVEWAYS WHILE THE OTHER DRIVEWAY IS RECONSTRUCTED. FOR COMMERCIAL PROPERTIES WITH ONE DRIVEWAY, THE CONTRACTOR SHALL PROVIDE ACCESS AT ALL TIMES BY USING PART WIDTH CONSTRUCTION. FOR COMMERCIAL PROPERTIES WITH TWO DRIVEWAYS WHERE ONE OF THE DRIVES IS USED EXCLUSIVELY AS AN ENTRANCE AND THE OTHER IS USED EXCLUSIVELY AS AN EXIT, THE CONTRACTOR SHALL PROVIDE ACCESS AT ALL TIMES FOR BOTH OF THE DRIVEWAYS BY USING PART WIDTH CONSTRUCTION.

THE CONTRACTOR, UPON DIRECTION OF THE ENGINEER, SHALL USE CLASS QC MS OR QC FS CONCRETE IN ACCORDANCE WITH CMS ITEM 499 TO EXPEDITE DRIVEWAY WORK AT SELECTED LOCATIONS. PAYMENT FOR CLASS MS OR FS CONCRETE WILL BE AS A SURCHARGE TO THE UNIT PRICE PER CUBIC YARD OF CONCRETE.

(T) <u>TRENCH FOR WIDENING</u>

THE OPENING TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AL ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIALS SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

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AFTER THE REPORT HAS BEEN SIGNED BY ALL PARTIES, THE SIGNAL INSTALLATION SHALL BE TURNED OVER TO THE CONTRACTOR, WHO SHALL THEN BE REQUIRED TO MAINTAIN THE TRAFFIC SIGNAL INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITION: EXISTING SIGNAL INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS INCLUDING DAMAGE DUE TO UTILITY RELOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION AT AN INTERSECTION FROM THE TIME THE INSTALLATION IS FIRST DISTURBED. WHETHER FROM UTILITY WORK OR FROM THE CONTRACTOR.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL PROVIDE THE CITY AND THE PROJECT ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. THE CONTRACTOR SHALL HAVE THE MALFUNCTION CORRECTED AND/OR REPAIRED TO THE SATISFACTION OF THE ENGINEER WITHIN EIGHT HOURS OF THE NOTIFICATION OR LIQUIDATED DAMAGES OF \$500 PER HOUR SHALL BE ASSESSED TO THE CONTRACTOR.

ALL LAMP OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE PROJECT ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN EIGHT HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGES.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE PROJECT ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN EIGHT HOURS AFTER THE CONTRACTOR IS NOTIFIED OF THE OUTAGE.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED EIGHT-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION, THEN THE ALLOTTED TIME LIMIT SHALL BE FORE THE WORST SINGLE OUTAGE.

WHERE THE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY DAMAGES FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGES AS PER 107.15.

WHERE THE CONTRACTOR HAS FAILED TO OR CANNOT RESPOND TO AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY. WITHIN PERIODS AS SPECIFIED ABOVE. THE PROJECT ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE CITY OF CANTON FOR POLICE SERVICES AND MAINTENANCE SERVICES BY THE CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15. IN ADDITION TO THESE BILLINGS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES OF \$500/HOUR FOR EACH HOUR BEYOND THE ALLOWED EIGHT HOUR PERIOD THAT THE SIGNAL IS INOPERATIVE.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICES ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A MUTUALLY ACCEPTABLE AGREEMENT WITH THE CITY OF CANTON TO PROVIDE THE MAINTENANCE.

THE CONTRACTOR SHALL INFORM THE PROJECT ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DUE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM.

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION, SHALL BE COVERED AS DESCRIBED IN 632.25.

THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

- TIME OF NOTIFICATION OF MALFUNCTION.
- TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION.
- ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED.
- A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE.
- TIME OF COMPLETION OF REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED FOUR HOURS AND SHALL NOT INCLUDE THE HOURS OF 6:00 AM TO 8:00 AM AND 4:00 PM TO 6:00 PM. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY "STOP" SIGNS, EXCEPT FOR THE FOLLOWING INTERSECTIONS WHICH SHALL BE PROTECTED BY OFF DUTY POLICE HIRED BY THE CONTRACTOR:

- MAHONING ROAD NE AT GRACE AVENUE NE
- MAHONING ROAD NE AT HARMONT AVENUE NE

(V) <u>NIGHT WORK</u>

THE CONTRACTOR'S NEED TO WORK BETWEEN SUNSET TO SUNRISE SHALL HAVE PRIOR APPROVAL FROM THE CITY. THE WRITTEN REQUEST SHOULD HAVE A 5 DAY ADVANCE NOTICE. THE REQUEST TO WORK BETWEEN THESE HOURS SHALL INCLUDE THE TYPE OF WORK TO BE DONE, EQUIPMENT TO BE USED, THE DURATION AND THE LOCATION. A TEMPORARY LIGHTING PLAN MAY BE REQUIRED (SEE THE "FLOODLIGHTING" NOTE SHEET 13).

(W) TRAFFIC LIMITATIONS

THE TRAFFIC LIMITATION DATES FOR THE YEAR OF CONSTRUCTION WILL BE FURNISHED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

(X) CONSTRUCTION SEQUENCE - GENERAL

THE CONTRACTOR SHALL DIVIDE THE ENTIRE PROJECT LENGTH INTO CONVENIENT CONSTRUCTION SECTIONS.

THE CONTRACTOR SHALL COMPLETE ALL WORK IN A GIVEN CONSTRUCTION SECTION BEFORE BEGINNING ANY WORK IN A SUBSEQUENT SECTION, UNLESS OTHERWISE APPROVED BY THE ENGINEER. NORMAL VEHICULAR TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BEYOND THE WORK LIMITS OF THE SECTION CURRENTLY UNDER CONSTRUCTION.

NO CHANGE IN TRAFFIC PATTERN SHALL TAKE PLACE DURING PEAK HOURS, 6:00 AM TO 9:00 AM AND 3:00 PM TO 6:00 PM, MONDAY THROUGH FRIDAY.

LOCATION OF ADVANCE WARNING SIGNS SHALL BE ADJUSTED TO PROVIDE FOR ADEQUATE SIGHT DISTANCE.

DRUMS SHALL BE PLACED 25' C/C APART ON THE MAIN LINE AND 10' C/C APART ON TAPER LENGTHS, AND 5' C/C AT RADII UNLESS OTHERWISE SPECIFIED. WHEN THE USE OF DRUMS IN LIEU OF TEMPORARY PAVEMENT MARKINGS IS APPROVED BY THE DIVISION OF TRAFFIC ENGINEERING, DRUMS SHALL BE PLACED 10' C/C APART IN ALL LOCATIONS EXCLUDING RADII.

(Y) PHASE SEQUENCE:

CONSTRUCTION AREA: SOUTH SIDE OF MAHONING ROAD BETWEEN GRACE AVENUE AND HARMONT AVENUE (STA 56+00 TO 95+00)

WORK DESCRIPTION: CONSTRUCTION OF NEW SIDEWALK, DRIVEWAYS, PEDESTRIAN RAMPS, LIGHT POLES, AND MISCELLANEOUS UTILITIES RELOCATION.

MAINTENANCE OF TRAFFIC: TWO WAY TRAFFIC TO MAINTAINED AT ALL TIMES AS SHOWN ON PHASE ONE PLAN. MIN. 10' LANE TO BE USED IN EACH DIRECTION.

CONSTRUCTION AREA: NORTH SIDE OF MAHONING ROAD BETWEEN GRACE AVENUE AND HARMONT AVENUE (STA 56+00 TO 95+00)

WORK DESCRIPTION: CONSTRUCTION OF NEW SIDEWALK, DRIVEWAYS, PEDESTRIAN RAMPS, LIGHT POLES, AND MISCELLANEOUS UTILITIES RELOCATION.

MAINTENANCE OF TRAFFIC: TWO WAY TRAFFIC TO MAINTAINED AT ALL TIMES AS SHOWN ON PHASE ONE PLAN. MIN. 10' LANE TO BE USED IN EACH DIRECTION.

STORM WORK AND CROSSWALKS:

AT PROPOSED STORM LINE. OTHER UTILITY LATERALS, AND CROSSWALKS LOCATED IN THE ROADWAY AND NOT COVERED BY PHASE I AND II. CONTRACTOR TO PROVIDE TRAFFIC CONTROL SCENARIOS IN ACCORDANCE WITH OMUTCD AND AS SHOWN ON SHEET 13 THRU 22

(Z) MAINTENANCE OF PEDESTRIAN TRAFFIC

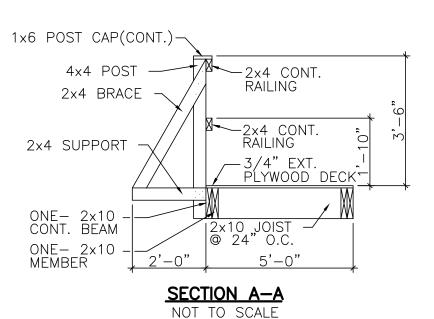
THE CONTRACTOR SHALL TAKE ADEQUATE PROVISIONS (I.E. TEMPORARY WALKWAYS, DETOURS, ETC.) FOR THE SAFETY OF PEDESTRIANS WITHIN THE WORK ZONE.

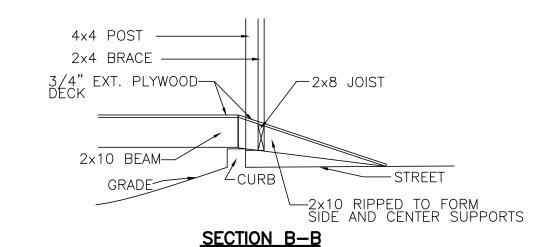
AT EXISTING SIDEWALK OR CROSSWALK LOCATIONS WHERE PEDESTRIAN TRAFFIC CAN NOT BE MAINTAINED. PROVIDE PEDESTRIAN TRAFFIC CONTROL IN ACCORDANCE WITH THE OMUTCD, CURRENT EDITION, LATEST REVISION, FIGURES 6H-28 (SIDEWALK DETOUR OR DIVERSION, TA-28) AND 6H-29 (CROSSWALK CLOSURES AND PEDESTRIAN DETOURS, TA-29).

THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS TO THE FRONT DOORS OF ALL STORES, OFFICES, RTA BUS STOPS, ETC., AS WELL AS ACCESS TO ALL RESIDENCES, DURING HIS/HER CONSTRUCTION, WITH TEMPORARY CONCRETE OR ASPHALT PAVEMENTS OR PEDESTRIAN BRIDGES. THE PEDESTRIAN BRIDGES ARE DETAILED ON THIS SHEET. EXISTING CONCRETE OR ASPHALT PAVEMENTS (PRIOR TO DEMOLITION) MAY BE USED FOR THE PURPOSES OF REROUTING PEDESTRIAN TRAFFIC. THESE PROVISIONS SHALL BE ADHERED TO TO MAINTAIN ACCESS TO BUILDING ENTRANCES AT ALL TIMES. TEMPORARY ACCESS TO ALL BUILDING ENTRANCES SHALL BE PROVIDED IMMEDIATELY UPON REMOVAL OF EXISTING PAVEMENT. IF A PORTION OF THE PEDESTRIAN WAY IS REROUTED DUE TO CONSTRUCTION, THE PATH OF TRAVEL SHALL BE CLEARLY DEFINED. THE CONTRACTOR SHALL SUBMIT A PEDESTRIAN ACCESS PLAN (INDICATING PEDESTRIAN ACCESS, LIMITATION, REROUTING AND NOTIFICATION) TO THE ENGINEER FOR REVIEW AND APPROVAL. "SIDEWALK CLOSED" SIGNS ON THE MAINTENANCE OF TRAFFIC PLANS REFER TO THE EXISTING SIDEWALKS AND DO NOT AUTHORIZE THE CONTRACTOR TO ELIMINATE PEDESTRIAN ACCESS TO ANY BUSINESSES OR RESIDENCES.

-3/4" EXTERIOR PLYWOOD DECK 5|4x4 POST [2x4 JOIST] —1— 2×10 MEMBER **└**CURBFACE -2X8 JOIST 2x10 RIPPED

FRAMING PLAN NOT TO SCALE





1. THE CONTRACTOR SHALL ESTABLISH A 5' WIDE PEDESTRIAN ZONE. INDICATED BY BARRICADES AND LIGHTS ALONG THE PORTION OF THE SITE UNDER CONSTRUCTION TO PROVIDE ACCESS TO TEMPORARY WOOD WALKWAYS.

2. RAMP AT BUILDING ENTRANCE MUST BE ADJUSTED TO ACCOMMODATE VARYING ENTRANCE CONDITIONS.

NOT TO SCALE

PEDESTRIAN TEMPORARY WALKWAYS (OR EQUAL) NOT TO SCALE



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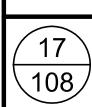
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MAHONING ROAD NE STA-0153-01.70

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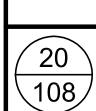
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CONSTRUCTION E

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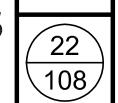
MAHONING ROAD NE STA-0153-01.70



								201	201	201	202	202	202	202	20
SHEET NO.	REFERENCE NO.			LOC	ATION			TREE REMOVED, 18" SIZE	STUMP REMOVED, 48" SIZE	STUMP REMOVED, 60" SIZE	PIPE REMOVED (24" AND UNDER), WATER	E REMOVED (24" AND UNDER), STORM	PIPE REMOVED (24" AND UNDER), GAS	PIPE REMOVED (OVER 24"), STORM	POLE REMOVED
			FROM			ТО					PIPE	PIPE	PIPE		
		STATION	OFFSET	SIDE	STATION	OFFSET	SIDE	EA	EA	EA	FT	FT	FT	FT	E
54	R-15	57+57.90	34.8	LT											
54		55+14.45	21.7	LT						1					
55		67+72.14	30.2	RT					1						
55		68+48.00	30.5	RT					1						
- 4		F7 10 00			00.75.00		ıT						005		
54 55		57+19.30 60+75.00		LT LT	60+75.00 61+44.65		LT LT						365 70		
55 55		61+98.79		LT	66+50.00		LT						451		
55		66+50.00		LT	66+55.08		LT						5		
55		71+05.24		LT	71+55.40		LT						50		
55		77+64.81		LT	77+93.21		LT						28		
56		78+33.00		LT	78+64.48		LT						32		
54		55+09.74		RT	56+46.78		RT						275		
54		56+85.68		RT	57+05.18		RT						51		
54		58+13.79		RT	58+23.79		RT						10		
54		64+18.49		RT	64+28.49		RT						10		
54		65+33.07		RT	66+28.25		RT						188		
55 55		67+18.57 67+82.58		RT RT	67+28.56 67+92.58		RT RT						10		
55		68+48.00		RT	69+66.80		RT						251		
55		70+57.05		RT	73+72.02		RT						630		
55		74+54.40		RT	78+00.00		RT						691		
56		78+00.00		RT	85+28.72		RT						1461		
56		87+04.17		RT	88+35.69		RT						138		
57		90+52.60	68.9	RT				1							
57		90+66.43	68.5	RT				1							
54	WR-1	56+87.53		LT	56+90.09		LT				3				
54 54	WR-2	62+50.09		RT	62+67.99		RT				20				
,	******	02100.00			02107.00						20				
54	PR-1	55+54.94	18.7	LT	56+21.83	8.3	LT					68			
54	PR-2	56+66.80	13.5	RT	57+01.82	46.0	LT					69			
54	PR-3	57+03.45	18.7	RT	57+30.22	29.7	LT					55			
54	PR-13	57+30.22	29.7	LT	57+47.67	15.8	LT							23	
54	PR-4	57+47.67	15.8	LT . –	57+81.29	18.2	LT					33			
54	PR-5	57+30.22	29.7	LT	57+36.40	19.3	RT					50			
54 55	PR-6 PR-15	60+53.12 66+52.07	16.1 11.8	LT LT	60+54.20 66+50.85	27.0 3.9	RT LT					43 8			
55 55	PR-15 PR-14	67+92.79	11.8	LT	67+92.50	3.9	LT					8			
55	PR-7	69+52.30	18.0	LT	69+52.18	11.8	LT					6			
55	PR-8	72+52.16	18.9	LT	72+52.38	11.3	LT					8			
55	PR-9	75+54.49	18.6	LT	75+54.50	11.3	LT					7			
55	PR-17	76+11.91	44.9	RT	76+15.71	46.3	RT					4			
56	PR-10	78+17.74	7.7	LT	78+17.31	0.3	RT					8	_		
56	PR-16	78+72.69	6.9	LT	78+72.72	1.9	LT					5			
56	PR-11	80+30.18	6.9	LT	80+30.18	1.9	LT					5			
56	PR-12	81+79.47	6.9	LT	81+79.33	1.9	LT					5			
56	LR-1	78+57.88	41.6	RT	78+97.55	41.7	RT								2
57	LR-1	91+26.43	32.3	LT	70-87.00	71./	111								1
57	LR-3	92+84.77	106.5	LT											1
	-														
													_		
	-												I		1

								202	202	202	202	202	202	202	202	202	202
											0			OR	ED	C	AS
	o.							Ω	H		PARKING BLOCK REMOVED			BENCH REMOVED FOR REUSE STORAGE	TRASH RECEPTACLE REMOVED FOR REUSE OR STORAGE	REMOVED	BOLLARD, WOOD REMOVED, AS PER PLAN
S.	Z Ш			1.00	TION			10VE	<u> </u>	STEPS REMOVED	ZEMC	REMOVED	VED	A A II	E RE	3EM(O N
 	N N			LOGA	ATION			REN	O V E	EMO	OCK F	EMC	GATE REMOVED	D FC	ACLI OR S	STEELI	D RE
SHEET	I BE							OLE	BAS	PS H	BLC	CE F	田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田	OVE	EPT JSE (, STI	VOO PER
\S	REFERENCE NO							MANHOLE REMOVED	CATCH BASIN OR INLET REMOVED	STE	KING	FENCE	GA-	REM	REC RREI	ARD-	۷, OF ا
	<u> </u>							2	CA		PAR			N N	ASH FOF	BOLLARD,)
			FROM	I		ТО											
54	DR-1	STATION 55+54.93	OFFSET 18.7	SIDE LT	STATION	OFFSET	SIDE	EA	EA 1	FT	EA	FT	EA	EA	EA	EA	EA
54	DR-2	56+21.83	8.3	LT				1	ı								
54	DR-3	56+66.80	13.5	RT					1								
54	DR-4	57+30.22	29.7	LT				1									
54 54	DR-5 DR-6	57+36.40 57+47.67	19.3 15.8	RT LT				1	1								
54	DR-7	57+47.07	18.2	LT				'	1								
54	DR-14	60+53.12	13.1	LT					1								
55 55	DR-8	69+52.30	18.0	LT					1								
55 55	DR-9 DR-10	72+52.16 74+44.24	18.9 37.5	LT RT				1	1								
55	DR-11	75+54.49	18.6	LT					1								
55	DR-51	76+15.71	46.3	RT					1								
57 57	DR-12 DR-13	91+81.16 92+61.05	45.4 28.7	LT LT					1								
31	וט	32±01.00	20.7	LI					I								
54	R-6	56+99.39	68.2	LT						3							
54	R-19	60+67.68	36.1	LT						7							
54 54	R-20 R-23	61+35.41 62+12.15	33.6 33.4	LT LT						5 5							
54	R-29	63+36.32	31.1	LT						3							
54	R-31	66+07.42	30.5	LT						3							
											_						
54	R-1	55+68.40	29.4	RT	56+24.45	29.9	RT				6						
54	R-17	58+38.44	29.2	LT	58+55.78	29.3	LT					33					
54	R-18	58+80.53	29.2	LT	59+34.73	38.0	LT					59					
54	R-111	58+55.78	29.3	LT	58+80.53	29.2	RT						1				
54	R-32	66+14.53	23.3	RT											1		
54	R-33	66+20.30	29.1	RT	66+27.36	26.6	RT							2			
55	R-45	72+65.25	25.0	RT	70 77 00	00.0	DT								1		
55 56	R-46 R-79	72+67.34 87+40.69	31.0 26.1	RT RT	72+77.88	28.9	RT							2			
54	R-5	56+56.03	43.6	LT												1	
54 54	R-93 R-27	57+09.33 62+66.03	68.6 40.2	LT LT												1	
04	1121	J <u>∠</u> +00.00	70.2	<u> </u>												1	
54	R-3	57+13.99	29.6	RT													1
54	R-24	62+32.65	32.4	LT				1									1
54 54	R-26 R-28	62+90.83 62+96.95	32.1 29.6	LT RT	62+98.64	36.8	RT	1									2
54	R-34	66+41.56	32.3	RT	66+39.99	47.6	RT										3
55	R-37	67+17.10	30.8	RT	67+19.43	46.3	RT										3
55 56	R-55 R-76	76+27.27 85+78.59	51.4 55.8	RT RT													1
56	R-76	85+78.59 86+18.69	55.8	RT				+									1
56	R-78	87+62.76	41.6	RT	87+62.42	56.3	RT										3
56	R-81	87+98.36	49.3	RT													1
56 56	R-82 R-83	88+51.95 88+92.44	49.7 43.3	RT RT	88+91.52	57.3	RT										3
57	R-87	90+64.50	60.8	RT	30 PO 1.02	<i>51.</i> 0	111	1									1
57	R-97	91+95.13	57.8	RT													1
								1									
			TOTAL CARR	IED TO GENER	AL SUMMARY			3	12	26	6	92	1	5	2	3	24





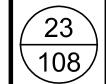
DEMOLITION SUB-SUMMARY

SHEET NO.		FROM	LOC	ATION	TO		FULL DEPTH PAVEMENT SAWING 52	PAVEMENT REMOVED 808	WALK REMOVED 502
	STATION	OFFSET	SIDE	STATION	OFFSET	SIDE	FT	SY	SF
54	55+09.79	23.6	LT	55+09.84	23.6	LT	5	<u> </u>	<u> </u>
54	55+11.75	18.2	LT	56+47.24	0.0	C/L	166		
54	55+11.75	18.1	RT	56+47.24	0.0	C/L	146		
54	55+24.52	23.5	RT	56+75.56	59.1	RT	242		
54	55+36.29	30.0	LT	55+43.37	30.0	LT	7		
54	55+36.62	12.8	LT	55+52.44	12.8	LT	41		
54	56+09.11	12.8	LT	56+52.86	12.8	LT	97		
54	56+06.73	71.0	LT	56+04.13	66.5	LT	5		
54	56+12.12	72.0	LT	56+31.89	105.8	LT	168		
54	56+22.54	28.5	LT	56+29.778	51.6	LT	24		
54	56+38.86	102.1	LT	56+90.49	81.8	LT	64		
54 54	57+01.13 57+31.15	75.6 103.5	LT LT	57+03.39 57+35.15	73.2 101.3	LT LT	5 5		
54	57+31.13	98.9	LT	57+74.53	79.4	RT	134		
54	57+46.86	0.0	C/L	66+50.00	1.7	RT	943		
54	57+46.86	0.0	C/L	62+58.21	49.2	RT	588		
54	59+56.93	18.0	LT	60+49.57	18.0	LT	194		
54	59+73.35	37.5	LT	59+82.65	32.7	LT	10		
54	60+34.10	38.4	LT	60+41.71	34.4	LT	9		
54	60+56.58	17.9	LT	64+37.86	17.7	LT	811		
54	60+68.27	42.4	LT	60+72.57	40.2	LT	5		
54	61+37.92	41.8	LT	61+40.61	40.3	LT	3		
54	62+85.60	40.0	RT	66+50.00	21.9	RT	386		
54	63+36.52	27.5	RT	63+36.20	37.2	RT	10		
54	63+35.89	34.4	LT	63+40.20	34.4	LT	4		
54	66+07.82	35.0	LT 	66+10.18	33.7	LT	3		
54	66+23.35	43.4	RT	66+24.56	32.6	RT	10		
54	64+04.61	34.0	LT	64+82.68	34.0	LT	78		
54 54	64+50.86 65+72.01	17.6 32.5	LT LT	66+41.69 65+81.93	17.6 32.4	LT LT	389 10		
54	05+72.01	32.5	LI	05+61.95	32.4	LI	10		
55	66+50.00	21.9	RT	66+55.83	56.2	RT	40		
55	66+50.00	1.7	RT	78+00.00	0.9	RT	1226		
55	66+60.78	17.6	LT	67+82.87	17.5	LT	253		
55	66+97.22	56.0'	RT	69+87.05	62.5	RT	407		
55	67+09.62	31.9	LT	67+23.55	31.9	LT	14		
55	67+28.00	33.3'	RT	67.28.00	42.8	RT	10		
55	68+14.01	32.4	LT	68+41.65	32.4	LT	28		
55	69+57.07	37.8	RT	69+74.80	47.8	RT	10		
55	70+52.68	39.0	RT	70+52.97	48.5	RT	10		
55	70+73.03	79.2	RT	73+92.97	64.2	RT	485		
55	72+42.66	37.2	LT	72+47.85	38.8	LT	5		
55 55	73+85.92 74+19.47	50.6 76.7	RT RT	73+86.09 77+99.76	40.7 18.0	RT RT	10 478		
55 55	74+19.47	76.7	RT	77+99.76	68.1	RT	37		
	74+55.04	37.7	RT	74+50.17	46.4	RT	10		
55 55	75+13.14	80.5	RT	75+49.1	80.5	RT	36		
55	75+30.54	34.1	LT	75+38.66	34.1	LT	9		
55	75+62.66	34.1	LT	75+72.66	34.1	LT	14		
55 55	75+75.60	48.0	RT	75+76.98	38.1	RT	10		
55	75+77.10	18.0	LT	76+00.06	18	LT	57		
55	75+81.89	87.3	RT	76+19.81	87.4	RT	38		
55	76+15.64	17.9	LT	76+50.45	17.7	LT	89		
55	76+29.97	45.9	RT	76+29.75	55.9	RT	10		
55 55	77+02.45	8.2	LT	78+00.11	8.2	LT	223		
55	77+62.51	30.8	LT	77+82.31	58.5	LT	47		
55			TOTAL THIS	COLUMN			8118		

							255	202	202
SHEET NO.			LOC	ATION			FULL DEPTH PAVEMENT SAWING	PAVEMENT REMOVED	WALK REMOVED
	CTATION	FROM	CIDE	CTATION	TO	CIDE	_	CV	C.E.
55	STATION 77+73.14	OFFSET 64.4	SIDE RT	STATION 77+74.07	OFFSET 54.5	SIDE	FT 10	SY	SF
55	77+73.14	65.4	LT	77+88.88	65.7	LT	5		
55	77+89.82	65.7	RT	77+90.36	56.0	RT	10		
56	78+00.11	8.2	LT	78+28.94	49.0	LT	148		
56	78+00.00	0.8	RT	87+73.55	83.4	LT	1067		
56	78+00.00	18.0	RT	89+50.00	31.5	RT	1179		
56	78+19.93	55.6	RT	78+20.12	65.2	RT	10		
56	78+25.96	66.5	RT	78+50.04	68.7	RT	24		
56	78+31.01	57.4	LT	78+35.93	57.7	LT	5		
56	78+42.66	54.2	LT	78+64.20	34.1	LT	43		
56	78+57.47	64.6	RT	78+57.85	54.6	RT	10		
56	78+76.63	15.7	LT	80+26.18	15.5	LT	314		
56	78+93.81	55.9	RT	78+93.83	65.9	RT	10		
56	78+99.82	68.7	RT	79+28.27	77.6	RT	37		
56	79+29.83	65.4	RT	79+29.90	55.9	RT	10		
56 56	79+75.96 80+34.18	59.7 15.5	RT LT	79+90.96 81+75.72	59.7 15.6	RT LT	42 298		
56	80+80.44	33.6	LT	81+25.87	33.6	LT	45		
56	82+09.97	31.0	LT	83+14.24	31.0	LT	104		
56	83+45.62	32.6	RT	83+83.88	32.2	RT	38		
56	83+73.52	42.5	RT	83+84.55	48.2	RT	15		
56	83+79.21	30.0	LT	84+47.61	30.0	LT	66		
56	84+26.99	49.1	RT	84+37.68	42.7	RT	15		
56	84+28.95	32.1	RT	84+63.67	39.4	RT	38		
56	84+95.41	29.0	LT	86+25.56	30.0	LT	130		
56	86+06.41	67.6	LT	89+50.00	2.5	LT	204		
56	86+40.90	29.4	LT	86+65.18	29.7	LT	24		
56	87+39.37	42.4	LT	87+60.41	67.7	LT	35		
						- "			
57	89+50.00	31.5	RT	91+20.95	0.0	C/L	202		
57	89+50.00	2.5	LT	91+20.95	0.0	C/L	197		
57 57	90+24.77 90+29.45	167.0	RT RT	91+70.44	39.7	RT	233		
57 57	90+29.45	51.2 34.9	LT	90+29.66 91+43.31	61.4 49.4	61.40 LT	10 64		
57	91+42.28	101.4	RT	91+46.07	104.5	RT	5		
57	91+51.47	53.5	LT	91+78.14	75.4	LT	35		
57	92+13.25	19.7	RT	92+13.46	0.0	C/L	17		
57	92+13.46	0.0	C/L	92+20.21	102.4	LT	133		
57	92+86.03	111.6	LT	92+84.81	84.1	LT	36		
57	93+04.86	151.6	LT	93+07.75	21.0	LT	211		
57	93+09.68	154.4	LT	93+13.76	151.6	LT	5	_	
57	93+09.81	32.1	LT	93+44.03	32.0	LT	34		
57	94+20.55	30.9	LT	94+53.83	30.9	LT	33		
57	94+85.82 ROADWAY PAV	29.3 VEMENT AREAS	LT S:	94+85.82	24.2	LT	5		
54	55+11.75	17.7	LT	57+82.72	8.0	LT		794	
54	55+11.79	17.6	RT	62+59.07	49.5	RT		550	
54	57+82.72	8.0	LT	66+50.00	1.7	LT		1114	
54	62+82.03	40.0	RT	65+50.00	23.6	RT		61	
55	65+50.00	23.6	RT	66+56.22	56.5	RT		3	
55	66+50.00	18.1	LT	78+00.00	8.1	LT		1310	
55	66+87.95	56.0	RT	69+88.63	63.3	RT		144	
55	70+17.52	78.2	RT	73+93.43	64.4	RT		28	
			TOTAL THIS	COLUMN			5156	4004	

							255	202	202	
SHEET NO.			LOC	ATION			 FULL DEPTH PAVEMENT SAWING	PAVEMENT REMOVED	WALK REMOVED	
		FROM	T		ТО		<u></u>			
	STATION	OFFSET	SIDE	STATION	OFFSET	SIDE	FT	SY	SF	ë :
55	74+18.69	76.2	RT	78+00.00	18.0	RT		223		ALCULATEI GEA CHECKED: JGG
56	78+00.00	8.1	LT	81+86.59	11.4	LT		402		CALCULATED: GEA CHECKED: JGG
56	78+00.00	18.0	RT	89+50.00	31.5	RT		179		9
56	81+86.59	11.4	LT	87+74.50	83.7	LT		37		
56	88+06.41	67.6	LT	89+50.00	2.5	LT		41		
57	89+50.00	31.5	RT	92+13.25	19.7	RT		449		
57	89+50.00	2.5	LT	92+22.80	100.6	LT		285		
57	93+02.46	153.3	LT	93+07.75	15.5	LT		14		
	ASPHALT DRIV	 /E APRON AND	PARKING LO	 T AREAS:						
54	55+28.79	28.5	RT	56+58.82	28.7	RT		128		OLITION UMMARY
54	56+22.54	28.5	LT	56+56.45	36.1	LT		54		
54	57+83.01	17.9	RT	58+75.88	17.9	RT		116		
54	59+16.00	18.0	RT	59+33.53	18.0	RT		22		
54	59+68.29	28.8	LT	59+80.77	28.6	LT . –		9		MOI SUI
54	64+01.90	28.5	LT	64+80.03	28.5	LT		48		<u>—</u> В —
54	65+69.75	28.5	LT	65+79.87	28.4	LT		4		DS
55	67+07.72	28.4	LT	67+21.65	28.3	LT		6		
55	68+14.08	28.2	LT	68+41.63	28.2	LT		13		
55	74+34.31	70.6	RT	74+84.91	48.8	RT		66		
55	75+30.69	28.4	LT	75+72.66	30.9	LT		14		
55	77+62.29	57.8	LT	77+82.31	58.5	LT		51		
56	78+29.23	31.3	RT	78+54.82	31.4	RT		68		
56	78+42.66	54.2	LT	78+64.31	55.6	LT		33		
56	79+01.82	31.3	RT	79+29.94	31.2	RT 		68		BY GEA GEA
56	79+45.20	31.3	RT	79+68.75	31.3	RT		60		4 4
56 56	79+75.96 79+92.55	59.7 31.2	RT RT	79+90.96 80+16.52	59.7 31.1	RT RT		25 49		21,////
56	80+80.61	28.3	LT	81+25.91	28.3	LT		26		1 4/
56	82+09.97	31.0	LT	83+14.24	31.0	 LT		31		
56	83+73.52	42.5	RT	83+81.64	42.3	RT		5		
56	83+79.21	30.0	LT	84+47.61	30.0	LT		6		
56	84+30.51	42.4	RT	84+37.68	42.7	RT		5		NS SET
56	84+95.41	29.0	LT	86+25.06	29.2	LT		17		REVISIONS BIDDING SI
56	85+85.41	32.7	RT	86+14.41	32.7	RT		128		
56	87+39.37	42.4	LT	87+57.94	69.4	LT		11		M NC
56 56	87+66.01 88+59.54	32.7 32.6	RT RT	87+95.14 88+88.60	32.6 32.4	RT RT		38 41		CONSTRUCTION ADDENDUM NO.
										CON
57	90+82.79	36.9	LT	91+41.36	48.9	LT		35		
57	91+52.04	55.4	LT	91+77.73	75.7	LT		15		111
57 57	92+86.03 93+09.81	111.6 32.1	LT LT	92+95.30 93+44.03	105.0 32.0	LT LT	9	15		
57	94+20.55	30.9	LT	94+53.83	30.9	LT	6			02
										ROAD NE 3-01.70
		TOTA	TOTAL THIS	COLUMN LEFT COLUMN			15 8118	2837		HONING ROAD STA-0153-01.70
		тс	OTAL FROM LE	EFT COLUMN			5156	4004		AHC ST,
			TOTAL THIS	SHEET			13289	6841		MA



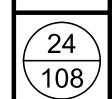


SHEET NO.			LOC	ATION			FULL DEPTH PAVEMENT SAWING	PAVEMENT REMOVED	WALK REMOVED
	STATION	FROM OFFSET	SIDE	STATION	TO OFFSET	SIDE	FT	SY	SF
54	CONCRETE DR 55+40.80	18.6	RT	55+70.08	18.5	RT			263
54	55+90.51	18.3	LT	56+25.56	18.2	LT			346
54	56+14.84	70.6	LT	56+43.03	53.9	LT			271
54	56+28.11	97.9	LT	56+86.50	73.6	LT			558
54	57+35.35	18.5	RT	57+83.39	18.3	RT			539
54 54	57+49.83 57+59.72	53.6 42.4	LT LT	57+74.53 57+76.54	79.4 35.5	LT LT			322 121
54	57+59.72 57+60.95	28.9	LT	58+19.05	28.9	LT			487
54	58+53.06	18.6	LT	58+80.31	18.9	LT			270
54	58+75.86	17.9	RT	59+15.64	18.4	RT			463
54	59+33.53	18.0	RT	59+69.92	18.1	RT			449
54	59+65.76	23.9	LT	59+83.35	23.9	LT			72
54	60+21.58	18.3	LT	60+42.95	18.5	LT			236
54	63+80.44	18.4	LT	64+31.26	18.6	LT 			491
54 54	64+49.95 65+25.96	18.5 18.4	LT LT	64+86.50 65+52.37	18.9 18.2	LT LT			324 254
54	65+62.94	18.2	LT	65+82.99	18.1	LT			154
55	67+02.21	18.5	LT	67+23.21	18.1	LT			188
55	68+13.68	18.4	LT	68+43.23	18.2	LT			280
55	70+55.61	18.8	LT	71+11.45	19.1	LT			508
55	72+84.73	18.4	LT	73+19.47	18.5	LT			299
55	74+24.53	68.0	RT	74+46.68	49.6	RT			258
55	74+83.53	18.0	LT	75+18.78	18.6	LT			304
55 55	75+28.32 75+79.45	19.2 21.6	LT RT	75+68.90 73+21.23	19.2 21.7	LT RT			359 2357
33	73+73.43	21.0	111	75+21.25	21.7	111			2007
56	78+26.89	22.0	RT	78+58.38	21.8	RT			272
56	78+26.97	54.2	RT RT	78+52.02	53.5	RT			295
56 56	78+99.34 79+00.81	21.9 55.2	RT	89+32.55 79+29.25	21.8 55.5	RT RT			273 328
56	79+42.37	21.2	RT	80+19.69	21.2	RT			1141
56	80+77.77	21.0	RT	81+08.47	21.8	RT			640
56	80+80.52	18.5	LT	81+18.75	18.6	LT			357
56	82+06.90	18.7	LT	82+38.60	18.6	LT			281
56	82+82.17	18.0	LT	83+17.86	18.2	LT			324
56	83+48.16	21.5	RT	83+82.90	21.5	RT			335
56 56	83+76.72	18.1	LT	84+11.42	18.3	LT			325
56 56	84+28.02 84+82.46	21.2 18.1	RT LT	84+61.39 85+17.61	20.9 17.0	RT LT			418 367
56	85+56.90	17.3	LT	85+92.52	17.0	LT			369
56	85+82.57	22.5	RT	86+18.19	22.5	RT			308
56	86+37.36	17.5	LT	86+71.31	17.3	LT			359
56	87+40.86	39.2	LT	87+68.45	62.2	LT			346
56	87+63.31	22.4	RT	87+98.60	22.3	RT			296
56 56	88+56.79 88+62.06	23.0 17.5	RT LT	88+91.67 88+92.46	22.9 17.4	RT LT			309 307
57	89+71.03	16.7	LT	90+43.96	17.3	LT			95
57 57	90+24.77	167.0	RT	90+49.35	143.5	RT			32
57 57	92+77.18 93+09.19	111.6 21.0	LT LT	93+06.93 93+46.65	141.6 21.0	LT LT			37
57	94+17.88	20.7	LT	94+57.04	20.7	LT			35

							255	202	202
SHEET NO.			LOCA	ATION			FULL DEPTH PAVEMENT SAWING	PAVEMENT REMOVED	WALK REMOVED
	STATION	FROM OFFSET	SIDE	STATION	TO OFFSET	SIDE	FT FT	SY	SF
	WALK AREAS:								
54	55+09.80	23.6	LT	55+91.14	23.7	LT			411
54 54	56+24.17	23.5	LT	56+53.03	19.1	LT			404 86
54	55+24.52 55+66.75	23.5	RT RT	55+42.37 56+55.61	23.5	RT RT			408
54	56+01.13	66.5	LT	56+13.63	66.7	LT			40
54	56+79.66	71.8	LT	57+35.15	101.3	LT			489
54	57+00.71	36.8	RT	57+52.68	29.8	RT			297
54	57+49.83	53.6	LT	57+71.36	23.0	LT			258
54	58+19.19	24.0	LT	58+54.62	24.0	LT			174
54	58+80.42	23.9	LT	59+65.76	23.9	LT			426
54	59+83.35	23.9	LT	60+24.94	23.6	LT			214
54	60+39.94	23.7	LT	61+53.97	28.7	LT			572
54	61+85.75	28.5	LT	62+75.13	24.7	LT			345
54 54	62+84.60 62+88.44	38.7 24.1	RT LT	63+36.52 63+87.60	27.5 28.5	RT LT			482 414
54	64+32.23	23.7	LT	64+52.41	23.6	LT			98
54	64+80.03	28.5	LT	65+26.25	23.9	LT			196
54	65+50.08	28.2	LT	65+69.75	28.5	LT			72
54	65+80.55	23.7	LT	66+50.00	23.6	LT			330
54	66+11.53	18.2	RT	66+29.55	18.2	RT			249
54	66+24.56	32.6	RT	66+50.00	36.0	RT			259
55	66+50.00	36.0	RT	66+60.25	37.3	RT			103
55	66+50.00	23.6	LT	67+03.46	23.5	LT			279
56 55	66+95.29 67+22.59	39.8 23.6	RT LT	67+28.00 68+15.92	33.3 23.2	RT LT			327 444
55	68+41.23	23.2	LT	70+59.94	24.0	LT			1068
55	69+75.07	37.8	RT	69+89.54	38.0	RT			157
55	70+28.20	47.2	RT	70+52.97	48.5	RT			210
55	71+07.10	23.9	LT	72+87.31	23.6	LT			974
55	72+61.70	21.0	RT	72+79.40	21.0	RT			195
55	73+16.77	23.6	LT	74+86.37	23.3	LT			834
55	73+86.09	40.7	RT 	73+98.06	41.6	RT			121
55 55	74+41.42	40.4	RT	74+51.02	37.7	RT			92
55 55	75+16.64 75+65.98	23.2	LT LT	75+30.68 77+88.88	23.2 65.7	LT LT			81 1238
55	75+65.96 75+76.97	38.1	RT	77+80.66	39.2	RT			66
55	76+18.08	45.7	RT	76+29.97	45.9	RT			117
55	77+74.07	54.5	RT	77+90.40	57.0	RT			593
56	78+19.93	55.6	RT	78+26.59	55.8	RT			60
56	78+31.11	55.7	LT	80+83.18	23.3	LT			1350
56	78+51.89	54.4	RT	78+57.85	54.6	RT			65
56	78+93.81	55.9	RT	79+00.16	56.2	RT			66
56 56	81+16.18 82+35.87	23.3	LT LT	82+09.83 82+83.93	23.4	LT LT			466 233
56	83+14.20	23.4	LT	83+79.36	23.6	LT			321
56	84+08.73	23.8	LT	84+85.27	24.2	LT			368
56	85+14.82	24.0	LT	85+59.73	23.8	LT			218
56	85+89.00	23.5	LT	86+40.97	23.7	LT			274
56	86+67.72	23.8	LT	87+44.79	36.4	LT		_	488
56	87+28.70	22.9	RT	87+42.89	23.0	RT			218
56	88+14.97	56.1	LT	88+64.38	286	LT			414
56	88+88.88	29.0	LT	89+50.00	30.1	LT			378
			TOTAL THIS (COLUMN	l	I			18042

	202	202	255							
	WALK REMOVED	PAVEMENT REMOVED	FULL DEPTH PAVEMENT SAWING			TION	LOCA			SHEET NO.
	05	0)/		CIDE	TO	CTATION	CIDE	FROM	CTATION	
CALCULATED: GEA CHECKED:	SF 232	SY	FT	SIDE	OFFSET 31.1	STATION 89+87.78	SIDE LT	OFFSET 30.1	STATION 89+50.00	57
CULAT GEA HECKEI	310			LT	118.7	92+26.97	LT	28.5	90+26.45	57
CALC	209			RT	143.5	90+49.35	RT	51.2	90+29.45	57
	564			RT	52.2	92+09.69	RT	101.4	91+42.28	57
	7			RT	35.0	91+96.13	RT	37.3	91+93.39	57
	714			LT	24.5	93+12.22	LT	111.4	92+80.08	57
	51			LT	151.6	93+13.76	LT	147.3	93+04.78	57
	383			LT	24.4	94+20.23	LT	24.4	93+44.12	57
	155			LT	24.2	94+85.82	LT	24.5	94+53.92	57
DEMOLITION SUB-SUMMAR)										
MOLI SUN										
S										
E BY /14 GEA 14 GEA										
DATE 4/21/14 5/7/14										
REVISIONS BIDDING SET										
JCTION E										
CONSTRUCTION ADDENDUM NO.										
l										
NING ROAD NE A-0153-01.70										
80A -01.7	.625				•	OLUMN	TOTAL THIS C			·
NG F 153	8042					T COLUMN	TAL FROM LEF	TC		
ONING TA-0153	8055						L FROM FAR L			
MAHC ST	0700	6841	13289		nv.		TOTAL FROM S			
-	0722	6841	13289		ίΥ 	IERAL SUMMAI	AKKIED TO GEI	TOTAL CA		

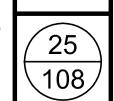




								202	202	202	254	625		
								ш		Ω	<u> </u>			
_	NO.							CONCRETE	ASPHALT	GUTTER REMOVED	ASPHALT	٥		
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Ш							ONC	ASPI	REN		BOX REMOVED		
SHEET NO	RENC			LOCA	ATION				_ •	TER	VING	ZEM		
一里	ERE							REMOVED,	REMOVED	GUT	PLA	OX		
S	REFE							ZEM	REN		N			
	<u> </u>							CURB	CURB	CURB AND	PAVEMENT PLANING, CONCRETE	PULL		
			FROM			ТО		- DO	O	CUI	PAV			
		STATION	OFFSET	SIDE	STATION	OFFSET	SIDE	FT	FT	FT	SY	EA		
54	CR-2	55+11.75	18.2	LT	56+12.16	72.1	LT	228						
54	CR-1	55+11.75	18.1	RT	56+58.82	28.7	RT	152						
54	CR-3 CR-4	56+27.68 57+12.00	98.3 25.0	LT RT	57+39.414 62+52.81	98.9	LT RT	150 542						
54 54	CR-5	57+12.00	48.4	LT	62+52.61	18.3 28.7	LT	430						
54	CR-8	61+85.47	48.0	LT	66+50.00	18.1	LT	489						
54	CR-9	62+88.84	24.1	LT	62+94.25	18.2	LT	9						
54	CR-7	63+00.01	18.1	RT	66+50.00	25.6	RT	351						
54	CR-6	65+79.87	28.4	LT	65+82.97	34.4	LT	6						
55	CR-12	66+50.00	23.6	RT	66+57.74	53.5	RT	34						
55	CR-13	66+50.00	18.1	LT	77+94.49	52.4	LT	1165						
55	CR-15	66+95.84	38.0	RT	69+89.61	55.4	RT			326				
55	CR-14	68+13.50	32.4	LT	68+13.58	28.2	LT	4						
55 55	CR-16	70+20.18	66.7	RT RT	73+97.53 74+24.53	52.8	RT RT	10		424				
55	CR-10 CR-20	74+19.05 74+24.53	76.4 68.0	RT	74+24.53 78+00.00	68.0 21.3	RT	10		397				
55	CR-11	74+88.97	28.2	LT	74+88.97	28.5	LT	1		007				
55	CR-19	75+66.27	31.1	LT	75+72.66	30.9	LT		6					
55	CR-21	76+17.82	84.4	RT	76+19.82	86.4	RT	3						
55	C R-22	76+47.45	30.3	LT	76+87.45	30.3	LT		40					
55	CR-23	77+62.50	30.8	LT	77+82.31	58.5	LT		40					
56	CR-26	78+00.00	21.3	RT	89+50.00	34.1	RT			1153				
56	CR-24	78+26.59	55.8	RT	78+29.62	26.3	RT	29						
56	CR-28	78+30.94	49.1	LT	87+47.53	30.8	LT			937				
56 56	CR-25 CR-27	78+42.66 78+51.89	54.2 54.4	LT RT	78+64.22 78+55.65	34.1 26.3	LT RT	27	30					
56	CR-18	78+99.97	68.7	RT	79+01.88	26.3	RT	42						
56	CR-29	79+27.77	77.6	RT	79+29.91	26.3	RT	51						
56	CR-30	79+43.61	55.7	RT	79+45.28	26.4	RT	29						
56	CR-31	80+16.52	31.2	RT	80+16.96	49.1	RT	18						
56 56	CR-32 CR-34	83+14.21 83+79.21	28.4 28.5	LT LT	83+14.21 83+79.21	30.0	LT LT	2 2						
56	CR-33	83+81.28	43.3	RT	83+84.46	47.3	RT	7						
56	CR-36	84+26.96	48.2	RT	84+30.51	42.4	RT	7						
56	CR-39	85+82.84	81.0	RT	85+85.41	32.7	RT	38						
56	CR-41	86+14.08	81.0	RT	86+14.41	32.7	RT	38						
56 56	CR-37 CR-38	86+25.06 86+40.71	29.2 30.0	LT LT	86+25.06 86+40.90	30.0 29.4	LT LT	1						
56	CR-40	87+47.53	30.8	LT	87+50.45	34.6	LT	4						
56	CR-43	87+65.30	44.2	RT	87+66.01	32.7	RT	11						
56	CR-44	87+95.12	44.5	RT	87+95.14	32.6	RT	12						
56	CR-45	88+05.40	61.2	LT	89+50.00	16.7	LT	4		181				
56 56	CR-46 CR-47	88+15.00 88+59.43	15.1 45.0	LT RT	88+15.74 88+59.54	55.5 32.6	LT RT	1 12						
56	CR-48	88+64.91	28.6	LT	88+64.91	29.6	LT	1						
56	CR-49	88+88.48	45.5	RT	88+88.60	32.4	RT	13						
56	CR-35	88+88.91	29.0	LT	89+00.89	30.0	LT	12						
57	CR-55	89+50.00	34.1	RT	90+31.77	171.3	RT			275				
57	CR-50	89+50.00	16.7	LT	90+31.77	102.0	LT			313				
57	CR-51	89+71.03	16.7	LT	89+88.74	34.5	LT	18						
57	CR-52	90+24.89	34.5	LT	90+43.46	17.4	LT	21						
57	CR-58	90+82.79	37.0	LT	91+41.36	48.9	LT	101		73				
57	CR-56	90+91.90	31.4	RT	91+25.97	30.4	RT	101						
			TC	OTAL THIS SHE	ET			4072	116	4079				

								202	202	202	254	625			
								<u>н</u>	-	/ED	ALT				
Ö.	8							CONCRETE	ASPHALT	REMOVED	ASPHALT	/ED			
N N	S E			LOC	ATION			OS OS				REMOVED			
SHEET	REFEREN				, (1101)			/ED,	REMOVED	GUTTER	ANIIA ICRE	X RE			
SH	Ħ.							REMOVED	EMC		F P (BOX			
	R							88 B RE	CURB F	CURB AND	MEN	PULL			
			EDOM			TO.		CURB	no	CUR	PAVEMENT PLANING, CONCRETE				
		STATION	FROM OFFSET	SIDE	STATION	TO OFFSET	SIDE	FT	FT	FT	SY	EA			
57	CR-42	91+52.04	55.4	LT	91+77.73	75.7	LT	<u> </u>		38	0.			_	
57	CR-60	91+72.09	40.8	RT	92+13.25	19.2	RT			49					
57	CR-61	92+77.42	19.1	RT	92+82.42	19.1	RT	00		5					
57 57	CR-63 CR-62	92+84.69 93+04.46	109.6 151.9	LT LT	92+85.31 93+02.75	84.0 20.5	LT LT	28		189					
57	CR-70	93+06.93	141.6	LT	93+10.38	138.8	LT	5		1.00					
57	CR-64	93+09.81	32.1	LT	93+12.22	29.6	LT	3							
57	CR-59	93+44.03	29.4	LT	93+44.03	32.0	LT	3							
57 57	CR-54 CR-53	94+20.55 94+53.83	30.9 30.9	LT LT	94+20.83 94+53.91	29.4	LT LT	2 2							
54	R-9	57+03.92	55.2	LT								1			
54	R-11	57+18.69	21.7	RT	F7 . F4 .00	01.0	1.T					1			
54 55	R-13 R-14	57+51.69 77+74.92	35.2 23.8	LT RT	57+54.39 77+86.33	31.2 33.6	LT RT					2			
55	R-60	77+88.10	32.8	LT	11100100							1			
56	R-64	78+40.81	32.7	LT	78+42.44	32.4	LT					2			
56	R-67	78+55.39	39.3	RT								1			
56 56	R-66 R-68	78+65.90 79+00.18	26.1 41.2	RT RT								1			
57	R-91	91+00.60	27.1	RT								1			
57	R-10	91+21.95	31.8	RT								1			
57	R-96	91+59.20	66.7	RT				_				1			
57 57	R-95 R-66	91+63.16 92+00.68	25.7 34.6	LT RT								1			
57	R-101	92+05.04	91.0	LT								1			
57	R-102	92+63.36	27.5	RT								1			
57	R-12	92+64.89	35	LT								1			
54	ML-1	55+09.75	0.0	C/L	66+50.00	0.0	C/L				5697				
54	ML-2	55+41.65	36.5	RT	55+65.65	36.5	RT				5				
54	ML-3	56+20.63	28.6	LT	56+29.94	51.7	LT				6				
54 54	ML-4 ML-5	59+74.51 65+73.29	39.3 34.5	LT LT	59+83.65 65+83.13	34.6 34.4	LT LT				2				
55	ML-6	65+73.29	0.0	C/L	78+00.00	0.0	C/L				2 5488				
55	ML-7	67+10.85	34.0	LT	67+24.75	34.0	LT				3				
55	ML-8	68+14.136	34.4	LT	68+41.79	34.4	LT				6				
55 55	ML-9 ML-10	74+35.64 75+81.19	70.2 89.4	RT RT	74+45.06 76+19.81	77.2 89.4	RT RT				8				
56	ML-11	75+81.19 78+00.00	0.0	C/L	89+50.00	0.0	C/L				5018				+
56	ML-12	78+25.66	69.0	RT	78+49.85	71.2	RT				7				
56	ML-13	78+99.79	70.7	RT	79+22.82	77.6	RT				7				<u> </u>
56 56	ML-14 ML-15	79+73.96 82+10.13	79.6 33.0	RT LT	79+92.96 83+15.25	79.6 33.0	RT RT				17 23				
56	ML-16	82+10.13	50.2	RT	84+39.68	51.1	RT				10				+
56	ML-17	83+79.08	32.0	LT	84+47.84	31.9	LT				15				
56	ML-18	84+60.33	31.2	LT . –	86+25.16	30.9	LT . –				34				<u> </u>
56 57	ML-19 ML-20	87+32.88 89+50.00	47.0 0.0	LT C/L	87+58.10 94+89.88	69.4 0.0	LT C/L				9 4187				+
57	ML-21	92+85.60	81.8	LT	93+12.80	139.0	LT				4187				+
57	ML-22	93+07.91	34.1	LT	93+44.40	34.0	LT				8				
57	ML-23	94+19.97	32.9	LT	94+53.82	32.9	LT				7				
			TO	TAL THIS COLU	UMN			43		281	20609	20			
															-
				FD 3.1.				4.4							
			TOTAL	FROM LEFT C	COLUMN			4072	116	4079					



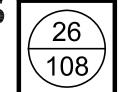


DEMOLITION SUB-SUMMARY

								1		T	T							
					611	611	611	611	611 ш	611	611	611	611	611	611	611	611	SPCL
					BASE	BASE,	NO. 3, WITH 60" BASE, DOGHOUSE	MANHOLE NO. 3, WITH 96" BASE, DOGHOUSE, AS PER PLAN	3, DOGHOUSE			0 10	GRADE	2	RECONSTRUCTED GRADE	10	Ш	EXISTING MANHOLE
	Š.				=)" B/	5" B/ PLAI) 유	က	3A	RECONSTRUCTED	GR		RUC	ED 1	INLET FRAME AND GRATE	ĬN
N O N	Z Ш				H 72	.96 H)) H E	H 96 ER I	00	CATCH BASIN, NO.		RUC	은	INLET RECONSTRUCTED GRADE	IST	CATCH BASIN ADJUSTED GRADE) GF	M &
			LOCATION		WITH	E NO. 3, WITH 9 AS PER PLAN	WIT	WIT S PI		N.	BASIN, NO.	STI DE	ADJUSTED	TRU	CON	NDJL DE	ANE	
SHEET	REFERENC				က်	. 3, PER	. 3, GHC	. З. А.	CATCH BASIN, NO.	BAS	BAS	S A K	SUL	ONS	RE (IIN A	ME	_SIX
五	声				S N	NO AS F		SUC	NIS	- -	- -			ECC	SIN	BAS	FRA	
0)	岸				MANHOLE		MANHOLE	OLE GR	H BA	CAI	САТСН	MANHOLE	MANHOLE	 	CATCH BASIN F TO (JO.	Щ	BULKHEAD
					ANH	MANHOL	I N	HNH	힏			Z	I N	N N	\TC	CAT	Z	JLK
			FROM		Ž	È	È	È	Ö			Š	È		Ö			B
		STATION	OFFSET	SIDE	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
46	MH-B	55+27.05	8.3	LT		1												
46	MH-D	57+02.43	8.3	LT		1												
46	MH-13	57+30.22	29.7	LT				1			4							
46	CB-ZG MH-E	57+36.31 57+47.67	15.5 15.8	RT LT				1			'							
46	CB-F	57+73.45	21.5	LT		1		'										
46	MH-G	59+47.60	8.5	LT		1												
46	CB-H	60+32.97	21.5	LT							1							
46	MH-I	60+53.32	8.0	LT		1												
47	MH-K	64+44.30	9.4	LT		1												
47	CB-L	64+44.38	20.4	LT						1								
48	MH-M	66+51.46	7.9	LT				1										
48	MH-N	67+92.85	7.5	LT				1										
48	CB-O	69+52.30	18.5	LT				1										
48	CB-P	71+27.04	18.5	LT		1												
49	CB-R	72+52.17	18.5	LT				1										
48	CB-S	73+38.13	18.5	LT 		1												
48	CB-J	74+40.85	30.8	RT							1							
48	CB-U	74+48.79	18.5	LT		1												
48	CB-W MH-X	75+54.49 76+07.55	18.5 3.7	LT LT	1			1										
48	CB-Y	76+07.55 76+07.55	18.5	LT						1								
50	MH-Z	70+07.53 78+17.52	3.7	LT				1		'								
50	MH-ZA	78+72.71	4.4	LT			1											
50	MH-ZB	80+30.18	4.4	LT			1											
50	MH-ZC	81+79.40	4.4	LT			1											
52	CB-ZD	91+80.23	59.2	LT							1							
52	CB-ZE	92+66.19	63.1	LT					1									
52	CB-ZF	93+02.75	20.5	LT							1							
46	DJ-8	57+03.45	18.7	RT								1						
46	DJ-14	57+44.17	58.1	LT									1					
46 46	DJ-19 DJ-20	58+00.03 60+54.20	26.8 27.0	RT RT									1					
47	DJ-20	62+84.69	36.7	RT									1					
47	DJ-23	66+44.20	36.8	RT									1					
50	DJ-53	78+18.90	29.2	LT									1					
50	DJ-65	80+30.17	25.9	RT									1					
51	DJ-88	87+88.24	49.6	LT									1					
52	DJ-100	91+33.36	52.1	RT									1					
52	DJ-107	91+81.96	36.4	LT									1					
52	DJ-109	92+26.97	35.1	LT									1					
47	DJ-24	66+47.32	19.1	RT												1	1	
46	DJ-15	57+51.23	26.3	LT										1				
48	DJ-27	67+93.04	18.4	LT										1		4		
49 51	DJ-50 DJ-81	75+84.11 86+23.96	34.9 17.5	RT LT										1				
51	DJ-81	86+23.96 87+74.75	72.7	LT										1	1		1	
51	DJ-96	89+49.33	34.3	RT										1	1		1	
52	DJ-97	89+53.61	17.3	LT										1				
52	DJ-112	92+48.99	67.2	LT										1			1	
54	SP-2	56+80.66	10.1	LT														1
54	SP-3	57+35.62	11.6	RT														1
54	SP-1	60+54.20	27.0	RT														1
	TOTAI	_ CARRIED TO	GENERAL SUMM	IARY	1	9	3	8	1	2	5	1	11	6	1	2	3	3
								-										_

					611	SPCL	SPCL					
					Ш		CONNECT TO EXISTING MANHOLE					
					GRADE	САТСН	Ĭ					
	S				GF GF	၁	W K					
SHEET NO.	CE		LOCATION		0 TO	L EXISTING (BASIN						
	REFERENC				TE	ASIL	X					
単	l E				SUC	LL E	— <u>Э</u>					
S					AD	DRILL	E					
	<u> </u>				INLET ADJUSTED	CORE	NEC					
			FROM		_	8	NO.					
		STATION	OFFSET	SIDE	EA	EA	EA					
46	DJ-16	57+22.90	70.0	LT	1							
48	DJ-25	66+53.10	18.5	LT	1							
48	DJ-31	69+51.49	22.0	RT	1							
49	DJ-37	72+53.35	21.0	RT	1							
49	DJ-47	75+54.54	21.6	RT	1							
50	DJ-59	78+16.13	22.0	RT	1							
50	DJ-62	78+72.61	18.7	LT	1							
50	DJ-66	80+30.19	18.5	LT	1							
50	DJ-68	81+37.64	21.7	RT	1							
50 50	DJ-70	81+79.81	18.6 18.7	LT LT	1							
50	DJ-74 DJ-80	83+21.03 86+28.09	23.0	RT	1							
51	DJ-80	87+48.39	32.4	LT	1							
	2001	0.110.00	<u> </u>									
46	SP-28	57+03.45	18.7	RT			1					
46	SP-27	57+22.90	70.0	LT		1						
46	SP-24	57+51.23	56.3	LT		1						
46	SP-4	58+00.03	26.8	RT			1					
47	SP-5	66+47.32	19.1	RT		1						
48	SP-6	66+53.10	18.5	LT		1						
48	SP-7	67+93.04	18.4	LT		1						
48	SP-8	69+51.49	22.0	RT		1						
49	SP-9	72+53.35	21.0	RT		1						
49	SP-10	75+54.54	21.6	RT		1						
50 50	SP-11 SP-12	78+16.13 78+72.61	22.0 18.7	RT LT		1						
50	SP-12	80+30.17	25.9	RT		1	1					
50	SP-14	80+30.17	18.5	LT		1	'					
50	SP-15	81+37.61	19.6	RT		1						
50	SP-16	81+79.81	18.6	LT		1						
50	SP-17	82+73.37	25.7	RT			1					
50	SP-18	83+21.03	18.7	LT		1						
51	SP-19	86+28.09	23.0	RT		1						
51	SP-20	86+23.96	17.5	LT		1						
51	SP-21	87+48.39	32.4	LT		1						
51	SP-22	87+74.75	72.7	LT		1						
51	SP-23	89+49.33	34.3	RT		1						
52 52	SP-25 SP-26	89+53.61 91+33.36	17.3 52.1	LT RT		1	1					
52	JF -20	J1+JJ.JD	JZ. I	nı			I					
						_						
		0488775	OFNED :: 51	A A A D Y			_					
	IOTAL 	CAKKIED TO	GENERAL SUM	MAKY	13	20	5					
			_									

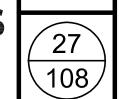




								611	611	611	611	611	611	611	611	611
										SDR						
								UNDERDRAINS /RAP, 707.33	CONDUIT, TYPE B, 707.45, FOR DRAINAGE CONNECTION	5, SE	PER	PER	PER	PER	PER	PER
Ċ.	2							ERDI , 707	07.4 CTIC	707.45,	, AS	, AS	, AS	, AS	, AS	, AS
Ŏ N	Щ			LOC	ATION			E UNDE	B, 70 VNE	B, 7(Щ. В	ы В	он П	р В, П	оЕ В, 	Щ
SHEET	RENC							ш ≶	PE CO	TYPE 26	CONDUIT, TYPE PLAN	T, TYPI PLAN	TYPE	CONDUIT, TYPE PLAN	CONDUIT, TYPE PLAN	CONDUIT, TYPE E
뮈	EBI							N PIPI	r, T) 4GE		UT,	UT,	CONDUIT, '	J. J.	ÜŢ,	Ü, Ü
S	REFI							LO\ HFA	DUI AIN	_Ina	QNC	ONDUIT	QNC	ONC.	QNC	QNC
	<u> </u>							SHALLOW I	SON	CONDUIT,	ار ار	5" C	18" C(36" C(48" C(54" C(
			FROM			TO		99	99		-	=	-	ĕ	4	ιĊ
		STATION	OFFSET	SIDE	STATION	OFFSET	SIDE	FT	FT	FT	FT	FT	FT	FT	FT	FT
46	UD-1	55+27.05	8.3	LT	56+50.97	31.4	RT	96	40							
46 46	UD-2 UD-3	55+27.05 56+27.51	8.3 100.1	LT LT	56+10.49 57+22.90	71.3	LT LT	196 115	16 2							
46	UD-7	57+03.45	18.7	RT	57+22.90	17.0	RT	23	3							
46	UD-4	57+22.90	70.0	LT	57+38.79	99.9	LT	33	1							
46	UD-8	57+36.31	15.5	RT	57+99.86	17.0	RT	63	2							
46	UD-6	57+50.68	52.3	LT	57+73.45	21.5	LT	42	1							
46	UD-5	57+51.23	56.3	LT	57+66.66	82.6	LT	30	1							
46	UD-9	57+73.45	21.5	LT	60+45.97	23.0	LT	272	1							
46 46	UD-10 UD-11	58+00.03 60+52.97	26.8 21.5	RT LT	60+75.00 60+75.00	17.0 23.0	RT LT	265 21	12							
40	וו-טט	00+3∠.¥/	21.5	LI	00+75.00	∠ა.∪	LI	21								
47	UD-11	60+75.00	23.0	LT	61+69.50	61.7	LT	115								
47	UD-12	61+89.60	50.5	LT	64+44.38	20.4	LT	276	2							
47	UD-14	64+44.38	20.4	LT	66+46.51	20.4	LT	202	1							
47	UD-10	60+75.00	17.0	RT	62+56.58	31.7	RT	188								
47	UD-13	62+86.78	35.5	RT	66+47.32	19.1	RT	370	2							
40	110.45	00 47 00	40.4	DT	00 50 04	45.0	DT	00	1							
48 48	UD-15 UD-16	66+47.32 66+53.10	19.1 18.5	RT LT	66+59.24 67+86.46	45.8 20.0	RT LT	29 133	2							
48	UD-17	66+93.36	46.3	RT	69+51.49	22.0	RT	271	2							
48	UD-57	67+93.04	18.4	LT	69+38.94	20.0	LT	144	2							
48	UD-19	69+51.49	22.0	RT	69+91.15	50.0	RT	56	2							
48	UD-18	69+52.30	18.5	LT	70+13.41	20.2	LT	54	3							
48	UD-20	70+25.15	58.9	RT	72+25.00	19.5	RT	221								
40	LID 00	70.05.00	10.5	DT	70 . 50 05	00.0	DT	0.5								
49 49	UD-20 UD-22	72+25.00 72+52.17	19.5 18.5	RT LT	72+53.35 73+26.50	20.0	RT LT	25 69	3							
49	UD-21	72+53.35	21.0	RT	73+20.50	29.2	RT	139	0							
49	UD-23	73+38.13	18.5	LT	74+37.17	20.0	LT	94	3							
49	UD-58	74+30.48	48.4	RT	74+40.85	30.8	RT	20	1							
49	UD-24	74+40.85	30.8	RT	75+48.69	19.5	RT	110	1							
49	UD-25	74+48.79	18.5	LT	75+42.86	20.0	LT ·-	89	3							
49	UD-26	75+54.49	18.5	LT RT	76+07.55	18.5	LT	243	2							
49 49	UD-28 UD-27	75+54.54 76+07.55	21.6 18.5	LT	78+00.00 77+93.03	19.5 51.4	RT LT	206	1							
10	00 27	70107.00	10.0		77100.00	01.1		200	'							
50	UD-28	78+00.00	19.5	RT	78+09.51	19.5	RT	9								
50	UD-30	78+16.13	22.0	RT	80+25.17	19.5	LT	206	2							
50	UD-29	78+32.81	42.1	LT	78+72.61	18.7	LT	51	2							
50	UD-31	78+72.61	18.7	LT	80+22.41	20.0	LT	149	1							
50 50	UD-32	80+30.17	25.9	RT	81+26.66	19.5	RT	90	8							
50 50	UD-33 UD-34	80+30.19 81+37.61	18.5 19.6	LT RT	81+72.04 82+72.03	20.0	LT RT	141	2							
50	UD-35	81+79.81	18.6	LT	83+13.26	20.0	LT	133	2							
50	UD-36	82+73.37	25.7	RT	83+75.00	19.5	RT	90	11							
50	UD-37	83+21.03	18.7	LT	83+74.95	20.0	LT	53	2							
51	UD-36	83+75.00	19.5	RT	84+43.51	19.5	RT	68								
51	UD-37	83+75.00	20.0	LT	84+39.26	20.0	LT	172	4							
51 51	UD-39 UD-38	84+50.50 84+52.34	19.6 20.0	LT RT	86+23.96 86+28.09	17.5 23.0	LT RT	173 174	1							
51	UD-38	86+23.96	17.5	LT	86+28.09	18.0	LT	70	1							
51	UD-41	86+28.09	23.0	RT	87+89.40	21.5	RT	160	•							
51	UD-42	87+05.00	18.0	LT	87+48.39	32.4	LT	46	1							
51	UD-43	87+48.39	32.4	LT	87+70.21	67.0	LT	40	2							
			TOT	AL THIS COL	JMN			6101	151							
			101		-				.51							

								611	611	611	611	611	611	611	611	611
								SN	FOR	SDR	ŭ.	Œ.	ŭ.	ŭ.	ŭ.	Œ
	Ö.							SHALLOW PIPE UNDERDRAINS WITH FABRIC WRAP, 707.33	15, F ON	15, S	S PER	AS PER	AS PER	S PER	S PER	S PER
Ċ.	ON ON							ERC 9, 70	CONDUIT, TYPE B, 707.45, F DRAINAGE CONNECTION	707.45,	3, AS	B, AS	B, AS	3, AS	B, AS	B, AS
9	CE			LOC	ATION			L AP	B, 7	Ď,	B →	Ш	111	В В	Ш	Ш
Ш	REN							PEL	PE CO	TYPE 26	CONDUIT, TYPE PLAN	' CONDUIT, TYPE E	CONDUIT, TYPE PLAN	r, TYPE PLAN	, TYPE PLAN	r, TYPE PLAN
SHEET	ERI							V PII BRIC	, , , , , , , , , , , , , , , ,	<u> </u>	UT,	UT,	H, H	H, H	H, H	H H
$\overline{\mathbf{S}}$	REFE							LOV			ONC.	ONC.	ONC.	CONDUIT	CONDUIT	CONDUIT
	<u> </u>							HAL	ONI DR/	CONDUIT,	00	00	00			0
			FROM			TO				 	12"	15"	18"	36"	184	42
		STATION	OFFSET	SIDE	STATION	OFFSET	SIDE	FT	FT	FT	FT	FT	FT	FT	FT	FT
51	UD-44	87+72.85	83.9	LT	87+74.75	72.7	LT	11								
51	UD-45	87+99.40	21.5	RT	89+49.33	34.3	RT	150	1							
51	UD-46	88+34.00	18.0	LT	89+53.61	17.3	LT	119	1							
52	UD-48	89+53.61	17.3	LT	90+97.83	24.9	LT	144	2							
52	UD-51	91+67.11	50.1	LT	91+80.23	59.2	LT	15	2							
52 52	UD-52	91+80.23 92+66.19	59.2 63.1	LT LT	92+24.46 93+05.05	109.8 150.1	LT LT	67 95	2							
52	UD-53 UD-54	92+66.19	63.1	LT	93+03.03	38.6	LT	25	1							
52	UD-54	92+66.19	30.7	LT	93+02.75	20.5	LT	25	2							
52	UD-56	93+02.75	20.5	LT	94+73.42	22.0	LT	170	1							
52	UD-47	89+49.33	34.3	RT	90+32.68	168.0	RT	237	1							
52	UD-49	90+88.90	26.7	RT	91+20.80	43.3	RT	61								
52	UD-50	90+90.50	23.5	RT	91+33.36	52.1	RT	52	14							
46		55+23.84	13.8	LT	55+27.05	8.3	LT							6		
46		55+25.62	2.0	LT	55+27.05	8.3	LT				6					
46		55+27.05	8.3	LT	57+02.43	8.3	LT							184		
46		57+02.43	8.3	LT	57+47.67	15.8	LT							46		00
46 46		57+30.22 57+47.67	29.7 15.8	LT LT	57+47.67	15.8 21.5	LT LT									23 27
46		57+47.67	15.8	LT	57+73.45 57+36.31	15.5	RT				32					21
46		57+73.45	21.5	LT	59+47.60	8.5	LT				02					175
46		59+47.60	8.5	LT	60+53.32	8.0	LT									106
46		60+52.97	21.5	LT	60+53.32	8.0	LT					14				
46/47		60+53.32	8.0	LT	64+44.38	20.4	LT									391
47		60+44.30	9.4	LT	64+44.38	20.4	LT				11					
47/48		60+44.30	9.4	LT	66+51.46	7.9	LT									207
		00 54 40	7.0		07.00.05	7.5										444
48 48		66+51.46 67+92.65	7.9 7.5	LT LT	67+92.65 69+52.30	7.5 18.5	LT LT									141 159
48		69+52.30	18.5	LT	71+27.04	18.5	LT								175	139
48		70+83.20	17.9	LT	70+83.41	31.8	LT			15					170	
48/49		71+27.04	18.5	LT	72+52.17	18.5	LT								125	
49		72+52.17	18.5	LT	73+38.13	18.5	LT							86		
49		73+38.13	18.5	LT	74+48.79	18.5	LT							111		
49		74+40.85	30.8	RT	74+44.24	37.6	RT				7					
49		74+48.79	18.5	LT	75+54.49	18.5	LT							106		
49		75+54.49	18.5	LT	76+07.55	3.7	LT				10			53		
49		76+07.55	3.7	LT	76+07.55	18.5	LT				10			010		
49/50		76+07.55	18.5	LT	78+17.52	3.7	LT							210		
50		78+17.52	3.7	LT	78+72.71	4.4	LT						55			
50		78+72.71	4.4	LT	80+30.18	4.4	LT						158			
50		80+30.18	4.4	LT	81+79.40	4.4	LT						150			
52		91+80.23	59.2	LT	91+81.16	45.4	LT					14				
52		92+60.86	28.2	LT	93+02.75	20.5	LT			84						
			TO	TAL THIS COL	UMN			1171	28	99	66	28	363	802	300	1229
			TOTAL	FROM LEFT C	COLUMN			6101	151							
			TOTAL 0155	IED TO 05:				70	4		-		225	225	222	1000
			TOTAL CARR	IED TO GENEF	RAL SUMMARY			7272	179	99	66	28	363	802	300	1229

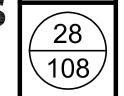




SUB-SUMMARY

								304	609	609	609	609	608	608	
								<u> </u>				TYPE	<	В	
	NO.							UNDER		Z	AND	7B, T	TYPE,	TYPE	
NO.					. —			.9)	9	AS PER PLAN	V CURB	CURB,) (i)	, ,	
Z	S			LOCA	NOITA			BASE (URB)	TYPE	PER	20 7		STEPS,	STEPS,	
EE.	REFERENCE							E B/	3B, 1	AS F	TER,	CONCRETE (E S1	
SHEET	i ii							GAT	CURB,	CURB,	SINA TUX	OS OS	RET	RET	
	RE							AGGREGATE C		กว	COMBINATION (GUTTER, T	ASPHALT (CONCRETE	CONCRETE	
			FROM			ТО		AG			0	SPH	ŏ	ŏ	
		STATION	OFFSET	SIDE	STATION	OFFSET	SIDE	CY	FT	FT	FT	FT €	FT	FT	
69	VC	88+64.88	26.5	LT	88+64.88	30.0	LT	0.04	4						
69	VC	88+88.88	26.0	LT	89+00.87	30.0	LT	0.14	15						
69	VC	78+00.00	18.5	RT	79+28.96	18.5	RT	1.21	131						
69	VC	78+28.63	24.5	RT	78+25.85	67.0	RT	0.40	43						
69	VC	78+52.57	24.5	RT	78+49.75	69.2	RT	0.42	45	400		79			
70	VC	89+50.00	33.5	RT	90+31.77	171.3	RT	2.24	242						
70	IC	89+50.00	16.5	LT	92+26.53	102.0	LT	2.77	299						
70	VC	89+78.84	26.5	LT	89+88.84	35.1	LT	0.16	17	_					
70	VC	90+24.73	35.3	LT	90+34.53	26.6	LT	0.16	17						
70 70	VC VC	90+90.50	22.5	RT RT	91+25.05	38.2	RT RT	1.15 2.22	124		48				
70	VC	91+72.10 92+90.65	40.8 106.9	LT	92+13.25 92+85.31	19.2 83.9	LT	0.29	31		48				
70	IC	93+04.45	151.9	LT	93+02.75	20.5	LT	1.49	161						
70	VC	93+09.15	143.6	LT	93+10.38	138.8	LT	0.09	10						
70	VC	93+09.81	32.1	LT	93+12.03	295	LT	0.04	4						
70	VC	93+44.03	32.0	LT	93+44.03	29.5	LT	0.03	3						
70 70	VC VC	94+20.55 94+53.82	30.9 30.9	LT LT	94+20.75 94+53.82	29.5 29.5	LT LT	0.02	2						
70	VO	34+30.0 <u>2</u>	50.5	LI	34700.02	25.5	<u> </u>	0.02							
67	ST-1	60+66.18	30.0	LT	60+71.18	30.0	LT						7		
67	ST-2	61+36.61	30.0	LT	61+40.61	30.0	LT						5		
67 67	ST-3 ST-4	63+35.89 66+06.28	30.6 29.2	LT LT	63+39.89 66+10.28	30.6 29.2	LT LT							4	
07	31-4	00+00.20	29.2	LI	00+10.20	29.2	LI							4	
	I	1	TO:	TAL THIS COLU	IMN	<u>, </u>		13	1150	400	48	79	12	8	
			10	., 11110 0010	· · · · · · · · ·			10	1100	700	70	13	12		
			TOTAL	. FROM LEFT C	OLUMN			91	8997	400		79			
			TOTAL CARR	IED TO GENER	AI SIIMMARV			104	10147	800	48	158	12	8	
			IOIAL OAKK	ILD IO GENER	AL GOIVIIVIAN I			104	1014/	000	40	136	14	°	





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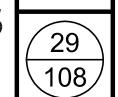
MAHONING ROAD STA-0153-01.70

						~			<u> </u>	
SHEET NO.	REFERENCE NO.		LOCA	ATION		J AGGREGATE BASE (4" UNDER WALK)	4" CONCRETE WALK	5" CONCRETE WALK	SPECIAL - CONCRETE BOXOUT	
		FRO	OM	T	0	− ¥			S	
	0)4/ /	STATION	SIDE	STATION	SIDE	CY	SF	SF	EA	
67 67	CW-1	55+09.80 55+36.13	LT LT	55+36.13 56+03.06	LT LT	1.62 4.69	131	380		
67	CW-3	56+27.06	LT	56+40.90	LT	5.68		460		
67	CW-4	56+03.84	LT	56+07.73	LT	0.30	24			
67	CW-5	56+83.29	LT . –	56+86.31	LT	0.35		28		
67 67	CW-6 CW-7	56+90.47 57+00.95	LT LT	57+03.39 57+20.26	LT LT	0.84 2.10	68	170		
67	CW-7	57+20.26	LT	57+20.20	LT	2.10	172	170		
67	CW-9	57+52.72	LT	57+88.49	LT	4.93		399		
67	CW-10	58+41.49	LT	58+55.40	LT	1.16		94		
67	CW-11	58+81.40	LT	59+64.15	LT	6.04		489		
67 67	CW-12	59+82.15 60+41.63	LT LT	60+23.63 61+31.11	LT LT	2.21 6.80		179 551		
67	CW-13	60+66.42	LT	60+71.42	LT	0.25	20	331		
67	CW-15	61+36.61	LT	61+40.61	LT	0.32	26			
67	CW-16	62+02.21	LT	62+62.30	LT	4.12		334		
67	CW-17	62+88.92	LT	63+00.77	LT	0.96		78		
67 67	CW-18	63+17.77 63+85.34	LT LT	63+71.34 64+02.46	LT LT	3.28 1.48		266 120		
67	CW-20	64+26.46	LT	64+56.46	LT	2.04		165		
67	CW-21	64+80.46	LT	65+29.24	LT	4.27		346		
67	CW-22	65+47.24	LT	65+63.38	LT	1.54		125		
67	CW-23	65+80.38	LT	66+23.98	LT	3.84	4	311		
67 67	CW-24 CW-25	66+06.73 55+24.52	LT RT	66+09.81 55+36.65	LT RT	0.05	60			
67	CW-26	55+70.65	RT	56+30.14	RT	4.12	- 00	334		
67	CW-27	57+07.17	RT	57+52.00	RT	5.60		454		
67	CW-28	57+76.00	RT	59+22.00	RT	18.41		1491		
67 67	CW-29 CW-30	59+46.00 60+09.84	RT RT	59+85.84 62+47.33	RT RT	5.44 32.26		2613		
67	CW-30	62+95.07	RT	63+36.20	RT	5.27		427		
67	CW-32	66+23.35	RT	66+52.47	RT	4.14		335		
68 68	CW-33	67+00.81 67+73.08	RT RT	67+28.00 67+99.02	RT RT	3.36 1.99		272 161		
68	CW-34	67+73.08	RT	67+99.02	RT	1.36		110		
68	CW-36	70+38.99	RT	70+52.97	RT	2.30		186		
68	CW-37	66+44.43	LT	66+95.21	LT	5.09		412		
68	CW-38	67+21.76	LT	68+05.36	LT	7.73		626		
68 68	CW-39 CW-40	68+41.86 68+90.54	LT LT	68+90.54 69+22.54	LT LT	3.91		317 268		
68	CW-41	69+22.54	LT	70+37.23	LT	9.85		798		
68	CW-42	70+54.23	LT	70+61.23	LT	0.65		53		
68	CW-43	71+06.23	LT	72+90.04	LT	16.14		1307		
68 68	CW-44 CW-45	73+24.04 74+77.30	LT LT	74+60.30 74+88.91	LT LT	11.37		921 93		
68 68	CW-45	74+77.30 75+12.91	LT	74+88.91 75+38.66	LT	2.58		209		
68	CW-47	75+62.66	LT	76+51.45	LT	7.46		604		
68	CW-48	76+51.45	LT	76+83.45	LT	3.31		268		
68	CW-49	76+83.45	LT	77+93.85	LT	9.33		756		
68 68	CW-50	77+83.87 73+85.92	LT RT	77+93.85 73+92.48	LT RT	1.22 0.85		99 69		
68	CW-51	73+65.92	RT	73+92.46	RT	1.68		136		
68	CW-53	74+63.76	RT	74+75.10	RT	0.65		53		
68 68	CW-54	75+09.27	RT	75+35.11	RT	1.86		151		
	CW-55	76+18.05	RT	76+29.75	RT	1.38	1	112	l	

						304	608	608	SPCL	
SHEET NO.	REFERENCE NO.		LOCA	ATION		AGGREGATE BASE (4" UNDER WALK)	4" CONCRETE WALK	5" CONCRETE WALK	SPECIAL - CONCRETE BOXOUT	
		FRO		TC		,				
68	CW-56	STATION 77+49.85	SIDE RT	STATION 77+89.82	SIDE RT	7.11	SF	SF 576	EA	
69	CW-57	79+76.96	RT	79+89.96	RT	1.95		158		
69	CW-58	79+77.46	RT	79+89.46	RT	1.40		113		
69	CW-59	78+31.01	LT	78+41.08	LT	0.49		40		
69	CW-60	78+41.08	LT . 	80+83.71	LT	22.16		1795		
69	CW-61	81+07.71	LT	82+09.97	LT	8.36		677		
69	CW-62 CW-63	82+33.97	LT	82+90.21	LT LT	5.11		414		
69 69	CW-63	83+14.21 88+03.62	LT LT	83+79.21 88+13.78	LT	6.09 2.49		493 202		
69	CW-65	84+03.21	LT	84+85.42	LT	7.33		594		
69	CW-66	85+09.42	LT	85+45.42	LT	2.42		196		
69	CW-67	85+69.42	LT	86+41.00	LT	6.33		513		
69	CW-68	86+65.00	LT	87+17.73	LT	4.35		352		
69	CW-69	87+40.14	LT	87+47.31	LT	0.44		36		
69	CW-70	87+56.60	LT	87+64.37	LT	0.40		32		
69	CW-71	88+26.48	LT	88+64.88	LT	3.43		278		
69 69	CW-72 CW-73	88+88.88 89+27.67	LT LT	89+27.67 89+59.86	LT LT	3.41		276 272		
69	CW-73	86+96.83	RT	87+36.77	RT	3.95		320		
	000 71	00100.00		07100.77	111	0.00		020		
70	CW-75	89+59.86	LT	89+78.84	LT	1.14		92		
70	CW-76	90+34.51	LT	91+14.70	LT	6.26		507		
70	CW-77	91+31.01	LT	91+89.09	LT	5.67		459		
70	CW-78	92+01.11	LT	92+19.08	LT	2.41		195		
70	CW-79	93+09.57	LT . –	93+13.76	LT	0.72		58		
70	CW-80	92+89.06	LT	93+12.03	LT	9.35		757		
70 70	CW-81 CW-82	93+44.03 94+53.82	LT LT	84+20.82 94+85.82	LT LT	5.07 2.00		411 162		
70	CW-83	92+71.92	LT	92+83.92	LT	1.56		126		
70	CW-84	91+42.28	LT	92+15.59	LT	6.10		494		
70	CW-85	91+72.62	LT	92+13.07	LT	1.51		122		
70	CW-86	90+29.45	LT	90+31.35	LT	15.99		1295		
67		55+81.65	LT			0.14			1	
67		55+94.54	RT			0.14			1	
67		57+43.50	RT			0.14			1	
67		57+94.50	RT			0.14			1	
67		58+49.67	RT			0.14			1	
67 67		58+99.65 58+99.65	LT RT			0.14			1	
67		58+99.65	RT			0.14			1	
67		60+02.64	LT			0.14			1	
67		60+28.34	RT			0.14			1	
67		60+75.01	LT			0.14			1	
67		60+78.88	RT			0.14			1	
67		61+28.19	RT			0.14			1	
67		61+79.37	RT			0.14			1	
67 67		62+12.71 62+62.30	LT LT			0.14			1	
67		63+21.23	LT			0.14			1	
67		63+62.80	LT			0.14			1	
67		64+34.91	LT			0.14			1	
67		64+88.91	LT			0.14			1	
67		65+88.82	LT			0.14			1	
67		66+44.43	LT			0.14			1	
		тот	AL THIS COLU	JMN		151		12015	22	

						304	608	608	SPCL	
SHEET NO.	REFERENCE NO.			ATION		AGGREGATE BASE (4" UNDER WALK)	4" CONCRETE WALK	5" CONCRETE WALK	SPECIAL - CONCRETE BOXOUT	
		FRO		1	0				-	
		STATION	SIDE	STATION	SIDE	CY	SF	SF	EA	
67		62+29.37	RT			0.14			1	
68		66+95.21	LT			0.14			1	
68		67+55.77	LT			0.14			1	
68		68+05.36	LT			0.14			1	
68		68+60.36	LT			0.14			1	
68		68+66.52	LT			0.14			1	
68		70+17.95	LT			0.14			1	
68		71+40.54	LT			0.14			1	
68		71+90.57	LT			0.14			1	
68		72+40.57	LT			0.14			1	
68		72+81.54	LT			0.14			1	
68		73+67.48	LT			0.14			1	
68		74+08.15	LT			0.14			1	
68 68		74+56.80	LT LT			0.14			1	
68		75+71.16 76+21.02				0.14			1	
68		76+21.02 77+06.37	LT LT			0.14			1	
68		77+56.37	LT			0.14			1	
00		77100.07				0.11			'	
69		78+76.32	LT			0.14			1	
69		79+25.77	LT			0.14			1	
69		79+76.16	LT			0.14			1	
69		80+26.57	LT			0.14			1	
69		80+75.21	LT			0.14			1	
69		81+26.21	LT			0.14			1	
69		81+76.53	LT			0.14			1	
69		82+42.47	LT			0.14			1	
69		83+22.71	LT			0.14			1	
69		84+21.71	LT			0.14			1	
69		85+27.37	LT 			0.14			1	
69		86+15.42	LT			0.14			1	
69 69		86+87.45 88+56.38	LT LT			0.14			1	
69		89+05.38	LT			0.14			1	
30		33100.00	<u> </u>			5.17			'	
70		89+67.34	LT			0.14			1	
70		90+61.98	LT			0.14			1	
70		91+02.60	LT			0.14			1	
70		91+47.17	LT			0.14			1	
70		91+86.61	LT			0.14			1	
70		92+20.61	LT			0.14			1	
70		92+71.33	LT			0.14			1	
70		93+52.53	LT			0.14			1	
70		94+02.32 94+62.32	LT			0.14			1	
70		94+02.32	LT			0.14			1	
		тот	AL THIS COLU	JMN		6			43	
		TOTAL	FROM LEFT C	OLUMN		151		12015	22	
		TOTAL FR	OM FAR LEFT	COLUMN		236	505	18571		
		TOTAL CARRII	ED TO GENER	AL SUMMARY		393	505	30586	65	





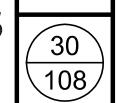
WALK SUB-SUMMARY

						304 —	608	60
SHEET NO.	REFERENCE NO.			ATION		 AGGREGATE BASE (4" UNDER WALK)	DETECTABLE WARNING	CUBB BAMP
		FRO			0			_
C7	CD 1	STATION 50.00.14	SIDE	STATION	SIDE	CY	SF	S
67 67	CR-1 CR-41	56+30.14 56+48.88	RT LT	56+63.26	RT LT	1.58 0.59	32 12	12
67	CR-40	56+59.45	LT	56+64.63	LT	0.39	8	4
67	CR-39	56+86.31	LT	57+00.95	LT	1.64	10	13
67	CR-2	56+94.52	RT	57+07.17	RT	0.67	10	5
67	CR-38	57+04.97	LT	57+18.84	LT	0.78	12	6
67	CR-3	57+17.61	RT	57+33.35	RT	0.70	10	5
67	CR-37	57+49.48	LT	57+59.98	LT	1.07	21	8
67	CR-36	61+31.11	LT	61+53.11	LT	1.53	32	12
67	CR-4	61+31.69	RT	61+48.52	RT	0.74	10	6
67	CR-35	61+90.02	LT	62+02.21	LT	0.65	10	5
67 67	CR-5 CR-6	62+47.33 62+86.22	RT RT	62+57.46 62+95.07	RT RT	0.62	10	5 7
67	CR-6	62+86.22	LT	62+95.07	LT	1.56	18	12
67	CR-7	63+05.92	RT	63+11.92	RT	0.37	10	3
67	CR-33	66+23.98	LT	66+40.98	LT	1.85	10	15
67	CR-8	66+29.07	RT	66+35.07	RT	0.49	10	4
68	CR-9	66+52.47	RT	66+60.63	RT	0.85	18	6
68	CR-10	66+92.31	RT	67+00.81	RT	0.86	18	7
68	CR-11	69+85.82	RT	69+92.68	RT	0.78	18	6
68 68	CR-12 CR-32	70+27.63 70+37.23	RT LT	70+38.99 70+54.23	RT LT	0.99 1.85	18	15
68	CR-13	70+37.23	RT	70+34.23	RT	0.51	10	4
68	CR-14	73+92.48	RT	73+97.12	RT	0.56	18	4
68	CR-15	74+28.54	RT	74+40.42	RT	1.06	18	8
68	CR-31	74+60.30	LT	74+77.30	LT	1.85	10	15
68	CR-16	74+65.80	RT	74+71.80	RT	0.38	10	3
68	CR-42	75+75.62	RT	75+82.91	RT	0.74		6
68	CR-43	76+11.91	RT	76+18.05	RT	0.77		6
68	CR-30	77+73.78	LT	77+92.45	LT	1.23	27	10
68	CR-17	77+73.85	RT	77+85.35	RT	0.59	10	4
69	CR-44	78+19.93	RT	78+26.91	RT	0.69		5
69	CR-29	78+34.18	LT	78+45.25	LT 	0.69	10	5
69	CR-45	78+51.11	RT	78+57.83	RT	0.78		6
69 69	CR-46 CR-47	78+93.81 79+23.82	RT RT	78+99.82 79+29.89	RT RT	0.67		5
69	CR-28	87+17.73	LT	87+47.31	LT	3.37	36	27
69	CR-18	87+17.73	RT	87+33.63	RT	0.59	10	4
69	CR-48	88+03.62	LT	88+14.47	LT	0.79		6
69	CR-27	88+05.87	LT	88+26.48	LT	2.21	14	17
70	CR-19	90+53.39	RT	90+64.87	RT	1.09	10	8
70	CR-20	90+90.58	RT	91+03.06	RT	1.09	10	8
70	CR-26	91+14.70	LT	91+31.01	LT	1.91	10	15
70	CR-21	91+16.53	RT	91+25.62	RT	1.11	10	9
70	CR-22	91+78.08	RT	91+90.93	RT	1.09	10	8
70 70	CR-25 CR-24	91+89.09 92+69.99	LT LT	92+01.11 92+86.02	LT LT	1.85 1.54	10 24	15
70	CR-23	92+74.92	RT	92+80.92	RT	0.49	10	4
		TOTAL CARRIE	ED TO GENER	RAL SUMMARY		50	584	40

						204	450	C00	600	
						304	452 Ш сс	608	608	
SHEET NO.	REFERENCE NO.		LOCA	ATION		AGGREGATE BASE (4" UNDER WALK)	3" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 (UNDER WALK PAVERS)	SPECIAL - MISC.: 2-1/4" BRICK WALKWAY PAVERS	SPECIAL - MISC.: BRICK BOX FORM	
			ОМ	TO		-				
		STATION	SIDE	STATION	SIDE	CY	SY	SF	SF	
67 67		55+68.15 55+81.04	LT RT	55+95.15 56+08.04	LT RT	0.99	9	80	80 80	
67		56+37.69	LT	56+49.18	LT	1.14	10	92	92	
67		57+33.35	RT	57+40.00	RT	0.33	3	27	27	
67		57+81.00	RT	58+08.00	RT	0.99	9	80	80	
67		58+36.15	RT	58+63.15	RT	0.99	9	80	80	
67		58+86.15	RT	59+13.15	RT	0.99	9	80	80	
67		58+16.79	RT	58+31.79	RT	1.48	13	120	120	
67		58+86.15	LT	59+13.15	LT	0.99	9	80	80	
67		59+63.84	RT	59+73.84	RT	0.49	4	40	40	
67 67		59+89.14 60+14.84	LT RT	60+16.14 60+41.84	LT RT	0.99	9	80 80	80 80	
67		60+61.51	LT	60+88.51	LT	0.99	9	80	80	
67		60+65.38	RT	60+92.38	RT	0.99	9	80	80	
67		61+14.69	RT	61+24.69	RT	0.49	4	40	40	
67		61+65.87	RT	61+92.87	RT	0.99	9	80	80	
67		62+02.21	LT	62+26.21	LT	0.84	8	68	68	
67		62+15.87	RT	62+42.87	RT	0.94	8	76	76	
67		62+48.92	LT	62+58.57	LT	0.49	4	40	40	
67		63+24.74	LT	63+34.74	LT	0.49	4	40	40	
67 67		63+49.31 64+38.43	LT LT	63+59.31 64+48.43	LT LT	0.49	4	40	40	
67		64+92.43	LT	65+02.43	LT	0.49	4	40	40	
67		65+92.34	LT	66+02.34	LT	0.49	4	40	40	
67/68		66+47.94	LT	66+57.94	LT	0.49	4	40	40	
68		66+81.70	LT	66+91.70	LT	0.49	4	40	40	
68		67+42.29	LT	67+69.29	LT	0.99	9	80	80	
68		67+74.58	RT	67+89.58	RT	1.21	11	98	98	
68 68		67+91.86 68+46.86	LT LT	68+01.86 68+73.86	LT LT	0.49	9	40 80	40 80	
68		68+90.54	LT	69+22.54	LT	0.99	7	64	64	
68		69+53.02	LT	69+80.02	LT	0.99	9	80	80	
68		70+03.38	LT	70+31.45	LT	0.99	9	80	80	
68		71+27.04	LT	71+54.04	LT	0.99	9	80	80	
68		71+77.07	LT	72+04.07	LT	0.99	9	80	80	
68		72+27.07	LT	72+54.07	LT	0.99	9	80	80	
68		72+68.04	LT	72+78.04	LT	0.49	4	40	40	
68		73+53.98	LT	73+80.98	LT	0.99	9	80	80	
68 68		73+94.65 74+21.65	LT LT	74+21.65 74+43.30	LT LT	0.99	9 4	80 40	80 40	
68		74+21.65 75+10.77	RT	74+43.30 75+25.77	RT	1.21	11	98	98	
68		75+74.66	LT	75+84.66	LT	0.49	4	40	40	
68		76+07.52	LT	76+34.52	LT	0.99	9	80	80	
68		76+51.45	LT	76+83.45	LT	0.79	7	64	64	
68		76+92.87	LT	77+19.87	LT	0.99	9	80	80	
68		77+42.87	LT	77+69.87	LT	0.99	9	80	80	
68		77+51.35	RT	77+66.35	RT	1.21	11	98	98	
68		77+69.87	LT	77+84.86	LT	1.84	17	149	149	
69		78+41.20	LT	78+58.32	LT	2.44	22	198	198	
69		78+62.82	LT	78+89.82	LT	0.99	9	80	80	
69		79+12.27	LT	79+39.27	LT	0.99	9	80	80	
69		79+62.66	LT	79+89.66	LT	0.99	9	80	80	
69		80+13.07	LT	80+40.07	LT	0.99	9	80	80	
69		80+61.71	LT	80+71.71	LT	0.49	4	40	40	
		TO	TAL THIS COLU	IMN		48	435	3912	3912	

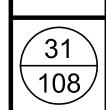
70 70 70 70 70 70 70 70 70 70	STATION 81+12.71 81+63.03 82+45.97	SIDE LT	TC		AGGREGATE BASE (4" UNDER WALK)	3" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 (UNDER WALK PAVERS)	SPECIAL - MISC.: 2-1/4" BRICK WALKWAY PAVERS	SPECIAL - MISC.: BRICK BOX FORM	
69 69 69 69 69 69 69 69 69 69 69 69 69 70 70 70 70 70 70 70 70 70 70 70 70 70	81+12.71 81+63.03 82+45.97				CY			SF	
69 69 69 69 69 69 69 69 69 69 69 69 69 70 70 70 70 70 70 70 70 70 70 70 70 70	81+63.03 82+45.97		STATION 81+39.71	SIDE	0.99	SY 9	SF 80	80	
69 69 69 69 69 69 69 69 69 69 69 69 69 70 70 70 70 70 70 70 70 70 70 70 70 70	82+45.97	LT	81+90.03	LT	0.99	9	80	80	
69 69 69 69 69 69 69 69 69 69 69 69 70 70 70 70 70 70 70 70 70 70 70 70 70		LT	82+55.97	LT	0.33	4	40	40	
69 69 69 69 69 69 69 69 69 70 70 70 70 70 70 70 70 70 70 70 70 70	83+26.21	LT	83+36.21	LT	0.49	4	40	40	
69 69 69 69 69 69 69 70 70 70 70 70 70 70 70 70 70 70 70 70	84+08.21	LT	84+35.21	LT	0.99	9	80	80	
69 69 69 69 69/70 70 70 70 70 70 70 70 70 70	85+14.37	LT	85+40.37	LT	0.94	8	76	76	
69 69 69 69/70 70 70 70 70 70 70 70 70 70	86+01.92	LT	86+28.92	LT	0.98	9	79	79	
69 69 69/70 70 70 70 70 70 70 70 70 70 70	86+73.95	LT	87+00.95	LT	0.99	9	80	80	
69 69/70 70 70 70 70 70 70 70 70 70 70 70 70 7	87+00.13	RT	87+15.13	RT	1.21	11	98	98	
70 70 70 70 70 70 70 70 70 70 70	88+42.88	LT	88+52.88	LT	0.49	4	40	40	
70 70 70 70 70 70 70 70 70 70	88+93.88	LT	89+01.88	LT	0.40	4	32	32	_
70 70 70 70 70 70 70 70 70 70	89+27.67	LT	89+55.67	LT	0.69	6	56	56	+
70 70 70 70 70 70 70 70 70 70	89+55.67	LT	89+78.84	LT	0.80	7	65	65	_
70 70 70 70 70 70 70 70	90+48.34	LT	90+75.22	LT	0.80	9	80	80	
70 70 70 70 70 70 70	90+88.17	LT	92+25.05	LT	8.41	76	681	681	-
70 70 70 70 70	90+88.93	LT	91+15.58	LT	0.99	9	80	80	
70 70 70 70	91+34.32	LT	91+57.65	LT	0.96	9	78	78	
70 70 70	91+73.79	LT	92+11.07	LT	7.36	66	596	596	
70 70	91+75.60	LT	91+95.45	LT	0.84	8	68	68	
70	92+10.88	LT	92+20.21	LT	0.49	4	40	40	
	92+73.56	LT	92+70.75	LT	1.02	9	83	83	
	93+56.03	LT	93+66.03	LT	0.49	4	40	40	
70 70	93+88.82 94+65.82	LT LT	94+15.82 94+75.82	LT LT	0.99	9	80 40	80 40	
									\perp
	ТО	ΓAL THIS COLU	JMN		33	301	2712	2712	





WALK SUB-SUMMARY

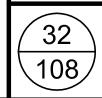




REVISIONS
CONSTRUCTION BIDDING SET
ADDENDUM NO. 1

MISCELLANEOUS SUB-SUMMARY

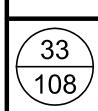




REVISIONS
CONSTRUCTION BIDDING SET
ADDENDUM NO. 1

SANITARY SUB-SUMMARY





WATER SUB-SUMMARY

E BY /14 GEA 14 GEA

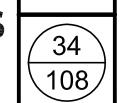
REVISIONS
CONSTRUCTION BIDDING SET
ADDENDUM NO. 1

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				614	614	614	614	614	614	614	614	614	614	614	614
SHEET NO.	PHASE	LOCA	ATION	WORK ZONE SPEED LIMIT SIGN	MAINTAINING TRAFFIC, MISC.: BUSINESS SIGN	WORK ZONE MARKING SIGN	WORK ZONE CENTER LINE, CLASS I	WORK ZONE CENTER LINE, CLASS II	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS I	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	WORK ZONE EDGE LINE, CLASS I	WORK ZONE STOP LINE, CLASS I	WORK ZONE ARROW, CLASS I	RESUME LEGAL SPEED SIGN
		FROM	TO	EA	EA	EA	MILE	MILE	MILE	FT	FT	MILE	FT	EA	EA
		STATION MAHONING RO	STATION OAD N.E. S.R. 153												
		55+11.75 55+36.18	55+36.18 56+53.86												
		56+27.06	56+37.69												
		56+46.12	56+54.06												
		56+27.60	57+20.26												
		57+20.26	57+39.41												
		57+65.84	61+53.11												
		61+53.11	61+70.81												
		61+88.29	61+89.77												
		61+89.77	77+94.85												
		77+94.85	77+94.49												
		61+89.77	67+21.76												
		77+61.78	77+73.13												
		78+43.12	78+64.81												
		78+30.94 87+64.84	87+64.84 87+74.02												
		82+33.97 83+14.21	82+90.21 83+19.21												
		83+74.21	83+79.21												
		84+03.21	84+47.60												
		84+60.09	84+85.42												
		85+09.42	85+45.42												
		85+69.42	86+25.56												
		86+36.00	86+40.71												
		86+65.18	86+70.00												
		88+11.69	88+15.71												
		88+59.88	88+64.88												
		88+88.88	89+01.47												
		89+78.84	89+88.84												
		90+24.73	90+34.53												
		TOTAL THIS COLU	JMN												
				1	1	I	1			1				I	1

				614	614	614	614	614	614	614	614	614	614	614	614
				LIMIT	MISC.:	N IGN	я́ Щ	Д Щ	Щ	: CHANNELIZING , CLASS I	S ⊢ N ⊢	Щ	шı́	CLASSI	SIGN
					O. Z. ≥ ×	WORK ZONE MARKING SIGN	WORK ZONE CENTER LINE, CLASS I	WORK ZONE CENTER LINE CLASS II	CENTER LINE, I, 642 PAINT	JELIZ –	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	WORK ZONE EDGE LINE CLASS I	> LINE,	, CL	ED 8
		LOCA	ATION	ZONE SPEED I SIGN	MAINTAINING TRAFFIC , BUSINESS SIGN	ARKI	ENTE SS -	ENTE SS II	ENTE	HANN	1ANN II, 64	EDGI SS I	ZONE STOP I CLASS I	ARROW,	SPEED
S.				NE 9	IG TE	Ĭ N	NE C CLAS	NE C	NE C	유 유 의 의	VE CF VSS I	ONE	ONE		EGAL
<u> </u>)E			X ZC	AININ BUS	ZOZ	K 20	K 20	K ZONE LASS III,	ZOZ	(ZOI)	XK Z	RK Z	ZON	MEL
SHEET	PHASI			WORK	AINT/	VORK	MORI	MORI	WORK CLA	WORK ZONE (VORK	WO	WORK	WORK ZONE	RESUME LEGAL
S	₫.	FROM	ТО	EA	≧ EA	S EA	MILE	MILE	MILE	> FT	> FT	MILE	FT	≥ EA	ΕA
		STATION	STATION		LA	LA	IVIILL	IVIILL	IVIILL	1 1	1 1	IVIILL			
		MAHONING RO	AD N.E. S.R. 153												
		55+11.75 55+36.18	55+36.18 56+53.86												
		33730.10	30+33.00												
		56+27.06	56+37.69												
		56+46.12	56+54.06												
		30770.12	30+04.00												
		56+27.60	57+20.26												
		57+20.26	57+39.41												
		57+65.84	61+53.11												
		61+53.11	61+70.81												
		61+88.29	61+89.77												
		61+89.77	77+94.85												
		77+94.85	77+94.49												
		61+89.77	67+21.76												
		77+61.78	77+73.13												
		78+43.12	78+64.81												
		78+30.94	87+64.84												
		87+64.84	87+74.02												
		82+33.97	82+90.21												
		83+14.21	83+19.21												
		20.74.04	00 70 04												
		83+74.21	83+79.21												
		84+03.21	84+47.60												
		84+60.09	84+85.42												
			55=												
		85+09.42	85+45.42												
		85+69.42	86+25.56												
		86+36.00	86+40.71												
		86+65.18	86+70.00												
		88+11.69	88+15.71												
		88+59.88	88+64.88												
		88+88.88	89+01.47												
		89+78.84	89+88.84												
		90+24.73	90+34.53												
		TOTAL THIS COLU													
		TOTAL FROM LEFT CO													
		TOTAL CARRIED TO GENER.	AL SUMMARY												



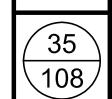


MAINTENANCE OF TRAFFIC SUB-SUMMARY

								661	661	661	661	661	662	SPCL	
								Щ.	EÉ,	EÉ,	Ë,	Щ.			
	NO.							CALIPER, AC	; 2" CALIPER, MAPLE	DECIDUOUS TREE, 2" CALIPER, SCHUBERT CHERRY	, 2" CALIPER, r PEAR	DECIDUOUS TREE, 2" CALIPER, CLEVELAND SELECT PEAR	ڻ <u>ا</u>	ATE	
ON				1.00	A TION!			2" C/	2" C/ //APL	2" C/ HERF	2" C/ PEA	2" C/	WATERING	GRATE	
	NC			LOC	ATION			ZEE,	REE,	REE,	tee, RAT	REE, SELE		TREE	
SHEET	REFERENCE							VUOUS TREE, 2" C IVORY SILK LILA	IS TF VALL	JS TF JBEF	IS TE	JS TE	LANDSCAPE	1	
S	EFE								NUS	UOL SCHL	ARIS	UOL VEL/	NDS	SPECIAL	
	Ж.							DECIDUOUS IVOR	DECIDUOUS TREE SUN VALLEY	ECID	DECIDUOUS TREE, ARISTOCRAT	ECID	_ ₹	S	
		CTATION	FROM	CIDE	CTATION	TO	CIDE						CAL	ГА	
67		STATION	OFFSET	SIDE	STATION 55+94.54	OFFSET 24.5	SIDE RT	EA 1	EA	EA	EA	EA	GAL 200	EA 1	
67		55+81.65	24.50	LT		-			1				200	1	
67		56+31.94	34.30	LT						1			200		
67 67		56+34.57	42.50	LT	57+43.50	18.5	RT			1		1	200	1	
67					57+94.50	18.5	RT	1				ı	200	1	
67					58+49.67	18.5	RT		1				200	1	
67					58+99.65	18.5	RT			1			200	1	
67 67		58+99.65	24.50	LT	59+77.34	18.5	RT				1	1	200	1	
67		60+02.64	24.50	LT	39+77.34	10.5	111	1				ı	200	1	
67					60+28.34	18.5	RT		1				200	1	
67					60+78.88	18.5	RT			1			200	1	
67 67		60+75.01	24.50	LT	61+28.19	18.5	RT				1	1	200	1 1	
67					61+79.37	18.5	RT	1				ı	200	1	
67		62+12.71	24.50	LT					1				200	1	
67					62+29.37	18.5	RT			1			200	1	
67 67		62+62.30 63+21.23	24.60 24.30	LT LT							1	1	200	1	
67		03+21.23	24.50	LI	63+43.20	18.8	RT	1				I	200	ı	
67		63+62.80	24.00	LT					1				200	1	
67					63+98.51	19.2	RT			1			200		
67 67		64+34.91	23.50	LT	64+48.50	19.6	RT				1	1	200	1	
67		64+88.91	23.10	LT	04+40.50	19.0	111	1				ı	200	1	
67					64+98.50	20.0	RT		1				200		
67			20.22		65+48.50	20.4	RT			1			200		
67 67		65+88.82	22.30	LT	65+98.50	20.7	RT				1	1	200	1	
67		66+44.43	21.90	LT	00100.00	20.7	111	1				'	200	1	
68		66+95.21	21.50	LT					1				200	1	
68 68		67+55.77 68+05.36	21.50 21.50	LT LT						1	1		200	1 1	
68		337333			68+50.36	21.5	RT				-	1	200		
68		68+60.36	21.50	LT				1					200	1	
68		60.66.50	21.50	IT	69+37.05	21.5	RT		1	1			200	1	
68 68		69+66.52 70+17.95	21.50 21.60	LT LT							1		200 200	1 1	
68					70+92.54	21.5	RT					1	200		
68		71+40.54	21.50	LT			_	1					200	1	
68 68		71+90.57	21.50	LT	71+42.61	21.5	RT		1	1			200	1	
68		/ I+3U.3/	21.00	LI	71+92.29	21.5	RT			'	1		200	1	
68		72+40.57	21.50	LT								1	200	1	
68			·		72+42.30	21.5	RT	1					200		
68 68		72+81.54	21.50	LT	73+17.20	21.5	RT		1	1			200	1	
68		73+67.48	21.50	LT	70717.20	<u></u>	111			<u>'</u>	1		200	1	
68		74+08.15	21.50	LT								1	200	1	
68		74+56.80	21.50	LT				1					200	1	
68 68		75+71.16 76+21.02	21.50 21.50	LT LT					1		1		200	1 1	
68		1 UTL 1.UL	21.00	LI	76+48.77	21.5	RT				1		200	1	
68		77+06.37	21.50	LT								1	200	1	
			TC	OTAL THIS SHE	ΈΤ			11	11	11	11	11	11000	39	

								661	661	661	661	661	662	SPCL			
													002	OI OL			
	_							;, 2" CALIPER,	;, 2" CALIPER, MAPLE	DECIDUOUS TREE, 2" CALIPER, SCHUBERT CHERRY	DECIDUOUS TREE, 2" CALIPER, ARISTOCRAT PEAR	ALIPER, PEAR	(5				
	REFERENCE NO.							ALIF C	l ALI	ALIF ™	ALIF IR	ALIF PE#	LANDSCAPE WATERING	GRATE			
Ö.	Ш				4.71011			2" C	2" C	2" C ERF	2" C	2" C	#	GR			
Z	2			LOC	ATION			デ デ ハ	H, ≻. ≥	, H.	AT.	;; 	M W	TREE			
SHEET	E E							TRE	13E	TRE TRE	TRE OCR	TRE D SI	A H	1			
出	Щ							US	US V	US	US.	US	SCA	IAL			
(O)	Ш							On ≥	OUC SUN) SC +) ARII) NEI	ND	SPECIAL			
	_ Œ							DECIDUOUS TREE, IVORY SILK	DECIDUOUS TREE SUN VALLEY			DECIDUOUS TREE, 2" C CLEVELAND SELECT	_ 5	S			
			FROM			TO											
		STATION	OFFSET	SIDE	STATION	OFFSET	SIDE	EA	EA	EA	EA	EA	GAL	EA			ë
68					77+13.16	21.5	RT	1					200				ATEC A A A ED:
68		77+56.37	21.50	LT					1				200	1			CALCULATED: GEA CHECKED:
																	S O
69		78+76.32	21.50	LT						1			200	1			
69					78+88.16	21.5	RT				1		200				
69		79+25.77	21.50	LT								1	200	1			
69		79+76.16	21.50	LT				1					200	1			
69		80+26.57	21.50	LT					1				200	1			
69 69		80+75.21	21.50	LT	80+83.61	21.5	RT			1	1		200	1			
69		81+26.21	21.50	LT	80+63.61	21.5	nı				1	1	200	1			
69		01+20.21	21.50	L1	81+33.61	21.5	RT	1				'	200	'			I <
69		81+76.53	21.50	LT	01100.01	21.0	111	<u> </u>	1		1		200	1			1 2 6
69		01170.00	21.00		81+83.61	21.5	RT		<u> </u>	1			200	'		_	188
69					82+28.75	21.5	RT			<u> </u>	1		200				O ≥
69		82+42.47	21.50	LT	02120.70	21.0	111				'	1	200	1			လ ≥
69		92112117			83+08.86	21.5	RT	1				<u> </u>	200				Ιӹ⊃
69		83+22.71	21.50	LT	33133.33	2110	111	1	1				200	1		_	一門公
69					83+91.22	21.5	RT			1			200				STREETSCAPE SUB-SUMMARY
69		84+21.71	21.50	LT							1		200	1			
69					84+69.31	22.8	RT					1	200				
69		85+27.37	19.5	LT				1					200	1			
69					85+69.26	23.5	RT		1				200				
69		86+15.42	19.5	LT						1			200	1			
69		86+87.45	19.5	LT							1		200	1			
69					87+38.13	23.5	RT					1	200				
69					87+83.13	23.5	RT	1					200				
69		88+56.38	19.5	LT	00.07.00	05.5	RT		1	1			200	1			
69 69		89+05.38	19.5	LT	88+67.62	25.5	nı			1	1		200	1			BY GEA GEA
0.5		03+03.00	10.0								<u> </u>		200	'			DATE /21/14 5/7/14
70					89+66.62	36.5	RT					1	200				4/21/5/7/
70		89+67.34	19.5	LT				1					200	1			4 ,
70		90+61.98	22.0	LT					1				200	1			
70		91+02.60	27.2	LT						1			200	1			
70		91+47.17	39.8	LT							1		200	1			
70		91+86.61	69.8	LT								1	200	1			
70		92+20.61	107.0	LT				1					200	1			REVISIONS BIDDING SET
70					92+63.43	22.1	RT		1				200				
70		92+71.33	71.6	LT	_			1		1			200	1			
70		00 70 7	22.7		93+14.18	22.1	RT				1		200			_	RUC.
70		93+52.53	23.5	LT	00 57.00	00.4	DT					1	200	1		_	CONSTRUCTION ADDENDUM NO.
70 70		94+02.32	23.5	LT	93+57.08	22.1	RT	1	1				200	1			CC
70		94+02.32	23.5	LI	94+14.18	22.0	RT		1	1			200	1			
70		94+62.32	23.5	LT	94+14.10	22.0	111			<u>'</u>	1		200	1			Lin
70		01102.02	20.0								<u> </u>		200	'		_	世
																	198
																	1 < .
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		.	TO	TAL THIS COL	LIMNI		_	9	0	9	9	8	8800	26			
			10	INL INIO UULI	OIVIIN			9	9	9	9	0	0000	∠0			
			TOTAL	. FROM LEFT C	OLUMN			11	11	11	11	11	11000	39			$I \circ \vdash$
			. 3 17 (2							.,	<u> </u>	''	1.550				¥ is
			TOTAL CARR	RIED TO GENER	RAL SUMMARY			20	29	29	29	27	28600	91			Σ
																	1



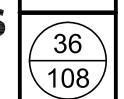


STREETSCAPE SUB-SUMMARY

							630	630	630	630	630	630	630	630
SHEET NO.	REFERENCE NO.	LOCATI	ON	SIDE	CODE	SIZE (INCHES)	GROUND MOUNTED SUPPORT, NO. 3 POST, 730.016, SQUARE, AS PER PLAN	STREET NAME SIGN SUPPORT, NO. 3 POST, 730.016, SQUARE, AS PER PLAN	SIGN, DOUBLE FACED, STREET NAME	SIGN, STOP, AS PER PLAN	SIGN, MISC., AS PER PLAN	SIGN HANGER ASSEMBLY, MAST ARM	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN, FLAT SHEET
							FT	FT	EA	EA	EA	EA	EA	SF
	1		57+02.8	LT	SPECIAL (EXIST)	24" X 12"			1		2			
	2		57+04.3	LT	R23	30" X 30"			1		6.25			
	3		57+09.6	LT	D3-1	VAR X 8"			1		1.3	1		
	<u>4</u> 5		57+12.5 57+15.7	RT RT	D3-1 S1-1	VAR X 8" 30" X 30"			ı		1.3 6.25	1		
	<u>5</u>		57+15.7	RT	W16-7P	24" X 12"		1			2			
	6		57+71.0	LT	S1-1	30" X 30"		•		1	6.25			
	6		57+71.0	LT	W16-7P	24" X 12"				1	2			
	7		58+13.6	RT	R7-1-12	12" X 18"				1	1.5			
	8		58+63.5	LT	R7-1-12	12" X 18"				1	1.5			
	9		58+75.6	RT	R3-H9J	6" X 24"					1			
	9		58+75.6	RT	R3-9B	24" X 36"	1				6			
	10		59+21.5	LT	R3-H9K	6" X 24"					1			
	10		59+21.5	LT	R3-9B	24" X 36"	1				6			
	11		60+17.5	LT	S1-1	30" X 30"		4			6.25			
	11 12		60+17.5 60+17.6	LT RT	W16-7P R7-1-12	24" X 12" 12" X 18"		1		1	1.5			
	13		60+51.5	LT	R7-1-12	12" X 18"				1	1.5			
	14		61+39.5	LT	D3-1	VAR X 8"				1	1.3	1		
	15		61+53.2	LT	R1-1-30	30" X 30"	1			•	6.25	<u> </u>		
	16		62+09.6	RT	R7-1-12	12" X 18"				1	1.5			
	17		62+90.9	RT	R1-1-30	30" X 30"	1				6.25			
	18		63+06.5	RT	R1-1-30	30" X 30"	1				6.25			
	19		63+09.6	RT	D3-1	VAR X 8"				1	1.3	1		
	19		63+09.6	RT	R3-9B	24" X 36"				1	6			
	20		63+30.8	LT	R7-1-12	12" X 18"				1	1.5			
	21		64+15.1	RT	R7-1-12	12" X 18"				1	1.5			
	22		66+01.4 66+22.9	LT RT	R7-1-12 R7-1-12	12" X 18" 12" X 18"				1	1.5 1.5			
	24		67+05.1	RT	R1-1-30	30" X 30"	1			1	6.25			
	25		67+29.2	RT	D3-1	VAR X 8"	•			1	1.3	1		
	26		68+06.5	LT	R3-9B	24" X 36"	1				6			
	27		68+44.1	RT	R3-9B	24" X 36"				1	6			
	28		69+00.5	LT	R7-1-12	12" X 18"				1	1.5			
	29		70+04.5	LT	SPECIAL (EXIST)	12" X 18"				1	1.5			
	30		70+30.7	RT	R1-1-30	30" X 30"	1				6.25			
	31		70+69.8	RT	D3-1	VAR X 8"				1	1.3	1		
	31 32		70+69.8 71+70.6	RT RT	R3-9B R7-1-12	24" X 36" 12" X 18"				1	6 1.5			
	32		71+93.5	LT	R7-1-12	12 X 18 12" X 18"				1	1.5			
	34		72+72.0	RT	SPECIAL (EXIST)	12" X 18"				1	1.5			
	35		73+72.8	RT	R7-1-12	12" X 18"				1	1.5			
	36		74+34.1	RT	R1-1-30	30" X 30"	1				6.25			
	37		74+57.5	RT	D3-1	VAR X 8"					1.3	1		
	37		74+57.5	RT	W14-2	30" X 30"		1			6.25			
	38		74+81.5	LT	R7-1-12	12" X 18"				1	1.5			
	39		75+15.0	RT	R3-9B	24" X 36"	1				6			
	40		75+73.4	RT	R7-1-12	12" X 18"				1	1.5			
	41		75+85.4	LT	R3-9B	24" X 36"				1	6			
	42		76+08.3 76+39.5	RT LT	R1-1-30	30" X 30"	1				6.25 1.5			
	43		76+39.5 76+77.4	LT	SPECIAL (EXIST) R7-1-12	12" X 18" 12" X 18"	I			1	1.5			
	44 45		76+77.4	RT	S1-1	30" X 30"				1	6.25			
	45		76+81.3	RT	W16-9P	24" X 12"				1	2			
	46		77+19.5	LT	R2-1	24" X 30"	1				5			
	47		77+72.9	RT	S1-1	30" X 30"	1				6.25			
	_		TOTAL THIS COLUMN	N			14	3	4	30	190	7		

							630	630	630	630	630	630	630	630
SHEET NO.	REFERENCE NO.	LOCATION	J	SIDE	CODE	SIZE (INCHES)	GROUND MOUNTED SUPPORT, NO. 3 POST, 730.016, SQUARE, AS PER	STREET NAME SIGN SUPPORT, NO. 3 POST, 730.016, SQUARE, AS PER PLAN	SIGN, DOUBLE FACED, STREET NAME	SIGN, STOP, AS PER PLAN	SIGN, MISC., AS PER PLAN	SIGN HANGER ASSEMBLY, MAST ARM	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN, FLAT SHEET
							FT	FT	EA	EA	EA	EA	EA	SF
	47		77+72.9	RT	SPECIAL (EXIST)	12" X 18"					1.5			
	48		77+76.1	LT	S1-1	30" X 30"	1				6.25			
	49		77+90.4	LT	S1-1	30" X 30"	1				6.25			
	50		78+37.8	LT	R2-1	24" X 30"	1				5			
	51		78+96.4	RT	R2-1	24" X 30"	1				5			
	52		79+34.4	RT	R7-1-12	12" X 18"				1	1.5			
	53		79+58.2	LT	S1-1	30" X 30"				1	6.25			
	53		79+58.2	LT	W16-9P	24" X 12"				1	2			
	54		80+26.4	RT	R3-9B	24" X 36"				1	6			
	55		81+50.2	LT	R7-1-12	12" X 18"				1	1.5			
	56 57		82+11.3	RT	R7-1-12	12" X 18"				1	1.5			
	57 58		83+42.2 84+34.2	LT LT	R3-9B R7-1-12	24" X 36" 12" X 18"				1	6 1.5			
	58 59		84+34.2 84+87.0	RT	R7-1-12	12" X 18"				1	1.5			
	60		85+77.3	RT	R3-9B	24" X 36"				1	6			
	61		86+19.4	LT	R7-1-12	12" X 18"				1	1.5			
	62		87+46.6	LT	R1-1-30	30" X 30"	1			-	6.25			
	63		87+54.5	RT	D3-1	VAR X 8"				1	1.3	1		
	63		87+54.5	RT	R7-1-12	12" X 18"				1	1.5			
	64		88+34.9	LT	D3-1	VAR X 8"				1	1.3	1		
	64		88+34.9	LT	SPECIAL (EXIST)	12" X 18"				1	1.5			
	65		88+50.3	RT	SPECIAL (EXIST)	12" X 18"				1	1.5			
	66		88+80.1	RT	R3-8B	48" X 30"		1			10			
	67		88+07.0	LT	R3-HJ9	6" X 24"					1			
	67		88+07.0	LT	R3-9B	24" X 36"		1			6			
	68		89+38.9	LT	R7-1-12	12" X 18"				1	1.5			
	69 70		89+41.2 90+11.4	RT RT	R7-1-12 R3-7R	12" X 18" 30" X 30"	1			1	1.5 6.25			
	70		90+76.8	RT	R1-2	36" X 36"	1				9			
			90+76.8	RT	R5-1	30" X 30"		2			6.25			
	72		91+19.8	LT	M3-4	24" X 12"					2			
	72		91+19.8	LT	M1-5	24" X 24"	1				4			
	73		93+80.0	LT	R7-1-12	12" X 18"				1	1.5			
	74		94+10.0	LT	R3-8	30" X 30"	1				6.25			
	74		94+10.0	LT	SPECIAL (EXIST)	12" X 18"					1.5			
		Τ/	OTAL THIS COLUMN											
			L FROM LEFT COLUM	/N										
				1										
		TC	OTAL THIS COLUMN				8	4		19	129	2		





SIGNAGE SUB-SUMMARY

						644	644	644	644	644	644
SHEET NO.	REFERENCE NO.			ATION		LANE ARROW	WORD ON PAVEMENT, 72"	DOTTED LINE, 4"	STOP LINE	CHANNELIZING LINE, 8"	CROSSWALK LINE
		FRC	M	Т)						
		STATION	SIDE	STATION	SIDE	EA	EA	FT	FT	FT	FT
75	CH	55+09.75	LT	56+53.36	LT					144	
75	CH	55+09.75	RT O#	56+31.70	RT		4			173	
75 75	W A	55+81.70 56+13.70	C/L			1	1				
75	S	56+31.70	RT	56+31.70	LT	'			23		
75	S	56+59.95	LT	56+67.81	LT				16		
75	 S	56+72.00	RT	56+88.43	RT				16		
75	S	57+18.86	LT	57+33.26	LT				16		
75	СН	57+73.45	LT	58+48.45	LT					75	
75	S	57+73.45	RT	57+73.45	LT	_	_	_	24		
75	Α	57+97.45	LT			1					
75	W	58+29.45	LT			_	1				
75	A	59+33.44	LT	59+63.44	LT	2					
75 75	A CW	60+53.44 61+36.61	LT LT	60+83.44 61+95.93	LT/RT	2					158
75	S	61+54.19	LT	61+72.23	LT				15		130
75	A	62+05.52	LT	62+35.55	LT	2			1.0		
75	CW	62+52.66	RT	62+89.43	RT						65
75	D	62+59.71	RT	62+69.38	RT			22			
75	S	62+72.38	RT	62+85.79	RT				13		
75	S	62+98.57	RT	62+98.91	RT				1		
75	CW	63+05.43	RT	63+17.70	RT						74
75	Α	63+22.55	LT	63+52.58	LT	2					
75	A	64+42.55	LT ·-	64+72.58	LT	2					
75 75	A CW	65+62.54 66+28.63	LT RT	65+92.57 66+35.90	LT LT	2					74
75	CVV	00+20.03	nı	00+33.90	LI						74
76	D	66+51.85	RT	66+71.31	RT			40			
76	S	66+75.95	RT	66+92.45	RT				17		
76	S	66+93.33	RT	66+98.46	RT				20		
76	Α	67+31.86	C/L	67+61.86	C/L	2					
76	Α	68+11.86	C/L	68+41.86	C/L	2					
76	D	69+83.74	RT	69+95.99	RT			28			
76 76	CW	69+92.00	RT	70+32.53	RT				10		78
76 76	S S	70+08.00 70+20.14	RT RT	70+24.85 70+27.64	RT RT				19 22		
76	CW	70+20.14	RT	70+27.64	LT						82
76	A	70+59.23	C/L	70+89.23	C/L	2					
76	Α	71+79.23	C/L	72+09.23	C/L	2					
76	Α	72+59.23	C/L	72+89.23	C/L	2					
76	CW	73+97.11	RT	74+32.04	RT						65
76	S	73+97.76	RT	74+10.55	RT				16		
76	CW	74+65.30	LT/RT	74+72.30	LT/RT					144	74
76	A	74+78.91	C/L	75+08.91	C/L DT	2					
76 76	A CH	75+90.16 75+97.41	RT RT	76+04.66 75+97.41	RT RT	2				55	
76	A	75+97.41 75+98.91	C/L	75+97.41 76+28.91	C/L	2				33	
76	CH	76+97.26	RT	77+73.35	RT	_				76	
76	W	77+08.15	C/L	- 72			1				
76	Α	77+40.15	C/L			1					
76	S	77+73.35	RT	77+73.35	RT		_	_	24		
76/77	CW	77+78.85	LT/RT	78+41.46	LT/RT						178
		TOT	AL THIS COLU	INANI		31	3	90	242	667	848

						644	644	644	644	644	644
SHEET NO.	REFERENCE NO.		LOC	ATION		LANE ARROW	WORD ON PAVEMENT, 72"	DOTTED LINE, 4"	STOP LINE	CHANNELIZING LINE, 8"	CROSSWALK LINE
		FRO	OM	To)						
		STATION	SIDE	STATION	SIDE	EA	EA	FT	FT	FT	FT
77	CW	77+91.53	LT	78+35.05	LT						44
77	S	77+94.05	LT 	78+13.76	LT 				20		
77 77	A CH	78+34.57 78+39.07	RT RT	78+46.57 78+40.63	RT RT	2				30	
77	S	78+56.32	RT	78+56.32	LT				24	30	
77	A	78+61.63	C/L	78+91.63	C/L	2					
77	Α	79+05.82	RT	79+17.82	RT	2					
77	СН	79+11.82	RT	79+60.46	RT					54	
77	Α	79+52.21	RT	79+68.71	RT	2					
77	Α	80+06.58	RT			1					
77	A	80+21.63	C/L	80+51.63	C/L	2					
77	A	81+81.63	C/L	82+11.63	C/L	2					
77 77	A A	83+41.63 85+01.63	C/L C/L	83+71.63 85+31.63	C/L C/L	2					
77	A	86+61.63	C/L C/L	86+91.63	C/L C/L	2					
77	CW	87+27.13	LT/RT	88+17.65	LT	_					225
77	S	87+49.95	LT	97+73.61	LT				24		
77	Α	88+43.88	RT	88+73.88	RT	2					
78	СН	89+52.59	RT	91+03.55	RT					302	
78	Α	89+52.59	RT			2					
78	W	89+84.59	RT			0	2				
78 78	A W	90+16.59 90+48.59	RT RT			2	1				
78	D	90+46.39	RT	90+75.85	RT		1	46			
78	CW	90+59.73	RT	90+96.60	RT						78
78	СН	90+65.57	RT	90+91.33	RT					31	
78	S	90+67.55	RT	90+97.55	LT				11		
78	W	90+80.64	RT				1				
78	CH	90+85.12	RT	91+52.46	RT					124	
78 78	CH A	90+94.97 90+99.01	RT RT	91+26.69	RT	1				58	
78		91+18.09	RT			1	1				
78	A	91+39.47	RT			1	•				
78	S	91+43.13	RT	91+52.46	RT				11		
78	S	91+56.73	RT	91+66.93	RT				12		
78	CW	91+99.73	LT	92+74.42	LT						171
78	S	92+08.83	LT	92+31.58	LT				28	10-	
78 78	CH A	92+22.24 92+39.81	LT LT	93+00.50	LT	1				137	
78 78	W	92+39.81	LT			1	1				
78	CW	92+74.42	LT	92+82.12	RT		•				88
78	Α	92+76.05	LT			1					
78	СН	92+86.92	LT	93+84.32	LT					97	
78	S	92+86.92	LT	92+86.92	RT				29		
78	W	92+94.16	LT				1				
78 78	A W	93+08.92	LT LT			1					
78	A	93+40.92 93+72.92	LT			1	1				
		TOT	TAL THIS COL	UMN		31	8	46	159	833	606
		TOTAL	FROM LEFT (COLUMN		31	3	90	242	667	848
		TOTAL CARRI	ED TO GENER	RAL SUMMARY		62	11	136	401	1500	1454

						642	64 ш
SHEET NO.	REFERENCE NO.			ATION		CENTER LINE	TBANSVERSE/DIAGONAL LINE
		FRO	DM	ТС)		
		STATION	SIDE	STATION	SIDE	MILE	F
75	СВ	55+09.75	LT	55+16.66	LT	0.01	
75	T	55+16.66	LT ·-	55+68.87	LT 		5
75 75	CS CB	55+16.66 55+09.75	LT RT	56+31.70 55+26.11	LT RT	0.02	
75	CS	55+26.11	RT	55+78.66	RT	0.01	
75	CS	56+18.31	LT/RT	56+72.00	LT/RT	0.01	
75	CS	57+33.26	LT	57+53.31	LT	0.01	
75	CS	57+73.45	RT	59+13.34	LT/RT	0.04	
75	Т	58+60.15	RT	59+13.34	RT		53
75	СВ	59+13.44	LT/RT	61+36+61	LT/RT	0.08	
75	СВ	61+72.23	LT	61+80.73	LT	0.01	
75	СВ	61+85.53	LT/RT	62+55.53	LT/RT	0.02	
75	CS	62+48.34	RT	62+59.71	RT	0.01	
75 75	CS CS	62+69.38 62+98.57	RT RT	62+72.38 63+23.54	RT RT	0.01	
75 75	CB	63+11.75	LT/RT	66+28.81	LT/RT	0.01	
75	CB	66+35.72	LT/RT	66+55.81	LT/RT	0.12	
, 0	02	00100112		30100101		0.02	
76	CS	66+44.95	RT	66+51.85	RT	0.01	
76	CW	66+59.15	RT	66+94.12	RT	0.02	
76	CS	66+71.31	RT	66+75.95	RT	0.01	
76	CS	66+93.33	RT	67+43.24	RT	0.01	
76	СВ	67+01.86	LT/RT	68+49.70	LT/RT	0.06	
76	CS T	68+49.70	LT/RT	69+78.42	LT/RT C/L	0.04	10
76 76	CS	68+49.70 69+75.36	LT RT	69+84.25 69+83.74	RT	0.01	19
76	CS	69+95.99	RT	70+08.00	RT	0.01	
76	CS	70+20.14	RT	70+42.50	RT	0.01	
76	СВ	70+49.23	LT/RT	73+40.22	LT/RT	0.11	
76	CS	73+30.76	LT	73+79.23	LT	0.01	
76	Т	73+30.76	LT	73+85.06	C/L		70
76	CS	73+40.22	RT	73+79.23	RT	0.01	
76 76	CS CB	74+10.55 74+48.91	RT LT/RT	74+26.34 74+65.30	RT LT/RT	0.01	
76	CB	74+72.30	LT/RT	74+03.30	LT/RT	0.02	
76	CS	76+41.82	LT/RT	77+73.55	LT/RT	0.03	
76	T	76+42.15	LT	76+85.44	LT		40
					_		_
77	CS	78+13.76	LT	78+13.61	LT	0.01	
77	СВ	78+56.32	LT/RT	87+27.13	LT/RT	0.16	
77	CS	87+73.61	LT, C/L	88+23.88	LT/RT	0.03	0
77 77	T CB	87+95.45 88+23.88	LT/RT	88+23.88 88+93.88	RT LT/RT	0.05	3
77	Т	88+93.88	LT LT	89+39.41	LT LT	0.03	5
77/78	CS	88+93.88	LT/RT	90+67.55	LT	0.04	
78	CS	90+45.40	RT	90+54.43	RT	0.02	
78	CS	90+75.84	RT	91+43.13	RT	0.02	
78	CS	92+21.24	LT	93+09.84	LT/DT	0.03	
78 78	CS T	92+86.92 93+94.40	RT RT	94+34.32 94+40.15	LT/RT LT	0.04	33
78	СВ	94+71.90	LT/RT	94+40.15	LT/RT	0.02	٥,
-					,,,,,		
				AL SUMMARY			



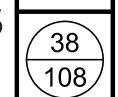


PAVEMENT MARKING SUB-SUMMARY

SHEET NO.	REFERENCE NO.		EDOM.	LOC	ATION	TO		AGGREGATE BASE (4" UNDER PAVEMENT, DRIVE AND CROSSWALK)	AGGREGATE BASE (6" UNDER BUS STOP AND PAVERS)	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 (BUS ST PAD)	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC FS (UNDER ROADWAY PAVERS)	NON-REINFORCED CONCRETE PAVEMENT, MISC.: ROADWAY BRICK PAVERS	10" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC FS (CROSSWALK)		
	-	STATION	FROM OFFSET	SIDE	STATION	TO OFFSET	SIDE	CY	CY	SY	SY	SF	¥		
67	PVT-1	56+35.14	21.5	RT	56+92.50	60.1	LT	16.33					98		
67 67	PVT-13 PVT-2	56+43.84 56+43.84	22.5 22.5	RT RT	57+47.42 57+03.12	33.3 22.4	LT RT	7.33			554	4991	44		
67	PVT-3	57+16.98	59.4	LT	57+03.12	15.8	RT	14.17					85		
67	PVT-4	57+97.58	2.5	RT	58+47.58	2.5	RT		12.00	72					
68	PVT-5	67+46.08	5.5	RT	67+96.08	5.5	RT		12.00	72					
68	PVT-6	68+90.54	5.5	LT	69+40.54	5.5	LT		12.00	72					
68	PVT-7	74+82.27	5.5	RT	75+32.27	5.5	RT		12.00	72					
68	PVT-8	76+51.45	5.5	LT	77+01.45	5.5	LT		12.00	72					
68	PVT-9	77+23.35	5.5	RT	77+73.35	5.5	RT		12.00	72					
69	PVT-10	86+71.63	7.5	RT	87+21.63	7.5	RT		12.00	72					
69/70	PVT-11	89+27.68	3.5	LT	89+77.68	3.5	LT		12.00	72					
69	PVT-12	91+21.45	27.6	LT	91+86.66	24.5	RT	16.00					96		
	PVT-14		24.5	RT	92+12.46	17.5	LT		89.50		537	4828			
	1		TOTAL CARRI	ED TO GENEF	RAL SUMMARY			54	186	576	1091	9819	323		

								304	448	301	452	452	407	407	
								001		1			107		
								AGGREGATE BASE (4" UNDER PAVEMENT, DRIVE AND CROSSWALK)	SURFACE PG64-22	CONCRETE BASE, PG64 22 (DRIVEWAY)	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC FS (RESIDENTIAL DRIVE APRON)	7" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC FS (COMMERCIAL DRIVE APRON)		TACK COAT FOR INTERMEDIATE COURSE (0.04 GAL/SY)	
	NO.								E SURFA PG64-22 /)	Ü,	NCF C F	N C F	GAL/SY)	JED SY)	
O.								1 4 色 ◇	PG(BAS	CLASS QC DRIVE API	S S E	ЗАL	ERIV AL/8	
NO	CE			LOCA	ATION			SE (AY,	Ľ₩	ASS	AS,		Α Ε Ω	
SHEET	REFERENCE							3ATE BASE (4' EMENT, DRIVE CROSSWALK)	CONCRETE SE, TYPE 1, P(Ä N	[TACK COAT (0.15	л 9.0	
単	E. E.								ŠÉ.	NC DR	N F IAI	NT,)AT	О О Э	
SF	Ш							GA EM	T C S S S C C C C C C C C C C C C C C C	CC (25)		ME RER(00)AT	
	ZE							AV AV	Į Į Į	ALT	ON-REINFO PAVEMENT RESIDENTIA	N-R MM	\CK	88	
								\GG F	ASPHALT CONCRETE COURSE, TYPE 1, F (DRIVEWAY)	ASPHALT	NO P.	N O		Ä	
			FROM			ТО			Ř	AS				1	
		STATION	OFFSET	SIDE	STATION	OFFSET	SIDE	CY	CY	CY	SY	SY	GAL	GAL	
67	DR-1	55+36.65	22.0	RT	55+70.65	22.5	RT	5.25	0.72	1.20		30	2.59	0.69	
67	DR-2	55+98.06	22.5	LT	56+32.06	22.5	LT	2.67				24			
67	DR-39	56+11.51	71.0	LT	56+40.82	54.0	LT	3.78				34			
67	DR-38	56+27.86	98.7	LT	56+79.23	69.0	LT	6.22				56			
67	DR-3	57+47.00	16.5	RT	57+81.00	16.5	RT	40.33				363			
67	DR-40	57+52.48	58.2	LT	57+66.28	84.0	LT	3.44				31			
	DR-4	57+88.24		LT	58+41.24		LT	49.62	1.02	1.71		422	3.67	0.08	
67			22.5			22.5	+		1.02	1./ 1			3.07	0.98	
67	DR-5	58+50.15	22.5	LT	58+86.15	22.5	LT	25.56				230			
67	DR-6	59+17.00	16.5	RT	59+51.00	16.5	RT	40.33	2.25			363		0.00	
67	DR-7	59+58.90	22.5	LT	59+86.90	22.5	LT	1.02	0.38	0.64	19		1.37	0.36	
67	DR-8	59+80.84	16.5	RT	60+14.84	16.5	RT	4.44				40			
67	DR-9	60+18.38	22.5	LT	60+46.38	22.5	LT				27				
67	DR-10	62+65.92	22.5	LT	62+93.92	22.5	LT	0.86	0.32	0.54	19		1.15	0.31	
67	DR-11	63+66.28	22.0	LT	63+90.28	21.8	LT	0.45	0.17	0.28	16		0.61	0.16	
67	DR-12	63+97.40	21.8	LT	64+31.40	21.5	LT	4.07	0.44	0.74		26	1.58	0.42	
67	DR-13	64+51.40	21.4	LT	64+85.40	21.1	LT	4.18	0.44	0.74		27	1.58	0.42	
67	DR-14	65++24.17	20.8	LT	65+52.17	20.6	LT	0.94	0.35	0.59	21		1.26	0.34	
67	DR-15	65+58.31	20.6	LT	65+85.31	20.4	LT	0.62	0.23	0.39	20		0.83	0.22	
	0					-57.							- 133		
68	DR-41	66+98.69	19.5	LT	67+26.76	19.5	LT	0.93	0.35	0.58	21		1.26	0.34	
									+			32			
68	DR-16	68+08.86	19.5	LT	68+46.86	19.5	LT	5.50	0.73	1.21			2.63	0.70	
68	DR-17	70+56.23	19.5	LT	71+11.23	19.5	LT	7.05	0.56	0.93		50	2.02	0.54	
68	DR-18	72+85.04	19.5	LT	73+29.04	19.5	LT	5.07	0.32	0.53		38	1.15	0.31	
	DR-42	74+22.26	70.7	RT	74+27.72	56.6	RT	1.79	0.67	1.12	9		2.41	0.64	
68	DR-19	74+83.91	19.5	LT	75+17.91	19.5	LT	3.73	0.23	0.39		28	0.83	0.22	
68	DR-20	75+33.66	19.5	LT	75+67.66	19.5	LT	3.90	0.30	0.49		28	1.08	0.29	
68	DR-21	75+80.41	19.0	RT	76+14.41	19.0	RT	22.28	7.48	12.47		21	26.93	7.18	
69	DR-22	78+26.13	19.0	RT	78+55.13	19.0	RT	12.54	3.95	6.59		18	14.22	3.79	
69	DR-23	78+97.32	19.0	RT	79+26.32	19.0	RT	12.99	4.12	6.87		18	14.83	3.96	
69	DR-24	79+28.96	18.5	RT	80+45.96	18.5	RT	45.95	12.48	20.80		114	44.93	11.98	
69	DR-25	80+78.71	19.5	LT	81+12.71	19.5	LT	4.61	0.56	0.94		28	2.02	0.54	
69	DR-26	82+04.97	19.5	LT	82+38.97	19.5	LT	5.48	0.89	1.48		28	3.20	0.85	
69	DR-27	82+85.21	19.5	LT	83+19.21	19.5	LT	5.49	0.89	1.49		28	3.20	0.85	
69	DR-28	83+48.52	19.0	RT	83+76.52	19.0	RT	4.93	1.14	1.90		17	4.10	1.09	
69	DR-29	83+74.21	19.5	LT	84+08.21	19.5	LT	5.21	0.79	1.31		28	2.84	0.76	
69	DR-30	84+34.68	19.0	RT	84+61.46	20.0	RT	5.38	1.31	2.18		17	4.72	1.26	
69	DR-31	84+80.33	17.9	LT	85+14.33	17.5	LT	5.54	0.91	1.52		28	3.28	0.87	
69	DR-32	85+40.33	17.5	LT	85+74.33	17.5	LT	6.58	1.30	2.17		28	4.68	1.25	
69	DR-33	86+36.00	17.5	LT	86+70.00	17.5	LT	4.01	0.34	0.56		28	1.22	0.33	
69	DR-43	87+47.31	32.9	LT	87+65.56	58.5	LT	5.30	0.78	1.30		29	2.81	0.75	
69	DR-34	88+59.88	17.5	LT	88+93.88	17.5	LT	4.18	0.40	0.67		28	1.44	0.38	
70	DR-35	89+78.84	17.5	LT	90+34.92	18.1	LT	10.44				94			
70	DR-44	92+81.76	105.4	LT	93+02.86	147.7	LT	8.59	1.43	2.38		43	5.15	1.37	
70	DR-36	93+07.03	21.5	LT	93+49.03	21.5	LT	5.59	0.72	1.20		33	2.59	0.69	
70	DR-37	94+15.82	21.5	LT	94+58.82	21.5	LT	5.19	0.53	0.88		34	1.91	0.51	
			TOTAL CARR	IED TO GENER	AL SUMMARY			402	47	79	152	2484	170	45	
			_ 3/441		u ti				"	, 5		51	., 5		



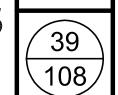


ROADWAY SUB-SUMMARY

								304	305	424	448	407	407	
	C									1ER YPE A	E TYPE 2,			
S S C	NCE NO			LOCA	ATION			ASE (4" U DRIVE AI WALK)	ETE BAS	D POLYN RETE, T	ONCRET OURSE, 1-22	0.15 GAL/	INTERMI 04 GAL/S	
SHEEL	REFERENCE							AGGREGATE BASE (4" UNDER PAVEMENT, DRIVE AND CROSSWALK)	10" CONCRETE BASE	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE PG64-22	TACK COAT (0.15 GAL/SY)	TACK COAT FOR INTERMEDIATE COURSE (0.04 GAL/SY)	
	Ж		FROM			ТО		AGGRE PA\	10	FINE	AS	TACI	TACK CO	
		STATION	OFFSET	SIDE	STATION	OFFSET	SIDE	CY	SY	CY	CY	GAL	GAL	
67		55+09.75	C/L	RT	56+47.82	C/L	RT			6	13	46	12	
67		55+09.75	C/L	LT	56+53.36	C/L	LT	00.07	040	7	14	50	13	
67 67		55+11.75 55+11.75	C/L	LT RT	56+50.00 56+50.00	C/L C/L	LT RT	26.67 5.78	240 52					
67		56+12.16	72.1	LT	56+77.87	51.0	LT	1.22	11					
67		56+52.20	30.5	RT	56+93.52	30.5	RT	1.00	9	2	4	13	4	
67		56+10.40	73.0	LT	56+85.61	64.1	LT			5	10	35	9	
67		57+16.98	59.4	LT	57+67.04	85.9	LT	1.00	9	3	7	24	7	
67		57+38.67	C/L	RT	62+59.07	C/L	RT	6.78	61					
67		57+38.67	C/L	LT	66+50.00	C/L	LT	158.67	1428	47	93	337	90	
57		57+38.67	C/L	RT	66+50.00	C/L	RT	-	_	35	69	249	67	
67		62+82.03	40.0	RT	66+50.00	21.9	RT	2.67	24					
68		66+50.00	21.9	RT	66+56.22	56.5	RT	0.33	3					
88		66+50.00	C/L	LT	78+00.00	C/L	LT	136.67	1230	47	94	338	90	
68		66+50.00	C/L	RT	78+00.00	C/L	RT	0.50	00	59	119	428	114	
68 68		66+87.98 70+17.74	56.0 65.8	RT RT	69+83.63 74+00.02	63.3 53.7	RT RT	3.56 6.67	32 60					
68 68		70+17.74 74+18.69	76.2	RT	74+00.02 78+00.00	53.7 C/L	RT	4.44	40					
69		78+00.00	C/L	LT	87+74.50	83.7	LT	73.00	657					
69		78+00.00	C/L	RT	89+50.00	C/L	RT			52	103	371	12	
69 69		78+00.00	C/L	LT RT	89+50.00	C/L	LT	12.00	117	56	113	406	12	
59 59		78+00.00 88+06.00	18.0 57.9	LT	89+50.00 89+50.00	31.5 2.5	RT LT	13.00 4.89	117 44					
70		89+50.00	2.5	LT	91+21.45	C/L	LT	9.56	86					
70		89+50.00	31.5	RT	91+76.42	32.5	RT	43.89	395					
70		89+50.00	C/L	LT	94+89.88	C/L	LT			41	82	295	12	
70 70		89+50.00 91+67.92	C/L 48.8	RT LT	94+89.88 92+13.46	C/L	RT LT	7.56	68	47	94	338	12	
70		92+13.46	46.6 C/L	RT	92+13.46	17.2	RT	0.44	4					
70		93+02.46	153.3	LT	93+07.75	15.5	LT	25.89	233					
			TOTAL CARR	ED TO GENER	AL SUMMARY			534	4803	407	815	2930	454	

NO.	E NO.			I OCA	ATION							
SHEET NO.	REFERENCE NO.			2007								
		OTATION	FROM	OIDE	OTATION	TO	OIDE					
		STATION	OFFSET	SIDE	STATION	OFFSET	SIDE					
									,	,		
			_									
			TOTAL CARRI	IED TO GENERA	AL SUMMARY							





ROADWAY SUB-SUMMARY

MAHONING ROAD NE (S.R. 153) BETWEEN THE GRACE AVENUE NE AND HARMONT AVENUE NE INTERSECTIONS LOCATED IN THE CITY OF CANTON, COUNTY OF STARK, STATE OF OHIO.

OWNER INFORMATION: CITY OF CANTON

2436 30TH STREET N.E CANTON, OHIO 44705 CONTACT: DANIEL J. MOEGLIN, P.E., S.I. PHONE: 330-489-3370 FAX: 330-489-3337

GENERAL CONTRACTOR INFORMATION: BUSINESS NAME P.O. BOX 499, 26 NORTH COCHRAN STREET STREET ADDRESS

CONTACT INFORMATION FOR THE PERSON RESPONSIBLE FOR AUTHORIZING AND AMENDING THE SWPPP:

PHONE NUMBER CONTACT NAME

PROJECT DESCRIPTION:

THE PROJECT WORK INVOLVES THE SITE IMPROVEMENT OF APPROXIMATELY 0.67 MILES OF MAHONING ROAD NE (S.R. 153) BETWEEN THE GRACE AVENUE NE AND HARMONT AVENUE NE INTERSECTIONS. THE PROJECT CONSISTS OF INSTALLING NEW ADA COMPLIANT HANDICAP RAMPS, WIDENED SIDEWALKS, DECORATIVE BRICK PAVERS, STREET TREES, BUS STOPS, BENCHES, SIGNAGE AND STREET LIGHTING. IN ADDITION TO THE STREETSCAPE PORTION OF THE PROJECT, A SECONDARY STORM SEWER SYSTEM IS BEING INSTALLED TO HELP MINIMIZE FLOODING. REPLACEMENT OF EXISTING CATCH BASINS WILL OCCUR WHERE THE ROAD WIDTH IS INCREASED. ALL EXISTING PAVEMENT WILL BE MILLED AND RESURFACED.

PRIOR LAND USE:

EXISTING 3-LANE ASPHALT PAVED ROAD WITH SIDEWALKS ON BOTH SIDES OF THE ROAD SERVING EXISTING RETAIL BUSINESSES AND RESIDENTIAL HOUSES. UNDERGROUND UTILITIES CONSIST OF SANITARY SEWERS, STORM SEWERS, WATER LINES, GAS LINES AND TELEPHONE FIBEROPTIC.

TYPE OF CONSTRUCTION (CHECK ALL THAT APPLY):

MAINTENANCE	COMMERCIAL
_ REDEVELOPMENT _ MANUFACTURING _	INDUSTRIAL
_ NEW DEVELOPMENT _ HEALTH FACILITY _	SUBDIVISION
X OTHER: STREETSCAPE/ROADWAY PROJECT	OUTLOT

SITE AREA SUMMARY:

TOTAL PROJECT SITE AREA: 6.9 AREA TO BE DISTURBED: PRE-DEVELOPMENT IMPERVIOUS AREA: POST-DEVELOPMENT IMPERVIOUS AREA: PERCENT INCREASE OF IMPERVIOUS AREA: PRE-DEVELOPMENT RUN-OFF COEFFICIENT: 98 POST-DEVELOPMENT RUN-OFF COEFFICIENT: QUALITY OF STORM WATER DISCHARGE FROM THE SITE: UNKNOWN QUALITY OF ANY DISCHARGE FROM THE SITE:

5/2014

12/2014

NOT APPLICABLE ESTIMATED CONSTRUCTION START DATE: ESTIMATED CONSTRUCTION COMPLETION DATE:

SITE SOIL TYPES AND DESCRIPTIONS:

% OF SITE DESCRIPTION

NAME OF RECEIVING STREAM OR SURFACE WATER: MIDDLE BRANCH NIMISHILLEN CREEK

EROSION AND SEDIMENT CONTROL MEASURES USED ON THE SITE:

SILT FENCE, FILTER SOCK, STORM DRAIN INLET PROTECTION, CONCRETE WASHOUT PIT, TEMPORARY SEEDING, PERMANENT SEEDING AND MULCHING.

EROSION AND SEDIMENT CONTROL MEASURES TO REMAIN AFTER CONSTRUCTION AND BECOME THE POST CONSTRUCTION CONTROL **MEASURES:**

PERMANENT SEEDING

SOIL PROTECTION CHART

OOIL I NOTLO HON OHAN	<u> </u>											
STABILIZATION TYPE	J	F	М	Α	М	J	J	Α	S	0	Ν	D
PERMANENT SEEDING			•	0	0	*	*	*		•		
TEMPORARY SEEDING				•	•	*	*	*				
SODDING			*	*	*	*	*	*	*			
MULCHING	0	0	0	•	0	0	•	•	•	•	•	•

(*) - IRRIGATION NEEDED

GENERAL NOTES

THE CITY OF CANTON WILL SUBMIT A NOTICE OF INTENT TO THE OHIO EPA FOR COVERAGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION STORM WATER PERMIT BECAUSE THE PROJECT WILL CAUSE MORE THAN 1 ACRE OF EARTH DISTURBANCE. THE CONTRACTOR WILL BE REQUIRED TO DEVELOP A STORM WATER POLLUTION PREVENTION PLAN FOR THE PROJECT AND COMPLY WITH ALL NPDES TERMS AND CONDITIONS THROUGHOUT PROJECT CONSTRUCTION.

THE CONTRACTOR SHALL READ AND FOLLOW THE PRACTICES AND REQUIREMENTS OF EROSION AND SEDIMENT CONTROL IN THE MOST CURRENT STANDARDS AND SPECIFICATIONS FOR:

LOCAL EROSION AND SEDIMENT CONTROL REGULATIONS

 ODNR RAINWATER AND LAND DEVELOPMENT MANUAL OHIO EPA GENERAL PERMIT FOR CONSTRUCTION SITE STORM

2. THE CONTRACTOR MUST SUBMIT A CO-PERMITTEE APPLICATION TO THE OHIO EPA PRIOR TO BEGINNING WORK AND SHALL BE RESPONSIBLE FOR ALL TERMS AND CONDITIONS OF THE OHIO NPDES GENERAL PERMIT UNTIL A NOTICE OF TERMINATION (NOT) IS SUBMITTED.

PRIOR TO COMMENCING WORK, SUBCONTRACTORS INVOLVED IN SWPPP IMPLEMENTATION OR ACTIVITIES THAT IMPACT STORM WATER SHALL COMPLETE THE "SUBCONTRACTOR CERTIFICATION /AGREEMENT FOR SWPPP" ACKNOWLEDGING THEY UNDERSTOOD THE CONDITIONS AND THEIR RESPONSIBILITIES.

THE CONTRACTOR SHALL USE EROSION CONTROL MEASURES AS NECESSARY TO PREVENT SEDIMENT MOVEMENT INTO STORM SEWERS. SPECIAL PRECAUTIONS IN CONSTRUCTION EQUIPMENT USE SHALL BE MADE TO PREVENT SITUATIONS THAT PROMOTE EROSION. CLEANUP SHALL BE DONE IN A MANNER THAT DOES NOT DISTURB EROSION CONTROL MEASURES.

SOIL STOCKPILES SHALL BE RINGED WITH SILT FENCE ALONG THE BOTTOM FOOTPRINT. IF THE STOCKPILE WILL BE INACTIVE FOR 21 DAYS OR MORE, THE SURFACE SHALL BE SEEDED OR STABILIZED WITHIN 7 DAYS OF LAST ACTIVITY.

6. THE CONTRACTOR MAY NEED ADDITIONAL DEWATERING OR EROSION AND SEDIMENTATION PREVENTION MEASURES TO CONTEND WITH GROUNDWATER. GROUNDWATER. STORM WATER AND SEDIMENT BEARING DRAINAGE SHALL BE FILTERED TO ALLOW REMOVAL OF SILT. SEDIMENT, DEBRIS AND OTHER POLLUTANTS PRIOR TO DISCHARGE FROM THE SITE (I.E. SETTLING IN PLACE OR DEWATERING INTO A SUMP PIT OR FILTER BAG). SETTLED MATERIAL SHALL BE DISPOSED OF IN A STABILIZED LOCATION WHERE IT WILL NOT BE CARRIED OFF-SITE OR INTO A STORM SEWER BY RAINFALL. WATER WITH A VISIBLE SHEEN MUST BE REMOVED BY A VACUUM TRUCK. THERE SHALL BE NO TURBID OR MURKY DISCHARGES TO SURFACE WATERS RESULTING FROM DEWATERING ACTIVITIES. GROUNDWATER DEWATERING WHICH DOES NOT CONTAIN SEDIMENT OR OTHER POLLUTANTS DOES NOT REQUIRE TREATMENT PRIOR TO DISCHARGE, BUT CARE MUST BE TAKEN TO ENSURE IT DOES NOT BECOME POLLUTANT-LADEN BY TRAVERSING OVER DISTURBED SOILS OR OTHER POLLUTANT SOURCES OR ERODE THE DISCHARGE AREA.

7. IF UNFORESEEN ENVIRONMENTAL CONDITIONS ARE ENCOUNTERED, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE NECESSARY. IF THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION OR MAINTENANCE THAT COULD DISCHARGE POLLUTANTS TO SURFACE WATERS, THE REVISION TO THE SWPPP MUST BE COMPLETED AS SOON AS PRACTICAL AND PRIOR TO THE NEXT STORM EVENT. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY ALSO BE REQUESTED BY THE CITY OF CANTON, SOIL AND WATER CONSERVATION DISTRICT, OR OHIO EPA AT ANYTIME. SUCH REQUEST SHALL BE IMPLEMENTED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

8. SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO CLEARING, GRUBBING, GRADING OR OTHER CONSTRUCTION ACTIVITY AND SHALL CONTINUE TO FUNCTION UNTIL UPLAND DISTURBED AREAS ARE STABILIZED. APPROPRIATE CONTROLS SHALL BE CONSTRUCTED OR EXISTING CONTROLS ALTERED TO ADDRESS CHANGING DRAINAGE PATTERNS AS CONSTRUCTION PROGRESSES.

9. A QUALIFIED INSPECTION PERSON SHALL COMPLETE AND SIGN A CHECKLIST FOLLOWING EACH INSPECTION. AT A MINIMUM, THE INSPECTION REPORT MUST INCLUDE THE FOLLOWING:

 INSPECTION PERSON'S NAME, TITLE AND QUALIFICATION. WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION, ESTIMATE OF THE BEGINNING OF EACH PRIOR STORM EVENT, DURATION OF EACH STORM EVENT, APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT AND WHETHER ANY DISCHARGES OCCURRED.

 WEATHER INFORMATION AND A DESCRIPTION OF ANY DISCHARGES OCCURRING AT THE TIME OF THE INSPECTION. • LOCATION OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS

FROM THE SITE. LOCATION OF BMP'S THAT NEED TO BE MAINTAINED. LOCATION OF BMP'S THAT FAILED TO OPERATE AS DESIGNED OR

PROVED INADEQUATE FOR A LOCATION. LOCATION WHERE ADDITIONAL BMP'S WERE NEEDED, BUT DID NOT EXIST AT THE TIME OF INSPECTION.

 CORRECTIVE ACTION REQUIRED INCLUDING CHANGES TO THE SWPPP AND IMPLEMENTATION DATES.

12. THE CONTRACTOR SHALL HAVE COPIES OF THE FOLLOWING ON-SITE:

 SIGNED NOI APPLICATION OHIO EPA NATIONAL POLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERAL PERMIT

SUBCONTRACTOR CERTIFICATION / AGREEMENT FOR SWPPP

 DELEGATION OF AUTHORITY FOR SWPPP THESE SWPPP AND ANY SWPPP AMENDMENT LOGS

GRADING AND STABILIZATION ACTIVITY LOG

INSPECTION LOGS

INSPECTION DATE.

13. THE CONTRACTOR SHALL REMOVE ALL MUD, SOIL OR DEBRIS DEPOSITED ON ROADS, DRIVE LANES, ETC. AT THE END OF EACH WORK DAY OR AS REQUIRED DURING THE DAY.

SPILL PREVENTION AND MATERIAL MANAGEMENT PRACTICES

I. STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN AN ORDERLY MANNER IN APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

2. PRODUCTS SHALL BE KEPT IN ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL UNLESS NOT RESEALABLE.

3. SUBSTANCES NOT TO BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

4. WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER. FOLLOW LOCAL, STATE AND MANUFACTURERS' RECOMMENDED METHODS FOR DISPOSAL SHALL IF SURPLUS PRODUCT IS TO BE DISPOSED OF.

5. THE CONTRACTOR SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ON-SITE.

6. SAFETY DATA SHEETS (SDS) MUST BE RETAINED ON-SITE.

7. <u>SPILL CONTROL PRACTICES:</u>

 MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP MUST BE POSTED AND SITE PERSONNEL MADE AWARE OF THE PROCEDURES, LOCATION OF THE INFORMATION AND LOCATION OF CLEANUP SUPPLIES.

 SPILL CLEANUP MATERIAL OR EQUIPMENT SHALL BE KEPT IN A MATERIAL STORAGE AREA ON-SITE (I.E. DUST PANS, BROOMS, MOPS, RAGS, GLOVES, GOGGLES, SAWDUST, KITTY LITTER, SAND. AND PLASTIC OR METAL TRASH CONTAINERS).

 SPILLS SHALL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING.

 TOXIC OR HAZARDOUS MATERIAL SPILLS MUST BE REPORTED TO THE APPROPRIATE FEDERAL GOVERNMENT AGENCY, OHIO EPA (800-282-9378), LOCAL FIRE DEPARTMENT (911) AND LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) REGARDLESS OF SIZE AND WITHIN 30 MINUTES OF A SPILL.

 SPILL PREVENTION PLANS SHALL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT A SPILL TYPE FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT AND THE CLEAN-UP MEASURES SHALL BE INCLUDED.

PRODUCT SPECIFIC PRACTICES

SOLID, SANITARY AND TOXIC WASTE SHALL BE DISPOSED IN A PROPER MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. IT IS PROHIBITED TO BURN, BURY OR POUR ONTO THE GROUND OR INTO A SEWER SOLVENTS, PAINT, STAINS, DIESEL FUEL, GASOLINE, MOTOR OIL, HYDRAULIC FLUID, CEMENT CURING COMPOUNDS, ANTIFREEZE, OR OTHER TOXIC OR HAZARDOUS WASTE.

PETROLEUM PRODUCTS: ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS AND CLEARLY LABELED

FERTILIZERS: APPLY FERTILIZER ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER CONTENTS OF PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS: CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT IN USE. EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER, BUT SHALL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS: CONCRETE TRUCKS SHALL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE. WASH OUT OF CONCRETE TRUCKS SHALL OCCUR IN A DESIGNATED AREA WHERE THE WASHING CAN COLLECT AND BE DISPOSED OF PROPERLY WHEN HARDENED.

WASTE MATERIALS: COLLECT WASTE MATERIALS INCLUDING TRASH AND CONSTRUCTION DEBRIS IN A SECURELY LIDDED DUMPSTER AND DISPOSE IN AN OHIO EPA APPROVED LANDFILL. MATERIALS WHICH CONTAIN ASBESTOS TO COMPLY WITH THE OHIO EPA AIR POLLUTION REGULATIONS. THE DUMPSTER IS TO BE HAULED OFF-SITE AND EMPTIED AS NECESSARY.

HAZARDOUS WASTE: DISPOSE OF HAZARDOUS WASTE MATERIALS IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS OR AS SPECIFIED BY THE MANUFACTURER.

SANITARY WASTE: CONTRACTOR SHALL PROVIDE TEMPORARY SANITARY FACILITIES AT THE SITE AND IT SHALL BE SERVICED BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS 1 TIME PER WEEK, OR MORE OFTEN IF NECESSARY.

OFF-SITE VEHICLE TRACKING: A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. ALL PAVED STREETS ADJACENT TO THE SITE SHALL BE SWEPT DAILY, OR MORE OFTEN IF NECESSARY, TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE SHALL BE COVERED WITH A TARPAULIN.

FUEL STORAGE TANKS: FUEL STORAGE TANKS SHALL BE LOCATED IN DIKED AREAS AND AWAY FROM DRAINAGE CHANNELS. THE DIKED AREAS SHOULD HOLD A VOLUME OF AT LEAST 110% OF THE LARGEST TANK. THE DIKED ARES ARE NOT NECESSARY IF THE CONTRACTOR USES SELF-CONTAINED SPILL PROOF TANKS. A GENERAL LOCATION FOR THE FUEL STORAGE TANKS IS SHOWN IN THE SWPPP, BUT MAY BE MOVED TO BETTER SUIT THE CONTRACTOR'S MEANS AND METHODS.

POLLUTION PREVENTION PLAN INVENTORY

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE ANTICIPATED TO BE PRESENT ON-SITE DURING CONSTRUCTION

X CONCRETE X FERTILIZERS X PAINTS (ENAMEL AND LATEX) X ASPHALT X DETERGENTS X PETROLEUM BASED PRODUCTS ___ CMU BLOCK X CLEANING SOLVENTS

STABILIZATION PRACTICES

AREA REQUIRING TEMPORARY

STABILIZATION

1. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN SOIL EROSION AND SEDIMENT CONTROL DEVICES IN AREAS TO REMAIN DISTURBED FOR 14 DAYS OR UNTIL PERMANENT STABILIZATION IS COMPLETE. PERMANENT VEGETATION SHALL BE GROUND COVER DENSE ENOUGH TO COVER 80% OF THE SOIL SURFACE AND MATURE ENOUGH TO SURVIVE WINTER WEATHER CONDITIONS.

2. ALL NEW AND EXISTING STORM INLET BASINS WITHIN THE WORK LIMITS SHALL HAVE INLET PROTECTION INSTALLED UNLESS THE SEWER IS INACTIVE DUE TO PRIOR WORK. DO NOT REMOVE INLET PROTECTION FROM EXISTING STORM INLET BASINS TO BE REMOVED OR ABANDONED UNTIL AFTER THE DOWNSTREAM STORM STRUCTURE IS PLUGGED FROM STORM FLOW.

3. PERIMETER CONTROLS SHALL BE IMPLEMENTED AS A FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING AND SHALL CONTINUE TO FUNCTION UNTIL UPLAND AREAS ARE STABILIZED.

TEMPORARY STABILIZATION: DISTURBED PORTIONS OF THE CONSTRUCTION ACTIVITIES CEASE FOR MORE THAN 14 DAYS. BUT LESS THAN 1 YEAR, SHALL FOLLOW THIS CHART:

TIME FRAME TO APPLY

EROSION CONTROLS

		1
	Disturbed areas within 50 feet of surface water, not at final grade, and to remain idle more than 14 days.	Within 2 days of the most recent disturbance.
	Disturbed areas not within 50 feet of surface water, to be dormant more than 14 days, but less than 1 year.	Within 7 days of the most recent disturbance.
	Disturbed areas that will remain idle over the winter.	Prior to the onset of winter weather.
.	For areas to be paved, disturbed areas that will remain dormant for the time constraints mentioned in the above criteria.	Temporarily stabilize with geotextile and/or stone subbase until pavement is installed.

5. PERMANENT STABILIZATION: DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL FOLLOW THIS CHART:

AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
Areas to be dormant for 1 year or more.	Within 7 days of the most recent disturbance.
Areas within 50 feet of surface water and at final grade.	Within 2 days of reaching final grade.
All other areas at final grade.	Within 7 days of reaching final grade.

MAINTENANCE / INSPECTION PROCEDURES

1. REGULAR INSPECTION AND MAINTENANCE SHALL BE PROVIDED FOR EROSION AND SEDIMENT CONTROL PRACTICES. INSPECTIONS SHALL BE PERFORMED UNTIL THE NOTICE OF TERMINATION (NOT) IS FILED WITH THE OHIO EPA. INSPECTIONS TO BE MADE A MINIMUM OF 1 TIME PER WEEK AND WITHIN 24 HOURS AFTER STORM EVENTS GREATER THAN 0.5 INCHES OF RAIN IN A 24 HOUR PERIOD. THE INSPECTION FREQUENCY MAY BE REDUCED TO AT LEAST ONCE EVERY MONTH IF THE ENTIRE SITE IS TEMPORARILY STABILIZED OR RUNOFF IS UNLIKELY DUE TO WEATHER CONDITIONS (I.E. SITE COVERED WITH SNOW OR THE GROUND IS FROZEN). A WAIVER OF INSPECTION REQUIREMENTS IS AVAILABLE UNTIL 1 MONTH BEFORE THAWING CONDITIONS ARE EXPECTED IF ALL THE FOLLOWING CONDITIONS ARE

• THE PROJECT IS LOCATED IN AN AREA WHERE FROZEN CONDITIONS ARE ANTICIPATED TO CONTINUE FOR EXTENDED PERIODS OF TIME (I.E., MORE THAN 1 MONTH).

• LAND DISTURBANCE ACTIVITIES HAVE BEEN SUSPENDED. THE BEGINNING AND ENDING DATES OF THE WAIVER PERIOD ARE

DOCUMENTED IN THE SWPPP.

ONCE A DEFINABLE AREA HAS BEEN FULLY STABILIZED, IT MAY BE MARKED ON THE SWPPP AND NO FURTHER INSPECTION REQUIREMENTS ARE REQUIRED FOR THAT AREA OF THE SITE.

2. SILT FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, VERIFICATION FABRIC IS SECURELY ATTACHED TO FENCE POSTS, AND VERIFICATION FENCE POSTS ARE FIRMLY IN THE GROUND. BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED 1/3 THE FENCE HEIGHT.

3. <u>DUST CONTROL</u>: THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY (I.E. CALCIUM CHLORIDE, WATER OR MOTORIZED DUST-FREE STREET SWEEPING DEVICE) TO MAINTAIN ROADWAYS USED FOR SITE ACCESS AT THE END OF EACH WORK DAY OR AS REQUIRED AND ADHERE TO ALL GOVERNING AUTHORITY ORDINANCES.

4. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER. ANY REPAIR NEEDED SHALL TO BE INITIATED WITHIN 24 HOURS OF THE REPORT.

5. AFTER SUBMITTAL OF THE NOT, THE PERMITTEE SHALL MAINTAIN FOR 3 YEARS A RECORD SUMMARIZING THE RESULTS OF INSPECTIONS, NAMES AND QUALIFICATIONS OF INSPECTION PERSONNEL, THE INSPECTION DATES, MAJOR OBSERVATIONS RELATED TO THE IMPLEMENTATION OF THE SWPPP, A CERTIFICATION WHETHER THE FACILITY IS IN COMPLIANCE WITH THE SWPPP AND PERMIT. AND IDENTIFICATION OF ANY INCIDENTS OF NON-COMPLIANCE.

• WHEN PRACTICE REQUIRES REPAIR OR MAINTENANCE: IF INSPECTION REVEALS A CONTROL PRACTICE NEEDS REPAIR OR MAINTENANCE, EXCEPT FOR SEDIMENT SETTLING PONDS, REPAIR OR MAINTENANCE SHALL OCCUR WITHIN 3 DAYS OF INSPECTION. SEDIMENT SETTLING PONDS REPAIR OR MAINTENANCE SHALL OCCUR WITHIN 10 DAYS OF INSPECTION.

 WHEN PRACTICE FAILS TO PROVIDE INTENDED FUNCTION: IF INSPECTION REVEALS A CONTROL PRACTICE FAILS TO PERFORM ITS FUNCTION AND A MORE APPROPRIATE CONTROL PRACTICE IS REQUIRED, THE SWPPP SHALL BE AMENDED, THE NEW CONTROL PRACTICE INSTALLED WITHIN 10 DAYS OF INSPECTION, AND THE "STORM WATER POLLUTION PREVENTION PLAN AMENDMENT LOG" FORM COMPLETED.

• WHEN PRACTICE SHOWN IN THE SWPPP IS NOT INSTALLED: IF INSPECTION REVEALS A CONTROL PRACTICE HAS NOT BEEN IMPLEMENTED IN ACCORDANCE WITH THE SCHEDULE, IT SHALL BE IMPLEMENTED WITHIN 10 DAYS OF INSPECTION. IF INSPECTION REVEALS A PLANNED CONTROL PRACTICE IS NOT NEEDED, THE RECORD SHALL CONTAIN A STATEMENT EXPLAINING WHY AND THE "STORM WATER POLLUTION PREVENTION PLAN AMENDMENT LOG" FORM COMPLETED.

8. SEEDING SHALL BE INSPECTED FOR BARE SPOTS AND WASHOUTS.

9. THE CONTRACTOR SHALL SELECT INDIVIDUALS TO BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND COMPLETING INSPECTION AND MAINTENANCE REPORTS. THE CONTRACTOR SHALL COMPLETE THE "DELIGATION OF AUTHORITY FOR STORM WATER POLLUTION PREVENTION PLAN" FORM.

SEQUENCE OF MAJOR CONSTRUCTION **ACTIVITIES FOR SWPPP:**

A PRE-CONSTRUCTION MEETING TO BE HELD TO DISCUSS THE OHIO EPA NPDES PERMIT REQUIREMENTS.

CONTRACTOR TO SUBMIT A CONSTRUCTION SCHEDULE FOR PROPOSED CONSTRUCTION ACTIVITIES.

INSPECTION, MAINTENANCE, RECORD KEEPING AND SITE POSTING OF ALL CONTROLS TO BEGIN AND CONTINUE FOR THE DURATION OF THE

CONTRACTOR TO ESTABLISH THE STAGING AREA AND ALL

NON-SEDIMENT POLLUTION CONTROLS. CONTRACTOR TO INSTALL SILT FENCE AND INLET PROTECTION PRIOR TO ANY EARTH DISTURBANCE ACTIVITY.

6. INSTALL ALL OTHER TEMPORARY SEDIMENTATION AND EROSION CONTROL ITEMS AS SOON AS POSSIBLE, BUT NO LATER THAN 7 DAYS OF FIRST SOIL DISTURBANCE. CONTROLS TO BE INSPECTED AND MAINTAINED FOR THE PROJECT DURATION OR UNTIL UPSLOPE AREAS ARE PERMENENTLY STABILIZED

7. SITE DEMOLITION AND CONSTRUCTION TO BEGIN. INSTALL DEWATERING MEASURES AS NECESSARY.

EARTHWORK GRADING OPERATIONS TO BEGIN AND SHALL BE PERFORMED TO LIMIT BOTH THE AREA AND DURATION OF BARE SOIL 2 EXPOSURE. ANY AREAS LEFT UNDISTURBED FOR MORE THAN 14 DAYS SHALL REQUIRE TEMPORARY SEEDING AND MULCHING WITHIN 7 DAYS OF LAST DISTURBANCE. ENHANCED SWALE AREAS MAY BE ROUGH GRADED.

TO. BEGIN STORM SEWER AND INLET CONSTRUCTION. INSTALL INLET PROTECTION AS STORM INLETS ARE CONSTRUCTED.

11. CONSTRUCT REMAINING UTILITIES INCLUDING SANITARY, WATER AND ELECTRIC.

12. BEGIN PAVING OPERATIONS.

13. CONTRACTOR TO INSPECT AND CLEAN EXISTING AND PROPOSED STORM DRAINAGE SYSTEMS.

14. PERMANENTLY SEED DISTURBED AREAS WITHIN 7 DAYS OF FINAL GRADING.

15. INSTALL LANDSCAPING.

16. CONTINUE INSPECTIONS, MAINTENANCE, RECORD KEEPING AND SITE

POSTING UNTIL FINAL STABILIZATION IS ACHIEVED. 17. REMOVE AND DISPOSE OF TEMPORARY SEDIMENTATION AND EROSION CONTROL ITEMS FROM STORM SEWER AND INLETS AFTER THE SITE IS STABILIZED AND 70% COVERAGE OBTAINED

18. AT COMPLETION OF ALL WORK, CONTRACTOR IS TO:

 DISPOSE OF ALL DEBRIS AND WASTE MATERIAL FROM THE SITE THAT RESULTED FROM CONSTRUCTION ACTIVITIES.

 CLEAN ALL ROADS AND LAWNS OF DEBRIS AND DIRT. • OPEN GUTTERS TO OBTAIN FREE DRAINAGE.

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CT Consultants

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SUBCONTACTOR CERTIFICATION / AGREEMENT FOR STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

As a subcontractor, you are required to comply with the Storm Water Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the on-site office trailer. Each subcontractor engaged in activities at the construction site that could impact storm water must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMP's and other practices described in the SWPPP. This certification is hereby signed in reference to the above named project.

PHONE NO: ____

ADDRESS	3:	FAX NO:	
NAME:	(PRINT NAME)	TITLE (*):	
	(SIGNATURE)	DATE:	
DESCRIPT	TION OF CONSTRUCTION SERVICE(S)	TO BE PROVIDED:	
(-			

(*) - For a Corporation, must be a responsible corporate officer such as President, Secretary, Treasurer or Vice-President in charge of a principal business function or anyone who performs similar decision-making functions for the corporation. For a partnership or sole proprietorship, must be a General Partner or the Proprietor.

FINAL CERTIFICATION AND NOTIFICATION FOR STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

PROJECT NAME:	
PROJECT NO:	
PROJECT ADDRESS:	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

ADDRESS	S:	FAX NO:
NAME:	(PRINT NAME)	TITLE (*):
	(SIGNATURE)	DATE:

(*) - For a Corporation, must be a responsible corporate officer such as President, Secretary, Treasurer or Vice-President in charge of a principal business function or anyone who performs similar decision-making functions for the corporation. For a partnership or sole proprietorship, must be a General Partner or the Proprietor.

GRADING AND STABILIZATION ACTIVITY LOG

PROJECT NAME:
PROJECT ADDRESS:
WPPP CONTACT PERSON:

DATE GRADING ACTIVITY INITIATED			DATE STABILIZATION MEASURE INITIATED AND TYPE	DESCRIPTION OF STABILIZATION MEASURE AND LOCATION (ATTACH SKETCH IF NECESSARY)
			☐ Temporary ☐ Permanen	
			☐ Temporary	
			☐ Temporary ☐ Permanen	
			☐ Temporary	
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UTION NOTES

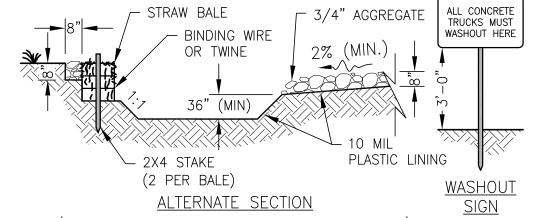
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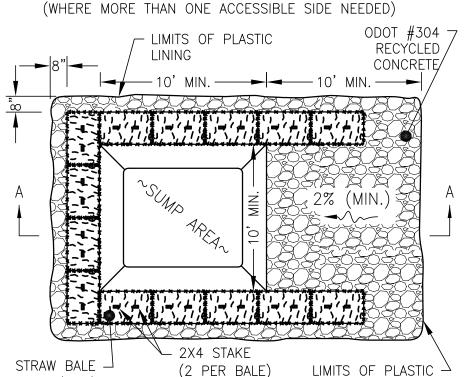
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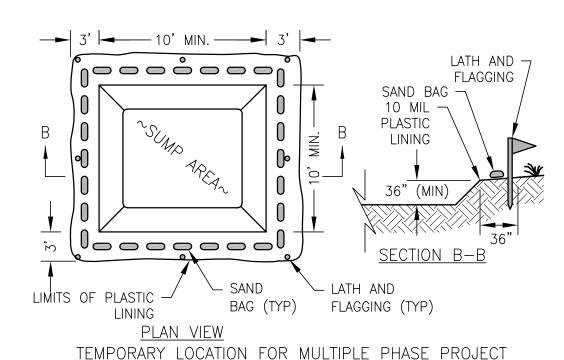






<u>PLAN VIEW</u>

SINGLE LOCATION FOR ENTIRE PROJECT



LINING

NOTES:

1. WASH WATER SHALL NOT FLOW TO SURFACE WATERS.

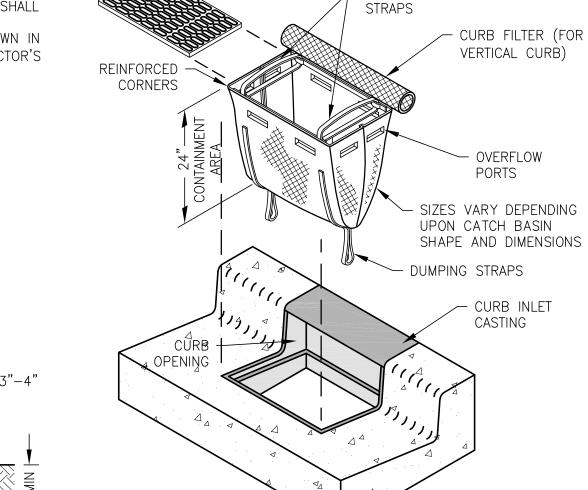
MEANS ANDD METHODS.

FILTER SOCK

- 2. WASHOUT PIT SHALL BE LOCATED 100' MINIMUM FROM INLETS, STREAMS, WETLANDS AND ANY OTHER SURFACE WATERS.
- WASHOUT PIT SHALL HAVE SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12".
- 4. WASHOUT PIT SHALL NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED. MANUFACTURED CONCRETE
- WASHOUT DEVICES MAY BE USED.

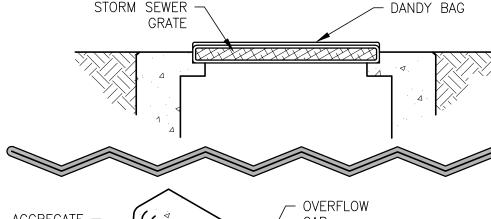
 5. SAW CUT CONCRETE, RESIDUE FROM SAW CUT, AND GRINDINGS SHALL
- BE DISPOSED OF IN THE WASHOUT PIT.

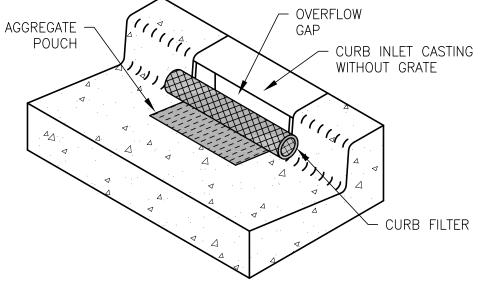
 6. A GENERAL LOCATION FOR THE CONCRETE WASHOUT PIT IS SHOWN IN THE SWPPP, BUT MAY BE MOVED TO BETTER SUIT THE CONTRACTOR'S

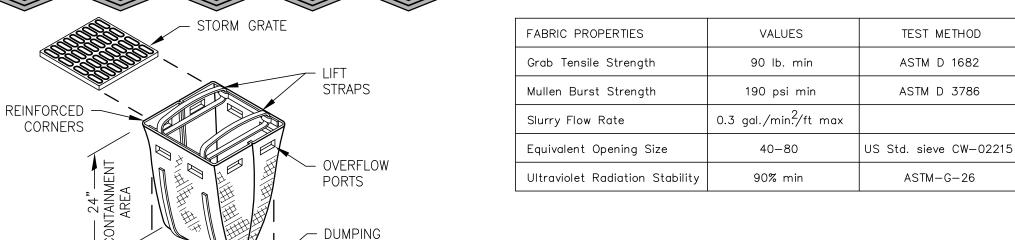


STORM GRATE

STORM DRAIN INLET PROTECTIONS (IP) STORM SEWER GRATE LIFT STRAPS VELCRO CLOSURE







STRAPS

STORM

SILT FENCE

- GROUND

<u>SECTION</u>

JOINING SECTIONS

OF SILT FENCE

LEVEL CONTOUR NO SLOPE

ELEVATION

5' FLAT SLOPE IN

FRONT OF BARRIER

— 6"MIN

WRAP GEOTEXTILE

AROUND STAKES

BEFORE DRIVING

CHANGE THE LAYOUT OF THE SILT FENCE.

REMOVE ACCUMULATED SEDIMENT.

• INSTALL OTHER PRACTICES.

MULCHING (M

1. APPLY MULCH OR OTHER APPROPRIATE VEGETATIVE PRACTICES TO DISTURBED AREAS WITHIN 7 DAYS OF GRADING IF THE AREA IS TO REMAIN DORMANT FOR MORE THAN 45 DAYS OR ON AREAS OF THE SITE WHICH CAN BE BROUGHT TO FINAL GRADE.

2. MULCH SHALL CONSIST OF ONE OF THE FOLLOWING:
STRAW IS TO BE UNROTTED SMALL—GRAIN STRAW APPL

• STRAW IS TO BE UNROTTED SMALL—GRAIN STRAW APPLIED AT A RATE OF 2 TONS/AC. OR 90 LB/1,000 S.F. (2 TO 3 BALES). MULCH IS TO BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED.

WOOD-CELLULOSE FIBER APPLIED AT A RATE OF 2,000 LB/AC. OR 46 LB/1,000 S.F.
 OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS APPLIED

ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS/AC.

3. ANCHOR MULCH IMMEDIATELY TO MINIMIZE LOSS BY WIND OR RUNOFF. ACCEPTABLE ANCHORING METHODS ARE AS FOLLOWS:

PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL USING A DISK, CRIMPER OR SIMILAR TOOL. DO NOT FINELY CHOP STRAW TO BE MECHANICALLY ANCHORED, BUT LEAVE LONGER THAN 6 INCHES.
 USE NETTINGS PER THE MANUFACTURER'S RECOMMENDATIONS.

NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF OR ON CRITICAL SLOPES.

• SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES

RECOMMENDED BY THE MANUFACTURER.

• APPLY WOOD—CELLULOSE FIBER BINDER AT A NET DRY WEIGHT OF 750 LB/AC. WOOD CELLULOSE FIBER IS TO BE MIXED WITH WATER AND THE MIXTURE IS TO CONTAIN A MAXIMUM OF 50 LB/100 GAL. OF WOOD CELLULOSE FIBER.

PERMANENT SEEDING (PS)

SPECIFICATIONS FOR PERMANENT SEEDING SITE PREPARATION:

1. A SUBSOILER, PLOW OR OTHER IMPLEMENT TO BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION. SUBSOILING TO BE DONE WHEN SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING IS NOT TO BE DONE ON SLIP—PRONE AREAS.

 GRADE THE SITE AS NEEDED TO PERMIT USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
 APPLY RESOIL WHERE NEEDED TO ESTABLISH VEGETATION.

1. APPLY AGRICULTURAL GROUND LIMESTONE TO ACIDIC SOIL AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, APPLY AT RATE OF 100 LB/1.000 S.F. OR 2 TONS/AC.

2. APPLY FERTILIZER AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, APPLY AT A RATE OF 12 LB/1,000 S.F. OR 500 LB/AC. OF 10-10-10 OR 12-12-12 ANALYSIS.

3. LIME AND FERTILIZER TO BE WORKED INTO THE SOIL WITH A DISK HARROW, SPRING—TOOTH HARROW, OR OTHER SUITABLE FIELD IMPLEMENT TO A DEPTH OF 3".

SEEDING DATES AND SOIL CONDITIONS

SEED MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. THESE ARE IDEAL SEEDING DATES, BUT SEEDING MAY BE MADE ANY TIME THROUGHOUT THE GROWING SEASON WITH THE USE OF ADDITIONAL MULCH AND IRRIGATION. TILLAGE/SEED BED PREPARATION TO BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. SEE THE FOLLOWING SECTION ON DORMANT SEEDING FOR WINTER SEEDING.

DORMANT SEEDINGS.

BACKFILL TRENCH

AND COMPACT

PRESERVE VEGETATION FOR 5 FEET, OR

AS MUCH AS POSSIBLE, UPSLOPE FROM

REMOVED, IT SHALL BE RE-ESTABLISHED

THE SILT FENCE. IF VEGETATION IS

WITHIN 7 DAYS FROM SILT FENCE

INSTALLATION.

THROUGH THE GEOTEXTILE. PERFORM ONE OF THE FOLLOWING IF

RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE

2. SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW

ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW:

1. DO NOT PLANT SEEDINGS FROM OCTOBER 1 TO NOVEMBER 20.
SEEDS ARE LIKELY TO GERMINATE DURING THIS PERIOD, BUT PROBABLY WILL NOT SURVIVE THE WINTER.

2. THE FOLLOWING METHODS MAY BE USED:

• FROM OCTOBER 1 TO NOVEMBER 20, PREPARE THE SEED BED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20 AND BEFORE MARCH 15, INCREASE THE SEEDING RATES BY 50% AND BROADCAST THE SEED MIXTURE.

• FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEED BED, LIME AND FERTILIZER, APPLY THE SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.

 APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO—SEEDED (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON FIRM, MOIST SEED BED.

• WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER TYPE SEEDER IS USED, THE SEED BED IS TO BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG.

MULCHING:

1. APPLY MULCH MATERIAL IMMEDIATELY AFTER SEEDING. SEEDING MADE DURING OPTIMUM SEEDING DATES ON FLAT AREAS WITH FAVORABLE SOIL CONDITIONS MAY NOT NEED MULCH TO ACHIEVE STABILIZATION. DORMANT SEEDING IS TO BE MULCHED.

2. SEE MULCHING FOR MATERIALS AND ANCHORING METHODS.

<u>IRRIGATION</u>:

1. PERMANENT SEEDING TO INCLUDE IRRIGATION TO ESTABLISH VEGETATION DURING DRY OR HOT WEATHER OR ON ADVERSE SITE CONDITIONS AS NEEDED FOR ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH.

2. EXCESSIVE IRRIGATION RATES TO BE AVOIDED AND IRRIGATION MONITORED TO PREVENT EROSION AND DAMAGE FROM RUNOFF.

SPECIFICATIONS FOR MAINTENANCE OF PERMANENT SEEDING:

PERMANENT SEEDING TO NOT BE CONSIDERED ESTABLISHED FOR AT LEAST 1 FULL YEAR FROM THE TIME OF PLANTING. SEEDED AREAS TO BE INSPECTED FOR FAILURE AND VEGETATION REESTABLISHED AS NEEDED. DEPENDING ON SITE CONDITIONS, IT MAY BE NECESSARY TO IRRIGATE, FERTILIZE, OVERSEED, OR REESTABLISH PLANTINGS IN ORDER TO PROVIDE PERMANENT VEGETATION FOR ADEQUATE EROSION CONTROL

2. ESTABLISH MAINTENANCE FERTILIZATION RATES BY SOIL TEST RECOMMENDATIONS OR BY USING THE FOLLOWING RATES:

	SEE	DING RATE						
SEED MIX	LB./AC.	LB./1,000 S.F.	NOTES:					
GENERAL USE								
Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass		1/2 TO 1 1/4 TO 1/2 1/4 TO 1/2						
Tall Fescue	40	1						
Dwarf Fescue	40	1						
STEEF	P BANKS	OR CUT SLOP	ES					
Tall Fescue	40	1						
Crown Vetch Tall Fescue	10 20	1/4 1/2	Do not seed later the August					
Flat Pea Tall Fescue	20 20	1/2 1/2	Do not seed later the August					
POAD DITCHES AND SWALES								

ROAD DITCHES AND SWALES							
Tall Fescue	40	1					
Dwarf Fescue	90	2-1/4	Do not seed later the				
Kentucky Bluegrass	5		August				
		_AWN					
Kentucky Bluegrass	60	1-1/2					
Perennial Ryegrass	60	1-1/2					
Kentucky Bluegrass	60	1-1/2	For shaded areas				
Creeping Red Fescue	60	1-1/2					

PERMANENT SEEDING (continued)

	MAINTENANCE FOR PERMANENT SEEDINGS FERTILIZATION AND MOWING					
MIXTURE	FORMULA	LB./ AC.	TIME	MOWING		
Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass	10-10-10	500		<u>></u> 3"		
Tall Fescue	10-10-10	500	Fall, yearly or as needed	<u>≥</u> 4"		
Dwarf Fescue	10-10-10	500		<u>></u> 2"		
Crown Vetch Fescue	0-20-20	400	Spring, yearly following establishment,	Do not		
Flat Pea Fescue	0-20-20	400	then every 4-7 years	mow		

Note: Following soil test recommendations is preferred to the fertilizer

TEMPORARY SEEDING (TS)

TEMPORARY SEED TO BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 14 DAYS OR MORE. THESE IDLE AREAS SHOULD BE SEEDED AS SOON AS POSSIBLE AFTER GRADING OR BE SEEDED WITHIN 7 DAYS. SEVERAL

APPLICATIONS OF TEMPORARY SEEDING ARE NECESSARY ON TYPICAL CONSTRUCTION PROJECTS.

2. THE SEED BED IS TO BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION.

3. SOIL AMENDMENTS MAY BE REQUIRED TO ESTABLISH ADEQUATE STANDS OF VEGETATION. PERFORM SOIL TESTS ON THE SITE TO PREDICT THE NEED FOR LIME AND FERTILIZER.

4. APPLY SEED UNIFORMLY WITH CYCLONE SEEDER, CULTIPACKER SEEDER OR HYDROSEEDER. COVER BROADCASTED SEED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPING INTO PLACE USING A ROLLER OR CULTIPACKER. IF HYDROSEEDING IS USED, MIX THE SEED AND FERTILIZER ON SITE AND IMMEDIATELY USE.

MULCHING TEMPORARY SEEDING

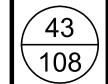
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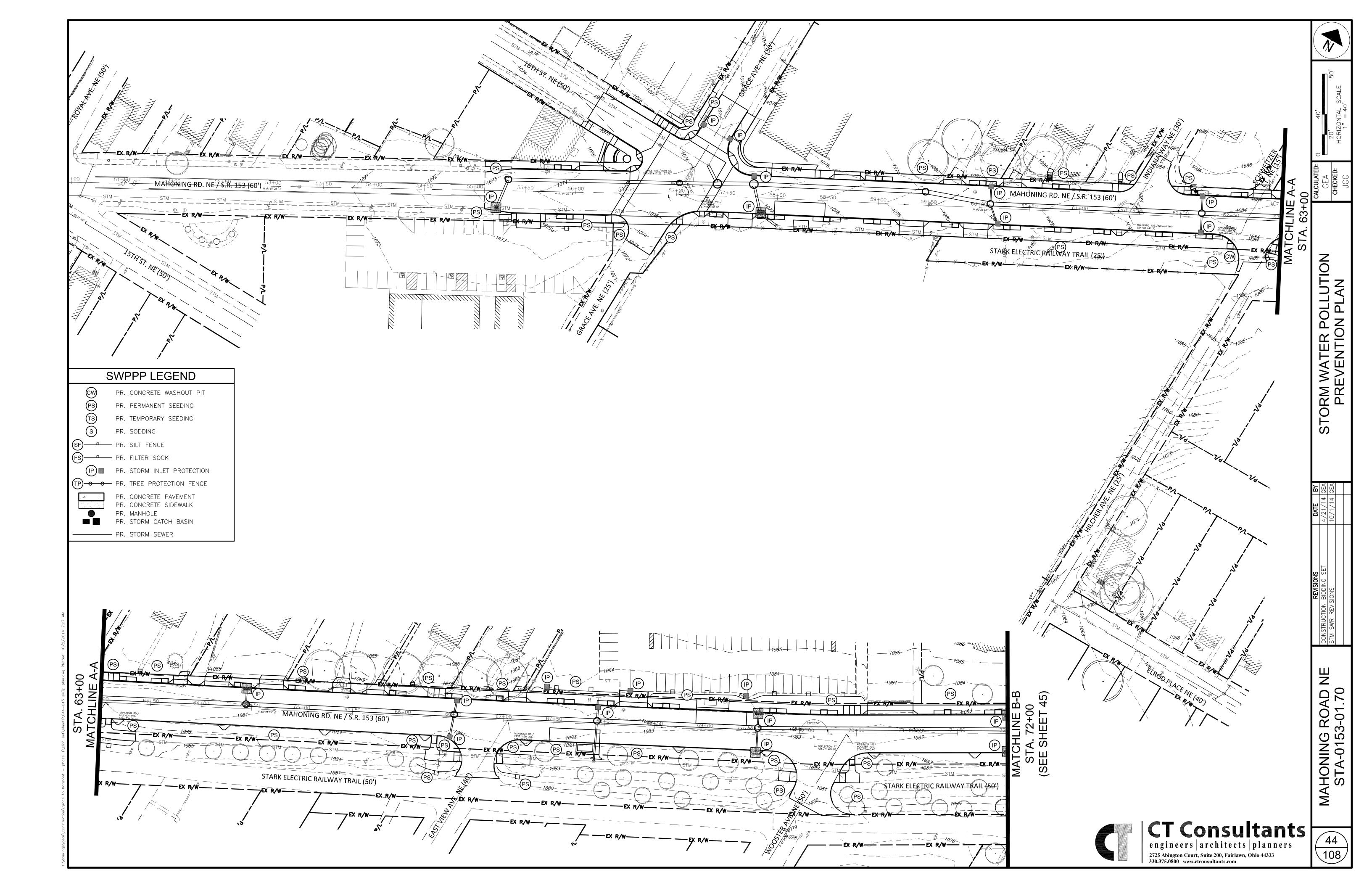
2. SEE MULCHING FOR MATERIALS AND ANCHORING METHODS.

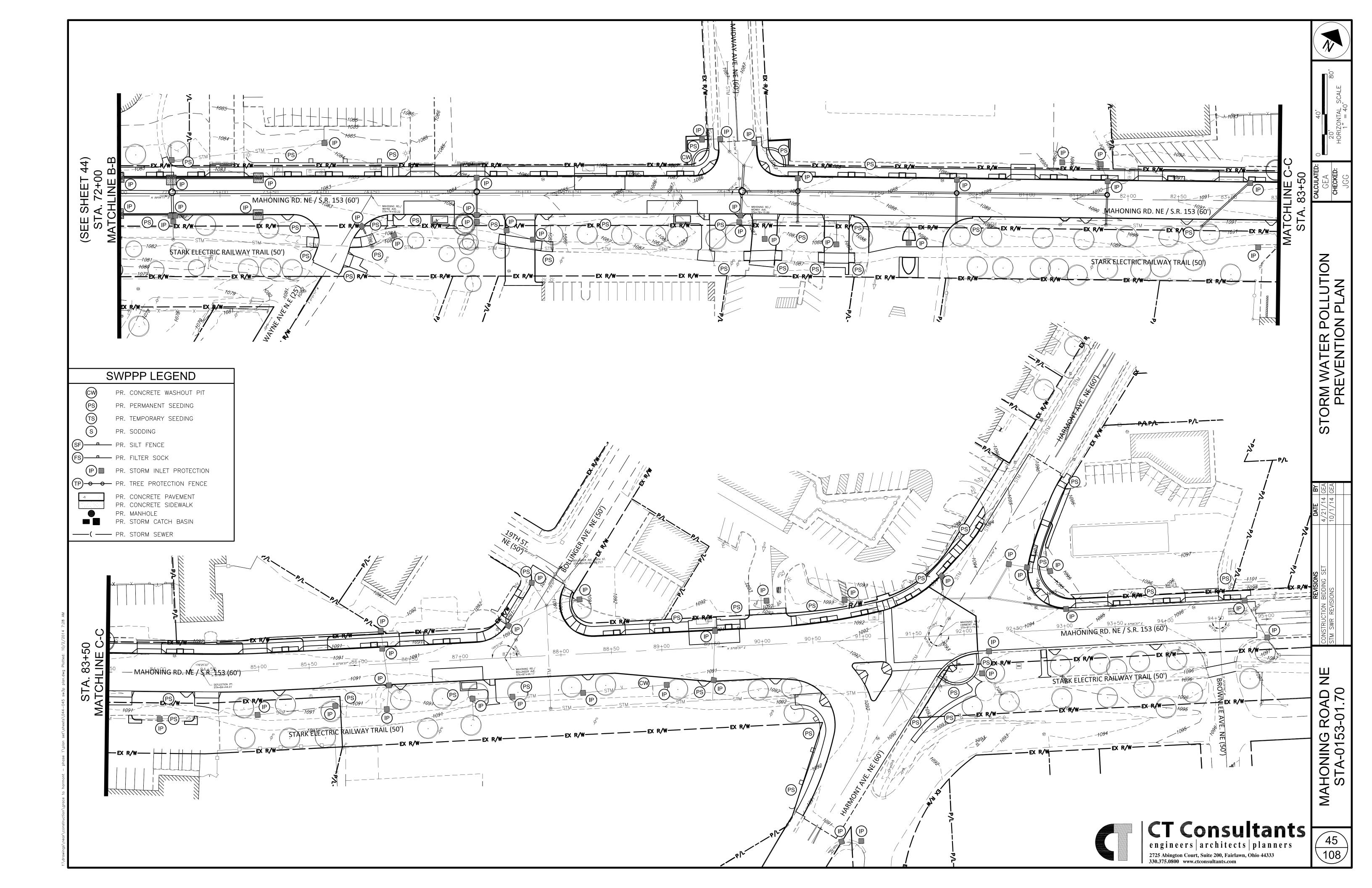
TEMPORARY SEEDING SPECIES SELECTION						
SEEDING DATES	SPECIES	LB/1,000 S.F.	PER AC.			
March 1 to August 15	Oats Tall Fescue Perennial Ryegrass	3 1 1	4 bushel 40 lb. 40 lb.			
	Perennial Ryegrass Tall Fescue	2 1	40 lb. 40 lb.			
August 16 to November 1	Rye Tall Fescue Perennial Ryegrass	3 1 1	2 bushel 40 lb. 40 lb.			
	Wheat Tall Fescue Perennial Ryegrass	3 1 1	2 bushel 40 lb. 40 lb.			
	Perennial Ryegrass Tall Fescue	2 1	40 lb. 40 lb.			
November 1 to	Use mulch only, sodding practices or dormant					

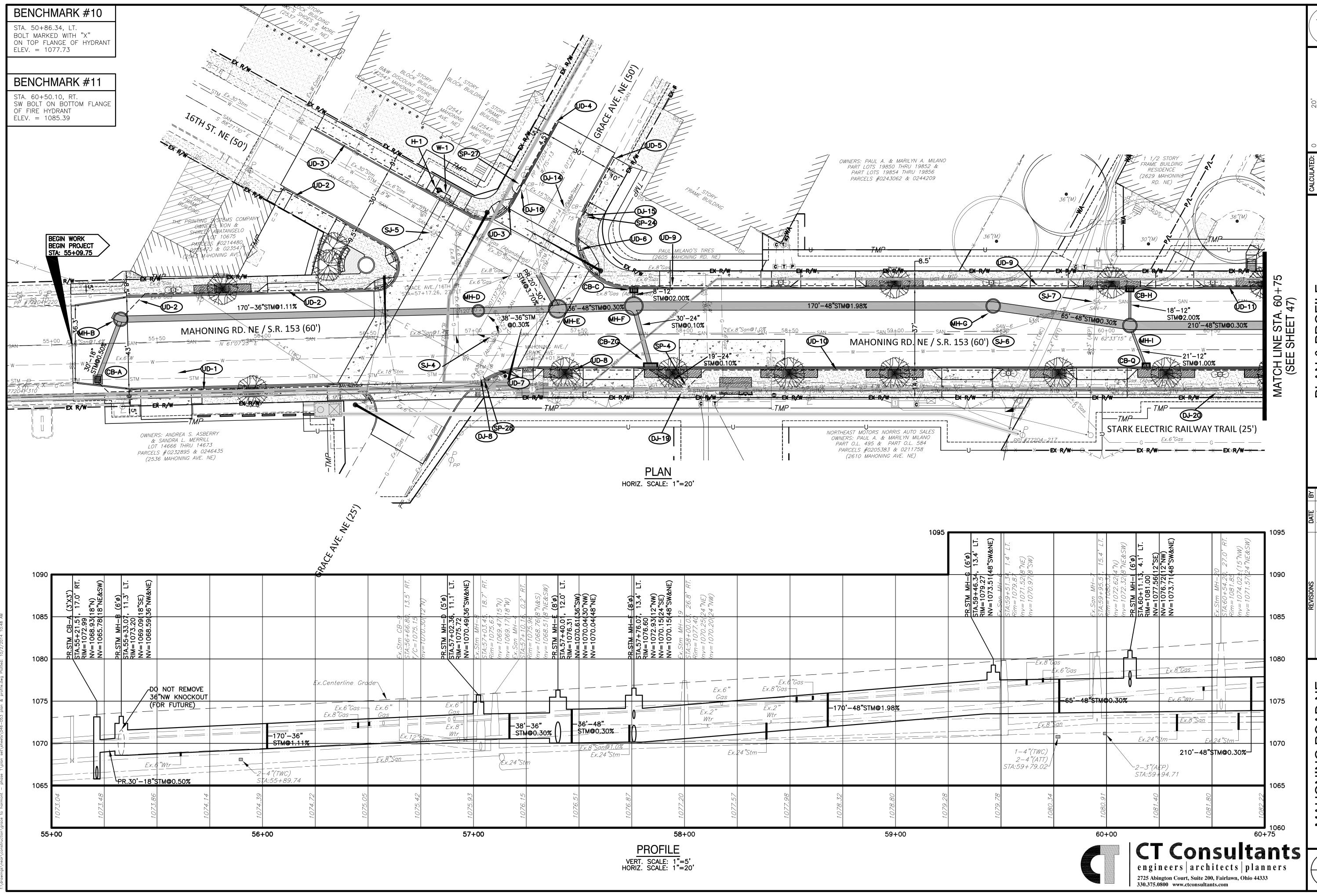
Spring Seeding seeding.











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