

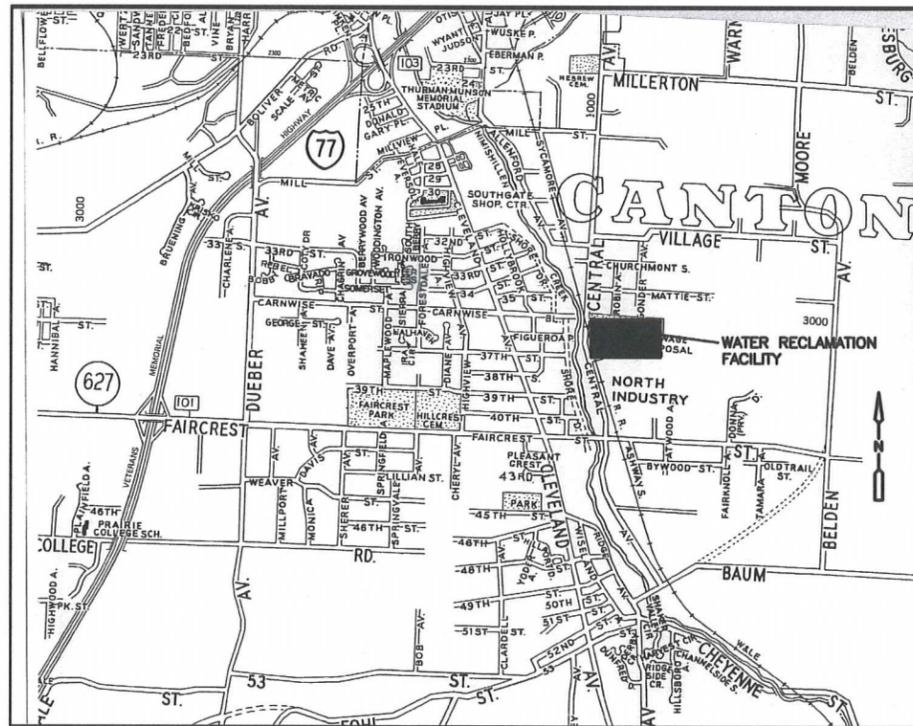
# CITY OF CANTON, OHIO

## CANTON WATER RECLAMATION FACILITY

### BIOFILTER MEDIA REPLACEMENT PROJECT

MAY 2012

#### LIST OF DRAWINGS



**LOCATION MAP**

NO SCALE

<u>SHT. NO.</u>	<u>DESCRIPTION</u>
<u>GENERAL</u>	
G.01	TITLE SHEET
<u>CIVIL</u>	
C.01	EXISTING SITE PLAN
<u>MECHANICAL</u>	
M.01	BIOFILTER – PLAN
M.02	BIOFILTER – EXISTING SECTIONS
M.03	BIOFILTER – NEW SECTIONS

SUBMITTED BY:

*Edward J. St. John*  
EDWARD J. ST. JOHN, P.E., BCEE

5/1/12

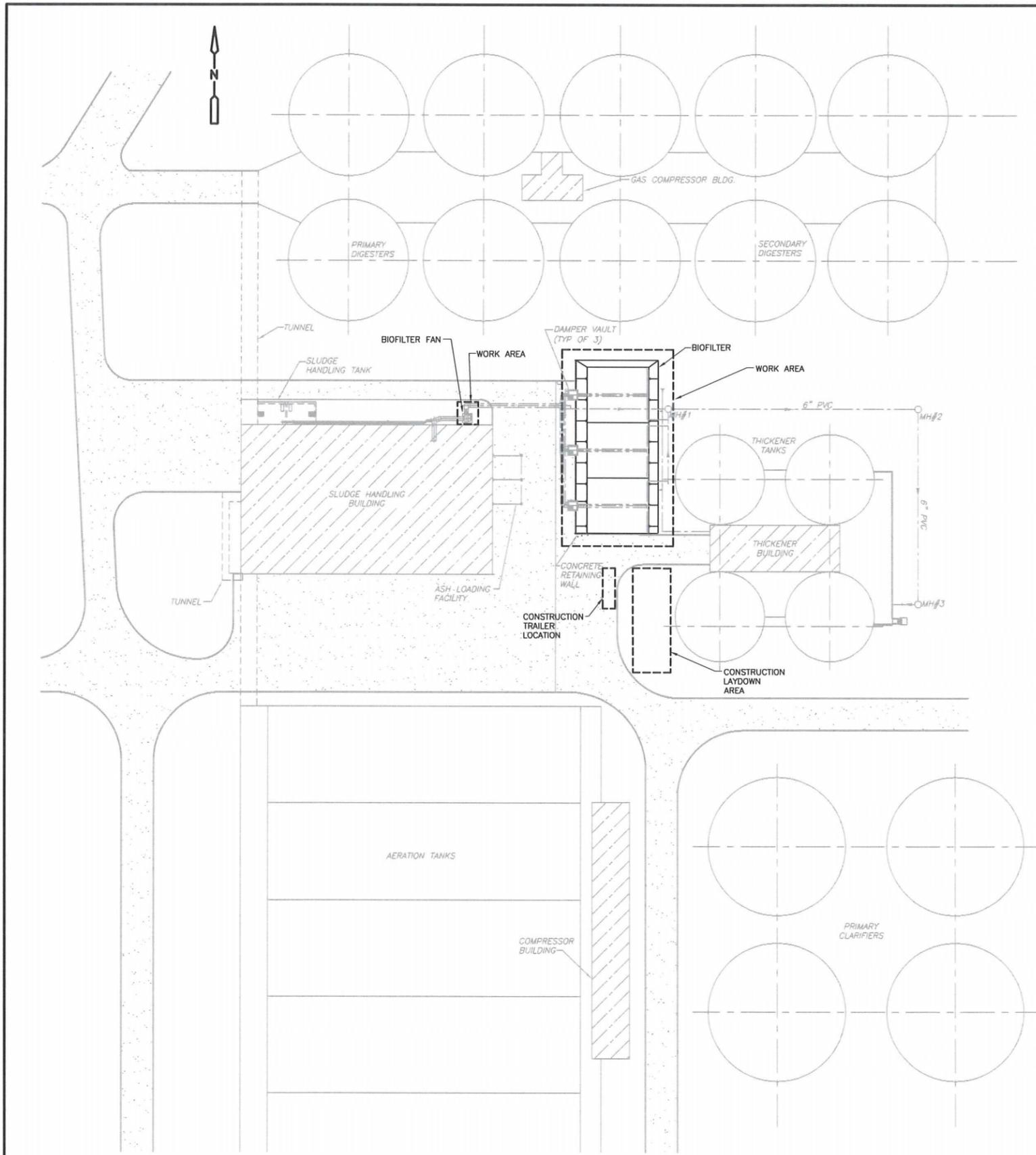
DATE

**CDM  
Smith**



**CDM  
Smith**  
CLEVELAND, OHIO

**UNDERGROUND UTILITIES**  
48 HOURS  
BEFORE YOU DIG  
CALL (TOLL FREE)  
800/362-2764  
OHIO UTILITIES  
PROTECTION SERVICE  
NON-MEMBERS  
MUST BE CALLED DIRECTLY



**GENERAL NOTES**

1. EXISTING STRUCTURES, ELEVATIONS, PIPING AND UTILITIES ARE INDICATED IN THEIR APPROXIMATE LOCATIONS ON THE PLANS; HOWEVER, THE INFORMATION IS NOT GUARANTEED TO BE CORRECT AND/OR COMPLETE, HAVING BEEN PLOTTED FROM AVAILABLE DRAWINGS. ALL SUCH DATA SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO FABRICATION AND CONSTRUCTION. THE EXISTENCE OF STRUCTURES, PIPING, ETC. WHICH ARE NOT SHOWN AND WHICH MAY BE ENCOUNTERED WILL NOT BE A BASIS FOR A CLAIM FOR EXTRA WORK.
2. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING. EXISTING PIPE AND UTILITY LOCATIONS ARE APPROXIMATE ONLY AND MAY NOT REFLECT ALL EXISTING PIPING IN THE AREA.
3. CONTRACTOR SHALL RESTORE ALL EXISTING FEATURES DISTURBED DURING THE COURSE OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO ROADWAYS, CURBING, AND GRASSED AREAS TO CONDITIONS EXISTING PRIOR TO START OF WORK UNLESS OTHERWISE NOTED ON DRAWINGS.
4. CONTRACTOR SHALL PROTECT FROM DAMAGE ALL MANHOLE FRAMES AND COVERS, VALVE BOXES AND COVERS, AND UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED.
5. CONTRACTOR TO RESEED ALL AREAS DISTURBED OR EXCAVATED DURING CONSTRUCTION. SEE SPECIFICATION SECTION 02933 FOR DETAILS.
6. CONTRACTOR TO PROVIDE TEMPORARY FENCING AND SECURITY AROUND LAYDOWN AREA.
7. CONTRACTOR AND ASSOCIATED WORKERS MUST PARK IN THE SPACE PROVIDED IN THE LAYDOWN AREA.
8. CONTRACTOR SHALL ENSURE THAT EXISTING GAS, STORMWATER, ELECTRICAL, PHONE, SANITARY, POTABLE AND NON-POTABLE WATER UTILITIES ARE MAINTAINED IN SERVICE AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY AND OWNER.
9. THE CONTRACTOR'S OPERATIONS SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE INTERFERENCE WITH PLANT OPERATIONS.
10. THE ASH LOADING FACILITY MUST STAY IN OPERATION AND BE ACCESSIBLE AT ALL TIMES.

**ABBREVIATIONS**

CONC - CONCRETE  
 HDPE - HIGH DENSITY POLYETHYLENE  
 NTS - NOT TO SCALE  
 PVC - POLYVINYL CHLORIDE

**VALVES AND SYMBOLS**

SYMBOL	FEATURE
	GENERAL SHUT-OFF VALVE

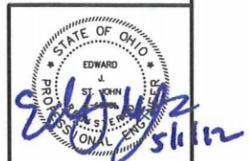
**SITE PLAN**  
 NTS

DESIGNED BY: S. WYMAN  
 DRAWN BY: G. PRATT  
 SHEET CHK'D BY: S. WYMAN  
 CROSS CHK'D BY: E. ST. JOHN  
 APPROVED BY: E. ST. JOHN  
 DATE: MAY 2012



CITY OF CANTON, OHIO  
 CANTON WATER RECLAMATION FACILITY  
**BIOFILTER MEDIA REPLACEMENT PROJECT**

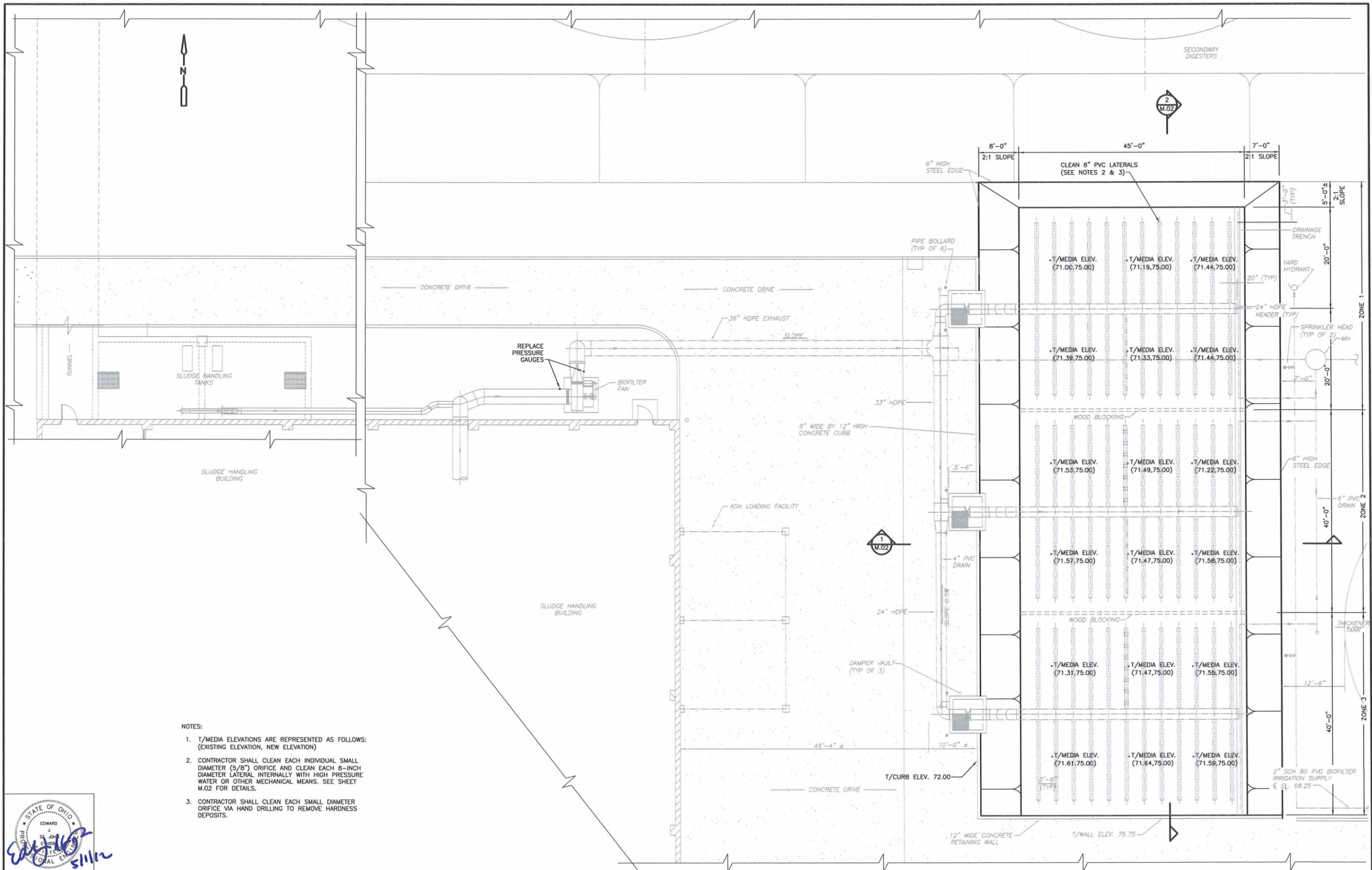
**CIVIL**  
**EXISTING SITE PLAN**



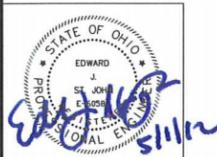
PROJECT NO. 20501-89399  
 FILE NAME: CANTON-02

SHEET NO.  
**C.01**

REV. NO.	DATE	DRWN	CHKD	REMARKS



- NOTES:
1. T/MEDIA ELEVATIONS ARE REPRESENTED AS FOLLOWS:  
(EXISTING ELEVATION, NEW ELEVATION)
  2. CONTRACTOR SHALL CLEAN EACH INDIVIDUAL SMALL DIAMETER (5/8") ORIFICE AND CLEAN EACH 8-INCH DIAMETER LATERAL INTERNALLY WITH HIGH PRESSURE WATER OR OTHER MECHANICAL MEANS. SEE SHEET M.02 FOR DETAILS.
  3. CONTRACTOR SHALL CLEAN EACH SMALL DIAMETER ORIFICE VIA HAND DRILLING TO REMOVE HARDNESS DEPOSITS.



REV. NO.	DATE	DRWN	CHKD	REMARKS

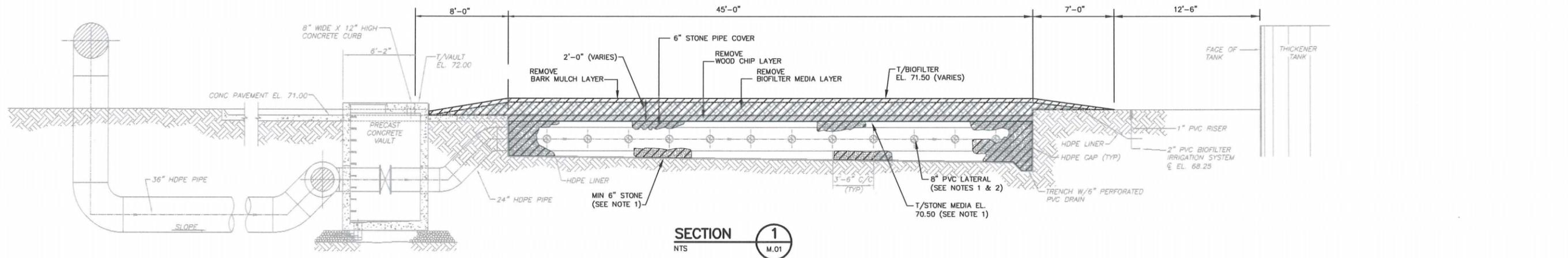
DESIGNED BY: S. WYMAN  
 DRAWN BY: G. PRATT  
 SHEET CHK'D BY: S. WYMAN  
 CROSS CHK'D BY: E. ST. JOHN  
 APPROVED BY: E. ST. JOHN  
 DATE: MAY 2012

**CDM Smith**  
 1488 WEST 9th STREET, SUITE 750  
 CLEVELAND, OHIO 44113  
 Tel: (216) 579-0404

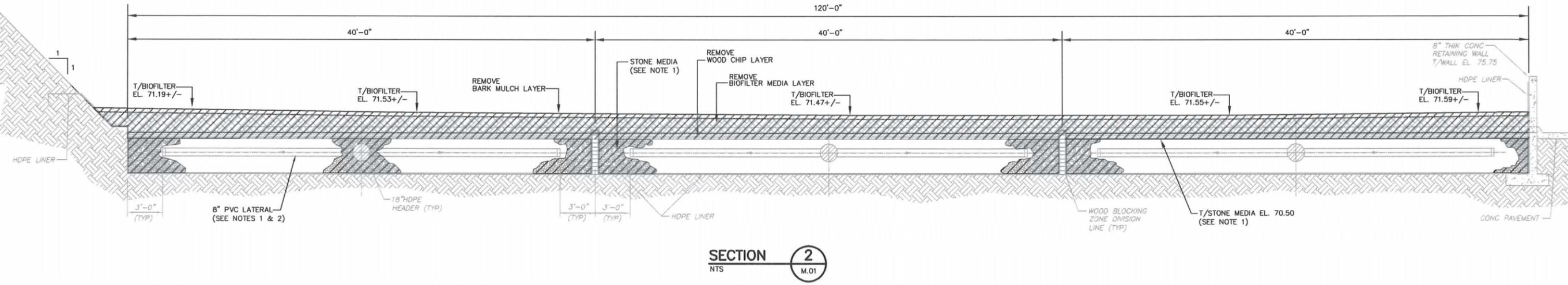
CITY OF CANTON, OHIO  
 CANTON WATER RECLAMATION FACILITY  
**BIOFILTER MEDIA REPLACEMENT PROJECT**

**MECHANICAL  
 BIOFILTER - PLAN**

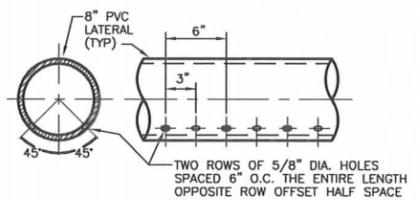
PROJECT NO. 20501-89399  
 FILE NAME: CANTON-03  
 SHEET NO. **M.01**



SECTION 1  
NTS M.01



SECTION 2  
NTS M.01



DETAIL A  
1 1/2" = 1'-0"

- NOTES:
- CONTRACTOR SHALL REMOVE AND REINSTALL STONE AS REQUIRED TO CLEAN EACH INDIVIDUAL SMALL DIAMETER (5/8") ORIFICE AND CLEAN EACH 8" DIAMETER LATERAL INTERNALLY WITH HIGH PRESSURE WATER OR OTHER MECHANICAL MEANS. SEE DETAIL A THIS SHEET FOR ORIFICE LOCATIONS.
  - CONTRACTOR SHALL CLEAN EACH SMALL DIAMETER ORIFICE VIA HAND DRILLING TO REMOVE HARDNESS DEPOSITS.

DESIGNED BY:	S. WYMAN
DRAWN BY:	G. PRATT
SHEET CHKD BY:	S. WYMAN
CROSS CHKD BY:	E. ST. JOHN
APPROVED BY:	E. ST. JOHN
DATE:	MAY 2012

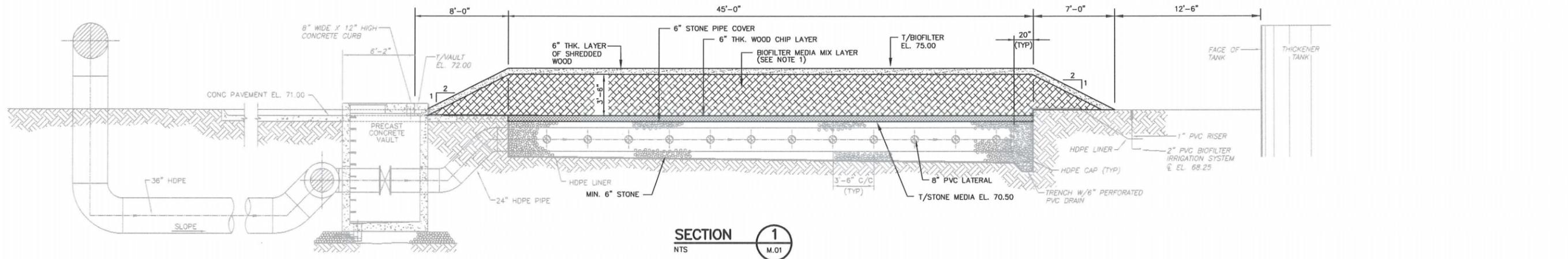
**CDM Smith**  
1488 WEST 9th STREET, SUITE 750  
CLEVELAND, OHIO 44113  
Tel: (216) 578-0404

CITY OF CANTON, OHIO  
CANTON WATER RECLAMATION FACILITY  
**BIOFILTER MEDIA REPLACEMENT PROJECT**

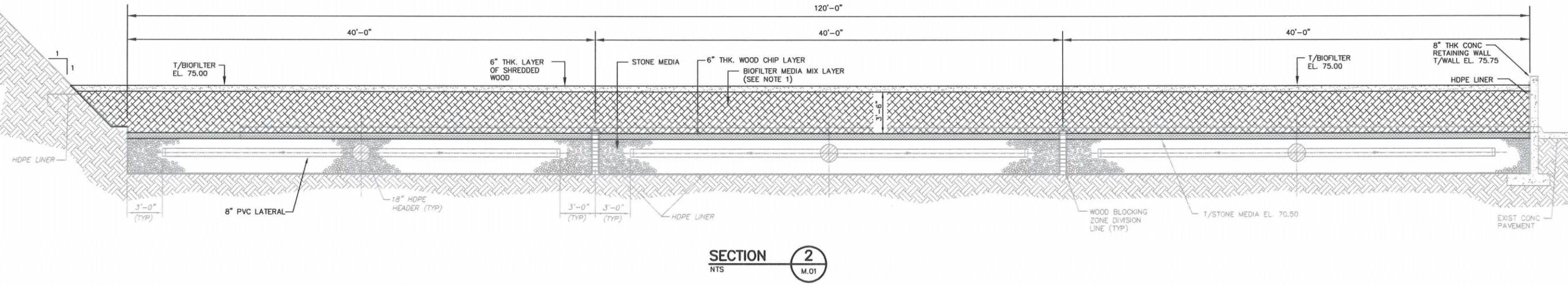
**MECHANICAL**  
**BIOFILTER - EXISTING SECTIONS**



PROJECT NO.	20501-89399
FILE NAME:	CANTON-04
SHEET NO.	M.02

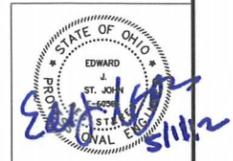


SECTION 1  
NTS M.01



SECTION 2  
NTS M.01

NOTE:  
1. CONTRACTOR SHALL INSTALL A DEPTH OF 4 FEET OF BIOFILTER MEDIA MIX TO ACCOUNT FOR SETTLEMENT. THE TOP OF BIOFILTER ELEVATION FOLLOWING INSTALLATION SHALL BE 75.50.



DESIGNED BY:	S. WYMAN
DRAWN BY:	G. PRATT
SHEET CHECK'D BY:	S. WYMAN
CROSS CHECK'D BY:	E. ST. JOHN
APPROVED BY:	E. ST. JOHN
DATE:	MAY 2012



CITY OF CANTON, OHIO  
CANTON WATER RECLAMATION FACILITY  
BIOFILTER MEDIA REPLACEMENT PROJECT

MECHANICAL  
BIOFILTER - NEW SECTIONS

PROJECT NO.	20501-89399
FILE NAME:	CANTON-05
SHEET NO.	M.03