

NOT TO SCALE

Engineering

ros ms D

S

OVEMEN 2 **=** Ш

<

Ш

Z

WATER SUPPL APPROVED! 110 BIVIPONMENTAL PROTECTION AGENCY X AS EVIDENCED BY COPY OF LETTER OF APPROVAL HERETO ATTACHED

E-52687

ILLIAM H. ADAMS IV, P.E. 52687

CITY OF ZANESVILLE WAYNE AVE. WATER IMPROVEMENTS ZANESVILLE, OHIO

SPECIFICATIONS

THE CURRENT REQUIREMENTS OF THE CITY OF ZANESVILLE, ODO AND THE CONSTRUCTION AND MATERIALS SPECIFICATIONS OF THE "RAINWATER AND LAND DEVELOPMENT, OHIO'S STANDARDS FOR STORMWATER MANAGEMENT LAND DEVELOPMENT AND URBAN STREAM PROTECTION, SECOND EDITION 1996" IN FORCE ON THE DATE OF THIS CONTRACT, INCLUDING ALL SUPPLEMENTS THERET AS WELL AS THE MANUFACTURERS RECOMMENDATIONS FOR INSTALLATION SHALL GOVERN THE MATERIALS AND WORKMANSHIP TO COMPLETE THE IMPROVEMENTS SET FORTH IN THESE PLANS.

CONSTRUCTION DRAWINGS, SUPPLEMENTAL SPECIFICATIONS, AND SPECIAL PROVISIONS LISTED ON THE TITLE SHEET OR REFERRED TO WITHIN THESE PLANS SHALL BE CONSIDERED A PART OF THESE PLANS.

SAFETY

THE CONTRACTOR AND SUBCONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL STATE AND LOCAL SAFETY REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTOR(S) TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK THE CONTRACTOR AND SUB-CONTRACTOR SHALL ALSO ABIDE BY ALL ORDINANCES OF MUSKINGUM COUNTY.

ENGINEER

THE TERM "ENGINEER" USED IN THESE PLANS SHALL MEAN THE DESIGN ENGINEER.

INCLUSIVE BID

THE CONTRACTOR'S BID SHALL INCLUDE ALL LABOR, MATERIALS. AND EQUIPMENT REQUIRED TO COMPLETE THE PROJECT. COMPENSATION FOR ANY WORK WHICH DOES NOT HAVE A SPECIFIC PAY ITEM WILL BE INCLUDED IN THE PRICE BID FOR THE INDIVIDUAL ITEMS.

PERMITS

THE CONTRACTOR OR DEVELOPER SHALL SECURE AND PAY FOR ALL PERMITS AND GOVERNMENT FEES, LICENSES, AND INSPECTIONS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE IMPROVEMENTS SHOWN ON THE PLANS. ALL PERTINENT STANDARD CONSTRUCTION DRAWINGS ARE AVAILABLE UPON REQUEST AT THE OFFICE OF THE CITY ENGINEER.

EMERGENCY PHONE NUMBER

THE CONTRACTOR SHALL PROVIDE THE CITY OF ZANESVILLE WITH A 24 HOUR TELEPHONE NUMBER TO READILY CONTACT A RESPONSIBLE PARTY IN THE CASE OF AN EMERGENCY. COSTS AND/OR DAMAGES INCURRED RELATED TO WORK PERFORMED BY THE CONTRACTOR IN SUCH EMERGENCIES ARE THE CONTRACTOR'S RESPONSIBILITY AND NOT THAT OF THE CITY OF ZANESVILLE.

WORKING HOURS

WORKING HOURS ARE LIMITED TO **7:00 A.M. TO 6:00 P.M.** MONDAY THROUGH FRIDAY. NO WORK IS TO BE CONDUCTED OTHERWISE WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

PLAN MODIFICATIONS

ANY MODIFICATION TO THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE CITY ENGINEER.

SITE INVESTIGATION

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE AND VERIFY THE EXTENT OF THE WORK TO BE PERFORMED PRIOR TO MAKING HIS BID. THIS IS ESPECIALLY TRUE WITH REGARD TO ANY REMOVAL ITEMS.

CONSTRUCTION STAKING

ALL CONSTRUCTION STAKING SHALL BE DONE BY OR UNDER THE DIRECTION OF A PROFESSIONAL REGISTERED SURVEYOR.

CLEAN UP

THE TRACKING OF MUD, DIRT, DEBRIS OR SPILLAGE OF SAME UPON STREETS, RESIDENTIAL OR COMMERCIAL DRIVES, SIDEWALKS, OR BIKE PATHS IS PROHIBITED AND ANY SUCH OCCURANCE SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. AT THE END OF THE DAY, THE CONTRACTOR SHALL CLEAN UP AND DISPOSE OF ALL DEBRIS AND MATERIAL RESULTING FROM HIS OPERATION AND RESTORE ALL SURFACES AND STRUCTURES TO THEIR ORIGINA CONDITION.

THE CONTRACTOR SHALL MAINTAIN THE PROJECT IN A PRESENTABLE CONDITION, PER SPECIFICATION 104.06.

SANITARY FACILITIES

THE CONTRACTOR SHALL FURNISH AND MAINTAIN SANITARY CONVENIENCE FACILITIES FOR THE WORKERS AND INSPECTORS FOR THE DURATION OF THE PROJECT.

DELIVERIES TO THE JOB SITE

DELIVERIES OF MATERIALS AND EQUIPMENT TO THE JOB SITE SHALL BE ROUTED SUCH TO MAXIMIZE THE USE OF STATE AND FEDERAL ROUTES AND TO MINIMIZE THE USE OF STREETS. IF THE CONTRACTOR DESIRES A ROUTE NOT COMPLYING WITH THE ABOVE, HE SHALL REQUEST, IN WRITING, PERMISSION FROM THE CITY ENGINEER TO USE AN ALTERNATE A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO THE DELIVERY DATE. THE ENGINEER SHALL HAVE THE RIGHT TO THE LIMIT THE ROUTE OF DELIVERY, TOTAL TONNAGE PER VEHICLE PER DELIVERY OR THE HOURS SUCH DELIVERIES MAY

RIGHT-OF-WAY

IN ADDITION TO DIRECT REQUIREMENTS OF THE CONTRACT SPECIFIC CATIONS. THE CONTRACTOR SHALL OBSERVE AND CONFORM TO THE SPECIFIC REQUIREMENTS OF ALL RIGHTS-OF-WAYS INCLUDING EASEMENTS, COURT ENTRIES, RIGHTS OF ENTRY OR ACTION FILED IN COURT IN ACCORDANCE WITH THE CODE OF THE APPLICABLE GOVERNING AGENCY. THE CONTRACTOR SHALL NOT TRESPASS UPON PRIVATE PROPERTY WITHOUT THE WRITTEN CONSENT OF THE

NON-RUBBER TIRE VEHICLES

NONRUBBER TIRE VEHICLES. NO NONRUBBER TIRE VEHICLES SHALL BE MOVED ON COUNTY STREETS. EXCEPTIONS MAY BE GRANTED BY THE COUNTY WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING AND ANY RESULTING DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE CITY. THE CONTRACTOR SHALL USE EXTREME CARE WHEN OPERATING NONRUBBER TIRE VEHICLES ON STREETS OR DRIVEWAYS TO AVOID MARKING OR DAMAGING THE PAVEMENT. PROTECTION OF THE PAVEMENT FROM DAMAGE RESULTING FROM THE TRACKS OF NON-RUBBER TIRE VEHICLES UTILIZED IN TRENCH EXCAVATION SHALL BE REQUIRED. A WOOD PLANK SYSTEM, USED TIRES, RUBBER MATS OR OTHER MEANS AS APPROVED BY THE CITY'S REPRESENTATIVE SHALL BE USED TO PROTECT THE PAVEMENT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS OF THE CONTRACT.

DRAINAGE

ALL STORM SEWER, CULVERTS, HEADWALLS, CURB INLETS, MANHOLES, METHODS OF CONSTRUCTION, AND WORKMANSHIP FOR DRAINAGE AND APPURTENANCES SHOWN ON THESE PLANS SHALL CONFORM TO THE RULES AND REGULATIONS OF MUSKINGUM COUNTY CURRENT ON THE DATE OF CONTRACT UNLESS THE REQUIREMENTS OF SUCH RULES AND REGULATIONS ARE UPGRADED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.

IRON PINS AND MONUMENTS

THE CONTRACTOR SHALL REFERENCE ALL IRON PINS AND MONUMENTS BEFORE EXCAVATING AT OR NEAR THEM, IF ANY IRON PINS OR MONUMENTS ARE DESTROYED OR DAMAGED BY THE CONTRACTOR, THEY SHALL BE ACCURATELY REPLACED BY A REGISTERED SURVEYOR AT THE COMPLETION OF THE OF THE PROJECT AND AT NO EXPENSE TO THE CITY OR THE PROPERTY

UTILITY INTERFERENCE

IF DURING CONSTRUCTION, INTERFERENCE ARISES WITH EXISTING UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE UTILITY COMPANY INVOLVED. ANY AND ALL WORK REQUIRED FOR PUBLIC OR PRIVATE UTILITIES WILL BE DONE AT THE EXPENSE OF THEIR PERSPECTIVE OWNERS, UNLESS OTHERWISE NOTED ON THESE PLANS. THE CONTRACTOR SHALL NOTIFY, AT LEAST (7) SEVEN DAYS BEFORE BREAKING GROUND, ALL PUBLIC SERVICE CORPORATIONS HAVING WIRES, POLES, PIPES, CONDUITS MANHOLES, OR OTHER STRUCTURES THAT MAY BE AFFECTED BY THIS OPERATION, INCLUDING ALL STRUCTURES WHICH ARE AFFECTED AND NOT SHOWN ON THESE PLANS.

STORM WATER POLLUTION PREVENTION PLAN

SEE SHEET C-13 FOR STORM WATER PREVENTION PLAN.

WORK IN RIGHT-OF-WAY

NO MATERIALS, INCLUDING PIPE, SHALL BE STORED WITHIN THE RIGHT-OF-WAY OR WITHIN 100 FEET OF ANY INTERSECTING STREET. ALLEY, OR DRIVEWAY. DURING NON-WORKING HOURS, STORAGE OF EQUIPMENT SHALL COMPLY WITH THESE SAME REQUIREMENTS. COMPLIANCE WITH THESE REQUIREMENTS SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS LEGAL RESPONSIBILITIES OR LIABILITIES FOR THE SAFETY OF THE PUBLIC.

THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION IN ACCORDANCE WITH ITEM 203.05.

ALL EXCAVATED MATERIAL SHALL BE WORKED IN SUCH A MANNER THAT WILL NOT ENDANGER THE WORK NOR OBSTRUCT THE WALKS AND DRIVEWAYS, HYDRANTS UNDER PRESSURE, VALVE PITS. MANHOLE COVERS, VALVE BOXES, INLETS, FIRE AND POLICE CALL BOXES OR OTHER UTILITIES. GUTTERS SHALL BE KEPT CLEAR OR OTHER SATISFACTORY PROVISIONS MADE FOR STREET DRAINAGE, AND NATURAL WATER COURSES SHALL NOT BE OBSTRUCTED. THE FINAL TRIMMING OF THE BOTTOM AND SIDE OF THE EXCAVATION AGAINST WHICH MASONRY IS TO BE BUILT, SHALL BE DONE JUST BEFORE THE CONCRETE IS PLACED.

ROADWAY, STORM DRAINAGE, I.E. DITCHES, PIPES AND CULVERTS SHALL NOT BE OBSTRUCTED DURING CONSTRUCTION. TEMPORARY EROSION AND SEDIMENTATION MEASURES ARE TO BE INSTALLED AND MAINTAINED BY THE CONTRACTOR TO PREVENT SILTATION OF DRAINAGE DITCHES, SEWERS, AND CULVERTS.

THE WORK OF THIS CONTRACT SHALL NOT INTERFERE WITH THE CONTINUOUS FLOW IN, OR THE OPERATION OF, THE EXISTING SANITARY SEWER, WATER LINES, POWER, TELEPHONE, CABLE T.V., GAS OR ANY OTHER SYSTEM THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL POLES AND RELOCATING ANY UTILITY THAT IMPEDES CONSTRUCTION. NOTHING SHALL BE DONE BY ANY OTHER CONTRACTOR FOR THIS PROJECT WHICH WILL IN ANY WAY REDUCE THE QUALITY OR QUALITY LEVEL OF SUCH OPERATIONS. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER ONE (1) WEEK PRIOR TO MODIFYING ANY FACILITIES. NO PAYMENT WILL BE MADE FOR ANY UTILITY MAINTENANCE UNLESS SPECIFICALLY NOTED AS A BID ITEM IN THE PROPOSAL.

EXISTING UTILITIES

THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CON-STRUCTION. THE CONTRACTOR SHALL CALL, TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (OUPS) (1-800-362-2764) SEVENTY TWO (72) HOURS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST FORTY EIGHT (48) HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES.

LOCATION MAP

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CITY OF ZANESVILLE AND/OR ENGINEER ASSUMES NO RESPONSIBILITY AS TO THE ACCURACY OR DEPTHS OF THE UNDERGROUND FACILITIES AS SHOWN ON THE PLANS. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST SEVEN (7) DAYS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION OF ANY UTILITIES AS REQUIRED BY THE PLAN WITH THE OWNER OF THE AFFECTED UTILITY.

WHERE POTENTIAL GRADE CONFLICTS MIGHT OCCUR WITH EXISTING UTILITIES. THE CONTRACTOR WILL BE REQUIRED TO UNCOVER SUCH UTILITIES SUFFICIENTLY IN ADVANCE OF LAYING PIPE OR DUCT IN ORDER THAT THE ENGINEER MAY DETERMINE THE EXACT ELEVATION AND MAKE ANY NECESSARY ADJUSTMENTS. COST OF THE ABOVE SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS IN THE CONTRACT.

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

AEP 1900 LICKING ROAD ZANESVILLE, OHIO (740) 450-4863 ATTN: FRED MILLER

> CABLE TIME WARNER CABLE 737 HOWARD STREET ZANESVILLE, OHIO 43701 (740) 455-9705 ATTN: ENGINEERING DEPT.

WATER CITY OF ZANESVILLE WATER DIVISION 1750 NORTH RIVER ROAD ZANESVILLE, OHIO 43701 (740) 455-0631 ATTN: PAUL MILLS

TELEPHONE AMERITECH 160 N. SIXTH STREET ZANESVILLE, OHIO 43701 (740) 454-3514 ATTN: ENGINEERING DEPT.

COLUMBIA GAS OF OHIO

ZANESVILLE, OHIO 43702

2429 LINDEN AVENUE

ATTN: JIM DEITRICH

P.O. BOX 310

(740) 452-5467

CITY OF ZANESVILLE SEWER DIVISION 1730 MOXAHALA AVENUE ZANESVILLE, OHIO 43701 (740) 455-0641 ATTN: DAN SMITH

UNDERGROUND UTILITIES TWO WORKING DAYS BEFORE YOU DIG CALL 1-800-362-2764 (TOLL FREE) OHIO UTILITIES PROTECTION SERVICE **NON-MEMBERS** AUST BE CALLED DIRECTLY

BENCHMARKS:

DATE 7/20/09

RECEIVED

JUL 23 2009

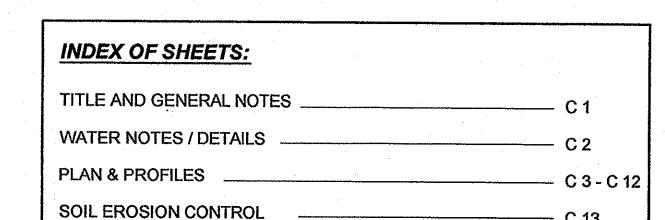
Ohio EPA - DDAGW

SR 22/93

BASE PLAN IS PREPARED FROM **EXISTING AVAILABLE MAPPING** PROVIDED BY THE CITY OF ZANESVILLE AND MUSKINGUM MAPPING

SIGNATURES BELOW SIGNIFY ONLY AGREEMENT WITH THE GENERAL PURPOSES AND INTENT OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE OWNER AND ENGINEER PREPARING THE PLANS.

APPROVED MAL	APPROVED MAN Amo				
DATE 7-20-09	PUBLIC SERVICE DIRECT				
0/1 0					



CITY ENGINEER

#714429 Amount 3650,000 ate 6/30/0 134944 Date 6/26/89

PLANS PREPARED BY:

WILLIAM H

REVISION INDEX: A DATE: DESCRIPTION: 1 07/14/09 REVISED PER CITY AND EPA COMMENTS

Horiz:

C0906 JUNE 24, 2009 SHEET #:

ITEM 638 - WATER WORK - GENERAL

ALL WATER PIPE, FITTINGS, METHODS OF CONSTRUCTION, AND WORKMANSHIP FOR WATER LINES AND APPURTENANCES SHOWN ON THESE PLANS SHALL CONFORM TO THE RULES AND REGULATIONS OF THE CITY OF ZANESVILLE, DIVISION OF WATER, AND ODOT ITEM 638 CURRENT ON THE DATE OF CONTRACT UNLESS THE REQUIREMENTS OF SUCH RULES AND REGULATIONS ARE UPGRADED BY THE FOLLOWING NOTES OR BY THE CONSTRUCTION DETAILS SET FORTH HEREIN.

THE INSTALLATION, JOINING AND BACKFILLING FOR ALL WATER MAINS, HYDRANTS AND SERVICE CONNECTIONS SHALL CONFORM TO THE CITY OF ZANESVILLE DESIGN STANDARDS OR AS DIRECTED BY THE WATER SUPERINTENDENT.

OPERATION OF IN SERVICE VALVES SHALL BE BY WATER DEPARTMENT PERSONNEL ONLY. A 24 HOUR NOTICE SHALL BE REQUIRED FOR SHUT DOWNS.

ALL WATER MAIN MATERIALS MUST MEET AWWA SPECIFICATIONS AND A STATEMENT OF VERIFICATION MUST BE FURNISHED TO THE CITY.

ALL WATER MAINS SHALL BE AWWA C-900 (DR-18) PVC.

SERVICE LINES SHALL BE OF 200 PSI POLYETHYLENE (PE) COPPER TURING SIZE (CTS), NOT LESS THAN 3/4" AND SHALL BE COVERED TO A DEPTH OF FOUR (4) FT.

CURVING AND DEFECTION SHALL BE LIMITED TO THAT RECOMMENDED BY THE MANUFACTURER.

ALL FITTINGS SHALL BE DUCTILE IRON, MECHANICAL JOINT, SHALL COMPLY WITH AWWA SPECIFICATIONS, AND BE MANUFACTURED IN THE UNITED STATES. FITTINGS SHALL BE ADEQUATELY RESTRAINED WITH MECHANICAL RESTRIANTS USING ROMAC GRIP RINGS. COMPACT DUCTILE FITTINGS MADE IN THE UNITED STATES PER ANSI/AWWA C153/A21.53 SHALL BE USED.

HYDRANTS SHALL BE AVK SERIES 2780 NOSTALGIC STYLE DRY BARREL MEETING AWWA C502 WITH THE FACTORY BRASS PLUGS INSTALLED IN THE HYDRANT DRAINS

ALL VALVES SHALL BE AVK SERIES 45 RESILIENT WEDGE GATE VALVE WITH NONRISING STEM MEETING AWWA C-509 AND SHALL HAVE MECHANICAL JOINTS, A RIGHT CLOSURE, AND A 2" SQUARE OPERATING NUT.

THE CAPS AND INSIDE OF ALL MAINLINE WATER VALVE BOXES SHALL BE PAINTED BLUE, AND THE CAPS AND INSIDE OF ALL FIRE HYDRANT GATE VALVE BOXES SHALL BE PAINTED RED WITH TWO COATS OF RUST INHIBITIVE PAINT. PUBLIC FIRE HYDRANTS ARE TO BE PAINTED WITH TWO COATS OF FEDERAL SAFETY YELLOW, SHERWIN WILLIAMS B54Y37. PRIVATE FIRE HYDRANTS ARE TO BE PAINTED FEDERAL SAFETY RED WITH WHITE CAPS AND BONNETS. HYDRANTS PLACED IN A FACTORY LOOPED SYSTEM SHALL BE PAINTED ALL FEDERAL SAFETY RED. ALL MECHANICAL FASTENERS, BOLTS, ALL THREAD ROD, ETC., ARE TO RECEIVE ONE COAT OF RUST INHIBITIVE PAINT OR COATING.

IF THE TOP OF THE OPERATING NUT IS MORE THAN THIRTY SIX (36) INCHES BELOW FINISHED GRADE, AN EXTENSION STEM SHALL BE FURNISHED TO BRING THE TOP OF THE OPERATING NUT TO WITHIN TWENTY FOUR (24) INCHES OF FINISHED GRADE ELEVATION. ALL VALVE STEM EXTENSIONS ARE TO BE INSTALLED WITH THE EXTENSION SECURED DIRECTLY TO THE VALVE OPERATING NUT WITH GALVANIZED RESTRAINT CLIPS.

ALL WATER LINES SHALL BE INSTALLED WITH AT LEAST 10 FEET HORIZONTAL SEPARATION FROM SANITARY SEWER LINES. WHEVER A WATER LINE AND SEWER MUST CROSS, THE SEWER MAIN SHALL BE LAID SUCH THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER LINE MEASURED BETWEEN THE OUTSIDE PIPE WALLS. IN CASES WHERE THE REQUIRED SEPARATION CANNOT BE MAINTAINED, CLOSER INSTALLATION (WITH THE SEWER ENCASED IN CONCRETE OR MADE OF PRESSURE PIPE) MAY BE PERMITTED ON A CASE-BY-CASE BASIS ONLY AFTER RECEIPT OF WRITTEN CONCURRENCE FROM THE OHIO EPA DIVISION OF DRINKING WATER.

WATER LINES SHALL BE INSTALLED WITH A MINIMUM OF FOUR AND A HALF (4.5) FEET OF COVER MEASURED FROM THE FINISHED GRADE TO THE TOP OF THE WATER MAIN.

STRUCTURAL BACKFILL TYPE 2 PER 703.11 SHALL BE USED FROM 6" BELOW THE PIPE TO A MINIMUM OF 1' ABOVE THE PIPE. IN PAVED AREAS THE STRUCTURAL BACKFILL TYPE 1 SHALL BE BROUGHT UP TO THE SUBGRADE OF THE PAVEMENT. IN NONPAVED AREAS SOIL OR GRANULAR EMBANKMENT PER 203.02R MAY BE USED AS BACKFILL. PLACEMENT AND COMPACTION REQUIREMENTS FOR BACKFILL SHALL BE PER

THE COST OF ANY DEWATERING OPERATIONS OR ROCK **EXCAVATION REQUIRED FOR THE CONSTRUCTION OF THE** WATER LINE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WATER MAIN.

THE COSTS OF ALL FITTINGS SHALL BE INCLUDED IN THE UNIT

WHEREVER A NON-METALIC WATER MAIN IS INSTALLED THE USE OF UNDERGROUND BLUE METALLIC LOCATOR TAPE AND A TRACER WIRE INSTALLED ABOVE THE LINE SHALL BE

THE NORMAL WORKING PRESSURE IN THE WATER MAINS SHALL

ALL WATER LINES SHALL BE PRESSURE TESTED AT 150 PSI FOR 2 HOURS PRIOR TO ACCEPTANCE BY THE CITY OF ZANESVILLE. THE COST OF THE ABOVE WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE WATER MAIN. THIS TESTING MUST BE IN ACCORDANCE WITH AWWA C-605.

BEFORE BEING PLACED INTO SERVICE AND AFTER BE DISINFECTED IN ACCORDANCE WITH THE SPECIFICATIONS AND PROCEDURES OUTLINED IN AWWA C-651 "STANDARD PROCEDURE FOR DISINFECTION WATER MAINS". ALL BACTERIOLOGICAL TESTING SHALL BE PERFORMED BY THE CITY. SHOULD THE INITIAL TREATMENT RESULT IN AN UNSATISFACTORY BACTERIAL TEST, THE ORIGINAL CHLORINATION PROCEDURE SHALL BE REPEATED BY THE ARE OBTAINED.

603.11.

PRICE BID FOR THE WATER MAIN

THE COSTS OF ALL CONNECTIONS TO AND DISCONNECTION FROM THE EXISTING WATER MAIN SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WATER MAIN.

REQUIRED. TAPE SHALL HAVE 18" OF COVER.

NOT BE LESS THAN 35 PSI.

HYDROSTATIC TESTING, THE COMPLETED WATER WORK SHALL CONTRACTOR AT HIS EXPENSE UNTIL SATISFACTORY RESULTS

ITEM 638-FIRE HYDRANT ASSEMBLY, AS PER PLAN

THE CONTRACTOR SHALL FURNISH AND INSTALL FIRE HYDRANTS AT LOCATIONS AS INDICATED ON THE PLANS AS DIRECTED BY THE ENGINEER. ALL LABOR AND MATERIALS REQUIRED FROM THE WATER MAIN TO THE FIRE HYDRANT INCLUDING (BUT NOT LIMITING TO) THE WATCH VALVE AND VALVE BOX SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 638- FIRE HYDRANT ASSEMBLY, AS PER PLAN.

FIRE HYDRANTS SHALL BE LOCATED A MINIMUM OF 2' BEHIND THE BACK OF CURB AND A MINIMUM OF 1' INSIDE THE RIGHT-OF-WAY LINE AS DIRECTED BY THE ENGINEER. THE LOCATION WILL BE SELECTED TO MINIMIZE SIDEWALK IMPACTS. WATCH VALVES SHALL BE LOCATED SO AS TO BE OUTSIDE OF EXISTING CURB LINE.

ITEM 603-6" PVC SDR 35

THE FOLLOWING CONTINGENCY QUALITY SHALL BE USED AS DIRECTED BY THE ENGINEER TO REPAIR UNMARKED SEWER AND DRAINAGE LINES ENCOUNTERED IN THE PROJECT. ITEM 603-6" PVC SDR 35- 100 FT

ITEM 638- 1/2 INCH POLYETHYLENE SERVICE BRANCH, AS PER PLAN

THE CONTRACTOR SHALL FURNISH AND INSTALL SERVICE BRANCHES AT LOCATIONS AS INDICATED ON THE PLANS AS DIRECTED BY THE ENGINEER. ALL LABOR AND MATERIALS REQUIRED FROM THE WATER MAIN TO THE NEW CURB STOP INCLUDING (BUT NOT LIMITED TO) THE TAP, CORP STOP, CURB STOP, AND NEW CURB BOX SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 638-3/4 INCH POLYETHYLENE SERVICE BRANCH, AS PER PLAN.

ITEM 202- PAVEMENT REMOVED, AS PER PLAN

ALL PAVEMENTS TO BE REMOVED SHALL BE SAW CUT PRIOR TO REMOVAL. ALL PAVEMENTS TO BE REMOVED ARE CONSIDERED AS UNCLASSIFIED EXCAVATION. PAVEMENT SHALL BE TRIMMED TO A NEAT STRAIGHT EDGE PRIOR TO REPLACEMENT. ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THE WORK LISTED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 202- PAVEMENT REMOVED AS PER PLAN.

ITEM SPECIAL - 5 - SACK CDF

THIS ITEM WILL SERVE AS THE TEMPORARY PAVEMENT SURFACE UNTIL ASPHALT BECOMES AVAILABLE THE VISQUEEN BARRIER SHALL BE INCLUDED IN THIS PAY ITEM.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE TYPE 1, PG 64-22, AS PER PLAN

THIS ITEM IS TO BE CONSIDERED A CONTINGENCY QUALITY. THE PROJECT AREA IS SCHEDULED TO BE MILLED AND RESURFACED IN 20IL. THIS ITEM WILL INCLUDE THE REMOVAL OF THE 5-SACK CDF AND VISQUEEN BARRIER.

ITEM 638 8" WATER MAIN HDPE, DR11

THE FOLLOWING CONTINGENCY QUANTITY SHALL BE INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 638 8" WATER MAIN HDPE, DR11-40 FT

ITEM 614 - MAINTAINING TRAFFIC

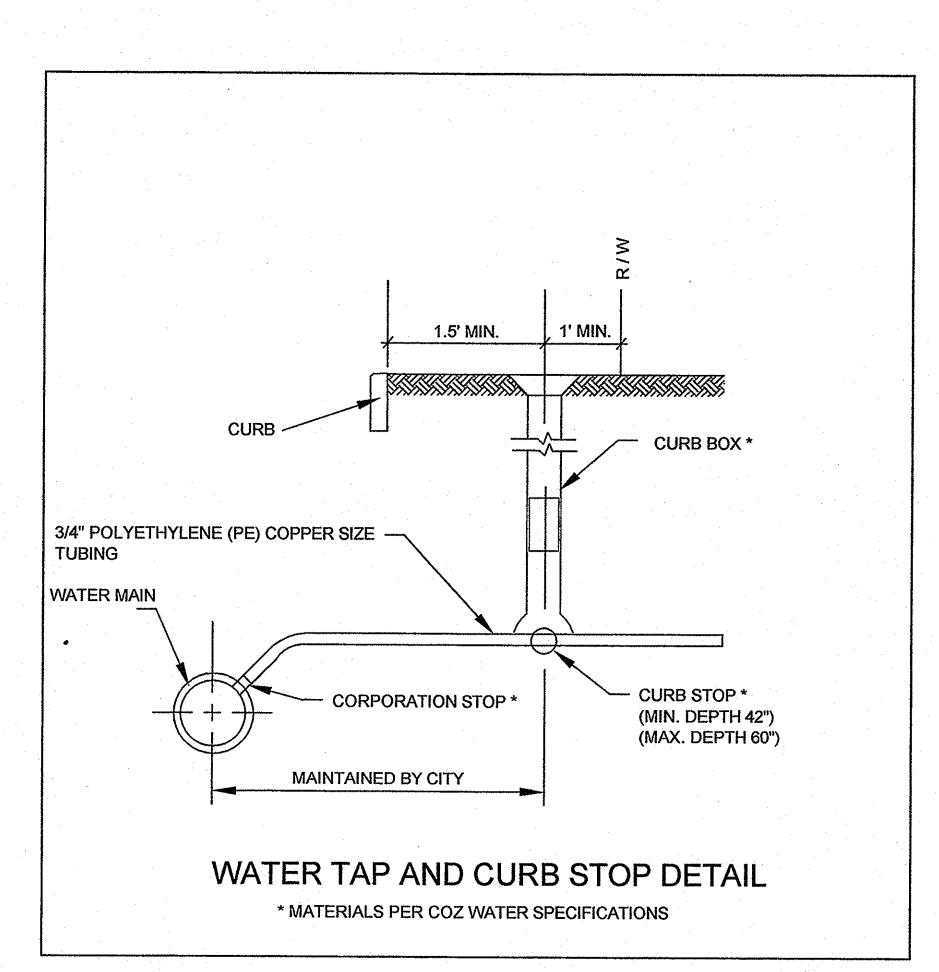
ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ITEM 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES COMMUTED.

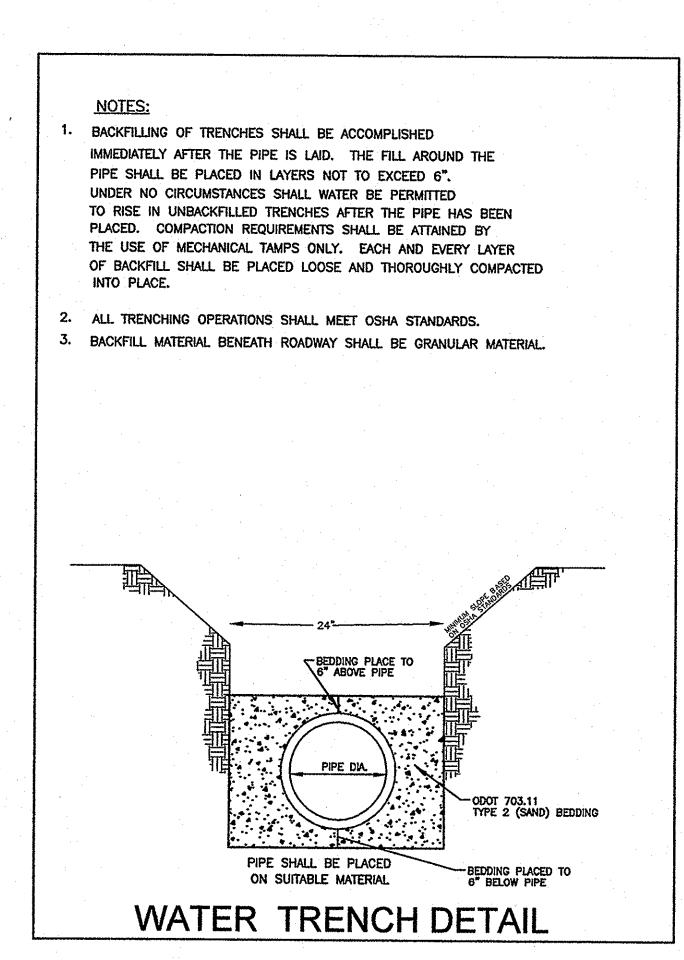
DURING DAYLIGHT HOURS TRAFFIC MAY BE LIMITED TO ONE LANE USING FLAGGERS PER ODOT STD DWG MT- 97.10 (4-17-09) OR TEMPORARY SIGNAL PER ODOT STD DWG MT- 96.20.

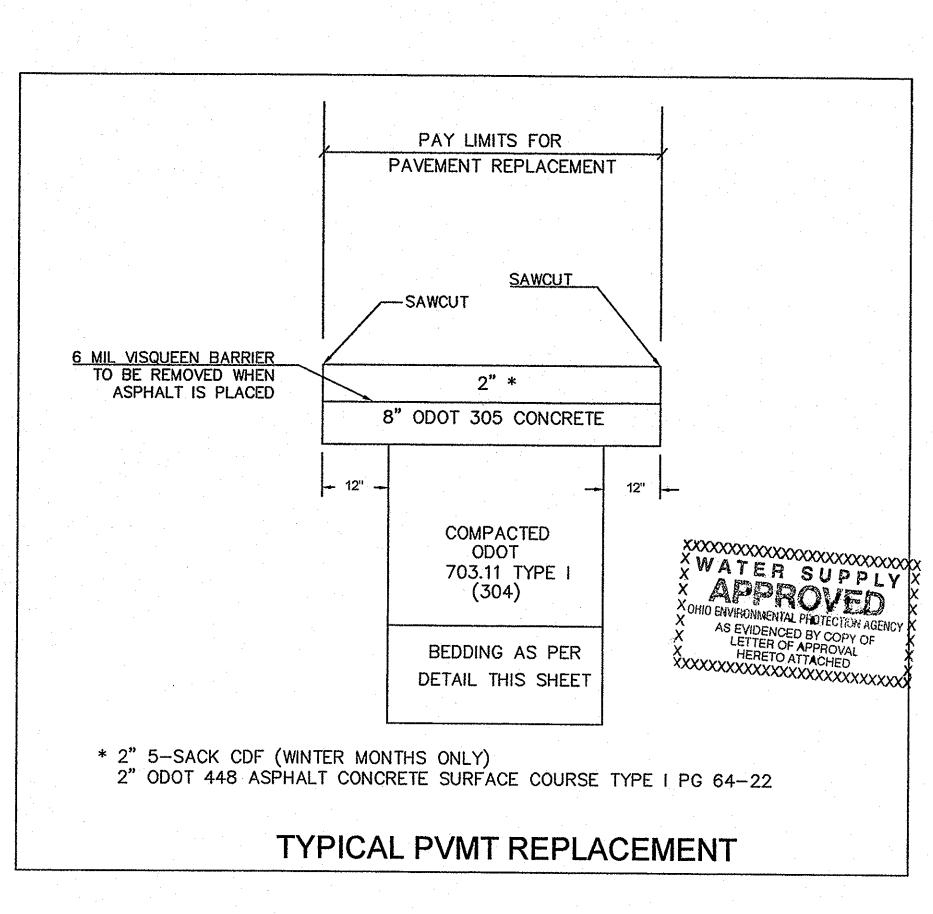
AT THE END OF EACH WORK DAY THE TRENCH SHALL BE BACKFILLED TO THE EXISTING PAVEMENT SURFACE WITH COMPACTED 304. THE TRENCH SHALL BE MAINTAINED DURING CONSTRUCTION WITH 304 UNTIL PAVEMENT REPLACEMENT HAS BEEN COMPLETED.

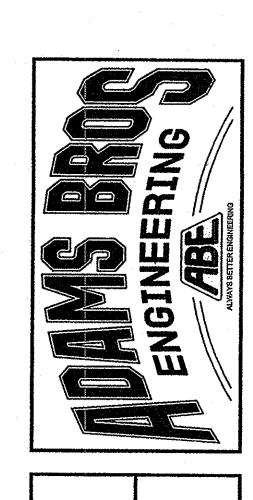
THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN SIGNS AND SUPPORTS, AS DETAILED IN THE OMUTED IN LOCATIONS BOTH WITHIN AND OUTSIDE OF THE WORK LIMITS.

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO MAINTAIN TRAFFIC PER THE PROVISIONS LISTED WITHIN THIS NOTE SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM G14. MAINTAINING TRAFFIC.







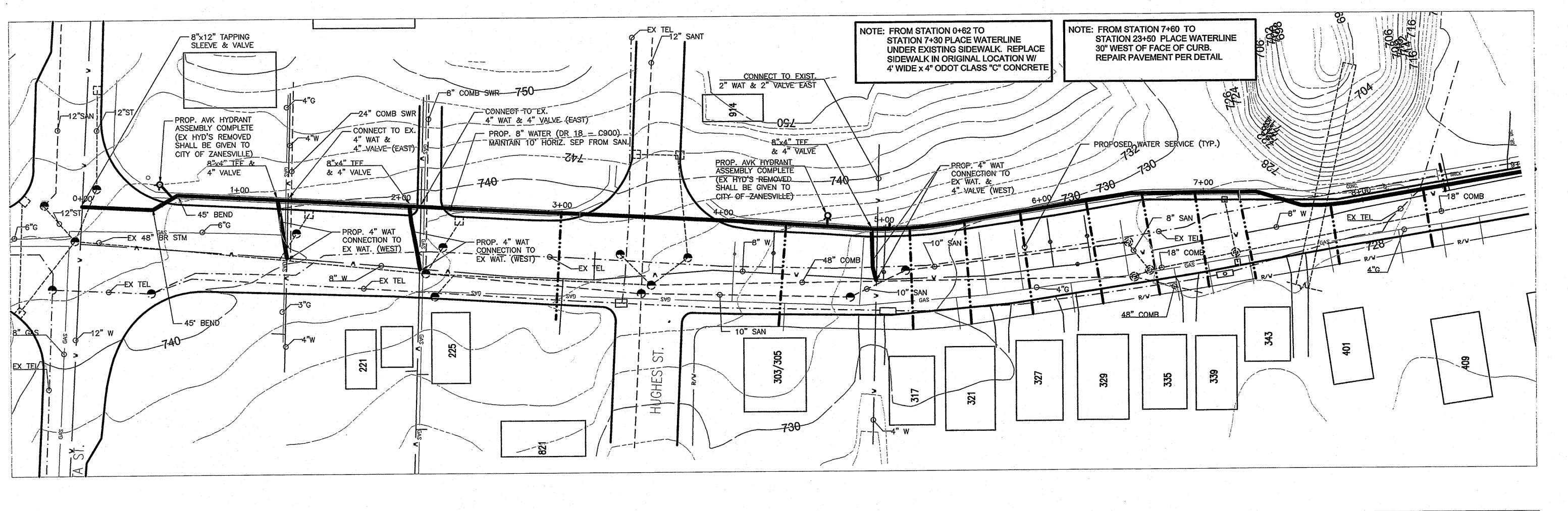


Enginee ering 60 **Engin** Bros 1501 V ANES' 40) 45 Cixil ms 7

(1)

EME MP Ш 2 1 WAYN

Horiz: JOB #: C0906 JUNE 24, 2009 SHEET #



water centerline PROFILE

Station

Station

4+,00

CONTR. TO VERIFY
LOCATION (ADJUST
WAT ELEV AS

NESSESARY)

CONTR. TO VERIFY
LOCATION (ADJUST
WAT ELEV AS

NESSESARY)

EX 12" SAN CONTR. TO VERIFY

WAT ELEV AS

ESSESARY)

LOCATION (ADJUST

4+00

735.97 735.970

4+00

4.5' MIN. COVER

3+00

3+00

- 1.5' MIN. CLEARANCE

EX 8' SAN
CONTR. TO VERIFY
LOCATION (ADJUST

WAT ELEV AS

NESSESARY)

5+,00

EX WATER
CONTR. TO VERIFY
LOCATION (ADJUST
WAT ELEV AS

NESSESARY)

5+00

5+00

ROP. 8" WATER (DR 18 - 0900)

1+00 EX GAS
CONTR. TO VERIFY
LOCATION (ADJUST
WAT ELEV AS
EXISTING/PROP. SURFACE NESSESARY)

PROP. 8" WATER (DR 18 - C900)

EX 24" SAN
CONTR. TO VERIFY

LOCATION (ADJUST WAT ELEV AS

NESSESARY)

EX WATER

CONTR. TO VERIFY

LOCATION (ADJUST

WAT ELEV AS

-NESSESARY)

2+'00

739.37

2+00

0+00 750

740

730

720

710

700| 0+00

EX GAS
CONTR. TO VERIFY
LOCATION (ADJUST
WAT FLEV AS

EX WATER /
CONTR. TO VERIFY

EX 12" STM LOCATION (ADJUST CONTR. TO VERIFY WAT ELEV AS NESSESARY)

WAT ELEV AS

NESSESARY)

NESSE\$ARY)

1+00

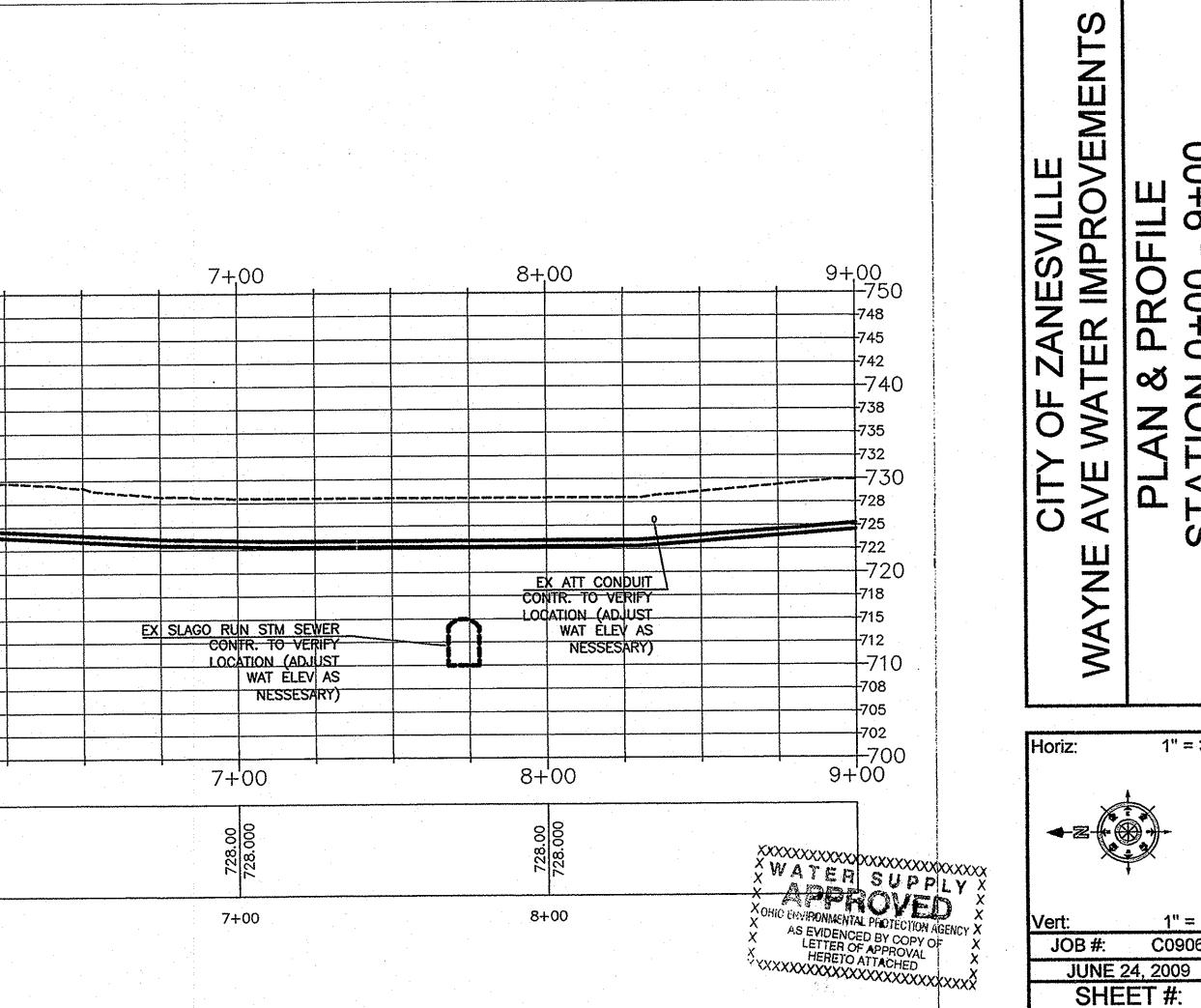
741.67

1+00

6+00

6+00

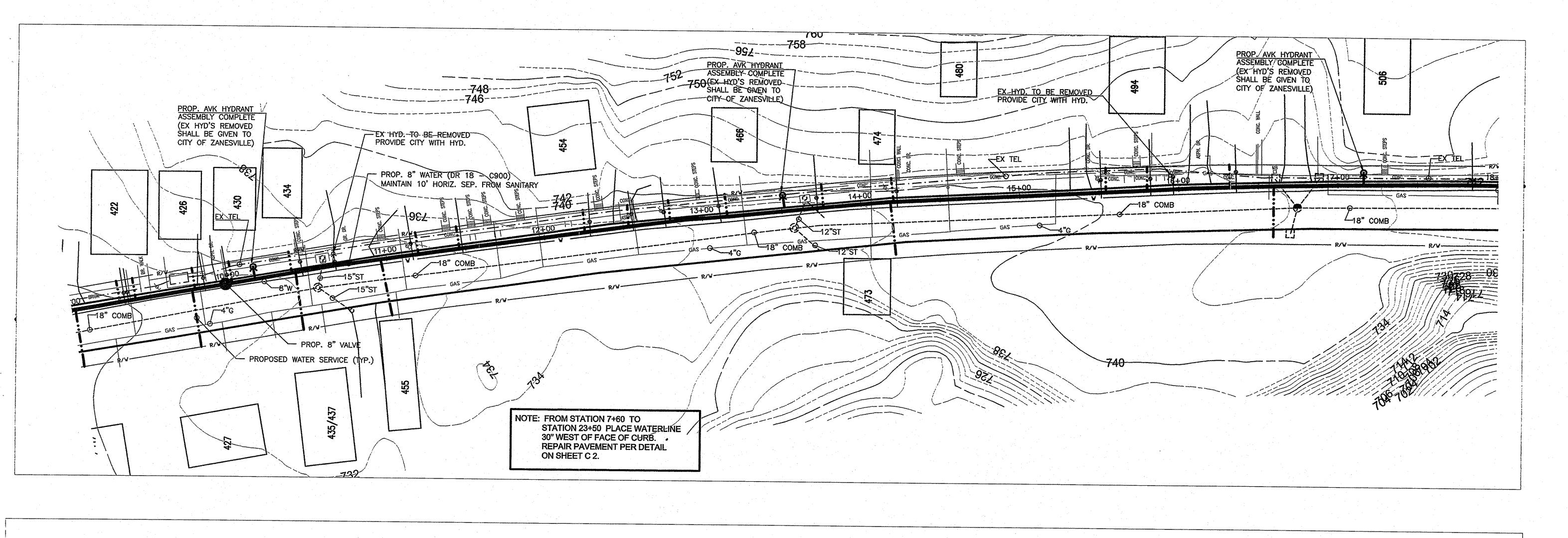
6+00

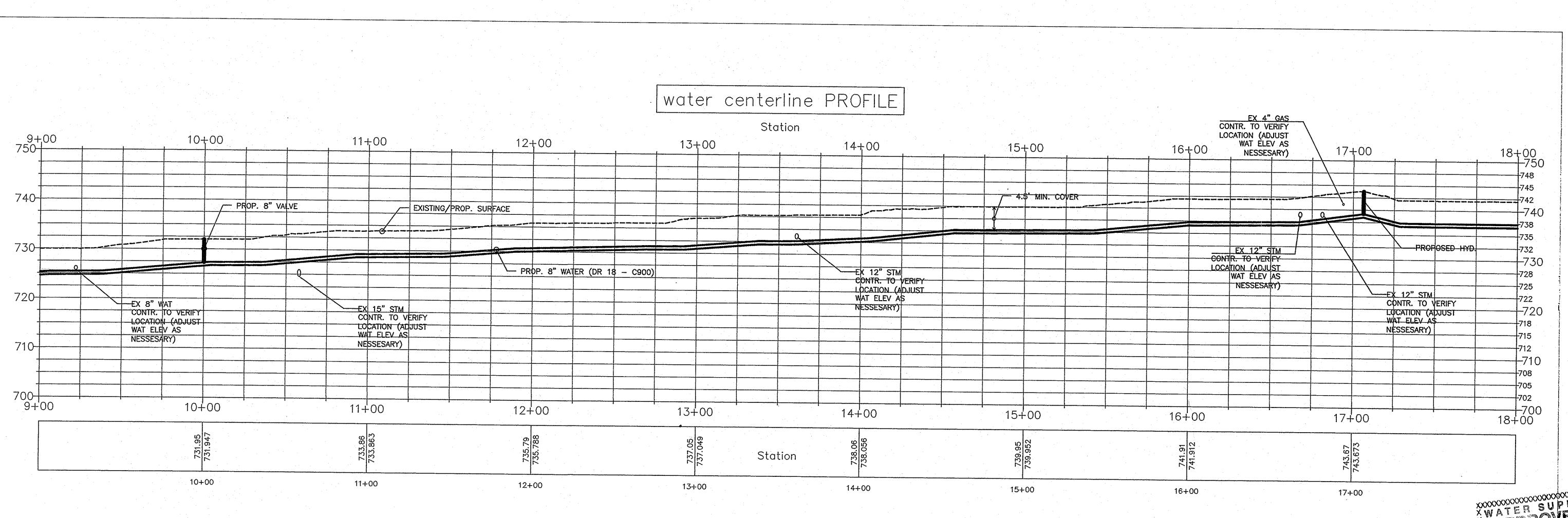


Engineerin venue) 43701 (740) 4! Bros. ams Q

0+0

1" = 30' 1" = 10' C0906

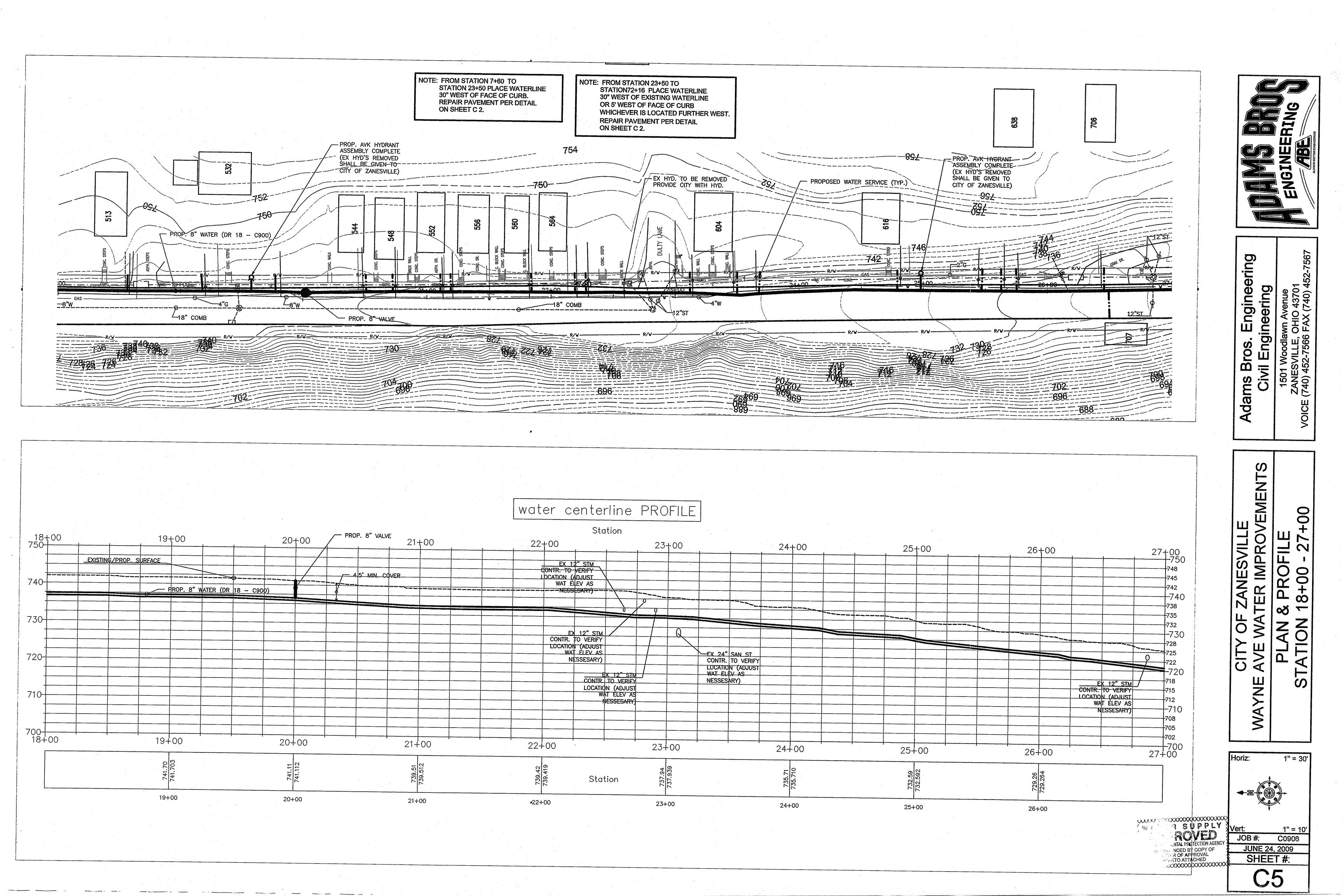


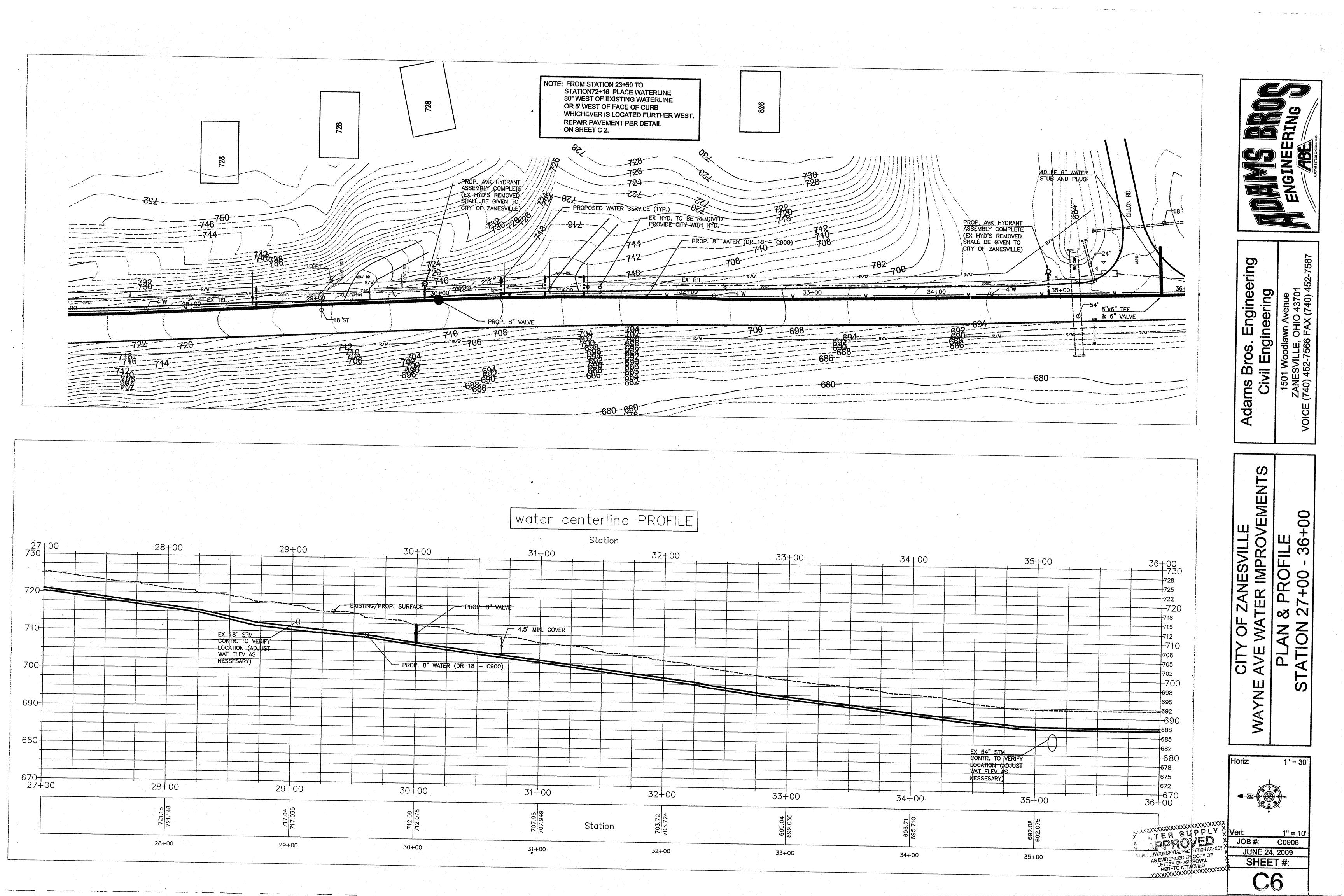


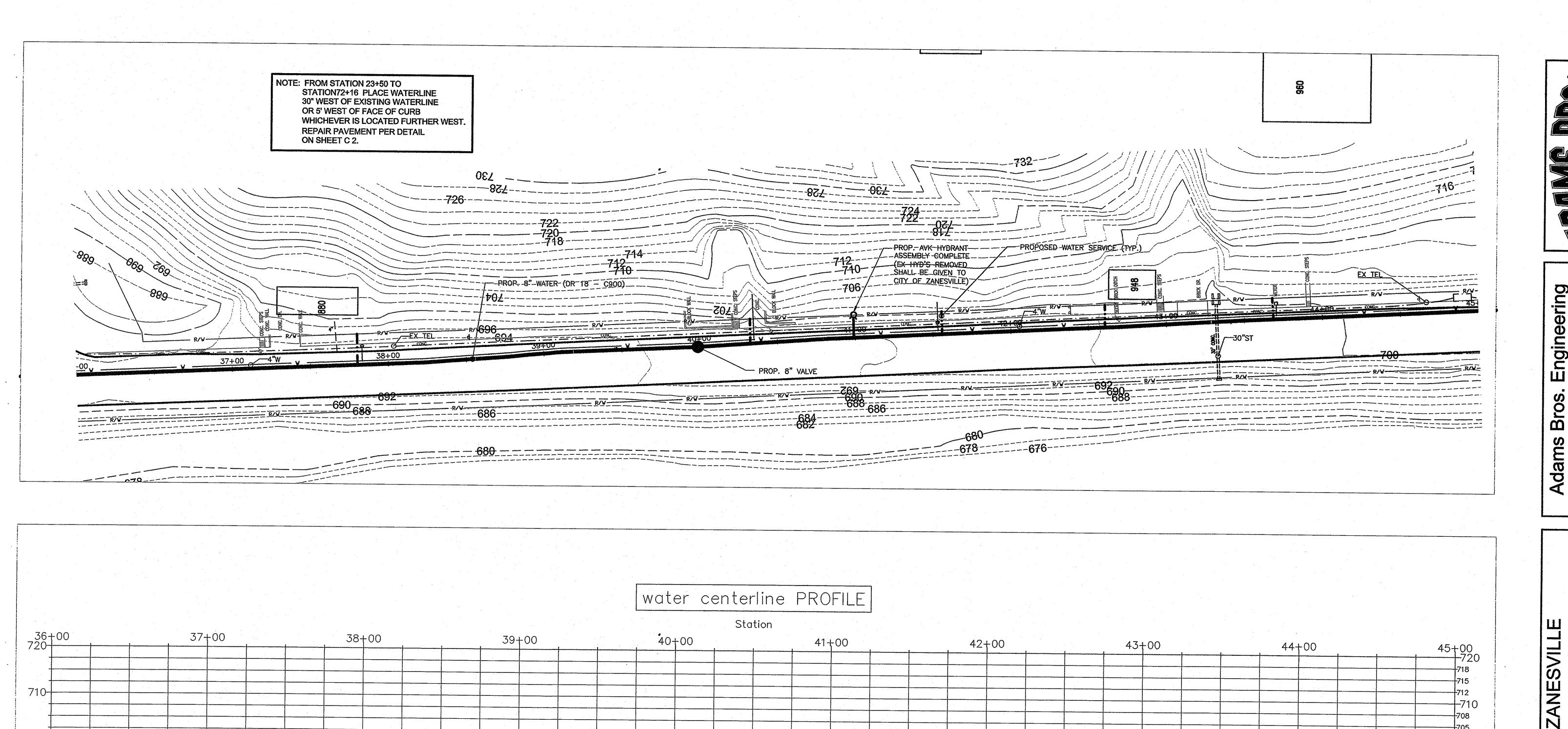
Adams Bros. Engineering

Civil Engineering
1501 Woodlawn Avenue
ZANESVILLE, OHIO 43701
VOICE (740) 452-7566 FAX (740) 45

CITY OF ZANESVILLE
WAYNE AVE WATER IMPROVEMENT:
PLAN & PROFILE
STATION 9+00 - 18+00







✓ PROP. 8" VALVE

Station

40+00

40+00

- PROP. 8" WATER (DR 18 - C900)

38+00

38+00

39+00

39+00

690

680-

670-

660| 36+00

37+00

37+00

4.5' MIN. COVER_

42+00

42+00

41+00

41+00

EX 30" STM CONTR: TO VERIFY COCATION (ADJUST

43+00

43+00

WAT ELEV AS

NESSESARY)

F ZANESVILLE ATER IMPROVEMENT I & PROFILE V 36+00 - 45+00 OF

Horiz: 1" = 30' 1" = 10' JOB #: C0906 JUNE 24, 2009 SHEET#:

WAYNE

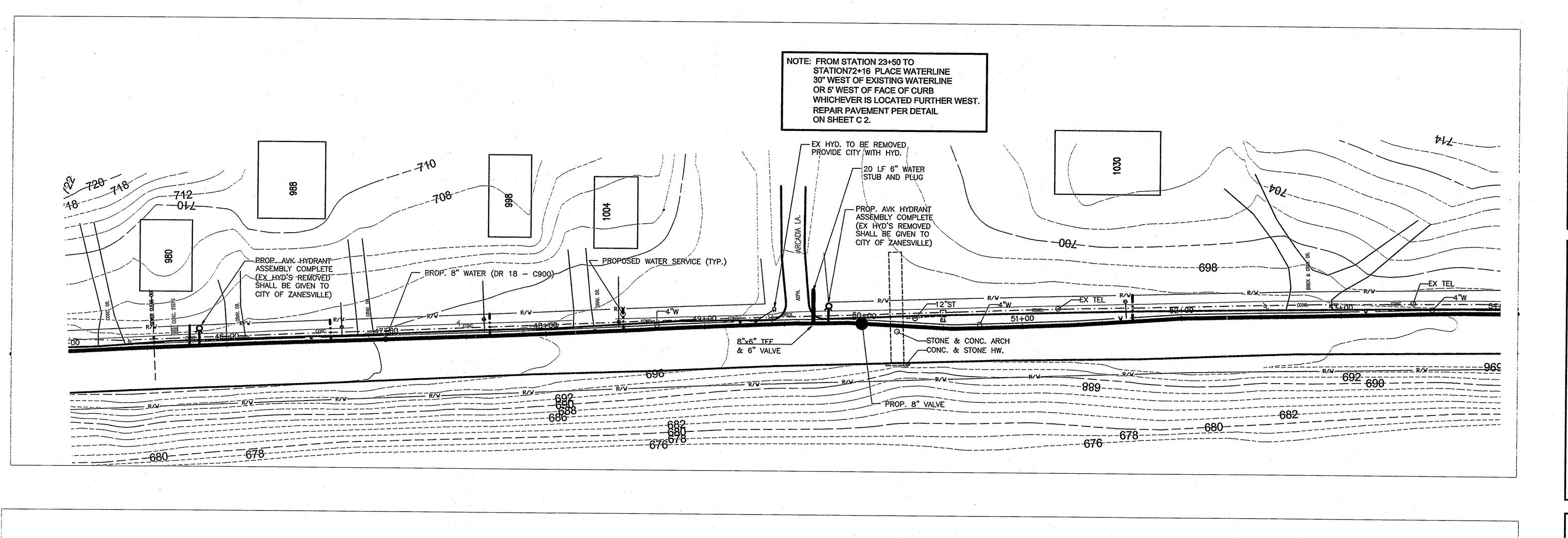
44+00

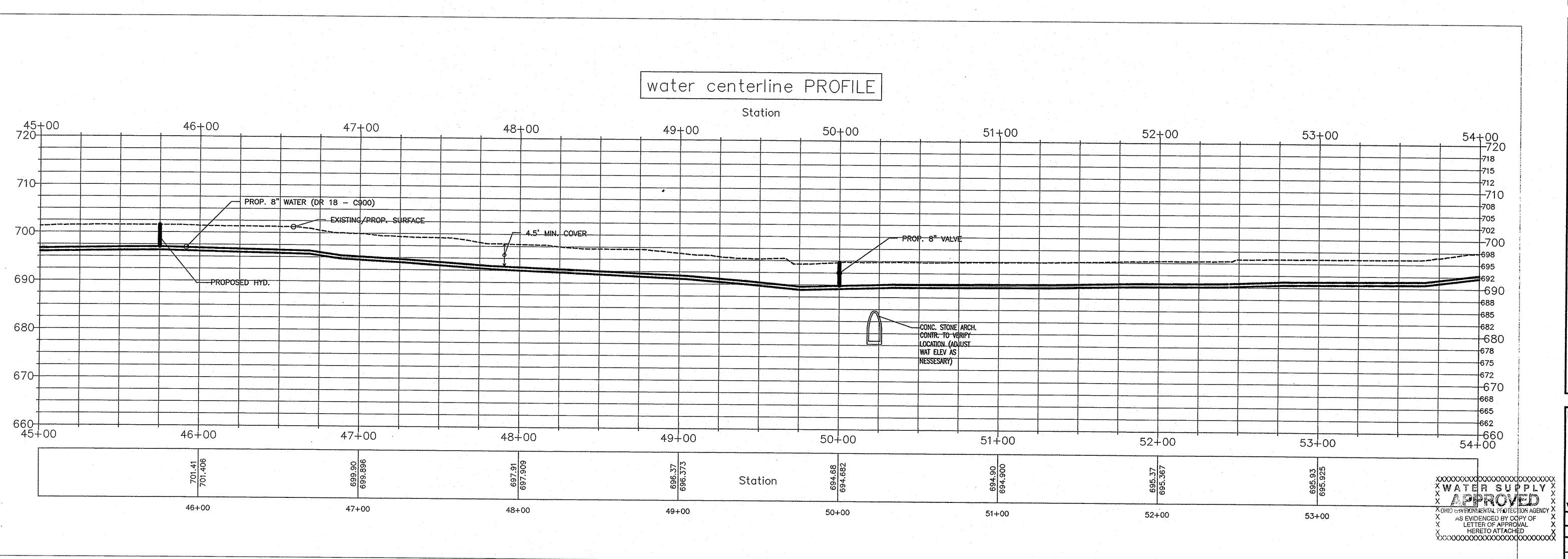
44+00

45+00

PLAN 8

3ros. Engineering I Engineering





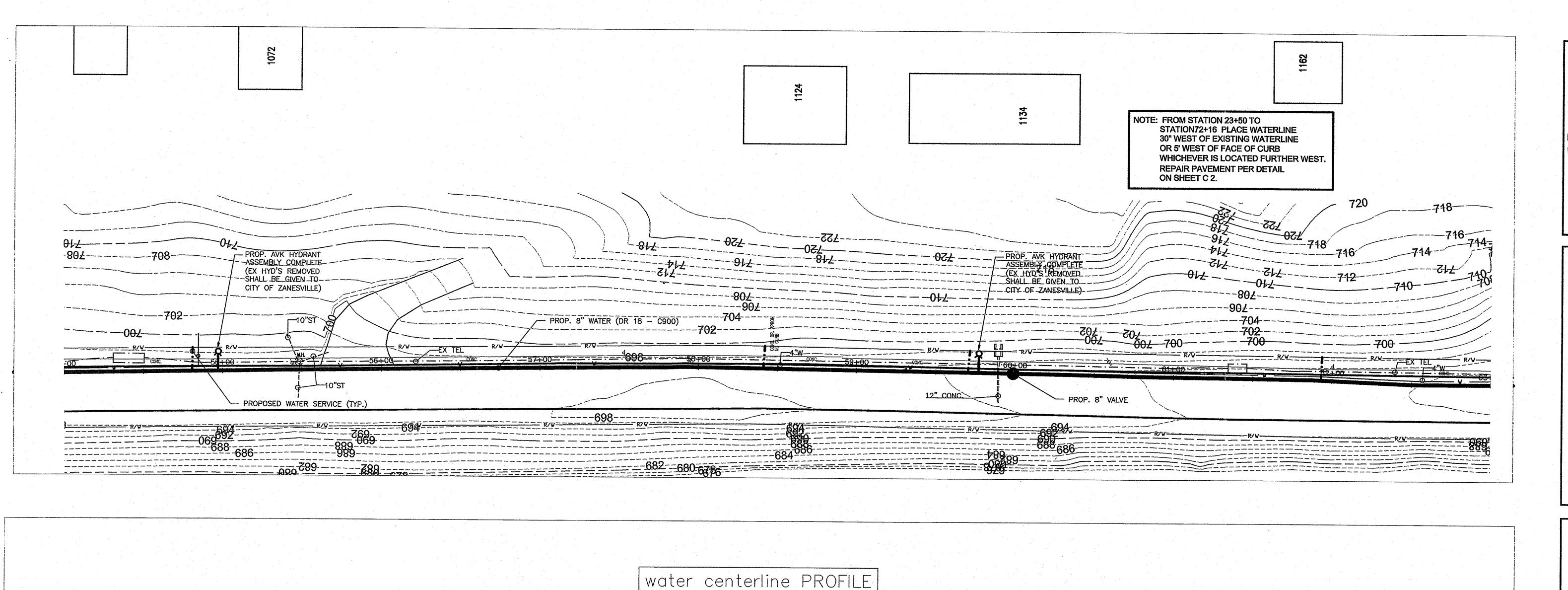


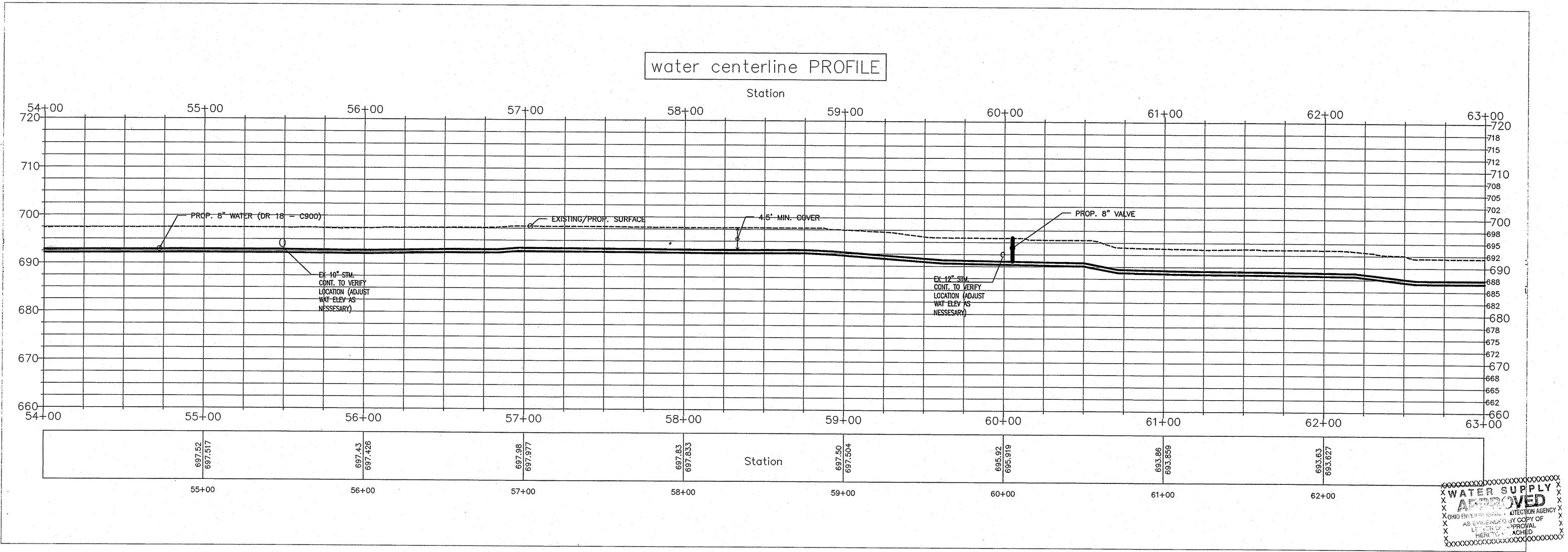
Engineering

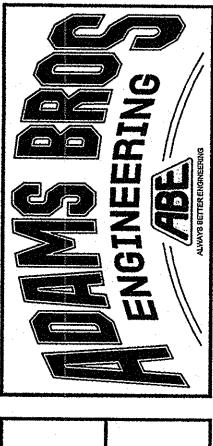
ms Bros. Enginee Civil Engineering

F ZANESVILLE ATER IMPROVEMENT I & PROFILE V 45+00 - 54+00 PLAN S STATION WAYNE

Horiz: 1" = 30' JOB#: C0906 JUNE 24, 2009 SHEET #:







Adams Bros. Engineerin

CITY OF ZANESVILLE
WAYNE AVE WATER IMPROVEMENTS
PLAN & PROFILE
STATION 54+00 - 63+00

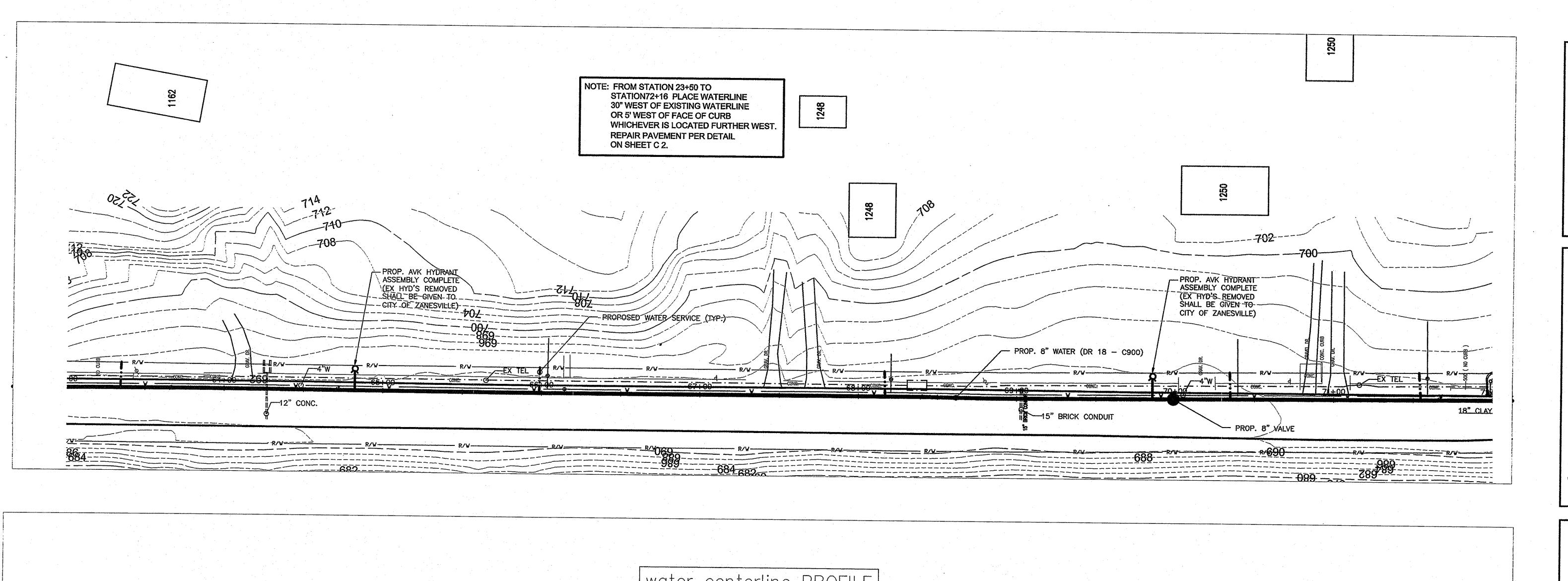
Horiz: 1" = 30'

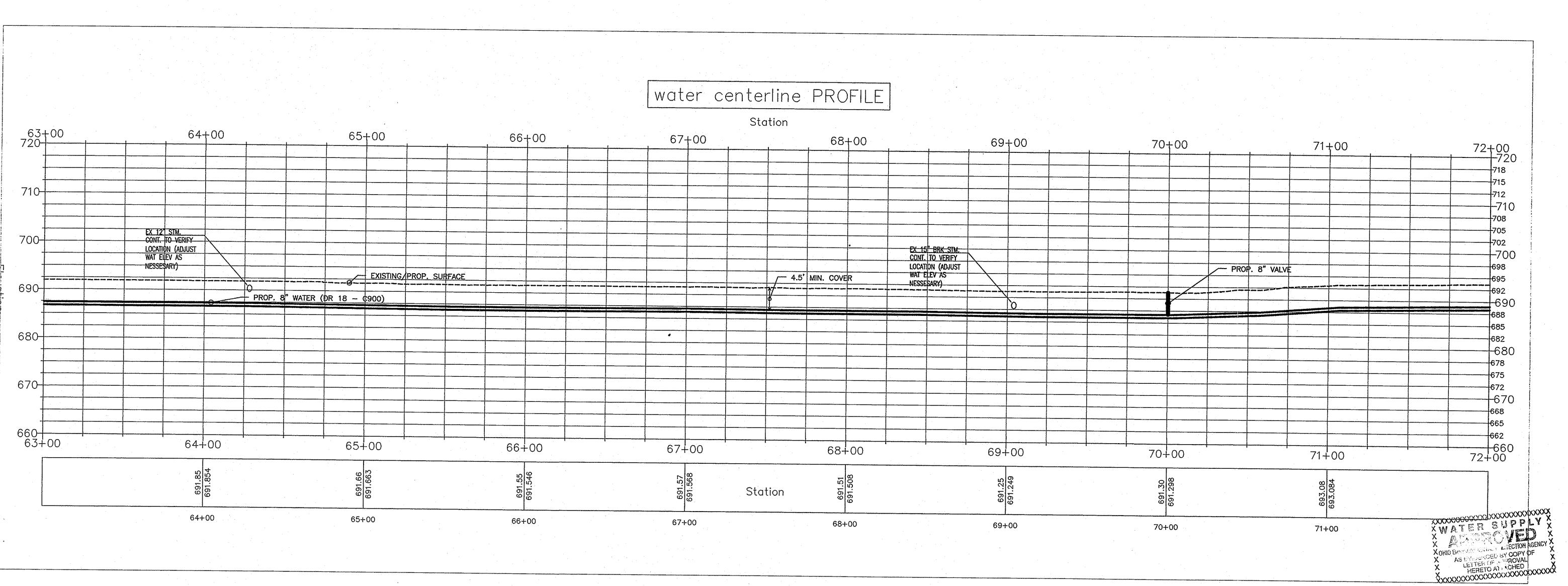
Vert: 1" = 10'

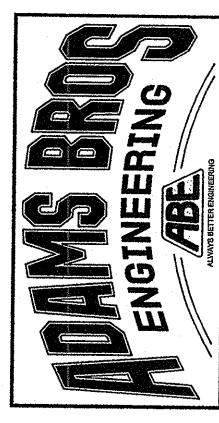
JOB #: C0906

JUNE 24, 2009

SHEET #:







Adams Bros. Engineering Civil Engineering

ENTS Adams Bros.
Civil Eng

CITY OF ZANESVILLE
WAYNE AVE WATER IMPROVEMEN
PLAN & PROFILE
STATION 63+00 - 72+00

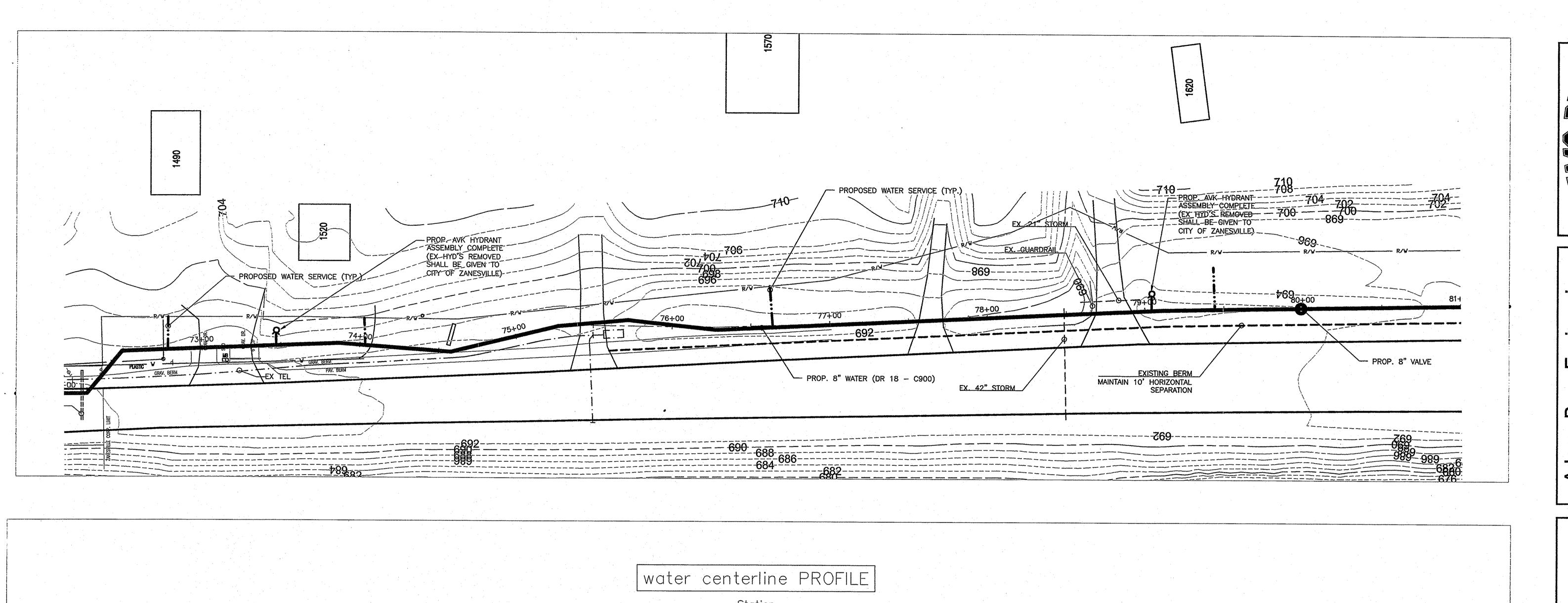
Horiz: 1" = 30'

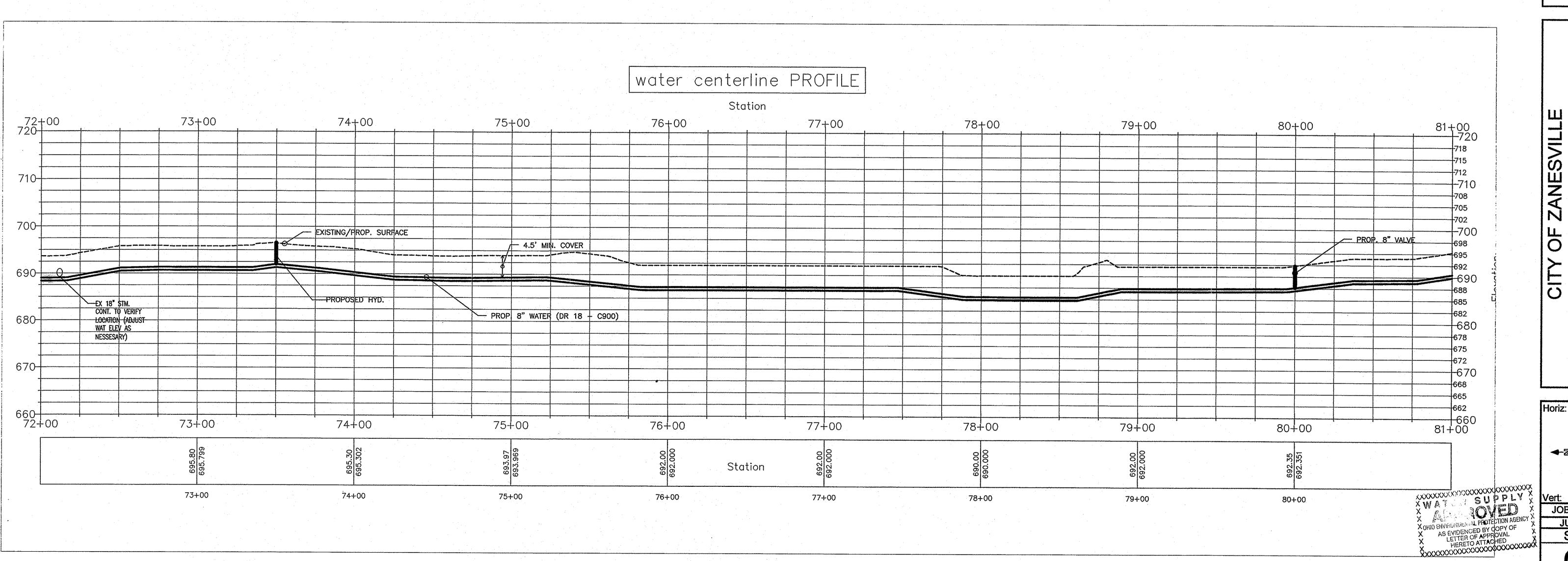
Vert: 1" = 10'

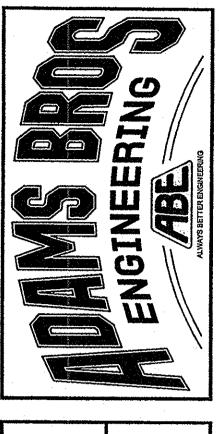
JOB #: C0906

JUNE 24, 2009

SHEET #:







Adams Bros. Engineering Civil Engineering

Tolvii Enginee
1501 Woodlawn Av
ZANESVILLE, OHIO

CITY OF ZANESVILLE
WAYNE AVE WATER IMPROVEMENTS
PLAN & PROFILE
STATION 72+00 - 81+00

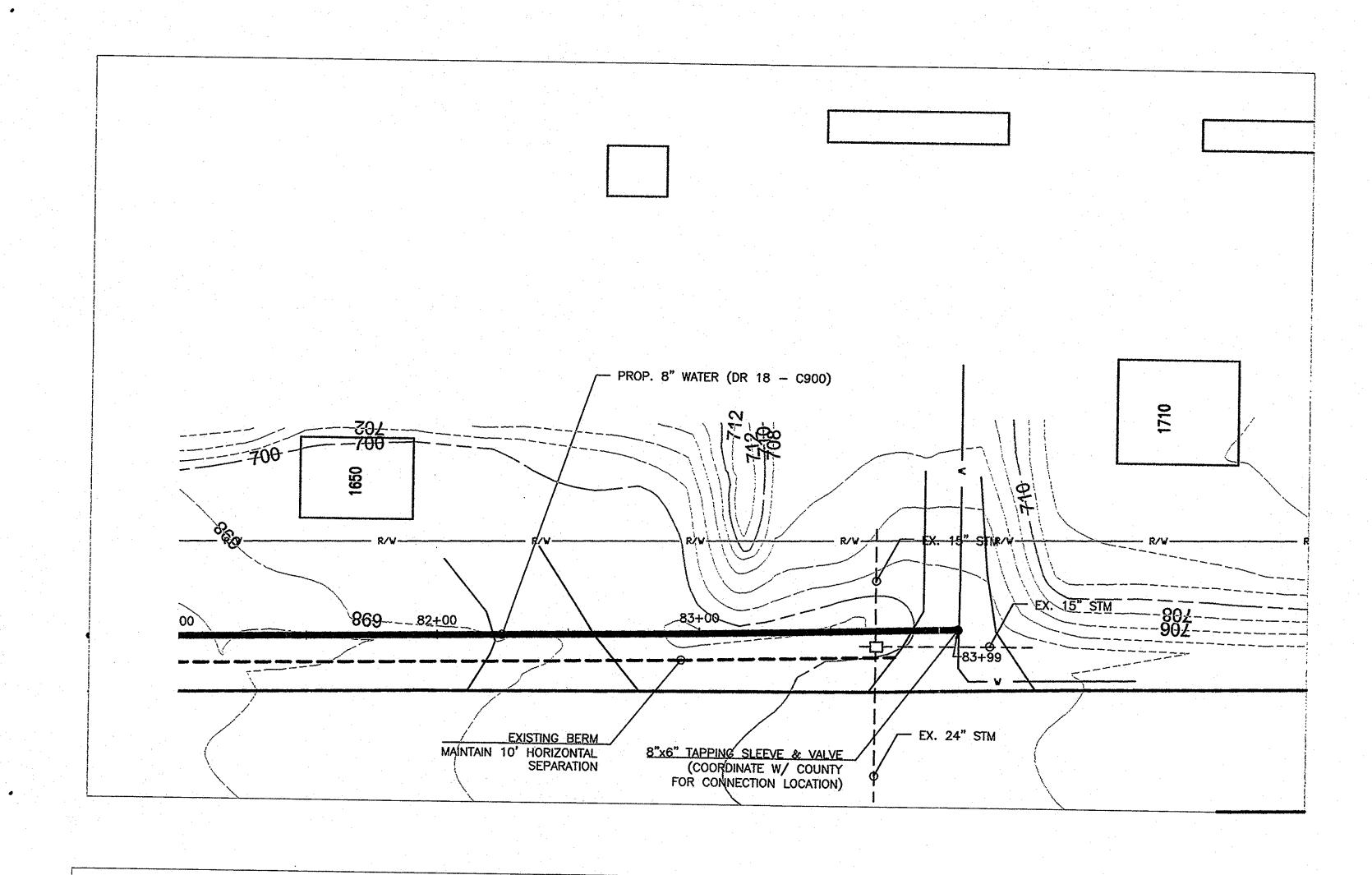
Horiz: 1" = 30'

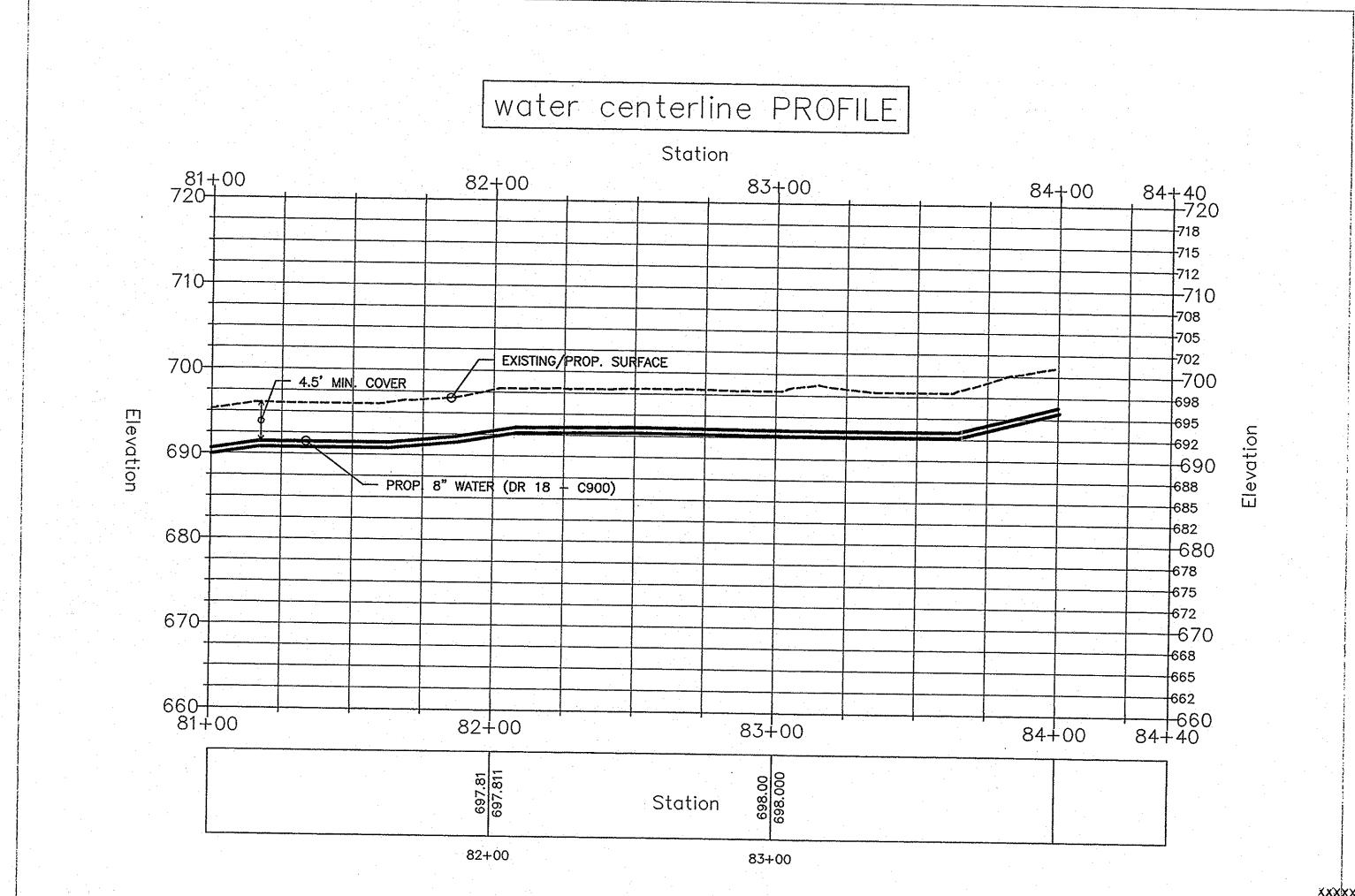
Vert: 1" = 10'

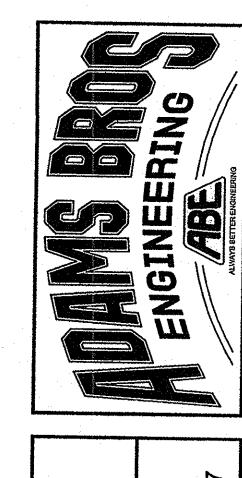
JOB #: C0906

JUNE 24, 2009

SHEET #:







Adams Bros. Engineering Civil Engineering

Y OF ZANESVILLE

E WATER IMPROVEMENTS

AN & PROFILE

TON 81+00 - 84+10

Vert: JOB#: 1" = 10' C0906 JUNE 24, 2009 SHEET #:

WAYNE

SEEDING AND MULCHING SHALL BE IN ACCORDANCE WITH THE CURRENT "RAINWATER AND LAND DEVELOPMENT, OHIO'S STANDARDS FOR STORMWATER MANAGEMENT LAND DEVELOPMENT AND URBAN STREAM PROTECTION, SECOND EDITION 1996".

TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE CURRENT "RAINWATER AND LAND DEVELOPMENT, OHIO'STANDARDS FOR STORMWATER MANAGEMENT LAND DEVELOPMENT AND URBAN STREAM PROTECTION, SECOND EDITION 1996".

THE CONDITIONS OF THE NPDES CONSTRUCTION STORM WATER GENERAL PERMIT SHALL BE MET DURING ALL STAGES OF CONSTRUCTION. THE LOCATION AND TIMING OF ALL EROSION AND SEDIMENT CONTROL ITEMS SHALL BE FIELD ADJUSTED TO PREVENT SIGNIFICANT IMPACTS ON RECEIVING WATERS. IMPLEMENTATION OF THIS STORM WATER POLLUTION PREVENTION PLAN SHALL CONTINUE THROUGHOUT THE DURATION OF THE PROJECT OR UNTIL SUCH TIME THAT THE UPSLOPE DISTURBED AREAS ARE STABILIZED.

INSTALLATION OF SEDIMENT BASINS/DAMS, PERIMETER FILTER FABRIC FENCE, AND DITCH CHECKS SHALL BE CONCURRENT WITH CLEARING AND GRUBBING AND/OR GRADING OPERATIONS.

ALL REASONABLE ATTEMPTS SHOULD BE MADE TO MINIMIZE THE TOTAL AREA OF DISTURBED LAND.

AREAS TO REMAIN DORMANT FOR MORE THAN 45 DAYS SHOULD BE IMMEDIATELY STABILIZED WITH TEMPORARY SEEDING AND MULCHING, EROSION CONTROL MATTING OR OTHER APPROPRIATE EROSION CONTROL MEASURES.

ADDITIONAL QUANTITIES OF TEMPORARY SOIL EROSION AND SEDIMENT CONTROL ITEMS ARE GIVEN IN THE GENERAL NOTES.

GENERAL NOTES - EROSION AND SEDIMENT CONTROL

- 1. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE PROPER SOIL EROSION MEASURES FOR PROTECTION OF ALL ADJOINING ROADS, LANDS AND STREAMS. REFER TO OHIO DEPARTMENT OF NATURAL RESOURSES MANUAL TITLED, "RAINWATER AND LAND DEVELOPEMENT, SECOND EDITION 1996".
- 2. THE CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL AT ALL POINTS WHERE STORM WATER LEAVES THE LIMITS OF THE PROJECT, ALL POINTS WHERE STORM WATER ENTERS A STREAM THAT TRAVERSES THE PROJECT AND ALL POINTS WHERE STORM WATER ENTERS PORTIONS OF COMPLETED UNDERGROUND PIPING.
- 3. ALL DISTURBED AREAS WHICH WILL REMAIN UNWORKED FOR 45 DAYS OR MORE SHALL BE SEEDED. OTHER SEDIMENT CONTROLS WHICH ARE INSTALLED SHALL BE MAINTAINED UNTIL THE VEGETATION GROWTH HAS BEEN ESTABLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY SEDIMENT CONTROL DEVICES AT THE CONCLUSION OF CONSTRUCTION ONCE PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
- 4. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING.
- 5. ALL STORM SEWER, SANITARY SEWER AND WATER MAINS SHALL BE MULCHED AND SEEDED WITHIN 21 DAYS AFTER BACKFILL. NO MORE THAN 500 FEET OF TRENCH WILL BE OPEN AT ANY ONE TIME.
- 6. ELECTRIC POWER, TELEPHONE, CATV AND GAS SUPPLY TRENCHES SHALL BE COMPACTED, SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL
- 7. ALL TEMPORARY EARTH BERMS, DIVERSIONS, SEDIMENT TRAP EMBANKMENTS AND EARTH STOCKPILES SHALL BE SEEDED AND MULCHED FOR TEMPORARY VEGETATIVE COVER WITHIN 21 DAYS AFTER GRADING. STRAW OR HAY MULCH OR EQUIVALENT IS REQUIRED.
- 8. ALL STORM SEWER INLETS SHALL BE PROTECTED BY SEDIMENT TRAPS WHICH WILL BE MAINTAINED AND MODIFIED AS REQUIRED AS CONSTRUCTION PROGRESSES.
- 9. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH RAINFALL OR WHEN THE LEVEL OF DEPOSIT REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- 10. ANY DISTURBED AREA NOT STABILIZED WITH SEEDING, SODDING, PAVING OR BUILT UPON BY NOVEMBER 1ST, OR AREAS DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW AT THE RATE OF 2 TONS PER ACRE AND OVER-SEEDED BY APRIL 15TH.
- 11. AT THE COMPLETION OF CONSTRUCTION, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED. SEDIMENT DEPOSITS SHALL BE REGRADED AND SEEDED.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN OHIO EPA PERMIT FOR TEMPORARY EROSION AND SEDIMENT CONTROL ON THE CONSTRUCTION SITE. THE DESIGN OF EROSION AND SEDIMENT CONTROL SYSTEMS SHALL FOLLOW THE REQUIREMENTS OF OHIO EPA, ITEM 207 OF ODOT STANDARD SPECIFICATIONS AND THE REQUIREMENTS OF THE LOCAL JURISDICTION.
- 13. DRAINAGE SWALES AND STORMWATER MANAGEMENT BASINS ARE TO BE PERMANENTLY SEEDED WITHIN 7 DAYS OF INSTALLATION, SILT FENCE INSTALLED ALONG TOP OF BASINS, AND SWALES AND ORANGE CONSTRUCTION FENCE PLACED AROUND ENTIRE PERIMETER OF BASINS AND SWALES.
- 14. OTHER EROSION CONTROL PRACTICES NOT ALREADY SPECIFIED ON THIS PLAN MAY BE NECESSARY DUE TO UNFORSEEN ENVIRONMENTAL CONDITIONS AND/OR CHANGES IN DRAINAGE PATTERNS CAUSED BY EARTH MOVING ACTIVITY. PERSONNEL FROM FRANKLIN SOIL AND WATER CONSERVATION DISTRICT WILL MAKE PERIODIC SITE INSPECTIONS TO ASSURE COMPLIANCE WITH THE EROSION CONTROL PLAN.

			4								
SOIL PROTECTION C	SEEDING & MULCHING CHART					Unde Deve for S Land Stree	r "Rai lopme Stormy Devel	nwater nt, Oh vater I opmer otectic	and io's S Manag it and	tandards ement Urban	
STABILIZATION TYPE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT NOV	DE
PERMANENT SEEDING			+			•					
DORMENT SEEDING	+							-		+	-
TEMPORARY SEEDING			+								
SODDING		,	+						-		
MULCHING	+										*

THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO ACCOMPLISH BOTH THE TEMPORARY AND PERMANENT SEEDING.

ALL DITCHES, RIGHT-OF-WAY AREAS AND OTHER AREAS DISTURBED DURING CONSTRUCTION ARE TO BE SEEDED AND MULCHED.

TOPSOIL STOCKPILES SHALL BE LOCATED AS SHOWN ON THE DRAWINGS AND PROTECTED FROM EROSION BY SEEDING AND SILT FENCE

EXCESS EXCAVATION WILL HAVE TO BE TRUCKED FROM THE SITE.

MAINTENANCE NOTES

CONSTRUCTION ENTRANCE:

INSPECT THE MEASURE ON A REGULAR BASIS AND AFTER THERE HAS BEEN A HIGH VOLUME OF TRAFFIC OR A STORM EVENT. APPLY ADDITIONAL STONE PERIODICALLY AND WHEN REPAIR IS REQUIRED. IMMEDIATELY REMOVE SEDIMENT OR OTHER MATERIALS TRACKED ONTO THE PUBLIC ROADWAY. ENSURE THAT ASSOCIATED SEDIMENT CONTROL MEASURES ARE IN GOOD WORKING ORDER.

INLET PROTECTION:

THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED SEDIMENT SHALL BE REMOVED AND THE STRUCTURE RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/4 THE DESIGN DEPTH OF THE STRUCTURE. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

SILT FENCE AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SHOULD THE FABRIC OF A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED IMMEDIATELY. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE,

EROSION AND SEDIMENTATION CONTROL SPECS.

- REMOVE AND STOCKPILE TOPSOIL IMMEDIATELY PRIOR TO BEGINNING OPERATIONS.
- IMMEDIATELY AFTER FINAL GRADING IS COMPLETED, SPREAD TOPSOIL FROM THE STOCKPILES OVER THE EXPOSED AREAS AND GRADE AS REQUIRED TO PREPARE THE SITE FOR PERMANENT SEEDING AND SODDING.
- 3. THE PERMANENT SEEDING AND MULCHING OF THE EXPOSED AREAS SHALL BE IN ACCORDANCE WITH THE "RAINWATER AND LAND DEVELOPMENT, OHIO'S STANDARDS FOR STROMWATER MANAGEMENT LAND DEVELOPMETN AND URBAN STREAM PROTECTION, SECOND EDITION 1996".
- IF CONSTRUCTION TAKES PLACE FROM OCTOBER 1 TO MARCH 1, ALL EXPOSED AREAS SHALL BE TEMPORARILY MULCHED UNTIL MARCH 1 AND THEN PERMANENTLY SEEDED OR SODDED AS SPECIFIED ABOVE. MULCHING SHALL BE IN ACCORDANCE WITH THE "RAINWATER AND LAND DEVELOPMENT, OHIO'S STANDARD FOR STROMWATER MANAGEMENT LAND DEVELOPMENT AND URBAN STREAM PROTECTION, SECOND EDITION 1996".
- 5. FOR ROUGH-GRADE AREAS OR OTHER AREAS WHERE ADDITIONAL WORK IS NOT SCHEDULED FOR A PERIOD OF 3 WEEKS OR LONGER, AND IN AREAS WHERE UNANTICIPATED DELAYS ARE ENCOUNTERED, TEMPORARY SEEDING SHALL BE APPLIED IN THE SAME MANNER AS THE PERMANENT SEEDING USING RYE OR WHEAT SEED AT THE RATE OF 40#/ACRE. TEMPORARY SEEDING IS APPLICABLE ONLY FROM MARCH 1 TO OCTOBER 1. AT OTHER TIMES, USE TEMPORARY MULCHING AS SPECIFIED ABOVE.

Silt Fence

- 1. Silt fence shall be constructed before upslope land disturbance begins.
- 2. All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so
- that small swales or depressions which ma carry small concentrated flows to the silt fence are dissipated along its length. 3. To prevent water ponded by the silt fence from flowing around the ends, each end shall be constructed upslope so that the ends
- are at higher elevation.
- 4. Where possible, silt fence shall be placed on the flattest area available.
- 5. Where possible, vegetation shall be preserved for 5 ft. (or as much as possible) upslope from the silt fence. If vegetation is
- removed, it shall be reestablished within 7 days from the installation of the silt fence.
- 6. The height of the silt fence shall be a minimum of 16 in. above the original ground surface.
- 7. The silt fence shall be placed in a trench cut a minimum of 6 in. deep. The trench cut a shall be cut with trencher, cable laying machine, or other suitable device which will ensure an adequately uniform trench depth.
- 8. The silt fence shall be placed with the stakes on the downslope side of the geoxtile and so the ground surface. Excess material
- shall lay on the bottom of the 6 in.-deep trench. The trench shall be backfilled and compacted.
- 9. Seams between section of the silt fence shall be overlapped with the end stakes of each section wrapped together before driving
- 10. Maintenance-Silt fence shall allow runoff to pass only as diffuse flow through the geoextile. If runoff overtops the silt fence, flows under or around the ends, or in any other way becomes a concentrated flow, one of the following shall be performed, as
 - 1) The layout of the silt fence shall be changed,
 - 2) Accumulated sediment shall be removed, or
 - 3) Other practices shall be installed. Criteria for Silt Fence Materials
 - 1. Fence Posts-The length shall be a minimum of 32 in. long. Wood posts will be 2-by-2 in. hardwood of sound quality. The maximum spacing between posts shall be 10 ft.

 - 2. Silt Fence Fabric shall be ODOT Type C Geotextile Fabric or as described by the chart below:

FABRIC PROPERTIES	
MINIMUM TENSILE STRENGTH	120 LBS \
MAXIMUM ELONGATION AT 60 LBS	50 %
MINIMUM PUNCTURE STRENGTH	50 LBS
MINIMUM TEAR STRENGTH	40 LBS
MINIMUM BURST STRENGTH	200 PSI
APPARENT OPENING SIZE	_< 0.84 MM
MINIMUM PERMITTIVITY	1X10 ² SEC.
	ISION70 %

RECEIVED

Ohio Environmental Protection Agenty Southeast District

WORK WITHIN PAVED AREAS SHALL BE OPENED TO TRAFFIC EACH NIGHT. SWEEP PAVEMENT AS NECESSARY TO MAINTAIN A CLEAN SITE DAILY.

EROSION CONTROL MEASURES

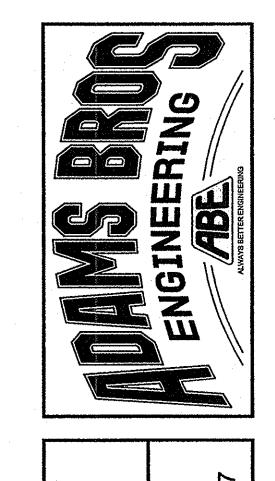
WHEN EXCAVATING IN GRASSED AREAS, PROVIDE SILT FENCE ON THE LOWER SIDE OF TRENCH TO ELIMINATE SILT RUNOFF.

Level Contor No Slope

Elevation

16" Minimum

Section



Engine ros ams

SVILLE IMPR(S ZANE 日 日

JOB #: C0906 **JUNE 24, 2009** SHEET #:

WA

Trench to be Backfilled

XWATER SUPPLY

X OHIO ENVIRONMENTAL PROTECTION AGENCY :

AS EVIDENCED BY COPY OF LETTER OF APPROVAL



State of Ohio Environmental Protection Agency

STREET ADDRESS:

MAILING ADDRESS:

Lazarus Government Center 50 W. Town St., Suite 700 Columbus, Ohio 43215 TELE: (614) 644-3020 FAX: (614) 644-3184 www.epa.state.oh.us

P.O. Box 1049 Columbus, OH 43216-1049

July 24, 2009

Re: Muskingum County
Application No. 714429
Zanesville PWS #OH6002712
Detail Plans for the Wayne Avenue Waterline
Replacement

Plans Received June 30th, 2009 From William H. Adams IV, P.E.

City of Zanesville 401 Market Street Zanesville, OH 43701

Ladies and Gentlemen:

The Ohio Environmental Protection Agency has reviewed the enclosed plans submitted pursuant to Ohio Revised Code Sections 6109.07 et. seq., or accepted the certification of plan review by an authorized professional engineer pursuant to a contract therefore. These plans are approved subject to the condition of compliance with all applicable laws, rules, regulations, and standards. The applicant is responsible for obtaining all other necessary approvals, waivers or releases required by state, federal or local law prior to implementing this plan. Further, all construction must be supervised by a registered engineer, if required by law, or expert qualified in such work.

The enclosed report or project summary sheet(s) contains a description of the facilities approved which may include information regarding approved operating rates, capacities, and requirements, and is incorporated herein.

This approval shall become void five years from the date of this letter unless the facilities are constructed as proposed by that date. By accepting this approval, the applicant acknowledges that this deadline shall not be considered or construed as extending or having any effect whatsoever on any compliance schedule or deadline set forth in any administrative or court order issued to or binding upon the applicant, and the applicant shall abide by such compliance schedules or deadlines to avoid the initiation of additional legal action by the Ohio Environmental Protection Agency.

A license to operate will be required for these facilities. The owner shall notify the appropriate district office of the Ohio Environmental Protection Agency in writing within ten days of placing this water system in operation so that a license to operate application can be provided to the owner. The owner shall return the completed application and the appropriate fee within seven days of receiving the application.

Lead solder and flux that exceeds 0.2 percent lead content and any pipe or pipe fitting that exceeds an 8 percent lead content shall not be used in the installation of the proposed facilities.

The owner shall provide for the proper maintenance and operation of the water supply and distribution system.

Necessary measures shall be taken to ensure that there will be no cross connections between the public water supply and any private water supply. The local health department shall be notified of any private water wells which will no longer be used as sources of potable water and which should be abandoned.

Ted Strickland, Governor Lee Fisher, Lieutenant Governor Chris Korleski, Director City of Zanesville July 24, 2009 Page 2

The supplier of water shall ensure that no customer at any one, two or three family dwelling installs a booster pump that is supplied from any pipe connected to the public water supply system unless an air gap separation is provided in accordance with Ohio Administrative Code Rule 3745-95-07(A).

Air Pollution Control Requirements: Fugitive dust generated by this water line project shall be controlled as specified in OAC 3745-17-08(B).

A National Pollutant Discharge Elimination System (NPDES) permit will be required if the construction project results in a disturbance greater than or equal to one acre. As a requirement of the permit, a Storm Water Pollution Prevention Plan (SWPPP) must be developed before submitting the Notice of Intent (NOI) for coverage under the permit. The NOI must be submitted 45 days prior to beginning construction. To obtain the application form and relevant information, please contact Ohio EPA's stormwater coordinator at (740) 385-8501.

The proposed facility may be constructed only in accordance with plans approved by the director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the agency. Any deviation from the approved plans or the above conditions may lead to sanctions and penalties provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

Should there be any questions regarding the requirements, meaning, or interpretation of any of the above which we may clarify, please contact the Division of Drinking and Ground Waters, Southeast District Office, Ohio Environmental Protection Agency.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filled with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filling of the appeal shall be filled with the Director within three (3) days of filling with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filled with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission 309 South Fourth Street, Room 222 Columbus, OH 43215

Sincerely

Chris Korleski Director

CK/fs

cc: Central Office, DDAGW
Sarah Wallace, SEDO, DDAGW
Muskingum County Health Department
William H. Adams, IV, P.E.

REPORT ON DETAIL PLANS (#714429) FOR THE CITY OF ZANESVILLE WAYNE AVENUE WATER LINE REPLACEMENT MUSKINGUM COUNTY, PWS ID# OH6002712

July 21, 2009

On June 30th, 2009, detail plans for the proposed Wayne Avenue Water Line Replacement Project were received from William H. Adams IV, P.E. of Adams Bros. Engineering. The plans propose the replacement of 8,400 feet of existing water main along Wayne Avenue (SR #60 at the south end of Zanesville.

Waterline

The location and type of waterline to be installed is as follows:

Location	Distance	Type of Pipe
From the intersection of Wayne Avenue and Marietta Street south along Wayne Avenue to the Riverview Manor Trailer Park.	8,400'	8" C-900 DR 18 PVC

All piping associated with this project will be installed and pressure tested in accordance with AWWA Standard C-605 and decontaminated per AWWA Standard C-651 before being placed in operation.

The estimated project cost is \$1,000,000. It is recommended that the plans be approved with the usual conditions.

Steve Lind, P.E. Environmental Supervisor Division of Drinking and Ground Waters

L:\DATA\DDAGW\LIND\Zanesville Wayne Avenue #714429 report.docx