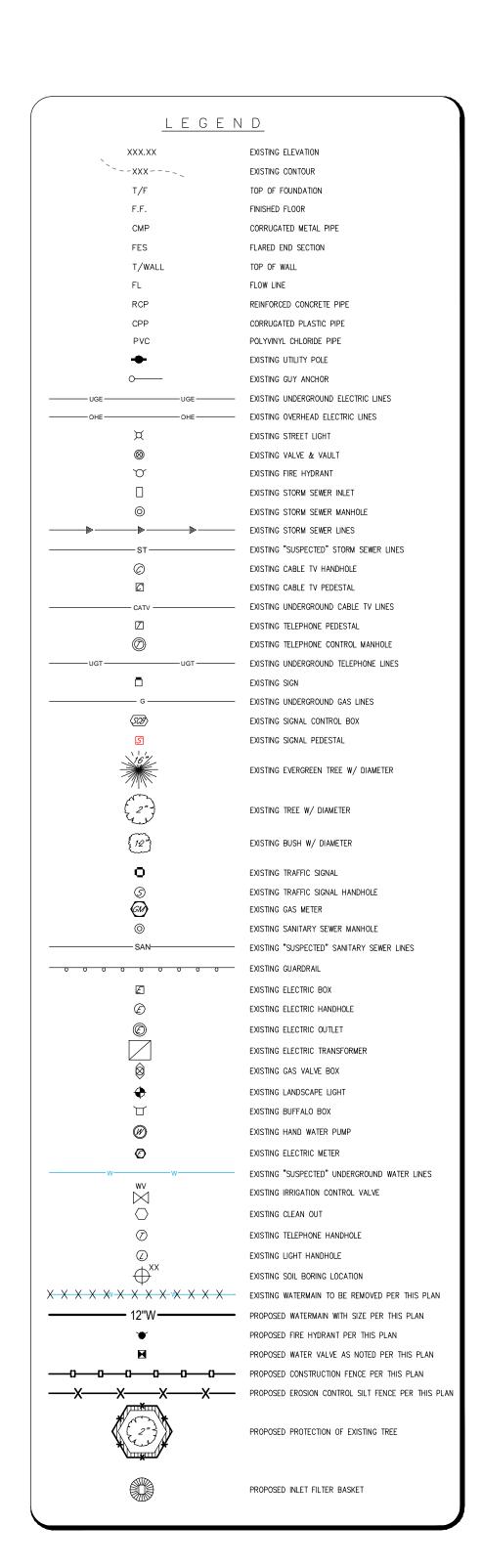
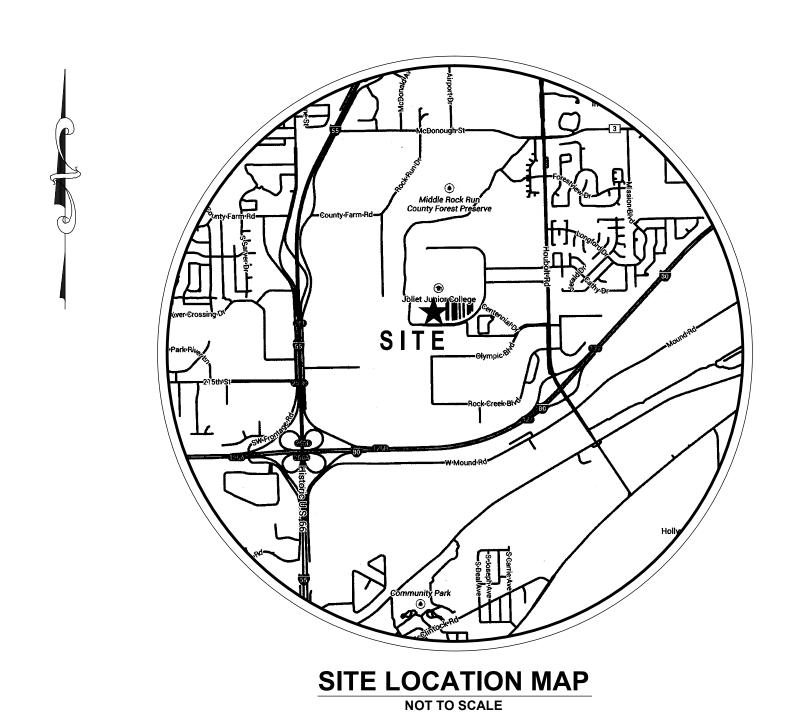
MAIN CAMPUS WAUERMAIN EXUENSION JOLET JUNIOR COLLEGE

City of Joliet Will County, Illinois





INDEX OF ENGINEERING SHEETS

SHEET No.										
1.)	. COVER SHEET									
2.)	PLAN	AND	PROFILE	OF	PROPOSED	WATERMAIN	EXTENSION	(1	OF	4)
3.)	PLAN	AND	PROFILE	OF	PROPOSED	WATERMAIN	EXTENSION	(2	OF	4)
4.)	PLAN	AND	PROFILE	OF	PROPOSED	WATERMAIN	EXTENSION	(3	OF	4)
5.)	PLAN	AND	PROFILE	OF	PROPOSED	WATERMAIN	EXTENSION	(4	OF	4)

GENERAL NOTES AND CONSTRUCTION DETAILS

NOTE: DUE TO THE UNCERTAINTY OF SEASONAL GROUND WATER TABLES AND THE GEOPHYSICAL CONDITIONS AFFECTING GROUND WATER MOVEMENT, RUETTIGER, TONELLI & ASSOCIATES TAKES NO RESPONSIBILITY FOR THE MANAGEMENT OF GROUND WATER ASSOCIATED WITH SUB-GRADE CONSTRUCTION. BASEMENTS OR OTHER LIKE FACILITIES CONSTRUCTED BELOW THE FINISHED SURFACE GRADE OF THE PROPERTY ARE AT THE RISK OF THE BUILDER/OWNER.

LAND SURVEYOR / ENGINEER:

RUETTIGER, TONELLI & ASSOCIATES, INC. 129 CAPISTA DRIVE SHOREWOOD, ILLINOIS 60404 Ph. (815) 744-6600

OWNER / DEVELOPER

JOLIET JUNIOR COLLEGE 1215 HOUBOLT ROAD **JOLIET, ILLINOIS 60431** CONTACT: PHIL THIELE Ph. (815) 280-2889

SITE BENCHMARK 1: HEAD BOLT ON FIRE HYDRANT THAT ARROW POINTS TO, LOCATED APPROXIMATELY 740' SOUTH OF MAIN CAMPUS EXIT ROAD ONTO HOUBOLT ROAD. ELEVATION: 607.75 (NAVD 88) SITE BENCHMARK 2: CUT CROSS TOP OF CONCRETE PAD BY ELECTRIC
PANELS LOCATED TO THE EAST OF THE BASEBALL FIELD PRESS BOX

ELEVATION = 564.18 (NAVD 88) FIELD VERIFY BENCHMARK WITH BENCHMARK LIST I, JOSEPH P. HAMMER, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF ILLINOIS, HEREBY CERTIFY THAT THESE IMPROVEMENT PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION BY RUETTIGER, TONELLI & ASSOCIATES, INC., ILLINOIS PROFESSIONAL DESIGN FIRM No. 184-001251.

DATED THIS____DAY OF____

JOSEPH P. HAMMER IL P.E. No. 062-053186 (EXPIRES 11-30-2015) TO ENSURE AUTHENTICITY OF THIS DRAWING, IT MUST BEAR THE EMBOSSED SEAL OF THE DESIGN FIRM OR PROFESSIONAL LICENSEE WHO PREPARED THIS DRAWING.

REVISIONS DOCUMENTATION: DATE **DESCRIPTION** No. DATE DESCRIPTION PROJECT No.: 20150152.00 DATE: 3-12-2015 FIELD BOOK: JJC2, P. 50 DRAWN BY: R.P. CHECKED BY: J.H.

ONE-CALL SYSTEM

CONTACT J.U.L.I.E. at 811 or 800-892-0123

48 Hours (2 Working Days) BEFORE YOU DIG.

Include the following:

County, City/Township, Section & 1/4 Section No.



Ruettiger, Tonelli & Associates, Inc.

Surveyors • Engineers • Planners • Landscape Architects • G.I.S. Consultants 129 CAPISTA DRIVE - SHOREWOOD, ILLINOIS 60404 PH. (815) 744-6600 FAX (815) 744-0101 website: www.ruettigertonelli.com

JOLIET JUNIOR COLLEGE

MAIN CAMPUS WATERMAIN EXTENSION **1215 HOUBOLT ROAD JOLIET, ILLINOIS 60431**

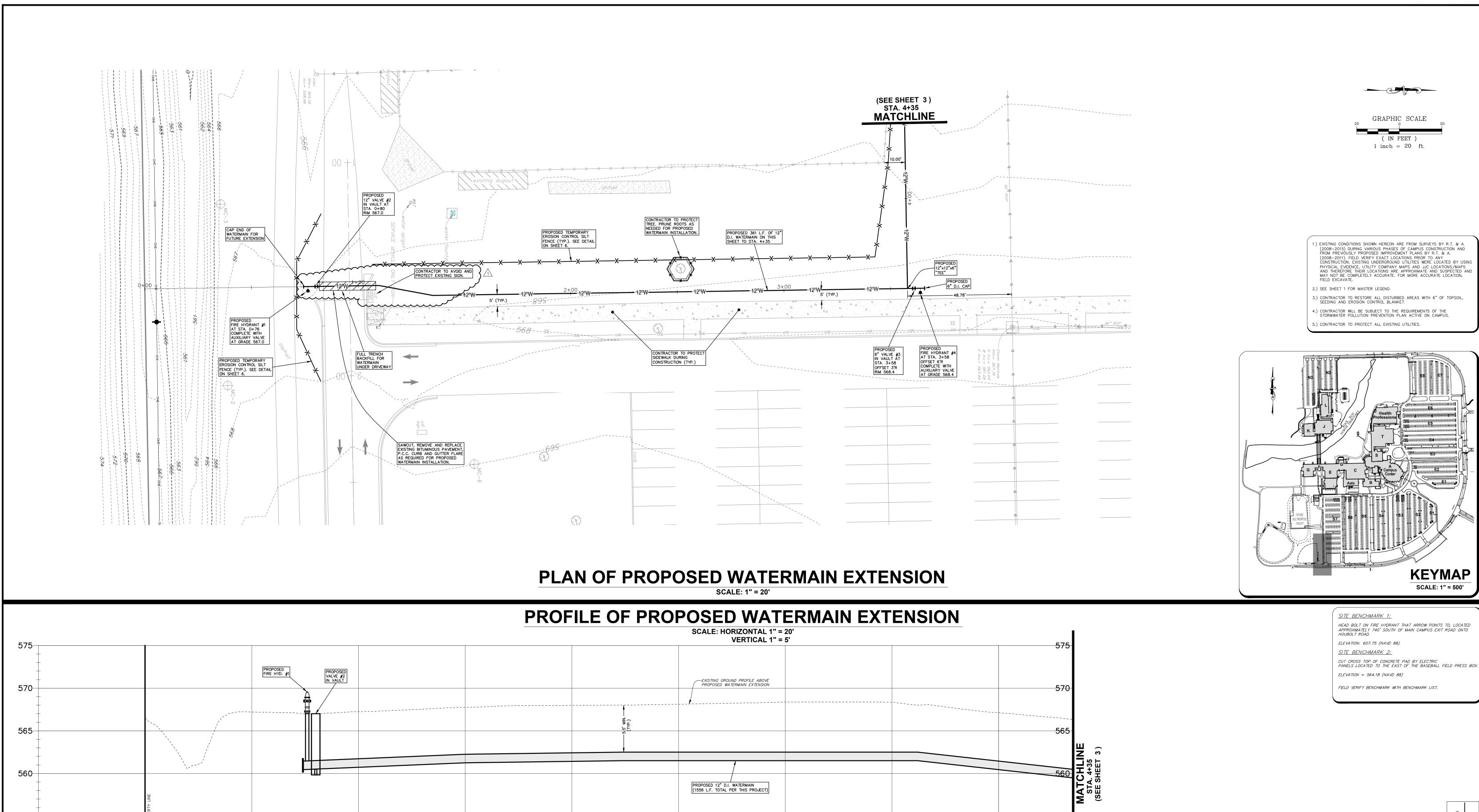
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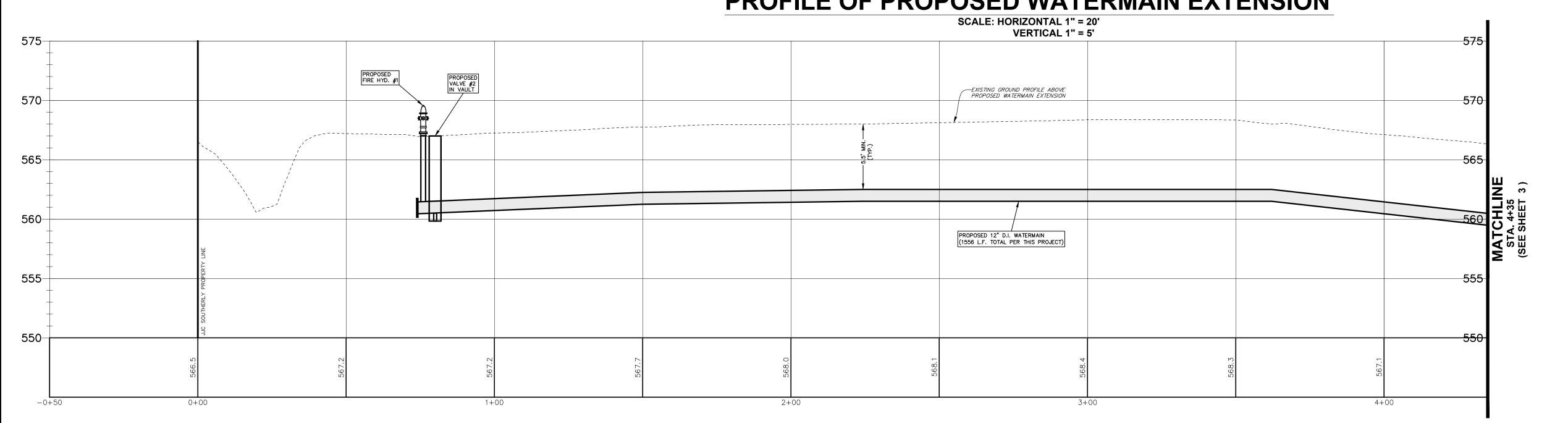
DRAWING No. 315-0152-C1

COVER SHEET

SCALE: AS NOTED **ENGINEERING DEPARTMENT**

SHEET 1 OF 6





PLAN AND PROFILE OF PROPOSED WATERMAIN **EXTENSION (1 OF 4)**

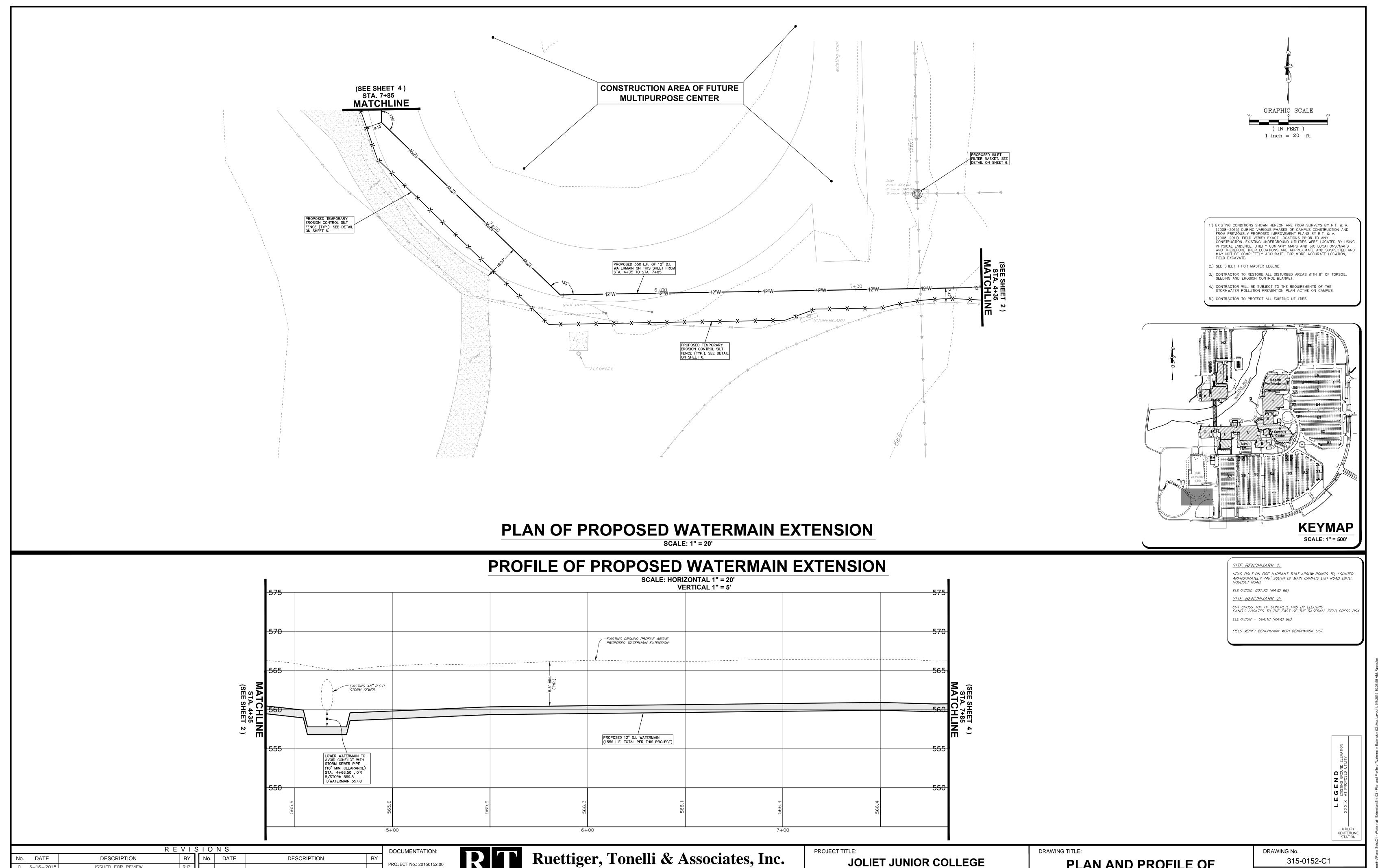
DRAWING No. 315-0152-C1 SCALE: AS NOTED

ENGINEERING DEPARTMENT SHEET 2 OF 6

REVISIONS DOCUMENTATION: Ruettiger, Tonelli & Associates, Inc. **DESCRIPTION** DATE DESCRIPTION **JOLIET JUNIOR COLLEGE** ISSUED FOR REVIEW R.F

ADDENDUM 1 R.F PROJECT No.: 20150152.00 Surveyors • Engineers • Planners • Landscape Architects • G.I.S. Consultants MAIN CAMPUS WATERMAIN EXTENSION DATE: 3-12-2015 129 CAPISTA DRIVE - SHOREWOOD, ILLINOIS 60404 **1215 HOUBOLT ROAD** FIELD BOOK: JJC2, P. 50 PH. (815) 744-6600 FAX (815) 744-0101 DRAWN BY: R.P. **JOLIET, ILLINOIS 60431** website: www.ruettigertonelli.com CHECKED BY: J.H.

UTILITY CENTERLINE STATION



Surveyors • Engineers • Planners • Landscape Architects • G.I.S. Consultants

129 CAPISTA DRIVE - SHOREWOOD, ILLINOIS 60404

PH. (815) 744-6600 FAX (815) 744-0101

website: www.ruettigertonelli.com

JOLIET JUNIOR COLLEGE

MAIN CAMPUS WATERMAIN EXTENSION

1215 HOUBOLT ROAD

JOLIET, ILLINOIS 60431

DATE

DATE

DESCRIPTION

ISSUED FOR REVIEW R.F

ADDENDUM 1 R.F

DESCRIPTION

PROJECT No.: 20150152.00

FIELD BOOK: JJC2, P. 50

DATE: 3-12-2015

DRAWN BY: R.P.

CHECKED BY: J.H.

315-0152-C1

AS NOTED

ENGINEERING DEPARTMENT

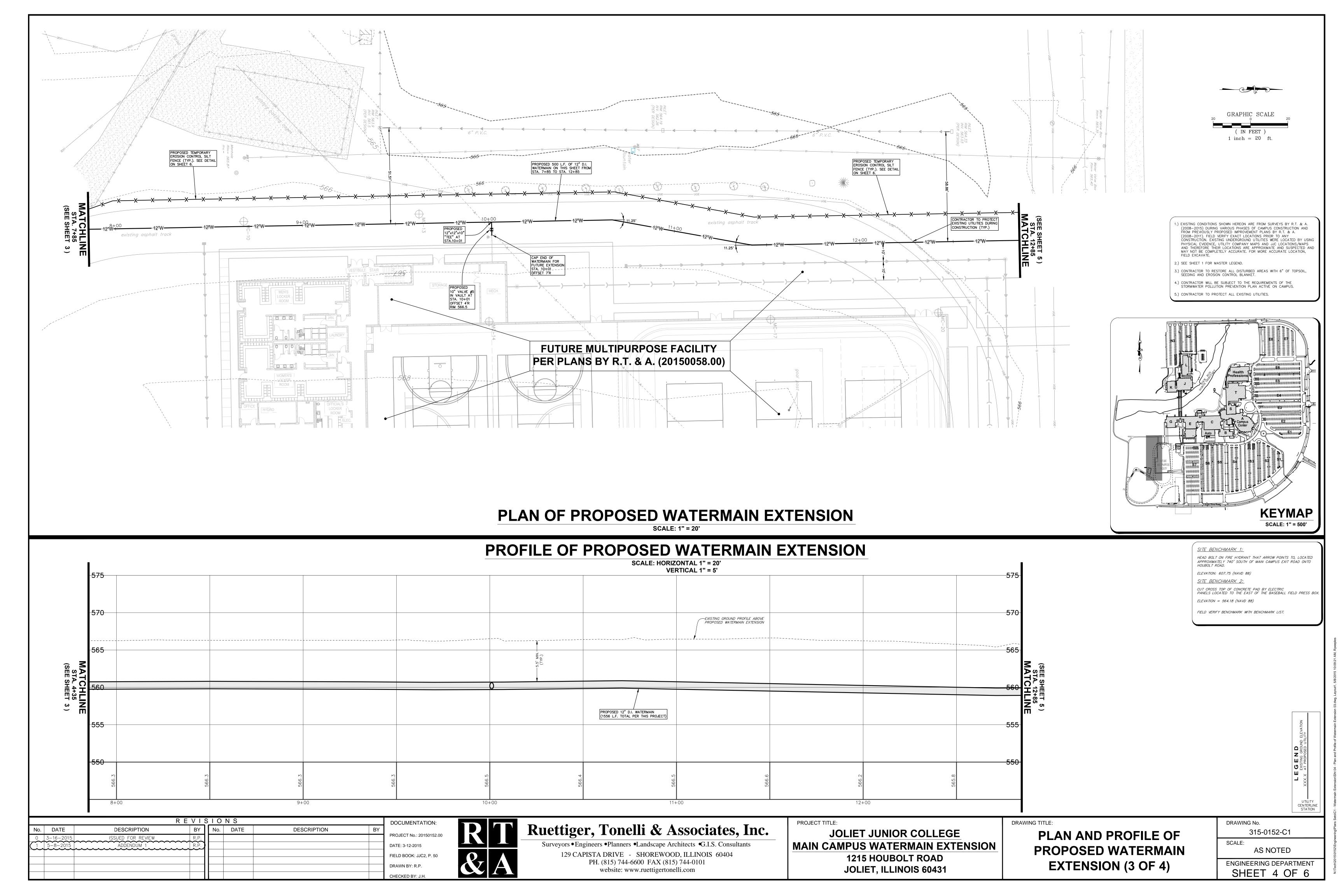
SHEET 3 OF 6

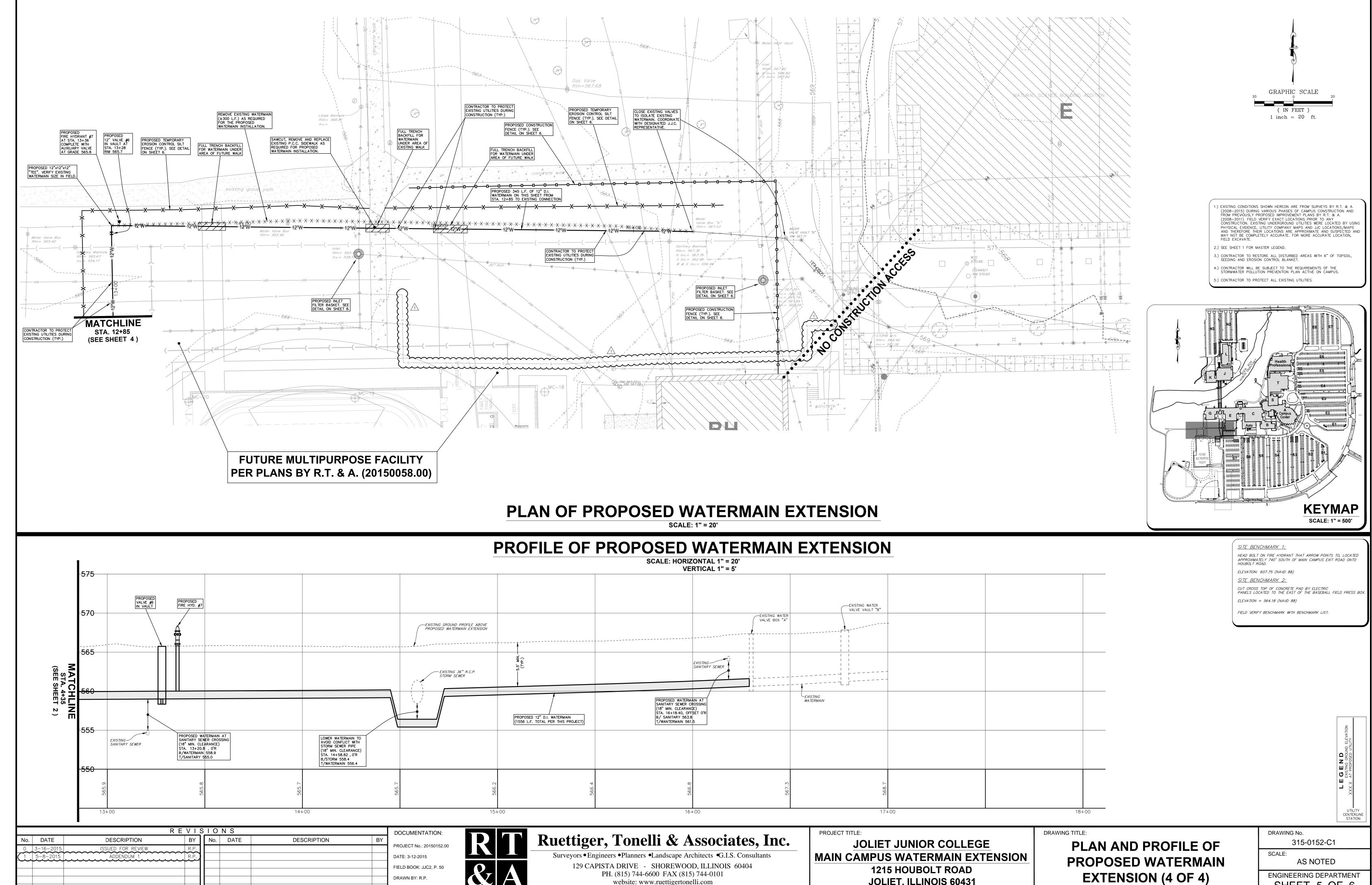
SCALE:

PLAN AND PROFILE OF

PROPOSED WATERMAIN

EXTENSION (2 OF 4)





website: www.ruettigertonelli.com

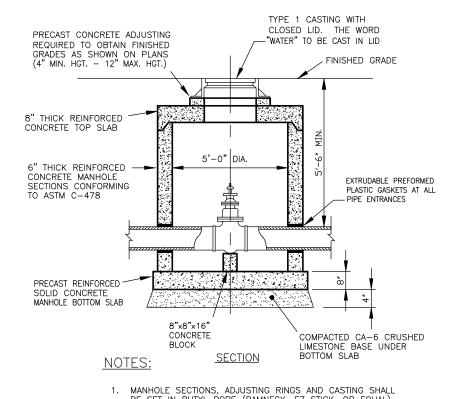
JOLIET, ILLINOIS 60431

DRAWN BY: R.P.

CHECKED BY: J.H.

SHEET 5 OF 6

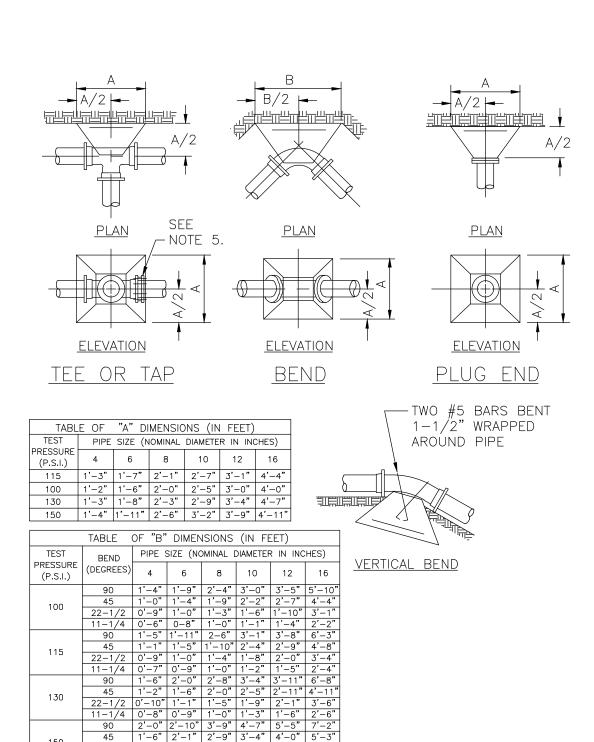
FIRE HYDRANT INSTALLATION NOT TO SCALE



2. VALVE MUST ALIGN WITH CENTER OF VAULT OPENING. WATER VALVE VAULT FOR 10" AND 12" DIA. PIPES

NOT TO SCALE

T HOLES AND INTÈRIOR JOINTS SHALL BE SEALED



DATE

- 1. THRUST BLOCKS SHALL BE CONSTRUCTED OF CLASS "SI" P.C. CONCRETE. 2. REINFORCING STEEL SHALL BE BASED ON TEST PRESSURES:
- 3. THRUST BLOCK SIZE FOR TEE DETERMINED BY SMALLEST DIAMETER OF TEE AND TEST PRESSURE OF PIPE. 4. ALL THRUST BLOCK SIZES SHOWN ARE BASED ON A MINIMUM SOIL BEARING PRESSURE OF 1500 PSI (STANDARD PROCTOR).
- 5. MECHANICALLY RESTRAINED JOINTS SHALL BE USED WHEREVER THERE IS A SHORTAGE OF SPACE DUE TO OTHER UTILITIES OR STRUCTURES, AND WHERE BEARING SOILS HAVE BEEN DISTURBED OR DO NOT MEET THE MINIMUM SOIL BEARING REQUIREMENT.

DESCRIPTION

ISSUED FOR REVIEW

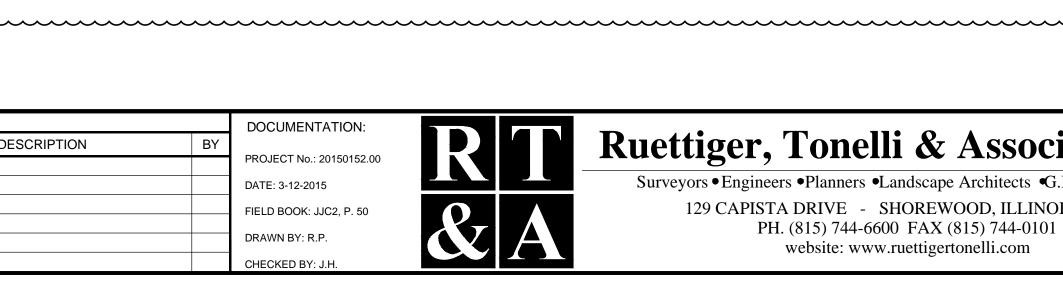
ADDFNDUM 1

REVISIONS

DATE

THRUST BLOCK INSTALLATION

NOT TO SCALE



DOCUMENTATION:

FIELD BOOK: JJC2, P. 50

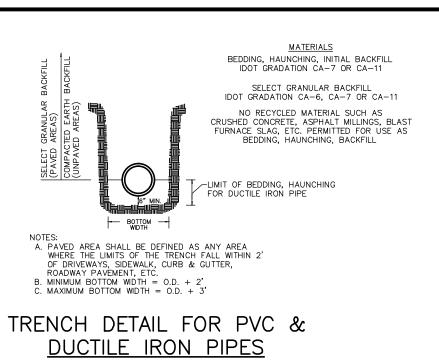
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DRAWN BY: R.P.

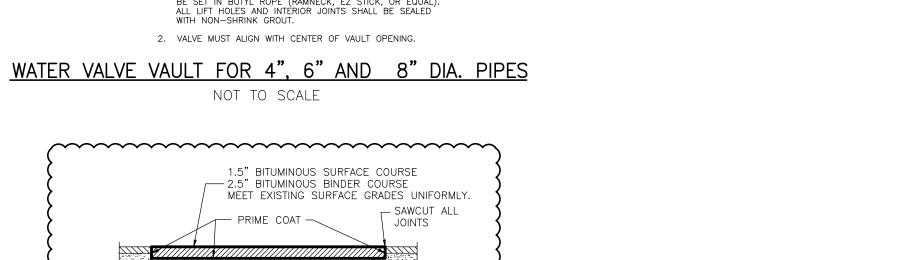
CHECKED BY: J.H.

ROJECT No.: 20150152.00

DESCRIPTION



NOT TO SCALE



TYPE 1 CASTING WITH

PRECAST CONCRETE ADJUSTING

[4" MIN. HGT. - 12" MAX. HGT.

5" THICK REINFORCED --

PRECAST REINFORCED

BLOCK

PRECAST REINFORCED

CLOSED LID. THE WORD

BOTTOM SLAB

12" CA-6

AS SPECIFIED

PIPE TRENCH

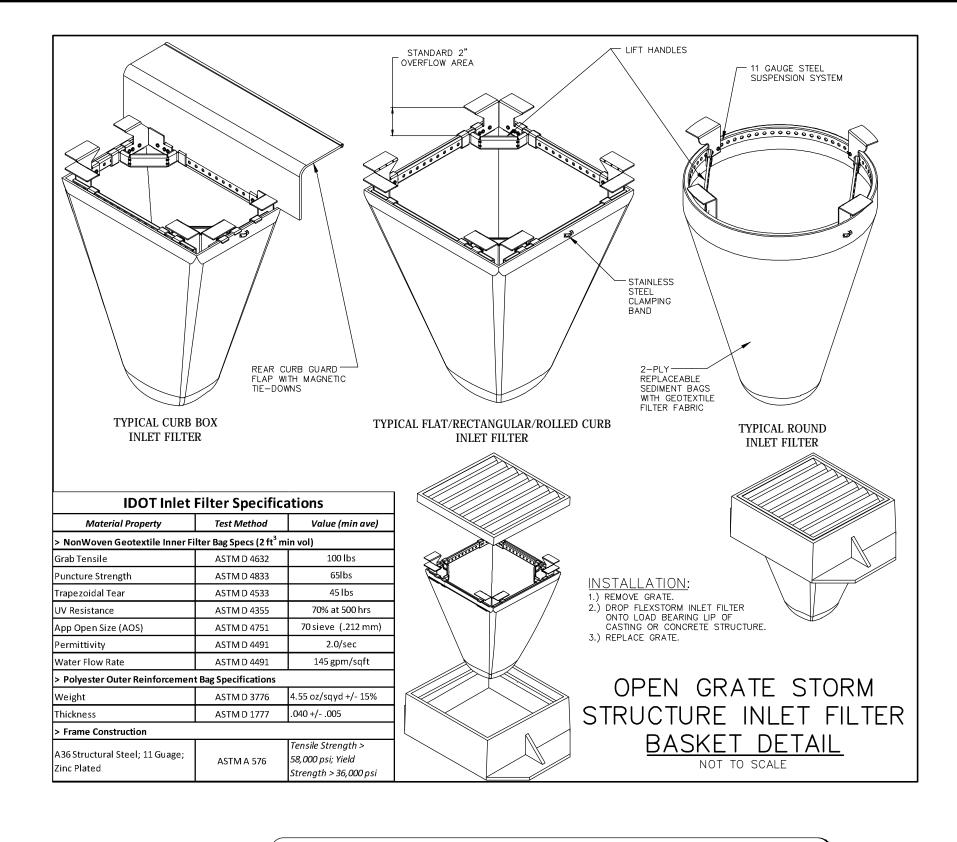
BITUMINOUS PAVEMENT REPAIR

- COMPACTED BACKFILL

FINISHED GRADE

FXTRUDABLE PREFORMED

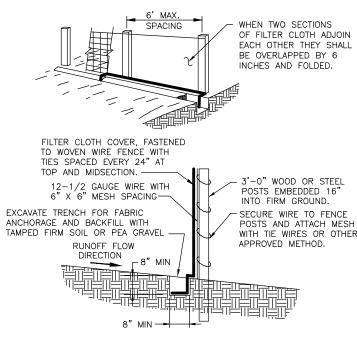
Standard Temporary Construction Fence Panel Specification **Panels** Stabalizers / Stands Side View 1 1/4" ~ Tension Bands /(5 per side) Front View 0 0 •2 x 11ga wire fill Tension bands w/ nuts and bolts OD WAII (not press clips) **All pipe and wire to be Framework | 1 3/8" | .065" hot dipped galvanized** •Wire ties every 12 Inches Standard Temporary Construction Panel



- THE TEMPORARY EROSION CONTROL SYSTEMS INSTALLED BY THE CONTRACTOR SHALL BE PROPERLY MAINTAINED AS DIRECTED BY THE VILLAGE TO CONTROL SILTATION AT ALL TIMES DURING THE LIFE OF THE CONTRACT ALL STORM SEWER STRUCTURES WITH OPEN GRATES SHALL BE PROTECTED BY INSTALLING FILTER BASKETS FOR THE DURATION OF THE CONSTRUCTION, UNTIL FINAL PERMANENT STABILIZATION IS ACHIEVED.
- DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN (7) SEVEN CALENDAR DAYS FOLLOWING THE END OF ACTIVE DISTURBANCE, RE-DISTURBANCE, CONSISTENT WITH THE FOLLOWING CRITERIA. APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION MEASURES SHALL INCLUDE SEEDING, MULCHING, SODDING
- ALL EROSION CONTROL ITEMS REMAIN IN PLACE AND BE MAINTAINED UNTIL DEEMED UNNECESSARY BY THE OWNER / DEVELOPER AND THE VILLAGE AT WHICH TIME THE EROSION CONTROL ITEMS SHALL BE COMPLETELY REMOVED FROM

EROSION CONTROL TO BE APPLIED PER THE ILLINOIS PROCEDURES FOR URBAN SOIL EROSION AND SEDIMENTATION

- ALL DISTURBED AREAS NOT SPECIFICALLY IDENTIFIED FOR LANDSCAPING IMPROVEMENTS OR IMPERVIOUS SURFACE TREATMENTS SUCH AS PAVEMENTS, DRIVES, PATIOS, STOOPS, SIDEWALKS OR WALKWAYS SHALL BE FINISHED WITH A MINIMUM OF 6" OF TOPSOIL AND RESTORED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2002 AS FOLLOWS:
- CLASS 2 SEED PER SECTION 250.
 FERTILIZED NUTRIENTS IN THE RATIO OF 1:1:1 OF NITROGEN, PHOSPHOROUS AND POTASSIUM EACH, ALL AT THE
- RATE OF 60 LBS/ACRE IN ACCORDANCE WITH SECTION 250. EROSION CONTROL BLANKET: EXCELSIOR GREEN BLANKET (LD.O.T. SEC. 251.04)
 CONTRACTOR SHALL MAINTAIN RESTORED AREA AS NEEDED UNTIL GERMINATION IS COMPLETED AND THE OWNER, OR LOCAL AGENCY HAVING JURISDICTION, HAS ACCEPTED THE WORK.
- FOR EACH PHASE OF WORK, THE CONTRACTOR RESPONSIBLE FOR THAT WORK IS TO PROVIDE QUALIFIED PERSONNEL
- DISTURBED AREAS OF THE CONSTRUCTION SITE WHICH HAVE NOT BEEN STABILIZED WITH IMPERVIOUS MATERIALS OR VEGETATIVE GROUND COVER.
- STRUCTURAL CONTROL MEASURES (I.E. SILT FENCE, GRATE FABRIC, ETC.).
- OFF SITE ROADS AND ON SITE PAVEMENTS WHICH THE CONTRACTOR'S VEHICLES AND OR EQUIPMENT OPERATE. SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT HAS 0.5 INCHES OR MORE OF PRECIPITATION. ALL INSPECTIONS SHALL BE IN CONFORMANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN INSPECTION
- ANY STOCKPILE OF TOPSOIL MAINTAINED ON SITE SHALL BE STABILIZED WITH A VEGETATION ACCORDING TO NOTE 4 ABOVE. STOCKPILE SHALL BE SURROUNDED WITH SILT FENCE.



NOTES FOR SILT FENCE

- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL SHALL BE REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.
- 2. FILTER CLOTH SHALL BE FILTER X, MIRAFI 100X, STABILINKA T140N, OR EQUAL 3. PREFABRICATED UNIT SHALL BE GEOFAB, ENVIROFENCE, OR EQUAL

SILT FENCE INSTALLATION

NOT TO SCALE

JOLIET JUNIOR COLLEGE 1215 HOUBOLT ROAD **JOLIET, ILLINOIS 60431**

DRAWING TITLE:

GENERAL NOTES AND CONSTRUCTION DETAILS

DRAWING No. 315-0152-C1

ENGINEERING DEPARTMENT

SITE CONSTRUCTION GENERAL NOTES

1. ALL NEW CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION; AND "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" - ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION. 2. THE OWNER AND/OR CONTRACTOR ARE REQUIRED TO FOLLOW THE ACTIVE GENERAL PERMIT ILR-10 OR NATIONAL POLLUTANT ELIMINATION SYSTEM (NPDES) PERMIT. CONTRACTOR IS REQUIRED TO MAINTAIN THE STORMWATER POLLUTION PREVENTION PLAN. 3. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CONSTRUCTION

UNLESS NOTED OTHERWISE, ANY UNDERGROUND SEWER OR DRAIN TILE SHALL REMAIN IN OPERATION, AND IF DAMAGED SHALL BE REPAIRED TO EXISTING OR BETTER CONDITION. THE OWNER OF THE TILE AND THE CONSTRUCTION MANAGER SHALL BE NOTIFIED BEFORE TRENCH IS BACKFILLED.

- 5. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE OWNER, CONSTRUCTION MANAGER AND ENGINEER IF THERE IS ANY DISCREPANCY BETWEEN THE PLANS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH ANY STAGE OF CONSTRUCTION OF PROPOSED IMPROVEMENTS.
- 6. GRANULAR BACKFILL TO BE CRUSHED LIMESTONE CA-6.
- EROSION CONTROL TO BE APPLIED PER THE ILLINOIS PROCEDURES FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL MANUAL, LATEST EDITION. EROSION CONTROL NOTED SHALL BE CONSIDERED AS MINIMUM. ADDITIONAL MEASURES MAY BE REQUIRED AS CONSTRUCTION PROCEEDS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COMPLETELY REMOVE AND PROPERLY DISPOSE OF EXISTING STRUCTURES, DEBRIS, WASTES AND VEGETATION FROM THE SITE AS NOTED ON THE PLAN OR AS MAY BE REQUIRED TO PROPERLY COMPLETE HIS WORK. ALL DEBRIS AND SURPLUS MATERIALS REMOVED FROM THE SITE SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR. NO ON-SITE BURNING OR BURIAL SHALL BE ALLOWED.

THE CONTRACTOR SHALL MAINTAIN THE SITE IN A CLEAN AND ORDERLY MANNER AT ALL TIMES. DEBRIS AND SURPLUS MATERIAL CLEAN UP AND REMOVAL SHALL PROCEED AS THE WORK

ANY EXISTING WATER AND SANITARY SERVICES ENCOUNTERED FROM PREVIOUSLY DEMOLISHED BUILDINGS SHALL BE ABANDONED AND CAPPED OFF.

ALL WORK CONDUCTED WITHIN ANY PUBLIC AREAS SHALL BE GOVERNED BY THE APPLICABLE ARTICLES OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS". WORK SHALL INCLUDE FURNISHING, INSTALLING, MAINTAINING, RELOCATING AND REMOVING ALL TRAFFIC CONTROL DEVICES USED FOR THE PURPOSE OF REGULATING, WARNING OR DIRECTING TRAFFIC DURING THE CONSTRUCTION OF ANY IMPROVEMENTS, LOADING AND UNLOADING OF MATERIALS, MOBILIZATION OF EQUIPMENT, CLEANING OF PAVEMENTS, OR WHENEVER THE SAFETY OF WORKERS OR TRAFFIC MAY BE AN ISSUE.

TRAFFIC CONTROL DEVICES INCLUDE: SIGNS AND THEIR SUPPORTS, SIGNALS, PAVEMENT MARKINGS, BARRICADES WITH SAND BAGS, CHANNELING DEVICES, WARNING LIGHTS, ARROW BOARDS, FLAGGERS, OR ANY OTHER DEVICE USED FOR THE PURPOSE OF REGULATING, WARNING OR GUIDING TRAFFIC THROUGH THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LOCATION, INSTALLATION, AND ARRANGEMENT OF ALL TRAFFIC. ANY DROP OFF GREATER THAN TWO INCHES WITHIN EIGHT FEET OF THE PAVEMENT EDGE SHALL BE PROTECTED BY TYPE I OR II BARRICADES WITH IDOT APPROVED WARNING LIGHTS.

TRAFFIC CONTROL DEVICES AND MEASURES SHALL BE SUBJECT TO APPROVAL AND INSPECTION BY CONSTRUCTION MANAGER.

- 10. FOR EACH PHASE OF WORK, THE CONTRACTOR RESPONSIBLE FOR THAT WORK IS TO PROVIDE QUALIFIED PERSONNEL WHO SHALL INSPECT:
- DISTURBED AREAS OF THE CONSTRUCTION SITE WHICH HAVE NOT BEEN STABILIZED WITH IMPERVIOUS MATERIALS OR VEGETATIVE GROUND COVER.
- STRUCTURAL CONTROL MEASURES (I.E. SILT FENCE, GRATE FABRIC, ETC.)
- OFF SITE ROADS AND ON SITE PAVEMENTS WHICH THE CONTRACTOR'S VEHICLES AND OR EQUIPMENT OPERATE.

SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT HAS 0.5 INCHES OR MORE OF PRECIPITATION.

ALL INSPECTIONS SHALL BE IN CONFORMANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN INSPECTION REQUIREMENTS.

WATERMAIN NOTES

SANITARY SEWER & WATER MAIN SEPARATION SHALL CONFORM TO SECTION 41-2.01 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

WATER MAIN

- WATER MAIN SHALL BE CEMENT LINED DUCTILE IRON C-151, CLASS 52 WITH C-111 PUSH-ON JOINTS; DISINFECTION-CHLORINE, INITIAL CONC. 50 mg/l, FINAL 25 mg/l, RETENTION TIME 24 HOURS, MINIMUM SAMPLES TWO CONSECUTIVE DAYS @ 24 HOUR
- ALL FITTINGS SHALL BE CEMENT LINED DUCTILE IRON, MECHANICAL JOINT; RETAINER GLANDS ARE REQUIRED ON ALL BENDS, TEES, OR ELBOWS; ALL PLUGS SHALL BE CLOW F-1159 OR APPROVED EQUAL.
- 3. FIRE HYDRANT SHALL BE A CLOW F-2500 MUELLER "CENTURION" A-423 COMPLETE WITH AUXILIARY VALVE; VALVE OPENING OF 5 1/4 INCH AND EQUIPPED WITH TWO 2 1/2 INCH HOSE CONNECTIONS AND ONE 4 1/2" MALE PUMPER CONNECTION.
- 4. ALL VALVES SHALL BE RESILIENT SEATED CONFORMING TO AWWA C509 STANDARDS; MANUFACTURED BY MUELLER OR APPROVED EQUAL.
- 5. RETAINER GLANDS SHALL BE REQUIRED FOR HYDRANTS NOT DIRECTLY CONNECTED TO HYDRANT TEE AT WATERMAIN.



Ruettiger, Tonelli & Associates, Inc.

Surveyors • Engineers • Planners • Landscape Architects • G.I.S. Consultants 129 CAPISTA DRIVE - SHOREWOOD, ILLINOIS 60404 PH. (815) 744-6600 FAX (815) 744-0101 website: www.ruettigertonelli.com

MAIN CAMPUS WATERMAIN EXTENSION

SCALE: **AS NOTED**

SHEET 6 OF 6