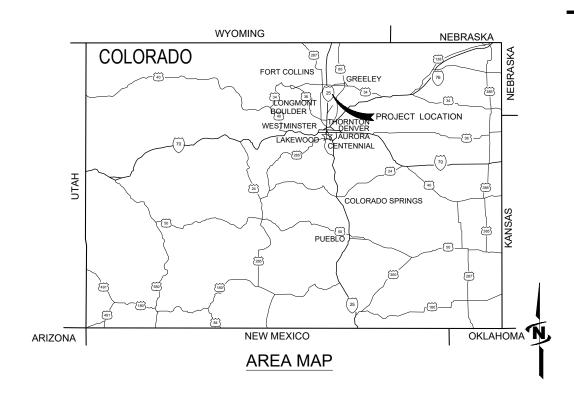
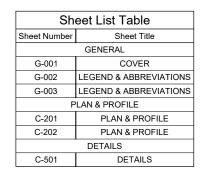
# **ALLEY SEWER REHABILITATION**



# TOWN OF JOHNSTOWN

May 2024

PRELIMINARY PLANS NOT FOR CONSTRUCTION





**VICINITY MAP** 

PROJECT NO. 87-24-001



J-U-B ENGINEERS, INC.

2809 E. Harmony Rd. Suite 300, Fort Collins, CO 80528 p 970 377 3602 w www.jub.com







J-U-B FAMILY OF COMPANIES

### APPROXIMATE QUANTITIES

ITEMS NOT INDICATED ARE CONSIDERED INCIDEN

ITEMS NOT IND	CATED ARE CONSIDERED INCIDENTAL		
Item No.	Item Description	Quantity	Unit
1	8" SDR 35 PVC SEWER PIPE	550	LF
2	48" MANHOLE	2	EA
3	SERVICE CONNECTIONS	18	LS
4	JOINT ENCASEMENTS IN CONCRETE	16	EA
5	CONCRETE REPAIR*	30	SY
6	ASPHALT REPAIR*	285	SY
7	GRAVEL SURFACE REPAIR*	60	SY

\*ASSUMES UP TO 6 FT WIDTH SURFACE DISTURBANCE ALONG TRENCH

### REUSE OF DOCUMENTS

J-U-B grants to CLIENT a nonexclusive, non-transferable license to use the Drawings, Specifications and/or Contract

CLIENT may make and retain copies of the Documents for reference, but J-U-B shall retain all common law, statutory and other reserved rights, including the copyright thereto, and the same shall not be reused on this Project or any other Project without J-U-B's prior written consent. Distribution of Documents to meet regulatory or permitting requirements, or for similar purposes, in connection with the Project, including but not limited to distribution to contractors or subcontractors for the performance of their work, is not to be construed as publication adversely affecting the reserved rights of J-U-B. The Documents are not intended for use in creating dtm for grading or earthwork, survey staking layout (unless specifically identified as such in the documents), or property boundary layouts.

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If the Documents are provided in electronic format, the electronic documents are subjeto the provisions of J-U-B's "electronic document/data limited license" found at edocs lith com

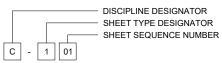
# LINE LEGEND

LINE DESCRIPTION	PROPOSED LINE	EXISTING LINE
POWER / COMMUNICA	ATIONS	
OVERHEAD POWER	——ОНР——	OHP
UNDERGROUND POWER	UP	UP
OVERHEAD TELEPHONE	——— ОНТ ———	OHT
UNDERGROUND TELEPHONE	UT	UT
FIBER OPTIC	——F/0——	F/O
CABLE TELEVISION	CTV	ctv
UNDERGROUND POWER, TEL, CABLE TV		- — — -P,T,CTV - — — -
UNDERGROUND POWER, TEL, CABLE TV, GAS		——— P,T,CTV,G ———
STORM DRAIN		
STORM DRAIN (GENERAL)	SD	sp
STORM DRAIN	——————————————————————————————————————	x"sp
ROOF DRAIN	RD	RD
LAND DRAIN	LD	LD
SANITARY SEWER		
SANITARY SEWER (GENERAL)	ss	ss
SANITARY SEWER	x"ss	x"ss
SANITARY SEWER SERVICE	ssss	ss ss
SEWER FORCE MAIN	———- FМ———	————FM————
WATER		
WATER (GENERAL)	——— w ———	w
WATER (SPECIFIED SIZE)	×"W	x*w
WATER SERVICE	wsws	wsws
IRRIGATION		
IRRIGATION	——— IRR ———	IRR
GRAVITY IRRIGATION	GIRR	GIRR
PRESSURE IRRIGATION	PIRR	PIRR
POTABLE WATER	PW	PW
NON-POTABLE WATER	NPW	NPW
GAS		l
NATURAL GAS	G	G
NATURAL GAS SERVICE	— G — G —	c c
HIGH PRESSURE GAS	HPG	HPG
LIQUID GAS	LG	re
UTILITY		
CHLORINE LINE	——— CHL ———	CHL
INDUSTRIAL WASTE WATER	IWW	ıww
INDUSTRIAL WASTE WATER		

LINE DESCRIPTION	PROPOSED LINE	EXISTING LINE
BOUNDARY		
PROPERTY LINE	——P/L——	——— P/L ———
PROPERTY LINE		
RIGHT OF WAY	R/W	R/W
TEMPORARY EASEMENT	T/E	т/Е
PERMANENT EASEMENT	———P/E———	P/E
TOWNSHIP AND RANGE		
SECTION LINE		
QUARTER SECTION LINE		
1/16 SECTION LINE		
STATE LINE		
COUNTY LINE		
SITE		
FENCE	x	x
MAJOR CONTOUR	2521	
MINOR CONTOUR		
GRADE BREAK		GB
TOP OF BANK		тов
TOE OF SLOPE		ТОЕ
CUT LIMITS		
CUT LIMITS	CUT	
FILL LIMITS		
FILL LIMITS	FILL	
DITCH		
STORM SWALE		
EDGE OF WATER		
HIGH WATER		
WETLAND		WET
WETLAND BOG		BOG
WETLAND MARSH		MRSH
WETLAND SWAMP		SWMP
ROADWAY		
ROAD SHOULDER		
ROAD CENTERLINE		
ROAD ASPHALT		————EP———
ROAD GRAVEL	EG	— — — EG — — —
TOP BACK OF CURB		
LIP OF GUTTER		
LANDSCAPING LIMITS	LS	LS

# SHEET NUMBERING

SAMPLE: C-101



DISCIPLINE DESIGNATORS		
DISCIPLINE	DESIGNATOR	DESCRIPTION
	G	ALL GENERAL
GENERAL	GI	GENERAL INFORMATION
GENERAL	GC	GENERAL CONTRACTUAL
	GR	GENERAL RESOURCE
SURVEY/MAPPING	V	ALL SURVEY
GEOTECHNICAL	В	ALL GEOTECHNICAL
CIVIL	С	ALL CIVIL
LANDSCAPE	L	ALL LANDSCAPE
STRUCTURAL	S	ALL STRUCTURAL
ARCHITECTURAL	A	ALL ARCHITECTURE
EQUIPMENT	Q	ALL EQUIPMENT
MECHANICAL	М	ALL MECHANICAL
ELECTRICAL	E	ALL ELECTRICAL
PLUMBING	Р	ALL PLUMBING
PROCESS	D	ALL PROCESS
RESOURCE	R	ALL RESOURCE

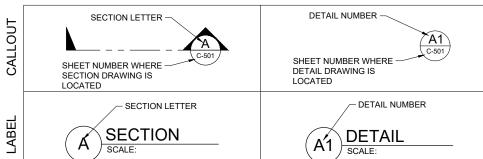
	SHEET TYPE DESIGNATORS
DESIGNATOR	SHEET TYPE
0	GENERAL (SYMBOLS, LEGENDS, NOTES, ETC.)
1	PLANS (HORIZONTAL VIEWS)
2	ELEVATIONS, PROFILES, COMBINED PLAN & PROFILES
3	SECTIONS (SECTIONAL VIEWS)
4	LARGE-SCALE VIEWS (PLANS, ELEVATIONS, ECT.)
5	DETAILS OR COMBINED DETAILS AND SECTIONS
6	SCHEDULES AND DIAGRAMS
7	USER DEFINED
8	USER DEFINED
9	3D REPRESENTATIONS (ISOMETRICS, PERSPECTIVES, PHOTOS)

# SECTION AND DETAIL IDENTIFIERS

NOTE:
A DASH MAY BE PLACED IN THE LOWER PORTION
OF THE IDENTIFIER IF THE DETAIL DRAWING OR
SECTION VIEW IS LOCATED ON THE SAME SHEET.

### SECTION IDENTIFICATION

### DETAIL IDENTIFICATION



J-U-B ENGINEERS, INC. 2809 E. Harmony Road Suite 300 Fort Collins, CO 80528

NOT FOR CONSTRUCTION

ALLEY SEWER REHABILITATION TOWN OF JOHNSTOWN

FILE: 87-24-001\_G-002 JUB PROJ. #:87-24-001 DRAWN BY: TJG DESIGN BY: TJG

CHECKED BY: KCY

ONE INCH

AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY
LAST UPDATED: 5/21/2024

SHEET NUMBER:

G-002

LEGEND & ABBREVIATIONS

J-U-B ENGINEERS, INC.

SYMBOL DESCRIPTION	EXISTING SYMBOL	PROPOSED SYMBOL
SURVEY		
CAP (ALUMINUM)	0	
CAP (BRASS)	•	
CHISELED X		
CTRL PT GENERIC	<u>&amp;</u>	
CTRL PT ½" REBAR	△1/2" PIN CONTROL PT	
CTRL PT %" REBAR	△ 5/8" PIN CONTROL PT	
CTRL PT 60D NAIL	Å 60D	
CTRL PT HUB & TACK	А нт	
CTRL PT PK NAIL	Å PK	
CTRL PT TEMP BENCH MARK	А твм	
NAIL	٥	•
NAIL AND TAG	Ø <sup>N/T</sup>	
NAIL (PK)	<b>©</b> PK	
BOLT	•	
DRILL STEEL	0	
REBAR (½")	0	•
REBAR (5/8")	0	•
STAINLESS STEEL ROD	•	
IRON PIPE	©	
RAILROAD SPIKE	<b>♦</b>	
R/W MONUMENT	0	
STONE	$\oplus$	
SECTION CORNER. MON.	22   15	
SECTION QUARTER MON.	15	
SITE		
BOLLARD		
BOULDER	0	<b></b>
DRINKING FOUNTAIN	DF	DF
FLAGPOLE	(F)	(Ē)
GATE		
MAIL BOX	M	M
PARKING METER	<u>PM</u>	<u>PM</u>
POST	0	•
SIGN		-
SPOT ELEVATION		×
TREE (SHRUB)	0	
TREE (STUMP)	n	
TREE (CONIFEROUS)	W. W.	
TREE (DECIDUOUS)	The state of the s	
TEST HOLE	(TH)	
WELL	(w)	ŵ

SYMBOL	EXISTING	PROPOSED
UTILITIES DESCRIPTION	SYMBOL	SYMBOL
MANHOLE (GENERIC)		
PRESSURE CLEAN OUT	_	
AT GRADE	PCG	(PCG)
THRUST BLOCK VAULT	I	
COMMUNICATION		
TELE. MANHOLE	T	
TELE. PEDESTAL TELE. POLE	① ——	
TV PEDESTAL		<b>Ⅳ</b>
GUY WIRE	<u> </u>	<u> </u>
DOMESTIC WATER		
FIRE HYDRANT	A.	<b>A</b>
SPIGOT	•	•
YARD HYDRANT	9	•
WATER MANHOLE	w	•
WATER METER	⊞	•
WATER VALVE	×	W
ELECTRIC		
ELEC. MANHOLE	(E)	•
ELEC. METER	Ē	E
ELEC. TRANS.	E	E
JUNCTION BOX	J	J
POWER POLE	-	-
POWER STUB	Œ	Œ
STREET LIGHT	*	*
TRAFFIC SIGNAL POLE		
IRRIGATION		
IRRIGATION VALVE	RB	IRR
IRRIGATION VALVE BOX	0	①
SPRINKLER	Δ	Δ
NATURAL GAS	1	1
GAS METER	G H	G
GAS VALVE	G	G
SANITARY SEWER		1
CLEANOUT	0	•
SEWER STUB	(S)	\$
SS MANHOLE	(\$)	•
STORM DRAIN		
CATCH BASIN		
DRY WELL	(DW)	(DW)
FLARE END		
GREASE TRAP		
SD MANHOLE	0	

SYMBOL DESCRIPTION	EXISTING SYMBOL	PROPOSED SYMBOL
FITTINGS	-	
BEND (11.25°)		I
BEND (22.5°)		$\rightarrow$
BEND (45°)		<b>「</b>
BEND (90°)		4
CAP		E
COUPLING	#	#
CROSS	H	+
REDUCER (CONCENTRIC)		M
REDUCER (ECCENTRIC)		N
TEE	ㅗ	ᄺ
TRUE UNION	=	=
WYE		
VALVES		
AIR VALVE	A	A
BLOW OFF	B	A
COMBO VALVE		
BALL VALVE (N.C.)	] <b>—</b> [	] <b>—</b> [
BALL VALVE (N.O.)	151	151
BUTTERFLY VALVE	N	N
CHECK VALVE	И	И
CHECK VALVE (FLANGE)	N	N
CHECK VALVE (MJ)	N	N
GATE VALVE	$\bowtie$	$\bowtie$
PLUG VALVE (N.C.)	M	<b>&gt;</b>
PLUG VALVE (N.O.)	M	×
ROAD MARKINGS		
TURN ARROW		•
ARROW STRAIGHT	Î	<b> </b>
ARROW STRAIGHT/TURN		4
BICYCLE ROUTE		060
CAR		
HANDICAP SYMBOL	Ğ.	Ġ.
ROADWAY		-
INTERSTATE ROUTE	25)	
MAST ARM		
PEDESTRIAN SIGNAL		
STATE ROUTE	14	

SYMBOL DESCRIPTION	EXISTING SYMBOL	PROPOSED SYMBOL
ROADWAY (CONT.)		-
TYPE 2 BARRICADE	••	
US ROUTE	287	
TRAFFIC ATTENUATOR		
JERSEY BARRIER		

AB	BREVIATIONS
ASSY	ASSEMBL
>	ANGL
@	AT (MEASUREMENTS
BLDG	BUILDING
BM	BENCH MARI
BSC	BITUMINOUS SURFACE COURS
BSW	BACK OF SIDEWALI
BW	BOTH WAY:
C	CHANNEL (STRUCTURAL
C/L	CENTER LIN
CMP	CORRUGATED METAL PIP
CO	CLEANOU
CONC	CONCRET
CONT	CONTINUOU
CPLG	COUPLING
CU FT	CUBIC FEE
CU YD	CUBIC YARI
DEG OR °	DEGRE
	DETAI
DET	DIAMETEI
DIA OR Ø	DUCTILE IRON PIP
DIP	
DIST	DISTRIBUTIO
DWG	EAC
EA	
ELB	ELBOV
ELEV	ELEVATIO
EW	EACH WA
EXIST	EXISTING
FG	FINISH GRAD
FH	FIRE HYDRAN
FLG	FLANG
FT OR '	FEE
GV	GATE VALV
HORIZ	HORIZONTA
ID	INSIDE DIAMETE
IN OR "	INC
LB OR #	POUN
LF	LINEAL FEE
LN	LINEA
MAX	MAXIMUI
MIN	MINIMUI
NO OR #	NUMBE
PE	POLYETHYLEN
PL	PLAT
PL	PROPERTY LIN
PVC	POLYVINYL-CHLORID
R	RADIU
RP	RADIUS POIN
R&R	REMOVE & REPLAC
REM	REMOV
REQ'D	REQUIRE
REV	REVISIO

AE	BREVIATIONS
ASSY	ASSEMBLY
S	SLOPE
SPEC	SPECIFICATION
STA	STATION
STD	STANDARE
STL	STEEL
ST STL	STAINLESS STEEL
TBC	TOP BACK OF CURE
TYP	TYPICAL
TFC	TOP FACE OF CONCRETE
W/	WITH
W/O	WITHOUT
W/REQ'D	WHERE REQUIRED

(JUB)
I II D ENGINEEDS INC

J-U-B ENGINEERS, INC. 2809 E. Harmony Road Suite 300 Fort Collins, CO 80528

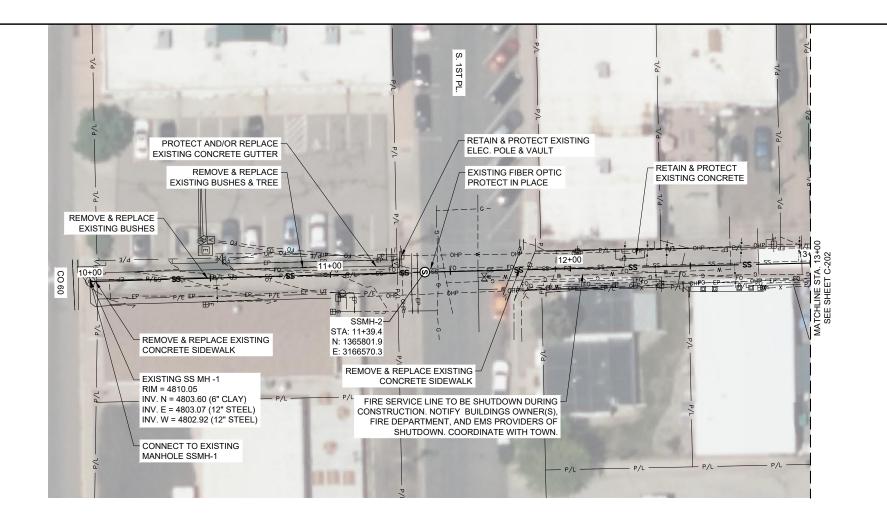
NOT FOR CONSTRUCTION PRELIMINARY PLANS

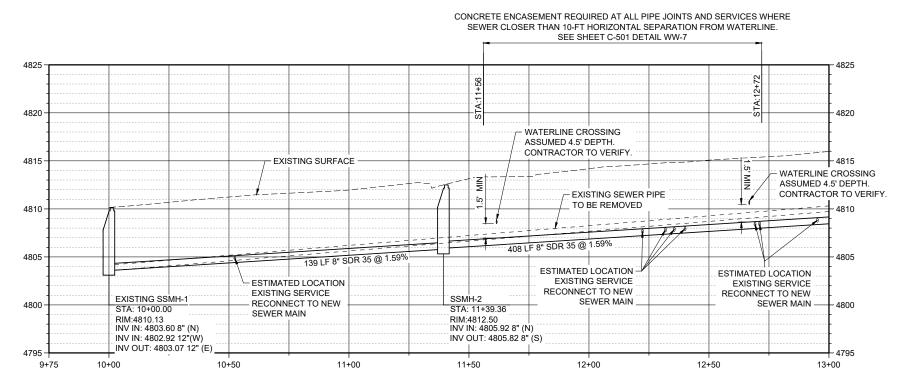
ALLEY SEWER REHABILITATION TOWN OF JOHNSTOWN LEGEND & ABBREVIATIONS

G-003

TRAFFIC LIGHT

000







### **KEY MAP**

- <u>GENERAL NOTES:</u>
  1. PLANS DEVELOPED FOR CONCEPT DESIGN ONLY. NOT TO BE USED FOR CONSTRUCTION.
- NEW SEWER PIPE TO BE GASKETED 8" PVC D3034 SDR 35. REFERENCE TOWN OF JOHNSTOWN DESIGN CRITERIA AND
- CONSTRUCTION REGULATIONS, OR MOST CURRENT VERSION, FOR REQUIREMENTS.
- CONTRACTOR TO PROTECT ALL BUILDINGS ALONG ALIGNMENT. USE ADEQUATE SHORING WHERE NECESSARY TO PROTECT BUILDING FOUNDATIONS.
- NEW SEWER TO OCCUPY SAME TRENCH AS EXISTING SEWER. REMOVE EXISTING SEWER PIPE. BYPASS PUMPING REQUIRED TO MAINTAIN SERVICE AT ALL TIMES UNLESS SPECIFICALLY AUTHORIZED BY OWNER. SUBMIT SERVICE AND BYPASS PUMPING PLAN TO TOWN FOR REVIEW AND ACCEPTANCE PRIOR TO BEGINNING CONSTRUCTION.
- UTILITIES IDENTIFIED VIA ONE CALL LOCATES. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES AND CROSSINGS. MAINTAIN 18" MINIMUM VERTICAL SEPARATION BETWEEN ALL EXISTING UTILITIES AND NEW SEWER LINE. NOTIFY ENGINEER OR TOWN OF JOHNSTOWN IF ANY CONFLICTS EXIST.
- EXISTING SANITARY SERVICE LOCATIONS AND QUANTITIES ESTIMATED BASED ON BUILDING LOCATIONS AND REVIEW OF LIMITED CCTV DATA. CONTRACTOR TO VERIFY.
- INSTALL SEWER LINE AT MINIMUM 18" BENEATH EXISTING WATERLINE. IF 18" REQUIREMENT CANNOT BE MET, CONSTRUCT THE CROSSING USING ONE LENGTH OF PIPE AT LEAST 14 FEET LONG CENTERED OVER OR UNDER THE WATER MAIN. ENCASE ALL SEWER JOINTS WITH CONCRETE THAT EXIST WITHIN 10 FEET EITHER SIDE OF THE WATERLINE. SEE SHEET C-501 DETAIL WW-7.
- PROTECT AND HOLD OVERHEAD UTILITY POLES WHERE
- NECESSARY. COORDINATE WITH UTILITY OWNER.

  10. CONTRACTOR TO PROVIDE AS-BUILT SURVEY INCLUDING INVERT ELEVATIONS. JET AND CAMERA SEWER LINE AFTER CONSTRUCTION COMPLETION.

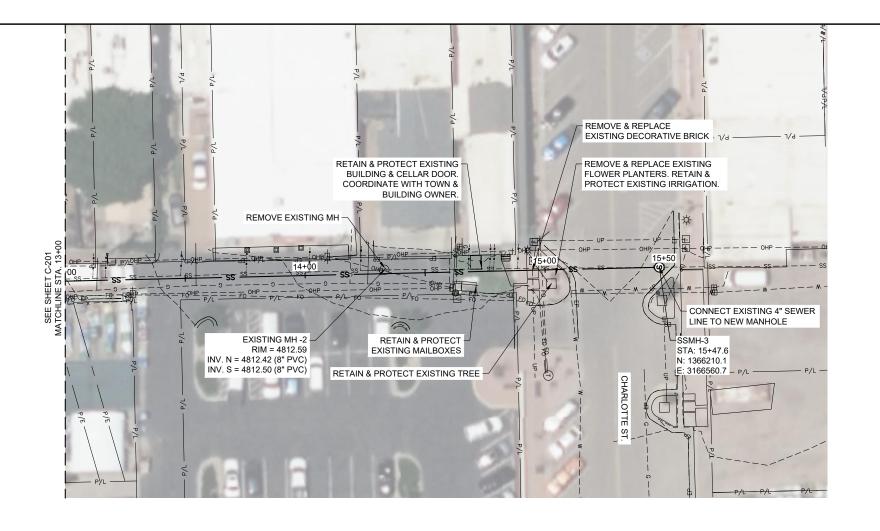
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J.	-U-B	ENG	INEE
J-U-B ENGINEERS, INC.	2809 E. Harmony Road	Suite 300	Fort Collins, CO 80528
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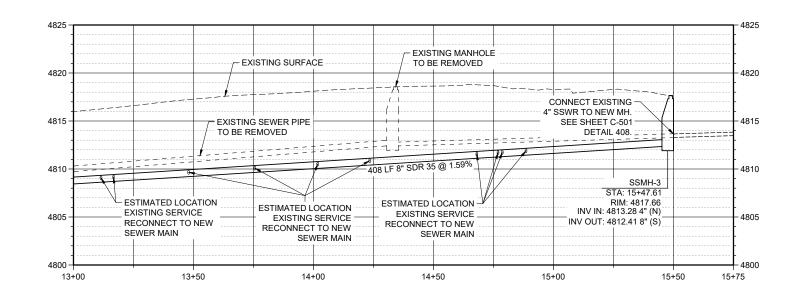
PRELIMINARY PLANS	NOT FOR CONSTRUCTION							
HT AND ME SENT. CLIENT'S -U-B.							BY APR. DATE	
COPYRIG THE SA TEN CON LL BE AT JRE TO J	REVISION						/ APR.	
OTHER RESERVED REGISTS OF THESE EDAMINES. AND THE SAME THAN OTHER RELISE WITHOUT SO THESE EDAMINES. AND THE SAME THAN OTHER RESERVED WITHOUT LILES PRIOR WANTER CONSENT. ANY RELISE WITHOUT LILES PRIOR WAILL BE AT CLIENTS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSITINE TO LIVE.							O.   DESCRIPTION   B'	
	H	_		_	_		۲	

# ALLEY SEWER REHABILITATION TOWN OF JOHNSTOWN

SHEET NUMBER: C-201

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### **KEY MAP**

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- REFERENCE TOWN OF JOHNSTOWN DESIGN CRITERIA AND CONSTRUCTION REGULATIONS, OR MOST CURRENT VERSION, FOR REQUIREMENTS.
- 4. CONTRACTOR TO PROTECT ALL BUILDINGS ALONG ALIGNMENT. USE ADEQUATE SHORING WHERE NECESSARY TO PROTECT BUILDING FOUNDATIONS.
- NEW SEWER TO OCCUPY SAME TRENCH AS EXISTING SEWER. REMOVE EXISTING SEWER PIPE. BYPASS PUMPING REQUIRED TO MAINTAIN SERVICE AT ALL TIMES UNLESS SPECIFICALLY AUTHORIZED BY OWNER. SUBMIT SERVICE AND BYPASS PUMPING PLAN TO TOWN FOR REVIEW AND ACCEPTANCE PRIOR TO BEGINNING CONSTRUCTION.
- UTILITIES IDENTIFIED VIA ONE CALL LOCATES. CONTRACTOR TO FIELD VERIFY ALL EXISTING UTILITIES AND CROSSINGS. MAINTAIN 18" MINIMUM VERTICAL SEPARATION BETWEEN ALL EXISTING UTILITIES AND NEW SEWER LINE. NOTIFY ENGINEER OR TOWN OF JOHNSTOWN IF ANY CONFLICTS EXIST.
- EXISTING SANITARY SERVICE LOCATIONS AND QUANTITIES ESTIMATED BASED ON BUILDING LOCATIONS AND REVIEW OF
- LIMITED CCTV DATA. CONTRACTOR TO VERIFY.
  INSTALL SEWER LINE AT MINIMUM 18" BENEATH EXISTING
  WATERLINE. IF 18" REQUIREMENT CANNOT BE MET, CONSTRUCT THE CROSSING USING ONE LENGTH OF PIPE AT LEAST 14 FEET LONG CENTERED OVER OR UNDER THE WATER MAIN. ENCASE ALL SEWER JOINTS WITH CONCRETE THAT EXIST WITHIN 10 FEET EITHER SIDE OF THE WATERLINE. SEE SHEET C-501 DETAIL WW-7.
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J-U-B ENGINEERS. INC. J-U-B ENGINEERS, INC. 2809 E. Harmony Road Suite 300 Fort Collins, CO 80528

NOT FOR CONSTRUCTION PRELIMINARY PLANS

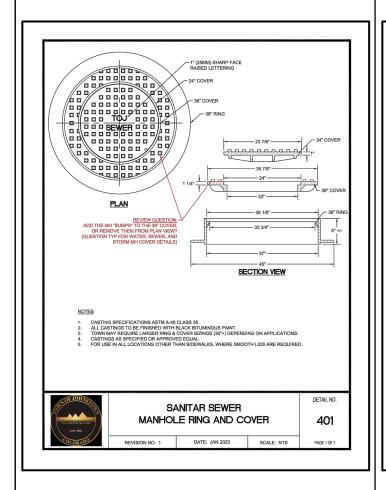
ALLEY SEWER REHABILITATION TOWN OF JOHNSTOWN

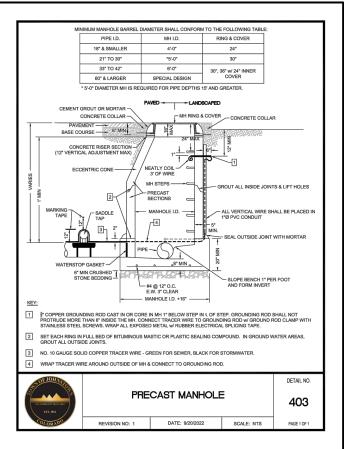
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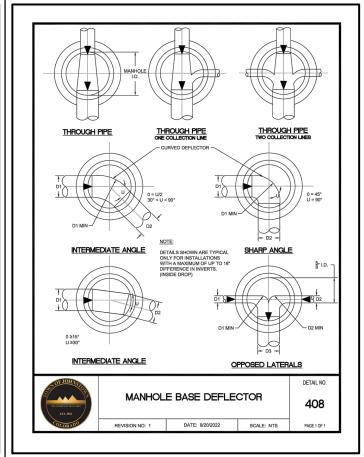
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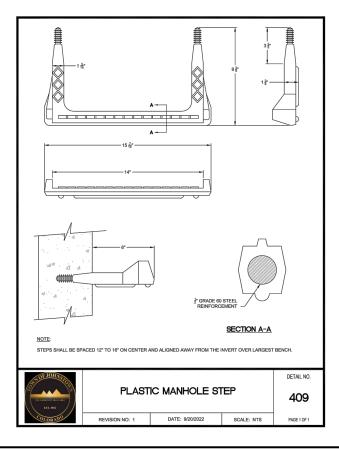
C-202

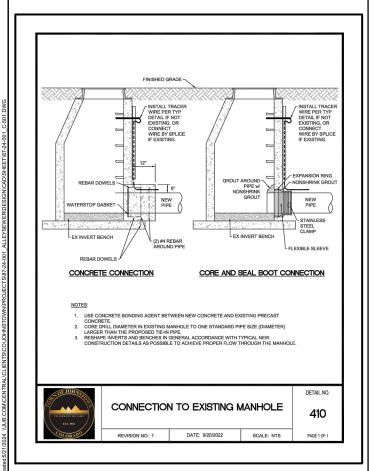
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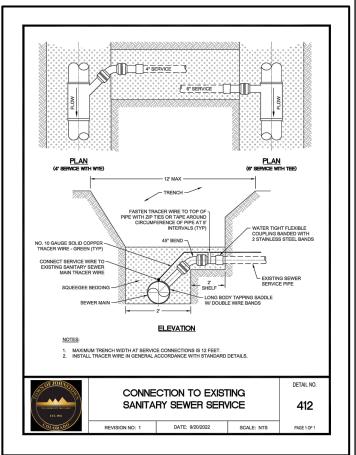


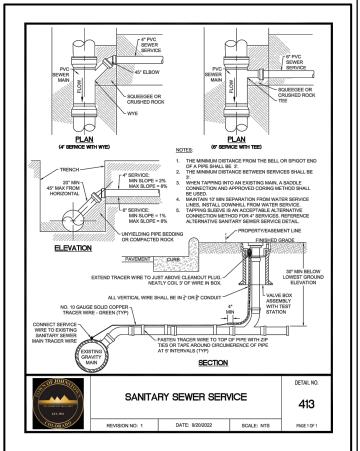


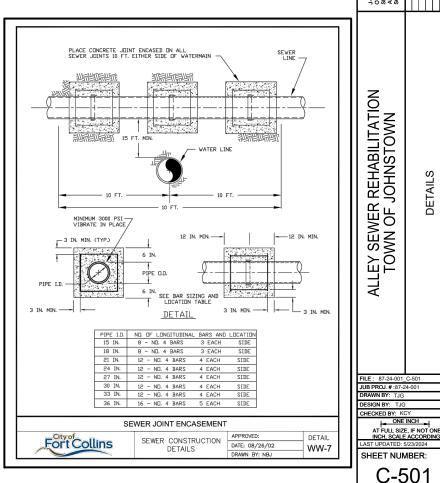


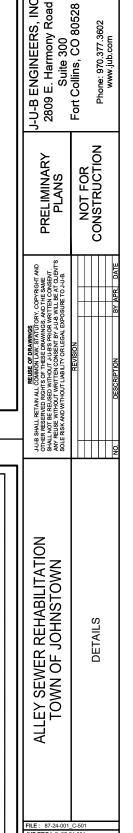












J-U-B ENGINEERS. INC