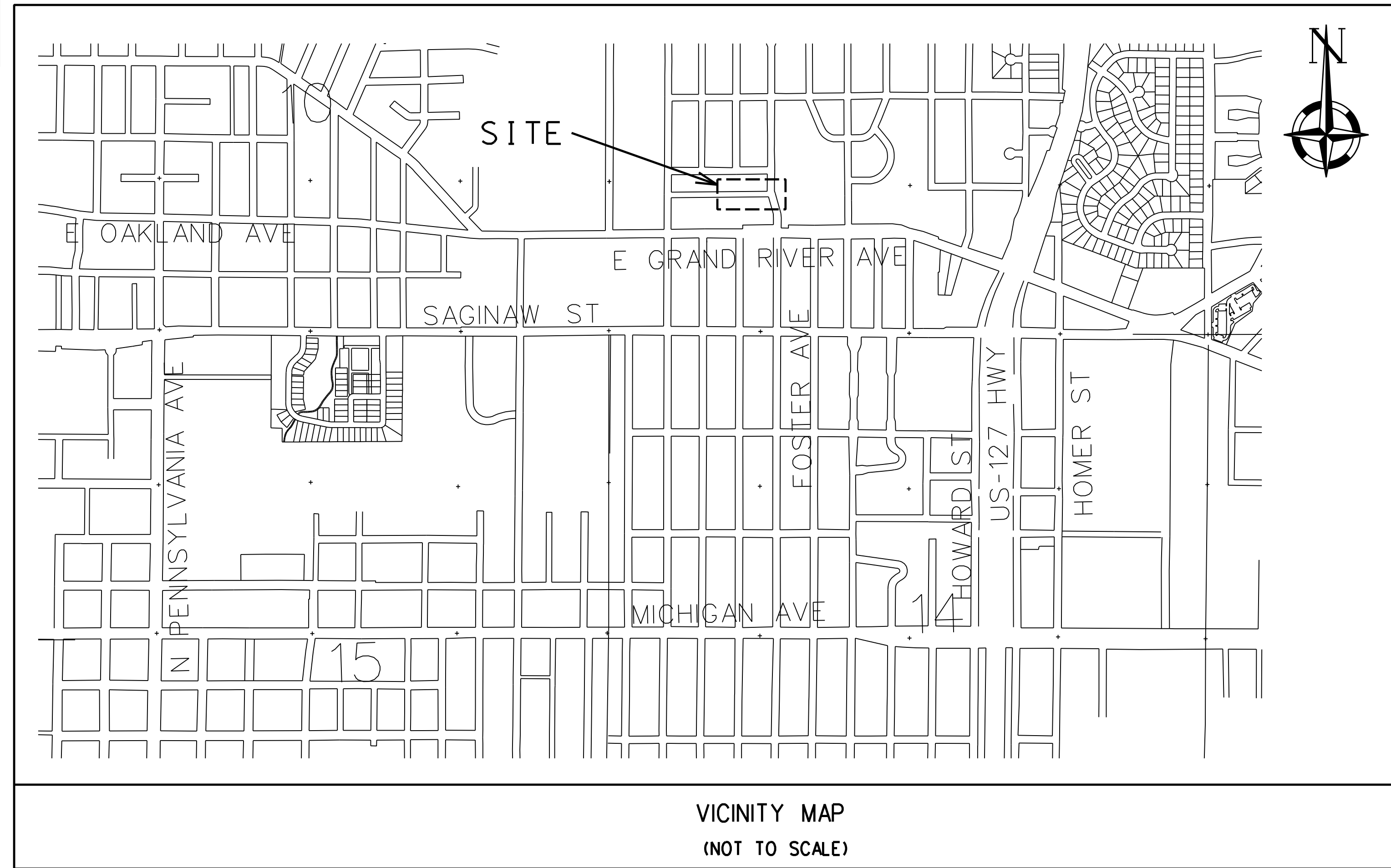
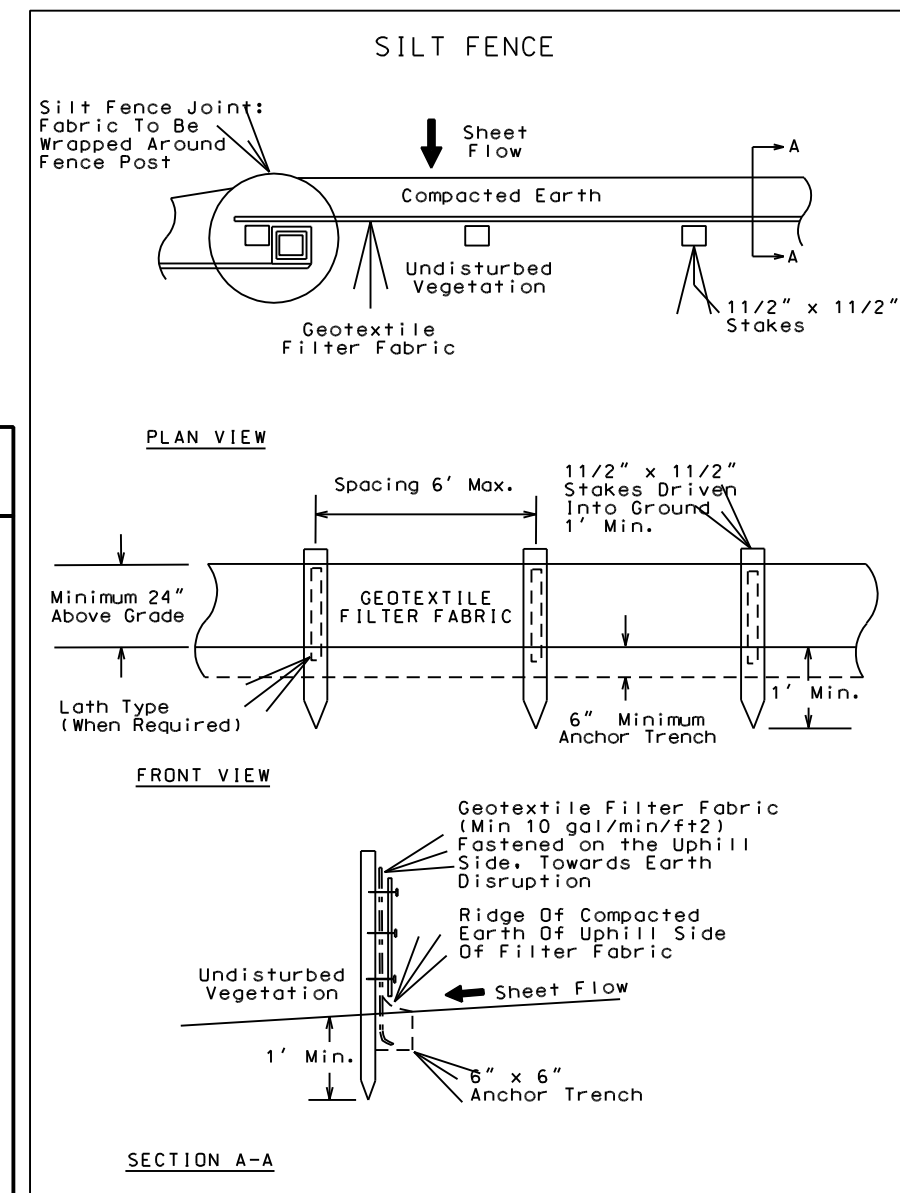
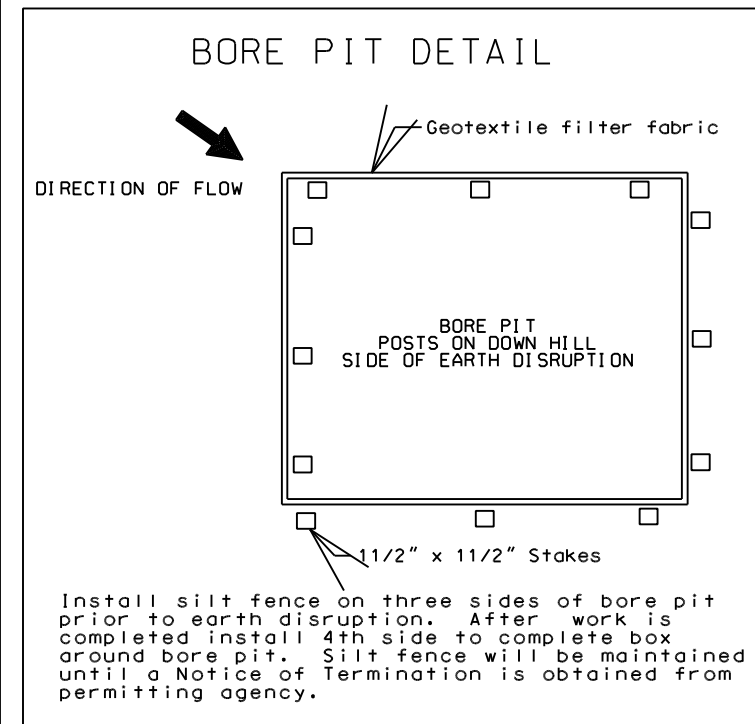
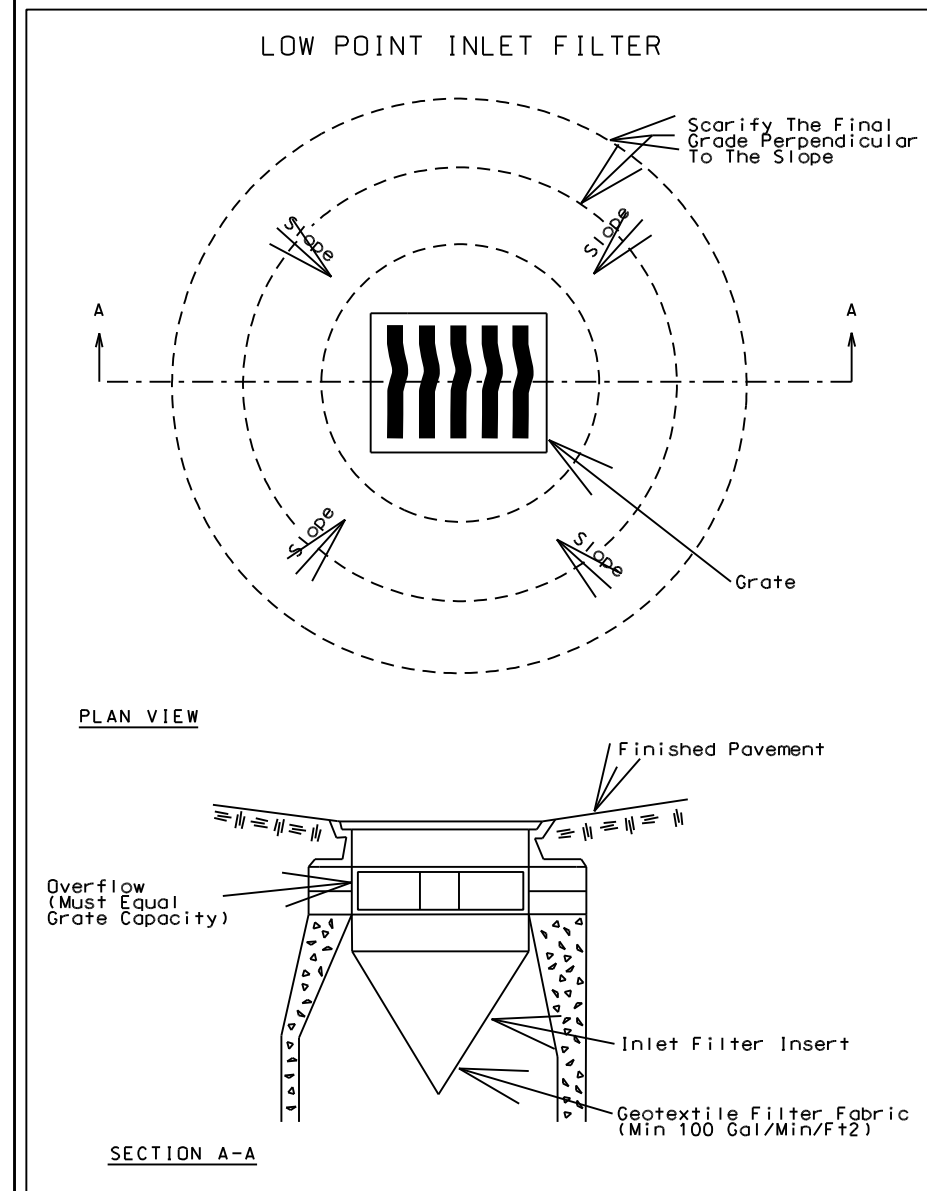




CONSUMERS ENERGY CONSTRUCTION PLANS FOR: DAPP:15111 SHOPPERS ALLEY

LEGEND

---	PROPOSED GAS
---	PROPOSED JOINT
---	EXISTING GAS
---	RETIRE/ABANDON
---	NON DISTRIBUTION MAIN
---	CENTERLINE
---	EASEMENTS
---	GRAVEL ROAD
---	OVERHEAD ELECTRIC
---	UNDERGROUND ELECTRIC
---	UNDERGROUND TELEPHONE
---	UNDERGROUND CABLE TV
---	UG CABLE TV & TELEPHONE
---	UG ELECTRIC, TELEPHONE, CABLE
---	FIBER OPTIC COMMUNICATION
---	WATER MAIN
---	STORM SEWER
---	SANITARY SEWER
---	STEAM MAIN
---	PRESSURE CONTROL FITTING
---	TRANSITION FITTING
---	INSULATING FITTING
---	REGULATION STANDS
---	TEES
---	45 & 90 ELBOWS
---	CAP
---	REDUCER
---	VALVE
---	NONINSULATED FITTING
---	HIGH PRESSURE MAIN DESIGNATION
---	HP MAN > 20" SMYS (TOD MAN)
---	ROAD/SIDEWALK BREAK



MISS DIG CONSTRUCTION NOTE:

- CALL MISS DIG FOR MARKING OF OTHER UTILITIES' FACILITIES. LOCATE/MARK CE GAS FACILITIES YOURSELF.
- REMOVE AND REPLACE SIDEWALK AND ROAD AS NECESSARY TO PRECISELY LOCATE EXISTING UTILITIES MARKED PER MISS DIG LAW AND FOR TIE-INS.
- WHEN BORING PARALLEL TO EXISTING GAS LINE WITHIN 5' SEE GAS OPERATIONS CONSTRUCTION & FIELD PRACTICE 013 FOR ADDITIONAL PRECAUTIONS BEYOND MISS DIG REQUIREMENTS.

DATE	REVIEWED BY:
5/25/18	CHAD AMMERMAN

DATE	REVIEWED BY:
5/29/18	BRIAN TRENT

REVIEWER COMMENTS: 2315 E. GRAND RIVER HAS AREA OF CONTAMINATION ON GRAND RIVER. NO KNOWN CONTAMINATION IN OUR WORK AREA IF AREAS OF CONTAMINATION ARE FOUND CALL TED WEBSTER 517-331-3995

SAFETY OBSERVATIONS

<input checked="" type="checkbox"/>	PROXIMITY TO BUILDING	DATE: 5/16/2018
<input type="checkbox"/>		DATE:
<input type="checkbox"/>		DATE:
<input type="checkbox"/>		DATE:
<input type="checkbox"/>		DATE:

EXAMPLES: VICIOUS DOG, POISON IVY, SLIPPERY SURFACE, UNEVEN GROUND, BEES, OVERHEAD WIRE, TRIPPING HAZARD
ALL SAFETY OBSERVATIONS ARE NOT LIMITED TO THOSE LISTED HERE. PLEASE BE AWARE OF YOUR SURROUNDINGS.

GAS MAIN FOOTAGE BLOCK

PIPE SPECIFICATIONS SIZE, TYPE, PRESSURE, YEAR	PIPE FOOTAGE ESTIMATE	ACTUAL
RETIRE 2" S-MP 1961	311'	
RETIRE 2" S-MP 1965	148'	
RETIRE 2" P-MP 1997	12'	
INSTALL 2" P-MP	TRENCH	
	BORE	441'
INSTALL	TRENCH	
	BORE	

GENERAL NOTES

SAFETY
CONSTRUCTION CREW SHALL MAINTAIN ALL CONSUMERS ENERGY STANDARDS FOR SAFETY IN REGARDS TO WORK SITE WORK CONDITIONS AND PERSONAL AND APPAREL. NON-COMPLIANCE WITH ANY SUCH STANDARDS SHALL BE CAUSE FOR DISCONTINUATION OF WORK UNTIL ALL SUCH STANDARDS ARE MET.

TRAFFIC CONTROL
TRAFFIC CONTROL IN PUBLIC STREETS AND RIGHTS-OF-WAY SHALL BE IN ACCORDANCE WITH ALL APPLICABLE MICHIGAN MANUAL UNIFORM TRAFFIC CONTROL DEVICES (M.M.U.T.C.D) STANDARDS OR LOCAL GOVERNMENT STANDARDS FOR SAFETY AND TRAFFIC CONTROL, AS SPECIFIED IN THE PERMIT.

SOIL EROSION CONTROL (PUBLIC ACT 451, PART 91)
SOIL EROSION CONTROL MEASURES ARE REQUIRED TO PROTECT NATURAL WATER COURSES SUCH AS STREAMS, RIVERS, AND LAKES IN ADDITION TO CATCH BASINS, DITCHES, AND DRAINS. COMPLETE PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA WITHIN 5 CALENDAR DAYS AFTER GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. IF IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR IF SIGNIFICANT EARTH CHANGE ACTIVITY CEASE, THEN A PERSON SHALL MAINTAIN TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IN PLACE AND THE AREA IS STABILIZED.

CONSTRUCTION PERMITS
THE CONSTRUCTION PERMITS INCLUDED IN THE WORK ORDER PACKET WITH THIS DESIGN ARE TO SPECIFY DEPTH, BORING, BACKFILL, COMPACTION, SOIL EROSION AND OTHER CONSTRUCTION REQUIREMENTS WHICH MUST BE STRICTLY OBSERVED. IF YOU HAVE ANY QUESTIONS ABOUT THE WORK YOU ARE PERFORMING THAT ARE NOT COVERED IN THE PERMIT REFER TO THE COM STANDARDS. IF THAT DOES NOT PROVIDE THE REQUIRED ANSWER, CONTACT THE DESIGNER OF THIS WORK ORDER. CLEAN UP AND RESTORATION ARE TO BE COMPLETED PRIOR TO LEAVING THE SITE.

CONSTRUCTION
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CONSUMERS ENERGY STANDARDS FOR GAS MAIN CONSTRUCTION AND THE MICHIGAN GAS SAFETY CODE; AND SHALL BE SUBJECT TO INSPECTION AND APPROVAL.

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CONTACT MISS DIG A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION (PUBLIC ACT 174). CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING UTILITY OWNERS WHO MAY NOT BE PART OF THE MISS DIG ALERT SYSTEM.

THE LOCATIONS, SIZE AND ELEVATION OF SEWERS, STRUCTURES, CURBS, WALKS AND RELATED STRUCTURES WERE OBTAINED FROM FIELD OBSERVATION, AND/OR THROUGH PLANS BY OTHERS. CONSUMERS ENERGY IS NOT RESPONSIBLE FOR INFORMATION ON ANY OTHER SEWERS, DRAINS, CURBS OR RELATED STRUCTURES NOT FOUND AND NOT SHOW HEREON, THAT MAY CROSS, PARALLEL LIE CONTIGUOUS TO OR SERVICE THIS SITE.

DESIGN AND RECORDS
CHANGES TO THE PROPOSED PLANS MUST BE REVIEWED AND APPROVED BY CE ENGINEERING DEPT AND DISTRIBUTION SUPERVISOR PRIOR TO REVISION.
THE CREW LEADER ON THE JOB SHALL NOTE AS-BUILT REVISIONS TO EACH CONSTRUCTION SHEET AND SHALL ALSO CERTIFY THE PRESSURE TEST. ALL FIELD-REVISED PRESSURE TEST SEGMENTS SHALL BE CLEARLY LABELED, INCLUDING DIMENSIONS AND A CREW LEADER'S CERTIFICATION FOR EACH SEGMENT.

VERIFYING GAS FEEDS
THE GAS SOURCE FEEDS SHOWN ON THIS WORK ORDER ARE TAKEN FROM THE QUARTER SECTION MAPS. THE CONSTRUCTION CREW IS TO VERIFY THE GAS SOURCE FEEDS.

ABOVE GROUND NATURAL GAS INDICATORS
AFTER THE NATURAL GAS MAIN AND/OR SERVICES HAVE BEEN RETIRED AND/OR ABANDONED, CE AND/OR ITS DESIGNATED CONTRACTOR IS REQUIRED TO REMOVE ALL OF THE ABOVE GROUND INDICATION OF NATURAL GAS LINES BELOW GRADE. THIS INCLUDES: ALL TEST BOXES, MAIN MARKERS, VALVE COVERS, STUB RETIREMENT MARKERS AND MISS DIG FLAGS.

PRESSURE TESTS FOR STANDARD & MEDIUM PRESSURE MAINS GDEM 2-160 & GOCFP 001

SPECIFY A 90 PSIG AIR TEST DETERMINE THE TEST DURATION USING THE PRESSURE TEST DURATION CALCULATOR FOUND IN GOCFP 001 AND USING THE FOLLOWING INFORMATION:

- MINIMUM TEST DURATION - 30 MINUTES.
- MAXIMUM TEST DURATION FOR STEEL PIPE - 24 HOURS.
- MAXIMUM TEST DURATION FOR PLASTIC PIPE - 8 HOURS.
- SPECIFY A RECORDING PRESSURE GAUGE FOR TESTS EXCEEDING 3 HOURS, OTHERWISE UTILIZE AN INDICATING GAUGE FOR TEST.

IF THE GAS MAIN INSTALLATION IS PRESSURE TESTED IN SEGMENTS:

- INCLUDE A SEPARATE CERTIFICATION FOR EACH PRESSURE TEST.
- PROVIDE DETAILS ON THE AS-BUILT DRAWING TO LINK EACH MAIN SEGMENT TESTED TO THE APPROPRIATE CERTIFICATION.
- REFER TO THE PRESSURE TEST DURATION CALCULATOR IN GOCFP 001 CALCULATE CORRECT TEST DURATION.
- DO NOT EXCEED MAXIMUM PRESSURE TEST DURATIONS FOR EITHER PLASTIC OR STEEL.

PRESSURE TEST CERTIFICATIONS

	A	B	C	D	E
TEST LOCATION/SEGMENT:					
PIPE SIZE:					
PIPE LENGTH:					
CERTIFIED BY:					
CERTIFIED DATE:					
PRESSURE TEST MINUTES:					
SYSTEM PRESSURE:					
PRESSURE TEST LBS:					
SOAP TEST PERFORMED:					
TESTED MEDIUM:					
PRE-TESTED PIPE USED:					
GAUGE USED:					
INDICATING: RECORDING:					

-CONSTRUCTION CERTIFICATION-
Work was constructed as Engineered or Changed as Indicated. All Salvageable Material Was Returned to Stores.

Signed _____	in Direct Charge of Work
Dates: Started _____	Completed _____
Staked New Pipe: Signed _____	Date _____
MISS DIG NUMBER: _____	DATE: _____

NO	DATE	REVISION	BY	APPR	SHEETS AFFECTED

CONSUMERS ENERGY CONTACTS

DEPARTMENT	NAME	NUMBER	ALTERNATE
* PROJECT DESIGNER	C ROBBINS-GRACE	517-374-2335	517-483-3866
* DESIGN LEAD	JEREMY BEARD	517-745-1479	
ENG TECH ANALYST	ADAM BERTRAM	517-374-2375	
SYSTEM ENGINEER	STEVE WYLIE	517-374-2124	517-416-8534
GAS SYSTEM PLANNING	24/7 ON CALL	517-740-8205	

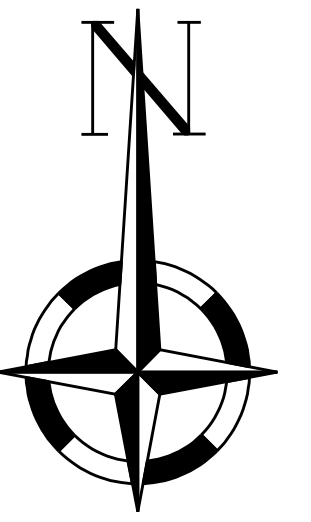
* = ABLE TO APPROVE FIELD CHANGES

CONSUMERS ENERGY

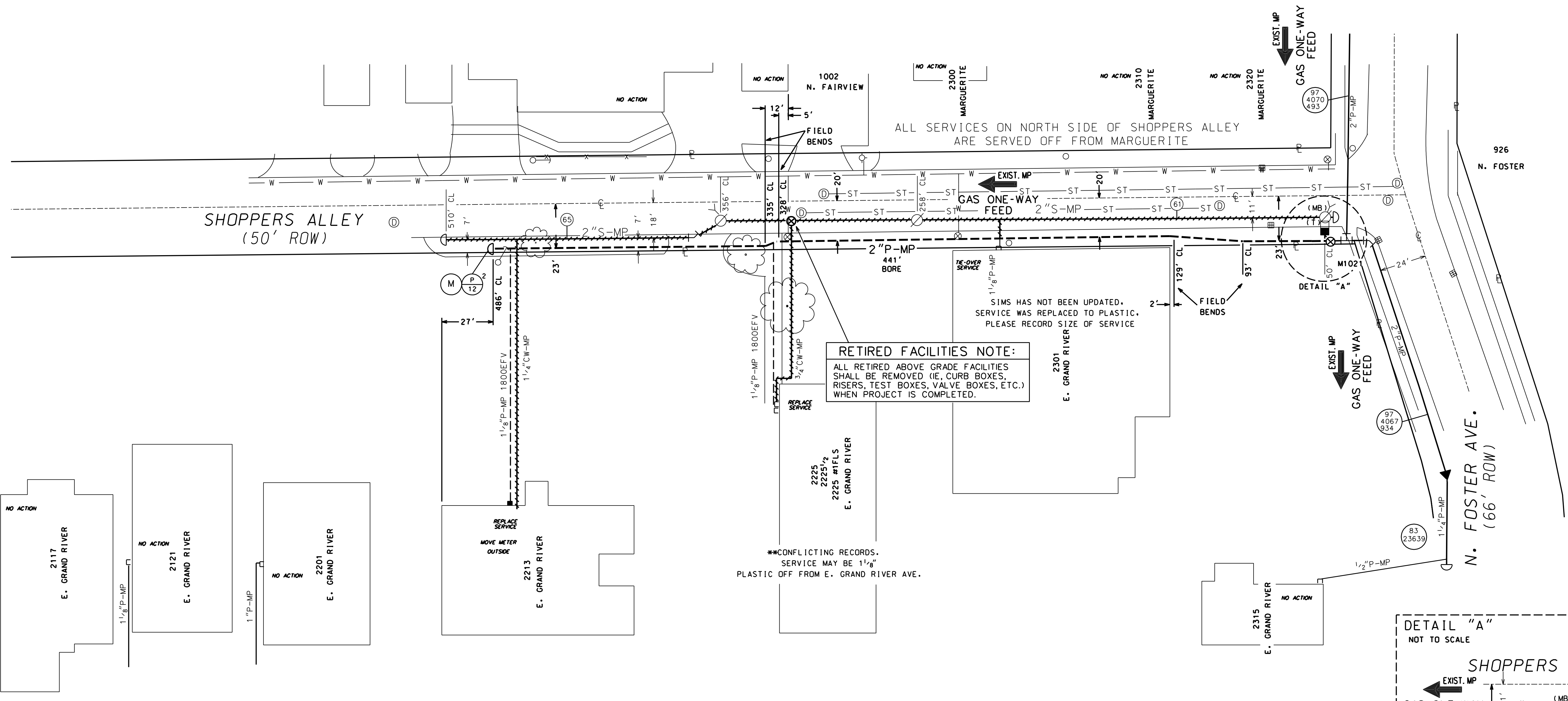
DAPP:15111 SHOPPERS ALLEY	ORDER NO.
GAS MAIN REPLACEMENT IN THE CITY OF LANSING INGHAM COUNTY	CM NO. 100004836064
DESIGNED BY: CHRISTY R.G.	DATE: 5/18/2018
APPROVED BY: _____	DATE: 05/31/2018
SHEET 1 OF 2	SCALE 1" = NA

ORDER TYPE	ACTIVITY TYPE	DESIGN NUMBER
GC0N	DMN	10933419
GAS NUMBER	NOTIFICATION NUMBER	
0402113427	1044356408	

DESIGN FILE NAME: 10933419.001
T 4N R 2W SEC. 11



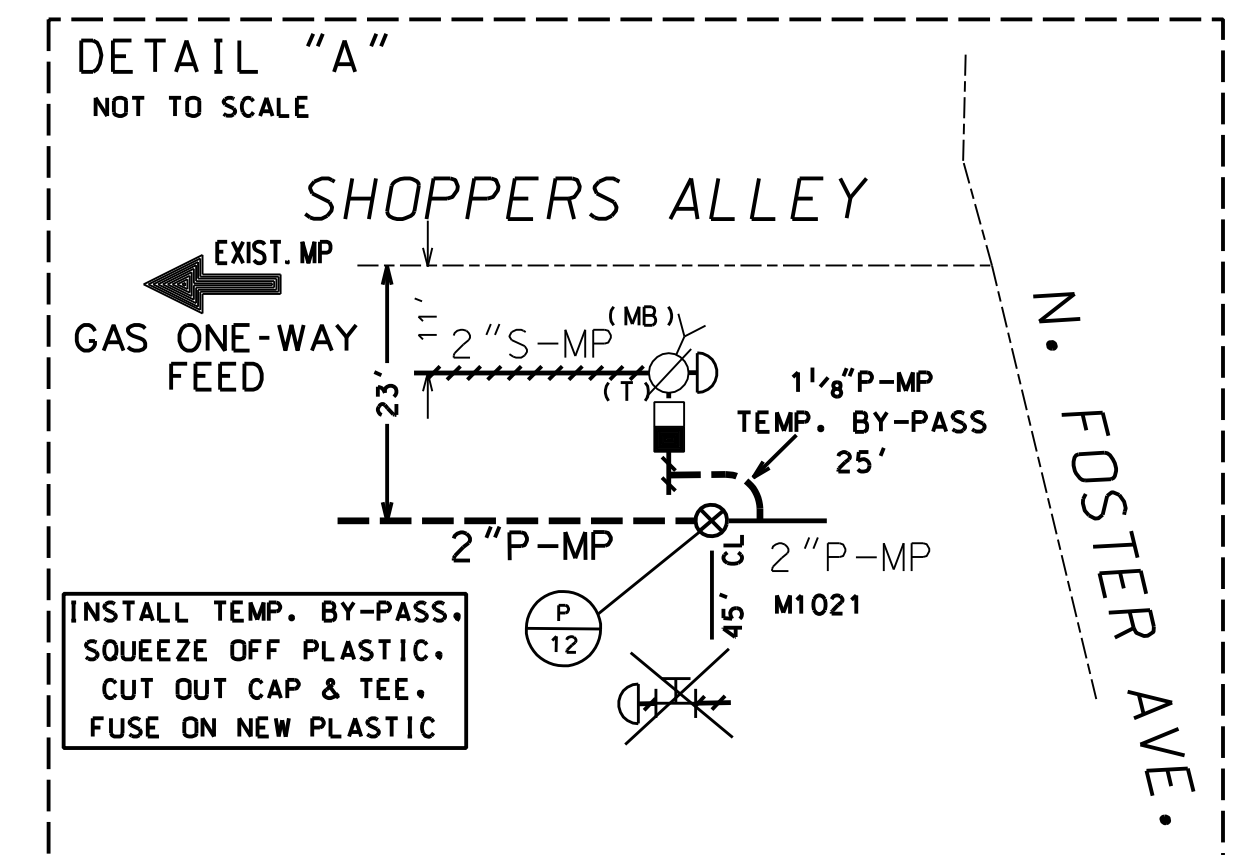
Ingham COUNTY
Lansing CITY



RETIRED FACILITIES NOTE:
ALL RETIRED ABOVE GRADE FACILITIES SHALL BE REMOVED (IE, CURB BOXES, RISERS, TEST BOXES, VALVE BOXES, ETC.) WHEN PROJECT IS COMPLETED.

**CONFLICTING RECORDS. SERVICE MAY BE 1 1/8\"/>

*UTILITIES SHOWN ARE ALL I HAD AVAILABLE. THERE ARE MORE



2

<p>-CONSTRUCTION CERTIFICATION- Work was constructed as Engineered or Changed as Indicated. All Salvageable Material Was Returned to Stores.</p>		<p>Signed: _____ in Direct Charge of Work Dates: Started _____ Completed _____</p>		<p>Staked New Pipe: Signed _____ Date _____</p>		<p>MISS DIG NUMBER: _____ DATE: _____</p>		<p>NO DATE REVISION BY APPR SHEETS AFFECTED</p>		<p>Consumers Energy A CMS Energy Company GAS</p>		<p>DAPP: 15111 SHOPPERS ALLEY ORDER NO. _____</p>	
<p>DESIGNED BY: CHRISTY R.G. DATE: 5/18/2018</p>		<p>APPROVED BY: _____ DATE: 05/31/2018</p>		<p>SCALE: 1"=30'</p>		<p>SHEET 2 OF 2</p>		<p>GAS MAIN REPLACEMENT IN THE CITY OF LANSING INGHAM COUNTY</p>		<p>CM NO. 100004836064</p>			
<p>ORDER TYPE: _____</p>		<p>MAINTENANCE ACTIVITY TYPE: _____</p>		<p>DESIGN NUMBER: 10933419</p>		<p>GCON DMN: 10933419</p>		<p>GAS NUMBER: 0402113427</p>		<p>NOTIFICATION NUMBER: 1044356408</p>			
<p>DESIGN FILE NAME: 10933419.001</p>													
<p>T 4N R 2W SEC.11</p>													