



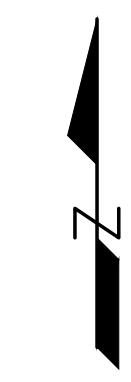
CITY OF JOLIET

2016 HALDEMANN TERRACE LATERAL POINT REPAIRS

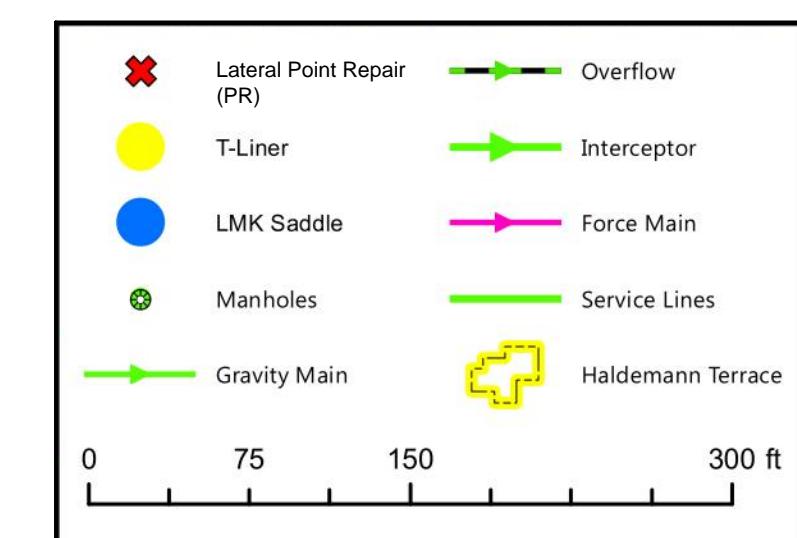
CONTRACT NO. 2151-0416

INDEX OF SHEETS

- 1 COVER
- 2 GENERAL NOTES
- 3 SOQ AND POINT REPAIR SCHEDULE
- 4-13 POINT REPAIRS PLANS
- 14 DETAILS



LEGEND



LOCATION MAP

FOR CONSTRUCTION
MARCH 4, 2016

PLANS WILL NOT CONFORM TO STANDARD SCALES.

FOR UNDERGROUND UTILITY LOCATIONS CALL
J.U.L.I.E. 1-800-892-0123



11/30/2017

REGISTERED P.E., STATE OF ILLINOIS EXPIRES

Catherine L. Morley



The Choice for Collection System Solutions

LICENSE #184-000813
EXPIRES 4/30/2017

200 W. FRONT STREET
WHEATON, IL 60187

**CITY OF JOLIET
GENERAL NOTES**

- Division II, III and IV, and the applicable standard drawings of the "Standard Specifications for Water and Sewer Main Construction in Illinois" Dated July, 2009, shall govern the construction of the proposed improvement, except as modified or revised, and/or amended as shown on the plans, or called for on the contract document, and/or as ordered by the engineer. All the references in Division II, III and IV to Division I of the Standard Specifications shall be deleted and reference made to the applicable sections of the contract documents. Paving improvements shall be constructed in conformance with standard Specifications for Road and Bridge Construction Adopted January 1, 2012 by Illinois Department of Transportation.
- The maximum allowable rate of infiltration shall not exceed 200 gallons per 24 hours per inch-diameter per mile of sewer pipe.
- Sanitary sewer pipe shall be PVC-SDR26, unless stated otherwise, in accordance with ASTM D-2241 with gasket and integral bell joint conforming to ASTM F477 and ASTM D-3139 respectively.
- Where ductile iron pipe is used for sanitary sewer, the pipe shall be in accordance with ANSI A-21.51 And the joints in accordance with A-21.11.
- All sanitary sewer shall be constructed on a minimum bedding of 6" embedment material Class II per ASTM D-2321.
- All proposed sanitary sewer, water main and services under and within 2' of pavement or sidewalk shall be backfilled with trench backfill which shall be crushed stone, gradation CA-7 or CA-6.
- "Band Seal" or similar flexible type coupling shall be used at all points of change in sanitary sewer pipe material.
- When connecting to the existing sanitary sewer, if no wye, tee or manhole is existing, one of the following methods shall be used:
 - Circular saw-cut sewer main by proper tools ("Sewer-Tap" machine or similar) and proper installation of hub-wye or hub-tee saddle.
 - With pipe cutter, neatly and accurately cut out desired length of pipe for insertion of proper fitting, using "BAND-SEAL" or similar coupling to hold it firmly in place.
- Horizontal and vertical separation of water mains and sewer lines shall be done in accordance with Section 41-2.01B and Section 41-2.01C of the "Standard Specification for Water and Sewer Main Construction in Illinois" Adopted July 2009.
- The locations of existing underground utilities, such as water mains, sewer, gas lines, etc., as shown on the plans have been determined from the best available information and is given for the convenience of the contractor. However, the engineer and owner do not assume responsibility for the accuracy of the locations shown. It shall be the contractor's responsibility to contact all utility companies and their facilities shall be located prior to any work.
- Wherever obstructions not shown on the plans are encountered during the progress of the work and interfere to such an extent that an alteration in the plans is required, the engineer shall be notified prior to any changes.
- As-Built drawings shall be prepared by the contractor and submitted to the engineer as soon as the project is completed. Any change in the length, location or alignment shall be shown in red.
- The City of Joliet must be notified at (815) 724-4220 at least two working days prior to commencement of work.
- All water main shall be ductile iron cement lined Class 52 with rubber gasket push-on joints and 8 MIL polywrap in accordance with ANSI A-21.51 unless specified otherwise.
- All fire hydrants shall be designed for a working pressure of 150 pounds per square inch and shall conform in workmanship, design and material to AWWA Standard C-502. Hydrant hose nozzle, pumper nozzle and type shall conform to the City of Joliet Standard.
- Gate valves shall be resilient wedge with non-rising stem designed for not less than 150 psi working pressure and shall be tested for leakage and distortion under a hydraulic pressure of not less than 300 PSI. The minimum requirements for all gate valves shall, in design, material and workmanship, conform to the standards of AWWA C-500. All materials used in the manufacture of gate valves be equal to the City of Joliet Standards with ends as required for specified joints.
- All fittings shall be ductile iron compact mechanical joint rated for 350 psi conforming to AWWA C-153. Mechanical joint restraint shall be EBBA Iron Megalug. All fittings and bolts shall be American made. Retainer glands are required on all elbows, tees, crosses, valves, hydrants and auxiliary valves. No concrete thrust blocks shall be allowed.
- Connections to existing manholes to be made by corning a hole through the manhole sidewall and installing an A-LOC OR KOR-N-SEAL type boot.
- Leakage testing and deflection testing shall be performed in accordance with Section 31-1.11B (3 & 4) of the "Standard Specifications for Sewer and Watermain Construction in Illinois", Latest Edition. Vacuum testing of the manholes shall be performed in accordance with ASTM C-1244.
- Disinfection and pressure testing shall be prepared per the standard specifications for sewer and water.
- Erosion control will be constructed in accordance with standard specifications for soil erosion and sediment control as contained in IEPA/WPC/87-012 or Current Edition.
- It shall be the Contractor's duty and responsibility to ascertain and execute the means, methods and sequence of construction in accordance with the plans, specifications and other contract documents. This shall include, but shall not be limited to, the exclusive duty and responsibility to provide for workplace safety and worker supervision. It shall exclusively be the Contractor's duty and responsibility to investigate and ascertain the current physical state and operational status of the City's water supply system and the City's sanitary sewer system, including whether a water main or other vessel is operational, contains water, is pressurized or is otherwise safe to alter. Any information provided by the City, or its employees and consultants, regarding the state of its water supply and sanitary sewer systems is provided as a courtesy to the Contractor but is not warranted to be true and may not be relied on by the Contractor in satisfaction of, or to diminish, its exclusive duty to ascertain and execute the means, methods and sequence of construction in accordance with the plans, specifications and other contract documents and its exclusive responsibility to provide for workplace safety and worker supervision.

**CITY OF JOLIET
PROJECT NOTES**

- The watermain and water services shown in the backyard utility easement have been abandoned in place for all repair locations. The Contractor shall cap ends of any abandoned watermain removed during the point repair work with ductile iron plugs (6" or 8").
- Overhead wires are located in the backyard utility easement. The Contractor is responsible for coordinating any work with ComEd required for the work around overhead wires or utility poles.
- Possible access routes have been identified on the drawings. Contractor shall identify and present final access routes for review and approval by city.
- Trenches within 5' of garages are to be backfilled with trench backfill which shall be crushed stone, gradation CA-7 or CA-6.
- Fence restoration shall occur within 24 hours of removal. If point repair is not completed within 24 hours, the contractor shall coordinate with the engineer and install temporary fencing if requested by the homeowner.
- The Contractor shall provide bypass pumping as needed to maintain the sewer service and to prevent sewage backups during construction.
- On a daily basis, the work and the adjacent areas affected thereby shall be cleaned up and all rubbish, surplus materials, and unneeded construction equipment shall be removed and all damage repaired so that the public and private owners will be inconvenienced as little as possible. Upon completion of the work, these areas shall be left in a clean and neat condition.
- Traffic control shall be per the City of Joliet or State requirements.
- Prior to removal of existing trees and shrubs for access and/or excavation, the Contractor shall coordinate with the City of Joliet, the Homeowner and the Engineer.
- Contractor to verify all dimensions and spot repair locations.
- Contractor to utilize plywood or equivalent material to minimize damage to yards and driveways by equipment or stockpiled backfill.

**SANITARY SEWER
PUBLIC UTILITIES MATERIALS LIST**

- PIPE**
PVC SDR 26 for all pipe.
- COUPLINGS AND ADAPTORS**
Non shear rubber mission coupling connectors with stainless steel bands, nuts and housings.

**HOT-MIX ASPHALT
MIXTURE REQUIREMENTS**

MIXTURE TYPE	AIR VOIDS @ Ndes
ROADWAY	
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (IL 9.5mm)	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	4% @ 50 Gyr.
HOT-MIX ASPHALT DRIVEWAY PAVEMENT	4% @ 50 Gyr.

NOTES:

- The unit weight used to calculate all hma surface mixture quantities is 112 lbs/sq yd/in.
- The "ac type" for polymerized hma mixes shall be "sbs/sbr pg 70-22" and for non-polymerized hma the "ac type" shall be "pg 64-22" unless modified by district one special provisions. For "percent of rap" see district one special provisions.
- This note must always be present under the mixture table when including a pay item for surface course that is measured in tons. use 135 lbs/sq yd/in. if using an sma surface course.

State Standards

000001-05	Symbols & Abbreviations
424001-05	Curb Ramps for Sidewalks
602401-03	Manhole Type A
602601-02	Precast Reinforced Concrete Flat Slab Top
602701-02	Manhole Steps
606001-04	Conc. Curb T-B & Comb Curb & Gutter
701501-05	Urban Lane Closure, 2L, 2W, Undivided
701701-06	Urban Lane Closure, Multilane Intersection
701801-04	Lane Closure, Multilane Crosswalk
701901-01	Traffic Control Devices
780001-02	Typical Pavement Markings

C:\johel.L11\294800.Joliet - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS.dwg CAD/IGN Materials List-SDO Schmitt.dwg

DESIGNED: JS	
DRAWN: YG	
CHECKED: CM	
DATE: MARCH 4, 2016	



2016 HALDEMANN TERRACE
LATERAL POINT REPAIRS

GENERAL NOTES

SCALES		COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL:	NTS	WILL	14	2
VERTICAL:	NTS			
PROJECT NO. 11-2948-00				

SUMMARY OF QUANTITIES

SEQUENCE	ITEM DESCRIPTION	QUANTITY	UNITS
1	LATERAL POINT REPAIR #1	1	L SUM
2	LATERAL POINT REPAIR #2	1	L SUM
3	LATERAL POINT REPAIR #3	1	L SUM
4	LATERAL POINT REPAIR #4	1	L SUM
5	LATERAL POINT REPAIR #5	1	L SUM
6	LATERAL POINT REPAIR #6	1	L SUM
7	LATERAL POINT REPAIR #7	1	L SUM
8	LATERAL POINT REPAIR #8	1	L SUM
9	LATERAL POINT REPAIR #9	1	L SUM
10	LATERAL POINT REPAIR #10	1	L SUM
11	LATERAL POINT REPAIR #11	1	L SUM
12	LATERAL POINT REPAIR #12	1	L SUM
13	LATERAL POINT REPAIR #13 (NO SADDLE)	1	L SUM
14	PROJECT MANAGEMENT	36	HR
15	SANITARY SEWER LATERAL, 6" PVC, SDR 26	50	LF
16	TRENCH BACKFILL	265	CU YD
17	FENCE TO BE REMOVED AND RE-ERECTED	200	LF
18	TREE REMOVAL, (UNITS OF DIAMETER)	80	UNITS
19	BUSH REMOVAL	15	EACH
20	LANDSCAPING ALLOWANCE	18	EACH
21	CONTINGENT CASH ALLOWANCE	1	TOTAL

SUPPLEMENTAL LANDSCAPING UNIT PRICES

ITEM	DESCRIPTION	QUANTITY	UNITS
S1	PROTECT & REPLANT EXISTING SHRUB	-	EACH
S2	DENSI YEWE, 3FT, BALLED & BURLAP	-	EACH
S3	ARBORVITAE, 5 GALLON, 3 FOOT	-	EACH
S4	MAGNOLIA, 5 GALLON, 4 FOOT	-	EACH
S5	PERENNIAL SHRUB, 2 1/2 GAL.	-	EACH
S6	RESTORE MULCH OR STONE COVERING	-	SY
S7	REMOVE & REPLACE MULCH OR STONE COVERING	-	SY

POINT REPAIR SCHEDULE

Lateral Point Repair Number	Address	Street	US MH	DS MH	Segment length (feet)	Footage from US MH (feet)	Approximate Depth (feet)	Mainline Diameter (inches)	Pipe Condition	Comments
1	810	Grand Blvd.	1117	1084	179.41	158.2	9.29	10	Collapsed Pipe w/ large void	Not marked by the City of Joliet.
2	823	Haldeemann Ave.	1018	995	179.00	127.7	14.40	12	Roots	
3	902	Grand Blvd.	960	995	187.77	93.7	17.10	12	Collapsed Pipe	Near a garage.
4	906	Grand Blvd.	960	995	187.77	44.9	17.50	12	Collapsed Pipe	
5	916	Grand Blvd.	884	914	189.97	120.8	16.00	10	Collapsed Pipe w/ large void	
6	922	Grand Blvd.	883	884	177.25	155.0	13.66	10	Roots	
7	926	Grand Blvd.	883	884	177.25	40.5	9.55	10	Offset Service	Near a garage.
8	804	Manor Ct.	1151	1101	175.92	5.6	9.20	10	Offset Service	
9	821	Grand Blvd.	1101	1068	175.33	101.6	16.10	10	Offset Service	Near a garage.
10	816	Manor Ct.	1101	1068	175.33	124.8	16.30	10	Offset Service	
11	901	Grand Blvd.	1008	1047	178.15	132.1	18.27	12	Collapsed Pipe w/ large void	
12	905	Grand Blvd.	1008	1047	178.15	31.8	17.55	12	Collapsed Pipe w/ large void	
13	913	Grand Blvd.	987	1008	178.15	9.6	16.09	10	Collapsed Pipe	No saddle needed, only non-shear coupling about 3' away from connection to mainline.

Note:
- Point Repair No. 13 will require a non-shear mission coupling from the 6" CIPP T-liner end to the new PVC repair.

W:\renanzun\office-11\WHEATON\PROJECTS\Joliet_IL\11294800 Joliet - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\4 CAD\GN-Materials List-SOC-Schedule.dwg

DESIGNED: JS
DRAWN: YG
CHECKED: CM
DATE: MARCH 4, 2016



2016 HALDEMANN TERRACE
LATERAL POINT REPAIRS

SUMMARY OF QUANTITIES
AND POINT REPAIR SCHEDULE

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NTS	WILL	14	3
VERTICAL: NTS			
PROJECT NO. 11-2948-00			



C:\johel.L11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\4-CADD\C1 - All Point Repairs.dwg
 \\whe-hal-11294800\Office-11\WHEATON\PROJECTS\Johel.L11294800\Johel - 2016 SSES & Rehabilitation\GIS\Map Documents\Map Documents - Exhibits\Lateral Point Repair\Haldemann Lateral Point Repair - Overall (11x7).mxd - Date Printed: 3/8/2016 10:45:35 AM

DESIGNED: JS	
DRAWN: YG	
CHECKED: CM	
DATE: MARCH 4, 2016	



2016 HALDEMANN TERRACE
LATERAL POINT REPAIRS

POINT REPAIRS

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NOTED	WILL	14	4
VERTICAL:			
PROJECT NO. 11-2948-00			

POINT REPAIR 1
 Address: 810 Grand Blvd.
 Distance from USMH: 158.2'
 Approximate Depth: 9.29'
 Lateral Diameter: 6"
 Mainline Diameter: 10"

NOTE:
 GPS LOCATES MAY BE A MORE
 ACCURATE REPRESENTATION
 OF THE LOCATION OF THE
 POINT REPAIR.



	GPS Locate		Overflow
	Lateral Repairs		Interceptor
	Mission Coupling to T-liner		Force Main
	LMK Saddle		Service Lines
	Manholes		Haldemann Terrace
	Gravity Main		

0 10 20 40 ft

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\4 CAD\CAD-2 - Point Repair 1.dwg

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS - WITH SURVEY MOVE (11x17).mxd - Date Printed: 3/30/2016 9:18:19 PM

DESIGNED: JS	
DRAWN: YG	
CHECKED: CM	
DATE: MARCH 4, 2016	



2016 HALDEMANN TERRACE
 LATERAL POINT REPAIRS

POINT REPAIR 1

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NOTED	WILL	14	5
VERTICAL:			
PROJECT NO. 11-2948-00			



POINT REPAIR 2
 Address: 823 Haldemann Ave.
 Distance from USMH: 127.7'
 Approximate Depth: 14.4'
 Lateral Diameter: 6"
 Mainline Diameter: 12"

NOTE:
 GPS LOCATES MAY BE A MORE ACCURATE REPRESENTATION OF THE LOCATION OF THE POINT REPAIR.

	GPS Locate		Overflow
	Lateral Repairs		Interceptor
	Mission Coupling to T-liner		Force Main
	LMK Saddle		Service Lines
	Manholes		Haldemann Terrace
	Gravity Main		

0 10 20 40 ft

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\04 CAD\CAD-3 - Point Repair 2.dwg

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\04 GIS\Map Documents\Map Documents - Exhibits\Lateral Point Repair\Haldemann Lateral Point Repairs - WITH SURVEY MOVE (15x17).mxd - Date Printed: 3/10/2016 9:26:11 PM

DESIGNED: JS	
DRAWN: YG	
CHECKED: CM	
DATE: MARCH 4, 2016	



2016 HALDEMANN TERRACE
 LATERAL POINT REPAIRS

POINT REPAIR 2

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NOTED	WILL	14	6
VERTICAL:			
PROJECT NO. 11-2948-00			

C:\johel.L11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\DWG\CAD\C-4 - Point Repair 3 and 4.dwg



POINT REPAIR 3
 Address: 902 Grand Blvd.
 Distance from USMH: 93.7'
 Approximate Depth: 17.10'
 Lateral Diameter: 6"
 Mainline Diameter: 12"

POINT REPAIR 4
 Address: 906 Grand Blvd.
 Distance from USMH: 44.9'
 Approximate Depth: 17.50'
 Lateral Diameter: 6"
 Mainline Diameter: 12"

NOTE:
 GPS LOCATES MAY BE A MORE
 ACCURATE REPRESENTATION
 OF THE LOCATION OF THE
 POINT REPAIR.

	GPS Locate		Manholes
	Existing Lateral Connection		Gravity Main
	Lateral Repairs		Overflow
	Mission Coupling to T-liner		Interceptor
	LMK Saddle		Force Main
			Service Lines
			Haldermann Terrace

0 10 20 40 ft

DESIGNED: JS
DRAWN: YG
CHECKED: CM
DATE: MARCH 4, 2016



2016 HALDEMANN TERRACE
 LATERAL POINT REPAIRS

POINT REPAIRS 3 & 4

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NOTED	WILL	14	7
VERTICAL:			
PROJECT NO. 11-2948-00			

POINT REPAIR 5
 Address: 916 Grand Blvd.
 Distance from USMH: 120.8'
 Approximate Depth: 16.00'
 Lateral Diameter: 6"
 Mainline Diameter: 10"

NOTE:
 GPS LOCATES MAY BE A MORE ACCURATE REPRESENTATION OF THE LOCATION OF THE POINT REPAIR.



	GPS Locate		Manholes
	Lateral Repairs		Gravity Main
	Mission Coupling to T-liner		Overflow
	LMK Saddle		Interceptor
			Force Main
			Service Lines
			Haldermann Terrace

0 10 20 40 ft

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\DWG\CAD\C-5 - Point Repair 5.dwg

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS - WITH SURVEY MOVE (11x17).indd - Date Printed: 3/10/2016 9:49:12 PM

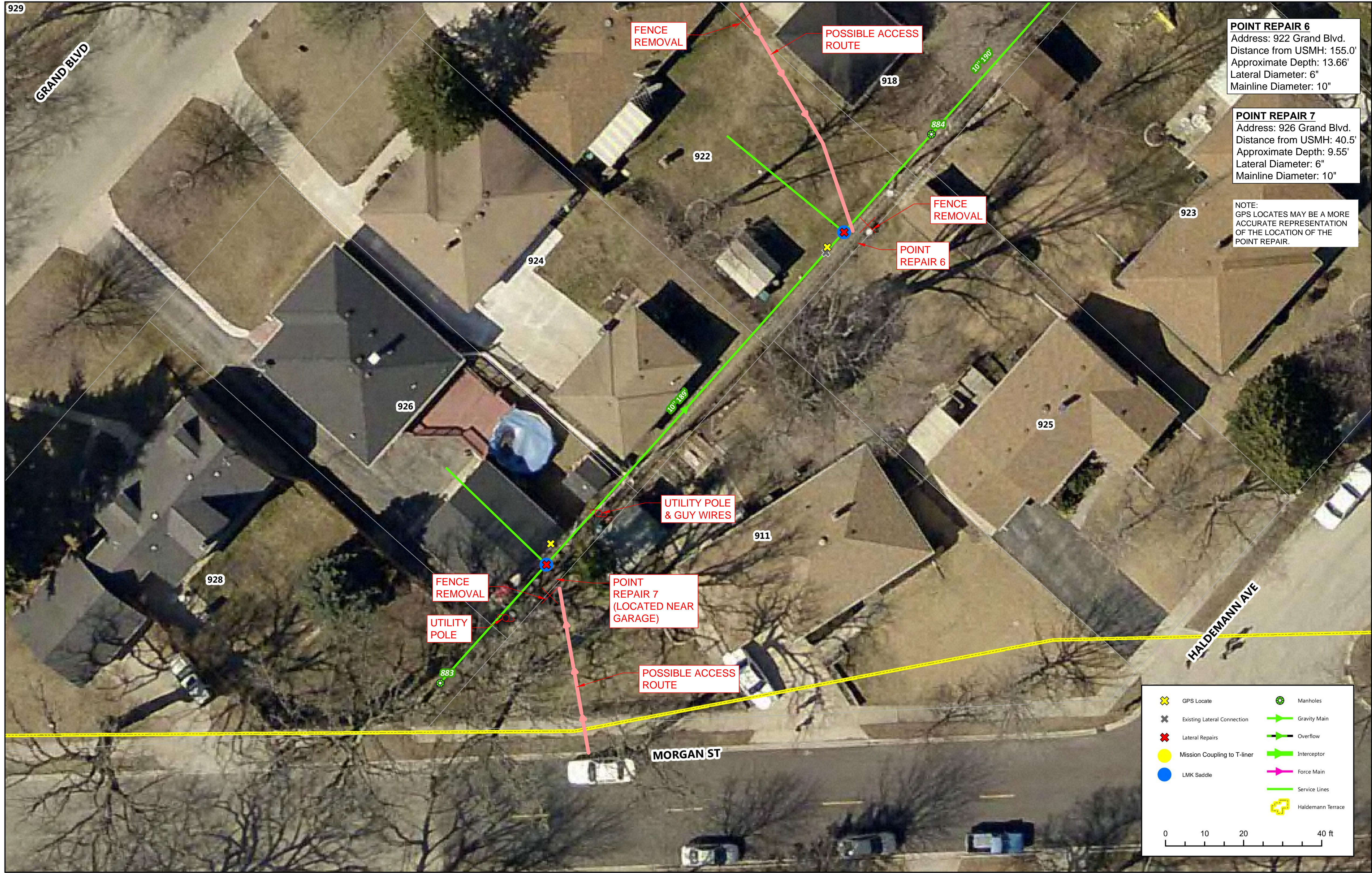
DESIGNED: JS	
DRAWN: YG	
CHECKED: CM	
DATE: MARCH 4, 2016	



2016 HALDEMANN TERRACE
 LATERAL POINT REPAIRS

POINT REPAIR 5

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NOTED	WILL	14	8
VERTICAL:			
PROJECT NO. 11-2948-00			



POINT REPAIR 6
 Address: 922 Grand Blvd.
 Distance from USMH: 155.0'
 Approximate Depth: 13.66'
 Lateral Diameter: 6"
 Mainline Diameter: 10"

POINT REPAIR 7
 Address: 926 Grand Blvd.
 Distance from USMH: 40.5'
 Approximate Depth: 9.55'
 Lateral Diameter: 6"
 Mainline Diameter: 10"

NOTE:
 GPS LOCATES MAY BE A MORE
 ACCURATE REPRESENTATION
 OF THE LOCATION OF THE
 POINT REPAIR.

✕	GPS Locate	⊕	Manholes
✕	Existing Lateral Connection	—	Gravity Main
✕	Lateral Repairs	—	Overflow
●	Mission Coupling to T-liner	—	Interceptor
●	LMK Saddle	—	Force Main
		—	Service Lines
		⊕	Haldemann Terrace

0 10 20 40 ft

C:\johel.L11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\4 CAD\CAD 6 - Point Repair 6 and 7.dwg

\\the-pennant\office-11\WHEATON\PROJECTS\Johel.L11294800\Johel - 2016 SSES & Rehabilitation\5.0 GIS\Map Documents\Map Documents - Exhibits\Lateral Point Repair\Move Exhibit Sewers to GPS Locates\Repair 6 & 7 (11x17).mxd - Date Printed: 3/11/2016 10:36:55 AM

DESIGNED: JS	
DRAWN: YG	
CHECKED: CM	
DATE: MARCH 4, 2016	



2016 HALDEMANN TERRACE
 LATERAL POINT REPAIRS

POINT REPAIRS 6 & 7

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NOTED	WILL	14	9
VERTICAL:			
PROJECT NO. 11-2948-00			



POINT REPAIR 8
 Address: 804 Manor Ct.
 Distance from USMH: 5.6'
 Approximate Depth: 9.2'
 Lateral Diameter: 6"
 Mainline Diameter: 10"

NOTE:
 GPS LOCATES MAY BE A MORE
 ACCURATE REPRESENTATION
 OF THE LOCATION OF THE
 POINT REPAIR.

	GPS Locate		Manholes
	Lateral Repairs		Gravity Main
	Mission Coupling to T-liner		Overflow
	LMK Saddle		Interceptor
			Force Main
			Service Lines
			Haldemann Terrace



Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\04 CAD\C7 - Point Repair 8.dwg

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\04 GIS\Map Documents\Map Documents - Exhibits\Lateral Point Repair\Haldemann Lateral Point Repairs - WITH SURVEY MOVE (11x17).mxd - Date Printed: 3/10/2016 6:12:44 PM

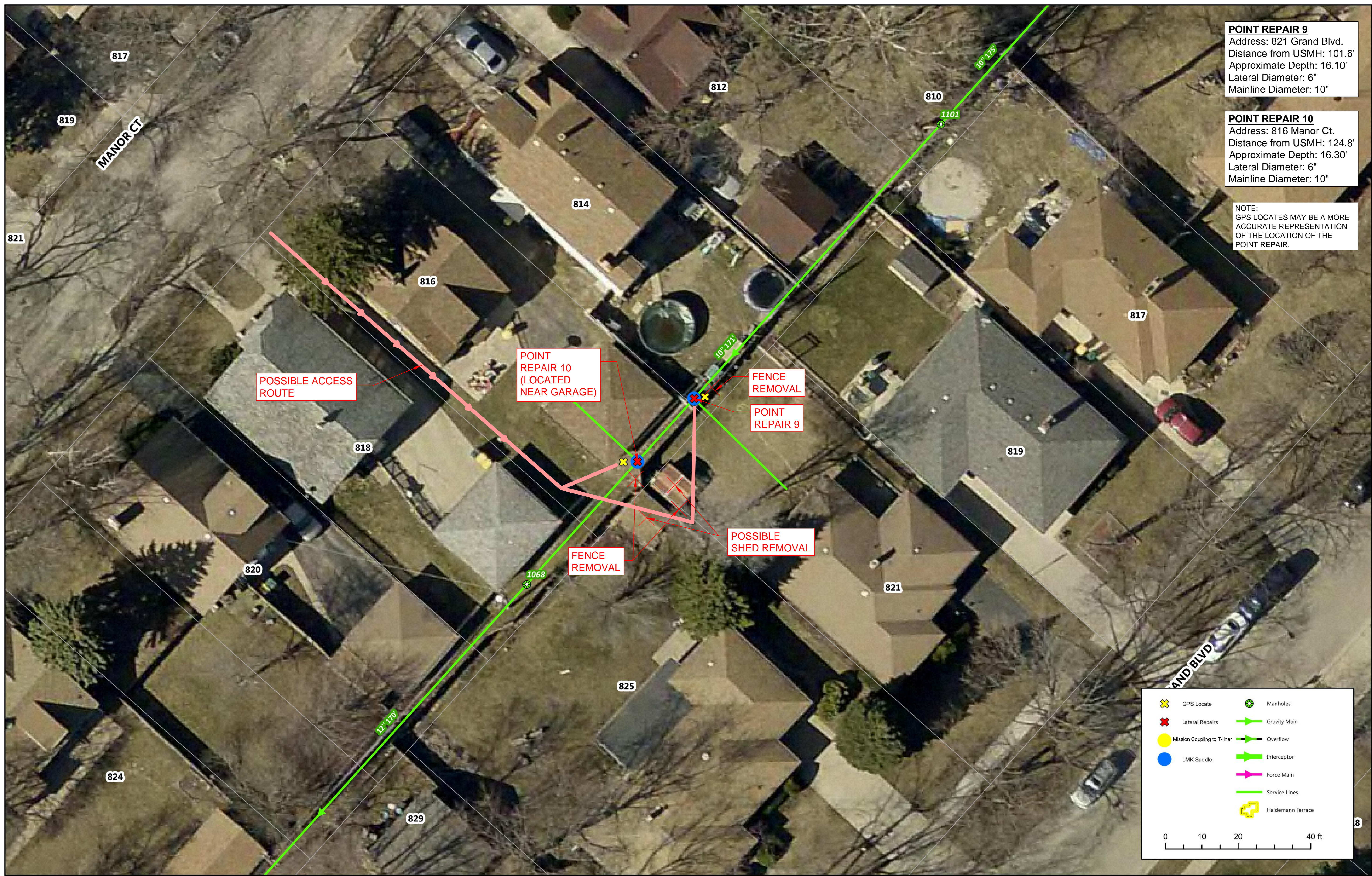
DESIGNED: JS	
DRAWN: YG	
CHECKED: CM	
DATE: MARCH 4, 2016	



2016 HALDEMANN TERRACE
 LATERAL POINT REPAIRS

POINT REPAIR 8

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NOTED	WILL	14	10
VERTICAL:			
PROJECT NO. 11-2948-00			



POINT REPAIR 9
 Address: 821 Grand Blvd.
 Distance from USMH: 101.6'
 Approximate Depth: 16.10'
 Lateral Diameter: 6"
 Mainline Diameter: 10"

POINT REPAIR 10
 Address: 816 Manor Ct.
 Distance from USMH: 124.8'
 Approximate Depth: 16.30'
 Lateral Diameter: 6"
 Mainline Diameter: 10"

NOTE:
 GPS LOCATES MAY BE A MORE ACCURATE REPRESENTATION OF THE LOCATION OF THE POINT REPAIR.

	GPS Locate		Manholes
	Lateral Repairs		Gravity Main
	Mission Coupling to T-liner		Overflow
	LMK Saddle		Interceptor
			Force Main
			Service Lines
			Haldemann Terrace

0 10 20 40 ft

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\DWG\CAD\C-8 - Point Repair 9 and 10.dwg

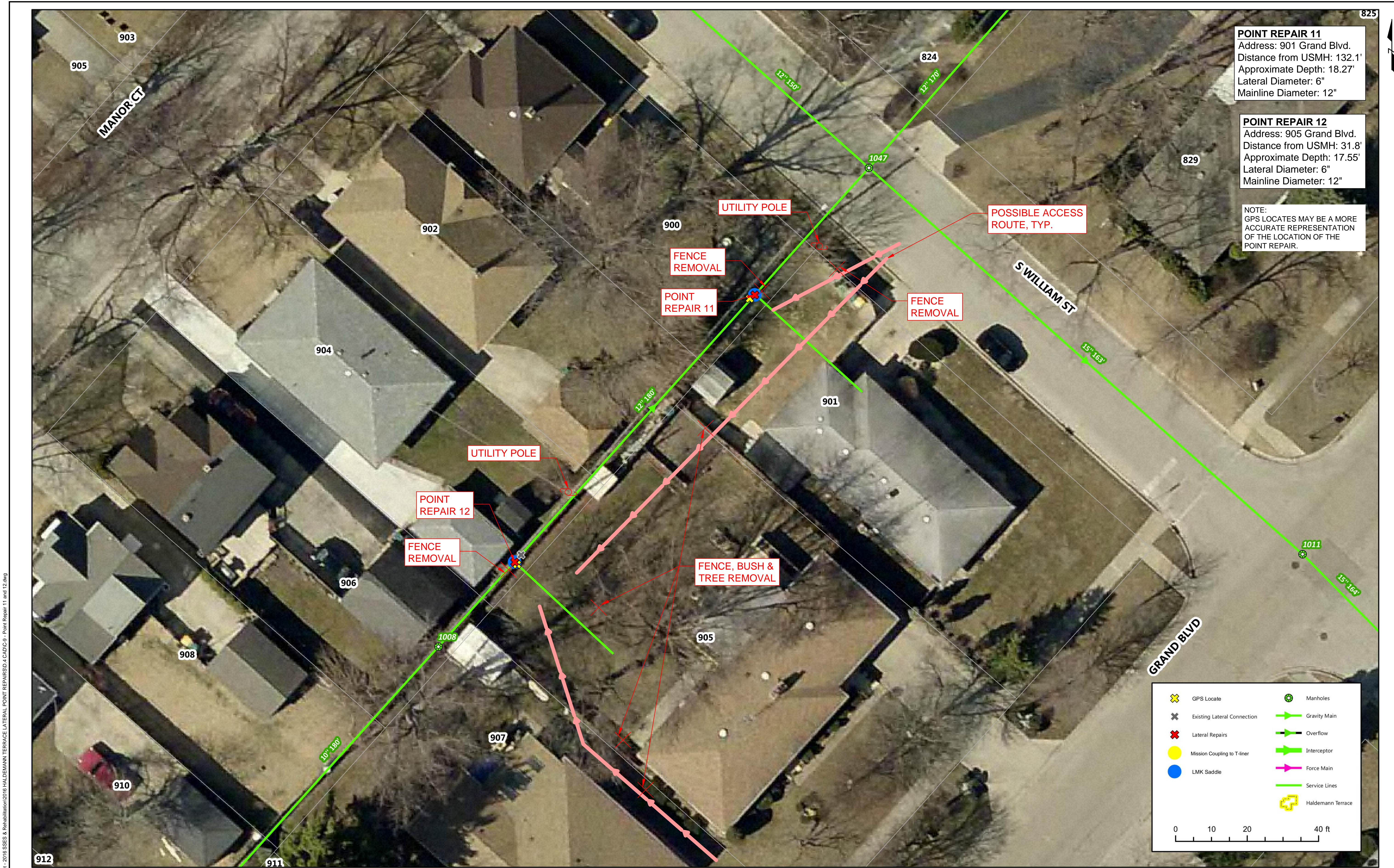
DESIGNED: JS
 DRAWN: YG
 CHECKED: CM
 DATE: MARCH 4, 2016



2016 HALDEMANN TERRACE
 LATERAL POINT REPAIRS

POINT REPAIRS 9 AND 10

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NOTED	WILL	14	11
VERTICAL:			
PROJECT NO. 11-2948-00			



POINT REPAIR 11
 Address: 901 Grand Blvd.
 Distance from USMH: 132.1'
 Approximate Depth: 18.27'
 Lateral Diameter: 6"
 Mainline Diameter: 12"

POINT REPAIR 12
 Address: 905 Grand Blvd.
 Distance from USMH: 31.8'
 Approximate Depth: 17.55'
 Lateral Diameter: 6"
 Mainline Diameter: 12"

NOTE:
 GPS LOCATES MAY BE A MORE
 ACCURATE REPRESENTATION
 OF THE LOCATION OF THE
 POINT REPAIR.

	GPS Locate		Manholes
	Existing Lateral Connection		Gravity Main
	Lateral Repairs		Overflow
	Mission Coupling to T-liner		Interceptor
	LMK Saddle		Force Main
			Service Lines
			Haldemann Terrace

0 10 20 40 ft

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\04 CAD\CAD-9 - Point Repair 11 and 12.dwg
 Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\05 GIS\Map Documents\Map Documents - Exhibits\Lateral Point Repair\Move Exhibit Sewers to GPS Locates\Repair 11 & 12 (11x17).mxd - Date Printed: 3/16/2016 4:55:43 PM

DESIGNED: JS
 DRAWN: YG
 CHECKED: CM
 DATE: MARCH 4, 2016



2016 HALDEMANN TERRACE
 LATERAL POINT REPAIRS

POINT REPAIRS 11 AND 12

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NOTED	WILL	14	12
VERTICAL:			
PROJECT NO. 11-2948-00			



POINT REPAIR 13
 Address: 913 Grand Blvd.
 Distance from USMH: 9.6'
 Approximate Depth: 16.09'
 Lateral Diameter: 6"
 Mainline Diameter: 10"

905
 NOTE:
 POINT REPAIR NO. 13 WILL
 REQUIRE A NON-SHEAR
 MISSION COUPLING FROM THE
 6" CIPP T-LINER END TO THE
 NEW PVC REPAIR.

NOTE:
 GPS LOCATES MAY BE A MORE
 ACCURATE REPRESENTATION
 OF THE LOCATION OF THE
 POINT REPAIR.

**POINT
 REPAIR 13
 (LOCATED
 NEAR GARAGE)**

**POSSIBLE ACCESS
 ROUTE**

	GPS Locate		Manholes
	Lateral Repairs		Gravity Main
	Mission Coupling to T-liner		Overflow
	LMK Saddle		Interceptor
	Force Main		Service Lines
	Haldemann Terrace		

0 10 20 40 ft

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS\4 CAD\CAD-10 - Point Repair 13.dwg

Q:\Johel_LL11294800\Johel - 2016 SSES & Rehabilitation\5.0 GIS\Map Documents\Map Documents - Exhibits\Lateral Point Repair\More Exhibit Servers to GPS Locates\Repair 13 (11x17).mxd - Date Printed: 3/16/2016 5:09:20 PM

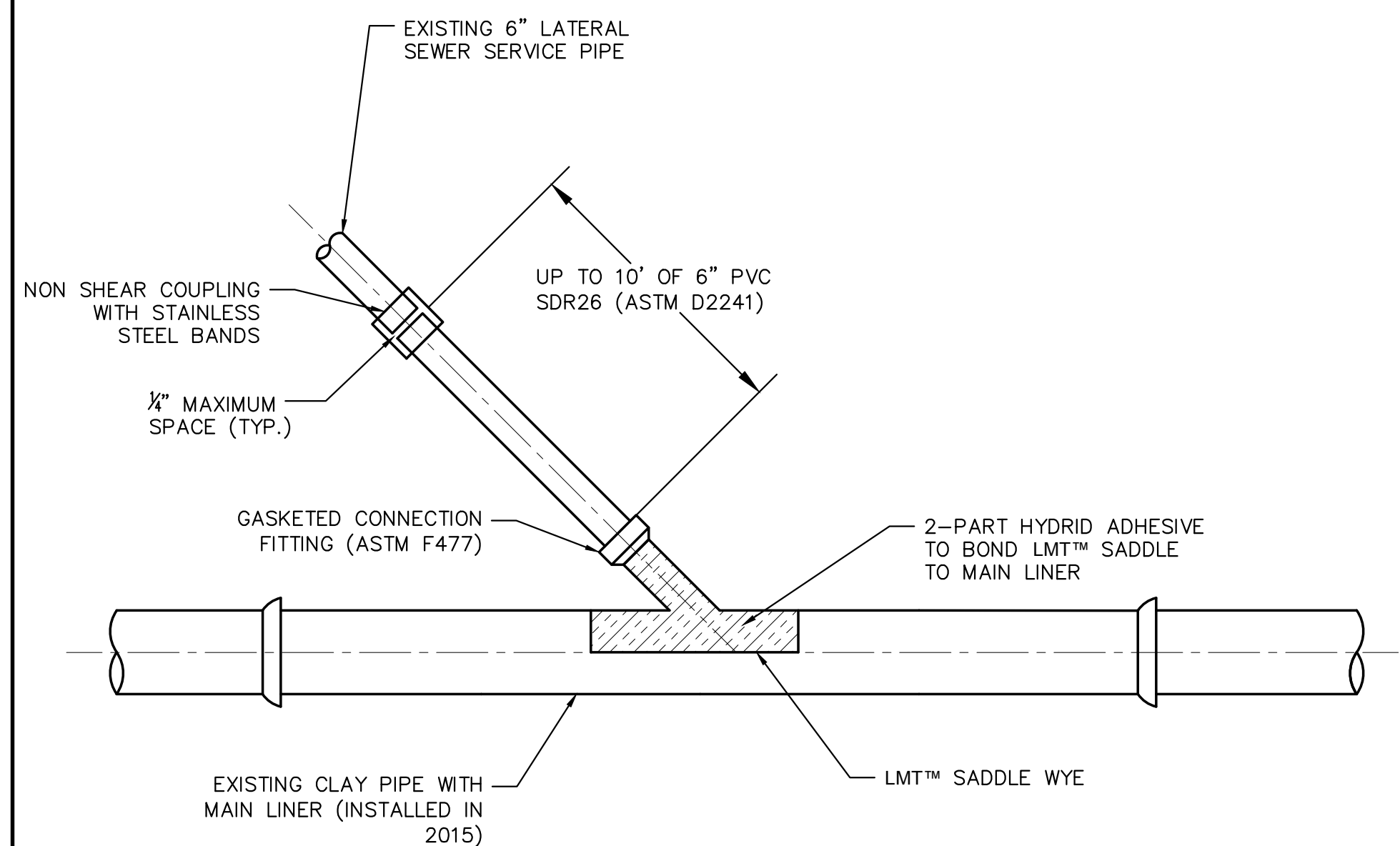
DESIGNED: JS	
DRAWN: YG	
CHECKED: CM	
DATE: MARCH 4, 2016	



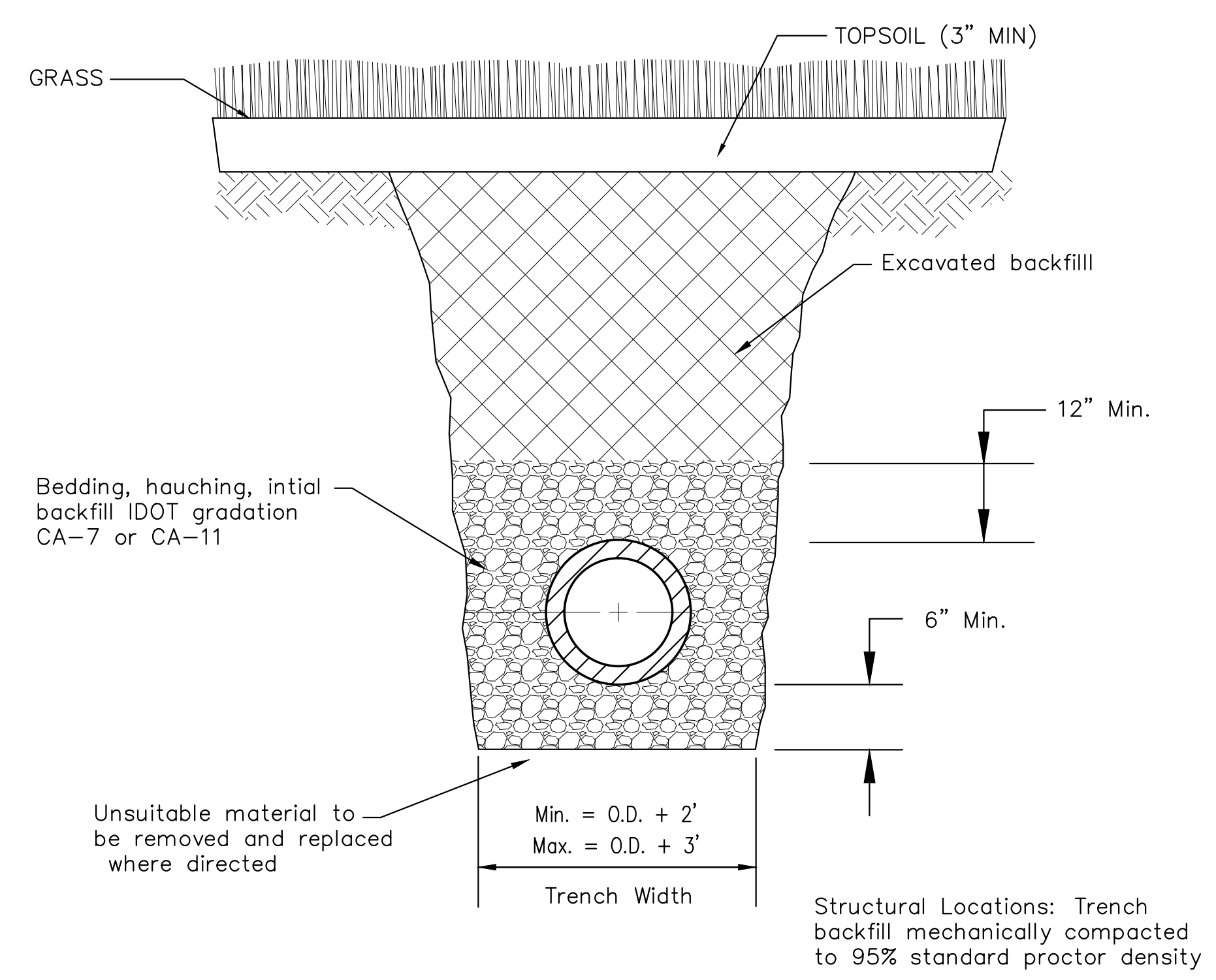
2016 HALDEMANN TERRACE
 LATERAL POINT REPAIRS

POINT REPAIR 13

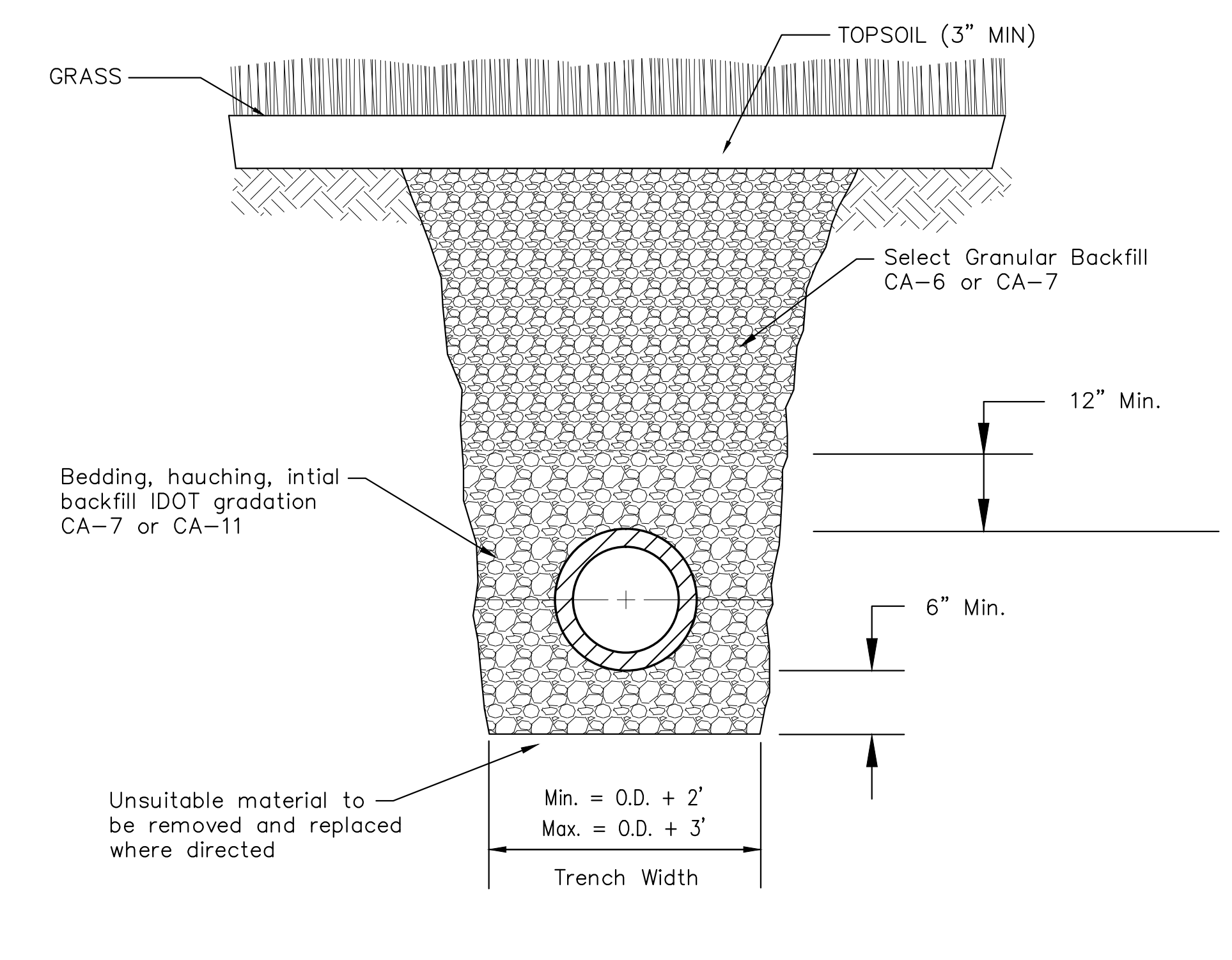
SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NOTED	WILL	14	13
VERTICAL:			
PROJECT NO. 11-2948-00			



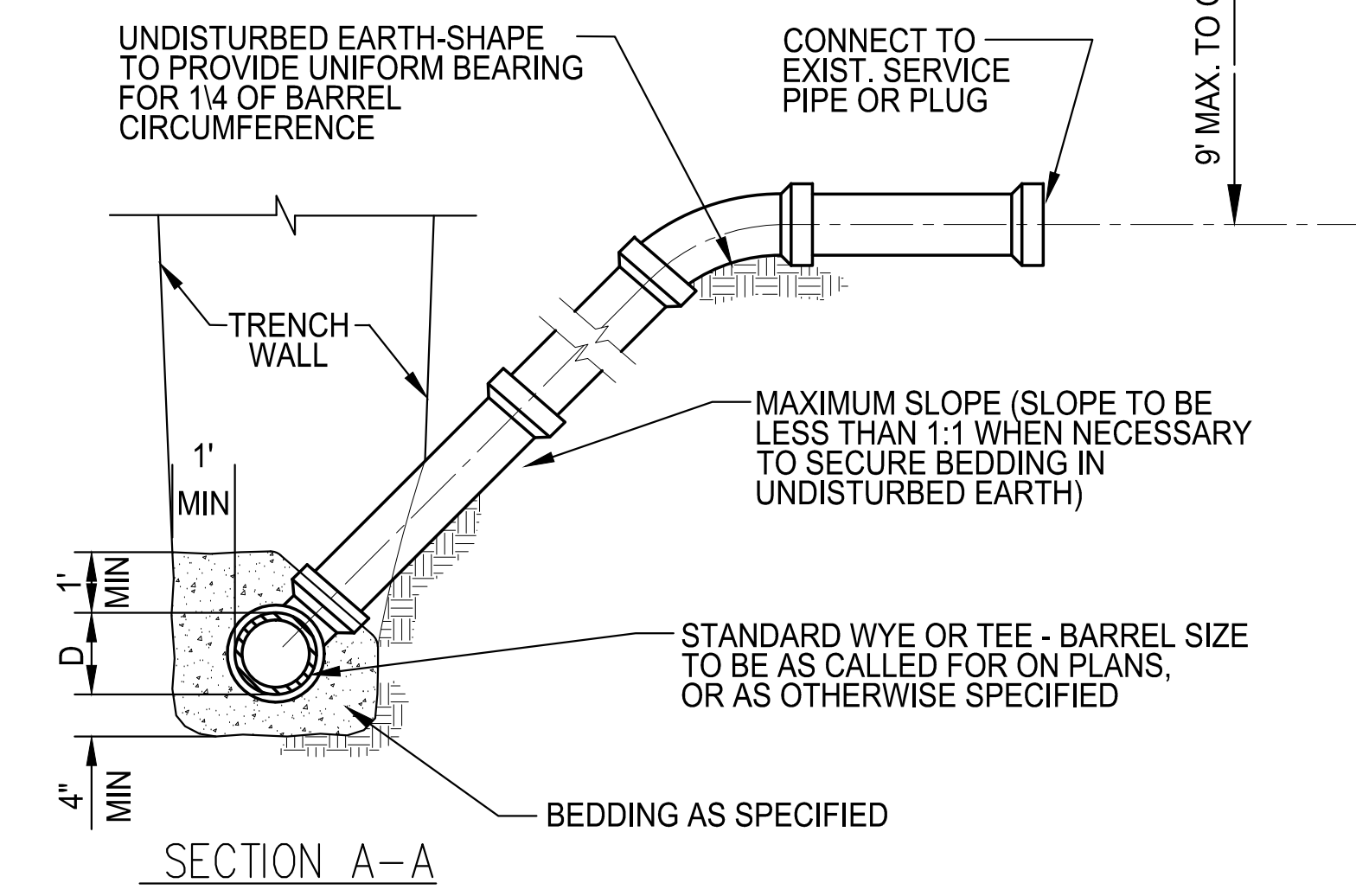
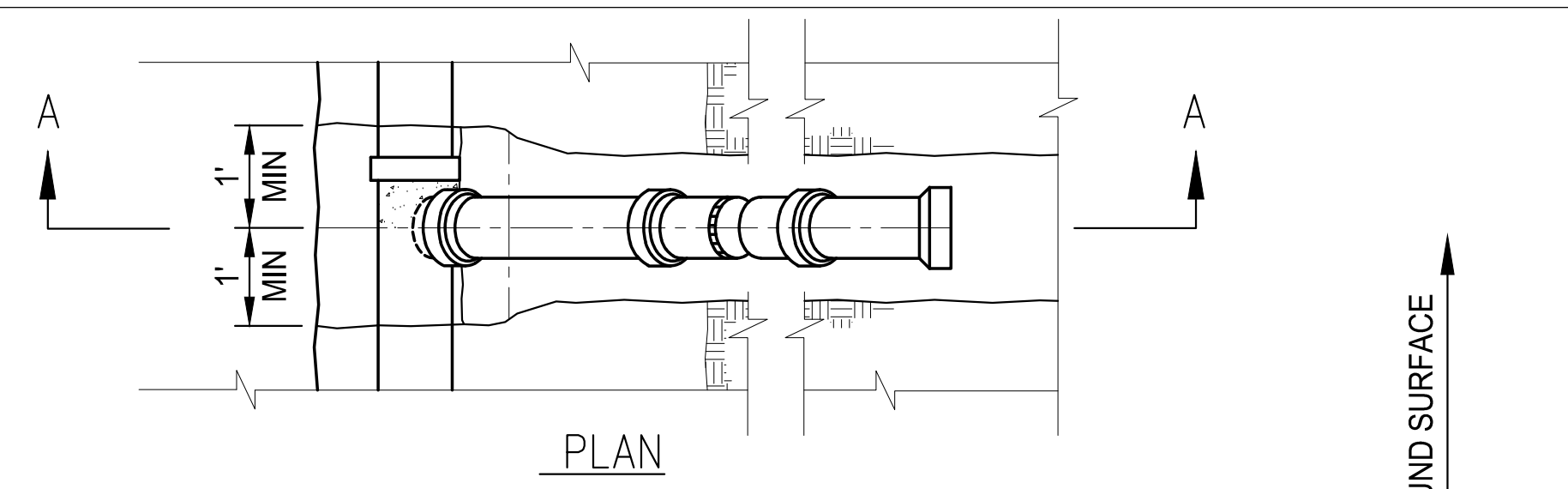
CONNECTION OF SEWER LATERAL TO EXISTING MAINLINE WITH LMT™ WYE
N.T.S.



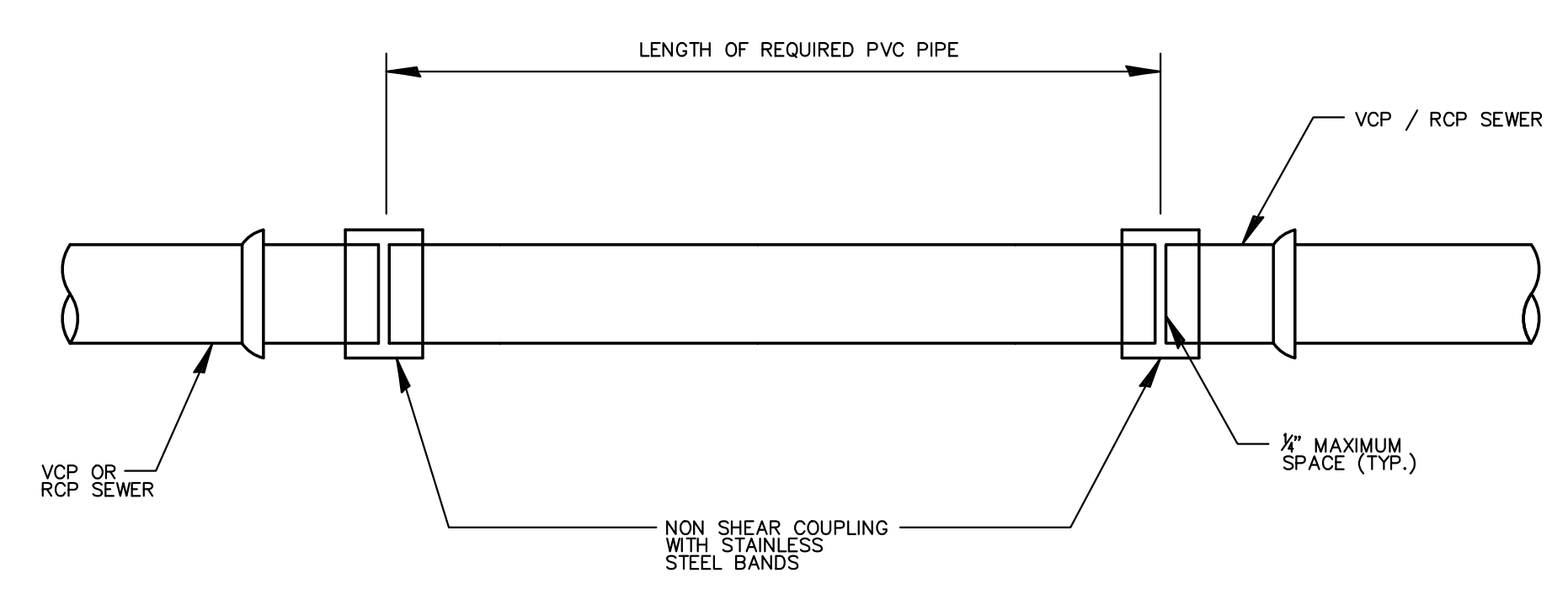
UTILITY TRENCH IN NON-PAVED AREAS
N.T.S.



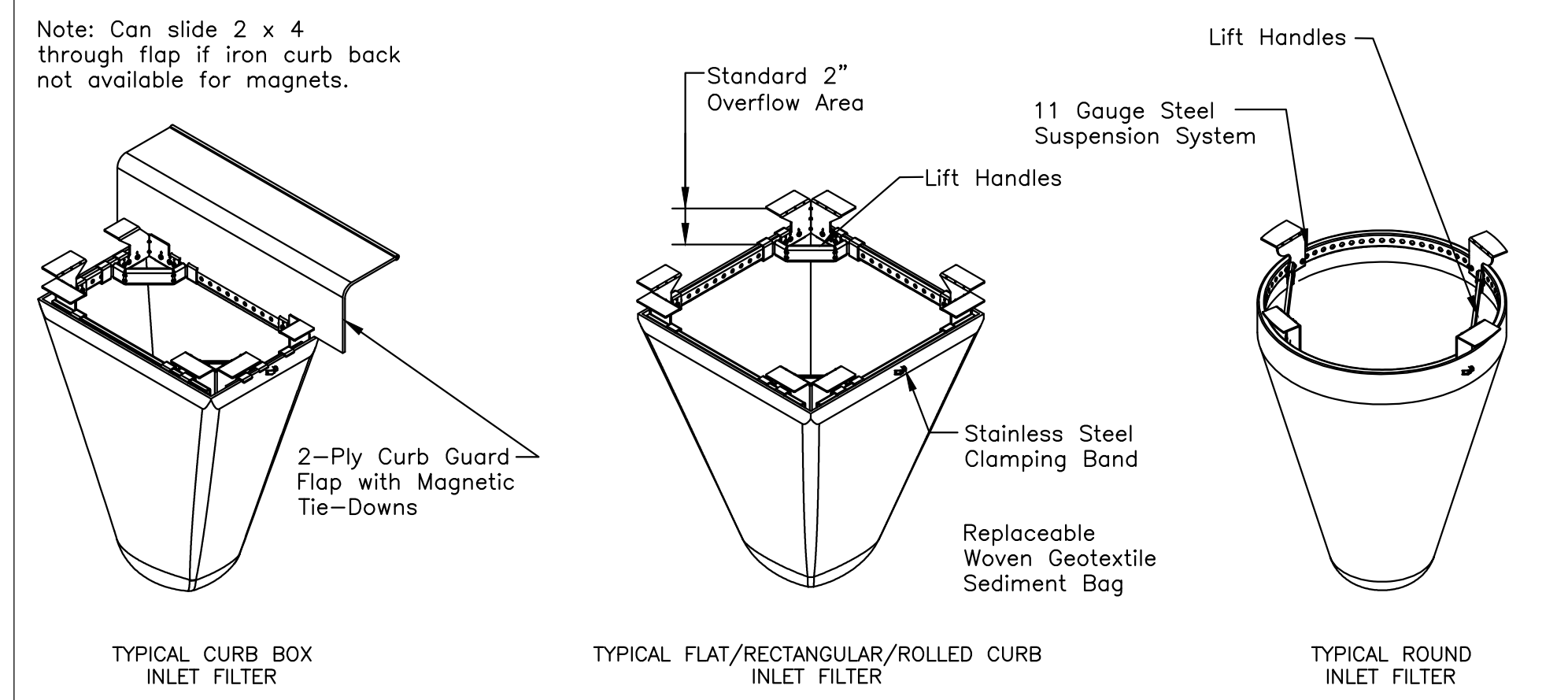
UTILITY TRENCH WITHIN 5' OF AN EXISTING GARAGE FOUNDATION
N.T.S.



TYPICAL RISER SANITARY SERVICE LATERAL
N.T.S.



CONNECTING SEWER PIPES OF SIMILAR & DISSIMILAR MATERIAL
N.T.S.



- Materials:**
1. Framing - 11 gauge steel; corrosion resistant
 2. Sediment Bag - Woven Geotextile (Type FF or approved alternate); 2 cubic ft typ volume; Stainless Steel locking band securing bag to frame
- Installation:**
1. Remove grate
 2. Drop Inlet Filter onto load bearing lip of casting or concrete structure
 3. Replace grate

STORM DRAIN INLET PROTECTION
N.T.S.

C:\pjh\11294800.dwg - 2016 SSES & Rehabilitation\2016 HALDEMANN TERRACE LATERAL POINT REPAIRS.DWG CAD\DWG\11-1.dwg

DESIGNED: JS	
DRAWN: YG	
CHECKED: CM	
DATE: MARCH 4, 2016	



2016 HALDEMANN TERRACE
LATERAL POINT REPAIRS

DETAILS 1

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NTS	WILL	14	14
VERTICAL: NTS			
PROJECT NO. 11-2948-00			