

**TYPICAL ASPHALT
ALLEY CONSTRUCTION
AND REPAIR**

CITY OF GREENFIELD

STANDARD DETAIL

ALLEY PAVEMENT REPLACEMENT DETAIL

Dwn.By: *D.Rodgers*

Origin Date: 11/30/07

Des. No: R-100-01

Rev. Date: 12/10/07

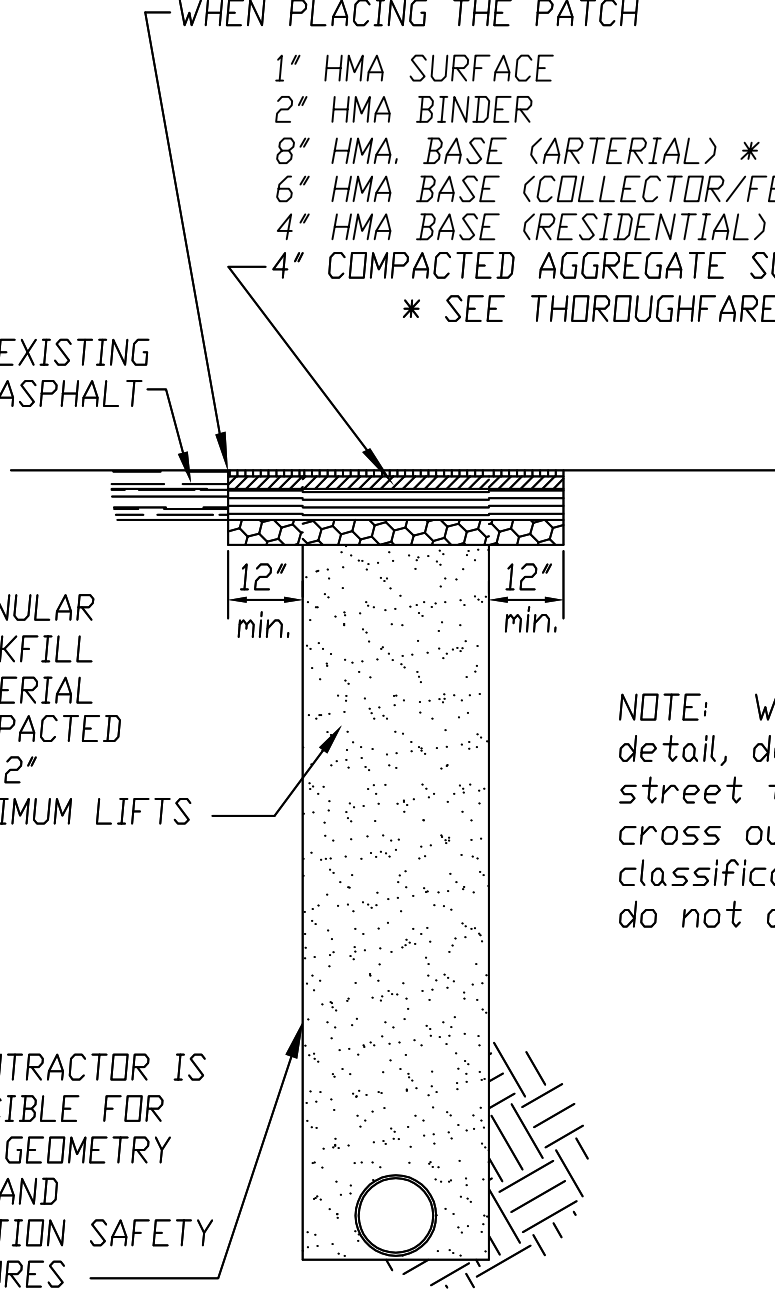
SAWCUT EXISTING ASPHALT
TO A NEAT EDGE AND TACK
WITH EMULSIFIED ASPHALT
WHEN PLACING THE PATCH

- 1" HMA SURFACE
- 2" HMA BINDER
- 8" HMA BASE (ARTERIAL) *
- 6" HMA BASE (COLLECTOR/FEEDER) *
- 4" HMA BASE (RESIDENTIAL) *
- 4" COMPACTED AGGREGATE SUBBASE
- * SEE THOROUGHFARE PLAN

EXISTING
ASPHALT

GRANULAR
BACKFILL
MATERIAL
COMPACTED
IN 12"
MAXIMUM LIFTS

THE CONTRACTOR IS
RESPONSIBLE FOR
TRENCH GEOMETRY
DESIGN AND
EXCAVATION SAFETY
PROCEDURES



NOTE: When using this
detail, determine the
street type and
cross out those
classifications which
do not apply.

CITY OF GREENFIELD

STANDARD DETAIL

ASPHALT STREET CUT REPAIR DETAIL

Dwn.By: *D.Rodgers*

Origin Date: 12/29/98

Des. No: R-101-01

Rev. Date: 12/10/07

ASPHALT PAVEMENT REPAIR SPECIFICATIONS

I. MATERIALS

A. ASPHALT

1. Asphalt Material shall meet the requirements of Section 403 of the INDDOT Standard Specifications.
2. The required thickness of the pavement patch is based on the Thoroughfare Designation as established by the Greenfield Comprehensive Plan.

B. BEDDING AND BACKFILL

1. Granular material must be used to backfill the excavation. The material must be mechanically compacted in lifts not to exceed 12".

II. EXECUTION

A. TRAFFIC SAFETY

1. Road Closures are not allowed except when specifically approved by the City of Greenfield Police Department Traffic Safety Officer.
2. The Worksite Traffic Control Manual as published by INDDOT shall be used as a guideline for establishing traffic control and safety measures for all road cuts and pavement repairs.
3. The worksite must be completely protected from vehicular and pedestrian traffic at all times. The use of Type II Barricades with flashing lights or drums with flashing lights is required.
4. All Traffic Control and Safety Equipment and sufficient personnel to erect and operate the equipment must be onsite before any construction in the Right-of-Way begins.

B. PERMIT REQUIRED

1. A Right of Way Cut Permit is required before any work is performed in the City Right-of-Way.
2. The Right of Way Cut Permit is issued by the City Engineers Office.

INSTALL #4 J-BARS
@ 18" O.C. ALONG
ENTIRE LENGTH
OF MATCHLINE

8" CONCRETE (ARTERIAL) *
7" CONCRETE (COLLECTOR/FEEDER) *
6" CONCRETE (RESIDENTIAL) *
4" COMPACTED AGGREGATE SUBBASE

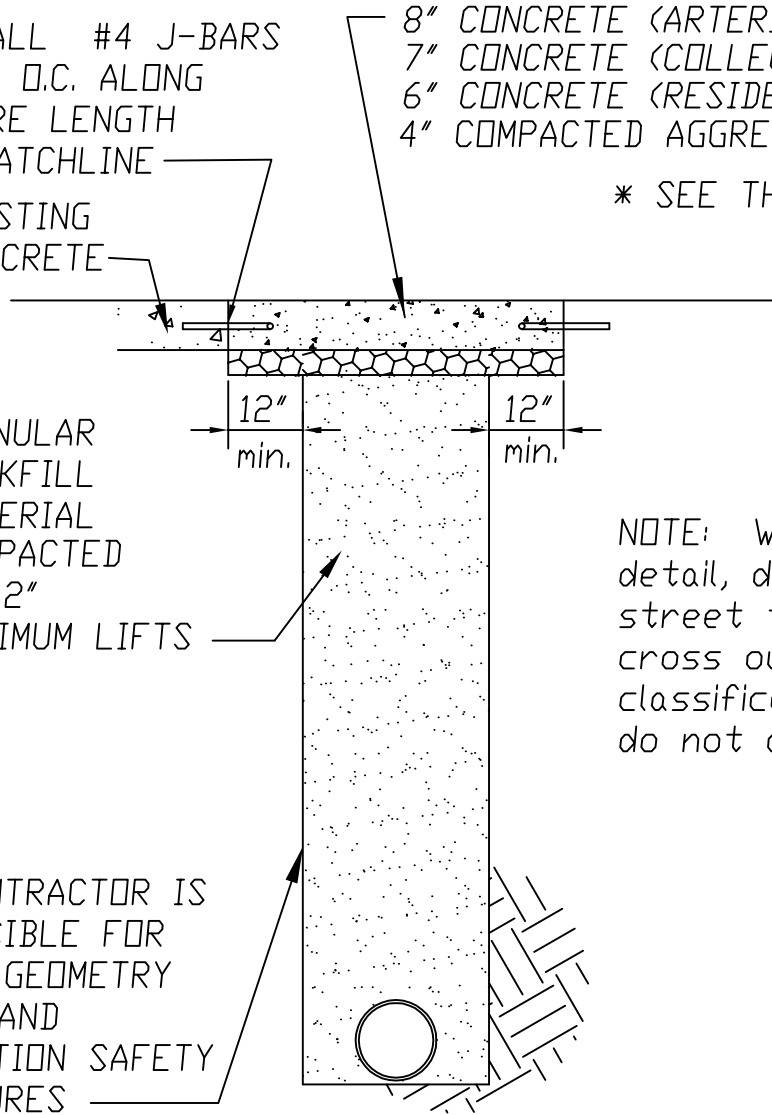
* SEE THOROUGHFARE PLAN

EXISTING
CONCRETE

GRANULAR
BACKFILL
MATERIAL
COMPACTED
IN 12"
MAXIMUM LIFTS

NOTE: When using this
detail, determine the
street type and
cross out those
classifications which
do not apply.

THE CONTRACTOR IS
RESPONSIBLE FOR
TRENCH GEOMETRY
DESIGN AND
EXCAVATION SAFETY
PROCEDURES



CITY OF GREENFIELD

STANDARD DETAIL

CONCRETE STREET CUT REPAIR DETAIL

Dwn.By: *D.Rodgers*

Origin Date: 12/29/98

Des. No: R-102-01

Rev. Date: 12/10/07

CONCRETE PAVEMENT REPAIR SPECIFICATIONS

I. MATERIALS

A. CONCRETE

1. Concrete shall be a High-Early-Strength mix capable of supporting vehicular traffic within 12 hours.
2. Concrete Material shall meet the requirements of Section 702 of the INDDT Standard Specifications.
3. INDDT Standard Specifications Section 501.10 Limitations of Mixing shall govern the placement of concrete in cold weather.
4. The required thickness of the concrete patch is based on the Thoroughfare Designation as established by the Greenfield Comprehensive Plan.
5. J-Bars are required as shown in the drawing. Other types of load transfer joints may be approved prior to construction.

B. BEDDING AND BACKFILL

1. Granular material must be used to backfill the excavation. The material must be mechanically compacted in lifts not to exceed 12".

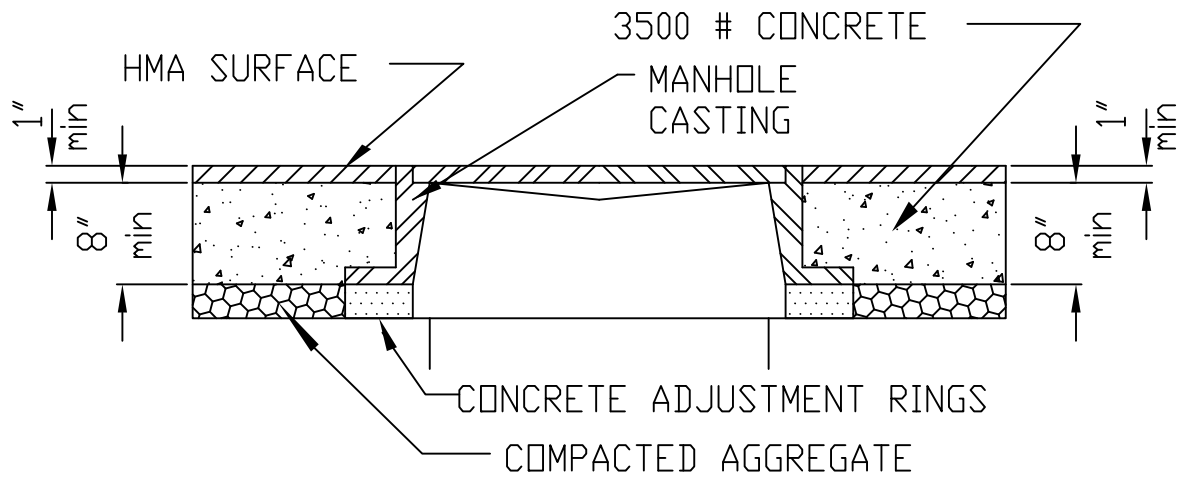
II. EXECUTION

A. TRAFFIC SAFETY

1. Road Closures are not allowed except when specifically approved by the City of Greenfield Police Department Traffic Safety Officer.
2. The Worksite Traffic Control Manual as published by I.D.D.T. shall be used as a guideline for establishing traffic control and safety measures for all road cuts and pavement repairs.
3. The worksite must be completely protected from vehicular and pedestrian traffic at all times. The use of Type II Barricades with flashing lights or drums with flashing lights is required.
4. All Traffic Control and Safety Equipment and sufficient personnel to erect and operate the equipment must be onsite before any construction in the Right-of-Way begins.

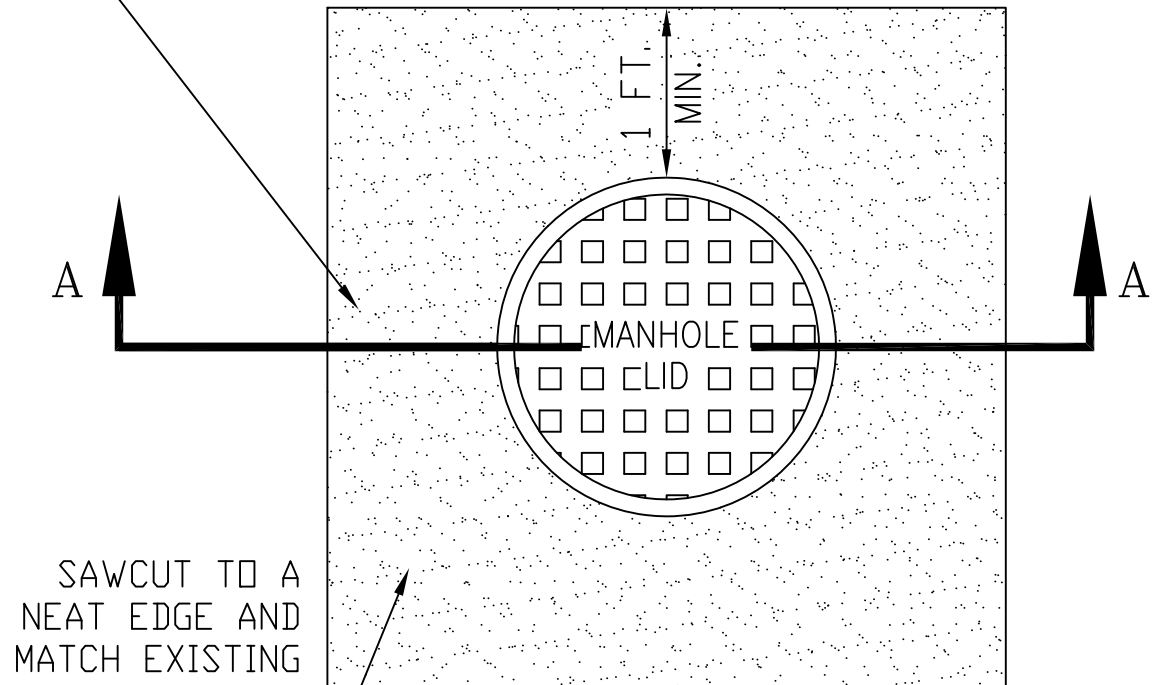
B. PERMIT REQUIRED

1. A Right Of Way Cut Permit is required before any work is performed in the City Right-of-Way.
2. The Right Of Way Cut Permit is issued by the City Engineers Office.



SECTION "A-A"

REMOVE EXISTING PAVEMENT
AND REPLACE WITH MINIMUM
8" OF CONCRETE, TOPPED
WITH 1" OF HMA SURFACE



SAWCUT TO A
NEAT EDGE AND
MATCH EXISTING
PAVEMENT SURFACE

CITY OF GREENFIELD

STANDARD DETAIL

Manhole Casting Adjustment in Asphalt Street

Dwn.By: D.Rodgers

Origin Date: 01/05/99

Des. No: R-106-02

Rev. Date: 9/30/10

MANHOLE ADJUSTMENT IN ASPHALT STREET SPECIFICATIONS

I. MATERIALS

A. CONCRETE

1. Concrete shall be a High-Early-Strength mix capable of supporting vehicular traffic within 12 hours.
2. Concrete Material shall meet the requirements of Section 702 of the INDOT Standard Specifications.
3. INDOT Standard Specifications Section 501.10 Limitations of Mixing shall govern the placement of concrete in cold weather.
4. The required thickness of the concrete patch is based on the Thoroughfare Designation as established by the Greenfield Comprehensive Plan.
5. J-Bars are required as shown in the drawing. Other types of load transfer joints may be approved prior to construction.

B. ASPHALT

1. Asphalt Material shall meet the requirements of Section 403 of the I.D.O.T. Standard Specifications.

C. CASTING

1. Casting shall be East Jordan Iron Works casting #1020 & 1022 or approved equal.
2. Lid shall be stamped with the words "CITY OF GREENFIELD - SANITARY" or "CITY OF GREENFIELD - STORM".
3. Joint sealant under the casting shall be two rings of non-hardening butyl rubber rope, Conseal or equal. (Kent Seal is not acceptable)

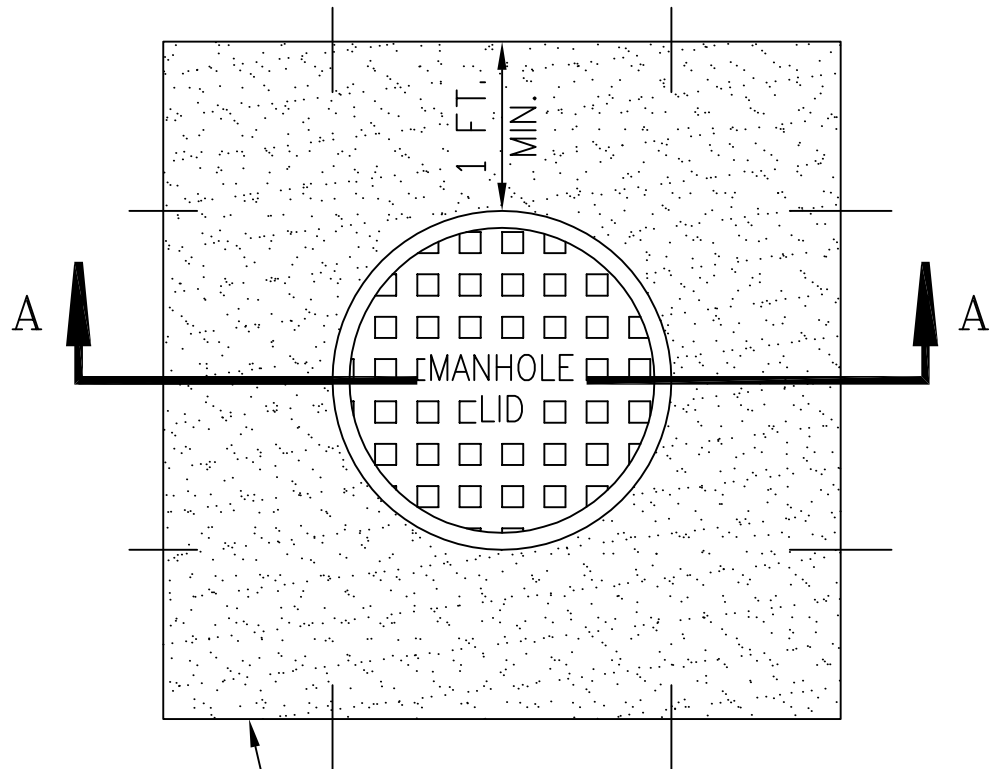
II. EXECUTION

A. TRAFFIC SAFETY

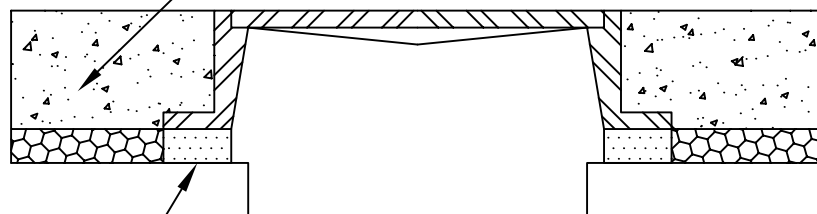
1. Road Closures are not allowed except when specifically approved by the City of Greenfield Police Department Traffic Safety Officer.
2. The Worksite Traffic Control Manual as published by I.D.O.T. shall be used as a guideline for establishing traffic control and safety measures for all road cuts and pavement repairs.
3. The worksite must be completely protected from vehicular and pedestrian traffic at all times. The use of Type II Barricades with flashing lights or drums with flashing lights is required.
4. All Traffic Control and Safety Equipment and sufficient personnel to erect and operate the equipment must be onsite before any construction in the Right-of-Way begins.

B. PERMIT REQUIRED

1. A Right Of Way Cut Permit is required before any work is performed in the City Right-of-Way.
2. The Right Of Way Cut Permit is issued by the City Engineers Office.



SAWCUT AND REMOVE EXISTING
CONCRETE AND REPLACE PER
CITY OF GREENFIELD
CONCRETE STREET CUT REPAIR
STANDARD DETAIL



CONCRETE ADJUSTMENT RINGS
SECTION "A-A"

CITY OF GREENFIELD

STANDARD DETAIL

Manhole Casting Adjustment in Concrete Street

Dwn.By: *D.Rodgers*

Origin Date: 01/05/99

Des. No: R-107-01

Rev. Date: 12/10/07

MANHOLE ADJUSTMENT IN CONCRETE STREET SPECIFICATIONS

I. MATERIALS

A. CONCRETE

1. Concrete shall be a High-Early-Strength mix capable of supporting vehicular traffic within 12 hours.
2. Concrete Material shall meet the requirements of Section 702 of the INDOT Standard Specifications.
3. INDOT Standard Specifications Section 501.10 Limitations of Mixing shall govern the placement of concrete in cold weather.
4. The required thickness of the concrete patch is based on the Thoroughfare Designation as established by the Greenfield Comprehensive Plan.
5. J-Bars are required as shown in the drawing. Other types of load transfer joints may be approved prior to construction.

B. CASTING

1. Casting shall be East Jordan Iron Works casting #1020 & 1022 or approved equal.
2. Lid shall be stamped with the words "CITY OF GREENFIELD - SANITARY" or "CITY OF GREENFIELD - STORM".
3. Joint sealant under the casting shall be two rings of non-hardening butyl rubber rope, Conseal or equal. (Kent Seal is not acceptable)

II. EXECUTION

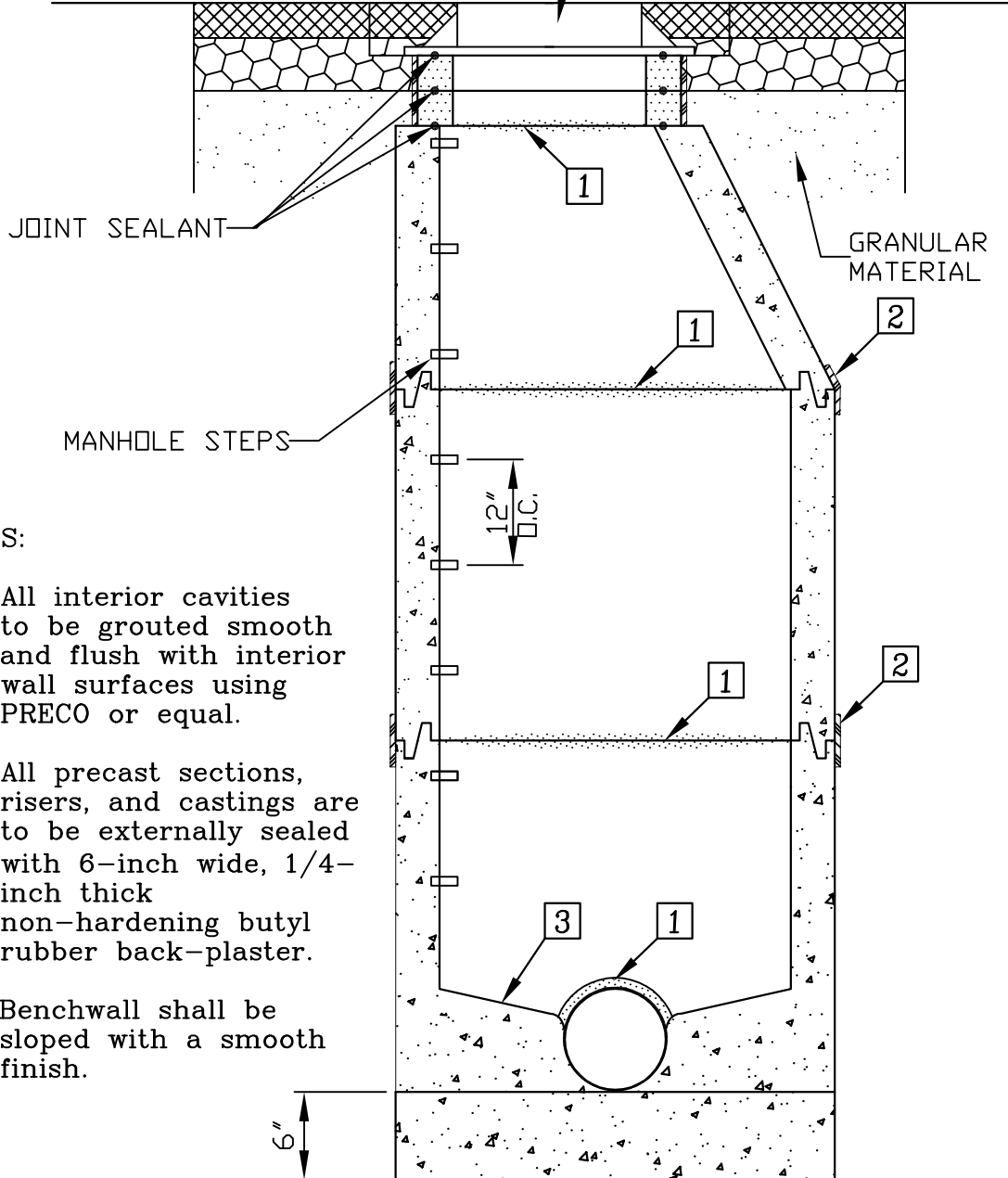
A. TRAFFIC SAFETY

1. Road Closures are not allowed except when specifically approved by the City of Greenfield Police Department Traffic Safety Officer.
2. The Worksite Traffic Control Manual as published by I.D.O.T. shall be used as a guideline for establishing traffic control and safety measures for all road cuts and pavement repairs.
3. The worksite must be completely protected from vehicular and pedestrian traffic at all times. The use of Type II Barricades with flashing lights or drums with flashing lights is required.
4. All Traffic Control and Safety Equipment and sufficient personnel to erect and operate the equipment must be onsite before any construction in the Right-of-Way begins.

B. PERMIT REQUIRED

1. A Right Of Way Cut Permit is required before any work is performed in the City Right-of-Way.
2. The Right Of Way Cut Permit is issued by the City Engineers Office.

EAST JORDAN IRON WORKS
 CASTING #1022 WITH GASKET LID
 (OR APPROVED EQUAL)
 WITH "CITY OF GREENFIELD
 SANITARY" CAST IN LID



NOTES:

- 1 All interior cavities to be grouted smooth and flush with interior wall surfaces using PRECO or equal.
- 2 All precast sections, risers, and castings are to be externally sealed with 6-inch wide, 1/4-inch thick non-hardening butyl rubber back-plaster.
- 3 Benchwall shall be sloped with a smooth finish.

CITY OF GREENFIELD	
STANDARD DETAIL	
SANITARY SEWER MANHOLE	
Dwn.By: <i>D.Rodgers</i>	Origin Date: 01/04/99
Des. No: SN-115-02	Rev. Date: 08/01/08

SANITARY SEWER MANHOLE SPECIFICATIONS

I. MATERIALS

A. CASTING

1. Casting shall be East Jordan Iron Works casting 1022 or approved equal with Gasketed Lid.
2. Lid shall be stamped with the words "CITY OF GREENFIELD – SANITARY".
3. A minimum of 4" and a maximum of 12" of concrete adjustment rings shall be installed under the casting.
4. Joint sealant under the casting, between the adjustment rings and between the adjustment rings and the manhole shall be two rings of non-hardening butyl rubber rope, Conseal or equal. (Kent Seal is not acceptable)

B. CONCRETE MANHOLE

1. 48" diameter precast concrete sections shall be used to construct the manhole barrel.
2. A flat-top may not be used in place of a cone section unless specifically approved by City Officials before construction begins.
3. All openings for sewers entering and leaving the manhole shall be core-drilled and fitted with a resilient, watertight connector.
4. All joints shall be fully sealed and watertight. The use of a rubber gasket is required.
5. The steps shall be made of plastic-coated steel and shall be placed as shown on the drawing.
6. The invert must be constructed as shown on the drawing.
7. Lateral Taps into manholes are not allowed.

C. BEDDING AND BACKFILL

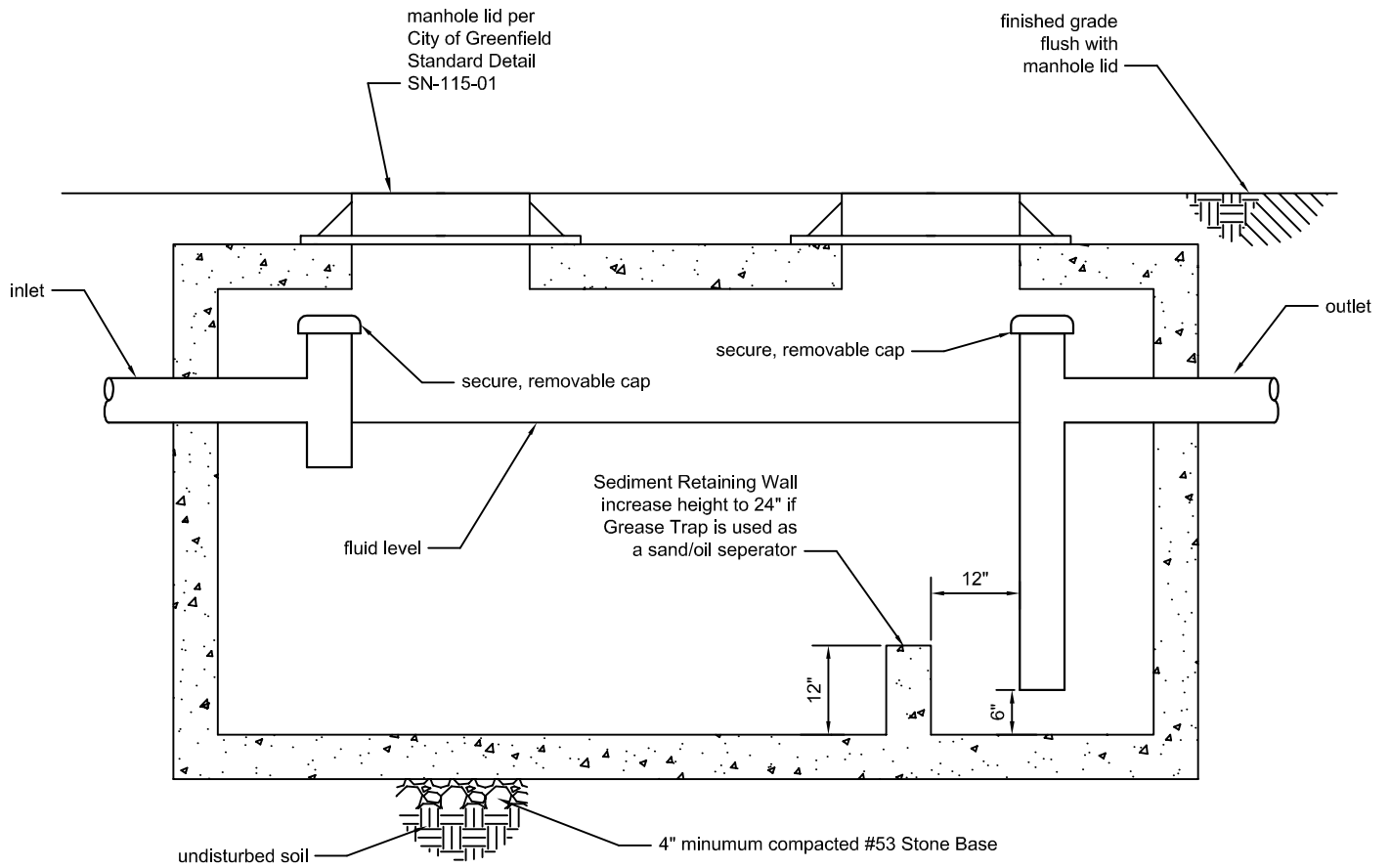
1. The manhole must be constructed directly upon undisturbed soil or a minimum of 6" of compacted crushed stone.
2. Granular material must be used to backfill the excavation. The material must be mechanically compacted in lifts not to exceed 12".

II. EXECUTION

A. INSPECTIONS

1. The manhole must be inspected by the Wastewater Treatment and Collections Department designated Inspector before the excavation is backfilled.

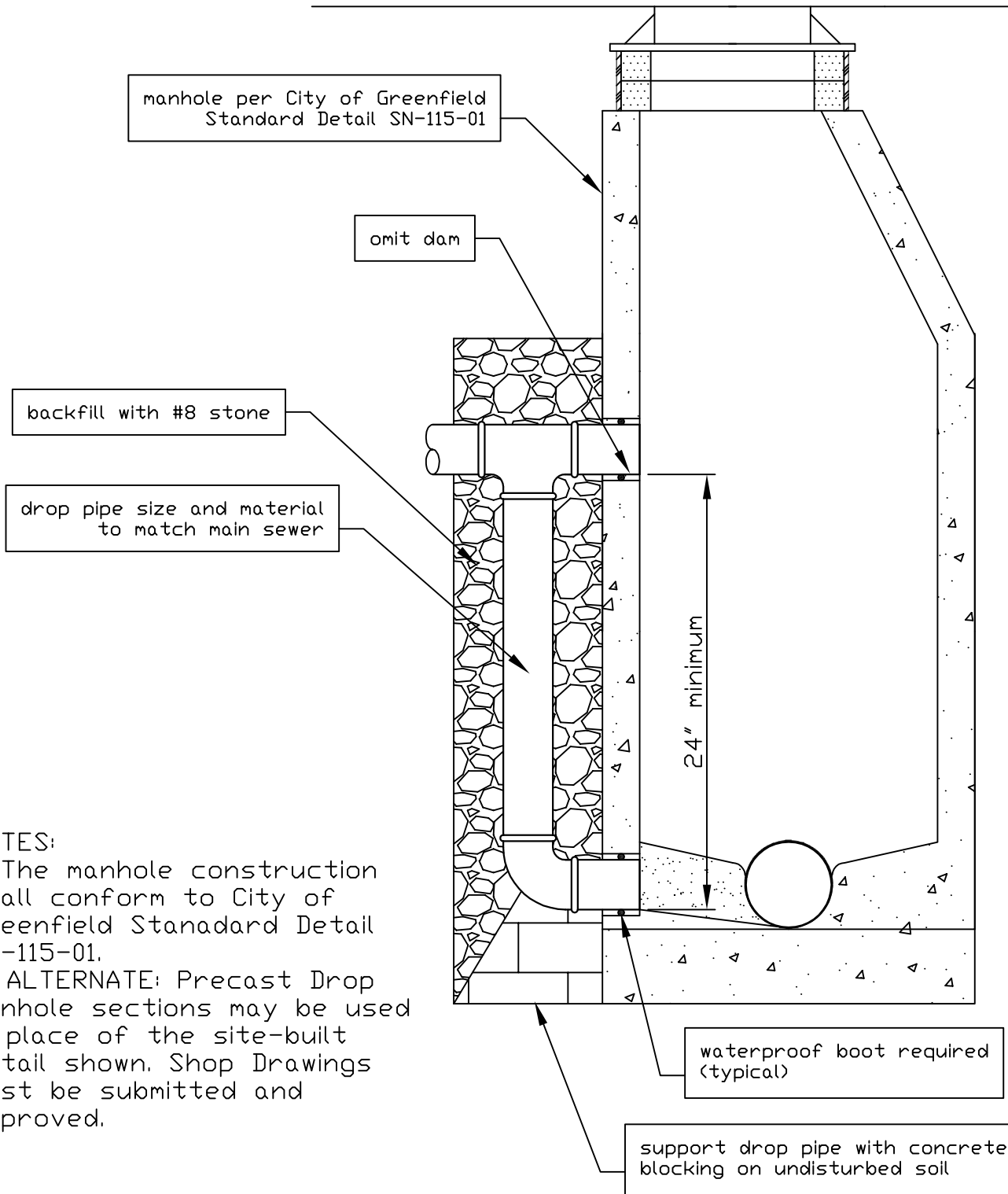
Call 477-4360



NOTES:

1. To facilitate cleaning, manhole lid openings must not be obstructed by the inlet or discharge piping assemblies.
2. This structure must be designed to withstand H2O loading conditions.

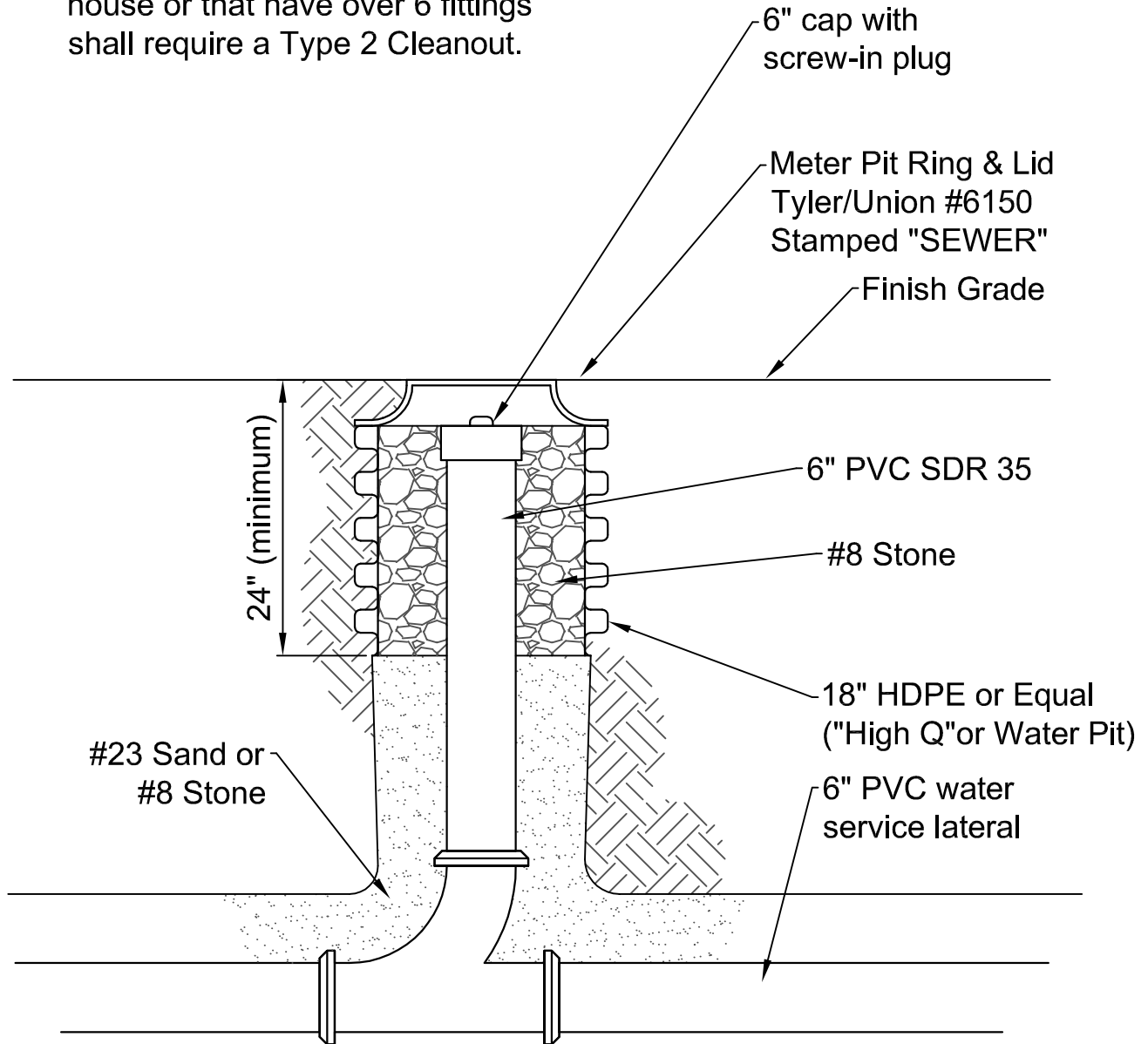
CITY OF GREENFIELD	
STANDARD DETAIL	
Commercial Grease Trap	
Dwn.By: <i>D.Rodgers</i>	Origin Date: 09/04/08
Des. No: SN-134	Rev. Date:



NOTES:
 1. The manhole construction shall conform to City of Greenfield Standard Detail SN-115-01.
 2. ALTERNATE: Precast Drop Manhole sections may be used in place of the site-built detail shown. Shop Drawings must be submitted and approved.

CITY OF GREENFIELD	
STANDARD DETAIL	
SANITARY SEWER DROP MANHOLE	
Dwn.By: <i>D.Rodgers</i>	Origin Date: 09/16/2008
Des. No: SN-135	Rev. Date:

Laterals that are over 100 feet in length between the main and the house or that have over 6 fittings shall require a Type 2 Cleanout.



CITY OF GREENFIELD

STANDARD DETAIL

CLEAN-OUT TYPE 2

Dwn.By: *D.Rodgers*

Origin Date: 10/31/08

Des. No: SN-136

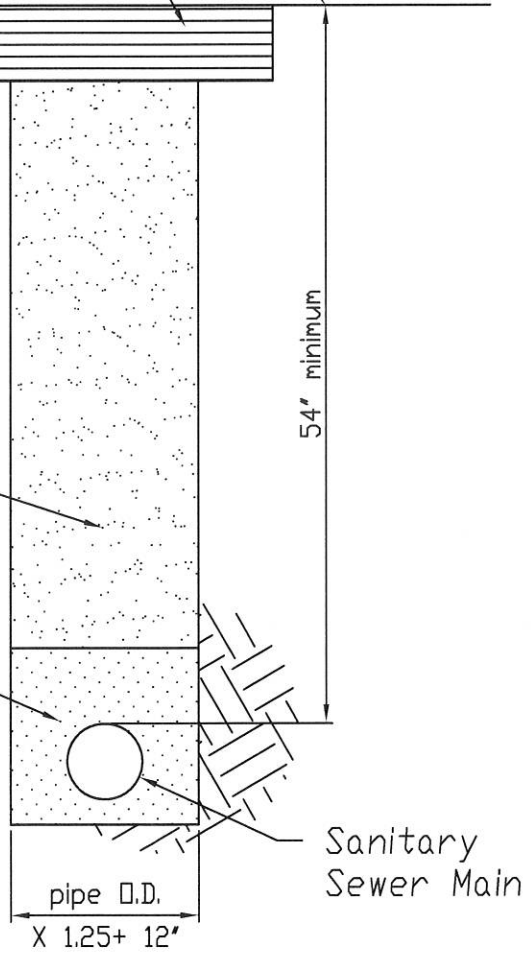
Rev. Date:

finish grade
 pavement repair per
 COG Std. Dtl. R-101-01
 or R-102-01 if applicable

Backfill Material
 install #8 Stone or #24 sand
 within 5 feet of pvmt. edge, back
 of curb, or back of sidewalk.
 Install Clean Fill Material
 outside 5 feet of pvmt. edge, back
 of curb, or back of sidewalk:

Pipe Bedding Material
 #8 Limestone
 depth per table below

Pipe Bedding Table		
Flexible (PVC) Pipe		
Pipe Size, Inches	Depth Below Barrel, Inches	Depth Above Top of Pipe, Inches
6 or less	4	6
8 to 15	4	12
18 and larger	8	12
Semi-Rigid (Ductile Iron) Pipe		
Pipe Size, Inches	Depth Below Barrel, Inches	Depth Above Top of Pipe, Inches
8 to 15	4	6
18 and larger	8	6

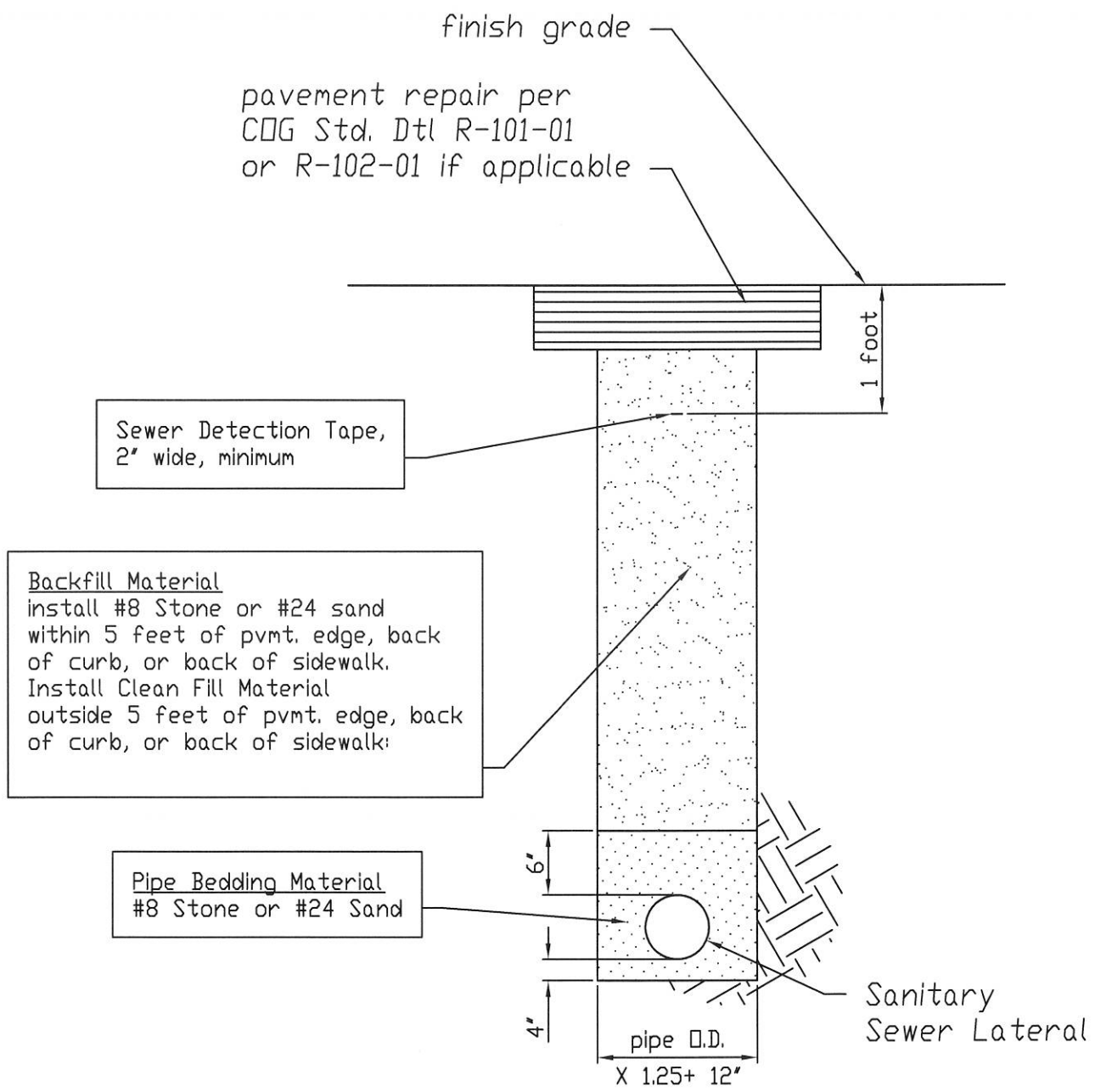


CITY OF GREENFIELD

STANDARD DETAIL

Mainline Sewer Backfill and Bedding

Dwn. By: <i>D. Rodgers</i>	Origin Date: 1/12/2016
Des. No: SN-137	Rev. Date:



CITY OF GREENFIELD

STANDARD DETAIL

Sewer Lateral Backfill and Bedding

Dwn.By: *D.Rodgers*

Origin Date: 1/13/2016

Des. No: SN-138

Rev. Date: