

City of Alpena

Plans for proposed

2017 Resurfacing Project

| Utilities | |
|--|-----------------------------|
| Name of Contact | Type of Utility |
| United Water 210 Harbor Drive Alpena, MI 49707 Attn: Mike Glowinski (989) 354-1400 | City Water & Sewer |
| Thunder Bay Electric 1693 M-32 West Alpena, MI 49707 Attn: Tim Madrzynski (989) 354-2840 | City Lighting & Fiber Optic |
| DTE Energy (Michcon) 1111 US-23 North Alpena, MI 49707 Attn: Tom Hext (989) 354-2797 | Natural Gas |
| Frontier Communications 3840 US 23 North Alpena, MI 49707 Attn: Dave Vance (989) 356-8281 | Telephone |
| Alpena Power Company 310 N. Second Av Alpena, MI 49707 Attn: Gary Graham (989) 358-4951 (Direct) | Electricity |
| Charter Communications 345 S. State St. P.O. Box 339 Oscoda, MI 48750 Attn: Ted Matthews (989) 739-1483 x:13508 | Cable |
| Alpena Township 4385 US-23 North Alpena, MI 49707 Attn: Jerry Bleau (989) 356-0297 | Township Water and Sewer |

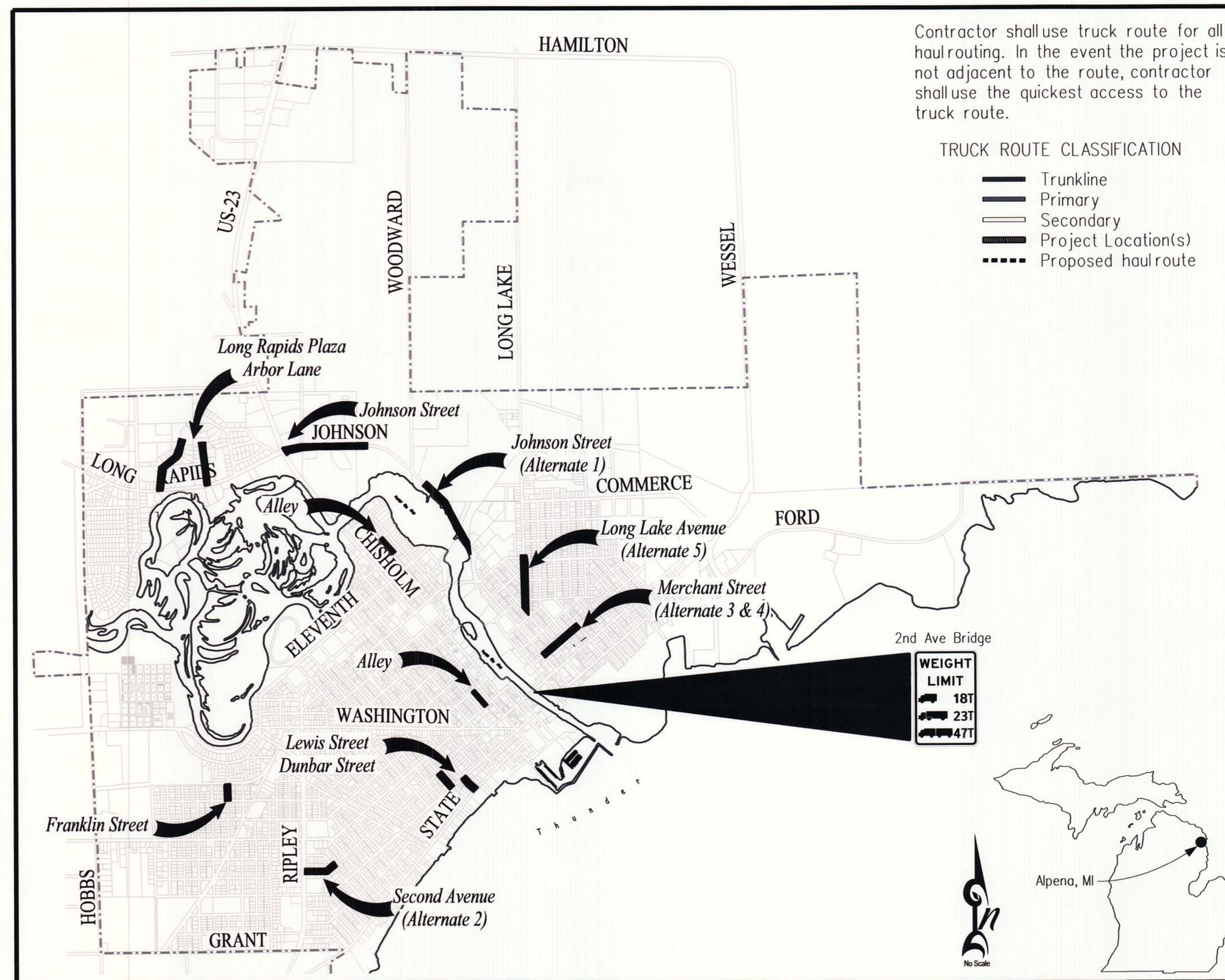
Alley Resurfacing
Between Lockwood and Chisholm - from Third to Fourth
Between Chisholm and River - from Twelfth to Thirteenth

Cold Milling
Johnson Street - from Chisholm (US 23) to College
Johnson Street - from Woodward to Miller (Alternate 1)
Second Avenue - from Ripley to Bingham (Alternate 2)
Dunbar Street - from First to State
Long Lake Avenue - from Miller to Walnut (Alternate 5)

Thin Overlay
Arbor Lane - from Long Rapids to end
Long Rapids Plaza - from Long Rapids to end

Crushing and Shaping
Lewis Street - from First to Second
Franklin Street - from Ontario to Fifth
Merchant Street - from Oldfield to Miller
Merchant Street - from Miller to Lake (Alternate 3)
Merchant Street - from Lake to Clark (Alternate 4)

| | Sheet Numbers |
|----------------------|---------------|
| Title | 1 |
| Cold Milling | 2 |
| Crushing and Shaping | 3 |
| High Use Alley | 4 |
| Thin Overlay | 5 |
| Cold Milling - Alt 5 | 6 |
| Project Quantities | 7 |



Contractor shall use truck route for all haul routing. In the event the project is not adjacent to the route, contractor shall use the quickest access to the truck route.

TRUCK ROUTE CLASSIFICATION

- Trunkline
- Primary
- Secondary
- Project Location(s)
- Proposed haul route

Project Notes :

Designed in accordance with 2011 AASHTO "A Policy on Geometric Design of Highways and Streets"

All signage shall be in accordance with the 2011 Michigan Manual of Uniform Traffic Control Devices.

The improvements covered by these plans shall be done in accordance with the MDOT 2012 Standard Specifications for Construction except as modified by the supplemental specifications and special provisions included in the contract documents.

The contractor shall protect any and all street sections that are not part of this contract. The contractor shall, at his own expense, repair or replace any such damage in accordance with the MDOT 2012 Standard Specifications for Construction, and to the satisfaction of the engineer.

It shall be the responsibility of the Contractor to apply for, and the City of Alpena shall issue no cost permits required under the soil erosion and sedimentation control act (public act 347) for work conducted within the city limits. Contractor shall be responsible for obtaining other legally mandated permits for off-site disposal of spoils generated by his work.

Underground utility locations as shown on plans were obtained from utility owners records and were NOT field located. The City cannot guarantee the accuracy or completeness of the buried utility information shown in these plans. It shall be the Contractor's responsibility to contact Miss Dig (1-800-482-7171) in accordance with the MISS DIG System requirements to verify the location of all existing utilities, and pay for any and all costs or charges associated with the utility marking.

All utilities shown in these plans are a representation of their approximate location and depth(s). Actual field locations may vary and the contractor shall verify locations by contacting the appropriate utility owner. The absence of utilities shown hereon does not ensure that no utilities exist. The Contractor shall contact MISSDIG not less than 72 hours before any excavation.



Contract for: Cold Milling, Crushing and Shaping, HMA Surface and Thin Overlay

Prepared by:
City of Alpena Engineering Department
208 North First Avenue
Alpena, MI 49707

Prepared under the supervision of:

Richard O. Sullenger, P.E., City Engineer
Registration No. 34953



City of Alpena final plan approval:

Greg E. Sundin, City Manager
Date: 2-27-17

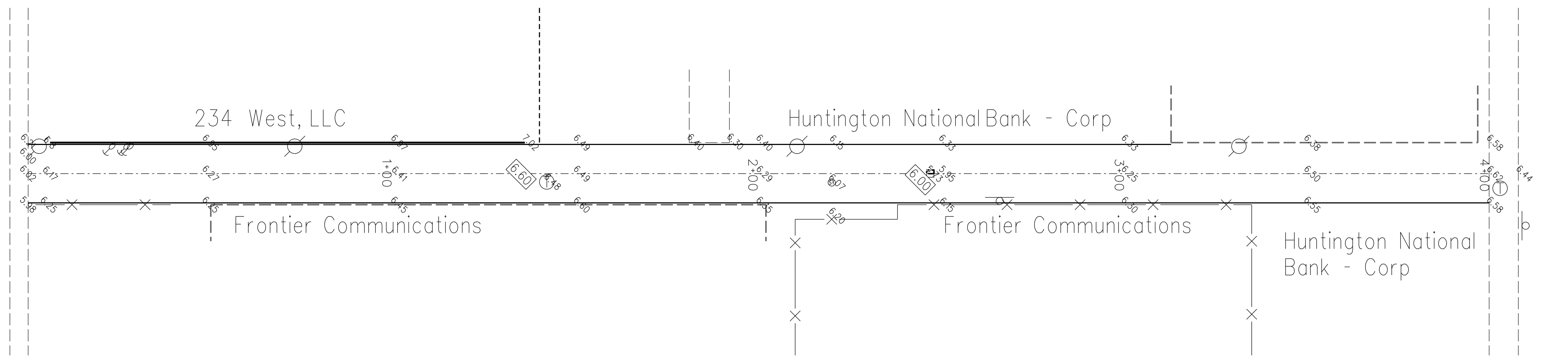
8 FILES

2017 Resurfacing Project

GM ELEVATION
Northwest Corner of Box Curb
behind WMCR building: 107.00

Fourth Avenue (66')

Third Avenue (66')



Alley - 3rd Ave to 4th Ave
Between Lockwood and Chisholm

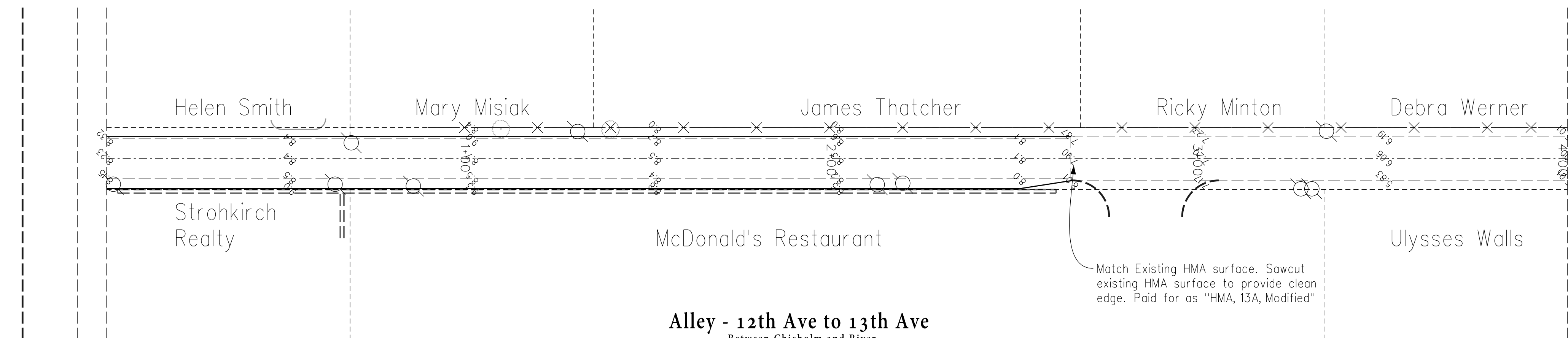
Alley between 4th and 3rd
100 Cyd - Excavation, Earth, LM, Modified
200 Ton - Aggregate Base, 22A, Modified
450 Syd - HMA Base Crushing
and Shaping, Modified
1LS - Staking, Shaping, and Grading
120 Ton - HMA, 13A, Modified
4 Ea - Dr Structure Cover, Adj, Case 1
1LS - Traffic Control

| Final Plans | Revision | Date | By | Check |
|-------------|----------|------------|-----|-------|
| | 1 | 02/24/2017 | ROS | ROS |
| | 2 | | ROS | ROS |
| | 3 | | ROS | ROS |
| | 4 | | ROS | ROS |

GM ELEVATION
Northwest Edge of Sidewalk
at alley and Twelfth Av: 105.00

Thirteenth Avenue (66')

Twelfth Avenue (66')



Alley - 12th Ave to 13th Ave
Between Chisholm and River

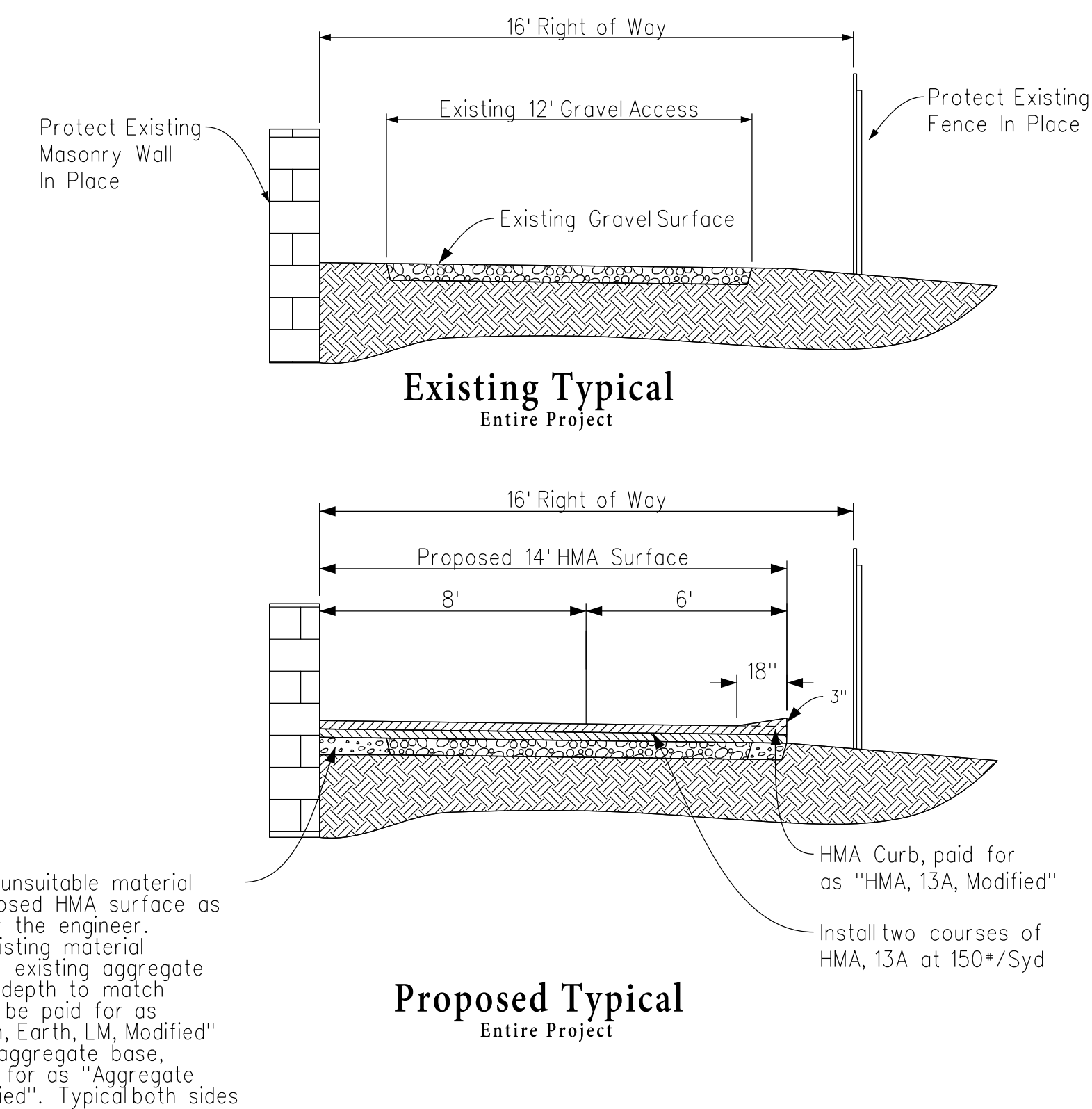
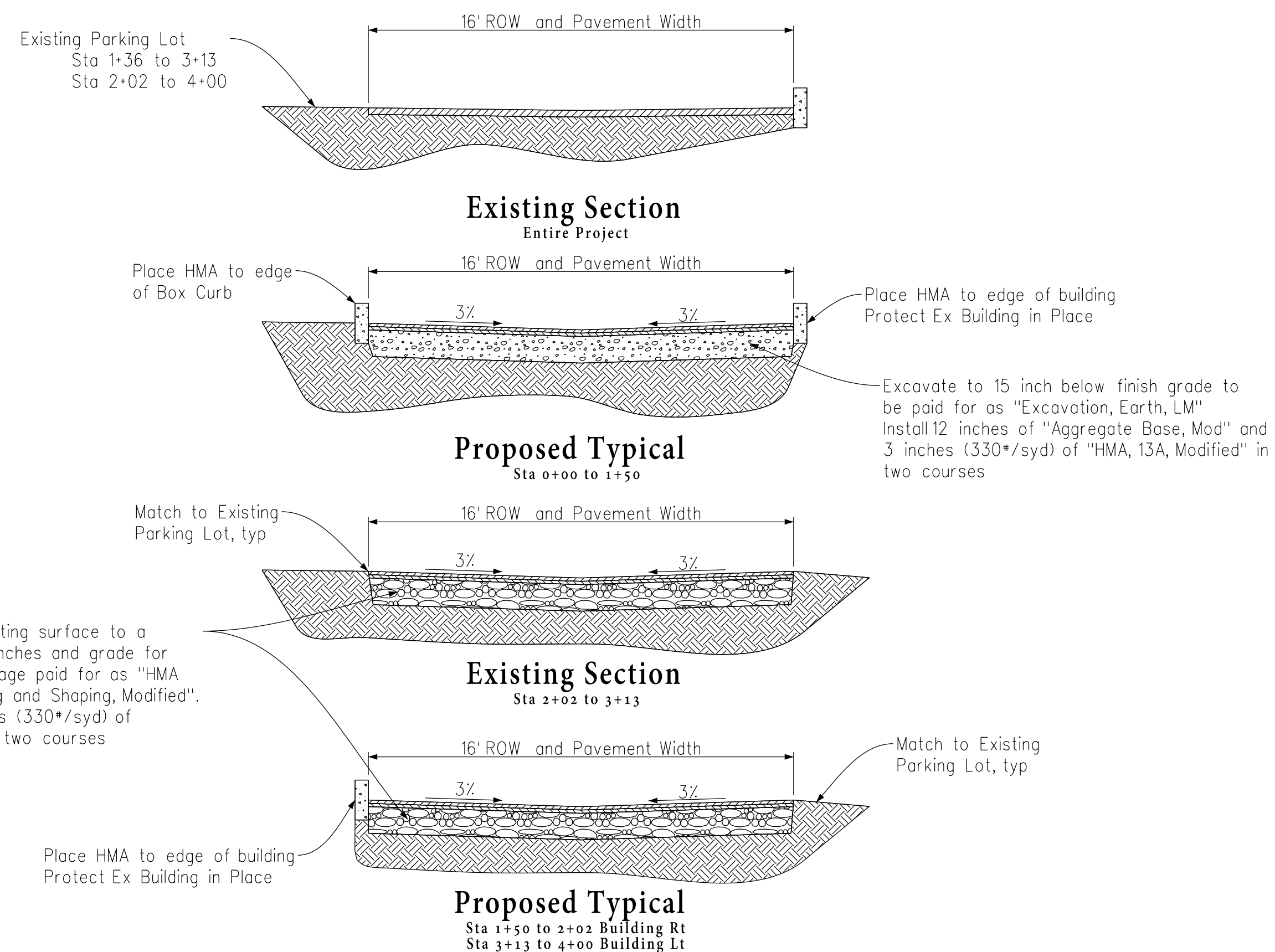
Alley between 13th and 12th
10 Cyd - Excavation, Earth, LM, Modified
2,64 Sta - Machine Grading
1LS - Staking, Shaping, and Grading
50 Ton - Aggregate Base, 22A, Modified
85 Ton - HMA, 13A, Modified
1LS - Traffic Control

Location: As Noted

Page: High Use Alley Plan and Typical

Alley - 3rd Ave to 4th Ave
Between Lockwood and Chisholm

Alley - 12th Ave to 13th Ave
Between Chisholm and River



Project: 2017 Resurfacing Projects

Alpena City Hall
208 North First Avenue
Alpena, MI 49707
Ph: 989-354-1730
Fax: 989-354-1709

City of Alpena MICHIGAN
Engineering

Street Code/Location

Scale:
Horizontal: none
Vertical: none

Sheet No. 2 OF 7

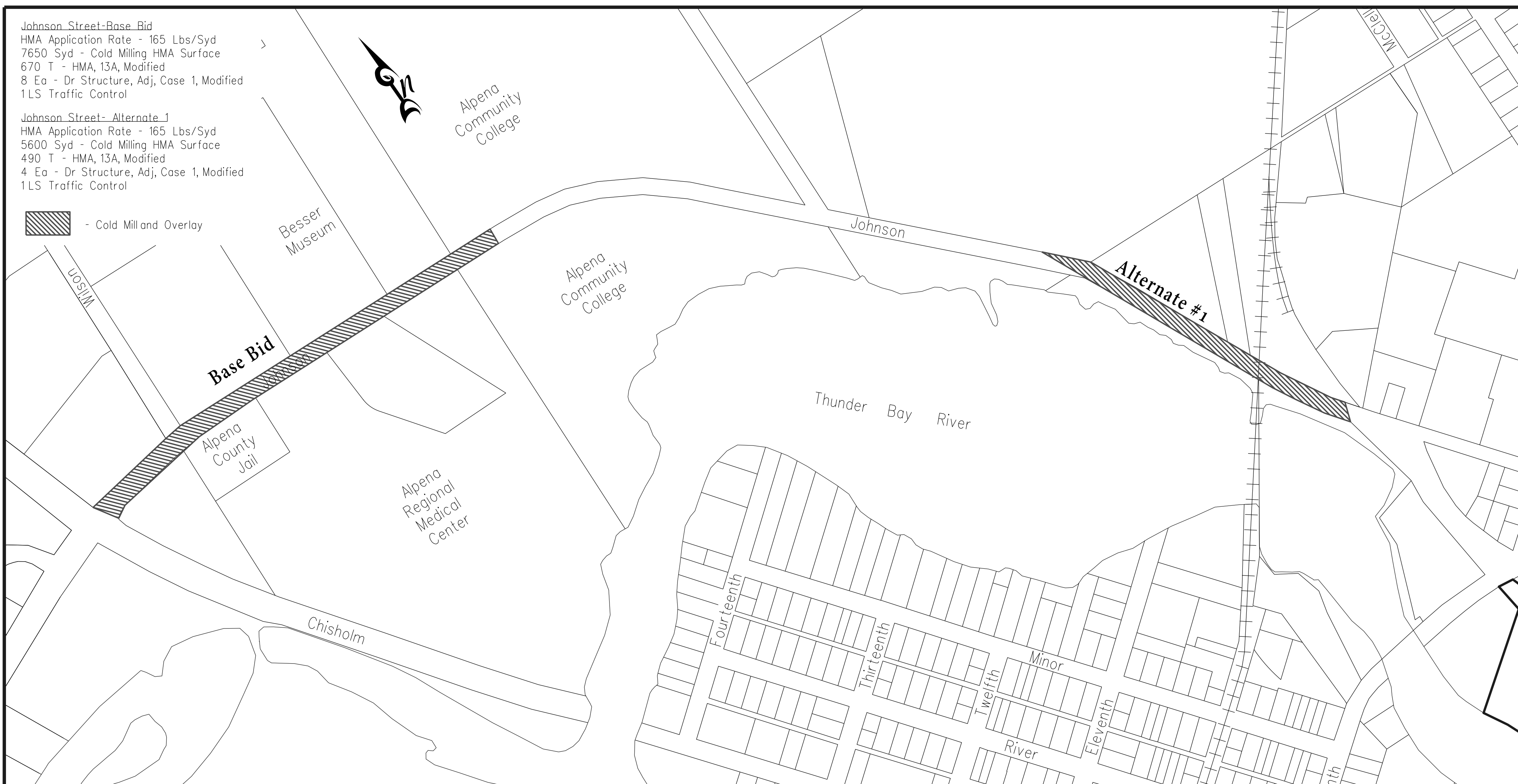


2017 Resurfacing - High Use Alley

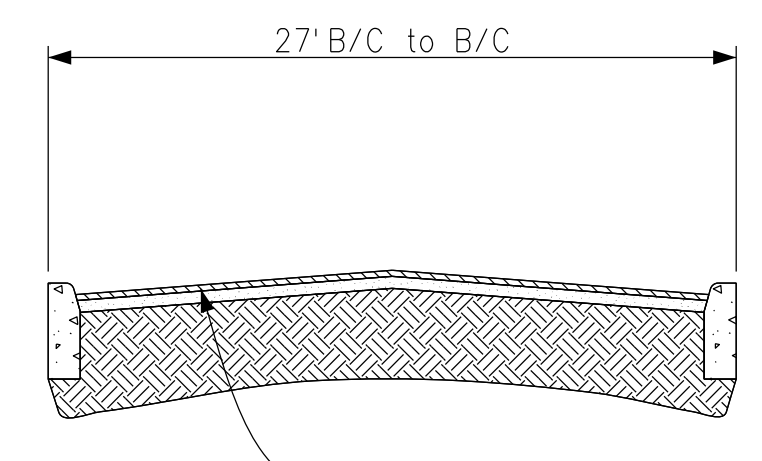
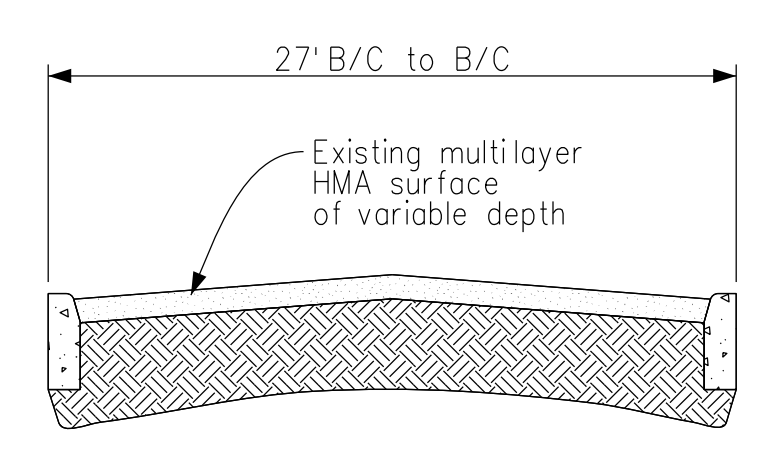
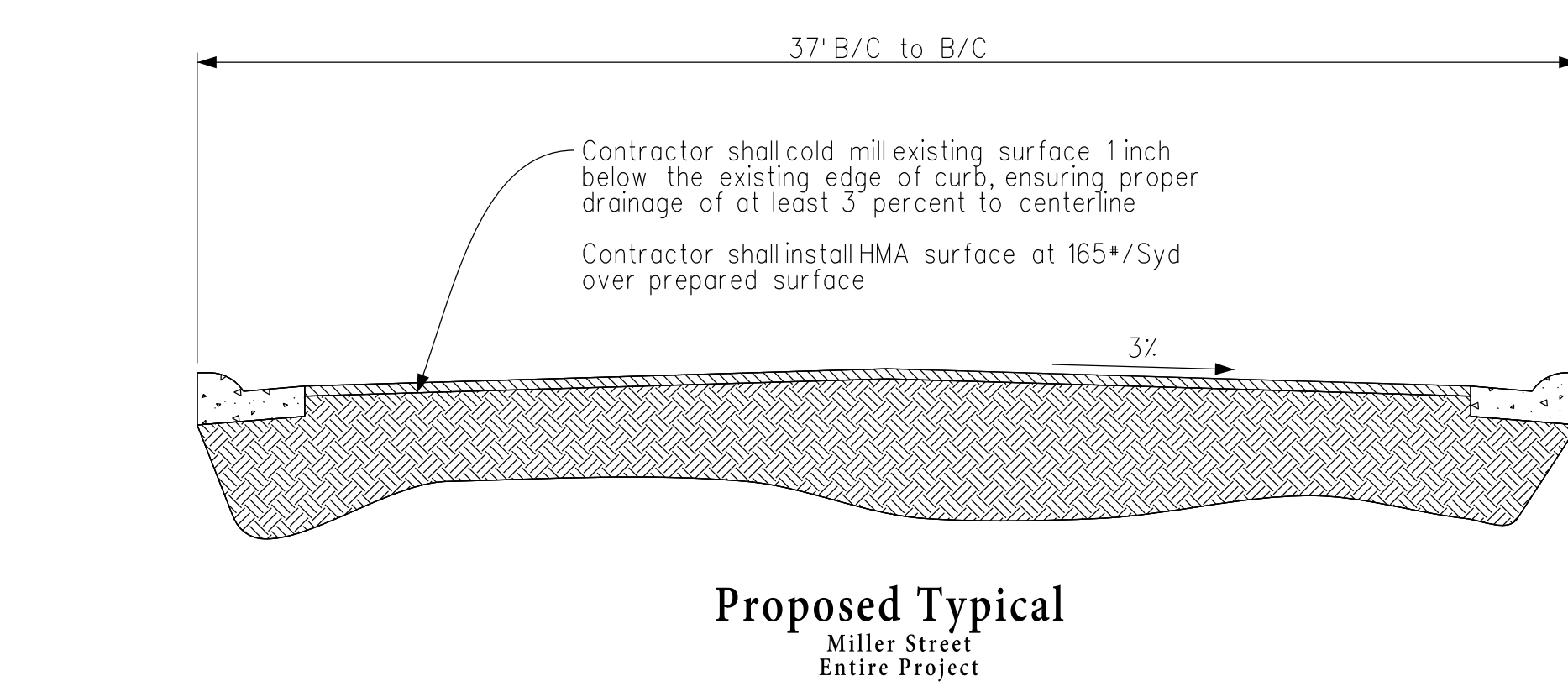
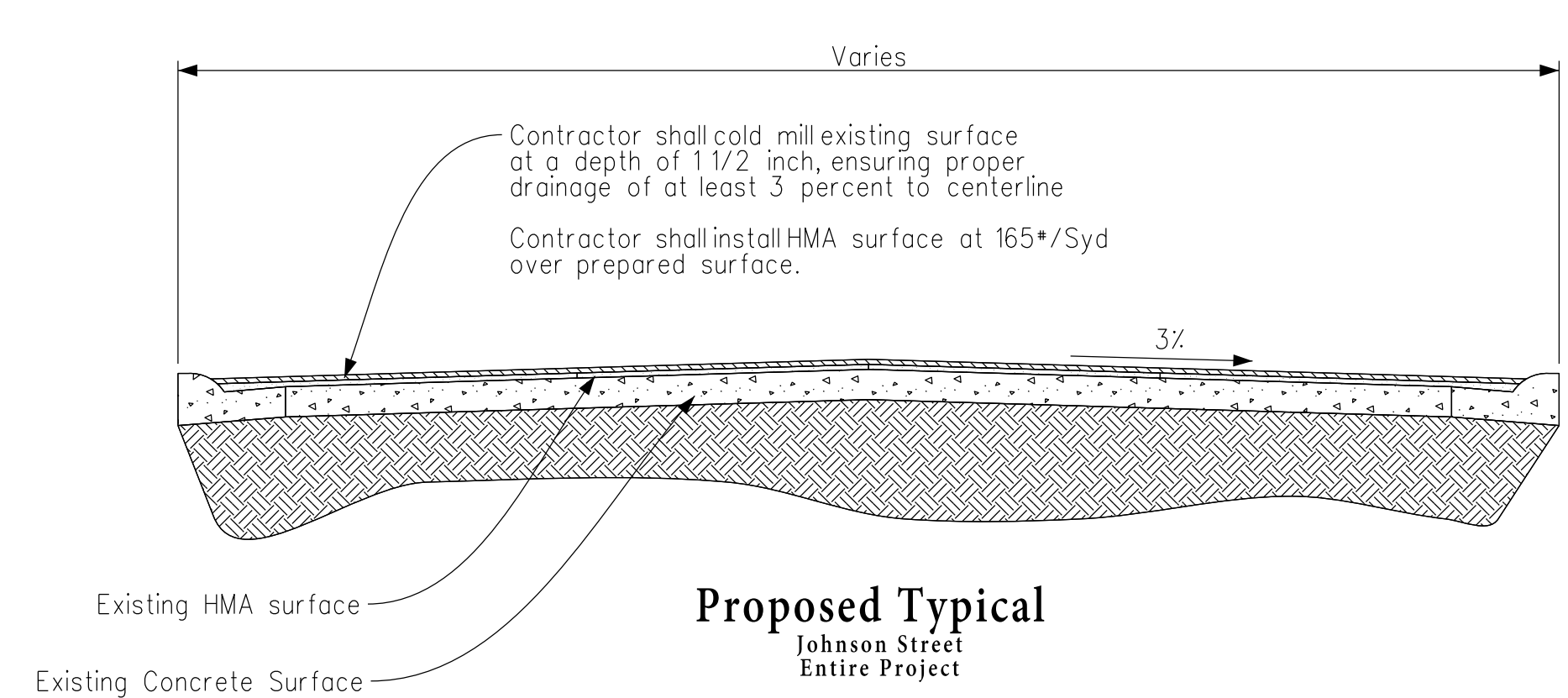
Johnson Street-Base Bid
 HMA Application Rate - 165 Lbs/Syd
 7650 Syd - Cold Milling HMA Surface
 670 T - HMA, 13A, Modified
 8 Ea - Dr Structure, Adj, Case 1, Modified
 1LS Traffic Control

Johnson Street- Alternate 1
 HMA Application Rate - 165 Lbs/Syd
 5600 Syd - Cold Milling HMA Surface
 490 T - HMA, 13A, Modified
 4 Ea - Dr Structure, Adj, Case 1, Modified
 1LS Traffic Control

- Cold Mill and Overlay



| | | | | | |
|---|---------------|-----------------|---------------------|-----------------------|--------------|
| Final Plans | Revision | Initial Review | Departmental Review | Issued for Permitting | Final Review |
| 1 | 1 | 2 | 3 | 4 | |
| AL | AL | AL | AL | AL | AL |
| 02/24/2017 | | | | | |
| Design By: ROS | Drawn By: sjs | Checked By: ROS | Printed: SUBENAMES | Date: sDATES | Time: sTIMES |
| As Shown | | | | | |
| Cold Milling and Overlay Plan and Typical | | | | | |
| 2017 Resurfacing Project | | | | | |
| Alpena City Hall 208 North First Avenue Alpena, MI 49707 Ph: 989-354-1730 Fax: 989-354-1709 | | | | | |
| | | | | | |
| Street Code/Location Scale: Horizontal: none Vertical: none Sheet No. | | | | | |
| 3 OF 7 | | | | | |



Dunbar Street
 HMA Application Rate - 165 Lbs/Syd
 1150 Syd - Cold Milling HMA Surface
 125 T - HMA, 13A, Modified
 1 Ea - Dr Structure, Adj, Case 1, Modified
 1LS Traffic Control

Second Avenue - Alternate 2
 HMA Application Rate - 165 Lbs/Syd
 50 Ft - Curb and Gutter, Rem
 50 Ft - Curb and Gutter, Conc, Det C4
 2628 Syd - Cold Milling HMA Surface
 225 T - HMA, 13A, Modified
 8 Ea - Dr Structure, Adj, Case 1, Modified
 1LS Traffic Control

- Cold Mill and Overlay

2017 Resurfacing - Cold Milling and Overlay

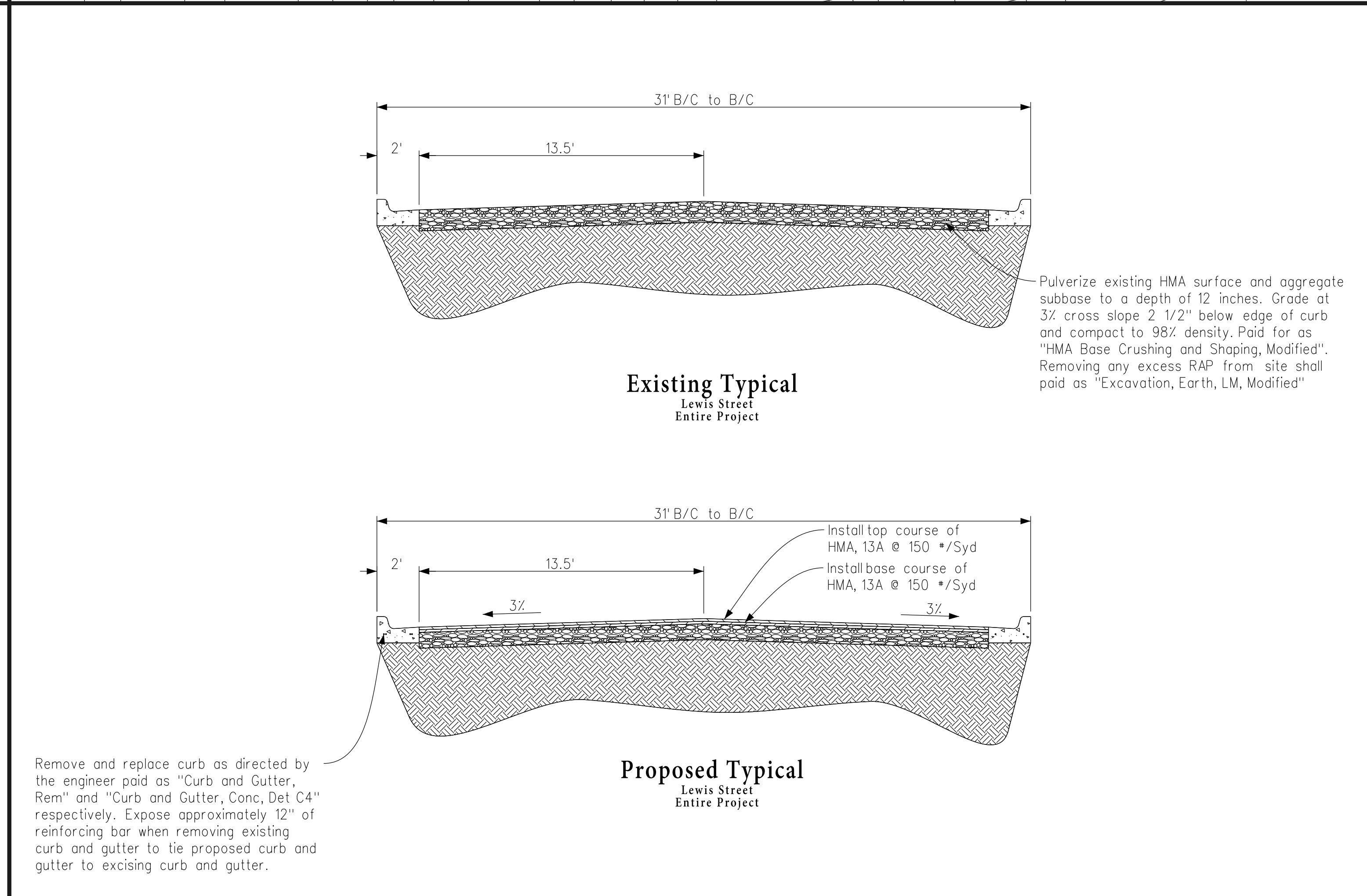
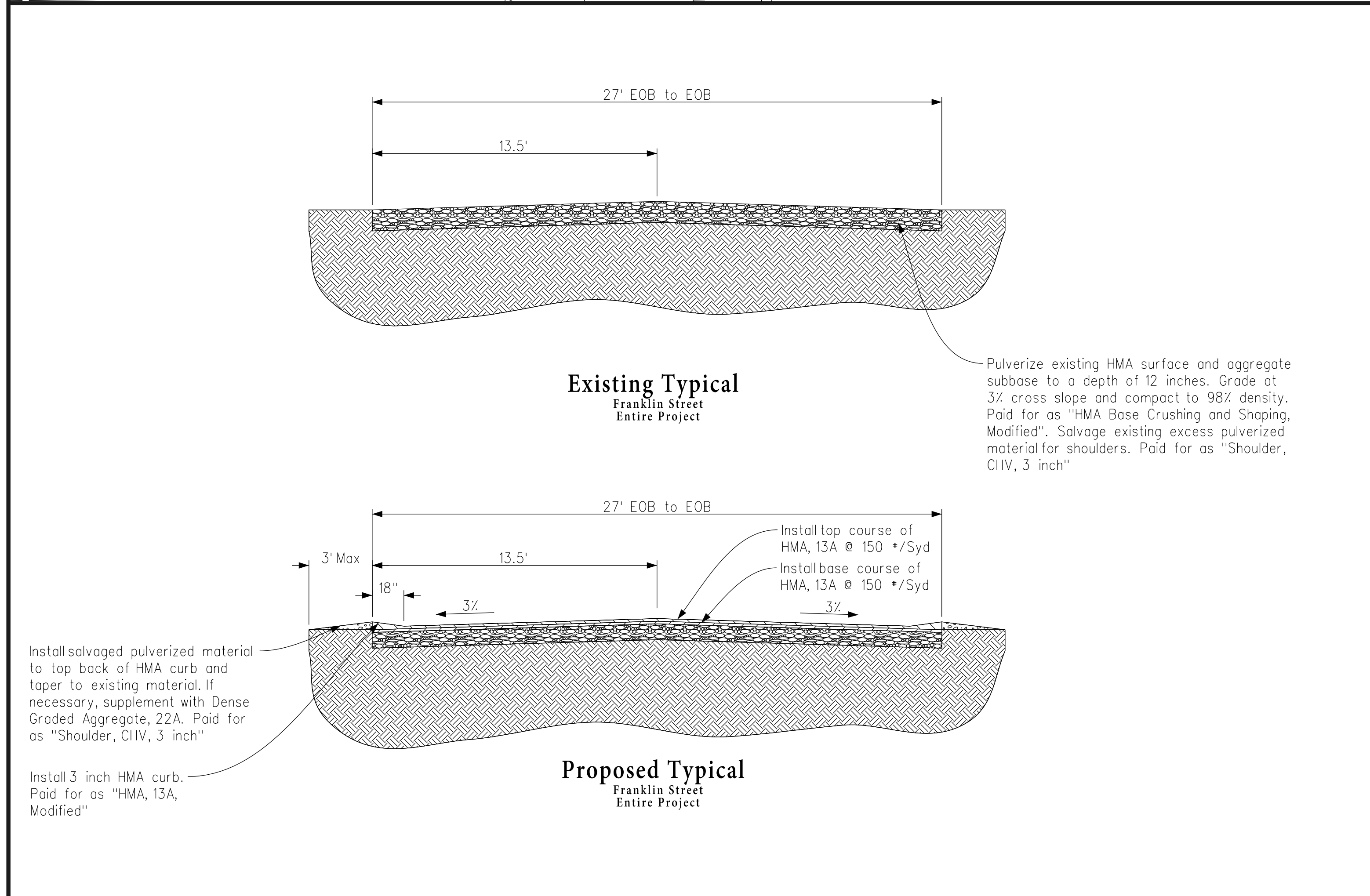


| Final Plans | Revision | Date | By | Check |
|-------------|----------|------------|-----|-------|
| | 1 | | ROS | ROS |
| | 2 | | ROS | ROS |
| | 3 | | ROS | ROS |
| | 4 | 02/24/2017 | ROS | ROS |

Design By: sjs
 Drawn By: sjs
 Checked By: ROS
 Printed: SUBERNAMES
 Date: sDATEs
 Time: sTIMES

As Shown

Crushing & Shaping Plan and Typical



2017 Resurfacing Project

Alpena City Hall
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City of Alpena MICHIGAN Engineering

Street Code/Location

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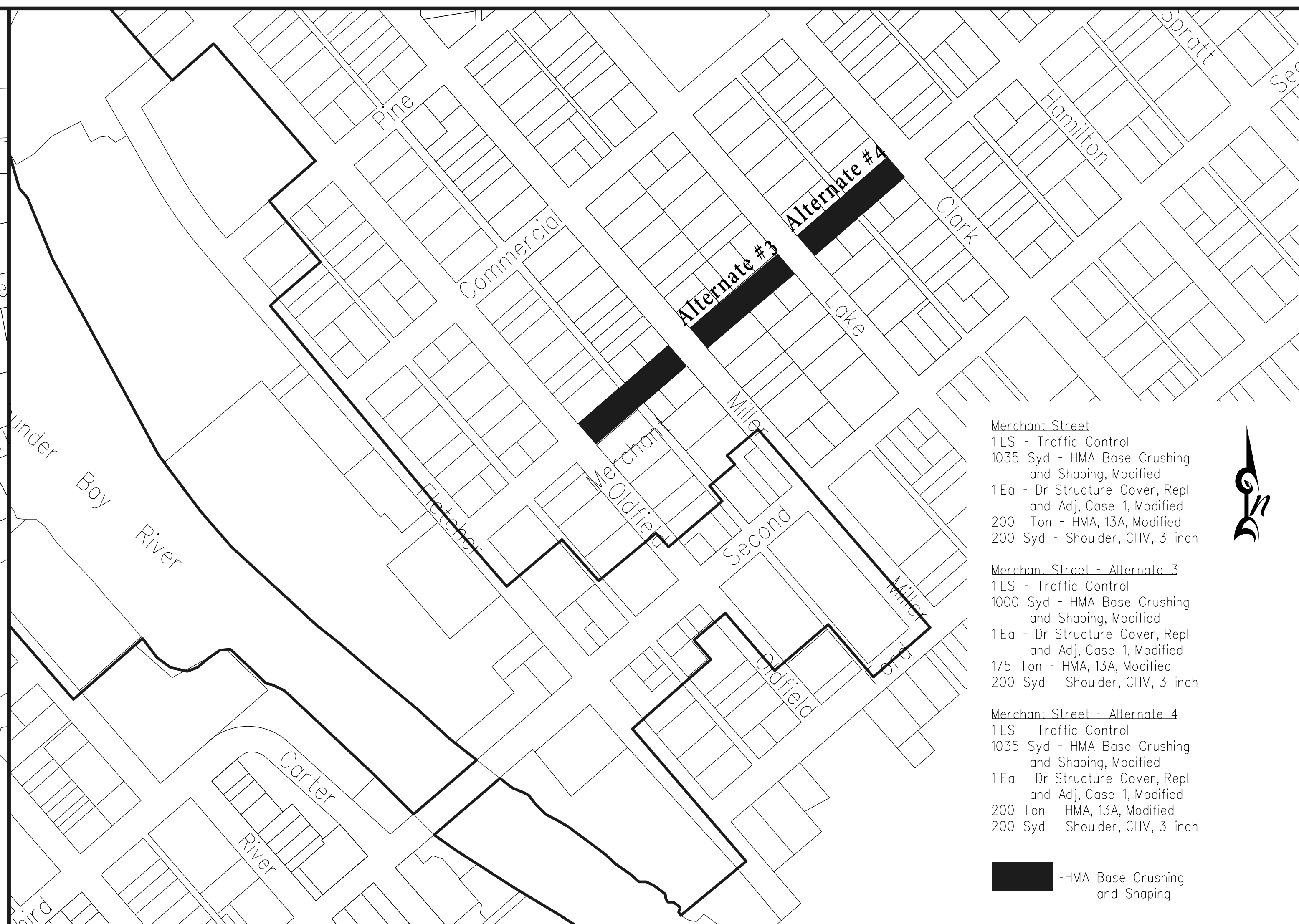
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2017 Resurfacing - Crushing and Shaping

Long Rapids Plaza
 HMA Application Rate - 165 Lbs/Syd
 350 T - HMA, 13A, Modified
 50 T - HMA, 13A, Modified, Wedge Patching
 3 Ea - Riser, Dr Structure, Install
 1 Ea - Riser, Water Valve, Install
 1LS - Street Cleaning
 1LS - Traffic Control
 920 Syd - Shoulder, CIII, 3 inch

Arbor Lane
 HMA Application Rate - 165 Lbs/Syd
 275 T - HMA, 13A, Modified
 1LS - Street Cleaning
 1LS - Traffic Control
 220 Syd - Shoulder, CIII, 3 inch

Thin Overlay



Merchant Street
 1LS - Traffic Control
 1035 Syd - HMA Base Crushing and Shaping, Modified
 1 Ea - Dr Structure Cover, Repl and Adj, Case 1, Modified
 200 Ton - HMA, 13A, Modified
 200 Syd - Shoulder, CIII, 3 inch

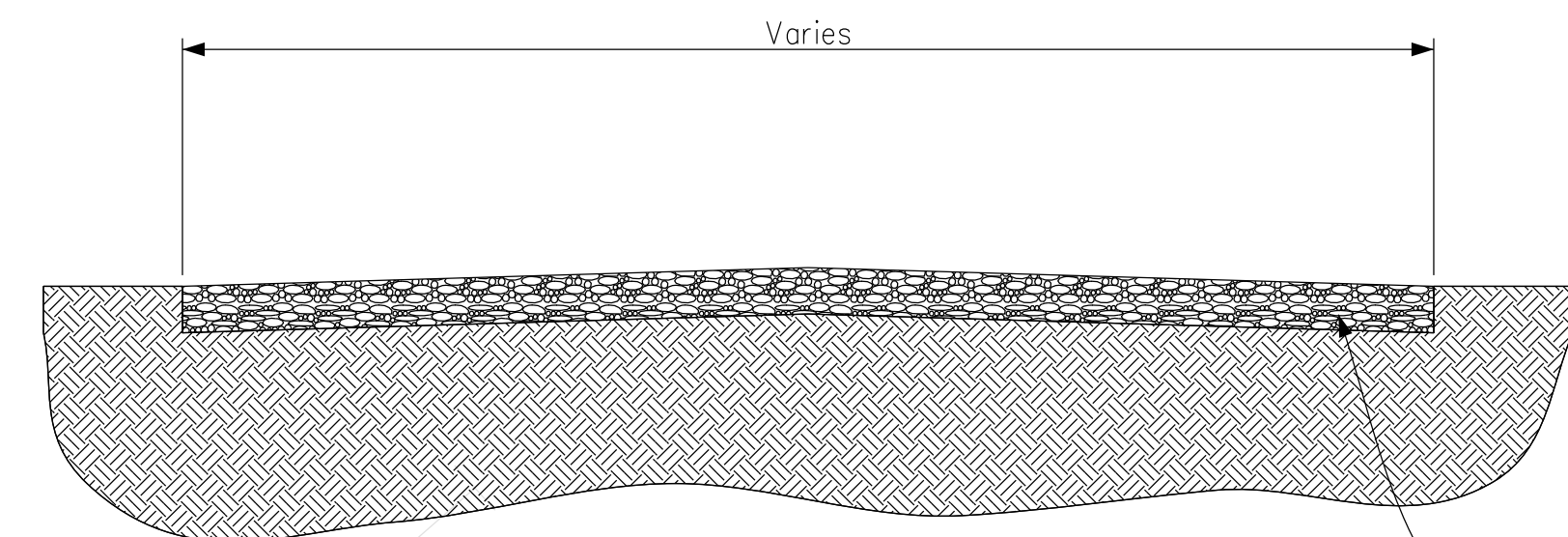
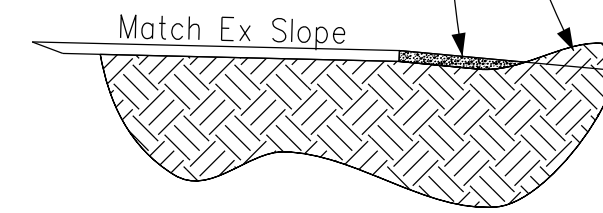
Merchant Street - Alternate 3
 1LS - Traffic Control
 1000 Syd - HMA Base Crushing and Shaping, Modified
 1 Ea - Dr Structure Cover, Repl and Adj, Case 1, Modified
 175 Ton - HMA, 13A, Modified
 200 Syd - Shoulder, CIII, 3 inch

Merchant Street - Alternate 4
 1LS - Traffic Control
 1035 Syd - HMA Base Crushing and Shaping, Modified
 1 Ea - Dr Structure Cover, Repl and Adj, Case 1, Modified
 200 Ton - HMA, 13A, Modified
 200 Syd - Shoulder, CIII, 3 inch

HMA Base Crushing and Shaping

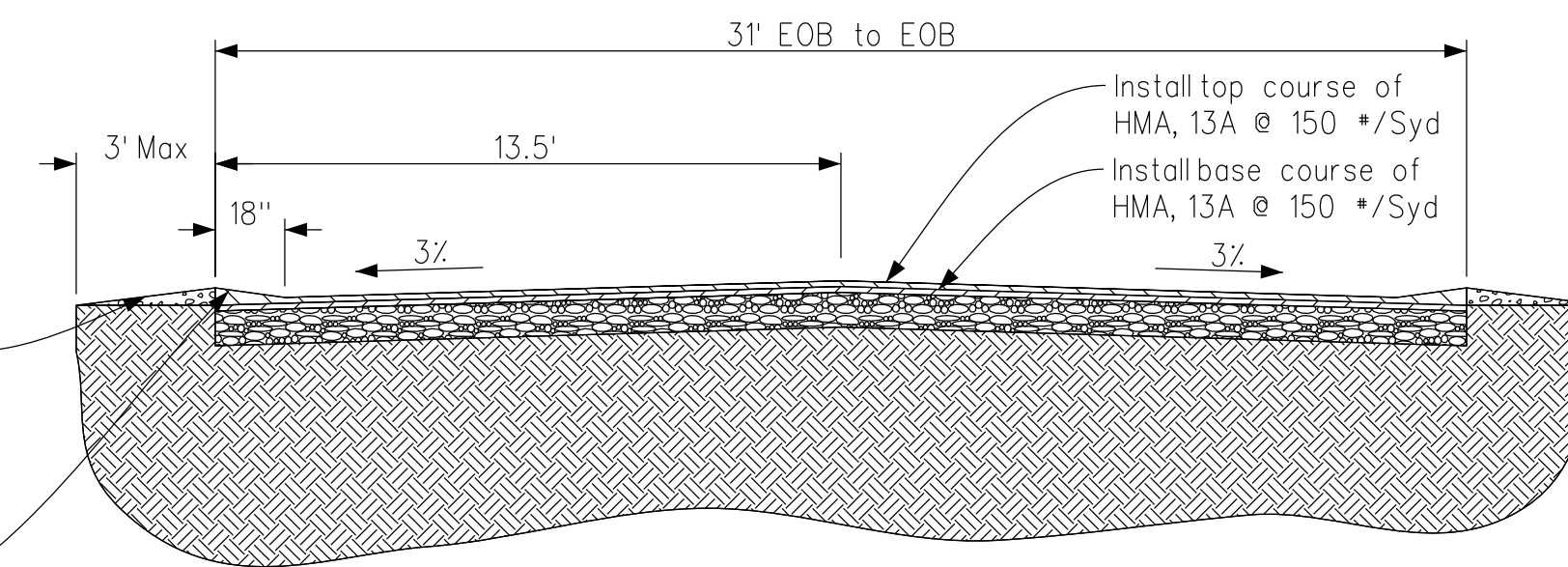


Pull existing material to edge of HMA overlay and taper slope to provide positive drainage. Supplement with additional shoulder gravel as needed. Included in the Item "Shoulder, Class III"



Existing Typical
 Merchant Street
 Entire Project

Pulverize existing HMA surface and aggregate subbase to a depth of 12 inches. Grade at 3% cross slope and compact to 98% density. Paid for as "HMA Base Crushing and Shaping, Modified". Salvage existing excess pulverized material for shoulders. Paid for as "Shoulder, CIII, 3 inch"



Proposed Typical
 Merchant Street
 Entire Project

Install salvaged pulverized material to top back of HMA curb and taper to existing material. If necessary, supplement with Dense Graded Aggregate, 22A. Paid for as "Shoulder, CIII, 3 inch"

Install 3 inch HMA curb. Paid for as "HMA, 13A, Modified"

| | | | | | | | |
|-------------|----------|------------|-----|----------|------------|------|------|
| Final Plans | Revision | Date | By | Check By | Printed By | Date | Time |
| | 1 | | ROS | ROS | SUBENAMES | | |
| | 2 | | ROS | ROS | sDATES | | |
| | 3 | | ROS | ROS | sTIMES | | |
| | 4 | 02/24/2017 | | | | | |

Location: **As Shown**

Page: **Thin Overlay**
Crushing & Shaping
Plan and Typical

Project: **2017 Resurfacing Project**

Alpena City Hall
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 Alpena, MI 49707
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City of Alpena MICHIGAN
Alpena Engineering

Street Code/Location

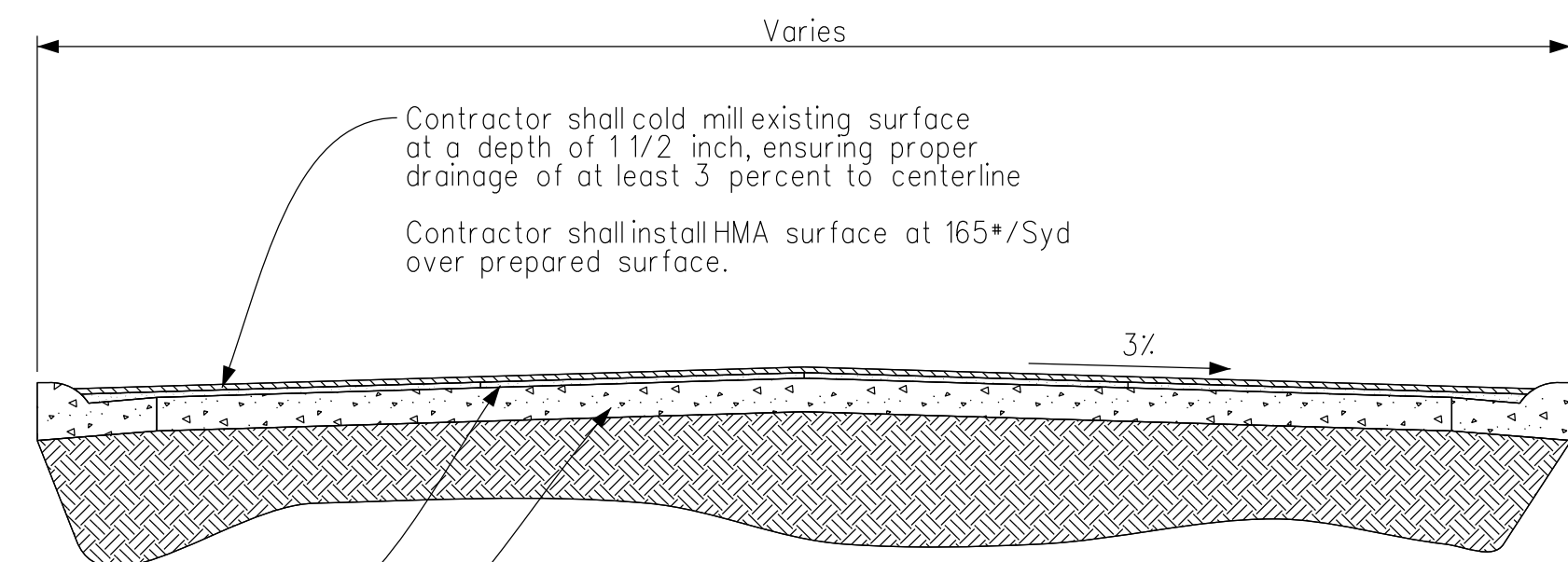
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2017 Resurfacing - Thin Overlay/Crushing & Shaping

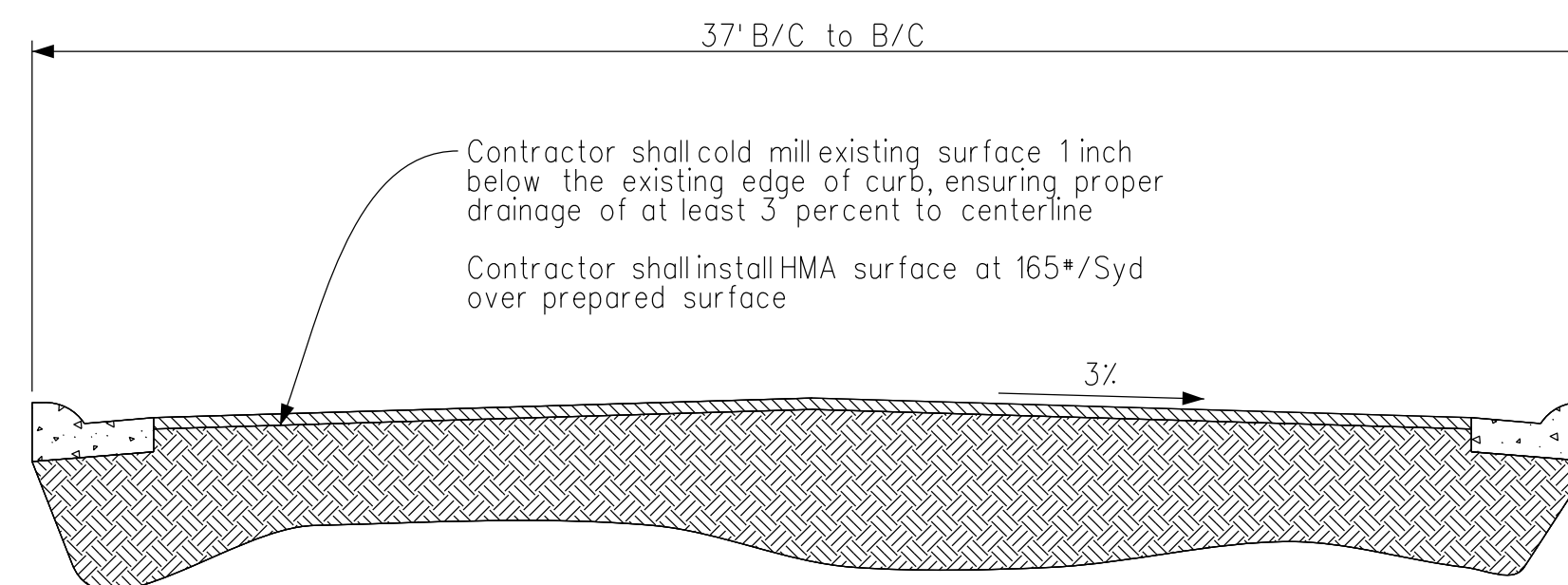
Long Lake Avenue - Alternate 5
 HMA Application Rate - 165 Lbs/Syd
 3820 Syd - Cold Milling HMA Surface
 325 T - HMA, 13A, Modified
 15 Ea - Dr Structure, Adj, Case 1, Modified
 2 Ea - Water Shutoff, Adj, Case 1
 1LS Traffic Control

 - Cold Mill and Overlay



Proposed Typical
 Johnson Street
 Entire Project

Existing HMA surface
 Existing Concrete Surface



Proposed Typical
 Miller Street
 Entire Project

| | | | | | | | | | |
|---|--|---|--|---|--|---|--|---|--|
| Design By: ROS Drawn By: s l s Checked By: ROS Printed: sUSERNAMES Date: sDATES Time: sTIMES | | #/777 ROS ROS ROS ROS | | #/777 ROS ROS ROS ROS | | #/777 ROS ROS ROS ROS | | #/777 ROS ROS ROS ROS | |
| Final Plans Revision Initial Review Departmental Review Issued for Permitting Final Review | | #/777 ROS ROS ROS ROS | | #/777 ROS ROS ROS ROS | | #/777 ROS ROS ROS ROS | | #/777 ROS ROS ROS ROS | |
| Location: Cold Milling and Overlay Plan and Typical | | Location: As Shown | | Location: As Shown | | Location: As Shown | | Location: As Shown | |
| Project: 2017 Resurfacing Project | | Project: 2017 Resurfacing Project | | Project: 2017 Resurfacing Project | | Project: 2017 Resurfacing Project | | Project: 2017 Resurfacing Project | |
| City of Alpena MICHIGAN Engineering | | Alpena City Hall 208 North First Avenue Alpena, MI 49707 Ph: 989-354-1730 Fax: 989-354-1709 | | Alpena City Hall 208 North First Avenue Alpena, MI 49707 Ph: 989-354-1730 Fax: 989-354-1709 | | Alpena City Hall 208 North First Avenue Alpena, MI 49707 Ph: 989-354-1730 Fax: 989-354-1709 | | Alpena City Hall 208 North First Avenue Alpena, MI 49707 Ph: 989-354-1730 Fax: 989-354-1709 | |
| Street Code/Location | | Street Code/Location | | Street Code/Location | | Street Code/Location | | Street Code/Location | |
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| 6 OF 7 | | 6 OF 7 | | 6 OF 7 | | 6 OF 7 | | 6 OF 7 | |

2017 Resurfacing - Cold Milling and Overlay - Long Lake Ave

| Pay Item | Description | Units | 01 Johnson Street | 02 Johnson Street | 03 Second Avenue | 04 Dunbar Street | 05 McDonalds Alley | 06 Alley | 07 Lewis Street | 08 Franklin Street |
|----------|---|-------|-------------------|-------------------|------------------|------------------|--------------------|----------|-----------------|--------------------|
| 1500001 | Mobilization, Max | LSUM | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2040020 | Curb and Gutter, Rem | Ft | | | 50 | | | | 200 | |
| 2050030 | Machine Grading | Sta | | | | | 2.64 | | | |
| 2057021 | Excavation, Earth, LM, Modified | Cyd | | | | | 10 | 100 | 10 | |
| 2090001 | Project Cleanup | LSUM | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3027031 | Aggregate Base, 22A, Modified | Ton | | | | | 50 | 200 | | |
| 3057011 | HMA Base Crushing and Shaping, Modified | Syd | | | | | | 450 | 1260 | 1200 |
| 3070145 | Shoulder, CI III, 3 inch | Syd | | | | | | | | 230 |
| 3077011 | Shoulder, CI IV, 3 inch, Modified | Syd | | | | | | | | 230 |
| 4030004 | Dr Structure Cover, Adj, Case 1, Modified | Ea | 8 | 4 | 8 | 1 | | 4 | 1 | 1 |
| 5010002 | Cold Milling HMA Surface | Syd | 7650 | 5600 | 2628 | 1150 | | | | |
| 5017031 | HMA, 13A, Modified | Ton | 670 | 490 | 225 | 125 | 85 | 120 | 210 | 200 |
| 5017031 | HMA, 13A, Modified, Wedge Patching | Ton | | | | | | | | |
| 5017051 | Street Cleaning | LSUM | | | | | | | | |
| 8020023 | Curb and Gutter, Conc, Det C4 | Ft | | | 50 | | | | 200 | |
| 8127051 | Traffic Control | LSUM | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8207050 | Riser, Dr Structure, Install | Ea | | | | | | | | |
| 8207050 | Riser, Water Valve, Install | Ea | | | | | | | | |
| 8230421 | Water Shutoff, adj, Case 1 | Ea | | | | | | | | |
| 8247051 | Staking, Shaping, and Grading | LSUM | | | | | 1 | 1 | | |

| Pay Item | Description | Units | 09 Long Rapids Plaza | 10 Arbor Lane | 11 Merchant Street | 12 Merchant Street | 13 Merchant Street | 14 Long Lake Avenue | Project Total |
|----------|---|-------|----------------------|---------------|--------------------|--------------------|--------------------|---------------------|---------------|
| 1500001 | Mobilization, Max | LSUM | 1 | 1 | 1 | 1 | 1 | 1 | 14 |
| 2040020 | Curb and Gutter, Rem | Ft | | | | | | | 250 |
| 2050030 | Machine Grading | Sta | | | | | | | 2.64 |
| 2057021 | Excavation, Earth, LM, Modified | Cyd | | | | | | | 120 |
| 2090001 | Project Cleanup | LSUM | | | 1 | 1 | 1 | 1 | 12 |
| 3027031 | Aggregate Base, 22A, Modified | Ton | | | | | | | 250 |
| 3057011 | HMA Base Crushing and Shaping, Modified | Syd | | | 1035 | 1000 | 1035 | | 5980 |
| 3070145 | Shoulder, CI III, 3 inch | Syd | 920 | 220 | | | | | 1370 |
| 3077011 | Shoulder, CI IV, 3 inch, Modified | Syd | | | 200 | 200 | 200 | | 830 |
| 4030004 | Dr Structure Cover, Adj, Case 1, Modified | Ea | | | 1 | 2 | | 15 | 45 |
| 5010002 | Cold Milling HMA Surface | Syd | | | | | | 3820 | 20848 |
| 5017031 | HMA, 13A, Modified | Ton | 350 | 275 | 200 | 175 | 200 | 325 | 3650 |
| 5017031 | HMA, 13A, Modified, Wedge Patching | Ton | 50 | | | | | | 50 |
| 5017051 | Street Cleaning | LSUM | 1 | 1 | | | | | 2 |
| 8020023 | Curb and Gutter, Conc, Det C4 | Ft | | | | | | | 250 |
| 8127051 | Traffic Control | LSUM | 1 | 1 | 1 | 1 | 1 | 1 | 14 |
| 8207050 | Riser, Dr Structure, Install | Ea | 3 | | | | | | 3 |
| 8207050 | Riser, Water Valve, Install | Ea | 1 | | | | | | 1 |
| 8230421 | Water Shutoff, adj, Case 1 | Ea | | | | | | 2 | 2 |
| 8247051 | Staking, Shaping, and Grading | LSUM | | | | | | | 2 |

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| Final Plans | Revision |
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| 100 | 100 |

Design By: s1s
 Drawn By: ROS
 Checked By: ROS
 Printed: SUSERNAMEs
 Date: sDATEs
 Time: sTIMEs

Location: Entire Project

Project: 2017 Resurfacing Project

Alpena City Hall
 208 North First Avenue
 Alpena, MI 49707
 Ph: 989-354-1730
 Fax: 989-354-1709

City of Alpena Engineering

Street Code/Location: NA
 Scale:
 Horizontal: none
 Vertical: none
 Sheet No.

7 OF 7

2016 Capital Improvements Project - Estimated Quantities