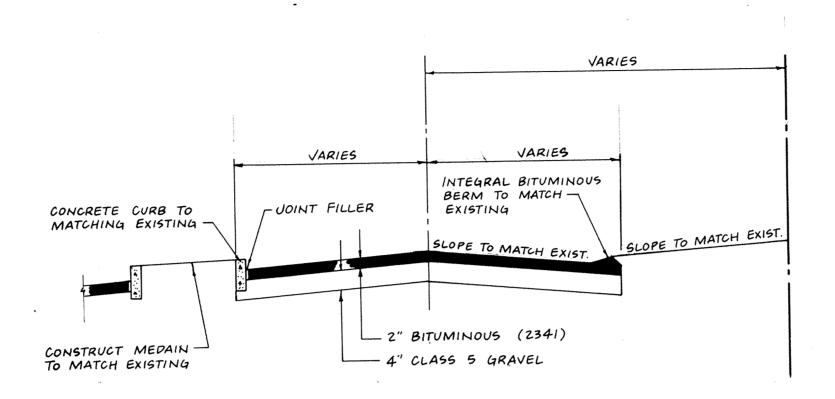
			Quantity	
Specification	Item	Unit	SAP)t
2101.502 2101.507 2571.541 2571.544 2105.501 2331.502 Spec. Spec. Spec. Spec. 2211.501 2331.508 2341.508 2341.508 2341.504 2357.502 Spec.	Clearing Grubbing Transplant Trees Transplant Shrubs Common Excavation Concrete Curb & Gutter Water (Dust Control) Concrete Driveway Apron Concrete Valley Gutter Triangular V Gutter Sections Concrete Driveway Pavement Bituminous Driveway Pavement Aggregate Base (Class 5) Bituminous Surfacing (2331) Bituminous Surfacing (2341) Bitum. Material for Mixt. (2331) Bitum. Material for Mixt. (2341) Bitum. Material for Mixt. (2341) Bituminous Tack Coat Adjust Existing Valves Adjust Existing Wanhole Reconstruct Existing Manhole Sodding Seeding Relocate Existing Hydrant Bituminous Street Restoration Remove & Relocate Exist. Signs Sign Panels 18" White Stop Bar 4" Yellow Pavement Line 6" White Pavement Line White Arrow 4" White Centerline	Tree Tree Tree CY LF (M) Gallons SF SF Each SY Ton Ton Ton Ton Ton Gallon Each LF SY Each SY LF LF LF Each LF	15 15 15 00 6700 100 900 270 6 40 170 6020 1950 1460 98 88 875 3 6 10 2700 4500 1 1400 42 50 3700 3500 6 1000	5
Spec.	8" Pipe 10-12' Standard Manhole Extra Depth Manhole 4" Service Connection (Wye) 4" Service Pipe Granular Foundation Air Test Sewer Line Connect to Existing MH	LF Each LF Each LF Ton LF Each	345 2 1 5 100 20 345 1	
2503.511 2503.511 2503.511 2503.511 2503.511 2503.511 2503.511 2506.508 2506.506 2506.508 2506.506 2506.508 2506.508 2506.508 2506.508 2506.508 2506.508 2506.508 2506.509 2503.511 Spec. 2501.515 Spec. Spec. Spec.	18" RCP CI. III 21" RCP CI. III 24" RCP CI. III 30" RCP CI. III 36" RCP CI. III 42" RCP CI. III 48" Manhole Extra Depth 48" MH 54" Manhole Extra Depth 54" MH 72" Manhole Extra Depth 72" MH Tee Section Manhole 84" Manhole Extra Depth 84" MH 108" Manhole Extra Depth 108" MH Catch Basin Jack 54" RCP Connect to Exist. 30" RCP 21" Flared End Section 54" Flared End Section Grouted Rip Rap Bituminous Restoration Granular Foundation Seeding	LF LF LF LF LF LF Each LF Each LF Each LF Each LF Each LF Each SY Ton SY	161 385 70 205 1005 790 1838 5 13 3 26 2 6 3 2 12 2 8 4 195 1 1 58 1400 250 600	

* NON-PARTICIPATING

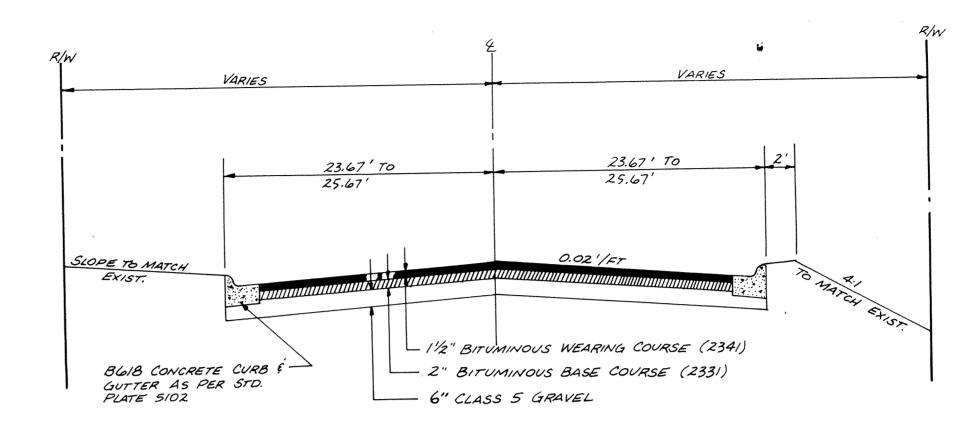


NOTE: RESTORATION SHALL BE LIMITED TO THE MINIMUM REQUIRED FOR PROPOSED CONSTRUCTION.

TYPICAL STREET RESTORATION SECTION

GENERAL WATERMAIN NOTES

- 1. All watermain shall have 7.5' minimum cover unless noted otherwise. 2. Maintain 10' minimum horizontal separation between watermain and
 - sanitary sewer.
- 3. Maintain 18" minimum vertical separation between sanitary and water-
- main where they cross. 4. All service connections shall be tapped under pressure.



TYPICAL STREET SECTION

(GATES AVENUE)

STORM SEWER STRUCTURES

NON-INLET CASTINGS: MANHOLE # 1,2,3,4,5,6, 7, 10, 11, 19, 20, & 21

INLET CASTINGS

MANHOLE # 8,9,12,13,14,15,16, 17 & 18

CATCH BASIN # 1-8

General Construction Notes

- 1. Remove portions of bituminous and concrete driveways necessary to
- construct aprons. Proposed driveway openings and locations shall be determined by the
- engineer in the field prior to construction.
- 3. Straight line cut, tack and match all connections to existing
- 4. Contractor shall be responsible for location of all existing utili-
- ties prior to construction. 5. Contractor shall be responsible for maintaining utility services
- during construction. 6. Removal and replacement of all trees and landscape items shall be as directed by the engineer or as per special provision of the
- specification. 7. All street radii shall be 25' unless otherwise noted.
- 8. Stationing refers to street centerline. 9. All concrete curb elevations shown are to top of curb unless other-
- wise shown.
- 10. All storm drainage inlet castings shall be R-3250A unless noted
- otherwise. 11. All non-inlet castings shall be R-1733.
- 12. All storm sewer and watermain crossings with vertical separation of less than 2.5 shall be insulated with 2" styrofoam 4' in each direction. This work shall be incidental.

AS-BUILT DRAWN BY: MIZK Date 12.76.84

SAP 204-124-01

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under State of Minn. Statutes Sections 326.02 to 326.16.

Temp Maure

Date 3/1/83 Minn.Reg.No. 153/6

diversified

municipal environmental land surveying soil exploration p.o. box j. csseo, minnesota 55369 = (612) 425-2181 VERT...

CHECKED BY

CITY OF ELK RIVER

ESTIMATED QUANTITIES & STREET SECTION

27 SHEETS FILE NO. ER402.02