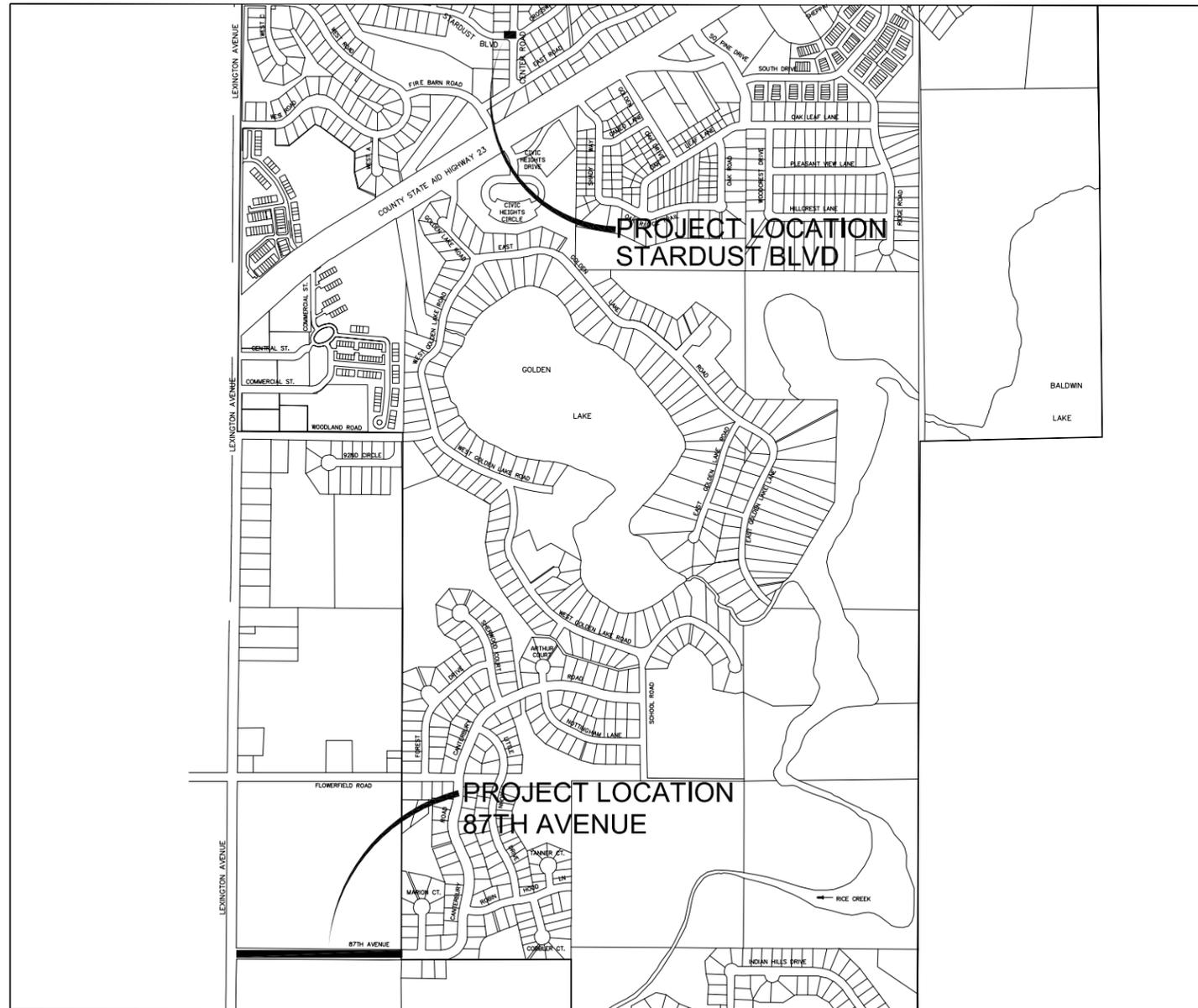


87TH AVENUE AND STARDUST BOULEVARD STREET AND UTILITY IMPROVEMENTS FOR THE CITY OF CIRCLE PINES

CONSTRUCTION PLAN FOR STREET AND STORM SEWER IMPROVEMENTS

LOCATED ON 87TH AVENUE AND STARDUST BOULEVARD



PLAN SYMBOLS

STATE LINE	----
COUNTY LINE	-----
TOWNSHIP OR RANGE LINE	-----
SECTION LINE	-----
QUARTER LINE	-----
SIXTEENTH LINE	-----
RIGHT-OF-WAY LINE	-----
SLOPE EASEMENT	-----SE
PRESENT RIGHT-OF-WAY	-----
CONTROL OF ACCESS LINE	-----
PROPERTY LINES (EXCEPT LAND LINES)	-----
VACATED PLATTED PROPERTY	-----
CORPORATE OR CITY LIMITS	-----
TRUNK HIGHWAY CENTER LINE	-----
RETAINING WALL	-----
RAILROAD	-----
RAILROAD RIGHT-OF-WAY	-----
RIVER OR CREEK	-----
DRY RUN	-----
DRAINAGE DITCH	-----
DRAIN TILE	-----
CULVERT	-----
DROP INLET	-----
GUARD RAIL	-----
BARBED WIRE FENCE	-----
WOVEN WIRE FENCE	-----
CHAIN LINK FENCE	-----
RAILROAD SNOW FENCE	-----
STONE WALL OR FENCE	-----
HEDGE	-----
RAILROAD CROSSING SIGN	-----
RAILROAD CROSSING BELL	-----
ELECTRIC WARNING SIGN	-----
CROSSING GATE	-----
MEANDER CORNER	-----
SPRINGS	-----
MARSH	-----
TIMBER	-----
ORCHARD	-----
BRUSH	-----
NURSERY	-----
CATCH BASIN	-----
FIRE HYDRANT	-----
CATTLE GUARD	-----
OVERPASS (HIGHWAY OVER)	-----
UNDERPASS (HIGHWAY UNDER)	-----
BRIDGE	-----
BUILDING (ONE STORY FRAME)	-----
F - FRAME	-----
S - STONE	-----
B - BRICK	-----
IRON ROD OR PIPE	-----
MONUMENT (STONE, CONCRETE, OR METAL)	-----
WOODEN HUB	-----
GRAVEL PIT	-----
SAND PIT	-----
BORROW PIT	-----
ROCK QUARRY	-----

UTILITY SYMBOLS

POWER POLE LINE	-----
TELEPHONE OR TELEGRAPH POLE LINE	-----
JOINT TELEPHONE AND POWER ON POWER POLE	-----
ON TELEPHONE POLES	-----
ANCHOR	-----
STREET LIGHT	-----
PEDESTAL (TELEPHONE CABLE TERMINAL)	-----
GAS MAIN	-----
WATER MAIN	-----
CONDUIT	-----
TELEPHONE CABLE IN CONDUIT	-----
ELECTRIC CABLE IN CONDUIT	-----
OVERHEAD POWER	-----
TELEPHONE MANHOLE	-----
ELECTRIC MANHOLE	-----
BURIED TELEPHONE CABLE	-----
BURIED ELECTRIC CABLE	-----
AERIAL TELEPHONE CABLE	-----
SEWER (SANITARY OR STORM)	-----
SEWER MANHOLE	-----

SCALES

INDEX MAP	0 600 1200
PLAN	0 30 60
PROFILE HORIZ.	0 30 60
VERT.	0 5 10

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 3802, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF PRIVATE UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS TO DETERMINE THE TYPE AND LOCATION OF PRIVATE UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

EXCAVATION NOTICE SYSTEM

A CALL TO GOPHER STATE ONE (651-454-0002) IS REQUIRED A MINIMUM OF 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION.

GOVERNING SPECIFICATIONS

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION," SPECIAL PROVISIONS AND ANY AMENDMENTS THERETO AND THE "STANDARD UTILITIES SPECIFICATION FOR WATERMAIN SERVICE LINE INSTALLATION AND STORM SEWER INSTALLATION" REFERENCED "CEAM" DATED 1999 OR AS MODIFIED IN THE PROJECT MANUAL.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL COMFORM TO THE MN MUTCD INCLUDING THE FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS, DATED MAY, 2005. ALL TRAFFIC CONTROL DEVICES SHALL HAVE RETROREFLECTIVE SHEETING.

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-4	STARDUST BLVD STORM SEWER
5	GENERAL LAYOUT AND TYPICAL SECTION
6	TRAFFIC CONTROL PLAN
7	DETAILS
8-9	STORM SEWER AND STREET
10-13	EROSION CONTROL PLAN/SWPPP
14-18	CROSS SECTIONS

THIS PLAN SET CONTAINS 18 SHEETS

ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

WSB
& Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsben.com
763-541-4800 - Fax 763-541-1700
INFRASTRUCTURE ■ ENGINEERING ■ PLANNING ■ CONSTRUCTION

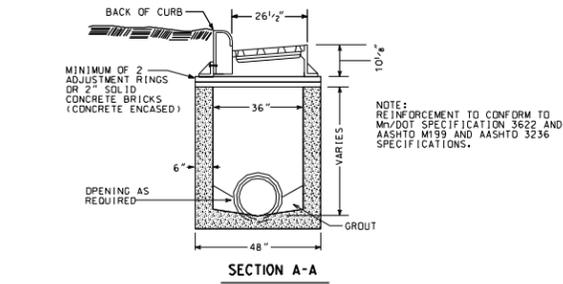
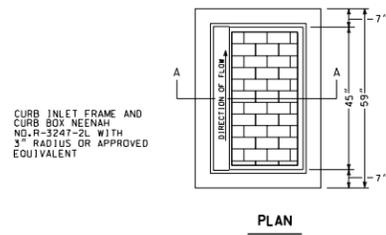
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ENGR. _____ SHIBANI K. BISSON, PE
DATE 02/24/2009 LIC. NO. 41860



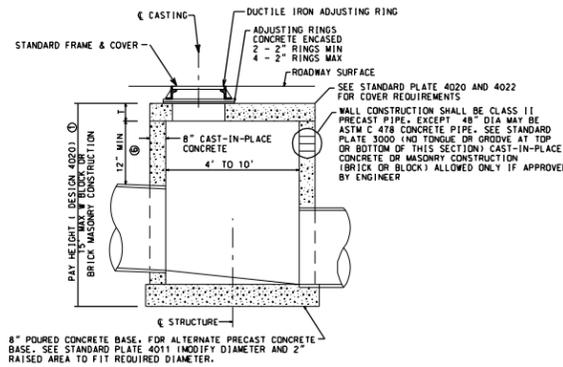
Prepared for:

City of Circle Pines
200 Civic Heights Circle
Circle Pines, Minnesota 55014
(763)-784-5898

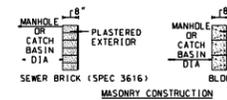


NOTE:
DESIGN SPEC 1 CATCH BASIN SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH WHICH ALSO INCLUDES THE CASTING.

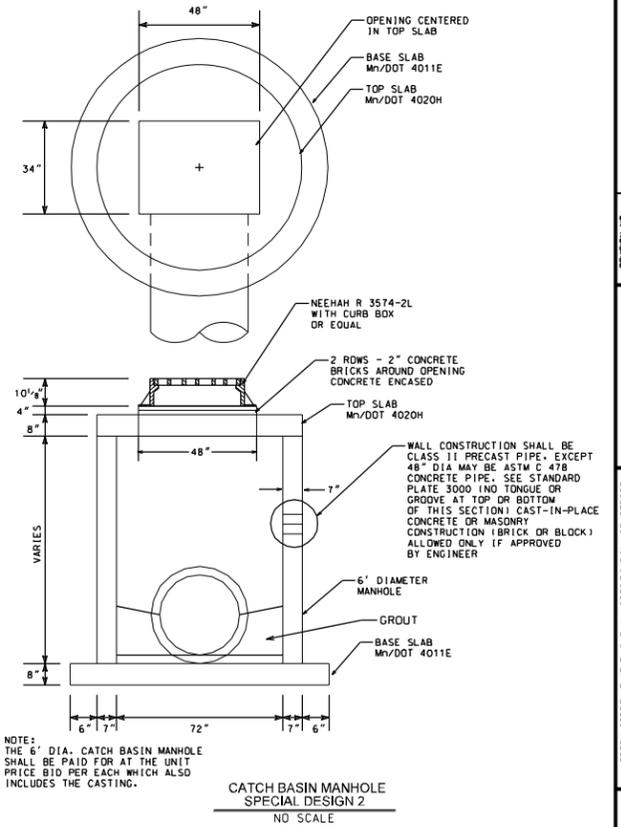
DESIGN SPEC 1
(3'X4') CATCH BASIN
NO SCALE



- REFER TO STANDARD PLANS FOR HEIGHT AND DIAMETER REQUIRED.
- MANHOLE STEPS SHALL BE CAST IRON OR MA MODEL PS-I-PF (BY MA INDUSTRIAL INC.) CONFORMING TO ALL OSHA REGULATIONS AND SPACED 16" OC.
- MINIMUM STEEL REINFORCEMENT
- EQUIVALENT STEEL AREA IN WIRE MESH MAY BE USED
- GENERAL DIMENSIONS FOR CONCRETE APPLY TO BRICK AND CONCRETE MASONRY UNIT CONSTRUCTION ALSO, EXCEPT AS NOTED.
- 12" MINIMUM FOR PRECAST, 3 BRICKS OR 1 BLOCK MINIMUM FOR MASONRY CONSTRUCTION
- REINFORCEMENT AS PER SPEC 3301, GRADE 60.

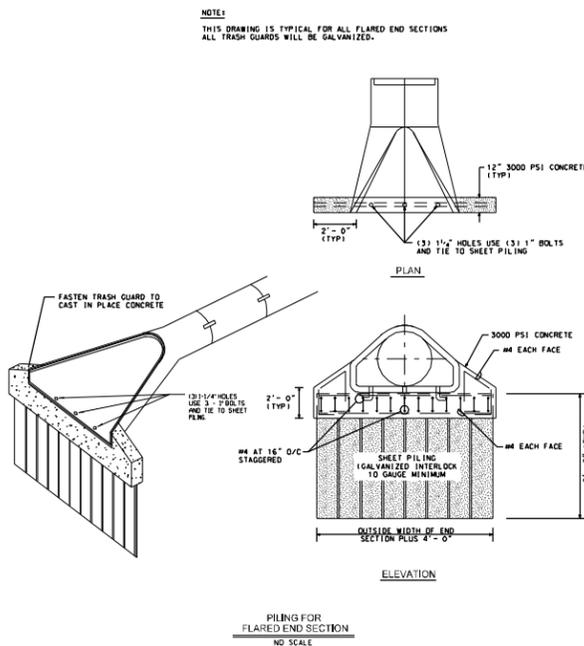


Standard Manhole for
Storm Sewer
NO SCALE

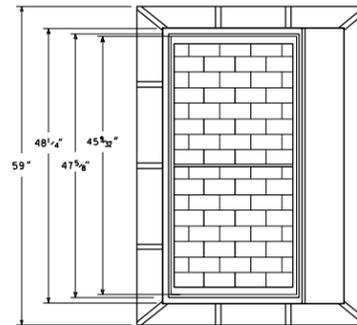


NOTE:
THE 6" DIA. CATCH BASIN MANHOLE SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH WHICH ALSO INCLUDES THE CASTING.

CATCH BASIN MANHOLE
SPECIAL DESIGN 2
NO SCALE

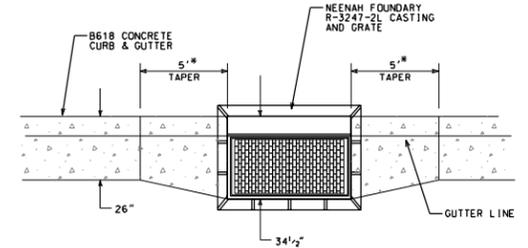


PILING FOR
FLARED END SECTION
NO SCALE



NOTE:
CASTING SHALL BE NEEHAH FOUNDARY R-3574-2L OR APPROVED EQUAL

Casting D - R-3247-2L
Curb Inlet Frame and Curb Box
NO SCALE



* THE TAPER SECTION SHALL BE PAID FOR AS B618 CURB & GUTTER

CONCRETE CURB & GUTTER
AT R-3247-2L CASTING
NO SCALE

REVISION NO.	DATE	EXPLANATION

SCALE:	AS NOTED
PLAN: 1" = 12"	DESIGN: 1" = 12"
ELEVATION: 1" = 12"	CONSTRUCTION: 1" = 12"
CHECKED BY: SHIBANI K. BISSON, PE	PROJECT NO: 1307-32
DATE: JAN. 27, 2009	RECORD COPY BY: 41860

2009 STREET AND UTILITY
IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA

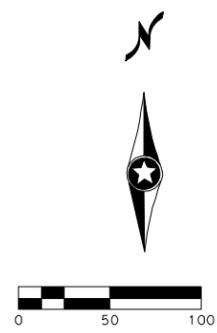
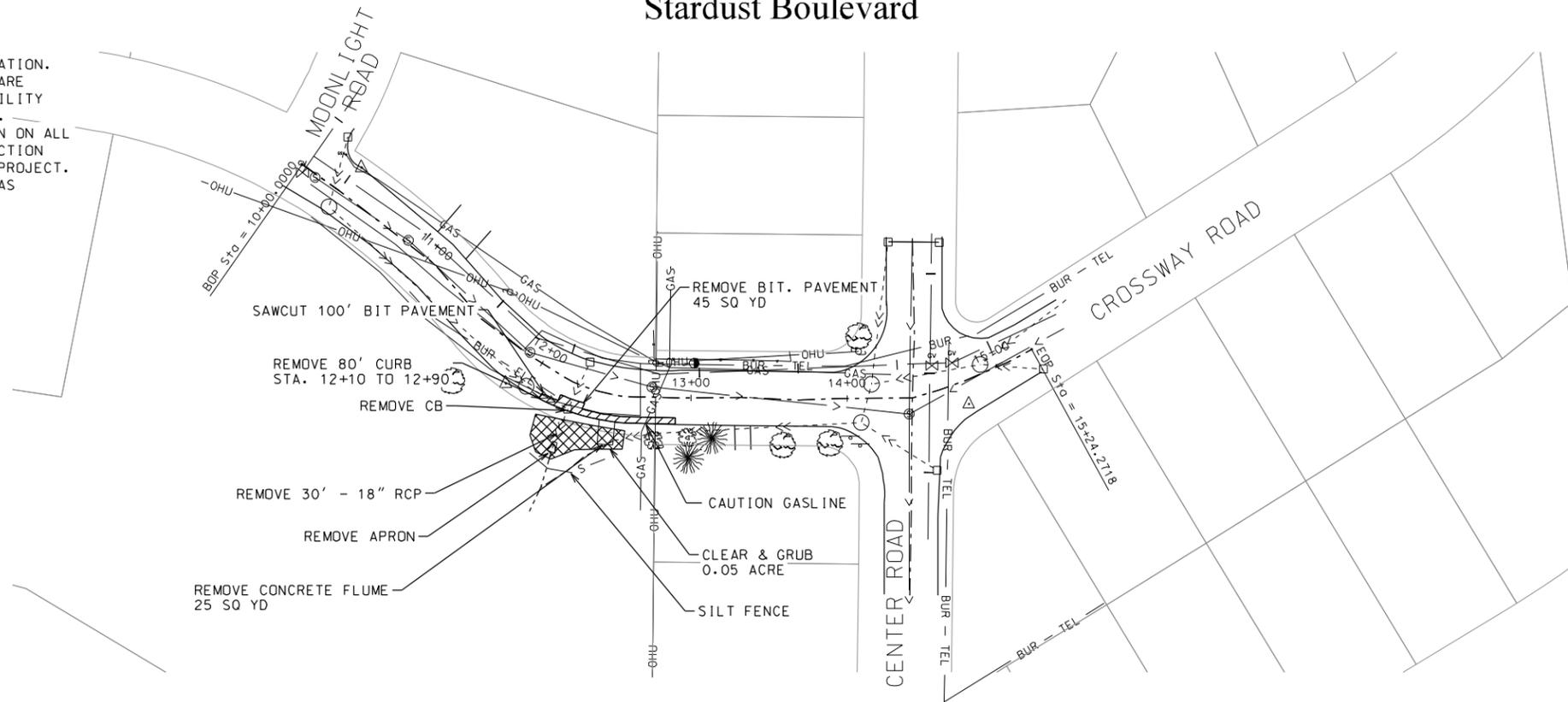
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com

763-841-4000 Fax: 763-841-1700

INFRASTRUCTURE ENGINEERING & PLANNING CONSTRUCTION

Stardust Boulevard

- NOTES:**
1. CONTRACTOR SHALL PROTECT EXISTING UTILITIES DURING CONSTRUCTION AT NO ADDITIONAL COMPENSATION.
 2. THE EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THEIR EXACT LOCATION AND ELEVATION.
 3. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL CATCH BASINS (NEW AND EXISTING). INLET PROTECTION SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT.
 4. THE CONTRACTOR SHALL SOD ALL DISTURBED AREA AS DIRECTED BY THE ENGINEER.



910															910												
905	EXISTING GRADE														905												
900															900												
895															895												
890															890												
885															885												
880															880												
875															875												
																900.47	899.89	899.45	899.09	898.50	898.52	898.90	899.35	899.93	900.44	900.44	
																10+00	11+00	12+00	13+00	14+00	15+00	16+00					

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SHIBANI K. BISSON, PE
DATE: JAN. 27, 2009 UC. NO. 41560

REVISION NO.	DATE	EXPLANATION

SCALE:	AS NOTED
PLAN BY:	DESIGN BY:
CHECKED BY:	PROJECT NO. 1507-32

2009 STREET AND UTILITY IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA

701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 www.wsbeng.com

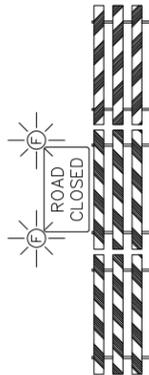
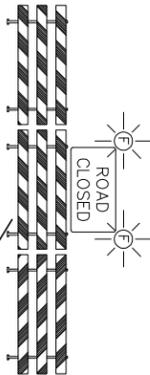
WSB & Associates, Inc.
 INFRASTRUCTURE ■ ENGINEERING ■ PLANNING ■ CONSTRUCTION

K:\0507-32\Cad\Proposed\01560mr1.dgn

NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO MMUTCD.
2. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN THE DEVICES IN THIS TRAFFIC CONTROL PLAN.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE.
4. INPLACE SIGNS WHICH CONFLICT WITH THIS PLAN SHALL BE SALVAGED OR COVERED (INCIDENTAL)
5. ALL TRAFFIC CONTROL SIGNS SHALL BE THE CONTRACTORS RESPONSIBILITY AND SHALL BE CONSIDERED UNDER THE LUMPS SUM TRAFFIC CONTROL PAY ITEM. ANY AMENDMENTS TO SIGNING AS REQUIRED BY THE ENGINEER OR APPLICABLE REGULATIONS SHALL BE INCLUDED IN LUMP SUM TRAFFIC CONTROL PAY ITEM.

USE FLOWERFIELD RD
EAST OF
LEXINGTON AVE
87TH AVE
CLOSED



87TH AVE
CLOSED
EAST OF
LEXINGTON AVE.
USE FLOWERFIELD RD

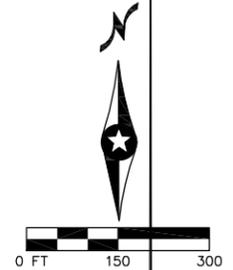
RETRO-REFLECTIVE DRUMS AT
50' SPACES TYPICAL TO CLOSE
LEFT TURN LANE



LEXINGTON AVENUE

FLOWERFIELD ROAD

87TH AVENUE



REVISION NO.	EXPLANATION
SCALE:	AS NOTED
PLAN BY:	MRJ
DESIGN BY:	JPK
CHECKED BY:	SKB
PROJECT NO.:	1507-32
DATE:	
RECORD COPY BY:	
DATE:	
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	
SHIBANI K. BISSON, PE	
DATE:	JAN.27. 2009
LIC. NO.:	41860

**2009 STREET AND UTILITY
IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA**

701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com

WSB
& Associates, Inc.

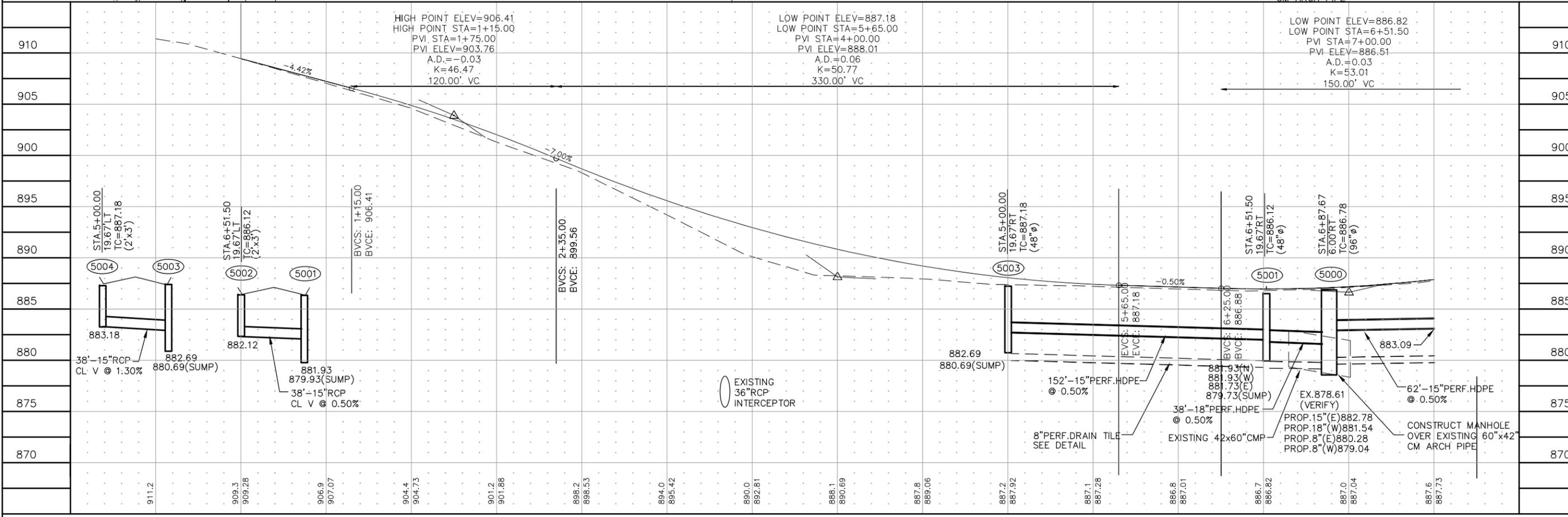
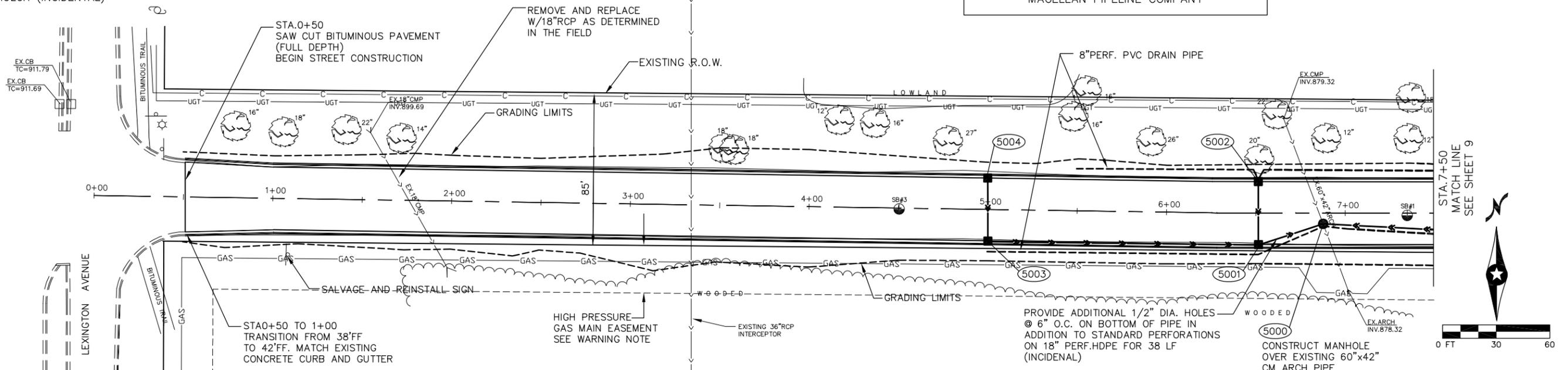
INFRASTRUCTURE ENGINEERING PLANNING CONSTRUCTION

NOTES:

1. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES DURING CONSTRUCTION AT NO ADDITIONAL COMPENSATION.
2. THE EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THE EXACT LOCATION AND ELEVATION.
3. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL CATCH BASINS. INLET PROTECTION SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT.
4. THE CONTRACTOR SHALL RECLAIM BITUMINOUS PAVEMENT FROM STA.0+50 TO STA. 13+00
5. SALVAGE AND REINSTALL OR PROTECT IN PLACE EXISTING MULCH (INCIDENTAL)

87TH AVENUE

WARNING
HIGH PRESSURE GAS LINE
 EXCAVATION AND/OR CONSTRUCTION PROHIBITED WITHOUT COMPLIANCE WITH STATE ONE-CALL, AND WITHOUT WRITTEN PERMISSION FROM MAGELLAN PIPELINE COMPANY



REVISION NO.	EXPLANATION
SCALE:	AS NOTED
PLAN BY:	JPK
CHECKED BY:	MRJ
PROJECT NO.:	1507-32
DATE:	
DESIGNER:	
PROJECT NO.:	
DATE:	
RECORD COPY BY:	

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

SHIBANI K. BISSON, PE
 DATE: JAN.27, 2009 LIC. NO. 41560

2009 STREET AND UTILITY IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA

701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 www.wsbeng.com

WSB
 & Associates, Inc.

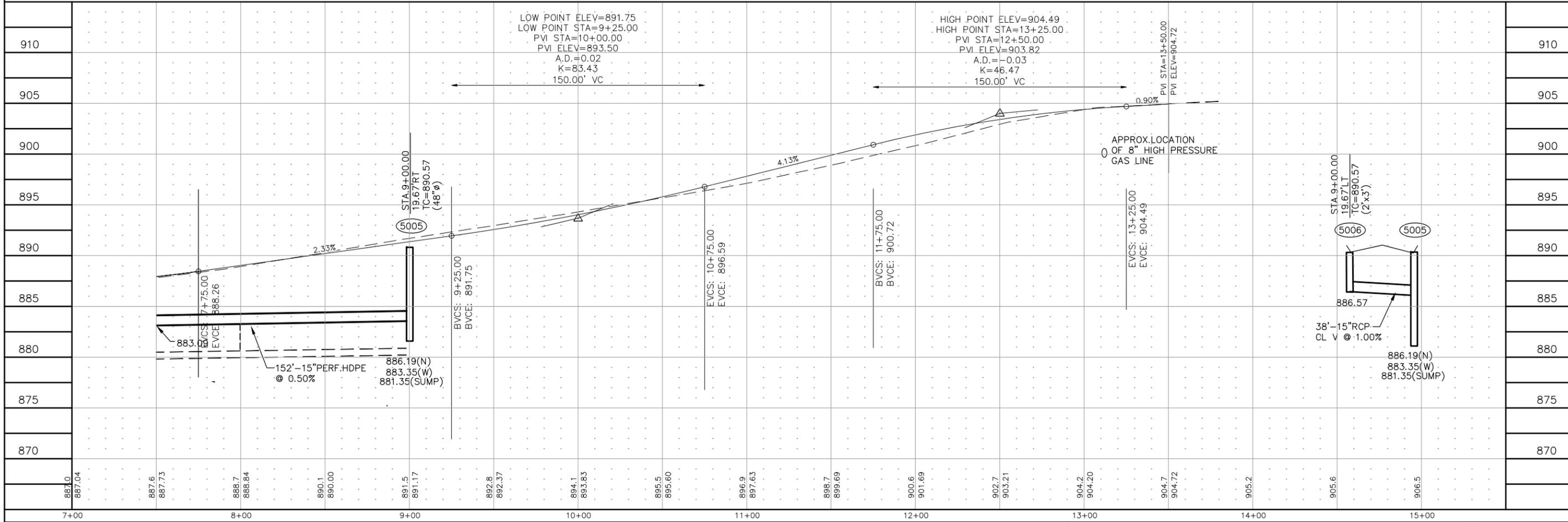
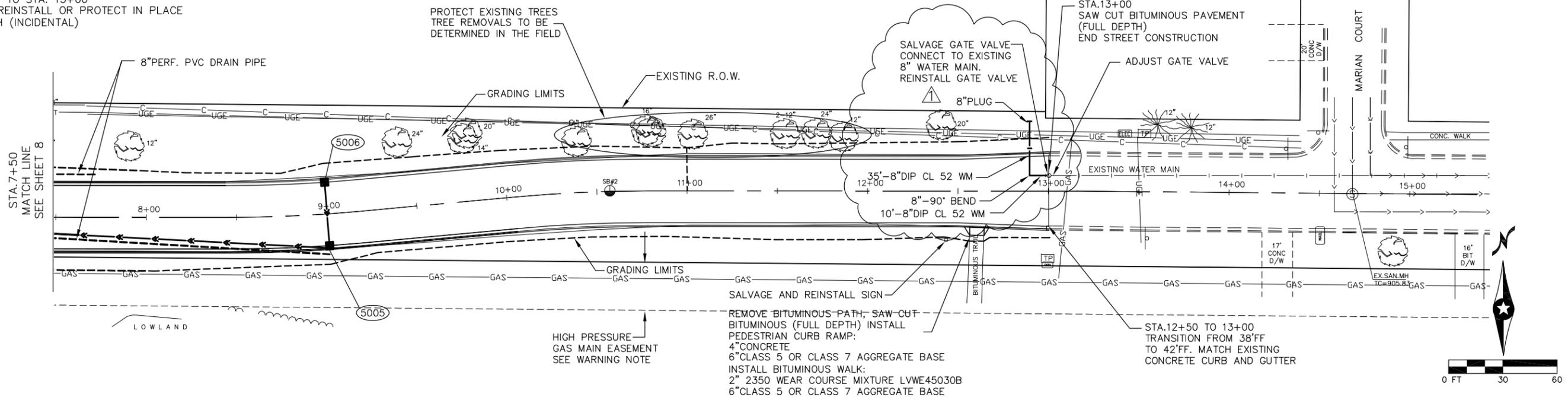
763-841-4800 • Fax 763-841-1700
 INFRASTRUCTURE ENGINEERING PLANNING CONSTRUCTION

NOTES:

1. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES DURING CONSTRUCTION AT NO ADDITIONAL COMPENSATION.
2. THE EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THE EXACT LOCATION AND ELEVATION.
3. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL CATCH BASINS. INLET PROTECTION SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT.
4. THE CONTRACTOR SHALL RECLAIM BITUMINOUS PAVEMENT FROM STA.0+50 TO STA. 13+00
5. SALVAGE AND REINSTALL OR PROTECT IN PLACE EXISTING MULCH (INCIDENTAL)

87TH AVENUE

WARNING
HIGH PRESSURE GAS LINE
 EXCAVATION AND/OR CONSTRUCTION PROHIBITED WITHOUT COMPLIANCE WITH STATE ONE-CALL, AND WITHOUT WRITTEN PERMISSION FROM MAGELLAN PIPELINE COMPANY



REVISION NO.	EXPLANATION
4/21/09	WATER MAIN STUB
SCALE:	AS NOTED
PLAN BY: MRJ	DESIGN BY: JPK
CHECKED BY: SGB	PROJECT NO: 1307-32
RECORD COPY BY:	DATE:

DESIGNER'S CERTIFICATION: I, SHIBANI K. BISSON, PE, AMERICAN SOCIETY OF CIVIL ENGINEERS, REGISTERED PROFESSIONAL ENGINEER AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: JAN. 27, 2009 UC. NO. 41860

2009 STREET AND UTILITY IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA

701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 www.wsbeng.com

WSB & Associates, Inc.
 INFRASTRUCTURE ENGINEERING PLANNING CONSTRUCTION

K:\01507-32\Cad\Plan\1507-32-01SS.dwg, Layout2, 4/22/2009 10:28:54 AM

STORM WATER POLLUTION PREVENTION PLAN AND CONTACT INFORMATION

Project Description

This project consists of street and stormsewer reconstruction of 87th Avenue from Lexington Avenue to approximately 150 feet west of Marian Court. Project is located in section 36 in Township 31N Range 23W in the City of Blaine.

Receiving Waters

Storm water from this project will be collected and conveyed into subsurface filtration trenches within the right-of-way, then into the wetlands adjacent to Rice Creek.

Responsible Parties

The City of Circle Pines and the Contractor are responsible co-permittee's for implementation of the SWPPP. Contractor is responsible for installation, inspection, maintenance, and repair of all erosion prevention and sediment control BMPs before, during,

Project Engineer

Shibani Bisson, P.E.
WSB & Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
763-287-7162

City of Circle Pines

Jim Keinath
City Administrator
200 Civic Heights Circle
Circle Pines, MN 55014
763-231-2305

Contractor:

To Be Determined

Construction Notes:

Construction shall be governed by Mn/Dot Specifications, special provisions, amendments and the project specifications and detail plates. Permits and maps relating to this project's SWPPP can be found in the Project Manual. The contractor shall keep the i

SWPPP Quantities are located within the project manual.

Contacts

AGENCY	PERMIT	NAME	PHONE NUMBER
MPCA	NPDES	Paul Estuesta	651-757-2345
DNR Permit	Const. Dewatering	Kate Drewry	651-259-5753
Rice Creek Watershed District	Rule C & D	Nick Tomczik	763-398-3079
State Duty Officer	N/A	MPCA	1-800-422-0798
Design	N/A	Shibani Bisson, P.E.	763-541-4800
Erosion Control Review	N/A	Travis Fristed	763-287-7169
Erosion Control Supervisor	N/A	TBD	TBD

Special Waters, Impaired Waters, & TMDL Implementation Plans Containing Special Storm Water Requirements:

No special waters exist within one mile of, and downstream of any project discharge points. This project is located within one mile of, and discharges to an impaired waters. Rice Creek is impaired for fish and invertebrate IBI, therefore additional BMP re

Calculations:

Area to be disturbed =	Total Project 1.59 Acres
Pre-Construction Impervious Area =	1.14 Acres
Post-Construction Impervious Area =	1.11 Acres
Net Increase in Impervious Area =	-0.03 Acres

Timing of BMP Installation

The Erosion Prevention and Sediment Control BMP's shall be installed as necessary to minimize erosion from disturbed surfaces and to capture sediment on site. Perimeter controls (silt fence, construction rock entrance, tire cleaning areas, etc. shall be p

Construction Timeline: May 15- September 15, 2009

Appendix A. Impaired Waters Requirements

C.1.a- Contractor shall stabilize all disturbed soils within 7 days after construction activity in that portion of the site has temporarily or permanently ceased (C.1.a).

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

SHIBANI K. BISSON, PE
DATE: JAN. 27, 2009 LIC. NO. 41860

2009 STREET AND UTILITY
IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA

701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com
763-541-4800 • Fax 763-541-1700
INFRASTRUCTURE ENGINEERING & PLANNING CONSTRUCTION



SEQUENCE OF CONSTRUCTION

- Contractor to verify that all applicable permits have been obtained and NPDES permit modification form has been submitted to MPCA prior to the start of construction.
- Permittee(s) must plan for and implement appropriate construction phasing, vegetative buffer strips, horizontal slope grading, and other construction practices that minimize erosion, so that the inspection and maintenance requirements of Part IV.E. of the NPDES construction permit are complied with. The location of areas not to be disturbed (including tree protection fencing) must be delineated (e.g. with flags, stakes, signs, silt fence, orange tree protection fence, etc.) on the development site before work begins (Part IV.B.1).
- Sediment control practices must be established on all down gradient perimeters before any up gradient land disturbing activities begin. These practices shall remain in place until Final Stabilization is achieved (Part IV.C.1.b).
- Contractor to rough grade site and install utilities, then install and maintain all temporary/permanent erosion control BMPs as shown on plans and in conformance with the NPDES construction permit.
- Contractor to achieve Final Stabilization prior to submission of the NOT.

CHANGE OF PERMIT COVERAGE (PART II.B.5)

- For construction projects where the owner or operator changes.
- The original/current owner shall provide a copy of the complete notice of termination/permit modification form (as required in Part II.C.2.b) to the new owner. The original/current owner shall provide a SWPPP to the new owner and operator that specifically addresses the remaining construction activity.
 - The new owner or operator shall submit a complete and signed permit modification portion (permit modifications include subdivision registration or permit transfer) of the notice of termination/permit modification form to the MPCA prior to commencing construction activity on site or in no case later than seven (7) days after taking ownership of the property.
 - If an operator or general contractor has completed their portion of work on the site, is no longer in operational control of the project, and all contractual obligations between the owner and operator or general contractor relating to compliance with the terms and conditions of this permit have been met, the operator or general contractor, may transfer permit coverage back to the owner or to a new operator using the notice of termination/permit modification form. A signature from both the owner and operator is required.

TERMINATION OF PERMIT COVERAGE

The Permittee(s) coverage under this permit terminates at midnight on the postmark date of the Notice of Termination (NOT), or on the date an online NOT is submitted to the MPCA (PART II.C.1).

Termination of coverage for the entire project (PART II.C.2.a)

All Permittee(s) must submit a NOT within 30 days after Final Stabilization has been completed on all portions of the site for which the Permittee is responsible and all construction activity has been completed. If the site includes permanent stormwater management systems, the requirements for final cleanup/maintenance must be performed as required in Final Stabilization. Permittee(s) must submit a NOT within 30 days after selling the entire site including roads and stormwater infrastructure, and coverage is transferred to another owner.

Termination of coverage for a portion of the entire project (PART II.C.2.b)

All Permittee(s) must submit a NOT within seven (7) days after selling or otherwise legally transferring portions of the site to another party and they are no longer the owner or operator. The portions of the site being sold to another party must be in compliance with the permit (e.g. all temporary erosion protection and sediment control measures must be in place). The form must include signatures from the original Permittee(s) and contact information for the new owner of the property.

Termination of Coverage prior to completing all Construction Activity (Part IV.C.6.a-c): Permittee(s) may terminate permit coverage prior to completing all construction activity, if Final Stabilization is achieved (all Parts IV.G.1-5 of the NPDES construction permit) and the following three (3) conditions are met:

- Construction activity has ceased for at least 90 days.
- At least 90% (by area) of all originally proposed construction activity has been completed and permanent cover established on those areas.
- On areas where construction activity is not complete, permanent cover has been established.

Alternative Permanent Stormwater Treatment Systems (PART II.C.3):

Permittee(s) that use an alternative method for the Permanent Stormwater Management System are prohibited from terminating this permit until Final Stabilization has been achieved, pursuant to Part III.C.5 and Part II.C.3 of the NPDES Phase II construction permit.

INSPECTION, MAINTENANCE, & RECORD KEEPING

The contractor/operator must assign a trained individual(s) (pursuant to Part III.A.1-2) to oversee the implementation, maintenance, and repair of BMPs. This individual(s) shall also perform inspections, revise/amend the SWPPP (as necessary), and be available for an onsite inspection within 72 hours upon request by the permitted owner (or its designee), local government units, or MPCA (Part III.A.2.a.ii). Training documentation for all personnel associated with this project must be available within 72 hours upon request (Part III.2a-d)

The Permittee(s) must amend the SWPPP as necessary to include additional requirements, such as additional or modified BMPs, designed to correct problems identified or address situations whenever (Part III.A.5):

- There is a change in design, construction, operation, maintenance, weather or seasonal conditions that has a significant effect on the discharge of pollutants to surface waters or underground waters;
- Inspections or investigations by site operators, local, state or federal officials indicate the SWPPP is not effective in eliminating or significantly minimizing the discharge of pollutants to surface waters or underground waters or that the discharges are causing water quality standard degradation (e.g. nuisance conditions as defined in Minn. R. 7050.0210, subp. 2); or
- The SWPPP is not achieving the general objectives of minimizing pollutants in stormwater discharges associated with construction activity, or the SWPPP is not consistent with the terms and conditions of this permit.
- The MPCA notifies the Permittee(s) in writing, that the project's stormwater discharges may contribute to non-attainment of any applicable water quality standards, impaired waters standards, and/or TMDL Waste Load Allocations. In response, the Permittee(s) must develop a supplemental BMP action plan or appropriate SWPPP amendments describing SWPPP modifications to address the identified concerns and submit information requested by MPCA, which may include an individual permit application. If MPCA's written notification requires a response, failure to respond within the specified timeframe constitutes a permit violation.

INSPECTION AND ENTRY (Part V.H)

The Permittee(s) must comply with the provisions of 40 CFR 122.41(i), Minn. Stat. ch. 115.04 and Minn. Stat. ch. 115B.17. The Permittee(s) shall allow representatives of the MPCA or any member, employee or agent thereof, when authorized by it, upon presentation of credentials, to enter upon any property, public or private, for the purpose of obtaining information or examination of records or conducting surveys or investigations.

INSPECTIONS (Part IV.E)

- The Permittee's must routinely inspect the entire construction site at least once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours. Following an inspection which occurs within 24 hours after a rainfall event, the next inspection must be conducted within seven (7) days after that.
- All inspections and maintenance conducted during construction must be recorded in writing and these records must be retained with the SWPPP in accordance with Part III.D of the NPDES construction permit. Records of each inspection and maintenance activity shall include:
 - Date and time of inspections;
 - Name of person(s) conducting inspections;
 - Findings of inspections, including recommendations for corrective actions;
 - Corrective actions taken (including dates, times, and party completing maintenance activities);
 - Date and amount of all rainfall events greater than 1/2 inch (0.5 inches) in 24 hours;
 - Documentation of changes made to the SWPPP
- Where parts of the construction site have permanent cover, but work remains on other parts of the site, inspections of the areas with permanent cover may be reduced to once per month. Where construction sites have permanent cover on all exposed soil areas and no construction activity is occurring anywhere on the site, the site must be inspected for a period of twelve (12) months (the inspections may be ceased during frozen ground conditions). Following the twelfth month of permanent cover and no construction activity, inspections may be terminated until construction activity is once again initiated or sooner if notified in writing by the MPCA. Where work has been suspended due to frozen ground conditions, the required inspections and maintenance schedule must begin within 24 hours after runoff occurs at the site or prior to resuming construction, whichever comes first.

MAINTENANCE (Part IV.E)

The Permittee(s) are responsible for the operation and maintenance of all temporary and permanent water quality management BMPs, as well as all erosion prevention and sediment control BMPs, for the duration of the construction work at the site. The Permittee(s) are responsible until another Permittee has assumed control according (see change of permit coverage) over all areas of the site that have not been finally stabilized or the site has undergone Final Stabilization, and a NOT has been submitted to the MPCA (Part IV.E.4.e).

If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in streets could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets) (Part IV.E.4.f).

All nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs within 24 hours after discovery, or as soon as field conditions allow access unless another time frame is specified below.

Silt Fence: All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the height of the fence. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access (Part IV.E.4.a).

Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches 1/2 the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access (Part IV.E.4.b). 1/2 the storage volume.

Surface waters, including drainage ditches, catch basins, and conveyance systems, must be inspected for evidence of erosion and sediment deposition. The removal and stabilization of exposed soils must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints. If precluded, removal and stabilization must take place within seven (7) calendar days of obtaining access. The Permittee is responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work (Part IV.E.4.c).

Construction site vehicle exit locations must be inspected for evidence of off-site sediment tracking onto paved surfaces. Tracked sediment must be removed from all paved surfaces, within 24 hours of discovery, or if applicable, within a shorter time to comply with Part IV.C.6 of the NPDES construction permit (Part IV.E.4.d).

Infiltration Basins: All infiltration areas must be inspected to ensure that no sediment from ongoing construction activity is reaching the infiltration area and these areas are protected from compaction due to construction equipment driving across the infiltration area (Part IV.E.5).

RECORD RETENTION (Part III.D)

The SWPPP (original or copies) including, all changes to it, and inspections and maintenance records must be kept at the site during construction by the Permittee who has operational control of that portion of the site. The SWPPP can be kept in either the field office or in an on site vehicle during normal working hours.

All owner(s) must keep the SWPPP, along with the following additional records, on file for three (3) years after submittal of the NOT. This does not include any records after submittal of the NOT.

- Any other permits required for the project;
- Records of all inspection and maintenance conducted during construction.
- All permanent operation and maintenance agreements that have been implemented, including all right of way, contracts, covenants and other binding requirements regarding perpetual maintenance; and
- All required calculations for design of the temporary and Permanent Stormwater Management Systems.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

SHIBANI K. BISSON, PE
DATE: JAN.27, 2009 LIC. NO. 41860

2009 STREET AND UTILITY
IMPROVEMENT PROJECT

87TH AVENUE
CIRCLE PINES, MINNESOTA

701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com

WSB
& Associates, Inc.
INFRASTRUCTURE ENGINEERING & PLANNING CONSTRUCTION

CITY PROJECT NO.

EROSION CONTROL PLAN
GENERAL NOTES AND DETAILS (SWPPP)

SHEET 11 OF 18 SHEETS

CONSTRUCTION ACTIVITY REQUIREMENTS (PART IV)

STORM WATER POLLUTION PREVENTION PLAN (Part IV.A)

The Permittee(s) must implement the entire SWPPP and the requirements of this NPDES permit. The BMPs identified in the SWPPP and in this permit must be selected, installed, and maintained in an appropriate and functional manner that is in accordance with relevant manufacturer specifications and accepted engineering practices.

EROSION CONTROL PRACTICES (Part IV.B)

Exposed Soils: All exposed soil areas shall be stabilized within 14 days (or 7 days for areas discharging to Appendix A, Special or Impaired Waters) after the construction activity in that portion of the site has temporarily or permanently ceased. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) and the constructed base components of roads, parking lots and similar surfaces are exempt from this requirement but must comply with Part IV.C.5 of the NPDES construction permit.

Temporary/Permanent Drainage Ditches & Swales: The normal wetted perimeter of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be stabilized within 200 lineal feet from the property edge, or from the point of discharge into any surface water. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a surface water. Temporary or permanent ditches or swales that are being used as a sediment containment system (with properly designed rock ditch checks, bio rolls, silt dikes etc.) do not need to be stabilized. These areas must be stabilized within 24 hours after no longer being used as a sediment containment system.

Storm Sewer Outlets: Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours after connection to a surface water.

SEDIMENT CONTROL PRACTICES (Part IV.C)

Where ten (10) or more acres of disturbed soil drain to a common location, a temporary (or permanent) sediment basin must be provided prior to runoff leaving the construction site or entering surface waters. All temporary basins shall be designed and constructed to the minimum standards specified in Part III.B of the NPDES construction permit (Part III.B).

Temporary or permanent drainage ditches and sediment basins that are designed as part of a sediment containment system (e.g., ditches with rock check dams) require sediment control practices only as appropriate for site conditions (Part IV.C.1.a).

Down gradient systems: If the down gradient treatment system is overloaded, additional up gradient sediment control practices or redundant BMPs must be installed to eliminate the overloading, and the SWPPP must be amended to identify these additional practices as required in Part III.A.4, a. through c. of the NPDES construction permit (Part IV.C.1.b).

3:1 slopes (or steeper) must be less than 75 feet in length: In order to maintain sheet flow and minimize rills and/or gullies, there shall be no unbroken slope length of greater than 75 feet for slopes with a grade of 3:1 or steeper (Part IV.C.1.c).

Silt Fence: shall follow, as close as possible, to a single contour line.

Short-term activities: The timing of the installation of sediment control practices may be adjusted to accommodate short-term activities such as clearing or grubbing, or passage of vehicles. Any short-term activity must be completed as quickly as possible and the sediment control practices must be installed immediately after the activity is completed. However, sediment control practices must be installed before the next precipitation event even if the activity is not complete (Part IV.C.3).

Inlet Protection: All storm drain inlets must be protected by appropriate BMPs during construction until all sources with potential for discharging to the inlet have been stabilized. Inlet protection may be removed for a particular inlet if a specific safety concern (street flooding/freezing) has been identified and the Permittee(s) have received written correspondence from the jurisdictional authority (e.g. city/county/township/MnDOT engineer) verifying the need for removal. Written correspondence must be documented in the SWPPP and available within 72 hours upon request. Permission to remove inlet protection based on a specific safety concern must still be obtained from the local jurisdictional authority within 30 days of removal (Part IV.C.4).

Temporary soil stockpiles must have silt fence perimeter or other effective sediment controls, and cannot be placed in surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater (Part IV.C.5). Polyethylene covers shall be used to cover all exposed stockpiles when not in use and prior to forecast storm events. Covers should be anchored to prevent wind damage and fugitive dust.

Vehicle tracking of sediment from the construction site (or onto streets within the site) must be minimized by BMPs such as stone pads, concrete or steel wash racks, or equivalent systems. Street sweeping must be used if such BMPs are not adequate to prevent sediment from being tracked onto the street (Part IV.C.6).

Sawcutting: milling, directional boring and other construction operations that have the potential to create slurries shall not be performed when it is raining or forecast to rain within 24 hours.

DEWATERING AND BASIN DRAINING (Part IV.D)

Dewatering or basin draining that may have turbid or sediment laden discharge water must be discharged to a temporary or permanent sedimentation basin (and/or other appropriate BMP) on the project site whenever possible. Discharge from the temporary or permanent sedimentation basin must be visually checked to ensure adequate treatment is obtained in the basin and that nuisance conditions (see Minn. R. 7050.0210, subp. 2), impacts to wetlands, and erosion in receiving channels or on downslope properties will not result from the discharge. The discharge must be dispersed over natural rock riprap, sand bags, plastic sheeting, or other accepted energy dissipation measures. Adequate sedimentation control measures are required for discharge water that contains suspended solids (Part IV.D.1).

POLLUTION PREVENTION MANAGEMENT MEASURES (Part IV.F)

The Permittee(s) shall implement the following pollution prevention management measures on the site:

Solid Waste: Collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and must comply with MPCA disposal requirements (Part IV.F.1)

Hazardous Materials: Oil, gasoline, paint and any hazardous substances must be properly stored, including secondary containment, to prevent spills, leaks or other discharge. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA regulations (Part IV.F.2).

Truck Washing: External washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine degreasing is allowed on site (Part IV.F.3).

Concrete washout onsite: All liquid and solid wastes generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. A compacted clay liner that does not allow washout liquids to enter ground water is considered an impermeable liner. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA regulations. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities at the designated location in the plan. (Part IV.F.4). Washout water is prohibited from draining onto public right of way, storm sewer, or into environmentally sensitive areas (as designated in the plans)

FINAL STABILIZATION (Part IV.G)

Final Stabilization requires all of Parts IV.G.1-5 or Part IV.G.6 of the NPDES construction permit:

70% Vegetative Cover: Final Stabilization requires that all soil disturbing activities at the site have been completed and all soils must be stabilized by a uniform, live perennial vegetative cover with a density of 70% over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions.

Final Clean out of Permanent Stormwater Treatment System: The Permittee(s) must ensure that the permanent stormwater treatment system meets all design requirements in Part III.C of the NPDES construction permit. This includes but is not limited to, a final clean out of temporary or permanent sedimentation basins that are to be used as permanent water quality management basins and final construction or maintenance of infiltration basins. All sediment must be removed from conveyance systems and ditches must be stabilized with permanent cover.

Removal of all Temporary BMPs: Prior to submission of the NDT, all temporary synthetic and structural erosion prevention and sediment control BMPs (such as silt fence) must be removed on the portions of the site for which the Permittee is responsible. BMPs designed to decompose on site (such as some compost logs) may be left in place.

Projects on Agricultural Land: For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land) Final Stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use.

ADDITIONAL BMPs FOR SPECIAL OR IMPAIRED WATERS DURING CONSTRUCTION ACTIVITY (APPENDIX A)

All requirements in Appendix A are in addition to BMPs already specified in the permit. Where provisions of Appendix A conflict with requirements elsewhere in the permit, the provisions in Appendix A take precedence. All BMPs used to comply with this Appendix must be documented in the SWPPP for the project (Appendix A.A).

Exposed Soils: All exposed soil areas must be stabilized within (7) days after the construction activity in that portion of the site has temporarily or permanently ceased (Appendix A.C.1.a).

Temporary sediment basin requirements described in Part III.B.1-5 of the NPDES construction permit must be used for common drainage locations that serve an area with five (5) or more acres disturbed at one time (Appendix A.C.1.b).

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

SHIBANI K. BISSON, PE
DATE: JAN. 27, 2009 UC. NO. 41860

2009 STREET AND UTILITY
IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA

701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com



763-541-4800 • Fax 763-541-1700
INFRASTRUCTURE ENGINEERING & PLANNING • CONSTRUCTION

REVISION NO. DATE

AS NOTED

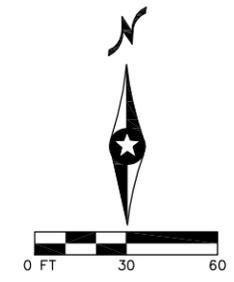
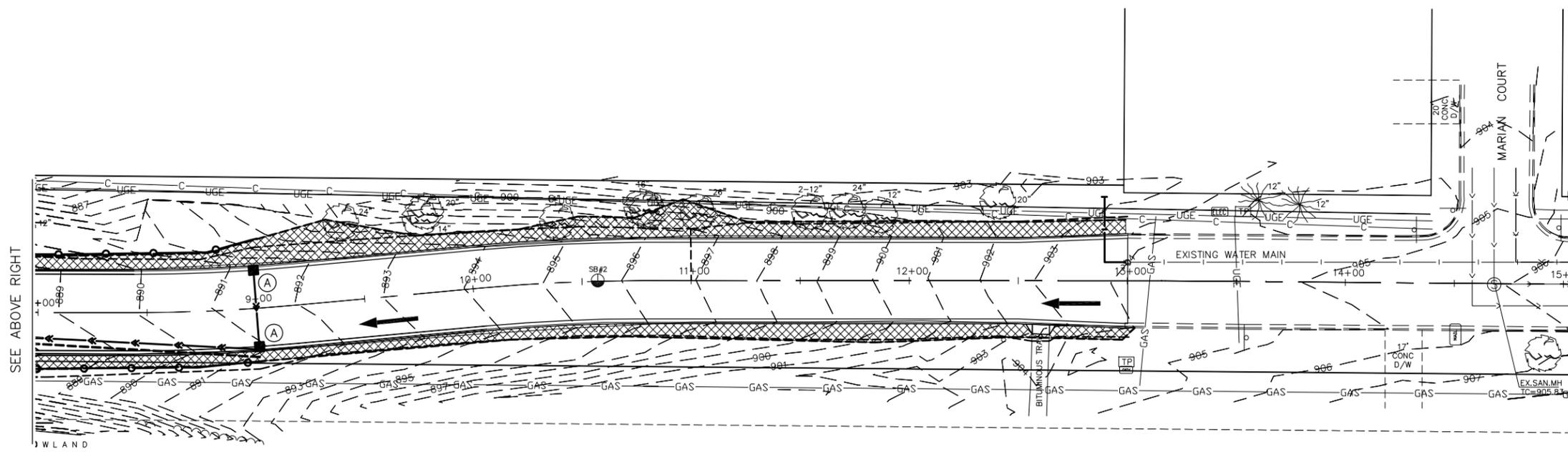
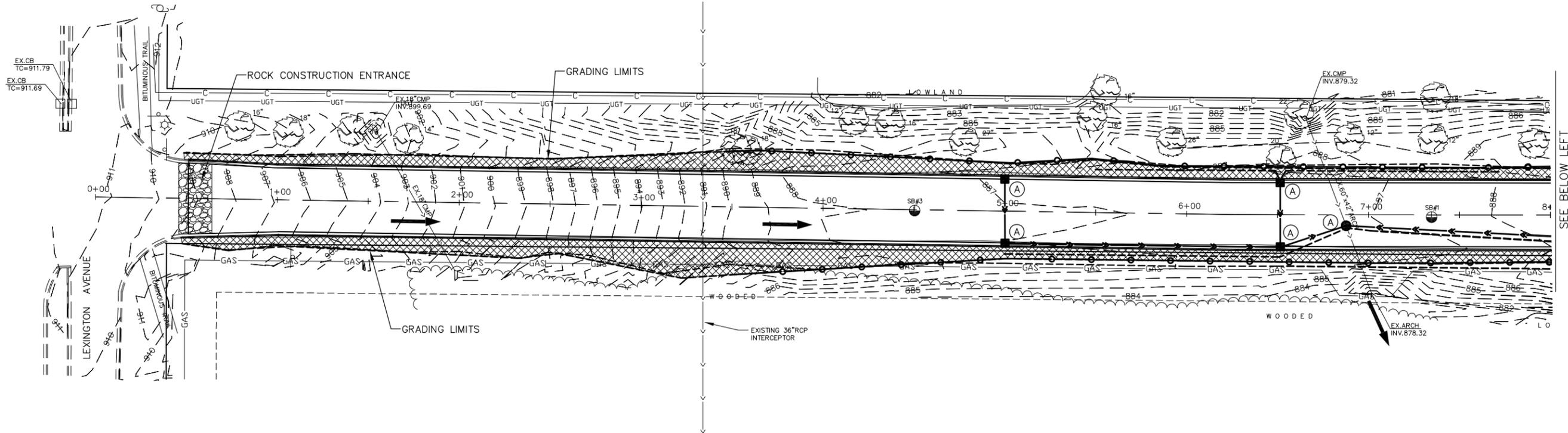
SCALE: PLAN BY: MRJ DESIGN BY: JPK PROJECT NO: 1307-32 RECORD COPY BY: SHB DATE

CITY PROJECT NO.

EROSION CONTROL PLAN
GENERAL NOTES AND DETAILS (SWPPP)

SHEET 12 OF 18 SHEETS

87TH AVENUE



- LEGEND**
- DIRECTION OF FLOW
 - SILT FENCE
 - SEED MIX - MN\DOT NO. 250 @ 70 lbs/Acre
TYPE 4 MULCH
FERTILIZER - 23-0-23 @ 200 lbs./Acre
 - INLET PROTECTION

REVISION NO.	EXPLANATION
SCALE:	AS NOTED
DESIGN BY:	JPK
PROJECT NO.:	1307-32
CHECKED BY:	SKB
DATE:	
RECORD COPY BY:	
DATE:	

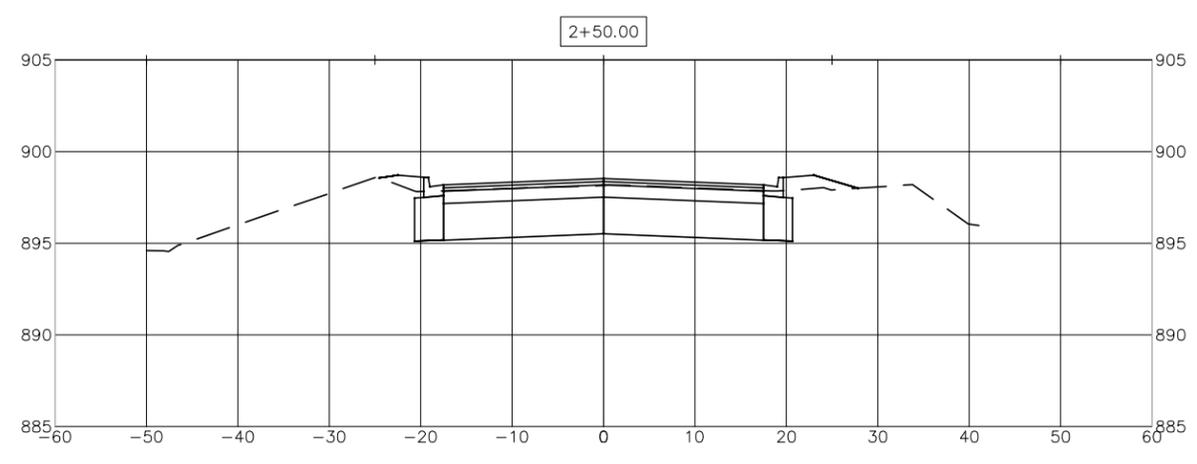
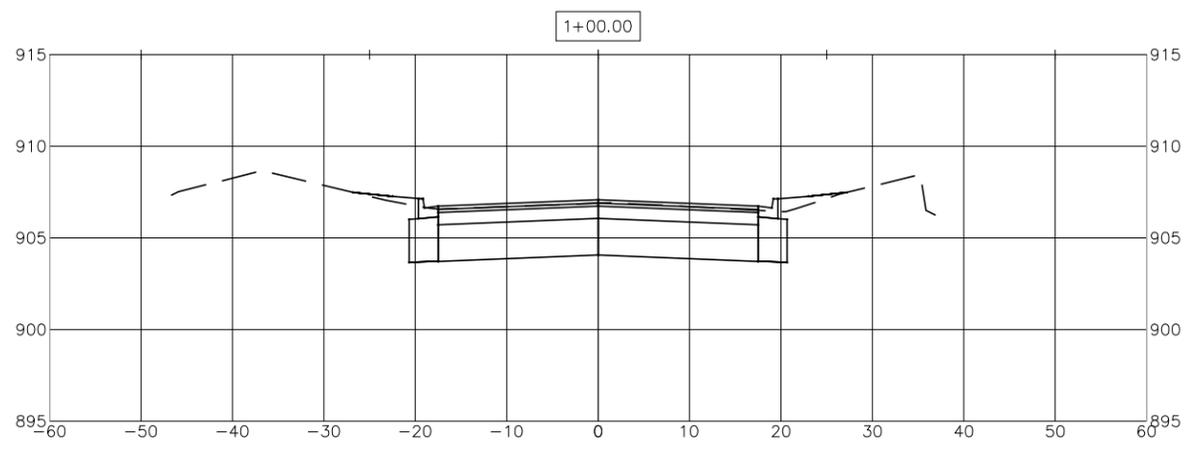
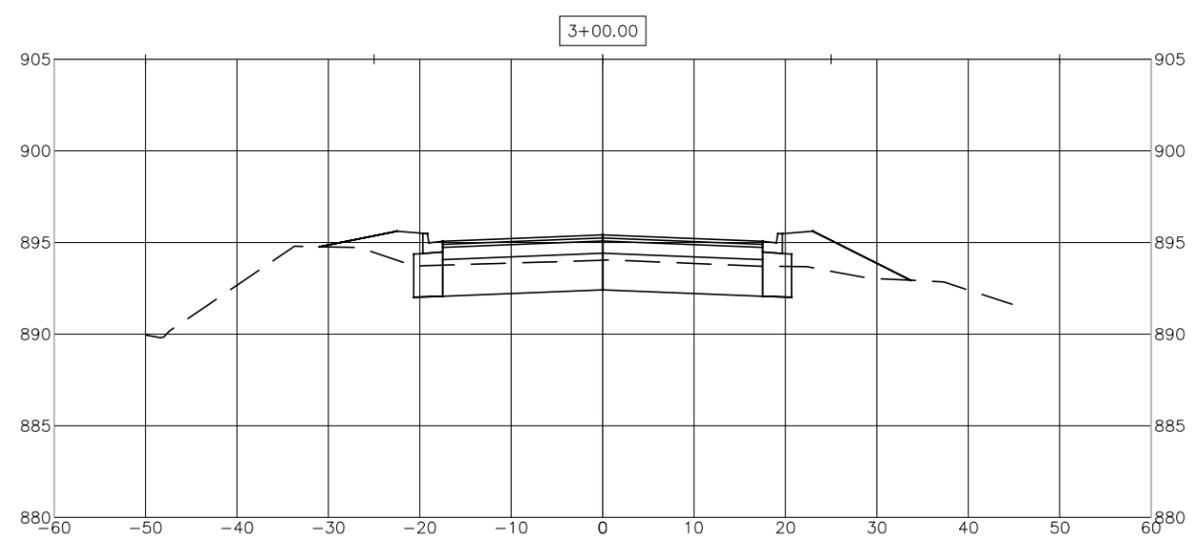
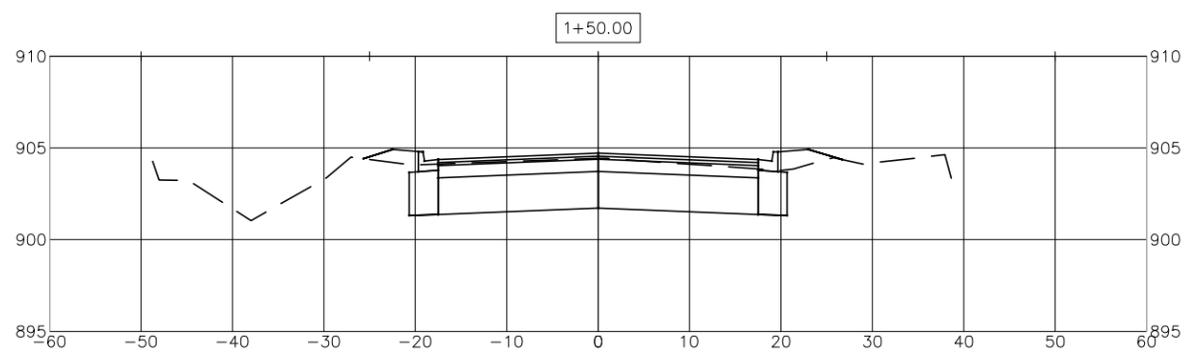
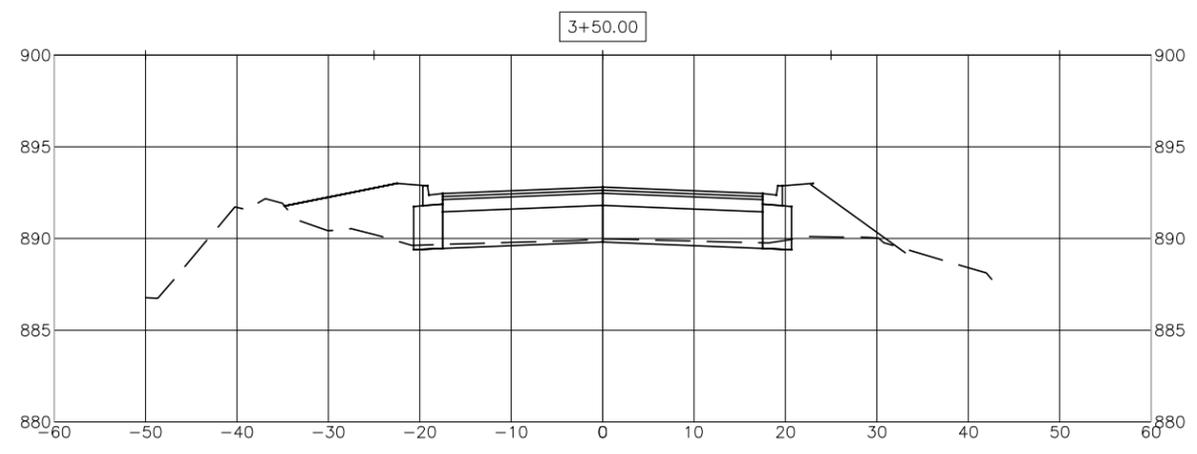
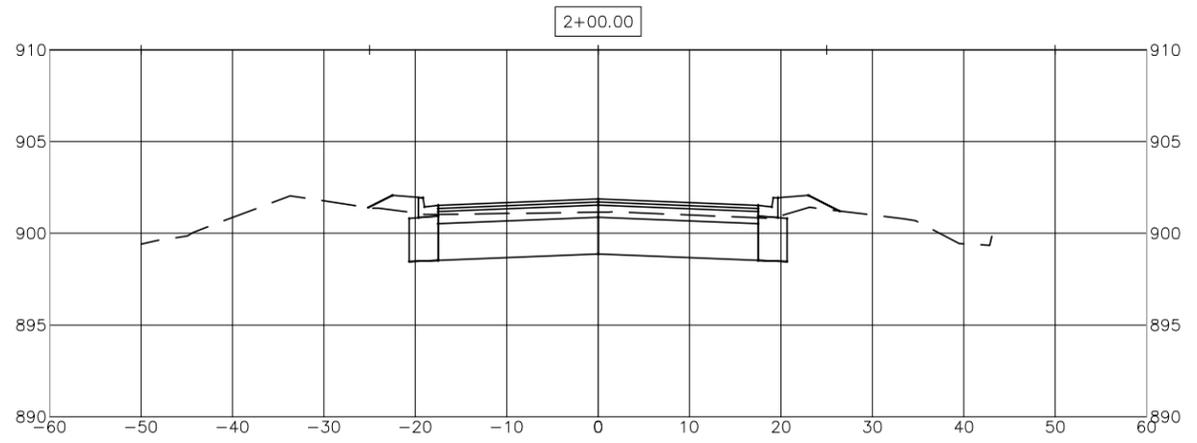
2009 STREET AND UTILITY
IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA

701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com

WSB
& Associates, Inc.

INFRASTRUCTURE ENGINEERING PLANNING CONSTRUCTION

K:\101507-32\Cad\Plan\1507-32-SWPPP02.dwg, EROSION CONTROL, 4/22/2009 10:42:53 AM



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

SHIBANI K. BISSON, PE
DATE: JAN. 27, 2009 LIC. NO. 41560

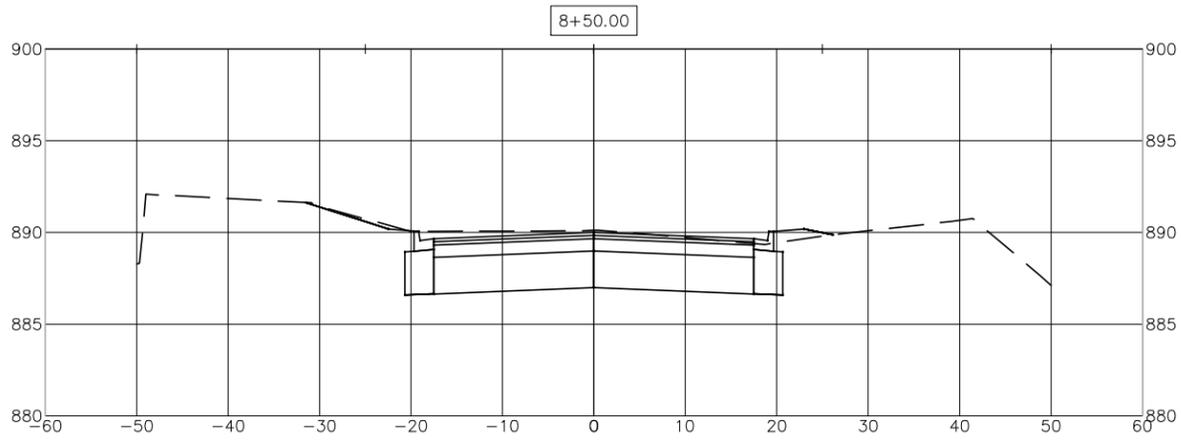
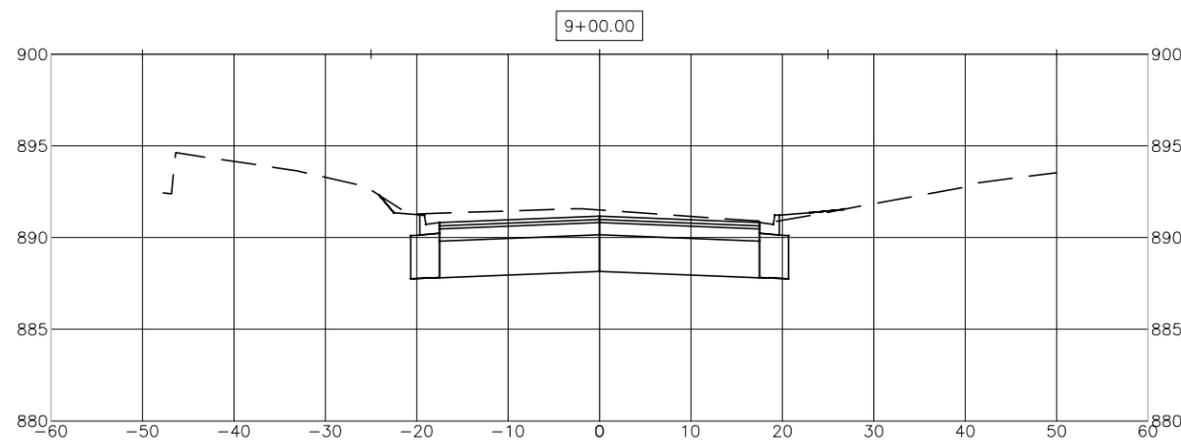
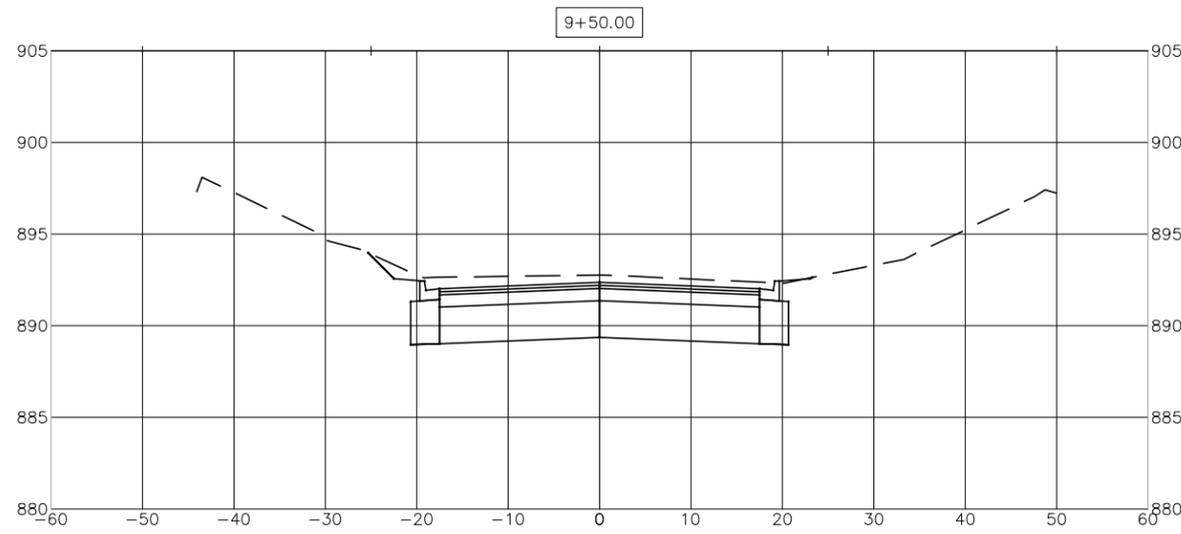
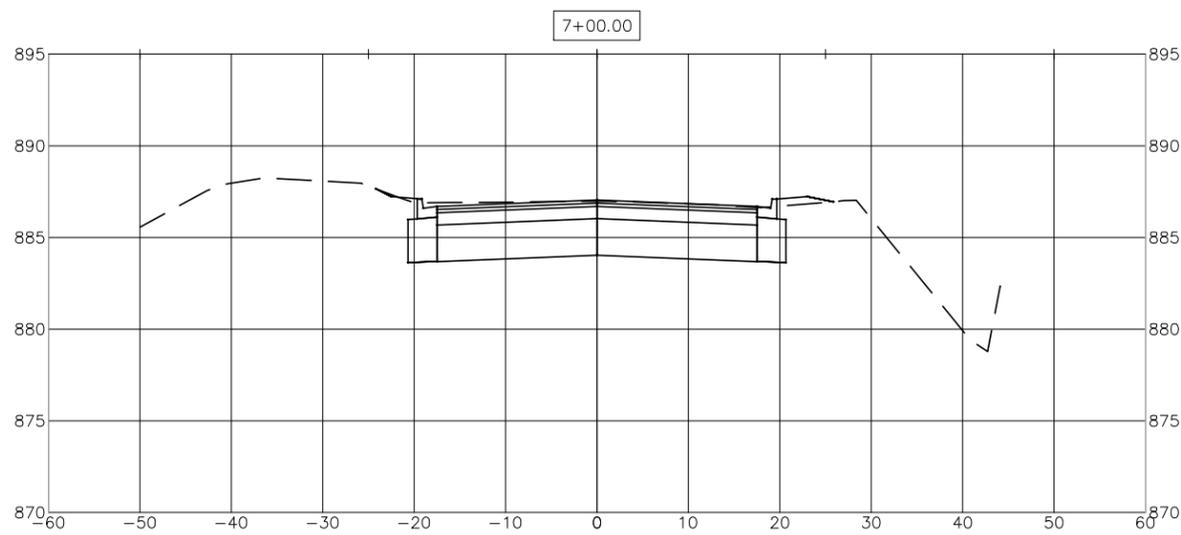
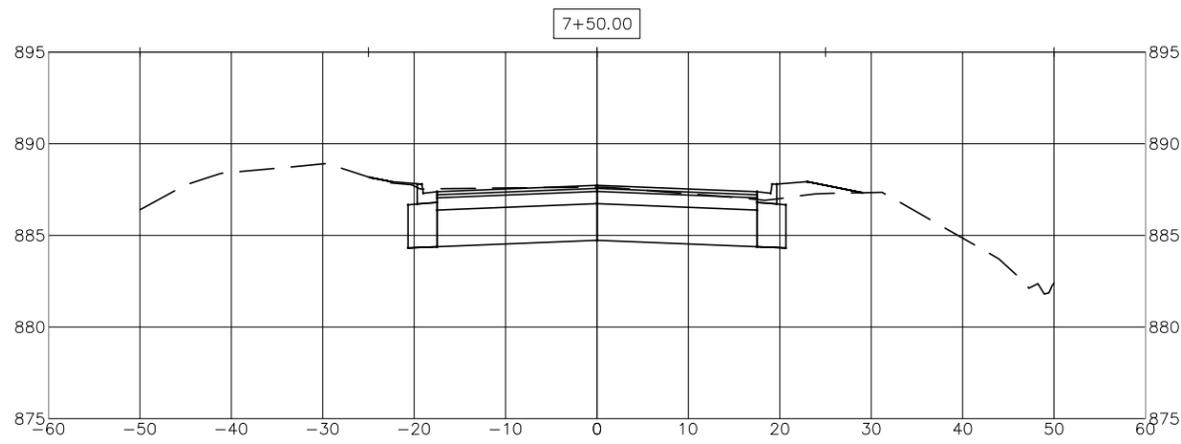
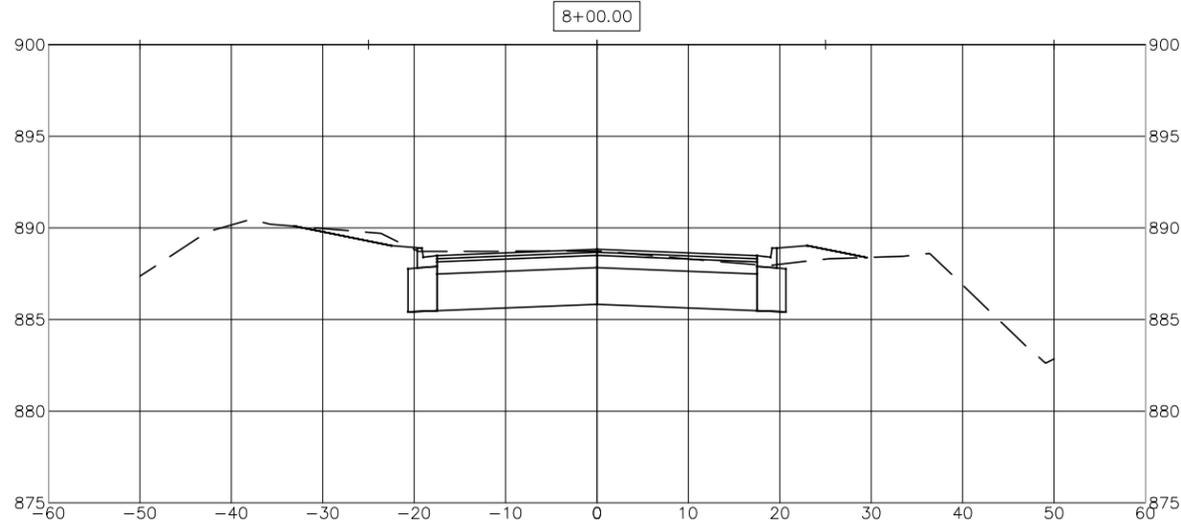
REVISION NO.	DATE	EXPLANATION

SCALE:	AS NOTED
PLAN BY:	MIRJ
DESIGN BY:	JPK
CHECKED BY:	SKB
PROJECT NO.:	1507-32
RECORD COPY BY:	
DATE:	

**2009 STREET AND UTILITY
IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA**

701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com





I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

SHIBANI K. BISSON, PE
DATE: JAN. 27, 2009 UC. NO. 41560

REVISION NO.	DATE	EXPLANATION

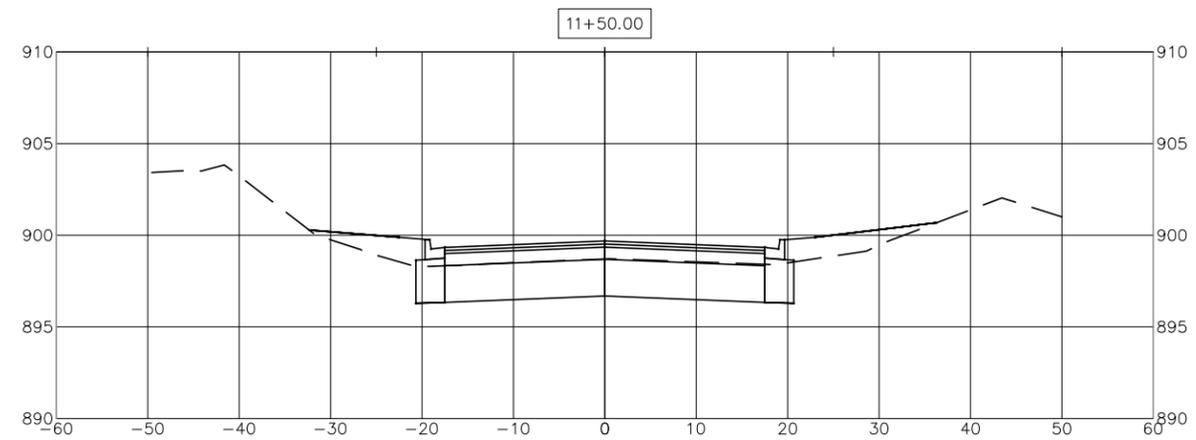
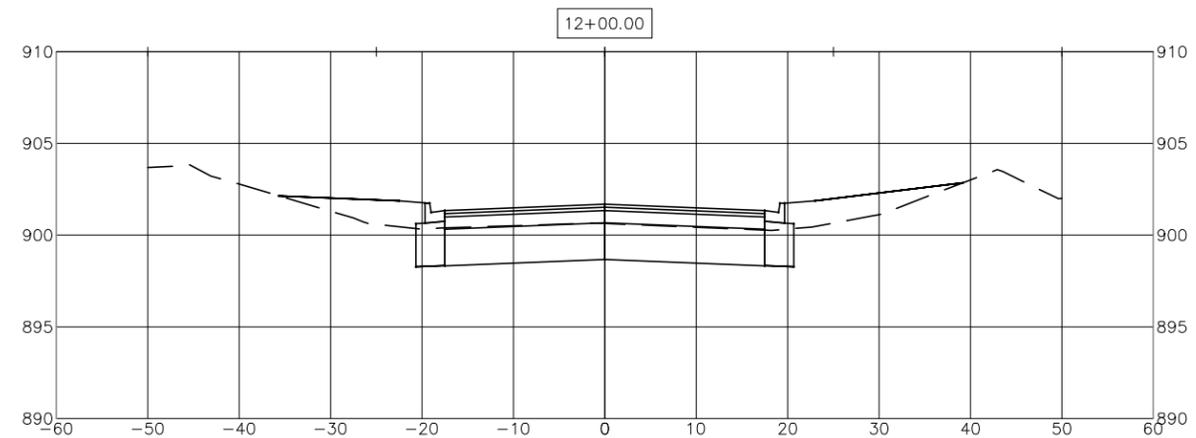
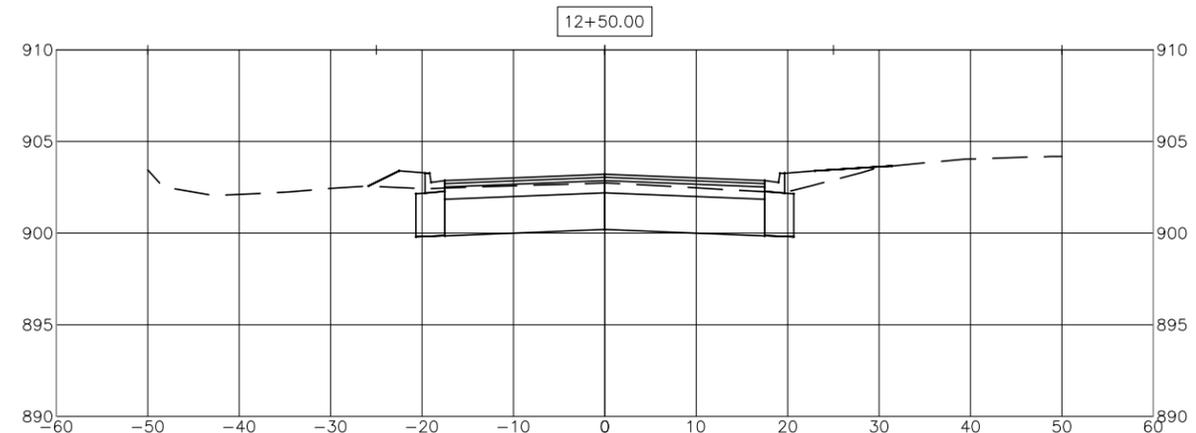
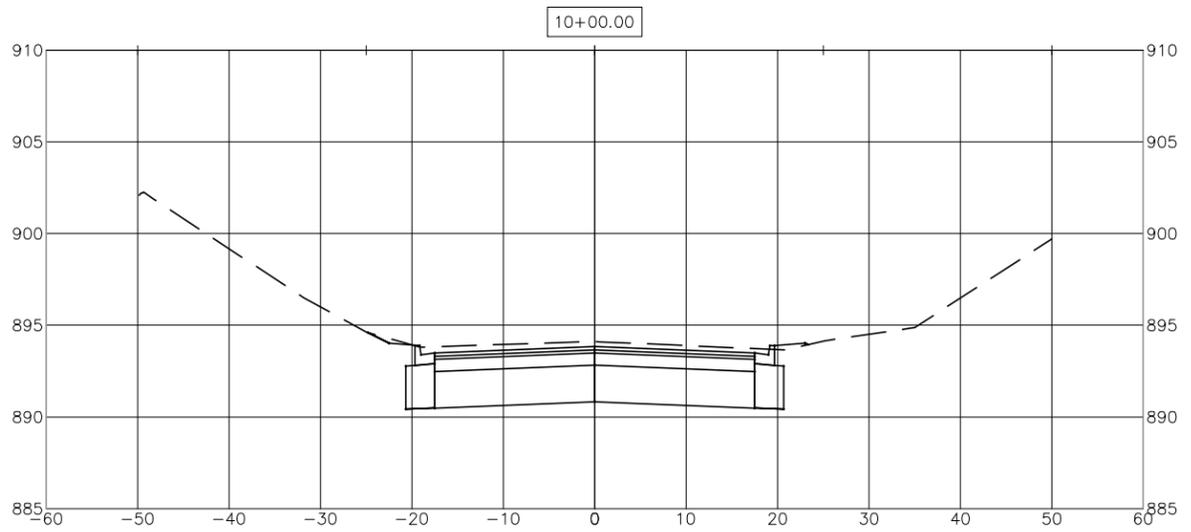
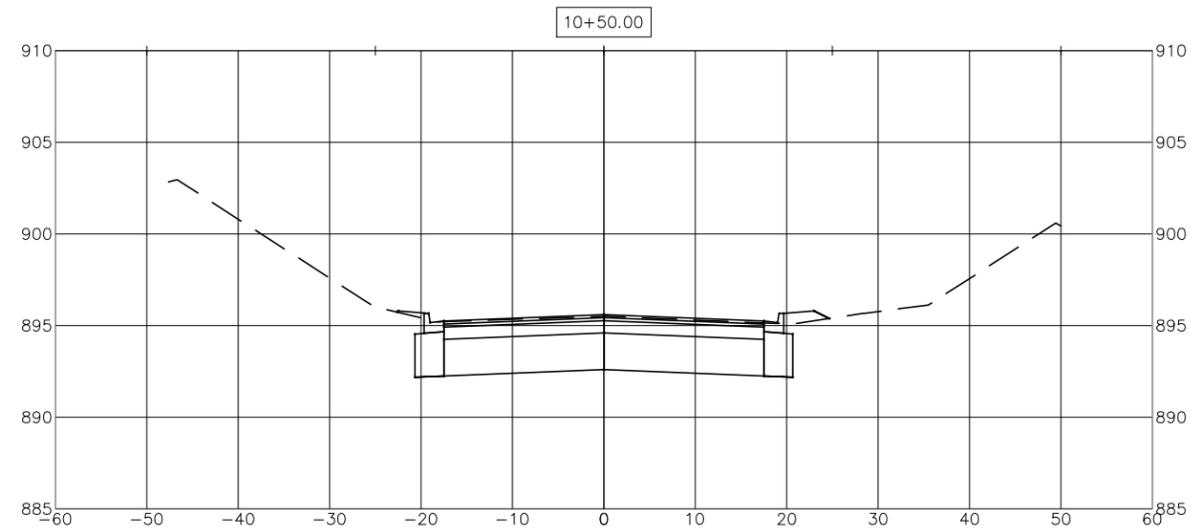
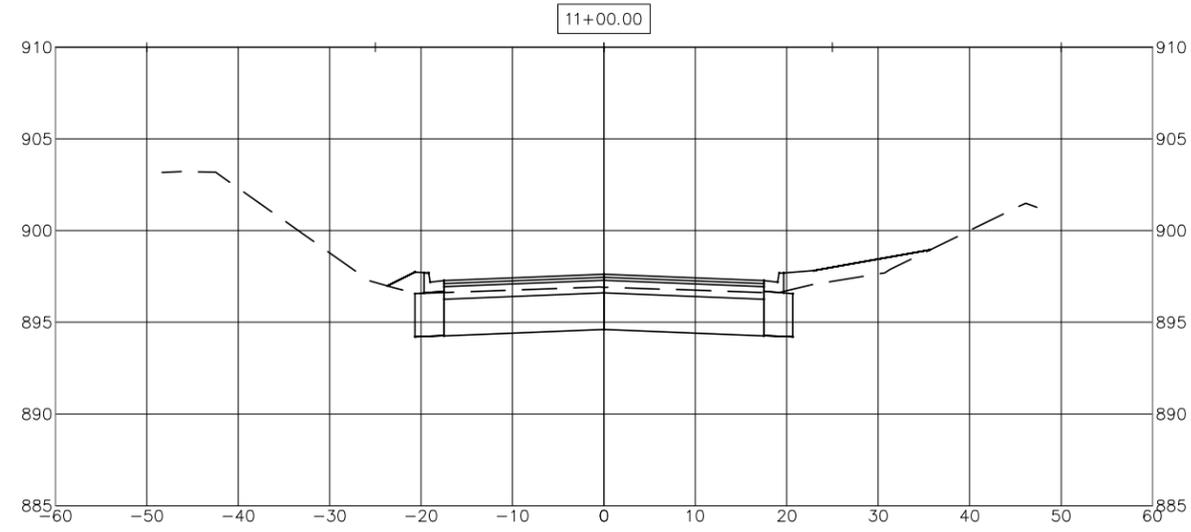
SCALE:	AS NOTED
PLAN BY: MRJ	DESIGN BY: JPK
CHECKED BY: SKB	PROJECT NO: 1507-32
RECORD COPY BY:	DATE:

**2009 STREET AND UTILITY
IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA**

701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com

WSB
& Associates, Inc.
INFRASTRUCTURE | ENGINEERING | PLANNING | CONSTRUCTION

K:\01507-32\Cad\Plan\1507-32-SECTIONS-A.dwg, 3, 4/22/2009 10:40:08 AM



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

SHIBANI K. BISSON, PE
 DATE: JAN. 27, 2009 UC. NO. 41560

**2009 STREET AND UTILITY
 IMPROVEMENT PROJECT
 87TH AVENUE
 CIRCLE PINES, MINNESOTA**

701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 www.wsbeng.com

WSB
 & Associates, Inc.
 INFRASTRUCTURE ENGINEERING PLANNING CONSTRUCTION

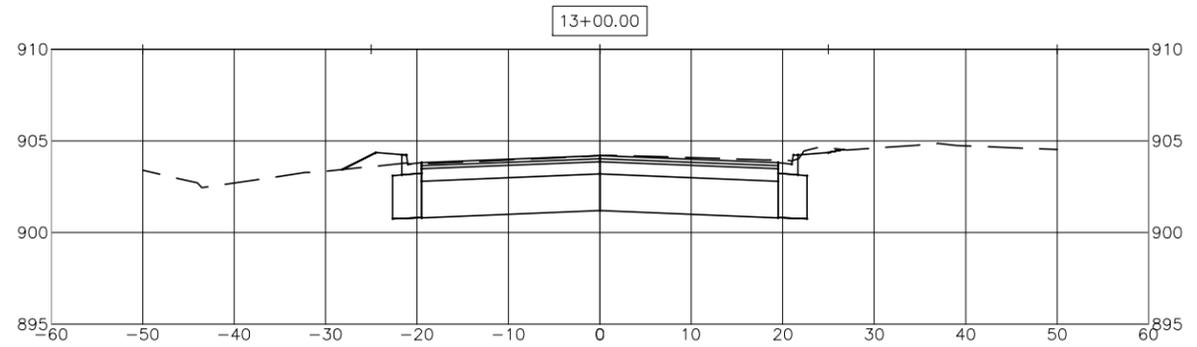
REVISION NO. DATE EXPLANATION

SCALE:	AS NOTED
PLAN BY:	MRJ
DESIGN BY:	JPK
CHECKED BY:	SKB
PROJECT NO.:	1507-32
RECORD COPY BY:	DATE

CITY PROJECT NO.

CROSS SECTIONS
 87TH AVENUE

SHEET 17 OF 18 SHEETS



CITY PROJECT NO.

CROSS SECTIONS
87TH AVENUE

SHEET 18 OF 18 SHEETS

**2009 STREET AND UTILITY
IMPROVEMENT PROJECT
87TH AVENUE
CIRCLE PINES, MINNESOTA**

701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com



763-841-4800 • Fax: 763-841-1700
INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT
WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION
AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER
UNDER THE LAWS OF THE STATE OF MINNESOTA

SHIBANI K. BISSON, PE
DATE: JAN. 27, 2009 LIC. NO. 415860

REVISION NO.
DATE

EXPLANATION

SCALE: AS NOTED

PLAN BY: MRJ

DESIGN BY: JPK

CHECKED BY: SKB

PROJECT NO.: 1307-32

RECORD COPY BY: DATE