DEMOLITION NOTES

1. Verify all existing utility locations.
2. It is the responsibility of the Contractor to perform or coordinate all necessary utility demolitions and relocations from existing utility locations to all onsite amenities and buildings. These connections include, but are not limited to, water, sanitary sewer, cable tv, telephone, gas, electric, site lighting, etc.
3. Prior to beginning work, contact Gopher State Onecall (651-454-0002) to locate utilities throughout the area under construction. The Contractor shall retain the services of a private utility locator to locate the private utilities.
4. Sawcut along edges of pavements, sidewalks, and curbs to remain.
5. All construction shall be performed in accordance with state and local standard specifications for construction.
6. Actual in-field trees/vegetation may differ slightly from that shown on the plans. Contractor shall field verify existing conditions for necessary removals to complete the work.

KEY NOTES

1. SAWCUT, REMOVE, AND DISPOSE OF BITUMINOUS PAVEMENT
2. SAWCUT, REMOVE, AND DISPOSE OF CONCRETE PAVEMENT
3. SAWCUT, REMOVE, AND DISPOSE OF CONCRETE CURB AND GUTTER
4. REMOVE AND DISPOSE OF STORM SEWER FLARED END SECTION
5. REMOVE AND DISPOSE OF TREE, STUMP, AND ROOTS
6. REMOVE AND DISPOSE OF STORM SEWER PIPE
7. REMOVE AND DISPOSE OF STORM SEWER PER CITY REQUIREMENTS, BULKHEAD ENDS TO REMAIN AND FILL WITH SAND (OR APPROVED ALTERNATIVE)
8. PROTECT EXISTING CATCH BASIN TO REMAIN. SAWCUT AND PATCH ADJACENT CURB AND PAVEMENT AS NECESSARY TO COMPLETE PIPE CONNECTION, MATCH EXISTING SECTIONS.

GENERAL

- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SETBACK LINE

SYMBOL LEGEND

- SAWCUT, REMOVE, AND DISPOSE OF BITUMINOUS PAVEMENT SECTION
- SAWCUT, REMOVE, AND DISPOSE OF CONCRETE PAVEMENT SECTION
- PROPOSED WETLAND IMPACT (18,726 SF)
- REMOVE AND DISPOSE OF TREE, STUMP, AND ROOTS
- APPROXIMATE BORING LOCATION SEE PROJECT GEOTECHNICAL REPORT

18" RCP (PER RECORD DRAWING)
8" (PER RECORD DRAWING)
8" PVC (PER RECORD DRAWING)
INV: 905.89 (PER RECORD DRAWING)
18" (PER RECORD DRAWING)
INV: 917.81 (PER RECORD DRAWING)
ROSEMARY WAY N.
INV (S): 914.8(
INV (N): 914.70
24" (PER RECORD DRAWING)
21" RCP (PER RECORD DRAWING)
INV: 915.17 (PER RECORD DRAWING)
WETLAND-6 IMPACT: 5,484 SF
WETLAND-3 IMPACT: 4,351 SF
WETLAND-5 IMPACT: 3,138 SF
WETLAND-7 IMPACT: 5,753 SF
WETLAND-6
WETLAND-5
WETLAND-8
WETLAND-7
WETLAND-3
VICTOR HUGO BLVD
MH-8 (48")
RIM: 918.35
INV: 914.70
24" HDPE @ 0.29%
MH-7 (48")
RIM: 920.65
INV: 913.90
24" HDPE @ 0.36%
B-01 B-02 B-03 B-04 B-05 B-06 B-07 B-08 B-09 B-10 B-11 B-12 B-13 B-14 B-15 B-16 B-17 B-18
GAS
OE

NORTH
0 15 30 60

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6770 STILLWATER BLVD, SUITE 110
STILLWATER, MN 55082

Project Title:
HUGO WEST APARTMENTS
HUGO, MN 55038

11/04/2024 PERMIT SET - NOT FOR CONSTRUCTION

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Bryan D. Miller, P.E.
Date: 11.04.2024 Lic. No.: 54950

Rev.	Date	Description

Project #: 12246027.000
Drawn By: NJN
Checked By: BDM
Issue Date: 11.04.2024

Sheet Title:
DEMOLITION PLAN

Sheet:
C100

SYMBOL LEGEND

PROPOSED PARK SPACE
TOTAL AREA = 79,707 SF± (1.8 ACRES)
TOTAL TRAILS = 1,120 LF±

GARAGE STALLS:	75
SURFACE STALLS:	124
TOTAL STALLS:	199

NEW IMPERVIOUS (APARTMENT):	2.6 ACRES±
NEW IMPERVIOUS (PARK):	0.2 ACRES±
TOTAL NEW IMPERVIOUS:	2.8 ACRES±

KEY NOTES

1. NEW STANDARD-DUTY BITUMINOUS PAVEMENT, DETAIL 1/C600
2. NEW LIGHT-DUTY CONCRETE PAVEMENT, DETAIL 3/C600
3. NEW HEAVY-DUTY CONCRETE PAVEMENT, DETAIL 4/C600
4. NEW B612 CONCRETE CURB AND GUTTER, DETAIL 5/C600
5. NEW SIGN AND POST, DETAIL 8/C600
   - _A: ADA PARKING
   - _B: ACCESS AISLE
   - _C: STOP SIGN
6. MATCH EXISTING PAVEMENT SECTION, RESTORE PER CITY REQUIREMENTS
7. TRASH ENCLOSURE, SEE ARCHITECTURAL
8. MONUMENT SIGN, SEE ARCHITECTURAL
9. NEW PARALLEL CURB RAMP, DETAIL 7/C600
10. NEW PERPENDICULAR RIGHT OF WAY CURB RAMP, DETAIL 1/C602
11. NEW COMMERCIAL DRIVEWAY, DETAIL 3/C602
12. NEW BOLLARD, DETAIL 9/C600
13. NEW BITUMINOUS TRAIL PAVEMENT, DETAIL 4/C602
14. NEW 4' BLACK VINYL FENCING W/ SLATS, DETAIL 5/C602
15. NEW SINGLE SWING GATE, 4' OPENING, DETAIL 6/C602
16. NEW HEAVY-DUTY BITUMINOUS PAVEMENT, DETAIL 2/C600
17. NEW SURMOUNTABLE CURB AND GUTTER, DETAIL 6/C600
18. NEW PET WASTE BAG DISPENSER AND SIGNAGE, CONFIRM FINAL LOCATION WITH OWNER
19. NEW PERPENDICULAR CURB RAMP, DETAIL 2/C602
20. COORDINATE FENCE INSTILLATION AND FINAL GATE LOCATIONS/SIZES WITH UTILITY COMPANIES
21. NEW B618 CITY CONCRETE CURB AND GUTTER, DETAIL 7/C602
22. TAPER CURB TO FLUSH, 5' TYPICAL

GENERAL

- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SETBACK LINE

SYMBOL LEGEND

- NEW STANDARD-DUTY BITUMINOUS PAVEMENT DETAIL 1/C600
- NEW HEAVY-DUTY BITUMINOUS PAVEMENT DETAIL 2/C600
- MATCH EXISTING PAVEMENT SECTION RESTORE PER CITY REQUIREMENTS
- NEW BITUMINOUS TRAIL PAVEMENT DETAIL 4/C602
- NEW LIGHT-DUTY CONCRETE PAVEMENT DETAIL 3/C600
- NEW HEAVY-DUTY CONCRETE PAVEMENT DETAIL 4/C600
- STRUCTURAL STOOP SEE ARCH/STRUCTURAL
- PAVEMENT MARKINGS (WHITE)

ROSEMARY WAY N.

89 UNIT APARTMENT BUILDING
FFE = 922.00 (ARCH 100'-00")

NEW 20 UNIT GARAGE
FFE = 922.00

NEW 17 UNIT GARAGE
FFE = 922.00 (ARCH 100'-00")

NEW 38 UNIT GARAGE
FFE = 922.00 (ARCH 100'-00")

WETLAND-8
WETLAND-7
WETLAND-3
EXISTING WETLAND 2
PROPOSED LOT LINE
VICTOR HUGO BLVD

NORTH
0 15 30 60

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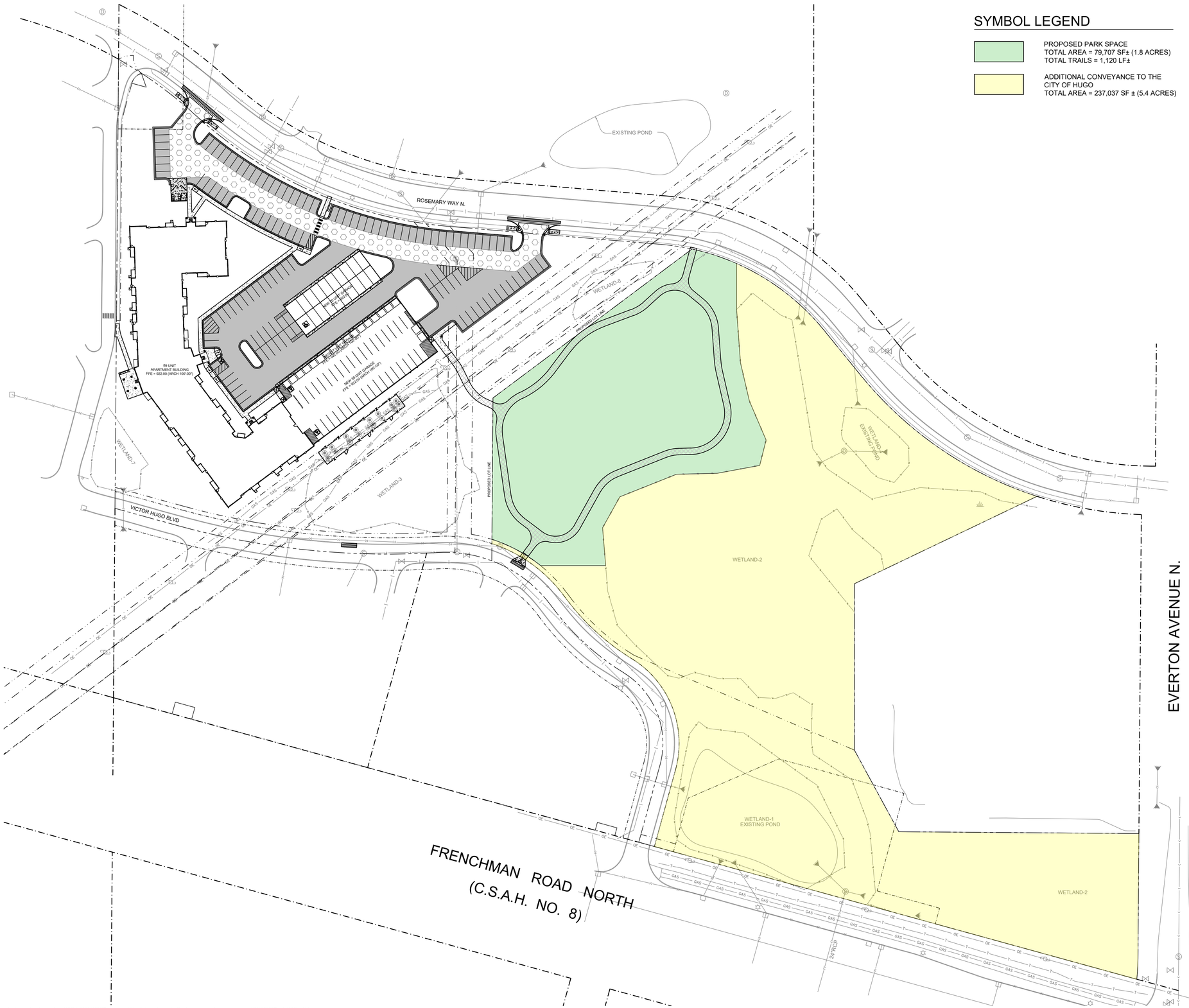
Rev.	Date	Description

Project #: 12246027.000
Drawn By: NJN
Checked By: BDM
Issue Date: 11.04.2024

Sheet Title:
SITE PLAN

Sheet:
C200



SYMBOL LEGEND

PROPOSED PARK SPACE
TOTAL AREA = 79,707 SF± (1.8 ACRES)
TOTAL TRAILS = 1,120 LF±

ADDITIONAL CONVEYANCE TO THE CITY OF HUGO
TOTAL AREA = 237,037 SF ± (5.4 ACRES)

GENERAL

- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SETBACK LINE

NORTH

0 30 60 120

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Drawn By: NJN
Checked By: BDM
Issue Date: 11.04.2024

Sheet Title:
OVERALL SITE PLAN

Sheet:
C201

GRADING NOTES

1. Tree protection consisting of snow fence or safety fence installed at the drip line shall be in place prior to beginning any grading or demolition work at the site.
2. All elevations with an asterisk (*) shall be field verified. If elevations vary significantly, notify the Engineer for further instructions.
3. Grades shown in paved areas represent finish elevation.
4. See Sheet C500 for restoration.
5. All construction shall be performed in accordance with state and local standard specifications for construction.
6. Pavement grades within ADA parking stalls and access aisles shall not exceed 2.0% in any direction.

KEY NOTES

(1) 1:20 MAXIMUM SLOPE IN PATH OF TRAVEL AND 1:50 MAXIMUM CROSS SLOPE ALONG BITUMINOUS TRAIL. MODIFY PROPOSED CONTOURS AS NECESSARY TO HELP SITE EARTHWORK. COORDINATE WITH OWNER AND ENGINEER DURING CONSTRUCTION.

(2) COORDINATE GRADING WITH EXISTING UTILITY COMPANIES

UPLAND AREA CALCULATIONS

SITE UPLAND / DEVELOPED AREA	=	386,311 SF± **8.9 ACRES±**

NOTES:
1) AREAS INCLUDE IMPACTED PORTIONS OF WETLANDS 3, 5, 6, AND 7 (AS IDENTIFIED ON SHEET C100).
2) AREAS INCLUDE EXISTING DEVELOPED ON-SITE STORMWATER BASINS RECEIVING RUNOFF FROM THE SITE (WETLANDS 1 & 4).

GENERAL

- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SETBACK LINE

SYMBOL LEGEND

- 950 — EXISTING CONTOURS
- 950 — PROPOSED CONTOURS - MAJOR INTERVAL
- 949 — PROPOSED CONTOURS - MINOR INTERVAL
- GRADE BREAK LINE
- 2.0% — GRADE SLOPE
- 902.00 TC / 901.00 GL — SPOT ABBREVIATIONS:

TC - TOP OF CURB
GL - GUTTER LINE
GO - GUTTER OUT
B - BITUMINOUS
C - CONCRETE
CC - CURB CUT
EOF - OVERFLOW
TW - TOP OF WALL
BW - BOTTOM OF WALL (F/G)
(*) - EXISTING TO BE VERIFIED

ROSEMARY WAY N.

WETLAND-8

WETLAND-7

WETLAND-3

VICTOR HUGO BLVD

NEW 20 UNIT GARAGE HFE = 922.00 (ARCH 100-06")

NEW 17 UNIT GARAGE FFE = 922.00 (ARCH 100-06")

NEW 38 UNIT GARAGE FFE =922.00 (ARCH 100-06")

89 UNIT APARTMENT BUILDING FFE = 922.00 (ARCH 100-06")

PROPOSED LOT LINE

PROPOSED 920 LOT LINE

SATISFACTORY FILL BORROW PIT AREA
(TO BE FILLED BACK IN WITH THE EXISTING TOPSOIL STOCKPILE ONCE SATISFACTORY FILL IS FINISHED)

WETLAND 3
EXISTING OUTLET: 917.00
PROPOSED OUTLET: 917.00
EXISTING 100-YR HWL: 917.67
PROPOSED 100-YR HWL: 917.67

2% MAX SLOPE IN ADA AREA

NORTH
0 15 30 60

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Rev.	Date	Description

Project #: 12246027.000
Drawn By: NJN
Checked By: BDM
Issue Date: 11.04.2024
Sheet Title: GRADING PLAN

Sheet: **C300**

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EROSION CONTROL NOTES

1. See Sheets C600-C601 for Erosion Control Notes.

KEY NOTES

1. SEDIMENT LOG, DETAIL 2/C601
2. ROCK CONSTRUCTION ENTRANCE (LOCATE DURING CONSTRUCTION), DETAIL 1/C601
3. INLET PROTECTION, DETAIL 5/C601
4. EROSION CONTROL BLANKET, DETAIL 6/C601 (TYPICAL OF ALL SLOPES 4:1 OR GREATER, NOT ALL AREAS MAY BE SHOWN ON THE PLAN)
5. SILT FENCE, DETAIL 3/C601 (INSTALL DOUBLE ROW UPGRADIENT OF ALL WETLANDS
6. RIP RAP AT OUTLET, DETAIL 13/C601

GENERAL

- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SETBACK LINE

SYMBOL LEGEND

- SEDIMENT LOG, DETAIL 2/C601
- SILT FENCE, DETAIL 3/C601
- ROCK CONSTRUCTION ENTRANCE (LOCATE DURING CONSTRUCTION) DETAIL 1/C601
- INLET PROTECTION, DETAIL 5/C601
- CONCRETE WASHOUT STATION (LOCATE DURING CONSTRUCTION)
- EROSION CONTROL BLANKET, DETAIL 6/C601 (TYPICAL OF ALL SLOPES 4:1 OR GREATER. NOT ALL AREAS MAY BE SHOWN ON PLAN.

ROSEMARY WAY N.

89 UNIT APARTMENT BUILDING FFE = 922.00 (ARCH 100'-0

NEW 20 UNIT GARAGE FFE = 922.00 (ARCH 100'-00")

NEW 17 UNIT GARAGE FFE = 922.00 (ARCH 100'-00")

NEW 38 UNIT GARAGE FFE = 922.00 (ARCH 100'-00")

WETLAND-8

WETLAND-3

WETLAND-2

PROPOSED LOT LINE

PROPOSED LOT LINE

VICTOR HUGO BLVD

NORTH

0 15 30 60

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Project #: 12246027.000
Drawn By: NJN
Checked By: BDM
Issue Date: 11.04.2024

Sheet Title:
EROSION CONTROL PLAN

Sheet:
C301

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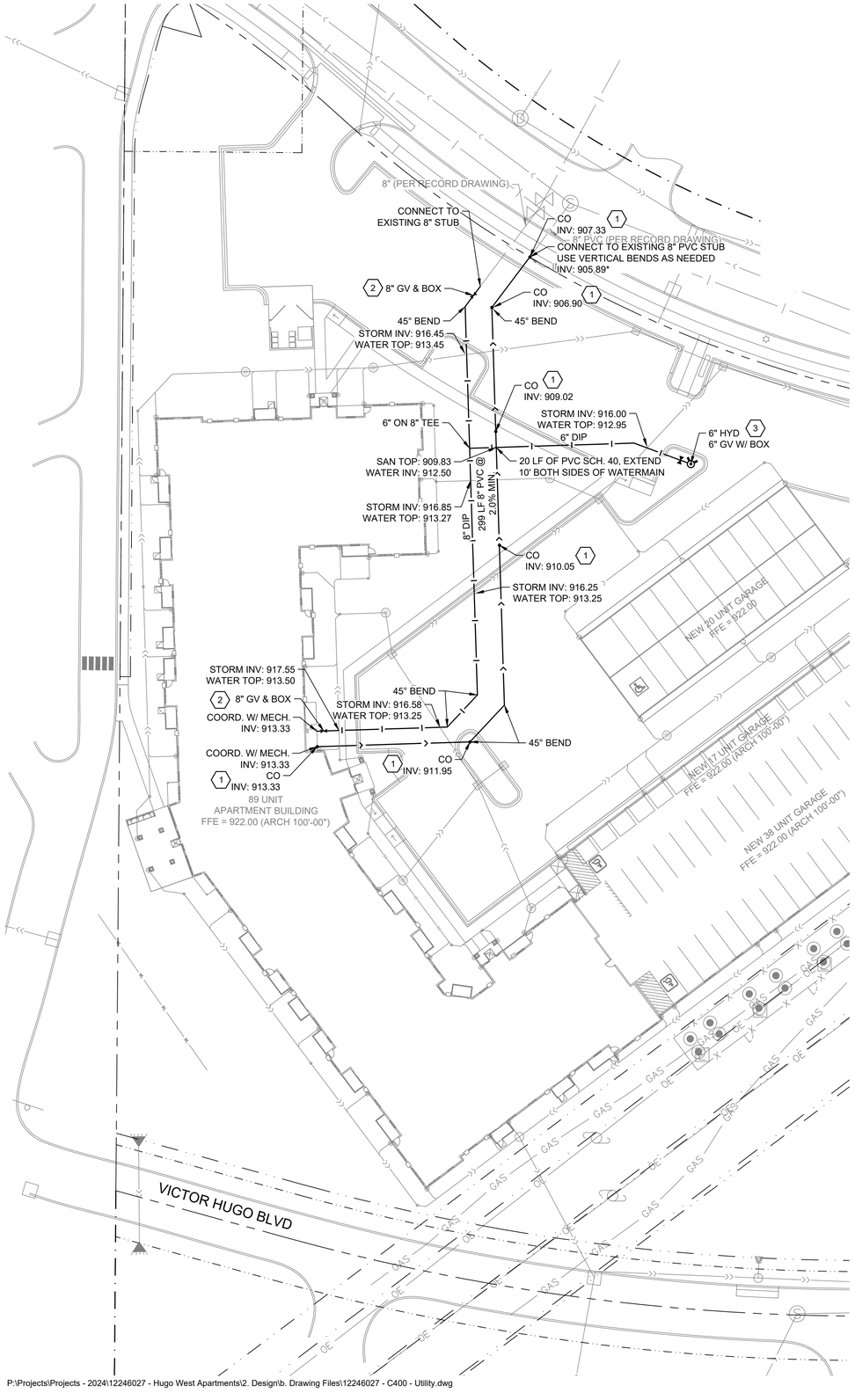

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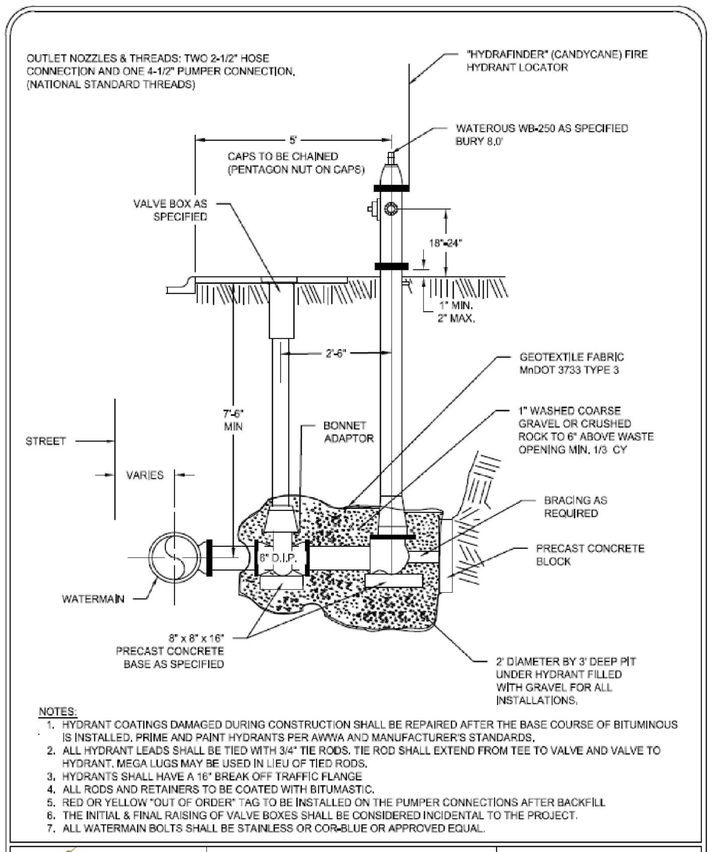
KEY NOTES

1. CLEANOUT, DETAIL 10/C601
2. GATE VALVE AND BOX, DETAIL 11/C601
3. HYDRANT & GATE VALVE, SEE DETAIL 1/C400



NOTES:
1. HYDRANT COATINGS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AFTER THE BASE COURSE OF BITUMINOUS IS INSTALLED. PRIME AND PAINT HYDRANTS PER AWWA AND MANUFACTURER'S STANDARDS.
2. ALL HYDRANT LEADS SHALL BE TIED WITH 3/4" TIE RODS. TIE ROD SHALL EXTEND FROM TEE TO VALVE AND VALVE TO HYDRANT. MEGA LUGS MAY BE USED IN LIEU OF TIED RODS.
3. HYDRANTS SHALL HAVE A 16" BREAK OFF TRAFFIC FLANGE
4. ALL RODS AND RETAINERS TO BE COATED WITH BITUMASTIC.
5. RED OR YELLOW "OUT OF ORDER" TAG TO BE INSTALLED ON THE PUMPER CONNECTIONS AFTER BACKFILL
6. THE INITIAL & FINAL RAISING OF VALVE BOXES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
7. ALL WATERMAIN BOLTS SHALL BE STAINLESS OR COR-BLUE OR APPROVED EQUAL.

CITY OF HUGO EST. 1906	TYPICAL HYDRANT INSTALLATION	Special Details	
		Date: 04-01-15	HU-W-1
		Revised: 03-12-20	

1 / C400 HYDRANT & GATE VALVE INSTALLATION DETAIL

NOT TO SCALE

GENERAL

- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SETBACK LINE

SYMBOL LEGEND

- WATERMAIN PIPE
- SANITARY SEWER PIPE
- CLEANOUT (CO), DETAIL 10/C601
- GATE VALVE & BOX, DETAIL 11/C601
- HYDRANT (HYD), DETAIL 1/C400
- * EXISTING ELEVATION TO BE VERIFIED

UTILITY NOTES

1. It is the responsibility of the contractor to perform or coordinate all necessary utility connections and relocations from existing utility locations to the proposed building, as well as to all onsite amenities. These connections include but are not limited to water, sanitary sewer, cable TV, telephone, gas, electric, site lighting, etc.
2. All service connections shall be performed in accordance with state and local standard specifications for construction. Utility connections (sanitary sewer, watermain, and storm sewer) may require a permit from the City.
3. The contractor shall verify the elevations at proposed connections to existing utilities prior to any demolition or excavation.
4. The contractor shall notify all appropriate engineering departments and utility companies 72 hours prior to construction. All necessary precautions shall be made to avoid damage to existing utilities.
5. Storm sewer requires testing in accordance with Minnesota plumbing code 4714.1107 where located within 10 feet of waterlines or the building.
6. HDPE storm sewer piping shall meet ASTM F2306 and fittings shall meet ASTM D3212 joint pressure test. Installation shall meet ASTM C2321.
7. All RCP pipe shown on the plans shall be MN/DOT class 3.
8. Maintain a minimum of 7 ½' of cover over all water lines and sanitary sewer lines. Where 7 ½' of cover is not provided, install 2" rigid polystyrene insulation (MN/DOT 3760) with a thermal resistance of at least 5 and a compressive strength of at least 25 psi. Insulation shall be 8' wide, centered over pipe with 6" sand cushion between pipe and insulation. Where depth is less than 5', use 4" of insulation.
9. Install water lines 12" above sewers. Where the sewer is less than 12" below the water line (or above), install sewer piping of materials approved for inside building use for 10 feet on each side of the crossing.
10. All watermain piping shall be class 52 ductile iron pipe unless noted otherwise.
11. See Project Specifications for bedding requirements.
12. Pressure test and disinfect all new watermains in accordance with state and local requirements.
13. Sanitary sewer piping shall be PVC, SDR-35 for depths less than 12', PVC SDR-26 for depths between 12' and 26', and class 52 D.I.P. for depths of 26' or more.
14. A structure adjustment shall include removing and salvaging the existing casting assembly, removing existing concrete rings to the precast section. Install new rings and salvaged casting to proposed grades, cleaning casting flange by mechanical means to insure a sound surface and install an external chimney seal from casting to precast section. Chimney seals shall be Infi-Shield Uni-Band or an approved equal.

NORTH

0 15 30 60

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HUGO, MN 55038

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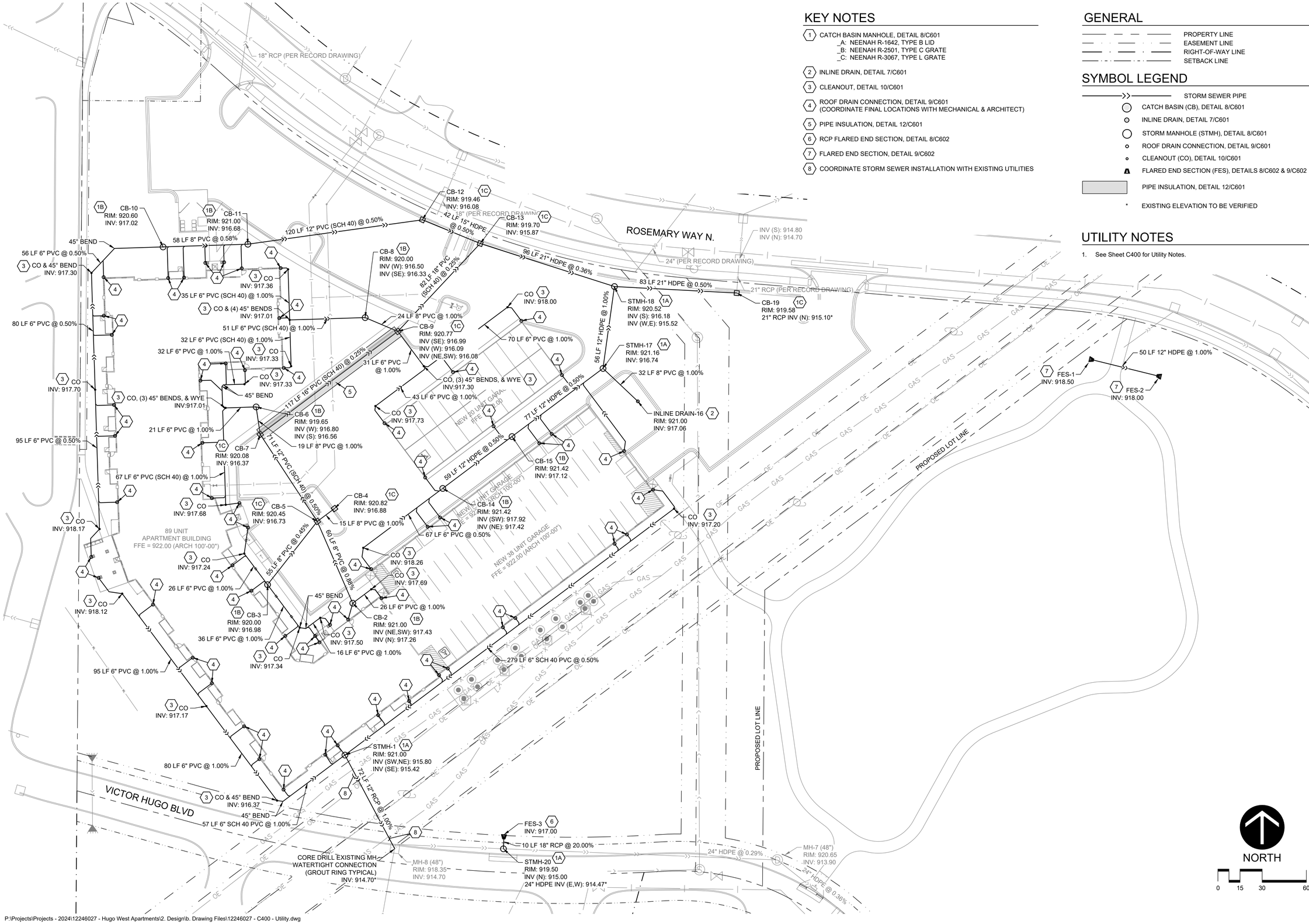
Rev.	Date	Description

Project #: 12246027.000
Drawn By: NJN
Checked By: BDM
Issue Date: 11.04.2024

Sheet Title:
SANITARY AND WATERMAIN PLAN

Sheet:
C400



KEY NOTES

1. CATCH BASIN MANHOLE, DETAIL 8/C601
   - _A: NEENAH R-1642, TYPE B LID
   - _B: NEENAH R-2501, TYPE C GRATE
   - _C: NEENAH R-3067, TYPE L GRATE
2. INLINE DRAIN, DETAIL 7/C601
3. CLEANOUT, DETAIL 10/C601
4. ROOF DRAIN CONNECTION, DETAIL 9/C601 (COORDINATE FINAL LOCATIONS WITH MECHANICAL & ARCHITECT)
5. PIPE INSULATION, DETAIL 12/C601
6. RCP FLARED END SECTION, DETAIL 8/C602
7. FLARED END SECTION, DETAIL 9/C602
8. COORDINATE STORM SEWER INSTALLATION WITH EXISTING UTILITIES

GENERAL

- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SETBACK LINE

SYMBOL LEGEND

- STORM SEWER PIPE
- CATCH BASIN (CB), DETAIL 8/C601
- INLINE DRAIN, DETAIL 7/C601
- STORM MANHOLE (STMH), DETAIL 8/C601
- ROOF DRAIN CONNECTION, DETAIL 9/C601
- CLEANOUT (CO), DETAIL 10/C601
- FLARED END SECTION (FES), DETAILS 8/C602 & 9/C602
- PIPE INSULATION, DETAIL 12/C601
- * EXISTING ELEVATION TO BE VERIFIED

UTILITY NOTES

1. See Sheet C400 for Utility Notes.

NORTH

0 15 30 60

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Rev.	Date	Description

Project #: 12246027.000
Drawn By: NJN
Checked By: BDM
Issue Date: 11.04.2024
Sheet Title:

STORM SEWER PLAN

Sheet:
C401

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PLANTING CALCULATIONS

PARKING & LOADING AREA CALCULATIONS

INTERIOR PARKING LOT AREA	=	61,119 SF±
REQUIRED INTERIOR LANDSCAPING	=	5% x 61,119 SF
REQUIRED	=	3,056 SF
PROVIDED	=	3,468 SF±

PLANTING CALCULATIONS:

1 DECIDUOUS TREE PER UNIT	=	89 DECIDUOUS
REQUESTED/PROVIDED	=	42
1 CONIFEROUS TREE PER UNIT	=	89 CONIFEROUS
REQUESTED/PROVIDED	=	64
1 ORNAMENTAL PER 1,000 SF BLDG	=	46 ORNAMENTALS
REQUESTED/PROVIDED	=	37
1 SHRUB PER 200 SF BLDG	=	230 SHRUBS
REQUESTED/PROVIDED	=	343

SHRUBS

Symbol	Qty.	Common Name	Size
	98	Anthony Waterer Spirea	15"
	90	Little Princess Spirea	15"
	70	Isanti Dogwood	24"
	85	Scandia Juniper	15"

Notes:
1. The planting locations, species, and quantities shown are approximate. Final species and planting arrangements shall be provided by the landscape contractor for Owner review and approval prior to planting.
2. Additional landscape screening shall be provided to screen any ground mounted mechanical equipment. The locations and plant types for screening shall be reviewed and approved by Owner once mechanical equipment locations are known.

TREES

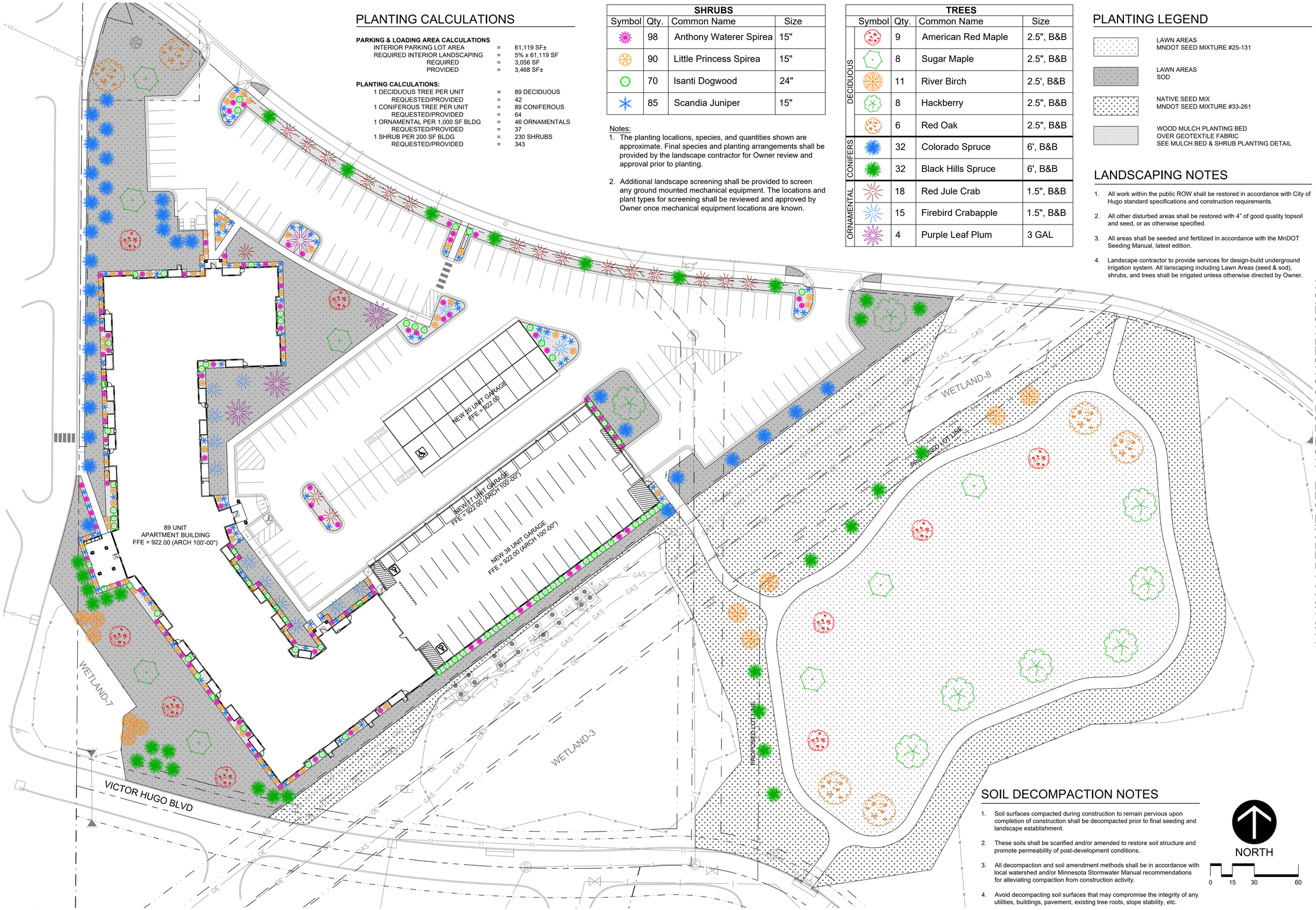
	Symbol	Qty.	Common Name	Size
DECIDUOUS		9	American Red Maple	2.5", B&B
		8	Sugar Maple	2.5", B&B
		11	River Birch	2.5', B&B
		8	Hackberry	2.5", B&B
		6	Red Oak	2.5", B&B
CONIFERS		32	Colorado Spruce	6', B&B
		32	Black Hills Spruce	6', B&B
ORNAMENTAL		18	Red Jule Crab	1.5", B&B
		15	Firebird Crabapple	1.5", B&B
		4	Purple Leaf Plum	3 GAL

PLANTING LEGEND

- LAWN AREAS — MNDOT SEED MIXTURE #25-131
- LAWN AREAS — SOD
- NATIVE SEED MIX — MNDOT SEED MIXTURE #33-261
- WOOD MULCH PLANTING BED OVER GEOTEXTILE FABRIC — SEE MULCH BED & SHRUB PLANTING DETAIL

LANDSCAPING NOTES

1. All work within the public ROW shall be restored in accordance with City of Hugo standard specifications and construction requirements.
2. All other disturbed areas shall be restored with 4" of good quality topsoil and seed, or as otherwise specified.
3. All areas shall be seeded and fertilized in accordance with the MnDOT Seeding Manual, latest edition.
4. Landscape contractor to provide services for design-build underground irrigation system. All lanscaping including Lawn Areas (seed & sod), shrubs, and trees shall be irrigated unless otherwise directed by Owner.



SOIL DECOMPACTION NOTES

1. Soil surfaces compacted during construction to remain pervious upon completion of construction shall be decompacted prior to final seeding and landscape establishment.
2. These soils shall be scarified and/or amended to restore soil structure and promote permeability of post-development conditions.
3. All decompaction and soil amendment methods shall be in accordance with local watershed and/or Minnesota Stormwater Manual recommendations for alleviating compaction from construction activity.
4. Avoid decompacting soil surfaces that may compromise the integrity of any utilities, buildings, pavement, existing tree roots, slope stability, etc.

NORTH

0 15 30 60

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11/04/2024 PERMIT SET - NOT FOR CONSTRUCTION

Project Title:
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HUGO, MN 55038

I hereby certify that this plan, specifications 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.

Bryan D. Miller, P.E.

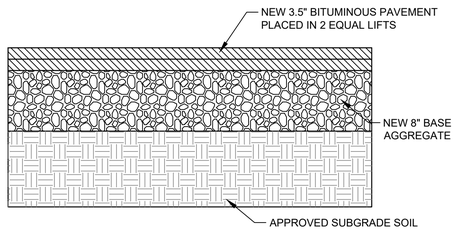
Date: 11.04.2024 Lic. No.: 54950

Rev.	Date	Description

Project #: 12246027.000
Drawn By: NJN
Checked By: BDM
Issue Date: 11.04.2024

Sheet Title:
LANDSCAPE PLAN

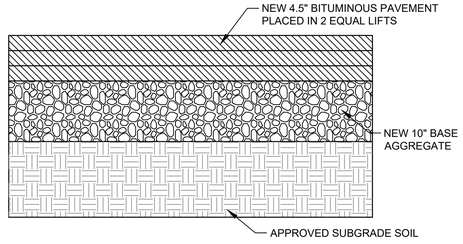
Sheet:
C500



STANDARD-DUTY BITUMINOUS PAVEMENT SECTION

1 / C600

NOT TO SCALE



HEAVY-DUTY BITUMINOUS PAVEMENT SECTION

2 / C600

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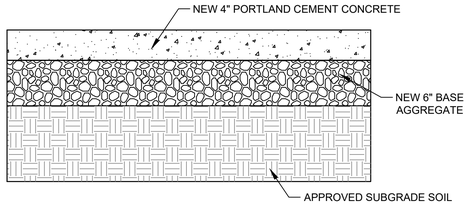

LIGHT-DUTY CONCRETE PAVEMENT DETAIL

3 / C600

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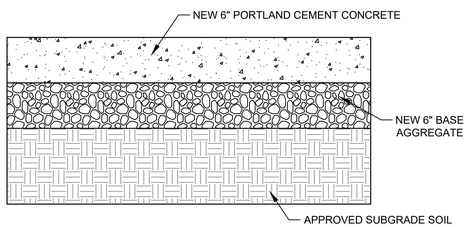

HEAVY-DUTY CONCRETE PAVEMENT DETAIL

4 / C600

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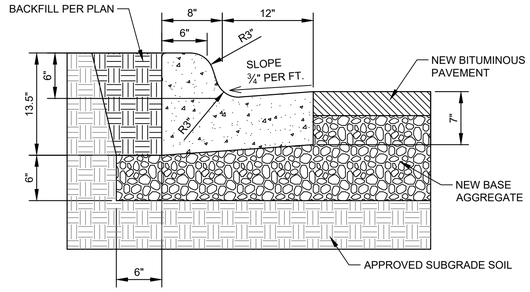
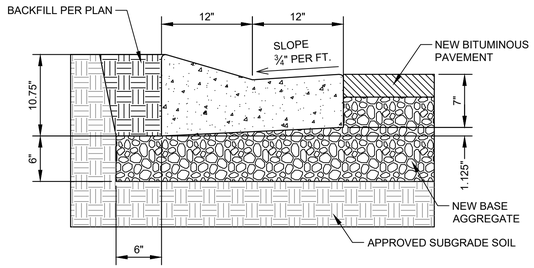


NOTE: TIP OUT GUTTER WHEN NEEDED TO ENSURE POSITIVE DRAINAGE.

B612 CONCRETE CURB & GUTTER DETAIL

5 / C600

NOT TO SCALE

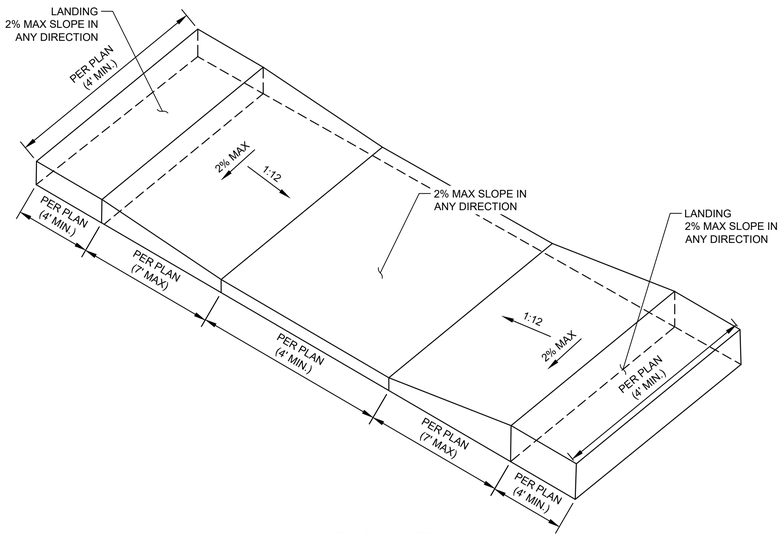


NOTE: TIP OUT GUTTER WHEN NEEDED TO ENSURE POSITIVE DRAINAGE.

SURMOUNTABLE CURB & GUTTER DETAIL

6 / C600

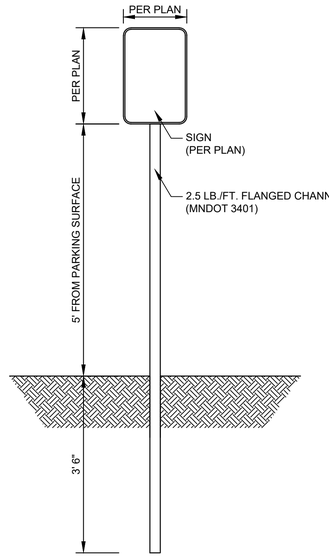
NOT TO SCALE



PARALLEL ACCESSIBLE RAMP DETAIL

7 / C600

NOT TO SCALE

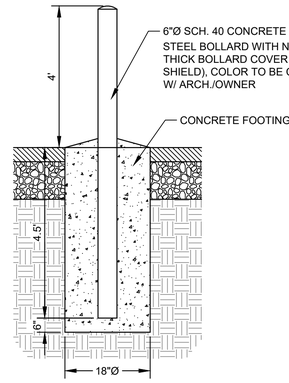


NOTES:
1. ALL SIGNS TO BE INSTALLED IN ACCORDANCE WITH MMUTCD AND MNDOT CURRENT STANDARD SIGNS MANUAL.
2. SEE PROJECT MANUAL FOR SIGN TYPES AND SPECIFICATION.
3. ALL SIGNS SHALL BE REVIEWED AND APPROVED BY OWNER/ENGINEER PRIOR TO CONSTRUCTION.
4. SIGN POSTS TO BE 6" BEHIND THE BACK OF CURB, UNLESS OTHERWISE DIRECTED.
5. SHARE POST WHERE APPLICABLE.
6. SIGNS WITHIN CONCRETE SIDEWALKS SHALL BE SURFACE MOUNTED WITH APPROVED BREAK-AWAY DEVICES.

PARKING SIGN AND POST DETAIL

8 / C600

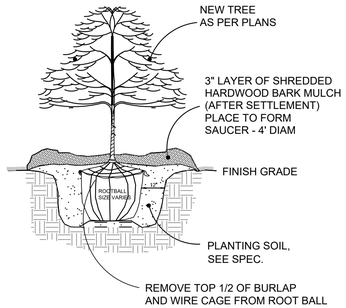
NOT TO SCALE



BOLLARD DETAIL

9 / C600

NOT TO SCALE



NOTES:

PROVIDE AND INSTALL PLANT MATERIALS THAT MEET SPECIFICATIONS AND ARE OF THE SIZE TYPE, AND SPECIES GIVEN.

REMOVE DEAD OR DAMAGED BRANCHES. RETAIN THE NATURAL FORM OF THE TREE OR SHRUB.

DO NOT CUT THE LEADER.

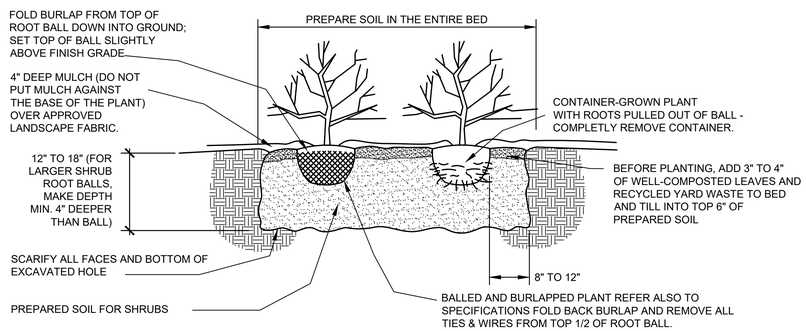
PLACE WEED BARRIER. DIG PLANT HOLES 12" MIN. LARGER THAN BALL, ALL SIDES. BACK FILL WITH PLANTING SOIL. SCARIFY BOTTOM OF PLANTING HOLE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

ALL TREES ARE TO BE AT LEAST 2.5" IN DIAMETER AT 1 FOOT OFF THE GROUND AT TIME OF PLANTING, UNLESS SPECIFIED OTHERWISE.

TYPICAL TREE PLANTING DETAIL

10 / C600

NOT TO SCALE



NOTES
1. FOR CONTAINER-GROWN SHRUBS, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS THAT CIRCLE THE PERIMETER OF THE CONTAINER.

2. INCORPORATE COMMERCIALLY PREPARED MYCORRHIZA SPORES IN THE SOIL IMMEDIATELY AROUND THE ROOT BALL AT RATES SPECIFIED BY THE MANUFACTURER.

3. IF PLANTS ARE TO BE PRUNED, BRANCHES SHALL BE PRUNED AT THE BRANCH BARK RIDGE, NOT FLUSH WITH THE BARK.

4. ALL SHRUBS MUST BE AT LEAST 18" TALL WHEN PLANTED, EXCEPT FOR CERTAIN LOW, CREEPING SHRUBS.

MUCLH BED AND SHRUB PLANTING DETAIL

11 / C600

NOT TO SCALE

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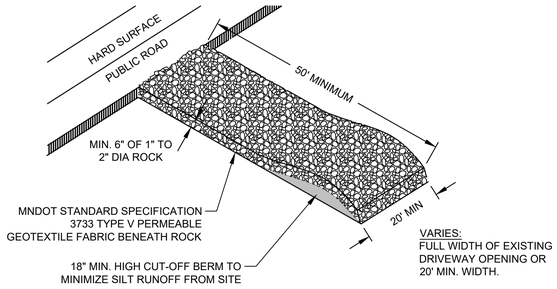
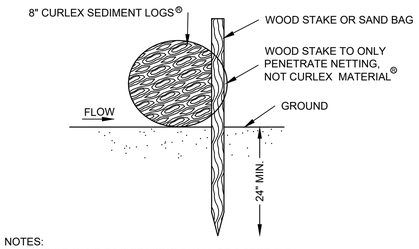


1 C601 ROCK CONSTRUCTION ENTRANCE

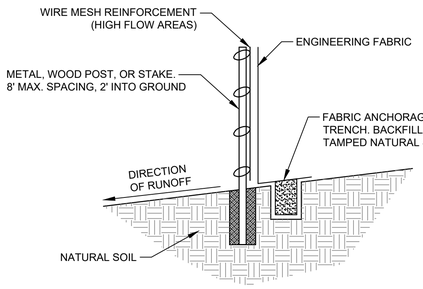
NOT TO SCALE



NOTES:
1. STAKE OR SAND BAG SPACING SHALL BE 2 FEET O.C.

2 C601 SEDIMENT LOG DETAIL

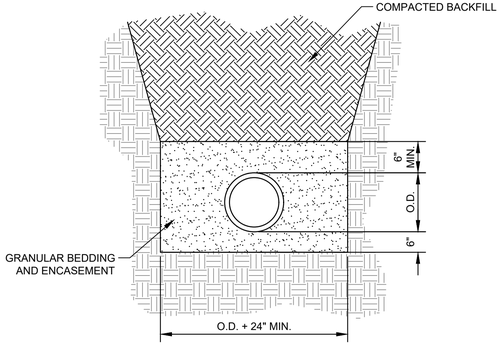
NOT TO SCALE



NOTE: DEPENDING UPON CONFIGURATION, ATTACH FABRIC TO WIRE MESH WITH HOG RINGS, STEEL POSTS WITH WIRES, OR WOOD POSTS WITH STAPLES.

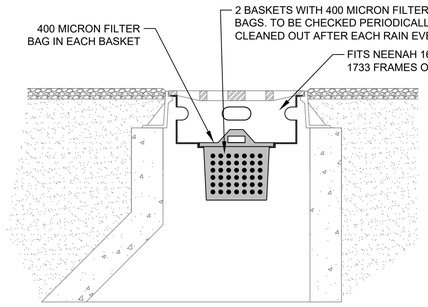
3 C601 SILT FENCE INSTALLATION DETAIL

NOT TO SCALE



4 C601 GRANULAR BEDDING DETAIL

NOT TO SCALE

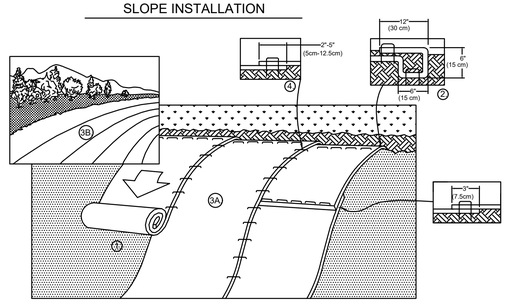


PROFILE

5 C601 INFRASAFE INLET PROTECTION DEVICE (OR EQ.)

NOT TO SCALE

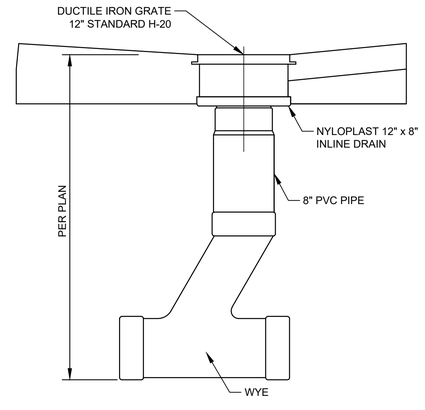
SLOPE INSTALLATION



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
   NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
   NOTE:
   *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

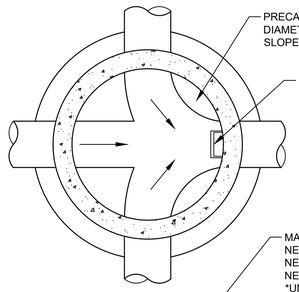
6 C601 EROSION CONTROL BLANKET

NOT TO SCALE

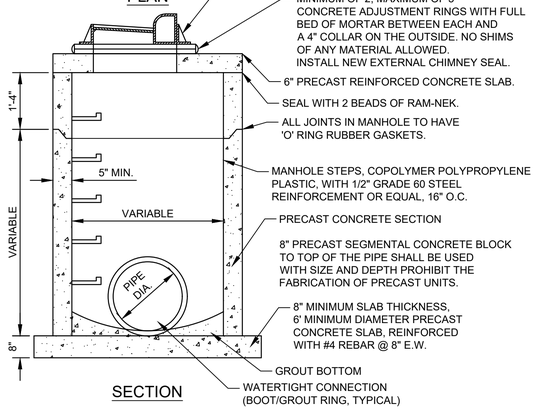


7 C601 INLINE DRAIN DETAIL

NOT TO SCALE



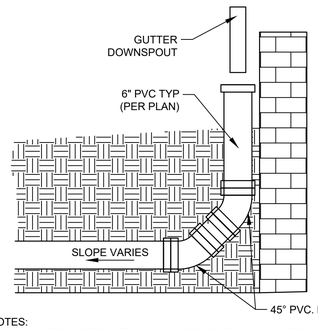
PLAN



SECTION

8 C601 CATCH BASIN MANHOLE DETAIL

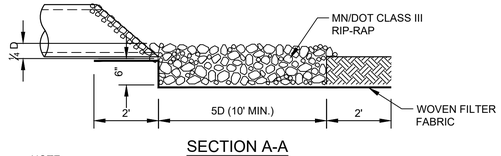
NOT TO SCALE



NOTES:
1. INCLUDE NECESSARY 6" PVC PIPE, BENDS, AND WYE FOR CONNECTION TO MAIN LINE, SEE SHEET C401 FOR ROUTING.
2. COORDINATE FINAL LOCATIONS WITH MECHANICAL AND ARCHITECT.

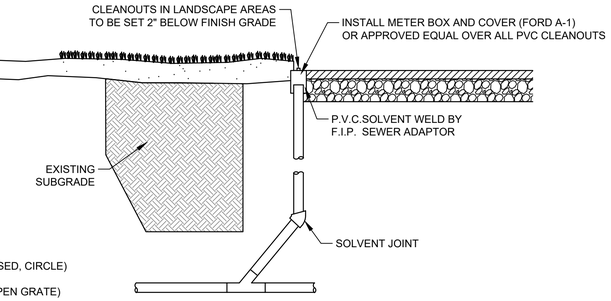
9 C601 ROOF DRAIN CONNECTION DETAIL

NOT TO SCALE



SECTION A-A

NOTE:
FW300 MIRAFI FABRIC OR EQUAL



10 C601 CLEANOUT DETAIL

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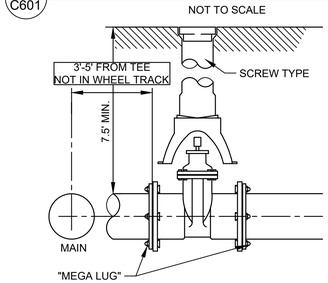
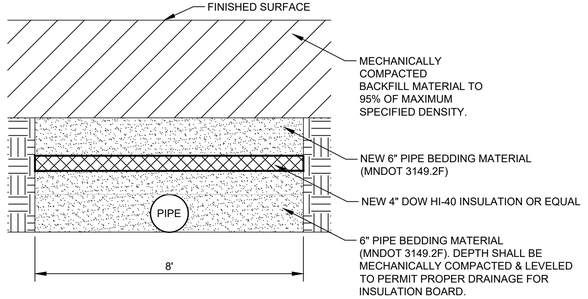


NOTES:
1.) GATE VALVE SPECIFICATIONS PER CITY STANDARDS.
2.) "MEGA LUG" THRUST RESTRAINT GLANDS ARE REQUIRED ON ALL GATE VALVE LEAD JOINTS BACK TO THE WATERMAIN.
3.) HYDRANTS SHALL BE MARKED WITH APPROVED "OUT OF SERVICE" TAGS WHEN INSTALLED.
4.) WHEN INSTALLING A VALVE ROD EXTENSION, THE NON-BREAKABLE COUPLING SLEEVES GO ON THE BOTTOM AND THE BREAKABLE SLEEVES GO ON THE TOP OF THE EXTENSION ROD. VERIFY "TOP AND BOTTOM" OF BREAKOFF SECTION.
5.) CONTRACTOR SHALL ADJUST TOP BARREL SECTION FLUSH TO FINISH GRADE

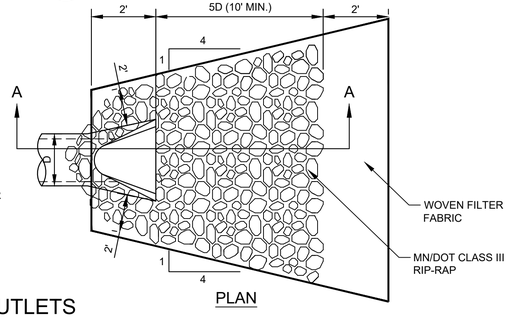
11 C601 GATE VALVE INSTALLATION DETAIL

NOT TO SCALE



12 C601 PIPE INSULATION DETAIL

NOT TO SCALE



PLAN

13 C601 RIP-RAP AT OUTLETS

NOT TO SCALE

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Sheet: C601

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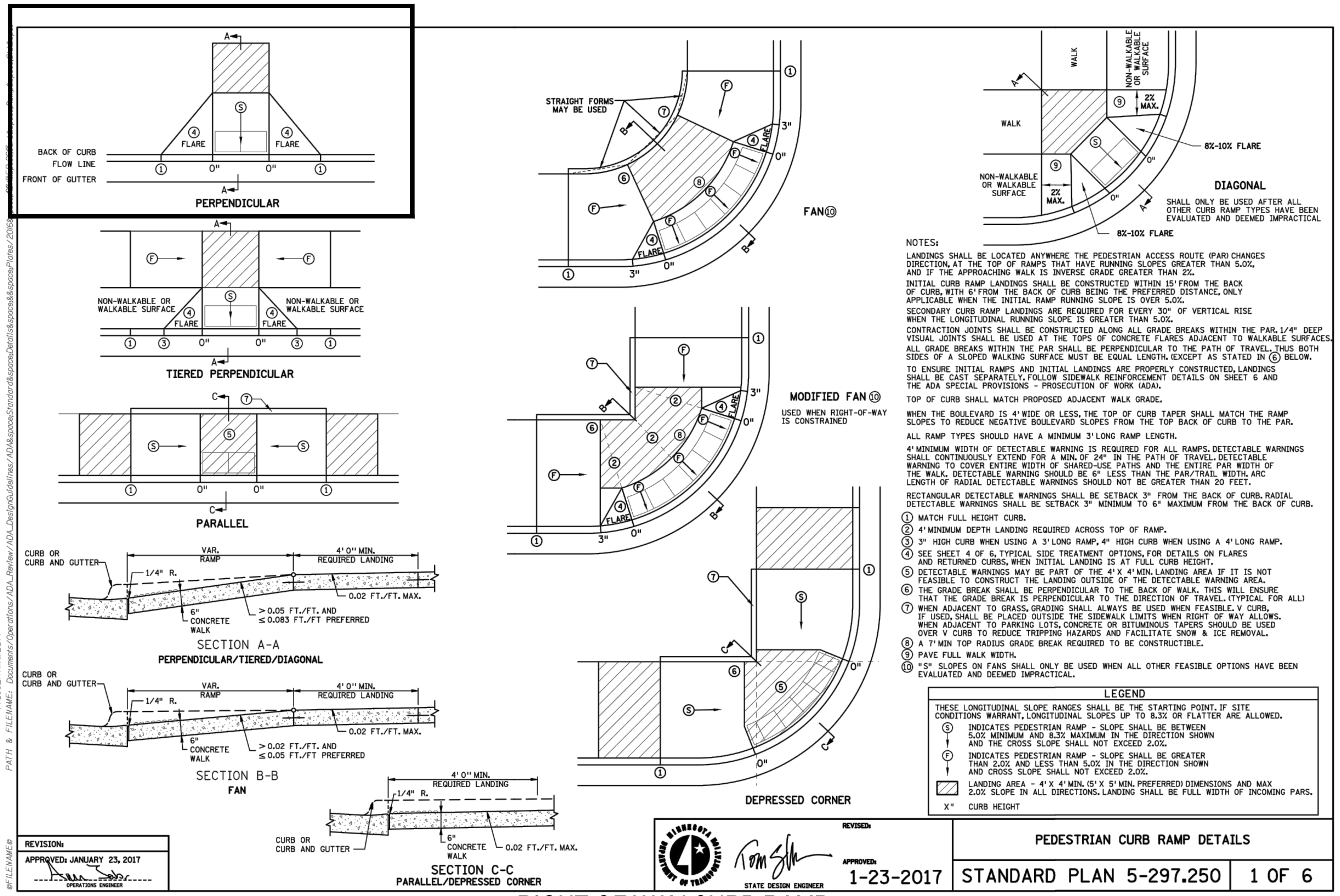


NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE GREATER THAN 2%.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL RUNNING SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH. (EXCEPT AS STATED IN (6) BELOW.

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS SHALL BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 AND THE ADA SPECIAL PROVISIONS - PROSECUTION OF WORK (ADA).

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

WHEN THE BOULEVARD IS 4' WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3' LONG RAMP LENGTH.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER ENTIRE WIDTH OF SHARED-USE PATHS AND THE ENTIRE PAR WIDTH OF THE WALK. DETECTABLE WARNING SHOULD BE 6" LESS THAN THE PAR/TRAIL WIDTH. ARC LENGTH OF RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.

RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.

1. MATCH FULL HEIGHT CURB.
2. 4' MINIMUM DEPTH LANDING REQUIRED ACROSS TOP OF RAMP.
3. 3" HIGH CURB WHEN USING A 3' LONG RAMP, 4" HIGH CURB WHEN USING A 4' LONG RAMP.
4. SEE SHEET 4 OF 6, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS, WHEN INITIAL LANDING IS AT FULL CURB HEIGHT.
5. DETECTABLE WARNINGS MAY BE PART OF THE 4' X 4' MIN. LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.
6. THE GRADE BREAK SHALL BE PERPENDICULAR TO THE BACK OF WALK. THIS WILL ENSURE THAT THE GRADE BREAK IS PERPENDICULAR TO THE DIRECTION OF TRAVEL. (TYPICAL FOR ALL)
7. WHEN ADJACENT TO GRASS, GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS TAPERS SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.
8. A 7' MIN TOP RADIUS GRADE BREAK REQUIRED TO BE CONSTRUCTIBLE.
9. PAVE FULL WALK WIDTH.
10. "S" SLOPES ON FANS SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

(S) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.

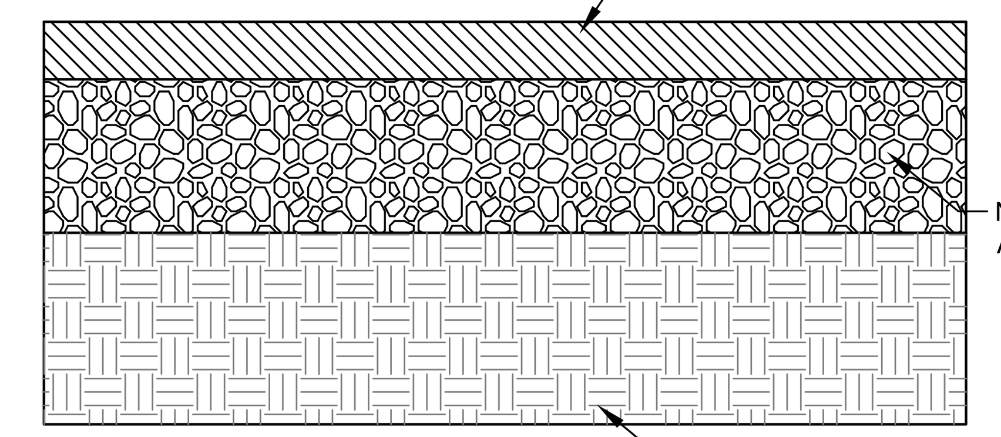
(F) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.

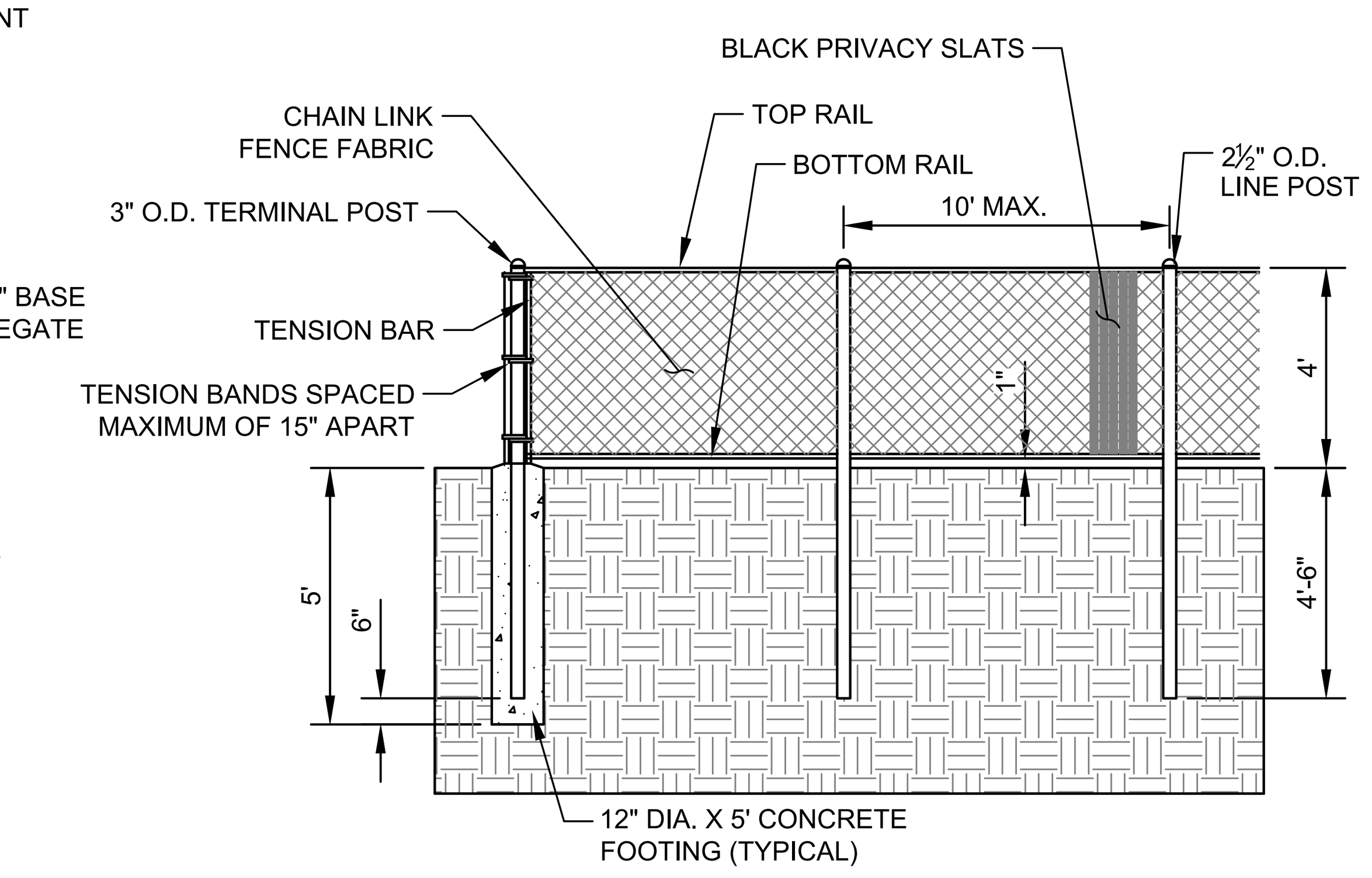
X" CURB HEIGHT

REVISED:
APPROVED: 1-23-2017
PEDESTRIAN CURB RAMP DETAILS
STANDARD PLAN 5-297.250 | 1 OF 6

1 / C602
RIGHT OF WAY CURB RAMP
NOT TO SCALE

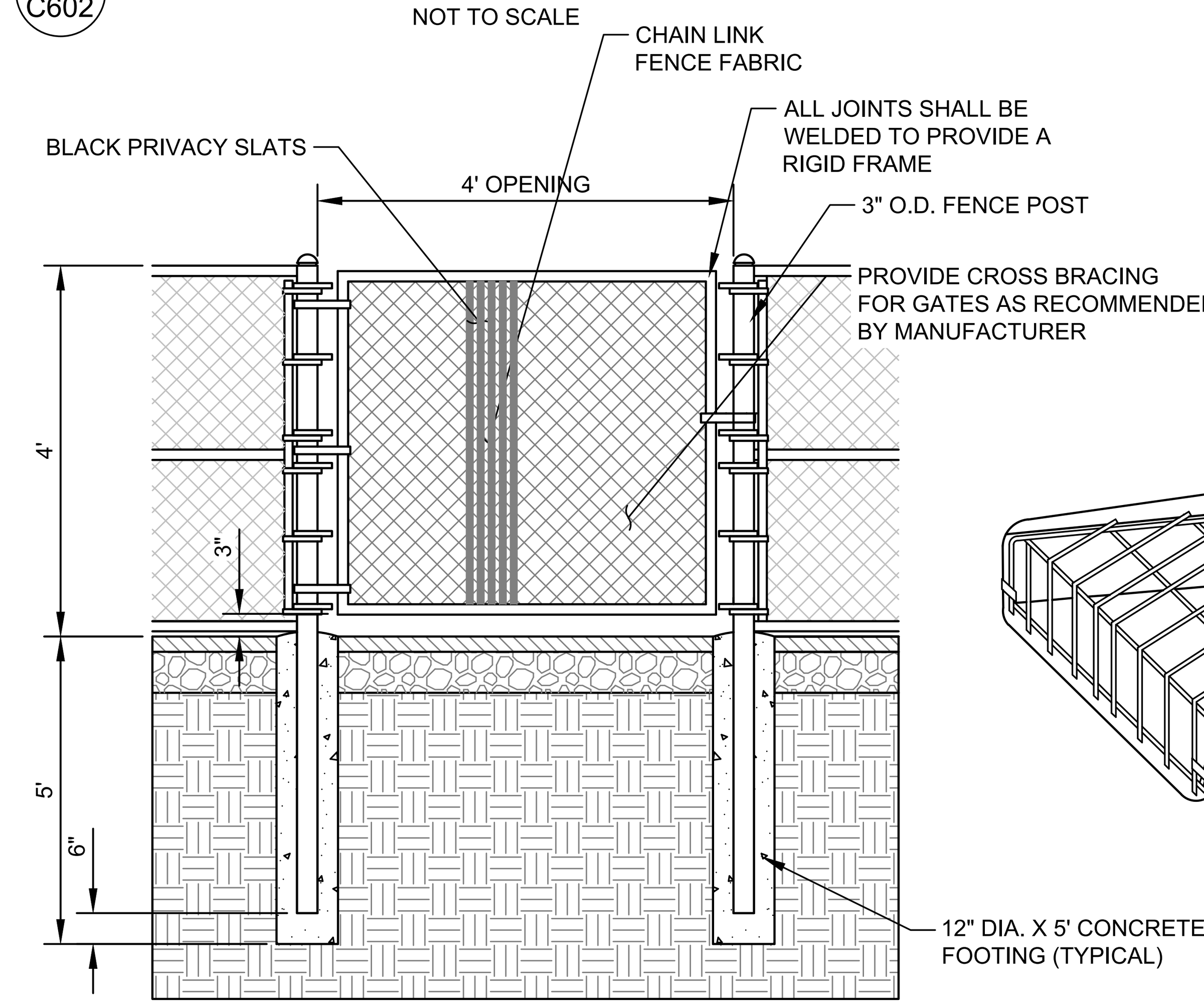


4 / C602
BITUMINOUS TRAIL PAVEMENT SECTION
NOT TO SCALE



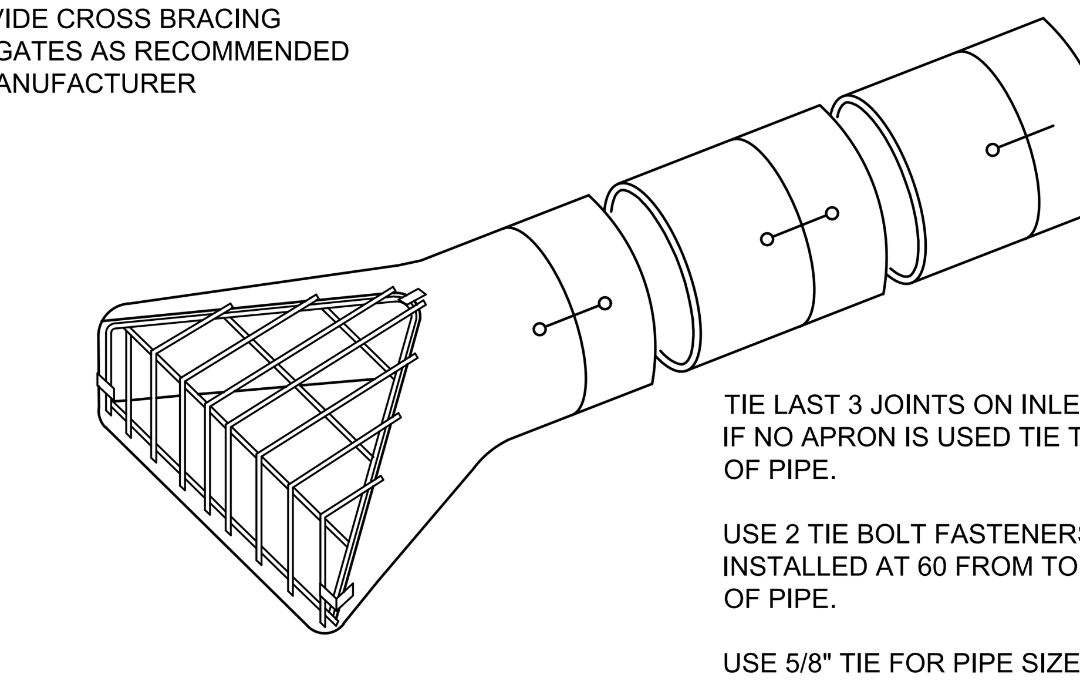
NOTE: FENCE TO BE BLACK VINYL.

5 / C602
FENCE DETAIL
NOT TO SCALE



NOTE: FENCE TO BE BLACK VINYL.

6 / C602
SINGLE GATE DETAIL
NOT TO SCALE



TIE LAST 3 JOINTS ON INLET AND OUTLET. IF NO APRON IS USED TIE THE LAST 3 SECTIONS OF PIPE.

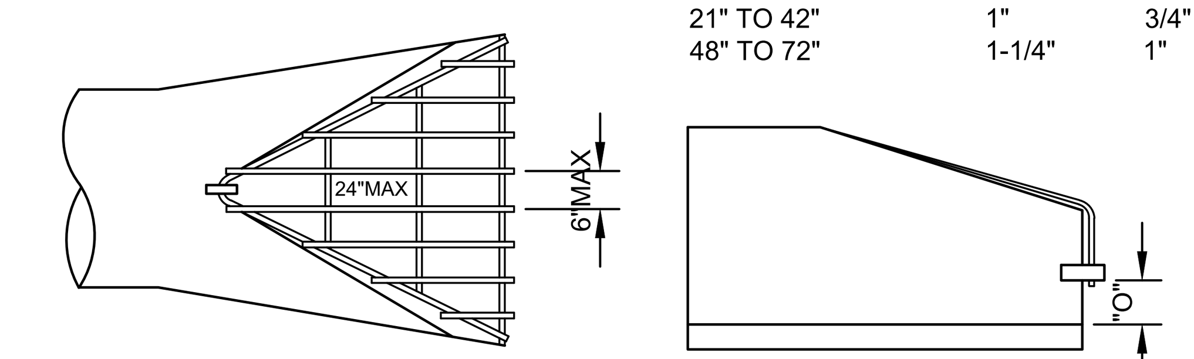
USE 2 TIE BOLT FASTENERS PER JOINT INSTALLED AT 60 FROM TOP OR BOTTOM OF PIPE.

USE 5/8" TIE FOR PIPE SIZES 12" TO 27". USE 3/4" TIE FOR PIPE SIZES 30" TO 66". USE 1" TIE FOR PIPE SIZES OVER 72".

NUTS AND WASHERS ARE NOT REQUIRED ON PIPE SIZE LESS THAN 21".

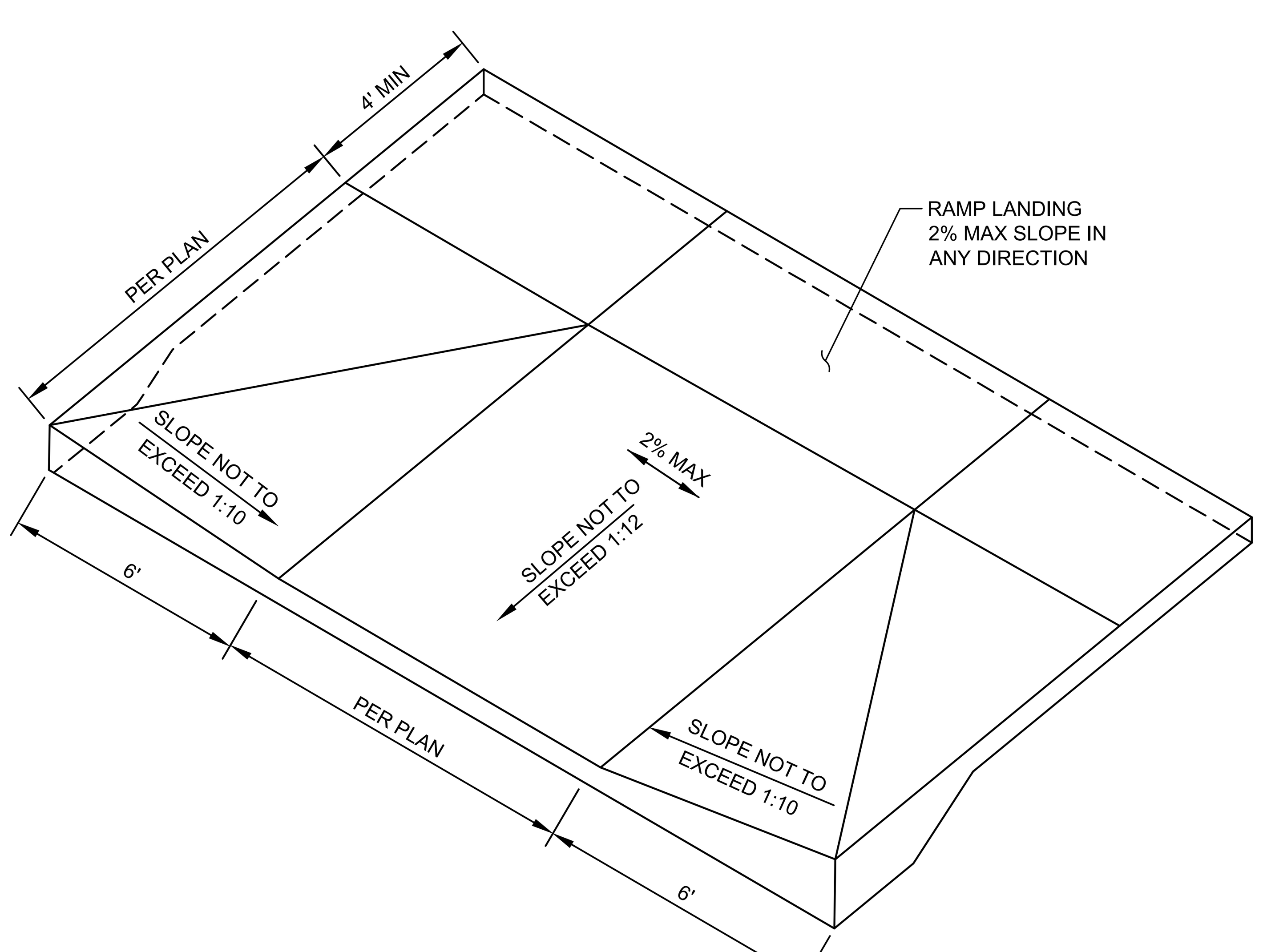
TRASH GUARDS WILL BE REQUIRED ON 18" OR LARGER PIPE.

SIZE OF PIPE	BARS	BOLTS	"O"
12" TO 18"	3/4"	5/8"	4"
21" TO 42"	1"	3/4"	6"
48" TO 72"	1-1/4"	1"	12"



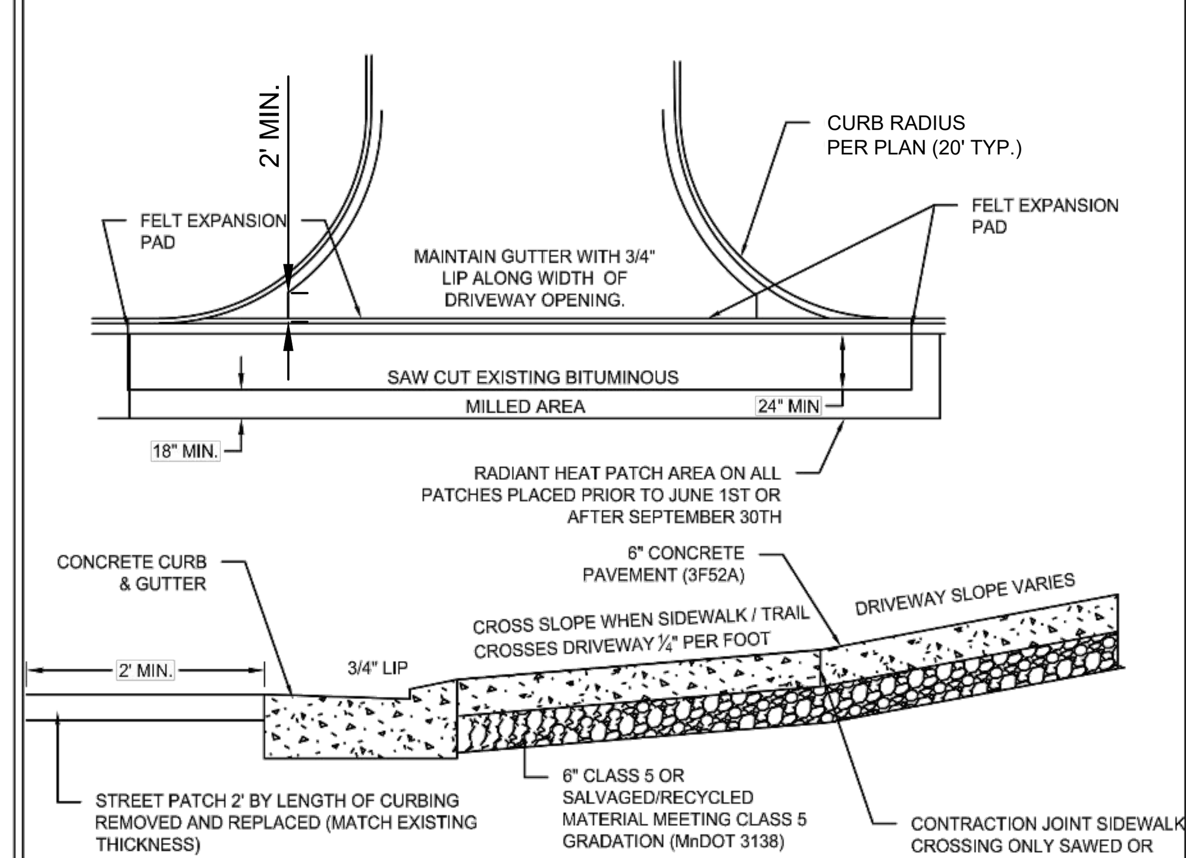
PROVIDE 3 CLIPS TO FASTEN TRASH GUARD TO F.E.S. HOT DIP GALVANIZE AFTER FABRICATION.

8 / C602
RCP FLARED END SECTION DETAIL
NOT TO SCALE



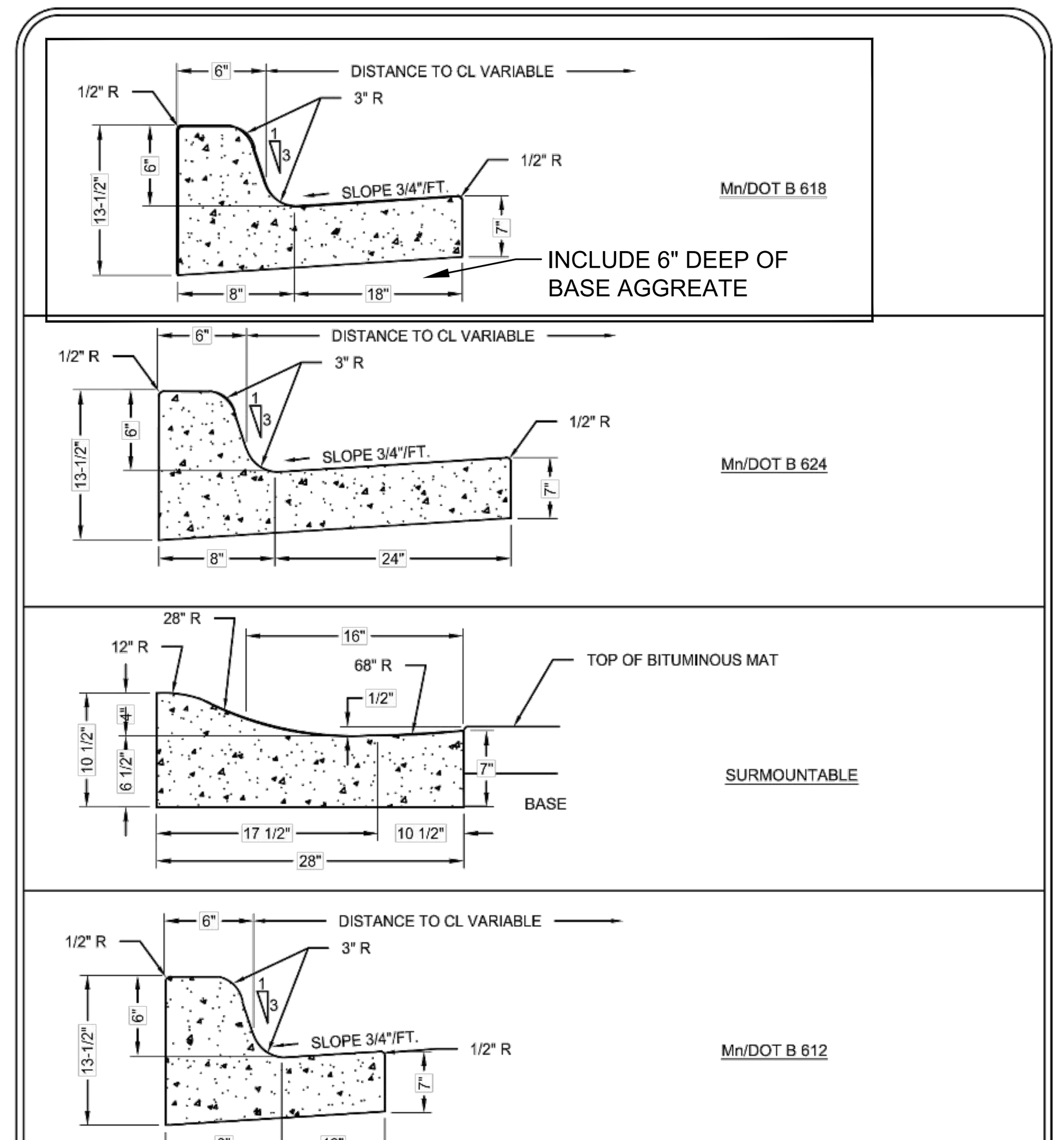
2 / C602
PERPENDICULAR ACCESSIBLE RAMP DETAIL
NOT TO SCALE

NOTES:
1. ALL CONCRETE MATCH POINTS SHALL BE SAW CUT AND HAVE EXPANSION PAD UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER
2. ALL CONCRETE SHALL HAVE A SLUMP OF 3" OR LESS, A 7-DAY STRENGTH OF AT LEAST 2,000 PSI AND A 28 DAY COMPRESSIVE STRENGTH OF 3,900 PSI
3. ALL BITUMINOUS MATCH POINTS SHALL BE SAW CUT OR MILLED AND TACKED PRIOR TO PATCHING. ON ROADS WERE BITUMINOUS IS 3" THICK OR GREATER THE TOP 1.5" SHALL BE MILLED A MINIMUM OF 18" BEYOND THE SAW CUT AS A MATCH POINT.
4. GRAVEL AND BITUMINOUS IN ROADWAY AREA SHALL BE REPAIRED TO A LIKE NEW CONDITION MATCHING EXISTING THICKNESS.
5. BITUMINOUS PATCH WORK DONE PRIOR TO JUNE 1ST AND AFTER SEPTEMBER 30TH SHALL BE HEATED WITH A RADIANT HEATER TO SEAL THE EDGES.
6. ALL DRIVEWAYS WITH A GRADER GREATER THEN 10% MUST OBTAIN CITY ENGINEER APPROVAL.
7. ALL DRIVEWAYS MUST MEET CITY CODE FOR LOT COVERAGE AREA.
8. NO DRIVEWAY SHALL BE WITHIN 40' OF A STREET END RADIUS UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE CITY ENGINEER.
9. WHERE SIDEWALKS / TRAILS EXISTS OR ARE PROPOSED, THE DRIVEWAY SHALL EXTEND THROUGH THE SIDEWALK / TRAIL AREA WITH PEDESTRIAN CURB OPENINGS PLACED (SEE MNDOT PEDESTRIAN CURB RAMP DETAILS). A MAXIMUM 2% CROSS SLOPE ON SIDEWALK / TRAIL AREAS CROSSING THROUGH DRIVEWAYS.
10. CONTRACTOR TO CALL CITY ENGINEERING DEPARTMENT (651) 762-6316 PRIOR TO CONSTRUCTION.



CITY OF HUGO EST. 1906 | COMMERCIAL/MULTI FAMILY CONCRETE DRIVEWAY DETAIL | Special Details | Date: 04-01-15 | Revised: 03-12-20 | HU-STR-15

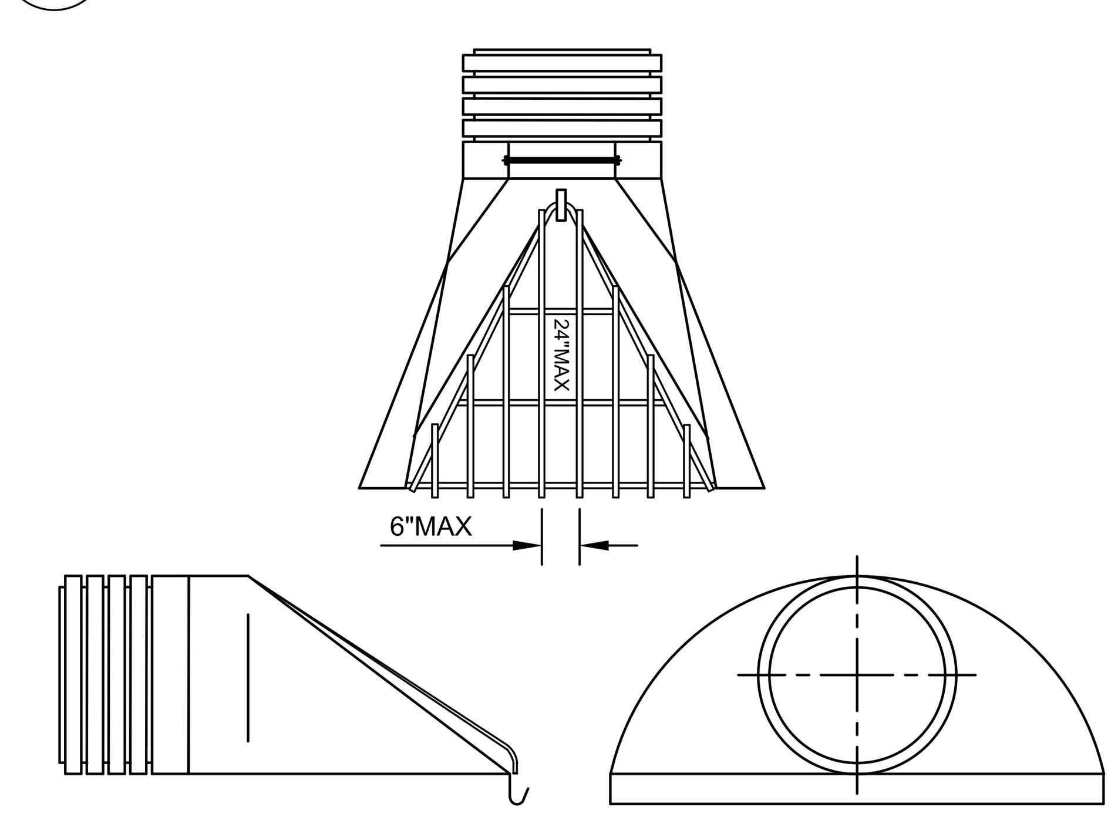
3 / C602
COMMERCIAL DRIVEWAY DETAIL
NOT TO SCALE



NOTES:
1. MINIMUM OF 3" CLASS 5 AGGREGATE BASE UNDER ALL CURB AND GUTTER
2. SEE DETAIL HU-STR-6 FOR BURB AT CATCH BASINS

CITY OF HUGO EST. 1906 | CONCRETE CURB & GUTTER | Special Details | Date: 04-01-15 | Revised: 03-12-20 | HU-STR-8

7 / C602
CITY CURB DETAIL
NOT TO SCALE



PROVIDE 3 CLIPS TO FASTEN TRASH GUARD TO F.E.S. HOT DIP GALVANIZE AFTER FABRICATION.

9 / C602
FLARED END SECTION DETAIL
NOT TO SCALE

11/04/2024 PERMIT SET - NOT FOR CONSTRUCTION

Larson Engineering, Inc.
3524 Labore Road
White Bear Lake, MN 55110
651.481.9120 (f) 651.481.9201
www.larsonengr.com

Client:
SUMMIT MANAGEMENT, LLC
6770 STILLWATER BLVD, SUITE 110
STILLWATER, MN 55082

Project Title:
HUGO WEST APARTMENTS
HUGO, MN 55038

I hereby certify that this plan, specifications 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.

Bryan D. Miller, P.E.
Date: 11.04.2024 Lic. No.: 54950

Rev.	Date	Description

Project #: 12246027.000
Drawn By: NJN
Checked By: BDM
Issue Date: 11.04.2024

Sheet Title:
DETAILS

Sheet:
C602

P:\Projects\Projects - 2024\12246027 - Hugo West Apartments\2. Design\b. Drawing Files\12246027 - C600 - Details.dwg

PROJECT SPECIFIC SWPPP INFORMATION:

I. GENERAL CONSTRUCTION ACTIVITY INFORMATION

PROJECT NAME: HUGO WEST APARTMENTS
PROJECT LOCATION: UNASSIGNED (SEE MAP)
HUGO, MN 55038

PROJECT CONTACTS

MARK LAMBERT
6770 STILLWATER BLVD N, SUITE 110
STILLWATER, MN 55082
CONTACT: 612-689-2202
MLAMBERT@SUMMITRE.NET

ENGINEER:
LARSON ENGINEERING, INC.
3524 LABORE ROAD
WHITE BEAR LAKE, MN 55110
CONTACT: BRYAN MILLER, P.E., 651-481-9120,
BMILLER@LARSONENGR.COM

CONTRACTOR:
COMPANY **(TBD)**
ADDRESS
CITY, STATE, ZIP
CONTACT: NAME, PHONE, EMAIL

CITY WHERE WORK WILL TAKE PLACE: HUGO, MN
COUNTY WHERE WORK WILL TAKE PLACE: WASHINGTON

LATITUDE/LONGITUDE OF APPROXIMATE CENTROID OF PROJECT: 45° 09' 53" N, 93° 00' 51" W

PROJECT TYPE (CIRCLE ONE): (RESIDENTIAL) COMMERCIAL/INDUSTRIAL

ROAD CONSTRUCTION RESIDENTIAL & ROAD CONSTRUCTION

OTHER (DESCRIBE): _____

DATES OF CONSTRUCTION (ESTIMATED):
Construction start date: 09/2024 (TBD)
Construction completion date: 12/2025 (TBD)

PROJECT DESCRIPTION:
This project will consist of the construction of a new multi-family apartment complex located between Rosemary Way and Victor Hugo Boulevard just east of Festival Foods in Hugo, MN. The project will consist of the construction of a new apartment building, garages, parking lots, drives, sidewalks, and related erosion control and utilities.

PROJECT LIMITS:
See the project plans, in particular the grading & erosion control plans, for site disturbance limits.

SITE DISTURBANCE SUMMARY (to nearest tenth acre)**:**

Total number of acres to be disturbed:	5.9
Pre-Construction acres of impervious:	0.0
Post-Construction acres of impervious:	2.8
Total new impervious acres:	2.8

II. RECEIVING WATERS

RECEIVING WATERS (WITHIN ONE MILE OF PROJECT PROPERTY EDGE):

NAME OF WATER BODY	TYPE	SPECIAL WATER?	IMPAIRED WATER?
Clearwater Creek	Creek	No	Yes
8 Onsite Unamed Wetlands	Wetland	No	No

TOTAL MAXIMUM DAILY LOAD (TMDL) WATERS
N/A

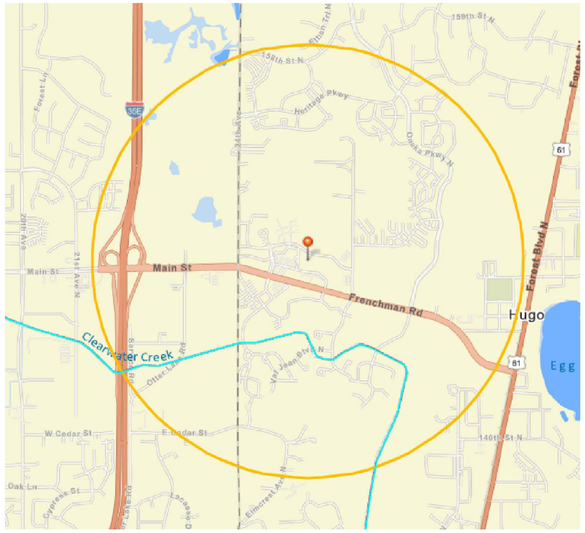
IDENTIFY WETLAND IMPACTS:

1. Will construction result in any potential adverse impacts to wetlands, including excavation, degradation of water quality, draining, filling, permanent inundation or flooding, conversion to a stormwater pond?
   Yes.
   If yes, describe impacts and mitigation measures that were taken to address the impacts and include copies of permits or approvals from an official state wide wetland program issued specifically for this project or site:
   The project includes +/-18,726 SF of wetland impact and will be mitigated via wetland credits. Wetland impact is preliminary and permits/approvals will be provided once finalized.

ENVIRONMENTALLY SENSITIVE AREAS:

1. Identify adjacent public waters where the MN DNR has declared "work in water restrictions" during fish spawning timeframes:
   None identified.
2. Describe any stormwater mitigation measures that will be implemented, as a result of an environmental review, endangered or threatened species review or archeological site review:
   N/A

PROJECT LOCATION AND RECEIVING WATERS MAP:



III. PROJECT PLANS AND SPECIFICATIONS

Refer to the project plans, specifications, geotechnical report, and stormwater calculations which depict various features that are relevant to this project. Such features may include, but are not limited to, the following:

- Project location and construction limits.
- Existing and final grades, including dividing lines and direction of flow for all pre and post-construction stormwater runoff drainage areas located within the project limits.
- Soil types at the site.
- Locations of impervious surfaces.
- Locations of areas not to be disturbed (e.g., buffer zones, wetlands, etc.)
- Steep slope locations.
- Locations of areas where construction will be phased to minimize duration of exposed soils.
- Locations of all temporary and permanent erosion control and sediment control best management practices (BMP's).
- Buffer zones as required in item 9.17 and 23.11 of the permit.
- Locations of potential pollution-generating activities identified in Section 12 of the permit.
- Standard details for erosion and sediment control BMP's to be installed at the site.

The anticipated erosion prevention and sediment control BMP quantities needed for the life of this project include the following. These quantities are estimated only and shall be verified by the Contractor.

BMP	Estimated Quantity	Final Quantity
Rock Construction Entrance	3 EA	_____
Silt Fence	3,325 LF	_____
Sediment Log	325 LF	_____
Inlet Protection	22 EA	_____
Concrete Washout	1 EA	_____
Turf Seeding	3.1 ACRE	_____
Erosion Blanket	1,125 SY	_____

SOIL INFORMATION

Refer to geotechnical report for site specific soil information.

TEMPORARY SEDIMENT CONTROL (SITE SPECIFIC ITEMS)

1. Is the project required to install a temporary sediment basin due to 10 or more acres draining to a common location, or 5 acres or more if the site is located within 1 mile of a special or impaired water?
   No.
   If yes, describe (or attach plans) showing how the basin will be designed and constructed in accordance with Section 14.
   N/A
2. Will the project include dewatering, basin draining?
   No.
   If yes, describe measures to be used to treat/dispose of turbid or sediment-laden water and method to prevent erosion or scour of discharge points (see Section 10 of the permit):
   N/A. Based on soil boring results, dewatering is not anticipated.
3. Will the project include use of filters for backwash water?
   No.
   If yes, describe how filter backwash water will be managed on the site or properly disposed of:
   N/A

PERMANENT STORMWATER MANAGEMENT (SITE SPECIFIC ITEMS)

1. Will the project result in one acre or more of new impervious surface or result in one acre or more of new impervious in total if the project is part of a larger plan of development?
   Yes.
   If yes, a water quality volume of one inch of runoff from the cumulative new impervious surfaces must be retained on site (Section 15) through infiltration unless prohibited due to one of the reasons in item 16.14 through 16.21. If infiltration is prohibited, identify other methods of stormwater treatment used (e.g. filtration, wet sedimentation basin, regional ponding, or equivalent method):
   Stormwater volume will be provided in two previously constructed wet sedimentation basins that were constructed for this future impervious.
2. Attach design parameters for the planned permanent stormwater management system, including volume calculations, discharge rate calculations, construction details including basin depth, outlet configurations, location, design of pre-treatment devices, and timing for installation.
   See the project plans and stormwater calculations.
3. For infiltration systems, provide at least one soil boring, test pit, or infiltrometer test in the location of the infiltration practice for determining infiltration rates.
   See the geotechnical evaluation reports contained within the stormwater calculations. Additional in-field testing and geotechnical observations are planned during construction to verify soil characteristics at the proposed basin location.
4. For projects that discharge to trout streams, including tributaries to trout streams, identify method of incorporating temperature controls into the permanent stormwater management system.
   N/A

SEQUENCE OF CONSTRUCTION ACTIVITIES

1. Install stabilized rock construction entrances.
2. Install perimeter erosion control BMP's (silt fence, bio-logs, etc).
3. Install temporary construction fencing at infiltration areas and other areas not be disturbed.
4. Install inlet protection throughout project area and downstream inlets.
5. Construct temporary sediment basins/traps as necessary.
6. Strip and stockpile topsoil.
7. Complete rough grading of site.
8. Stabilize denuded areas and stockpiles.
9. Install site utilities.
10. Install temporary inlet protection at newly installed catch basins/inlets.
11. Install curb and gutter and pavement sections.
12. Place topsoil and final grading of areas to be vegetated.
13. Remove accumulated sediment from basins / ponds.
14. Final grade pond and infiltration areas, including soil de-compaction as specified.
15. Complete stormwater basin as-built surveys (as required by project specifications and/or local jurisdictional authorities).
16. Complete permanent stabilization including plantings, seeding, and mulch.
17. Upon completion of construction activity and satisfactory vegetation establishment, remove remaining temporary erosion and sediment control BMPs.
18. Reseed / restore any areas disturbed during BMP removal.

SEEDING NOTES AND REQUIREMENTS:

1. The Contractor is responsible to salvage and preserve existing topsoil as necessary for final stabilization. All topsoil to be salvaged and re-used shall be processed as necessary to meet project specifications.
2. Prior to final seeding, all areas to be vegetated shall be scarified/decompacted and amended as specified in the plans and specifications.
3. Unless otherwise noted, all seed mixes and applications shall be in accordance with MNDOT Seeding Manual, latest edition.
4. See the project plans and specifications for seed mixtures, mulch, slope stabilization, and all other landscaping requirements.

FINAL STABILIZATION:

Ensure Final Stabilization of the site. Final Stabilization is not complete until all of the following requirements are complete:

1. All soil disturbing activities at the site have been completed and soils are stabilized by a uniform perennial vegetative cover with a density of 70 percent of its expected final growth over the entire pervious surface area, or other equivalent means necessary to prevent soil erosion under erosive conditions.
2. The permanent stormwater management system is constructed and operating as designed. Temporary or permanent sedimentation basins that are to be used as permanent water quality management basins have been cleaned of any accumulated sediment. All sediment has been removed from conveyance systems and ditches are stabilized with permanent cover.
3. All temporary synthetic and structural erosion prevention and sediment control BMPs (such as silt fence, bio-logs, etc.) have been removed from the site. BMPs designed to decompose on site may be left in place.
4. Upon correction of all erosion and sediment items and achieving vegetative cover, temporary erosion prevention and sediment control BMPs will be removed and properly disposed/recycled.
5. Within 30 days of final stabilization, a notice of termination shall be submitted to the MPCA (see Permit Termination Req's) .

GENERAL SWPPP NOTES:

1. The Contractor and all Subcontractors involved with construction activity that disturbs soil, or implements a pollution control measure as part of the Storm Water Pollution Prevention Plan (SWPPP) for this project, must comply with the requirements of the National Pollution Discharge Elimination System (NPDES) / State Disposal System (SDS) Program, General Permit MNR10001, Dated August 1, 2018.
2. The Contractor and all Subcontractors shall be responsible for reviewing the NPDES Permit in its entirety, to ensure that all SWPPP measures are in place and permit requirements fulfilled throughout the duration of the project.

SWPPP TRAINING (SECTION 21):

SWPPP PREPARER:
COMPANY: LARSON ENGINEERING, INC.
CONTACT: NATHAN NOHNER, 612-224-6725, NNOHNER@LARSONENGR.COM
COURSE, INSTRUCTOR: DESIGN OF SWPPP, ONLINE COURSE
TRAINING ENTITY: UNIVERSITY OF MINNESOTA
EXPIRATION: MAY 31, 2026

SWPPP CONTACT:
CONTRACTOR: **(TBD)**
CONTACT: NAME, PHONE, EMAIL
COURSE, INSTRUCTOR:
TRAINING ENTITY:
EXPIRATION:

This SWPPP was prepared by personnel certified in design of construction SWPPP's as listed above. Copies of respective certifications are available upon request. In accordance with Section 21 of the permit, the following individuals must receive training, and the content and extent of the training is commensurate with the individual's job duties and responsibilities with regard to activities covered under the permit:

a. Individuals preparing the SWPPP for the project.
b. Individuals overseeing implementation of, revising and/or amending the SWPPP, and individuals performing inspections for the project.
c. Individuals performing or supervising the installation, maintenance and repair of BMP's.

Individuals must receive training from local, state, federal agencies, professional organizations, or other entities with expertise in erosion prevention, sediment control, permanent stormwater treatment and the MN NPDES/SDS Construction Stormwater permit. Individuals shall attend a refresher-training course every three (3) years.

SWPPP IMPLEMENTATION RESPONSIBILITIES:

1. The Owner and Contractor are Permittee(s) as identified by the NPDES permit.
2. The Contractor shall be responsible for all on-site implementation of the SWPPP, including all Subcontractor activities.
3. The Contractor shall provide knowledgeable and experienced person(s) in the application, installation, and maintenance of Erosion and Sediment Control BMP's throughout the project.
4. The Contractor shall provide person(s) meeting the training requirements of the NPDES permit to conduct inspection and maintenance of all erosion prevention and sediment control BMP's in accordance with permit requirements. One of these individuals must be available for an on-site inspection within 72 hours upon request by the MPCA.
5. The Contractor shall provide training documentation for all individual(s) required by the permit. This training documentation shall be recorded in the SWPPP prior to construction, or as soon as personnel for the project have been determined. Documentation shall include:
   a. Names of personnel associated with the project required to be trained (as listed above and under Section 21 of the permit).
   b. Dates of training, name of instructor, and entity providing training.
   c. Content of training course or workshop including number of hours of training.

INSPECTIONS AND MAINTENANCE:

1. The Contractor shall provide person(s) meeting the training requirements to conduct inspection and maintenance of all erosion prevention and sediment control BMP's under this project in accordance with permit requirements.
2. An example MPCA construction stormwater checklist can be found at the link below. Note: This template inspection report does not address all aspects of the NPDES Permit. The completion of this checklist does not guarantee that all permit requirements are in compliance; it is the responsibility of the Permittee(s) to read and understand the full permit requirements.

   https://www.pca.state.mn.us/sites/default/files/wq-strm2-36.docx

RECORDS RETENTION:

The SWPPP, including all changes/amendments, and inspections and maintenance records shall be kept on site during normal working hours by individuals who have operational control of that portion of the site.

All Owner(s) shall keep the SWPPP, along with the following additional records, on file for three (3) years after submittal of the NOT as outlined in Section 4:

a. The Final SWPPP;
b. Any other stormwater related permits required for the project;
c. Records of all inspection and maintenance conducted during construction;
d. 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
e. All required calculations for design of the temporary and permanent stormwater management systems.

Larson Engineering, Inc.
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White Bear Lake, MN 55110
651.481.9120 (f) 651.481.9201
www.larsonengr.com

Client:
SUMMIT MANAGEMENT, LLC
6770 STILLWATER BLVD, SUITE 110
STILLWATER, MN 55082

11/04/2024 PERMIT SET - NOT FOR CONSTRUCTION

Project Title:
HUGO WEST APARTMENTS
HUGO, MN 55038

I hereby certify that this plan, specifications 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.

Bryan D. Miller, P.E.
Date: 11.04.2024 Lic. No.: 54950

Rev.	Date	Description

Project #: 12246027.000
Drawn By: NJN
Checked By: BDM
Issue Date: 11.04.2024

Sheet Title:
SWPPP

Sheet:
C700

GENERAL SWPPP REQUIREMENTS AND NOTES:

SWPPP AMENDMENTS (SECTION 6):

1. One of the individuals described in item 21.2.a or 21.2.b of the permit or another qualified individual must complete all SWPPP changes. Changes involving the use of less stringent BMPs must include a justification describing how the replacement BMP is effective for the site characteristics.
2. The SWPPP shall be amended to include additional or modified BMPs as necessary to correct problems identified or address situations whenever there is a change in design, construction, operation, maintenance, weather or seasonal conditions having a significant effect on the discharge of pollutants to surface waters or groundwater.
3. The SWPPP shall be amended to include additional or modified BMPs as necessary to correct problems identified or address situations whenever inspections or investigations by the site owner or operator, USEPA or MPCA officials indicate the SWPPP is not effective in eliminating or significnatly minimizing the iscarge of pollutants to surface waters or groundwater or the discharges are cuasing water quality standard exceedances (e.g., nuisance conditions as defined in Minn. R. 7050.0210, subp. 2 or the SWPPP is not consistend with the ofjectives of the USEPA approved TMDL.

BMP SELECTION AND INSTALLATION (SECTION 7):

1. All BMPs identified in the SWPPP document and construction plans shall be selected, installed, and maintained in an appropriate and functional manner in accordance with relevant manufacturer specifications and accepted engineering practices.
2. Do not disturb more land (i.e., phasing) than can be effectively inspected and maintained in accordance with Section 11.

TEMPORARY EROSION PREVENTION PRACTICES (SECTION 8)

1. Prior to beginning any construction work at the site, locations of areas not to be disturbed must be delineated (e.g., with flags, stakes, signs, silt fence, snow fence, etc.) throughout the project site.

2. Minimize the need for disturbance of portions of the project with steep slopes. For those sloped areas which must be disturbed, use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing).

3. Stabilize all exposed soil areas (including stockpiles). Stabilization must be initiated immediately to limit soil erosion whenever any construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days (or 7 days if within one mile of an identified impaired water). Stabilization must be completed no later than 14 calendar days (or 7 days if within one mile of an identified impaired water) after the construction activity has ceased.

4. Stabilization is not required on constructed base components of roads, parking lots, and similar surfaces. Stabilization is not required on temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but sediment controls must be placed at the base of the stockpile.

5. For Public Waters that the Minnesota Department of Natural Resources has promulgated “work in water restrictions” during specified fish spawning time frames, all exposed soil areas that are within 200 feet of the water's edge, and drain to these waters must complete the stabilization activities within 24 hours during the restriction period.

6. Stabilize the normal wetted perimeter of the last 200 linear feet of temporary or permanent drainage ditches or swales that drain water from the site within 24 hours after connecting to a surface water or property edge. Stabilize remaining portions of temporary or permanent ditches or swales within 14 calendar days (or 7 days if within one mile of an identified impaired water) after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases.

7. Temporary or permanent ditches or swales being used as sediment containment systems during construction (with properly designed rock-ditch checks, bio rolls, silt dikes, etc.) do not need to be stabilized during the temporary period of use as a sediment containment system. These areas must be stabilized within 24 hours after no longer being used for as a sediment containment system.

8. Applying mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices is not acceptable within any portion of the normal wetted perimeter of a temporary or permanent drainage ditch or swale section with a continuous slope of greater than 2 percent.

9. Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours after connection to a surface water or permanent stormwater treatment system.

10. Route water around unstabilized areas on the site and to reduce erosion, unless infeasible. Use erosion controls and velocity dissipation devices such as check dams, sediment traps, riprap, or grouted riprap at outlets within and along the length of any constructed stormwater conveyance channel, and at any outlet, to provide a non-erosive flow velocity, to minimize erosion of channels and their embankments, outlets, adjacent stream banks, slopes, and downstream waters during discharge conditions.

11. Unless infeasible due to lack of pervious or vegetated areas, direct discharges from BMPs to vegetated areas of the site (including any natural buffers) in order to increase sediment removal and maximize stormwater infiltration. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.

12. Infiltration areas shall not be excavated until all upstream areas have been stabilized and/or upstream BMPs are in place to properly prevent sediment deposition. Only low impact equipment shall be allowed in infiltration areas which shall be clearly identified, staked, and marked/fenced off.

13. Project phasing shall be implemented to ensure land disturbance and temporary erosion control measures can be effectively inspected and maintained throughout the duration of the project in accordance with the Inspection and Maintenance requirements of Section 11.

TEMPORARY SEDIMENT CONTROL PRACTICES (SECTION 9)

1. Sediment control practices must be established on all down gradient perimeters and be located upgradient of any buffer zones. The perimeter sediment control practices must be in place before any upgradient land-disturbing activities begin. These practices shall remain in place until Final Stabilization has been established.

2. If downgradient sediment controls become overloaded, based on frequent failure or excessive maintenance requirements, additional upgradient sediment control practices or redundant BMPs shall be installed to eliminate the overloading concerns. All changes shall be recorded in the SWPPP.

3. Temporary or permanent drainage ditches and sediment basins 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.

4. A floating silt curtain placed in the water is not an acceptable sediment control BMP except when working on a shoreline or below the waterline. Immediately after construction activity (e.g., installation of rip rap along the shoreline) in that area is complete, upland perimeter control practices shall be installed if exposed soils still drain to a surface water.

5. Re-install all sediment control practices that have been adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity has been completed. Complete any short-term activity that requires removal of sediment control practices as quickly as possible and re-install sediment control practices before the next precipitation event even if the short-term activity is not complete.

6. 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 by the Permittee(s) or the jurisdictional authority (e.g., city/county/township/MnDOT engineer).The Permittee(s) must document the need for removal in the SWPPP.

7. Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in any natural buffers or 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.

8. Where vehicle traffic leaves any part of the site (or onto paved roads within the site) install a vehicle tracking BMP to minimize the track out of sediment from the construction site. Examples of vehicle tracking BMPs include (but are not limited to) rock pads, mud mats, slash mulch, concrete or steel wash racks, or equivalent systems. Use street sweeping if such vehicle tracking BMPs are not adequate to prevent sediment from being tracked onto the street.

9. The Permittee(s) must install temporary sedimentation basins as required in accordance with permit requirements.

10. Minimize soil compaction by restricting vehicle access in areas where final vegetative stabilization will occur, unless otherwise infeasible.

11. Discharges from BMPs shall be directed to vegetated areas unless infeasible.

12. Preserve a 50 foot natural buffer or (if a buffer is infeasible on the site) provide redundant (double) perimeter sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water.

13. Perimeter sediment controls shall be installed at least 5 feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, the reasons for which shall be recorded in the SWPPP.

14. The use of polymers, flocculants, or other sedimentation treatment chemicals, if used on the project, shall be used in accordance with accepted engineering practices, dosing specifications, and sediment removal design specifications provided by the product manufacturer or supplier. Use conventional erosion and sediment controls prior to the chemical addition to ensure effective treatment. Chemicals may only be applied where treated stormwater is directed to a sediment control system which allows or filtration of settlement of the floc prior to discharge.

15. If the proposed project as shown on the plans has 10 or more acres draining to a common location or 5 acres or more if the site is within one mile of a special or impaired water (as identified in Section II - Receiving Waters and Environmentally Sensitive Areas), then a temporary sediment basin must be constructed as shown on the plans. Temporary sediment basins will have a minimum of 3,600 cubic feet of storage per acre draining to the basin. The basin outlet shall provide for discharging water from the surface to minimize discharging of pollutants. A stabilized emergency overflow shall be constructed.

DEWATERING AND BASIN DRAINING (SECTION 10)

1. Discharge turbid or sediment-laden waters related to dewatering or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) to a temporary or permanent sediment basin on the project site unless infeasible. Discharge from the temporary or permanent sedimentation basins to surface waters if the basin water has been visually checked to ensure adequate treatment has been obtained in the basin and that nuisance conditions will not result from the discharge. If the water cannot be discharged to a sedimentation basin prior to entering the surface water, it must be treated with the appropriate BMPs, such that the discharge does not adversely affect the receiving water or downstream properties.

2. Discharge water that contains oil or grease, must use an oil-water separator or suitable filtration device (e.g. cartridge filters, absorbents pads) prior to discharging the water.

3. All water from dewatering or basin-draining activities must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or downslope properties, erosion or scour in the immediate vicinity of discharge points, or inundation in wetlands causing significant adverse impact to the wetland.

4. The use of filters with backwash water, haul the backwash water away for disposal, return the backwash water to the beginning of the treatment process, or incorporate the backwash water into the site in a manner that does not cause erosion. Discharge backwash water to the sanitary sewer if permission is granted by the sanitary sewer authority. Replace and clean the filter media used in dewatering devices when required to retain adequate function.

INSPECTIONS AND MAINTENANCE (SECTION 11)

1. Owner and Contractor shall ensure that a trained person (as identified in item 21.2.b) of the permit will inspect the entire construction site at a minimum:
   - Once every seven (7) days during active construction, and
   - Within 24 hours after a rainfall event greater than 1/2 inch in 24 hours

2. Inspect all erosion prevention and sediment control BMPs and Pollution Prevention Management Measures to ensure integrity and effectiveness during all routine and post-rainfall event inspections. All nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs by the end of the next business day after discovery, or as soon as field conditions allow access unless another time frame is specified below. Investigate and comply with the following Inspection and Maintenance requirements:

   a. All perimeter control devices must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches one-half (1/2) of the height of the device. These repairs must be made by the end of the next business day after discovery, or thereafter as soon as field conditions allow access.
   b. Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches one-half (1/2) the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access.
   c. Inspect and photograph dewatering discharges at the beginning and at least once every 24 hours during operation.
   d. Surface waters, including drainage ditches and conveyance systems, must be inspected for evidence of erosion and sediment deposition during each inspection. Remove all deltas and sediment deposited in surface waters, including drainage ways, catch basins, and other drainage systems, and restabilize the areas where sediment removal results in exposed soil. The removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints. Use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) calendar days of obtaining access. Contact all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters.
   e. 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 both on and off site within 24 hours of discovery, or if applicable, within a shorter time.
   f. Streets and other areas adjacent to the project must be inspected for evidence of off-site accumulations of sediment. If sediment is present, it 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).

5. Inspection frequency adjustment:
   a. Inspections of areas with permanent cover can be reduced to once per month, even if construction activity continues on other portions of the site; or
   b. where sites have permanent cover on all exposed soil and no construction activity is occurring anywhere on the site, inspections can be reduced to once per month and, after 12 months, may be suspended completely until construction activity resumes. The MPCA may require inspections to resume if conditions warrant; or
   c. where construction activity has been suspended due to frozen ground conditions, inspections may be suspended. Inspections must resume within 24 hours of runoff occurring, or upon resuming construction, whichever comes first.

3. All inspections and maintenance activities within 24 hours of being conducted must be recorded and retained in the SWPPP. These records must include:
   a. Date and time of inspections
   b. Name of person(s) conducting inspections
   c. Findings of inspections, including the specific location where corrective actions are needed
   d. Corrective actions taken (including dates, times, and party completing maintenance activities)
   e. Date and amount of all rainfall events greater than 1/2 inch (0.5 inches) in 24 hours. Rainfall amounts must be obtained by a properly maintained rain gauge installed onsite, a weather station that is within 1 mile of your location or a weather reporting system that provides site specific rainfall data from radar summaries.
   f. If any discharge is observed to be occurring during the inspection, a record of all points of the property from which there is a discharge must be made, and the discharge should be described (i.e., color, odor, floating, settled, or suspended solids, foam, oil sheen, and other obvious indicators of pollutants) and photographed.
   g. Any amendments to the SWPPP proposed as a result of the inspection must be documented within seven (7) calendar days.

4. All infiltration areas must be inspected to ensure that no sediment from ongoing construction activity is reaching the infiltration area. All infiltration areas must be inspected to ensure that equipment is not being driven across the infiltration area.

POLLUTION PREVENTION MANAGEMENT MEASURES (SECTION 12)

Implement the following pollution prevention management measures on the site:

1. Storage, Handling, and Disposal of Construction Products, Materials, and Wastes shall comply with the following to minimize the exposure to stormwater of any of the products, materials, or wastes. Products or wastes which are either not a source of contamination to stormwater or are designed to be exposed to stormwater are not held to this requirement:

   a. Building products that have the potential to leach pollutants must be under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by a similarly effective means designed to minimize contact with stormwater.
   b. Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials must be under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by similarly effective means designed to minimize contact with stormwater.
   c. Hazardous materials, toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) must be properly stored in sealed containers to prevent spills, leaks or other discharge. Restricted access storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste or hazardous materials must be in compliance with Minn. R. ch. 7045 including secondary containment as applicable.
   d. Solid waste must be stored, collected and disposed of properly in compliance with Minn. R. ch. 7035.
   e. Portable toilets must be positioned so that they are secure and will not be tipped or knocked over. Sanitary waste must be disposed of properly in accordance with Minn. R. ch. 7041.

2. Fueling and Maintenance of Equipment or Vehicles; Spill Prevention and Response: Take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. Conduct fueling in a contained area unless infeasible. Ensure adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. Report and clean up spills immediately as required by Minn. Stat. § 115.061, using dry clean up measures where possible.

3. Vehicle and equipment washing: Wash the exterior of vehicles or equipment on the project site, washing must be limited to a defined area of the site. Runoff from the washing area must be contained in a sediment basin or other similarly effective controls and waste from the washing activity must be properly disposed of. Properly use and store soaps, detergents, or solvents. No engine degreasing is allowed on site.

4. Concrete and other washouts waste: Provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. The liquid and solid washout wastes must not contact the ground, and the containment must be designed so that it does not result in runoff from the washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA rules. A sign must be installed adjacent to each washout facility that requires site personnel to utilize the proper facilities for disposal of concrete and other washout wastes.

PERMIT TERMINATION (SECTIONS 4 AND 13)

1. Permittees must submit a NOT within 30 days after all termination conditions listed in Section 13 are complete.

2. Permittees must submit a NOT within 30 days after selling or otherwise legally transferring the entire site, including permit responsibility for roads (e.g., street sweeping) and stormwater infrastructure final clean out, or transferring portions of a site to another party. The permittees' coverage under the permit terminates at midnight on the submission date of the NOT.

3. Permittees may terminate permit coverage prior to completion of all construction activity if they meet all of the following conditions:
   a. Construction activity has ceased for at least 90 days; and
   b. at least 90 percent (by area) of all originally proposed construction activity has been completed and permanent cover has been established on those areas; and
   c. on areas where construction activity is not complete, permanent cover has been established; and
   d. the site complies with items 13.3 through 13.7 of the permit.

   After permit coverage is terminated under this item, any subsequent development on the remaining portions of the site will require permit coverage if the subsequent development itself or as part of the remaining common plan of development or sale will result in land disturbing activity of one (1) or more acres in size.

4. Permittees may terminate coverage upon MPCA approval after submitting information documenting the owner canceled the project.

5. Permittees must complete all construction activity and must install permanent cover over all areas prior to submitting the NOT. Vegetative cover must consist of a uniform perennial vegetation with a density of 70 percent of its expected final growth. Vegetation is not required where the function of a specific area dictates no vegetation, such as impervious surfaces or the base of a sand filter.

6. Permittees must clean the permanent stormwater system of any accumulated sediment and must ensure the system meets all applicable requirements in Section 15 through 19 of the permit and is operating as designed.

7. Permittees must remove all sediment from conveyance systems prior to submitting the NOT.

8. Permittees must remove all temporary synthetic erosion prevention and sediment control BMPs prior to submitting the NOT. BMPs designed to decompose on-site may be left in place.

9. For residential construction only, permit coverage terminates on individual lots if the structures are finished and temporary erosion prevention and downgradient perimeter control is complete, the residence sells to the homeowner, and the permittee distributes the MPCA's "Homeowner Fact Sheet" to the homeowner.

10. For construction projects on agricultural land (e.g., pipelines across cropland), disturbed land must be returned to its preconstruction agricultural condition prior to submitting the NOT.

11. When submitting the NOT, permittees must include either ground or aerial photographs showing vegetative cover requirements have been met as listed above. All submitted photographs shall include the date and specific site location.

LONG TERM OPERATION AND MAINTENANCE:

1. Upon the completion of construction activity and NPDES permit termination, in accordance with Sections 4 and 13, the Property Owner shall become the responsible party for long term operation and maintenance (O&M) of all permanent stormwater management features under this project.

2. All associated operations, inspections, maintenance, and record keeping shall be performed by trained individual(s) familiar with the site stormwater management system.

3. Record keeping of inspections and maintenance items shall be maintained by the Owner in accordance with applicable Maintenance Agreements/Declarations as required by local jurisdictional authorities.

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6770 STILLWATER BLVD, SUITE 110
STILLWATER, MN 55082

11/04/2024 PERMIT SET - NOT FOR CONSTRUCTION

Project Title:
HUGO WEST APARTMENTS
HUGO, MN 55038

I hereby certify that this plan, specifications 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.

Bryan D. Miller, P.E.
Date: 11.04.2024 Lic. No.: 54950

Rev.	Date	Description

Project #: 12246027.000
Drawn By: NJN
Checked By: BDM
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