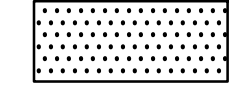


SYMBOL LEGEND

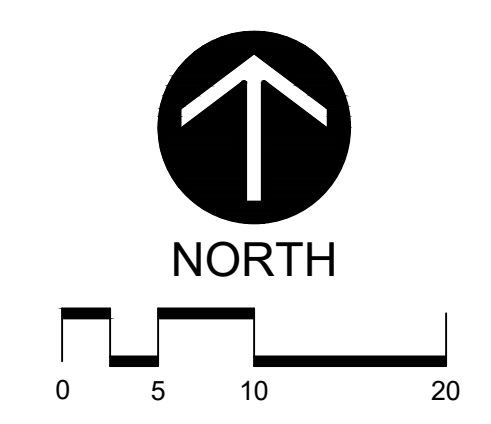
 REMOVE AND DISPOSE OF EXISTING BITUMINOUS PAVEMENT SECTION

KEY NOTES

- ① SAWCUT, REMOVE, AND DISPOSE OF EXISTING CONCRETE CURB AND GUTTER.
- ② REMOVE AND DISPOSE OF EXISTING TREE, STUMP, AND ROOTS.

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.



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

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ELEMENT DESIGN-BUILD
 1110 RAYMOUND AVENUE, UNIT 3
 ST. PAUL, MN 55108

UPPER 33RD STREET TOWNHOUSE DEVELOPMENT
 LAKE ELMO, MN

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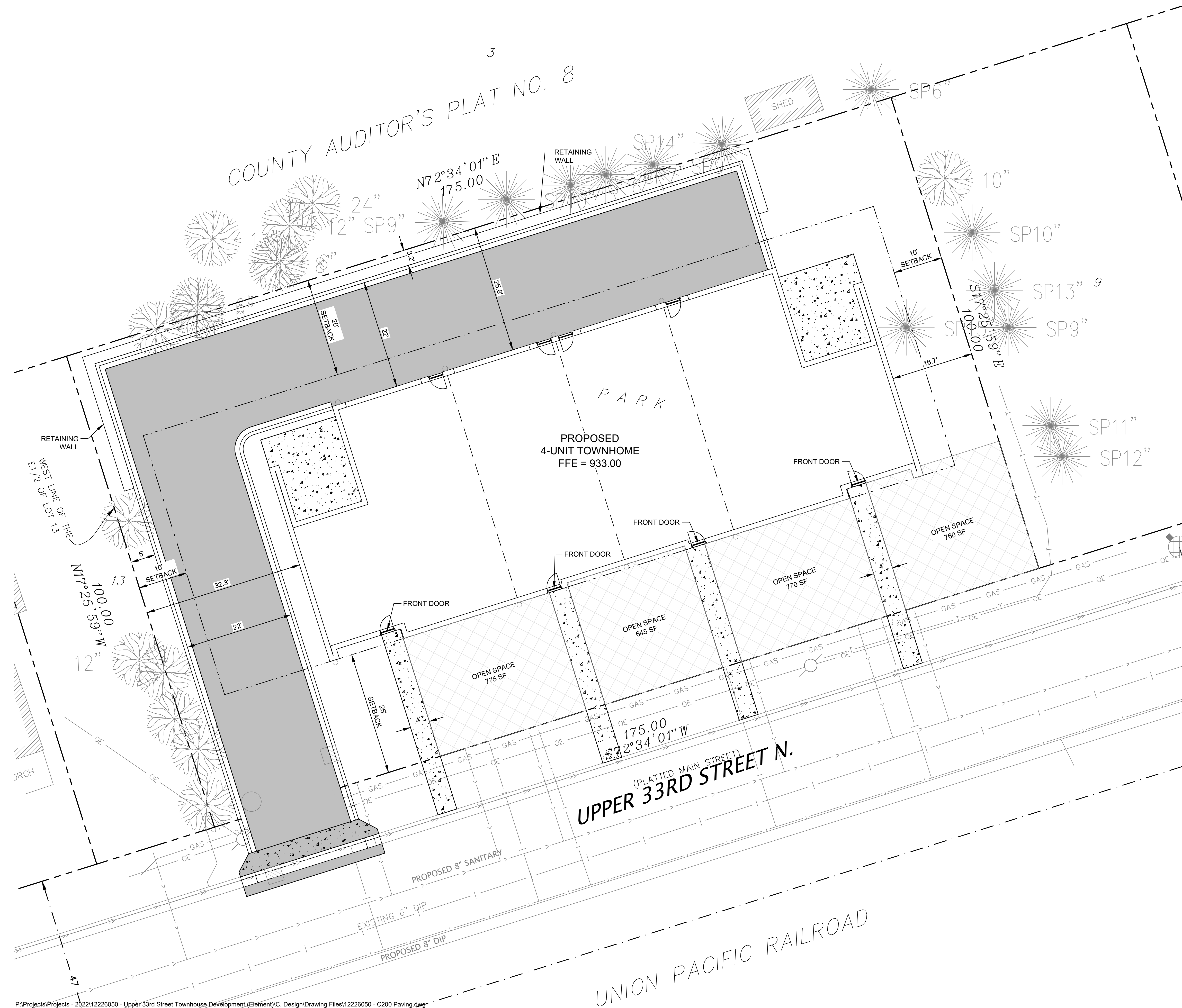
Matthew J. Woodruff, P.E.
 Date: 11.03.22 Lic. No.:

Rev.	Date	Description


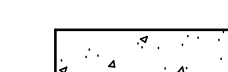

Project #: 12226050
 Drawn By: TJR
 Checked By: MJW
 Issue Date: 11.03.22
 Sheet Title:

DEMOLITION PLAN

Sheet: **C100**




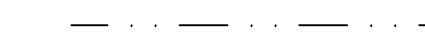

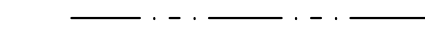
SYMBOL LEGEND

-  NEW LIGHT-DUTY BITUMINOUS PAVEMENT
SEE DETAIL 1/C500
-  NEW CONCRETE SIDEWALK
SEE DETAIL 3/C500
-  NEW DRIVEWAY APRON CONCRETE PAVEMENT
SEE DETAIL 10/C500

AREA CALCULATIONS:

PROPERTY AREA = 17,500 S.F.
 IMPERVIOUS AREA = 11,684 S.F.
 IMPERVIOUS PERCENT = 66.8%
 MAX. ALLOWABLE IMPERVIOUS = 75% (13,125 S.F.)

GENERAL LEGEND

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

KEY NOTES

- 1 B612 CURB AND GUTTER, SEE DETAIL 2/C500
- 2 DRIVEWAY APRON, SEE DETAIL 10/C500
- 3 RETAINING WALL, SEE DETAIL 4/C500

NOTE:

LOTS WILL BE CONSOLIDATED INTO ONE LOT.

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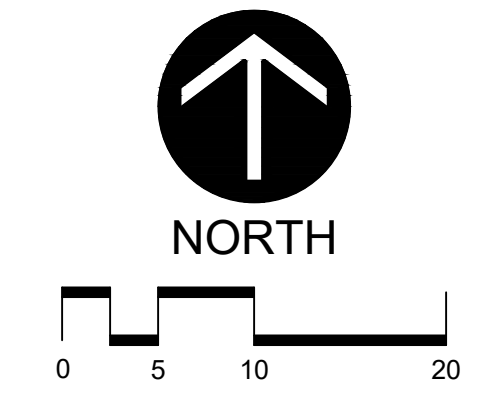
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 Sheet Title:

SITE PLAN

Sheet: **C200**



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. Restore all disturbed areas with 4" of good quality topsoil and seed.
5. All construction shall be performed in accordance with state and local standard specifications for construction.
6. No wheeled machines shall be used to excavate BMP(s), and/or during the backfilling.
7. No construction traffic is allowed over the BMP(s) during any phase of the project.
8. BMP(s) shall be protected from all exposed soil during all construction activities.
9. BMP(s) shall not be open to accept water until the site is stabilized.

KEY NOTES

1. ROCK CONSTRUCTION ENTRANCE, SEE DETAIL 8/C500
2. SILT FENCE, SEE DETAIL 9/C500
3. INLET PROTECTION, SEE DETAIL 7/C500

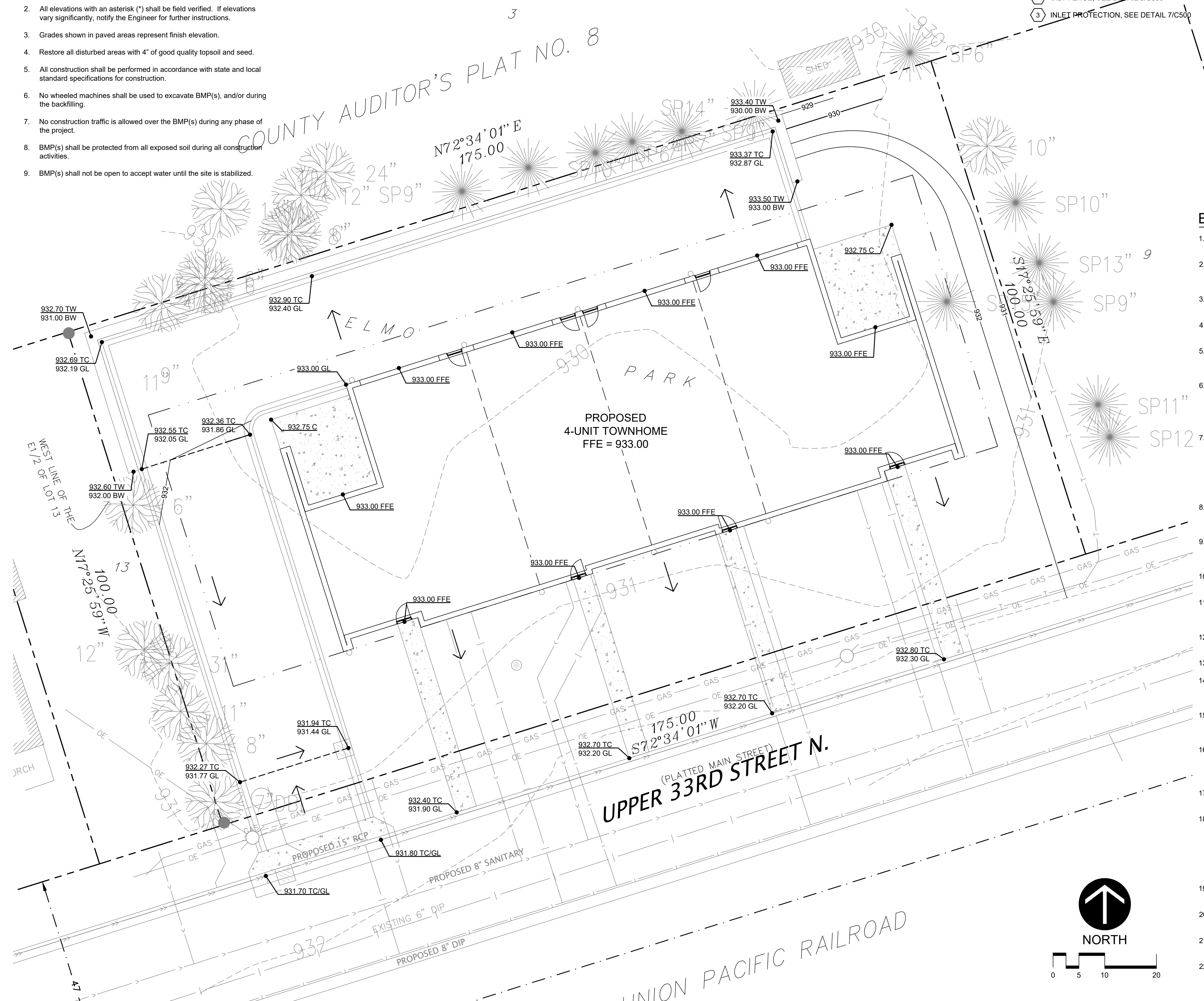
SYMBOL LEGEND

- 950 --- EXISTING CONTOURS
- 950 --- PROPOSED CONTOURS - MAJOR INTERVAL
- 949 --- PROPOSED CONTOURS - MINOR INTERVAL
- GRADE BREAK LINE
- 2.0% GRADE SLOPE
- SILT FENCE
- SEDIMENT LOG
- RIP-RAP / ROCK CONST. ENTRANCE
- INLET PROTECTION

- SPOT ABBREVIATIONS:**
- TC - TOP OF CURB
 - GL - GUTTER LINE
 - C - CONCRETE
 - FFE - FIRST FLOOR ELEVATION
 - GFE - GARAGE FLOOR ELEVATION
 - TW - TOP OF WALL
 - BW - BOTTOM OF WALL (F/G)
 - (*) - EXISTING TO BE VERIFIED

EROSION CONTROL NOTES

1. Install temporary erosion control measures (inlet protection, silt fence, and rock construction entrances) prior to beginning any excavation or demolition work at the site.
2. Erosion control measures shown on the erosion control plan are the absolute minimum. The contractor shall install temporary earth dikes, sediment traps or basins, additional siltation fencing, and/or disk the soil parallel to the contours as deemed necessary to further control erosion.
3. All construction site entrances shall be surfaced with crushed rock across the entire width of the entrance and from the entrance to a point 50' into the construction zone.
4. The toe of the silt fence shall be trenched in a minimum of 6". The trench backfill shall be compacted with a vibratory plate compactor.
5. All grading operations shall be conducted in a manner to minimize the potential for site erosion. Sediment control practices must be established on all down gradient perimeters before any up gradient land disturbing activities begin.
6. All exposed soil areas must be stabilized as soon as possible to limit soil erosion but in no case later than 14 days 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.
7. 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. Stabilization of the remaining portions of any temporary or permanent ditches or swales must be complete within 14 days after connecting to a surface water and construction in that portion of the ditch has temporarily or permanently ceased.
8. All storm sewer catch basins not needed for site drainage during construction shall be covered to prevent runoff from entering the storm sewer system. Catch basins necessary for site drainage during construction shall be provided with inlet protection.
9. In areas where concentrated flows occur (such as swales and areas in front of storm catch basins and intakes) the erosion control facilities shall be backed by stabilization structure to protect those facilities from the concentrated flows.
10. Inspect the construction site once every seven days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours.
11. All BMPs must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the capacity of the BMP. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access.
12. 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.
13. All soils tracked onto pavement shall be removed daily.
14. Temporary soil stockpiles must have silt fence 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.
15. 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.
16. 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.
17. 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 onsite.
18. 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.
19. Upon completion of the project and stabilization of all graded areas, all temporary erosion control facilities (silt fences, hay bales, etc.) shall be removed from the site.
20. A City approved dewatering/pumping plan is required prior to any pumping activity. Notify City of Roseville Engineering Dept. at 651-792-7004 prior to beginning any pumping activity.
21. Notify City of Roseville Engineering Dept. at 651-792-7004, prior to beginning any and all construction activity to verify Erosion Control Measures are in place.
22. Notify City of Roseville Engineering Dept. at 651-792-7004, at least 24 hours prior to the construction of stormwater BMPs.



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Rev.	Date	Description

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 Issue Date: 11.03.22

Sheet Title:
GRADING AND EROSION CONTROL PLAN

Sheet:
C300

COUNTY AUDITOR'S PLAT NO. 8

SYMBOL LEGEND

- | | | | |
|---|------------------|-------|------------------------------|
| ○ | STORM MANHOLE | —x—x— | CABLE UNDERGROUND LINE |
| ○ | CATCH BASIN | —x—x— | ELECTRIC OVERHEAD LINE |
| □ | CURB INLET | —x—x— | ELECTRIC UNDERGROUND LINE |
| ▲ | FLARED END | —x—x— | FIBER OPTIC UNDERGROUND LINE |
| ○ | SANITARY MANHOLE | —x—x— | NATURAL GAS UNDERGROUND LINE |
| ⊗ | HYDRANT | —x—x— | SANITARY SEWER PIPE |
| ⊗ | GATE VALVE & BOX | —x—x— | STORM SEWER PIPE |
| ⊗ | WATER SHUTOFF | —x—x— | TELEPHONE UNDERGROUND LINE |
| ⊗ | LIGHT POLE | —x—x— | WATERMAIN PIPE |
| | | —x—x— | DRAINTILE PIPE |

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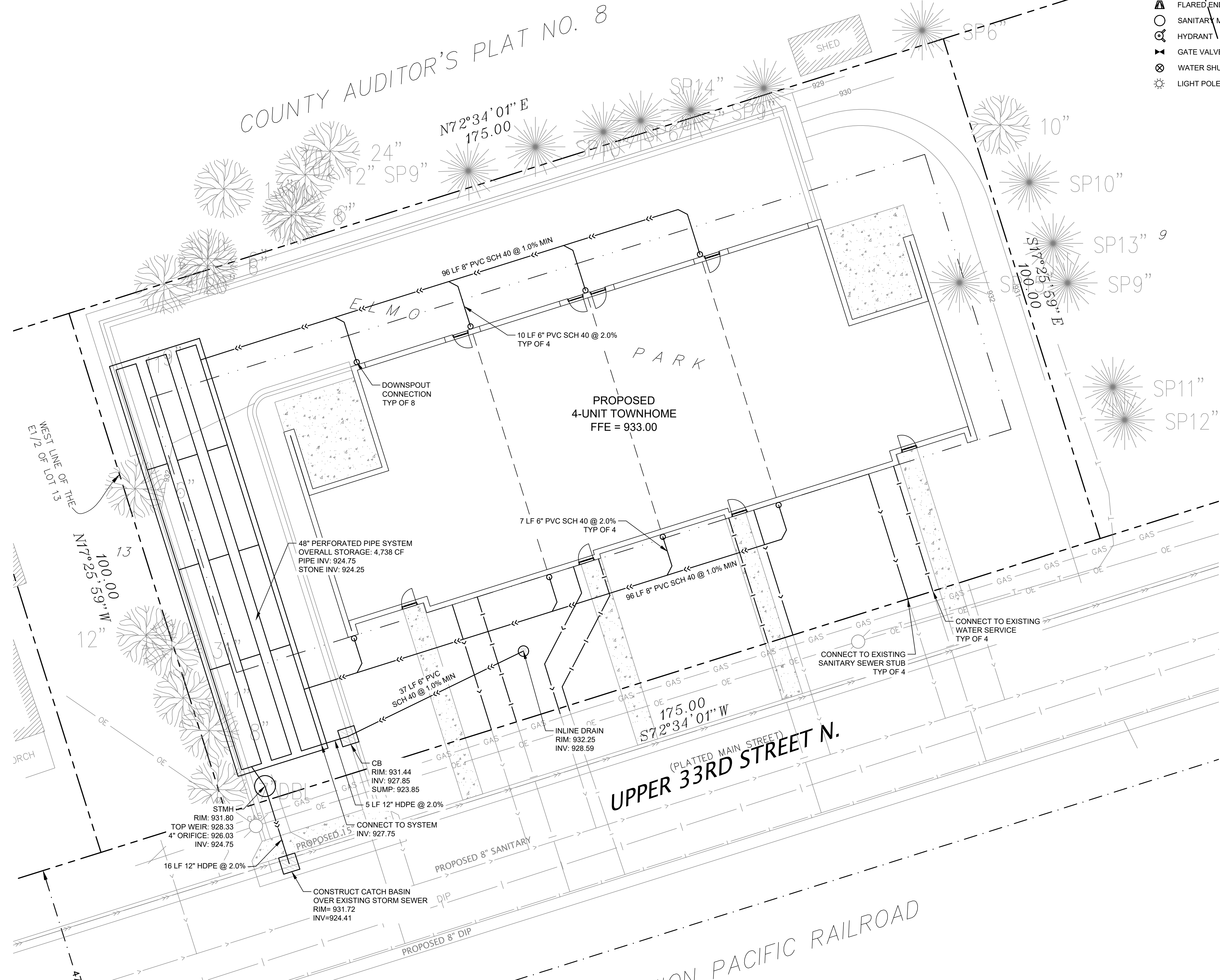
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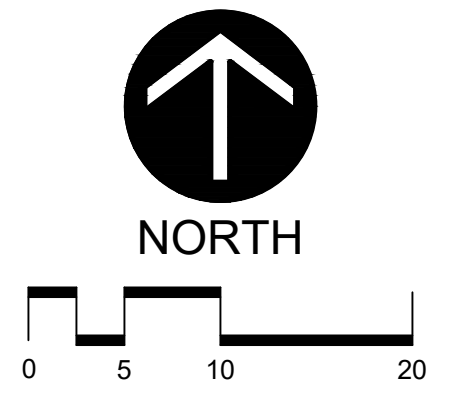
UTILITY PLAN

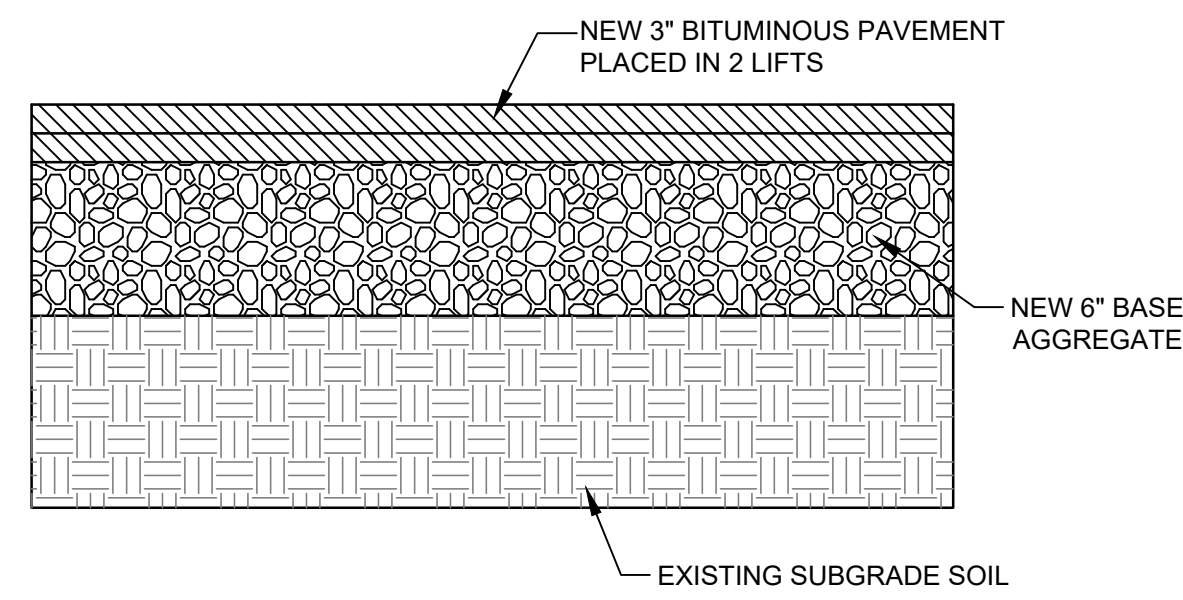
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UTILITY NOTES

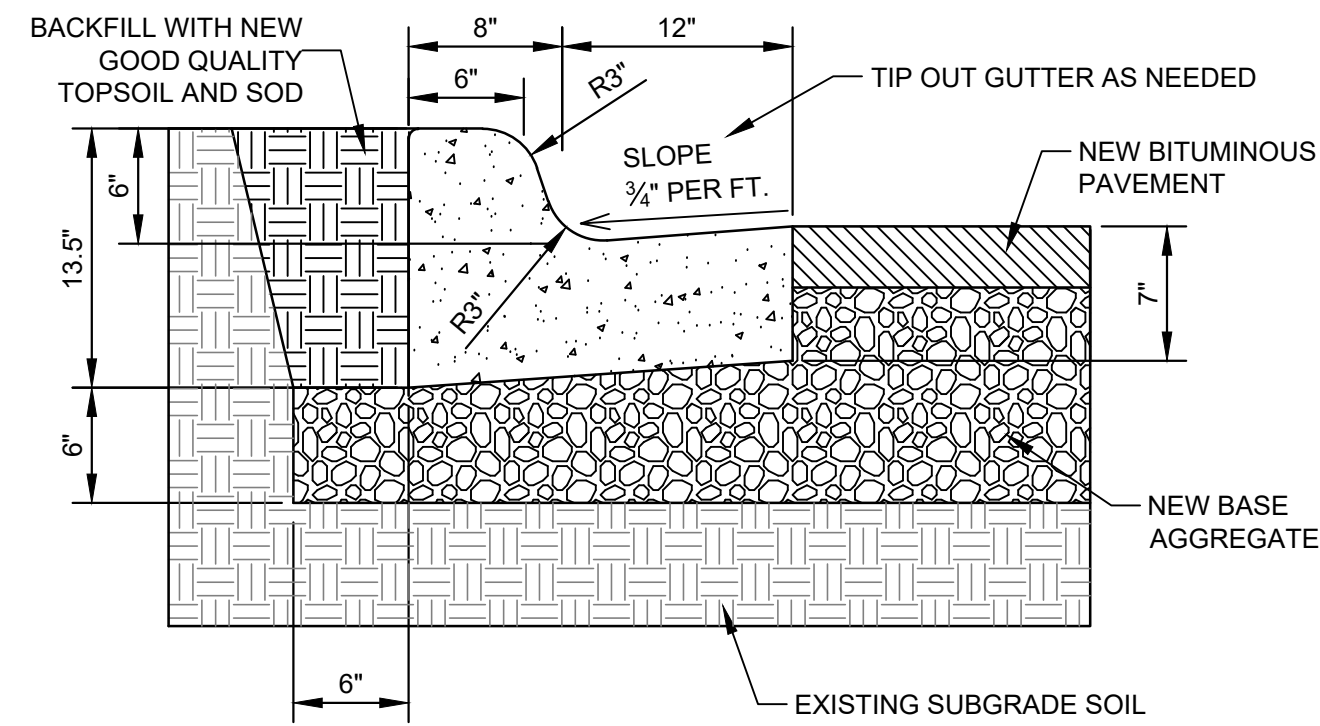
- It is the responsibility of the contractor to perform or coordinate all necessary utility connections and relocations from existing utility locations to the proposed building, as well as to all onsite amenities. These connections include but are not limited to water, sanitary sewer, cable TV, telephone, gas, electric, site lighting, etc.
- 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.
- The contractor shall verify the elevations at proposed connections to existing utilities prior to any demolition or excavation.
- 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.
- Storm sewer requires testing in accordance with Minnesota plumbing code 4714.1109 where located within 10 feet of waterlines or the building.
- HDPE storm sewer piping shall meet ASTM F2306 and fittings shall meet ASTM D3212 joint pressure test. Installation shall meet ASTM C2321.
- Maintain a minimum of 7 1/2' of cover over all water lines and sanitary sewer lines. Where 7 1/2' 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.
- 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.
- A City approved dewatering/pumping plan is required prior to any pumping activity. Notify City of Roseville Engineering Dept. at 651-792-7004 prior to beginning any pumping activity.





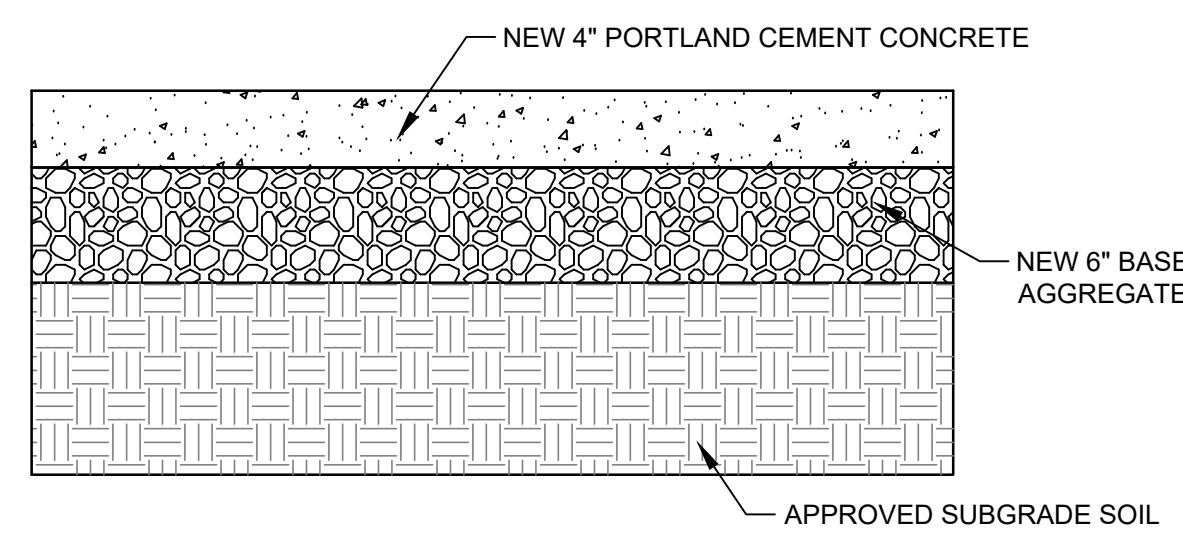
1
C500
LIGHT-DUTY BITUMINOUS PAVEMENT SECTION

NOT TO SCALE



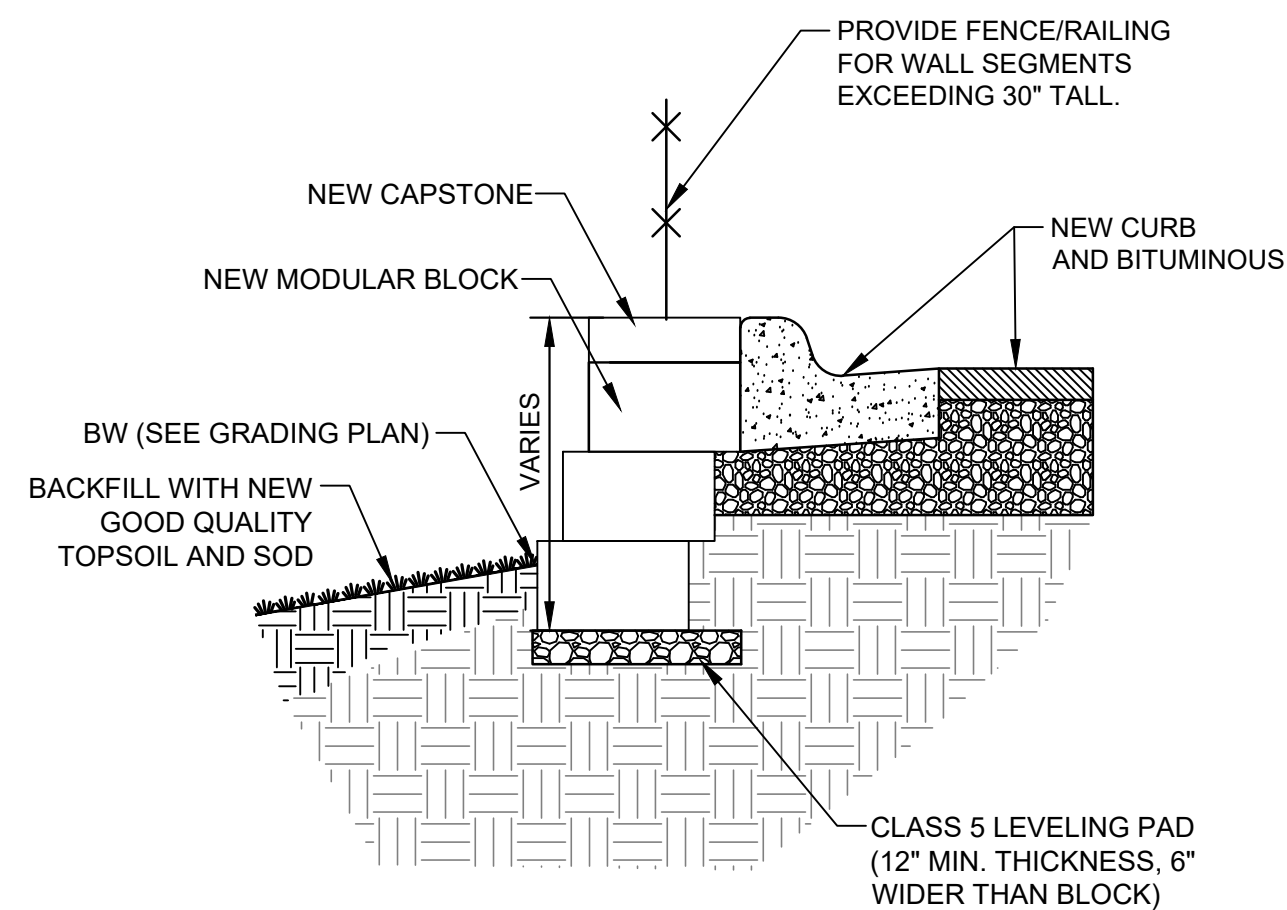
2
C500
B612 CONCRETE CURB & GUTTER DETAIL

NOT TO SCALE



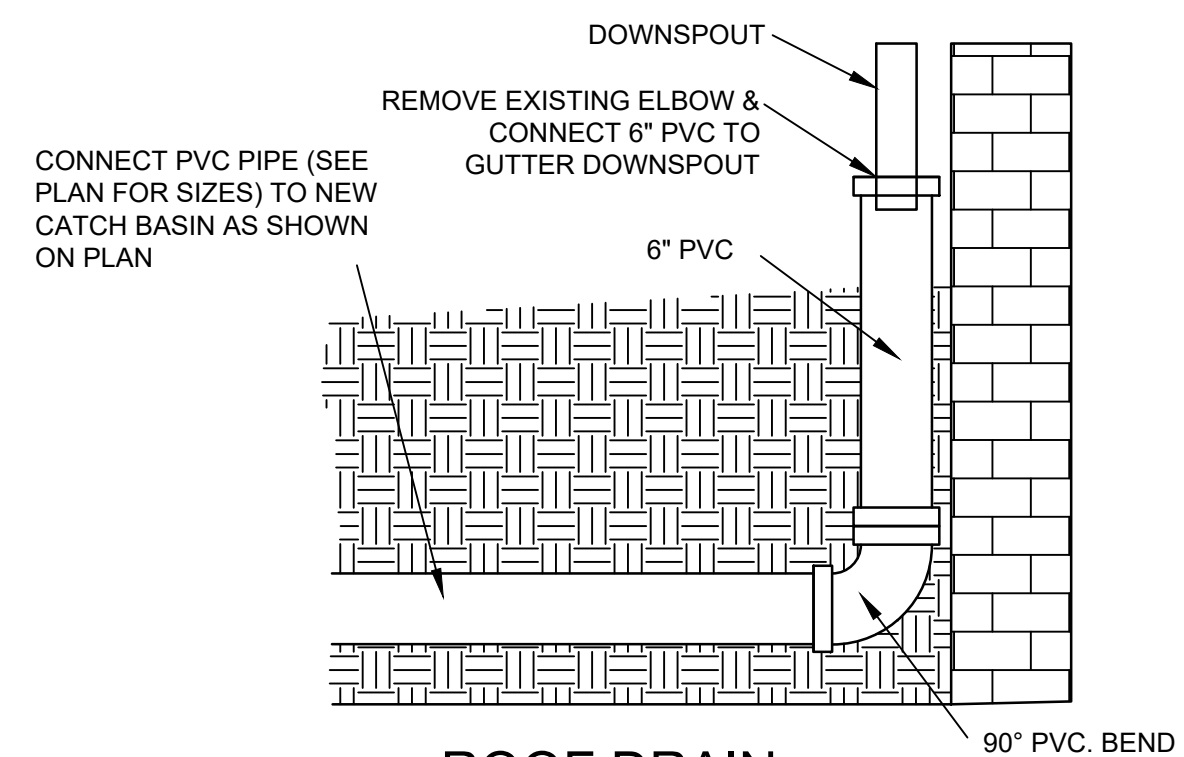
3
C500
CONCRETE SIDEWALK CONSTRUCTION DETAIL

NOT TO SCALE



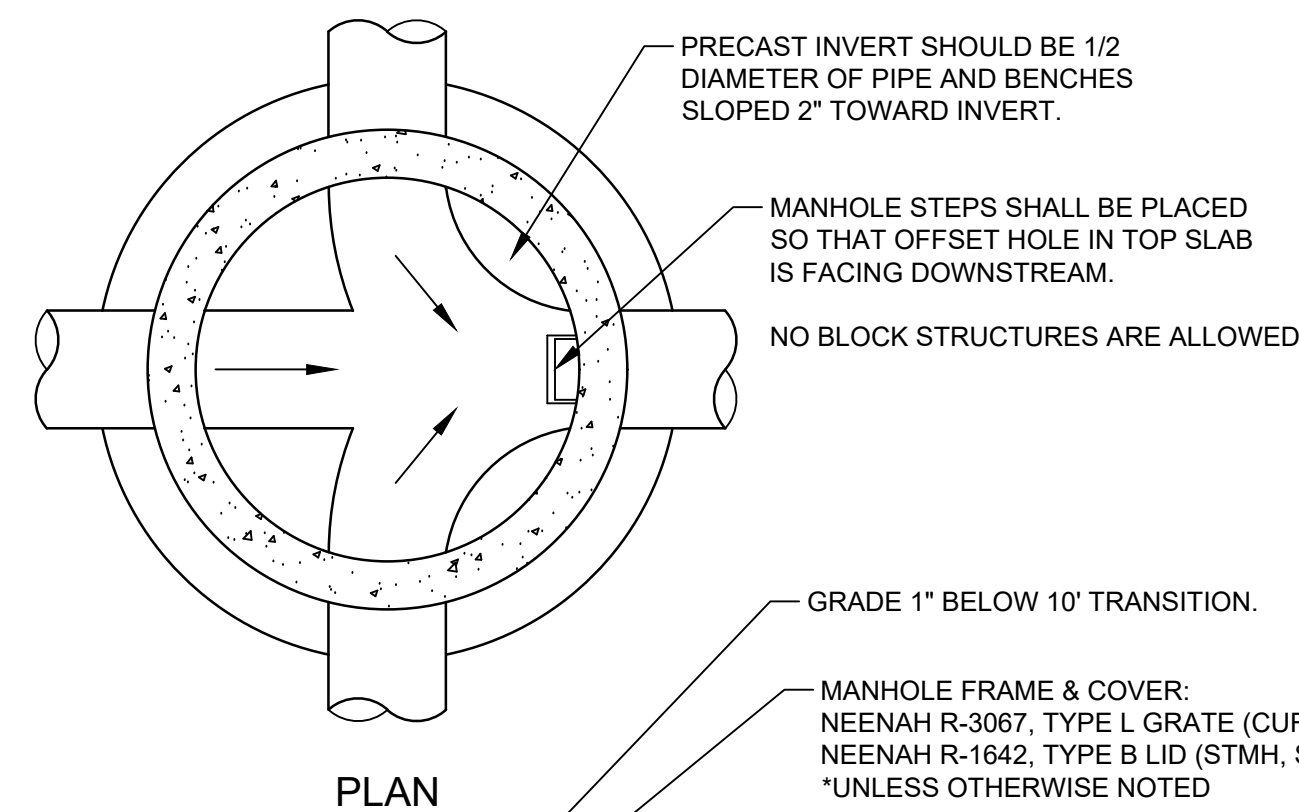
4
C500
RETAINING WALL DETAIL

NOT TO SCALE



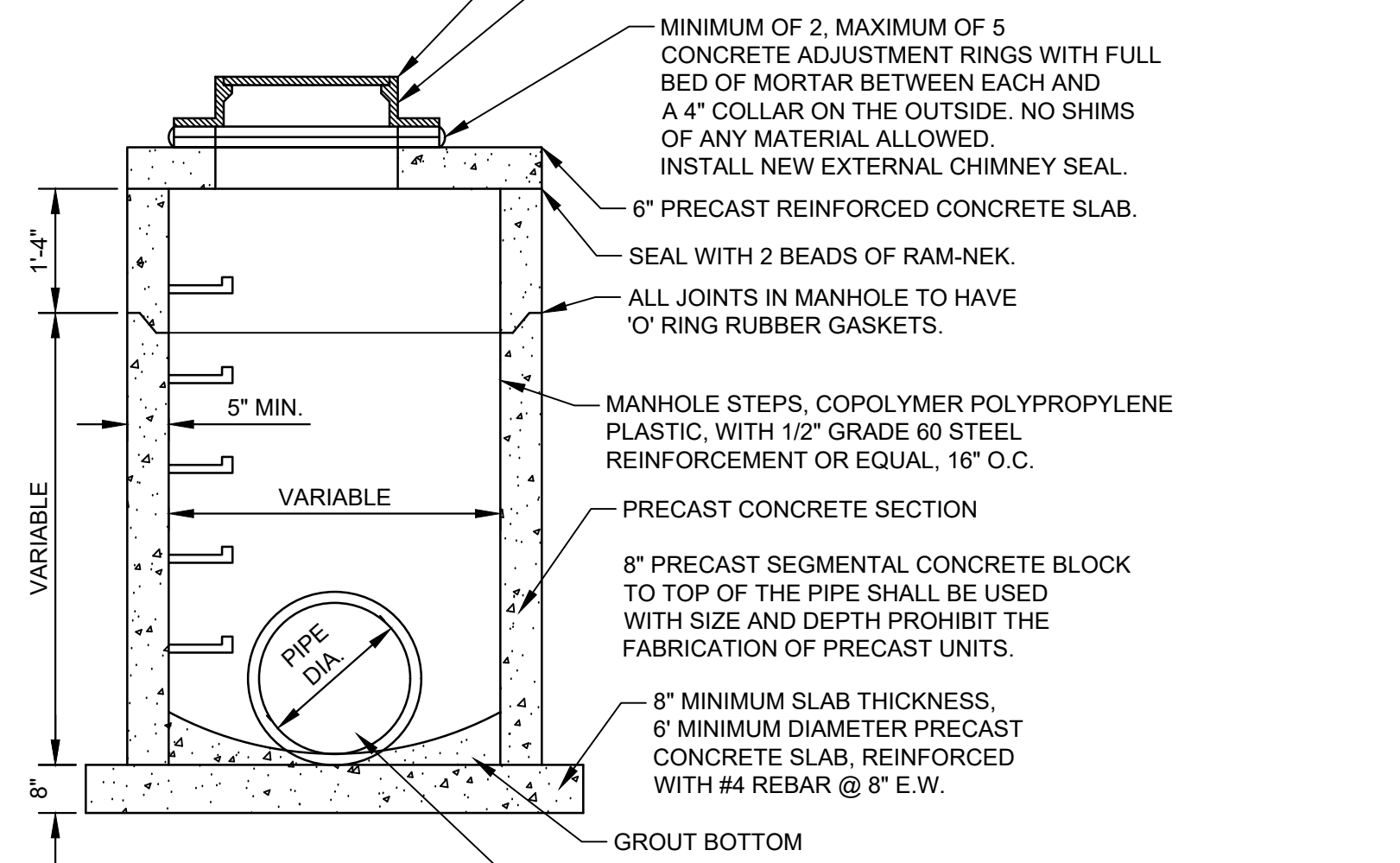
5
C500
ROOF DRAIN CONNECTION DETAIL

NOT TO SCALE



6
C500
CATCH BASIN MANHOLE DETAIL

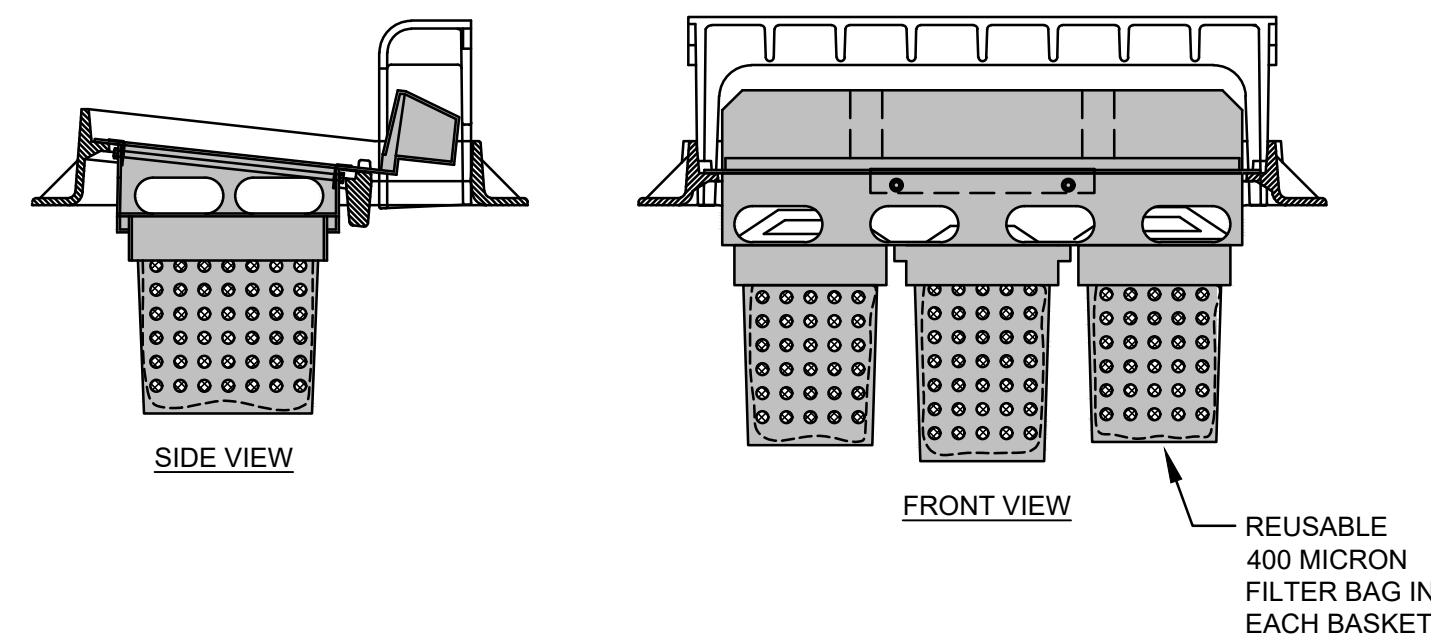
NOT TO SCALE



7
C500
INFRASAFE INLET PROTECTION DEVICE (OR EQUAL)

NOT TO SCALE

FILTER AREA	6.5 FT ²
OVERFLOW AREA	0.6 FT ²
MAXIMUM OVERFLOW RATE (@ 7\"/>	
MAXIMUM OVERFLOW RATE (@ 1.3\"/>	
BASKET WEIGHT (EMPTY)	1 LB
BASKET WEIGHT (FULL-APPROX.)	70 LBS



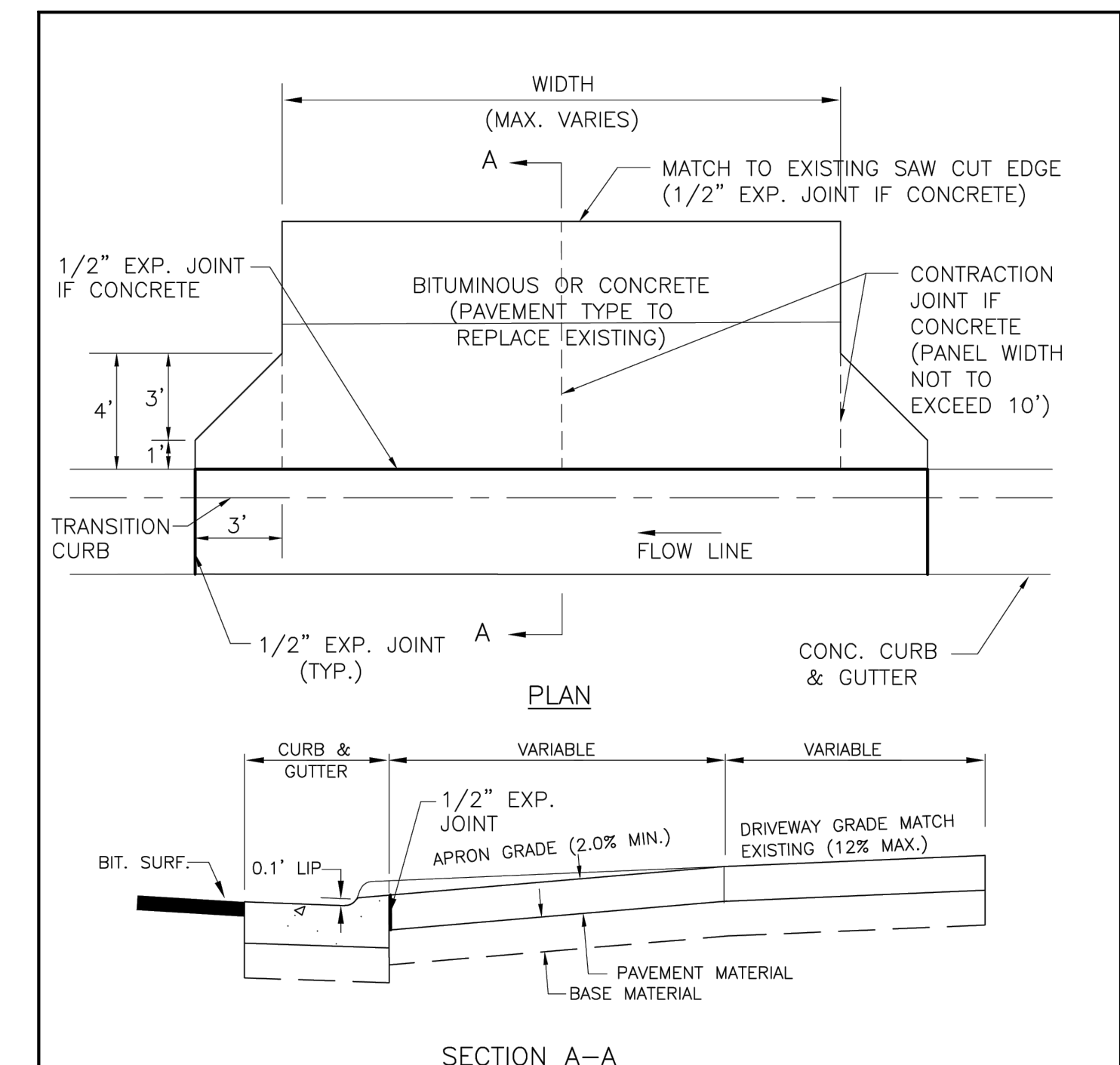
8
C500
ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE



9
C500
SILT FENCE INSTALLATION DETAIL

NOT TO SCALE



DRIVEWAY TYPE	SURFACE THICKNESS	BASE THICKNESS
BITUMINOUS CONCRETE	3 INCHES	6 INCHES
	6 INCHES	4 INCHES

- NOTES :
1. BITUMINOUS MATERIAL SHALL BE PER STREET TYPICAL SECTION.
 2. AGGREGATE BASE MATERIAL SHALL BE PER STREET TYPICAL SECTION.

10
C500
RESIDENTIAL DRIVEWAY DETAIL

NOT TO SCALE

APRIL 2019

CITY OF LAKE ELMO

STANDARD DRAWING NO. 504
LAKE ELMO

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DETAILS

Sheet: **C500**