

# HOVEY'S ISLAND

15530 SNOWSHOE ROAD  
HENDERSON, NY 13650

PROJECT CONTACTS

**CIVIL ENGINEER**  
BERGMANN ENGINEERING ASSOCIATES INC.  
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ALBANY, NY 112211  
CIVIL ENGINEER: GREGG URSPRUNG, P.E., LEED AP  
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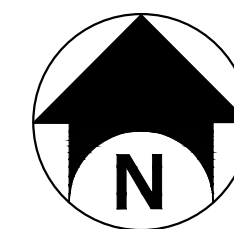
**OWNER**  
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PREPARED FOR:  
**SUN ASSOCIATION ISLAND RV LLC.**  
27777 FRANKLIN ROAD, SUITE 300  
SOUTHFIELD, MI 48034



SITE LOCATION MAP  
1" = 500'



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**SUN COMMUNITIES**

**HOVEYS ISLAND**

TOWN OF HENDERSON  
JEFFERSON COUNTY  
NEW YORK

Date Revised	Description

NOT FOR  
CONSTRUCTION  
60% SUBMISSION

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Project Manager G. URSPRUNG, PE	Discipline Lead R. DARLING, PE
Designer S. AL GBURI	Reviewer P. HOLSBERGER, PE
Date Issued 7/6/2023	Project Number 15347.00

Sheet Name

**COVER SHEET**

Drawing Number

**C000**



**SURVEY NOTES:**

1. THIS PLAN IS BASED ON A SURVEY ENTITLED "TOPOGRAPHIC AND BATHYMETRIC SURVEY OF HOVEY'S ISLAND" DATED 11/19/2021, PREPARED BY BERGMANN
2. THE HORIZONTAL DATUM IS REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM (NAD 83) THROUGH GPS OBSERVATIONS.
3. THE VERTICAL DATUM IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) THROUGH GPS OBSERVATIONS.
4. THE WETLAND DELINEATING IS FROM A SITE INVESTIGATION DONE BY BERGMANN.
5. EDGE OF WATER SHOWN IS FROM A FIELD SURVEY DATED 7/14/2021
6. THE UNDERGROUND STRUCTURES AND UTILITIES SHOWN ON THESE PLANS HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORD MAPS. THEY ARE NOT CERTIFIED TO THE ACCURACY OF THEIR LOCATION AND/OR COMPLETENESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND EXTENT OF ALL UNDERGROUND STRUCTURES AND UTILITIES PRIOR TO ANY DIGGING OR CONSTRUCTION ACTIVITIES IN THEIR VICINITY.

**DEMOLITION NOTES:**

1. ALL REQUIRED DEMOLITION PERMITS MUST BE OBTAINED FROM ALL REQUIRED AGENCIES PRIOR TO COMMENCEMENT OF WORK.
2. ALL UTILITY COMPANIES MUST BE NOTIFIED A MINIMUM OF 48 HOURS IN ADVANCE OF DEMOLITION.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTROL DUST, DIRT AND DEBRIS DURING DEMOLITION AND CONSTRUCTION PHASES.
4. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
5. THE CONTRACTOR SHALL PERFORM ALL WORK IN COMPLIANCE WITH TITLE 29 OF FEDERAL REGULATIONS, PART 1926, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION (OSHA).

**SITE IMPROVEMENT NOTES:**

1. THE CONTRACTOR SHALL PERFORM ALL WORK IN COMPLIANCE WITH TITLE 29 OF FEDERAL REGULATIONS, PART 1926, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION (OSHA).
2. ALL ROADS AND PRIVATE DRIVES SHALL BE KEPT CLEAN OF MUD, DEBRIS ETC. AT ALL TIMES.
3. REFER TO ARCHITECTURAL DRAWINGS FOR PRECISE BUILDING DIMENSIONS.
4. IN ALL TRENCH EXCAVATIONS, CONTRACTOR MUST LAY THE TRENCH SIDE SLOPES BACK TO A SAFE SLOPE, USE A TRENCH SHIELD OR PROVIDE SHEETING AND BRACING.
5. ALL EXISTING SURFACE APPURTENANCES (I.E. WATER VALVES, CATCH BASIN FRAMES AND GRATES, MANHOLE COVERS) WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO FINISHED GRADE.
6. AREAS DISTURBED OR DAMAGED AS PART OF THIS PROJECT'S CONSTRUCTION THAT ARE OUTSIDE OF THE PRIMARY WORK AREA SHALL BE RESTORED, AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
7. THE CONTRACTOR SHALL CALL "DIG SAFELY NEW YORK" AT 1-800-962-7962 AT LEAST 3 WORKING DAYS (EXCLUDING WEEKENDS AND HOLIDAYS) PRIOR TO CONSTRUCTION.
8. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE CODES, ORDINANCES, DESIGN STANDARDS AND STANDARD SPECIFICATIONS OF THE AGENCIES WHICH HAVE THE RESPONSIBILITY OF REVIEWING PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF ALL ITEMS INCLUDED IN THESE PLANS.
9. UNLESS SPECIFICALLY STATED, THE CONTRACTOR SHALL APPLY FOR AND OBTAIN ALL NECESSARY PERMITS AS REQUIRED FOR CONSTRUCTION OF THIS PROJECT PRIOR TO THE BEGINNING OF WORK FROM THE PREVIOUSLY MENTIONED AGENCIES.
10. THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
11. WHEN ANY EXISTING UTILITY REQUIRES ADJUSTMENT OR RELOCATION, THE CONTRACTOR SHALL NOTIFY THE PROPER UTILITY COMPANY AND COORDINATE THE WORK ACCORDINGLY. THERE SHALL BE NO CLAIM MADE BY THE CONTRACTOR FOR ANY COSTS CAUSED BY DELAYS IN CONSTRUCTION DUE TO THE ADJUSTMENT OR RELOCATION OF UTILITIES.
12. THE CONTRACTOR IS TO VERIFY THAT THE PLANS AND SPECIFICATIONS THAT THEY ARE BUILDING FROM ARE THE VERY LATEST PLANS AND SPECIFICATIONS THAT HAVE BEEN APPROVED BY ALL APPLICABLE PERMIT-ISSUING AGENCIES AND THE OWNER. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING THE FINAL APPROVAL AND PERMITS HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
13. SHOULD THE CONTRACTOR ENCOUNTER CONFLICT BETWEEN THESE PLANS AND SPECIFICATIONS, EITHER AMONG THEMSELVES OR WITH THE REQUIREMENTS OF ANY AND ALL REVIEWING AND PERMIT-ISSUING AGENCIES, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE CONSTRUCTION MANAGER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT THE SOLE EXPENSE TO THE CONTRACTOR.
14. THE CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS INDICATING ALL CHANGES AND DEVIATIONS FROM APPROVED DRAWINGS.
15. ALL SIGNS AND TRAFFIC CONTROL MEASURES DURING CONSTRUCTION AND MAINTENANCE ACTIVITIES SHALL BE CONSTRUCTED AND INSTALLED PER THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) WITH NEW YORK STATE SUPPLEMENT.

**UTILITY NOTES:**

1. IF A UTILITY CONFLICT IS ENCOUNTERED DURING CONSTRUCTION, WORK SHALL BE HALTED UNTIL REVISED DESIGN MEETS THE SATISFACTION OF THE TOWN ENGINEER AND THE UTILITY COMPANY.
2. ALL WORKMANSHIP, MATERIALS, AND CONSTRUCTION PRACTICES SHALL CONFORM TO THE REQUIREMENTS OF THE TOWN OF BIG FLATS OR THE AGENCY HAVING JURISDICTION OVER THE APPLICABLE UTILITY.
3. ANY HOMES HAVING FOUNDATION DRAINS OR SLUMP PUMPS SHALL NOT CONNECT THEM TO THE SANITARY SEWER IN ANY MANNER OR AT ANY TIME. THIS REQUIREMENT SHALL BE ADDED TO EACH DEED PRIOR TO ISSUANCE.
4. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITY DURING CONSTRUCTION AT NO COST TO THE OWNER.
5. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
6. CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
7. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATERLINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS THE CONFLICT IS DISCOVERED.
8. TOPS OF EXISTING UTILITY STRUCTURES SHALL BE ADJUSTED TO FINISHED GRADE.
9. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
10. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE CONSTRUCTION REQUIREMENTS OF THE UTILITY OWNERS.
11. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
12. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
13. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION AND ELEVATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE, AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES, IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH UTILITY REQUIREMENTS AS TO LOCATION AND SCHEDULING FOR TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO EXISTING UTILITIES.
14. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANIES AND THE OWNER'S INSPECTING AUTHORITIES.
15. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS TO INCLUDE BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
16. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPE SIZES AND INVERTS ELEVATIONS BEFORE ORDERING MANHOLE AND CATCH BASIN STRUCTURES.
17. ALL UTILITIES BELOW PAVED AREAS SHALL BE BACKFILLED WITH 100% GRANULAR MATERIAL (OR APPROVED OTHER) AND COMPACTED TO 95% OF ITS MAXIMUM UNIT WEIGHT.
18. ALL RIM ELEVATIONS IN OUTLAIN AREAS ARE APPROXIMATE ONLY AND SHALL BE ADJUSTED BY THE CONTRACTOR AFTER FINAL GRADES ARE ESTABLISHED.
19. SD9-35 SANITARY SEWERMAN-SNAP-ON TYPE "O RING" GASKETS ARE TO BE USED FOR ALL PIPE JOINTS. REFER TO SANITARY SEWER TABLES FOR PIPE SIZE AND INVERT, TYP.

**WATER LINE TESTING NOTES:**

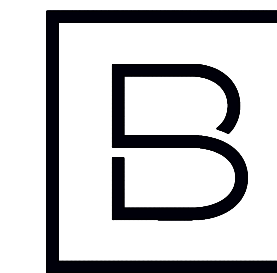
1. PIPING TESTS: CONDUCT PIPING TESTS BEFORE JOINTS ARE COVERED AND AFTER CONCRETE THRUST BLOCKS HAVE HARDENED SUFFICIENTLY. FILL PIPELINE 24 HOURS BEFORE TESTING AND APPLY TEST PRESSURE TO STABILIZE SYSTEM. USE ONLY POTABLE WATER.
2. CONDUCT HYDROSTATIC TESTS AT NOT LESS THAN ONE-AND-ONE-HALF TIMES WORKING PRESSURE FOR FOUR HOURS. INCREASE PRESSURE IN 50-PSIG INCREMENTS AND INSPECT EACH JOINT BETWEEN INCREMENTS. HOLD AT TEST PRESSURE FOR 1 HOUR; DECREASE TO 0 PSIG. SLOWLY INCREASE AGAIN TO TEST PRESSURE AND HOLD FOR 1 MORE HOUR. MAXIMUM ALLOWABLE LEAKAGE IS 2 QUARTS PER HOUR PER 100 JOINTS. REMAKE LEAKING JOINTS WITH NEW MATERIALS AND REPEAT TEST UNTIL LEAKAGE IS WITHIN ALLOWED LIMITS. TESTING TO BE INSPECTED AND OBSERVED BY THE TOWN OF BIG FLATS WATER DEPARTMENT FOR A MINIMUM OF FOUR HOURS.
3. AFTER TESTS, CLEAN AND DISINFECT ALL WATER-DISTRIBUTION PIPING. PURGE NEW WATER-DISTRIBUTION PIPING SYSTEMS AND PARTS OF EXISTING SYSTEMS THAT HAVE BEEN ALTERED, EXTENDED, OR REPAIRED BEFORE USE. FILL SYSTEM WITH WATER/CHLORINE SOLUTION CONTAINING AT LEAST 50 PPM OF CHLORINE; ISOLATE AND ALLOW TO STAND FOR 24 HOURS. AFTER STANDING TIME, FLUSH SYSTEM WITH CLEAN, POTABLE WATER UNTIL NO CHLORINE REMAINS IN WATER COMING FROM SYSTEM. SUBMIT WATER SAMPLES IN STERILE BOTTLES FOR TESTING. REPEAT PROCEDURE IF BIOLOGICAL EXAMINATION SHOWS EVIDENCE OF CONTAMINATION. ALL CHLORINATION AND DISINFECTION ACTIVITIES TO BE INSPECTED AND OBSERVED BY THE TOWN OF BIG FLATS WATER DEPARTMENT FOR A MINIMUM OF 24 HOURS.

**SANITARY SEWER TESTING NOTES:**

1. ALL SANITARY SEWER MAINS AND APPURTENANCES, INCLUDING LATERALS, EXTENSIONS AND MANHOLES, MUST BE TESTED IN A MANNER APPROVED BY CCSD (CHEMUNG COUNTY SEWER DISTRICT). ALL TEST RESULTS AND RECORD DRAWINGS MUST BE SUBMITTED TO THE CCSD FOR REVIEW BEFORE THEY WILL BE CONSIDERED FOR APPROVAL AND WASTEWATER FLOW.
2. DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE PIPE. THE TEST SHALL BE CONDUCTED AFTER ALL FINAL BACKFILL HAS BEEN IN PLACE AT LEAST THIRTY (30) DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF FIVE PERCENT (5%). IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID BALL OR MANDREL, IT SHALL HAVE A MINIMUM DIAMETER EQUAL TO NINETY-FIVE PERCENT (95%) OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
3. PIPE JOINT TESTING SHALL CONSIST OF:
  - LOW PRESSURE AIR-TESTING OF SANITARY SEWERS SHALL BE CONDUCTED PER ASTM F1417.
  - WATER (HYDROSTATIC) TEST WHERE LEAKAGE EXFILTRATION OR INFILTRATION SHALL NOT EXCEED 100 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM. AN EXFILTRATION OR INFILTRATION TEST SHALL BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.
3. AIR TESTING FOR CONCRETE SEWER MANHOLE WATER TIGHTNESS OR DAMAGE SHALL CONFORM TO THE TESTING PROCEDURES DESCRIBED IN EITHER ASTM C1244 OR THE VACUUM TESTING SPECIFICATIONS GIVING IN TR-16. MANHOLES WHICH CANNOT BE PROPERLY AIR (VACUUM) TESTED BY THE ASTM OR TR-16 PROCEDURE SHOULD BE VISUALLY INSPECTED AND LEAKAGE TESTED USING INTERNAL OR EXTERNAL HYDROSTATIC PRESSURE.
4. ALL CONVENTIONAL GRAVITY SEWERS, MANHOLES AND CLEANOUTS SHALL UNDERGO HYDROSTATIC TESTING OF VIA METHODS DESCRIBED IN AWWA C600 AND SHALL OCCUR AFTER BEING FLUSHED AND BEFORE BEING USED.

**GRADING NOTES**

1. REFER TO EROSION AND SEDIMENT CONTROL PLAN FOR REQUIRED EROSION AND SEDIMENT CONTROL MEASURES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REMOVAL OF TEMPORARY SEDIMENTATION CONTROLS. EROSION CONTROL MEASURES SHALL NOT BE REMOVED BEFORE VEGETATION HAS OCCURRED COMPLETELY.
3. ALL SILT FENCE TO BE REPLACED WHENEVER THEY BECOME CLOGGED OR INOPERABLE AND SHALL BE REPLACED AT A MINIMUM OF EVERY 3 MONTHS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF TOPSOIL TO ALL DISTURBED AREAS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN EROSION CONTROL MEASURES AT ALL TIMES.
5. SILT FENCE, JUTE MESH, AND/OR EROSION CONTROL BLANKETS WILL BE USED ON STEEP SLOPES AND WHEREVER NECESSARY TO CONTROL EROSION AND SILTATION OF EXISTING DRAINAGE SYSTEMS AS ORDERED BY THE ENGINEER OR SPECIFIED ON PLANS.
6. THE CONTRACTOR SHALL DESIGNATE A MEMBER OF HIS/HER FIRM TO BE RESPONSIBLE TO MONITOR EROSION CONTROL, EROSION CONTROL STRUCTURES, TREE PROTECTION AND PRESERVATION THROUGHOUT CONSTRUCTION.
7. ALL DISTURBED AREAS SHALL BE PROTECTED FROM EROSION EITHER BY MULCH OR TEMPORARY SEEDING WITHIN 2 WEEKS OF DISTURBANCE.
8. ALL SITE GRADING MUST BE PERFORMED TO INSURE POSITIVE DRAINAGE ACROSS THE ENTIRE SITE, THROUGHOUT THE PERIOD OF CONSTRUCTION AND AFTER PROJECT COMPLETION.
9. EROSION CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH THE NEW YORK STATE GUIDELINES FOR URBAN EROSION SEDIMENT CONTROL MANUAL, JEFFERSON COUNTY HEALTH DEPARTMENT, AND THE TOWN OF HENDERSON REQUIREMENTS.
10. IN GENERAL, EARTHWORK AND PAVEMENT CONSTRUCTION SHOULD BE PERFORMED IN ACCORDANCE WITH THE LATEST NEW YORK STATE DOT STANDARD SPECIFICATIONS FOR CONSTRUCTION UNLESS OTHERWISE NOTED.
11. REMOVE ANY EXISTING TOPSOIL, ORGANIC SOILS, UNSUITABLE FILL, VEGETATION, TREES AN OTHER DELETERIOUS MATERIALS TO EXPOSE THE SUBGRADE SOIL. TREE ROOTS SHOULD BE COMPLETELY REMOVED.
12. EXCAVATE TO THE DEPTH OF THE FINAL SUBGRADE ELEVATION TO ALLOW FOR GRADE CHANGES AND THE PLACEMENT OF THE RECOMMENDED PAVEMENT SYSTEM.
13. ON SITE FILL MATERIAL CAN BE USED IF THE SPECIFIED COMPACTION REQUIREMENTS CAN BE ACHIEVED. IF ON SITE MATERIAL IS USED, IT SHOULD BE CLEAN AND FREE OF FROZEN SOIL, ORGANICS, OR OTHER DELETERIOUS MATERIALS.
14. THE FINAL SUBGRADE SHOULD BE THOROUGHLY PROOFROLLED USING A LOADED TANDEM AXLE TRUCK UNDER THE OBSERVATION OF GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
15. THE AGGREGATE BASE SHOULD BE COMPACTED TO ACHIEVE A MINIMUM OF 95 PERCENT OF THE MAXIMUM MODIFIED PROCTOR DRY DENSITY. THE BASE AND SUBGRADE COMPACTION SHOULD EXTEND A MINIMUM OF 12 INCHES BEYOND THE PAVED EDGE OR BACK OF CURB.



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ARCHITECTS ENGINEERS PLANNERS

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## SUN COMMUNITIES

### HOVEYS ISLAND

TOWN OF HENDERSON  
JEFFERSON COUNTY  
NEW YORK

Date Revised	Description

NOT FOR  
CONSTRUCTION  
60% SUBMISSION

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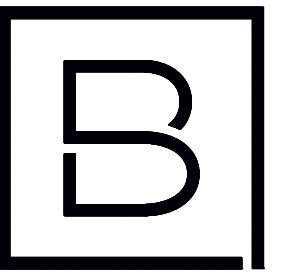
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## NOTES

Drawing Number

# C001





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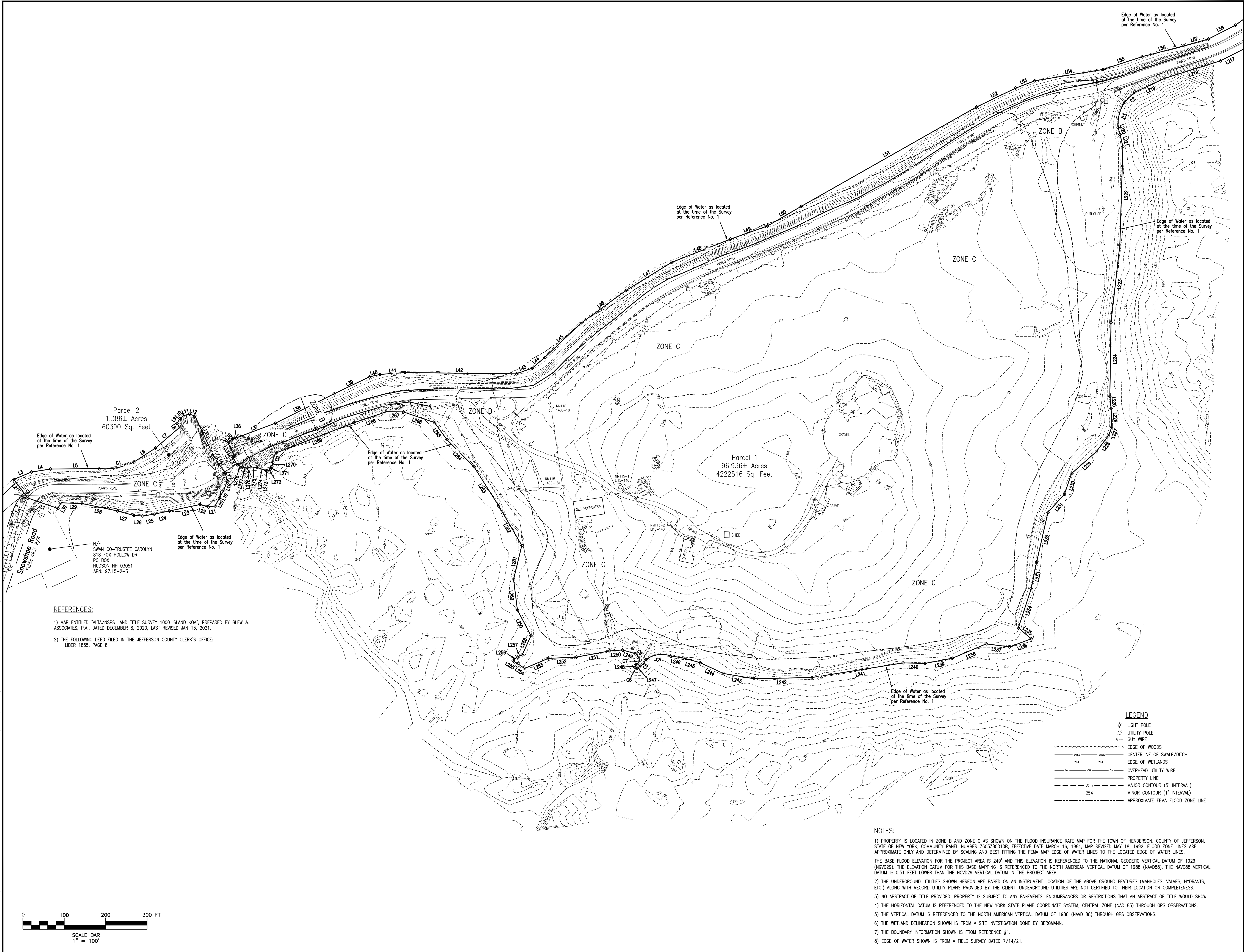
Project Manager G. URSprung, PE	Discipline Lead R. DARLING, PE
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Date Issued 7/6/2023	Project Number 15347.00

Sheet Name

# TOPOGRAPHIC AND BATHYMETRIC SURVEY

Drawing Number

# X100

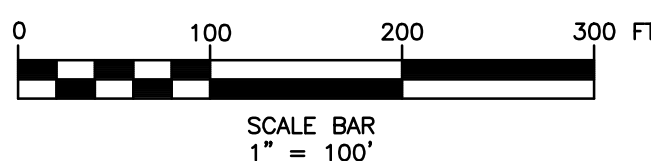


### REFERENCES:

- 1) MAP ENTITLED "ALTA/NSPS LAND TITLE SURVEY 1000 ISLAND KOA", PREPARED BY BLEW & ASSOCIATES, P.A., DATED DECEMBER 8, 2020, LAST REVISED JAN 13, 2021.
- 2) THE FOLLOWING DEED FILED IN THE JEFFERSON COUNTY CLERK'S OFFICE:  
LIBER 1855, PAGE 8

### NOTES:

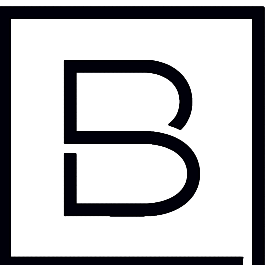
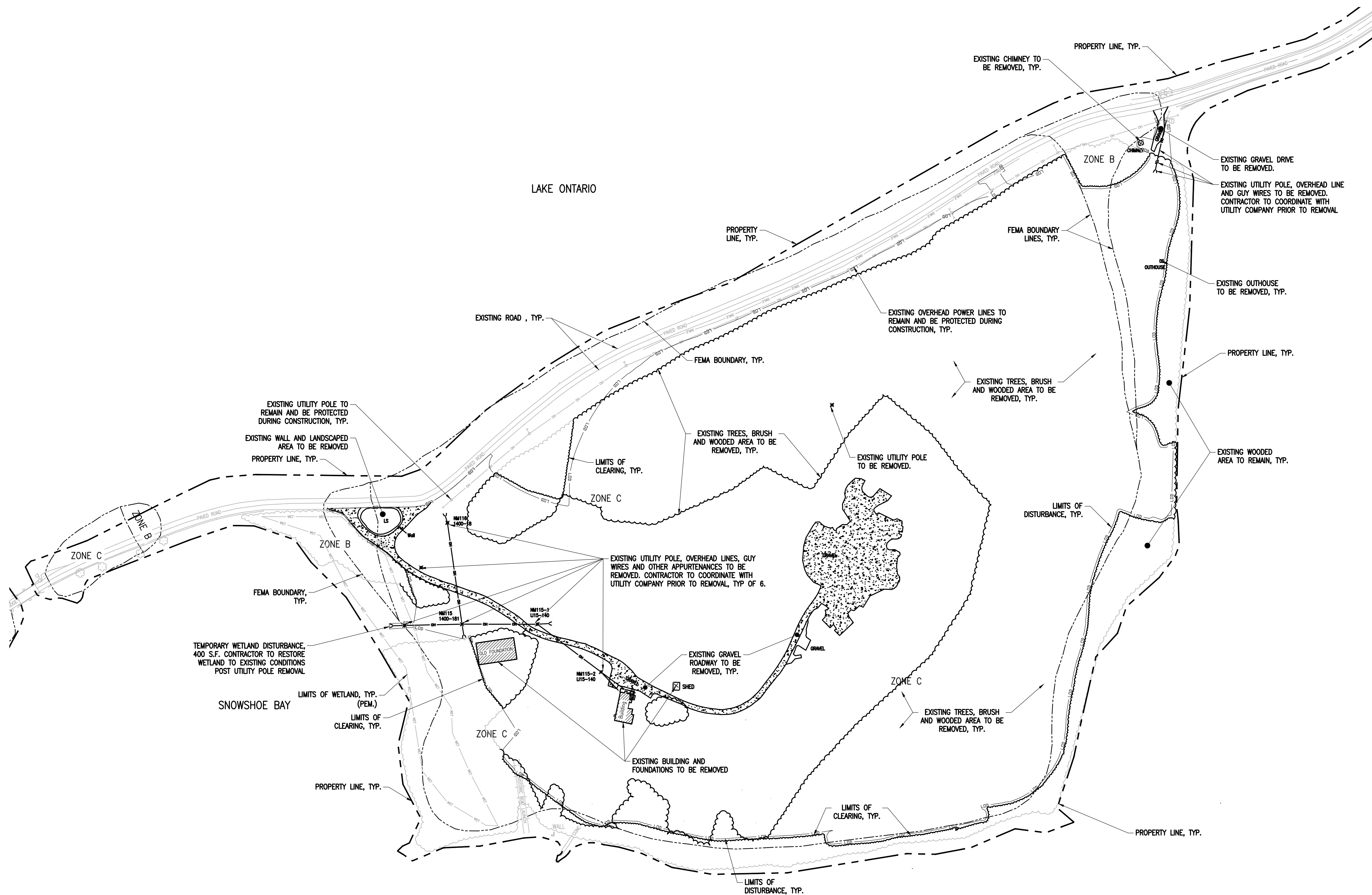
- 1) PROPERTY IS LOCATED IN ZONE B AND ZONE C AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF HENDERSON, COUNTY OF JEFFERSON, STATE OF NEW YORK, COMMUNITY PANEL NUMBER 36033800108, EFFECTIVE DATE MARCH 16, 1981, MAP REVISED MAY 18, 1992. FLOOD ZONE LINES ARE APPROXIMATE ONLY AND DETERMINED BY SCALING AND BEST FITTING THE FEMA MAP EDGE OF WATER LINES TO THE LOCATED EDGE OF WATER LINES.
- 2) THE BASE FLOOD ELEVATION FOR THE PROJECT AREA IS 249' AND THIS ELEVATION IS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29). THE ELEVATION DATUM FOR THIS BASE MAPPING IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THE NAVD88 VERTICAL DATUM IS 0.51 FEET LOWER THAN THE NGVD29 VERTICAL DATUM IN THE PROJECT AREA.
- 3) THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON AN INSTRUMENT LOCATION OF THE ABOVE GROUND FEATURES (MANHOLES, VALVES, HYDRANTS, ETC.) ALONG WITH RECORD UTILITY PLANS PROVIDED BY THE CLIENT. UNDERGROUND UTILITIES ARE NOT CERTIFIED TO THEIR LOCATION OR COMPLETENESS.
- 4) NO ABSTRACT OF TITLE PROVIDED. PROPERTY IS SUBJECT TO ANY EASEMENTS, ENCUMBRANCES OR RESTRICTIONS THAT AN ABSTRACT OF TITLE WOULD SHOW.
- 5) THE HORIZONTAL DATUM IS REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE (NAD 83) THROUGH GPS OBSERVATIONS.
- 6) THE VERTICAL DATUM IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) THROUGH GPS OBSERVATIONS.
- 7) THE WETLAND DELINEATION SHOWN IS FROM A SITE INVESTIGATION DONE BY BERGMANN.
- 8) THE BOUNDARY INFORMATION SHOWN IS FROM REFERENCE #1.
- 9) EDGE OF WATER SHOWN IS FROM A FIELD SURVEY DATED 7/14/21.





**DEMOLITION LEGEND:**

- PROPERTY LINE
- - - - - LIMITS OF DISTURBANCE
- ▨ BUILDING FOUNDATION TO BE REMOVED
- ▩ GRAVEL ROADWAY TO BE REMOVED
- ✕ DEMO ITEM



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Sheet Name

**REMOVALS PLAN**

Drawing Number

**C080**



### SITE DATA CHART

ZONING DISTRICT: PDD		
	REQUIRED	PROPOSED
MINIMUM PROP. AREA	43,560 SQ. FT. (10 AC.)	±1,703,196 SQ. FT. (39.1 AC.)
MINIMUM LOT SIZE	5000 SQ. FT. (0.11 AC.)	>5,000 SQ. FT.
MINIMUM LOT WIDTH	50 FT	50 FT
PROPOSED AREAS		
TOTAL AREA OF PROPERTY	N/A	±1,643,085 SQ. FT.
RECREATIONAL/GREEN SPACE	20.0%	38.4%
BUILDING SETBACKS		
WATERFRONT* (FRONT YARD)	75 FT	±77 FT
MINIMUM BUILDING SEPARATION	20 FT	20 FT
BUILDING SETBACK FROM PUBLIC ROAD	150 FT	1,285±

\* ENTIRETY OF PROPERTY PERIMETER IS WATERFRONT

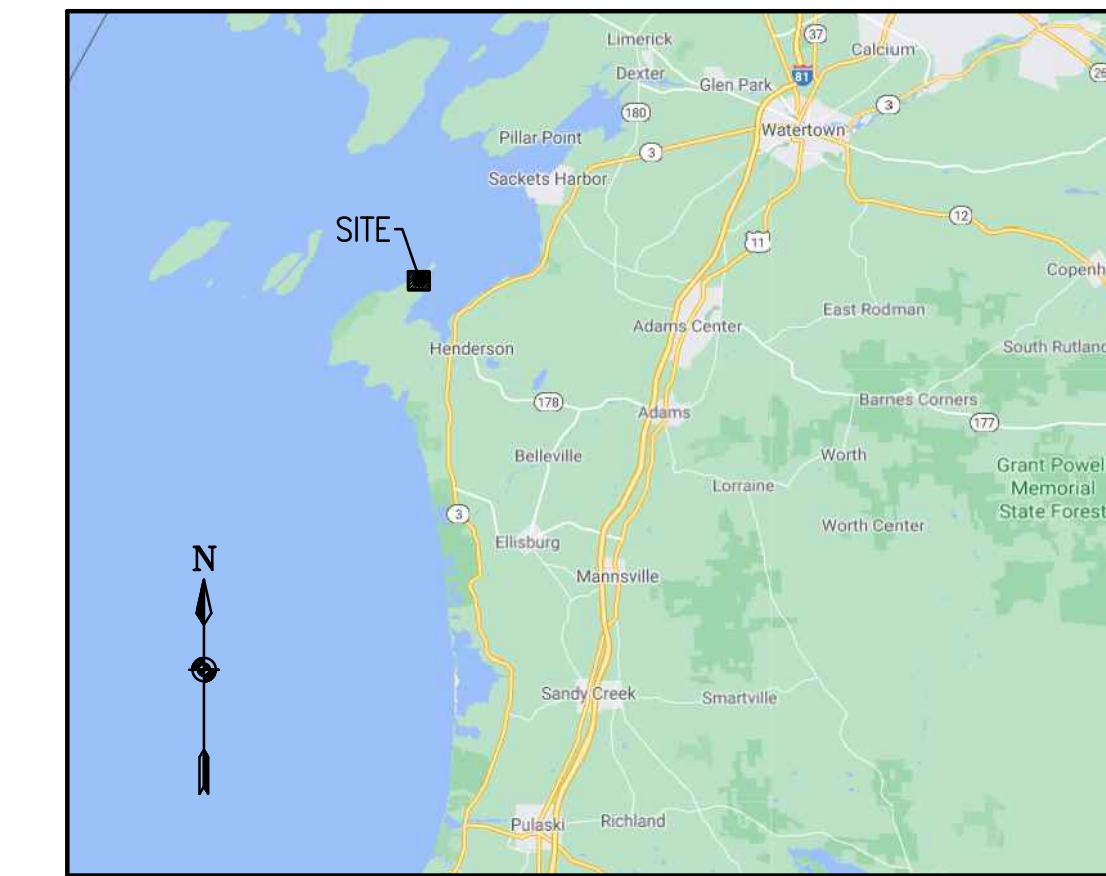
### PROJECT DATA

- APPLICANT:  
SUN ASSOCIATION ISLAND RV, LLC  
1250 EAST DIEHL ROAD, SUITE 300  
NAPEVILLE, IL 60563  
  
EXISTING ZONING: PDD  
PROPOSED ZONING: PDD  
  
PROPOSED USAGE: SEASONAL CABINS  
117 HOUSING UNITS
- PARKING REQUIRED  
2 SPACES PER UNIT (10'X20' PER CODE)
- PARKING PROPOSED  
2 SPACES PER UNIT (10'X20' PER CODE)  
PARKING ADJACENT TO MAINTENANCE FACILITY - 3 SPACES

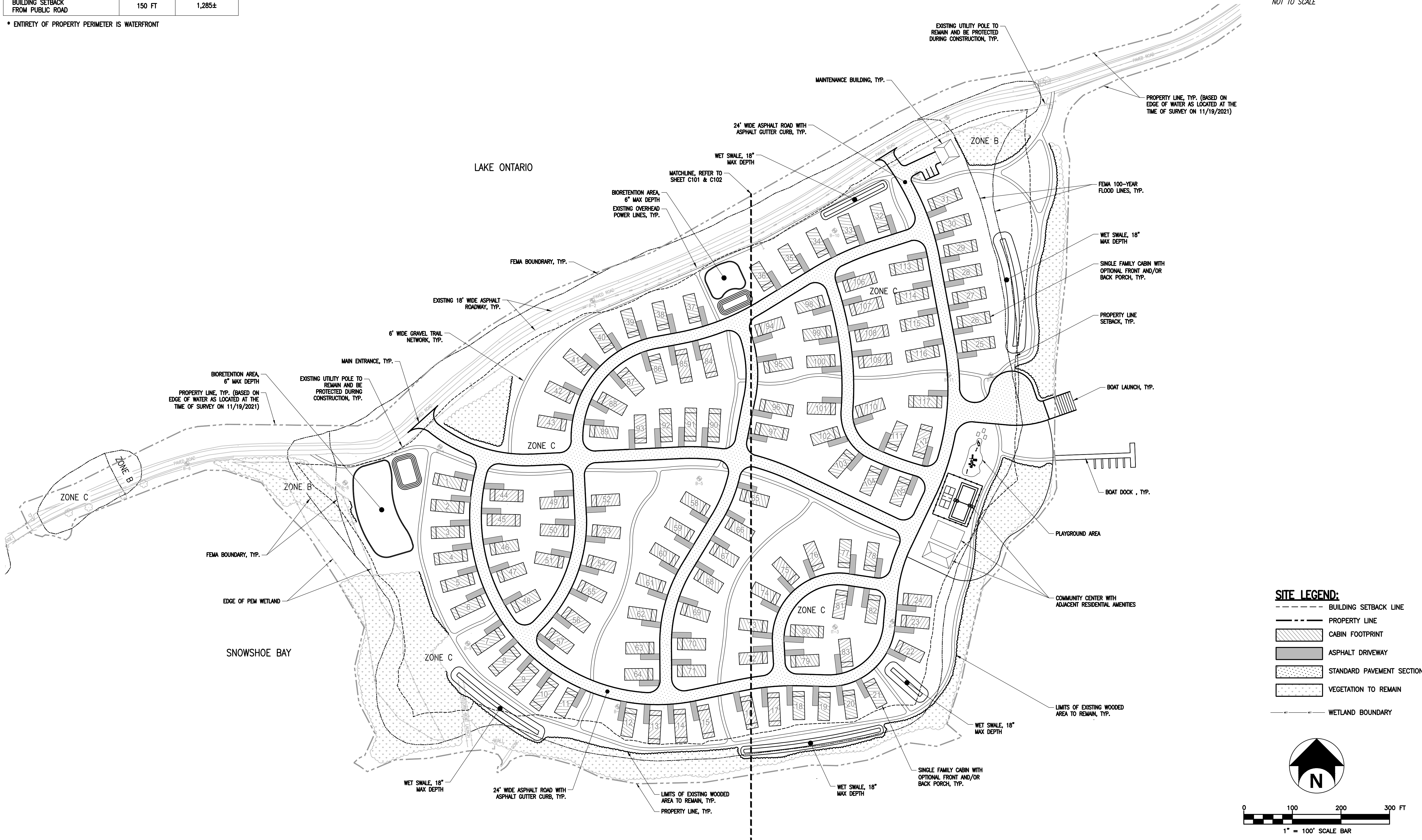
### FEMA ZONES

ZONE B: MODERATE FLOOD HAZARD ZONE,  
LOCATED BETWEEN THE 100-YEAR AND  
500-YEAR FLOODPLAIN

ZONE C: MINIMAL FLOOD HAZARD ZONE,  
LOCATED ABOVE THE 500-YEAR FLOODPLAIN

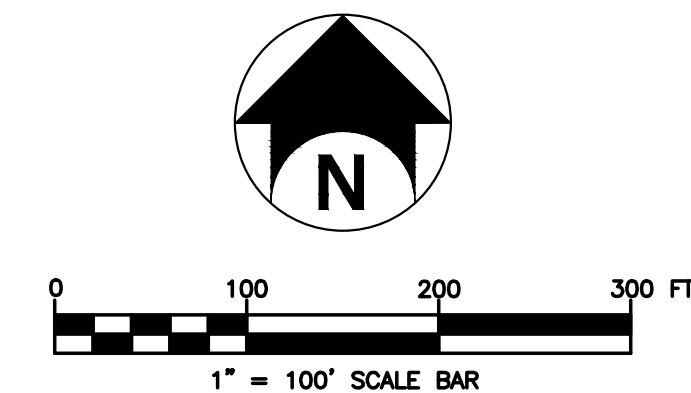


SITE LOCATION MAP  
NOT TO SCALE



**SITE LEGEND:**

---	BUILDING SETBACK LINE
---	PROPERTY LINE
[Hatched Box]	CABIN FOOTPRINT
[Solid Grey Box]	ASPHALT DRIVEWAY
[Dotted Box]	STANDARD PAVEMENT SECTION
[Stippled Box]	VEGETATION TO REMAIN
---	WETLAND BOUNDARY



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Designer S. AL GBURI	Reviewer P. HOLSBERGER, PE
Date Issued 7/6/2023	Project Number 15347.00

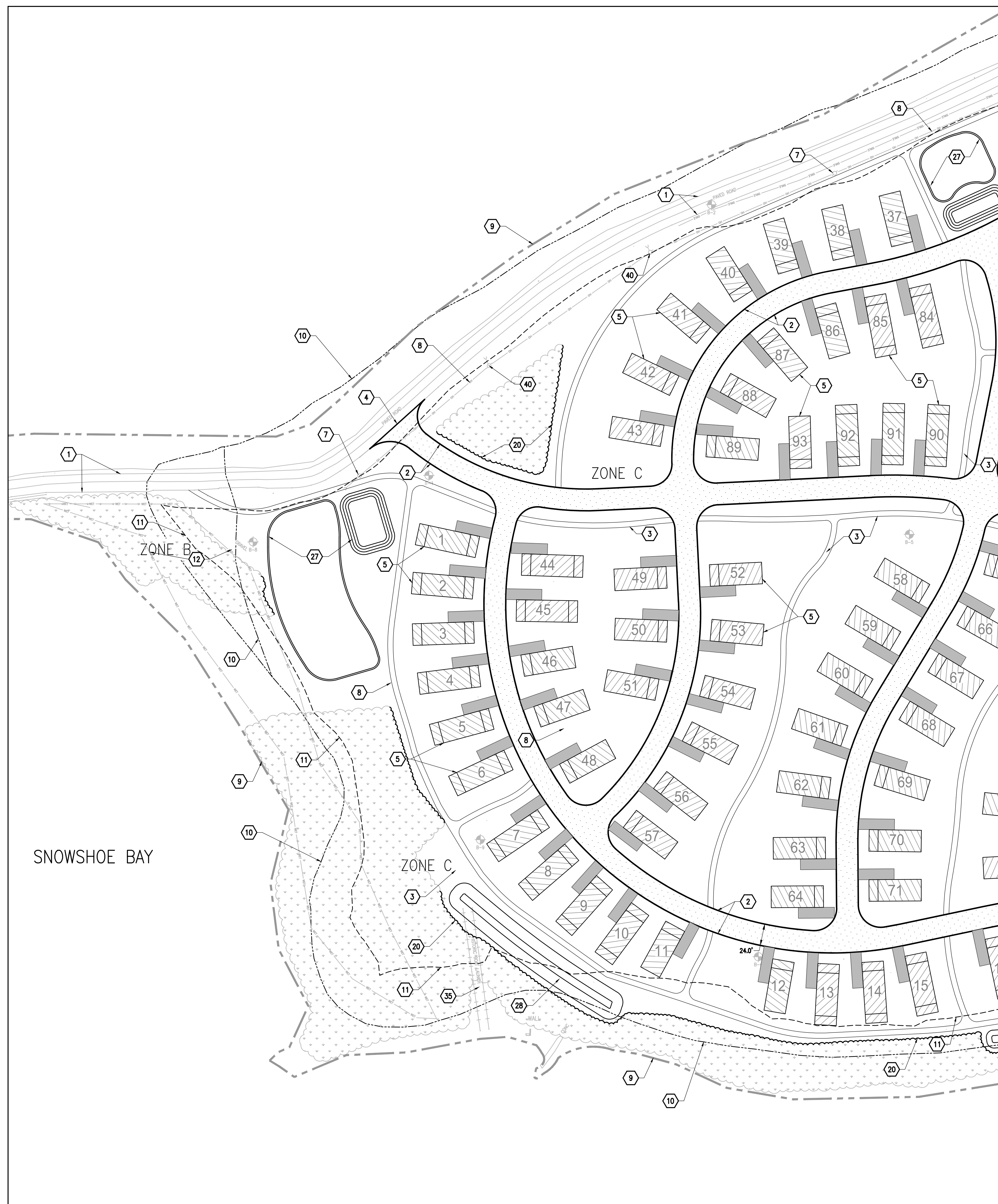
Sheet Name

## OVERALL SITE PLAN

Drawing Number

# C100



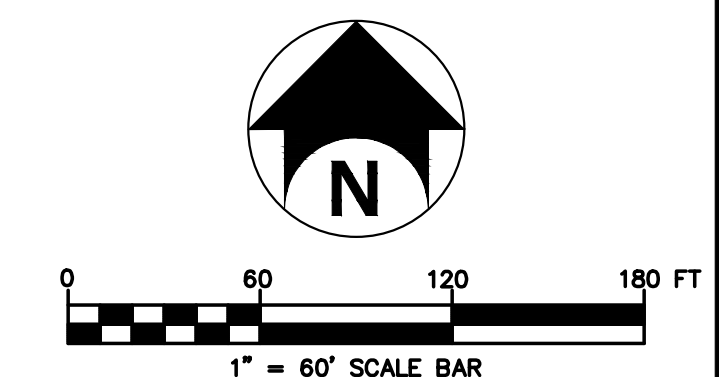


**KEY NOTES:**

1. EXISTING 18' WIDE ASPHALT ROADWAY
2. 24' WIDE ASPHALT ROAD WITH ASPHALT GUTTER CURB, REFER TO DETAIL ON SHEET C500
3. 6' WIDE GRAVEL TRAILWAY NETWORK, REFER TO DETAIL ON SHEET C500
4. MAIN ENTRANCE, TYP.
5. SINGLE FAMILY CABIN WITH FRONT AND/OR BACK PORCH, REFER TO ARCHITECTURAL PLAN
6. MAINTENANCE BUILDING
7. EXISTING UTILITY POLE AND ASSOCIATED APPURTENANCES TO REMAIN AND BE PROTECTED DURING CONSTRUCTION
8. EXISTING OVERHEAD POWER LINES TO BE PROTECTED DURING CONSTRUCTION
9. PROPERTY BOUNDARY, TYP.
10. FEMA BOUNDARY, TYP.
11. PROPERTY SETBACK, TYP.
12. EXISTING NON-FEDERAL REGULATED WETLAND TO BE PROTECTED DURING CONSTRUCTION
13. NOT USED
14. STOP SIGN, REFER TO DETAIL ON SHEET C501
15. PAVEMENT DIRECTIONAL MARKING, REFER TO DETAIL ON SHEET C501
16. PAINTED CROSSWALK, REFER TO DETAIL ON SHEET C501
17. ACCESSIBLE PARKING SPACE MARKINGS AND SIGNAGE, REFER TO DETAIL ON SHEET C501
18. DETECTABLE WARNING STRIP, REFER TO DETAIL ON SHEET C501
19. CHAINLINK FENCE
20. LIMITS OF WOODED AREA, TYP.
21. CHILDREN'S PLAY EQUIPMENT
22. AMENITIES AREA
23. COMMUNITY CENTER WITH ADJACENT COMMUNITY-ONLY POOL
24. SWIMMING POOL
25. BOAT DOCK
26. BOAT RAMP
27. BIORETENTION AREA, REFER TO DETAIL ON SHEET C503
28. WET SWALE
29. ROADWAY LIGHT POLE FIXTURE, SEE LIGHTING PLAN
30. BUILDING MOUNTED LIGHT, SEE LIGHTING PLAN
31. ELECTRICAL TRANSFORMER & CT CABINET ON CONCRETE PAD PER UTILITY COMPANY REQUIREMENTS, CONTRACTOR TO COORDINATE EXACT LOCATION AND INSTALLATION WITH UTILITY PROVIDER.
32. SANITARY SEWER MANHOLE
33. FIRE HYDRANT, GATE VALVE AND VALVE BOX
34. CATCH BASIN
35. EXISTING BOAT LAUNCH RAMP

**SITE LEGEND:**

- BUILDING SETBACK LINE
- PROPERTY LINE
- CABIN FOOTPRINT
- ASPHALT DRIVEWAY
- STANDARD PAVEMENT SECTION
- VEGETATION TO REMAIN
- WETLAND BOUNDARY



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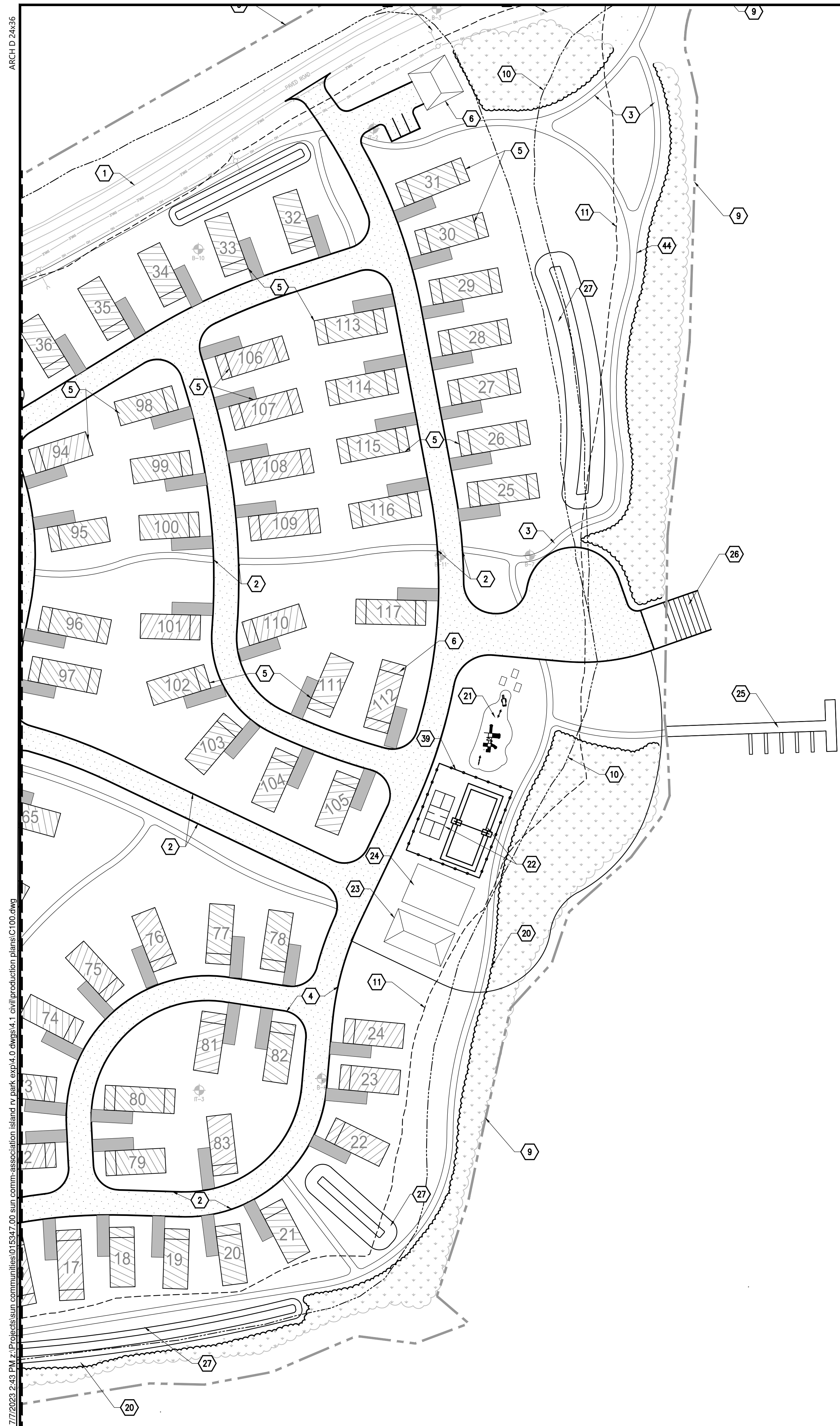
Sheet Name

**SITE PLAN I**

Drawing Number

**C101**



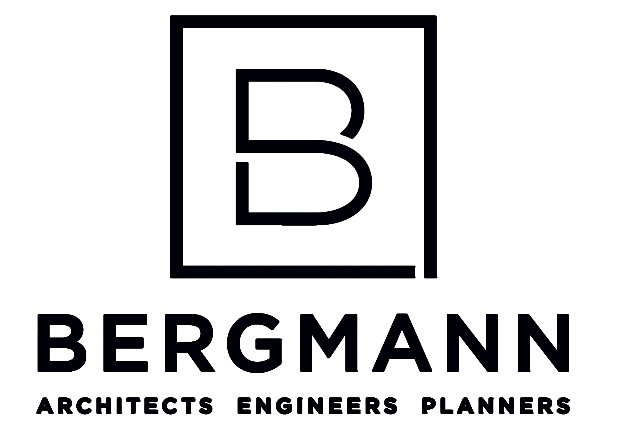
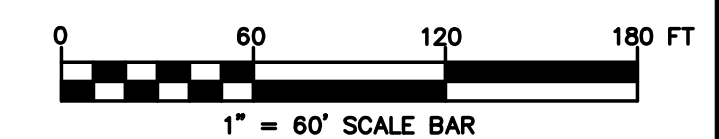
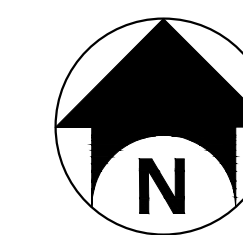


**KEY NOTES:**

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2. 24' WIDE ASPHALT ROAD WITH ASPHALT GUTTER CURB, REFER TO DETAIL ON SHEET C500
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35. EXISTING BOAT LAUNCH RAMP

**SITE LEGEND:**

- BUILDING SETBACK LINE
- PROPERTY LINE
- ▨ CABIN FOOTPRINT
- ▭ ASPHALT DRIVEWAY
- ▨ STANDARD PAVEMENT SECTION
- ▨ VEGETATION TO REMAIN
- WETLAND BOUNDARY



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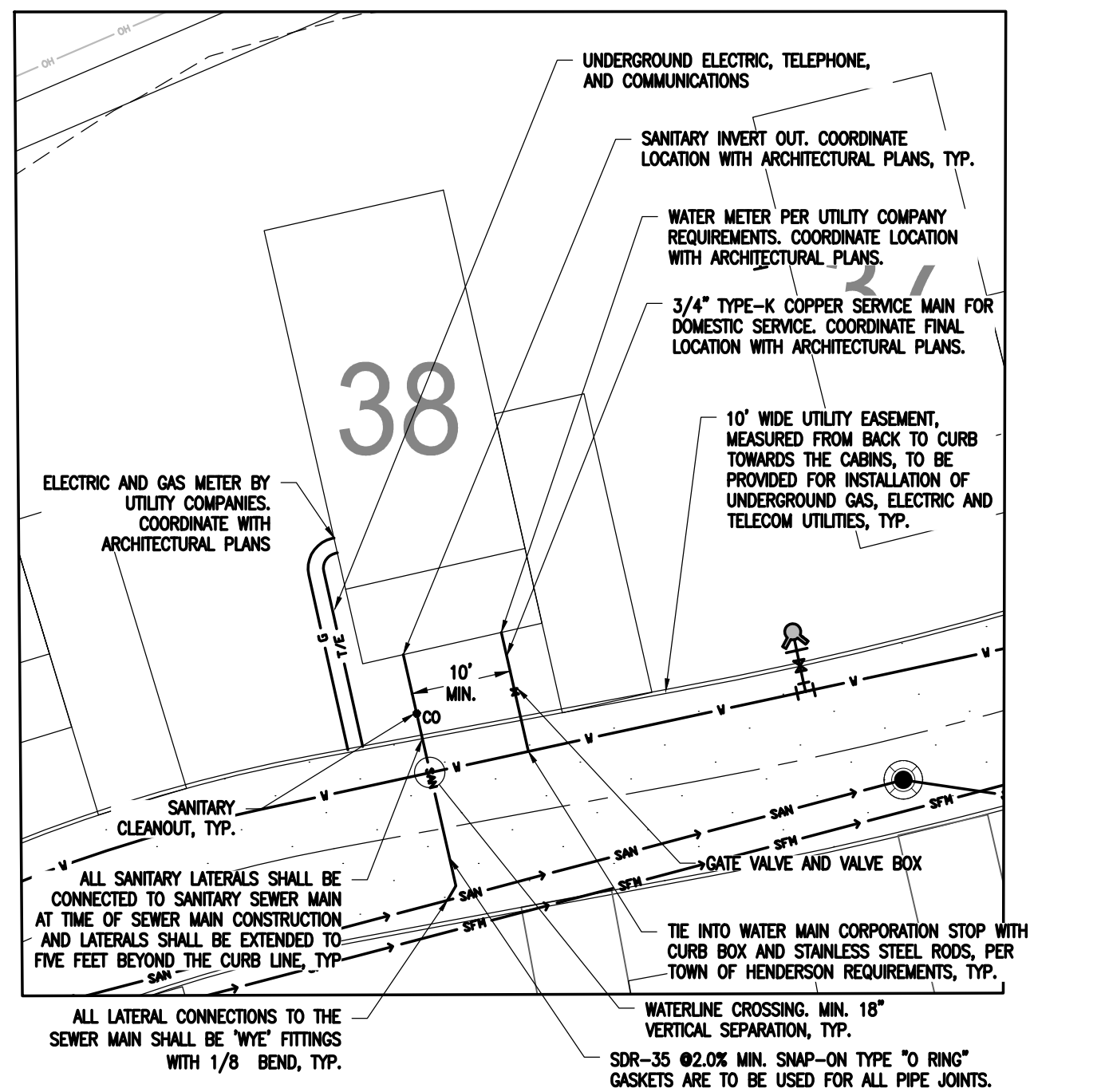
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**SITE PLAN II**

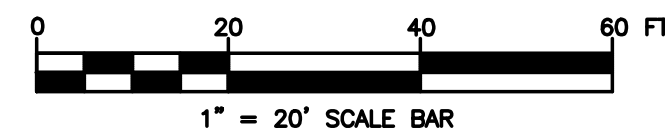
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**C102**



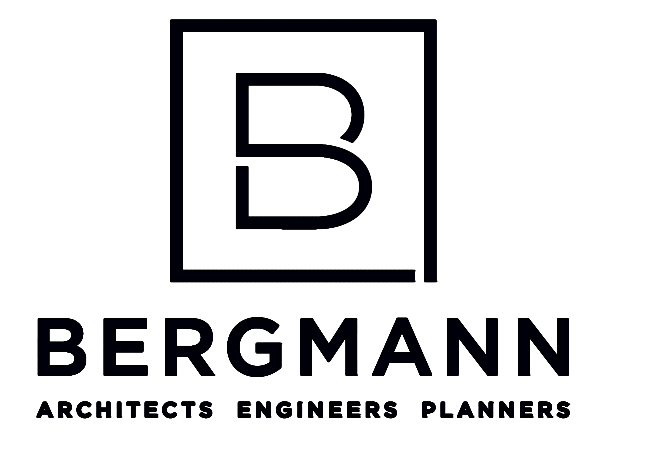
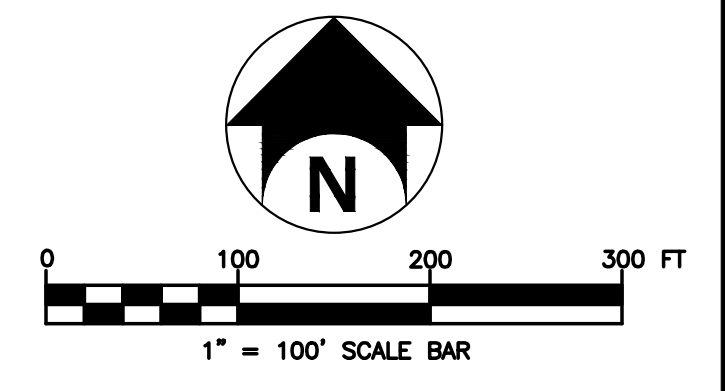
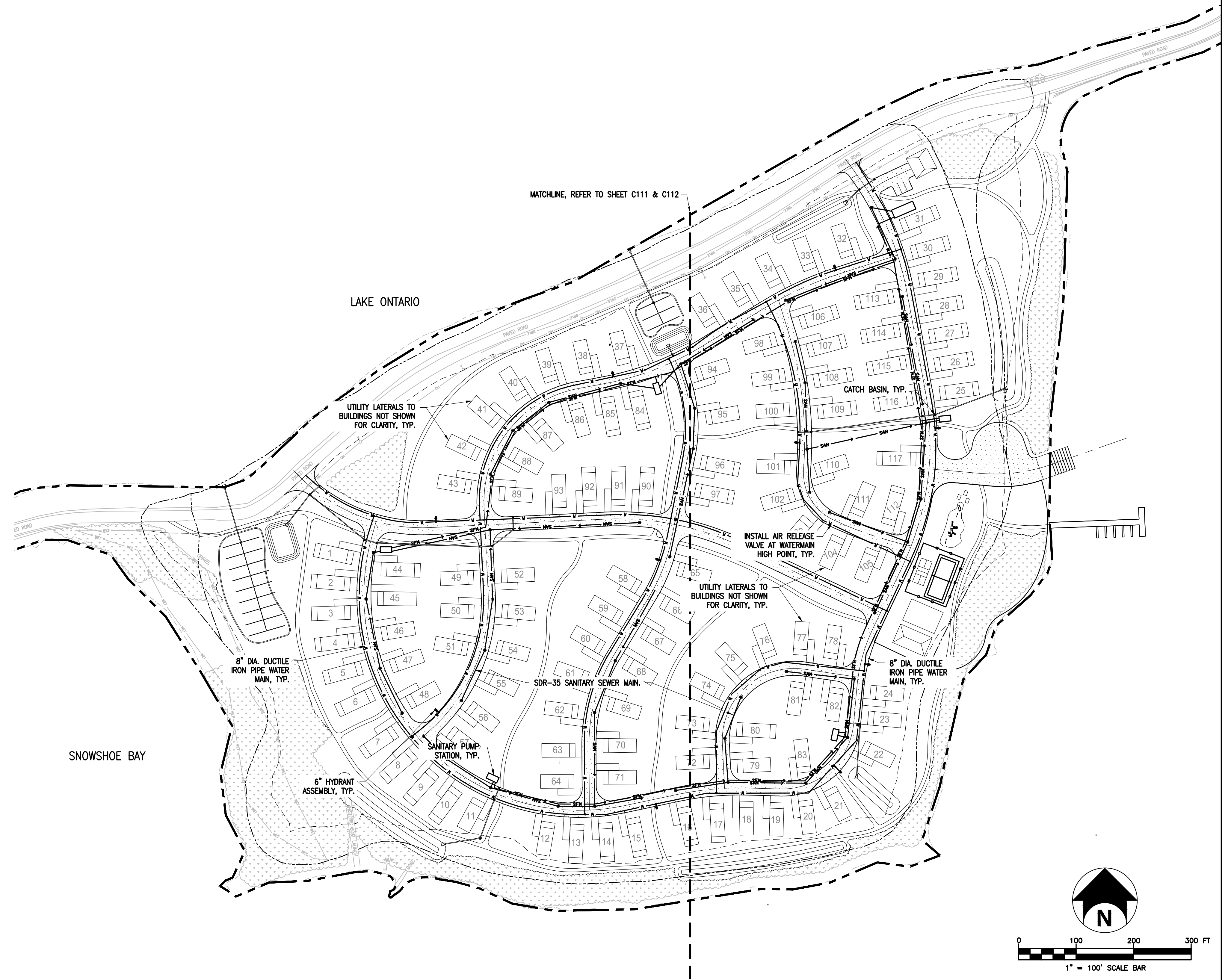


**TYPICAL UTILITY SERVICE CONNECTION DETAIL FOR INDIVIDUAL UNITS**  
1"=20'



**UTILITY LEGEND:**

	STORM SEWER
	CATCH BASIN
	STORM MANHOLE
	HYDRANT
	VALVE/CURB BOX
	P.I.V.
	WATER MAIN
	SANITARY GRAVITY SEWER
	SANITARY FORCE MAIN
	SANITARY SEWER MANHOLE
	CLEANOUT
	ELECTRIC
	GAS
	UTILITY CROSSING



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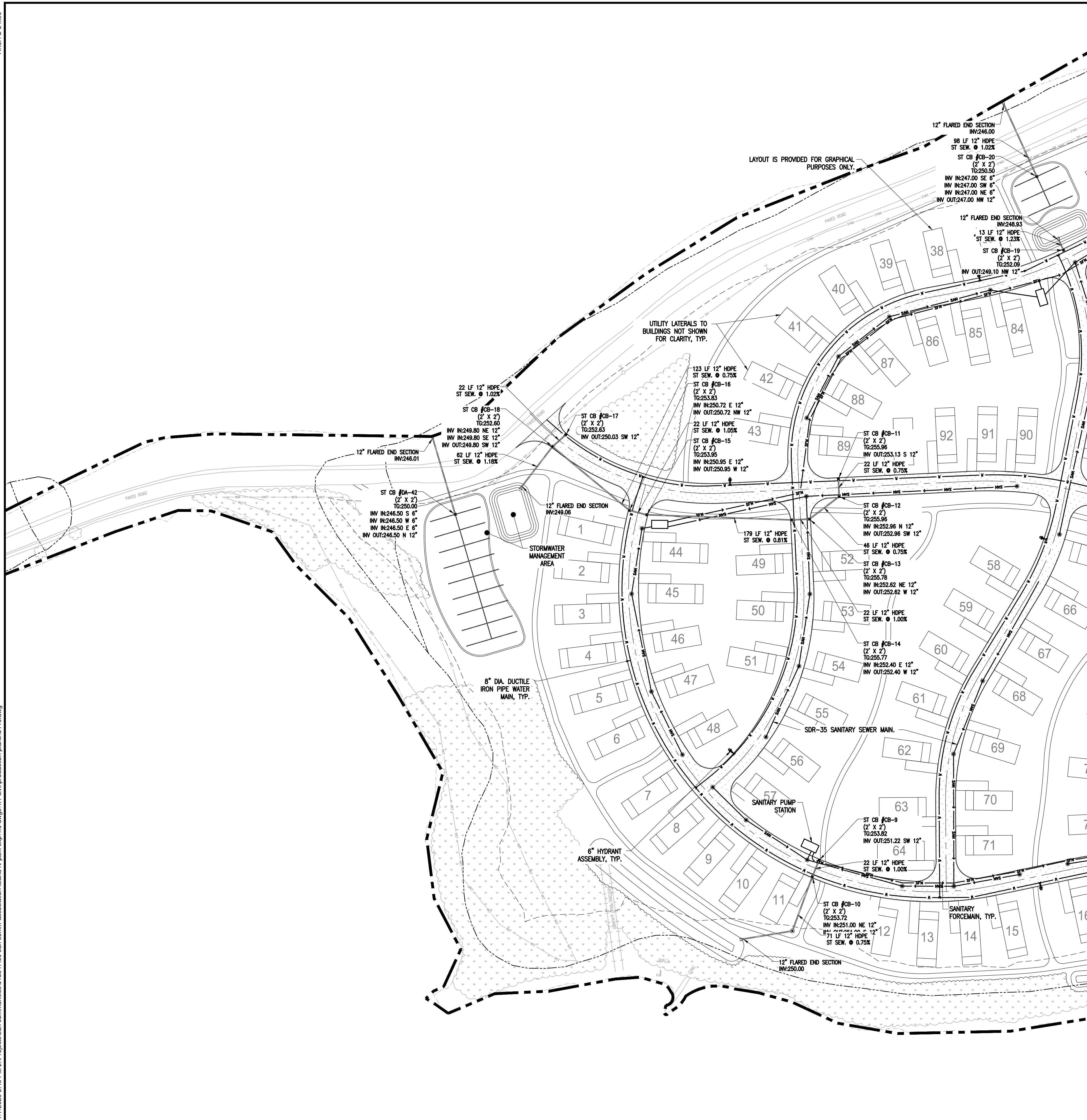
Sheet Name

**OVERALL UTILITY PLAN**

Drawing Number

**C110**





UTILITY LEGEND:

- STORM SEWER
- CATCH BASIN
- STORM MANHOLE
- HYDRANT
- VALVE/CURB BOX
- P.I.V.
- WATER MAIN
- SANITARY GRAVITY SEWER
- SANITARY FORCEMAIN
- SANITARY SEWER MANHOLE
- CLEANOUT
- ELECTRIC
- GAS
- UTILITY CROSSING



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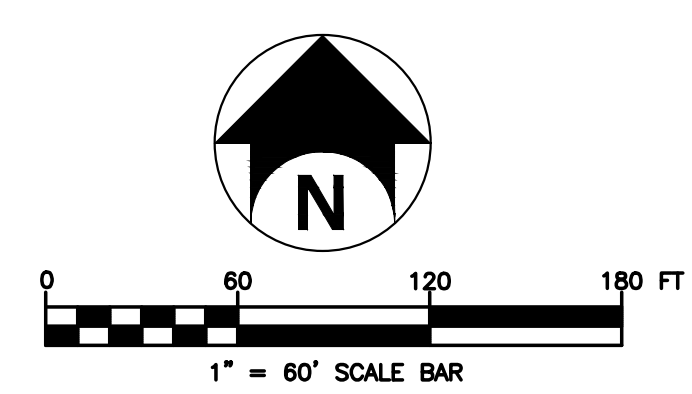
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Sheet Name

UTILITY PLAN I

Drawing Number

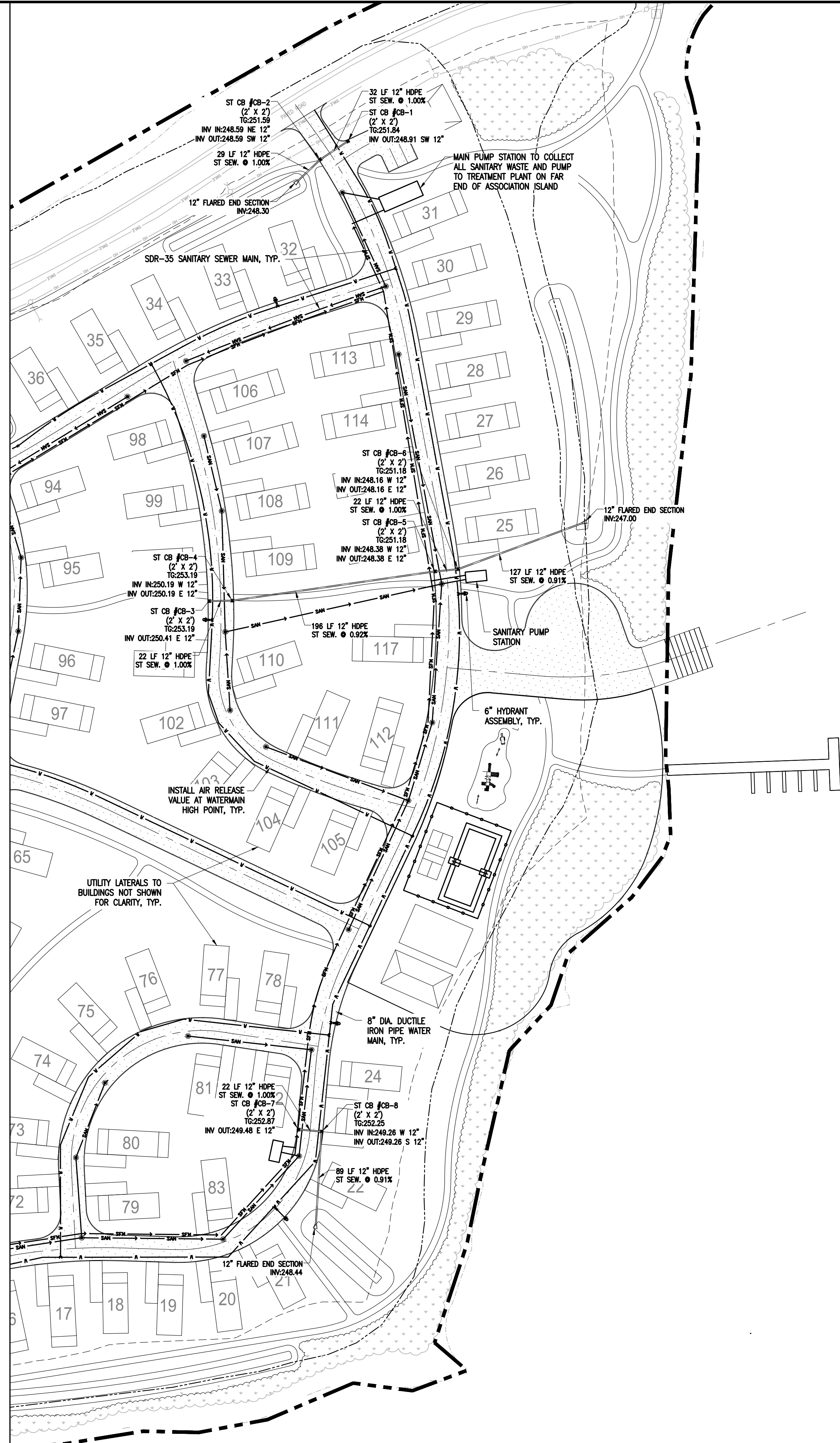
C111





UTILITY LEGEND:

- STORM SEWER
- CATCH BASIN
- STORM MANHOLE
- HYDRANT
- ⊗ VALVE/CURB BOX
- ⊙ P.I.V.
- WATER MAIN
- SANITARY GRAVITY SEWER
- SANITARY FORCEMAIN
- SANITARY SEWER MANHOLE
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- ELECTRIC
- GAS
- UTILITY CROSSING



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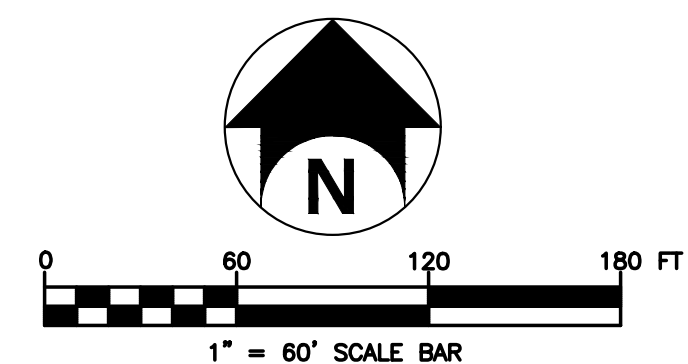
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Designer S. AL GBURI	Reviewer P. HOLSBERGER, PE
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Sheet Name

**UTILITY PLAN II**

Drawing Number

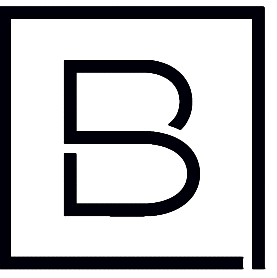
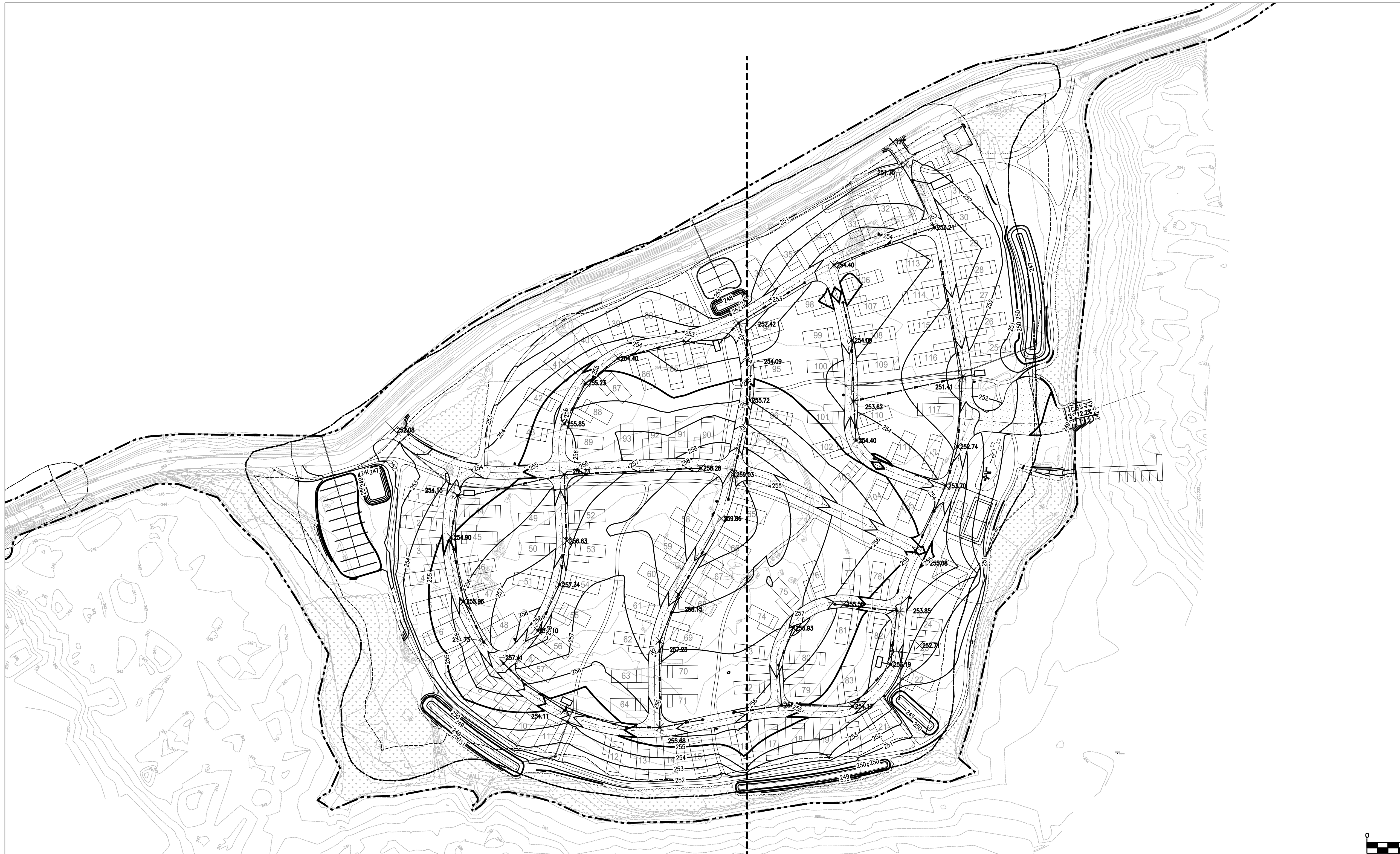
**C112**





**GRADING LEGEND:**

- 75— PROPOSED MAJOR CONTOUR
- 76— PROPOSED MINOR CONTOUR
- TC=78.01 PROPOSED TOP OF CURB / BOTTOM OF CURB ELEVATION
- BC=77.51 PROPOSED TOP OF WALL / BOTTOM OF WALL
- ×TW=152.50 PROPOSED TOP OF WALL / BOTTOM OF WALL
- ×77.73 PROPOSED SPOT ELEVATION
- ×EG=77.73 EXISTING ELEVATION
- ×HP=77.73 PROPOSED HIGH POINT ELEVATION
- ×TO=77.73 PROPOSED TOP OF GRATE ELEVATION
- ×RIM=77.73 PROPOSED RIM ELEVATION
- 2.5% PROPOSED SLOPE
- 72— EXISTING CONTOUR



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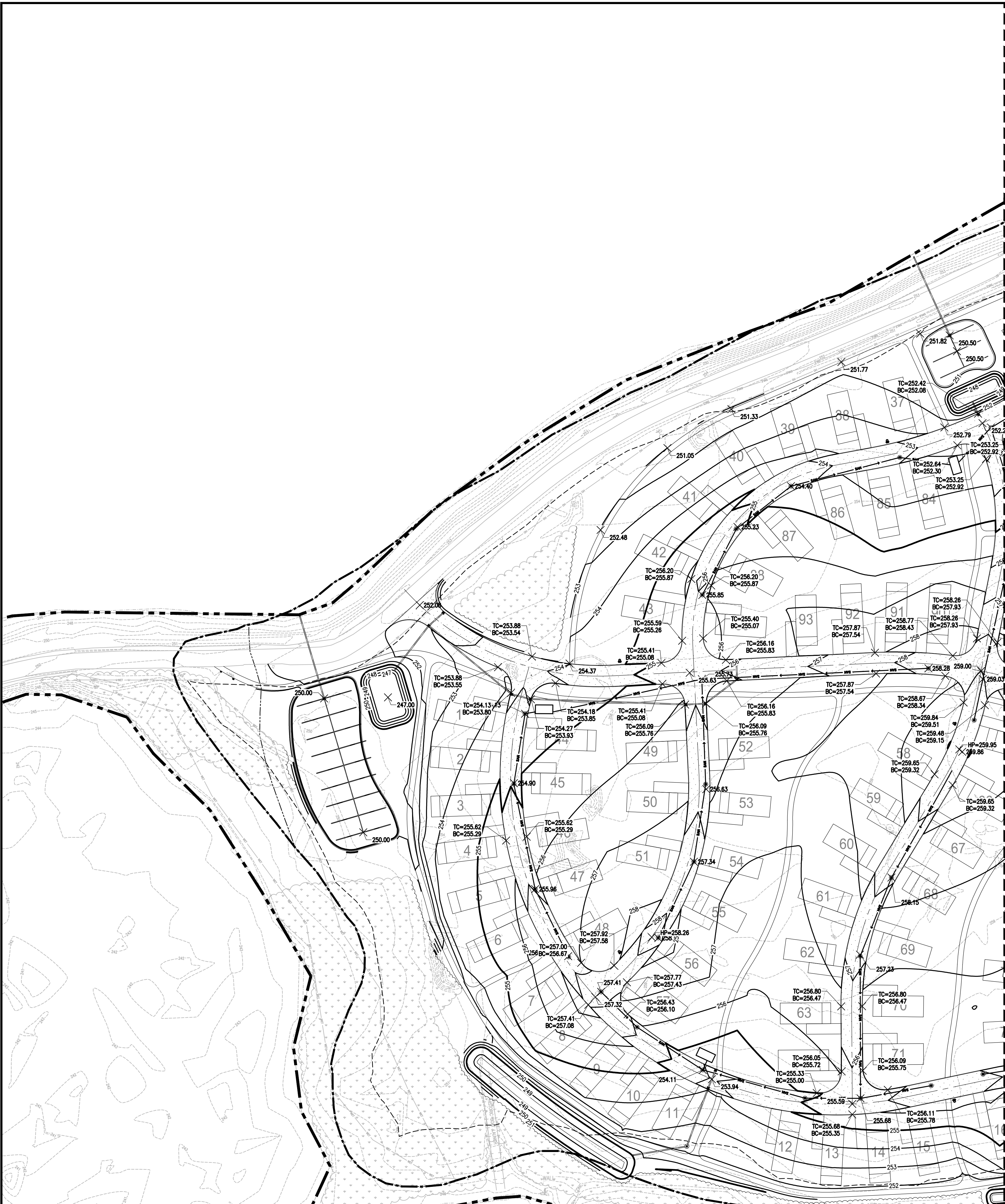
Sheet Name

**OVERALL GRADING PLAN**

Drawing Number

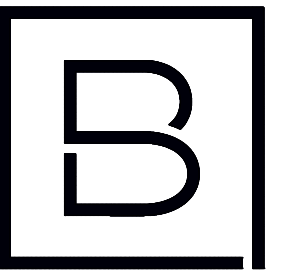
**C120**





**GRADING LEGEND:**

- 75— PROPOSED MAJOR CONTOUR
- 76— PROPOSED MINOR CONTOUR
- TC=78.01  
•BC=77.51 PROPOSED TOP OF CURB / BOTTOM OF CURB ELEVATION
- ×TW/BW=152.50 PROPOSED TOP OF WALL / BOTTOM OF WALL
- ×77.73 PROPOSED SPOT ELEVATION
- ×EG=77.73 EXISTING ELEVATION
- ×HP=77.73 PROPOSED HIGH POINT ELEVATION
- ×TG=77.73 PROPOSED TOP OF GRATE ELEVATION
- ×RIM=77.73 PROPOSED RIM ELEVATION
- 2.5% PROPOSED SLOPE
- 72— EXISTING CONTOUR



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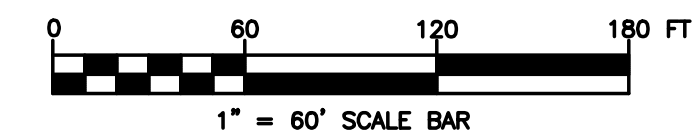
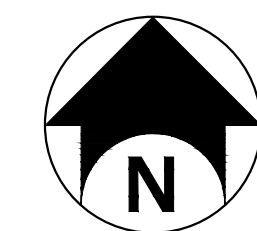
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Sheet Name

**GRADING PLAN I**

Drawing Number

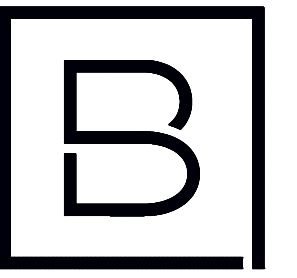
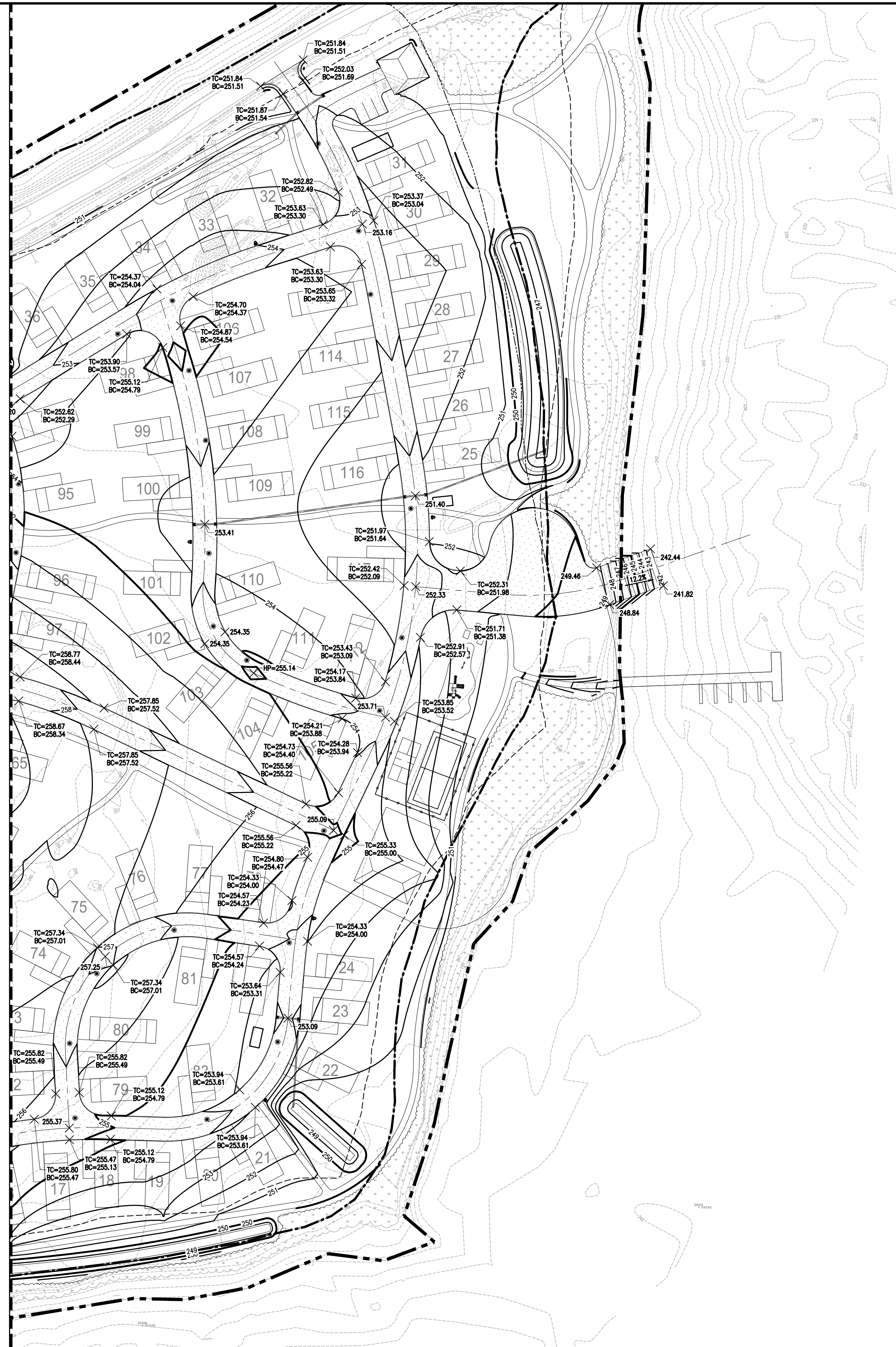
**C121**





**GRADING LEGEND:**

- 75— PROPOSED MAJOR CONTOUR
- 76— PROPOSED MINOR CONTOUR
- ×TC=78.01 PROPOSED TOP OF CURB / BOTTOM OF CURB ELEVATION
- ×BC=77.51
- ×TW/BW=152.50 PROPOSED TOP OF WALL / BOTTOM OF WALL
- ×77.73 PROPOSED SPOT ELEVATION
- ×EG=77.73 EXISTING ELEVATION
- ×HP=77.73 PROPOSED HIGH POINT ELEVATION
- ×TG=77.73 PROPOSED TOP OF GRATE ELEVATION
- ×RIM=77.73 PROPOSED RIM ELEVATION
- 2.5% PROPOSED SLOPE
- 72— EXISTING CONTOUR



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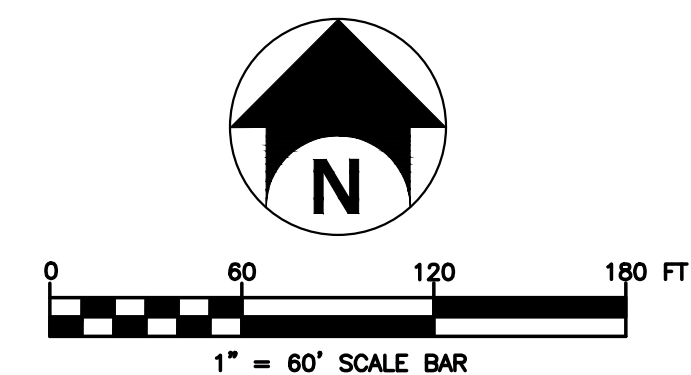
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Sheet Name

**GRADING PLAN II**

Drawing Number

**C122**

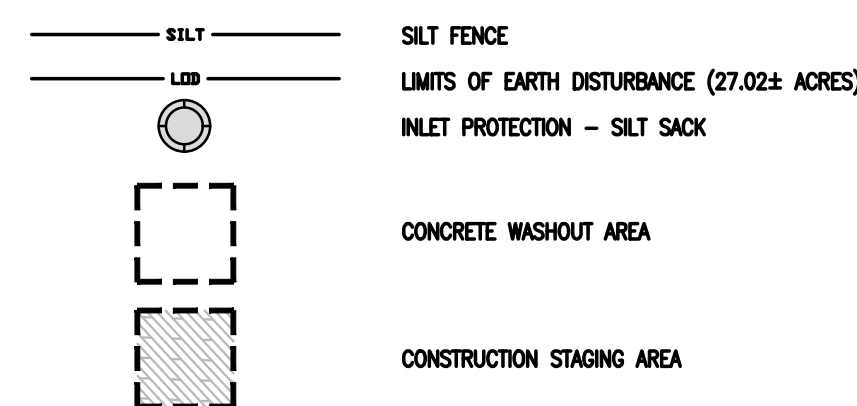




### E&S NOTES

- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST BE IMPLEMENTED, INSPECTED, MONITORED, AND MAINTAINED AS SPECIFIED IN THE NYS DOT SPECIFICATIONS.
- THE LOCATIONS OF EROSION AND SEDIMENT CONTROL MEASURES, AS INDICATED IN THE CONTRACT DOCUMENTS MAY REQUIRE FIELD ADJUSTMENTS DEPENDING ON THE SEQUENCE OF CONSTRUCTION ACTIVITIES, CONSTRUCTION METHODS AND/OR ACTUAL FIELD CONDITIONS.
- THE ENGINEER IN CHARGE SHALL BE NOTIFIED OF ANY SIGNIFICANT CHANGES TO THE EROSION AND SEDIMENT CONTROL MEASURES INDICATED IN THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE ENGINEER IN CHARGE THEIR WRITTEN SCHEDULE AND PROPOSED MEASURES FOR TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL WORK AND SCHEDULE OF OPERATIONS AS REQUIRED BY SECTION 209 OF THE NYS DOT STANDARD SPECIFICATIONS.
- ALL DREDGED AND EXCAVATED MATERIAL THAT IS DISPOSED OF ON AN UPLAND SITE SHALL BE SUITABLY STABILIZED WITH SEED AND MULCH IN ACCORDANCE WITH SECTION 209 OF THE NYS DOT STANDARD SPECIFICATIONS SO THAT IT CAN NOT REASONABLY RE-ENTER ANY WATER BODY OR WETLAND AREA.
- INSPECTION, PERIODIC CLEANING AND MAINTENANCE OF TEMPORARY SOIL EROSION AND POLLUTION DEVICES SHALL BE PERFORMED ON A SCHEDULED BASIS IN ACCORDANCE WITH SECTION 209 OF THE NYS DOT STANDARD SPECIFICATIONS. THE COST OF INSTALLING, CLEANING AND REMOVING TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES SHALL BE PAID FOR UNDER THE ITEMS SHOWN.
- CONTROL MEASURES SHALL BE PLACED PRIOR TO STARTING EARTH WORK OPERATIONS AND SHALL REMAIN IN PLACE UNTIL THE NEW SLOPES ARE STABILIZED WITH SEEDING, MULCH AND/OR SLOPE PROTECTION, IN ACCORDANCE WITH SECTION 209 OF THE NYS DOT STANDARD SPECIFICATIONS.
- WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO ADJACENT ROADWAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT CONTAMINATION OF ANY STREAM OR WATERWAY BY SILT, SEDIMENT, FUELS, SOLVENTS, LUBRICANTS, EPOXY COATINGS, CONCRETE LEACHATE OR ANY OTHER POLLUTANT ASSOCIATED WITH CONSTRUCTION AND CONSTRUCTION PROCEDURES.
- DURING CONSTRUCTION, NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE INTO ANY WATERS, NOR SHALL WASHINGS FROM CONCRETE TRUCKS, MIXERS OR OTHER DEVICES BE ALLOWED TO ENTER ANY WETLAND OR WATERS.
- DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WHICH ARE PRONE TO BLOWING FROM THE WIND WILL BE COVERED BY A TARPULIN.
- IF CONSTRUCTION ACTIVITIES ARE DISCONTINUED IN AREAS OF SOIL DISTURBANCE BEFORE FINAL GRADING IS COMPLETE, THEN TEMPORARY GRADING SHALL INCLUDE TEMPORARY SEEDING AND MULCH THAT WILL BE STABILIZED WITHIN SEVEN (7) DAYS OF EXPOSURE. MULCH SHALL BE MAINTAINED UNTIL SUITABLE VEGETATIVE COVER IS ESTABLISHED.
- CONTAIN ANY TEMPORARY STOCKPILES OF TOPSOIL OR FILL WITH SILT FENCES AS SHOWN IN THE SILT FENCE DETAIL IN THE NYS DOT STANDARD SHEETS AND STANDARD SPECIFICATIONS. PILES EXPOSED FOR LONGER THAN TWO (2) WEEKS SHALL BE STABILIZED BY SEEDING, MULCH AND/OR SLOPE PROTECTION IN ACCORDANCE WITH SECTION 209 OF THE NYS DOT STANDARD SPECIFICATIONS.
- ALL METHODS AND EQUIPMENT PROPOSED BY THE CONTRACTOR TO ACCOMPLISH THE WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER IN CHARGE.
- AT THE COMPLETION OF CONSTRUCTION AND PERMANENT SOIL STABILIZATION, SEDIMENT SHALL BE REMOVED FROM NEW DRAINAGE PIPES, DRAINAGE STRUCTURES, AND CHECK DAMS. THE COST FOR SEDIMENT REMOVAL SHALL BE INCLUDED IN THE COST BID FOR THE EROSION CONTROL ITEMS.
- THE LOCATION OF EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED IN THE CONTRACT DOCUMENTS, MAY REQUIRE FIELD ADJUSTMENTS DEPENDING ON THE SEQUENCE OF CONSTRUCTION ACTIVITIES, CONSTRUCTION METHODS AND/OR ACTUAL FIELD CONDITIONS. NO MODIFICATIONS WILL BE MADE WITHOUT THE APPROVAL OF THE ENGINEER.
- THE TOWN HIGHWAY MUST BE KEPT CLEAN OF MUD, DIRT, AND OTHER DEBRIS AT ALL TIMES.
- ANY DEBRIS OR EXCESS MATERIALS FROM CONSTRUCTION OF THIS PROJECT SHALL BE IMMEDIATELY AND COMPLETELY REMOVED FROM THE BED AND BANKS OF ALL WATER AREAS TO AN APPROPRIATE UPLAND AREA FOR DISPOSAL.
- ANY GRADED AREAS NOT SUBJECT TO FURTHER DISTURBANCE OR CONSTRUCTION TRAFFIC SHALL BE ESTABLISHED WITH PERMANENT VEGETATIVE COVER, AS PER CONTRACT SPECIFICATIONS, WITHIN 14 DAYS OF FINAL GRADING.
- THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL DEVICES.
- UNLESS OTHERWISE INDICATED TEMPORARY SEDIMENT FILTER BAGS SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED DRAINAGE STRUCTURES, WITHIN THE LIMITS OF EXCAVATION.

### E&S LEGEND:



### CLEARING AND GRUBBING

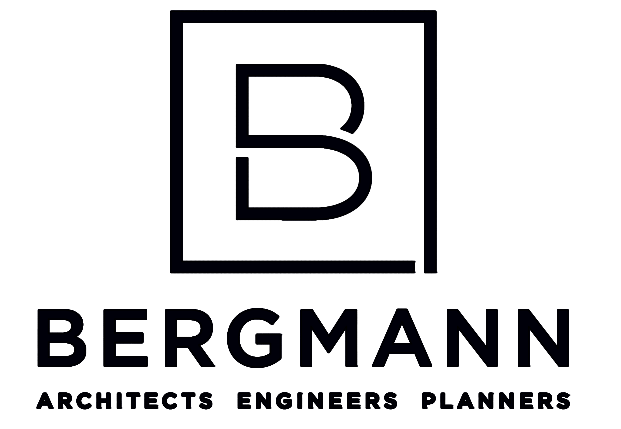
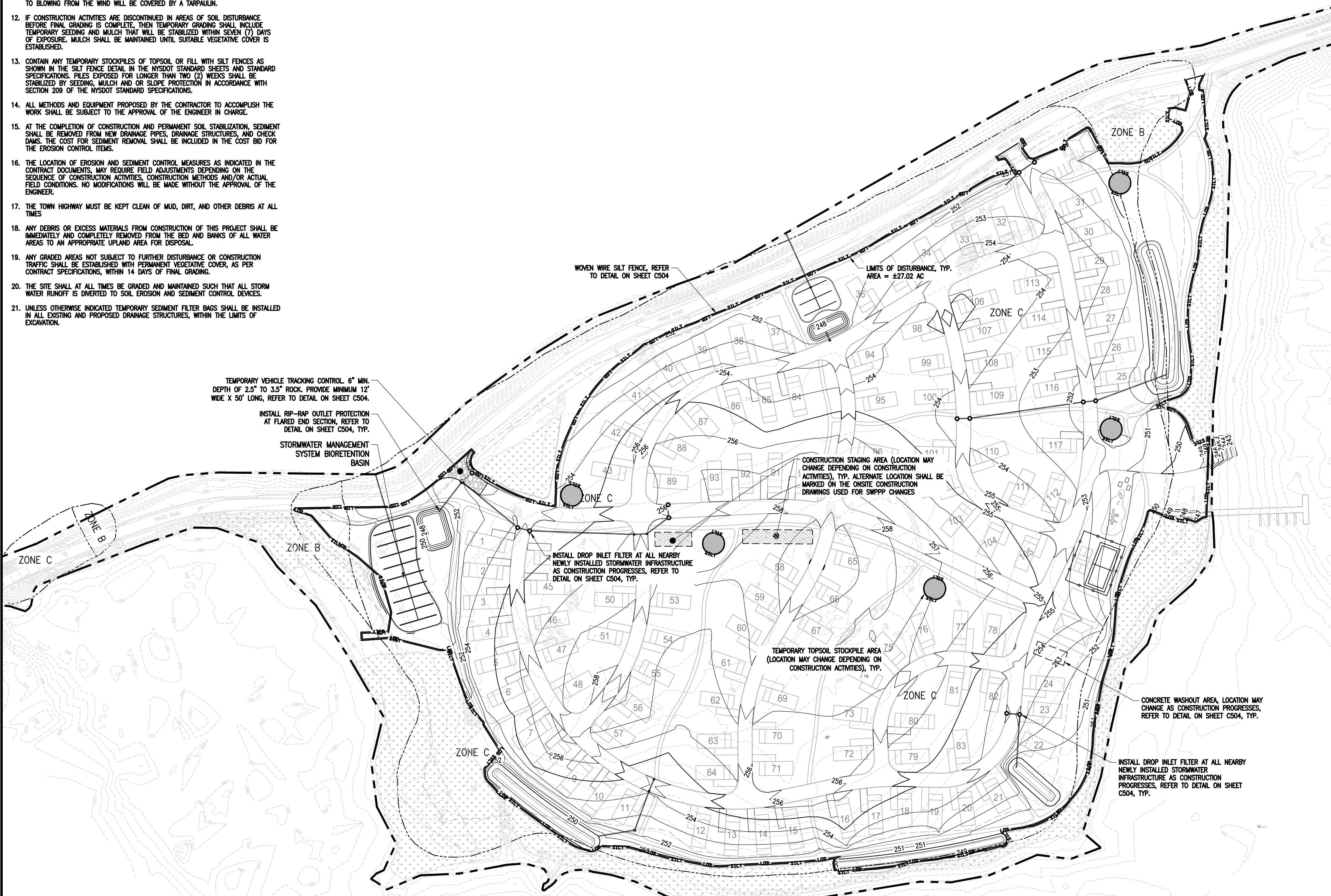
- THE CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS INDICATED IN THE CONTRACT DOCUMENTS AND A.O.B.E. WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
  - ALL VEGETATION SPECIFIED FOR CLEARING AND GRUBBING REMOVAL AS INDICATED ON THE PLANS.
- CLEARING AND GRUBBING SHALL NOT INCLUDE THE FOLLOWING:
  - TREE BRANCHES AND TREE ROOTS THAT HAVE BEEN BROKEN OR INJURED DURING CONSTRUCTION. THIS CORRECTIVE WORK SHALL BE DONE IN ACCORDANCE WITH ACCEPTED NURSERY PRACTICE. WORK SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
- CLEARING AND GRUBBING SHALL BE LIMITED TO NO MORE THAN IS NECESSARY BEYOND THE REQUIRED GRADING LIMITS, UNLESS DIRECTED OTHERWISE.
- THE CONTRACTOR MAY ENCOUNTER NESTING BIRDS DURING THE ADMINISTRATION OF THIS CONTRACT. UNDER THE MIGRATORY BIRD TREATY ACT, IT IS UNLAWFUL TO TAKE, CAPTURE, OR KILL ANY MIGRATORY BIRDS, INCLUDING THEIR FEATHERS, NESTS AND EGGS. THE CONTRACTOR SHOULD SCHEDULE WORK TO MINIMIZE THE POTENTIAL CONFLICT BETWEEN THIS FEDERAL LAW AND WORK OPERATIONS. REFER TO SPECIAL NOTE FOR MIGRATORY BIRD PROTECTION AND AVOIDANCE ELSEWHERE IN THE CONTRACT DOCUMENTS FOR FURTHER GUIDANCE AND REQUIREMENTS. ADDITIONAL TIME RESTRICTIONS FOR OTHER WORK ARE CONTAINED ELSEWHERE IN THE CONTRACT DOCUMENTS.
- ALL HEALTHY PLANT MATERIALS CLEARED ON THE JOB SITE MAY BE CHIPPED AND/OR SHREDDED ON-SITE FOR SUBSEQUENT REUSE. CHIPPED AND SHREDDED MATERIAL MUST BE ACCEPTABLE TO AND LOCATIONS SHALL BE APPROVED BY THE EIC PRIOR TO ACCEPTANCE AND DISTRIBUTION. MATERIAL FROM DISEASED PLANTS SHALL BE COLLECTED AND DISPOSED OF OFF-SITE TO A LOCATION ACCEPTABLE TO THE ENGINEER.

### E&S INSTALLATION NOTES

- CONSTRUCT INTERCEPTOR/DIVERSION SWALES/BERMS & TEMPORARY SEDIMENT BASIN'S TO INTERCEPT SURFACE WATER AND DRECT IT AWAY FROM WORK AREA AS INDICATED ON PLANS. SEDIMENT SHALL BE REMOVED FROM BASINS BEFORE THEY REACH 25% CAPACITY.
- REMOVE AND STOCKPILE TOPSOIL AS DIRECTED BY THE CONSTRUCTION MANAGER REPLACE TOPSOIL TO A MINIMUM 4" DEPTH. ALL DISTURBED AREAS TO BE HYDROSEEDED AS DIRECTED BY THE CONSTRUCTION MANAGER TO PROMOTE VEGETATION AS SOON AS PRACTICABLE.
- INSTALL INLET PROTECTION, AND RIP RAP APRONS PROGRESSIVELY AS STORM SEWER, AND DISCHARGE POINTS ARE INSTALLED.
- IF THE SEASONS PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE "STANDARDS", NETTING OR LIQUID MULCH BINDER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF TOPSOIL TO ALL DISTURBED AREAS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN EROSION CONTROL MEASURES AT ALL TIMES.
- ALL DISTURBED AREAS SHALL BE FINISH GRADED TO PROMOTE VEGETATION ON ALL EXPOSED AREAS AS SOON AS PRACTICABLE. STABILIZATION PRACTICES (TEMPORARY/PERMANENT SEEDING, MULCHING, GEOTEXTILES, ETC.) MUST BE IMPLEMENTED WITHIN SEVEN (7) DAYS WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, AND NOT EXPECTED TO RESUME WITHIN FOURTEEN (14) DAYS.
- PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES. ALL CONSTRUCTION DEBRIS AND SEDIMENT SPILLS, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
- ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS ON THE PROPOSED SITE.
- DIVERSION SWALES/BERMS, AND SEDIMENT TRAPS SHOULD BE RELOCATED INWARD AS PERIMETER SLOPE CONSTRUCTION PROGRESSES AND RECONSTRUCTED TO THE NYS STANDARDS & SPECIFICATIONS AT THE END OF EACH DAY TO DIVERT RUNOFF FROM SLOPED AREAS AND DIRECT TO APPROPRIATE BASINS.
- PERIMETER AREAS SHALL BE TEMPORARILY STABILIZED WITH SEED AND MULCH AT LEAST ONCE A WEEK, AT A MINIMUM, WITH 100% PERENNIAL RYEGRASS MIX AT A RATE OF 2-4 LBS PER 1000 SF AND MULCH 90-100 LB/1000 SF OF WEED FREE STRAW.
- SLOPE TRACKING SHALL BE IMPLEMENTED ON ALL SLOPE 1 ON 3 OR GREATER AT THE END OF EACH WORK DAY AND PRIOR TO FINAL SLOPE GRADING AND STABILIZATION.

### SEQUENCE OF CONSTRUCTION:

- HOLD A PRE-CONSTRUCTION MEETING, ATTENDED BY THE PROJECT MANAGER, CONTRACTOR, SUB-CONTRACTORS, NYSDEC REPRESENTATIVE AND THE OPERATOR'S ENGINEER PRIOR TO LAND DISTURBING ACTIVITIES.
- CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCES/EXITS AT LOCATIONS SHOWN ON THE PLANS.
- INSTALL PERIMETER SILT FENCES AND TEMPORARY SEDIMENT BASINS IN THE LOCATIONS SHOWN ON THE PLANS.
- HAVE A QUALIFIED PROFESSIONAL CONDUCT AN ASSESSMENT OF THE SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND CERTIFY IN AN INSPECTION REPORT THAT THE APPROPRIATE EROSION AND SEDIMENT CONTROLS DESCRIBED IN THE SWPPP AS REQUIRED BY PART IV OF THE GP-0-20-001 HAVE BEEN ADEQUATELY INSTALLED OR IMPLEMENTED TO ENSURE OVERALL PREPAREDNESS OF THE SITE FOR THE COMMENCEMENT OF CONSTRUCTION.
- BEGIN CLEARING AND GRUBBING OPERATIONS. CLEARING AND GRUBBING SHALL BE DONE ONLY IN AREAS WHERE EARTHWORK WILL BE PERFORMED AND ONLY IN AREAS WHERE BUILDING IS PLANNED TO COMMENCE WITHIN 14 DAYS AFTER CLEARING AND GRUBBING.
- INSTALL DIVERSION SWALES AT LOCATIONS SHOWN ON THE PLANS.
- COMMENCE SITE GRADING. THE WORK SHALL BE PROGRESSED TO ALLOW A REASONABLE TRANSFER OF CUT AND FILL EARTH FOR ROUGH GRADING AND EARTH MOVING. THE CONTRACTOR WILL BE GIVEN SOME LATITUDE TO VARY FROM THE FOLLOWING SCHEDULE IN ORDER TO MEET THE FIELD CONDITIONS ENCOUNTERED. CONTRACTOR SHALL REVIEW VARIATIONS TO SWPPP WITH DESIGN ENGINEER AND QUALIFIED PROFESSIONAL PRIOR TO IMPLEMENTATION. ALL CHANGES TO SWPPP DRAWINGS MUST BE DOCUMENTED WITHIN ONSITE SWPPP.
- STOCKPILE TOPSOIL IN A LOCATION ACCEPTABLE TO CONSTRUCTION MANAGER. WHEN STOCKPILE IS COMPLETE, INSTALL PERIMETER SILT FENCE, SEED SURFACE WITH 100% PERENNIAL RYEGRASS MIXTURE AT A RATE OF 2-4 LBS PER 1000 SF. APPLY 90-100 LBS PER 1000 SF OF MULCH.
- INSTALL EROSION CONTROL BLANKETS ON ALL SLOPES GREATER THAN 3:1. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 7 DAYS SHALL BE TEMPORARILY SEEDED AND WATERED.
- FOLLOWING ROUGH GRADING, UTILITY INSTALLATION SHOULD BEGIN. TRENCH EXCAVATION/BACKFILL AREAS SHOULD BE STABILIZED PROGRESSIVELY AT THE END OF EACH WORKDAY WITH SEED AND STRAW MULCH AT A RATE OF 100% PERENNIAL RYE GRASS AT 2-4 LBS/1000 SF MULCHED AT 90-100 LBS/1000 SF.
- CONSTRUCT ALL CURB, GUTTER INLETS, AREA INLETS, AND STORM SEWER MANHOLES, AS SHOWN ON THE PLANS. INLET PROTECTION MAY BE REMOVED TEMPORARILY FOR THIS CONSTRUCTION. PLACE REQUIRED RIP RAP AT LOCATIONS SHOWN ON THE PLANS.
- AS ROADWAY, BUILDING PADS AND ACCESS DRIVES ARE BROUGHT TO GRADE, THEY WILL BE STABILIZED WITH CRUSHED STONE SUBBASE AT A DEPTH SPECIFIED ON PLANS TO PREVENT EROSION AS SOON AS PRACTICABLE. INLET PROTECTION MAY BE REMOVED TEMPORARILY FOR THIS CONSTRUCTION.
- CLEAN SUB-BASE WHERE REQUIRED AND INSTALL BASE MATERIAL AS REQUIRED FOR PAVEMENT. PROCEED WITH BUILDING AND PAVING. REMOVE INLET PROTECTION AROUND INLETS AND MANHOLES NO MORE THAN 48 HOURS PRIOR TO PAVING OPERATIONS.
- CARRY OUT FINAL GRADING AND SEEDING AND PLANTING.
- REMOVE TEMPORARY CONSTRUCTION EXITS ONLY PRIOR TO FINAL PAVING OPERATIONS (THESE AREAS ARE TO BE PAVED LAST)
- A QUALIFIED PROFESSIONAL SHALL PERFORM A SITE ASSESSMENT TO CONFIRM THAT ALL PERMANENT STORMWATER DEVICES HAVE BEEN INSTALLED PER PLANS AND BOX UNIFORM GERMINATION/STABILIZATION HAS BEEN ACHIEVED PRIOR TO THE REMOVAL OF ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROLS.



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## SUN COMMUNITIES

## HOVEYS ISLAND

TOWN OF HENDERSON  
JEFFERSON COUNTY  
NEW YORK

Date Revised	Description
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CONSTRUCTION  
60% SUBMISSION

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Project Manager G. URSprung, PE	Discipline Lead R. DARLING, PE
Designer S. AL GBURI	Reviewer P. HOLSBERGER, PE
Date Issued 7/6/2023	Project Number 15347.00

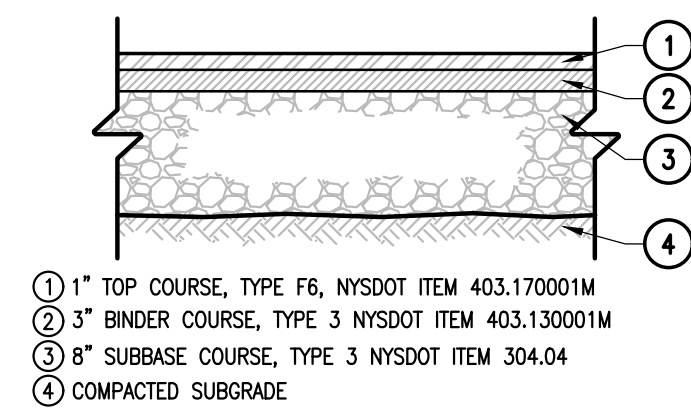
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## EROSION AND SEDIMENT CONTROL PLAN

Drawing Number

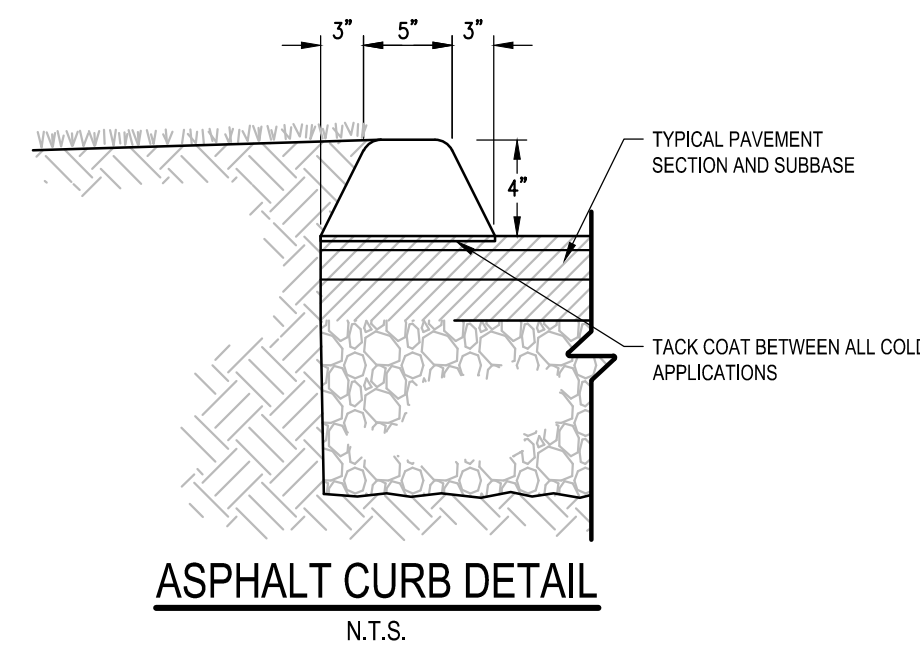
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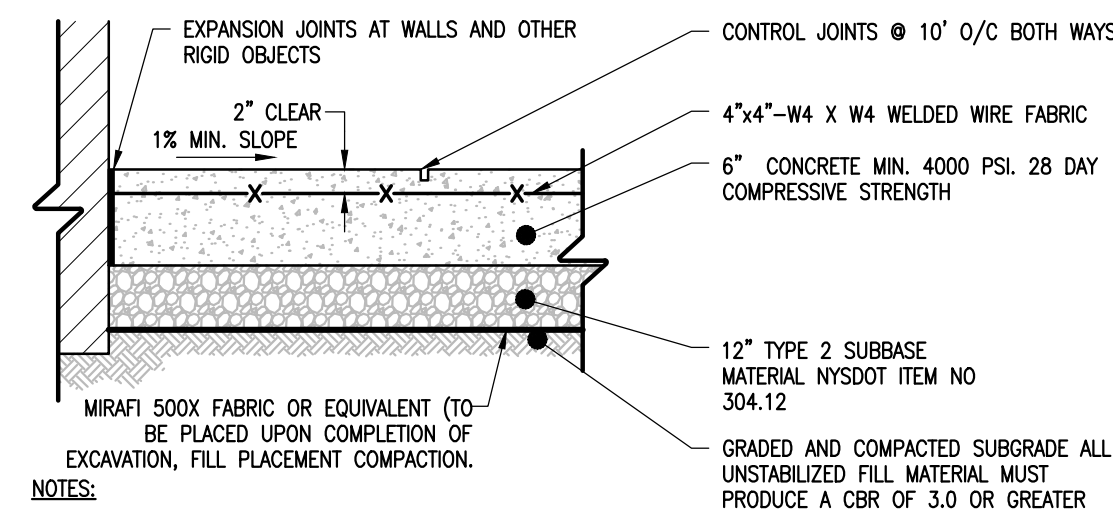


- NOTES:
1. COMPACT SUBGRADE TO A MODIFIED PROCTOR DENSITY OF 95%
  2. SUBBASE COURSE SHALL HAVE NO MORE THAN (7%) SEVEN PERCENT BY WEIGHT FINER THAN NO. 200 SIEVE.

**STANDARD DUTY ASPHALT PAVEMENT SECTION**  
N.T.S.

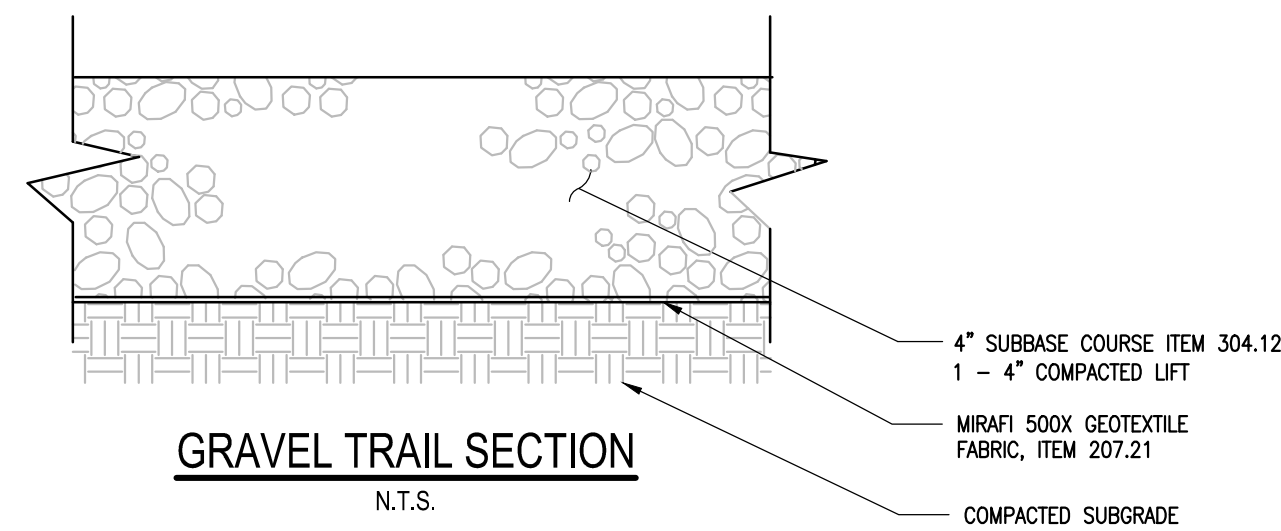


**ASPHALT CURB DETAIL**  
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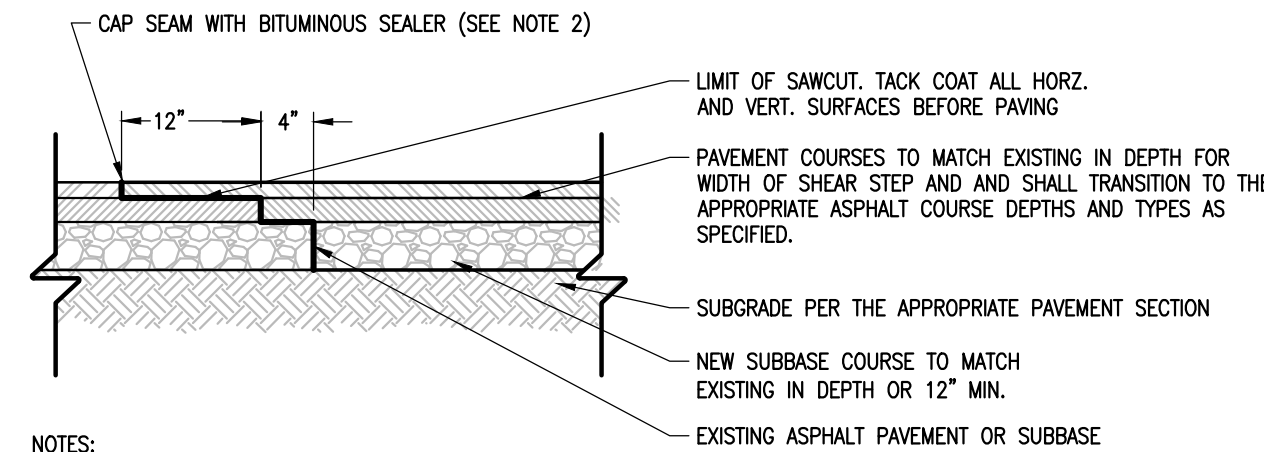


- NOTES:
1. ITEM 304.12 SHALL HAVE NO MORE THAN 7 PERCENT BY WEIGHT, FINER THAN NO. 200 SIEVE.

**BUILDING CONCRETE PAD DETAIL**  
N.T.S.

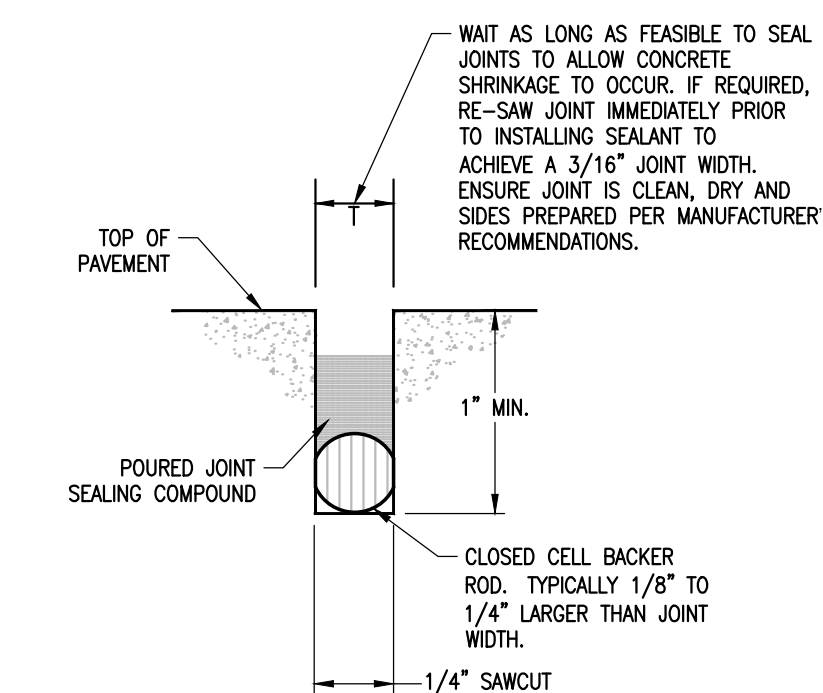


**GRAVEL TRAIL SECTION**  
N.T.S.



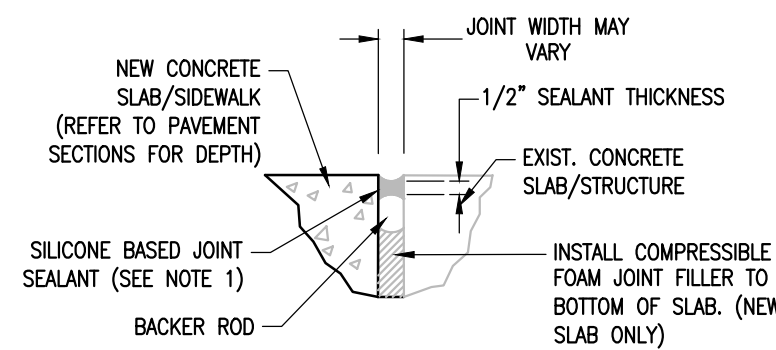
- NOTES:
1. EXISTING PAVEMENT SHALL BE SAW CUT TO OBTAIN A STRAIGHT AND NEAT EDGE FOR PAVING. FINAL SAW CUT SHALL BE MADE PRIOR TO PAVING AND AFTER SUBBASE STONE IS PLACED.
  2. ADD COAL TAR SEAL COAT WITH UNVULCANIZED RUBBER AT JOINT ALONG SAWCUT SEAM. SEALANT SHALL BE STRUCK OFF FLUSH WITH PAVEMENT SURFACE.
  3. DEPTH OF SAWCUT SHALL BE DETERMINED ONCE THE PAVEMENT CROSS SECTION HAS BEEN EXPOSED.

**SHEAR STEP DETAIL**  
N.T.S.

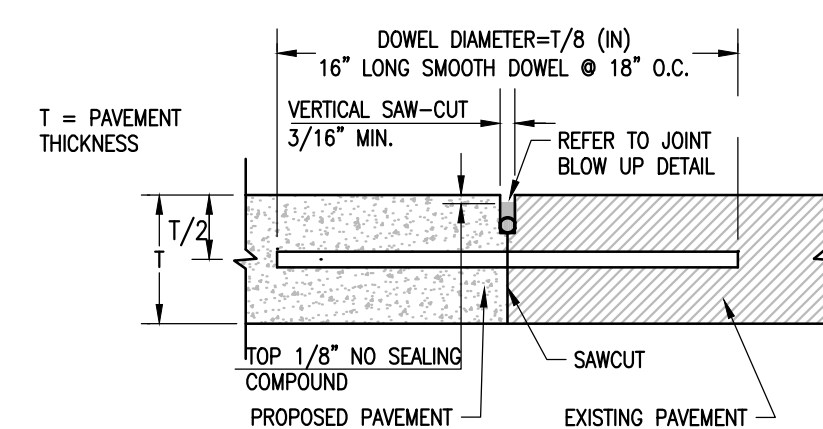


- NOTES:
1. ENSURE JOINTS ARE CLEAN AND DRY PRIOR TO THE APPLICATION OF THE JOINT SEALANT.
  2. INSTALL CLOSED CELL BACKER ROD AFTER JOINTS HAVE BEEN CLEANED AND DRIED IN ACCORDANCE WITH SEALANT MANUFACTURER'S REQUIREMENTS.
  3. INSTALL BACKER ROD AT CONSISTENT AND UNIFORM DEPTH.
  4. JOINT SEALANT APPLICATION SHALL BE IN STRICT COMPLIANCE WITH SEALANT MANUFACTURER'S REQUIREMENTS.

**JOINT BLOW-UP DETAIL**

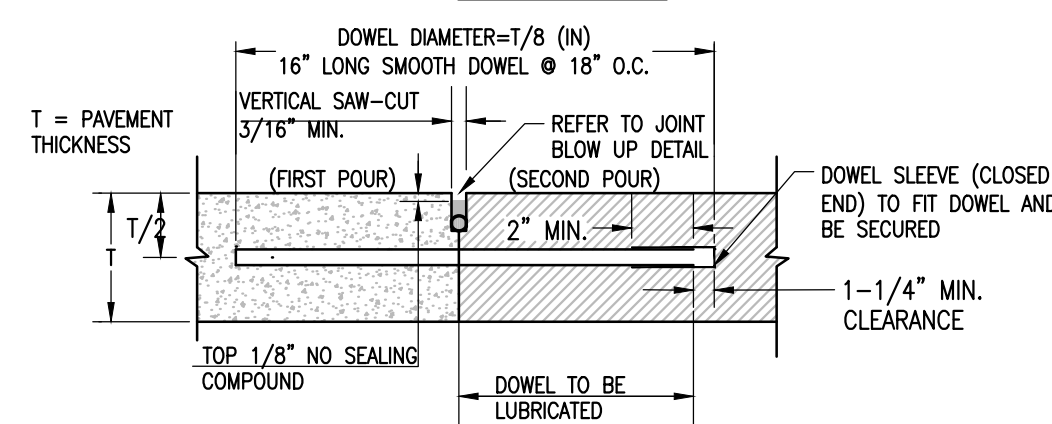


**ISOLATION JOINT**



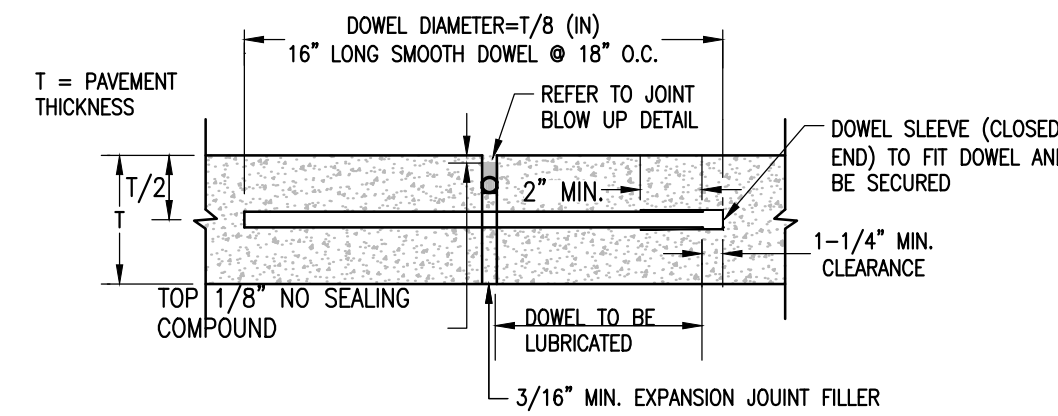
- NOTE:
1. DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIC.
  2. DRILLING BY HAND IS NOT ACCEPTABLE, PUSHING DOWEL BARS INTO GREEN CONCRETE IS NOT ACCEPTABLE.

**BUTT JOINT**



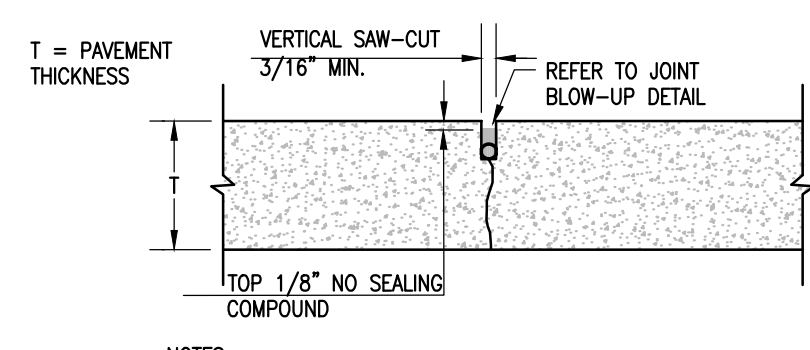
- NOTE:
1. DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE.

**CONSTRUCTION JOINT**



- NOTE:
1. DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE.

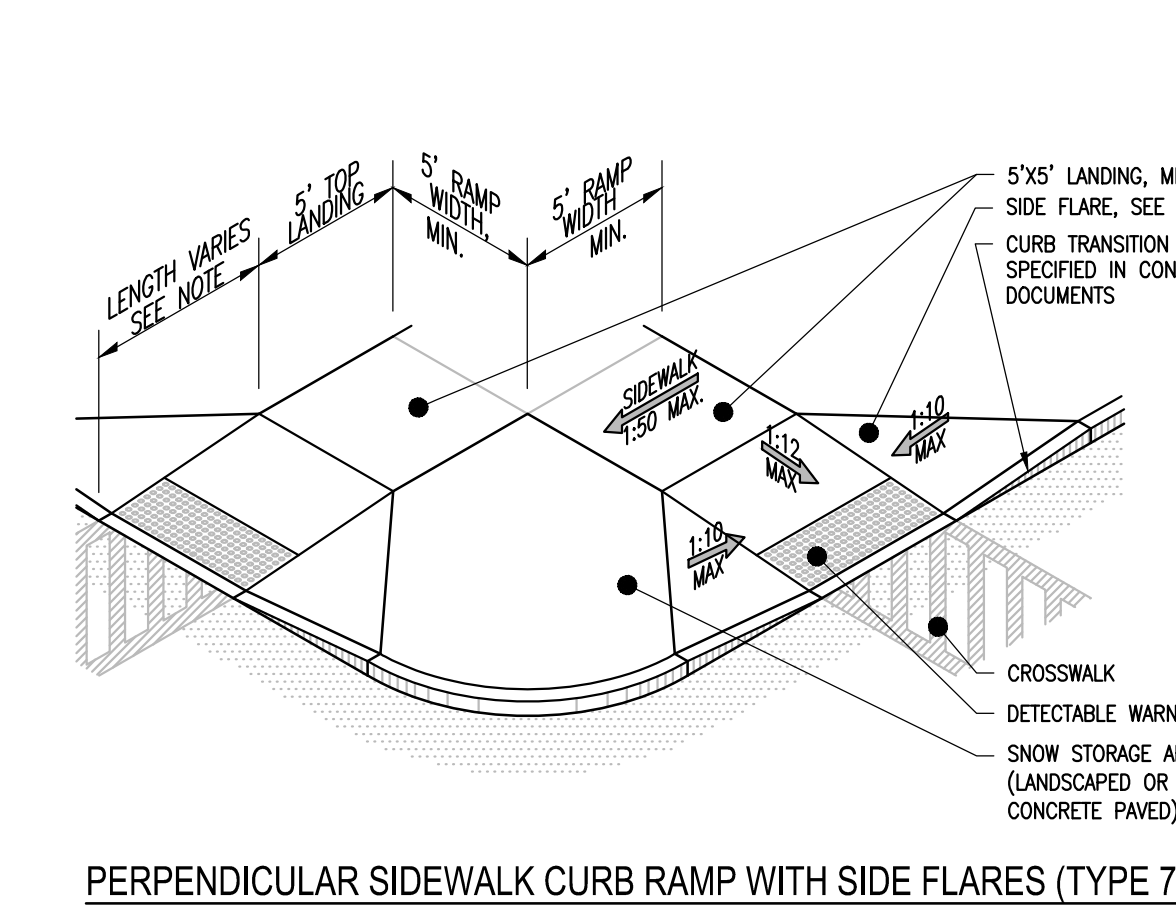
**TRANSVERSE EXPANSION JOINT**



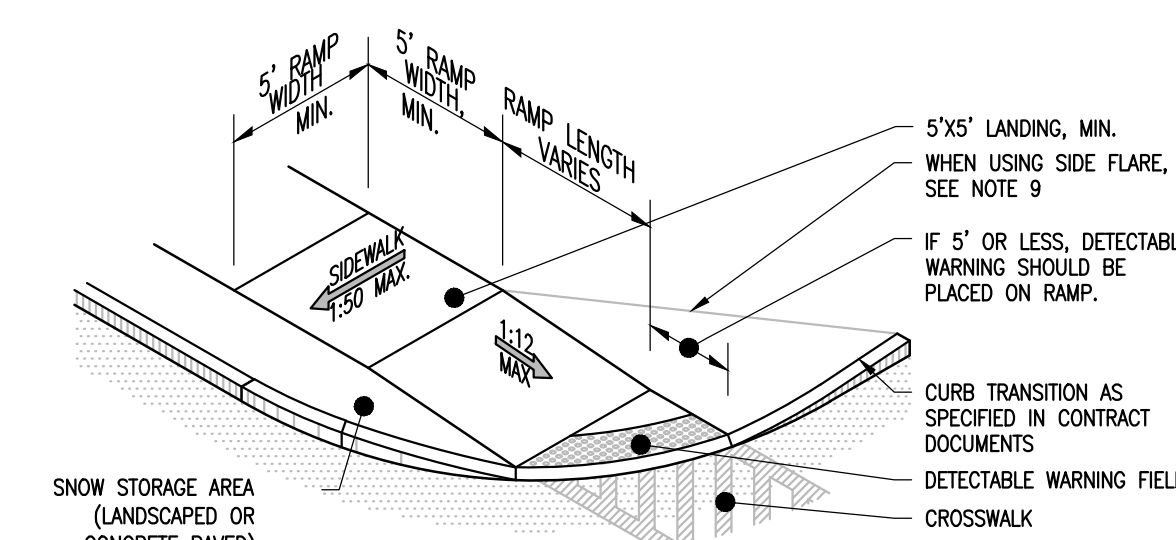
- NOTES:
1. COLOR OF JOINT SEALANT SHALL MATCH COLOR OF ADJACENT PAVEMENT.

**CONTRACTION JOINT**

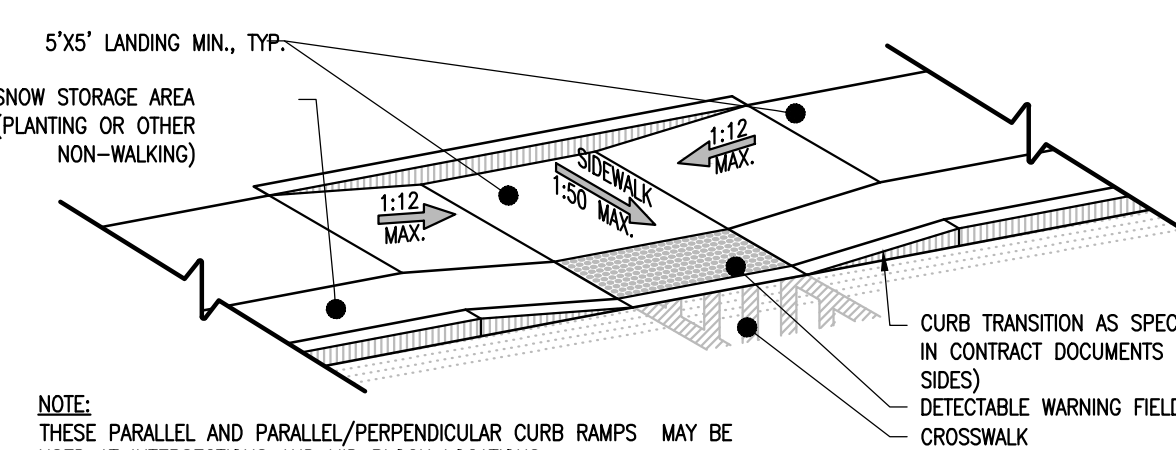
**CONCRETE JOINT DETAILS**  
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**PERPENDICULAR SIDEWALK CURB RAMP WITH SIDE FLARES (TYPE 7)**

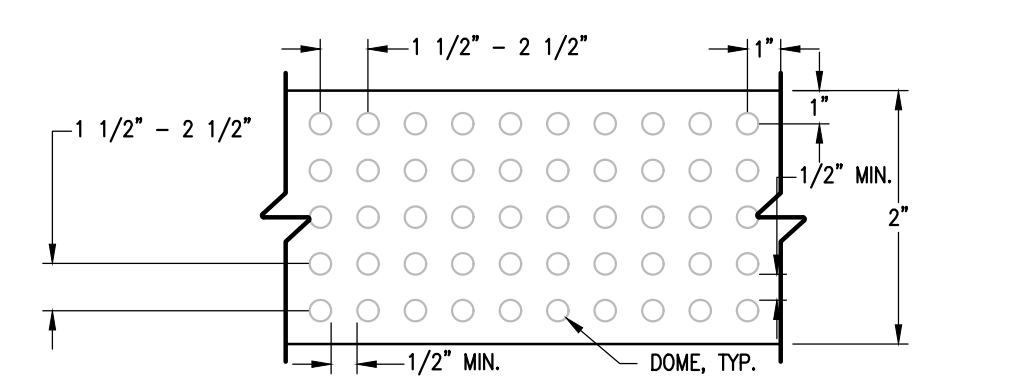


**CURB RAMP WITHOUT SIDE FLARES (TYPE 1)**

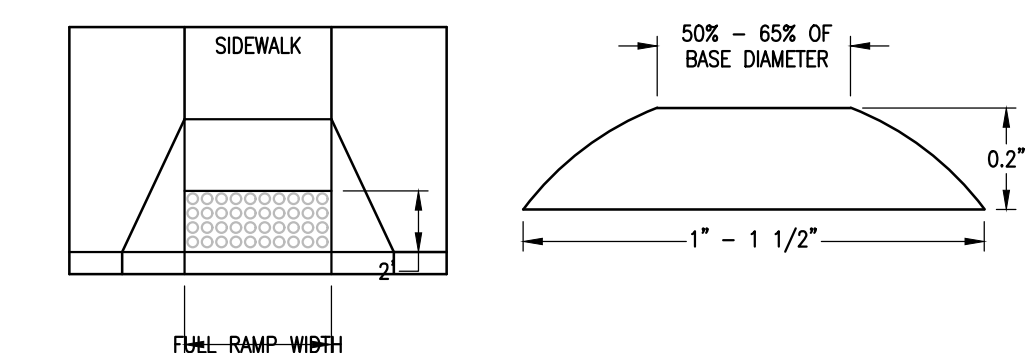


**COMBINED PARALLEL/PERPENDICULAR CURB RAMP (TYPE 10)**

- NOTES:
1. THE DETECTABLE WARNING DETAILS PROVIDED ARE NOT DRAWN TO SCALE. THE QUANTITY OF DOMES DEPICTED ON THE DETECTABLE WARNING FIELD (THE DOMES AND THE ENTIRE 2' LEVEL SURFACE) IS FOR ILLUSTRATION ONLY.
  2. LOCATION OF DETECTABLE WARNINGS. DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE OF THE WARNING FIELD NEAREST TO THE ROADWAY OR STREET SURFACE IS 6" TO 9" (1' WHERE TRANSVERSABLE CURB IS USED) FROM THE EDGE OF THE ROADWAY/STREET, OR FROM THE FACE OF THE DROPPED CURB, WHERE A DROPPED CURB CONTINUES ACROSS THE BOTTOM OF THE SIDEWALK CURB RAMP. THE DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
  3. DOME ALIGNMENT. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL.
  4. PAYMENT LINES ARE THE 2' DIMENSION SHOWN IN THE DETAILS EXTENDING THE FULL WIDTH OF THE CURB RAMP AND/OR APPLICABLE SURFACES. LANDINGS SHALL HAVE A MINIMUM CLEAR DIMENSION OF A 5' BY 5' SQUARE.
  5. LANDINGS MAY OVERLAP WITH ADJACENT LANDINGS OR A SINGLE LANDING MAY SERVE MULTIPLE CURB RAMPS OR PARALLEL OR PERPENDICULAR RAMPS. LANDINGS MAY OVERLAP WITH THE CLEAR GROUND SPACE REQUIRED AT PEDESTRIAN SIGNAL PUSH BUTTONS.
  6. CROSS SLOPES: THE MAXIMUM CROSS SLOPE OF CURB RAMPS SHALL BE 2 PERCENT. THE MAXIMUM CROSS SLOPE AT LANDINGS IS 2 PERCENT IN ANY DIRECTION. SURFACES SHALL GENERALLY BE IN CONTINUOUS PLANES WITH A MINIMUM OF SURFACE WARP.
  7. THE RUNNING GRADE OF CURB RAMPS SHOULD BE AS FLAT AS PRACTICABLE. THE MAXIMUM RUNNING GRADE OF ANY PORTION OF ANY CURB RAMP SHALL BE 1:12 (8.3%), CURB RAMPS ARE NOT REQUIRED TO BE LONGER THAN 15'.
  8. THE SURFACE OF ALL CURB RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE IS RECOMMENDED ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.
  9. CURB RAMPS LOCATED WHERE PEDESTRIANS MAY WALK ACROSS THE CURB RAMP SHALL HAVE FLARED SIDES. THE LENGTH OF THE FLARES SHALL BE AT LEAST TEN (10) TIMES THE CURB HEIGHT, MEASURED ALONG THE CURB LINE. WHEN INFEASIBLE OR IMPRACTICABLE TO PROVIDE A LANDING THAT IS AT LEAST 4' WIDE (MEASURED FROM THE TOP OF THE RAMP TO THE BACK OF THE SIDEWALK), THE LENGTH OF THE FLARES SHALL BE TWELVE (12) TIMES THE CURB HEIGHT MEASURED ALONG THE CURB LINE.
  10. COORDINATE ALL TRAFFIC CONTROL DEVICES, UTILITY LOCATIONS, SIGNS, STREET FURNITURE AND DRAINAGE TO ENSURE A CONTINUOUS PEDESTRIAN ACCESS ROUTE AT ALL CURB RAMP LOCATIONS. GUIDANCE FOR CROSSWALK MARKINGS AND TRAFFIC CONTROL DEVICES IS PROVIDED IN THE MUTCD. DRAINAGE GRATES AND UTILITY ACCESS COVERS ARE NOT ALLOWED IN RAMP WALKING SURFACES OR LANDINGS.
  11. AT MARKED CROSSINGS, THE FULL WIDTH OF THE RAMP SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS. THE SIDES OF THE RAMPS (THE FLARES) NEED NOT BE WITHIN THE WIDTH OF THE MARKINGS.
  12. RAMP TRANSITIONS BETWEEN WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES (1/4" MAX).



**DOMES SPACING**



**DETECTABLE WARNING AT CURB RAMP**

**DOMES SECTION**

**ACCESSIBLE RAMPS WITH DETECTABLE WARNING STRIP DETAILS**  
N.T.S.

**SUN COMMUNITIES**

**HOVEYS ISLAND**

TOWN OF HENDERSON  
JEFFERSON COUNTY  
NEW YORK

Date Revised	Description
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NOT FOR  
CONSTRUCTION  
60% SUBMISSION

Project Manager G. URSPRUNG, PE	Discipline Lead R. DARLING, PE
Designer S. AL GBURI	Reviewer P. HOLSBERGER, PE
Date Issued 7/6/2023	Project Number 15347.00

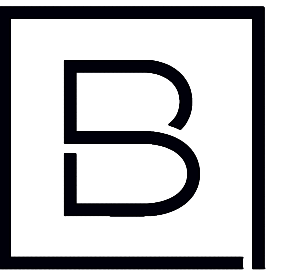
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**SITE DETAILS I**

Drawing Number

**C500**





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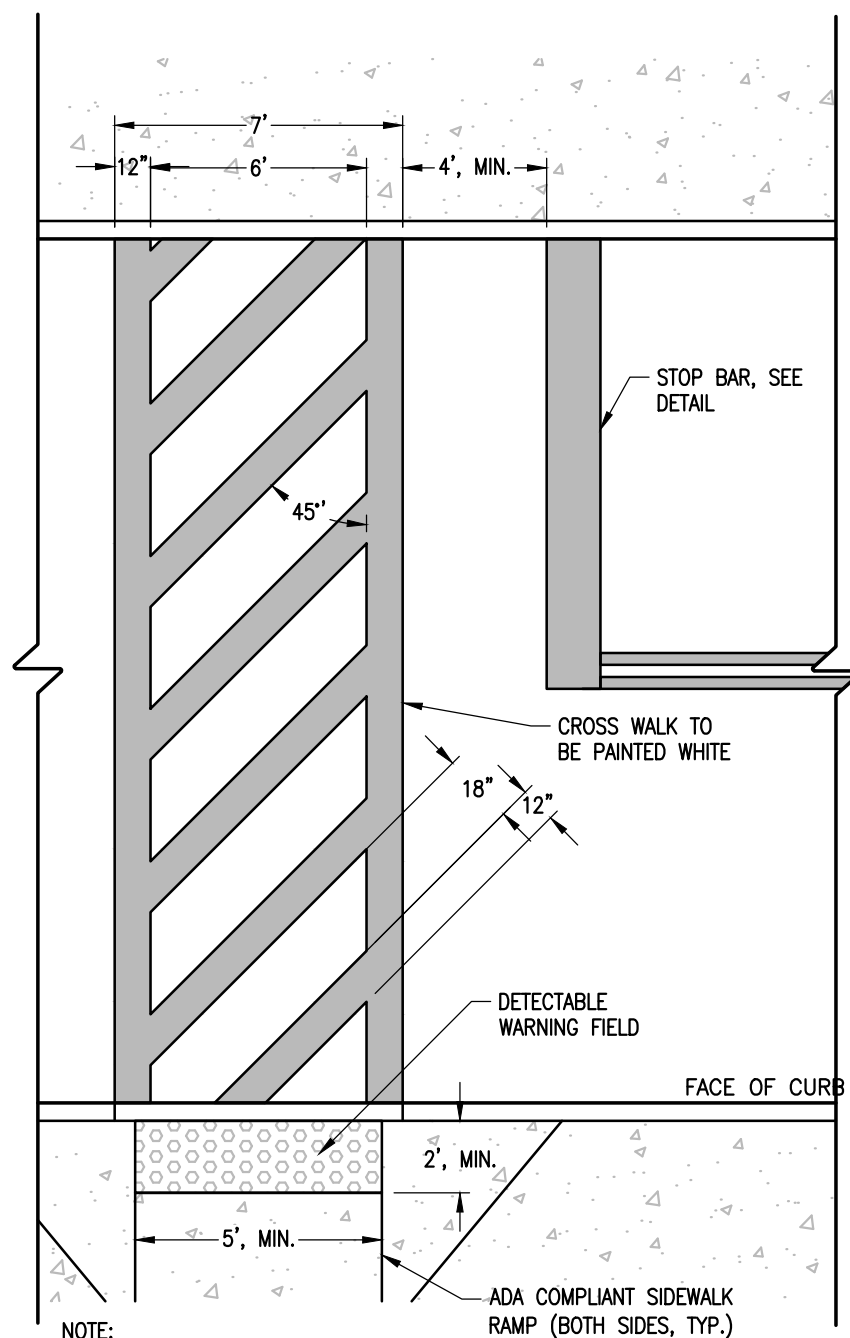
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**SUN COMMUNITIES**

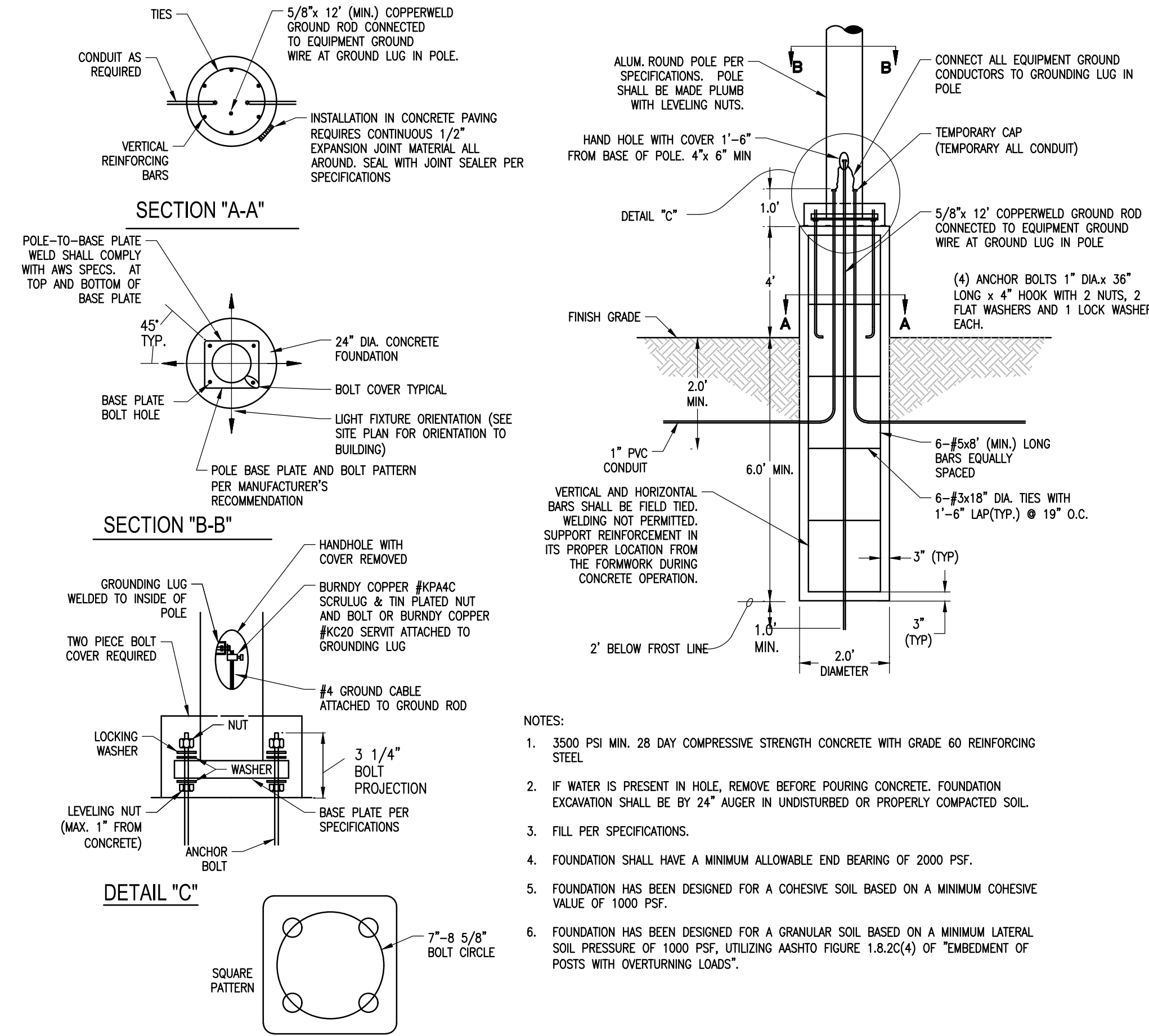
**HOVEYS ISLAND**

TOWN OF HENDERSON  
JEFFERSON COUNTY  
NEW YORK

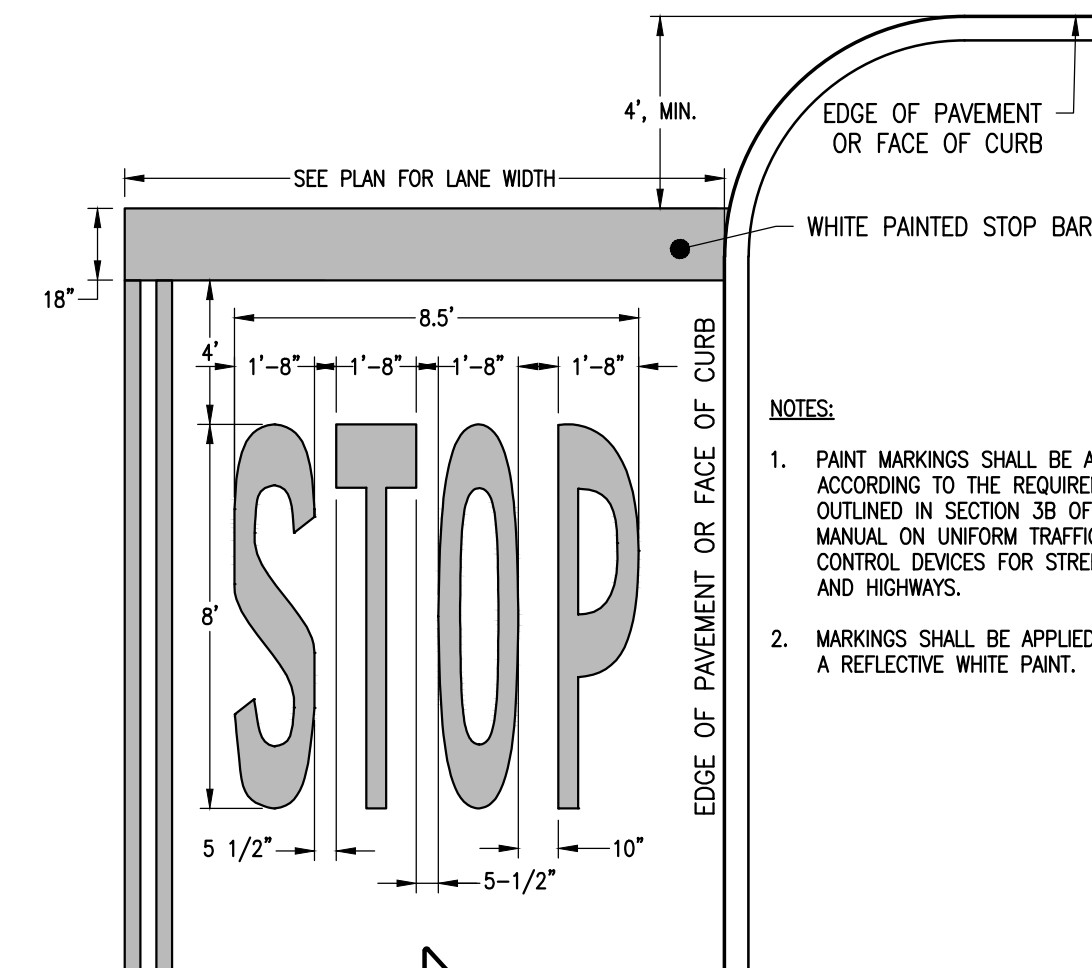
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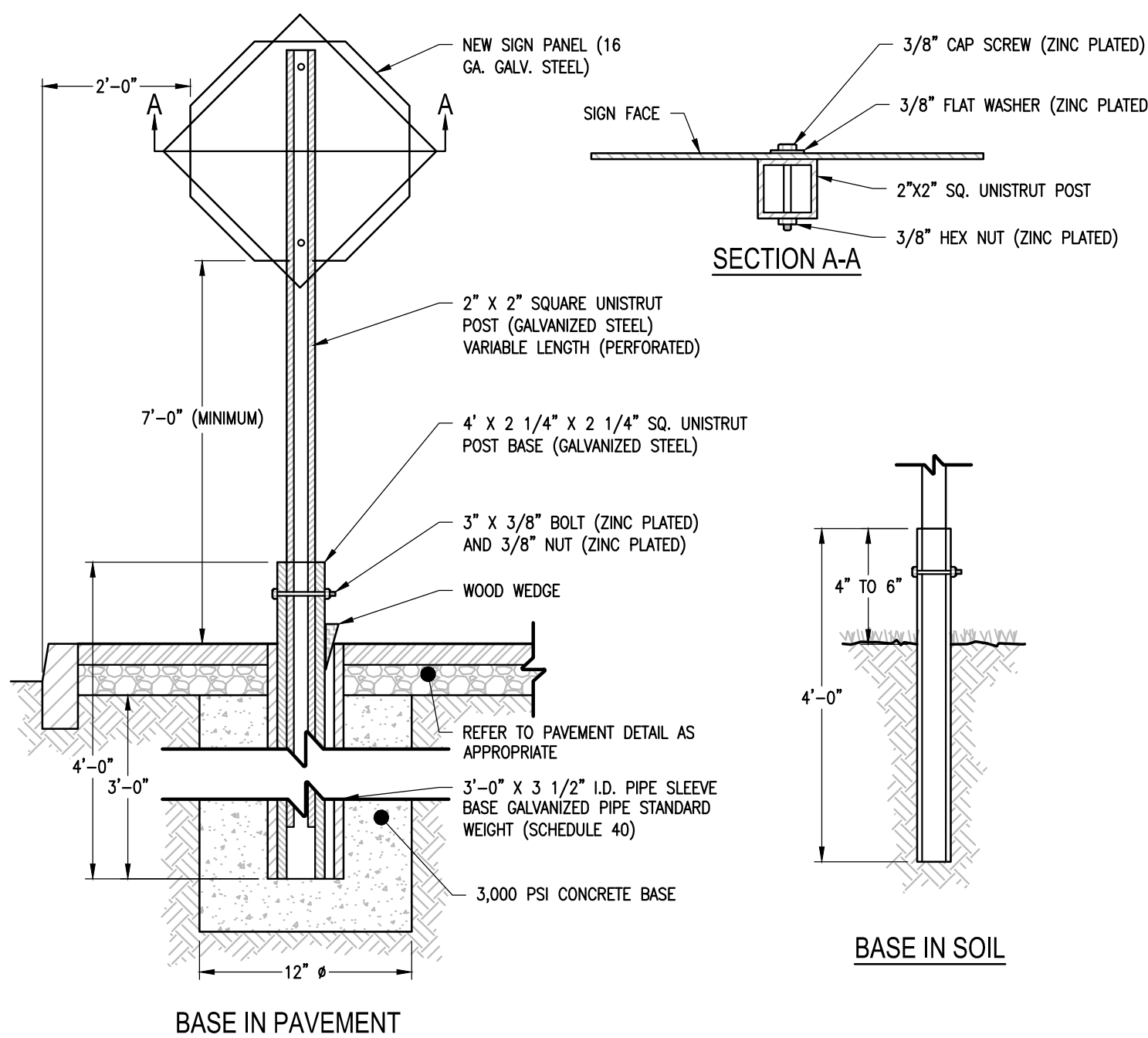
**PAINTED CROSSWALK**  
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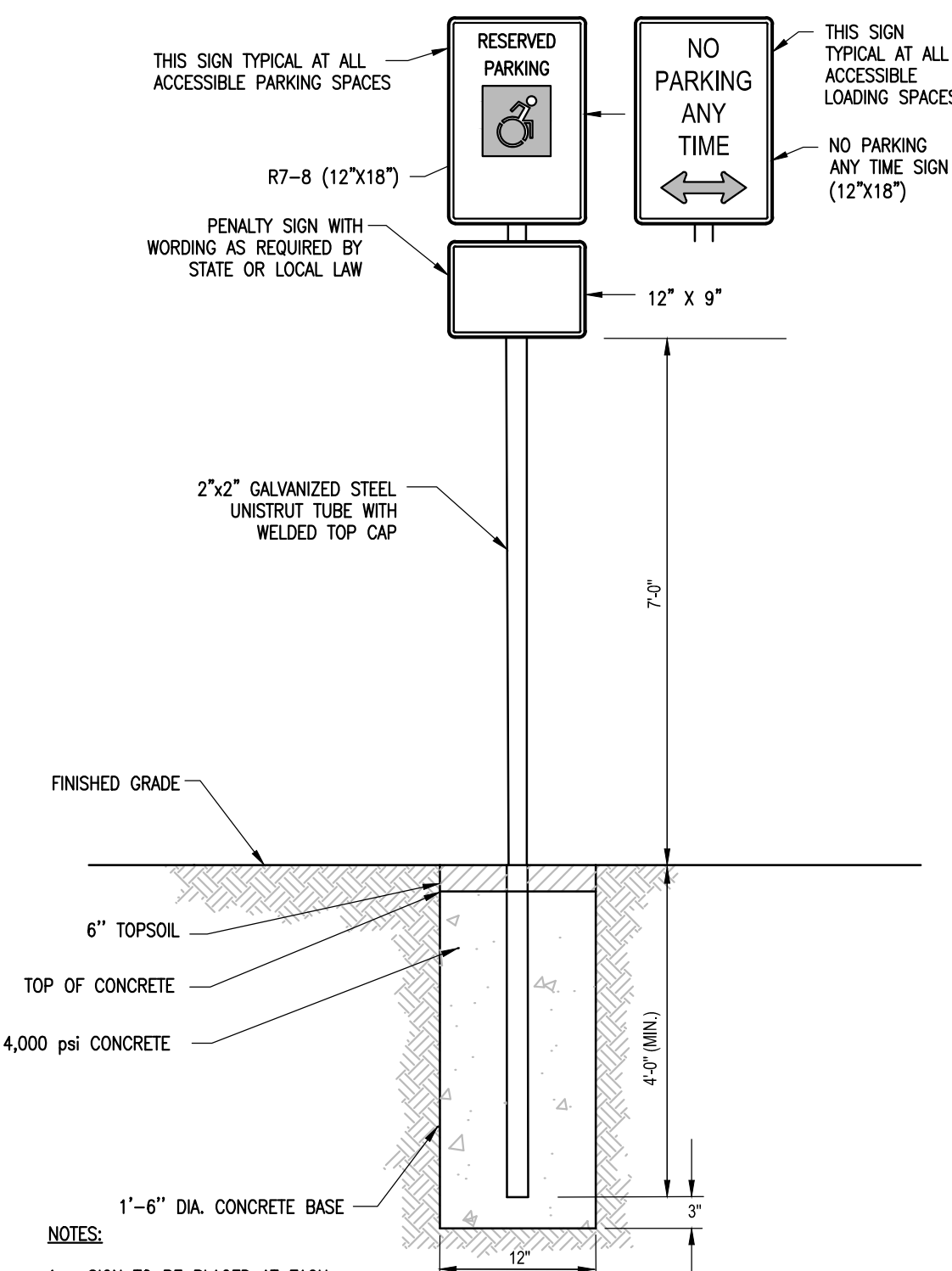
**SITE LUMINAIRE FOUNDATION DETAIL (ROUND BASE)**  
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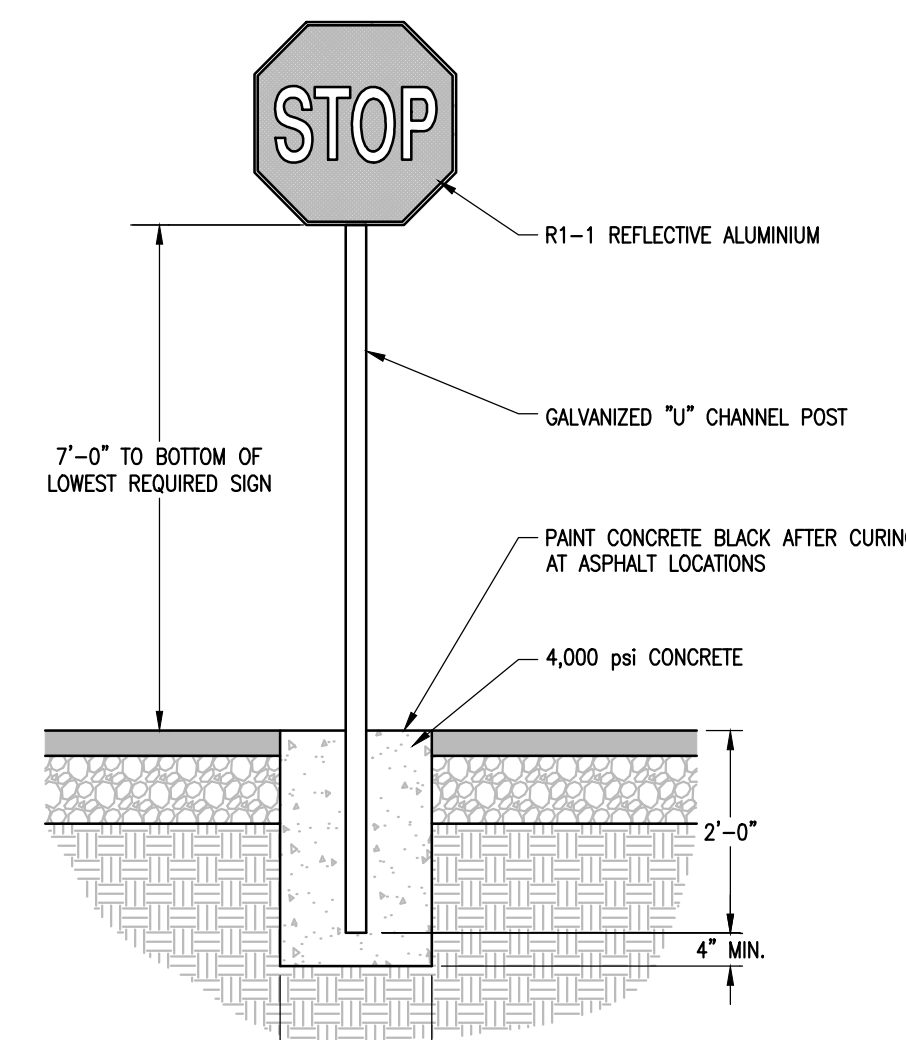
**STOP BAR DETAIL**  
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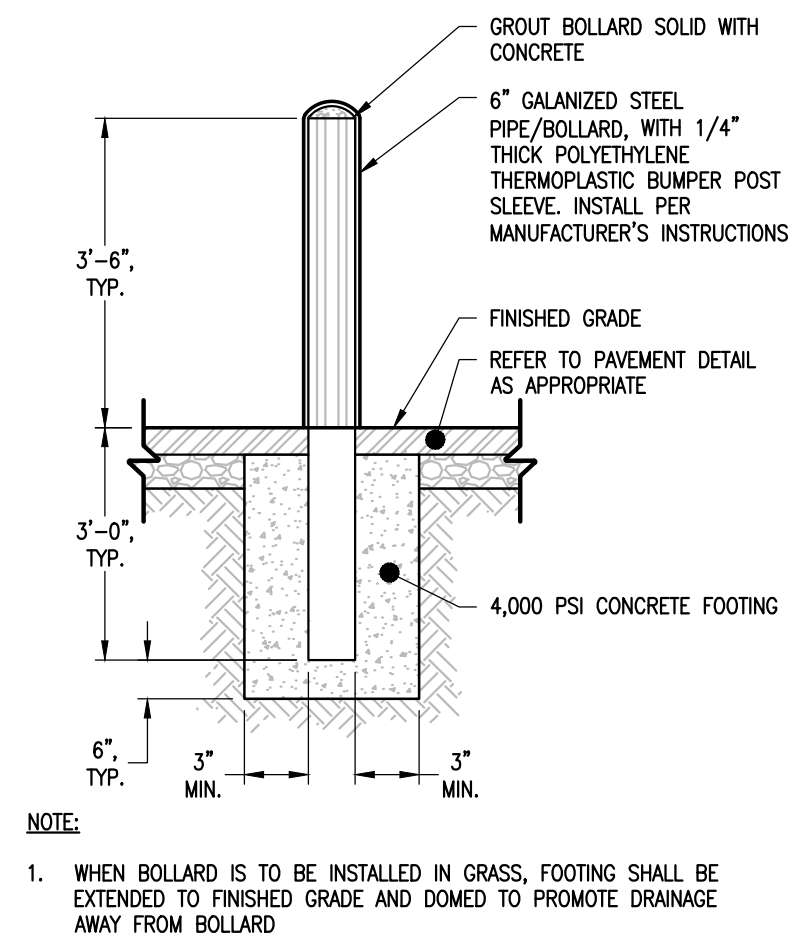
**TYPICAL POST MOUNT SIGN INSTALLATION**  
N.T.S.



**ACCESSIBLE PARKING SIGN DETAIL**  
N.T.S.



**STOP SIGN DETAIL**  
N.T.S.



**6\"/>**

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Project Manager G. URSprung, PE	Discipline Lead R. DARLING, PE
Designer S. AL GBURI	Reviewer P. HOLSBERGER, PE
Date Issued 7/6/2023	Project Number 15347.00

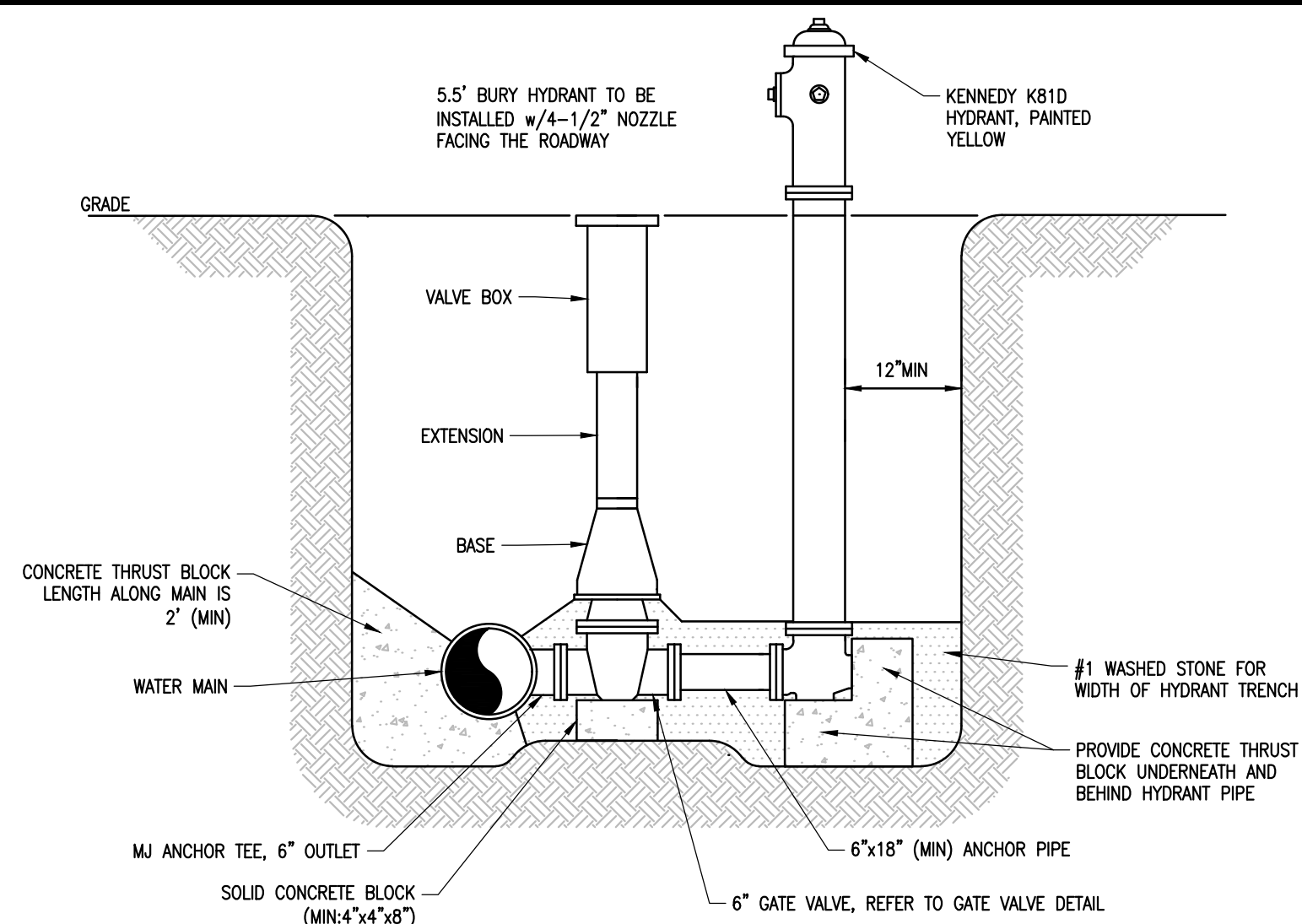
Sheet Name

**SITE DETAILS II**

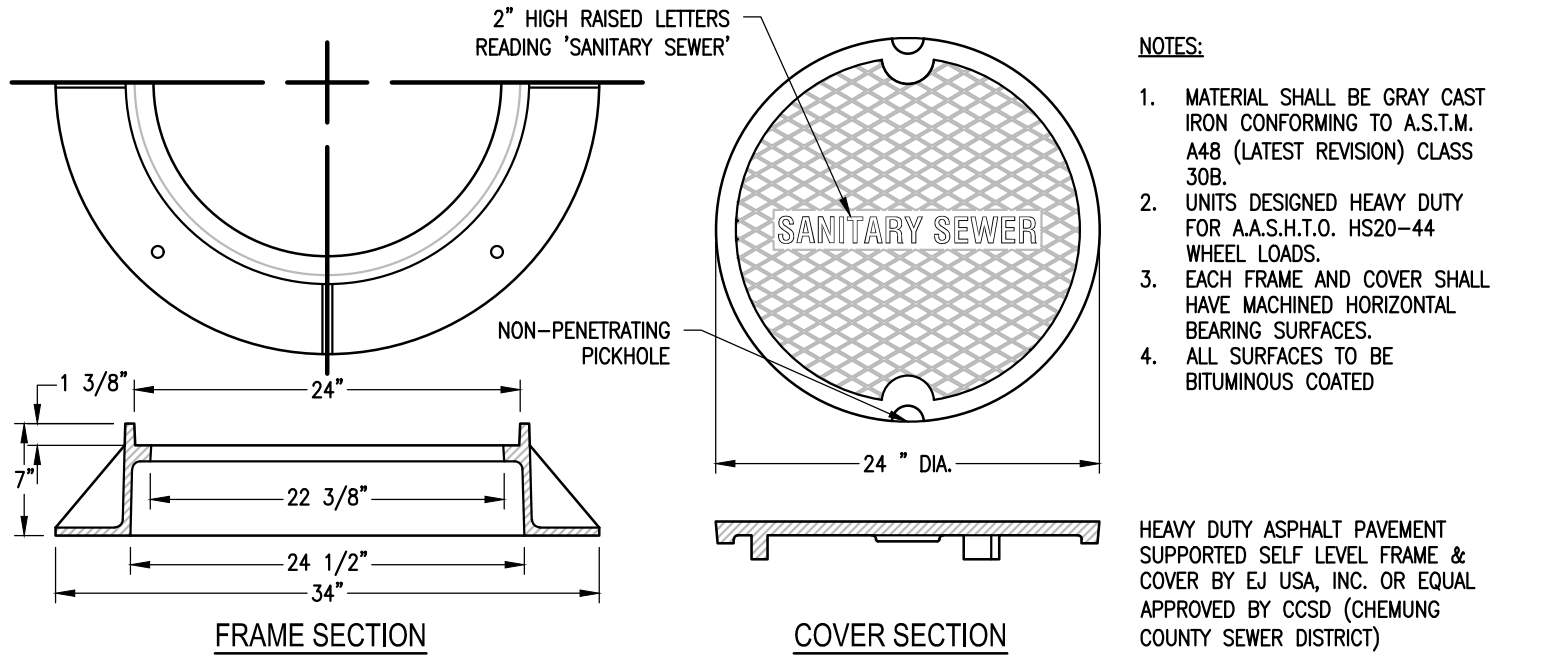
Drawing Number

**C501**

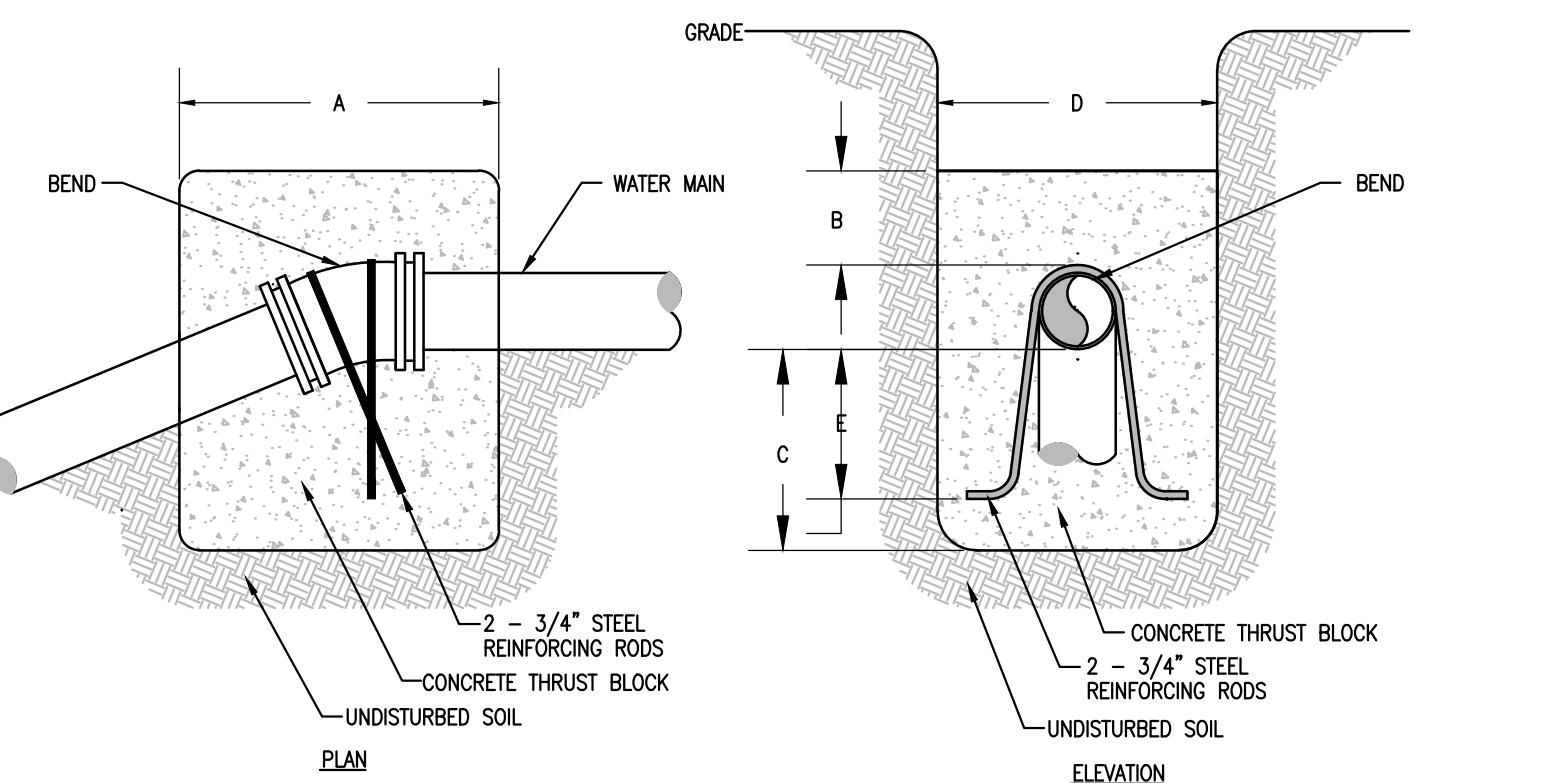




**PERPENDICULAR HYDRANT ASSEMBLY**  
N.T.S.



**SANITARY SEWER MANHOLE FRAME & COVER**  
N.T.S.



**SANITARY SEWER MANHOLE DETAIL**  
N.T.S.

BEND *	MINIMUM VOLUME OF CONCRETE DIMENSIONS	MINIMUM ALLOWABLE DIMENSIONS FOR VERTICAL THRUST BLOCKS (IN FEET)				
		A	B	C	D	E
6" x 11-1/4"	0.6 CY	1.5	1.0	1.0	4.0	0.7
6" x 22-1/2"	1.1 CY	2.0	2.0	1.0	4.0	0.7
6" x 45"	2.1 CY	3.0	2.0	1.5	4.0	1.2
8" x 11-1/4"	0.7 CY	3.0	2.0	1.25	2.5	0.75
8" x 22-1/2"	1.4 CY	4.0	2.0	1.75	3.0	1.25
8" x 45"	2.5 CY	4.5	2.0	2.25	4.0	1.75

\* COMPLETE ONLY THOSE DIMENSIONS FOR EACH TYPE OF FITTINGS THAT WILL ACTUALLY BE INSTALLED.

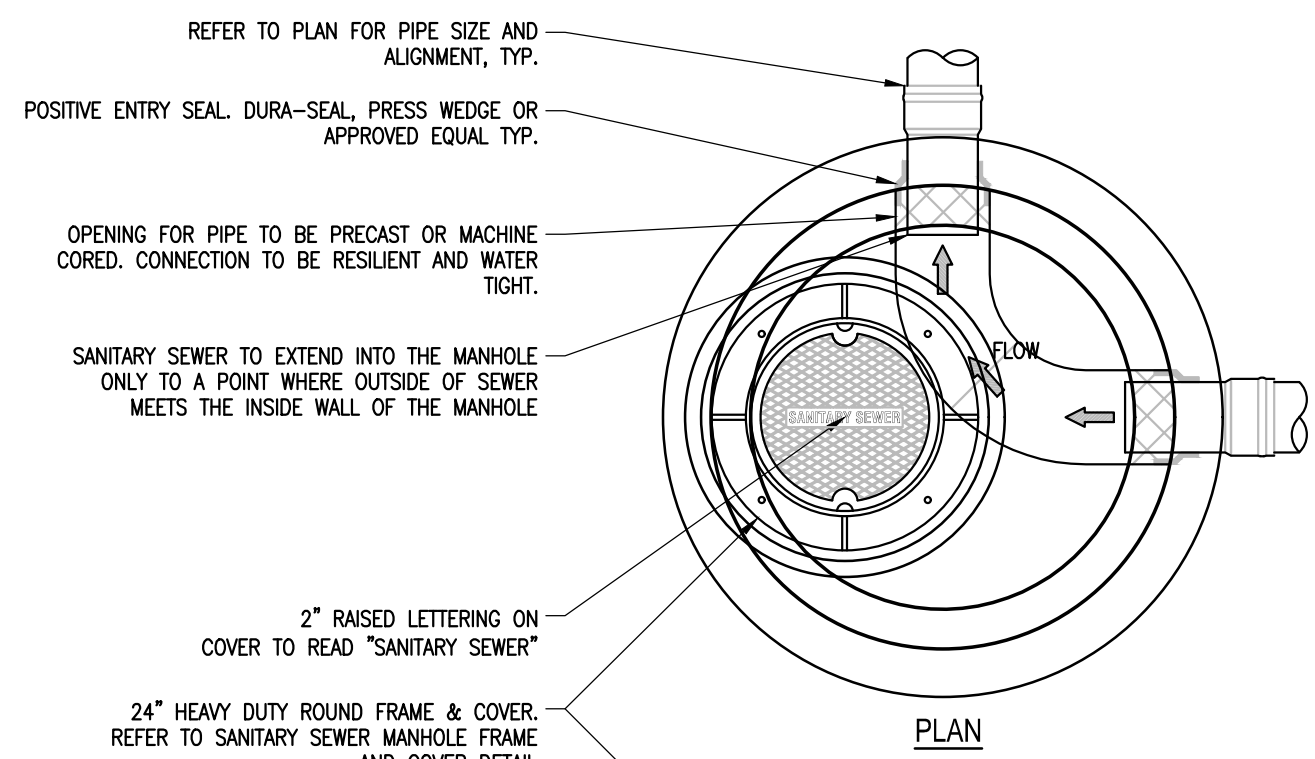
FITTING *	MINIMUM HORIZONTAL THRUST BLOCK DIMENSIONS, IN FEET, TO BE POURED AGAINST UNDISTURBED SOIL		
	H	W	A
6" x 11-1/4" BEND	1	1.1	2
6" x 22-1/2" BEND	1	1.1	2
6" x 45" BEND	2	2.2	2
6" x 90" BEND	2	4	2
6" TEE OR PLUG	1.9	3	2
8" x 11-1/4" BEND	0.8	1.7	1.5
8" x 22-1/2" BEND	1.2	2.4	1.5
8" x 45" BEND	1.7	3.3	1.5
8" x 90" BEND	2.2	4.5	1.9
8" TEE OR PLUG	1.9	3.8	1.5

NOTE: WIDTH (W) OF BLOCK SHALL NOT EXCEED TWICE THE HEIGHT (H).

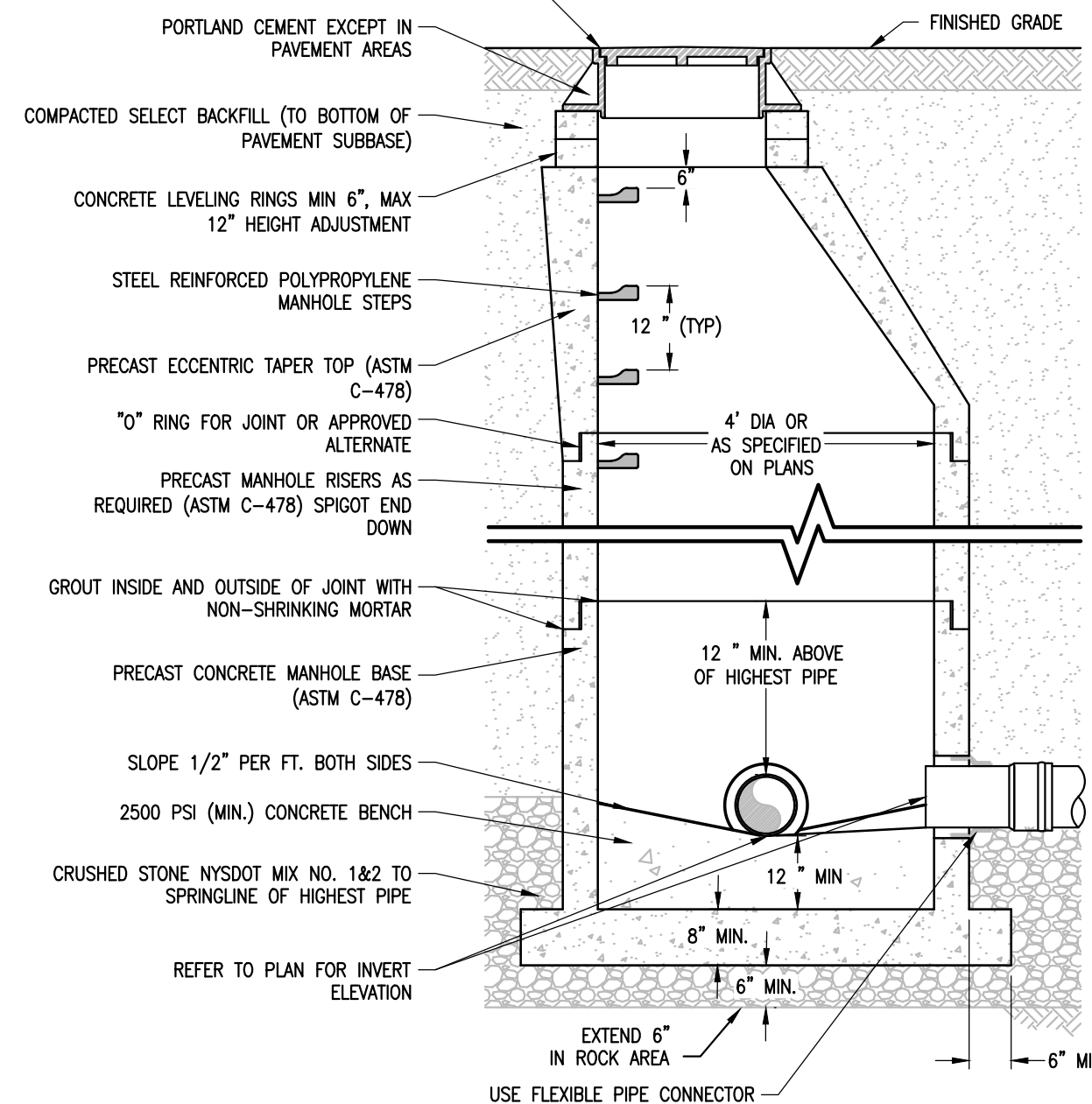
NOTE: WIDTH (W) OF BLOCK SHALL NOT EXCEED TWICE THE HEIGHT (H).

**NOTES:**

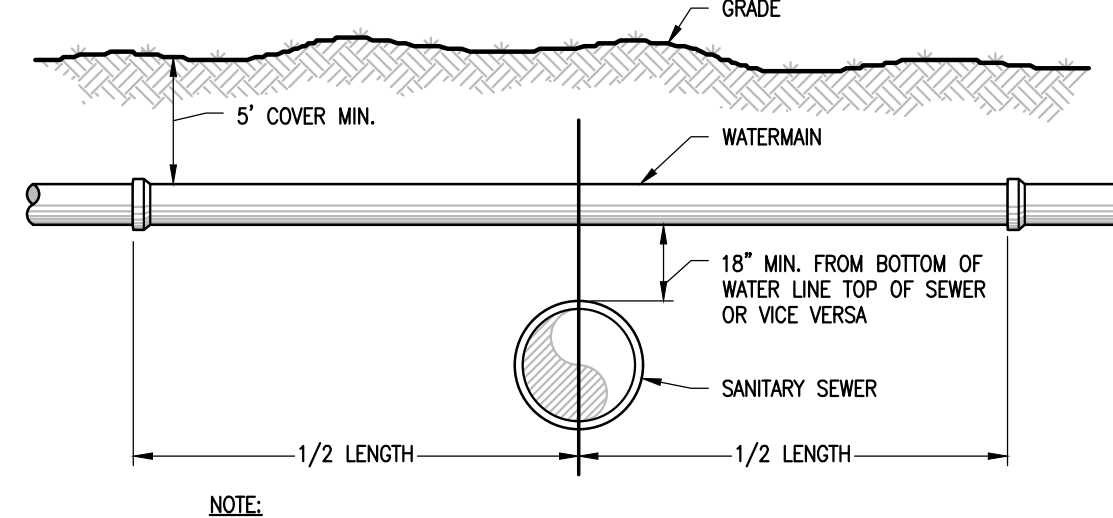
- DO NOT COVER BELLS OR FLANGES WITH CONCRETE
- WRAP ALL FITTINGS WITH VISQUEEN.
- BACK ALL TEES ACCORDING TO SIZE OF BRANCH.
- BACKING FUTURE LINE EXTENSIONS SHALL BE SUCH THAT LATER REMOVAL IS POSSIBLE.
- ALL BENDS WHERE FITTINGS ARE USED, BOTH HORIZONTAL OR VERTICAL SHALL BE BACKED.
- REACTION BACKING TABLE IS BASED ON 150 P.S.I. AND SOIL BEARING PRESSURE OF 2,000 LB./SQ.FT. ADDITIONAL BACKING MAY BE REQUIRED IN SOME AREAS AS DIRECTED BY ENGINEERS.
- ALL CONCRETE SHALL BE 2500 P.S.I. MIN.



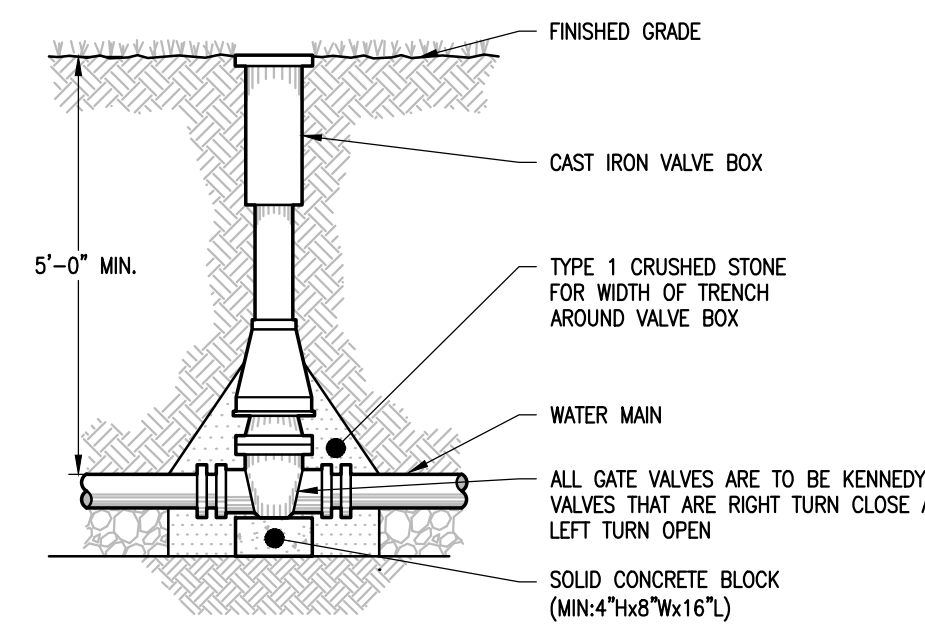
**PLAN**



**SECTION**



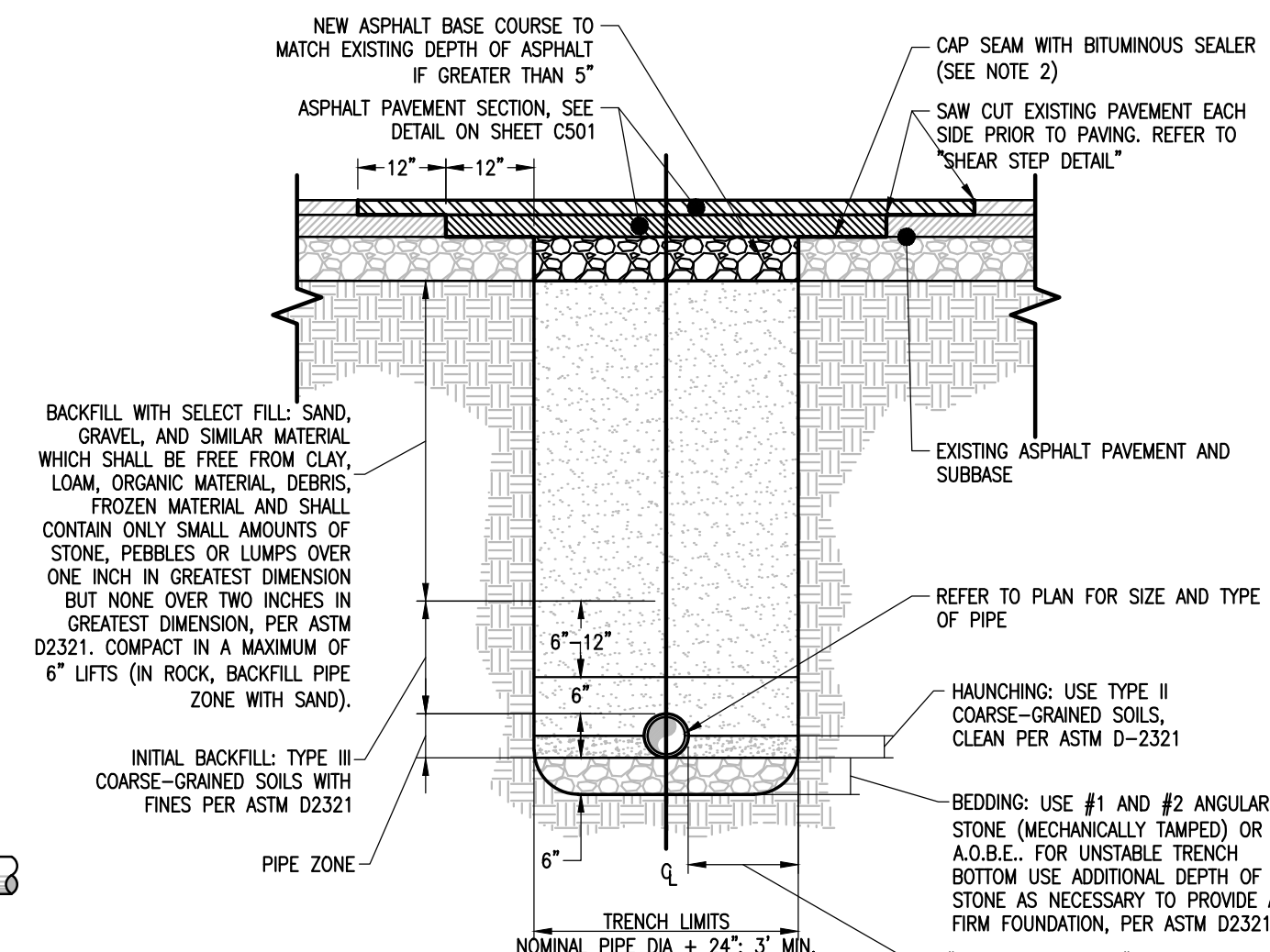
**TYPICAL WATER LINE - SEWER LINE CROSSING**  
N.T.S.



**NOTES:**

- VALVE BOX SHALL BE CENTERED ON VALVE AND SET ON COMPACTED BACKFILL.
- VALVE SHALL NOT SUPPORT VALVE BOX.
- ALL BODY AND BONNET BOLTS SHALL BE STAINLESS STEEL.
- ALL VALVES SHALL BE OPEN LEFT.

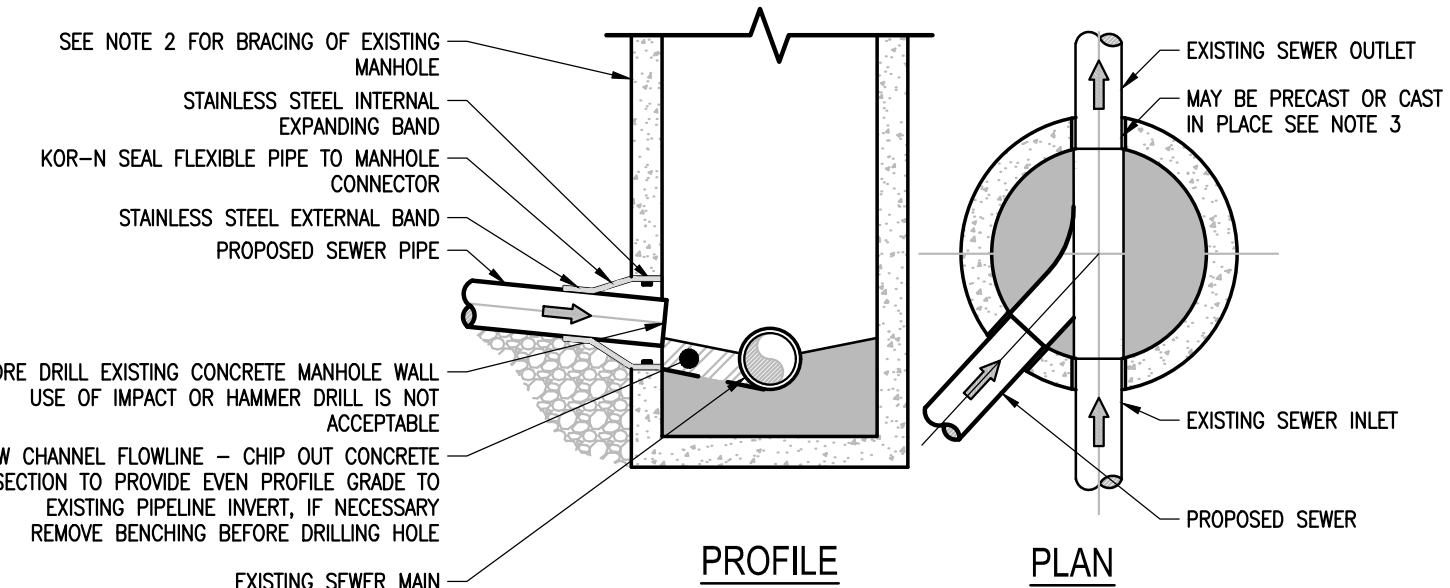
**GATE VALVE DETAIL (WATER MAIN)**  
N.T.S.



**NOTES:**

- EXISTING PAVEMENT SHALL BE SAW CUT TO OBTAIN A STRAIGHT AND NEAT EDGE FOR PAVING. FINAL SAW CUT SHALL BE MADE PRIOR TO PAVING AFTER BACKFILL OF TRENCH TO BOTTOM OF NEW PAVEMENT.
- ALL SEAMS BETWEEN EXISTING AND NEW ASPHALT SURFACES SHALL BE SEALED WITH AN ASPHALT FILLER CORRESPONDING TO THE MATERIAL REQUIREMENTS OF MYSDOT. COST TO FURNISH AND APPLY THIS MATERIAL SHALL BE INCLUDED IN THE PRICE BID FOR ASPHALT TOP.
- HIGHWAY INSPECTION MAY REQUIRE 10' WIDE SURFACE REPAIR AS FIELD DETERMINED.

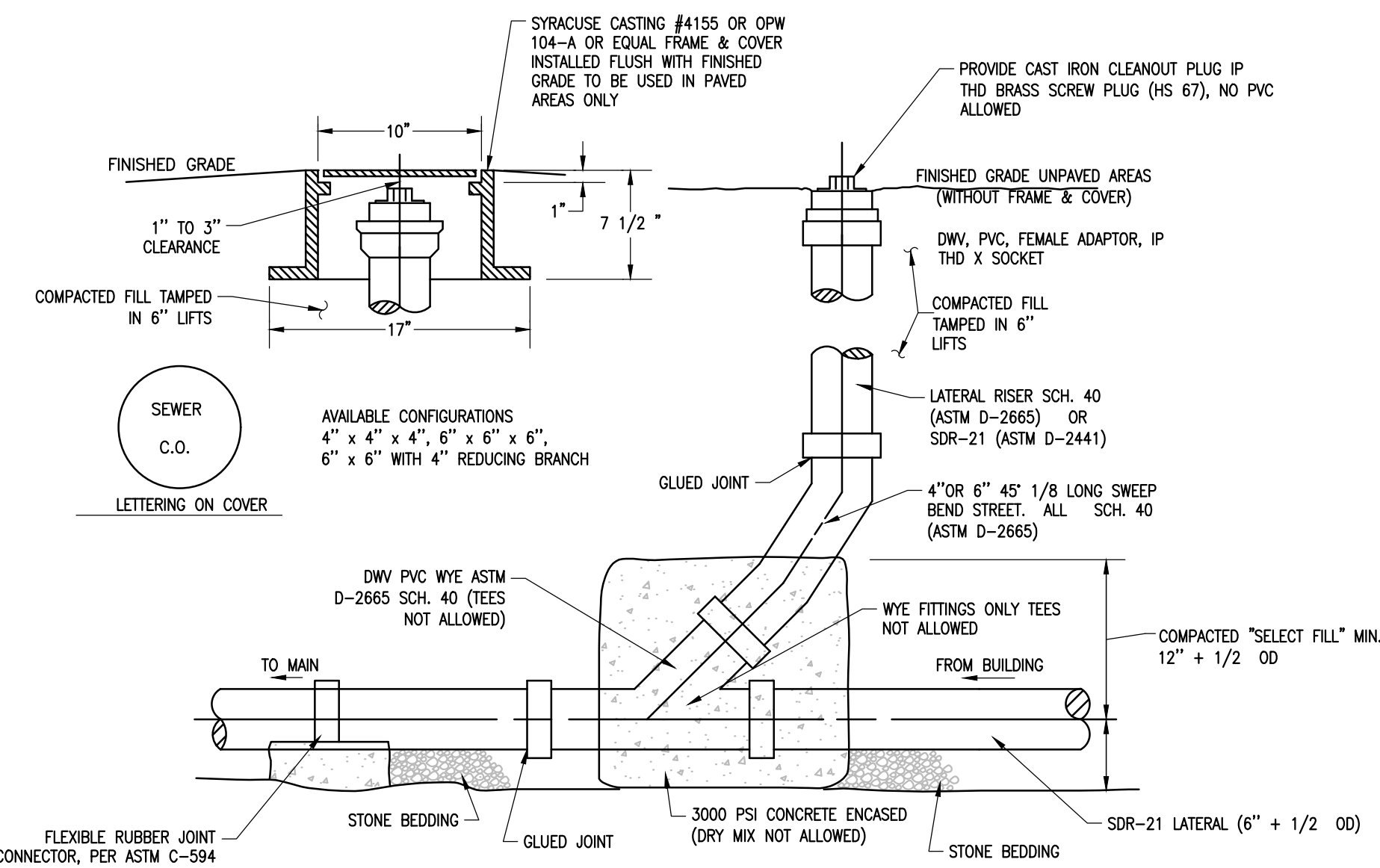
**SANITARY SEWER TRENCH & RESTORATION DETAIL (PAVED AREAS)**  
N.T.S.



**NOTES:**

- THE CROWN OF THE NEW SEWER SHALL NOT BE CONSTRUCTED LOWER THAN THE CROWN OF THE EXISTING SEWER MAIN. THE INVERT OF THE NEW SEWER SHALL BE CONSTRUCTED AT LEAST 3" ABOVE EXISTING MAIN SEWER INVERT.
- EXISTING MANHOLE STRUCTURE SHALL BE SUFFICIENTLY BRACED AND PROTECTED TO PREVENT ANY SHIFTING OR DAMAGE TO THE MANHOLE.
- THE EXISTING MANHOLE BASE MAY BE ROUND OR SQUARE. CONTRACTOR SHALL FIELD VERIFY AND ADAPT METHOD AS APPROPRIATE.
- CONTRACTOR MUST COAT ALL DISTURBED AREAS OF MANHOLE WITH TWO COATS OF SIKAGARD NO. 62 OR APPROVED EQUAL FOR INTERIOR OF BASE AND TWO COATS OF SUPER SERVICE BLACK FOR ALL OTHER SURFACES.
- STUB AT MANHOLE SHALL NOT EXCEED 100 DEGREES ALIGNMENT ENTERING AGAINST EXISTING UPSTREAM SEWER.
- THE DISTRICT MUST BE NOTIFIED 48 HOURS IN ADVANCE OF CONSTRUCTION FOR INSPECTION OF CONNECTION.
- STUBS 4" MAX. R.C.P. & D.I.P., 1" MAX. ALL OTHER PIPE MATERIALS, FROM OUTSIDE FACE.
- CORED OPENINGS IN MANHOLE RISER SECTIONS SHALL BE A MINIMUM OF 6" FROM A RISER JOINT.
- NO IMPACT DEVICES SHALL BE USED FOR MAKING NEW HOLES IN EXISTING MANHOLES OR CHAMBERS.
- CORE-DRILL CIRCULAR OPENING IN MANHOLE WALL OF DIAMETER REQUIRED TO FIT THE PROPERLY SIZED BOOT.
- KOR-N SEAL FLEXIBLE RUBBER BOOT OR APPROVED EQUAL SHALL BE USED FOR WATERTIGHT CONNECTION.
- CUT, SHAPE, AND SLOPE NEW INVERT CHANNEL IN THE EXISTING CONCRETE BENCH FOR SMOOTH FLOW FROM NEW SANITARY SEWER CONNECTION.
- CLEAN EXISTING MANHOLE OF ANY DIRT, CONCRETE, OR DEBRIS WHICH MAY ACCUMULATE DURING THE CONSTRUCTION PROCESS.

**CORED CONNECTION TO EXISTING SEWER MANHOLE**  
N.T.S.

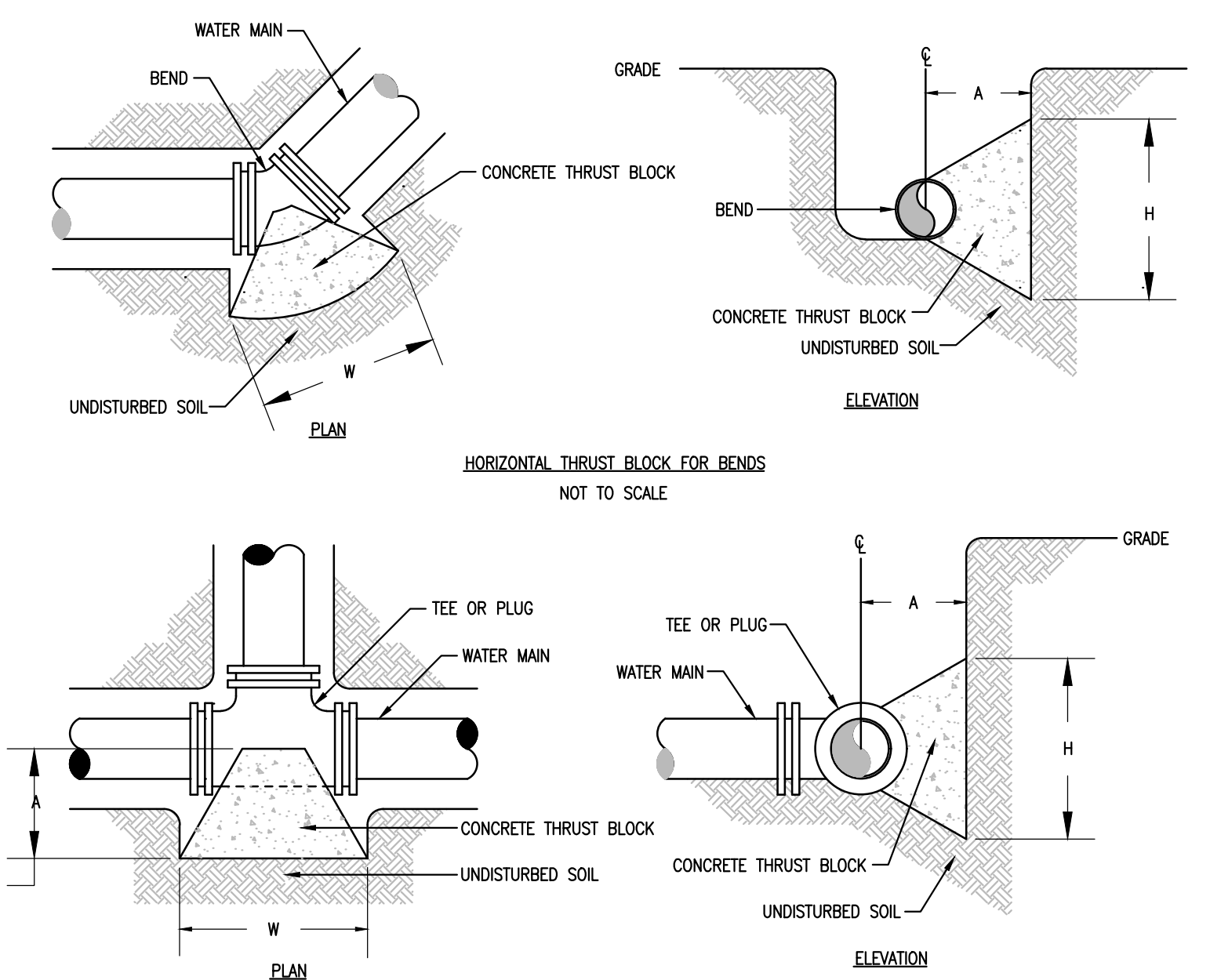


**NOTES:**

- IT IS RECOMMENDED THAT ALL SOLVENT WELD JOINTS BE MADE AS FOLLOWS:
- CLEAN DRY HUBS & SPOTS
  - PRIMER APPLIED TO PARTS BEING CONNECTED
  - PVC SOLVENT WELD CEMENT APPLIED DIRECTLY OVER PRIMER
  - PVC TYPE 1 IS COMPATIBLE FOR SOLVENT WELDING TO SDR-21 OR ANY OTHER PVC TYPE 1 PIPE MADE TO "STEEL PIPE" OUTSIDE DIMENSIONS

**SANITARY AND STORM SEWER CLEAN-OUT**  
N.T.S.

**DISINFECTION/BLOW-OFF/SAMPLING TAP**  
N.T.S.



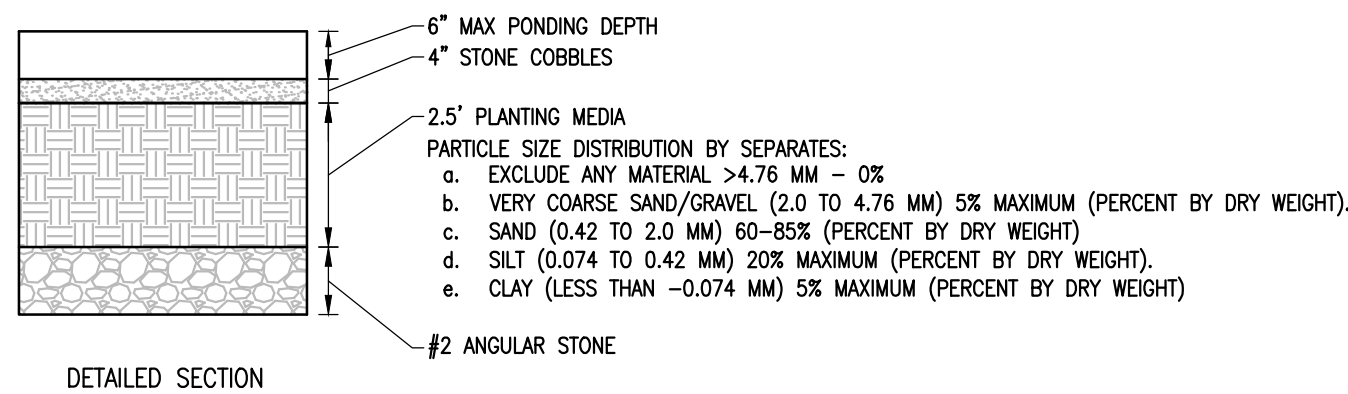
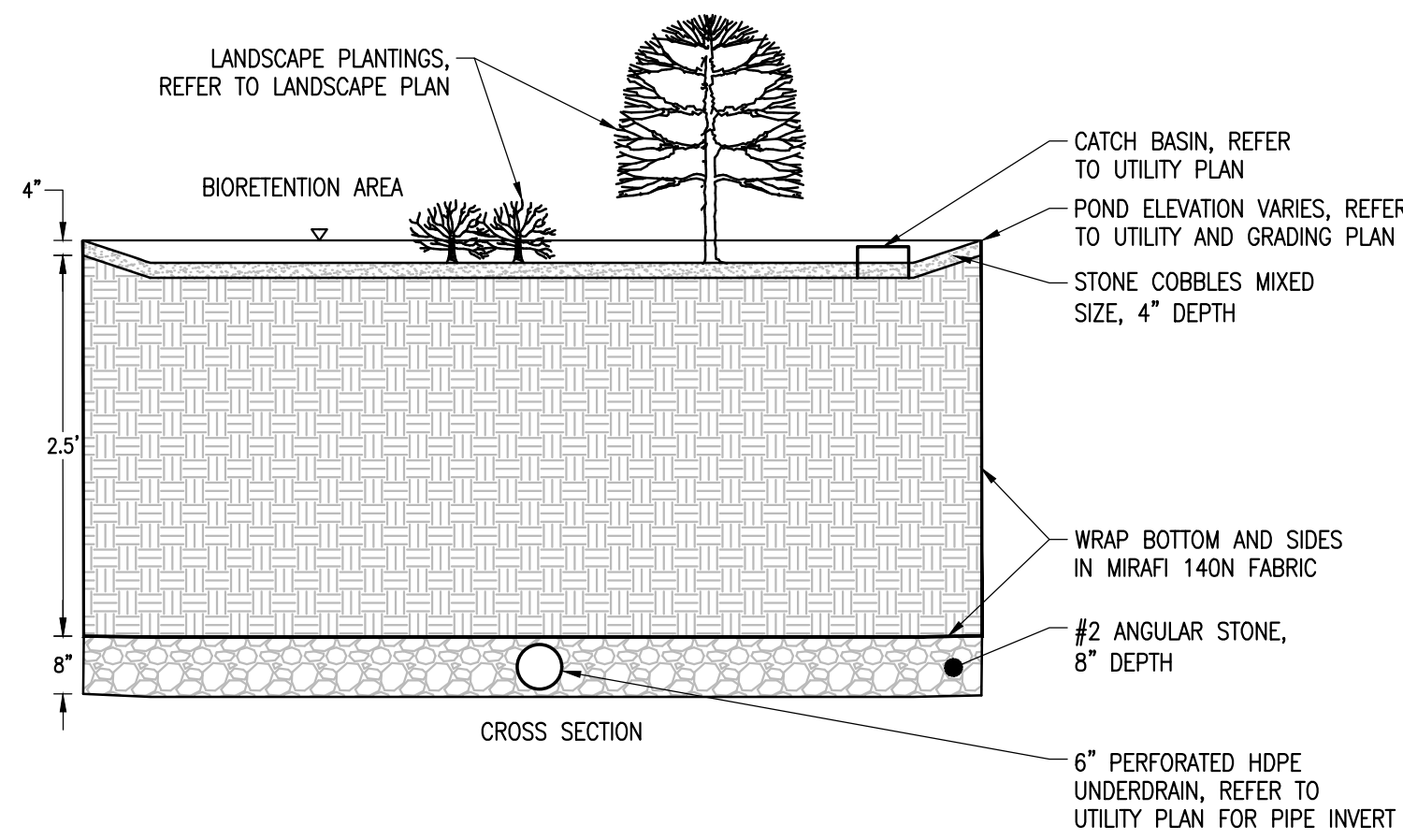
**UTILITY THRUST BLOCK DETAIL**  
N.T.S.

Date Revised	Description
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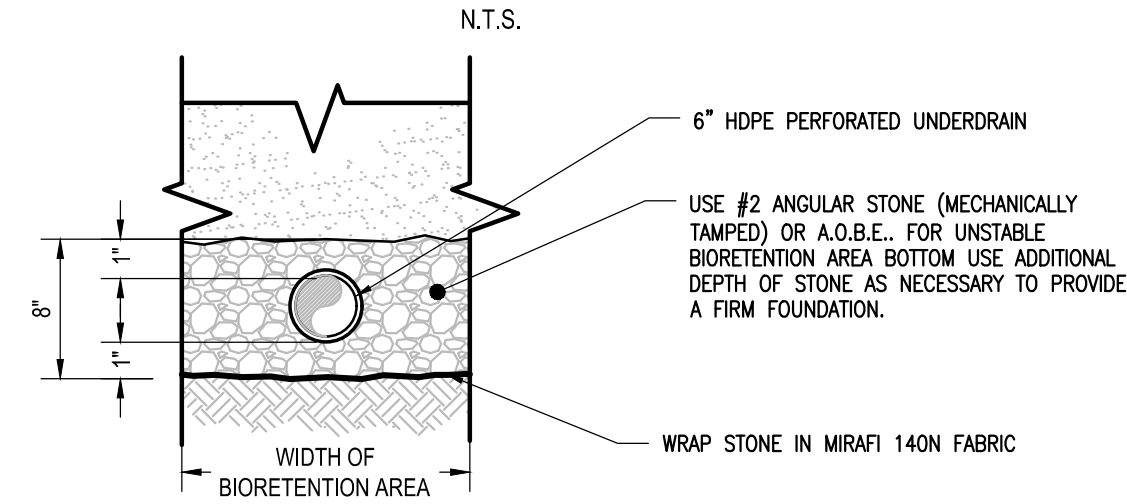
**NOT FOR**  
**CONSTRUCTION**  
**60 % SUBMISSION**

Project Manager G. URSPRUNG, PE	Discipline Lead R. DARLING, PE
Designer S. AL GBURI	Reviewer P. HOLSBERGER, PE
Date Issued 7/6/2023	Project Number 15347.00
Sheet Name	

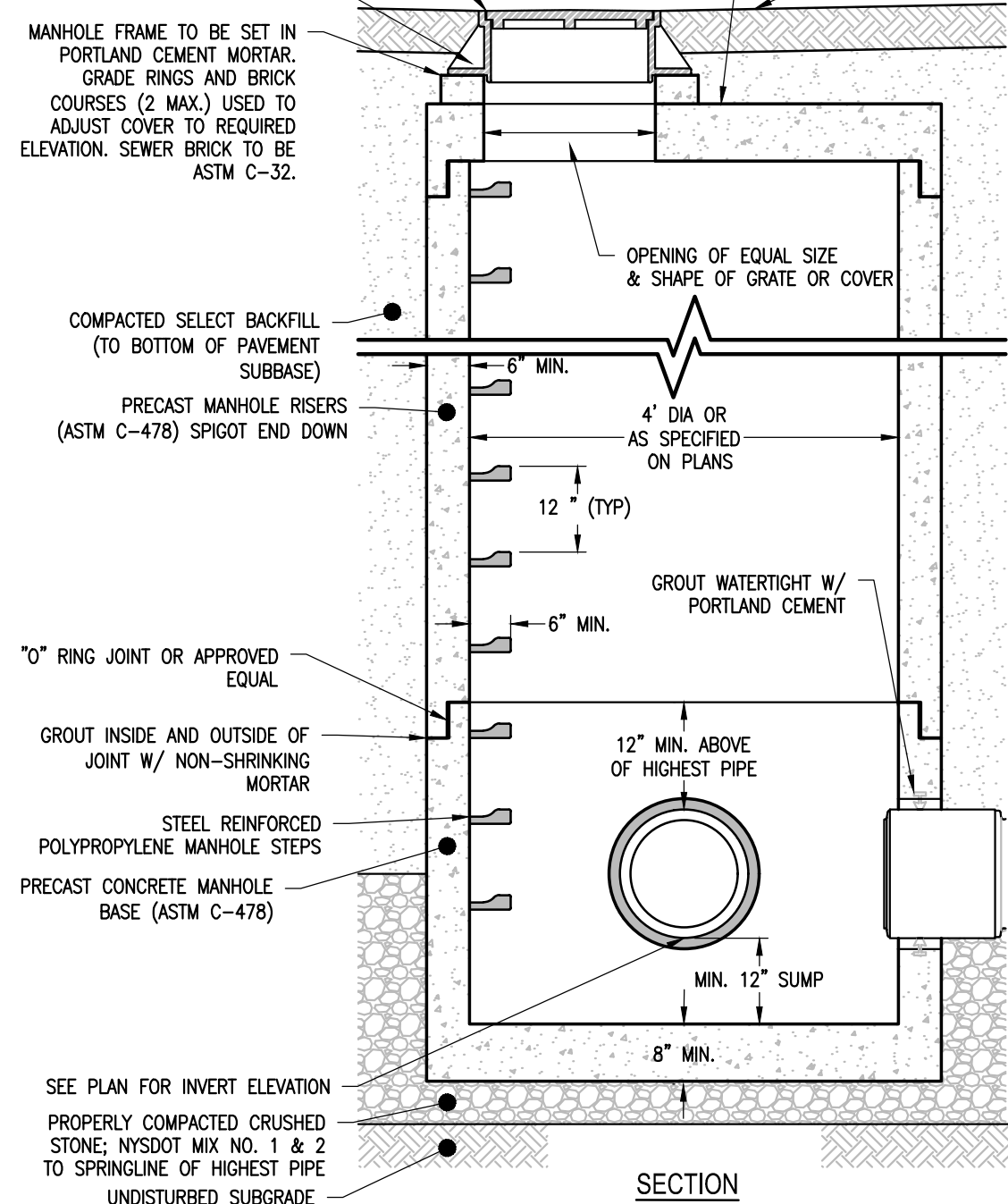
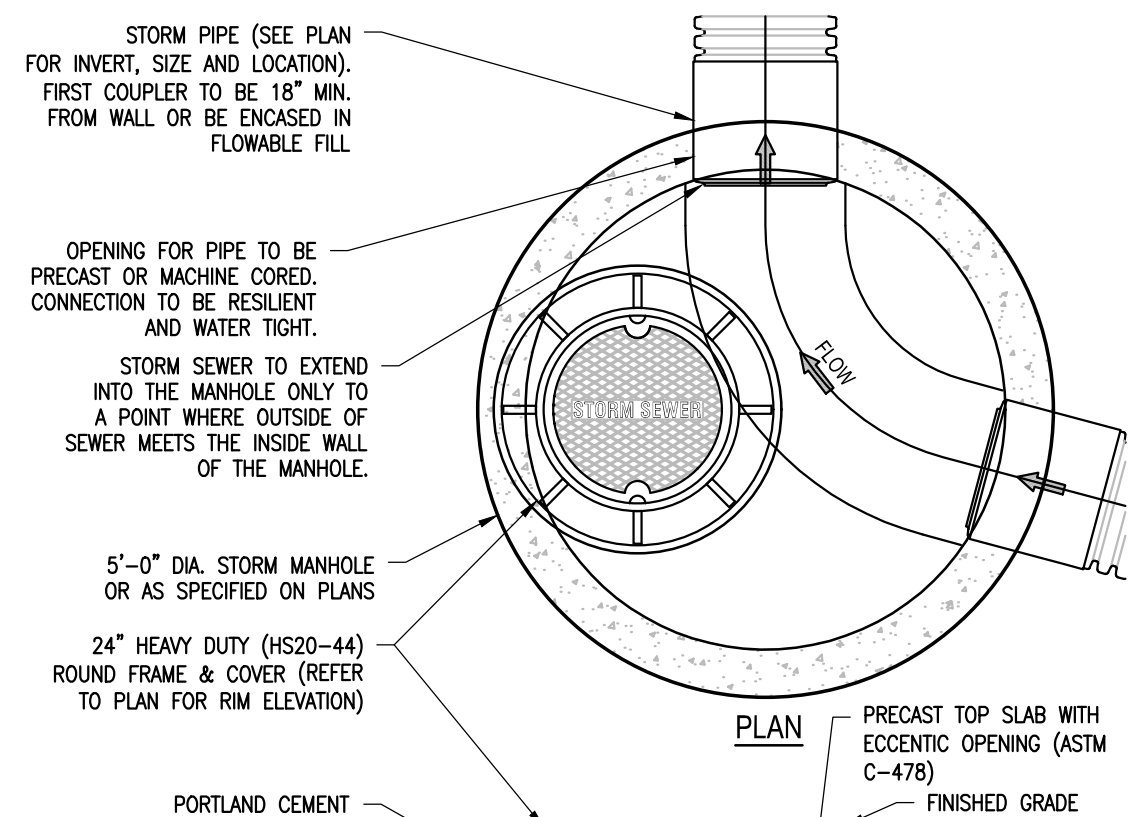




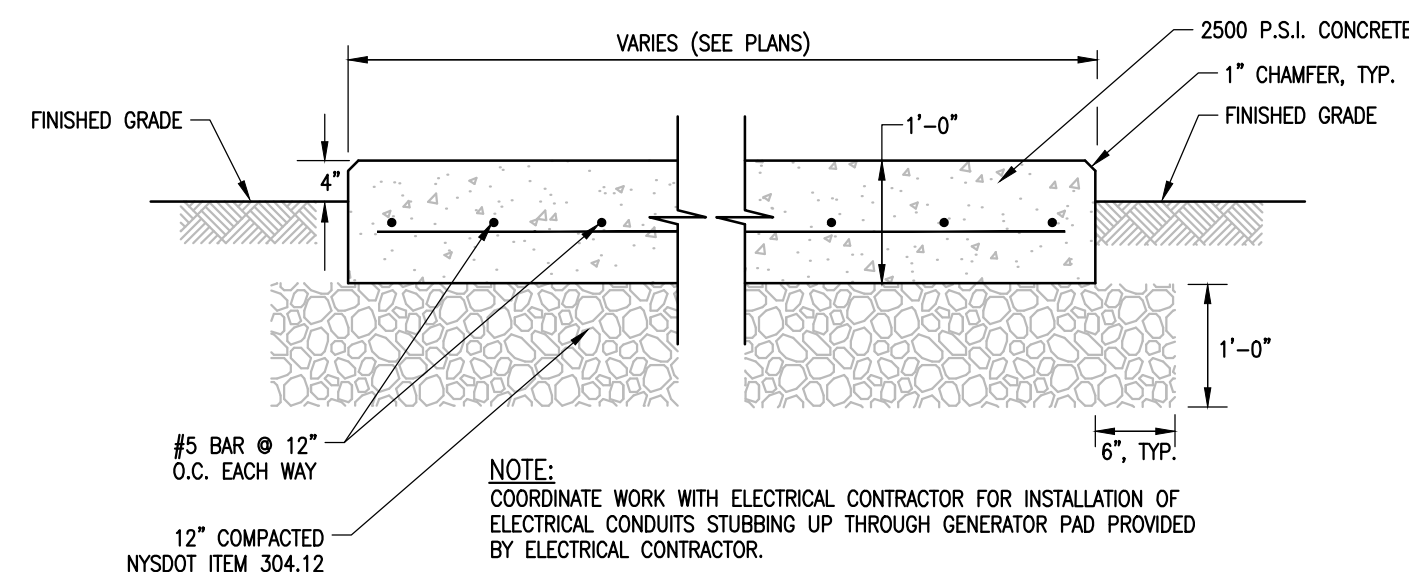
**BIO-RETENTION AREA DETAIL**  
N.T.S.



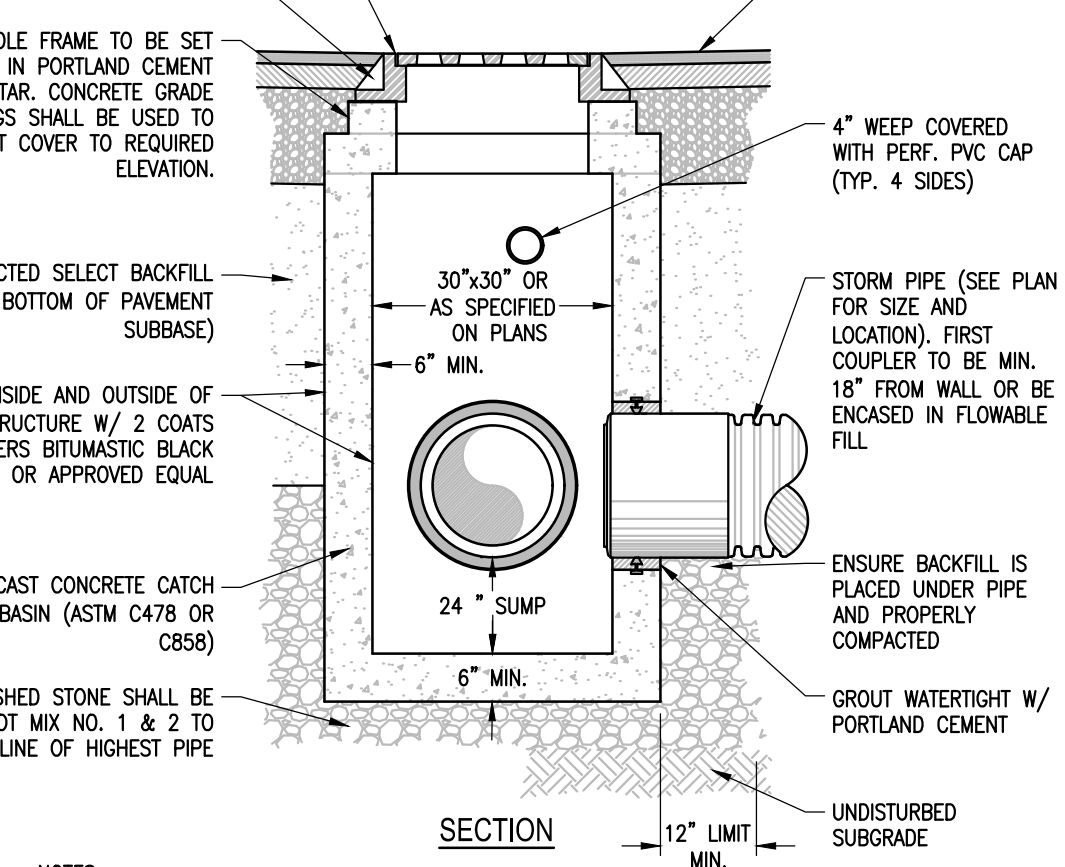
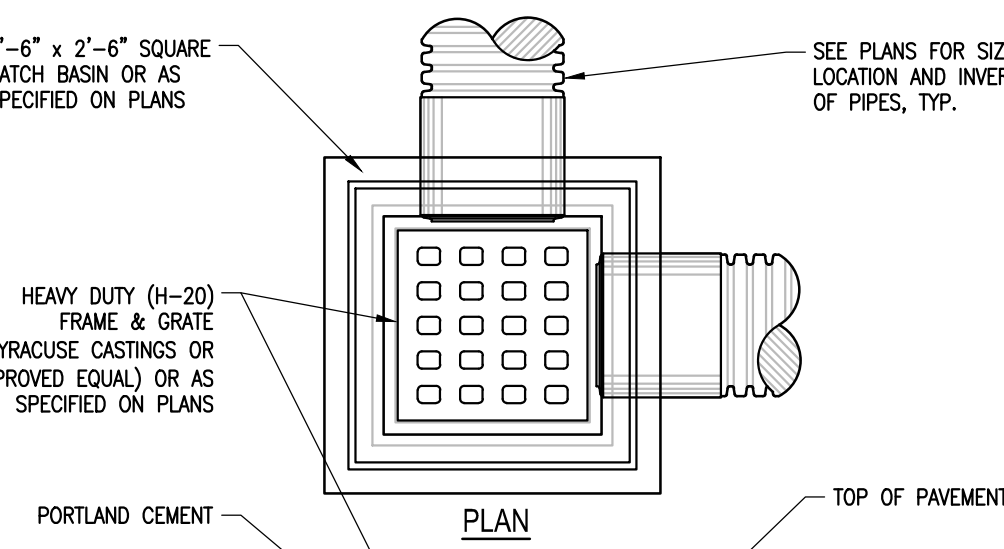
**UNDERDRAIN DETAIL**  
N.T.S.



**STORM MANHOLE DETAIL**  
N.T.S.

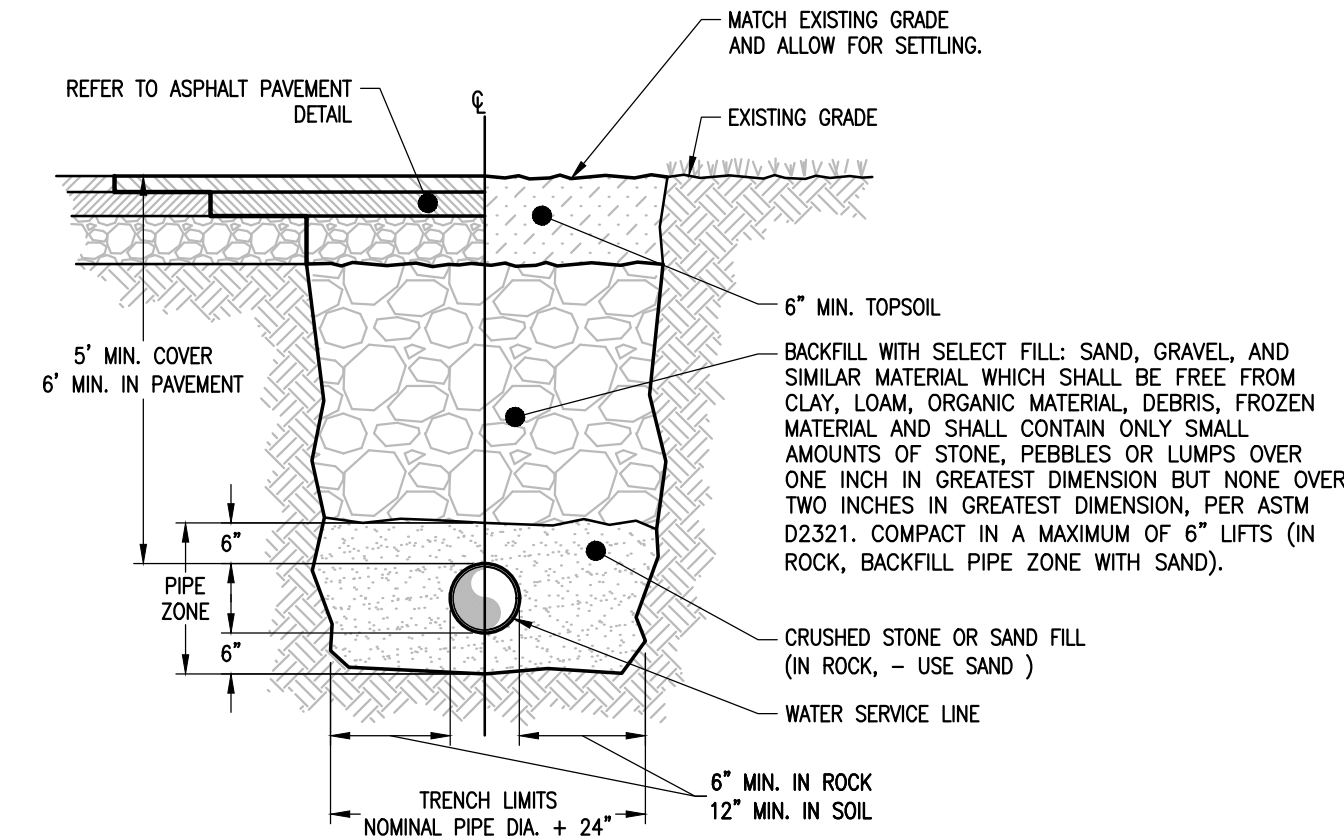


**GENERATOR PAD DETAIL**  
N.T.S.



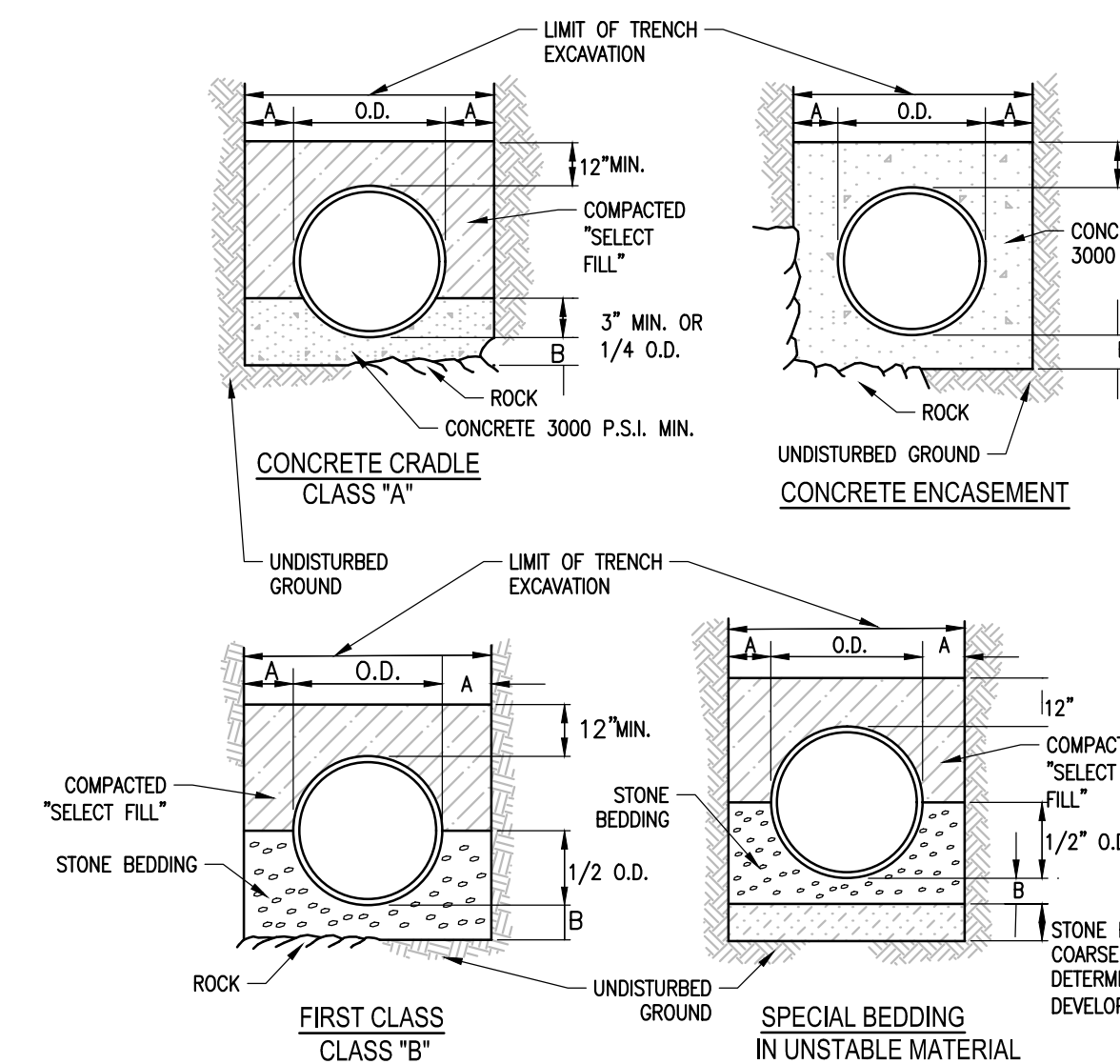
- NOTES:
1. ALL STORM SEWER OUTLETS TO HAVE A CATCH BASIN TRAP INSTALLED ON 12" OR LESS PIPES, NEEDHAM FOUNDRY R-3700 SERIES OR APPROVED EQUAL.
  2. ALL STORM STRUCTURES TO HAVE A MINIMUM 2' SUMP.

**CATCH BASIN DETAIL**  
N.T.S.

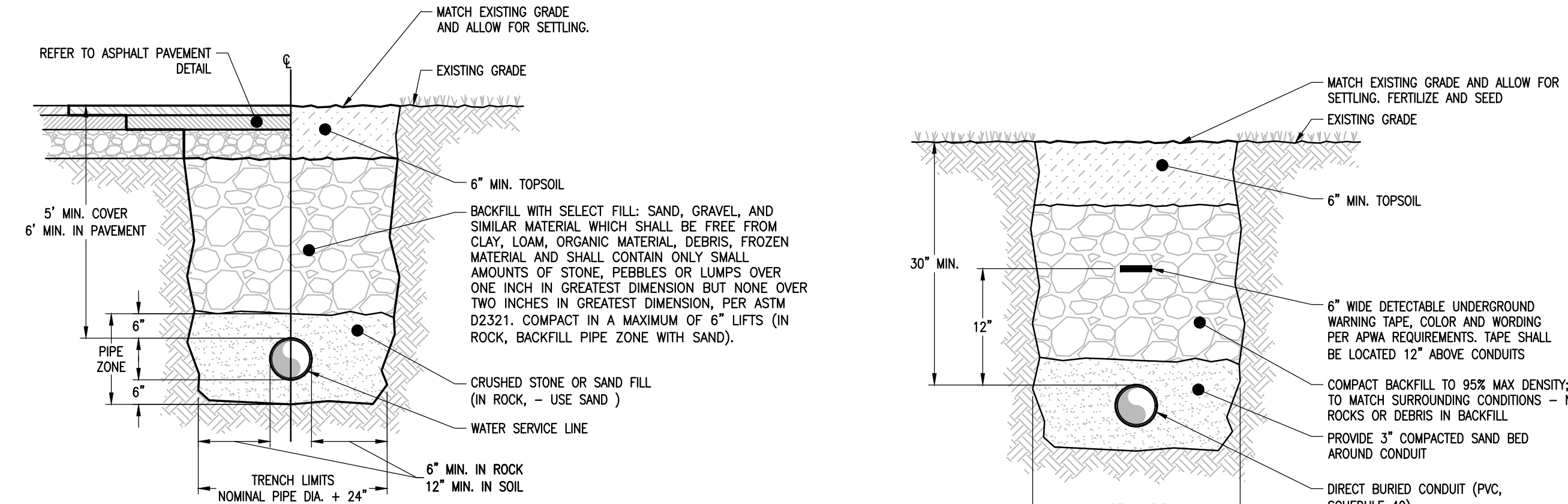


- NOTE:
- THIS DETAIL TO APPLY TO ALL WATER MAIN AND WATER SERVICE INSTALLATIONS; ALL WATER MAINS & SERVICE LINES WILL BE INSTALLED WITH A MINIMUM OF 5' OF COVER, INCLUDING UNDER THE EXISTING ON-SITE DRAINAGE CHANNELS.

**WATER MAIN & SERVICE TRENCH DETAIL**  
N.T.S.



**UTILITY BEDDING MATERIAL DETAIL**  
N.T.S.



- NOTES:
1. REPAIR ALL SETTLEMENT
  2. MINIMUM TOP SOIL DEPTH 6"
  3. MULTIPLE CONDUITS SHALL BE SPACED 7" ON CENTER

**DIRECT BURIED CONDUIT TRENCH DETAIL**  
(IN GRASS)  
N.T.S.

**SUN COMMUNITIES**

**HOVEYS ISLAND**

TOWN OF HENDERSON  
JEFFERSON COUNTY  
NEW YORK

Date Revised	Description

**NOT FOR CONSTRUCTION**  
**60% SUBMISSION**

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Project Manager G. URSPRUNG, PE	Discipline Lead R. DARLING, PE
Designer S. AL GBURI	Reviewer P. HOLSBERGER, PE
Date Issued 7/6/2023	Project Number 15347.00

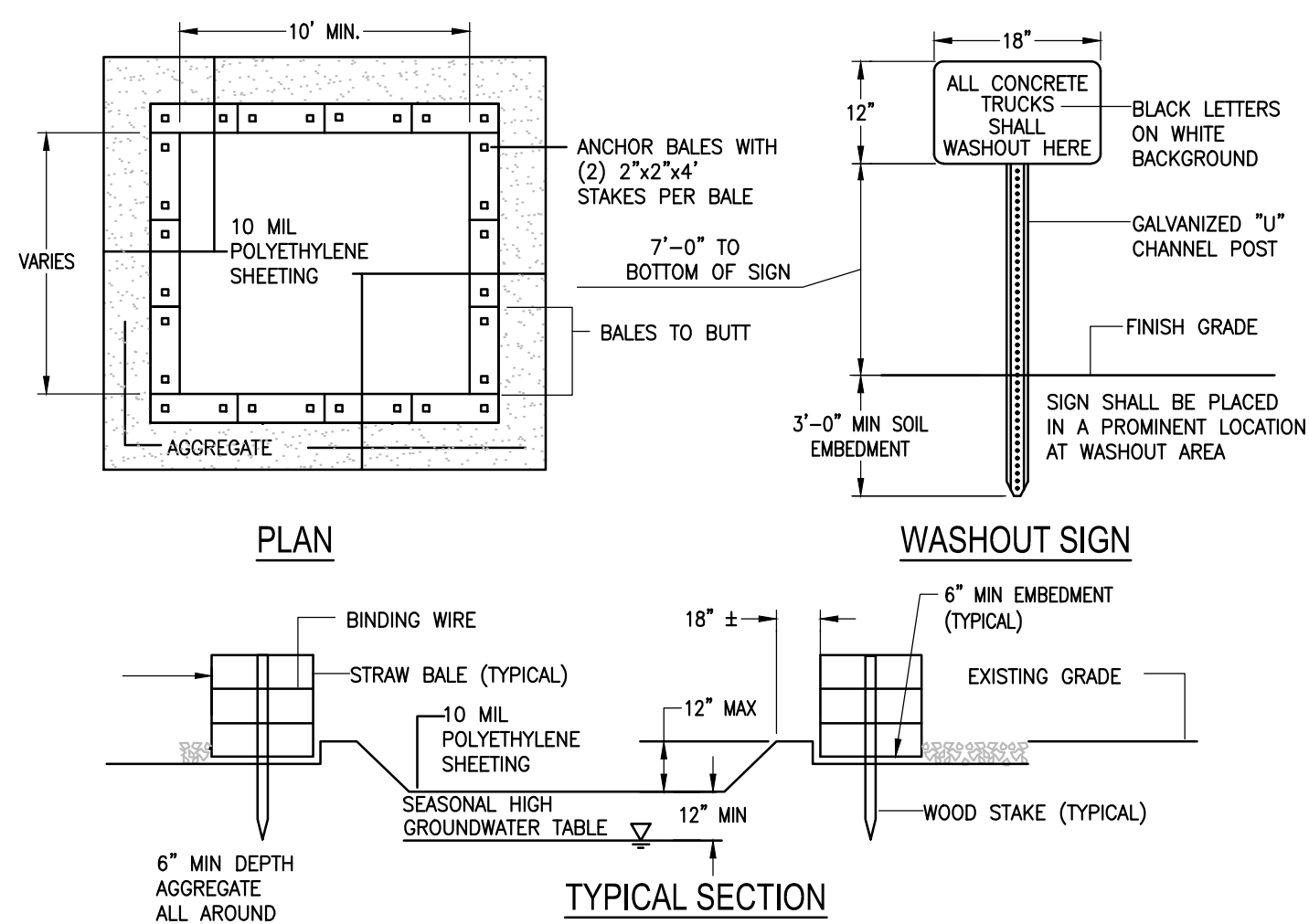
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**UTILITY DETAILS II**

Drawing Number

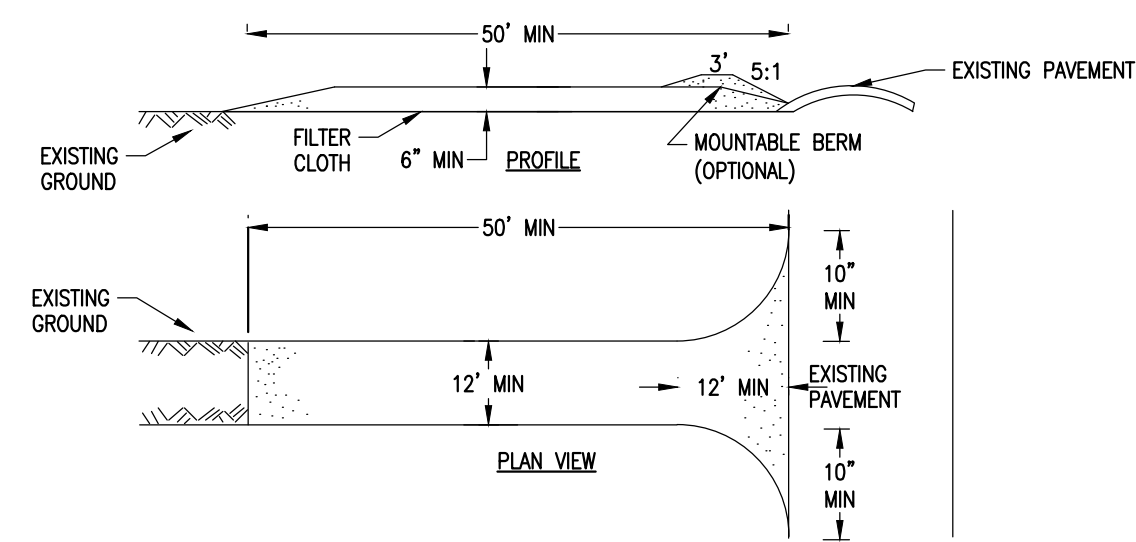
**C503**





- CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
- CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
- WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
- WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
- ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
- AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

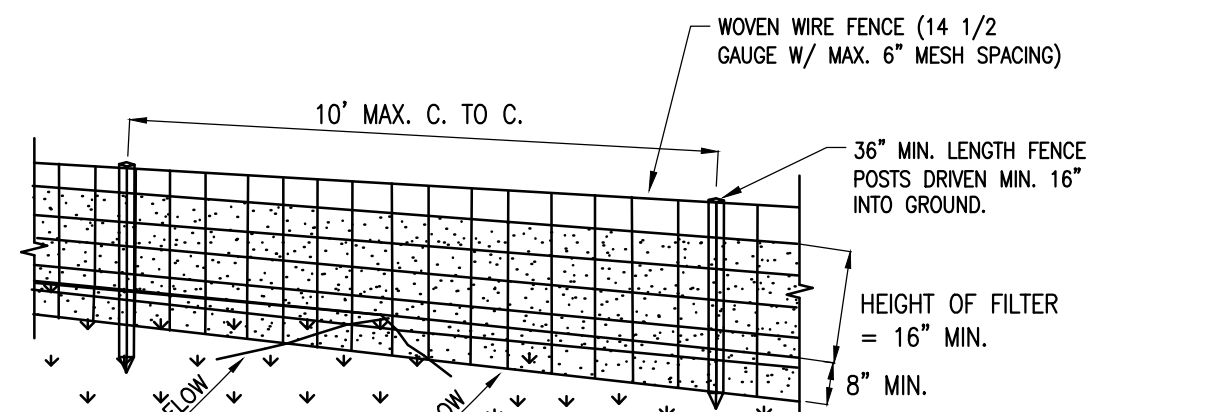
**CONCRETE WASHOUT AREA**  
N.T.S.



**CONSTRUCTION SPECIFICATIONS**

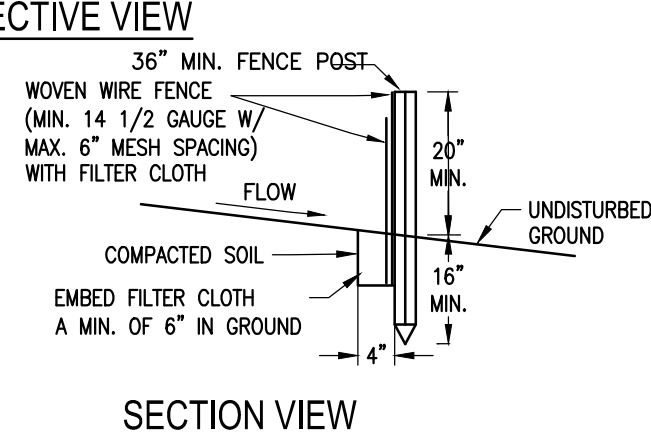
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS, TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH

**TEMPORARY STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
N.T.S.

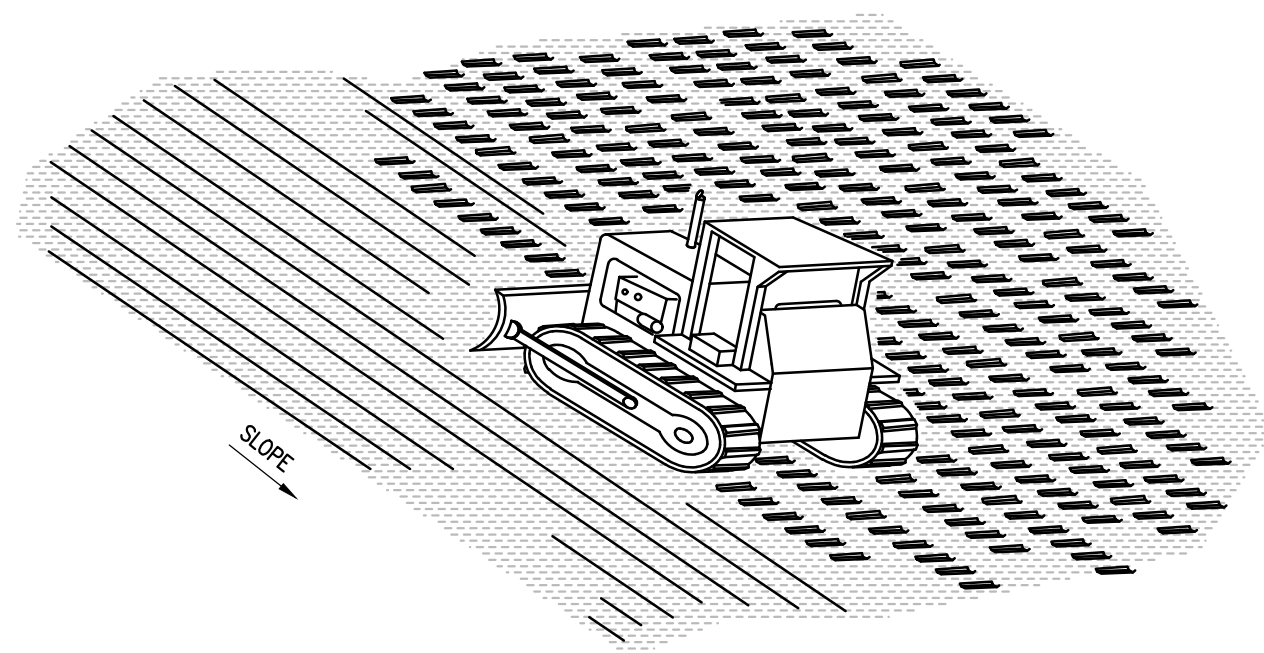


**CONSTRUCTION SPECIFICATIONS**

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "J" OR "U" TYPE OR HARDWOOD.
- FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILURKA T140N, OR APPROVED EQUIVALENT.
- PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



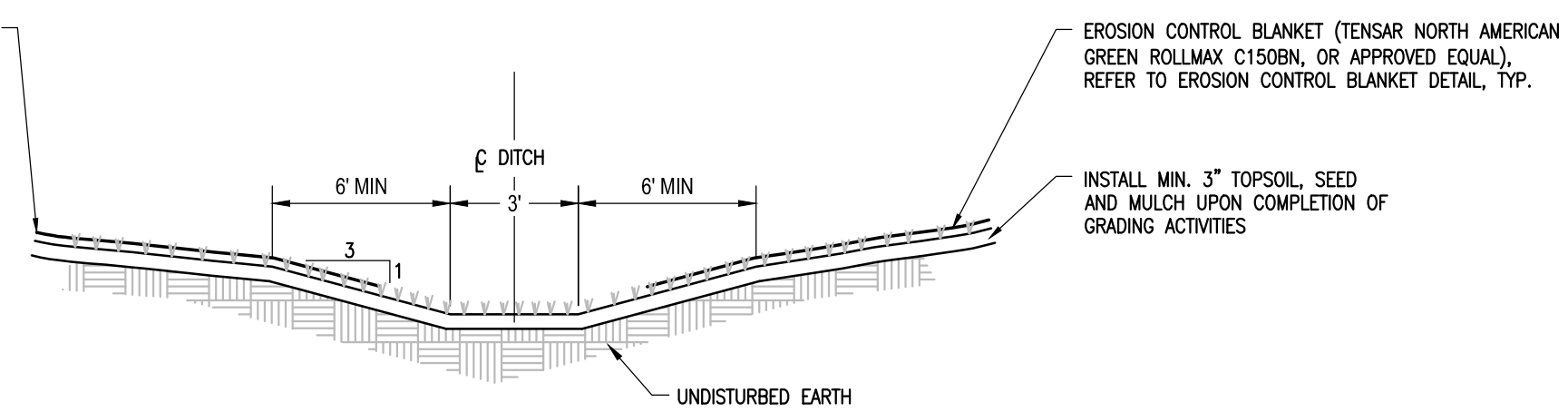
**SILT FENCE INSTALLATION DETAIL**  
N.T.S.



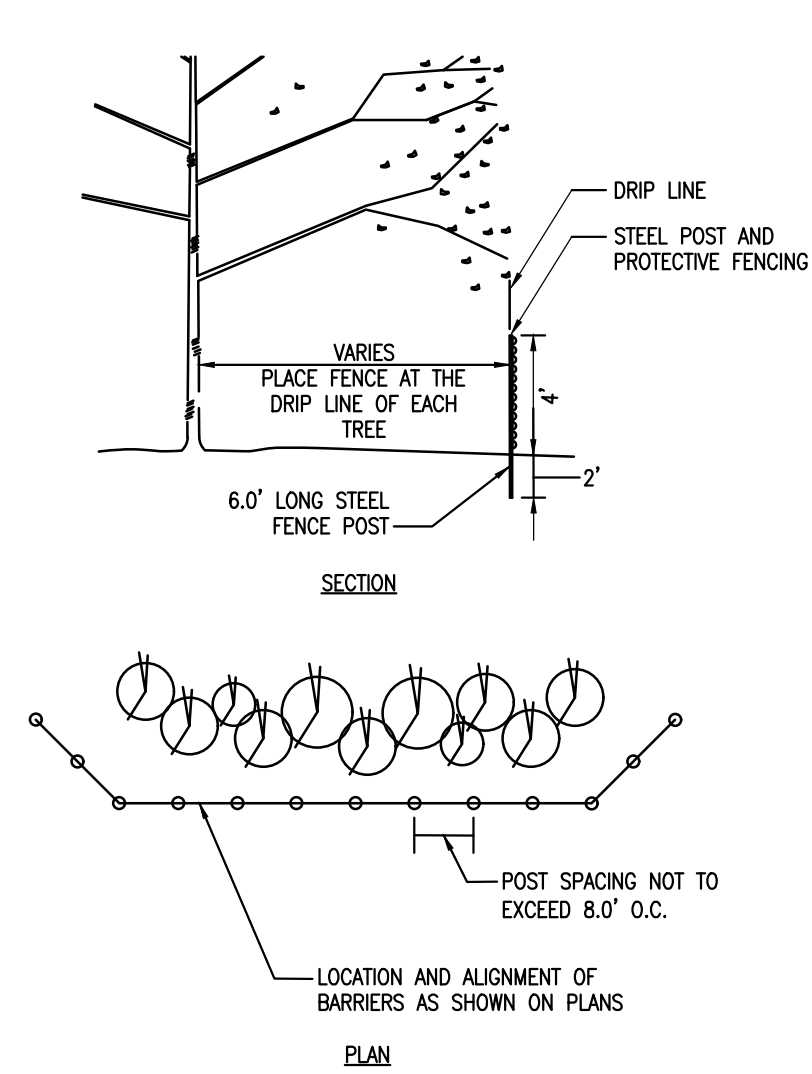
**NOTE:**  
USE DOZER TRACKS TO CREATE GROOVES PERPENDICULAR TO THE SLOPE. GROOVES WILL CATCH SEED, FERTILIZER, MULCH, RAINFALL AND DECREASE SEDIMENT IN RUNOFF.

**SLOPE TRACKING DETAIL**  
N.T.S.

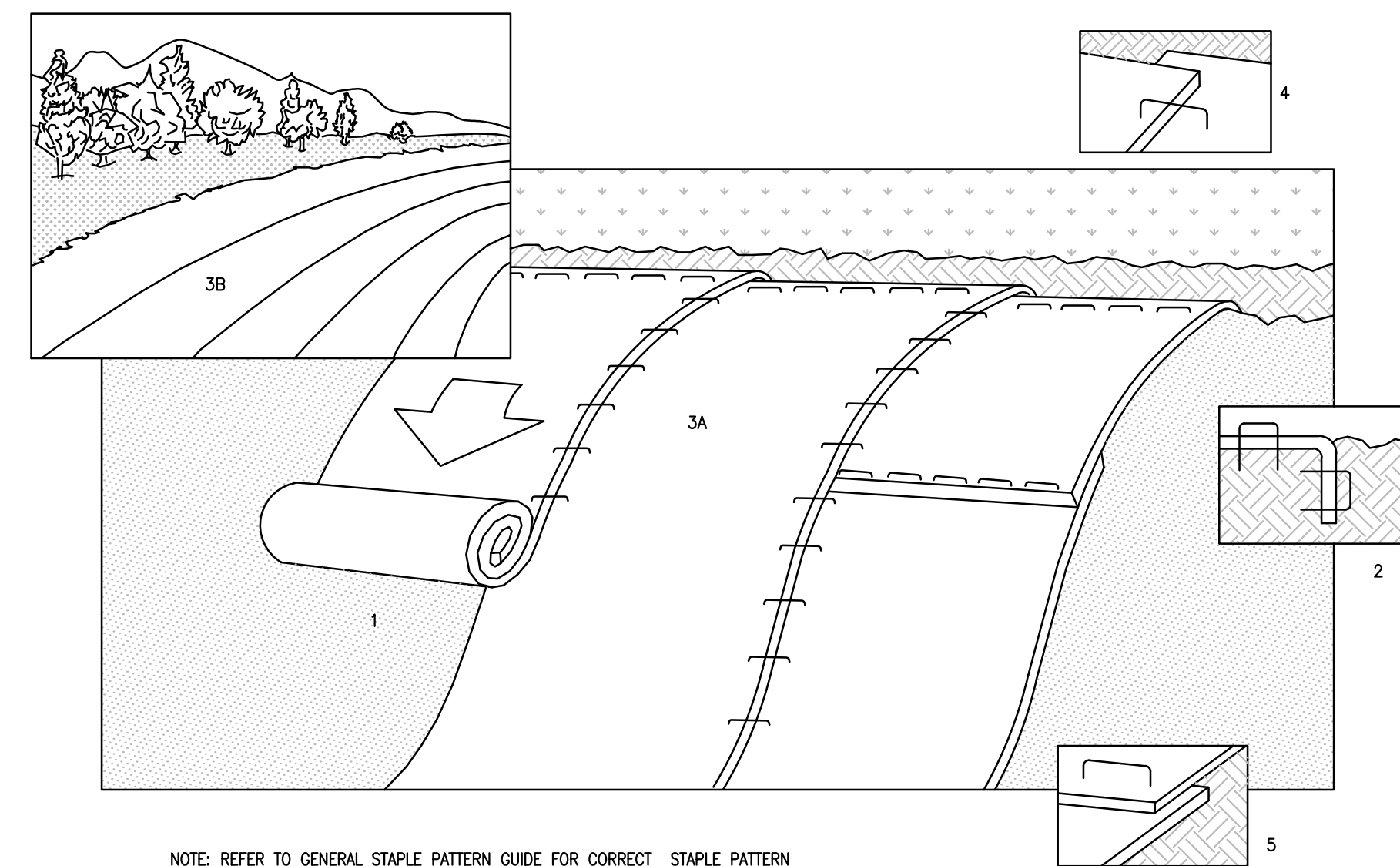
INSTALL EROSION CONTROL BLANKET ALONG EXTENTS OF GRASSED SWALE. ROLL BLANKETS DOWN SIDES OF GRASSED SWALE, OVERLAP AND STAPLE AT SWALE CENTERLINE. EXTEND BLANKET 5' BEYOND LIMITS OF SWALE ON EACH SIDE AND ANCHOR PER EROSION CONTROL MAT INSTALLATION DETAIL.



**GRASS SWALE DETAIL**  
N.T.S.



**VEGETATION PROTECTION BARRIER DETAIL**  
N.T.S.



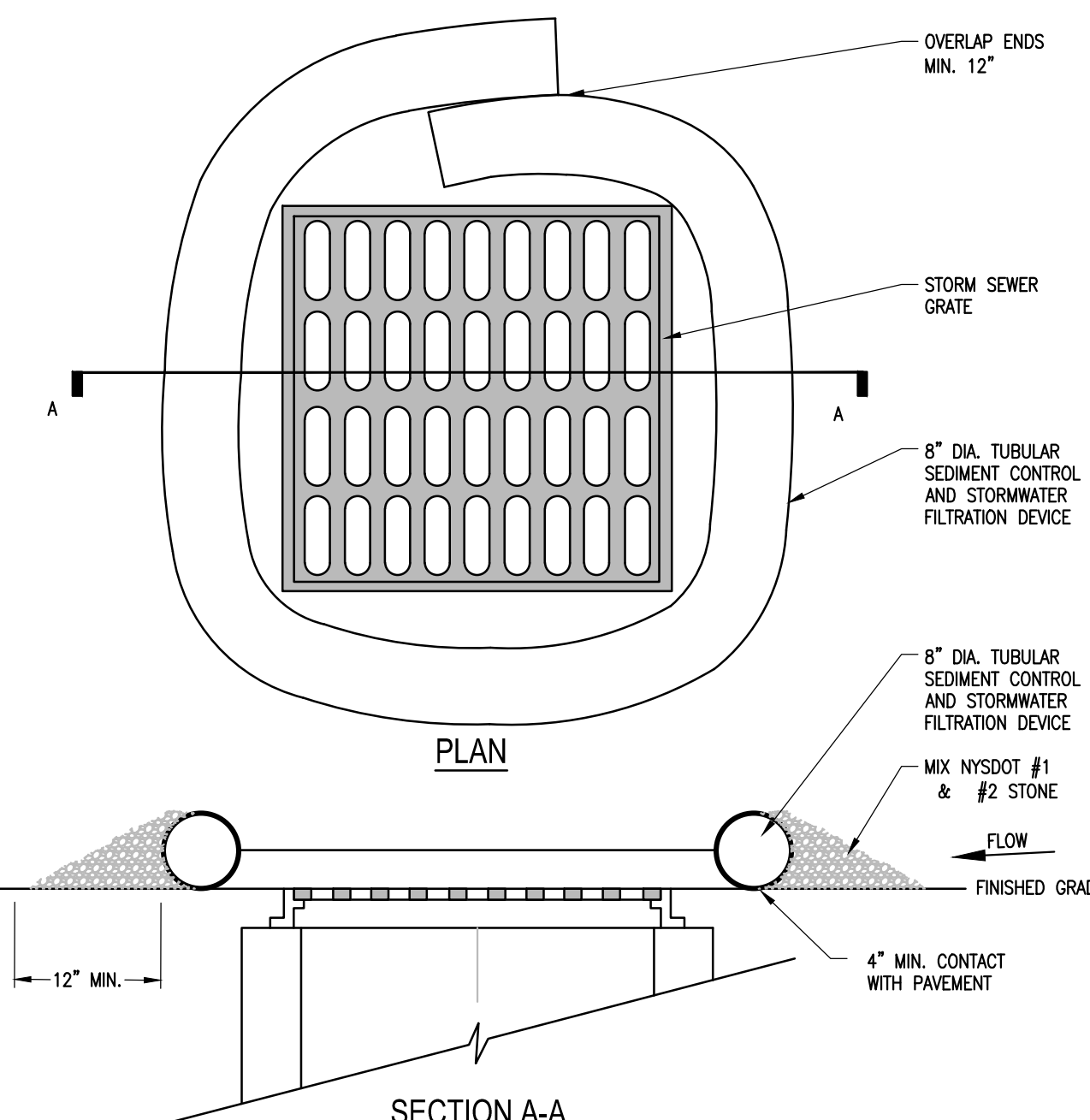
**NOTE:** REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-0-SEED DO NOT SEED PREPARED AREA. CELL-0-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH, BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
- WHEN BLANKETS MUST BE SPICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.
- MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL SUPERCEDE THIS DETAIL.

**INSTALLATION OF GEOSYNTHETICS EROSION CONTROL MATS**

- EROSION CONTROL MATS SHALL BE UTILIZED ON ALL SLOPES GREATER THAN 1:3 REQUIRING PERMANENT STABILIZATION.
- SLOPES SHALL BE PREPARED AND EROSION CONTROL MATS SHALL BE INSTALLED, ANCHORED AND SOIL FILLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND INSTALLATION PROCEDURES.
- SEEDING SHALL BE COMPLETED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS ABOVE PRIOR TO PLACEMENT OF THE EROSION CONTROL MAT. A SECOND APPLICATION OF PERMANENT SEEDING SHALL BE APPLIED AFTER THE MAT IS IN PLACE, PRIOR TO SOIL FILLING THE MAT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE, RESEEDING AND REPAIR OF MATS AND SLOPES UNTIL PERMANENT STABILIZATION IS ACHIEVED.

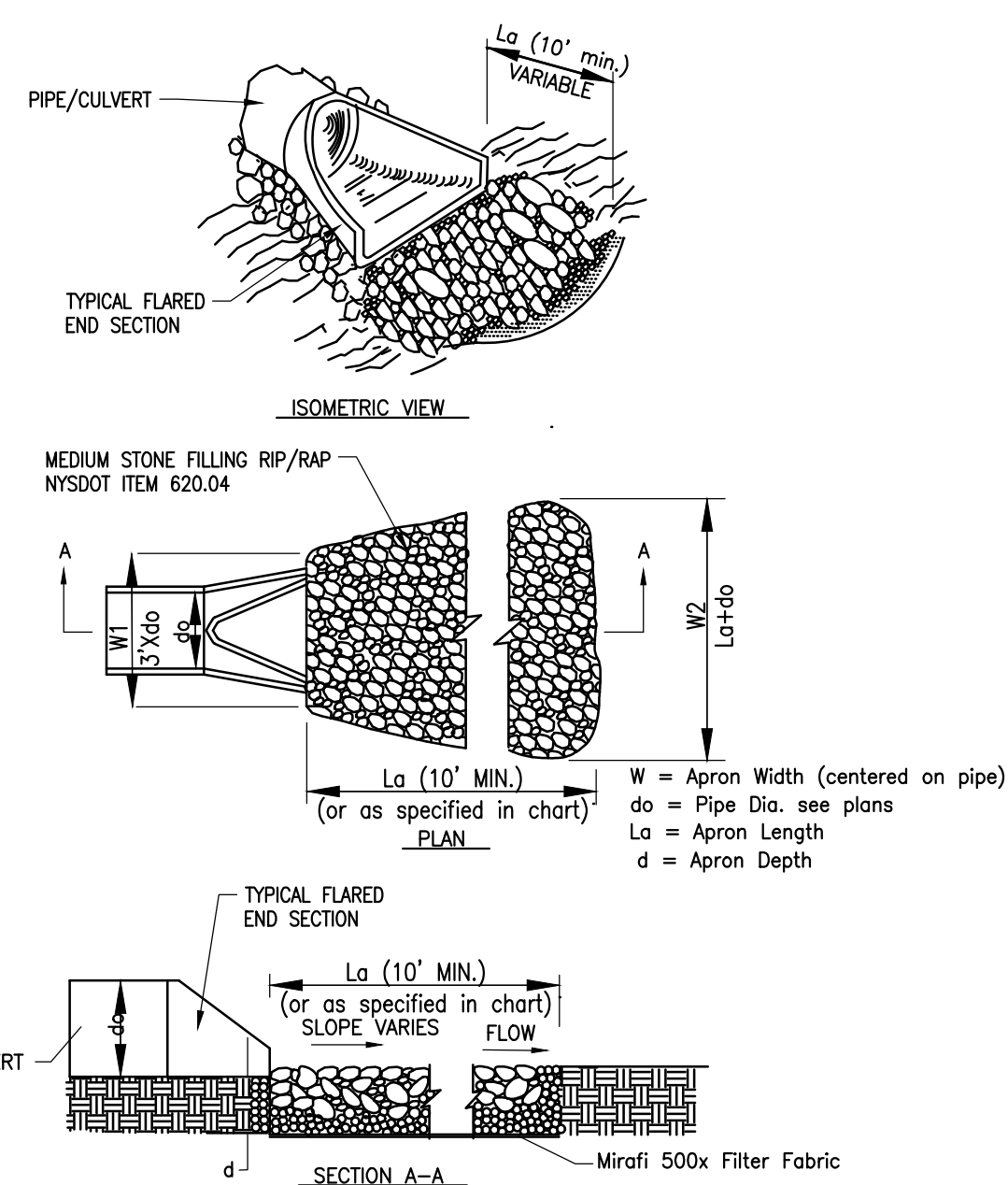
**EROSION CONTROL MAT INSTALLATION**  
N.T.S.



**NOTES:**

- TUBULAR SEDIMENT CONTROL AND STORMWATER FILTRATION DEVICES SHALL BE FILTREXX FILTERSOXX, OR EQUIVALENT.
- REPLACE AND DISPOSE OF PER MANUFACTURERS SPECIFICATIONS.
- THIS PRACTICE INCLUDES SANDBAGS, COMPOST FILTER SOCKS, GEO-TUBES FILLED WITH BALLAST, AND MANUFACTURED SURFACE BARRIERS. PEA GRAVEL CAN ALSO BE USED IN CONJUNCTION WITH THESE PRACTICES TO IMPROVE PERFORMANCE. WHEN INLET IS NOT AT A LOW POINT, AND IS OFF-SET FROM THE PAVEMENT OR GUTTER LINE, PROTECTION SHOULD BE SELECTED AND INSTALLED SO THAT FLOWS ARE NOT DIVERTED AROUND INLET.
- THE DRAINAGE AREA SHOULD BE LIMITED TO 1 ACRE AT THE DRAINAGE INLET. ALL PRACTICES WILL BE PLACED AT THE INLET PERIMETER OR BEYOND TO MAXIMIZE THE FLOW CAPACITY OF THE INLET. PRACTICES SHALL BE WEIGHTED, BRACED, TIED, OR OTHERWISE ANCHORED TO PREVENT MOVEMENT OR SHIFTING OF LOCATION ON PAVED SURFACES. TRAFFIC SAFETY SHALL BE INTEGRATED WITH THE USE OF THIS PRACTICE. ALL PRACTICES SHOULD BE MARKED WITH TRAFFIC SAFETY CONES AS APPROPRIATE. STRUCTURE HEIGHT SHALL NOT CAUSE FLOODING OR BY-PASS FLOW THAT WOULD CAUSE ADDITIONAL EROSION. THE STRUCTURE SHOULD BE INSPECTED AFTER EVERY STORM EVENT. ANY SEDIMENT SHOULD BE REMOVED AND DISPOSED OF ON THE SITE. ANY BROKEN OR DAMAGED COMPONENTS SHOULD BE REPLACED. CHECK ALL MATERIALS FOR PROPER ANCHORING AND SECURE AS NECESSARY.
- IF USING THE COMPOST FILTER SOCK, THE COMPOST INFILL SHALL BE WELL DECOMPOSED (MATURED AT LEAST 3 MONTHS), WEED-FREE, ORGANIC MATTER. IT SHALL BE AEROBICALLY COMPOSTED, POSSESS NO OBJECTIONABLE ODORS, AND CONTAIN LESS THAN 1% BY DRY WEIGHT, OF MANMADE FOREIGN MATTER. WHEN USING COMPOST FILTER SOCKS ADJACENT TO SURFACE WATER, THE COMPOST SHOULD HAVE LOW NUTRIENT VALUE.

**PAVED SURFACE INLET PROTECTION DETAIL**  
N.T.S.



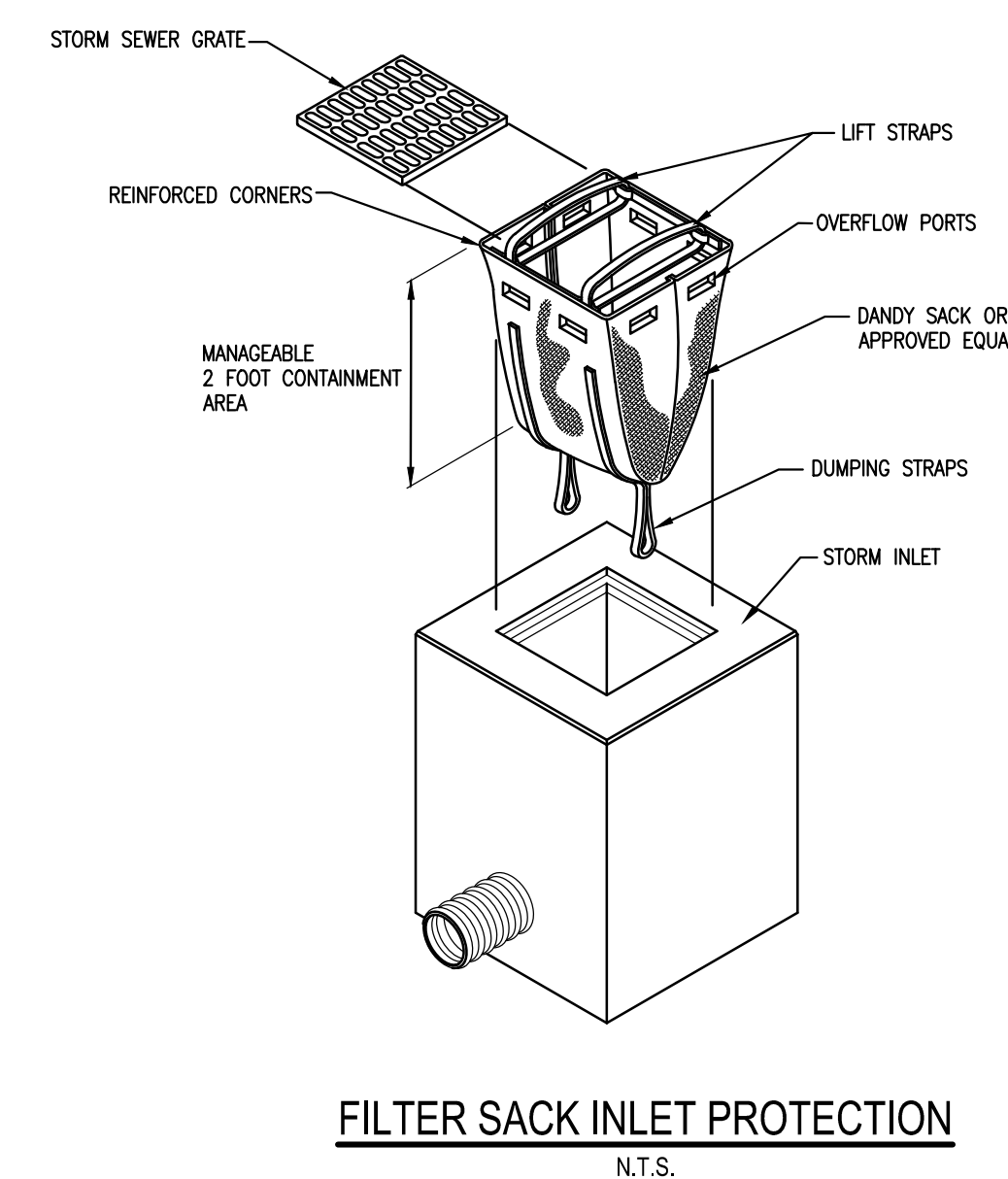
**RIP RAP SIZING CHART**

PIPE DIA.	W1-MINIMUM	W2-MINIMUM	La-MINIMUM	D-MINIMUM
12"	3'	15'	14'	13.5"
18"	4.5'	15.5'	14'	13.5"
24"	6'	16'	17'	13.5"

**NOTES:**

- d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NO LESS THAN 6".
- INSTALL FILTER MIRAFI 500X OR APPROVED EQUAL FILTER FABRIC BETWEEN RIP-RAP AND SUBGRADE

**OUTLET PROTECTION-RIP RAP APRON**  
N.T.S.



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Albany, NY 12211  
www.bergmannpc.com

**SUN COMMUNITIES**

**HOVEYS ISLAND**

TOWN OF HENDERSON  
JEFFERSON COUNTY  
NEW YORK

Date Revised	Description
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**NOT FOR CONSTRUCTION**  
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**E&S DETAILS**

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