

GENERAL NOTES

- FOR CONSTRUCTION STAKING AND SURVEYING SERVICES CONTACT LANDFORM AT 612.252.9070.
- INSTALL PERIMETER SEDIMENT CONTROLS PRIOR TO BEGINNING WORK AND MAINTAIN FOR DURATION OF CONSTRUCTION. INSTALL POND / BASIN PROTECTION SEDIMENT CONTROLS WITHIN 7 DAYS OF COMPLETION OF BASIN GRADING. REMOVE PERIMETER CONTROLS AFTER AREAS CONTRIBUTING RUNOFF ARE PERMANENTLY STABILIZED AND DISPOSE OF OFF SITE.
- LIMIT SOIL DISTURBANCE TO THE GRADING LIMITS SHOWN. SCHEDULE OPERATIONS TO MINIMIZE LENGTH OF EXPOSURE OF DISTURBED AREAS.
- MANAGEMENT PRACTICES SHOWN ARE THE MINIMUM REQUIREMENT. INSTALL AND MAINTAIN ADDITIONAL CONTROLS AS WORK PROCEEDS TO PREVENT EROSION AND CONTROL SEDIMENT CARRIED BY WIND OR WATER.
- REFER TO SWPPP NOTES ON SHEET C3.5 FOR ADDITIONAL REQUIREMENTS.
- EXCAVATE PONDS AND TEMPORARY SEDIMENTATION BASINS EARLY IN THE CONSTRUCTION SEQUENCE. REMOVE SEDIMENT FROM PONDS AND BASINS PERIODICALLY AND AFTER AREAS CONTRIBUTING RUNOFF ARE PERMANENTLY STABILIZED.
- CONTRACTOR SHALL PREVENT SEDIMENT LADEN WATER FROM ENTERING INFILTRATION SYSTEMS UNTIL THE SITE IS COMPLETELY STABILIZED.
- ALL EXPOSED SOILS AREAS SHALL BE STABILIZED IMMEDIATELY TO LIMIT SOIL EROSION IN THAT PORTION OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED.
- TEMPORARY SEED, SOD, MULCH AND FERTILIZER SHALL MEET THE FOLLOWING SPECIFICATIONS, AS MODIFIED.

ITEM	SPECIFICATION NUMBER
SOD	MNDOT 3876
SEED	MNDOT 3876
	MN TYPE 22-111 @ 30.5 LB/AC - TEMPORARY EROSION CONTROL
	MN TYPE 25-151 @ 120 LB/AC - PERMANENT TURF
MULCH	MNDOT 3882
	MN TYPE 33-261 @ 35 LB/AC - PERMANENT WETLAND BUFFER
	(MNDOT TYPE 1 @ 2 TON/AC, DISC ANCHORED)
FERTILIZER (FOR PERMANENT TURF ONLY)	MNDOT 3881
GENERAL PLACEMENT	MNDOT 2575
- SEE SITE RESTORATION SHEET FOR PERMANENT TURF AND LANDSCAPE ESTABLISHMENT.
- SCRAPE ADJACENT STREETS CLEAN DAILY AND SWEEP CLEAN WEEKLY.

GRADING NOTES

- CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING GRADING.
- REFER TO THE GEOTECHNICAL REPORT PREPARED BY BRAUN INTERTEC, DATED APRIL 12, 2017, FOR ADDITIONAL INFORMATION ON BACKFILL MATERIAL AND GROUNDWATER CONDITIONS.
- REMOVE TOPSOIL FROM GRADING AREAS AND STOCKPILE SUFFICIENT QUANTITY FOR REUSE. MAINTAIN STOCKPILES WITH MAXIMUM 1V:2H SLOPES.
- REMOVE SURFACE AND GROUND WATER FROM EXCAVATIONS. PROVIDE INITIAL LIFTS OF STABLE FOUNDATION MATERIAL IF EXPOSED SOILS ARE WET AND UNSTABLE.
- AN INDEPENDENT TESTING FIRM SHALL VERIFY THE REMOVAL OF ORGANIC AND UNSUITABLE SOILS, SOIL CORRECTION, AND COMPACTION AND PROVIDE PERIODIC REPORTS TO THE OWNER.
- PLACE AND COMPACT FILL USING LIFT THICKNESSES MATCHED TO SOIL TYPE AND COMPACTION EQUIPMENT TO OBTAIN SPECIFIED COMPACTION THROUGHOUT THE LIFT.
- COMPACT COHESIVE SOILS IN PAVED AREAS TO 95% OF MAXIMUM DRY DENSITY, STANDARD PROCTOR (ASTM D698) EXCEPT THE TOP 3 FEET WHICH SHALL BE COMPACTED TO 100%. COMPACT TO 98% DENSITY WHERE FILL DEPTH EXCEEDS 10 FEET. THE SOILS SHALL BE WITHIN 3% OF OPTIMUM MOISTURE CONTENT. IN GRANULAR SOILS ALL PORTIONS OF THE EMBANKMENT SHALL BE COMPACTED TO NOT LESS THAN 95% OF MODIFIED PROCTOR DENSITY (ASTM D1557).
- AVOID SOIL COMPACTION OF INFILTRATION PRACTICES. ANY EQUIPMENT USED IN INFILTRATION AREAS SHOULD BE SMALL SCALED AND TRACKED.
- ALL DISTURBED SOIL SURFACE AREAS, EXCEPT FOR THE AREAS UNDER THE PROPOSED STREET PAVEMENT AND THE TRAIL AND SIDEWALKS, SHALL BE DECOMPACTED TO A DEPTH OF 18-INCHES AND COVERED WITH SIX INCHES OF TOPSOIL. REFER TO RPBOWD STANDARD EROSION CONTROL NOTES FOR ADDITIONAL REQUIREMENTS.
- REFER TO SHEET C3.3 FOR PHASE 1 BASIN CROSS-SECTIONS.
- SLOPE CALLOUTS ARE VERTICAL: HORIZONTAL (V:H)

RPBOWD STANDARD EROSION CONTROL NOTES

- NATURAL TOPOGRAPHY AND SOIL CONDITIONS MUST BE PROTECTED, INCLUDING RETENTION ONSITE OF NATIVE TOPSOIL TO THE GREATEST EXTENT POSSIBLE.
- ADDITIONAL MEASURES, SUCH AS HYDRAULIC MULCHING AND OTHER PRACTICES AS SPECIFIED BY THE DISTRICT MUST BE USED ON SLOPES OF 3:1 (H:V) OR STEEPER TO PROVIDE ADEQUATE STABILIZATION.
- FINAL SITE STABILIZATION MEASURES MUST SPECIFY THAT AT LEAST SIX INCHES OF TOPSOIL OR ORGANIC MATTER BE SPREAD AND INCORPORATED INTO THE UNDERLYING SOIL DURING FINAL SITE TREATMENT WHEREVER TOPSOIL HAS BEEN REMOVED.
- CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE MUST BE PROPERLY MANAGED.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION AND VEGETATION IS ESTABLISHED SUFFICIENTLY TO ENSURE STABILITY OF THE SITE, AS DETERMINED BY THE DISTRICT.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE REMOVED UPON FINAL STABILIZATION.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 CALENDAR DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED ON A PROPERTY THAT DRAINS TO AN IMPAIRED WATER.
- SOIL SURFACES COMPACTED DURING CONSTRUCTION AND REMAINING PERVIOUS UPON COMPLETION OF CONSTRUCTION MUST BE DECOMPACTED TO ACHIEVE:
 - A SOIL COMPACTION TESTING PRESSURE OF LESS THAN 1,400 KILOPASCALS OR 200 POUNDS PER SQUARE INCH IN THE UPPER 12 INCHES OF SOIL OR
 - A BULK DENSITY OF LESS THAN 1.4 GRAMS PER CUBIC CENTIMETER OR 87 POUNDS PER CUBIC FOOT IN THE UPPER 12 INCHES OF SOILIN ADDITION, UTILITIES, TREE ROOTS AND OTHER EXISTING VEGETATION MUST BE PROTECTED UNTIL FINAL REVEGETATION OR OTHER STABILIZATION OF THE SITE. REFER TO SHEET C3.6 FOR DECOMPACTION AREAS.
- THE PERMITTEE MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL FACILITIES AND SOIL STABILIZATION MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS. THE PERMITTEE MUST REPAIR, REPLACE, OR SUPPLEMENT ALL NONFUNCTIONAL BMPs WITH FUNCTIONAL BMPs WITHIN 48 HOURS OF DISCOVERY AND PRIOR TO THE NEXT PRECIPITATION EVENT UNLESS ADVERSE CONDITIONS PRECLUDE ACCESS TO THE RELEVANT AREA OF THE SITE, IN WHICH CASE THE REPAIR MUST BE COMPLETED AS SOON AS CONDITIONS ALLOW. WHEN ACTIVE LAND-DISTURBING ACTIVITIES ARE NOT UNDERWAY, THE PERMITTEE MUST PERFORM THESE RESPONSIBILITIES AT LEAST WEEKLY UNTIL VEGETATIVE COVER IS ESTABLISHED. THE PERMITTEE WILL MAINTAIN A LOG OF ACTIVITIES UNDER THIS SECTION FOR INSPECTION BY THE DISTRICT ON REQUEST.
- ACTIVITIES MUST BE CONDUCTED SO AS TO MINIMIZE THE POTENTIAL TRANSFER OF AQUATIC INVASIVE SPECIES (E.G., ZEBRA MUSSELS, EURASIAN WATERMILFOLI, ETC.) TO THE MAXIMUM EXTENT POSSIBLE.

- STAKING OFF AND MARKING OF PROPOSED INFILTRATION FACILITIES TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT, STOCKPILING OF MATERIALS, AND TRAFFIC. IF INFILTRATION FACILITIES ARE IN PLACE DURING CONSTRUCTION ACTIVITIES, BEST PRACTICES MUST BE DEPLOYED TO PREVENT SEDIMENT AND OTHER MATERIAL FROM ENTERING THE PRACTICES. INFILTRATION FACILITIES MUST NOT BE EXCAVATED TO WITHIN 3 FEET OF FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED. ANY ACCUMULATED SEDIMENT IN AN INFILTRATION FACILITY MUST BE REMOVED IN MANNER THAT PREVENTS COMPACTION OF THE FACILITY BOTTOM. TO PROVIDE A WELL-AERATED, HIGHLY POROUS SURFACE, THE SOILS BELOW AN INFILTRATION PRACTICE MUST BE LOOSENOED TO A MINIMUM DEPTH OF 18 INCHES PRIOR TO INSTALLATION OR PLANTING.

LEGEND

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	INLET PROTECTION	134 EACH
	SILT FENCE	18,000 FEET
	VEHICLE TRACKING PAD	2 EACH
	EROSION CONTROL BLANKET	474,033 S.F.
	ERIKAMAT	10,469 S.F.
	BUILDING PAD	

LEGEND

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	CONCRETE WASHOUT	
	DRAINAGE SWALE	
	CONSTRUCTION LIMITS	

OWNER

LEVEL 7 DEVELOPMENT, LLC

4600 KINGS POINT RD
MINNETRISTA, MN 55331

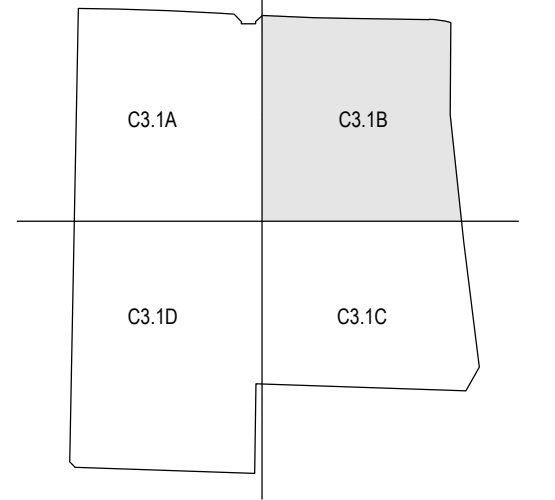
MUNICIPALITY



PROJECT

AVIENDA

KEY MAP



ISSUE / REVISION HISTORY

DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW

BY SES DATE 05.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of MINNESOTA.

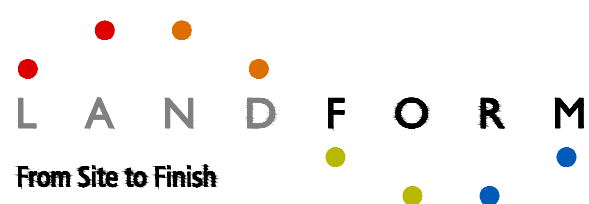
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Signature of Engineer:
Date: 05/27/2020

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WATERSHED SUBMITTAL

MAY 27, 2020



105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401

Tel: 612-252-9070
Fax: 612-252-9077
Web: landform.net

FILE NAME: C302SCD001B.DWG

PROJECT NO.: SCD14001.LEV

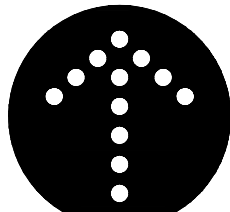
NE PHASE 1 GRADING, DRAINAGE, & EROSION CONTROL

C3.2B

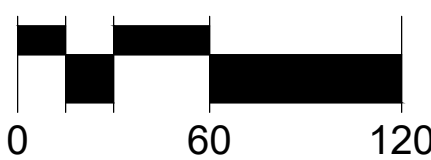
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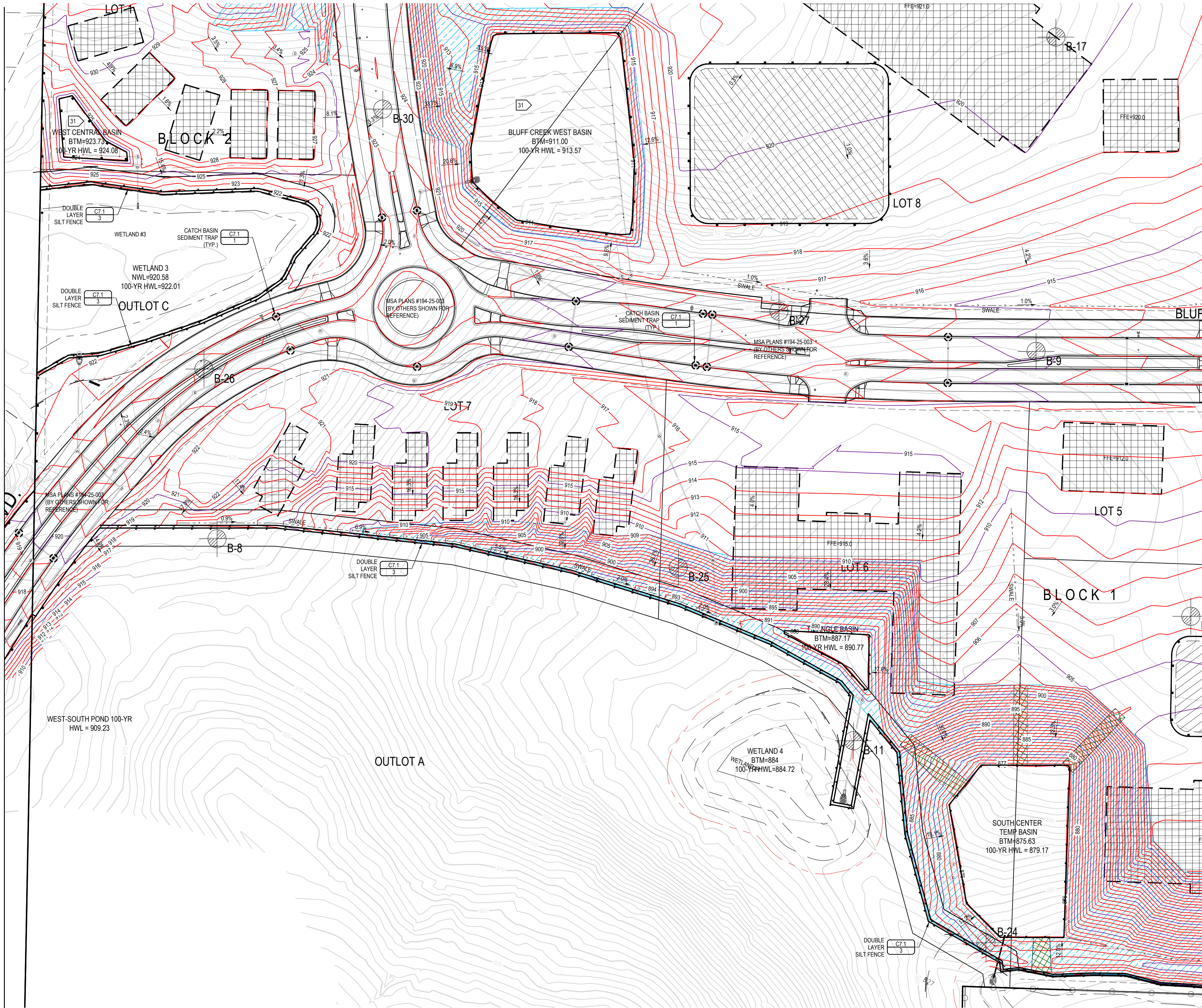


Know what's Below.
Call before you dig.

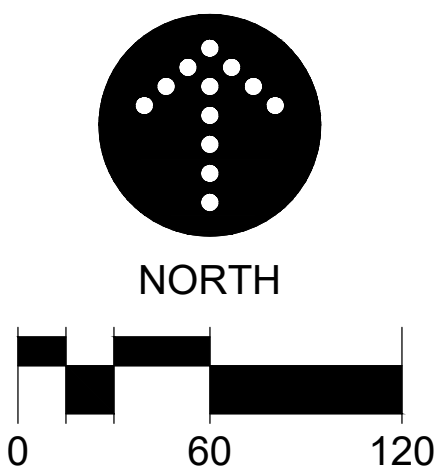


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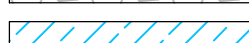




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LEGEND		
SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
WA	CONCRETE WASHOUT	
---	DRAINAGE SWALE	
---	CONSTRUCTION LIMITS	

- GENERAL NOTES
- EROSION PREVENTION AND SEDIMENT CONTROL NOTES
- GRADING NOTES
- RPBCWD STANDARD EROSION CONTROL NOTES
- LEGEND
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	:BUILDING PAD	

OWNER

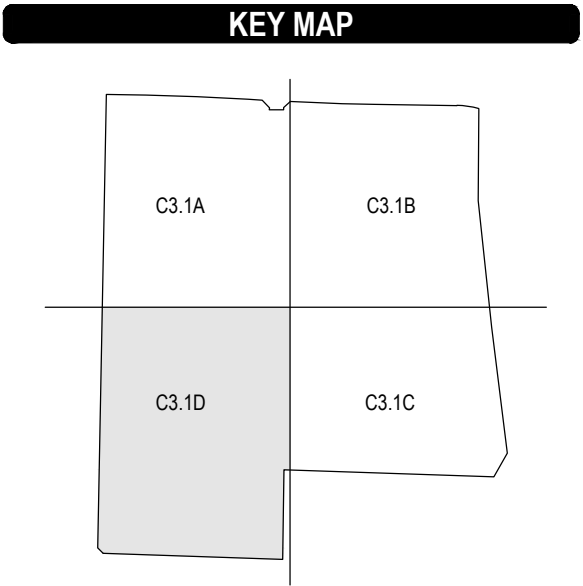
LEVEL 7 DEVELOPMENT, LLC

4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY

PROJECT

AVIENDA



ISSUE / REVISION HISTORY		
CONTACT ENGINEER FOR ANY PRIOR HISTORY		
DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW	
BY SES	DATE 06.19.2020

CERTIFICATION

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PRELIMINARY
NOT FOR CONSTRUCTION

WATERSHED SUBMITTAL
MAY 27, 2020

LANDFORM
From Site to Finish

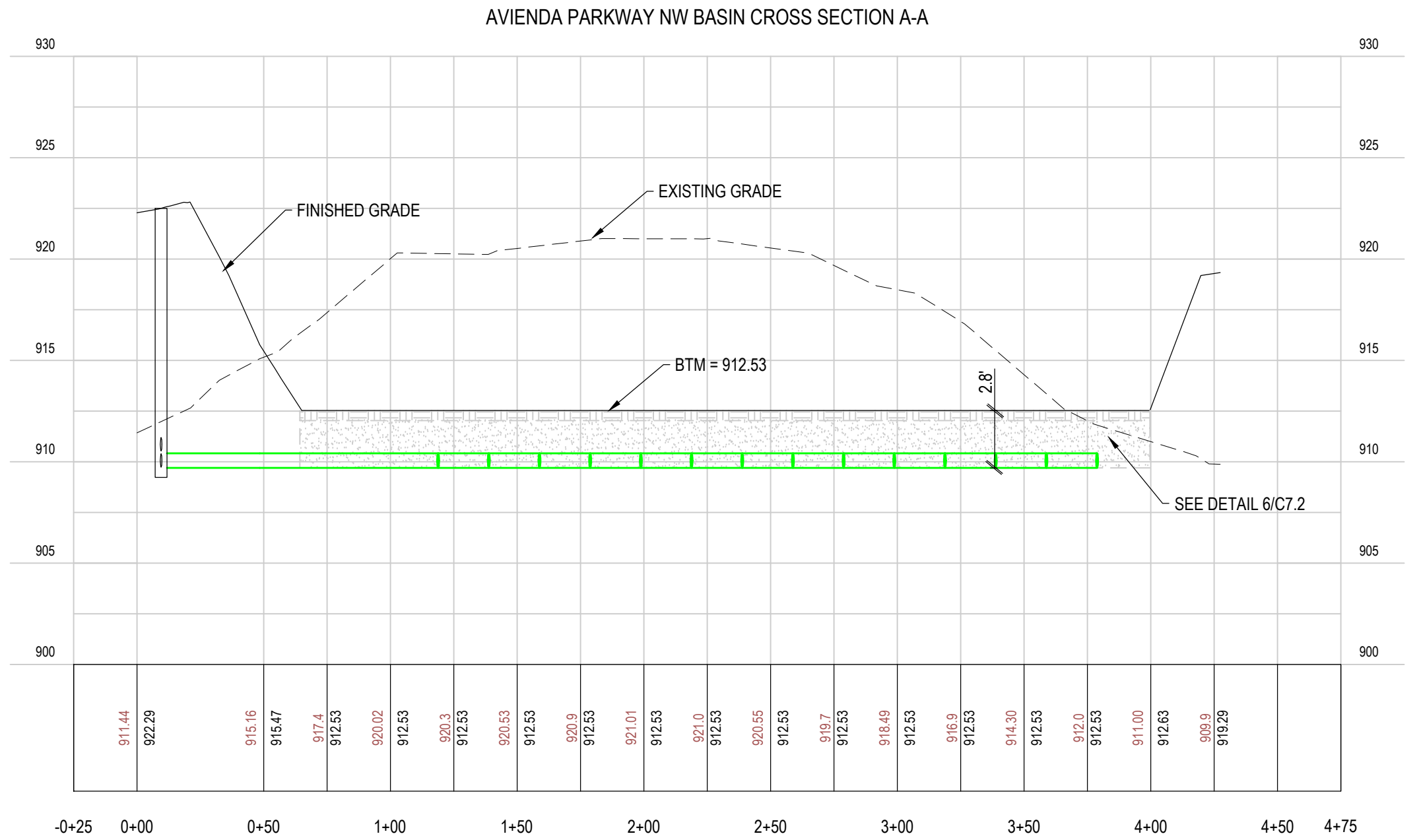
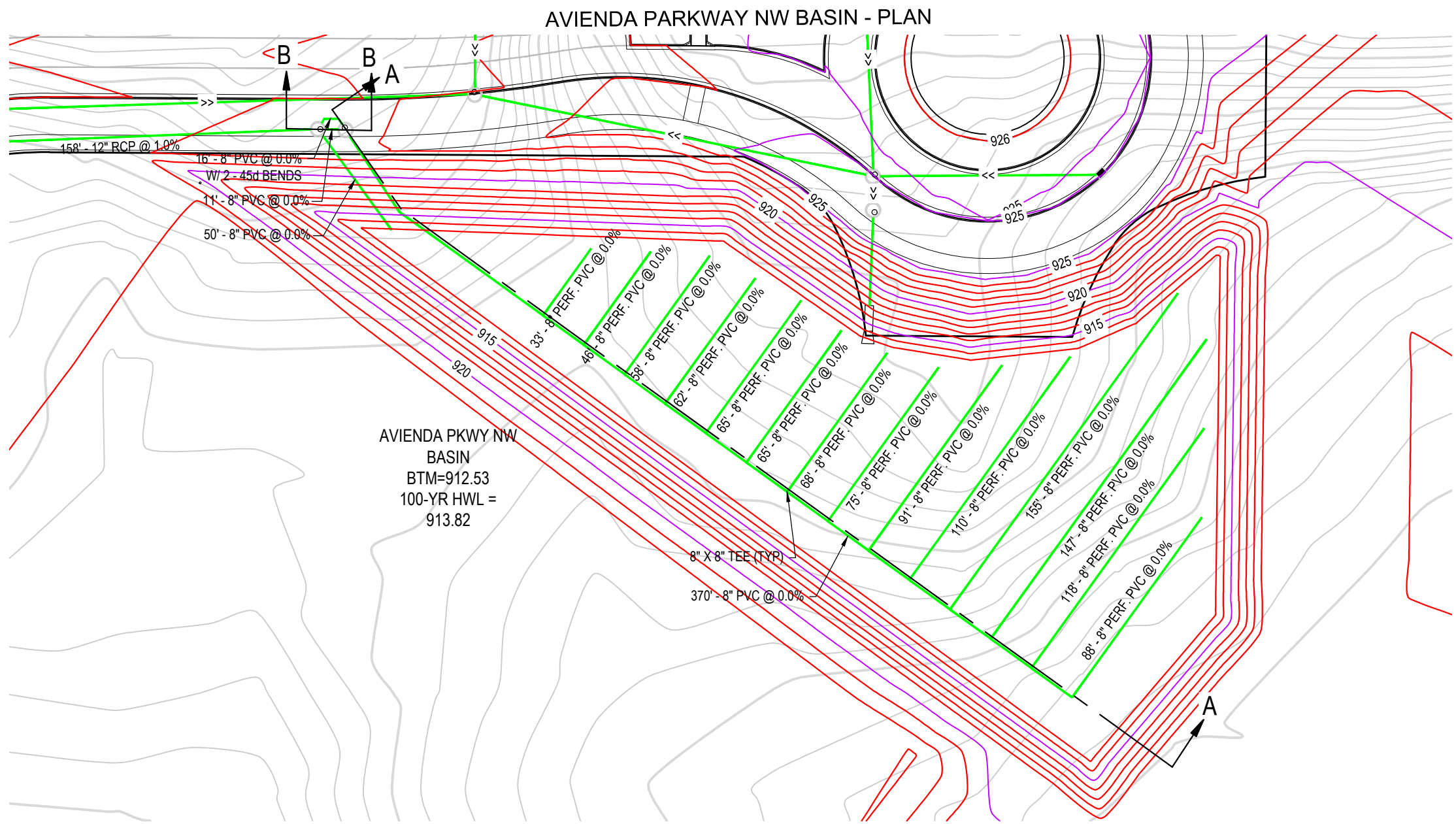
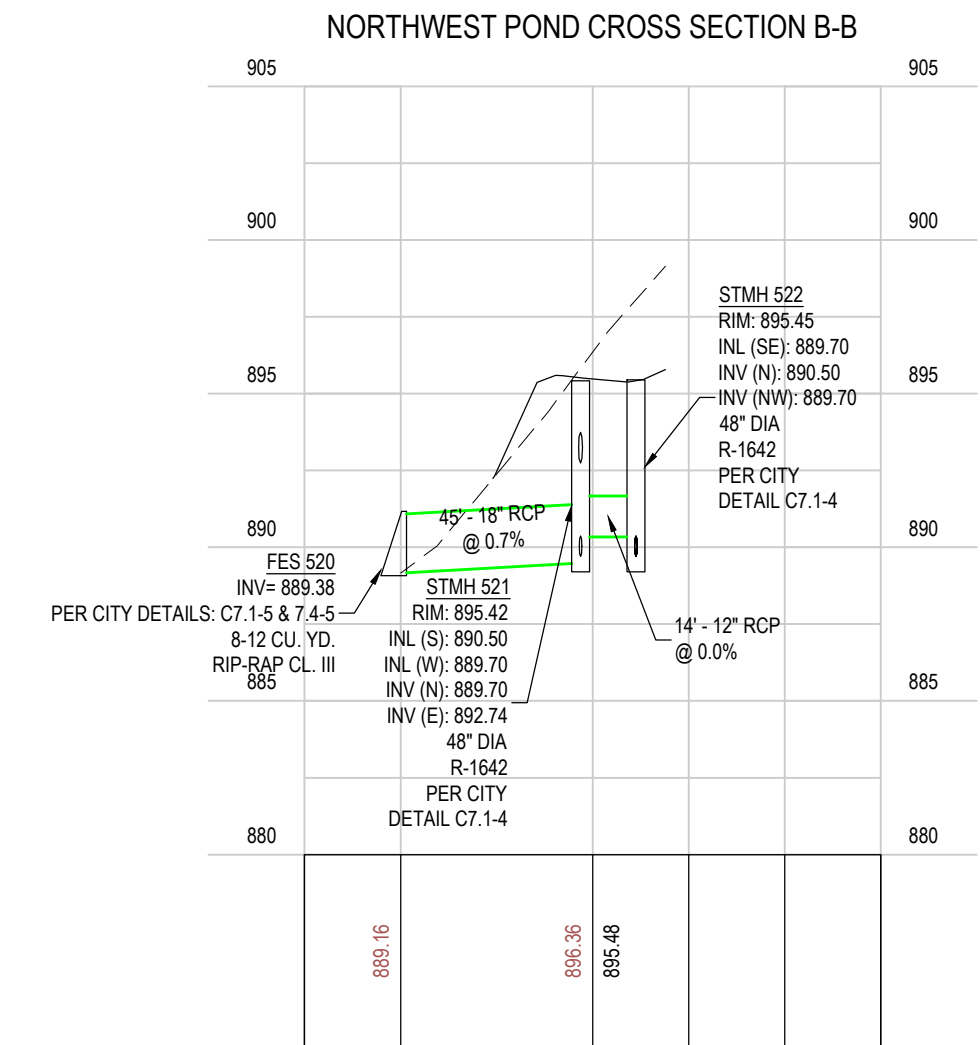
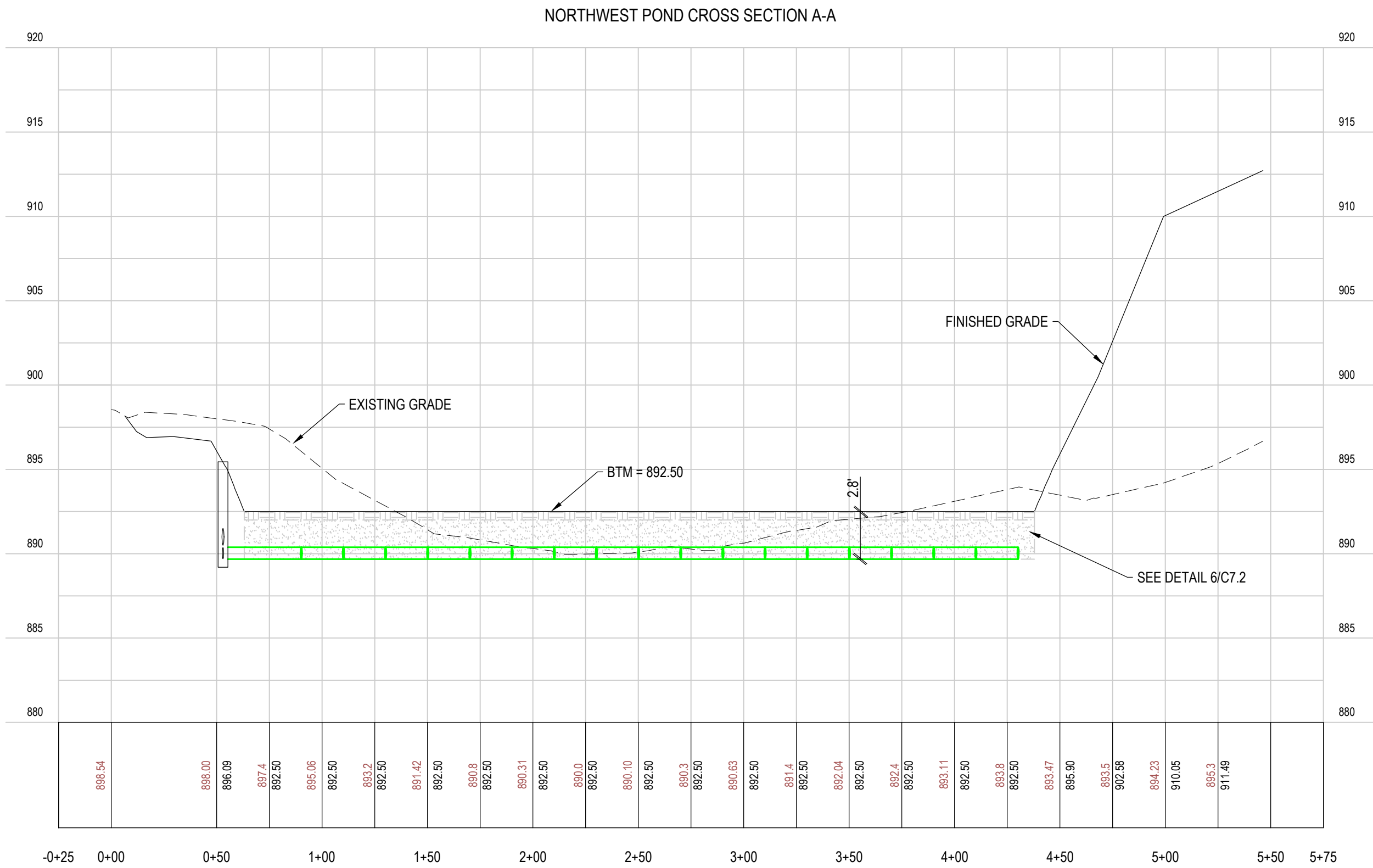
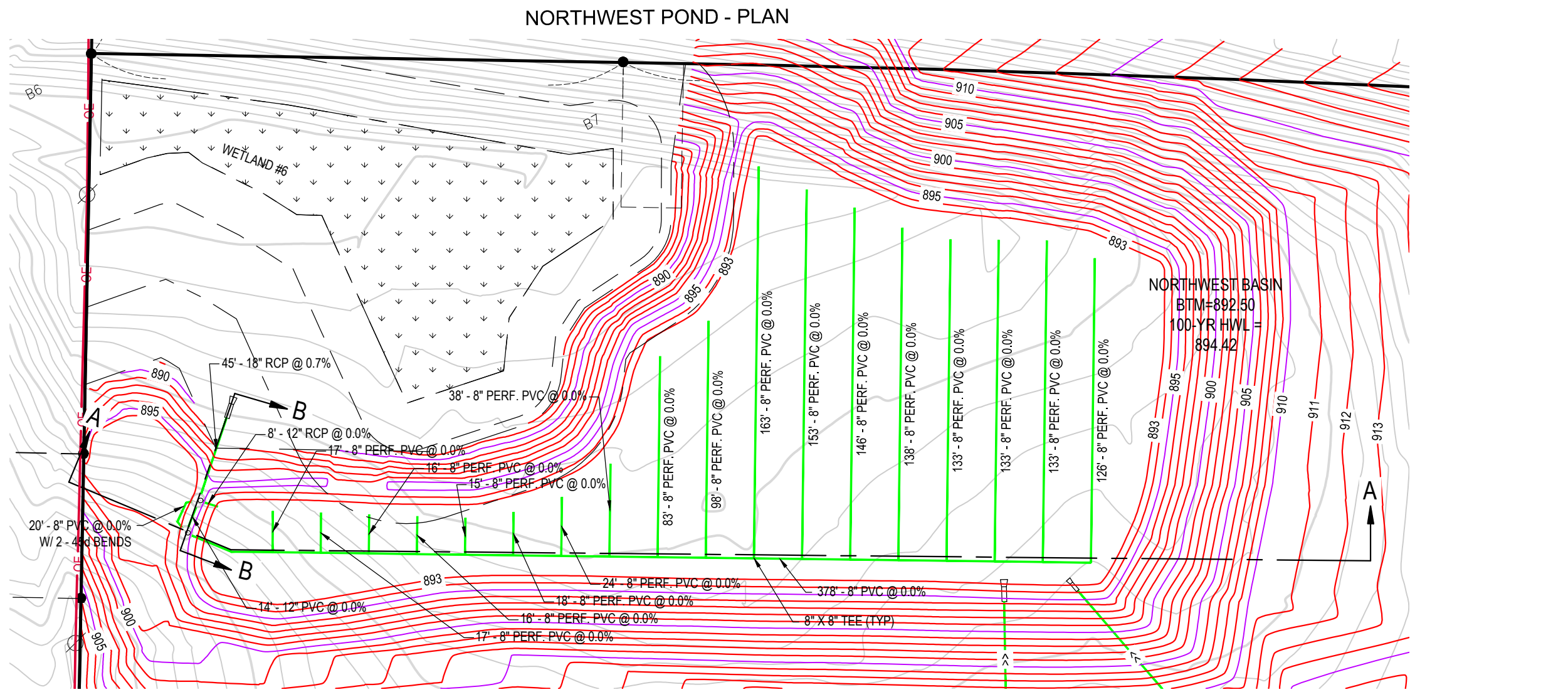
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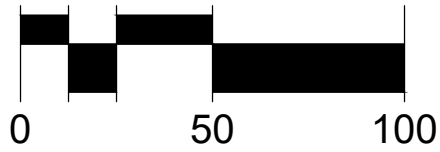
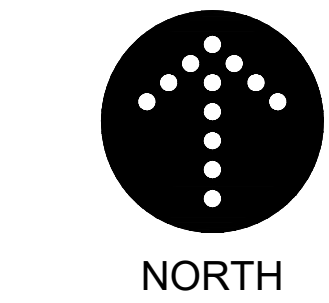
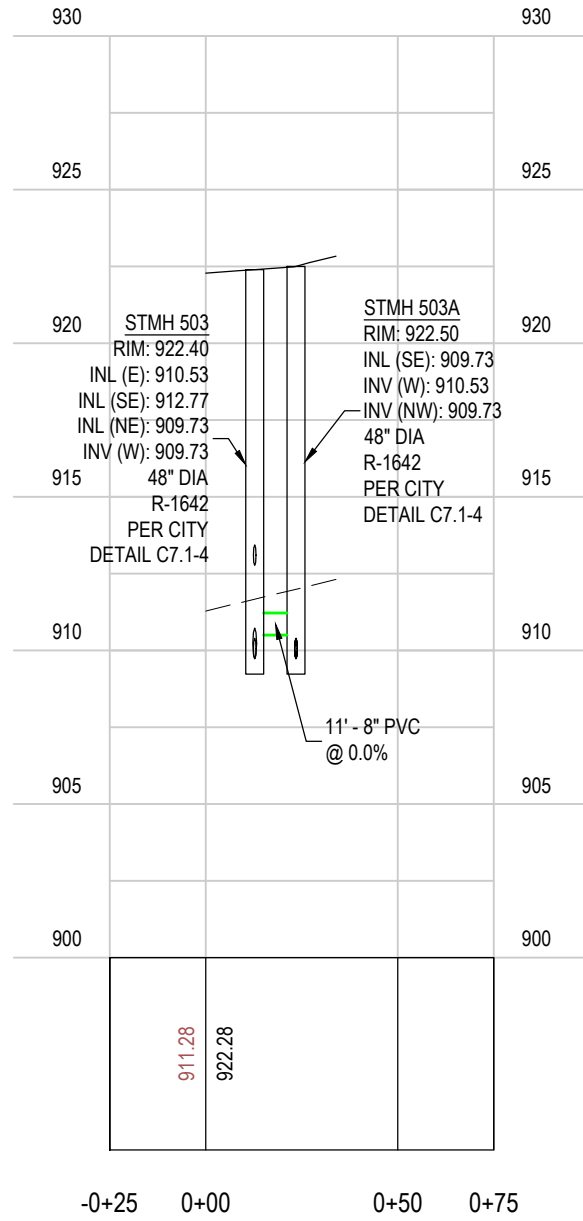
FILE NAME C302SCD001D.DWG
PROJECT NO. SCD14001.LEV

SW PHASE 1 GRADING,
DRAINAGE, & EROSION CONTROL
C3.2D

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AVIENDA PARKWAY NW BASIN CROSS SECTION B-B



OWNER

LEVEL 7 DEVELOPMENT, LLC

4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA

ISSUE / REVISION HISTORY

CONTACT ENGINEER FOR ANY PRIOR HISTORY

DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW

BY SES DATE 05.19.2020

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WATERSHED SUBMITTAL
MAY 27, 2020

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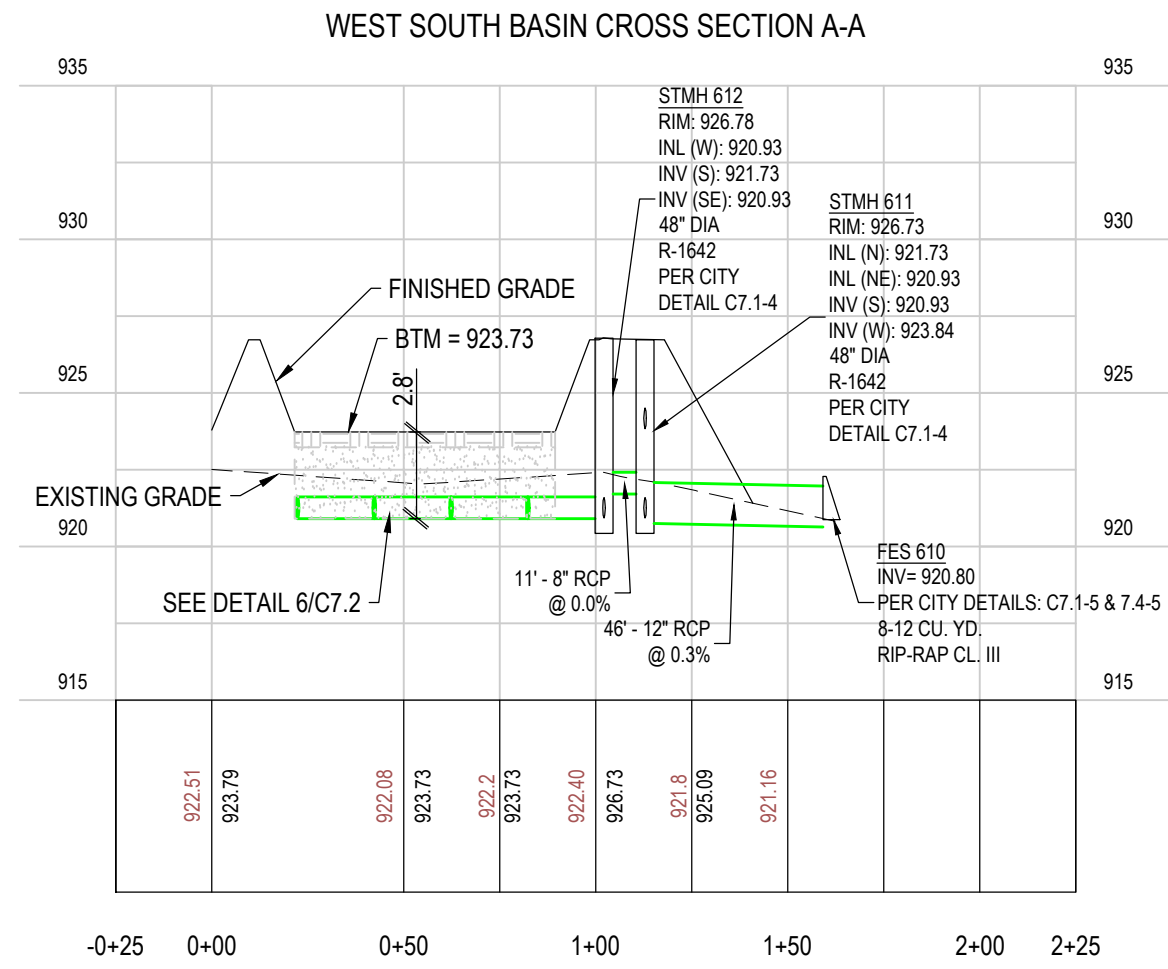
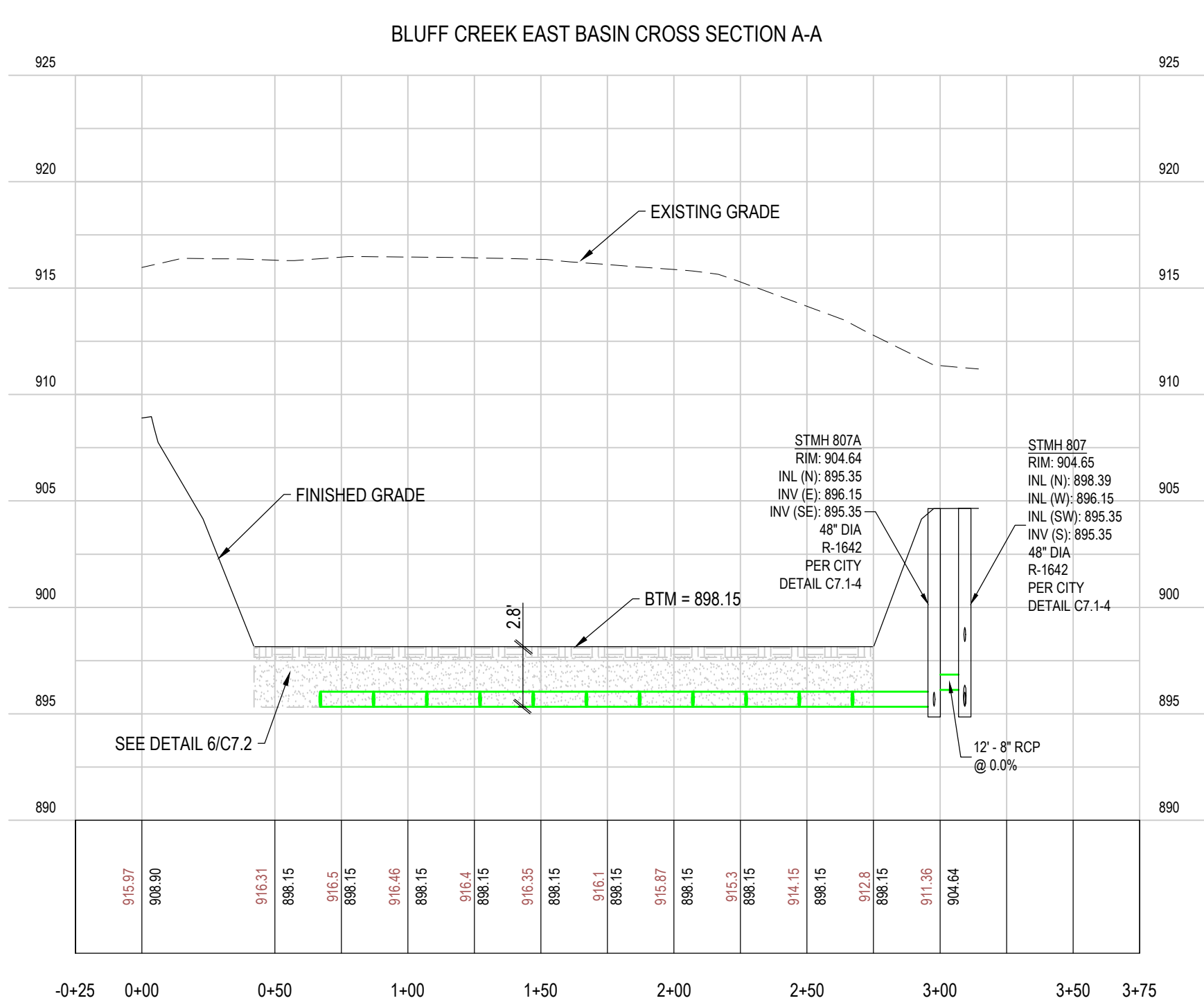
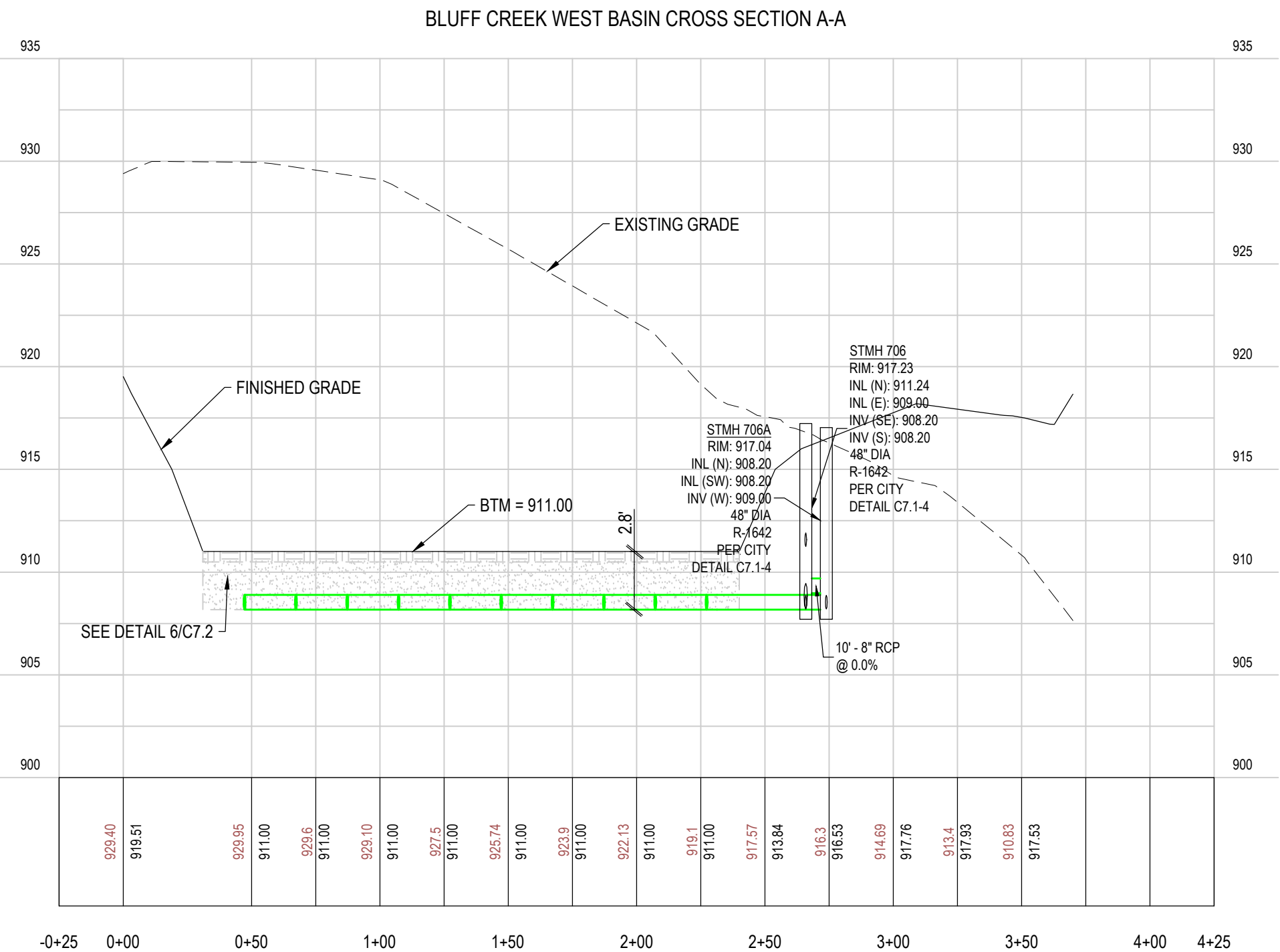
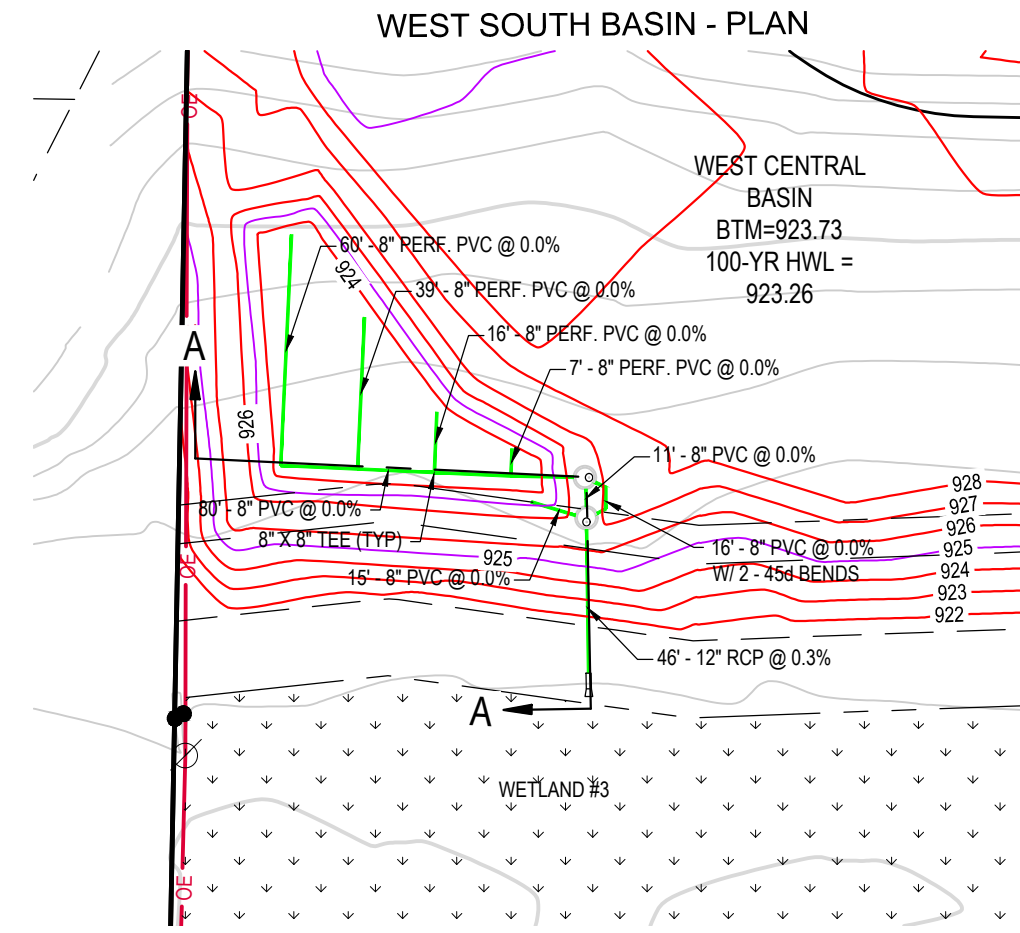
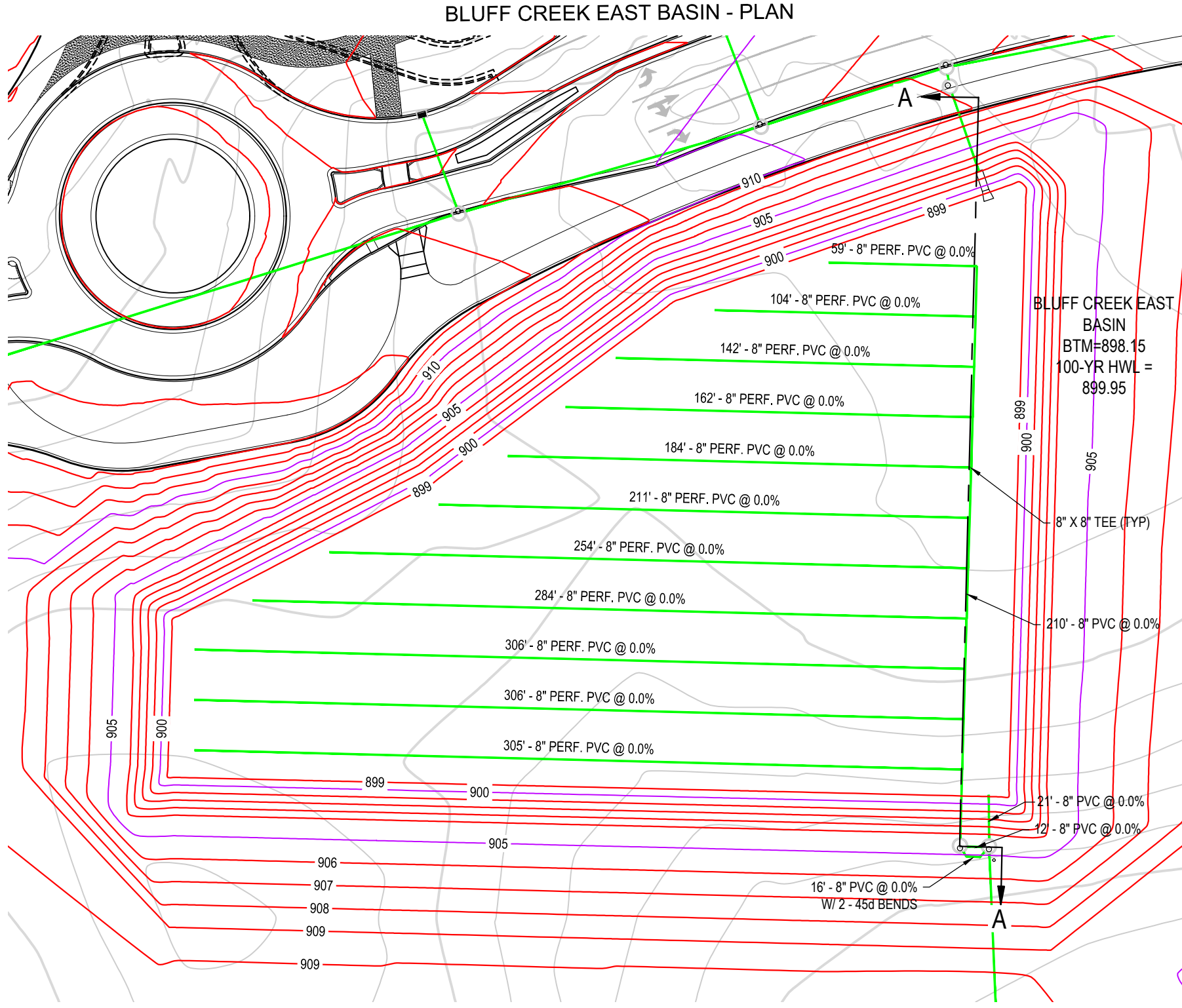
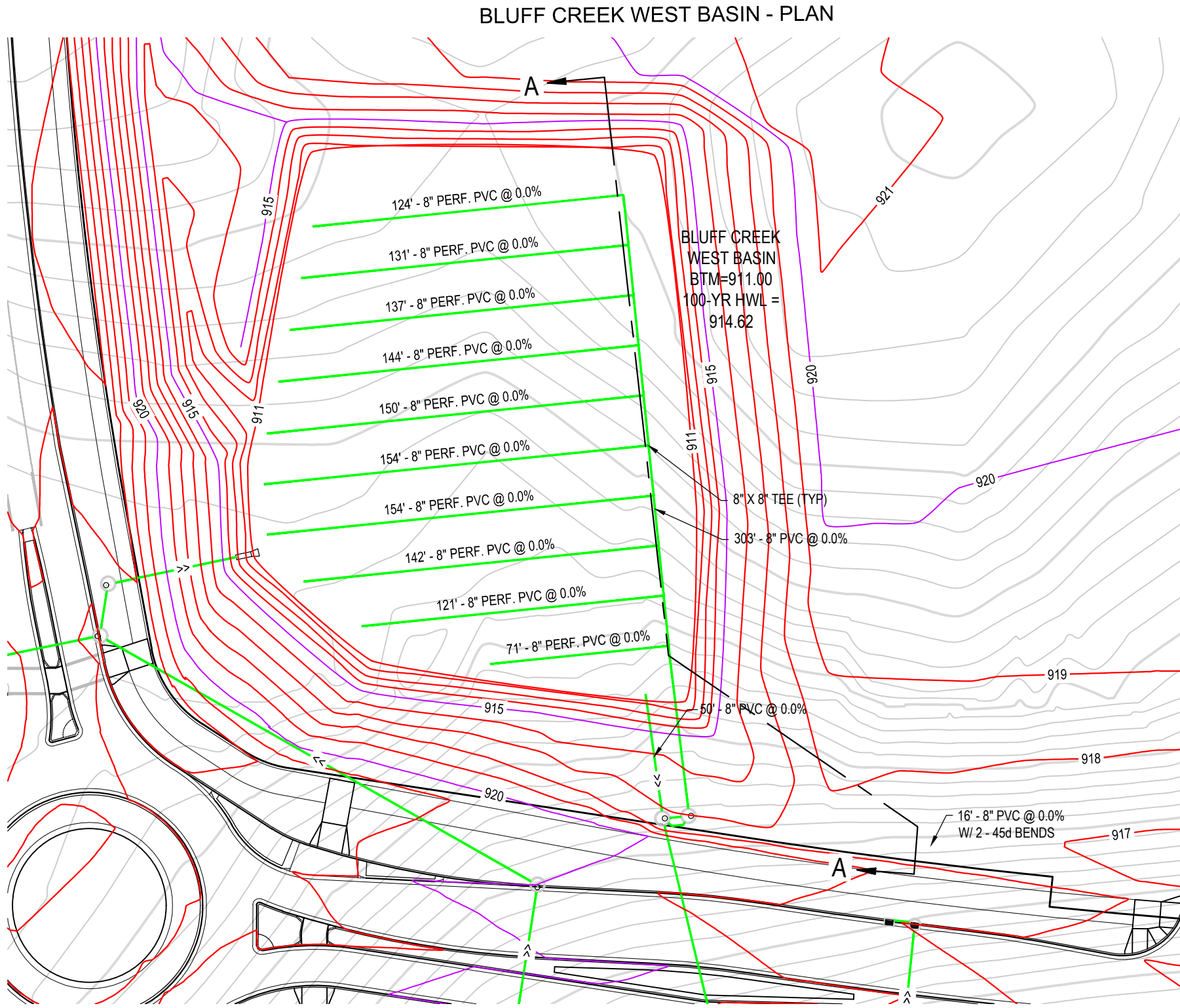
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FILE NAME C303SCD001.DWG

PROJECT NO. SCD14001.LEV

BASIN CROSS SECTIONS

C3.3A



OWNER
LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY
CITY OF MINNETRISTA

PROJECT
AVIENDA

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WATERSHED SUBMITTAL
MAY 27, 2020

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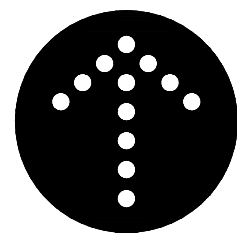
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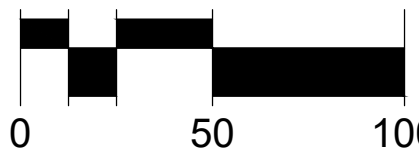
BASIN CROSS SECTIONS
C3.3B

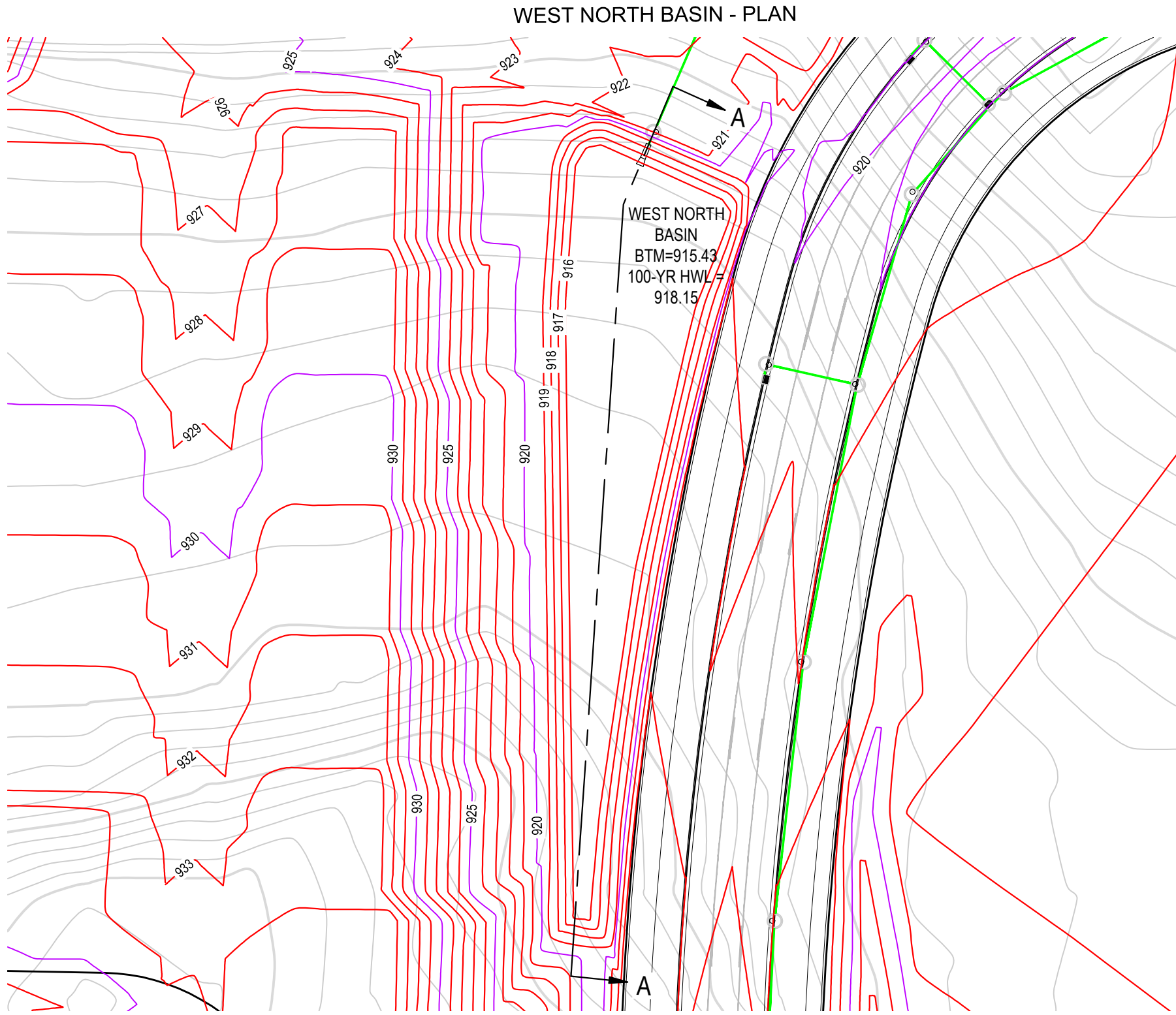


Know what's Below.
Call before you dig.

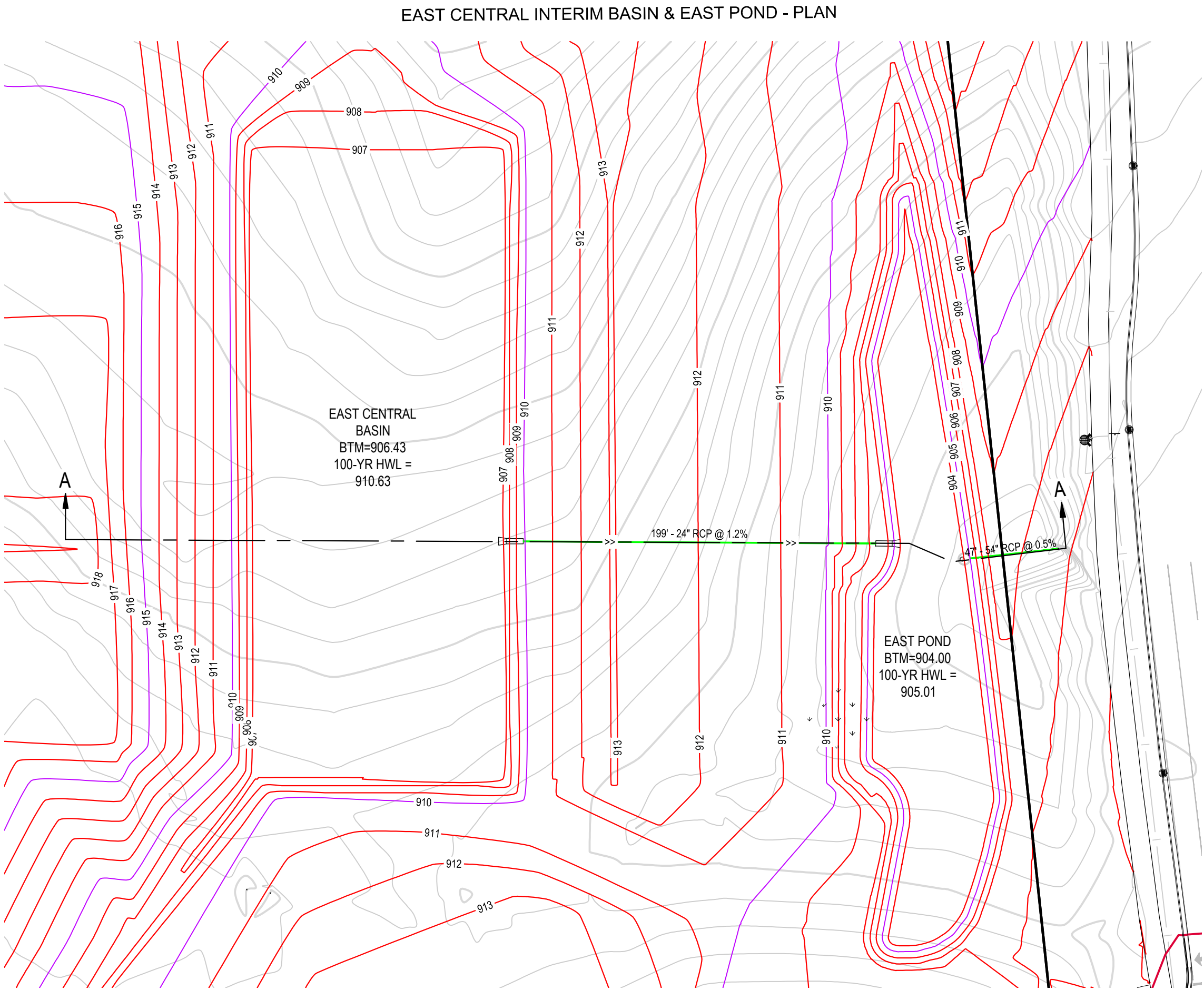
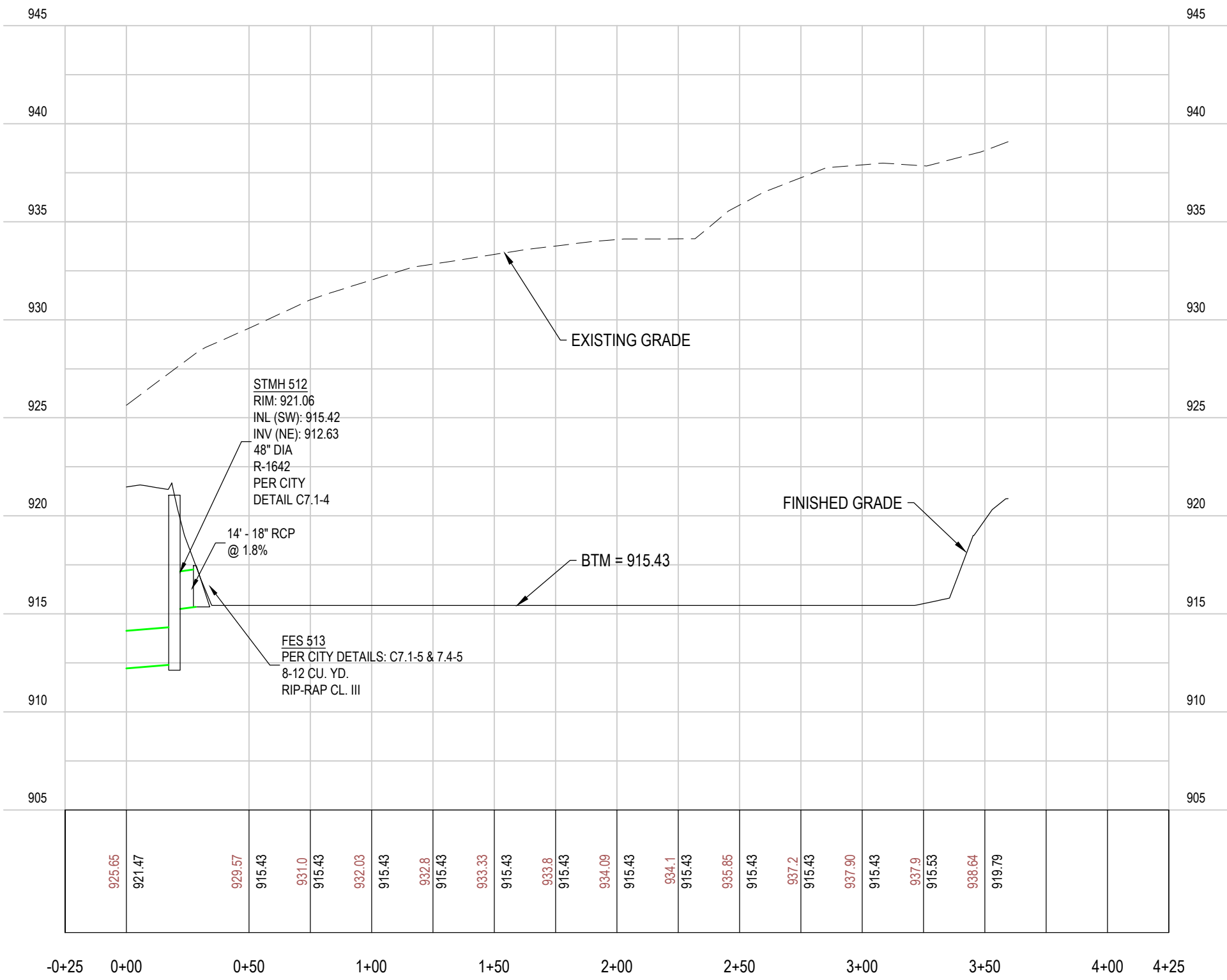


NORTH

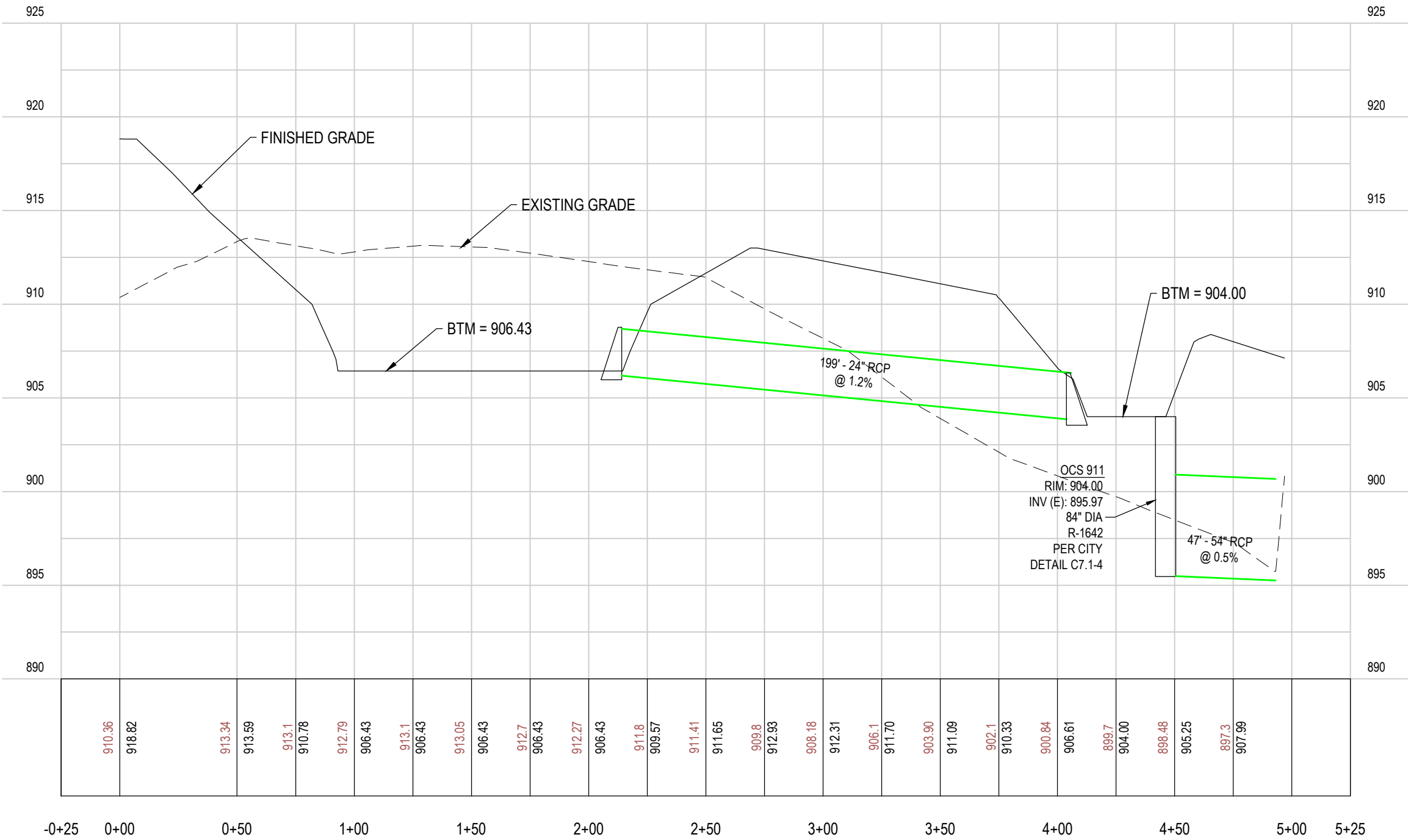




WEST - NORTH BASIN CROSS SECTION A-A



EAST CENTRAL INTERIM BASIN & EAST POND CROSS SECTION A-A



OWNER

LEVEL 7 DEVELOPMENT, LLC

4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

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BY SES

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Signature
Steven E. Sabornie
License No. 17175 Date: 06/27/2020

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MAY 27, 2020

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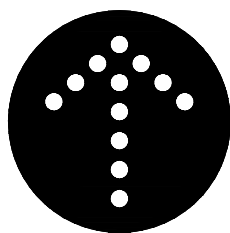
PROJECT NO. SCD14001.LEV

BASIN CROSS SECTIONS

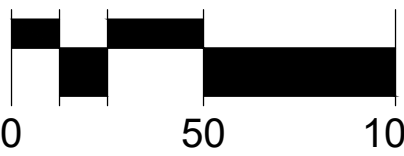
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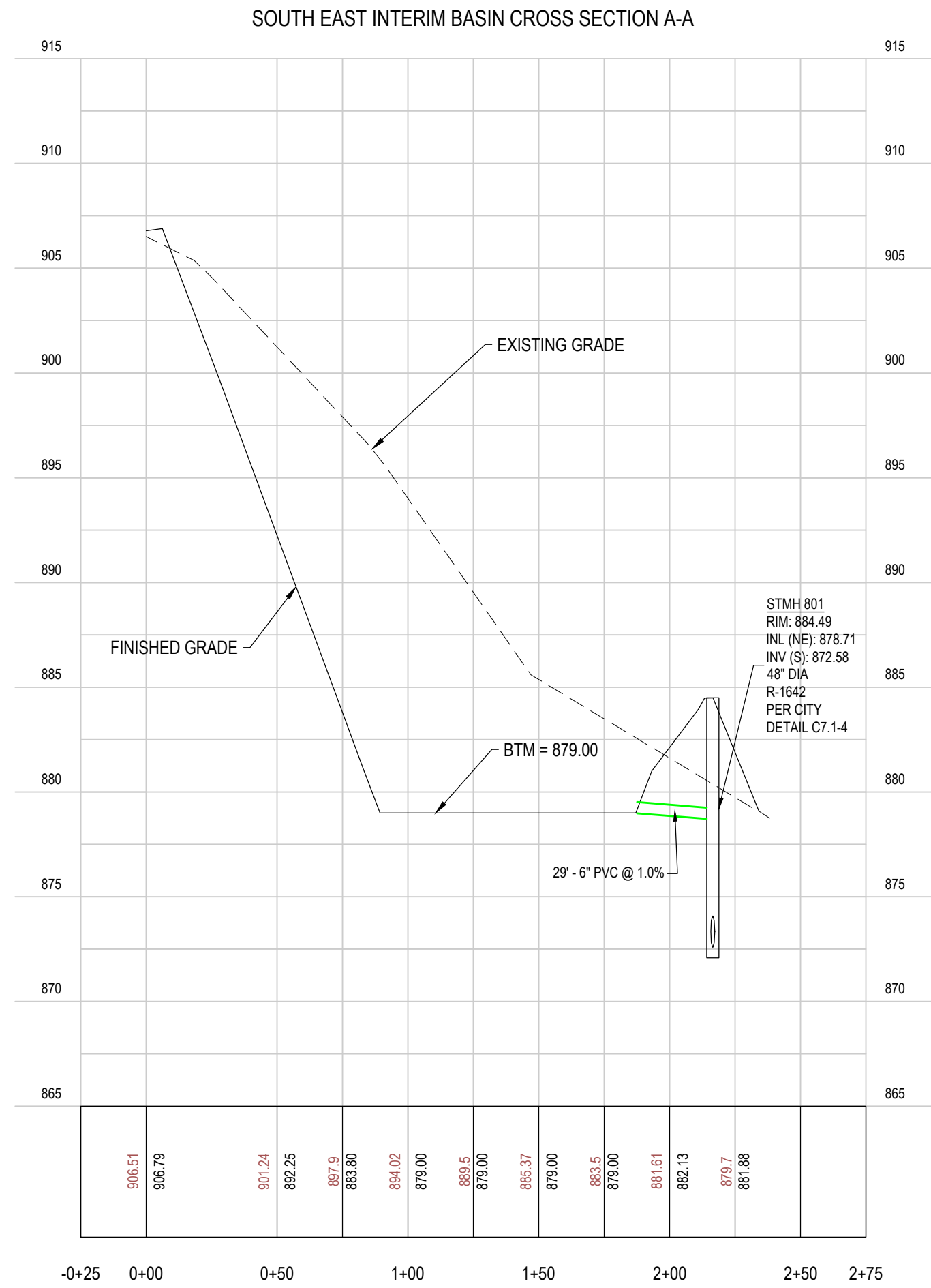
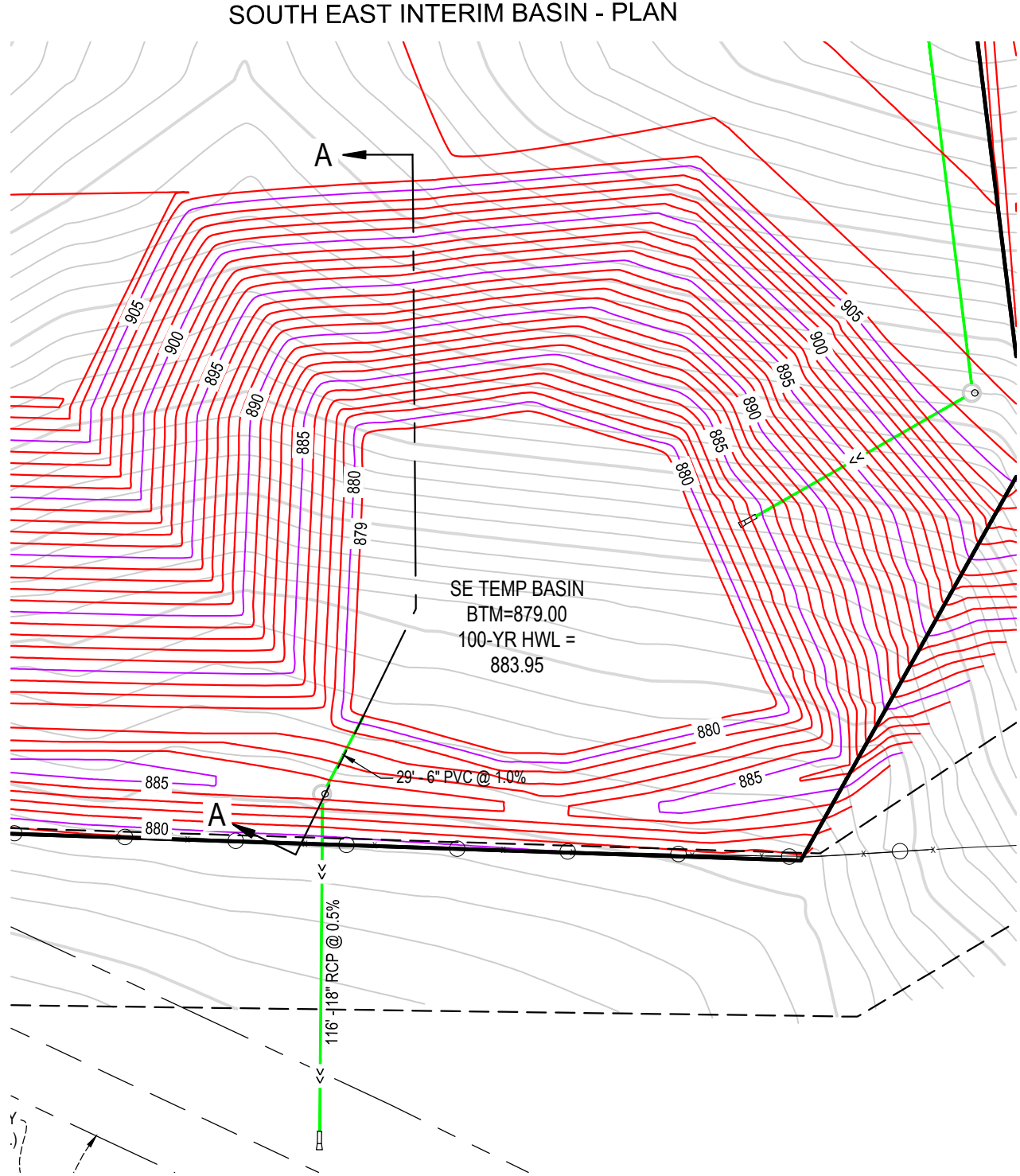
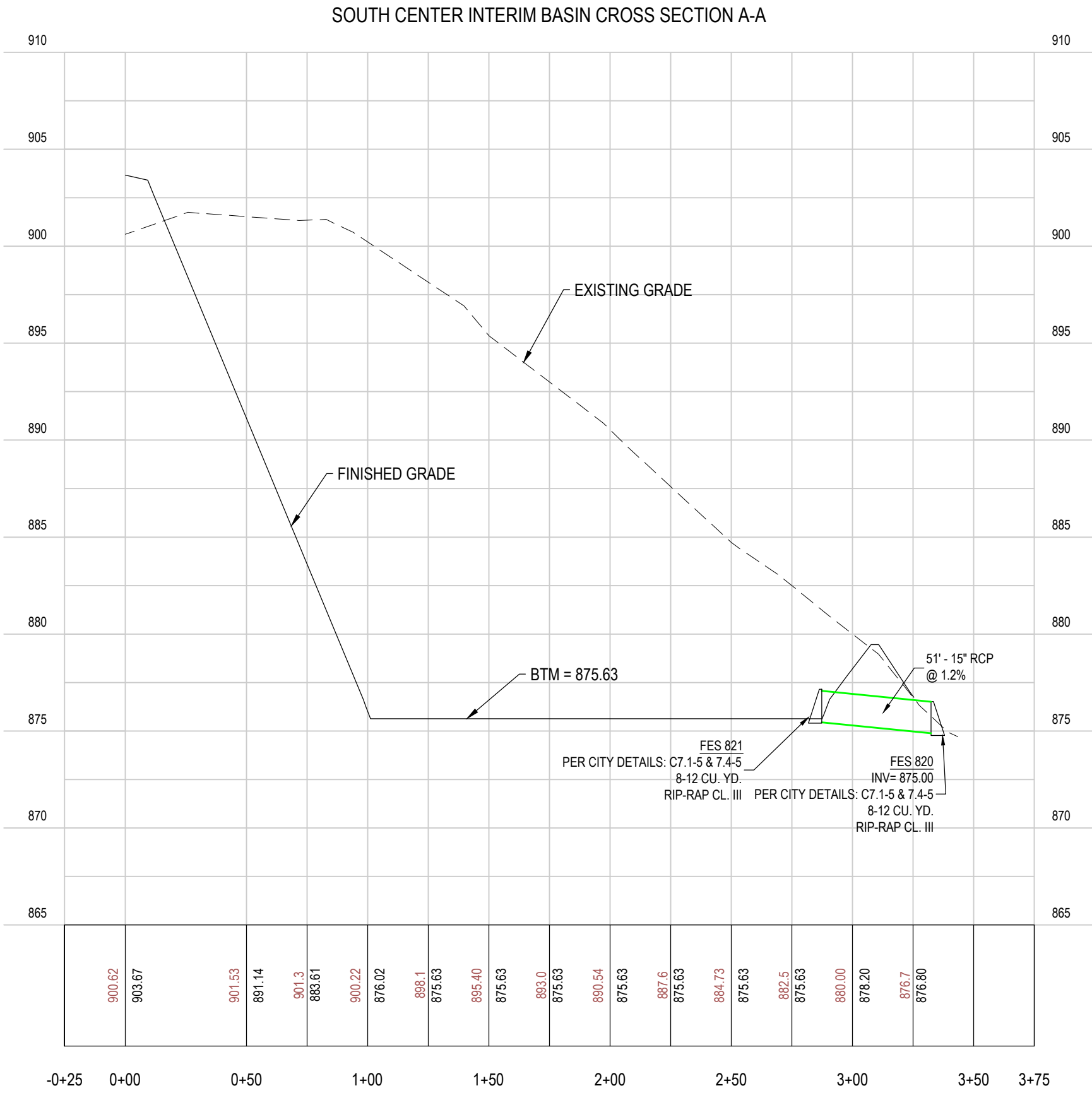
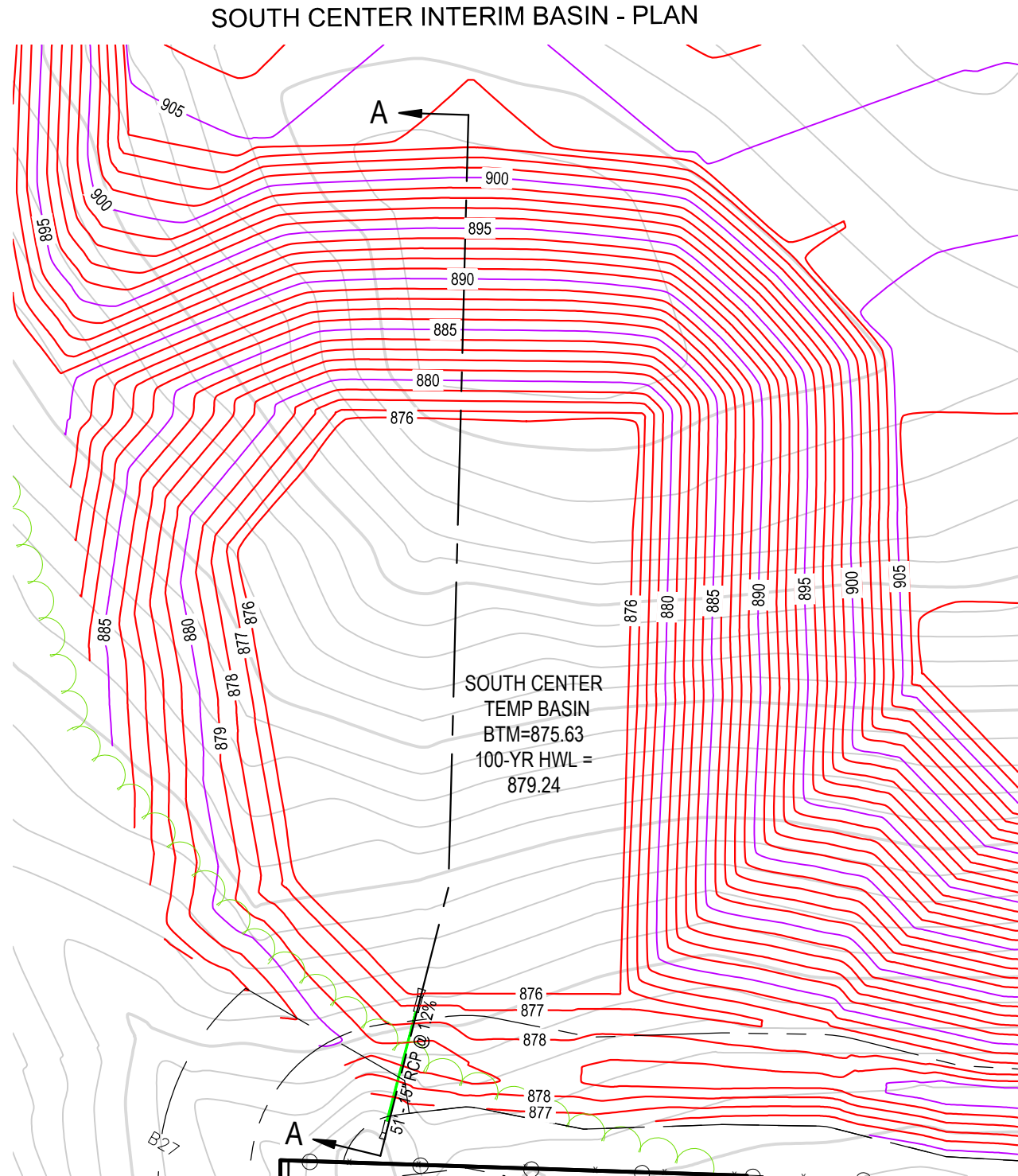
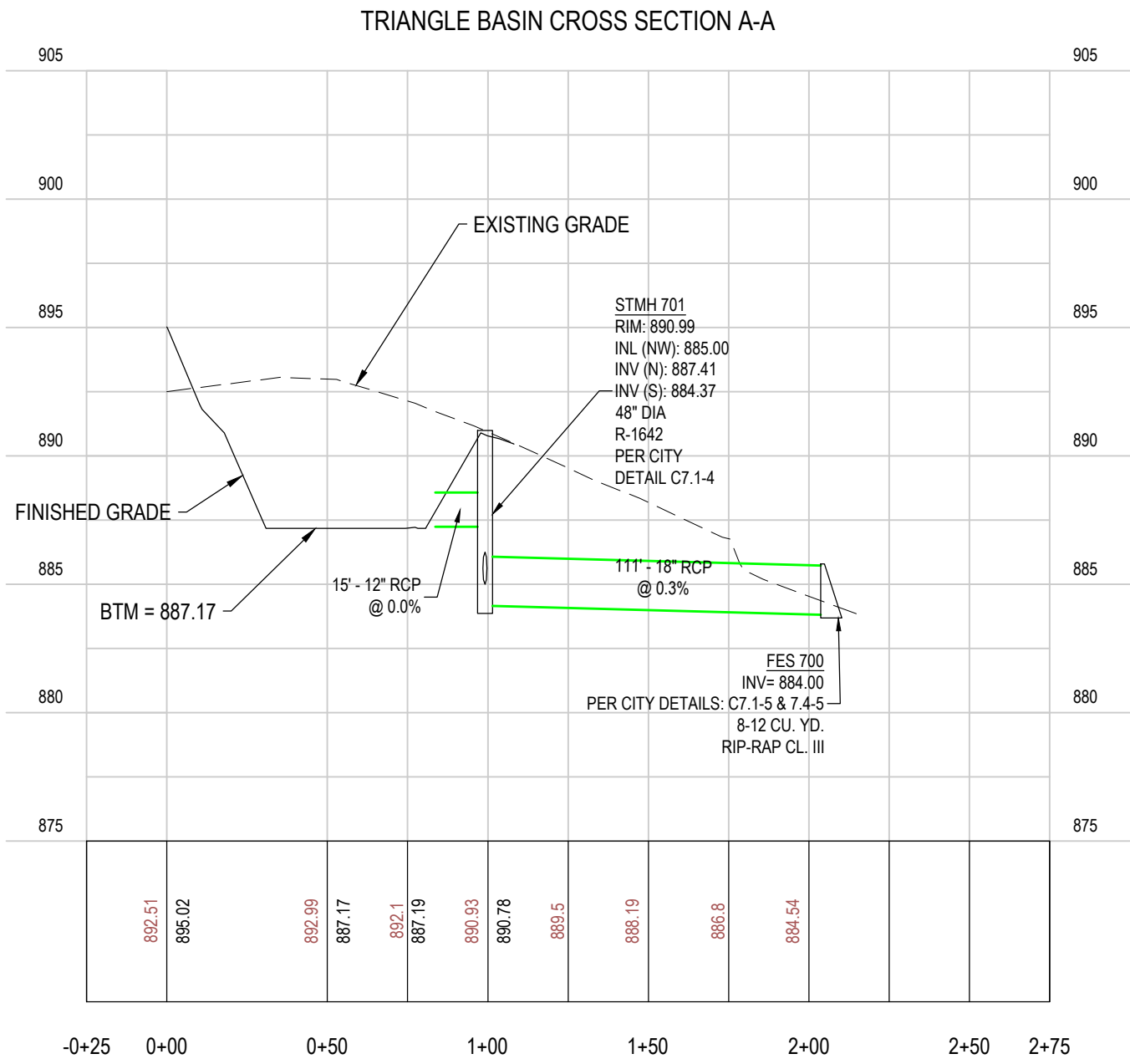
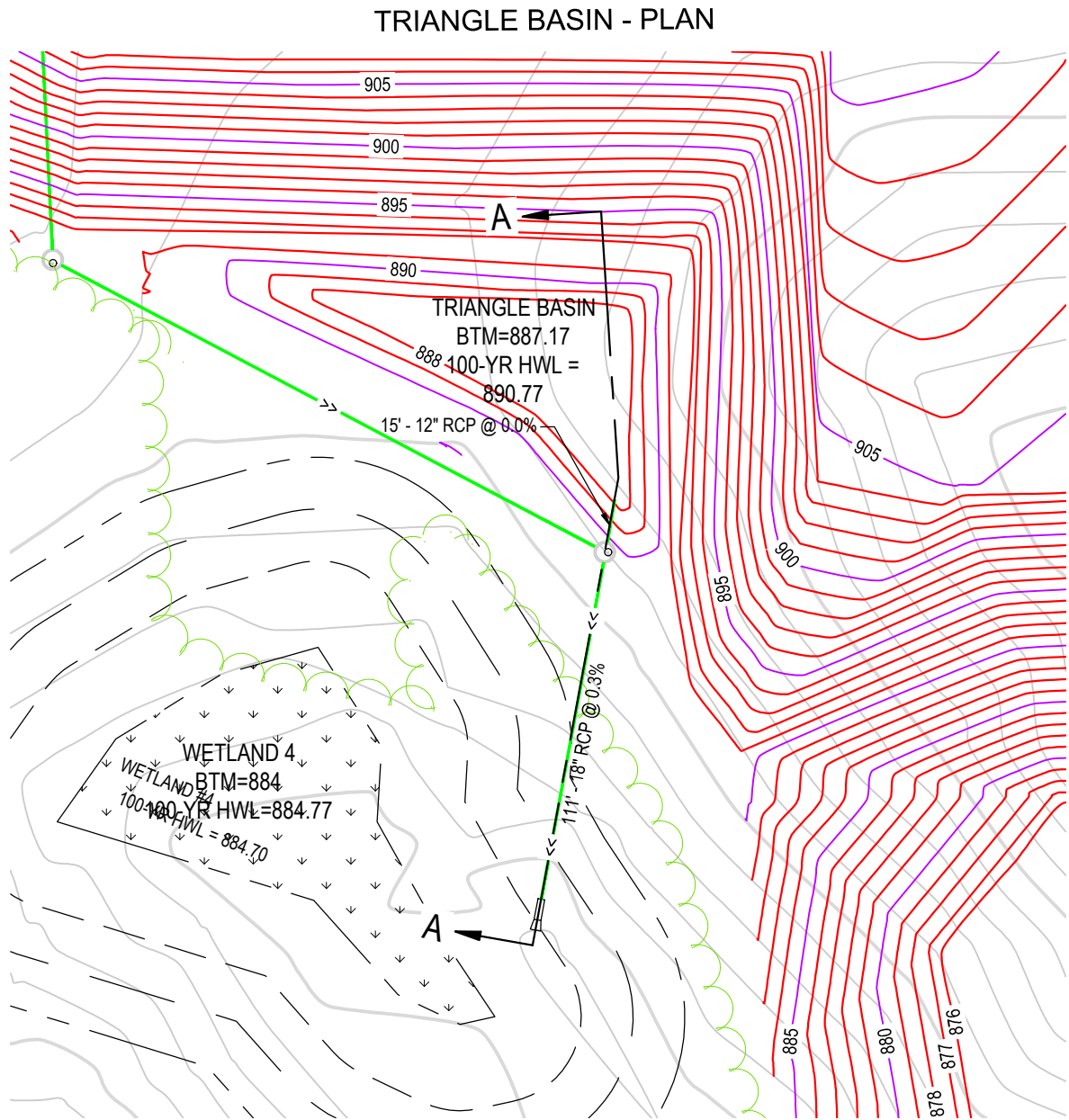
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0 50 100



OWNER

LEVEL 7 DEVELOPMENT, LLC

4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA

ISSUE / REVISION HISTORY

DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW

BY SES DATE 05.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of MINNESOTA.

Signature shown is a digital signature of original. The printed copy of this plan on file at Landform Professional Services, LLC, office and is not subject to request.

WATERSHED SUBMITTAL
MAY 27, 2020

LANDFORM
From Site to Finish

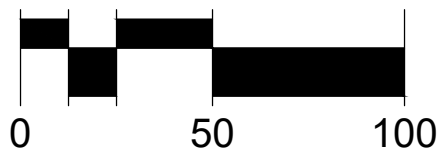
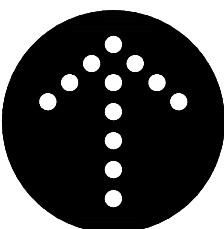
105 South Fifth Avenue Suite 513
Minneapolis, MN 55401
Tel: 612-252-9070
Fax: 612-252-9077
Web: landform.net

FILE NAME C303SCD001.DWG

PROJECT NO. SCD14001.LEV

BASIN CROSS SECTIONS

C3.3D





SEED / SOD SCHEDULE

GROUND COVER	CODE
	SOD HYLAND SOD, SALT TOLERANT
	TURF SEED MN/DOT MIX 25-141
	BUFFER/ WET SEED MN/DOT MIX 33-261

SEE EROSION CONTROL PLAN & SWPPP FOR ADDITIONAL INFORMATION AND TEMP. SEEDING CONDITIONS

OWNER

LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY

PROJECT

AVIENDA

ISSUE / REVISION HISTORY		
CONTACT ENGINEER FOR ANY PRIOR HISTORY		
DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW

BY SES DATE 05.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature shown is a digital representation of the original. Wet signed copy of this plan on file at Landform Professional Services, LLC office and is available upon request.

IF THE SIGNATURE, SEAL OR FOUR LINES DIRECTLY ABOVE ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED BEYOND INTENDED READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

WATERSHED SUBMITTAL

MAY 27, 2020

105 South Fifth Avenue Suite 513 Minneapolis, MN 55401
Tel: 612-252-9070 Fax: 612-252-9077 Web: landform.net

FILE NAME C304SCD001.DWG

PROJECT NO. SCD14001.LEV

PHASE 1 SEEDING & SODDING

C3.4

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SEEDING / SODDING NOTES

- GENERAL:
1. ALL PLANT MATERIAL INSTALLATION, INCLUDING SEED AND SOD, SHALL BE COMPLETED PRIOR TO SUBSTANTIAL COMPLETION.

2. CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES, INCLUDING IRRIGATION LINES, WITH THE OWNER FOR PROPRIETARY UTILITIES 72 HOURS BEFORE DIGGING. CONTRACTOR SHALL CONTACT EITHER COMMON GROUND ALLIANCE AT 811 OR CALL811.COM OR Gopher State ONE CALL AT 651-681-7336 (TWIN CITIES METRO AREA) OR 800-252-1166 (GREATER MINNESOTA) OR WEB AT www.gopherstateonecall.org. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ANY DAMAGES TO SAME. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONFLICTS TO FACILITATE PLANT RELOCATION.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS, AND PERMITS GOVERNING THE WORK.

4. ALL PLANT MATERIAL QUANTITIES, SHAPES OF BEDS AND LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN AND ADJUSTED TO CONFORM TO THE EXACT CONDITIONS OF THE SITE. THE LANDSCAPE ARCHITECT SHALL APPROVE THE STAKING LOCATION OF ALL PLANT MATERIALS PRIOR TO INSTALLATION. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.

5. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.

6. NO PLANT MATERIAL SHALL BE SUBSTITUTED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT. ALL SUBSTITUTIONS MUST BE APPROVED PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING, OR AFTER INSTALLATION.

7. THE PLAN TAKES PRECEDENCE OVER THE LANDSCAPE LEGEND IF DISCREPANCIES EXIST. THE SPECIFICATIONS TAKE PRECEDENCE OVER THE PLANTING NOTES AND GENERAL NOTES.

8. CONTRACTOR SHALL PROVIDE GUARANTEE OF ALL PLANT MATERIALS FOR TWO COMPLETE GROWING SEASONS (APRIL 1 - NOVEMBER 1) YEAR. THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECTS OR OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. THE GUARANTEE SHALL COVER THE FULL COST OF REPLACEMENT INCLUDING LABOR AND PLANTS. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL LANDSCAPE LEGEND SPECIFICATIONS.

9. CONTRACTOR SHALL PROVIDE NECESSARY WATERING OF PLANT MATERIALS UNTIL THE PLANT IS FULLY ESTABLISHED OR IRRIGATION SYSTEM IS OPERATIONAL. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR.

10. PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.

11. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.

SOIL PREPARATION:

12. TOPSOIL SHALL BE LOCAL FERTILE AGRICULTURAL SOIL FREE OF SUBSOILS, ROCKS, CLAYS, PLANTS, WEEDS, ROOTS AND OTHER IMPURITIES. PH VALUE SHALL BE BETWEEN 5.4 AND 7.0.

13. REMOVE DEBRIS AND WEEDS FROM SUBSOIL.

14. THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL PERFORM A SOIL TEST PRIOR TO INSTALLATION AND NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.

15. SPREAD TOPSOIL TO A MINIMUM DEPTH OF 6". TOPSOIL PLACEMENT SHALL TAKE PLACE DURING DRY WEATHER. PREPARE TOPSOIL SO THAT IT IS FREE OF DEBRIS AND GRADED TO DRAIN AS INDICATED ON GRADING PLANS.

16. LIGHTLY COMPACT TOPSOIL AFTER PLACEMENT AND PROHIBIT CONSTRUCTION TRAFFIC FROM AREAS WITH TOPSOIL.

SEEDING/ SODDING:

17. HIGHLAND SOD SHALL BE NURSERY GROWN GRADE: CULTIVATED GRASS SOD WITH STRONG FIBROUS ROOT SYSTEM FREE OF STONES, BURNED OR BARE SPOTS CONTAINING NO MORE THAN 5 WEEDS PER 1000 SF. SOD SHALL BE GROWN IN MINERAL SOILS. SOD GROWN IN PEAT SOILS WILL BE REJECTED.

18. SOD MIXTURE SHALL BE 40% KENTUCKY BLUEGRASS, 30% PERENNIAL RYEGRASS, 30% FINE FESCUES.

19. FERTILIZER FOR SODDED AREAS SHALL BE NITROGEN 10%, PHOSPHORIC ACID 10%, SOLUBLE POTASH 10%.

20. APPLY FERTILIZER AT APPLICATION RATE OF 1LB/1000 SF TO TOPSOIL PRIOR TO PLACING SOD.

21. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE PROPER SOIL CONTACT. MOISTEN PREPARED SOIL IMMEDIATELY PRIOR TO LAYING SOD. LAY SOD IMMEDIATELY UPON DELIVERY TO THE SITE, LEAVING NO OPEN JOINTS OR OVERLAPPING JOINTS. DO NOT STRETCH SOD. DO NOT LAY SOD IF TEMPERATURE IS BELOW FREEZING.

22. ROLL SOD WITH 1/3 FULL ROLLER AFTER SOD AND SOIL HAVE DRIED. ROLL BEFORE THE FIRST WATERING.

23. SEED AS SPECIFIED ON PLANS AND PER MN/DOT 2014 SEEDING MANUAL SPECIFICATIONS.

24. REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
- 811

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0 150 300
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NPDES PERMIT AND SWPPP COMPONENTS

1. The current Minnesota Construction Stormwater General Permit (Permit) dated August 1, 2018 is referenced in this document as the Permit.

The SWPPP includes the following components:

- Construction Documents prepared by Landform
- Stormwater Management Narrative and calculations
- Maintenance Plan for permanent stormwater BMPs
- Preliminary geotechnical report prepared by Braun Intertec, dated 4-12-2017
- Piezometer report by Braun Intertec, dated 10-16-2017
- Double-ring infiltrometer test results by Braun Intertec, dated 8-16-2017

All components must be kept onsite by the Operator. The Operator shall contact Civil Engineer if they do not have all of the above documents.

SITE INFORMATION

Site location: Latitude: 44.867527, Longitude: -93.557648

Disturbed area = 93.0 ac.
Pre-construction impervious area within disturbed area = 0.4 ac.
Post-construction impervious area within disturbed area = 0.0 ac.
Net change in impervious area within disturbed area = -0.4 ac.

- Type of stormwater management:
- Filtration
 - Wet Sedimentation

Erosion prevention and sediment control quantities are on sheets C3.0 - C3.0D.

SITE EVALUATION / ASSESSMENT / PLANNING

1. The Operator shall have primary responsibility and significant authority for the development, implementation, maintenance, inspection and amendments to the approved SWPPP. Duties include but are not limited to:
- Ensuring full compliance with the SWPPP and the Permit.
 - Implementing all elements of the SWPPP, including but not limited to:
 - Implementing prompt and effective erosion and sediment control measures
 - Implementing all non-storm water management, and good housekeeping BMPs ensuring that no materials other than Storm water are discharged in quantities, which will have an adverse effect on receiving waters or storm drain systems, etc.
 - Conducting routine inspections and maintenance
 - Ensuring elimination of all unauthorized discharges
 - Contradicting to ensure all of the necessary corrections / repairs are made immediately, and that the project complies with the SWPPP, the Permit, and approved plans at all times

STORMWATER POLLUTION PREVENTION MANAGEMENT MEASURES

1. Operator must develop pollution prevention management measures, implement good housekeeping BMPs, must follow all applicable federal, state, and local building codes, Occupational Safety and Health Act (OSHA), and the general conditions and general requirements of the construction contract.
2. The Operator shall minimize the exposure to stormwater of any of the products, material, or wastes stored on site that may wash downstream or contaminate stormwater.
3. Building products that have the potential to leach pollutants must be under cover.
4. Chemicals and landscape materials shall be under cover to prevent the discharge of pollutants.
5. Operator to track progress of the following items on site maps: portable toilets, material storage areas, vehicle and equipment fueling and maintenance areas, concrete washouts, paint and stucco washouts, dumpsters or other trash and debris containers, spill kits, stockpiles, any other non-structural non-storm water management BMPs, any temporarily removed structural BMPs, any changes to the structural BMPs.
6. Solid waste: collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and must comply with MPCA disposal requirements.
7. Hazardous waste: oil, gasoline, paint and any hazardous substances must be properly stored in sealed containers to prevent spills, leaks or other discharge. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste or materials must be in compliance with Minn. R. Ch. 7045 including secondary containment as applicable.
8. Portable toilets must be positioned so that they are secure and will not be tipped or knocked over.
9. Concrete and other washout waste: operator must provide effective containment for all liquid and solid wastes generated by washout operations. The liquid and solid wastes must not contact the ground, and the containment must be designed so that it does not result in runoff from the washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA rules. A sign must be installed adjacent to each washout facility that requires site personnel to utilize the proper facilities for disposal of concrete and other washout wastes.
10. External vehicle washing: external washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine degreasing is allowed on site.
11. Operator shall take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where they will be loaded or unloaded as detailed in the Permit.

SWPPP CONTACT AND TRAINING INFORMATION

1. Owner:
- Bahram Akrafi
c/o Lifetime Fitness
attn: Mark Nordland
2902 Corporate Place
Chanhassen, MN 55317
952-229-7090
mnordland@life
2. Operator:
- Rachel Contracting, Inc.
attn: Ron Fricke
4125 Napier Ct. NE
St. Michael, MN 55376
763-424-1500
rfricke@rachelcontracting.com
Certification: U of MN, Design of Construction SWPPP, exp. May 31, 2021
3. Long Term Maintenance and Operation:
- Level 7 Development, Inc.
c/o Life Time
attn: Mark Nordland
2902 Corporate Place
Chanhassen, MN 55317
952-229-7090
mnordland@life
4. SWPPP Designer:
- Steve Sabraski, P.E.
Landform
105 South Fifth Avenue, Suite 513
Minneapolis, MN 55401
612-252-9070
ssabraski@landform.net
Certification: u of MN, Design of Construction SWPPP, exp. May 31, 2022
5. SWPPP Inspector / Manager:
- Landform
105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401
attn: Fred Voiz
612-363-3684
Certification: Construction Site Management, exp. May 31, 2021
6. BMP Installation and Repair:
- To be determined. Contact Operator until BMP Installer and Maintainer is selected.
Certification: , exp.

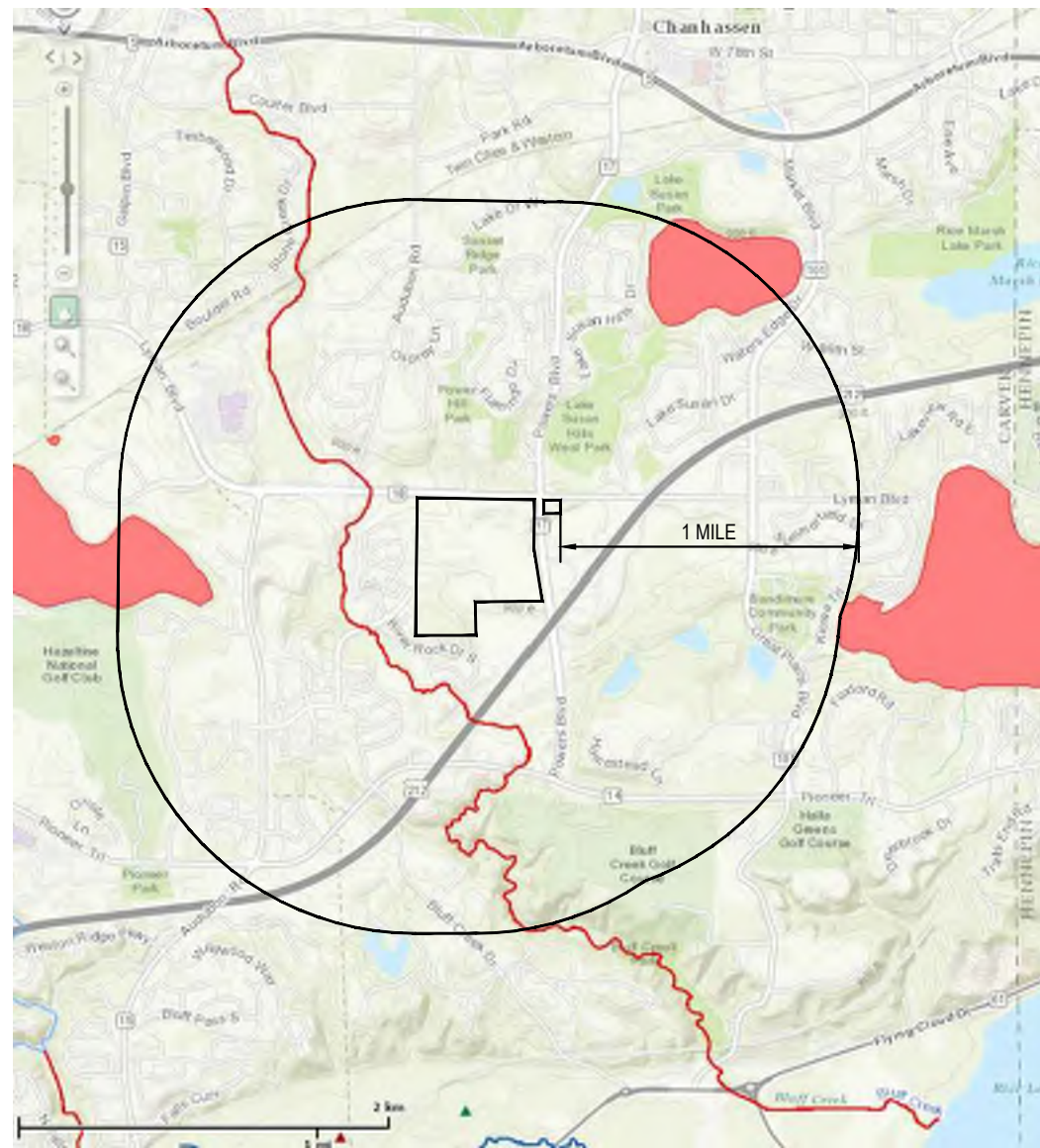
DESCRIPTION OF CONSTRUCTION ACTIVITY

1. Construction activity includes erosion and sediment control BMPs installation, clearing and grubbing, site grading, utility installation, paving, and landscaping.
2. Future construction activity will include erosion and sediment control BMPs installation, utility installation, paving, building construction, and landscaping on individual parcels.

SCHEDULE OF BMP INSTALLATION AND CONSTRUCTION ACTIVITY

1. Install perimeter sediment control BMPs prior to start of other site work. Refer to Grading, Drainage, Paving and Erosion Control sheets for initial locations of BMPs.
2. Construct temporary / permanent sedimentation basins prior to upland disturbance. Install perimeter sediment control BMPs at toe of slopes and apply erosion control blankets to basin sides within 7 days of completion of grading individual basins.
3. Protect in filtration areas with construction fencing at toe of slopes within 48 hours of completion of basin construction.
4. Stabilize outlets from temporary / permanent sedimentation basins within 24 hours of outlet construction.
5. Stabilize storm sewer outfalls within 24 hours of outlet construction (install rip rap).
6. Perform work in phases to minimize disturbed area at any one time.
7. Strip topsoil from areas to be disturbed and stockpile with perimeter sediment control BMPs. Provide immediate stabilization.
8. Rough grade site. Grading areas open at one time should be limited to minimize potential for sediment transport.
9. Install public utilities.
10. Final grade roadway areas and compact subgrade.
11. Place pavement aggregate and compact.
12. Install curb and gutter. Backfill and stabilize exposed soil.
13. Install private (small) utilities (gas, electric, communications).
14. Pave roadways, trails and walks.
15. Provide final stabilization for any remaining disturbed areas.
16. Remove temporary BMPs once up gradient areas are stabilized.
17. Connect infiltration practices to storm sewer inlets.
18. Future work (individual construction) shall follow a similar sequence but include building construction.
19. The SWPPP will need to be revised for each successive construction phase to include site specific items.

WATERS WITHIN ONE MILE OF SITE



ENVIRONMENTAL, ENDANGERED SPECIES, & ARCHEOLOGICAL REVIEWS

1. There are no requirements for storm water due to environmental, endangered species or archeological review with in the Chanhassen AUAR Updates of May 2017.

MINNESOTA IMPAIRED WATERS

1. Hazeltine Lake (AUID: 10-0014-00) is impaired based on the current USEPA 303(d) Clean Water Act list; is within 1 mile of this site; and stormwater does discharge to it.
2. Lake Riley (AUID: 10-0002-00) is impaired based on the current USEPA 303(d) Clean Water Act list; is within 1 mile of this site; and stormwater does discharge to it.
- A. TMDLs have been established for this impaired water for Fishes Bioassessment.
- B. TMDLs have been established for this impaired water for Mercury in Fish Tissue.
- C. TMDLs have been established for this impaired water for Nutrient / eutrophication biological indicators.
3. Lake Susan (AUID: 10-0013-00) is impaired based on the current USEPA 303(d) Clean Water Act list; is within 1 mile of this site; and stormwater does discharge to it.
- A. TMDLs have been established for this impaired water for Mercury in fish tissue. There are no special construction requirements for this impairment.
- B. TMDLs have not been established for this impaired water for Nutrient / eutrophication biological indicators. There are no special construction requirements for this impairment.
4. Bluff Creek (AUID: 07020012-710) is impaired based on the current USEPA 303(d) Clean Water Act list; is within 1 mile of this site; and stormwater does discharge to it.
- A. TMDLs have been established for this impaired water for Fishes bioassessments. There are no special construction requirements for this impairment.
- B. TMDLs have been established for this impaired water for Turbidity. There are no special construction requirements for this impairment.
5. This site will meet these TMDLs using the following methods: Follow Permit requirements.
6. Stream Unassessed (AUID: 07020012-999), tributary to Lake Susan is not impaired, is within one mile of the site, and stormwater from the site does discharge to it.
7. The following waters are within one mile of the site, receive stormwater discharge from the site, but do not appear on the MPCA Impaired Waters Viewer:
- A. MNDOT Wetland M09
- B. MNDOT Wetland M10
- C. Onsite Wetland #3
- D. Onsite Wetland #4
- E. Onsite Wetland #5
- F. MNDOT Stormwater "Englewood" Pond

EROSION PREVENTION AND SEDIMENT CONTROL

1. See Grading, Drainage, and Erosion Control sheets for the location and type of temporary erosion prevention and sediment control BMPs. See Grading, Drainage, and Erosion Control sheets for the location and type of permanent erosion prevention and sediment control BMPs.
2. Minimize Disturbed Areas and Protect Natural Features and Soil

Appropriate construction practices (e.g. construction phasing, vegetative buffer strips, horizontal slope grading) shall be used to minimize erosion.

Areas not to be disturbed (buffers, bluff creek overlay districts, etc.) shall be protected with construction or silt fence before work begins.

Operator shall develop methods to minimize soil compaction outside of building pads, pavement areas and utility trenches and shall use tracked equipment wherever practicable.

Topsoil shall be salvaged and reused to the extent practicable.

3. Phase Construction Activity
- Operator must not disturb more land than can be effectively inspected and maintained.

Sediment control practices shall be established on all down gradient perimeters before any upgradient land disturbing activities begin. These practices shall remain in place until final stabilization has been established in accordance with the Permit.

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

4. Control Stormwater Flowing onto and Through the Project

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, shall 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 shall be completed within 24 hours after connecting to a surface water.

Stabilization of the remaining portions of any temporary or permanent ditches or swales shall be complete within 14 days after connecting to a surface water and construction in that portion of the ditch has temporarily or permanently ceased.

Temporary or permanent ditches or swales that are being used as a sediment containment system (with properly designed rock ditch checks, bio rolls, silt dikes etc.) do not need to be stabilized. These areas shall be stabilized within 24 hours after no longer being used as a sediment containment system.

5. Stabilize Soils

All exposed soil areas, including stockpiles, must be stabilized. The site has discharge points within one mile of, and flows to impaired waters. Therefore, stabilization of all exposed soil areas shall be initiated immediately to limit soil erosion in that portion of the site where construction has temporarily or permanently ceased. Stabilization must be completed within seven (7) calendar days of cessation of construction activity.

Temporary soil stockpiles shall have silt fence or other effective sediment controls, and cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the storm water.

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.

6. Protect Slopes

Operator shall avoid work on slopes with a grade of 3h:1v or greater when practicable. Grading on slopes with a grade of 3h:1v or steeper will require techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing).

7. Protect Storm Drain Inlets

All storm drain inlets shall be protected by appropriate BMPs during construction until all sources with potential for discharging to the inlet have been stabilized. Inlet protection may be temporarily removed if a specific safety concern has been identified.

8. Provide Energy Dissipation at all Pipe Outlets Within 24 Hours

After connection to a surface water or permanent stormwater treatment system.

9. Establish Perimeter Controls and Sediment Barriers

Prior to disturbing soils on a project site, establish sediment control BMPs on all downgradient perimeters and where site discharges to public waters.

10. Retain Sediment On-site and Control Dewatering Practices

Dewatering or basin draining of turbid or sediment laden water related to construction activities shall be discharged to a temporary or permanent sedimentation basin or treated with the appropriate BMP prior to entering the surface water.

Discharge shall not cause nuisance conditions, erosion in receiving channels, adversely affect receiving water or impact wetlands, or downstream properties. Discharge points shall be adequately protected from erosion and scour by accepted energy dissipation measures.

Discharge water containing oil or grease shall be treated to remove oil or grease prior to discharge to surface waters.

Refer to Permit requirements for temporary or permanent sediment basins.

11. Establish Stabilized Construction Exits

Vehicle tracking pads shall be established as shown on the grading, drainage, paving and erosion control sheet to minimize tracking of sediment from the construction site onto adjacent streets.

12. Infiltration Basin Protection

Operator must not excavate infiltration systems to final grade or within three (3) feet of final grade until the contributing drainage area has been constructed and fully stabilized unless rigorous erosion prevention and sediment controls have been installed.

When excavating an infiltration system to within three (3) feet of final grade, operator shall mark off and protect the area from heavy construction equipment to prevent compaction of soils.

13. Dewatering and Basin Draining

Permittees must discharge turbid or sediment-laden waters related to dewatering or basin draining to a temporary or permanent sediment basin. Discharges must not cause erosion or scour near the discharge points.

14. Remove Sediment from Surface Waters

All sediment deposits and deltas must be removed from surface waters (including drainage ways, catch basins, and other drainage systems) and the removal areas restabilized within seven (7) days.

SURFACE WATER BUFFERS

1. 50 foot buffers from surface waters are not possible everywhere on this site due to site grading requirements. We have provided smaller buffers in combination with double silt fence where grading is adjacent to surface waters. For Wetland 3, the buffer ranges from 28' to 50'. Wetland 4 has a buffer of 50'. For Wetland 6, the buffer ranges from 20' to 80'. MNDOT Wetland M09 has a buffer ranging from 38' to 80'.

The above buffers are impacted only for storm sewer inlet and outlet construction.

TEMPORARY SEDIMENTATION BASIN(S)

1. This project does have more than 5 acres draining to a common location and the site drains to Impaired Waters, therefore temporary sediment basins are required. Refer to sheets C3.0 - C3.0D for further information.
2. Temporary sediment basins shall provide treatment to runoff before it leaves the construction site or enters surface waters. The contractor shall comply with the following requirements:
- A. Sedimentation basins must provide live storage of runoff resulting from the 2-year 24-hr rainfall event from each acre drained to the basin with a minimum of 1,800 cubic feet live storage volume. (where no calculation has been performed, each basin shall provide at least 5,000 cubic feet of live storage) sedimentation basins must include a stabilized emergency overflow to prevent basin integrity failure.
- B. Discharge from temporary sedimentation basins will be withdrawn from the surface in order to minimize the discharge of pollutants.
3. Discharge from basin draining shall not adversely affect the receiving water or downstream properties. Contractor will visually check to ensure adequate treatment has been obtained and that nuisance conditions will not result from the discharge.
4. Any discharge observed to be occurring during the inspection shall be recorded, described, and photographed.
5. If any proposed temporary BMPs are not working as planned refer to the "Stormwater Compliance Assistance Toolkit for Small Construction Operators", MPCA, 2017 for additional information. Operator shall contact the SWPPP Designer for additional requirements and information.

POST CONSTRUCTION / PERMANENT BMPs

1. See Grading, Drainage, and Erosion Control sheets for post construction and permanent stormwater BMPs.

INSPECTIONS AND MAINTENANCE

1. Permittees must ensure that a trained person will inspect the entire construction site at least once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5-inches in 24 hours.
2. Inspections shall include stabilized areas, erosion prevention and sediment control BMPs, and infiltration areas.
3. Surface waters on or adjacent to the site must be inspected for evidence of erosion or sediment deposition.
4. Permittees must record all inspection and maintenance activities within 24 hours of being conducted as detailed in the Permit.
5. Inspection Records content shall include:
- A. Date and time of inspections;
- B. Name of persons conducting inspections;
- C. Findings of inspections, including specific locations where corrective actions are needed;
- D. Corrective actions taken including dates, times, and the party taking the corrective action;
- E. Dates of all rainfall events greater than 1/2 inch in 24 hours (refer to Permit for measurement requirements);
- F. Any discovered discharge must be recorded, including photographs, descriptions of discharge (color, odor, settled or suspended solids, oil sheen, or other obvious indicators of pollution), and specific location of discharge location;
- G. Any amendments to the Permit as a result of inspections must be documented within seven calendar days as described in the Permit.
6. BMP Maintenance:
- A. Nonfunctional BMPs must be repaired or replaced by the end of the next business day after discovery unless a different time frame is indicated.
- B. Follow the designer's or manufacturer's recommended maintenance procedures for all BMPs.
- C. Remove sediment from BMPs when the depth of sediment has reached 1/2 the height of the BMP and properly dispose of sediment into controlled areas to prevent soil from returning to the BMP during subsequent rain events.
- D. Remove sediment from paved roadways within one calendar day of discovery.
- E. Remove sediment from around BMPs protecting storm drain inlets.
- F. Surface waters with evidence of sediment deposition must be stabilized and sediment removed within seven calendar days of discovery, or as stated by the Permit.
- G. Ensure that construction support activities, including borrow areas, waste areas, contractor work areas, and material storage areas and dedicated concrete and asphalt batch plants are cleaned and maintained.
- H. Replace damaged BMPs that no longer operate effectively.
7. Add BMPs as needed during construction to minimize erosion and prevent sediment from leaving the site.

RECORD KEEPING / RECORD RETENTION

1. The SWPPP (original or copies) including, all changes to it, and inspections and maintenance records shall be kept at the site during construction by the Owner / Operator who has operational control of that portion of the site. The SWPPP can be kept in either the field office or in an on site vehicle during normal working hours.
2. All Owner(s) must keep the SWPPP, along with the following additional records, on file for three (3) years after submittal of the Notice of Termination (NOT). This does not include any records after submittal of the NOT.
3. The following is a list of records that shall be kept at the project site available for inspectors to review:
- copy of the SWPPP, with any modifications
 - inspection and maintenance records
 - permanent operation and maintenance agreements
 - calculations for the design of temporary and permanent storm water management systems
 - any other permits required for the project
 - records of all inspection and maintenance conducted during construction
 - all permanent operation and maintenance agreements that have been implemented, including all right of way, contracts, covenants and other binding requirements regarding perpetual maintenance; and
 - all required calculations for design of the temporary and permanent storm water management systems.

LOG OF CHANGES TO THE SWPPP / AMENDMENTS

1. The Owner / Operator(s) must amend the SWPPP as necessary to include additional requirements, such as additional or modified BMPs, designed to correct problems identified or address situations as detailed in the Permit.

FINAL STABILIZATION

1. The Owner / Operator(s) must ensure final stabilization of the site. Final stabilization includes:
- A. Ensuring all areas have permanent cover.
- B. Vegetative areas must have perennial cover with a density of 70% of expected final growth.

TERMINATION OF COVERAGE

1. Owner / Operator(s) wishing to terminate coverage under the Permit must submit a Notice of Termination (NOT) to the MPCA. Compliance with the permit is required until a NOT is submitted. Refer to the Permit for details. Conditions for submitting a NOT include:
- A. Site must have achieved final stabilization (refer to section above).
- B. The permanent stormwater treatment and conveyance systems must be clean and all accumulated sediment removed.
- C. All temporary synthetic erosion prevention and sediment control BMPs must be removed from the site and disposed of properly.
- D. Single-Family Residential only - Permit termination on individual lots occurs once building construction is complete, temporary erosion prevention and downgradient perimeter control is complete, the residence sells to the homeowner, and the permittee distributes the MPCA's "Homeowner Fact Sheet" to the homeowner.

OWNER

LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA

ISSUE / REVISION HISTORY

CONTACT ENGINEER FOR ANY PRIOR HISTORY			
DATE	ISSUE / REVISION		REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES	
01 MAY 2020	CITY SUBMITTAL	SES	
27 MAY 2020	WATERSHED SUBMITTAL	SES	

PROJECT MANAGER REVIEW

BY SES

DATE 06.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the state of MINNESOTA.

Steven E. Sabraski
License No. 14785
Date: 06/27/2020

Signature shown is a digital signature of original and a true copy of this plan on file at Landform Professional Services, LLC office and a true copy of this plan on file at

CONSTRUCTION

IF THE SIGNATURE, SEAL OR FOUR LINES DIRECTLY ABOVE ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED BEYOND INTENDED READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

WATERSHED SUBMITTAL

MAY 27, 2020

LANDFORM
From Site to Finish

105 South Fifth Avenue Tel: 612-252-9070
Suite 513 Fax: 612-252-9077
Minneapolis, MN 55401 Web: landform.net

FILE NAME C305SCD001.DWG

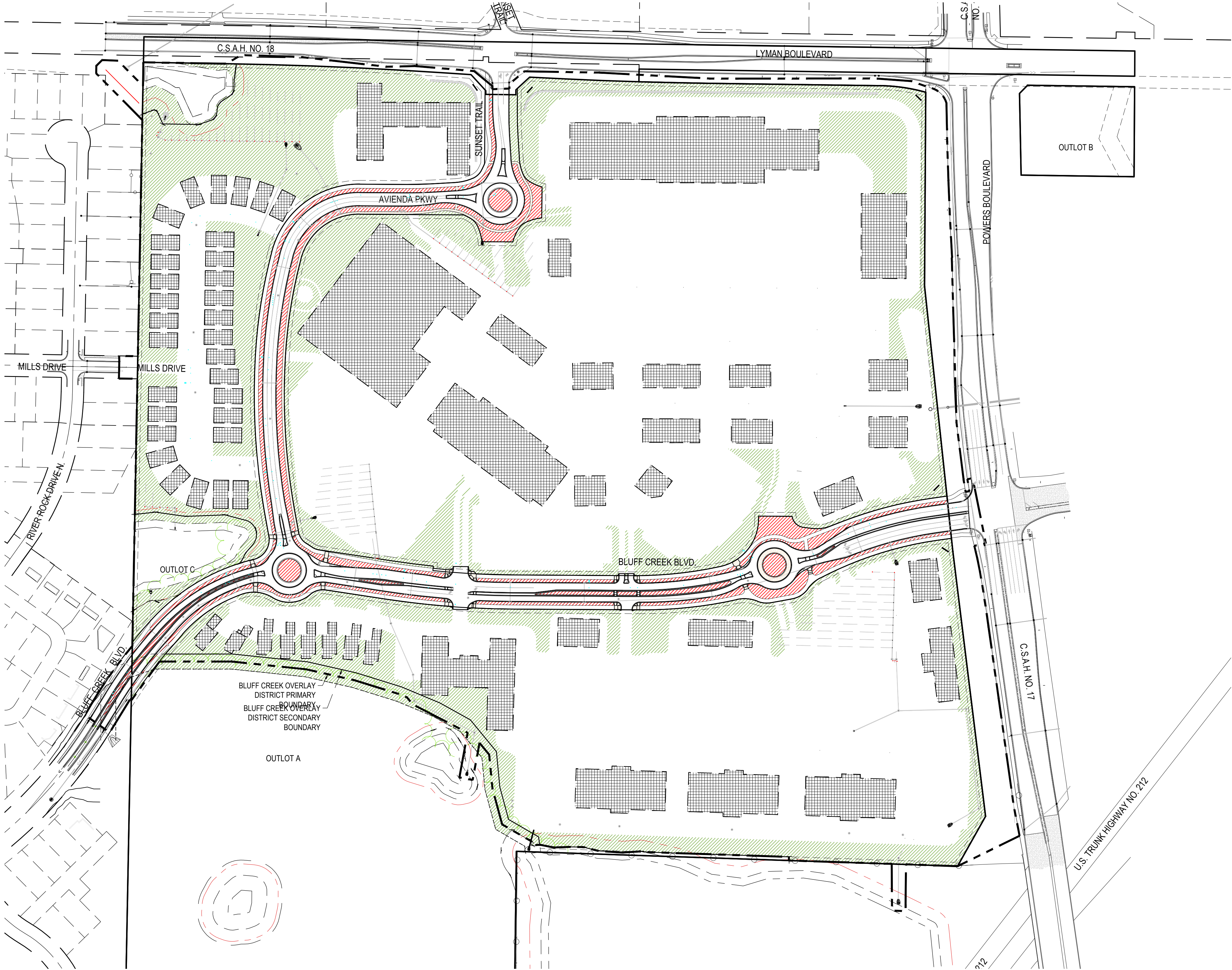
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SWPPP NOTES

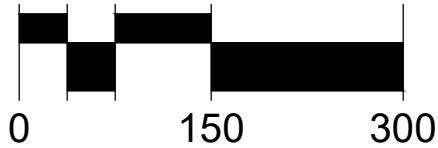
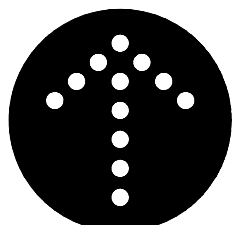
C3.5



Know what's Below.
Call before you dig.



Know what's Below.
Call before you dig.



LEGEND		
	PHASE 1 DECOMPACTION AREAS	
	ANTICIPATED FUTURE DECOMPACTION AREAS (FOR REFERENCE)	

LEGEND		
SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:CONCRETE WASHOUT	
	:DRAINAGE SWALE	
	:CONSTRUCTION LIMITS	

- GENERAL NOTES
1. FOR CONSTRUCTION STAKING AND SURVEYING SERVICES CONTACT LANDFORM AT 612.252.9070.
- EROSION PREVENTION AND SEDIMENT CONTROL NOTES
2. INSTALL PERIMETER SEDIMENT CONTROLS PRIOR TO BEGINNING WORK AND MAINTAIN FOR DURATION OF CONSTRUCTION. INSTALL POND / BASIN PROTECTION SEDIMENT CONTROLS WITHIN 7 DAYS OF COMPLETION OF BASIN GRADING. REMOVE PERIMETER CONTROLS AFTER AREAS CONTRIBUTING RUNOFF ARE PERMANENTLY STABILIZED AND DISPOSE OF OFF SITE.
3. LIMIT SOIL DISTURBANCE TO THE GRADING LIMITS SHOWN. SCHEDULE OPERATIONS TO MINIMIZE LENGTH OF EXPOSURE OF DISTURBED AREAS.
4. MANAGEMENT PRACTICES SHOWN ARE THE MINIMUM REQUIREMENT. INSTALL AND MAINTAIN ADDITIONAL CONTROLS AS WORK PROCEEDS TO PREVENT EROSION AND CONTROL SEDIMENT CARRIED BY WIND OR WATER.
5. REFER TO SWPPP NOTES ON SHEET C3.5 FOR ADDITIONAL REQUIREMENTS.
6. EXCAVATE PONDS AND TEMPORARY SEDIMENTATION BASINS EARLY IN THE CONSTRUCTION SEQUENCE. REMOVE SEDIMENT FROM PONDS AND BASINS PERIODICALLY AND AFTER AREAS CONTRIBUTING RUNOFF ARE PERMANENTLY STABILIZED.
7. CONTRACTOR SHALL PREVENT SEDIMENT LADEN WATER FROM ENTERING INFILTRATION SYSTEMS UNTIL THE SITE IS COMPLETELY STABILIZED.
8. ALL EXPOSED SOILS AREAS SHALL BE STABILIZED IMMEDIATELY TO LIMIT SOIL EROSION IN THAT PORTION OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED.
9. TEMPORARY SEED, SOD, MULCH AND FERTILIZER SHALL MEET THE FOLLOWING SPECIFICATIONS, AS MODIFIED.

ITEM	SPECIFICATION NUMBER
SOD	MNDOT 3878
SEED	MNDOT 3876
	MN TYPE 22-111 @ 30.5 LB/AC - TEMPORARY EROSION CONTROL
	MN TYPE 25-151 @ 120 LB/AC - PERMANENT TURF
MULCH	MNDOT 3882
	MN TYPE 33-261 @ 35 LB/AC - PERMANENT WETLAND BUFFER
	(MNDOT TYPE 1 @ 2 TON/AC, DISC ANCHORED)
FERTILIZER (FOR PERMANENT TURF ONLY)	MNDOT 3881
GENERAL PLACEMENT	MNDOT 2575
10. SEE SITE RESTORATION SHEET FOR PERMANENT TURF AND LANDSCAPE ESTABLISHMENT.
11. SCRAPE ADJACENT STREETS CLEAN DAILY AND SWEEP CLEAN WEEKLY.

- GRADING NOTES
12. CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING GRADING.
13. REFER TO THE GEOTECHNICAL REPORT PREPARED BY BRAUN INTEREC, DATED APRIL 12, 2017, FOR ADDITIONAL INFORMATION ON BACKFILL MATERIAL AND GROUNDWATER CONDITIONS.
14. REMOVE TOPSOIL FROM GRADING AREAS AND STOCKPILE SUFFICIENT QUANTITY FOR REUSE. MAINTAIN STOCKPILES WITH MAXIMUM 1V:2H SLOPES.
15. REMOVE SURFACE AND GROUND WATER FROM EXCAVATIONS. PROVIDE INITIAL LIFTS OF STABLE FOUNDATION MATERIAL IF EXPOSED SOILS ARE WET AND UNSTABLE.
16. AN INDEPENDENT TESTING FIRM SHALL VERIFY THE REMOVAL OF ORGANIC AND UNSUITABLE SOILS, SOIL CORRECTION, AND COMPACTION AND PROVIDE PERIODIC REPORTS TO THE OWNER.
17. PLACE AND COMPACT FILL USING LIFT THICKNESSES MATCHED TO SOIL TYPE AND COMPACTION EQUIPMENT TO OBTAIN SPECIFIED COMPACTION THROUGHOUT THE LIFT.
18. COMPACT COHESIVE SOILS IN PAVED AREAS TO 95% OF MAXIMUM DRY DENSITY, STANDARD PROCTOR (ASTM D698) EXCEPT THE TOP 3 FEET WHICH SHALL BE COMPACTED TO 100%. COMPACT TO 98% DENSITY WHERE FILL DEPTH EXCEEDS 10 FEET. THE SOIL SHALL BE WITHIN 3% OF OPTIMUM MOISTURE CONTENT. IN GRANULAR SOILS ALL PORTIONS OF THE EMBANKMENT SHALL BE COMPACTED TO NOT LESS THAN 95% OF MODIFIED PROCTOR DENSITY (ASTM D1557).
19. AVOID SOIL COMPACTION OF INFILTRATION PRACTICES. ANY EQUIPMENT USED IN INFILTRATION AREAS SHOULD BE SMALL SCALED AND TRACKED.
20. ALL DISTURBED SOIL SURFACE AREAS, EXCEPT FOR THE AREAS UNDER THE PROPOSED STREET PAVEMENT AND THE TRAIL AND SIDEWALKS, SHALL BE DECOMPACTED TO A DEPTH OF 18-INCHES AND COVERED WITH SIX INCHES OF TOPSOIL. REFER TO RPB/CWD STANDARD EROSION CONTROL NOTES FOR ADDITIONAL REQUIREMENTS.
21. REFER TO SHEET C3.3 FOR PHASE 1 BASIN CROSS-SECTIONS.
22. SLOPE CALLOUTS ARE VERTICAL/HORIZONTAL (V/H)

- RPB/CWD STANDARD EROSION CONTROL NOTES
21. NATURAL TOPOGRAPHY AND SOIL CONDITIONS MUST BE PROTECTED, INCLUDING RETENTION ON SITE OF NATIVE TOPSOIL TO THE GREATEST EXTENT POSSIBLE.
22. ADDITIONAL MEASURES, SUCH AS HYDRAULIC MULCHING AND OTHER PRACTICES AS SPECIFIED BY THE DISTRICT MUST BE USED ON SLOPES OF 3:1 (H/V) OR STEEPER TO PROVIDE ADEQUATE STABILIZATION.
23. FINAL SITE STABILIZATION MEASURES MUST SPECIFY THAT AT LEAST SIX INCHES OF TOPSOIL OR ORGANIC MATTER BE SPREAD AND INCORPORATED INTO THE UNDERLYING SOIL DURING FINAL SITE TREATMENT WHEREVER TOPSOIL HAS BEEN REMOVED.
24. CONSTRUCTION SITE WASTE SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER AND SANITARY WASTE MUST BE PROPERLY MANAGED.
25. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION AND VEGETATION IS ESTABLISHED SUFFICIENTLY TO ENSURE STABILITY OF THE SITE, AS DETERMINED BY THE DISTRICT.
26. ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPs MUST BE REMOVED UPON FINAL STABILIZATION.
27. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 CALENDAR DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED ON A PROPERTY THAT DRAINS TO AN IMPAIRED WATER.
28. SOIL SURFACES COMPACTED DURING CONSTRUCTION AND REMAINING PERVIOUS UPON COMPLETION OF CONSTRUCTION MUST BE DECOMPACTED TO ACHIEVE:

A) A SOIL COMPACTION TESTING PRESSURE OF LESS THAN 1,400 KILOPASCALS OR 200 POUNDS PER SQUARE INCH IN THE UPPER 12 INCHES OF SOIL OR
B) A BULK DENSITY OF LESS THAN 1.4 GRAMS PER CUBIC CENTIMETER OR 87 POUNDS PER CUBIC FOOT IN THE UPPER 12 INCHES OF SOIL

IN ADDITION, UTILITIES, TREE ROOTS AND OTHER EXISTING VEGETATION MUST BE PROTECTED UNTIL FINAL REVEGETATION OR OTHER STABILIZATION OF THE SITE. REFER TO SHEET C3.6 FOR DECOMPACTION AREAS.
29. THE PERMITTEE MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL FACILITIES AND SOIL STABILIZATION MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS. THE PERMITTEE MUST REPAIR, REPLACE, OR SUPPLEMENT ALL NONFUNCTIONAL BMPs WITH FUNCTIONAL BMPs WITHIN 48 HOURS OF DISCOVERY AND PRIOR TO THE NEXT PRECIPITATION EVENT UNLESS ADVERSE CONDITIONS PRECLUDE ACCESS TO THE RELEVANT AREA OF THE SITE, IN WHICH CASE THE REPAIR MUST BE COMPLETED AS SOON AS CONDITIONS ALLOW. WHEN ACTIVE LAND-DISTURBING ACTIVITIES ARE NOT UNDERWAY, THE PERMITTEE MUST PERFORM THESE RESPONSIBILITIES AT LEAST WEEKLY UNTIL VEGETATIVE COVER IS ESTABLISHED. THE PERMITTEE WILL MAINTAIN A LOG OF ACTIVITIES UNDER THIS SECTION FOR INSPECTION BY THE DISTRICT ON REQUEST.
30. ACTIVITIES MUST BE CONDUCTED SO AS TO MINIMIZE THE POTENTIAL TRANSFER OF AQUATIC INVASIVE SPECIES (E.G., ZEBRA MUSSELS, EURASIAN WATERMILFOLI, ETC.) TO THE MAXIMUM EXTENT POSSIBLE.
31. STAKING OFF AND MARKING OF PROPOSED INFILTRATION FACILITIES TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT, STOCKPILING OF MATERIALS, AND TRAFFIC. IF INFILTRATION FACILITIES ARE IN PLACE DURING CONSTRUCTION ACTIVITIES, BEST PRACTICES MUST BE DEPLOYED TO PREVENT SEDIMENT AND OTHER MATERIAL FROM ENTERING THE PRACTICE(S). INFILTRATION FACILITIES MUST NOT BE EXCAVATED TO WITHIN 3 FEET OF FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED. ANY ACCUMULATED SEDIMENT IN AN INFILTRATION FACILITY MUST BE REMOVED IN MANNER THAT PREVENTS COMPACTION OF THE FACILITY BOTTOM. TO PROVIDE A WELL-AERATED, HIGHLY POROUS SURFACE, THE SOILS BELOW AN INFILTRATION PRACTICE MUST BE LOOSENOED TO A MINIMUM DEPTH OF 18 INCHES PRIOR TO INSTALLATION OR PLANTING.

LEGEND		
SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:INLET PROTECTION	134 EACH
	:SILT FENCE	18,000 FEET
	:VEHICLE TRACKING PAD	2 EACH
	:EROSION CONTROL BLANKET	474,033 S.F.
	:ENKAMAT	10,469 S.F.
	:BUILDING PAD	

OWNER

LEVEL 7 DEVELOPMENT, LLC

4600 KINGS POINT RD
MINNETRISTA, MN 55331

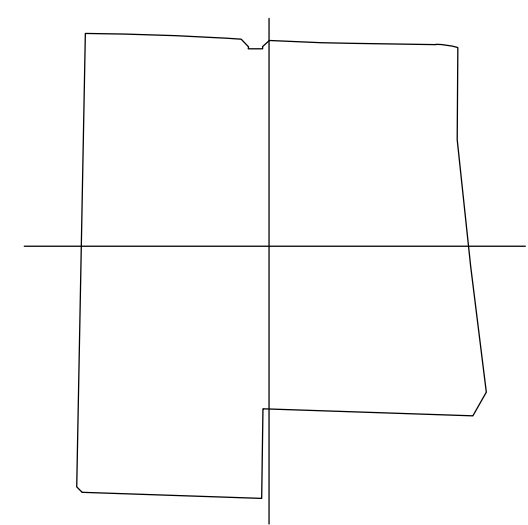
MUNICIPALITY



PROJECT

AVIENDA

KEY MAP



ISSUE / REVISION HISTORY

CONTACT ENGINEER FOR ANY PRIOR HISTORY		
DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW

BY SES DATE 06.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of MINNESOTA.

Signature
Steven E. Salomon, P.E.
License No. 14718 Date: 06/27/2020

Signature shown is a digital signature of original. No other copy of this plan on file at Landform Professional Services, LLC office and no other documents requested.

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WATERSHED SUBMITTAL

MAY 27, 2020

LANDFORM
From Site to Finish

105 South Fifth Avenue Suite 513
Tel: 612-252-9070
Fax: 612-252-9077
Minneapolis, MN 55401 Web: landform.net

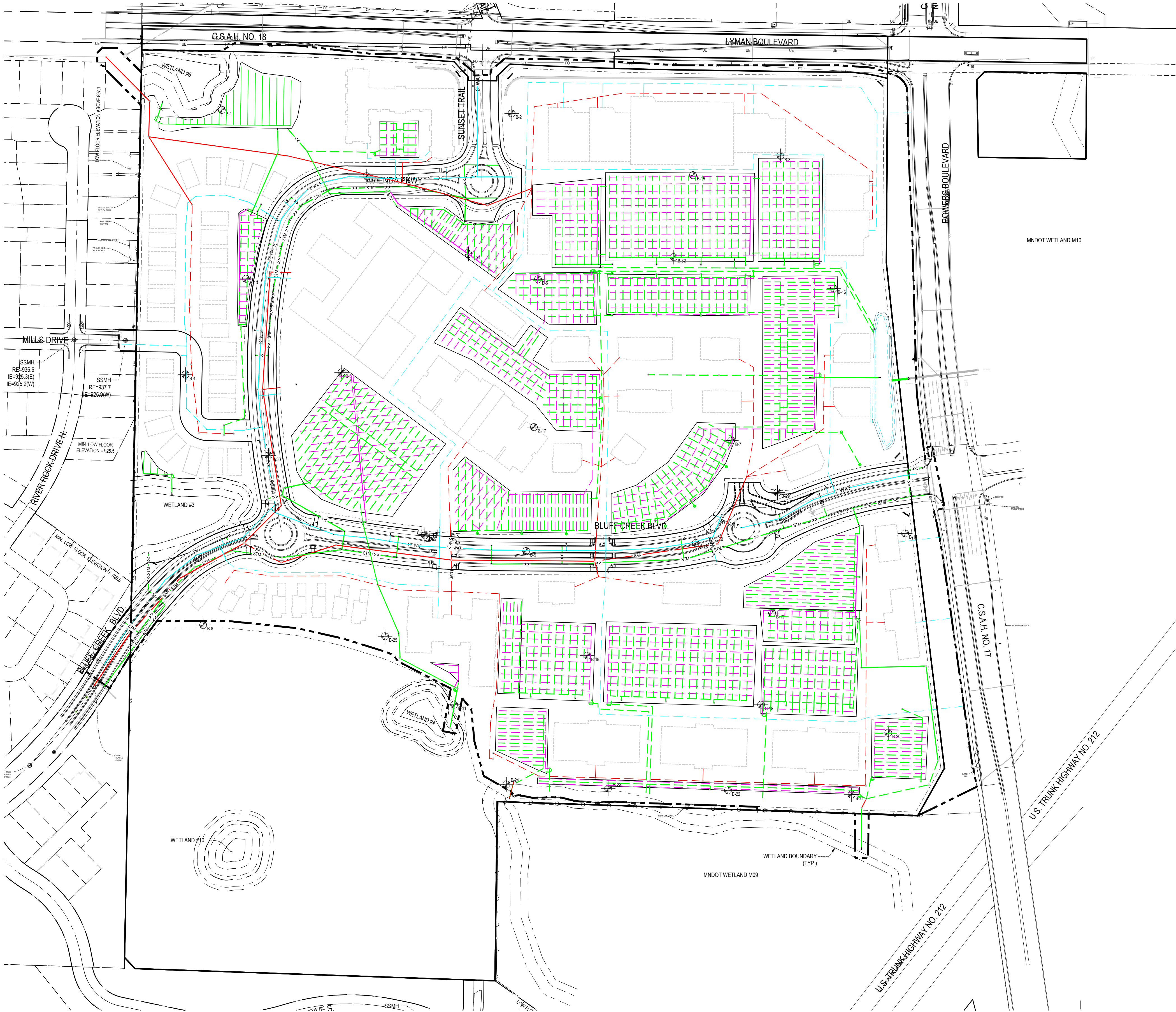
FILE NAME C306SCD001.DWG

PROJECT NO. SCD14001.LEV

PHASE 1
SOIL LOOSENING AREAS

C3.6

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- GENERAL NOTES
- FOR CONSTRUCTION STAKING AND SURVEYING SERVICES CONTACT LANDFORM PROFESSIONAL SERVICES AT 612.252.9070.
 - PIPE MATERIALS - REFER TO UTILITY PROFILES.
 - CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING.
 - CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL UTILITY POINTS OF CONNECTION PRIOR TO CONSTRUCTION OF ANY PROPOSED UTILITIES. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF THERE IS ANY DISCREPANCY.
 - CONTRACTOR TO POTHOLE ALL EXISTING UTILITIES AT PROPOSED CROSSINGS PRIOR TO CONSTRUCTION OF NEW UTILITIES TO VERIFY DEPTHS OF EXISTING LINES. CONTACT ENGINEER IMMEDIATELY IF ANY CONFLICTS ARE DISCOVERED.
 - PROVIDE MEANS AND MEASURES TO PROTECT ADJACENT PROPERTY FROM DAMAGE DURING UTILITY INSTALLATION.
 - PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE OR END OF END SECTION.
 - INSTALL TRACKER WIRE WITH ALL NON-CONDUCTIVE UTILITIES PER CITY SPECIFICATIONS.
 - CONNECT TO CITY UTILITIES IN ACCORDANCE WITH CITY OF CHANHASSEN STANDARDS.
 - CONTACT CITY OF CHANHASSEN PUBLIC WORKS DEPARTMENT AT 952.227.1300 FOR WATERMAIN CONNECTION INSPECTIONS.
 - MAINTAIN 7.5 FEET OF COVER ON WATER.
 - DEFLECT WATER TO MAINTAIN 18-INCH MINIMUM OUTSIDE SEPARATION AT SEWER CROSSINGS. CENTER PIPE LENGTHS TO PROVIDE GREATEST SEPARATION BETWEEN JOINTS.
 - CONTACT CITY OF CHANHASSEN PUBLIC WORKS DEPARTMENT, AT 952.227.1300 FOR FLUSHING AND PRESSURE TEST INSPECTIONS.
 - THE WATER DISTRIBUTION SYSTEM SHALL BE DISINFECTED PER MINNESOTA RULES, PART 4715.2250.
 - ADJUST STRUCTURES TO FINAL GRADE WHERE DISTURBED. COMPLY WITH REQUIREMENTS OF UTILITY. MEET REQUIREMENTS FOR TRAFFIC LOADING IN PAVED AREAS.
 - REFER TO SHEETS C5.1 - C5.9 FOR AVIENDA PUBLIC UTILITY PLAN AND PROFILES.
 - REFER TO PLANS BY TOOLE DESIGN GROUP FOR BLUFF CREEK BLVD PUBLIC PLAN AND PROFILES.
 - REFER TO SHEETS C7.1 - C7.5 FOR CIVIL CONSTRUCTION DETAILS.

- LEGEND
- FUTURE SANITARY SEWER (FOR REFERENCE ONLY)
 - FUTURE WATERMAIN AND SERVICES (FOR REFERENCE ONLY)
 - FUTURE STORM SEWER / BASIN DISTRIBUTION PIPES (FOR REFERENCE ONLY)
 - FUTURE BASIN UNDERDRAIN COLLECTION PIPES (FOR REFERENCE ONLY)
 - PHASE 1 SANITARY SEWER
 - PHASE 1 WATERMAIN
 - PHASE 1 STORM SEWER
 - CONSTRUCTION LIMITS

OWNER

LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA


ISSUE / REVISION HISTORY		
DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
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PROJECT MANAGER REVIEW

BY SES DATE 05.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of MINNESOTA.


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WATERSHED SUBMITTAL
MAY 27, 2020

LANDFORM
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Minneapolis, MN 55401

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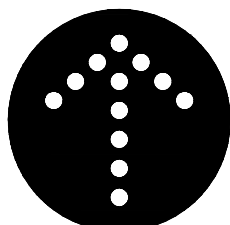
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ULTIMATE
UTILITIES
C4.0

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NORTH





GENERAL NOTES

- FOR CONSTRUCTION STAKING AND SURVEYING SERVICES CONTACT LANDFORM AT 612.252.9070.
- PIPE MATERIALS. REFER TO 2020 CITY OF CHANHASSEN STANDARD SPECIFICATIONS.
- CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING.
- CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL UTILITY POINTS OF CONNECTION PRIOR TO CONSTRUCTION OF ANY PROPOSED UTILITIES. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY IF THERE IS ANY DISCREPANCY.
- CONTRACTOR TO POTHOLE ALL EXISTING UTILITIES AT PROPOSED CROSSINGS PRIOR TO CONSTRUCTION OF NEW UTILITIES TO VERIFY DEPTHS OF EXISTING LINES. CONTACT ENGINEER IMMEDIATELY IF ANY CONFLICTS ARE DISCOVERED.
- PROVIDE MEANS AND MEASURES TO PROTECT ADJACENT PROPERTY FROM DAMAGE DURING UTILITY INSTALLATION.
- PIPE LENGTHS SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE OR END OF END SECTION.
- INSTALL TRACER WIRE WITH ALL NON-CONDUCTIVE UTILITIES. PER CITY SPECIFICATIONS.
- CONNECT TO CITY UTILITIES IN ACCORDANCE WITH CITY OF CHANHASSEN STANDARDS.
- CONTACT CITY OF CHANHASSEN PUBLIC WORKS DEPARTMENT AT 952.227.1300 FOR WATERMAIN CONNECTION INSPECTIONS, FLUSHING, AND PRESSURE TEST INSPECTIONS.
- MAINTAIN 7.5 FEET OF COVER ON WATER.
- DEFLECT WATER TO MAINTAIN 18-INCH MINIMUM OUTSIDE SEPARATION AT SEWER CROSSINGS. CENTER PIPE LENGTHS TO PROVIDE GREATEST SEPARATION BETWEEN JOINTS.
- THE WATER DISTRIBUTION SYSTEM SHALL BE DISINFECTED PER MINNESOTA RULES, PART 4715.2250.
- ALL JOINTS AND CONNECTIONS IN THE STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATER TIGHT. APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCH BASINS, AND OTHER STRUCTURES.
- CATCH BASINS IN CURB AND GUTTER ARE SUMPED 2 INCHES BELOW THE GUTTER GRADE.
- ADJUST STRUCTURES TO FINAL GRADE WHERE DISTURBED. COMPLY WITH REQUIREMENTS OF UTILITY. MEET REQUIREMENTS FOR TRAFFIC LOADING IN PAVED AREAS.

LEGEND

- PHASE 1 INFILTRATION BASIN
- PHASE 1 INTERIM BASIN
- CONSTRUCTION LIMITS

OWNER

LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA

ISSUE / REVISION HISTORY

DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
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PROJECT MANAGER REVIEW

BY SES DATE 05.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of MINNESOTA.

Signature of **SEVEN E. SASS**
License No. **17175** Date: **05/27/2020**
Signature shown is a digital signature of original. No other copy of this plan on file at Landform Professional Services, LLC office and no other copy on request.

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WATERSHED SUBMITTAL
MAY 27, 2020



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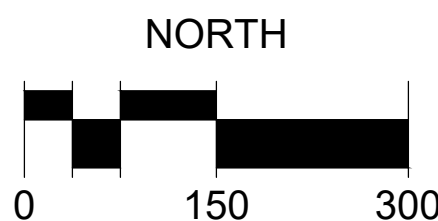
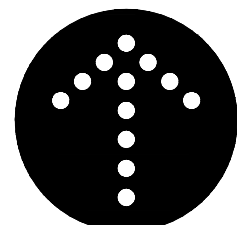
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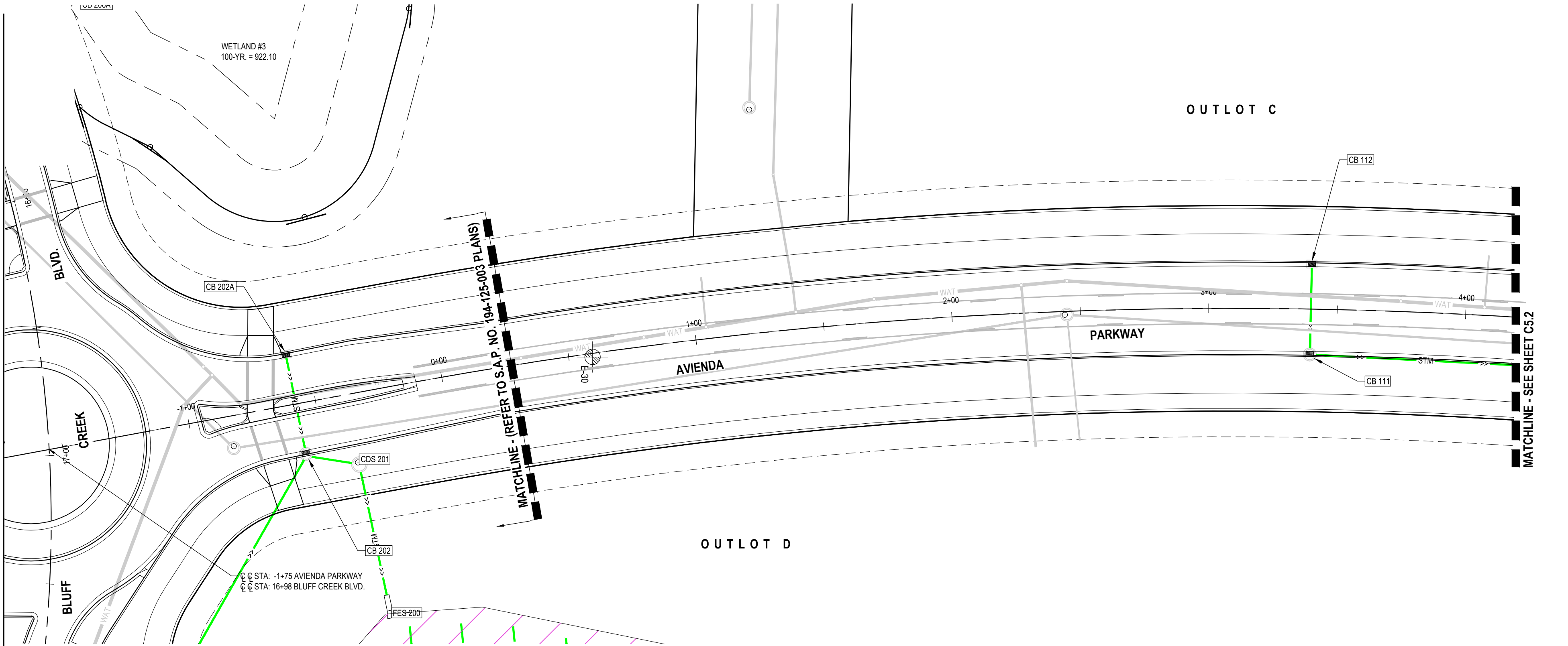
PHASE 1
OVERALL UTILITIES

C4.1

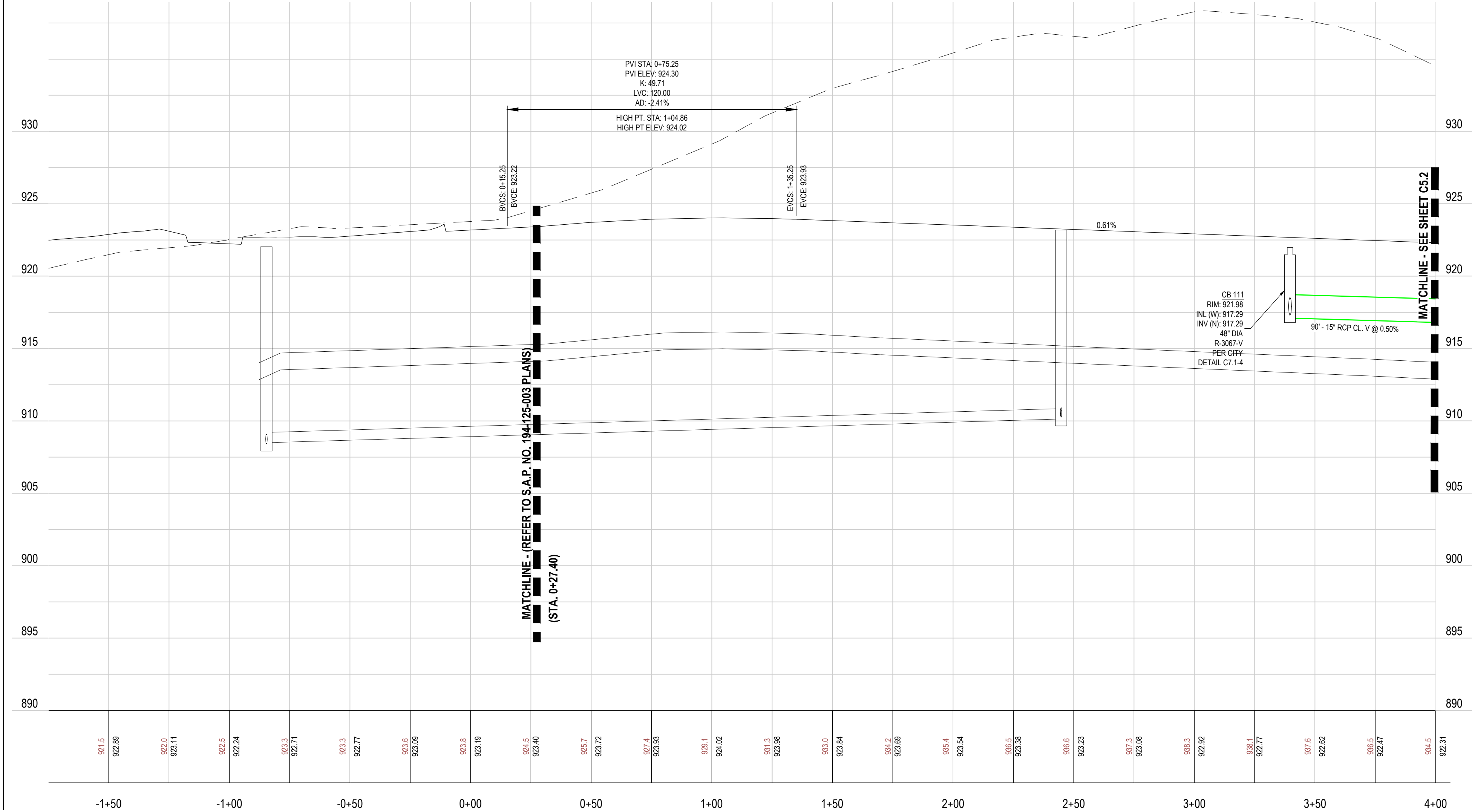


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GENERAL NOTES

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LEGEND

- PHASE 1 INFILTRATION BASIN
- PHASE 1 INTERIM BASIN
- CONSTRUCTION LIMITS

OWNER

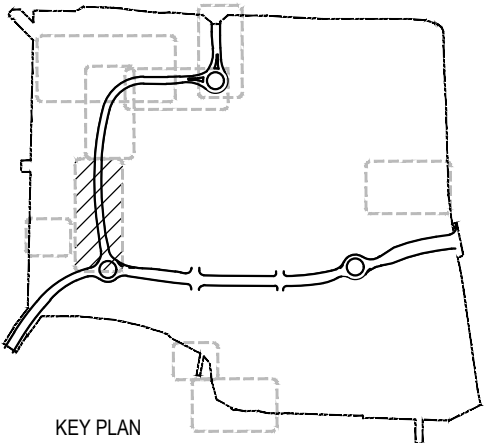
LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA



KEY PLAN

ISSUE / REVISION HISTORY

DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW

BY SES DATE 06.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of MINNESOTA.

Signature: *Steven E. Sabers* License No. 1775 Date: 06/27/2020

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WATERSHED SUBMITTAL
MAY 27, 2020

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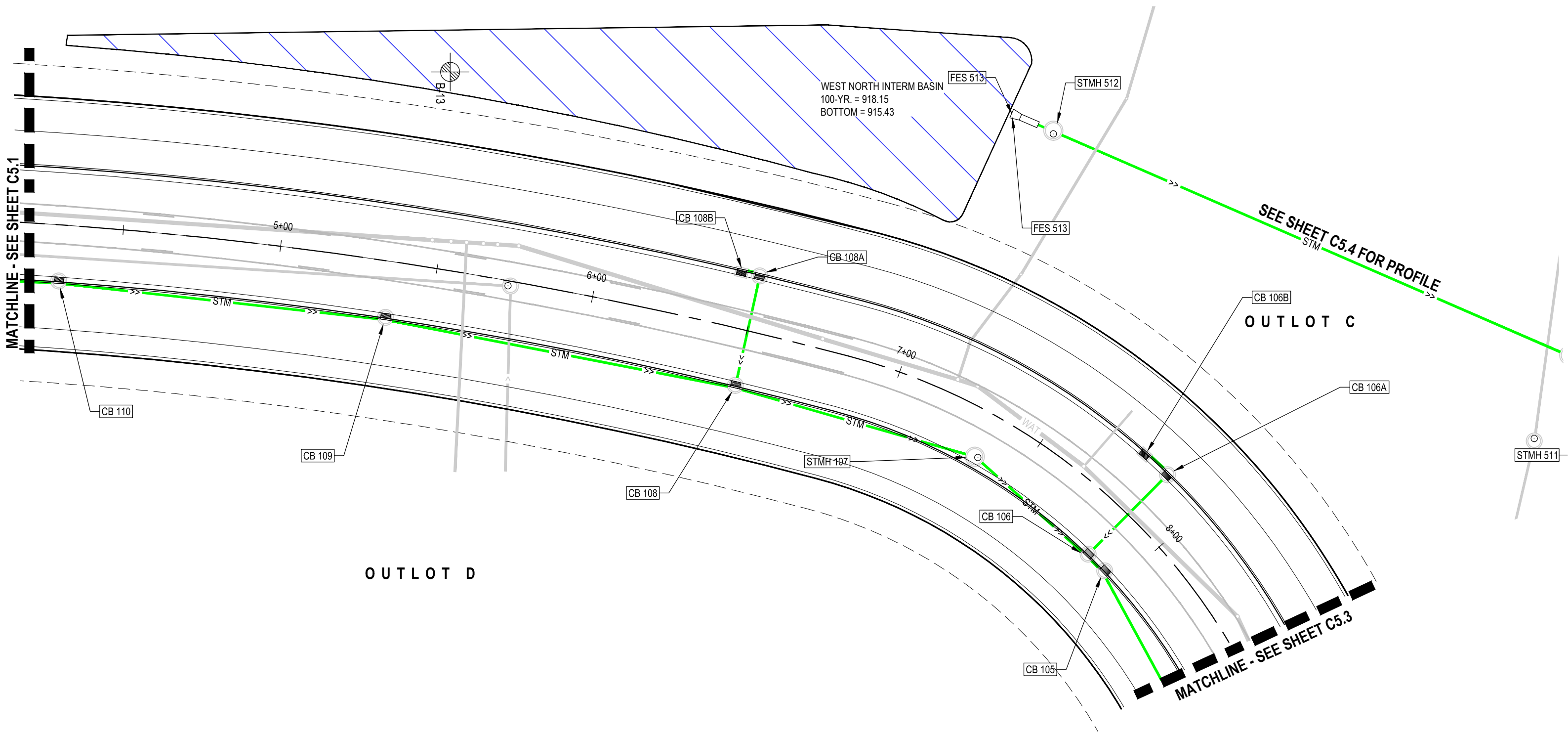
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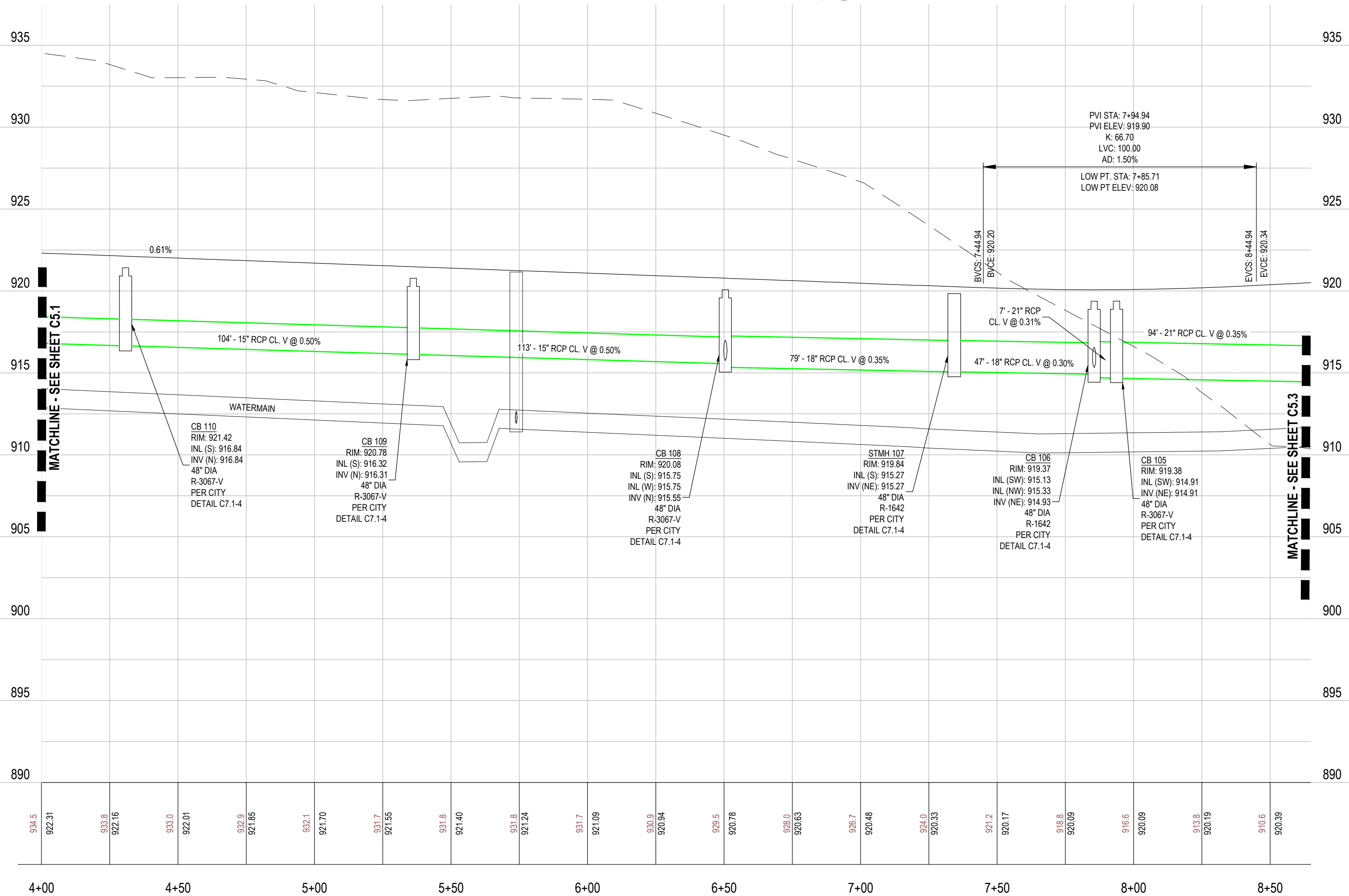
WEST AVIENDA PARKWAY
STREET & STORM

C5.1

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AVIENDA PARKWAY



GENERAL NOTES

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UTILITY NOTES

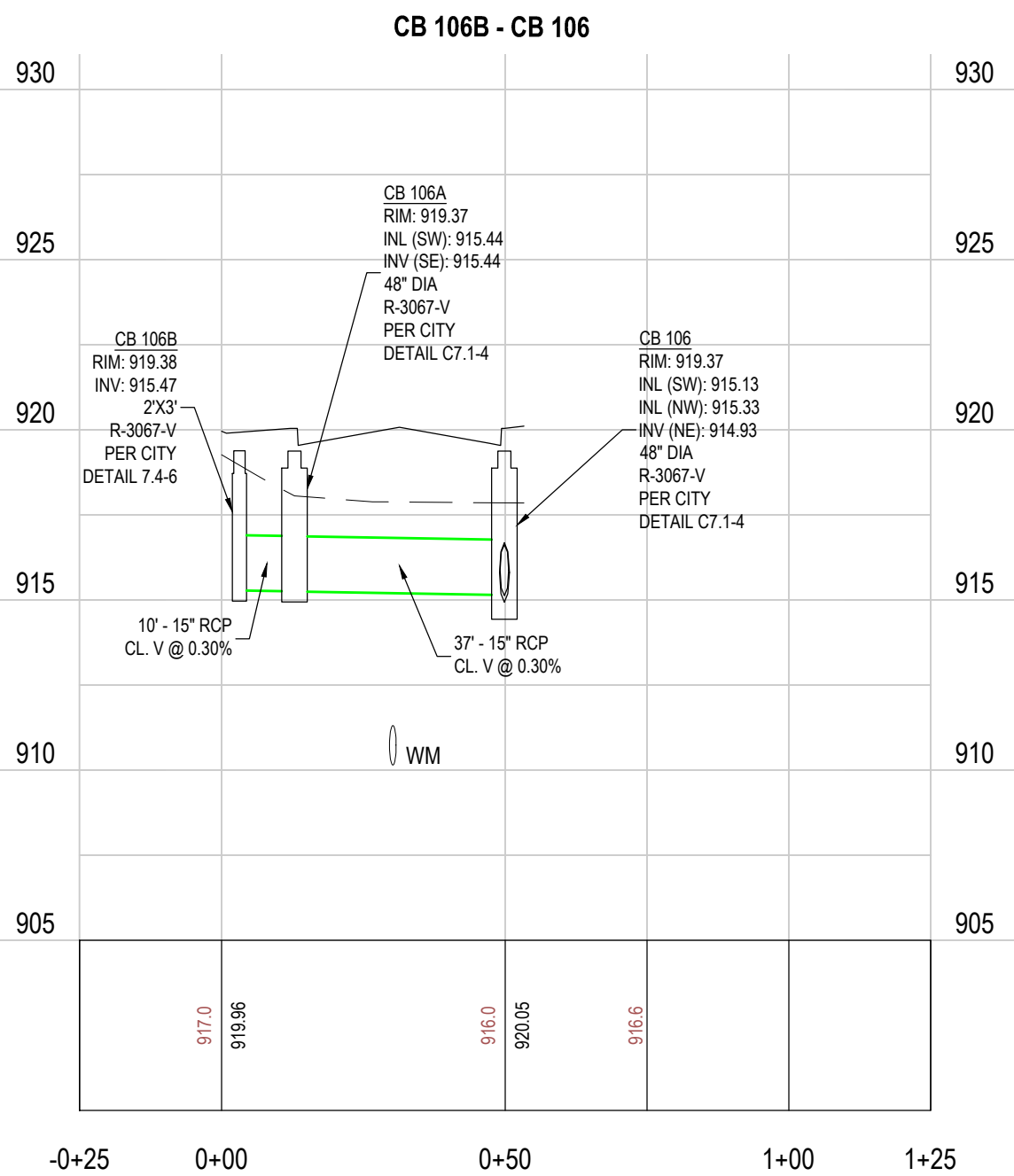
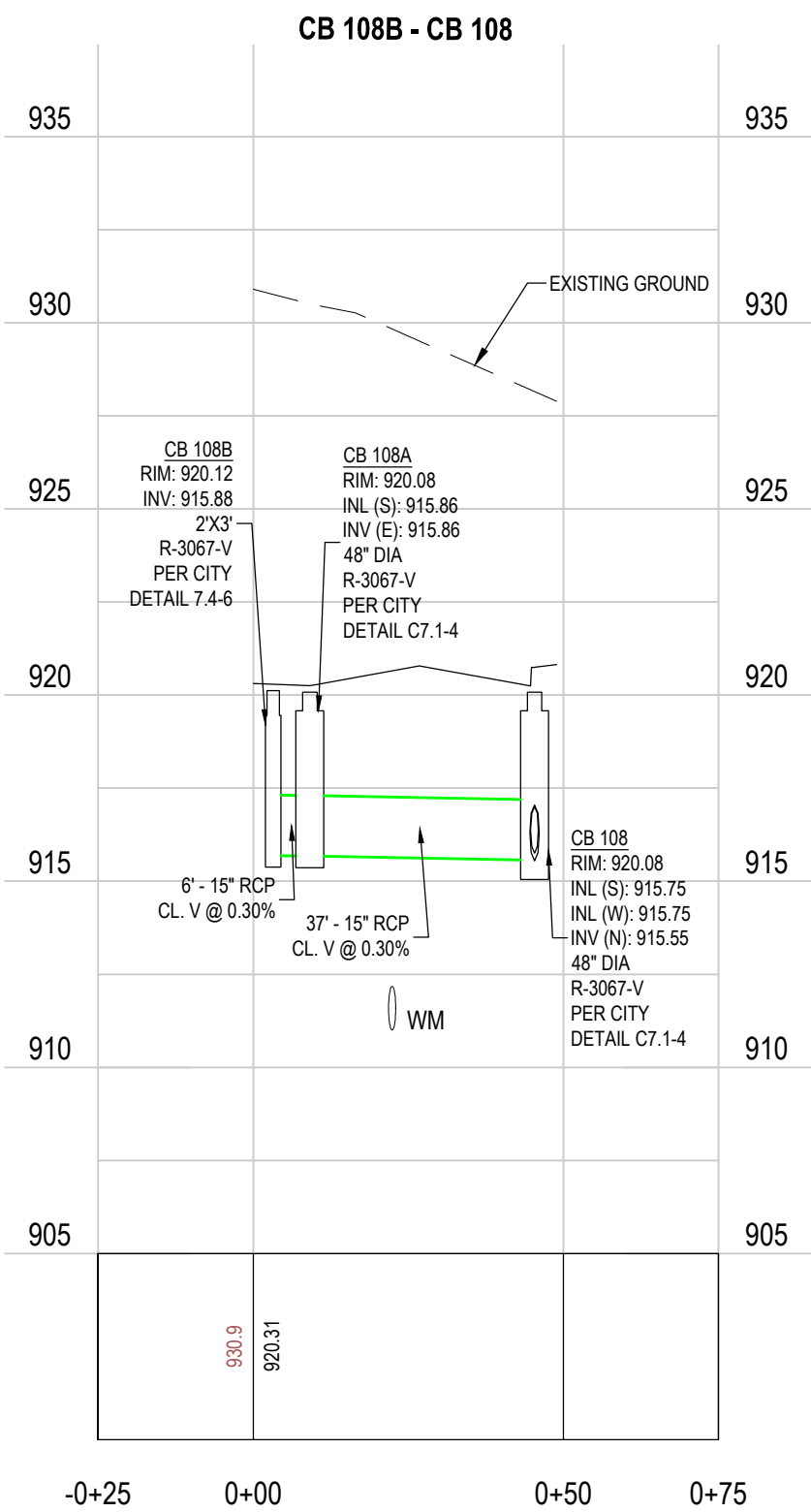
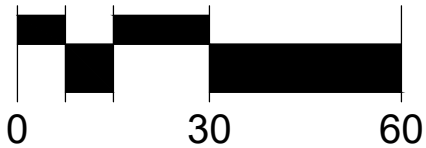
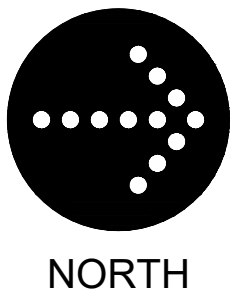
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- CONSTRUCTION LIMITS



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OWNER

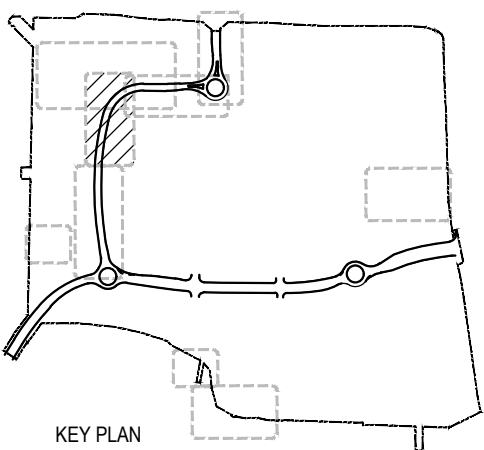
LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA



KEY PLAN

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MAY 27, 2020

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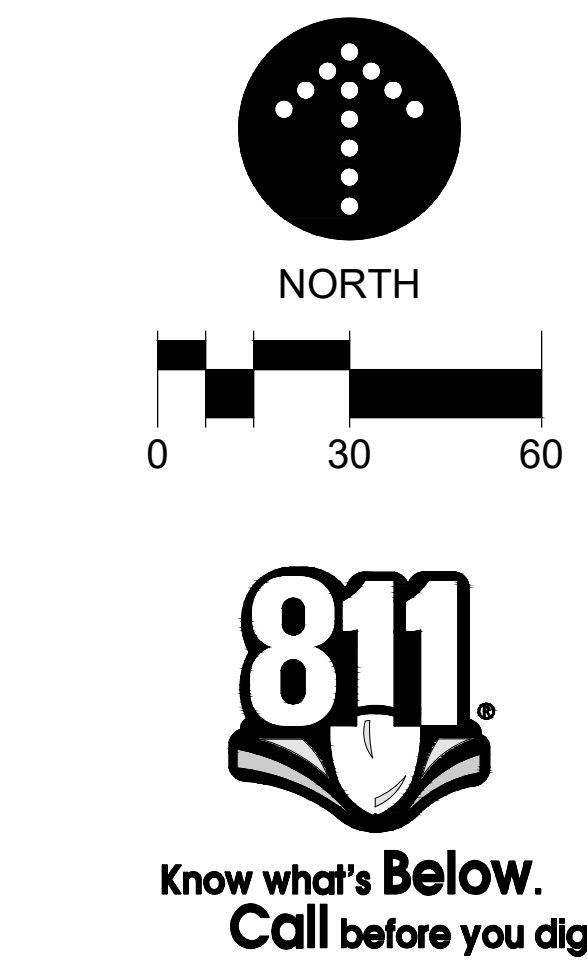
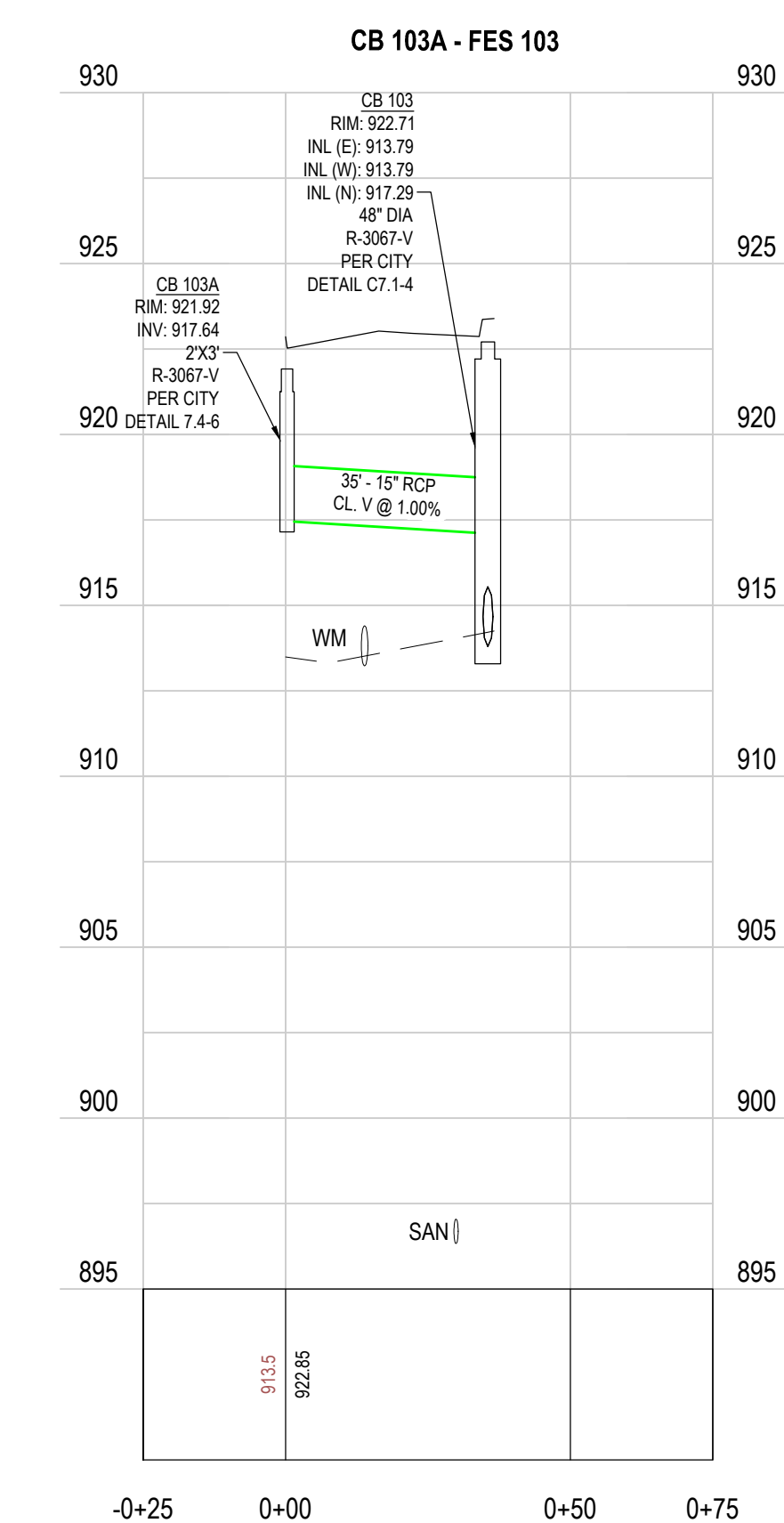
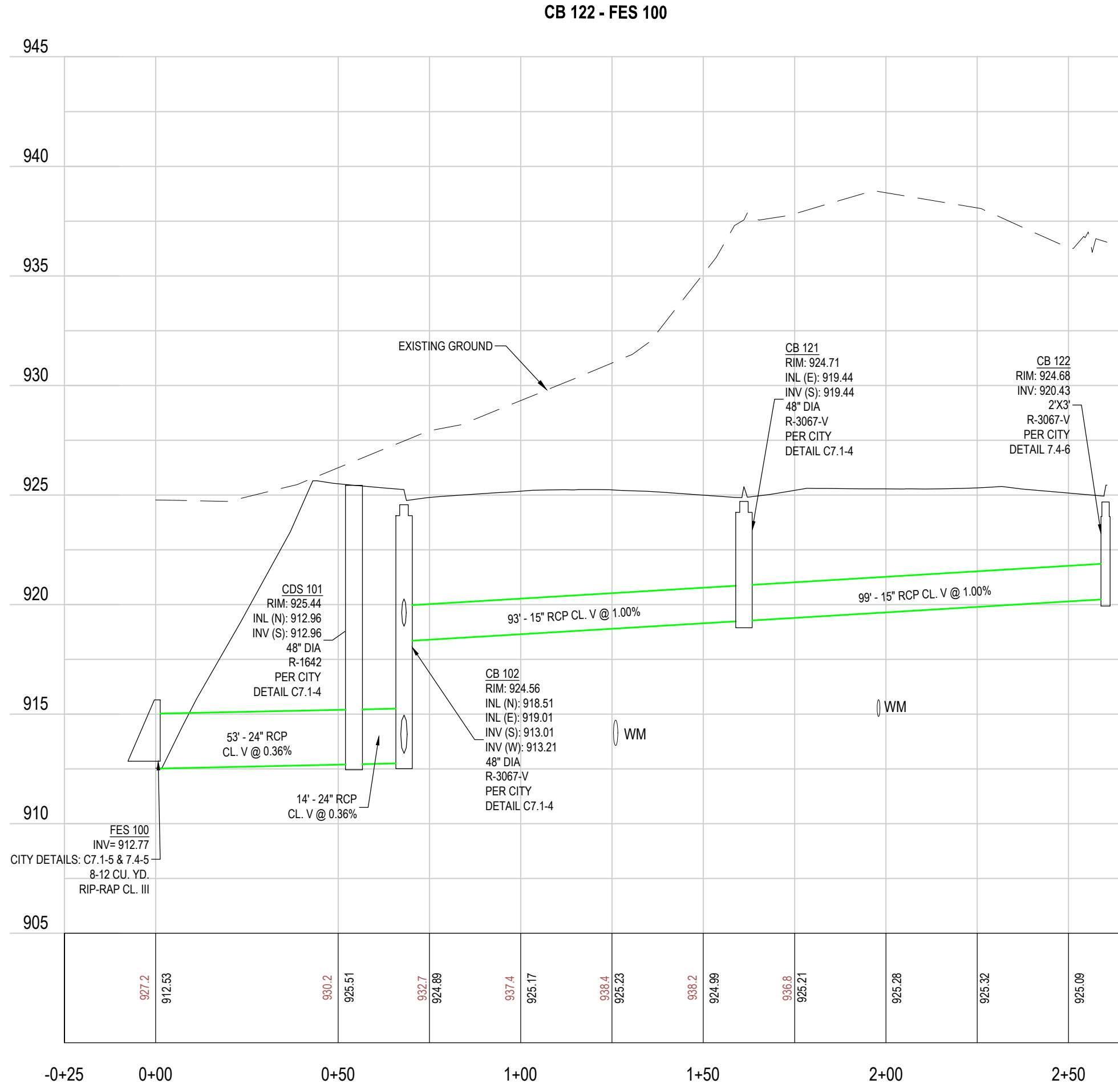
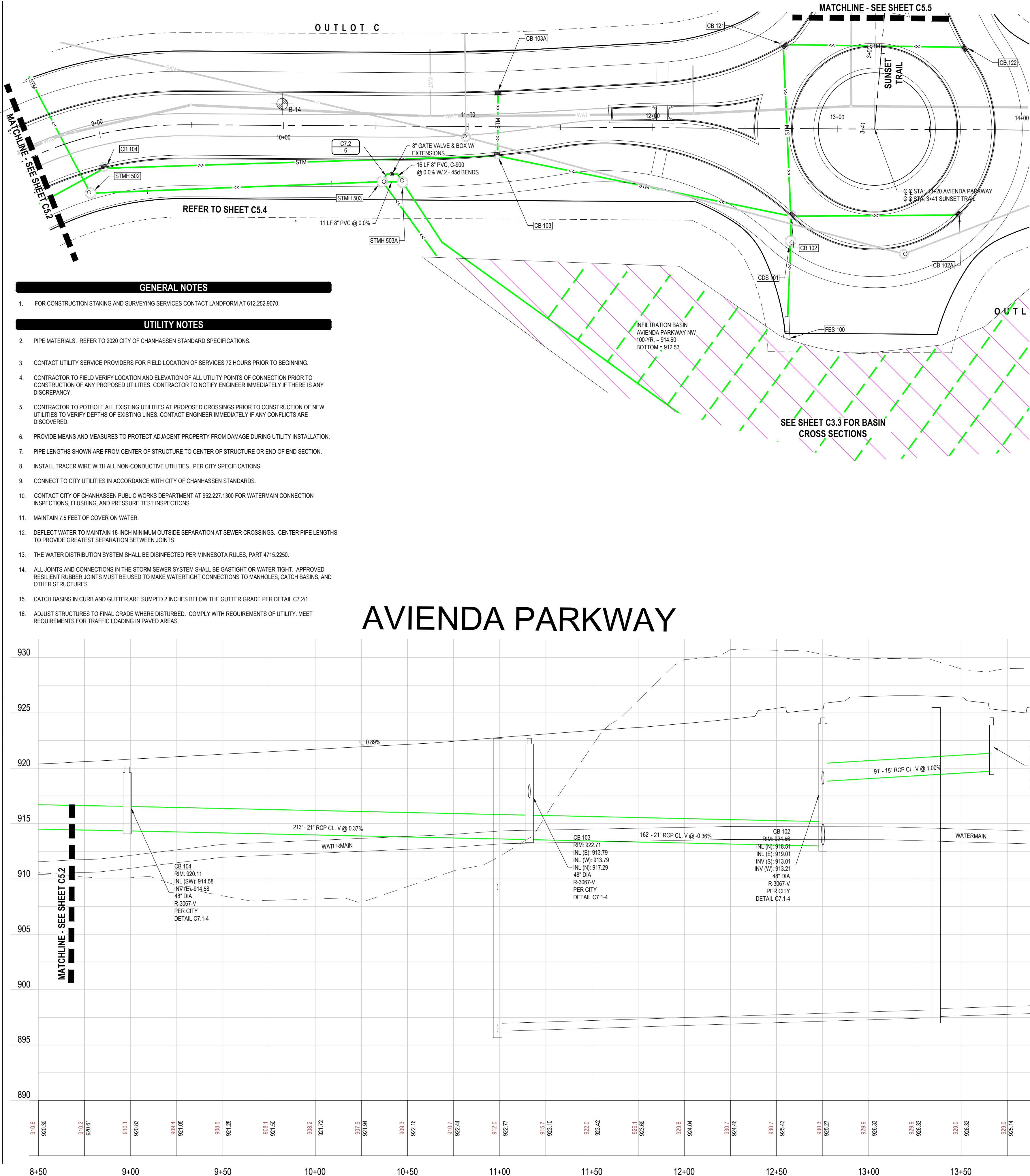
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FILE NAME C500SCD001.DWG

PROJECT NO. SCD14001.LEV

WEST AVIENDA PARKWAY
STREET & STORM

C5.2

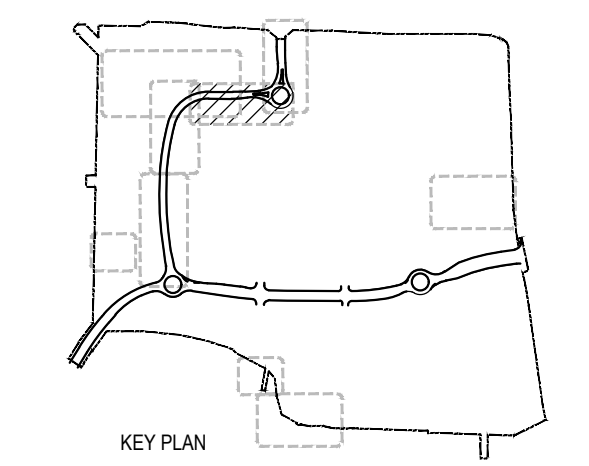


LEGEND	
	:PHASE 1 INFILTRATION BASIN
	:PHASE 1 INTERIM BASIN
	:CONSTRUCTION LIMITS

OWNER
LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331



PROJECT
AVIENDA

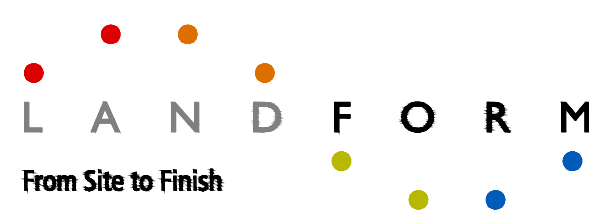


ISSUE / REVISION HISTORY		
CONTACT ENGINEER FOR ANY PRIOR HISTORY		
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22 APR 2020	WATERSHED SUBMITTAL	SES
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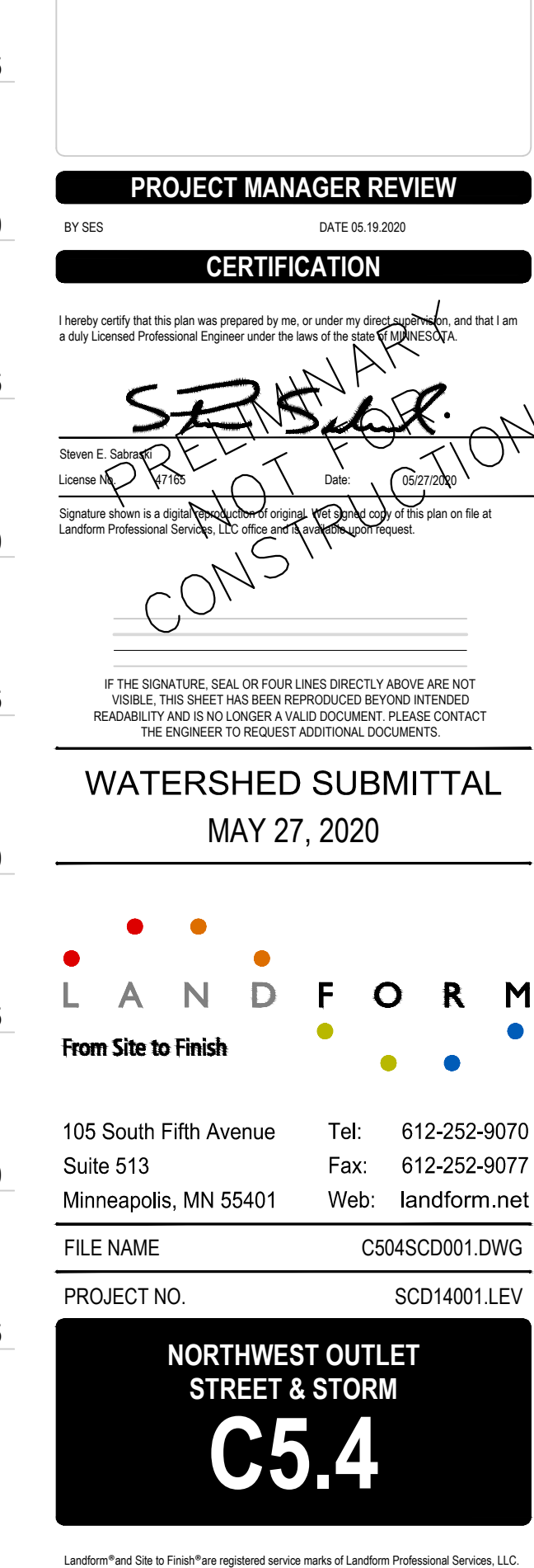
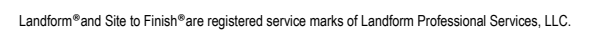
PROJECT MANAGER REVIEW
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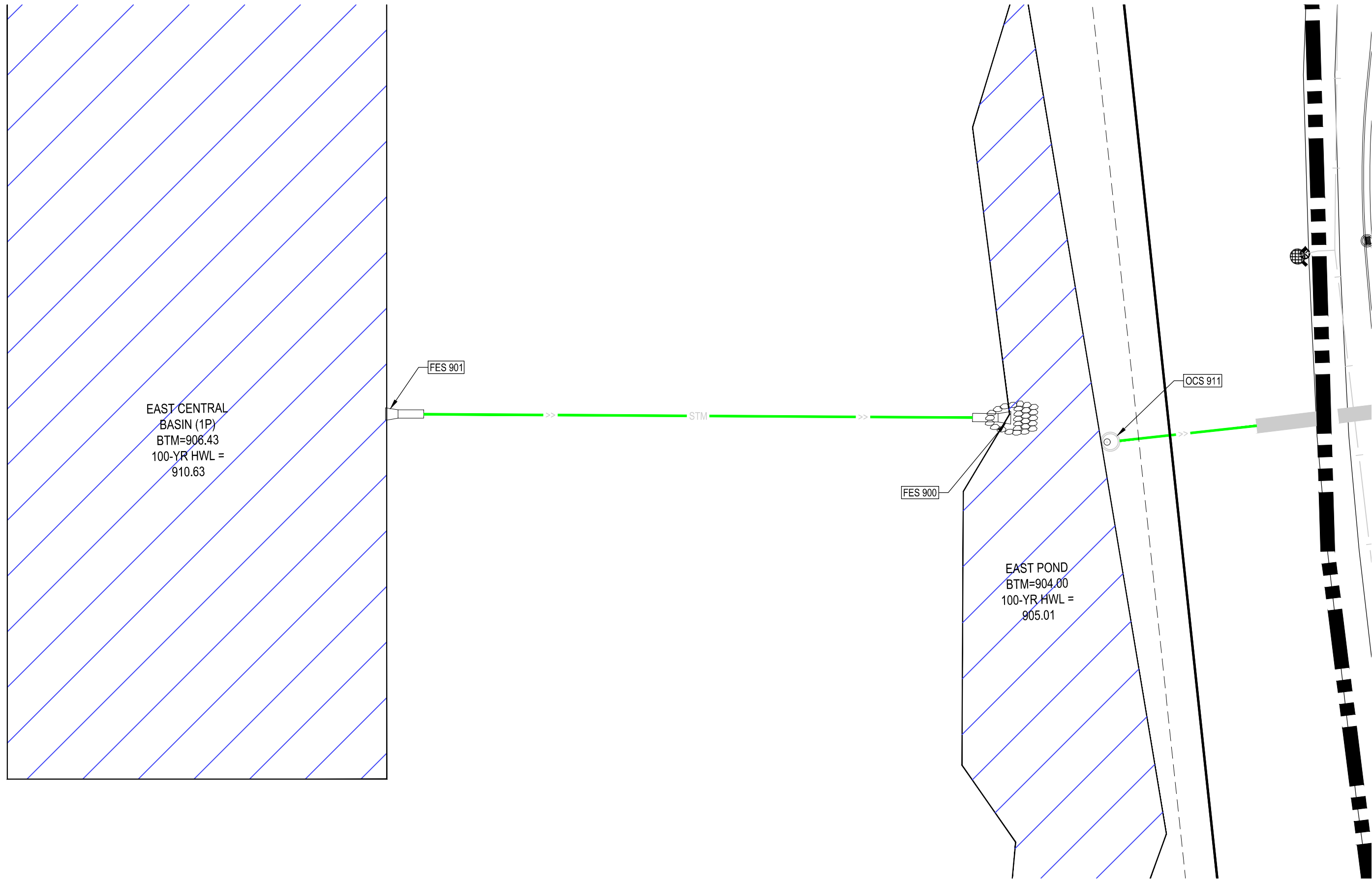
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Steven E. Sabers License No. 17175 Date: 06/27/2020
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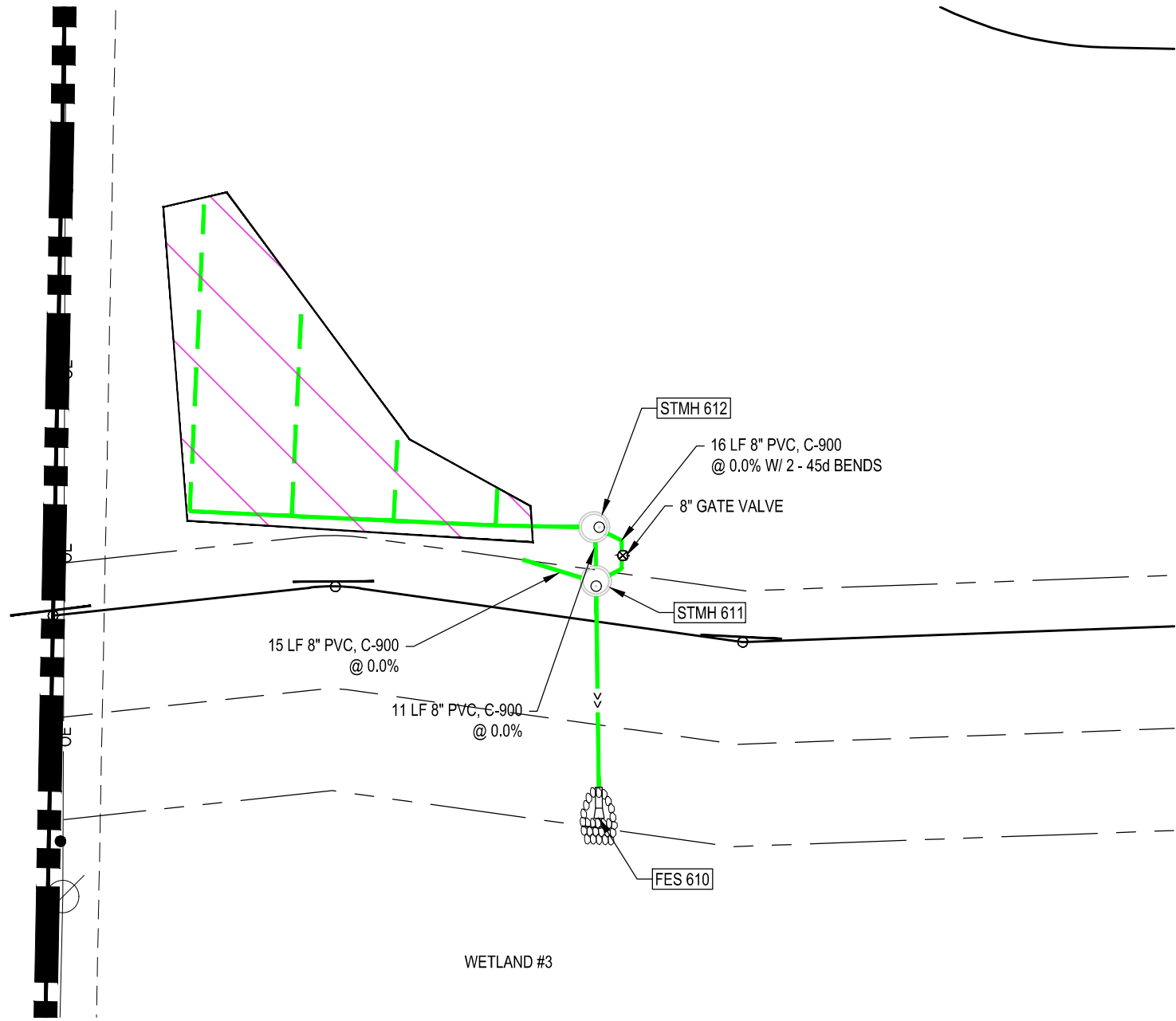
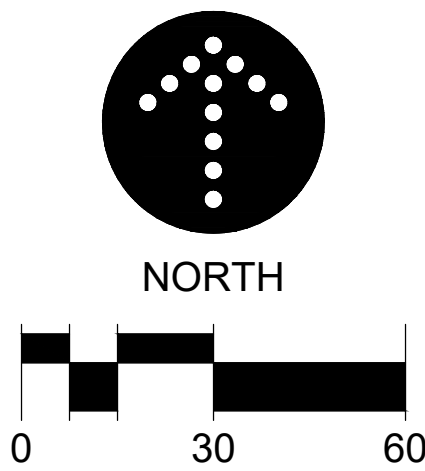


105 South Fifth Avenue Suite 513 Minneapolis, MN 55401 Tel: 612-252-9070 Fax: 612-252-9077 Web: landform.net
FILE NAME C500SCD001.DWG
PROJECT NO. SCD14001.LEV
NORTH AVIENDA PARKWAY STREET & STORM C5.3

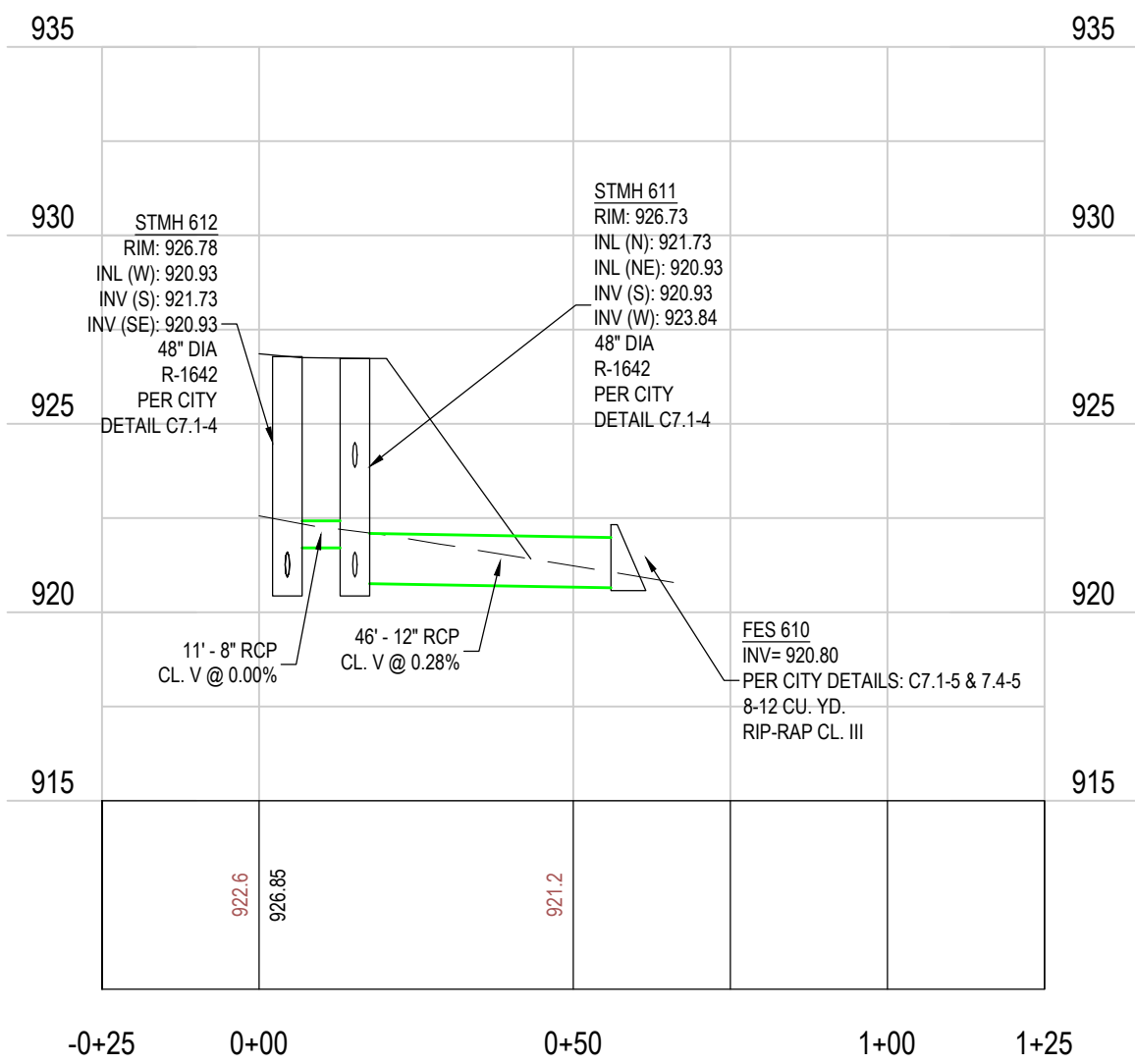




EAST INTERIM BASIN NETWORK



WETLAND 3 BASIN



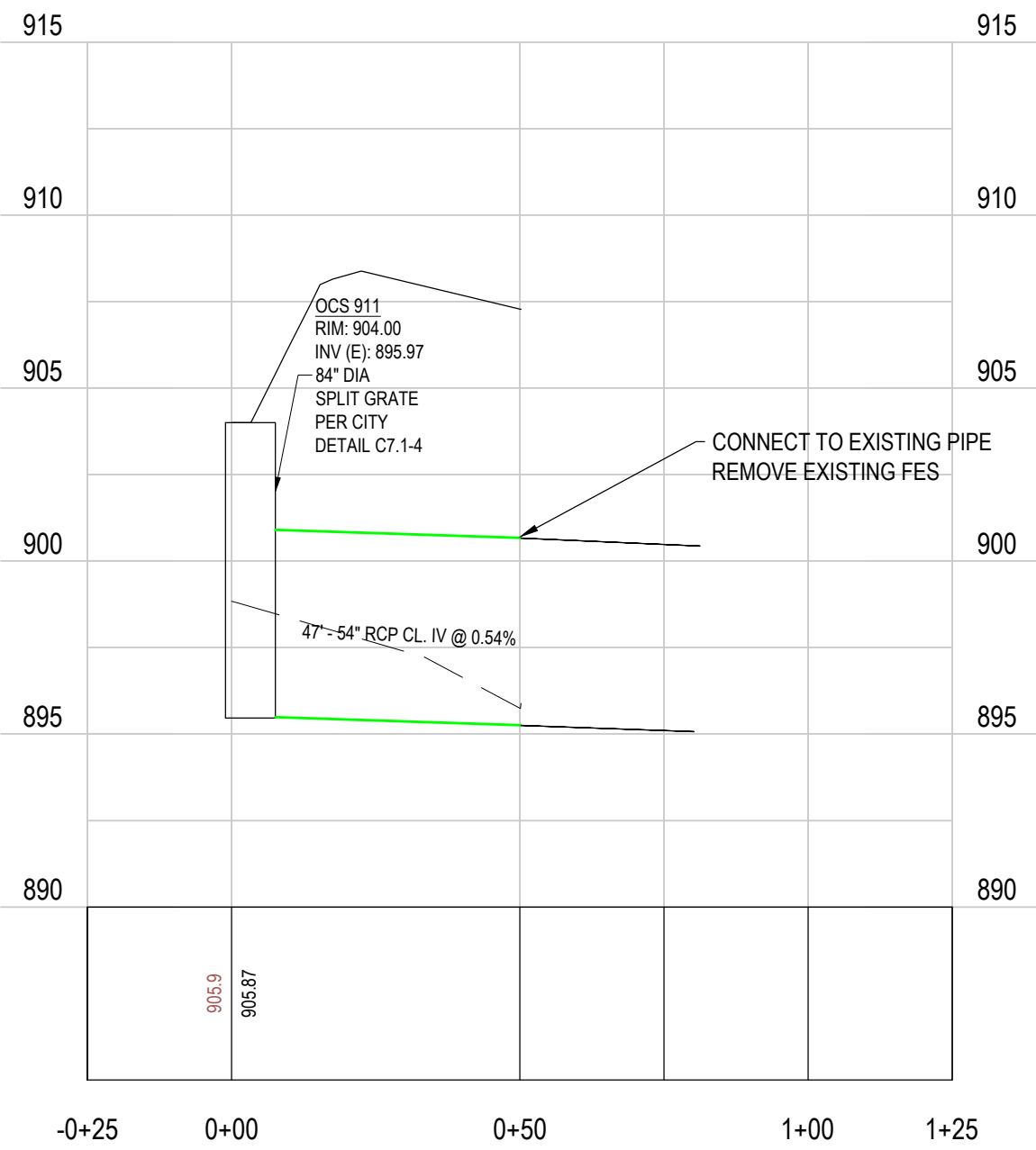
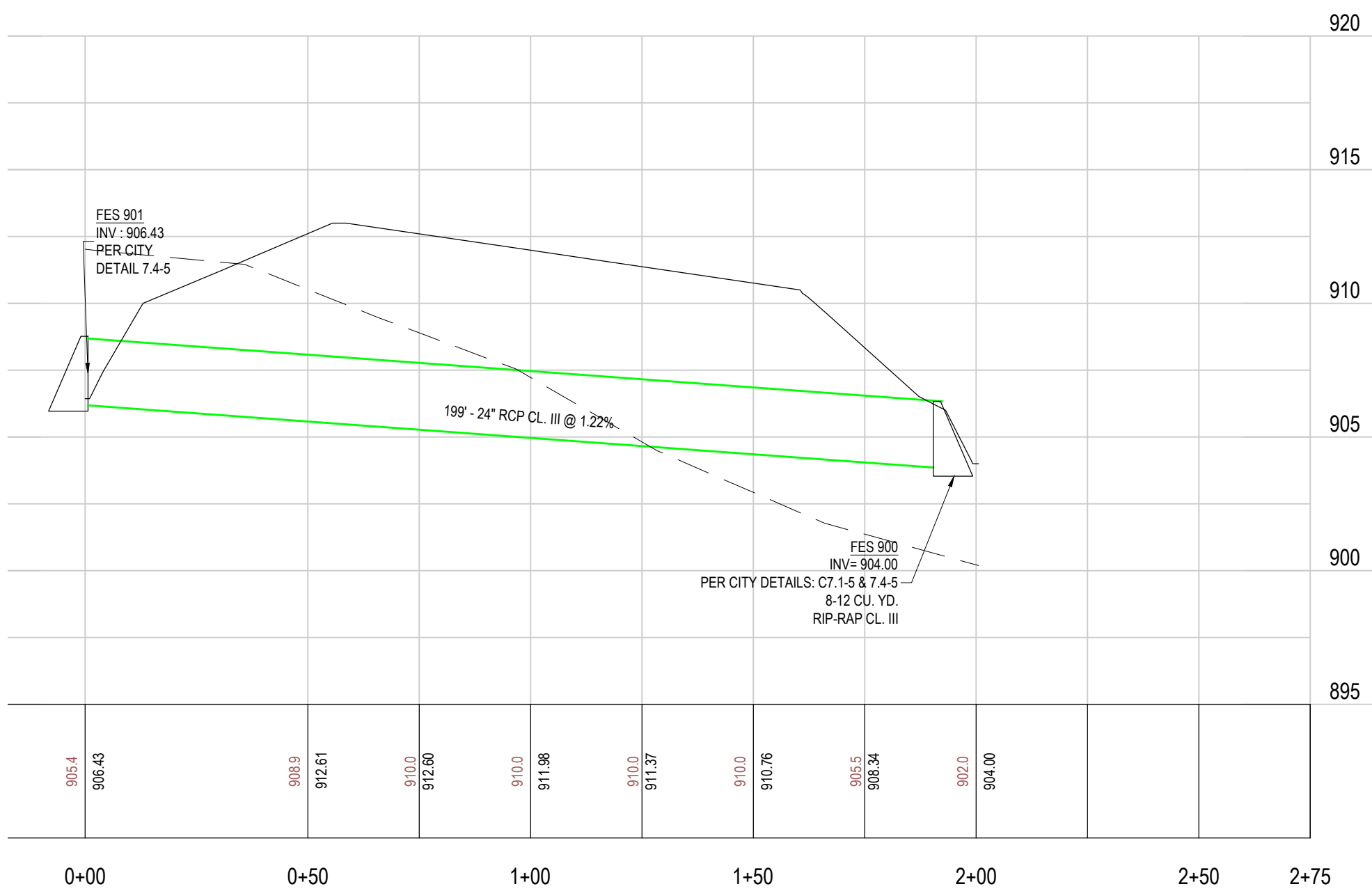
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UTILITY NOTES



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OWNER

LEVEL 7 DEVELOPMENT, LLC

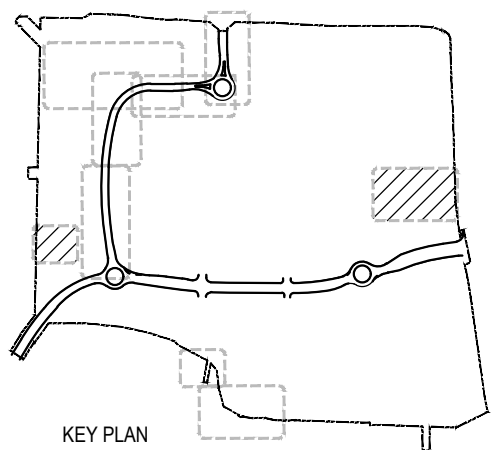
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA



KEY PLAN

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BY SES	DATE 06.19.2020
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Steven E. Sabers
License No. 17785 Date: 06/27/2020

WATERSHED SUBMITTAL

MAY 27, 2020



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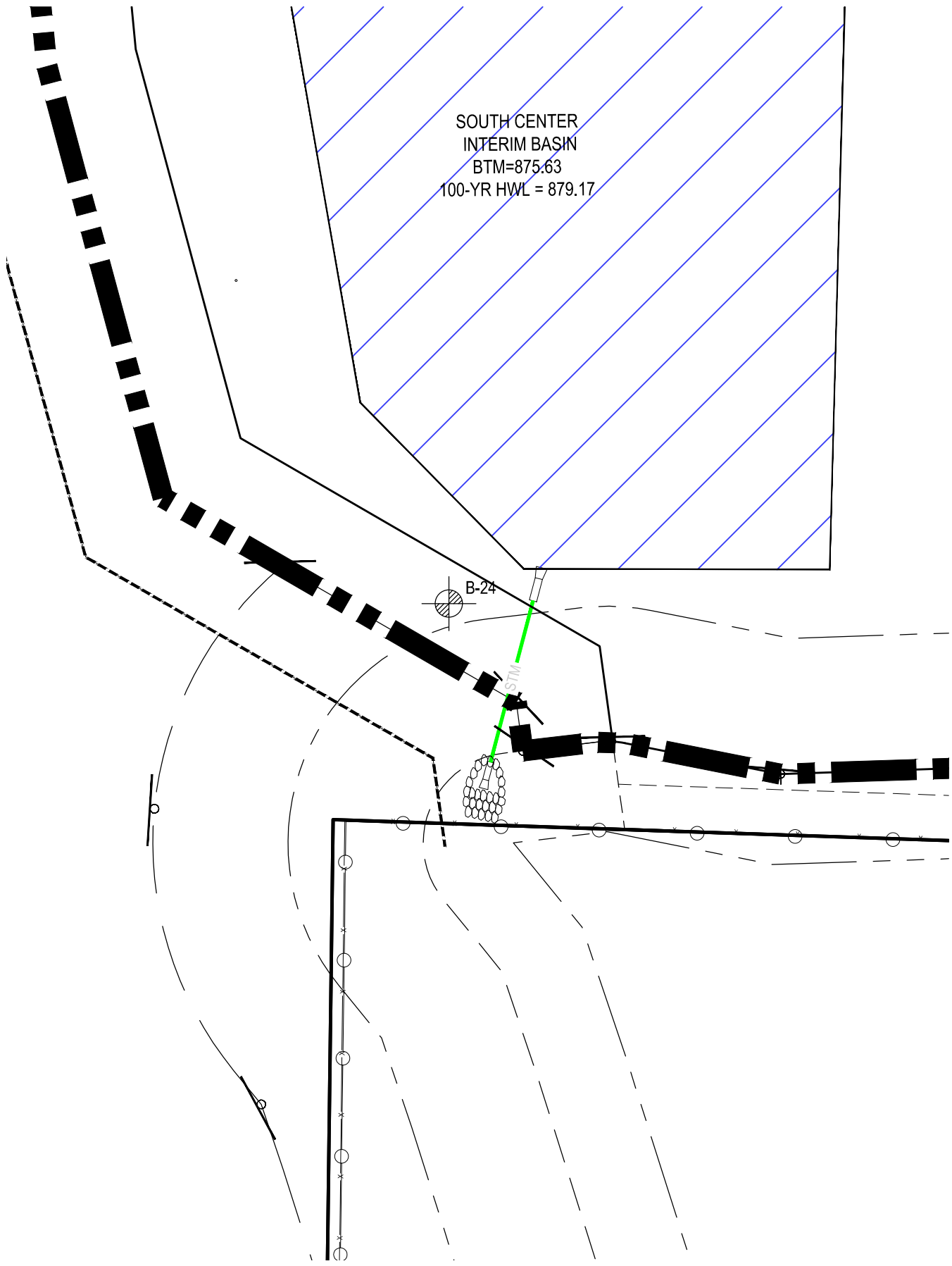
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PROJECT NO. SCD14001.LEV

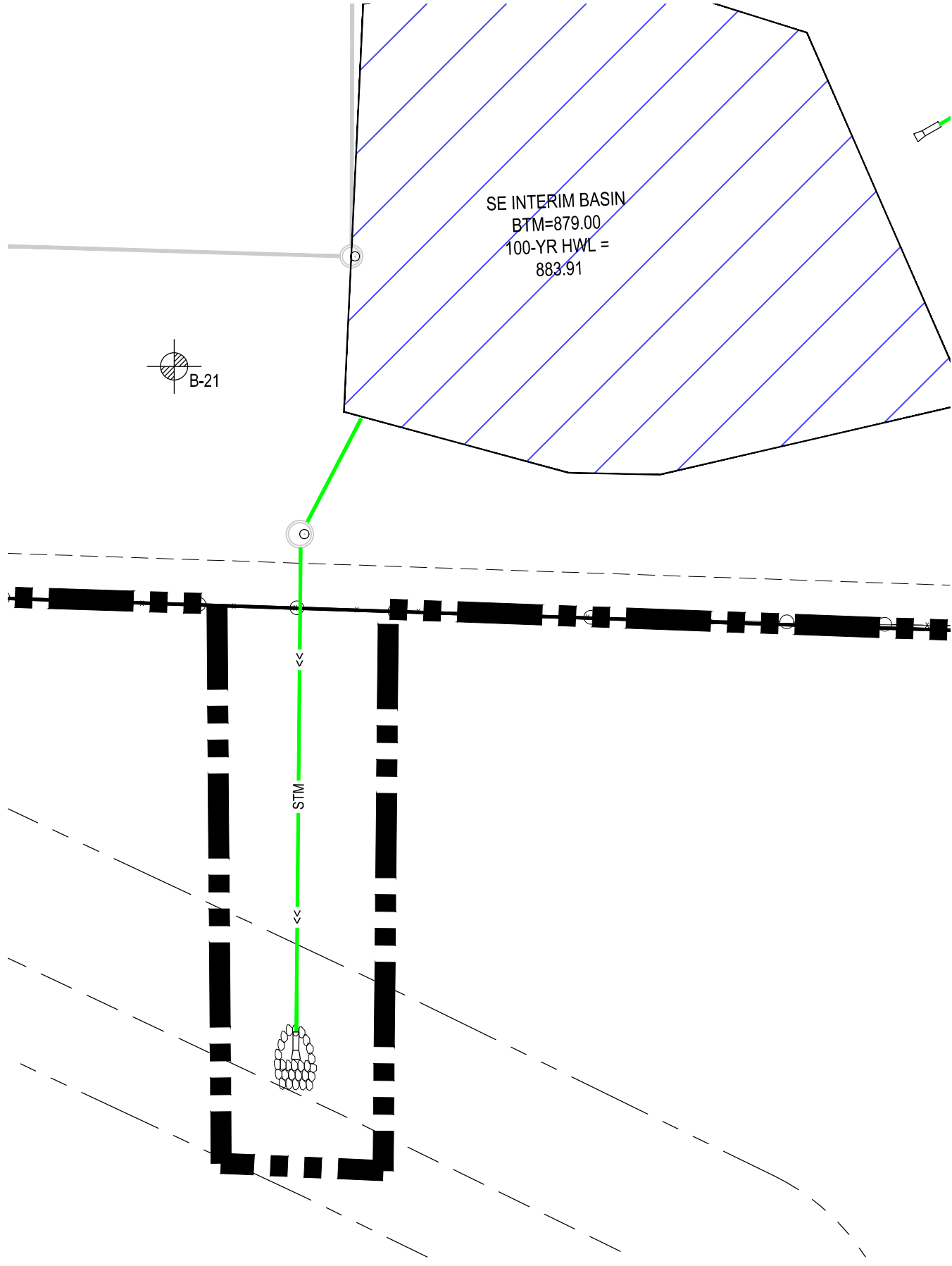
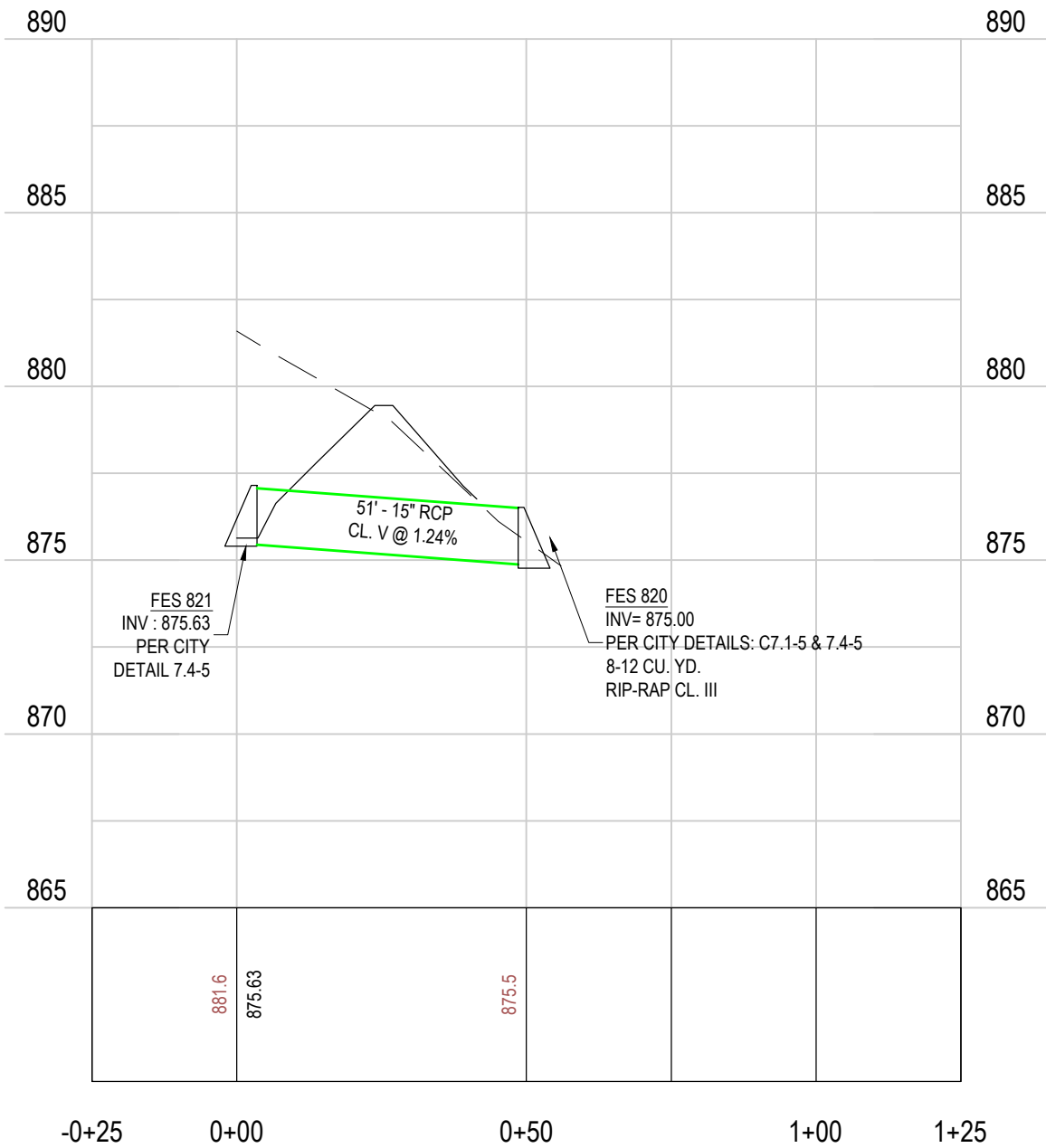
EAST INTERIM BASIN
STORM

C5.6

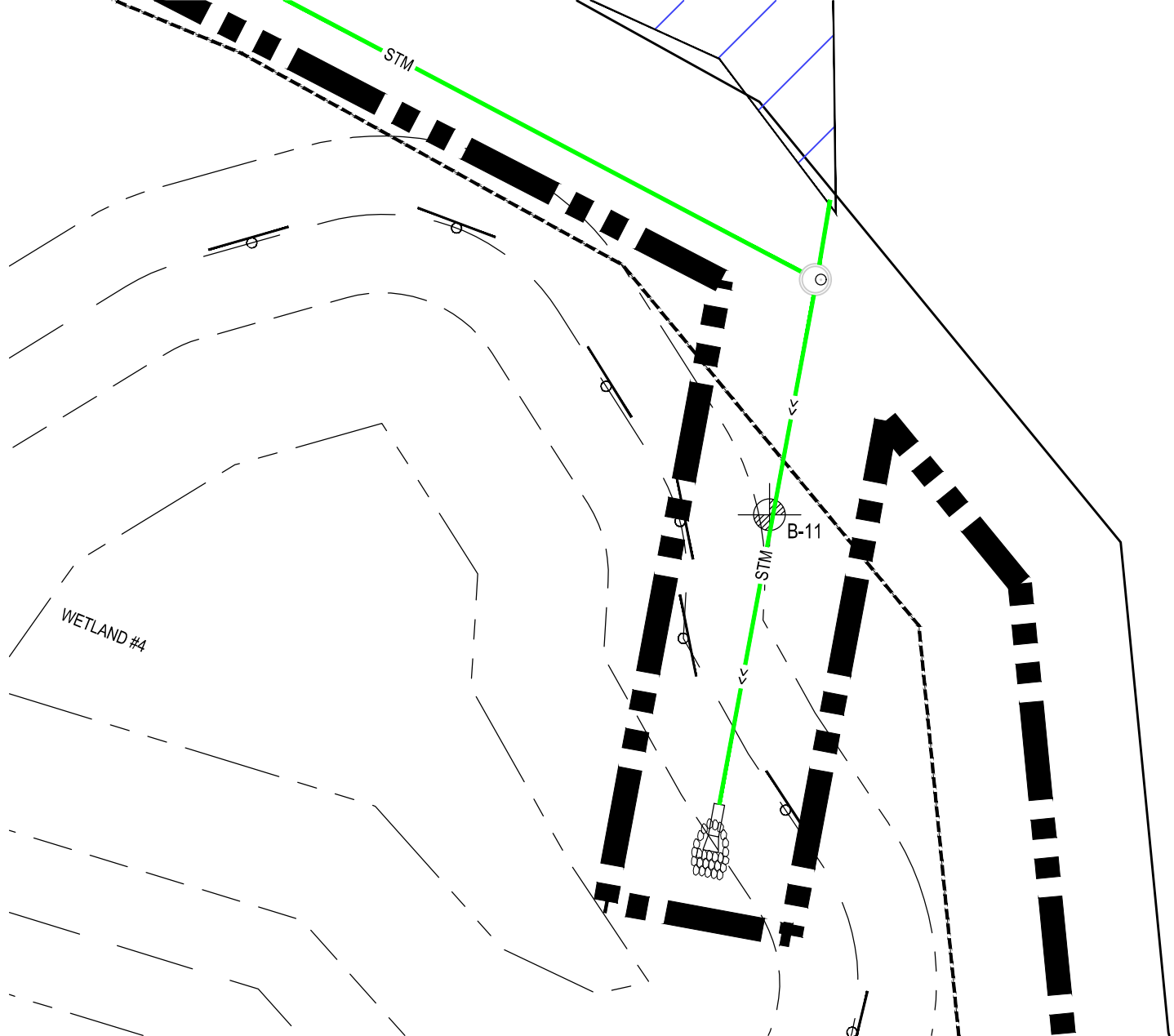
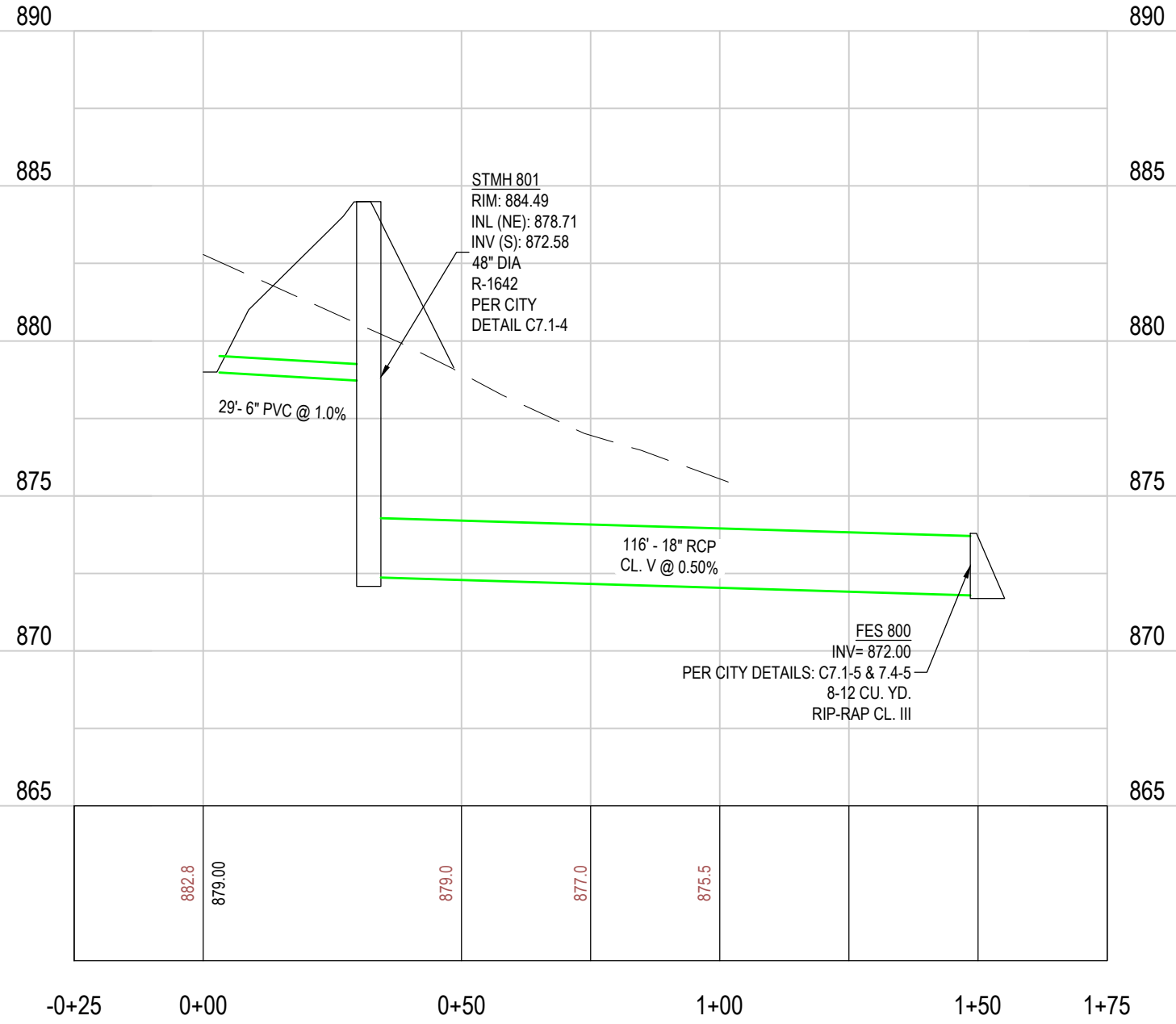
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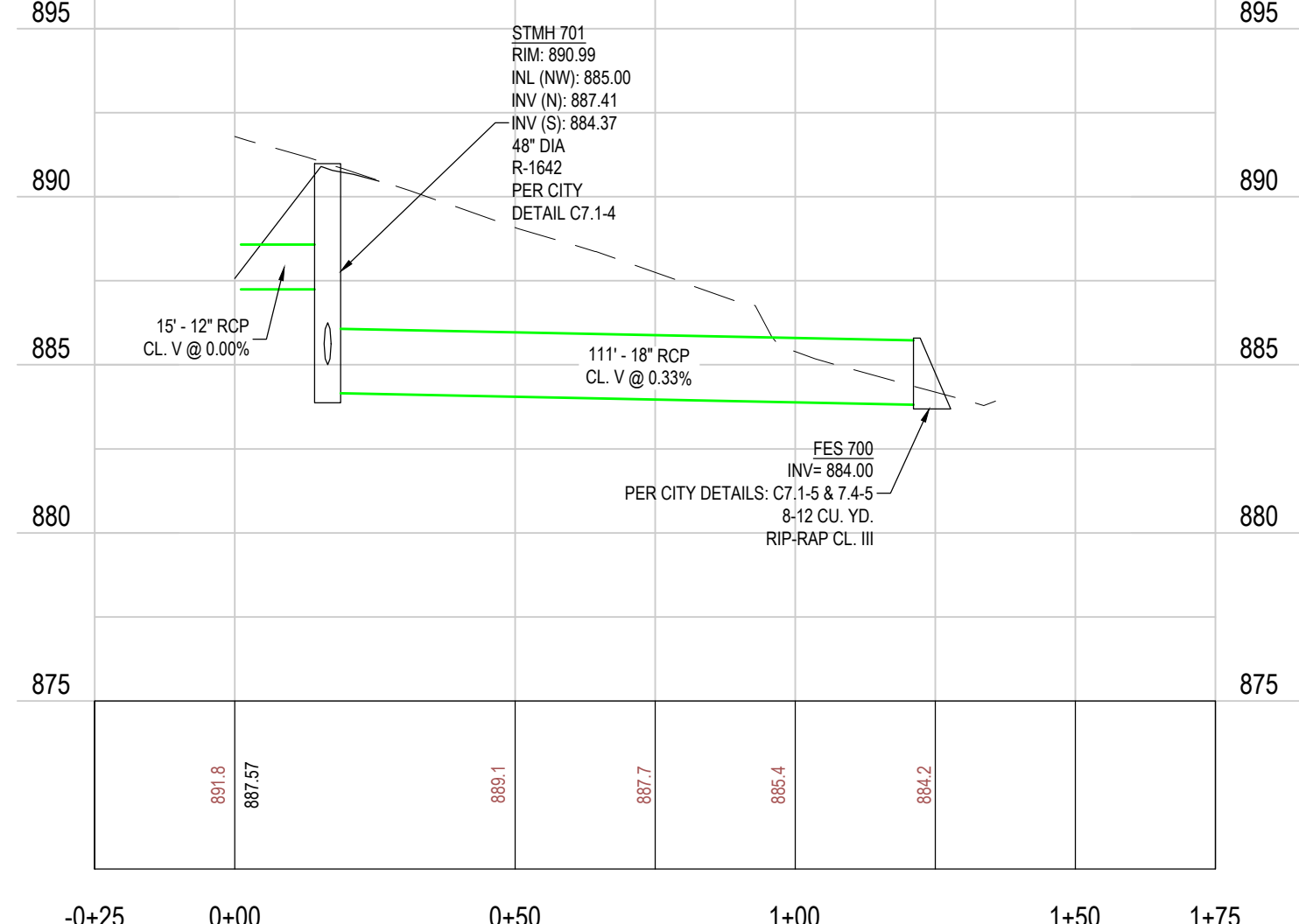
SOUTH CENTER
INTERIM BASIN



SOUTHEAST
INTERIM BASIN



TRIANGLE BASIN



LEGEND

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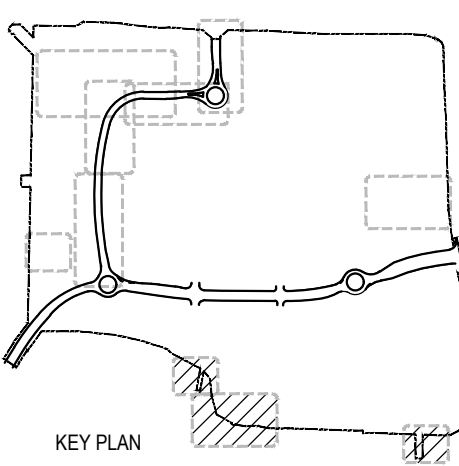
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LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY

PROJECT

AVIENDA



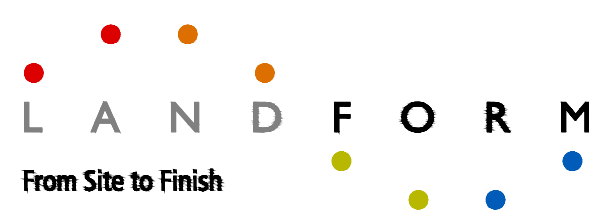
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BY SES DATE 05.19.2020
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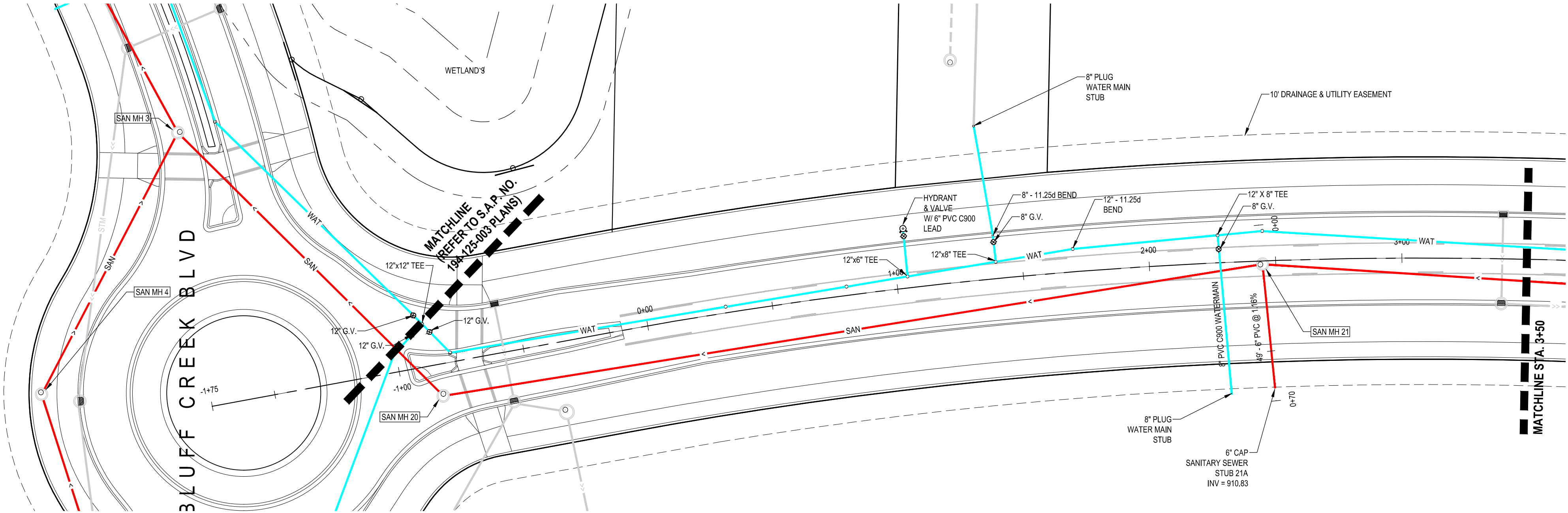
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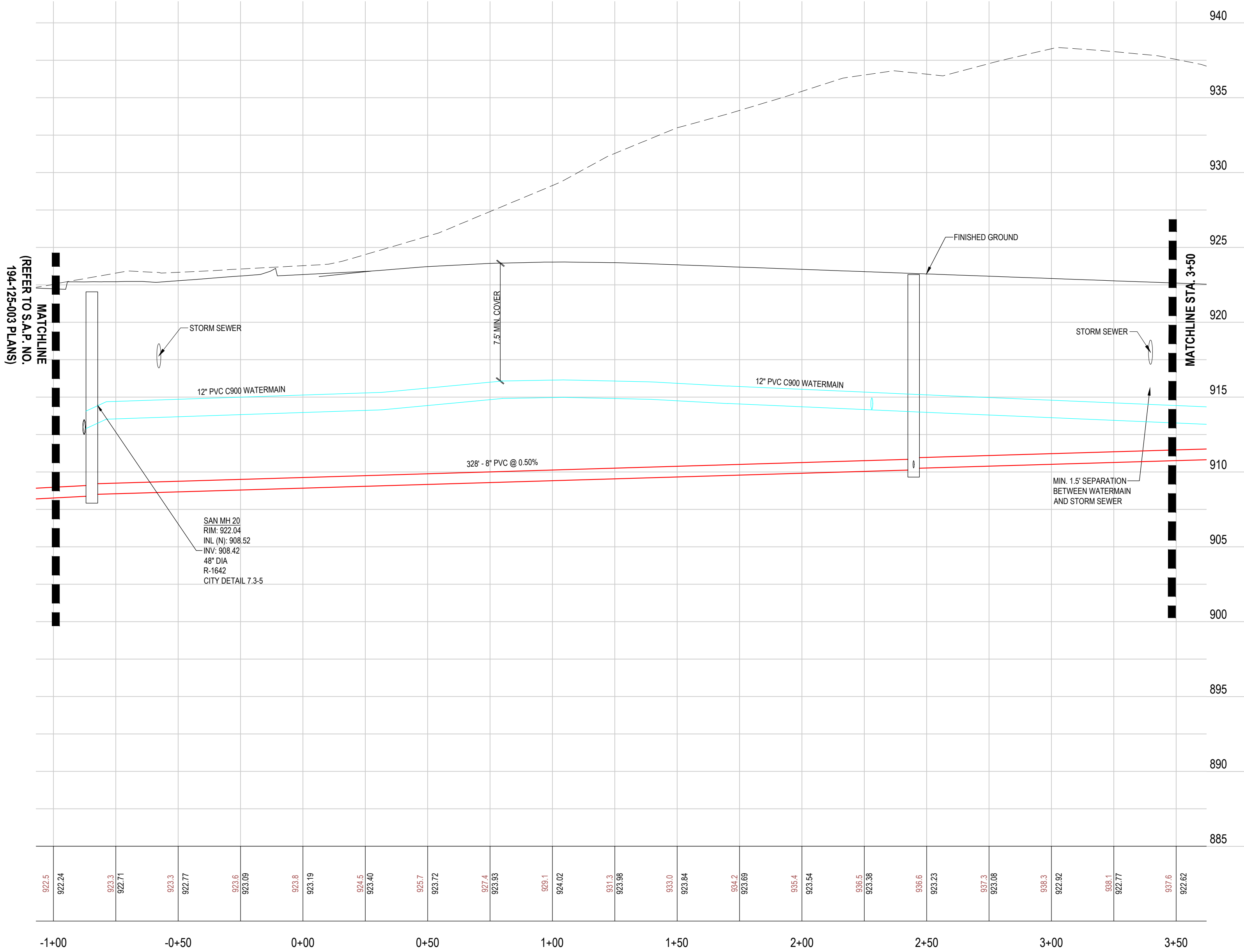
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MAY 27, 2020



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Suite 513 Fax: 612-252-9077
Minneapolis, MN 55401 Web: landform.net
FILE NAME C5045CD001.DWG
PROJECT NO. SCD14001.LEV
SOUTH INTERIM BASINS
STORM
C5.7



AVIENDA PARKWAY



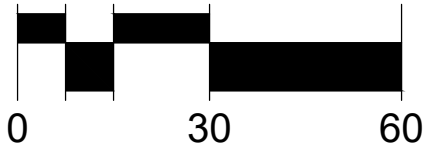
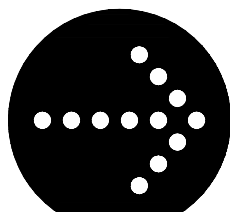
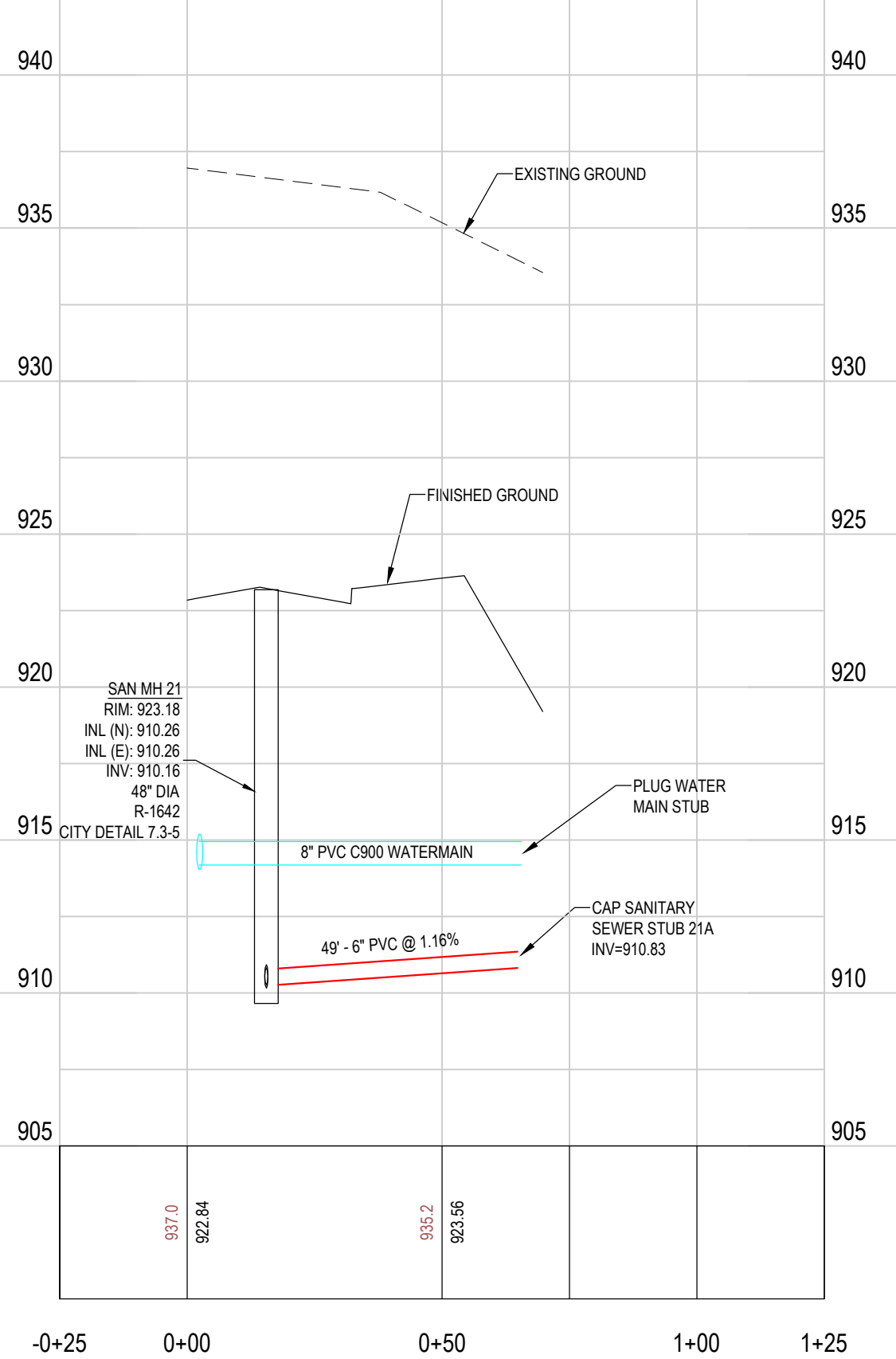
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LEGEND

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- PHASE 1 INTERIM BASIN
- CONSTRUCTION LIMITS

STUB 21A - SAN MH 21



OWNER

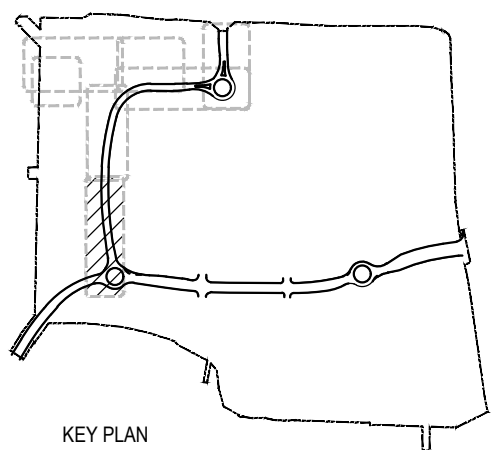
LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA



KEY PLAN

ISSUE / REVISION HISTORY

DATE	ISSUE / REVISION	REVIEW
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01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW

BY SES DATE 06.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the state of MINNESOTA.

Signature of **SEAN E. SLOAN**, License No. **17785**, Date: **06/27/2020**
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WATERSHED SUBMITTAL
MAY 27, 2020



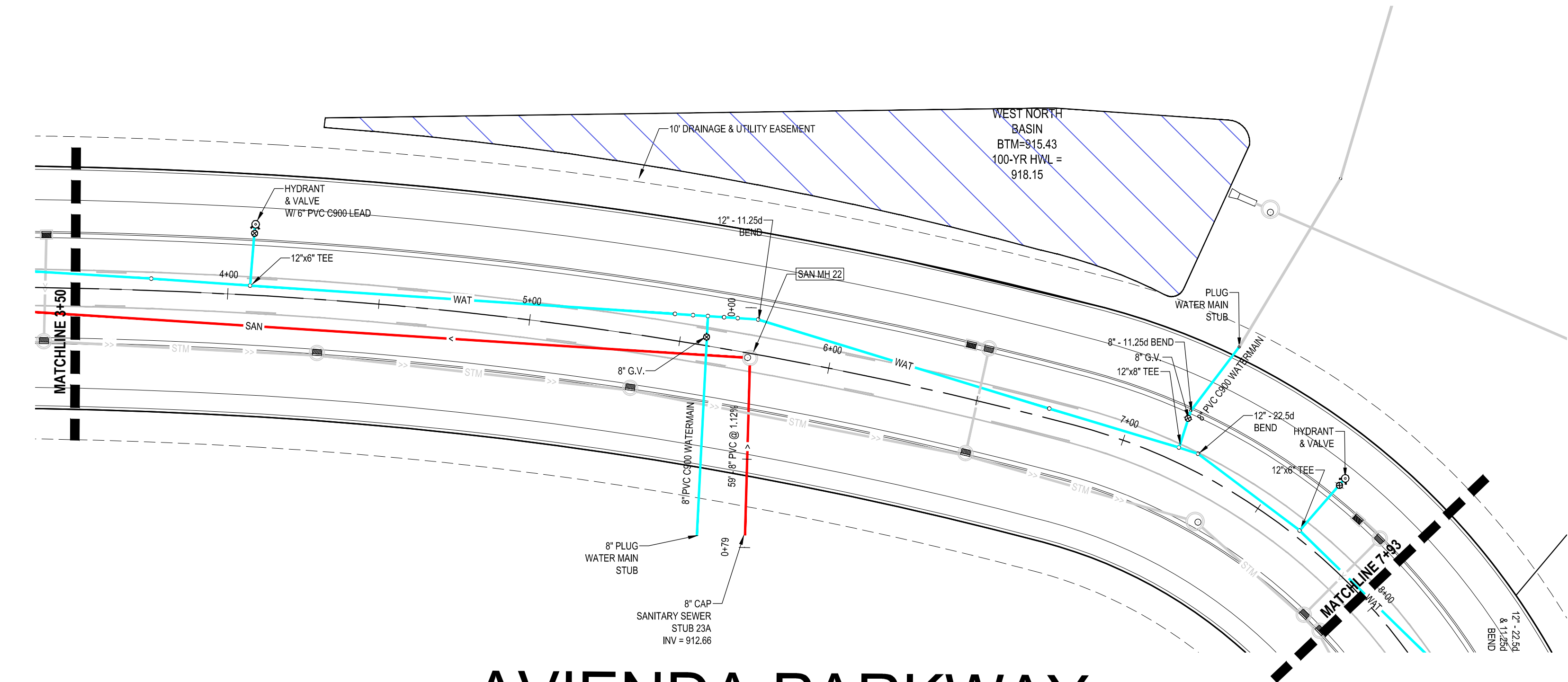
105 South Fifth Avenue Tel: 612-252-9070
Suite 513 Fax: 612-252-9077
Minneapolis, MN 55401 Web: landform.net

FILE NAME C600SCD001.DWG

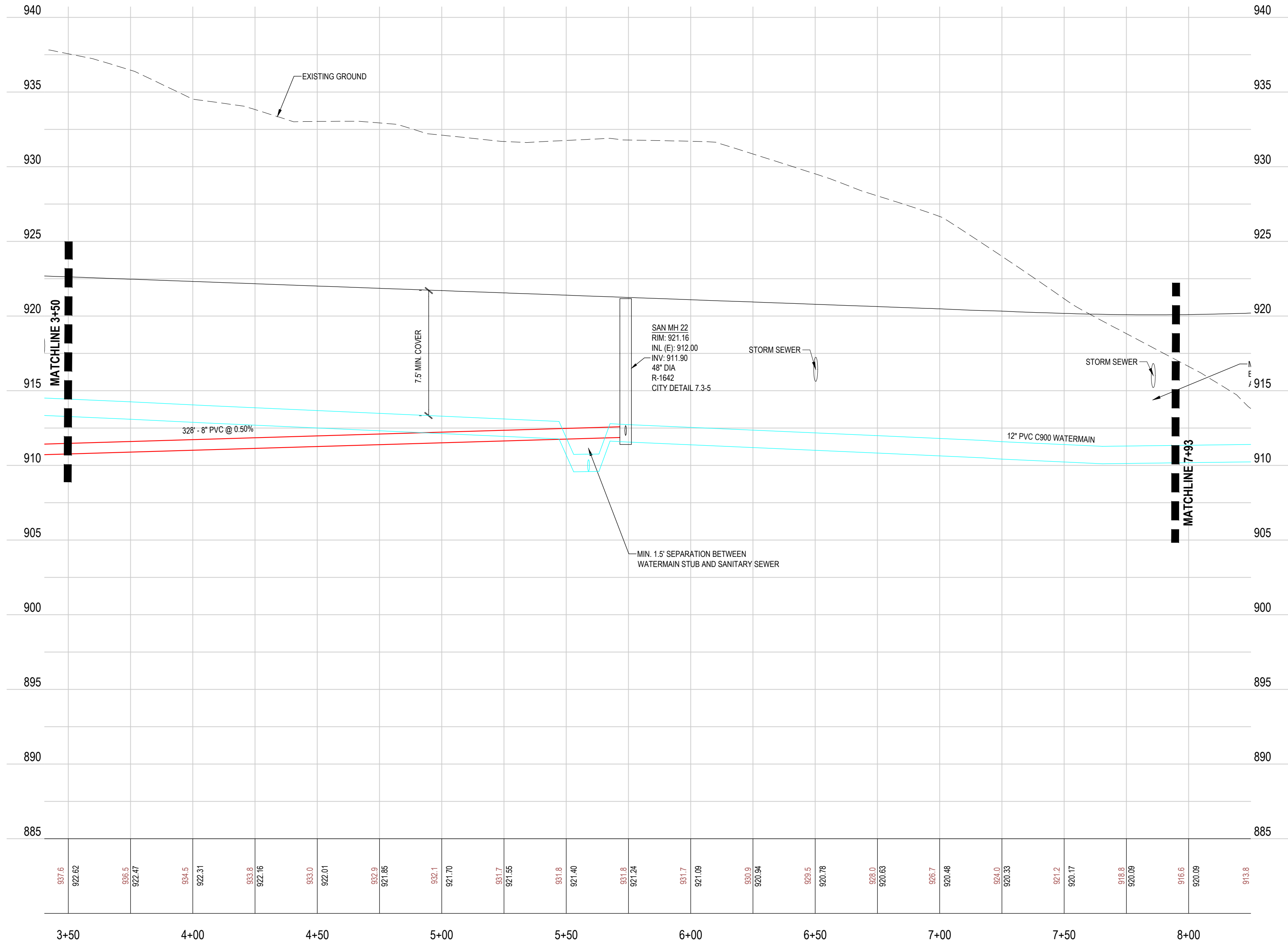
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WEST AVIENDA PARKWAY
WATER & SANITARY

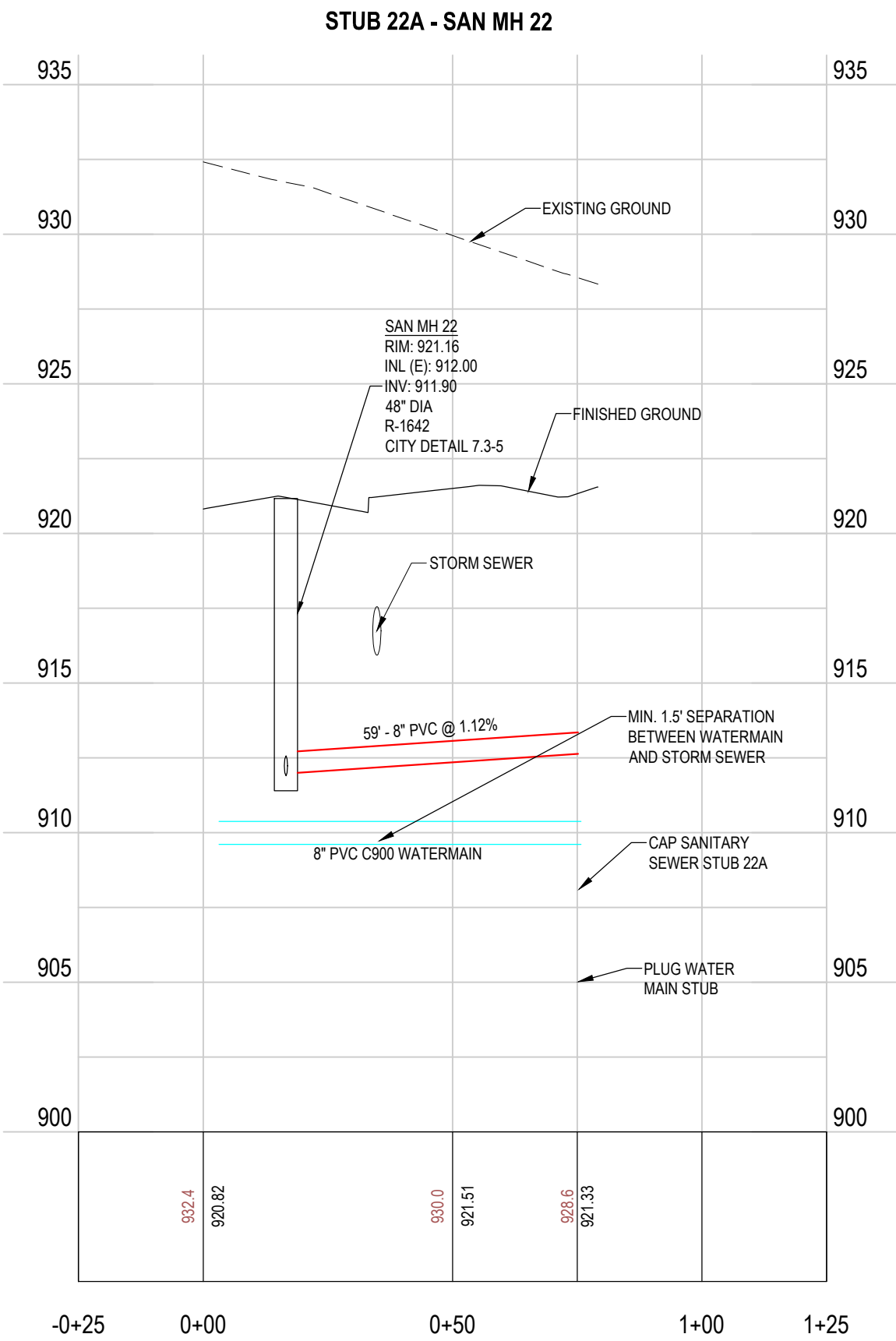
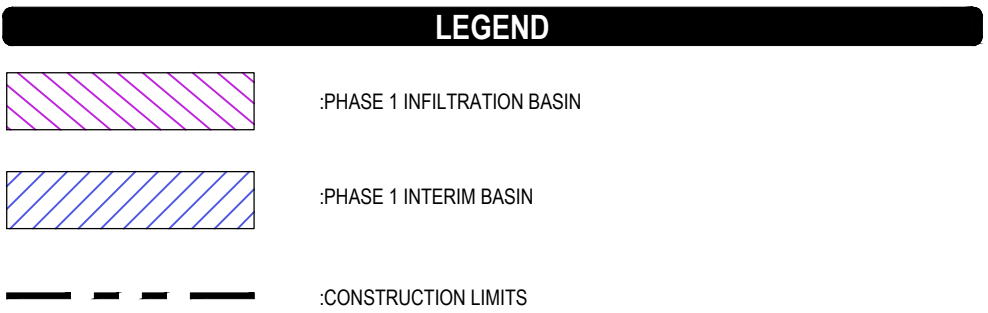
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AVIENDA PARKWAY



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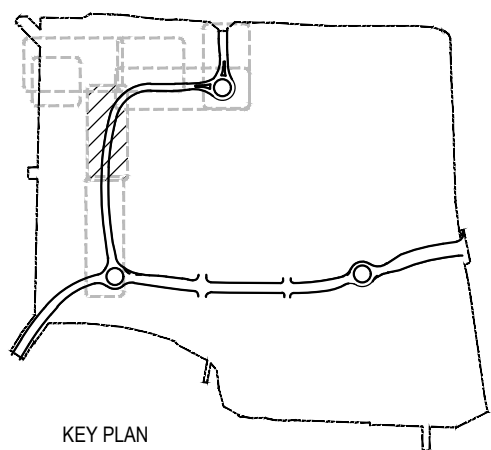
OWNER

LEVEL 7 DEVELOPMENT, LLC

4600 KINGS POINT RD
MINNETRISTA, MN 55331



AVIENDA



ISSUE / REVISION HISTORY		
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WATERSHED SUBMITTAL

MAY 27, 2020



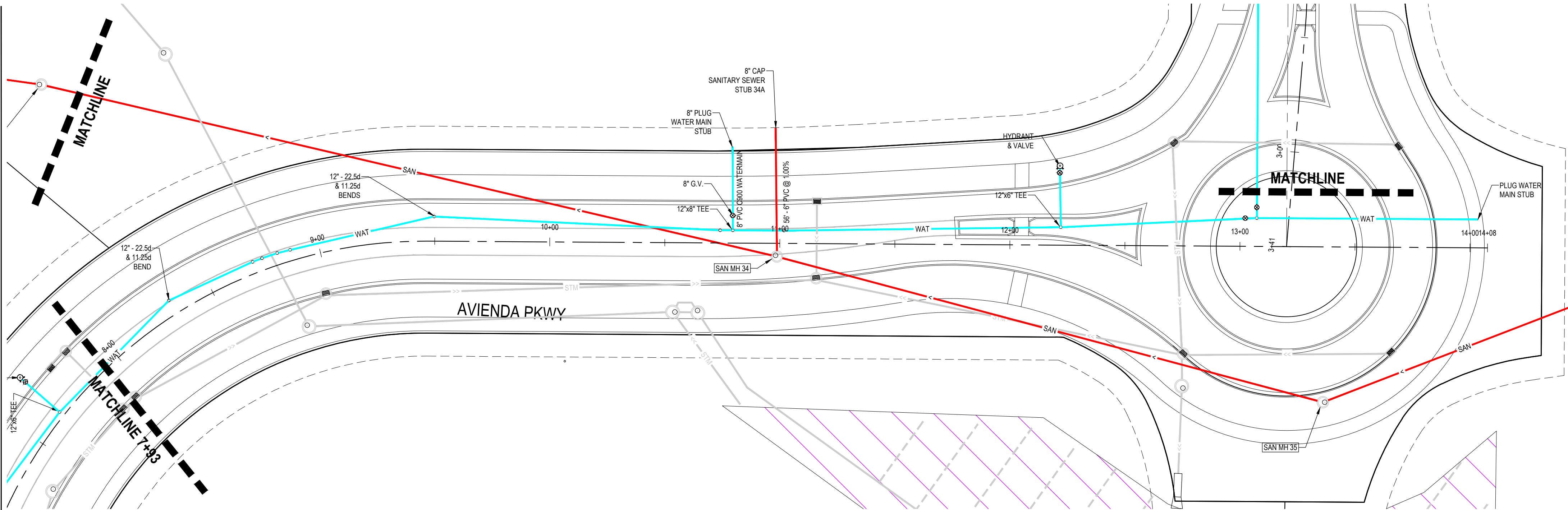
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FILE NAME C600SCD001.DWG

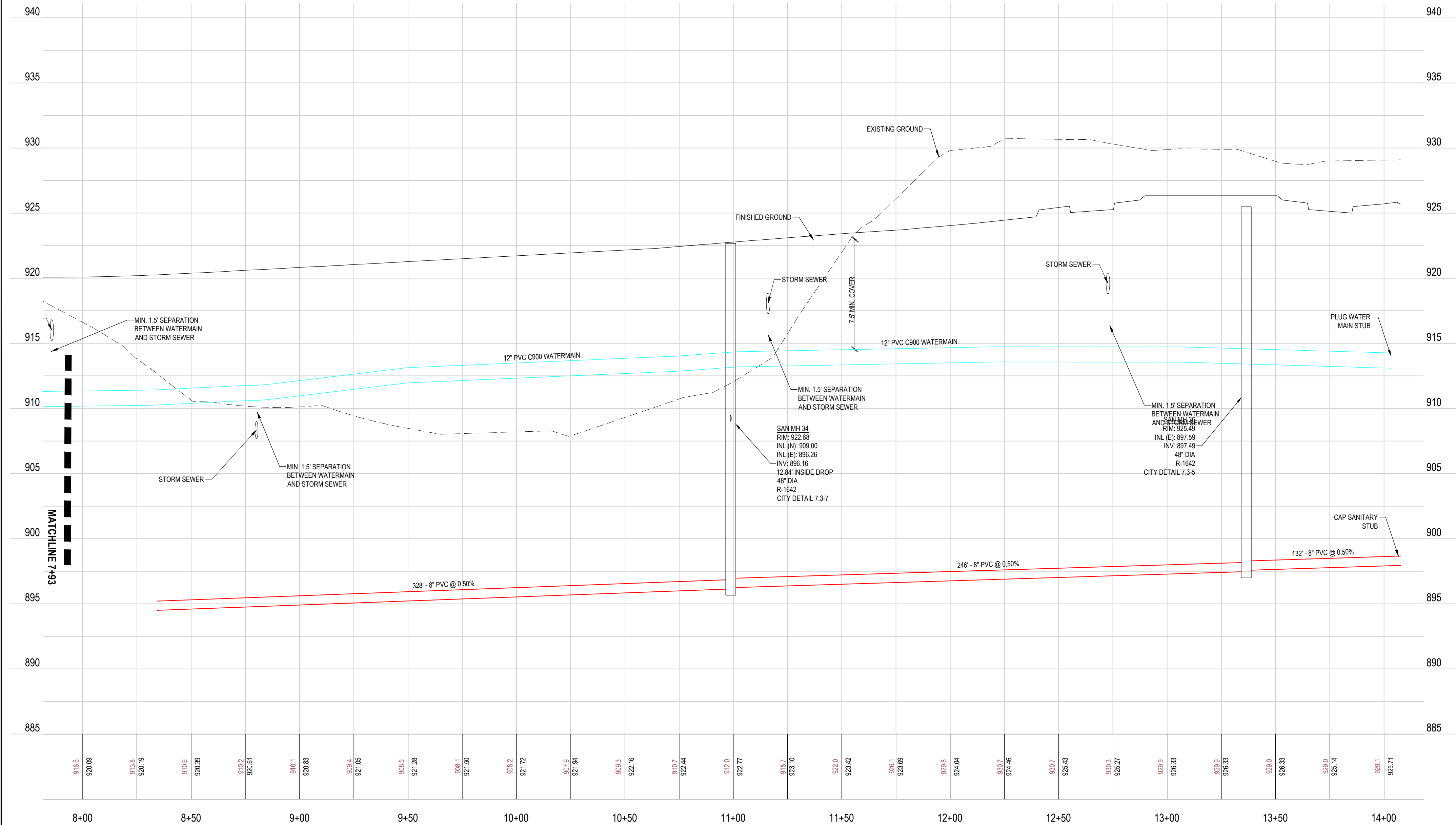
PROJECT NO. SCD14001.LEV

WEST AVIENDA PARKWAY
WATER & SANITARY

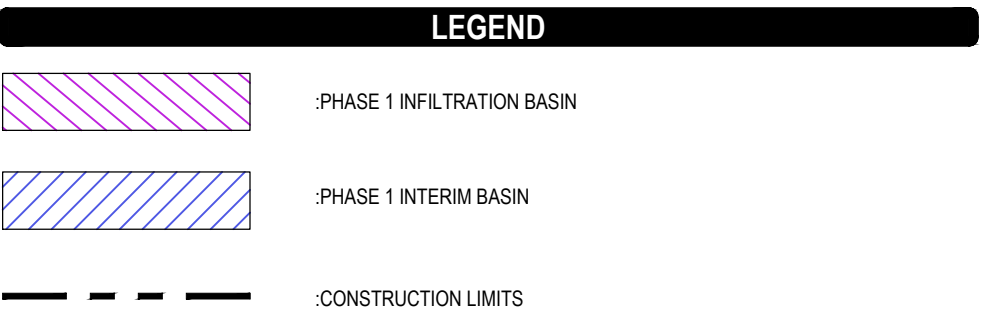
C6.2



AVIENDA PARKWAY



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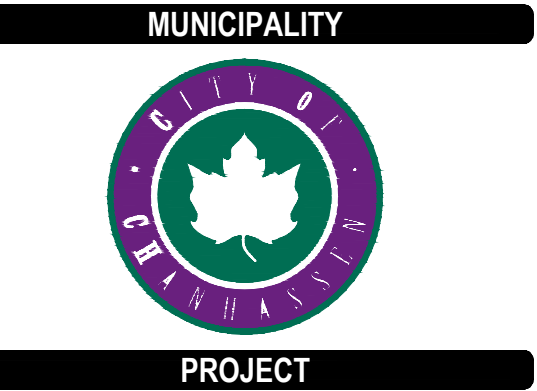


OWNER

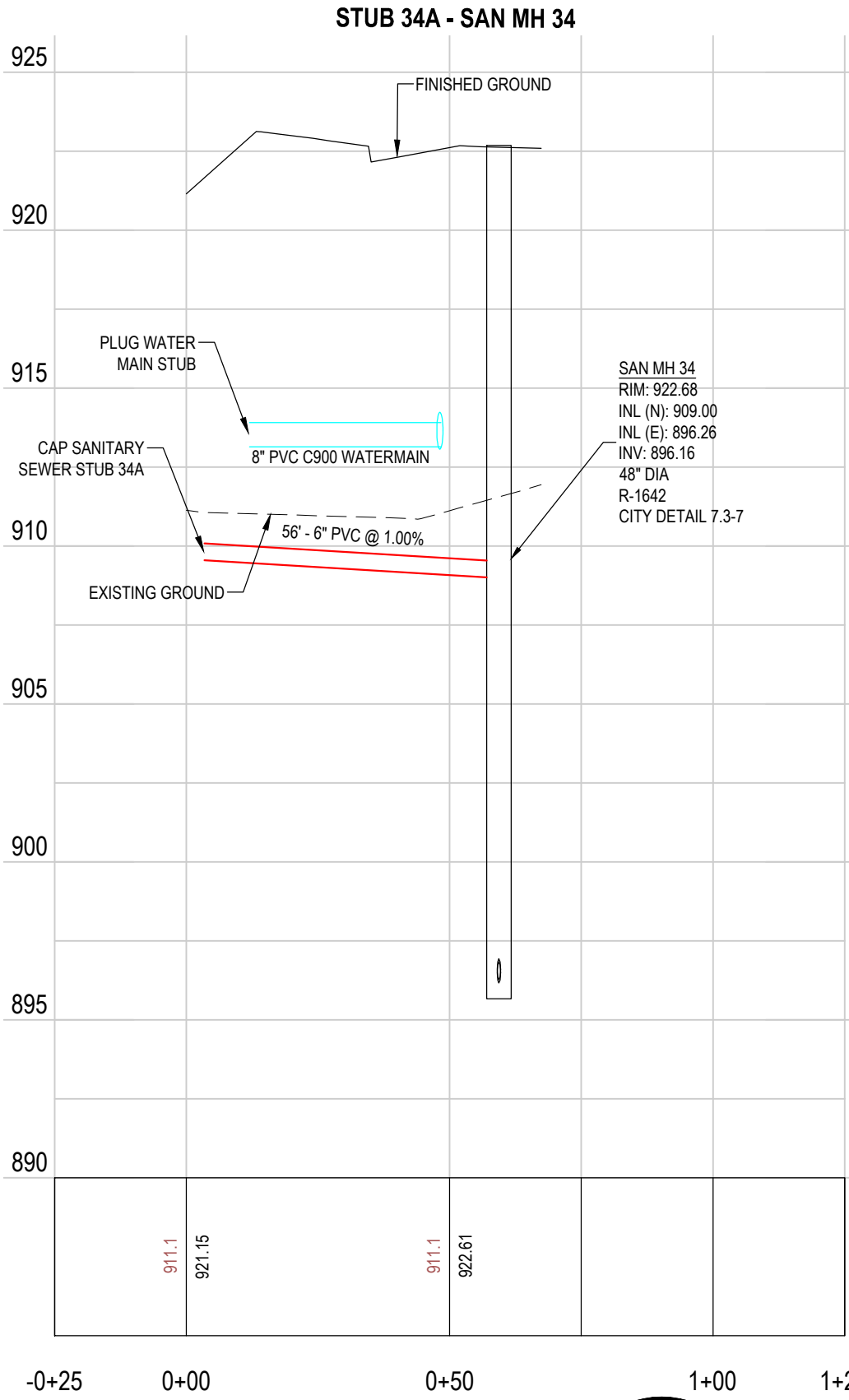
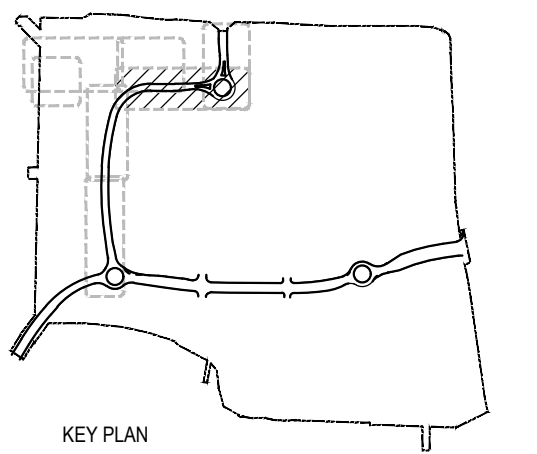
LEVEL 7 DEVELOPMENT, LLC

4600 KINGS POINT RD

MINNETRISTA, MN 55331



AVIENDA



ISSUE / REVISION HISTORY

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PROJECT MANAGER REVIEW

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Signature
Steven E. Sabers
License No. 17785 Date: 06/27/2020

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WATERSHED SUBMITTAL

MAY 27, 2020



105 South Fifth Avenue Suite 513 Minneapolis, MN 55401

Tel: 612-252-9070 Fax: 612-252-9077 Web: landform.net

FILE NAME

C600SCD001.DWG

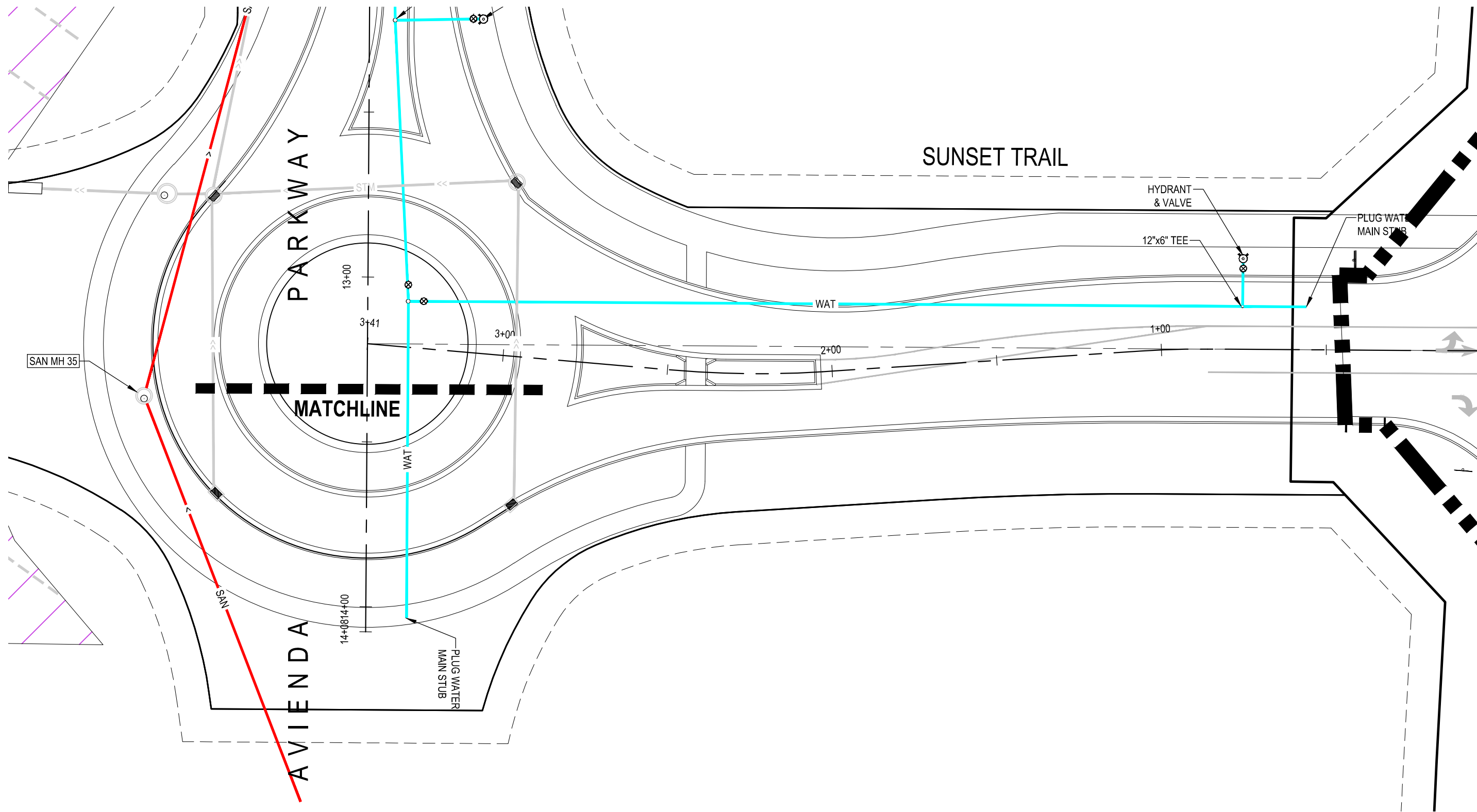
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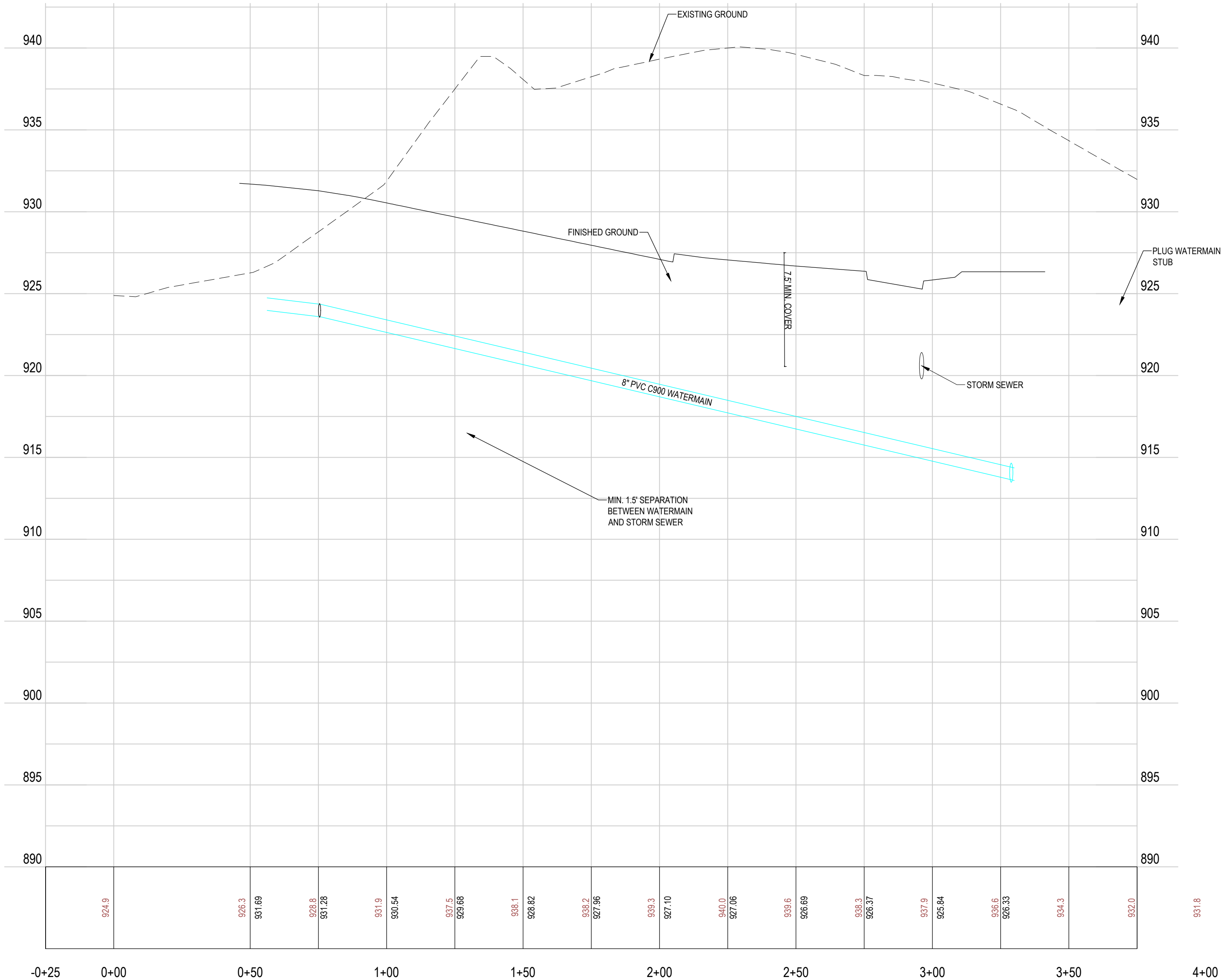
NORTH AVIENDA PARKWAY
WATER & SANITARY

C6.3

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SUNSET TRAIL



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LEGEND

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-  :PHASE 1 INTERIM BASIN
-  :CONSTRUCTION LIMITS

OWNER

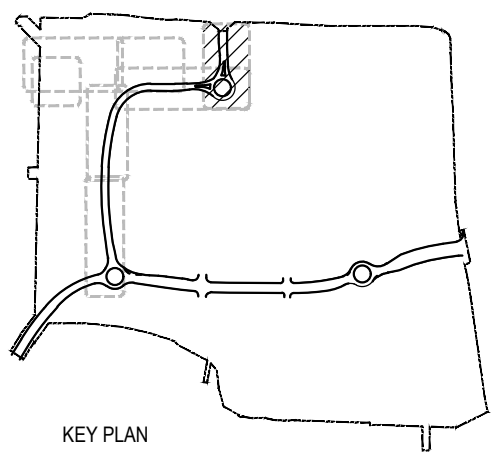
LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA



KEY PLAN

ISSUE / REVISION HISTORY

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PROJECT MANAGER REVIEW

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Steven E. Sabornie, P.E.
License No. 47785 Date: 06/27/2020

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WATERSHED SUBMITTAL
MAY 27, 2020

LANDFORM
From Site to Finish

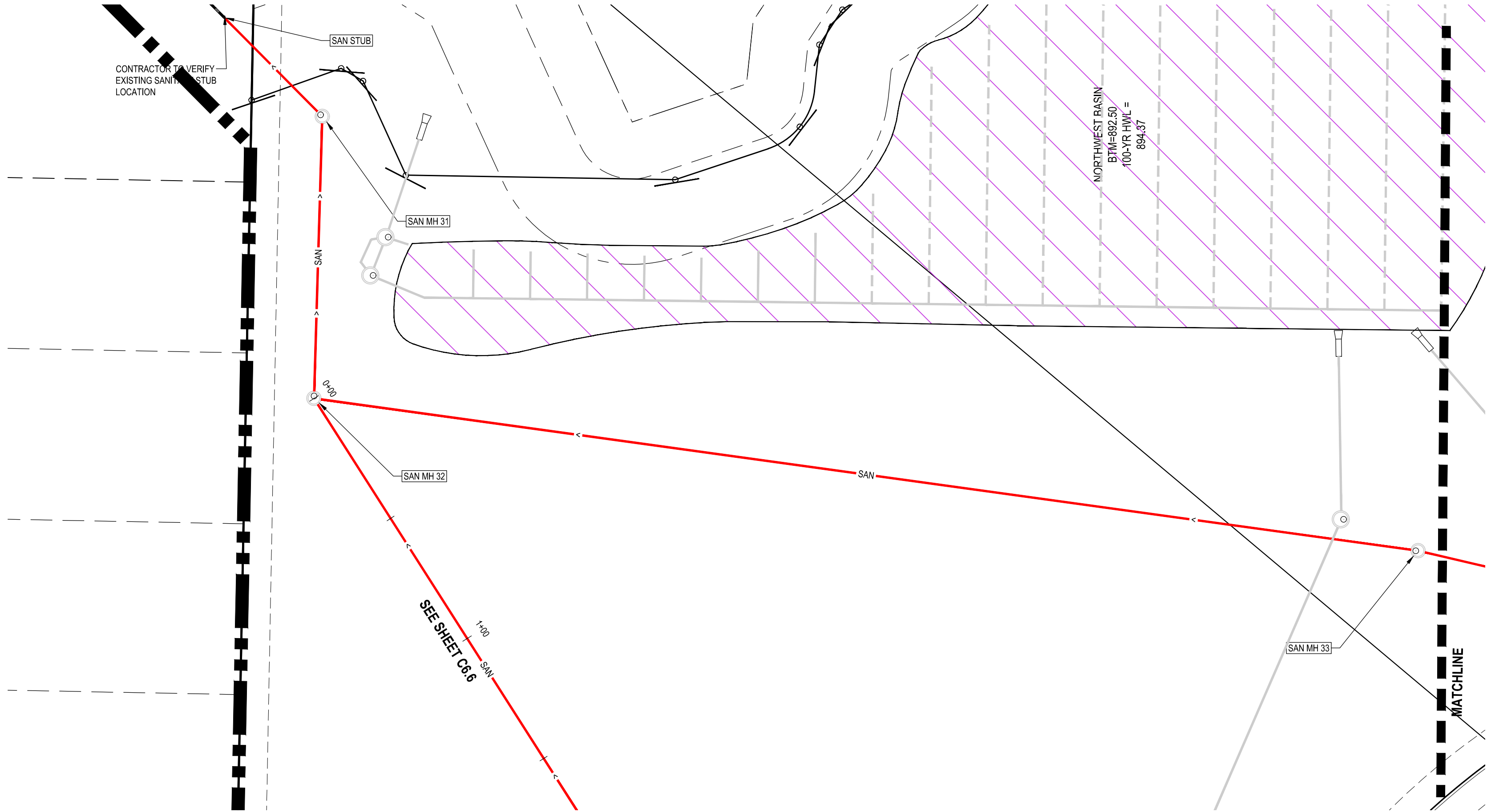
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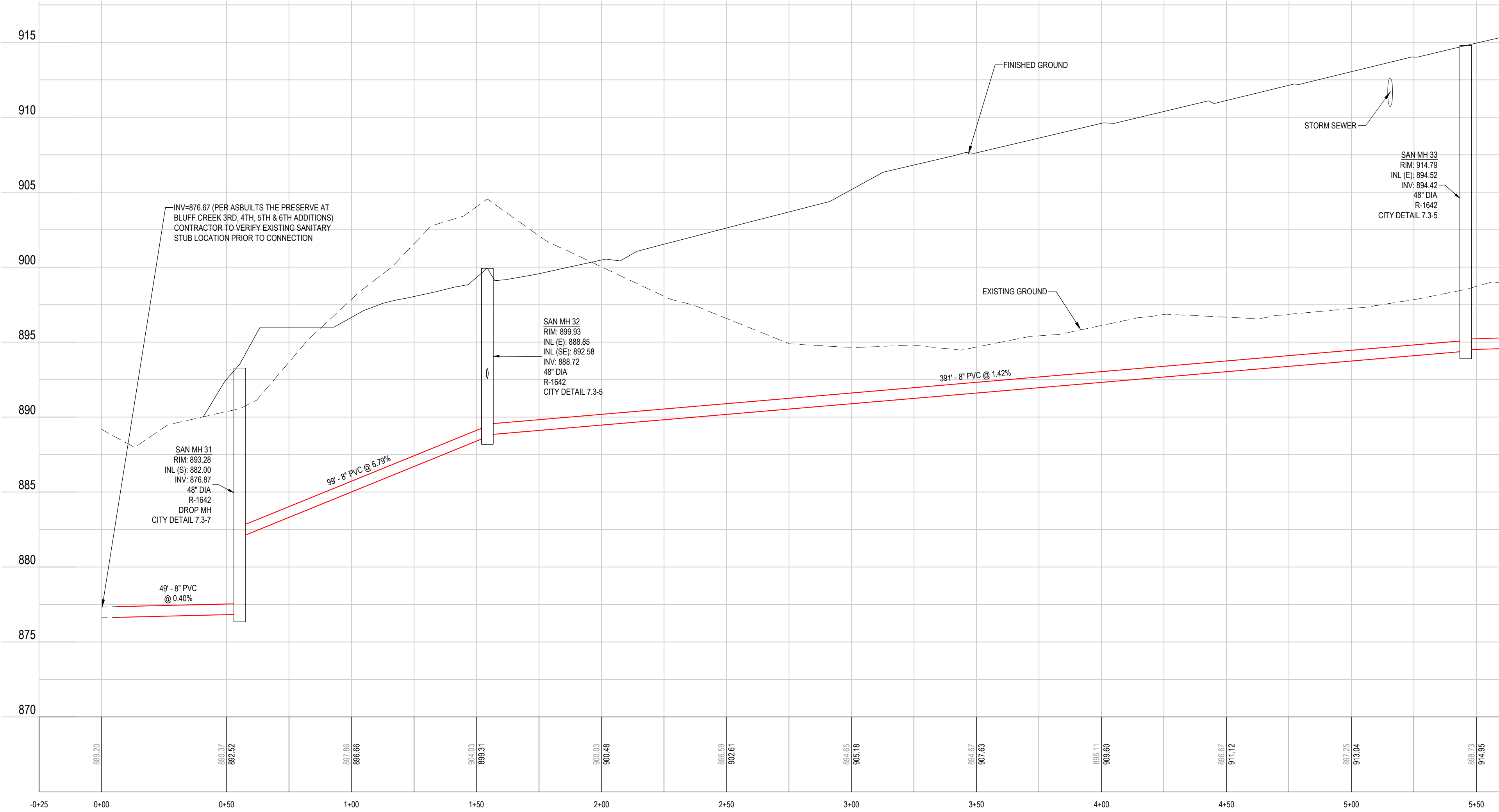
PROJECT NO. SCD14001.LEV

SUNSET TRAIL
WATER & SANITARY

C6.4



NW OUTLET



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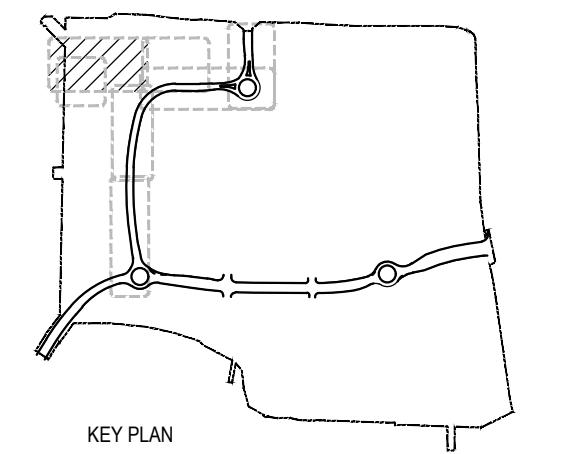
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 - CONSTRUCTION LIMITS

OWNER
LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY

PROJECT

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License No. 14715 Date: 06/27/2020

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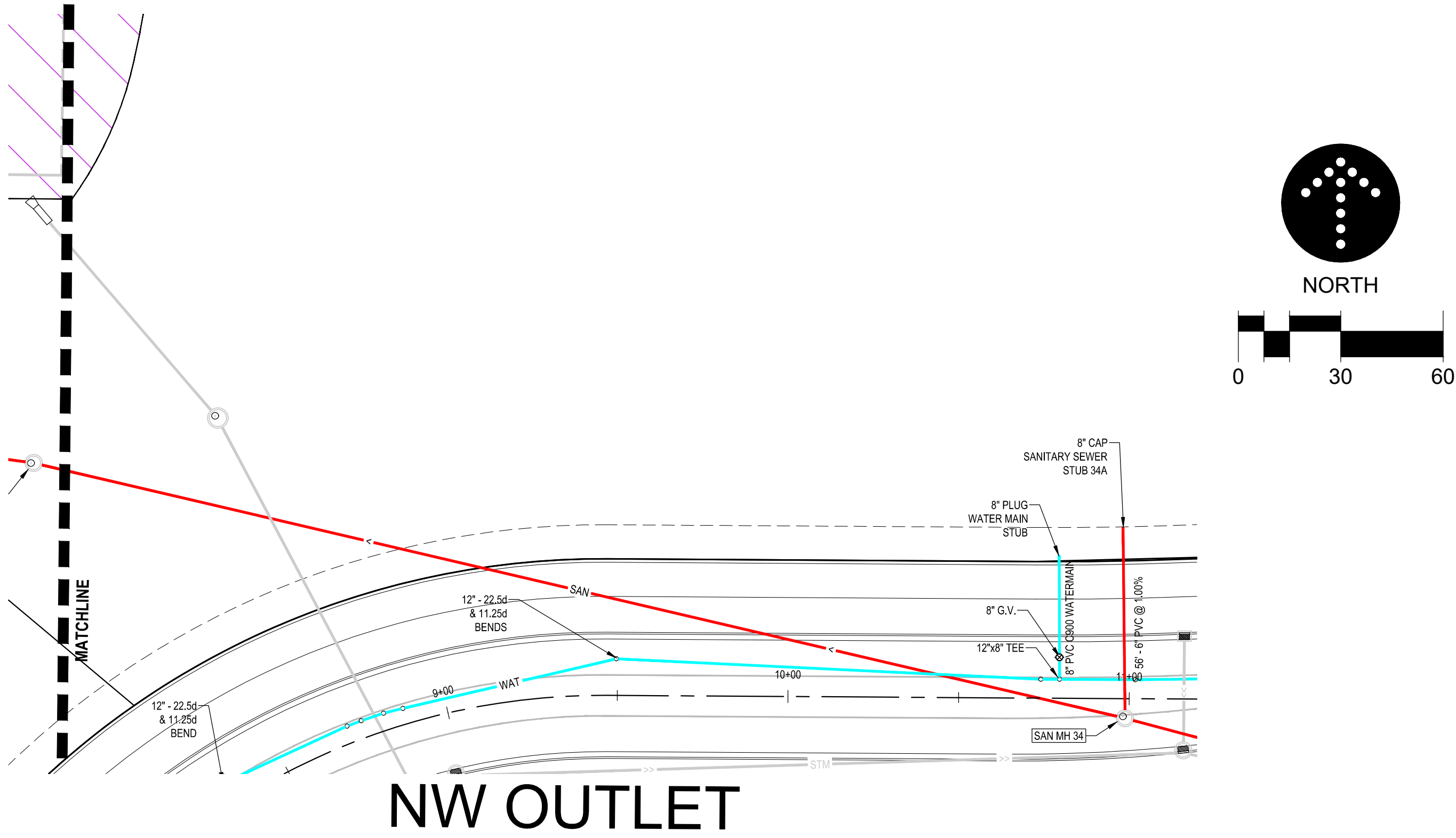
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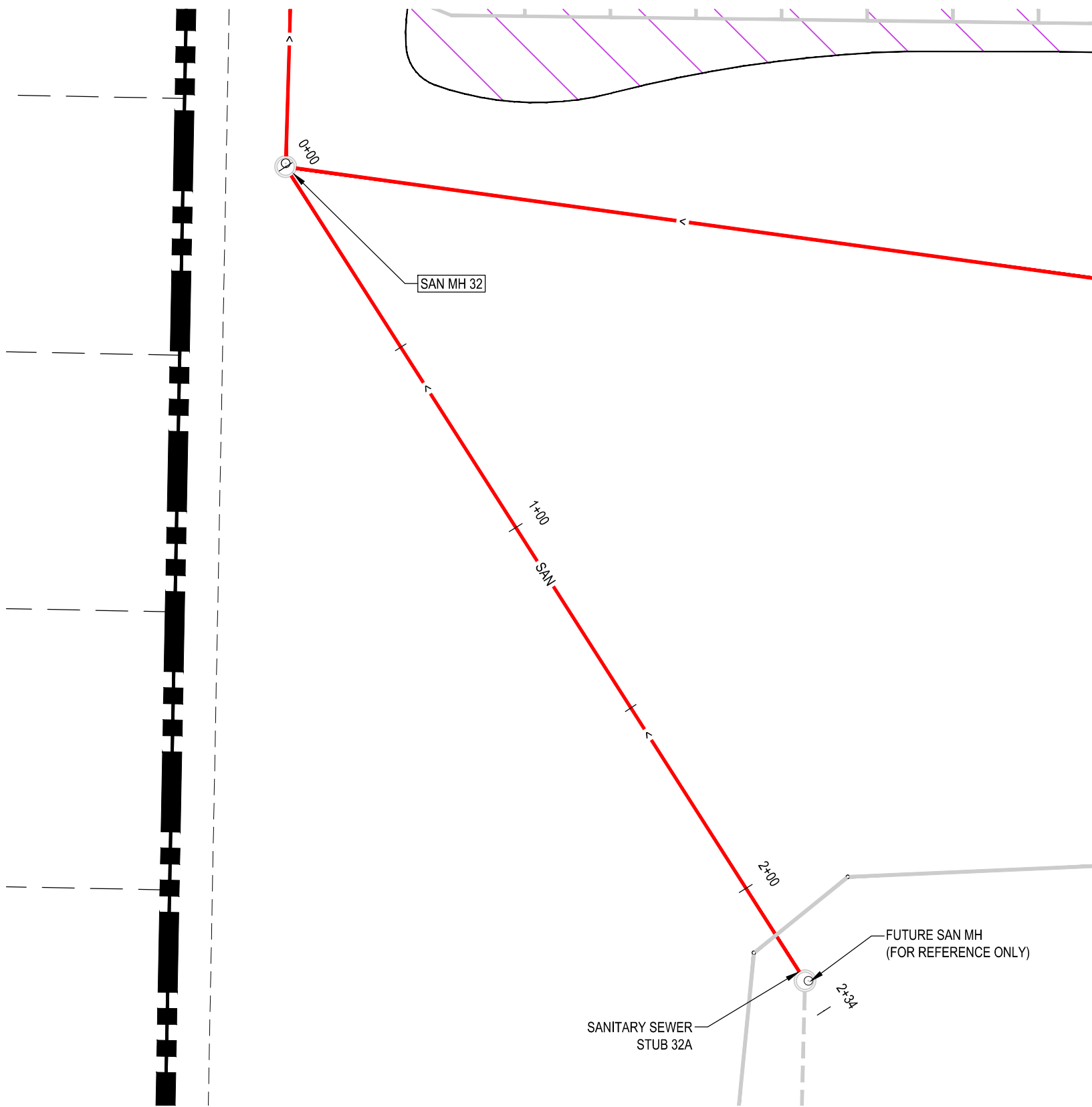
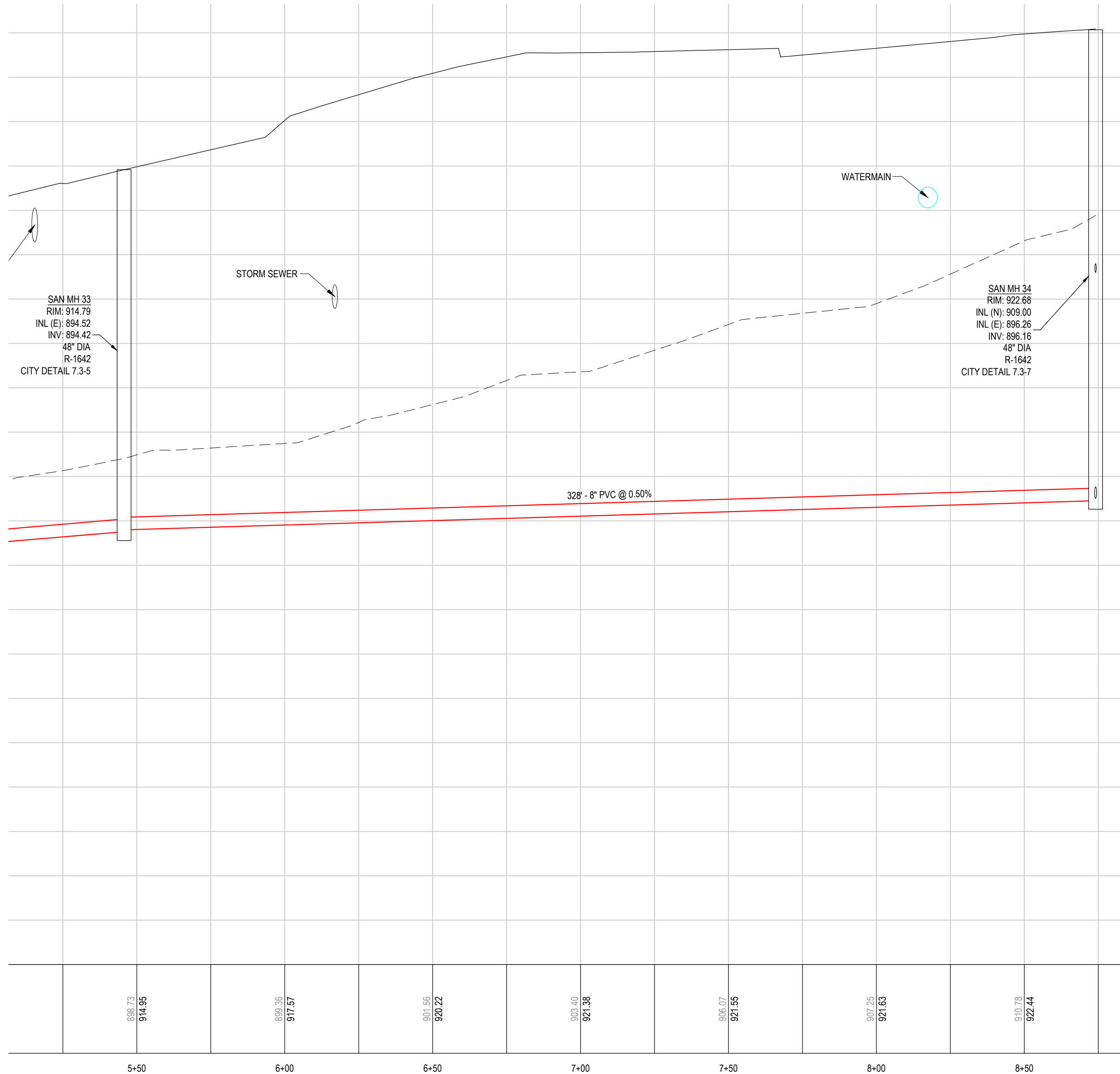
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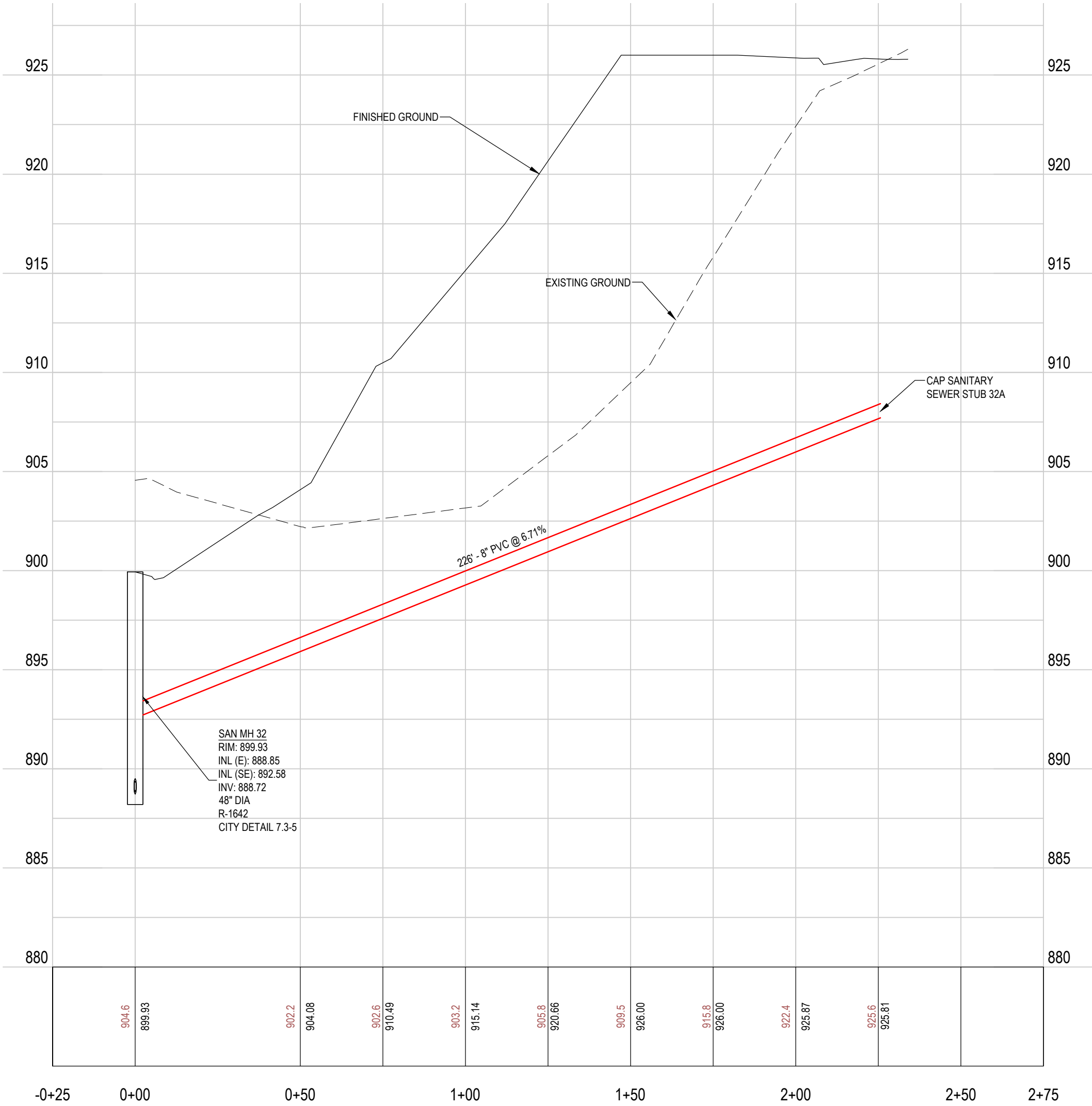
NORTHWEST OUTLET
WATER & SANITARY
C6.5



NW OUTLET



SAN MH 32 STUB



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OWNER

LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY


CHANHASSEN

PROJECT

AVIENDA

KEY PLAN



ISSUE / REVISION HISTORY		
CONTACT ENGINEER FOR ANY PRIOR HISTORY		
DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW


BY SES DATE 06.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

PRELIMINARY
NOT FOR CONSTRUCTION

Signature shown is a digital signature of original. No other copy of this plan on file at Landform Professional Services, LLC. Office and drawings upon request.

Signature: 
Steven E. Sabers
License No: 17175 Date: 06/27/2020

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WATERSHED SUBMITTAL

MAY 27, 2020

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Suite 513
Minneapolis, MN 55401

Tel: 612-252-9070
Fax: 612-252-9077
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FILE NAME

C600SCD001.DWG

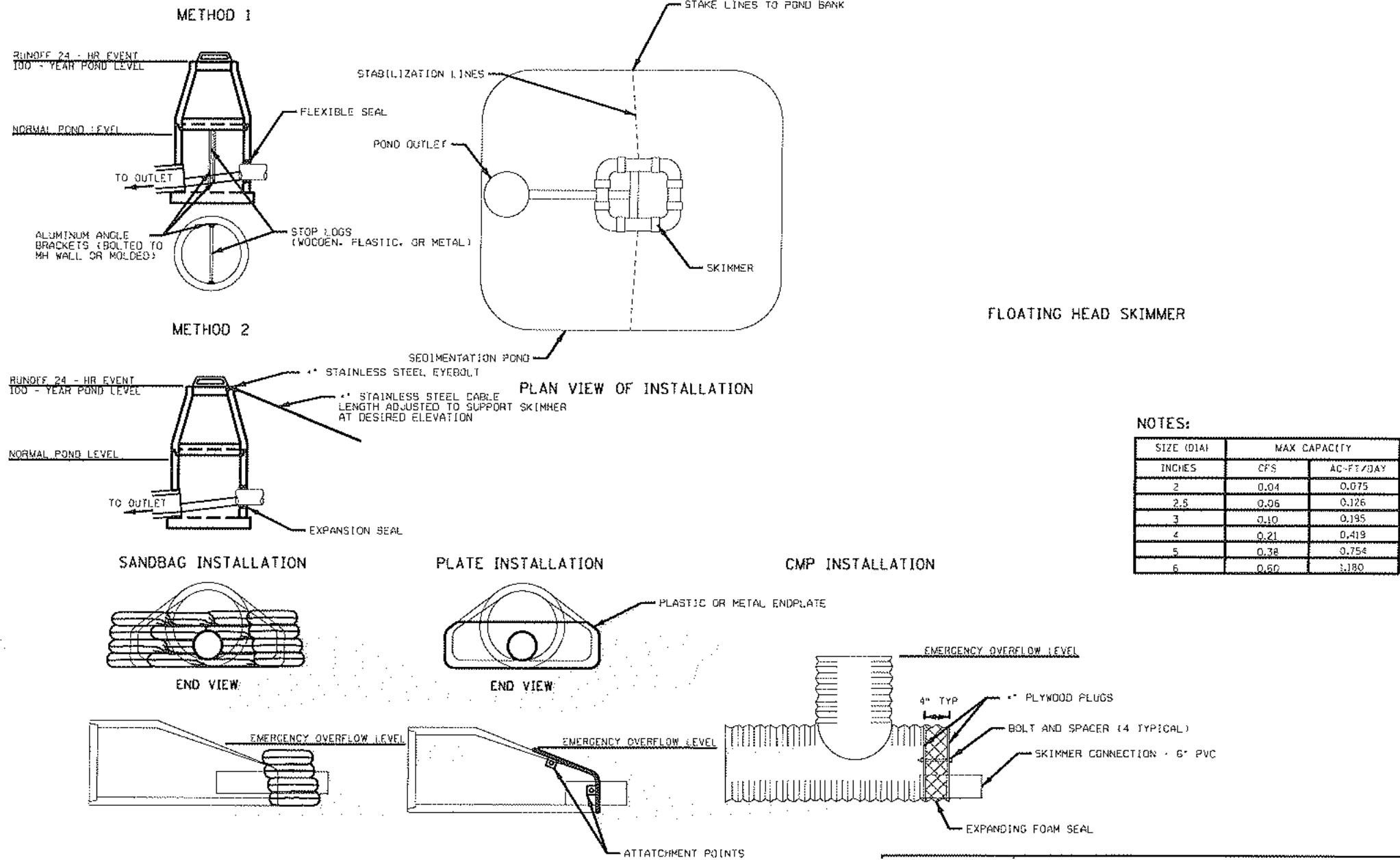
PROJECT NO.

SCD14001.LEV

NORTHWEST OUTLET
WATER & SANITARY

C6.6

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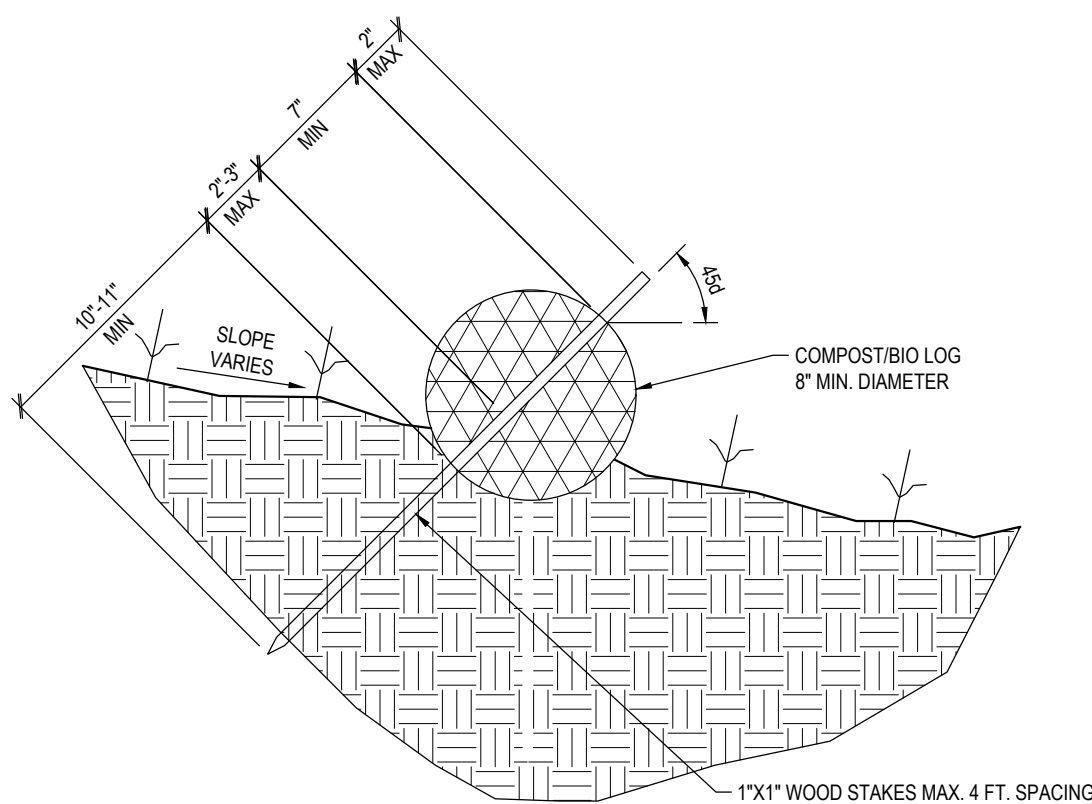
NOTES:

1. Dimensions shall be grouted both inside and outside of the structure.
2. The thick structure shall be grouted with 2" of grout.
3. If a pump is required a minimum pump depth of 4" shall be constructed below the lowest pipe invert in the structure.

SIZE (DIA)	CFS	AC-FT/DAY
2	0.04	0.075
3	0.05	0.125
4	0.10	0.185
5	0.21	0.419
6	0.38	0.724
8	0.92	1.760

FLOATING HEAD SKIMMER

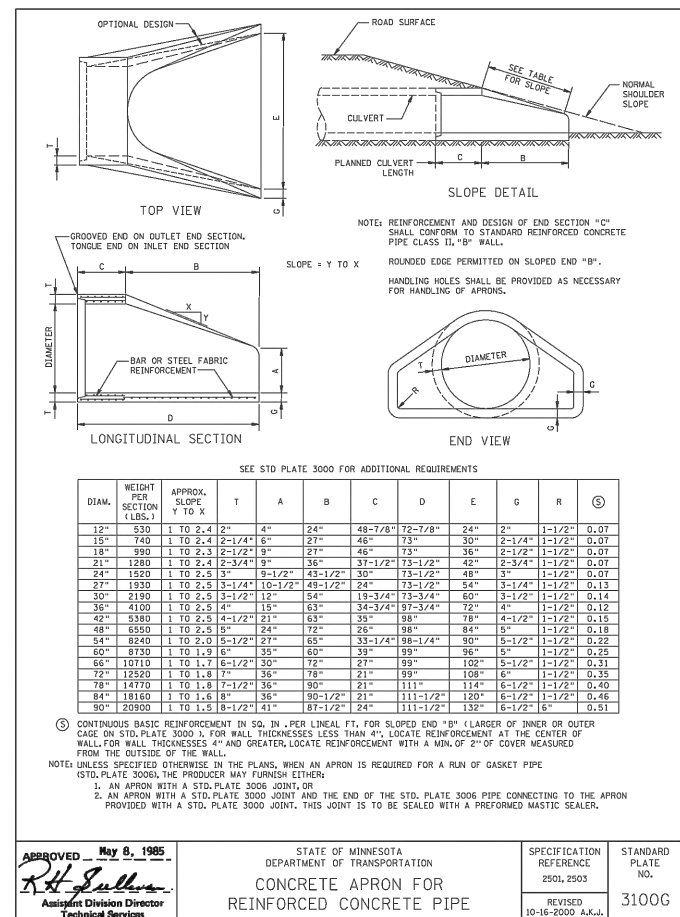
NO SCALE



MAINTAIN BY REMOVING SEDIMENT AND REPLACING DAMAGED LOGS UNTIL TURF IS ESTABLISHED. REMOVE AFTER PERMANENT STABILIZATION IS COMPLETE.

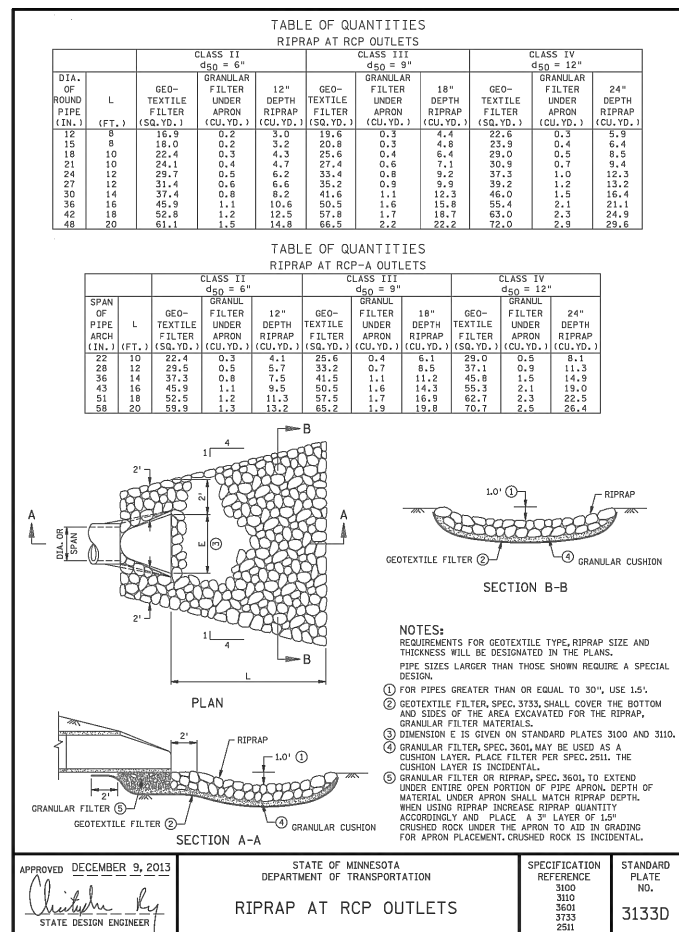
TEMPORARY COMPOST/BIO LOG

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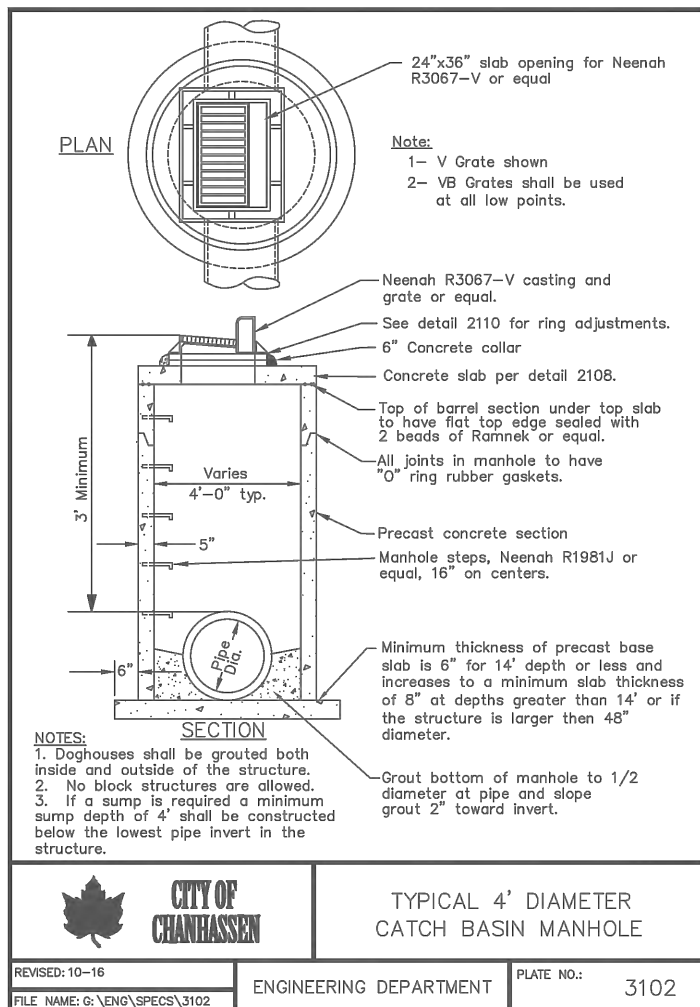
MNDOT CONCRETE APRON DETAIL

NO SCALE



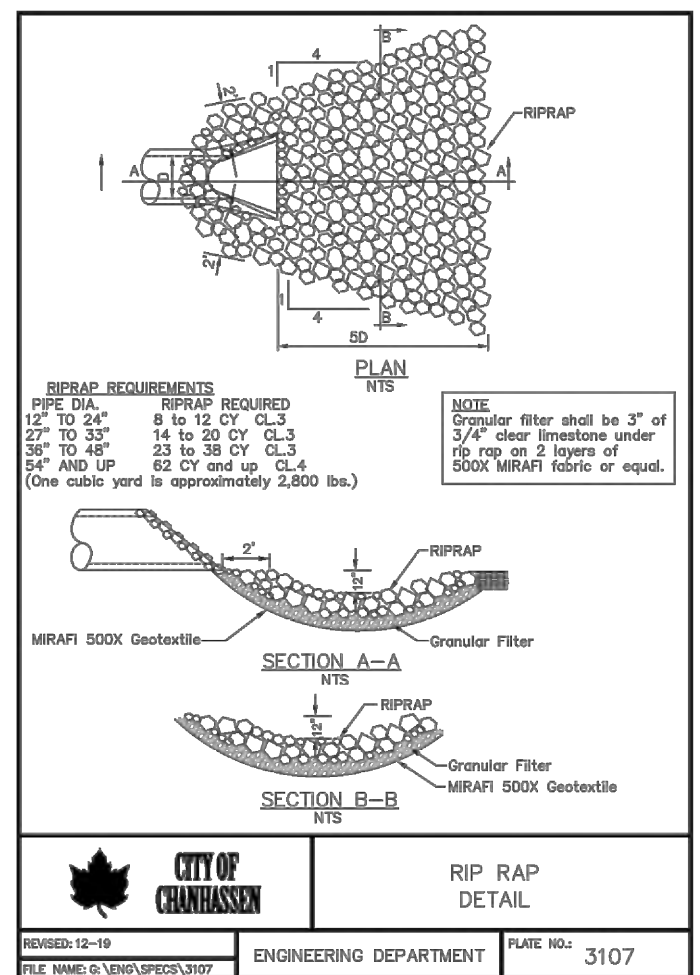
MNDOT RIP RAP AT RCP OUTLETS

NO SCALE



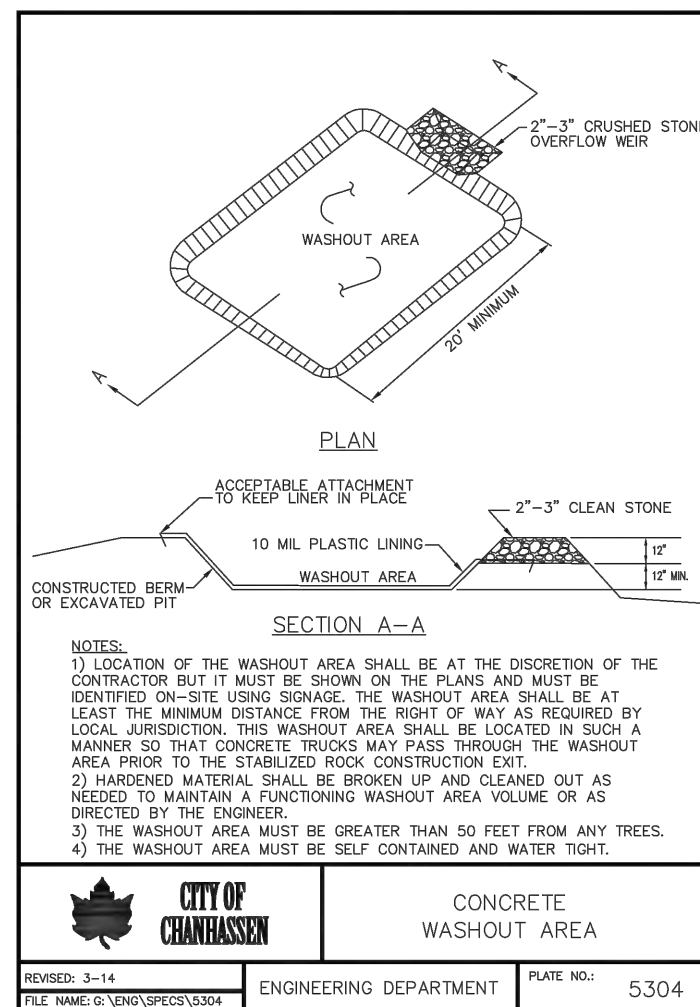
TYPICAL 4' DIAMETER CATCH BASIN MANHOLE

NO SCALE



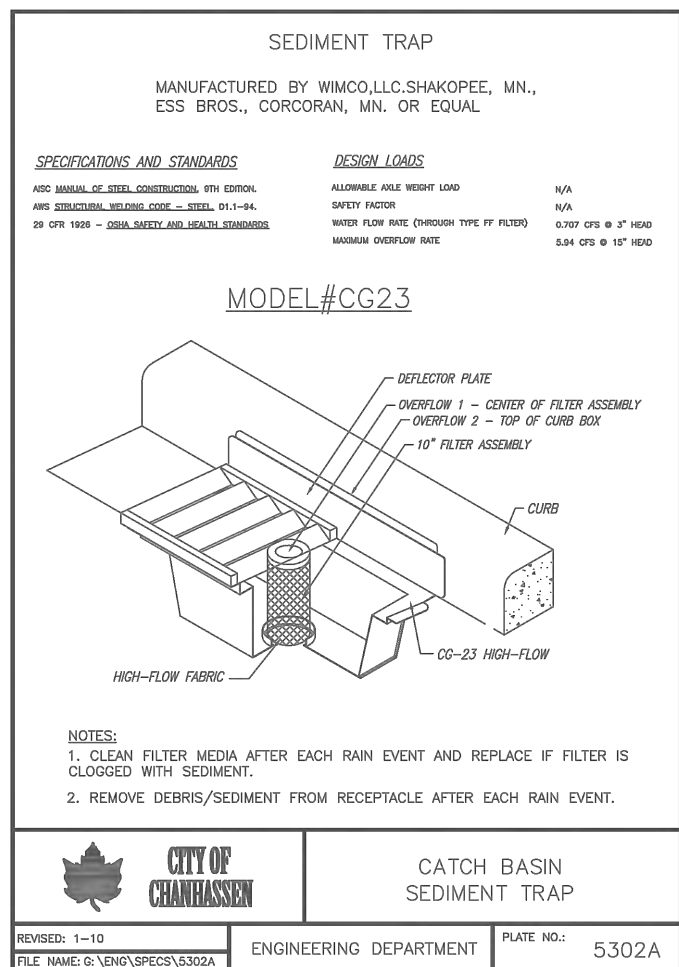
RIP RAP DETAIL

NO SCALE



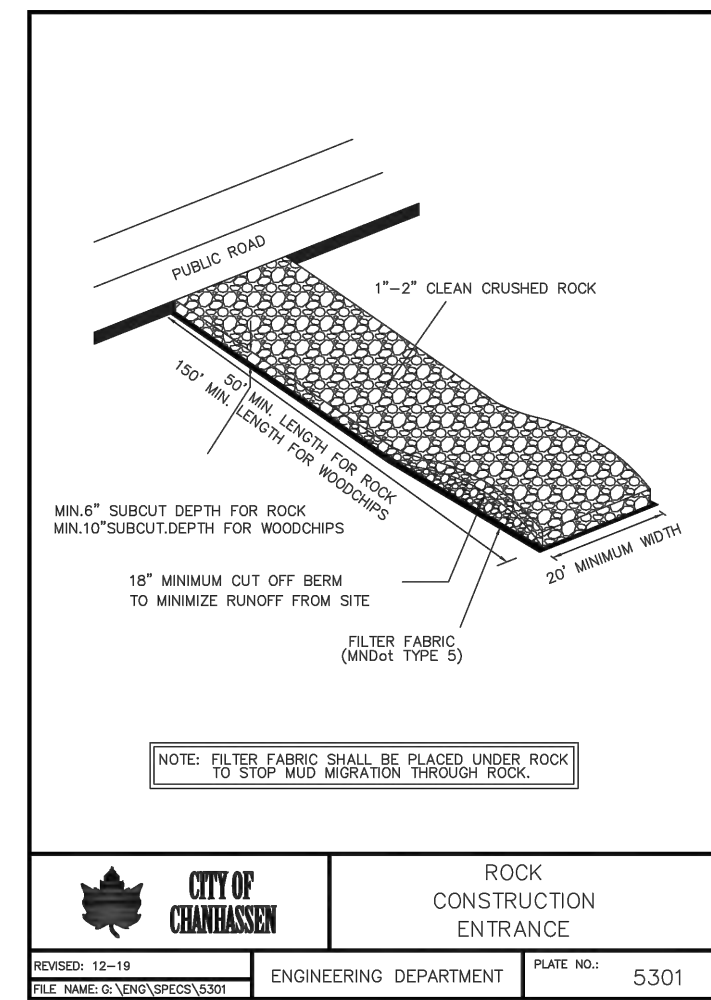
CONCRETE WASHOUT AREA

NO SCALE



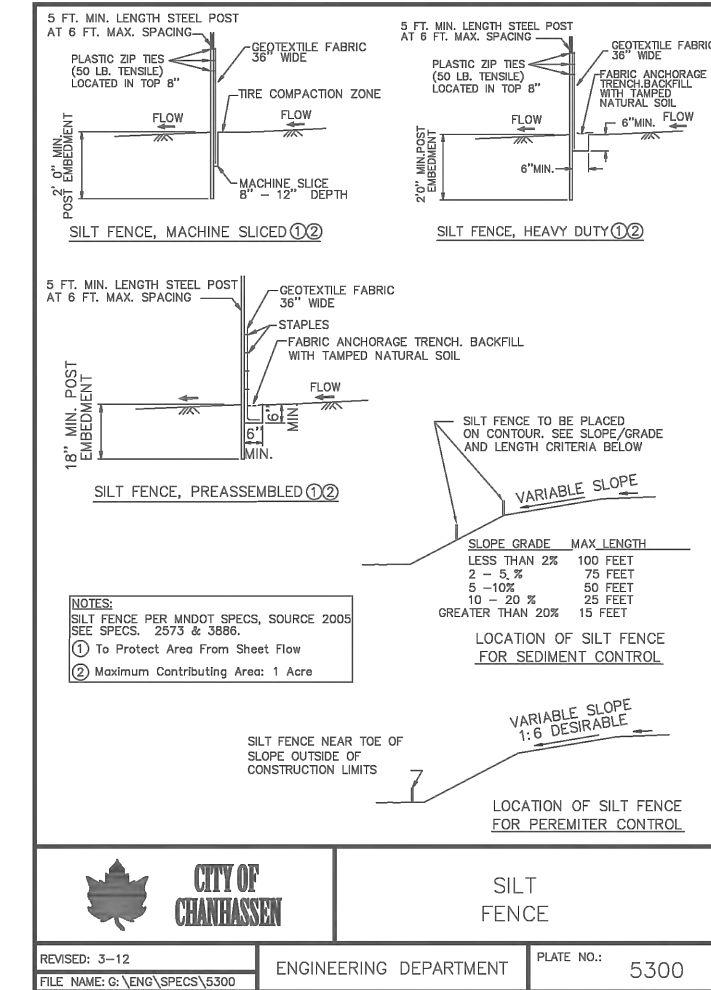
CATCH BASIN SEDIMENT TRAP

NO SCALE



ROCK CONSTRUCTION ENTRANCE

NO SCALE



SILT FENCE

NO SCALE



Know what's Below.
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OWNER

LEVEL 7 DEVELOPMENT, LLC

4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY



PROJECT

AVIENDA

ISSUE / REVISION HISTORY

DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW

BY SES DATE 05.19.2020

CERTIFICATION

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PRELIMINARY - NOT FOR CONSTRUCTION

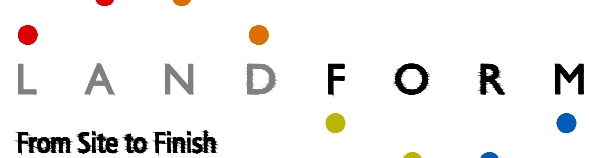
Steven E. Sabers License No. 14778 Date: 05/27/2020

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WATERSHED SUBMITTAL

MAY 27, 2020



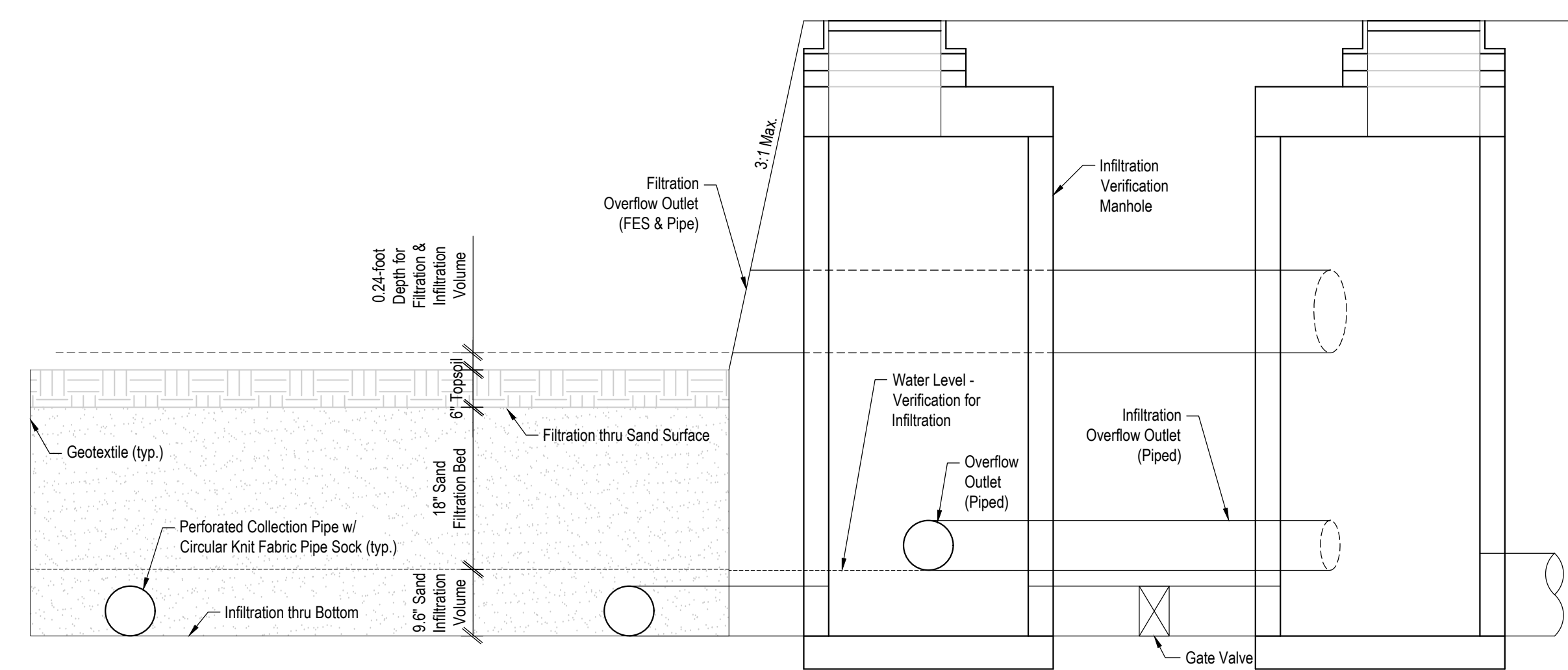
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FILE NAME C706SCD001.DWG

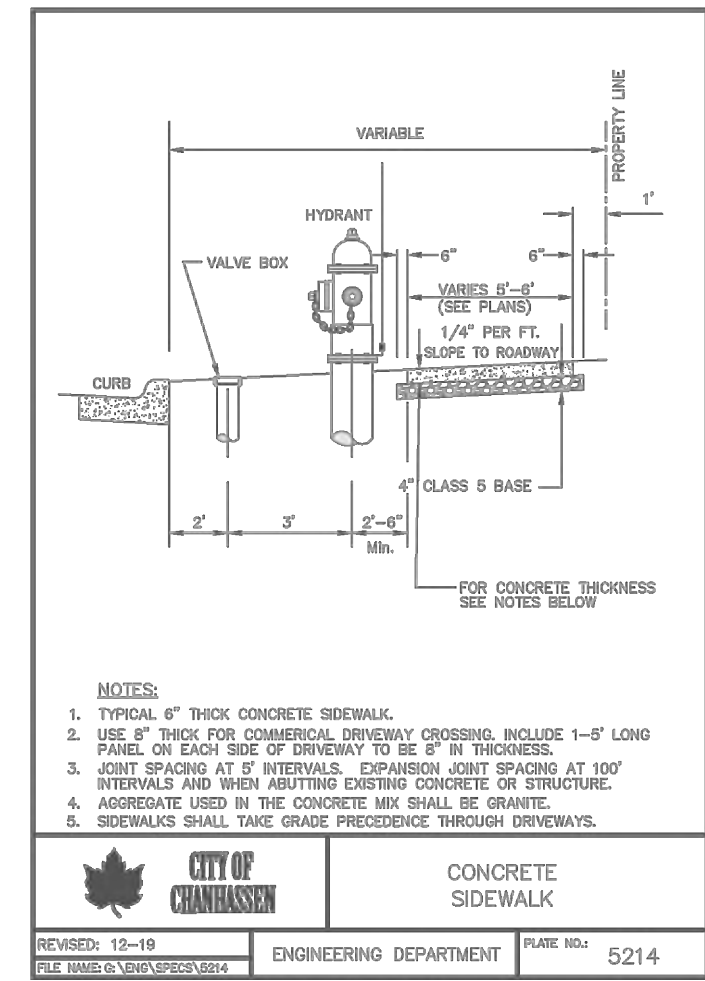
PROJECT NO. SCD14001.LEV

CIVIL CONSTRUCTION DETAILS

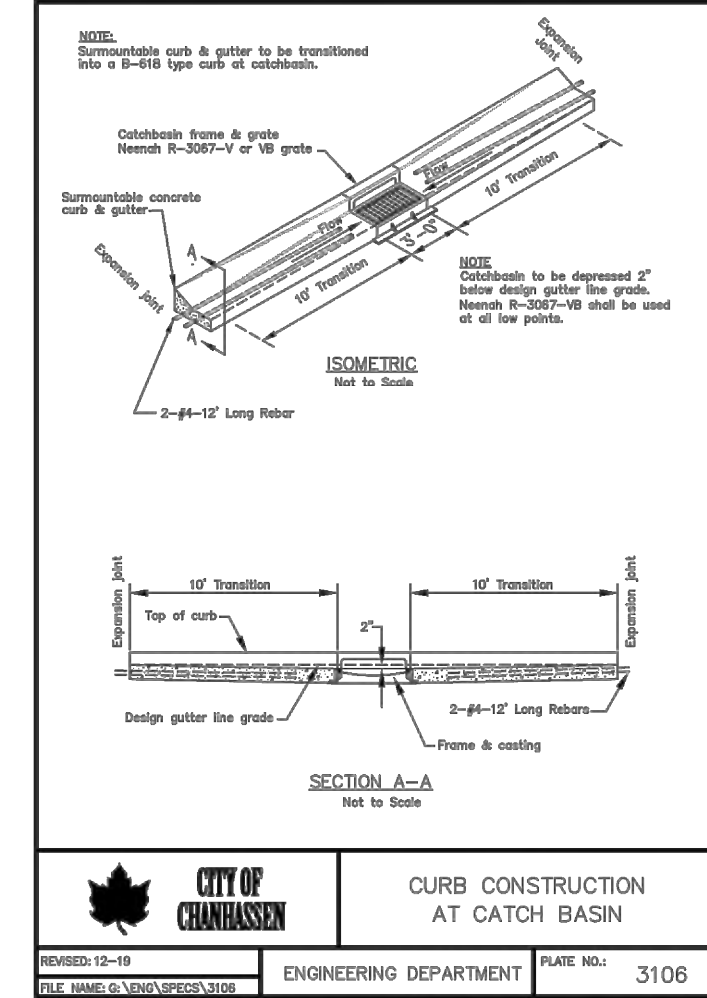
C7.1



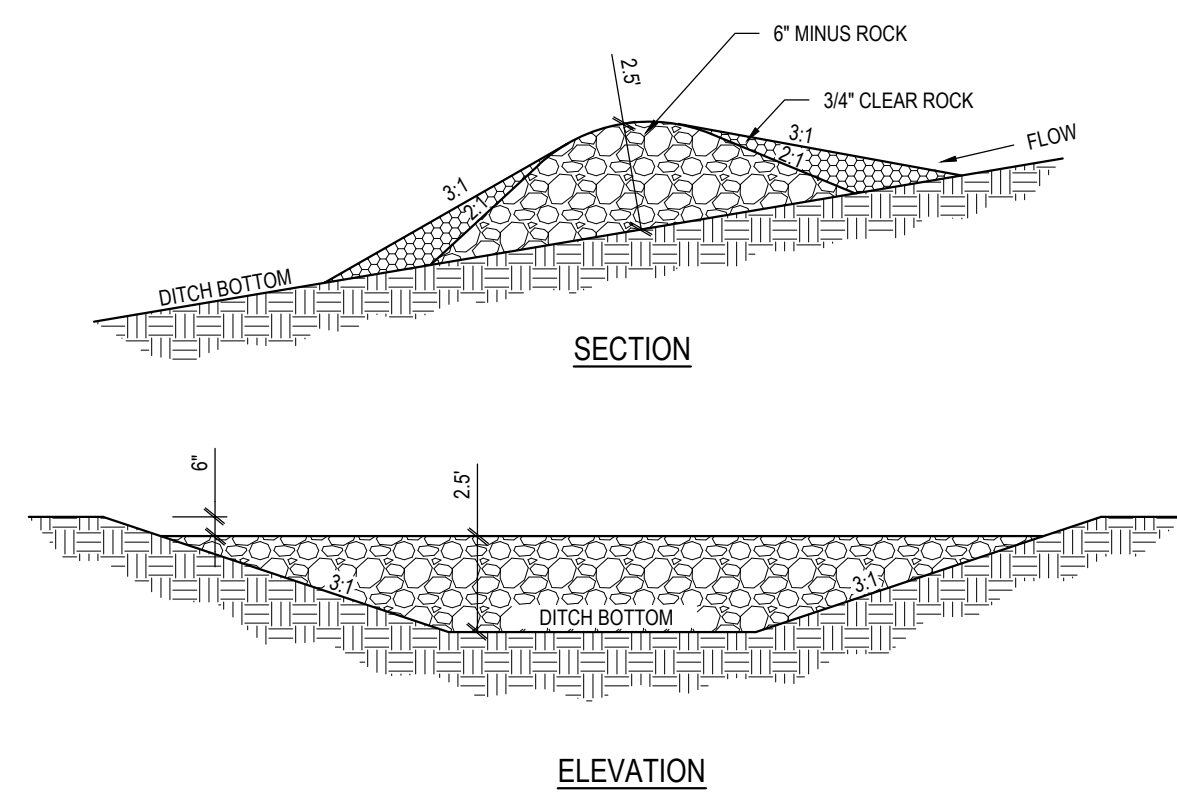
6 PHASE 1 FILTRATION / INFILTRATION BASIN AND OUTLET MANHOLES NO SCALE



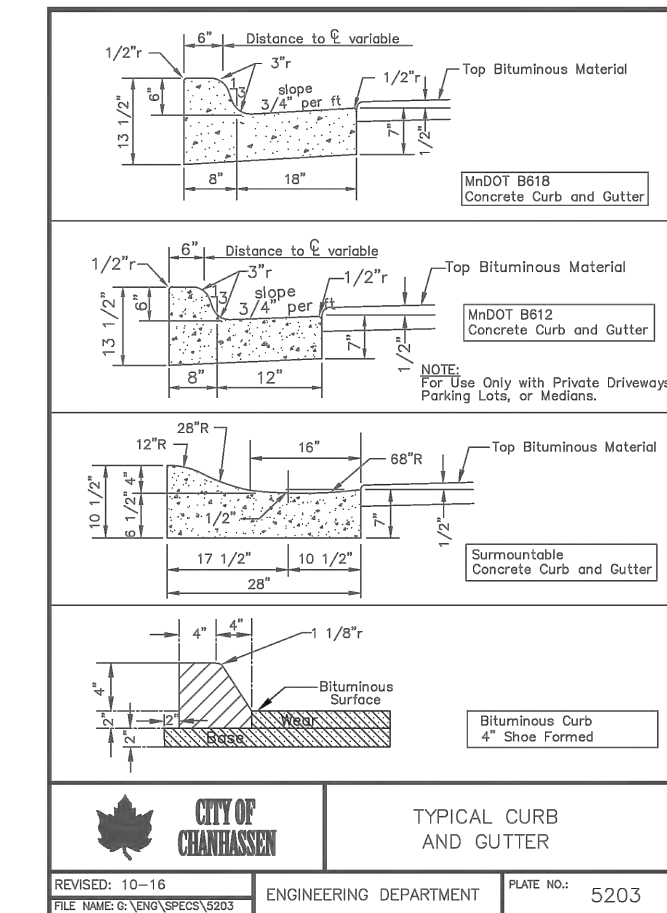
4 CONCRETE SIDEWALK NO SCALE



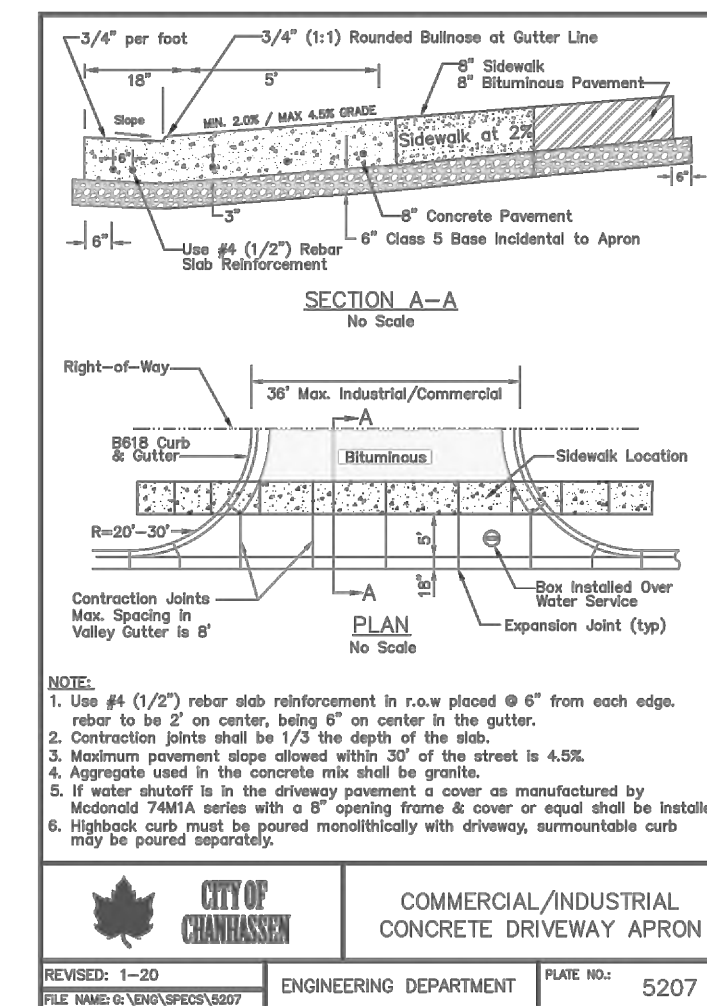
1 CURB CONSTRUCTION AT CATCH BASIN NO SCALE



5 ROCK DIKE NO SCALE



2 TYPICAL CURB AND GUTTER NO SCALE



3 COMMERCIAL/INDUSTRIAL CONCRETE DRIVEWAY APRON NO SCALE



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OWNER
LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

MUNICIPALITY
CITY OF CHANTHANESSA
PROJECT

AVIENDA

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PROJECT MANAGER REVIEW
BY SES DATE 05.19.2020
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Signature: Steven E. Sabers Date: 05/27/2020
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WATERSHED SUBMITTAL
MAY 27, 2020

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FILE NAME C702SCD001.DWG

PROJECT NO. SCD14001.LEV

CIVIL CONSTRUCTION
DETAILS
C7.2

OWNER

LEVEL 7 DEVELOPMENT, LLC

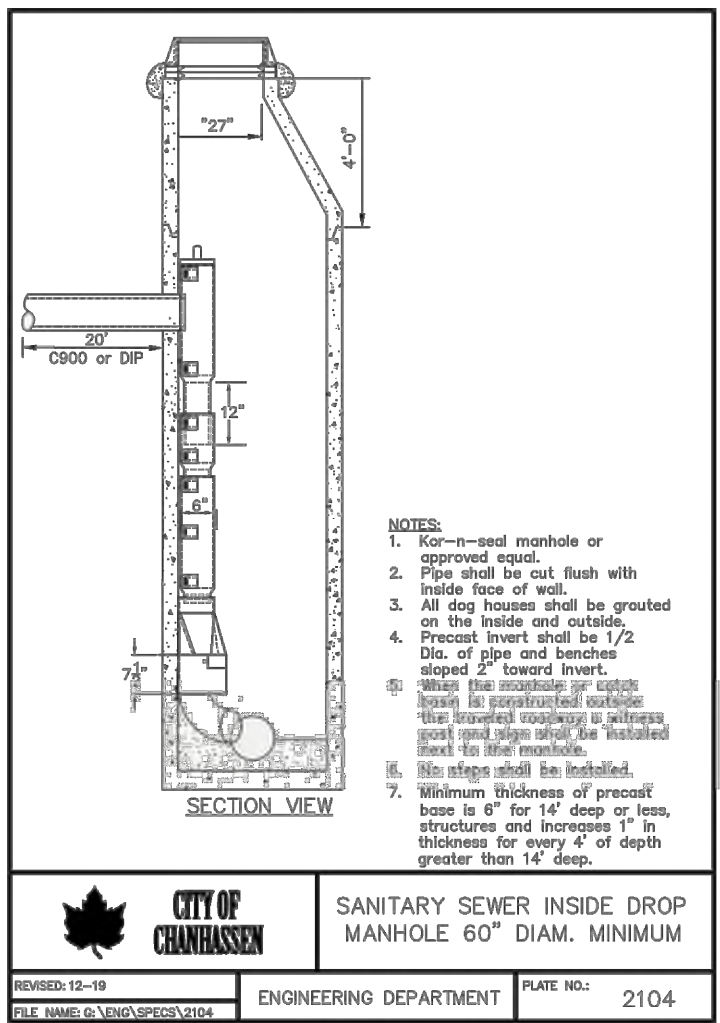
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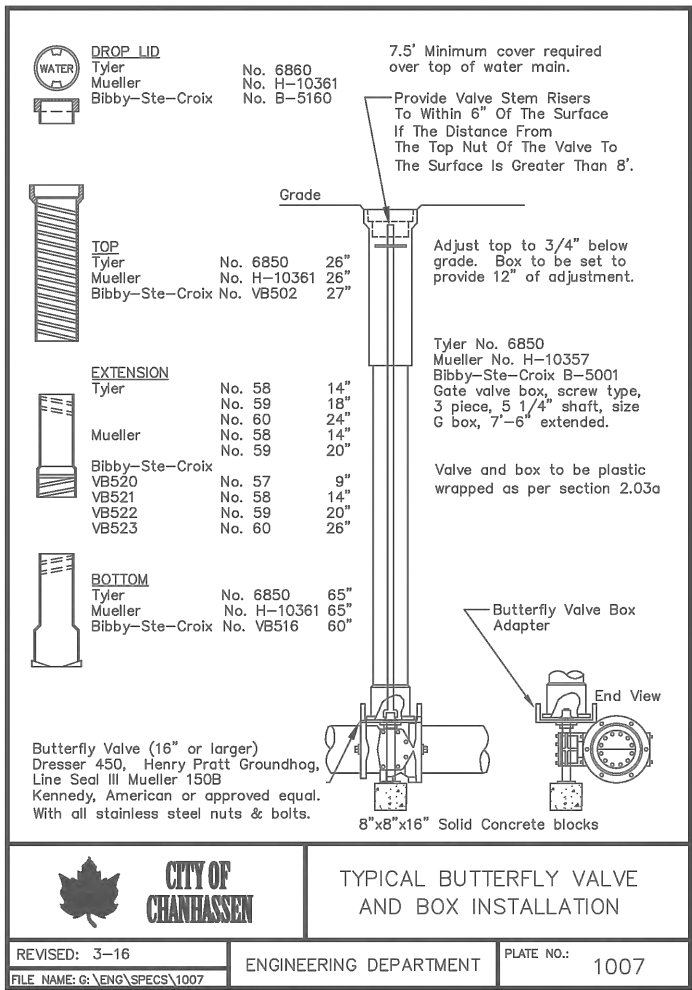
PROJECT

AVIENDA



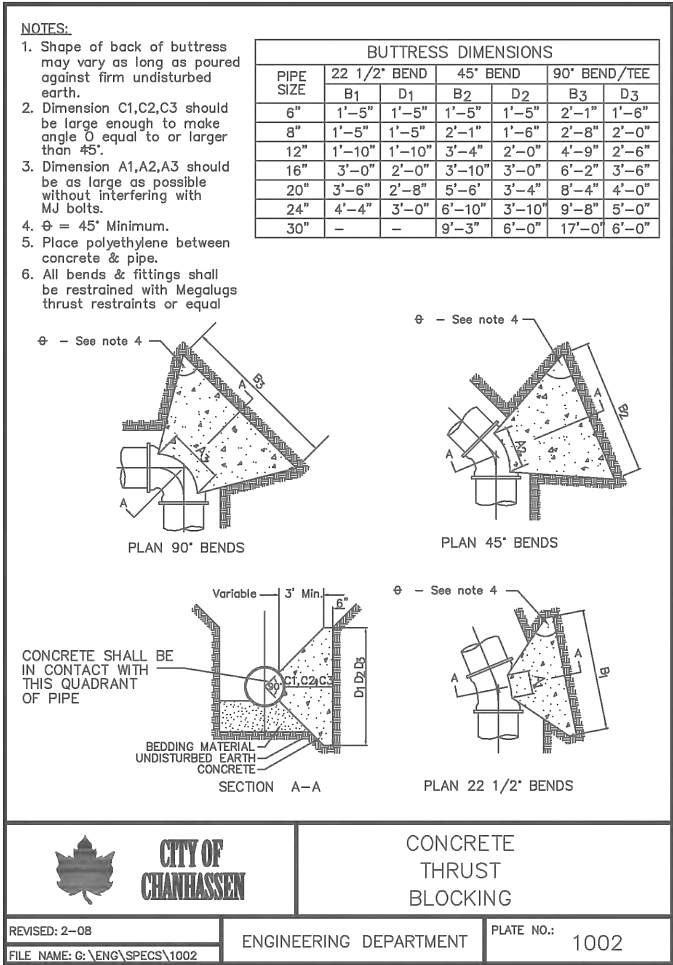
SANITARY SEWER INSIDE DROP MANHOLE

NO SCALE



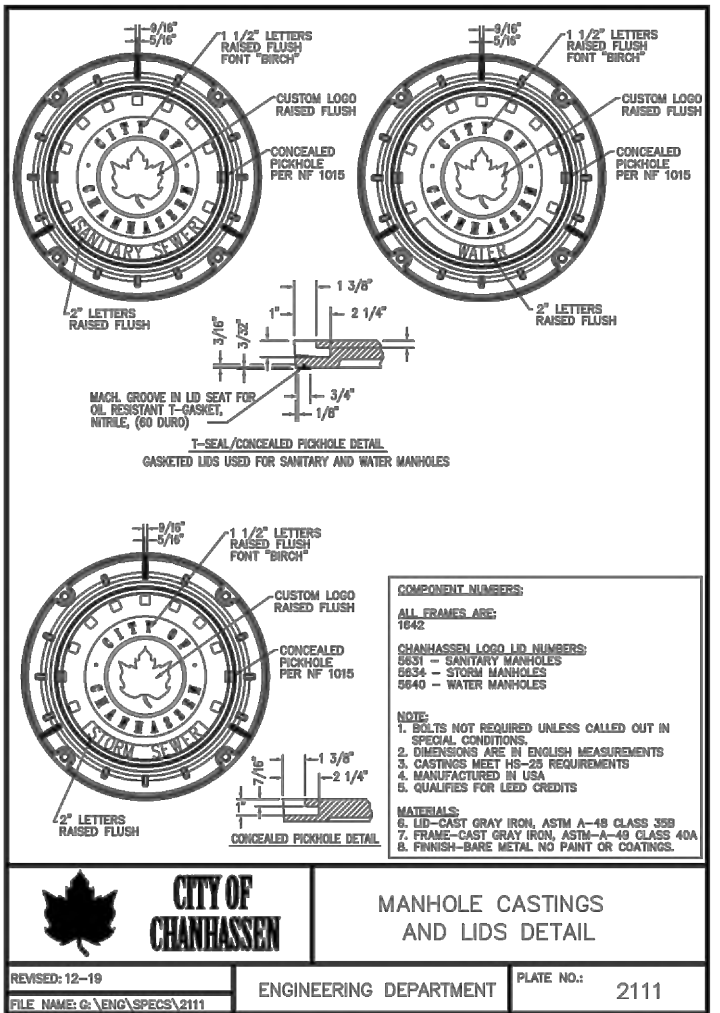
TYPICAL BUTTERFLY VALVE AND BOX INSTALLATION

NO SCALE



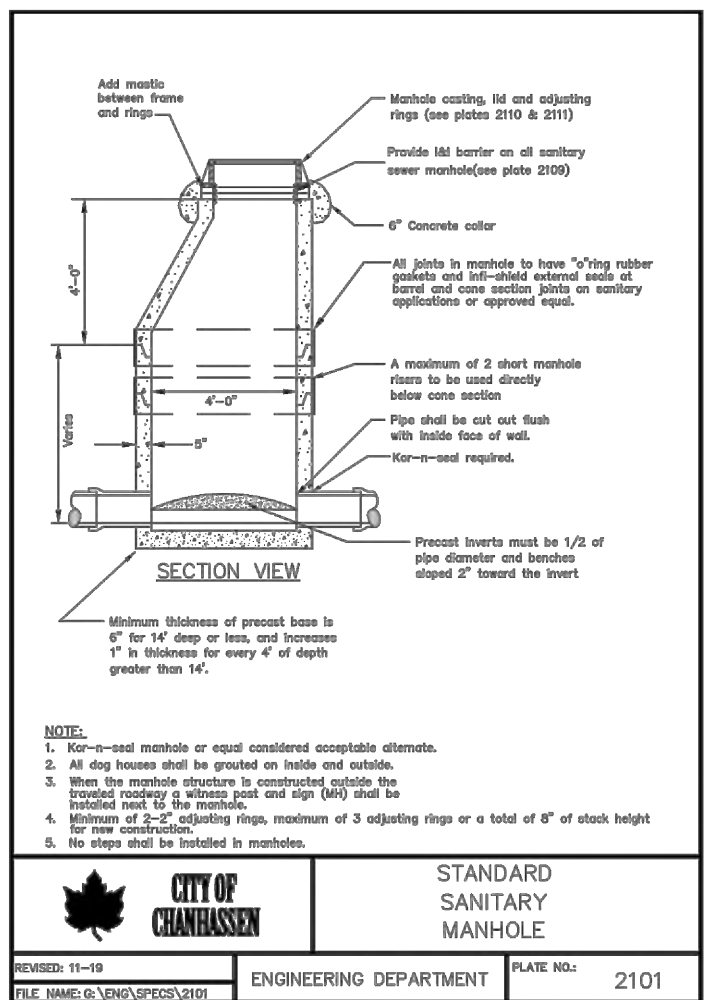
CONCRTE THRUST BLOCKING

NO SCALE



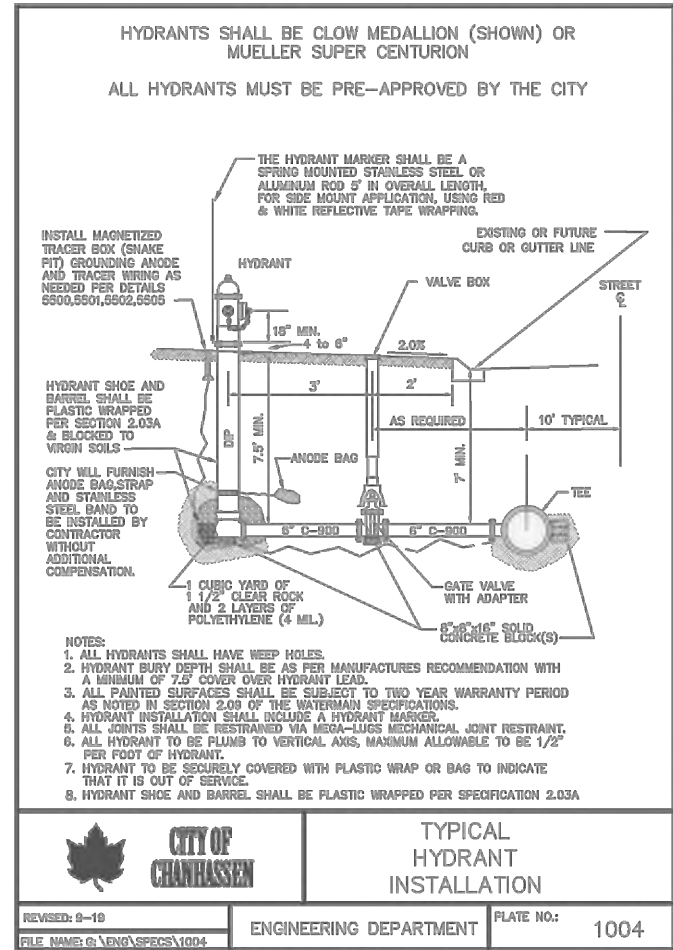
MANHOLE CASTING AND LIDS DETAIL

NO SCALE



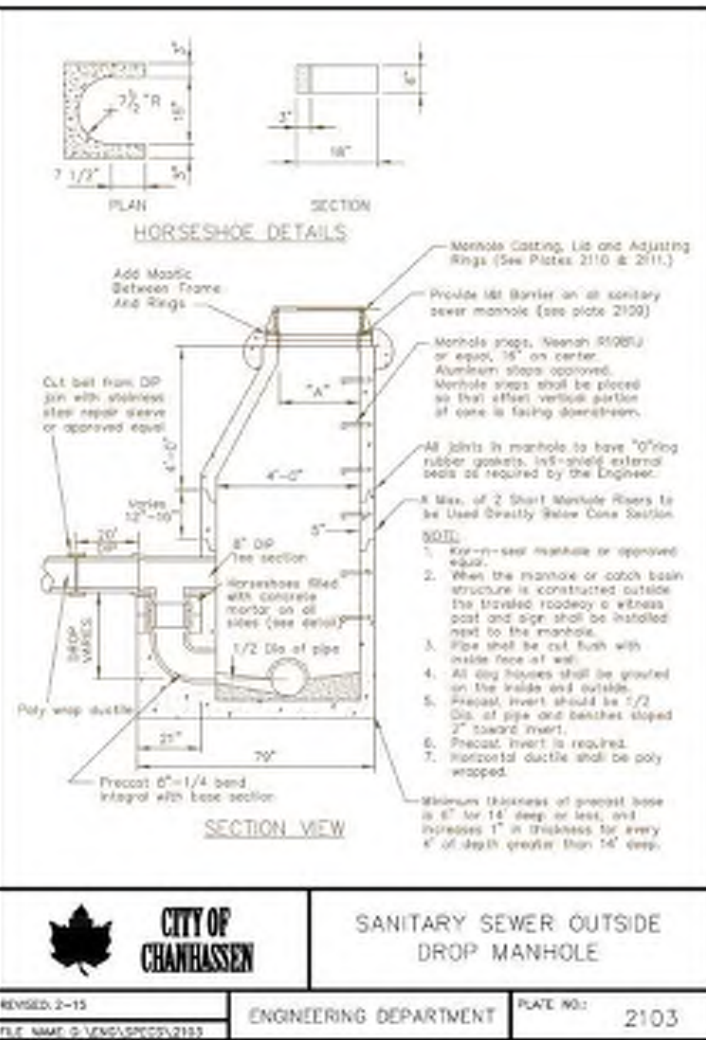
STANDARD SANITARY MANHOLE

NO SCALE



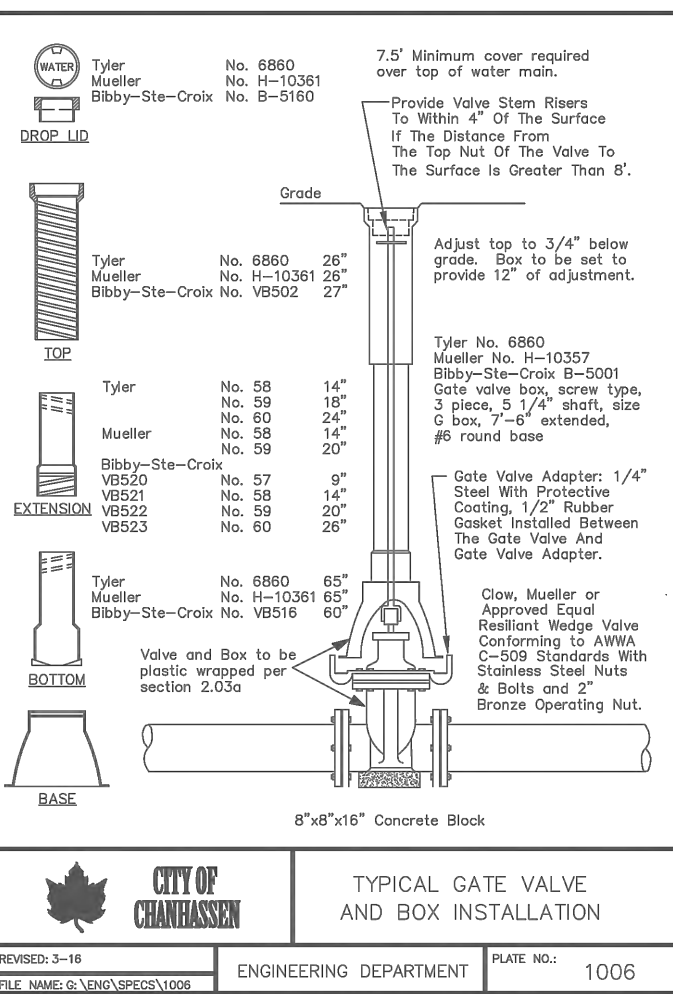
TYPICAL HYDRANT INSTALLATION

NO SCALE



SANITARY SEWER OUTSIDE DROP MANHOLE

NO SCALE



TYPICAL GATE VALVE AND BOX INSTALLATION

NO SCALE

PROJECT MANAGER REVIEW

BY SES DATE 05.19.2020

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MAY 27, 2020

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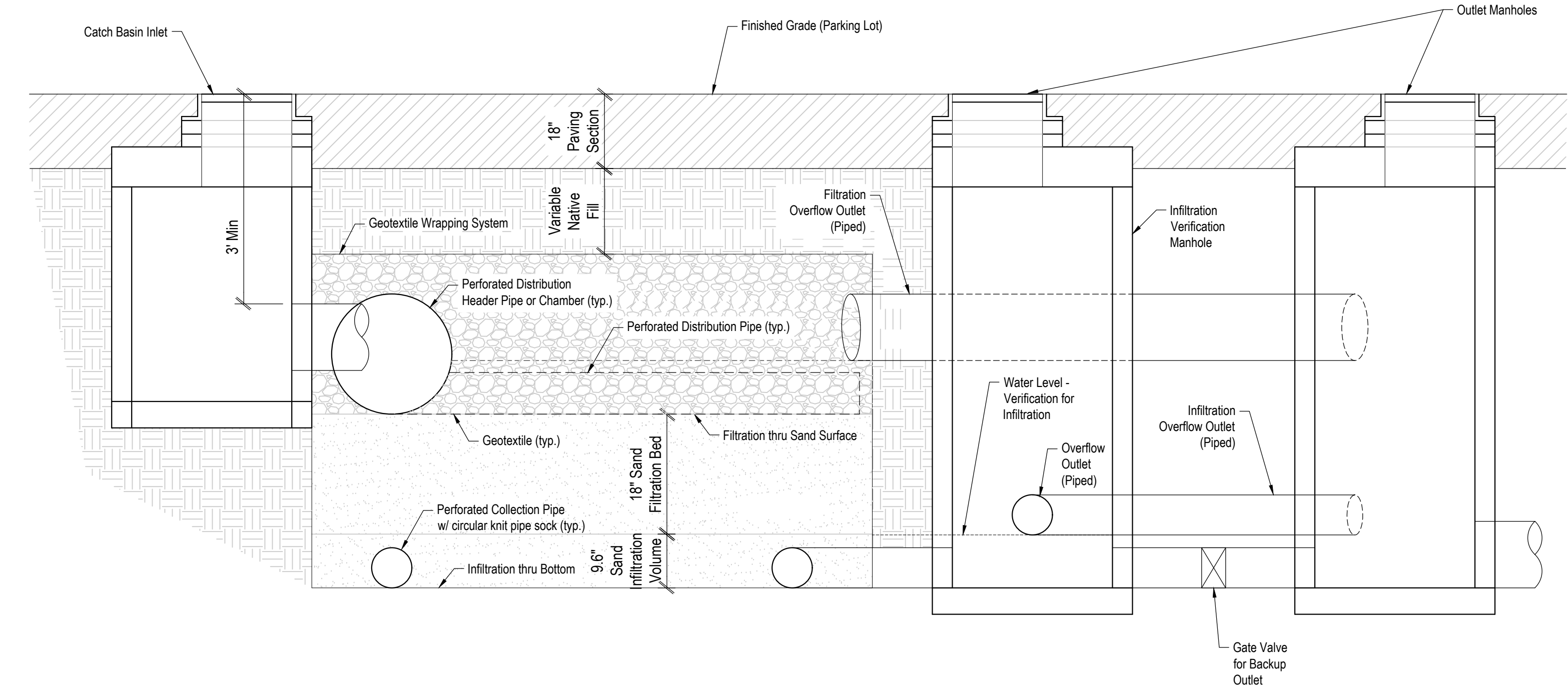
PROJECT NO. SCD14001.LEV

CIVIL CONSTRUCTION
DETAILS

C7.3



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1 **ULTIMATE CONDITION FILTRATION / INFILTRATION SYSTEM** NO SCALE

OWNER

LEVEL 7 DEVELOPMENT, LLC
4600 KINGS POINT RD
MINNETRISTA, MN 55331

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PROJECT

AVIENDA

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Signature
Steven E. Sabornie
License No. 127125 Date: 05/27/2020
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MAY 27, 2020



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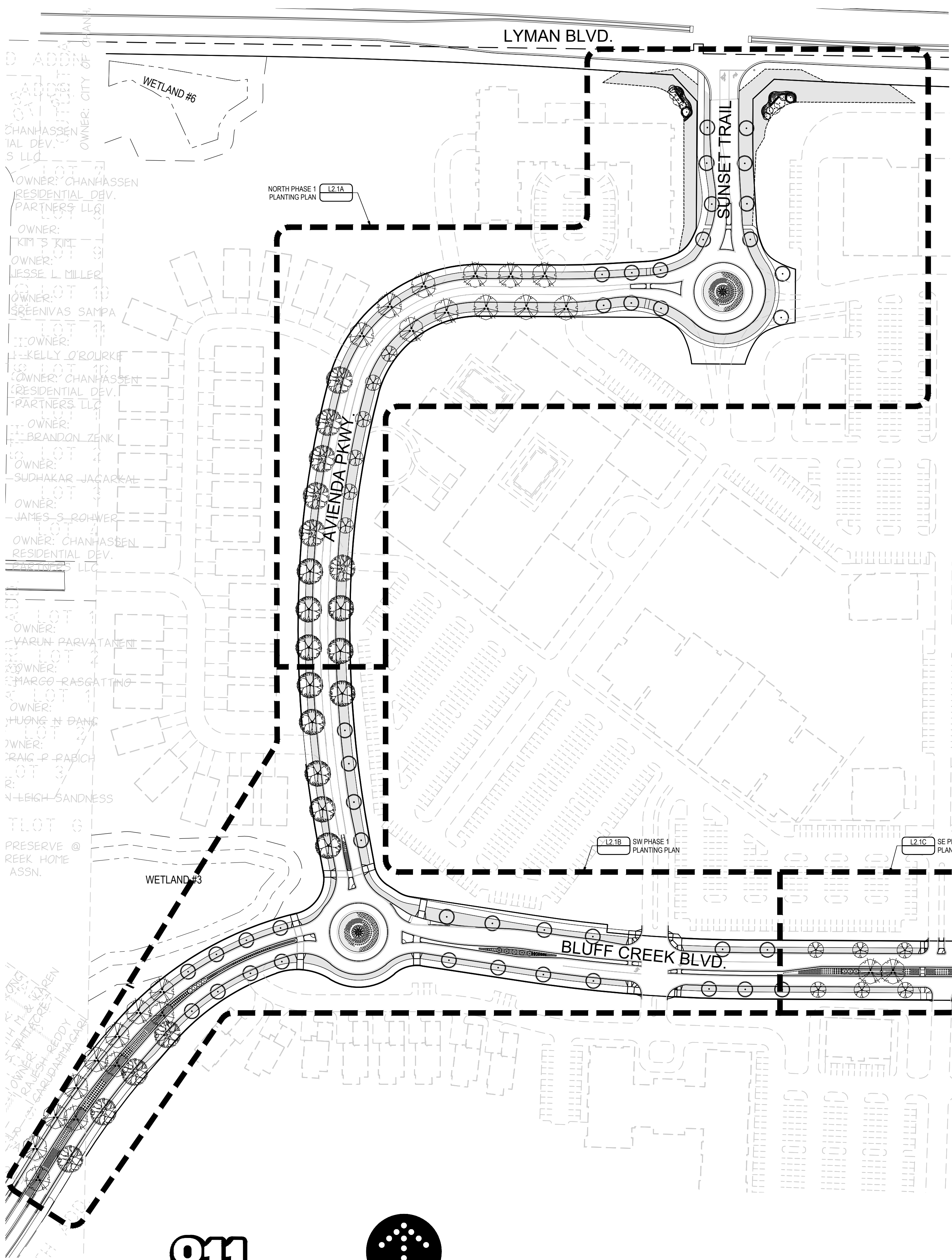
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CIVIL CONSTRUCTION
DETAILS

C7.6



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PLANT SCHEDULE									
	BENI	31	BETULA NIGRA / RIVER BIRCH	70" H X 50" W	2.5" CAL	B & B			
	QUAL	12	QUERCUS ALBA / WHITE OAK	70" H X 60" W	2.5" CAL	B & B			
	QUBI	11	QUERCUS BICOLOR / SWAMP WHITE OAK SALT TOLERANT	50" H X 50" W	2.5" CAL	B & B			
	TIMO	54	TILIA MONGOLICA 'HARVEST GOLD' / HARVEST GOLD LINDEN	40" H X 30" W	2.5" CAL	B & B			
	ULDA	14	ULMUS DAVIDIANA JAPONICA 'DISCOVERY' / DISCOVERY ELM	40" H X 30" W	2.5" CAL	B & B			
EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT COND.			
	PIGL	4	PICEA GLAUCA / WHITE SPRUCE	50" H X 20" W	8'-10" HT.	B & B			
	PIDE	10	PICEA GLAUCA DENSATA / BLACK HILLS SPRUCE	40" H X 15" W	8'-10" HT.	B & B			
	CODE	QTY	BOTANICAL / COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT COND.			
	MALU	15	MALUS X 'LANZAM' TM / LANCELOT DWARF CRABAPPLE	10" H X 10" W	1" CAL	POT			
	SYRE	7	SYRINGA RETICULATA / JAPANESE TREE LILAC	25" H X 20" W	2" CAL	B & B			
ORNAMENTAL TREES	CODE	QTY	BOTANICAL / COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT COND.			
	COFA	105	CORNUS SERICEA 'FARROW' / ARCTIC FIRE RED TWIG DOGWOOD	4" H X 4" W	3' HEIGHT	POT			
	IVER	24	ILEX VERTICILLATA 'JIM DANDY' / JIM DANDY WINTERBERRY	6" H X 6" W	#5 CONT.	POT			
	CODE	QTY	BOTANICAL / COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT COND.			
	CAKA	254	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / FEATHER REED GRASS	4" H X 2.5" W	#1 CONT.	POT			
	MISP	131	MISCANTHUS PURPURASCENS / SILVER GRASS	5" H X 3" W	#3 CONT.	POT			
	PANI	64	PANICUM VIRGATUM 'PRAIRE FIRE' / RED SWITCH GRASS	5" H X 2" W	#3 CONT.	POT			
	SPHE	79	SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED	3" H X 3" W	#3 CONT.	POT			
	CODE	QTY	BOTANICAL / COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT COND.			
	PERO	367	PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE' / RUSSIAN SAGE	2" H X 2" W	#2 CONT.	POT			
	CODE	QTY	BOTANICAL / COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT COND.	SPACING		
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT COND.	SPACING		
	RHGR	277	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC	2" H X 7" W	2 GAL.	POT	48" o.c.		
	CODE	QTY	BOTANICAL / COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT COND.	SPACING		
	LSFW	690	LIATRIS SPICATA 'FLORISTAN WHITE' / FLORISTAN WHITE SPIKE GAYFEATHER	3" H X 1" W	1 GAL.	POT	24" o.c.		
	SEDU	676	SEDUM X 'AUTUMN JOY' / AUTUMN JOY SEDUM	2" H X 2" W	#1 CONT.	POT	24" o.c.		
	CODE	QTY	BOTANICAL / COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT COND.	SPACING		
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT COND.	SPACING		
	CAPE	924	CAREX PENNSYLVANICA / PENNSYLVANIA SEDGE	1" H X 1" W	1 GAL.	POT	18" o.c.		
	SODDED TURF								

- LANDSCAPE NOTES
- GENERAL:
1.

ALL PLANT MATERIAL, INSTALLATION, INCLUDING SEED AND SOD, SHALL BE COMPLETED PRIOR TO SUBSTANTIAL COMPLETION.
2.

CONTRACTOR SHALL LOCATE AND VERIFY ALL UTILITIES, INCLUDING IRRIGATION LINES, WITH THE OWNER FOR PROPRIETARY UTILITIES 72 HOURS BEFORE DIGGING. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ANY DAMAGES TO SAME. NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONFLICTS TO FACILITATE PLANT RELOCATION.
3.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS, AND PERMITS GOVERNING THE WORK.
4.

ALL PLANT MATERIAL, QUANTITIES, SHAPES OF BEDS AND LOCATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN AND ADJUSTED TO CONFORM TO THE EXACT CONDITIONS OF THE SITE. THE LANDSCAPE ARCHITECT SHALL APPROVE THE STAKING LOCATION OF ALL PLANT MATERIALS PRIOR TO INSTALLATION. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
5.

NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
6.

NO PLANT MATERIAL SHALL BE SUBSTITUTED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT. ALL SUBSTITUTIONS MUST BE APPROVED PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING, OR AFTER INSTALLATION.
7.

PLANT SCHEDULE SHOWS TOTAL QUANTITIES FOR DESIGN. THE PLAN TAKES PRECEDENCE OVER THE PLANT SCHEDULE IF DISCREPANCIES EXIST.
8.

CONTRACTOR SHALL PROVIDE GUARANTEE OF ALL PLANT MATERIALS FOR TWO COMPLETE GROWING SEASONS (APRIL 1 - NOVEMBER 1). THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECT'S OR OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. THE GUARANTEE SHALL COVER THE FULL COST OF REPLACEMENT INCLUDING LABOR AND PLANTS. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING. ANY PLANT MATERIAL WHICH TURNS BROWN, OR DEFLICATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL LANDSCAPE LEGEND SPECIFICATIONS.
9.

CONTRACTOR SHALL PROVIDE NECESSARY WATERING OF PLANT MATERIALS UNTIL THE PLANT IS FULLY ESTABLISHED OR IRRIGATION SYSTEM IS OPERATIONAL. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR.
10.

PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
11.

REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
- SOIL PREPARATION:
12.

TOPSOIL SHALL BE LOCAL FERTILE AGRICULTURAL SOIL FREE OF SUBSOILS, ROCKS, CLAYS, PLANTS, WEEDS, ROOTS AND OTHER IMPURITIES. PH VALUE SHALL BE BETWEEN 5.4 AND 7.0.
13.

REMOVE DEBRIS AND WEEDS FROM SUBSOIL.
14.

THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL PERFORM A SOIL TEST PRIOR TO INSTALLATION AND NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.
15.

SPREAD TOPSOIL TO A MINIMUM DEPTH OF SIX (6") INCHES. TOPSOIL PLACEMENT SHALL TAKE PLACE DURING DRY WEATHER. PREPARE TOPSOIL SO THAT IT IS FREE OF DEBRIS AND GRADED TO DRAIN AS INDICATED ON GRADING PLANS. COORDINATE FINAL GRADES WITH GRADING CONTRACTOR.
16.

LIGHTLY COMPACT TOPSOIL AFTER PLACEMENT AND PROHIBIT CONSTRUCTION TRAFFIC FROM AREAS WITH TOPSOIL.
- PLANTING:
17.

ALL PLANTS TO BE SPECIMEN GRADE, MINNESOTA-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS:
ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC.
ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES.
ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.
ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.
CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
18.

PLANTS TO BE INSTALLED AS PER MNL & ANSI STANDARD PLANTING PRACTICES.
19.

PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. PROPERLY HEEL-IN MATERIALS IF NECESSARY; TEMPORARY ONLY.
20.

PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLAIR IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLAIR. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLAIR SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
21.

OPEN TOP OF BURLAP ON B&B MATERIALS; REMOVE POT ON POTTED PLANTS; SPLIT AND BREAK APART PEAT POTS. VERTICALLY SCORE ROOT BALLS PRIOR TO INSTALLATION.
22.

PRUNE PLANTS AS NECESSARY - PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
23.

WRAP ALL SMOOTH-BARKED TREES - FASTEN TOP AND BOTTOM. REMOVE BY APRIL 1ST.
24.

BACKFILL SOIL AND TOPSOIL TO ADHERE TO MNDOT STANDARD SPECIFICATION 3877 (SELECT TOPSOIL BORROW) AND TO BE EXISTING TOP SOIL FROM SITE FREE OF ROOTS, ROCKS LARGER THAN ONE INCH, SUBSOIL DEBRIS, AND LARGE WEEDS UNLESS SPECIFIED OTHERWISE. MINIMUM 6" DEPTH TOPSOIL FOR ALL LAWN GRASS AREAS AND 18" DEPTH TOPSOIL FOR TREE, SHRUBS, AND PERENNIALS.
25.

WOOD MULCH SHALL BE AT ALL TREE, SHRUB, PERENNIAL, AND MAINTENANCE AREAS. COLOR SHALL BE DARK BROWN. TREE AND SHRUB PLANTING BEDS SHALL HAVE 3" DEPTH OF SHREDDED HARDWOOD MULCH. SHREDDED HARDWOOD MULCH TO BE USED AROUND ALL PLANTS WITHIN TURF AREAS. PERENNIAL AND ORNAMENTAL GRASS BEDS SHALL HAVE 3" DEPTH SHREDDED HARDWOOD MULCH. MULCH TO BE FREE OF DELETERIOUS MATERIAL. DO NOT USE WEED BARRIER FABRIC. INDIVIDUAL TREES SHALL EACH HAVE A 4" DIAMETER MULCH RING.
26.

EDGING TO BE COMMERCIAL GRADE VALLEY-VIEW BLACK DIAMOND (OR EQUAL) POLY EDGING OR SPADED EDGE, AS INDICATED. POLY EDGING SHALL BE PLACED WITH SMOOTH CURVES AND STAKED WITH METAL SPIKES NO GREATER THAN 4 FOOT ON CENTER WITH BASE OF TOP BEAD AT GRADE. UTILIZE CURBS AND SIDEWALKS FOR EDGING WHERE POSSIBLE. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. INDIVIDUAL TREE, SHRUB, OR RAIN-GARDEN BEDS TO BE SPADED EDGE, UNLESS NOTED OTHERWISE.
- SEEDING/ SODDING:
27.

HIGHLAND SOD SHALL BE NURSERY GROWN GRADE; CULTIVATED GRASS SOD WITH STRONG FIBROUS ROOT SYSTEM FREE OF STONES, BURNED OR BARE SPOTS CONTAINING NO MORE THAN 5 WEEDS PER 1000 SF. SOD SHALL BE GROWN IN MINERAL SOILS. SOD GROWN IN PEAT SOILS WILL BE REJECTED.
28.

SOD MIXTURE SHALL BE 40% KENTUCKY BLUEGRASS, 30% PERENNIAL RYEGRASS, 30% FINE FESCUES.
29.

FERTILIZER FOR SODDED AREAS SHALL BE NITROGEN 10%, PHOSPHORIC ACID 10%, SOLUBLE POTASH 10%.
30.

APPLY FERTILIZER AT APPLICATION RATE OF 1LB/1000 SF TO TOPSOIL PRIOR TO PLACING SOD.
31.

ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE PROPER SOIL CONTACT. MOISTEN PREPARED SOIL IMMEDIATELY PRIOR TO LAYING SOD. LAY SOD IMMEDIATELY UPON DELIVERY TO THE SITE, LEAVING NO OPEN JOINTS OR OVERLAPPING JOINTS. DO NOT STRETCH SOD. DO NOT LAY SOD IF TEMPERATURE IS BELOW FREEZING.
32.

ROLL SOD WITH 1/3 FULL ROLLER AFTER SOD AND SOIL HAVE DRIED. ROLL BEFORE THE FIRST WATERING.
33.

SEED AS SPECIFIED ON PLANS AND PER MNDOT 2014 SEEDING MANUAL SPECIFICATIONS.
34.

REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
- IRRIGATION:
35.

PROVIDE IRRIGATION TO ALL PLANTED AREAS ON SITE. IRRIGATION SYSTEM TO BE DESIGN/BUILD BY LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR TO PROVIDE SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. CONTRACTOR TO PROVIDE OPERATION MANUALS, AS-BUILT PLANS, AND NORMAL PROGRAMMING. SYSTEM SHALL BE WINTERIZED AND HAVE SPRING STARTUP DURING FIRST YEAR OF OPERATION. SYSTEM SHALL HAVE ONE-YEAR WARRANTY ON ALL PARTS AND LABOR. ALL INFORMATION ABOUT INSTALLATION AND SCHEDULING CAN BE OBTAINED FROM THE GENERAL CONTRACTOR.

- DECOMPACTION NOTES
1.

ALL DISTURBED SOIL SURFACE AREAS, EXCEPT FOR THE AREAS UNDER THE PROPOSED STREET PAVEMENT AND THE TRAIL AND SIDEWALKS, SHALL BE DECOMPACTED TO A DEPTH OF EIGHTEEN (18") INCHES AND COVERED WITH SIX (6") INCHES OF TOPSOIL. REFER TO RPB/CWD STANDARD EROSION CONTROL NOTES ON GRADING SHEETS FOR ADDITIONAL REQUIREMENTS.

OWNER

LEVEL 7 DEVELOPMENT, LLC

4600 KINGS POINT RD

MINNETRISTA, MN 55331



AVIENDA

ISSUE / REVISION HISTORY

CONTACT ENGINEER FOR ANY PRIOR HISTORY

DATE	ISSUE / REVISION	REVIEW
22 APR 2020	WATERSHED SUBMITTAL	SES
01 MAY 2020	CITY SUBMITTAL	SES
27 MAY 2020	WATERSHED SUBMITTAL	SES

PROJECT MANAGER REVIEW

BY SES

DATE 06.19.2020

CERTIFICATION

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Landscape Architect under the laws of the state of MINNESOTA.

Joshua K. P...
Landscape Architect

Date: 06/27/2020

Signature shown is a true and correct copy of this plan on file at Landform Professional Services, LLC office and is available upon request.

PREPARED FOR
NOT FOR CONSTRUCTION

IF THE SIGNATURE, SEAL OR FOUR LINES DIRECTLY ABOVE ARE NOT VISIBLE, THIS SHEET HAS BEEN REPRODUCED BEFORE INTENDED READABILITY AND IS NO LONGER A VALID DOCUMENT. PLEASE CONTACT THE ENGINEER TO REQUEST ADDITIONAL DOCUMENTS.

WATERSHED SUBMITTAL

MAY 27, 2020



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FILE NAME

L201SCD001.DWG

PROJECT NO.

SCD14001.LEV

OVERALL
LANDSCAPE PLAN
L2.1

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