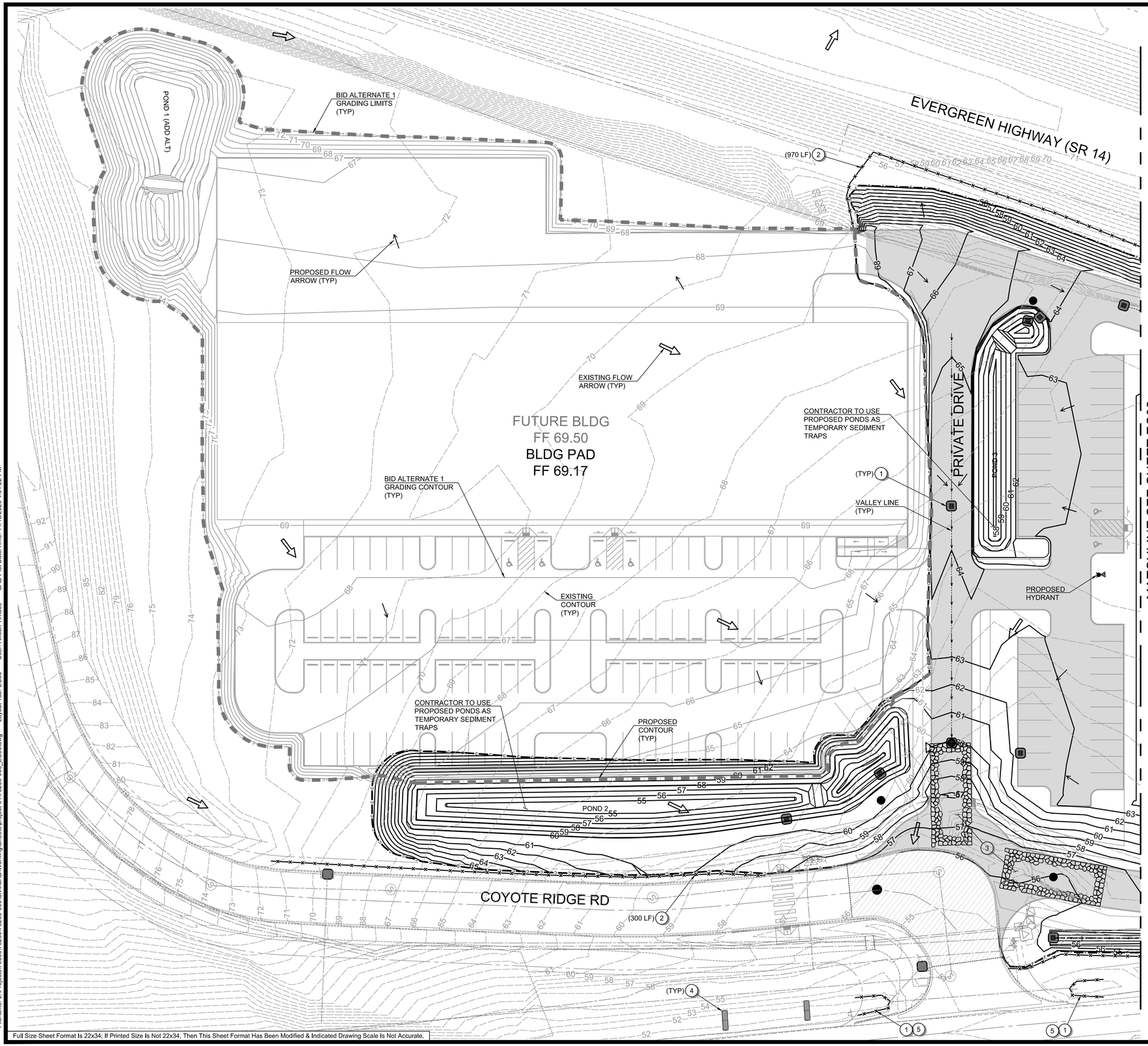


GENERAL NOTES:

1. SEE SHEET G03 FOR PROJECT'S GENERAL NOTES.
2. SEE SHEET G02 FOR ABBREVIATIONS AND MASTER LEGEND.
3. CONTRACTOR TO DIRECT RUNOFF TO PROPOSED PONDS FOR TEMPORARY SEDIMENT PONDS. CONTRACTOR TO REMOVE SEDIMENT PRIOR TO POND SEEDING.
4. STABILIZE SLOPES AND BUILDING PAD AREAS WITH EROSION CONTROL SEED MIX.

EROSION CONTROL NOTES:

1. STORM DRAIN INLET PROTECTION PER STANDARD DETAIL ON SHEET EC03.
2. SILT FENCE PER DETAIL ON SHEET EC03.
3. STABILIZED CONSTRUCTION ENTRANCE PER DETAIL ON SHEET EC03.
4. BIODEGRADABLE CHECK DAM SEE DETAIL ON SHEET EC03 FOR SPACING AND MATERIALS.
5. INSTALL EROSION CONTROL AT CULVERT ENDS PER DETAIL ON SHEET EC04.

LEGEND	
	PROPOSED CRUSHED SURFACING BASE COURSE
	PROPOSED GRIND AND INLAY
67	PROPOSED SURFACE CONTOUR
67	ADD ALT SURFACE CONTOUR

1 11/6/2026 - ADDENDUM NO. 1

NOTE NUMBER 4 ADDED FOR CLARITY.

Scale 1" = 30'

0 15 30 60

ADD NO. 1

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APEX

EROSION CONTROL PLAN FOR: CASCADES BUSINESS PARK INFRASTRUCTURE IMPROVEMENTS - PHASE 1

A SITE LOCATED IN THE CITY OF NORTH BONNEVILLE, WASHINGTON

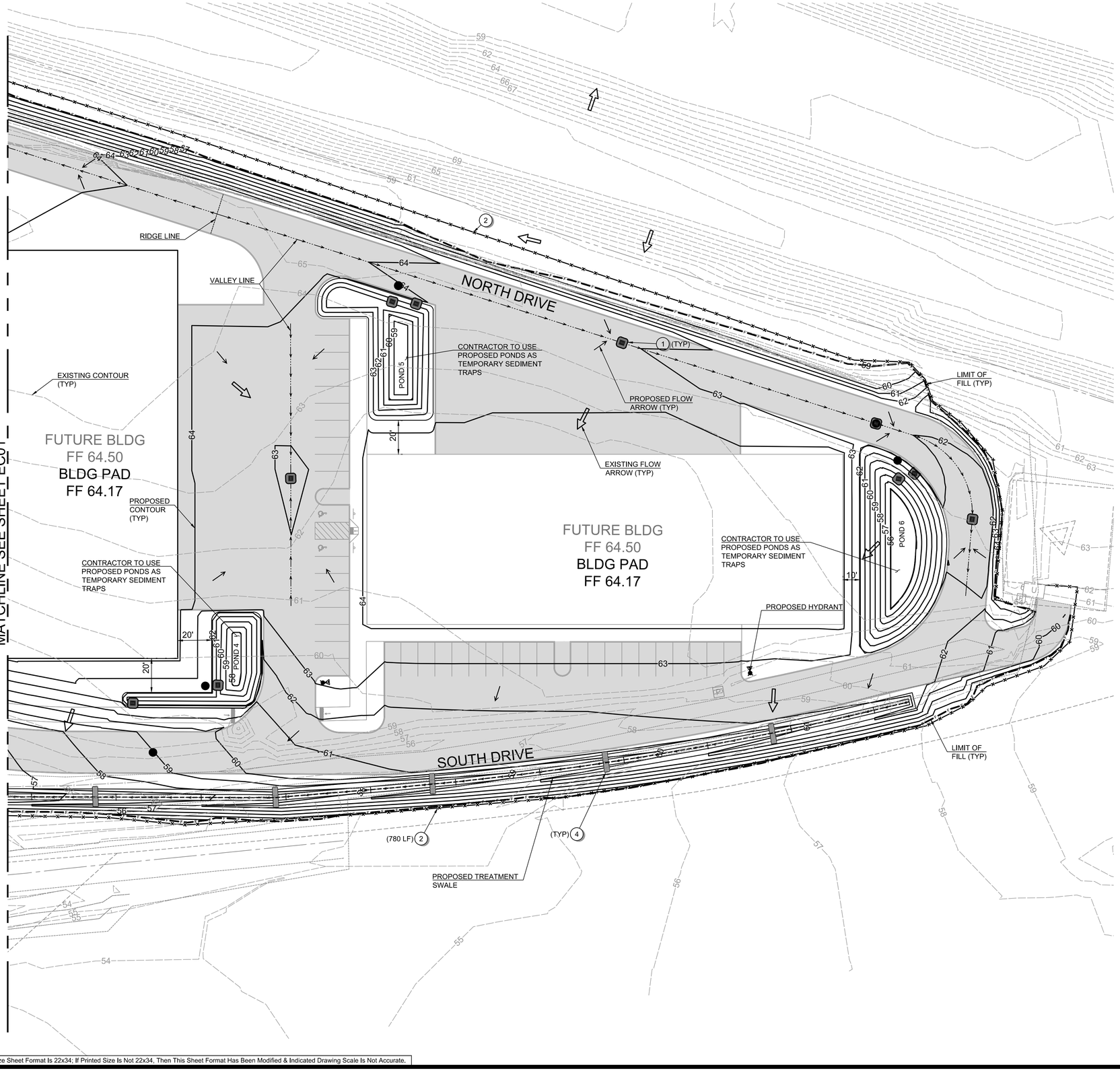
811 Know what's below. Call before you dig.

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STATE OF WASHINGTON
33172
REGISTERED
PROFESSIONAL ENGINEER
11-11-2026

DESIGNED:	ANT
CHECKED:	JBA
NOVEMBER 2026	78260.000
SHEET ID	EC01
SHEET	5 OF 28

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GENERAL NOTES:

1. SEE SHEET G03 FOR PROJECT'S GENERAL NOTES.
2. SEE SHEET G02 FOR ABBREVIATIONS AND MASTER LEGEND.
3. CONTRACTOR TO DIRECT RUNOFF TO PROPOSED PONDS FOR TEMPORARY SEDIMENT PONDS. CONTRACTOR TO REMOVE SEDIMENT PRIOR TO POND SEEDING.
4. STABILIZE SLOPES AND BUILDING PAD AREAS WITH EROSION CONTROL SEED MIX.

EROSION CONTROL NOTES:

1. STORM DRAIN INLET PROTECTION PER STANDARD DETAIL ON SHEET EC03.
2. SILT FENCE PER DETAIL ON SHEET EC03.
3. STABILIZED CONSTRUCTION ENTRANCE PER DETAIL ON SHEET EC03.
4. BIODEGRADABLE CHECK DAM SEE DETAIL ON SHEET EC03 FOR SPACING AND MATERIALS.
5. INSTALL EROSION CONTROL AT CULVERT ENDS PER DETAIL ON SHEET EC04.

LEGEND

- PROPOSED CRUSHED SURFACING BASE COURSE
- PROPOSED GRIND AND INLAY
- 67 PROPOSED SURFACE CONTOUR
- 67 ADD ALT SURFACE CONTOUR

1 11/6/2026 - ADDENDUM NO. 1

NOTE NUMBER 4 ADDED FOR CLARITY.

Scale 1" = 30'

0 15 30 60

ADD NO. 1

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APEX

EROSION CONTROL PLAN FOR: CASCADES BUSINESS PARK INFRASTRUCTURE IMPROVEMENTS - PHASE 1

A SITE LOCATED IN THE CITY OF NORTH BONNEVILLE, WASHINGTON

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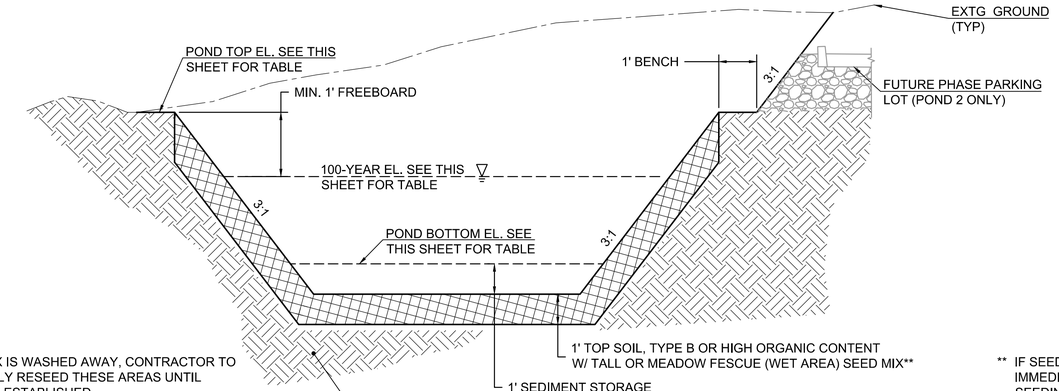
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11-11-2026

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NOVEMBER 2026	78260.000
SHEET ID	EC02
SHEET	6 OF 28

Filename: L:\Projects\78000\78260\78260-000\Civil\CAD\Working\Sheets\project-01\78260-000_EC00.dwg Layout Tab: LAYOUT1 User: Allison Timboe CAD Plot Date/Time: 11/10/2026 4:00:24 PM

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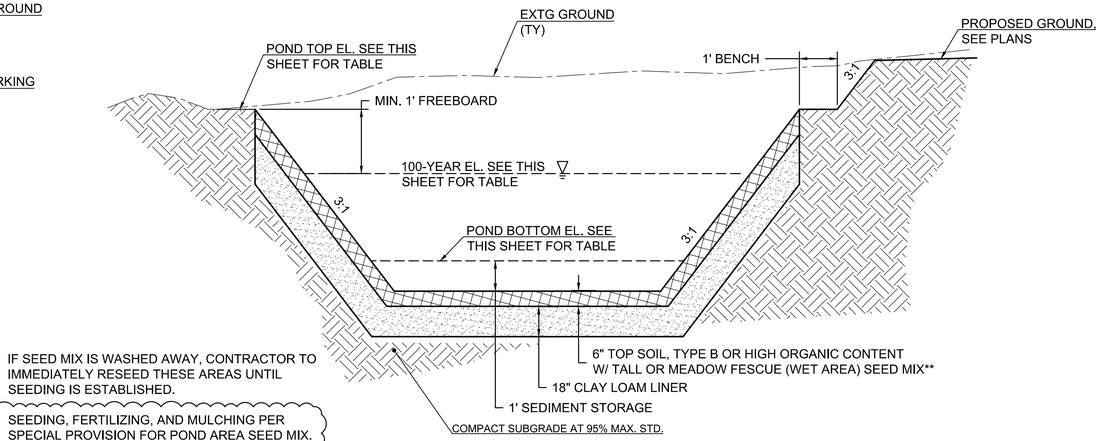
** IF SEED MIX IS WASHED AWAY, CONTRACTOR TO IMMEDIATELY RESEED THESE AREAS UNTIL SEEDING IS ESTABLISHED.

1 SEEDING, FERTILIZING, AND MULCHING PER SPECIAL PROVISION FOR POND AREA SEED MIX.

STORM FACILITIES INFORMATION						
DETENTION POND #	TOP AREA (SF)	BOTTOM AREA (SF)	TOP (EL.)	BOTTOM (EL.)	WQ-YEAR (EL.)	100-YEAR (EL.)
1 (ADD ALT)	7610	1550	67.00	61.00	64.18	66.07
2	10580	1230	60.00	55.00	57.55	58.82
3	4320	1020	62.00	59.00	59.74	60.90

Typical Pond Cross-section Detail

NTS



** IF SEED MIX IS WASHED AWAY, CONTRACTOR TO IMMEDIATELY RESEED THESE AREAS UNTIL SEEDING IS ESTABLISHED.

1 SEEDING, FERTILIZING, AND MULCHING PER SPECIAL PROVISION FOR POND AREA SEED MIX.

STORM FACILITIES INFORMATION						
DETENTION POND #	TOP AREA (SF)	BOTTOM AREA (SF)	TOP (EL.)	BOTTOM (EL.)	WQ-YEAR (EL.)	100-YEAR (EL.)
4*	1980	410	62.00	59.00	N/A	61.14
5*	3350	1090	63.00	60.00	N/A	62.11
6	4830	1230	62.00	57.00	58.83	59.56

* PONDS USED FOR ROOF RUNOFF DETENTION

Typical Pond Cross-section Detail

NTS

Private Drive Typical Section

NTS

South Drive Typical Section

NTS

North Drive Typical Section

NTS

Base Course Typical Section

NTS

Trench Restoration In Paved Area Typical Section

NTS

Grind and Inlay Typical Section

NTS

1 11/11/2026 - ADDENDUM NO. 1

SEED MIX NOTE UPDATED FOR CLARITY.
ADDED TRENCH RESTORATION IN PAVED AREA TYPICAL SECTION.
REVISED GRIND AND INLAY SECTION

ADD NO. 1

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TYPICAL SECTIONS FOR: CASCADES BUSINESS PARK INFRASTRUCTURE IMPROVEMENTS - PHASE 1

A SITE LOCATED IN THE CITY OF NORTH BONNEVILLE, WASHINGTON

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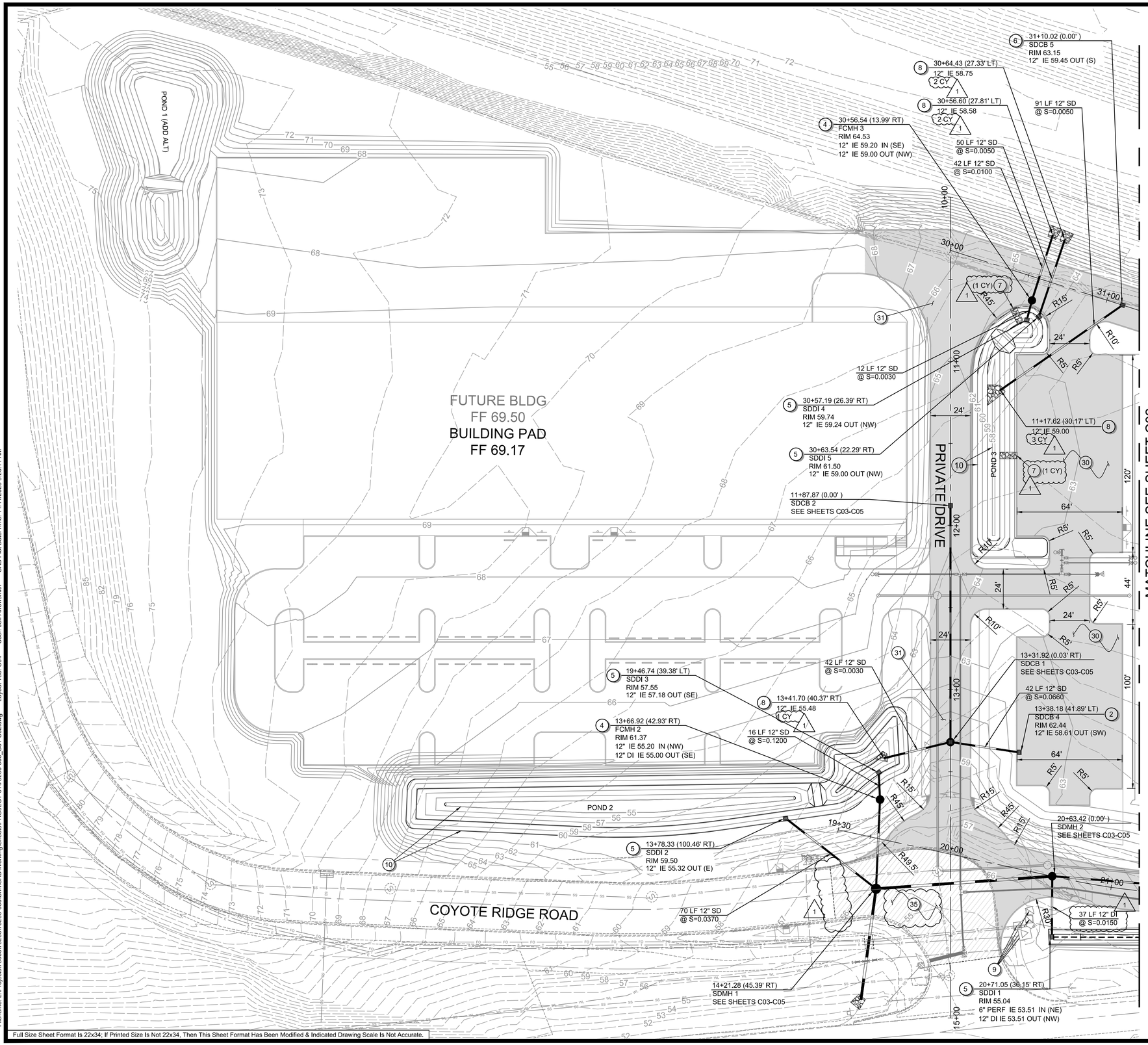
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PROFESSIONAL ENGINEER
11-11-2026

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CHECKED: JBA
NOVEMBER 2026
78260.000

SHEET ID
ST01
SHEET 11 OF 28

Filename: L:\Projects\78000\78260\78260-000\Civil\CAD\Working\Sheets\PROJECT-01\78260-000_ST01.dwg Layout Tab: ST01 User: Jeff Arrowsmith CAD Plot Date/Time: 11/11/2026 9:23:50 AM

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GENERAL NOTES

1. SEE SHEET G02 FOR PLAN SET LEGEND.
2. SEE SHEET G03 FOR PLAN SET GENERAL NOTES.
2. SEE SHEETS C03-C05 FOR STORM PROFILES AND C06-C07 FOR SWALE PROFILE.

CONSTRUCTION NOTES - STORM SEWER

1. INSTALL 48" MANHOLE TYPE 3 PER STANDARD PLAN B-15.60, WITH CIRCULAR FRAME AND COVER PER STANDARD PLAN B-30.70. SEE SHEETS D04 AND D05.
2. INSTALL CATCH BASIN TYPE 2 PER STANDARD PLAN B-10.20, WITH RECTANGULAR FRAME AND GRATE PER STANDARD PLANS B-30.10 AND B-30.30. SEE SHEETS D03 AND D04. CATCH BASIN IS 48-INCH I.D. UNLESS NOTED OTHERWISE ON THE PLANS.
3. INSTALL 48" MANHOLE TYPE 1 PER STANDARD PLAN B-15.20, WITH CIRCULAR FRAME AND COVER PER STANDARD PLAN B-30.70. SEE SHEETS D03 AND D04.
4. INSTALL FLOW CONTROL MANHOLE PER DETAIL ON SHEET D02.
5. INSTALL DITCH INLET PER DETAIL ON SHEET D01.
6. INSTALL CATCH BASIN TYPE 1 PER STANDARD PLAN B-5.20. SEE SHEET D03.
7. INSTALL 4-FOOT WIDE, 6-INCH THICK, QUARRY SPALLS PAD FROM TOP OF POND (AT LOCATION OF FUTURE CURB SCUPPER) TO BOTTOM OF POND PER DETAIL ON SHEET D01. (1)
8. CONSTRUCT STORM SEWER OUTLET WITH TRASH RACK PER DETAILS ON SHEET D02.
9. RELOCATE AND ADJUST EXISTING UTILITY STRUCTURE TO FINISHED GRADE.
10. CONSTRUCT POND PER DETAILS ON SHEET ST01.
11. CONSTRUCT STORM SEWER OUTLET PER DETAIL ON SHEET D02. BEVEL END TO MATCH SLOPE.
12. CONSTRUCT FLOW SPREADER EVERY 50 FEET PER DETAIL ON SHEET D01.
13. CONSTRUCT 587'Lx3.5'W BIOFILTRATION SWALE @ S=0.0100 PER DETAILS ON SHEET D01. SEE SHEET C06-C07 FOR PROFILE.
14. INSTALL 60" MANHOLE TYPE 3 PER STANDARD PLAN B-15.60, WITH CIRCULAR FRAME AND COVER PER STANDARD PLAN B-30.70. SEE SHEETS D04 AND D05.
15. BEVEL END TO MATCH SLOPE AND INSTALL PIPE END WITH TRASH RACK PER DETAILS ON SHEET D02.

CONSTRUCTION NOTES - STREET

30. BASE COURSE PER TYPICAL SECTION ON SHEET ST01.
31. PRIVATE DRIVE PER TYPICAL SECTION ON SHEET ST01.
32. NORTH DRIVE PER TYPICAL SECTION ON SHEET ST01.
33. SOUTH DRIVE PER TYPICAL SECTION ON SHEET ST01.
34. PROTECT EXISTING UTILITY STRUCTURES.
35. GRIND AND INLAY PER TYPICAL SECTION ON SHEET ST01.

LEGEND

- PROPOSED CRUSHED SURFACING BASE COURSE
- PROPOSED GRIND AND 2" HMA INLAY

1 11/11/2026 - ADDENDUM NO. 1

QUARRY SPALLS AND HAND PLACED RIP RAP QUANTITIES ADDED.
CONSTRUCTION NOTE NUMBER 7 WORDING CHANGED FOR POND.
37 LF OF SD PIPE CHANGED TO DI PIPE.
GRIND AND INLAY LIMITS CHANGED

Scale 1" = 30'

0 15 30 60

ADD NO. 1

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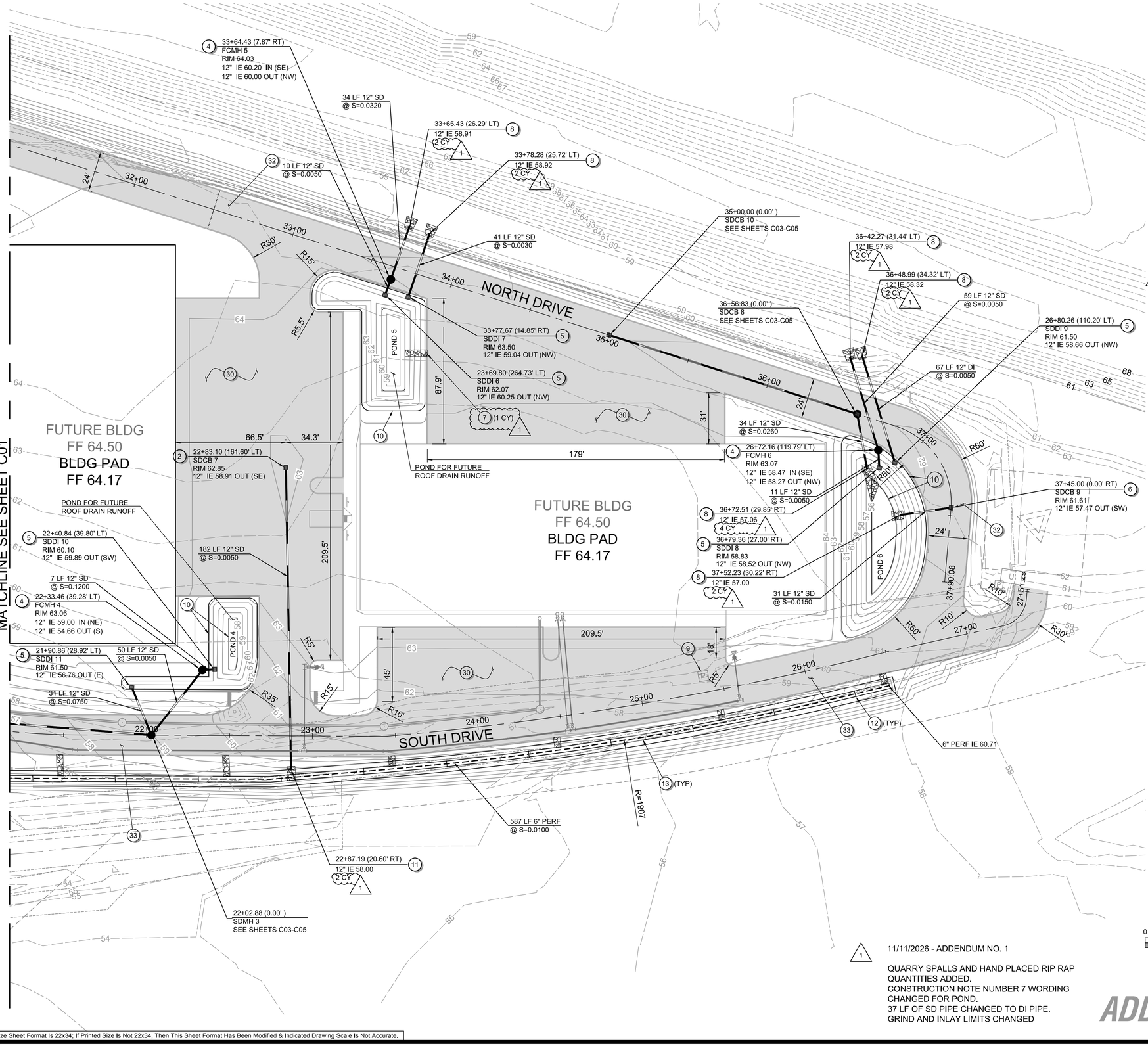
STREET AND STORM PLAN FOR: CASCADES BUSINESS PARK INFRASTRUCTURE IMPROVEMENTS - PHASE 1

A SITE LOCATED IN THE CITY OF NORTH BONNEVILLE, WASHINGTON

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PROFESSIONAL ENGINEER
11-11-2026

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CHECKED:	JBA
NOVEMBER 2026	78260.000
SHEET ID	C01
SHEET	12 OF 28



GENERAL NOTES

1. SEE SHEET G02 FOR PLAN SET LEGEND.
2. SEE SHEET G03 FOR PLAN SET GENERAL NOTES.
2. SEE SHEETS C03-C05 FOR STORM PROFILES AND C06-C07 FOR SWALE PROFILE.

CONSTRUCTION NOTES - STORM SEWER

1. INSTALL 48" MANHOLE TYPE 3 PER STANDARD PLAN B-15.60, WITH CIRCULAR FRAME AND COVER PER STANDARD PLAN B-30.70. SEE SHEETS D04 AND D05.
2. INSTALL CATCH BASIN TYPE 2 PER STANDARD PLAN B-10.20, WITH RECTANGULAR FRAME AND GRATE PER STANDARD PLANS B-30.10 AND B-30.30. SEE SHEETS D03 AND D04. CATCH BASIN IS 48-INCH I.D. UNLESS NOTED OTHERWISE ON THE PLANS.
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4. INSTALL FLOW CONTROL MANHOLE PER DETAIL ON SHEET D02.
5. INSTALL DITCH INLET PER DETAIL ON SHEET D01.
6. INSTALL CATCH BASIN TYPE 1 PER STANDARD PLAN B-5.20. SEE SHEET D03.
7. INSTALL 4-FOOT WIDE, 6-INCH THICK, QUARRY SPALLS PAD FROM TOP OF POND (AT LOCATION OF FUTURE CURB SCUPPER) TO BOTTOM OF POND PER DETAIL ON SHEET D01.
8. CONSTRUCT STORM SEWER OUTLET WITH TRASH RACK PER DETAILS ON SHEET D02.
9. RELOCATE AND ADJUST EXISTING UTILITY STRUCTURE TO FINISHED GRADE.
10. CONSTRUCT POND PER DETAILS ON SHEET ST01.
11. CONSTRUCT STORM SEWER OUTLET PER DETAIL ON SHEET D02. BEVEL END TO MATCH SLOPE.
12. CONSTRUCT FLOW SPREADER EVERY 50 FEET PER DETAIL ON SHEET D01.
13. CONSTRUCT 587'Lx3.5'W BIOFILTRATION SWALE @ S=0.0100 PER DETAILS ON SHEET D01. SEE SHEET C06-C07 FOR PROFILE.
14. INSTALL 60" MANHOLE TYPE 3 PER STANDARD PLAN B-15.60, WITH CIRCULAR FRAME AND COVER PER STANDARD PLAN B-30.70. SEE SHEETS D04 AND D05.
15. BEVEL END TO MATCH SLOPE AND INSTALL PIPE END WITH TRASH RACK PER DETAILS ON SHEET D02.

CONSTRUCTION NOTES - STREET

30. BASE COURSE PER TYPICAL SECTION ON SHEET ST01.
31. PRIVATE DRIVE PER TYPICAL SECTION ON SHEET ST01.
32. NORTH DRIVE PER TYPICAL SECTION ON SHEET ST01.
33. SOUTH DRIVE PER TYPICAL SECTION ON SHEET ST01.
34. PROTECT EXISTING UTILITY STRUCTURES.
35. GRIND AND INLAY PER TYPICAL SECTION ON SHEET ST01.

LEGEND

- PROPOSED CRUSHED SURFACING BASE COURSE
- PROPOSED GRIND AND 2" HMA INLAY

Scale 1" = 30'

0 15 30 60

1 11/11/2026 - ADDENDUM NO. 1

QUARRY SPALLS AND HAND PLACED RIP RAP QUANTITIES ADDED.
CONSTRUCTION NOTE NUMBER 7 WORDING CHANGED FOR POND.
37 LF OF SD PIPE CHANGED TO DI PIPE.
GRIND AND INLAY LIMITS CHANGED

ADD NO. 1

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STREET AND STORM PLAN FOR: CASCADES BUSINESS PARK INFRASTRUCTURE IMPROVEMENTS - PHASE 1

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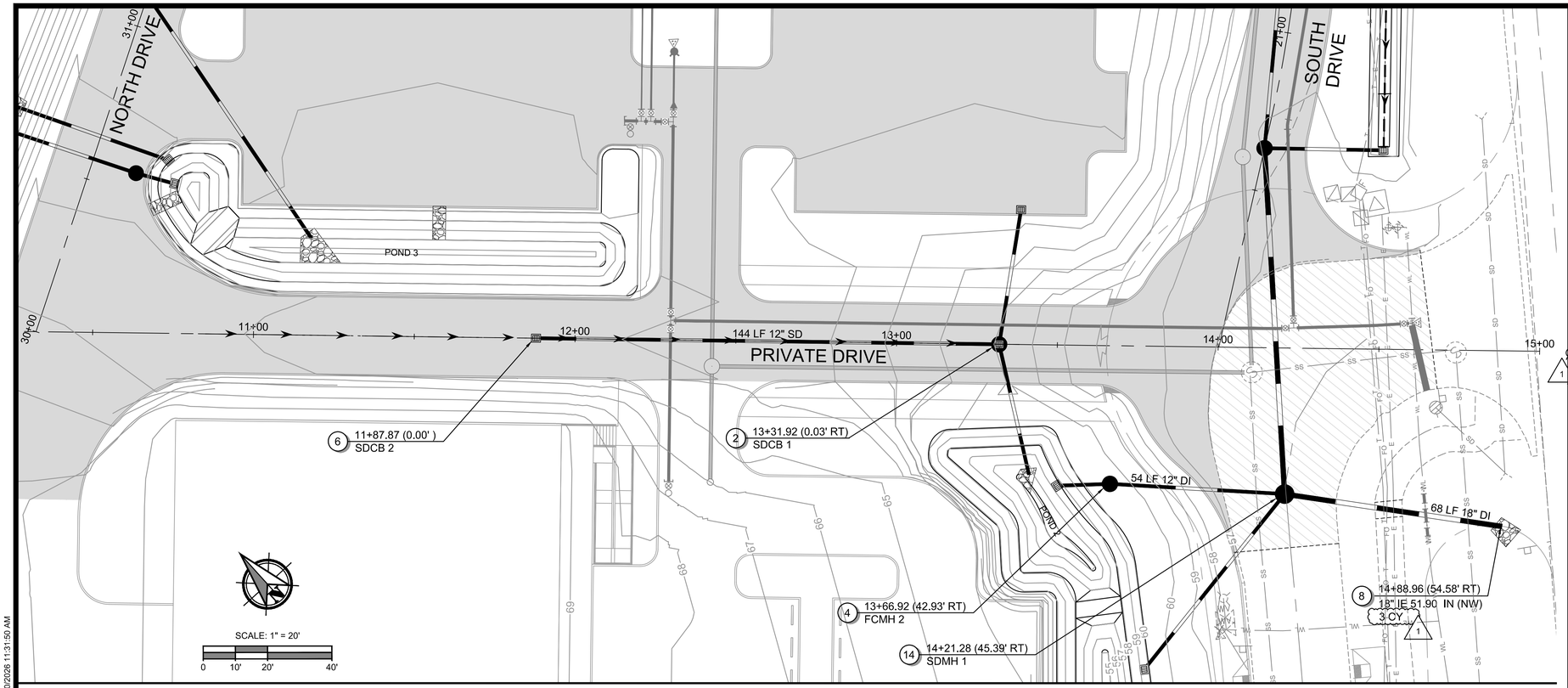
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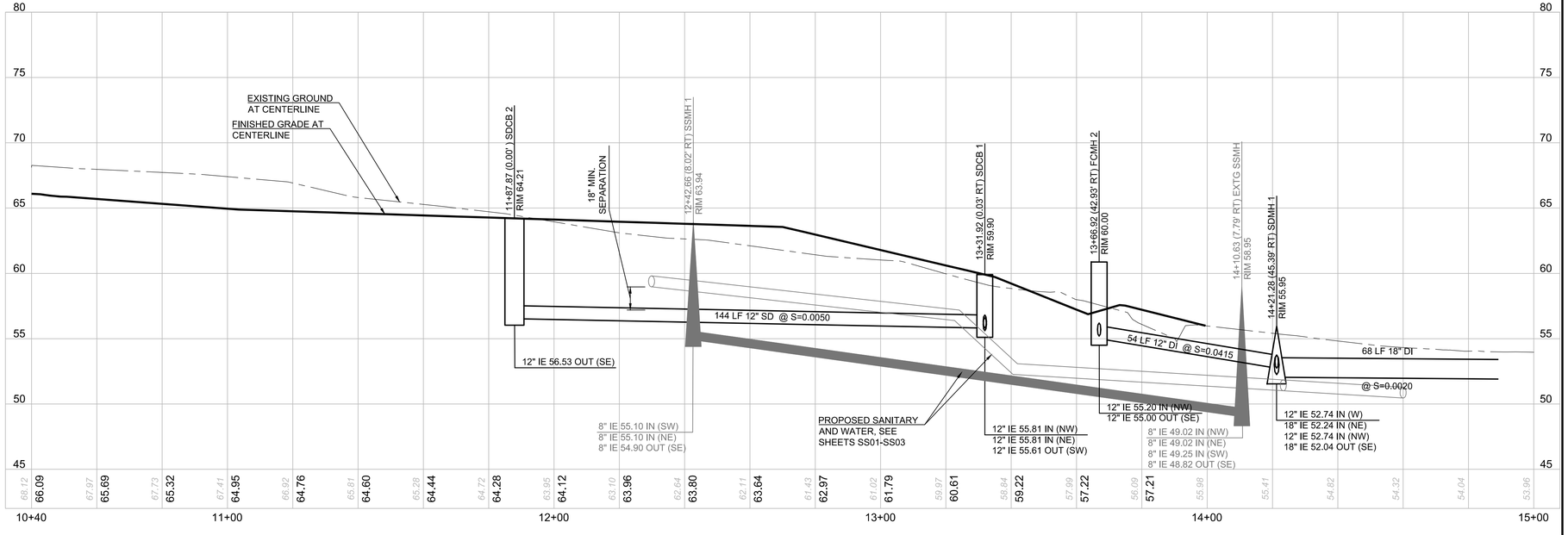
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C02

SHEET 13 OF 28

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GENERAL NOTES

1. SEE SHEET G02 FOR PLAN SET LEGEND.
2. SEE SHEET G03 FOR PLAN SET GENERAL NOTES.
2. SEE SHEETS C03-C05 FOR STORM PROFILES AND C06-C07 FOR SWALE PROFILE.

CONSTRUCTION NOTES - STORM SEWER

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4. INSTALL FLOW CONTROL MANHOLE PER DETAIL ON SHEET D02.
5. INSTALL DITCH INLET PER DETAIL ON SHEET D01.
6. INSTALL CATCH BASIN TYPE 1 PER STANDARD PLAN B-5.20. SEE SHEET D03.
7. INSTALL 4-FOOT WIDE, 6-INCH THICK, QUARRY SPALLS PAD FROM TOP OF SWALE (AT LOCATION OF FUTURE CURB SCUPPER) TO BOTTOM OF SWALE PER DETAIL ON SHEET D01.
8. CONSTRUCT STORM SEWER OUTLET WITH TRASH RACK PER DETAILS ON SHEET D02.
9. RELOCATE AND ADJUST EXISTING UTILITY STRUCTURE TO FINISHED GRADE.
10. CONSTRUCT POND PER DETAILS ON SHEET ST01.
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12. CONSTRUCT FLOW SPREADER EVERY 50 FEET PER DETAIL ON SHEET D01.
13. CONSTRUCT 587'Lx3.5'W BIOFILTRATION SWALE @ S=0.0100 PER DETAILS ON SHEET D01. SEE SHEET C06-C07 FOR PROFILE.
14. INSTALL 60" MANHOLE TYPE 3 PER STANDARD PLAN B-15.60, WITH CIRCULAR FRAME AND COVER PER STANDARD PLAN B-30.70. SEE SHEETS D04 AND D05.
15. BEVEL END TO MATCH SLOPE AND INSTALL PIPE END WITH TRASH RACK PER DETAILS ON SHEET D02.

1 11/6/2026 - ADDENDUM NO. 1

HAD PLACED RIP RAP QUANTITY ADDED. CONSTRUCTION NOTE NUMBER 7 WORDING CHANGED FOR POND.

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APEX

PRIVATE DRIVE STORM PROFILE FOR: CASCADES BUSINESS PARK INFRASTRUCTURE IMPROVEMENTS - PHASE 1

A SITE LOCATED IN THE CITY OF NORTH BONNEVILLE, WASHINGTON

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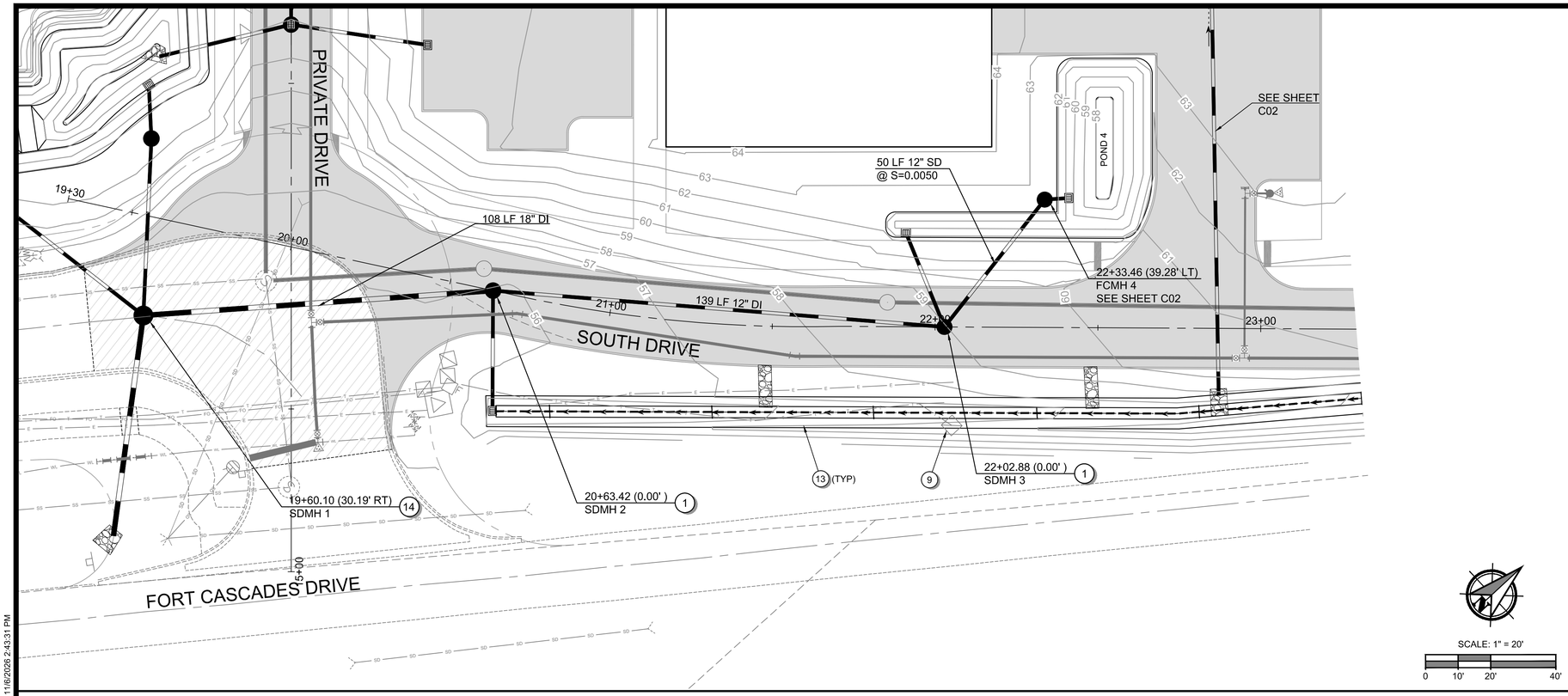
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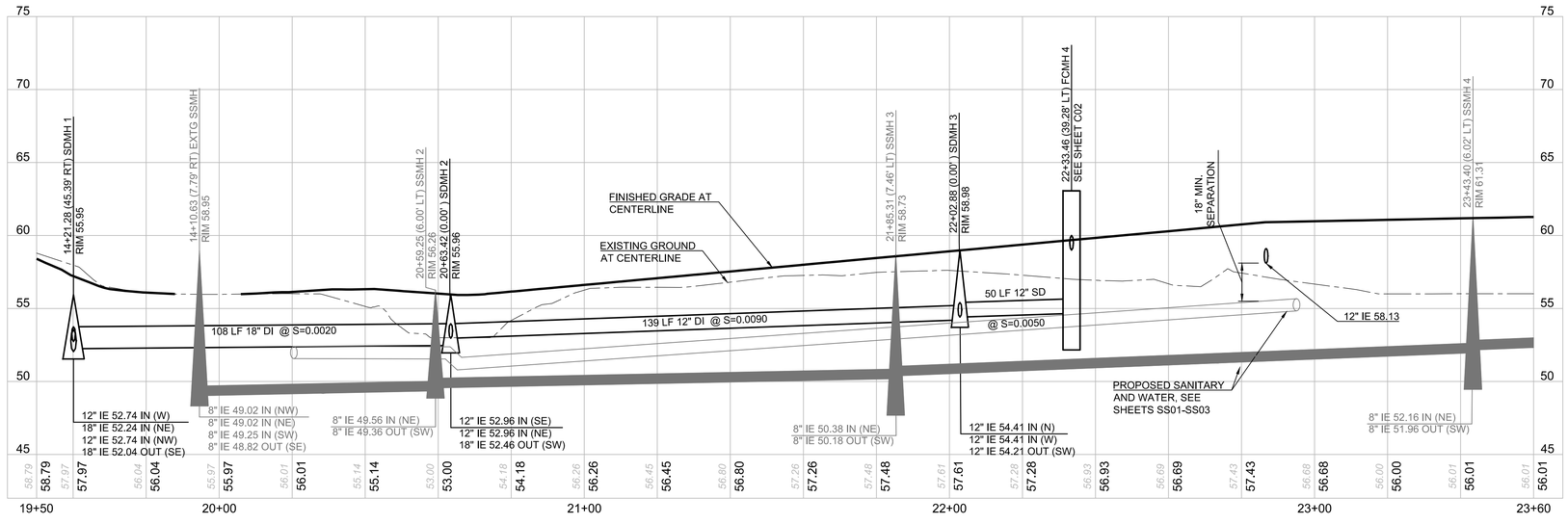
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SHEET 14 OF 28

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GENERAL NOTES

1. SEE SHEET G02 FOR PLAN SET LEGEND.
2. SEE SHEET G03 FOR PLAN SET GENERAL NOTES.
2. SEE SHEETS C03-C05 FOR STORM PROFILES AND C06-C07 FOR SWALE PROFILE.

CONSTRUCTION NOTES - STORM SEWER

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3. INSTALL 48" MANHOLE TYPE 1 PER STANDARD PLAN B-15.20, WITH CIRCULAR FRAME AND COVER PER STANDARD PLAN B-30.70. SEE SHEETS D03 AND D04.
4. INSTALL FLOW CONTROL MANHOLE PER DETAIL ON SHEET D02.
5. INSTALL DITCH INLET PER DETAIL ON SHEET D01.
6. INSTALL CATCH BASIN TYPE 1 PER STANDARD PLAN B-5.20. SEE SHEET D03.
7. INSTALL 4-FOOT WIDE, 6-INCH THICK, QUARRY SPALLS PAD FROM TOP OF SWALE (AT LOCATION OF FUTURE CURB SCUPPER) TO BOTTOM OF SWALE PER DETAIL ON SHEET D01.
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1 11/6/2026 - ADDENDUM NO. 1

CONSTRUCTION NOTE NUMBER 7 WORDING CHANGED FOR POND.

ADD NO. 1

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APEX

SOUTH DRIVE STORM PROFILE FOR:
CASCADES BUSINESS PARK INFRASTRUCTURE IMPROVEMENTS - PHASE 1
A SITE LOCATED IN THE CITY OF NORTH BONNEVILLE, WASHINGTON

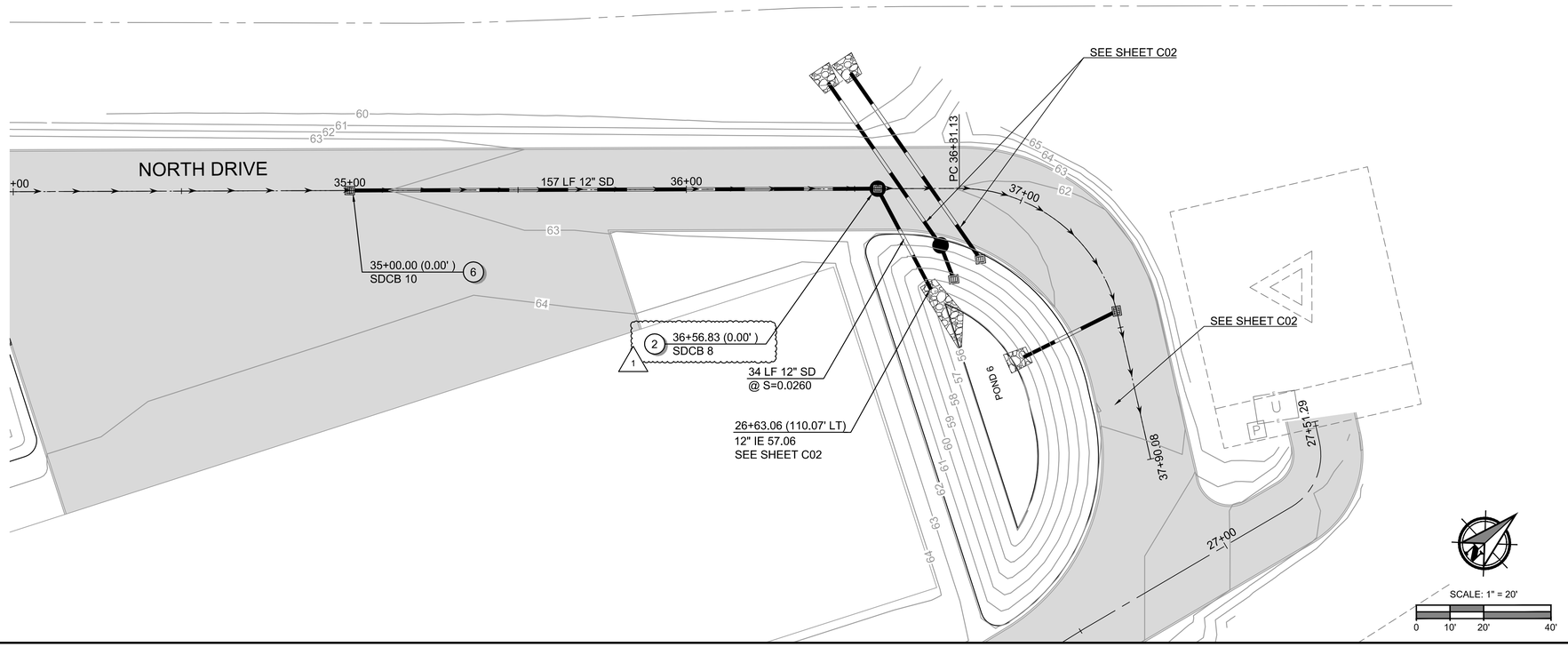
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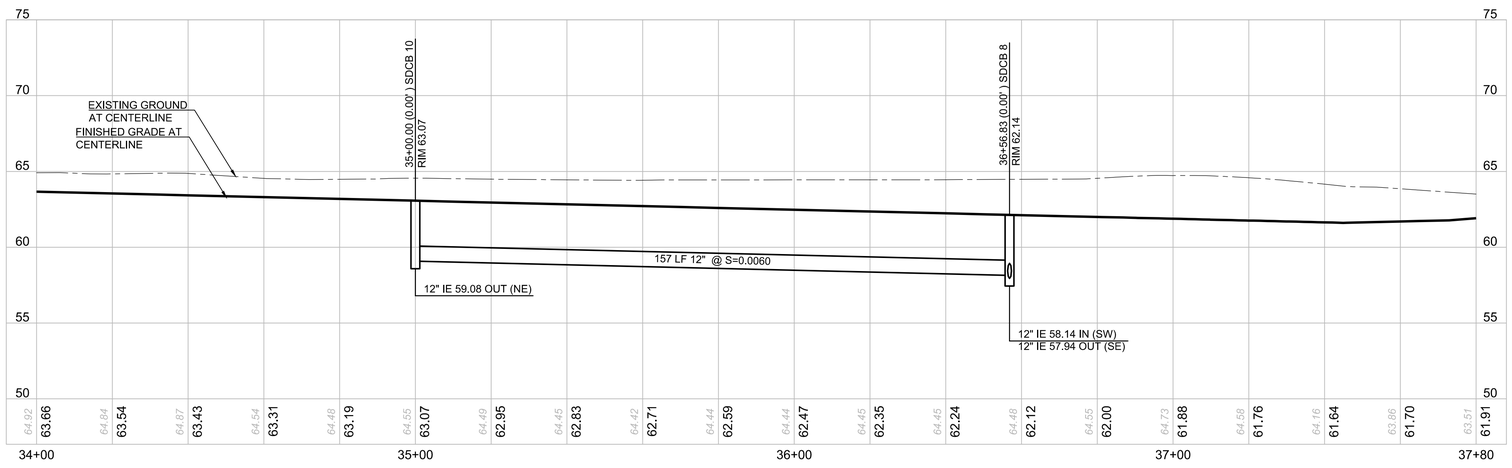
RICHARD E. DARLAND
STATE OF WASHINGTON
23172
REGISTERED
PROFESSIONAL ENGINEER
11-11-2026

DESIGNED: ANT
CHECKED: JBA
NOVEMBER 2026
78260.000

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C04
SHEET 15 OF 28

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GENERAL NOTES

1. SEE SHEET G02 FOR PLAN SET LEGEND.
2. SEE SHEET G03 FOR PLAN SET GENERAL NOTES.
2. SEE SHEETS C03-C05 FOR STORM PROFILES AND C06-C07 FOR SWALE PROFILE.

CONSTRUCTION NOTES - STORM SEWER

1. INSTALL 48" MANHOLE TYPE 3 PER STANDARD PLAN B-15.60, WITH CIRCULAR FRAME AND COVER PER STANDARD PLAN B-30.70. SEE SHEETS D04 AND D05.
2. INSTALL CATCH BASIN TYPE 2 PER STANDARD PLAN B-10.20, WITH RECTANGULAR FRAME AND GRATE PER STANDARD PLANS B-30.10 AND B-30.30. SEE SHEETS D03 AND D04. CATCH BASIN IS 48-INCH I.D. UNLESS NOTED OTHERWISE ON THE PLANS.
3. INSTALL 48" MANHOLE TYPE 1 PER STANDARD PLAN B-15.20, WITH CIRCULAR FRAME AND COVER PER STANDARD PLAN B-30.70. SEE SHEETS D03 AND D04.
4. INSTALL FLOW CONTROL MANHOLE PER DETAIL ON SHEET D02.
5. INSTALL DITCH INLET PER DETAIL ON SHEET D01.
6. INSTALL CATCH BASIN TYPE 1 PER STANDARD PLAN B-5.20. SEE SHEET D03.
7. INSTALL 4-FOOT WIDE, 6-INCH THICK, QUARRY SPALLS PAD FROM TOP OF SWALE (AT LOCATION OF FUTURE CURB SCUPPER) TO BOTTOM OF SWALE PER DETAIL ON SHEET D01. (1)
8. CONSTRUCT STORM SEWER OUTLET WITH TRASH RACK PER DETAILS ON SHEET D02.
9. RELOCATE AND ADJUST EXISTING UTILITY STRUCTURE TO FINISHED GRADE.
10. CONSTRUCT POND PER DETAILS ON SHEET ST01.
11. CONSTRUCT STORM SEWER OUTLET PER DETAIL ON SHEET D02. BEVEL END TO MATCH SLOPE.
12. CONSTRUCT FLOW SPREADER EVERY 50 FEET PER DETAIL ON SHEET D01.
13. CONSTRUCT 587'Lx3.5'W BIOFILTRATION SWALE @ S=0.0100 PER DETAILS ON SHEET D01. SEE SHEET C06-C07 FOR PROFILE.
14. INSTALL 60" MANHOLE TYPE 3 PER STANDARD PLAN B-15.60, WITH CIRCULAR FRAME AND COVER PER STANDARD PLAN B-30.70. SEE SHEETS D04 AND D05.
15. BEVEL END TO MATCH SLOPE AND INSTALL PIPE END WITH TRASH RACK PER DETAILS ON SHEET D02.

(1) 11/6/2026 - ADDENDUM NO. 1

CATCH BASIN TYPE 1 CHANGED TO CATCH BASIN TYPE 2. CONSTRUCTION NOTE NUMBER 7 WORDING CHANGED FOR POND.

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APEX

NORTH DRIVE STORM PROFILE FOR:
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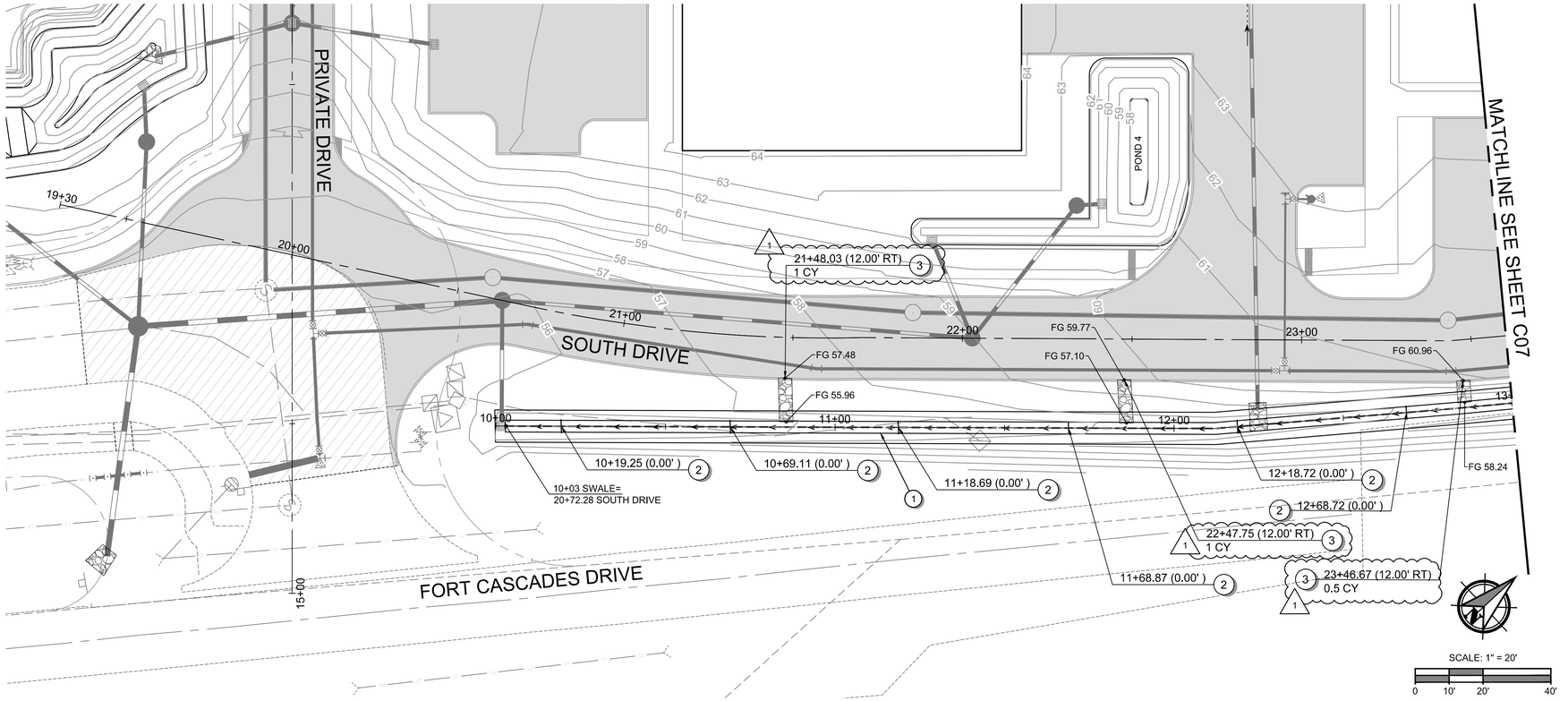
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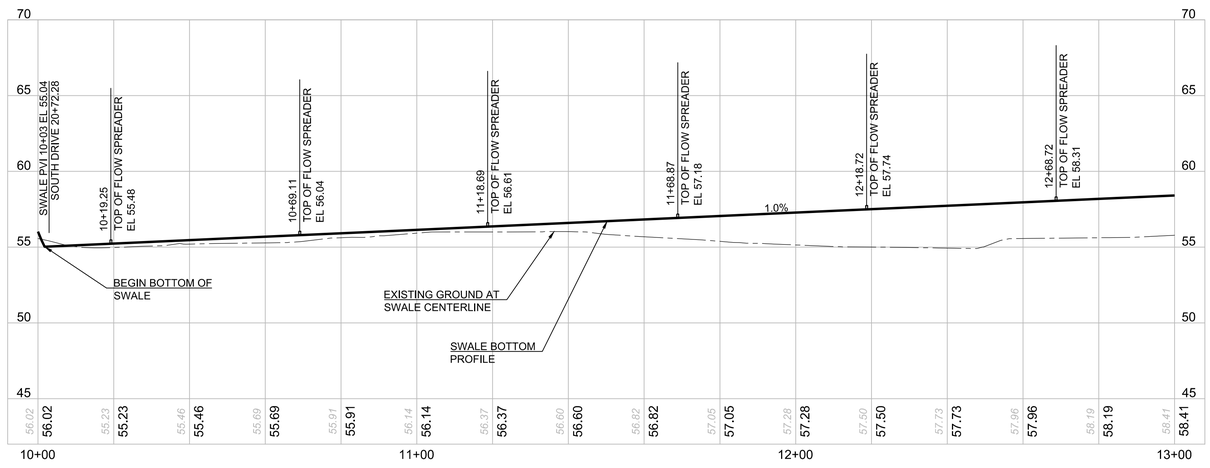
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GENERAL NOTES:

1. SEE SHEET G03 FOR PROJECT'S GENERAL NOTES.
2. SEE SHEET G02 FOR ABBREVIATIONS AND MASTER LEGEND.

SITE PLAN NOTES:

1. PROPOSED SWALE PER TYPICAL SECTION, SEE SHEET ST01.
2. PROPOSED FLOW SPREADER PER DETAIL, SEE SHEET D01.
3. 4-FOOT WIDE, 6-INCH THICK, QUARRY SPALLS PAD FROM TOP OF SWALE (AT LOCATION OF FUTURE CURB SCUPPER) TO BOTTOM OF SWALE PER DETAIL ON SHEET D01.

1 11/6/2026 - ADDENDUM NO. 1

QUARRY SPALLS QUANTITIES ADDED.

ADD NO. 1

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APEX

BIOFILTRATION SWALE PROFILE FOR:
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A SITE LOCATED IN THE CITY OF NORTH BONNEVILLE, WASHINGTON

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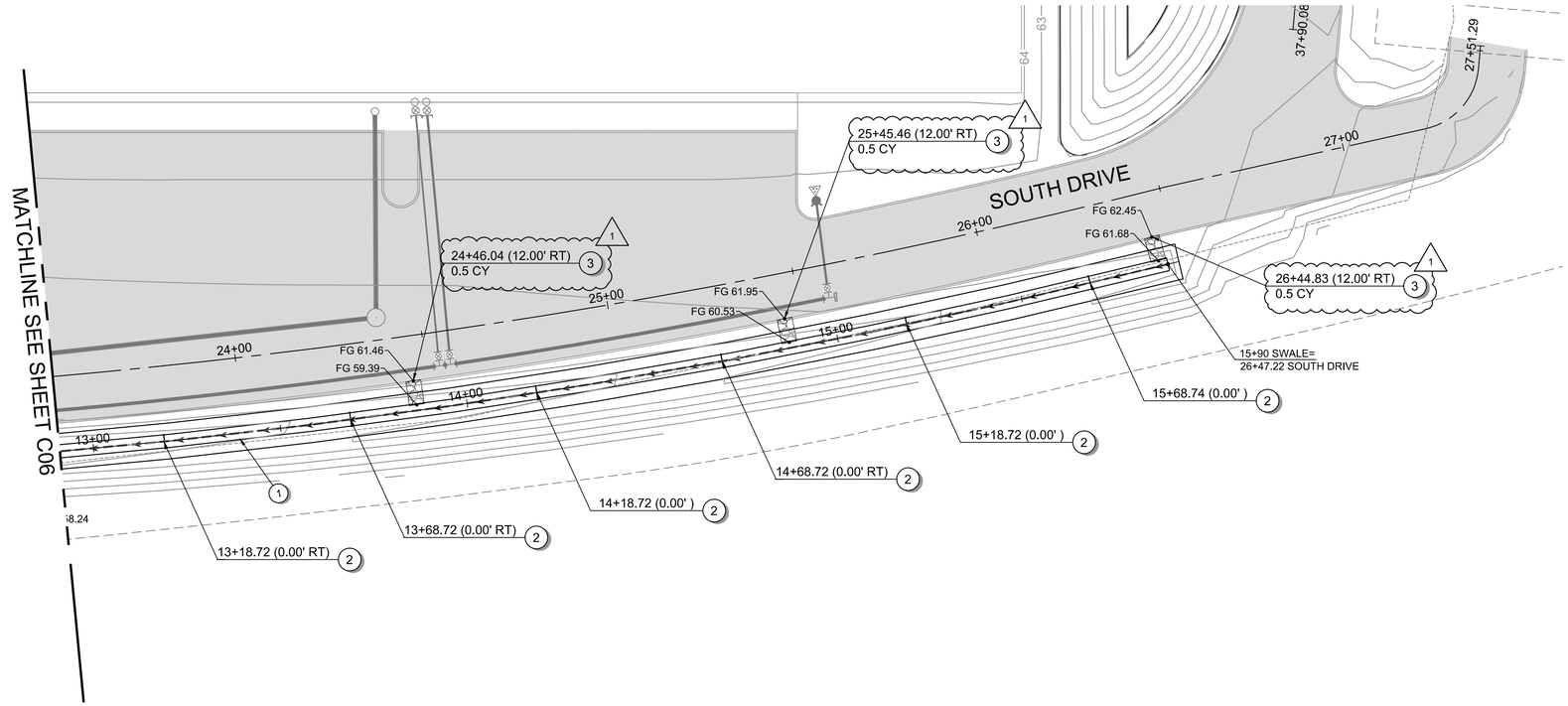
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PROFESSIONAL ENGINEER
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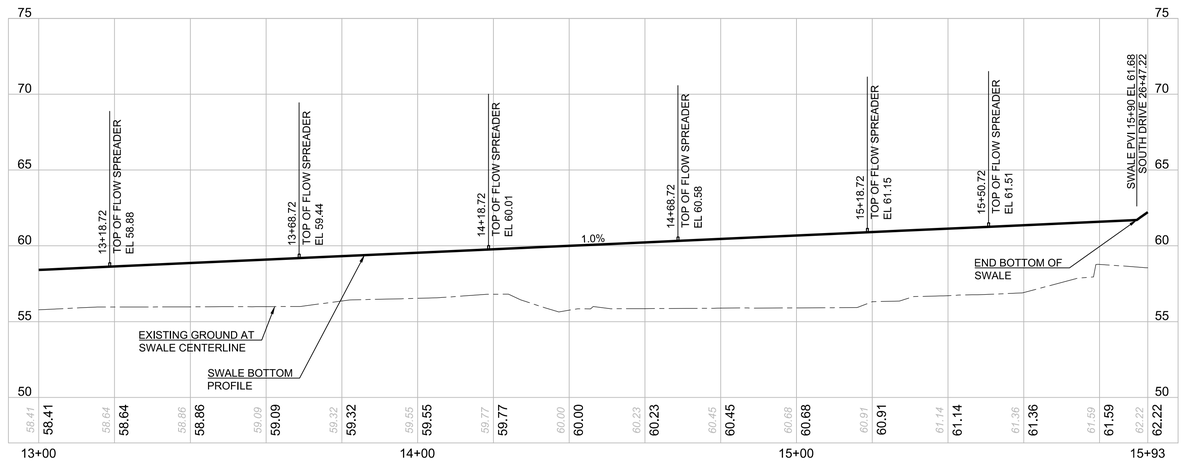
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GENERAL NOTES:

1. SEE SHEET G03 FOR PROJECT'S GENERAL NOTES.
2. SEE SHEET G02 FOR ABBREVIATIONS AND MASTER LEGEND.

SITE PLAN NOTES:

1. PROPOSED SWALE PER TYPICAL SECTION, SEE SHEET ST01.
2. PROPOSED FLOW SPREADER PER DETAIL, SEE SHEET D01.
3. 4-FOOT WIDE, 6-INCH THICK, QUARRY SPALLS PAD FROM TOP OF SWALE (AT LOCATION OF FUTURE CURB SCUPPER) TO BOTTOM OF SWALE PER DETAIL ON SHEET D01.

1 11/6/2026 - ADDENDUM NO. 1

QUARRY SPALLS QUANTITIES ADDED.

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BIOFILTRATION SWALE PROFILE FILE FOR:
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A SITE LOCATED IN THE CITY OF NORTH BONNEVILLE, WASHINGTON

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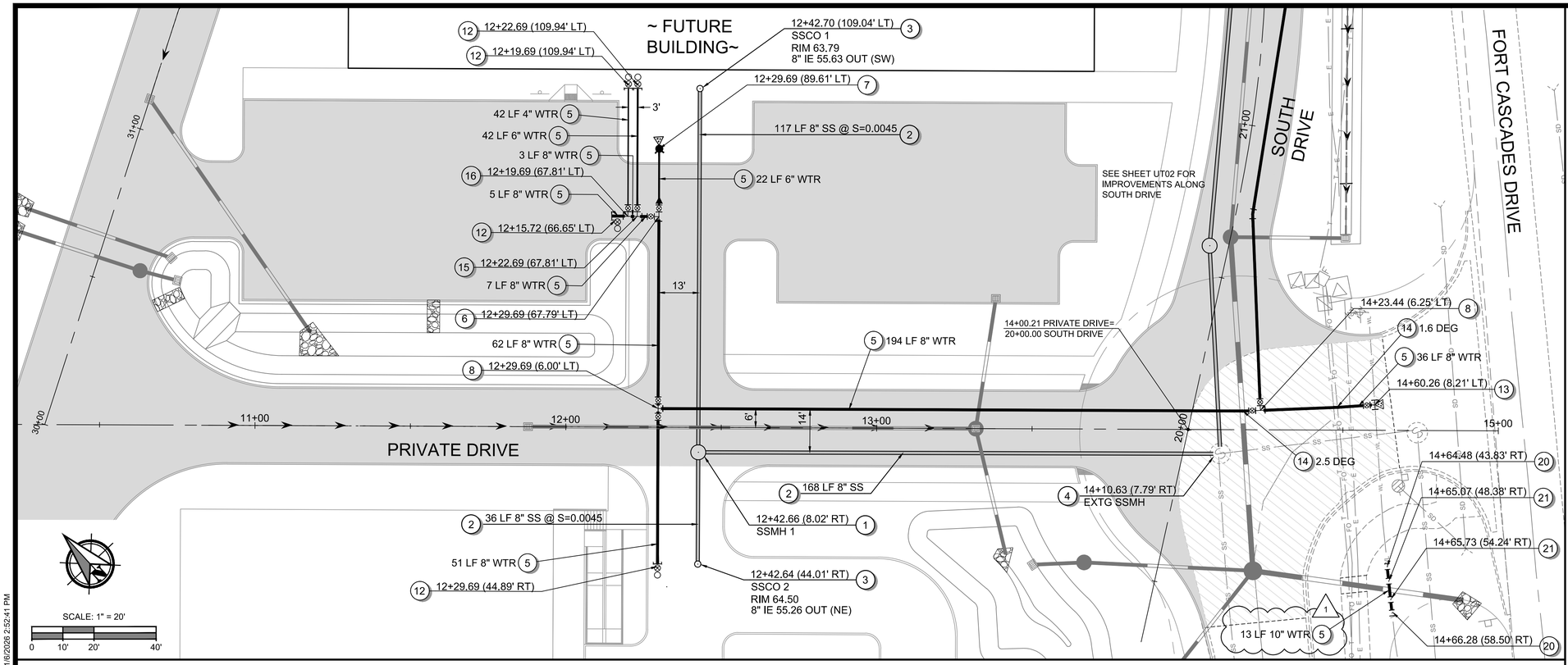
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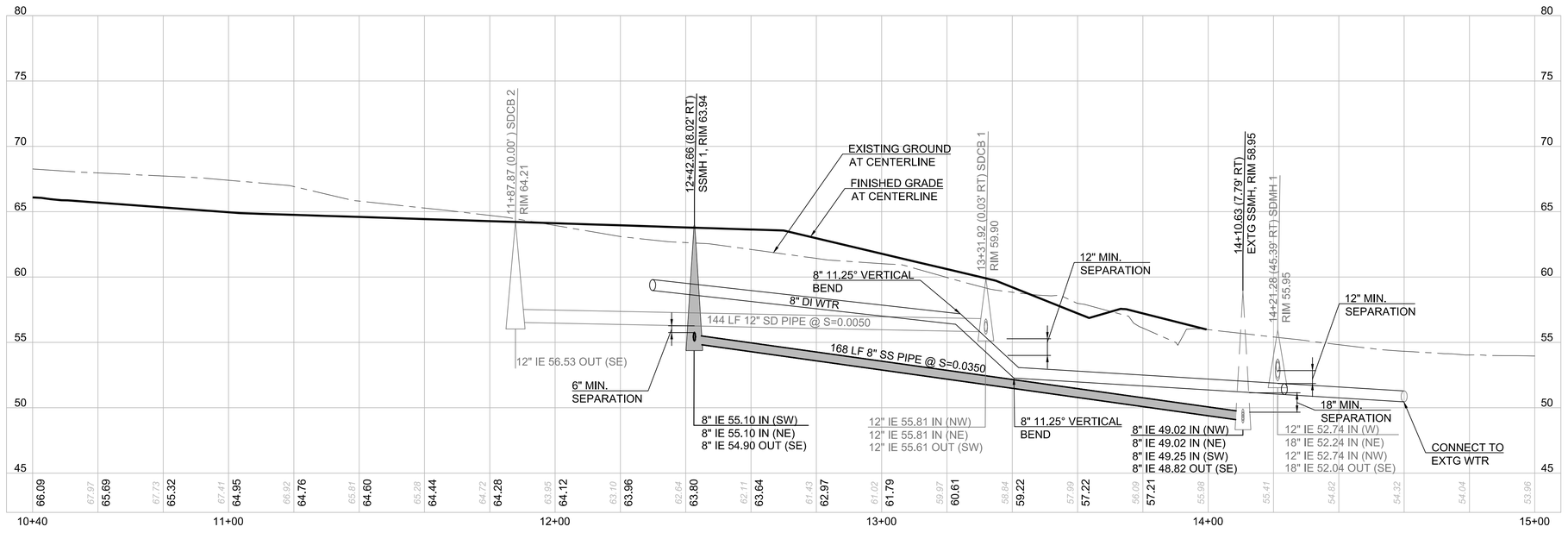
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NOVEMBER 2026	78260.000
SHEET ID	C07
SHEET	18 OF 28

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1 11/6/2026 - ADDENDUM NO. 1

10 INCH PIPE QUANTITY ADDED BETWEEN BENDS.

GENERAL NOTES

1. SEE SHEET G02 FOR PLAN SET LEGEND.
2. SEE SHEET G03 FOR PLAN SET GENERAL NOTES.
3. MECHANICALLY RESTRAIN ALL JOINTS ALONG MAINS AND FITTINGS THROUGHOUT THE PROPOSED WATER SYSTEM.
4. ANY PROPOSED THRUST BLOCKS SHALL BE CONSTRUCTED PER WSDOT STANDARD PLAN B-90.40. SEE SHEET D05.

CONSTRUCTION NOTES - SANITARY SEWER

1. INSTALL 48-INCH DIAM. MANHOLE TYPE 1 PER WSDOT STANDARD PLAN B-15.20, WITH CIRCULAR FRAME AND COVER PER WSDOT STANDARD PLAN B-30.70. SEE SHEETS D03 AND D04.
2. INSTALL 8-INCH DIAM. PVC SANITARY SEWER PIPE. PIPE LENGTHS AND SLOPES AS SHOWN ON PLANS.
3. INSTALL 8-INCH SANITARY SEWER CLEANOUT PER WSDOT STANDARD PLAN B-85.40. SEE SHEET D05.
4. CONNECT TO EXTG SANITARY SEWER MANHOLE.

CONSTRUCTION NOTES - WATER

5. INSTALL PIPE FOR WATER MAIN. PIPE DIAMETER AND LENGTH AS SHOWN ON PLANS. SEE GENERAL NOTES FOR PIPE MATERIAL REQUIREMENTS.
6. INSTALL (1) 8-INCH MJ TEE
   (1) 6-INCH MJ GATE VALVE
   (1) 8-INCH MJ GATE VALVE
   (1) 8-INCH x 6-INCH MJ REDUCER
7. INSTALL HYDRANT ASSEMBLY PER "TYPE A" DETAIL ON WSDOT STANDARD PLAN B-90.10. SEE SHEET D05.
8. INSTALL (1) 8-INCH MJ TEE
   (2) 8-INCH MJ GATE VALVES.
9. INSTALL (1) 8-INCH MJ TEE
   (2) 8-INCH MJ GATE VALVES
   (1) 8-INCH MJ PLUG
10. INSTALL 8-INCH MJ 11 1/4 DEG BEND.
11. INSTALL 6-INCH MJ 90 DEG BEND.
12. INSTALL 2-INCH BLOWOFF ASSEMBLY WITH GATE VALVE PER WSDOT STANDARD PLAN B-90.20. SEE SHEET D05.
13. AFTER NEW WATER MAINS HAVE BEEN TESTED IN ACCORDANCE WITH SPECIFICATION SECTION 7-09.3, AND TEST RESULTS HAVE BEEN APPROVED BY THE ENGINEER, CONNECT TO EXTG 10-INCH WATER MAIN WITH
    (1) 8-INCH X 10-INCH TAPPING TEE TEE w/ THRUST BLOCK
    (1) 8-INCH FLG x MJ GATE VALVE.
14. DEFLECT PIPE PER RADIUS OR ANGLE SHOWN ON PLANS. SEE GENERAL NOTES FOR PIPE DEFLECTION REQUIREMENTS.
15. INSTALL (1) 8-INCH x 6-INCH MJ TEE
    (1) 6-INCH MJ GATE VALVE
16. INSTALL (1) 8-INCH x 4-INCH MJ TEE
    (1) 4-INCH MJ GATE VALVE
17. INSTALL (1) 8-INCH MJ x 6-INCH FLG TEE
    (1) 6-INCH FLG x MJ GATE VALVE
    (1) 8-INCH MJ PLUG
18. INSTALL (1) 8-INCH x 6-INCH MJ TEE
    (1) 8-INCH MJ GATE VALVE
    (1) 6-INCH MJ GATE VALVE
19. INSTALL (1) 8-INCH MJ x 6-INCH FLG TEE
    (1) 6-INCH FLG x MJ GATE VALVE
20. AFTER NEW WATER MAINS HAVE BEEN TESTED IN ACCORDANCE WITH SPECIFICATION SECTION 7-09.3, AND TEST RESULTS HAVE BEEN APPROVED BY THE ENGINEER, CONNECT TO EXTG 10-INCH WATER MAIN WITH 10-INCH MJ 45 DEG VERTICAL BEND.
21. INSTALL 10-INCH MJ 45 DEG VERTICAL BEND. ENSURE 12-INCH MINIMUM SEPARATION BETWEEN PROPOSED 18-INCH STORM PIPE.

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APEX

SANITARY SEWER AND WATER PLAN AND PROFILE FOR:

CASCADES BUSINESS PARK INFRASTRUCTURE IMPROVEMENTS - PHASE 1

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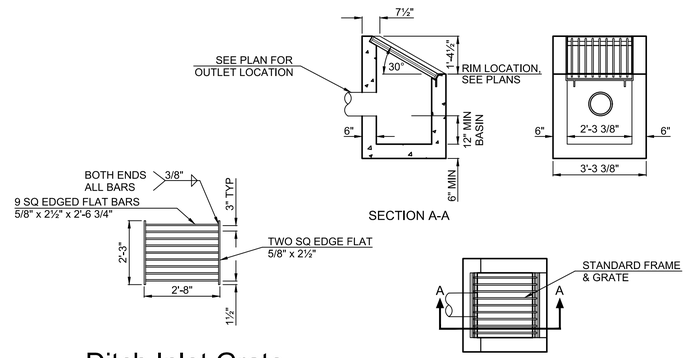
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SHEET	19 OF 28

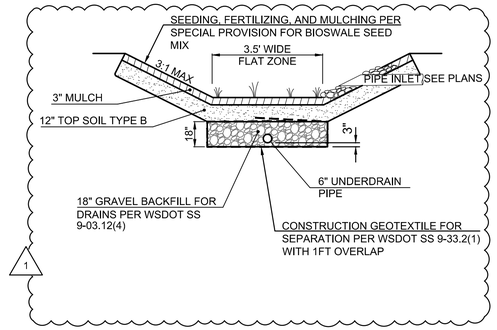
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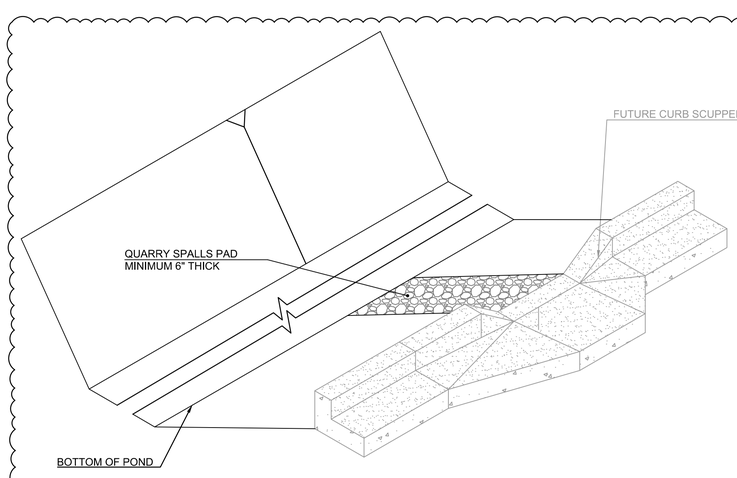
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NTS

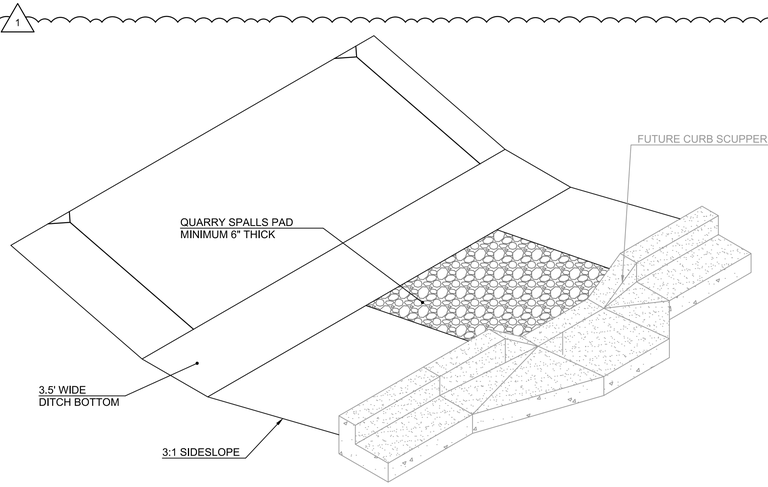
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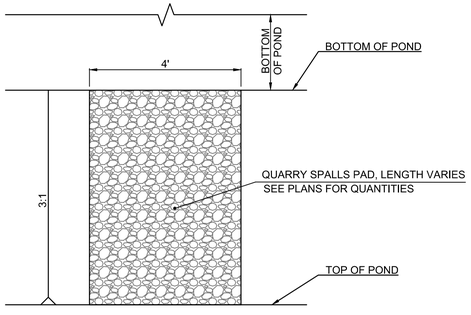


STORM FACILITIES INFORMATION				
STORM SWALE	LENGTH (FT)	SLOPE	BOTTOM WIDTH (FT)	DEPTH (FT)
1	587	1.0%	3.5	1.75

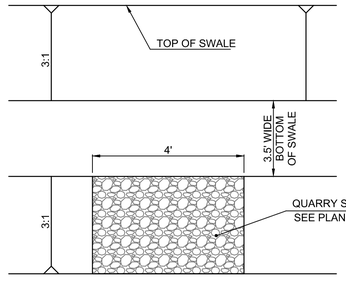
Biofilter Swale Cross-Section Detail
NTS



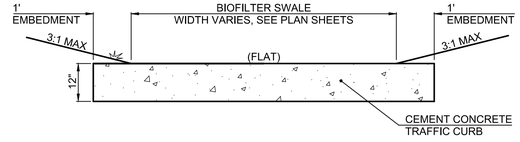




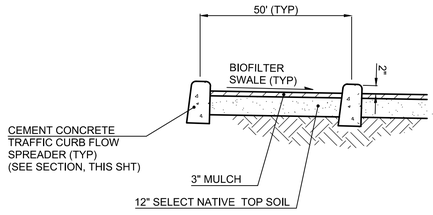
Quarry Spalls Pad
(TO BE USED IN LOCATIONS
WHERE SHOWN AT PONDS)
NTS



Quarry Spalls Pad
(TO BE USED IN LOCATIONS
WHERE SHOWN AT SWALE)
NTS



Flow Spreader Section
NTS



Biofilter Swale - Flow Spreader Detail
NTS

1 — 11/11/2026 - ADDENDUM NO. 1

QUARRY SPALLS PAD DETAILS UPDATED TO SHOW POND CONDITION AND SWALE CONDITION. REFERENCE ADDED TO SEE PLANS FOR QUANTITIES. BIOFILTER SWALE PLANTING NOTE AND TOP SOIL NOTE UPDATED, GEOTEXTILE FOR SEPARATION ADDED AROUND DRAIN ROCK

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APEX

MISCELLANEOUS DETAILS FOR:
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A SITE LOCATED IN THE CITY OF NORTH BONNEVILLE, WASHINGTON

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