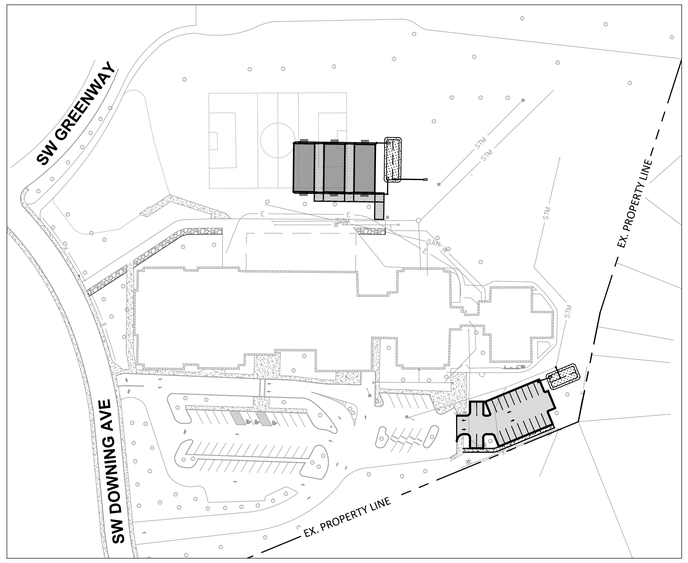
Received
Planning Division
05/01/2024

Exhibit 3.10

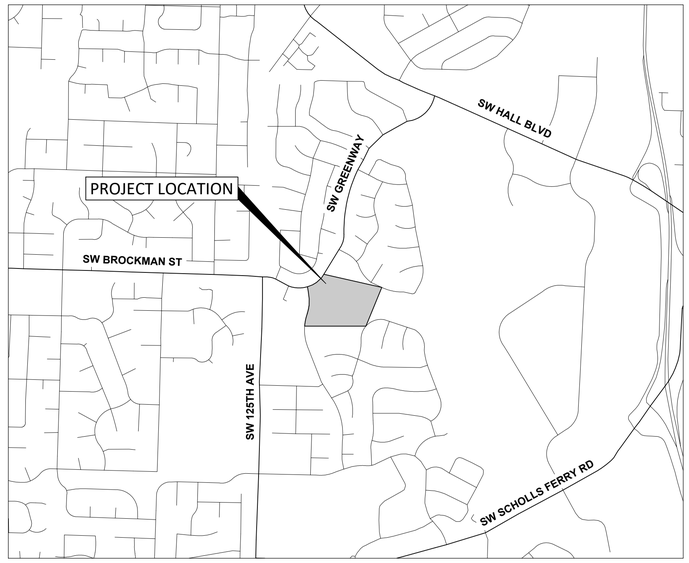
GREENWAY PORTABLES

BEAVERTON, OREGON

MARCH 2024



SITE MAP
1" = 100'



VICINITY MAP
1" = 1000'

OWNER

BEAVERTON SCHOOL DISTRICT
1260 NW WATERHOUSE AVENUE
BEAVERTON, OR 97006

CIVIL ENGINEER

HARPER HOUF PETERSON RIGHELLIS, INC.
205 SE SPOKANE STREET, SUITE 200
PORTLAND, OR 97202
CONTACT: BOBBY JACOBSON, P.E.
EMAIL: ROBERTJ@HHPR.COM
PHONE: (503) 221-1131

PROJECT LOCATION:

9150 SW DOWNING DRIVE
BEAVERTON, OR 97008
WASHINGTON COUNTY, OREGON
LATITUDE: 45°27'12.01"N
LONGITUDE: 122°48'6.69"W

IMPERVIOUS AREA:

EXISTING IMPERVIOUS AREA: 0.009 AC
PROPOSED IMPERVIOUS AREA: 0.362 AC

PROPERTY DESCRIPTION:

TAX LOT 100
TAX MAP 1S127CB
WASHINGTON COUNTY, OREGON
EXISTING CONDITIONS: GREENWAY ELEMENTARY SCHOOL

SURVEYOR

HARPER HOUF PETERSON RIGHELLIS, INC.
205 SE SPOKANE STREET, SUITE 200
PORTLAND, OR 97202
(503) 221-1131

DATUM

VERTICAL DATUM
ELEVATIONS SHOWN ARE BASED ON NAVD88 PER NETWORK GPS OBSERVATION.

HORIZONTAL DATUM
HORIZONTAL COORDINATES ARE BASED ON OREGON STATE PLANE (NORTH ZONE) - REFERENCE FRAME: NAD83(2011)(EPOCH:2010.00), INTERNATIONAL FEET. ALL DISTANCES ARE GROUND, SO STATE PLANE COORDINATES ARE APPROXIMATE, AND WERE DETERMINED FROM AN ORGN NETWORK GPS OBSERVATION.

ATTENTION EXCAVATORS:

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.

SHEET INDEX

COVER SHEET
GREENWAY PORTABLES
BEAVERTON, OREGON

Harper Houf Peterson Righellis Inc.
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LANDSCAPE ARCHITECTS★SURVEYORS
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REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 27, 2005
ROBERT D. JACOBSON
EXPIRES: 06/30/2025
PRELIMINARY NOT FOR CONSTRUCTION

DESIGNED:	DRAWN:	CHECKED:	DATE:
HHPR	HHPR	BDJ	03/01/2024

REVISIONS

NO.	DESCRIPTION	DATE

SHEET NO.
C0.1

JOB NO.
BSD-122

P:\01-Portland\BSD (Beaverton School District)\BSD-122 (Greenway Portables)\BSD122-DWGS\Sheets\SD\ BSD122-C0.1-Cover.dwg

GENERAL NOTES:

1. WORK SHALL CONFORM TO INTERNATIONAL BUILDING CODE (IBC), UNIFORM PLUMBING CODE (UPC), AND CITY OF BEAVERTON STANDARDS.

2. THE LOCATION AND DESCRIPTION OF EXISTING UTILITIES ARE COMPILED FROM AVAILABLE RECORDS AND/OR FIELD SURVEYS AND ARE APPROPRIATE. AS-BUILT INFORMATION SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

3. THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF O.R.S. 757.541 AND 757.571, INCLUDING NOTIFICATION OF ALL OWNERS OF UNDERGROUND FACILITIES AT LEAST 48 BUSINESS DAY HOURS PRIOR TO EXCAVATION. FIELD VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

4. PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO KEEP ALL EXISTING UTILITIES IN SERVICE AND PROTECT THEM DURING CONSTRUCTION.

5. CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.

6. EXISTING MONUMENTS, PROPERTY CORNERS, AND SURVEY MARKERS SHALL BE PROTECTED. REPLACEMENT SHALL BE AT THE CONTRACTOR'S EXPENSE.

7. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE JURISDICTION AND THE PROJECT SPECIFICATIONS.

8. ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0001 THROUGH 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. NOTES: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 323-1987.

9. CONTRACTOR TO PROTECT ALL EXISTING UTILITIES TO REMAIN. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELECTIONS TO FINISHED GRADE OF NEW CONSTRUCTION.

10. ALL ONSITE STORM PIPING SHALL BE HDPE, PVC 3034 OR APPROVED EQUAL AT 0.5% MIN, UNLESS NOTED OTHERWISE. ALL OFFSITE STORM PIPING SHALL MATCH EXISTING PIPE TYPE.

11. ALL ON-SITE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE UNIFORM PLUMBING CODE (UPC), INTERNATIONAL BUILDING CODE, AND THE INTERNATIONAL FIRE CODE. WORK SHALL ALSO CONFORM TO THE STANDARDS OF THE JURISDICTION AND TO THE PROJECT SPECIFICATIONS.

12. THE CONTRACTOR SHALL VERIFY AND CONFIRM EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF VARIATIONS IN CONDITIONS SHOWN ON THE PLANS. POINTS OF CONNECTION TO EXISTING UTILITIES AND LOCATIONS WHERE NEW UTILITIES WILL CROSS EXISTING UTILITIES SHALL BE VERIFIED BY POTHOLING PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. IT IS THE CONTRACTORS RESPONSIBILITY TO SCHEDULE POTHOLING SUCH THAT IF CONFLICTS ARE ENCOUNTERED, SUFFICIENT TIME EXISTS TO PREPARE MODIFIED DESIGNS AND HAVE THE MODIFICATIONS APPROVED BY THE JURISDICTION WITHOUT IMPACTING THE PROJECT SCHEDULE.

13. ALL TRADE LICENSES AND PERMITS NECESSARY FOR THE PROCUREMENT AND COMPLETION OF WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING DEMOLITION.

14. THE CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING RIGHT-OF-WAY SURVEY MONUMENTATION DURING DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING PAYING FOR THE REPLACEMENT BY A LICENSED SURVEYOR OF ANY DAMAGED OR REMOVED MONUMENTS.

15. PROTECT ALL ITEMS ON ADJACENT PROPERTIES AND IN THE RIGHT-OF-WAY INCLUDING BUT NOT LIMITED TO SIGNAL EQUIPMENT, PARKING METERS, SIDEWALKS, STREET TREES, STREET LIGHTS, CURBS, PAVEMENT AND SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ANY DAMAGED ITEMS TO ORIGINAL CONDITION.

16. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, AND OTHER FACILITIES IMMEDIATELY ADJACENT TO EXCAVATIONS FROM DAMAGES CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS.

17. LIMITS OF SAWCUT REMOVAL SHOWN ON PLANS IS APPROXIMATE. CONTRACTOR IS TO ADJUST LIMITS AS NECESSARY. CONTRACTOR IS TO SAWCUT AT A STRAIGHT LINE AT THE NEAREST JOINT.

18. CONTRACTOR IS RESPONSIBLE TO CONTROL DUST AND MUD DURING THE DEMOLITION PERIOD, AND DURING TRANSPORTATION OF DEMOLITION DEBRIS. ALL STREET SURFACES OUTSIDE THE CONSTRUCTION ZONE MUST BE KEPT CLEAN.

19. PROTECT ALL EXISTING UTILITY STRUCTURES AND UNDERGROUND MAINS NOT PROPOSED FOR DEMOLITION.

20. PROTECT ALL EXISTING VEGETATION TO REMAIN NOT WITHIN THE PROPOSED LIMITS OF DEMOLITION/GRADING.

21. CONTRACTOR TO VERIFY PAVEMENT SECTIONS WITH GEOTECHNICAL ENGINEER PRIOR TO EXCAVATION FOR UNDERCUT.

22. CONTRACTOR TO VERIFY BUILDING SLAB SECTION WITH GEOTECHNICAL ENGINEER, ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO EXCAVATION TO PAD ELEVATION.

PRIVATE UTILITIES NOTES:

STORM DRAINAGE

1. PRIVATE STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF BEAVERTON, THE INTERNATIONAL BUILDING CODE (IBC) AND THE UNIFORM PLUMBING CODE (UPC).

2. STORM DRAIN PIPE SHALL BE AS SHOWN ON PLAN. IF NOT SHOWN ON PLAN, PIPE SHALL BE PVC 3034 SDR35, OR A.S.T.M. C-14, CLASS 3 CONCRETE SEWER PIPE, OR AWWA C900 PVC, CLASS 100, OR HDPE SMOOTH INTERIOR, CORRUGATED EXTERIOR SEWER PIPE WITH BELL AND SPIGOT JOINTS, CONFORMING TO AASHTO M294.

3. THE CONTRACTOR SHALL TEST ALL PVC AND HDPE STORM PIPE FOR DEFLECTION AS PER CITY OF PORTLAND. A COPY OF THE TEST RESULTS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.

4. THE CONTRACTOR SHALL FLUSH THE ENTIRE STORM SYSTEM AND VIDEO INSPECT ALL STORM SEWER CONVEYANCE PIPES. A COPY OF THE REPORT AND VIDEO TAPE SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.

5. CATCH BASINS SHALL BE INSTALLED TO FINISH GRADE.

6. ADJUST MANHOLES, CLEAN OUT AND AREA DRAIN RIMS TO FINISH GRADE.

7. HORIZONTAL LINES CONNECTING WITH OTHER HORIZONTAL LINES SHALL ENTER THROUGH 45 DEGREE WYE BRANCH. TEE BRANCH IS NOT ALLOWED.

8. TRACER WIRE - 12-GAUGE STRANDED OR SOLID COPPER INSULATED HIGH MOLECULAR WEIGHT POLYETHYLENE (HMW-PE) TRACER WIRE. THE HMW-PE INSULATED COVER SHALL BE GREEN AND A MINIMUM 45 MIL THICK. THE WIRE SHALL BE RATED FOR 140 DEGREES FAHRENHEIT. INSTALL TRACER WIRE IN ALL TRENCHES FOR STORM SEWERS. PLACE THE TRACER WIRE DIRECTLY OVER THE PIPE CENTERLINE AND ON TOP OF THE PIPE ZONE MATERIAL, PARALLEL TO, AND ALONG THE ENTIRE LENGTH OF ALL NONMETALLIC PIPE.

9. REQUIRED STORMWATER FACILITY INSPECTIONS PRIOR TO COMPLETION
   INSPECTION #1: LOCATION, SIZE, DEPTH, STRUCTURE, LINING/WATERPROOFING, PENETRATIONS AND PIPING.
   INSPECTION #2: DRAINAGE MATERIAL/ROCK.
   INSPECTION #3: SOIL, PLANTS, ELEVATIONS, INLET PROTECTION, OUTFALLS.

WATER SERVICE

1. ALL PIPE SHALL HAVE A MINIMUM OF 36" OF COVER MEASURED FROM FINISH GRADE.

2. PRIVATE DOMESTIC AND FIRE WATER SERVICE LINES 3 1/2" OR SMALLER SHALL BE TYPE K COPPER OR SCHEDULE 40 PVC. LINES 4" OR LARGER TO BE CLASS 52 DI PIPE OR PVC PRESSURE PIPE (C-900 CLASS 150).

3. THE CONTRACTOR SHALL CALL FOR ALL INSPECTIONS AND PERFORM THE NECESSARY TESTING REQUIRED BY THE SPECIFICATIONS AND THE PRIVATE UTILITIES PERMIT. UPON COMPLETION OF THE INSTALLATION OF THE WATER SYSTEM ALL LINES SHALL BE FLUSHED AND DISINFECTED IN CONFORMANCE WITH HEALTH DIVISION GUIDELINES.

4. ALL DOMESTIC WATERLINES, JOINTS, TEES, BENDS (HORIZ. & VERT.), REDUCERS AND VALVES SHALL BE MECHANICALLY RESTRAINED USING ROMAC ROMAGRIP OR APPROVED EQUAL.

5. ALL FIRE SERVICE JOINTS TO BE MECHANICALLY RESTRAINED WITH MEGALUG SERIES JOINT RESTRAINTS.

6. ALL WATER PIPE SHALL COMPLY WITH AWWA STANDARDS AND UL APPROVED.

7. TRACER WIRE - 12-GAUGE STRANDED OR SOLID COPPER INSULATED HIGH MOLECULAR WEIGHT POLYETHYLENE (HMW-PE) TRACER WIRE. THE HMW-PE INSULATED COVER SHALL BE GREEN AND A MINIMUM 45 MIL THICK. THE WIRE SHALL BE RATED FOR 140 DEGREES FAHRENHEIT. INSTALL TRACER WIRE IN ALL TRENCHES FOR WATER LINE. PLACE THE TRACER WIRE DIRECTLY OVER THE PIPE CENTERLINE AND ON TOP OF THE PIPE ZONE MATERIAL, PARALLEL TO, AND ALONG THE ENTIRE LENGTH OF ALL NONMETALLIC PIPE.

MISC. UTILITIES

1. ELECTRICAL, TELEPHONE, GAS, AND TV INSTALLATION SHALL BE COORDINATED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANY INCLUDING REQUIREMENTS FOR UTILITY CROSSING SLEEVES.

2. ALL PROPOSED POWER, TELEPHONE, GAS, AND TV SERVICES ON SITE SHALL BE PLACED UNDERGROUND.

3. TRENCH BACKFILL WITHIN THE PUBLIC RIGHT OF WAY TO BE CRUSHED ROCK. THIS APPLIES TO ALL UTILITY INSTALLATIONS: STORM, SANITARY, WATER, IRRIGATION CROSSINGS, PRIVATE UTILITIES.

4. PLACE DETECTABLE MARKING TAPE AND TRACER WIRE IN THE TRENCH DIRECTLY ABOVE, PARALLEL TO, AND ALONG THE ENTIRE LENGTH OF ALL NONMETALLIC PIPE AND CONDUIT.

5. GAS SERVICES SHALL BE MORE THAN 10 FT AWAY FROM WATER SERVICES AND MORE THAN 18" BELOW WATER SERVICES AND CROSSINGS.

GENERAL NOTES
GREENWAY PORTABLES
BEAVERTON, OREGON

Harper Houf Peterson Righellis Inc.
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205 SE Spokane Street, Suite 200, Portland, OR 97202
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REGISTERED PROFESSIONAL ENGINEER — OREGON — JULY 9, 2004 — ROBERT D. JOVOVICH
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: 06/30/2025

DESIGNED:	DRAWN:	CHECKED:	DATE:
HHPR	HHPR	BDJ	03/01/2024

NO.	DESCRIPTION	DATE

REVISIONS

SHEET NO.
C0.2

JOB NO.
BSD-122

P:\01-Portland\BSD (Beaverton School District)\BSD-122 (Greenway Portables)\BSD122-DWGS\Sheets\SD\ BSD122-C0.2-General Notes.dwg

FIRE ACCESS PLAN
GREENWAY PORTABLES
BEAVERTON, OREGON

PORTABLE CLASSROOM
PORTABLE CLASSROOM
PORTABLE CLASSROOM

MAXIMUM DISTANCE FROM FIRE ACCESS LANE = 174'

400' HOSE PULL FROM FH TO BUILDING

EXISTING FH

EXISTING FIRE ACCESS ROAD

20.0' FIRE ACCESS LANE

PROPOSED REINFORCED GRAVEL SECTION

12.0'

8.0'

R28.0'

70.0'

R28.0'

20.0'

20.0'

PROPOSED REINFORCED GRAVEL SECTION

INSTALL NEW 'NO PARKING, FIRE LANE' SIGN AND INSTALL RED FIRE LINE STRIPING ALONG EXISTING CURB.

EXISTING FIRE ACCESS GATE. INSTALL NEW 'KNOX PADLOCK' PER OFC D103.5 & 503.6

INSTALL NEW SIGN AT EXISTING GATE IDENTIFYING FIRE ACCESS LANE.

EXISTING COVERED PLAY AREA WITH MINIMUM 13'-6" OF OVERHEAD CLEARANCE

EXISTING COVERED PLAY AREA WITH MINIMUM 13'-6" OF OVERHEAD CLEARANCE

EXISTING BUILDING

EXISTING BUILDING

SW DOWNING AVE

EXISTING PROPERTY LINE

EXISTING PROPERTY LINE

0 15 30 60

SCALE: 1" = 30'

P:\01-Portland\BSD (Beaverton School District)\BSD-122 (Greenway Portables)\BSD122-DWGS\Sheets\SD\ BSD122-C0.5-Fire Access Plan.dwg

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REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 13, 2005
ROBERT D. JANSEN
EXPIRES: 06/30/2025

NOT FOR CONSTRUCTION
PRELIMINARY

DESIGNED:	HHPR	CHECKED:	BDJ
DRAWN:	HHPR	DATE:	03/01/2024

NO.	DESCRIPTION	DATE

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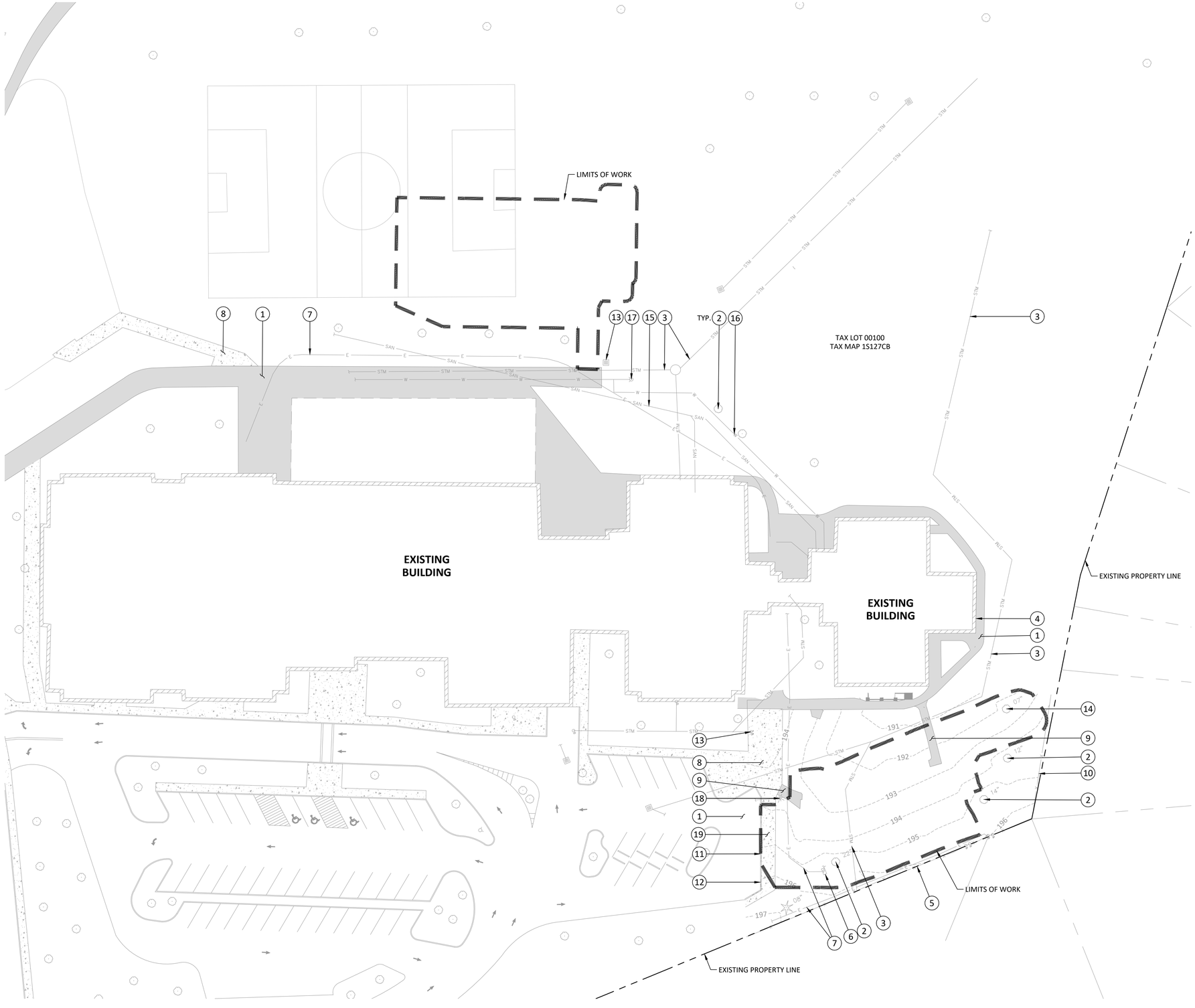

CONSTRUCTION NOTES:

1. PROTECT EXISTING AC PAVEMENT.
2. PROTECT EXISTING TREE.
3. PROTECT EXISTING STORM LINE.
4. EXISTING BUILDING TO REMAIN. PROTECT IN PLACE.
5. PROTECT EXISTING 5' WOOD FENCE.
6. PROTECT EXISTING POWER STRUCTURE.
7. PROTECT EXISTING POWER LINE.
8. PROTECT EXISTING CONCRETE SIDEWALK.
9. REMOVE EXISTING AC PAVEMENT.
10. PROTECT EXISTING 6' CHAINLINK FENCE.
11. REMOVE EXISTING CONCRETE CURB.
12. PROTECT EXISTING CONCRETE CURB.
13. PROTECT EXISTING STORM STRUCTURE.
14. REMOVE EXISTING TREE.
15. PROTECT EXISTING SANITARY LINE.
16. PROTECT EXISTING WATER LINE.
17. PROTECT EXISTING FIRE HYDRANT.
18. PROTECT EXISTING LIGHT POLE.
19. REMOVE EXISTING CONCRETE SIDEWALK.

DEMOLITION LEGEND:

LIMITS OF WORK

EXISTING CONDITIONS & DEMO PLAN

GREENWAY PORTABLES

BEAVERTON, OREGON

Harper Houf Peterson Righellis Inc.
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REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 13, 1999
ROBERT D. JAN
EXPIRES: 06/30/2025

NOT FOR CONSTRUCTION PRELIMINARY

DESIGNED:	DRAWN:	CHECKED:	DATE:
HHPR	HHPR	BDJ	03/01/2024

NO.	DESCRIPTION	DATE

REVISIONS

SHEET NO.

C1.0

JOB NO.

BSD-122

P:\01-Portland\BSD (Beaverton School District)\BSD-122 (Greenway Portables)\BSD122-DWGS\Sheets\SD\ BSD122-C1.0-Existing Conditions.dwg

LEGEND

PEDESTRIAN CIRCULATION PATH

0 30 60 120

SCALE: 1" = 60'

OVERALL SITE PLAN
GREENWAY PORTABLES
BEAVERTON, OREGON

Harper Houf Peterson Righellis Inc.
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REGISTERED PROFESSIONAL ENGINEER
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JULY 10, 2007
ROBERT D. JANSEN
EXPIRES: 06/30/2025

NOT FOR CONSTRUCTION PRELIMINARY

DESIGNED:	HHPR
DRAWN:	HHPR
CHECKED:	BDJ
DATE:	03/01/2024

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DATE	NO.	DESCRIPTION

SHEET NO.
C2.0

JOB NO.
BSD-122

P:\01-Portland\BSD (Beaverton School District)\BSD-122 (Greenway Portables)\BSD122-DWGS\Sheets\SD\ BSD122-C2.0-Overall Site Plan.dwg

CONSTRUCTION NOTES:

1. CONSTRUCT AC PAVEMENT. SEE AC PAVEMENT SECTION DETAIL ON SHEET C5.0.
2. CONSTRUCT METAL STAIRS.
3. PROPOSED PORTABLE CLASSROOM.
5. SAWCUT EXISTING PATH AS NECESSARY. MATCH EXISTING GRADES AT SAWCUT LINE. REFER TO SHEET C3.0 FOR ELEVATIONS.
6. EXISTING TREE TO REMAIN. PROTECT IN PLACE.
7. EXISTING LIGHT POLE TO REMAIN. PROTECT IN PLACE.
8. CONSTRUCT PORTABLE PLATFORM STRUCTURE AND RAMP.
10. PROPOSED STORM FACILITY. SEE SHEET C4.0 FOR DETAILS.
11. CONSTRUCT CONCRETE SIDEWALK PER DETAIL ON SHEET C5.0.
12. CONSTRUCT CONCRETE CURB PER DETAIL ON SHEET C5.0.
13. PROPOSED HVAC UNIT.
14. CONSTRUCT 8.0' REINFORCED GRAVEL SECTION PER DETAIL ON SHEET C5.0.

PORTABLE CLASSROOM
PORTABLE CLASSROOM
PORTABLE CLASSROOM
64.0'
12.0'
12.0'
79.8'
24.0'
36.2'
20.0'
TYP.
EXISTING BUILDING
EXISTING BUILDING
EXISTING PROPERTY LINE
EXISTING PROPERTY LINE
12.0'
8.0'
18.5'
R2.0'
24.0'
R2.0'
5.0'
R5.0'
R1.5'
R2.5'
24.0'
R5.0'
R5.0'
R5.0'
R10.0'
18.5'
8.5'
(TYP.)
0 15 30 60
SCALE: 1" = 30'

SITE PLAN
GREENWAY PORTABLES
BEAVERTON, OREGON

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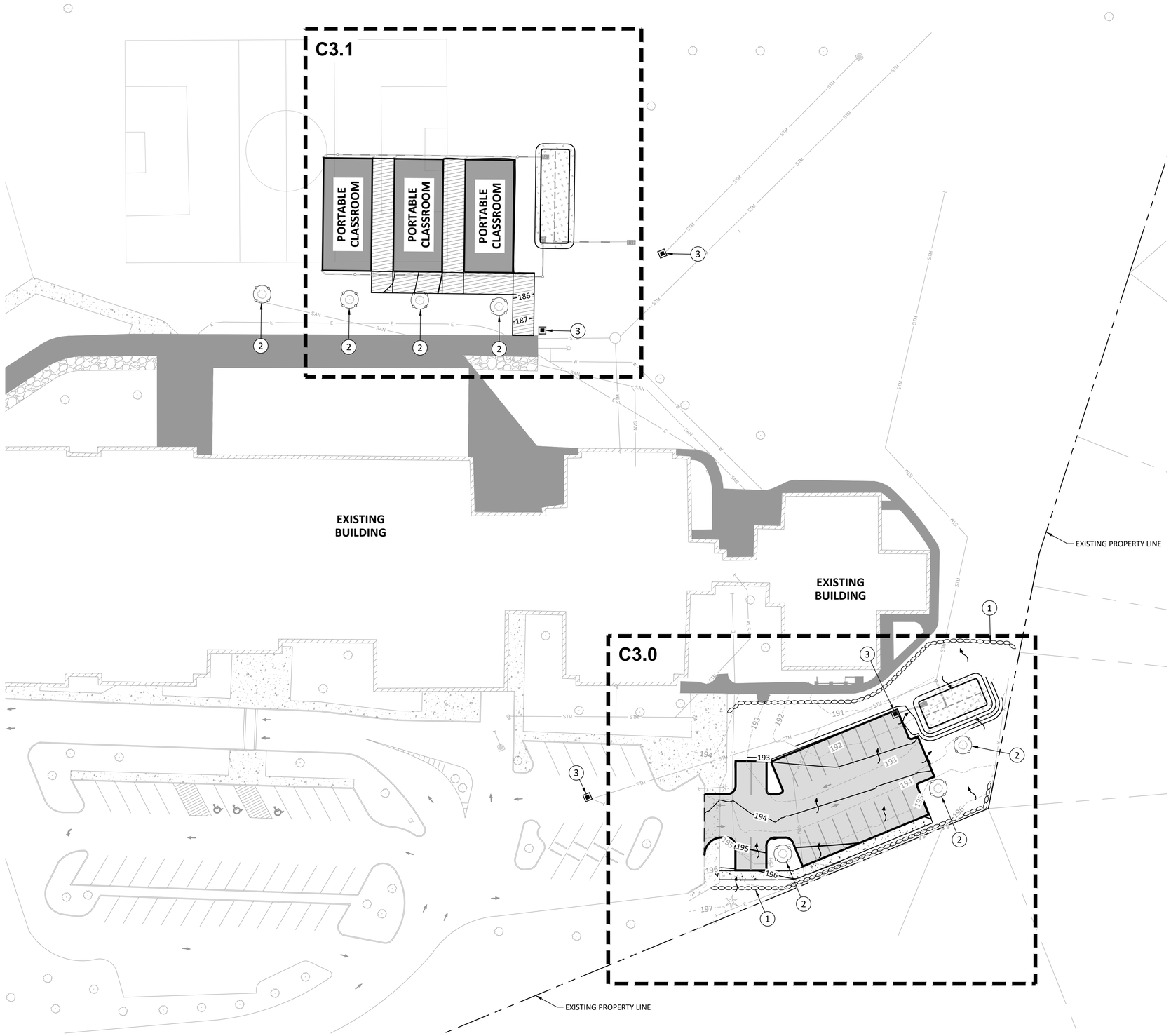
P:\01-Portland\BSD (Beaverton School District)\BSD-122 (Greenway Portables)\BSD122-DWGS\Sheets\SD\ BSD122-C2.1-Site Plan.dwg



CONSTRUCTION NOTES:

1. INSTALL STRAW WATTLES PER DETAIL ON SHEET C5.0.
2. INSTALL TREE PROTECTION FENCING.
3. INSTALL TYPE 4 OR 5 INLET PROTECTION PER DETAILS ON SHEET C5.0.

LEGEND

- STRAW WATTLES
- 100 EXISTING CONTOUR
- 101 PROPOSED MINOR CONTOUR
- 105 PROPOSED MAJOR CONTOUR
- TREE PROTECTION FENCE
- INLET PROTECTION
- FLOW DIRECTION

SCALE: 1" = 30'

OVERALL GRADING AND EROSION CONTROL PLAN

GREENWAY PORTABLES

BEAVERTON, OREGON

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ROBERT D. JAVAHERY
EXPIRES: 06/30/2025
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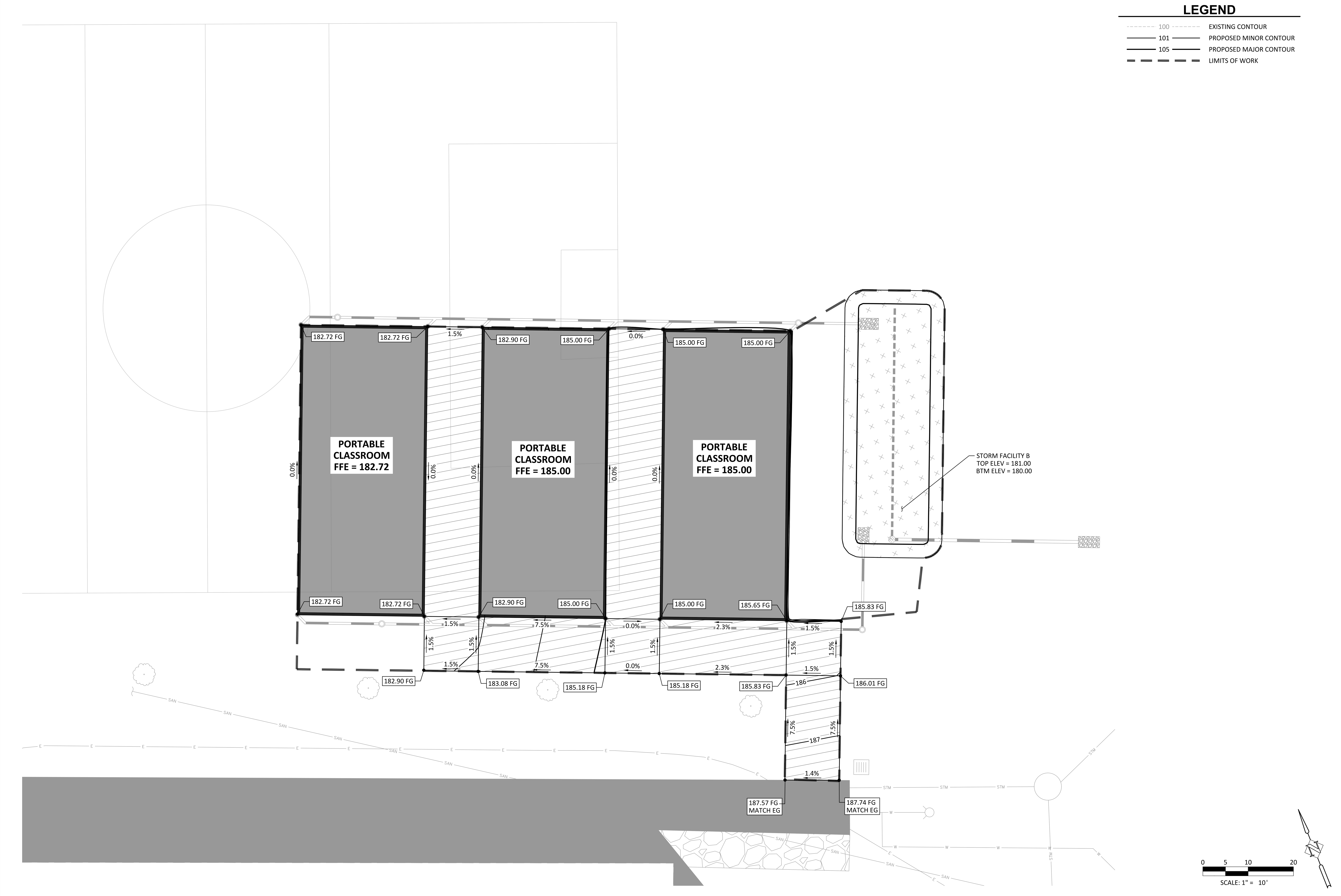
SHEET NO.

C3.0

JOB NO. BSD-122

P:\01-Portland\BSD (Beaverton School District)\BSD-122 (Greenway Portables)\BSD122-DWGS\Sheets\SD\ BSD122-C3.0-Overall Grading & ESC Plan.dwg



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GRADING PLAN
GREENWAY PORTABLES
BEAVERTON, OREGON

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SHEET NO.
C3.2

JOB NO.
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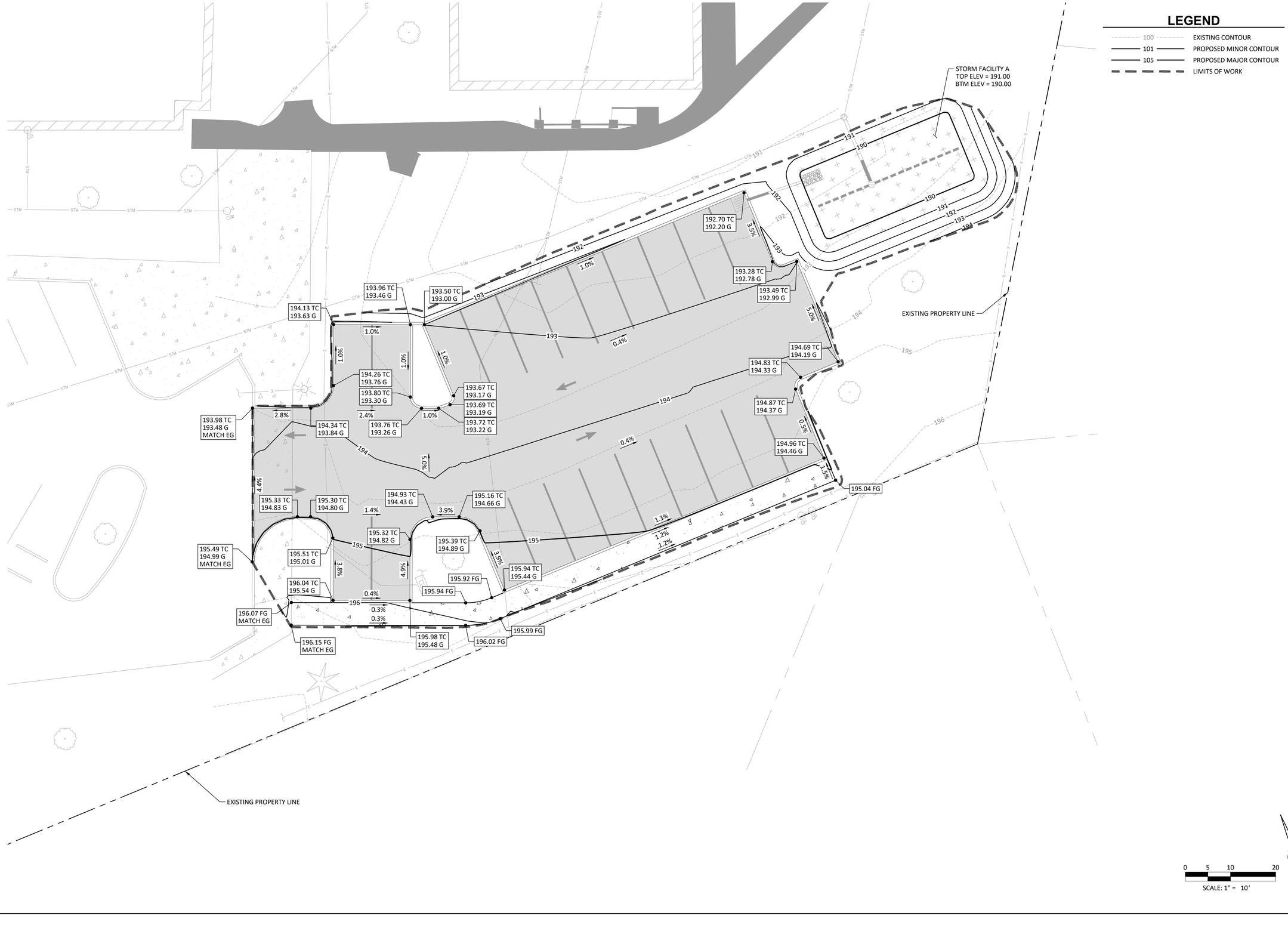

GRADING PLAN

GREENWAY PORTABLES

BEAVERTON, OREGON

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EXPIRES: 06/30/2025

NOT FOR CONSTRUCTION
PRELIMINARY

DESIGNED:	DRAWN:	CHECKED:	DATE:
HHPR	HHPR	BDJ	03/01/2024

REVISIONS

DATE	NO.	DESCRIPTION

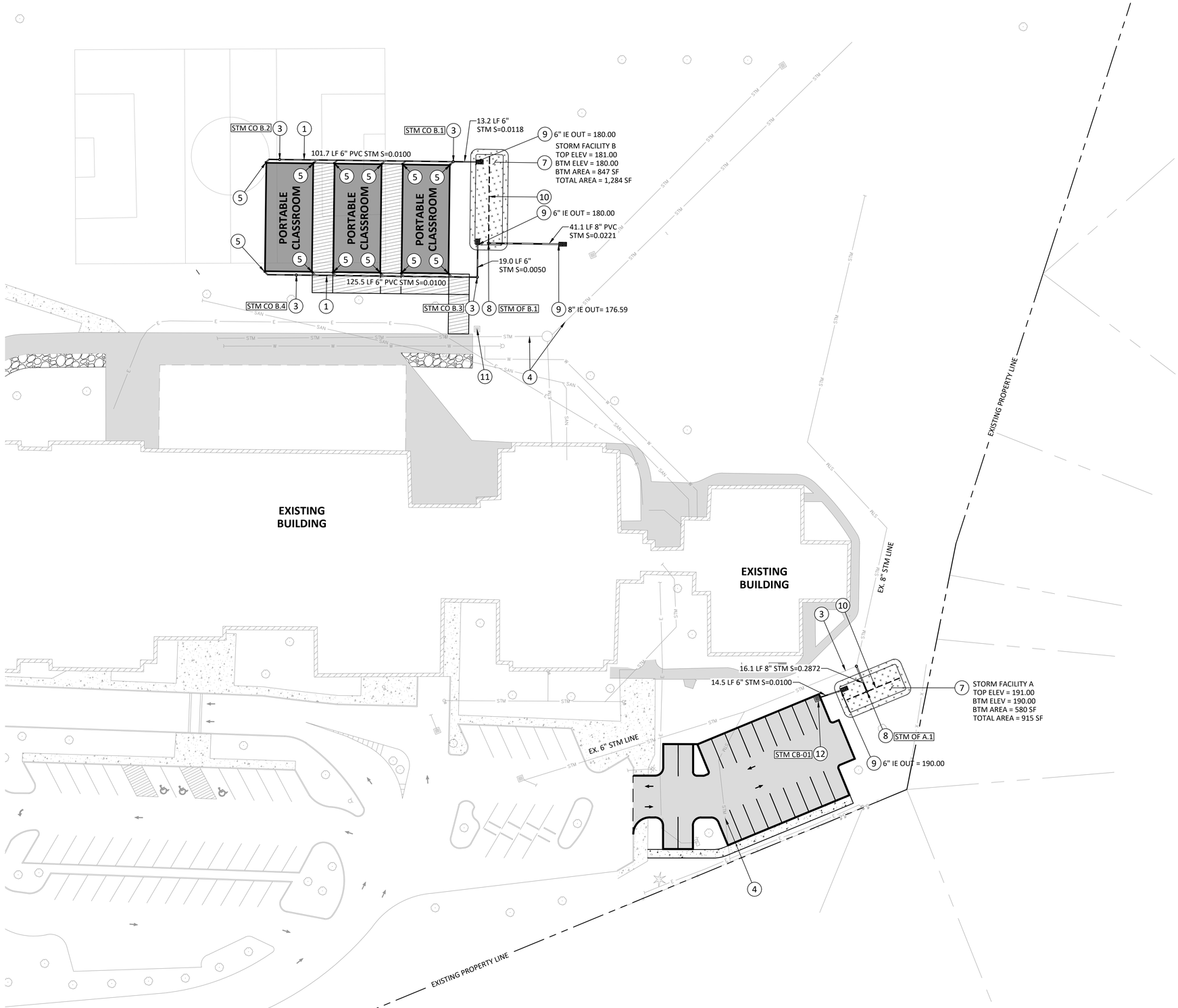
SHEET NO.

C3.1

JOB NO.

BSD-122

P:\01-Portland\BSD (Beaverton School District)\BSD-122 (Greenway Portables)\BSD122-DWGS\Sheets\SD\ BSD122-C3.1-Grading Plan.dwg



CONSTRUCTION NOTES:

1. INSTALL 6" PVC STORM MAIN. BACKFILL PER DETAIL ON SHEET C5.0.
3. CONSTRUCT STORM SEWER CLEANOUT PER DETAIL ON SHEET C5.0. SEE THIS SHEET FOR DATA.
4. PROTECT EXISTING STORM LINE.
5. ROOF DOWNSPOUT AND PIPING, COORDINATE LOCATION WITH BUILDING ROOF AND FLOOR PLANS. LAYOUT IS CONCEPTUAL - FINAL LAYOUT SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.
7. CONSTRUCT STORM RAIN GARDEN PER CWS STD. DWG. 725 ON SHEET C5.1.
8. CONSTRUCT OVERFLOW ATRIUM INLET PER DETAIL ON SHEET C5.1
9. CONSTRUCT RIPRAP STORM OUTFLOW PER CWS STD. DWG. 790 ON SHEET C5.1.
10. CONSTRUCT 6" PERFORATED STORM UNDERDRAIN PER CWS STD. DWG. 740 ON SHEET C5.1. STORM UNDERDRAIN SHALL BE A MINIMUM SLOPE OF 1.0%.
11. PROTECT EXISTING STORM STRUCTURE.
12. CONSTRUCT LYNCH STYLE CATCH BASIN PER DETAIL ON SHEET C5.1

STORM DRAINAGE DATA

NUMBER	DESCRIPTION	RIM ELEV.	INVERT ELEV.
STM CB-01	CATCH BASINS	192.28	6 " IE OUT (E) = 190.15
STM CO B.1	CLEANOUT	180.68	6 " IE IN (SW) = 180.16 6 " IE IN (W) = 180.16 6 " IE OUT (E) = 180.16
STM CO B.2	CLEANOUT	181.69	6 " IE OUT (E) = 181.18 6 " IE IN (W) = 181.18
STM CO B.3	CLEANOUT	180.62	6 " IE IN (W) = 180.10 6 " IE OUT (N) = 180.10
STM CO B.4	CLEANOUT	182.75	6 " IE OUT (E) = 181.16 6 " IE IN (W) = 181.16
STM OF A.1	OVERFLOW ATRIUM INLET	188.19	8 " IE OUT (N) = 186.25
STM OF B.1	OVERFLOW ATRIUM INLET	179.19	8 " IE OUT (SE) = 177.50

UTILITY PLAN

GREENWAY PORTABLES

BEAVERTON, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
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phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 9, 1999
ROBERT D. JANSEN
EXPIRES: 06/30/2025

NOT FOR CONSTRUCTION
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DOCUMENT SET - 1 OF 1

DESIGNED:	DRAWN:	CHECKED:	DATE:
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REVISIONS

NO.	DESCRIPTION	DATE

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BSD-122

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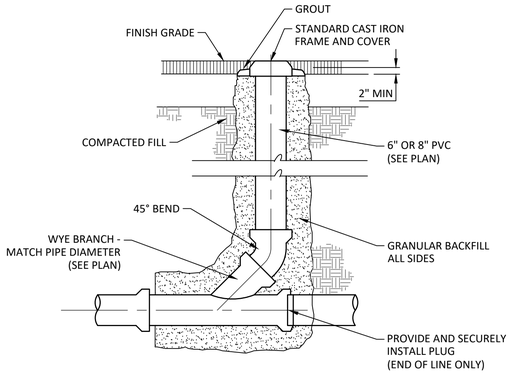
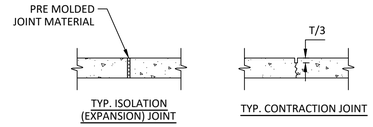


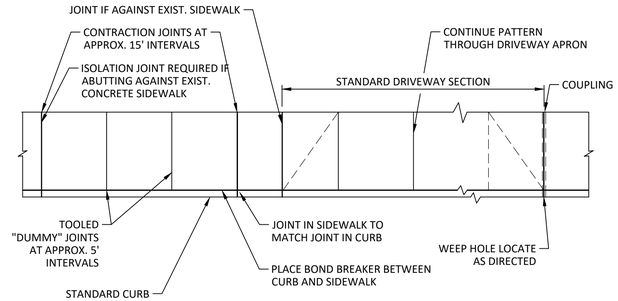
NOTE:
NOTE: CAST IRON FRAME AND COVER SHALL BE VALLEY IRON & STEEL CO. NO.'S 202 (6") OR 203 (8") OR APPROVED EQUAL.

STANDARD CLEANOUT
NTS



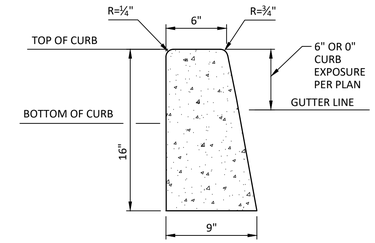
NOTE:
ALL JOINTS TO BE TOOLED WITH 1/2" RADIUS UNLESS SAWCUT

CONCRETE PAVEMENT JOINTS

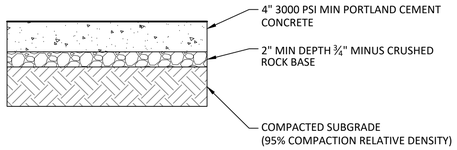


NOTE:
SIDEWALKS 8 FEET AND WIDER SHALL HAVE A LONGITUDINAL CONTRACTION JOINT AT THE MIDPOINT.

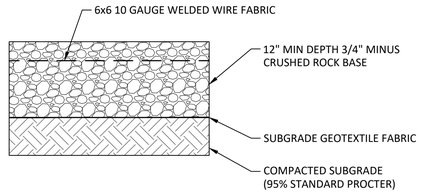
CONCRETE SIDEWALK
NTS



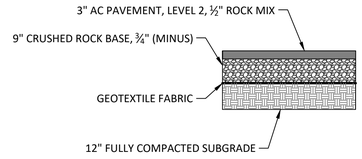
STANDARD CURB
NTS



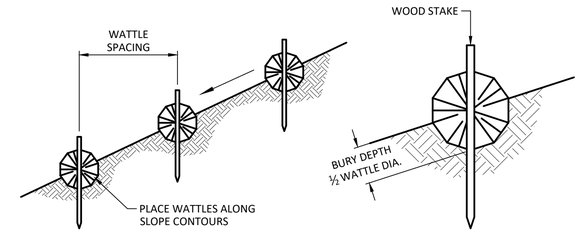
CONCRETE SECTION
NTS



REINFORCED GRAVEL SECTION (VEHICLE AREAS)
NTS

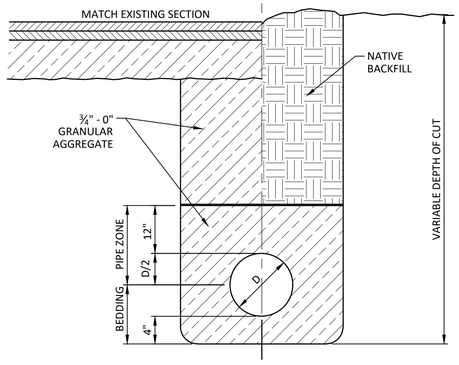


AC PAVEMENT SECTION
NTS

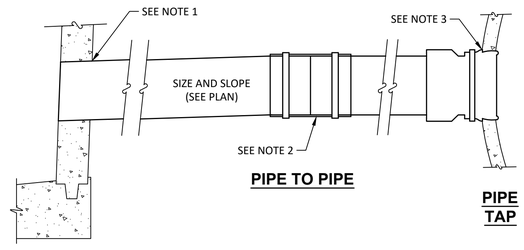


PROFILE SECTION

PAVED AREAS **NON-PAVED AREAS**

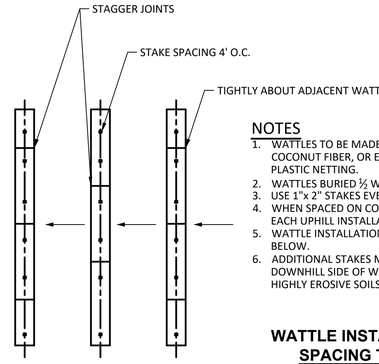


PIPE BEDDING AND BACKFILL TYPICAL SECTION
NTS



NOTES:
1. BREAK OUT WALL 2" MIN., 4" MAX. CLEAR OF PIPE WALL. GROUT SPACE WITH NON-SHRINK GROUT. FOR SANITARY CONNECTION INSTALL SAND COLLAR AS DIRECTED BY WATER ENVIRONMENT SERVICES (WES).
2. USE "FERNCO" FLEXIBLE COUPLING WITH STAINLESS STEEL CLAMPS OR APPROVED EQUAL AS REQUIRED.
3. CUT HOLE INTO PIPE AND INSTALL "FOWLER" SEWER BOOT TAP OR APPROVED EQUAL.

PIPE CONNECTION
NTS



PLAN VIEW

NOTES
1. WATTLES TO BE MADE FROM RICE STRAW, WOOD, COCONUT FIBER, OR EXCELSIOR PLACED WITHIN A PLASTIC NETTING.
2. WATTLES BURIED ½ WATTLE DIAMETER.
3. USE 1"x 2" STAKES EVERY 4' O.C.
4. WHEN SPACED ON CONTOUR, STAGGER JOINTS ON EACH UPHILL INSTALLATION.
5. WATTLE INSTALLATION SPACING PER TABLE BELOW.
6. ADDITIONAL STAKES MAY BE REQUIRED ON DOWNHILL SIDE OF WATTLES ON STEEP SLOPES OR HIGHLY EROSIVE SOILS.

WATTLE INSTALLATION SPACING TABLE

% SLOPE	SPACING SLOPE	(MAX)
<10%	<10:1	300'
10%>X<15%	10:1>X<7.5:1	150'
15%>X<20%	7.5:1>X<5:1	100'
20%>X<30%	5:1>X<3.5:1	50'
30%>X<50%	3.5:1>X<2:1	25'

EROSION AND SEDIMENT CONTROL WATTLE DETAIL
NTS

DETAILS
GREENWAY PORTABLES
BEAVERTON, OREGON

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REGISTERED PROFESSIONAL ENGINEER OREGON JULY 17, 2001 ROBERT D. JOHNSON
PRELIMINARY NOT FOR CONSTRUCTION
EXPIRES: 06/30/2025

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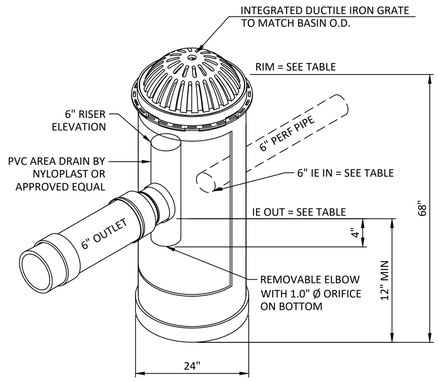
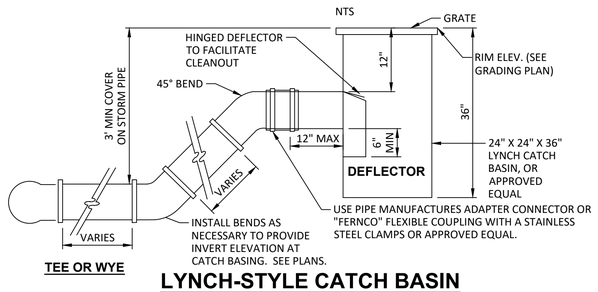


NOTES:

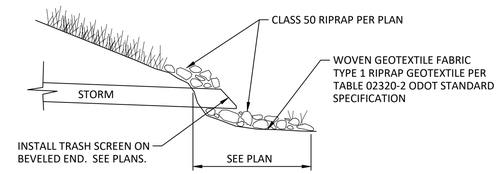
1. TRAP TO BE REMOVABLE TO ALLOW FOR FULL ACCESS TO OUTLET PIPE. FRAMES, GRATES, HOODS, & BASE PLATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2. THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS II MATERIAL AS DEFINED IN ASTM D2321.
3. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.
4. PVC AREA DRAIN BASIN SHALL BE OREGON PLUMBING CODE APPROVED.

ATRIUM INLET
NTS

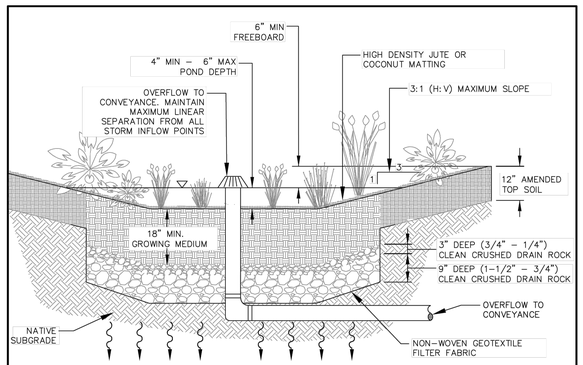


TEE OR WYE

LYNCH-STYLE CATCH BASIN
NTS



STORM/ROCK OUTFALL
NTS



NOTES:

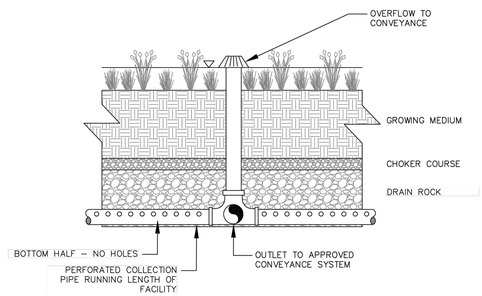
1. PROVIDE OVERFLOW CONVEYANCE SYSTEM, OVERFLOW CONVEYANCE HEIGHT TO ALLOW 4" MINIMUM – 6" MAXIMUM PONDING, PIPING TO A MINIMUM OF THE PLUMBING CODE OR CONVEY THE 25 YEAR STORM.
2. IF USING THE NATIVE SOIL INFILTRATION FOR SIZING, THE RATE SHALL BE DETERMINED BY ASTM STANDARD TESTING METHODS.
3. FLOW DISSIPATERS SHOULD BE USED IF ENTRY SLOPE TO THE BASIN IS GREATER THAN 3:1. FLOW DISSIPATERS SHALL BE CONSTRUCTED OUT OF ROCK OR GRAVEL PER DESIGN FLOW VELOCITY AT ENTRY OF THE FACILITY.
4. TREATMENT AREA SHALL HAVE HIGH DENSITY JUTE OR COCONUT MATTING OVER 18" MINIMUM OF GROWING MEDIUM OR BASE STABILIZATION METHOD AS APPROVED BY THE DISTRICT.
5. VEGETATION TO BE USED IN WET AREAS OF THE BASIN IS PER APPENDIX "A" FOR THE WET MOISTURE CONDITIONS.
6. VEGETATION TO BE USED IN OTHER AREAS OF BASIN CONFORMS TO PLANT LIST OF THIS HANDBOOK AS APPROVED BY DISTRICT.

NON–STRUCTURAL INFILTRATION PLANTER/RAIN GARDEN

DRAWING NO. 725 REVISED 10–31–19

Clean Water Services

PERFORATED PIPE MANIFOLD PROFILE



PIPING NOTES:

FOR PRIVATE PROPERTY, PIPING MUST BE CAST IRON, ABS SCH40, OR PVC SCH40. THREE–INCH PIPE IS REQUIRED FOR FACILITIES DRAINING UP TO 1,500 SQUARE FEET OF IMPERVIOUS AREA; OTHERWISE 4–INCH PIPE MINIMUM IS REQUIRED. PIPING INSTALLATION AND SIZING MUST FOLLOW CURRENT UNIFORM PLUMBING CODE.

FOR PUBLIC FACILITIES, 6–INCH OR 8–INCH ASTM 3034 SDR 35 PVC PIPE AND PERFORATED PIPE ARE REQUIRED.

NOTES:

1. BRANCH SPACING AND NUMBER OF BRANCHES TO BE CALCULATED BASED ON STORM FLOWS FROM IMPERVIOUS AREA BEING TREATED.
2. NO TREES OR DEEP ROOTED VEGETATION OVER PIPING.
3. GRADE SUBGRADE TO PROVIDE MANIFOLD WITH POSITIVE DRAINAGE.
4. CONVEYANCE SIZED AT MINIMUM FOR 25 YEAR EVENT STORM FLOWS.
5. DETENTION (IF REQUIRED) VOLUME BASED ON DEPTH OF DRAIN ROCK RESERVOIR LAYER AND POSITION OF MANIFOLD WITHIN THE DRAIN ROCK LAYER.
6. FITTINGS TO BE SAME MATERIAL AS PERFORATED PIPE.
7. PIPE SECTIONS EXPOSED TO SUNLIGHT SHALL BE OF MATERIAL NOT SUBJECT TO DEGRADATION FROM THE EFFECTS OF SUNLIGHT.

PERFORATED PIPE DETAILS

DRAWING NO. 740 REVISED 10–31–19

Clean Water Services

RIPRAP:

- ROCK FOR RIPRAP SHALL BE ANGULAR IN SHAPE.
- THICKNESS OF A SINGLE ROCK SHALL NOT BE LESS THAN ONE-THIRD ITS LENGTH.
- ROUNDED ROCK WILL NOT BE ACCEPTED UNLESS APPROVED BY THE DISTRICT.

RIPRAP INSTALLATION:

- EXCAVATE BELOW FINISH GRADE TO DEPTH & DIMENSIONS SHOWN ON APPROVED PLANS.
- INSTALL WOVEN GEOTEXTILE FABRIC.
- PLACE RIP RAP TO FINISH GRADE.

- GRADE RIPRAP SHALL BE THE CLASS AND SIZE OF ROCK ACCORDING TO THE FOLLOWING:

CLASS 50	CLASS 100	CLASS 200	CLASS 700	CLASS 2000	
		WEIGHT OF ROCK (LBS)			PERCENT (BY WEIGHT)
50-30	100-60	200-140	700-500	2000-1400	20
30-15	60-25	140-80	500-200	1400-700	30
15-2	25-2	80-8	200-20	700-40	40
2-0	2-0	8-0	20-0	40-0	10

RIP RAP DETAILS

DRAWING NO. 790 REVISED 10–31–19

Clean Water Services

DETAILS
GREENWAY PORTABLES
BEAVERTON, OREGON

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REGISTERED PROFESSIONAL ENGINEER OREGON JULY 10, 2009 ROBERT D JACOBSON
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BSD-122

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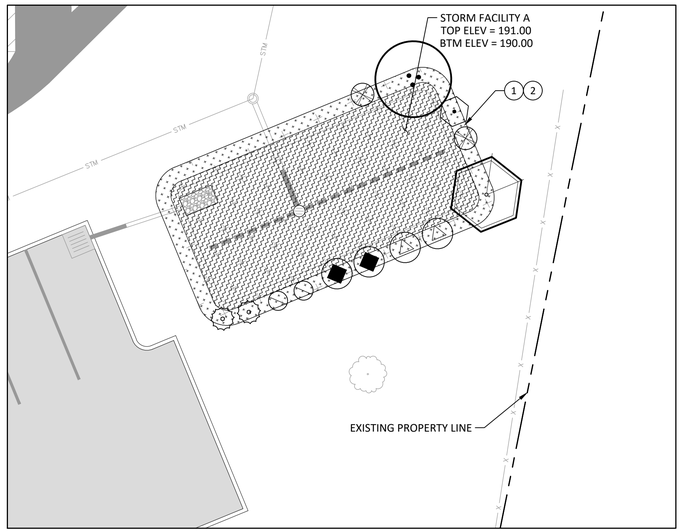
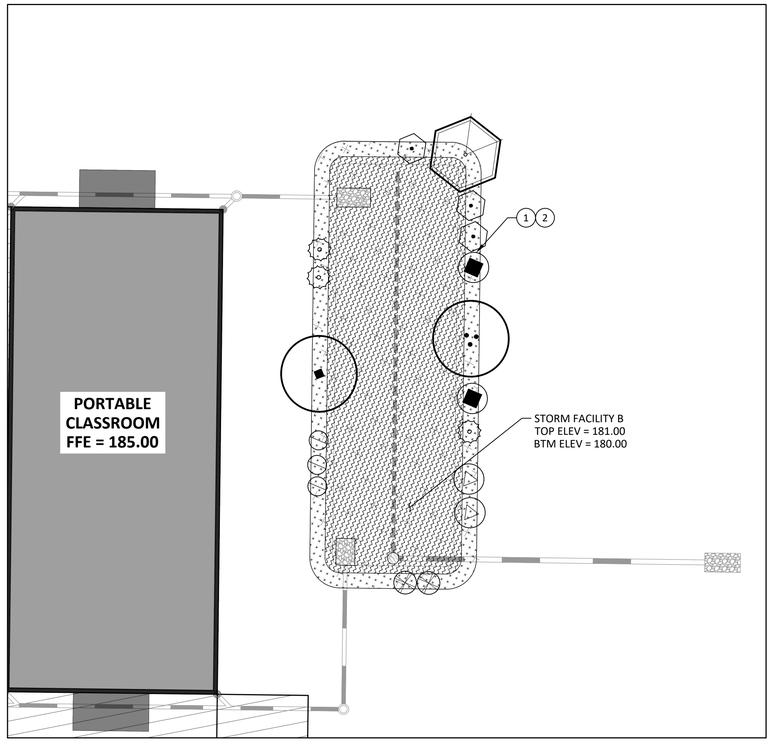
CONSTRUCTION NOTES:

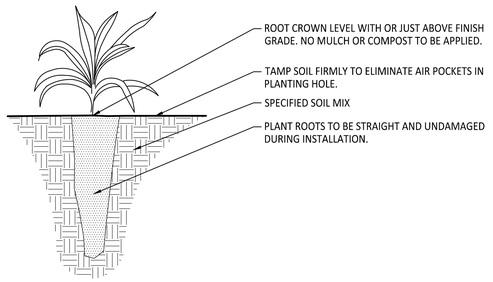
1. PLACE 12" STORMWATER FACILITY BLENDED SOIL IN FACILITIES PER CWS DETAIL #798.
2. PLACE 3" BARK MULCH IN ZONE B, TYP. NO MULCH IN ZONE A.



2 STORM FACILITY A
PLAN
Scale: 1"-10'-0"



1 STORM FACILITY B
PLAN
Scale: 1"-10'-0"



NOTE:
CREATE PLANTING HOLE BY DRIVING A STEEL SPIKE OR DIBBLE INTO THE GROUND AND WORKING BACK AND FORTH.

3 PLUG PLANTING
Section
NOT TO SCALE

CWS STORM WATER BASINS

FACILITY NUMBER	SW FACILITY SF	ZONE A SF	ZONE B SF	ZONE A PLUGS (6 / SF)	ZONE B SHRUBS	ZONE B TREES
A	915	686	229	4116	11	2
B	1284	986	298	5916	15	3
TOTAL	2199	1672	527	10032	26	5

STORMWATER TREATMENT - PRIVATE

ZONE A (WET)

2,508	Carex obnupta - Slough Sedge
2,508	Carex densa - Dense Sedge
2,508	Juncus patens - Spreading Rush
2,508	Deschampsia cespitosa - Tufted Hair Grass
1"x6" PLUG	6 PLUGS PER SF

ZONE B (SEMI-WET/DRY)

2	Crataegus douglasii - Douglas Hawthorne
2 GAL.	WELL BRANCHED, 2' MIN. HEIGHT
2	Rhamnus purshiana - Cascara
2 GAL.	WELL BRANCHED, 2' MIN. HEIGHT
1	Acer circinatum - Vine Maple
2 GAL.	WELL BRANCHED, 2' MIN. HEIGHT
141	Salix purpureana 'Nana' - Purple Willow
1 GAL	CONT., FULL PLANTS, SPACING AS SHOWN
137	Cornus serica 'Kelseyi' - Kelsey Dogwood
1 GAL	CONT., FULL PLANTS, SPACING AS SHOWN
127	Spiraea douglasii - Douglas Spirea
1 GAL	CONT., FULL PLANTS, SPACING AS SHOWN
70	Rosa nutkana - Nootka Rose
1 GAL	CONT., FULL PLANTS, SPACING AS SHOWN
145	Mahonia nervosa - Cascade Oregon Grape
1 GAL	CONT., FULL PLANTS, 4" MIN. HEIGHT
21	Symphoricarpos albus - Snowberry
1 GAL	CONT., FULL PLANTS, 1.5' MIN. HEIGHT
1644	Arctostaphylos uva-ursi - Kinnikinnick
#SP4	CONT., FULL PLANTS, 36" O.C.

0 5 10 20
SCALE: 1" = 10'

PLANTING PLAN
GREENWAY PORTABLES
BEAVERTON, OREGON

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OREGON
JANUARY 9, 2009
ROBERT D. JACOBSEN
EXPIRES: 06/30/2025

PRELIMINARY NOT FOR CONSTRUCTION

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DRAWN:	HHPR	DATE:	02/28/2024

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BSD-122

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PLANTING NOTES:

PLANTING METHODS, QUANTITIES AND PLACEMENT

1. DEEP ROOTING TREES AND SHRUBS SHALL NOT BE PLANTED ON TOP OF CONCRETE PIPES OR WITHIN 10 FEET OF RETAINING WALLS, INLET/OUTLET STRUCTURES OR OTHER CULVERTS.

2. LARGE TREES OR SHRUBS SHALL NOT BE PLANTED ON BERMS OVER 4 FEET TALL THAT IMPOUND WATER. SMALL TREES OR SHRUBS WITH FIBROUS ROOT SYSTEMS MAY BE INSTALLED ON BERMS THAT IMPOUND WATER AND ARE LESS THAN 4 FEET TALL.

3. CONTAINERIZED STOCK SHALL BE INSTALLED ONLY FROM FEBRUARY 1 THROUGH MAY 1 AND OCTOBER 1 THROUGH NOVEMBER 15. IF PLANTING OUTSIDE OF THESE TIMES IS PROPOSED, CONTRACTOR SHALL SUBMIT PROCEDURES OF ADDITIONAL MEASURES TO BE IMPLEMENTED TO ENSURE SURVIVAL.

ACCESS, MONITORING AND MAINTENANCE

1. STORMWATER FACILITIES ACCESS SHALL MEET REQUIREMENTS PER CLEAN WATER SERVICES DESIGN AND CONSTRUCTION STANDARDS, CHAPTER 4, SECTION 4.02.4.

2. CONTRACTOR SHALL PROVIDE MONITORING AND MAINTENANCE FOR A PERIOD OF 2 YEARS FOLLOWING SUBSTANTIAL COMPLETION AND ACCEPTANCE FROM DISTRICT.

3. CONTRACTOR SHALL SUBMIT MAINTENANCE SCHEDULE, INCLUDING RESPONSIBLE PARTY, CONTACT INFORMATION, DATES OF INSPECTION (MINIMUM 3 PER GROWING SEASON, AND ONE PRIOR TO ONSET OF GROWING SEASON) AND ESTIMATED MAINTENANCE SCHEDULE THROUGHOUT THE 2-YEAR MONITORING PERIOD.

4. CONTRACTOR SHALL INSPECT THE SITE WITH PROJECT ENGINEER OR OWNER'S REPRESENTATIVE DURING SCHEDULED SITE VISITS. PLANTINGS SHALL BE EVALUATED AND REPLACED AS NECESSARY TO ENSURE A MINIMUM 80% SURVIVAL RATE OF THE INSTALLATION AND 90% AERIAL COVERAGE.

5. NON-NATIVE, INVASIVE PLANT SPECIES SHALL BE REMOVED WHEN OCCUPYING GREATER THAN 20% OF THE SITE.

6. STORMWATER FACILITY SHALL BE RE-EXCAVATED AND PLANTED IF SILTATION GREATER THAN 3 INCHES IN DEPTH OCCURS WITHIN THE 2-YEAR MAINTENANCE PERIOD.

MULCHING AND IRRIGATION

1. TREES, SHRUBS AND GROUNDCOVERS PLANTED IN UPLAND AREAS SHALL BE MULCHED A MINIMUM 3" DEPTH AND 18" DIAMETER. APPROPRIATE MULCHES SHALL BE DERIVED FROM COMPOSTED BARK OR LEAVES THAT HAVE NOT BEEN CHEMICALLY TREATED. ORGANIC MULCH SHALL NOT BE USED IN FREQUENTLY INUNDATED AREAS (SWALE TREATMENT AREA).

2. CONTRACTOR SHALL SUBMIT SUPPLEMENTAL WATERING PLAN FOR APPROVAL BY DISTRICT/CITY. CONTRACTOR SHALL HAND WATER FOR A MINIMUM 2-YEAR PLANT ESTABLISHMENT PERIOD. WATERING SHALL BE A MINIMUM RATE OF 1 INCH PER WEEK FROM JUNE 15 THROUGH OCTOBER 15.

EROSION CONTROL

1. INSTALL AND/OR MAINTAIN EROSION CONTROL SYSTEMS IN ACCORDANCE WITH CLEAN WATER SERVICES STANDARDS PRIOR TO SITE WORK AND LANDSCAPE INSTALLATION.

2. GRADING, SOIL PREPARATION, AND SEEDING SHALL BE PERFORMED DURING OPTIMAL WEATHER CONDITIONS AND AT LOW FLOW LEVELS TO MINIMIZE SEDIMENT IMPACTS.

3. SITE DISTURBANCE SHALL BE MINIMIZED AND DESIRABLE NATIVE VEGETATION RETAINED WHERE POSSIBLE.

4. BIODEGRADABLE FABRICS SUCH AS BURLAP MAY BE USED TO SECURE PLANT PLUGS IN PLACE AND TO DISCOURAGE FLOATING UPON INUNDATION.

5. PLASTIC MESH THAT CAN ENTANGLE WILDLIFE IS NOT PERMITTED.

WATER QUALITY PLANTING GENERAL NOTES

1. ALL INVASIVE, NON-NATIVE OR NOXIOUS PLANT MATERIAL IS TO BE REMOVED. METHODS FOR REMOVAL AND CONTROL OF INVASIVE/NON-NATIVE AND/OR NOXIOUS PLANTS ARE TO FOLLOW STRATEGIES AS OUTLINED WITHIN THE *CWS IVAM GUIDANCE* MANUAL. THE SUBJECT SITE IS TO EMPLOY MANUAL/MECHANICAL MANAGEMENT STRATEGIES AND PESTICIDE MANAGEMENT STRATEGIES THROUGHOUT MAINTENANCE PERIOD OR UNTIL HEALTHY STAND OF DESIRABLE VEGETATION IS ESTABLISHED.

2. PRESERVE SITE'S EXISTING NATIVE VEGETATION TO THE MAXIMUM EXTENT PRACTICABLE. EVERY EFFORT SHALL BE MADE TO PROTECT A SITE'S EXISTING NATIVE VEGETATION. NATIVE VEGETATION ALONG SENSITIVE AREAS AND VEGETATED CORRIDORS SHALL BE RETAINED TO THE MAXIMUM EXTENT PRACTICABLE

3. REPLANTING/ENHANCEMENT AS FOLLOWS:
   - REFER TO PLANT TABLE AND PLAN FOR PLANT SPECIES, LOCATION, DISTRIBUTION, QUANTITIES, SIZE, CONDITION AND REQUIREMENTS.
   - A NATIVE SEED MIX HAS BEEN SPECIFIED FOR THE BUFFER AREA ONLY. ALL PLANTS TO BE PIT PLANTED WITH ADDITIONAL ORGANIC MATTER IF REQUIRED BUT NO TRADITIONAL FERTILIZER IS NECESSARY. PLANT PLACEMENT SHALL BE CONSISTENT WITH THE FORM OF THE NATURALLY OCCURRING PLANT COMMUNITY. SHRUBS SHALL BE PLACED IN SINGLES OR CLUSTERS OF THE SAME SPECIES TO PROVIDE A NATURAL PLANTING SCHEME.

4. PLANT INSTALLATION REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF SITE PLANTING AS SPECIFIED. ALL TREES AND SHRUBS PLANTED IN THE UPLAND AREA ARE TO BE MULCHED A MINIMUM OF THREE INCHES IN DEPTH AND 18 INCHES IN DIAMETER. APPROPRIATE MULCHES INCLUDE THOSE MADE FROM COMPOSTED LEAVESA OR BARK THAT HAVE NOT BEEM CHEMICALLY TREATED. TEMPORARY IRRIGATION WILL BE PROVIDED AND USED DURING THE TWO YEAR MAINTENANCE PERIOD.

5. MONITORING AND MAINTENANCE. CONTRACTOR IS RESPONSIBLE FOR MONITORING AND MAINTAINING THE SITE. ALL NEW PLANT MATERIAL IS TO BE TAGGED. THE REMOVAL OF NON-NATIVE, INVASIVE WEEDS IS NECESSARY THROUGHOUT THE TWO YEAR MAINTENANCE PERIOD, OR UNTIL A HEALTHY STAND OF DESIRABLE VEGETATION IS ESTABLISHED. THE SITE IS TO BE MONITORED A MIN. OF 4 TIMES PER YEAR, OR 3 TIMES PER GROWING SEASON. IF AT ANY TIME THE LANDSCAPING FALLS BELOW THE 80% SURVIVAL LEVEL, THE CONTRACTOR SHALL REINSTALL ALL DEFICIENT PLANTING AT THE NEXT APPROPRIATE OPPORTUNITY AND THE TWO YEAR MAINTENANCE PERIOD SHALL BEGIN AGAIN FROM THE DATE OF THE REPLANTING.

6. PLANT TIMING. CONTAINERIZED STOCK SHALL BE INSTALLED ONLY FROM FEBRUARY 1 THROUGH MAY 1 AND OCTOBER 1 THROUGH NOVEMBER 15. BARE ROOT STOCK SHALL BE INSTALLED ONLY FROM DECEMBER 15 THROUGH APRIL 15. PLANTINGS OUTSIDE THESE TIMES MAY REQUIRE ADDITIONAL MEASURES TO ENSURE SURVIVAL WHICH SHALL BE SPECIFIED ON THE PLANS.

SITE PREPARATION

1. CONTRACTOR SHALL REMOVE ALL WEEDS AND INVASIVE SPECIES PRIOR TO PLANTING. ALL SEEDED AREAS SHALL BE STRIPPED OF VEGETATION, SCARIFIED AND RECEIVE 4" OF TOPSOIL PRIOR TO APPLICATION OF SEED.

2. FOR UPLAND SITES WITH AT LEAST ONE FOOT OF NATIVE TOPSOIL, BUT CONTAINING A NON-NATIVE, INVASIVE SEED BANK OR PLANTS, REMOVE THE UNDESIRABLE PLANTS, ROOTS, AND SEEDS PRIOR TO PLANTING.

3. ALL PLANTING ISLANDS, BUFFER PLANTINGS AND GROUND COVER BEDS SHALL BE SCARIFIED 12" BELOW FINISHED GRADE AND HAVE 12" OF TOPSOIL ADDED TO BRING BACK TO FINISHED GRADE PRIOR TO PLANTING.

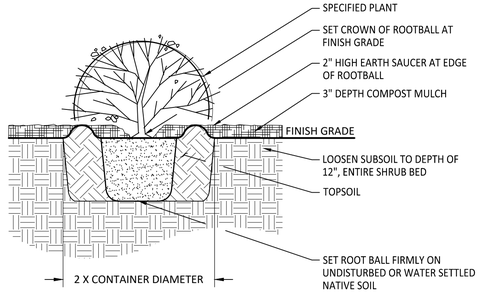
4. FOR UPLAND SITES WITH EITHER DISTURBED AND COMPACTED SOILS OR LESS THAN ONE FOOT OF TOPSOIL AND INVIASIVE, NON-NATIVE SEED BANK OR PLANTS THAT HAVE BECOME ESTABLISHED:
   - 4.1. REMOVE UNDESIRABLE PLANTS, ROOTS, AND SEEDS PRIOR TO ADDING TOPSOIL.
   - 4.2. TILL SUB-GRADE IN THESE AREAS TO DEPTH OF AT LEAST FOUR INCHES AND ADD 12" MINIMUM CLEAN COMPOST-AMENDED TOPSOIL. COMPOST AMENDED TOPSOIL SHALL HAVE THE FOLLOWING CHARACTERISTICS:
     - 4.2.1. TEXTURE: MATERIAL PASSES THROUGH 1-INCH SCREEN
     - 4.2.2. FERTILITY: 35% ORGANIC MATTER
   - 4.3. IN THE EVENT OF FLOODPLAIN GRADING, OVER-EXCAVATE SUB-GRADE TO ENSURE 12 INCHES OF TOPSOIL CAN BE APPLIED WITHOUT IMPACTING SURFACE WATER ELEVATIONS.

5. WHERE APPROPRIATE AND NECESSARY FOR EROSION CONTROL OR TO ENHANCE ORGANIC MATTER, LEAF COMPOST MAY BE PLACED UNIFORMLY ON TOPSOIL (REFER TO CHAPTER 6 , CLEAN WATER SERVICE DESIGN AND CONSTRUCTION STANDARDS). OTHER AMENDMENTS, CONDITIONERS, AND BIO-AMENDMENTS MAY BE ADDED AS NEEDED TO SUPPORT SPECIFIED PLANTS OR ADJUST SOIL pH. CONVENTIONAL FERTILIZERS (N-P-K) SHALL NOT BE USED FOR NATIVE PLANTINGS.

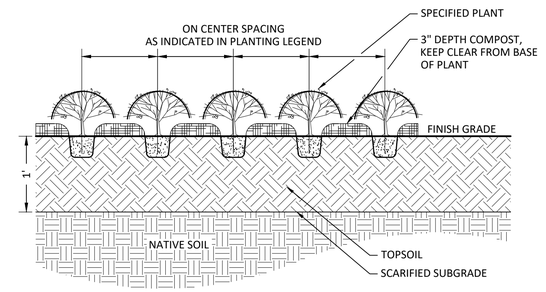
MAINTENANCE

1. CONTRACTOR SHALL PROVIDE MONITORING AND MAINTENANCE OF MITIGATION PLANTINGS AND VEGETATED CORRIDOR FOR A PERIOD OF 2 YEARS FOLLOWING SUBSTANTIAL COMPLETION AND ACCEPTANCE.

NOTE:
PROVIDE 36" DIAMETER MULCH OR COMPOST RING, AS SPECIFIED.

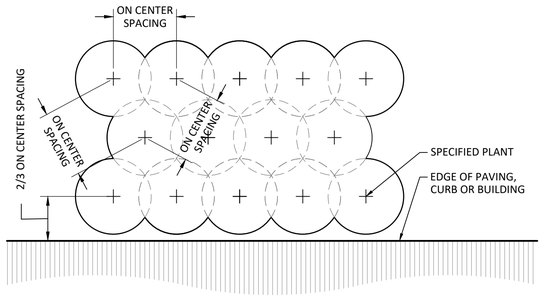


3 SHRUB PLANTING
Section — NOT TO SCALE

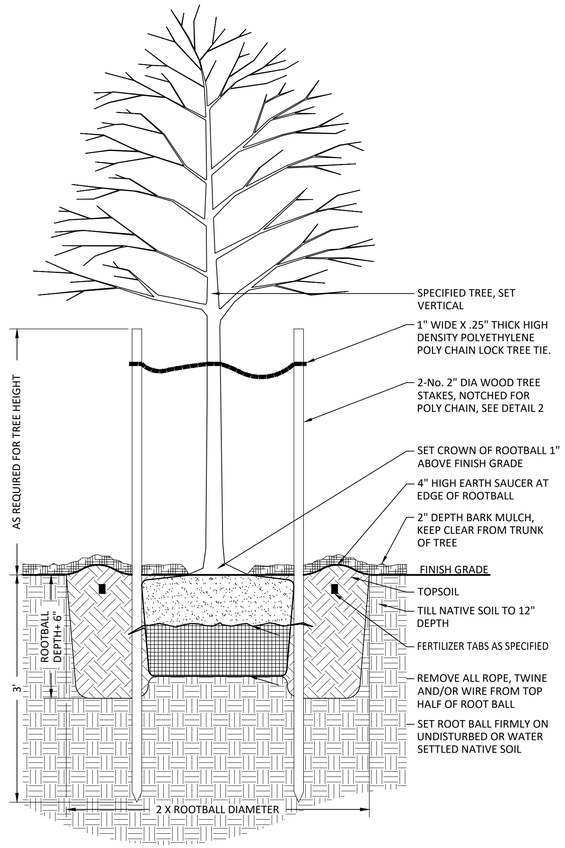


4 GROUNDCOVER PLANTING
Section — NOT TO SCALE

NOTE:
ON CENTER SPACING SHALL BE AS INDICATED IN PLANTING LEGEND.

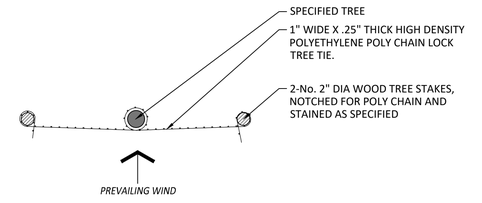


5 TRIANGULAR SPACING
Plan — NOT TO SCALE



1 DECIDUOUS TREE PLANTING
Section — NOT TO SCALE

NOTE:
WRAP POLY CHAIN AROUND NOTCHED STAKE AND LOCK TO SECURE. WRAP CENTER OF POLY CHAIN AROUND TREE TRUNK TO MOVE 3" IN ALL DIRECTIONS.



2 TREE STAKING
Plan — NOT TO SCALE

PLANTING PLAN
GREENWAY PORTABLES
BEAVERTON, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS★PLANNERS
LANDSCAPE ARCHITECTS★SURVEYORS
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REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 13, 2007
ROBERT D. JANSEN
EXPIRES: 06/30/2025
PRELIMINARY NOT FOR CONSTRUCTION

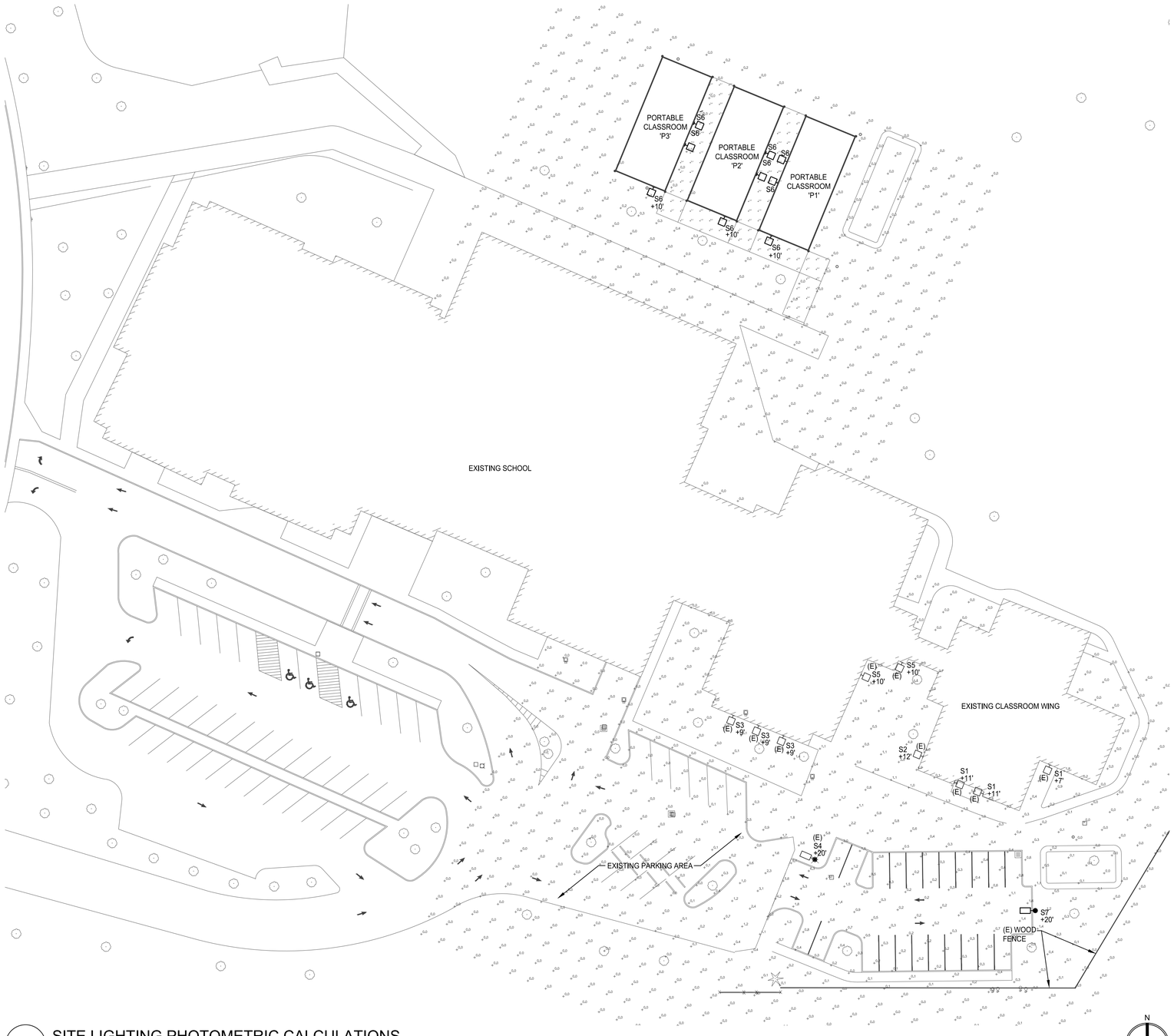
DESIGNED:	HHPR	DESCRIPTION	DATE
DRAWN:	HHPR		
CHECKED:	BDJ		
DATE:	02/28/2024		

REVISIONS

SHEET NO.
L1.1

JOB NO.
BSD-122

P:\01-Portland\BSD (Beaverton School District)\BSD-122 (Greenway Portables)\BSD122-DWGS\Sheets\SD\ BSD122-L1.0Planting Plan.dwg



LIGHTING FIXTURE INDEX

DWG	DESCRIPTION
S1	(E) OUTDOOR RATED WALL PACK (24VA)
S2	(E) OUTDOOR RATED WALL PACK (41VA) ATLAS WLM SERIES OR APPROVED EQUAL
S3	(E) OUTDOOR RATED SQUARE LED CANOPY DOWNLIGHT (36VA) LITHONIA CNY SERIES OR APPROVED EQUAL
S4	(E) POLE MOUNTED AREA LIGHT (462VA) LITHONIA KSE2 SERIES OR APPROVED EQUAL
S5	(E) OUTDOOR RATED FULL-CUTOFF WALL PACK (44VA) WAREHOUSE LIGHTING WLFC SERIES OR APPROVED EQUAL
S6	OUTDOOR RATED WALL PACK (15VA) STONCO LPW16 SERIES OR APPROVED EQUAL
S7	POLE MOUNTED AREA LIGHT (27 VA) GARDCO P15 SERIES OR APPROVED EQUAL

1 SITE LIGHTING PHOTOMETRIC CALCULATIONS

SCALE: 1" = 30'-0"

0' 15' 30' 60'

GREENWAY PORTABLES

BEAVERTON, OREGON

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STEPHEN M. LOCKHART

EXPIRES: 12-31-24

DESIGNED:	DRAWN:	CHECKED:	DATE:
MG	AD	SL	02/28/24

REVISIONS

NO.	DESCRIPTION	DATE

SHEET NO.

LC2.1

JOB NO.

BSD-122

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MKE & ASSOCIATES, INC.
CONSULTING ENGINEERS
MECHANICAL AND ELECTRICAL SYSTEMS

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