

Owner makes no representations that the required minimum amount of insurance is adequate to protect Contractor. The procuring and/or carrying of insurance shall not limit Contractor's obligation or liability pursuant to this Contract or as a matter of law.

**Q. Workers' Compensation.** Contractor shall furnish to Owner evidence that its workers are covered by applicable workers' compensation coverage.

**R. Subcontractors.** Contractor shall, upon request of Owner, provide a list of all subcontractors and suppliers of Contractor. With regard to all subcontractors retained by the Contractor, the Contractor agrees (i) to be primarily responsible for any Work performed by such subcontractor and to ensure that such Work is timely completed in the manner required herein; (ii) to ensure that invoices submitted by subcontractor comply with the requirements for invoices submitted by Contractor to Owner; (iii) that Contractor shall be solely responsible to make any necessary repairs or to perform punch-list items caused by subcontractor's Work; and (iv) to ensure that subcontractor complies with all the obligations of Contractor set forth herein and to be primarily responsible for any non-compliance. Contractor shall be solely responsible for paying subcontractor any amounts due to it. Owner may request partial lien releases for all partial payments and a final lien release for the final payment to each subcontractor. Contractor agrees to release Owner and to hold Owner harmless from any and all claims by subcontractor for payment.

**S. Disputes and Back Charges.** In the event of a dispute between Owner and Contractor, Contractor agrees to proceed with the Work in accordance with the requirements of this Contract, pending settlement of the dispute.

**T. Indemnification.** To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the Owner and its agents and employees from and against claims, damages, losses and expenses, including, but not limited to attorneys' and expert's fees, (collectively a "claim") arising out of or resulting from performance of the Contractor's Work under this Contract. Such obligation shall not be construed to negate, abridge, or otherwise reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this paragraph.

Contractor's duty to indemnify Owner shall not apply to liability for damages arising out of claims caused by or resulting in whole from the negligence of Owner or its agents or employees. Contractor's duty to indemnify Owner for liability for damages arising out of claims caused by or resulting from the concurrent negligence of: (a) Owner, its agents or employees, and (b) Contractor, its agents, employees and lower-tier subcontractors or suppliers of any tier shall apply only to the extent of negligence of Contractor, its agents, employees and lower-tier subcontractors or supplier of any tier.

**CONTRACTOR SPECIFICALLY AND EXPRESSLY WAIVES ANY IMMUNITY THAT MAY BE GRANTED IT UNDER THE WASHINGTON STATE INDUSTRIAL INSURANCE ACT, TITLE 51 RCW. FURTHER, THE INDEMNIFICATION OBLIGATION UNDER THIS CONTRACT SHALL NOT BE LIMITED IN ANY WAY BY ANY LIMITATION ON THE AMOUNT OR TYPE OF DAMAGES, COMPENSATION OR BENEFITS PAYABLE TO OR FOR ANY THIRD PARTY UNDER WORKERS' COMPENSATION ACTS, DISABILITY BENEFITS ACTS, OR OTHER EMPLOYEE BENEFITS ACTS PROVIDED CONTRACTOR'S WAIVER OF IMMUNITY BY THE PROVISIONS OF THIS PARAGRAPH EXTENDS ONLY TO CLAIMS AGAINST CONTRACTOR BY OWNER, AND DOES NOT INCLUDE, OR EXTEND TO, ANY CLAIMS BY CONTRACTOR'S EMPLOYEES DIRECTLY AGAINST CONTRACTOR.**

Contractor's Initials \_\_\_\_\_

Contractor agrees that its defense and indemnity obligations to Owner under this Contract survive any limitation imposed by any statute of repose or limitation including but not limited to RCW 4.16.300, 4.16.310, or 4.16.326, and Contractor hereby waives any and all defenses under any statute of repose or limitations. Contractor further agrees that any statute of limitation on a claim by Owner pursuant to this provision shall not begin to run until Owner discovers that Contract has breached either its duty to defend or its duty to indemnify, whichever occurs first.

**U. Warranty.** The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new, unless otherwise required or permitted by the Contract, that the Work of this Contract will be performed in a workmanlike manner and free from defects not inherent in the quality required or permitted, will comply with all applicable codes and regulations, will be consistent with industry standards, and that the Work will conform to the requirements of the Contract. This warranty shall be in addition to and not in limitation of any other warranty or remedy required by law or the Contract. This warranty shall extend for the longer of the period of (i) the warranty normally given by Contractor for the Work in its ordinary course of business, (ii) the warranty period set forth in the Quote or other documents sent to Owner, or (iii) one (1) year from the date of substantial completion of the Work or occupancy of the Project by Owner, whichever occurs first. The warranty shall not apply to any damage or loss to the Work occasioned by Owner's failure to perform ordinary and reasonable maintenance during the warranty period or any written notice of defects received after the one (1) year period. Owner shall promptly notify Contractor in writing of all warranty claims and allow Contractor reasonable access to the Project to correct or repair the Work.

**V. Contract Controls.** Except for the Scope of Work and Warranty provisions specifically incorporated herein by the Contract, any terms or conditions attached to or incorporated into Contractor's proposal, quote, or other document shall not apply to the Contract. The Contract shall be solely and exclusively governed by the terms and conditions set forth in the Contract and these Standard Contract General Conditions.

**W. Wage and Other Payments.** Contractor shall comply with all state and federal wage laws and, upon request, provide proof of the same to Owner. In addition, if Contractor's employees are members of a union, then Contractor shall pay when due all obligations due under the collective bargaining agreement or other agreement, including but not limited to, medical benefits, dental benefits, pension benefits and the like.

**X. Notices.** All notices, demands, requests, consents and approvals which may or are required to be given by any party to any other party hereunder shall be in writing and shall be deemed to have been duly given if delivered personally, sent by facsimile, emailed, sent by a nationally recognized overnight delivery service, or if mailed or deposited in the United States mail and sent by registered or certified mail, return receipt requested, postage prepaid to the address provided in this Contract or to such other address as either party hereto may from time-to-time designate in writing and deliver in a like manner. All notices shall be deemed complete upon actual receipt or refusal to accept delivery. Electronic transmission of any signed original document and retransmission of any signed electronic transmission shall be the same as delivery of an original document.

**Y. Claims.** As a condition precedent to any right to recover for any instances of interruption, disruption, extra work, additional work, changed work, delay, hindrance and/or

efficiency loss of any nature whatsoever in Contractor's Work (collectively "Impact"), believed by Contractor to be caused by the acts or omissions of Owner, Architect/Engineer or the employees or agents of any of them, Contractor must provide written notice to Owner in the manner required by this Contract within five (5) days after occurrence of the Impact. Such written notice shall identify the cause of the Impact, the party Contractor believes is responsible for the Impact, and a rough order of magnitude as to the extra cost and/or time resulting from the Impact. FAILURE OF CONTRACTOR TO PROVIDE TIMELY WRITTEN NOTICE, AS PROVIDED IN THIS PARAGRAPH, SHALL RESULT IN AN ABSOLUTE WAIVER AND FORFEITURE OF CONTRACTOR'S RIGHT TO RECOVER ANY ADDITIONAL COST OR TIME RESULTING FROM THE IMPACT.

In the event Contractor believes it is entitled to receive compensation and/or time due to damages from Impact(s), Contractor's Statement of Claim (setting forth in detail the entitlement and quantum basis for Contractor's claim with supporting data and/or the entitlement basis to support an extension of time) shall be delivered to Owner within fifteen (15) days of its Written Notice of Impact, or within sufficient time to allow Owner to comply with the notice and claim requirements of the Main Contract (whichever is sooner). FAILURE OF CONTRACTOR TO TIMELY PROVIDE ITS STATEMENT OF CLAIM FOR AN INCREASE IN THE CONTRACT AMOUNT OR FOR AN EXTENSION OF TIME SHALL RESULT IN AN ABSOLUTE WAIVER OF CONTRACTOR'S CLAIM AND ANY RIGHT TO RECOVER ADDITIONAL COST OR TIME RESULTING FROM THE IMPACT.

Owner does not waive the requirement for timely written notice and/or timely written submission of the Statement of Claim unless Owner's waiver is unequivocal, explicit, and in writing.

**Z. Mediation.** Claims, disputes, or other matters in controversy arising out of or related to this Contract, except those waived, shall be subject to mediation as a condition precedent to the institution of legal or equitable proceedings by either party. This requirement may be waived by Owner.

**AA. Arbitration / Litigation.** At Owner's sole option, all claims, disputes, and other matters in question between Contractor and Owner arising out of, or relating to, this Agreement shall be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then obtaining or by an arbitrator mutually agreed upon by the parties. In the event of arbitration, Contractor and Owner agree to be bound by the findings and award of such arbitration finally and without recourse to any court of law other than for the enforcement of the arbitrator's decision. If the Owner does not select Arbitration as the means of dispute resolution, all claims, disputes and other matters in question between Contractor and Owner arising out of, or relating to, this Agreement shall be decided by an action filed exclusively in the Superior Court of Whatcom County, Washington. The substantially prevailing party in any arbitration or litigation shall be entitled to an award of its attorneys' fees, costs and expert fees.

**BB. Governing Law.** This Agreement and the right of the parties hereto shall be governed by and construed in accordance with the laws of the State of Washington and the parties agree that in any such action venue shall lie exclusively in Whatcom County, Washington, regardless of where the Project is located. Both parties expressly waive their right to a jury trial.

**CC. Amendment.** No modification, termination or amendment of this Contract may be made except by written Contract signed by all parties.

**DD. Waiver.** Failure by Owner or Contractor to insist upon the strict performance of any covenant, duty agreement, or condition of this Contract or to exercise any right or remedy consequent upon a breach thereof shall not constitute a waiver of any such breach or any other covenant, agreement, term or condition. Any waiver must be expressly made in writing and signed by the waiving party.

**EE. Severability.** In case any one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

**FF. Neutral Authorship.** Each of the provisions of this Agreement has been reviewed and negotiated, and represents the combined work product of both parties hereto. No presumption which would interpret the provisions of this Agreement in favor of or against the party preparing the same shall be applicable in connection with the construction or interpretation of any of the provisions of this Agreement.

**GG. Captions.** The captions of this Contract are for convenience and reference only and in no way define, limit, or describe the scope or intent of this Contract.

**HH. Entire Agreement.** The entire agreement between the parties hereto is contained in this Agreement; and this Agreement supersedes all of their previous understandings and agreements, written and oral, with respect to this transaction, including any proposal for services. Owner shall not be liable to Contractor or to any third party for any representations, made by any person, concerning the Work or the terms of this Agreement, except to the extent that the same are expressed in this Agreement. No modification, termination or amendment of this Agreement may be made except by written agreement signed by both parties.



# Sudden Valley Community Association

360-734-6430

4 Clubhouse Circle Bellingham, WA 98229

www.suddenvalley.com

## CAPITAL REQUEST MEMO

**To:** Sudden Valley Community Association Board of Directors

**From:** Jo Anne Jensen, General Manager

**Date:** January 26, 2023

**Subject:** Capital Request – 2023 Playground ADA Improvements

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### Purpose

To request funding approval for permitting and construction.

### Background

In 2022, SVCA contracted with Pacific Landscape Architecture (PLA) to evaluate parks for ADA compliance. PLA prepared a report dated March 4, 2022 (attached for reference) summarizing the parks inspection. This inspection identified ADA compliance issues. PLA prepared a second report, dated April 26, 2022, (attached for reference) identifying the improvements necessary to bring the parks into compliance with ADA guidelines. This project will provide funding for improvements to be completed at 2 parks bringing them into ADA compliance. SVCA's 2023 budget includes a line item for these improvements in the amount of \$75,000.00.

### Analysis

SVCA proposes to begin the permitting and construction for park improvements. This will include:

- Notice of Activity (NOA) permit submittal to Whatcom County
- Preparation of bid documents and issuance to contractors for proposal
- Summary of bids received, with recommendation to SVCA's Board for contract award
- ADA compliance improvements at 2 parks:
  - o Recreation Corridor
  - o Gate 5 Entrance
- Construction is proposed to occur during summer 2023.

### Proposal

Authorize permitting and construction to begin per PNW Services, Inc. attached Proposal dated 1-18-23.



# Sudden Valley Community Association

360-734-6430

4 Clubhouse Circle Bellingham, WA 98229

[www.suddenvalley.com](http://www.suddenvalley.com)

## Request

Request \$78,032.60 per PNW Services, Inc. proposal to begin permitting and construction.

## Motion

Move that the Board of Directors approve the allocation of \$78,032.60 from CRRRF.

## Board of Directors Approval

Approved:  Not Approved:  SVCA Board of Directors

*This request was approved on Jan 24, 2023  
JoAnne Jensen, GM.*



January 18, 2023

Sudden Valley Community Association  
Attn: Jo Anne Jensen  
4 Clubhouse Circle  
Bellingham, WA 98229

RE: Project Scope Letter  
2023 Playground ADA Improvements

PNW is providing this project scope letter for improving 2 playgrounds to be ADA compliant. Pacific Landscape Architecture (PLA) has completed their design and cost estimates. Attached to this summary are the following documents:

- Cost estimates for 2 parks to become ADA compliant dated 8-4-22.
  - o Recreation Corridor Park
  - o Gate 5 Park
- Proposed construction drawings for each park.

The following is a summary of the overall proposed project cost:

<b>Construction</b>	
- Recreation Corridor Park with Alternates	\$30,855.00
- Gate 5 Park	\$25,700.00
Subtotal Engineer's Estimate	\$56,555.00
WSST @ 8.6%	\$4,863.73
<b>Total Engineers Estimate w/ WSST</b>	<b>\$61,418.73</b>
<b>Design, Permitting, &amp; Construction Management</b>	
- Prepare contractor bid package – PLA Allowance	\$1,000.00
- Notice of Activity (NOA) Permit Application Allowance	\$1,500.00
- Construction Management – PNW Services, Inc. – Per Attached	\$7,020.00
<b>Subtotal Design, Permitting, &amp; Construction Management</b>	<b>\$9,520.00</b>
Total Engineers Estimate & Oversight	\$70,938.73
Contingency @ 10%	\$7,093.87
<b>Total Project with Contingency</b>	<b>\$78,032.60</b>

Please let me know if there are any questions or if you need additional information.

Sincerely,

Tyler Andrews  
President

### Recreation Corridor Park

Location: Sudden Valley Gate 2, Barn View Drive, next to the Recreation Center

2022 Playground ADA Improvements include: ADA accessible surfacing & ramps, Leveling header for surfacing containment and for meeting ASTM fall zone requirements, Accessible route surfacing added. Related work includes: Demolish Existing Swing and small metal slide. Proposed future layout for the swing will also economize the area to add play surfacing material.

Recreation Corridor Playground	Unit	Qty	Cost	Subtotal
Original Playground Equipment & Install	EA	1	\$ 123,000.00	\$ 123,000.000
2022 ADA Improvements	EA	1	\$ 22,855.00	\$ 22,855.000
<b>Playground Total</b>				<b>\$ 145,855.00</b>
Alternate: New Swings Furnish & Install			\$	7,000.00
Alternate: (1) New ADA Picnic Table			\$	1,000.00

Notes:

1. Accessible ramp access paths are estimated to be 0.05% of cost of total project without stormwater engineering and disturbs 477 s.f. and can occur under Sudden Valley's existing Programmatic Permit, per PNW Services.
2. Multiple existing ADA designated parking stalls provided in nearby paved parking area.

### Gate 5 Park

Location: Sudden Valley Gate 5, near the mailbox area

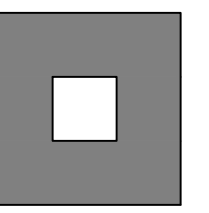
2022 Playground ADA Improvements include: ADA accessible surfacing, Leveling header for surfacing containment and for meeting ASTM fall zone requirements, Accessible route surfacing over existing driveway from street to playground. Related work includes: Repair and Relocate existing swing. The existing swing needs to be reset so the the playground can be one level. Relocating the swing will also economize the area to add play surfacing material.

Gate 5 Playground	Unit	Qty	Cost	Subtotal
Original Playground Equipment & Install	EA	1	\$ 43,000.00	\$ 43,000.000
2022 ADA Improvements	EA	1	\$ 23,100.00	\$ 23,100.000
<b>Playground Total</b>			<b>\$</b>	<b>66,100.00</b>

Alternate Paving & Striping ADA Parking \$ 2,600.00

Notes:

1. Paving 700 s.f. of the existing gravel driveway to provide an Accessible Trail is estimated to be 3% of cost of total project without stormwater engineering and can occur under Sudden Valley's existing Programatic Permit, per PNW Services.



DESIGNED BY: PLA  
DRAWN BY: SPW

Date: 6-30-22  
Issue: 100% SET

Sheet Title

**REC. CORRIDOR  
PARK  
SITE PLAN**

Sheet Number

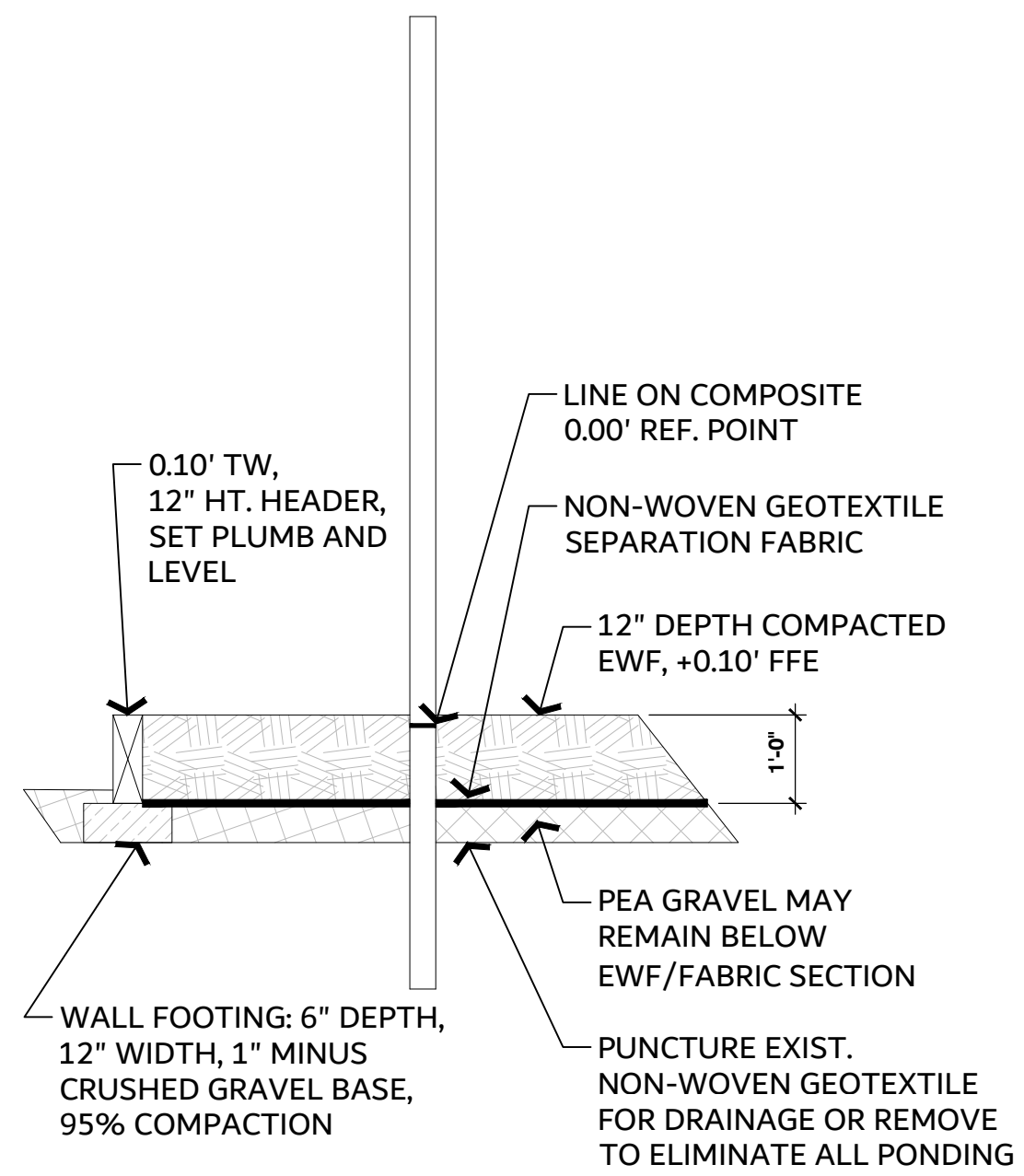
**L1.2**

**REFERENCE NOTES SCHEDULE RECREATION CORRIDOR**

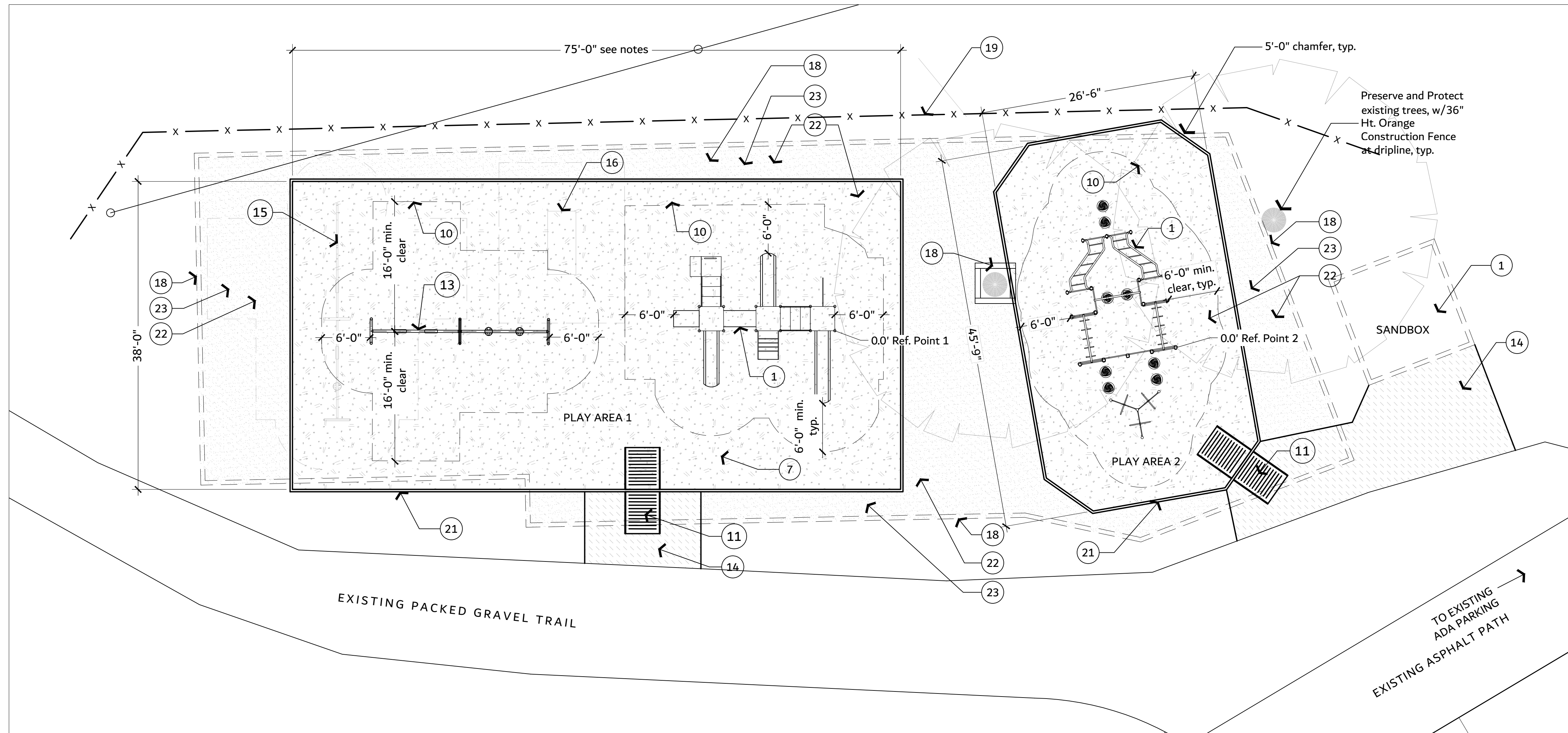
SYMBOL	DESCRIPTION	DETAIL
1	EXISTING PLAY EQUIPMENT TO REMAIN	
7	ENGINEERED WOOD FIBER (EWF) PLAYGROUND SURFACING, 12" COMPACTED DEPTH	
10	FALL ZONE	
11	PLAYGROUND ADA RAMP (FULL), SEE NOTE 7	
13	FUTURE 2-BAY SWING (BY OTHERS)	
14	CRUSHED ROCK SURFACING	2/L1.1
15	REMOVE & DISPOSE EXISTING SWING	
16	REMOVE & DISPOSE EXISTING SLIDE	
18	REMOVE & DISPOSE EXISTING PLAYGROUND HEADER	
19	SILT FENCE OR COIR LOG BMP	
21	NEW PLAYGROUND HEADER, TYPE A, SEE NOTE 7	
22	REMOVE EXISTING PEA GRAVEL. PUNCTURE OR REMOVE WOVEN GEOTEXTILE. SEE NOTES.	
23	TOPSOIL / EROSION CONTROL SEEDING	

**Notes:**

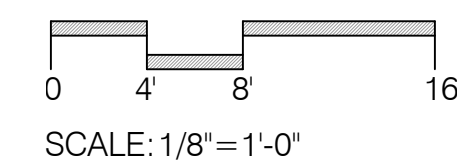
1. Recreation Corridor Park's reference elevation points are the top of lines on the sticker on each composite structure. Set header top level and 0.10' above these lines in each area.
2. Manufacturer is "Park & Play", Contact/Rep. is Wildwood Playgrounds, Bob or Steve Lewohl, 2127 NE 10th Avenue, Portland, OR 97212, www.wildwoodplaygrounds.com, 800-875-7529, bob@wildwoodplaygrounds.com
3. Remove existing pea gravel to depths needed for full depth of Engineered Wood Fiber (EWF). See note 2 for contact. Owner will direct stockpile location and/or reuse of existing pea gravel.
4. Cut and remove the existing woven geotextile including where vertical. Option to puncture to allow drainage. Install non-woven geotextile separation fabric per detail.
7. New Playground Header is pre-fabricated plastic system. Ramp should fit integrally with plastic prefab. edging system, sold by Wildwood Playgrounds. Equal ramp/edging options can be submitted for approval.
8. Install temporary construction fencing to prevent children from playing on equipment when no fall surfacing is in place.
9. Coordinate with Owner and swing manufacturer for playground area dimensions. Swing shown is ParkPlay Freestanding 2-bay arch swing, 3-1/2" O.D.

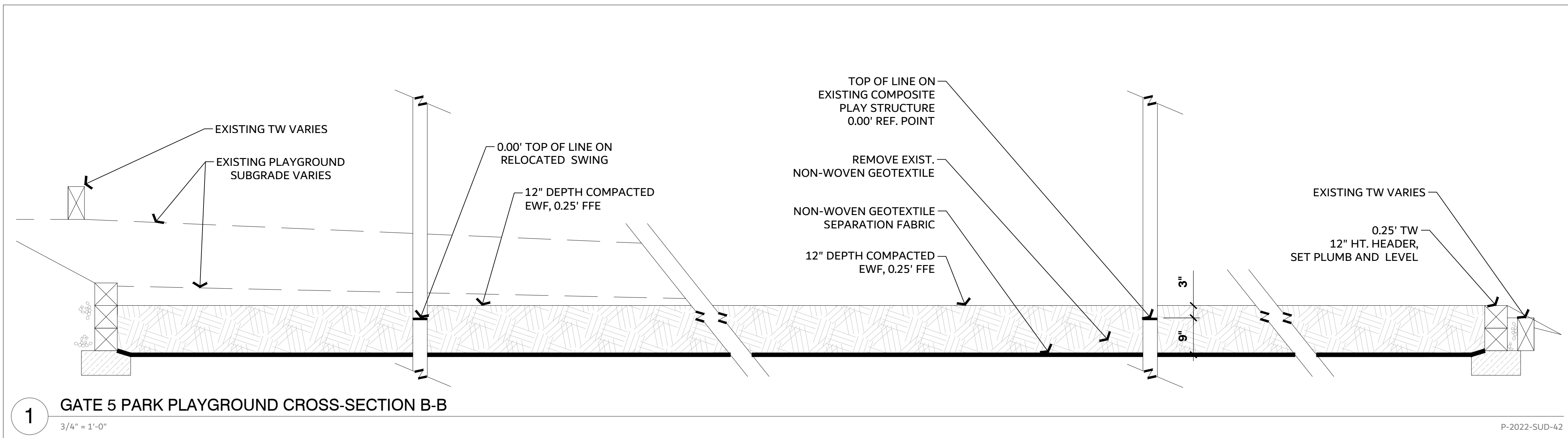
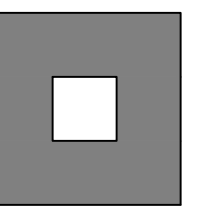


**1 REC. CORR. PARK PLAYGROUND DETAIL**  
1/2" = 1'-0" P-2022-SUD-40

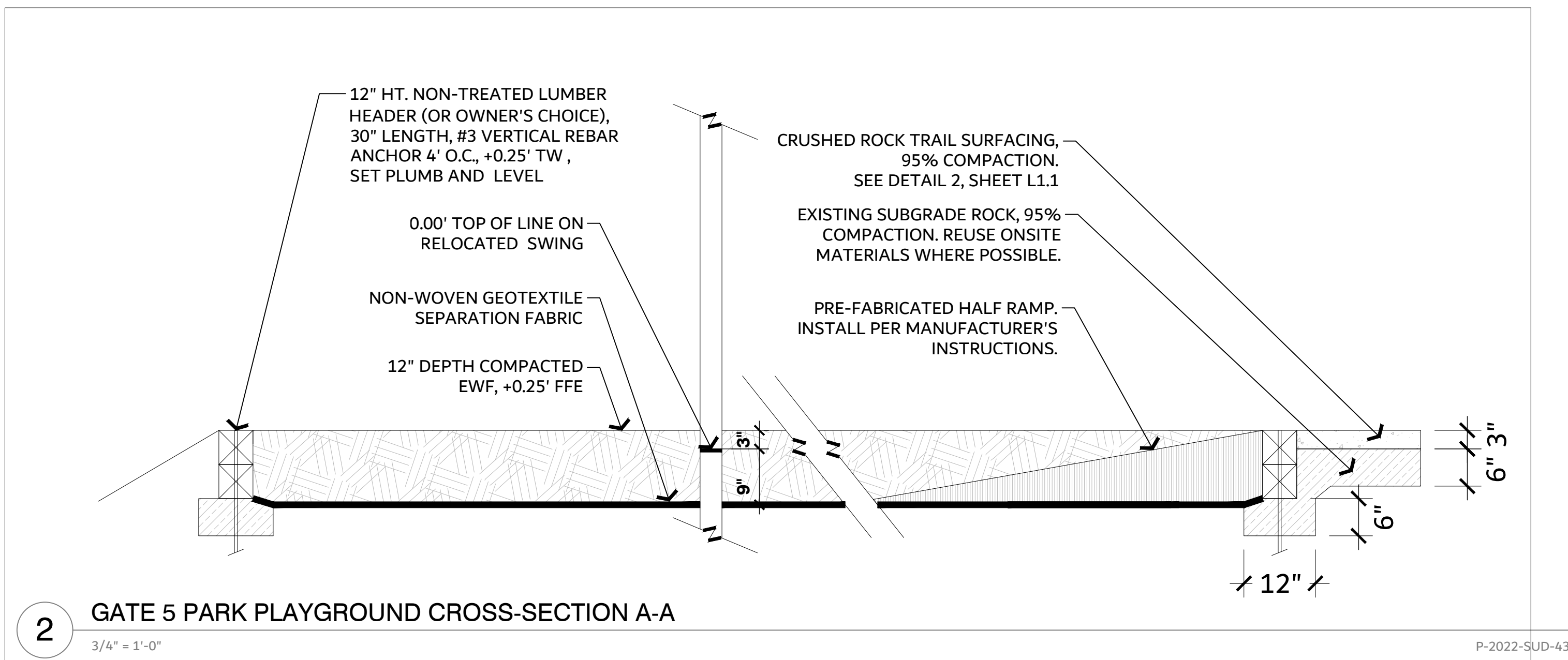


**2 Layout Plan**  
1/8" = 1'-0"





**1** GATE 5 PARK PLAYGROUND CROSS-SECTION B-B  
3/4" = 1'-0"



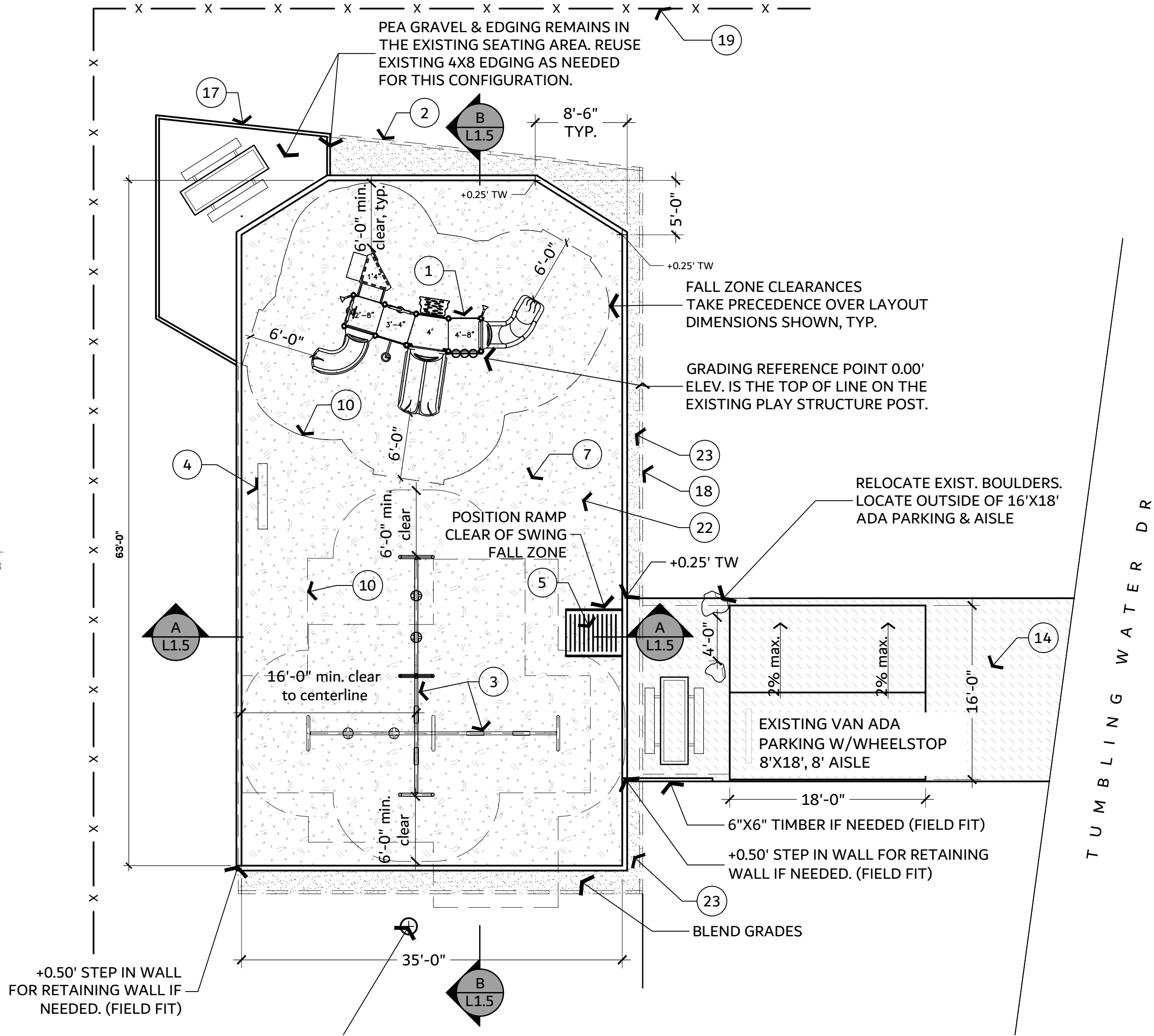
**2** GATE 5 PARK PLAYGROUND CROSS-SECTION A-A  
3/4" = 1'-0"

**Notes:**

- Gate 5 Park's reference elevation point is the top of line on the sticker on the composite structure. Set header top level with Top of Wall (TW) elevation shown.
- Fall Zone clearances, per ASTM-1487-21, take precedence over header layout dimensions shown. Header layout is ruled by fall zone clearances relative to the existing equipment.
- Layout dimensions shown are inside edge of header.
- Manufacturer is "Park & Play", Contact/Rep. is Wildwood Playgrounds, Bob or Steve Lebwohl, 2127 NE 10th Avenue, Portland, OR 97212, www.wildwoodplaygrounds.com, 800-875-7529, bob@wildwoodplaygrounds.com. Contact for swing installation instructions.
- Remove existing pea gravel to depths needed for full depth of Engineered Wood Fiber (EWF). See note 2 for contact. Owner will direct stockpile location and/or reuse of existing pea gravel.
- Cut and remove the existing woven geotextile. Cover bottom of excavation with non-woven geotextile separation fabric per detail.
- Cut wood header to accommodate the pre-fabricated Ramp and pins. Equal ramp/edging options can be submitted for approval.
- Remove 1 exist. wheelstop and deliver to Owner.
- Install temporary construction fencing to prevent children from playing on equipment when no fall surfacing is in place.
- Paving & Striping the ADA Parking stall and aisle is "disproportionate" (more than 20%) to cost of total project due to Whatcom County Code, Lake Whatcom Watershed overlay district, requirements for stormwater treatment including Engineering, Permits, and Construction. The 2022 estimated cost of paving & striping with related permits & construction of stormwater treatment is \$27,000.

**REFERENCE NOTES SCHEDULE GATE 5 PARK**

SYMBOL	DESCRIPTION	DETAIL
1	EXISTING PLAY EQUIPMENT TO REMAIN	
2	EXISTING PLAYGROUND EDGING- REMOVE & REUSE	
3	EXISTING 2-BAY SWING - RELOCATE	
4	RELOCATE PARK BENCH	
5	PLAYGROUND ADA RAMP (HALF)	
7	ENGINEERED WOOD FIBER (EWF) PLAYGROUND SURFACING, 12" COMPACTED DEPTH	
10	FALL ZONE	
14	CRUSHED ROCK SURFACING	2/L1.1
17	EXISTING PLAYGROUND HEADER TO REMAIN.	
18	REMOVE & DISPOSE EXISTING PLAYGROUND HEADER	
19	SILT FENCE OR COIR LOG BMP	
22	REMOVE EXISTING PEA GRAVEL. PUNCTURE OR REMOVE WOVEN GEOTEXTILE. SEE NOTES.	
23	TOPSOIL / EROSION CONTROL SEEDING	



**3** Layout Plan  
1/8" = 1'-0"



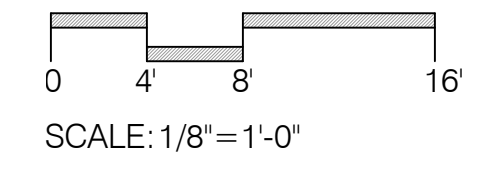
DESIGNED BY: PLA  
DRAWN BY: SPW

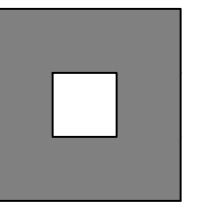
Date: 6-30-22 Issue: 100% SET

Sheet Title  
**GATE 5 PARK**  
**SITE PLAN**

Sheet Number

**L1.5**





# PACIFIC LANDSCAPE ARCHITECTURE

1814 Broadway Street  
Bellingham, WA 98225  
(360) 684-4295

## SUDDEN VALLEY PARK UPDATES

Sudden Valley  
Bellingham, WA 98229



DESIGNED BY: PLA  
DRAWN BY: SPW

Date Issue  
6-30-22 100% SET

Sheet Title

## DETAIL SHEET

Sheet Number

# L2.1

## MANUFACTURER'S SPECIFICATIONS

### PLAY EQUIPMENT SURFACING

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. This Section includes the following:

1. Loose fill systems for surfaces beneath and around play facilities.
2. Wear mats (under swings)
3. Non-woven geotextile material

##### 1.2 SUBMITTALS

- A. Product Data: For each product indicated.
- B. Shop Drawings: Show materials, cross sections, and drainage.
- C. Samples: For each product indicated.
- D. Installer certificates.
- E. Product test reports dated 2016 or later.
- F. Current product warranty.
- G. Maintenance data.
- H. Current insurance certificate.

##### 1.3 QUALITY ASSURANCE

A. Installer Qualifications: Engage an installer who is certified in writing by manufacturer to install manufacturer's products.

1. All materials and equipment listed herein shall be new and of the type specified:

- (a) Surfacing shall be IPEMA-CERTIFIED Engineered Wood Fiber. Substitutions, standard wood chips or bark mulch will not be acceptable.
- (b) Supplier must provide test results for Engineered Wood Fiber and playground rubber wear mats for impact attenuation in accordance with ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. Results must be provided for new material and for 12-year-old Engineered Wood Fiber.
- (c) Testing of Engineered Wood Fiber in accordance with ASTM F 1292 must show G-max values of less than 155G for the 8" thick system, or 120G for the 12" system at 12' drop heights, and HIC values of less than 1,000 for both new and 12-year-old material.
- (d) Testing of playground rubber wear mats in accordance with ASTM F1292 must show G-max values less than 200G, and HIC values of less than 1,000 for a 4' drop height.
- (e) Supplier must provide test results in accordance with ASTM F 1951, Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
- (f) Supplier must certify that the surface meets the intent of the Americans With Disabilities Act (ADA).
- (g) Supplier must provide written manufacturer's 10-year warranty against loss of resiliency, lifetime warranty on geotextile material and playground system drain materials.

B. Supplier must provide \$10 million product liability insurance certificate with project owner named as certificate holder, prior to delivery.

C. Standards and Guidelines: Provide playground surface systems complying with applicable provisions of the following, unless more stringent provisions are indicated: CPSC No. 325, "Handbook for Public Playground Safety"; ASTM F 1292; and ASTM F 1487, ASTM 1951.

#### PART 2 PRODUCTS

##### 2.1 PLAYGROUND SURFACE SYSTEMS, GENERAL

A. Accessibility: Provide playground surface systems as follows:

1. Determined to be accessible when tested according to ASTM PS 83.
2. Designed to comply with requirements for an accessible route as recommended by U.S. Architectural & Transportation Barriers Compliance Board's "ADA Accessibility Guidelines for Buildings and Facilities (ADAAG)."

##### 2.2 LOOSE-FILL PLAYGROUND SURFACE SYSTEMS

A. Organic Wood-Based Materials

1. Engineered Wood Fibers (EWF): Playground fall surfacing shall be EWF absorbent accessible surfacing. Fibers shall be Random-sized hardwood fibers, in manufacturer's standard fiber size approximately 10 times longer than wide; containing no bark, leaves, twigs, or foreign or toxic materials; graded according to manufacturer's standard specification for material consistency for playground surfaces. Engineered Wood Fiber is provided by: The Fibar Group, LLC., Fibar Group, 80 Business Park Drive, Suite 300, Armonk NY 10504; P/N: 1.800.342.2721.
2. Provide Engineered Wood Fiber or approved equal to a compacted minimum depth of twelve (12) inches minimum over 100% polyester, non-woven geotextile fabric (minimum flow rate of 10 gpm/ft).
3. Manufacturer's note: The amount of Fibar EWF necessary to provide the approximate depth after compaction is as follows: 12" Depth = 50 cubic yards per 1,000 sq. ft. of playground area.

B. Non-woven geotextile.

4. Needle-punched 100% non-woven geotextile fabric that separates the Engineered Wood Fiber from soil and drainage system below. Material allows water to flow through, and prevents rock and soil contamination of the EWF. Designed to cover the sub-grade and drainage matrix to ensure proper drainage.

C. Provide one (1) wear mat (minimum size: 36"x36"x1.5" rubber mat) under each swing. Beveled Edges. ADA compliant. Place per manufacturer's recommendations.

D. 6"X6" Timber material shall be per Owner's choice.

#### PART 3 EXECUTION

##### 3.1 INSTALLATION OF LOOSE FILL PLAYGROUND SURFACE SYSTEMS

A. Playground Surface System:

1. Inspect the subgrade within the header to assure subgrade elevations slopes toward low at 1% slope.
2. Remove all stones 1" and larger.
3. Compact subgrade to 95%.
4. Install playground equipment where indicated

5. Cover sub-grade with EWF non-woven geotextile material. Overlap all seams a minimum of 3". It will be necessary to slit the geotextile material to fit around the footings of the equipment. Overlap all slits with next piece of geotextile material.

6. IMPORTANT: With a permanent marker, mark off all the legs of the equipment at 12", according to the system depth.

7. Spread EWF, using a small front end loader. Operator should be careful not to travel on the geotextile material or turn sharply on the EWF. It will also be necessary to use hand labor to spread. To allow for natural compaction, additional material is supplied. Install all the material delivered. The finished grade of EWF will be several inches above grade until it compacts. Feather the edges to make a smooth transition to concrete curb.

8. Rake for a smooth, plumb and level finished surface.

9. After two weeks of active use, surface shall be backfilled with additional EWF product to ensure minimum 12" compacted depth if necessary, and then raked again.

10. Compaction Requirements: Mechanically compact materials. Provide topping off of play surfacing 2 weeks after the date of final completion to assure 12" final depth.

11. Finish Grading: Hand rake to a smooth finished surface and to required elevations with zero tolerance.

12. Contractor shall comply with CPSC and ASTM fall zones.

13. Protecting and Repairing: Protect newly graded areas from traffic and erosion. Keep free of trash and debris. Replenish with matching material, repair, and reestablish densities and finish elevations where surfaces become eroded, rutted, or settled or where they lose compaction and depth, until date of Completion.

B. Quality Control

1. Supplier must provide test results for impact attenuation in accordance with ASTM F1292 Standard Specification for Impact Attenuation for Surface Systems Under and Around Playground Equipment. Results must be provided for new material and for 12-year-old material.
2. Testing must show "g" ratings of not more than 120g for the 12" system at 12' fall heights, and HIC values of less than 1,000 for both new and 12-year-old material.
3. Supplier must provide test results in accordance with ASTM F1951 (formerly PS83) Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
4. Supplier must certify that the surface meets the intent of the Americans With Disabilities Act.
5. Supplier must provide written manufacturer's 10-year warranty against loss of resiliency, lifetime warranty on geotextile material and playground system drain material.
6. Supplier must provide \$10 million product liability insurance certificate with project owner named as certificate holder, prior to delivery.

Sudden Valley Community Association

**Playground ADA Improvements**

PNW Estimate - Bid Package, Permitting, and Construction Management

Task	Description	Hours	Estimated Cost
Design Oversight	Completed under separate proposal.	0	
	<b>Total Estimated Design Oversight Hours</b>	0	\$ -
Permitting	NOA permit application oversight.	3	
	<b>Total Estimated Permitting Cost</b>	3	\$ 405.00
Contractor Bids	Prepare bid package, issue to contractors, and answer any bid questions.	4	
	Review construction bids, and provide recommendation to SVCA.	1	
	<b>Total Estimated Bid Package Hours</b>	5	\$ 675.00
Construction Management	Issue construction contract.	2	
	Construction oversight - part time assumed.	40	
	Project closeout.	2	
	<b>Total Estimated Construction Management Hours</b>	44	\$ 5,940.00
	<b>Total Estimated</b>		\$ 7,020.00

## Sudden Valley Playground ADA Access Report

Date: April 26, 2022  
To: PNW Services Inc., PO Box 30498, Bellingham, WA 98228  
c/o Tyler Andrews 360-739-2072  
accounting@pnwcivil.com  
From: Susan Willhoft, RLA, Project Manager, Pacific Landscape Architecture

### Summary:

The Sudden Valley Board requested that Pacific Landscape Architecture (PLA) review playground surfacing and ADA accessibility of existing play areas. This document studies the applicability of Department of Justice (DOJ) and Americans with Disabilities Act (ADA) Standards for (7) seven Sudden Valley playgrounds. These standards became mandatory for newly constructed and altered facilities as of March 15, 2012.

To achieve compliance (5) five existing playgrounds will be required to undergo changes because of updates that occurred after 2012. (2) Two playgrounds pre-date 2012 and should be brought into compliance when alterations are made that affect, or could affect, the usability of the play area, such as adding play equipment or changing the entire ground surfacing. At Recreational Corridor, Gate 5, Maple Leaf Park, and Huckleberry Park, the required accessible routes include ADA designated parking, the path connecting parking to the playground area, and an accessible route to each ground level play equipment type. At Cascade Park, the required accessible routes include the path connecting the street to the playground area, an accessible route to each ground level play equipment type, and an opening added in the play area border curb. PLA evaluated the quantity of ground level and elevated play components at each playground to determine this requirement. See Appendix C. The accessible route must connect all entry and exit points of accessible play components.

No additions to equipment are required for the playgrounds to be brought into compliance with DOJ's ADA.

### Accessible Routes to Playground Areas:

Pacific Landscape Architecture evaluated the quantity ADA Parking Spaces required at each playground. See Appendix D. Following is a summary of Accessible Route improvements required.

1. Recreation Corridor Park: Use existing designated parking and path. Pave the short distance between paved trail and added opening(s) at wood edging.
2. Gate 5 Park: Pave the designated gravel parking spot and short path to playground. This requires a stormwater permit. Add opening at wood edging.
3. Maple Leaf Park: Pave an existing gravel parking spot. The existing loose gravel trail can be paved or have packed crushed gravel added and the slope down to playground eased. This

requires a stormwater permit. Cost of grading the trail and possibly the parking space can be evaluated for exemption. Add opening at wood edging.

4. Cascade Park: The existing loose gravel trail can be paved or have packed crushed gravel added and the slope down to playground eased. This requires a stormwater permit. Cost of grading the trail and possibly the parking space can be evaluated for exemption. Add opening at wood edging.
5. Huckleberry Park: Stripe and sign a designated parking spot on existing parking lot or add driveway to a new paved parking spot closer to the playground. The existing loose gravel trail can be paved or have packed crushed gravel added and the slope down to playground eased. The slope of this path requires survey and could involve a need for handrails and retaining walls. This requires a stormwater permit. Cost of grading the trail and possibly the parking space can be evaluated for exemption. Add opening at wood edging.

### **Accessible Routes Within Playgrounds:**

Playground surfacing must both meet requirements for impact attenuation and accessible travel over the surface to comply with DOJ and ADA requirements. The existing pea gravel does not meet these requirements.

Options to meet ADA requirements are:

- 12" Depth Engineered Wood Fiber
- Rubberized Poured-in-Place surfacing
- Rubberized Tile
- Plastic Playground Turf

Generally rubberized or plastic turf options are installed over a concrete pad or compacted gravel which impacts the cost and permeability of the surfacing.

### **Permitting Considerations:**

A concrete or compacted gravel subgrade will require stormwater permits within the Lake Whatcom Watershed. This effort would likely require survey, civil engineering, and landscape architectural design drawings and specs.

Any new parking pads or grading to achieve ADA accessibility to play areas would likely require stormwater permits within the Lake Whatcom Watershed.

The least involved improvement, requiring no permit review, is replacing the pea gravel surfacing with Engineered Wood Fiber Chips. The woven geotextile fabric, placed underneath the existing pea gravel, should be replaced with a Non-woven geotextile. The existing woven geotextile is slowing stormwater flow enough to retain moisture in the pea gravel, which is not desired in playgrounds. Playground areas should be free draining and puddles should not form. It could be possible to only remove pea gravel to the elevation required to backfill 12 inches of Engineered Wood Fiber Chips, placing a non-woven geotextile fabric between these layers. In this scenario, the woven-geotextile could be punctured to the extent that it becomes free draining below the remaining pea gravel.

Exemptions may exist for accessible routes. If stormwater permits cannot be obtained for parking and path of travel to play areas it is considered technically infeasible. If the cost to do so including consulting and permit fees is greater than 20% of the total cost of the play area and parking pads

combined, it would be considered a disproportional cost and you may prioritize compliance. See definitions for Disproportionality, Prioritization, and Technically Infeasible in Appendix F.

Whatcom County states that per IRC 105.2, playgrounds are considered exempt for building permits. Other permits such as Fire Regulations, Natural Resource Regulations, Zoning, and Setbacks are needed if applicable, however are likely outside the scope of this project.

**Other Considerations:**

The safety of these playgrounds could also be improved simultaneously by correcting the deficient size and location of fall zones (use zones) and resetting the wood containment edging with a level top for better containment. The monkey bars located at Cascade Park could be reset at the correct distance from the swingset.

**Appendix A:  
Playground Included in Review**

<b>Playground Location</b>	<b>Renovation History</b>
Cascade Park	2020: New swing set and monkey bars. New playground area with wood border and pea gravel surfacing.
Recreation Corridor Park	2020: New sandbox, (1) new climbing structure. Combined all of the individual play areas to make one contiguous area with new wood playground border and pea gravel surfacing. Middle climbing structure and swings installed between 2013-2016 (aerial photos) Slide is old and relocated to current position after 2012.
Maple Leaf Park	2019: New climbing structure, swing set, and spinner. New playground area with wood border and pea gravel surfacing. Gravel parking spots added.
Gate 5 Park	2019: New playground area with wood border and pea gravel surfacing in. Playground climber and swings installed between 2013-2016 (aerial photo).
Huckleberry Park	2018: Added pea gravel surfacing and replaced wood border. This surface replacement created the requirement for compliance with ADA Access rules. The large playground structure and swings were installed before 2012. (aerial photos)
Marina Park	pre-dates 2012 (aerial photos)
Treehouse Park	Old slide model pre-dates 2012

**Appendix B:  
Discussions With Playground Sales Representatives**

Wildwood Playgrounds  
 Bob or Steve Lebwohl  
 2127 NE 10th Avenue  
 Portland, OR 97212  
[www.wildwoodplaygrounds.com](http://www.wildwoodplaygrounds.com)  
 (800) 875-7529  
 bob@wildwoodplaygrounds.com

phone call 4/21/22

- Wildwood Playgrounds does remember selling many of these playgrounds to Sudden Valley and is asking the manufacturer for any drawings and records that might be available.
- They sell all types of playground surfacing.
- They subcontract to surfacing and playground installers. There is a long lead time.
- They can also send a "Lead Installer" to work with a community that is doing installation with volunteers. This can ensure the playground layout and equipment construction is done correctly.
- Suggests: to remove some pea gravel. Put a poly timber boarder or recycled wood border around the use zone, put in a layer of geotextile fabric and fill with 10 inches after compaction of engineered wood fiber.
- The challenge climber installed at the Recreation Corridor Park in 2020 is a ground-based activity.

Great Western Recreation  
Quinn Connell  
Direct: (435) 901-9544  
quinn@gwpark.com  
[www.gwpark.com](http://www.gwpark.com)

email 4/21/22 (edited for clarity)

- Quinn offered to help playground assessment, whether that is site visits or answering more questions.
- The tiles are typically (preferably) installed over a pavement surface which makes drainage a bit complicated at the edges. Water will drain through the tiles and come out at the outer edges of the play area, which will need "weep holes" if it has a concrete edger.
- Access ideas for entering pea gravel. The Fairbanks, AK, school district has tile covered asphalt access lanes coming into their play areas. This works fairly well, but to be very conservative about safety, I'd have the entrance walkway taper along the sides for 4 feet to have the tiles plunge down into the Pea Gravel and ensure a soft landing no matter what. A 5' wide (minimum) walkway, plus a taper (4' wide on each side that abuts loose fill). We do this because the loose fill tends to get displaced, and you wouldn't want it to get below the edge of the tile/asphalt and cause an injury.
- Pea gravel can be sent in for testing to determine how "squishy" it is and if it can be used for CFH over 5'. (The latest CPSC says 5' max for peg gravel) Fairbanks sent theirs in and it was deemed fine for 10' falls!

**Appendix C:  
Playground ADA Access Analysis, 4/20/2022**

**All Parks** have ground-level play components. At least one of each type of play component provided at ground level in a play area must be on the accessible route. Includes Cascade Park.

<b>Maple Leaf Park</b>	<b>Maple Leaf Park</b>
Composite w/transfer station, installed 2020.	<b>Composite w/transfer station</b>
8 elevated components	<b>8 components</b>
3 ground level play components required	tall slide
3 provided	steering wheel
steering wheel (on composite)	sliding pole
swingset	chain ladder climber
spinner	wavy climber
	upright climber
	short slide
	overhead bars
<b>Gate 5 Park</b>	<b>Gate 5 Park</b>
Composite w/transfer station, installed btwn. 2013-2016	<b>Composite w/transfer station</b>
8 elevated components	<b>8 components</b>
3 ground level play components required	tic tac toe
3 provided	ground level circle
circle panel (on composite)	curve slide
swingset	med slide
little table (on composite)	short slide
	spiral climber
	short climber
	little table
<b>Recreation Corridor Park</b>	<b>Recreation Corridor Park</b>
Composite w/transfer station, installed btwn. 2013-2016	<b>Composite w/transfer station</b>
Composite challenge climber, installed 2020. ground level	<b>10 components</b>
10 elevated components	tall slide
3 ground level play components required	short slide
5 provided	ladder access
sand box	crawl tube
slide	short slide 2
traffic light (on composite)	traffic light, ground level
crank (on composite)	crank, ground level
swing	plastic climber
Challenge Climber	ladder climber
	steering wheel
<b>Huckleberry Park</b>	<b>Huckleberry Park</b>
Composite w/transfer station, installed pre-2012	<b>Composite w/transfer station</b>
10 elevated components	<b>10 components</b>
3 ground level play components required	giant split slide
3 provided	tall ladder climber
drums (on composite)	plastic climber
play panel (on composite)	tall straight double slide
swingset	short curly slide
	overhead rings
	net climber
	fire pole
	drums (ground level)
	play panel (ground level)

**Appendix D:  
ADA Parking Space Analysis, 4/20/2022**

<b>Recreation Corridor</b>		
Type of Parking	Off-Street	Two ADA Accessible Parking Spot Required, One Van
Number of Parking Spaces	About 50	Designated Signage Required
Each stall 8.5x19'		
<b>Cascade Park</b>		
Type of Parking	On-Street	No ADA Parking Spot Required
Number of Parking Spaces	0	
Each stall 8.5x19'		
<b>Cascade Park</b>		
Type of Parking	Off-Street	One ADA Van Accessible Parking Spot Required
Number of Parking Spaces	4-5	Designated Signage Required
Each stall 8.5x19'		
<b>Gate 5 Park</b>		
Type of Parking	Off-Street	One ADA Van Accessible Parking Spot Required
Number of Parking Spaces	10 and 1 ADA stall	Designated Signage Required
Each stall 8.5x19'		
<b>Huckleberry Park</b>		
Type of Parking	Off-Street	One ADA Van Accessible Parking Spot Required
Number of Parking Spaces	3-5	Designated Signage Required
Each stall 8.5x19'		
<b>Marina Park</b>		
Type of Parking	Off-Street	Two ADA Accessible Parking Spot Required, One Van
Number of Parking Spaces	25-40	Designated Signage Required
Each stall 8.5x19'		
<b>Treehouse Park</b>		
Type of Parking	On-Street	No ADA Parking Spot Required
Number of Parking Spaces	0	
Each stall 8.5x19'		

On-Street, Off-Street and parking spaces noted above are as listed in Sudden Valley Park Master Plan, updated 2020.

**Exceptions to Designated Signage Requirement**

If a total of 4 or fewer parking spaces (inaccessible and accessible) is provided on a site, the required accessible space does not have to be identified by a sign (i.e., reserved exclusively for use of people with disabilities) (§216.5, Ex. 1). However, all other requirements for spaces, including access aisles, still apply.

**502.4 Floor or Ground Surfaces**

Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted. EXCEPTION: Slopes not steeper than 1:48 shall be permitted. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302.

## Appendix E:

Comparison of Playground Surfaces Evaluated in NCA Longitudinal Research Study			
Poured in Place Rubber (PIP)	Tiles (TIL)	Engineered Wood Fiber (EWF)	Hybrid Surface Systems (HYB)
<p><b>DESCRIPTION</b> Wear layer with larger rubber particles and finished with a custom top layer of granular particles. A binding agent is used and the material is poured out on site or “in place” as it gets its name.</p>	<p><b>DESCRIPTION</b> Bonded rubber constructed as 2 ft x 2 ft squares with interlocking sides.</p>	<p><b>DESCRIPTION</b> ASTM defines EWF as processed wood ground to a fibrous consistency, randomly sized, approximately 10 times longer than wide with a maximum length of 2 inches. Free of hazardous substances. Not to be confused with wood chips.</p>	<p><b>DESCRIPTION</b> Multi-layer system where the base layer may consist of either contained or loose particles like shredded rubber or carpet pad. The top layers may be outdoor carpeting, artificial turf, or rubber top mat.</p>
<p><b>COST (Average market cost 2009-2012)(MATERIAL ONLY)</b> \$6.59 to \$19/sq ft</p>	<p><b>COST (Average market cost 2009-2012)(MATERIAL ONLY)</b> \$8.96 to \$21/sq ft</p>	<p><b>COST (Average market cost 2009-2012)(MATERIAL ONLY)</b> \$ 0.74 to \$2.50/sq ft</p>	<p><b>COST (Average market cost 2009-2012)(MATERIAL ONLY)</b> \$7.50 to \$12.65/sq ft</p>
<p><b>INSTALLATION</b> Installer must be specially trained/certified by the manufacturer.</p>	<p><b>INSTALLATION</b> Can be installed by contractor or park/facility personnel. Learning curve associated with installation.</p>	<p><b>INSTALLATION</b> Can be installed by contractor or park/facility personnel.</p>	<p><b>INSTALLATION</b> Installer must be specially trained/certified by the manufacturer.</p>
<p><b>REPAIRS</b> Repairs must be conducted by trained installer.</p>	<p><b>REPAIRS</b> Repairs may be completed by contractor or park/facility personnel.</p>	<p><b>REPAIRS</b> Repairs may be completed by contractor or park/facility personnel.</p>	<p><b>REPAIRS</b> Usually repairs must be conducted by the installer. In some cases, park/facility personnel may be trained to make smaller repairs.</p>
<p><b>COMMON ACCESSIBILITY ISSUES</b> Cracking or flaking of the top layer can lead to divots and openings greater than 1/2 inch. Top layer deficiencies are often accelerated in high use areas (under swings, slides, teeter-totters). Results in non-compliant routes and clear ground spaces at equipment. May also result in non-compliant cross slope at entry/egress. Surface deficiencies can be traced to improper binding agent ratio, inability for product to properly cure, and deterioration of product over years of exposure to the elements.</p>	<p><b>COMMON ACCESSIBILITY ISSUES</b> Puncture holes and shifting seams can create openings and changes in level along the accessible route and at clear ground space for equipment. Foreign particles can lodge in seams causing separation including lift from adhesive for subsurface. Instances of cracking may occur as the product ages. Settled or washed out subsurface may compromise structural integrity of individual tiles.</p>	<p><b>COMMON ACCESSIBILITY ISSUES</b> Improper installation and/or maintenance can result in undulation across the horizon of the surface affecting running slope, cross slope and change in level. Product material should be installed in layers and compacted in order to achieve an accessible route and level clear ground space at equipment. Surface material is likely to displace at heavy use areas with motion, such as at swings, slides, sliding poles, climbers, spinners and teeter totters. Displaced material should be raked level and compacted before additional fill is added.</p>	<p><b>COMMON ACCESSIBILITY ISSUES</b> Seams may separate or detach from the border creating changes in level and openings affecting the accessible route. Shifting of loose fill in the base layer may affect running and cross slopes. The artificial turf top layer may experience build-up of static electricity requiring application of anti-static solution</p>

## **Appendix F: References and Definitions**

Sudden Valley Master parks Plan

Created in 2019 by the Parks, Recreation, and Trails Committee. Updated Summer 2020. [Sudden Valley Parks Master Plan - Public - Google Slides](#)

The 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design apply to state and local governments (Title II) and places of public accommodation (Title III).

### [Chapter 2: Alterations and Additions \(access-board.gov\)](#)

Advisory 202.4 Alterations Affecting Primary Function Areas. An area of a building or facility containing a major activity for which the building or facility is intended is a primary function area. Department of Justice ADA regulations state, **“Alterations made to provide an accessible path of travel to the altered area will be deemed disproportionate to the overall alteration when the cost exceeds 20% of the cost of the alteration to the primary function area.”** (28 CFR 36.403 (f)(1)). See also Department of Transportation ADA regulations, which use similar concepts in the context of public sector transportation facilities (49 CFR 37.43 (e)(1)).

### **Disproportionality (20%)**

The accessible path of travel is required to the extent that it is not “disproportionate” to the total cost. Regulations implementing the standards define “disproportionate” as exceeding 20% of the total cost of alterations to the primary function area. The 20% cap applies only to costs associated with the accessible path of travel, including an accessible route to the primary function area from site arrival points, entrances, and retrofits to restrooms, telephones, and drinking fountains.

### **Prioritization**

Compliance is required up to the point the 20% cost cap is reached, even where it does not result in a fully accessible path of travel. Where costs exceed this cap, compliance should be prioritized in this order:

1. an accessible entrance
2. an accessible route to the primary function area
3. restroom access
4. an accessible telephone
5. an accessible drinking fountain
6. access to other elements such as parking and storage

### **Technical Infeasibility**

Determining “technical infeasibility” requires a site-specific assessment of constraints or complications in relation to the planned scope of work. The term, as defined in the standards (§106), is intended to encompass design, site, engineering or other constraints that prohibit compliance. Examples include work that would impact a facility’s structural frame or that would conflict with applicable codes or building requirements.



1814 Broadway St.  
Bellingham, WA 98225  
(360) 684-4295

## **Sudden Valley Playgrounds Safety Surfacing Observation Summary**

Date: March 4, 2022  
To: PNW Services Inc., PO Box 30498, Bellingham, WA 98228  
c/o Tyler Andrews 360-739-2072  
accounting@pnwcivil.com  
From: Susan Willhoft, RLA, Project Manager, Pacific Landscape Architecture

Scope: This is a written summary of findings during site visits focused on the existing condition of play surfacing at each of seven playgrounds in Sudden Valley, and deficiencies in the play surfacing that may exist outside of U.S. Consumer Product Safety Commission guidelines and ASTM Standards for Public Playgrounds.

Pacific Landscape Architecture (PLA) reviewed playground surfacing type, depths, drainage, containment, fall/use zones, and ADA access. Professional landscape architectural opinions do not constitute legal licensed playground audits, which are not available through PLA.

Discussion: The Owner of any privately-owned park typically determines the level of risk and any risk management program to be used at that park. The Owner determines what action is required upon receiving this type of summary. One resource for development of a playground risk management program can be the playground equipment manufacturers representative. Documentation of Sudden Valley playground risk management programs, maintenance standards and procedures, as-built maps of playground layouts, maintenance instructions, and maintenance records were requested by PLA, but not available during this review.

The Sudden Valley Parks Master Plan<sup>1</sup> defines Sudden Valley's developed park types as Neighborhood Parks, typically smaller and surrounded by homes, meant for enjoyment by the adjacent residences, and Regional Parks, typically large spaces, that draw visitors from outside of Sudden Valley. Park types are noted on each park observation sheet.

Method: Susan Willhoft, PLA, assisted by Pam Andrews of PNW Services, conducted site visits of seven playground on February 24, 2022. PLA used a checklist found on following pages to review playground surfacing. Surface Type was identified, Test Pits dug to check surfacing depths, drainage and containment were visually observed, ADA access type, if any, identified. PLA used U.S. Consumer Product Safety Commission (CPSC) guidelines and ASTM Standards for Public Playgrounds to evaluate the playground surfacing. These Guidelines and Standards are developed from National Injury Data, Industry Experience, Risk Management and Litigation, and Anthropometrics.

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<sup>1</sup> Sudden Valley Parks Subcommittee and Recreation Manager. (2020). *The Sudden Valley Park Master Plan*. Bellingham: Sudden Valley Community Association.

Summary of findings, site visits February 24, 2022

Table 1: Playground Surfacing Deficiencies by Park						
Location	Surface Type	Depths	Drainage	Containment	Use Zones	ADA Access
Cascade Park	x				x	x
Maple Park	x				x	x
Treehouse Park	x	x		x	x	x
Gate 5 Park	x				x	x
Huckleberry Park	x	x		x	x	x
Recreation Corridor Park	x				x	x
Marina Park	x	x	x	x	x	x

Deficiency definitions used:

- *Surface Type*: Deficiency exists if the Fall Height observed is greater than the fall height of the playground safety surfacing as defined by Table 2, CPSC Publication. (2015) *Public Playground Safety Handbook*. Another deficiency is contamination of the pea gravel with other materials such as mud that could reduce the Fall Height of the playground safety surfacing.
- *Surface Depth*: Deficiency exists if depth of existing pea gravel material is less than 9" depth. See also surface type column and notes, as pea gravel is not sufficient for equipment with a fall height great than 5' height.
- *Drainage*: Deficiency exists if standing water inside of the playground and in any test pits dug into material.
- *Containment*: Deficiency exists if material is broken, rotten, or does not contain surfacing material to full depth. Containment walls are typically built with a level top throughout. Many of the containment walls observed had a variable top of wall elevation.
- *Use Zones*: Deficiency exists if Use Zones are not large enough as defined by ASTM F1487-17, Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.
- *ADA Access*: Public Playgrounds are now required to provide ADA access to the equipment and to provide a specific number of accessible play components relative to the total number of play features in the playground. Further study is recommended as Sudden Valley playgrounds are renovated in the future.

Recommendations for each park reviewed can be found on the following pages for Surface Type, Depths, Drainage, Containment, and Use Zones.

Terminology, reference ASTM 1487-17

- **Use Zone**: area beneath and immediately adjacent to the play structure or equipment that is designated for unrestricted circulation around the equipment and on whose surface it is predicted that a user would land when falling from or exiting the equipment
- **Fall Height**: vertical distance between a designated play surface and the protective surfacing beneath it (as measured per ASTM1487-17)

Location: Recreational Corridor Park Playground Type: Regional Park  
 Observation date: February 25, 2022

Observations by: Susan Willhoft, Pacific Landscape Architecture  
 Pam of Pacific Northwest Services onsite during site reviews

Site Observations	Note	Fall Height observed	Fall Height of 9" depth Pea Gravel per CPSC	Safety Surface Depth observed	Use Zone observed	Use Zone per ASTM 1487	Recommend Resize Use Zones	Recommend Replace Fall Surfacing
Year Renovated	2020							
Playground Surfacing	Pea Gravel over Woven Geotextile Fabric							
Containment	Low Treated Wood Retaining Wall, with untreated wood top piece							
ADA access	No							
2-bay swing, Belt Swings		8'-6"	5'-0"	9" min.	7' south, 11' north	17' min.	Y	Y
2-bay swing, Tot Swings		5'-8"	5'-0"	9" min.	7' south, 11' north	11'-4" min.	Y	Y
Composite A		8'-4" highest	5'-0"	9" min.	pass	varies	Y	Y
Composite B		4' lowest, 5'-6" highest	5'-0"	9" min.	pass	varies	Y	Y
Slide	note d.	3'-1"	5'-0"	9" min.	pass	varies	N	N

**Notes:**

- "Use Zones observed, pass": These Use Zones, measured in field, met or exceeded those recommended by ASTM 1487
- Containment: Retaining wall has variable top of wall elevation.
- Drainage: No standing water observed in this playground area. Shaded areas had some frozen pea gravel where mixed with mud. The woven geotextile wraps up the inside of the retaining wall. Rate of drainage flow not observed.
- Playground has signs stating playground is closed due to contamination with floodwater, orange cones placed at points along the retaining wall.
- Sandboxes do not require safety surfacing.

**Recommendations for Playground Safety Surface**

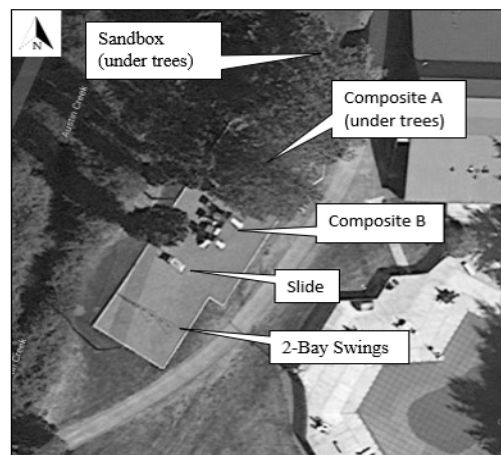
- Size Use Zones per ASTM and CPSC recommendations at Swings
- Add Playground Safety Surfacing that meets or exceeds the Fall Height requirements for Composite A, Composite B, and the 2-Bay Swings.
- ADA Accessibility laws have changed for public playgrounds. Further study of compliance to ADA laws are recommended as the playgrounds are upgraded and replaced.

**Other item noted to Pam of PNW Services:**

- Owner review if playground closure signage, orange cones are to remain. Effectiveness of the closure.
- Loose hardware requires maintenance. Example is S-hooks on swings. Contact manufacturer's rep. for information.
- Loose-filled Playground surfacing requires regular ongoing maintenance to maintain required depth and remove contaminants.
- Metal slide should be compared to current standards at next playground replacement/ remodel.

**Equipment Manufacturer:**

Play & Park Structures  
 544 Chestnut Street, Chattanooga, TN 37402  
 P: 800-727-1907 F: 423-425-3180  
 playandpark.com



Recreational Corridor Park, Sudden Valley Drive  
 Sudden Valley, Bellingham, WA  
 Image: Feb 2022 Google Maps, not to scale

**Location:** Marina Park Playground      **Type:** Regional Park  
**Observation date:** February 25, 2022

**Observations by:** Susan Willhoft, Pacific Landscape Architecture  
 Pam of Pacific Northwest Services onsite during site reviews

Site Observations	Note	Fall Height observed	Fall Height of 9" depth Pea Gravel per CPSC	Safety Surface Depth observed	Use Zone observed	Use Zone per ASTM 1487	Recommend Resize Use Zones	Recommend Replace Fall Surfacing
Year Renovated	unknown							
Playground Surfacing	Pea Gravel over dirt							
Containment	4"x6" Timbers							
ADA access	No							
2-bay swing, Belt Swings		over 10'-0"	5'-0"	4"-9", see note 4	16' southwest, 15'-9" northeast	more than 20'	Y	Y
2-bay swing, Tot Swings		over 8'-0"	5'-0"	4"-9", see note 4	16' southwest, 15'-9" northeast	more than 16'	Y	Y

**Notes:**

1. Use Zones too short on all sides of this swing structure.
2. Containment: Retaining wall has variable top of wall elevation.
3. Drainage: Standing water visible under swing seats. Puddles observed uphill of timber wall.
4. 9" depth pea gravel had 4" of standing water in test pit. 4" depth pea gravel material was mixed with mud.
5. Sandboxes do not require safety surfacing.

**Recommendations for Playground Safety Surface**

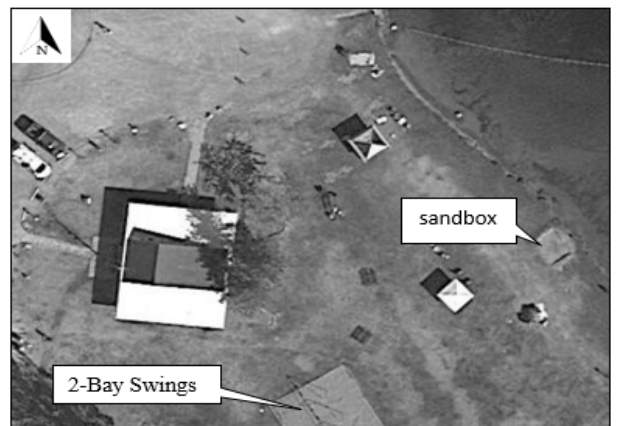
1. Improve drainage to flow around use zone and retaining wall to eliminate standing water within the playground safety surfacing.
2. Size Use Zones per ASTM and CPSC recommendations.
3. Replace Pea Gravel with a type of Playground Safety Surfacing that meets or exceeds the Fall Height requirements for this equipment.
4. Improve retaining wall to hold full depth of playground safety surfacing used.
5. ADA Accessibility laws have changed for public playgrounds. Further study of compliance to ADA laws are recommended as the playgrounds are upgraded and replaced.
6. Add Playground sign per ASTM1487 (current version), Section 14. Contact playground rep. for more information.

**Other item noted to Pam of PNW Services:**

- a. Recommend Owner review swingset footings for stability as the structure footings appear loose.
- b. Recommend Owner review sandbox retaining wall wood for rot and erosion on the lakeside of the sandbox.
- b. Loose hardware requires maintenance. Example is S-hooks on swings. Contact manufacturer's rep. for information.
- c. Loose-filled Playground surfacing requires regular ongoing maintenance to maintain required depth and remove contaminants.
- e. This site is on the Lake Whatcom Shoreline. Reviewing permit requirements is recommended for future improvements.

**Equipment Manufacturer:**

Play & Park Structures  
 544 Chestnut Street, Chattanooga, TN 37402  
 P: 800-727-1907 F: 423-425-3180  
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Location: Maple Leaf Park Playground Type: Neighborhood Park  
 Observation date: February 25, 2022

Observations by: Susan Willhoft, Pacific Landscape Architecture  
 Pam of Pacific Northwest Services onsite during site reviews

Site Observations	Note	Fall Height observed	Fall Height of 9" depth Pea Gravel per CPSC	Safety Surface Depth observed	Use Zone observed	Use Zone per ASTM 1487 (minimum)	Recommend Resize Use Zones	Recommend Replace Fall Surfacing
Year Renovated	2019							
Playground Surfacing	Pea Gravel over Woven Geotextile Fabric							
Containment	Timber Wall							
ADA access	No							
2-bay swing, Belt		8'	5'-0"	9" min.	16', both	16'	N	Y
2-bay swing, Tot sides of swings		5'-8"	5'-0"	9" min.	16', both	11'-4"	N	Y
					3'-6" north, 7' south	6'	Y	Y
Composite A		6'	5'-0"	9" min.	varies, 8' at tallest slide exit, 21'-4" btwn. Slide/ tot swing	varies, 20' btwn slide/ tot swing	Y	Y
Spinner		30"	5'-0"	9" min.	4'-8" to edging, 5' to movable picnic table	6'	Y	

**Notes:**

1. Containment: Timber wall has sloping top of wall elevation. Slopes downhill toward the Northeast overall.
2. Drainage: No standing water observed in this playground area. Ditches direct water around the north and south sides of the playground. The woven geotextile wraps up the inside of the retaining wall. Rate of drainage flow not observed.
3. "Finished Grade" stickers with line indicating level material depth for maintenance on Swing / Composite A. These are degraded and difficult to read.

**Recommendations for Playground Safety Surface**

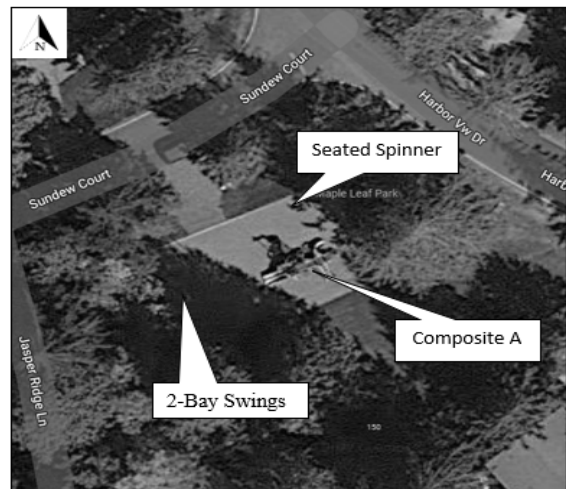
1. Size Use Zones per ASTM and CPSC recommendations at Swings sides and Spinner
2. Replace Playground Safety Surfacing with material that meets or exceeds the Fall Height requirements for Composite A and
3. ADA Accessibility laws have changed for public playgrounds. Further study of compliance to ADA laws are recommended as the playgrounds are upgraded and replaced.
4. Add Playground sign per ASTM1487 (current version), Section 14. Contact playground rep. for more information.

**Other item noted to Pam of PNW Services:**

- a. Recommend that the Owner review if playground closure signage, orange cones are to remain. Effectiveness of the closure.
- b. Loose hardware requires maintenance. Example is S-hooks on swings. Contact manufacturer's rep. for information.
- c. Loose-filled Playground surfacing requires regular ongoing maintenance to maintain required depth and remove contaminants.
- d. Recommend moving picnic table out of Use Zone for Spinner and Composite A .
- e. Contact manufacturers rep. to replace "Finished Grade" stickers (optional)

**Equipment Manufacturer:**

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 544 Chestnut Street, Chattanooga, TN 37402  
 P: 800-727-1907 F: 423-425-3180  
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Maple Leaf Park, Harbor View Drive  
 Sudden Valley, Bellingham, WA  
 Image: Feb 2022 Google Maps, not to scale

Location: Treehouse Park Playground Type: Neighborhood Park  
 Observation date: February 25, 2022

Observations by: Susan Willhoft, Pacific Landscape Architecture  
 Pam of Pacific Northwest Services onsite during site reviews

Site Observations	Note	Fall Height observed	Fall Height of 9" Wood Chip Mulch per CPSC	Safety Surface Depth observed	Use Zone observed	Use Zone per ASTM 1487 (minimum)	Recommend Resize Use Zones	Recommend Replace Fall Surfacing
Year Renovated	unknown							
Playground Surfacing	Wood Chip Mulch, non-uniform							
Containment	Treated Lumber box							
ADA access	No							
Custom Slide		30" at slide exit, varies up to 9' ht. at stairs and concrete structure	7'-0"	Frozen, unable to dig	0' at structure and sides of slide, 3'-7 1/2" x 6' box at slide exit	6' around structure. 6' at sides of slide extending 8' beyond slide end.	Y	Y

**Notes:**

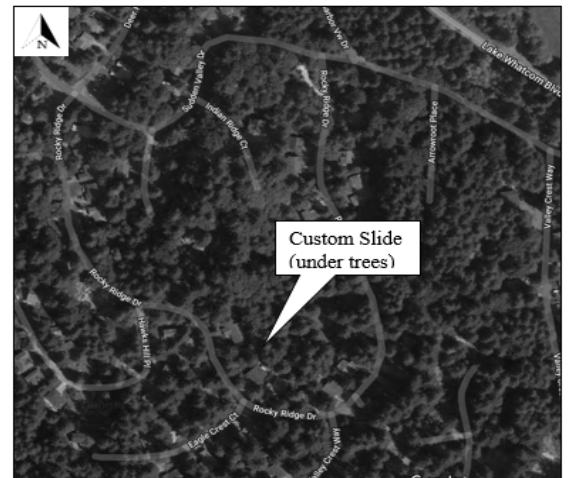
1. Drainage: Mulch box material was frozen solid, which may indicate poor drainage of box.
2. Guardrail is climbable and 37" height, ASTM standard is 38" height, non-climbable guardrail.
3. Stairway does not have a handrail, ASTM standard is to include handrails for the intended age group.
4. 24" inside diameter of tube slide is sized for children 2-5 years of age. Slide exit should be 7" max. above the fall surfacing for this age group. 30" inside diameter tube slide is the standard for children aged 5-12 yrs of age.

**Recommendations for Playground Safety Surface**

1. Size Use Zones per ASTM and CPSC recommendations.
2. Replace Playground Safety Surfacing with material that meets or exceeds the Fall Height requirements.
3. ADA Accessibility laws have changed for public playgrounds. Further study of compliance to ADA laws are recommended as the
4. Add Playground sign per ASTM1487 (current version), Section 14. Contact playground rep. for more information.
5. Establish the intended age group for this equipment for future improvements.

**Equipment Manufacturer:**

Olympic Recreation  
 No manufacturer information found online.



Tree House Park, Rocky Ridge Drive  
 Sudden Valley, Bellingham, WA  
 Image: Feb 2022 Google Maps, not to scale

Location: Cascade Park Playground  
 Observation date: February 25, 2022

Type: Neighborhood Park

Observations by: Susan Willhoft, Pacific Landscape Architecture  
 Pam of Pacific Northwest Services onsite during site reviews

Site Observations	Note	Fall Height observed	Fall Height of 9" depth Pea Gravel per CPSC	Safety Surface Depth observed	Use Zone observed	Use Zone per ASTM 1487	Recommend Resize Use Zones	Recommend Replace Fall Surfacing
Year Renovated	2020							
Playground Surfacing	Pea Gravel over Woven Geotextile Fabric							
Containment	Timber Wall							
ADA access	No							
2-bay swing, Belt Swings		7'-6"	5'-0"	12"	15'-6" east, 12'-3" west	15' min.	Y	Y
2-bay swing, Tot Swings		5'-0"	5'-0"	12"	15'-6" east, 12'-3" west	10' min.	N	N
sides of swings					3'-2" south, 10' north	6'		
Climber		6'-0"	5'-0"	9"	varies, 3'-2" btwn. Swing side /climber	6' all sides, 6'-0" btwn. Slide/tot swing	Y	Y

**Notes:**

1. Containment: Retaining wall has variable top of wall elevation.
2. Drainage: No standing water observed in this playground area. The woven geotextile wraps up the inside of the retaining wall. Rate of drainage flow not observed.
3. "Finished Grade" stickers with line indicating level material depth for maintenance on Swing.

**Recommendations for Playground Safety Surface**

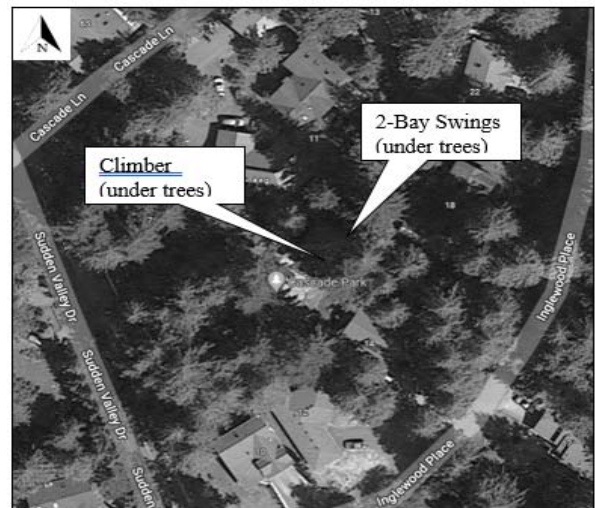
1. Resize Use Zones per ASTM and CPSC recommendations at Swings and between Swings/Climber
2. Add Playground Safety Surfacing that meets or exceeds the Fall Height requirements for Composite A and the 2-Bay
3. ADA Accessibility laws have changed for public playgrounds. Further study of compliance to ADA laws are recommended as the playgrounds are upgraded and replaced.
4. Add Playground sign per ASTM1487 (current version), Section 14. Contact playground rep. for more information.

**Other item noted to Pam of PNW Services:**

- a. Loose hardware requires maintenance. Example is S-hooks on swings. Contact manufacturer's rep. for information.
- b. Loose-filled Playground surfacing requires regular ongoing maintenance to maintain required depth and remove contaminants.

**Equipment Manufacturer:**

Play & Park Structures  
 544 Chestnut Street, Chattanooga, TN 37402  
 P: 800-727-1907 F: 423-425-3180  
 playandpark.com



Cascade Park, Sudden Valley Drive  
 Sudden Valley, Bellingham, WA  
 Image: Feb 2022 Google Maps, not to scale

**Location:** Huckleberry Park Playground Type: Neighborhood Park  
**Observation date:** February 25, 2022

Observations by: Susan Willhoft, Pacific Landscape Architecture  
 Pam of Pacific Northwest Services onsite during site reviews

Site Observations	Note	Fall Height observed	Fall Height of 9" depth Pea Gravel per CPSC	Safety Surface Depth observed	Use Zone observed	Use Zone per ASTM 1487	Recommend Resize Use Zones	Recommend Replace Fall Surfacing
Year Renovated	2018							
Playground Surfacing	Pea Gravel over Woven Geotextile Fabric							
Containment	Timber Wall							
ADA access	No							
2-bay swing, Belt Swings		8'-0"	5'-0"	5"-6"	15'-6" south, 15'-6" north	16' min.	Y	Y
2-bay swing, Tot Swings		5'-8"	5'-0"	5"-6"	15'-6" south, 15'-6" north	11'-4" min.	N	Y
sides of swings					5'-8" east, 7' west,	6'	Y	Y
Composite A		8'-6" highest	5'-0"	11" at post	pass, 21'-6" btwn. Slide/ tot swing	varies, 17'-4" btwn. Slide/ tot swing	N	Y

**Notes:**

- "Use Zones observed, pass": These Use Zones, measured in field, met or exceeded those recommended by ASTM 1487
- Containment: Retaining wall has variable top of wall elevation.
- Drainage: No standing water observed in this playground area. Some pea gravel contaminated with silts, mud. The woven geotextile wraps up the inside of the retaining wall. Rate of drainage flow not observed.

**Recommendations for Playground Safety Surface**

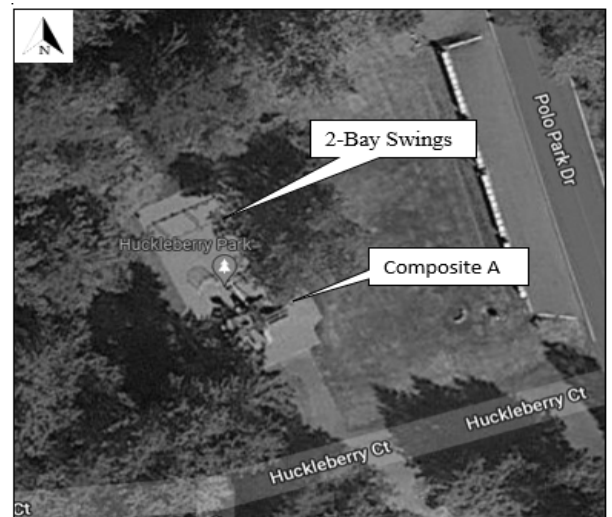
- Size Use Zones per ASTM and CPSC recommendations at Swings
- Add Playground Safety Surfacing that meets or exceeds the Fall Height requirements for Composite A and the 2-Bay
- ADA Accessibility laws have changed for public playgrounds. Further study of compliance to ADA laws are recommended as the playgrounds are upgraded and replaced.

**Other item noted to Pam of PNW Services:**

- Loose hardware requires maintenance. Example is S-hooks on swings. Contact manufacturer's rep. for information.
- Loose-filled Playground surfacing requires regular ongoing maintenance to maintain required depth and remove contaminants.

**Equipment Manufacturer:**

Play & Park Structures  
 544 Chestnut Street, Chattanooga, TN 37402  
 P: 800-727-1907 F: 423-425-3180  
 playandpark.com  
 Sticker on equipment lists: 1-888-404-5737, parkstructures.com



Huckleberry Park, Sudden Valley Community Center  
 Sudden Valley, Bellingham, WA  
 Image: Feb 2022 Google Maps, not to scale

Location: Gate 5 Park Playground  
 Observation date: February 25, 2022

Type: Neighborhood Park

Observations by: Susan Willhoft, Pacific Landscape Architecture  
 Pam of Pacific Northwest Services onsite during site reviews

Site Observations	Note	Fall Height observed	Fall Height of 9" depth Pea Gravel per CPSC	Safety Surface Depth observed	Use Zone observed	Use Zone per ASTM 1487	Recommend Resize Use Zones	Recommend Replace Fall Surfacing
Year Renovated	2019							
Playground Surfacing	Pea Gravel over Woven Geotextile Fabric							
Containment	Timbers							
ADA access	No							
2-bay swing, Belt		8'-0"	5'-0"	9" under swings	15'	16' min.	Y	Y
2-bay swing, Tot		5'-8"	5'-0"	9" under swings	15'	11'-4" min.	N	Y
Composite play		4'-8"	5'-0"	12"+ under composite structure	pass	varies	N	N

**Notes:**

- "Use Zones observed, pass": These Use Zones, measured in field, met or exceeded those recommended by ASTM 1487
- Containment: Timber wall has sloping top of wall elevation. Slopes downhill toward the North overall.
- Drainage: No standing water observed in this playground area. Shaded areas had some frozen pea gravel where mixed with mud. The woven geotextile wraps up the inside of the retaining wall. Rate of drainage flow not

**Recommendations for Playground Safety Surface**

- Size Use Zones per ASTM and CPSC recommendations at Swings.
- Replace Playground Safety Surfacing with material that meets or exceeds the Fall Height requirements for the 2-
- ADA Accessibility laws have changed for public playgrounds. Further study of compliance to ADA laws are

**Other item noted to Pam of PNW Services:**

- At the swing bay with belt swings, the top support bar moves with swings. Brown discoloration coming out of tube at both open ends. Recommend contacting Manufacturer Representative.
- Recommend moving on picnic table out of Tot Swing Use Zone.
- Loose hardware requires maintenance. Example is S-hooks on swings. Contact manufacturer's rep. for information.
- Loose-filled Playground surfacing requires regular ongoing maintenance to maintain required depth and remove contaminants.

**Equipment Manufacturer:**

Play & Park Structures  
 544 Chestnut Street, Chattanooga, TN 37402  
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 playandpark.com



Gate 5 Park, Tumbling Water Drive  
 Sudden Valley, Bellingham, WA  
 Image: Feb 2022 Google Maps, not to scale



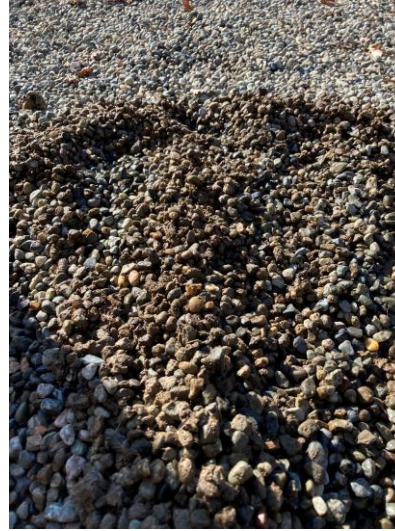
access (1)



access (2)



Composite A (1)



Composite A (8)



Composite A (10)



Composite A (11)



Composite A (13)



Composite A (14)



Composite B (1)



Composite B (7)



Composite B (8)



Composite B (9)



Composite A (12)



Composite B Surface



Containment



sandbox (1)



sandbox (2)



sign



Composite B (10)



Composite B (11)



Slide (1)



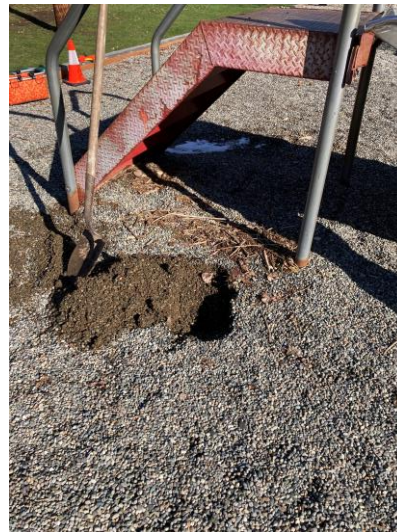
Slide (3)



Slide (5)



Slide (4)



Slide surfacing (4)



Slide surfacing (5)



Swing surfacing (1)



Marina Park (3)



Marina Park (4)



Marina Park (6)



Marina Park (8)



Marina Park (5)

Marina Park Playground



Marina Park (2)



Swing surfacing (2)



Marina Park (7)



Marina Park (1)



Marina Park (10)



Marina Park (11)



Marina Park (12)



Maple Park (1)



Maple Park (2)



Maple Park (3)



Maple Park (4)



Maple Park (5)



Maple Park (6)



Maple Park (7)



Maple Park (8)



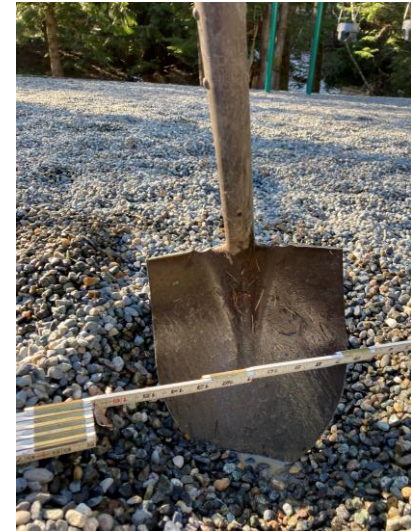
Maple Park (9)



Huckleberry Park (2)



Huckleberry Park (3)



Huckleberry Park (1)



Huckleberry Park (4)



Huckleberry Park (5)



Huckleberry Park (6)



Huckleberry Park (7)



Huckleberry Park (8)



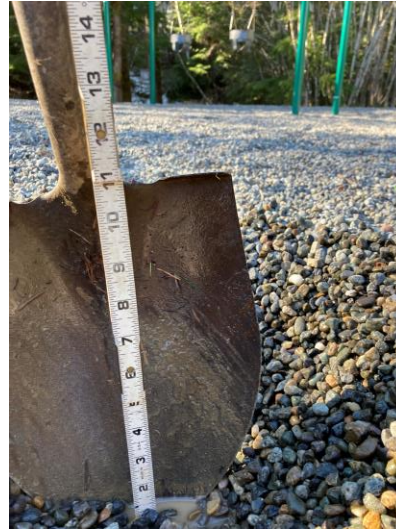
Huckleberry Park (9)



Huckleberry Park (10)



Huckleberry Park (12)



Huckleberry Park (13)



Treehouse Park structure (1)



Cascade Park surfacing (1)



Cascade Park surfacing (2)



Gate 5 Park Playground. Designated ADA Parking is available



Gate 5 Park Playground.



Gate 5 Park Playground Sign