Sudden Valley Community Association

360-734-6430
4 Clubhouse Circle Bellingham, WA 98229
www.suddenvalley.com

Finance Committee Regular Meeting

February 15, 2024, 6:30 pm, Via Zoom

Call to Order

Land Acknowledgement & Anti-Racism Statement

Item 1) Adoption of Agenda

Item 2) Approval of Jan 17, 2023 Minutes

Item 3) Announcements

Item 4) Property Owner Comments – 15 minutes Total

Please note that comments are limited to 3 minutes per person

Item 5) Review of December Financial Statements

Item 6) New Business

- 6a. Capital Request – Turf Care Tractor Replacement
- 6b. Capital Request – Turf Care Sand Trap Rake Replacement
- 6c. Capital Request – 2024 Fast Response Drainage Funds
- 6d. Capital Request – 2024 CVC Funds
- 6e. Capital Request – 2024 On-Call Engineering Funds
- 6f. Capital Request – 2024 Pothole/Minor Road Repair Funds
- 6g. Capital Request – Clubhouse HVAC
- 6h. Capital Request – Tennis Court Contract Award
- 6i. Capital Request – Road & Drainage Project
- 6j. Capital Request – Bridge Design
- 6k. Capital Request -- Bridge Inspections

Adjournment

January 17, 2024 Finance Committee Meeting via zoom

Called to order at 6:32pm

Attendees:

Chair: Laurie

Committee Members: Mary, Karen, Rob, Stu

Staff: Joel, JoAnne

Absent: Heather, Mitch

Motion: Adopt agenda - Rob. Adopted by acclimation.

Motion: Approve minutes – Karen. Approved by acclimation.

Announcements:

- JoAnne – Mike was going to attend but is still out with the snow crews
- Rob – Board vacancy. Applications accepted until COB 1/22
- Laurie – plan is to stay with Zoom meetings to accommodate staff request.

Property owner comments: none

Presentation of November Financials: Joel

- Collection rate through November 2023 – 97%
- YTD Net Income: $466,318
- Golf beat last year's revenue by $220K
- Marina Net Income: $177K. Some marina bad debt income will reverse (correction)

New Business:

- Capital Request 1:
  - Motion by Laurie: Move to recommend Board approve replacement of maintenance vehicle OP-1 not to exceed $90,480.
  - Discussion
  - Voting: Approved.
    - In favor – Mary, Laurie, Stu, Rob. Abstained – Karen (lack of bids)

- Capital Request 2:
  - Move to recommend that the Board approves allocation of $9,009.46 from CRRRF to fund HVAC replacement. – Laurie
  - Amendment – Karen: Move to recommend that the Board approves allocation of $9,009.46 from CRRRF to fund HVAC replacement, and staff will continue to follow up with Lynden Sheet Metal.
  - Discussion

- Voting: Approved. Unanimous.

- Capital Request 3:
  - Motion by Laurie : Move to recommend Board approves the allocation of $9,775 from CRRRF for the design and permitting phase of the Turf Care Building Remodel.
  - Discussion
  - Voting: Approved. Unanimous.

- Capital Request 4:
  - Motion by Laurie: Move to recommend Board of Directors approve the allocation of $54,080 from CRRRF to complete asphalt repairs of golf cart path
  - Discussion
  - Voting: Approved.
    - In favor – Mary, Laurie, Stu, Rob. Abstained – Karen (lack of bids)
- Action Item: Finance committee to take a look at current capital spending policy and make recommendation to amend if warranted.

Continuing Business:

- Marina Fees
  - Finance Committee was provided with 2022 and 2023 General Ledgers in order to ascertain total marina revenue and expenses by the following categories: Wetslips, Dryslips, Kayaks, Boat Launch, Restrooms, Park & Park facilities.
  - Karen presented findings
  - Discussion
  - Consensus was that the marina fees substantially exceed expenses and data does not indicate that anything more than a normal, standard increase would be prudent at this time.

Meeting adjourned at 8:53pm.

	WETSLIPS	DRYSLIPS	KAYAKS	BOAT LAUNCH	BATHROOMS	PARK	TOTAL MARINA
INCOME	**$ 93,038**	**$ 81,731**	**$ 15,307**	**$ 6,346**	**$ -**	**$ -**	**$ 196,421**
Bad Debt Expense	**$ (3,792)**	**$ (3,331)**	**$ (624)**		**$ -**	**$ -**	**$ (7,746)**
TOTAL INCOME	**$ 89,246**	**$ 78,400**	**$ 14,683**	**$ 6,346**	**$ -**	**$ -**	**$ 188,675**
EXPENSES							
Insurance	$ 218	$ 218	$ 218	$ 218	$ 218	$ 218	$ 1,309
Renewal Letters	$ 225	$ 225	$ 225	$ -	$ -	$ -	$ 675
Boat Decals	$ 104	$ 104	$ 104	$ -	$ -	$ -	$ 311
*Rodents	$ -	$ -	$ -	$ -	$ 521	$ -	$ 521
*Gutter Cleaning	$ -	$ -	$ -	$ -	$ 261	$ -	$ 261
R&M	$ 584	$ -	$ -	$ -	$ -	$ -	$ 584
B&O Tax	$ 1,437	$ 1,263	$ 236	$ 102	$ -	$ -	$ 3,039
*Property Tax	$ -	$ -	$ -	$ -	$ -	$ 5,901	$ 5,901
Water	$ -	$ -	$ -	$ -	$ 1,212	$ -	$ 1,212
Electric	$ -	$ -	$ -	$ -	$ 1,125	$ -	$ 1,125
Phone (Comcast)	$ 317	$ 317	$ 317	$ 317	$ -	$ -	$ 1,267
Payroll	$ -	$ -	$ -	$ -	$ -	$ (1)	$ (1)
*Security	$ 690	$ 690	$ -	$ -	$ -	$ 185	$ 1,566
TOTAL EXPENSES	**$ 3,574**	**$ 2,816**	**$ 1,100**	**$ 637**	**$ 3,337**	**$ 6,304**	**$ 17,768**
NET INCOME	**$ 85,672**	**$ 75,583**	**$ 13,583**	**$ 5,709**	**$ (3,337)**	**$ (6,304)**	**$ 170,907**

CAPITAL PROJECTS	
Wetslip Dock redesign & estimate	**$ 13,389**
Marina Launch Dock Replacement	**$ 48,941**
Security installation	**$ 4,411**
Parking lot grading	**$ 29,942**
Total Capital	**$ 96,683**
Net after Operating & Capital Expenses	**$ 74,223**

1) Wetslip revenue: wetslip revenue from combo slips determined to be = to wetslip fee. Remainder assigned to dryslips
2) Bad Debt expense = 4.075% of revenue
3) Insurance allocated equally across all areas
4) Renwal letters and boat decals allocated equally between wetslips, dryslips and kayaks.
5) B&O Tax assigned based on % of revenue
6) Phone (Comcast expenses) allocated equally between wetslips, dryslips, kayaks and boat launch

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CAPITAL REQUEST MEMO

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

From: **Greg Wadden, Golf Course Superintendent**

Date: **February 15, 2024**

Subject: **Capital Request – Replacement of NH 42 HP tractor model #TN55**

Purpose
To request funding to replace Ford turf tractor/loader or equivalent.

Background
The Turf Care Ford tractor/loader (Asset #1037) has reached the end of its serviceable lifespan and although scheduled for replacement in 2026 should be replaced before the TN55 New Holland tractor (Asset #1064) that is budgeted for replacement on the capital reserve study in 2024.

Analysis
Turfcare currently has two tractors: 1) the New Holland TN55; and 2) Ford tractor/loader model 1920. The hour meter reading on the Ford tractor currently sits at 5101 compared to 3584 for the New Holland TN55. This reading shows that the amount of wear and tear on the Ford tractor is substantially greater than that on the New Holland tractor and it is recommended to replace the Ford before the New Holland for this reason.

When looking for a replacement equivalent, the following quotes were generated:

Kubota M5660SUHD	$46,633.00 plus tax
John Deere 4066M	$51,671.24.00 plus tax
New Holland	$47,198.00 plus tax

Analysis for Tractor Replacement			
	John Deere 4066M	Kubota M5660SUHD	New Holland WM75
Minimum Requirements:			
PTO horsepower: 50 minimum	52	56	65
Tire requirement: turf tires	yes	yes	yes
Hydraulic pump flow: 10gpm	10.2 gpm	10.6 gpm	10.4 gpm
Loader capacity: 1150 lbs	2313 lbs	2536 lbs	3153 lbs
Transmission: 8x8	12x12	8x8	12x12
Front weight kit yes	yes	yes	yes
Quick detach bucket: yes	yes	yes	yes
Four wheel drive: yes	yes	yes	yes
Hydraulic lift capacity: 1881 lbs	3130 lbs	3307 lbs	3276 lbs
Price:	51,671.24	46,633+ tx	47198 + tx

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Since all three models compared meet the minimum requirements, we recommend purchasing the least expensive model, the Kubota.

Request
Request up to $50,936.70 for the purchase of the Kubota M5660SUHD to be paid from CRRRF.

Motion
Move that the SVCA Board of Directors approve the allocation of $50,936.70 from CRRRF for the purchase of a Kubota M5660SUHD Golf Course Tractor and authorize the Golf Course Superintendent to work with the Finance Director on the purchase of this item.

Board of Directors Approval:

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

BRIM PURCHASE ORDER

Lynden, Mt.Vernon, Pacific, Chehalis, Salem & Eugene

BRIM Tractor Company 2500 Cedardale Road Mt. Vernon, WA 98274 360.424.1600

Greg Wadden Sudden Valley Golf Course 360-746-8440

greg.wadden@suddenvalley.com

February 12, 2024

Salesperson: Jon Gouras

MAKE	MODEL	DESCRIPTION	UNIT #	SERIAL #	HRS	AMOUNT
New Holland	WM75	75hp tractor/ 550LU loader, open station				$ 47,900.00
		3 rear remotes, 12x12 transmission,				
discount		Only 4 left at this price				$ (6,000.00)
		turf tires				$ 5,298.00
		2) New 11.2-24/6 Goodyear SFT 105 TL R-3				
		2) New 16.9-30/6 Goodyear SFT 105 TL R-3				
Trade In						

Warranty:

SUBTOTAL	$	47,198.00
8.8% SALES TAX	$	4,153.42
TOTAL	**$**	**51,351.42**

Warranty coverage does not include travel/ hauling time or freight on parts.
All sales are final.

DOWN PAYMENT		
CONTRACT FEE/PDI		
BALANCE DUE	**$**	**51,351.42**

- ☐ Cash
- ☐ Check
- ☐ Bank Card
- ☐ NH Plan

MONTHS	
INTEREST	
PAYMENT	

- ☐ Sale
- ☐ Transfer
- ☐ Demo
- ☐ Rental
- ☐ Consignment

- ☐ Brim to Haul
- ☐ Customer to Haul

Special Instructions

☐ *Initial Here* Customer Warrants that Trade In Equipment or Consigned Equipment is Traded or Consigned with no Liens or Encumbrances

Purchaser's Signature: _____ Date: _____

4 Series

Compact Utility Tractor

JOHN DEERE

THE POWER OF 4 IS RISING

Introducing our latest 4 Series tractor. See page 11.

4052M Tractor with a canopy, front loader and wheel weights. ShadePro Canopy with optional fan is even cooler. **See page 4.**

4075R Tractor with 440R Mechanical Self-Leveling Loader (MSL), cab, heat and A/C and pallet forks. **See page 8.**

TractorPlus™ app. Better tools. Better information. With the TractorPlus™ App you'll get maintenance recommendations, tutorial videos and more. Available on all 4 Series Tractors. Download at the Apple Store or at Google Play.

The Smart Connector option enhances the user experience of the TractorPlus™ app by adding several features that help operators use and maintain equipment more efficiently.

4066M Heavy Duty with Catagory 2 Implement Versatility. **See page 6.**

Table of Contents:

THE POWER OF 4. UNLEASHED.

Warning: the power you will find inside these pages may well be the jolt you need to take a drive to your John Deere dealer and sit down in the seat of a 4 Series Compact Utility Tractor. Yes, the lineup is that powerful. There are nine models to choose from:

- **The 43.1 HP (31.7 kW) 4044M, 51.5 HP (37.9 kW) 4052M and 65.9 HP (48.5 kW) 4066M Tractors** have power and simplicity. To the power of 4. These open station models feature a standard PowrReverser™ Transmission designed to help make short work of loader work, with an easy forward/reverse lever mounted to the left of the steering column. The standard 4-Wheel Drive and tough Yanmar® diesel engines are essential. Learn all about it on **page 4**.

- **The 51.5 HP (37.9 kW) 4052M Heavy Duty and 65.9 HP (48.5 kW) 4066M Heavy Duty Tractors** are all strength and versatility. To the power of 4. The standard eHydro™ Transmission, four work lights and low Roll Over Protection Structure (ROPS) hinge point on these open station models allow for efficient work in dim, tight spaces while the standard Category 1, 2 Three-point Hitch can fit a wide array of attachments without any costly aftermarket enhancements to switch between the two. Perfect for the most heavy duty jobs. Check it out on **page 6**.

- **The 43.1 HP (31.7 kW) 4044R, 51.5 HP (37.9 kW) 4052R, 65.9 HP (48.5 kW) 4066R and 74.3 HP (55.4 kW) 4075R Tractors** are top of the line. To the power of 4. You'll get the eHydro Transmission with TwinTouch™ pedals, eThrottle™, SpeedMatch™, LoadMatch™, and Cruise Control for efficiency. The works. All standard. The options are powerful. Starting with the optional Cab with Heat and AC. Check it out on **page 8**.

A POWERFUL DEALER NETWORK IS HERE TOO.

Got a question? Can't decide which tractor is right for you? Talk to your local John Deere dealer. Your dealer is knowledgeable about landscaping, property care and 4 Series Tractors. Together, you two will find what you need.

Until then, page after page, check out the innovations and exceptional engineering to tackle any task quickly and easily. Or visit us at **JohnDeere.com/4Series** or **JohnDeere.ca/4Series**. Talk to your local dealer today.

THE 4M TRACTOR

Strength and Simplicity. To the Power of 4.

4M Tractors deliver dependable, economical power for work on landscape jobs, farms, horse operations, recreational properties and in municipal fleets.

Choose from three open station models. The 43.1 HP (31.7 kW) 4044M, 51.5 HP (37.9 kW) 4052M and 65.9 HP (48.5 kW) 4066M all feature 4-wheel drive and a tough, 4-cylinder Yanmar® diesel engine with an ample torque reserve.

And that's just for starters.

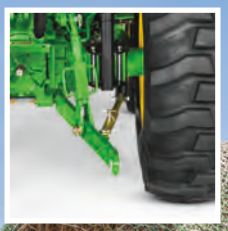
The optional 400E Front Loader transports mulch, soil or gravel.

What's standard is powerful

Serviceability is strong. A 200-hour oil change interval. A sliding front grill to service the battery and radiator. Convenient spots to check engine and hydraulic oil levels.

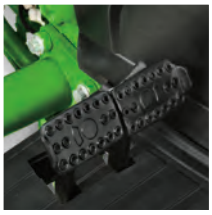
Folding ROPS (Roll Over Protective Structure). Keep it up and keep safe.

Great rear hitch capacity. The big, 15.9 gal/min (60.2 ltr/min) hydraulic pump offers power for fast loader cycles, responsive power steering, heavy 3-point-hitch lifts, and great backhoe performance.



The PowrReverser™ transmission. This 12F/12R gear drive transmission features a reverser lever located by the left side of the steering wheel for direction changes with a foot throttle to free hands for loader work, steering and direction changes.

Planetary final drives are the same as the design used on our high-horsepower John Deere tractors, offering exceptional reliability by spreading the load over three gears.



John Deere wet disk brakes are oil-cooled, so they virtually never wear out. And they almost never need adjusting. Work them hard, they can take it.

Differential Lock for exceptional traction gets you out of slick spots. Simply step on the foot pedal to send power equally to both rear wheels, which helps if one wheel starts spinning.

The optional e-Hydro transmission. With TwinTouch™ pedals, LoadMatch™, to help prevent stalls if the torque load increases on the engine, MotionMatch™, to control how quickly you accelerate or decelerate and a Cruise Control option. Just like in a car.

iMatch™ Quick Hitch
Hooking up a rear implement? With iMatch™ Quick Hitch simply back in, lift up, lock down, and drive away.

Canopies
Beat the sun and inclement weather. Canopy is installed to the ROPS. Available in metal and ABS plastic.

THE 4M HEAVY DUTY TRACTOR

Strength and Versatility. To the Power of 4.

Get a load of these impressively powerful and rugged John Deere 4M Heavy Duty Compact Tractors. The heavy-duty axle provides the strength to carry heavy loads on construction sites, clear land, and timber, and maintain acreage and farms. These tough, versatile machines were made for any heavy duty job that needs doing.

Choose from two open station, diesel, 4-wheel drive models: The 51.5 HP (37 kW) 4052M Heavy Duty and 65.9 HP (48.5 kW) 4066M Heavy Duty Tractor.

Category 2 Implements are no problem here. Attach AG Suitcase front weights to tractor for proper ballasting.

What's standard is strong and remarkably versatile

Rugged, rust and dent-resistant composite hood. Leave the dents and rust that expose your engine to the elements to metal hoods.

The Brush Guard and Front Weight Support. For protection and to be ready for when you need weight up front to counterbalance heavy implements in the back if your front loader is off.

The Factory Installed Hydraulics. Toward the rear and right side for exceptional all-around tractor and implement performance.

The Roll Over Protection System (ROPS) with a low hinge point. For storing in low-clearance areas like a shed or garage. Raise when operating.

Independent PTO with modulated engagement. A modulated, wet disk clutch engages the PTO. Simply pull up on the yellow knob and the PTO gently engages.

The LED work lights. To illuminate any low light environment. Start earlier and keep working later.

The big tires with the deep tread. Designed for work in muck and mud. The lug capacity is strong. For when slipping and sliding is not an option.

The Category 1, 2 Three-Point Hitch. Simplifies implement management. Switch out Category 1 Implements and Category 2 Implements quickly and easily without hard-to-manage add-ons.

The 4066M Heavy Duty features 51.9 PTO HP (38.7 kW) and the 4052M Heavy Duty has 40.8 PTO HP (30.5 kW). To power Category 1 or 2 implements.

The e-Hydro™ Transmission. With TwinTouch™ forward/reverse pedals, LoadMatch™ to prevent stalls while lifting, SpeedMatch™ to slow max speeds for precision tasks, MotionMatch™ to protect turf from stops and starts, eThrottle™ for fuel efficiency and noise and Cruise Control. Just like a car.

Optional 440R Quik-Park Loader. Easy to attach/detach. The lift capacity at full height measured at the pivot is 2,539 lbs (1,154 kg). That's heavy lifting. Mechanical Self-Leveling option available.

Telescoping draft links. The lower links can extend, making it easier to line up mounting holes on the tractor and implement.

Optional John Deere Quik-Knect™. Click PTO driven implements (115 PTO HP or less) into the back of your tractor quickly and easily. Avoid scraped knuckles.

Heavy Duty Front Axle. Two big, round bales. Two feed spots. No problem.

4M Heavy Duty Tractors only

THE 4R TRACTOR

The Pinnacle. To the Power of 4.

The tough, 4-cylinder Yanmar® diesel engine powered, 4052R, 65.9 HP (48.5 kW) 4066R, and the 74.3 HP (55.4 kW) 4075R have the best of just about everything. The overall benefits of these four-wheel drive tractors reach new heights of engineering excellence.

The 440R Mechanical Self-Leveling (MSL) Loader. Start level and stay level the easy way.

The standard features are powerful

LED Headlight and Work Lights. High-visibility lighting for those who start earlier and finish later. You know who you are.

HitchAssist™ 3-Point control. Align an implement from the back of your tractor with controls that creep the tractor backwards or forwards and adjust link positions to connect easily.

The e-Hydro™ Transmission. With TwinTouch™ forward/reverse pedals, LoadMatch™ to prevent stalls during heavy load applications, SpeedMatch™ to slow max speeds for precision tasks, MotionMatch™ to protect turf from stops and starts, eThrottle™ for fuel efficiency and noise and Cruise Control. Just like a car.

The operator cab with large, adjustable seat. Reach controls in comfort and be able to check rear implements with ease.

Serviceability is strong. A 200-hour oil change interval. A sliding front grill to service the battery and radiator. Convenient spots to check engine and hydraulic oil levels. Power up.

Electro-Hydraulic (EH) Hitch. Set your electro-hydraulic hitch from inside the cab. Lock in the same depth level, every pass. No guesswork.

Heavy Duty Front Axle. Tackle heavier loads with confidence. Dig deeper and get more work done faster. The 4075R makes easy work of clearing snow, logs, rocks … you name it.

The optional Snow Cab with heat and A/C. Great visibility, low noise, and you control the temperature. The air-ride seat is standard on the 4066R Tractor with a cab. Optional on others.

The PowrReverser™ Transmission option. This 12F/12R gear drive transmission features a reverser lever located by the left side of the steering wheel for direction changes with a foot throttle to free hands for loader work, steering and direction changes.

John Deere Hydraulic Downforce Kit. Add downward pressure in hard soil conditions.

IMPLEMENTS AND ATTACHMENTS.

Versatility. To the Power of 4.

More than 50 implements and hundreds of attachments are ready and waiting. From front loaders, backhoes and wheel rakes to canopies, work lights and batteries, John Deere and Frontier implements along with quality attachments do it all. Hookup is fast and easy, high performance is a given.

Telescoping Draft Links

Front and Rear Hay Spear. 4M HD Tractor only.

485A Backhoe with lighting guards and wheel weights.

Rear attaching snow blower and 4-season cab with heat and A/C. (4R only).


Posthole Diggers


Rear Blades


Landscape Rakes


Rotary Cutters

Category 1 implements or **Category 2 Implements?** Many large property owners with big projects and long task lists, landscapers, cow/calf operations and poultry houses use both category 1 and category 2 implements. We offer both. In fact, the category 1, 2 Three Point Hitch on 4M Heavy Duty Tractors make switching between the two categories easy and simplifies inventory management.

400E, 440R or th**e 440R MSL Front Loaders** get it done with an easy-to-attach/detach Quik-Park™ loader or Mechanical Self-Leveling (MSL) loader (4M HDs and 4Rs only). Heavy-duty buckets, 4-in-1 buckets, pallet forks and snow pushes are available. Joystick loader controls are standard on all models.


440R Quik-Park™ Loader

The 485A Backhoe has a full 180-degree bucket rotation, fast cycle times and a bucket digging force of more than 3,700 pounds (1678 kg) with a dig depth of up to 8 ft. 6 in. (2438mm). Buckets range from 12- to 24-inches (305-610mm) wide. Optional Ripper, Trenching Bucket, Mechanical and Hydraulic Thumbs are available for Backhoes. The Quik-Tatch™ technology installs or detaches without removing the 3-point hitch. A real time-saver.


Tillers


Rear Box Blades

Optional Attachments

Forward Lighting Kit, Rear Work Light and 360° LED Lighting
Enjoy increased visibility when working in low-light conditions. Lights mount to brush guards located on the ROPS.

Lighting Brush Guard Kits (Two Guards)
Available for both the warning lights and additional lighting options.

Engine Coolant and Transmission Oil Heaters
For cold weather operation, be ready with these kits to warm your machine.

Mirror Kits
For greater visibility of what's behind you while focusing on what's ahead.

Rear Ballast Options
For enhanced loader performance and tractor stability, a ballast box with optional extension and rear wheel weights are available.

Wheel Spacers (140 mm)
Widens the wheelbase for stability and a smooth ride when working on uneven ground and hillsides.

Quik-Tatch Weights, 42 lb (19.1 kg) and 70 lb (32.7 kg)
Add some extra weight to the front of the machine easily and securely with Quik-Tatch weights.

3rd Function Loader Hydraulics
Provides hydraulic couplers at the front of the loader boom for operating implements such as the Frontier 4-n-1 bucket, grapples and hydraulically adjusted blades.

Top And Tilt Kit
Allows hydraulic positioning, left/right and forward/backward, from the operators seat using the loader joystick. Ideal for use in box blade or rear blade applications.

Front Fenders And Rear Fender Extensions
Keep it clean by protecting yourself, the tractor and the implements from debris flying off the tractor tires.

For Front Fenders and Rear Fender Extensions. 4R Only

Front Hitch
Add a category 1 front hitch to easily connect and disconnect a front non-PTO driven implement.

4M and 4R only

Tool Storage
Tool Storage solutions provide a simple way to carry the most commonly used landscaping tools and power equipment on the tractor.

Additional Selective Control Valves and Power Beyond Kits*
Add rear implements with hydraulic functions like blades, snow blowers and a backhoe with a third, fourth or fifth SCV and Power Beyond Kit.

*For backhoes and wood chippers.

Maintenance Parts

Filter Pak
The key to do it yourself maintenance when it comes to changing your tractor filters.

Plus-50™ II Oil
The only engine oil you really ever need on the farm, in the field, or on the highway.

Batteries
John Deere StrongBox™ Batteries and high performance batteries are a versatile, reliable solution. Economy options available.

Hy-Gard Hydraulic/Transmission Oil™
Provides the best performance and wear protection for John Deere hydraulic and transmission systems. Formulated with friction modifiers that provide smooth clutch engagement and high braking capacity with minimum chatter.

6-YEAR / 2,000 HOUR LIMITED POWERTRAIN WARRANTY

We're backing these tractors with a reliable 6-Year Powertrain Warranty.[1] It's standard, comes at no cost, and covers both residential AND commercial use. It's just one more reason why—Nothing Runs Like a Deere.™

[1]All Compact Utility Tractors purchased new from an authorized John Deere Dealer come standard with a 6 year/2000 hour (whichever comes first) Powertrain Warranty. See the Limited Warranty for New John Deere Turf & Utility Equipment at dealer for details.

POWERGARD™ PROTECTION PLANS*

Protect your 4 Series Tractor with a PowerGard Protection Plan. It provides parts and labor coverage up to five years beyond your manufacturer's warranty. And if you sell your machine before the coverage term ends, the remaining coverage is fully transferable to the next owner—adding value to your resale or trade-in. Talk to your dealer for details. Or visit us online.

* Certain limitations and exclusions may apply. For complete terms and conditions, please refer to www.johndeere.com/pppr or www.johndeere.ca/pppr.

The Augusta Georgia Factory

All 4 Series Tractors are **designed, assembled, tested and distributed** out of our Augusta, Georgia Factory. Learn more about how we run at **JohnDeere.com/4Series** or **JohnDeere.ca/4Series**.

John Deere Financing

In the world of loader work, digging trenches, clearing ground, leveling driveways, putting in fences, sweeping sidewalks and caring for livestock and crops, you can count on John Deere Financial. Just like John Deere Tractors, our roots run deep in some of the healthiest, high producing fields and farms in the world and we're proud of the long-standing relationships we have with small farmers and large farming operations alike.

The lay of the land of commercial landscapers, sports turf complexes, golf courses, municipalities and federal governments are no strangers to us either. Put the strength and flexibility of John Deere Financing behind your purchase. We know the landscape you work in and we're committed to helping you get what you need. You can bank on it.

US: JohnDeere.com/4Series

CA: JohnDeere.ca/4Series

HELP YOURSELF

Our full list of implements and attachments would rival the longest to-do list. Let **TipsNotebook.com** show you how to use them.

SPECIFICATIONS

	4044M	4052M	4066M	4052M Heavy Duty
ENGINE	Yanmar® 4TNV88C-MJT	Yanmar® 4TNV86CT-MJT	Yanmar® 4TNV86CHT-MJT	Yanmar® 4TNV86CT-MJT
Type	Naturally-aspirated 4-cylinder Diesel	Turbocharged 4-cylinder Diesel	Turbocharged 4-cylinder Diesel	Turbocharged 4-cylinder Diesel
HP (Kw)*	43.1 (31.7)	51.5 (37.9)	65.9 (48.5)	51.5 (37.9)
PTO HP Gear Transmission – hp(Kw)	34.6 (25.8)	42.2 (31.4)	58 (53.2)	—
PTO HP Hydro Transmission – hp(Kw)	33.6 (25.0)	41.2 (30.7)	57 (42.5)	40.8 (30.5)
Engine Displacement cu in. (L)	133.5 (2.189)	127.6 (2.091)	127.6 (2.091)	127.6 (2.091)
ELECTRICAL				
Battery Power	770 CCA	770 CCA	770 CCA	770 CCA
Alternator	75 A	75 A	75 A	75 A
HYDRAULICS				
Type	Open Center	Open Center	Open Center	Open Center
Pump Type	Dual Independent	Dual Independent	Dual Independent	Dual Independent
Remote Control Valves	3/4/5 optional	3/4/5 optional	3/4/5 optional	NA
Total Capacity gpm (l/min)	15.9 (60.2)	15.9 (60.2)	15.9 (60.2)	15.9 (60.2)
TRANSMISSION				
Standard Transmission	12F/12R PowrReverser™	12F/12R PowrReverser™	12F/12R PowrReverser™	3F/3R Hydrostatic
Optional Transmission	3F/3R Hydrostatic	3F/3R Hydrostatic	3F/3R Hydrostatic	—
Final Drive	Planetary	Planetary	Planetary	Planetary
Brakes	Wet Disk	Wet Disk	Wet Disk	Wet Disk
Steering	Power	Power	Power	Power
Clutch	Wet disk, PowrReverser	Wet disk, PowrReverser	Wet disk, PowrReverser	—
4WD	Standard MFWD	Standard MFWD	Standard MFWD	Standard MFWD
PTO				
PTO Type	Independent 540	Independent 540	Independent 540	Independent 540
PTO Locations	Rear	Rear	Rear	Rear
Economy PTO	No	No	No	No
REAR HITCH				
Type	Category 1	Category 1	Category 1	Category 1/2
Lift Capacity (24 in. behind link arms)	2,500 lb. (1,135 kg)	2,500 lb. (1,135 kg)	2,500 lb. (1,135 kg)	2,500 lb. (1,135 kg)
Lift Capacity (At link ends)	3,130 lb. (1,420 kg)	3,130 lb. (1,420 kg)	3,130 lb. (1,420 kg)	3,130 lb. (1,420 kg)
OPERATING WEIGHT				
OOS (Open Operator Station)	3,770 lb. (1,710 kg)	3,770 lb. (1,710 kg)	3,770 lb. (1,710 kg)	4,255 lb (1,934 kg)
Cab	—	—	—	—
STANDARD TIRES**				
Front	8-16 (6PR, R1 Bar, 2 Position)	8-16 (6PR, R1 Bar, 2 Position)	8-16 (6PR, R1 Bar, 2 Position)	31.5x13-16.5 (10PR, R4 Industrial, 2 Position)
Rear	13.6x28 R1	13.6x28 R1	13.6x28 R1	16.9-24 R4
Roll Over Protective Structure	Folding	Folding	Folding	Folding
ComfortGard™ Cab	No	No	No	No
Air Ride Seat	No	No	No	No
Wheelbase	73 in. (1,855 mm)	73 in. (1,855 mm)	73 in. (1,855 mm)	73 in. (1,855 mm)

*Manufacturer's estimate of engine power 97/68/EC rated power (gross), hp (kW) **Additional tire options available. See dealer for details.

4066M Heavy Duty	4044R	4052R	4066R	4075R
Yanmar® 4TNV86CHT-MJT	Yanmar® 4TNV88C-MJT	Yanmar® 4TNV86CT-MJT	Yanmar® 4TNV86CHT-MJT	Yanmar® 4TNV86CHT-MJT
Turbocharged 4-cylinder Diesel	Naturally-aspirated 4-cylinder Diesel	Turbocharged 4-cylinder Diesel	Turbocharged 4-cylinder Diesel	Turbocharged 4-cylinder Diesel
65.9 (48.5)	43.1 (32.1)	51.5 (37.9)	65.9 (48.5)	74.3 (55.4)
—	34.6 (25.8)	42.2 (31.4)	58 (53.2)	–
51.9 (38.7)	33.6 (25.0)	41.2 (30.7)	57 (42.5)	60 (44.7)
127.6 (2.091)	133.5 (2.189)	127.6 (2.091)	127.6 (2.091)	127.6 (2.091)
ELECTRICAL				
770 CCA	770 CCA	770 CCA	770 CCA	770 CCA
75 A	75 A	75 A	75 A	75 A
HYDRAULICS				
Open Center	Open Center	Open Center	Open Center	Open Center
Dual Independent	Dual Independent	Dual Independent	Dual Independent	Dual Independent
NA	3/4/5 optional	3/4/5 optional	3/4/5 optional	3/4/5 optional
15.9 (60.2)	15.9 (60.2)	15.9 (60.2)	15.9 (60.2)	15.9 (60.2)
TRANSMISSION				
3F/3R Hydrostatic	3F/3R Hydrostatic	3F/3R Hydrostatic	3F/3R Hydrostatic	3F/3R Hydrostatic
—	12F/12R PowrReverser™	12F/12R PowrReverser™	12F/12R PowrReverser™	12F/12R PowrReverser™
Planetary	Planetary	Planetary	Planetary	Planetary
Wet Disk	Wet Disk	Wet Disk	Wet Disk	Wet Disk
Power	Power	Power	Power	Power
—	Wet disk, PowrReverser	Wet disk, PowrReverser	Wet disk, PowrReverser	Wet disk, PowrReverser
Standard MFWD	Standard MFWD	Standard MFWD	Standard MFWD	Standard MFWD
PTO				
Independent 540	Independent 540	Independent 540	Independent 540	Independent 540
Rear	Rear	Rear	Rear	Rear
No	Optional	Optional	Optional	Optional
REAR HITCH				
Category 1/2	Category 1	Category 1	Category 1	Category 1
2,500 lb. (1,135 kg)	2,500 lb. (1,135 kg)	2,500 lb. (1,135 kg)	2,500 lb. (1,135 kg)	2500lb (1,135 kg)
3,130 lb. (1,420 kg)	3,130 lb. (1,420 kg)	3,130 lb. (1,420 kg)	3,130 lb. (1,420 kg)	3130 lb (1,420 kg)
OPERATING WEIGHT				
4,255 lb (1,934 kg)	3,770 lb. (1,710 kg)	3,770 lb. (1,710 kg)	3,770 lb. (1,710 kg)	–
—	4,675 lb. (2,120 kg)	4,675 lb. (2,120 kg)	4,675 lb. (2,120 kg)	4828 lb (2,190 kg)
STANDARD TIRES**				
31.5x13-16.5 (10PR, R4 Industrial, 2 Position)	8-16 (6PR, R1 Bar, 2 Position)	8-16 (6PR, R1 Bar, 2 Position)	8-16 (6PR, R1 Bar, 2 Position)	8-16 (6PR, R1 Bar, 2 Position)
16.9-24 R4	13.6x28 R1	13.6x28 R1	13.6x28 R1	13.6-28 (4PR, R1 Bar, 5 Position)
Folding	Folding	Folding	Folding	Folding
No	Optional	Optional	Optional	Standard
No	Optional with cab	Optional with cab	Optional / Standard on cab	Standard
73 in. (1,855 mm)	73 in. (1,855 mm)	73 in. (1,855 mm)	73 in. (1,855 mm)	73 in. (1,855 mm)

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CA: JohnDeere.ca/4Series
Visit your John Deere Dealer

JOHN DEERE

3928970 (23-07)

Scholten's Equipment
8223 Guide Meridian Rd.
Lynden WA 98264
United States
360.354.4071

Printed 2024-01-10

Quote

Name/Company	SUDDEN VALLEY GOLF COURSE	Telephone	360-296-6497
Address		Account Manager	Tom Postma
City/Town, State/Province	,	Location Lynden Kubota	Quote No. 28252
Postal/Zip Code		Quote Date 2024-01-10	In Effect Until 2024-01-10

How did we get started 43 years ago? Hauling late model used equipment out of the Midwest. We put a 100hr. 90 day drivetrain warranty - money back guarantee on anything we sell over $20K. We still do it today. Take the risk out of buying equipment. Let us do it for you and guarantee it.

Quantity	Description		Price $
		Sales Items	
- New - Kubota M5660SUH/SUHD Tractor			
Stock No.: 4403714			
1	M5660SUHD	4WD Utility 2 Post Foldable ROPS Tractor	34156.00
1	AMR8526/AMR8541	Front LSW305-521R3 Grizz LSW Soft Turf and Rear LSW570-648 R3 Grizz LSW S.TF 5.75	3660.00
1	M1059	Front Weight Bracket Kit for Loader Application Requires Bolt/Bar Kit to mount weights. Up to 8 Front Suitcase Weights. Loader must be detached.	192.00
1	M8079	Suitcase Weight - Qty 8	1008.00
1	M8074A	Bolt/Bar Kit for M1875A and M8070 One Kit per 8 Front Suitcase Weights.	77.00
1	LA1154SU	Front Loader 2 Lever Type Quick Coupler. Includes Mounting Kit, Loader Valve and Joystick, Parking Stands and 2 Lever QA Coupler. Does not include Bucket or Grill Guard. Must be ordered separately.	7522.00
1	M1811	72” 2 Lever Quick Attach	871.00
1	Setup	Machine Setup and PDI	1500.00
1	Fluid	Bio Ballast Tire Fluid	500.00
		Sub-Total	**$49,486.00**

Sale Items Subtotal		$49,486.00
Total Price of Sale Items		$49,486.00
	Discount	($2,853.00)
	Balance	$46,633.00
Dealer Doc Fee		$200.00
Tax %		$4,103.70
	Contract Amount	$50,936.70

Account Manager _____ Accepted by _____

Tom Postma
Tel: 360-220-4174
Cell: 360-220-4174
Email: tom@scheq.com

For Earth, For Life
Kubota

M

KUBOTA DIESEL TRACTOR

M5660SUH/M5660SUHD

Built with the power to tackle a wide range of jobs, the new M5660SU brings new and enhanced features to the task, including Kubota's easy-to-use hydraulic shuttle.

SPECIAL UTILITY

Everything you asked for and more: Power, Easy operation, Convenience.

We asked what you wanted, and you told us. You wanted power. Easy operation. And comfort. And you wanted it all in an affordable mid-size diesel tractor that could handle it all, from front-loader work to mowing and a whole lot more.

We listened. Introducing the Kubota M5660SU, a diesel tractor with the power, easy operation, and comfort you asked for. Power from a 56 horsepower engine with Electronic CRS Common Rail direct fuel injection for better fuel economy. Easier operation from a variety of new and enhanced features usually found only on bigger tractors or listed as options, including a hydraulic shuttle that simplifies front loader work by letting you smoothly and quickly shift from forward to reverse and back again with a single lever. A new transmission that offers 8 forward and 8 reverse speeds to let you choose the right speed for the job. And the comfort of ergonomically designed controls and a high-back bucket seat with lumbar support to help you work more efficiently and comfortably. Plus a telescopic lower link, rear remote valve, and high-lift loader—all standard equipment—to let you do more in less time and with less effort.

You asked for it, and we delivered. The new M5660SU diesel tractor from Kubota.

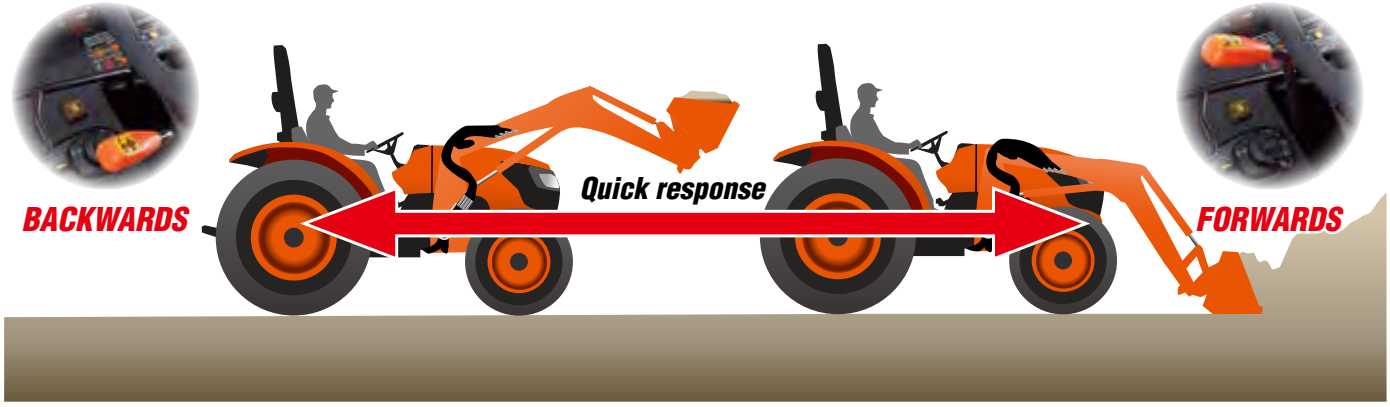
ENGINE

Powerful and Clean

The M5660SU takes tractor performance to the next level in power even as it reduces emissions. The powerful 56 hp engine features Electronic CRS Common Rail direct fuel injection for better fuel economy. For cleaner emissions, the M5660SU is equipped with a Common Rail System (CRS) and Diesel Particulate Filter (DPF) that work together to ensure compliance with the latest EPA Tier 4 Final emission regulations.

M5660SUH	2WD	56 Engine hp
M5660SUHD	4WD	56 Engine hp

TRANSMISSION



Hydraulic Shuttle

New to this class of tractor, the M5660SU's hydraulic shuttle provides smooth, quick, and effortless shifting between forward and reverse via a single lever, eliminating the need to depress the clutch to change directions. Conveniently located next to the steering wheel, the hydraulic shuttle lever boosts productivity in any job that requires lots of forward/reverse movements, such as front loader work.

Ergonomical Lever Layout

All levers, including the main shift lever and hydraulic shuttle lever, are located within easy reach from a sitting position. Drivers won't have to extend awkwardly or uncomfortably while performing tractor operations.

F8/R8 Transmission

A new transmission provides 8 forward and 8 reverse speeds spread across four synchronized main shift speeds and high/low speed ranges, letting you choose the right speed for the task at hand.

OPERABILITY

Live-Independent Hydraulic PTO

The M5660SU offers smooth and self-modulating hydraulic independent PTO. A PTO brake ensures smooth stops while maintaining PTO shaft speed. The shaft can be rotated 60 degrees for easy hook-up even while the engine is off.

3-Point Hitch

Rear-mounted implements can be attached quickly and easily to the Category I and II 3-point hitch, thanks to the adjustable top link, turn-buckle type lift rod, and telescopic stabilizers. The hitch provides ample lifting: up to 3307 lbs. at 24 inches behind the lift point.

Rear Remote Valve, SCD Type

The M5660SU offers one rear remote valve as standard equipment and up to three as options. SCD type is self canceling detent, and FD type has a float detent.

Telescopic Lower Link and Adjustable Lift Rods

Now standard equipment on the M5660SU, Kubota's telescopic lower link ends and adjustable lift rods ensure quick and simple attachment and adjustment of implements.

High-capacity Fuel Tank

The M5660SU now offers an ample 17.7-gallon (67 l) capacity fuel tank to keep you working longer between fill-ups.

Bevel-Gear Front Axle

A bevel-gear front axle provides excellent maneuverability and an astonishingly tight 55-degree turning radius, letting you work efficiently in narrow spaces. Standard features include a differential lock on the rear for increased stability and traction when working under difficult ground conditions.

COMFORT

High-Back Bucket Suspension Seat

The M5660SU takes operator comfort to an all-new level to keep you working efficiently and with less fatigue. The high-back bucket seat features lumbar support to help you work efficiently and comfortably even when the work day is long.

New Dash Panel

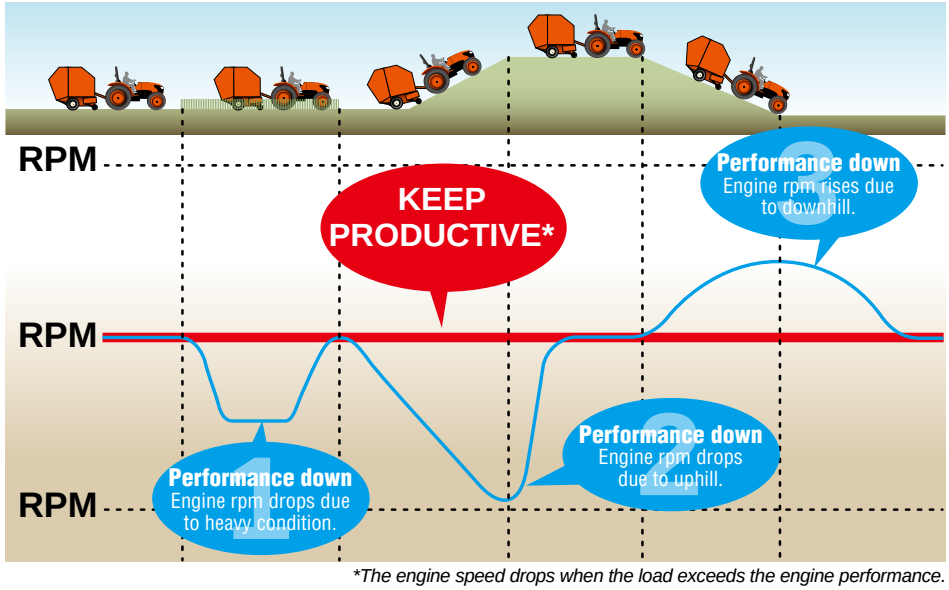
A redesigned dash panel with LCD display provides you with all the information you need to work efficiently and keep your M5660SU in peak condition. The easy-to-read gauges and indicators include a fuel consumption meter, parking indicator, ECU and fault code indicators.

PRODUCTIVITY

Economy PTO (optional)

The M5660SU's optional economy PTO can save you money as well as reduce operating noise. Simply select "540E" and the PTO shaft rotation speed is maintained at 540 rpm while the engine speed runs at 1828 rpm with limitation to 2132 rpm, thereby reducing both operating noise and fuel consumption.

• Keep Productive At Your Farm By Using Constant RPM Management



**The engine speed drops when the load exceeds the engine performance.*

Constant RPM Management

The M5660SU is equipped with a constant rpm management system that maintains a constant rpm rate regardless of the terrain. When traveling across hilly terrain, simply turn the Constant RPM Management switch to "On", and the M5660SU will maintain a constant travel speed as well as a constant PTO rpm rate when using PTO-driven implements. Constant rpm management improves work accuracy without the need to constantly adjust the travel speed and PTO shaft rpm rate.

Constant RPM Management Switch ON
Constant RPM Management Switch OFF

FRONT LOADER

Front Loader

Ideal for farm work, the M5660SU's new Front Loader is fully integrated with a slanted boom that offers greater visibility and clearer sight lines to the sides of the bucket and loader. The curved look is sleek, too, matching the lines of the hood and the tractor's overall design.

4-Bar Linkage

A 4-bar bucket linkage system increases the rollback and dumping angle for quicker scooping and dumping.

Quick-Mount Attach/Detach

Attach or detach the front loader quickly without the use of tools. The boom stands and mounting pins make this task a snap, allowing an extra measure of productivity and tractor versatility.

Frame

The frame of the front loader maintains its sturdy, thick steel frame, but its design has been simplified by removing braces and connectors. This helps to lessen effort and shorten the time it takes to attach the loader and offers increased visibility.

2-Lever Quick Coupler

This standard M-Series feature makes attaching buckets, bale spears and pallet forks quick and easy.

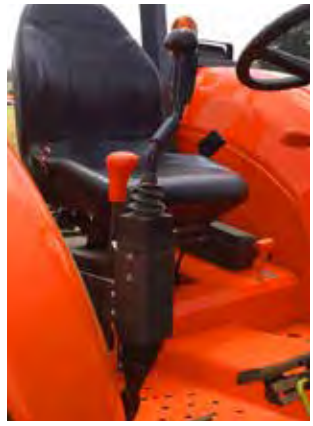
3rd Function Valve

The optional 3rd function valve broadens the scope of the front loader operation by enabling the use of a grapple bucket and various other hydraulically controlled attachments. The 3rd function valve can be activated with buttons located on the grip of the joystick.

Greater Lifting Power, Higher Lifting Height

The M5660SU now features an more powerful boom that provides even greater lifting power and height, so you can get more work done with less effort. Two boom cylinder fulcrum positions (Power and Height) let you adjust the boom to fit the job. When doing bucket work, which requires greater power, set the boom cylinder to the Power position. When performing pallet fork or bale spear tasks, which benefit from higher lifting heights, set the boom cylinder to the Height position.

Joystick Control



An easy-to-operate joystick gives you complete control over the loader's movement and speed. The joystick is located in front of the control console for fast and easy access. The Series Circuit lets you simultaneously operate the boom and bucket, while the Regenerative Bucket Dump Circuit quick and efficient dumping.

Protected Cylinder Tubes

To better protect the tractor hydraulics and offer the operator more visibility, the hydraulic tubes are neatly tucked inside the loader boom. Hydraulic tube covers further provide protection from wear and tear.

Front loader specifications

Model		LA1154	
Tractor Applications		M5660SUH / M5660SUHD	
Boom Cylinder Fulcrum		Height position	Power position
Maximum Lift Height (Pivot Pin)	in. (mm)	130.9 (3326)	115.7 (2938)
Clearance w/Attachment Dump	in. (mm)	99.9 (2537)	84.0 (2133)
Reach @ Maximum Height	in. (mm)	19.1 (485)	38.4 (976)
Maximum Dump Angle	degrees	43	60
Reach w/Attachment on Ground	in. (mm)	78.1 (1984)	
Maximum Rollback Angle	degrees	45	
Digging Depth (When Bucket is Level)	in. (mm)	6.8 (173)	5.9 (150)
Overall Height in Carry Position	in. (mm)	59.6 (1513)	
Material Bucket Width / Capacity (Heaped)	in. /cu.ft.(m^3)	72 / 19.43 (0.55)	
Lift Capacity (Bucket Center)	lbs. (kg)	2326 (1055)	2536 (1150)
Lift Capacity to Maximum Height at Pivot Pin	lbs. (kg)	2469(1120)	2928(1328)
Raising Time to Full Height w/out Load *1)	second	4.7	
Lowering time w/out Load (powerdown) *1)	second	3.6	
Attachment Rollback Time	second	3.0	
Attachment Dumping Time	second	2.8	

*1) *w/Standard valves.*

Specifications

Model			M5660SUH	M5660SUHD
			2WD	4WD
Engine			V2403-CR-TE4	
Type (Make: KUBOTA)			4 cylinder in-line, Common Rail Sytem, direct injection	
Rated Engine HP (97/68/EC)		HP (kW)	57.9 (43.2) @2600 rpm	
Engine net power (SAE J1349)		HP (kW)	56 (41.8) @2600 rpm	
PTO power (at rated engine RPM)		HP (kW)	50 (37.3)	
No. of cylinders/Aspiration			4 / Turbocharged	
Total displacement		cu. in. (cc)	148.5 (2434)	
Fuel tank capacity		US gal. (ℓ)	17.7 (67)	
Air cleaner			Dry, dual element	
Alternator		Amp	45	
Transmission				
No. of speeds			8F/8R	
Main gear shift (4 speeds)			Fully synchronized	
Shuttle			Hydraulic shuttle	
Main clutch			Multiple wet disk	
Brake			Mechanical wet disc	
Differential lock			Rear standard (mechanical)	
PTO				
PTO type			Live-independent, hydraulic PTO with PTO brake, multi-plate wet clutch	
Speed			@540 rpm (540/540E opt)	
Hydraulic				
Pump capacity (main)		gpm (ℓ/min)	10.6 (40.2)	
3-point hitch			Category I & II	
Control system			Position	
Lift capacity at 24 in. behind lift point		lbs. (kg)	3307 (1500)	
No. of remote valves			1 (2nd, 3rd & flow control valve optional)	
Tires				
Standard	2WD	Front/Rear	6.5–16 / 14.9–28	
	4WD	Front/Rear	8.3–24 / 14.9–28	
Traveling speeds (w/std. 4WD Ag. tires)				
No. of speeds (at rated engine speed)			Forward / Reverse	
First / Fifth		mph (km/h)	1.6 (2.6) 6.1 (9.7) / 1.6 (2.6) 6.2 (9.9)	
Second / Sixth			2.2 (3.6) 8.5 (13.7) / 2.3 (3.7) 8.7 (14.0)	
Third / Seventh			3.1 (5.1) 12.0 (19.2) / 3.2 (5.2) 12.2 (19.6)	
Fourth / Eighth			4.8 (7.7) 18.2 (29.3) / 4.9 (7.8) 18.6 (29.9)	
Other features				
4WD drive system (4WD model)			Bevel gear type with 55 degree turning angle	
Steering			Hydrostatic power steering	
Hood type / Pedal type			Full open, slanted, steel / Hanging	
Deck type			Semi-flat	
Dimensions				
Overall length		in. (mm)	138.7 (3525)	136 (3455)
Overall height (w/Foldable ROPS)		in. (mm)	95.3 (2420)	
Overall width (Minimum)		in. (mm)	73.2 (1860)	
Wheelbase		in. (mm)	82 (2085)	80.7 (2050)
Min. ground clearance		in. (mm)	16.3 (415)	
Tread width	Front	in. (mm)	55.9, 71.7 (1420, 1820)	51.2, 55.1 (1300,1400)
	Rear	in. (mm)	52.0, 67.7 (1320, 1720)	
Turning radius (w/o brake)		ft. (m)	10.8 (3.6)	12.8 (3.9)
Weight (with ROPS)		lbs. (kg)	4189 (1900)	4387 (1990)

The company reserves the right to change the above specifications without notice. This brochure is for descriptive purposes only. Please contact your local Kubota dealer for warranty information. For your safety, KUBOTA strongly recommends the use of a Rollover Protective Structure (ROPS) and seat belt in almost all applications.

Kubota®

KUBOTA TRACTOR CORPORATION

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Central Division: 14855 FAA Boulevard, Fort Worth, TX 76155 Tel (817) 571-0900
Northern Division: 6300 at One Kubota Way, Groveport, OH 43125 Tel (614) 835-1100
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Lynden, Mt.Vernon, Pacific, Chehalis, Salem & Eugene

BRIM Tractor Company 2500 Cedardale Road Mt. Vernon, WA 98274 360.424.1600

Greg Wadden Sudden Valley Golf Course 360-746-8440

greg.wadden@suddenvalley.com

February 12, 2024

Salesperson: Jon Gouras

MAKE	MODEL	DESCRIPTION	UNIT #	SERIAL #	HRS	AMOUNT
New Holland	WM75	75hp tractor/ 550LU loader, open station				$ 47,900.00
		3 rear remotes, 12x12 transmission,				
discount		Only 4 left at this price				$ (6,000.00)
		turf tires				$ 5,298.00
		2) New 11.2-24/6 Goodyear SFT 105 TL R-3				
		2) New 16.9-30/6 Goodyear SFT 105 TL R-3				
Trade In						

Warranty:

SUBTOTAL	$	47,198.00
8.8% SALES TAX	$	4,153.42
TOTAL	**$**	**51,351.42**

Warranty coverage does not include travel/ hauling time or freight on parts.
All sales are final.

DOWN PAYMENT		
CONTRACT FEE/PDI		
BALANCE DUE	**$**	**51,351.42**

- ☐ Cash
- ☐ Check
- ☐ Bank Card
- ☐ NH Plan

MONTHS	
INTEREST	
PAYMENT	

- ☐ Sale
- ☐ Transfer
- ☐ Demo
- ☐ Rental
- ☐ Consignment

- ☐ Brim to Haul
- ☐ Customer to Haul

Special Instructions

☐ *Initial Here* Customer Warrants that Trade In Equipment or Consigned Equipment is Traded or Consigned with no Liens or Encumbrances

Purchaser's Signature: _____ Date: _____

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: **Greg Wadden, Golf Course Superintendent**

Date: **February 15, 2024**

Subject: **Capital Request – Replacement of Turfcare Sand Trap Rake, Asset ID#1047**

Purpose
To request funding to replace Turfcare Cushman Groom Master sand trap rake.

Background
Turfcare's Cushman Groom Master sand trap rake has reached the end of its serviceable lifespan and is budgeted for replacement on the capital reserve study in 2024. Many of the components of this unit have either been replaced or are currently not operational such as: broken steering wheel, engine issues, hydraulic rake lift inactive and the three-wheel drive no longer working.

Analysis
The table below summarizes the available equipment that meets our needs. The lower horsepower of the Smithco Sandstar, it's unusual design (no steering wheel), and it's lack of three-wheel drive cause it to fail our review. Of the two models left, the John Deere 1220 Utility Rake is less expensive and meets all of our needs.

Analysis of Available Models			
	John Deere 1220 Utility Rake	**Toro 3040**	**Smithco Sandstar CVT**
Minimum Requirements			
Wheel base width	58"	58"	61"
Rated Horse Power	15Hp	16Hp	10Hp
Rear serrated tooth rake	78"	73"	72"
LED light kit	Yes	Yes	Yes
40" front plow	40"	40"	40"
Mid mount scarifier	58"	58"	61"
Three wheel drive	Yes	Yes	No
Turning wheel radius in inches	12"	8"	12"
Price	**$32,578.91**	**$34,772.00**	**$18,358.00**

Proposal
Provide funding for the purchase of a John Deere Tru finish 1220 Utility Rake, equipped with the following accessories as above: not to exceed $32,578.91 (this price includes sales tax).

Sudden Valley Community Association

360-734-6430
4 Clubhouse Circle Bellingham, WA 98229
www.suddenvalley.com

Motion

Move that the SVCA Board of Directors approve the allocation of $32,578.91 from CRRRF for purchasing a Sand Trap Rake and authorize the Golf Course Superintendent to work with the Finance Director on purchase of this item.

Board of Directors Approval:

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

Quote Summary

Prepared For:

SUDDEN VALLEY COMMUNITY ASSN
4 CLUBHOUSE CIR
BELLINGHAM, WA 98229
Business: 360-734-6430
MAINTENANCE@SUDDENVALLEY.COM

Prepared By:

Rick Michel
Pacific Golf & Turf
1818 Bickford Avenue
Snohomish, WA 98290
Phone: 360-568-7798
rmichel@pacificgolfturf.com

Quote Id: 29892781
Created On: 01 November 2023
Last Modified On: 19 January 2024
Expiration Date: 31 July 2024

Equipment Summary	Selling Price		Qty		Extended
JOHN DEERE TruFinish 1220 Utility Rake	$ 29,999.00	X	1	=	$ 29,999.00
SMITHCO SAND-STAR CVT MECHANICAL	$ 18,358.00	X	1	=	$ 18,358.00

Equipment Total

Quote Summary

Equipment Total
SubTotal
Sales Tax - (8.60%)
Est. Service Agreement Tax
Total
Down Payment
Rental Applied
Balance Due

Salesperson : X _____ **Accepted By : X** _____

Selling Equipment

Quote Id: 29892781 **Customer:** SUDDEN VALLEY COMMUNITY ASSN

JOHN DEERE TruFinish 1220 Utility Rake

Equipment Notes:
Hours:
Stock Number:

Code	Description	Qty
1901XF	TruFinish 1220 Utility Rake	1
	Standard Options - Per Unit	
001A	US/Canada	1
0443	All Other Countries - Operator's Manual - English/Spanish	1
6426	Rear Serrated Blade Sand Rake	1
9700	40 In. Front Blade	1
9702	LED Light Kit	1
9703	Mid-Mount Scarifier Tines	1

Selling Equipment

Quote Id: 29892781 **Customer:** SUDDEN VALLEY COMMUNITY ASSN

SMITHCO SAND-STAR CVT MECHANICAL

Equipment Notes:
Hours: 0
Stock Number:

Code	Description	Qty
41-000-A	SAND-STAR CVT MECHANICAL	1

NEVADA POWER PRODUCTS

1160 GLENDALE AVE. SPARKS, NV 89431
(775) 358-0114

3660 HIGHWAY 50 E. CARSON CITY, NV 89701
(775) 885-6979

TruFinish™ 1220

Utility Rake

Select Another Model In This Series

- Hydrostatic 2WD/3WD System. Shift with the push of a button
- Three-wheel stance with 42-in. (107-cm) wheelbase for a tight turning radius
- Lightweight, heavy-gauge aluminum front blade
- Three mid-mount rake options for the perfect finish
- Five rear rake options. For any infield skin or golf bunker need

+ Read More

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Send to a Friend ┐
Payment Calculator ┐

Print

Share

Features | Specs

Key Specs

Transmission type	Hydrostatic with 3 hydraulic wheel motors and selectable 2WD/3WD
Ground clearance @ rake attachment	5.5 - 7 in. 139 - 178 mm
Travel Speed (forward or reverse)	Forward: 0-12 mph (19 km/h) Reverse: 0-4 mph (6 km/h)
Tank capacity	18.9 L 5 U.S. gal.
Displacement	570 cc 34.8 cu in.
Engine type	Air-cooled
Horsepower	13.4 kW (18.0 HP) Engine Manufacturer Gross Power @3600 rpm per SAE J1940, tested in accordance with SAE J1995. The engine horsepower and torque information are provided by the engine manufacturer to be used for comparison purposes only. Actual operating horsepower and torque will be less. Refer to the engine manufacturer's web site for additional information

Engine

Manufacturer	
Type	Air-cooled
Displacement	570 cc
Horsepower	13.4 kW (18.0 HP) Engine Manufacturer Gross Power @3600 rpm per SAE J1940, tested in accordance with SAE J1995. The engine horsepower and torque information are provided by the engine manufacturer to be used for comparison purposes only. Actual operating horsepower and torque will be less. Refer to the engine manufacturer's web site for additional information
Compression ratio	
Lubrication	Full-pressure
Oil capacity	Without filter: 1.4 L 1.5 U.S. qt
Oil filter	Standard
Spark arrester muffler	
Idle speed	Low speed: 1,750 rpm fast idle speed (low load): 3,300 rpm

Electrical System

Type	12 V 16 amp
Battery	300 CCA

	12 V
Starter	Electric
Ignition	Transistor-type
Light kit	Available

Fuel System

Tank capacity	18.9 L 5 U.S. gal.
Fuel pump	
Fuel required	Unleaded gasoline

Transmission

Type	Hydrostatic with 3 hydraulic wheel motors and selectable 2WD/3WD
Fluid capacity	18.9 L 5 U.S. qt

Travel Speed

Forward or reverse	Forward: 0-12 mph (19 km/h) Reverse: 0-5 mph (8 km/h)

Brakes

Type	Dual rear wheel parking brakes; dynamic braking provided by closed loop hydrostatic powertrain

Steering

Type	Chain drive to steering wheel

Tires

Front	One 22-11x10 Knobby Tire
Rear	Two 22-11x10 Knobby Tire

Dimensions

Width	147 cm 58 in.
Height	189 cm 74.4 in.
Length	173 cm 68 in.
Wheelbase	107 cm 42 in.
Ground clearance @ rake attachment	178 mm 7 in.
Turning radius	
Weight (approx.)	431 kg 950 lb
Rear-hitch towing capacity	

Attachments

Rake	
Cultivator	
Front blade	
60-in. aluminum front blade	
Articulating front-mount core-removal blade	
Wide- and narrow-interval scarifier tines attachment	
Mid-mount 64.5-in. (164.9 mm) scraper blade attachment	
Rear-mounted 60-in. field finisher	
Hydraulic pump package	

Sound Levels

Operator ear	
Measuring standard	

Attachments installed	

Additional information

Date collected	

Date: January 8, 2024

Quotation for Sudden Valley Community Assoc

Quote No:8083393-00

Prepared For:	Greg Wadden	Quote No:	8083393-00
	Sudden Valley Community Assoc	**iQuote No:**	149171
	4 Clubhouse Circle	**Sales Person:**	Shawn Frisbee
	Bellingham, WA 98229		shawn.frisbee@turfstar.com
			206-501-7248

Summary

Configuration Name	Qty	Unit Price	Sub Total	Sales Tax	Total
010-Sand Pro 3040	1	$32,018.59	$32,018.59	$2,753.60	$34,772.19
020-Sand Pro 2040Z	1	$19,693.07	$19,693.07	$1,693.61	$21,386.68
Totals:			**$51,711.66**	**$4,447.21**	**$56,158.87**

Date: January 8, 2024

Quotation for Sudden Valley Community Assoc

Quote No:8083393-00

Configuration Product Details

010-Sand Pro 3040

Model	Product Description	Qty	Unit Price	Extended	Sales Tax	Total
08743	Sand Pro 3040	1	$23,566.67	$23,566.67	$2,026.73	$25,593.40
08714	Manual Blade (40in)	1	$2,057.69	$2,057.69	$176.96	$2,234.65
08734	Solid Tine Toolbar	1	$1,289.74	$1,289.74	$110.91	$1,400.65
08838	Midmount Toolbar System Sand Pro 3040/5040	1	$1,811.54	$1,811.54	$155.79	$1,967.33
08751	Tooth Rake	1	$1,976.92	$1,976.92	$170.02	$2,146.94
08740	LED Light Kit Sand Pro	1	$541.03	$541.03	$46.53	$587.56
FSD2	Delivery	1	$150.00	$150.00	$12.90	$162.90
FSD1	Setup	1	$625.00	$625.00	$53.76	$678.76
	Totals:					**$34,772.19**

Date: January 8, 2024

Quotation for Sudden Valley Community Assoc

Quote No:8083393-00

Configuration Product Details

020-Sand Pro 2040Z

Model	Product Description	Qty	Unit Price	Extended	Sales Tax	Total
FSD2	Delivery	1	$150.00	$150.00	$12.90	$162.90
FSD1	Setup	1	$383.00	$383.00	$32.94	$415.94
08706	Sand Pro 2040Z	1	$16,049.35	$16,049.35	$1,380.25	$17,429.60
08716	Tooth Rake-SandPro 2040Z	1	$2,193.51	$2,193.51	$188.64	$2,382.15
08721	SP 2040Z Light Kit	1	$610.39	$610.39	$52.50	$662.89
125-6469	SEAT ISOLATION KIT	1	$306.82	$306.82	$26.38	$333.20
	Totals:					**$21,386.68**

Standard Terms and Conditions

Prices including all finance options are subject to change based on Turf Star Western's receipt of product and estimated shipments. Currently, product availability is a minimum of 6-18 months. Your Final Price will be determined at time of shipment. Delivery is FOB point of origin unless otherwise stated.

Office Locations

Northern California:	Southern California:	Pacific Northwest:
3928 N.Blattela Lane Fresno, CA 93727 Fax: (559) 277-7123	79-253 Country Club Drive Bermuda Dunes, CA 92203 Fax: (760) 345-4297	1750 Industrial Dr.NE Salem, OR 97301 Ph: (503) 691-0250
2438 Radley Court Hayward, CA 94545 Fax: (510) 785-3576	955 Beacon Street Brea, CA 92821 Fax: (800) 775-8873	5869 South 194th Kent, WA 98032 Fax: (253) 872-6942
11373 Sunrise Gold Circle Rancho Cordova, CA 95742 Fax: (800) 241-1997	2110 La Mirada Ste 100 Vista, CA 92083 Fax: (760) 734-4285	2824 East Garland Spokane, WA 99207 Fax: (509) 483-7563

WARNING:

Cancer and Reproductive Harm-http://www.P65Warnings.ca.gov

For more information, please visit http://www.ttcoCAProp65.com

CALIFORNIA SPARK ARRESTER WARNING

Operation of this equipment in the State of California may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

TORO® Count on it.

SAND PRO® 3040/5040
ATTACHMENTS & ACCESSORIES

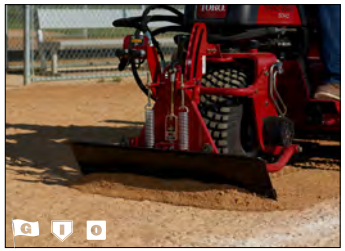
Sand Pro 3040/5040

With the Quick Attach System™ (QAS) and over 30 attachments, the Sand Pro 3040 & 5040 are versatile utility vehicles with many uses on golf courses and sports fields. The QAS lets you change most attachments in under a minute, with no tools required. And the variety of attachments allows you to repair a bunker, groom wet or dry sand, blow debris or reconstruct a tee with one machine. The Sand Pro keeps your course or field in tournament condition every day.

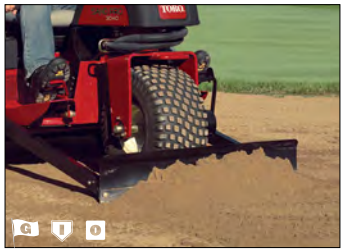
8111 Lyndale Ave. S.
Bloomington, MN 55420-1196
Rev. 7/18

Specifications subject to change.
Please contact your Toro distributor for details.

Front Attachments



Hydraulic Flex Blade
- Steerable flex design provides ultimate control
- Levels, packs and smooths uneven areas in one pass
- Dual-function edge can be rotated on the jagged or smooth side

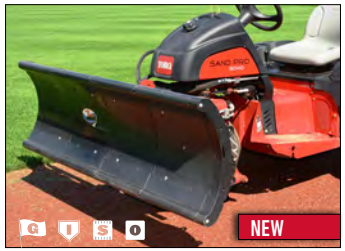


Manual Blade
- Spring-balanced steel blade is ideal for leveling uneven areas and pushing up bunker walls
- Foot lever enables additional downward pressure

60" Blade Extension
- 60" (152 cm) blade for leveling larger areas

Lip Broom
- Hydraulically-powered lip broom maintains infield lips by removing ridge buildup and sweeping material back into infield

Available from Rahn Industries
RahnIndustries.com 800-298-1707



Nordic Plow
- Clears snow and debris from any surface
- Rounded edge will not harm turf, making quick work of aeration core clean up
- Mounts over Manual Blade or to front QAS (5040 only)

Available from Nordic Plow
NordicPlow.com 800-662-7569

Bunker Pump
- Throws water up to 40' (12 m) and can pump 95 gal/min (360 l/min)
- Adjustable throw direction and angle

Bunker Pump Remote Discharge
- 50' (15 m) discharge hose allows Bunker Pump to be placed in hard to reach areas

G Golf I Infields/Sports Fields S Synthetic Turf O Other Surfaces

Sand Pro® 3040/5040 Accessories and Attachments

Rear Attachments

Flex Tooth Rake

- Follows contours for superior grooming regardless of bunker undulations
- Gentle on turf and bunker liners

Drag Mat Carrier System

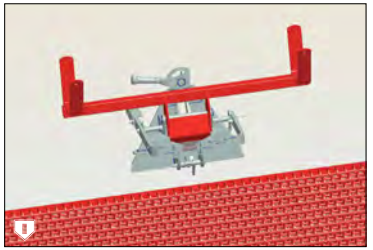
- Carrier frame allows operators to hydraulically raise and lower drag mats from the operator's seat

Nail Drag

- Use to scarify, loosen, or weed before smoothing
- Easily adjust nail pattern and depth
- Accepts up to 40D common nail

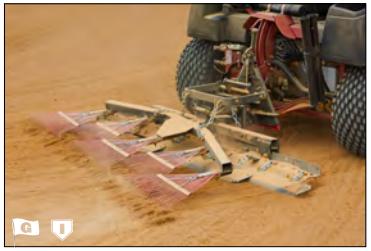
AutoMat Drag Mat

- Automatically engages the infield skin as the Nail Drag is lowered



Basic Drag Mat System

- Simple drag mat system



Spring Rake

- Leaf rake assembly great for collecting debris in groomed areas
- Can be used alone or with Tooth Rake

Coco Drag Mat

- Quickly produces a premium finish on dry, level surfaces

Flex Groomer

- Pairs with Nail Drag offering complete grooming in one pass

Spiker

- Spikes greens and other formal turf to increase airflow

Debris Blower

- Quickly clears debris from unwanted areas

Tooth Rake

- Lightly scarify, pack, smooth, and groom in wet or dry conditions

Weight Kit

- Increased performance in coarse or wet conditions

Tooth Rake Broom

- Attaches behind the Tooth Rake for a smoother finish

Pivoting Trowels Kit for Tooth Rake

- Provides full grooming in tight bunkers

Steel Drag Mat

- Quickly groom and finish more rugged surfaces, both wet and dry

Manual Drag Mat

- Works in tandem with Nail Drag to smooth and even scarified surfaces

Bunker Pump

- Throws water up to 40' (12 m) and can pump 95 gal/min (360 l/min)
- Adjustable throw direction and angle

Bunker Pump Remote Discharge

- 50' (15 m) discharge hose allows Bunker Pump to be placed in hard to reach areas

Finish Grader

- Weeder, solid, or carbine tines can be mounted to Finish Grader to level or scarify large areas
- Spring load regulation allows for relief if obstruction is hit

G Golf I Infields/Sports Fields S Synthetic Turf O Other Surfaces

Specifications subject to change.
Please contact your Toro distributor for details. Rev. 7/18

Sand Pro® 3040/5040 Accessories and Attachments

Rear Attachments

Lip Broom

- Maintains infield lips by removing ridge buildup and sweeping material back into infield
- Use traction unit controls to adjust aggressiveness and speed
- Optional edging attachments for trimming cart paths and walkways

Available from Rahn Industries
RahnIndustries.com 800-298-1707

Segmented Grooming Broom

- Minimizes top surface disruption, maximizes firmness, and provides a smooth finished look

Replacement Segmented Grooming Broom

- Broom with stiffer bristles

Weight Kit for Segmented Grooming Broom

- Improve performance in coarse or wet conditions

Rahn Groomer

- Use lock or float position to level uneven playing fields
- Prevents ridge build up and creates a safer infield

Available from Rahn Industries
RahnIndustries.com 800-298-1707

Mid Attachments

Weeder Tine Toolbar

- Ideal for removing weeds and grass from bunkers and infields

Spring Tine Toolbar

- Use for light to moderate scarifying and daily maintenance on bunkers and infields

Solid Tine Toolbar

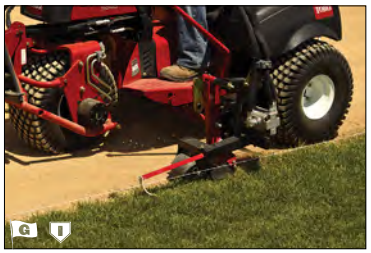
- Great for loosening compact bunkers and scarifying infields
- Tines can be rotated to maximize life

Carbide Tine Toolbar

- Carbide tips withstand the harshest conditions
- Perfect for loosening compacted infields

Leveling Blade

- Attach to any mid-mount toolbar
- Ability to lower blade independently of other toolbars
- Selectable depth setting for more consistent leveling



Sports Field Edger

- Maintain or renovate ball fields by removing overgrown turf infield or warning track lip build up

G Golf **I** Infields/Sports Fields **S** Synthetic Turf **O** Other Surfaces

Specifications subject to change.
Please contact your Toro distributor for details. Rev. 7/18

Sand Pro® 3040/5040 Accessories and Attachments

Accessories

Front Lift Frame Assembly
- Front QAS mounting assembly and hydraulic components

50 lb. Front Weights
- Allows Spiker or Rahn Groomer attachments without the Front Lift Frame Assembly to meet ANSI compliance

Mid-Mount Assembly
- Base mounting assembly for mid-mount toolbars featuring spring-loaded relief if obstruction is hit

Front Remote Hydraulics
- Quick connect design allows front powered attachments to be connected in under a minute

Rear Remote Hydraulics
- Quick connect design allows rear powered attachments to be connected in under a minute

Variable Orifice Kit
- Slows hydraulic lift and lower for increased precision

QAS A-Frame
- Used to attach Spring Rake to be used independently

400 Hour Filter Maintenance
- 9 engine oil filters, 2 hydraulic oil filters, and 2 air filters

Speed Control Kit
- Limits grooming to desired speed while allowing for full transport speed

Hitch/Tow Bar
- Allows traction unit to transport materials or trailers

Light Kit
- Front and rear flood lights

Tires

Smooth Tire
- Includes individual tire, wheel, and stem valve assembly
- Typically used on greens

Turf Tire
- Turf tread tire

CONFIGURATION CHART

	WORKING WIDTH	REQUIRED COMPONENTS	OPTIONAL ACCESSORIES
FRONT ATTACHMENTS			
HYDRAULIC FLEX BLADE	36" | 91cm (w)	Front Lift Frame Assembly	
MANUAL BLADE	40" | 102cm (w)		60" Blade Extension
BUNKER PUMP	-	Front Lift Frame Assembly, Front Remote Hydraulics, Rear Remote Hydraulics	Remote Discharge
LIP BROOM	-	Front Lift Frame Assembly, Front Remote Hydraulics, Rear Remote Hydraulics CHOOSE ONE: Poly Brush OR Cutting Disc OR Wire Brush	Hydraulic Flow Divider
NORDIC PLOW	64" | 163cm (w)	Front Lift Frame Assembly	
REAR ATTACHMENTS			
TOOTH RAKE	73" | 185cm (w)		Spring Rake, Pivoting Trowels Kit, Broom, Weight Kit
FLEX TOOTH RAKE	85" | 216cm (w)		
SPRING RAKE	80" | 203cm (w)	CHOOSE ONE: Tooth Rake OR QAS A-Frame	
COCO DRAG MAT	72" x 36" | 183cm x 91cm	Drag Mat Carrier System	
STEEL DRAG MAT	72" x 36" | 183cm x 91cm	Drag Mat Carrier System	
NAIL DRAG	65" | 164cm (w)		Flex Groomer CHOOSE ONE: AutoMat OR Manual Drag Mat
FLEX GROOMER	72" | 183cm (w)	Nail Drag	
AUTOMAT DRAG MAT	78" x 12" | 198cm x 30cm	Nail Drag	
BASIC DRAG MAT SYSTEM	78" x 72" | 198cm x 183cm	QAS Lift Arm Adapter, Hitch Tow Bar Kit	
MANUAL DRAG MAT	78" x 36" | 183cm x 91cm	Nail Drag or Finish Grader	
FINISH GRADER	66" | 168cm (w)		Manual Drag Mat CHOOSE ONE: Weeder Tines OR Carbide Tines OR Solid Tines
DEBRIS BLOWER	-	Rear Remote Hydraulics	
SPIKER	61" | 155cm (w)		
LIP BROOM	-	Rear Remote Hydraulics CHOOSE ONE: Poly Brush OR Cutting Disc OR Wire Brush	
RAHN GROOMER	72" | 183cm (w)		
SEGMENTED GROOMING BROOM	72" | 183cm (w)		Stiffer Bristles, Weight Kit
BUNKER PUMP	-	Rear Remote Hydraulics	Remote Discharge
MID ATTACHMENTS			
WEEDER TINE TOOL BAR	58" | 147cm	Mid-Mount Assembly	Leveling Blade
SPRING TINE TOOL BAR	58" | 147cm	Mid-Mount Assembly	Leveling Blade
SOLID TINE TOOL BAR	58" | 147cm	Mid-Mount Assembly	Leveling Blade
CARBIDE TINE TOOL BAR	58" | 147cm	Mid-Mount Assembly	Leveling Blade
SPORTS FIELD EDGER*	-	Rear Remote Hydraulics	

*Sports Field Edger can be installed in addition to with other mid-mount attachments

Golf | Infields/Sports Fields | Synthetic Turf | Other Surfaces

Specifications subject to change.
Please contact your Toro distributor for details. Rev. 7/18

Sand Pro® 2040Z

BUNKER RAKE

FEATURES

- *Kawasaki 12.2 hp (9.1 kW) gasoline, v-twin engine*
- *Flex tooth rake eliminates tire marks and mounts of sand*
- *Power steering via independent control sticks*
- *Unitized transmission minimizes hydraulic lines and connections*
- *Transport speed up to 12 mph (19.3 km/h)*
- *Hydraulic-powered groomer lift*
- *Two-post fixed ROPS, ISO/DIS 21299.2 certified*

Only the Toro Sand Pro 2040Z with exclusive Lift in Turn deliver a perfect finish in the tightest of turns.

Another industry first in bunker maintenance.

The Sand Pro 2040Z mechanical groomer is unlike anything else in the marketplace – a zero-turn bunker rake delivering unmatched productivity and maneuverability. The Sand Pro 2040Z is a daily bunker rake that will reduce your bunker maintenance labor cost. With the exclusive Flex Tooth Rake with patent-pending lift in turn technology, the 2040Z is the only mechanical groomer that can groom in a zero-turn without leaving tire marks or leaving unraked teardrops of sand. The nimble Sand Pro 2040Z will save you valuable time in your workday, improving bunkers' surface playability and consistency.

Call your Toro distributor at 800-803-8676

Sand Pro® 2040Z Specifications*

	SAND PRO 2040Z, MODEL 08706
ENGINE	Kawasaki 2 cylinder, air cooled, gasoline engine; Gross HP 13.6 HP (10.1 kW), Governed HP 12.2 HP (9.1 kW) @ 2400 rpm; Max torque 27.3 ft-lbs (37.0 Nm) @1800 rpm; Displacement 36.7 cu-in. (603 cc); Oil capacity w/filter 1.7 qts. w/filter (1.5 w/o filter); Oil Filter External, spin-on
AIR CLEANER SYSTEM	Heavy duty single stage cyclonic air filter with replacement element
FUEL CAPACITY	4.5 gals (17 liters) of unleaded gas (maximum 10% ethanol)
TRACTION DRIVE	Belt driven independent infinitely variable unitized transmission, with automatic tensioning system.
HYDRAULIC OIL	Factory fill Mobil fluid 424 tractor transmission fluid; Left hand transmission section: 3.1 qt (3.25 liters); Right hand transmission section: 3.55 qt (3.75 liters)
GROUND SPEED	Forward 0-12 mph (0-19.3 km/h), Reverse 0-4 mph (0-6.4 km/h). See Speed Limiter Kits below for additional information.
TIRES/WHEELS	Drive Wheels 25x12- 9, 3 ply rating pneumatic tubeless demountable with a Turf Tamer (knobby) tread. Front Wheel 16x7.5-8 4 ply rating pneumatic tubeless demountable with turf traction tread. Recommended tire pressure: 7 psi all tires
MAIN FRAME	Rectangular structured steel tube and high strength steel plate welded construction.
BRAKES	Twin levers with dynamic braking through hydrostatic transmission. Hand actuated parking brake lever that controls two integral wet disc brakes contained within transmission.
STEERING	Power steering, controlled through two independent control sticks with integrated dampeners. Min. turning radius: 0 in (0 cm)
CONTROLS/GAUGES	Ignition: Off/Run/Start; Throttle: Low - High Idle; Choke: Open /Closes choke plate; Parking Brake: Off - On LCD logic cluster includes hour meter and safety interlocks for operator presence, neutral and parking brake.
REAR ATTACHMENT HYDRAULIC LIFT	Raise/Lower switch mounted at end of right handle.
SEAT	High back cushion vinyl seat with drain hole, integrated armrest and retractable seat belt; adjustment is 4 inches fore and aft.
ROPS	Two post fixed ROPS, certified per ISO/DIS 21299.2 specifications
STORAGE	Built-in cup holder, rake holder and personal storage reached from seat.
ELECTRICAL FEATURES	12-volt system, 20-amp alternator at 3,600 rpm. Battery Voltage is displayed when key switch is moved from off to run (Low Battery LED will illuminate if key voltage is less than 12.3V in run position)
SOUND LEVEL	88 dBA (Operator Ear)
DIMENSIONS/WEIGHT	**with Flex Tooth Rake** / **with Nail Drag** **Length:** 89.0 in (226 cm) / 84.8 in (215 cm) **Width:** 84.0 in (213 cm) / 71.5 in (182 cm) **Overall Height:** 73.0 in (185 cm) / 73.0 in (185 cm) **Weight:** 920 lbs (417 kg) / 970 lbs (439 kg) **Wheelbase:** 58.0 in 147 cm **Tread width (to centerline of tire):** 46.9 in (119 cm)
GROUND CLEARANCE	5.5 in (14 cm) (at machine centerline 24 in tire)
TIE DOWNS	Four loops, one located on each corner of the machine.
WARRANTY	2-year limited warranty. Refer to the Operator's Manual for further details.
SAFETY CERTIFICATIONS	Certified to meet ANSI specification B71.4 - 2012 standards when equipped with weight kits supplied with attachments. Certified to meet ISO/DIS 21299 for ROPS. Engine meets all applicable emission standards per the manufacturer. Certified to meet C-Tick 2004/108/EC/(EMC) and the CE Machinery Directive.

	REAR ATTACHMENTS (NOTE: Unit must always have a rear attachment installed to meet ANSI and CE specifications)
FLEX TOOTH RAKE (08716) (GOLF APPLICATIONS)	• 84" (213 cm) wide tooth rake with three reversible rubber trowels that will not tear bunker liners • Convex Trowel Design is able to continuously groom a 70" (178 cm) radius surface • Lift-in-turn design allows for continuous grooming during a zero radius turn • Rubber trowel design reduces damage to bunker edges and liners
OPTIONAL ACCESSORIES FOR TOOTH RAKE	Broom Finishing Kit (three section brush), Model 08719
NAIL DRAG (08717) (INFIELD GROOMING APPLICATIONS)	• 66" (168 cm) wide with 88 removable nails arranged in diamond pattern • 3 height position for nails increases material flow and extends nail wear • 71.5" (182 cm) rubber groomer • Back blade allows for moderate or small area leveling of infield surface
OPTIONAL ACCESSORIES FOR NAIL DRAG	Drag mat finishing kit (08718): (78"W X 18"L 1"square steel mat); includes cradles to store mat during transport. Model 08718
	OTHER TRACTION UNIT ACCESSORIES
LIGHT KIT	2 LED lights, one in front one mounts to ROPS and points rearward. 3 Position switch, all lights on, front on or off. Model 08721
SPEED LIMITER KIT	Automatically reduces maximum speed of the traction unit when the rear attachment is lowered. Adjustable to maximum speed of 3 – 7 mph (4.8 – 11.3 km/h). Model 08720.
TRANSPORT SPEED LIMITER KIT	Reduces speed infinitely from top speed to approximately 7 mph (11 k/hr) or top speed of grooming speed. Part 130-7877
SEAT SUSPENSION KIT	Rubber isolators provide cushioning. PN 125-6469
MESH BAG KIT	Storage bag for maintenance tools, trash, debris, etc.; mounts to ROPS. PN 127-0359
TURF TRAC TIRE	Less aggressive tread for rear drive tires. PN 125-6462
BIMINI SUNSHADE	Canvas sunshade that mounts to ROPS. Model 30358
RAKE HOLDER	SP2040Z has a standard rake holder mounted on left hand side, a second optional rake holder can mount to right hand side of SP2040Z. PN 127-0353-03

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in design, required attachments and safety features. Consult your local Toro Distributor.

2018 Toro Commercial Equipment Guide 18-003-T Rev. 1/18

The Sand Pro 2020 is manufactured in Tomah, WI ISO 9002 Certified Plant.

THINK LIVE SAFELY

Quote Summary

Prepared For:

SUDDEN VALLEY COMMUNITY ASSN
4 CLUBHOUSE CIR
BELLINGHAM, WA 98229
Business: 360-734-6430
MAINTENANCE@SUDDENVALLEY.COM

Prepared By:

Rick Michel
Pacific Golf & Turf
1818 Bickford Avenue
Snohomish, WA 98290
Phone: 360-568-7798
rmichel@pacificgolfturf.com

Quote Id:	29892781
Created On:	01 November 2023
Last Modified On:	23 January 2024
Expiration Date:	31 July 2024

Equipment Summary	Selling Price		Qty		Extended
JOHN DEERE TruFinish 1220 Utility Rake	$ 29,999.00	X	1	=	$ 29,999.00
Equipment Total					**$ 29,999.00**

Quote Summary	
Equipment Total	$ 29,999.00
SubTotal	$ 29,999.00
Sales Tax - (8.60%)	$ 2,579.91
Est. Service Agreement Tax	$ 0.00
Total	$ 32,578.91
Down Payment	(0.00)
Rental Applied	(0.00)
Balance Due	**$ 32,578.91**

Salesperson : X _____ **Accepted By : X** _____

Selling Equipment

Quote Id: 29892781 **Customer:** SUDDEN VALLEY COMMUNITY ASSN

JOHN DEERE TruFinish 1220 Utility Rake

Hours:
Stock Number:

Code	Description	Qty
1901XF	TruFinish 1220 Utility Rake	1
	Standard Options - Per Unit	
001A	US/Canada	1
0443	All Other Countries - Operator's Manual - English/Spanish	1
6426	Rear Serrated Blade Sand Rake	1
9700	40 In. Front Blade	1
9702	LED Light Kit	1
9703	Mid-Mount Scarifier Tines	1

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CAPITAL REQUEST MEMO

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

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

Date: **February 22, 2024**

Subject: **Capital Request – 2024 Fast Response**

Purpose

To request funding for the 2024 Fast Response for Unforeseen Drainage Issues project.

Background

Sudden Valley Community Association (SVCA)'s 2024 budget includes $88,400 for Fast Response for Unforeseen Drainage Issues. This budget item is intended to cover unexpected drainage issues that may occur throughout the year. In 2022, SVCA began restoring SVCA's drainage system to the original 1970's construction design, and, in 2023, aggressively continued restoration. In 2023, SVCA cleared and established positive drainage at all culverts previously known and located 99 additional culverts that were buried. SVCA has also adopted a new 10 Year Roads and Drainage Capital Plan. With these improvements, the risk of an unexpected infrastructure failure is reduced, but still present. It is important to maintain this budget item to cover unexpected drainage issues that may arise. Some examples of situations in which the Fast Response budget has been used include the 2021 November flood, and the 2023 October rain event. In addition, SVCA anticipates additional culverts will continue to be found as 3 new culverts were already located in 2024. This puts the total of new culverts found in the last year up to 102.

Analysis

SVCA has approximately 40 miles of roads, typically with ditches on both sides, and 353 identified culverts. This infrastructure network winds through steep, heavily forested terrain, includes 1 lake, numerous drainage corridors, and 2 large creeks – Beaver Creek and Austin Creek. Given the scope of this network, it is not uncommon for drainage issues to develop during storm events. This capital request provides immediate financial assistance for SVCA to quickly address issues that may arise.

These unexpected events often require a quick response to reduce damage or re-establish access. This work is typically completed on a Time and Materials contract by external contractors if the scope is beyond the Maintenance Department's capabilities. A Time and Materials contract allows SVCA to quickly mobilize a contractor and complete the work. SVCA issued a request for bids for an on-call construction contract and received many responses (see attached). After review, we recommend that SVCA issue on-call contracts to the top 3 competitive bidders: Stremler Gravel, Inc.; Dirt Works Bellingham, Inc.;, and Tiger Construction LTD. With these contracts in place, the Maintenance & Facilities Manager will be able to

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contact the contractors by order of bid (lowest to highest) when urgent or emergency situations occur.

Request 1
Authorize $88,400.00 from Roads for the 2024 Fast Response for Unforeseen Drainage Issues project. The funds will be monitored by SVCA's Maintenance Manager who is responsible for the overall project, and will determine when it is necessary to use an external contractor.

Request 2
Authorize the General Manager to execute SVCA's standard construction contract (see attached) with the 3 recommended contractors per PNW's proposal dated February 6th, 2024.

- Stremler Gravel, Inc.
- Dirt Works Bellingham, Inc.
- Tiger Construction LTD.

Motion 1
Move that the SVCA Board of Directors approve the allocation of $88,400 from Roads for the 2024 Fast Response for Unforeseen Drainage Issues project and name the Maintenance & Facilities Manager as the individual responsible for management of this project.

Motion 2
Move that the SVCA Board of Directors authorize the General Manager to execute SVCA's standard construction contract with Stremler Gravel, Inc., Dirt Works Bellingham, Inc. and Tiger Construction LTD.

Motion 1
Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

Motion 2

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

PNW
SERVICES, INC.

February 6, 2024

Sudden Valley Community Association
Attn: Michael Brock
4 Clubhouse Circle
Bellingham, WA 98229

RE: Project Scope Letter
2024 On-Call Contractor

PNW is providing this overall project scope letter to SVCA for the 2024 On-Call Contractor projects. On 1-23-24 PNW issued a bid package to 6 contractors requesting quotes for a Time and Materials contract with SVCA.

- Stremler Gravel Inc. – Quote Received
- Dirt Works Bellingham, Inc. – Quote Received
- Tiger Construction LTD. – Quote Received
- Western Refinery Services – Quote Received
- Strider Construction – No Quote
- Premium Services – No Quote

The quantities on the bid form reflect the types of labor and equipment that SVCA has regularly used for similar scopes of work the last 2 years. Scopes of work have included ditching, culvert cleaning, culvert replacements, road repairs, flood cleanups, slide repairs, etc. The bid form was generated solely for the purpose of comparing units to establish the best value between contractors. PNW is recommending SVCA issue contracts to the 3 lowest bidders per the attached bid results.

1. Stremler Gravel, Inc.
2. Dirt Works Bellingham, Inc.
3. Tiger Construction LTD.

The contracts are for a 1-year period, and expire on 3-1-25. The intent is next January/February a new bid will be issued, and a new 1-year contract executed. The contracts issued will be for a $0.00 value, and strictly reference the unit prices per the bid forms. Only the actual quantities used would be paid. Each time SVCA has a project for this contract, the contractors would be called in order. Stremler Gravel would be called first, if they are unavailable Dirt Works would be called next, and then Tiger Construction. Attached is the bid package for reference.

Please let me know if you have any questions, or if you would like any further information.

Sincerely,

Tyler Andrews
President

February 6, 2024 - Bid Tabulation

Project: 2024 On-Call Contractor

Item #	Description	Quantity	Unit	Stremler Gravel		Dirt Works Bellingham		Tiger Construction LTD.		WRS	
				Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	Equipment Mobilization to SVCA - 8,000LB Size Machine	2	EA	$ 305.00	$ 610.00	$ 1,200.00	$ 2,400.00	$ 2,000.00	$ 4,000.00	$ 700.00	$ 1,400.00
2	Equipment Mobilization to SVCA - 18,000LB Size Machine	2	EA	$ 435.00	$ 870.00	$ 1,200.00	$ 2,400.00	$ 2,000.00	$ 4,000.00	$ 1,500.00	$ 3,000.00
3	Equipment Mobilization to SVCA - 35,000LB Size Machine	2	EA	$ 435.00	$ 870.00	$ 1,200.00	$ 2,400.00	$ 2,000.00	$ 4,000.00	$ 2,100.00	$ 4,200.00
4	Foreman w/ Tool Truck	80	HRS	$ 115.00	$ 9,200.00	$ 100.00	$ 8,000.00	$ 110.00	$ 8,800.00	$ 125.00	$ 10,000.00
5	Operator	70	HRS	$ 75.00	$ 5,250.00	$ 70.00	$ 4,900.00	$ 72.00	$ 5,040.00	$ 90.00	$ 6,300.00
6	Laborer	70	HRS	$ 75.00	$ 5,250.00	$ 60.00	$ 4,200.00	$ 52.00	$ 3,640.00	$ 72.00	$ 5,040.00
7	Truck Driver	70	HRS	$ 70.00	$ 4,900.00	$ 55.00	$ 3,850.00	$ 64.00	$ 4,480.00	$ 77.00	$ 5,390.00
8	Traffic Spotter	70	HRS	$ 75.00	$ 5,250.00	$ 65.00	$ 4,550.00	$ 44.00	$ 3,080.00	$ 72.00	$ 5,040.00
9	Flagger	40	HRS	$ 75.00	$ 3,000.00	$ 65.00	$ 2,600.00	$ 44.00	$ 1,760.00	$ 72.00	$ 2,880.00
10	2nd Tool Truck if Required	40	HRS	$ 35.00	$ 1,400.00	$ 40.00	$ 1,600.00	$ 38.00	$ 1,520.00	$ 35.00	$ 1,400.00
11	Dump Truck - Solo	40	HRS	$ 90.00	$ 3,600.00	$ 110.00	$ 4,400.00	$ 150.00	$ 6,000.00	$ 82.00	$ 3,280.00
12	Dump Truck - 5 CY	40	HRS	80.00	$ 3,200.00	$ 100.00	$ 4,000.00	$ 150.00	$ 6,000.00	50.00	$ 2,000.00
13	Excavator - 8,000LB Size	40	HRS	$ 60.00	$ 2,400.00	$ 45.00	$ 1,800.00	$ 44.00	$ 1,760.00	$ 68.00	$ 2,720.00
14	Excavator - 18,000LB Size	40	HRS	$ 65.00	$ 2,600.00	$ 75.00	$ 3,000.00	$ 78.00	$ 3,120.00	$ 120.00	$ 4,800.00
15	Staging Area Reload Machine	10	HRS	$ 75.00	$ 750.00	$ 125.00	$ 1,250.00	$ 102.00	$ 1,020.00	$ 170.00	$ 1,700.00
16	Offsite Disposal via Truck & Trailer	500	TCY	$ 18.50	$ 9,250.00	$ 20.00	$ 10,000.00	$ 30.00	$ 15,000.00	$ 30.00	$ 15,000.00
17	Onsite Equipment Moves	20	HRS	$ 165.00	$ 3,300.00	$ 160.00	$ 3,200.00	$ 137.00	$ 2,740.00	$ 170.00	$ 3,400.00
18	Traffic Control Devices	1	LS	$ 500.00	$ 500.00	$ 750.00	$ 750.00	$ 1,500.00	$ 1,500.00	$ 2,000.00	$ 2,000.00
19	Materials	1	EST.	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00
20	Minor Changes	1	EST.	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00
	Subtotal				**$ 72,200.00**		**$ 75,300.00**		**$ 87,460.00**		**$ 89,550.00**
	WSST @ 8.6%				**$ 6,209.20**		**$ 6,475.80**		**$ 7,521.56**		**$ 7,701.30**
	Total w/ WSST				**$ 78,409.20**		**$ 81,775.80**		**$ 94,981.56**		**$ 97,251.30**

January 23, 2024

Attn: Bidders

RE: Sudden Valley Community Association (SVCA)
Quote Request – 2024 On-Call Contractor

SVCA is requesting quotes for the 2024 On Call Contractor projects. This contract will be for a 1-year period, and the rates provided shall be effective for the full 1-year without changes. The contract will expire on March 1st, 2025. This is a Time and Materials contract. The quantities listed on the bid form are for bidding purposes only, and the actual quantities used will be paid. SVCA will use the established quantities on the bid form to determine the on-call contractors. SVCA intends to issue contracts to the 3 most competitive bids. As SVCA has projects arise the lowest bid contractor will be called first, if that contractor is unavailable the 2nd lowest contractor will be called, and finally the 3rd contractor. Each time a new project arises the order of priority will restart to first calling the lowest contractor.

The scope of work for this project is primarily intended to cover is unforeseen road and drainage issues that need to be quickly addressed without going through a full design/bidding process. Activities could include culvert replacement, drainage improvements, road repairs, etc. Typically, these are related to storm events and take place between the fall and spring. The scope of work will vary each time and should be anticipated to take between a day to a couple of weeks or more each call out. The number of call outs in a year will vary depending on issues that arise. Projects are anticipated to be sequenced as:

- Mobilize to the Gate 5 Overflow Parking Lot that is used for contractor staging.
- From Gate 5 move to the work location daily if no staging is available at the immediate site.
- Stage bulk materials at Gate 5, and shuttle onsite with solo dump trucks / tool trucks. The majority of locations throughout SVCA have no staging areas available, and roads generally don't have shoulders. At Gate 5 truck and trailer access is available.
- Generally, the Gate 5 location will have a piece of equipment dedicated to it for reloading materials into dump trucks.
- Typical crew configuration based on historical events include a foreman with a tool truck, operator with either an 8,000LB or 18,000LB sized excavator, laborer, dump truck, and traffic spotter. A second unoperated machine is typically at the staging area for reloading of materials.

In addition, SVCA intends to utilize this Contract to assist with ditching maintenance. Each year SVCA identifies more locations that need ditches cleaned as they work to reestablish their drainage network. The majority of SVCA's ditches haven't been maintained since they were built in the 1970's. Cleaning typically consists of removing 1' to 3' of debris, and then lining with jute matting or 2x4 quarry spalls. The ditching each year will typically use the crew identified above, and last for a couple of weeks during the summer months.

Other Project Notes:

1. The project will be presented to SVCA's Board on Thursday, 2-22-24, for contract award.
2. SVCA typical work hours are 8:00am – 7:00pm Monday thru Friday, and 8:00am – 6:00pm Saturday. Exceptions to this may apply depending on the scope of work required.
3. SVCA will allow contractor staging in the overflow parking lot located across from Gate 5 along Lake Louis Road. There is very limited staging available at each work location.
4. The rates listed on the bid form shall include all overhead and markup. All other items such as materials, rental equipment, subcontractors, etc. shall receive a 15% markup on invoice cost.
5. If other equipment is required than provided on the bid form, a unit rate shall be agreed to prior to mobilization.
6. Fridays are garbage/recycling day in Sudden Valley. Contractor shall not interfere with this pickup. If Contractor plans to have the road obstructed on Friday's other arrangements shall be coordinated by the Contractor for garbage/recycling collection.
7. Traffic control shall follow MUTCD and WSDOT standards.
8. Installation shall follow WSDOT specifications and standards.
9. This is a private project, and prevailing wages are not applicable.

Scope of Work Clarifications:

- Items 1 – 3 – Equipment Mobilization
    - These cover mobilizing machines to and from SVCA. Each mobilization shall be roundtrip. For example, a bid quantity of 2 means mobilizing 2 machines to and from SVCA.
- Item 4 – Foreman w/ Tool Truck
    - It is assumed only 1 tool truck will be required at each work location. If multiple locations are worked at once, or a specific area requires additional tool truck(s), bid item 10 shall apply.
    - Unless agreed to with SVCA additional tool trucks onsite will be incidental to the scope of work.
- Item 15 – Staging Area Reload Machine
    - This will be paid for actual time used rounded up to the nearest hour each day.
    - This machine is typically a loader or excavator depending on contractor availability. The machine is assumed to be capable of efficiently loading dump trucks.
- Item 16 – Offsite Disposal via Truck & Trailer
    - Contractor shall assume this is a mix of dirt, gravel, and organics – typical ditch debris. The unit price shall include hauling and disposal fees, and will be measured by truck yards.
    - If other disposal is required, it will covered under Item 20.
- Item 17 – Onsite Equipment Moves
    - This item covers a vehicle and trailer to move equipment from Gate 5 around SVCA. The driver is covered under Item 7.

- Item 18 – Traffic Control Devices
    - This item shall cover flagging signs and devices. If flagging is required, the lane closure is typically 200' or less.
    - This also covers devices such as cones/candles to delineate the work zones. Typically, 20 devices is adequate to cover any location while being worked, and could include signage such as Shoulder Closed or Road Work Ahead signs.
    - If detours or other extensive traffic control devices are required, they will be covered under Item 19.

Attachments:

1. Bid Form – 2 Pages
2. SVCA Standard Contract – 12 Pages

Questions shall be directed to Tyler Andrews at tylera@pnwcivil.com or 360-739-2072. Bids are due by 2:00 pm on Tuesday, 2-6-24. Email bid submissions to tylera@pnwcivil.com.

Sudden Valley Community Association

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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: **February 22nd, 2024**

Subject: **Capital Request – 2024 Ditches, Culverts, and Swales (CVC)**

Purpose
To request funding approval for maintenance of ditches, culverts, and swales per the 2016 Special General Meeting (SGM) Mandate for 2024.

Background
The 2016 SGM required Sudden Valley Community Association (SVCA) to perform major maintenance of ditches, culverts, and swales on an annual basis. A memo from Larson Gross dated December 29th, 2015, outlined the work that could be completed under this program, see attached. Since the 2016 SGM, this project has been called Culvert and Vegetation Control (CVC). From 2016 to 2021 it appears most of the work completed under this project was focused on vegetation control. In 2022, SVCA's Board of Directors approved the 2022 Road and Drainage Notice of Activity (NOA) Project that focused on solving known storm drainage issues. Many of these issues had been known for years but had not been addressed. This project completed work at more than 40 locations throughout SVCA. The scope of work included excavating to restore ditches/swales for over 5,000 lineal feet, culvert cleaning, and numerous culvert replacements.

In 2022, SVCA's Maintenance Department took a new approach to maintaining SVCA's drainage infrastructure by incorporating preventive maintenance activities along with the focused vegetation control that been done previously. With this shift, additional work was included as part of the annual operating budget for maintenance:

- Roadside mowing of all SVCA road shoulders a minimum of twice per year.
- Proactive trimming of roadside trees/vegetation by Maintenance staff using SVCA's bucket truck.
- Scheduling annual Clean Green events where chip-able material is brought by homeowners to maintenance staff for chipping/disposal.
- Regularly chipping roadside branches directly into a truck instead of side casting.
- Road cleaning with sweeper trucks that collect the debris instead of side casting material onto the shoulders and into ditches (completed twice per year).

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In 2023 the budgeted CVC funds for 2022 and 2023 were combined to focus on locating and cleaning all of SVCA's culverts. In addition, as the culverts were located, positive drainage was provided at each location so water could enter and exit the culverts as originally designed. Before the completion of this project SVCA had 254 known culverts. After 2023's project, SVCA had mapped 353 culverts, adding 99 culverts to SVCA's total.

In 2023, a contract was awarded to Impact Design to develop an updated Road and Drainage Plan. The new 10 Year plan identified the culverts that need to be replaced and provides a schedule for replacing them. For example, 2024's Road budget proposes to replace 52 culverts. In addition, the new 10 Year plan also identified the importance of continuing maintenance ditches and culverts. The plan specifically calls for the use of CVC funds each year to complete ditching, and to keep culverts clear. In addition, it recommended that any unused funds from prior years should be allocated to the following year's CVC allowance.

Analysis

SVCA has over 40 miles of roads with ditches typically on at least one side of the roadway, with many having ditches on both sides of the road. Last year, ditches where drainage issues had been identified were cleaned and restored. SVCA is continuing to prioritize locations for ditch improvements based on drainage issues. Areas where water is not flowing as intended will be prioritized for restoration with the funds available. This is a moving target, as each rain event typically identifies more locations where ditching is needed, and the maintenance department is maintaining a priority list as issues come to light. Rain events are also leading to the location of additional culverts being located. Any new culverts discovered will be cleaned and mapped as part of this year's proposed project. In 2024 we have already identified 3 new culverts and 2 catch basins that were previously unmapped.

This project is proposed to be a combined effort between SVCA's Maintenance Department, and outside contractors. When a scope of work is identified that is beyond Maintenance's ability, an approved vendor from the 2024 On-Call Contractor List will be engaged. Typically, a vendor will be used where heavy equipment not owned by SVCA is needed, which requires specialized experience, or when the scope of the work is beyond what can be handled by staff. A few examples of when an outside contractor will be utilized:

- Clearing a long culvert that is beyond the capabilities of SVCA's vac-trailer.
- Cleaning large stretches of ditches where larger equipment and full-size dump trucks would significantly reduce the cost per foot of ditching.
- Offsite disposal of materials generated during cleaning operations.

SVCA's maintenance department will undertake the cleaning of smaller culverts and structures that are suited to SVCA's vac-trailer, as well as complete isolated drainage improvements not suited for high volume production. In addition, SVCA's maintenance department will perform large scale pruning where appropriate to help drainage. Selective large-scale pruning is considered pruning that is required no more frequently than every 3-5 years, as defined by

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Larson Gross's memo from December 29th, 2015. SVCA's anticipated costs for this work are detailed below.

- $1,000 Water for jetting culverts – hydrant meter from LWWSD
- $3,000 Fuel and Equipment Maintenance
- $29,800.00 Supervisor – 500 hours at $59.60/hr.
- $32,000.00 Maintenance staff – 1,000 hours at $32.00/hr.

$65,800.00 Total Estimate SVCA Maintenance Department

The Supervisory budget above is substantial for the following reasons:

- Receives and reviews all drainage related requests that are reported. In 2023 the Maintenance department received 135 service requests that were related to drainage.
- Determines if the needed improvement can be completed by SVCA staff or requires outsourcing.
- Plans projects that will be performed by SVCA staff.
- Coordinates and oversees outside contractors.

Proposal

Authorize $125,320.00 for 2024's CVC project as identified in the Roads budget. The Maintenance & Facilities Manager will be responsible for project oversight and management of the funds. Funding breakdown is proposed to be:

- $65,800.00 toward SVCA's Maintenance Department
- $59,520.00 for outside contractors utilizing the 2024 On-Call Contractor list.
- $125,320.00 total project funds.

Motion

Move that the Board of Directors approve the allocation of $125,320.00 from Roads for the 2024 Ditches, Culverts, and Swales (CVC) project with funds to be administered by the Maintenance & Facilities Manager.

Board of Directors Approval:

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

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CAPITAL REQUEST MEMO

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

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

Date: **February 22, 2024**

Subject: **Capital Request – 2024 On-Call Engineering Services**

Purpose
To request funding approval for On-Call Engineering Services from the 2024 Capital Road Budget.

Background
The request will provide funding for On-Call Engineering Services to address emergency issues related to roadway and drainage infrastructure.

Analysis
The requested funds will allow SVCA to respond quickly to unanticipated damage or issues that arise outside of planned capital improvements. Services provided from these funds may include but are not limited to technical evaluations, preliminary engineering, and permitting support for unplanned projects. Based on the age of SVCA's infrastructure, we expect that emergency issues will occur.

Proposal
Authorize $41,600 as identified in SVCA's 2024 Capital Budget for Roads for On-Call Engineering Services in 2024. Funds will be administered by the Maintenance & Facilities Manager.

Motion
Move that the Board of Directors approve the allocation of $41,600 from SVCA's 2024 Capital Budget for Roads for On-Call Engineering Services in 2024 with funds to be administered by the Maintenance & Facilities Manager.

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Motion 1 Approvals

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

Sudden Valley Community Association

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CAPITAL REQUEST MEMO

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

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

Date: **February 22, 2024**

Subject: **Capital Request – 2024 Potholes & Minor Road Repairs**

Purpose

To request funding approval for pothole and minor road repairs in 2024.

Background

The Sudden Valley Community Association (SVCA)'s 2024 Roads budget includes a line item totaling $36,400 for Pothole Repairs. The intended work to be covered by this line item includes minor road repairs in addition to pothole restoration.

Analysis

As potholes are identified, SVCA's Maintenance Department will fill them temporarily with asphalt cold patch until a few potholes are identified. Once this occurs, permanent asphalt repairs are completed. This includes removal of the failed asphalt, subgrade preparation as needed, placement of new asphalt, and sealing the edges.

In addition, SVCA's Maintenance Department will also perform minor road repairs as part of this scope. Minor road repairs will be projects that don't require contractor expertise, specialized equipment, permitting, or are large scale projects. Minor road repairs will include activities such as:

- Repairing a washed-out shoulder. This could include aggregate placement to stabilize or repairing ruts off the edge of asphalt.
- Painting of stop bars at intersections.
- Painting of parking lots.
- Replacement of broken street signs/posts.
- Stabilizing a ditch with drainage issues.
- Installation of an asphalt berm for directing water flow.
- Etc.

Sudden Valley Community Association

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4 Clubhouse Circle Bellingham, WA 98229
www.suddenvalley.com

The proposed 2024 budget for these repairs is:

- $3,000.00 Asphalt materials – cold mix, hot mix, and tar.
- $1,000.00 Disposal of asphalt and aggregates.
- $4,180.00 Materials allowance – aggregates, erosion control materials, storm drainage, signs/signposts, etc.
- $3,500.00 Fuel and equipment.
- $11,920.00 Supervisor (200 hours at $59.60/hr).
- $12,800.00 Maintenance staff (400 hours at $32.00/hr).

$36,400.00 Total estimate.

Proposal
Authorize $36,400.00 from Roads for SVCA's Maintenance Department to complete pothole and minor road repairs in 2024.

Motion
Move that the Board of Directors approve the allocation of $36,400.00 from the 2024 Capital Budget for Roads for potholes and minor road repairs in 2024.

Approvals

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

Sudden Valley Community Association

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CAPITAL REQUEST MEMO

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

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

Date: **February 22, 2024**

Subject: **Capital Request – Clubhouse HVAC 20 Ton**

Purpose
To request funding for the replacement of the HVAC 20 Ton unit located in the Clubhouse.

Background
SVCA's 2024 budget includes $83,200.00 for replacing this unit. Per PNW's summary dated February 3, 2024, the unit has been evaluated to be at the end of its lifecycle.

Analysis
Funding is requested in the amount of $22,176 for design and permitting per PNW's summary. Access for installation of a new unit is a major factor in this project and could possibly require the temporary removal of doors and/or walls to bring in new equipment. In addition, an economizer, see description attached, must be added to meet current code requirements. These two requirements create the majority of the work that is needed to design a replacement the current system system.

We propose to replace this unit in kind, since altering the overall HVAC system in the clubhouse would require bringing the existing building up to current energy code. A thorough evaluation of this hasn't been completed, but is estimated that it would be a very large project considering the Clubhouse was built in the early 1970's. An energy code upgrade would likely include other items such as building insulation, window replacement, other HVAC components, etc.

After the design is complete, and permits submitted, an engineer's estimate will be prepared. The project will then be brought back to the Board for funding approval. Following approval, the project would be issued for bid, and then brought back to the Board of Directors for contract award.

Proposal
Authorize $22,176.00 from CRRRF per PNW's summary dated February 3rd, 2024, for design and permitting for the Clubhouse HVAC 20 Ton unit replacement project.

Sudden Valley Community Association

360-734-6430
4 Clubhouse Circle Bellingham, WA 98229
www.suddenvalley.com

Motion

Move that the SVCA Board of Directors approve the allocation of $22,176.00 from CRRRF for design and permitting per PNW's summary dated February 3, 2024, for the Clubhouse HVAC 20 Ton unit replacement project.

Approvals

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

February 3, 2024

Sudden Valley Community Association
Attn: Michael Brock
4 Clubhouse Circle
Bellingham, WA 98229

RE: Project Scope Letter
Clubhouse HVAC 20 TON

PNW is providing this overall project scope letter to SVCA for the proposed Clubhouse HVAC 20 TON replacement project. This specific unit is located on the first floor of the Clubhouse in Room 100, Mechanical Room (reference the attached drawing for this room location). SVCA's 2024 budget includes $83,200.00 for replacing this unit. The unit has been identified to be at the end of its life cycle. This has been confirmed by Barron Heating, who is SVCA's current maintenance service provider, and Berona Engineers. Berona Engineers has assisted SVCA with HVAC design at Barn 8, and the Area Z Maintenance Shop.

There are 2 HVAC units located in this mechanical room along with numerous other items. The lower 20-ton unit was previously replaced. The upper 20-ton unit is now proposed. An in-kind replacement is proposed, and due to code changes an economizer will have to be added as noted in Berona's proposal. An in-kind replacement is generally a simple task. However, in this case it is not. With the addition of an economizer being required, and where the unit is located, it presents many challenges. The majority of the HVAC design time will be figuring out how to add the economizer within the space, and get a new unit into the room. Removal of the existing unit is relatively simple as it can be cut into pieces. To access this room a new unit will need to fit through a 3' door next to room 107. This would be relatively simple to remove temporarily if needed. However, navigating through room 102 is narrow at 3'10" opening width between a wall and electrical switchgear. To then enter room 100 requires navigating through a 3' door that is in a CMU (concrete masonry unit) wall. This is likely a structural wall that will be challenging to create a temporary larger opening in. The new unit will need to be broken down preferably into pieces less than 3' to fit, and then be reassembled in the room. Attached for reference are a few pictures of the existing unit, and access restrictions.

Depending on how the new HVAC unit is designed, this project might require a remodel permit in addition to the HVAC permit. An allowance has been included for Sarah Brown Architecture + Design to provide additional drawings and remodel permitting assistance if needed. This would be if any walls / doors needed to be temporarily removed and then rebuilt after the new unit is installed. The intent is to not do anything that requires structural modifications. Funding for a structural engineer isn't included at this time in this proposal.

At this time, we are seeking funding approval to proceed with design and permitting. After design is complete, an engineer's estimate will be prepared and submitted to the Board for funding approval. Once funded, the project will be issued for bid, and then brought back to the Board for contract award.

Summary of anticipated costs:

Design & Permitting Scope	
- Berona Engineers, Inc. – HVAC design and permit application.	$10,000.00
- Sarah Brown Architecture + Design – Remodel design and permitting support as needed.	$6,000.00
- PNW Services, Inc. – Per Attached	$2,160.00
- Permit Fees Allowance	$2,000.00
Total Design & Permitting	**$20,160.00**
Contingency at 10%	$2,016.00
Total with Contingency	**$22,176.00**
Contractor Bids & Construction	
- Under Separate Proposal	

Please let me know if you have any questions, or if you would like any further information.

Sincerely,

Tyler Andrews
President

SUDDEN VALLEY COMMUNITY ASSOCIATION

CLUBHOUSE – FIRST FLOOR

KEY:

LIFE SAFETY:
FX = FIRE EXTINGUISHER
SD = SMOKE DETECTOR
FA = FIRE ALARM
FAP = FIRE ALARM PULL
FAP Reset = FIRE ALARM PULL RESET
EmLt = EMERGENCY EXIT LIGHT
Fire Pnl = FIRE ALARM PANEL
Hood F-Susp = HOOD FIRE SUPPRESSION

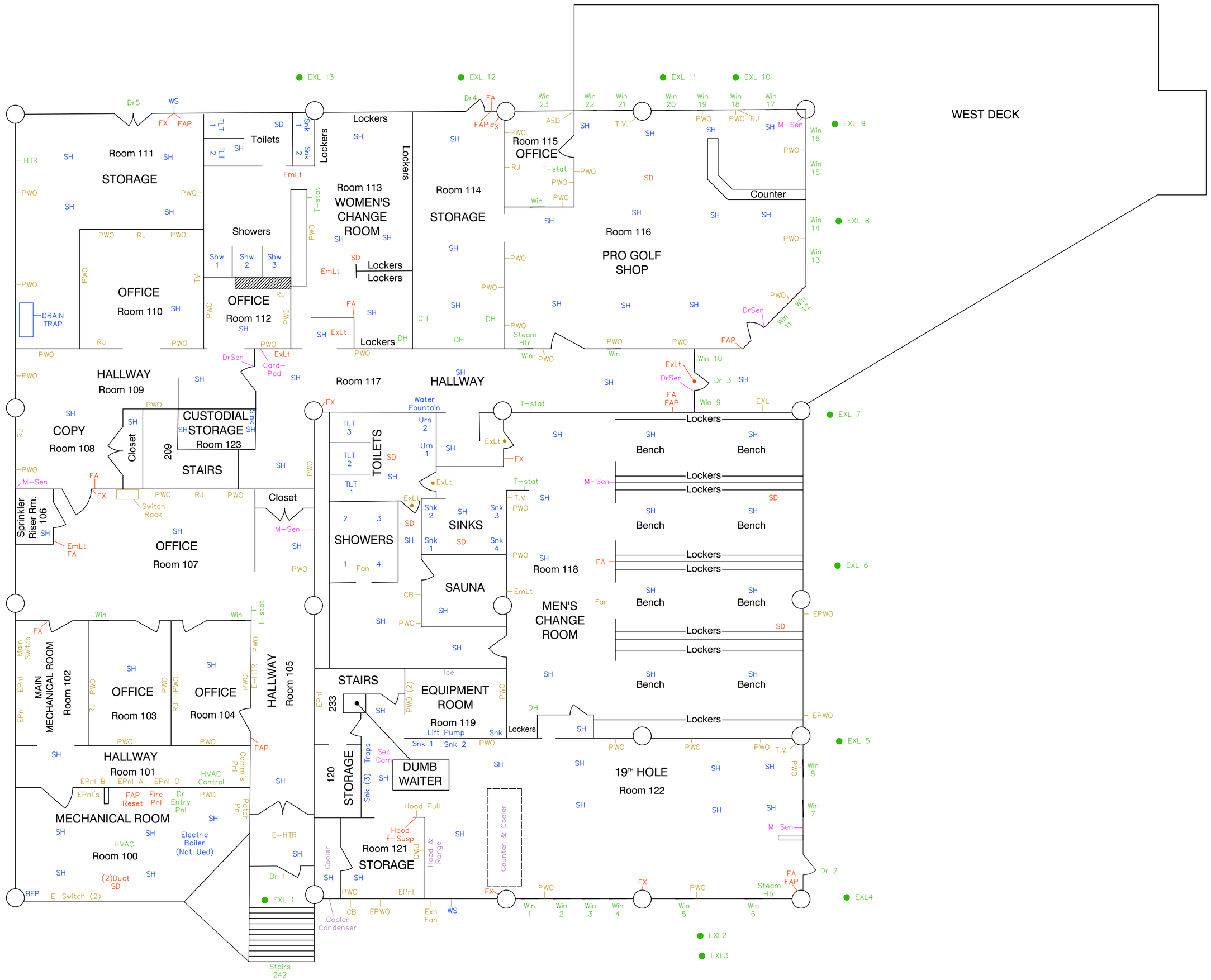
PLUMBING:
WS = WATER SPIGOT
Wshr = DISH WASHER
WHTR = WATER HEATER
SH= SPRINKLER HEAD
Shw = SHOWER
Snk = SINK
TLT = TOILET
Urn = URINAL
WATER FOUNTAIN
TRAPS
LIFT PUMP
DRAIN TRAP

MECHANICAL/BUILDING:
T-stat = THERMOSTAT
WIN = WINDOW
Dr = DOOR
Dr Entry Pnl = DOOR ALARM ENTRY PANEL
HVAC = HEATING VENTILATION AND AIR CONDITIONING
HVAC Control = HEATING VENTILATION & AIR CONDITION CONTROL
Steam Htr = STEAM HEATER
EXL # = EXTERIOR LIGHTS
DS = DOWN SPOUT

ELECTRICAL:
PWO = POWER OUTLET
EPWO = EXTERIOR POWER OUTLET
EPnl = ELECTRICAL PANEL
T.V. = TELEVISION MONITOR
CB = CIRCUIT BREAKER
EPnl = ELECTRICAL PANAL
E-HTR = ELECTRIC HEATER
Exh Fan = EXHAUST FAN
Fan
RJ = RJ45 ETHERNET
MAIN SWITCH
ExLt = EXIT LIGHT
El. SWITCH – ELECTRICAL SWITCH
Comm's Pnl = COMMUNICATION PANEL
SPKR = SPEAKER

SECURITY:
DrSen = DOOR SENSOR
MSen = MOTION SENSOR
Sec Cam = SECURITY CAMERA
CARD-PAD

EQUIPMENT:
COOLER
HOOD AND RANGE
COUNTER AND COOLER



SUDDEN VALLEY: B. BISHOP
PDF TO VISIO TO JPG

DESIGNED BY	DRAWN BY	CHECKED BY

SUDDEN VALLEY COMMUNITY ASSOCIATION
SUDDEN VALLY WASHINGTON
CLUBHOUSE – FIRST FLOOR

DATE	SCALE	JOB NUMBER
NOV. 2017	AS SHOWN	2016-148

SHEET 1
PAGE 1 OF 2

Room 102 - 3'10" Opening Width Assumes all Files Removed

Room 100 Access Door - 3' Opening

Existing Unit (Yellow) - Left Side

Existing Unit (Yellow) - Right Side

PROFESSIONAL SERVICES AGREEMENT

Jan 30, 2024

CLIENT: **Tyler Andrews**
PNW Services
PO Box 30498
Bellingham, WA 98228
(425)954-9614

PROJECT: **Sudden Valley Recreation Center- Clubhouse HVAC**
Bellingham, WA

SUBJECT: **MECHANICAL ENGINEERING SERVICES FEE PROPOSAL – Revised**

Berona Engineers, Inc. (BEI) is pleased to submit this proposal to provide Mechanical (HVAC) design services for this project. This proposal is a statement of intent by **PNW Services** (Client), to engage Berona Engineers, Inc. to perform the following mentioned services for this project.

The project consists of replacing the existing (upper) airhandler and associated 20-ton air-cooled condensing unit for the Clubhouse. The existing unit is at its life expectancy and needs to be replaced. There is one newer (lower) 20-ton airhandler located on the bottom that is to remain. The basic scope of new work will include a site visit to examine existing conditions, new equipment selection, and modification of ductwork design in the mechanical room for connection of new airhandler. We will look at a like-for-like replacement as well as a more efficient Variable Refrigerant Flow (VRF) type of system for best space compatibility. As the current system does not have an economizer, adding an economizer will be required per code and is therefore included in this scope. Design will conform to the 2018 WA State Energy Code.

Addition of a Dedicated Outside Air System (DOAS) in lieu of an economizer is not included in this scope and will be additional services.

Our basic scope will be to design through the Permit stages. We will respond to Permit questions, comments and make the necessary revisions to the documents. Then submit to the Client the final permit set for their use and at this submittal will indicate the completion and fulfillment of this agreement. The Client shall take full responsibility and full liability for any changes made to these permit documents, where BEI is not involved in and/or has not been authorized by BEI. These set of documents are for the sole purpose of this project and this project site, and shall not be used for any other site without BEI authorization. Changes developed by the contractor and changes to our design, if any, will become the Contractor's responsibility for those changes.

Construction administration will be additional and invoiced on an hourly basis, plus expenses.

Changes developed by the contractor and changes to our design, if any, will become the Contractor's responsibility for those changes.

Fees and Billings:
Our fee to perform this work will be a lump sum of **$10,000.00**.

Billings will be monthly based on our percent of completion of submittals.

Reimbursable expenses, if any, will be additional to our basic fee plus 15% and shall not exceed $300. Payments for each invoice must be received within 30 calendar days of invoice date. A 1.5% finance charge or $150, whichever is more will be assessed monthly on any balance remaining over 60 days after invoice date.

Additional Services:
Additional services will be any scope of work not listed above, scope changes by the Client. Additional services will be negotiated separately and either added to the basic agreement or performed under a separate agreement and will not proceed without written authorization.

BEI Hourly rates are as follows:
Principal: $200/hr, Senior Engineer: $ 180.00/hr, Project Engineer/Sr. Designer: $ 160.00/hr
Designer/Revit: $ 140.00/hr, CAD Operator: $ 120.00/hr, Administration: $ 85.00/hr.

Work not included:

1. Building Envelope and Energy Modeling
2. Plumbing design
3. Stairwell Pressurization
4. Fire and Life Safety Analysis Narrative
5. Fire sprinkler Design
6. Electrical Design
7. Seismic and structural design as it relates to mechanical & plumbing
8. Acoustic engineering
9. Testing, adjusting and balancing, including building pressure testing
10. Redesign based on value engineering
11. All fees, permits and inspections.

Client to Provide and Responsible for:

1. Take out all Permits and order site inspections
2. Architectural backgrounds in pdf, CAD and/or Revit formats.
3. Site Utilities
4. Equipment cut sheets for all owner or by others specified equipment.
5. Copying of our documents.
6. Distribution of our copied and original documents for each submittal.

TERMINATION OF SERVICES
The failure to make payment to BEI in accordance with the payment terms herein shall constitute a material breach of this Agreement and shall be cause for termination by Berona Engineers, Inc.

Either the Client or BEI may terminate this AGREEMENT without penalty at any time with or without cause upon giving the other party 30 calendar days prior written notice. Client shall within (15) fifteen calendar days of termination pay BEI for all services rendered and all costs incurred up to the date of termination, in accordance with the compensation provisions of this AGREEMENT. CLIENT shall also reimburse BEI termination expenses, including but not limited to, those associated with, reassignment of personnel, and space and equipment cost.

Our scope only covers reviewing documents to be submitted to the Jurisdiction Having Authority (JHA) for review and comment, of which we will respond and revise our documents accordingly. These documents will be used for the basis of the JHA to issue a construction permit for the Client. Our understanding is that your firm will be the builder and that you will have the last say on selected products for us to design around and that we will confirm selections through load calculations. Also, the Client will be responsible for the full means and methods for the construction of the work that we will provide design review for under this agreement.

INDEMNIFICATION
The Client shall indemnify and hold harmless Berona Engineers, Inc. and all of its personnel, agents, sub consultants from and against any and all claims, damages, losses and expenses (including reasonable attorney's fees) arising out of, or resulting from, the performances of these services, provided that any such claim, damage, loss or expenses is caused by the sole negligent act, errors, or omissions and/or strict liability of the Client, including, but not limited to anyone directly or indirectly employed by the Client or anyone or entity (other than BEI), associated with the Client whose acts may be liable.

APPLICABLE LAW: This agreement shall be governed by the laws of the State of Washington.

This proposal is good to the end of the day, Feb 29, 2024.

If this proposal is acceptable, please sign below and return a copy for our records. We look forward to working with you on this project. If you have any questions or require more information, please call.

Sincerely,

Berona Engineers, Inc.

Rob Russell, PE
Principal

ACCEPTABLE TO PNW Services:

By:_____ **Date:**_____

Sarah Brown
ARCHITECTURE + DESIGN

January 9, 2024

Tyler Andrews
PNW Services Inc.
PO Box 30498
Bellingham, WA 98228

Dear Tyler,

Thank you for allowing me the opportunity to propose on architectural services for the Mechanical Replacement located at the Sudden Valley Recreation Center-Clubhouse. The following provides a summary description of the project I have discussed with the Mechanical Engineer and describes the Agreement for Services between Tyler Andrews (Client), and Sarah Brown Architecture + Design, Architect (Consultant). By signing this Agreement for Services, Client accepts the scope, fees and timing as set forth herein, including the attached "CONSULTANT CONTRACT PROVISIONS" which is fully incorporated into this Agreement for Services.

PROJECT SUMMARY DESCRIPTION

The primary work will be to provide support drawings to the Mechanical Engineer and permit documents to Whatcom County Planning & Development for the replacement of mechanical units.

SCOPE OF SERVICES TO BE PROVIDED

The scope of work provided by Consultant will include:

- Preparation of Contract Documents consisting of Architectural Construction Drawings for the remodel and improvement in the subject projects.
- Assist the client with the submission to the Whatcom County for the project's building permit and respond to planning review comments. All other construction permit submissions are the responsibility of the project Contractors.

PERMIT/CONSTRUCTION DOCUMENTS

- Project Information & Code Requirements
- Site Plan
- Exiting/Demo Plan
- Floor Plan
- Reflected Ceiling Plan

SERVICES NOT PROVIDED

- The Consultant is not providing nor is the Consultant responsible for the following services:
- Structural, Electrical, Mechanical, Acoustical or Civil Engineering Design or their drawings for this Project.
- Fire suppression, Fire Alarm or Security System Design or their drawings for this Project.

Sarah Brown
ARCHITECTURE + DESIGN

- Construction budgets, cost estimates, or construction inspections, energy analysis or energy code compliance.
- Detailed Construction specifications.
- Energy Code calculations and submittal documentations.
- Fixtures or other equipment that have no permanent connection to the structure of the building.
- Interior Design or their drawings for this Project for selection of movable furniture, paint colors, finish materials selection including flooring.

PROJECT FEES

Fees for services provided will be billed on an hourly basis at the rate of $195.00 per hour, plus reimbursable expense. Reimbursable expenses will be billed to the client at cost. Reimbursable expenses include but are not limited to computer downloads, photo charges, shipping, document printing and copying.

The estimated total fee for services under this agreement, based on digital files being provided by the Client, is $5,800 but may vary depending on unforeseen issues (such as city questions or construction consulting) and the actual time required by the Consultant to complete this project.

Fees shall be invoiced monthly and will be paid by the Client within 30 days of receipt.

All additional costs associated with this project beyond the services described in this agreement, including but not limited to permit fees, application fees, contractor fees, etc. are the responsibility of Client, not the Consultant.

All limitations of liability, indemnifications, warranties and representations contained in this Agreement for Services shall survive the completion of this Agreement and shall remain in full force and effect.

Please indicate acceptance of this Agreement for Services where indicated below and return a signed copy to me.

Sincerely,

Sarah Brown

Sarah Brown

ACCEPTED:

By: _____

Date: _____

3222 EAGLERIDGE WAY, BELLINGHAM, WA 98226 360.920.5498 SARAH@SBARCHDESIGN.COM

Sarah Brown
ARCHITECTURE + DESIGN

CONSULTANT CONTRACT PROVISIONS

1. CONTRACT – These Contract Provisions and the accompanying Proposal constitute the full and complete Agreement between the parties and may be changed, amended, added to, superseded, or waived only if both parties specifically agree in writing to such amendment of the Agreement. In the event of any inconsistency between these Contract Provisions and any proposal, contract, purchase order, requisition, notice to proceed, or like document, these Contract Provisions shall govern.

2. RIGHT OF ENTRY – When entry to property is required for the CONSULTANT to perform its services, the Client agrees to obtain legal right-of-entry on the property.

3. DOCUMENTS – All reports, notes, drawings, specifications, data, calculations, and other documents, including those in electronic form, prepared by CONSULTANT are instruments of CONSULTANT's service that shall remain CONSULTANT's property. The Client agrees not to use CONSULTANT-generated documents for marketing purposes, for projects other than the project for which the documents were prepared by CONSULTANT, or for future modifications to this project, without CONSULTANT's express written permission.

Any reuse or distribution to third parties without such express written permission or project-specific adaptation by CONSULTANT will be at the Client's sole risk and without liability to CONSULTANT or its employees, subsidiaries, independent professional associates, subconsultants, and subcontractors. Client shall, to the fullest extent permitted by law, defend, indemnify, and hold harmless CONSULTANT from and against any and all costs, expenses, fees, losses, claims, demands, liabilities, suits, actions, and damages whatsoever arising out of or resulting from such unauthorized reuse or distribution.

4. DISPOSAL OF SAMPLES – CONSULTANT will discard samples upon completion of the work covered under this Agreement, unless the Client instructs otherwise in writing.

5. HAZARDOUS MATERIALS – The scope of CONSULTANT's services for this Agreement does not include any responsibility for detection, remediation, accidental release, or services relating to waste, oil, asbestos, lead, or other hazardous materials, as defined by Federal, State, and local laws or regulations.

6. CONSTRUCTION PHASE SERVICES – If CONSULTANT performs any services during the construction phase of the project, CONSULTANT shall not supervise, direct, or have control over Contractor's work. CONSULTANT shall not have authority over or responsibility for the construction means, methods, techniques, sequences, or procedures for safety precautions and programs in connection with the work of the Contractor. CONSULTANT does not guarantee the performance of the construction contract by the Contractor and does not assume responsibility for the Contractor's failure to furnish and perform its work in accordance with the Contract Documents.

7. STANDARD OF CARE – CONSULTANT and its employees, subsidiaries, independent professional associates, subconsultants, and subcontractors will exercise that degree of care and skill ordinarily practiced under similar circumstances by design professionals providing similar services. Client agrees that services provided will be rendered without any warranty, express or implied.

CONSULTANT shall exercise usual and customary professional care in its efforts to comply with applicable codes, regulations, laws rules, ordinances, and such other requirements in effect as of the date of execution of this Agreement.

8. OPINION OF PROBABLE COSTS – When required as part of its work, CONSULTANT will furnish opinions of probable cost, but does not guarantee the accuracy of such estimates. Opinions of probable cost, financial evaluations, feasibility studies, economic analyses of alternate solutions, and utilitarian considerations of operations and maintenance costs prepared by CONSULTANT hereunder will be made on the basis of CONSULTANT's experience and qualifications and will represent CONSULTANT's judgment as an experienced and qualified design professional. However, users of the probable cost opinions must recognize that CONSULTANT does not have control over the cost of labor, material, equipment, or services furnished by others or over market conditions or contractors' methods of determining prices or performing the work.

9. SUSPENSION OF WORK – The Client may, at any time, by written notice, suspend further work by CONSULTANT. The Client shall remain liable for, and shall promptly pay CONSULTANT, for all services rendered to the date of suspension of services, plus suspension charges, which shall include the cost of assembling documents, personnel and equipment, rescheduling or reassignment, and commitments made to others on Client's behalf.

Client shall pay CONSULTANT pursuant to the rates and charges set forth in the Proposal. CONSULTANT will submit monthly invoices to Client for services rendered and expenses incurred. If Client does not pay invoices within thirty (30) days of submission of invoice, CONSULTANT may, upon written notice to the Client, suspend further work until payments are brought current. The Client agrees to indemnify and hold CONSULTANT harmless from any claim or liability resulting from such suspension.

Upon receipt of payment for services performed through the date of suspension, the CONSULTANT will provide copies of their draft work product, in electronic form, in the state of completion achieved prior to termination to the client.

10. CHANGES OR DELAYS – Unless the accompanying Proposal provides otherwise, the proposed fees constitute CONSULTANT's estimate to perform the services required to complete the Project. Required services often are not fully definable in the initial planning; accordingly, developments may dictate a change in the scope of services to be performed. Where this occurs, changes in the Agreement shall be negotiated and an equitable adjustment shall be made.

Costs and schedule commitments shall be subject to renegotiation for unreasonable delays caused by the Client's failure to provide specified facilities, direction, or information, or if CONSULTANT's failure to perform is due to any act of God, labor trouble, fire, inclement weather, act of governmental authority, failure of transportation, accident, power failure, or interruption or any other cause beyond the reasonable control of CONSULTANT. Temporary work stoppage caused by any of the above may result in additional cost beyond that outlined in the accompanying Proposal.

11. LIABILITY – To the fullest extent permitted by law, the total liability, in the aggregate, of CONSULTANT and CONSULTANT's officers, directors, employees, agents, and consultants to Client and anyone claiming by, through or under Client, for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or in any way related to CONSULTANT's services, the Project or this Agreement, from any cause or causes whatsoever, including but not limited to, negligence, strict liability, breach of contract or breach of warranty shall not exceed the total compensation received by CONSULTANT under this Agreement.

12. CONFLICTS OF INTEREST – This assignment may involve parties with adverse interests to clients with whom CONSULTANT has current or past relationships. It is CONSULTANT policy to make reasonable attempts to identify such relationships prior to acceptance of a professional assignment, but CONSULTANT cannot assure that conflicts or perceived conflicts will not arise, and CONSULTANT does not accept responsibility for such occurrences.

13. REIMBURSABLE EXPENSES – CONSULTANT will bill direct nonpayroll expenses at cost plus 10%. Direct expenses include all reasonable expenses resulting from required responses to subpoenas or court orders related to work under the Contract.

14. MISCELLANEOUS - Governing Law: The laws of the state in which the CONSULTANT office executing this Agreement is located shall govern the validity and interpretation of this Agreement.

Invalid Terms: In the event any of these Contract Provisions are found to be illegal or otherwise unenforceable, the unenforceable Contract Provision will be stricken. Striking such a Contract Provision shall have no effect on the enforceability of the remaining Contract Provisions and those remaining Contract Provisions shall continue in full force and effect as if the unenforceable Contract Provision were never included in the Agreement.

Mediation: The Client and CONSULTANT agree to submit all claims and disputes arising out of this Agreement to non-binding mediation prior to the initiation of legal proceedings. This provision shall survive completion or termination of this Agreement; however, neither party shall seek mediation of any claim or dispute arising out of this Agreement beyond the period of time that would bar the initiation of legal proceedings to litigate such claim or dispute under the applicable law.

CONSULTANT Reliance: CONSULTANT shall be entitled to rely, without liability, on the accuracy and completeness of any and all information provided by Client, Client's consultants and contractors, and information from public records, without the need for independent verification.

Certifications: CONSULTANT shall not be required to sign any documents, no matter by whom requested, that would result in CONSULTANT's having to certify, guaranty, or warrant the existence of conditions that CONSULTANT cannot ascertain.

Third Parties: Nothing contained in this Agreement shall create a contractual relationship with, or a cause of action in favor of, a third party against either the Client or CONSULTANT. CONSULTANT's services hereunder are being performed solely for the benefit of the Client, and no other entity shall have any claim against CONSULTANT because of this Agreement or CONSULTANT's performance of services hereunder.

Consequential Damages: Neither the Client nor the CONSULTANT shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of, or connected in any way to the Project or this Agreement. This mutual waiver includes, but is not limited to, damages related to loss of use, loss of profits, loss of income, loss of reputation, unrealized savings or diminution of property value and shall apply to any cause of action including negligence, strict liability, breach of contract and breach of warranty.

Sudden Valley Community Association

Clubhouse HVAC 20 Ton

PNW Estimate - Bid Package, Permitting, and Construction Management

Task	Description	Hours	Estimated Cost
Design Oversight			
	Oversight of Berona Engineers and Sarah Brown Architecture & Design, review drawings, and site visits as required.	12	
	Total Estimated Design Oversight Hours	12	**$ 1,620.00**
Permitting			
	Oversight of permit applications, facilitate signatures / submittals / permit fees.	4	
	Total Estimated Permitting Cost	4	**$ 540.00**
Contractor Bids			
	Under separate proposal.	0	
	Total Estimated Bid Package Hours	0	**$ -**
Construction Management			
	Under separate proposal.	0	
	Total Estimated Construction Management Hours	0	**$ -**
	Total Estimated		**$ 2,160.00**

Mike Brock

From: robr@beronaengineers.com
Sent: Monday, February 5, 2024 1:52 PM
To: 'Tyler Andrews'
Cc: Mike Brock
Subject: RE: SVCA - Clubhouse HVAC Replacement

Hi Tyler,

An economizer is used in HVAC systems to provide “free cooling” during certain temperatures in order to save energy. When the system is in cooling mode, and the outside temperature ranges from 45-65 degrees, the condensing unit shuts off and the HVAC system uses 100% outside air (or mixture of higher outside air with return air) to provide the required 55 degree air needed to cool the building. This set up requires a duct, sized for 100% of the supply air, to be routed to the outside, along with an exhaust duct, sized for full flow, to relieve the building of the excess air and pressure. There are certain exceptions to using an economizer, typically by using a Dedicated Outside Air System (DOAS) or Energy Recovery Ventilator (ERV), but those require the same things as the economizer and include additional equipment but also do not need to be as big as an economizer.

Hope that helps.

Thanks.

Rob Russell, PE
Principal
BERONA ENGINEERS, INC.
(425)744-6033 ext 102

From: Tyler Andrews <tylera@pnwcivil.com>
Sent: Monday, February 5, 2024 12:52 PM
To: robr@beronaengineers.com
Cc: Michael Brock (mike.brock@suddenvalley.com) <mike.brock@suddenvalley.com>
Subject: RE: SVCA - Clubhouse HVAC Replacement

Hi Rob,
Can you please provide a 1-2 sentence description of what an “economizer” is so we can correctly explain this to the Board?
Thanks,
Tyler

Tyler Andrews
PNW Civil, Inc
PO Box 30498
Bellingham, WA 98228
360-739-2072

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: **February 22, 2024**

Subject: **Core Area: Tennis Court Resurfacing & Fencing**
SVCA Capital Code: 9723.05 – Change Order

Purpose
To request funding approval for the Core Area: Tennis Court Resurfacing & Fencing project.

Background
On February 9, 2023, Sudden Valley Community Association (SVCA)'s Board of Directors approved design and permitting under capital code 9723.05 for improving the existing tennis courts located next to the main pool at Barn 8. Design and permitting was completed, and the project was issued for bid in July of 2023. However, the bids exceeded the budgeted amount and contractors were not available to complete the project in 2023; therefore, SVCA elected to reject the bids and rebid the project in 2024. Per PNW's summary dated February 9, 2024, the project was issued for bid a second time, and Stremler Gravel, Inc. is the lowest bidder with a construction bid of $283,300.38. PNW's summary includes the initial capital request and bid packages for reference.

Analysis
SVCA's 2024 budget includes $191,278.00 for this project. The initial capital request for design and permitting used $19,101.50 leaving a balance of $172,176.50 available from the 2024 construction budget. The construction budget of $295,615.38 per PNW's attached summary means the project will come in over the initial reserve study budget by $123,438.88. However, with this project now put out for bid a second time, it appears the market price for completing repairs to the tennis courts was unfortunately higher than anticipated. It is doubtful that going to bid for a third time would lead to better results.

After design was completed, it was noted the southeast corner of the tennis court floods during heavy rain events. After investigation, it was determined that water is coming down the east slope adjacent to the tennis courts from pipe drains related to the building structures above. To mitigate this, we are proposing to install an infiltration trench for approximately 150' along the edge of asphalt to capture any excess surface water and prevent it from flooding the tennis courts. In addition, the 2 known pipe drains will be piped down the slope and connected to the infiltration trench. This will properly convey the stormwater from above the tennis courts and will prevent future erosion. This scope of work is anticipated to be added to Stremler Gravel's contract as a change order. This repair will model the infiltration trench that was installed along the north wall of Barn 8 in 2021 that has worked well to prevent annual flooding.

Sudden Valley Community Association

360-734-6430
4 Clubhouse Circle Bellingham, WA 98229
www.suddenvalley.com

For this project to move forward, we are requesting change order funding in the amount of $302,615.38:

- $295,615.38 per PNW's summary dated February 9, 2024 for construction.
- $7,000.00 allowance to install an infiltration trench to prevent water from flooding the tennis court.

Proposal
Authorize $302,615.38 from CRRRF as change order funding for construction to capital code 9723.05. And authorize the General Manager to execute SVCA's standard construction contract with Stremler Gravel, Inc. for completing the proposed repairs to the tennis court.

Motion 1
Move that the SVCA Board of Directors approve the allocation of $302,615.38 from CRRRF as change order funding to capital code 9723.05 for construction of the Core Area: Tennis Court Resurfacing & Fencing project.

Motion 2
Move that the SVCA Board of Directs approve contract award to Stremler Gravel, Inc. per their proposal dated February 9h, 2024, and authorize the General Manager to execute SVCA's standard construction contract.

Approvals

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

February 9, 2024

Sudden Valley Community Association
Attn: Mike Brock
4 Clubhouse Circle
Bellingham, WA 98229

RE: Project Scope Letter
Core Area: Tennis Court – Resurfacing & Fencing
Contract Award Recommendation

PNW is providing this contract award recommendation letter to SVCA for the Core Area: Tennis Court – Resurfacing & Fencing project. This tennis court is located adjacent to the Recreation Center, Barn 8, just past the main pool. On 2-9-23, SVCA's Board approved design and permitting for this project to proceed. Attached for reference is the initial Board approval package. Design and permitting was completed, and the project was issued for bid in 2023 with bid results received 7-20-23. 2 bids were received with the low bidder at $265,532.43. The 2023 bid results are attached for reference. SVCA's budget for this project is $189,925.00. With the project being substantially over budget, and construction not able to be completed in 2023 due to tennis court finishing contractor availability, SVCA elected to throw out the bids. The project was reissued for bid on 1-23-24, and the bid package was sent to 8 contractors.

- Stremler Gravel, Inc. – Bid Received
- Tiger Construction LTD. – Bid Received
- Western Refinery Services – No Bid
- Premium Services – No Bid
- NW Asphalt – No Bid
- Dirt Works Bellingham – No Bid
- Strider Construction – No Bid
- Ram Construction – No Bid

Bids were received on 2-9-24, and attached are the bid results including the engineer's estimate. Also attached is the bid package for reference. The 2024 bid package matched the 2023 bid package with the exception of incorporating 2 addendums and updating the dates. A few specific notes regarding the project:

- Construction can't start until 6-1-24 due to permit restrictions.
- The contract set 20 working days, not including cure time, as the contract period.
- Substantial completion was noted at 8-2-24 with final completion of 8-16-24.

The intent with issuing the bid in January was to access more availability with tennis court finishing specialty contractors. The scope of this work is specific to applying the acrylic surface and there is a limited number of contractors who perform this work. With more specialty contractors able to bid this scope, cheaper bids would most likely be provided. In addition, bidding in January with contract award in February should allow the project to proceed as planned in 2024 with contractors still having availability. Based on the bid results, PNW is recommending Stremler Gravel, Inc. be awarded the contract. Overall project costs anticipated:

Tennis Court Resurfacing Construction Estimate	
- Stremler Gravel per attached estimate dated 2-9-24.	$283,300.38
- Impact Design – Submittal reviews and construction question allowance.	$3,000.00
- PNW Services, Inc. – Construction oversight per attached.	$9,315.00
Total Construction Estimate	**$295,615.38**

Please let me know if you have any questions, or if you would like any further information.

Sincerely,

Tyler Andrews
President

February 9, 2024 - Bid Tabulation

Project: 2024 Tennis Court Repairs

				Engineers Estimate		Stremler Gravel, Inc.		Tiger Construction LTD.	
Item #	**Description**	**Quantity**	**Unit**	**Unit Price**	**Total**	**Unit Price**	**Total**	**Unit Price**	**Total**
1	Mobilization	1	LS	$ 15,000.00	$ 15,000.00	$ 36,100.00	$ 36,100.00	$ 33,000.00	$ 33,000.00
2	Access & Restoration	1	LS	$ 3,500.00	$ 3,500.00	$ 20,900.00	$ 20,900.00	$ 12,000.00	$ 12,000.00
3	Asphalt Repairs	1490	SF	$ 20.00	$ 29,800.00	$ 17.25	$ 25,702.50	$ 22.00	$ 32,780.00
4	Nets & Post Replacements	1	LS	$ 3,500.00	$ 3,500.00	$ 47,000.00	$ 47,000.00	$ 57,000.00	$ 57,000.00
5	2" Asphalt Overlay	1	LS	$ 53,400.00	$ 53,400.00	$ 45,800.00	$ 45,800.00	$ 53,000.00	$ 53,000.00
6	Acrylic Surfacing	1	LS	$ 37,800.00	$ 37,800.00	$ 50,000.00	$ 50,000.00	$ 51,000.00	$ 51,000.00
7	Pavement Markings	1	LS	$ 5,000.00	$ 5,000.00	$ 11,200.00	$ 11,200.00	$ 9,000.00	$ 9,000.00
8	Dog Park - 4' Fence Replacement	163	LF	$ 40.00	$ 6,520.00	$ 74.07	$ 12,073.41	$ 45.00	$ 7,335.00
9	Dog Park - 3' Man Gate	1	EA	$ 500.00	$ 500.00	$ 590.00	$ 590.00	$ 430.00	$ 430.00
10	Dog Park - 8' Equipment Gate	1	EA	$ 750.00	$ 750.00	$ 1,500.00	$ 1,500.00	$ 1,100.00	$ 1,100.00
11	Minor Changes	1	EST.	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00
	Subtotal				**$165,770.00**		**$260,865.91**		**$266,645.00**
	WSST @ 8.6%				**$ 14,256.22**		**$ 22,434.47**		**$ 22,931.47**
	Total w/ WSST				**$180,026.22**		**$283,300.38**		**$289,576.47**

SVCA Tennis Court Repairs

Engineer's Estimate

February 8, 2024

Estimate Prepared by:
Impact Design, LLC
5426 Barrett Road, Suite A103
Ferndale, WA 98248
Phone: (360) 389-8138

Client:
Tyler Andrews
PNW Services, Inc.
PO Box 30498
Bellingham, WA 98228

		ESTIMATED CONSTRUCTION COST			
NO.	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
Construction Costs					
1	MOBILIZATION	1	L.S.	$15,000.00	$15,000.00
2	ACCESS & RESTORATION	1	L.S.	$3,500.00	$3,500.00
3	ASPHALT REPAIRS	1490	SF	$20.00	$29,800.00
4	NETS & POST REPLACEMENTS	1	L.S.	$3,500.00	$3,500.00
5	2" ASPHALT OVERLAY	267	TONS	$200.00	$53,400.00
6	ACRYLIC SURFACING	21600	SF	$1.75	$37,800.00
7	PAVEMENT MARKINGS	1	LS	$5,000.00	$5,000.00
8	DOG PARK - 4' FENCE REPLACEMENT	163	LF	$40.00	$6,520.00
9	DOG PARK - 3' MAN GATE	1	EA	$500.00	$500.00
10	DOG PARK - 8' EQUIPMENT GATE	1	EA	$750.00	$750.00
11	MINOR CHANGES	1	EST.	$10,000.00	$10,000.00
	Subtotal				*$165,770.00*
	Tax @ 8.6%				*$14,256.22*
TOTAL CONSTRUCTION COST					$180,026.22
10% CONTINGENCY					$16,577.00
PROJECT TOTAL					$196,603.22

SCOTT IAN GOODALL
STATE OF WASHINGTON
51077
REGISTERED
PROFESSIONAL ENGINEER

2-8-2024

PNW
SERVICES, INC.

January 23, 2024

Attn: Bidders

RE: Sudden Valley Community Association (SVCA)
Bid Form – 2024 Tennis Court Repairs

Bid submissions are due by 11:00am on Friday, 2-9-24. Email bid submissions to tylera@pnwcivil.com.

Firm Name: Stremler Gravel, Inc.

Bid Schedule – 2023 Tennis Court Repairs					
Item #	Description	Quantity	Unit	Unit Price	Total
1.	Mobilization	1	LS	$36,100.00	$36,100.00
2.	Access & Restoration	1	LS	$20,900.00	$20,900.00
3.	Asphalt Repairs	1,490	SF	$ 17.25	$25,702.50
4.	Nets & Post Replacements	1	LS	$47,000.00	$47,000.00
5.	2" Asphalt Overlay	1	LS	$45,800.00	$45,800.00
6.	Acrylic Surfacing	1	LS	$50,000.00	$50,000.00
7.	Pavement Markings	1	LS	$11,200.00	$11,200.00
8.	Dog Park – 4' Fence Replacement	163	LF	$ 74.07	$12,073.41
9.	Dog Park – 3' Man Gate	1	EA	$ 590.00	$ 590.00
10.	Dog Park – 8' Equipment Gate	1	EA	$ 1500.00	$ 1500.00
11.	Minor Changes	1	EST.	$10,000.00	$10,000.00
	Subtotal				$260,865.91
	WSST @ 8.6%				$ 22,434.47
	Total w/ WSST				$283,300.38

By: _____ Date: 2/9/24
Signature of Authorized Person

Print Name & Title: Lane Stremler, President

PO Box 30498 • Bellingham, WA 98228 • p: 425-954-9614

PNW
SERVICES, INC.

January 23, 2024

Attn: Bidders

RE: Sudden Valley Community Association (SVCA)
Bid Form – 2024 Tennis Court Repairs

Bid submissions are due by 11:00am on Friday, 2-9-24. Email bid submissions to tylera@pnwcivil.com.

Firm Name: TIGER CONSTRUCTION LTD.

Bid Schedule – 2023 Tennis Court Repairs					
Item #	Description	Quantity	Unit	Unit Price	Total
1.	Mobilization	1	LS	$ 33,000.00	$ 33,000.00
2.	Access & Restoration	1	LS	$ 12,000.00	$ 12,000.00
3.	Asphalt Repairs	1,490	SF	$ 22.00	$ 32,780.00
4.	Nets & Post Replacements	1	LS	$ 57,000.00	$ 57,000.00
5.	2" Asphalt Overlay	1	LS	$ 53,000.00	$ 53,000.00
6.	Acrylic Surfacing	1	LS	$ 51,000.00	$ 51,000.00
7.	Pavement Markings	1	LS	$ 9,000.00	$ 9,000.00
8.	Dog Park – 4' Fence Replacement	163	LF	$ 45.00	$ 7,335.00
9.	Dog Park – 3' Man Gate	1	EA	$ 450.00	$ 450.00
10.	Dog Park – 8' Equipment Gate	1	EA	$ 1100.00	$ 1100.00
11.	Minor Changes	1	EST.	$10,000.00	$10,000.00
	Subtotal				$ 266,645.00
	WSST @ 8.6%				$ 22,931.47
	Total w/ WSST				$ 289,576.47

By: _____ Date: 2/09/2024
Signature of Authorized Person

Print Name & Title: SCOTT ISENHART, PRESIDENT

Sudden Valley Community Association

Core Area: Tennis Court - Resurfacing & Fencing - Contract Award

PNW Estimate - Bid Package, Permitting, and Construction Management

Task	Description	Hours	Estimated Cost
Design Oversight			
	Completed under separate proposal.	0	
	Total Estimated Design Oversight Hours	0	**$ -**
Permitting			
	Completed under separate proposal.	0	
	Total Estimated Permitting Cost	0	**$ -**
Contractor Bids			
	Completed under separate proposal.	0	
	Completed under separate proposal.	0	
	Total Estimated Bid Package Hours	0	**$ -**
Construction Management			
	Issue contract, coordinate submittal reviews, and preconstruction meeting.	5	
	Construction oversight - part time assumed (20 day construction contract at 3 hours per day average - some days more and some days less than 3 hours).	60	
	Contract closeout.	4	
	Total Estimated Construction Management Hours	69	**$ 9,315.00**
	Total Estimated		**$ 9,315.00**

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: **February 9, 2023**

Subject: **Capital Request – Core Area: Tennis Court Resurfacing & Fencing**

Purpose

To request funding approval for design and permitting to begin.

Background

The existing tennis courts located adjacent to the Main Pool at the Recreation Center, Barn 8, appear to be original construction, and need significant improvements to be usable. The existing asphalt has wide cracks, the net posts are failing, and the surface as a whole needs repair. In addition, the surrounding fence needs repair. SVCA's 2023 budget includes amounts to repair these items in the combined amount of $189,925.00.

Analysis

SVCA proposes to begin work on the design and permitting for improvements to the tennis courts. This will include:

- Design, engineering, and permitting for the project to be constructed. Permitting will require a Shoreline Substantial Development Permit, and the overall permitting process is anticipated to take approximately 5 months.
- The failing asphalt sections will be removed, and new asphalt will be installed.
- The entire asphalt surface will then be resurfaced.
- New surface markings will be applied to accommodate both tennis and pickleball.
- The existing nets will be replaced.
- The existing fence will be repaired/replaced.
- Construction is proposed for summer 2023 during the Lake Whatcom Watershed construction window. Depending on permitting, this will likely be during August or September.

Proposal

Authorize design and permitting to begin per PNW Services, Inc. attached Proposal dated 2-5-23.

Request

Request $19,101.50 per PNW Services, Inc. proposal to begin design and permitting.

Sudden Valley Community Association

360-734-6430
4 Clubhouse Circle Bellingham, WA 98229
www.suddenvalley.com

Motion

Move that the Board of Directors approve the allocation of $19,101.50 from the CRRRF Fund for the tennis court refencing and resurfacing project in the Rec Corridor.

Board of Directors Approval

Approved: ✓ Not Approved: _____ SVCA Board of Directors

This capital request was approved by the BOD on 3/9/23.

Joanne Jensen

February 5, 2023

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

RE: Project Scope Letter
Core Area: Tennis Court – Resurfacing & Fencing

PNW is providing this overall project scope letter to SVCA for Core Area: Tennis Court – Resurfacing & Fencing project. This area is located adjacent to the Recreation Center, Barn 8, just past the main pool. The existing tennis court appears to be original construction, and is in poor condition. Overall scope of work assumes:

- Project:
  - Removal of failed asphalt sections with cracks, and placement of new asphalt.
  - Overlay existing/repaired asphalt with new court surface.
  - The new court surface layout will accommodate both tennis and pickleball.
  - Repair/replacement of existing fence.
  - New court nets.

- Design, Permitting, & Contractor Bids
  - Coordinate with permit agencies.
  - Engineering & Permitting.
  - Cost evaluations for improvements.
  - Prepare bid package, issue to contractors, and bid evaluation with recommendation to SVCA.
  - A Shoreline Substantial Development Permit will be required for this project. With this requirement permitting is anticipated to take approximately 5 months. Construction is anticipated to occur in August/September of 2023.

Design, Permitting, Contractor Bids	
- Impact Design – Design & Permitting	$11,800.00
- Permit Fees Allowance	$3,000.00
- PNW Services, Inc. – Oversight & Bid Package	$2,565.00
Contingency at 10%	$1,736.50
Total – Design, Permitting, Contractor Bids	**$19,101.50**

Please let me know if you have any questions, or if you would like any further information.

Sincerely,

Tyler Andrews
President

January 19, 2023

Tyler Andrews
PNW Services, Inc.
PO Box 30498
Bellingham, WA 98228
360-739-2072

Thank you for the opportunity to submit a proposal to provide engineering and permitting assistance for a tennis court resurfacing project for the Sudden Valley Community Association. We propose to conduct the engineering and permitting assistance for this project on a Not To Exceed basis in accordance with the rate sheets attached and our budget of **$11,800.**

Scope of Work:

Tennis Court Resurfacing Engineering Plans and Specifications ($6,000)

We will prepare 100% construction documents for this improvement project. This will include the following sheets in the engineering plan set stamped by a professional engineer in Washington State:

- Cover Sheet and General Notes
- Existing Conditions Map
- Proposed Tennis/Pickleball Court Striping Layout
- Proposed Tennis/Pickleball Court Resurfacing Plan
    - This will include sections of asphalt that will need to be patched and replaced, and an overlay plan with an asphalt thickness schedule as needed. A site visit will be performed to determine the areas of asphalt that need to be replaced by inspection.
- Temporary Erosion and Sedimentation Control Plan
- Stormwater Pollution Prevention Plan
- Asphalt and Acrylic Resurfacing Details and Specifications (as needed)

It is assumed that a stormwater treatment system design or tree retention plan will not be required by Whatcom County for this project. We can provide this additional service on a Time and Materials basis as requested by SVCA.

Shoreline Substantial Development Permit ($3,500)

We will prepare the Shoreline Substantial Development permit on the behalf of Sudden Valley Community Association to provide for the proposed improvement project. We will prepare all the application requirements to accompany the Shoreline Substantial Development Permit submittal, including:

- Project Narrative,
- Preliminary Traffic & Concurrency Information form,
- Preliminary Stormwater Proposal,
- Mailing list of property owners in the area.

Land Surveying Scope ($2,300)

A survey crew will collect data to create a survey base map for the on-site information. Features they will survey include:

- Control X,Y,Z (State plane and NAVD88)
- Boundary Base Map
- The survey team will have utilities located and integrate as-built information from Lake Whatcom Water and Sewer District. All data will be collected in NAD 83, NAVD 88 datums.

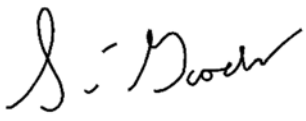
Excluded Scope: Geotechnical work, architectural design, structural engineering, landscape design, title reports, construction support, as-builts, and dry utilities coordination are not included in this scope.

Please sign and date below as a formal acceptance of this proposal. We are excited to be working on your project.

_____ _____

Name Date

Respectfully,



Scott Goodall, MS, PE
Principal - Impact Design, LLC

IMPACT DESIGN

2023 Rate Sheet

Office	Hourly Rate
Principal Engineer	$140
Design Engineer	$125
Engineering Technician	$110
Design Technician	$100
CAD Technician	$75

Field	Hourly Rate
Construction Inspection	$90
Drone Pilot (UAV Certified)	$90
Photogrammetry Technician	$75

Sub-Consultants	**15% Markup**
Equipment	**15% Markup**
Travel Expenses	**15% Markup**
Mileage	**$0.50 / Mile**

Impact Design, 5426 Barrett Road, Ferndale WA 98248

cell: (360) 389-8138 email: scott@bold-impact.com

Sudden Valley Community Association

Core Area: Tennis Court - Resurfacing & Fencing

PNW Estimate - Bid Package, Permitting, and Construction Management

Task	Description	Hours	Estimated Cost
Design Oversight			
	Oversight of Impact Design, review drawings, and site visits as required.	8	
	Total Estimated Design Oversight Hours	8	**$ 1,080.00**
Permitting			
	Oversight of permit applications, facilitate signatures / submittals / permit fees.	5	
	Total Estimated Permitting Cost	5	**$ 675.00**
Contractor Bids			
	Prepare bid package, issue to contractors, and answer any bid questions.	4	
	Review construction bids, and provide recommendation to SVCA.	2	
	Total Estimated Bid Package Hours	6	**$ 810.00**
Construction Management			
	Under seperate proposal after design / permitting.		
	Total Estimated Construction Management Hours	0	**$ -**
	Total Estimated		**$ 2,565.00**

July 20, 2023 - Bid Tabulation

Project: 2023 Tennis Court Repairs

				Stremler Gravel		Tiger Construction	
Item #	**Description**	**Quantity**	**Unit**	**Unit Price**	**Total**	**Unit Price**	**Total**
1	Mobilization	1	LS	$ 35,000.00	$ 35,000.00	$ 25,000.00	$ 25,000.00
2	Access & Restoration	1	LS	$ 18,200.00	$ 18,200.00	$ 11,000.00	$ 11,000.00
3	Asphalt Repairs	1490	SF	$ 15.50	$ 23,095.00	$ 20.00	$ 29,800.00
4	Nets & Post Replacements	1	LS	$ 47,000.00	$ 47,000.00	$ 55,000.00	$ 55,000.00
5	2" Asphalt Overlay	1	LS	$ 45,500.00	$ 45,500.00	$ 53,000.00	$ 53,000.00
6	Acrylic Surfacing	1	LS	$ 46,000.00	$ 46,000.00	$ 51,000.00	$ 51,000.00
7	Pavement Markings	1	LS	$ 11,200.00	$ 11,200.00	$ 10,000.00	$ 10,000.00
8	Dog Park - 4' Fence Replacement	163	LF	$ 70.00	$ 11,410.00	$ 50.00	$ 8,150.00
9	Dog Park - 3' Man Gate	1	EA	$ 600.00	$ 600.00	$ 450.00	$ 450.00
10	Dog Park - 8' Equipment Gate	1	EA	$ 1,500.00	$ 1,500.00	$ 1,200.00	$ 1,200.00
11	Minor Changes	1	EST.	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00
	Subtotal				**$244,505.00**		**$249,600.00**
	WSST @ 8.6%				**$ 21,027.43**		**$ 21,465.60**
	Total w/ WSST				**$265,532.43**		**$271,065.60**

January 23, 2024

Attn: Bidders

RE: Sudden Valley Community Association (SVCA)
Quote Request – 2024 Tennis Court Resurfacing

SVCA is requesting quotes for the 2024 Tennis Court Resurfacing project. This project is located next to Barn 8 / Recreation Center and rebuilds the existing tennis courts. Bid proposals are due by 11:00am on Friday, 2-9-24.

Summary of Work:

1. The project will go in front of the SVCA Board on Thursday, 2-22-24, for contract award.
2. All work is assumed to be completed under 1 mobilization.
3. Contractor will be allowed 20 working days to complete the scope of work. Necessary cure time for materials will not be counted as working days.
    a. Substantial completion is Friday, 8-2-24. Liquidated damages shall be assessed at $500.00 per day for any days incurred after 8-2-24. Additional days will be added for inclement weather.
    b. Final completion is Friday, 8-16-24.
    c. Contractor shall provide a schedule and submittals to SVCA within 3 weeks of contract execution.
4. SVCA work hours are 8:00am – 7:00pm Monday thru Friday, and 8:00am – 6:00pm Saturday.
5. SVCA will allow contractor staging in the overflow parking lot located across from Gate 5 along Lake Louis Road. Contractor staging will also be allowed in the grass next to the tennis courts for a space of 100’ x 100’. Contractor shall restore the staging areas upon completion.
6. Fridays are garbage/recycling day in Sudden Valley. Contractor shall not interfere with this pickup.
7. Layout – Asphalt areas for repair will have limits painted by the engineer prior to contractor mobilizing. All other layout is assumed by contractor.
8. All asphalt shall have sealed edges.
9. Traffic control per MUTCD and WSDOT standards.
10. Installation shall follow WSDOT specifications and standards.
11. Force account work to receive 15% markup.
12. Owner will hire a testing agency.
13. Contractor shall provide Performance and Payment Bonds. Bid bonds are not required.
14. This is a private project, and prevailing wages are not applicable.
15. Contractor shall warranty work for 1 year from final completion.

Scope of Work Clarifications:

- Item 2 – Access & Restoration

- Contractor shall access the site from the Barn 8 side. The swimming pool and Recreation Center located at Barn 8 is in use, and contractor shall provide pedestrian protection when accessing as necessary.
- All areas shall be fully restored upon completion.
- Contractor is responsible for grass establishment. Grass establishment is not subject to the working day schedule identified above, but shall be completed in 2024.
- Contractor shall remove and reinstall existing fence as necessary for access. Fencing shall be protected during construction, and any damage shall be restored upon completion.

- Item 7 – Pavement Markings
  - Layout shall include both tennis and pickleball as shown on the drawings.
- Item 8 – Dog Park Fence Replacement
  - Existing dog park fence on the north side of the tennis court shall be removed and replaced with a 4' tall galvanized chain link fence. Measurement of fence does not include gate lengths.
- Item 9 – Dog Park – 3' Man Gate
  - In new fence install a 3' man gate in close proximity to the existing man gate location.
- Item 10 – Dog Park – 8' Equipment Gate
  - Install a gate next to the pedestrian gate with an 8' opening for SVCA's equipment access.

Attachments:

1. Bid Form – 1 Page
2. Project Location Map – 1 Page
3. Drawings – 10 Pages
4. Specifications – 20 Pages
5. Shoreline Exemption Permit – 4 Pages plus Drawings
6. SVCA Standard Contract – 12 Pages

Questions shall be directed to Tyler Andrews at tylera@pnwcivil.com or 360-739-2072. Contractors are encouraged to independently visit the site; no formal pre-bid is scheduled. Bids are due by 11:00am on Friday, 2-9-24. Email bid submissions to tylera@pnwcivil.com.

January 23, 2024

Attn: Bidders

RE: Sudden Valley Community Association (SVCA)
Bid Form – 2024 Tennis Court Repairs

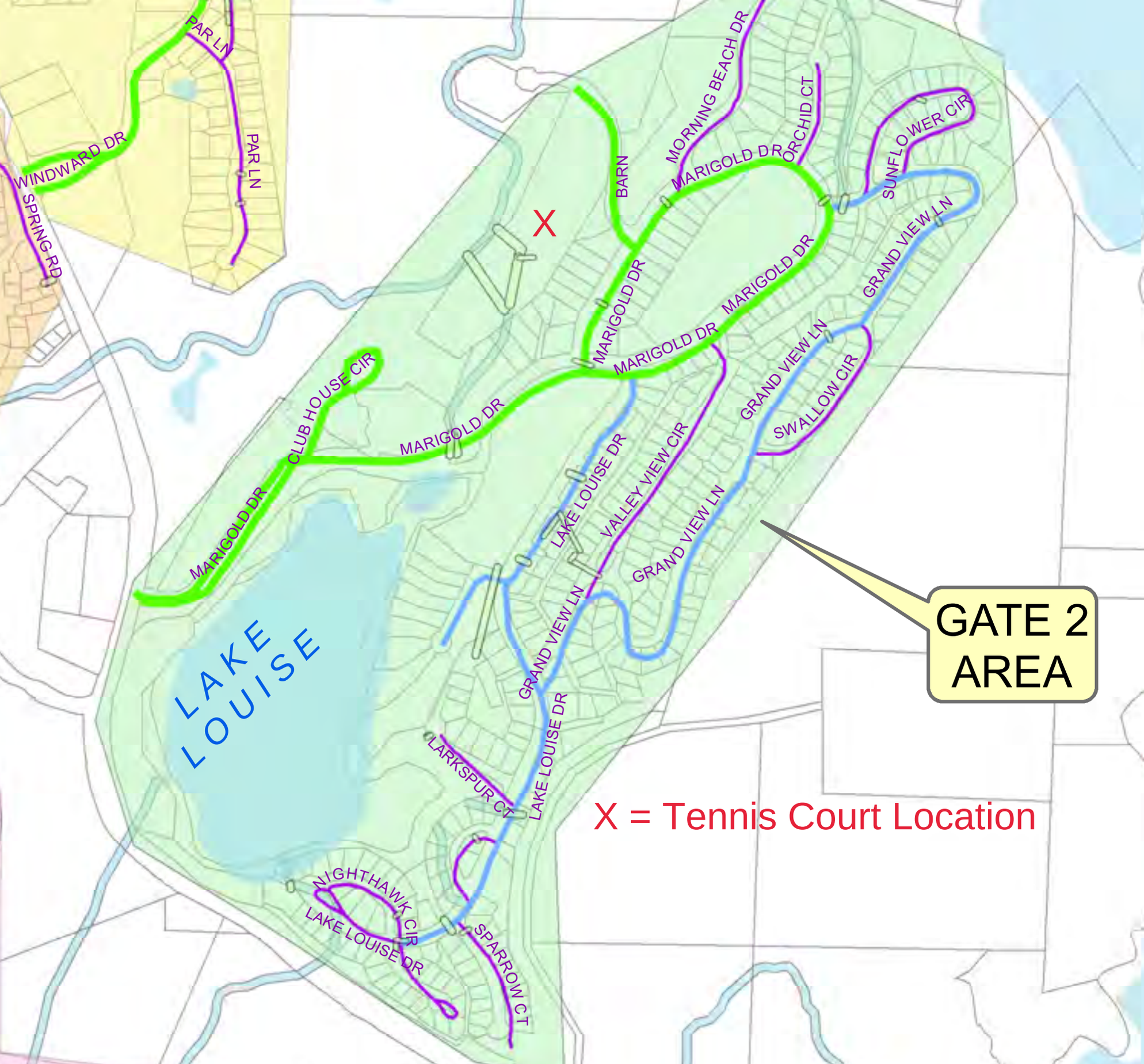
Bid submissions are due by 11:00am on Friday, 2-9-24. Email bid submissions to tylera@pnwcivil.com.

Firm Name:_____

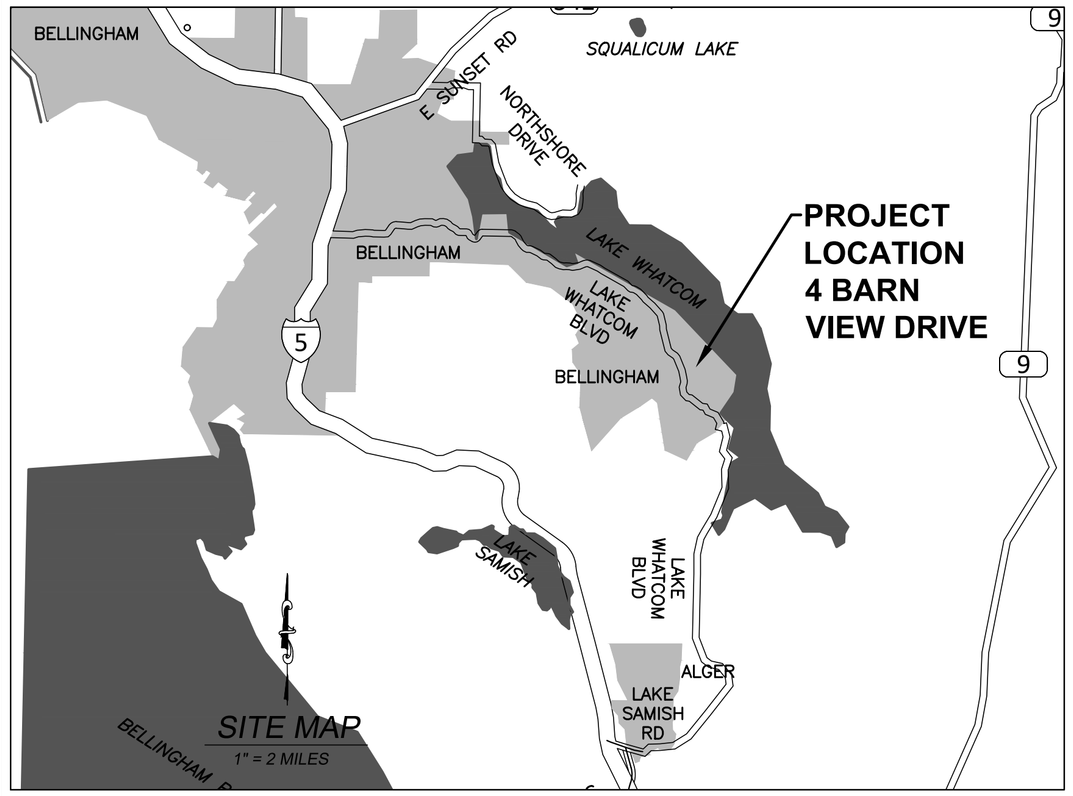
Bid Schedule – 2023 Tennis Court Repairs					
Item #	Description	Quantity	Unit	Unit Price	Total
1.	Mobilization	1	LS	$	$
2.	Access & Restoration	1	LS	$	$
3.	Asphalt Repairs	1,490	SF	$	$
4.	Nets & Post Replacements	1	LS	$	$
5.	2” Asphalt Overlay	1	LS	$	$
6.	Acrylic Surfacing	1	LS	$	$
7.	Pavement Markings	1	LS	$	$
8.	Dog Park – 4’ Fence Replacement	163	LF	$	$
9.	Dog Park – 3’ Man Gate	1	EA	$	$
10.	Dog Park – 8’ Equipment Gate	1	EA	$	$
11.	Minor Changes	1	EST.	$10,000.00	$10,000.00
	Subtotal				$
	WSST @ 8.6%				$
	Total w/ WSST				$

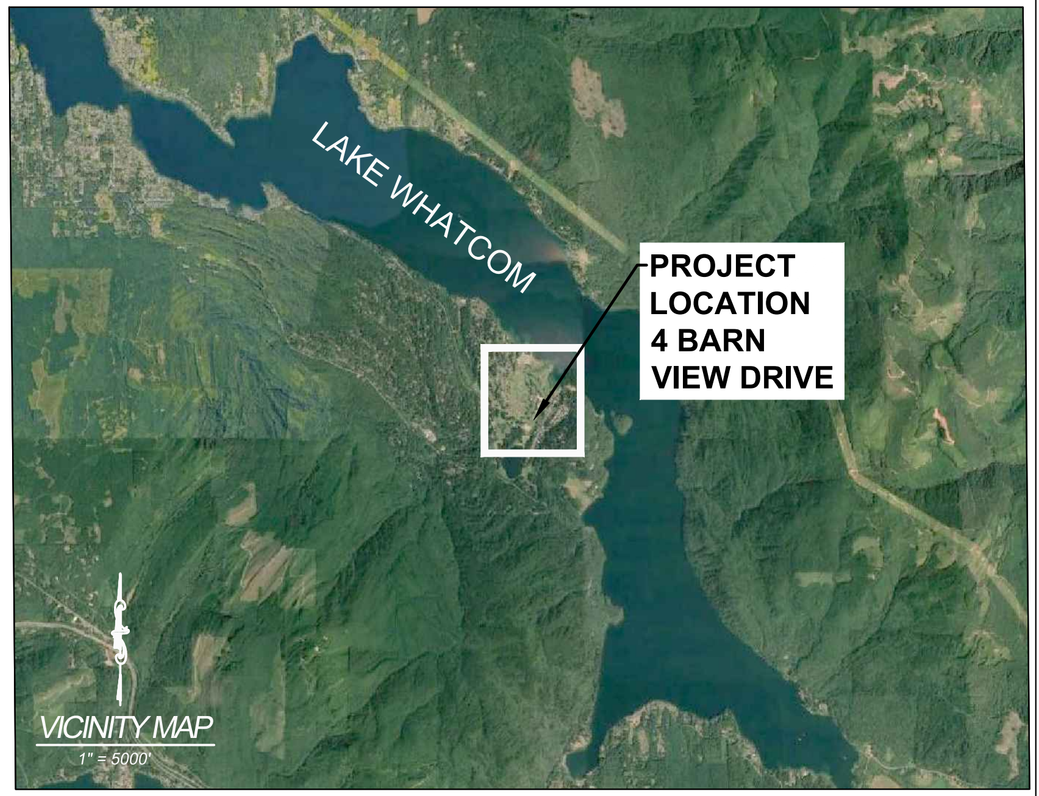
By:_____ Date:_____
Signature of Authorized Person

Print Name & Title:_____


PAR LN
PAR LN
WINDWARD DR
SPRING RD
X
BARN
MORNING BEACH DR
ORCHID CT
MARIGOLD DR
SUNFLOWER CIR
GRAND VIEW LN
MARIGOLD DR
MARIGOLD DR
MARIGOLD DR
CLUB HOUSE CIR
MARIGOLD DR
MARIGOLD DR
LAKE LOUISE DR
VALLEY VIEW CIR
GRAND VIEW LN
GRAND VIEW LN
SWALLOW CIR
GRAND VIEW LN
LAKE LOUISE
LARKSPUR CT
LAKE LOUISE DR
GRAND VIEW LN
NIGHTHAWK CIR
LAKE LOUISE DR
SPARROW CT
GATE 2 AREA
X = Tennis Court Location

VICINITY MAP





SHEET INDEX

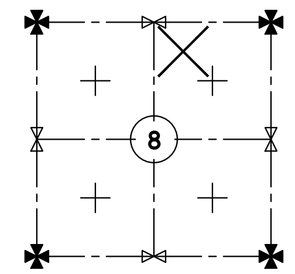
ABBREVIATIONS

1'/1"	ONE FOOT/ONE INCH	No./#	NUMBER
AC	ACRE	O.C.	ON CENTER
AF#	AUDITORS FILE NUMBER	PC	POINT OF CURVATURE
APPROX	APPROXIMATE	PCL	PARCEL
ASB/AB	AS–BUILT	PERF	PERFORATED
ASPH	ASPHALT	PI	POINT OF INTERSECTION
BLDG	BUILDING	PIV	POST INDICATOR VALVE
BMP	BEST MANAGEMENT PRACTICE	POB	POINT OF BEGINNING
BNDRY	BOUNDARY	PP	POWER POLE
BVCS	BEGINNING OF VERTICAL CURVE STATION	PROP	PROPERTY
BVCE	BEGINNING OF VERTICAL CURVE ELEVATION	K	LENGTH OF VERTICAL CURVE PER PERCENT GRADE DIFFERENCE
C	COMPACT PARKING STALL		
CC	CURB CUT	PT/POT	POINT OF TANGENCY
CB	CATCH BASIN	PVC	POLYVINYL CHLORIDE
CL	CENTERLINE	PVI	POINT OF VERTICAL INFLECTION
CMP	CORRUGATED METAL PIPE	PWR	POWER
CNTRL	CONTROL	R	RADIUS
CO	CLEANOUT	R/C	REBAR WITH CAP
COR	CORNER	RCP	REINFORCED CONCRETE PIPE
CPP	CORRUGATED POLYETHYLENE PIPE	RET	RETAINING
CONC	CONCRETE	RIM	RIM
CSTC	CRUSHED SURFACING TOP COURSE	R/W	RIGHT–OF–WAY (R.O.W.)
CULV	CULVERT	RPP	REDUCED PRESSURE PRINCIPAL
ø	DIAMETER	S	SOUTH
DEMO	DEMOLITION	SAN	SANITARY
DI	DUCTILE IRON	SCH	SCHEDULE
DWGS	DRAWINGS	SD	STORM DRAIN
E	EAST	SDCB	STORM DRAIN CATCH BASIN
EA	EACH	SDCO	STORM DRAIN CLEANOUT
EL/ELEV	ELEVATION	SDMH	STORM DRAIN MAN HOLE
ENC	REVOCABLE ENCROACHMENT PERMIT	SERV	SERVICE
EP/EOP	EDGE OF PAVEMENT	STND/STD	STANDARD
ESMT	EASEMENT	SS	SANITARY SEWER
EVCS	END OF VERTICAL CURVE STATION	SSCO	SANITARY SEWER CLEANOUT
EVCE	END OF VERTICAL CURVE ELEVATION	SSMH	SANITARY SEWER MANHOLE
EX/EXIST	EXISTING	ST	STREET
FDC	FIRE DEPARTMENT CONNECTION	TBM	TEMPORARY BENCH MARK
FFE/FF	FINISH FLOOR ELEVATION	TC	TOP OF CURB
FG	FINISH GRADE	TEL/TELE	TELEPHONE
FH	FIRE HYDRANT	TESC	TEMPORARY EROSION & SEDIMENTATION CONTROL
FND	FOUND		
GND	GROUND	TP	TOP OF PAVEMENT
GUTT	GUTTER	TS	TOP OF SIDEWALK
HP	HIGH POINT	TW	TOP OF WALL
INV	INVERT	TYP	TYPICAL
IE/I.E.	INVERT ELEVATION	UG	UNDERGROUND
IRRIG	IRRIGATION	VC	VERTICAL CURVE
LF	LINEAR FOOT	VEG	VEGETATION
LS	LAND SURVEYOR	W	WEST
MAX	MAXIMUM	WA	WATER
MIN	MINIMUM	W/IN	WITHIN
MON	MONUMENT	WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
NIC	NOT IN CONTRACT		
N	NORTH		

WHATCOM COUNTY GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT WSDOT/APWA STANDARD SPECIFICATIONS, WHATCOM COUNTY DEVELOPMENT STANDARDS (WCDS), AND SHALL BE SUBJECT TO APPROVAL BY WHATCOM COUNTY PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION – PUBLIC WORKS ENGINEERING SERVICES (PWES).
2. DEVELOPER/CONTRACTOR/CONSULTING ENGINEER SHALL SCHEDULE A PRE–CONSTRUCTION CONFERENCE WITH THE PUBLIC WORKS ENGINEERING SERVICES PROJECT MANAGER A MINIMUM OF 3 WORKING DAYS PRIOR TO BEGINNING ANY WORK.
3. NORMAL WORKING HOURS ARE 8:00 AM. TO 6:00 PM., MONDAY THROUGH FRIDAY. WORK DURING HOLIDAYS, WEEKENDS, AND OUTSIDE THE NORMAL WORK HOURS REQUIRES PRIOR ARRANGEMENTS AND APPROVAL.
4. SIGHT DISTANCE REQUIRED AT ALL INTERSECTIONS PER WCDS CHAPTER 5.
5. A REVOCABLE ENCROACHMENT PERMIT SHALL BE OBTAINED PRIOR TO COMMENCING ANY WORK WITHIN COUNTY MAINTAINED ROAD RIGHTS–OF–WAY.
6. THE CONTRACTOR SHALL CONTACT UTILITY LOCATION SERVICE 48 HOURS PRIOR TO STARTING WORK AT (800)424–5555 OR 811.
7. A COPY OF THE COUNTY–APPROVED DRAWINGS MUST BE ON THE JOB SITE WHENEVER WORK IS IN PROCESS.
8. WHATCOM COUNTY RESERVES THE RIGHT TO INSPECT ALL WORK. THE CONTRACTOR SHALL CALL THE CONSULTING ENGINEER AND THE PUBLIC WORKS ENGINEERING SERVICES PROJECT MANAGER AT (360)778–6220 AT LEAST 24 HOURS IN ADVANCE OF THE FOLLOWING WORK ITEMS:
   A. PLACEMENT OF TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES.
   B. PLACEMENT OF WATER, SANITARY SEWER, AND STORM DRAINAGE LINES AND BACKFILLING OF THESE LINES WITHIN COUNTY MAINTAINED ROAD RIGHTS–OF–WAY.
   C. PLACEMENT OF UNDERGROUND UTILITIES AND BACKFILLING WITHIN COUNTY MAINTAINED ROAD RIGHTS–OF–WAY.
   D. ROADWAY GRADING AT THE COMPLETION OF THE SUBGRADE, BALLAST, AND OF CRUSHED SURFACING.
   E. POURING OF CURB/GUTTER AND SIDEWALK.
   F. ASPHALT PAVING, AT THE BEGINNING OF PAVING.
   G. PRIOR TO PAVEMENT MARKING.
   H. OVERALL INSPECTION OF FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING, ROAD SIGNAGE, MONUMENT PLACEMENT, CLEANING OF DRAINAGE SYSTEM AND CONSTRUCTION DEBRIS.
   I. ALL WORK REQUIRED TO RELEASE OF ANY POSTED SECURITY.
9. ALL TESTING REQUIRED FOR THE WORK SHALL BE THE RESPONSIBILITY OF THE OWNER AND SHALL BE IN CONFORMANCE WITH WCDS WITH RESPECT TO THE CONSULTING ENGINEER.
10. THE CONTRACTOR SHALL RIP RAP ALL CULVERT INLETS AND OUTLETS.
11. THE CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISTURBED BY THE WORK IMMEDIATELY AFTER CONSTRUCTION. THE CONTRACTOR SHALL NOT LEAVE ANY PART OF THE ROAD USED BY OTHERS UN–PASSABLE WITHOUT NOTIFICATIONS AND AGREEMENT OF OTHER USERS.
12. ALL CUT AND FILL SLOPES SHALL BE MULCHED AND SEEDED FOR EROSION CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SLOPE EROSION UNTIL VEGETATION IS FIRMLY ESTABLISHED.
13. CONTRACTOR SHALL SWEEP AND REMOVE ALL DEBRIS TRACKED ONTO EXISTING ROADS DURING ALL PHASES OF CONSTRUCTION.
14. ANY TREE, WHERE 1/3 OF THE ROOT SYSTEM IS DAMAGED BY WORK, SHALL BE REMOVED.
15. THE CONTRACTOR SHALL INFORM THE CONSULTING ENGINEER AND OBTAIN APPROVAL FROM WHATCOM COUNTY ENGINEERING DIVISION OF ANY PROPOSED CHANGES IN PLANS PRIOR TO IMPLEMENTATION OF THE CHANGE. THE CONTRACTOR SHALL KEEP RECORDS OF DEVIATIONS AND FORWARD TO THE ENGINEER OF RECORD AND WHATCOM COUNTY ENGINEERING DIVISION.
16. TRAFFIC CONTROL IS TO BE MAINTAINED IN ACCORDANCE WITH WSDOT/APWA STANDARD SPECIFICATIONS.
17. THE DEVELOPER/CONTRACTOR SHALL POST A WARRANTY SECURITY AS REQUIRED BY THE WHATCOM COUNTY DEVELOPMENT STANDARDS.
18. AN ENGINEER SHALL PROVIDE RECORD DRAWINGS PER WCDS 507.D.

SURVEY DATUM



NE 1/4, NE 1/4, SECTION 8
T. 37 N., R. 4 E. OF W.M.

LEGEND

- FOUND MONUMENT (SEE NOTE)
- FOUND NAIL & SHINER
- SET REBAR & CAP (TRAV. CAP)
- SET NAIL & SHINER
- EXISTING SANITARY SEWER MANHOLE
- EXISTING SANITARY SEWER CLEAN–OUT
- EXISTING STORM DRAINAGE MANHOLE
- EXISTING STORM DRAINAGE CATCH BASIN
- EXISTING FIRE HYDRANT
- EXISTING WATERLINE VALVE
- EXISTING UTILITY POLE
- EXISTING STREET LIGHT
- EXISTING SIGNAL POLE / STREET LIGHT
- EXISTING COMMUNICATIONS MANHOLE
- EXISTING UTILITY JUNCTION BOX
- EXISTING SIGN
- EXISTING BOLLARD / PEDESTRIAN BUTTON
- 12"ø TREE DIAMETER
- EXISTING TREE (DECIDUOUS)

SURVEY NOTES

1. THIS SURVEY WAS PERFORMED IN FEB 2023 AT THE REQUEST OF IMPACT DESIGN, INC.
2. FIELD SURVEY PERFORMED WITH TRIMBLE R8–3 GNSS RECEIVER AND LEICA TCRP 1201+ ROBOTIC TOTAL STATION AND MEETS OR EXCEEDS THE STANDARDS SET FORTH WITHIN WAC 332–130–090.
3. BASIS OF BEARING (ASSUMED): THE INVERSE BETWEEN POWERTEK SURVEY CONTROL POINTS 30 & 40 TAKEN AS S80°51'43"E.

   P–TEK #30 N=628752.7860 E=1280539.9390 EL=331.85'
   P–TEK #40 N=628722.9040 E=12807257070 EL=333.47'
4. VERTICAL DATUM: CITY OF BELLINGHAM DATUM "1909" MUNICIPAL CODE (COBM 1909). DERIVED BY HOLDING LAKE LEVEL AT 11:00AM ON DECEMBER 14, 2022 (P–TEK #1030) AS 311.80' PER CITY OF BELLINGHAM (PUBLIC WORKS OPERATIONS).

   TO CONVERT TO TO NAVD88, SUBTRACT 1.7'.
5. THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT PURPORT TO SHOW ANY OR ALL EASEMENTS.
6. POWERTEK SURVEYING ASSUMES NO LIABILITY FOR ANY SUBSURFACE CONDITIONS OR FEATURES THAT MAY EXIST THAT ARE UNDETECTABLE AND/OR NOT VISIBLE.
7. CONTOUR INTERVALS ARE SHOWN AT 1 FOOT AND ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.

Shoreline Approval

PDS Stormwater	
Wetland/HCA	
Geo-hazard	
Zoning	
Fire	
Shoreline	ATH 6/1/2023

SHX2023-00054

IMPACT DESIGN
5426 BARRETT ROAD, SUITE A103
360-389-8188 WWW.BOLD-IMPACT.COM

SCOTTIAN GODDARD
STATE OF WASHINGTON
21097
REGISTERED PROFESSIONAL ENGINEER
05.09.2023

SVCA TENNIS COURTS RESURFACING
SVCA TENNIS COURTS
COVER SHEET
4 BARN VIEW DRIVE
BELLINGHAM, WASHINGTON 98229

REV	DATE	BY	DESCRIPTION

PROJECT NUMBER: 23001
DESIGNED/DRAWN BY: BLS
CHECKED BY: SIG
ISSUE DATE: 05.09.2023

1 OF: 9

TOPOGRAPHIC SITE PLAN

SITUATE IN A PORTION OF NE 1/4, NE 1/4 SECTION 14,
TOWNSHIP 38 NORTH, RANGE 2 EAST OF W.M.

LEGEND:

- FOUND MONUMENT (SEE NOTE)
- FOUND NAIL & SHINER
- SET REBAR & CAP (TRAV. CAP)
- SET NAIL & SHINER
- EXISTING SANITARY SEWER MANHOLE
- EXISTING SANITARY SEWER CLEAN-OUT
- EXISTING STORM DRAINAGE MANHOLE
- EXISTING STORM DRAINAGE CATCH BASIN
- EXISTING FIRE HYDRANT
- EXISTING WATERLINE VALVE
- EXISTING UTILITY POLE
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- EXISTING SIGNAL POLE / STREET LIGHT
- EXISTING COMMUNICATIONS MANHOLE
- EXISTING UTILITY JUNCTION BOX
- EXISTING SIGN
- EXISTING BOLLARD / PEDESTRIAN BUTTON
- 12"ø TREE DIAMETER
- EXISTING TREE (DECIDUOUS)

HOGWIRE FENCE
FOR DOG PARK,
4' TALL

SSMH
RIM ELEV=331.39
E INV, 8" PVC ELEV=327.34
N INV, 18" CMP ELEV=325.29

CHAINLINK FENCE,
12' TALL

72" CMP
INV ELEV=322.59

GRAVEL PATH

FENCE

WATER SPIGOT

POWER RISER

GATE

P-TEK # 30
N=628752.7860
E=1280539.9390
ELEV=331.85

P-TEK # 40
N=628722.9C
E=1280725.7
ELEV=333.47

CULVERT, 72" CMP

72" CMP
TOP PIPE ELEV=328.40
INV ELEV=323.03

INV, 6" PVC
ELEV=325.76

INV, 6" PVC
ELEV=325.29

CATCH BASIN
RIM ELEV=331.45
NW INV, 6" PVC ELEV=330.32
SE INV, 6" PVC ELEV=330.34
SW INV, 6" PVC ELEV=330.22

CHAINLINK FENCE,
12' TALL

HORSESHOE
COURT

SURVEY NOTES:

1. THIS SURVEY WAS PERFORMED IN FEB 2023 AT THE REQUEST OF IMPACT DESIGN, INC.
2. FIELD SURVEY PERFORMED WITH TRIMBLE R8-3 GNSS RECEIVER AND LEICA TCRP 1201+ ROBOTIC TOTAL STATION AND MEETS OR EXCEEDS THE STANDARDS SET FORTH WITHIN WAC 332-130-090.
3. BASIS OF BEARING (ASSUMED): THE INVERSE BETWEEN POWERTEK SURVEY CONTROL POINTS 30 & 40 TAKEN AS S80°51'43"E.

P-TEK #30	P-TEK #40
N=628752.7860	N=628722.9040
E=1280539.9390	E=12807257070
EL=331.85'	EL=333.47'

4. VERTICAL DATUM: CITY OF BELLINGHAM DATUM "1909" MUNICIPAL CODE (COBM 1909). DERIVED BY HOLDING LAKE LEVEL AT 11:00AM ON DECEMBER 14, 2022 (P-TEK #1030) AS 311.80' PER CITY OF BELLINGHAM (PUBLIC WORKS OPERATIONS).

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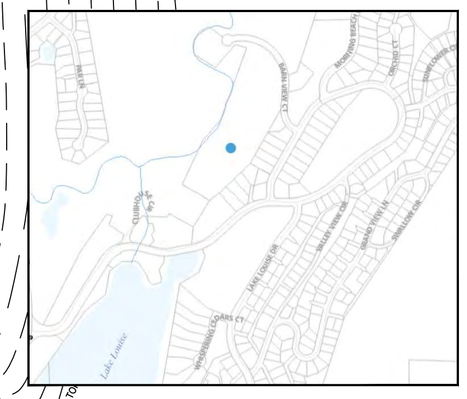
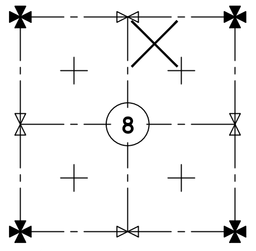
6. POWERTEK SURVEYING ASSUMES NO LIABILITY FOR ANY SUBSURFACE CONDITIONS OR FEATURES THAT MAY EXIST THAT ARE UNDETECTABLE AND/OR NOT VISIBLE.
7. CONTOUR INTERVALS ARE SHOWN AT 1 FOOT AND ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.



VICINITY MAP
(NTS, FROM C.O.B. CITY IQ)

0 10 20
SCALE: 1" = 10'



NE 1/4, NE 1/4, SECTION 8
T. 37 N., R. 4 E. OF W.M.

JOSHUA VICTOR DAHM
STATE OF WASHINGTON
46880
REGISTERED
PROFESSIONAL LAND SURVEYOR

POWERTEK

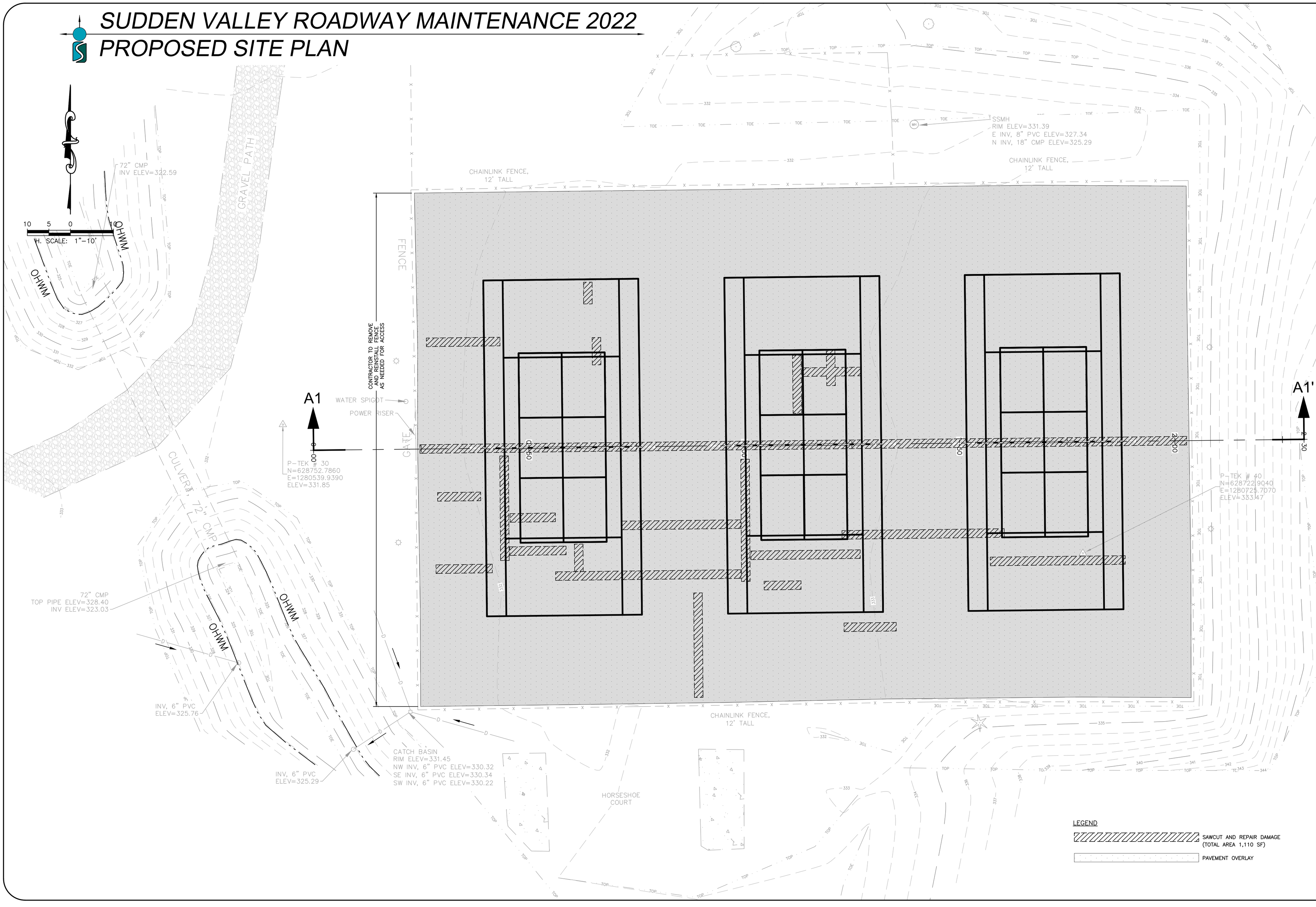
POWERTEK SURVEYING
(360) 746.8801
#5426 BARRETT ROAD #104
FERNDALE, WA 98248
WWW.POWERTEK.NET

TOPOGRAPHIC SITE PLAN FOR
SVCA / IMPACT DESIGN

DRAWN BY:	DATE:	JOB NO.:
GDM	4/28/2023	2023_008
REVIEWED BY:	SCALE:	SHEET:
JJD	1" = 10'	1 OF 1

I:\Shared\PROJECTS\23001 SVCA Tennis Courts\DWG\2023_008_Impact_SV-Tennis-Courts-Deliverables\2023_008_Impact_SV-Tennis-Courts-GDM.dwg

SUDDEN VALLEY ROADWAY MAINTENANCE 2022
PROPOSED SITE PLAN



IMPACT DESIGN
5426 BARRETT ROAD, SUITE A103
360-389-8138 WWW.BOLD-IMPACT.COM

SCOTTIAN GODDARD
STATE OF WASHINGTON
21077
REGISTERED
PROFESSIONAL ENGINEER
05.09.2023

SVCA TENNIS COURTS RESURFACING
SVCA TENNIS COURTS
PROPOSED SITE PLAN
4 BARN VIEW DRIVE
BELLINGHAM, WASHINGTON 98229

REV	DATE	BY	DESCRIPTION

PROJECT NUMBER: 23001
DESIGNED/DRAWN BY: BLS
CHECKED BY: SIG
ISSUE DATE: 05.09.2023

3
OF: 9

SUDDEN VALLEY ROADWAY MAINTENANCE 2022
PAVEMENT PATCHING PLAN

10 5 0 10
H. SCALE: 1"=10'

72" CMP
INV ELEV=322.59

OHWM

OHWM

GRAVEL PATH

CHAINLINK FENCE,
12' TALL

FENCE

SSMH
RIM ELEV=331.39
E INV, 8" PVC ELEV=327.34
N INV, 18" CMP ELEV=325.29

CHAINLINK FENCE,
12' TALL

WATER SPIGOT

POWER RISER

GATE

P-TEK # 30
N=628752.7860
E=1280539.9390
ELEV=331.85

CULVERT, 72" CMP

72" CMP
TOP PIPE ELEV=328.40
INV ELEV=323.03

OHWM

OHWM

INV, 6" PVC
ELEV=325.76

INV, 6" PVC
ELEV=325.29

CATCH BASIN
RIM ELEV=331.45
NW INV, 6" PVC ELEV=330.32
SE INV, 6" PVC ELEV=330.34
SW INV, 6" PVC ELEV=330.22

5.0'
17.1'
6.4'
8.2'
13.5'
13.5'
REMOVE AND REPLACE ASPHALT (TYP) (SEE PAVEMENT REPAIR DETAIL). ASPHALT REPAIR LOCATION AND SIZES ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATION AND SIZE IN FIELD. ALL PATCHING TO BE 2 FEET WIDE MINIMUM, PATCHING NOT TO EXCEED 1500 SQUARE FEET.
178.0'
10.0'
24.3'
10.5'
27.6'
13.1'
6.4'
13.1'
43.0'
25.4'
37.7'
31.3'
8.6'
12.1'
24.3'

PAVEMENT PATCH AREAS

P-TEK # 40
N=628722.9040
E=1280725.7070
ELEV=333.47

CHAINLINK FENCE,
12' TALL

HORSESHOE
COURT

2.0' (TYP)

LEGEND

SAWCUT AND REPAIR DAMAGE (TOTAL AREA 1,110 SF)

PAVEMENT OVERLAY

IMPACT DESIGN
5426 BARRETT ROAD, SUITE A103
360-389-9188 WWW.BOLD-IMPACT.COM

SCOTT IAN GODDARD
STATE OF WASHINGTON
21077
REGISTERED
PROFESSIONAL ENGINEER
05.09.2023

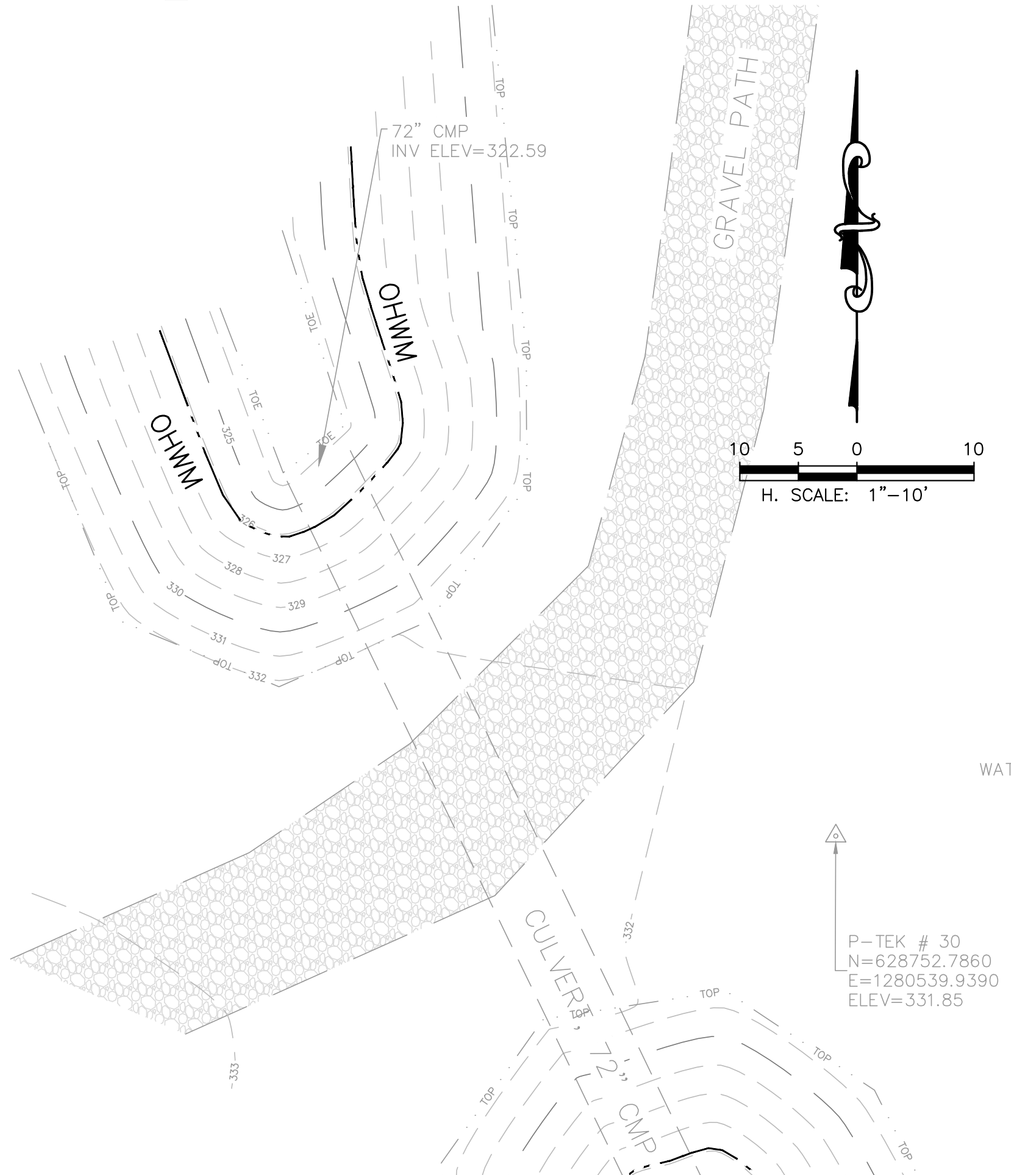
SVCA TENNIS COURTS RESURFACING
SVCA TENNIS COURTS
PAVEMENT PATCHING PLAN
4 BARN VIEW DRIVE
BELLINGHAM, WASHINGTON 98229

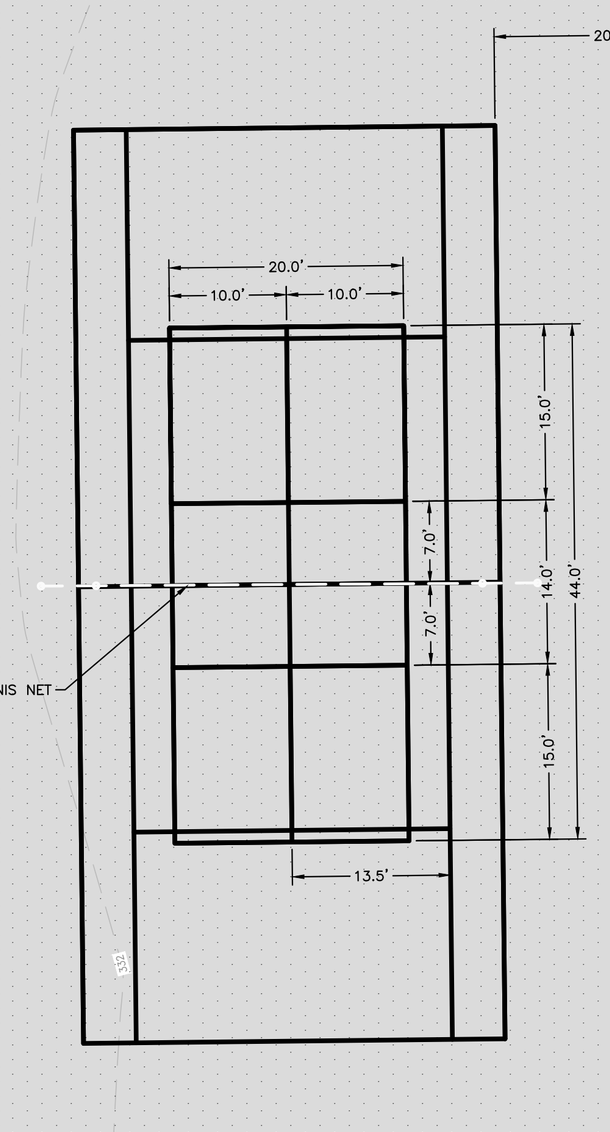
REV	DATE	BY	DESCRIPTION

PROJECT NUMBER: 23001
DESIGNED/DRAWN BY: BLS
CHECKED BY: SIG
ISSUE DATE: 05.09.2023

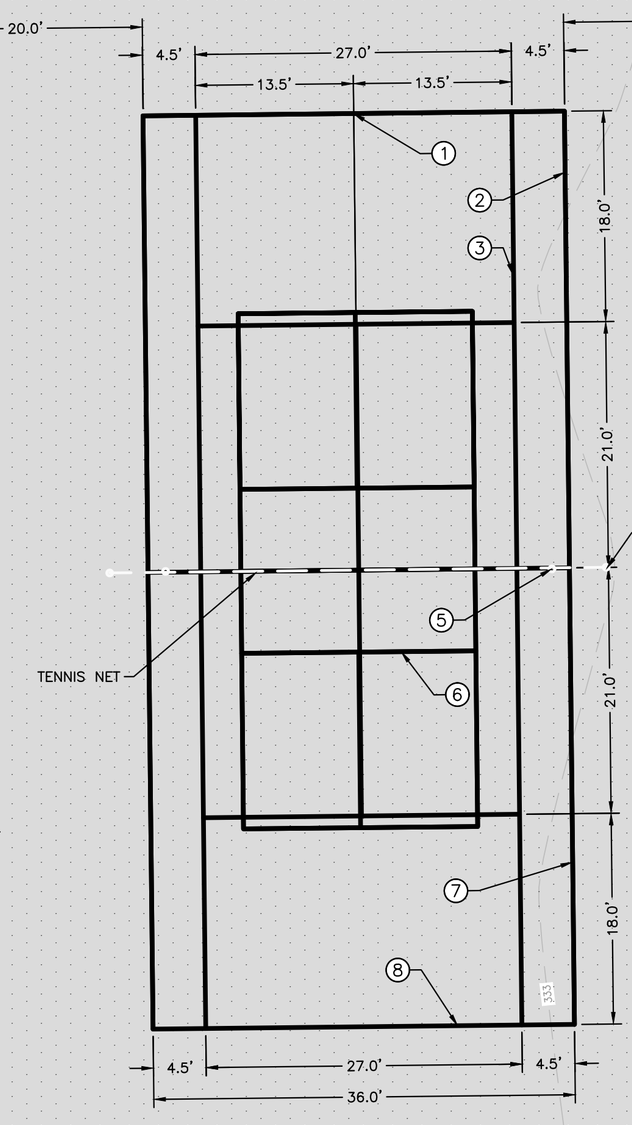
4
OF: 9

SUDDEN VALLEY ROADWAY MAINTENANCE 2022
PICKLE BALL & TENNIS STRIPING PLAN

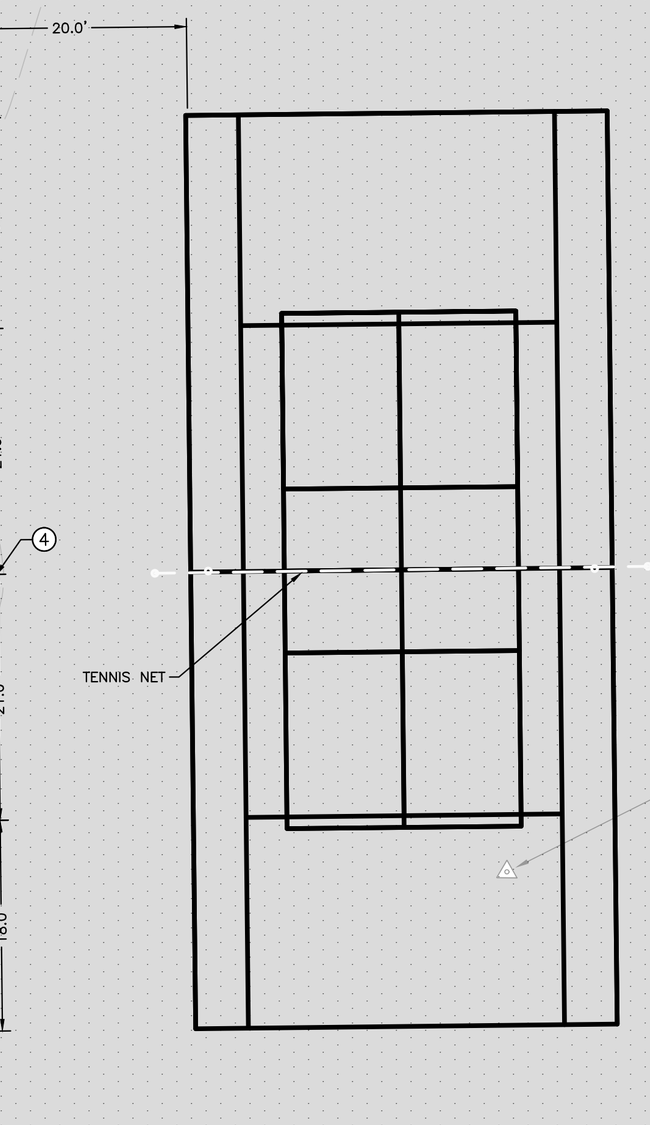




PICKLE BALL STRIPING DIMENSIONS



TENNIS COURT STRIPING DIMENSIONS



TENNIS COURT STRIPING LEGEND

1. CENTER MARK (TYP)
2. DOUBLES SIDE LINE (TYP)
3. SINGLES SIDE LINE (TYP)
4. NET POST 42' CENTER TO CENTER
5. MARK FOR SINGLES STICK 33' CENTER TO CENTER
6. SERVICE LINE (TYP)
7. 2" WIDTH PLAYING LINE (TYP)
8. BASE LINE (TYP)

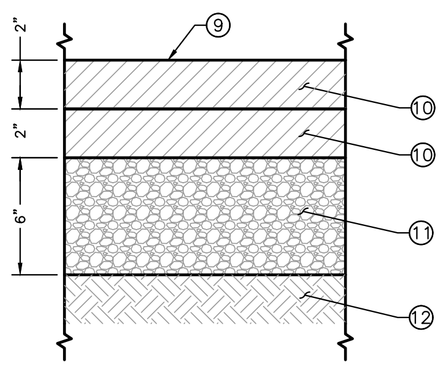
TENNIS COURT SURFACING LEGEND

9. ACRYLIC SURFACING (SEC 321823.53 PER SPECIFICATIONS)
10. ATHLETIC ASPHALT PAVING (SEC 321213.35 PER SPECIFICATIONS)
11. CRUSHED SURFACING TOP COURSE PER WSDOT STANDARD SPECIFICATION 9.03-9(3) COMPACTED TO 95%
12. 95% COMPACTED SUBGRADE (SEC 310000 PER SPECIFICATIONS)

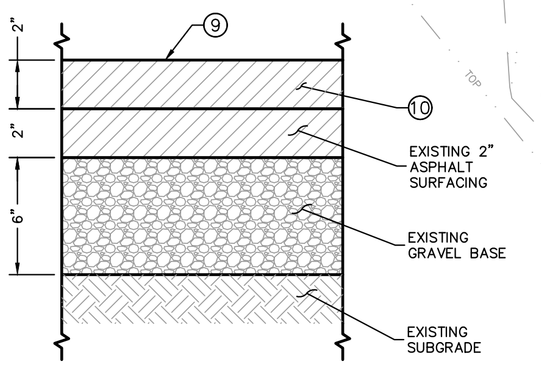
NOTE:

A. ALL STRIPING IS 2" WHITE PAINTED ON SURFACING WITH APPROVED SPECIFIED PAINT

PAVEMENT OVERLAY



ASPHALT REPAIR AND TENNIS COURT SURFACING



ASPHALT OVERLAY AND TENNIS COURT SURFACING

IMPACT DESIGN
5426 BARRETT ROAD, SUITE A103
360-389-8188 WWW.BOLD-IMPACT.COM

SCOTT IAN GODDARD
STATE OF WASHINGTON
21077
REGISTERED PROFESSIONAL ENGINEER
05.09.2023

SVCA TENNIS COURTS RESURFACING
SVCA TENNIS COURTS
PICKLE BALL & TENNIS STRIPING PLAN
4 BARN VIEW DRIVE
BELLINGHAM, WASHINGTON 98229

REV	DATE	BY	DESCRIPTION

PROJECT NUMBER: 23001
DESIGNED/DRAWN BY: BLS
CHECKED BY: SIG
ISSUE DATE: 05.09.2023

ELEMENT 1: PRESERVE VEGETATION / MARK CLEARING LIMITS

A. BEFORE BEGINNING LAND DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRADING, CLEARLY MARK ALL CLEARING LIMITS, SENSITIVE AREAS AND THEIR BUFFERS, AND TREES THAT ARE TO BE PRESERVED WITHIN THE CONSTRUCTION AREA.

B. RETAIN THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL VEGETATION IN AN UNDISTURBED STATE TO THE MAXIMUM DEGREE PRACTICABLE.

ADDITIONAL GUIDANCE FOR ELEMENT 1

- PLASTIC, METAL, FABRIC FENCE, OR OTHER PHYSICAL BARRIERS MAY BE USED TO MARK THE CLEARING LIMITS. NOTE THE DIFFERENCE BETWEEN THE PRACTICAL USE AND PROPER INSTALLATION OF BMP C233: SILT FENCE AND THE PROPER USE AND INSTALLATION OF BMP C103: HIGH-VISIBILITY FENCE.
- IF IT IS NOT PRACTICAL TO RETAIN THE DUFF LAYER IN PLACE, THEN STOCKPILE IT ON SITE, COVER IT TO PREVENT EROSION, AND REPLACE IT IMMEDIATELY WHEN YOU FINISH DISTURBING THE SITE.

SUGGESTED BMPS FOR ELEMENT 1

- BMP C101: PRESERVING NATURAL VEGETATION
- BMP C102: BUFFER ZONES
- BMP C103: HIGH-VISIBILITY FENCE
- BMP C233: SILT FENCE

ELEMENT 2: ESTABLISH CONSTRUCTION ACCESS

A. LIMIT CONSTRUCTION VEHICLE ACCESS AND EXIT TO ONE ROUTE, IF POSSIBLE.

B. STABILIZE ACCESS POINTS WITH A PAD OF QUARRY SPALLS, CRUSHED ROCK, OR OTHER EQUIVALENT BMPS, TO MINIMIZE TRACKING OF SEDIMENT ONTO PUBLIC ROADS.

C. LOCATE WHEEL WASH OR TIRE BATHS ON SITE, IF THE STABILIZED CONSTRUCTION ENTRANCE IS NOT EFFECTIVE IN PREVENTING TRACKING SEDIMENT ONTO ROADS.

D. IF SEDIMENT IS TRACKED OFF SITE, CLEAN THE AFFECTED ROADWAY(S) THOROUGHLY AT THE END OF EACH DAY, OR MORE FREQUENTLY AS NECESSARY (FOR EXAMPLE, DURING WET WEATHER). REMOVE SEDIMENT FROM ROADS BY SHOVELING, SWEEPING, OR PICKING UP AND TRANSPORTING THE SEDIMENT TO A CONTROLLED SEDIMENT DISPOSAL AREA.

E. CONDUCT STREET WASHING ONLY AFTER SEDIMENT IS REMOVED IN ACCORDANCE WITH 2.D (ABOVE).

F. CONTROL STREET WASH WASTEWATER BY PUMPING BACK ON SITE, OR OTHERWISE PREVENT IT FROM DIS- CHARGING INTO SYSTEMS TRIBUTARY TO WATERS OF THE STATE.

ADDITIONAL GUIDANCE FOR ELEMENT 2

MINIMIZE CONSTRUCTION SITE ACCESS POINTS ALONG LINEAR PROJECTS, SUCH AS ROADWAYS. STREET WASHING MAY REQUIRE LOCAL JURISDICTION APPROVAL.

SUGGESTED BMPS FOR ELEMENT 2

- BMP C105: STABILIZED CONSTRUCTION ACCESS
- BMP C106: WHEEL WASH
- BMP C107: CONSTRUCTION ROAD / PARKING AREA STABILIZATION

ELEMENT 3: CONTROL FLOW RATES

A. PROTECT PROPERTIES AND WATERWAYS DOWNSTREAM OF DEVELOPMENT SITES FROM EROSION AND THE ASSOCIATED DISCHARGE OF TURBID WATERS DUE TO INCREASES IN THE VELOCITY AND PEAK VOLUMETRIC FLOW RATE OF STORMWATER RUNOFF FROM THE PROJECT SITE.

B. WHERE NECESSARY TO COMPLY WITH 3.A (ABOVE), CONSTRUCT STORMWATER INFILTRATION OR DETENTION BMPS AS ONE OF THE FIRST STEPS IN GRADING. ASSURE THAT DETENTION BMPS FUNCTION PROPERLY BEFORE CONSTRUCTING SITE IMPROVEMENTS (E.G., IMPERVIOUS SURFACES).

C. IF PERMANENT INFILTRATION BMPS ARE USED FOR TEMPORARY FLOW CONTROL DURING CONSTRUCTION, PROTECT THESE BMPS FROM SILTATION DURING THE CONSTRUCTION PHASE.

ADDITIONAL GUIDANCE FOR ELEMENT 3

- CONDUCT A DOWNSTREAM ANALYSIS IF CHANGES IN FLOWS COULD IMPAIR OR ALTER CONVEYANCE SYSTEMS, STREAMBANKS, BED SEDIMENT, OR AQUATIC HABITAT. SEE III-3.2 PREPARING A STORMWATER SITE PLAN FOR OFF-SITE ANALYSIS GUIDELINES.
- EVEN GENTLY SLOPED AREAS NEED FLOW CONTROLS SUCH AS BMP C235: WATTLES OR OTHER ENERGY DISSIPATION / FILTRATION STRUCTURES. PLACE DISSIPATION FACILITIES CLOSER TOGETHER ON STEEPER SLOPES. THESE METHODS PREVENT WATER FROM BUILDING HIGHER VELOCITIES AS IT FLOWS DOWNSTREAM WITHIN THE CONSTRUCTION SITE.
- CONTROL STRUCTURES DESIGNED FOR PERMANENT DETENTION BMPS ARE NOT APPROPRIATE FOR USE DURING CONSTRUCTION WITHOUT MODIFICATION. IF USED DURING CONSTRUCTION, MODIFY THE CONTROL STRUCTURE TO ALLOW FOR LONG-TERM STORAGE OF RUNOFF AND ENABLE SEDIMENT TO SETTLE. VERIFY THAT THE BMP IS SIZED APPROPRIATELY FOR THIS PURPOSE. RESTORE BMPS TO THEIR ORIGINAL DESIGN DIMENSIONS, REMOVE SEDIMENT, AND INSTALL A FINAL CONTROL STRUCTURE AT COMPLETION OF THE PROJECT.
- EROSION HAS THE POTENTIAL TO OCCUR BECAUSE OF INCREASES IN THE VOLUME, VELOCITY, AND PEAK FLOW RATE OF STORMWATER RUNOFF FROM THE PROJECT SITE. THE LOCAL PERMITTING AGENCY MAY REQUIRE INFILTRATION OR DETENTION BMP DESIGNS THAT PROVIDE ADDITIONAL OR DIFFERENT STORMWATER FLOW CONTROL THAN THE DESIGNS DETAILED IN THIS MANUAL. THESE REQUIREMENTS MAY BE NECESSARY TO ADDRESS LOCAL CONDITIONS OR TO PROTECT PROPERTIES AND WATERWAYS DOWNSTREAM.
- VELOCITY OF WATER LEAVING THE SITE SHOULD NOT EXCEED 3 FEET/SECOND, IF THE DISCHARGE IS TO A STREAM OR DITCH. INSTALL VELOCITY DISSIPATION, SUCH AS BMP C207: CHECK DAMS OR BMP C202: RIPRAP CHANNEL LINING TO ENSURE REDUCTION OF THE FLOW VELOCITY TO A NON-EROSIVE LEVEL.
- IF THE DISCHARGE FROM A PROJECT SITE IS TO A MUNICIPAL STORM DRAINAGE SYSTEM, THE ALLOWABLE DIS- CHARGE RATE MAY BE LIMITED BY THE CAPACITY OF THE PUBLIC SYSTEM. IT MAY BE NECESSARY TO CLEAN THE MUNICIPAL STORM DRAINAGE SYSTEM PRIOR TO THE START OF THE DISCHARGE TO PREVENT SCOURING SOLIDS FROM THE DRAINAGE SYSTEM. OBTAIN PERMISSION FROM THE OWNER OF THE COLLECTION SYSTEM BEFORE DISCHARGING TO IT. ENSURE THAT NO DOWNSTREAM PIPES ARE SURCHARGED AS A RESULT OF INCREASED FLOWS FROM THE PROJECT SITE.
- IF THE DISCHARGE FROM A PROJECT SITE IS DIRECTLY TO A FLOW CONTROL EXEMPT RECEIVING WATER LISTED IN APPENDIX I-A: FLOW CONTROL EXEMPT RECEIVING WATERS OR TO AN INFILTRATION SYSTEM, THERE IS NO DISCHARGE FLOW LIMIT.

SUGGESTED BMPS FOR ELEMENT 3

- BMP C203: WATER BARS
- BMP C207: CHECK DAMS
- BMP C209: OUTLET PROTECTION
- BMP C235: WATTLES
- BMP C240: SEDIMENT TRAP
- BMP C241: SEDIMENT POND (TEMPORARY)

ELEMENT 4: INSTALL SEDIMENT CONTROLS

A. CONSTRUCT SEDIMENT CONTROL BMPS (SEDIMENT PONDS, TRAPS, FILTERS, ETC.) AS ONE OF THE FIRST STEPS IN GRADING. THESE BMPS MUST BE FUNCTIONAL BEFORE OTHER LAND DISTURBING ACTIVITIES TAKE PLACE.

B. MINIMIZE SEDIMENT DISCHARGES FROM THE SITE. THE DESIGN, INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS MUST ADDRESS FACTORS SUCH AS THE AMOUNT, FREQUENCY, INTENSITY AND DURATION OF PRECIPITATION, THE NATURE OF RESULTING STORMWATER RUNOFF, AND SOIL CHARACTERISTICS, INCLUDING THE RANGE OF SOIL PARTICLE SIZES EXPECTED TO BE PRESENT ON THE SITE.

C. DIRECT STORMWATER RUNOFF FROM DISTURBED AREAS THROUGH BMP C241: SEDIMENT POND (TEMPORARY) OR OTHER APPROPRIATE SEDIMENT REMOVAL BMP, BEFORE THE RUNOFF LEAVES A CONSTRUCTION SITE OR BEFORE DISCHARGE TO AN INFILTRATION FACILITY. RUNOFF FROM FULLY STABILIZED AREAS MAY BE DISCHARGED WITHOUT A SEDIMENT REMOVAL BMP, BUT MUST CONTROL FLOW RATES PER ELEMENT 3: CONTROL FLOW RATES.

D. LOCATE BMPS INTENDED TO TRAP SEDIMENT ON SITE IN A MANNER TO AVOID INTERFERENCE WITH THE MOVEMENT OF JUVENILE SALMONIDS ATTEMPTING TO ENTER OFF-CHANNEL AREAS OR DRAINAGES.

E. PROVIDE AND MAINTAIN NATURAL BUFFERS AROUND SURFACE WATERS, DIRECT STORMWATER TO VEGETATED AREAS TO INCREASE SEDIMENT REMOVAL AND MAXIMIZE STORMWATER INFILTRATION, UNLESS INFEASIBLE.

F. WHERE FEASIBLE, DESIGN OUTLET STRUCTURES THAT WITHDRAW IMPOUNDED STORMWATER FROM THE SURFACE TO AVOID DISCHARGING SEDIMENT THAT IS STILL SUSPENDED LOWER IN THE WATER COLUMN.

ADDITIONAL GUIDANCE FOR ELEMENT 4

- OUTLET STRUCTURES THAT WITHDRAW IMPOUNDED STORMWATER FROM THE SURFACE TO AVOID DISCHARGING SEDIMENT THAT IS STILL SUSPENDED LOWER IN THE WATER COLUMN ARE FOR THE CONSTRUCTION PERIOD ONLY. IF INSTALLING A FLOATING PUMP STRUCTURE, INCLUDE A STOPPER TO PREVENT THE PUMP BASKET FROM HITTING THE BOTTOM OF THE POND.
- IF A SEDIMENT TRAPPING BMP UTILIZES A CONTROL STRUCTURE THAT WILL ALSO BE USED IN A PERMANENT DETENTION BMP APPLICATION, THE CONTROL STRUCTURE CONSTRUCTION MUST BE FINALIZED FOR THE PERMANENT BMP APPLICATION UPON PROJECT COMPLETION.
- INSTALL SEDIMENT CONTROLS IN A MANNER THAT PROTECTS THE SENSITIVE AREAS AND THEIR BUFFERS MARKED IN ACCORDANCE WITH ELEMENT 1: PRESERVE VEGETATION / MARK CLEARING LIMITS.
- WHERE FEASIBLE, DIRECT STORMWATER TO VEGETATED AREAS TO INCREASE SEDIMENT REMOVAL AND MAXIMIZE STORMWATER INFILTRATION.
- SEED AND MULCH EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS ACCORDING TO THE TIMING INDICATED IN ELEMENT 5: STABILIZE SOILS.
- FULL STABILIZATION INCLUDES CONCRETE OR ASPHALT PAVING; QUARRY SPALLS USED AS DITCH LINING; OR THE USE OF ROLLED EROSION PRODUCTS, A BONDED FIBER MATRIX PRODUCT, OR VEGETATIVE COVER IN A MANNER THAT WILL FULLY PREVENT SOIL EROSION.
- THE LOCAL PERMITTING AUTHORITY MAY INSPECT AND APPROVE AREAS FULLY STABILIZED BY MEANS OTHER THAN PAVEMENT OR QUARRY SPALLS.

SUGGESTED BMPS FOR ELEMENT 4

- BMP C231: BRUSH BARRIER
- BMP C232: GRAVEL FILTER BERM
- BMP C233: SILT FENCE
- BMP C234: VEGETATED STRIP
- BMP C235: WATTLES
- BMP C240: SEDIMENT TRAP
- BMP C241: SEDIMENT POND (TEMPORARY)
- BMP C250: CONSTRUCTION STORMWATER CHEMICAL TREATMENT
- BMP C251: CONSTRUCTION STORMWATER FILTRATION

ELEMENT 5: STABILIZE SOILS

A. STABILIZE EXPOSED AND UNWORKED SOILS BY APPLICATION OF EFFECTIVE BMPS THAT PREVENT EROSION. APPLICABLE BMPS INCLUDE, BUT ARE NOT LIMITED TO: TEMPORARY AND PERMANENT SEEDING, SODDING, MULCHING, PLASTIC COVERING, EROSION CONTROL FABRICS AND MATTING, SOIL APPLICATION OF POLYACRYLAMIDE (PAM), THE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED, AND DUST CONTROL.

B. CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION.

C. CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND TO MINIMIZE DOWNSTREAM CHANNEL AND STREAM BANK EROSION.

D. SOILS MUST NOT REMAIN EXPOSED AND UNWORKED FOR MORE THAN THE TIME PERIODS SET FORTH BELOW TO PREVENT EROSION:

a. DURING THE DRY SEASON (MAY 1 - SEPTEMBER 30): 7 DAYS

b. DURING THE WET SEASON (OCTOBER 1 - APRIL 30): 2 DAYS

E. STABILIZE SOILS AT THE END OF THE SHIFT BEFORE A HOLIDAY OR WEEKEND IF NEEDED BASED ON THE WEATHER FORECAST.

F. STABILIZE SOIL STOCKPILES FROM EROSION, PROTECT WITH SEDIMENT TRAPPING MEASURES, AND WHERE POSSIBLE, LOCATE AWAY FROM STORM DRAIN INLETS, WATERWAYS AND DRAINAGE CHANNELS.

G. MINIMIZE THE AMOUNT OF SOIL EXPOSED DURING CONSTRUCTION ACTIVITY.

H. MINIMIZE THE DISTURBANCE OF STEEP SLOPES.

I. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.

ADDITIONAL GUIDANCE FOR ELEMENT 5

- SOIL STABILIZATION BMPS SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, ESTIMATED DURATION OF USE, AND POTENTIAL WATER QUALITY IMPACTS THAT STABILIZATION AGENTS MAY HAVE ON DOWNSTREAM WATERS OR GROUND WATER.
- ENSURE THAT GRAVEL BASE USED FOR STABILIZATION IS CLEAN AND DOES NOT CONTAIN FINES OR SEDIMENT.

SUGGESTED BMPS FOR ELEMENT 5

- BMP C120: TEMPORARY AND PERMANENT SEEDING
- BMP C121: MULCHING
- BMP C122: NETS AND BLANKETS
- BMP C123: PLASTIC COVERING
- BMP C124: SODDING
- BMP C125: TOPSOILING / COMPOSTING
- BMP C126: POLYACRYLAMIDE (PAM) FOR SOIL EROSION PROTECTION
- BMP C130: SURFACE ROUGHENING
- BMP C131: GRADIENT TERRACES
- BMP C140: DUST CONTROL

ELEMENT 6: PROTECT SLOPES

A. DESIGN AND CONSTRUCT CUT-AND-FILL SLOPES IN A MANNER TO MINIMIZE EROSION. APPLICABLE PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, REDUCING CONTINUOUS LENGTH OF SLOPE WITH TERRACING AND DIVERSIONS, REDUCING SLOPE STEEPNESS, AND ROUGHENING SLOPE SURFACES (FOR EXAMPLE, TRACK WALKING).

B. DIVERT OFF-SITE STORMWATER (RUN-ON) OR GROUND WATER AWAY FROM SLOPES AND DISTURBED AREAS WITH INTERCEPTOR DIKES, PIPES AND/OR SWALES. OFF-SITE STORMWATER SHOULD BE MAN- AGED SEPARATELY FROM STORMWATER GENERATED ON SITE.

C. AT THE TOP OF SLOPES, COLLECT DRAINAGE IN PIPE SLOPE DRAINS OR PROTECTED CHANNELS TO PREVENT EROSION. TEMPORARY PIPE SLOPE DRAINS MUST BE SIZED TO CONVEY THE FLOW RATE CALCULATED BY ONE OF THE FOLLOWING METHODS:

a. SINGLE EVENT HYDROGRAPH METHOD: THE PEAK VOLUMETRIC FLOW RATE CALCULATED USING A 10-MINUTE TIME STEP FROM A TYPE 1A, 10-YEAR, 24-HOUR FREQUENCY STORM.

OR

b. CONTINUOUS SIMULATION METHOD: THE 10-YEAR PEAK FLOW RATE, AS DETERMINED BY AN APPROVED CONTINUOUS RUNOFF MODEL WITH A 15-MINUTE TIME STEP.

D. THE HYDROLOGIC ANALYSIS MUST USE THE EXISTING LAND COVER CONDITION FOR PREDICTING FLOW RATES FROM TRIBUTARY AREAS OUTSIDE THE PROJECT LIMITS. FOR TRIBUTARY AREAS ON THE PROJECT SITE, THE ANALYSIS MUST USE THE TEMPORARY OR PERMANENT PROJECT LAND COVER CONDITION, WHICHEVER WILL PRODUCE THE HIGHEST FLOW RATES. IF USING THE WESTERN WASHINGTON HYDRO- LOGY MODEL (WWHM) TO PREDICT FLOWS, BARE SOIL AREAS SHOULD BE MODELED AS "LANDSCAPED" AREA.

E. PLACE EXCAVATED MATERIAL ON THE UPHILL SIDE OF TRENCHES, CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS.

F. PLACE CHECK DAMS AT REGULAR INTERVALS WITHIN CONSTRUCTED CHANNELS THAT ARE CUT DOWN A SLOPE.

ADDITIONAL GUIDANCE FOR ELEMENT 6

- CONSIDER SOIL TYPE AND ITS POTENTIAL FOR EROSION.
- STABILIZE SOILS ON SLOPES, AS SPECIFIED IN ELEMENT 5: STABILIZE SOILS.
- BMP COMBINATIONS ARE THE MOST EFFECTIVE METHOD OF PROTECTING SLOPES WITH DISTURBED SOILS. FOR EXAMPLE, USE BOTH BMP C121: MULCHING AND BMP C122: NETS AND BLANKETS IN COMBINATION.

SUGGESTED BMPS FOR ELEMENT 6

- BMP C120: TEMPORARY AND PERMANENT SEEDING
- BMP C121: MULCHING
- BMP C122: NETS AND BLANKETS
- BMP C123: PLASTIC COVERING
- BMP C124: SODDING
- BMP C130: SURFACE ROUGHENING
- BMP C131: GRADIENT TERRACES
- BMP C200: INTERCEPTOR DIKE AND SWALE
- BMP C201: GRASS-LINED CHANNELS
- BMP C203: WATER BARS
- BMP C204: PIPE SLOPE DRAINS
- BMP C205: SUBSURFACE DRAINS
- BMP C206: LEVEL SPREADER
- BMP C207: CHECK DAMS
- BMP C208: TRIANGULAR SILT DIKE (TSD)

ELEMENT 7: PROTECT DRAIN INLETS

A. PROTECT ALL STORM DRAIN INLETS MADE OPERABLE DURING CONSTRUCTION SO THAT STORMWATER RUNOFF DOES NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR TREATED TO REMOVE SEDIMENT.

B. CLEAN OR REMOVE AND REPLACE INLET PROTECTION DEVICES WHEN SEDIMENT HAS FILLED ONE-THIRD OF THE AVAILABLE STORAGE (UNLESS A DIFFERENT STANDARD IS SPECIFIED BY THE PRODUCT MANUFACTURER).

ADDITIONAL GUIDANCE FOR ELEMENT 7

PROTECT ALL EXISTING STORM DRAIN INLETS SO THAT STORMWATER RUNOFF DOES NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR TREATED TO REMOVE SEDIMENT.

- KEEP ALL APPROACH ROADS CLEAN. DO NOT ALLOW SEDIMENT AND STREET WASH WATER TO ENTER STORM DRAINS WITHOUT PRIOR AND ADEQUATE TREATMENT (AS DEFINED ABOVE) UNLESS TREATMENT IS PROVIDED BEFORE THE STORM DRAIN DISCHARGES TO WATERS OF THE STATE.
- INLETS SHOULD BE INSPECTED WEEKLY AT A MINIMUM AND DAILY DURING STORM EVENTS.

SUGGESTED BMPS FOR ELEMENT 7

- BMP C220: INLET PROTECTION

ELEMENT 8: STABILIZE CHANNELS AND OUTLETS

A. DESIGN, CONSTRUCT, AND STABILIZE ALL ON-SITE CONVEYANCE CHANNELS TO PREVENT EROSION FROM THE FLOW RATE CALCULATED BY ONE OF THE FOLLOWING METHODS:

a. SINGLE EVENT HYDROGRAPH METHOD: THE PEAK VOLUMETRIC FLOW RATE CALCULATED USING A 10-MINUTE TIME STEP FROM A TYPE 1A, 10-YEAR, 24-HOUR FREQUENCY STORM.

OR

b. CONTINUOUS SIMULATION METHOD: THE 10-YEAR PEAK FLOW RATE, AS DETERMINED BY AN APPROVED CONTINUOUS RUNOFF MODEL WITH A 15-MINUTE TIME STEP.

THE HYDROLOGIC ANALYSIS MUST USE THE EXISTING LAND COVER CONDITION FOR PREDICTING FLOW RATES FROM TRIBUTARY AREAS OUTSIDE THE PROJECT LIMITS. FOR TRIBUTARY AREAS ON THE PROJECT SITE, THE ANALYSIS MUST USE THE TEMPORARY OR PERMANENT PROJECT LAND COVER CONDITION, WHICHEVER WILL PRODUCE THE HIGHEST FLOW RATES. IF USING THE WESTERN WASHINGTON HYDRO- LOGY MODEL (WWHM) TO PREDICT FLOWS, BARE SOIL AREAS SHOULD BE MODELED AS "LANDSCAPED" AREA.

B. PROVIDE STABILIZATION, INCLUDING ARMORING MATERIAL, ADEQUATE TO PREVENT EROSION OF OUTLETS, ADJACENT STREAM BANKS, SLOPES AND DOWNSTREAM REACHES AT THE OUTLETS OF ALL CONVEYANCE SYSTEMS.

ADDITIONAL GUIDANCE FOR ELEMENT 8

THE BEST METHOD FOR STABILIZING CHANNELS IS TO COMPLETELY LINE THE CHANNEL WITH BMP C122: NETS AND BLANKETS FIRST, THEN ADD BMP C207: CHECK DAMS AS NECESSARY TO FUNCTION AS AN ANCHOR AND TO SLOW THE FLOW OF WATER.

SUGGESTED BMPS FOR ELEMENT 8

- BMP C122: NETS AND BLANKETS
- BMP C202: RIPRAP CHANNEL LINING
- BMP C207: CHECK DAMS
- BMP C209: OUTLET PROTECTION

ELEMENT 9: CONTROL POLLUTANTS

DESIGN, INSTALL, IMPLEMENT AND MAINTAIN EFFECTIVE POLLUTION PREVENTION MEASURES TO MINIMIZE THE DISCHARGE OF POLLUTANTS. THE PROJECT PROPONENT MUST:

A. HANDLE AND DISPOSE OF ALL POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS THAT OCCUR ON SITE IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER.

B. PROVIDE COVER, CONTAINMENT, AND PROTECTION FROM VANDALISM FOR ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND OTHER MATERIALS THAT HAVE THE POTENTIAL TO POSE A THREAT TO HUMAN HEALTH OR THE ENVIRONMENT. ON-SITE FUELING TANKS MUST INCLUDE SECONDARY CONTAINMENT. SECONDARY CONTAINMENT MEANS PLACING TANKS OR CONTAINERS WITHIN AN IMPERVIOUS STRUCTURE CAPABLE OF CONTAINING 110% OF THE VOLUME CONTAINED IN THE LARGEST TANK WITHIN THE CONTAINMENT STRUCTURE. DOUBLE-WALLED TANKS DO NOT REQUIRE ADDITIONAL SECONDARY CONTAINMENT.

C. CONDUCT MAINTENANCE, FUELING, AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES USING SPILL PREVENTION AND CONTROL MEASURES. CLEAN CONTAMINATED SURFACES IMMEDIATELY FOLLOWING ANY SPILL INCIDENT.

D. DISCHARGE WHEEL WASH OR TIRE BATH WASTEWATER TO A SEPARATE ON-SITE TREATMENT SYSTEM THAT PREVENTS DISCHARGE TO SURFACE WATER, OR TO THE SANITARY SEWER, WITH LOCAL SEWER DISTRICT APPROVAL.

E. APPLY FERTILIZERS AND PESTICIDES IN A MANNER AND AT APPLICATION RATES THAT WILL NOT RESULT IN LOSS OF CHEMICAL TO STORMWATER RUNOFF. FOLLOW MANUFACTURERS' LABEL REQUIREMENTS FOR APPLICATION RATES AND PROCEDURES.

F. USE BMPS TO PREVENT CONTAMINATION OF STORMWATER RUNOFF BY PH-MODIFYING SOURCES. THE SOURCES FOR THIS CONTAMINATION INCLUDE, BUT ARE NOT LIMITED TO: RECYCLED CONCRETE STOCKPILES, BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHING AND CURING WATERS, WASTE STREAMS GENERATED FROM CONCRETE GRINDING AND SAWING, EXPOSED AGGREGATE PROCESSES, DEWATERING CONCRETE VAULTS, CONCRETE PUMPING AND MIXER WASHOUT WATERS.

G. ADJUST THE PH OF STORMWATER IF NECESSARY TO PREVENT VIOLATIONS OF WATER QUALITY STANDARDS.

H. ASSURE THAT WASHOUT OF CONCRETE TRUCKS IS PERFORMED OFF SITE OR IN DESIGNATED CONCRETE WASHOUT AREAS ONLY. DO NOT WASH OUT CONCRETE TRUCK DRUMS OR CONCRETE HANDLING EQUIPMENT ONTO THE GROUND, OR INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS. WASHOUT OF SMALL CONCRETE HANDLING EQUIPMENT MAY BE DISPOSED OF IN A FORMED AREA AWAITING CONCRETE WHERE IT WILL NOT CONTAMINATE SURFACE OR GROUND WATER. DO NOT DUMP EXCESS CONCRETE ON SITE, EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS. CONCRETE SPILLAGE OR CONCRETE DISCHARGE DIRECTLY TO GROUND WATER OR SURFACE WATERS OF THE STATE IS PROHIBITED. DO NOT WASH OUT TO FORMED AREAS AWAITING INFILTRATION BMPS.

I. OBTAIN WRITTEN APPROVAL FROM ECOLOGY BEFORE USING CHEMICAL TREATMENT OTHER THAN CO2, DRY ICE, OR FOOD GRADE VINEGAR TO ADJUST PH.

J. UNCONTAMINATED WATER FROM WATER-ONLY BASED SHAFT DRILLING FOR CONSTRUCTION OF BUILDING, ROAD, AND BRIDGE FOUNDATIONS MAY BE INFILTRATED PROVIDED THE WASTEWATER IS MANAGED IN A WAY THAT PROHIBITS DISCHARGE TO SURFACE WATERS. PRIOR TO INFILTRATION, WATER FROM WATER-ONLY BASED SHAFT DRILLING THAT COMES INTO CONTACT WITH CURING CONCRETE MUST BE NEUTRALIZED UNTIL PH IS IN THE RANGE OF 6.5 TO 8.5 (SU).

ADDITIONAL GUIDANCE FOR ELEMENT 9

- WHEEL WASH AND/OR TIRE BATH WASTEWATER CAN BE COMBINED WITH WASTEWATER FROM CONCRETE WASHOUT AREAS IF THE WASTEWATERS WILL BE PROPERLY DISPOSED OF AT AN OFFSITE LOCATION OR TREATMENT FACILITY.
- DO NOT USE UPLAND LAND APPLICATIONS FOR DISCHARGING WASTEWATER FROM CONCRETE WASHOUT AREAS.
- WOODY DEBRIS MAY BE CHOPPED AND SPREAD ON SITE.
- CONDUCT OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, SOLVENT AND DEGREASING CLEANING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO STORMWATER RUNOFF USING SPILL PREVENTION MEASURES, SUCH AS DRIP PANS.
- CLEAN CONTAMINATED SURFACES IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT. EMERGENCY REPAIRS MAY BE PERFORMED ON-SITE USING TEMPORARY PLASTIC PLACED BENEATH AND, IF RAINING, OVER THE VEHICLE.

SUGGESTED BMPS FOR ELEMENT 9

- BMP C151: CONCRETE HANDLING
- BMP C152: SAWCUTTING AND SURFACING POLLUTION PREVENTION
- BMP C153: MATERIAL DELIVERY, STORAGE, AND CONTAINMENT
- BMP C154: CONCRETE WASHOUT AREA
- BMP C250: CONSTRUCTION STORMWATER CHEMICAL TREATMENT
- BMP C251: CONSTRUCTION STORMWATER FILTRATION
- BMP C252: TREATING AND DISPOSING OF HIGH PH WATER

ALSO SEE THE SOURCE CONTROL BMPS DETAILED IN VOLUME IV

ELEMENT 10: CONTROL DEWATERING

A. DISCHARGE FOUNDATION, VAULT, AND TRENCH DEWATERING WATER, WHICH HAVE SIMILAR CHARACTERISTICS TO STORMWATER RUNOFF AT THE SITE, INTO A CONTROLLED CONVEYANCE SYSTEM BEFORE DISCHARGE TO BMP C240: SEDIMENT TRAP OR BMP C241: SEDIMENT POND (TEMPORARY).

B. DISCHARGE CLEAN, NON-TURBID DEWATERING WATER, SUCH AS WELL-POINT GROUND WATER, TO SYSTEMS TRIBUTARY TO, OR DIRECTLY INTO SURFACE WATERS OF THE STATE, AS SPECIFIED IN ELEMENT 8: STABILIZE CHANNELS AND OUTLETS, PROVIDED THE DEWATERING FLOW DOES NOT CAUSE EROSION OR FLOODING OF RECEIVING WATERS. DO NOT ROUTE CLEAN DEWATERING WATER THROUGH STORMWATER SEDIMENT BMPS. NOTE THAT "SURFACE WATERS OF THE STATE" MAY EXIST ON A CONSTRUCTION SITE AS WELL AS OFF SITE; FOR EXAMPLE, A CREEK RUNNING THROUGH A SITE.

C. HANDLE HIGHLY TURBID OR OTHERWISE CONTAMINATED DEWATERING WATER SEPARATELY FROM STORM- WATER.

D. OTHER DEWATERING TREATMENT OR DISPOSAL OPTIONS MAY INCLUDE:

a. INFILTRATION.

b. TRANSPORT OFF SITE IN A VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS.

c. ECOLOGY-APPROVED ON-SITE CHEMICAL TREATMENT OR OTHER SUITABLE TREATMENT TECHNOLOGIES.

d. SANITARY OR COMBINED SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, IF THERE IS NO OTHER OPTION.

e. USE OF A SEDIMENTATION BAG THAT DISCHARGES TO A DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DEWATERING.

ADDITIONAL GUIDANCE FOR ELEMENT 10

- CHANNELS MUST BE STABILIZED, AS SPECIFIED IN ELEMENT 8: STABILIZE CHANNELS AND OUTLETS.
- CONSTRUCTION EQUIPMENT OPERATION, CLAMSHELL DIGGING, CONCRETE TREMIE POUR, OR WORK INSIDE A COFFERDAM CAN CREATE HIGHLY TURBID OR CONTAMINATED DEWATERING WATER.
- DISCHARGING SEDIMENT-LADEN (MUDDY) WATER INTO WATERS OF THE STATE LIKELY CONSTITUTES VIOLATION OF WATER QUALITY STANDARDS FOR TURBIDITY. THE EASIEST WAY TO AVOID DISCHARGING MUDDY WATER IS THROUGH INFILTRATION AND PRESERVING VEGETATION.
- DEWATERING WATER FROM CONTAMINATED SITES MUST BE HANDLED SEPARATELY FROM STORMWATER. DIRECT CONTAMINATED STORMWATER TO A SANITARY SEWER WHERE ALLOWED BY THE LOCAL SEWER AUTHORITY, OR TO OTHER APPROVED TREATMENT.

SUGGESTED BMPS FOR ELEMENT 10

- BMP C203: WATER BARS
- BMP C236: VEGETATIVE FILTRATION

ELEMENT 11: MAINTAIN BMPS

A. MAINTAIN AND REPAIR ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMPS AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION IN ACCORDANCE WITH BMP SPECIFICATIONS.

B. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL BMPS WITHIN 30 DAYS AFTER ACHIEVING FINAL SITE STABILIZATION OR AFTER THE TEMPORARY BMPS ARE NO LONGER NEEDED.

ADDITIONAL GUIDANCE FOR ELEMENT 11

- SOME TEMPORARY EROSION AND SEDIMENT CONTROL BMPS ARE BIODEGRADABLE AND DESIGNED TO REMAIN IN PLACE FOLLOWING CONSTRUCTION. BMP C122: NETS AND BLANKETS IS AN EXAMPLE OF A BMP WITH BIODEGRADABLE OPTIONS.
- PROVIDE PROTECTION TO ALL BMPS INSTALLED FOR THE PERMANENT CONTROL OF STORMWATER FROM SEDIMENT AND COMPACTION. ALL BMPS THAT ARE TO REMAIN IN PLACE FOLLOWING COMPLETION OF CONSTRUCTION SHALL BE EXAMINED AND PLACED IN FULL OPERATING CONDITIONS. IF SEDIMENT ENTERS THE BMPS DURING CONSTRUCTION, IT SHALL BE REMOVED AND THE FACILITY SHALL BE RETURNED TO THE CONDITIONS SPECIFIED IN THE CONSTRUCTION DOCUMENTS.
- REMOVE OR STABILIZE TRAPPED SEDIMENT ON SITE. PERMANENTLY STABILIZE DISTURBED SOIL RESULTING FROM REMOVAL OF BMPS OR VEGETATION.

SUGGESTED BMPS FOR ELEMENT 11

- BMP C150: MATERIALS ON HAND
- BMP C160: CERTIFIED EROSION AND SEDIMENT CONTROL LEAD

ELEMENT 12: MANAGE THE PROJECT

A. PHASE DEVELOPMENT PROJECTS TO THE MAXIMUM DEGREE PRACTICABLE AND TAKE INTO ACCOUNT SEASONAL WORK LIMITATIONS.

B. INSPECT, MAINTAIN AND REPAIR ALL BMPS AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. PROJECTS REGULATED UNDER THE CONSTRUCTION STORMWATER GENERAL PERMIT (CSWGP) MUST CONDUCT SITE INSPECTIONS AND MONITORING IN ACCORDANCE WITH SPECIAL CONDITION S4 OF THE CSWGP.

C. MAINTAIN, UPDATE, AND IMPLEMENT THE CONSTRUCTION SWPPP.

D. PROJECTS THAT DISTURB ONE OR MORE ACRES MUST HAVE SITE INSPECTIONS CONDUCTED BY A CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL). PROJECT SITES DISTURBING LESS THAN ONE ACRE MAY HAVE A CESCL OR A PERSON WITHOUT CESCL CERTIFICATION CONDUCT INSPECTIONS. BY THE INITIATION OF CONSTRUCTION, THE CONSTRUCTION SWPPP MUST IDENTIFY THE CESCL OR INSPECTOR, WHO MUST BE PRESENT ON SITE OR ON-CALL AT ALL TIMES.

ADDITIONAL GUIDANCE FOR ELEMENT 12

THE PROJECT MANAGER MUST ENSURE THAT THE PROJECT IS BUILT IN SUCH A WAY TO COMPLY WITH ALL CONSTRUCTION SWPPP ELEMENTS, AS DETAILED IN THIS SECTION. CONSIDERATIONS FOR THE PROJECT MANAGER INCLUDE, BUT ARE NOT LIMITED TO:

- CONSTRUCTION PHASING
- SEASONAL WORK LIMITATIONS
- COORDINATION WITH UTILITIES AND OTHER CONTRACTORS
- INSPECTION
- MONITORING
- MAINTAINING AN UPDATED CONSTRUCTION SWPPP

PHASING OF CONSTRUCTION

PHASE DEVELOPMENT PROJECTS WHERE FEASIBLE IN ORDER TO PREVENT SOIL EROSION AND TRANSPORTING OF SEDIMENT FROM THE SITE DURING CONSTRUCTION. REVEGETATE EXPOSED AREAS AND MAINTAIN THAT VEGETATION AS AN INTEGRAL PART OF THE CLEARING ACTIVITIES FOR ANY PHASE.

CLEARING AND GRADING ACTIVITIES FOR DEVELOPMENTS SHALL BE PERMITTED ONLY IF CONDUCTED USING AN APPROVED SITE DEVELOPMENT PLAN (E.G., SUBDIVISION APPROVAL) THAT ESTABLISHES PERMITTED AREAS OF CLEARING, GRADING, CUTTING, AND FILLING. MINIMIZE REMOVING TREES AND DISTURBING OR COMPACTING NATIVE SOILS WHEN ESTABLISHING PERMITTED CLEARING AND GRADING AREAS. SHOW ON THE SITE PLANS AND THE DEVELOPMENT SITE PERMITTED CLEARING AND GRADING AREAS AND ANY OTHER AREAS REQUIRED TO PRESERVE CRITICAL OR SENSITIVE AREAS, BUFFERS, NATIVE GROWTH PROTECTION EASEMENTS, OR TREE RETENTION AREAS AS MAY BE REQUIRED BY LOCAL JURISDICTIONS.

INSPECTION

ALL BMPS MUST BE INSPECTED, MAINTAINED, AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. SITE INSPECTIONS MUST BE CONDUCTED BY A PERSON KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EROSION AND SEDIMENT CONTROL. THE PERSON MUST HAVE THE SKILLS TO 1) ASSESS THE SITE CONDITIONS AND CONSTRUCTION ACTIVITIES THAT COULD IMPACT THE QUALITY OF STORMWATER, AND 2) ASSESS THE EFFECTIVENESS OF EROSION AND SEDIMENT CONTROL MEASURES USED TO CONTROL THE QUALITY OF STORMWATER DISCHARGES.

FOR CONSTRUCTION SITES ONE ACRE OR LARGER THAT DISCHARGE STORMWATER TO SURFACE WATERS OF THE STATE, A CESCL MUST BE IDENTIFIED IN THE CONSTRUCTION SWPPP; THIS PERSON MUST BE ON-SITE OR ON-CALL AT ALL TIMES. CERTIFICATION MUST BE OBTAINED THROUGH AN APPROVED TRAINING PROGRAM THAT MEETS THE EROSION AND SEDIMENT CONTROL TRAINING STANDARDS ESTABLISHED BY ECOLOGY. SEE BMP C160: CERTIFIED EROSION AND SEDIMENT CONTROL LEAD.

APPROPRIATE BMPS OR DESIGN CHANGES SHALL BE IMPLEMENTED AS SOON AS POSSIBLE WHENEVER INSPECTION AND/OR MONITORING REVEALS THAT THE BMPS IDENTIFIED IN THE CONSTRUCTION SWPPP ARE INADEQUATE, DUE TO THE ACTUAL DISCHARGE OF /OR POTENTIAL TO DISCHARGE A SIGNIFICANT AMOUNT OF ANY POLLUTANT.

THE CESCL OR INSPECTOR MUST EXAMINE STORMWATER VISUALLY FOR THE PRESENCE OF SUSPENDED SEDIMENT, TURBIDITY, DISCOLORATION, AND OIL SHEEN. THEY MUST EVALUATE THE EFFECTIVENESS OF BMPS AND DETERMINE IF IT IS NECESSARY TO INSTALL, MAINTAIN, OR REPAIR BMPS TO IMPROVE THE QUALITY OF STORMWATER DISCHARGES.

BASED ON THE RESULTS OF THE INSPECTION, CONSTRUCTION SITE OPERATORS MUST CORRECT THE PROBLEMS IDENTIFIED BY:

- REVIEWING THE CONSTRUCTION SWPPP FOR COMPLIANCE WITH THE 13 ELEMENTS AND MAKING APPROPRIATE REVISIONS WITHIN 7 DAYS OF THE INSPECTION.
- IMMEDIATELY BEGINNING THE PROCESS OF FULLY IMPLEMENTING AND MAINTAINING APPROPRIATE SOURCE CONTROL AND/OR TREATMENT BMPS AS SOON AS POSSIBLE, ADDRESSING THE PROBLEMS NO LATER THAN WITHIN 10 DAYS OF THE INSPECTION. IF INSTALLATION OF NECESSARY TREATMENT BMPS IS NOT FEASIBLE WITHIN 10 DAYS, THE CONSTRUCTION SITE OPERATOR MAY REQUEST AN EXTENSION WITHIN THE INITIAL 10- DAY RESPONSE PERIOD.
- DOCUMENTING BMP IMPLEMENTATION AND MAINTENANCE IN THE SITE LOG BOOK (APPLIES ONLY TO SITES THAT HAVE COVERAGE UNDER THE CONSTRUCTION STORMWATER GENERAL PERMIT).

THE CESCL MUST INSPECT ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, ALL BMPS, AND ALL STORMWATER DISCHARGE POINTS AT LEAST ONCE EVERY CALENDAR WEEK AND WITHIN 24 HOURS OF ANY DISCHARGE FROM THE SITE. (FOR PURPOSES OF THIS CONDITION, INDIVIDUAL DISCHARGE EVENTS THAT LAST MORE THAN ONE DAY DO NOT REQUIRE DAILY INSPECTIONS. FOR EXAMPLE, IF A STORMWATER POND DISCHARGES CONTINUOUSLY OVER THE COURSE OF A WEEK, ONLY ONE INSPECTION IS REQUIRED THAT WEEK.) THE CESCL OR INSPECTOR MAY REDUCE THE INSPECTION FREQUENCY FOR TEMPORARY STABILIZED, INACTIVE SITES TO ONCE EVERY CALENDAR MONTH

MAINTAINING AN UPDATED CONSTRUCTION SWPPP

CESCL CONTACT INFORMATION SHALL BE PROVIDED TO THE CITY OF FERNDALE AT OR BEFORE PRE-CONSTRUCION. THE CONSTRUCTION SWPPP WILL BE RETAINED ON-SITE AND WILL BE UPDATED ON A REGULAR BASIS. MODIFICATIONS TO THE CONSTRUCTION SWPPP WILL BE MADE WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF ANY BMP.

RETAIN THE CONSTRUCTION SWPPP ON-SITE OR WITHIN REASONABLE ACCESS TO THE SITE.

MODIFY THE CONSTRUCTION SWPPP WHENEVER THERE IS A CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE AT THE CONSTRUCTION SITE THAT HAS, OR COULD HAVE, A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO WATERS OF THE STATE.

THE CONSTRUCTION SWPPP MUST BE MODIFIED IF, DURING INSPECTIONS OR INVESTIGATIONS CONDUCTED BY THE OWNER/OPERATOR, OR THE APPLICABLE LOCAL OR STATE REGULATORY AUTHORITY, IT IS DETERMINED THAT THE CONSTRUCTION SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS IN STORMWATER DIS- CHARGES FROM THE SITE. MODIFY THE CONSTRUCTION SWPPP AS NECESSARY TO INCLUDE ADDITIONAL OR MODIFIED BMPS DESIGNED TO CORRECT PROBLEMS IDENTIFIED. COMPLETE REVISIONS TO THE CONSTRUCTION SWPPP WITHIN SEVEN (7) DAYS FOLLOWING THE INSPECTION.

SUGGESTED BMPS FOR ELEMENT 12

- BMP C150: MATERIALS ON HAND
- BMP C160: CERTIFIED EROSION AND SEDIMENT CONTROL LEAD
- BMP C162: SCHEDULING

ELEMENT 13: PROTECT LOW IMPACT DEVELOPMENT BMPS

THE PRIMARY PURPOSE OF ON-SITE STORMWATER MANAGEMENT IS TO REDUCE THE DISRUPTION OF THE NATURAL SITE HYDROLOGY THROUGH INFILTRATION. BMPS USED TO MEET I-3.4.5 MR5: ON-SITE STORMWATER MANAGEMENT (OFTEN CALLED LID BMPS) ARE PERMANENT FACILITIES.

A. PROTECT ALL LID BMPS (INCLUDING, BUT NOT LIMITED TO BMP T7.30: BIORETENTION, BMP T5.14: RAIN GARDENS, AND BMP T5.15: PERMEABLE PAVEMENTS) FROM SEDIMENTATION THROUGH INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL BMPS ON PORTIONS OF THE SITE THAT DRAIN INTO THE LID BMPS. RESTORE THE BMPS TO THEIR FULLY FUNCTIONING CONDITION IF THEY ACCUMULATE SEDIMENT DURING CONSTRUCTION. RESTORING THE BMP MUST INCLUDE REMOVAL OF SEDIMENT AND ANY SEDIMENT-LADEN BIORETENTION/RAIN GARDEN SOILS, AND REPLACING THE REMOVED SOILS WITH SOILS MEETING THE DESIGN SPECIFICATION.

B. MAINTAIN THE INFILTRATION CAPABILITIES OF LID BMPS BY PROTECTING AGAINST COMPACTION BY CONSTRUCTION EQUIPMENT AND FOOT TRAFFIC. PROTECT COMPLETED LAWN AND LANDSCAPED AREAS FROM COMPACTION DUE TO CONSTRUCTION EQUIPMENT.

C. CONTROL EROSION AND AVOID INTRODUCING SEDIMENT FROM SURROUNDING LAND USES ONTO BMP T5.15: PERMEABLE PAVEMENTS. DO NOT ALLOW MUDDY CONSTRUCTION EQUIPMENT ON THE BASE MATERIAL OR PAVEMENT. DO NOT ALLOW SEDIMENT-LADEN RUNOFF ONTO PERMEABLE PAVEMENTS OR BASE MATERIALS.

D. PERMEABLE PAVEMENT FOULED WITH SEDIMENTS OR NO LONGER PASSING AN INITIAL INFILTRATION TEST MUST BE CLEANED USING PROCEDURES IN ACCORDANCE WITH THIS MANUAL OR THE MANUFACTURER'S PROCEDURES.

E. KEEP ALL HEAVY EQUIPMENT OFF EXISTING SOILS UNDER LID BMPS THAT HAVE BEEN EXCAVATED TO FINAL GRADE TO RETAIN THE INFILTRATION RATE OF THE SOILS.

ADDITIONAL GUIDANCE FOR ELEMENT 13

SEE CHAPTER 5: PRECISION SITE PREPARATION, CONSTRUCTION & INSPECTION OF LID FACILITIES IN THE LID TECHNICAL GUIDANCE MANUAL FOR PUGET SOUND (HINMAN AND WULKAN, 2012) FOR MORE DETAIL ON PROTECTING LID INTEGRATED MANAGEMENT PRACTICES.

NOTE THAT THE LID TECHNICAL GUIDANCE MANUAL FOR PUGET SOUND (HINMAN AND WULKAN, 2012) IS FOR ADDITIONAL INFORMATIONAL PURPOSES ONLY. YOU MUST FOLLOW THE GUIDANCE WITHIN THIS MANUAL IF THERE ARE ANY DISCREPANCIES BETWEEN THIS MANUAL AND THE LID TECHNICAL GUIDANCE MANUAL FOR PUGET SOUND

(HINMAN AND WULKAN, 2012).

SUGGESTED BMPS FOR ELEMENT 13

- BMP C102: BUFFER ZONES
- BMP C103: HIGH-VISIBILITY FENCE
- BMP C200: INTERCEPTOR DIKE AND SWALE
- BMP C201: GRASS-LINED CHANNELS
- BMP C207: CHECK DAMS
- BMP C208: TRIANGULAR SILT DIKE (TSD)
- BMP C231: BRUSH BARRIER
- BMP C233: SILT FENCE
- BMP C234: VEGETATED STRIP

A STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

NTS

IMPACT DESIGN
5426 BARRETT ROAD, SUITE A103
360-389-8138 WWW.BOLD-IMPACT.COM

SCOTT IAN GOODALL, STATE OF WASHINGTON, REGISTERED PROFESSIONAL ENGINEER, 03.15.2022

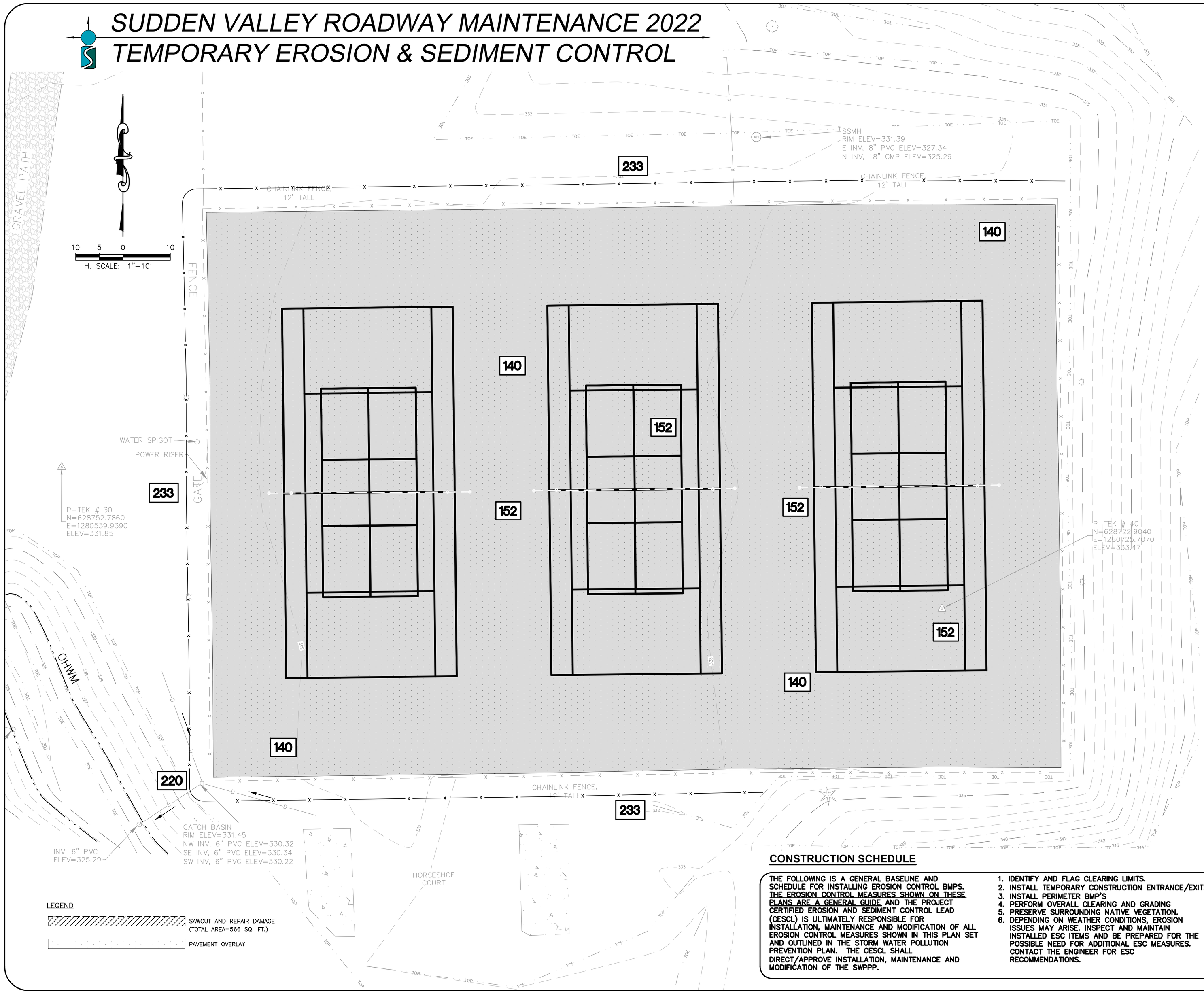
SVCA TENNIS COURTS RESURFACING

SVCA TENNIS COURTS
STORMWATER POLUTION PREVENTION PLAN
4 BARN VIEW DRIVE
BELLINGHAM, WASHINGTON 98229

REV	DATE	BY	DESCRIPTION

PROJECT NUMBER: 23001
DESIGNED/DRAWN BY: BLS
CHECKED BY: SIG
ISSUE DATE: 04.28.2023

SUDDEN VALLEY ROADWAY MAINTENANCE 2022
TEMPORARY EROSION & SEDIMENT CONTROL



LEGEND

SAWCUT AND REPAIR DAMAGE (TOTAL AREA=566 SQ. FT.)

PAVEMENT OVERLAY

LEGEND

ELEMENT #1 – MARK CLEARING LIMITS

- 101 — BMP C101 PRESERVE VEGETATION
- 103 — BMP C103 HIGH VISIBILITY FENCE

ELEMENT #2 – ESTABLISH CONSTRUCTION ACCESS

- 105 — BMP C105 STABILIZED CONSTRUCTION ENTRANCE (ONLY INSTALLED IF NECESSARY)

ELEMENT #3 – CONTROL FLOW RATES

- 220 — BMP C220 STORM DRAIN INLET PROTECTION

ELEMENT #4 – INSTALL SEDIMENT CONTROLS

- 220 — BMP C220 STORM DRAIN INLET PROTECTION
- 233 — BMP 233 SILT FENCE

ELEMENT #5 – STABILIZE SOILS

- 140 — BMP C140 DUST CONTROL

ELEMENT #6 – PROTECT SLOPES

ELEMENT #7 – PROTECT DRAIN INLETS

- 220 — BMP C220 STORM DRAIN INLET PROTECTION

ELEMENT #8 – STABILIZE CHANNELS AND OUTLETS

ELEMENT #9 – CONTROL POLLUTANTS

- 152 — BMP C152 SAWCUTTING AND SURFACE POLLUTION PREVENTION
- 153 — BMP C153 MATERIAL DELIVERY, STORAGE AND CONTAINMENT

ELEMENT #10 – CONTROL DEWATERING

ELEMENT #11 – MAINTAIN BMPs

- 160 — BMP C160 CERTIFIED EROSION AND SEDIMENT CONTROL LEAD

ELEMENT #12 – MANAGE THE PROJECT

- 160 — BMP C160 CERTIFIED EROSION AND SEDIMENT CONTROL LEAD

NO LID BMPs IN THIS PROJECT

CONSTRUCTION SCHEDULE

THE FOLLOWING IS A GENERAL BASELINE AND SCHEDULE FOR INSTALLING EROSION CONTROL BMPS. THE EROSION CONTROL MEASURES SHOWN ON THESE PLANS ARE A GENERAL GUIDE AND THE PROJECT CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL) IS ULTIMATELY RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND MODIFICATION OF ALL EROSION CONTROL MEASURES SHOWN IN THIS PLAN SET AND OUTLINED IN THE STORM WATER POLLUTION PREVENTION PLAN. THE CESCL SHALL DIRECT/APPROVE INSTALLATION, MAINTENANCE AND MODIFICATION OF THE SWPPP.

1. IDENTIFY AND FLAG CLEARING LIMITS.
2. INSTALL TEMPORARY CONSTRUCTION ENTRANCE/EXIT.
3. INSTALL PERIMETER BMP'S
4. PERFORM OVERALL CLEARING AND GRADING
5. PRESERVE SURROUNDING NATIVE VEGETATION.
6. DEPENDING ON WEATHER CONDITIONS, EROSION ISSUES MAY ARISE. INSPECT AND MAINTAIN INSTALLED ESC ITEMS AND BE PREPARED FOR THE POSSIBLE NEED FOR ADDITIONAL ESC MEASURES. CONTACT THE ENGINEER FOR ESC RECOMMENDATIONS.
7. MONITOR WEATHER AND ADD ADDITIONAL EROSION CONTROL MEASURES AS REQUIRED, WHETHER SHOWN ON THIS PLAN OR NOT. ADDITIONAL BMP MATERIALS SHALL BE KEPT ON HAND AT ALL TIMES (SUCH AS GRAVEL, STRAW, PLASTIC OR EQUIVALENT).
8. WHEN GRADING AND CONSTRUCTION ARE COMPLETE, SEED AND STABILIZE ALL EXPOSED SOILS AND REMOVE TEMPORARY BMPS ONCE DEEMED NO LONGER NECESSARY.

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5426 BARRETT ROAD, SUITE A103
360-389-9188 WWW.BOLD-IMPACT.COM

SCOTT IAN GOODALL — STATE OF WASHINGTON — 51097 — REGISTERED PROFESSIONAL ENGINEER

05.09.2023

SVCA TENNIS COURTS RESURFACING
SVCA TENNIS COURTS
TEMPORARY EROSION & SEDIMENT CONTROL
4 BARN VIEW DRIVE
BELLINGHAM, WASHINGTON 98229

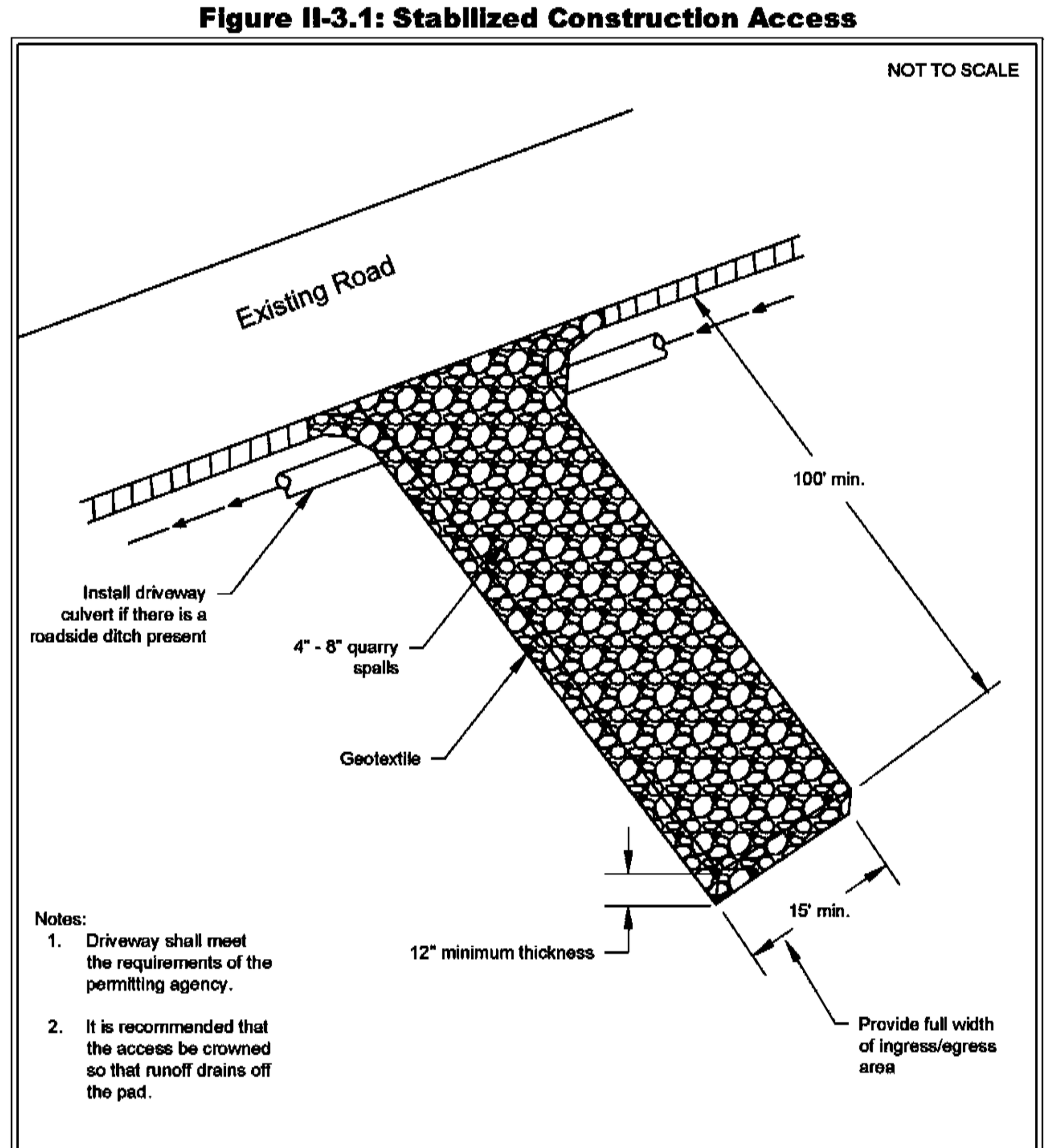
REV	DATE	BY	DESCRIPTION

PROJECT NUMBER: 23001
DESIGNED/DRAWN BY: BLS
CHECKED BY: SIG
ISSUE DATE: 05.09.2023

7
OF: 9

I:\Shared\PROJECTS\23001 SVCA Tennis Courts\DWG\23001 – SVCA TENNIS COURTS PLAN.dwg May 10, 2023–12:28pm

Figure II-3.1: Stabilized Construction Access



Notes:
1. Driveway shall meet the requirements of the permitting agency.
2. It is recommended that the access be crowned so that runoff drains off the pad.

DEPARTMENT OF ECOLOGY State of Washington

Stabilized Construction Access

Revised June 2018

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TEMPORARY CONSTRUCTION ENTRANCE

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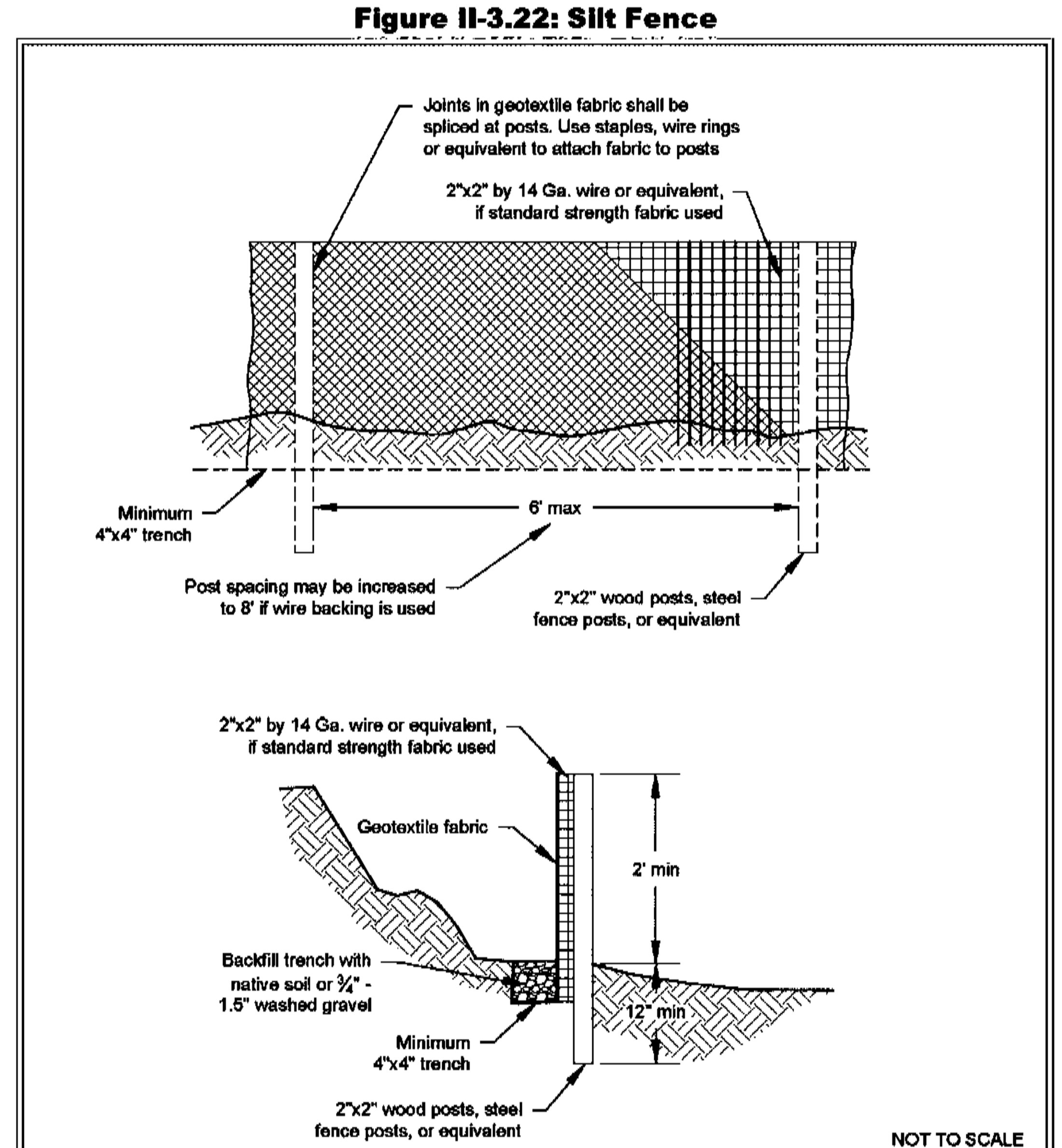
Figure II-3.22: Silt Fence



DEPARTMENT OF ECOLOGY State of Washington

Silt Fence

Revised July 2017

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SILT FENCE

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NOTES:
1. INSTALL EROSION CONTROL SEED MIX (TEMPORARY SEED MIX) ON 3:1 SLOPES OR LESS FOR AREAS TO VEGETATED WITH NATIVE SHRUB AND TREE SPECIES, INSTALL IN LIEU OF APPLYING HOG-FUEL MULCH.
2. INSTALL LOW-GROWING TURF SEED MIX IN JAMES STREET PLANTING STRIP AND OTHER ON-SITE AREAS WHERE LAWN IS SPECIFIED.

recommended mixes for both temporary and permanent seeding.

- Apply these mixes, with the exception of the wet area seed mix, at a rate of 120 pounds per acre. This rate can be reduced if soil amendments or slow-release fertilizers are used. Apply the wet area seed mix at a rate of 60 pounds per acre.
- Consult the local suppliers or the local conservation district for their recommendations. The appropriate mix depends on a variety of factors, including location, exposure, soil type, slope, and expected foot traffic. Alternative seed mixes approved by the local authority may be used, depending on the soil type and hydrology of the area.

Table II-3.4: Temporary and Permanent Seed Mixes

Common Name	Latin Name	% Weight	% Purity	% Germination
Temporary Erosion Control Seed Mix				
A standard mix for areas requiring a temporary vegetative cover.				
Chewings or annual blue grass	*Festuca rubra var. commutata* or *Poa anna*	40	98	90
Perennial rye	*Lolium perenne*	50	98	90
Redtop or colonial bentgrass	*Agrostis alba* or *Agrostis tenuis*	5	92	85
White dutch clover	*Trifolium repens*	5	98	90
Landscaping Seed Mix				
A recommended mix for landscaping seed.				
Perennial rye blend	*Lolium perenne*	70	98	90
Chewings and red fescue blend	*Festuca rubra var. commutata* or *Fes-tuca rubra*	30	98	90
Low-Growing Turf Seed Mix				
A turf seed mix for dry situations where there is no need for watering. This mix requires very little main-tenance.				
Dwarf tall fescue (several varieties)	*Festuca arundin-acea var.*	45	98	90
Dwarf perennial rye (Barclay)	*Lolium perenne var. barclay*	30	98	90
Red fescue	*Festuca rubra*	20	98	90
Colonial bentgrass	*Agrostis tenuis*	5	98	90
Bioswale Seed Mix				
A seed mix for bioswales and other intermittently wet areas.				
Tall or meadow fes-	*Festuca arundin-*	75-80	98	90

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EROSION CONTROL OR STABILIZATION SEED MIX

NTS

BMP C152: Sawcutting and Surfacing Pollution Prevention

Purpose

Sawcutting and surfacing operations generate slurry and process water that contains fine particles and high pH (concrete cutting), both of which can violate the water quality standards in the receiving water. Concrete spillage or concrete discharge to waters of the State is prohibited. Use this BMP to minimize and eliminate process water and slurry created through sawcutting or surfacing from enter- ing waters of the State.

Conditions of Use

Utilize these management practices anytime sawcutting or surfacing operations take place. Saw- cutting and surfacing operations include, but are not limited to:

- Sawing
- Coring
- Grinding
- Roughening
- Hydro-demolition
- Bridge and road surfacing

Design and Installation Specifications

- Vacuum slurry and cuttings during cutting and surfacing operations.
- Slurry and cuttings shall not remain on permanent concrete or asphalt pavement overnight.
- Slurry and cuttings shall not drain to any natural or constructed drainage conveyance includ- ing stormwater systems. This may require temporarily blocking catch basins.
- Dispose of collected slurry and cuttings in a manner that does not violate ground water or sur- face water quality standards.
- Do not allow process water generated during hydro-demolition, surface roughening or similar operations to drain to any natural or constructed drainage conveyance including stormwater systems. Dispose of process water in a manner that does not violate ground water or surface water quality standards.
- Handle and dispose of cleaning waste material and demolition debris in a manner that does not cause contamination of water. Dispose of sweeping material from a pick-up sweeper at an appropriate disposal site.

Maintenance Standards

Continually monitor operations to determine whether slurry, cuttings, or process water could enter waters of the state. If inspections show that a violation of water quality standards could occur, stop operations and immediately implement preventive measures such as berms, barriers, secondary containment, and/or vacuum trucks.

SAWCUTTING (BMP C152)

NTS

Table II-3.6: Mulch Standards and Guidelines

Mulch Material	Guideline	Description
Straw	Quality Standards	Air-dried; free from undesirable seed and coarse material.
	Application Rates	2"-3" thick; 5 bales per 1,000 sf or 2-3 tons per acre
	Remarks	Cost-effective protection when applied with adequate thickness. Hand-application generally requires greater thickness than blown straw. The thickness of straw may be reduced by half when used in conjunction with seeding. In windy areas straw must be held in place by crimping, using a tackifier, or covering with netting. Blown straw always has to be held in place with a tackifier as even light winds will blow it away. Straw, however, has several deficiencies that should be considered when selecting mulch materials. It often introduces and/or encourages the propagation of weed species and it has no significant long-term benefits It should also not be used within the ordinary high-water elevation of surface waters (due to flotation).
Hydromulch	Quality Standards	No growth inhibiting factors.
	Application Rates	Approx. 35-45 lbs per 1,000 sf or 1,500 - 2,000 lbs per acre
	Remarks	Shall be applied with hydromulcher. Shall not be used without seed and tackifier unless the application rate is at least doubled. Fibers longer than about 3/4 - 1 inch clog hydromulch equipment. Fibers should be kept to less than 3/4 inch.
Compost	Quality Standards	No visible water or dust during handling. Must be produced per WAC 173-350, Solid Waste Handling Standards, but may have up to 35% biosolids.
	Application Rates	2" thick min.; approx. 100 tons per acre (approx. 750 lbs per cubic yard)
	Remarks	More effective control can be obtained by increasing thickness to 3". Excellent mulch for protecting final grades until landscaping because it can be directly seeded or tilled into soil as an amendment. Compost used for mulch has a coarser size gradation than compost used for BMP C125: Topsoiling / Composting or BMP T5.13: Post-Construction Soil Quality and Depth. It is more stable and practical to use in wet areas and during rainy weather conditions. Do not use near wetlands or near phosphorous impaired water bodies.
Chipped Site Vegetation	Quality Standards	Gradations from fines to 6 inches in length for texture, variation, and interlocking properties. Include a mix of various sizes so that the average size is between 2- and 4-inches.
	Application Rates	2" thick min.;
	Remarks	This is a cost-effective way to dispose of debris from clearing and grubbing, and it eliminates the problems associated with burning. Generally, it should not be used on slopes above approx. 10% because of its tendency to be transported by runoff. It is not recommended within 200 feet of surface waters. If permanent seeding or planting is expected shortly after mulch, the decomposition of the chipped vegetation may tie up nutrients important to grass establishment. Note: thick application of this material over existing grass, herbaceous species, and some groundcovers could smother and kill vegetation.
Wood-Based Mulch	Quality Standards	No visible water or dust during handling. Must be purchased from a supplier with a Solid Waste Handling Permit or one exempt from solid waste regulations.
	Application Rates	2" thick min.; approx. 100 tons per acre (approx. 750 lbs. per cubic yard)
	Remarks	This material is often called "wood straw" or "hog fuel". The use of mulch ultimately improves the organic matter in the soil. Special caution is advised regarding the source and composition of wood-based mulches. Its preparation typically does not provide any weed seed control, so evidence of residual vegetation in its composition or known inclusion of weed plants or seeds should be monitored and prevented (or minimized).
Wood Strand Mulch	Quality Standards	A blend of loose, long, thin wood pieces derived from native conifer or deciduous trees with high length-to-width ratio.
	Application Rates	2" thick min.
	Remarks	Cost-effective protection when applied with adequate thickness. A minimum of 95-percent of the wood strand shall have lengths between 2 and 10-inches, with a width and thickness between 1/16 and 1/2-inches. The mulch shall not contain resin, tannin, or other compounds in quantities that would be detrimental to plant life. Sawdust or wood shavings shall not be used as mulch. [Specification 9-14.4(4) from the *Standard Specifications for Road, Bridge, and Municipal Construction* (WSDOT, 2016)

Washington State Department of Ecology

2019 Stormwater Management Manual for Western Washington (2019 SWMMWW)

Publication No.19-10-021

EROSION CONTROL MULCH APPLICATION TABLE

NTS

IMPACT DESIGN
5426 BARRETT ROAD, SUITE A103
360-389-8138 WWW.BOLD-IMPACT.COM

SCOTT IAN GOODALL
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
04.28.2023

SVCA TENNIS COURTS RESURFACING
SVCA TENNIS COURTS
DETAILS
4 BARN VIEW DRIVE
BELLINGHAM, WASHINGTON 98229

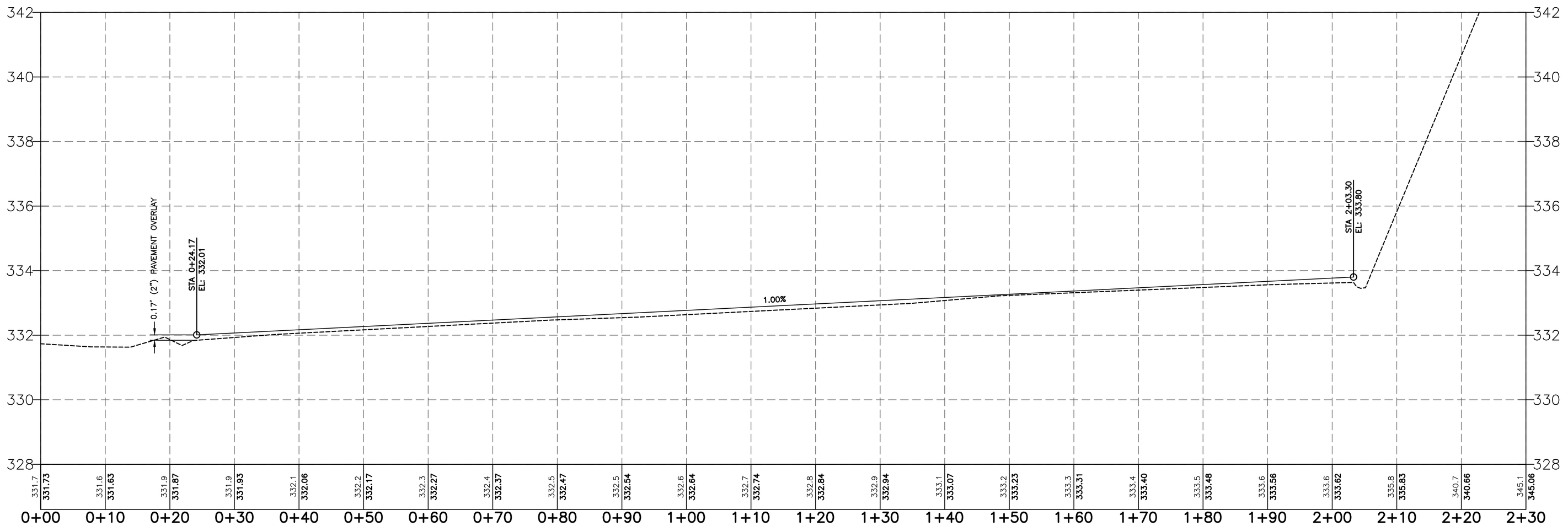
REV	DATE	BY	DESCRIPTION

PROJECT NUMBER: 23001
DESIGNED/DRAWN BY: BLS
CHECKED BY: SIG
ISSUE DATE: 04.28.2023

8 OF: 9

I:\Shared\PROJECTS\23001 SVCA Tennis Courts\DWG\TESC DETAILS.dwg May 10, 2023-12:28pm

SUDDEN VALLEY ROADWAY MAINTENANCE 2022
PROFILE-A1-A1'



A1–A1' PROFILE

10 5 0 10

H. SCALE: 1"=10'
V. SCALE 1"=2'

IMPACT DESIGN
5426 BARRETT ROAD, SUITE A103
360-389-9188 WWW.BOLD-IMPACT.COM

SCOTTIAN GODDARD
STATE OF WASHINGTON
21077
REGISTERED PROFESSIONAL ENGINEER
05.09.2023

SVCA TENNIS COURTS RESURFACING
SVCA TENNIS COURTS
PROFILE-A1-A1'
4 BARN VIEW DRIVE
BELLINGHAM, WASHINGTON 98229

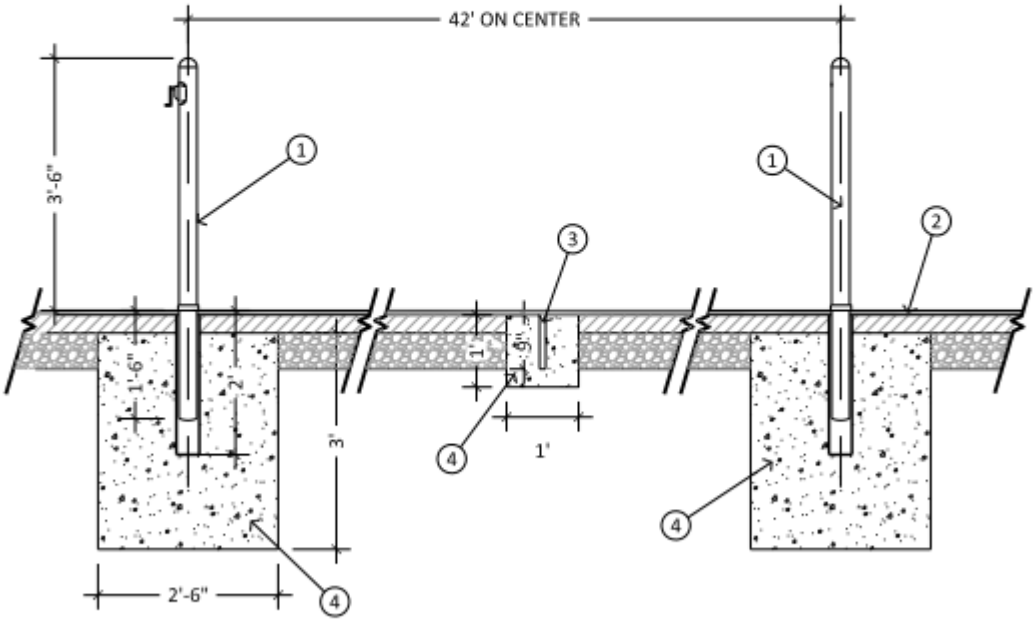
REV	DATE	BY	DESCRIPTION

PROJECT NUMBER: 23001
DESIGNED/DRAWN BY: BLS
CHECKED BY: SIG
ISSUE DATE: 05.09.2023

9 OF: 9

IMPACT DESIGN

1. NET POSTS (SEC 129300)
2. TENNIS COURT SURFACE (SEC 321823)
3. CENTER ANCHOR
4. CAST-IN-PLACE CONCRETE FOOTING PER MANUFACTURERS RECCOMENDATIONS. FOOTINGS ARE 2'-6" LENGTH x 2'-6" WIDTH x 3' DEPTH. INSTALL CLASS 4000 PCC W/ AIR ENTRAINMENT



1 TENNIS NET POST FOOTING

NTS

SECTION 129300 - SITE SPORTS EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Tennis Court Construction

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples: For each exposed product and for each color and texture specified.

C. Samples for Initial Selection: For units with factory-applied finishes.

D. Samples for Verification: For each type of exposed finish, not less than 6-inch- (152-mm-) long linear components and 4-inch- (102-mm-) square sheet components.

E. Product Schedule: Use same designations indicated on Drawings.

1.4 INFORMATIONAL SUBMITTALS

A. Material Certificates: For site furnishings manufactured with preservative-treated wood.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For site furnishings to include in maintenance manuals.

PART 2 - PRODUCTS

2.1 TENNIS COURT EQUIPMENT

A. Tennis Nets

1. Manufacturer: Douglas Industries, 800.553.8907.
2. Model: No. TN-36 with side pockets and wooden dowels.
3. Quantity: One set per Court.

B. Net Posts and Sleeves

1. Manufacturer: Douglas Industries, 800.553.8907.
2. Model: DTP-37 Green, 3” O.D., with net lacing, 3/16” Steel Wall, with ground sleeves.
    a. Include Cable and Ratchet Winch.
3. Quantity: One set per Court.

C. Line Markings for Tennis and Pickleball Courts

1. Line markings shall be Plexipave HI-Hide Plexicolor Line Paint. Apply in strict accordance with manufacturer’s specifications and instructions.
2. Unless otherwise noted, tennis lines shall be white.
3. The lines shall be masked on both sides with an acceptable tape. Each measurement shall be accurately set to within 1/8” tolerance in accordance with the American Sports Builders Association (ASBA). Each court area shall be marked for doubles play.
4. All areas that have overlapped in color shall be corrected and non-appearing. All overspray in excess shall be corrected and non-appearing. No spraying shall be done with the wind factor above seven (7) mph.

2.2 FABRICATION

A. Metal Components: Form to required shapes and sizes with true, consistent curves, lines, and angles. Separate metals from dissimilar materials to prevent electrolytic action.

B. Welded Connections: Weld connections continuously. Weld solid members with full-length, full-penetration welds and hollow members with full-circumference welds. At exposed connections, finish surfaces smooth and blended, so no roughness or unevenness shows after finishing and welded surface matches contours of adjoining surfaces.

C. Pipes and Tubes: Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of handrail and railing components.

D. Exposed Surfaces: Polished, sanded, or otherwise finished; all surfaces smooth, free of burrs, barbs, splinters, and sharpness; all edges and ends rolled, rounded, or capped.

E. Factory Assembly: Factory assemble components to greatest extent possible to minimize field assembly. Clearly mark units for assembly in the field.

2.3 GENERAL FINISH REQUIREMENTS

A. Appearance of Finished Work: Noticeable variations in same piece are unacceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.4 STEEL AND GALVANIZED-STEEL FINISHES

A. Powder-Coat Finish: Manufacturer's standard polyester, powder-coat finish complying with finish manufacturer's written instructions for surface preparation, including pretreatment, application, baking, and minimum dry film thickness.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Comply with manufacturer's written installation instructions unless more stringent requirements are indicated. Complete field assembly of site furnishings where required.

B. Install site equipment level, plumb, true, and securely anchored positioned at locations indicated on Drawings.

C. Post Setting: Set cast-in support posts in concrete footing with smooth top, shaped to shed water. Protect portion of posts above footing from concrete splatter. Verify that posts are set plumb or at correct angle and are aligned and at correct height and spacing. Hold posts in position during placement and finishing operations until concrete is sufficiently cured.

D. Posts Set into Voids in Concrete: Form or core-drill holes for installing posts in concrete to depth recommended in writing by manufacturer of site furnishings and 3/4 inch (19 mm) larger than OD of post. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions, with top smoothed and shaped to shed water.

E. Pipe Sleeves: Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts have been inserted into sleeves, fill annular space between post and sleeve with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions, with top smoothed and shaped to shed water.

F. Concrete for posts to be of 4000 psi compressive strength in 28 days of curing. Concrete is to be maintained at a minimum temperature of 40 degrees F during mixing, pouring, and thereafter for 24 hours.

1. Comply with ACI 301.
2. Allow proper curing of concrete before applying any net and goal loads.

3.3 PROTECTION AND INSPECTION

A. Verify proper position and configuration of all items. Make corrections as required.

1. Verify proper height of nets at court center and adequate anchorage of nets at corners.

B. Clean work areas and dispose of all trash and debris.

C. Clean all installed items and remove temporary protective coatings.

END OF SECTION

SECTION 321823 ATHLETIC SURFACING SYSTEM

ATHLETIC SURFACING SYSTEM

1.1 APPLICATION

Depending upon the product used in the system, application is by 70 or 50 durometer flexible rubber squeegee, as well as by wide hair-type push brooms for finish coat application of non sand-filled materials.

1.2 QUALITY ASSURANCE

- Manufacturer: Minimum 10 years experience producing athletic surfacing coatings.
- Installer: American Sports Builders Association Certified. Licensed installers, experienced and trained in the use of these products.

1.3 DRYING TIME

- 30 minutes to one hour at 70 degrees with 50% relative humidity.
- Indoor applications require fans and good ventilation.
- Surface may be used for play in 24 hours after completion.

1.4 COLOR RANGE

Color(s) to be selected by Architect from full range of manufacturer's available standard colors. Nine

Color Standards: Light Green, Dark Green, Florida Green, California Red, Sahara Red, Pacific Blue, Cape Gray, Brown, Maroon. (Special colors are available on request.)

1.5 LIMITATIONS

1. The Plexipave or equal system will not prevent pavement cracks from occurring or reoccurring.
2. Do not apply if surface temperature is less than 50 degrees or more than 140 degrees.
3. Allow asphalt to cure for a minimum of **21 days**.
4. Allow concrete to cure for a minimum of 28 days.
5. No curing agents allowed on concrete surfaces.
6. DO NOT STORE IN HOT SUN.
7. Apply only when ambient temperature is 50 degrees and rising.
8. Do not apply when rain is imminent.
9. After diluting with water, use mixed materials promptly.
10. Keep containers tightly closed when not in use.
11. KEEP FROM FREZING.

1.6 THE PLEXI PAVE SYSTEM

SURFACE COATINGS

Product	Description	Specification No.
Plexichrome or equal	**Full color (9 colors) Finish Coat (Non-textured).**	**10.1**
Plexipave Gran Prix or equal	Exceptionally flexible Acrylic Surface Color Coating for resilient surfaces.	10.32
Fortified Plexipave or equal	ready-to-use, textured Color Finish.	10.2
Plexipave Color Base or equal	**Neutral Acrylic Texture (filler coat) for job mixing with Plexichrome to make full color-in-depth surfacing.**	**10.5**
Plexicushion or equal	Rubberized cushion subsurface, multi-coat system used under Plexipave.	10.3
Plexicushion Base Coat or equal	Large rubber Particle Underlayment for Plexicushion.	10.9
Plexicolor Line Paint or equal	**Flat, high-hide 100% Acrylic Line Marking Paint-7 colors-Textured or Non-textured.**	**10.4**

SURFACE PREPARATION PRODUCTS

Acrylic Resurfacer or equal	**Acrylic Binder for job mixing with silica sand and water for filler coat mixes.**	**10.8**
Crack Filler	Highly flexible, high solids filler for minor cracks.	10.10
Court Patch Binder or equal	**Concentrated Acyrlic binder for mixing with silica sand and cement for patching and major cracks.**	**10.14**
Plexibond Coating or equal	Surface primer as well as an adhesive in the Plexibond Fiberglass repair system.	10.11
Concrete Preparer	Acid pretreatment for uncoated Portland Cement Concrete.	10.13
Ti-Coat or equal	Two-component water-based epoxy primer for new or old uncoated concrete.	10.17
Plxipatch or equal	High Solids, ready-to-use acrylic compound for light patching.	10.21

***USE SURFACE COATINGS AND SURFACE PREPARATION PRODUCTS IN BOLD**

2.1 STANDARD ASPHALT INSTALLATION

New Construction

- Level with Court Patch binder mix or Plexipatch or equal
- 2 coat Acrylic Resurfacer or equal
- 2 coats Fortified Plexipave or equal
- 2 coat finish (depending on speed of play-either Fortified Plexipave or Plexichrome or equal) (see Asphalt Spec. #10.18)

Re-Coat

Depending on the condition of the surface,

- 1 coat of Acyrlic Resurfacer or equal, (needed for courts that require extensive preparation)
- 2 or 3 coats of Fortified Plexipave..

2.3 APPLICATION RATES PER COAT (UNDILUTED)

	GALLON/SQUARE YARD	GALLON/SQUARE METER	YARDS/GALLONS	DILUTION RATE
ACRYLIC RESURFACER OR EQUAL	.05-.07	.06-.09	15-20	2 to 1 10-16# Sand/Gal
COLOR BASE OR EQUAL	.05-.07 Base (.03-.04) Chrome (.02-.03)	.06-.09 Base (.03-.04) Chrome (.02-.03)	30 to 20 to 20 Mix 15-20	Combined 3 to 2 to 2
PLEXICHROME OR EQUAL	.05-.04	.05-.06	20.25	1 to 1
PLEXIPAVE OR EQUAL	.05-.07	.06-.09	15-20	2 to 1
FORTIFIED PAVE (FACTORY) OR EQUAL	.05-.07	.06-.09	15-20	4 to 1
JOB MIX FORTIFIED (SEE COLOR BASE) OR EQUAL				
PLEXICUSHION OR EQUAL	.1-.13	.12-.16	8-10	4 to 1
PLEXICUSHION BASE COAT OR EQUAL	.25	.3	4	4 to 1
CLEAR-GLO OR EQUAL	.025	.03	40	1 to 1
PLEXITRAC RESURFACER OR EQUAL	.22-.50	.26-.60	2-4	4 to 1
TI COAT (A&B) OR EQUAL	.025-.03	.029-.036	33-44	None
CONCRETE PREPARER OR EQUAL	.01-.013	.012-.016	78-100	1 to 4
PLEXIBOND COATING PLEXIBOND SYSTEM PRIMER OR EQUAL	.07-.05 .04-.025	.084-.06 0.048-0.03	15-20 25-40	2 to 1 1 to 2

END OF SECTION

321823.1 RESURFACER

RESURFACER

1.1 DESCRIPTION

Acrylic Resurfacer or equal is an asbestos free, acrylic latex binder developed expressly for job mixing with silica sand to obtain a fast drying filler coat that reduces posterity in asphalt and concrete pavements. As opposed to other filler coat products, multiple applications of Acrylic Resurfacer or equal does not require rolling between coats.

1.2 SURFACE USES: Acrylic Resurfacer or equal may be applied over properly prepared asphalt and concrete sub-bases that are to be surfaced with the Plexipave or equal or Plexicushion or equal Surfacing System.

1.3 APPLICATION

Use a 70 Durometer flexible rubber squeegee, 24”, 30”, 36” width.

1.4 DRYING TIME

Thirty minutes to one hour under optimum outdoor temperature and humidity conditions (70 degrees F, 50% humidity). For indoor application, provide heat and air circulation to expedite drying.

1.5 MIXING

A variety of sand gradations can be used depending on the surface conditions to be treated. Quantities of sand and water will vary depending on the sand gradation. When using finger gradation less sand should be used to maintain strength in the mix. For level or patching, Court Patch Binder or equal mixes should be used (see specification Section 10.14.)

1.6 COVERAGE

Filler Coat: 15-20 square yards per gallons depending on surface texture and porosity (.05-.07 gals/sq. yd.)

1.7 LIMITATIONS

1. Apply only when ambient temperature is 50 degrees F and rising
2. Do not apply when rain in imminent
3. Do not apply when surface temperature is less than 50 degrees F or more than 140 degrees F.
4. Do not apply over tar emulsion sealers.
5. Keep containers tightly closed when not in use.
6. Keep materials from freezing.
7. New asphalt shall be allowed to cure for at least 14 days; concrete shall cure for 28 days. Do not use curing compounds.
8. Use only with sands free clay, silt and other foreign materials.
9. The Plexipave system or equal will not prevent pavement cracks from occurring.

PART 2 – SPECIFICATIONS

2.1 SCOPE

A. This specification pertains to the application of Acrylic Resurfacer or equal over asphalt and concrete tennis courts and other recreational areas as designated in the Site Plans. The material is to be used as a filler coating to reduce surface porosity and obtain a uniform texture prior to applying the Plexipave Color Surface System or equal. Application shall be equally durable over indoor or outdoor asphalt, indoor concrete and outdoor concrete with a proper vapor barrier in place.

B. The work shall consist of suitably cleaning and preparing the asphalt or concrete to assure a satisfactory bond of the Acrylic Resurfacer or equal Filler Mix, and the subsequent application of the quantity of material specified herein.

C. Materials shall be delivered to the site in sealed, properly labeled containers and water used in mixing shall be fresh and clear. Coverage rates are based on manufacturer's materials prior to adding sand and mixing with water.

2.2 SURFACE PREPARATION

A. Refer to the Asphalt Paving Specification for as asphaltic concrete pavement and tolerances. Also see the drawings for additional details.

B. The surface to receive the Acrylic Resurfacer or equal Mix shall be of uniform texture, clean, and free of grease, oils and other foreign materials.

C. **Asphalt-**Allow asphalt to cure a minimum of **21 days**. Prior to the application of surfacing materials, the entire surface shall be flooded and checked for minor depressions or irregularities. Any puddle area covering a nickel shall be marked and repaired with Court Patch Binder or equal using the following mix

1. 100 lbs of 60-80 mesh silica sand (dry)
2. 3 gallons Plexipave Court Patch Binder or equal
3. 1 to 2 gallons Portland Cement (dry) (depending on humidity and temperature)

A tack coat consisting of 1 part Court Patch binder or equal and 2 parts water shall be applied to the patch areas and allowed to dry thoroughly prior to repairing. For more information see California Products Specification 10.14 or 10.21.

After patching, the surface shall not vary much more than 1/8" in ten feet measured in any direction.

2.3 APPLICATION OF SURFACE FILLER COAT

A. Filler Coat – The Contractor shall apply 2 filler coats in opposite directions over the entire slab. The material must be delivered to the job site in unopened containers and mixed at the job site according to the manufacturer's specifications. If an asphaltic emulsion filler is used, the filler coat shall be compacted with 3,000 pound, steel-wheeled, self-propelled roller.

B. Application of the Acrylic Resurfacer or equal Mix shall be applied to a clean, dry, level surface using the following mix:

Acrylic Resurfacer	55 gallons
Water (clean and potable)	20-40 gallons
Sand (60-80 mesh)	600-900 pounds
Liquid Yield	112-138 gallons

Use clean, dry sand and clear potable water to make mixes. Mix the ingredients throughout in a mortar box or mortar mixer. Apply the Acrylic Resurfacer or equal mix with a 70 Durometer rubber bladed squeegee on the surface with sufficient quantity to cover as the squeegee is pulled over the surface.

B. Asphalt-Apply the Acrylic Resurfacer or equal Mix one to two coats (depending on surface porosity) at a rate of .05-.07 gallons per square yard per coat.

D. Allow the application of Acrylic Resurfacer or equal to dry thoroughly. Scrape off all ridges and rough spots prior to any subsequent application Acrylic Resurfacer or equal or Plexipave or equal.

END OF SECTION

321823.2 ACRYLIC PATCHING SYSTEM

ACRYLIC PATCHING SYSTEM

1.1 DESCRIPTION

Court Patch Binder or equal is a high strength acrylic latex bonding liquid designed to mix with Silica Sand and Portland Cement as an easy to use patching compound. The patching mix may be used over new or existing asphalt and concrete surfaces to repair depressions, cracks, and other irregularities. Court Patch Binder or equal allows for application of quick drying leveling patches up to ¾" in depth.

1.2 SURFACE USES:

Over new or existing asphalt and concrete pavement to correct depressions and uneven texture on:

- Tennis Courts
- Outdoor Basketball Courts
- Play Areas
- Pathways and Walks

1.3 APPLICATION

A. Use steel trowel and/or metal screed to fill and level depressions, bird baths or irregularities in tennis courts and other recreational pavement areas.

B. Cracks greater than ¼" shall be filled and leveled with a square hand-trowel or broad knife by forcing the Court Patch Binder or equal filler mix into the crack and striking off excess material. Edges may be feathered using a hand trowel and damp cloth to form a smooth transition from patch to the original surface.

1.4 COLOR

Neutral

1.5 DRYING TIME

Applications of Court Patch Binder or equal mixes dry at various rates depending on the type of mineral aggregate, the thickness applied, and the weather conditions. Thin applications by squeegee or trowel using fine aggregate will cure and dry in less than one hour.

Thick applications (up to ¾") for patching deep bird baths and rough pavement will take a minimum of six hours to dry depending on temperature and humidity conditions. Patches should be allowed to cure for 24 hours before applying the Plexipave System or equal.

PART 2 – Court Patch Mix

2.1 MIXES

A. Depressions up to ¾" shall be applied by steel trowel or metal screed to level the surface to proper grade using the following mix designs.

Thin Patches ¼" or Less
100 lbs. #80-100 Mesh Silica Sand (dry)
3 gallons Court Patch Binder or equal
1 to 2 gallons Portland Cement (dry)
(Minimum 12 lbs, Maximum 24 lbs.

Thick Patches ¼" or Greater
Use 60-80 Mesh Silica Sand (dry)

Depending on temperature and humidity)
Mix in a clean mortar box or mortar mixer to a workable consistency. Thoroughly clean and apply a tack coat of 1 part Court Patch Binder or equal diluted with 2 parts water to the area to be patched. Court Patch Binder or equal mix may be applied directly to the depressed area after the tack coat has completely dried. The patch should be allowed to cure for 24 hours prior to the application of the Plexipave Color Surface System or equal.

Depressions in excess of ¾" depth must receive multiple applications of Court Patch Binder or equal Mix, allow 24 hours before applying subsequent lifts. Each application of Court Patch mix or equal must be feathered out to a fine edge. Any rough edges must be rubbed down with an abrasive rubbing stone to remove roughness.

2.2 COVERAGE

Because of the wide variation in surface conditions, porosity and texture, the coverage figures given here are approximate and serve only as a guide:

Patching mix: 1 ½ square yards per 100 lbs. batch laid ½ thick.

2.3 LIMITATIONS

1. Allow new asphalt surface **21 days** to cure and new concrete 28 days to cure.
2. Do not use in temperatures below 55 degrees F or when rain or high humidity is imminent.
3. Ambient temperature must be 55 degrees F and rising.
4. Keep containers tightly closed when not in use.
5. Do not apply if surface temperature is in excess of 140 degrees F.
6. DO NOT ADD WATER.
7. KEEP FROM FREEZING. DO NOT STORE IN HOT SUN.

END OF SECTION

321823.3 ACRYLIC LATEX COATING

ACRYLIC LATEX COATING

1.1 DESCRIPTION

Plexichrome or equal is a 100% acrylic coating, highly pigmented to provide a colorful, long lasting finish on tennis courts and other types of recreational areas. Plexichrome or equal is used in the Plexipave or equal Color Surface System on asphalt and concrete tennis courts, and it is used on light-traffic areas, such as walkways, medians and berms, as an attractive weather- resistant coating. Plexichrome or equal protects asphalt from deteriorating effects of the sun and makes black surfaces 10-15 degrees cooler.

1.2 SURFACE USES

- On tennis courts, used as final finish coat over Plexipave or equal for a fast playing surface.
- Blended with Plexipave or equal Color Base or approved dry sands to make a job-mix Fortified Plexipave or equal as a colored textured coating.

1.3 APPLICATION

- For Plexichrome or equal finish coat-apply with squeegee and follow immediately behind with a wide hair-type push broom.
- Fortified Plexipave or equal filler coats and finish coats are applied with a 50 Durometer rubber squeegee only.

1.4 DRYING TIME

- Approximately 30 minutes to 1 hour for each coat.
- Ready to play within 24 hours.

1.5 COLOR RANGE

- Color(s) to be selected by Architect from full range of manufacturer's available standard colors.
- 10 selected colors: [Light Green, Dark Green, Florida Green, Red, Sahara Sand, Pacific Blue, Cape Gray, Brown, and Maroon].

1.6 COVERAGE

- Plexichrome or equal Finish: 20-25 square yards per gallon (.05-.04 gal/sq. yd.)
- Fortified Plexipave or equal : First coat- 10-15 yards per gallon (.1-.07 gal/sq. yd.)
  Second Coat-15-20 square yards per gallon (.07-.05 gal/sq. yd.)
  Third coat-20-25 square yards per gallon (.05-.04 gal/sq. yd.)

1.7 LIMITATIONS

1. Apply only when ambient temperature is 50 degrees F and rising.
2. No filling properties if surface texture and porosity varies.
3. Surface should not be powdery, cracked, or deteriorated.
4. Do not use on parking lots, and areas subject to serve usage or abrasion.
5. Do not apply when rain or high humidity is imminent.
6. Keep from freezing. Do not store in the hot sun.
7. Keep containers tightly closed when not in use.
8. The Plexipave or equal system will not prevent pavement cracks from occurring.

PART 2 – Mix Specifications

2.1 MIXES

Various mix designs available to adapt the texture and final speed of play:

Fast Play-Plexichrome or equal Finish

Plexichrome or equal	1 part
Water	1 part

Medium Play-Fortified Plexipave or equal

Color Base	30 gallons	Plexichrome or equal	30 gallons
Plexichrome or equal	20 gallons	*Sand(80-100 mesh)	240 lbs.
Water	20 gallons	Water	20 gallons

*Sand samples shall be submitted to CPC for approval prior to use. Sand shall be free of contaminants. OSHA regulations hall be strictly followed.

2.2 SPECIFICATIONS PLEXICHROME or equal COLOR FINISH FOR ASPHALT

A. Over asphalt and concrete surfaces such as walkways, recreational play areas, or as designated in the site plans, 2-coats of Plexichrome or equal Acrylic color finish shall be applied with wide hair-type push brooms or by a rubber squeegee followed by a wide hair-type push broom. Dilution rate shall not exceed 1 part Plexichrome or equal to 1 part water.

B. One coat shall be applied length wise on the surface and the second, laterally. The material shall be flowed-on freely, maintaining a wet edge in a continuous application to the opposite limit of the area.

C. Over tennis court surfaces-Two coats of Fortified Plexipave or equal shall be applied over properly prepare asphalt and concrete surfaces using Plexichrome or equal in one of these specified mixes. See CPC Specifications Section 10.18-10.19 for application procedures on asphalt and concrete bases. As a finish coat, one coat of Plexichrome or equal may be applied crosswise with a rubber squeegee followed by a wide hair-type broom.

D. The surface shall be of uniform porosity and free of any ridges or roller marks prior to application of Fortified Plexipave or equal or Plexichrome or equal. The finished surface shall be of new uniform color. All lines shall be painted with Plexicolor Line Paint or equal according to CPC Specifications Section 10.4. Solvent-type traffic paint shall not be used for line marking.

E. Materials specified for the Plexipave or equal System shall be delivered to the site in sealed, green painted containers, properly labeled with California Products Corporation labels and stenciled with the proper batch code numbers. Products packaged or labeled in any other manner will not be accepted. Mixing with clean fresh water shall only be done at the job site. Spreading rates are based upon material prior to mixing with water as directed.

END OF SECTION

321823.4 COLOR BASE

COLOR BASE

1.1 DESCRIPTION

Plexipave or equal Color Base is an asbestos free, naturally colored texture base used for mixing with Plexichrome or equal and water to produce Fortified Plexipave or equal. By adding appropriate amounts of each, the on-the-job determination of color will lower material coats and eliminate the need for warehousing large quantities of ready to use Fortified Plexipave or equal in different colors. With its filler properties, job mixed Fortified Plexipave or equal provides a durable, uniformly textured, medium play tennis surface.

The Plexipave or equal Color Finishing system can be used on properly prepared asphalt and concrete surfaces. Outdoor concrete must be constructed with a vapor barrier under the slab and have adequate perimeter drainage.

1.2 APPLICATION

Use 50 Durometer Flexible rubber squeegees for Fortified Plexipave or equal Filler Coats, and Fortified Plexipoave Finish Coats or equal.

1.3 DRYING TIME

- 30 minutes to one hour per coat
- A three-coat application in normal summer drying weather can often be made over a properly prepared surface in one day.
- Indoor applications require fans and good ventilation.

1.4 COLOR RANGE

Neutral (Color obtained by the addition of Plexichrome or equal.

1.5 COVERAGE

- First Coat: 10-15 sq. yds./gal. (.1-.07 gal/sq./yd.)
- Second Coat: 15-20 sq. yds./gal. (.07-.05 gal/sq. yd.)
- Third Coat: 20-25 sq. yds./gal. (.05-.04 gal/sq. yd.)
- Depending on surface porosity.

1.6 MIXES

Fortified Plexipave or equal: A 30:20:20 mix is used to obtain Fortified Plexipave or equal using 30 gallons of Plexipave or equal Color Base, 20 gallons of Plexichrome or equal, and 20 gallons of water. Mix may be adjusted depending on the porosity of the surface and ambient temperature at the time of applications.

1.7 LIMITATION

1. Apply only when ambient temperature is 50 degrees F and rising.
2. Do not apply when rain or high humidity is imminent.
3. Do not apply when surface temperature is in excess of 140 degrees F.
4. Allow asphalt to cure at least **21 days** before application
5. Allow concrete to cure 28 days. Do not sue curing agents or concrete hardeners.

PART 2 – SPECIFICATIONS

2.1 SCOPE

A. This specification pertains to the application of job-mixed Plexipave or equal Color Base and Plexichrome or equal over tennis courts and other recreational areas as designated in the Site Plans. The Material in colors indicated shall be for use over asphalt, concrete surfaces and must be equally durable over both. Special Binder and pigment content give excellent color development and durability.

2.2 SURFACE PREPARATION

A. Prior to applying this system, the net sleeves, center strap anchor and fencing shall be installed and approved by the owner.

B. The asphalt (or concrete) surface to receive the color finish shall be clean, sound, free of grease, oils, and other foreign materials and shall be to the grade and pitch shown in the plans.

C. Edges adjacent to buildings, curbing and landscaping not to be coated with this Color Finish System shall be adequately masked with tape or otherwise protected during these applications. The contractor shall also erect appropriate temporary barriers to protect the coatings during drying and curing periods.

D. New asphalt should cure approximately 14 days prior to the application of surfacing materials. New concrete should cure for 28 days. Concrete shall have a wood float of broom finish. DO NOT STEEL TROWEL. DO NOT USE CURING AGENTS OR

CONCRETE HARDNERS. Also, uncoated concrete surfaces must be acid washed with Concrete Preparer.

E. Repair all ridges, cracks and birdbath prior to the application of the surfacing material (See specification 10.14.) After patching, the surface shall not vary more than +1/8 in 10 ft. measured in any direction.

2.3 APPLICATION OF SURFACE FILLER COAT

A. Asphalt-Over asphalt; apply one to two coats of Acrylic Resurfacer or equal to provide a uniformly textured surface. Allow coats to thoroughly dry before the application of subsequent coats.

2.4 COLOR COAT APPLIATION

A. Over new asphalt or concrete surfaces that have been properly prepared, apply two coats of job mixed Fortified Plexipave or equal using a mix of Plexipave or equal Color Base and Plexichrome or equal (ColorBase:20 gallons; Plexichrome or equal: 20 gallons;

Water 20-22 gallons). All work shall be done by experienced, carefully trained workmen. The first coat shall be applied lengthwise of the court and the second coat, crosswise of the court.

B. The final finish coat shall be either Plexichrome or equal or Job Mix Fortified Plexipave or equal. For a Plexichrome or equal finish, mix 1 part Plexichrome or equal, 1 part of water and apply with a wide hair-type broom crosswise of the court.

For Job Mix Fortified Plexipave or equal use a mix of Plexipave or equal Color Base and Plexichrome or equal (Color Base: 30 gallons; Plexichrome or equal: 20 gallons; water: 20-22 gallons) The application shall be made crosswise of the court using a 50 durometer flexible rubber squeegee.

C. White lines conforming to U.S. Tennis Association specifications shall be laid-out and Plexicolor Line Paint or equal (100% acrylic latex) applied by brushing using masking tape or templates

PART 3 – GENERAL

3.1 GENERAL

A. Materials specified for the Color Finish System or equal shall be delivered to the site in sealed, properly labeled containers and water used in mixing shall be fresh and clear. Coverage rates are based upon manufacturer's material prior to mixing with water.

B. Upon completion, the contractor shall remove all containers, surplus materials and debris and leave the site in a clean and orderly condition acceptable to the owner. Gates shall be secured.

END OF SECTION

32 18 23.5 LINE PAINT

LINE PAINT

1.1 DESCRIPTION

A. High reflective marking paint for use over any bituminous surface or color coating system in recreational or light traffic areas. The finished application is non-glaring, highly resistant to climatic conditions, fast drying, easily applied and provides excelling hiding. Plexicolor Line Paint or equal will not cause crazing, cracking, peeling, or deterioration to asphalt that is typical of solvent-type traffic paints. Also available as a texture line paint coating fine silica fillers.

1.2 SPECIAL USES: Asphalt and color-coated concrete surfaces.

- Tennis Courts
- Play Areas
- Asphalt Shingles
- Curbs and Berms
- Running Tracks
- Parking Lots
- Restricted Travel Roadway (not subject to wet abrasion)

1.3 DESCRIPTION

- Brush
- Roller
- Spray and Marking Equipment
- Airless Spray

1.4 DRYING TIME

30 minutes to one hour- 1 coat

1.5 COLOR RANGE

Color(s) to be selected by Architect from full range of manufacturer's available standard colors. [White, Yellow, Red, Blue, Green, Orange, Black]

1.6 COVERAGE

Approximately 150-200 square feet per gallon.
(One gallon generally required for one doubles tennis court, 481 linear feet – 2" wide).

1.7 LIMITATIONS

1. Apply only when ambient temperature is 50 degrees F and rising.
2. Do not apply when rain or high humidity is imminent.
3. Not for application on general use roadways subjected to skidding tires, snowplows, or chains.
4. Keep from freezing. Do not store in hot sun.
5. Keep containers tightly closed when not in use.
6. Do not apply when surface temperature is less than 50 degrees F or more than 140 degrees F.
7. Allow asphalt to cure at least **21 days**.

PART 2 – SPECIFICATIONS

2.1 LINE PAINT SPECIFICATIONS

The Line Paint, as designated on drawings and in specifications, for use over asphaltic and tar emulsion surfaces including slurry coats, shall conform to the following characteristics and performance:

A. The paint shall be a 100% acrylic emulsion type containing no alkyds, butadiene styrene, or vinyls and shall be thinned with water only. The paint shall also be suitable for application by brush, spray, or roller.

B. All materials used in the manufacturing of paint shall be of good commercial quality entirely suitable for the purpose intended under normal conditions of use. For white color, the opaque portion of the pigment shall be rutile titanium dioxide and the vehicle shall consist of 100% acrylic polymer dispersed in water together with the minimum amounts of necessary additives; such as pigmented dispersants, anti-foaming agents, and preservatives; but no driers shall be used.

C. The white paint shall meet a minimum requirement of total solids (percent by weight or paint) of 51.5% and maximum pigment content (percent by weight of paint) of 36%. The white paint shall contain not less than three pounds per gallon of treated rutile titanium dioxide. A minimum fitness of grind of 4 and a viscosity (Krebs Units) of 80 minimum and 95 maximum is required. The paint shall brush easily and have good flowing, leveling, and spreading characteristics and shall be suitable for application by spray equipment or rollers.

D. This paint shall be suitable for use over all types of bituminous surfaces and when applied over emulsified asphalt, it shall not cause lifting, crazing, peeling, or other damage the base.

END OF SECTION

WHATCOM COUNTY
Planning & Development Services
5280 Northwest Drive
Bellingham, WA 98226-9097
360-778-5900, TTY 800-833-6384
360-778-5901 Fax

Mark Personius, AICP
Director

EXEMPTION FROM THE SHORELINE MANAGEMENT PROGRAM SUBSTANTIAL DEVELOPMENT PERMIT REQUIREMENT

SHX2023-00054

Applicant:	Sudden Valley Community Association c/o PNW Services, Inc. PO Box 30498 Bellingham, WA 98228
Project Description:	Repair of existing sports court in same footprint
Project Location(s):	10 Barn View Ct., Bellingham Section 08, Township 37N, Range 04E W.M.
Parcel Number:	370408318457
Adjacent Water Body:	Austin Creek
Shoreline Designation:	Urban
SEPA:	Categorically Exempt per WAC 197-11-800 – 3 - Repair, Remodeling and Maintenance

Pursuant to the Whatcom County Shoreline Management Program (SMP), Title 23, Section 23.60.022(B) allows for the maintenance and repair of lawfully established structures without the need for a Shoreline Substantial Development Permit if done to restore a development to a state comparable to its original condition within a reasonable period after decay or partial destruction except where repair causes substantial adverse effects to the shoreline resource or environment. Such repair can be in the form of complete replacement where such replacement is the common method of repair for the type of structure or development and the replacement structure is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to the shoreline resources or the environment.

It has been determined that the proposal is consistent with the above-referenced exemption and qualifies for review without the need to obtain a shoreline substantial development permit.

Note that an exemption from the substantial development permit process is not an exemption from compliance with shoreline regulations, or from any other regulatory

requirement. To be authorized, all uses and developments must be consistent with the policies and regulatory provisions of the SMP and the Washington State Shoreline Management Act (SMA). The Administrator may attach conditions to the approval of exempt developments and/or uses as necessary to assure consistency of the project with applicable shoreline regulations.

The requested Shoreline Exemption is approved subject to the attached conditions. Note that pursuant to WCC 23.60.150, a party with standing may be entitled to appeal this decision to the office of the Hearing Examiner. The application for appeal from the Shoreline Administrator's decision may be obtained at the PDS Office or online at https://www.whatcomcounty.us/920/Applications-FormsLinks. Such an appeal shall be filed within twenty (20) calendar days of this determination.

Official: Andrew Hicks
Title: Shoreline Administrator

Approved: June 1, 2023

CONDITIONS ASSOCIATED WITH SHX2023-00054

S100. The proposed work shall be consistent with the scope of the application materials provided and consistent with the site plan stamped "Site Plan Review Approval" and initialed by the Shoreline Administrator on June 1, 2023. Any changes will require additional review by the Whatcom County Shoreline Administrator.

S101. The sportscourt must be replaced within the same footprint, and shall not be any closer to Austin Creek than the existing court.

S101. Natural drainage patterns shall be maintained and discharges from the site shall occur at the natural location, unless it can be shown that relocation will have no significant adverse impact to either built or natural systems as a result of the relocation. (WCC20.80.634(1)(e))

S101. Proper Erosion Control measures shall be installed prior to any land alteration and maintained throughout the entire land disturbance / construction process. Any evidence of sedimentation shall be controlled and kept on site.

S101. Water from foundation excavation area shall not be pumped or directed offsite to any storm drain, ditch, or regulated Critical Area.

S102. Issuance of this shoreline permit does not release the applicant from any other Local, State, regional or Federal statutes or regulations applicable to the proposed development.

S104. The project shall not result in significant degradation of ground or surface waters and shall be completed during periods of dry weather.

S105. All construction debris shall be removed from the shoreline environment upon completion of the project and disposed of in accordance to all applicable regulations.

S106. Washington State Department of Ecology Water Quality Standards shall be maintained.

S107. The proposal must comply with all bulk and dimensional setback requirements as required by the Whatcom County Shoreline Management Program and the Whatcom County Zoning Code.

S108. Best Management Practices (BMPs) will be required in order to address any construction related impacts to water quality, the shoreline, and/or existing habitat.

S109. Construction shall be commenced within two (2) years of the effective date of this shoreline permit, and shall be completed in five (5) years. The Shoreline Administrator may grant a single extension for a period of not more than one (1) year based on a showing of good cause. Such request must be filed with the Shoreline Administrator before the expiration date described above.

S110. Should archaeological resources (e.g. shell midden, faunal remains, stone tools) be observed during project activities, all work in the immediate vicinity should stop, and the area should be secured. The Washington State Department of Archaeology and Historic Preservation (Local Government Archaeologist 360-586-3088) and the Lummi Nation Tribal Historic Preservation Office (Lena Tso, THPO 360-312-2257; Tamela Smart, Deputy THPO 360-312-2253) should be contacted immediately in order to help assess the situation and to determine how to preserve the resource(s). Compliance with all applicable laws pertaining to archaeological resources is required. If ground disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance. The finding of human skeletal remains will be reported to the county medical examiner/coroner and local law enforcement in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation (DAHP) who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and the affected tribes. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

S601. No more than 500 sq. ft. of soil in total shall be exposed from October 1 through May 31 in the Lake Whatcom, Lake Samish, and Lake Padden Watersheds.

S602. All exposed soils shall be covered within 48 hours. After construction is complete, all disturbed soils shall be permanently stabilized.

S603. Revegetation of areas disturbed is the preferred method of stabilization. All revegetation within buffers shall be native.

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: **February 22, 2024**

Subject: **Capital Request – 2024 Road & Drainage Construction**

Purpose

To request construction funding for 2024 Road & Drainage projects.

Background

On August 10, 2023 Sudden Valley Community Association (SVCA)'s Board of Directors approved capital code 9923.5 to proceed for designing and permitting the 2024 Road & Drainage project. Design and permitting will be finished this month, and this capital request is for construction funding. SVCA's 2024 budget included $234,000 for Deer Run Lane Asphalt Overlay, and an additional $624,000 to replace 48 culverts. Combined, these projects total $858,000. In addition, SVCA carried $354,759 forward from 2023's road budget. This provides SVCA with a total of $1,212,759 to be used towards the 2024 Road & Drainage projects.

Analysis

SVCA proposes to complete the following projects within this overall funding request:

- $1,018,836.11 is requested for Deer Run Lane asphalt improvements and replacement of 53 culverts per PNW's summary dated February 8, 2024.
- $30,000 to complete the Cold Spring Drainage Repair that has been designed and permitted under capital code 9922.8. This project was expected to complete in 2023 but delayed due to permitting.
- $15,000 to renew SVCA's Programmatic Permit with Whatcom County per Impact Design's proposal dated 2-8-24.
- $15,000 to renew SVCA's 5-year permit with Whatcom County for maintaining the gravel surfaces at the marina parking lot, clubhouse parking lot, and trail around Lake Louis. This budget is based on Impact Design's proposal for renewing the programmatic permit plus a 50% contingency as the proposal hasn't been received yet.
- $67,880.16 Contingency as identified on PNW's proposal.

Proposal

Authorize $1,018,836.11 from Roads per PNW's summary dated February 8th, 2024 for Deer Run Lane and replacement of 53 culverts.

Authorize $30,000.00 from Roads for completing Cold Spring Drainage Improvements.

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Authorize $30,000 for the renewal of 5-year Programmatic Permit, and renewal of 5-year permit with Whatcom County for allowance to maintain gravel surfaces at 3 locations per PNW's summary dated February 8th, 2024.

Authorize $34,119.05 from Roads as contingency per PNW's summary dated February 8th, 2024.

Motion 1
Move that the SVCA Board of Directors approve the allocation of $1,018,836.11 from 2024 Capital Budget for Roads per PNW's summary dated February 8, 2024 for Deer Run Lane and replacement of 53 culverts.

Motion 2
Move that the SVCA Board of Directors approve the allocation of $30,000.00 from 2024 Capital Budget for Roads for completing Cold Spring Drainage Improvements.

Motion 3
Move that the SVCA Board of Directors approve the allocation of $30,000 from the 2024 Capital Budget for Roads for the renewal of 5-year Programmatic Permit, and renewal of 5-year permit with Whatcom County allowance maintenance of gravel surfaces at 3 locations per PNW's summary dated February 8th, 2024.

Motion 4
Move that the SVCA Board of Directors approve the allocation of $34,119.05 from 2024 Capital Budget for Roads as contingency per PNW's summary dated February 8th, 2024, and authorize the Maintenance & Facilities Manager to direct these funds.

February 8, 2024

Sudden Valley Community Association
Attn: Michael Brock
4 Clubhouse Circle
Bellingham, WA 98229

RE: Project Scope Letter
2024 Road & Drainage Project

PNW is providing this overall project scope letter to SVCA for the 2024 Road and Drainage project. This project was approved on 8-10-23 to have design and permitting take place under capital code 9923.5. Design and permitting is wrapping up this month, and this capital request is requesting construction funding for the proposed projects. SVCA's 2024 budget identifies $858,000.00 available in funds plus an additional $354,759.00 that was carried forward from the 2023 Road's budget for a combined total of $1,212,759.00. The initial 2024 budget assumed asphalt repairs and overlay to Deer Run Lane, and replacing 48 culverts. The carry over funds from 2023 are intended to cover the following additional items:

- Culvert #4 design and permitting for replacement with a bridge in 2025.
- Construction to complete the Cold Spring Drainage Repair designed and permitted under capital code 9922.8.
- 5 additional culverts identified by Impact Design for replacement in 2024.
- Renewing SVCA's 5-year Programmatic Permit with Whatcom County.
- Renewing SVCA's 5 year permit with Whatcom County that allows gravel surfaces to be maintained at the marina parking lot, clubhouse parking lot, and Lake Louis Trail.
- Contingency funds for construction if bid prices exceed the preliminary budget allowances.

The following is a budget summary of each project proposed:

- $250,261.11 – Deer Run Lane – This budget was provided by Impact Design to repair existing asphalt defects, and then overlay the road. This project models what SVCA completed at Cascade Lane and Green Hill in 2022. Reference attached engineer's estimate dated 2-8-24.
- $724,450.00 – Replace 53 culverts identified on the attached spreadsheet provided by Impact Design.
- $99,803.84 – Culvert #4 design and permitting. This scope of work has been submitted under a separate capital request, but is funded as part of the 2023 carryover allowance.
- $30,000.00 – Construction of the Cold Spring Drainage Repair that was designed under capital code 9922.8. This project was originally scheduled to be completed in 2023, but was delayed due to permit approvals. Permit approvals are expected this spring, and this project is proposed to be part of this year's project.
- $15,000.00 – Renewal of SVCA's Programmatic permit with Whatcom County per Impact Design's proposal dated 2-8-24. This is a 5-year permit that allows SVCA to complete simple projects under just a Notice of Activity (NOA) permit. This

significantly streamlines the permit process for SVCA, and saves a substantial amount of time and expense each year. A few examples of simple projects this permit covers:
    - Road repairs with full asphalt replacement less than 1,500SF.
    - Asphalt repairs consisting of grinding and patching or asphalt overlay projects.
    - Culvert replacements not adjacent to creeks, wetlands, etc.
    - Culvert cleaning and ditching maintenance.
- $15,000.00 – Renewal of SVCA's 5-year permit with Whatcom County that allows the gravel surfaces to be maintained at the marina parking lots, clubhouse parking lot, and Lake Louis Trail. A proposal from Impact Design hasn't been received. This budget allowance matches the Programmatic permit renewal estimate as the scope of work is similar.
- The balance of funds is proposed to be contingency if construction costs exceed the preliminary budgets. If any of the contingency is remaining after these projects are completed in 2024, it is recommended that money either be used to complete additional ditching improvements required, be used to replace additional culverts in 2024, or carry forward towards SVCA's 2025 road and drainage project.

Summary of anticipated costs:

2024 Road & Drainage Projects	
- Deer Run Lane Asphalt Improvements per Impact Designs engineer's estimate dated 2-8-24.	$250,261.11
- Replacement of 53 culverts per Impact Designs attached spreadsheet.	$724,450.00
- PNW Services Inc. – Construction management of Deer Run Lane and replacement of 53 culverts per attached spreadsheet.	$37,125.00
- Impact Design Allowance – Paint asphalt repair locations prior to overlay, and answer any construction questions.	$3,000.00
- Testing Allowance – Asphalt overlay installation.	$4,000.00
Subtotal – Deer Run Lane & Culvert Replacements	**$1,018,836.11**
- Culvert #4 Design & Permitting – This is covered under a separate capital request, and no funding is needed as part of this capital request.	$0.00
- Cold Spring Drainage Repair – Allowance carried forward from 2023.	$30,000.00
- Renewal of 5-Year Programmatic Permit per Impact Design's proposal dated 2-8-24.	$15,000.00
- Renewal of 5-Year permit with Whatcom County to maintain gravel surfaces at 3 locations identified above.	$15,000.00
Subtotal of Other 2024 Projects	**$60,000.00**
Total of Proposed Projects	**$1,078,836.11**

Contingency Balance – Combined 2023 and 2024 Funds Available $1,212,759.00 less $99,803.84 for Culvert #4 less 2024 Proposed Projects $1,061,336.11	$34,119.05
Total Capital Request	**$1,112,955.16**

Please let me know if you have any questions, or if you would like any further information.

Sincerely,

Tyler Andrews
President

Deer Run Lane Roadway Repair and Maintenance

Engineer's Estimate

February 8, 2024

Estimate Prepared by:
Impact Design, LLC
5426 Barrett Road, Suite A103
Ferndale, WA 98248
Phone: (360) 389-8138

Client:
Tyler Andrews
PNW Services, Inc.
PO Box 30498
Bellingham, WA 98228

		ESTIMATED CONSTRUCTION COST			
NO.	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
Construction Costs					
1	MOBILIZATION	1	L.S.	$19,000.00	$19,000.00
2	PROJECT TEMPORARY TRAFFIC CONTROL	1	L.S.	$20,000.00	$15,000.00
3	REMOVAL OF STRUCTURES AND OBSTRUCTIONS INCL. SAWCUTTING	1	L.S.	$4,600.00	$4,600.00
4	BITUMINOUS GRINDING	1100	S.Y.	$30.00	$33,000.00
5	ROADWAY EXCAVATION INCL. HAUL	60	C.Y.	$90.00	$5,410.00
6	HMA CL 1/2-IN PG 64-22	521	TON	$200.00	$104,147.50
7	RAISE CASTING TO GRADE	10	EA.	$500.00	$5,000.00
8	MINOR DRAINAGE IMPROVEMENTS ALONG ROADWAY SHOULDER	1	L.S.	$10,000.00	$10,000.00
9	TEMPORARY EROSION AND SEDIMENT CONTROL	1	L.S.	$5,000.00	$5,000.00
10	PROJECT SURVEY SUPPORT	1	L.S.	$9,500.00	$9,500.00
	Subtotal				*$210,657.50*
	Tax @ 8.8%				*$18,537.86*
	10% Contingency				*$21,065.75*
PROJECT TOTAL					**$250,261.11**

2-8-2024

Culvert ID	Zone Number	Approximate Address	Culvert Length (ft.)	Culvert Diameter (in.)	Culvert Material	Estimated Cost
403	Zone 9	230 Polo Park Dr	59	18	CMP	$ 14,750.00
404	Zone 9	230 Polo Park Dr	79	18	CMP	$ 19,750.00
FND67	Zone 1	Gate 1 Mailbox Entrance	39	12	CMP	$ 7,800.00
FND 68.2	Area Z	Maintenance Parking	12	12	CPP	$ 2,400.00
FND 68.3	Area Z	Maintenance Parking	90	12	PVC/CPP	$ 18,000.00
FND 68.4	Area Z	Btwn Maintenance/Tall Barn	40	12	CPP	$ 8,000.00
FND 68.1	Area Z	Toward Community Garden	37	12	CMP	$ 7,400.00
FND 21.2	Zone 3A	Newberry Ct	27	18	CMP	$ 6,750.00
205	Zone 3A	15 Spring Rd	40	24	CMP	$ 10,000.00
176	Zone 3B	24 Lost Fork Ln	50	12	CMP	$ 10,000.00
432 433	Zone 3B	13 Strawberry Cyn Ct	46	18	CMP	$ 11,500.00
402	Zone 3B	7 Lost Fork Ln	39	24	CMP	$ 9,750.00
103	Zone 3C	142 Harbor View Dr	42	24	CMP	$ 10,500.00
99	Zone 3C	28 Plum Ln	51	12	CMP	$ 10,200.00
214	Zone 3C	46 Maple Ct	67	18	CMP	$ 16,750.00
122	Zone 3D	2 Rocky Ridge Dr	29	18	CMP	$ 7,250.00
117	Zone 3D	54 Harbor View Dr	35	18	CMP	$ 8,750.00
FND 30	Zone 3D	99 Harbor View Dr	39	18	CMP	$ 9,750.00
111	Zone 3D	113 Harbor View Dr	40	18	CMP	$ 10,000.00
109	Zone 3D	55 Green Hill Rd	41	18	CPP/CMP	$ 10,250.00
120	Zone 3D	10 Harbor View Dr	42	18	CMP	$ 10,500.00
118	Zone 3D	46 Harbor View Dr	43	18	CMP	$ 10,750.00
110	Zone 3D	125 Harbor View	52	18	CMP	$ 13,000.00
39	Zone 9	8 Horseshoe Cir	34	12	CMP	$ 6,800.00
27	Zone 13	66 Polo Park Dr	39	12	CMP	$ 7,800.00
20	Zone 13	168 Polo Park Dr	42	12	CPP/CMP	$ 8,400.00
55	Zone 13	5 River Ridge Loop	45	12	CMP	$ 9,000.00
78	Zone 13	29 Sunnyside Ln	50	18	CMP	$ 12,500.00
1	Zone 13	150 Polo Park Dr	54	18	CMP	$ 13,500.00
25	Zone 13	3 Huckleberry Ct	60	24	CMP	$ 15,000.00
431	Zone 13	29 Lost Lake Ln	75	18	CMP	$ 18,750.00
13	Zone 5	18 Big Leaf ln	60	24	CMP	$ 15,000.00
157	Zone 1	5 North Point Dr	30	12	Green PVC/CM	$ 6,000.00
144	Zone 1	26 Longshore Ln	31	12	CMP	$ 6,200.00
155	Zone 1	83 Windward Dr	35	12	CMP	$ 7,000.00
FND 49	Zone 1	17 Marina Dr	40	12	CMP	$ 8,000.00
139	Zone 1	17 Clear Lake Ct	40	12	CMP	$ 8,000.00
FND 53	Zone 1	142 Windward Dr	41	12	CMP	$ 8,200.00
142	Zone 1	65 Windward Dr	45	12	CMP	$ 9,000.00
415	Zone 1	28 Windward Dr	53	12	CMP	$ 10,600.00
FND 48	Zone 1	20 Par Ln	55	12	CMP	$ 11,000.00
FND 45	Zone 2	23 Sunflower Cir	20	12	CMP	$ 4,000.00
75	Zone 2	43 Marigold Dr	40	12	CMP	$ 8,000.00
203	Zone 2	14 Lake Louise Dr	61	18	CMP	$ 15,250.00
63	Zone 2	52 Lake Louise Dr	70	18	CMP	$ 17,500.00
143	Zone 1	26 Longshore Ln	82	12	CMP	$ 16,400.00

133	Zone 3C	4 North Summit Dr	83	24	CMP	$ 20,750.00
FND 62	Zone 2	3 Barn View Ct	83	12	CMP	$ 16,600.00
410	Zone 2	22 Lake Louise Dr	120	12	CMP	$ 24,000.00
126	Zone 3D	1 Sudden Valley Dr	120	18	CMP/CPP	$ 30,000.00
445	Zone 2	20 Lake Louise Dr (Outlet)	200	12	CMP	$ 40,000.00
FND 42	Zone 2	6 Lake Louise Dr	254	12	CMP	$ 50,800.00
FND 61	Zone 2	37-30 Marigold Dr	283	12	CMP	$ 56,600.00
Totals			3284			$ 724,450.00

Sudden Valley Community Association

2024 Road & Drainage Project

PNW Estimate - Bid Package, Permitting, and Construction Management

Task	Description	Hours	Estimated Cost
Design Oversight			
	Completed under separate proposal.	0	
	Total Estimated Design Oversight Hours	0	**$** -
Permitting			
	Completed under separate proposal.	0	
	Total Estimated Permitting Cost	0	**$** -
Contractor Bids			
	Completed under separate proposal.	0	
	Total Estimated Bid Package Hours	0	**$** -
Construction Management			
	Contract award, preconstruction meeting, and initial project coordination.	6	
	Deer Run Lane - General project oversight - prep and cleanup.	8	
	Deer Run Lane - Asphalt grinding and asphalt placement - full time supervision assumed for 4 working days.	40	
	Culverts - Initial coordination and site reviews with contractor.	16	
	Culverts - Part time oversight assumed for replacement of 53 culverts. Duration assumed at 40 working days for 5 hours per day.	200	
	Project closeout.	5	
	Total Estimated Construction Management Hours	275	**$ 37,125.00**
	Total Estimated		**$ 37,125.00**

February 8, 2023

Tyler Andrews
PNW Services, Inc
PO Box 30498
Bellingham, WA 98228
360-739-2072

RE: Sudden Valley Community Association
5-Year Programmatic Permit Update

Thank you for the opportunity to submit a proposal to update the 5-Year Programmatic Permit Update. The existing document that has been accepted by the Whatcom County will expire at the end of 2024. This document was created 5 years ago and was intended to be used for stormwater maintenance. Since then, this permit has been used for many other types of maintenance and repair in Sudden Valley that has saved substantial time and costs from permit fees and consultant permit preparation costs.

The intention of this proposal is to expand the scope and reach of the 5-Year Programmatic Permit to allow for even more projects to be permitted *faster and more efficiently.* We will attempt to include projects within the shorelines jurisdiction, projects that include roadway focused repairs, larger culvert replacements, emergency projects, in-stream repairs and other work.

We propose to conduct the permit support for this project on a Not To Exceed basis in accordance with the rate sheets attached and a budget of **$15,000.**

Scope of Work:

Impact Design will provide an updated 5-Year Programmatic Permit document to be submitted to Whatcom County including the following Whatcom County Land Use Permits under its umbrella:

- Programmatic Land Disturbance Permit
- Programmatic Shorelines Permit
- Programmatic SEPA Process
- Programmatic Whatcom County Critical Areas Permit

- Programmatic Typical Temporary Erosion and Sedimentation Control Plan
- Programmatic Typical Stormwater Pollution and Prevention Control Plan
- Programmatic Typical Ditch and Culvert Details
- Programmatic Typical Project and Process
- Programmatic Phosphorous Mitigation Plan complying with Whatcom County Code 20.51

It is assumed that there will be several meetings with Whatcom County Planning and the Whatcom County Public Works Stormwater Division to discuss the details of this proposal.

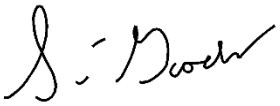
Excluded Scope: Survey or GIS work, geotechnical work, environmental work, permit fees, traffic studies, critical areas work, structural engineering, architectural design, title reports, construction support and as-built drawings are not included in this scope.

Not To Exceed: This proposal is for a time and materials budget based on the attached rate sheet. The total estimated cost to complete the contract is **$15,000.**

_____ _____

Name Date

I am available and ready to get started on this project,



Scott Goodall, MS, PE
Principal
Impact Design, LLC

IMPACT DESIGN

2024 Rate Sheet

Office	Hourly Rate
Principal Engineer	$140
Design Engineer/Landscape Architect	$125
Engineering Technician	$90
CAD Technician (Level 1)	$70

Field	Hourly Rate
Construction Inspection	$90
Drone Pilot (UAV Certified)	$90
Photogrammetry Technician	$75

Sub-Consultants	**15% Markup**
Equipment	**15% Markup**
Travel Expenses	**15% Markup**
Mileage	**$0.50 / Mile**

Impact Design, 5426 Barrett Road, Ferndale WA 98248

cell: (360) 389-8138 email: scott@bold-impact.com

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: **February 22nd, 2024**

Subject: **Capital Request – 2024 Bridge Designs**

Purpose
To request funding for the 2024 Bridge Designs project.

Background
The Ten-Year Road & Drainage Plan calls for work to begin on the replacement of the Area Z Access Bridge (Bridge #2) and Culvert #4 in 2024. Sudden Valley Community Association (SVCA)'s 2024 budget includes $31,200.00 for design and permitting of the Area Z Access Bridge (Bridge #2) but does not include funding for Culvert #4 because the final Ten-Year Plan was not available when the budget was finalized. Work on Culvert #4 was estimated by Impact Design at $86,500 but the estimate didn't include utility coordination. PNW's summary dated February 6, 2024, (attached) identifies specifics for both bridges and summarizes the proposed expenses.

Analysis
As described in the Background section of the Road & Drainage Project Capital Request memo dated February 22, 2024, there are unspent funds from the 2023 Capital Budget for Roads that we propose to carry forward to the 2024 budget.

PNW's attached summary recommends SVCA proceed with design and permitting of both locations in 2024. Both locations cross Beaver Creek and are in close proximity. This creates efficiency:

- One set of permits can apply to both locations.
- 1 hydrologic analysis can be completed and applied to both locations.
- Geotechnical borings can be completed at the same time saving mobilizations, and only 1 report will need to be prepared.
- Bridge designs are anticipated to be similar allowing shared details – utility hangers, etc.

PNW's summary identifies a projected design and permitting budget of $131,003.84 to complete both locations. SVCA's 2024 budget included $31,200.00 for Area Z Access Bridge as noted above leaving a difference of $99,803.84. We propose to take the needed $99,803.84 from the $354,759.00 carry over. This would leave a balance of $254,955.16 to be added to the 2024 Road and Drainage project proposed.

Sudden Valley Community Association

360-734-6430
4 Clubhouse Circle Bellingham, WA 98229
www.suddenvalley.com

Proposal

Authorize $131,003.84 from Roads per PNW's summary dated February 6th, 2024, for design and permitting to replace the Area Z Access Bridge, and Culvert #4, and authorize the General Manager to execute contracts with the following vendors:

- Chinook Engineering – Design and Permitting
  - $38,810.00 – Area Z Access Bridge
  - $38,810.00 – Culvert #4 Replacement with Bridge
- $13,000.00 NW Geologic PLLC – Geotechnical Exploration

Motion 1

Move that the SVCA Board of Directors approve the allocation of $131,003.84 from the 2024 Capital Budget for Roads for design and permitting per PNW's summary dated February 6, 2024, for the 2024 Bridge Design project.

Motion 2

Move that the SVCA Board of Directors authorize the General Manager to execute contracts with Chinook Engineering per their proposals dated February 2nd, 2024, with total amounts not to exceed $77,620.

Motion 3

Move that the SVCA Board of Directors authorize the General Manager to execute a contract with NW Geologic PLLC per their proposal dated February 5, 2024, with a not to exceed amount of $13,000.00.

Approvals

Motion 1

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

Motion 2

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

Motion 3

Approved: _____ Not Approved: _____ SVCA Finance Committee

Sudden Valley Community Association

360-734-6430
4 Clubhouse Circle Bellingham, WA 98229
www.suddenvalley.com

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

February 6, 2024

Sudden Valley Community Association
Attn: Michael Brock
4 Clubhouse Circle
Bellingham, WA 98229

RE: Project Scope Letter
2024 Bridge Designs

PNW is providing this overall project scope letter to SVCA for the 2024 Bridge Designs project. This project is proposed to replace an existing bridge, and replace a large culvert with a bridge. Specifically:

- Area Z Access Bridge (Road Bridge #2) – This bridge is located off Honeycomb Lane to access Area Z. The bridge is used by the maintenance department regularly for quick access to gates 3, 9, 13, and by community members to access the community gardens. The bridge is at the end of its life cycle, and currently has a 5-ton weight rating. This substantially limits the vehicles that can travel over it, and with continued deterioration the weight rating capacity will continue to decline.
- Culvert #4 Replacement with Bridge (Road Bridge #5) – Currently this is an 8' diameter corrugated metal arch culvert identified in SVCA's new 10-Year Road and Drainage plan prepared by Impact Design that needs replacement. The new 10-year plan identifies replacing this large culvert with a pre-engineered metal bridge. This is located on Polo Park Drive between the intersections of Lost Lake Lane and Sunnyside Lane. The bridge didn't have capacity to handle the water volume during the November, 2021, flood event leading to a road failure and emergency repair. In addition, the culvert is substantially rusted out.

SVCA's 2024 budget identified $31,200.00 for design and permitting of the Area Z Access Bridge. The 2024 budget was based on a memo from Impact Design dated 6-30-23 that gave SVCA budget parameters until the 10-year plan was completed. When this memo was prepared, Impact Design didn't know Culvert #4 needed replacing. The memo identified rebuilding Deer Run Lane, and replacing many other storm drainage culverts in 2024, see attached. The new 10-year plan that was finished in October, 2023, is planned to be incorporated into SVCA's 2025 budget, and be incorporated into the reserve study update in 2024. Reference attached for Impact Design's 10-year summary table.

The 10-year plan update included a preliminary engineer's estimate for replacing Culvert #4, see attached. This budget identified $86,500.00 for design/permitting, and under construction, line 26, identified a LWWSD (Lake Whatcom Water & Sewer) budget of $30,000 for DEA (Developer Extension Agreement) and oversight. LWWSD's participation is required to relocate the waterline. A portion of the LWWSD budget is needed for establishing the DEA, and completing design review. The balance is related to construction oversight.

Bridge design and permitting requires a substantial amount of time – geotechnical borings and soils report, survey, design, and permitting. All of this combined could take up to a year on average. The permitting is the largest time component, and will likely take 6 months if not longer to complete. As stated previously, Culvert #4 failed during the November, 2021, flood event because it didn't have the capacity to allow the required volume of water through. When this occurred, it washed out part of Polo Park Drive, and required an emergency repair. PNW is recommending a portion of the SVCA 2024 Road/Drainage budget be used to supplement the design funds needed for Culvert #4. Impact Design has indicated their overall plan has some flexibility, and if all the 2024 culverts proposed aren't completed, they would shift some projects to the next available year when more funds are available. Impact Design agrees that potentially shifting a few of the smaller culverts to a later year is better than shifting the design for replacing Culvert #4. The basic logic is, if a small culvert fails it is simple to fix generally speaking. However, if Culvert #4 failed, it would close a major road, Polo Park Drive, and require this year long process to start plus ordering a bridge and construction.

The intent with completing the design and permitting for both projects in 2024 is to allow the projects to go to bid during January or February of 2025. This would allow contract award by March, and enough time to order pre-engineered bridges to arrive for summer 2025 construction as planned. In addition, design and permitting both projects at once has a substantial savings for SVCA as the same permits will apply to both locations, same hydrologic analysis, etc. A few details regarding each bridge proposed:

- Area Z – Road Bridge #2
    - The new bridge design will slightly lengthen the existing span and straighten the bridge out so there isn't a turn onto the bridge from Honeycomb Lane.
    - There is one utility hanging on this bridge. It will be temporarily suspended during construction, and then mounted onto the new bridge.
- Culvert 4 Replacement with Bridge (Road Bridge #5)
    - The creek will have a diversion installed for construction, and the existing corrugated metal culvert will be removed.
    - A channel will be excavated to be similar in width to the existing creek above and below the current culvert. Utilities will be temporarily supported during this phase.
    - A bridge will be constructed and utility lines will be hung from the bridge. This will include water, communications, and power lines.
    - During construction Polo Park Drive will be closed and traffic detoured around.

Summary of anticipated costs:

Design & Permitting Scope	
- Chinook Engineering – Area Z Access Bridge	$38,810.00
- Chinook Engineering – Culvert 4 Replacement to SVCA Bridge #5	$38,810.00
- NW Geologic PLLC – Geotechnical Borings and Design Report	$13,000.00
- PNW Services, Inc. – Per Attached	$7,425.00
- Permit Fees Allowance	$4,000.00

- LWWSD – DEA & Design (Construction oversight not included) Allowance per Attached	$12,049.40
- Utility Companies – Allowance for design reviews and coordination to hang utilities on bridges. (Construction assistance not included)	$5,000.00
Total Design & Permitting	**$119,094.40**
Contingency at 10%	$11,909.44
Total with Contingency	**$131,003.84**
Contractor Bids & Construction	
- Under Separate Proposal	

Chinook Engineering completed design and permitting for SVCA's 8th Hole Golf Course Bridge Replacement project in 2022. A comparison quote was requested from Impact Design, and their estimate matched what was in the 10 Year plan. Chinook Engineering provided 2 quotes for completing the geotechnical scope of work ($25,000 Palmer Geotechnical Consultants, and $45,000 Aspect Engineering). PNW reached out to NW Geologic who has previously done a lot of geotechnical work for SVCA, and requested a quote. The quote came back substantially less and is included above. Chinook Engineering's proposal assumes design and permitting is completed for both bridges at the same time, and that is why the proposals match. The total amount of work required was determined, and then split between the 2 locations.

Please let me know if you have any questions, or if you would like any further information.

Sincerely,

Tyler Andrews
President

Technical Memorandum

SVCA 10-Year Capital Plan 2023 & 2024 Projects

June 30th, 2023

Tyler Andrews
PNW Services, Inc.
PO Box 30498
Bellingham, WA 98228

Re: Technical Memorandum
SVCA 10-Year Capital Plan, 2023 Culvert Projects & 2024 Culvert/Road Projects.

The purpose of this Technical Memorandum is to give recommendations for the 2023 and 2024 infrastructure improvement projects and to give a preliminary cost estimate as a means to review the planned yearly budget amounts. Based on Impact Designs completed field investigation of the Sudden Valley Community Association roadway and drainage infrastructure for the 10-year Capital Improvements project, we found a total of 58 drainage culverts that appear to be in critical condition.

2023 Culvert Projects:

The following 10 culverts were found to be in the greatest critical condition and are recommended to be replaced this year. We estimate each project will have a cost of approximately $10,000 - $15,000 each depending on material/diameter/length. This gives a project budget range of $100,000 - $150,000 total.

Culvert ID	Zone Number	Road Name	Approximate Address	Culvert Length (ft.)	Culvert Diameter (in.)	Culvert Material
11	Zone 5	Big Leaf Ln	15 Big Leaf Ln	55	18/12	CMP
15	Zone 5	Shetland Ct	19 Tumbling Water Dr	58	12	CMP
17	Zone 5	Shetland Ct	3 Shetland Ct	41	18	CMP
FND 13	Zone 13	Yearling Pl	5 Meadow Ct	28	12	CMP
28	Zone 13	Granite Cir	67 Polo Park Dr	46	24	CMP
403	Zone 9	Polo Park Dr	230 Polo Park Dr	59	18	CMP
162	Zone 3B	Kinglet Ct	188 Sudden Valley Dr	41	12	CMP
FND 67	Zone 1	Gate 1 Mailboxes	Gate 1 Mailboxes	39	12	CMP
63	Zone 2	Lake Louise Dr	52 Lake Louise Dr	70	18	CMP
408.2	Zone 2	Larkspur Ct	7 Larkspur Ct	17	12	CMP

2024 Culvert Projects:

The following 48 culverts were all found to have a critical barrel condition and should be prioritized for the 2024 maintenance projects. All the culverts below appear to be simple conveyance pipes for roadway crossings, and do not have fish bearing capacity. We estimate each project will cost approximately $10,000 - $15,000 each depending on material/diameter/length. This gives a project a budget range of $490,000 - $735,000 total.

Culvert ID	Zone Number	Road Name	Approximate Address	Culvert Length (ft.)	Culvert Diameter (in.)	Culvert Material
66	Zone 5	Louis View Dr	20 Louise View Dr	62	18	CMP
67	Zone 5	Sweetclover Cir	12 Sweetclover Cir	48	12	Inlet-Concrete Pipe/Outlet-CMP
58	Zone 5	Louis View Dr	1 Catkin Ct	48	12	CMP
1	Zone 13	Polo Park Dr	150 Polo Park Dr	54	18	CMP
78	Zone 13	Sunnyside Ln	29 Sunnyside Ln	50	18	CMP
431	Zone 13	Lost Lake Ln	29 Lost Lake Ln	75	18	CMP
27	Zone 13	Misty Ridge Ct	66 Polo Park Dr	39	12	CMP
404	Zone 9	Polo Park Dr	230 Polo Park Dr	79	18	CMP
205	Zone 3A	Spring Rd	15 Spring Rd	40	24	CMP
406	Zone 3A	Rocky Ridge Dr	30 Rocky Ridge Dr	109	12	CMP
171	Zone 3B	Stable Ln	32 Stable Ln	32	12	CMP
178	Zone 3B	Canyon Ct	23 Canyon Ct	39	12	CMP
176	Zone 3B	Tawny Cir	24 Lost Fork Ln	50	12	CMP
432 433	Zone 3B	Strawberry Cyn Ct	13 Strawberry Cyn Ct	46	12 18	CMP
103	Zone 3C	Amberland Way	142 Harbor View Dr	42	24	CMP
99	Zone 3C	Plum Ln	28 Plum Ln	51	12	CMP
214	Zone 3C	Maple Ct	46 Maple Ct	67	18	CMP
126	Zone 3D	Sudden Valley Dr	1 Sudden Valley Dr	120	18/12	CMP/CPP
89	Zone 3D	Indian Ridge Ct	39 Sudden Valley Dr	86	12	CMP
FND 38	Zone 3D	Indian Meadow Ct	1 Indian Meadow Ct	35	12	CMP
118	Zone 3D	Harbor View Dr	46 Harbor View Dr	43	18	CMP
117	Zone 3D	Harbor View Dr	54 Harbor View Dr	35	18	CMP
120	Zone 3D	Harbor View Dr	10 Harbor View Dr	42	18	CMP
FND 30	Zone 3D	Harbor View Dr	99 Harbor View Dr	39	18	CMP
109	Zone 3D	Green Hill Rd	55 Green Hill Rd	41	18	CPP/CMP
111	Zone 3D	Harbor View Dr	113 Harbor View Dr	40	18	CMP
122	Zone 3D	Rocky Ridge Dr	2 Rocky Ridge Dr	29	18	CMP
FND 48	Zone 1	Par Ln	20 Par Ln	55	12	CMP
147	Zone 1	Par Ln	20 Par Ln	20	12	CMP

441	Zone 1	Jubilee Ln	3 Jubilee Ln	59	12	CMP
148	Zone 1	Par Ln	11A Par Ln	189	12	CMP
415	Zone 1	Birdie Ln	28 Windward Dr	53	12	CMP
143	Zone 1	Inlet Cir	26 Longshore Ln	82	12	CMP
144	Zone 1	Inlet Cir	26 Longshore Ln	31	12	CMP
145	Zone 1	Spinnaker Ln	17 Marina Dr	72	12	CPP/CMP
FND 49	Zone 1	Marina Dr	17 Marina Dr	40	12	CMP
157	Zone 1	North Point Dr	5 North Point Dr	30	12	Green PVC/CMP
FND 52	Zone 1	Sanwick Pt Ct	36 North Point Dr	43	12	Concrete Pipe/CPP
81	Zone 2	Lake Louise Dr	1 Sparrow Ct	61	18	CMP
408.1	Zone 2	Larkspur Ct	7 Larkspur Ct	19	12	CMP
409	Zone 2	Whispering Cedars	Whispering Cedars Entrance	N/A	24	CMP
410	Zone 2	Lake Louise Dr	22 Lake Louise Dr	120	12	CMP
203	Zone 2	Lake Louise Dr	14 Lake Louise Dr	61	18	CMP
FND 61	Zone 2	Marigold Dr	37-30 Marigold Dr	283	12	CMP
75	Zone 2	Marigold Dr	43 Marigold Dr	40	12	CMP
FND 45	Zone 2	Sunflower Cir	23 Sunflower Cir	20	12	CMP
445	Zone 2	Lake Louise Dr	20 Lake Louise Dr (Outlet)	200	12	CMP
FND 62	Zone 2	Barn View Ct	3 Barn View Ct	83	12	CMP

2024 Road Projects:

Impact Design recommends that in addition to drainage improvement projects, at least one major asphalt overlay road project should be considered yearly. For the 2024 construction season Impact Design recommends Deer Run Lane should be overlayed. We estimate overlay projects will cost $4.00 - $5.00 per square foot. This gives the overlay of Deer Run Lane a project budget range of $180,000 - $225,000.

Overall Conclusions

Should all culvert and roadway projects we have recommended for the 2024 construction season be completed, we estimate the total costs to be in the $670,000 - $960,000 range. The cost estimate per culvert replacement, and cost per square foot of asphalt overlay is based on local historical data alone, and no engineered design has been done. Prior to construction, an engineering analysis and civil/stormwater engineering drawings should be completed. Based on this analysis a yearly budget of $900,000 to $1,000,000 appears to be adequate to catch up with and maintain SVCA's infrastructure for the next 3-5 years.

Based on our current progress we expect to have the first draft of the SVCA 10-Year Capital Improvements Plan by the end of August.

Respectfully,

6-30-2023

Scott Goodall, MS, PE
Principal
Impact Design, LLC

10 Year CIP Summary Table

Year	CATEGORY	Corresponding Table	Project Name	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
2023	CONSTRUCTION	Table 2	2023 Culverts Remove and Replace	$ 133,750.00										
	DESIGN	Table 3	2024 Culverts Remove and Replace	$ 15,000.00										
2024	CONSTRUCTION	Table 3	2024 Culverts Remove and Replace		$ 580,200.00									
	CONSTRUCTION	Table 9	2024 Repair and Overlay Deer Run Lane		$ 225,445.52									
	DESIGN	-	2025 Area Z Bridge Replacement		$ 30,000.00									
	DESIGN	Table 8	2025 Culvert 4 Remove and Install Bridge		$ 86,500.00									
	DESIGN	-	Programatic Permit Reivew and Application		$ 15,000.00									
2025	CONSTRUCTION	-	2025 Area Z Bridge Replacement			$ 175,000.00								
	CONSTRUCTION	Table 8	2025 Culvert 4 Remove and Install Bridge			$ 981,178.00								
	DESIGN	Table 4	2026 Culverts Remove and Replace			$ 15,000.00								
	DESIGN	Table 9	2026 Road Repairs and Overlays			$ 20,000.00								
2026	CONSTRUCTION	Table 4	2026 Culverts Remove and Replace				$ 701,300.00							
	CONSTRUCTION	Table 9	2026 Road Repairs and Overlays				$ 178,969.34							
	DESIGN	Table 8	2027 Culvert 24 Remove and Install Bridge				$ 77,850.00							
2027	CONSTRCUTION	Table 8	2027 Culvert 24 Remove and Install Bridge					$ 883,060.20						
	DESIGN	Table 8	2028 Culvert 22 Remove and Replace					$ 86,500.00						
	DESIGN	-	5 Year CIP Review					$ 17,000.00						
2028	CONSTRUCTION	Table 8	2028 Culvert 22 Remove and Install Bridge						$ 981,178.00					
	DESIGN	Table 8	2029 Culvert 23 Remove and Replace						$ 86,500.00					
2029	CONSTRUCTION	Table 8	2029 Culvert 23 Remove and Install Bridge							$ 981,178.00				
	DESIGN	Table 5	2030 Culverts Remove and Replace							$ 10,000.00				
	DESIGN	Table 9	2030 Road Repairs and Overlays							$ 20,000.00				
2030	CONSTRUCTION	Table 5	2030 Culverts Remove and Replace								$ 257,000.00			
	CONSTRUCTION	Table 9	2030 Road Repairs and Overlays								$ 467,117.56			
	DESIGN	Table 6	2031 Culverts Remove and Replace								$ 10,000.00			
	DESIGN	Table 9	2031 Road Repairs and Overlays								$ 20,000.00			
2031	CONSTRUCTION	Table 6	2031 Culverts Remove and Replace									$ 125,200.00		
	CONSTRUCTION	Table 9	2031 Road Repairs and Overlays									$ 564,996.96		
	DESIGN	Table 8	2032 Culvert 54 Remove and Install Bridge									$ 86,500.00		
2032	CONSTRUCTION	Table 8	2032 Culvert 54 Remove and Install Bridge										$ 981,178.00	
	DESIGN	Table 7	2033 Culvert Remove and Replace										$ 10,000.00	
	DESIGN	Table 9	2033 Road Repairs and Overlays										$ 10,000.00	
2033	CONSTRUCTION	Table 7	2033 Culvert Remove and Replace											$ 88,800.00
	CONSTRUCTION	Table 9	2033 Road Repairs and Overlays											$ 537,176.20
	DESIGN	-	2034-2044 10 Year CIP											$ 150,000.00
Totals				**$ 148,750.00**	**$ 937,145.52**	**$ 1,191,178.00**	**$ 958,119.34**	**$ 986,560.20**	**$ 1,067,678.00**	**$ 1,011,178.00**	**$ 754,117.56**	**$ 776,696.96**	**$ 1,001,178.00**	**$ 775,976.20**

Bridge Installation

Engineer's Estimate

September 8, 2023

Estimate Prepared by:
Impact Design, LLC
5426 Barrett Road, Suite A103
Ferndale, WA 98248
Phone: (360) 389-8138

Client:
Tyler Andrews
PNW Services, Inc.
PO Box 30498
Bellingham, WA 98228

		ESTIMATED CONSTRUCTION COST			
NO.	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
Construction Costs					
1	MOBILIZATION	1	L.S.	$40,000.00	$40,000.00
2	PROJECT TEMPORARY TRAFFIC CONTROL	1	L.S.	$5,000.00	$5,000.00
3	CLEARING & GRUBBING	0.3	AC	$20,000.00	$6,000.00
4	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	1	L.S.	$8,000.00	$8,000.00
5	ROADWAY EXCAVATION AND HAUL	1791	C.Y.	$60.00	$107,460.00
6	6" CSBS AT ABUTMENTS	20	TONS	$150.00	$3,000.00
7	GEOTEXTILE	45	S.Y.	$20.00	$900.00
8	PRECAST CONCRETE FOOTERS - UNLOAD & INSTALL	1	L.S.	$8,000.00	$8,000.00
9	STEEL BRIDGE COMPLETE	1	L.S.	$340,000.00	$340,000.00
10	BACKWALLS	1	L.S.	$20,000.00	$20,000.00
11	WELD BRIDGE HOLD DOWNS	1	L.S.	$35,000.00	$35,000.00
12	D.F. GUARDRAIL/HANDRAIL	200	LF	$150.00	$30,000.00
13	STREAMBED SEDIMENT	240	TONS	$100.00	$24,000.00
14	CRUSHED SURFACING TOP COURSE	35	TONS	$100.00	$3,500.00
15	CRUSHED SURFACING BASE COURSE	20	TONS	$150.00	$3,000.00
16	GRAVEL BASE	35	TONS	$100.00	$3,500.00
17	HMA CL 1/2-IN PG 64-22	35	TON	$250.00	$8,750.00
18	FISH EXCLUSION, DEWATERING AND STREAM DIVERSION	1	L.S.	$40,000.00	$40,000.00
19	RIPARIAN REVEGETATION	1	L.S.	$10,000.00	$10,000.00
20	RESTORATION & FINAL CLEANUP	1	L.S.	$5,000.00	$5,000.00
21	8 INCH WATERMAIN, DUCTILE IRON	100	LF	$300.00	$30,000.00
22	WATER TESTING, COMPLETE	1	L.S.	$2,500.00	$2,500.00
23	8 INCH SANITARY SEWER MAIN, DUCTILE IRON	100	LF	$300.00	$30,000.00
24	SANITARY SEWER MANHOLE	2	EA.	$9,000.00	$18,000.00
25	STRIPING	1	L.S.	$2,500.00	$2,500.00
26	LWWSD DEA & Oversight	1	LS	$30,000.00	$30,000.00
	Subtotal				*$814,110.00*
	Tax @ 8.6%				*$70,013.46*
TOTAL CONSTRUCTION COST					**$884,123.46**
Engineering and Permitting Costs					
1	CRITICAL AREAS REPORT AND PERMITTING	1	L.S.	$20,000.00	$20,000.00
2	BOUNDARY AND TOPOGRAPHIC SURVEY	1	L.S.	$5,000.00	$5,000.00
3	GEOTECHNICAL REPORT	1	L.S.	$6,500.00	$6,500.00
4	CIVIL AND STRUCTURAL ENGINEERING DESIGN	1	L.S.	$55,000.00	$55,000.00
TOTAL ENGINEERING AND PERMITTING COSTS					**$86,500.00**
10% CONTINGENCY					**$97,054.54**
PROJECT TOTAL					**$1,067,678.00**

Chinook Engineering
860 Windrose Drive
Coupeville, WA 98239
360.672.5528

Community Association
Sudden Valley Community Association
4 Clubhouse Circle
Bellingham, WA 98229

Proposal Number	23474
Proposal Date	02/02/2024

Pricing

Description	Rate	Qty	Line Total
Job Name Bridge 2 Replacement – Area Z Access	$0.00	1	$0.00
Survey and Data Collection Scan Visit Site and collect preliminary and in depth topography survey information adequate to prepare site survey base map for design. Scan the site with LiDAR scanner and prepare base map with instruments for a base Map	$170.00	25	$4,250.00
Survey and Data Collection Prepare base with Topography	$170.00	10	$1,700.00
Hydraulic and Hydrologic Analysis Determine Hydrology and calculations for stream flows and tabulate	$150.00	8	$1,200.00
Hydraulic Computer Modeling Use measurements to numerically analyze the resulting hydraulics for the project. HECRAS to set up and perform what if modeling	$170.00	20	$3,400.00
Conceptual Design Conceptual Design and cost estimating in preparation of County Preapplication	$170.00	20	$3,400.00
Drawing Development Engineering modelling to prepare design drawings and sketches, to include surface models of existing and proposed.	$170.00	40	$6,800.00
Geotechnical Report Interpretation Review and use the Geotechnical report and any coordination with the Geotechnical Professional	$170.00	5	$850.00
Final Design Prepare Final Design Drawings and specifications ready to build or bid the project.	$170.00	30	$5,100.00
Drawing Development Graphics	$6,000.00	1	$6,000.00

Drawings are drafted with a sub-contractor to Chinook Engineering, Autoscan, Inc.			
Construction Cost Estimates Engineer's Construction Cost Estimates at 30%, 60%, 100%	$170.00	4	$680.00
Meetings	$170.00	16	$2,720.00
Permitting Assistance Assist in the preparation of permits	$170.00	15	$2,550.00
Travel Mileage	$0.625	256	$160.00

Subtotal	38,810.00
Tax	0.00
Proposal Total (USD)	$38,810.00

Notes

Tyler,
I have revised the proposals for the two sites.

Under this Proposal we assume that the projects at two sites are finished concurrently with Culvert 4 Bridge 5, sharing some economy of scale to this site with similarities and shared tasks occurring for both sites. Permitting, Drawing Development Graphics, Surveying, Meetings and Travel are shared with each project. Other tasks shared economies in will also be expected.

We are assuming that one set of drawings and one permit application covering the two sites will be completed.

Borings and geotechnical report to be provided by others.

Community Association, Sudden Valley Community Association

Chinook Engineering
860 Windrose Drive
Coupeville, WA 98239
360.672.5528

Community Association
Sudden Valley Community Association
4 Clubhouse Circle
Bellingham, WA 98229

Proposal Number 23476
Proposal Date 02/02/2024

Pricing

Description	Rate	Qty	Line Total
Job Name Culvert 4 Replacement with Bridge #5	$0.00	1	$0.00
Survey and Data Collection Scan Visit Site and collect preliminary and in depth topography survey information adequate to prepare site survey base map for design. Scan the site with LiDAR scanner and prepare base map with instruments for a base Map	$170.00	25	$4,250.00
Survey and Data Collection Prepare base with Topography	$170.00	10	$1,700.00
Hydraulic and Hydrologic Analysis Determine Hydrology and calculations for stream flows and tabulate	$150.00	8	$1,200.00
Hydraulic Computer Modeling Use measurements to numerically analyze the resulting hydraulics for the project. HECRAS to set up and perform what if modeling	$170.00	20	$3,400.00
Conceptual Design Conceptual Design with short alternative analysis and cost estimating in preparation of County Preapplication	$170.00	20	$3,400.00
Drawing Development Engineering modeling to prepare design drawings and sketches, to include surface models of existing and proposed and calculations. Interaction, collaboration and guidance for drawings.	$170.00	40	$6,800.00
Geotechnical Report Interpretation Review and use the Geotechnical report and any coordination with the Geotechnical Professional	$170.00	5	$850.00
Final Design Prepare Final Design Drawings and specifications ready to build or bid the project. PE interaction and review with the Team and the Graphics.	$170.00	30	$5,100.00
Drawing Development Graphics	$6,000.00	1	$6,000.00

Drawings are drafted with a sub-contractor to Chinook Engineering, Autoscan, Inc.

Construction Cost Estimates Engineer's Construction Cost Estimates at 30%, 60%, 100%	$170.00	4	$680.00
Meetings	$170.00	16	$2,720.00
Permitting Assistance Assist in the preparation of permits	$170.00	15	$2,550.00
Travel Mileage	$0.625	256	$160.00

Subtotal	38,810.00
Tax	0.00
Proposal Total (USD)	$38,810.00

Notes

Tyler,
I have revised the proposals for the two sites.

Under this Proposal we assume that the projects at two sites are finished concurrently with Area Z Bridge sharing some economy of scale to this site with similarities and shared tasks occurring for both sites. Permitting, Drawing Development Graphics, Surveying, Meetings and Travel are shared with each project. Other tasks shared economies in will also be expected.

We are assuming that one set of drawings and one permit application covering the two sites will be completed.

Borings and geotechnical report to be provided by others.

Community Association, Sudden Valley Community Association

NW Geologic PLLC

February 5, 2024

PNW Services, Inc.
PO Box 30498
Bellingham, WA 98228

Attn: Tyler Andrews

RE: Subsurface Investigation for Culvert and Bridge Improvements, Sudden Valley, Washington

Dear Mr. Andrews:

NW Geologic PLLC (NW Geo) thanks you for the opportunity, and respectfully submits the following proposal to provide a geotechnical subsurface investigation and report for the above-referenced project. We estimate the total cost of our services for this project to be **$13,000.00.** All services will be provided on a *Time and Materials* basis. Due to the relatively high cost of obtaining a subcontractor, our firm requests a 50 percent of total cost deposit in order to commence the project. The remaining 50 percent of the project cost is due at the time of report delivery. No work will be performed beyond the scope and cost estimate without your prior authorization.

We understand that the Sudden Valley Community Association intends to replace two structures within the Sudden Valley neighborhood, near Bellingham, WA. The first location is a culvert replacement located on Polo Park Drive near the intersection with Sunnyside Lane and Lost Lake Lane. The location contains a paved roadway over the culvert that sustained damage during the November 2021 flood events. It is our understanding that the culvert that provides conveyance of the waters of Beaver Creek will be replaced with a premanufactured steel bridge. The second location is a steel bridge replacement at the north entrance to Area Z accessed from Honeycomb Lane. The bridge also provides roadway conveyance over Beaver Creek.

The project team has requested our services in support of new bridge foundation designs that would be installed by other parties based on our subsurface investigation recommendations. The purpose of our study is to provide limited subsurface exploration by Standard Penetration Test (SPT) hollow stem auger soil boring methods and a geotechnical report that will address subsurface conditions and provide recommendations that will be suitable for project planning. We are requested to provide allowable bearing capacity and lateral earth pressures for use in design.

If you wish to accept this proposal, we simply ask that you return a signed electronic copy of the service agreement enclosed. In closing, our experienced engineering geology staff will ensure the highest level of quality is brought to your project. We believe that our local staff and vast experience on projects of similar size and scope make NW Geo the clear team member of choice for this project. We look forward to working with you.

Respectfully Submitted,

Kurt Parker, Owner
Licensed Engineering Geologist
NW Geologic PLLC

Attachments: Services Provided, Cost Estimate, Assumptions, General Terms & Conditions, Service Agreement, 2024 Rate Sheet

NW Geologic PLLC

Services Provided

The purpose of our services is to collect subsurface data at four locations – two for each creek crossing – that will be used to make recommendations for project design. The final product will be an illustrated, limited scope subsurface investigation report containing a summary of subsurface conditions with appropriate allowable bearing capacity and lateral earth pressure recommendations for foundation design. Our services will include the following:

1. Perform an initial site visit to observe existing conditions and mark and file an underground utility locate request as required by Washington State Law. NW Geo is not responsible for mismarked or unlocatable utilities. We request any as-builts or other information related to existing utilities be provided prior to the primary field work.
2. Explore the soil and groundwater conditions underlying the project site by advancing four SPT hollow stem auger borings up to 30 feet below present grade (BPG) in depth at each location or until refusal conditions are encountered. The total planned drilling footage is approximately 120 feet. One boring will be advanced on either side of each creek crossing at an appropriate location determined by NW Geologic. The SPT borings will be subcontracted by a specialty drilling service coordinated by NW Geologic. The subcontractor will cut and patch asphalt as applicable and provide basic cleanup. The cuttings from the borings will be hauled away for disposal. Accordingly, the property owner must expect some disturbance by machinery across access and test locations.
3. NW Geo will review the information collected during the subsurface investigation and perform analyses to develop recommendations for this project. Our findings, conclusions and recommendations will be summarized in a subsurface investigation report that will contain the following information:
    - A description of site surface, subsurface, groundwater and mapped geologic conditions.
    - A site plan showing the approximate location of the explorations accomplished for this project.
    - Detailed SPT auger boring exploration logs based on subsurface exploration findings.
    - Laboratory analysis of select soil samples to determine the engineering properties.
    - Recommendations for allowable bearing capacity and lateral earth pressures based on soil conditions that are appropriate for engineering design of the new structures.
    - Recommendations for geotechnical consulting during construction.

This proposal for services *does not* include conditions for stormwater management, geologic hazards, slope stability analysis, environmental studies or monitoring of groundwater on this property.

Cost Estimate

The following is an approximate breakdown of our services. Costs may be shared between tasks in order to accommodate the project schedule and budgets.

Project Coordination, Site Visit, Locates and Setup	$300
Field Exploration (1 day)	$1,000
Subcontracted CPT Services (Subcontracted)	$8,500*
Laboratory Services (Subcontracted)	$300
Subsurface Investigation Report	$2,500
Mileage	$100
Project Management	$300
Total (estimated)	**$13,000**

*The SPT subcontractor estimate may be more or less than the estimate provided above and is dependent on their schedule, current costs, availability and subsurface ground conditions.

Estimate Assumptions

- NW Geologic PLLC will bill for services on a *Time and Materials* basis per the attached cost estimate.
- Unless accepted by Client by returning a signed copy of this service agreement to NW Geo, or otherwise expressed in writing, the cost estimate shall remain valid for not more than 90 days.
- Unforeseen circumstances may result in a requirement for additional site exploration or sampling. NW Geo will consult with client prior to modifying the scope of services if the total fees will exceed the proposed amount. Additional services not contained in the Cost Estimate for services (if required), will be billed in accordance with the unit rates shown in the 2024 Rate Sheet provided with the original proposal.
- Proposed services include subsurface exploration and characterization of site only. Pilot infiltration testing, grain size analysis, groundwater monitoring, mounding analysis, site monitoring, geologic hazards, slope stability analysis, construction observation and / or field-testing during construction are not included. Due to the specialized nature of NW Geo's work and the detailed knowledge of the site gained during this phase or work, it is recommended that NW Geo be retained for construction services.

General Terms & Conditions

- NW Geologic PLLC (NW Geo) will provide professional services to Client, as defined by the scope of work, with that degree of care and skill ordinarily exercised under similar circumstances by members of the geotechnical engineering profession. This representation is in lieu of any warranties or other representations, either expressed or implied. If conditions differ during construction from what was reported by NW Geo during inspection, the Client shall immediately contact this consulting firm and make us aware of the changes, and authorize further and appropriate evaluation, if necessary. It is also understood and agreed to that statements made in NW Geo reports are independent opinions, based on professional judgment, education and experience, and should not be construed to be conclusive representations of fact.
- Utility repairs are not included within the scope of this contract. Despite our foremost efforts to avoid existing utilities, damage is sometimes unavoidable due to mis-marked or unlocatable utilities. In the unforeseen circumstance that existing underground utilities are damaged, the client shall be responsible for the cost of utility repairs.
- This proposal including those documents incorporated by reference reflect the entire agreement of both parties with respect to the terms and conditions with which NW Geo will service this project and supersedes any previous written or verbal agreements. If any portion of this agreement is found to be void or voidable, such portion shall be stricken, and the agreement reformed to match the stricken provisions as closely as permitted by law. Should any provisions be held illegal, invalid or unenforceable, the enforceability of the remaining provisions shall continue unimpaired.
- Unless otherwise stated in writing, Client assumes sole responsibility for determining the quantity and nature of required work, and that it is adequate for its intended purpose. Client shall communicate these general conditions to each third party to whom Client conveys any part of NW Geo 's work. NW Geo shall have no obligation greater than that set forth in NW Geo's proposal to any of Client's third parties. Client shall cause all tests and inspection of the site, materials, and work performed by NW Geo or others, to be timely and properly performed, in accordance with project plans, specifications, contract documents, and Design Professionals' recommendations.
- The work proposed herein shall not include determining, supervising, or implementing the means, methods, techniques, sequences, or procedures of construction. NW Geo shall not be responsible for evaluating, reporting, or affecting job conditions concerning health, safety, or welfare. NW Geo's work, or failure to perform same, shall in no way excuse the contractor(s), subcontractor(s), and/or supplier(s) from performance of their work in accordance with the contract documents.
- NW Geo will not provide any manner of recommended solution or 'fix' for any site conditions or installed work that differ from project documents. In such instances, NW Geo's field report outlining the deviation from project documents will be provided to the Contractor and / or Client for clarification from the appropriate design professional.
- Client acknowledges that the laws of the State of Washington shall govern this agreement. Except for actions such as enforcement of mechanic's liens required to be brought in a specific venue, or unless otherwise agreed in writing, any mediation or other legal proceeding shall occur in Whatcom County, Washington. Client waives its right to have suit brought, tried in or removed to any other county or jurisdiction. The prevailing party shall be entitled to recovery of reasonable costs incurred, including court costs, reasonable attorney's fees and other direct expenses related to the claim.
- These terms and conditions shall survive the completion of proposed services and / or the termination of this agreement, whether for cause or convenience.

NW Geologic PLLC

- This document may not be modified or altered except by written agreement signed by authorized Client and NW Geo representatives.
- Invoices are due and payable upon receipt. Any invoice not paid within thirty (30) days of the date rendered may be assessed a finance charge of one-and-one-half (1½%) percent per month, for each month beyond thirty (30) days past due. Invoices not paid within sixty (60) days of the date rendered may result in NW Geo stopping work until such invoices are paid in full. Invoices not paid within ninety (90) days of the date rendered may be referred to an independent company for collection. Client will be responsible for all expenses incurred by NW Geo for the collection of any unpaid invoice(s), including collection fees, actual attorneys' fees, and costs for legal counsel. Furthermore, Client acknowledges that NW Geo may elect to withhold a Final Letter of Compliance for the project, and/or place a lien on any real property until all outstanding invoices and/or fees have been paid in full.
- Project management fees include required time to review field and laboratory reports. If Client requires any manner of backup documentation, changes to NW Geo's standard invoices, or entry / upload to third-party entities, the additional time to assemble the required information and / or complete alterations shall be billed as Project Management. Any fees required for participation in third-party payment processing shall be billed back to Client at cost plus 15%.
- NW Geo carries the standard insurance required by law in the State of Washington. If Client requires additional insurance, the Client agrees to pay any additional fees incurred by NW Geo to fulfill Clients request for such insurance, if obtainable.
- The Client agrees to indemnify, defend and hold NW Geo, its officers, employees, agents and independent contractors harmless from any and all claims, suits, losses, costs and expenses, including but not limited to court costs and reasonable attorney fees arising or alleging to have risen from the performance of NW Geo's work. In the event that the Client or Client's principal shall bring any suit, cause of action, claim or counterclaim against NW Geo to the extent that NW Geo shall prevail in such suit, cause of action, claim or counterclaim, the party initiating such action shall pay to NW Geo the costs and expenses incurred by NW Geo to answer and or defend, including reasonable attorney fees, court costs, witness fees and other related expenses.
- NW Geo shall retain the right to reuse copyrightable materials or patented / patentable concepts or processes arising from its services or documentation of services.
- By nature of providing professional services rather than supplying material goods to the project, NW Geo assumes itself exempt from sales or use taxes. Quoted unit rates do not include any required sales, use or excise taxes or TERO fees that may be collected by the Contracting Agency or others.

Service Agreement

This agreement is made between NW Geologic PLLC also described herein as 'NW Geo,' and Client, as identified below, and fully incorporates the Services Provided, Cost Estimate, Estimate Assumptions, General Terms and Conditions, Service Agreement and 2024 Rate Sheet as attached to this document. These elements shall constitute the agreement in its entirety, superseding all prior correspondence, negotiations, or agreements, oral or written. This agreement shall be in effect as of the date signed by Client, or verbally requests services from NW Geo, whichever occurs first. The undersigned have read and understand all applicable documents comprising this agreement and accept this bid proposal and the exclusions and assumptions therein, and agrees to retain NW Geologic PLLC for the scope of services outlined in this proposal.

_____

Authorized Signature

_____

Printed Name & Title Date

_____

Billing Address

_____

Email Address

_____

Telephone Number

NW Geologic PLLC

2024 Rate Sheet

PROFESSIONAL SERVICES

Engineering Geologist	$120.00 /hour
Project Manager	$100.00 /hour
Geologist	$90.00 /hour
Field Technician	$80.00 /hour
Construction Support	$90.00 /hour
Plan Review	$100.00 /hour
Laboratory Services	Quote
Mining Services	Quote

- NW Geologic PLLC (NW Geo) requests advance notice for scheduling field services. Subcontracted excavation or drilling work may be delayed by 2 to 4 weeks depending on subcontractor schedules.
- A mileage charge shall be invoiced at $0.70 per map mile from our office – round trip.
- There is no minimum charge per site visit. All field and related report work will be billed under the established contract.
- Overtime rates of 1.5 times the standard rate apply for work in excess of 8 hours per day. We typically do not charge overtime rates unless it becomes necessary and is agreed upon with the client.
- Field testing equipment expenses are included in the hourly rates except where specifically noted on a project specific proposal.
- Rental equipment, reimbursable expenses and subcontractor fees will be invoiced at cost plus 10%.
- Laboratory testing services will be subcontracted and the appropriate amount and type(s) of testing will be included in any proposals, if applicable.
- The ordering of work from NW Geo shall constitute acceptance of the 2024 Rate Sheet, General Conditions, and any project specific proposal.

Sudden Valley Community Association

2024 Bridge Designs

PNW Estimate - Bid Package, Permitting, and Construction Management

Task	Description	Hours	Estimated Cost
Design Oversight			
	Oversight of Chinook Engineering and site visits for design.	14	
	Oversight of NW Geologic PLLC to complete borings and geotechnical report.	5	
	Coordination with utility providers to establish agreements with SVCA for relocating utilities to hang on bridge - power, comm, and water (LWWSD Developer Extension Agreement).	24	
	Total Estimated Design Oversight Hours	43	**$ 5,805.00**
Permitting			
	Site visits with permit agencies. Oversight of permit applications, facilitate signatures / submittals / permit fees.	12	
	Total Estimated Permitting Cost	12	**$ 1,620.00**
Contractor Bids			
	Under separate proposal.	0	
	Total Estimated Bid Package Hours	0	**$ -**
Construction Management			
	Under separate proposal.	0	
	Total Estimated Construction Management Hours	0	**$ -**
	Total Estimated		**$ 7,425.00**

LAKE WHATCOM WATER AND SEWER DISTRICT

SVCA DEA - Utility Relocation

Prepared by: M. Mankamyer, P.E., Wilson Engineering LLC

Prepared for: Bill Hunter, P.E., LWWSD District Engineer/ Assistant General Manager

Proposal No.: 2020-001; Task Order 008

Date: July 1, 2020

Task Description		Principal Engineer	Senior CAD Design Technician	
Rate ($/hr) =	L.S.	$170	$107	
Task 1: Project Management / Meetings / Coordination				
Track and report progress & expenditures monthly		4		$ 680
Project Coordination with District		12	4	$ 2,468
Sub-Total	**$ -**	**16**	**4**	**$ 3,148**
Task 2: Plan Review				
1 - Initial Plan Review and Comment/Response Letter		8	12	$ 2,644
2 - Revised Plan Review and Comment/Response Letter		4	4	$ 1,108
3 - Revised Plan Review and Approval Letter		2	2	$ 554
Sub-Total	**$ -**	**14**	**18**	**$ 4,306**
Task 3: Constrcution Inspection				
1 - Prepare for / Attend Pre-construction meeting		4	4	$ 1,108
2 - Inspection - on-site (assume 80 hours)			80	$ 8,560
3 - Inspection - daily reports			16	$ 1,712
Sub-Total	**$ -**	**4**	**100**	**$ 11,380**
Task 4: Project Closeout				
1 - Review Record Drawings (assume one revision)		4	8	$ 1,536
2 - Prepare Bill of Sale		6	4	$ 1,448
3 - Prepare Construction Completion Report		4	2	$ 894
Sub-Total	**$ -**	**14**	**14**	**$ 3,878**
Direct Expenses				**$ -**
Project Total	**$ -**	**48**	**136**	**$ 22,712**

Assumptions:

1. District will provide Project Administration and correspondance with SVCA.
2. Third plan submittal will meet all District requirements to be approved.
3. Second Record Drawing submittal will meet all District requirements to be approved.

2024 LWWSD Design Allowance:
- $3,148 Engineer's Project Management
- $4,306 Engineer's Plan Review
- $3,500 LWWSD Staff Fees
- $10,954 Subtotal
- $1,095.40 10% Contingency from 2020 to 2024
- $12,049.40 Total LWWSD Design Allowance

Tyler Andrews

From: Bill Hunter <bill.hunter@lwwsd.org>
Sent: Monday, August 17, 2020 4:42 PM
To: Tyler Andrews
Cc: Joe Acla (gm@suddenvalley.com); Justin Clary
Subject: RE: SVCA - 2021 Box Culvert Design Projects
Attachments: Task Order 2020-008-SVCA Culverts Plan Review.doc; Engineering Fee Estimate-TO#8_ 2020 Rates.pdf

Hi Tyler,

Estimated District labor and consultant resources is in the range of $26k. I have attached the District's General Engineering consultant's estimate that outlines assumptions. The District staff administration cost estimate of $3.5k is based on the previous SVCA Area Z Fire Hydrant cost.

District's consultant estimate:	$22,712
District staff administration:	$ 3,500
Estimate Total	$26,212

The actual amount will depend on plan review/coordination, duration of construction, unforeseen challenges discovered during excavation, and coordination between contractor and District's consultant for field observations.

Bill Hunter, P.E. | Assistant General Manager / District Engineer

LAKE WHATCOM WATER & SEWER DISTRICT
1220 Lakeway Drive
Bellingham, WA 98229

8am – 5pm, Monday – Thursday
(360) 734-9224, Fax: (360) 738-8250
www.lwwsd.org

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: **February 22nd, 2024**

Subject: **Capital Request – 2024 Bi-Annual Bridge Inspections**

Purpose
To request funding for the 2024 Bi-Annual Bridge Inspections project.

Background
Sudden Valley Community Association (SVCA)'s 2024 budget includes $6,760.00 to complete bridge inspections every 2 years, following National Bridge Inspection Standards (NBIS). SVCA's bridges were last inspected in February of 2022, and are due for re-inspection in 2024. It is unknown if any evaluations were conducted prior to the 2022 inspections.

Analysis
SVCA has four road bridges and eight golf course bridges to be inspected by a certified bridge inspector. Integrity Structural Engineering PLLC completed these inspections in 2022 and have submitted a proposal to complete inspections again in 2024, see attached. In 2022, the inspection fee was $6,540.00, this year the inspection proposal is $5,561.00. The reduction in cost is due to bridge details and data that can be reused from the 2022 inspection, resulting in approximately a 15% savings. Bridge inspections are proposed to be completed at the end of February, with reports submitted in March. Two reports will be submitted to SVCA, one for the four road bridges and one for the eight golf course bridges.

Proposal
Authorize $5,561.00 from Roads for the 2024 Bi-Annual Bridge Inspections project. Upon completion of the inspections, the submitted report will be shared with the Board of Directors.

Request
Request $5,561.00 from Roads for the 2024 Bi-Annual Bridge Inspections project.

Motion
Move that the SVCA Board of Directors approve the allocation of $5,561.00 from Roads for the 2024 Bi-Annual Bridge Inspections project, and authorize the General Manager to execute a contract with Integrity Structural Engineering per their proposal dated February 5th, 2024.

Sudden Valley Community Association

360-734-6430
4 Clubhouse Circle Bellingham, WA 98229
www.suddenvalley.com

Approvals

Approved: _____ Not Approved: _____ SVCA Finance Committee

Approved: _____ Not Approved: _____ Board of Directors

Signed: _____ Date: _____
ELECTED, SVCA Board President

INTEGRITY STRUCTURAL ENGINEERING PLLC

4124 INTERLAKE AVENUE NORTH SEATTLE, WA 98103
TEL: (206) 547-1379 FAX: (206) 547-1381 EMAIL: INTEGRITYSE@ATT.NET

February 5, 2024

Mr. Tyler Andrews
PNW Services, Inc.
P.O. Box 30498
Bellingham, WA 98228

Dear Mr. Andrews:

Re: Proposal for Professional Bridge Inspection Services at Sudden Valley Community Assoc. Inspection and Reporting for Four Vehicle Bridges & Eight Golf Course Bridges

Thank you for your request and the opportunity to assist you again with the private Sudden Valley Community Association bridges. Integrity Structural Engineering's (ISE) scope of work is to perform a visual inspection, create/modify existing sketches, and take field measurements, for the four (4) vehicle bridges (one is used primarily for a utility support) and eight (8) golf course pedestrian type bridges some of which may be crossed by golf course maintenance equipment. The condition assessments for the vehicle bridge will match to that of the standard WSBIS reporting, while the others will not but shall be similar to my previous reporting containing engineering reporting and criteria consistent for their intended use. Scour observations, creek profile, bridge sketches/measurements, inspection notes, and structural condition state appraisal will be completed for each bridge and shall be provided electronically via email.

Specific work breakdown tasks are:

- Coordinate and perform one (1) site visit to inspect all bridges in a single day.
- Create field sketches, notes, and take measurements/photographs for reporting use.
- Complete a WSDOT type bridge inspection/reporting by a WSDOT/FHWA certified bridge inspector documenting current conditions for the four (4) vehicle bridges.
- Complete a bridge inspection/reporting and condition assessment of the eight (8) golf course bridges by a WSDOT/FHWA certified bridge inspector.
- Provide two written summary memos one for the vehicle bridges and one for the golf course bridges that will also include statements of the general observed conditions and maintenance recommendations.
- Electronic transmission of the completed reports, sketches, and photographic figures.

SCHEDULE
ISE's inspection work of this project will commence upon your written authorization with access coordinated directly with SVCA for completion in February 2024. Completed inspection reports will be transmitted within two (2) weeks after field inspection.

In consideration of the mutual covenants and agreements stated below, the parties agree:

I. ISE's Services Provided

A. On a Time & Material Basis for the compensation stated below, ISE shall provide to the Client professional services of:

1. Bridge Inspection and Technical Reporting.

B. These services are provided exclusively for the Client's use on the Private Sudden Valley Community Association Bridges and may not be used for any other purpose or by any other person or entity without the prior written consent of ISE.

II. Compensation, Fee, and Billing

Services will be provided and billed on a Time and Materials Basis at the consulting rate of $170.00 per hour for Structural Engineer/Bridge Consultant and expenses at direct cost plus ten percent (10%) mark-up with a not to exceed Budget of $5,561 without prior Client approval. Fees and costs are billed monthly and at completion of the reporting, which are due and payable upon receipt. Client must notify ISE in writing within ten (10) days of the date of the Invoice of any question, issue or discrepancy with the Invoice. Absent such written notification the Client agrees that the Invoice amount is correct, due and payable, and binding on Client. Client shall pay ISE the amount due within thirty (30) days of the date of each Invoice. Any amount not paid shall accrue interest at the rate of one percent (1%) per month from the date of the Invoice. Failure to pay the fees billed may result in the termination of ISE services.

III. Client's Duties and Responsibilities

In addition to Client's duties stated above with respect to the invoices and payment to ISE and except as otherwise specifically agreed in writing between the parties, the Client shall provide to ISE:

1. Copies of past inspection reporting, Plans, and/or permits for the bridges, if any.
2. Cooperation with ISE for the work and inspection including and not limited to right of access.

IV. Limitations of Liability

1. ISE shall not be responsible for nor held liable for any matter outside its control including, but not limited to: employee or contractor strikes or lockouts at job sites, delays or accidents caused by third parties, failure by Client to provide ISE information necessary to perform its services, and negligent work or intentional acts by other parties.

2. ISE makes no representations regarding the existing bridge structural condition, scour critical classification of foundations/slopes, or any cost figures made in connection with construction costs and/or fees.

3. Client understands and agrees that compensation, as set forth in Paragraph II, is based solely on the Services Provided in Paragraph I.

4. Regardless of the presence or absence of coverage, ISE shall not be liable for loss or damage beyond its control, or for loss of earnings, loss of use or other incidental or consequential damages suffered by Client or others, however caused. *Integrity Structural Engineering, PLLC's* liability hereunder, whether in tort or in contract, for any cause of action shall be limited to one hundred percent (100%) of the fee earned by ISE under this Agreement or $50,000, whichever is greater.

Thank you for your request of my proposal Mr. Andrews. If accepted, provide me with a counter signed copy of this letter indicating your acceptance to initiate work and a $1000 retainer that will be used to offset the balance due at final invoicing.

Sincerely,

Kenneth M. Wilson

Kenneth M. Wilson, PE SE
Bridge Consultant / WSDOT Bridge Inspector #D2038

Encl: Cost Estimate Spreadsheet

Notice to proceed and acceptance of this Proposal for Professional Engineering Services,

By: _____ _____
Name (Printed) Date

_____
Signature

_____
Title (Printed)

2024Sudden Valley Br Inspection

Task	PM/Br Engr	Total Hrs ISE, PLLC	
2024 Sudden Valley Community Bridge Inspection & Reporting for Four Vehicle Bridges & Eight Golf Course Bridges			
1 Inspection, Condition Assessment, and Technical Reporting			
a. Coordination, Phone & Email Technical Discussions, Admin.	1	1	
b. Background Review, Preparation, and Inspection Planning	2	2	
c. Preparation, Travel, Bridge Inspection, Measurements, Photographic Figures, and Sketches (4 Vehicle Bridges+8 Golf Course Bridges, One Day Maximum)	13	13	
d. Inspection Memorandum and WSBIS Reporting Preparation, Photographic Figures, Maintenance Recommendations, and Email Summary (4 Vehicle Bridges)	8	8	
e. General Bridge Inspection Reporting Memo, Sketches, Maintenance Recommendations, and Photographic Figures, and Email Summary (8 Golf Course Bridges)	8	8	
Subtotal Task 1	32	32	Subtotal Task 1
2024 Sudden Valley Community Bridge Inspection & Reporting for Four Vehicle Bridges & Eight Golf Course Bridges			
1 Inspection, Condition Assessment, and Technical Reporting	32	32	Subtotal Task 1
	32	32	
Billing Rate	$ 170.00		
Fee	$ 5,440	$ 5,440	

		labor cost =	$ 5,440
Mileage	$ 121	direct costs =	$ 121
Courier, mail	$ -	ISE, PLLC =	$ 5,561
Tolls	$ -		
Reproduction	$ -		
ISE, PLLC Direct Expenses Subtotal:	$ 121		