

# Juvenile Rehabilitation Echo Glen Children's Center



# Security Improvements Scoping and Feasibility Study

## June 3, 2022

State Project No. 2022-558 KMB Project No. 22019



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Date:	June 3, 2022
То:	Trent Phillips – DCYF JR Capital Budget Manager
From:	Sheri O'Brien, AIA – Partner Bryan Beley, AIA – Associate
Project:	Echo Glen Children's Center Security Improvements Department of Children, Youth, and Families State Project No. 2022-558
Subject:	Scoping and Feasibility Study
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Dear Mr. Phillips,

KMB architects is pleased to present this Scoping and Feasibility Study for the Washington State Department of Children, Youth, and Families (DCYF) Security Improvements project at Echo Glen Children's Center (EGCC).

In discussions with DCYF Office of Capital Programs, and in response to recent resident AWOL (absent without leave) attempts, the need has been identified for a secure perimeter around a portion of the EGCC site with multiple vehicular gates to restrict a combination of pedestrian and vehicular movement and access.

This feasibility analysis outlines an understanding of where and what type of fencing is appropriate for this perimeter, vehicular and pedestrian movement restrictions, and other access control and monitoring considerations. Main entry visitor improvements, visitor security screening, and door control modifications are to be explored, as well. With insights and preferences of the defined user and stakeholder group, the following scoping and feasibility study provides potential solutions and considerations for the following project goals:

- Reduce likelihood of future resident AWOL attempts from youth on campus.
- Restrict accidental and intentional access onto the campus and direct towards single-point of entry.

A separate scoping and feasibility investigation related to the need for a campus secondary access and egress route will follow, and this study document will be amended and reissued.

Thank you for the opportunity to assist with this important project. Please feel free to reach out for any questions, comments, or concerns.

Sincerely,

Sheri O'Brien, AIA - Partner

Bryán Beley, AIA – Associate

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## **Project Directory**

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Thank you to all who participated in stakeholder meetings and were involved with information gathering during the development of this Study. Your efforts and insights are deeply appreciated.

## **Executive Summary**

### **Background Information**

Echo Glen Children's Center in Snoqualmie is a medium / maximum security facility that is not currently fenced but bordered by natural wetlands.<sup>1</sup> It provides treatment services for younger male offenders and is the only institution with female offenders with gender specific programming. Echo Glen provides educational services for a wide range of youth with varying needs including Dialectical Behavior Therapy, Aggression Replacement Training, cultural programming, sex offense specific treatment, and inpatient chemical dependency treatment. It is also known for its Canine Connection program which allows youth to train future service animals. Female youth offenders sentenced by the Department of Corrections are also placed in Echo Glen.

On January 6, 2022, at around 7:45 AM, five male teenagers serving various sentences at Echo Glen Children's Center (EGCC) assaulted several staff members, stole a nurse's set of keys, and proceeded to escape the campus in a stolen car.<sup>2</sup> While not uncommon to the facility, this is one of the latest major escapes from the DCYF-managed facility in the last few years. In response to this event, several security measures have been updated including replacing on-campus cars with smaller utility carts, special uniforms for maximum security juveniles, and enforcing the use of a single-point of entry to the campus. The existing open nature of the campus still makes implementation of these and other security protocols difficult, and the recent update to allow juveniles to continue to serve sentences in DCYF juvenile detention facilities until the age of twenty-five<sup>3</sup> may necessitate a shift in the future of the campus' current level of security.

## Security Improvements Scoping and Feasibility Study

KMB architects, along with civil engineering firm Perteet Inc, was requested to conduct a scoping review and feasibility study for campus security improvements. While preliminary diagrams and prior discussions identified a general understanding of the security need, this study explores and confirms potential solutions to the presented problems and identifies other considerations and areas where additional research is required.

This study shall explore the following problem statements and goals:

- Mitigate or reduce the likelihood of future resident AWOL (absent without leave) attempts.
- Restrict accidental and intentional access onto the campus: pedestrian and vehicular.
- Direct all staff, visitors, providers, and vendors towards a single-point of entry.
- Identify necessary security protocols as implemented by EGCC and DCYF.
- Maintain "park-like" campus environment in look and feel.

<sup>&</sup>lt;sup>1</sup> Washington State Department of Children, Youth & Families (DCYF), "https://www.dcyf.wa.gov/services/juvenile-rehabilitation/residentialfacilities/echo-glen," Echo Glen Children's Center (2022).

<sup>&</sup>lt;sup>2</sup> Sara Jean Green and Lewis Kamb, "https://www.seattletimes.com/seattle-news/law-justice/5-incarcerated-teens-attack-staff-escape-from-juvenile-facility-near-snoqualmie/," The Seattle Times (2022).

<sup>&</sup>lt;sup>3</sup> Washington State Legislature, "House Bill 1646 – 2019-20," (2019)



View of the EGCC Health Services, Main Entrance, and Administrative Building from the main visitor parking lot.

## **Summary of Analysis**

Echo Glen Children's Center is an open medium / maximum security facility with separate minimum, medium, and maximum security-capable living units, referred to as "cottages". All programs and services are contained within the campus located in several separate support and program buildings such as the kitchen and dining hall, health services and administrative building, classroom buildings, and multipurpose / recreation building. To maintain a controlled secure perimeter, all EGCC programs and activities should be contained within the Campus Perimeter.

DCYF leadership and EGCC staff offered insight and opinions based on their collective past experience on-site and at similar facilities. The completion of this study is anticipated to lead to a design and construction project which will continue to develop the proposed solutions. As proposed in this study, the construction of these Security Improvements is estimated to cost about \$4 million.

#### Limitations of this Study

- This study is limited to high-level research and readily available information from DCYF, EGCC, King County, the Washington State Department of Natural Resources (DNR) and other past reports and projects completed at the facility.
- Specific design standards or guidelines for DCYF facilities are not known to exist, and decisions made by leadership and the design team reflect the recommendations based on experience, similar installations, and other standards and guidelines from related facilities or agencies.
- Diagrams and exhibits included in support of this study are not to be used as construction documents and will
  require further construction detail and specifications.

#### **Campus Perimeter Security**

The open nature of the existing campus greatly increases the likelihood of an AWOL attempt by committed juveniles. Most escapes are directed either to the north of campus through a heavily forested area towards Lake Alice or to the south along the campus main access road. Utilizing the wetland boundary of Lake Kittyprince to the east, a partial Campus Perimeter satisfies the level of security acceptable to EGCC and DCYF to secure the facility.

The proposed Campus Perimeter effectively provides a continuous fence barrier along a majority of the facility, but it is understood to have vulnerabilities along the terminations of a fence line – where the fence meets close to the wetland boundary. Where these vulnerabilities exist, video surveillance, motion detection monitoring, and motion-activated lighting are sufficient in mitigating further AWOL attempts. If an escape is reported, it is likely that a perimeter security camera has captured the individual, and a security detail can be dispatched to a targeted location.

The routing of the perimeter fence runs alongside campus roadways, parking areas, forests, fields, and existing buildings. In each of these instances, clearances must be maintained, and specific detailing should be designed to minimize climbing at any other vulnerable areas. In all of these locations, construction of a new fence is feasible, but requires coordination and further design development with outside agencies such as the Department of Natural Resources and King County to satisfy specific rules and regulations. Forested areas will be impacted, and additional grading may be required.

#### Visitor and Staff Entry Check-in and Screening

Fencing and access through the secure perimeter further controls and monitors activity entering and exiting the campus, both pedestrian and vehicular. The location and routing of the fence line acts as a funnel and directs staff and visitors towards a single-point of entry at the Main Entrance and Administration building. Improvements at the Main Entrance include construction of a secure vestibule with controlled access from the secure control station, card reader access retrofits to surrounding doors, and upgrades to the Main Entrance area for the Body Scanner workstation and relocation of the visitor check-In window. Updated policies and procedures implemented by EGCC would further improve the security and operations of the facility and help maintain the secure perimeter.

#### Campus Secondary Access / Egress Route

Currently, the Echo Glen Children's Center has one vehicular route to access and egress from the campus. If this road is blocked for any reason (fallen trees, vehicle blockages, etc.), no vehicles would be able to enter or exit the campus. In emergency situations, this would cause extensive delays and can negatively impact operations of the facility and in some cases, the safety of residents, staff, and visitors. A secondary access and egress road via a northern route would provide an emergency-only path into or from the campus in the event or situation where the primary route is blocked or non-navigable.

Further research is required. An updated version of this study will be released upon completion and inclusion of this section.

## **Campus Perimeter Security**

### **Campus Perimeter**

In the exploration of a Campus Perimeter, two major types of restrictions are considered: Pedestrian and Vehicular. Pedestrian restrictions require a physical barrier, such as a continuous span of fencing with a deterrent to prevent attempts to climb over – with controlled access via pedestrian gates. The goal of this secure perimeter would be to contain residents within the campus as well as restrict the public or visitors from accidentally or intentionally trespassing. Vehicular restrictions relate to roadways and access into, from, and around the campus via larger controlled gates or vehicle barriers. Fencing is not necessarily required for vehicular access restrictions, as topography, terrain, and the natural environment – such as trees – would function as reasonable barriers.

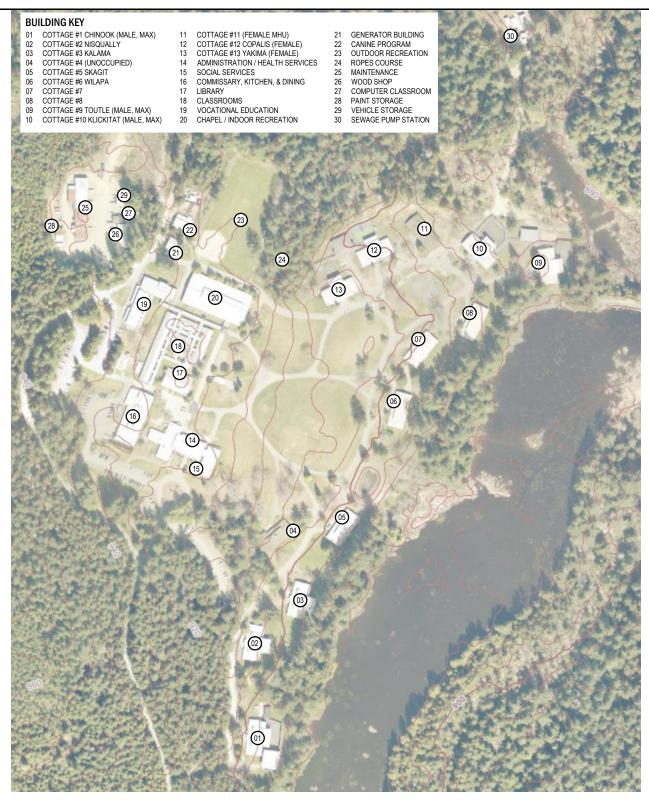
Due to Lake Kittyprince – a designated Category I Wetland<sup>4</sup> – encroachment and other construction within the 300-foot wetland buffer may be restricted or would require further mitigation. As such, this wetland as a 'natural perimeter' could be utilized as a part of the Campus Perimeter, restricting pedestrian access along the wetland boundary.

As part of this study, the feasibility of both a partial Campus Perimeter ('Base') and a fully-enclosed perimeter ('Alternate') were to be explored.

The 'Base' Campus Perimeter, as discussed, utilizes the existing wetland boundary to the east as part of the secure perimeter. While it is understood that the perimeter fencing cannot be built clear into the wetland (due to critical area and protective wetland regulations), it clearly presents a 'vulnerability' in the perimeter. To further mitigate truant residents, these locations should be closely monitored or patrolled in the case of a reported AWOL attempt. The 'Base' perimeter is proposed to partially enclose the campus with a continuous barrier from the southern edge of the wetland near Cottage #1 (pending an alternative consideration noted below) around the Main Entry, Administrative buildings, classroom and vocational education buildings, recreational play field, and continue to the northern edge of the wetland near Cottage #9. At the two 'vulnerabilities' near Cottage #1 and #9, additional motion detection monitoring, motion-activated lighting, and video surveillance are proposed to be deployed.

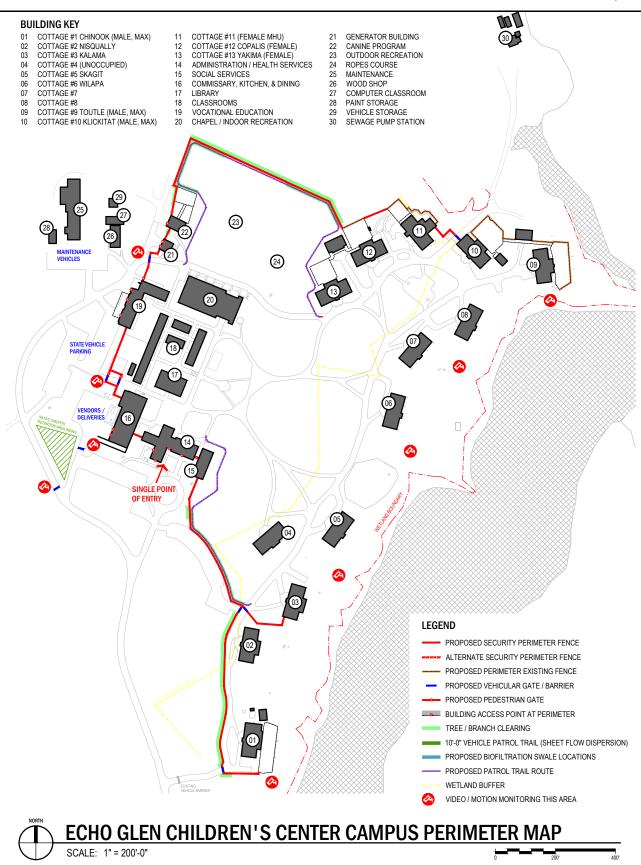
An 'Alternate' Campus Perimeter was also explored, fully-enclosing all cottages within the fence line. In this option, additional fencing spans between each of the cottages along the east-side wetland boundary. This fence line is clearly within the 300-foot wetland buffer. Further study would be required for a more in-depth exploration of the work involved along the eastern edge of the campus, but it eliminates the 'vulnerabilities' as described in the 'Base' perimeter above.

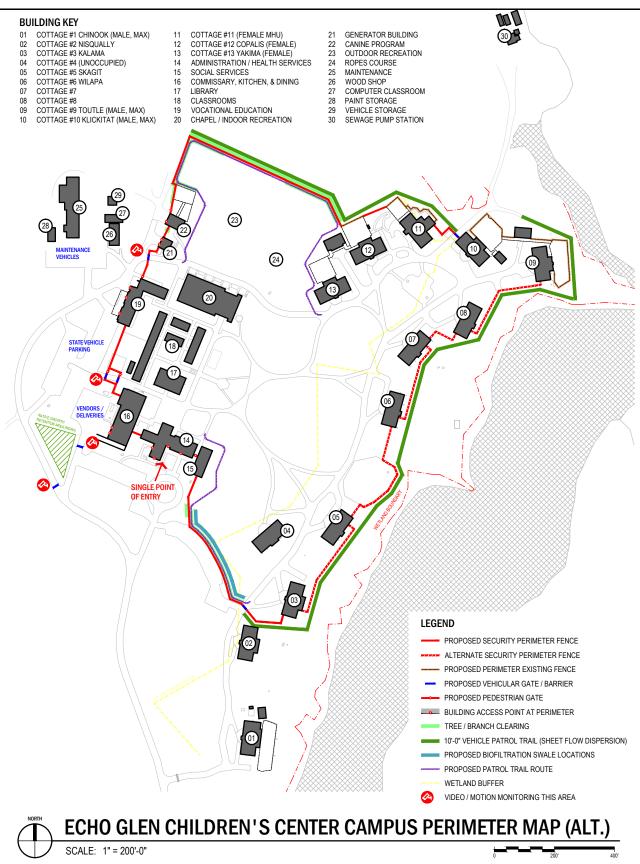
<sup>&</sup>lt;sup>4</sup> EDAW, Inc. "Wetland Reclassification Report," Echo Glen Children's Center (2005).





KMB architects





Following discussions with EGCC and DCYF leadership, the 'Base' Campus Perimeter scheme is the preferred option to mitigate resident AWOL attempts and protect and monitor the perimeter, all while preserving the integrity, look and feel of the campus.

Other areas of alternative considerations:

- a) During the Project Kick-off meeting, it was brought to the attention of the group that DCYF Juvenile Rehabilitation plans to convert two existing cottages into true Minimum Security programs with resident access to outside services (not on campus) and co-location outside any secure perimeter. In preliminary discussions, this future project would likely target Cottage #1 and #2 to be converted to minimum programs. This would affect which portion of the campus is within the secure perimeter. If conversion of these cottages were to occur simultaneously to this Campus Perimeter project, this extension of fencing to include Cottage #1 and #2 would not be necessary. However, if this fencing project were to be constructed prior to this Minimum Cottage conversion, the two cottages would be required to be included in the Campus Perimeter to support the current use and encompass these programs within the Campus Perimeter. Provisions for the future conversion of these cottages would be considered including additional fencing and two vehicle access gates for proper vehicle circulation. This alternate is identified as a 'deductive' alternate in the cost estimate, as it will be assumed in the 'Base' that this fencing project would be standalone from a cottage conversion project.
- b) A forested area is situated directly to the west and south of Cottage #4. An alternate route for the Campus Perimeter was explored, locating the fence in-bound of the forest, rather than out-bound along a portion of public parking. In discussions of this area, the perceived presence of fencing along this forested area, if clearly visible from within the grounds, would affect the image of the park-like campus. As an argument for added security, it would present a clear deterrent from AWOL attempts along this particular stretch. This alternate route does appear to encroach the 300-foot wetland buffer, which may require additional mitigations or improvements further study required. While initially explored as an alternate, this option was removed from the final construction cost estimate due to cost comparisons and added complications of being in the wetland buffer.
- c) An existing ropes course is situated east and adjacent to the recreational play field. This program, offered to all Echo Glen residents is an adventure-based counseling activity, which teaches communication, safety, and trust, while residents traverse a roped obstacle course integrated within the forest. In an alternative routing of the perimeter fence line, the ropes course is located outside of the perimeter. While the program is preferred to be contained within the secure perimeter, routing a fence line through the existing forest involving additional clearing, tree removal, grading, and a new patrol pathway was predicted to increase the total construction cost of the project. Similar to alternate b) above, this alternative routing was removed from the final construction cost estimate due to extensive additional scope and cost, as well as a programmatic desire to keep all resident programs within the Campus Perimeter.
- d) Further described in the 'Perimeter Fencing Design' narratives, a clear distance is required from the fence to any trees, branches, limbs, or overgrown vegetation. These clear swaths create a path around the perimeter providing patrol personnel clear visuals and ease of inspection for any irregularities in the fence line. Along interior or exterior paths, an alternate construction cost line item will be added to upgrade these patrol paths to be constructed as compacted earth with crushed rock to allow a small vehicle to traverse. Due to the impact of this surface with stormwater run-off and flow control, certain requirements must be implemented to satisfy King County.

## **Site Considerations**

Washington State Department of Natural Resources (DNR)

The property that EGCC occupies is a long-term lease with DNR, the landowner. As part of that agreement and ownership of the land, development activities and impacts are subject to DNR review and requirements. The following is a summary of the requirements and reviews that may be required as part of the security fencing and alternate drive path improvements.

- Lease Conditions Approval Per the conditions of the lease, DNR would need to approve any fencing / security project that will impact the land. This should be a written request outlining the project and include all supporting documentation i.e., building plans, reports, diagrams of features that will impact the land.
- Wetlands DNR has a set of regulations related to critical areas (wetland and water bodies), including a policy of zero loss of wetlands. This is different than King County which may negotiate a buffer / setback combination. For instance, a wetland that is 0.25 to 1 acre in size requires at least a 100-foot buffer for wetlands greater than 1 acre, the buffer is greater than 100 feet. Wetland buffer requirements vary between DNR and King County. Generally, DNR requires a larger wetland buffer than King County, therefore, the project will be required to coordinate with DNR prior to finalization of the project approach with King County.



View of Lake Kittyprince from Cottage #9.

- Trees / Timber DNR would conduct a timber cruise of trees that have been identified for removal. DNR would
  assess the fair market value of the trees for which DCYF would pay DNR for. For trees that only need trimming for
  clearances around the fence, the project would be responsible for determining and obtaining all required permits.
- Wildlife and Birds Wildlife and birds, specifically the Vaux Swift, have been seen in the area, but it is unknown if this is an area where they breed in. No other species of significance have been identified. As the project moves from the feasibility stage, coordination with DNR's biologists will be needed to confirm any habitats and requirements consistent with Habitat Corridor Protection (HCP) policies and practices. None are known / identified at this point during feasibility.

Cultural Resources – An appropriate cultural resource survey through DNR will need to be completed. The extent
of the survey will depend on the final nature of construction and ground disturbance. It is recommended that the
DNR cultural resource team be involved early in the project so that they can provide guidance to help streamline
the process. There have already been a number of surveys conducted on site which should help the process.

Washington State Department of Archaeology and Historic Preservation (DAHP)

- Additionally, a cultural resources report should be completed through the DAHP, as well. This report would include an archaeological and built-environment survey in support of this Campus Perimeter project. In a recent construction project at EGCC, Cottage #11 is being renovated to house the facility's female mental-health housing unit. Conducted in 2019, a cultural resources report was required, and the campus was requested to be evaluated for eligibility for listing as a historic district in the King County Historic Resource Inventory and National Register of Historic Places (NRHP). Currently, the structures, buildings, landscaping, pathways, and overall campus fall under the purview of historic preservation.
- In response to the cultural resources report which identified that the construction project will have an adverse
  impact on the campus a Memorandum of Understanding (MOU) between DAHP and DCYF was written for the
  mitigation of related impacts. The MOU establishes that DCYF would implement multiple measures to maintain
  the historic background of the campus and educate the public, families, and visitors with history regarding the
  original campus architect and landscape architect. Specifically, DCYF agreed to develop a public web site
  educating the public, install an educational historic public display on campus, and install an educational plaque in
  the main lobby.
- Echo Glen Children's Center has remained an un-fenced juvenile facility since it was originally established, and the physical presence of a fence barrier would impact the feel and perception of the facility. It will be anticipated DAHP will be afforded an opportunity to review and comment on the impacts of the project regarding the historic preservation of the campus. Further research is required.

#### King County

- Native Growth Retention Area (NGRA) These are areas that are set aside for stormwater mitigation purposes and are protected in perpetuity. These areas may not be impacted in any way, including but not limited to removal of trees, paving, etc. or impacted by additional stormwater being directed to the area. There is one NGRA on-site west of the commissary, kitchen, and dining building.
- Stormwater Requirements The project will need to meet the current King County Surface Water Design Manual (2021). Based on the impervious area of the alternate drive path along the fence, the project would trigger a full drainage review and all minimum requirements, including water quality and flow control.



Native Growth Retention Area (NGRA) per King County.

However, due to the anticipated low frequency of use of a drive path and the nature of the adjacent environment (forest or grassy areas) and gentle slopes that facilitate sheet flow off the drive path, BMP T5.12 Sheet Flow

Dispersion for Driveways may be used for most of the drive path. For areas where slope or space do not allow dispersion techniques, a bioswale (biofiltration swale) may be used for water quality and conveyance of drive path runoff. Further coordination with King County is required during the design phase to determine the most suitable flow control and water quality best management practices (BMPs) for the site.

- Wetlands Further coordination with King County and DNR is needed to determine if an updated wetland report is required to delineate, map, and rate the on-site wetlands to the current standards (Washington State Wetland Rating System for Western Washington - established in 2014).
- Permitting This project will likely require a clearing and grading permit. Current estimated permitting timelines with King County are roughly 6 months.
- Fees The base fee for a clearing and grading permit from King County is \$2,126 for the approximately 2 acres of clearing and grading needed for the fence and potential patrol roadway. Beyond the base fee, the total fee will vary depending on the complexity and length of the review process.

## **Perimeter Fencing Design**

#### Fencing

Non-climb Options

Chain link fabric or mesh is typically the most cost effective fencing as a pedestrian barrier. A standard 2inch mesh is commonly installed throughout residential subdivisions and commercial environments. This standard mesh size is susceptible to climbing, due its larger size openings, allowing a secure hand grip and foot positioning. To mitigate this, smaller sized mesh is used which is sometimes referred to as non-climb fencing or mini mesh. Mini mesh chain link fabric is made in assorted sizes from 1-inch to 1/4-inch mesh sizes and are available in several wire gauges, typically 12 to 6 gauge. Finish options come in standard galvanized, vinyl coated, or aluminum. While a 1-inch mesh still allows finger to pass through, foot holds are less secure - even smaller, a 3/8-inch mesh would not allow climbing and be more secure. These small openings also make it more difficult to manually cut through because there is so little space for the cutters to operate.

Other High-Security Fencing options are available – at an additional cost. Included in this study's construction cost estimate, an enclosure grid system with a welded wire mesh of 6 and 8 gauge wire provides a non-climb straight fence solution for the barrier.



Example of a mini mesh chain link fence fabric in comparison to standard 2-inch chain link.



Non-climb welded wire mesh fence system.

Barrier Height

The height of the perimeter fencing should be determined based on the security level required and monitoring available, also considering added costs. 12-foot tall fencing limits the ease of advancing up the barrier with forward momentum. Coupled with non-climb mesh, a tall barrier would offer a medium level of security. Additional height may be desired if no other top-edge deterrent is introduced such as barbed wire or a curved or angled top. Higher fences do require engineering to calculate post and footing depths as it relates to fence loading, moment forces, and wind loads.

Colors

The color of fencing affects the visibility of the barrier, which affects the perception of its viewer. A white colored fence is very visible, standing out with any darker backgrounds – and black typically offers the opposite effect, allowing a viewer to look through the material easier. In the existing park-like nature of the campus, it is important that this Campus Perimeter maintain this as much as possible . With the backdrop of trees and vegetation, it may be recommended to use a green color to blend in with the environment. Where the fence line is not surrounded by trees, black or a brown color would limit the visibility and the presence of a fence, especially to visitors.



Example of a standard, green-colored vinyl-coated chain link fence.

• Razor / Barbed Wire

Barbed wire, or other razor wires and barbed tapes, are physical security components designed to inflict serious cuts on anyone attempting to climb over or through. Due to this and the perceived nature of its use, the presence of barbed wire or razor wire has a strong psychological deterrent effect.



Secure perimeter fence with Concertina wire at Green Hill School (DCYF).

A range of barbed wire types are available, from traditional coiled barbed wire to razor ribbon mesh panels and Concertina wire – a razor tape formed in large coils which can be expanded like an accordion. Each of these options present a danger to those attempting to climb over but can still be defeated using a heavy blanket or bypassing altogether via other vulnerabilities in the fence itself.

The presence of barbed wire also impacts the perception of a facility to residents, staff, and visitors. Barbed wire is commonly used as a high-security barrier component such as in prisons, jails, and other detention facilities. This adds to the perception of an institutionalized or guarded environment which does not reflect the rehabilitative nature of the programs and treatments DCYF hopes to offer. Due to this perception, DCYF and administrative leadership would like to keep the perimeter fence free of barbed wire and simplify the construction with added height and non-climbable fence material.

Another factor against the use of razor wire is the presence of wildlife. As the fence line approaches the wetland buffer. Birds or other animals may accidentally find themselves injured or worse, entangled in the razor wire.

• Other Top-Edge Deterrent Options

A fence barrier can be made less climbable with other forms of topedge deterrents. Top spokes or spikes may be used, typically seen on steel, aluminum, or ornamental iron fences. Commonly used in psychiatric facilities, heavily curved, or angled fences, coupled with non-climbable mesh further limit the possibility of climbing over.

In regard to a straight fence, it must be noted that a fence with no top-edge deterrent may not be considered "high-security" and should require some level of monitoring. The opportunity still presents itself to use forward momentum to advance up and over the barrier – or to use the help of a partner or multiple partners to boost another over. Adding height, while increasing the cost, does make this more difficult. It should also be noted that downed trees or other obstacles can be used to climb the fence. Patrol and maintenance of the fence is important to maintain the integrity of the perimeter.



High-security steel palisade fence design.

Clearances / Perimeter Access and Patrol

- Final clearances required are to be coordinated with EGCC and DCYF leadership during the design phase. A
  minimum of 10 feet of clearing on either side of the fence is the base evaluation as part of this study. Further
  coordination and evaluation of other design standards or guidelines for high-security fencing at similar facilities will
  continue to inform the final design.
- To maintain the integrity of the secure perimeter, the fence line will require routine patrolling and continual vegetation clearing.
- A perimeter access road for vehicles, if provided, should be a minimum of 10' of pavement width per King County standards for driveway width. Existing interior paved routes on the campus are typically a minimum of 10' wide. A perimeter access road, if provided, along the fence exterior or interior, where needed, was evaluated as a 3" HMA (Hot Mix Asphalt) Class 1/2" PG 58H-22 over 6" of crushed surfacing top course or at a minimum, a drivable compacted earth trail. At this time, EGCC would like to exclude any improvements relating to drivable patrol roads

along the new campus perimeter. Patrolling is anticipated to be by pedestrian means only. The drivable options for the perimeter access roads are included in the cost estimate as alternates. It should be noted, however, that any disturbance or change in surface conditions from the natural conditions will trigger some level of stormwater evaluation. Further coordination to follow in the design phase.

### Vehicular Access

- Vehicle access through the Campus Perimeter would be through vehicle gates located at main driveways around the campus, integrated within the secure fence line. Where the fence line passes over a main roadway, an access is required at least for maintenance and emergency access. Vehicular access gates may be swinging or sliding in nature, each requiring certain clearances and configurations further research and exploration is required during design. For this construction cost estimate, a sliding system is assumed to be implemented at all vehicle gates for ease of control and less required clearances in front of the gate. Exclusive access will be needed for emergency responders, which will need to be coordinated with each associated party.
- To maintain security and monitoring of the campus, all vehicles (except for authorized patrol, maintenance, and emergency) should enter the secure campus through a designated vehicle sallyport. A sallyport is a secure entryway that consists of a series of doors or gates which provide control and monitoring of the access point from a central location. In a sallyport, only one opening shall be open at a time: entry gate opens, vehicle enters, gate closes exit gate opens, vehicle exits, gate closes. The gates can be programmed this way to prevent user error of allowing both gates to be open. The sallyport may also be used to do a vehicle search before entering and offers the benefit of maintaining the continuous perimeter at all times.
- Authorized patrol, maintenance, and emergency-related vehicles would access the campus via other single-level gated access points. These gates would be authorized card reader access only – no central control would be provided. A security protocol would need to be in place to mitigate residents running through the gates as a vehicle enters or exits, as well as additional video surveillance monitoring.
- Elsewhere on the campus, outside of the secure perimeter, vehicular access can be controlled via vehicle barrier arm gates or drop-arm barriers. These do not limit pedestrian access but would limit ingress and slow egress of vehicles. Card access or remote control from a central location can provide access. Free exiting, the use of a vehicle pressure pad, is acceptable at these locations.



Example of a cantilever sliding chain-link fence.



Example of a wheeled sliding gate with steel fencing.



Example of a two-way drop-arm vehicle barrier.

The main campus gate is located along the main access road – SE 99th Street, a one-mile two-way paved road. This is a sliding gate with card access and remote control with intercom call station to the security control station. A video surveillance camera is also installed to monitor the area and capture license plate information. While excluded from the evaluation and exploration of this study, EGCC expressed a desire to upgrade this gate to restrict the egress to authorized or screened vehicles only. Currently, all vehicles exiting are able to trigger the opening of the gate via vehicle pressure pad. To implement this procedure, the existing gate and road would need to be modified to accommodate a card reader and intercom call station in the middle of the road, which may require widening and additional clearance for turn-around space.



The existing sliding gate along the main EGCC campus access road (SE 99th Street).

## **Pedestrian Access**

Specific locations throughout the Campus Perimeter will require pedestrian access. These access locations would
provide card reader access and exit through a gate in the fence line. Only authorized personnel should be allowed
to use these access points to limit passage or exit, such as maintenance and patrol. All staff and visitors should
enter the campus through the Main Administration Building Entry Point.

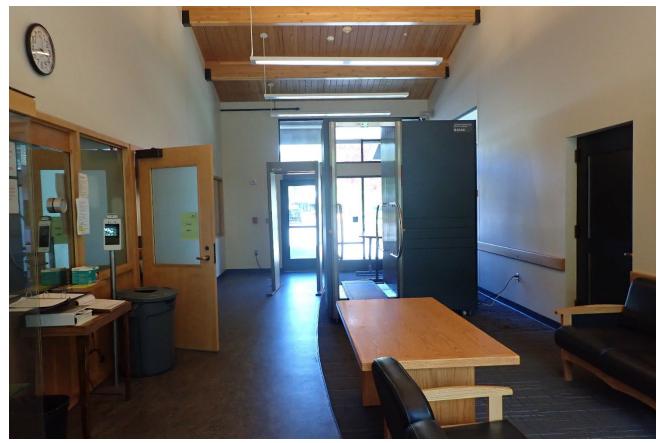
## **Control and Monitoring**

- An existing Key Card system is implemented at the facility at certain doors and access points. For future success
  of operations and security of the facility, a fully-implemented system of card readers, credentials / authorizations,
  and monitoring should be installed and used. All staff and visitors should enter through the Main Administration
  Building Entry Point, which means other access points should be restricted to only authorized personnel with
  specific key card credentials.
- Other access points that provide access to visitors without appropriate key card credentials would require remote controlled access from Central Control with a two-way intercom to allow for communication. Video surveillance at each access point is also recommended to maintain monitoring along the perimeter.

- Other doors and entries into buildings along the exterior of the Campus Perimeter must also be reviewed. If the
  door is required to offer free egress and is accessible to residents, it presents a vulnerability and must be
  addressed. For example, at the Vocational Education building, classrooms can be accessed via a back door, on
  the west side of the building. To limit escapes and unauthorized entries this area is proposed to be fenced.
- In the 'Base' Campus Perimeter, the eastern boundary of the campus utilizes the natural wetland, Lake Kittyprince. To maintain monitoring of these areas between and behind the cottages, several locations for Video Surveillance, Motion Detection Monitoring, and Motion-activated Lighting is proposed. These video feeds will be visible at all times from the central security control station. Lighting around these areas would be motion-activated as a first-level alert of the area and increase visibility. Motion detection monitoring would allow the security control station to put eyes on the area and confirm the disturbance. It was noted that the accidental triggering of the motion detection from wildlife is welcome, ensuring monitoring of the area is consistently being surveilled. Further research is required regarding specific locations, mounting requirements, and product options. A security electronics specialist is recommended during the design phase for consultation.

## **Visitor and Staff Entry Check-in and Screening**

Another major goal of the Echo Glen Children's Center is to control and monitor the number of authorized staff and visitors in the campus. Currently, without a secure perimeter around the facility, vehicles and other unauthorized visitors have the ability to trespass onto the campus accidentally or intentionally. With the introduction of a Campus Perimeter, policies and procedures can be implemented to require all pedestrian staff, visitors, or vendors to enter the campus through a single point of entry.



The existing EGCC Main Entrance and Visitor Check-in area with Body Scanner and walk-through metal detector.

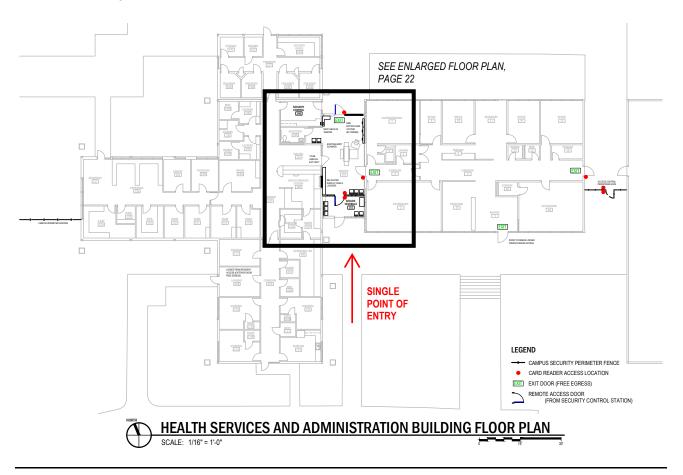
## **Main Entry Improvements**

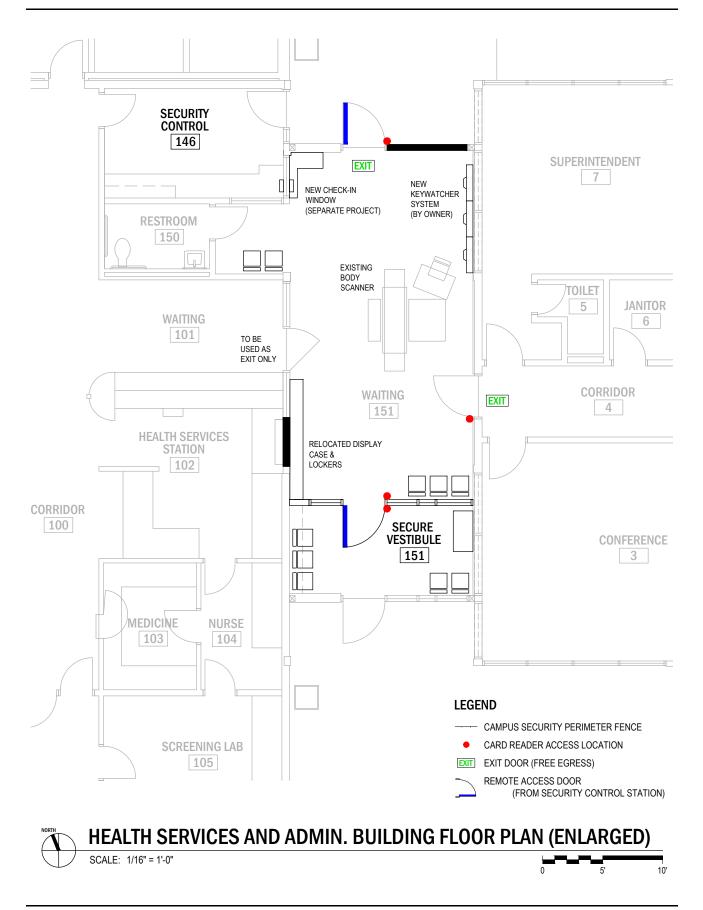
As part of a DCYF minor works project, upgrades to the campus security video surveillance system are planned. This project plans to connect existing cameras to a new front end interface with the objective to reduce failures of cameras, add additional storage capacity, and build a more reliable system. As budget allows, this project may also include additional new cameras and viewing stations throughout select buildings of the facility. In relation to these improvements, the main entrance area and adjacent space functions would be changed. The current check-in window that fronts health services would no longer be used for visitor check-in and would be exclusively programmed for the health services area only. Check-in functions would now occur toward the campus-side door, where the new Security Control room is located. One-way glazing, a speaker port, and pass-thru tray would be required at the new check-in window. These improvements are recommended to be included as part of the Security Control Room upgrades and not as part of this project's Main Entry Improvements (this scope of work is not included in the construction cost estimate).

To further control and monitor who enters the campus, improvements to the existing main entry are recommended. Currently, a visitor may enter the main lobby area and walk straight through, exiting the back door, bypassing the check-in window. To limit this free access, a secure vestibule is proposed at the main entry door (south end of the lobby toward public parking) which requires key card access or remote control from the security control station. or those without key card credentials, upon identifying one's reason for the visit via intercom communication, authorization may be granted, and the door would be remotely unlocked. To further secure the lobby, the campus-side door (north end of the lobby) is also recommended to be access controlled with card reader and remote control.

Access control to the surrounding doors is also proposed to limit access only to authorized personnel. The door into Administrative Offices would require authorized key card credentials – visitors would be required to check-in and may be escorted through the door. All other entry into or exiting from the main entrance area should require authorized access, key card or remote control. This provides further control of who is entering and exiting the campus at all times.

With the construction of a Campus Perimeter and Main Entry Improvements, further policies and procedures must be in place to further secure the campus. EGCC will implement visitor check-in procedures including security checks via Body Scanner or Metal Detection Screening. A new workstation within the main entrance area will place a designated person in the entry area to direct and assist visitors through this screening and check-in process. Due to the private nature of the visuals on the Body Scanner monitors, configuration of the space should limit visibility from others in the area and even from outside the building. Opaque window film or other screening film may be installed to provide additional privacy. Separate procedures are also planned to be implemented for staff related to a new KeyWatcher® system which is planned to be installed along the back wall of the main entrance area.





## **Construction Cost Estimating**

### **Estimated Costs Summary**

Roen Associates provided construction cost estimating services for this scoping and feasibility study. The 'Base' Campus Perimeter is shown as the Total Construction Cost with each alternate broken out as separated line items independent of one another (each alternate includes all mark-ups and escalation). Estimated quantities and take-offs were provided by the architectural team based on the CAD campus plans and proposed fence locations.

Item	Description	QTY	UOM	\$ / UOM	Cost
1	Main Entry Building Improvements	1	LS		\$103,434
2	Sitework	1	LS		\$3,504,857
3	General Conditions & Support Services	6	МО	\$25,000	\$150,000
	Total Estimated Construction Cost (Today's Dollars)				
4	Escalation to Midpoint (Q4, 2023 @ 5%/Year)	7.25%	on	\$3,758,291	\$272,476
Total Construction Cost (Escalated)					\$4,030,767

#### ALTERNATES (including all mark-ups and escalation):

Upgrade Fence	\$851,351
Fully Enclosed Campus with Fencing Only	\$1,371,891
Fully Enclosed Campus with Fencing and East-boundary Access Road	\$1,684,540
Access Road Driveway	\$165,322
Drivable Compacted Earth Trail	\$60,811
Cottage #1 and #2 Perimeter Fence Exclusion (Deductive Alternate)	(\$709,575)

The cost estimate assumes a Design-Bid-Build delivery method.

The schedule of construction assumes a 2023 Quarter 3 start with a 6-month duration. The estimate includes escalation to the midpoint of construction – additional delay or a further postponed construction start would further increase this value.

#### EXCLUSIONS:

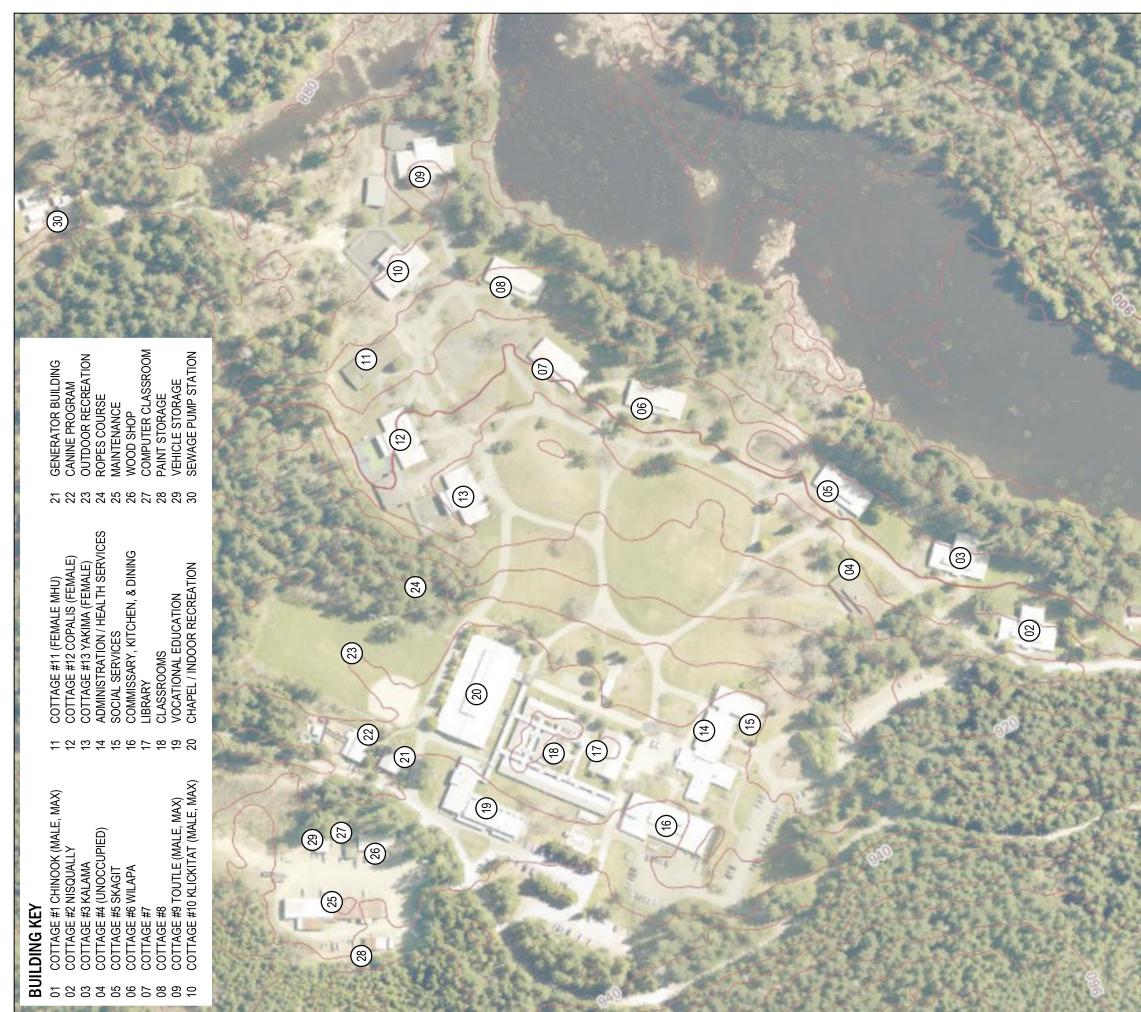
The cost estimate provided is for construction only – soft costs such as project management, Architectural / Engineering design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furniture, and sales tax are not included.

Costs as determined by DNR are expected to be paid by DCYF to DNR for removal of trees on site.

New Security Control Station work as recommended is not included in this cost estimate; work to be included under a separate scope. Main Campus Gate screened exiting improvements and Secondary Emergency Access / Egress Route improvements are also not included in this cost estimate.

## Attachments

Campus Map and Perimeter Diagrams (11"x 17")	3 sheets
Health Services and Administration Building Floor Plan (11"x 17")	1 sheet
Cost Estimate Package, Roen & Associates	11 pages
Security Improvements Scoping and Feasibility Meeting Minutes	
- Meeting #1 (April 20, 2022) – Project Kick-off	5 pages
<ul> <li>Meeting #1a (April 29, 2022) – Follow-up with EGCC Superintendent</li> </ul>	4 pages
- Meeting #2 (May 11, 2022)	6 pages
- Meeting #3 (May 25, 2022)	4 pages



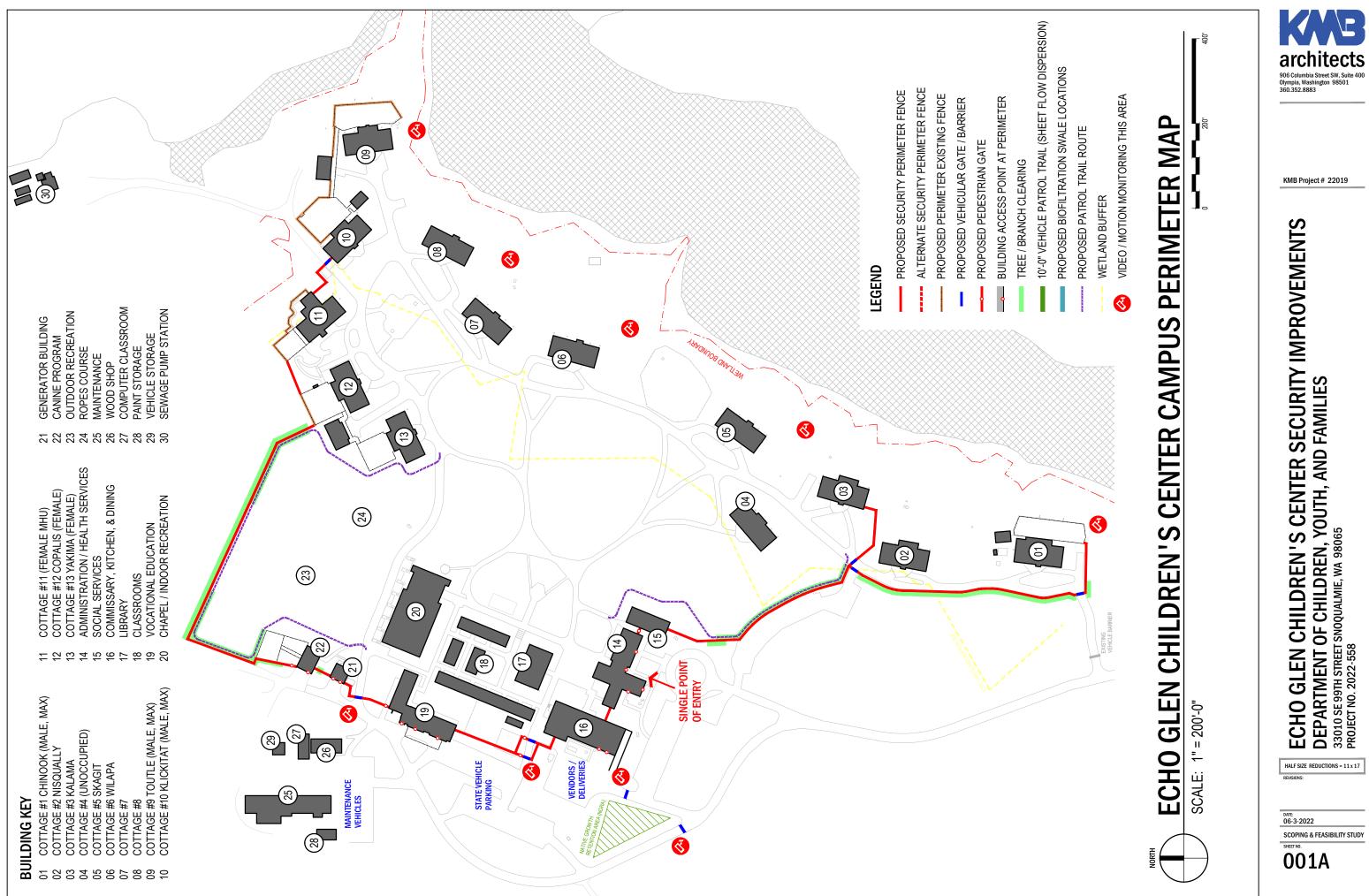


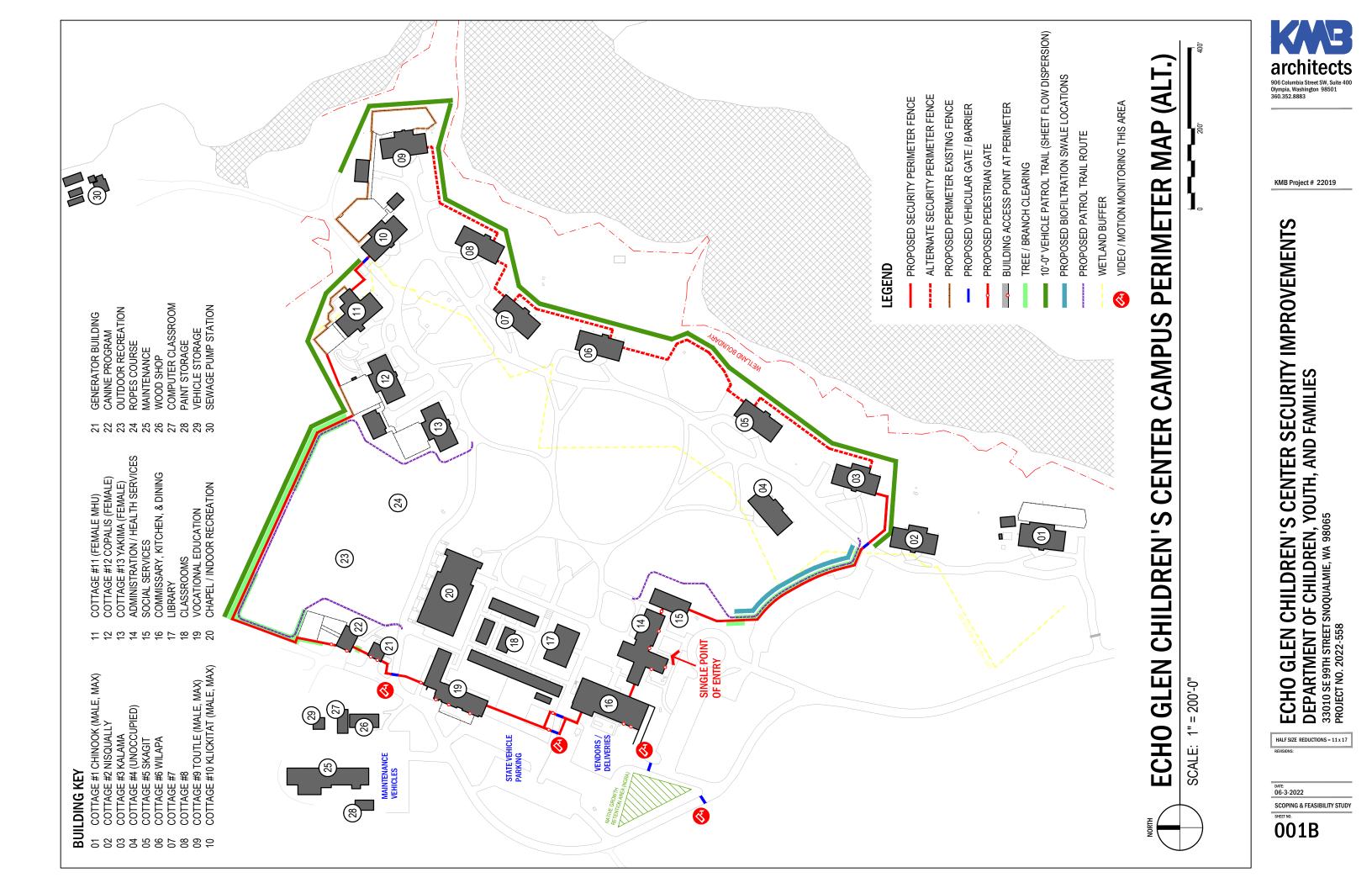


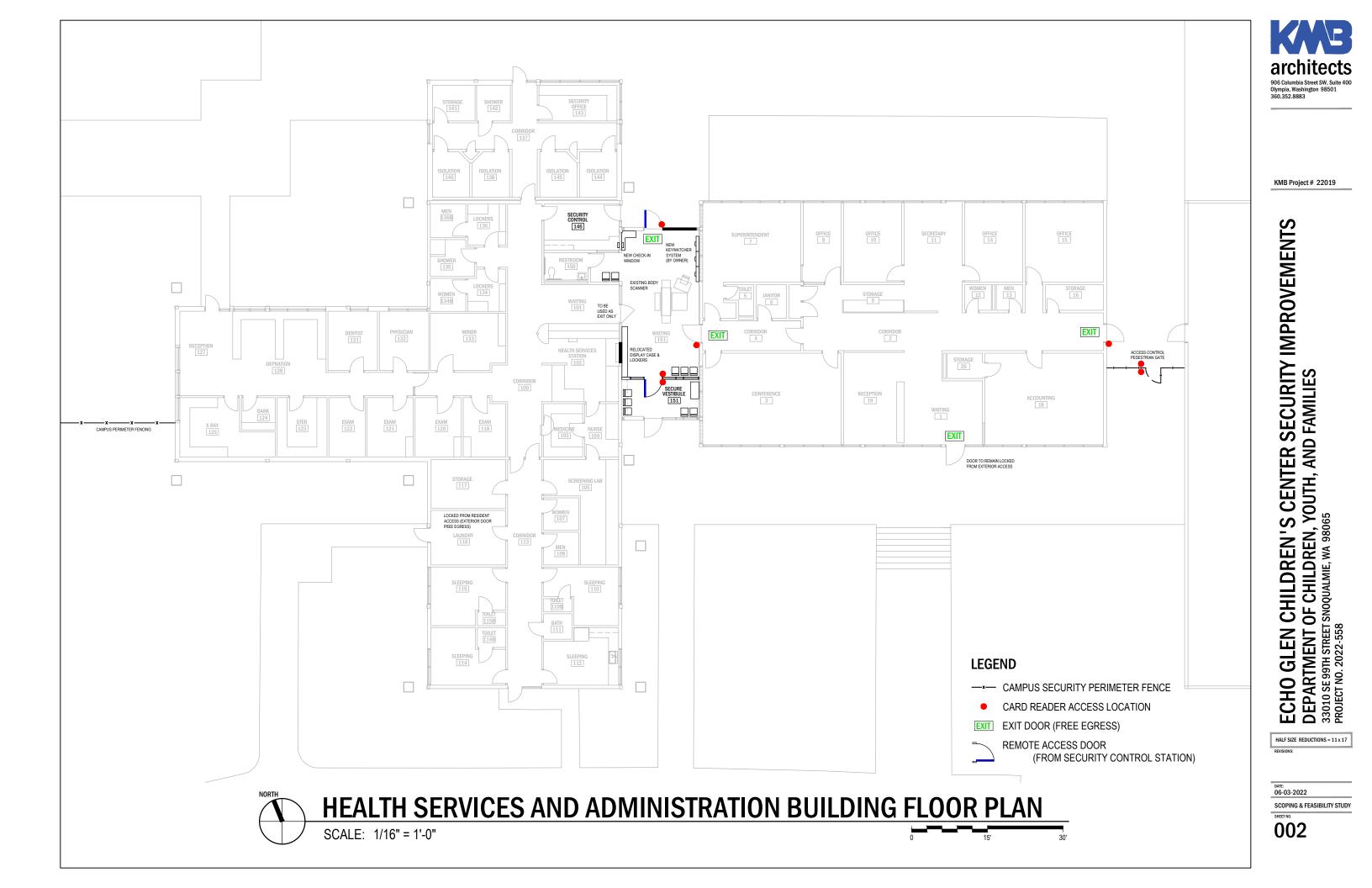


ECHO GLEN CHILDREN'S CENTER SECURITY IMPROVEMENTS DEPARTMENT OF CHILDREN, YOUTH, AND FAMILIES 33010 SE 99TH STREET SNOQUALMIE, WA 98065 PROJECT NO. 2022-558 HALF SIZE REDUCTIONS = 11 x 17

DATE: 06-3-2022 SCOPING & FEASIBILITY STUDY SHEET NO. 0000







#### **EXECUTIVE SUMMARY**

#### **EGCC - Perimeter Security Improvements**



June 2, 2022

PROJECT INFORM	ATION	Project Number	
<u>Owner:</u>	Department of Children, Youth and Families	Estimate Date:	June 2, 2022
Name:	EGCC - Perimeter Security Improvements	Building Area:	See Estimate
Location:	33013 S. 99th Street, Snoqualmie, WA 98065	Site Area:	See Estimate
Seattle Office:	Roen Associates	Contact Name:	Dan Deymonaz
	500 Union Street, Suite 927	Telephone:	(206) 343-1003
	Seattle, WA 98101	<u>E-mail:</u>	dan@roenassociates.com
Spokane Office:	Roen Associates	Contact Name:	
	121 South Wall	Telephone:	(509) 838-8688
	Spokane, WA 99201	<u>E-mail:</u>	
Project Type:	Security Fencing Scope Including Access Rds.		
Estimate Level:	PreDesign Estimate		
Project Start:	Q3, 2023	Project Duration:	6 months
Documents Review	ved:		
	Document	<u>A/E/C</u>	Firm Date
Drawings:	Perimeter Site Fencing Plans	KMB Arcl	nitects 5/16/2022

Reports:

#### **Construction Cost Summary**

Owner: Department of Children, Youth and Families Project: EGCC - Perimeter Security Improvements

### **ESTIMATED COSTS SUMMARY**

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June 2, 2022

Item	Description	QTY	UOM	\$ / UOM	Cost
1	Main Entry Building Improvements	1	LS		\$103,434
2	Sitework	1	LS		\$3,504,857
3	General Conditions & Support Services	6	MO	\$25,000	\$150,000
	Total Estimated Construction Cost (Today's Dollars)				\$3,758,291
4	Escalation to Midpoint (Q4, 2023 @ 5%/Year)	7.25%	on	\$3,758,291	\$272,476
	Total Construction Cost (Escala	ated)			\$4,030,767

#### ALTERNATES (includes all mark ups and escalation

Upgrade Fence	\$851,351
Fully Enclosed Campus with Fencing Only	\$1,371,891
Fully Enclosed Campus w/ Fencing and Access Road	\$1,684,540
Access Road Driveway	\$165,322
Drivable Compacted Earth Trail	\$60,811
Cottage 1 and 2 Perimeter Fence Exclusion	(\$709,575)

#### COMMENTS:

Design, Bid, Build delivery method is assumed

Assumes a Q3, 2023 start and a 6 month schedule

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

#### Roen Associates 500 Union St #927 Seattle, WA 98101

#### DCYF EGCC Security Improvements - Main Entry Budget Estimate



Project Owner:	Department of Children, Youth and Families	Architect:	KMB Architects
Project Name:	EGCC - Perimeter Security Improvements	Project Duration:	6 MO
Project Location:	33013 S. 99th Street, Snoqualmie, WA 98065	Building GSF:	472
Project Start Date:	Q3, 2023	Site GSF:	1
Estimate Date:	June 2, 2022		

	ESTIMATE SUMMARY		Unit of	Unit	Total Estimated
No.	Description	Quantity	Measure	Cost	Cost
A10	Foundations	472	BGSF	\$0.00	\$0
A20	Basement Construction	472	BGSF	\$0.00	\$0
B10	Superstructure	472	BGSF	\$0.00	\$0
B20	Exterior Enclosure	472	BGSF	\$8.47	\$4,000
B30	Roofing	472	BGSF	\$0.00	\$0
C10	Interior Construction	472	BGSF	\$47.35	\$22,350
C20	Stairs	472	BGSF	\$0.00	\$0
C30	Interior Finishes	472	BGSF	\$2.12	\$1,000
D10	Conveying Systems	472	BGSF	\$0.00	\$0
D20	Plumbing	472	BGSF	\$0.00	\$0
D30	HVAC	472	BGSF	\$5.08	\$2,400
D40	Fire Protection	472	BGSF	\$5.08	\$2,400
D50	Electrical	472	BGSF	\$81.36	\$38,400
E10	Equipment	472	BGSF	\$0.00	\$0
E20	Casework & Furnishings	472	BGSF	\$13.77	\$6,500
F10	Special Construction	472	BGSF	\$0.00	\$0
F20	Selective Demolition	472	BGSF	\$5.85	\$2,760
	Building Construction Subtotal				\$79,810
	Design Contingency			20.00%	\$15,962
	Subtotal				\$95,772
	Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)			8.00%	\$7,662
	Subtotal				\$103,434
	Escalation to Mid-Point (See Summary)				\$0
	BUILDING GRAND TOTAL	472	BGSF	\$219.14	\$103,434

Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.

### DCYF EGCC Security Improvements - Main Entry Budget Estimate



	DETAILED ESTIMATE		Unit of	Unit	Total Estimated
No.	Description	Quantity	Measure	Cost	Cost
A10	FOUNDATIONS	,			
-	Foundations		1		
	SUBTOTAL FOUNDATIONS	472	BGSF	\$0.00	\$0
A20	BASEMENT CONSTRUCTION				
	Basement Construction		1		
	SUBTOTAL BASEMENT CONSTRUCTION	472	BGSF	\$0.00	\$0
B10	SUPERSTRUCTURE				
	Superstructure	1	1		
	SUBTOTAL SUPERSTRUCTURE	472	BGSF	\$0.00	\$0
		472	0001	\$0.00	φu
B20					
D20	Exterior Windows	1	1		
	Existing Exterior to Remain			\$ -	\$0
				\$ -	<b>Ф</b> О
	Exterior Doors				
	Retrofit Existing Door w for Electronic Access Control (Reader Devices included with Electrical), Electric Strike and New Lock Set	2	ea	2,000.00	\$4,000
	SUBTOTAL EXTERIOR ENCLOSURE	472	BGSF	\$8.47	\$4,000
		=		<b>*</b> •••••	• 1,000
B30	ROOFING				
	Roofing		1		
	SUBTOTAL ROOFING	472	BGSF	\$0.00	\$0
C10	INTERIOR CONSTRUCTION	I	<b></b>		
	Interior Construction			1	
	New Interior GWB Wall Assemblies	128	sf	\$ 20.00	\$2,560
	Header Framing over New Storefront	120	lf	\$ 20.00 \$ 50.00	\$650
		13	ls	\$ 50.00 \$ 1,360.00	\$050
	Misc. Cutting and Patching - Allowance		15	φ 1,300.00	φ1,300
	Interior Doors, Frames, Hardware				
	Retrofit Existing Door w for Electronic Access Control (Reader Devices included with Electrical), Electric Strike and New Lock Set	1	ea	2,000.00	\$2,000
	Interior Glazing				
	New Interior Vestibule Storefront (13'-0" x 7'-0")	91	sf	\$ 80.00	\$7,280
	Aluminum Storefront Doors, HW, Complete - per leaf	1	ea	\$ 7,500.00	\$7,500
	Premium for Electronic Hardware at Card Readers (Reader Devices included with Electrical)	1	ea	1,000.00	\$1,000
	SUBTOTAL INTERIOR CONSTRUCTION	472	BGSF	\$47.35	\$22,350

### DCYF EGCC Security Improvements - Main Entry Budget Estimate



	DETAILED ESTIMATE		Unit of	Unit	Total Estimated				
No.	Description	Quantity	Measure	Cost	Cost				
C20	STAIRS								
	Stairs								
	SUBTOTAL STAIRS	472	BGSF	\$0.00	\$0				
C30	INTERIOR FINISHES								
	Interior Finishes								
	Paint	1	ls	\$ 1,000.00	\$1,000				
	SUBTOTAL INTERIOR FINISHES	472	BGSF	\$2.12	\$1,000				
D10	CONVEYING SYSTEMS	_							
	Conveying Systems								
	SUBTOTAL CONVEYING SYSTEMS	472	BGSF	\$0.00	\$0				
D20	PLUMBING								
	Plumbing								
	SUBTOTAL PLUMBING	472	BGSF	\$0.00	\$0				
_									
D30	HVAC								
	HVAC								
	Misc. Adjustments	1	ls	\$ 2,400.00	\$2,400				
	SUBTOTAL HVAC	472	BGSF	\$5.08	\$2,400				
D (A									
D40	FIRE PROTECTION	1	1						
	Fire Protection			A 0 400 CC	<u> </u>				
	Misc. Adjustments	1	ls	\$ 2,400.00	\$2,400				
				<b>AB</b>					
	SUBTOTAL FIRE PROTECTION	472	BGSF	\$5.08	\$2,400				

### DCYF EGCC Security Improvements - Main Entry Budget Estimate



	DETAILED ESTIMATE		Unit of	Un	it	Total Estimated			
No.	Description	Quantity	Measure	Co	st	Cost			
D50	ELECTRICAL								
	Electrical								
	Card Readers (includes rough in, cable and device)	6	ea	\$ 6,0	00.00	\$36,000			
	Misc. Adjustments	1	ls	\$ 2,4	00.00	\$2,400			
	SUBTOTAL ELECTRICAL	472	BGSF	\$	81.36	\$38,400			
E10	EQUIPMENT		P	D					
	Equipment								
	SUBTOTAL EQUIPMENT	472	BGSF		\$0.00	\$0			
E20	CASEWORK & FURNISHINGS		I	I		1			
	Fixed Casework								
	Relocate (E) Display Case and Lockers	1	ls		00.00	\$3,500			
	New Counterspace w Pass - Thru at New Check In Window	1	ls	\$ 3,0	00.00	\$3,000			
	SUBTOTAL FURNISHINGS	472	BGSF	\$	13.77	\$6,500			
F10									
FIU	SPECIAL CONSTRUCTION								
	Special Construction								
	SUBTOTAL SPECIAL CONSTRUCTION	472	BGSF		\$0.00	\$0			
		472	0001		φ <b>0.00</b>	φU			
F20	SELECTIVE BUILDING DEMOLITION								
•	Selective Demolition for New Counter Space Pass Thru								
	Selective Interior Demolition	32	hf		75.00	\$2,400			
	Supervision, Hauling & Dump Fees	15%	on	\$	2,400	\$360			
	Hazardous Components Abatement				-				
	None								
	SUBTOTAL SELECTIVE BUILDING DEMOLITION	472	BGSF		\$5.85	\$2,760			
Z10	GENERAL REQUIREMENTS								
	General Conditions								
	See Summary								
	SUBTOTAL GENERAL REQUIREMENTS	472	BGSF		\$0.00	\$0			

Roen Associates
500 Union St #927
Seattle, WA 98101

### DCYF EGCC Security Improvements - Sitework Budget Estimate



Project Owner:	Department of Children, Youth and Families	Architect:	KMB Architects
Project Name:	EGCC - Perimeter Security Improvements	Project Duration:	6 MO
Project Location:	33013 S. 99th Street, Snoqualmie, WA 98065	Building GSF:	
Start Date:	Q3, 2023	Site GSF:	1
Estimate Date:	June 2, 2022		

	ESTIMATE SUMMARY		Unit of	Unit	Total Estimated			
No.	Description	Quantity	Measure	Cost	Cost			
G10	Site Preparation	1	ls	\$113,365	\$113,365			
G20	Site Improvements	1	ls	\$2,427,000	\$2,427,000			
G30	Site Civil / Mech Utilities	1	ls	\$0.00	\$0			
G40	Site Electrical Utilities	1	ls	\$164,000	\$164,000			
G50	Other Site Construction	1	ls	\$0.00	\$0			
	Sitework Subtotal							
	Design Contingency			20.00%	\$540,873			
	Subtotal				\$3,245,238			
	Contractor Mark Up (Overhead, Profit, Insurance, Bond, B&O Tax)			8.00%	\$259,619			
	Subtotal				\$3,504,857			
	Escalation to Mid-Point (See Summary)			0.00%	\$0			
	SITE GRAND TOTAL 1 Is							
Estima	Estimate excludes soft costs such as design fees, permits, testing / inspections, construction change order contingencies, loose fixtures / furnishings and sales tax.							

#### DCYF EGCC Security Improvements - Sitework Budget Estimate



	DETAILED ESTIMATE		Unit of	Unit	Total Estimated
No.	Description	Quantity	Measure	Cost	Cost
G10	SITE PREPARATON	,			
	Mobilization	1	ls	25,000.00	\$25,000
	Site Demolition & Relocation				
	Tree + Branch Clearing 15'-0" High, 10'-0 Clear from Fence Line	2,300	sf	1.00	\$2,300
	Tree Removal (Estimated 1 Tree Per 250sf Clear, Average 20" Dia.	125	ea	200.00	\$25,040
	Demolish Existing Chain Link Fence (Incl. Posts and Concrete)	125	lf	10.00	\$1,250
	Misc. Site Clearing	1	ls	5,000.00	\$5,000
	Site Earthwork				
	Clear and Grub (20' at Access Road)	31,300	sf	0.25	\$7,825
	Excavation				
	Grading and Fill (20' at Access Road)	31,300	sf	1.50	\$46,950
	Hazardous Waste Remediation				
	None Included				
	SUBTOTAL SITE PREPARATON	1	SGA	\$113,365	\$113,365
G20	SITE IMPROVEMENTS				
	Site Development				
	Drivable Compacted Earth Trail 10'-0" Clear Width from Fence Line - 1,250lf (Not Included in Base Bid - See Alternates)				\$0
	Security Perimeter Fencing and Gates				
	14'-0" High Fence (8'-0" Standard Chainlink, 6'-0" Non Climb Mesh) Vinyl Coated Green	3,500	lf	650.00	\$2,275,000
	16'-0" Sliding Gate for Maintenance Only (Card Reader and Monitoring Only)	5	ea	10,000.00	\$50,000
	16'-0" Sliding Gate @ Central Security (access controls / intercom included w/ electrical)	2	ea	15,000.00	\$30,000
	20'-0" Vehicle Barrier Arm Gate Operator w Sensor Kit (access control and intercom included w/ electrical)	2	ea	28,000.00	\$56,000
	Man Gate (access control w/ electrical)	4	ea	4,000.00	\$16,000
	SUBTOTAL SITE IMPROVEMENTS	1	SGA	\$2,427,000	\$2,427,000
G30	SITE CIVIL / MECHANICAL UTILITIES				
	Water Service - Not Included in Scope				
	Sanitary Sewer Systems - Not Included in Scope				
	Storm Drainage - Not Included in Scope				
	SUBTOTAL SITE CIVIL / MECHANICAL UTILITIES	1	SGA	\$0.00	\$0

#### DCYF EGCC Security Improvements - Sitework Budget Estimate



	DETAILED ESTIMATE		Unit of	Unit	Total Estimated
No.	Description	Quantity	Measure	Cost	Cost
G40	SITE ELECTRICAL UTILITIES				
	Electrical and Telecom Utilities				
	Additional Exterior Pole Mounted Video Survellance and Integrated Motion Monitoring w Motion Light	9	ea	\$ 6,000.00	\$54,000
	Power, Access Controls, Intercom at Gates		ls	\$ 110,000	\$110,000
	SUBTOTAL SITE ELECTRICAL UTILITIES	1	SGA	\$164,000.00	\$164,000
G50	OTHER SITE CONSTRUCTION				
	Other Site Construction				
	SUBTOTAL OTHER SITE CONSTRUCTION	1	SGA	\$0.00	\$0
Z10	GENERAL REQUIREMENTS				
	General Conditions				
	See Summary				
	SUBTOTAL GENERAL REQUIREMENTS	1	SGA	\$0.00	\$0



	DETAILED ALTERNATE ESTIMATES		Unit of	Unit	Total Estimated
Alt No.	Description	Quantity	Measure	Cost	Cost
1	Upgrade Fence	,			
	Upgrade all Fencing (12' High) and Gates from Chainlink to Security Non - Climb Welded Steel Wire Fencing. Vinyl Coated / Green ( Assume Ameristar Matrix Alpha w Wire Works Infill	3,500	lf	175.00	\$612,500
	SUBTOTAL				\$612,500
	Contingency			20.00%	
	Markups (Insurance, Bond, OH & P, B&O Tax)			8.00%	\$122,500 \$58,800
	Escalation to Midpoint (Q4, 2023 @ 5%/Year)			7.25%	\$58,800
	TOTAL ESTIMATED CONSTRUCTION COSTS			1.2370	· · ·
24					\$851,351
2A	Fully Enclosed Campus with Fencing Only	250	lf	10.00	¢2 500
	Demolish Portion of (E) Standard Chainlink Fence Additonal 14'-0" High Fence	250	II If	10.00 650.00	\$2,500 \$975,000
	Tree Removal	60	ea	200.00	\$975,000
	Clear and Grub (10' at new fence)	15,000	sf	0.25	\$3,750
	Grading and Fill	15,000	sf	1.50	\$22,500
	Remove 5 Cameras from Base	(5)	ea	5,750.00	(\$28,750)
		(0)	ou	0,100.00	(\$20,100)
	SUBTOTAL				\$987,000
-	Contingency			20.00%	\$197,400
	Markups (Insurance, Bond, OH & P, B&O Tax)			8.00%	\$94,752
	Escalation to Midpoint (Q4, 2023 @ 5%/Year)			7.25%	\$92,739
	TOTAL ESTIMATED CONSTRUCTION COSTS				\$1,371,891
2B	Fully Enclosed Campus w/ Fencing and Access Road		<u> </u>		. , ,
	Demolish Portion of (E) Standard Chainlink Fence	250	lf	10.00	\$2,500
	Additonal 14'-0" High Fence	1,500	lf	650.00	\$975,000
	Remove 5 Cameras from Base	(5)	ea	5,750.00	(\$28,750)
	Additonal Access Road Driveway - 3"HMA CL 1/2" PG 58H-22 Over 6" CSTC	24,540	sf	7.00	\$171,780
	Sheet Flow Dispersion	4,968	sf	3.00	\$14,904
	Tree Removal	120	ea	200.00	\$24,000
	Clear and Grub (20' at access road)	30,000	sf	0.25	\$7,500
	Grading and Fill	30,000	sf	1.50	\$45,000
	SUBTOTAL				\$1,211,934
	Contingency			20.00%	\$242,387
	Markups (Insurance, Bond, OH & P, B&O Tax)			8.00%	\$116,346
	Escalation to Midpoint (Q4, 2023 @ 5%/Year)			7.25%	\$113,873
	TOTAL ESTIMATED CONSTRUCTION COSTS				\$1,684,540

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3A	Access Road Driveway							
	Access Road Driveway - 3"HMA CL 1/2" PG 58H-22 Over 6" CSTC	15,650	sf	7.00	\$109,550			
	Sheet Flow Dispersion - 1,565lf	3,130	sf	3.00	\$9,390			
	SUBTOTAL				\$118,940			
	Contingency			20.00%	\$23,788			
	Markups (Insurance, Bond, OH & P, B&O Tax)			8.00%	\$11,418			
	Escalation to Midpoint (Q4, 2023 @ 5%/Year)			7.25%	\$11,176			
	TOTAL ESTIMATED CONSTRUCTION COSTS				\$165,322			
3B	Drivable Compacted Earth Trail							
	Drivable Compacted Earth Trail 10'-0" Clear Width from Fence Line - 1,250lf	12,500	sf	3.50	\$43,750			
	SUBTOTAL				\$43,750			
	Contingency			20.00%	\$8.750			
	Markups (Insurance, Bond, OH & P, B&O Tax)			8.00%	\$4,200			
	Escalation to Midpoint (Q4, 2023 @ 5%/Year)			7.25%	\$4,111			
	TOTAL ESTIMATED CONSTRUCTION COSTS				\$60,811			
4	Cottage 1 and 2 Perimeter Fence Exclusion							
	Remove 12'-0" High Fence	(700)	lf	650.00	(\$455,000)			
	Remove Tree + Branch Clearing	(1,500)	sf	1.00	(\$1,500)			
	Remove Tree Removal	(20)	ea	200.00	(\$4,000)			
	Remove 16'-0" Sliding Gate w/ Access Control (card reader both sides) - Includes Electrical	(2)	ea	25,000.00	(\$50,000)			
	SUBTOTAL				(\$540.500)			
					(\$510,500)			
	Contingency			20.00%	(\$102,100)			
	Markups (Insurance, Bond, OH & P, B&O Tax)			8.00%	(\$49,008			
	Escalation to Midpoint (Q4, 2023 @ 5%/Year)			7.25%	(\$47,967			
	TOTAL ESTIMATED CONSTRUCTION COSTS				(\$709,575			



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# **Meeting Minutes**

# Project:Perimeter Fencing Scope and Feasibility Study<br/>Echo Glen Children's Center (EGCC)<br/>KMB Project No. 22019Meeting Date:April 20, 2022

Location: EGCC / Zoom Meeting

Purpose of Meeting: 01 Project Kick-Off

	April 2022									
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May 2022									
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Att	Dist	Name	Position / Company	Email	Phone	Cell
Clier	nt Tea	m				
$\checkmark$	$\checkmark$	Michael Poier	Chief, DCYF Office of Capital Programs	michael.poier@dcyf.wa.gov	360.764.0253	
$\checkmark$	$\checkmark$	Trent Phillips	JR Capital Budget Manager, DCYF Office of Capital Programs	trent.phillips@dcyf.wa.gov	360.764.0177	
	$\checkmark$	Jason Francois, MBA	Project Manager, DES Facility Professional Services	jason.francois@des.wa.gov	360.706.3926	
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$\checkmark$	$\checkmark$	Harvey Perez	Director of Institution Programs, DCYF Juvenile Rehabilitation	harvey.perez@dcyf.wa.gov	360.902.8100	360.338.2324
$\checkmark$	$\checkmark$	Willie Fullilove	Superintendent, Echo Glen Children's Center	willie.fullilove@dcyf.wa.gov	425.831.2500	
	$\checkmark$	Tony Lillehaug	Facility & Security Manager, Echo Glen Children's Center	anthony.lillehaug@dcyf.wa.gov	425.831.2500	
$\checkmark$	$\checkmark$	Karl Last	Plant Manager, Echo Glen Children's Center	karl.last@dcyf.wa.gov	425.831.2500	425.299.5743
Desi	ign Te	am				
$\checkmark$	$\checkmark$	Sheri O' Brien, AIA	Partner, KMB architects	sheriobrien@kmb-architects.com	360.352.8883	206.393.2781
$\checkmark$	$\checkmark$	Bryan Beley, AIA	Associate, KMB architects	bryanbeley@kmb-architects.com	360.352.8883	253.678.0210
$\checkmark$	$\checkmark$	Patty Buchannon, PE, LEED AP	Senior Associate, Perteet Inc.	patty.buchanan@perteet.com	206.436.0515	206.399.7462
$\checkmark$	$\checkmark$	Giancarlo De Simone, PE	Civil Engineer, Perteet Inc.	giancarlo.desimone@perteet.com	206.436.0515	

## **Opening Items**

- a. Campus Site Walk prior to meeting Karl Last escorted Bryan, Patty, Giancarlo, and Harvey around the southern portion of the campus from the Cottage #1 fire lane access to the staff parking west of the Commissary building.
- b. A/E Services: Scope and Feasibility Study including cost opinion
- c. Introductions Roles & Responsibilities

### **Discussion Items**

- 1. Perimeter Fencing Scope and Feasibility Study
  - A. Project Scope
    - 1) Identify Problem Statement
      - a) What is the problem? DCYF JR and Echo Glen participants provided their understanding and opinion on the issues and problems to be solved at the campus.
        - The project should be more aptly described as the "Echo Glen Security Improvements" project, more than just looking at fencing.
        - The overall security improvements would include:
          - (1) Fencing and access points
          - (2) Main single point entry / traffic flow at building entry
          - (3) Security protocols
          - (4) Secondary access road
        - The facility had a major AWOL event in January 2022 involving 5 young men who stole a nurse's car and fled from the campus. It was much more thought out than a simple escape.
        - As the name of the facility suggests, Echo Glen was originally designed as a children's center for young boys and girls ages 12, 13 and 14 years old. Population is increasing in age to 17 those will leave before their 18<sup>th</sup> birthday. Future may include direct placement of 16 to 24 year olds. Placement criteria is not changing, but Green Hill School, for example, will need to increase projections. Echo Glen is medium/maximum now, not minimum anymore.
        - It is too easy for visitors to access the campus. Vehicles are able to drive past visitor parking areas into and around the campus. Traffic needs to be redirected to a main central parking, a true single point of entry for staff, volunteers, visitors, and providers where the facility can identify who is on campus.
        - Still important to maintain the "park-like" image of the campus to both residents and visitors. It is a
          unique campus do not want to take away the character and beauty of the campus. Move fence
          towards parking lot, use trees to conceal fences as best as possible.
        - There is currently one access into the campus. A secondary access / egress road is needed for emergency management, staff getting off campus, and first responders (fire, police, ambulance) getting on campus. The increasing occurrence of wildfires another consideration for urgency of work. One tree fallen over road limits all incoming / outgoing traffic.

- b) What is the intent of the fencing?
  - (1) Trying to keep residents in (preventing escapes)
    - Reduce likelihood of future AWOL attempts. Fencing would help mitigate the risk and ability for youth to run off campus. Current campus does not have a fenced perimeter.
    - Fencing may funnel escape attempts toward admin, to set locations security protocols in place.
    - Use the fencing as deterrent against escapes minimize escape opportunities for youth the boundaries make them think twice.
  - (2) Prevent unauthorized personnel onto the site
    - Accidental and intentional trespassing onto the campus needs to be controlled, funnel through a single point of entry.
- 2) Security Fencing
  - As requested and discussed previously by DCYF / Echo Glen, 12-foot anti-climb / anti-cut fences and motorized access control gates are desired. (Further study required regarding type of fence and heights.)
  - Barbed or Razor wire (Concertina wire) is considered to further prevent climbing and escapes. Notes that this changes image and feel of campus. A thinner shape, less industrial version of razor wire is believed to be acceptable – wants to secure facility.
  - Escapes toward the north forested area and wetlands is also a concern. While not as likely for trespassers, there has been history of escapes through forest up towards Lake Alice. Perimeter fencing may encompass recreation field, access toward sewer pumpstation.
- 3) Gates and Access Points
  - a) Main road access gate How is it used? Is it successful for its intent?
    - Currently main gate is a secure access only with card badge or call box access to security with video of who is sitting in the car.
    - Currently the gate is free exiting, sensor 40 feet from gate will open.
    - There is a security desire to screen prior to exiting. License plate scanner to monitor incoming and outgoing vehicles. Keypad on secure side of gate is desired, but road is too narrow, would need to be widened. A full vehicle sallyport is not necessary.
  - b) Vehicular Movement
    - (1) Accidental vs Intentional Breach
  - c) Pedestrian Movement
  - d) Monitoring and Access Control
- 4) Main Visitor Entrance (entry modifications / controls and visitor / staff screening)
  - (Mentioned, but not clearly discussed.)
     ACTION ITEM: KMB to schedule meeting with Willie Fullilove for further discussion on entry modifications and visitor / staff screening.

- 5) New Parking (scope, timeline, inclusion in study)
  - (Not discussed.) **ACTION ITEM:** KMB to confirm further project plans from DCYF JR.
- 6) Site Considerations
  - Mentioned, but not clearly discussed. ACTION ITEM: KMB architects and Perteet tol follow-up with DCYF and DNR for further site and land confirmations.
  - a) Extent of Wetlands
  - b) King county covenant NGRA (native growth retention area)
  - c) Other protected timber lands, Department of Natural Resources (DNR)
    - (1) Brief meeting with Carrie Nelson (DNR) supposed receive map of DNR lands & protected timberlands of the area. (confirm communication, available files)
  - d) Wildlife protection survey (found no Vaux Swift nests or nesting trees near Cottage 11 scope)

### B. Preliminary Solution Diagram

- 1) Review and discuss
  - (Not directly presented or discussed.) Preliminary solutions to be updated and presented at the following project meeting.

### C. Conversion for Two Minimum Security Cottages

- Felice Upton provided an update on recent DCYF JR plans to convert two collocated buildings to true minimum security cottages with access to the community which would be OUTSIDE the discussed fencing perimeter – 32 beds each, one for male, one for female. No interaction with max.
- The youngest of the population in DCYF that is maximum security classification will remain at EGCC and not go to Green Hill School.
- Based on the discussion, Cottages #1 and #2 would be the best for their current locations. They are further removed from the rest of the campus, closer to the community and would make the perimeter fencing scoping slightly simpler.

### 2. Campus Secondary Access Feasibility Study

- 1) Problem Statement
  - a) Currently only one way to access the campus for Emergency first responders (fire, police, ambulance)
- 2) Echo Glen Children's Center is located on DNR land confirm extents of secondary access
- 3) Potential access pathways:
  - a) Existing trails? Backroads / 4WD paths?
    - The north edge buildings just south of the power lines is the EGCC sewer pump station main access road from maintenance through trees; secondary access road between cottages 10 and 11.
  - b) Powerlines, owner?
    - PSE (Puget Sound Energy) owns the power poles on the north edge. Owner of housing development to the northeast is unknown.

- 4) A/E Services: Scope and Feasibility Study including cost opinion
  - KMB to discuss scope and fee amendment with DES / DCYF JR to include in A/E services.
  - a) Communication with DNR, AHJs, adjacent land owners, utility providers, first responders, etc.
  - b) Permitting and access road requirements
  - c) Site surveys and confirmation, physical site exploration
- 5) In relation to Fencing Scope and Feasibility Study

### 3. Project Schedule

D.	Scope and Feasibility Study Due	Friday, June 3, 2022
C.	Meeting #3 – Finalize Direction / Draft Document Review	Wednesday, May 18, 2022 (tentative)
B.	Meeting #2 – Scope Confirmation and Options Development	Wednesday, May 4, 2022 (tentative)
Α.	Kick-off Meeting #1 – Problem Statement / Campus Walk	Wednesday, April 20, 2022

### 4. Next Steps

### A. Action Item Review

- 1) ACTION ITEM: KMB to schedule meeting with Willie Fullilove for further discussion on entry modifications and visitor / staff screening.
- 2) ACTION ITEM: KMB to confirm further project plans from DCYF JR.
- 3) **ACTION ITEM:** KMB architects and Perteet tol follow-up with DCYF and DNR for further site and land confirmations.

### B. Next Meeting

Date:Wednesday, May 4, 2022 (to be confirmed)Time:TBDLocation:Zoom Meeting (Site visit, if necessary)

### 5. Post-Meeting Campus Site Walk

 After the meeting, Karl continued to escort Bryan, Patty, and Giancarlo around the remaining campus, following the potential perimeter fence line. Photos of the site walk are available upon request.\

These Meeting Notes are not a transcript but are intended to accurately reflect the key items of discussion and any decisions reached or commitments made at the meeting. Any attendee noting a material error or inaccuracy in these Meeting Notes is requested to bring such item(s) to our attention at the next scheduled meeting, or contact the KMB Project Manager at 360.352.8883, or by fax at 360.352.8853. Appropriate corrections will be made and recorded in the next published Meeting Minutes.



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# **Meeting Minutes**

# Project:Perimeter Fencing Scope and Feasibility Study<br/>Echo Glen Children's Center (EGCC)<br/>KMB Project No. 22019Meeting Date:April 29, 2022

Location: Zoom Meeting

Purpose of Meeting: 01a Kick-off Meeting Follow-up

	April 2022					
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	May 2022					
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Att Dist	Name	Position / Company	Email	Phone	Cell
Client Tea	am				
	Michael Poier	Chief, DCYF Office of Capital Programs	michael.poier@dcyf.wa.gov	360.764.0253	
	Trent Phillips	JR Capital Budget Manager, DCYF Office of Capital Programs	trent.phillips@dcyf.wa.gov	360.764.0177	
	Jason Francois, MBA	Project Manager, DES Facility Professional Services	jason.francois@des.wa.gov	360.706.3926	
	Felice Upton	Assistant Secretary for JR DCYF Juvenile Rehabilitation	felice.upton@dcyf.wa.gov	360.338.2300	
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	Tony Lillehaug	Facility & Security Manager, Echo Glen Children's Center	anthony.lillehaug@dcyf.wa.gov	425.831.2500	
	Karl Last	Plant Manager, Echo Glen Children's Center	karl.last@dcyf.wa.gov	425.831.2500	425.299.5743
Design Te	eam				
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	Patty Buchannon, PE, LEED AP	Senior Associate, Perteet Inc.	patty.buchanan@perteet.com	206.436.0515	206.399.7462
	Giancarlo De Simone, PE	Civil Engineer, Perteet Inc.	giancarlo.desimone@perteet.com	206.436.0515	

## **Opening Items**

a. No opening items.

### **Discussion Items**

- 1. Security Improvements (Perimeter Fencing Scope and Feasibility Study)
  - A. Main Visitor Entrance (entry modifications / controls and visitor / staff screening)
    - a) The goal is to have all individuals access the facility via one single entrance. This includes visitors, staff, contractors, and providers. Currently, there's no recorded way to know who's in the campus at any given time.
    - b) There was mention of a satellite or energy company (possibly Verizon) who enters frequently enters campus unauthorized (likely King County contract). They should be stopped at a gate. MOU or Agreement needs to be in place.
    - c) Ideally, individuals come through the one door. Then go to the destination. Includes all staff.
    - d) For Maintenance personnel or those driving a State Vehicle, the hope is that they would stop by this main entrance first to sign in, then proceed past the secure vehicle gates.
    - e) Within the campus, there should not be that much flow currently there is construction flow (cottage 11 remodel) and campus approved vehicles maintenance vehicles (Polaris/ Taylor-Dunn Bigfoot), transportation, and contractors.
    - f) The car that was taken during the January escape was parked in front of the cottage. This would no longer be allowed, and the staff would park in the designated parking area and be required to walk through the single point of entry into the campus.
    - g) In the main entry area, there is a Body Scanner that will come online in June. Visitors will be required to be screened prior to entry into the campus. Staff may also be screened through the Body Scanner or checked with a handheld metal detector.
    - h) A sallyport is desired at the main entrance, similar to standard design of other juvenile detention facilities (ie. Green Hill School). Security would screen and buzz through for access past the secure vestibule. Would include a camera, intercom, and access control doors.
    - Currently, there is a project in place to relocate security to an adjacent space including upgrades to camera. The current reception would be converted for health services. ABSCO working on camera / security piece – this includes blacking out windows for once way visibility – which is preferred.
    - j) **ACTION ITEM:** Project team may reach out to Karl for drawings or other project information. May also need to reach out to DCYF also for further information.
    - k) Back door (north of main space) is currently equipped with exit device, which allows free access into the campus. This would ideally be accessed only with an authorized ID keycard or remote access from security.
    - I) There is an anticipated workstation within the main space next to scanner for a permanent spot. Windows behind the workstation need to be blacked out to prevent viewing the Body Scanner screens shows everything. Currently potentially open workstation would be nice to be enclosed.
    - m) There are also plans to locate a KeyWatcher behind the body scan machine delay getting keys. This should be located in a separate vestibule or spot / alcove away from view of the Body Scanner screens.

- n) The existing window at reception will not be used after the security project is complete. New window is located at the corner where the new security station is located.
- Location of existing reception will be health services, which youth would enter from the main entry back door. This creates a cross circulation of visitors and youth. There's also a potential for youth to access the health services from Intake – to be explored as part of this study.
- p) The right door into Administration is currently unlocked desire to add access control (key card access). During sign-in, all staff should go through scanning regardless of their destination.
- q) Project team to look at perimeter of building, other access points. There is an existing exterior door (which remains locked) on the south side of the Admin building. Plans show this as "waiting area" and "reception". Currently the space is not really used. This space may be used as a potential guest waiting for Admin or VIP personnel.
- r) Potential as a staff lounge. There is no staff lounge in this area currently a classroom in the library is sometimes used as a staff lounge. There are ideas of a staff quiet room to made available to staff. Staff wellness (decompression room) would be useful and was included in the draft DCYF Master Plan.

### B. New Parking (scope, timeline, inclusion in study)

- a) Willie is unclear about parking scope and actual future plans. The original understanding was that the main parking area (west of the roundabout) was to be expanded, not so sure about the parking southeast of the roundabout (closer to cottage #4).
- b) For a potential future project, it is envisioned that ALL staff would park at the main parking area which would prevent staff vehicles from entering the backside parking and require all staff to enter through the main security access point.
- c) Mondays and Tuesday are pretty full a lot of staff. Most other days, it is believed that all vehicles can currently fit in front parking.
- d) It would be preferred if only State vehicles park in the back area by Commissary and the west campus area. Maintenance could also enter and park toward maintenance buildings.

### C. Potential solutions for exploration

- Looking at the possibility of fencing between each cottage, along wetland, to create a true continuous perimeter. Project team would look at actual feasibility (might not be possible) – within critical area of wetland.
- b) This would take away from the character of the campus need to consider aesthetics and feel.
- c) The alternative to this would be to locate cameras or other monitoring devices at end points, mitigating the potential escape routes of a fleeing youth.

### 2. Project Schedule

A. Kick-off Meeting #1 - Problem Statement / Campus Walk	Wednesday, April 20, 2022
B. Meeting #2 – Scope Confirmation and Options Development	Wednesday, May 11, 2022
C. Meeting #3 – Finalize Direction / Draft Document Review	Wednesday, May 25, 2022
D. Scope and Feasibility Study Due	Friday, June 3, 2022

### 3. Next Steps

- A. Action Item Review
  - 1) ACTION ITEM: KMB to schedule meeting with Willie Fullilove for further discussion on entry modifications and visitor / staff screening.
  - 2) ACTION ITEM: KMB to confirm further project plans from DCYF JR.
  - 3) ACTION ITEM: KMB architects and Perteet to follow-up with DCYF and DNR for further site and land confirmations.
  - 4) **ACTION ITEM:** Project team may reach out to Karl for drawings or other project information. May also need to reach out to DCYF also for further information.

### B. Next Meeting

Date:	Wednesday, May 11, 2022
Time:	1:00 PM to 3:00 PM
Location:	Zoom Meeting (Site visit, if necessary)



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# **Meeting Minutes**

### Project: Perimeter Fencing Scope and Feasibility Study (Security Improvements) Echo Glen Children's Center (EGCC) KMB Project No. 22019

Meeting Date: May 11, 2022

Location:

Purpose of Meeting:

02 Project Meeting

Zoom Meeting

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26	27	28	29	30		

Att	Dist	Name	Position / Company	Email	Phone	Cell
Clie	nt Tea	m				
	$\checkmark$	Michael Poier	Chief, DCYF Office of Capital Programs	michael.poier@dcyf.wa.gov	360.764.0253	
$\checkmark$	$\checkmark$	Trent Phillips	JR Capital Budget Manager, DCYF Office of Capital Programs	trent.phillips@dcyf.wa.gov	360.764.0177	
	$\checkmark$	Jason Francois, MBA	Project Manager, DES Facility Professional Services	jason.francois@des.wa.gov	360.706.3926	
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Des	ign Te	am				
$\checkmark$	$\checkmark$	Sheri O' Brien, AIA	Partner, KMB architects	sheriobrien@kmb-architects.com	360.352.8883	206.393.2781
$\checkmark$	$\checkmark$	Bryan Beley, AIA	Associate, KMB architects	bryanbeley@kmb-architects.com	360.352.8883	253.678.0210
$\checkmark$	$\checkmark$	Patty Buchannon, PE, LEED AP	Senior Associate, Perteet Inc.	patty.buchanan@perteet.com	206.436.0515	206.399.7462
$\checkmark$	$\checkmark$	Giancarlo De Simone, PE	Civil Engineer, Perteet Inc.	giancarlo.desimone@perteet.com	206.436.0515	

### **Discussion Items**

### 1. Security Improvements (Perimeter Fencing Scope and Feasibility Study)

### A. Security Fencing

- 1) Review of Fencing Scope, Alternatives / Options for exploration
  - At Vocational Classrooms building, looking to add fencing toward the back where the fire escapes exits are

     this also prevents teachers from accessing these classrooms from the back. Required to enter through
    main entry.
  - At 'weak points' video monitoring + motion detection + motion lighting is desired. Even if the motion detection is triggered by wildlife, it still keeps main control vigilant of the monitoring of the area.
  - Ropes course is preferred to be contained within the secure perimeter, even though youth are supervised, still opportunity to escape, and easier to manage if all activities remain inside the perimeter.
  - There are areas of existing fencing that may need to be upgraded (or replaced).
  - Fencing within the campus would make it a more enclosed campus but we would like to keep the feel of a park-like environment. But there are areas where we do want to see it it becomes like a deterrent to let the youth know that there is a fence there.
  - Continue to balance Deterrence vs Image of the campus.
  - Desire to have a security patrol path running the entire campus perimeter.
  - Potential vehicle path behind Cottage #4 to patrol perimeter fencing.
  - ACTION ITEM: Perteet to continue to review minimum widths and clearances from fence to control climbing and identify clear zones – somewhat site specific, drivable path, consistent paved path, etc.
- 2) Impacts from Cottage #1 & #2 Minimum Conversion
  - Minimum cottage –
  - Backside of 3 convert to MAX
  - Potential package mixed use, aging population vs minimum

Example Razor Wire Styles shown:



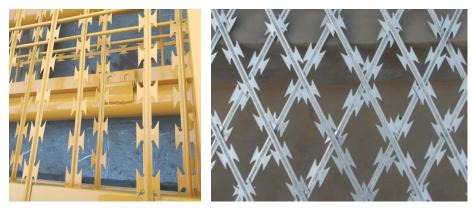
Left image is of Green Hill School's perimeter security fencing – appears to be a 12'-0" chain link fence with Concertina (razor wire) above. Use of non-climb mesh uncertain.

Image on the right is a close-up of a concertina wire and ornamental fence (not at Green Hill School).



Alternatives to Concertina Wire include straight barbed wire overhangs (not pictured) or razor wire mesh shown above and below. Razor wire mesh has the appearance of a diamond pattern fence. The proposed usage would be limited to the upper 2'-0" of the entire 12'-0" fence only, similar to the overhanging (angled) section in the right image.

The green color is also recommended to keep with the park-like setting and blending in with surrounding trees.



Close-up images of straight razor fencing and razor mesh. Project team will look into usability of these types of fencing around DNR wetland buffers, which may have special requirements for wildlife protection.

### B. Access Control Gates

- 1) Procedures and Policies card keys already implemented ideally all access points in and out of the secure perimeter should have key card access both ways, potentially remote access control also.
- 2) Vehicle Control Gates
  - a) Credentials, Monitoring
  - b) Entering & Exiting
  - Key card or central control access provided when entering vehicle barrier gate (shown on drawings). When exiting, a sensor would be activated when a vehicle pulls up free exiting is acceptable at these gates.
  - c) Main gate upgrades (exit screening, turn-around space, license monitoring)
  - Future intent at existing main campus entry gate to require authorized, or screened, exit. This would require a wider road for the gate box, intercom, key card, and turn around space.

### Examples shown:



Potential vehicle barrier gates with clear signage. Overhead bar type, visual barrier. Would likely not prevent an errant car driving from driving through.



(Similar vehicle barrier arm on left) Right image is a standard cantilever sliding chain link fence with barbed wire. Sliding gates are preferred at vehicle access points around secure perimeter.



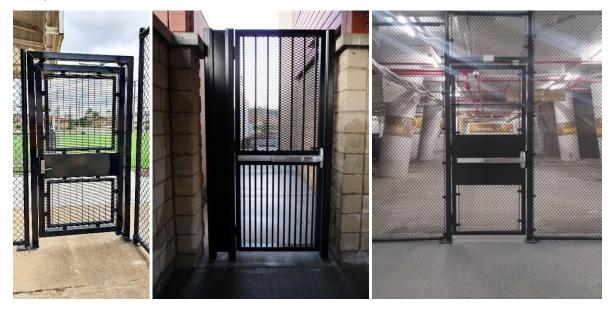
Sliding gate on the left, swinging gate on the left. Style of gate and sliding gate on the left is preferred.



Types of swinging gates shown – sliding gate is more acceptable. KMB to gather thoughts from Karl and Tony.

- 3) Pedestrian Control Gates
  - a) Credentials, Monitoring
  - b) Entering & Exiting
  - Every door on the campus, in a best case scenario should have monitoring of some kind.
  - Entering and exiting around campus security perimeter should have access control on both sides key card
    access with select gates with central control (intercom and release). Video surveillance also preferred.

### Examples shown:



These types are acceptable around perimeter. (Note, pedestrian gates would not have exit devices allowing free exit.) Minimize usage of gates to mount / climb fences.

### C. Main Pedestrian Entrance

- 1) Security Camera Upgrades Project (Impacts, changes to entry space)
- 2) Secure Vestibule, Security Check, Check-in Window
- 3) Admin. Building Access Control Doors
- It was identified that a KeyWatcher system and location has already been identified, drawn on the wall.
- Karl and Tony would know more about the Security Control Room and camera projects.
- **ACTION ITEM:** KMB architects to review discussion with Karl and Tony for additional comments.
- Update to main entry to include secure vestibule, new check-in window location, and updated workstation for body scan / security screening personnel.
- Doors along buildings around perimeter should have access control exit, no free exit, unless authorized. Admin building may require exit locations – limit authorization to entry into building instead.

### D. Site Impacts Update

- 1) Cottage 11 Construction (Drawings received)
- 2) Department of Natural Resources
  - a) Wetland considerations / requirements -
- King County stormwater permit requirement involved with Cottage 11.
- Carrie Nelson, DNR suggested having Trent in that meeting.
  - b) Other Protected Timber Lands
- There is no code or requirement for the clearance or distances from trees, secure side vs public side.
- Compacted earth for patrol roadway along fence would still require stormwater mitigation.
- ACTION ITEM: Perteet to coordinate DNR and King County meeting. Continue research on DNR / King County wetland mitigation, stormwater requirements, tree removal (harvesting) etc.

### 2. Project Schedule

<b>A</b> .	Kick-off Meeting #1 - Problem Statement / Campus Walk	Wednesday, April 20, 2022
	1) Follow-up – Meeting with Willie regarding Secure Entry	Friday, April 29, 2022
В.	Meeting #2 – Scope Confirmation and Options Development	Wednesday, May 11, 2022
C.	Meeting #3 – Finalize Direction / Draft Document Review	Wednesday, May 25, 2022
D.	Scope and Feasibility Study Due	Friday, June 3, 2022

### 3. Next Steps

Trent also reminds team to make sure to include the security aspect of intrusion alarms and cameras. As
part of the existing system, adding cameras (30 cameras) as part of the fencing project would impact access
control and monitoring.

### A. Action Item Review

- 1) **ACTION ITEM:** Perteet to continue to review minimum widths and clearances from fence to control climbing and identify clear zones somewhat site specific, drivable path, consistent paved path, etc.
- 2) ACTION ITEM: KMB architects to review discussion with Karl and Tony for additional comments.
- 3) **ACTION ITEM:** Perteet to coordinate DNR and King County meeting. Continue research on DNR / King County wetland mitigation, stormwater requirements, tree removal (harvesting) etc.

### B. Next Meeting

Date:	Wednesday, May 25, 2022
Time:	1:00 PM to 3:00 PM
Location:	Zoom Meeting (Site visit, if necessary)
Subject:	Draft Study Document Review



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# **Meeting Minutes**

### Project: Security Improvements (Perimeter Fencing Scope and Feasibility Study) Echo Glen Children's Center (EGCC) KMB Project No. 22019

Meeting Date: May 25, 2022

Location:

Purpose of Meeting: 03 Project Meeting

May 2022						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Zoom Meeting

June 2022						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Att	Dist	Name	Position / Company	Email	Phone	Cell	
Clie	Client Team						
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$\checkmark$	$\checkmark$	Trent Phillips	JR Capital Budget Manager, DCYF Office of Capital Programs	trent.phillips@dcyf.wa.gov	360.764.0177		
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$\checkmark$	$\checkmark$	Giancarlo De Simone, PE	Civil Engineer, Perteet Inc.	giancarlo.desimone@perteet.com	206.436.0515		

### **Discussion Items**

- 1. Security Improvements (Perimeter Fencing Scope and Feasibility Study)
  - A. Review of Draft Document Scope
    - 1) Perimeter Security Fencing
      - a) Alternatives and Options
        - The Study will include a proposed 'Base' campus secure perimeter and a more secure, fully-enclosed secure perimeter as the 'Alternate'.
        - The perimeter was explored to compare an alternate if the Ropes Course (and associated forest area) was located outside the secure campus perimeter. Echo Glen would prefer this program remain within the perimeter. The Draft cost estimate also revealed it is more costly to route around the forest. Direction was provided to eliminate this Alternate from the study.
        - Another alternate explored whether the perimeter should be in-bound of the forest near Cottage #4 or out-bound, bordering the parking lot. The in-bound alternate encroached into the 300' wetland buffer, and visible fencing has the potential to detract from the existing park-like setting. Direction was provided to eliminate this Alternate from the study.
        - Felice mentioned a Juvenile Detention Facility she visited in Ogden, Utah (Weber Valley Multi-Use Youth Center) which had a nicely built tall, straight fence with no razor or barb wire at the top. It appears to be a 14'-0" tall fence with standard chain link and non-climb chain link mesh in the upper half. This is the direction Echo Glen recommends going.
        - Regarding patrol of the perimeter, sightlines is important and distance / clearance from trees.
      - b) Surveillance Cameras and Monitoring
        - The Study document uses the term 'weak-points' to identify the locations on the 'Base' campus
          perimeter between the wetland boundary and the physical secure fencing. "Vulnerabilities" was a
          suggested replacement word.
        - It was understood motion monitors and motion-activated lighting would be constantly triggered by raccoons, deer, etc. Motion systems may also include a certain weight to minimize false alarms. Willie welcomes additional 'false alarms' to keep security control vigilant while monitoring.
    - 2) Access Control Gates
      - a) Vehicle Control Gates
        - A vehicle sallyport was added to the secure perimeter for vehicles entering the campus. This would be one single location to enter and exit the facility. This sallyport shall be remote controlled by security control. All other vehicle gates will be for maintenance and fire / emergency only (likely card key access).
        - There are operations concerns for this type of sallyport. There are restrictions that can be placed on the system to prevent the operation of one gate when the other is open.
      - b) Pedestrian Control Gates
      - c) Procedures and Policies

- 3) Main Entrance
  - a) Secure Vestibule, Screening, Check-in Window
- 4) Other considerations
  - It was mentioned that having all staff park at the front public parking, there are not many walkways to the main entry. Would this be included in the scope? While it would be nice to add sidewalks and walking paths into the scope, Felice wants to get the best chance at securing funding for the project. Adding too much scope outside of the secure fencing scope may not help.
  - Requiring all staff to park at the front main parking will cause further issues with parking. It was noted that 40 to 50 cars are currently parked beyond the gate where the campus map is labeled "State Vehicle Parking".
  - Parking reconfiguration around the main parking area would be required. Again, this would be outside the scope of the secure fencing and should not be included at this time. Identify it as a problem but may need to be in a different project.
  - The study should identify there is a problem. Overflow parking issue? Stormwater implications, no
    matter what type of parking, there will be stormwater implications but the type of paving (asphalt vs
    lesser surface / gravel parking) may save on cost.
  - It was mentioned that wheel stops in the grass can show there's extra space to park. Maintenance may be able to do that.

### B. Site Impacts Update

- 1) Department of Natural Resources
  - a) Wetland considerations / requirements
    - "No-loss of wetland." Wetland improvements based on DNR and King County for mitigation or replacement of lost habitat. Replacement would be significant.
    - More likely to improve wetland area around same wetland.
    - Considering the work we're doing with the fencing, the perimeter, including the 'fully-enclosed' option are still feasible so long as we satisfy the requirements.
    - No critical or endangered species were found per the latest report. There was suspect of Vaux Swift in the area, but did not determine actual nesting trees around the Cottage #11 work.
  - b) Other Protected Timber Lands
- 2) King County
  - a) Stormwater requirements

### 2. Construction Cost Estimate

Felice will be asking for funding for conversion / construction of a maximum security cottage. There is political
will to construct the minimum program – but construction for maximum has not been fruitful (thought of as a
'state of mind' or perception rather than the actual program of what goes on in the maximum cottage).

- There is pressure to get this security work done. Political will from Felice Upton offered to get the project moving, especially with County. This is not a typical project with recent news and truant youth this is a detention facility.
- Emergency State Facility seems like there should be space for that availability. Permitting in King County may take up to 6 months. Would the permitting duration be quicker if we had more reason (Sheriff influence?).
- Felice will work towards public safety narrative, internal to King County. Fencing project.
- The process after this study would still require contracting for A/E services, Design and Construction Documents, bidding, and contractor procurement. This project will happen. As soon as possible, if all goes well.

### 3. Project Schedule

<del>A.</del>	Kick-off Meeting #1 - Problem Statement / Campus Walk	Wednesday, April 20, 2022
	1) Follow-up – Meeting with Willie regarding Secure Entry	Friday, April 29, 2022
<del>B.</del>	Meeting #2 - Scope Confirmation and Options Development	Wednesday, May 11, 2022
	1) Follow-up - Meeting with Tony, review of Perimeter and Access	Wednesday, May 18, 2022
C.	Meeting #3 – Finalize Direction / Draft Document Review	Wednesday, May 25, 2022
D.	Scope and Feasibility Study Due	Friday, June 3, 2022

### 4. Next Steps

- A. Action Item Review
  - 1) **ACTION ITEM:** KMB architects to coordinate with DAHP for considerations of secure perimeter.
  - 2) ACTION ITEM: KMB architects to submit Study Document to DCYF (Friday, June 3, 2022).

### B. Next Meeting

### No future meetings.

KMB received the A/E services contract for an additional feasibility study regarding the Secondary Access / Egress. Schedule and future meeting dates to be finalized, proceed with same distribution group.