Midpeninsula Regional Open Space District

R-20-76
Meeting 20-16
July 22, 2020

SPECIAL MEETING AGENDA ITEM 1

AGENDA ITEM

Administrative Office Project Update

GENERAL MANAGER'S RECOMMENDATION

Review and provide feedback on the current project design to reconfigure and repurpose the 5050 El Camino Real building in Los Altos, California as the main administrative office for the Midpeninsula Regional Open Space District.

SUMMARY

At the February 12, 2020 public meeting, the Board reviewed and provided feedback on the Administrative Office Project (AO or Project) design and cost estimate, which reflected a 50% complete construction document set. At the July 22, 2020 public meeting, the Board will receive a project update and provide feedback on the latest design reflecting a 90% complete construction document set, which has been issued to the City of Los Altos to begin the Building Permit process. Updates at this meeting will focus on the following elements:

- COVID-19 considerations
- Boardroom dais layout
- Audio Visual (AV) and Information Technology
- Sustainable design components (LEED benchmarks, lighting, HVAC, operable windows)
- Contractor pre-qualifications process
- Solicitation for peer review and construction management services
- Bird Safe Window Glazing
- Locally sourced/salvaged wood

BACKGROUND

Midpeninsula Regional Open Space District (District) has been evaluating options to address the lack of sufficient administrative office space to meet ongoing and long-term business needs since 2015, as the organization began to undergo significant internal restructuring to accelerate project delivery, expand public service delivery, and ensure sufficient resources to manage public land and access facilities. At the July 2017 public meeting, the Board adopted a resolution to enter into a purchase and sale agreement for the building located at 5050 El Camino Real, Los Altos, CA (R-17-90). Escrow closed on the purchase on February 1, 2019.

At the December 6, 2017 public meeting, the Board approved the Space Needs Assessment & Basic Program Report (R-17-128) for the Project. At the August 22, 2018 public meeting, the Board approved a contract with the design consultant, Noll & Tam, to assess and design the new AO based

on the Board-approved project design goals, program elements, and space needs (R-18-97 and R-18-100). At the October 24, 2018 public meeting, District staff and the Board began the design process for the new AO by prioritizing project goals and space needs (R-18-123).

From January through May 2019, the Board held a public open house and several public meetings to solicit public input and provide feedback on the evolving schematic design options, cost estimates, and alternatives to reduce total project costs. At the May 22, 2019 public meeting, the Board approved the final schematic design and associated cost estimate (R-19-64). On the same date, the Board approved a contract amendment with Noll & Tam to continue with the remaining phases of the Project, including design development, construction documents, permitting assistance, construction administration, and as-built drawings.

At the October 9, 2019 Board meeting, the Board reviewed the design development plans and revised cost estimate to confirm that the Project as designed meets the Board-approved project goals, program elements, design direction, and project budget (R-19-130). As part of this review, the Board approved the design development plans, allowing Noll & Tam to proceed into the next project phase - construction documents (detailed, constructible plans) and permitting.

At the February 12, 2020 public meeting, the Board reviewed and provided the following feedback on the Project design and cost estimate, which reflected a 50% complete construction document set:

- Reuse current administrative office's flagpole;
- Include sufficient power outlets at the atrium area for public and staff use;
- Use salvaged redwood or acacia wood for the dais; and
- Provide an update at a subsequent Board meeting on the Heating/Ventilation/Air Conditioning (HVAC) system and sustainable design components.

Throughout the project, the Board has remained informed of major design components and engaged in making decisions to provide direction on project scope and budget. Each decision made has been deliberate and transparent to the public. Below is a summary of key project decisions made since 2017.

Boardroom, Atrium, and Dais

- Provide a boardroom layout that maximizes the seating configuration and flexibility of use for public events and meetings, and for staff use. The dais will face the main boardroom entrance and the atrium to allow direct lines of sight between members of the public and the board. The dais will follow an arc shape for board member-to-board member visibility.
- Provide a formal, attractive, and fixed dais and select other room furniture that is mobile to maximize flexibility for different public meeting sizes and configurations.
- Provide sliding doors at the boardroom entrance that open up the space to the atrium area to accommodate overflow for meetings with larger audiences and higher public attendance.
- Provide appropriate audiovisual technology to accommodate boardroom flexibility and allow for webcasting of meetings.
- Center the public restroom on the east-west building axis location to allow easy access for the public from the main entrance lobby, atrium, and boardroom.
- Incorporate the District's logo on the dais to facilitate general public awareness.
- Install a translucent partition between the Boardroom and atrium area to facilitate focused public meeting/Boardroom discussions.

HVAC (heating, ventilation, and air conditioning)

- Explore mixed mode HVAC system of passive and active air circulation for energy efficiency.
- Replace existing HVAC units with high functioning, efficient units.
- Provide operable windows and include sensors that turn off HVAC when windows are open to reduce energy consumption.
- Provide new window glazing to improve window function and reduce heat/cold transfer and HVAC use.

Exterior Site Plan

- Provide an accessible ramp connecting the El Camino Real public sidewalk to the building entrance without relocating utilities while reducing tree removal. Keep existing retaining wall veneer and/or its natural aesthetics. Keep existing redwood trees where feasible.
- Provide a public-friendly outdoor gathering area.
- Ensure new plantings are drought tolerant native plants.
- Replace the exterior T1-11 cladding where needed to protect the building from the elements.
- Install an exterior metal sunshade in the rear of the building to reduce the transfer of heat and direct light.
- Install new vertical office sign inset into the rock wall with the inclusion of "5050 El Camino Real" for ease of public wayfinding.
- Reuse existing flagpole.
- Replace existing side entrance cladding to protect the building from the elements.
- Add exterior vertical aluminum panels with printed design at El Camino Real facing facades to assist with site and agency recognition/wayfinding.

Building Interior

- Provide an ADA accessible lobby entrance as the main egress/ingress for the public, visitors, tenants, Board, and staff. The Board, staff, and tenants will have distinct keycards to enter their respective areas for increased security. The public and visitors will check in with the receptionist at the lobby prior to going to their destinations.
- Centralize the offices and conference rooms along the x and y-axis of the building to accommodate departmental needs, department adjacencies, access to natural light, privacy/noise reduction, and efficient cubicle/office space layouts.
- Provide stairs from garage to first floor on the eastern side of the building for direct access to staff parking area.
- Include a combination of gender neutral and gender specific restrooms.
- Provide operable windows and new window glazing to allow natural ventilation, improve window efficiency, and reduce HVAC energy use.
- Provide bird safe window glass pattern that is approved by the American Bird Conservancy.
- Include roof/electrical connections to facilitate installation of solar panels as either an add alternate during the bidding process or as part of a separate future contract.
- Use dropped acoustic ceiling tiles for the open office areas.
- Provide a mix of chairs, tables, and seating in the atrium to accommodate various ages and preferences for diverse members of the public.

General Project Decisions

- Follow a Design-Bid-Build process to maintain a high level of decision-making throughout design and construction.

- Pursue the "Enhance Design Option", estimated at between $18.7M – $27.4M, while finding as many cost effective alternatives to control/reduce total costs.
- Meet as many of the Leadership in Energy and Environmental Design (LEED) Gold benchmarks as possible while excluding the costly and formal certification process, and proceed with CALGreen design; find opportunities to publicly communicate these goals and achievements.

DISCUSSION

Incorporating Board feedback for the Project, District staff and Noll & Tam have proceeded to update the construction documents and submitted a permit application with the City of Los Altos. The current project design, which the Board will discuss at the July 22, 2020 public Board meeting, reflects a set of 90% complete construction documents.

COVID-19 Considerations

The COVID-19 pandemic has changed the way the District has been conducting business in the office, as well as operations in the field. Over the past several months, the District has formed a re-entry team to discuss ways to improve the current offices to provide a safe working environment for staff. Many of the practices and improvements are being carried over into the new AO design to maintain a safe office environment for the public and staff. These improvements along with other hygienic enhancements are listed below. The District will continue to closely monitor COVID-19 and incorporate new practices and recommended improvements as appropriate. Currently, the District is exploring the use of UV-C light and free-standing air filters to improve interior air quality, as well as setting aside a holding area for receiving packages/mail near the front desk.

Hygienic Practices and Improvements for the new AO:

- Installation of hygiene barriers, such as Plexiglas, at huddles spaces, conference rooms, and other gathering areas.
- Selection of easy-to-clean materials and tabletops.
- Effective HVAC airflow and circulation; maximizing natural ventilation through operable windows.
- Frequent replacement of HVAC filters.
- Purchase of flexible workstation partitions that accommodate Plexiglas extensions.
- Visual cues that encourage one-way aisles and social distancing; use of subtle contrasting color grids in Boardroom carpet to facilitate safe social distancing.
- Installation of touchless fixtures such as faucets, toilets, trash can, motion-sensor lights and doors, and water filling stations.
- Flexible spacing of Boardroom and atrium seating for the public.
- Inclusion of two outdoor meeting rooms.
- Incorporation of webcasting technology in the Boardroom that facilitates broadcasting.

The current design also allows for flexibility in the layout of the staff area and the ability to increase or decrease the office cubicle floor space to accommodate changes in staff deployment, expanded telecommuting, and/or additional separation of work stations.

Permitting Update

On June 5, 2020, Noll & Tam submitted plans, specifications, and calculations to the City of Los Altos to start the Building Permit review process. As the permitting agency, the City of Los Altos

will be the Lead Agency under the California Environmental Quality Act (CEQA) and anticipates the Project to be eligible for a categorical exemption.

The Project's final construction documents will include the following main components:

- Architecture (interior and exterior);
- Civil engineering – grading, drainage, demolition, and utilities;
- Landscape architecture – planting and hardscape;
- Structural engineering – framing, seismic analysis, shear wall, beams, and columns;
- Information technology (IT) – audiovisual, communication, servers, and security; and
- Mechanical and electrical engineering – plumbing, HVAC, lighting, power & signal, and fire alarm.

All interior and exterior improvements are consistent with the Board-approved project goals, program elements, and design direction.

Project Cost Estimate

The cost estimate as of July 22, 2020 has not significantly changed since the 50% construction documents cost estimate and is approximately $24.78 million, which is within the range of the Board approved project budget of $18.7 to $27.4 million. The cost estimate includes construction labor and material, design fees, permitting fees, testing and inspection, design and construction contingencies, escalation, and other miscellaneous project costs. The cost estimate will be updated at the 100% construction document level around Fall 2020 and include the COVID-19/hygienic improvements. The updated cost estimate will reflect the current economic and construction market conditions (including projected changes to construction costs related to the ongoing economic downturn).

Boardroom Dais Layout

At the February 12, 2020 public Board meeting, Noll & Tam presented updates to several atrium area and Boardroom design elements and renderings. Some key design ideas included: use of authentic natural materials (such as wood, cork, and stone) wherever possible; bringing the outdoors in to create warm and light-filled spaces; using natural colors found in nature; and incorporating aesthetic elements from the open space preserves to reflect the conservation and natural resource values and mission of the District. In addition, the Board also commented on the need to provide flexibility in the use of the space to accommodate a wide range of space needs (e.g. small, medium, and large public gatherings and meetings; public workshops; open houses; and formal public hearings). The main public space (public lobby, atrium, and Boardroom) will be located at the center of the building with direct connections to the parking area and public sidewalk through the entrance plaza/exterior walkway.

These public facing areas will incorporate a combination of rustic and functional design and will include salvaged and recycled wood as much as possible (sources listed under the Source Wood Material section below). The lobby flooring will be of concrete with a topographic pattern extending from the plaza into the lobby that subtly communicates the range of elevations found in District public open space lands. The main lobby walls will be covered in a wood veneer with a secondary dark gray accent wall featuring a quote that embodies the District's mission and values. The Boardroom is designed to face northerly toward the main public entrance with its back to the south face of the building, where an outdoor space and planter area will be located. Tall drought tolerant native plants will provide visual and solar shading to the Boardroom. The Board dais is proposed to be fixed while the remaining furniture will be mobile, allowing maximum flexibility

for other uses such as public workshops, open houses, trainings or staff meetings. On October 9, 2019, the Board provided the following input, which has been incorporated into the latest plans:

- Include the District logo and source local/salvaged wood into Board dais design;
- Expose raw edges of source wood to accentuate the natural aesthetic of wood; and
- Provide revised frosting design concepts for the Boardroom glass partition that are subtle and integrate well with the design of the adjoining public spaces.

The dais will accommodate the seven Board members, with three staff members seated at the end of the dais. This design allows for greater separation if needed by relocating staff to a separate mobile table. This separate table would be stored in the storage closet for use as the need arises. Computer hook ups and a microphone will be available at each seat.

Noll & Tam will present updated design elements and renderings that include the items listed above at the July 22, 2020 Board meeting to receive any additional Board feedback and direction. The presentation will also include pictures of a mocked dais for the Board to understand the views as seen from various points at the new dais.

Audio Visual (AV) and Information Technology

The District and Noll & Tam have been exploring ways to enhance the Boardroom AV system to accommodate remote conferencing. The AV system will allow Board members and the public to call into meetings and/or connect to the meeting using a webcasting platform, such as Zoom. The system will record, archive, and stream audio and video. After each meeting, recorded files can be uploaded to the network for storage, playback, or streaming.

When streaming a meeting via the webcasting platform, staff will designate the "Boardroom" as a meeting participant to control the webcast meeting. The audio and visual will be recorded via a dedicated computer to keep the technology and operations simple, flexible, accessible, and cost effective. The computer can be connected in the control room, at the dais, or at the presentation lectern. Installed software will allow staff to download the audio, convert it into a text stream, and save the text streams (if enabled) from public questions/comments during the virtual meeting. The public will be able to participate in the virtual meeting by accessing a streaming link on the District's website, which will be available for each meeting.

The Boardroom will include commercial-grade, pan-tilt-zoom, high definition cameras for the video feed. The cameras will have a pre-set configuration, allowing for toggling between views of the Boardroom, PowerPoint presentation, and lectern, via microphone input. A dedicated camera operator will not be required to operate the cameras.

The designed AV configuration will allow for the streaming of Board meetings and will be able to support broadcasting. Broadcasting, while the choice of many municipalities, has additional costs associated with it, such as the need for a dedicated operator. If District needs change in the future, and the switch to a broadcasting platform is needed, the system can accommodate it with minor adjustments.

Sustainable design components (LEED benchmarks, HVAC and operable windows)

The Project is currently on track to meet LEED gold rating equivalency. LEED is a point-based rating system where points can be achieved by meeting prescriptive and/or performance

requirements. The goal of LEED is to help building owners and operators be environmentally responsible and use resources efficiently. Due to the costs (certification and consultant fees) and time required, the District will not apply for the LEED certification, yet will design and track the Project to meet the requirements. Notable sustainable design components include:

- Building located in a densely developed area with access to transit;
- Energy use to be less than 10% of the CA Building Code Title 24 standards;
- Building equipped to include solar panels;
- Efficient fixtures to reduce indoor water usage;
- Construction and demolition waste management;
- Natural interior lighting; and
- Operable windows and low volatile organic compound (VOC) materials for improved indoor air quality.

The Project will replace the existing HVAC system with a new, energy efficient system and ductwork. A ceiling fan above the atrium will be installed to provide air circulation and cooling to the building. In addition to the large amount of ventilation air through the new HVAC system and ceiling fan, natural ventilation will be provided through operable windows throughout the building. These operable windows would function with the building's computerized HVAC system by dividing the building into different HVAC zones. There are approximately 175 operable windows distributed evenly throughout the building. When operable windows are open in a zone, the computerized HVAC system would detect that occupants prefer outdoor air and automatically shuts off HVAC in the zone, reducing energy costs. This zone's temperature would be controlled by outdoor temperature and airflow.

Contractor Pre-Qualification Process

At the February 12, 2020 Board meeting, the Board expressed a desire for staff to pre-qualify all General Contractors interested in bidding on this Project. Staff is preparing this solicitation and anticipates beginning the pre-qualification process at the end of July 2020. This process will identify a pool of qualified general contractors to bid on the project as an effective risk management tool to reduce potential problems resulting from artificially low bids submitted by contractor who are unable to perform successfully. Additionally, qualified contractors may price their bids more competitively knowing they are competing with qualified firms.

Solicitation for Peer Review and Construction Management Services

As the Project progresses from design into permitting, staff has determined that certain aspects of the design warrant a third party or peer review to ensure high quality Project delivery. The HVAC system is of particular interest. Staff has moved forward with securing a dedicated peer review to ensure that the HVAC system is designed to meet District needs and support a healthy work environment in light of COVID-19. The selected firm will also be tasked with providing intermittent inspection and construction management assistance services. The selected firm will work closely with the District project manager to advise on and assist with the design, construction, and occupancy phases of the Project. This solicitation process began in June 2020 and a firm will be selected in September 2020.

Interpretive Planning & Design

The new Administrative Office provides interpretive opportunities and integration of enhanced architectural features to engage the public and office visitors. Exhibits and other engagement elements will be professionally-designed and fabricated to connect office visitors to the District's

mission, messaging, and Vision Plan goals while fostering a welcoming experience. The District will be soliciting a Request for Proposal (RFP) for an interpretive planning and design firm to develop a comprehensive interpretive approach that will be implemented at appropriate public-facing interior and exterior spaces and building elements.

The RFP solicitation will be released in July 2020, and an interpretive consultant is anticipated to be selected in late August. Depending on the fee proposals, Board approval for the award of contract is scheduled for October 14, 2020. Staff plans to bring design options for the interpretive elements to the full Board for review and approval as part of this work.

Board Feedback on Outstanding Project Design Elements

On July 22, 2020, the Board will have an opportunity to provide final direction on the following outstanding project design elements to guide the completion of the construction documents.

Bird Safe Window Glazing

Noll & Tam has worked closely with the Santa Clara Valley Audubon Society and American Bird Conservancy (Conservancy) on the bird safety window glazing to be installed on the north side of the building. The Conservancy recently approved several bird safe glass patterns, including the options listed below. Noll & Tam recommends one of the following patterns for Board approval:

- Guardian Bird1st
- Walker AviProtek 1st surface Pattern 216
- Walker AviProtek 1st surface Pattern 221

See Attachment 1 for details. The Board is asked to select one of the window grazing options listed above for the project.

Locally Sourced/Salvaged Wood Material

District staff and Noll & Tam are further evaluating the reuse and repurposing of felled trees, stockpiled wood, and/or non-native trees identified for removal. Some architectural usage of this material includes handrails, benches, interior finishes, desks, signage, and/or the Boardroom dais. Five sources of wood are currently under evaluation. Additional evaluation is required to confirm the feasibility based on material conditions, cost (fall, transport, mill, and woodwork), and design opportunities. Below is a brief summary of each wood source, including site location, description, and suitability; note that one additional source site has been identified. The Board is asked to confirm the following wood reuse options, including the reuse of redwood logs and/or acacia wood, which will require a temporary interim veneer or exposed materials until the wood fascia material is ready for installation.

- *Redwood logs from La Honda Creek Redwood Cabin (new source site).* In April 2020, the Board approved the demolition of an existing redwood cabin structure in the La Honda Creek Open Space Preserve. The Redwood Cabin was constructed in 1928 using second and third growth redwood trees. The demolition of this structure is anticipated to occur in late 2022. During the demolition, Staff will evaluate the condition of the wood to determine suitability for salvage. If the wood can be salvaged and reused in the Administrative Office, then it will be transported away from the Redwood Cabin site so that it can be repurposed.

Installation for this feature will occur after the March 2022 move-in date. Interim solutions until final redwood log installation occurs include leaving the interior finishes empty or installing temporary, low-cost material (similar to a veneer).

- *Blackwood acacia (Acacia melanoxylon)* at Purisima Creek Redwoods Preserve associated with 17 acres of invasive, non-native acacia located within redwood/mixed conifer forest along the planned Purisima-to-the-Sea regional trail corridor.

  In October 2019, two trees were felled and delivered to a local mill and lumber yard to determine the quality and feasibility of the wood. In December 2019, the wood was determined to be adequate for project design elements such as benches, interior finishes, desks, signage, and Boardroom dais. The wood is currently stored at the Foothill Field Office for drying. Staff will again review the wood in one year to assess the amount of warping and determine whether it is feasible for stairs and handrails (elements that require plum, level materials). The full cost will be presented to the Board once additional information is gathered.

  Restoration plan development and permitting process will require one year minimum. After that point, the milling, drying, and fabrication process will require over one year. The timeline below indicates that installation will occur after February 2023, after the March 2022 move-in date. Interim solutions until final acacia installation occurs include leaving interior finishes empty or install a temporary veneer material.

Milestones	Tentative Timeline
Transport two felled trees to lumber yard and determined that acacia trees are feasible for project design	October – December 2019
Identify trees to be used at the AO and evaluate tree permits that may be required	January 2020 – September 2020
Hire consultant and develop the Restoration Plan	July 2020 – June 2021
Fall trees and transport select specimens to the lumber yard for milling	September 2021 – March 2022
Move-In	March 2022
Storage and air-dry lumber to cure	March 2022 – September 2022
Fabricate lumber to meet project specifications	September 2022 - November 2022
Installation	November 2022 – February 2023

- *Stockpiled redwood trees* at Bear Creek Redwoods Preserve. Several 12 to 36-inch diameter at breast height (dbh) segments of redwood trees have been stockpiled at the preserve. These trees

either fell naturally or were brought down to improve traffic and line-of-sight safety as part of the construction of the newly opened public access parking lot. Mitigation measures for tree removal are being implemented separately. These redwood trees were cut into large sections that may be salvaged and reused. The quality and quantity of the wood are not feasible for furniture, stair treads, or handrail. However, the wood may be feasible for signage and lobby wall cladding. The District is coordinating with Noll & Tam to incorporate the wood into the project design.

- *Redwood logs stockpiled* at Skyline Field Office. Several 12 to 36-inch dbh segments of naturally felled redwood trees have been stockpiled at the Preserve. These redwood trees were cut into large sections that may be salvaged and reused. The District is coordinating with Noll & Tam to incorporate the wood into the project design.
- *Barn wood stockpile* from La Honda Creek Preserve. Old barn wood from prior demolition projects of dilapidated buildings that were removed for public safety to open lower La Honda Preserve to public access were saved and stockpiled. This material was inspected and determined as non-hazardous. Although a majority of the wood is damaged, cracked, and/or has dents from nails, some of the wood planks may be feasible for reuse on various interior walls, the boardroom dais, and the entry desk. Noll & Tam will confirm the possible use of the barn wood stockpile after an inspection and if feasible for reuse, will incorporate the wood into the project design where possible.

FISCAL IMPACT

At each major milestone, the District presents a revised cost estimate to ensure that the Project design remains within the May 2019 Board-approved project budget of $27.4 million (R-19-64). At this current time, the updated cost estimate is approximately $24.78 million and below the Board approved project budget of $27.4 million. The design team will continue to update the project cost estimate as the details of the project design progresses through the construction document phase.

Since 2015, the District has studied alternatives for meeting the District's long-term office space needs. These alternatives include purchasing and renovating a new building; renovating and completing end-of-life repairs (e.g. HVAC) to the current 330 Distel Circle building while also continuing to rent adjacent office spaces; and rebuilding a larger three-story building at 330 Distel Circle. Following the 2019 purchase of 5050 El Camino Real, the cost analysis indicates that renovating the 5050 El Camino Real building at approximately a $24.78 million is the most cost-effective solution to meet the District's long-term needs, compared to $32 million to $33 million net cost for the other office space options.

Funding sources for the Project include using *Committed for Infrastructure* reserve funds, any future additions to the reserve, rent income, parity bond proceeds, and interest earned from the parity bonds. Partial reimbursement is also expected from the future sale of the current 330 Distel Circle office. To begin the surplus property sale process of the existing building, the District issued a notice of surplus sale on November 22, 2019.

The Project is not funded by Measure AA.

PUBLIC NOTICE

Public notice was provided as required by the Brown Act.

CEQA COMPLIANCE

As the permitting agency, the City of Los Altos will be the Lead Agency under the California Environmental Quality Act and considers the Project eligible for a categorical exemption.

NEXT STEPS

The General Manager will direct Noll & Tam to incorporate any additional comments received from the Board at the July 22 meeting into the construction documents. The table below is an operational timeline showing current and future project milestones.

PROJECT SCHEDULE WITH KEY MILESTONES

Milestones	Tentative Timeline
Construction Documents, Permits, and Bidding	October 2019 – March 2021
Construction	March 2021 - March 2022
Move-In	March 2022

Attachments:

1. Bird safe glazing exhibits

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GUARDIAN BIRD1ST™

PROTECT BIRDS

WITH CLEAR RESULTS

Up to a billion birds die each year due to building collisions.

Twice a year, migratory birds embark on a long, cross-continental flight. But their journey is often cut short. From hummingbirds to colorful warblers, bird populations are decreasing—and glass buildings are one reason why. Birds simply can't tell the reflection of trees and sky in façades from the real thing. Guardian Bird1st™ coated glass is the clear answer for safer birds year round.

WHAT HUMANS SEE

Guardian Bird1st glass offers the right balance of solar performance, aesthetics and bird safety—so you can start designing your bird-friendly building through one trusted source. A patent-pending UV stripe coating on the first surface is virtually invisible to the human eye in dry conditions. Views remain pristine unlike traditional ceramic frit solutions, all while helping protect birds. Paired with select Guardian SunGuard® low-E coatings, Bird1st glass offers the high performance you want and need, and may help your project earn LEED Pilot Credit 55.

AMERICAN BIRD CONSERVANCY
TESTED EFFECTIVE

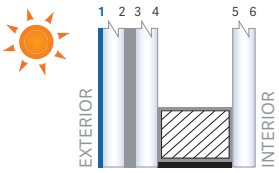
WHAT BIRDS SEE

The Guardian Bird1st UV stripe coating visually signals an impending barrier to birds and helps prevent collisions. With an acceptable Avoidance Index score[1] from the American Bird Conservancy, the product follows the 2x2 rule to account for different sizes and species of birds.

[1] Avoidance Index (AI) Scores indicate the fraction of trials in which birds flew towards the unpatterned control glass.

HELP SAVE ENERGY, HELP SAVE BIRDS

Guardian Bird1st™ glass helps reach energy goals when paired with Guardian SunGuard® low-E coatings.

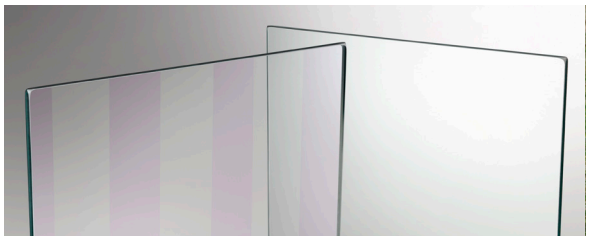


MAKEUP NAME	TRANSMITTANCE			REFLECTANCE			U-VALUE		Relative Heat Gain (RHG)	Solar Heat Gain Coefficient (SHGC)	Light To Solar Gain (LSG)
	Visible (τ_v%)	UV (τ_{uv}%)	Solar (τ_e%)	Visible ρ_v% out	Visible ρ_v% in	Solar ρ_e% out	Winter Night (Btu/hr·ft²·F)	Summer Day (Btu/hr·ft²·F)			
Bird1st with **NU 78/65** (#5)	76	0	48	12	13	14	0.30	0.29	139	0.59	1.29
Bird1st with **SN 68** (#4)	66	0	30	11	12	22	0.29	0.27	86	0.36	1.83
Bird1st with **SNX-L 62/34** (#5)	63	0	25	12	12	27	0.28	0.27	92	0.38	1.65
Bird1st with **SNX 62/27** (#4)	60	0	22	11	12	26	0.28	0.26	65	0.27	2.22

1. Figures may vary due to manufacturing tolerances. All tabulated data is based on NFRC methodology using Guardian's Performance Calculator.
2. Values are for indication purposes only and are subject to variation according to conditions of measurement, manufacture and/or application.
3. Solar Heat Gain Coefficient (SHGC) represents the solar heat gain through the glass relative to the incident solar radiation.

PROTECT + PRESERVE

THE BIRDS + YOUR VIEW



To birds, the vertical stripe coating is visible (this image is a representation of the Bird1st stripe coating).

To the human eye, the Guardian Bird1st coating looks transparent in most viewing conditions.

DETAILS

SIZE
102" x 144" (maximum)

THICKNESS
6mm

OPTIONS
- Guardian UltraClear™ low-iron glass
- Standard clear glass

WARRANTY
10 years

SAFETY
Heat-treated and laminated

See what's possible™ at **GuardianGlass.com/Bird1st**

 v3.20

GUARDIAN® GLASS

AviProtek Pattern 216

The AviProtek pattern 216 is a bird friendly solution with acid-etched visual markers on the exterior surface of the glass. This pattern is made with 6 mm dots spaced four inches apart in both the vertical and horizontal planes. This bird friendly pattern meets local regulations where dots spaced at four inches in both planes are accepted, such as in the city of Toronto, Canada (as of 2019).

Product Specifications

Thicknesses: 4 mm and 6 mm (5/32" and 1 /4")

Dimensions: Standard 96" x 130" – Other dimensions are available on request

Substrates: Clear, low-iron – Other substrate are available on request

Surface: To be used on the exterior surface

Availability: This pattern is subject to 4,000 pound minimum quantities.

Threat Factors: Meets local bird friendly regulations where dot spacing 4 inches apart are acceptable.

Energy: Can be combined with any low-e glass on position 3

Applications: Exterior

Warranty: 10 year limited warranty on surface degradation. For all terms and conditions regarding the Walker Textures® warranty, please contact our Customer Service Department.

AviProtek Pattern 221

The AviProtek pattern 221 is a bird friendly solution with acid-etched visual markers on the exterior surface of the glass. The pattern is made with 5MM dots spaced two inches apart in the horizontal planes and four inches apart in the vertical planes. This pattern meets the recognized 2×4 rule as well as regulations or guidelines in municipalities where a bird friendly approach is required.

Product Specifications

Thicknesses: 4 mm and 6 mm (5/32" and 1 /4")

Dimensions: Standard 96" x 130" – Other dimensions are available on request

Substrates: Clear, low-iron – Other substrate are available on request

Surface: To be used on the exterior surface

Availability: This pattern is subject to 4,000 pound minimum quantities

Threat Factors: Meets the 2×4 rule and local bird friendly regulations

Energy: Can be combined with any low-e glass on position 3

Applications: Exterior

Warranty: 10 year limited warranty on surface degradation. For all terms and conditions regarding the Walker Textures® warranty, please contact our Customer Service Department.