

# **2024 Washingtonian Residential Design Awards**

**Project Title:** Split Skylight

**Location:** Washington DC

**Date of Completion:** 2/01/2023

## **Project Statement:**

This is a single-family home renovation on a tight urban lot in Washington DC. Our clients asked to expand their existing footprint, but per their zoning regulations, had very little room to grow in width. They also wanted a large screened-in porch. Unfortunately, following sun studies of the site, we found that the porch blocked a significant amount of light coming into the new expanded living space. And with neighbors so close on both sides of the house, first floor window light was limited too.

Our strategy then was to light the first floor from above, drawing both morning and afternoon sun to keep the interior naturally lit throughout the day. The solution of skylights split along an asymmetrical ridge line that allowed us to direct morning light into the new primary bedroom space and carve out some of the second floor to bring afternoon light down to the double-story kitchen.

## **Design Narrative: How does this project address Design for Integration, Wellbeing, and Discovery?**

The original parts of the house were upgraded but room arrangements remain largely the same. Instead of fully gutting the home and replacing existing plaster with drywall, most of the plaster on the first and second floor in the original home was retained and patched where needed. Flooring on the second floor was salvaged and refinished. New efficient systems, such as heating and cooling, a tankless hot water heater, and new windows, were all part of the project scope. Simplified upgrades blend the existing house with the new addition. For example, on the 100+year-old stair, treads were refinished and a crisp stained ebony wood handrail with steel balusters replaced a heavier banister. The underside of the new screened porch is detailed in a way to foster play, integrating a climbing wall, swings, and shade from the southern sun.

## **Community Engagement: How does this project address Design for Equitable Communities and Economy?**

Located in an urban area of Washington DC, this urban property is 2 blocks away from a Metro stop and within walking distance of a transit station. Homes are close together and close to the street. Our approach to creating a more modern facade was to simplify and soften. Gray windows were used instead of darker ones, and dissimilar materials were painted the same color to bring more cohesiveness to the facade. A heavy front entrance overhang was removed, allowing more northern light in to the house's front rooms.

## **Sustainability and Resilience: How does this project address Design for Ecosystems, Water, Energy, Resources, and Change?**

This project, in its sectional approach, can serve as a transformative example of adding an addition in a tight urban neighborhood without sacrificing light and air. The new screened porch helps to balance light and heat into the new first floor addition while providing a place for green roof and water capture on the top. Skylights, heaters, and fans maintain that the screened porch will be a three-season room, providing ventilation and a connection to the yard beyond.

# Split Skylight

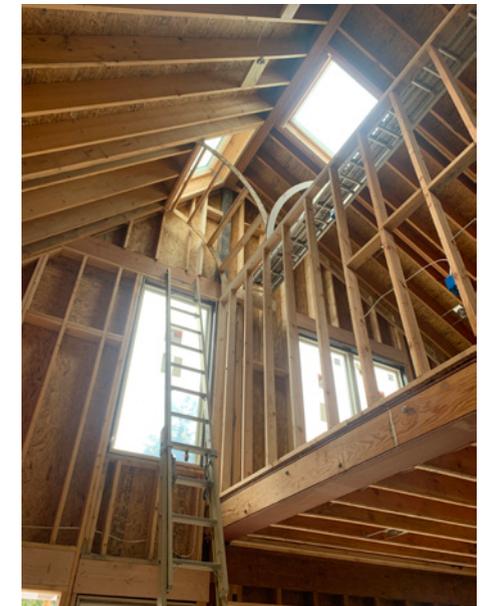
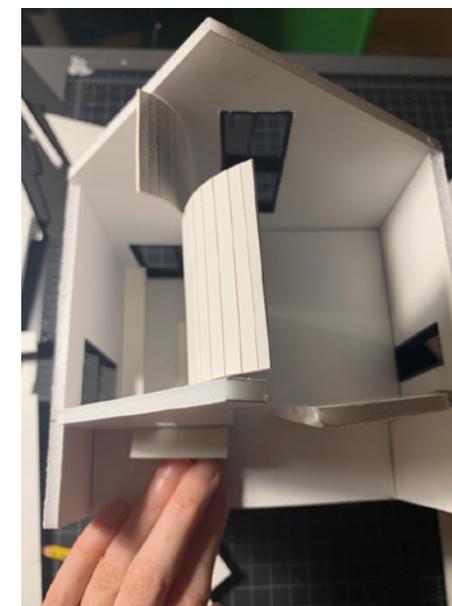
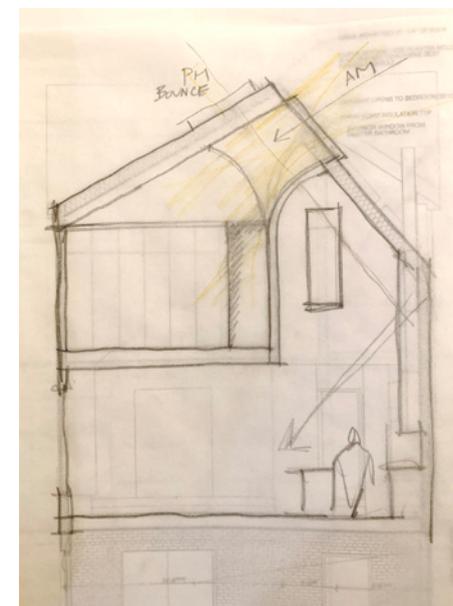
Washington, DC

Split skylight is a single family home renovation on a tight urban lot in Washington DC. Our clients asked to expand their existing footprint, but per their zoning regulations, had very little room to grow in width. They also wanted a large screened in porch. Unfortunately, following sun studies of the site, we found that the porch blocked a significant amount of light coming into the new expanded living space. And with neighbors so close on both sides of the house, first floor window light was limited too.

Our strategy was to light the first floor from above; ideally bringing in both morning and afternoon light to keep the interior naturally lit throughout the day. The solution was skylights split along an asymmetrical ridge line that allowed us to direct morning light into the new primary bedroom space and carve out some of the second floor to bring afternoon light into the double-story kitchen. A strategically placed east-

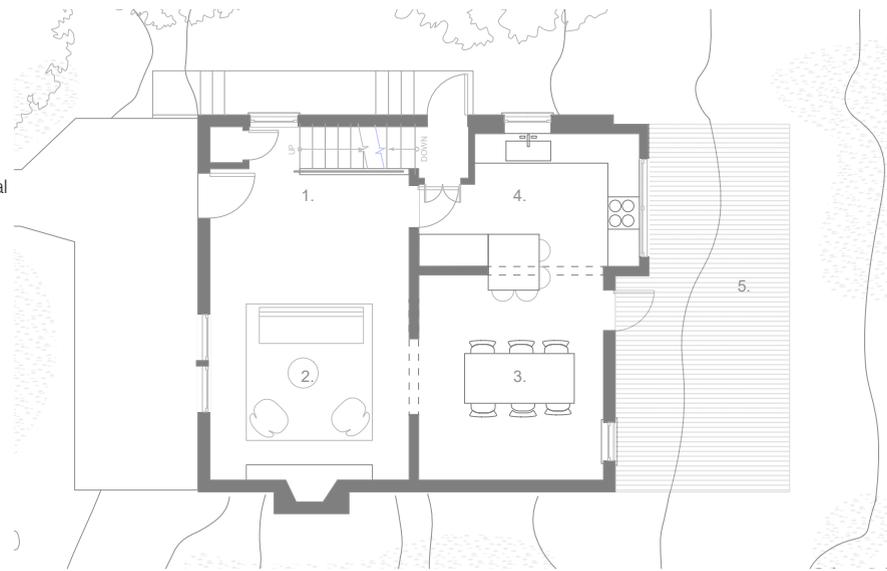
facing skylight was also added deeper into the addition to bounce off the white walls and down into the kitchen below.

The original parts of the house were upgraded but room arrangements remain largely the same. Instead of fully gutting the home and replacing existing plaster with drywall, most of the plaster on the first and second floor in the original home was retained and patched where needed. Flooring on the second floor was also salvaged and refinished. New efficient systems, such as heating and cooling, a tankless hot water heater, and new windows, were all part of the project scope. Simplified upgrades blend the existing house with the new addition. For example, on the 100+ year-old stair, treads were refinished and a crisp stained ebony wood handrail with steel balusters replaced a heavier banister.



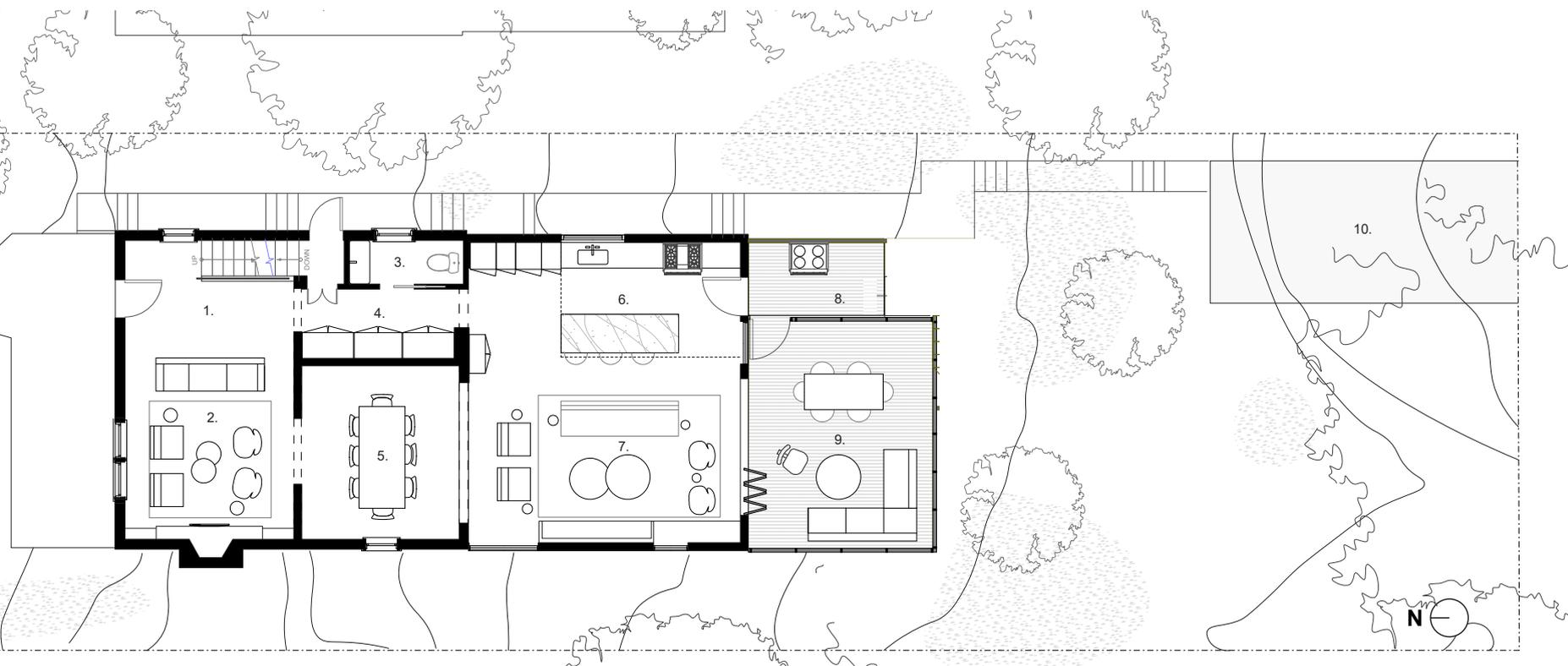
First Floor, original

- 1. Foyer
- 2. Living Room
- 3. Dining Room
- 4. Kitchen
- 5. Deck



First Floor, renovated w/ addition

- 1. Foyer
- 2. Living Room
- 3. Powder Room
- 4. Mudroom
- 5. Dining Room
- 6. Kitchen
- 7. Family Room
- 8. Deck
- 9. Screen Porch
- 10. Parking



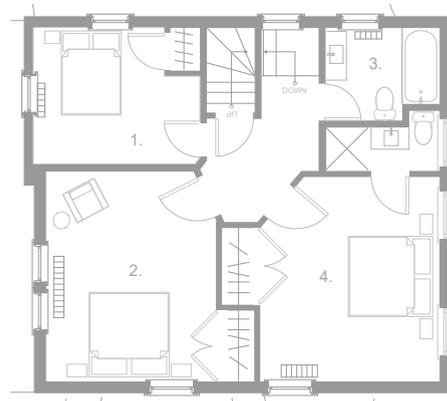
Located in an urban area of Washington DC, this site is oriented facing North/South. With the rear facing south, a deep screened porch shields the first floor from direct south facing light and a cantilever on the porch keeps the basement shielded from the sun in the middle of the day.



The front of the house also received an upgrade. An existing porch that made the front rooms of the house very dark was removed, windows were replaced in a soft grey finish with a simple mullion pattern. Heavy Tudor elements from the front facade were replaced with a clean stucco finish.

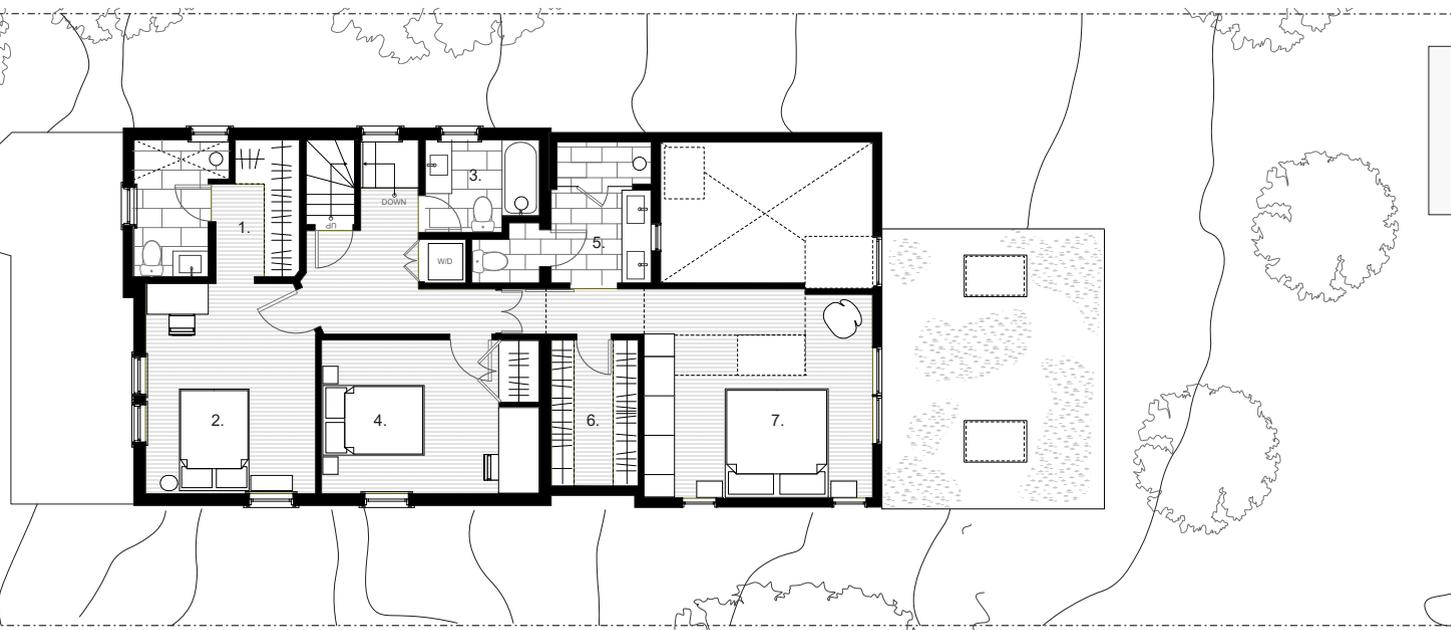
Second Floor, original

- 1. Bedroom
- 2. Bedroom
- 3. Bathroom Room
- 4. Primary Bedroom



Second Floor, renovated w/ addition

- 1. Closet & Bathroom
- 2. Bedroom
- 3. Bath Room
- 4. Bedroom
- 5. Primary Bath
- 6. Primary Closet
- 7. Primary Bedroom





(above) Section looking north, featuring the split skylight's eastern-facing scoop to for the primary bedroom to receive a natural glow at sunrise.



(above) Section looking south, featuring a light well to pull afternoon sunlight deep in to the new kitchen.

(right) A low window and overhead east-facing skylight balance the new kitchen's natural light throughout the day.







The split skylight solution is organized by a dramatic sculpted volume over the kitchen which gathers the skylights, exterior windows, and internal windows that bounce natural light deep in to the house's interior.



(left) The original house had limited access between the living area and the south-facing, wooded back yard.

(below) Bifold doors were selected to open to the screened porch, extending an indoor-outdoor living space into three seasons of the year.

(right) The projecting porch created a new protected place for kids' play equipment and a tucked away storage area. The flat roof above the porch is equipped with fans and heaters to extend the number of comfortable days in the space, and prepped for a green roof to establish in the Spring.





(left) Framed views repeat throughout the addition, drawing natural light from external as well as internal sources, and even mirrors, as seen in these moments within the primary suite.

(below) At the first floor, the addition leaves a majority of the existing house intact, but gains head height in the addition by taking a few steps down into a new family room/ kitchen zone that takes advantage of the full width of the house.



