Landscape Architecture



this year of stalled projects and dreams deferred, the opening of Buddy Holly Hall of Performing Arts and Sciences is a cheering reminder of what this industry is all about. Having opened in January, it is only now beginning to hit its stride with a

broad range of offerings that includes programs of music by Beethoven and Gustav Holst, the comic Brian Regan, Broadway's Kristin Chenoweth, and touring musicals, including *Jersey Boys*, *An Officer and a Gentleman*, and—of course—*Buddy: The Buddy Holly Musical*.



The building's undulating vertical fins are hung 5' off the curtain wall, making, Lukasik says, "an arcade of sorts."

Holly is, of course, Lubbock's most famous son, and naming the new building after him surely was a no-brainer. It's also an expression of civic pride. With a population of roughly a quarter of a million, Lubbock is described by Wikipedia as the "economic, educational, and health-care

hub of the multicounty region" of Northwest Texas. Located some distance from the cultural centers of Dallas and Houston, and with a large academic community—it is the home of Texas Tech University, among others—it has plenty of arts activity and an Arts District that is home to



The angulation of the horizontals in the lobby are inspired by the walls of the nearby Caprock Canyon, Lukasik says. The spiral staircase alludes to the tornadoes that are found in the area.

all sorts of music, dance, and visual media. What the city has lacked was a venue expansive enough to accommodate its ambitions.

Now the city has it. Designed by Diamond Schmitt in association with Parkhill and MWM Architects of Lubbock, developed by Garfield Public/Private LLC in partnership with Lubbock Entertainment/Performing Arts Association (LEPAA), and built by Lee Lewis Construction, Buddy Holly Hall is now in operation and will formally celebrate its opening this summer. It is West Texas' largest dedicated performance venue, bringing the city's vibrant performing arts community—including the Lubbock Symphony Orchestra, Ballet Lubbock, and Lubbock Independent School District, along with a variety of professional touring productions—under one roof. The 220,000-sq.-ft. building is the first of its kind in the region. Jack Hagler, of the the-

atre consultancy Schuler Shook, says, "For a city of that size to take on this level of a project, and to be 100% privately financed, is amazing."

Indeed, Buddy Holly Hall can be seen as a bet placed on Lubbock's prospects, its environment, and its aspirations. The building is designed in response to the singular Texas landscape, just as it is carefully tailored to the needs of a growing community that sets considerable store by its devotion to the arts.

Diamond Schmitt, which has previously been represented in these pages by such projects as National Arts Centre in Ottawa, Toronto's Four Seasons Centre for the Performing Arts, and the Mariinsky Theatre in St.

Petersburg, took on a project rooted in a rather different landscape than these, working closely with theatre consultants Schuler Shook and acousticians Jaffe Holden.

"When I first landed in Lubbock, I understood what is meant by the term 'wide open,'" says Michael Lukasik, of Diamond Schmitt. The clients, he notes, "kept talking about the harshness and extremes of the plains." Looking over the piece of land earmarked for the center, he learned that, thanks to a landscape in which water tables and bedrock are so close to the surface, most buildings in the city don't have basements. Also, it sits in the middle of a flood plain, making it necessary to build in certain protections. So, Lukasik says, "We basically constructed a mound and then inserted the basement into that." The mound on which the building rests is more than 15' above ground level.

A series of gestures suggest an openness to the Lubbock community. "We worked with a local landscape architect who took his cues from the local flora and fauna as well as the colors of the soil," Lukasik says. "We placed the building facing the arts district," providing a link to the city's existing culture. In another sign of connectedness, the use of glass along the ground-level entrance is meant to dissolve the threshold between indoors and outdoors. A canopied courtyard allows for outdoor performances.

Noting the building's sloped roof and the undulating vertical fins that are hung 5' off the curtain wall, Lukasik says these elements make "an arcade of sorts." According to The Architect's Newspaper, the fins are made of glass fiber reinforced concrete: "The fiberglass resin has a proprietary coating that mimics precast concrete and allowed for both the unique structural condition of the facade's overhang as well as the wiring for light fixtures that highlight donor plates set in the floor along the arcade. Each fin is actually two halves cast around a steel beam, completely supported from above while the beam ensures lack of movement during strong winds. The halves show a clean reveal as they rotate in their array from left to right."

"The fins are deliberately set at different angles as you move across the façade," Lukasik says. "They close up to provide shade in certain areas, then open up to reveal the large supergraphic donor wall. They close off again as you go further east, reaching the exterior courtyard." Referring to the upper lobby area, which rests above the sloped roof, he adds, "The fenestration there becomes a series of long horizontal stripes that frame the horizon." He adds, "The landscape was always on our minds, first and foremost."

As the program for the hall developed to include two theatres, a ballet school, multipurpose rooms, a bistro, and bars, the project became "a set of parts," Lukasik says. "The challenge was dealing with the interactions of all the users. When they open up the multipurpose room to the lobby, it's huge enough to have weddings. There is a stage in the lobby with a proper backdrop and lighting." And, on any given day, he notes, there may be performances in the theatres, music rehearsals in the multipurpose rooms, dance classes in the ballet school, and food and drink served in the destination restaurant. All of these elements

had to be wrangled into a coherent whole.

One of the lobby's most striking elements is the donor wall, in which hundreds of guitar picks combine to make a supergraphic portrait of Buddy Holly playing his guitar. "We started kicking around the idea of the pick," Lukasik says. "Matthew [Lella, also of Diamond Schmitt] plays the guitar, and we have a band in the office. The way the donor wall works, anyone can purchase a pick and put their name on it. It works on a macro level when you're driving by and the building is lit up. And it works on a micro level when you're close up and looking at the names on the picks. We did the graphic and handed it off to Brad Oldham, an artist in Dallas."

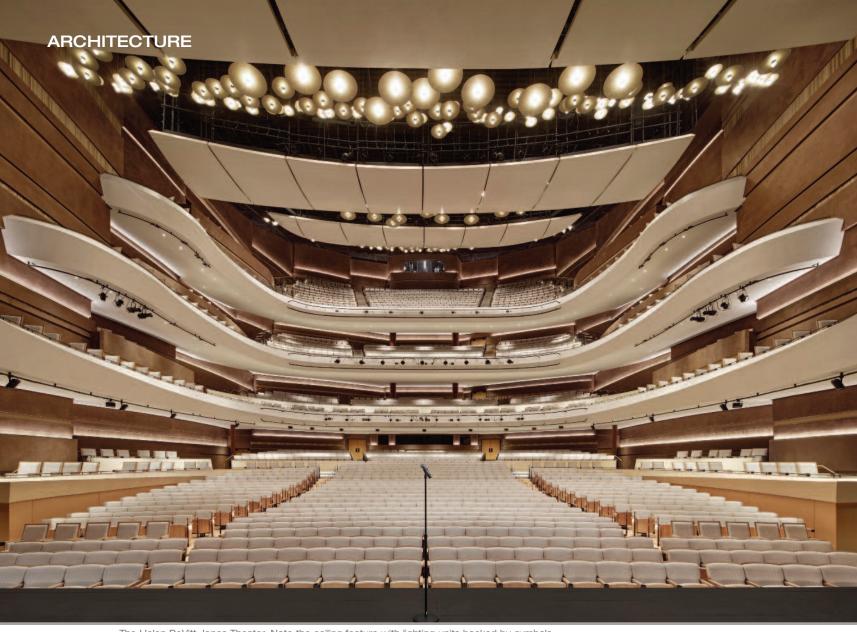
Linking the various elements, of course, is the lobby. Again, Lukasik says, inspiration was drawn from the surrounding landscape. "Matthew and I spent a lot of time traveling with people from LEPAA, getting to know the area, including the Caprock Canyon, located north of the city. We were struck by the red and ocher of the soil, which influenced the theatres' interiors. The lobby is white but its forms, the angulation of the horizontals [that define the space] came from the walls of the canyon." At one end of the lobby is an imposing spiral staircase, its shape an allusion to the tornados for which the area is known.

The staircase will be partnered by another striking vertical feature on the building's exterior. "The site was home to two very large radio towers," Lukasik says. The intention is to restore the 200' radio tower with lighting. Buddy Holly's widow, Maria, saw the video of the design and she said of the tower, "It is his spirit rising up." Given the building's location, the tower will be visible from very far off. It will also be a marker for the cultural district.

The Helen DeVitt Jones Theater

The larger of the two performing spaces, the Helen DeVitt Jones Theater, seats 2,297 and is designed for symphony concerts, large-scale ballet, and touring Broadway shows. Accommodating these uses resulted in a bit of a push and pull. Hagler recalls that in discussion with Lella and acoustician Mark Holden, "I said, 'This hall is designed first of all for Broadway and popular music. But it has other uses, and it will be remembered as a symphony hall. That needs to be our guiding principle for the three prime programs.' From that meeting, I think we ended up with an amazing room that does what everybody needs."

The earth-toned walls, covered with plaster, enclose the room, which has seating on four levels. Schuler Shook worked with the clients to develop the theatre's program, recommending a number of setups to make it flexible enough to accommodate a range of presentations. These included a fixed seating capacity of about 600 in the orchestra, with removable seating wagons [supplied by Staging Concepts] to create a flat-floor arrangement for galas, cabaret seating, or standing general admission for



The Helen DeVitt Jones Theater. Note the ceiling feature with lighting units backed by cymbals.

concerts. Series Seating was the chair manufacturer.

Despite its size, the theatre retains a feeling of intimacy. "The balconies keep everyone pretty close to the stage," says Kimberly Corbett Oates, of Schuler Shook. Interestingly, she adds, "The first balcony has VIP boxes along the face of it. One thing that made sense in Lubbock, LEPAA found, was to have premium seating as personal licensing opportunities. With them, people have the right of first refusal to their seats. The VIP boxes range from four to 16 seats. Behind the boxes is additional premium seating, arranged in traditional rows."

For additional flexibility, the two stage-apron extensions can bring an orchestra further into the audience chamber; the lift system, supplied by Gala, creates the orchestra pit for musical theatre, ballet, or opera. "It was important to Jaffe Holden to extend the orchestra," Corbett Oates says. "When the concert shell towers [used for acoustic musical presentations] are in place, they cross the proscenium line

and the ceilings come very close to the forestage, leaving just a gap for lighting. Both lifts come up to the stage level, pushing the orchestra out into the hall and increasing the stage space for choristers or larger ensembles. The lifts also work independently. One lift down gives us our Broadway pit; we can then put seats on the second lift. They also work in tandem to carry seat wagons to the basement. One reason we can do all this is because smoke control is done by an exhaust system in the stage house, which means we don't have a fire curtain."

The theatre's rigging system, supplied and installed by Texas Scenic, has 52 rope-operated counterweight line sets plus four high-capacity hoists for the orchestra shell ceiling. Corbett Oates adds, "We also have motorized light ladders at stage right and stage left, a hoist for the center speaker cluster, and one for the left and right speaker arrays. There are catwalks over the audience area as well as a forestage grid." The Super Diva orchestra shell was



The Crickets Studio Theater.

supplied by Wenger. Stage masking here and in the Crickets Studio Theater was supplied by IWEISS.

Lighting in the theatre is controlled by an ETC Gio console with an ETC Paradigm/Net3 system for house lighting. Dimming and distribution are also by ETC, using the company's Sensor dimmers, Sensor IQ breakers, and PowerSafe Pro company switches. The lighting rig includes a complement of conventional ETC Source Fours, Source Four Series 2 Lustrs, D60 Lustrs, ColorSource Cycs, Chroma-Q Color Force IIs, and Lycian 1295 ELT followspots, along with a variety of accessories from Altman Lighting, Lex Products, and Osram. The lighting package was supplied by Vincent Lighting Systems with distribution and control systems handled by Texas Scenic.

In designing the room's acoustics, Carlos Rivera, of Jaffe Holden says, "The big driver was the symphony, so we had to determine what the high end of the reverberation needed to be. We set up the geometric size of the room and discussed with the LEPAA folks what they wanted to do with the hall in terms of rental and additional income." The key element in making the space flexible was the addition of 17 acouStac variable acoustic banners, manufactured and supplied by Texas Scenic. "We knew we needed a reverb time of two seconds for the symphony and close to one second for pop music and touring and so on," Rivera says. Garth Hemphill, also of Jaffe Holden, says, "I was tuning the sound system and the difference was astonishing. We brought in all the banners and it was a different space."

In terms of acoustical isolation, Rivera says, "I measured the environmental noise on-site. It was mostly empty—a parking lot, an old post office, and some small structures. There was not a lot of noise from flyovers. Mostly, we had to deal with vehicular traffic, including some public buses."

Still, he says, "We had to isolate the two theatres and



Schuler Shook and Jaffe Holden designed the performance infrastructure for the ballet school, including a large studio for informal presentations. Harlequin supplied the school with Harlequin Liberty panels and Harlequin Studio B Marley through Z Floor Company.

the multipurpose room, which is in the front of the building, off the main lobby. We did this with structural breaks. The smaller theatre is in its own building with a 2" gap in the structure. The DeVitt is also independent, with an acoustical joint that separates it from the lobby. All three rooms can be used at the same time."

In the DeVitt, Hemphill says, the speaker system—consisting of left and right arrays plus a center cluster—draws on products from d&b audiotechnik's Y-Series, which, fittingly, is advertised as being suitable for a variety of situations and performance styles. The Y-Series boxes are paired with d&b Y subs in the arrays and SL-Subs on the floor. The 96-speaker rig is controlled by a Yamaha CL5 console. "Typically, in a house like this, a roadhouse with a symphony, I wouldn't put in a loudspeaker system that big, but, from day one, they wanted the ability for a major artist to do a fly-in. This is a rider-friendly setup; nobody is going

to turn down a CL5 or d&b speakers." Another plus factor: "We can use d&b's ArrayProcessing feature to change the coverage pattern in the lower orchestra, when the seating wagons are removed, with the press of a button.

Otherwise, it would have to be a four-to-eight-hour work call. It's amazing what you can do with ArrayProcessing."

The expansive speaker system allows for the creation of multiple fill zones. "We have three different front fill systems because of the different positions of the pit lifts," Hemphill says. "We have box fills and under- and overbalcony positions." How big is the system? "It took one-and-a-half 12-hour days to tune the presets for the room."

Another unusual touch is the overhead arrangement of house lighting units, each of which is backed by a cymbal. "We worked locally to develop it," Lukasik says. "It became bigger than what we had originally imagined, a ceiling of floating elements." The acoustically damped

cymbals create sound diffusion and a singing tone in the hall. The hope is that the ceiling will become an iconic symbol of the theatre.

The Crickets Studio Theater

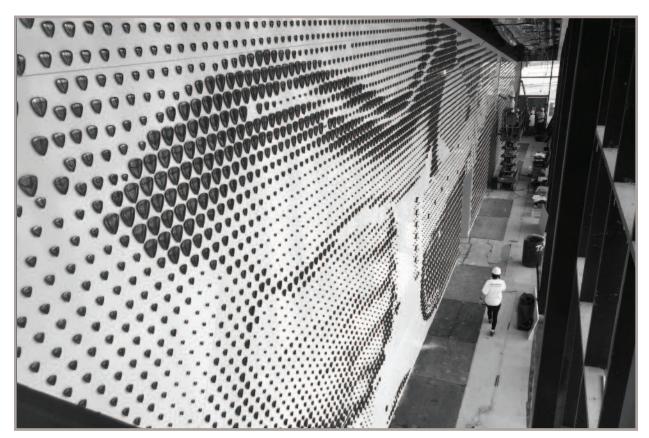
Many performing arts centers of this size and type opt for a black-box second stage, a generally useful, if visually drab, solution. But the Crickets Studio is a little gem of a space, featuring an undulating wall pattern, eye-catching lavender seats, and a small balcony. It is a proper theatre in every way. The Schuler Shook specification included seating for 415 plus standing room and a smaller stage with community use in mind. The main client in this space is the Lubbock Independent School District, which uses it for concerts and musical competitions, as well as the ballet school. Mostly designed for unamplified music, it also contains an acoustical banner system and motorized automated rigging, both supplied by Texas Scenic.

Working with Diamond Schmitt, Rivera says Jaffe Holden "was able to integrate the acoustical shaping and diffusion" in the tilt-up walls' wave pattern. "A lot of research went into finding concrete forms that could provide the right depth and diffusion," he says. "Also, we did a ton of analysis early on to calculate the initial volume based on this number of seats." Lukasik adds, "The DeVitt

Theater walls have a sparkle to them. The plaster finish of the acoustic wall reveal is not metallic but has a sparkle paint finish that picks up the lighting a bit more. It's carefully done and is second fiddle to the wall's earthy tone."

The rigging, Corbett Oates says, is TSC's inline hoist system. "They have 11 hoists and a motorized roll drop for the cyclorama upstage. It is important that the room change over easily. The rear orchestra shell wall consists of panels that are permanently mounted to the upstage wall; only the side towers move. The cyclorama can drop down to hide it." The rigging was supplied and installed by Texas Scenic. Again, Wenger provided the orchestra shell. Lighting is controlled by an ETC Ion console, with house lighting handled by ETC's Paradigm/Net3 system. Again, Sensor dimmers, sensor IQ breakers, and PowerSafe Pro company switches are used. Texas Scenic was the supplier. The lighting package, supplied by Vincent Lighting Systems, includes ETC Source Four Series 2 Lustrs, ETC ColorSource Spots, ColorSource PARs, ColorSource Cycs, Lycian M2 followspots, again with accessories from Altman Lighting, Lex Products, and Osram. Automated units available for both spaces include High End Systems SolaSpot 2000s, Martin by Harman MAC Auras, and Mac Aura XBs.

In this case, Hemphill opted for Fulcrum Acoustic's



The donor wall features a large-scale portrait of Buddy Holly consisting of guitar picks.

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DX15 dual 15" coaxial loudspeakers. "They're really nice, with a value point," he says. "We have a pair for the balcony and a pair for the orchestra. The center cluster is the CX Series, also from Fulcrum." The console is a Yamaha CL3 digital mixer.

In terms of cinema capabilities, Hemphill says, "There are surround sound speaker locations in both theatres. They also have three Draper Stagescreens for the large theatre and multi-purpose room, and in the Studio Theater, a motorized screen. They have Panasonic 21K laser projectors for the DeVitt, another Panasonic for the Crickets, and two portable Epson units for the multipurpose room."

Additional spaces

The previously mentioned multipurpose room includes 6,000 subdividable square feet that can be opened to the lobby. Schuler Shook recommended a grid of rigging strongpoints and show power to support events and the ability to roll a car into a room or lobby. The firm determined the size needed for University Interscholastic League music competitions for the regional school districts—a major aspect of the Texas educational system, Hagler says. Ballet Lubbock's pre-professional academy is a 20,000-sq.-foot dance center, with offices and storage space. Schuler Shook and Jaffe Holden designed the performance infrastructure, including a large studio for informal presentations. (The academy makes use of Harlequin flooring in these areas and curtains supplied by IWEISS.) Food service includes a 2,500-sq.-ft. kitchen for catering and the 2,500sq.-ft. Rave On Bistro, which seats 100. The Christine DeVitt Lobby accommodates 300 seated for banquets, weddings, and galas.

Other necessities include loading docks; control rooms; dressing rooms; visiting company offices; a conference room; management and administrative offices; storage for

sets, costumes, equipment, and seat wagons; and performers' lounges.

Hemphill says the ballet school has an AV infrastructure, including Bluetooth connections connecting instructors to loudspeakers in the ceilings to bring in audio. "They also have a series of tie lines between the main theatre and ballet, allowing them to monitor what's going on."

Of course, the pandemic interfered with the process of completing the building. Diamond Schmitt is based in Toronto and quarantine rules made it impossible for its team to visit Texas during the final stages. Lukasik says that he is still finishing up the last few punchlist items from afar. Nevertheless, everyone involved expresses high satisfaction with the project, both in terms of the collaboration and the significance of it to Lubbock's community.

"In everything from feasibility studies and facility conceptual planning to design mockups and custom equipment designs, our team was closely involved in the creation of this remarkable project for Lubbock," Corbett Oates says. "There is no other venue like this in the area, and, coupled with the nearby visual arts district, its current setup allows for daytime and evening engagementbringing it 'closer' to the community." Hagler adds, "The Buddy Holly Hall is on a site that has been underutilized since the 1980s. It's bringing new energy to the downtown area. The excitement around its opening is great to see, and we're thrilled to support such a project."