





Light of Experience

This is Steven Holl's first major public building in the United States, built in Seattle, his home town. The site is on a street that runs straight through the university campus. The new building defines its place in terms of three planes of green space (to its north, west and, in the future, east); and the plane of a reflecting pool to the south.

Holl started with a simple scheme: a stone box with seven bottles of light. This seminal idea of light nourishes both a powerful metaphor of the church and Holl's own architectural preoccupations with developing the sensory, perceptual, and emotional intentions of a building. The light metaphor also has a programmatic logic, with the seven bottles corresponding to stages of the Jesuit liturgy. The bottle/light scoops create a dramatic roofscape.

The slender 52ft bell tower clad in zinc signals the beginning of the processional route into the chapel, past the reflecting pool. The ochre-stained monochromatic exterior of the building is in absolute contrast to the light-washed interior. It glows with the effects of suffused daylight and various intense colours projected onto surfaces by light coming through coloured lenses set in the mouths of the light scoops. Soft light is intersected by bold slashes of colour. Subtly reflected colourings define layered planes. Light bounces off the highly polished concrete floor. The saturation of the projected colours varies with the intensity of the sunlight, and the progress of the sun enlivens or subdues colours.

The seven different light conditions relate to: 1 procession: natural sunlight; 2 narthex: natural sunlight; 3 nave: yellow field with blue lens (east), blue field with yellow lens (west); 4 Blessed Sacrament: orange field with purple lens; 5 choir: green field with red lens; 6 Reconciliation Chapel: purple field with orange lens; 7 bell tower and pond: reflected night light.

Holl devised the complementary coloured lenses because the project could not afford stained glass windows. The budget imposed other constraints. The initial scheme was shrunk from 10,000ft² to 6100ft², and the original intention to use stone gave way to precast concrete panels, with stone limited to the window ledges and a bench.

Using tilt-slab construction – which for Holl recalled Schindler's Kings Road house in Los Angeles – the building carcass was raised in twenty-four hours. To ensure the high-quality interior finish, the slabs were cast face-up. The twenty-one panels interlock, with the windows formed in the interlocking voids of the slabs. It is a pure tectonic expression. Panels are 8–10ins thick, 30ft high, and weigh some 78,000 lbs; one

is 77 tons. They had to be picked up and rotated by a hydraulic crane. The pick-up hook points in the slabs remain in the walls as traces of the construction method. Hook covers cast in brass were applied over the holes once the walls were up, casting shadows. This detail is reminiscent of Scarpa, in whose work the processes of manufacture are remembered as ornament.

The light scoops were formed using a curved steel-tube framing system that Holl had used before on the Stretto house in Dallas. The rolled pipe and tube sections allow elements to attach in multiple directions; few steel roof members are straight or horizontal. The roof is supported at the bearing pockets cast into the backs of the concrete panels.

Phenomenology of architecture

Steven Holl sees every project is an experiment, and seeks a new form of modern architecture. He is centrally concerned in developing architecture's sensual, phenomenological aspects – using light, texture, detail and overlapping space. He chooses to sketch his designs in watercolour because he is interested in light and this provides the best medium for analysing its effects.

His collaboration with Juhani Pallasmaa and Alberto Pérez-Cómez on *Questions of Perception. Phenomenology of Architecture* demonstrates the significance he places on the experiential. In this book, Pallasmaa laments that 'The architecture of our time is turning into the retinal art of the eye.'¹ He explains the simple premise of phenomenology: 'Every touching experience of architecture is multi-sensory; qualities of matter, space, and scale are measured equally by the eye, ear, nose, skin, tongue, skeleton and muscle. Architecture involves seven realms of sensory experience which interact and infuse each other.'²

This is Holl's touchstone. While architecture can be generated and understood at many levels, direct spatial or material experience will be felt by everyone.

The chapel is a richly experiential domain which rewards the senses and transcends the everyday exterior world. In its dramatic use of light and evocation of mass, it recalls something of Ronchamp. Of his own first visit to Ronchamp in 1970, Holl writes: '...we stepped into the empty space along a wash of sunlight. It was completely silent inside, except for the crackling of candles... mysteriously aglow. Above contrasting textures (extremely rough plaster against concrete) the concave ceiling appeared molded by light, space and the upward thrust of the thick walls.'³

Haig Beck and Jackie Cooper

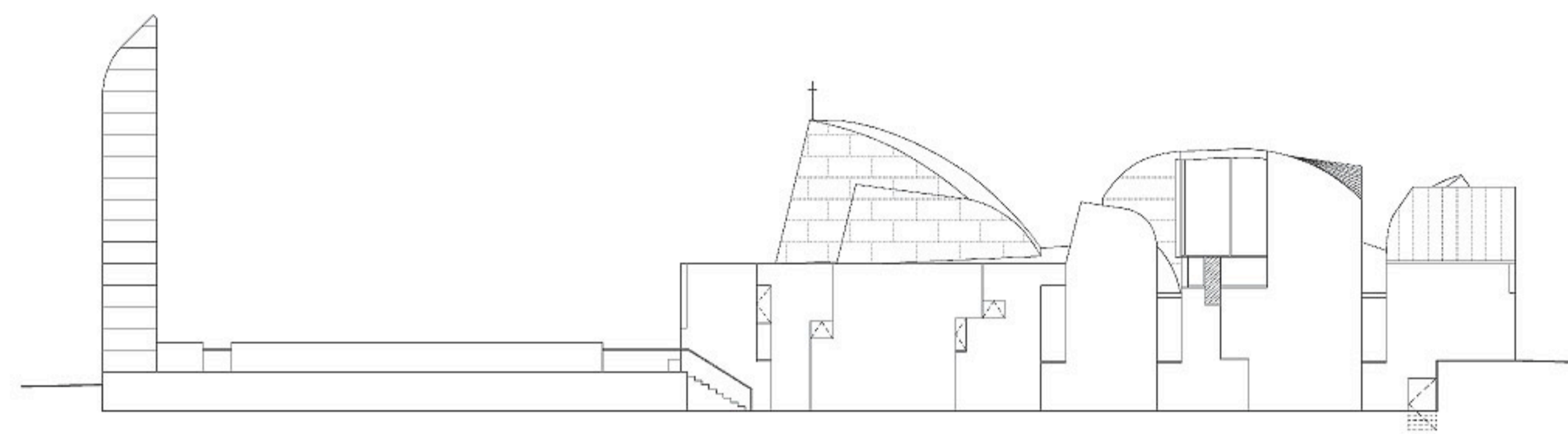
¹ Steven Holl, Juhani Pallasmaa, Alberto Pérez-Cómez, *Questions of Perception. Phenomenology of Architecture*, Architecture and Urbanism, July 1994 special issue, Tokyo, p29

² *Ibid*, p30

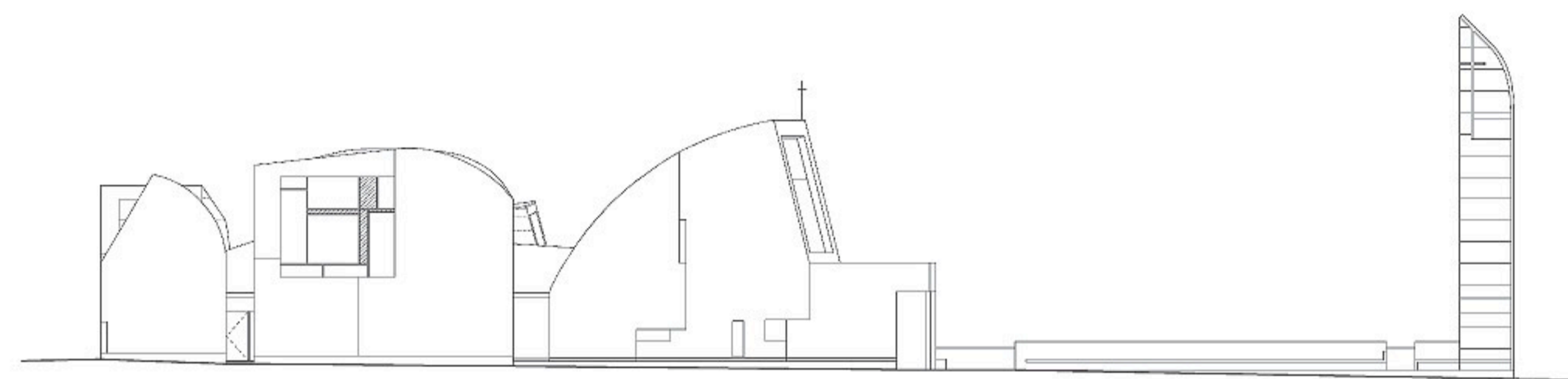
³ *Ibid*, pp123–124

Architect:
 Steven Holl Architects
 Principal:
 Steven Holl
 Project architect:
 Timothy Bade
 Project team:
 Justin Kornhammer,
 Jan Kinsbergen,
 Aucka Tuskes
 Associate architect:
 Olson Sundberg Architects
 Principals:
 Rick Sundberg,
 Tom Kundig
 Project managers:
 James Graham
 Janet Webb
 Structural engineers:
 Datum Engineers
 (schematic phase)
 Monte Clarke Engineering
 (construction)
 Mechanical, electrical,
 plumbing:
 Abacus Engineered
 Systems
 Consultants:
 Liturgical: Bill Brown
 Lighting: L. Chervatoire
 International
 Acoustical:
 Peter George & Assoc.
 General contractor:
 Baugh Construction
 Models:
 Timothy Bade,
 Jan Kinsbergen
 Water colours:
 Steven Holl

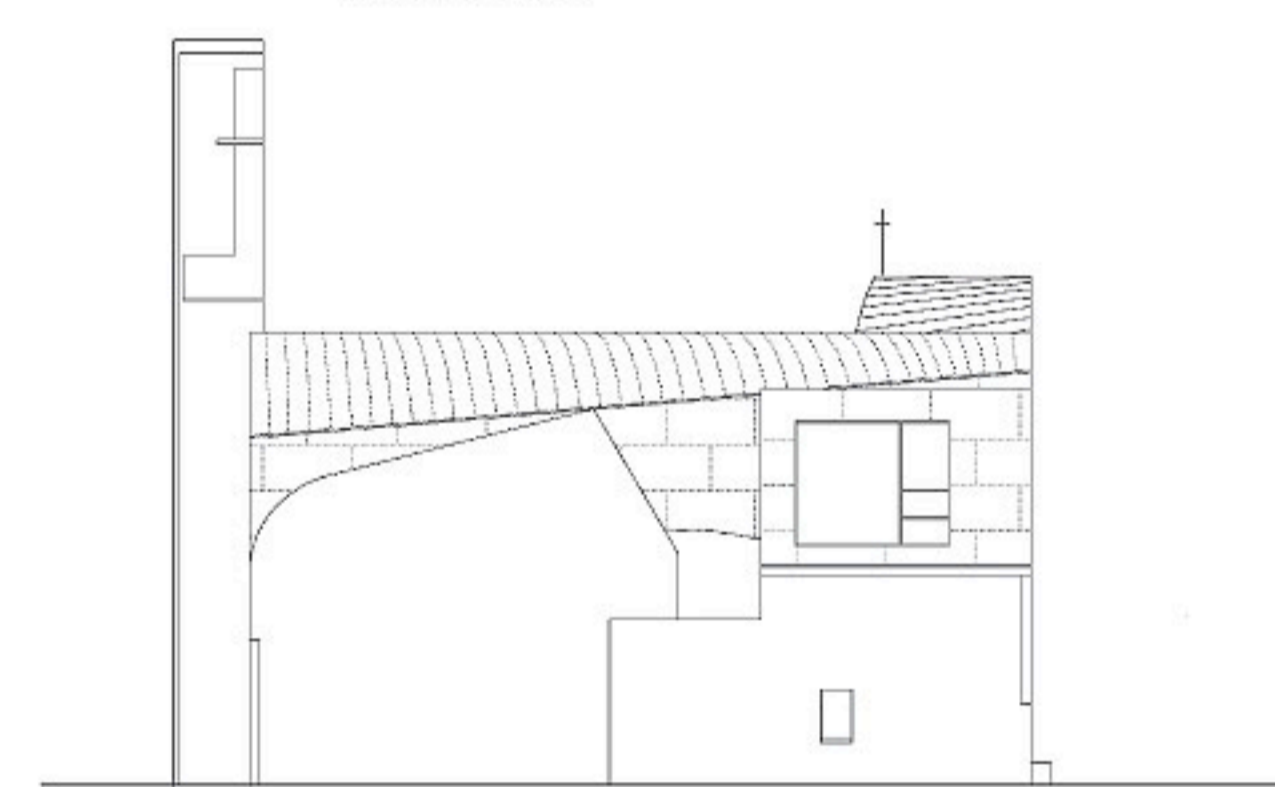
- 1 Bell tower
- 2 Thinking Field reflecting pool
- 3 Bench
- 4 Narthex
- 5 Carpet
- 6 Procession (ramp up)
- 7 Baptistry
- 8 Blessed Sacrament Chapel
- 9 Tabernacle
- D Choir
- II Cantor
- II Altar
- B Processional cross
- H Presider's chair
- E Arto
- F Ramp up
- I Reconciliation Chapel
- B Bible room
- I Female toilets
- II Janitor
- II Male toilet
- II Vesting sacristy
- B Book stand
- II Mechanical room



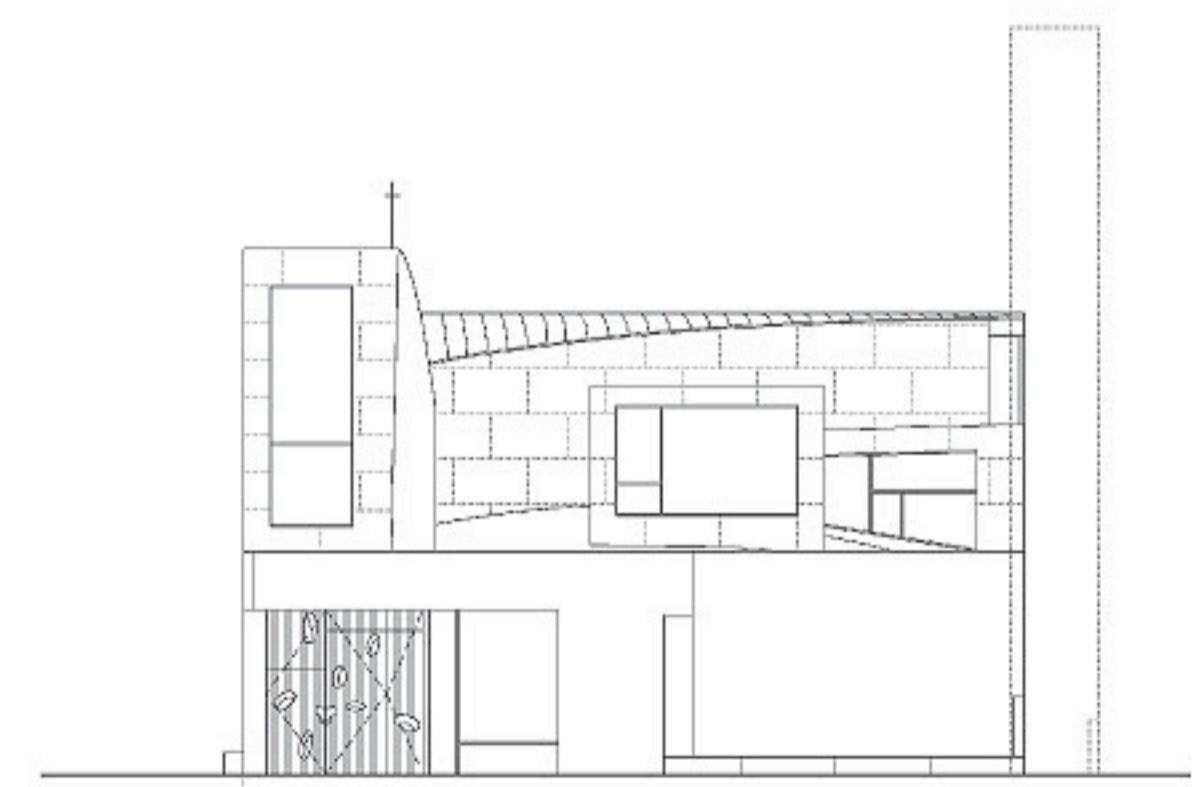
East elevation



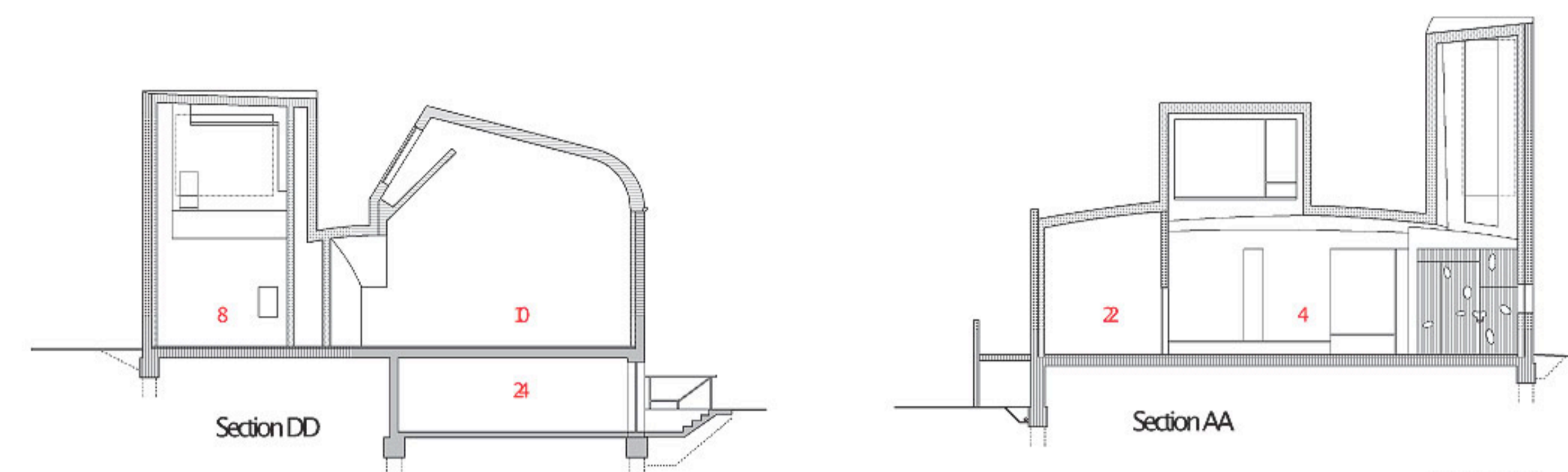
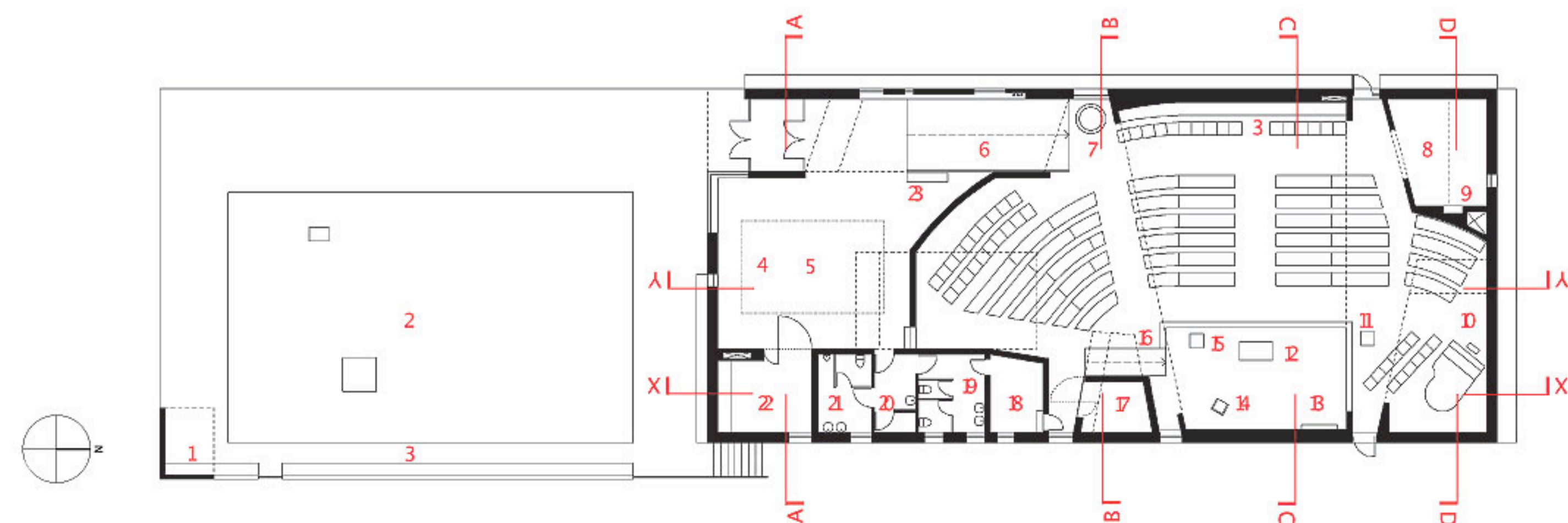
West elevation



North elevation

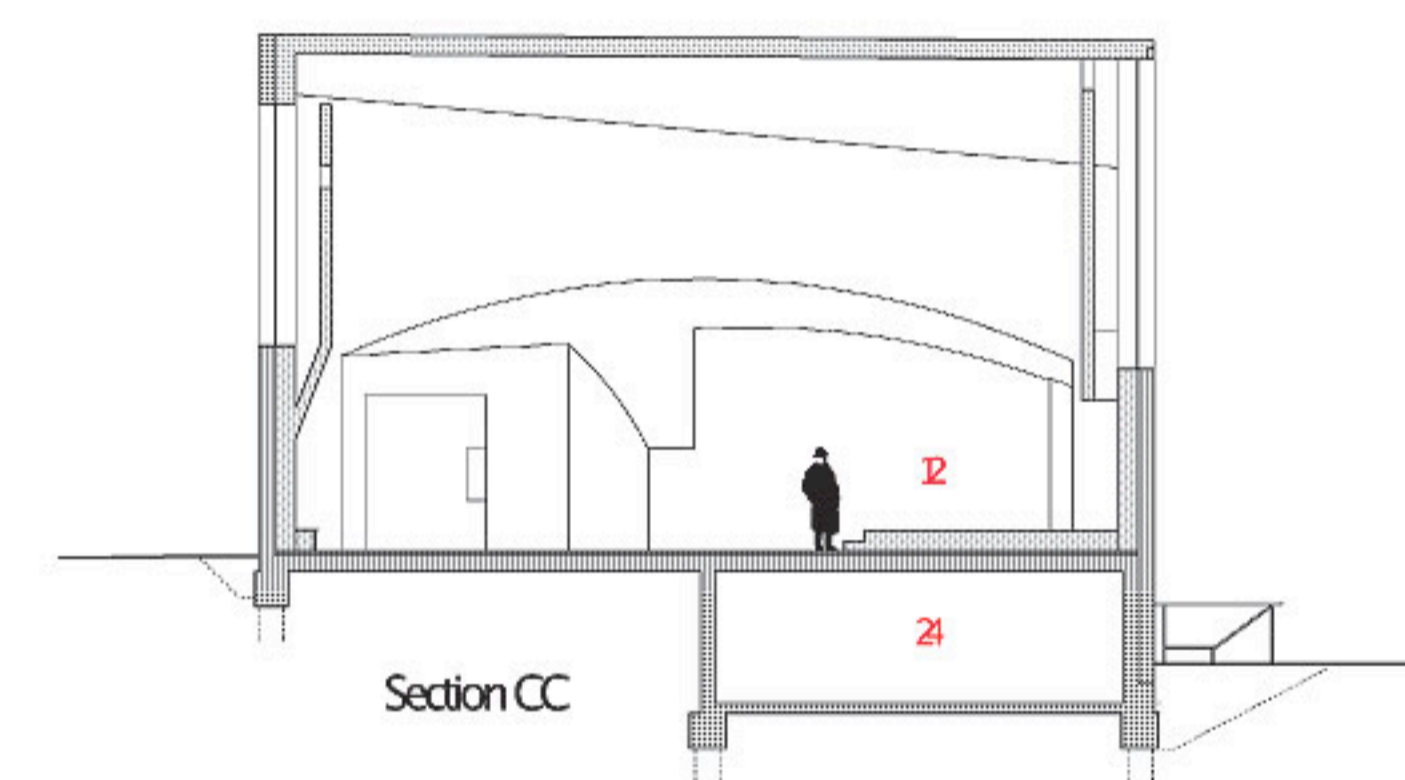


South elevation

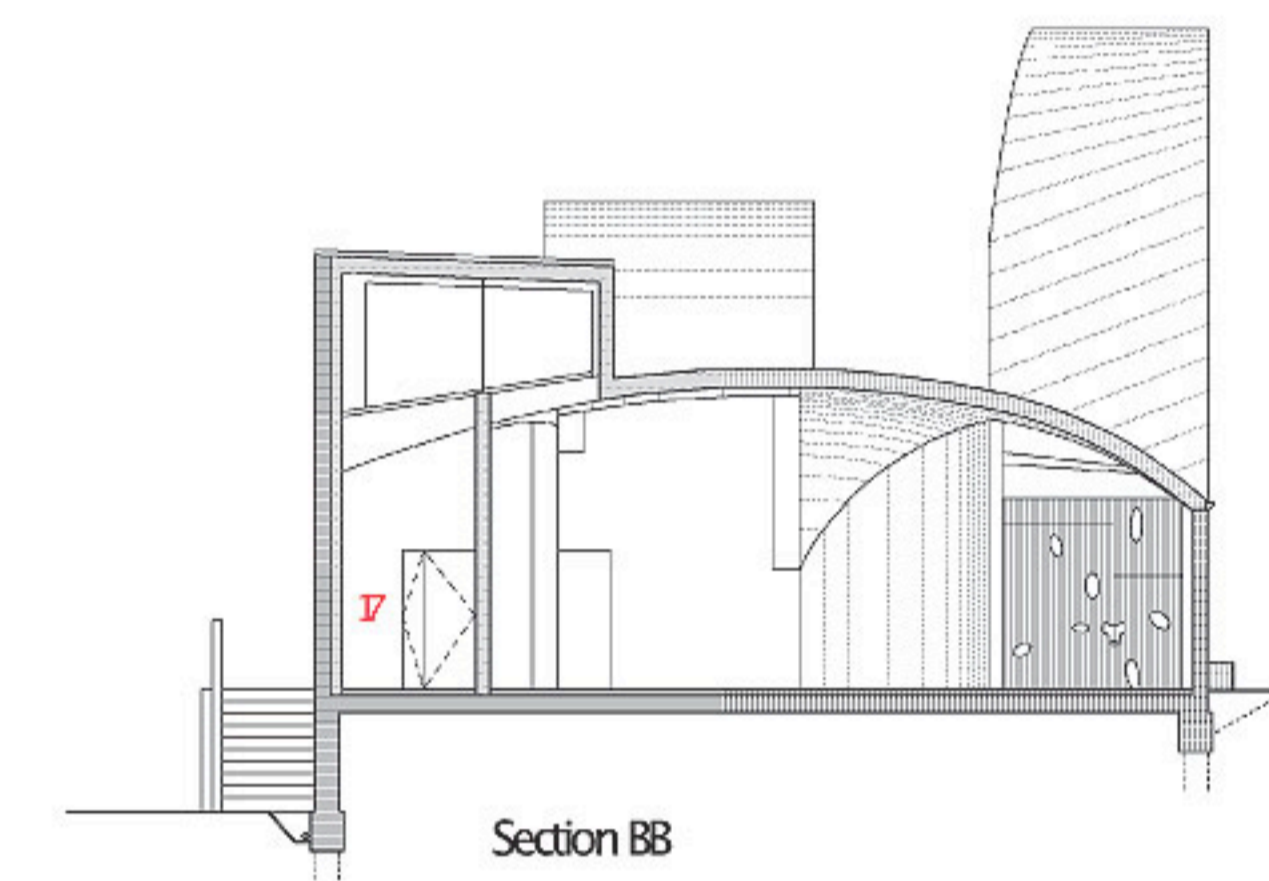


Section DD

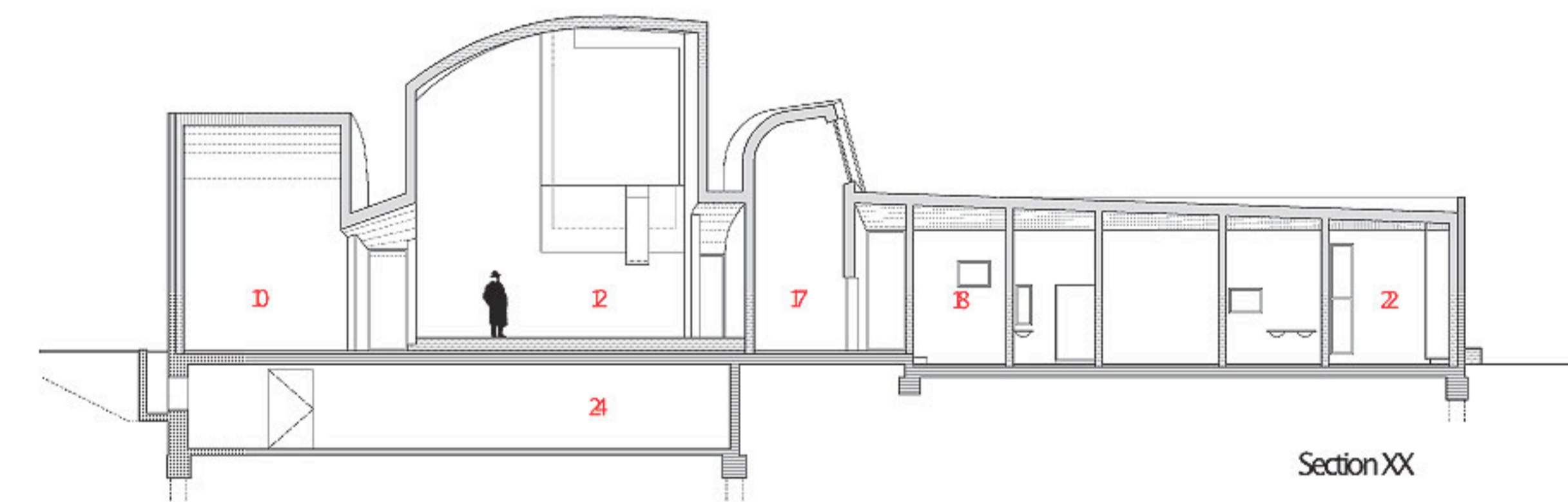
Section AA



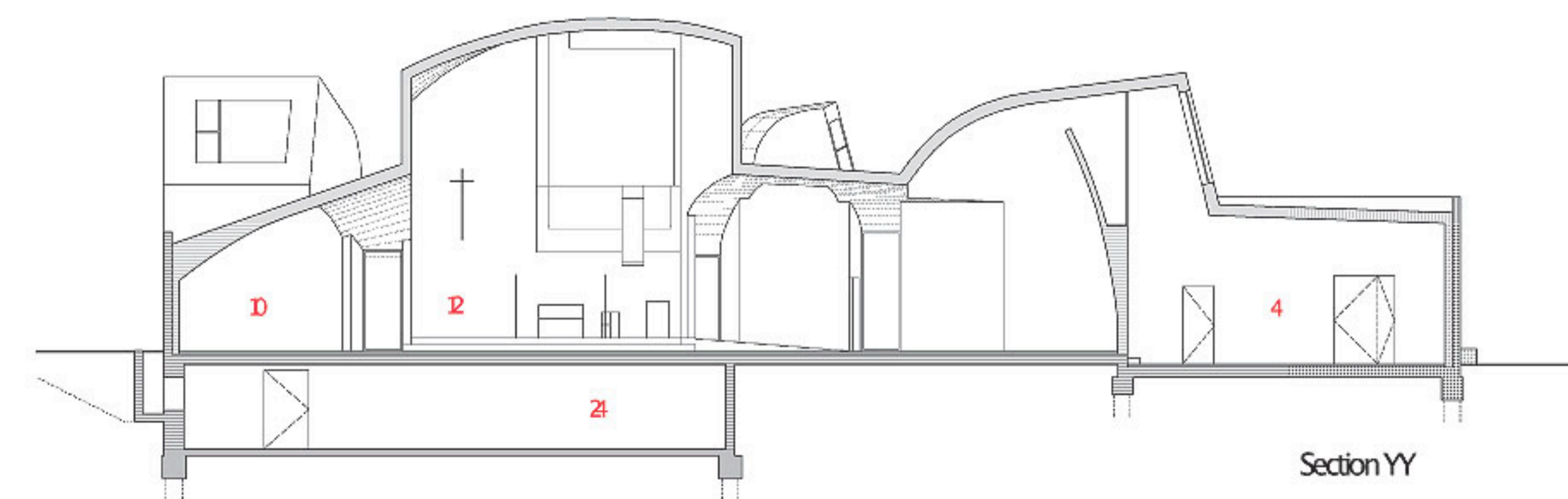
Section CC



Section BB



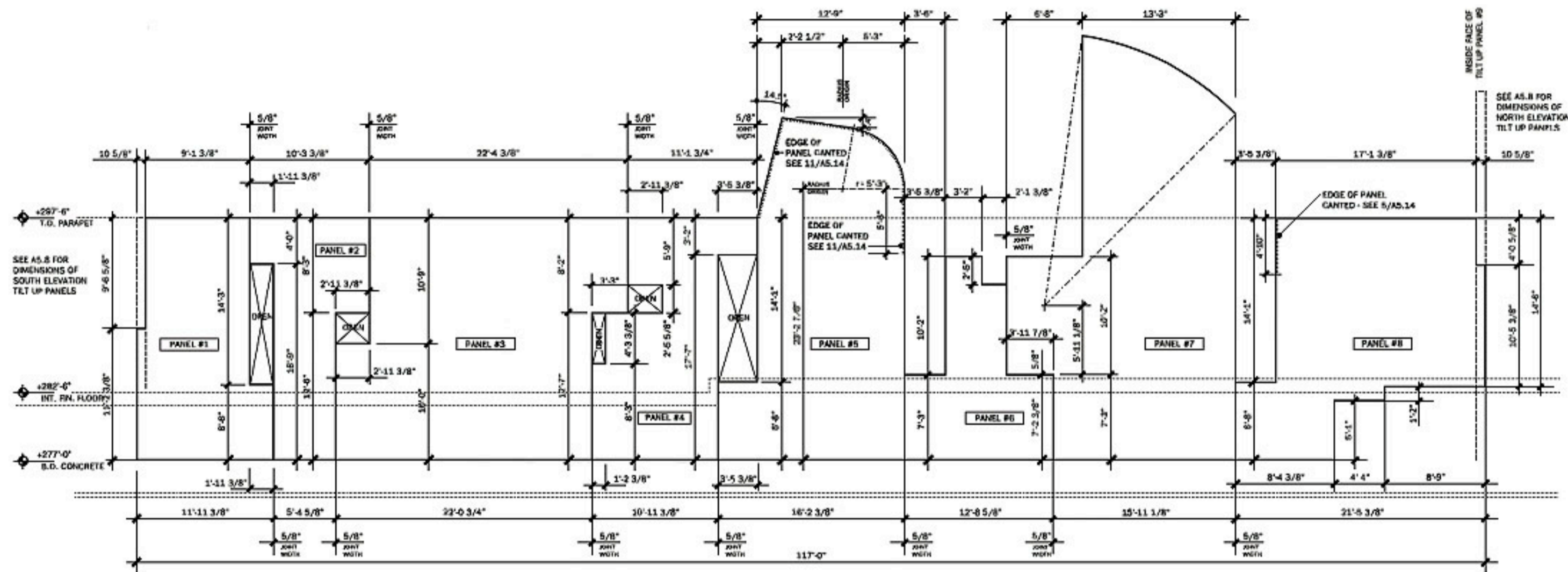
Section XX



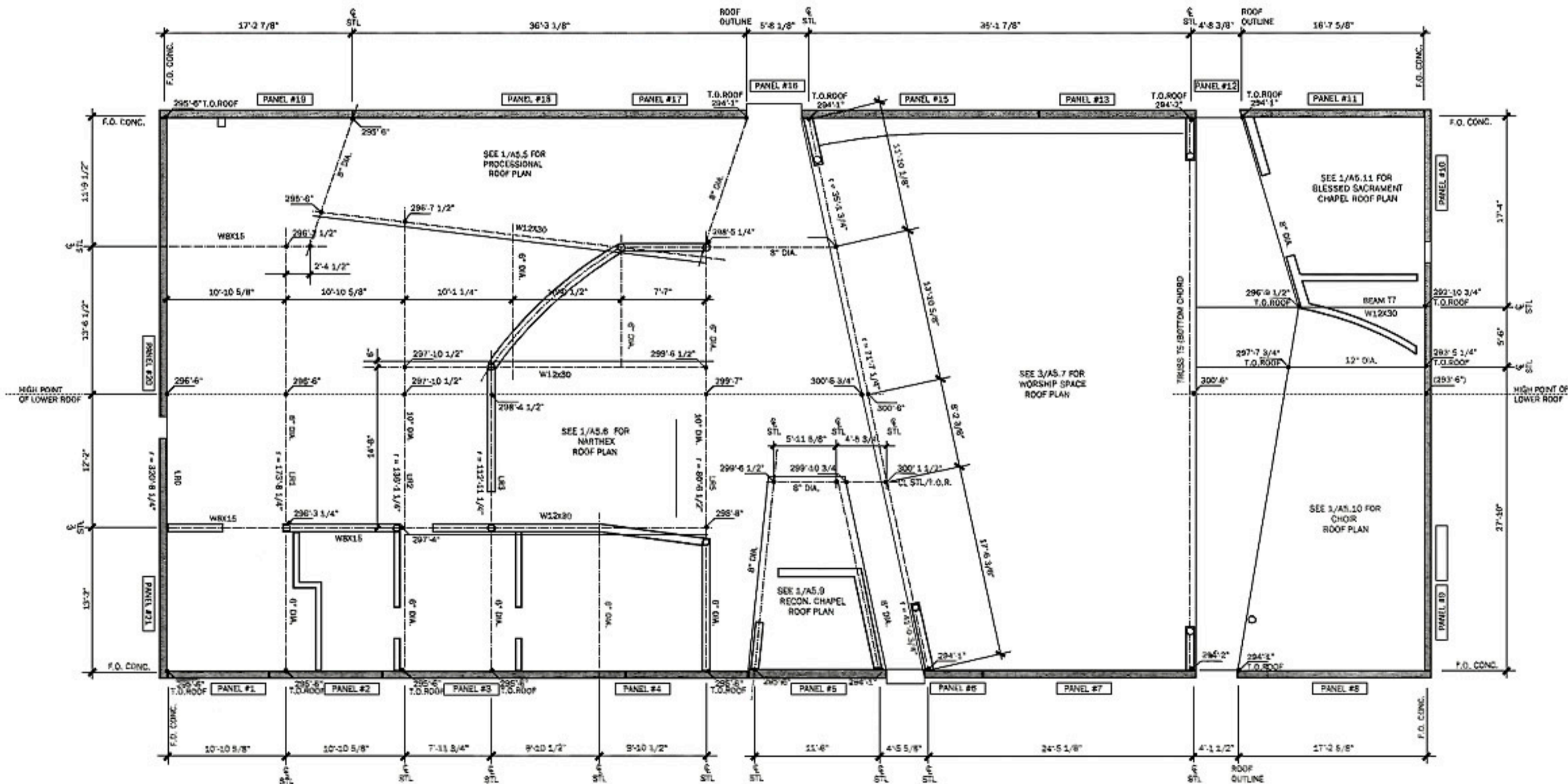
Section YY

Architect's statement
 ... he returns to his
 metaphor of light: the light
 to perceive what can best
 be decided upon must
 come down from the first
 and supreme wisdom...
 Eyes to See, Ears to Hear,
 David Lonsdale SJ
 Programme: Jesuit chapel
 for the Seattle University
 community.
 Concept: a gathering of
 different lights in a stone
 box. The metaphor of light
 is shaped in different vol-
 ume emerging from the
 roof whose irregularities
 aim at projecting different
 qualities of light.
 Each of the seven light
 volumes corresponds to a
 part of the programme of
 Jesuit Catholic worship.
 For instance, the south-
 facing light corresponds to
 the procession. The main
 worship space has a vol-
 ume of east and west light.
 The city-facing north light
 corresponds to the Chapel
 of the Blessed Sacrament
 and the mission of com-
 munity outreach.
 In the narthex and entry
 process, one experiences
 the natural light of the sun,
 with its play of shadows.
 Moving deeper into the
 chapel, the light has a
 mysterious glow of reflec-
 ted colour fields, with the
 complementary colours of

each field set in a stained
 glass lens.
 At night, the time of gath-
 erings for mass, the light
 volumes are like beacons
 shining in all directions
 out across the campus.
 On many occasions, for
 someone is always pray-
 ing, these lights shine
 throughout the night.
 The chapel is a space-
 defining building on the
 campus, sited to form a
 new quadrangle of green
 space that will surround it.
 To its south is a pond or
 thinking field; at night
 this reflective pool
 becomes a silent accom-
 paniment to the chapel.
 The building's elongated rectangular
 plan is suited to the task
 of defining both the cam-
 pus space and the space
 inside for the processional
 and gathering functions.
 Steven Holl



East elevation tilt-up panels set-out



Plan showing tilt-up panels set-out

Photographs: Jim Graham

