SITE ANALYSIS METHODS SECTION





MIT Japan 3/11 Workshop SITE ANALYSIS REFERENCE DOCUMENTS

Approaching a design project in the context of disaster aid is vastly different than that engaged in a typical architectural studio. As preparation for engaging the post-earthquake and tsunami site in the town of Utatsu in Minami-Sanriku, we have compiled the following resources:

- 01. Key Workshop Documents
- 02. Minami Sanriku and Miyagi Base Maps
- 03. Minami Sanriku Site Analysis Resources
- 04.2011 Tohoku Earthquake-Tsunami Documents and Resources
- 05. Selected East Japan Earthquake-Tsunami Resources and Documents
- 06. Other Disaster Research and Design Web Portals
- 07. Disaster-Resilient Design Documents

Note: This compilation is meant to be as extensive as possible, to provide ready knowledge and resources for the extent of the Japan 3/11 Initiative. Because time and capacity to digest information are both limited for this summer, we have starred resources that would be particularly helpful at this stage.

Please also feel free to find and add additional resources to the database, ensuring that everyone has access to the news.

- ** = highly suggested
- * = good to skim



Site Analysis Package & Schedule

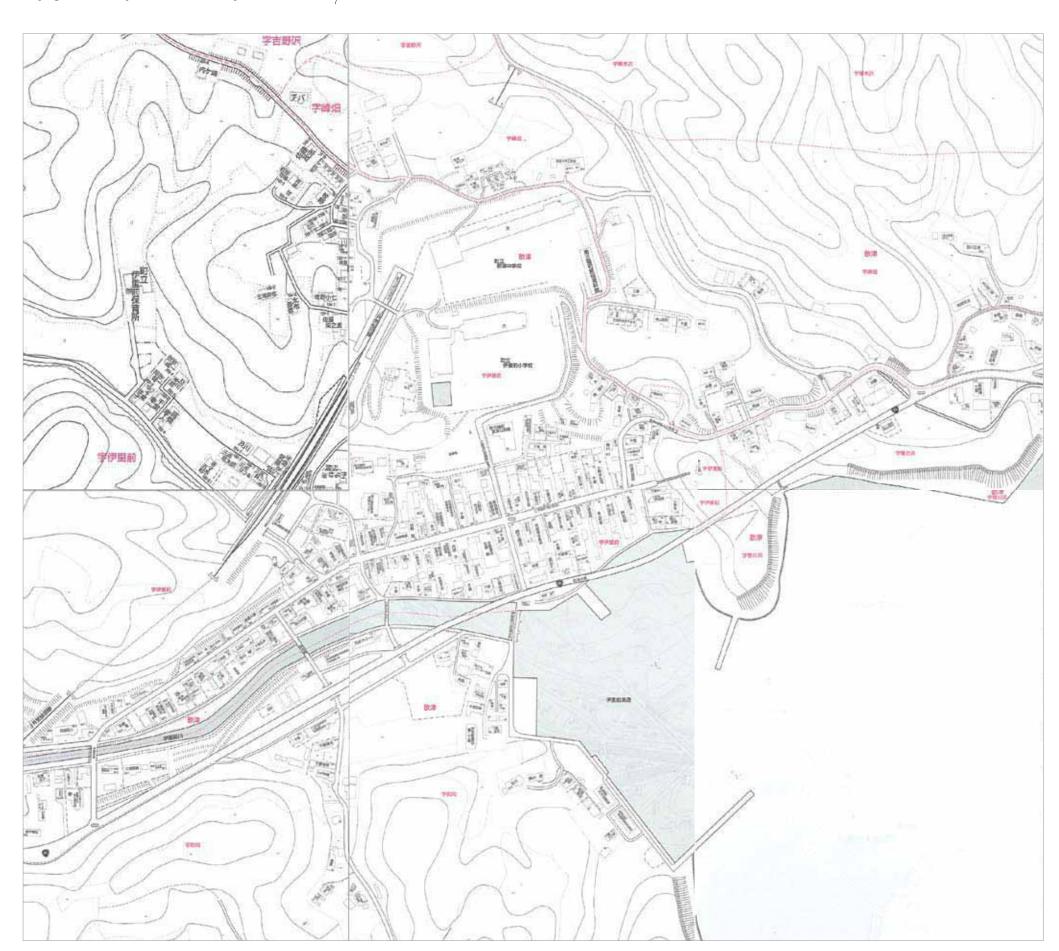
During our three days in Utatsu (Minami-Sanriku, Miyagi), there is much to observe, absorb, and analyze. To structure the site analysis portion of the workshop, this package includes drawing templates acting as our observation recording tools.

We will be working as individuals, in small teams, and as an entire group to analyze and assess the different areas of Utatsu. Using these templates will help to establish a foundation for the remainder of the design workshop in Tane.

Contents

- 1A / Pre-Arrival Observations July 16
- 1B / Photographic Analysis exercise July 16
- 2A / Arrival, Path + Place July 17 p.m.
- 2B / Community Interviews ongoing
- 3A / Site Reference for Transects July 18
- 3B / Transects through the Site July 18
- 4A / Detailed Site Inventory + Analysis July 19
- 4B / Site Sections July 19
- 4C / Building Analysis (FEMA)
- 5 / Departure + Evacuation Paths July 20 a.m.

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Site Inventory Variables

(adapted from LaGro, 2001)

// Physical attributes

- post-tsunami conditions
 - -- surviving features
 - -- rubble surfaces (composition, materials, texture, foundations)
 - -- post-disaster actions (grading, sorting, removal, filling)
- landforms and slopes
 - -- landform types, relations, assets
 - -- relative elevations
 - -- slopes (%, shape, cut/fill, constraints on circulation/bldg)
- soils
 - -- type/description (texture, color, moisture)
 - -- drainage / compaction
 - -- erosion (existing/potential)
- geology (visible bedrock, alluvial, fill land; stability)
- hydrology
 - -- drainage patterns
 - -- channel width, depth, form
 - -- flood hazards
- coastal
 - -- access/assets/exposure
 - -- structures (breakwater, edge)
- -- nearshore/offshore currents, tides, features
- microclimates (sun/shade; temp, humidity, precip, wind)

// Biological attributes

- ecosystem types/assets/impacts
- vegetation
 - -- structure (tree/shrub/groundcover; evergreen/decid)
 - -- density (% cover -- 100% to bare ground)
 - -- tsunami damage (wave, salinity)
- wildlife (terrestrial, marine)

// Cultural and built environment attributes

- communities (locations, structure, needs, interests)
- camps/temporary housing (" ")
- land use & tenure
 - -- public/private, owned/leased
- -- land use /open space pattern
- public infrastructure & services
- buildings
- -- building typology / architectural assets
- -- rapid visual screening (see FEMA form)
- cultural heritage (structures, places, sites, intangible)
- visual analysis & landscape aesthetics
 - -- visual experience (view directions, lengths, qualities)
 - -- sense of place

3A / Site Reference for Transects

Scale = 1:1500



Map of Transect and Site Analysis

Transects

- 1 / West Entry(Adele)
- 2 / JR Corridor(Yushiro)
- 3 / West Valley(Fai)
- 4 / Slopes of Utatsu(Yihyum)
- 5 / Edo Road(Anita)
- 6 /Cove to School(Florence, Yuto)
- 7 / East Valley Road (Matthew)

Site Analysis

- A / For Sea and Mountain(Adele, Yushiro)
- B / Highland Overview(Fai, Matthew)
- C / Kitsune(Yihyum, Florence)
- D / Piglimage & Restration(Anita, Yuto)