

Construction Detail Models

The following images are samples of details modeled during the construction and structures course. The details are generated from a previous studio assignment. The primary goal is to help the students understand how the detail is constructed.



Geocell Retaining Wall



Fountain wall



Treated framed Deck

Ossilating Wood Bench



Full Scale Installations

As a final product to the construction materials course. Students are required to build full scale portions of thier project. The students are assigned a small group in which to explore materiality and have hands-on experience in working with the materials in the detail they are designing.



Laminate Bench



Lifted decking as Seat



Concrete & Wood table



Pipe Bench



Ossilating Wood Bench



Cubist Bench

Studies in Materials and Construction

The Students were asked to study individual materials and write a report discussing their properties and uses within the landscape. To increase the retention and understanding they were required to build a trash can, an item lacking in our facilities, to demonstrate that knowledge.



From Left to Right:
PVC Plastics & Wood - Matt Watson
Cedar & Steel - Drew Rini
Glass & Wood - Singleton Hicks
Plexiglas, Teak, & Steel - John Tierney

**Matt Watson and Drew Rini's objects are on permanent display/use in
Knolwton Hall as part of the Furniture Collection*

A vertical collage of 12 images showing various origami models. The models include geometric shapes like stars and cubes, and more complex structures like a boat and a house, all made from paper. The colors used are primarily gold, silver, blue, and white. The images are arranged in a vertical sequence, showcasing a variety of origami art.

Material, Pattern, Joints & Cor

Fabrication Process

The fabrication process involves several steps: cutting white paper templates, using scissors to cut the paper, working with perforated metal sheets, cutting metal sheets with large circular holes, using a machine to cut metal sheets, and finally assembling the components into a 3D structure.

168Pound

Student: Zhiguo Chen
Instructor: Charles Cartwright

The Folding Screen:

a modular expression

initial design

Process

laser cut model

early 3D models

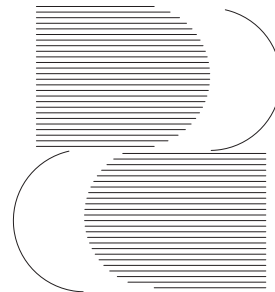
shopbot

stain test

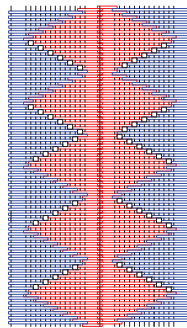
assembly



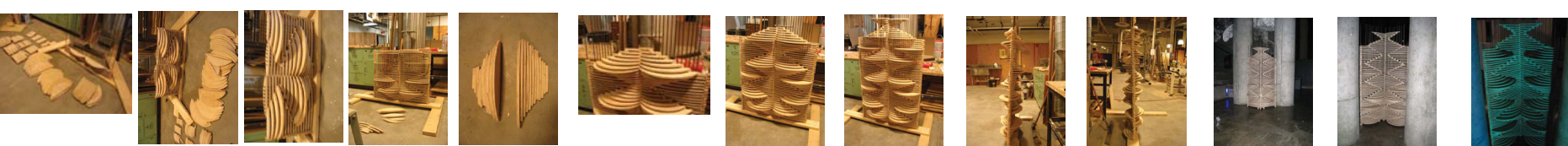
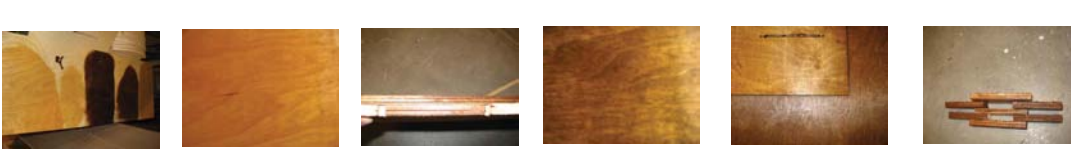
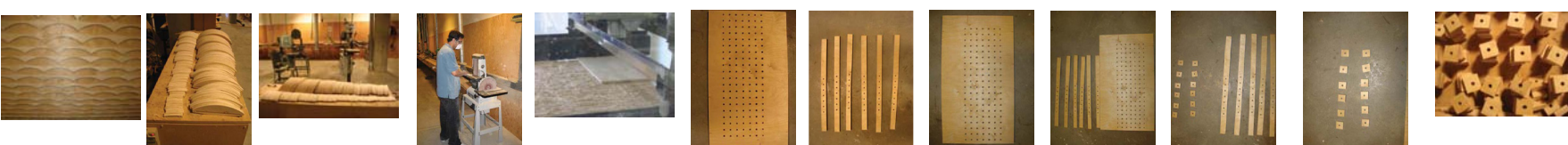
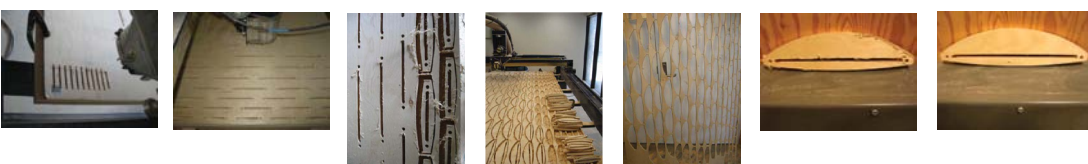
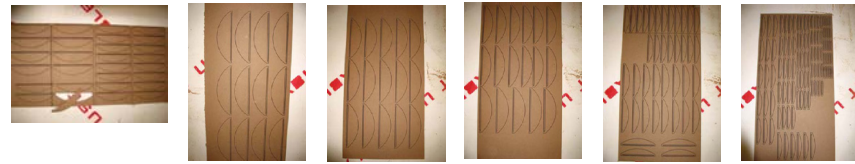
The Great Wave Off Kanagawa:
A Japanese woodblock print by
Hokusai



The wave form interpreted



The wave form expressed



Construction Document Example



COLUMBUS INTERACTIVE FLOOD PLAIN

MATT WATSON

LANDSCAPE ARCHITECTURE 658

WINTER 2008

- L1 EXISTING CONDITIONS
- L2 LAYOUT ENLARGEMENT REFERENCE
- L3 MATERIALS PLAN
- L4 GRADING PLAN
- L5 PLANTING PLAN
- L6.1 LAYOUT - MAIN SITE EAST
- L6.2 LAYOUT - MAIN SITE WEST
- L6.3 LAYOUT - SOUTHERN PENINSULA
- L6.4 LAYOUT - ENTRANCE & PLAZA AREAS
- L7 LIGHTING PLAN and DETAILS
- L8.1 SITE DETAILS 1
- L8.2 SITE DETAILS 2



GENERAL NOTES

SITE MATERIALS LEGEND



MATERIALS & LAYOUT NOTES

1. Contractor shall verify existing conditions prior to commencing work. Notify Landscape Architect of any discrepancies between the plans and actual site conditions. No work shall be performed in areas where such discrepancies exist.
2. Do not create drainage unless otherwise noted. Utilize dimensions indicated on the plans. The contractor shall be responsible for the means, sequence, and procedures of the work.
3. Unless otherwise indicated on the plans, all line work, layout and dimensions are to be perpendicular to one another.
4. Do not disturb areas outside of the construction limits.
5. Maintain positive drainage in all areas. Contractor shall be responsible for any damage to existing drainage during normal installation within the first year. Once site is in a flood control area, contractor shall be responsible for damages occurring from more severe storm conditions.
6. Protect Native Plant Center during construction. Contractor shall be responsible for any damage resulting from construction activities. This is including but not limited to soil removal, debris, and erosion.
7. Locate and protect all existing utilities during construction. Contractor shall be responsible for damages to existing utilities resulting from construction activities. Contact Ohio Utilities Protection Service and A.E.P. at 1-800-362-2784 prior to excavation.
8. All dimensions on this drawing are in feet.
9. The contractor shall exercise particular care in respecting the river corridor while grading. The riverbed and runoff into the river and not up stream. Do not disturb riparian areas.
10. Contractor shall not release any left over concrete or rock into river. All materials that are not used have to be stored in a container and take away from Landscape Architect.

DRAWN BY
MATT WATSON

03/07/2008

SCALE

METROPARKS IMPROVEMENTS

Grandview and Avenue & Dublin Road Intersection
Columbus, OH, USA 43210

WATERBURY

NORTH ARROW

SHEE

2008 MATTHEW WILLIAM WATSON



| PLANT LIST CODE | BOT. NAME/COMMON NAME | QUANTITY | SIZE | CONDITION | NOTES |
|-----------------------------------|---|----------|------------|-----------|-------------------------------------|
| TREES | | | | | |
| AC-R | Acer rubrum Red Maple | 03 | 2" Cal. | B&B | Locate/adjust in field |
| B-N | Betula nigra River Birch | 06 | 2" Cal. | B&B | Locate/adjust in field |
| Q-PH | Quercus Phellos Willow Oak | 06 | 1 1/2" Ht. | B&B | |
| SA-N1 | Salix nigra Black Willow | 06 | 2" Cal. | B&B | |
| SA-N2 | Salix nigra Black Willow | 01 | 4" Cal. | B&B | |
| GRASSES | | | | | |
| AN-V | Andropogon virginicus (middle) Broomrape | C.Est. | 6' HT. | B&B | 36" x spacing, seed between No. 1's |
| FE-OT | Festuca ovina tenuifolia Sheep's Fescue | C.Est. | Seed | Seed | Water well in first week |
| P-VH | Pennisetum virginicum (top) Switchgrass | C.Est. | No. 2 | Cont. | 12" spacing along tight path edge |
| SP-AM | Spergularia americana Eastern Blu-rod | C.Est. | No. 1 | Cont. | 36" x spacing |
| WETLAND PLANTS and FLOWERS | | | | | |
| HB-MC | Hibiscus moscheutos Marsh Hibiscus | 07 | No. 5 | Cont. | |
| I-VC | Iris versicolor Blue Flag | 00 | Seed | Seed | |
| R-PA | Rosa palustris Swamp Rose | 11 | No. 3 | Cont. | Keep at least 3' from ab. decks |
| V-L | Viburnum lentago Hannyberry | 05 | No. 5 | Cont. | Only 1 row b/t ab. decks |

GENERAL NOTES

PLANT MATERIAL LEGEND

BOTANICAL NAME,
COMMON NAME
(More info in plant chart)

Andropogon virginicus
Broomrape
(More info in plant chart)

Sparganium americanum
Eastern Blu-rod
(More info in plant chart)

Festuca ovina tenuifolia
Sheep's Fescue
(More info in plant chart)

Hibiscus moscheutos
Marsh Hibiscus
(More info in plant chart)

Viburnum lentago
Hannyberry
(More info in plant chart)

Rosa palustris
Swamp Rose
(More info in plant chart)

Betula nigra
River Birch
(More info in plant chart)

Salix nigra
Black Willow
(More info in plant chart)

Acer rubrum
Red Maple
(More info in plant chart)

Quercus Phellos
Willow Oak
(More info in plant chart)

- NOTES
1. Contractor shall be responsible for making himself familiar with all underground utilities, pipes, and structures. Contractor shall take sole responsibility for any cost incurred due to damage of said utilities.

2. Contractor shall be responsible for any coordination with subcontractors as required to accomplish planting operations.

3. Final location of all plant materials shall be subject to the approval of the Landscape Architect.

4. Immediately upon award of bid, contractor shall secure plant material as specified from available sources. In the event that plant materials are not available, contact Landscape Architect for approved substitutions. No substitutions for plant material will be allowed without prior written approval by the Landscape Architect.

5. All plant material shall be approved by the Landscape Architect in charge of construction prior to installation.

6. See details and specifications for staking method and backfill requirements.

7. Excavate hole for tree plantings that are at least two times the width of the rootball.

8. Tree location may be adjusted in the field to suit specific site requirements as directed by construction manager. Stake all tree planting locations for approval by Landscape Architect prior to planting.

9. All plant materials shall match specifications per species and shall comply with AmS 250.1 "Standards for Nursery Stock."

10. Hifields Rest of Nature center to be covered with iris vegetation.



REVISIONS

DATE BY

MATT WATSON

03/07/2008

SCALE

1" = 10'

PROJECT NAME AND ADDRESS

METROPARKS IMPROVEMENTS
Grandview and Avenue & Dublin Road Intersection
Columbus, OH, USA 43210

PIANTING PLAN

SHEET

L5

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