

# UNIVERSITY OF NEVADA LAS VEGAS

# LIED LIBRARY FLOORING RENOVATION

AMENDMENT #6D CONTRACT 5641

4505 S Maryland Parkway Las Vegas, Nevada 89154

#### **BASIS OF DESIGN & CODE INFORMATION**

1 CODES:

2012 INTERNATIONAL BUILDING CODE
2012 UNIFORM PLUMBING AND MECHANICAL CODE
2011 NATIONAL ELECTRICAL CODE
2012 INTERNATIONAL FIRE CODE
2012 INTERNATIONAL ENERGY CONSERVATION CODE
2010 AMERICANS WITH DISABILITIES ACT STANDARDS

#### 2. CONSTRUCTION: TYPE B II

- SCOPE OF WORK: THE DEMOLITION OF UP TO 3/8" OFF THE TOP OF THE EXISTING CONCRETE SLAB OF APPROXIMATELY 10,000 SQ.FT. ON THE FIRST FLOOR INCLUDING THE REMOVAL OF THE EXISTING FLOORING MATERIALS. THE AREA WILL BE REPLACE WITH A NEW DESIGN OF 3/8" THICK TERRAZZO OR EQUAL FLOORING PRODUCT PER THESE DOCUMENTS. ALL THE WORK IS WITHIN THE EXISTING BUILDING. SOME INTERIOR MILLWORK WILL BE REMOVED, MODIFIED AND REINSTALLED ALSO ON THE FIRST FLOOR.
- 4. DEFERRED SUBMITTALS:





241 w charleston, suite 107 las vegas, nevada 89102 Tel: 702.263.7111 www.lgainc.com



UNIVERSITY OF NEVADA LAS VEGAS

> LIED LIBRARY FLOORING RENOVATION

4505 S Maryland Parkway, Las Vegas, Nevada, 89154,

REVISIONS

Project No.: 007113007

File: 007111007 UNLV AMENDMENT 6D.pln

Drawn By: #CAD Technician

All Drawings, Specifications and Copies thereof furnished by the Architect are to be used only with respect to this Project and are not to be used on any other Project with the exception of one contract set for each party to the building contract. Such Documents are to be returned or suitably accounted for to the Architect on request at the completion of the Project. Any use or reproduction of this Drawing in whole or in part by any means whatsoever is strictly prohibited except with the specific written consent of LG Architects, Inc., a Nevada Corporation. Copyright © LG Architects, Inc. all rights reserved. Submission or distribution to meet official regulatory requirements or for other purposes in connection with the project in not to be construed as publication in

derogation of the Architects common law Copyrights or other reserved rights.

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Key Plar

Date of Issue: September 12, 2013
PROGRESS SET

COVE

00.1 أ

Il dimensions and on-site conditions are to be verified by the Subcontractors before starting their work.

Report any discrepancies to the General Contractor.

	ABBREVI	ATION	LEGEND
@ G	AT CENTERLINE		MAXIMUM MARKER BOARD
۰	DEGREE		MECHANICAL
	DIAMETER OR ROUND		METAL
	POUND OR NUMBER PLUS OR MINUS		MANUFACTURER MINIMUM
т-	PLUS OR MINUS		MISCELLANEOUS
ADJ	ADJUSTABLE		MASONRY OPENING
	ABOVE FINISHED FLOOR	MUR	MURAL
AL	ALUMINUM	NIC	NOT IN CONTRACT
ВО	BOTTOM OF		NUMBER
_	BOTTOM OF DECK	NTS	NOT TO SCALE
	BOARD BOTTOM	0/	OVER
	BRACE		ON CENTER
	BRITISH THERMAL UNIT	OD	OUTSIDE DIAMETER
BTUH	BRITISH THERMAL UNITS PER HOUR		OPERABLE PARTITION
CECI	CONTRACTOR FURNISHED		OPPOSITE OWNER FURNISHED, OWNER INSTALLED
	CONTRACTOR INSTALLED		OWNER FURNISHED, CONTRACTOR INSTALLER
_	CAST IN PLACE		
	CONTROL JOINT CLEAR	DI	PLASTIC LAMINATE
_	COLUMN		PANEL
	CONCRETE		POUNDS PER SQUARE FOOT
	CONNECTION CONTINUOUS		POUNDS PER SQUARE INCH PAINT
CPT	CARPET		
CT	CERAMIC TILE		
СТВ	CERAMIC TILE BASE	R	RISER
DEPT	DEPARTMENT	RAD RB	RUBBER BASE
DIA	DIAMETER	RCP	REFLECTED CEILING PLAN
DIM	DIMENSION	REV	REVISION
DWG	CARPET CERAMIC TILE CERAMIC TILE BASE  DEPARTMENT DIAMETER DIMENSION DRAWING  EDUCATION BUILDING	RM	ROOM
EB	EDUCATION BUILDING EXPANSION JOINT ELEVATION ELECTRICAL EMERGENCY ENGINEER EQUAL EQUIPMENT EXTERIOR	SC	SEALED CONCRETE
EJ	EXPANSION JOINT	SHR	SHOWER
FLEC	ELEVATION FI FCTRICAI	SIVI	SI OPF
EMERG	EMERGENCY	SPEC	SPECIFICATIONS
ENGR	ENGINEER	SQ	SQUARE
EQ EOPT	EQUAL EQUIPMENT	SS	STAINLESS STEEL STANDARD
EXT	EXTERIOR	STL	STEEL
		01011	O I O I V IOL
FA	FIRE ALARM	SUSP	SUSPENDED
FF&F	FIRE EXTINGUISHER AND CABINET FIXTURES, FURNISHINGS,	SYIVI	STIVIVIETRICAL
	FIXTURES, FURNISHINGS, AND EQUIPMENT FINISH FLOOR FACE OF CONCRETE FACE OF FINISH FACE OF STUDS	T&G	TONGUE AND GROOVE
FF	FINISH FLOOR	T	TREAD
FOC	FACE OF CONCRETE  FACE OF FINISH	TEI	TELEPHONE
FOS	FACE OF STUDS	THK	THICK
	FIDED DEINIEMBRICH LANNINGTE	T(1)	TOP OF DECK
FTG	FOOT OR FEET FOOTING	TOC	TOP OF CONCRETE TOP OF MASONRY
		TOD	TOD OF DADADET
GA	GAUGE GALVANIZED IRON	TOS	TOP OF STEEL/STUD
GI	GALVANIZED IRON	TOW	TOP OF WALL
GIS	GEOGRAPHIC INFORMATION SYSTEM		TUBE STEEL
GC	GENERAL CONTRACTOR		TELEVISION
	GROUND	TYP	TYPICAL
GYP	GYPSUM	UL	UNDERWRITERS LABORATORIES
_	HOLLOW CORE		UNLESS NOTED OTHERWISE
	HEIGHT	\/I⊏	VEDIEV IN FIELD
	HOLLOW METAL HIGH POINT		VERIFY IN FIELD VINYL COMPOSITION TILE
	HEATING, VENTILATION,	VERT	VERTICAL
	AND AIR CONDITIONING		VESTIBULE
JAN	JANITOR	VS	VISITOR SERVICES
_	JOINT		WATER
	LABORATORY		WITH
	LABORATORY LATERAL		WATER CLOSET WOOD
	LOCKER		WALK-OFF MAT
	LOW POINT	W/O	WITHOUT
		W/P	WATERPROOF

WP WATERPROOF WT WEIGHT

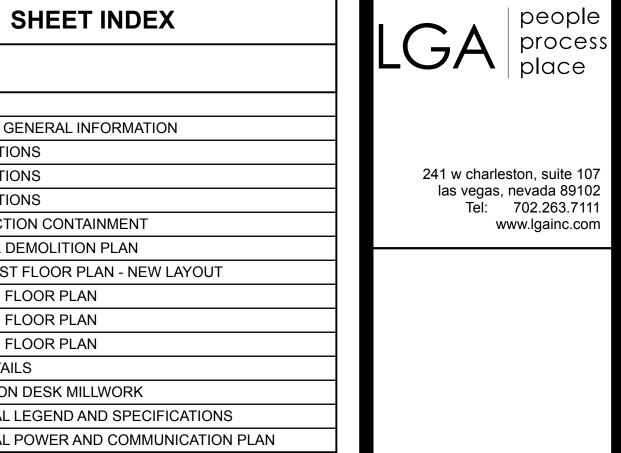
WORKING DRAWING SYMBOL	LOCATION	USE
A (SECTION NUMBER) (SHEET NUMBER)	PLANS	INDICATES BUILDING SECTION
(ELEVATION NUMBER) (SHEET NUMBER)	PLANS	INDICATES EXTERIOR BUILDING ELEVATION
(ELEVATION NUMBER ALONG OUTSIDE)  1 (A2.20) 3 (SHEET NUMBER INSIDE)  4 (ELEVATION NUMBER) (SHEET NUMBER)	FLOOR PLANS AND ENLARGED PLANS	INDICATES INTERIOR ELEVATION
STORAGE (ROOM NAME)  105 (ROOM NUMBER)	PLANS (EXCEPT EXITING)	INDICATES ROOM NAME AND NUMBER
STORAGE (ROOM NAME)  329 SF (ROOM SF)  300 (LOAD FACTOR)  2 (PERMITTED OCCUPANTS)	EXITING PLANS	DIPLAYS INFORMATION USED FOR EGRESS CALCULATIONS
(PLAN OR DETAIL NUMBER) (SHEET NUMBER)  A (DRAWING NUMBER)  A6.01 (SHEET NUMBER)	PLANS	INDICATES ENLARGED PLAN OR DETAIL
W2 (BUILDING SYSTEM TYPE)	PLANS AND SECTIONS	INDICATES BUILDING SYSTEM SEE BUILDING SYSTEMS SHEET.
(CEILING TYPE) C1 12'-0" AFF (CEILING HEIGHT)	REFLECTED CEILING PLANS	INDICATES CEILING TYPE AND HEIGHT ABOVE FINISHED FLOOR.
±0" (ELEVATION TARGET)	PLANS, ELEVATIONS, AND SECTIONS	INDICATES VERTICAL HEIGHT
(REVISION INDICATOR)	PLANS, ELEVATIONS, AND SECTIONS	INDICATES REVISION
⟨MAT-2⟩ (FINISH MATERIAL)	PLANS, ELEVATIONS, AND SECTIONS	INDICATES FINISH MATERIAL
6 (KEYNOTE NUMBER)	PLANS,	INDICATES KEYNOTE

WORKING SYMBOLS LEGEND			PROJECT DIRECTORY	
WORKING DRAWING SYMBOL	LOCATION	USE	CLIENT: UNLV	
A (SECTION NUMBER) (SHEET NUMBER)	PLANS	INDICATES BUILDING SECTION	4505 S. Maryland Parkway Las Vegas, Nevada 89154 p: (702) 895-4795 Project Manager: Roland Wisdom	
(ELEVATION NUMBER) (SHEET NUMBER)	PLANS	INDICATES EXTERIOR BUILDING ELEVATION	ARCHITECT: LGA 241 W. Charleston Blvd, Suite 107 Las Vegas, Nevada 89101	
(ELEVATION NUMBER ALONG OUTSIDE) 1 (A2.20) 3 (SHEET NUMBER INSIDE) 4 (ELEVATION NUMBER) (SHEET NUMBER)	FLOOR PLANS AND ENLARGED PLANS	INDICATES INTERIOR ELEVATION	p: (702) 263-7111 http://www.lgainc.com Project Manager: Deborah Bergin  COST ESTIMATES: ESG 11549 Snow Creek Ave. Las Vegas, NV 89135 p: (702) 889-4033 f: (702) 889-4035	
STORAGE (ROOM NAME)  105 (ROOM NUMBER)	PLANS (EXCEPT EXITING)	INDICATES ROOM NAME AND NUMBER	Principal-in-Charge: Ed Golembiewski  ELECTRICAL CONSULTANT: TJK CONSULTING ENGINEERS INC.	
STORAGE (ROOM NAME)  329 SF (ROOM SF)  300 (LOAD FACTOR)  2 (PERMITTED OCCUPANTS)	EXITING PLANS	DIPLAYS INFORMATION USED FOR EGRESS CALCULATIONS	5459 S. Durango Drive, Suite 100 Las Vegas, NV 89113 p: (702) 871-3621 Principal-in-Charge: Ken Meechudhone	
(SHEET NUMBER)  A (DRAWING NUMBER)  A (SHEET NUMBER)  A (SHEET NUMBER)	PLANS	INDICATES ENLARGED PLAN OR DETAIL	CODE ANALYSIS CONSULTANTS: TERP CONSULTING 7936 Monaco Bay Court Las Vegas, NV 89117 p: (702) 953-9436 Project Manager: Bryan Douglass	
(BUILDING SYSTEM TYPE)	PLANS AND SECTIONS	INDICATES BUILDING SYSTEM. SEE BUILDING SYSTEMS SHEET.		
(CEILING TYPE) C1 12'-0" AFF (CEILING HEIGHT)	REFLECTED CEILING PLANS	INDICATES CEILING TYPE AND HEIGHT ABOVE FINISHED FLOOR.		
±0" (ELEVATION TARGET)	PLANS, ELEVATIONS, AND SECTIONS	INDICATES VERTICAL HEIGHT		
(REVISION INDICATOR)	PLANS, ELEVATIONS, AND SECTIONS	INDICATES REVISION		
<u>⟨MAT-2</u> ⟩ (FINISH MATERIAL)	PLANS, ELEVATIONS, AND SECTIONS	INDICATES FINISH MATERIAL		
6 (KEYNOTE NUMBER)	PLANS, ELEVATIONS, AND SECTIONS	INDICATES KEYNOTE NUMBER		

**VICINITY MAP** 

PROJECT LOCATION —

PROJECT DIRECTORY		SHEET INDEX		
CLIENT: UNLV	ID	NAME		
4505 S. Maryland Parkway Las Vegas, Nevada 89154	G1.00	COVER		
roject Manager: Roland Wisdom	G1.01	INDEX AND GENERAL INFORMATION		
	G1.02	SPECIFICATIONS		
	G1.03	SPECIFICATIONS		
ARCHITECT: L <b>GA</b>	G1.04	SPECIFICATIONS		
241 W. Charleston Blvd, Suite 107	G1.05	CONSTRUCTION CONTAINMENT		
Las Vegas, Nevada 89101	A0.01	1ST FLOOR DEMOLITION PLAN		
p: (702) 263-7111 http://www.lgainc.com	A2.01	OVERALL 1ST FLOOR PLAN - NEW LAYOUT		
roject Manager: Deborah Bergin	A2.21	ENLARGED FLOOR PLAN		
	A2.22	ENLARGED FLOOR PLAN		
COST ESTIMATES:	A2.23	ENLARGED FLOOR PLAN		
ESG 11549 Snow Creek Ave.	A2.41	FINISH DETAILS		
Las Vegas, NV 89135	A2.42	CIRCULATION DESK MILLWORK		
(702) 889-4033 (702) 889-4035 incipal-in-Charge: Ed Golembiewski	E1.01	ELECTRICAL LEGEND AND SPECIFICATIONS		
	E2.01	ELECTRICAL POWER AND COMMUNICATION PLAN		





**UNIVERSITY OF NEVADA LAS VEGAS** 

LIED LIBRARY **FLOORING RENOVATION** 

4505 S Maryland Parkway, Las Vegas, Nevada, 89154,

**REVISIONS** 

007113007 File: 007111007 UNLV AMENDMENT 6D.pln #Architect Name

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3D View:

Key Plan:

INDEX AND GENERAL INFORMATION

All dimensions and on-site conditions are to be verified by the Subcontractors before starting their work.

Report any discrepancies to the General Contractor.

B. Owner: University of Nevada Las Vegas, 4505 S. Maryland Parkway, Las Vegas. NV 89154. Owner's Representative: Roland Wisdom, Proiect Architect; phone, 702-895-4795 and fax, 702-895-4960. Architect: LGA Architects, Inc., 241 W. Charleston Blvd, Suite 107. Las Vegas, NV 89102; phone, 702-263-7111 and fax, 702-263-8111.

WORK COVERED BY CONTRACT DOCUMENTS The Work of Project is defined by the Contract Documents and consists of the following: This project includes removal of the existing flooring materials on the first level as shown in the documents and provide new flooring materials as shown in the documents.

General: Contractor shall have limited use of Project site for construction operations as indicated by requirements of this Use of Site: Limit use of Project site to area provided by UNLV for storage container for materials. Do not disturb portions of site beyond areas in which the storage is allowed. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a dust tight condition throughout construction period. Repair damage caused by construction operations.

COORDINATION WITH OCCUPANTS Full Owner Occupancy: Owner will occupy site and existing building(s) during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or

obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.

**WORK RESTRICTIONS** Work Restrictions, General: Comply with restrictions on construction operations. On-Site Work Hours: The library building is closed to students during the construction period referenced in the bid documents.

Working hours are 24 hours everyday during the period of Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated: Notify Owner not less than two days in advance of proposed utility interruptions. Obtain Owner's written permission before proceeding with

utility interruptions. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other lisruption to Owner occupancy with Owner. Notify Owner not less than two days in advance of proposed disruptive operations.

Obtain Owner's written permission before proceeding with disruptive operations. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor-air

Controlled Substances: Use of tobacco products and other

controlled substances is not permitted. SPECIFICATION AND DRAWING CONVENTIONS Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain

terms, words, and phrases when used in particular situations. These conventions are as follows: Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

Specification requirements are to be performed by Contractor unless specifically stated otherwise. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:

typical generic terms used in the individual Specifications Keynoting: Materials and products are identified by reference keynotes referencing Specification Section

Terminology: Materials and products are identified by the

numbers found in these documents END OF SECTION 011000

**SECTION 012500 - SUBSTITUTION PROCEDURES** 

PART 1 GENERAL SUMMARY Section includes administrative and procedural requirements for substitutions

Related Requirements Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

**DEFINITIONS** Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

ACTION SUBMITTALS Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and

Orawing numbers and titles. Substitution Request Form: Use CSI Form 13.1A. Documentation: Show compliance with requirements for substitutions and the following, as applicable: Statement indicating why specified product or abrication or installation couldn't be provided, if

Coordination information, including a list of changes or revisions needed to other parts of the Work that will be necessary to accommodate proposed substitution. Product Data, including drawings and descriptions

Samples, where applicable or requested.

of products and fabrication and installation

Certificates and qualification data, where applicable or requested. Material test reports from a qualified testing agency indicating and interpreting test results for

ompliance with requirements indicated. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of

availability, or delays in delivery. Cost information, including a proposal of change, if any, in the Contract Sum. Contractor's certification that proposed substitution

complies with requirements in the Contract

Documents except as indicated in substitution

Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to

produce indicated results. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request or seven days of receipt of additional information or documentation, whichever is later. Forms of Acceptance: Change Order,

Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work. Use product specified if Architect does not issue a decision on use of a proposed substitution within

QUALITY ASSURANCE Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers

PART 2 - PRODUCTS **SUBSTITUTIONS** 

Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related Conditions: Architect will consider Contractor's request for

substitution when the following conditions are satisfied: Requested substitution is consistent with the Contract Documents and will produce indicated Requested substitution will not adversely affect

Contractor's construction schedule. Requested substitution has received necessary approvals of authorities having jurisdiction. Requested substitution is compatible with other portions of the Work. Requested substitution has been coordinated with

Requested substitution provides specified warranty If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors

other portions of the Work.

Substitution for Convenience: Not allowed.

END OF SECTION 012500 SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL Section includes administrative and procedural requirements for

handling and processing Contract modifications.

MINOR CHANGES IN THE WORK Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's

Owner Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised **Drawings and Specifications.** Work Change Proposal Requests issued by Architect are

> not instructions either to stop work in progress or to execute the proposed change. Within 10 days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change. Include a list of quantities of products required or eliminated and unit costs, with total amount of

purchases and credits to be made. If requested furnish survey data to substantiate quantities. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts Include costs of labor and supervision directly

attributable to the change. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time. Quotation Form: Use CSI Form 13.6D, "Proposal Worksheet Summary," and Form 13.6C, "Proposal

Worksheet Detail." Contractor Initiated Work Change Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the

Contract Time. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities. Indicate applicable taxes, delivery charges, equipment

rental, and amounts of trade discounts. Include costs of labor and supervision directly attributable to the change. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and

activity relationship. Use available total float before requesting an extension of the Contract Time. Comply with requirements in Division 01 Section Substitution Procedures" if the proposed change requires substitution of one product or system for product or system

Work Change Proposal Request Form: Use CSI Form 13.6A, "Change Order Request (Proposal)," with attachments CSI Form 13.6D, "Proposal Worksheet Summary," and Form 13.6C, "Proposal Worksheet Detail."

**ADMINISTRATIVE CHANGE ORDERS** Allowance Adjustment: See Division 01 Section "Allowances" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect actual costs of Unit Price Adjustment: See Division 01 Section "Unit Prices" for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope

of unit-price work. CHANGE ORDER PROCEDURES On Owner's approval of a Work Changes Proposal Request, Architect will issue a Change Order for signatures of Owner and

Contractor on AIA Document G701. CONSTRUCTION CHANGE DIRECTIVE Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Construction Change Directive contains a complete

method to be followed to determine change in the Contract Sum or the Contract Time. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive. 1. After completion of change, submit an itemized account

time adjustments to the Contract.

description of change in the Work. It also designates

and supporting data necessary to substantiate cost and

END OF SECTION 012600

**SECTION 012900 - PAYMENT PROCEDURES** PART 1 GENERAL

Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment. **Related Requirements:** 

Division 01 Section "Contract Modification Procedures" for

administrative procedures for handling changes to the Contract.

SCHEDULE OF VALUES Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the Application for Payment forms with continuation <del>a.</del>

Submittal schedule. Items required to be indicated as separate activities in Contractor's construction schedule. Submit the schedule of values to Architect at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment. Format and Content: Provide at least one line item for each Specification Section. Identification: Include the following Project identification **SPECIFICATIONS** 

delayed for coordination.

submittal on label or title block.

recording action taken:

Date.

Project name.

Name of Architect

Name of supplier.

appropriate

appropriate

enabling navigation to each item.

LNHS-061000.01.A).

including revision identifier.

electronic submittal file as follows:

taken by Architect.

Project name.

appropriate.

appropriate.

Remarks.

submittals.

copies as initial submittal.

SUBMITTAL PROCEDURES

two copies.

Name of Contractor.

information:

Name of Contractor.

Name of subcontractor

Name of manufacturer.

including revision identifier.

Other necessary identification.

Electronic Submittals: Identify and incorporate information in each

Assemble complete submittal package into a single

indexed file incorporating submittal requirements of a

single Specification Section and transmittal form with links

Name file with submittal number or other unique identifier,

a. File name shall use project identifier and

Provide means for insertion to permanently record

Contractor's review and approval markings and action

Transmittal Form for Electronic Submittals: Use electronic

form acceptable to Owner, containing the following

Name of firm or entity that prepared submittal.

Names of subcontractor, manufacturer, and

Specification paragraph number or drawing

designation and generic name for each of multiple

Drawing number and detail references, as

Location(s) where product is to be installed, as

Related physical samples submitted directly.

Transmittal number, numbered consecutively.

Submittal and transmittal distribution record.

Note date and content of revision in label or title block and

Resubmit submittals until they are marked with approval

Indication of full or partial submittal.

Deviations: Identify deviations from the Contract Documents on

Re-submittals: Make re-submittals in same form and number of

Distribution: Furnish copies of final submittals to manufacturers,

subcontractors, suppliers, fabricators, installers, authorities having

jurisdiction, and others as necessary for performance of

Use for Construction: Retain complete copies of submittals on

Project site. Use only final action submittals that are marked with

Submit electronic submittals via email as PDF electronic

Action Submittals: Submit three paper copies of each

submittal unless otherwise indicated. Architect will return

Certificates and Certifications Submittals: Provide a

statement that includes signature of entity responsible for

preparing certification. Certificates and certifications shall

be signed by an officer or other individual authorized to

Provide a notarized statement on original paper

copy certificates and certifications where

Statement of compliance with specified referenced

Application of testing agency labels and seals.

Wiring diagrams showing factory-installed wiring.

Clearances required to other construction, if not

Three paper copies of Product Data unless

otherwise indicated. Architect will return two

indicated on accompanying Shop Drawings.

Submit Product Data before or concurrent with Samples.

Architect will return annotated file. Annotate and

retain one copy of file as an electronic Project

construction activities. Show distribution on transmittal forms.

Other necessary identification.

Note date and content of previous submittal.

clearly indicate extent of revision.

approval notation from Architect's action stamp.

record document file.

sign documents on behalf of that entity.

element of construction and type of product or equipment.

Product Data: Collect information into a single submittal for each

submit as Shop Drawings, not as Product Data.

Include the following information, as applicable

Manufacturer's product specifications.

Testing by recognized testing agency.

Notation of coordination requirements.

Availability and delivery time information.

For equipment, include the following in addition to the

Manufacturer's catalog cuts.

Printed performance curves.

Operational range diagrams.

Submit Product Data in the following format:

Shop Drawings: Prepare Project-specific information, drawn

accurately to scale. Do not base Shop Drawings on reproductions

PDF electronic file.

of the Contract Documents or standard printed data.

Standard color charts.

If information must be specially prepared for submittal

because standard published data are not suitable for use,

Mark each copy of each submittal to show which products

General Submittal Procedure Requirements:

indicated.

and options are applicable.

standards.

above, as applicable:

notation from Architect's- action stamp.

Name and address of Architect.

Name of Construction Manager.

Category and type of submittal.

Submittal purpose and description.

Specification Section number and title.

Specification Section number followed by a

LNHS-061000.01). Resubmittals shall include an

alphabetic suffix after another decimal point (e.g.,

decimal point and then a sequential number (e.g.,

submittal.

submittal item for identification.

Architect reserves the right to withhold action on a

submittals until related submittals are received.

Processing Time: Allow time for submittal review, including time for re-submittals, as follows. Time for review shall commence on

Architect's receipt of submittal. No extension of the Contract Time

will be authorized because of failure to transmit submittals enough

in advance of the Work to permit processing, including re-

Initial Review: Allow 15 days for initial review of each

submittal. Allow additional time if coordination with

subsequent submittals is required. Architect will advise

Contractor when a submittal being processed must be

Intermediate Review: If intermediate submittal is

necessary, process it in same manner as initial submittal.

Re-submittal Review: Allow 15 days for review of each re-

Indicate name of firm or entity that prepared each

Provide a space approximately 6 by 8 inches on label or

beside title block to record Contractor's review and

Include the following information for processing and

Submittal number or other unique identifier,

Number and title of appropriate Specification

Drawing number and detail references, as

Location(s) where product is to be installed, as 2

point (e.g., 061000.01.A).

Submittal number shall use Specification

Section number followed by a decimal

point and then a sequential number (e.g.,

061000.01). Re-submittals shall include

an alphabetic suffix after another decimal

Paper Submittals: Place a permanent label or title block on each

approval markings and action taken by Architect.

Name of Construction Manager.

submittal requiring coordination with other

on the schedule of values: Project name and location Name of Architect. Architect's project number Contractor's name and address. Date of submittal.

Arrange schedule of values consistent with format of AIA Document G703. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum. Round amounts to nearest whole dollar; total shall equal

the Contract Sum. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by

Payment Application Times: Submit Application for Payment to UNLV representative for Architects review. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action. Entries shall match data on the schedule of values and

Contractor's construction schedule. Use updated

in previous application, after deduction for retainage, on

schedules if revisions were made. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt. One copy shall include waivers of lien and similar attachments if required.

Transmit each copy with a transmittal form listing attachments and recording appropriate information about Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment. Submit partial waivers on each item for amount requested

each item. When an application shows completion of an item, submit conditional final or full waivers. Owner reserves the right to designate which entities Waiver Forms: Submit executed waivers of lien on forms

acceptable to Owner. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following: List of subcontractors. Schedule of values.

Contractor's construction schedule (preliminary if not final). Submittal schedule (preliminary if not final). List of Contractor's staff assignments Copies of building permits. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.

Initial progress report.

Certificates of insurance and insurance policies Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.

This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

Evidence of completion of Project closeout requirements Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid. Updated final statement, accounting for final changes to the Contract Sum.

AIA Document G706-1994, "Contractor's Affidavit of Payment of Debts and Claims." AIA Document G706A-1994, "Contractor's Affidavit of Release of Liens." AIA Document G707-1994, "Consent of Surety to Final Payment."

Evidence that claims have been settled. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial

Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Final liquidated damages settlement statement.

END OF SECTION 012900 **SECTION 013300 - SUBMITTAL PROCEDURES** PART 1 - GENERAL

SUMMAR Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

Related Requirements: Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule. Division 01 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals. Division 01 Section "Project Record Documents" for

submitting record Drawings, record Specifications, and record Product Data. Division 01 Section "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

DEFINITIONS Action Submittals: Written and graphic information and physical samples that require Architect's responsive action. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

ACTION SUBMITTALS Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.

SUBMITTAL ADMINISTRATIVE REQUIREMENTS Architect's Digital Data Files: Electronic copies of digital data files of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

Preparation: Fully illustrate requirements in the Contract Coordinate each submittal with fabrication, purchasing, Documents. Include the following information, as testing, delivery, other submittals, and related activities applicable: Identification of products. that require sequential activity. Coordinate transmittal of different types of submittals for Schedules. related parts of the Work so processing will not be delayed Compliance with specified standards. because of need to review submittals concurrently for Notation of coordination requirements. Notation of dimensions established by field coordination. measurement.

Relationship and attachment to adjoining construction clearly indicated. Seal and signature of professional engineer if Sheet Size: Except for templates, patterns, and similar

full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches, but no larger than 22 by 34 Submit Shop Drawings in the following format: PDF electronic file. Three opaque copies of each submittal. Architect will retain one copies; remainder will be returned. Coordination Drawings Submittals: Comply with requirements specified in Division 01 Section "Project Management and Coordination ' Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress"

Documentation. Application for Payment and Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Division 01 Section "Closeout Procedures." Maintenance Data: Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."

Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified. PART 3 - EXECUTION

CONTRACTOR'S REVIEW

Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Project Closeout and Maintenance Material Submittals: See requirements in Division 01 Section "Closeout Procedures." Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents. ARCHITECT'S ACTION

General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for re-submittal without review. Submittals not required by the Contract Documents may not be

END OF SECTION 013300.

**SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS** PART 1 - GENERAL

reviewed and may be discarded.

**INFORMATIONAL SUBMITTALS** 

exposures.

Section includes requirements for temporary utilities, support facilities, and security and protection facilities. Related Requirements: Division 01 Section "Summary" for work restrictions and limitations on utility interruptions

USE CHARGES Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire prevention program. QUALITY ASSURANCE Accessible Temporary Egress: Comply with applicable provisions

in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1. PART 2 - PRODUCTS **EQUIPMENT** Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire

PART 3 - EXECUTION TEMPORARY UTILITY INSTALLATION Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions. Install and operate temporary lighting that fulfills security and protection requirements without operating entire

Telephone Service: Provide superintendent with cellular telephone or portable two-way radio for use when away from field office. SECURITY AND PROTECTION FACILITIES INSTALLATION

Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise

Construct dustproof partitions per details in the drawings. Insulate partitions to control noise transmission to occupied areas. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are

Protect air-handling equipment. Provide walk-off mats at each entrance through temporary Temporary Fire Protection: Install and maintain temporary fireprotection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire prevention program.

Prohibit smoking in construction areas. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction. Develop and supervise an overall fire-prevention and protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

OPERATION, TERMINATION, AND REMOVAL Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses. Maintenance: Maintain facilities in good operating condition until Maintain operation of temporary enclosures, heating cooling, humidity control, ventilation, and similar facilities

on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily

. Materials and facilities that constitute temporary facilities are property of Contractor. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 Section "Closeout Procedures." END OF SECTION 015000

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL SUMMARY

Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products. Related Requirements:

Division 01 Section "Substitution Procedures" for requests for substitutions. DEFINITIONS Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock.

The term "product" includes the terms "material," "equipment," "system," and terms of similar intent. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.

Comparable Product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product. ACTION SUBMITTALS

Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or SEVEN days of receipt of additional information or documentation, whichever is later. a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."

Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.

Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options. PRODUCT DELIVERY, STORAGE, AND HANDLING

QUALITY ASSURANCE

Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions. Delivery and Handling: Schedule delivery so that there is no storage within the work area. All short term storage shall be in containers in

a location agreed to by the Owner. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.

Store products to allow for inspection and measurement of quantity or counting of units. Store materials in a manner that will not endanger Project Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation. Comply with product manufacturer's written instructions for

temperature, humidity, ventilation, and weather-protection

requirements for storage. PRODUCT WARRANTIES Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents. Manufacturer's Warranty: Written warranty furnished by

individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.

Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures.

PRODUCT SELECTION PROCEDURES General Product Requirements: Provide products that comply with

the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects. Owner reserves the right to limit selection to products with

warranties not in conflict with requirements of the Contract Documents. Where products are accompanied by the term "as selected," Architect will make selection. Descriptive, performance, and reference standard

requirements in the Specifications establish salient characteristics of products. END OF SECTION 016000

**SECTION 017300 - EXECUTION** PART 1 - GENERAL

SUMMARY Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:

Construction layout. Field engineering and surveying. Installation of the Work. Cutting and patching. Coordination of Owner-installed products Progress cleaning. Starting and adjusting Protection of installed construction. Correction of the Work.

Related Requirements: Division 01 Section "Summary" for limits on use of Project Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

QUALITY ASSURANCE Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements. Operational Elements: Do not cut and patch operatin elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.

> Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and

patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

MATERIALS

PART 2 - PRODUCTS

A. General: Comply with requirements specified in other Sections.

In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible. If identical materials are unavailable or cannot be used use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION EXAMINATION

Existing Conditions: The existence and location of utilities and construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of utilities, mechanical and electrical systems, and other construction affecting the Work. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other

conditions affecting performance. Record observations. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed. Verify compatibility with and suitability of substrates,

been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions. PREPARATION Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field

with construction progress to avoid delaying the Work. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Division 01 Section "Project Management and Coordination."

**CONSTRUCTION LAYOUT** Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.

INSTALLATION General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated. Make vertical work plumb and make horizontal work level. Where space is limited, install components to maximize space available for maintenance and ease of removal for

replacement Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated Comply with manufacturer's written instructions and recommendations for installing products in applications indicated. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product

performance until Substantial Completion. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy. Sequence the Work and allow adequate clearances to iccommodate movement of construction items on site a placement in permanent locations. Tools and Equipment: Do not use tools or equipment that produce

harmful noise levels.

Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.

Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Allow for building movement, including thermal expansion and contraction Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to

Project site in time for installation. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

**CUTTING AND PATCHING** Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their

original condition Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties Temporary Support: Provide temporary support of work to be cut. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.

Adjacent Occupied Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures

recommendations. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use. Finished Surfaces: Cut or drill from the exposed of finished side into concealed surfaces.

with original Installer; comply with original Installer's written

Mechanical and Electrical Services: Cut off pipe or conduit

in walls or partitions to be removed. Cap, valve, or plug

and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting. Proceed with patching after construction operations requiring cutting are complete. Patching: Patch construction by filling, repairing, refinishing closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.

Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of

patching and refinishing. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

including compatibility with existing finishes or primers. Proceed with installation only after unsatisfactory conditions have

/ No: 1952 measurements before fabrication. Coordinate fabrication schedule PARCHITECT

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**UNIVERSITY OF NEVADA LAS** 

9-12-2013

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Key Plan:

Date of Issue: September 12, 2013 PROGRESS SET

**SPECIFICATIONS** 

dimensions and on-site conditions are to be verified by the Subcontractors before starting their work. Report any discrepancies to the General Contractor.

Standard maintenance instructions and bulletins.

removal, replacement, and assembly.

items that detail essential maintenance procedures:

Precautions against improper maintenance.

Test and inspection instructions.

Troubleshooting guide.

Drawings, diagrams, and instructions required for maintenance, including disassembly and component

Identification and nomenclature of parts and components

List of items recommended to be stocked as spare parts.

Maintenance Procedures: Include the following information and

Product maintenance manuals.

formatted and organized as required by this Section.

and maintenance submittals are acceptable.

CLOSEOUT SUBMITTALS

Systems and equipment maintenance manuals.

Manual Content: Operations and maintenance manual content is

specified in individual Specification Sections to be reviewed at the

time of Section submittals. Submit reviewed manual content

Architect will comment on whether content of operations

Where applicable, clarify and update reviewed manual

content to correspond to revisions and field conditions.

Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is

Submit a final Application for Payment according to

Certified List of Incomplete Items: Submit certified copy of

Architect's Substantial Completion inspection list of items

Preliminary Procedures: Before requesting final inspection for

Results of completed inspection will form the basis of 2

completed or corrected.

FINAL COMPLETION PROCEDURES

requirements for final completion.

determining final completion, complete the following:

Division 01 Section "Payment Procedures."

LGA people proce place

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No: 1952

No: 1952

PACHITECT OF NEVADE

9-12-2013

UNIVERSITY OF NEVADA LAS VEGAS

FLOORING RENOVATION

4505 S Maryland Parkway, Las Vegas, Nevada, 89154,

REVISIONS

Project No.: 007113007

File: 007111007 UNLV AMENDMENT 6D.pln

Drawn By: #CAD Technician

#Architect Name

All Drawings, Specifications and Copies thereof furnished by the Architect are to be used only with respect to this Project and are not to be used on any other Project with the exception of one contract set for each party to the building contract. Such Documents are to be returned or suitably accounted for to the Architect on request at the completion of the Project. Any use or reproduction of this Drawing in whole or in part by any means whatsoever is strictly prohibited except with the specific written consent of LG Architects, Inc., a Nevada Corporation. Copyright © LG Architects, Inc. all rights reserved. Submission or distribution to meet official regulatory requirements or for other purposes in connection with the project in not to be construed as publication in

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Checked By:

Key Plan:

Date of Issue: September 12, 2013

PROGRESS SET

SPECIFICATIONS

G103

I dimensions and on-site conditions are to be verified by the Subcontractors before starting their work.

Report any discrepancies to the General Contractor.

A. Manufacturer's product data for each type of terrazzo and accessory. System will be evaluated on the basis of standards. For tests not listed in published data, manufacturer shall supply missing data

according to standard referenced. 1. Physical properties. 2. Performance properties.

3. Specified tests. 4. Material Safety Data Sheet. 5. Manufacturer's standard warranty.

B. Shop Drawings. Include terrazzo installation requirements. Include plans, elevations, sections, component details and attachments to other work. Show layout of the following: Divider strips.

2. Control and expansion joint strips.

3. Border strips. 4. Terrazzo patterns.

C. Samples for Verification: Match architect's samples for each type, material, color and pattern of terrazzo and accessory required showing the full range of color, texture and pattern variations expected. Label each terrazzo sample to identify Terroxy® Resin System's matrix color and aggregate types, sizes and proportions. Prepare samples of same thickness and from same material to be used for the work in size indicated below: 1. Epoxy terrazzo: minimum 6" x 6" (152.4 mm x 152.4 mm) sample of each color and type of terrazzo.

2. Accessories: 6" length (152.4 mm) of each kind of divider strip, stop strip and control joint strip required.

D. Material Test Reports: For moisture and/or relative humidity of substrate.

E. Maintenance Data: Submit four copies of NTMA maintenance recommendations and four copies of manufacturer's instructions

#### 1.04 QUALITY ASSURANCE

1. Obtain primary Epoxy Terrazzo Flooring System materials including moisture treatment, membranes, primers, resins and hardening agents from a single manufacturer with proof of NTMA membership. 2. Obtain aggregates, divider strips, sealers and cleaners from source recommended by primary materials

3. Engage an epoxy manufacturer with at least ten (10) years experience.

B. Pre-installation Conference: Conduct conference at project site. Review methods and procedure related to terrazzo including, but not limited to, the following:

1. Inspect and discuss installation procedures, joint details, job site conditions, substrate specification, vapor barrier details and coordination with other trades. 2. Review and finalize construction schedule and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.

3. Review special terrazzo designs and patterns. 4. Review plans for concrete curing and site drying to enable timely achievement of suitable slab moisture

C. NTMA Standards: Comply with NTMA's "Terrazzo Specifications and Design Guide" and with written recommendations for terrazzo type indicated unless more stringent requirements are specified.

D. Mock-ups: Build mock-ups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Build mock-ups for terrazzo including accessories. a. Size: Minimum 100 sq. ft. (9.3 sq. m) of typical poured-in-place flooring condition for each

color and pattern in locations directed by architect. 2. Approved mockups may become part of the completed work if undisturbed at time of substantial

#### 1.05 DELIVERY, STORAGE AND HANDLING

A. Deliver materials to project site in supplier's original wrappings and containers labeled with source's or manufacturer's name, material or product brand name and lot number if any.

B. Store materials in their original, undamaged packages and containers inside a well-ventilated area protected from weather, moisture, soiling, extreme temperatures and humidity.

1. Storage temperatures should be between 50°F to 80°F (10.0°C to 26.6°C).

# 1.06 PROJECT CONDITIONS

A. Prior to surface preparation, terrazzo contractor shall: 1. Evaluate slab condition, including slab moisture content and extent of repairs required, if any.

2. Maintain the ambient room and floor temperature at 60°F (15.5°C) or above for a period extending 72 hours before, during and after floor installation. Concrete to receive epoxy terrazzo shall have cured for at least 28 days and be free of all curing compounds. Test concrete substrate to determine acceptable moisture levels prior to installation. Testing should be conducted according to ASTM F2170 (determining relative humidity in concrete slabs using in situ probes). Proceed with installation only after substrates have a maximum relative humidity measurement reading less than 80%. If relative humidity measurement reading is greater than or equal to 80%, Terroxy® Moisture Vapor Treatment is required. Apply to terrazzo substrates according to Terroxy® Resin Systems Moisture Vapor Treatment Product Data Sheet. An effective in situ probe for relative humidity testing is the RH BluePeg available from T&M Supply.

B. Prior to and during each day of installation, the terrazzo contractor shall verify that the dew point is at least 5°F (-15°C) less than the slab and air temperature.

C. Acceptable Substrates:

1. Level tolerance: Concrete sub-floor shall be level with a maximum variation from level of 1/4" in 10 feet (6.4 mm in 3.1m). Any irregularity of the surface requiring patching and/or leveling shall be done using Terroxy® Fill and selected aggregates as recommended by Terroxy® Resin Systems. 2. Concrete floor shall be prepared mechanically by shot blasting in accordance with ICRI Guideline No. 03732. Specifically, surface preparation results should achieve a CSP3-CSP5 profile.

3. Concrete floor shall receive a steel trowel finish. 4. Concrete shall be cured a minimum of 28 days. No curing agents are to be used in areas to receive

5. Concrete slab shall have an efficient moisture vapor barrier (suggested minimum: 15 mils (.4 mm thickness)) directly under the concrete slab. Moisture barrier shall NOT be punctured.

6. Saw cutting of control joints must be done between 12 and 24 hours after placement of the structural concrete and at a frequency compatible to ACI recommendations.

D. Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during terrazzo installation.

E. Provide protection from other trades prior to final acceptance by owner.

# PART 2 – PRODUCTS

# 2.1 EPOXY TERRAZZO

A. Products: Systems Overview: The basis of design is Terroxy® Resin Systems Epoxy Matrix by Terrazzo & Marble Supply Companies, Wheeling, IL (<u>www.tmsupply.com</u>). Other manufacturer's be incorporated into the work but must meet similar specifications criteria and provide whole systems for the various products and components

# B. Materials:

1. Primer: Terroxy® Primer or Terroxy® Moisture Vapor Treatment (for slabs on-grade, light weight a. Physical properties of moisture mitigating primer shall have a maximum of 0.3 perms with 100%

2. Flexible Reinforcing Membrane: Terroxy® Iso-Crack Epoxy Membrane, for substrate crack preparation

and reflective crack reduction. Reinforcement: Terroxy® fiberglass scrim (optional).

3. Epoxy Matrix: Terroxy® Epoxy Matrix and in color required for mix indicated. a. Physical properties without aggregates. All specimens cured for 7 days at 73-77°F (22.8-25

°C) and 50 percent plus or minus 2 percent RH. This product shall meet the following

Terroxy<sup>®</sup> Thin-set Epoxy Terrazzo Test Method Property Typical Results ASTM D-2240 using Hardness Shore-D Durometer Tensile Strength ASTM D-638 4,800 psi min. Compressive Strength | ASTM D-695 Specimen 10,000 psi min 2,000 psi min. B cylinder 68.9 MPa 82.7 MPa ASTM D-790 Flexural Strength Not specified 4,500 psi min. 1.7 MPa ASTM D-1308 seven No deleterious effects: Chemical Resistance No deleterious effects: lays at room temperature Distilled Water Distilled Water by immersion method Mineral Oil Mineral Oil Isopropanol Isopropanol

> Ethanol 0.025 Detergent

> > Solution

10% Sodium

Hydroxide

Acid

This finished Epoxy Matrix shall meet the following requirements:

1% Soap Solution

10% Hydrochloric

30% Sulfuric Acid

5% Acetic Acid

b. Physical properties with aggregates. For Epoxy Matrix blended with three volumes of Valders marble blended 60% #1 chip and 40% #0 chip, ground and grouted with epoxy resin according to Installation Specifications, finishing to a nominal 3/8" (9.5 mm) thickness. All specimens cured for 7 days at 73-77°F (22.8-25°C) and 50 percent RH plus or minus 2

0.025 Detergent Solution

10% Hydrochloric Acid

1% Soap Solution 10% Sodium Hydroxide

30% Sulfuric Acid

5% Acetic Acid

Property	Test Method	NTMA Requirements	Terroxy® Thin-set Epoxy Terrazzo Typical Results
Flammability	ASTM D-635	Self-extinguishing, extent of burning 0. 25 inches max.	Self-extinguishing, extent of burning 0. 25 inches max.
Thermal Coefficient of Linear Expansion	ASTM D-696	25x10 <sup>-6</sup> inches per inch per degrees to 140°F 11.4 x 10-7 cm per cm per °C to 60°C Max	25x10 <sup>-6</sup> inches per inch per degrees to 140°F 11.4 x 10-7 cm per cm per °C to 60°C Max
Bond Strength	ACI COMM 403, Bulletin 59-43 (pages 1139-1141)	300 psi (100% concrete failure)  2.1 MPa (100% concrete failure)	300 psi (100% concrete failure)  2.1 MPa (100% concrete failure)

4. Aggregates Marble, Glass, Mother of Pearl, Porcelain, Concrete complying with NTMA gradation standards for mix indicated and containing no deleterious or foreign matter. a. Abrasion and Impact Resistance: Less than 40 percent loss per ASTM C 131.

b.24-Hour Absorption Rate: Less than 0.74 percent. c. Dust Content: Less than 1.0 percent by weight.

d.Pre-Consumer or Post-Consumer Recycled Content: <Insert Value> percent. 5. Finishing Grout: Terroxy® Epoxy Matrix or Terroxy® Clear Resin with a broadcast of limestone filler as recommended by Terroxy® Resin Systems.

C. Mix: Comply with NTMA's "Terrazzo Specifications and Design Guide" and manufacturer's written instructions for matrix and aggregate proportions and mixing.

#### 2.2 STRIP MATERIALS

A. Thin-set Divider Strips: L-type.

1. Material White-zinc alloy selected from Domus Terrazzo full range. 2. Guide for commonly used L-type divider strips for Thin-set Epoxy Terrazzo Systems:

B. Expansion Joint Strips: Separate double L-type angles, positioned back to back with minimum 1/8" (3.2 mm) width between. Fill area between strips with semi-flexible joint filler.

C. Random Crack Detail: For cracks over 1/16" width before surface preparation. Fill saw cut with 100% solids epoxy, followed by application of Terroxy® Iso-Crack Membrane (40 mils / 1.0mm) with fiberglass mesh reinforcement embedded into the membrane.

# 2.3 MISCELLANEOUS ACCESSORIES

A. Strip Adhesive: 100% solids epoxy resin adhesive recommended by Terroxy® Resin Systems. 1. Use adhesive that has a VOC content of 50g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

1. Strips: Provide mechanical anchoring devices for strip materials as required for secure attachment to

D. Patching and Fill Material: Terroxy® Fill and selected aggregates as recommended by Terroxy® Resin

E. Joint Compound: Terroxy® Joint Filler, color to be selected by architect to match/compliment terrazzo.

F. Cleaner: Terroxy® Terra Clean, a neutral cleaner with pH factor between 7 and 10 specifically designed for

terrazzo.

G. Surface Finish System: Level of polish to be satin finish. Contractor to provide sample for approval.

H. Sealer: Slip and stain-resistant sealer that is chemically neutral with a pH factor between 7 and 10, that meets a standard coefficient of friction of 0.5 or higher, as measured by the James Machine (ASTM D-2047 Test Method), does not affect physical properties of terrazzo and complies with NTMA's "Terrazzo Specifications and Design Guide. 1. Terroxy® WB Acrylic Sealer, satin gloss, water-based sealer.

# PART 3 – EXECUTION

# 3.1 EXAMINATION

**A.** Examine substrates and areas, with Terrazzo Contractor present, for compliance with requirements for installation tolerances and other conditions affecting performance.

**B.** Proceed with installation only after unsatisfactory conditions, including level tolerances, have been corrected.

3.2 PREPARATION **A.** Clean substrates of substances, including oil, grease and curing compounds, that might impair terrazzo bond.

Provide clean, dry and neutral substrate for terrazzo application

**B.** Concrete Slabs:

1. Provide sound concrete surface free of laitance, glaze, efflorescence, curing compounds, formrelease agents, dust, dirt, grease, oil and other contaminants incompatible with terrazzo. a. Prepare concrete mechanically by shot blasting. Surface preparation results should achieve a CSP3-CSP5 profile according to International Concrete Repair Institute Guideline No.

b. Repair or level damaged and deteriorated concrete according to Terroxy® Resin Systems Technical Bulletin 008 Substrate Leveling Requirements for Terroxy® Thin-set epoxy

Repair cracks and non-expansion joints greater than 1/16" (1.6 mm) wide according to Terroxy® Resin Systems Technical Bulletin 009 Crack Detailing and Joint Treatments for Terroxy® Resin Thin-set epoxy terrazzo.

2. Verify that concrete substrates are visibly dry and free of moisture.

# 3. Moisture Testing:

a. Test for moisture according to ASTM F2170 (determining relative humidity in concrete slabs using in situ probes). An effective in situ probe for relative humidity testing is the

Blue Peg available from Terrazzo & Marble Supply. Proceed with installation only after substrates have a maximum relative humidity measurement reading less than 80%. If relative humidity measurement reading is greater than or equal to 80%, Terroxy® Moisture Vapor Treatment is required. Apply to terrazzo substrates according to Terroxy® Resin Systems Moisture Vapor Treatment Product Data Sheet.

# **SPECIFICATIONS**

C. Protect other work from dust generated by grinding operations. Control dust to prevent air pollution and comply with environmental protection regulations.

1. Erect and maintain temporary enclosures and other suitable methods to limit dust migration and to ensure adequate ambient temperatures and ventilation conditions during installation.

3.3 EPOXY TERRAZZO INSTALLATION

**A.** General:

1. Comply with NTMA's written recommendations for terrazzo and accessory installation.

2. Place, rough grind, grout, cure grout, fine grind and finish terrazzo according to Terroxy® Resin Systems Epoxy Matrix Product Data Sheet and NTMA's "Terrazzo Specifications and Design Guide." 3. Ensure that matrix components and fluids from grinding operations do not stain terrazzo by reacting with divider and control-joint strips.

4. Delay fine grinding until heavy trade work is complete and construction traffic through area is restricted.

**B.** Thickness: [3/8" (9.5 mm)]

C. Flexible Reinforcing Membrane

1. [Option 1: Membrane application for isolated cracking. Route out all cracks and fill with 100% solids epoxy. Apply Terroxy® Iso-Crack Epoxy Membrane (spread at 40 mils = 1.0 mm thickness) across the crack allowing 12 inches (304.8 mm) on either side. Imbed fiberglass scrim at a minimum of 9" into wet membrane and saturate with additional membrane.]

2. [Option 2: Membrane application for extensive cracking or crack prevention. Route out all cracks and fill with 100% solids epoxy (fiberglass scrim optional). Apply Terroxy® Iso-Crack Epoxy Membrane (spread at 40 mils = 1.0 mm thickness) over prepared substrate to produce full substrate coverage in areas to receive terrazzo.]

D. Primer: Apply to terrazzo substrates according to Terroxy® Resin Systems Primer Product Data Sheet.

**E.** Strip Materials:

1. Divider and Accessory Strips: a. Install strips in adhesive setting bed without voids below strips or mechanically anchor strips as required to attach strips to substrate.

> b. Control/Construction Joints (saw cut, cold joint): Option 1. Preferred: Separate double L-type angles back to back with minimum 1/8" (3.2mm) width between. Fill joint and area between strips with semi-flexible joint filler.

Option 2. Fill saw cut with 100% solids epoxy. Place single L-type angle strip

shouldered on concrete, adjacent to the joint. Option 3. For artwork considerations only. Buried Joint: Fill saw cut with 100% solids epoxy, followed by application of Terroxy® Iso-Crack Membrane. (40 mils / 1.0mm) with fiberglass mesh reinforcement embedded into the membrane. Note: Movement from the substrate may reflect through the finished flooring.

c. Expansion Joint Strips: Separate double L-type angles, positioned back to back with minimum 1/8" (3.2 mm) width between. Fill area between strips with semi-flexible joint filler.

d. Random Crack Detail: For cracks over 1/16" width before surface preparation. Fill saw cut with 100% solids epoxy, followed by application of Terroxy® Iso-Crack membrane (40 mils / 1.0mm) with fiberglass mesh reinforcement embedded into the membrane. Note: Movement

1. Mix epoxy matrix with chips and fillers in ratios directed by Terroxy® Resin Systems. 2. Trowel apply terrazzo mixture over epoxy primer to provide a dense flat surface to top of divider strips. Allow to cure per Terroxy® Resin Systems recommendations before rough grinding.

**G.** Rough Grinding: Grind with 24 grit silicon carbide or 24 grit turbo diamonds until all terrazzo strips and marble chips are uniformly exposed.

from the substrate may reflect through the finished flooring.

**H.** Grouting:

Cleanse floor with clean water and rinse.

2. Remove excess rinse water by wet vacuum, dry and fill voids with Terroxy® Resin Systems Epoxy

Matrix or Clear Resin with a broadcast of limestone filler. 3. Allow grout to cure. Grout may be left on terrazzo until other trades work is completed.

I. Polishing: Polish with 120 grit T&M Resin Pads or equivalent stones until all grout is removed from surface. Produce surface with a minimum of 70 percent aggregate exposure.

3.4 PRECAST TERRAZZO INSTALLATION

A. Install precast units using method recommended by NTMA and manufacturer unless otherwise indicated.

**B.** Seal joints between units with joint sealants.

3.5 CLEANING AND PROTECTION

**A.** Cleaning: Remove grinding dust from installation and wash all surfaces with Terroxy® Terra Clean.

**B.** Sealing: Apply slip and stain-resistant sealer that is chemically neutral with a pH factor between 7 and 10, that meets a standard coefficient of friction of 0.5 or higher, as measured by the James Machine (ASTM D-2047 Test Method), does not affect physical properties of terrazzo and complies with NTMA's "Terrazzo Specifications and Design Guide." (If conducting Terroxy® Natural Finish System, as described in item J Surface Finishing from sub-part 3.03 EPOXY TERRAZZO INSTALLATION, remove this item.)

C. Protection: Upon completion, the work shall be ready for final inspection and acceptance by the owner or his agent. Provide final protection and maintain conditions, in a manner acceptable to terrazzo contractor, that ensure terrazzo is without damage or deterioration.

END OF SECTION 096623

#### **TERRAZZO FORMULA'S** Formula Information - #1 Formula Number: 13GG-184 **Epoxy Color:** Black 2018 Sealer: WB Urethane % Description 20.00% Black Stallion **TOTAL** % 80.00% Black Stallion Formula Information - #2 13GG-185 Epoxy Color: Pensive #13430 Sealer: WB Urethane Description 0,1 crystal 20.00% SM Chocolate 0,1 30.00% Valders 10.00% Arabian Black G Formula Information – #3 Formula Number: 13GG-186 DE 5216 Autumn Umber (Dunn Edwards) Sealer: WB Acrylic Description 10.00% Black Glass TOTAL % 70.00% Dusty Rose 20.00% Dusty Rose

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**UNIVERSITY OF NEVADA LAS VEGAS** 

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**REVISIONS** 

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#Architect Name

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Key Plan:

Date of Issue: September 12, 2013

**SPECIFICATIONS** 

PROGRESS SET

dimensions and on-site conditions are to be verified by the Subcontractors before starting their work. Report any discrepancies to the General Contractor.