# NEW CASTLE-HENRY COUNTY PUBLIC LIBRARY Interior and Exterior Renovations RE-BID

# LWC Commission No. 22105.00

# **ADDENDUM #01 August 25, 2023**

LWC, Inc. 712 EAST MAIN ST RICHMOND, IN 47374

### To Prospective Bidders:

This addendum is a modification of the Contract Documents for the above referenced project and is hereby incorporated into and becomes a part of said Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification. It is to be considered in the Proposals and covers additions to or changes in the Contract Documents as indicated below.

This addendum consists of the following:

#### Attachments:

- Specifications:
  - 00001 Index Phased Volume 1 & 2
  - o Section 312000 Earthwork
  - o Section 312323 Flowable Fill
  - o Section 312500 Erosion Control
  - Section 313116 Termite Control
- Drawings:
  - Architectural: G002, A101, A102, A102-2D, A201, A502, A503, ID001, ID101, ID102, ID104
  - Electrical: E301Mechanical: M501
- General Items:
  - Pre-Bid Meeting Agenda and Notes, including Attendees List

# PRODUCT APPROVALS AND SUBSTITUTIONS

Subject to compliance will all requirements of the Construction Documents the following products are approved.

ITEM NO.1 – Ceiling Baffles – Section 098400

- AB-1: Frasch!, Skinny Baffle and mounting kit may be substituted for the specified Turf Torrent product.

ITEM NO.2 – Acoustical Ceiling Panels – Section 095113

- Panels: CertainTeed Symphony High NRC, Narrow Reveal
- Suspension System: Narrow Reveal Corner Bevel 9/16" EZ Stab Bolt Slot

# **SPECIFICATIONS**

ITEM NO.1 – Section 00001 - Specifications Index

- Corrected Spec Section Listing

ITEM NO. 2 - Division 31 Sections

- Sections missing from original issuance of documents.

ITEM NO. 3 – Section 232123 – Hydronic Pumps

- A. Modify paragraph 2.3 to state:
  - Base mounted end suction pumps shall be centrifugal type with flexible coupling, motor and channel steel or cast iron base with "back pull out" design. Each pump shall be bronze fitted with cast iron casing, stainless steel or bronze impeller, grease lubricated ball bearings, mechanical seals and flanged pipe connections (except pumps 2 inches and smaller may be threaded end). Pumps shall be Bell & Gossett Series e-1510 or equal by Armstrong, Patterson, or Grundfos/Peerless/Paco, Taco and Aurora.

#### **DRAWINGS**

ITEM NO.1 - G002 - SYMBOLS ABBREVIATIONS AND PARTITION TYPES

Added corner guard details and notes

ITEM NO.2 - A101 - LOWER LEVEL PLAN

- Added missing room identification tags.

ITEM NO. 3 - A102 - UPPER LEVEL PLAN

- Added missing room identification tags.

ITEM NO. 4 – A102-2D – UPPER LEVEL DIMENSIONED PLAN

- Added missing wall type designation tags.

ITEM NO. 5 - A201 - LOWER LEVEL REFLECTED CEILING PLAN

Added room and finish designation tags.

ITEM NO. 6 - A502 - WALL SECTION AND DETAILS

- Section 5, Deleted note referencing curtain wall stabilization.

ITEM NO. 7- A503 - WALL SECTIONS AND DETAILS

- Section 3 Added notations related to flashing and waterproofing locations and termination points.
- Added notation related to concrete wall footing.

ITEM NO.8 - ID001 - INTERIOR DESIGN SCHEDULES AND DETAILS

- Added notations related to ceiling finishes, referencing the reflected ceiling plans for finish types and patterns.
- Changed floor finish designations in Rooms 167 and 168.
- Corrected room finish lists, eliminating rooms not found in re-bid documents.

ITEM NO. 9 - ID101 - LOWER LEVEL FINISH PLAN

- Changed floor finish note in 169 to VT-1 in lieu of QT-1

ITEM NO. 10 - ID102 - LOWER LEVEL WALL FINISH PLAN

- Modified extent of corner guards

ITEM NO. 11 - ID104 - UPPER LEVEL WALL FINISH PLAN

- Modified wall finishes and corner guards in certain areas.

ITEM NO. 12 – E301 – LOWER LEVEL POWER AND SYSTEMS PLAN

- Removed power and control for lite brite wall.
- Removed plan notes 18 & 19

- Edit plan note 15 as indicated.

# ITEM NO. 12 – M501 – MECHANICAL DETAILS

- Eliminated unused details. – See sheet.

# **BIDDER QUESTIONS:**

- Confirm that the communications cabling is provided and installed by owner and not part of this project per notes in the drawings.
  - Response: Yes. All conduit, pathways and rough-ins for communications (data) cabling shall be part of your Base Bid. The devices, terminations and cabling will be by the Owner's Vendor. The GC is required to coordinate all work with that of the Owner Specified Vendors.

**END OF ADDENDUM 01** 



Pre-Bid Meeting Agenda New Castle-Henry County Public Library **Interior and Exterior Renovations** 2023-08-22 - 3:00pm

# 1) Introductions / Sign-In Sheet

- Kevin McCurdy LWC- Partner
- Greg Drennen LWC Senior Associate
- Winnie Logan, Director NCHCPL
- Steve Morgan, Maintenance Supervisor

# 2) Project Description

General Scope of Work: The project involves the renovation of the existing building and site including but not limited to site / civil construction, demolition work, interior structural modifications and remodeling of interior building spaces. Work will be conducted in two primary phases.

#### Exterior Site Work:

- · Site work includes demolition, excavation, underground utilities, stormwater and other related site work.
- Site lighting, concrete walks curbs and asphalt pavement modifications is included.
- Site landscaping, trees, plants and grasses and related work is included in the scope of work.

#### **Building Remodeling Work:**

- Building remodeling will require modifications to existing interior slabs and footings. Structural modifications required for removal of interior stairs as well as modifications to other building systems.
- Modifications to existing walls including demolition and construction of metal stud and gypsum board wall systems and ceiling systems, soffits and finishes.
- New interior doors, windows, borrow lite frames as well as new exterior flush aluminum doors and frames.
- Interior specialty systems and finishes include acoustical ceiling systems, visual display surfaces and toilet room accessories and partitions.
- New finishes and replacement of existing finishes are required throughout the remodeling areas.
- Work will also include replacement of rooftop HVAC systems, electrical and plumbing work and exterior masonry cleaning and renovation.





- Bids due: Tuesday, September 12 at 3:00pm
- Submit to: Sealed bids will be received at the New Castle-Henry County Public Library, 376 South 15<sup>th</sup> Street, New Castle, IN 47362. Submit bids to the attention of Winnie Logan, Director. There will be a public reading. Bids received after the 3:00pm deadline will not be considered.
- Bid Basis: Bids will be based on a stipulated sum basis and include all Work indicated in the Drawings, Specifications, and Contract Documents.
- Each Bidder shall submit a Bid Bond with their Bids totaling (5%) of the contract amount.
- Do Not submit bids to LWC Inc.
- Bids submitted by any other method will not be accepted.
- Final Addendum to be released no later than Friday prior to Bid Day.
- 3) PDF Documents available to download from the following location:
  - LWC FTP Site: Contact Sherry Jeffers by email at sjeffers@lwcinspires.com.
- 4) Hard Copy documents may be ordered from the following, and printed at contractor expense:
  - Eastern Engineering Plan Room, (<a href="https://distribution.easternengineering.com">https://distribution.easternengineering.com</a>)
  - (317)598-0661
- 5) Bidding and questions:
  - All questions must be submitted in writing to LWC, Inc. via email. No verbal answers will be given. Submit questions via email to: Greg Drennen (gdrennen@lwcinspires.com)
- 6) General Project schedule:
  - Construction will start on or about December 1, 2023 with substantial completion on June 1, 2025
  - Phase 1 Exterior North-East, Lower Level and portions of Upper Level December 1, 2023 to August 2024
  - Phase 2 Exterior South-West, portion of Lower Level and Upper Level Renovation August 2024 to June 1, 2025
  - Project Closeout July-August 2025
- 7) Allowances No Allowances





# 8) Unit Pricing:

- Unit Price No. 1 Engineered Fill for Unsuitable Soils. Price per cubic yard.
- Unit Price No. 2 Flowable Fill for Unsuitable Soils. Price per cubic yard.

#### 9) Alternates – 012300

- Alternate No. 1: Epoxy Terrazzo in lieu of Carpet. Where indicated.
- Alternate No. 2: Sound absorptive acoustical system.
- Alternate No. 3: Exterior building uplighting. Supplemental ground mounted lights.
- Alternate No. 4A: Type B1 Bollard light fixture.
- Alternate No. 4B: Type B1 Bollard light fixture.
- Alternate No. 4C: Type B1 Bollard light fixture.
- Alternate No. 5: Type P1 Light Fixture

#### 10) Special Attention:

- Existing Vendors / Contractors: There are some vendors and subcontractors specified to be utilized by the General Contractor to maintain continuity with ongoing Library operations. Refer to Specification Section 011000 Summary:
  - i. Data Systems, Security Cameras and Access Controls: Vital Computing LLC
  - ii. Fire Alarm Systems: Koorsen Fire & Security
  - iii. Building Security: Johnson Controls, Inc.
  - iv. Existing Vendors: RFID Readers, Drop Boxes: FE Technologies
- Means of egress from the building that open to active construction areas of the site must remain active throughout the project. The local Fire Marshal shall be made aware of your Schedule of Work and the location and placement of temporary barriers to ensure access for fire prevention and occupant egress are adequate.
- The library will remain open throughout the duration of the project. Special consideration will need to be given to safety and security of the patrons and staff to ensure their safety.
- Any changes to site traffic patterns and access to the building will need to be communicated 72 hours in advance to the Owner. All temporary site and interior





- signage required to communicate changes to site traffic patterns and means of egress shall be the responsibility of the Contractor.
- Drawings from previous projects are available to review. Existing Drawings can be found on LWC's FTP. The Contractor shall be responsible for reviewing and understanding and incorporating knowledge of existing conditions into their Bids. Additional cost for existing conditions that are obvious from available existing documentation will not be allowed.
- 11) Temporary facilities as specified. Section 015000
  - General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, occupants of Project, testing agencies, and authorities having jurisdiction.
  - Temporary Enclosures: Each Contractor is responsible for protecting new and existing construction that may be affected by their construction operations. This protection includes temporary enclosure of new building elements from weather conditions, precipitation, rain, snow, ice or temperature fluctuations or other elements that can damage new or existing construction. This protection also includes temporary separation of areas under construction from occupied areas. Contractor shall be responsible for any and all clean-up costs resulting from failure to provide adequate temporary separations. Refer to other Division 1 Sections for submittals and requirements related to Temporary Enclosures.
- 12) Drawings have been submitted to State of Indiana for Building Permit. Other required permits must be submitted by trades as required.
- 13) Contractor shall ensure site security at exterior site construction, storage and staging areas as well as at openings into existing building.





# 14) Safety

- Temporary Egress: Contractor is responsible for coordinating temporary enclosures and signage required to maintain egress while library is open to the public.
- Personal Protective Equipment requirements by Contractor.
- Project to follow all OSHA Standards.
- Follow all health and safety protocols and guidelines.

# 15) Project meeting requirements. 013100

- Preconstruction Conference: Architect will schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.
- Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
- Project Closeout Conference: Schedule and conduct a project closeout conference, at a time convenient to Owner and Architect, but no later than 90 days prior to the scheduled date of Substantial Completion.
- Progress Meetings: Conduct progress meetings at weekly intervals.
- Coordination Meetings: Conduct Project coordination meetings at weekly intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.

#### 16) General Information:

- **Library Hours** 
  - i. Monday Thursday 9am to 9pm
  - ii. Friday 9am to 6pm
  - iii. Saturday 9am to 5pm
  - iv. Sunday 1pm to 5pm

#### 17) Tour

Following this meeting.

For additional site visits contact Winnie Logan @ (765) 529-0362 to arrange for building access.





# 18) Questions:

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**END OF NOTES** 



# INTERIOR AND EXTERIOR RENOVATIONS RE-BID

# Pre-Bid Meeting Sign-in Sheet Date and Local Time:

22-Aug-23

PRINT NAME & TITLE	COMPANY	ADDRESS	TELEPHONE NOS.	E-MAIL ADDRESS	
1 Kevin R. McCurdy, AIA	LWC, Inc.	712 East Main	ofc. 765-966-3546	kmccurdy@lwcinspires.com	
			fax	12	
			cell 765-277-9738		
2 Greg Drennen, AIA	LWC, Inc.	712 East Main	ofc.		
2 Greg Brennen, Ant	2110, 1110.	712 Edot Wall	fax		
			cell 765-993-1096	gdrennen@lwcinspires.com	
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3 BRIAN FENNIG	treije	7600 tendle ton PI	KE ofc.	· · · · · · · · · · · · · · · · · · ·	
		Indianapolis, 1	fax	52 blennigates to.	Barr
		· ·	cell 260 43852	sa blennigates co.	CHA
4 GARRETT DRYSDA	LE SVENIVES	3550 E PRIORITY	ofc		
	JAR 10 CALL	WAY S DR. INDIANAPE			
			cell 317-6-77-2	915 gdrysdale@skender	
V 1 01	1115	CLICIT 10 ALM		.csm	
5 Kyle Slaven	WCI	645 Indiana AVE. Richmond, IN	ofc.		
		Richmond, LN	fax	0454 Kyle@wcirichmond.	r oh
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6 Brian Ballan	LE WLI		ofc.	briand weirichmond. co	-
	3		fax		
		- A - A	cell 765.969.	4524	
2				2.25	
7 BRIAN GULLE	HUSTON RC	ECTRIC 1915 ENORTH	ST ofc. 765-45	7 - 913	
		KOKOM8 IN	fax cell		
8 ROBERT BE	NTLEY		ofc. 317 - 90	3-8970	
8 11015-111 00			fax		
ERANTIHAM	COMPANY		cell		
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9 Teremiah Wal	4	struction IIII NWT	ofc.	jeremiah@ Hor-Const	rentin
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11 MAT ROOT	HEAPY		ofc		
			fax	marootoheapy.com	
			cell 765-914-42	18	
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# **SPECIFICATION**

# For

# INTERIOR AND EXTERIOR RENOVATIONS OF NEW CASTLE – HENRY COUNTY PUBLIC LIBRARY

SPECIFICATION SECTIONS			
	RE-BID	PERMIT	CONSTRUCTION
DIVISION 0 SECTIONS – BIDDING AND CONTRACT REQUIREMENTS	SET	SET	SET
000210 – Invitation to Bid - REBID	X	X	
000211 – Instructions to Bidders - REBID	X	X	
000900 – Geotech Report	X	X	
001020 – Supplemental Instructions to Bidders	X	X	
001020 – Supplemental Instructions to Bidders  001030 – Form of Proposal - REBID	X	X	
001030A – Form 01 Proposat - REBID 001030A – Form 96 Revised 2013 - Indiana	X		
		X	
001031 – A101 – 2017 Standard Form of Agreement	X	X	
001031A – A101 – 2017 Exhibit A Insurance and Bonds			
001050 – A310 – 2010 Bid Bond	X	X	
001060 – A312 – 2010 Payment Bond	X	X	
001070 – A312 – 2010 Performance Bond	X	X	
001071 – A201 – 2017 General Conditions	X	X	
001072 – Modifications to General Conditions	X	X	
001090 – Affidavit of Employment Eligibility Verification	X	X	
DIVISION 1 SECTIONS – GENERAL CONDITIONS			
011000 – Summary of Work - REBID	X	X	
012200 – Unit Prices	X	X	
012300 - Alternates	X	X	
012500 – Substitution Procedures	X	X	
012600 – Contract Modification Procedures	X	X	
012900 – Payment Procedures	X	X	
013100 - Project Management and Coordination	X	X	
013200 – Construction Progress Documentation	X	X	
013300 - Submittal Procedures - Shop Drawings, Product Data and Samples	X	X	
013310 – Agreement and Waivers	X	X	
014000 – Quality Control Services	X	X	
014200 - References	X	X	
015000 – Temporary Facilities and Controls	X	X	
016000 – Product Requirements	X	X	
017300 - Execution	X	X	
017329 – Cutting and Patching	X	X	
017700 – Closeout Procedures	X	X	
017823 – Operation and Maintenance Data	X	X	
017839 – Project Record Documents	X	X	
017900 – Demonstration and Training	X	X	
	1		
DIVISION 2 SECTIONS – EXISTING CONDITIONS			
020100 – Maintenance of Existing Conditions	X	X	

024113 – Selective Site Demolition	X	X	
024119 – Selective Demolition	X	X	
DIVISION 3 SECTIONS - CONCRETE			
031000 – Concrete Formwork	X	X	
032000 – Concrete Reinforcement	X	X	
033000 – Cast in Place Concrete	X	X	
DIVISION 4 SECTIONS - MASONRY			
040111 – Exterior Surfaces Cleaning	X	X	
042000 - Masonry	X	X	
, , , , , , , , , , , , , , , , , , , ,			
DIVISION 5 SECTIONS - METALS			
055000 – Metal Fabrications	X	X	
055213 – Pipe and Tube Railings - REBID	X	X	
055215 Tipe and Tabe Ramings REBID	74	21	
DIVISION 6 SECTIONS			
061053 – Miscellaneous Rough Carpentry	X	X	
064023 – Interior Architectural Woodwork	X	X	
00-1025 — Interior Architectural Woodwork	Λ	Λ	
DIVISION 7 SECTIONS			
071413 – Fluid Applied Waterproofing	X	X	
071415 – Fluid Applied Waterproofing 072100 – Thermal Insulation	X	X	
	X	X	
072414 – EIFS Recoat Systems	X	X	
078413 – Penetration Firestopping			
078446 – Fire-Resistive Joint Systems	X	X	
079200 – Joint Sealants			
DIVISION 8 SECTIONS			
081113 – Hollow Metal Doors and Frames	X	X	
081416 – Flush Wood Doors	X	X	
083113 – Access Doors and Frames	X	X	
084113.01 – Flush Aluminum Doors and Frames	X	X	
087100 – Door Hardware - REBID	X	X	
088000 – Glazing	X	X	
088000 – Glazing	Λ	Λ	
DIVISION 9 SECTIONS			
	v	v	
092216 – Non-Structural Metal Framing	X X	X	
092900 – Gypsum Board			
093000 - Tiling	X	X	
095113 – Acoustical Panel Ceilings	X	X	
095223 – Custom Linear Metal Ceiling System - REBID	X	X	
095423 – Linear Metal Ceilings - REBID	X	X	
096513 – Resilient Base and Accessories	X	X	
096623 – Resinous Matrix Terrazzo Flooring	X	X	
096813 – Tile Carpeting	X	X	
098400 – Custom Felt Fabrications (Turf Design)	X	X	
098413 – Sound-Absorptive Acoustical System	X	X	
099100 – Interior Painting	X	X	
DIVISION 10 SECTIONS			
101426 – Post and Panel – Pylon Signage	X	X	

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102113.14 – Stainless Steel Toilet Partitions	X	X	
102600 – Wall and Door Protection	X	X	
102800 - Toilet, Bath and Laundry Accessories	X	X	
104413 – Fire Protection Cabinets	X	X	
DIVIDION 44 OF CITIONS			
DIVISION 11 SECTIONS	***	*7	
115213 – Projection Screens	X	X	
DIVISION 12 SECTIONS			
122413 – Roller Window Shades	X	X	
124813 – Roher Window Shades 124813 – Entrance Floor Mats	X	X	
124813 – Entrance Proof Wats	A	Λ	
DIVISION 14 SECTIONS			
144200 – Wheelchair Lifts	X	X	
THE WAR SHOWN SHOWN			
DIVISION 20 SECTIONS			
NOT USED			
DIVISION 21 SECTIONS			
210501 – Basic Fire Suppression Requirements	X	X	
210502 – Agreement and Waiver for the Use of Electronic Files	X	X	
210502A – Electronic Files – Heapy Release form to Contractors	X	X	
210504 – Basic Fire Suppression Materials and Methods	X	X	
210505 – Firestopping	X	X	
210507 – Piping Materials and Methods for Fire Suppression	X	X	
210509 – Excavation, Backfill and Surface Restoration	X	X	
210529 – Hangers and Supports for Fire Suppression Piping	X	X	
210553 – Identification for Fire Suppression Piping and Equipment	X	X	
		71	
DIVISION 22 SECTIONS			
220501 – Basic Plumbing Requirements	X	X	
220502 – Agreement and Waiver for the Use of Electronic files	X	X	
220502A – Electronic Files – Heapy Release Form to Contractors	X	X	
220504 – Basic Plumbing Materials and Methods	X	X	
220505 – Firestopping	X	X	
220507 – Piping Materials and Methods	X	X	
220509 - Excavation, Backfill and Surface Restoration	X	X	
220523 – General Duty Valves for Plumbing Piping	X	X	
220529 – Hangers and Supports for Plumbing Piping	X	X	
220553 – Identification of Plumbing Piping and Equipment	X	X	
220719 – Plumbing Piping Insulation	X	X	
221116 – Interior Domestic Water Piping	X	X	
221119 – Interior Domestic Water Piping Specialties	X	X	
221316 – Interior Drainage and Vent Systems	X	X	
221319 – Drainage System Specialties	X	X	
221329 – Plumbing Pumps - Drainage	X	X	
224200 – Plumbing Fixtures	X	X	
DIVISION 22 SECTIONS			
DIVISION 23 SECTIONS  230501 Pagic HVAC Paguirements	X	v	
230501 – Basic HVAC Requirements	Λ	X	l

220,502		***	
230502 – Agreement and Waiver for the Use of Electronic files	X	X	
230502A – Electronic Files – Heapy Release Form to Contractors	X	X	
230504 – Basic HVAC Materials and Methods	X	X	
230505 – Firestopping	X	X	
230507 – Piping Materials and Methods	X	X	
230513 – Electrical Requirements for HVAC Equipment	X	X	
230514 – Adjustable Frequency Motor Controller	X	X	
230519 – Gauges and Make Up Meters	X	X	
230523 – General Duty Valves for HVAC Piping	X	X	
230529 – Hangers and Supports for HVAC Equipment	X	X	
230530 – Bases and Supports for HVAC Equipment	X	X	
230531 – HVAC Equipment Drives	X	X	
230549 – Vibration Control for HVAC	X	X	
230550 – Flexible HVAC Pipe Connectors	X	X	
230553 – Identification of HVAC Piping and Equipment	X	X	
230593 – Testing, Adjusting and Balancing for HVAC	X	X	
230713 – Duct Insulation	X	X	
230716 – HVAC Equipment Insulation	X	X	
230719 – HVAC Pipe Insulation	X	X	
230923 – Building Automation System for HVAC	X	X	
230925 – Instrumentation and Control Devices for HVAC	X	X	
230947 – Control Power and Wiring for HVAC	X	X	
232113 – Hydronic Piping	X	X	
232117 – Glycol Solution Systems	X	X	
232123 – Hydronic Pumps	X	X	
232300 – Refrigerant Piping	X	X	
233113 – HVAC Ductwork	X	X	
233300 – Air Duct Accessories	X	X	
233700 – Air Outlets and Inlets	X	X	
236420 – Scroll Water Chillers – Air Cooled	X	X	
237323 – Custom Air Handling Units	X	X	
238128 – DX Mini Split Systems	X	X	
DIVISION 26 SECTIONS			
260501 – Basic Electrical Requirements	X	X	
260502 – Agreement and Waiver for Use of Electronic Files	X	X	
260502A – Electronic Files – Heapy Release Form to Contractors	X	X	
260504 – Basic Electrical Materials and Methods	X	X	
260505 – Firestopping	X	X	
260509 - Excavation, Backfill and Surface Restoration	X	X	
260519 – Low-Voltage Electrical Power Conductors - Copper	X	X	
260520 – Low-Voltage Electrical Power Conductors – Metal Clad MC Cable	X	X	
260526 – Grounding and Bonding for Electrical Systems	X	X	
260533 – Raceways and Boxes for Electrical Systems	X	X	
260543 – Manholes, Handholes, Underground Ducts and Raceways for Electrical	X	X	
260553 – Identification for Electrical Systems	X	X	
260923 – Lighting Control Devices	X	X	
260926 – Lighting Control Panelboards	X	X	
262213 – Distribution Transformers	X	X	
262416 – Panelboards	X	X	
262417 – Panelboards with Surge Protective Devices	X	X	
262716 – Electrical Cabinets and Enclosures	X	X	

262719 – Single Channel Aluminum Multi-Outlet Assembly	X	X	
262726 – Wiring Devices and Coverplates	X	X	
262813 – Fuses	X	X	
262816 – Disconnect Switches	X	X	
262913 – Motor Controllers	X	X	
264313 – Surge Protection Devices for Low-Voltage Electrical Power Circuits	X	X	
265113 – Interior Luminaires and Drivers	X	X	
265200 – Exit and Emergency Lighting	X	X	
265600 – Exterior Lighting	X	X	
DIVISION OF CECTIONS			
DIVISION 27 SECTIONS	<b>3</b> 7	***	
270501 – Basic Communications Requirements	X	X	
270502 – Agreement and Waiver for Use of Electronic Files	X	X	
270502A – Electronic Files – Heapy Release Form to Contractors	X	X	
270504 – Basic Communications Materials and Methods	X	X	
270505 – Firestopping	X	X	
270526 – Grounding and Bonding for Communications Systems	X	X	
270528 - Communications Systems Pathways and Support Equipment	X	X	
270553 – Identification for Communications Systems	X	X	
274119 – Video display Equipment	X	X	
275125 – Building Paging / Intercom System	X	X	
275128 – Auditorium sound Reinforcement System	X	X	
DIVISION 28 SECTIONS			
283100 – Extension of Existing Fire Detection and Alarm (Addressable)	X	X	
265100 – Extension of Existing Fire Detection and Alarm (Addressable)	Λ	Λ	
DIVISION 31 SECTIONS			
312000 - Earthwork	X	X	
312323 – Flowable Fill	X	X	
312500 – Erosion Control	X	X	
313116 – Termite Control	X	X	
515110 – Terrinte Control	Λ	Λ	
DIVISION 32 SECTIONS			
321216 – Asphalt Paving	X	X	
321300 – Site Concrete	X	X	
323300 – Site Furnishings	X	X	
328000 - Irrigation	X	X	
329000 – Planting	X	X	
329219 – Seeding	X	X	
DIVISION 33 SECTIONS			
330500 – Common Work Results for Utilities	X	X	
334000 – Storm Drainage	X	X	
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NEW CASTLE-HENRY COUNTY PUBLIC LIBRARY INTERIOR AND EXTERIOR RENOVATIONS LWC Project No. 22105.00 Page 6 of 6

**END OF INDEX** 

# SECTION 31 20 00 - EARTHWORK

#### PART 1 - GENERAL

#### 1.1 SUMMARY

#### A. Section Includes:

- 1. Excavation, filling, backfilling and compacting.
- 2. Trenching and trench backfilling.
- 3. Mass earthwork and rough grading.
- 4. Finish grading, including spreading of topsoil.
- 5. Dewatering.
- 6. Soil stabilization.
- 7. Testing and inspection.

#### B. Related Sections:

- 1. Division 00 Section "Geotechnical Data".
- 2. Division 02 Section "Selective Site Demolition".
- 3. Division 31 Section "Site Clearing".
- 4. Division 31 Section "Erosion Control".
- 5. Division 31 Section "Termite Control".

#### 1.2 QUALITY ASSURANCE

#### A. Testing and Inspection:

- 1. All testing and inspection shall be performed by an independent Geotechnical Engineering Consultant ("Geotechnical Engineer").
- 2. The Geotechnical Engineer is responsible for all testing, sampling and inspection.
- 3. The Geotechnical Engineer is responsible for approving materials, installation and procedures.
- 4. The Contractor is responsible for providing these services.
- 5. The Contractor is responsible for all coordination and scheduling with the Geotechnical Engineer.

# B. Topsoil:

- 1. All topsoil shall be tested and approved by the Geotechnical Engineer.
- 2. Refer to 1.3 Submittals for more information.

C. Any work in public right-of-way or other areas subject to the jurisdiction of any body shall be performed either to the requirements of that jurisdiction or to the requirements of this Specification, whichever is more stringent.

#### 1.3 SUBMITTALS

- A. All submittals shall be reviewed approved by Architect/Engineer and Geotechnical Engineer.
- B. Product Data and Test Reports:
  - 1. Field and laboratory tests and inspections.
  - 2. Drainage fill: Include material specifications and sieve analysis. Include signed material certificate from manufacturer/supplier.
  - 3. Chemical modification: Include material specifications and signed material certificate from manufacturer/supplier.
  - 4. Geo-synthetic materials: Include material specifications and signed material certificate from manufacturer/supplier.

# C. Topsoil:

- 1. Furnish topsoil analysis performed by the Geotechnical Engineer.
- 2. Analysis shall state the following: (Refer to Part 2 for minimum requirements)
  - a. Percentage of organic matter.
  - b. Gradation of sand, silt and clay, Include USDA textural classification.
  - c. Cation exchange capacity.
  - d. Deleterious material.
  - e. pH.
  - f. Mineral and plant nutrient content (phosphorus, potassium, magnesium, calcium).
- 3. Analysis shall state if topsoil is suitable for the intended use and as defined in this Specification, and shall state any requirements or recommendations necessary to make it suitable.
- 4. Analysis shall state annual nutrient requirements and recommendations.
- 5. This analysis is required for both on site and off site topsoil.
- 6. Samples of the topsoil shall be taken under the following conditions:
  - a. Within four (4) weeks prior to placing topsoil, take three representative samples of proposed topsoil.
  - b. Within one week after placing topsoil, take three representative samples of inplace topsoil.
  - c. All samples shall be taken in witness of the Owner, in areas approved by the Owner. Contractor to coordinate with Owner as required.
- 7. Provide copies of all topsoil analysis and recommendations to Owner and Architect/Engineer.

#### PART 2 - PRODUCTS

#### 2.1 MATERIALS

#### A. General:

- 1. All soil materials shall be approved by the Geotechnical Engineer.
- 2. All soil materials shall be suitable for each application.
- 3. Suitable soils are defined as soils which provide proper strength, compaction and drainage requirements and which are approved by the Geotechnical Engineer.
- 4. Fill material which is unsuitable due to excess moisture will not be classified as unsuitable if it can be dried to optimum moisture specified herein by manipulation, aeration or blending with other materials satisfactorily as approved by the Geotechnical Engineer.

#### B. Fill Materials:

1. Note: The following describes fill materials and their application for use. The materials shall be used for the listed applications, unless designated otherwise on the Drawings. If the Contractor has any questions or concerns regarding the materials or intended application, contact the Architect/Engineer for direction. Compaction requirements are the percentage of maximum dry density per ASTM D698 Standard Proctor Test, unless noted otherwise in the Geotechnical Report.

## 2. General fill:

- a. Suitable on-site or off-site fill material free of debris, roots, organic and frozen materials, and stones having a maximum dimension of 2".
- b. Minimum compaction: 95%.
- c. Application: General filling and backfilling of excavations and trenches outside of the building.

#### 3. Structural fill:

- a. Suitable on-site or off-site fill material free of debris, roots, organic and frozen materials, and stones having a maximum dimension of 2".
- b. Minimum compaction: 100%.
- c. Application: Compacted subgrade under buildings, foundations and areas subject to structural loads.

#### 4. Granular fill:

- a. Clean, natural or manufactured sand per requirements of INDOTSS Type "B" borrow, 4.75mm (No. 4) gradation. Pea gravel is not acceptable.
- b. Minimum compaction: 95%.
- c. Application: Backfilling of excavations and trenches which are under or within 5' of pavement, and underneath exterior concrete pavement, walks, curbs and slabs on grade.

# 5. Drainage Fill:

- a. General: Clean, washed fill sand with 100% passing the 4.75mm (No.4) sieve and no more than 5% passing the 0.075 mm (No. 200) sieve. Pea gravel or #53 stone are not acceptable.
- b. Minimum compaction: 95%.
- c. Application: Free draining material required for applications such as the outside of basement walls, the back side (earth side) of retaining walls and building slabs on grade.
- 6. Aggregate fill: Unless otherwise indicated, shall meet the following:
  - a. Naturally or artificially graded mixture of natural or crushed gravel, crushed stone and natural or crushed sand.
  - b. ASTM D2940, with 100 percent passing a 1 ½ inch sieve and not more than 8 percent passing a No. 200 sieve.
  - c. Application: base course under concrete and other items per plans.

#### 7. Permeable soil mix:

- a. Permeable soil mix to promote infiltrate and allow runoff to filter through media and sustain vegetation.
- b. Soil shall consist of the following:
  - a) 50-60% sand.
  - b) 20-30% compost.
  - c) 20-30% topsoil.
- c. Clay is not permitted.
- d. Shall have a minimum permeability rate of 1.0 feet per day (0.5 inches per hour)
- e. Application: Rain Gardens and Bioswales.

# C. Topsoil:

- 1. Topsoil shall be fertile, friable, natural surface soil obtained from well-drained areas and possessing characteristics of representative soils in the project vicinity that produce heavy growths of crops, grass or other vegetation.
- 2. Topsoil shall consist of friable loam, reasonably free of subsoil, clay lumps, brush, roots, weeds or other objectionable vegetation, stones or similar objects larger than 1-1/2" in any dimension, litter or other materials unsuitable or harmful to plant growth.
- 3. Supplement on-site topsoil with off-site topsoil as necessary.
- 4. Unless otherwise indicated, minimum compacted thickness in lawn areas is 4".
- 5. The mechanical analysis of topsoil shall be as follows:
  - a. 1" mesh sieve size; 99%-100% passing.
  - b. 1/4" mesh sieve size: 97%-99% passing.
  - c. No. 100 mesh sieve size: 40%-60% passing.
  - d. No. 200 mesh sieve size: 20%-40% passing.

- 6. The following minimum requirements shall also be met:
  - a. Organic matter: 3-5%.
  - b. pH: 6.5 to 7.3.
  - c. Sand, silt, clay content: per USDA loam textural classification.
  - d. Minerals and nutrients: Per Geotechnical Engineer recommendations and amendments suitable for use in local area.

#### D. Soil Separator Fabric:

- 1. Nonwoven, needle-punched geotextile fabric manufactured from polyolefins or polyesters per ASTM M288, suitable for subsurface drainage and other specified applications.
- 2. Application: subsurface drains and as specified in Contract Documents.
- 3. Specifications (values based on Mirafi 140N):
  - a. Apparent opening size: 70 (U.S. Standard Sieve Size); ASTM D-4751-99A.
  - b. Flow rate: 135 gpm/sf; ASTM D-4491-99A.
  - c. Puncture strength: 65 lbs; ASTM D-4833-00.
  - d. Mullen Burst: 225 lb/sq. in.
  - e. Grab tensile/elongation: 155 lbs/50%.
  - f. UV Resistance: 70% at 500 hours.

# E. Geo-synthetic Reinforcement:

- 1. General: TriAx Geogrid TX5 as manufactured by Tensar International Corp., Atlanta Georgia.
- 2. Application: Soil stabilization as required and as recommended by the Geotechnical Engineer.

#### F. Chemical Modification:

- 1. General: INDOTSS 215.
- 2. Materials: Hydrated lime per INDOTSS 913.04(b) and Type I Portland cement per INDOTSS 901-01(b).
- 3. Quantity: 4.0 + /- 0.5% by dry unit mass of the soils.
- 4. Application: If Geotechnical report indicates that chemical modification may be needed for soil stabilization, then Contractor shall include provisions for chemical modification in their bid.

# G. Other Materials:

1. All other materials not specifically described but not required for proper completion of the Work of this Section, shall be as selected by the Contractor subject to the approval of the Architect/Engineer and Geotechnical Engineer.

#### **PART 3 - EXECUTION**

#### 3.1 REQUIREMENTS

#### A. General:

- 1. Weather: Do not perform earthwork activities during inclement weather.
- 2. Dust: Use all necessary and appropriate means, such as water sprinkling, as required to prevent dust from being a nuisance to the Owner, public and concurrent performance of other work on the site.
- 3. Conflicts: Should the preceding job conditions or other items specified herein because actual or possible conflicts, notify the Architect/Engineer immediately and do not proceed until such conflict has been resolved.
- 4. Refer to Division 31 Section "Termite Control" for termite protection requirements.
- B. Preparation: Verify that the following has been completed prior to beginning earthwork:
  - 1. Protective fencing has been installed for trees and vegetation to remain.
  - 2 Site clearing (clearing and grubbing).
  - 3. Selective site demolition.
  - 4. Erosion and sediment control measures are in place.

#### C. Protection:

- 1. For items indicated to remain, provide protection to prevent damage from construction activities. Any damage or destruction to items intended to remain intact shall be repaired or replaced to the satisfaction of the Owner at the Contractor's expense.
- 2. Topsoil: Protect placed topsoil from heavy machinery traffic. Remove and replace topsoil that is compacted by heavy machinery traffic.
- 3. Subgrade: Ditches and drains along the subgrade shall be maintained to drain effectively at all times. Repair subgrade of any ruts that may occur by reshaping and recompacting as required.
- 4. Utilities: Determine locations of existing utilities and the extent to which they may affect earthwork operations. Where service and utility lines are to remain, provide protection to prevent damage or disruption of services.
- 5. Damaged utilities shall be repaired immediately at the Contractor's expense.
- 6. Open excavation:
  - a. The Contractor is responsible for ensuring all open excavations are properly barricaded and protected at all times. This includes work such as mass excavation and trenching, and also includes other potentially dangerous conditions such as retention ponds.
  - b. Provide and install all necessary and appropriate means such as, but not limited to, signage, fencing, traffic barricades, and lighting to warn, discourage, and prevent danger to adjacent workers and general public.
  - c. Unless otherwise indicated, install a minimum 6' 10-guage chain link fence around all open excavations, retention ponds, and other areas of potential danger, and

maintain them while such conditions exist. Increase measures as required per site conditions.

# 3.2 LAYOUT

- A. Surveyor: Secure the services of a licensed land surveyor, acceptable to the Architect/Engineer and Owner, to layout locations of building, parking areas, drive, walks, curbs, finish elevations and other work, including mechanical and electrical items that are to be installed on the project site.
- B. References: Establish and maintain lines, corners, elevations and general reference points. Verify dimensions indicated on Drawings. If conflicts exist, immediately notify the Architect/Engineer before continuing work.

#### 3.3 EXCESS WATER CONTROL

- A. Excess moisture: If excess moisture is present in soils, do not resume operations until moisture content and density are reported to be satisfactory by the Geotechnical Engineer.
- B. Flooding: Provide berms or channels to prevent flooding of subgrade. Promptly remove all water collecting in depressions.
- C. Softened subgrade: Where soil has been softened or eroded by flooding or placement during inclement weather, remove all damaged areas and recompact as specified for fill and compaction.

#### D. Dewatering:

- 1. Provide and maintain ample means and devices with which to promptly remove and dispose of all water from every source entering the excavations or other parts of the work at all times during construction.
- 2. Dewater by means which will ensure dry excavations and the preservation of the final lines and grades at bottom of excavations, such as sump pumps, trenching, etc.
- 3. Do not use extreme measures or durations as to cause adverse effects to Project Site or adjoining properties.

#### 3.4 CHEMICAL MODIFICATION

#### A. General:

- 1. Scarify and/or disc area to a depth of 12" prior to distributing modifiers.
- 2. Utilize screw type, cyclone, or pressure manifold type distributors to apply modifier.
- 3. Do not apply when wind conditions create potential hazards or transference of material to adjacent areas.
- 4. Mix modifiers with rotary speed mixers or disc harrow, and continue until a homogenous layer of the required thickness is obtained.

# 5. Compaction:

- a. Lime modified soils shall be compacted within 3 days.
- b. Cement modified soils shall be compacted within 30 minutes.
- 6. Observation and testing: Quantities of materials, placing, mixing, and compacting shall be, as recommended, observed and tested by the Geotechnical Engineer.

#### 3.5 STOCKPILING

#### A. General:

- 1. See drawings for designated stockpiling areas. If Drawings do not designate specific areas, or areas shown are insufficient, contact Architect/Engineer for direction.
- 2. Stockpile earth materials in manners that will prevent intermixing of different materials and intrusion of trash, debris and organic materials.
- 3. Slope stockpiled materials to provide adequate surface drainage.
- 4. Install and maintain erosion control measures. Refer to drawings and Division 31 Section "Erosion Control". At a minimum, silt fence shall be installed around all stockpiled areas. Seed areas which are to remain stockpiled for extended periods of time.
- 5. Storage or stockpiling of materials on the subgrade is prohibited.

#### 3.6 EXCAVATION

#### A. General:

- 1. Excavation shall conform to OSHA and all other applicable safety regulations.
- 2. Excavation shall conform to the dimensions and elevations indicated on the Drawings, except as specified herein.
- 3. Excavation shall extend sufficient distance from walls and footings to allow for placing and removal of forms, installation of services and inspection.
- 4. Remove unsuitable material below indicated depths and replace with suitable, compacted material or lean concrete, at the Architect/Engineer discretion.
- 5. Topsoil stripping: Strip topsoil to its depth from areas to be covered by building, by walks and by other work and where existing surface areas required grading in order to establish new elevations.
- 6. Subgrade: Unless otherwise indicated, excavate to following subgrades:
  - a. Slab-on-grade: Sub-grade at bottom of drainage fill or at bottom of existing topsoil, whichever is lower.
  - b. Drives and paving: Sub-grade at bottom of aggregate base.
  - c. Footing: Sub-grade at indicated bottom of footing.
  - d. Lawn area: Sub-grade 4" below indicated surface elevation.

#### 3.7 TRENCHING

#### A. General:

- 1. All trenching shall conform to OSHA and all other applicable safety standards.
- Verification:
  - a. Contractor shall verify all existing grades, inverts, utilities, obstacles and topographical conditions prior to any trenching, excavation or underground installations.
  - b. In the event existing conditions are such as to prevent installations in accordance with the Contract Documents, immediately notify the Architect/Engineer and await decision before continuing work.
  - c. Architect/Engineer decision will be final and binding upon the Contractor, and installations shall be in accordance with same.
- 3. Saw cut existing pavements to proper width for trenching.
- 4. Legally dispose materials unsuitable for trench backfilling off-site.

#### B. Width:

- 1. Trenches for piping shall be not less than 12" wide or more than 16" wider than the outside diameter of the pipe to be laid therein, and shall be excavated true-to-line, so that a clear space not less than 6" or more than 8" in width is provided on each side of the pipe.
- 2. For sewers, the maximum width of trench specified shall apply to the width at and below the level at the top of the pipe. The width of the trench above that level may be made as wide as necessary for sheeting and bracing, and proper installation of the Work.
- 3. Trenches shall be open vertical construction.

# C. Depth:

- 1. Trench as required to provide the elevations shown on the drawings.
- 2. Where elevations are not shown on the drawings, trench to sufficient depth to give a minimum of 36" of fill above the top of the pipes measured from the adjacent finish grade.
- 3. Where trench excavation is inadvertently carried below proper elevation, backfill with approved material and then compact to provide a firm and unyielding subgrade and/or foundation at no additional cost to the Owner.

#### D. Trench Bracing:

- 1. Properly support all trenches in strict accordance with all pertinent rules and regulations.
- 2. Brace, sheet, and support trench walls in such a manner that they will be safe and that the ground alongside the excavation will not slide or settle, and that all existing

- improvements of every kind, whether on public or private property, will be fully protected from damage.
- 3. In the event of damage to such improvements, immediately make all repairs and replacements necessary at no additional cost to the Owner.
- 4. Arrange all bracing, sheeting, and shoring so as to not place stress on any portion of the completed Work until the general construction thereof has proceeded far enough to provide sufficient strength.
- 5. All shoring and sheeting required to perform and protect the excavation and as required for the safety of employees and abutting structures shall be performed. All workmen performing work in 48" or deeper trench or excavation shall be protected by use of a welded sheet steel "safety box."
- 6. Removal: Exercise care in the drawing and removal of sheeting, shoring, bracing, and timbering to prevent collapse or caving of the excavation faces being supported.

# E. Bedding:

- 1. Where pipes or conduits are to be installed, excavate below the proposed alignment of the pipe and backfill with clean sand to provide uniform support unless otherwise noted on the drawings.
- 2. Unless shown otherwise on Drawings, minimum bedding to be 4" below pipe.
- 3. Storm sewer pipes are to be bedded with stone.
- 4. Refer to drawings and details for further information and requirements.

#### F. Grading and Handling of Trenched Material:

- 1. During excavation, material shall be stacked in an orderly manner a sufficient distance back from edges of trenches to avoid overloading and prevent slides or cave-ins.
- 2. Control the temporary stockpiling of trenched material in a manner to prevent water from running into the excavations.
- 3. Do not obstruct the surface drainage but provide means whereby stormwater is diverted into existing gutters, surface drains or other temporary drains.
- 4. Any water accumulated in the trenches shall be removed by pumping or by other approved methods.

## 3.8 FILLING, BACKFILLING AND COMPACTING

- A. Prior to filling, backfilling and compacting, proof-roll and remediate subgrade per Part 3 Quality Assurance.
- B. Unless otherwise indicated, maximum lift thickness is 8" of un-compacted material.

# C. Moisture:

- 1. Thoroughly mix each layer to assure uniformity of material.
- 2. Supplement mixing with wetting or drying as required to obtain the moisture content required for the indicated percentages of compaction.

- 3. All fill shall be placed so that the moisture content is within +/- 2% of the optimum moisture content according to ASTM D698.
- 4. Do not use frozen materials in the fill or allow the fill to be placed upon frozen materials.

#### D. Compaction:

- 1. Compaction shall be accomplished by approved means and shall meet the following densities for various parts of the Work. See Part 2 for density requirements of individual soil materials.
- 2. Compaction by flooding is not acceptable.
- 3. In cut areas where pavement is planned, scarify the upper 12" of subgrade prior to compaction.

# E. Equipment:

- 1. Tracked equipment shall not be used as compaction equipment.
- 2. The static weight of compaction equipment utilized for the compaction of backfill materials near walls as defined in No.3 below shall not exceed 2,000 lbs. for non-vibratory equipment and 1,000 lbs. for vibratory equipment.
- 3. All heavy equipment, including compaction equipment heavier than noted herein, shall not be allowed closer to walls than 3 feet plus the vertical distance from backfill surface to the bottom of the wall.

## 3.9 GRADING

# A. General:

- 1. After filling and backfilling operations are complete, neatly and evenly grade areas to be seeded or sodded.
- 2. Scarify subgrade to a depth of 6" and place minimum 4" topsoil (6" maximum).
- 3. Grade to obtain the elevations indicated within a tolerance of plus or minus 0.1 foot.
- 4. Slope finished subgrade surface to provide drainage away from building walls.

# B. Treatment After Completion of Grading:

- 1. After grading is completed and inspected, permit no further excavation, filling, or grading except with the review of and the inspection by the Owner.
- 2. Use all necessary means to prevent the erosion of freshly graded areas during construction and until such time as permanent drainage and erosion control measures have been installed.

#### 3.10 QUALITY ASSURANCE

#### A. Coordination:

1. A representative from the Geotechnical Engineer shall be present to observe and perform tests at all times earthwork is in progress.

2. Contractor shall provide minimum 72 hour notice to Geotechnical Engineer before each operation requiring testing or inspection.

#### B. Testing:

- 1. To verify adequacy of compaction, the Geotechnical Engineer shall perform field density tests.
- 2. A grid pattern shall be established with a maximum area of 1,000 square feet.
- 3. For each grid, provide minimum one test per each lift of compacted material.

# C. Proofrolling:

- 1. Proofrolling shall be supervised by the Geotechnical Engineer.
- 2. Since standard test procedures are not available for proofrolling, the necessary scope and method of testing shall be determined by the Geotechnical Engineer, subject to review by the Architect/Engineer.
- 3. In areas to be covered by buildings and other site improvements, and other areas deemed necessary by the Geotechnical Engineer or Architect/Engineer, prepare and test subgrade as follows:
  - a. Using a loaded tri-axle dump truck or other approved method, the Contractor shall proof-roll the exposed subgrade under the observation of the Geotechnical Engineer.
  - b. Based on this observation, plus supplemental testing as required, the Geotechnical Engineer shall determine when and where soft, loose or other undesirable materials are to be removed and replaced.

# D. Approval and Remediation:

- 1. When testing and proofrolling indicate proper compaction has been obtained, and after approval from Geotechnical Engineer has been given, continue fill and backfill work until the indicated elevation is achieved.
- 2. If required density has not obtained, the Contractor shall remove the defective material and repeat operations until the required density is obtained and approval is given by the Geotechnical Engineer.
- 3. Cost of material removal, replacement, compaction and re-testing shall be the responsibility of the Contractor.

#### 3.11 SURPLUS SOIL MATERIALS

A. Unless otherwise indicated or directed by Owner, remove excess soil materials and legally dispose of off-site.

#### 3.12 JOB COMPLETION

A. Upon completion of the Work of this Section:

- 1. Remove all trash and debris from earthwork operations.
- 2. Remove surplus equipment and tools.
- 3. Leave the site in a neat and orderly condition.
- 4. Restore all adjacent areas disrupted by earthwork activities to their original condition.

END OF SECTION 31 20 00

#### SECTION 31 23 23 - FLOWABLE FILL

#### PART 1 - GENERAL

#### 1.1 SUMMARY

#### A. Section Includes:

- 1. Flowable fill as shown or implied by the Contract Documents and as required to perform Work
- 2. Backfilling pipe trenches for pipe structures, utility cuts and other work extending under pavement as indicated on the Drawings or as required by job conditions.

# B. Related Sections:

- 1. Division 31 Section "Earthwork".
- 2. Division 32 Section "Site Concrete".

#### 1.2 QUALITY ASSURANCE

# A. Codes and Standards:

- 1. In addition to complying with all pertinent codes and regulations, comply with all pertinent requirements of the following:
  - a. Indiana Department of Transportation Standard Specifications (INDOTSS), current Edition Section 213.
  - b. "Controlled Low Strength Materials" ACI 229.
- 2. Comply with the recommendations of American Concrete Institute for installation in hot and cold weather.
- 3. Where provisions of pertinent codes and standards conflict with this Section, the more stringent provisions shall govern.

# 1.3 SUBMITTALS

A. Mix design.

FLOWABLE FILL 31 23 23 - 1

#### PART 2 - PRODUCTS

#### 2.1 MATERIALS

#### A. Flowable Fill:

- 1. Cement: ASTM C150, Type I or III.
- 2. Fine Aggregate: ASTM C33.
- 3. Water: Clean, fresh, potable.
- 4. Air-entraining admixture: ASTM C260.
- 5. Fly ash: Not allowed.
- 6. Do not use calcium chloride or admixtures containing soluble chlorides. Fill shall not exceed maximum chloride ion content for corrosion as defined in ACI 318 Table 4.5.4.

#### 2.2 MIX DESIGN

- A. The flowable fill mix design shall meet the following requirements:
  - 1. Unconfined 28-day compressible strength shall be 75-100 psi.
  - 2. Flowable fill shall be hand tool excavatable.
  - 3. Utilize a slower set (24 hour) mix.

#### PART 3 - EXECUTION

#### 3.1 GENERAL

#### A. Environmental Conditions:

- 1. Unless adequate protection is provided, do not place flow-able fill during rain, sleet or snow.
- 2. When extreme hot or cold weather conditions occur, or are expected to occur, which might detrimentally affect flow-able fill, employ handling and placing techniques to guard against such effects.

# B. Preparation:

- 1. Remove all wood scraps, ice, snow, frost, standing water and debris from the area in which flowable fill will be placed.
- 2. Thoroughly wet the surface of excavations (except in freezing weather), coat forms with release agent, and remove all standing water.
- 3. Place flowable fill only on solid, dry and unfrozen substrate.
- 4. Pipes and objects subject to floating shall be securely strapped and anchored to prevent movement or displacement.

# C. Placing:

FLOWABLE FILL 31 23 23 - 2

- 1. Convey flowable fill from mixer by methods that will prevent separation of materials.
- 2. Deposit flowable fill as close as possible to its final position to avoid segregation.
- 3. Flowable fill can be backfilled by granular material after the flowable fill can withstand the axial load of a #4 reinforcing rod, square end, without being penetrated with 150 lbs. pressure exerted concentrically (approximately 24 hour duration).

END OF SECTION 31 23 23

FLOWABLE FILL 31 23 23 - 3

# SECTION 31 25 00 - EROSION CONTROL

# PART 1 - GENERAL

#### 1.1 SUMMARY

#### A. Section Includes:

- 1. Prevention of soil or sediment leaving project site.
- 2. Prevention of soil or sediment impacting on-site or off-site activities or conditions.
- 3. Dust control.

#### B. Related Sections:

- 1. Division 02 Section "Selective Site Demolition".
- 2. Division 31 Section "Site Clearing".
- 3. Division 31 Section "Earthwork".
- 4. Division 32 Section "Seeding".

#### 1.2 SUBMITTALS

- A. Product data for the following:
  - 1. Silt fence.
  - 2. Inlet filters.
  - 3. Erosion control blanket and fasteners.

# 1.3 QUALITY ASSURANCE

# A. Regulatory Requirements:

1. The standard for erosion/sediment control for this project is the Indiana Handbook for Erosion Control in Developing Areas, latest edition (Indiana Department of Natural Resources, Division of Soil Conservation). All erosion control work shall conform to this manual.

# B. General Requirements:

- 1. Erosion/sediment control measures are to be installed prior to beginning any earth disturbing activities and maintained throughout construction.
- 2. The Contractor is responsible for ensuring all specified and necessary erosion/sediment control measures are installed, functioning and properly maintained.

3. Any fines or other costs incurred due to inadequate or improper installation, maintenance or performance of erosion/sediment control measures as identified by the self-monitoring process and/or other agency having jurisdiction over erosion control shall be the sole responsibility of the Contractor.

#### PART 2 - PRODUCTS

#### 2.1 MATERIALS

#### A. Silt Fence:

- 1. Woven or non-woven produced from 100% polypropylene, designed specifically to retain sediment and remain highly permeable to water.
- 2. Geotextile shall be attached to wood stakes with wood laths and staples or nails.
- 3. Bottom 12 inches of fabric shall be left unsecured to allow for entrenchment.
- 4. Stakes: 2" x 2" x 36" hardwood sharpened to a point on one end, maximum 5' spacing.
- 5. Lath:  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " x 24" for attaching the fabric to the stakes.
- B. Inlet Filters: Streamguard catch basin insert by Bowhead Environmental & Safety (800-909-3677), or Architect/Engineer approved equal.
- C. Frosion Control Blanket:
  - 1. Standard: unless otherwise indicated, North American Green S150 BN or approved equal.
  - 2. General: woven, 100% biodegradable blanket, or approved equal.
  - 3. Matrix: 100% straw fiber, 0.5 lbs/syd.
  - 4. Netting: 100% biodegradable natural organic fiber.
  - 5. Fasteners: 6" biodegradable plastic stakes.
- D. Refer to Division 32 Sections "Seeding" and "Planting" for temporary and permanent ground cover requirements.

#### PART 3 - EXECUTION

#### 3.1 REQUIREMENTS

#### A. General:

- 1. Prevent mud and dirt accumulations on all streets surrounding the project. Utilize stone tracking strips/construction entrances, street sweepers, spray trucks, power washers and other necessary and appropriate means as required. Roadways shall be kept clear of accumulated sediment that is a result of runoff or tracking.
- 2. Dust control: Use all necessary and appropriate means, such as water sprinkling, calcium chloride (AASHTO M 144), vegetative cover, spray-on adhesives, as required to prevent

- dust from being a nuisance to the Owner, public or concurrent performance of work on the site.
- 3. Keep the amount of disturbed area to a minimum at all times.
- 4. Seed immediately after grading soil, and install erosion control blanket where applicable.
- 5. Sequence installation of measures to ensure proper erosion control. See Drawings for basic sequencing requirements.
- 6. Temporary seed all areas that cannot be final seeded within a time period that will prevent soil erosion. For temporary seeding, utilize a fast growing seed of oats, annual rye grass, wheat or rye depending on the time of year.
- 7. See Division 32 Section "Seeding" for seeding requirements.
- 8. The Contractor shall inform all Subcontractors of the requirements of the Construction Stormwater Pollution Prevention Plan (SWP3) and its maintenance provisions, so that erosion/sediment disruption may be prevented by all those working on site.
- 9. Un-vegetated areas that are likely to be left inactive for more than 15 days must be stabilized.
- 10. Proper storage and handling of materials, such as fuels or hazardous wastes, and spill prevention and cleanup measures shall be implemented to minimize the potential for pollutants to contaminate surface or ground water or degrade soil quality. Notify Indiana Department of Environmental Management (IDEM) of any release.
- 11. Final stabilization shall be achieved when all land disturbing activities have been completed and a perennial vegetative cover exists with at least a 70% density. Once this has been achieved, the Contractor shall notify the Owner and Architect/Engineer. The Contractor must still complete all maintenance and quality requirements as specified in Division 32 Sections "Seeding" and "Planting".

#### 3.2 INSTALLATION

#### A. Silt Fence:

- 1. Install silt fence where indicated on Drawings and on other areas as required.
- 2. Follow all manufacturer guidelines for installation.
- 3. Dig a minimum 8" deep trench along proposed fence line to allow toe-in.
- 4. Install fence with stakes on the down stream/slope side.
- 5. Backfill and compact both sides of trench and ensure fence is anchored sufficiently.

# B. Erosion Control Blanket:

- 1. Install blankets where indicated on Drawings and on other areas as required.
- 2. Follow all manufacturer guidelines for installation, including minimum overlapping and anchoring/stapling spacing.
- 3. Tuck the uppermost edge of the upper blankets into a check slot (slit trench, minimum 6" deep), backfill with soil and tamp down.
- 4. See drawings for additional installation requirements.

# C. Stone Tracking Area/Construction Entrance:

- 1. Install at all temporary entrances/exits for construction traffic and in other areas as needed to prevent soil materials from being deposited on streets, parking areas, etc.
- 2. Minimum thickness is 6" of #2 stone. Increase as necessary for field conditions. Install geotextile fabric underneath stone to improve stability if needed.
- 3. Minimum dimensions are shown on the plans. Increase as necessary for field conditions.

#### 3.3 INSPECTION AND MAINTENANCE

#### A. General:

- 1. Inspect all erosion control measures periodically and after each storm event.
- 2. Repair and replace all measures as necessary to ensure proper soil erosion prevention.
- 3. Maintain temporary measures until vegetation has been adequately established and construction activities have been completed to a point where the potential for soil erosion has been sufficiently eliminated. The Contractor is responsible for maintaining temporary measures until such a point and then removing the measures, even if all other construction work is complete.
- 4. Implement erosion/sediment control modifications as directed by the Architect/Engineer.

#### B. Silt Fence:

- 1. Inspect periodically and after each storm event.
- 2. If fabric tears, starts to decompose, or in any way becomes ineffective, replace the affected portion immediately.
- 3. Remove deposited sediment when it reaches 1/3 of the height of the fence at its lowest point or when it is causing the fabric to bulge. Do not undermine the fence during cleanout.
- 4. After the contributing drainage area has been stabilized, remove the fence and sediment deposits, bring the disturbed area to grade and stabilize.

#### C. Erosion Control Blanket:

- 1. During vegetative establishment, inspect after each storm event for any erosion underneath the blanket.
- 2. If any areas show erosion, pull back that portion of blanket, add soil, reseed, re-lay and re-anchor blanket.
- 3. After vegetative establishment, check the treated area periodically and repair as required.

#### D. Stone Tracking Area/Construction Entrance:

- 1. Inspect weekly and after storm events or heavy use.
- 2. Re-shape as needed for drainage and runoff control.
- 3. Top dress with clean stone as needed.
- 4. Immediately remove mud and sediment tracked or washed onto roads, parking lots, etc. by brushing or sweeping. Flushing is only to be used if the water is conveyed to a sediment trap or basin.

## E. Inlet Filters:

- 1. Inspect each inlet periodically and after each storm event.
- 2. If fabric tears, starts to decompose, or in any way becomes ineffective, replace the affected portion immediately.
- 3. Remove deposited sediment often and do not allow to build up and cause damage to the fabric or reduce the flow capacity of the inlet.
- 4. Remove inlet fabric after the contributing drainage area has been stabilized.

# F. Seeding:

- 1. Inspect temporary and permanent seeding periodically and after each storm event.
- 2. Repair damaged, bare or sparse areas by filling any gullies, re-fertilizing, over-seeding, reseeding and re-mulching.
- 3. Install erosion control blanket over areas that do not hold.

# G. Final Inspection and Acceptance:

- 1. Contractor shall notify the Owner in writing, 24 hours in advance that the project is ready for final inspection and acceptance. The following conditions must be met:
  - a. All land disturbing activities have been completed and the entire site has been stabilized
  - b. All temporary erosion and sediment control measures have been removed.

END OF SECTION 31 25 00

EROSION CONTROL 31 25 00 - 5

### SECTION 31 31 16 - TERMITE CONTROL

### PART I - GENERAL

### 1.1 SUMMARY

- A. Section Includes:
  - 1. Furnish and apply soil treatment for subterranean termite control.
- B. Related Sections:
  - 1. Division 31 Section "Earthwork".

## 1.2 QUALITY ASSURANCE

## A. References:

- 1. EPA: Environmental Protection Agency Federal Insecticide, Fungicide and Rodenticide Act.
- B. Regulatory Requirements:
  - 1. Formulate and apply termiticides according to the EPA-Registered label.
  - 2. Conform to all requirements of authorities having jurisdiction.
- C. Installer Qualifications:
  - 1. Company specializing in performing the work of this Section with minimum five years experience.
  - 2. Company licensed according to regulations of all authorities having jurisdiction.

# D. Warranty:

- 1. Provide five (5) year warranty for material and application.
- 2. Include coverage for damage and repairs to building and building contents caused by termites. Repair damage and retreat where required.
- 3. Owner reserves right to renew warranty for an additional five years.
- 4. Inspect work annually and report in writing to Owner.

### 1.3 SUBMITTALS

## A. Product Data:

- 1. Indicate each toxicant to be used, composition by percentage dilution schedule and intended application rate.
- 2. Manufacturer's installation instructions and recommendations.
- 3. EPA-Registered Label for termiticide products.
- B. Test Reports: Submit regulatory agency approval reports when required.
- C. Project Record Drawings: Accurately record moisture content of soil before application, date and rate of application, areas of application, diary of meter readings and corresponding soil coverage. Submit to Owner.

# 1.4 DELIVERY, STORAGE, AND HANDLING

#### A. General:

- 1. Conform to all manufacture recommendations and requirements.
- 2. Conform to all applicable codes and requirements.
- 3. Deliver products to site in original labeled and sealed containers.
- 4. Store in a cool, dry, well ventilated area.
- 5. Storage area must be locked and inaccessible to anyone except installer.

#### PART 2 - PRODUCTS

### 2.1 GENERAL

- A. Termiticide: EPA-Registered, complying with requirements of authorities having jurisdiction, in an aqueous solution formulated to prevent termite infestation. Provide quantity required for application at the label volume and rate for the maximum termiticide concentration allowed for each specific use, according to the product's EPA-Registered Label. Subject to compliance with requirements, the following are acceptable products:
  - 1. BASF Corporation; Termidor.
  - 2. Bayer Environmental Science; Premise 75.
  - 3. FMC Corporation; Dragnet, Talstar, Prevail.
- B. Mix toxicant to manufacturer instructions.

#### PART 3 - EXECUTION

## 3.1 PREPARATION

# A. Requirements:

- 1. Verify that soil surfaces are unfrozen, sufficiently dry to absorb toxicant and ready to receive treatment.
- 2. Beginning of application shall mean acceptance of soil conditions.
- 3. Verify that anticipated weather conditions comply with label recommendations prior to application.

## 3.2 APPLICATION

#### A. Locations:

- 1. Under slabs on grade.
- 2. Crawl spaces.
- 3. Both sides of foundation surface.
- 4. Soil within ten feet of building perimeter.
- 5. Other areas as required.

# B. Requirements:

- 1. Apply toxicant 24 hours prior to installation of vapor barrier under slabs-on-grade.
- 2. Apply toxicant in accordance with manufacture instructions.
- 3. Apply extra treatment to structure penetration surfaces such as pipe or ducts, and soil penetrations such as ground rods or posts.
- 4. Coordinate soil treatment at foundation perimeter with finish grading to avoid disturbance of treated soil.
- 5. Coordinate treatment with all other contractors, trades and Owner.

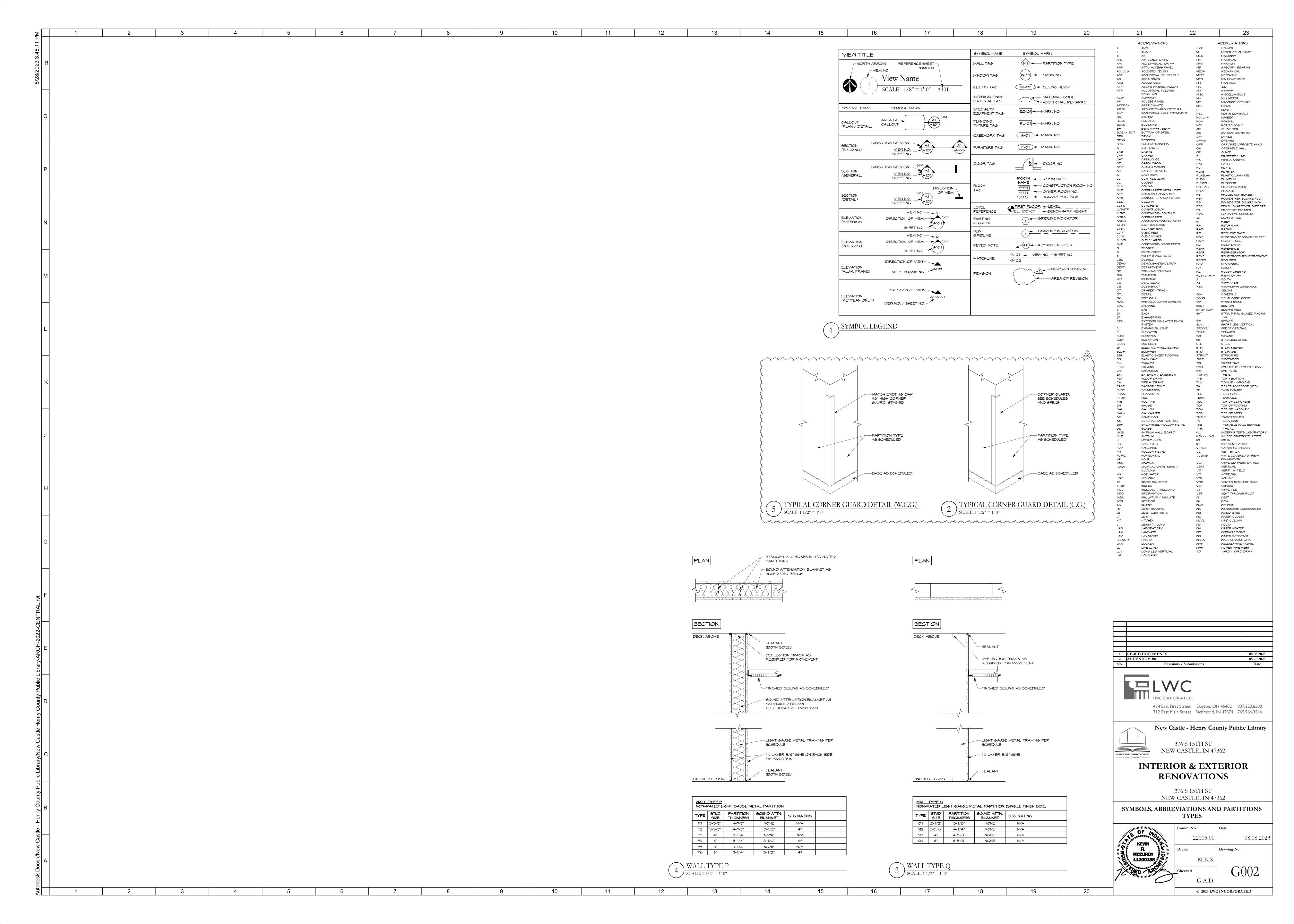
### C. Retreatment:

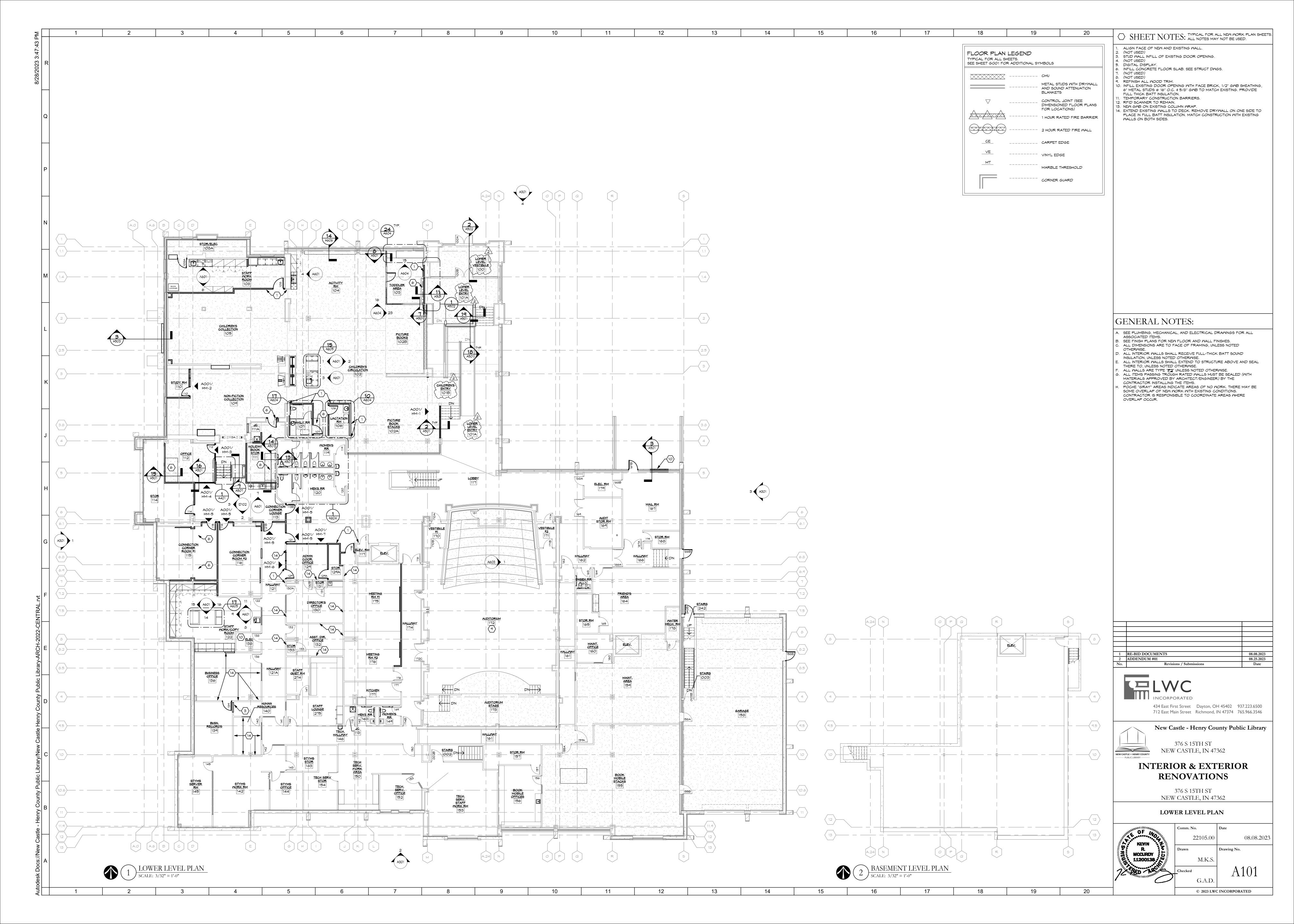
- 1. Retreat disturbed soil which has already been treated.
- 2. If inspection or testing identifies the presence of termites, retreat soil and retest.
- 3. Use same toxicant as for original treatment.

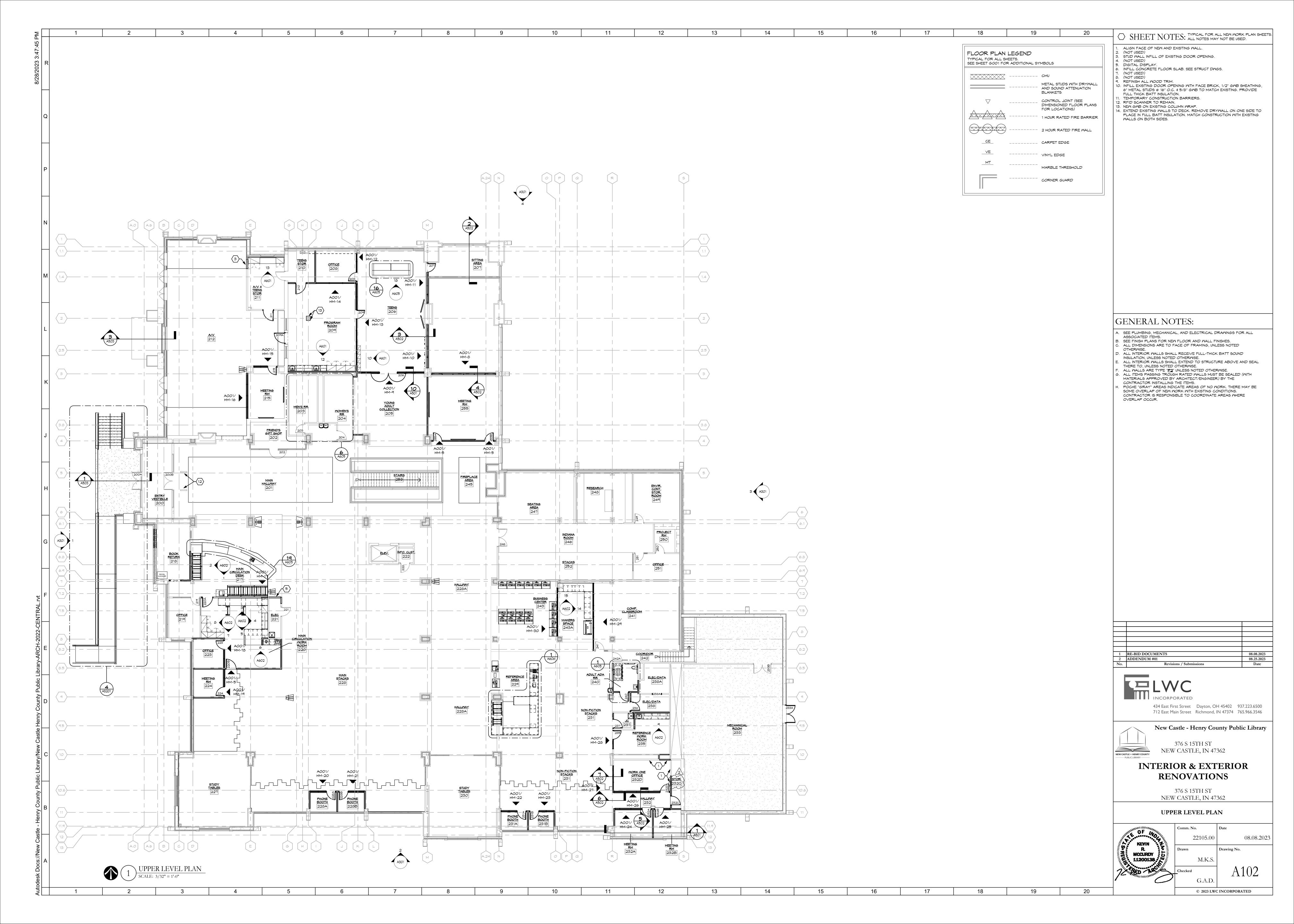
#### D. Protection:

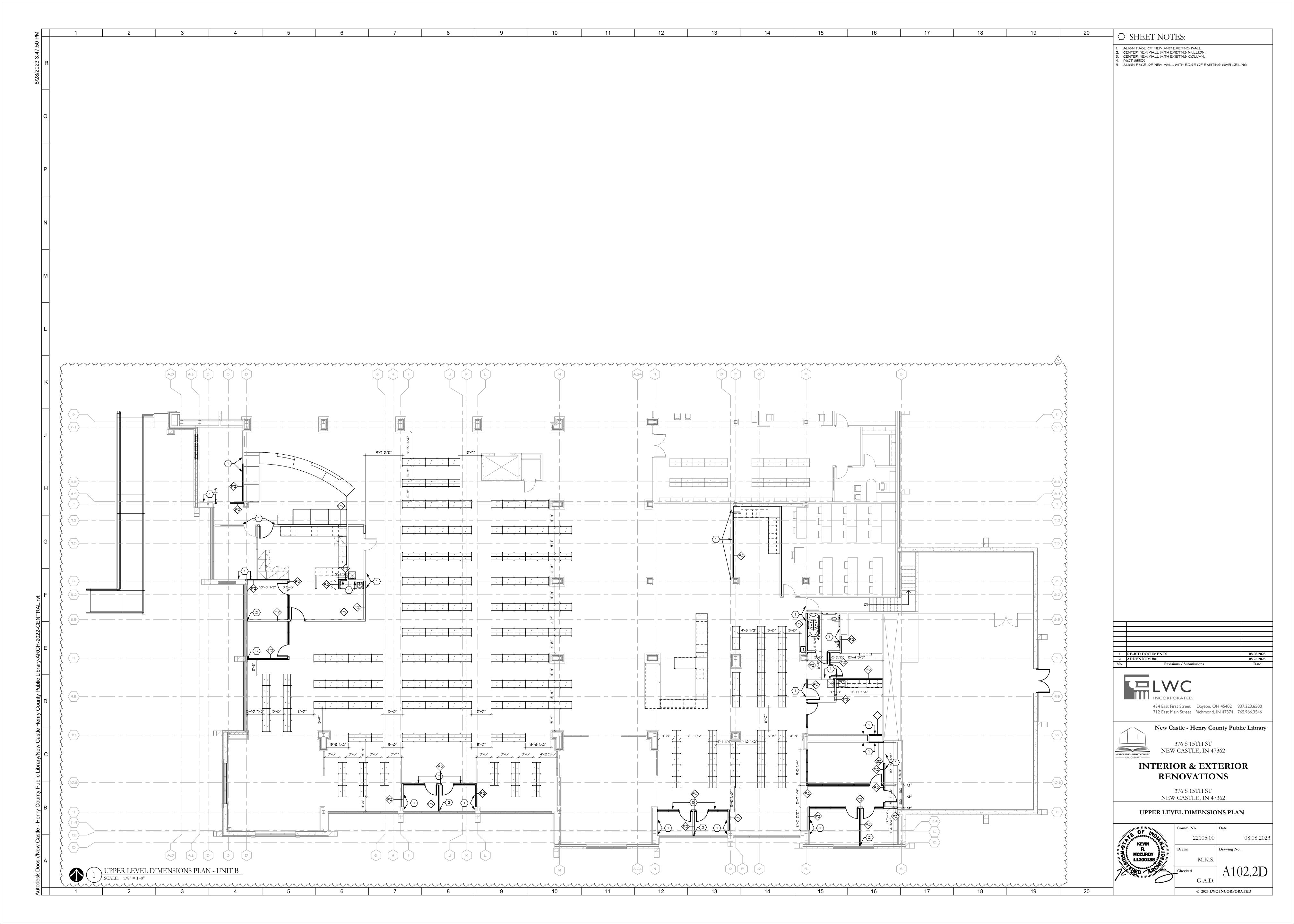
- 1. Protect finished work from disturbance until completely dry.
- 2. Post warning signs in areas of application.
- 3. Protect treated areas against injury or hazard to humans and animals.

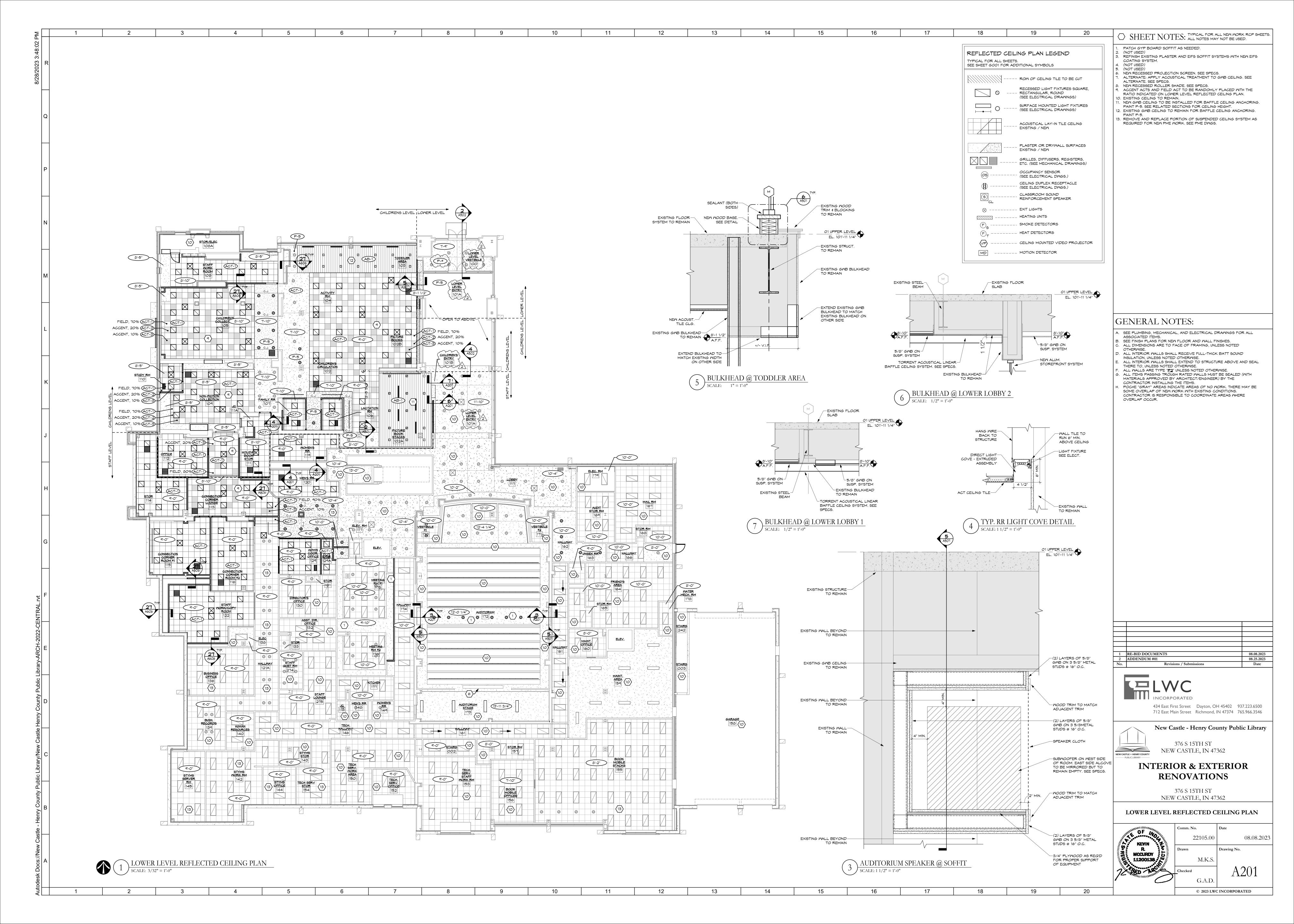
END OF SECTION 31 31 16

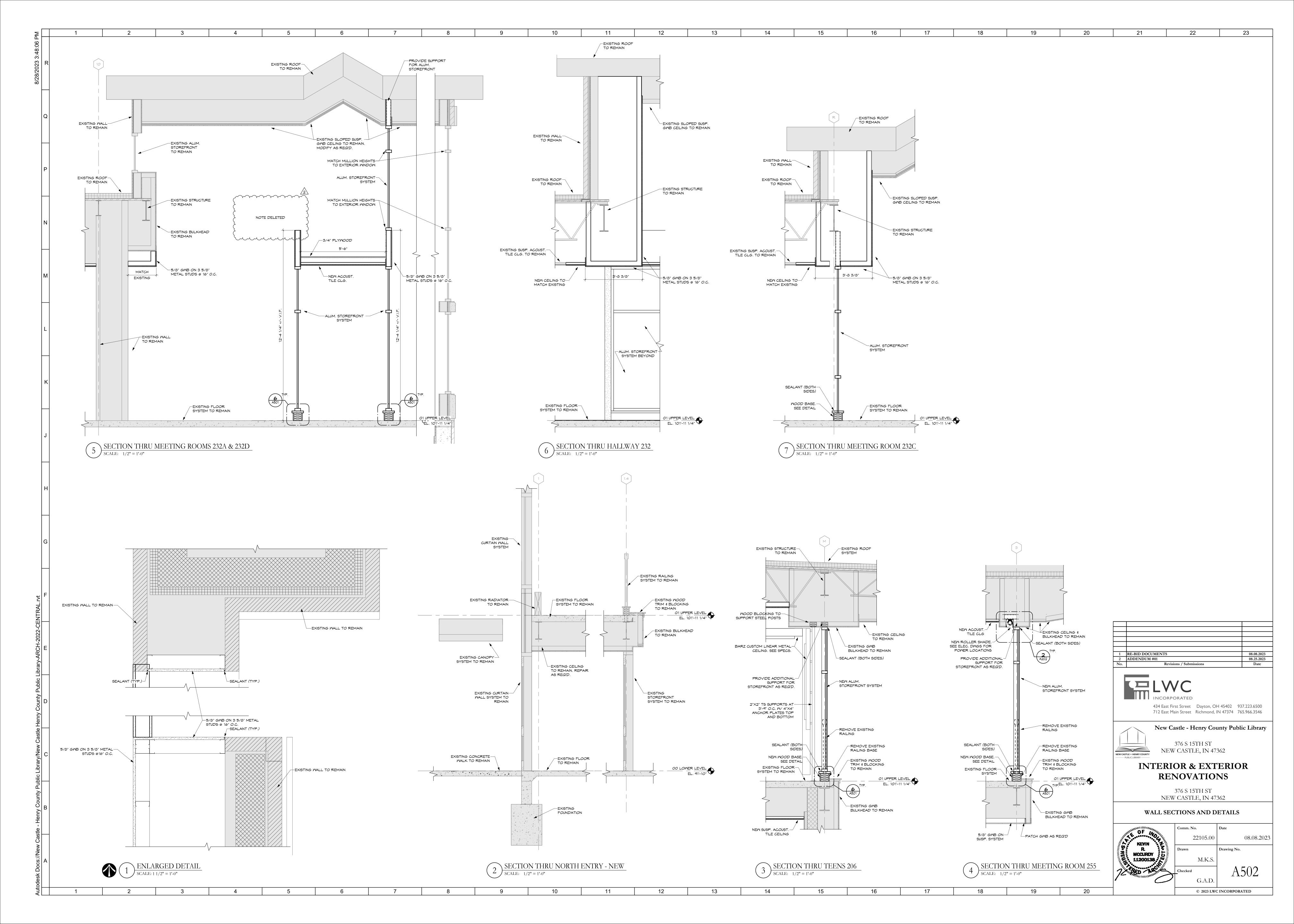


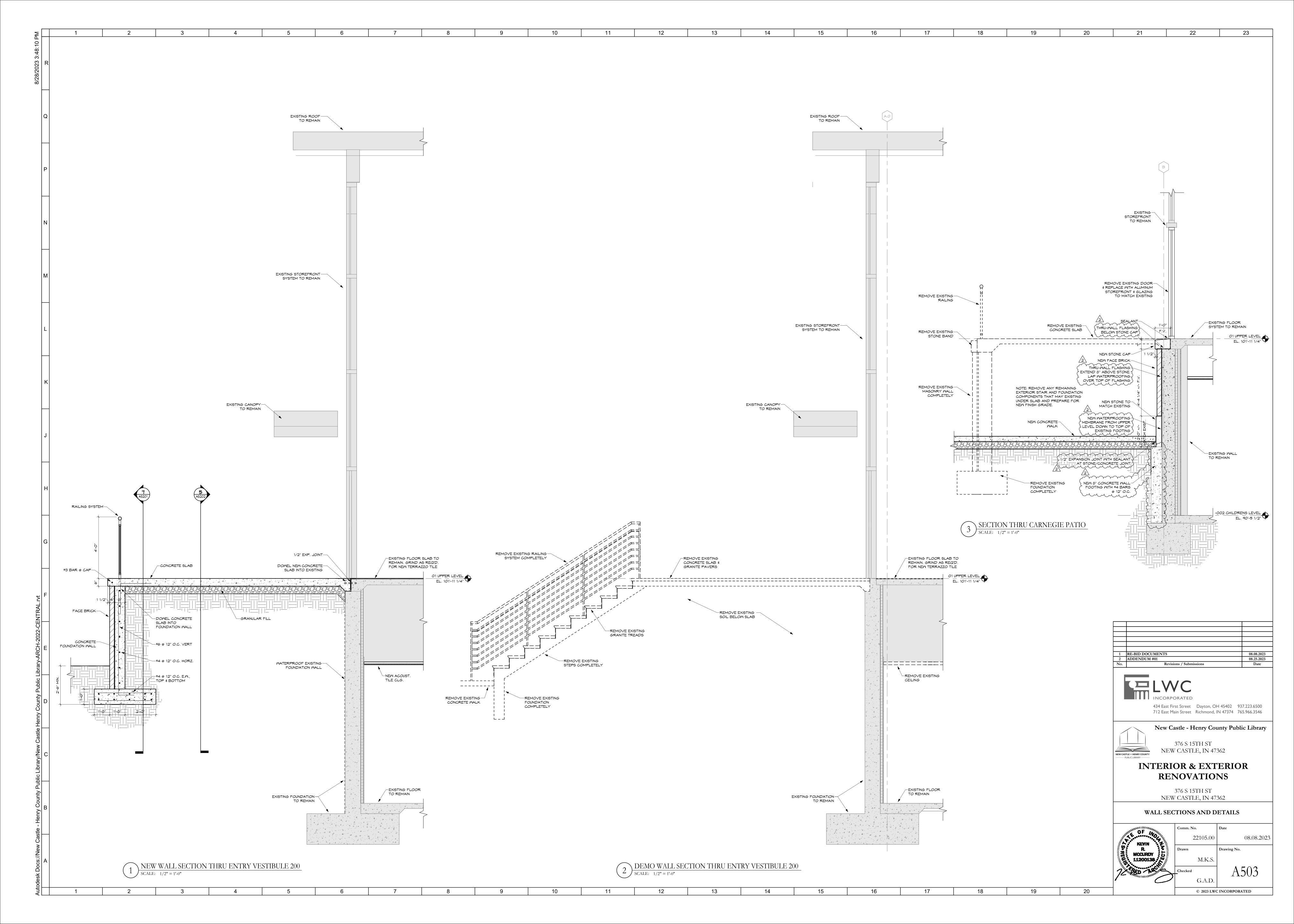






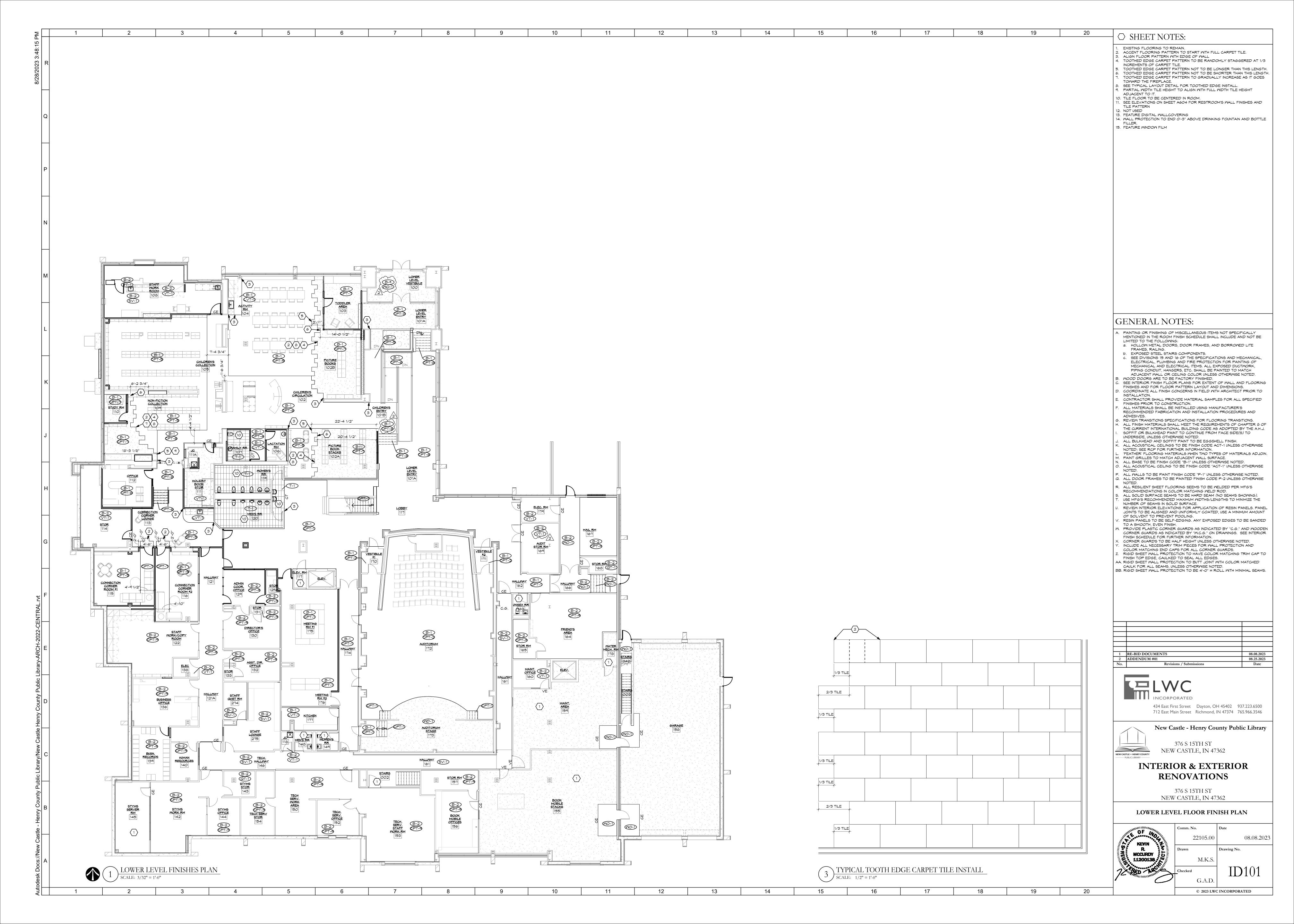


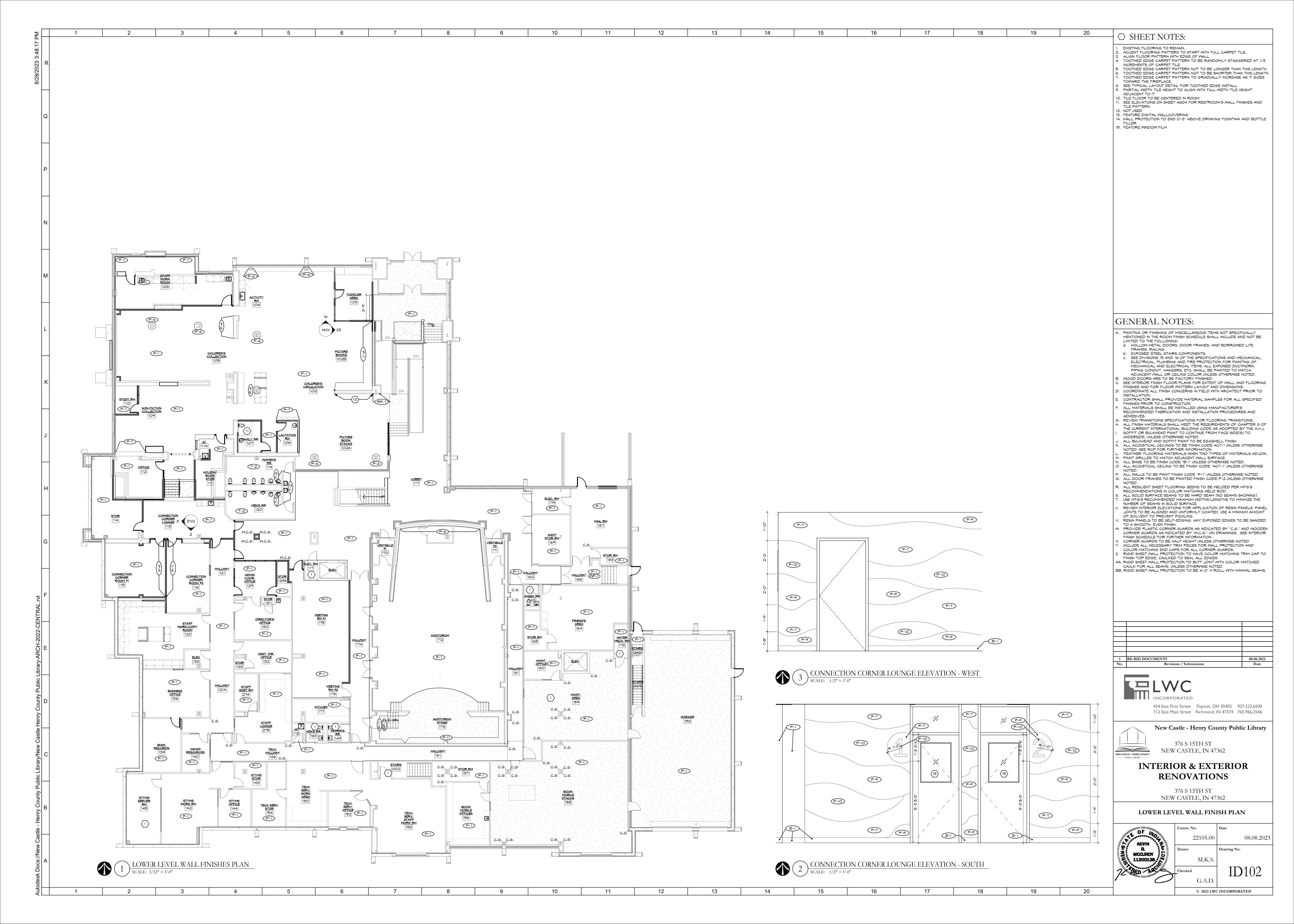


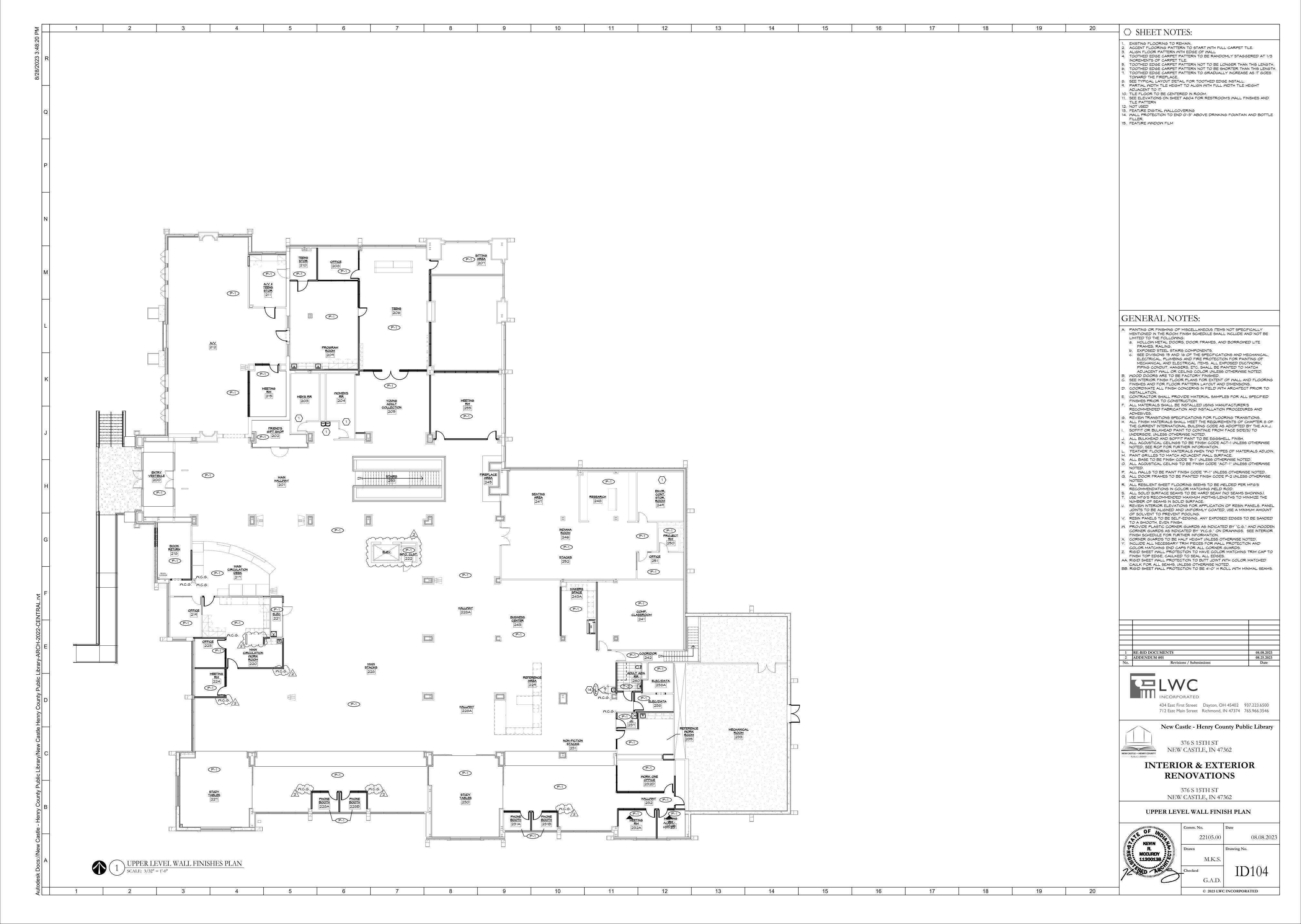


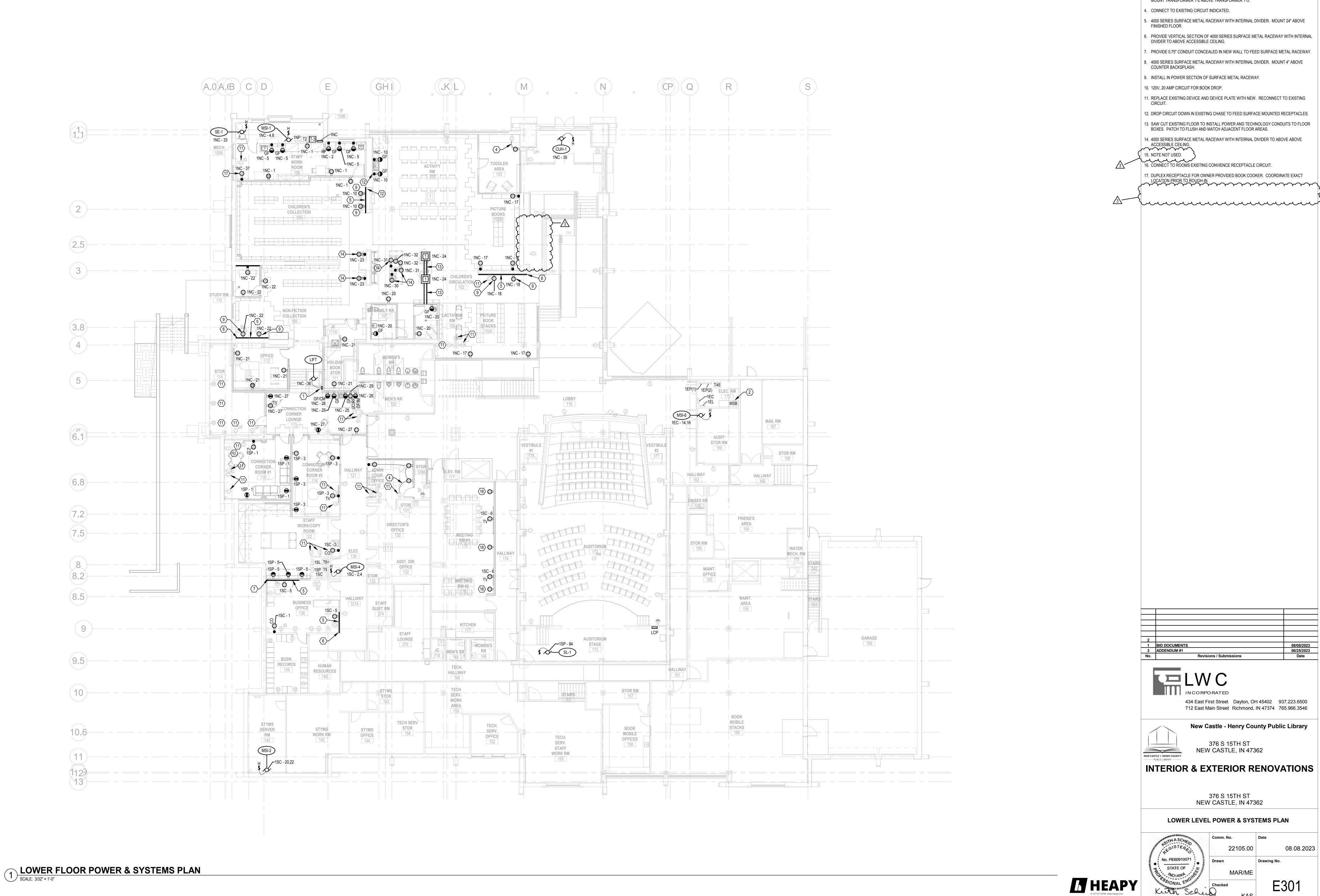
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	101A	STAIRS LOWER LEVEL VESTIBULE LOWER LEVEL ENTRY	EXISTING EXISTING PAINT PAINT PAINT PAINT	EXISTING EXISTING PAINT PAINT PAINT PAINT	EXISTING  WO-1  CPT-5,CPT-6, CPT-8	EXISTING EX	XISTING CEILING NOTE 1 CEILING NOTE 1	ACT-1 ACT-2 ACT-3	ACOUSTICAL CEILING TILE ACOUSTICAL CEILING TILE ACOUSTICAL CEILING TILE	USG USG USG	88136 MARS HIGH-NRC ACOUSTICAL PANEL 88136 MARS HIGH-NRC ACOUSTICAL PANEL 88136 MARS HIGH-NRC ACOUSTICAL PANEL	TBD TBD TBD	FIELD CEILING TILE  CHILDREN'S GREEN ACCENT CEILING TILE  CHILDREN'S BLUE ACCENT CEILING TILE
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	109 NO	STAFF WORK ROOM  ION-FICTION COLLECTION  STUDY RM  HOLIDAY BOOK STOR	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	SV-1 SEE SHEET ID101 CPT-7 VT-1	B-1 C	CEILING NOTE 1 CEILING NOTE 1 CEILING NOTE 1 CEILING NOTE 1	)	CARPET CARPET GROUT	SHAM CONTRACT TARKETT SHAM CONTRACT MAPI	9"x36" WEATHERED COLOR TILE  18"x36" GOO57 KNOT STITCH  KERAPOXY	883226 NATURE QUIET 60806 SAND DUNE  02 PEWTER	CHILDREN'S ACCENT CARPET  STAFF AREAS  CHILDREN'S ACCENT CARPET  TYPICAL FLOOR GROUT
	111A 112	JC OFFICE NNECTION CORNER LOUNGE	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	VT-1 CPT-6 CPT-5	B-2 C B-1 C BASE C	CEILING NOTE 1 CEILING NOTE 1 CEILING NOTE 1	G-2 G-3 LVT-1	GROUT GROUT LUXURY VINYL TILE	MAPI MAPI SHAM CONTRACT	KERACOLOR KERACOLOR 9"X48" / 0926V INLET	O1 ALABASTER 49 LIGHT ALMOND 26720 THATCH	TYPICAL WALL GROUT FAMILY RESTROOM WALL GROUT BRICK INSTALLATION METHOD
		STOR  NECTION CORNER ROOM #1  INECTION CORNER ROOM #2  LOBBY	PAINT PAINT PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	VT-1 CPT-5 CPT-5 CPT-1	B-1 C	CEILING NOTE 1 CEILING NOTE 1 CEILING NOTE 1 CEILING NOTE 1	P-1 P-2 P-3 P-4	PAINT PAINT PAINT PAINT	SHERMIN MILLIAMS SHERMIN MILLIAMS SHERMIN MILLIAMS SHERMIN MILLIAMS	EG-SHEL SEMI-GLOSS FLAT EG-SHEL	SM9173 SHIITAKE SM0037 MORRIS ROOM GREY MATCH EXISTING CEILING SM0037 MORRIS ROOM GREY	FEILD PAINT  DOOR AND WINDOW FRAME PAINT  FIELD CEILING PAINT  ACCENT PAINT
	118 119 120	JC MOMEN'S RR MEN'S RR	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	VT-1 EXISTING EXISTING	B-2 E) N/A E) N/A E)	XISTING  XISTING  XISTING	P-5 P-6 P-7	PAINT PAINT PAINT	SHERMIN MILLIAMS SHERMIN MILLIAMS SHERMIN MILLIAMS	EG-SHEL EG-SHEL EG-SHEL	SM9038 CUCUZZA VERDE SM6354 ARMAGNAC SM6218 TRADEWIND	ACCENT PAINT ACCENT PAINT ACCENT PAINT
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	129A 130	STOR DIRECTOR'S OFFICE ASST. DIR. OFFICE	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	CPT-9 CPT-9 CPT-9	B-2 C	CEILING NOTE 1 CEILING NOTE 1 CEILING NOTE 1	PL-1 PT-1 RM-1 RP-1	PLASTIC LAMINATE PERFORMANCE TOP RUBBER MAT	MILSONART MILSONART	MOOD PATTERN THINSCAPE INTERLOCKING RUBBER TILES/ MINIMUM THICKNESSOF 2.25" COL	SHAKER CHERRY TS503-LR ITALIAN CARRARA	NEM CASEMORK  OR SELECTION FALL PROECTION IN CHILDREN'S PLAY AREA
	133 136 138 139	STOR BUSINESS OFFICE ELEC BUSN. RECORDS	PAINT PAINT PAINT PAINT EXISTING EXISTING PAINT PAINT	PAINT PAINT PAINT PAINT EXISTING EXISTING PAINT PAINT	CPT-9 CPT-9 EXISTING CPT-9	B-2 C EXISTING EX	CEILING NOTE 1 CEILING NOTE 1 EXISTING NOTE 1	RP-1	RESIN PANEL SEALED CONCRETE SOLID SURFACE SOLID SURFACE	3FORM TBD MILSONART CORIAN	VARIA 3/8" THICKNESS TBD	TBD TBD 9200CS MYSTIQUE WEATHERED AGGREGATE	CHILDREN'S AREA ENTRANCE SIGN  CHILDRENS BOOKSHELF TOPPER  RESTROOM COUNTERTOPS
	140 142 143	HUMAN RESOURCES STYMS WORK RM STYMS STOR	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT PAINT PAINT PAINT PAINT PAINT	CPT-9 CPT-9 CPT-9	B-2 C B-2 C B-2 C	CEILING NOTE 1 CEILING NOTE 1 CEILING NOTE 1	) 55-3 ) 5T-1 5V-1 ) T-1	SOLID SURFACE STAIN SHEET VINYL	CORIAN TBD SHAW CONTRACT	TBD 4219V INNATE SHEET	NEUTRAL AGGREGATE TBD 95715 UMBER	MINDOM STOOL AND CIRCULATION DESK COUNTERTOPS
	144 145 146	STYMS OFFICE STYMS SERVER RM TECH. HALLWAY MEN'S RR	PAINT PAINT EXISTING EXISTING PAINT PAINT PAINT PAINT	PAINT PAINT EXISTING EXISTING PAINT PAINT PAINT PAINT	CPT-9 EXISTING VT-1 EXISTING	EXISTING EXECUTE: EXE	CEILING NOTE 1  EXISTING  EXISTING  EXISTING	T-1 T-2 T-3 T-4	TILE TILE TILE TILE	CROSSVILLE CROSSVILLE PORTOBELLO AMERICA PORTOBELLO AMERICA	12x24 GOTHAM  12x24 STONE FICTION  3"x14" TERRALMA  3/5"x14" TERRALMA	AV321 LAMP POST FTSO3 TRAVERTINE SILVER 200717E NORONHA 200753E JALAPAO LINER	MALL TILE  FLOOR TILE  FAMILY RESTROOM FIELD WALL TILE  FAMILY RESTROOM ACCENT TILE
		MOMEN'S RR TECH SERV. MORK AREA TECH. SERV. OFFICE	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT PAINT PAINT PAINT PAINT PAINT	EXISTING  CPT-9  CPT-9	N/A EX B-2 EX	XISTING  XISTING  XISTING  BTING, P-2	T-5 T-6	TILE TILE TILE	PORTOBELLO AMERICA	3/5"X14" TERRALMA  4X RANDOM STRIGHT STACKED MOSAIC CASCADING WATERS  3"X14" TERRALMA	200752E NORONHA LINER CM45 CERULEAN SMELL 200714E JALAPAO	FAMILY RESTROOM ACCENT TILE  ACCENT TILE  SPIRAL STAIRCASE WALL ACCENT TILE
		TECH SERV STOR  BOOK MOBILE STACKS  BOOK MOBILE OFFICES	PAINT PAINT EXISTING EXISTING PAINT PAINT PAINT PAINT	PAINT PAINT EXISTING EXISTING PAINT PAINT	CPT-9 EXISTING CPT-9	EXISTING EXISTING EXISTENCE EXISTENC	CEILING EXISTING CEILING NOTE 1	T-8 TER-1 TER-2	TILE TERRAZZO TERRAZZO	PORTOBELLO AMERICA TBD TBD	3"x14" TERRALMA  TBD  TBD	200715E SERIDO TBD TBD	SPIRAL STAIRCASE WALL ACCENT TILE FIELD TERRAZZO ACCENT TERRAZZO
	157 158 159 160	STOR RM  GARAGE  MAINT. AREA  MAINT. OFFICE	EXISTING EXISTING EXISTING EXISTING PAINT PAINT	PAINT PAINT EXISTING EXISTING EXISTING EXISTING PAINT PAINT	CPT-9  WO-1, EXISTING  EXISTING  VT-1	B-2, EXISTING EXECUTION EXISTING EXISTI	CEILING NOTE 1  EXISTING  EXISTING  CEILING NOTE 1	MD-2 MD-3	VINYL TILE EXISTING WOOD FLOOR LINEAR METAL CEILING JUSTOM LINEAR METAL CEILING	TARKETT REFINISH EXISTING USG USG	VCT II   CEILING PLUS  PLUS BARZ	530 WINTER STORM S38 NATURAL WALNUT TBD	AUDITORIUM STAGE FLOORING  MAIN CIRC. DESK & BUSINESS CENTER CLG.  TEEN AREA CEILING
	161 162 163	HALLMAY HALLMAY UNISEX RR	PAINT PAINT N/A PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	SV-1 CPT-1 EXISTING	B-2 E) B-1 N/A E)	P-2 XISTING	MO-1 MP-1 MP-2	WALK OFF MAT WALL PROTECTION WALL PROTECTION	MOHAWK INPRO INPRO	GT311 STEP UP II  040" RIGID SHEET, STANDARD SOLID  040" RIGID SHEET, STANDARD SOLID	983 IRON ORE 0258 CHINO 0152 BLACK	TO START ABOVE RUBBER BASE  TO START ABOVE BASE
	164 165 166 167	FRIEND'S AREA STOR RM HALLWAY MAIL RM	PAINT PAINT P-1, WP-1 P-1, WP-1 PAINT PAINT	PAINT         PAINT           P-1, MP-1         P-1, MP-1           PAINT         PAINT	CPT-9 CPT-9 WO-1 WO-1, CPT-9	B-2 C B-2 EXIS B-2 EX	CEILING NOTE 1 CEILIN	<u>^2</u>					GENERAL NOTES:
	168 169 170	STOR RM AUDIT STOR RM VESTIBULE #1 VESTIBULE #2	PAINT PAINT PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	QT-1 QT-1 CPT-2 CPT-2	B-2 EX	XISTING XISTING XISTING XISTING						A. PAINTING OR FINISHING OF MISCELLANEOUS ITEMS NOT SPECIFICAL MENTIONED IN THE ROOM FINISH SCHEDULE SHALL INCLUDE AND N
	172 173 174	AUDITORIUM AUDITORIUM STAGE HALLWAY	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	CPT-2 CPT-2 REFINISHED CPT-1	B-1 EXIS	STING, P-2  XISTING  XISTING						LIMITED TO THE FOLLOWING:  a. HOLLOW METAL DOORS, DOOR FRAMES, AND BORROWED LITERAMES, RAILING.  b. EXPOSED STEEL STAIRS COMPONENTS.
	175 176 177	MEETING RM #1 MEETING RM #2 KITCHEN	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT PAINT PAINT PAINT PAINT PAINT	CPT-1 CPT-1 LVT-1	B-1 AC	CT-1, P-2 CT-1, P-2 CEILING NOTE 1	2					C. SEE DIVISIONS 15 AND 16 OF THE SPECIFICATIONS AND MECHA ELECTRICAL, PLUMBING AND FIRE PROTECTION FOR PAINTING MECHANICAL AND ELECTRICAL ITEMS. ALL EXPOSED DUCTWO PIPING CONDUIT, HANGERS, ETC. SHALL BE PAINTED TO MATC
	178 179 242 274	MATER MECH. RM ELEC. RM STAIRS STAFF QUIET RM	EXISTING EXISTING PAINT PAINT PAINT PAINT PAINT PAINT	EXISTING EXISTING PAINT PAINT PAINT PAINT PAINT PAINT	EXISTING  VT-1  WO-1  5V-1	B-2 E) B-2 E)	XISTING  XISTING  XISTING  XISTING  CEILING  NOTE 1						ADJACENT WALL OR CEILING COLOR UNLESS OTHERWISE NOT B. WOOD DOORS ARE TO BE FACTORY FINISHED.  C. SEE INTERIOR FINISH FLOOR PLANS FOR EXTENT OF WALL AND FINISHES AND FOR FLOOR PATTERN LAYOUT AND DIMENSIONS.
	275 O1 UPPER LEVEL	STAFF LOUNGE	PAINT PAINT	PAINT PAINT	SV-1		CEILING NOTE 1	2					<ul> <li>D. COORDINATE ALL FINISH CONCERNS IN FIELD WITH ARCHITECT PR INSTALLATION.</li> <li>E. CONTRACTOR SHALL PROVIDE MATERIAL SAMPLES FOR ALL SPEFINISHES PRIOR TO CONSTRUCTION.</li> </ul>
	201	ENTRY VESTIBULE  MAIN HALLWAY  FRIEND'S GIFT SHOP  MEN'S RR	PAINT PAINT PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	WO-1, TER-1 CPT-1, CPT-4 LVT-1 EXISTING	B-1 E)	P-2 P-2 EXISTING EXISTING						<ul> <li>F. ALL MATERIALS SHALL BE INSTALLED USING MANUFACTURER'S RECOMMENDED FABRICATION AND INSTALLATION PROCEDURES A ADHESIVES.</li> <li>G. REVIEW TRANSITIONS SPECIFICATIONS FOR FLOORING TRANSITION</li> </ul>
	204 205 YOI 206	MOMEN'S RR OUNG ADULT COLLECTION TEENS	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	EXISTING  CPT-1  CPT-3	N/A EX B-1 AC	XISTING CT-1, P-2 CT-1, P-2						<ul> <li>H. ALL FINISH MATERIALS SHALL MEET THE REQUIREMENTS OF CHAPT THE CURRENT INTERNATIONAL BUILDING CODE AS ADOPTED BY THE I. SOFFIT OR BULKHEAD PAINT TO CONTINUE FROM FACE SIDE(S) TO UNDERSIDE, UNLESS OTHERWISE NOTED.</li> </ul>
	207 208 209 210	SITTING AREA OFFICE PROGRAM ROOM TEENS STOR	PAINT PAINT PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	CPT-8	B-1 AC	P-2 CT-1, P-2 CT-1, P-2 ACT-1						<ul> <li>J. ALL BULKHEAD AND SOFFIT PAINT TO BE EGGSHELL FINISH.</li> <li>K. ALL ACOUSTICAL CEILINGS TO BE FINISH CODE ACT-1 UNLESS OTHE NOTED; SEE RCP FOR FURTHER INFORMATION.</li> <li>L. 'FEATHER' FLOORING MATERIALS WHEN TWO TYPES OF MATERIALS</li> </ul>
	212 215	A/V & TEENS STOR A/V MEETING RM	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	5V-1 CPT-1, CPT-4 LVT-1	B-1 AC	XISTING P-2 CT-1, P-2 P-2. CEILING NOTE 1	•					M. PAINT GRILLES TO MATCH ADJACENT WALL SURFACE.  N. ALL BASE TO BE FINISH CODE "B-1" UNLESS OTHERWISE NOTED.  O. ALL ACOUSTICAL CEILING TO BE FINISH CODE "ACT-1" UNLESS OTH NOTED.
	218 219	MAIN CIRCULATION DESK  BOOK RETURN  OFFICE  N CIRCULATION WORK ROOM	PAINT PAINT PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	CPT-1 5V-1 CPT-1 CPT-1	B-2 E	P-2, CEILING NOTE 1 ACT-1 XISTING ACT-1	2					P. ALL WALLS TO BE PAINT FINISH CODE "P-1" UNLESS OTHERWISE NO Q. ALL DOOR FRAMES TO BE PAINTED FINISH CODE P-2 UNLESS OTHER NOTED. R. ALL RESILIENT SHEET FLOORING SEEMS TO BE WELDED PER MFG
	221 222 223	ELEC INFO. CLST. OFFICE	PAINT PAINT EXISTING EXISTING PAINT PAINT	PAINT         PAINT           EXISTING         EXISTING           PAINT         PAINT	VT-1  EXISTING  CPT-1	B-2 EXISTING EX	ACT-1 EXISTING ACT-1						RECOMMENDATIONS IN COLOR MATCHING WELD ROD.  5. ALL SOLID SURFACE SEAMS TO BE HARD SEAM (NO SEAMS SHOW  T. USE MFG'S RECOMMENDED MAXIMUM WIDTHS/LENGTHS TO MINIMIZ  NUMBER OF SEAMS IN SOLID SURFACE.
	224 227 228 228A	MEETING RM STUDY TABLES MAIN STACKS	PAINT PAINT PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	CPT-4 LVT-1 CPT-2 CPT-4	B-1 EXIS	ACT-1 P-2 5TING, P-2 P-2						<ul> <li>V. REVIEW INTERIOR ELEVATIONS FOR APPLICATION OF RESIN PANE JOINTS TO BE ALIGNED AND UNIFORMLY COATED, USE A MINIMUM OF SOLVENT TO PREVENT POOLING.</li> <li>V. RESIN PANELS TO BE SELF-EDGING. ANY EXPOSED EDGES TO BE</li> </ul>
	228A 228B 229	PHONE BOOTH  HALLWAY  PHONE BOOTH  REFERENCE AREA	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	CPT-1 CPT-4 CPT-2	B-1 EXIS	P-2 DTING, P-2 P-2 DTING, P-2						TO A SMOOTH, EVEN FINISH.  W. PROVIDE PLASTIC CORNER GUARDS AS INDICATED BY "C.G." AND CORNER GUARDS AS INDICATED BY "W.C.G." ON DRAWINGS. SEE FINISH SCHEDULE FOR FURTHER INFORMATION.
	230 231 231A 231B	STUDY TABLES  NON-FICTION STACKS  PHONE BOOTH	PAINT PAINT PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	LVT-1 CPT-2 CPT-4 CPT-4	B-1 EXIS	P-2 5TING, P-2 P-2 P-2						<ul> <li>X. CORNER GUARDS TO BE HALF HEIGHT UNLESS OTHERWISE NOTED</li> <li>Y. INCLUDE ALL NECESSARY TRIM PIECES FOR WALL PROTECTION A</li> <li>COLOR MATCHING END CAPS FOR ALL CORNER GUARDS.</li> <li>Z. RIGID SHEET WALL PROTECTION TO HAVE COLOR MATCHING TRI</li> </ul>
	232 232A 232B	PHONE BOOTH  HALLWAY  MEETING RM  MEETING RM	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT PAINT PAINT PAINT PAINT PAINT	CPT-4 CPT-4 CPT-4	B-1 B-1	P-2 P-2 P-2 P-2						FINISH TOP EDGE, CAULKED TO SEAL ALL EDGES.  AA. RIGID SHEET WALL PROTECTION TO BUTT JOINT WITH COLOR MA  CAULK FOR ALL SEAMS, UNLESS OTHERWISE NOTED.  BB. RIGID SHEET WALL PROTECTION TO BE 4'-0" H ROLL WITH MINIM,
	233	STOR  WORK ONE OFFICE  MECHANICAL ROOM  REFERENCE WORK ROOM	PAINT PAINT EXISTING EXISTING PAINT PAINT	PAINT PAINT EXISTING EXISTING PAINT PAINT	CPT-1 EXISTING	EXISTING EX	P-2 EXISTING						
	237 238 238A	JC ELEC/DATA ELEC/DATA	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	VT-1 VT-1 VT-1	B-2 E) B-2 E)	XISTING ACT-1 XISTING						1 RE-BID DOCUMENTS
	240 241 243 243	ADULT ADA RR COMP. CLASSROOM BUSINESS CENTER MAKERS SPACE	2T-X T-2 PAINT PAINT PAINT PAINT PAINT PAINT	T-2 T-2  PAINT PAINT  PAINT PAINT  PAINT PAINT	T-1 CPT-1 CPT-2 CPT-2	B-1 E)	CT-1, P-2  XISTING  CEILING NOTE 1  CEILING NOTE 1	^					1 RE-BID DOCUMENTS 2 ADDENDUM #01 No. Revisions / Submissions
	245 246 247	FIREPLACE AREA INDIANA ROOM SEATING AREA	PAINT PAINT PAINT PAINT PAINT PAINT	PAINT         PAINT           PAINT         PAINT           PAINT         PAINT	CPT-1, CPT-4 CPT-1, CPT-2 CPT-1	B-1 EX B-1 EX	P-2 :XISTING :XISTING	<u>/2\</u>					EELWC
	248 249 EN 250	RESEARCH NVIR. CONT. STOR. ROOM PROJECT RM OFFICE	PAINT PAINT EXISTING EXISTING PAINT PAINT PAINT PAINT	PAINT         PAINT           EXISTING         EXISTING           PAINT         PAINT           PAINT         PAINT	CPT-1 EXISTING CPT-1 CPT-1	EXISTING EXIST EX	XISTING XISTING XISTING XISTING						INCORPORATED
	252 253 255	STACKS STAIRS MEETING RM	PAINT PAINT N/A N/A PAINT PAINT	PAINT         PAINT           N/A         N/A           PAINT         PAINT	CPT-1, CPT-2  CPT-1  CPT-1  CPT-2	B-1 EX	XISTING  N/A  CT-1, P-2						434 East First Street Dayton, OH 45402 937.22 712 East Main Street Richmond, IN 47374 765.90
	( REMARKS NOTES:	D CEILING PLANS FOR CEILIN	NG TYPES AND FINISHES.										New Castle - Henry County Public 1
													376 S 15TH ST NEW CASTLE, IN 47362
													INTERIOR & EXTERIOR
													RENOVATIONS
													376 S 15TH ST NEW CASTLE, IN 47362
CARPET EDGE SIMILAR		TILE EDGE SIN	₹ /	-TILE EDGE SIMILAR TO SCHLUTER									INTERIOR DESIGN SCHEDULES & DETAI
TO IOHNSITE # EG TO IOHNSITE # CTA CARPET I	EDGE SIMILAR ISITE # RRS	SYSTEMS - SC	CHIENE	SYSTEMS - RENO-U									Comm. No. Date
EXISTING CARPET SHEET VINYL CARPET OR LVT CARPET OR TERRAZZO OR NEW TERRAZZO (CE)	R LVT	CERAMIC TILE	-TERRAZZO	CERAMIC TILE									22105.00   08
NEW TERRAZZO (CF)	(CT)	<u>'</u>	\11	/									MCCURDY ( M.K.S. )
FLOOR EDGE DETAILS													Checked IDO

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○ SHEET NOTES:

1. LOCATE ABOVE ACCESSIBLE CEILING.

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2. PROVIDE 175 AMP FUSES IN EXISTING CHILLER FUSIBLE SWITCHES.

3. EXTEND EXISTING FEEDERS TO NEW TRANSFORMERS. REFER TO SINGKE-LINE DIAGRAM. MOUNT TRANSFORMER T-2 ABOVE TRANSFORMER T-3.

12. DROP CIRCUIT DOWN IN EXISTING CHASE TO FEED SURFACE MOUNTED RECEPTACLES.

13. SAW CUT EXISTING FLOOR TO INSTALL POWER AND TECHNOLOGY CONDUITS TO FLOOR

08/08/2023 08/25/2023 Date

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