



CITY OF IDAHO SPRINGS
1711 Miner Street
P.O. Box 907
Idaho Springs, CO 80452-0907
Telephone (303) 567-4421
p.m.
FAX (303) 567-4955

NOTICE AND AGENDA
Regular Meeting
Idaho Springs Planning Commission
1711 Miner Street, City Hall
Wednesday, April 12, 2023 – 6:00

PLANNING COMMISSION
Regular Meeting
Wednesday April 12th, 2023
6:00 PM

- ❖ **Call to Order**
- ❖ **Roll Call**
- ❖ **Nominations for Chair and Vice Chair**
- ❖ **Approval of Minutes from March 1st, 2023.**
- ❖ **Conflict of Interest**
- ❖ **Public Comment Period**
- ❖ **New Business**
 - a) **Public Hearing: Final Development Plan Application for Construction of A Marijuana Cultivation Facility at 2820 Colorado Blvd. by Igadi Ltd.**
- ❖ **Adjournment**

IN-PERSON AND REMOTE MEETING PUBLIC ATTENDANCE AND PARTICIPATION
INSTRUCTIONS

The Public is able to view and hear this meeting remotely at the following address on the City's website:
<https://www.colorado.gov/pacific/idahospings/city-council-live>

To provide public comment remotely please use the link below
<https://us02web.zoom.us/j/89171912558?pwd=cTNDRO8rL0NhQzdVcG4wZlo5clY5dz09>

For in-person Unscheduled Public Comment, please sign-in at the entrance to the Council Chambers.

Each individual that is providing public comment is limited to three (3) minutes.



**PLANNING COMMISSION
MINUTES
March 01, 2023**

Prior to the roll call, Deputy City Clerk Wonder Martell swore in Commissioner Chuck Howard for an additional 4-year term on Planning Commission.

ROLL CALL

Chairman Cindy Olson called the meeting to order at 6:00 p.m. Commissioners present were Cindy Olson, Don Reimer, Ursula Cruzalegui, Lisa Manifold, and Chuck Howard. Commissioner Kent Slaymaker was absent. Staff present are Assistant City Administrator Jon Cain, Deputy City Clerk Wonder Martell, and assistant city attorney Nick Klein.

APPROVAL OF MINUTES

Commissioner Lisa Manifold moved to approve the minutes from December 07, 2022. Commissioner Don Reimer seconded. Chair Olson Deputy City Clerk Wonder Martell if she would fix a few typos in the minutes and attorney Nick Klein also found a few typos in the minutes that he requested be fixed as well. Deputy City Clerk Wonder Martell advised Chair Olson and Attorney Klein that she would correct the typos found in the December minutes. The motion carried by unanimous voice vote.

PUBLIC COMMENT

Chair Olson asked the audience if there was any public comment. Christopher Hawkins 412 Colorado Blvd came to the podium to make public comment. Mr. Hawkins wanted to tell the commission that the house on the 1500 block of Colorado Blvd, the one that the car drove thru awhile ago, was recently up for demolition. Mr. Hawkins stated that the records for this house state it was built in the 1880's and he thinks this house is older than that. Mr. Hawkins stated that he put together a whole PDF packet and had emailed it to Assistant City Administrator Jon Cain. Mr. Hawkins stated that he had located a picture of that property dated 1869 and that its older than we think that it is. The commission thanked Mr. Hawkins for this information and stated they looked forward to seeing that PDF packet that was sent to Mr. Cain.

NEW BUSINESS

Parking Fee-In-Lieu program

Assistant City Administrator Mr. Cain went over his staff report with the commission and reminded them of the prior discussions and research done on this program. Attorney Mr. Klein stated that in the minutes from the last meeting, that the commission and agreed upon the refund period being 20 years, and he did not notice that when drafting this ordinance so the ordinance states 15 years. Attorney Klein advised the commission that they could amend the ordinance to state 20 years, or they could keep it at the 15 years as currently written. Mr. Klein also advised the commission to focus on subsection E. Some municipalities have a application review period or an option to provide parking, or pay the fee-in-lieu and asked the commission to consider the criteria provided. Mr. Klein also wanted to point out the payment plan, and that the 10 years could be adjusted.

Board Discussion:

Chair Olson mentioned that in section G, the optional payment plan section, there is no mention that there is no reimbursement for payment in a payment plan. For example if someone signs up for a 10 year payment plan, then after 5 years leaves, there is no reimbursement for the money that has been paid for the 5 years. Chair Olson stated that it is not clear in the ordinance that there would be no reimbursement for monies already paid into the payment plan. Also if the property changes hands, how does the city get the new owner to pay the payment plan for the remaining time period. Assistant City Administrator Mr. Can stated that a change of use would prompt a property review and a review of the parking requirements so potentially a change to the payment plan as well.

Chair Olson asked staff to put something in the ordinance about there being no reimbursement. Attorney Mr. Klein agreed that was fair, and that language can also been in each individual agreement versus the ordinance. Chair Olson stated that was tricky and would like that language to be very clear in this ordinance. Commissioner Manifold agreed that it should be in the ordinance so it would be in the municipal code. Attorney Klein also mentioned some verbiage on change of use and or cold feet. Chair Olson stated again that there needed to be language in the ordinance that spoke to there being no reimbursement. Attorney Mr. Klein agreed that the language should be in the agreements and in the actual ordinance. Mr. Cain stated that staff was hoping the ordinance would be approved and get it sent to council for final approval. Chair Olson asked staff if in #1 dedicated fund for more than the mobility hub, like for all parking maintenance.

Mr. Cain advised that the funds could be used for other parking improvements. Chair Olson asked about the statement “if funds have not been spent after 15 years, it will be refunded. How does the city prove that those fees have not been spent? Mr. Cain advised it was practically impossible without created multiple GL accounts for each account. Attorney Mr. Klein state that other municipalities have done just that, created multiple line items to trach each accounts spending. Mr. Cain stated it would be difficult to have that many line items. Commissioners Cruzalegui and Manifold asked that the “refund” part be removed. Chair Olson asked staff to delete #1 and enhance section J which speaks on how to get reimbursement. Attorney Klein stated that section H speaks of how the funds can be spent.

Chair Olson stated she was fine with elimination section I. Commissioner Cruzalegui agreed with eliminating I and then maybe putting in something like the remaining funds could be used for community projects. Mr. Cain advised that the funds will go into an enterprise fund and because of TABOR, must be used for specific things. Commissioner Manifold stated the fees should go to the parking fund. Commissioner Cruzalegui stated maybe a different fund without the term parking. Attorney Klein stated that the boundary on the map provided circles the areas that are eligible for this program, not necessarily where the funds would go. Commissioner Cruzalegui reiterated Attorney Klein by stating that the funds could possibly be spent outside of this boundary on the map.

Mr. Cain stated that he would check with TABOR on the boundary line. Commissioner Manifold asked that if there was an additional historic district created in the city, would the fund be able to be spent in that new district? Mr. Cain stated that the ordinance could possibly be expanded. Commissioner Cruzalegui stated that she was a bit confused and would like some clarification on the funds. She understands that the funds must be used for transportation, but can they be used in areas of transportation connectivity, which isn't just cars and parking, but humans, she is worried that the funds will be tied to only the Historic District.

Mr. Cain replied and advised Ms. Cruzalegui that the intent is for a mobility hub which includes sidewalks, maybe a potential roundabout, creating mass transit opportunities in Idaho Springs ever half hour. That connections to the greenway and a potential pedestrian bridge to go over I70. This is about people centered infrastructure to make mobility easier and safer in the city, possibly better manage the traffic coming in from the highway. Commissioner Reimer asked if the public has been notified of this, Mr. Cain replied that there have been over 45 public meetings on this subject and by the end of it, most likely more than 75 public meetings on this project.

Commissioner Manifold made the motion to approve Ordinance No. @, series 2023 and Ordinance amending section 21-125 and adopting a new section 21-127 of the Idaho Springs Municipal code to establish a parking fee-in-lieu program with the conditions of removing section I and enhancing the language in the ordinance that there will be reimbursement of payments and there would be no refunds. Commissioner Cruzalegui seconded followed by an all-in favor roll call vote. Motion carries.

Attorney Klein mentioned that in his review of the municipal code, section 5-3(c) that a board nomination of a Chair and a Vice Chair for Planning Commission needs to happen in March. Attorney Klein also mentioned that it was better to have that action listed on an agenda and recommended to put it on the next agenda for the special meeting schedule for March 15th.

ADJOURMENT

Chair Olson adjourned the meeting at 6:50 pm

Administrative Department

TO: Mayor and City Council
CC: Planning Commission; City Administrator Andrew Marsh
FROM: Jonathan Cain, Assistant City Administrator, Interim
Community Development Planner
DATE: April 12, 2023
SUBJECT: Staff Update
ATTACHMENTS: None



Requests for Action

Motion to approve City Participation in and submittal of associated paperwork for the State of Colorado 2023 Opioid Settlements with Teva, Allergan, Walmart, CVS, and Walgreens.

Community Development

- The Planning Commission will meet on April 12 to consider a final development plan (FDP) application at 2820 Colorado Boulevard for construction of a new marijuana cultivation facility.
- The Planning Commission will likely be meeting in May to consider another FDP Application.
- City staff have been working with several applicants regarding inquiries about various projects around the City.

Utility Billing

- **Xpress Bill Pay:** 55 additional customers have signed up for online billing statements (total, 255). 42 additional customers have signed up for Autopay (total 210, or nearly a quarter of accounts).
- **Utility Billing:**
 - 859 of 948 accounts read properly.
 - 25 Accounts had equipment that did not communicate.
 - 91 accounts did not complete reads.
 - Paul Crain and Patti Tyler have been coordinating to address equipment with no communication or partial communication.
 - Patti Tyler has set up 4 new payment plans with customers, bringing the active total to 8. 2 of these payment plans are in Default.
 - LEAP: The City has submitted all required paperwork and Residents can now participate in the program in Idaho Springs.

City Clerk

- See attached report.

Finance

- The annual audit is nearly completed.
- Kelsey Smith is finalizing filing for 2022.

Municipal Court

- 32 Traffic Tickets written in March.
- No April Court Date.

- May Court Date has 47 cases on the docket. 33 can pay their tickets, 14 must appear.

Updates

- The Mayor and City Staff interviewed two Best and Brightest Candidates on Wednesday March 29. One candidate visited the City on April 5, 2023. We will know in the next few weeks if we are matched for a fellowship.
- The City submitted an Application for \$1,000,000 from the Energy Impact Assistance Fund (EIAF) of the Department of Local Affairs (DOLA) on April 3. This would help to fund the Chicago Creek Water Main Replacement Project. DOLA will contact us later this Spring regarding next steps in the process.
- On March 30 I attended the Countywide Broadband Stakeholder Meeting for Clear Creek County. The County has applied for funding to support “middle mile” broadband installation.
- On April 1, the City of Idaho Springs, the Chamber of Commerce, and Beau Jo’s celebrated the restaurant’s 50th Anniversary with a CODA event between 16th-15th Avenues Downtown. April 1 was declared “Beau Jo’s Day” by Governor Polis, and Mayor Harmon, Congressman Neguse and Commissioner George Marlin read proclamations for the event. Hundreds of people visited Downtown for the Event.
- I continue to attend CDOT Floyd Hill Technical Team Meetings. The project has officially kicked off, with early projects including installation of wildlife crossings in Genesee and near the East end of Floyd Hill and construction of Roundabouts near Homestead Road. Construction of the roundabouts is estimated to be completed in the Fall of 2023. Construction of the Wildlife Crossings is estimated to be completed in the Fall of 2024. More information about these projects can be found at this link:
<https://www.codot.gov/projects/i70floydhill/earlyprojects>

TO: Planning Commission
CC: City Administrator Andrew Marsh
FROM: Jonathan Cain, Assistant City Administrator &
Interim Community Development Planner
DATE: April 12, 2023
SUBJECT: Proposed Final Development Plan for 1620 Colorado Blvd.
ATTACHMENTS: Submission Materials



PROPOSAL

Igadi, Ltd. (the “Applicant”), and Pennell & Associates, (the “Property Owner”) request approval of a Final Development Plan (FDP) at 2820 Colorado Boulevard (the “Property”) for the construction of a Marijuana Cultivation Facility (the “Project”). This building will be located adjacent to the existing Igadi Retail Dispensary at 2818 Colorado Boulevard.

REQUIRED ACTIONS

Chapter 21, “Land Development Regulations” of the City of Idaho Springs Municipal Code (ISMC) requires the Project to go through a Final Development Plan (FDP) process that includes public hearing and decision by both Planning Commission and City Council.

EXISTING CONDITIONS

The Property is situated on the northwest corner of Gilson Street and Colorado Boulevard. The total area of the property is approximately 15,000 square feet, although the northern boundary of the property extends into Clear Creek, and the eastern boundary of the property extends into Gilson Street. The property has approximately 106 feet of frontage on Colorado Boulevard and 133 feet of Frontage on Gilson Avenue.

The Property is somewhat constrained by steep grades along the eastern frontage of the property along Gilson Street and steep slopes and limited access on the north side of the property along Clear Creek.

PROJECT DESCRIPTION

The Applicant and Property Owner have submitted a land use application to build a new 7,215 square foot marijuana cultivation facility on the property.

Prior Use and Approvals.

- **Previous Use.** The Applicant previously operated a Marijuana Cultivation Facility on this property in a 2,750 square foot house and garage until the structures were demolished in 2021.
- **Parking Variance.** At a meeting on February 16, 2023, the Variance Board approved a variance from the off-street parking requirements of Sections 21-125 and 21-127 of the ISMC that required five (5) off-street parking spaces for this project. The Variance Board approved the request because the new marijuana cultivation facility will not be open to the public and the use of public parking spaces in front of this property by staff members will remain consistent with the use associated with the previous cultivation facility.

- **Community Meeting.** The FDP process requires the Applicant to hold a Community Meeting before submitting an FDP application. This meeting is intended to solicit and document input on the proposed project and was held on February 16, 2023. Notice of the meeting was mailed to residents living within 300 feet of the property. It was also advertised in the Clear Creek Courant and in the official City Posting Places. No Residents or Community Stakeholders attended.

Existing Use and Zoning.

The property is zoned Commercial 2 (C-2) and is in the East End Overlay District. Its current classified use is industrial, "Light Manufacturing". C-2 Zoning allows Marijuana Businesses to operate.

Surrounding Use and Zoning.

The property is surrounded by C-2 Zoning, mostly located in the East End Overlay District. There is a residential neighborhood directly across Clear Creek to the North along Riverside Drive that is zoned R-2.

REVIEW PROCESS

The Land Development Regulations dictate the following process for an FDP application.

1. Community Meeting Prior to Application
2. Application and Review by City Staff, City Consultants, and other Agencies.
3. Planning Commission Hearing
4. City Council Hearing

Effect of Approval.

FDP's run with the described property. The City Clerk maintains files containing all documents relevant to the application and approval. Approval of the FDP constitutes authorization to construct improvements upon and use of the property subject to the approved plan. The Applicant would next pursue building permits through the City Building Department for construction.

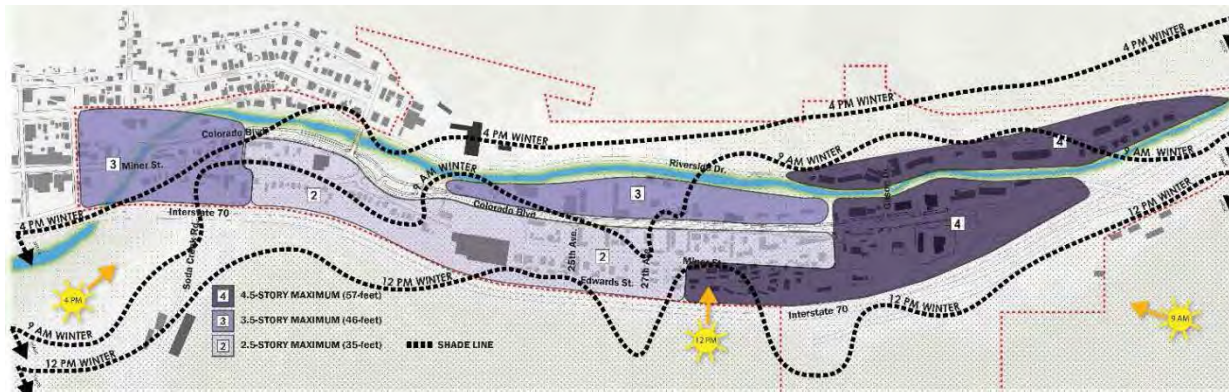
REVIEW CRITERIA

The Land Development Regulations (LDR) require approval of a Final Development Plan (FDP) for all structures. For an FDP subject to public hearings, LDR section 21-206 includes the following criterion.

Final development plans shall conform to all use and development standards of the ISMC as well as the Idaho Springs Standards and Specifications for Design and Construction and any underlying Planned Development.

Chapter 21 Zoning Standards and Chapter 26 East End Overlay District Standards						
Zoning District:	Chapter 21 C-2			East End Overlay District		
Proposed Use:	Marijuana Cultivation Facility					
Building Setbacks:	Front 10'	Rear 10'	Side 5'	Front 6-10'	Rear 10'	Side 5'
Building Height:	35'			57'		
Unobstructed Open Space:	15 Percent					
Lot Size Required:	(-)					
Minimum Width at Front of Setback:	(-)					
Minimum Number of Parking Spaces:	5*					

** The Applicant received a variance from Parking Requirements listed in Section 21-125 and 21-127 of the Municipal Code.*



****Maximum Allowable Building Heights Map in East End Overlay District***

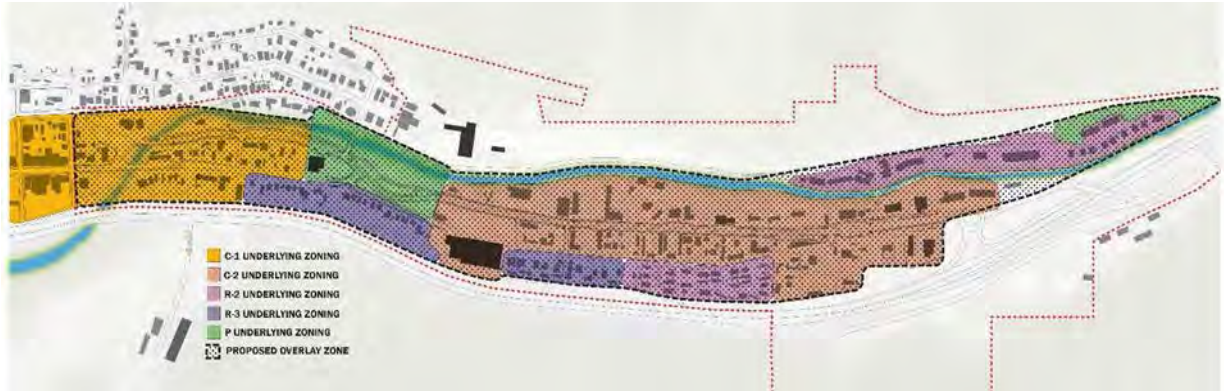
Analysis: The proposed building is approximately 23.5 feet tall at the East End and has a glulam ridge at the west Entrance that is approximately 28.5 feet tall. It appears that the building meets the setback and height requirements of the East End Overlay District.

The Building is approximately 6500 square feet, and the lot is approximately 15,000 square feet, meaning slightly over half (54%) of the lot is unobstructed open space, meeting the Unobstructed Open Space Requirements. The Applicant received a Variance from Off-Street Parking Requirements on February 16, 2023.

Chapter 21: Design Standards.

This property is in the East End Overlay District. Sec. 26-40 of the ISMC states the following:

In addition to the provisions of the Site and Design Standards of Article IV of Chapter 21 of the Idaho Springs Municipal Code (Land Development Regulations), the following building and site design standards shall apply in the East End Overlay District. In case of a conflict between the provisions of this Section and the provisions of Chapter 20, the provisions of this Section shall apply.



*** East End Overlay District with underlying zoning areas**

Design Setting.

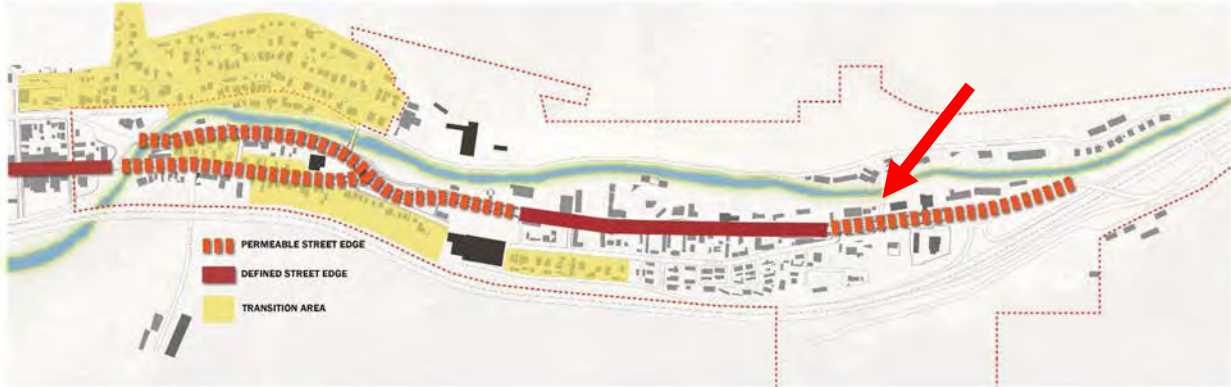
The East End Overlay District area consists largely of highway service commercial developments, including food and beverage, retail, service, and lodging establishments in addition to several established residential neighborhoods and the historic Argo Mill property.

The East End Action Plan establishes a vision to build on the established character of this area and support reinvestment over time. A key concept established by the East End Action Plan is the need for future development to address lots with double frontages between Miner Street and Colorado Boulevard, and between Colorado Boulevard and Clear Creek, with active uses and a higher level of architectural detail to support an inviting pedestrian environment.

The East End Action Plan supports development that builds on established architectural themes in the area. The most prevalent themes include remnants of "roadside" development from the 1930s to 1950s along Colorado Boulevard and building forms and materials typical of early Colorado mining communities like Idaho Springs. The East End Action Plan also seeks to support expanded housing options in the East End through infill and redevelopment of existing uses over time, either as part of mixed-use developments (e.g., residential units above retail or office uses) or as free-standing residential structures.

The East End Action Plan also seeks to enhance pedestrian and bicycle safety and connectivity throughout the East End and includes guidance regarding complete streets, streetscape character, and frontage character for various street typologies within the East End Action Plan boundary.

General Standards.



** Edges and Transitions Map (26-40-1). Arrow indicates the Property location.*

1) Edges and transitions.

- a) **Permeable street edges.** Colorado Boulevard in front of this property is identified as a “Permeable Street Edge” by the ISMC. This requires that at least fifty (50) percent of the buildable lot width shall be occupied by the front façade wall of the building located at or between the minimum and maximum front setbacks.

Analysis: The proposed building *appears* to meet this requirement as well as all other setback requirements of the East End Overlay District and Chapter 21.

2) Exterior Materials.

- a) **Distinctive materials.** In addition to the distinctive materials listed in Article VI: Site and Design Standards of Chapter 21 of the Idaho Springs Land Development Code, the following additional materials may also be used: Cor-Ten or other rusting steel, galvanized metal, wood shingle siding, metal shingle siding, wood horizontal siding, and other similar materials consistent with the Design Principles and Guidelines provided in the East End Action Plan, as approved by the City Administrator.
- b) **Prohibited materials.** The use of Exterior Insulated Finishing Systems (EIFS), vinyl or aluminum siding, mirrored or highly reflective glass or glazing, and large scale pre-finished metal or column panel systems shall be prohibited.

Analysis: The proposed building will be clad in pre-finished metal panels. The side of the building will be clad in stucco-colored panels, and the front of the building will be clad in corrugated steel-colored panels. **The proposed exterior materials appear to be on the list of prohibited materials listed in the General Standards of the East End Overlay District.** The Applicant has been notified of this situation and asked to present possible alternatives to the Planning Commission.

3) Location-specific standards for Colorado Boulevard Frontage.

- a) Orientation.** Development shall be oriented toward Colorado Boulevard to the maximum extent practicable. Entrance locations shall be placed with consideration of business-to-business pedestrian access and safe access to pedestrian and bicycle facilities. An operable and unlocked (during business hours) front door is required on Colorado Boulevard for commercial businesses.

Analysis: The proposed orientation of the building conforms to this requirement.

- b) Parking location.** Surface parking and vehicle storage shall be located behind and/or to the side of buildings. Surface parking will not be permitted between the main building and Colorado Boulevard.

Analysis: The Project received a variance from the parking requirements of the ISMC at a Variance Board Hearing on February 16, 2023. The marijuana cultivation facility will be operated by 3 employees. This use of parking spaces is consistent with the historic use of parking for this property.

- c) Street-level interest.** A variety of features shall be incorporated to activate the street frontage and create a pedestrian and bicycle-friendly environment along the Colorado Boulevard frontage. Required features may vary based on the type of development and location. Such features may include, but shall not be limited to:

- (1) Transparent storefront windows and doors at the street level (commercial uses only)
- (2) Other visual activation methods on the ground floor such as display cases, public art, or murals.
- (3) Café seating
- (4) Pedestrian plazas
- (5) Pocket parks
- (6) Landscaping
- (7) Benches
- (8) Inverted-U bicycle racks.

Analysis: There appears to be some landscaping in front of the building and there may be future opportunities to collaborate with the property owner to further activate this space. The project appears to meet this requirement.

- d) **Clear zone.** A clear zone a minimum of six (6) feet wide (eight (8) feet preferred) shall be maintained within or adjacent to (where a dedicated trail or sidewalk is provided) the hardscaped portion of the build-to-zone along Colorado Boulevard. The clear zone shall be unobstructed by any permanent or nonpermanent street furniture, outdoor merchandise displays, benches, trash receptacles, outdoor dining areas, and other pedestrian amenities. In some instances, the City Administrator or their designee can allow a reduction in this clear zone if it is determined the additional street frontage is not necessary, the spirit of the build to zone is met, and the reduction would be compatible with adjacent properties.

Analysis: The Clear Creek Greenway runs in front of this property and is wider than a normal City Sidewalk (11 feet). Additionally, there is a public parking area directly south of the Greenway that further extends the clear zone in front of the property. It appears that this project meets this requirement.

- e) **Pedestrian connectivity.** Direct pedestrian access shall be provided to and between the primary building entrance or entrances to each building; sidewalks or walkways on adjacent properties that extend to a shared property line; sidewalks or trails along Colorado Boulevard and Miner Street; and the Clear Creek Greenway.

Analysis: There is currently no sidewalk connection on the East Side of this property along Gilson Street between the Bridge over Clear Creek to the north and to Colorado Boulevard to the south. Additionally, the current property line to the east extends into Gilson Street. **The provision of a sidewalk is required by the East End Action Plan.**

The City worked with the Applicant and came to an agreement whereby the Applicant and Property Owner will design a 4' sidewalk and provide right of way for the sidewalk to the City, who will construct the Sidewalk later. The Applicant also agreed to provide right of way for all of Gilson Street to the City. The City Engineer has determined that approximately 10 feet is required for this on the east end of the property.

The current site plan shows a four-foot easement on the East End of the Property; per the agreement with the City a sidewalk and site grading plan must be shown on the site plan wide enough to accommodate the construction of the sidewalk without impacting the foundation of the new building. Additionally, the Applicant must provide the property for the sidewalk to the City through Easement or some other means. **These are conditions of approval for this FDP.**

- f) **Vehicular access.** To the maximum extent practicable, access points shall be coordinated with adjacent properties to promote efficient traffic operations and to minimize the need for multiple curb cuts for individual driveways.

Analysis: There is a pre-existing curb cut that was previously utilized by the applicant at the property for access. The building has been designed to continue utilizing that access point to the property for trash loading and deliveries.

g) Clear Creek frontage.

- i) Views. Structures and public spaces shall be oriented to maximize and frame views to or from Clear Creek.
- ii) Creek frontage. A variety of design features shall be provided to activate the frontage along Clear Creek, while retaining sufficient width (as required by Table 46-4.1: Building and Site Regulations) to protect the environmental quality and functions of the creek. Design features shall embrace the Creek's presence and visibility, support pedestrian and bicycle access along the creek frontage, and enhance the enjoyment of residents and visitors.

Analysis: This project is situated on the south side of the lot, with much of the north portion of the lot which extends into Clear Creek left as Open Space. The Applicant is also designing a new sidewalk to connect between the Gilson Street Bridge at Clear Creek to Colorado Boulevard, potentially improving the Creek's presence and visibility in this section and enhancing the enjoyment of residents and visitors. However, Sec. 9-161 (I) states the following:

[...] every licensed cultivation facility and operation must be contiguous to the commonly owned store or center with which the cultivation facility is associated. For purposes of this subsection, "contiguous to" means within the same building and sharing one (1) or more common walls or floor/ceiling. Nothing herein shall be construed to amend or waive the otherwise applicable requirements related to such a shared building, including but not limited to building code, fire code and other life safety codes.

This requirement mandates that the new Marijuana Cultivation Facility be contiguous with the retail operation that exists on the lot immediately to the west. Because of this the building is quite large (approximately 190 feet from Mountain Moonshine in the West to the end of the proposed cultivation facility in the east). This does not allow for breaks within the massing of the property to create viewsheds to the Creek.

- h) **Parking lot screening.** The perimeter of all surface parking lots and vehicle storage areas shall be screened from the Clear Creek Greenway, sidewalks, trails, open space, and other public spaces by a low decorative masonry wall or wrought iron fence a minimum of three (3) feet in height in combination with landscaping.

Analysis: The Applicant received a Variance from Parking Requirements of the ISMC on February 16, 2023. No onsite parking is required for this project.

Signage.

The Final Development Plan Application submitted by the Applicant includes information about signage they would like to have on the property. While the Applicant will go through a separate process to determine what signage is allowed on the property, analysis of the proposed signage is included in this staff report. The Applicant has indicated in the site plans a total of four (4) signs to be erected on the property: Two Wall Signs, and 2 Double sided Illuminated pole signs to be mounted on a 50' Pole.

Proposed Signage

Wall Signs	Sign 1: 78 Sq. Ft.	Sign 2: 42 Sq. Ft.	Total: 120 Sq. Ft.
Pole Signs	Sign 1: 64 Sq. Ft. (128 Sq. Ft.)	Sign 2: 42 Sq. Ft. (84 Sq. Ft.)	Total: 212 Sq. Ft.
		Total Sq. Ft. Signage:	664 Square Feet

Analysis: The Applicant will need to apply for sign permits before installing signs. City Staff will analyze this application and ensure that it complies with ISMC at that time.

Properties located in Sign Zone 1 are allowed to have 1 pole sign per premises. Pole Signs must have a 10 ft. Setback. **The Pole Sign identified in the Site Plan does not meet this setback requirement.**

Standards and Specifications for Design and Construction.

JVA, Inc., the City's engineering firm reviewed this application. A letter to the applicant with comments about the project was provided to the Applicant on March 16, 2023, with several comments to be addressed by the Applicant. A copy of this letter is included in the referrals. On March 27, the Applicant responded with an updated site plan and plumbing information for the building in response to these comments.

JVA Engineering completed a second review of the application on April 4, 2023. Following that review, 4 comments remain to be addressed by the Applicant:

- a) Roof Drains are shown; however, it is unclear where they discharge. Show on Civil Site Plan and include downspout or discharge direction and erosion control measures to protect slope from erosion.
- b) A sidewalk along Gilson Street should be shown on the Civil Site Plan per the agreement with the City.
- c) ADA ramp and connections to sidewalk on Colorado Boulevard on Civil Site Plan should be shown with proposed grades to match existing.
- d) Provide slope arrows on Site Plan to show direction of slope around site.

On April 5, 2023, the Applicant submitted an updated site plan that appears to satisfy some of these requirements. JVA Engineering analyzed this Site Plan and determined that all conditions except for (b) were met. **A Sidewalk and site grading plan for the same that meet the standards and specifications for Design and Construction and are approved by the City Engineer must be provided on the Site Plan as a condition of approval for this project. An Easement or Vacation of Property accommodating the same must be provided to the City as a condition of approval for this project.**

REFERRALS

The application was sent for review by City Staff, Consultants, and Public Agencies on February 27, 2023. The City requested comments, questions, and concerns to be returned by March 1, 2023.

Sent	Returned	Referral	Comments Returned
☒	☒	Andrew Marsh, City Administrator	Final Review of Staff Report
☒	☒	Nathan Buseck, Chief of Police	No Concerns.
☐	☒	John Curtis, Director, Public Works	
☒	☒	Nathan Skalak, JVA Engineering	See comments above.
☒	☒	Dan Wester, Safebuilt	No Concerns. Concerns will be addressed during Building Permit review.
☒	☒	Kelly Babeon, Clear Creek Fire Authority	No Comments. Concerns will be addressed during Building Permit review.
☒	☒	Carmen Beery, City Attorney	Request Proof of Title from last 30 Days, per ISMC Requirement. Applicant provided, attached to staff report.
☒	☒	Wonder Martell, Deputy City Clerk	No Concerns.

PUBLIC NOTICE

Public Notice was provided based on the requirements of Table 21-85-1 of the ISMC. Requirements include a Community Meeting (**held February 16, 2023**), A Notification Mailing to Property Owners within 300 Feet of the Property (**sent March 14, 2023**), and a Sign Posted on the Property at least fourteen (14) days prior to the Planning Commission Hearing (**posted March 28, 2023**).

ATTACHMENTS

1. **Completed Land Use Application (2.16.2023)**
2. **Cover Letter by David Michel of Igadi, Ltd. (2.16.2023)**
3. **Architectural Elevations in Color**
4. **Vicinity Map**
5. **Site Plan**
6. **Landscape Plan**
7. **Legal Description of Property**
8. **Title Commitment**
9. **Approval of Property Owner for Project**
10. **Impact Analysis Letter**
 - a. **Traffic Analysis**
 - b. **Electrical Plans**
 - c. **Plumbing Plans**
 - d. **Mechanical Plans**
 - e. **Floor Plans**
11. **Initial Comments from JVA to Applicant**

PLANNING STAFF SUMMARY, FINDINGS AND RECOMMENDATION

The City received an application for Final Development Plan from Igadi, Ltd., and Pennell & Associates requesting approval of a Final Development Plan (FDP) at 2820 Colorado Boulevard for the construction of a Marijuana Cultivation Facility. Staff finds that the application complies with the criteria for approval except for as noted in the recommended conditions of approval.

SUGGESTED MOTION

Based on the findings made on the record of this matter, I move to **recommend APPROVAL WITH CONDITIONS** of the Final Development Plan for the Igadi, Ltd. Marijuana Cultivation Facility at 2820 Colorado Boulevard, the conditions being as follows:

1. Prior to the issuance of any permit related to the Plan, the following shall occur:
 - a. An amended Site Plan must be filed with and approved by the City Administrator that includes Sidewalk and Grading details along the east side of Gilson Street from Colorado Boulevard to the Gilson Street Bridge that conform to the design specifications of the City of Idaho Springs.
 - b. The property owner shall provide approximately 10 feet width of right of way dedication approved by the City-- either by easement or by a subsequent plat amendment—on the east side of the property between the Gilson Street Bridge and Colorado Boulevard deemed adequate for the maintenance and upkeep of Gilson Street and the installation of a new sidewalk.
 - c. The proposed Pole Sign shall be relocated to meet the 10-foot setback requirement.

/JHC



City of Idaho Springs
NOTICE OF FORMAL SUBMITTAL
IGADI, LTD. CULTIVATION FACILITY
Date of Notice: February 27, 2023

Any comments or issues considered relevant to the application for approval below would be appreciated. Project Materials are attached.

Project: Igadi Ltd. Cultivation Facility Final Development Plan

Location: 2820 Colorado Boulevard

Applicant(s): David Michel, Igadi, Ltd. | Scott Pennell, Pennell and Associates, LLC

Summary: Review of an application for Final Development Plan for a new marijuana cultivation facility located at 2820 Colorado Boulevard

Attachments: Land Use Application

Please Reply By: Noon on Wednesday March 1, 2023

Reply to: Jonathan Cain, Interim Community Development Planner
Phone: (303)567.4421 x115
Email: planning@idahospringsco.com

Sent	Returned	Referral to:
☒	☐	Andrew Marsh, Idaho Springs City Administrator
☒	☐	Chief Nathan Buseck, Idaho Springs Police Department
☐	☐	John Curtis, Idaho Springs Public Works
☒	☐	Nathan Skalak, JVA Engineering
☒	☐	Dan Wester, Safebuilt
☒	☐	Chief Kelly Babeon, Clear Creek Fire Authority
☒	☐	Clear Creek County EMS
☒	☐	Carmen Beery, City Attorney
☒	☐	Wonder Martell, Deputy City Clerk, City of Idaho Springs



Staff Use Only

Application Number: _____

Received By: WM

Date: 2/17/2023

Idaho Springs Land Use

Application

1. This is the master land use form for the City of Idaho Springs. Please use to apply for:

(Please select one of the following as appropriate)

- | | | |
|---|---|---|
| ☐ Administrative (Subdivision) | ☐ Annexation | ☐ Conditional Use Waiver |
| ☐ Plat Major Subdivision | ☐ Variance or Appeal | ☐ RV Park |
| ☐ Planned Development Overlay | ☐ Minor Subdivision | ☒ Site Plan |
| ☐ Sign Permit | ☐ Rezoning | |
| ☐ Temporary Use | ☐ Other: <u>FDP</u> | |

2. Project Name: Igadi Cultivation

Please print or type legibly

3. Contact information: (a list of additional contacts may be attached)

Owner Name: Pennel & Associates, LLC

Applicant Name: Igadi, Ltd.

Address: PO Box 1142, Idaho Springs CO 80452

Address: 4891 Independence St., Wheat Ridge CO 80033

Telephone: (303) 419-8620 Fax: _____

Telephone: (970) 509-9119 Fax: _____

E-mail: sparky1142@msn.com

E-mail: dmichel@igadiltd.com

4. Property Description:

Address or Location: 2820 Colorado Blvd.

Existing Zoning: C-2 Existing Use: Marijuana Cultivation

Proposed Zoning: C-2 Proposed Use: Marijuana Cultivation

5. Purpose: (describe intent of this application in 1-2 sentences)

Final Development Plan review for re-construction of Igadi cultivation facility.

6. Certification: (must be signed in blue ink)

I certify that I am the lawful owner of the parcel(s) of land affected by this application and hereby consent to this action.

Owner: [Signature] Date: 2/16/23 AND

I certify that the information and attachments I have submitted are true and correct to the best of my knowledge.

In filing this application, I am acting with the knowledge and consent of the property owner(s). I understand that all materials and fees required by the City of Idaho Springs must be submitted prior to processing this application.

Applicant: [Signature] Date: 2/16/23



February 16, 2023

Jonathan Cain
Assistant City Administrator
City of Idaho Springs
1711 Miner St.
Idaho Springs, CO 80466

Re: Final Development Plan Application for 2820 Colorado Blvd., Idaho Springs, CO (the "Property") requested by Igadi, Ltd. (the "Applicant")

Dear Mr. Cain:

The Applicant and Property owner, Pennell & Associates, LLC, are reconstructing the cultivation located on the Property to be a state-of-the-art marijuana cultivation facility. The Project will take the former approximately 2,750± square foot house and garage turned cultivation and replace it with a 7,215 square foot cultivation facility as depicted on the attached Elevations attached hereto as Exhibit B and Site Plan attached hereto as Exhibit C (the "Project"). The zoning for the Property is C-2, it is within the East End Overlay District, and the applicant has received a variance from any requirement to add additional on-site parking.

The construction will aesthetically enhance the area around Colorado Blvd. It will not impose any significant increase in parking or traffic because the larger cultivation facility will not require any additional employees as it will be automated and trimming will take place at an off-site location in Aurora, CO. The water demand for the cultivation facility will be approximately 300 gallons per day and the sewer requirement will be a fraction of that amount. Currently the Property is serviced by two (2) 1" water pipes and a 4" sewer pipe, which will be more than adequate for operating the Project.

For the foregoing reasons, the Applicant requests the Planning Commission approve this Final Development Plan Application. Please do not hesitate to contact me with any questions, concerns, or to discuss the requested variance or the Project further.

Sincerely,

David P. Michel
Founder and General Counsel

PRINTED: 3/27/2023 12:05:13 PM

LE PATH: Autocad Docx/22-016 Igadi Idaho Springs/22-016_Igadi Idaho Springs_223.rvt



1 3D EXTERIOR VIEW
A4.3 SCALE:



2 3D EXTERIOR VIEW II
A4.3 SCALE:

2WR
ARCHITECTURE | INTERIORS

7430 E. Caley Ave
Suite 280E
Centennial, CO 80111
P. (720) 258-4780

NOT FOR
CONSTRUCTION

IMPORTANT NOTICE: THIS DOCUMENT IS
CONFIDENTIAL. PLEASE DO NOT REPRODUCE THIS
DOCUMENT IN ANY WAY OTHER THAN WHAT IS
NEEDED TO FULFILL THE SCOPE OF YOUR
WORK. PLEASE RETURN THIS DOCUMENT TO 2WR +
PARTNERS UPON COMPLETION OF YOUR WORK OR
DESTRUCTION. IF YOU ARE USING ELECTRONIC COPIES,
PLEASE DELETE THEM FROM YOUR SYSTEM ONCE
YOUR WORK IS COMPLETED.

THIS DOCUMENT, AND ANY AFFILIATED
ARCHITECTURAL, DESIGN, CONSTRUCTION, SECURITY,
AND PLANNING DOCUMENTS (AFFILIATED
DOCUMENTS) ARE CONFIDENTIAL AND CONTAIN
PROPRIETARY DATA AND INFORMATION OF 2WR +
PARTNERS. THIS DOCUMENT, AND ANY AFFILIATED
DOCUMENTS SHALL ONLY BE VIEWED, REPRODUCED, OR
COPIED BY INDIVIDUALS AND ENTITIES THAT HAVE BEEN
EXPLICITLY AUTHORIZED IN WRITING BY THE OWNER
AND 2WR + PARTNERS. NO DISCLOSURE,
AGREEMENT, AND SHALL BE VIEWED, USED SOLELY
FOR THE PURPOSES STATED IN SUCH AUTHORIZATION.
ANY COPYING, REPRODUCING, INCORPORATING,
DISTRIBUTING, RE-PLACING, OR OTHERWISE
REPRODUCING THE CONTENTS OF THESE DOCUMENTS, BY ANY
MEANS, IS STRICTLY PROHIBITED.

IGADI - IDAHO
SPRINGS

IGADI, LTD.
2818 COLORADO BLVD,
IDAHO SPRINGS, CO 80452

SITE PLAN
REVIEW

NOT FOR BID

Project Number: 22-016
Date: 03.27.2023
Drawn By: JH
Checked By: GM
Revisions:

No.	Date	Description
-----	------	-------------

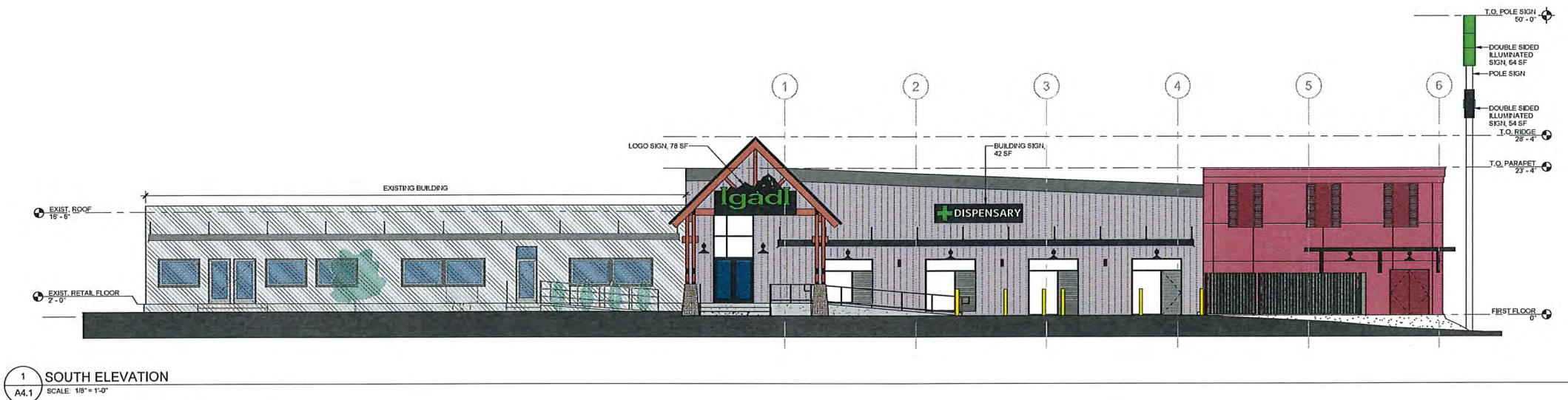
Sheet Description
EXTERIOR
VIEWS

Sheet Number

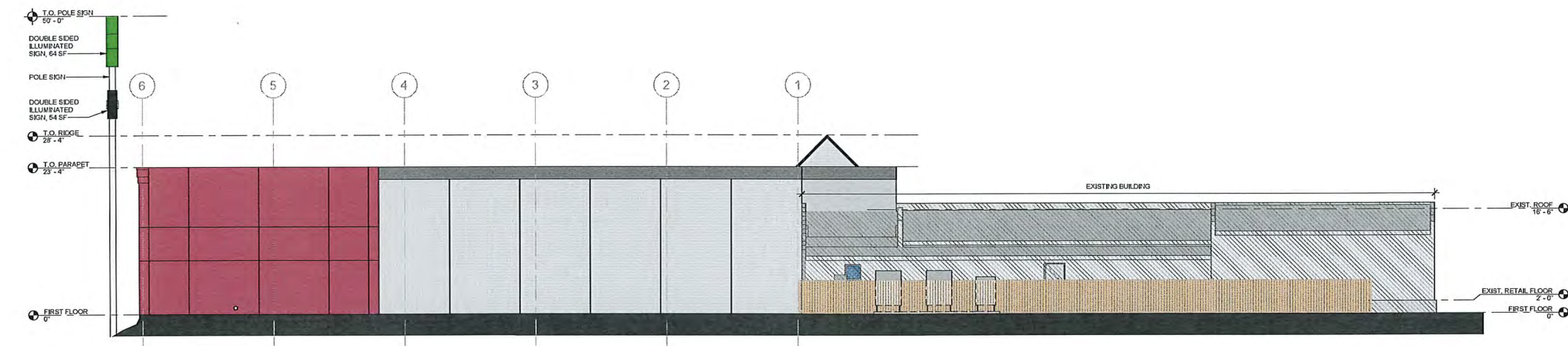
A4.3

PRINTED: 3/27/2023 12:04:49 PM

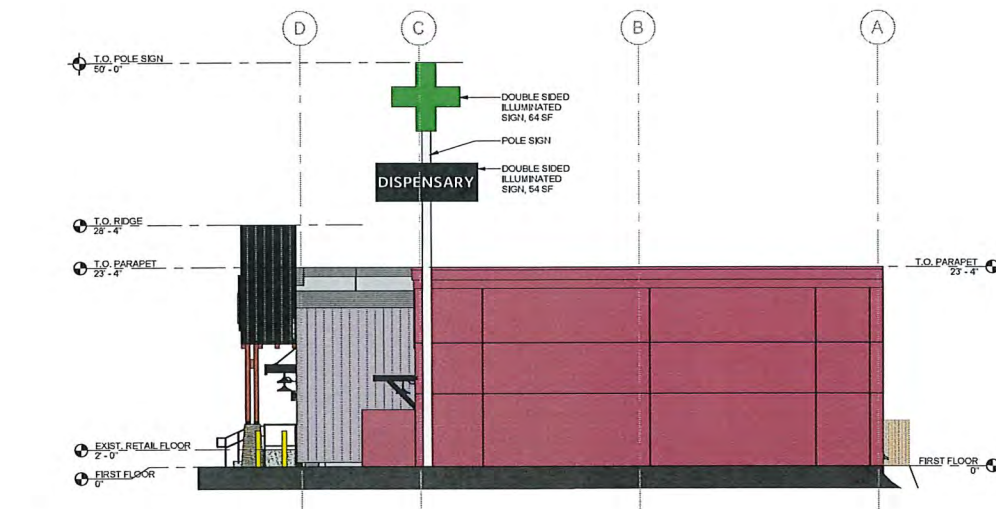
FILE PATH: A:\pdesk\Draws\22-016 Igadi Idaho Springs\22-016_Igadi Idaho Springs_R23.rvt



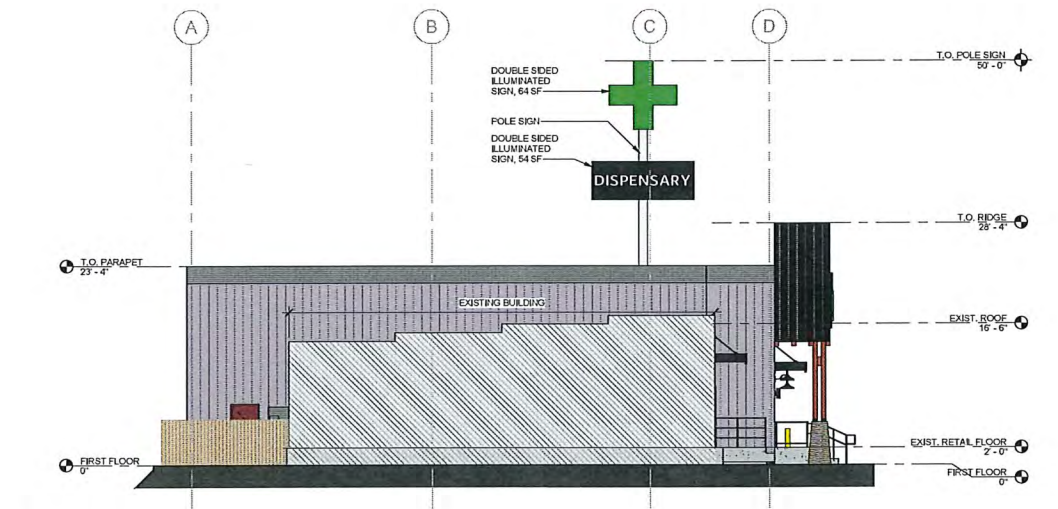
1 SOUTH ELEVATION
A4.1 SCALE: 1/8" = 1'-0"



2 NORTH ELEVATION
A4.1 SCALE: 1/8" = 1'-0"



3 EAST ELEVATION
A4.1 SCALE: 1/8" = 1'-0"



4 WEST ELEVATION
A4.1 SCALE: 1/8" = 1'-0"



7430 E. Caley Ave
Suite 280E
Centennial, CO 80111
P. (720) 258-4780

NOT FOR
CONSTRUCTION

IMPORTANT NOTICE: THIS DOCUMENT IS
CONFIDENTIAL. PLEASE DO NOT REPRODUCE THIS
DOCUMENT IN ANY WAY OTHER THAN THAT IS
NEEDED TO PERFORM WITHIN THE SCOPE OF YOUR
WORK. PLEASE RETURN THIS DOCUMENT TO 2WR +
PARTNERS UPON COMPLETION OF YOUR WORK OR
DESTRUCTION. IF YOU ARE USING ELECTRONIC COPIES,
PLEASE DELETE THEM FROM YOUR SYSTEM ONCE
YOUR WORK IS COMPLETED.

THIS DOCUMENT, AND ANY AFFILIATED
ARCHITECTURAL, GENERAL CONTRACTING, SECURITY,
AND PLANNING DOCUMENTS (AFFILIATED
DOCUMENTS) ARE CONFIDENTIAL AND CONTAIN
PROPRIETARY DATA AND INFORMATION OF 2WR +
PARTNERS. THIS DOCUMENT, AND ANY AFFILIATED
DOCUMENTS SHALL ONLY BE VIEWED BY
INDIVIDUALS AND ENTITIES THAT HAVE BEEN
EXPLICITLY AUTHORIZED IN WRITING BY THE OWNER
AND 2WR + PARTNERS. NO REUSE, REPRODUCTION,
AGREEMENT AND SHALL BE VIEWED SOLELY
FOR THE PURPOSES STATED IN SUCH AUTHORIZATION.
ANY COPYING, REPRODUCING, MODIFYING,
DISTRIBUTING, DISPLAYING, OR COMMUNICATING
THE CONTENTS OF THESE DOCUMENTS, BY ANY
MEANS IS STRICTLY PROHIBITED.

IGADI - IDAHO
SPRINGS

IGADI, LTD.
2818 COLORADO BLVD.
IDAHO SPRINGS, CO 80452

SITE PLAN
REVIEW

NOT FOR BID

Project Number: 22-016
Date: 03.27.2023
Drawn By: JH
Checked By: GM
Revisions:

No.	Date	Description
-----	------	-------------

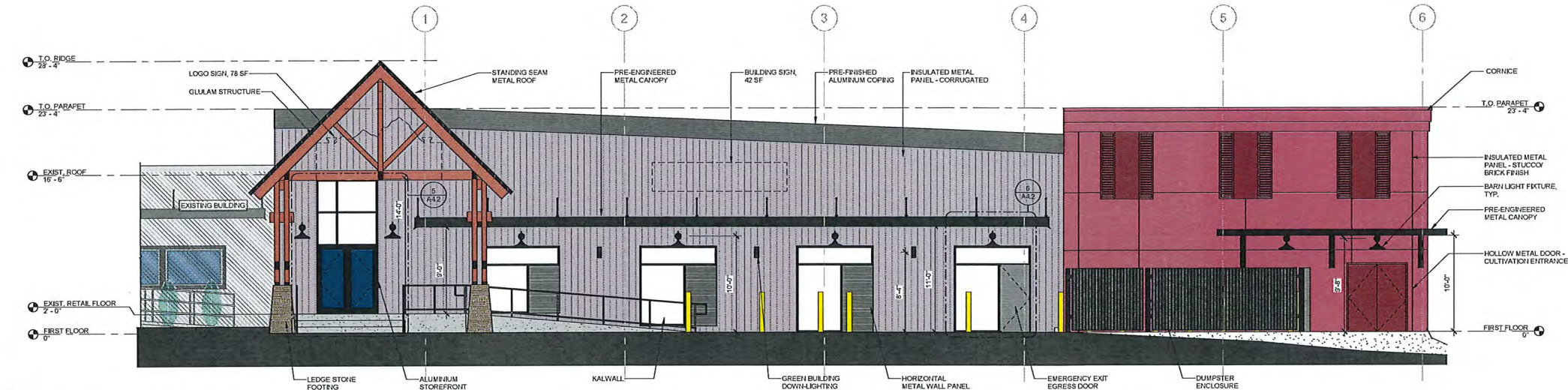
Sheet Description
OVERALL
EXTERIOR
ELEVATIONS

Sheet Number

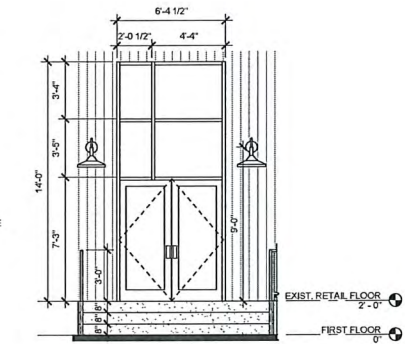
A4.1

PRINTED: 3/27/2023 12:05:00 PM

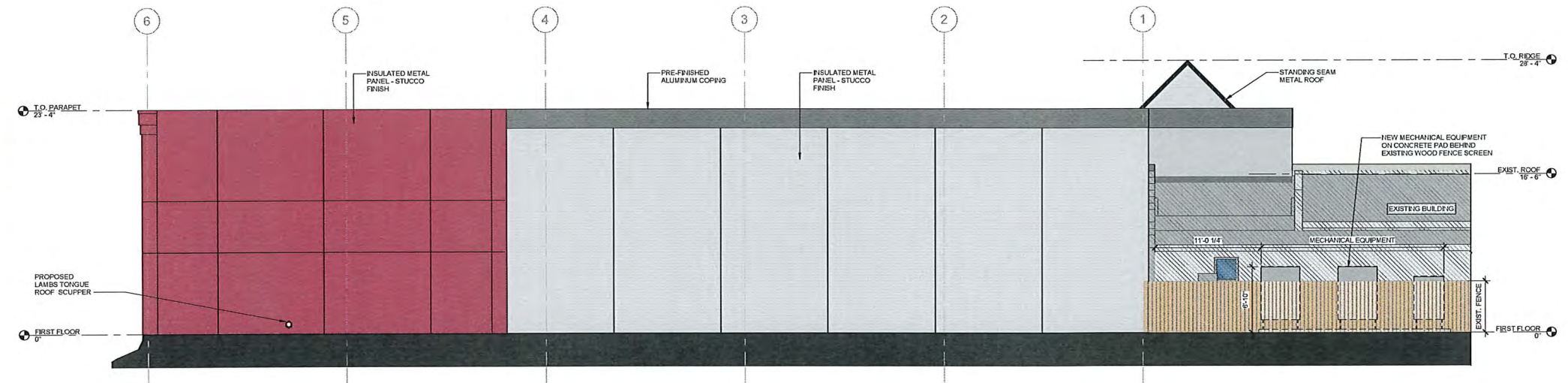
LE PATH: Autodesks Docs/22-016 Igadi Idaho Springs/22-016 Igadi Idaho Springs_R23.rvt



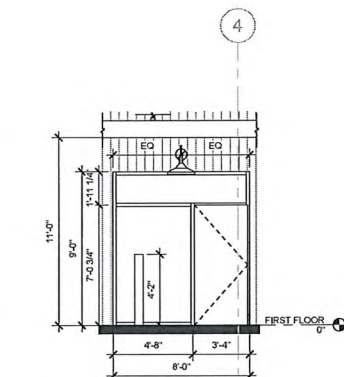
1 ENLARGED SOUTH ELEVATION
A4.2 SCALE: 3/16" = 1'-0"



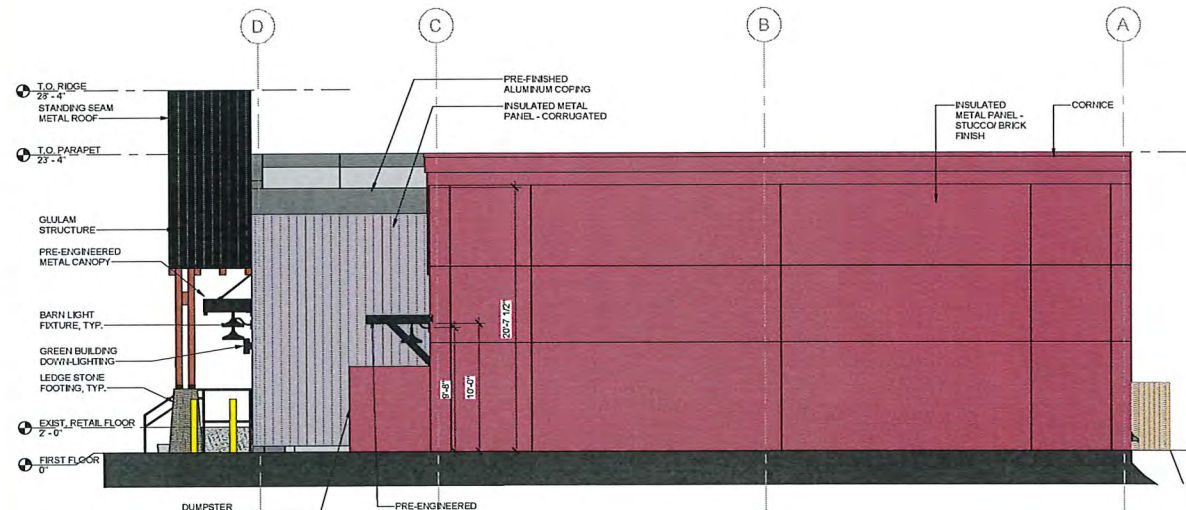
5 ENTRY DOOR ELEVATION
A4.2 SCALE: 1/4" = 1'-0"



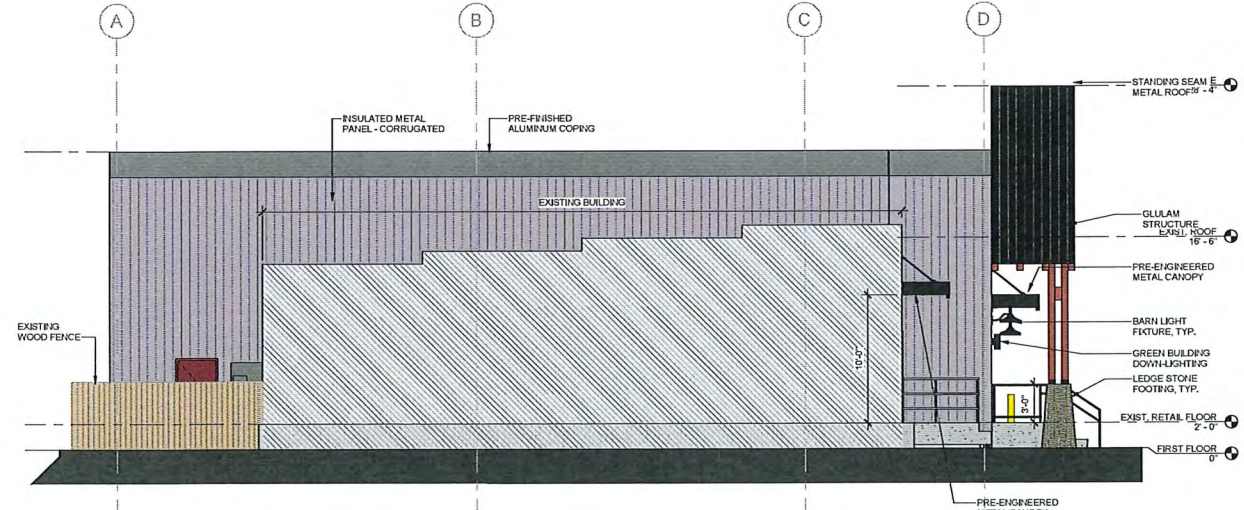
2 ENLARGED NORTH ELEVATION
A4.2 SCALE: 3/16" = 1'-0"



6 EGRESS DOOR ELEVATION
A4.2 SCALE: 1/4" = 1'-0"



3 ENLARGED EAST ELEVATION
A4.2 SCALE: 3/16" = 1'-0"



4 ENLARGED WEST ELEVATION
A4.2 SCALE: 3/16" = 1'-0"

2WR
ARCHITECTURE | INTERIORS

7430 E. Caley Ave
Suite 280E
Centennial, CO 80111
P. (720) 258-4780

NOT FOR CONSTRUCTION

IMPORTANT NOTICE: THIS DOCUMENT IS CONFIDENTIAL. PLEASE DO NOT REPRODUCE THIS DOCUMENT IN ANY WAY OTHER THAN WHAT IS NEEDED TO PERFORM WITHIN THE SCOPE OF YOUR WORK. PLEASE RETURN THIS DOCUMENT TO 2WR + PARTNERS UPON COMPLETION OF YOUR WORK OR DESTROY IT. IF YOU ARE USING ELECTRONIC COPIES, PLEASE DELETE THEM FROM YOUR SYSTEM ONCE YOUR WORK IS COMPLETED.

THIS DOCUMENT, AND ANY AFFILIATED ARCHITECTURAL, ENGINEERING, CONSTRUCTION, SECURITY, AND PLANNING DOCUMENTS (AFFILIATED DOCUMENTS) ARE CONFIDENTIAL AND CONTAIN PROPRIETARY DATA AND INFORMATION OF 2WR + PARTNERS. THIS DOCUMENT, AND ANY AFFILIATED DOCUMENTS SHALL ONLY BE VIEWED BY INDIVIDUALS AND ENTITIES THAT HAVE BEEN EXPLICITLY AUTHORIZED IN WRITING BY THE OWNER AND 2WR + PARTNERS. NONDISCLOSURE AGREEMENT, AND SHALL BE VIEWED SOLELY FOR THE PURPOSES STATED IN SUCH AUTHORIZATION. ANY COPYING, REPRODUCING, INCORPORATING, DISTRIBUTE, OR COMMUNICATING THE CONTENTS OF THESE DOCUMENTS BY ANY MEANS, IS STRICTLY PROHIBITED.

IGADI - IDAHO SPRINGS

IGADI, LTD.
2818 COLORADO BLVD,
IDAHO SPRINGS, CO 80452

SITE PLAN REVIEW

NOT FOR BID

Project Number: 22-016
Date: 03.27.2023
Drawn By: JH
Checked By: GM
Revisions:

No.	Date	Description
-----	------	-------------

Sheet Description
ENLARGED EXTERIOR ELEVATIONS

Sheet Number

A4.2

\\denver-server\civill\Projects\2275011\gad\ltd town grow\Drawg\production\2275011 COVER SHEET.dwg

SITE ADDRESS: 2820 COLORADO BOULEVARD, IDAHO SPRINGS, CO
PARCEL NAME: IDAHO SPRINGS EAST END ANNEX

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL MUNICIPAL REGULATIONS AND CODES, WHICHEVER IS MORE STRINGENT.
2. ALL WORK AND MATERIALS SHALL COMPLY WITH O.S.H.A. STANDARDS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES' SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
4. REFER TO LANDSCAPE PLANS FOR GRASS, TREES, AND PLANTED MATERIALS.
5. ALL DIMENSIONS AND COORDINATES ARE FROM FLOWLINE OF CURB UNLESS SHOWN OTHERWISE.
6. RADII = 3' UNLESS OTHERWISE INDICATED.

1. ALL FEATURES OF THIS PROJECT INCLUDING, BUT NOT LIMITED TO, SIDEWALKS, CURB RAMPS, ACCESSIBLE PARKING, AND ACCESSIBLE ROUTES SHALL COMPLY WITH THE APPLICABLE ACCESSIBILITY CODES [AMERICAN DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES; THE PROPOSED PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG)] PUBLISHED IN THE FEDERAL REGISTER JULY 2011; INTERNATIONAL BUILDING CODE (IBC); ICC A117.1; ETC.]
2. WHERE SPATIAL LIMITATIONS OR EXISTING FEATURES WITHIN THE LIMITS OF THE PROJECT PREVENT FULL COMPLIANCE WITH THESE GUIDELINES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER UPON DISCOVERY OF SUCH FEATURES. THE CONTRACTOR SHALL NOT PROCEED WITH ANY ASPECT OF THE WORK WHICH IS NOT IN FULL COMPLIANCE WITH THESE GUIDELINES WITHOUT PRIOR, WRITTEN PERMISSION FROM THE ENGINEER. ANY WORK WHICH IS NOT PERFORMED WITHIN THESE GUIDELINES, FOR WHICH THE CONTRACTOR DOES NOT HAVE WRITTEN APPROVAL, SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
3. GENERAL SLOPE GUIDANCE:
 - 3.1. CROSS SLOPES SHALL NOT EXCEED 1:50 (2.0%). PREFERRED SLOPE IS 1.5%.
 - 3.2. RUNNING SLOPES SHALL NOT EXCEED 5% EXCEPT AT RAMPS. PREFERRED MAXIMUM SLOPE IS 4.5%.
 - 3.3. RAMP RUNNING SLOPES SHALL NOT EXCEED 1:12 (8.3%). PREFERRED MAXIMUM SLOPE IS 7.8%.
 - 3.4. SLOPES AT LANDINGS, ACCESSIBLE PARKING STALLS, AND ACCESSIBLE AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION. PREFERRED MAXIMUM SLOPE IS 1.5%.
 - 3.5. EXCEPTIONS WITHIN THE PUBLIC RIGHT-OF-WAY: WHERE THE ESTABLISHED ADJACENT STREET GRADE EXCEEDS 5%, RUNNING SLOPES PARALLEL TO THE STREET SLOPES SHALL NOT EXCEED THE GENERAL GRADE ESTABLISHED FOR THE ADJACENT STREET.
CURB RAMP RUNNING SLOPE CAN EXCEED 8.3% TO LIMIT THE RESULTING RAMP LENGTH TO 15 FEET.



SCALE 1"=500'

OWNER
IGADI, LTD.
DAVID MICHEL
DMICHEL@IGADILT.D.COM
970.509.9119

CIVIL ENGINEER
WALLACE DESIGN COLLECTIVE
9800 PYRAMID CT, SUITE 350
ENGLEWOOD, CO 80112
AARON BARNHART, PE
AARON.BARNHART@WALLACE.DESIGN
720.704.5288

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	SITE PLAN
3	GRADING & UTILITY PLAN

ABBREVIATIONS		LINETYPES		SYMBOLS	
(M)	MEASURED DATA	_____	CENTERLINE		UTILITY POLE
(R)	RECORD DATA	_____ SF	SILT FENCE		LIGHT POLE
BC	BACK OF CURB	-----	LIMITS OF CONSTRUCTION		GUY ANCHOR
CL	CENTERLINE	-----	PROPOSED MAJOR CONTOUR		ELECTRIC BOX
EG	EXISTING GRADE	-----	PROPOSED MINOR CONTOUR		ELECTRIC METER
FG	FINISHED GRADE	-----	EXISTING MAJOR CONTOUR		ELECTRIC TRANSFORMER
FL	FLOWLINE	-----	EXISTING MINOR CONTOUR		AC UNIT
GL	GUTTER LINE	-----	EASEMENT		ELECTRIC MANHOLE
HP	HIGH POINT	_____ X _____ X _____ X	FENCE		GAS METER
INV	INVERT	-----	PROPERTY LINE		GAS VALVE
LF	LINEAR FEET	-----	LOT LINE		OIL/GAS WELLHEAD
LP	LOW POINT	-----	BUILDING SETBACK		VENT PIPE
ME	MATCH EXISTING	_____ FO	FIBER OPTIC		PIPELINE MARKER
RW	RIGHT-OF-WAY	_____ OC	OVERHEAD COMMUNICATION		COMMUNICATION PEDESTAL
SF	SQUARE FEET	_____ UC	UNDERGROUND COMMUNICATION		COMMUNICATION MANHOLE
SY	SQUARE YARDS	_____ OE	OVERHEAD ELECTRIC		SEWER CLEAN-OUT
TBK	TOP OF BANK	_____ UE	UNDERGROUND ELECTRIC		SANITARY SEWER MANHOLE
TC	TOP OF CURB	_____ G	NATURAL GAS		DOWNSPOUT
TG	TOP OF GRATE	_____ FM	SEWER FORCE MAIN		ROOF DRAIN
TOE	TOE OF BANK	_____ SS	SANITARY SEWER MAIN		STORM DRAIN MANHOLE
TP	TOP OF PAVEMENT	_____ SS	SANITARY SEWER SERVICE		FIRE HYDRANT
TR	TOP OF RIM	=====	DRAINAGE AREA, MAJOR		IRRIGATION CONTROL VALVE
TS	TOP OF SIDEWALK	=====	DRAINAGE AREA, MINOR		SHUT-OFF VALVE
TW	TOP OF WALL	=====	DRAINAGE FLOW PATH		SPRINKLER HEAD
RCP	REINFORCED CONCRETE PIPE	===== SD	STORM DRAINAGE PIPE		WATER METER
		===== F	FIRE LINE		WATER VALVE
		===== W	WATER LINE		YARD HYDRANT
					PIPE BOLLARD
					BENCHMARK
					ACCESSIBLE PARKING
					MAILBOX
					MONITORING WELL
					POTHOLE
					SIGN



IGADI - IDAHO SPRINGS

2820 COLORADO BLVD, IDAHO SPRINGS, CO

REV	DESCRIPTION	DATE
DATE		04.05.2023
PROJECT NO.		2275011
SHEET NAME		
COVER SHEET		
SHEET NO.		1

denver-server\civil\Projects\2275011 | gad\ltd town grow\DWG\production\2275011 SITE PLAN.dwg
PLOT: 4/5/2023 6:33:03 PM
ORIG SIZE: 24"x36"



CAUTION
NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.

FIRE DEPARTMENT ACCESS NOTE:
THE PROPOSED BUILDING CAN BE ACCESSED BY
THE FIRE DEPARTMENT FROM BOTH GILSON
STREET AND COLORADO BOULEVARD
RIGHT-OF-WAY.

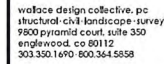
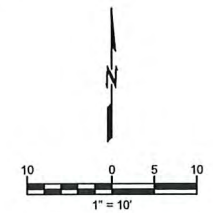
UTTER TO BE
CTED FOR A
PROJECT BY THE
S.
& GUTTER IS NO
LDING PROJECT.

4' SIDEWALK, CURB, & GUTTER TO BE
DESIGNED & CONSTRUCTED FOR A
PUBLIC IMPROVEMENT PROJECT BY THE
CITY OF IDAHO SPRINGS.
THIS SIDEWALK, CURB, & GUTTER IS NOT
PART OF THE IGADI BUILDING PROJECT.

— PROPOSED 4' SIDEWALK EASEMENT

GILSON 3

COLORADO BOULEVARD



IGADI - IDAHO SPRINGS

2820 COLORADO BLVD, IDAHO SPRINGS, CO

[illegible]

SITE PLAN

SHEET NO.

2



IGADI - IDAHO SPRINGS

2820 COLORADO BLVD, IDAHO SPRINGS, CO

REV	DESCRIPTION	DATE

DATE
04.05.2023

PROJECT NO.
2275011

SHEET NAME

**GRADING &
UTILITY PLAN**

SHEET NO.
3



Know what's below.
Call before you dig.

CAUTION

NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.

IGADI - IDAHO SPRINGS
2820 COLORADO BLVD, IDAHO SPRINGS, CO
LANDSCAPE PLAN



IGADI - IDAHO SPRINGS

REV	DESCRIPTION	DATE
		07-24-76

DATE	02.14.20
PROJECT NO.	23750
SHEET NAME	

SEEDING NOTES	SHEET NO.
---------------	-----------

Know what's below.
Call before you dig.



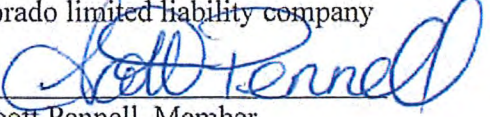
...what's below.

உள்ளே போய் பார்த்தால்

PERMISSION TO APPLY FOR FINAL DEVELOPMENT PLAN

Pennell & Associates, LLC, a Colorado limited liability company, hereby consents to and designates Igadi, Ltd. to apply on its behalf for Final Development Plan with the City of Idaho Springs for 2820 Colorado Blvd., Idaho Springs, CO 80452 (the "Property"). Pennell & Associates, LLC is the owner of the Property.

Pennell & Associates, LLC,
A Colorado limited liability company

By: 

Scott Pennell, Member



32065 Castle Court, Suite 200
Evergreen, CO 80439
Phone: 303-670-8523 / Fax: 303-633-7781

Date: March 30, 2023
File No.: 598-CS0606727-752
Buyer(s)/Borrower(s): To Be Determined
Owner(s): PENNELL AND ASSOCIATES, LLC, a Colorado limited liability company
Property: 2820 Colorado Blvd, Idaho Springs, CO 80452-5042
Assessor Parcel No.: R001223 and 1833-313-00-202

PLEASE TAKE NOTE OF THE FOLLOWING REVISED TERMS CONTAINED HEREIN:

WIRED FUNDS ARE REQUIRED ON ALL CASH PURCHASE TRANSACTIONS. FOR WIRING INSTRUCTIONS, PLEASE CONTACT YOUR ESCROW OFFICE AS NOTED ON THE TRANSMITTAL PAGE OF THIS COMMITMENT.

To: Chicago Title of Colorado - Evergreen
32065 Castle Court
Suite 200
Evergreen, CO 80439

Attn: Jill Tadra
Phone: 3032919890
Fax: 303-670-8538
Email: tadraj@CTT.com

Attn: Audrey Croft
Phone: (303) 291-9942
Fax: (303) 633-7782
Email: Audrey.Croft@ctt.com

Attn: Kelly Suazo
Phone: (303) 264-1220
Fax: (303) 633-7775
Email: Kelly.Suazo@ctt.com

To: Contracted Purchaser or Designee

To: PENNELL AND ASSOCIATES, LLC, a Colorado limited liability company
Attn: Scott Pennell
sent via email

END OF TRANSMITTAL

ALTA COMMITMENT FOR TITLE INSURANCE

issued by:



Commitment Number:

CS0606727

NOTICE

IMPORTANT - READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, Chicago Title Insurance Company, a Florida corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Amount of Insurance and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within one hundred eighty (180) days after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

Chicago Title Insurance Company

By:

Handwritten signature of Michael J. Nolan.

Michael J. Nolan, President

Attest:

Handwritten signature of Marjorie Nemzura.

Marjorie Nemzura, Secretary

Countersigned By:

Handwritten signature of Terry N. Williams.

Terry N. Williams
Authorized Officer or Agent

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Copyright American Land Title Association. All rights reserved.

The use of this Form (or any derivative thereof) is restricted to ALTA licensees and ALTA members in good standing as of the date of use. All other uses are prohibited. Reprinted under license from the American Land Title Association.



Transaction Identification Data, for which the Company assumes no liability as set forth in Commitment Condition 5.e.:

ISSUING OFFICE:	FOR SETTLEMENT INQUIRIES, CONTACT:
Title Officer: CPF CT Title Chicago Title of Colorado - Evergreen 32065 Castle Court, Suite 200 Evergreen, CO 80439 Main Phone: 303-670-8523 Email: Chicago@co.titlegroup.fntg.com	Escrow Officer: Jill Tadra Chicago Title of Colorado - Evergreen 32065 Castle Court, Suite 200 Evergreen, CO 80439 Phone: 3032919890 Main Phone: 303-670-8523 Email: tadjaj@CTT.com

Order Number: 598-CS0606727-752
Property Address: 2820 Colorado Blvd, Idaho Springs, CO 80452-5042

SCHEDULE A

1. Commitment Date: March 23, 2023 at 08:00 AM
2. Policy to be issued:

(a) ALTA Owner's Policy 2021

Proposed Insured: To Be Determined

Proposed Amount of Insurance: \$100,000.00
3. The estate or interest in the Land at the Commitment Date is:

Fee Simple
4. The Title is, at the Commitment Date, vested in:

PENNELL AND ASSOCIATES, LLC, a Colorado limited liability company
5. The Land is described as follows:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

PREMIUMS:	
Owner's Policy Premium	\$629.00
CO 110.1-06	\$95.00
Tax Certificate	\$13.50

END OF SCHEDULE A

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Copyright American Land Title Association. All rights reserved.

The use of this Form (or any derivative thereof) is restricted to ALTA licensees and ALTA members in good standing as of the date of use. All other uses are prohibited. Reprinted under license from the American Land Title Association.



EXHIBIT "A"

Legal Description

A parcel of land lying in the Southwest ¼ of Section 31, Township 3 South, Range 72 West of the 6th P.M., City of Idaho Springs, being more particularly described as follows:

Beginning at the Northeast corner of property described in [Book 319 at Page 75](#), Clear Creek County records; thence South 89°05 East, 109.6 feet; thence South 04°12' East along the East line of said property a distance of 142.04 feet more or less, to a point on the North right of way of Colorado Boulevard; thence South 78°04' West, along said North right of way a distance of 10.00 feet, more or less, to a point of tangency, thence continuing along said North right of way 93.62 feet, more or less, along a curve to the right having a central angle of 02°49'50" and a radius of 1895.02 feet; thence North 06°31' West, a distance of 159.70 feet to the Point of Beginning,

County of Clear Creek,
State of Colorado.

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Copyright American Land Title Association. All rights reserved.

The use of this Form (or any derivative thereof) is restricted to ALTA licensees and ALTA members in good standing as of the date of use. All other uses are prohibited. Reprinted under license from the American Land Title Association.



SCHEDULE B, PART I - Requirements

All of the following Requirements must be met:

1.

Pay the agreed amounts for the interest in the land and/or for the mortgage to be insured.
2.

Pay us the premiums, fees and charges for the policy.
3.

Obtain a certificate of taxes due from the county treasurer or the county treasurer's authorized agent.
4.

Evidence that any and all assessments for common expenses, if any, have been paid.
5.

The Company will require that an Affidavit and Indemnity Agreement be completed by the party(s) named below before the issuance of any policy of title insurance.

Party(s): PENNELL AND ASSOCIATES, LLC, a Colorado limited liability company

The Company reserves the right to add additional items or make further requirements after review of the requested Affidavit.
6.

Deed sufficient to convey the fee simple estate or interest in the Land described or referred to herein, to the Proposed Insured Purchaser.

NOTE: Statement of Authority for PENNELL AND ASSOCIATES, LLC, a Colorado limited liability company recorded August 11, 2005 at Reception No. [234558](#) discloses the following person(s) authorized to sign on behalf of the entity, pursuant to Colorado Revised Statutes:

Scott A. Pennell, Manager and Sandra E. Pennell, Manager
7.

Recordation of an Updated Statement of Authority for PENNELL AND ASSOCIATES, LLC, a Colorado limited liability company pursuant to Colorado Revised Statutes evidencing the existence of the entity and authority of the person(s) authorized to execute and deliver instruments affecting title to real property on behalf of the entity and containing other information required by Colorado Revised Statutes.
8.

The company requires the Seller/Vested owner named herein on Schedule "A" to provide complete information necessary to identify all leases and/or tenancies that may be in effect regarding this property. If no leases and/or tenancies are in existence, that information must be provided in written form prior to closing.
9.

Furnish to the Company an ALTA/ACSM Land Title Survey in form, content and certification to Chicago Title Insurance Company and Chicago Title of Colorado.

Note: Exception may be made to any adverse matters disclosed by the ALTA/ACSM Land Title Survey.
10.

Please be advised that our search did not disclose any open Deeds of Trust of record. If you should have knowledge of any outstanding obligation, please contact the Title Department immediately for further review prior to closing.
11.

The Company reserves the right to add additional exceptions and/or make further requirements once the identity

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Copyright American Land Title Association. All rights reserved.

The use of this Form (or any derivative thereof) is restricted to ALTA licensees and ALTA members in good standing as of the date of use. All other uses are prohibited. Reprinted under license from the American Land Title Association.

SCHEDULE B, PART I - Requirements
(continued)

of the Purchaser is disclosed.

NOTE: Exception number 5 will be removed from the Owner's and/or Lender's Policy provided the Company conducts the closing.

NOTE: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.

NOTE: Endorsement Form 110.1, deleting exception(s) 1-4 will be issued with the Owner's Policy, subject to satisfaction of requirements and as applicable.

END OF SCHEDULE B, PART I

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Copyright American Land Title Association. All rights reserved.

The use of this Form (or any derivative thereof) is restricted to ALTA licensees and ALTA members in good standing as of the date of use. All other uses are prohibited. Reprinted under license from the American Land Title Association.



SCHEDULE B, PART II - Exceptions

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This Commitment and the Policy treat any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document will be excepted from coverage.

The Policy will not insure against loss or damage resulting from the terms and conditions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

- 1. Any facts, rights, interests or claims that are not shown by the Public Records but which could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
- 2. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
- 3. Any encroachments, encumbrances, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by Public Records.
- 4. Any lien or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.
- 5. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the Public Records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires of record for the value the estate or interest or mortgage thereon covered by this Commitment.

NOTE: Upon satisfaction of all requirements herein, the above exception will not be reflected on any proposed title policy identified in Schedule A.

- 6. Water rights, claims of title to water, whether or not these matters are shown by the Public Records.
- 7. All taxes and assessments, now or heretofore assessed, due or payable.

NOTE: This tax exception will be amended at policy upon satisfaction and evidence of payment of taxes.
- 8. Terms, conditions, provisions, agreements, obligations and easements contained in the Agreement as set forth below:

Recording No.: [Book 114 Page 445](#)

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Copyright American Land Title Association. All rights reserved.

The use of this Form (or any derivative thereof) is restricted to ALTA licensees and ALTA members in good standing as of the date of use. All other uses are prohibited. Reprinted under license from the American Land Title Association.



SCHEDULE B, PART II - Exceptions
(continued)

9. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:
- In favor of: the City of Idaho Springs
Purpose: sewer line
Recording Date: March 25, 1987
Recording No: [Book 452 Page 878](#)
10. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:
- In favor of: the City of Idaho Springs
Purpose: sewer line
Recording Date: January 23, 1995
Recording No: [Book 521 Page 857](#)
11. All matters shown on Survey recorded Land Survey Plat recorded December 24, 2006 in [Book 765 at Page 618](#),
12. Any question, dispute or adverse claims as to any loss or gain of land as a result of any change in the riverbed location by other than natural causes, or alteration through accretion, reliction, erosion or avulsion of the center thread, bank, channel or flow of waters in Clear Creek lying within subject land; and any question as to the location of such center thread, bank, bed or channel as a legal description monument or marker for purposes of describing or locating subject lands.
13. Any rights, interest or easements in favor of the riparian owners, the State of Colorado, the United States of America, or the general public, which exist, have existed, or are claimed to exist in and over the waters and present and past bed and banks of Clear Creek.
14. Lease and Option to Purchase to Igadl, Ltd., and the terms and conditions thereof, as disclosed by Memorandum recorded December 9, 2016 in Book 927 at Page 629 at Reception No. [282424](#).

END OF SCHEDULE B, PART II

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Copyright American Land Title Association. All rights reserved.

The use of this Form (or any derivative thereof) is restricted to ALTA licensees and ALTA members in good standing as of the date of use. All other uses are prohibited. Reprinted under license from the American Land Title Association.



COMMITMENT CONDITIONS

1. DEFINITIONS
- a. "Discriminatory Covenant": Any covenant, condition, restriction, or limitation that is unenforceable under applicable law because it illegally discriminates against a class of individuals based on personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or other legally protected class.

b. "Knowledge" or "Known": Actual knowledge or actual notice, but not constructive notice imparted by the Public Records.

c. "Land": The land described in Item 5 of Schedule A and improvements located on that land that by State law constitute real property. The term "Land" does not include any property beyond that described in Schedule A, nor any right, title, interest, estate, or easement in any abutting street, road, avenue, alley, lane, right-of-way, body of water, or waterway, but does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.

d. "Mortgage": A mortgage, deed of trust, trust deed, security deed, or other real property security instrument, including one evidenced by electronic means authorized by law.

e. "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.

f. "Proposed Amount of Insurance": Each dollar amount specified in Schedule A as the Proposed Amount of Insurance of each Policy to be issued pursuant to this Commitment.

g. "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.

h. "Public Records": The recording or filing system established under State statutes in effect at the Commitment Date under which a document must be recorded or filed to impart constructive notice of matters relating to the Title to a purchaser for value without Knowledge. The term "Public Records" does not include any other recording or filing system, including any pertaining to environmental remediation or protection, planning, permitting, zoning, licensing, building, health, public safety, or national security matters.

i. "State": The state or commonwealth of the United States within whose exterior boundaries the Land is located. The term "State" also includes the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and Guam.

j. "Title": The estate or interest in the Land identified in Item 3 of Schedule A.
2. If all of the Schedule B, Part I-Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.
3. The Company's liability and obligation is limited by and this Commitment is not valid without:

a. the Notice;

b. the Commitment to Issue Policy;

c. the Commitment Conditions;

d. Schedule A;

e. Schedule B, Part I-Requirements; and

f. Schedule B, Part II-Exceptions; and

g. a counter-signature by the Company or its issuing agent that may be in electronic form.
4. COMPANY'S RIGHT TO AMEND
- The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company is not liable for any other amendment to this Commitment.
5. LIMITATIONS OF LIABILITY
- a. The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:

i. comply with the Schedule B, Part I-Requirements;

ii. eliminate, with the Company's written consent, any Schedule B, Part II-Exceptions; or

iii. acquire the Title or create the Mortgage covered by this Commitment.

b. The Company is not liable under Commitment Condition 5.a. if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.

c. The Company is only liable under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.

d. The Company's liability does not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Condition 5.a. or the Proposed Amount of Insurance.

e. The Company is not liable for the content of the Transaction Identification Data, if any.

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

(continued)

- f.

The Company is not obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I-Requirements have been met to the satisfaction of the Company.
- g.

The Company's liability is further limited by the terms and provisions of the Policy to be issued to the Proposed Insured.
6.

LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT; CHOICE OF LAW AND CHOICE OF FORUM
- a.

Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- b.

Any claim must be based in contract under the State law of the State where the Land is located and is restricted to the terms and provisions of this Commitment. Any litigation or other proceeding brought by the Proposed Insured against the Company must be filed only in a State or federal court having jurisdiction.
- c.

This Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- d.

The deletion or modification of any Schedule B, Part II-Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- e.

Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- f.

When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.
7.

IF THIS COMMITMENT IS ISSUED BY AN ISSUING AGENT
- The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for closing, settlement, escrow, or any other purpose.
8.

PRO-FORMA POLICY
- The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.
9.

CLAIMS PROCEDURES
- This Commitment incorporates by reference all Conditions for making a claim in the Policy to be issued to the Proposed Insured. Commitment Condition 9 does not modify the limitations of liability in Commitment Conditions 5 and 6.
10.

CLASS ACTION
- ALL CLAIMS AND DISPUTES ARISING OUT OF OR RELATING TO THIS COMMITMENT, INCLUDING ANY SERVICE OR OTHER MATTER IN CONNECTION WITH ISSUING THIS COMMITMENT, ANY BREACH OF A COMMITMENT PROVISION, OR ANY OTHER CLAIM OR DISPUTE ARISING OUT OF OR RELATING TO THE TRANSACTION GIVING RISE TO THIS COMMITMENT, MUST BE BROUGHT IN AN INDIVIDUAL CAPACITY. NO PARTY MAY SERVE AS PLAINTIFF, CLASS MEMBER, OR PARTICIPANT IN ANY CLASS OR REPRESENTATIVE PROCEEDING. ANY POLICY ISSUED PURSUANT TO THIS COMMITMENT WILL CONTAIN A CLASS ACTION CONDITION.
11.

ARBITRATION
- The Policy contains an arbitration clause. All arbitrable matters when the Proposed Amount of Insurance is Two Million And No/100 Dollars (\$2,000,000.00) or less may be arbitrated at the election of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at <http://www.alta.org/arbitration>.

END OF CONDITIONS

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Copyright American Land Title Association. All rights reserved.

The use of this Form (or any derivative thereof) is restricted to ALTA licensees and ALTA members in good standing as of the date of use. All other uses are prohibited. Reprinted under license from the American Land Title Association.



DISCLOSURE STATEMENT

- Pursuant to Section 38-35-125 of Colorado Revised Statutes and Colorado Division of Insurance Regulation 8-1-2 (Section 5), if the parties to the subject transaction request us to provide escrow-settlement and disbursement services to facilitate the closing of the transaction, then all funds submitted for disbursement must be available for immediate withdrawal.
- Colorado Division of Insurance Regulation 8-1-2, Section 5, Paragraph H, requires that "Every title insurance company shall be responsible to the proposed insured(s) subject to the terms and conditions of the title insurance commitment, other than the effective date of the title insurance commitment, for all matters which appear of record prior to the time of recording whenever the title insurance company, or its agent, conducts the closing and settlement service that is in conjunction with its issuance of an owners policy of title insurance and is responsible for the recording and filing of legal documents resulting from the transaction which was closed". Provided that Chicago Title of Colorado - Evergreen conducts the closing of the insured transaction and is responsible for recording the legal documents from the transaction, exception No. 5 in Schedule B-2 will not appear in the Owner's Title Policy and Lender's Title Policy when issued.
- Colorado Division of Insurance Regulation 8-1-2, Paragraph M of Section 5, requires that prospective insured(s) of a single family residence be notified in writing that the standard exception from coverage for unfiled Mechanics or Materialmans Liens may or may not be deleted upon the satisfaction of the requirement(s) pertinent to the transaction. These requirements will be addressed upon receipt of a written request to provide said coverage, or if the Purchase and Sale Agreement/Contract is provided to the Company then the necessary requirements will be reflected on the commitment.
- Colorado Division of Insurance Regulation 8-1-3, Paragraph C. 11.f. of Section 5 - requires a title insurance company to make the following notice to the consumer: "A closing protection letter is available to be issued to lenders, buyers and sellers."
- If the sales price of the subject property exceeds \$100,000.00 the seller shall be required to comply with the Disclosure of Withholding Provisions of C.R.S. 39-22-604.5 (Nonresident Withholding).
- Section 39-14-102 of Colorado Revised Statutes requires that a Real Property Transfer Declaration accompany any conveyance document presented for recordation in the State of Colorado. Said Declaration shall be completed and signed by either the grantor or grantee.
- Recording statutes contained in Section 30-10-406(3)(a) of the Colorado Revised Statutes require that all documents received for recording or filing in the clerk and recorder's office shall contain a top margin of at least one inch and a left, right, and bottom margin of at least one-half of an inch. The clerk and recorder may refuse to record or file a document that does not conform to requirements of this paragraph.
- Section 38-35-109 (2) of the Colorado Revised Statutes, requires that a notation of the purchasers legal address, (not necessarily the same as the property address) be included on the face of the deed to be recorded.
- Regulations of County Clerk and Recorder's offices require that all documents submitted for recording must contain a return address on the front page of every document being recorded.
- Pursuant to Section 10-11-122 of the Colorado Revised Statutes, the Company is required to disclose the following information:
 - o The subject property may be located in a special taxing district.

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Copyright American Land Title Association. All rights reserved.

The use of this Form (or any derivative thereof) is restricted to ALTA licensees and ALTA members in good standing as of the date of use. All other uses are prohibited. Reprinted under license from the American Land Title Association.



DISCLOSURE STATEMENT
(continued)

- o A Certificate of Taxes Due listing each taxing jurisdiction shall be obtained from the County Treasurer or the County Treasurer's authorized agent.
- o Information regarding special districts and the boundaries of such districts may be obtained from the Board of County Commissioners, the County Clerk and Recorder or the County Assessor.
- Pursuant to Section 10-11-123 of the Colorado Revised Statutes, when it is determined that a mineral estate has been severed from the surface estate, the Company is required to disclose the following information: that there is recorded evidence that a mineral estate has been severed, leased, or otherwise conveyed from the surface estate and that there is a substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and that such mineral estate may include the right to enter and use the property without the surface owner's permission.

Note: Notwithstanding anything to the contrary in this Commitment, if the policy to be issued is other than an ALTA Owner's Policy (6/17/06), the policy may not contain an arbitration clause, or the terms of the arbitration clause may be different from those set forth in this Commitment. If the policy does contain an arbitration clause, and the Amount of Insurance is less than the amount, if any, set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties.

This page is only a part of a 2021 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Copyright American Land Title Association. All rights reserved.

The use of this Form (or any derivative thereof) is restricted to ALTA licensees and ALTA members in good standing as of the date of use. All other uses are prohibited. Reprinted under license from the American Land Title Association.





Inquire before you wire!

WIRE FRAUD ALERT

This Notice is not intended to provide legal or professional advice.
If you have any questions, please consult with a lawyer.

All parties to a real estate transaction are targets for wire fraud and many have lost hundreds of thousands of dollars because they simply relied on the wire instructions received via email, without further verification. **If funds are to be wired in conjunction with this real estate transaction, we strongly recommend verbal verification of wire instructions through a known, trusted phone number prior to sending funds.**

In addition, the following non-exclusive self-protection strategies are recommended to minimize exposure to possible wire fraud.

- **NEVER RELY** on emails purporting to change wire instructions. Parties to a transaction rarely change wire instructions in the course of a transaction.
- **ALWAYS VERIFY** wire instructions, specifically the ABA routing number and account number, by calling the party who sent the instructions to you. DO NOT use the phone number provided in the email containing the instructions, use phone numbers you have called before or can otherwise verify. **Obtain the number of relevant parties to the transaction as soon as an escrow account is opened.** DO NOT send an email to verify as the email address may be incorrect or the email may be intercepted by the fraudster.
- **USE COMPLEX EMAIL PASSWORDS** that employ a combination of mixed case, numbers, and symbols. Make your passwords greater than eight (8) characters. Also, change your password often and do NOT reuse the same password for other online accounts.
- **USE MULTI-FACTOR AUTHENTICATION** for email accounts. Your email provider or IT staff may have specific instructions on how to implement this feature.

For more information on wire-fraud scams or to report an incident, please refer to the following links:

Federal Bureau of Investigation:
<http://www.fbi.gov>

Internet Crime Complaint Center:
<http://www.ic3.gov>

FIDELITY NATIONAL FINANCIAL PRIVACY NOTICE

Effective January 1, 2023

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

A limited number of FNF subsidiaries have their own privacy notices. If a subsidiary has its own privacy notice, the privacy notice will be available on the subsidiary's website and this Privacy Notice does not apply.

Collection of Personal Information

FNF may collect the following categories of Personal Information:

- contact information (e.g., name, address, phone number, email address);
- demographic information (e.g., date of birth, gender, marital status);
- identity information (e.g. Social Security Number, driver's license, passport, or other government ID number);
- financial account information (e.g. loan or bank account information); and
- other personal information necessary to provide products or services to you.

We may collect Personal Information about you from:

- information we receive from you or your agent;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

Collection of Browsing Information

FNF automatically collects the following types of Browsing Information when you access an FNF website, online service, or application (each an "FNF Website") from your Internet browser, computer, and/or device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

Other Online Specifics

Cookies. When you visit an FNF Website, a "cookie" may be sent to your computer. A cookie is a small piece of data that is sent to your Internet browser from a web server and stored on your computer's hard drive. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to "Do Not Track" features enabled through your browser.

Links to Other Sites. FNF Websites may contain links to unaffiliated third-party websites. FNF is not responsible for the privacy practices or content of those websites. We recommend that you read the privacy policy of every website you visit.

Use of Personal Information

FNF uses Personal Information for three main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To communicate with you about our, our affiliates', and others' products and services, jointly or independently.

When Information Is Disclosed

We may disclose your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to affiliated or nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to affiliated or nonaffiliated third parties with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law.

We reserve the right to transfer your Personal Information, Browsing Information, and any other information, in connection with the sale or other disposition of all or part of the FNF business and/or assets, or in the event of bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

Security of Your Information

We maintain physical, electronic, and procedural safeguards to protect your Personal Information.

Choices With Your Information

Whether you submit Personal Information or Browsing Information to FNF is entirely up to you. If you decide not to submit Personal Information or Browsing Information, FNF may not be able to provide certain services or products to you.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law. For additional information about your California privacy rights, please visit the "California Privacy" link on our website (<https://fnf.com/pages/californiaprivacy.aspx>) or call (888) 413-1748.

For Nevada Residents: We are providing this notice pursuant to state law. You may be placed on our internal Do Not Call List by calling FNF Privacy at (888) 714-2710 or by contacting us via the information set forth at the end of this Privacy Notice. For further information concerning Nevada's telephone solicitation law, you may contact: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: aginquiries@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes.

For Vermont Residents: We will not disclose information about your creditworthiness to our affiliates and will not disclose your personal information, financial information, credit report, or health information to nonaffiliated third parties to market to you, other than as permitted by Vermont law, unless you authorize us to make those disclosures.

For Virginia Residents: For additional information about your Virginia privacy rights, please email privacy@fnf.com or call (888) 714-2710.

Information From Children

The FNF Websites are not intended or designed to attract persons under the age of eighteen (18). We do not collect Personal Information from any person that we know to be under the age of thirteen (13) without permission from a parent or guardian.

International Users

FNF's headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

FNF Website Services for Mortgage Loans

Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except as required or authorized by contract with the mortgage loan servicer or lender, or as required by law or in the good-faith belief that such disclosure is necessary: to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

Your Consent To This Privacy Notice; Notice Changes

By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The Privacy Notice's effective date will show the last date changes were made. If you provide information to us following any change of the Privacy Notice, that signifies your assent to and acceptance of the changes to the Privacy Notice.

Accessing and Correcting Information; Contact Us

If you have questions or would like to correct your Personal Information, visit FNF's [Privacy Inquiry Website](#) or contact us by phone at (888) 714-2710, by email at privacy@fnf.com, or by mail to:

Fidelity National Financial, Inc.
601 Riverside Avenue,
Jacksonville, Florida 32204
Attn: Chief Privacy Officer



March 15, 2023

Jonathan Cain
Assistant City Administrator
City of Idaho Springs
1711 Miner St.
Idaho Springs, CO 80466

Re: Impact Analysis for Final Development Plan Application for 2820 Colorado Blvd., Idaho Springs, CO (the "Property") requested by Igadi, Ltd. (the "Applicant")

Dear Mr. Cain:

The Applicant and Property owner, Pennell & Associates, LLC, are reconstructing the cultivation located on the Property to be a state-of-the-art marijuana cultivation facility. The Project will take the former approximately 2,750± square foot house and garage turned cultivation and replace it with a 7,215 square foot cultivation facility as depicted on the attached Elevations attached hereto as Exhibit B and Site Plan attached hereto as Exhibit C (the "Project"). The zoning for the Property is C-2, it is within the East End Overlay District, and the applicant has received a variance from any requirement to add additional on-site parking.

The state-of-the-art cultivation facility to be constructed will include a tremendous amount of automation requiring the same amount of workers to operate the facility, 3 workers, as originally required to operate the smaller 2750± square foot facility that will be replaced. This is accounted for by adding a fertigation system that automatically mixes nutrients and an automated watering system that reduces the heavy labor needs of hand watering. Finally, all of the product will be sent to Igadi's newly designed centralized trimming center dramatically reducing the staffing requirements associated with that activity. Additionally, Igadi has instituted a program whereby its consolidating its ordering of cultivation products for all of its cultivations to Aurora and distributing it to its other cultivations on its company truck from this centralized distribution center, which should reduce the historic amount of deliveries to this location. Other than that, the only monthly deliveries are CO2 from General Air, Rx Green Technologies (3-5 pallets) and Cultivate (1-2 pallets). As result, Igadi will be able to operate the larger facility with the same number of staff as the prior, smaller cultivation operation and should not produce any additional traffic to the Property. In fact, the amount of traffic generated at this new cultivation should be less than in the past.

The construction will aesthetically enhance the area around Colorado Blvd. It will not impose any significant increase in parking or traffic because the larger cultivation facility will not require any additional employees as it will be automated and trimming will take place at an off-site location in Aurora, CO. The water demand for the cultivation facility will be approximately 300 gallons per day. The dehumidification system will recapture approximately 70% - 80% of the water, which will be recycled and used with the plants as the water is distilled and of the highest quality when recaptured from the dehumidification system. Currently the Property is serviced by two (2) 1" water pipes, which we believe will be sufficient. The Property is further serviced by a 4" sewer pipe, which will be more than adequate for operating the Project. Igadl's watering techniques are such that it generally does not have much effluent from the cultivation operation, only about 1250 gallons per month total, which may be less at this new cultivation as a result of the automated watering system it will use reducing the potential for over-watering. It operates a similar sized cultivation in Tabernash, CO, which is where it calculated this number. Also, attached hereto is a Sample Results of the effluent water from the cultivation in Tabernash. There is already gas and telecommunications provided to the Property and we will have add three phase power to the building and increase the electrical loads to the Property in the amount of 600 amps.

There are no anticipated environmental hazards associated with the use of the Property and the use of the property will not change from the prior use, which is marijuana cultivation, but the state-of-the-art building and mechanical systems will operate more efficiently than in the past and the mechanical system and building design will cut down on any odors or other nuisances that could emanate from the building.

The building is not a historic building and will not consume any natural resources. Further, there are no additional education requirements or additional constraints on emergency services with the newly constructed cultivation.

For the foregoing reasons, the Applicant requests the Planning Commission approve this Final Development Plan Application. Please do not hesitate to contact me with any questions, concerns, or to discuss the requested variance or the Project further.

Sincerely,

David P. Michel

David P. Michel
Founder and General Counsel



PO Box 629
Mesa, CO 81643
970-314-4888

February 16, 2023

David Michel, Manager
Igadi Ltd.
PO Box 3228
Winter Park, CO 80482



Re: Project Trip Generation Letter
Igadi Cultivation Facility (Project) at 2820 Colorado Blvd. (Idaho Springs)

David Michel:

This letter describes the existing and proposed business operations based on information from you, the business owner. It also includes my estimate of the changes in Project trip generation for the site reconfiguration.

Land Use Summary

Historic Use

The building on the site included a house and garage of approximately 2,750-sf. Igadi operated a marijuana cultivation facility in this building since 2016. Three employees were needed to perform the cultivation.



Current Use

The original house and garage have been demolished and removed.



Proposed Use

The proposed land would be a state-of-the-art, 7,215-sf cultivation facility, which would include new automation of the cultivation process. A fertigation system will automatically mix nutrients and an automated watering system that reduces the heavy labor needs of hand watering. The cultivated product will be sent to Igadi's newly designed centralized trimming center. This automation would reduce the staffing requirements associated with cultivation. This means that the same three employees can run the larger size operation in the bigger building.

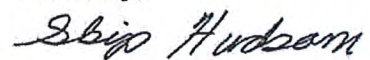
Project Trip Generation Changes

Trip generation estimates are typically based on trip rates from the most recent edition of the ITE Trip Generation Manual. However, that document does not include trip rates for a cultivation facility, and this must be considered in another way. As a non-retail operation, the only travel to/from the site would be employees and deliveries. In this case the number of employees will remain the same as the historic use, and the delivery schedule would remain the same.

The larger cultivation building would be supported by the same number of employees (3), and it would not create any additional Project trips. Therefore, the Project would not create additional traffic volume on the adjacent road system, and it would not have any additional traffic impact.

Please contact me if you have any questions regarding the information in this letter.

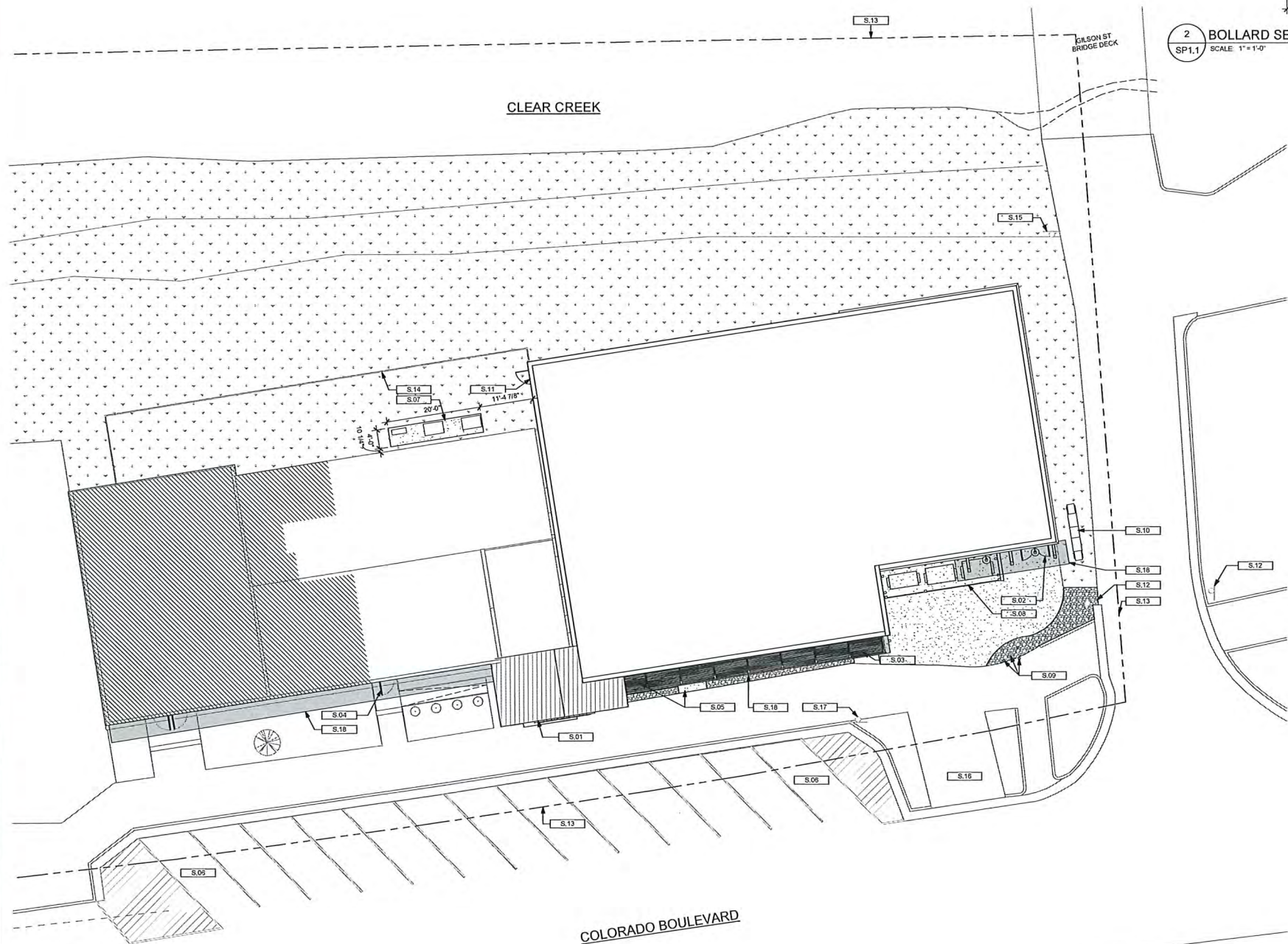
Sincerely,



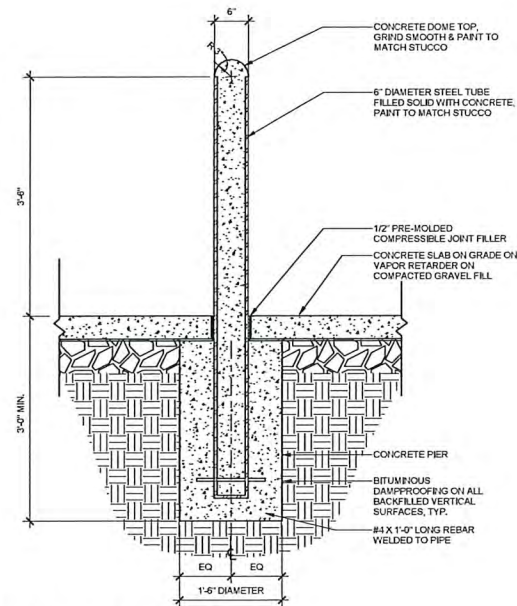
Barrie "Skip" Hudson, P.E.
President

PRINTED: 3/19/2023 6:11:43 PM

LE PATH: Autocad Docx/22-016 Igadi Idaho Springs/22-016 Igadi Idaho Springs_R23.rvt



1 SITE PLAN
SP1.1 SCALE: 3/32" = 1'-0"



2 BOLLARD SECTION
SP1.1 SCALE: 1" = 1'-0"

GENERAL SITE NOTES

- ARCHITECTURAL SITE PLAN IS A SCHEMATIC REPRESENTATION. REFER TO CIVIL DRAWINGS FOR SITE SURVEY, DRAINAGE, AND LOCATIONS OF EXISTING UTILITIES. COORDINATE WITH CAMPUS FACILITIES PLAN.
- COORDINATE ALL NEW WORK WITH CIVIL AND LANDSCAPE PLANS. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING WORK.
- CONTRACTOR TO COORDINATE WITH OWNER FOR LOCATIONS OF TEMPORARY CONSTRUCTION AND STAGING.
- ALL ACTIVE EXISTING MANHOLES, DRAIN COVERS, AND ACCESS PANELS TO REMAIN UNLESS NOTED OTHERWISE.
- ALL EXTERIOR SITE LIGHTING TO REMAIN UNLESS NOTED OTHERWISE.
- ALL ROOF DOWNSPOUTS, BOOTS, AND DRAIN LINES TO REMAIN UNLESS NOTED OTHERWISE. REFER TO CIVIL AND NEW WORK DRAWINGS.

KEYED SITE NOTES

S.01	RETAIL MAIN ENTRANCE
S.02	EMPLOYEE ENTRANCE DOORS
S.03	EMERGENCY EXIT EGRESS DOOR
S.04	EXISTING RETAIL EXIT
S.05	CONCRETE HANDICAPPED ACCESSIBLE SIDEWALK & RAMP, SEE CIVIL DRAWINGS
S.06	ACCESSIBLE PARKING, SEE CIVIL DRAWINGS
S.07	MECHANICAL EQUIPMENT ON CONCRETE PAD, SEE MECHANICAL
S.08	TRASH AND RECYCLING DUMPSTER AREA W/ CONCRETE PAD
S.09	NEW CONCRETE BOLLARDS SURROUNDING EXISTING FIRE HYDRANT, TYP.
S.10	NEW POLE SIGN
S.11	ELECTRICAL/MECHANICAL ROOM ACCESS DOOR
S.12	EXISTING STOP SIGN
S.13	PROPERTY LINE
S.14	EXISTING FENCE, TYP.
S.15	EXISTING ROAD SIGN
S.16	EXISTING CONCRETE ACCESS
S.17	EXISTING HO OVERSIGHT PARKING SIGN
S.18	NEW PRE-ENGINEERED METAL CANOPY

SITE LEGEND

	ROOF DOWNSPOUT
	SEWER DRAIN
	MANHOLE



7430 E. Caley Ave
Suite 280E
Centennial, CO 80111
P. (720) 258-4780

NOT FOR
CONSTRUCTION

IMPORTANT NOTICE: THIS DOCUMENT IS
CONFIDENTIAL. PLEASE DO NOT REPRODUCE THIS
DOCUMENT IN ANY WAY OTHER THAN WHAT IS
NEEDED TO PERFORM WITHIN THE SCOPE OF YOUR
WORK. PLEASE RETURN THE DOCUMENT TO 2WR +
PARTNERS UPON COMPLETION OF YOUR WORK OR
DESTRUCTION. IF YOU ARE USING ELECTRONIC COPIES,
PLEASE DELETE THEM FROM YOUR SYSTEM ONCE
YOUR WORK IS COMPLETED.

THIS DOCUMENT, AND ANY AFFILIATED
ARCHITECTURAL DESIGN, CONSTRUCTION, SECURITY,
AND PLANNING DOCUMENTS (AFFILIATED
DOCUMENTS) ARE CONFIDENTIAL AND CONTAIN
PROPRIETARY DATA AND INFORMATION OF 2WR +
PARTNERS. THIS DOCUMENT, AND ANY AFFILIATED
DOCUMENTS SHALL ONLY BE VIEWED, USED BY
INDIVIDUALS AND ENTITIES THAT HAVE BEEN
EXPLICITLY AUTHORIZED IN WRITING BY THE OWNER
AND 2WR + PARTNERS UNDER A NON-DISCLOSURE
AGREEMENT, AND SHALL BE VIEWED USED SOLELY
FOR THE PURPOSES STATED IN SUCH AUTHORIZATION.
ANY COPYING, REPRODUCTION, MODIFICATION,
DISTRIBUTION, RE-PLACING, OR COMMUNICATING
THE CONTENTS OF THESE DOCUMENTS, IN ANY
MANNER, IS STRICTLY PROHIBITED.

IGADI - IDAHO
SPRINGS

IGADI, LTD.
2818 COLORADO BLVD.
IDAHO SPRINGS, CO 80452

DESIGN
DEVELOPMENT

NOT FOR BID

Project Number: 22-016
Date: 02.24.2023
Drawn By: JH
Checked By: XXX
Revisions:

No.	Date	Description
-----	------	-------------

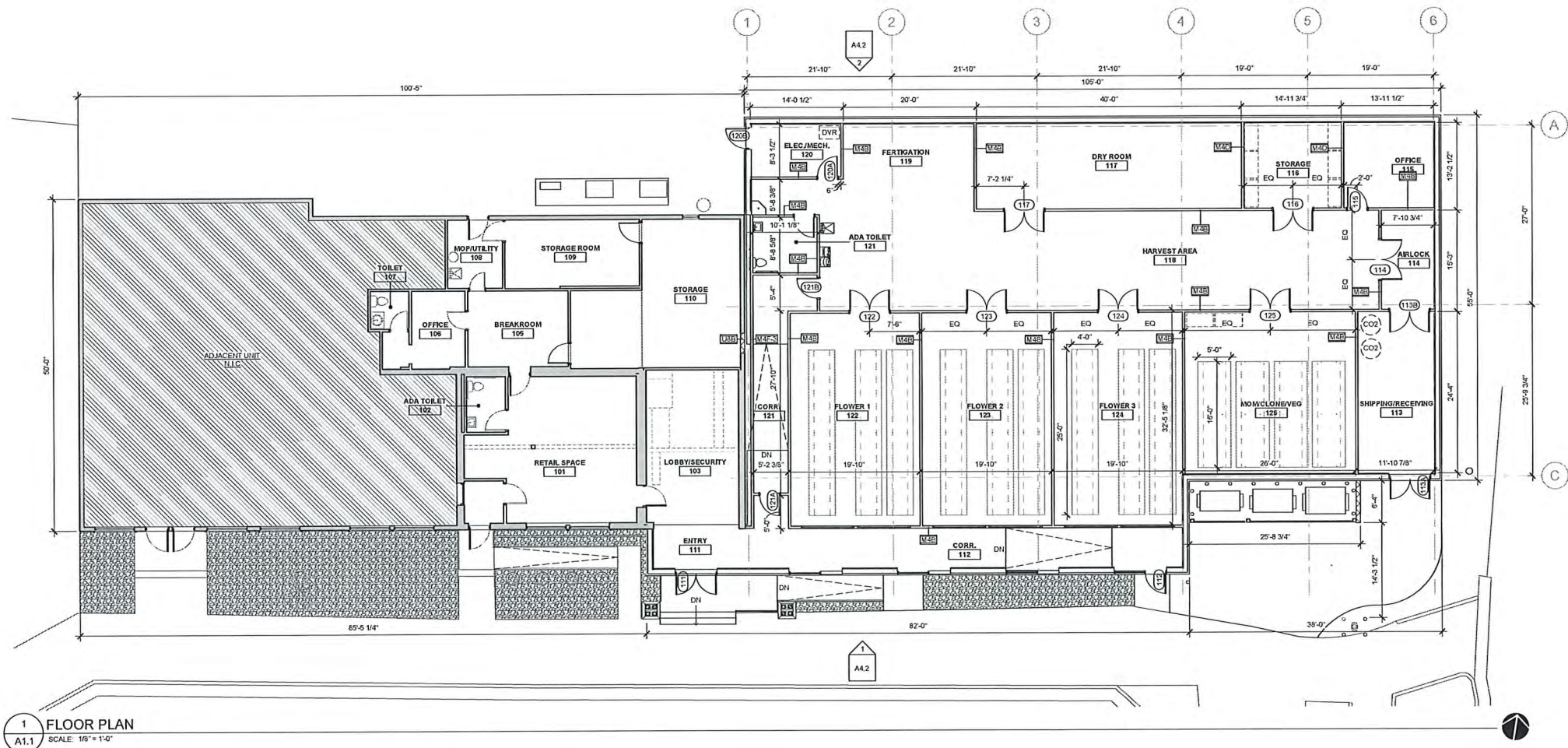
Sheet Description
SITE PLAN
& DETAILS

Sheet Number

SP1.1

PRINTED: 3/13/2023 6:11:44 PM

LE PATH: Autodesk Docs/22-016 Igadi Idaho Springs/22-016 Igadi Idaho Springs_R23.rvt



GENERAL CONSTRUCTION NOTES

- DIMENSIONS TO NEW CONSTRUCTION ARE MEASURED FROM FACE OF STUD OR FACE OF MASONRY. TYP (UNQ). DIMENSIONS TO EXISTING ELEMENTS ARE MEASURED FROM FINISH FACE, TYP (UNQ).
- REFER TO FINISH PLAN FOR FREE STANDING FURNISHINGS, (UNQ).
- REFER TO REFLECTED CEILING PLANS FOR ADDITIONAL FRAMING INFORMATION.
- REFER TO SHEET T1.2 FOR TYPICAL WALL TYPES.
- REFER TO WALL SECTIONS FOR EXTERIOR AND SPECIALTY WALL ASSEMBLIES.
- REFER TO LIFE SAFETY PLANS FOR LOCATIONS OF FIRE AND SMOKE WALLS AND COMPARTMENTATION DESIGNATIONS AND FOR CONSTRUCTION INFORMATION RELATED TO SMOKE WALLS.
- REFER TO DEMOLITION PLANS FOR ADDITIONAL FRAMING INFORMATION.
- UNTAGGED INTERIOR WALLS ARE TYPE _____ UNLESS NOTED OTHERWISE.

KEYED CONSTRUCTION NOTES



7430 E. Caley Ave
Suite 280E
Centennial, CO 80111
P. (720) 258-4780

NOT FOR CONSTRUCTION

IMPORTANT NOTE: THIS DOCUMENT IS CONFIDENTIAL. PLEASE DO NOT REPRODUCE THIS DOCUMENT IN ANY WAY OTHER THAN WHAT IS ALLOWED TO YOU BY THE SCOPE OF YOUR WORK. PLEASE RETURN THIS DOCUMENT TO 2WR + PARTNERS UPON COMPLETION OF YOUR WORK OR DESTROY IT. IF YOU ARE USING ELECTRONIC COPIES, PLEASE DELETE THEM FROM YOUR SYSTEM ONCE YOUR WORK IS COMPLETED.

THIS DOCUMENT, AND ANY AFFILIATED ARCHITECTURAL, DESIGN, CONSTRUCTION, SECURITY, AND PLANNING DOCUMENTS (AFFILIATED DOCUMENTS) ARE CONFIDENTIAL AND CONTAIN PROPRIETARY DATA AND INFORMATION OF 2WR + PARTNERS. THIS DOCUMENT, AND ANY AFFILIATED DOCUMENTS, SHALL ONLY BE VIEWED, USED, COPIED, REPRODUCED, OR OTHERWISE TRANSMITTED BY INDIVIDUALS AND ENTITIES THAT HAVE BEEN EXPRESSLY AUTHORIZED IN WRITING BY THE OWNER AND 2WR + PARTNERS. NO ENCLOSURE AGREEMENT, AND SHALL BE VIEWED USED SOLELY FOR THE PURPOSE STATED IN SUCH AGREEMENT. ANY COPYING, REPRODUCING, MODIFYING, DISTRIBUTING, DELETING, OR COMMUNICATING THE CONTENTS OF THESE DOCUMENTS, BY ANY MEANS, IS STRICTLY PROHIBITED.

IGADI - IDAHO SPRINGS

IGADI, LTD.
2818 COLORADO BLVD,
IDAHO SPRINGS, CO 80452

DESIGN DEVELOPMENT

NOT FOR BID

Project Number: 22-016
Date: 02.24.2023
Drawn By: JH
Checked By: SA
Revisions:

No.	Date	Description
-----	------	-------------

SHEET DESCRIPTION

FIRST FLOOR PLAN

SHEET NUMBER

A1.1

HVAC SYMBOLS

	FIRE DAMPER
	MANUAL VOLUME DAMPER
	SMOKE DETECTOR
	SUPPLY DIFFUSER
	RETURN GRILLE OR REGISTER
	EXHAUST GRILLE OR REGISTER
	DEVOLUTION DUCTWORK/EQUIPMENT
	DEVOLUTION - SINGLE LINE
	EXISTING DUCTWORK/EQUIPMENT
	RIGID AIR DUCTWORK
	SINGLE LINE RIGID DUCTWORK
	FLEXIBLE DUCT CONNECTION
	FLEXIBLE ROUND DUCTWORK
	DUCT SIZE TRANSITION (HORIZONTAL)
	DUCT SIZE TRANSITION (VERTICAL)
	EXHAUST/RETURN AIR DUCT DOWN
	EXHAUST/RETURN AIR DUCT UP
	OUTSIDE SUPPLY AIR DUCT DOWN
	OUTSIDE SUPPLY AIR DUCT UP
	THERMOSTAT
	POINT OF CONNECTION
	POINT OF DEVOLUTION
	DIFFUSER/GRILLE DESIGNATION
	CFM

GENERAL NOTES

- ALL WORK SHOWN ON THESE DOCUMENTS IS NEW UNLESS SPECIFICALLY IDENTIFIED AS EXISTING OR PROVIDED BY OTHERS.
- INSTALL ALL WORK ON THIS PROJECT IN ACCORDANCE WITH APPLICABLE CODES LISTED IN HVAC SPECIFICATIONS.
- SYMBOLS SHOWN ON SCHEDULES INDICATE THE TYPE OF EQUIPMENT ONLY. REVIEW DRAWINGS TO DETERMINE THE EXACT QUANTITIES REQUIRED FOR EACH EQUIPMENT TYPE.
- THESE DRAWINGS ARE DIAGNOSTIC AND ARE INTENDED TO DEPICT THE GENERAL LOCATION OF HVAC SYSTEM COMPONENTS. DO NOT SCALE MECHANICAL DRAWINGS. CONSULT ARCHITECTURAL PLANS FOR PROPER DIMENSIONS AND INFORMATION USED IN LOCATION OF EQUIPMENT.
- CONNECT ALL MECHANICAL EQUIPMENT TO DUCTWORK USING RUBBERIZED-CAVITAS FLEXIBLE CONNECTIONS. INSTALL ALL MECHANICAL EQUIPMENT ON VIBRATION ISOLATION DEVICES.
- UNOBSTRUCTED ACCESS IS REQUIRED ON ALL SIDES OF ELECTRIC DUCT HEATERS AND SIMILAR EQUIPMENT. LOCATE ALL SUCH EQUIPMENT WITH ADEQUATE CLEARANCE FOR MAINTENANCE AND TO PROVIDE CLEARANCES REQUIRED BY THE NATIONAL ELECTRICAL CODE.
- INSTALL DUCTWORK TIGHT TO THE UNDERSIDE OF THE BUILDING STRUCTURE. ADJUST THE DUCT ELEVATION AS REQUIRED TO MAINTAIN DUCT TIGHT TO BOTTOM OF STRUCTURE WHERE STRUCTURE ELEVATIONS CHANGE.
- PROVIDE ALL NECESSARY TRANSITIONS IN DUCTWORK AND PIPING FOR CONNECTION TO EQUIPMENT AND ACCESSORIES. REDUCE PIPING AND DUCTWORK SIZES ONLY AT THE CONNECTION POINT TO EQUIPMENT.
- SUSPEND DUCTWORK FROM THE BUILDING STRUCTURE IN ACCORDANCE WITH THE SMACHIA DUCT CONSTRUCTION STANDARDS. SECURELY ATTACH DUCTWORK SUPPORTS TO THE BUILDING STRUCTURE.
- PROVIDE TURNING VANES IN ALL 90-DEGREE RECTANGULAR ELBOWS.
- ELBOWS CONSTRUCTED USING A SHARP 90-DEGREE ANGLE ON THE INSIDE OF THE ELBOW AND A RADIUS BEND ON THE OUTSIDE OF THE ELBOW (HARD RADIUS HEEL OR "SLED-BOOT" FITTING) WILL NOT BE ACCEPTED.
- INSTALL 1/2-INCH WIRE MESH SCREENS ON ALL OPEN END DUCTWORK.
- INSTALL VOLUME DAMPERS AT ALL BRANCH DUCTWORK CONNECTIONS TO MAIN TRUNK DUCT AND DIFFUSER RUNOUTS.
- PROVIDE AN OPPOSED BLADE DAMPER AT EACH DUCT TAKE-OFF TO EACH CEILING DIFFUSER.
- SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL AIR INLETS, AIR OUTLETS & MECHANICAL DEVICES VISIBLE IN SPACE.
- THE MECHANICAL CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ALL WORK AS ACTUALLY INSTALLED. ON COMPLETION OF THE PROJECT, ONE (1) COMPLETE SET OF ORIGINAL DRAWINGS SHALL BE DELIVERED TO THE ARCHITECT.
- PROVIDE OPERATIONS AND MAINTENANCE MANUALS FOR ALL SYSTEMS.
- THE CONTRACTOR SHALL NOT CORE DRILL CONCRETE SLABS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF A STRUCTURAL ENGINEER (BY CONTRACTOR) AND THE BUILDING OWNER.
- CONTRACTOR TO RADIOGRAPH PROBABLE CORE DRILL LOCATION TO PREVENT CUTTING CONCEALED RE-BARS AND/OR CONDUIT IN CONCRETE MASS.
- MATERIALS EXPOSED WITHIN PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84.

DRAWING INDEX

M1.1	MECHANICAL NOTES AND SYMBOLS
M1.2	SPECIFICATIONS
M2.1	MECHANICAL PLAN
M2.2	CONDENSATE PLAN
M4.1	MECHANICAL SCHEDULE
M5.1	MECHANICAL DETAILS
M5.2	EXHAUST FAN, DAMPER WIRING AND CONTROL SEQUENCE

HVAC ABBREVIATIONS

AC	AIR CONDITIONING
ACU	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AHU	AIR HANDLING UNIT
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
COND	CONDENSATE
CU	CONDENSING UNIT
DE	DISHWASHER EXHAUST
DN	DOWN
DW	DOMESTIC WATER
(E)	EXISTING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
ET	EXHAUST TASK
EUH	ELECTRIC UNIT HEATER
EWI	ENTERING WATER TEMPERATURE
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FM	FEET PER MINUTE
GPM	GALLONS PER MINUTE
H	HUMIDIFIER
HP	HOT WATER
HPU	HEAT PUMP UNIT
HTG	HEATING
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
IN	INCHES
KE	KITCHEN EXHAUST
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
LD	LINEAR DIFFUSER
LRA	LOCKED ROTOR AMPERES
LWT	LEAVING WATER TEMPERATURE
MAU	MAKE-UP AIR UNIT
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPACITY
MCCP	MAXIMUM OVERCURRENT PROTECTION AMPS
MCD	MOTOR OPERATED DAMPER
MTR	MOTOR
NC	NOISE CRITERIA, NORMALLY CLOSED
NO	NORMALLY OPENED
OA	OUTSIDE AIR
PD	PRESSURE DROP
PF	PROPELLER FAN
PH	PHASE
PRF	PRE-FILTER
PSIG	POUNDS PER SQUARE INCH, GAUGE
RA	RETURN AIR
RG	RETURN GRILLE
RH	RELATIVE HUMIDITY
RL	REFRIGERANT LIQUID
RLA	RUNNING LOAD AMPERES
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RR	RETURN REGISTER
RS	REFRIGERANT SUCTION
RTU	ROOFTOP UNIT
SA	SUPPLY AIR
SF	SUPPLY AIR FAN
SG	SUPPLY GRILLE
SH	SENSIBLE HEAT
SL	SOUND LEVEL FOR DUCT WORK
SP	STATIC PRESSURE
SR	SUPPLY REGISTER
STR	STARTER
T	THERMOSTAT
TD	TRANSFER DUCT
TG	TRANSFER GRILLE
TH	TOTAL HEAT
TS	TEMPERATURE SENSOR
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UC	UNDERCUT
UH	UNIT HEATER
UV	UNIT VENTILATOR
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VVT	VARIABLE VOLUME & TEMPERATURE
W	WATTS

BUILDING PLANS FOR:

EasyRoots
4045 N Pecos St. Suite 210
Denver, CO, 80211

CLIENT EMAIL: SALES@EASYROOTS.COM
PHONE: 480-316-2412 | CELL PHONE: 933-327-9283

MECHANICAL NOTES AND SYMBOLS

IGADI IDAHO SPRINGS
Idaho Springs, CO.

FEBRUARY 2023
AS NOTED

S H E E T

M1.1

SPECIFICATIONS

- A. GENERAL
1. ALL WORK SHOWN ON THESE DOCUMENTS IS NEW UNLESS SPECIFICALLY IDENTIFIED AS EXISTING OR PROVIDED BY OTHERS.
2. FURNISH ALL LABOR, MATERIALS, SUPPLIES, PERMITS, TOOLS, EQUIPMENT, DEVICES, APPLIANCES, AND PERFORM ALL OPERATIONS NECESSARY FOR THE INSTALLATION OF COMPLETE HVAC AND PLUMBING SYSTEMS AND SATISFACTORY OPERATION OF ALL WORK AS SHOWN ON THE DRAWINGS OR HEREINAFTER SPECIFIED, EXCEPT AS OTHERWISE SPECIFICALLY EXCLUDED. THE SCOPE SHALL INCLUDE, BUT NOT BE LIMITED TO THE WORK SPECIFIED HEREINAFTER:

a. PERMITS AND CERTIFICATES.

b. HVAC SYSTEMS.

c. TESTING OF ALL EQUIPMENT, SYSTEMS AND MATERIALS.

d. GENERAL PROVISIONS FOR HVAC AND PLUMBING WORK.
- B. APPLICABLE CODES AND STANDARDS: PERFORM ALL WORK IN ACCORDANCE TO THE FOLLOWING CODES AND STANDARDS:

2018 INTERNATIONAL BUILDING CODE

2018 INTERNATIONAL MECHANICAL CODE

2018 INTERNATIONAL ENERGY CODE

2018 INTERNATIONAL PLUMBING CODE

NATIONAL FIRE PROTECTION AGENCY (NFPA)
- A MECHANICAL PERMIT SHALL BE OBTAINED BY A LICENSED MECHANICAL CONTRACTOR WITH APPROPRIATE WORK CLASSIFICATION AND REGISTERED WITH THE CITY. MECHANICAL WORK SHALL COMPLY WITH THE CURRENT EDITION OF THE MICHIGAN MECHANICAL CODE (MMC) AND ADOPTED STANDARDS, PUBLIC ACT 230 OF 1972, MICHIGAN BUILDING CODE, AND WHERE APPLICABLE, THE INTERNATIONAL FUEL GAS CODE (IFGC), INTERNATIONAL ENERGY CONSERVATION CODE (IECC), MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS, NFPA 99, 2014 INTERNATIONAL FIRE CODE (IFC), AND REFERENCED SECTIONS OF THE ELECTRICAL, PLUMBING, AND BUILDING CODES. WORK IS SUBJECT TO FIELD REVIEW, INSPECTION, AND APPROVAL.
- EXISTING CONDITIONS
1. THE SITE, LOCATION AND ROUTING OF SYSTEMS INDICATED TO HAVE NEW CONNECTIONS MADE TO THEM ARE SHOWN ACCURATELY AS FIELD CONDITIONS WOULD PERMIT. BIDDING CONTRACTORS SHALL VISIT THE SITE AND THOROUGHLY EXAMINE THE CONTRACT DRAWINGS. CONTRACTORS WHO DO NOT VISIT THE SITE MAY BE UNILATERALLY NOT PERMITTED TO SUBMIT A BID IF THE OWNER SO DECIDES. ALL EXISTING CONDITIONS SHALL BE EXAMINED AND THEIR EXACT LOCATION VERIFIED. THE CONTRACTORS SHALL REPORT TO THE OWNER BEFORE SUBMITTING A BID, ANY CONDITIONS WHICH MIGHT MAKE THE INSTALLATION OF THE REQUIRED EQUIPMENT A PROBLEM. NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED FOR FAILURE TO INVESTIGATE EXISTING CONDITIONS OR MISUNDERSTANDING OF THE CONTRACT DOCUMENTS.
2. CONTRACTORS SHALL VERIFY ALL EXISTING CONDITIONS AND SHALL BRING ALL DISCREPANCIES TO THE ENGINEER'S ATTENTION PRIOR TO START OF WORK.
- D. GENERAL PROVISIONS FOR MECHANICAL WORK:
1. DRAWINGS: DRAWINGS ARE CONSIDERED DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK AND SYSTEMS. REFER TO ARCHITECTURAL DRAWINGS TO VERIFY LOCATION OF EQUIPMENT, ETC. CHECK DRAWINGS OF OTHER TRADES TO VERIFY EXACT SPACE CONDITIONS FOR DUCTWORK, PIPING AND OTHER EQUIPMENT.
2. QUALITY OF MATERIALS: NEW, BEST OF THEIR RESPECTIVE KIND, FREE FROM DEFECTS.
3. SHOP DRAWINGS: SUBMIT SHOP DRAWINGS FOR ALL MATERIAL AND EQUIPMENT SPECIFIED HEREIN OR LISTED IN THE EQUIPMENT SCHEDULES.
4. SUBMIT COORDINATION DRAWING TO A SCALE OF 1/4"=1'-0" OR LARGER DETAILING MAJOR ELEMENTS, COMPONENTS, AND EXISTING AND NEW SYSTEMS OF MECHANICAL EQUIPMENT AND MATERIAL IN RELATION WITH OTHER SYSTEMS, INSTALLATION AND BUILDING COMPONENTS FOR THE FIRST FLOOR AND LOWER LEVEL MECHANICAL ROOM. INDICATE LOCATION OF WHERE SPACE IS LIMITED FOR INSTALLATION AND ACCESS AND WHERE SEQUENCING AND COORDINATION OF INSTALLATIONS ARE OF IMPORTANCE TO THE EFFICIENT FLOW OF WORK. INDICATE PROPOSED LOCATION OF PIPING, DUCTWORK, EQUIPMENT AND MATERIALS INCLUDING CLEARANCES FOR INSTALLATION, SERVICE AND MAINTENANCE OF VARIOUS PIECES OF EQUIPMENT.
5. INDICATE SCHEDULING, SEQUENCING, MOVEMENT AND POSITIONING OF EQUIPMENT INTO THE BUILDING.
6. CONTRACTOR SHALL VISIT THE SITE AND THOROUGHLY EXAMINE ALL CONTRACT DOCUMENTS TO HAVE A COMPLETE UNDERSTANDING OF THE SCOPE OF THE PROJECT BEFORE SUBMITTING HIS PROPOSAL. ANY QUESTIONS OR DISCREPANCIES OR IRREGULARITIES THAT THE CONTRACTOR MAY HAVE ABOUT THE PROJECT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING AND RESOLVED PRIOR TO THE ORDERING OF MATERIALS OR INSTALLATION OF WORK. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO PERFORM ALL WORK REQUIRED FOR A COMPLETE AND SATISFACTORY INSTALLATION.
7. DISCONNECTION OF BUILDING SERVICES SHALL BE DURING THE WEEKENDS OR AFTER 7:00 PM WITH PRIOR APPROVAL OF THE BUILDING MANAGEMENT.
8. PROTECT ALL HVAC EQUIPMENT AND DUCTWORK FROM COLLECTING DUST AND DEBRIS DURING THE CONSTRUCTION PROCESS. COVER AND SEAL ALL EQUIPMENT INCLUDING INLETS AND DISCHARGE WITH PLASTIC. SEAL ALL DUCTWORK OPENINGS DURING CONSTRUCTION PROCESS.
9. CLEAN ALL EQUIPMENT AND DUCTWORK PRIOR TO OCCUPANCY.
- E. AIR FLOW AND WATER BALANCE TESTING:
1. SCOPE: AFTER COMPLETION OF THE INSTALLATION OF THE AIR CONDITIONING AND HEATING SYSTEM AND VENTILATION SYSTEM AND PRIOR TO ACCEPTANCE BY THE OWNER, THE SYSTEMS SHALL BE ADJUSTED AND BALANCED TO DELIVER AIR QUANTITIES AND WATER FLOWS AS SPECIFIED ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER. ADJUST EXISTING AND NEW UNITS TO DELIVER THE AIR QUANTITIES INDICATED ON THE DRAWINGS. SUBMIT AN AIR BALANCE AND WATER BALANCE REPORT TO ENGINEER.
2. TESTING AND BALANCING SHALL BE PERFORMED BY AN INDEPENDENT CONTRACTOR PER ASSOCIATED AIR BALANCING COUNCIL (IABCO), NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE, LATEST EDITION.
3. INSTALL ALL FILTERS AND ARTIFICIALLY LOAD THE AIR FILTERS TO 90 PERCENT OF FINAL (DRTY) PRESSURE DROP PRIOR TO BALANCING AIR CONDITIONING UNIT.
4. BALANCE AIR AND WATER QUANTITIES TO WITHIN PLUS OR MINUS 3 PERCENT OF THAT INDICATED ON THE DRAWINGS, ANY REQUIRED CHANGES TO SWEERS, BELTS, PULLEYS OR THE ADDITION OF DAMPERS REQUIRED TO ACHIEVE SPECIFIED FLOW RATES SHALL BE PROVIDED BY THE HVAC CONTRACTOR WITH NO ADDITIONAL COST TO OWNER.
5. THE BALANCE REPORT SHALL INCLUDE AS A MINIMUM THE FOLLOWING INFORMATION:

5.1. ABC OR REEB CERTIFICATION NUMBER AND SIGNATURE OF BALANCING CONTRACTOR.

5.2. INSTRUMENTATION LIST WITH LAST CALIBRATION DATES.

5.3. AIR CFM AND STATIC PRESSURE READINGS (DISCHARGE AND SUCTION) AS MEASURED BY PITOT TUBE DUCT TRAVERSE AT THE UNITS.

5.4. MOTOR AND FAN RPM, SWEERS, BELT SIZES AND LENGTHS.

5.5. OUTSIDE, RETURN, MIXED AND SUPPLY AIR TEMPERATURES AT FULL COOLING AND HEATING.

- 5.6. WATER BALANCE DATA INCLUDING GPM WITH INLET AND OUTLET TEMPERATURES AND PRESSURE READINGS.
- 5.7. MAKE AND MODEL NUMBERS OF ALL AIR DISTRIBUTION EQUIPMENT.
- 5.8. FINAL BALANCED AIR VOLUMES AT ALL OUTLETS INCLUDING RETURNS WHERE DUCTED.
- 5.9. INDEXED PLAN WITH UNITS, DIFFUSERS AND RETURN LOCATIONS.
6. ALL CONTROL SEQUENCES SHALL BE TESTED AND OPERATING STATUS RECORDED IN THE REPORT.
7. THE BALANCING CONTRACTOR SHALL PERFORM ALL APPLICABLE TESTING AND BALANCING FUNCTIONS REQUIRED FOR THE SYSTEM DESIGNED IN THESE DRAWINGS.
- DUCT CONSTRUCTION AND SEALING GUIDELINES
- FOR LOW PRESSURE DUCT SYSTEMS = 2 W.C.
- FOR ALL DUCT SYSTEMS WITH AN OPERATING PRESSURE LESS THAN OR EQUAL TO 2 W.C., THE FOLLOWING SHALL APPLY:
1. REFER TO HVAC EQUIPMENT SCHEDULES FOR THE DESIGNED DUCT MAXIMUM OPERATING PRESSURE, FOR EACH SYSTEM.
2. DUCTWORK SHALL BE FABRICATED FROM PRIME GRADE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH SMACH 2" W.C. PRESSURE RATINGS, AND SHALL BE SUPPORTED AS PER SMACH STANDARDS.
3. RECTANGULAR DUCTWORK LONGITUDINAL SEAMS SHALL BE LOCKING TYPE FASTENING METHOD EQUAL TO "SHAP LOCK" OR "BUTTON LOCK" WITH APPLIED SEALANT REQUIRED. IN COMPLIANCE WITH IMC SECTION C403.2.9.1, EXCEPTION.
4. ROUND DUCTWORK LONGITUDINAL SEAMS SHALL BE LOCKING TYPE FASTENING METHOD EQUAL TO "SHAP LOCK" WITH APPLIED SEALANT REQUIRED. COMPLIANCE WITH IMC SECTION C403.2.9.1, EXCEPTION.
5. DUCT CONNECTIONS TO EQUIPMENT, FITTINGS, AND OTHER DUCTS SHALL BE SEALED WITH AN APPLIED MASTIC SEALANT, OR APPROVED TAPE SEAL, IN COMPLIANCE WITH 2018 IMC SECTION C403.2.9.1.1.
6. LOCKING TYPE LONGITUDINAL JOINTS AND SEAMS, OTHER THAN SHAP LOCK AND BUTTON LOCK TYPES, NEED NOT BE SEALED AS SPECIFIED IN THIS SECTION, ACCORDING TO THE IMC SECTION C403.2.9.1.1.
7. TAPES AND MASTICS FOR HARD DUCTS SHALL BE UL 181A LISTED AND LABELED.

7.1. UL 181A-P FOR PRESSURE SENSITIVE TAPE.

7.2. UL 181A-M FOR MASTIC.

7.3. UL 181-F FOR HEAT SENSITIVE TAPE.
8. TAPES AND MASTICS FOR FLEXIBLE AIR DUCT SHALL BE UL 1818 LISTED.

8.1. UL 1818-FX FOR PRESSURE SENSITIVE TAPE.

8.2. UL 1818-M FOR MASTIC.
- PIPE INSULATION NOTES
- INSULATION FOR FIELD ERECTED REFRIGERANT PIPE
- REFRIGERANT SUCTON GAS PIPING
- SUCTON LINES SHALL BE INSULATED EQUAL TO FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION WITH A THERMAL CONDUCTIVITY RATIO OF 0.25 BTU-IN/HRS-F/DEGREE F AT 75 F MEAN TEMPERATURE. UL-181 LISTED AND ASTM -C-254 MATERIAL, AND SHALL HAVE A FLAME SPREAD NOT OVER A RATING OF 25, AND SMOKE DEVELOPED NOT OVER A RATING OF 50, EQUAL TO ARMACELL AP-ARMAFLEX-FS TUBE INSULATION. OUTDOOR APPLICATIONS SHALL INCLUDE UV PROTECTION.
- SUCTON PIPE<1 1/2" SHALL BE INSULATED WITH 1/2" THICK MATERIAL.
- SUCTON PIPE>1 1/2" SHALL BE INSULATED WITH 3/4" THICK MATERIAL.
- REFRIGERANT LIQUID PIPING:
- INSULATION LINES SHALL BE INSULATED IF AND AS RECOMMENDED BY SPECIFIC AC SYSTEM MANUFACTURERS.
- INSULATION SHALL BE FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION WITH A THERMAL CONDUCTIVITY RATIO OF 0.25 BTU-IN/HRS-F/DEGREE F AT 75 F MEAN TEMPERATURE. UL-181 LISTED AND ASTM -C-254 MATERIAL, AND SHALL HAVE A FLAME SPREAD NOT OVER A RATING OF 25, AND SMOKE DEVELOPED NOT OVER A RATING OF 50, EQUAL TO ARMACELL AP-ARMAFLEX-FS TUBE INSULATION. OUTDOOR APPLICATIONS SHALL INCLUDE UV PROTECTION.
- LIQUID PIPE<1 1/2" SHALL BE INSULATED WITH 1/2" THICK MATERIAL.
- REFRIGERANT HOT GAS PIPING
- ONLY HOT GAS PIPING WHICH IS EXPOSED TO PUBLIC DIRECT HAND CONTACT, AND AS INDICATED ON THE PLANS, SHALL BE INSULATED FOR CONTACT PROTECTION. INSULATION SHALL BE FLEXIBLE CLOSED CELL ELASTOMERIC THERMAL INSULATION WITH A THERMAL CONDUCTIVITY RATIO OF 0.25 BTU-IN/HRS-F/DEGREE F AT 75 F MEAN TEMPERATURE. UL-181 LISTED AND ASTM -C-254 MATERIAL, AND SHALL HAVE A FLAME SPREAD NOT OVER A RATING OF 25, AND SMOKE DEVELOPED NOT OVER A RATING OF 50, EQUAL TO ARMACELL AP-ARMAFLEX-FS TUBE INSULATION. INTENDED FOR HOT TOUCH PROTECTION. OUTDOOR APPLICATIONS SHALL INCLUDE UV PROTECTION.
- HOT GAS PIPE SHALL BE INSULATED WITH 1/2" THICK MATERIAL.
- TYPE "B" DUCT WRAP
- FIBERGLASS DUCT WRAP WITH FOIL-SCRM DRAFT/STUCK JACKET, EQUAL TO KNAUF INSULATION FIBERGLASS DUCT WRAP, A DENSITY OF 0.75 LB/CF, WITH A FLAME SPREAD NOT OVER 25, AND SMOKE DEVELOPED NOT OVER A RATING OF 50, IN COMPLIANCE WITH ASTM-E-84, IECC. MATERIAL IS RATED FOR A MAXIMUM DUCT TEMPERATURE OF 250F. INSULATION SHALL COMPLY WITH NFPA 90A AND 90B, BASED ON THE PUBLISHED "INSTALLED R-VALUE" AT 75 F MEAN TEMPERATURE.

1-1/2" THICKNESS EQUAL R-4.2

2" THICKNESS EQUALS R-5.8

2-3/16" EQUAL R-6

2-1/2" THICKNESS EQUALS R-7.0

3" THICKNESS EQUALS R-8
- G. DUCTWORK REUSE AND CLEANING
1. ANY DUCTWORK TO BE REUSED AND/OR REMAIN IN PLACE SHALL BE CLEANED, TESTED AND DEMONSTRATED TO BE CLEAN IN ACCORDANCE WITH THE STANDARDS SET FORTH BY THE NATIONAL AIR DUCT CLEANERS ASSOCIATION (NADCA) SPECIFICATION. THE CLEANING TESTING AND DEMONSTRATION SHALL OCCUR IMMEDIATELY PRIOR TO OWNER OCCUPANCY TO AVOID CONTAMINATION FROM CONSTRUCTION DUST AND OTHER AIRBORNE PARTICULATES.
- I. DUCT LEAKAGE TEST:
1. TEST ALL DUCTWORK IN OWNER'S PRESENCE WITH 4 INCHES W.C. AND HIGHER PRESSURE CLASS. REPLACE DUCTWORK NOT MEETING THE PRESSURE OR SEAL CLASS.
2. TEST SECTIONS SHALL NOT EXCEED 150 LF IN LENGTH AND SHALL INCLUDE DAMPERS REQUIRED BY CONTRACT DOCUMENTS.
- J. INSULATION:

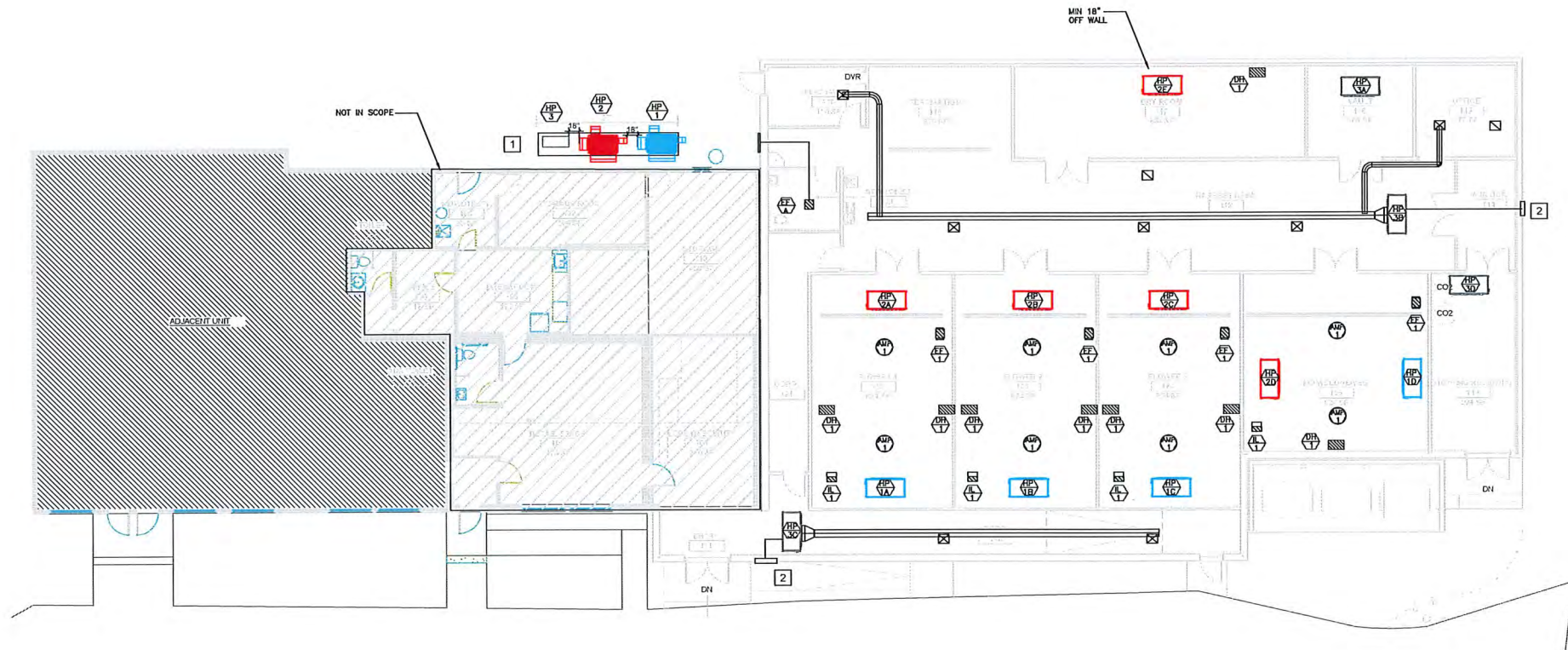
1. INSULATE CONDENSATE DRAIN WITH 1/2" ELASTOMERIC INSULATION.
2. INSULATE IN-DOOR SUPPLY AND RETURN AIR DUCTWORK WITH 1" THICK MINIMUM R-6 INSULATION.
3. INSULATE SUPPLY, RETURN AIR DUCTWORK LOCATED OUTDOORS AND OUTSIDE AIR DUCTWORK WITH R-8 INSULATION.
4. INSULATE OUTSIDE AIR DUCT WITH R-8 INSULATION.
5. INSULATE CONDENSATE DRAIN PIPING WITH 1/2" THICK INSULATION.
6. TAPE AND SEAL ALL INSULATION JOINTS.
7. PROVIDE PRE-MOLDED PVC PROTECTIVE COVERING FOR PIPING INSULATION INSTALLED OUTDOORS.
- P. HVAC SYSTEM CONTROL
1. PROVIDE ALL RELAYS, TRANSFORMERS, PANELS, WIRING, ETC., FOR A COMPLETE INSTALLATION.
2. PROVIDE PROGRAMMABLE THERMOSTAT TO PLACE UNIT IN OCCUPIED, UNOCCUPIED, NIGHT SET-BACK AND MORNING MODES OF OPERATION. UNIT FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS OF OPERATION (AS DIRECTED BY OWNER) OR MORNING WARM-UP MODE. UNIT COOLING OR HEATING SHALL ENERGIZE TO MAINTAIN SPACE TEMPERATURE SETTINGS. UNIT FAN SHALL ENERGIZE INTERMITTENTLY DURING NIGHT SET-BACK TO SATISFY THE THERMOSTAT SETTING IN NIGHT SET-BACK MODE OF OPERATION. OUTSIDE AIR DAMPER SHALL REMAIN CLOSED DURING MORNING WARM-UP MODE AND NIGHT SET-BACK MODE.
3. PROVIDE A 5 DEGREE F DEADBAND BETWEEN COOLING AND HEATING SET-POINTS.
4. DR COOLING SHALL OPERATE WHEN SPACE TEMPERATURE IS ABOVE COOLING SETPOINT (ADJ.).
5. PROVIDE OPTIMUM START FUNCTION.
6. PROVIDE LOCAL EXHAUST FAN SWITCH.
- Q. ACCESS DOORS:
1. PROVIDE ACCESS DOORS IN ALL CEILINGS, DUCTS, CHASES, WALLS, ETC., OF COMPATIBLE MATERIAL OR RATING TO ALLOW FOR EASY ACCESS TO ALL CONCEALED OPERATING DEVICES FOR CLEANING, ADJUSTMENT, RESETTNG OR REPLACEMENT OF SAME. DEVICES INCLUDE BUT ARE NOT LIMITED TO VALVES, VOLUME DAMPERS, CLEAN-OUTS, ETC.
- R. IDENTIFICATION
1. ALL EQUIPMENT, DUCTWORK, PIPING AND MECHANICAL DEVICES SHALL BE PROVIDED WITH IDENTIFICATION NAME TAG OR MARKING OF NO LESS THAN 1/4" LETTERS OR IN ACCORDANCE WITH ASME 13.1.
- S. EXECUTION
1. ALL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH APPLICABLE CODES AND ORDINANCES AS SPECIFIED UNDER GENERAL CONDITIONS.
2. UPON COMPLETION OF THE WORK, ALL EQUIPMENT SHALL BE THOROUGHLY CLEANED AND SANITIZED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EQUIPMENT UNDER THIS SECTION UNTIL FINAL ACCEPTANCE OF THE JOB.
4. TEST AND INSPECTION:

a. ALL EQUIPMENT AND SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH LOCAL AND OTHER APPLICABLE CODES.

b. AT THE TIME OF FINAL INSPECTION AND TEST, ALL CONNECTIONS TO DEVICES AND EQUIPMENT MUST BE COMPLETED AND OPERATING IN A NORMAL MANNER FOR AT LEAST 5 DAYS.

c. THE CONTRACTOR SHALL FURNISH THE INSTRUMENTS FOR MAKING ALL TESTS. TESTS SHALL BE CONDUCTED IN THE PRESENCE OF OWNER'S REPRESENTATIVE.

d. CONTRACTOR SHALL CORRECT ANY EQUIPMENT OR SYSTEMS THAT DO NOT TEST SATISFACTORY.
5. LEAK TEST ALL PIPING SYSTEM PRIOR TO INSULATION AND CONNECTION TO EQUIPMENT.
6. CLEAN PIPING SYSTEM AND FLUSH PIPING PRIOR TO PLACING IN SERVICE.
- T. GUARANTEE AND WARRANTIES:
1. CONTRACTOR SHALL GUARANTEE ALL WORK PERFORMED AND ALL MATERIALS INSTALLED BY HIM TO BE IN COMPLIANCE WITH ALL APPLICABLE CODES AND TO BE FREE FROM INHERENT DEFECTS. CONTRACTOR SHALL REPAIR OR REPLACE ANY DEFECTIVE MATERIALS OR WORKMANSHIP AT NO CHARGE TO THE OWNER FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE.
2. PROVIDE A LIST OF WARRANTIES WITH WARRANTY PERIOD FOR EACH PIECE OF EQUIPMENT.
- U. OSM MANUALS:
1. PROVIDE OSM MANUALS FOR HVAC SYSTEMS ASSEMBLED IN A BINDER. PROVIDE TYPE WRITTEN INDEX OF ALL EQUIPMENT AND DEVICES. SUBMIT ONE COPY OF THE OPERATING AND MAINTENANCE MANUAL TO THE OWNER FOR APPROVAL 30 DAYS BEFORE DATE OF FINAL APPROVAL.
- V. COORDINATION:
- THE DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW SCOPE. THE CONTRACTOR SHALL COORDINATE HIS COORDINATION. THE DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW SCOPE. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES TO PROVIDE BEST ARRANGEMENT OF ALL DUCTS, PIPES, CLEAN-OUT, ETC. LOCATION OF EXISTING PIPING AND DUCTWORK SHOWN IS APPROXIMATE. CONTRACTOR SHALL VERIFY THEIR LOCATION PRIOR TO BEGINNING WORK OF THIS SECTION AND SHALL MAKE MODIFICATIONS AND ADJUSTMENTS REQUIRED TO INSTALL THE WORK OF THIS SECTION.
- FIELD VERIFY REFRIGERANT PIPE LENGTHS AND INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

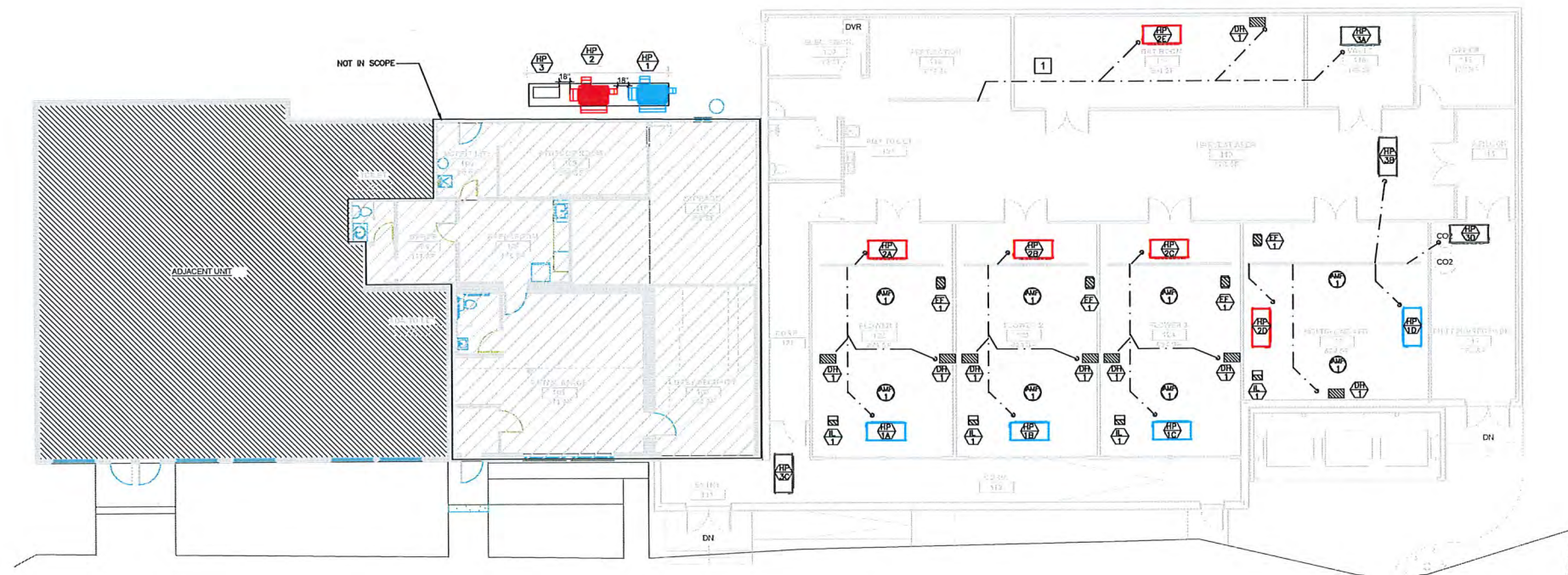


1 FIRST FLOOR PLAN - MECHANICAL
M2.1 SCALE: 1/8" = 1'-0"

- GENERAL NOTES.
1. PROVIDE FCU UNIT AND HEAT PUMP UNIT DISCONNECT WITHIN SIGHT OF THE UNIT.
 2. THE AIR HANDLER AND DEHUMIDIFIER SHOWN ON THIS SHEET WILL BE MOUNTED ABOVE THE CEILING AND DUCTED TO THE SPACE.
 3. EXHAUST FAN AND AIR INTAKE DUCTING TO RUN ABOVE ROOMS
 4. THE MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICIAN ON CEILING PENETRATIONS.
 5. ROUND DUCTING AND REGISTERS CAN BE SUBSTITUTED WITH EQUIVALENT SIZE OF RECTANGULAR DUCT/REGISTERS.

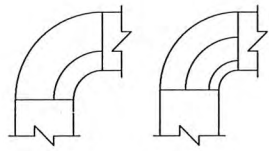
NOTE: INSTALLING CONTRACTOR OR OWNER SHALL MAKE ALL NECESSARY VENTILATION / OUTSIDE AIR PROVISIONS REQUIRED BY CODE. OUTSIDE AIR SHALL BE SET TO CODE MINIMUM. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL AND STATE CODE. FOR LOW AMBIENT COOLING (COOLING BELOW 30F), CUSTOMER OR INSTALLING CONTRACTOR MUST ADD VENTILATION TO ANY CULTIVATION ROOM.

KEYED NOTES:	
1	INSTALL HEAT PUMP UNIT AND CONDENSING UNIT ON 6" CONCRETE PAD.
2	12x12 OUTSIDE AIR INTAKE.

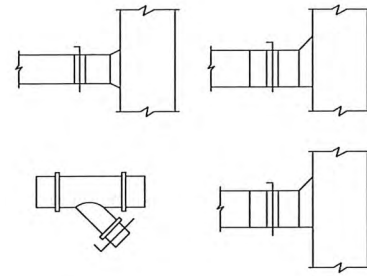


KEYED NOTES:

1 CONDENSATE DOWN TO FERTIGATION ROOM.



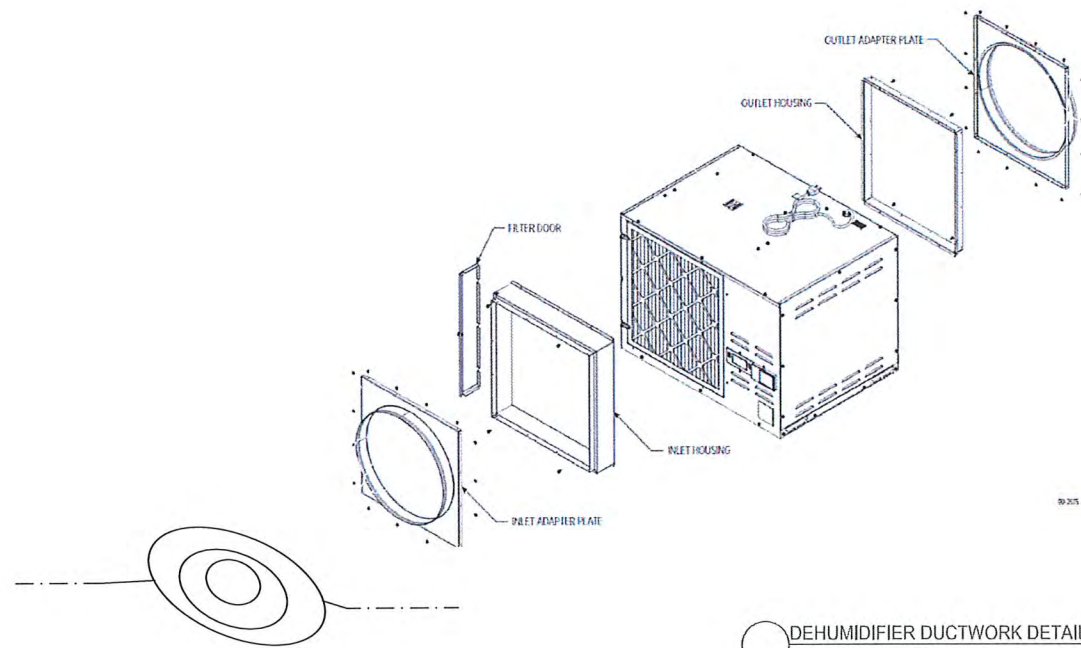
TURNING VANES DETAIL
NOT TO SCALE



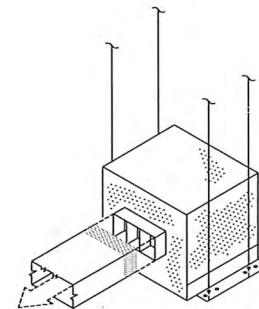
DUCT TAKE-OFFS DETAIL
NOT TO SCALE



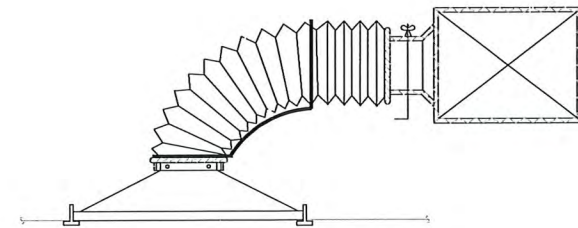
VOLUME DAMPER DETAIL
NOT APPLICABLE



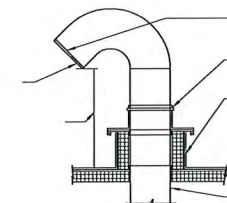
DEHUMIDIFIER DUCTWORK DETAIL



CEILING EXHAUST FAN DETAIL
NOT APPLICABLE



6 TYPICAL DIFFUSER CONNECTION
NOT TO SCALE



GOOSENECK DETAIL
NOT TO SCALE

PLUMBING ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	MH	MAINHOLE
AFG	ABOVE FINISHED GRADE	MIN	MINIMUM
APD	AIR PRESSURE DROP	MTG	MOUNTING
BD	BALANCING DAMPER	MV	MANUAL AIR VENT
BF	BARRIER FREE	NC	NORMALLY CLOSED
BOD	BOTTOM OF DUCT ELEVATION	NFVH	NON-FREEZE WALL HYDRANT
BTUH	BRITISH THERMAL UNIT PER HOUR	NO	NORMALLY OPEN
BV	BALANCING VALVE	OA	OUTSIDE AIR
CB	CATCH BASIN	OAI	OUTSIDE AIR INTAKE
CBV	CALIBRATED BALANCING VALVE	PD	PRESSURE DROP
CFH	CUBIC FEET PER HOUR	PIV	POST INDICATOR VALVE
CFM	CUBIC FEET PER MINUTE	PRV	PRESSURE REDUCING VALVE
CH	CABINET HEATER	PR	PANEL RADIATION
CI	CAST IRON	PT	PRESSURE / TEMPERATURE TAPPING
CM	CEILING MOUNTED	RA	RETURN AIR
CO	CLEAN OUT	RAV	RELIEF AIR VENT
CV	CONTROL VALVE	RD	ROOF DRAIN
CD	DOMESTIC COLD WATER	RH	RELATIVE HUMIDITY
DF	DRINKING FOUNTAIN	RPM	REVOLUTIONS PER MINUTE
DN	DOWN	RPPBP	REDUCED PRESSURE PRINCIPAL BACKFLOW PREVENTER
EA	EXHAUST AIR	RV	RELIEF VALVE
EAT	ENTERING AIR TEMPERATURE	RW	RAW WATER (UNSOFTENED)
EDB	ENTERING DRY BULB	SA	SUPPLY AIR
EF	EXHAUST FAN	SENS	SENSIBLE
ESP	EXTERNAL STATIC PRESSURE	SH	SHOWER
EWB	ENTERING WET BULB	SK	SINK
EWG	ELECTRIC WATER COOLER	SOV	SHUT-OFF VALVE
EWT	ENTERING WATER TEMPERATURE	SP	STATIC PRESSURE
EXIST	EXISTING	TEMP	TEMPERATURE
FD	FLOOR DRAIN	TOT	TOTAL
FBM	FEET PER MINUTE	TR	TEMPERATURE RISE
FR	FIN RADIATION	TS	TIP SPEED
HB	HOSE BIBB	TSP	TOTAL STATIC PRESSURE
GPM	GALLONS PER MINUTE	UH	UNIT HEATER
HP	HORSE POWER	URNL	URNAL
HW	DOMESTIC HOT WATER	VAV	VARIABLE AIR VOLUME BOX
HWR	DOMESTIC HOT WATER RETURN	V	VENT
IE	INVERT ELEVATION	VEL	VELOCITY
LAT	LEAVING AIR TEMPERATURE	VIF	VERIFY IN FIELD
LAV	LAVATORY	VTR	VENT THRU ROOF
LDB	LEAVING DRY BULB	W	WASTE
LVR	LOUVER	WC	WATER CLOSET
LWB	LEAVING WET BULB	WPD	WATER PRESSURE DROP
LWT	LEAVING WATER TEMPERATURE		
MA	MIXED AIR		
MAT	MIXED AIR TEMPERATURE		
MAX	MAXIMUM		
MB	MOP BASIN		
MBH	BRITISH THERMAL UNIT PER HOUR (THOUSANDS)		

SYMBOLS

AW	ACID WASTE	MVAC	MEDICAL VACUUM
AWV	ACID WASTE VENT		OUTSIDE STEM AND YOKE VALVE
	BALANCING VALVE		OXYGEN
	BUTTERFLY VALVE		PRESSURE GAUGE
	CALIBRATED BALANCING VALVE		PRESSURE REDUCING VALVE
	CAP		PRESSURE RELIEF VALVE
	CHECK VALVE		PRESSURE / TEMPERATURE TAPPING
CR	CHILLER RETURN	PHR	PRIMARY HEATING HOT WATER RETURN
CS	CHILLER SUPPLY	PHS	PRIMARY HEATING HOT WATER SUPPLY
CWR	CHILLED WATER RETURN	PC	PUMPED CONDENSATE
CWS	CHILLED WATER SUPPLY		REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER
	COLD WATER (DOMESTIC)	SAW	SANITARY SEWER (ABOVE FLOOR)
CA	COMPRESSED AIR	SAN	SANITARY SEWER (BELOW FLOOR)
COND	CONDENSATE		SHUT-OFF VALVE
CD	CONDENSATE DRAIN		SMOKE DAMPER
	CONTROL VALVE	SCW	SOFT COLD WATER
CTR	COOLING TOWER RETURN	SHW	SOFT HOT WATER
CTS	COOLING TOWER SUPPLY	SHWR	SOFT HOT WATER RETURN
	FIRE DAMPER (HORIZONTAL)		SPRING CHECK VALVE
	FIRE DAMPER (VERTICAL)	STM (#)	STEAM
	FIRE/SMOKE DAMPER	ST	STEAM TRAP
	FIRE PROTECTION	ST (OF)	STORM SEWER (ABOVE FLOOR)
	FLOW METER (PROBE TYPE)	ST (OF)	STORM SEWER (OVERFLOW SYSTEM)
	FLOW METER (WAFER TYPE)	ST	STORM (BELOW FLOOR)
	FLOW SWITCH		STRAINER
FD	FOOTING DRAIN	TS	TEMPERATURE SENSOR
FOR	FUEL OIL RETURN	TW	TEPID WATER
FOS	FUEL OIL SUPPLY	TWR	TEPID WATER RETURN
G	GAS		THERMOMETER
	GAS COCK		THERMOSTAT
HR	HEATING HOT WATER RETURN		THREE-WAY CONTROL VALVE
HS	HEATING HOT WATER SUPPLY		THROTTLING VALVE
HPR	HEAT PUMP RETURN		TRIPLE DUTY VALVE (ANGLE)
HPS	HEAT PUMP SUPPLY		TRIPLE DUTY VALVE (STRAIGHT)
	HOT WATER RETURN (DOMESTIC)		UNION
	HOT WATER SUPPLY (DOMESTIC)		VACUUM
	HUMIDISTAT	VAC	VACUUM BREAKER
MA	MEDICAL AIR	V	VENT

PLUMBING FIXTURES

WATER CLOSET (TANK TYPE) WC-1
WATER CLOSET (FLOOR MOUNTED); KOHLER WELLYWORTH CLASSIC, TWO-PIECE ELONGATED 1.6 GPF TOILET, K-3595-SS, VITREOUS CHINA, EQUIPPED WITH SLOAN FLUSHMATE POLISHED CHROME LEFT HANDED LEVER, WITH ANTIMICROBIAL FINISH, WHITE IN COLOR, CONTRACTOR TO SUPPLY OPEN FRONT SEAT, TO MATCH, THE TOILET IS ASME A112.19.2/CSA B45.1 AND ADA COMPLIANT

SK-1
KOHLER SOHO K-2084-0 WHITE 20" X 18" WALL-MOUNT BATHROOM SINK WITH SINGLE FAUCET HOLE KOHLER KUMIN K-98827-4-CP POLISHED CHROME SINGLE-HANDLE BATHROOM SINK FAUCET

SS-1
SERVICE SINK: ONE PIECE 23"x23" FLOOR MOUNT SINGLE UTILITY SERVICE SINK WHITE BY FLORESTONE MANUFACTURER PART #FM-1 UD

FLOOR DRAIN FD-1
ASME A112.21.1, LACQUERED CAST IRON TWO PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WEEP HOLES, REVERSIBLE CLAMPING COLLAR, AND 6 INCH DIAMETER, ROUND, ADJUSTABLE NICKEL-BRONZE STRAINER, PROVIDE TRAP PRIMER CONNECTION AT ALL LOCATIONS SHOWN ON PLANS, AND AS REQUIRED BY CODE.

WATER HEATER WH-1
RHEEM 20 GALLON ELECTRIC PROFESSIONAL CLASSIC SERIES POINT-OF-USE MODEL #R0EZ01R1P0U

DF-1
DRINKING FOUNTAIN-SELF-CLOSING AND COMPLY WITH ASME A112.19.1/CSA B45.2, ASME A112.19.2/CSA B45.1, OR ASME A112.19.3/CSA B45.4

EYE WASH EW-1
GUARDIAN COMBINATION EYEFACE WASH AND SHOWER SAFETY STATION, 20 GPM FLOW CONTROL G1950P

PLUMBING NOTES

FITTINGS, TRIM, AND ACCESSORIES
A. TOILET SEATS: ELONGATED, SOLID WHITE PLASTIC WITH MOLDED-IN BUMPERS, CLOSED BACKOPEN FRONT, LESS COVER, AND HAVING BRASS CHECK HINGE.
B. SUPPLIES AND STOPS FOR LAVATORIES AND SINKS: POLISHED CHROME-PLATED, LOOSE-KEYED ANGLE STOP HAVING 1/2" INLET AND 3/8" O.D. X 12" LONG CHROME-PLATED BRASS TUBING OUTLET, AND WALL FLANGE AND ESCUTCHEON.
C. TRAPS: BRASS, CHROME PLATED ADJUSTABLE 1" TRAP WITH CLEANOUT AND WASTE TO WALL WITH ESCUTCHEON.
D. THERMOSTATIC MIXING VALVE FOR INDIVIDUAL LAVS OR SINKS: CONFORM TO ASSE STANDARD 1070 WITH HIGH LIMIT SET AT 110°F WITH CHECKSTOPS ON INLETS, WATTS SERIES USG-8 UNDER SINK GUARDIAN OR EQUAL.
E. BARRIER-FREE LAVATORY TRAP WRAP: PROVIDE ADA-CONFORMING, WHEELCHAIR ACCESSIBLE LAVATORY P-TRAP AND ANGLE VALVE ASSEMBLY PROTECTIVE PIPE COVER, COVER SHALL BE SECURED WITH SNAP-CLIP FLUSH REUSABLE FASTENERS, ANGLE STOP SHALL HAVE LOCK-LID LOCKING ACCESS COVERS, TRUE-BRO LAY GUARD OR EQUAL.
F. IN LOCATIONS WHERE ARCHITECT IS PROVIDING A BELOW COUNTER BARRIER-FREE COUNTERTOP BASIN SHIELD, PROVIDE OFFSET TAILPIECE TO ALLOW FOR INSTALLATION OF ARCHITECTURAL SHIELD / AVOID CONFLICT WITH SINK TAILPIECE, ELKAY LXAD/LXAD18 OR EQUAL.

INSTALLATION
A. INSTALL PLUMBING FIXTURES LEVEL AND PLUMB, IN ACCORDANCE WITH FIXTURE MANUFACTURER'S WRITTEN INSTRUCTIONS, ROUGH-IN DRAWINGS, AND PERTINENT CODES AND REGULATIONS, THE ORIGINAL DESIGN, AND THE REFERENCED STANDARDS.
B. COMPLY WITH THE INSTALLATION REQUIREMENTS OF REQUIRED CODES AND STANDARDS WITH RESPECT TO BARRIER-FREE PLUMBING FIXTURES. COORDINATE WITH GRAB BAR INSTALLATIONS.
C. INSTALL COUNTER TOP MOUNTED SINKS AS FAR FORWARD AS POSSIBLE WITHIN COUNTER TOP.
D. FASTEN PLUMBING FIXTURES SECURELY TO SUPPORTS OR BUILDING STRUCTURE. SECURE SUPPLIES BEHIND OR WITHIN WALL CONSTRUCTION TO PROVIDE RIGID INSTALLATION.
E. INSTALL A STOP VALVE IN AN ACCESSIBLE LOCATION IN THE WATER CONNECTION TO EACH FIXTURE.
F. INSTALL ESCUTCHEONS AT EACH WALL, FLOOR, AND CEILING PENETRATION IN EXPOSED FINISHED LOCATIONS AND WITHIN CABINETS AND MILLWORK.
G. SEAL FIXTURES TO WALLS AND FLOORS USING SILICONE SEALANT, MATCH SEALANT COLOR TO FIXTURE COLOR.
H. INSTALL FLUSH VALVES FOR WATER CLOSETS IN OFF-SET TYPE BARRIER-FREE STALLS WITH HANDLES ON WIDE SIDE OF STALL.
I. INSTALL THERMOSTATIC MIXING VALVE FOR INDIVIDUAL LAVS OR SINKS BENEATH FIXTURE, IN A VISUALLY CONCEALED LOCATION.

ROUGH-IN SCHEDULE
LINE SIZES INDICATED BELOW ARE RUN-OUT SIZES, REDUCE SIZE AS REQUIRED AT CONNECTION TO FIXTURE. MAIN LINES SHALL BE INSTALLED AS INDICATED ON DRAWINGS.

FIXTURE	HOT WATER	COLD WATER	WASTE	VENT
LAVATORY	1/2"	1/2"	2"	2"
SINK	1/2"	1/2"	1 1/2"	2"
WATER CLOSET TANK -	1/2"	1/2"	4"	2"
MOP BASIN	3/4"	3/4"	3"	1 1/2"
NON-FREEZE HYDRANT -	3/4"	3/4"	-	-
HOSE BIBB	-	3/4"	-	-

MOUNTING HEIGHTS SCHEDULE
MOUNT PLUMBING FIXTURES AS SCHEDULED BELOW.

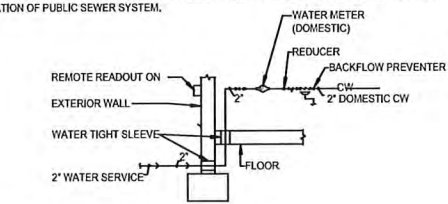
FIXTURE	MOUNTING HEIGHT
LAVATORY	31" FLOOR TO RIM
SINK	35" FLOOR TO RIM
BARRIER-FREE LAVATORIES AND SINK REFER TO ARCH. DRAWINGS FOR EXACT LOCATION AND HEIGHTS (MAX 34" A.F.F. TO RIM)	
BARRIER FREE WATER CLOSET	17" FLOOR TO TOP OF SEAT
BARRIER FREE FLUSH VALVES	27" FLOOR TO BOTTOM EDGE OF FRONT APRON
SHOWER HEAD	44" MAX HANDLE TO FLOOR
BARRIER FREE SHOWER CONTROLS MIN.	72" FLOOR TO HEAD
BARRIER FREE SHOWER SPRAY UNIT	38" ABOVE FLOOR, MAX 48" ABOVE FLOOR
SLIDE BAR	BOTTOM MAX 48" ABOVE FLOOR
	TOP MIN. 12" ABOVE FLOOR

*SEE MOUNTING HEIGHTS + ABBREVIATIONS SHEET FOR VISUALS

PLUMBING SPECIALTIES
A. CALIBRATED BALANCING VALVES: PROVIDE AS INDICATED, CALIBRATED BALANCE VALVES EQUIPPED WITH VALVES ON READOUT PORTS TO FACILITATE CONNECTING OF DIFFERENTIAL PRESSURE METER TO BALANCE VALVES. READOUT VALVES SHALL HAVE 1/4" NPT CONNECTION FOR METERS. PROVIDE CALIBRATED NAMEPLATE TO INDICATED DEGREE OF CLOSURE OF ORIFICE. CONSTRUCT BALANCING VALVE WITH INTERNAL SEALS TO PREVENT LEAKAGE AROUND ROTATING ELEMENT. VALVES TO HAVE MEMORY STOP FEATURE TO ALLOW VALVE TO BE CLOSED AND THEN REOPENED TO SET POINT WITHOUT DISTURBING BALANCING POSITION. PROVIDE BALANCE VALVES WITH PERFORMED POLYURETHANE INSULATION SUITABLE FOR USE ON DOMESTIC HOT WATER SYSTEMS, AND TO PROTECT BALANCE VALVES DURING EQUIPMENT. BELL & GOSSETT "CIRCUIT SETTER" APOLLO VALVES OR EQUAL.
B. RECESSED NON-FREEZE WALL HYDRANTS: CAST-BRONZE BOX WITH TEE HANDLE KEY, VACUUM BREAKER, HINGED LOCKING COVER, 3/4" IN INLET, AND HOSE OUTLET. PROVIDE BRONZE CASING OF SUITABLE LENGTH TO HAVE VALVE BODY INSIDE BUILDING, NOT WITHIN EXTERIOR WALL. "WOODCORE" MODEL B97, "COBRACORE" OR EQUAL.
C. BACKFLOW PREVENTER: REDUCED-PRESSURE-PRINCIPLE ASSEMBLY CONSISTING OF SHUTOFF VALVES ON INLET AND OUTLET AND STRAINER ON INLET. ASSEMBLIES SHALL INCLUDE TEST COCKS, AIR GAP DRAIN FITTING AND PRESSURE-DIFFERENTIAL RELIEF VALVE LOCATED BETWEEN 2 POSITIVE SEATING CHECK VALVES AND COMPLY WITH REQUIREMENTS OF ASSE STANDARD 1013. PRESSURE DROP THROUGH ASSEMBLY SHALL NOT EXCEED 12 PSIG/WATTS' NO. 909 SERIES, FEBCO, APOLLO VALVES.

GENERAL PLUMBING NOTES

- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, AND LAWS.
- ARRANGE AND PAY FOR ALL PERMITS AND INSPECTIONS AS REQUIRED.
- ALL WORK SHALL BE PERFORMED TO FACILITATE EXPEDITIOUS PROGRESS ON THE WHOLE PROJECT. COORDINATE WORK WITH OTHER TRADES TO MINIMIZE AND RESOLVE POTENTIAL CONFLICTS.
- COMPLETED SYSTEMS SHALL BE TESTED, BALANCED, AND GUARANTEED. PROVIDE REPORT TO A/E.
- THE DRAWINGS ARE DIAGRAMMATIC IN NATURE. THE CONTRACTOR SHALL PROVIDE FITTINGS, OFFSETS, ETC., AS NECESSARY TO PROVIDE COMPLETE SYSTEMS.
- FURNISH AND INSTALL ALL VALVING FOR THE PROPER SECTIONALIZING AND OPERATION OF PIPING SYSTEMS. PROVIDE ACCESS PANELS AS REQUIRED FOR ACCESS TO VALVES.
- ALL PIPES PASSING THROUGH FINISHED WALLS, PARTITIONS, AND FLOORS SHALL BE FITTED WITH ADJUSTABLE ESCUTCHEONS, AND APPROPRIATE FIRE STOPPING WHERE REQUIRED.
- ATTACH ALL FIXTURES TO SUPPORTING SURFACES PLUMB AND LEVEL. WALL HUNG UNITS SHALL BE SECURELY FASTENED TO WALL BACKING. PROVIDE CHAIR CARRIERS FOR ALL LAVATORIES.
- WHERE FIXTURES ARE MOUNTED TO WALLS AND FLOORS, SEAL ALL INTERSECTIONS WITH DOW WHITE SILICONE CAULK.
- IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY DETAIL OF CONSTRUCTION. CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS NECESSARY FOR A COMPLETE CODE COMPLYING SYSTEM.
- FINAL LOCATION OF ALL CEILING FEATURES NEEDS TO BE COORDINATED WITH ALL TRADES.
- PROVIDE APPROPRIATE FIRE STOPPING MATERIALS WHERE FIRE RATED ASSEMBLIES ARE PENETRATED.
- ALL WORK AND MATERIALS SHALL BE GUARANTEED IN WRITING FOR ONE YEAR FROM PROJECT COMPLETION.
- PROVIDE SHOP DRAWINGS FOR APPROVAL OF PLUMBING FIXTURES, ROOF TOP UNITS, GRILLES AND REGISTERS, FANS, WATER HEATERS, AND THERMOSTATS.
- MECHANICAL CONTRACTOR TO FIELD VERIFY ALL SITE LOCATIONS.
- SLOPE ALL NEW SANITARY PIPING A MIN. OF 1/8" PER FOOT.
- SANITIZE ALL NEW HOT & COLD WATER LINES PER LOCAL WATER DEPARTMENT REQUIREMENTS. FLUSH AND TEST SYSTEM FOR LEAKS. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROPER LEAK-FREE OPERATION OF SYSTEM. SOLDER JOINTS WITH NON-LEAD SOLDER.
- PROVIDE D-ELECTRIC FITTINGS WHERE DISSIMILAR METALS ARE CONNECTED.
- SUPPLY ALL NECESSARY TRIM, P-TRAPS, AND ANGLE STOPS AT EACH PLUMBING FIXTURE.
- DISTRIBUTE HOT & COLD WATER PIPING IN TYPE "L" HARD DRAWN COPPER TUBING, ASTM B 88, TO MEET MINIMUM CONNECTION SIZE REQUIREMENTS AS SHOWN ON THE PLUMBING FIXTURE CONNECTION SCHEDULE.
- INSULATE ALL COLD WATER LINES WITH 1" MINERAL FIBER INSULATION WITH VAPOR BARRIER. INSULATE ALL HOT WATER LINES WITH 1" FIBERGLASS.
- DRAIN, VENT AND WASTE PIPING SHALL BE SCHEDULE DWV PVC. CLEAN OUTS IN FINISHED AREAS SHALL BE RECESSED AND HAVE CHROME OR BRASS COVER PLATES FLUSH WITH THE FINISHED FLOOR.
- PROVIDE SHUTOFF VALVES ON HOT & COLD WATER BRANCH PIPING TO ISOLATE BRANCH.
- PROVIDE CLEAN OUTS INSIDE AND OUTSIDE THE BUILDING 100 FEET APART, AND AT LOCATIONS WHERE A CHANGE IN DIRECTION GREATER THAN 45 DEGREES OCCURS.
- INSTALL EACH FIXTURE WITH TRAP, EASILY REMOVABLE FOR SERVICE AND CLEANING.
- AT EACH BARRIER FREE WATER CLOSET WITH FLUSH VALVE, INSTALL THE HANDLE TOWARD THE "OPEN" SIDE OF THE WATER CLOSET STALL.
- INSTALL POTABLE WATER PROTECTION DEVICES ON PLUMBING LINES WHERE CONTAMINATION OF DOMESTIC WATER MAY OCCUR, ON JANITOR ROOMS, FIRE SPRINKLER SYSTEMS, AND FLUSH VALVES.
- INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE, JOINTS, OR CONNECTED EQUIPMENT.
- FURNISH AND INSTALL WATER HAMMER ARRESTERS IN ACCORDANCE WITH PDI WH201.
- LAY OUT PLUMBING WORK TO AVOID CONFLICTS WITH OTHER BUILDING COMPONENTS. ESTABLISH ELEVATION OF PUBLIC SEWER SYSTEM.



1 WATER SERVICE DETAIL
P100 NTS

ENERGY CONSERVATION CODE 2021

PROJECT CLIMATE ZONE: 5b
STATEMENT OF COMPLIANCE: TO THE BEST OF MY KNOWLEDGE, BELIEF, & PROFESSIONAL JUDGEMENT, THESE PLANS & SPECIFICATIONS ARE IN COMPLIANCE W/ THE ENERGY CONSERVATION CODE 2021

CODE SECTION	CODE PRESCRIPTIVE REQUIREMENT REQUIRED														
LOAD CALCULATIONS	SYSTEM DESIGN LOADS SHALL BE DETERMINED IN ACCORDANCE W/ GENERALLY ACCEPTED ENGINEERING STANDARDS ACCEPTABLE TO THE ADOPTING AUTHORITY.														
EQUIPMENT EFFICIENCY	EQUIPMENT & TANKS SHALL MEET REQUIREMENTS OF SECTION 7.4.2 & TABLE 7.8 WHERE MULTIPLE CRITERIA ARE LISTED. ALL CRITERIA SHALL BE MET. EQUIPMENT NOT LISTED IN TABLE 7.8 HAS NO MINIMUM PERFORMANCE REQUIREMENTS. THE EFFICIENCY SHALL BE PROVIDED AS NOTED IN THE EQUIPMENT SCHEDULE.														
SERVICE HOT-WATER PIPING INSULATION	THE CODE-LISTED PIPING SHALL BE INSULATED TO LEVELS SHOWN IN SECTION 6, TABLE 6.3-1. INSULATION SHALL BE AS REQUIRED IN THIS CODE SECTION, BUT THE MINIMUM THICKNESS SHALL NOT SUPERSEDE ANY GREATER INSULATION THICKNESS REQUIREMENTS NECESSARY TO MEET THE PROJECT SPECIFICATIONS. <table><tr><th>TEMP RANGE (°F)</th><th>CONDUCTIVITY (Btu-in)</th><th>MEAN RATING TEMP. (°F)</th><th>1" PIPE</th><th>1" TO 4" PIPE</th><th>4" TO 6" PIPE</th><th>6" & UP PIPE</th></tr><tr><td>105°-140°</td><td>0.21-0.28</td><td>100°</td><td>1" INS.</td><td>1" INS.</td><td>1 1/2" INS.</td><td>1 1/2" INS.</td></tr></table>	TEMP RANGE (°F)	CONDUCTIVITY (Btu-in)	MEAN RATING TEMP. (°F)	1" PIPE	1" TO 4" PIPE	4" TO 6" PIPE	6" & UP PIPE	105°-140°	0.21-0.28	100°	1" INS.	1" INS.	1 1/2" INS.	1 1/2" INS.
TEMP RANGE (°F)	CONDUCTIVITY (Btu-in)	MEAN RATING TEMP. (°F)	1" PIPE	1" TO 4" PIPE	4" TO 6" PIPE	6" & UP PIPE									
105°-140°	0.21-0.28	100°	1" INS.	1" INS.	1 1/2" INS.	1 1/2" INS.									
SERVICE WATER HEATING SYSTEM CONTROLS	TEMPERATURE CONTROLS SHALL BE IN ACCORDANCE W/ SECTION 7.4.4.1. TEMPERATURE MAINTENANCE CONTROLS SHALL BE IN ACCORDANCE W/ SECTION 7.4.4.2. OUTLET TEMPERATURE CONTROLS SHALL BE IN ACCORDANCE W/ SECTION 7.4.4.3. CIRCULATING PUMP CONTROLS SHALL BE IN ACCORDANCE W/ SECTION 7.4.4.4.														
POOLS	POOL EQUIPMENT IS NOT PART OF THIS APPLICATION & SHALL BE FILED SEPARATELY.														
HEAT TRAPS	VERTICAL PIPE RISERS SERVING STORAGE WATER HEATERS & STORAGE TANKS NOT HAVING INTEGRAL HEAT TRAPS & SERVING A NONRECIRCULATING SYSTEM SHALL HAVE HEAT TRAPS ON BOTH THE INLET & OUTLET PIPING AS CLOSE AS PRACTICAL TO THE STORAGE TANK.														
SPACE HEATING & WATER HEATING	NOT APPLICABLE FOR THIS PROJECT.														
SERVICE WATER HEATING EQUIPMENT USED TO PROVIDE ADD'L FUNCTION OF SPACE HEATING	NOT APPLICABLE FOR THIS PROJECT.														
BUILDINGS W/ HIGH-CAPACITY SERVICE WATER HEATING SYSTEMS	APPLICABLE EQUIPMENT SHALL MEET REQUIREMENTS OF THIS SECTION & SHALL HAVE A MINIMUM THERMAL EFFICIENCY OF 60%. THE EFFICIENCY SHALL BE PROVIDED AS NOTED IN THE EQUIPMENT SCHEDULE.														

PLUMBING LEGENDS NOTES AND ABBREVIATIONS

EasyRoots
4045 N Pecos St. Suite 210
Denver, CO, 80211
CLIENT EMAIL: SALES@EASYSROOTS.COM
PHONE: 480-316-2412
CELL PHONE: 833-327-9283

IGADI IDAHO SPRINGS
Idaho Springs, CO.

FEBRUARY 2023
AS NOTED

P-100

PLUMBING WATER AND WASTE SERVICE CALCULATIONS										
DESIGNATION	FIXTURE					PIPE DIAMETER(IN.)				
	QTY	DRAIN (DFU)	TOTAL	WATER SUPPLY (WSFU)	TOTAL CW	S	W	V	CW	HW
EW-1	1	2	2	2.5	2.5	-	2"	1 1/2"	3/4"	-
SK-1	1	1	1	.4	.4	-	2"	1 1/2"	3/4"	3/4"
HB-1	4	-	-	5	20	-	-	-	3/4"	-
SS-1	2	2	4	3	-	-	2"	1 1/2"	3/4"	3/4"
FT-1	5	4	20	-	-	2"	-	2"	1"	-
WC-1	1	4	4	4	4	4"	-	2"	1"	-
VF-1	2	5	1	.75	1.5	4"	-	2"	1"	-
TOTAL FIXTURE UNITS			32		25.9	-	-	-	-	-

- NOTES:
1. FIXTURE UNIT PER IPC 2018.
 2. REFER TO ARCHITECT'S DRAWING FOR REQUIRED HANDICAPPED MOUNTING HEIGHT.
 3. COLOR/FINISHES TO BE SELECTED BY THE ARCHITECT.

HOT WATER PIPING SCHEDULE BASED ON 5 FEET PER SECOND

PIPE SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"
GPM	25	6	13	20	28	56	72	135	190	450
FT. FU.	1	7	16	28	45	119	236	533	874	2570

COLD WATER PIPING SCHEDULE BASED ON 5 PSI PER 100 FEET

PIPE SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"
GPM	25	6	13	22	33	65	128	160	330	700
FT. FU.	1	7	18	34	62	190	455	719	1658	5106
FV. FU.	-	-	-	5	16	68	-	-	-	-

WATER HEATERS SCHEDULE

EQUIPMENT TAG	EQUIPMENT	No. REQUIRED	MODEL	OUTLET WATER TEMP (°F)	W.M.P.	TEST PRESSURE	GPM/HEATER	TEMP. RISE (°F)	HW SINGLE ELEMENT	AMP SUPPLY	VOLTS	PHASE	CYCLE	PEAK FLOWRATE PER ZONE (GPM)	EFFICIENCY	NOTES
EW-1	ELECTRIC STORAGE WATER HEATER	1	AO SMITH EXMT-6	140	150	150	-	100	1.64	20	120	1	60	3.5	99	

NOTE: PROVIDE A LEAK DETECTION SYSTEM FOR THE WATER HEATERS TO BE PLACED ON FLOOR BEVEATH WATER HEATERS. CONNECT LEAK DETECTION SYSTEM TO BMS.

PLUMBING PIPING AND FITTING MATERIAL

LOCATION	SANITARY SOIL WASTE AND VENT PIPING	DOMESTIC WATER PIPING	FUEL GAS PIPING	FIXTURE CONNECTION TO TRAPS	INDIRECT AND CONDENSATE DRAIN
ABOVE GRADE	1/2" TO 2": SHALL BE SCH 11 2 1/2" UP AND UP, SHALL BE PVC SCHEDULE 80 CONFORMING TO ASTM D2246, ASTM F441/ASTM F442, CSA B137.8	1/2" TO 2": SHALL BE SCH 11 2 1/2" UP AND UP, SHALL BE CPVC SCHEDULE 80 CONFORMING TO ASTM D2246, ASTM F441/ASTM F442, CSA B137.8	SCHEDULE 40 GALVANIZED STEEL PER ASTM A53. FITTINGS UP TO 2" SHALL BE GALVANIZED THREADED VALVEABLE POLY PER ANSI. 8" & 10" FITTINGS 2 1/2" AND OVER SHALL BE GALVANIZED WELDED SCHEDULE 40 STEEL.	TYPE DWV HARD DRAIN COPPER	SHALL BE CPVC SCHEDULE 80 CONFORMING TO ASTM D2246, ASTM F441/ASTM F442, CSA B137.8
BELOW GRADE	SAME AS ABOVE	SAME AS ABOVE	-	-	-
INSULATION	-	INSULATED HOT WATER WITH 1 1/2" THICK PEEKGLASS INSULATION PER CSC TITLE 24.	-	-	INSULATE CONDENSATE DRAIN PIPING WITH 1" THICK PER CSC TITLE 24.

BACKFLOW PREVENTION TYPES

NO.	ITEMS/EQUIPMENT (SIZE)		TYPE
1	ICE DRINK DISPENSER (1/2")	NON-HEALTH HAZARD	DOUBLE CHECK VALVE (DCV)
2	COFFEE MACHINE (1/2")	NON-HEALTH HAZARD	DOUBLE CHECK VALVE (DCV)
3	ICE MAKER (1/2")	NON-HEALTH HAZARD	DOUBLE CHECK VALVE (DCV)
4	HOT WATER DISPENSER (1/2")	NON-HEALTH HAZARD	DOUBLE CHECK VALVE (DCV)
5	MAIN DOMESTIC WATER LINE(1")	NON-HEALTH HAZARD	DOUBLE CHECK VALVE (DCV)

TRAP PRIMER SCHEDULE

TAG NUMBER	MFR./MODEL NO.	POWER	REMARKS
TP-1	PPP MODEL SMP-500-115V	115V, 1PH, 60 HZ	POWER OUTLET, SINGLE TRAP
TP-2	PPP MODEL SMP-500-115V #DUL4	115V, 1PH, 60 HZ	FOR 1 - 4 TRAPS
TP-3	PPP MODEL PTS-12	115V, 1PH, 60 HZ	FOR UP TO 12 TRAPS

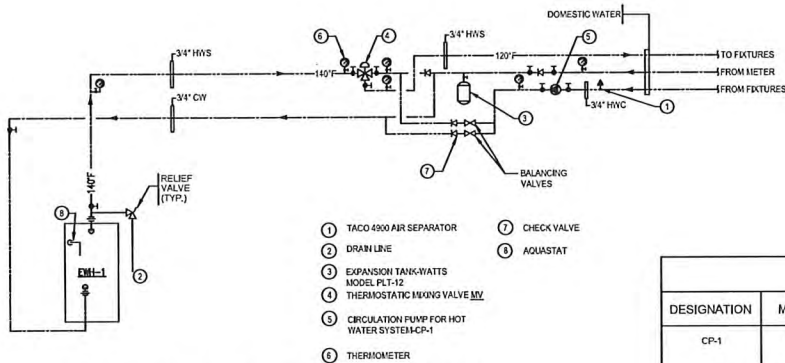
WATER HAMMER ARRESTER SCHEDULE

DESIGN.	REL. NO.	SIZE (IN.)	REL.	HEIGHT
A	WDA	1/2" NPT	3/4"	8 1/2"
B	WDA	3/4" NPT	1"	8 3/4"
C	WDA	1" NPT	1"	1"
D	WDA	1 1/2" NPT	1"	15 1/2"
E	WDA	2" NPT	1"	15 1/2"
F	WDA	2 1/2" NPT	1"	15 1/2"

NOTES:
1. REL. NO. WDA3 ON ONLY ONE WATER HAMMER ARRESTER
2. PROVIDE ACCESS DOOR FOR ALL ARRESTERS ONLY ACCESS REQUIRED

CIRCULATING PUMP SCHEDULE

DESIGNATION	MANUFACTURER	LOCATION	GPM	ELECTRICAL	HEAD	WEIGHT	REMARKS
CP-1	TACO L-113	APARTMENTS	3	120 V/60	15 FT	27 LBS	FLANGE CONNECTION WITH OVERLOAD PROTECTION



WATER HEATER FLOW SCHEMATIC

NTS

BUILDING PLANS FOR:

EasyRoots
4045 N Pecos St. Suite 210
Denver, CO, 80211
CLIENT EMAIL: SALES@EASYSROOTS.COM
PHONE: 480-316-2412 CELL PHONE: 833-327-9283

PLUMBING SCHEDULES

IGADI IDAHO SPRINGS
Idaho Springs, CO.

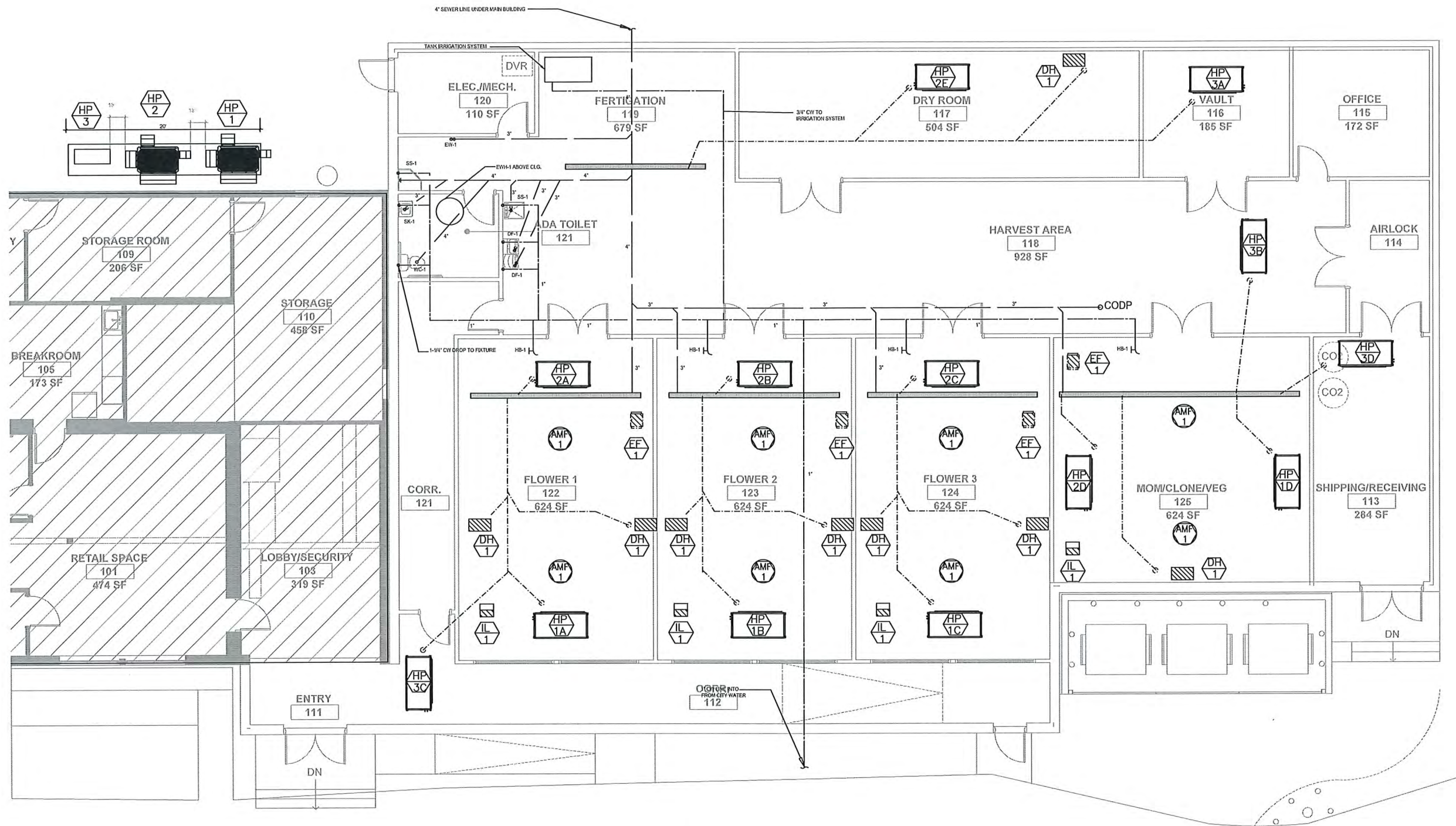
FEBRUARY 2023
AS NOTED

* WALWORTH FIGURE NUMBERS ** APOLLO VALVE CO. *** VALVES USED FOR DOMESTIC WATER SYSTEM SHALL BE IN COMPLIANCE WITH NSF 61

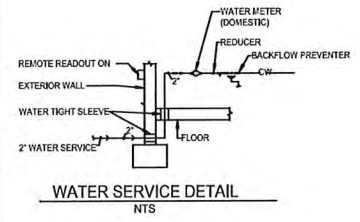
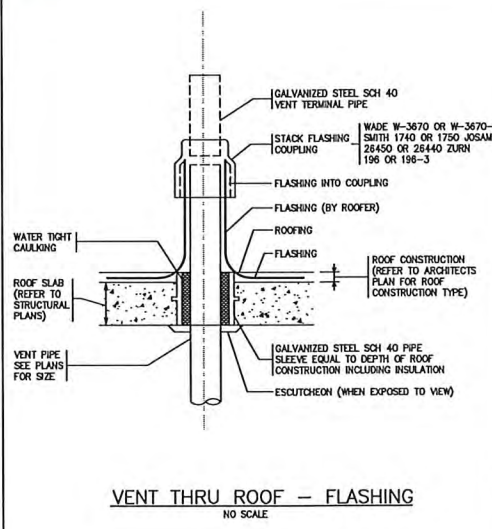
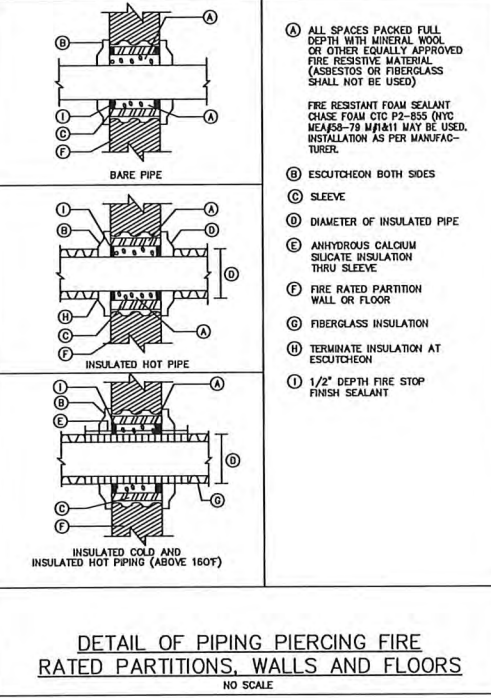
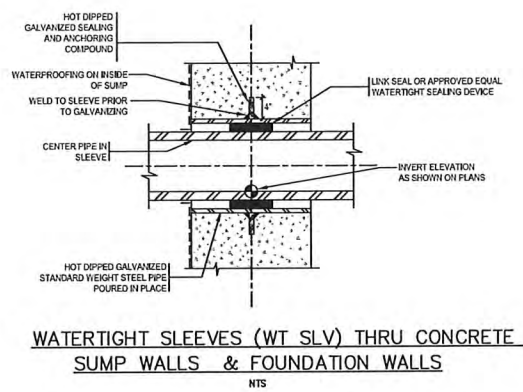
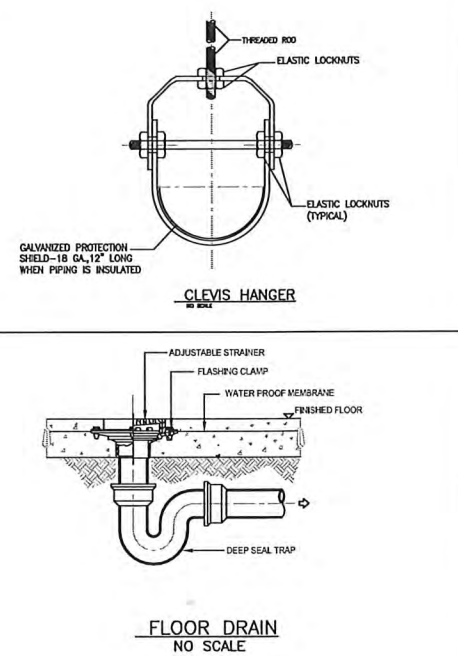
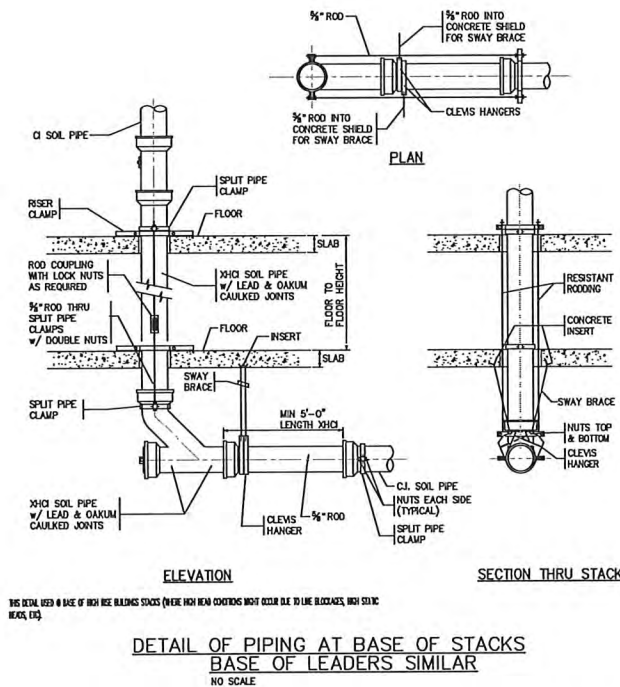
HOUSE DRAINS - INSIDE OF BLDG. WALL
SANITARY STACKS
SANITARY BRANCHES
VENTS
FIXTURE CONNECTIONS-WATER
C.W. - 4" & SMALLER
C.W. - BURIED BUILDING SERVICE
C.W. - BURIED INSIDE BUILDING
H.W.

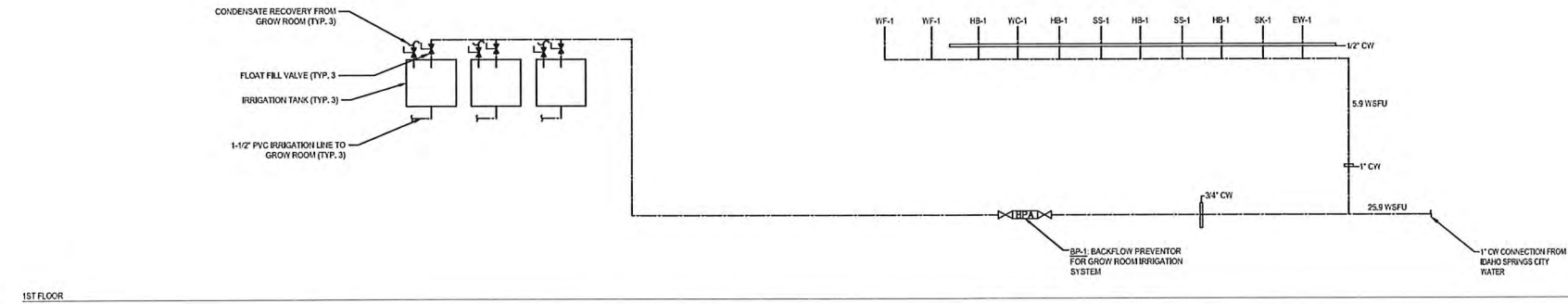
WATTS



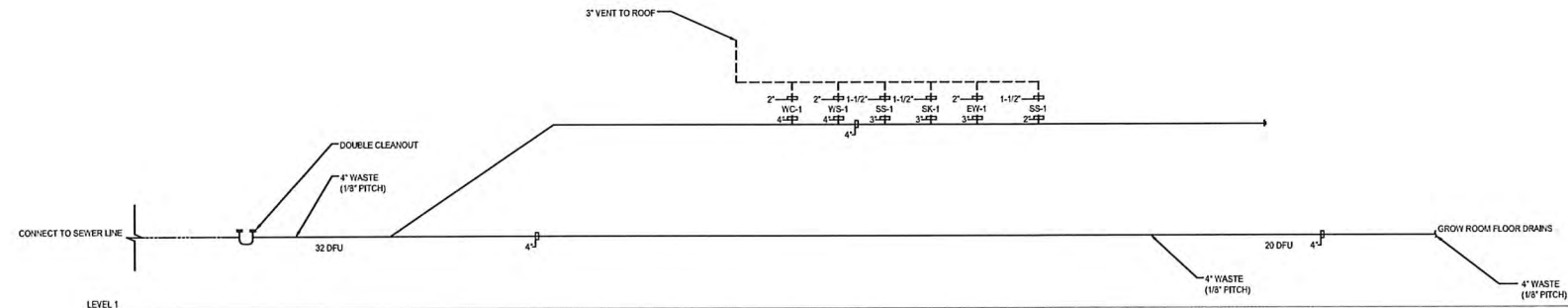


1 PLUMBING PLAN
P-200 SCALE: 1/4" = 1'-0"





DOMESTIC WATER FLOW SCHEMATIC
NTS



SANITARY FLOW SCHEMATIC
NTS

SYMBOL	DESCRIPTION
	MOTORS IN MECHANICAL SYSTEM EQUIPMENT
	INDIVIDUALLY MOUNTED SECONDARY OVERCURRENT AND/OR SWITCHING DEVICES (CIRCUIT BREAKERS, FUSIBLE SWITCHES, AIRCUT SWITCHES, ETC.) APPLIED AS SPECIFIED.
	MOTOR CONTROLLER
	VARIABLE FREQUENCY CONTROLLER WITH INTEGRAL DISCONNECT
	JUNCTION BOX WITH THERMAL OVERLOAD DISCONNECT SWITCH
	MOTOR - WITH LOCAL STARTER
	MOTOR - WITH LOCAL STARTER AND DISCONNECT
	MOTOR - WITH INTEGRAL STARTER DISCONNECT
	MOTOR - WITH INTEGRAL VARIABLE FREQUENCY CONTROL
	MOTOR - WITH LOCAL VARIABLE FREQUENCY CONTROL
	MOTOR - PACKAGE UNIT WITH INTEGRAL STARTER
	MOTOR - PACKAGE UNIT WITH INTEGRAL VFC
	MOTOR - PACKAGE UNIT WITH INTEGRAL VFC/DISCONNECT
	MOTOR - DUPLEX MOTOR WITH CONTROLLERS

SYMBOL	DESCRIPTION	NOTES
	MOTORS, PANELS, AND INDIVIDUALLY MOUNTED DEVICES AND EQUIPMENT—SECONDARY LIGHT AND POWER RINGS	
	MOTORS IN MECHANICAL SYSTEM EQUIPMENT	COMPLETE INFORMATION FOR MOTORS IS INDICATED BY APPLICATION OF REFERENCE TO MOTOR LIST
	INDIVIDUALLY MOUNTED SECONDARY OVERCURRENT AND SWITCHING DEVICES (CIRCUIT BREAKERS, FUSIBLE SWITCHES, UNFUSED SWITCHES, ETC.) APPLIED AS SPECIFIED.	COMPLETE INFORMATION FOR DEVICES IS INDICATED BY APPLICATION OF TAG SYMBOLS OR AS SCHEDULED ON DRAWINGS
	MOTOR CONTROLLER FOR MOTORS IN MECHANICAL SYSTEM EQUIPMENT.	SUBSCRIPT NUMBERS INDICATE RINGS WHERE REQUIRED (1 POLE FUSING UNLESS NOTED).
	POWER OR DISTRIBUTION PANEL.	ADDITION OF NOTE INDICATING PANEL DESIGNATION IN 50 DELETES FRONT FACE OF PANEL.
	LIGHTING OR APPLIANCE PANEL.	
	PANELLETTE	ARROWHEAD DENOTES FRONT.
	INDIVIDUALLY MOUNTED THREE PHASE UNIT TYPE TRANSFORMER—SECONDARY VOLTAGE TO SECONDARY VOLTAGE.	SUBSCRIPT NUMBERS INDICATE KVA RATINGS.
CIRCUITRY GENERAL		
	INDIVIDUAL RUN TERMINATED.	SYMBOLS REPRESENT VERTICAL PORTION OF RUN TO ANOTHER LEVEL EXCEPT THAT WHERE NOTED WITH EQUIPMENT IDENTIFICATION OF RUN IS TO ITEM ON SAME LEVEL.
	INDIVIDUAL RUN TERMINATED BELOW TO LEVEL ABOVE.	
	INDIVIDUAL RUN OFFSET WITHIN SAME LEVEL.	
	INDIVIDUAL RUN TERMINATED.	
	CONDUIT BANK.	SECONDARY FEEDERS UNLESS OTHERWISE NOTED.
	CONDUIT BANK STUPEDED.	SYMBOLS REPRESENT PORTION OF BANK TO ANOTHER LEVEL EXCEPT THAT WHERE NOTED WITH EQUIPMENT IDENTIFICATION OF BANK IS TO ITEM ON SAME LEVEL.
	CONDUIT BANK OFFSET WITHIN SAME LEVEL.	
	CONDUIT BANK TERMINATED.	
	CONDUIT OR FEEDER BANK FROM LEVEL BELOW TO LEVEL ABOVE.	
MULTI OUTLET ASSEMBLY		
	MULTI OUTLET RACE.	SUBSCRIPT UPPER CASE LETTERS

SYMBOL	DESCRIPTION	NOTES
WIRING DEVICES		
S	WIRING DEVICE TYPE SWITCH	WITHOUT SUBSCRIPT NUMBER SYMBOL DENOTES "SINGLE POLE" SUBSCRIPT NUMBERS DENOTE 2 POLE, 3-WAY, 4-WAY, ETC. SUBSCRIPT UPPER CASE LETTERS DENOTE WIRING DEVICE STANDARD AS SPECIFIED. SUBSCRIPT LOWER CASE LETTERS DENOTE NON STANDARD TYPE REFERENCE TO SCHEDULE OF NON STANDARD WIRING DEVICES. SUBSCRIPT LOWER CASE LETTERS INDICATE SWITCH CONTROL ASSOCIATION.
	WALL DUPLEX CONVENIENCE RECEPTACLE	ISOLATION OF SYMBOL THUS:  INDICATES RECEPTACLE WITH EACH HALF SEPARATELY OPERATED (HALF CONSTANT, HALF SWITCH CONTROLLED)
	WALL DUPLEX CONVENIENCE RECEPTACLE WITH INTEGRAL USB PORTS	INDICATES WIRING DEVICES MOUNTED IN PRE-EXISTING OUTLETS SURGEON UP FROM FLOOR.
	WALL SINGLE CONVENIENCE RECEPTACLE	SUBSCRIPT LETTERS IN PRE-EXISTING SYMBOL EXCEPTIONS TO REFERENCED STANDARD HOLDINGS AS FOLLOWS:
	FLOOR SINGLE CONVENIENCE RECEPTACLE	TYPE FLUSH FLOOR FITTING
	FLOOR DUPLEX CONVENIENCE RECEPTACLE	TYPE FLUSH FLOOR FITTING
	DOUBLE DUPLEX "GRAND" RECEPTACLE	TYPE STANDARD FITTING
	CEILING CONVENIENCE RECEPTACLE	
	WALL SPECIAL PURPOSE POWER SUPPLY RECEPTACLE	
	FLOOR SPECIAL PURPOSE POWER SUPPLY RECEPTACLE	
	CEILING SPECIAL PURPOSE POWER SUPPLY RECEPTACLE	GANGING BY SYMBOL SHOWN IN CIRCUITRY PLAN IN COMBINATION WITH ANY WIRING DEVICES SYMBOLS THUS- DENOTES WIRING DEVICES WHICH ARE:
	WALL BOX DIMMER	
	WIRING DEVICE GANGING SYMBOL	TO BE GANGED IN A SINGLE COMMON PLATE OUTLET.

[illegible]

#	DESCRIPTION
1	GENERAL CONTRACTOR SHALL VERIFY FIELD CONDITIONS BEFORE SUBMITTING BID.
2	ALL WORK SHALL BE DONE IN ACCORDANCE WITH 2019 NEC AS AMENDED BY 2019 ELECTRICAL CODES. ALL CODES AND ANY ADDITIONAL STATE OR LOCAL CODES WHICH MAY APPLY.
3	ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2019 ELECTRICAL CODES AND ANY ADDITIONAL STATE OR LOCAL CODES WHICH MAY APPLY.
4	CERTIFICATES, ETC. REQUIRED.
5	IT IS THE INTENT OF THESE PLANS TO PROVIDE A COMPLETE OPERATIONAL ELECTRICAL SYSTEM. THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL WIRING, EQUIPMENT, MATERIAL, ETC. REQUIRED, EXCEPT WHERE SHOWN OTHERWISE. NOTED: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY QUESTIONS CONCERNING RESPONSIBILITY. THEY SHALL BE ANSWERED TO OWNER PRIOR TO BID. NO EXTRA CHARGES WILL BE ALLOWED.
6	ELECTRICAL SERVICE SHALL BE COORDINATED WITH THE EXISTING FIELD CONDITIONS.
7	CONTRACTOR SHALL MAKE ALL FIELD CONNECTIONS TO ALL CONTROLS, OWNER-SUPPLIED EQUIPMENT, MECHANICAL AND PLUMBING EQUIPMENT.
8	REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATION DETAILS. ALL FIXTURE AND DEVICE LOCATIONS SHOWN ON ARCHITECTURAL DRAWINGS SUPERSEDE THOSE SHOWN ON ELECTRICAL PLANS.
9	CIRCUIT NUMBER ON THE DRAWINGS ARE FOR IDENTIFICATION ONLY AND DO NOT INDICATE THE POSITION ON THE PANEL BOARD. CONNECT THE CIRCUITS WITH THE BOTTOM LINE OF THE PANEL BOARD. LOCATIONS NEAR THE TOP OF THE PANEL, AND THE WIRE HEAVILY LOADED CIRCUITS NEAR THE BOTTOM OF THE PANEL. CIRCUITS EVENLY BETWEEN PHASE. SO THAT FEEDER WIRES CARRY APPROXIMATELY EQUAL CURRENT. ALL PHASES MUST BE BALANCED WITHIN 10% OR LESS. C.G. SHALL BE NEUTRAL. IF NECESSARY.
10	BRANCH CIRCUIT CONDUCTOR INSULATION SHALL BE COLOR CODED AND SHALL BE 90C VOLT. TYPE THHN/THWN.
11	WIRING IN HIGH TEMPERATURE AREAS SHALL HAVE INSULATION TYPE SUITABLE FOR THE TEMPERATURE. CABLES USED IN SPACES FOR ENVIRONMENTAL AIR SHALL CONFORM WITH APPLICABLE N.E.C. REQUIREMENTS.
12	ALL WIRING USED IN RETURN OR DISCHARGE AIR PLenums SHALL BE LISTED AND APPROVED FOR USE AND REMOVED BY THE LATEST EDITION OF THE N.E.C. FOR SUCH APPLICATION.
13	ALL WIRE AND CABLE CONDUCTORS SHALL BE COVERED WITH INSULATION. CONDUCTORS SHALL BE PROTECTED BY RIGID OR FLEXIBLE RACEWAY, SOLID OR STRANDED, AND CONDUCTORS SIZED LARGER THAN #10 AWG AND OVER.
14	BRANCH CIRCUITS FOR POWER AND LIGHTING SHALL NOT BE LESS THAN #12 AWG, OR AS NOTED. WIRES ARE TO BE SIZED FOR THE CIRCUIT VOLTAGE AND SIZE. SEE THE SPECIFICATIONS TO THIS SET.
15	DATA CABLES SHALL BE CAT6 PLenum RATED. TO BE PROVIDED BY OWNER SELECTED VENDOR. ELECTRICAL WORK SHALL BE TO PROVIDE OUTLET BOXES AND "RING AND STRING" FOR PULLING OF CABLES IN CONDUIT SPACES.
16	CONTROL WIRING SHALL NOT BE LESS THAN #14 AWG UNLESS OTHERWISE NOTED.
17	HOMERUNS SHOWN ARE SCHEMATIC. CONTRACTOR MAY ORIGINATE HOMERUNS FROM DIFFERENT LOCATIONS. ALL WIRE INCLUDING HOMERUNS SHALL BE DELINEATED ON AS-BUILT DRAWINGS.
18	WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. ALL WIRING SHALL BE TESTED FOR PROPER CONNECTIONS AND SHORT CIRCUITS PRIOR TO THE TURNING OVER OF WORK AS A COMPLETE UNIT.
19	CONDUCTORS FOR ELECTRICAL WIRING SHALL BE IN ACCORDANCE WITH N.E.C. REQUIREMENTS EVEN IF IT IS NOT SHOWN ON THE DRAWINGS. PROVIDE AN ADDITIONAL CONDUCTOR IN ALL RACWAYS EVEN THOUGH THE DRAWINGS SHOW ONLY CIRCUIT AND/OR NEUTRALS. CONDUCTORS, THE PLUMBING AND PIPING SYSTEM SHALL NOT BE USED FOR ANY OTHER SIZED. THE WIRING SHALL BE GROUNDED TO BUILDING STEEL IN ACCORDANCE WITH NEC 250-70.
20	ALL CONDUITS PASSING THROUGH PARTITIONS ARE TO BE PROPERLY SEaled. THE WIRING SHALL BE GROUNDED TO BUILDING STEEL IN ACCORDANCE WITH NEC 250-70.
21	FURNISH AND INSTALL ALL CONDUIT WITH PULL WIRES AS REQUIRED. ALL OUTLET BOXES SHALL BE STEEL, EXTRA DEEP WITH GROUNDING PIGTAILS AND GROUNDING PIGTAILS.
22	ALL PENETRATIONS SHALL BE INSTALLED AND SEALED PER NATIONAL STATE AND LOCAL CODES.
23	DO NOT MAKE ANY CHANGES OR SUBSTITUTIONS WITHOUT SPECIFIC WRITTEN APPROVAL FROM THE ARCHITECT OR OWNER.
24	GUARANTEE ALL WORK, MATERIAL AND EQUIPMENT FOR A PERIOD OF ONE YEAR FROM THE DATE OF APPROVAL AND FINAL ACCEPTANCE.
25	LABEL ALL JUNCTION BOXES, OUTLETS, LIGHT SWITCH, ETC. WITH CIRCUIT NUMBER ON INTERIOR OR COVER PLATE. USE NUMBER LINE UNDER.
26	GENERAL CONTRACTOR SHALL PROVIDE SENSITIVE RESTROOMS AND SHOWERS FOR ALL FLOOR PLATES. USE ROOM LINE UNDER.
27	EQUIPMENT TO RESIST EARTHQUAKE EFFECTS DETERMINED IN ACCORDANCE WITH THE NATIONAL EARTHQUAKE ENGINEERING CODE.
28	THE OWNER SHALL PROVIDE ALL EQUIPMENT, MATERIALS AND LABOR TO COMPLETE ALL ELECTRICAL WORK IN A NEAT AND WORKMANLIKE MANNER IN ACCORDANCE WITH GOOD COMMERCIAL PRACTICE INCLUDING THE INSTALLATION OF ALL THE EQUIPMENT MATERIALS AND SYSTEMS AND THE FINAL CONNECTIONS TO THE OWNER'S EQUIPMENT AND FIXTURES AS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL FURNISH THE EQUIPMENT AND LIGHTING TO PROVIDE A MINIMUM OF 25 FC IN WORK AREAS.
29	ALL THE ELECTRICAL AND MECHANICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND THE INSTALLATION OF THE OWNERS FIXTURES. THE C.G. IS RESPONSIBLE TO REMOVE ALL TEMPORARY WIRING UPON COMPLETION OF CONSTRUCTION OF THE BUILDING.
30	THIS CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL NECESSARY SUPPLIES, MATERIALS AND LABOR TO COMPLETE THE WORK. HANG ALL EQUIPMENT AND LIGHTING FROM THE EXISTING STRUCTURE IN ACCORDANCE WITH THE ARCHITECTURAL/STRUCTURAL SUPPORT AND LOADINGS.
31	IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO PROVIDE FULLY DEVELOPED COORDINATION DRAWINGS FOR ALL OF HIS RESPECTIVE WORK. THE DRAWINGS SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, ALL HVAC, PLUMBING, FIRE PROTECTION, ELECTRICAL, LIGHTING, STRUCTURAL AND ARCHITECTURAL SYSTEMS FROM EXISTING CONDITIONS.
32	ALL DISCONNECTING MEANS AND EQUIPMENT INDICATED ON THE DRAWINGS SHALL BE IDENTIFIED BY NAMEPLATE IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE.
33	ALL WIRING FOR THE EMERGENCY LIGHTING AND EMERGENCY SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE ARTICLE 700.
34	THE WIRING METHODS AND MATERIALS INDICATED IN THE SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE ARTICLE 300.

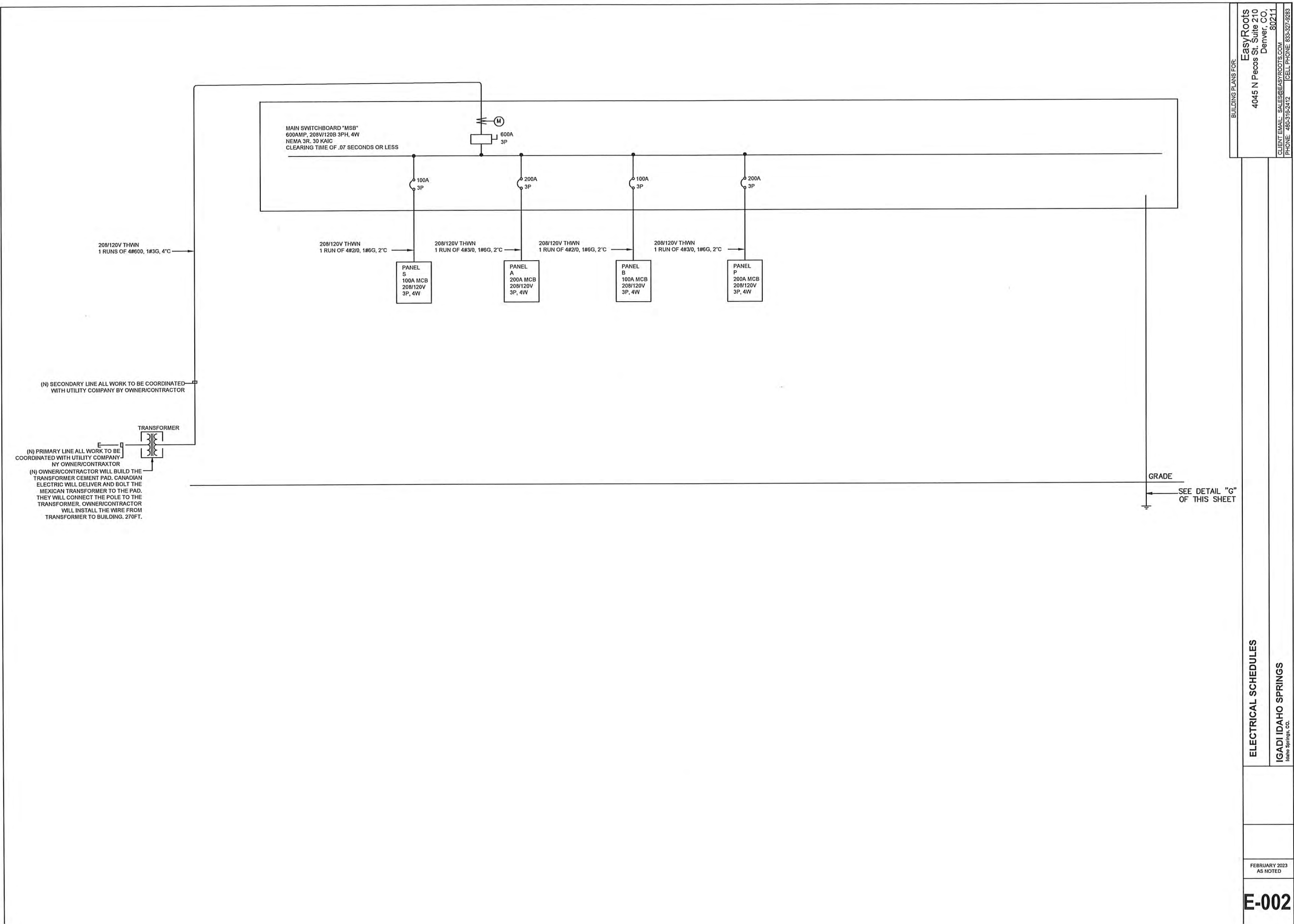
#	DESCRIPTION
32	THE WIRING METHODS AND MATERIALS INDICATED IN THE SPECIFICATIONS AND ON THE DRAWINGS SHALL BE INSTALLED AND CONNECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE ARTICLE 310.0.
34	THE ELECTRICAL SERVICE AND DISTRIBUTION SYSTEM AS INDICATED ON THE RISER DIAGRAM AND MATERIALS INDICATED IN THE SPECIFICATION SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE ARTICLE 320.3, SERVICES.
36	ALL OVER CURRENT PROTECTION SHALL BE IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE ARTICLE 240.0, OVERCURRENT PROTECTION.
38	ALL GROUNDING REQUIREMENTS OF THE COMPLETE ELECTRICAL DISTRIBUTION SYSTEM AND AS INDICATED IN THE SPECIFICATIONS SHALL BE IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE ARTICLE 250.0, GROUNDING AND BONDING.
40	ALL REINFORCING OF CONCRETE NATIONAL ELECTRIC CODE ARTICLE 314.0 AND/OR CUTTING OF ROOF, CONTRACTOR SHALL COORDINATE WITH BUILDING ENGINEER.
42	ALL LIGHTING FIXTURES, HOUSING, IN COMPLIANCE WITH THE NATIONAL CONTRACTOR SHALL PROVIDE AND INSTALL INDIVIDUAL SUPPORT AT EACH CORNER OF REDUCED LIGHTING TRAFFIC CONNECTED TO BUILDING SYSTEM SHALL BE INDIVIDUALLY SUPPORTED IN THE SAME FASHION AS PER NEC REQUIREMENTS.
44	DO NOT SCALE FROM THESE DRAWINGS.
46	PLANS ARE PREPARED WITH REQUIRED BRANCH CIRCUITS INDICATED BY CIRCUITS NUMBERS, PROVIDE AND INSTALL ALL CONDUITS, CONDUCTORS, BOXES, TERMINALS AND ALL OTHER MATERIALS IN COMPLIANCE WITH THE NATIONAL SPECIFICATION (HOME RUN SHOWN). BRANCH CIRCUIT INSTALLATION SHALL COMPLY WITH SPECIFICATIONS.
48	ELECTRICAL RECEPTACLE, SWITCH AND LIGHTING FIXTURES (NCEC-1138.4.1).
50	RECEPTACLE HEIGHTS
52	RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTABLES SHALL BE LOCATED 18" TO 24" ABOVE FINISHED FLOOR OR WORKING PLATFORM. IF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING NOT LESS THAN 18 INCHES (301MM) MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING TO THE LEVEL OF THE FINISHED FLOOR OR WORKING PLATFORM. IF THE REACH IS OVER AN OBSTRUCTION (FOR EXAMPLE, A KITCHEN BASE CABINET) BETWEEN 20 AND 25 INCHES (508 MM) ABOVE FINISHED FLOOR OR WORKING PLATFORM, AS MEASURED AT THE BOX, IT IS REDUCED TO 44 INCHES (1118MM) FOR FORWARD APPROACH, OR 48 INCHES (1168MM) FOR SIDE APPROACH, PROVIDED THE OBSTRUCTION IS NO MORE THAN 24 INCHES (610MM) IN DEPTH. OBSTRUCTION SHALL NOT EXCEED MORE THAN 25 INCHES (635MM) FROM THE WALL BENEATH THE RECEPTACLE.
54	SWITCH AND CONTROL DEVICES (NCEC-368.2.4).
56	CONTROL OR SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, ALARMS, ALARMS, FIRE ALARMS, AND OTHER EQUIPMENT SHALL BE LOCATED NO MORE THAN 48 INCHES (1219MM) MEASURED FROM THE TOP OF THE OUTLET BOX NOT LESS THAN 15 INCHES (381MM) ABOVE FINISHED FLOOR OR WORKING PLATFORM. IF THE REACH IS OVER A FINISHED FLOOR OR WORKING PLATFORM, IF THE REACH IS OVER A PHYSICAL BARRIER OR AN OBSTRUCTION (FOR EXAMPLE, A KITCHEN BASE CABINET) BETWEEN 20 AND 25 INCHES (508 MM) ABOVE FINISHED FLOOR OR WORKING PLATFORM, AS MEASURED AT THE BOX, IT IS REDUCED TO 44 INCHES (1118MM) FOR FORWARD APPROACH, OR 48 INCHES (1168MM) FOR SIDE APPROACH, PROVIDED THE OBSTRUCTION IS NO MORE THAN 24 INCHES (610MM) IN DEPTH. PHYSICAL BARRIERS OR OBSTRUCTIONS SHALL NOT EXCEED MORE THAN 25 INCHES (635MM) FROM THE WALL BENEATH A CONTROL.

GENERAL NOTES:

1. REFER TO ARCHITECTURAL AND LIGHTING DRAWINGS FOR SPECIALLY LIGHTING FIXTURES SCHEDULES.
2. REFER TO SECURITY DRAWINGS FOR SECURITY ROUGHING, EQUIPMENT, DEVICES, CONDUITS AND WIRING.
3. REFER TO IT-1 FOR ALL DRAWINGS FOR ROUGH-IN EQUIPMENT, DEVICES, CONDUIT AND WIRING. CONDUIT AND ROUGH-IN TO BE PROVIDED BY THE CONTRACTOR AS INDICATED WITHIN THE SPECIFICATIONS.
4. FOR EXACT QUANTITY AND LOCATION OF MOTORS, REFER TO HVAC, PLUMBING AND FIRE PROTECTION DRAWINGS.
5. ROUTING OF CONDUIT IS DIAGNOSTIC. CONTRACTOR SHALL SUBMIT ACTUAL FIELD INSTALLATION SHOP DRAWINGS, INCLUDING ALL FULFILLERS PER SPECIFICATIONS, AS REQUIRED FOR ENGINEER'S REVIEW.

LIGHTING FIXTURE SCHEDULE							
Type	Symbol	Type Location Description	Lighting Circuit #	Lamps	Volts	Watts	Notes
L1		Ceiling Recessed led (6" round)	"Lithonia Ltg" LDNS 40/05 LOGAR LD	LED	20V	120/ 277V	New dimmable Lighting Fixture
LIE		Ceiling Recessed led	"Lithonia Ltg" LDNS 40/05 LOGAR LD	LED	20V	120/ 277V	New dimmable EH Lighting Fixture
L2		Surface mnt. 1x 4 ft. Lighting Fixture	"Lithonia lighting"ZULI L46-300UL -35K-INVOLT	LED	25V	120/ 277V	New dimmable Lighting Fixture
EX		Surface mnt. 1x 4 ft. Lighting Fixture WITH 90 KMH BATTERY	"Lithonia lighting"ZULI L46-300UL -35K-INVOLT -EH	LED	25V	120/ 277V	New EH SIGN Lighting Fixture
L3		Hall mounted FIXTURE HIGH EFFICIENCY	"Lithonia pilot 14 20800 120	LED	20V	120/ 277V	New dimmable Lighting Fixture
L4		2XRecessed led	"Lithonia pilot 14 20800 120 P835	LED	40V	120/ 277V	New dimmable Lighting Fixture
L5		2XRecessed led WITH 90 KMH BATTERY	"Lithonia pilot 14- 160L- P835-EH	LED	40V	120/ 277V	New dimmable Lighting Fixture
L6			NEXT LIGHT MEGA PRO	LED	340W	208V	New dimmable Lighting Fixture
L7			NEXT LIGHT VED 8		210W	208V	New dimmable Lighting Fixture
N		Exhaust Fan w/light	OTXEL10C			31.4W	

WIRE SCHEDULE AND NOTES						
LOAD PER PH (KVA)	WIRE SIZE (AWG)	MAXIMUM LENGTH OF BRANCH CIRCUIT UTILIZATION VOLTAGE				NOTES AND REMARKS
		(120, 1PH, MAX) (V.D. 35%)	(240, 3PH, MAX) (V.D. 35%)	(240, 3PH, MAX) (V.D. 35%)	(240, 3PH, MAX) (V.D. 35%)	
< 1.92	#12	56 FT	85 FT	98 FT		
	#10	94 FT	141 FT	163 FT		5
	#8	144 FT	217 FT	250 FT		5
	#6	230 FT	345 FT	398 FT		5
< 1.44	#12	75 FT	113 FT	130 FT		5
	#10	125 FT	188 FT	217 FT		5
	#8	192 FT	289 FT	334 FT		5
	#6	306 FT	460 FT	531 FT		5
< 1.26	#12	86 FT	129 FT	149 FT		
	#10	143 FT	215 FT	248 FT		
	#8	220 FT	330 FT	381 FT		
	#6	350 FT	525 FT	606 FT		
< 1.08	#12	100 FT	150 FT	173 FT		
	#10	167 FT	250 FT	289 FT		
	#8	256 FT	385 FT	445 FT		
	#6	400 FT	600 FT	690 FT		
< 0.8	#12	120 FT	180 FT	240 FT		
	#10	200 FT	300 FT	347 FT		
	#8	300 FT	450 FT	517 FT		
	#6	450 FT	675 FT	773 FT		
< 0.72	#12	150 FT	225 FT	260 FT		
	#10	250 FT	375 FT	434 FT		
	#8					
	#6					
#	NOTES					
1	CONTRACTOR SHALL REFER TO THIS TABLE PRIOR TO START OF BRANCH CIRCUIT ROUGH-IN.					
2	CONTRACTOR SHALL USE THE APPROPRIATE WIRE SIZE IN CONFORMANCE WITH THE LENGTH OF THE PROPOSED LOAD VERIFIED ROUTING OF BRANCH CIRCUIT WIRING (INCLUDING VERTICAL & LATERAL RUN, ROUTED PARALLEL/PERPENDICULAR TO THE BUILDING STRUCTURE).					
3	SEE PANEL SCHEDULE FOR THE CORRESPONDING KVA LOAD PER PHASE OF A PARTICULAR BRANCH CIRCUIT.					
4	RESISTANCE VALUES USED ARE FOR UNCOATED COPPER WIRES IN STEEL CONDUIT, 75 DEGREE C, OPERATING AT 60HZ.					
5	THE VALUES IN "120V, 1PH" COLUMN IS TO BE USED FOR GENERAL PURPOSE RECEPTACLE LOAD.					



ELECTRICAL SPECIFICATIONS					
PART 1	GENERAL	PART 2	PRODUCTS	PART 2	PRODUCTS
1.01	SCOPE OF WORK: Furnish and install all materials and equipment and provide all labor, tools, transportation, superintendence and services required and necessary to complete the work shown on the drawings and/or specified herein. Also include all other work and miscellaneous items, not specifically mentioned, but reasonably inferred for a complete installation including all accessories and appurtenances required for testing the system. It is the intent of the drawings and specifications that all systems be complete, and ready for operation. Changes may be made if approved by owner, owner's representative.	MATERIAL APPROVALS: All materials must be new and bear Underwriter's Laboratories label. Materials that are not covered by UL testing standards shall be tested and approved by an independent testing laboratory or a governmental agency. Material not in accordance with these specifications may be rejected either before or after installation. CONDUITS AND UTILITY RACEWAYS: A. Rigid Steel: Hot-dipped galvanized. B. Intermediate Metal Conduit (IMC): Hot-dipped galvanized. C. Electrical Metallic Tubing (EMT): Electro-galvanized. D. Wireway: Code gauge steel, with knockouts and hinged cover, corrosion resistant gray baked enamel finish. E. Provide fittings and accessories approved for the purpose equal in all respects to the conduit or raceway. EMT connectors and couplings shall be steel set-screw type indoors and steel compression type in wet locations and outdoors.	2.01	2.10	2.11
1.03	LICENSE, FEES AND PERMITS: Electrical contractor will arrange for all required inspections.	2.02	2.03	2.12	2.13
1.04	SAFETY AND INDEMNITY: The Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of work. This requirement will apply continuously and not be limited to normal working hours. No act, service, drawing review or construction review by the Owner, the Engineer or their Consultants, is intended to include review of the adequacy of the Contractor's safety measures, in, on, or near the construction site.	2.04	2.05	2.14	2.15
1.05	DRAWINGS AND SPECIFICATIONS: All drawings and all divisions of these specifications shall be considered as a whole and work of this Division shown anywhere therein shall be furnished under this Division. Drawings are diagrammatic and indicate the general arrangement of equipment and wiring. Most direct routing of conduits and wiring is not assured. Exact requirements shall be governed by conditions of the job. Consult all other drawings in preparation of the bid. Extra lengths of wiring or addition of pull or junction boxes, etc., necessitate by such conditions shall be included in the bid.	2.06	2.07	2.16	2.17
1.06	CONDITIONS AT SITE: The electrical contractor shall have examined the site and familiarized themselves with all disassemble existing conditions. No extra payment will be allowed for work required because of these conditions, whether specifically mentioned or not.	2.08	2.09	2.18	2.19
1.07	WORKMANSHIP AND CONTRACTOR'S QUALIFICATIONS: Only quality workmanship will be accepted. Haphazard or poor installation will be cause for rejection of work.	2.10	2.11	2.20	2.21
1.08	SHOP DRAWINGS AND MATERIALS LISTS: Submit to Owner in a single package six (6) copies of complete shop drawings and materials list, as noted below, for review within fifteen (15) days after award of contract. Submittals required as follows: 1. Wiring devices: switches, receptacles, device plates. 2. Enclosures for utility company metering. 3. Main fused disconnect switch. 4. Panelboards. 5. Disconnect switches. 6. Lighting fixtures, lamps and lighting control equipment. 7. Owner is a large distributor of construction materials for state funded projects. Electrical contractor will give specs for wire and conduit from a PNMspecify.com can purchase at lower prices as available to electrical contractor.	2.12	2.13	2.22	2.23
1.11	CUTTING AND PATCHING: All cutting and patching required for work of this Division is included herein. Coordination with General Contractor and other trades is imperative. Contractor shall bear the responsibility for and the added expense of adjusting for improper holes, supports, etc.	2.14	2.15	2.24	2.25
1.12	ACCEPTANCE DEMONSTRATION: Upon completion of the work, at a time to be designated by the Owner, the Contractor shall demonstrate for the Owner the operation of the electrical installation including any and all special items installed by him or installed under his supervision. Properly set automatic time switches to perform switching operations in accordance with schedules provided by the Owner's representative, and demonstrate (using the manufacturer's operating instructions) how to override and/or test time switches programming.	2.16	2.17	2.26	2.27
1.13	RECORD DRAWINGS, EQUIPMENT DATA: Maintain one set of clean working drawings at the job site and enter daily such "as-built" information as feeder and service routes, pull box locations and changes in layout or arrangement which occur during construction. Deliver completed drawings to the Owner. Deliver to the Owner's representative three copies of data sheets or other current manufacturers' publications for each item of electrical equipment furnished for the project including at least these data: 1. Technical description and replaceable parts list. 2. Physical description and installation instructions. 3. Main fused disconnect switch. 4. Manufacturer's Warranty.	2.18	2.19	2.28	2.29
1.15	GUARANTEE: Guarantee the installation free from defects of workmanship and materials for a period of one year after date of Certification of final payment and promptly remedy any defects developing during this period, without charge.	2.20	2.21	2.30	2.31
1.16	TEMPORARY SERVICES: Provide adequate and safe temporary electrical power and lighting throughout the construction and finishing of the premises. In addition to special or unusual requirements, provide at least these items: 1. Three 20-amp circuits for construction power tools. Provide GFI temporary circuits with coverplates to meet OSHA requirements. 2. Three or more light strings suspended approximately one foot below the height of finish ceiling with lamps spaced not more than twelve feet on centers. Strings shall be run the length of the store space parallel to the ceiling walls, with one string within eight feet of each wall and one (or more) intermediate string(s) arranged to limit the spacing between rows to sixteen feet or less. 3. Flood lighting and task lighting for painting and other finish work. When permanent electrical service is operable, disconnect and remove from the premises the materials and equipment used for temporary power and lighting, and restore modifications and repair damage caused by the installation, use or removal of temporary service provisions. This section will be worked out with the owner or his representative.	2.22	2.23	2.32	2.33
		2.24	2.25	2.34	2.35
		2.26	2.27	2.36	2.37
		2.28	2.29	2.38	2.39
		2.30	2.31	2.40	2.41
		2.32	2.33	2.42	2.43
		2.34	2.35	2.44	2.45
		2.36	2.37	2.46	2.47
		2.38	2.39	2.48	2.49
		2.40	2.41	2.50	2.51
		2.42	2.43	2.52	2.53
		2.44	2.45	2.54	2.55
		2.46	2.47	2.56	2.57
		2.48	2.49	2.58	2.59
		2.50	2.51	2.60	2.61
		2.52	2.53	2.62	2.63
		2.54	2.55	2.64	2.65
		2.56	2.57	2.66	2.67
		2.58	2.59	2.68	2.69
		2.60	2.61	2.70	2.71
		2.62	2.63	2.72	2.73
		2.64	2.65	2.74	2.75
		2.66	2.67	2.76	2.77
		2.68	2.69	2.78	2.79
		2.70	2.71	2.80	2.81
		2.72	2.73	2.82	2.83
		2.74	2.75	2.84	2.85
		2.76	2.77	2.86	2.87
		2.78	2.79	2.88	2.89
		2.80	2.81	2.90	2.91
		2.82	2.83	2.92	2.93
		2.84	2.85	2.94	2.95
		2.86	2.87	2.96	2.97
		2.88	2.89	2.98	2.99
		2.90	2.91	3.00	3.01
		2.92	2.93	3.02	3.03
		2.94	2.95	3.04	3.05
		2.96	2.97	3.06	3.07
		2.98	2.99	3.08	3.09
		3.00	3.01	3.10	3.11
		3.02	3.03	3.12	3.13
		3.04	3.05	3.14	3.15
		3.06	3.07	3.16	3.17
		3.08	3.09	3.18	3.19
		3.10	3.11	3.20	3.21
		3.12	3.13	3.22	3.23
		3.14	3.15	3.24	3.25
		3.16	3.17	3.26	3.27
		3.18	3.19	3.28	3.29
		3.20	3.21	3.30	3.31
		3.22	3.23	3.32	3.33
		3.24	3.25	3.34	3.35
		3.26	3.27	3.36	3.37
		3.28	3.29	3.38	3.39
		3.30	3.31	3.40	3.41
		3.32	3.33	3.42	3.43
		3.34	3.35	3.44	3.45
		3.36	3.37	3.46	3.47
		3.38	3.39	3.48	3.49
		3.40	3.41	3.50	3.51
		3.42	3.43	3.52	3.53
		3.44	3.45	3.54	3.55
		3.46	3.47	3.56	3.57
		3.48	3.49	3.58	3.59
		3.50	3.51	3.60	3.61
		3.52	3.53	3.62	3.63
		3.54	3.55	3.64	3.65
		3.56	3.57	3.66	3.67
		3.58	3.59	3.68	3.69
		3.60	3.61	3.70	3.71
		3.62	3.63	3.72	3.73
		3.64	3.65	3.74	3.75
		3.66	3.67	3.76	3.77
		3.68	3.69	3.78	3.79
		3.70	3.71	3.80	3.81
		3.72	3.73	3.82	3.83
		3.74	3.75	3.84	3.85
		3.76	3.77	3.86	3.87
		3.78	3.79	3.88	3.89
		3.80	3.81	3.90	3.91
		3.82	3.83	3.92	3.93
		3.84	3.85	3.94	3.95
		3.86	3.87	3.96	3.97
		3.88	3.89	3.98	3.99
		3.90	3.91	4.00	4.01
		3.92	3.93	4.02	4.03
		3.94	3.95	4.04	4.05
		3.96	3.97	4.06	4.07
		3.98	3.99	4.08	4.09
		4.00	4.01	4.10	4.11
		4.02	4.03	4.12	4.13
		4.04	4.05	4.14	4.15
		4.06	4.07	4.16	4.17
		4.08	4.09	4.18	4.19
		4.10	4.11	4.20	4.21
		4.12	4.13	4.22	4.23
		4.14	4.15	4.24	4.25
		4.16	4.17	4.26	4.27
		4.18	4.19	4.28	4.29
		4.20	4.21	4.30	4.31
		4.22	4.23	4.32	4.33
		4.24	4.25	4.34	4.35
		4.26	4.27	4.36	4.37
		4.28	4.29	4.38	4.39
		4.30	4.31	4.40	4.41
		4.32	4.33	4.42	4.43
		4.34	4.35	4.44	4.45
		4.36	4.37	4.46	4.47
		4.38	4.39	4.48	4.49
		4.40	4.41	4.50	4.51
		4.42	4.43	4.52	4.53
		4.44	4.45	4.54	4.55
		4.46	4.47	4.56	4.57
		4.48	4.49	4.58	4.59
		4.50	4.51	4.60	4.61
		4.52	4.53	4.62	4.63
		4.54	4.55	4.64	4.65
		4.56	4.57	4.66	4.67
		4.58	4.59	4.68	4.69
		4.60	4.61	4.70	4.71
		4.62	4.63	4.72	4.73
		4.64	4.65	4.74	4.75
		4.66	4.67	4.76	4.77
		4.68	4.69	4.78	4.79
		4.70	4.71	4.80	4.81
		4.72	4.73	4.82	4.83
		4.74	4.75	4.84	4.85
		4.76	4.77	4.86	4.87
		4.78	4.79	4.88	4.89
		4.80	4.81	4.90	4.91
		4.82	4.83	4.92	4.93
		4.84	4.85	4.94	4.95
		4.86	4.87	4.96	4.97
		4.88	4.89	4.98	4.99
		4.90	4.91	5.00	5.01
		4.92	4.93	5.02	5.03
		4.94	4.95	5.04	5.05
		4.96	4.97	5.06	5.07
		4.98	4.99	5.08	5.09
		5.00	5.01	5.10	5.11
		5.02	5.03	5.12	5.13
		5.04	5.05	5.14	5.15
		5.06	5.07	5.16	5.17
		5.08	5.09	5.18	5.19
		5.10	5.11	5.20	5.21
		5.12	5.13	5.22	5.23
		5.14	5.15	5.24	5.25
		5.16	5.17	5.26	5.27
		5.18	5.19	5.28	5.29
		5.20	5.21	5.30	5.31
		5.22	5.23	5.32	5.33
		5.24	5.25	5.34	5.35
		5.26	5.27	5.36	5.37
		5.28	5.29	5.38	5.39
		5.30	5.31	5.40	5.41
		5.32	5.33	5.42	5.43
		5.34	5.35	5.44	5.45
		5.36	5.37	5.46	5.47
		5.38	5.39	5.48	5.49
		5.40	5.41	5.50	5.51
		5.42	5.43	5.52	5.53
		5.44	5.45	5.54	5.55
		5.46	5.47	5.56	5.57
		5.48	5.49	5.58	5.59
		5.50	5.51	5.60	5.61
		5.52	5.53	5.62	5.63
		5.54	5.55	5.64	5.65
		5.56	5.57	5.66	5.67
		5.58	5.59	5.68	5.69
		5.60	5.61	5.70	5.71
		5.62	5.63	5.72	5.73
		5.64	5.65	5.74	5.75
		5.66	5.67	5.76	5.77
		5.68	5.69	5.78	5.79
		5.70	5.71	5.80	5.81
		5.72	5.73	5.82	5.83
		5.74	5.75	5.84	5.85
		5.76	5.77	5.86	5.87
		5.78	5.79	5.88	5.89
		5.80	5.81	5.90	5.91
		5.82	5.83	5.92	5.93
		5.84	5.85	5.94	5.95
		5.86	5.87	5.96	5.97
		5.88	5.89	5.98	5.99
		5.90	5.91	6.00	6.01
		5.92	5.93	6.02	6.03
		5.94	5.95	6.04	6.05
		5.96	5.97	6.06	6.07
		5.98	5.99	6.08	6.09
		6.00	6.01	6.10	6.11
		6.02	6.03	6.12	6.13
		6.04	6.05	6.14	6.15
		6.06	6.07	6.16	6.17
		6.08	6.09	6.18	6.19
		6.10	6.11	6.20	6.21
		6.12	6.13	6.22	6.23
		6.14	6.15	6.24	6.25
		6.16	6.17	6.26	6.27
		6.18	6.19	6.28	6.29
		6.20	6.21	6.30	6.31
		6.22	6.23	6.32	6.33
		6.24	6.25	6.34	6.35
		6.26	6.27	6.36	6.37
		6.28	6.29	6.38	6.39
		6.30	6.31	6.40	6.41
		6.32	6.33	6.42	6.43
		6.34	6.35	6.44	6.45
		6.36	6.37	6.46	6.47
		6.38	6.39	6.48	6.49
		6.40	6.41	6.50	6.51
		6.42	6.43	6.52	6.53
		6.44	6.45	6.54	6.55
		6.46	6.47	6.56	6.57
		6.48	6.49	6.58	6.59
		6.50	6.51	6.60	6.61

BRANCH PANELBOARD SCHEDULE									
2/15/2023									
PANEL: 9 200/120 3 4W MOUNTING SURFACE FLUSH X MAIN LUGS ONLY X SHUNT TRIP MAIN FEED THRU LUG NUMBER OF POLES 68 BUS RATING 100A ISOLATED GROUND BUS GROUND BUS X NEUTRAL 100%									
CKT No.	LOAD	TRIP (AMP)	VA / PHASE			TRIP (AMP)	LOAD	CKT No.	
			A	B	C				
1	HP	202	240	240		720	202	2	4"
3						720	202	4	6"
5	HP	202	240	240		720	202	6	8"
7						720	202	8	10"
9	HP	202	240	240		720	202	10	12"
11						720	202	12	14"
13	HP	202	240	240		720	202	14	16"
15						720	202	16	18"
17	HP	202	240	240		720	202	18	20"
19						720	202	20	22"
21	HP	202	240	240		720	202	22	24"
23						720	202	24	26"
25	HP	202	240	240		720	202	26	28"
27						720	202	28	30"
29	HP	202	240	240		720	202	30	32"
31						720	202	32	34"
33	HP	202	240	240		720	202	34	36"
35						720	202	36	38"
37	HP	202	240	240		720	202	38	40"
39						720	202	40	42"
41	HP	202	240	240		720	202	42	44"
43						720	202	44	46"
45	HP	202	240	240		720	202	46	48"
47						720	202	48	50"
49	HP	202	240	240		720	202	50	52"
51						720	202	52	54"
53	HP	202	240	240		720	202	54	56"
55						720	202	56	58"
57	HP	202	240	240		720	202	58	60"
59						720	202	60	62"
61	HP	202	240	240		720	202	62	64"
63						720	202	64	66"
65	SPARE	201				720	201	66	68"

BRANCH PANELBOARD SCHEDULE									
2/15/2023									
PANEL: A 200/120 3 4W MOUNTING SURFACE FLUSH X MAIN LUGS ONLY X SHUNT TRIP MAIN FEED THRU LUG NUMBER OF POLES 42 BUS RATING 200A ISOLATED GROUND BUS GROUND BUS X NEUTRAL 100%									
CKT No.	LOAD	TRIP (AMP)	VA / PHASE			TRIP (AMP)	LOAD	CKT No.	
			A	B	C				
1	LIGHTING FLOWER ROOM	202	900	900		900	202	2	4"
3						900	202	4	6"
5	LIGHTING FLOWER ROOM	202	900	900		900	202	6	8"
7						900	202	8	10"
9	LIGHTING FLOWER ROOM	202	900	900		900	202	10	12"
11						900	202	12	14"
13	LIGHTING FLOWER ROOM	202	900	900		900	202	14	16"
15						900	202	16	18"
17	LIGHTING FLOWER ROOM	202	900	900		900	202	18	20"
19						900	202	20	22"
21	LIGHTING FLOWER ROOM	202	900	900		900	202	22	24"
23						900	202	24	26"
25	LIGHTING FLOWER ROOM	202	900	900		900	202	26	28"
27						900	202	28	30"
29	LIGHTING FLOWER ROOM	202	900	900		900	202	30	32"
31						900	202	32	34"
33	LIGHTING FLOWER ROOM	202	900	900		900	202	34	36"
35						900	202	36	38"
37	LIGHTING FLOWER ROOM	202	900	900		900	202	38	40"
39						900	202	40	42"
41	SPARE	201				900	201	42	

A

B

C

W 13440 13440 11520

A 112 112 99

BRANCH PANELBOARD SCHEDULE									
2/15/2023									
PANEL: B 200/120 3 4W MOUNTING SURFACE FLUSH X MAIN LUGS ONLY X SHUNT TRIP MAIN FEED THRU LUG NUMBER OF POLES 54 BUS RATING 100A ISOLATED GROUND BUS GROUND BUS X NEUTRAL 100%									
CKT No.	LOAD	TRIP (AMP)	VA / PHASE			TRIP (AMP)	LOAD	CKT No.	
			A	B	C				
1	LIGHTING FLOWER ROOM	302	315	315		301	SPARE	2	4"
3						301	SPARE	4	6"
5	LIGHTING FLOWER ROOM	302	315	315		301	SPARE	6	8"
7						301	SPARE	8	10"
9	LIGHTING FLOWER ROOM	302	315	315		301	SPARE	10	12"
11						301	SPARE	12	14"
13	LIGHTING FLOWER ROOM	302	315	315		301	SPARE	14	16"
15						301	SPARE	16	18"
17	LIGHTING FLOWER ROOM	302	315	315		301	SPARE	18	20"
19						301	SPARE	20	22"
21	LIGHTING FLOWER ROOM	302	315	315		301	SPARE	22	24"
23						301	SPARE	24	26"
25	LIGHTING FLOWER ROOM	302	315	315		301	SPARE	26	28"
27						301	SPARE	28	30"
29	SPARE	201				301	SPARE	30	32"
31	SPARE	201				301	SPARE	32	34"
33	SPARE	201				301	SPARE	34	36"
35	SPARE	201				301	SPARE	36	38"
37	SPARE	201				301	SPARE	38	40"
39	SPARE	201				301	SPARE	40	42"
41	SPARE	201				301	SPARE	42	44"
43	SPARE	201				301	SPARE	44	46"
45	SPARE	201				301	SPARE	46	48"
47	SPARE	201				301	SPARE	48	50"
49	SPARE	201				301	SPARE	50	52"
51	SPARE	201				301	SPARE	52	54"
53	SPARE	201				301	SPARE	54	

A

B

C

W 1575 1575 1260

A 13.13 13.13 10.9

BRANCH PANELBOARD SCHEDULE									
2/15/2023									
PANEL: P 200/120 3 4W MOUNTING SURFACE FLUSH X MAIN LUGS ONLY X SHUNT TRIP MAIN FEED THRU LUG NUMBER OF POLES 64 BUS RATING 200A ISOLATED GROUND BUS GROUND BUS X NEUTRAL 100%									
CKT No.	LOAD	TRIP (AMP)	VA / PHASE			TRIP (AMP)	LOAD	CKT No.	
			A	B	C				
1	RECEPTACLES	201	720	720		900	201	2	4"
3	RECEPTACLES	201	720	720		900	201	4	6"
5	RECEPTACLES	201	720	720		900	201	6	8"
7	RECEPTACLES	201	720	720		900	201	8	10"
9	RECEPTACLES	201	720	720		900	201	10	12"
11	RECEPTACLES	201	720	720		900	201	12	14"
13	RECEPTACLES	201	720	720		900	201	14	16"
15	RECEPTACLES	201	720	720		900	201	16	18"
17	RECEPTACLES	201	720	720		900	201	18	20"
19	RECEPTACLES	201	720	720		900	201	20	22"
21	RECEPTACLES	201	720	720		900	201	22	24"
23	RECEPTACLES	201	720	720		900	201	24	26"
25	RECEPTACLES	201	720	720		900	201	26	28"
27	RECEPTACLES	201	720	720		900	201	28	30"
29	RECEPTACLES	201	720	720		900	201	30	32"
31	RECEPTACLES	201	720	720		900	201	32	34"
33	RECEPTACLES	201	720	720		900	201	34	36"
35	RECEPTACLES	201	720	720		900	201	36	38"
37	RECEPTACLES	201	720	720		900	201	38	40"
39	RECEPTACLES	201	720	720		900	201	40	42"
41	RECEPTACLES	201	720	720		900	201	42	44"
43	DAB PUMP	202	1400	1400		1400	202	44	46"
45						1400	202	46	48"
47	DAB PUMP	202	1400	1400		1400	202	48	50"
49						1400	202	50	52"
51	RECEPTACLES	201	720	720		900	201	52	54"
53	RECEPTACLES	201	720	720		900	201	54	

A

B

C

W 9940 11540 13570

A 82.83 97 113.1

MAIN DISTRIBUTION PANELBOARD SCHEDULE

2/15/2023

PANEL: MSB

200/120 3 4W

MOUNTING SURFACE

FLUSH

MAIN LUGS ONLY

SHUNT TRIP MAIN

FEED THRU LUG

NUMBER OF POLES

NA

BUS RATING 800A

GROUND BUS

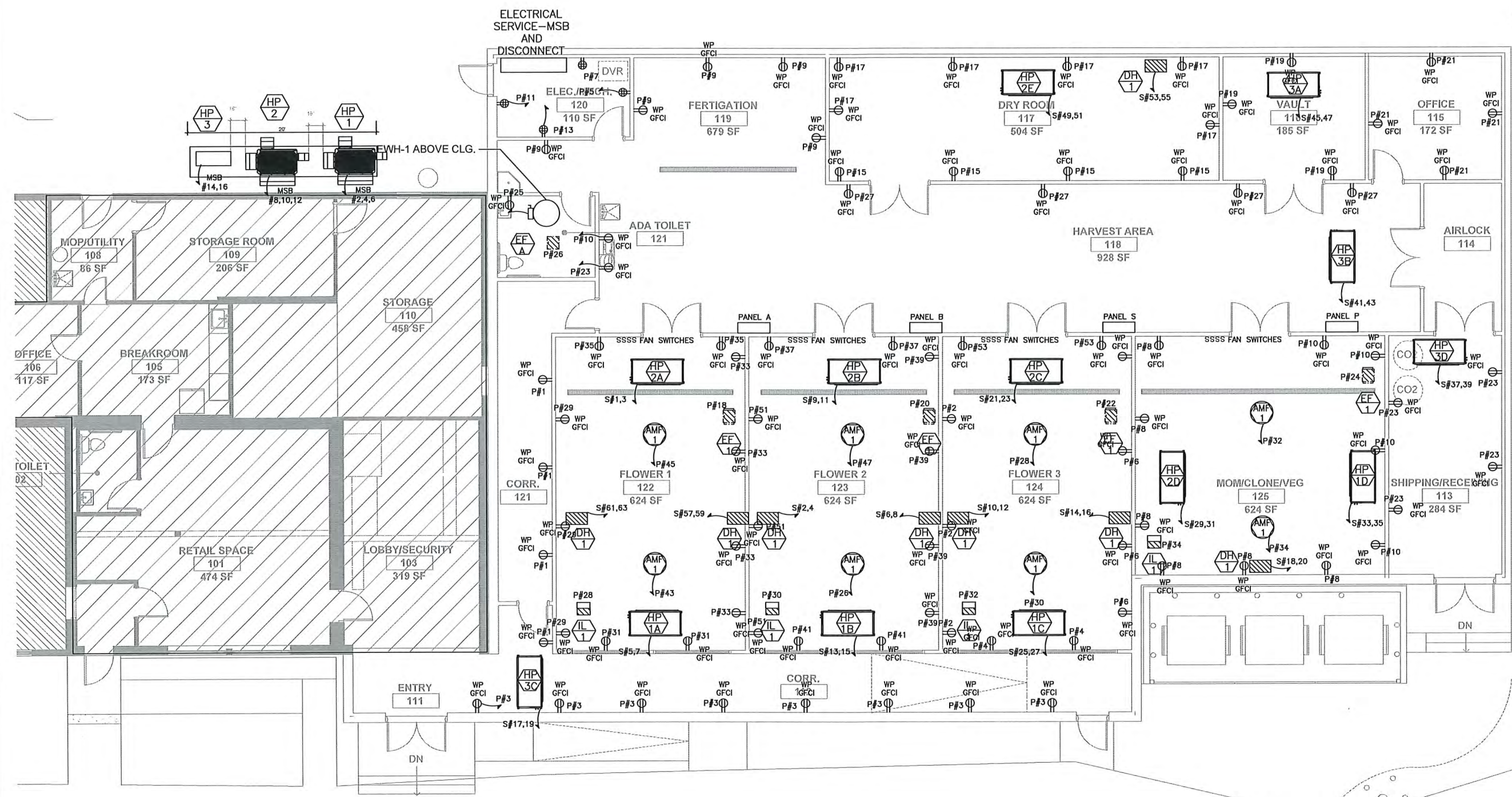
ISOLATED GROUND BUS

NEUTRAL 100%

CKT No.	LOAD	TRIP (AMP)	VA / PHASE			TRIP (AMP)	LOAD	CKT No.
			A	B	C			
1			13440			7200		2
3	PANEL A	2000		13440		7200		4
5					11520	7200		6
7			6450			7200		8
9	PANEL S	1000		5760		7200		10
11					5500	7200		12
13	SPARE	201				7200		14
15	SPARE	201				7200		16
17	SPARE	201				7200		18
19			6940			7200		20
21	PANEL P	2000		11540		7200		22
23					13670	7200		24
25				1575		7200		26
27	PANEL B	1000		1575		7200		28
29					1260	7200		30
31	SPARE	201				7200		32
33	SPARE	201				7200		34
35	SPARE	201				7200		36
37	SPARE	201				7200		38
39	SPARE	201				7200		40
41	SPARE	201				7200		42

W 47630 45615 40270

A 367 405.1 365.6



1 POWER PLAN
E-100 SCALE: 1/4" = 1'-0"

BUILDING PLANS FOR:
EasyRoots
4045 N Pecos St. Suite 210
Denver, CO, 80211
CLIENT EMAIL: SALES@EASYROOTS.COM
PHONE: 480-316-2412 CELL PHONE: 833-327-9283

ELECTRICAL PLANS
IGADI IDAHO SPRINGS
Idaho Springs, CO.

FEBRUARY 2023
AS NOTED

E-100





JVA, Incorporated
1319 Spruce Street
Boulder, CO 80302
303.444.1951
info@jvajva.com

www.jvajva.com

March 16, 2023

Mr. Jon Cain
Assistant City Administrator/Planner
1711 Miner St.
Idaho Springs, CO 80452

RE: 2820 Colorado Blvd, Idaho Springs, CO
1st Submittal – Igadi, Ltd. – Development Review
JVA Job No.: 1529.49c

Dear Jon:

On behalf of the City of Idaho Springs, JVA has reviewed the submitted documents. The submittal included the following documents:

- IGADI REFERRAL PACKAGE 22723
- 23.0313_22-016_Igadi Idaho Springs_Floor Plan
- Igadi - Idaho Springs - Electrical 021723 (6)
- Igadi - Idaho Springs - Mechanical Rev 1 021023 (6)
- Igadi - Idaho Springs - Plumbing - 021723 (4)
- Igadi ID SPRGS Cultivation Trip Gen letter 230216
- Impact Assessment Letter for IS Final

Our review has generated the following comments:

Grading, Drainage, and Erosion Control Comments:

1. Refer to attached redlined document for additional information.
2. Proposed structure is outside of Regulatory Floodway per FEMA FIRM map number 08019C0226E.
3. The proposed grading design appears to be in compliance with IBC for minimum slope away from structure, where applicable. Per IBC code, 6 inches of fall in the first 10 feet is required to direct runoff away from the structure. Due to this being an unoccupied special use structure, grading may not need to comply with IBC.
4. Disturbed slopes exceeding 3:1 should be covered with erosion control blankets. All disturbed areas to be seeded and stabilized.
5. Provide proper erosion control measures during construction to manage onsite and offsite flows.
6. Provide information regarding roof drainage, location of downspouts, and mitigation to offsite flows due to steep slopes.
7. Show spot elevations at sidewalk connections and provide elevations at door stoops.
8. Provide slope arrows for all proposed grades around the facility.



Street Comments:

9. Coordinate with City to provide 4-foot sidewalk along Gilson that connects Colorado Blvd sidewalk to the Bridge crossing at Clear Creek. Applicant to design sidewalk for construction by City at a later date. An easement or shared use agreement will be required and will be determined during final review.

Utility Comments:

10. (2) existing 1-inch waterline serve the existing building and will continue to serve the site.
11. An existing 4-inch sanitary sewer will be utilized on the north of the property at the existing connection. No changes are planned. Water usage and discharged is noted in the impact document and have been reviewed by City Utilities Department.
12. Show existing easements where utility connections will be made.

The above comments may not reflect all changes required to meet City of Idaho Springs standards. These comments are based on information provided. Additional comments may arise as additional information is provided and/or reviewed.

JVA Inc.'s review of the submittals listed on the attached letter was performed within the following limitations and parameters:

The plan and document review by the City of Idaho Springs does not necessarily include confirmation of design calculations, project approach or every project design element. Therefore, authorization from the City of Idaho Springs to proceed with construction of the project does not constitute unconditional acceptance or approval of the submitted plans or documents, particularly if specific aspects are later discovered to not be in compliance with the City of Idaho Springs municipal codes or regulations in effect at the time such authorization was granted. The responsibility for compliance with the City of Idaho Springs municipal codes and regulations rests solely with the developer, their design engineer and their engineer's consultants. Neither the City of Idaho Springs nor JVA, Inc, accept responsibility for the project design and/or construction of this development nor any other design consideration or standard utilized in the project.

Sincerely,

By:

Nathan Skalak, P.E.
Project Manager

RE: Idaho Springs Municipal Code, 2007 updated December, 2022

[illegible]

**wallace
design
collective**

2015's design studio has an
award-winning design team
with a focus on design
and a focus on design



IGADI - IDAHO SPRINGS
2820 COLORADO BLVD, IDAHO SPRINGS, CO

DATE	02.15.2022
PROJECT NO.	220001
SHEET NAME	GRADING & UTILITY PLAN
SHEET NO.	
3	