



**to:** **Bill Gibson**  
Town of Frisco Community Development  
**from:** Matt Stais  
**date:** 14 August 2020  
**project:** **Retail + Office Building**  
Frisco Bay Marina  
Frisco, Colorado  
**re:** **Project Narrative**

The Frisco Bay Marina and Waterfront Park is a well loved community asset and a key piece of Frisco's summer recreational scene. Initial facilities were established in the late 1980s and the usage has grown steadily over the years.

Offices currently occupy the historic Lund House, which was moved to the Marina circa 1998. Bathrooms and the Island Grill were added circa 2005. The existing offices are not adequate to serve current demand.

The Town commissioned Logan Simpson to update the Marina Master Plan in 2018, and executed 'The Big Dig' and Phase One site Improvements in 2019. The proposed Retail + Office Building is part of the Phase Two Site Improvements; further detail of Phase Two scope is attached for review.

The proposed building includes expanded retail space, staff offices, and support spaces in a single story wood frame building atop a concrete slab and foundation.

Main floor elevation of USGS 9023.00 is 1.5 feet below the FEMA Base Flood Elevation (BFE) for Tenmile Creek. Town code requires one foot of freeboard above BFE, so the bottom 2.5 feet of building walls are designed to be floodproof in accordance with FEMA standard P-936 (2013).

Floodproofing will be accomplished with concrete walls, which will be poured with board formed texture and left exposed as the base of the building. Insulation will be provided on the interior of these walls.

Primary wall siding is locally sourced beetlekill pine from Summit County. Standing seam steel siding is used for secondary accent siding. Asphalt shingles are proposed for roofing, with 850 sq ft of solar PV panels on south facing roofs, expected to provide 17KW of capacity. An exterior materials palette is attached for review.

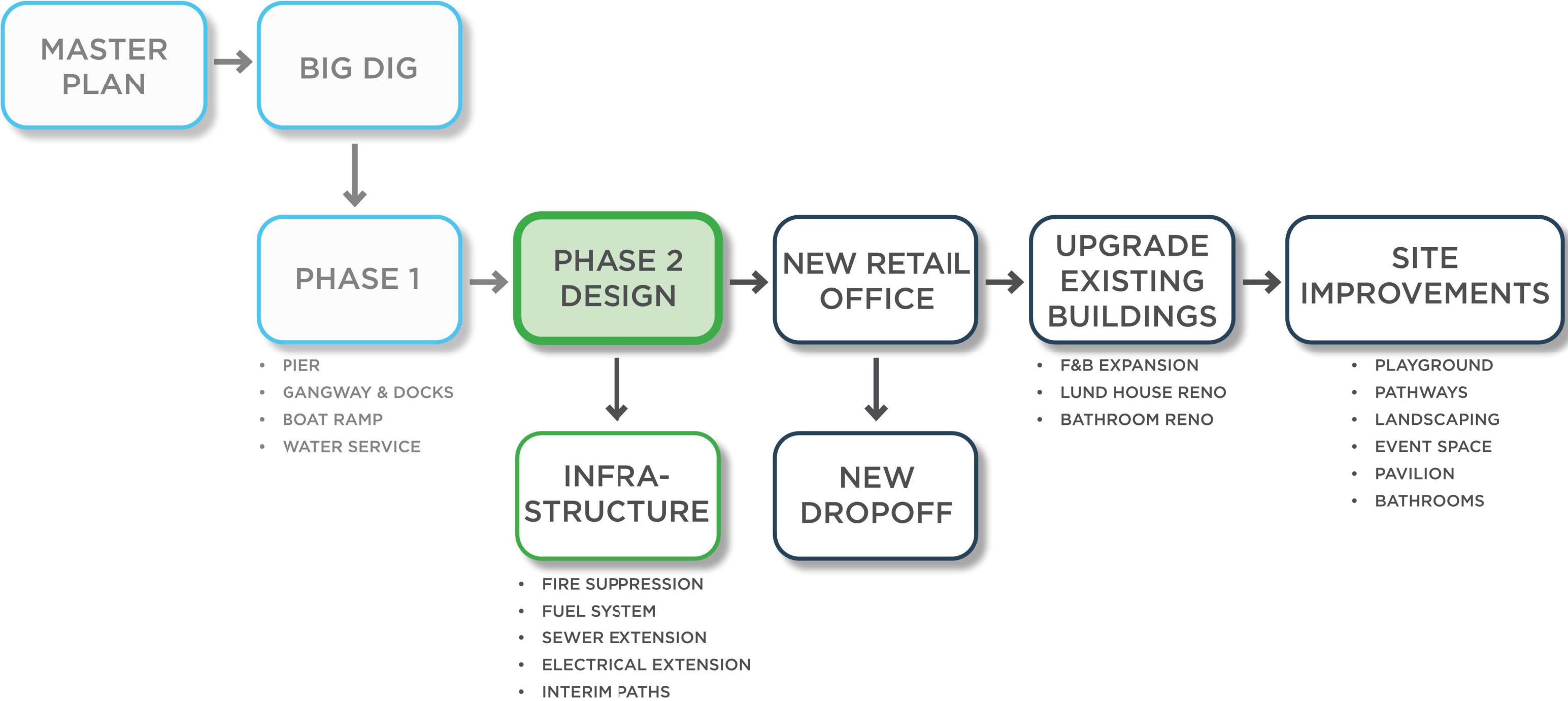
The Town has prioritized sustainability in project design, construction, and operation of this building to the greatest extent practicable. Specifics are included in attached summary of sustainable design precepts.

Inclusion of active solar systems will be a budgetary decision for the Owner, but the design will incorporate 'solar ready' options for mechanical and electrical systems so the town can easily add those at a later date if not installed as part of initial construction.

Project goals tie directly to principles outlined in the Marina Master Plan and the Frisco Community Plan. Final site conditions will include trail connections to the rec path and neighboring areas, connect the Marina more closely with Main Street, improve vehicular access including a dropoff for shuttle services and possible future public transit, and more opportunities for the public to interact with the shoreline of Lake Dillon while enhancing the natural resources along the lake edge.

This building is a key part of the evolution of the Frisco Bay Marina. Its completion and occupancy will help the Marina staff better serve guests, and allow for future renovations to the Lund House and Island Grill (considered a separate scope of work from this application).

We look forward to your comments.





## sustainable design precepts

14 august 2020

stais architecture &amp; interiors

1	sustainable site selection & design		notes
1.1	● sustainable site selection	building not sited in farmland, wetland, parkland or habitat	yes
1.2	● building orientation	building is oriented to capture sunlight, minimize wind effects	yes - roof designed w/PV in mind
1.3	● reduced site disturbance	site disturbance maximized at areas already disturbed, not green space	building sited on newly created land
1.4	● stormwater management	strategic plan to manage stormwater runoff; include vegetated swales	yes
1.5	● light pollution reduction	spec & locate fixtures to minimize light trespass from site	yes
1.6	● alternative transportation	include bicycle storage & changing rooms; public transport nearby	ample bike storage
2	energy efficiency		notes
2.1	? optimize energy performance	use better insulation at building envelope	under study - details to follow
2.2	●	use daylighting to reduce power demand	provided at all habitable spaces
2.3	?	use higher efficiency HVAC equipment	under study - details to follow
2.4	● on site renewable energy	solar photo-voltaic for power generation (7-8:12, east-west ridge = best)	solar ready for 17KW system
2.5	○	solar for domestic hot water? (12:12, east-west ridge = best)	no - minimal HW usage
2.6	○	study feasibility of ground source [geothermal] heating and cooling	not applicable; going the solar route!
2.7	○	wind power: price and design for vertical or horizontal turbines	not applicable; going the solar route!
2.8	○ off site renewable energy	purchase green power for operations?	goal is net zero on-site!
2.9	● ozone protection	do not specify systems with HCFC or halons	yes
2.10	? measurement & verification	continuous metering provides accountability; determine costs/benefits	consider for educational piece
3	water efficiency		notes
3.1	○ water efficient landscaping	use non-potable graywater for irrigation: design 2 pipe system	not included
3.2	● wastewater technologies	use waterless urinals, low flow toilets & showers	yes; discuss details w public works
3.3	● water use reduction	utilize 'dry cleanup' practices where possible	yes; discuss details w public works
4	material & resource efficiency		notes
4.1	● recycled content	spec products with post-consumer & post-industrial content	research/discuss with Town staff
4.2	? resource reuse	use min 5% salvaged, refurbished or reused materials	research/discuss with Town staff
4.3	● local and regional materials	use min 20% materials & products from within 500 miles	primary siding = local beetlekill pine
4.4	○ rapidly renewable materials	use min 5% of materials with ten year [max] harvest cycle	research/discuss with Town staff
4.5	? certified wood	50% or more of wood products to be FSC certified	research/discuss - possibly SFI?
4.6	● construction waste mgmt	recycle and/or salvage minimum 50% construction waste	specify this and coord w builder
4.7	● recycling program	for building operation	yes
5	indoor environmental quality		notes
5.1	? healthy materials	use low-VOC paints, adhesives, sealants, carpet products & systems	research/discuss with Town staff
5.2	?	use products without urea-formaldehyde [toxic]	research/discuss with Town staff
5.3	? chemical & pollutant control	use entryway systems, separate contaminated areas	consider entry systems at porches
5.4	● controllability of systems	allow occupants to control airflow, temperature & lighting	natural ventilation, several heat zones
5.5	● thermal comfort	provide thermally comfortable indoor environment	natural ventilation, several heat zones
5.6	● daylight & views	provide connections to the outdoors for occupants	included
5.7	● construction IAQ mgmt plan	protect HVAC & control contaminants during construction	specify this and coord w builder
5.8	○ carbon dioxide monitoring	monitoring system to provide constant feedback on IAQ	small building; not needed
5.9	● tobacco smoke control	prohibit smoking indoors; designate exterior areas	yes (exterior area in future scope)
6	innovation & design process		notes
6.1	○ building commissioning	NO commissioning due to project size, costs outweigh benefits	not selected due to building size
6.2	? innovation: education	use facility to educate community about sustainability	research/discuss with Town staff
6.3	● innovation: what else?	other ideas to be determined: do you have a suggestion?	document integrated design process



## Technical Memorandum

**Date:** August 14, 2020  
**Project:** Frisco Bay Marina Phase II Improvements  
**To:** Matt Stais, AIA  
Principal Architect  
Stais Architecture and Interiors  
**From:** Chris Jain, PE, CFM  
**Reviewed By:** Joel Price, PE, LEED AP  
**Re:** Stormwater Drainage Conceptual Design Memo

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### Introduction

This memo summarizes the proposed stormwater drainage concepts related to proposed development of new impervious area created by revising the existing vehicle turnaround area, adding concrete sidewalk and 2,200 square foot Marina Office Building. These improvements are all part of the Frisco Bay Marina Phase II Improvements.

### Existing Conditions

In general, the site runoff is addressed with drywells throughout the park. The existing runoff within the Phase II work limits generally drains to the east-southeast. There is an existing curb and gutter along the south edge of the entrance drive going to the boat ramp. The westerly inlet is connected to a drywell. A second inlet was installed in this same south curb line as part of the Phase I improvements that included the construction of the boat ramp. This inlet is connected to a drywell system that was also constructed with Phase I.

Several of the existing drywells have been filled in, or they have been observed to have standing water in them, indicating they are likely not functioning as well as they did when they were originally installed.

### Proposed Drainage Concepts

Due to high groundwater and the observed conditions of the existing wet wells, it is proposed to minimize inlets and piping infrastructure and surface drain the improvement area to a proposed water quality bioswale and forebay on the south side of the parking lot. This will allow for maintenance and removal of sediment at the forebay and provide water quality treatment prior to entering the existing vegetated area and wetland which outfall into Dillon Reservoir.

Sizing calculations will be completed as part of the next steps of the Phase II design development phase.



PRIMARY ROOF:  
ASPHALT SHINGLES  
TAMKO HERITAGE 50 YR  
COLOR: "WEATHERED WOOD"



PRIMARY SIDING:  
1x8 RS BEETLEKILL PINE  
SHIPLAP PROFILE (VERT)  
COLOR: SW #3521 "CROSSROADS"  
SEMI-TRANSPARENT STAIN

FASCIA, TRIM, BEAMS:  
COLOR: "SW 3524 CHESTNUT"  
SEMI-TRANSPARENT STAIN

FIBERGLASS WINDOWS:  
COLOR: ALPEN "GUNBARREL"

SECONDARY SIDING:  
BRIDGERSTEEL ULTRA BATTEN 13-3/4" COVERAGE  
COLOR: "REGAL BLUE"



BASE:  
EXPOSED CONCRETE W/  
BARNWOOD FORMLINERS



exterior materials palette

frisco bay marina retail & office building • frisco • colorado

date: 14 august 2020

draft



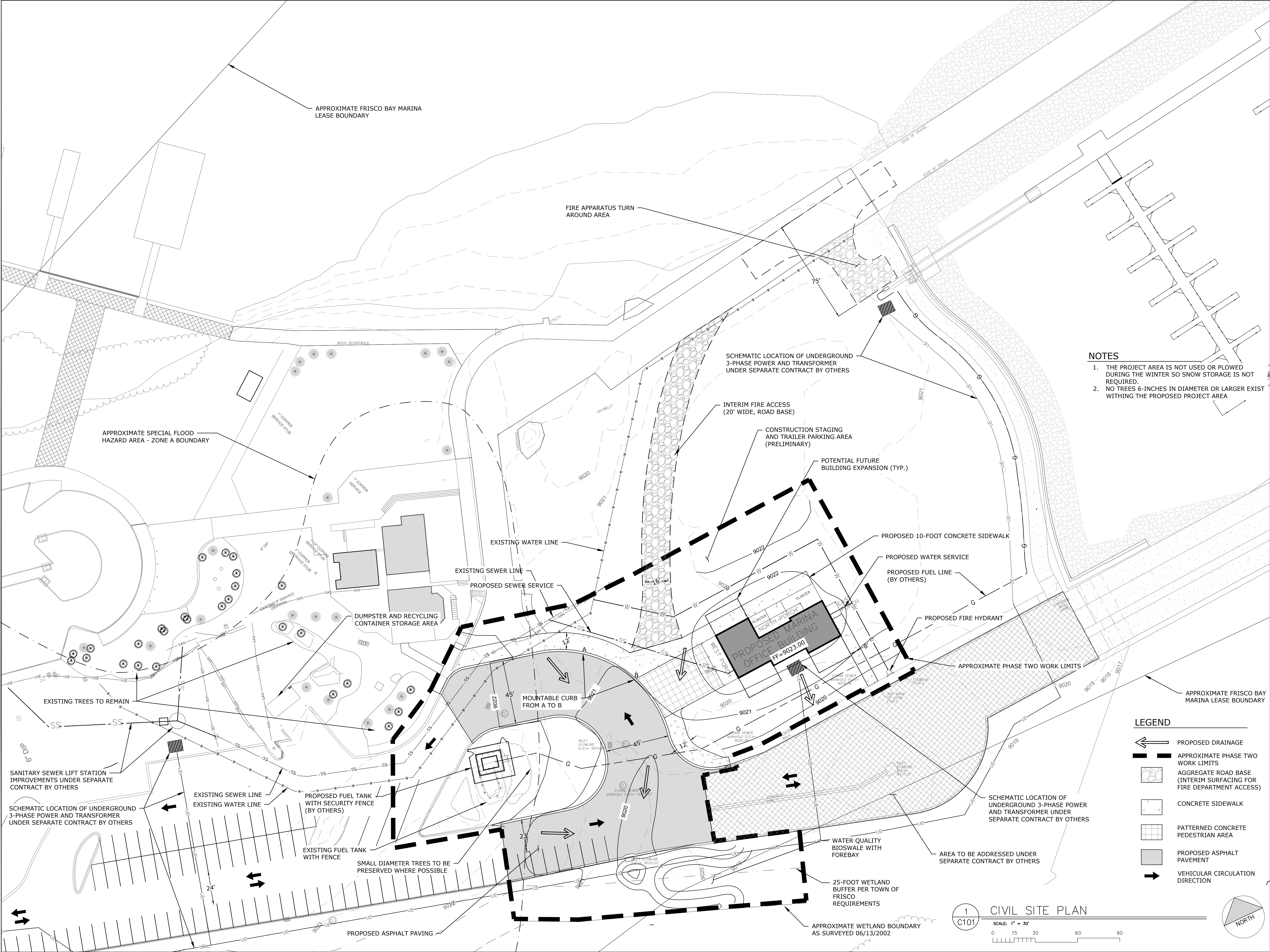












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970 453 0444

**murraysmith**

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LOUISVILLE, COLORADO 80027

- NOTES**
1. THE PROJECT AREA IS NOT USED OR PLOWED DURING THE WINTER SO SNOW STORAGE IS NOT REQUIRED.
  2. NO TREES 6-INCHES IN DIAMETER OR LARGER EXIST WITHING THE PROPOSED PROJECT AREA

www.staisarchitects.com

**frisco bay marina**  
**retail & office building**

290 marina road  
frisco - colorado

PROJECT # 1951

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REUSE WITHOUT WRITTEN CONSENT IS PROHIBITED.

ISSUE:

review	11 mar 2020
DRC review	24 june 2020
Town Planning	14 august 2020

CIVIL SITE PLAN

**draft**

C101



CHECKED BY:  
DRAWN BY:

ES  
AR, LF

GENERAL NOTES

1. THESE PLANS SHALL NOT BE UTILIZED FOR CONSTRUCTION OR PERMITTING UNLESS STATED FOR SUCH USE IN THE TITLE BLOCK.

2. DRAWINGS ARE INTENDED TO BE PRINTED ON 24" X 36" PAPER. PRINTING THESE DRAWINGS AT A DIFFERENT SIZE WILL IMPACT THE SCALE. VERIFY THE GRAPHIC SCALE BEFORE REFERENCING ANY MEASUREMENTS ON THESE SHEETS. THE RECIPIENT OF THESE DRAWINGS SHALL BE RESPONSIBLE FOR ANY ERRORS RESULTING FROM INCORRECT PRINTING, COPYING, OR ANY OTHER CHANGES THAT ALTER THE SCALE OF THE DRAWINGS. VERIFY ALL PLAN DIMENSIONS PRIOR TO START OF CONSTRUCTION. NOTIFY THE OWNER'S REPRESENTATIVE TO ADDRESS ANY QUESTIONS OR CLARIFY ANY DISCREPANCIES.

3. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

5. SUBMIT A CHANGE ORDER FOR APPROVAL FOR ANY CHANGES TO WORK SCOPE RESULTING FROM FIELD CONDITIONS OR DIRECTION BY OWNER'S REPRESENTATIVE WHICH REQUIRE ADDITIONAL COST TO THE OWNER PRIOR TO PERFORMANCE OF WORK.

6. THE CONTRACTOR SHALL PROVIDE A STAKED LAYOUT OF ALL SITE IMPROVEMENTS FOR INSPECTION BY THE OWNER'S REPRESENTATIVE AND MAKE MODIFICATIONS AS REQUIRED. ALL LAYOUT INFORMATION IS AVAILABLE IN DIGITAL FORMAT FOR USE BY THE CONTRACTOR.

7. IF A GEOTECHNICAL SOILS REPORT IS NOT AVAILABLE AT THE TIME OF CONSTRUCTION, NORRIS DESIGN RECOMMENDS A REPORT BE AUTHORIZED BY THE OWNER AND THAT ALL RECOMMENDATIONS OF THE REPORT ARE FOLLOWED DURING CONSTRUCTION. THE CONTRACTOR SHALL USE THESE CONTRACT DOCUMENTS AS A BASIS FOR THE BID. IF THE OWNER ELECTS TO PROVIDE A GEOTECHNICAL REPORT, THE CONTRACTOR SHALL REVIEW THE REPORT AND SUBMIT AN APPROPRIATE CHANGE ORDER TO THE OWNER'S REPRESENTATIVE IF ADDITIONAL COSTS ARE REQUESTED.

8. CONTRACTOR SHALL CONFIRM THAT SITE CONDITIONS ARE SIMILAR TO THE PLANS, WITHIN TOLERANCES STATED IN THE CONTRACT DOCUMENTS, AND SATISFACTORY TO THE CONTRACTOR PRIOR TO START OF WORK. SHOULD SITE CONDITIONS BE DIFFERENT THAN REPRESENTED ON THE PLANS OR UNSATISFACTORY TO THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND FURTHER DIRECTION.

9. CONTRACTOR IS RESPONSIBLE TO PAY FOR, AND OBTAIN, ANY REQUIRED APPLICATIONS, PERMITTING, LICENSES, INSPECTIONS AND METERS ASSOCIATED WITH WORK.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO ANY VIOLATIONS OR NON-CONFORMANCE WITH THE PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS, JURISDICTIONAL CODES, AND REGULATORY AGENCIES.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL UTILITY LOCATES PRIOR TO ANY EXCAVATION. REFER TO ENGINEERING UTILITY PLANS FOR ALL PROPOSED UTILITY LOCATIONS AND DETAILS. NOTIFY OWNER'S REPRESENTATIVE IF EXISTING OR PROPOSED UTILITIES INTERFERE WITH THE ABILITY TO PERFORM WORK.

12. UNLESS IDENTIFIED ON THE PLANS FOR DEMOLITION OR REMOVAL, THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT OR EXISTING LANDSCAPE, ADJACENT OR EXISTING PAVING, OR ANY PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION, ESTABLISHMENT OR DURING THE SPECIFIED MAINTENANCE PERIOD. ALL DAMAGES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS AS DETERMINED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR LOGGING ANY DAMAGES PRIOR TO START OF CONSTRUCTION AND DURING THE CONTRACT PERIOD.

13. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER'S REPRESENTATIVE PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.

15. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE APPROPRIATE JURISDICTIONAL AGENCIES AND THE OWNER'S REPRESENTATIVE IF THEIR WORK AND OPERATIONS AFFECT OR IMPACT THE PUBLIC RIGHTS-OF-WAY. OBTAIN APPROVAL PRIOR TO ANY WORK WHICH AFFECTS OR IMPACTS THE PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THIS REQUIREMENT DURING THE CONTRACT PERIOD.

16. SIGHT TRIANGLES AND SIGHT LINES SHALL REMAIN UNOBSTRUCTED BY EQUIPMENT, CONSTRUCTION MATERIALS, PLANT MATERIAL OR ANY OTHER VISUAL OBSTACLE DURING THE CONTRACT PERIOD AND AT MATURITY OF PLANTS PER LOCAL JURISDICTIONAL REQUIREMENTS. NO PLANT MATERIAL OTHER THAN GROUND COVER IS ALLOWED TO BE PLANTED ADJACENT TO FIRE HYDRANTS AS STIPULATED BY JURISDICTIONAL REQUIREMENTS.
17. COORDINATE SITE ACCESS, STAGING, STORAGE AND CLEANOUT AREAS WITH OWNER'S REPRESENTATIVE.

18. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SAFETY FENCING AND BARRIERS AROUND ALL IMPROVEMENTS SUCH AS WALLS, PLAY STRUCTURES, EXCAVATIONS, ETC. ASSOCIATED WITH THEIR WORK UNTIL SUCH FACILITIES ARE COMPLETELY INSTALLED PER THE PLANS, SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.

19. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THEIR MATERIAL STOCK PILES AND WORK FROM VANDALISM, EROSION OR UNINTENDED DISTURBANCE DURING THE CONSTRUCTION PERIOD AND UNTIL FINAL ACCEPTANCE IS ISSUED.

20. THE CONTRACTOR SHALL KNOW, UNDERSTAND AND ABIDE BY ANY STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ASSOCIATED WITH THE SITE. IF A STORM WATER POLLUTION PREVENTION PLAN IS NOT PROVIDED BY THE OWNER'S REPRESENTATIVE, REQUEST A COPY BEFORE PERFORMANCE OF ANY SITE WORK.

21. MAINTAIN ANY STORM WATER MANAGEMENT FACILITIES THAT EXIST ON SITE FOR FULL FUNCTIONALITY. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ANY NEW STORM WATER MANAGEMENT FACILITIES THAT ARE IDENTIFIED IN THE SCOPE OF WORK TO FULL FUNCTIONALITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER FOR FAILURE TO MAINTAIN STORM WATER MANAGEMENT FACILITIES DURING THE CONTRACT PERIOD.

22. THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM EXITING THE SITE OR ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION OR CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS DURING THEIR CONTRACTED COURSE OF WORK.

23. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREVENT ANY IMPACTS TO ADJACENT WATERWAYS, WETLANDS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS RESULTING FROM WORK DONE AS PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE STANDARDS DURING THEIR CONTRACTED COURSE OF WORK.

24. THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL LOADS OF CONSTRUCTION MATERIAL IMPORTED TO OR EXPORTED FROM THE PROJECT SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF MATERIAL DURING TRANSPORT. TRANSPORTATION METHODS ON PUBLIC RIGHT-OF WAYS SHALL CONFORM TO JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS.

25. THE CLEANING OF EQUIPMENT IS PROHIBITED AT THE JOB SITE UNLESS AUTHORIZED BY THE OWNER'S REPRESENTATIVE IN A DESIGNATED AREA. THE DISCHARGE OF WATER, WASTE CONCRETE, POLLUTANTS, OR OTHER MATERIALS SHALL ONLY OCCUR IN AREAS DESIGNED FOR SUCH USE AND APPROVED BY THE OWNER'S REPRESENTATIVE.

26. THE CLEANING OF CONCRETE EQUIPMENT IS PROHIBITED AT THE JOB SITE EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE IN THE STORM SEWER IS PROHIBITED.

27. OPEN SPACE SWALES: IF SWALES ARE EXISTING ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE CONVEYANCE OF WATER WITHIN THE SWALES DURING THE CONTRACT PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DIVERSION OR PUMPING OF WATER IF REQUIRED TO COMPLETE WORK. ANY SWALES DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. IF THE SWALE NEEDS TO BE DISTURBED OR MODIFIED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DISTURBANCE.

28. DETENTION AND WATER QUALITY PONDS: IF DETENTION PONDS AND WATER QUALITY PONDS ARE EXISTING ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE PONDS, DRAINAGE STRUCTURES AND SPILLWAYS DURING CONSTRUCTION. ALL PONDS, DRAINAGE STRUCTURES AND SPILLWAYS SHALL BE MAINTAINED IN OPERABLE CONDITIONS AT ALL TIMES. ANY POND OR SPILLWAY AREAS DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. IF THE POND NEEDS TO BE DISTURBED OR MODIFIED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DISTURBANCE.

29. LOCAL, STATE AND FEDERAL JURISDICTIONAL REQUIREMENTS, RESTRICTIONS OR PROCEDURES SHALL SUPERSEDE THESE PLANS, NOTES AND SPECIFICATIONS WHEN MORE STRINGENT. NOTIFY THE OWNER'S REPRESENTATIVE IF CONFLICTS OCCUR.

SHEET LIST

L-100	LANDSCAPE NOTES & SCHEDULE
L-200	LANDSCAPE PLAN
L-300	LANDSCAPE DETAILS

SHORT GRASS MIXTURE

COMMON NAME	BOTANICAL NAME	%	LBS./1000 S.F.
PERENNIAL RYEGRASS	LOLIUM PERENNE	30%	0.6 LBS.
CHEWINGS FESCUE	FESTUCA RUBRA	30%	0.6 LBS.
KENTUCKY BLUEGRASS, LIMOUSINE	POA PRATENSIS	25%	0.5 LBS.
KENTUCKY BLUEGRASS, MARQUIS	POA PRATENSIS	15%	0.2 LBS.
TOTAL		100%	2.0 LBS.

NOTES

1. SEED APPLICATION RATES
- 1.1. BROADCAST: 85-90 LBS/ACRE

1.2. DRILLED: 15-20 LBS/ACRE
2. APPLY EROSION CONTROL NETTING TO ANY AREA WHICH IS VULNERABLE TO SOIL EROSION SUCH AS SWALES OR STEEP SLOPES (3:1 OR STEEPER)
3. UTILIZE HYDROMULCH AND TACKIFIER OF 2,000 POUNDS PER ACRE WITH 3% TACKIFIER. UNLESS NOTED OTHERWISE IN TECHNICAL SPECIFICATIONS, AMEND ALL TOPSOIL IN RESEED AREAS TO 2" DEPTH WITH COMPOST.

LANDSCAPE NOTES

1. THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLANS AND SPECIFICATIONS AS CLOSELY AS POSSIBLE. ANY SUBSTITUTION OR ALTERATION SHALL NOT BE ALLOWED WITHOUT APPROVAL OF THE OWNER'S REPRESENTATIVE. OVERALL PLANT QUANTITY AND QUALITY SHALL BE CONSISTENT WITH THE PLANS.

2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES. GRAPHIC QUANTITIES TAKES PRECEDENCE OVER WRITTEN QUANTITIES.

3. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND TAG ALL PLANT MATERIAL PRIOR TO SHIPPING TO THE SITE. IN ALL CASES, THE OWNER'S REPRESENTATIVE MAY REJECT PLANT MATERIAL AT THE SITE IF MATERIAL IS DAMAGED, DISEASED, OR DECLINING IN HEALTH AT THE TIME OF ONSITE INSPECTIONS OR IF THE PLANT MATERIAL DOES NOT MEET THE MINIMUM SPECIFIED STANDARD IDENTIFIED ON THE PLANS AND IN THE SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR INSPECTION AND APPROVAL OF ALL MATERIALS AND PRODUCTS PRIOR TO INSTALLATION.

4. THE OWNER'S REPRESENTATIVE MAY ELECT TO UPSIZE PLANT MATERIAL AT THEIR DISCRETION BASED ON SELECTION, AVAILABILITY, OR TO ENHANCE SPECIFIC AREAS OF THE PROJECT. THE CONTRACTOR SHALL VERIFY PLANT MATERIAL SIZES WITH OWNER'S REPRESENTATIVE PRIOR TO PURCHASING, SHIPPING OR STOCKING OF PLANT MATERIALS. SUBMIT CHANGE ORDER REQUEST TO OWNER'S REPRESENTATIVE FOR APPROVAL IF ADDITIONAL COST IS REQUESTED BY THE CONTRACTOR PRIOR TO INSTALLATION. RE-STOCKING CHARGES WILL NOT BE APPROVED IF THE CONTRACTOR FAILS TO SUBMIT A REQUEST FOR MATERIAL CHANGES.

5. THE CONTRACTOR SHALL WARRANTY ALL CONTRACTED WORK AND MATERIALS FOR A PERIOD OF TWO YEARS AFTER SUBSTANTIAL COMPLETION HAS BEEN ISSUED BY THE OWNER'S REPRESENTATIVE FOR THE ENTIRE PROJECT UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS OR SPECIFICATIONS.

6. REFER TO IRRIGATION PLANS FOR LIMITS AND TYPES OF IRRIGATION DESIGNED FOR THE LANDSCAPE. IN NO CASE SHALL IRRIGATION BE EMITTED WITHIN THE MINIMUM DISTANCE FROM BUILDING OR WALL FOUNDATIONS AS STIPULATED IN THE GEOTECHNICAL REPORT. ALL IRRIGATION DISTRIBUTION LINES, HEADS AND EMITTERS SHALL BE KEPT OUTSIDE THE MINIMUM DISTANCE AWAY FROM ALL BUILDING AND WALL FOUNDATIONS AS STIPULATED IN THE GEOTECHNICAL REPORT.

7. LANDSCAPE MATERIAL LOCATIONS SHALL HAVE PRECEDENCE OVER IRRIGATION MAINLINE AND LATERAL LOCATIONS. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.

8. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE EXISTS IN ALL LANDSCAPE AREAS. SURFACE DRAINAGE ON LANDSCAPE AREAS SHALL NOT FLOW TOWARD STRUCTURES AND FOUNDATIONS. MAINTAIN SLOPE AWAY FROM FOUNDATIONS PER THE GEOTECHNICAL REPORT RECOMMENDATIONS. ALL LANDSCAPE AREAS BETWEEN WALKS AND CURBS SHALL DRAIN FREELY TO THE CURB UNLESS OTHERWISE IDENTIFIED ON THE GRADING PLAN. IN NO CASE SHALL THE GRADE, TURF THATCH, OR OTHER LANDSCAPE MATERIALS DAM WATER AGAINST WALKS. MINIMUM SLOPES ON LANDSCAPE AREAS SHALL BE 2%; MAXIMUM SLOPE SHALL BE 25% UNLESS SPECIFICALLY IDENTIFIED ON THE PLANS OR APPROVED BY THE OWNER'S REPRESENTATIVE.

9. PRIOR TO INSTALLATION OF PLANT MATERIALS, AREAS THAT HAVE BEEN COMPACTED OR DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE THOROUGHLY LOOSENEED TO A DEPTH OF 8" - 12" AND AMENDED PER SPECIFICATIONS.

10. ALL LANDSCAPED AREAS ARE TO RECEIVE ORGANIC SOIL PREPARATION TO TOWN OF FRISCO RECOMMENDATION OR AS NOTED IN THE TECHNICAL SPECIFICATIONS 3 CU. YDS PER 1,000 SF.

11. TREES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DRAINAGE AREAS, OR UTILITY EASEMENTS. CONTACT OWNER'S REPRESENTATIVE FOR RELOCATION OF PLANTS IN QUESTIONABLE AREAS PRIOR TO INSTALLATION.
12. THE CENTER OF EVERGREEN TREES SHALL NOT BE PLACED CLOSER THAN 8' AND THE CENTER OF ORNAMENTAL TREES CLOSER THAN 6' FROM A SIDEWALK, STREET OR DRIVE LANE. EVERGREEN TREES SHALL NOT BE LOCATED ANY CLOSER THAN 15' FROM IRRIGATION ROTOR HEADS. NOTIFY OWNER'S REPRESENTATIVE IF TREE LOCATIONS CONFLICT WITH THESE STANDARDS FOR FURTHER DIRECTION.

13. ALL EVERGREEN TREES SHALL BE FULLY BRANCHED TO THE GROUND AND SHALL NOT EXHIBIT SIGNS OF ACCELERATED GROWTH AS DETERMINED BY THE OWNER'S REPRESENTATIVE.

14. ALL TREES ARE TO BE STAKED AND GUYED PER DETAILS FOR A PERIOD OF 3 YEARS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING STAKES AT THE END OF 3 YEARS FROM ACCEPTANCE OF LANDSCAPE INSTALLATION BY THE OWNER'S REPRESENTATIVE. OBTAIN APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.

15. ALL TREES INSTALLED ABOVE RETAINING WALLS UTILIZING GEO-GRID MUST BE HAND DUG TO PROTECT GEO-GRID. IF GEO-GRID MUST BE CUT TO INSTALL TREES, APPROVAL MUST BE GIVEN BY OWNER'S REPRESENTATIVE PRIOR TO DOING WORK.

16. ALL TREES IN SEED OR TURF AREAS SHALL RECEIVE MULCH RINGS. OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE FOR ANY TREES THAT WILL NOT BE MULCHED FOR EXCESSIVE MOISTURE REASONS.

17. SHRUB, GROUNDCOVER AND PERENNIAL BEDS ARE TO BE CONTAINED BY BEND-A-BOARD. EDGER IS NOT REQUIRED WHEN ADJACENT TO CURBS, WALLS, WALKS OR SOLID FENCES WITHIN 3' OF PRE-MULCHED FINAL GRADE. EDGER SHALL NOT BE REQUIRED TO SEPARATE MULCH TYPES UNLESS SPECIFIED ON THE PLANS.

18. ALL SHRUB BEDS ARE TO BE MULCHED LANDSCAPE SHREDDED BARK MULCH OVER GEOTEXTILE WEED CONTROL FABRIC AS SPECIFIED IN THE DETAILS AND TECHNICAL SPECIFICATIONS OR MATERIALS SCHEDULE. ALL GROUND COVER AND PERENNIAL FLOWER BEDS SHALL BE MULCHED WITH LANDSCAPE MULCH AS SPECIFIED IN THE DETAILS AND TECHNICAL SPECIFICATIONS OR MATERIALS SCHEDULE. NO WEED CONTROL FABRIC IS REQUIRED IN GROUNDCOVER OR PERENNIAL AREAS.

19. AT SEED AREA BOUNDARIES ADJACENT TO EXISTING NATIVE AREAS, OVERLAP ABUTTING NATIVE AREAS BY THE FULL WIDTH OF THE SEEDER.

20. EXISTING TURF AREAS THAT ARE DISTURBED DURING CONSTRUCTION, ESTABLISHMENT AND THE MAINTENANCE PERIOD SHALL BE RESTORED WITH NEW SOD TO MATCH EXISTING TURF SPECIES. DISTURBED NATIVE AREAS WHICH ARE TO REMAIN SHALL BE OVER SEEDED AND RESTORED WITH SPECIFIED SEED MIX.

21. CONTRACTOR SHALL OVER SEED ALL MAINTENANCE OR SERVICE ACCESS BENCHES AND ROADS WITH SPECIFIED SEED MIX UNLESS OTHERWISE NOTED ON THE PLANS.

22. ALL SEEDED SLOPES EXCEEDING 25% IN GRADE (4:1) SHALL RECEIVE EROSION CONTROL BLANKETS. PRIOR TO INSTALLATION, NOTIFY OWNER'S REPRESENTATIVE FOR APPROVAL OF LOCATION AND ANY ADDITIONAL COST IF A CHANGE ORDER IS NECESSARY.

23. WHEN COMPLETE, ALL GRADES SHALL BE WITHIN +/- 1/8" OF FINISHED GRADES AS SHOWN ON THE PLANS.

24. SOFT SURFACE TRAILS NEXT TO MANICURED TURF OR SHRUB BEDS SHALL BE CONTAINED WITH 3" x 14 GAUGE GREEN ROLL TOP EDGER, RYERSON OR EQUAL.

25. PRIOR TO THE PLACEMENT OF MULCH AND WEED FABRIC, A GRANULAR, PRE-EMERGENT, WEED CONTROL AGENT SHALL BE ADDED TO ALL PLANTING BEDS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTION, EXCEPT AROUND ORNAMENTAL GRASSES.

26. THE CONTRACTOR IS EXPECTED TO KNOW AND UNDERSTAND THE CITY AND COUNTY SPECIFICATIONS FOR LANDSCAPE AND IRRIGATION. IN CASES OF DISCREPANCIES THE HIGHER OF THE TWO STANDARDS SHALL HAVE PRECEDENCE.

27. THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL IMPROVEMENTS SHOWN OR INDICATED ON THE APPROVED LANDSCAPE PLAN ON FILE IN THE PLANNING DEPARTMENT.

LAYOUT NOTES

1. WRITTEN DIMENSIONS WILL TAKE PRECEDENCE OVER SCALED DIMENSIONS.

2. SHOULD SITE CONDITIONS BE DIFFERENT THAN WHAT IS INDICATED ON THE DRAWINGS CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY FOR CLARIFICATION.

3. CURVED WALKS AND CURB EDGES ARE INTENDED TO BE CONSTRUCTED WITH SMOOTH FLOWING CURVES. ANYTHING OTHER THAN SMOOTH FLOWING CURVES WILL BE REJECTED.

4. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.

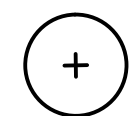

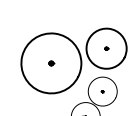


5. THE CONTRACTOR SHALL PROVIDE A STAKED LAYOUT OF ALL SITE IMPROVEMENTS FOR INSPECTION BY THE OWNER'S REPRESENTATIVE AND MAKE MODIFICATIONS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.

6. THE CONTRACTOR SHALL INSTALL SLEEVING FOR IRRIGATION IMPROVEMENTS PRIOR TO INSTALLING CONCRETE FLATWORK. REFER TO IRRIGATION PLANS.
7. LAYOUT WALKS, SCORE JOINTS AND PAVING PATTERNS AS CLOSELY AS POSSIBLE TO PLANS, DETAILS, AND SPECIFICATIONS. DO NOT DEVIATE FROM PLANS UNLESS SPECIFIC APPROVAL IS OBTAINED FROM THE OWNER'S REPRESENTATIVE.

8. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE LANDSCAPE ARCHITECT PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK. SEE TECHNICAL SPECIFICATIONS.

9. CONTRACTOR IS RESPONSIBLE FOR SUPERVISING ALL SAFETY SURFACING AND PAVEMENT DURING THE CURING PROCESS.

PLANTING SCHEDULE

SYM.	COMMON NAME		BOTANICAL NAME	SIZE & COND.	EXPOSURE	WATER
	EVERGREEN TREES					
	CBS	COLORADO SPRUCE	PICEA PUNGENS	B&B	PART SUN	MED
	DECIDUOUS TREES					
	NAR	NARROWLEAF COTTONWOOD	POPULUS ANGUSTIFOLIA	3" CAL, B&B	SUN	LOW-MED
	CHO	NATIVE CHOKECHERRY	PRUNUS VIRGINIANA	2" CAL, B&B	PART SUN	LOW-MED
	ANG	QUAKING ASPEN	POPULUS TREMULOIDES	2" CAL, B&B	PART SUN	MED
	DECIDUOUS SHRUBS					
	ART	DWARF ARCTIC BLUE WILLOW	SALIX PURPUREA 'NANA'	#5 CONT.	SUN/PART	MED
	LMC	MISS CANADA LILAC	SYRINGA X PRESTONIAE 'MASS CANADA'	#5 CONT.	SUN	XERIC
	PEK	PEKING COTONEASTER	COTONEASTER ACUTIFOLIA	#5 CONT.	SUN/PART	LOW-MED
	PIX	PIXWELL GOOSEBERRY	RIBES HIRTELLUM PIXWELL	#5 CONT.	SUN/PART	LOW-MED
	RRO	REDLEAF ROSE	ROSA GLAUCA	#5 CONT.	SUN/PART	LOW-MED
	SHC	SHUBERT CHOKECHERRY	PRUNUS VIRGINIANA	#5 CONT.	SUN/PART	MED
	WRO	WOODS ROSE	ROSA WOODSII	#5 CONT.	SUN/PART	LOW
	ORNAMENTAL GRASSES					
	IRG	INDIAN RICEGRASS	ACHNATHERUM HYMENOIDES	#1 CONTAINER	SUN	XERIC
	AVG	BLUE AVENA	HELICTOTRICHON SEMPEVIRENS	#1 CONTAINER	SUN/PART	XERIC
	BFE	BLUE FESCUE	FESTUCA GLAUCA 'ELIJAH BLUE'	#1 CONTAINER	SUN	XERIC
	PERENNIAL PLANTS					
	SMN	MAY NIGHT SALVIA	S. SYLVESTRIS x 'MAINACHT'	#1 CONT.		
	SLV	SILVERWEED	POTENTILLA ANSERINE	#1 CONT.		
	SWW	SWEET WOODRUFF	GALIUM ODORATUM	#1 CONT.		
	LUP	RUSSEL HYBRIDS LUPINE	LUPINUS 'RUSSELL STRAIN'	#1 CONT.		
	DRA	DRAGON'S BLOOD SEDUM	SEDUM SPURILUM 'DRAGON'S BLOOD'	#1 CONT.		
	YAM	MOONSHINE YARROW	ACHILLEA 'MOONSHINE'	#1 CONT.		



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FRISCO BAY MARINA OFFICE BUILDING

PHASE 2.1 - PROJECT # 1951

290 MARINA ROAD, FRISCO, COLORADO

TOWN OF FRISCO PLANNING

OWNER:

TOWN OF FRISCO  
1 EAST MAIN STREET  
FRISCO, CO 80443  
OWNER CITY/STATE  
970.668.5276

NOT FOR  
CONSTRUCTION

DATE:

06/24/20:

DRC REVIEW

08/14/20:

TOWN PLANNING

SHEET TITLE:  
LANDSCAPE  
NOTES &  
SCHEDULE



FRISCO BAY MARINA OFFICE BUILDING  
PHASE 2.1 - PROJECT # 1951  
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TOWN PLANNING

SHEET TITLE:  
LANDSCAPE  
PLAN

L-200

LEGEND

- EXISTING TREES TO REMAIN
- DECIDUOUS TREES; DETAIL 1 / L-300
- SHRUBS; DETAIL 2 / L-300
- ORNAMENTAL GRASS; DETAIL 3 / L-300
- LANDSCAPE BOULDERS FROM ONSITE
- PERENNIAL PLANTING; DETAIL 3 / L-300
- SHORT GRASS SEED MIX
- LANDSCAPE BED, SHREDDED BARK MULCH
- COBBLE DRIP LINE
- CRUSHER FINES PATH; DETAIL 6 / L-300
- BENDA BOARD EDGER; DETAIL 5 / L-300
- SPADE CUT EDGER; DETAIL 4 / L-300
- LIMIT OF WORK

NOTES - FUEL SYSTEM ISLAND AREA

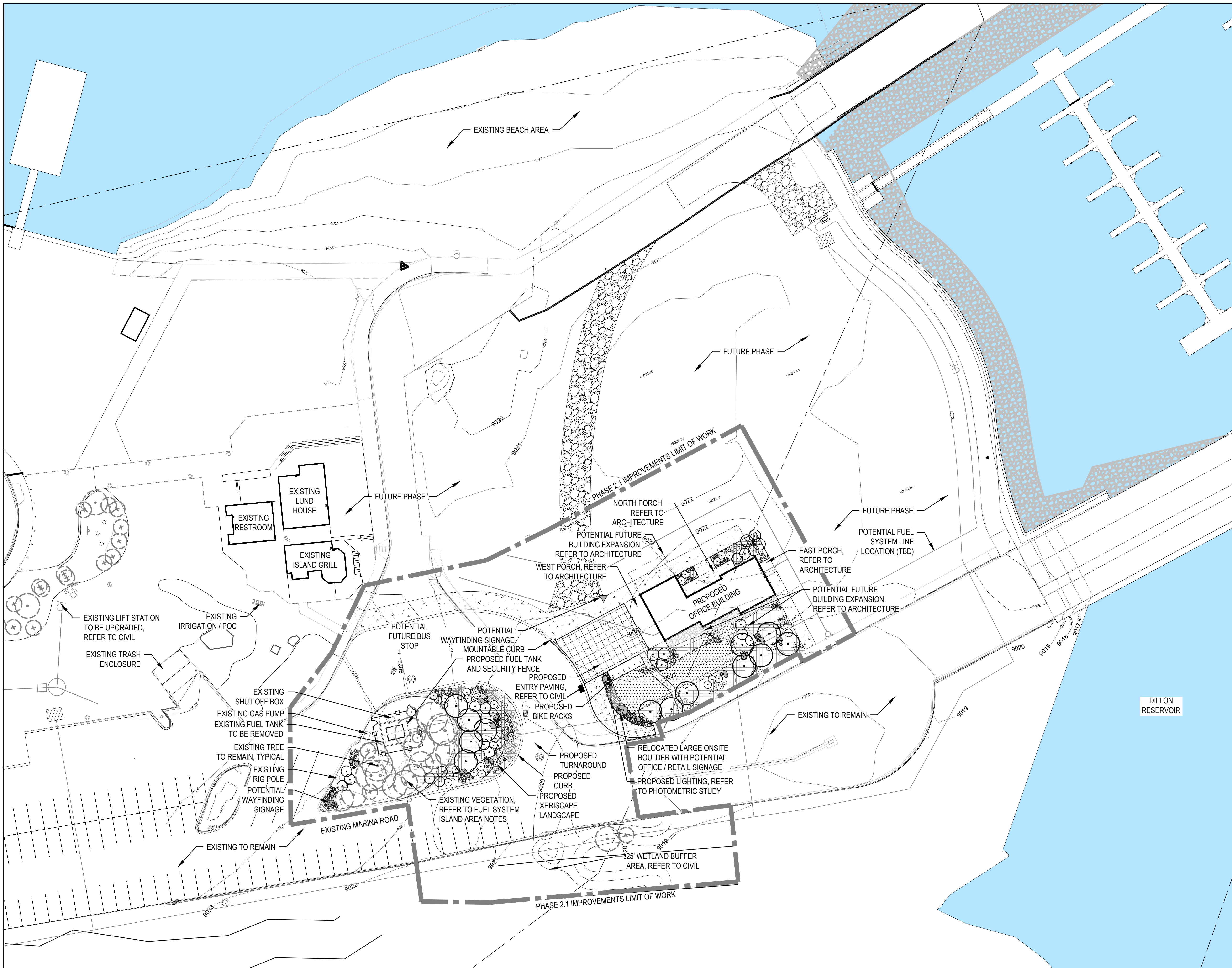
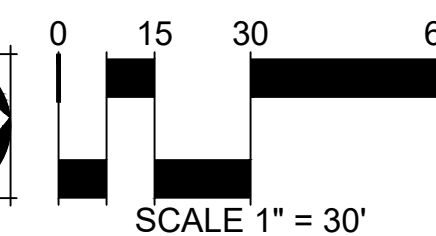
1. LIMB UP ALL 3.5"+ CALIPER DECIDUOUS TREES WITH BRANCHES BELOW 4' IN HEIGHT.
2. REMOVE ALL SUCKERS FROM THE BASE OF DECIDUOUS TREES LARGER THAN 2.5" CALIPER.
3. THIN AND REMOVE ALL VOLUNTEER TREES LESS THAN 1" CALIPER.
4. PRUNE ALL SHRUBS FOLLOWING BEST PRACTICE INDUSTRY STANDARDS. NO MORE THAN 1/3 OF ANY SHRUB SHALL BE PRUNED OR REMOVED IN ONE SEASON.
5. REMOVE ALL INVASIVE SPECIES AND NOXIOUS WEEDS FROM UNDERSTORY USING A MECHANICAL METHOD.

IRRIGATION NOTES

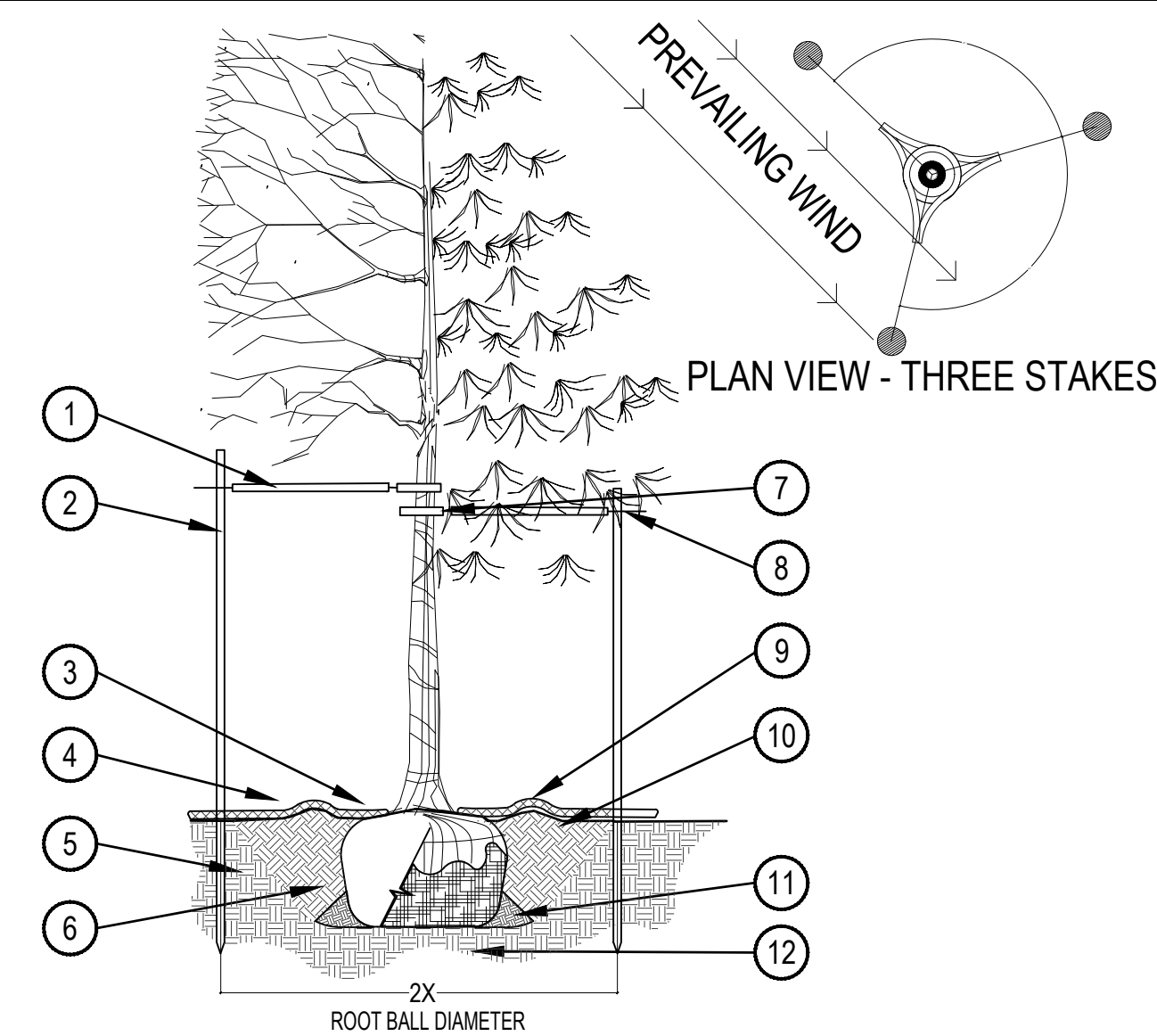
1. REPAIR AND REPLACE DAMAGED IRRIGATION WITHIN PHASE 1 IMPROVEMENTS LIMIT OF WORK BOUNDARY.

CHECKED BY:  
DRAWN BY:

ES  
AR, LF



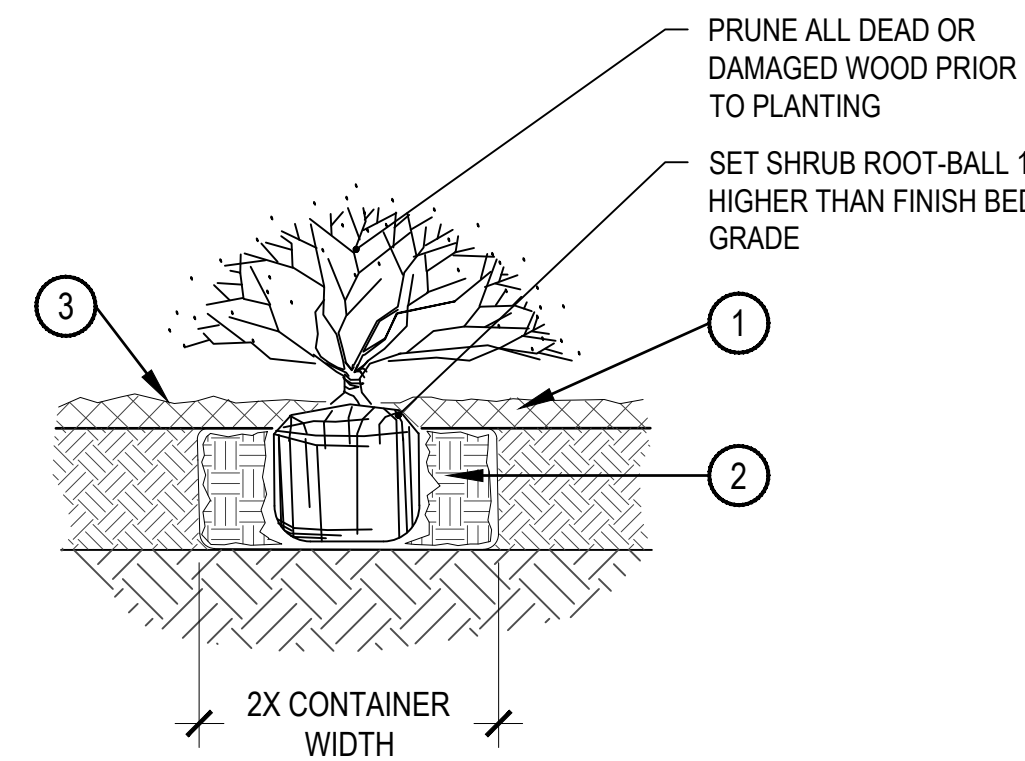




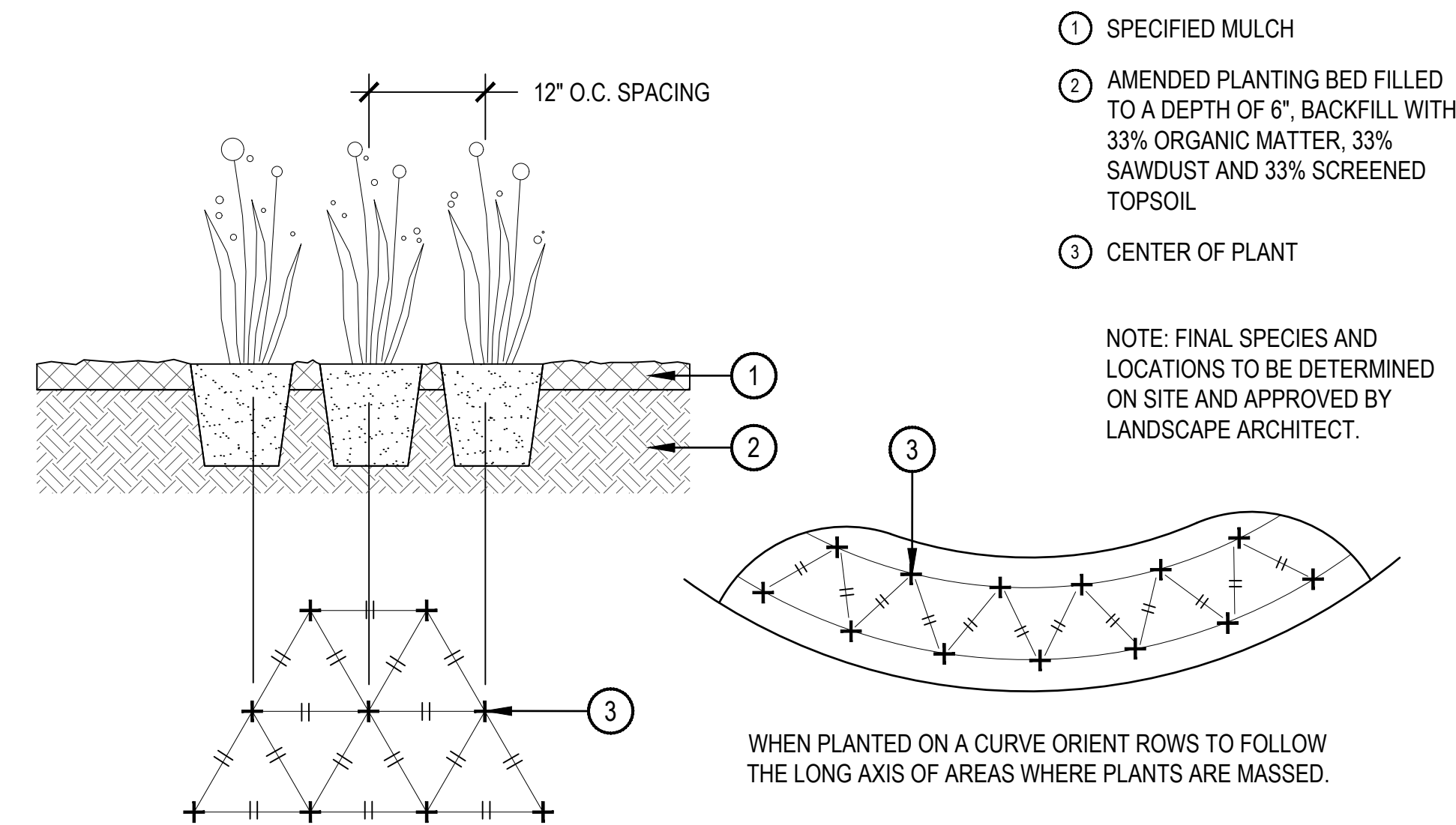
## 1 TREE PLANTING

- PRUNING NOTES:**
1. ALL PRUNING SHALL COMPLY WITH ANSI A300 STANDARDS.
  2. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS AND BROKEN BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED. HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
- STAKING NOTES:**
1. STAKE TREES PER DIAGRAM. AFTER A MINIMUM OF (3) THREE YEARS CONFIRM TREE IS ESTABLISHED. CHECK FOR ROOTBALL STABILITY. APPLY HAND PRESSURE TO TRUNK OF TREE, WHEN ROOTBALL DOES NOT MOVE, REMOVE STAKING.
  2. WIRE OR CABLE SHALL BE MIN. 12 GAUGE, TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. NYLON STRAPS SHALL BE LONG ENOUGH TO ACCOMMODATE 1- $\frac{1}{2}$ " OF GROWTH AND BUFFER ALL BRANCHES FROM WIRE.
  3. ADJUST STAKING, STRAPS AND GUY WIRES ANNUALLY.

1. PLACE MIN.  $\frac{3}{8}$ " PVC PIPE AROUND EACH WIRE. EXPOSED WIRE SHALL BE MAX. 2" EACH SIDE
2. INSTALL STAKING PER SPECIFICATIONS
3. PLANT TREE SO THAT FIRST ORDER MAJOR ROOT IS 1"-2" ABOVE FINAL GRADE.
4. 3" DEEP MULCH RING PLACED A MINIMUM OF 4 FT. IN DIAMETER ON TOP OF WEED FABRIC. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK (FINISHED GRADE REFERENCES TOP OF MULCH).
5. 1:1 SLOPE ON SIDES OF PLANTING HOLE.
6. REMOVE ALL TWINE, ROPE, BURLAP AND WIRE FROM ENTIRE ROOT BALL AND TRUNK
7. GROMMETED NYLON STRAPS
8. GALVANIZED WIRE, MIN. 12 GAUGE CABLE - TWIST WIRE ONLY TO KEEP FROM SLIPPING.
9. 4-6" HIGH WATER SAUCER IN NON-TURF AREAS.
10. BACKFILL WITH PLANT MIX. PLANT MIX SHALL CONSIST OF EQUAL PARTS TOPSOIL, COMPOST, AND EXCAVATED SOIL. WATER THOROUGHLY WHEN BACKFILLING
11. PLACE SOIL AROUND ROOT BALL FIRMLY, DO NOT COMPACT OR TAMP. SETTLE SOIL WITH WATER TO FILL ALL AIR POCKETS.
12. PLACE ROOT BALL ON UNDISTURBED SOIL TO PREVENT SETTLEMENT.

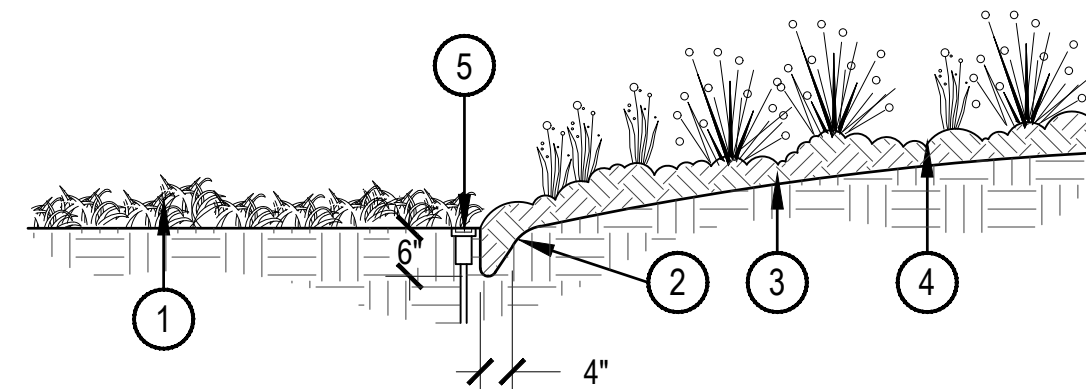


## 2 SHRUB PLANTING



## 3 PERENNIAL / ORNAMENTAL GRASS PLANTING

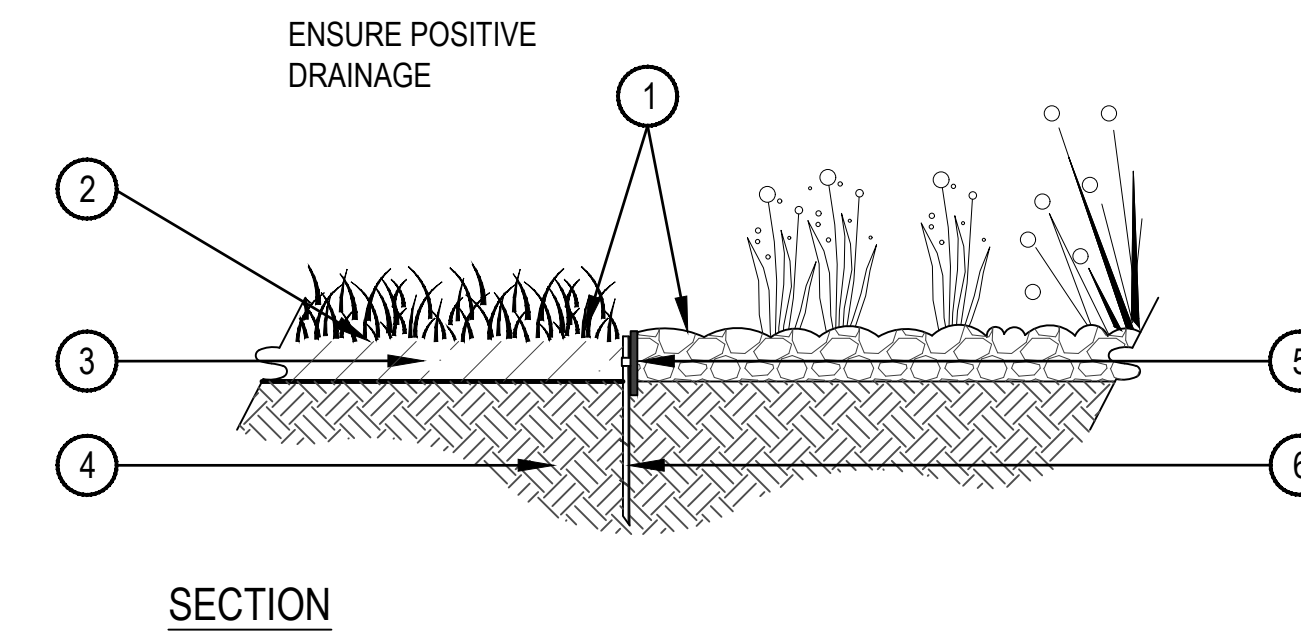
1. SPECIFIED MULCH
2. AMENDED PLANTING BED FILLED TO A DEPTH OF 6", BACKFILL WITH 33% ORGANIC MATTER, 33% SAWDUST AND 33% SCREENED TOPSOIL
3. CENTER OF PLANT



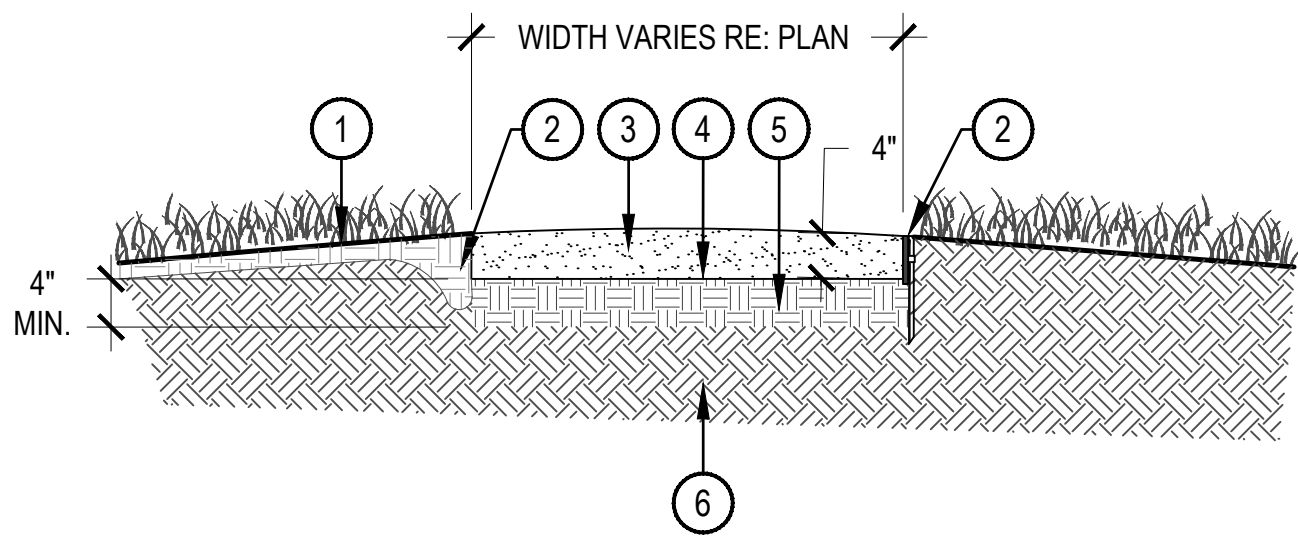
## 4 SPADE CUT EDGE

- NOTE:**
1. SPADE CUT EDGE TO UTILIZED FOR TRANSITION BETWEEN PLANTING BEDS AND PLANTING POCKETS AND ADJACENT LANDSCAPE (EXCEPT TURF), RE: LANDSCAPE PLANS.
  2. IF IRRIGATION HEAD IS LOCATED ADJACENT TO MULCH BEDS, OFFSET HEAD INTO GRASS AREA TO ENSURE STABLE SUPPORT.

1. ADJOINING LANDSCAPE - TYPICALLY IRRIGATED DRY LAND SEED
2. VERTICAL SPADE CUT EDGE FILLED WITH SPECIFIED MULCH, TAPER EDGE OF BED SO MULCH IS DEEPER AGAINST SPADED EDGE.
3. SPECIFIED DEPTH OF MULCH (TYPICALLY WOOD MULCH 3"-4" DEEP)
4. PLANTING BED
5. IRRIGATION HEADS SHOULD BE LOCATED ADJACENT TO MULCH BEDS. OFFSET HEAD INTO GRASS AREA TO ENSURE STABLE SUPPORT.



## 5 BEND-A-BOARD EDGER



## 6 CRUSHER FINES PATH

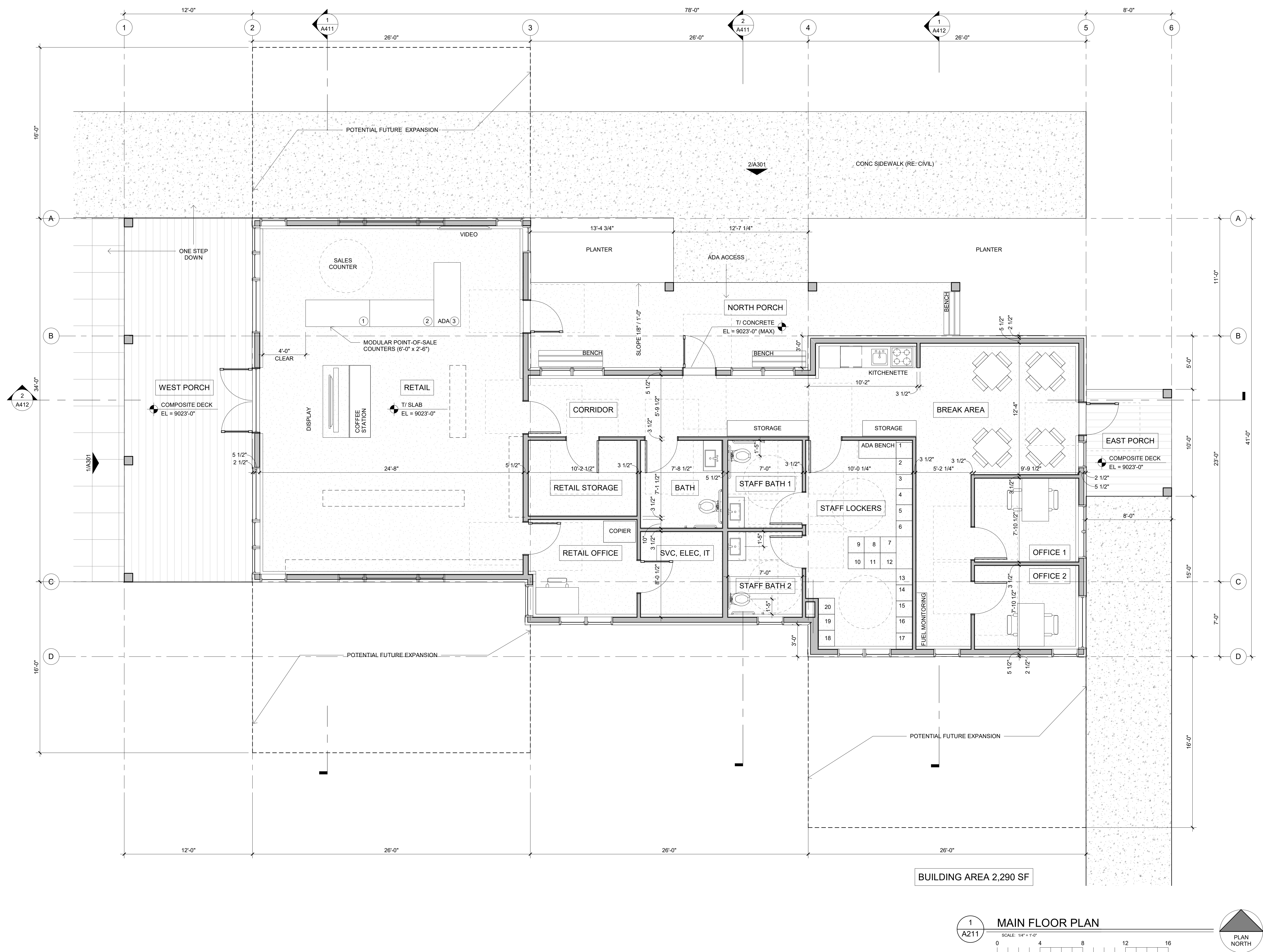
1. SLOPE ADJACENT GRADE AWAY FROM TRAIL, SWALE IF NECESSARY
2. EDGE TYPE, SEE PLAN. SPADE CUT EDGER (RE: DETAIL 4/L-300) OR BENDA BOARD EDGER (RE: DETAIL 5/L-300)
3. 4" DEPTH CRUSHER FINES: COMPACTED IN 2 - 2" LIFTS
4. WEED FABRIC
5. COMPACTED SUBGRADE COMPACTED TO 95% PROCTOR DENSITY
6. UNDISTURBED SOIL

- COMPACTION NOTES:**
1. REFER TO CIVIL DRAWINGS FOR SITE GRADING.
  2. COMPACT WET FOR BEST RESULTS.
  3. USE A SMALL (4") RIDING ROLLER TO COMPACT TRAIL.
  4. CROWN TRAIL IN FLAT AREAS (AS SHOWN).
  5. CROSS-SLOPE TRAIL AT 1-2% WITH GRADE WHERE TOPOGRAPHY DICTATES.

- REVEGETATION NOTES:**
1. RE-SEED DISTURBED EDGES OF TRAIL UPON COMPLETION OF TRAIL CONSTRUCTION.
  2. FOLLOW SEEDING SPECIFICATIONS AS PROVIDED BY LANDSCAPE ARCHITECT.

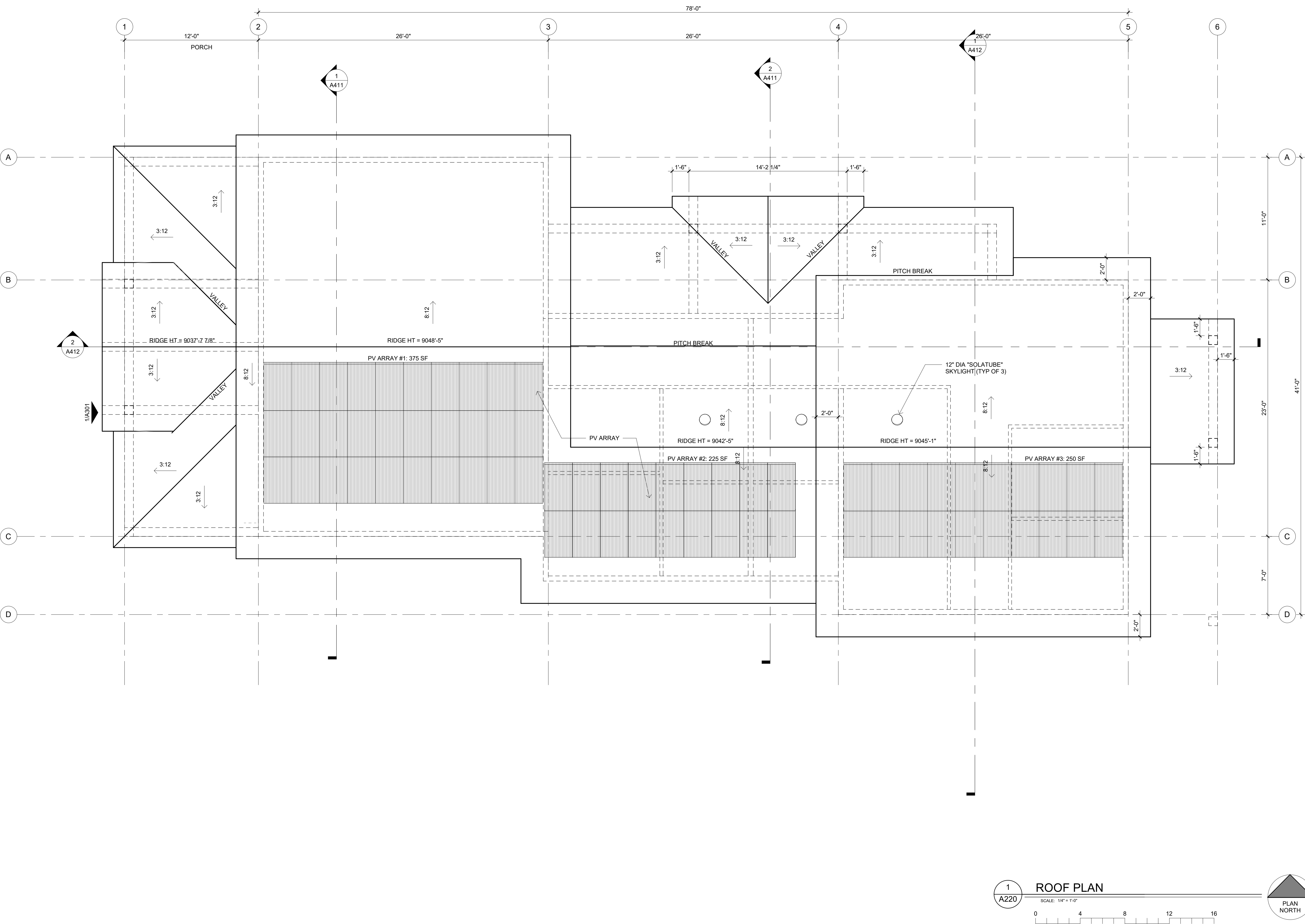
1. SPECIFIED MULCH
2. AMENDED SOIL IN PLANTING BED PER SPECIFICATIONS. TILL SOIL TO A DEPTH OF EIGHT INCHES.
3. FINISH GRADE (TOP OF MULCH)

- NOTE:**
1. BROKEN OR CRUMBLING ROOT-BALLS WILL BE REJECTED
  2. CARE SHOULD BE TAKEN NOT TO DAMAGE THE SHRUB OR ROOT-BALL WHEN REMOVING IT FROM ITS CONTAINER
  3. ALL JUNIPERS SHOULD BE PLANTED SO THE TOP OF THE ROOT-BALL OCCURS ABOVE THE FINISH GRADE OF THE MULCH LAYER
  4. DIG PLANT PIT TWICE AS WIDE AND HIGH AS THE CONTAINER

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1  
A220

ROOF PLAN

SCALE: 1/4" = 1'-0"

0 4 8 12 16

PLAN NORTH

frisco bay marina  
retail & office building

290 marina road  
frisco , colorado

PROJECT # 1951

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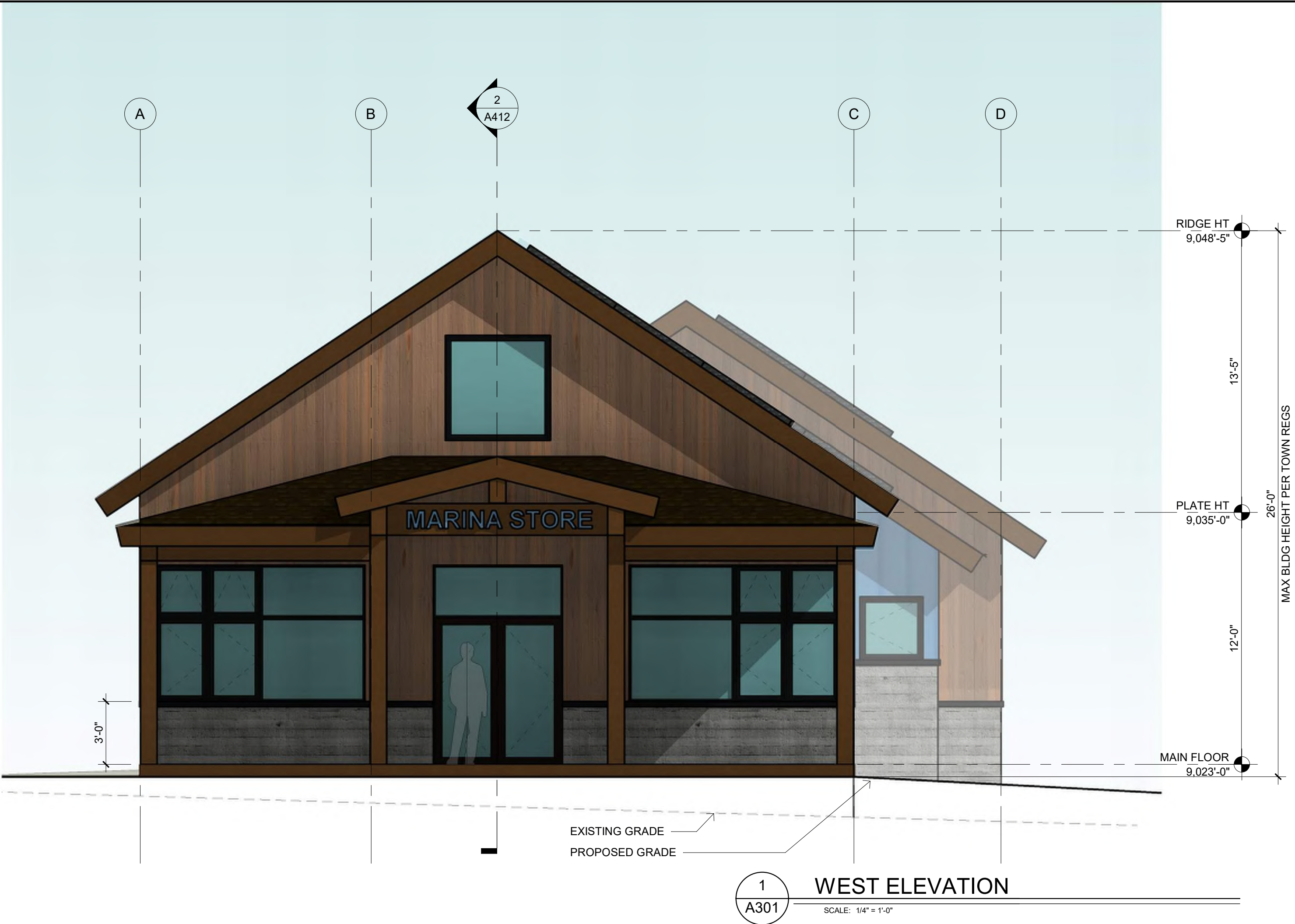
ROOF PLAN

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A220



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**frisco bay marina  
retail & office building**

290 marina road  
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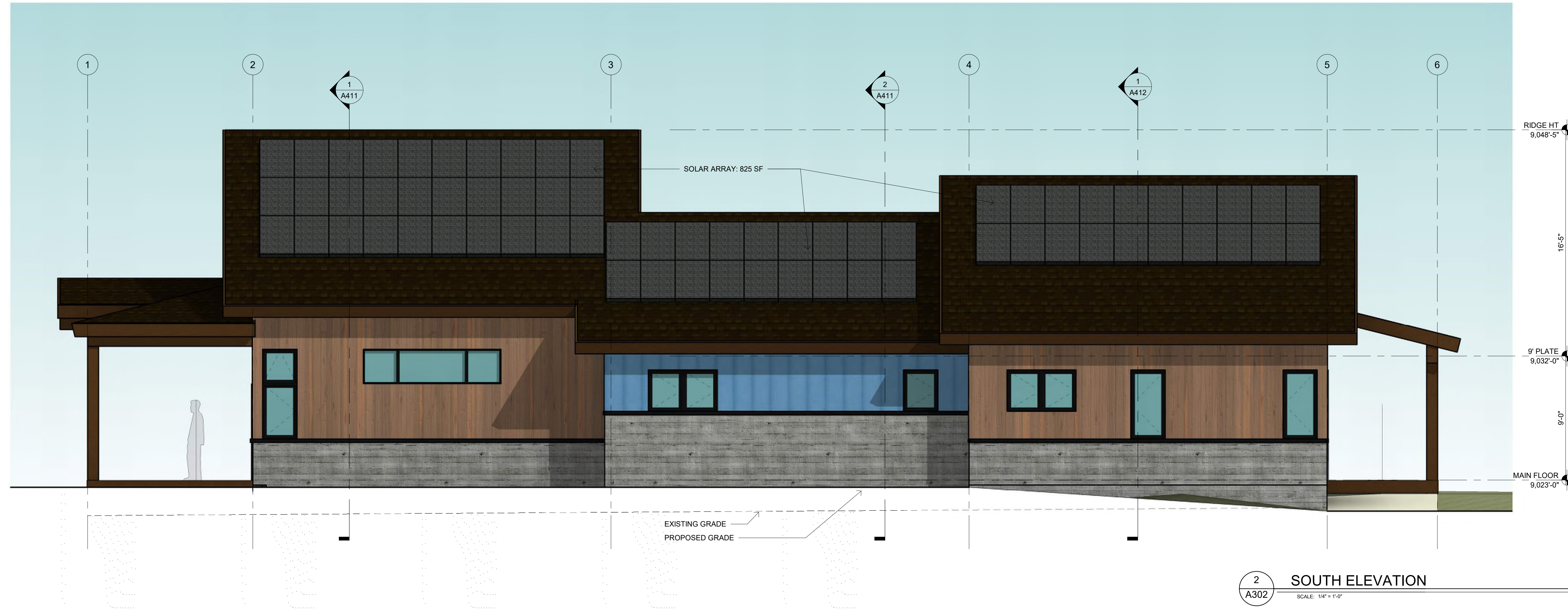
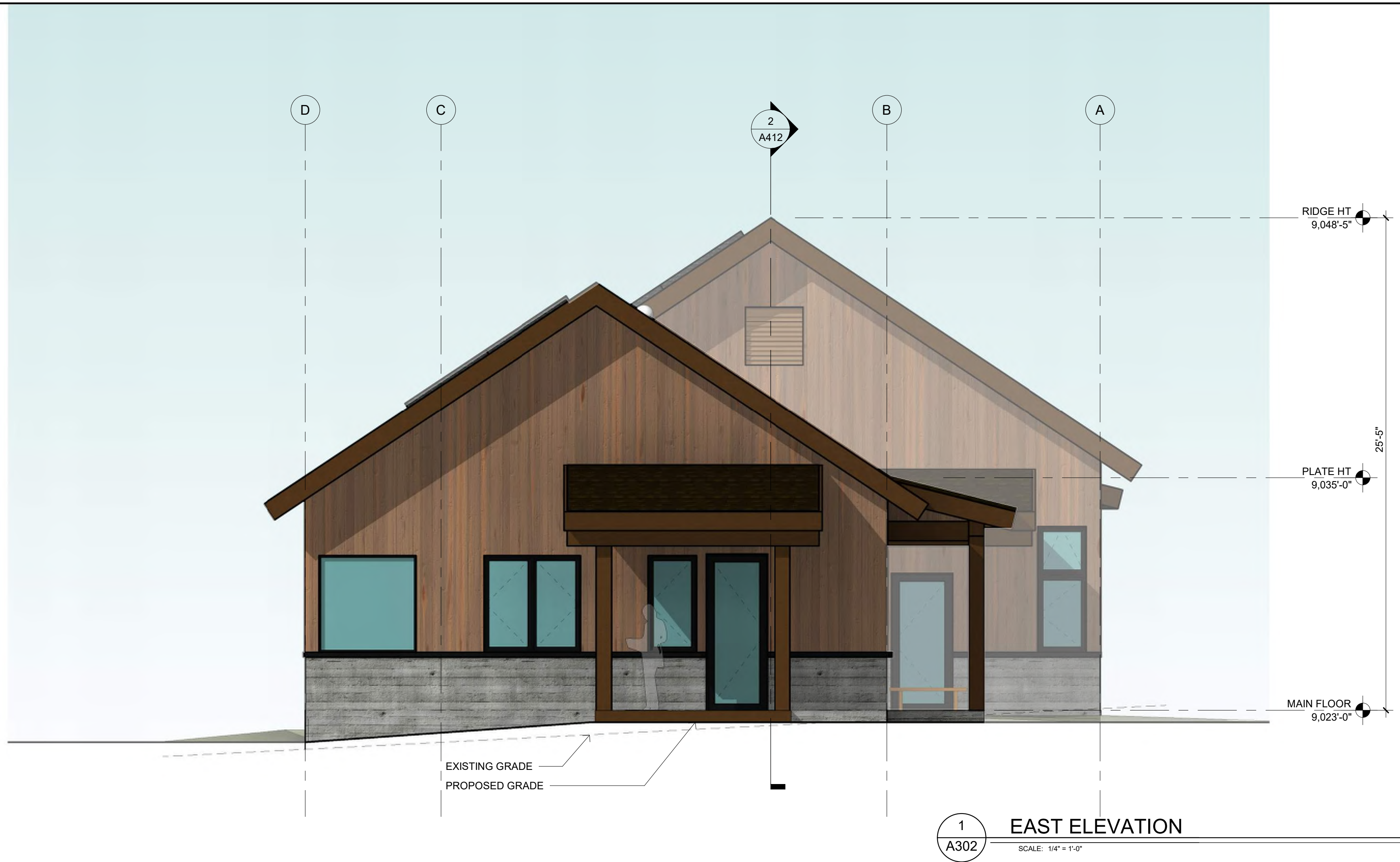
**EXTERIOR ELEVATIONS**

**draft**

**A301**



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**frisco bay marina  
retail & office building**

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**EXTERIOR ELEVATIONS**

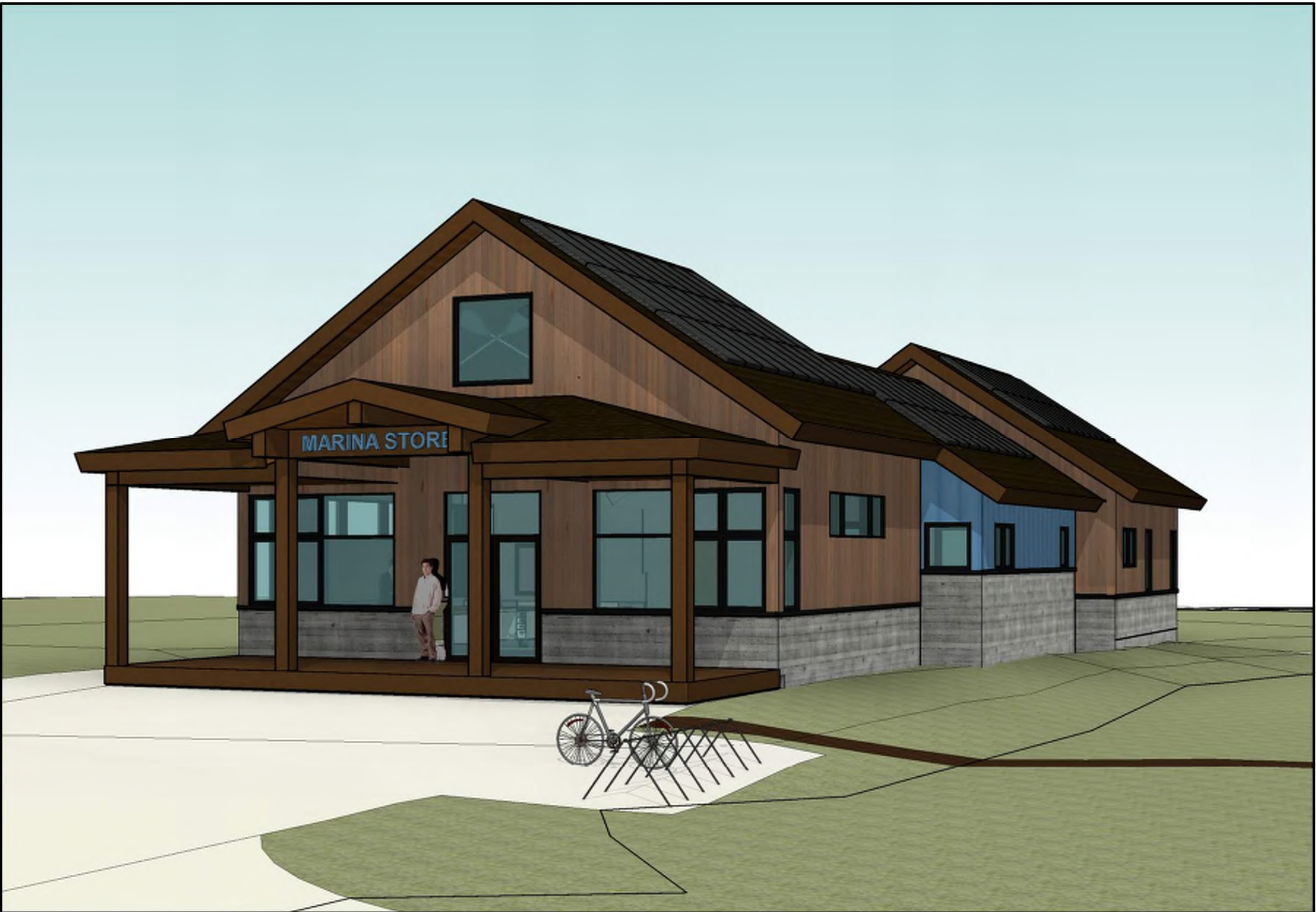
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**A302**





3  
A311  
VIEW FROM NORTHEAST  
SCALE:



1  
A311  
VIEW FROM SOUTHWEST  
SCALE:



4  
A311  
VIEW FROM SOUTHEAST  
SCALE:



2  
A311  
VIEW FROM NORTHWEST  
SCALE:

EXTERIOR MATERIALS KEY



E1 PRIMARY ROOF:  
ASPHALT SHINGLES  
COLOR: TAMKO "WEATHERED WOOD"



E5 PRIMARY SIDING:  
1x8 SHIPLAP VERT RS PINE BEETLE KILL  
COLOR: SW#3521 "CROSSROADS"  
SEMI-TRANSPARENT STAIN



E6 SECONDARY SIDING:  
BRIDGERSTEEL ULTRA BATTEN  
13 3/4" COVERAGE  
COLOR: "REGAL BLUE"



E3 FASCIA, TRIM, BEAMS, MISC WOOD  
COLOR: SW#3525 "CHESTNUT"  
SEMI-TRANSPARENT STAIN

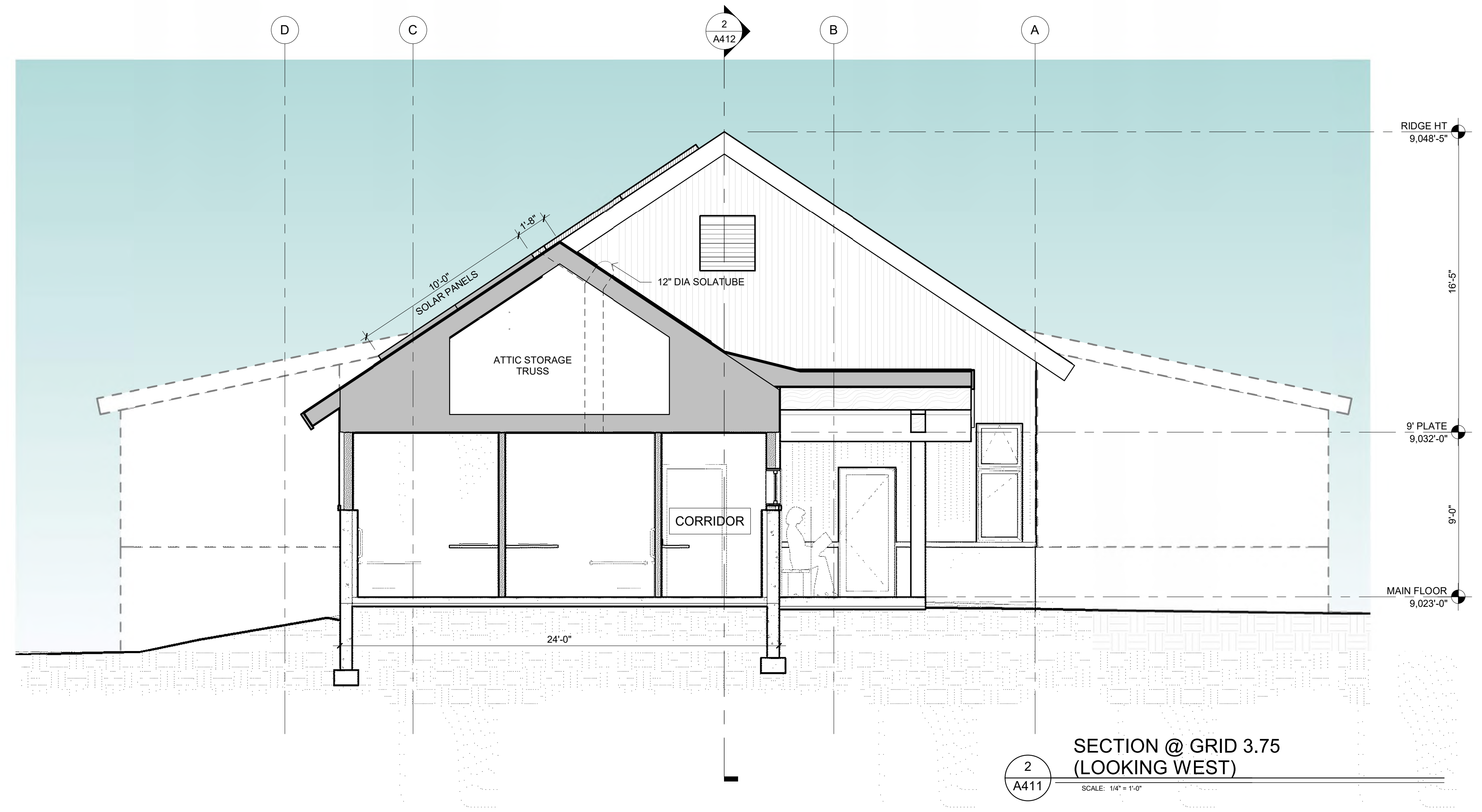
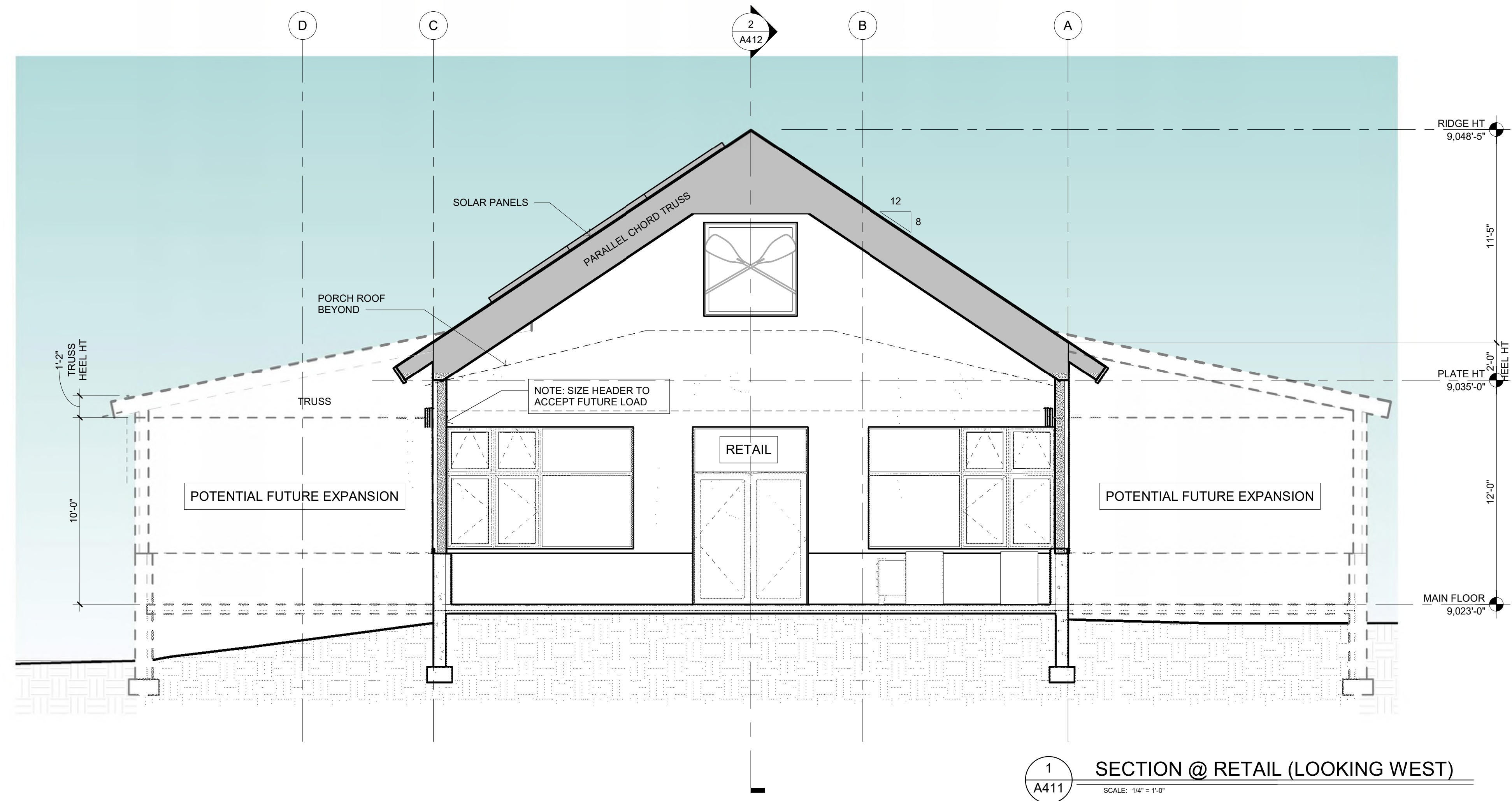


E10 CONCRETE BASE W/  
BARNWOOD FORMLINERS

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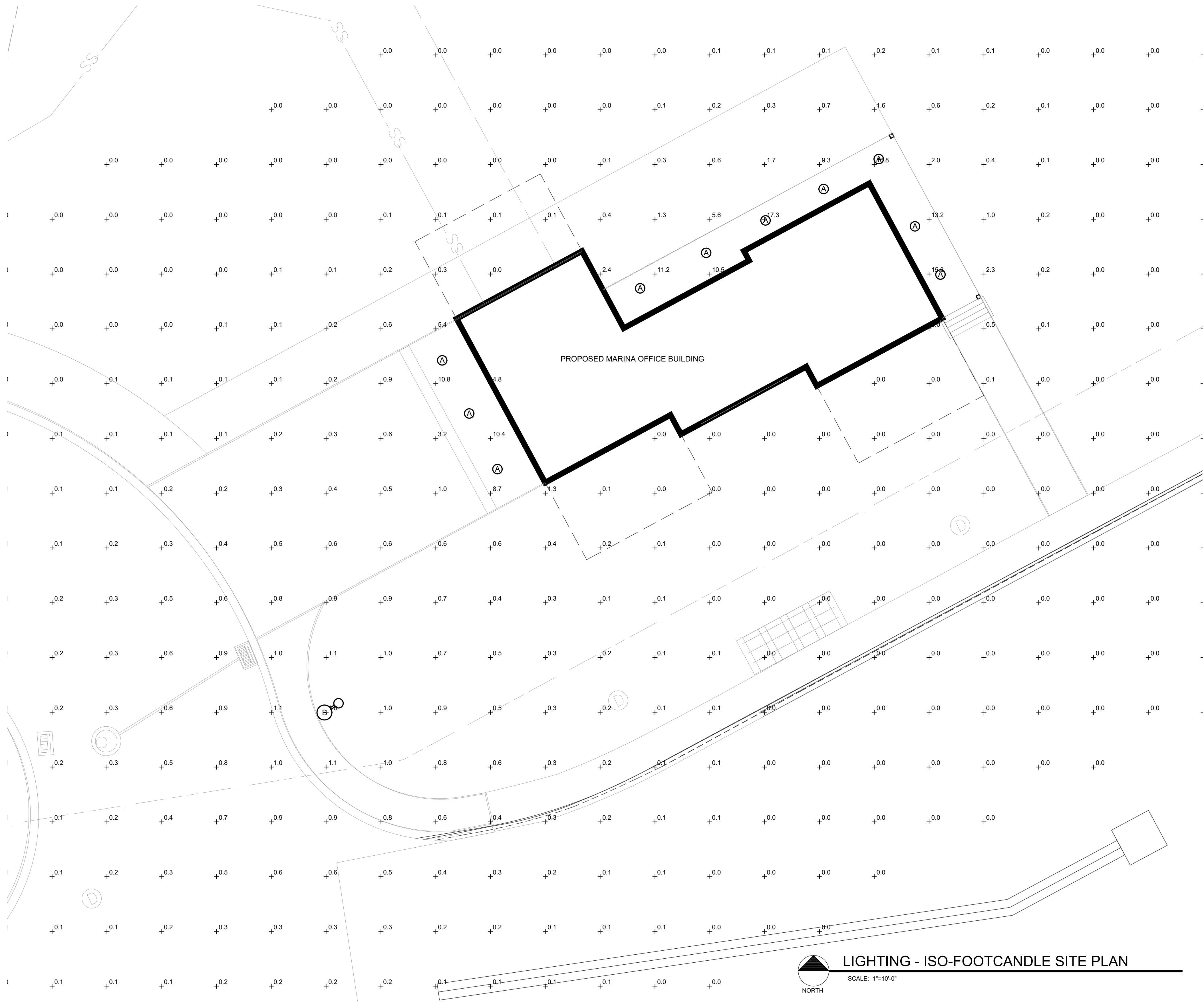
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A412







**LIGHT POLE DETAIL NOTES:**  
THE NEW POLE MOUNTED LIGHT WILL BE MOUNTED ON A POLE TO MATCH THE EXISTING POLES AS SHOWN IN THE PHOTO. PROVIDE THE POLE, POLE BASE, SOLAR PANELS. THE WIND GENERATORS WILL NOT BE USED ON THE NEW POLE LIGHTS.

SITE LIGHTING LUMINAIRE SCHEDULE					
TYPE	MANUFACTURER CATALOG NO.	MANUFACTURER CATALOG NO.	VOLTAGE MOUNTING	BALLAST/DRIVER LAMP SPECIFICATION	DESCRIPTION
A	PORTFOLIO LIGHTING LDS68-10-15-D010TR-EU6B-1020-35, 6LBS-1-H	APPROVED EQUIVALENT	120-277V RECESSED EXTERIOR CEILING	0-10V LED DIMMING 1500LM, 15.5W, 3500K, 80CRI	6" RECESSED DOWN LIGHT, SHALLOW WIDE BEAM SPUN ALUMINUM REFLECTOR, SELF FLANGE, SEMI- SPECULAR CLEAR FINISH, WET LISTED
B	MCGRAW-EDISON LIGHTING TT-C3-LED-E1-SWQ-PM-BK	APPROVED EQUIVALENT	120-277V POLE MOUNTED	LED DIMMING DRIVER 5782LM, 4000K, 45W, 70CRI	TOPIER SITE LED LIGHT FIXTURE, WET LISTED, LOW TEMPERATURE RATED, BLACK FINISH. POWER WILL BE PROVIDE FROM SOLAR PANELS LOCATED ON THE POLE

**NOTES:**  
1. THE ELECTRICAL CONTRACTOR IS TO ORDER ALL HARDWARE AND COMPONENTS NECESSARY FOR A FULL AND COMPLETE INSTALLATION AND MOUNTING OF ALL LUMINAIRE.  
2. ALL POLES TO BE STRAIGHT POLE. COLOR TO MATCH LUMINAIRES. POLE SHAFT WILL BE RATED FOR WIND GUSTS OF 100 MILES/HOUR.  
3. ALL OUTSIDE LIGHT SOURCES SHALL CONFORM TO ALL LOCAL MUNICIPAL ZONING & DEVELOPMENT CODES, LIGHT TRESPASS AND DARK SKY INITIATIVES.  
4. ALL EXTERIOR BUILDING MOUNTED AND PARKING LOT LIGHTS ARE TO BE CONTROLLED THRU A PHOTOCELL, TIME CLOCK OR AUTOMATIC CONTROL SYSTEM FOR ALL NIGHT OPERATION.  
5. NOTIFY ENGINEER OF ANY OBSTRUCTIONS TO POLE PLACEMENT IMMEDIATELY BEFORE PROCEEDING.  
6. ORDER ALL EXTERIOR LUMINAIRES WITH MULTI-TAP BALLAST AND FIELD VERIFY AVAILABLE VOLTAGE FOR EACH LUMINAIRE PRIOR TO INSTALLATION.

**EXTERIOR LIGHTING DESIGN CONCEPTS:**

- CALCULATIONS ARE USING POINT-TO-POINT METHOD WITH TEN FEET DISTANCE BETWEEN CALCULATION GRID POINTS, USING VISUAL LIGHTING CALCULATIONS SOFTWARE.
- THE IESNA STANDARDS REPRESENT THE LOWEST ACCEPTABLE LEVELS FOR PROPER VISIBILITY AND RECOMMEND MINIMUM MAINTAINED LIGHT LEVELS FOR OPEN PARKING LOTS AT 0.2-0.5 FOOT CANDLE LEVELS FOR ENHANCED SECURITY CONDITIONS.
- PROPOSED LIGHT FIXTURES AND LIGHT LEVELS ARE TO BE IN ACCORDANCE WITH ALL LOCAL REQUIREMENTS.

**EXTERIOR LIGHTING NOTES:**

- LIGHT FIXTURES SHALL BE INSTALLED AND MAINTAINED IN A MANNER CONSISTENT WITH THE LIGHTING PLAN APPROVED BY THE CITY PLANNING DEPARTMENT. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE PROPER MAINTENANCE OF THE LIGHTING FIXTURES ON THEIR PROPERTY.
- REFER TO LANDSCAPE PLANS FOR MATURE HEIGHT OF EXISTING AND PROPOSED TREES.
- REFER TO ARCHITECTURAL ELEVATIONS FOR BUILDING HEIGHT INFORMATION.
- ALL EXTERIOR LIGHT FIXTURES SHALL BE OPERATED BY ASTRONOMICAL TIME CLOCK, PHOTOCELL OR LIGHTING CONTROL SYSTEM.
- POST-CURFEW LIGHT LEVELS FOR PARKING LOTS SHALL BE REDUCED BY AT LEAST 50%. ENTRY LIGHTS MAY BE LEFT ON.
- FACILITIES & SITE DEVELOPMENT OF THIS SITE ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CITY CONSTRUCTION SPECIFICATIONS, STANDARDS AND DETAILS.
- ALL OUTSIDE LIGHT SOURCES SHALL CONFORM TO ALL LOCAL ZONING & DEVELOPMENT CODES.
- PARKING LOT LIGHTS SHALL OPERATE DUSK TO PRE-SET OFF, SO THAT THEY EXTINGUISH ONE HOUR AFTER CLOSE OF BUSINESS OR NO LATER THAN 10 P.M. BUILDING SECURITY LIGHTS WILL OPERATE FROM DUSK TO DAWN.

**PHOTOMETRIC CALCULATION DISCLAIMER:**

LIGHTING PATTERN USED FOR LUMINAIRES REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY LUMINAIRE MAY VARY DUE TO VARIATION IN VOLTAGE, TOLERANCE IN LAMPS AND OTHER VARIABLE FIELD AND EQUIPMENT CONDITIONS.

**ACCEPTANCE BLOCK**

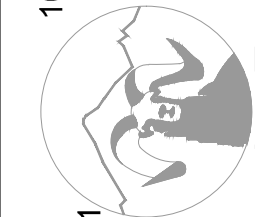
THE CITY REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE CITY'S DEVELOPMENT STANDARDS, SUBJECT TO THESE PLANS BEING SEALED, SIGNED, AND DATED BY THE PROFESSIONAL OF RECORD. REVIEW BY THE CITY DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN. THE CITY NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD. CONSTRUCTION MUST COMMENCE WITHIN ONE YEAR FROM THE DATE OF PLAN SIGNATURE.

CITY DEVELOPMENT ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

CITY PLANNER \_\_\_\_\_ DATE \_\_\_\_\_

DO NOT REPRODUCE THESE DRAWINGS AND SPECIFICATIONS WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE DESIGNER. THE DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF THE SERVICE AND SHALL REMAIN THE PROPERTY OF THE DESIGNER. WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANYONE, ON ANY OTHER PROJECTS FOR ADDITION TO THIS PROJECT BY OTHERS EXCEPT BY THE EXPRESSED WRITTEN PERMISSION OF THE DESIGNER.

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Durango, CO 81301  
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**Bighorn Consulting Engineers, Inc.**  
Mechanical & Electrical Engineers

**FRISCO BAY MARINA  
RETAIL & OFFICE BUILDING**  
290 MARINA ROAD  
FRISCO, COLORADO

DATE:	ISSUED FOR:
08/14/20	TOWN PLANNING

DATE:	08/14/2020
JOB NO:	20-095
DRAWN BY:	BCE
CHECKED BY:	BCE
SCALE:	AS SHOWN

SHEET NUMBER:  
**IES1-1**



