

STRUCTURAL NOTES

THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS AMONG THE DRAWINGS BEFORE STARTING ANY WORK OR FABRICATION. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, SITE CONDITIONS, SPECIFICATIONS AND THESE NOTES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER AT ONCE.

ALL CONSTRUCTION SHALL COMPLY WITH THE 2006 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE LOCAL BUILDING OFFICIAL.

SAFETY - THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL OSHA AND DOSH SAFETY STANDARDS. THE CONTRACTOR IS IN CHARGE OF ALL SAFETY MATTERS ON AND AROUND THE JOB SITE. PROVIDE TEMPORARY ERECTION BRACING AND SHORING AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

CODE
2009 INTERNATIONAL BUILDING CODE (IBC)

DESIGN LIVE LOADS

FLOOR LOADS - SEE DESIGN LOAD SCHEDULE THIS SHEET
MINIMUM ROOF LIVE LOAD = 20 PSF

SNOW

GROUND SNOW LOAD = 50 PSF
ROOF SNOW LOAD = 40 PSF
SNOW EXPOSURE FACTOR, $C_e = 0.90$
SNOW LOAD IMPORTANCE FACTOR = 1.0
THERMAL FACTOR, $C_t = 1.0$

WIND DESIGN DATA

VELOCITY = 130 MPH HOUR 3 SECOND GUST
IMPORTANCE FACTOR, $I_w = 1.0$
EXPOSURE C
INTERNAL PRESSURE COEFFICIENT, $G_c p_i = \pm 0.18$
COMPONENTS AND CLADDING PRESSURES,
ROOF
ZONE 3 - WITHIN 8' OF CORNERS = 92.3 PSF
ZONE 2 - WITHIN 8' OF EAVE AND PEAK = 62.4 PSF
ZONE 1 - EVERYWHERE ELSE = 36.0 PSF
WALLS
ZONE 5 - WITHIN 8' OF VERTICAL CORNERS = 52.5 PSF
ZONE 4 - EVERYWHERE ELSE = 42.6 PSF

SEISMIC DESIGN DATA

$I_e = 1.0$
 $S_s = 1.0g$, $S_1 = 0.2g$, $S_DS = .16$, $S_D1 = 0.09$
SITE CLASS D
SEISMIC DESIGN CATEGORY D
SEISMIC RESISTING SYSTEM = BEARING WALL,
PLYWOOD SHEARWALLS, $R = 6.5$
SEISMIC BASE SHEAR = $V_s = 34.3$ KIPS $C_e = 0.11$
EQUIVALENT LATERAL FORCE PROCEDURE

OCCUPANCY CATEGORY II

FOUNDATION DESIGN

FOUNDATION DESIGN IS BASED ON DRIVEN PILE WITH A MINIMUM CAPACITY OF 40 KIPS FOR GRAVITY AND 3 KIPS FOR LATERAL LOAD. PILING FOR THE MAIN BUILDING ARE COMPLETED.

EXTERIOR PILE FOR THE STAIRS, RAMP AND PARKING AREA ARE LIGHTLY LOADED.

SPECIAL INSPECTIONS/QUALITY ASSURANCE PROGRAM

SPECIAL INSPECTION IS REQUIRED BY CHAPTER 17 OF THE IBC. OWNER TO ENGAGE THE SERVICES OF A QUALIFIED SPECIAL INSPECTOR. THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION (AT A MINIMUM):
- SOILS COMPACTION, GRADATION, AND FILL.
- CONCRETE REINFORCEMENT INSPECTION, CONTINUOUS DURING PLACEMENT.
- STEEL, 100% VISUAL INSPECTION OF ALL WELDS, NON DESTRUCTIVE TESTING OF FILLET WELDS 3/8" THROAT AND LARGER.
- BRICK VENEER, ANCHORAGE PLACEMENT AND VENEER INSTALLATION.
- SEISMIC HOLD DOWNS, STEEL AND WOOD LATERAL RESISTING SYSTEMS.
- HIGH STRENGTH BOLTS
- WOOD BUILDING LATERAL SYSTEMS. INSPECT PRIOR TO COVER, FRAMING SPECIES, SHEATHING TYPE, NAIL AND ANCHOR BOLT TYPE, PLATE WASHERS, SHEAR WALL EDGE NAILING, SHEAR WALL TOP PLATE, TIE DOWN ANCHOR BRACKET TYPE AND LOCATION, HURRICANE CLIPS, STRAPS, DRAG STRUT CONNECTIONS WHERE CALLED OUT.

THE SPECIAL INSPECTION FIRM TO PROVIDE A SPECIAL INSPECTION AND QUALITY ASSURANCE PLANS PROGRAM FOR THE SEISMIC SYSTEM PER IBC 1705-2 FOR APPROVAL BY THE OWNER AND ENGINEER OF RECORD. THE CONTRACTOR SHALL PROVIDE A LETTER OF RESPONSIBILITY PER IBC 1705.3 TO THE OWNER PRIOR TO CONSTRUCTION.

WOOD PRODUCTS

ALL LUMBER SHALL BE A MINIMUM OF HF#2 FOR ALL BRIDGING, BLOCKING AND FRAMING REQUIRED. MINIMUM FASTENING TO BE PER IBC TABLE 2304.3.1 UNLESS SPECIFICALLY NOTED IN THESE DRAWINGS. PROVIDE POSITIVE CONNECTION UTILIZING SIMPSON HANGERS OR FRAMED BEAM POCKETS TO RESIST VERTICAL AND LATERAL LOADING AT ALL POST CAPS AND BASES, BEARING WALLS.

WOOD I- JOISTS - PROVIDE WOOD I JOISTS AS MANUFACTURED BY BOISE CASCADE, TRUSS JOIST, ROSEBURG OR EQUAL. PROVIDE FULL DEPTH SOLID BLOCKING AT ALL SUPPORTS. COORDINATE ALL HANGERS WITH ACTUAL JOIST SIZE. SUBMIT CONTRACTOR CHECKED ENGINEER SHOP DRAWINGS STAMPED BY AN ALASKAN LICENSED PROFESSIONAL ENGINEER PRIOR TO FABRICATION AND INSTALLATION.

FLOOR SHEATHING - USE APA RATED SHEATHING, TONGUE AND GROOVE, USE 24" SPAN RATING.

GLU LAM BEAMS SHALL BE 24" DF/HF WITH $F_b = 2,400$ psi. USE V4 FOR SIMPLE SPANS AND V8 FOR CANTILEVERS OR BEAMS CONTINUOUS OVER SUPPORTS.

ROOF SHEATHING: USE APA RATED SHEATHING. UPPER ROOF SHEATHING WITH SUPPORTS @ 24" O.C. USE MINIMUM 3/4" SHEATHING WITH A 24/16 SPAN RATING.

WALL SHEATHING: USE APA RATED SHEATHING. PROTECT SHEATHING FROM THE WEATHER UNLESS IT IS RATED FOR EXTERIOR EXPOSURE. PROVIDE FRAMING OR BLOCKING BEHIND ALL PANEL EDGES. PROVIDE MINIMUM 3/8" FROM EDGE TO CENTER OF NAIL. DRIVE NAILS FLUSH, DO NOT OVERDRIVE FASTENERS. PROVIDE FASTENERS PER SHEARWALL SCHEDULE.

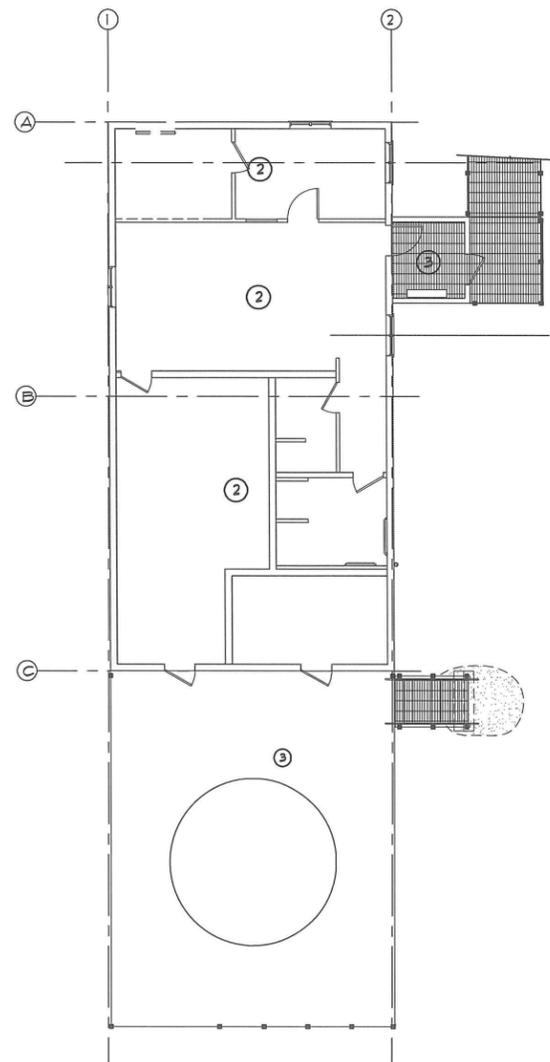
ALL WOOD IN CONTACT WITH CONCRETE OR EXPOSED TO THE WEATHER SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH AMERICAN WOOD PRESERVATIVE ASSOCIATION. PROVIDE PRESSURE TREATED FOUNDATION SILL PLATES, PROVIDE 3X3X229" MIN. PLATE WASHERS FOR FOUNDATION ANCHOR BOLTS.

ABBREVIATIONS

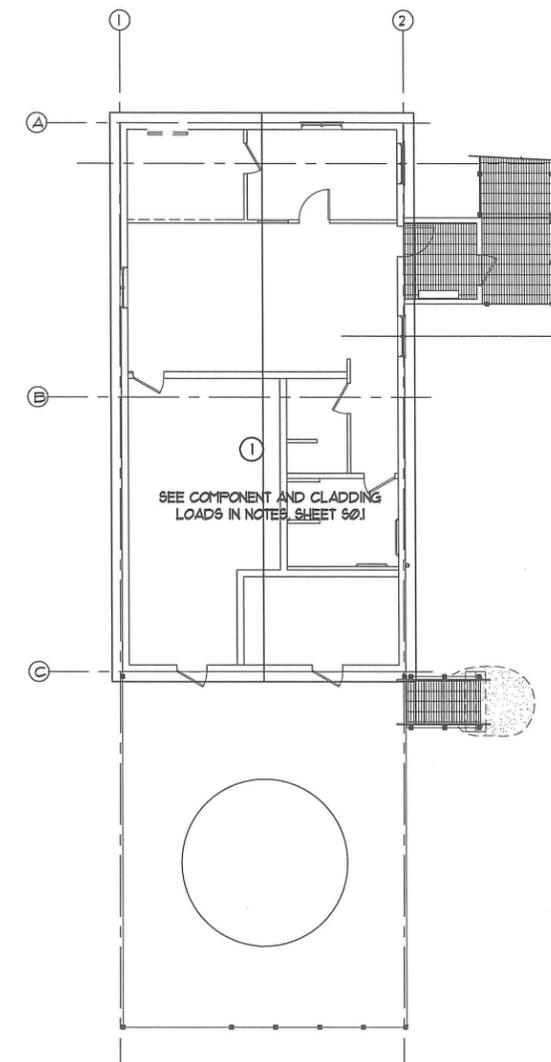
E.W. - EACH WAY
IBC - INTERNATIONAL BUILDING CODE
I.S. - INSIDE
O.S. - OUTSIDE
F.O.S. - FACE OF STUD
HDG - HOT DIP GALVANIZED
MFG - MANUFACTURER
FFA - FOST FROM ABOVE
SIM. - SIMILAR TO
SIP - STRUCTURAL INSULATED PANELS
TYP. - TYPICAL
UNO - UNLESS NOTED OTHERWISE
W.T.E. - WITH THE EXCEPTION
W.W.M. - WELDED WIRE MESH

DESIGN LOAD SCHEDULE

DESCRIPTION	SUPERIMPOSED DEAD LOAD (PSF)	LIVE LOAD (PSF)
1 ROOF BALANCED SNOW LOAD	15	40
2 FLOOR LOAD THROUGHOUT	10	100



1 Floor Design Load
S0.1 Scale: 1/8" = 1'-0"



2 Roof Design Load
S0.1 Scale: 1/8" = 1'-0"

Oien Associates, Inc.
Construction Management, Engineering, Inspection
Phone: (907) 454-8807
Fax: (907) 454-8807
Email: bo@oien.com
1000 Lakeside Drive
Eagle River, AK 99577

SCALE: AS SHOWN
DATE: 6/13/16
DESIGNED: BCO
DRAWN: RRL
APPROVED: OAL



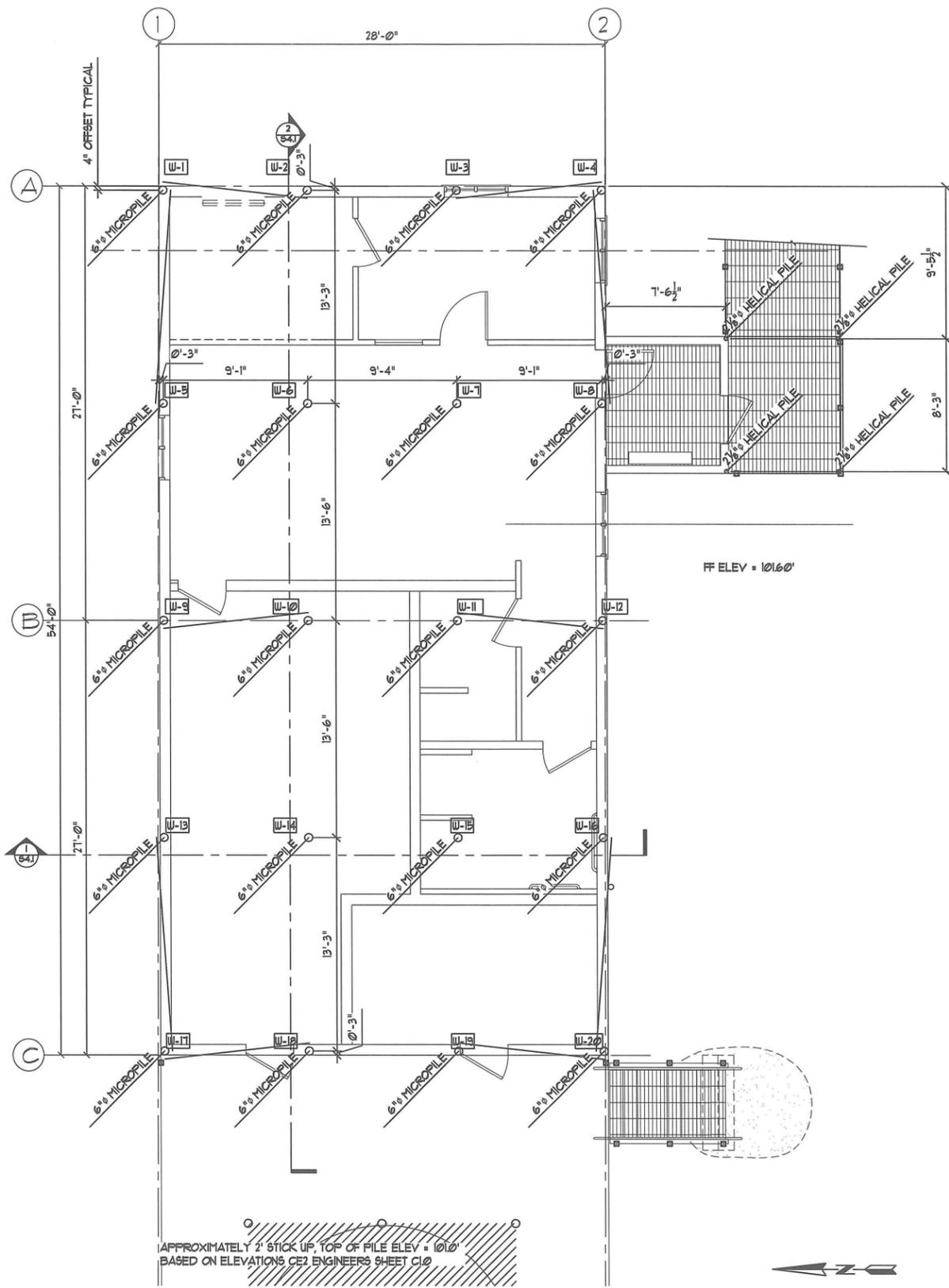
WASHETERIA AND WATER TANK
STRUCTURAL NOTES
CHEFORNAK, ALASKA

CER ENGINEERS, INC.
PO BOX 2286 ANCHORAGE, AK 99501 TEL: 907-546-1001 FAX: 907-546-3415

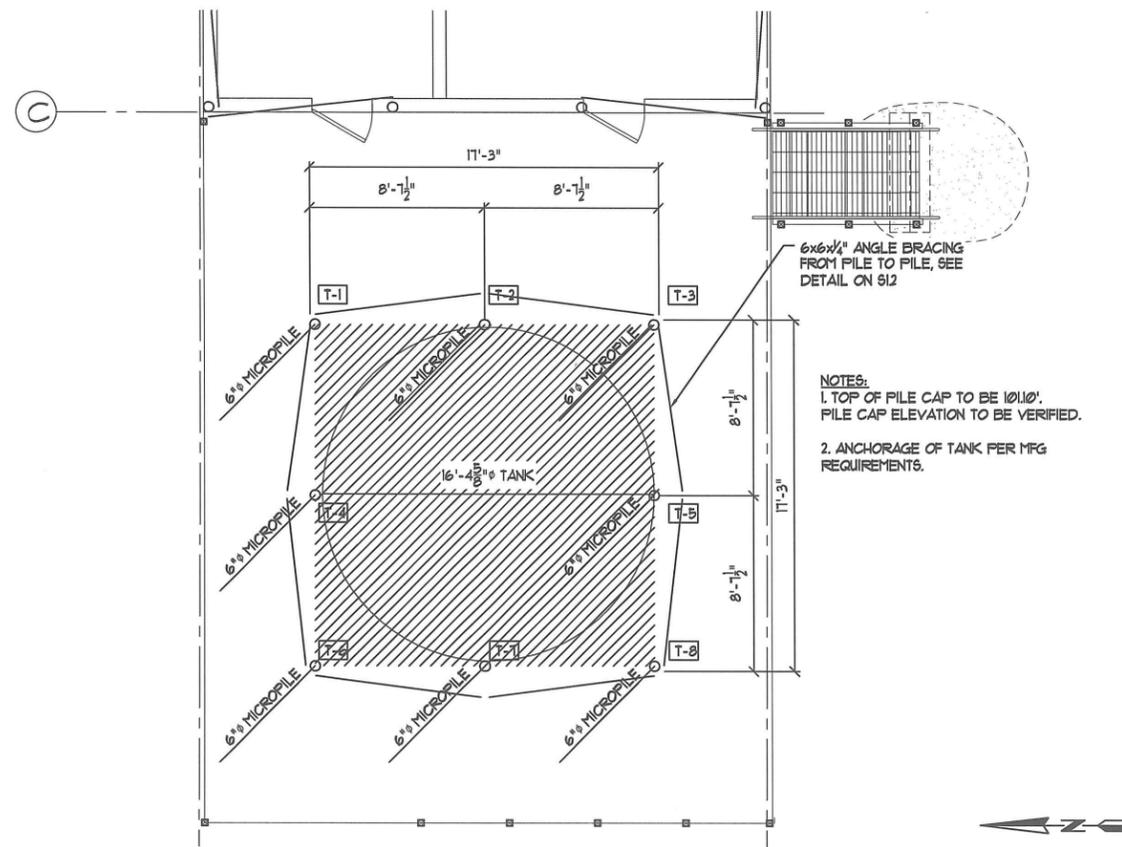
REVISION	BY	DATE

Project No. 63058
Date 6/13/16
Designed BCO
Drawn RRL
Approved OAL

Sheet No. **S0.1**
SHEET OF



1 Washeteria Pile Plan
S1J Scale: 1/4" = 1'-0"



2 Water Tank Platform Pile Plan
S1I Scale: 1/4" = 1'-0"

65% DOCUMENTS

Oien Associates, Inc.
Construction Management Engineering Inspection
Phone: (907) 454-6907
Fax: (907) 454-6907
Email: loien@oien.com
Edge River, AK 99571

SCALE:
AS SHOWN
MAKE ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON SCALES ACCORDINGLY

CONSTRUCTION RECORD	
FIELD BOOK	
STAKING	
FOREMAN	
AS-BUILT	
INSPECTOR	



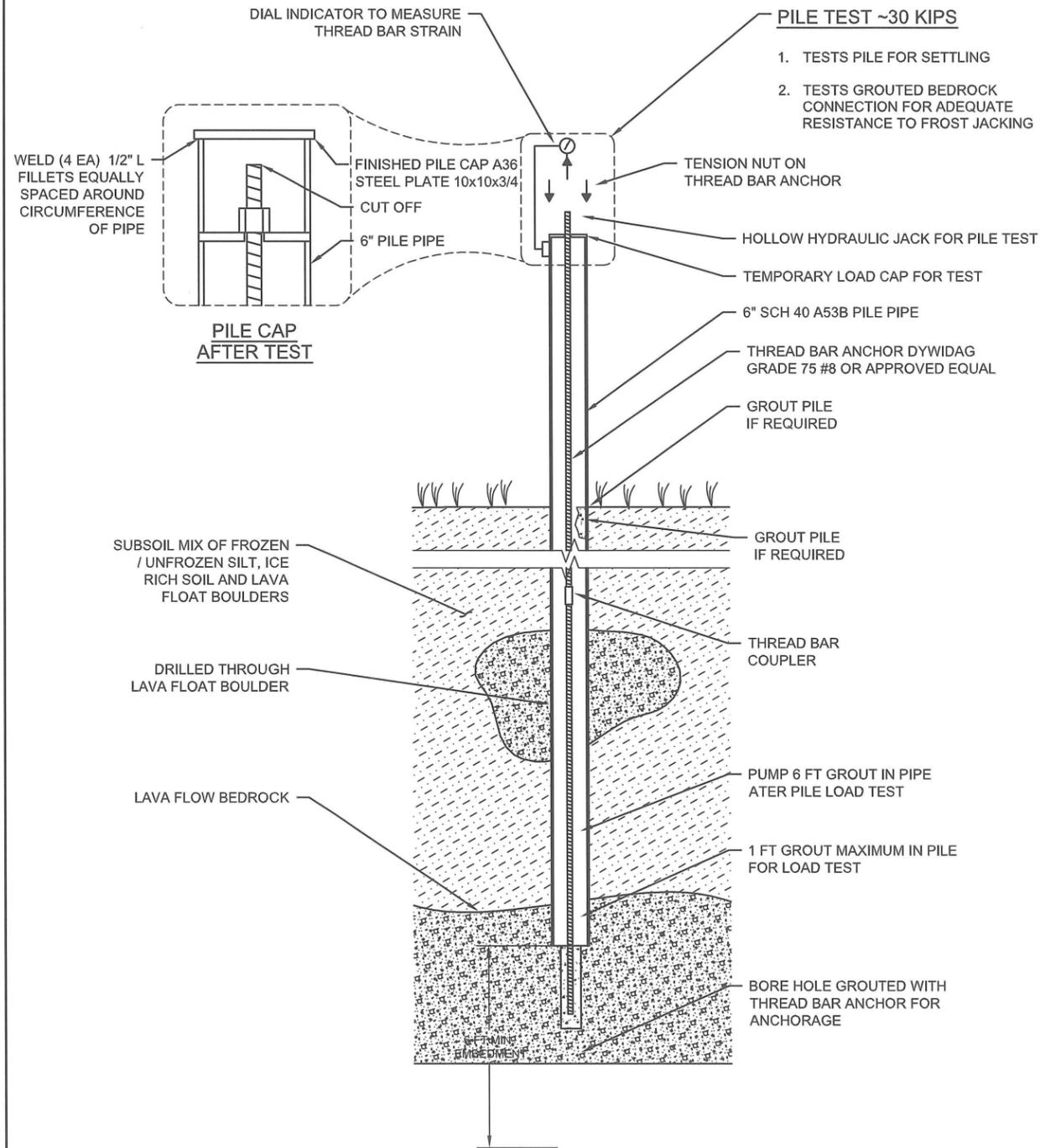
WASHETERIA AND WATER TANK
WASHETERIA FOUNDATION PLAN
CHEFORNIAK, ALASKA

CE2
ENGINEERS, INC.
PO BOX 2286 ANCHORAGE, AK 99502 PH: 907-346-1100 FAX: 907-346-1115

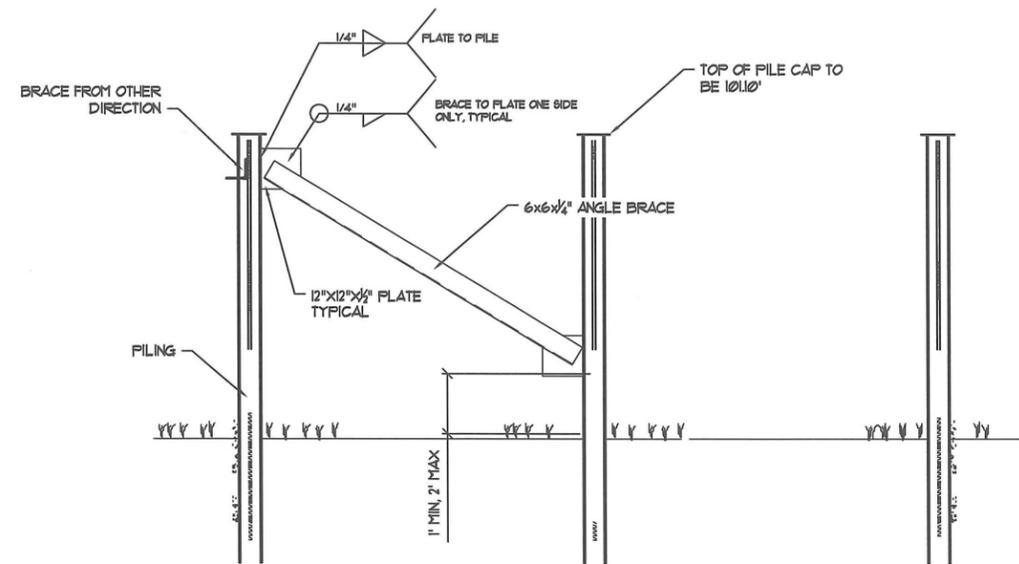
REVISION	BY	DATE

Project No. 63058	Date 6/13/16	Designed BCO	Drawn BRL	Approved OAL
-------------------	--------------	--------------	-----------	--------------

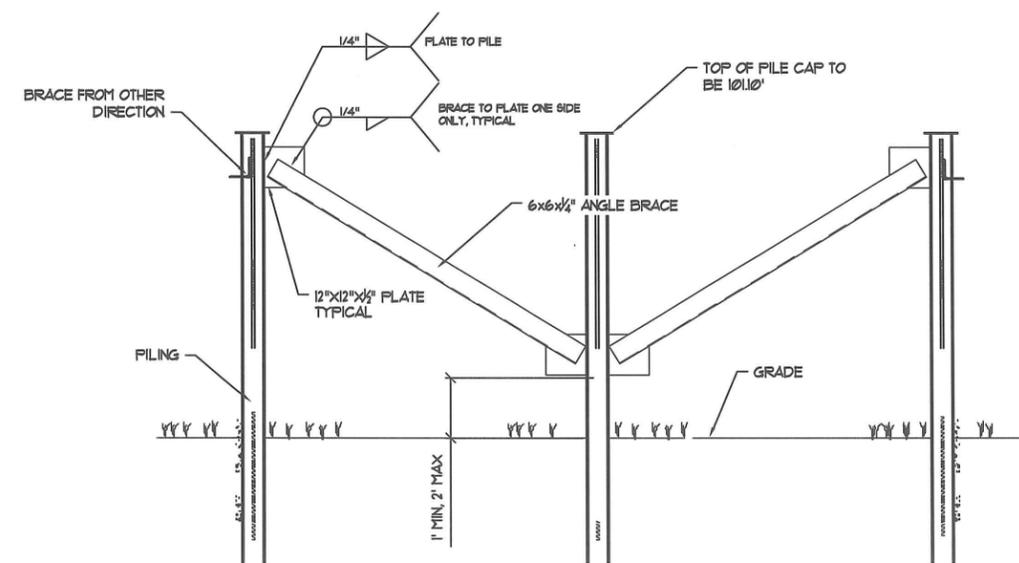
Sheet No. S1.1
SHEET OF



1
S12
Micropile Detail
No Scale



3
S12
Washeteria Bracing Detail
1/4" = 1'-0"



2
S12
Tank Bracing Detail
1/4" = 1'-0"

Oien Associates, Inc.
Construction Management Engineering Inspection
Phone (907) 494-0907
Fax (907) 494-0908
Email: loam@oien.com
1800 Lakes Drive
Eagle River, AK 99577

SCALE: AS SHOWN
BASE ON ONE INCH ORIGINAL DRAWING
IF NOT ONE INCH ON SCALE ACCORDINGLY

CONSTRUCTION RECORD
FIELD BOOK
STAKING
FOREMAN
AS-BUILT
INSPECTOR



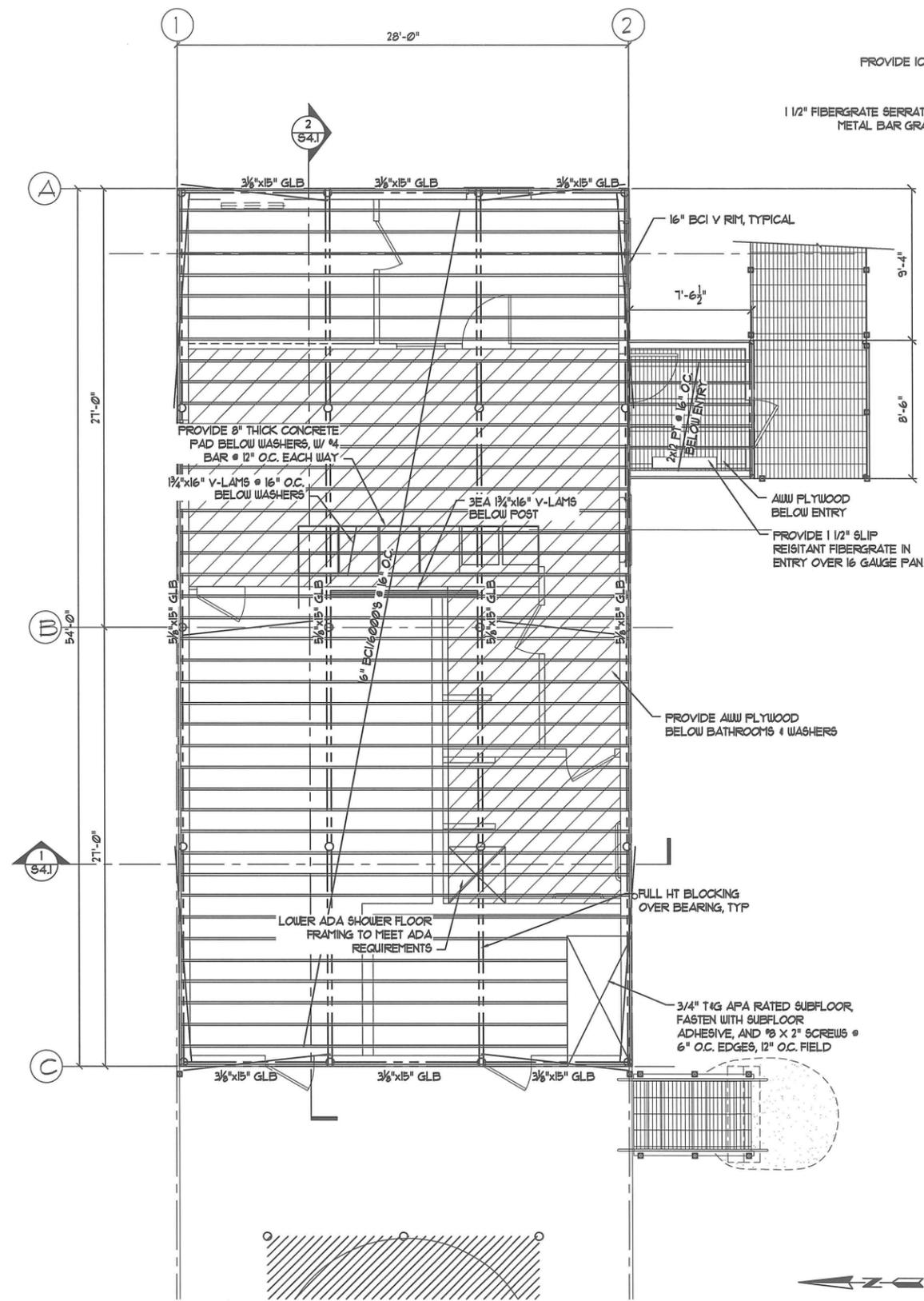
WASHETERIA AND WATER TANK
WASHETERIA MICROPILE DETAIL
CHEFORNIAK, ALASKA

CER
ENGINEERS, INC.
P.O. BOX 22266 ANCHORAGE, AK 99522 PH: 907-346-8100 FAX: 907-346-9105

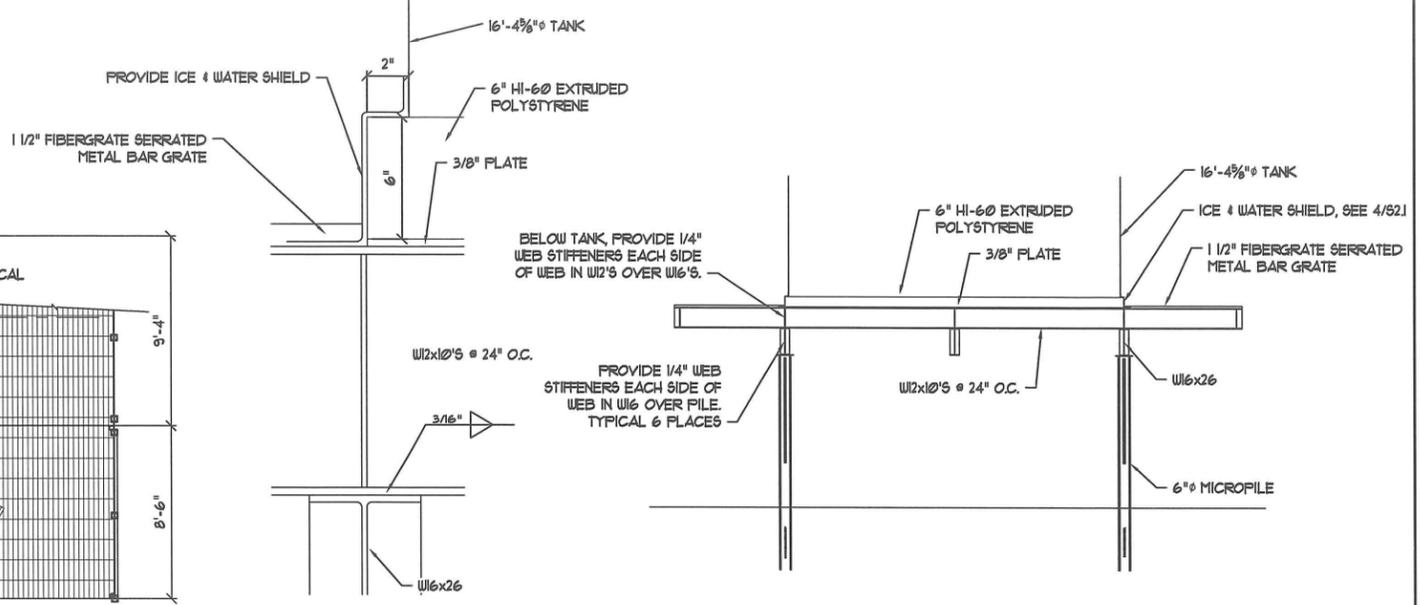
BY	DATE
REVISION	

Project No.	63058	Date	6/13/16	Designed	B.C.O.	Drawn	RRJ	Approved	OAL
-------------	-------	------	---------	----------	--------	-------	-----	----------	-----

Sheet No. **S12**
SHEET OF

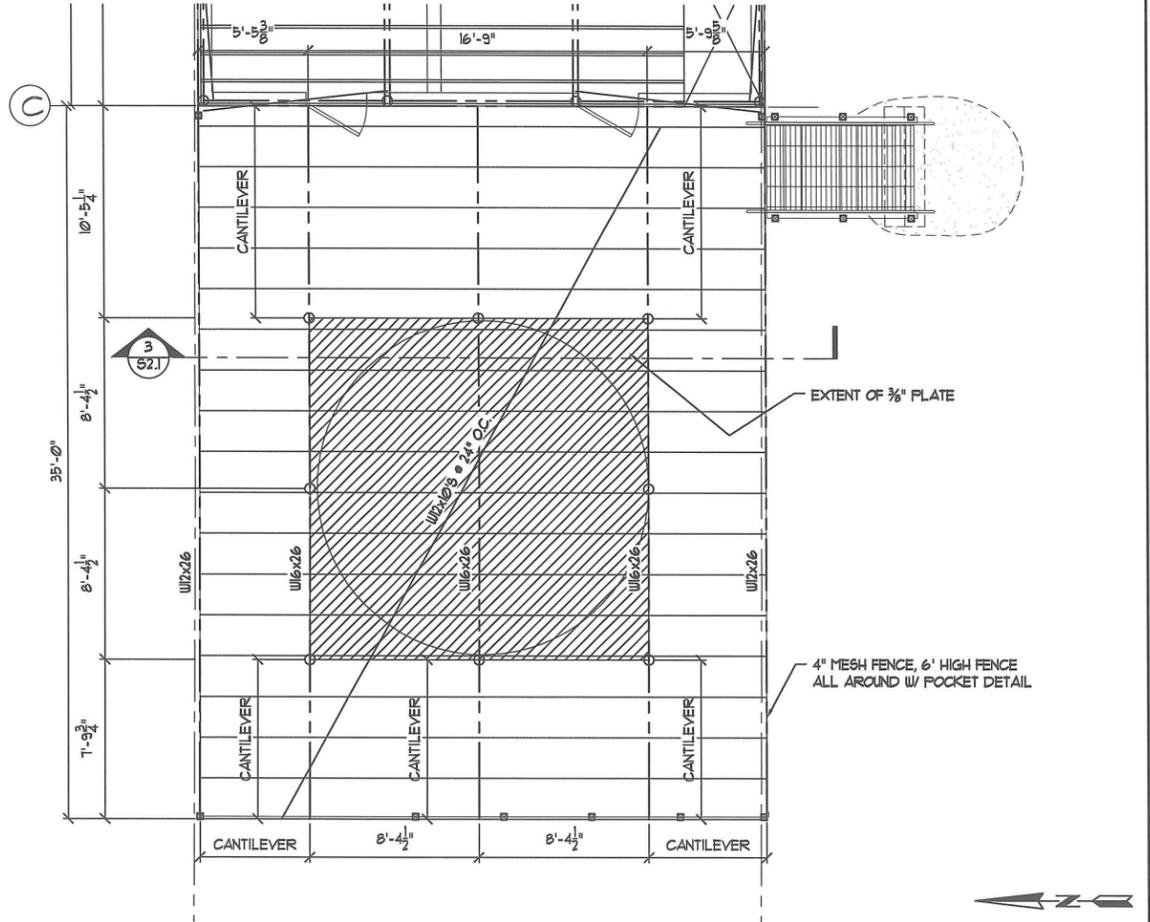


1 Floor Framing Plan
Scale: 1/4" = 1'-0"



3 Ice & Water Shield Section
Scale: 3/4" = 1'-0"

4 Water Tank Platform Section
Scale: 1/4" = 1'-0"



2 Water Tank Platform Framing Plan
Scale: 1/4" = 1'-0"

Oien Associates, Inc.
Construction Management Engineering Inspection
Phone: (907) 494-0907
Fax: (907) 494-0907
1400 Haines Drive
Eagle River, AK 99577

SCALE:	AS SHOWN
CONSTRUCTION RECORD	FIELD BOOK
STANDING	FOREMAN
AS-BUILT	INSPECTOR

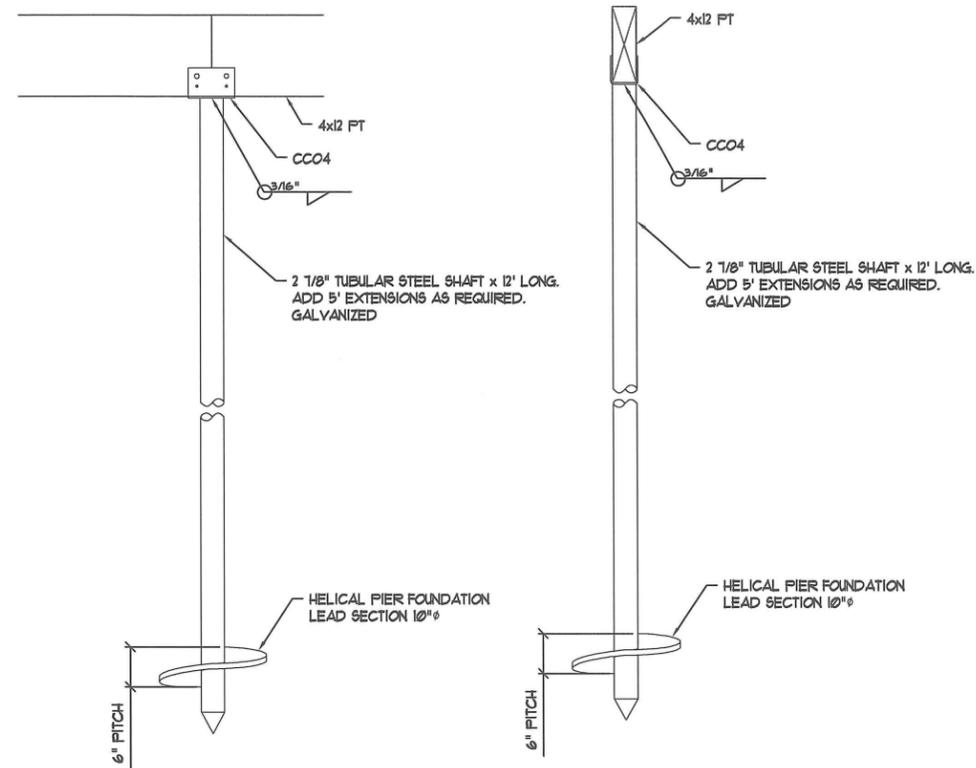


WASHETERIA AND WATER TANK
WASHETERIA FLOOR FRAMING PLAN
CHEFORKNAK, ALASKA



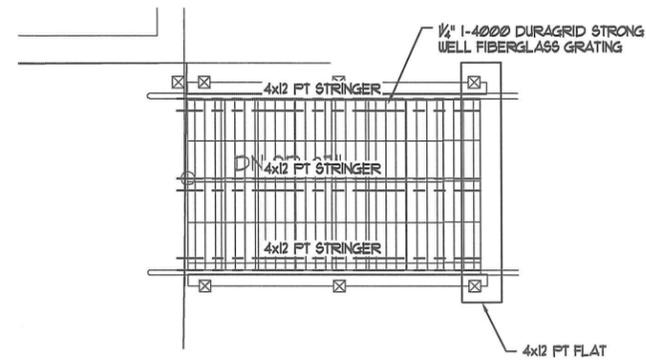
PROJECT No.	6305B
DATE	6/13/16
DESIGNED	B.C.O.
DRAWN	REL.
APPROVED	OAL

Sheet No. S2.1
SHEET OF

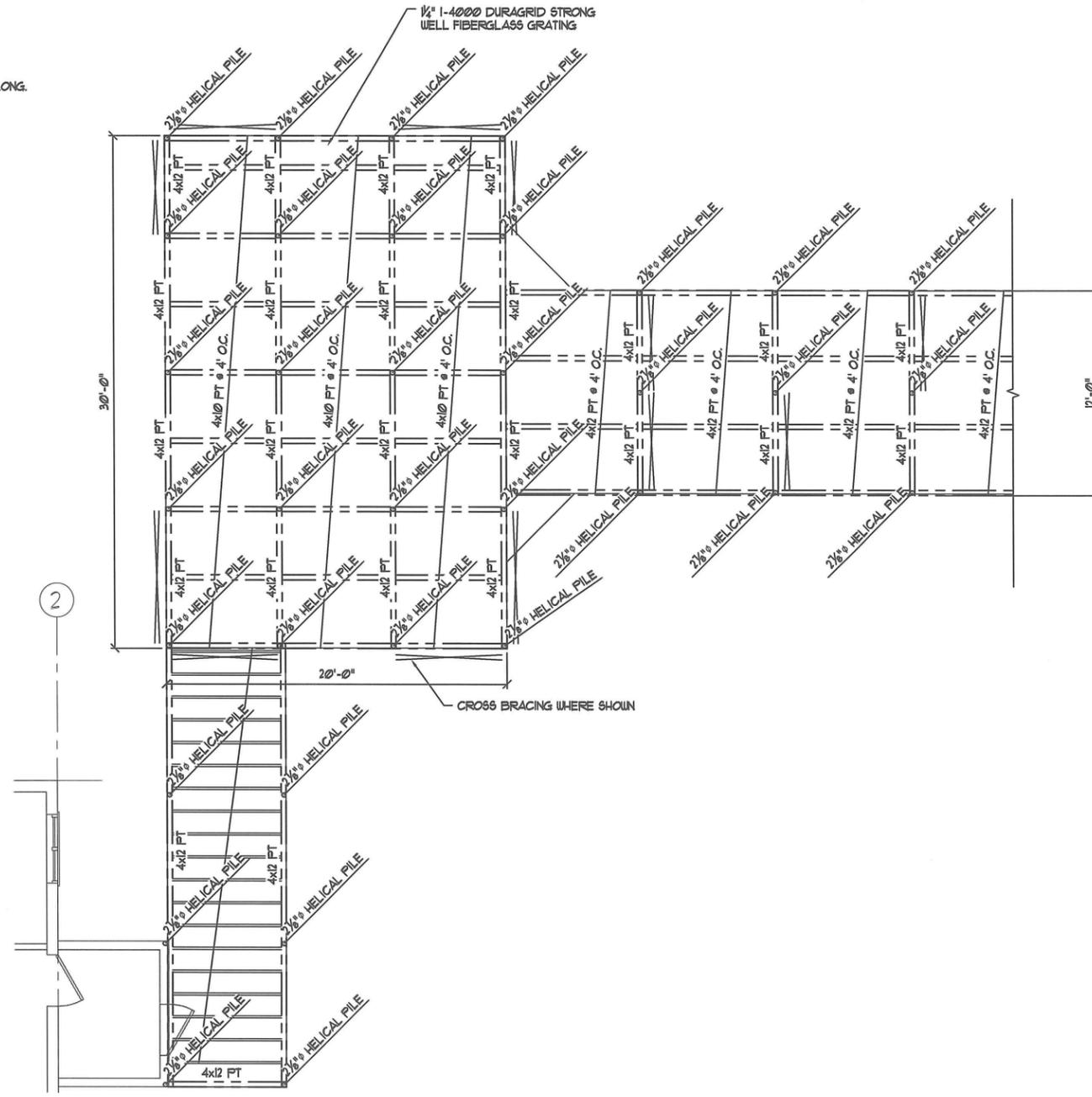


3 Helical Pier Detail
S1.1 Scale: 1/2" = 1'-0"

4 Helical Pier Detail
S1.1 Scale: 1/2" = 1'-0"



2 Exterior Stair Framing Plan
S2.2 Scale: 3/8" = 1'-0"



1 Parking Deck Framing Plan
S2.2 Scale: 1/4" = 1'-0"

Oien Associates, Inc.
Construction Management Engineering Inspection
Phone: (907) 494-8907
1428 Haines Drive
Eagle River, AK 99577

SCALE: AS SHOWN
MAKE ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS DRAWING, SCALE ACCORDINGLY

CONSTRUCTION RECORD	FIELD BOOK
STANDING	FOREMAN
AS-BUILT	INSPECTOR



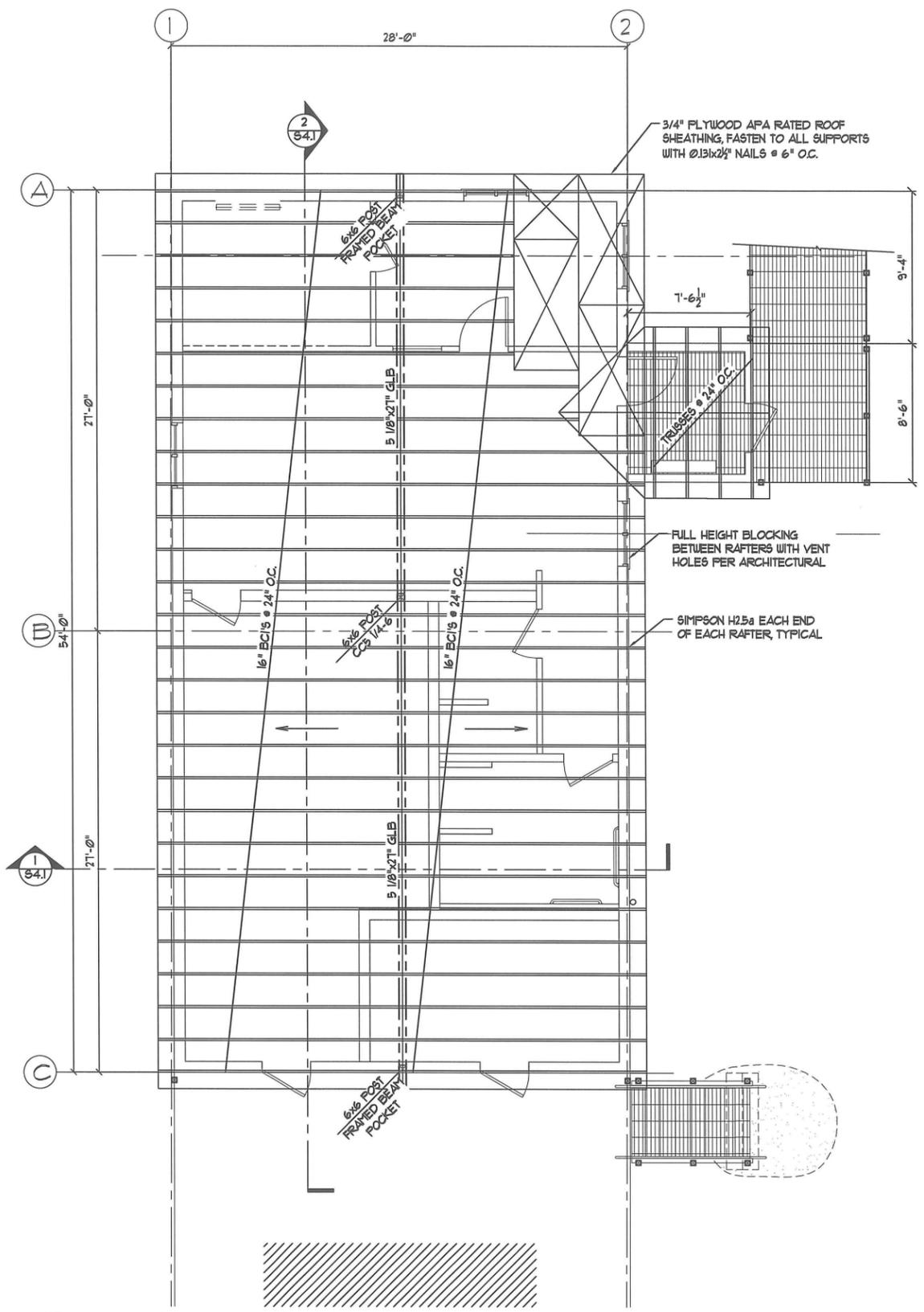
WASHETERIA AND WATER TANK
WASHETERIA RAMP FRAMING PLAN
EXT. STAIR FRAMING PLAN
CHEFORNIAK, ALASKA

CEI
ENGINEERS, INC.
P.O. BOX 2284 ANCHORAGE, AK 99502 PH: 907-546-1100 FAX: 907-546-1115

REVISION	BY	DATE

Project No. 6305B	Date 6/13/16	Designed BCO	Drawn BRL	Approved OAL
-------------------	--------------	--------------	-----------	--------------

Sheet No. S2.2
SHEET OF



1
S3.1
Roof Framing Plan
Scale: 1/4" = 1'-0"

65% DOCUMENTS

REVISION	BY	DATE

Project No.	63058
Date	6/13/16
Designed	BCO
Drawn	ERL
Approved	CALL

Sheet No. S3.1
SHEET OF



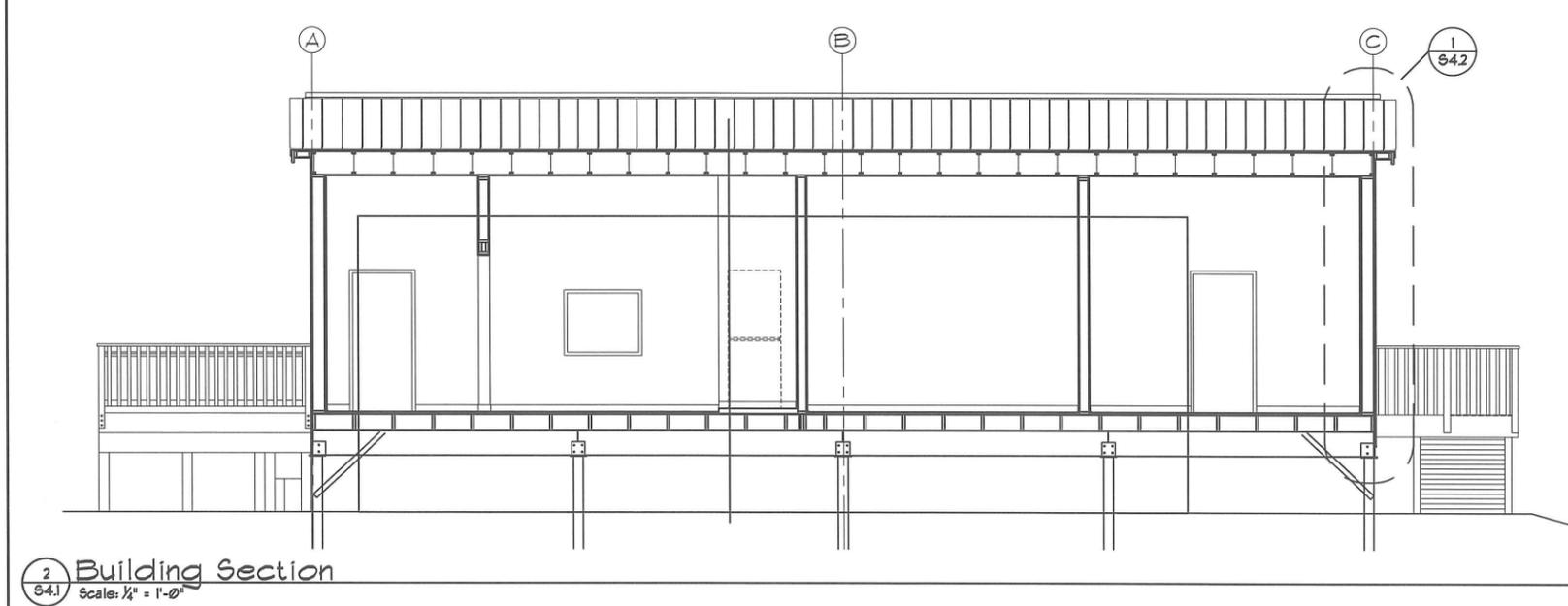
WASHETERIA AND WATER TANK
WASHETERIA
ROOF FRAMING PLAN
CHEFORKNAK, ALASKA



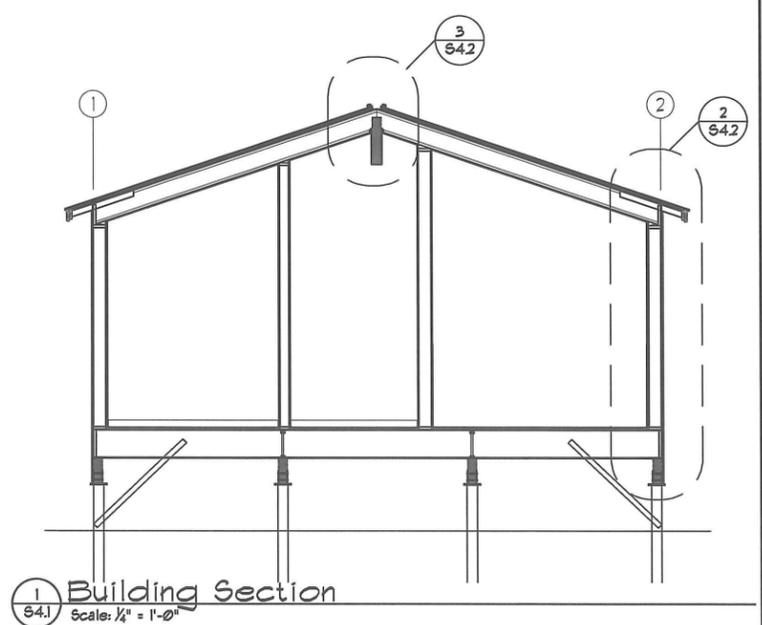
CONSTRUCTION RECORD	
FIELD BOOK	
STAKING	
FOREMAN	
AS-BUILT	
INSPECTOR	

SCALE: AS SHOWN
MAXIMUM INCHES ORIGINAL DRAWING 1"
IF NOT ONE INCH ON ORIGINAL DRAWING SCALES ACCORDINGLY

Oien Associates, Inc.
Construction Management Engineering Inspection
Phone: (907) 454-0907
1455 Howe Dr.
Eagle River, AK 99577



2 Building Section
Scale: 1/4" = 1'-0"



1 Building Section
Scale: 1/4" = 1'-0"

65% DOCUMENTS

Oien Associates, Inc.
Construction Management • Engineering • Inspection
1000 Highway 207
Eagle River, AK 99571
Phone: (907) 454-2827
Fax: (907) 454-2827
www.oien.com

SCALE:
AS SHOWN
DIMENSIONS ON ORIGINAL DRAWING
IF NOT ONE DIMENSION
SCALE IS INDICATED
SCALE IS RESPONSIBILITY

CONSTRUCTION RECORD	
FIELD BOOK	
STAMPS	
FOREMAN	
AS-BUILT	
INSPECTOR	



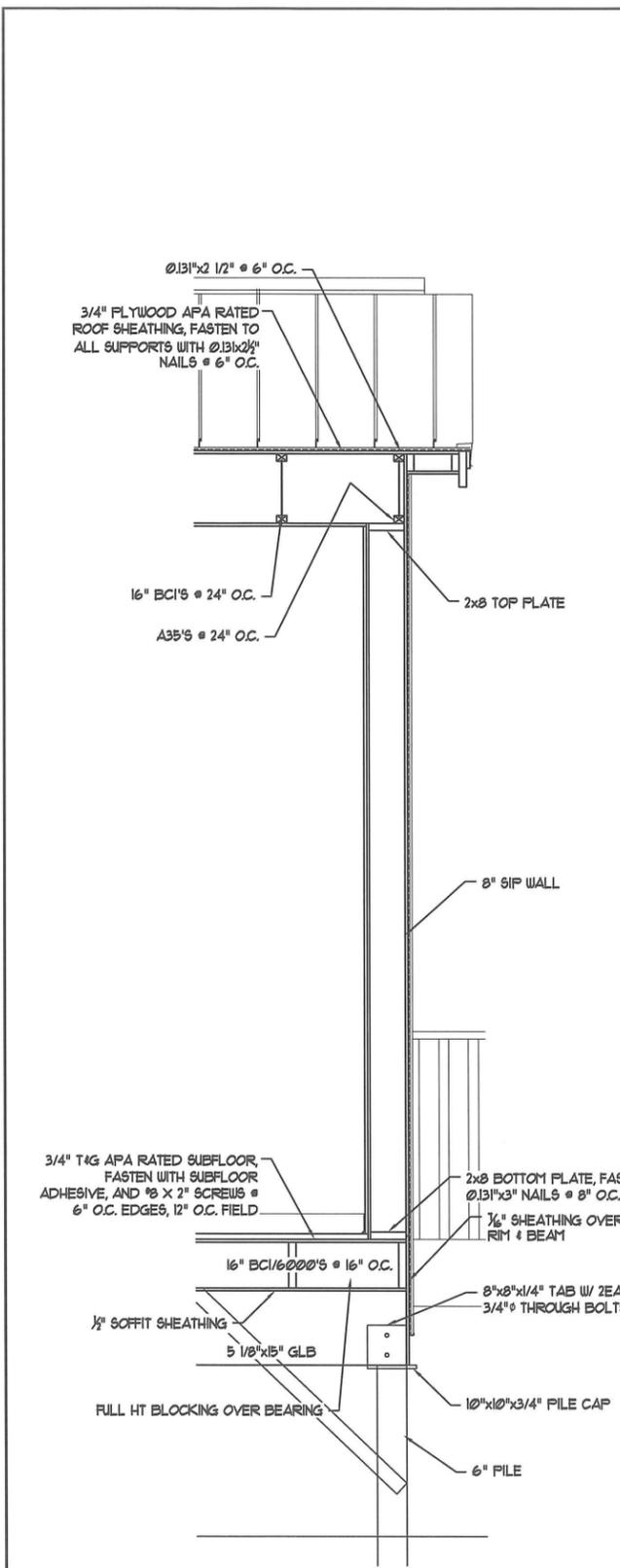
WASHETERIA AND WATER TANK
WASHETERIA BUILDING SECTIONS
CHEFORNIAK, ALASKA

CEI
ENGINEERS, INC.
P.O. BOX 2236 ANCHORAGE, AK 99503 TEL: 907-346-1010 FAX: 907-346-1015

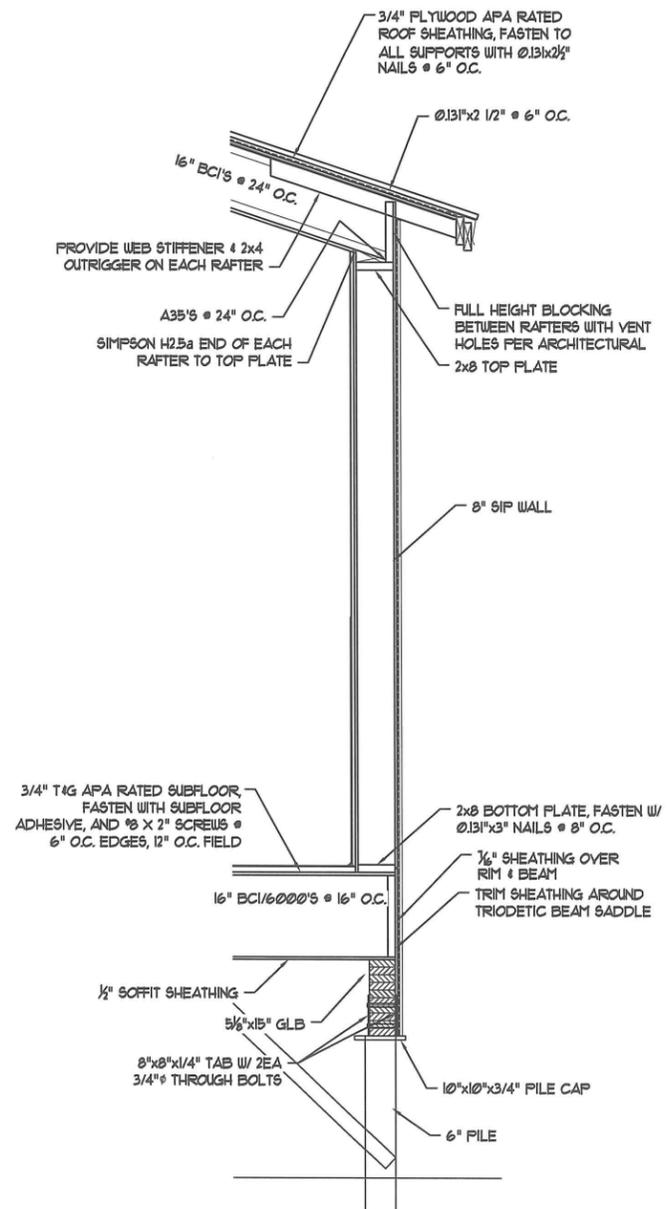
REVISION	BY	DATE

Project No.	6305B	Designed	B.C.O.	Drawn	B.R.L.	Approved	O.A.L.
Date	6/13/16						

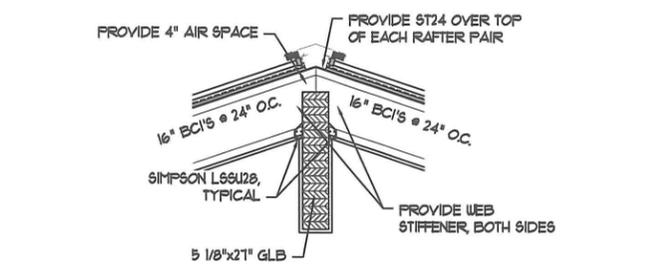
Sheet No. **S4.1**
SHEET _____ OF _____



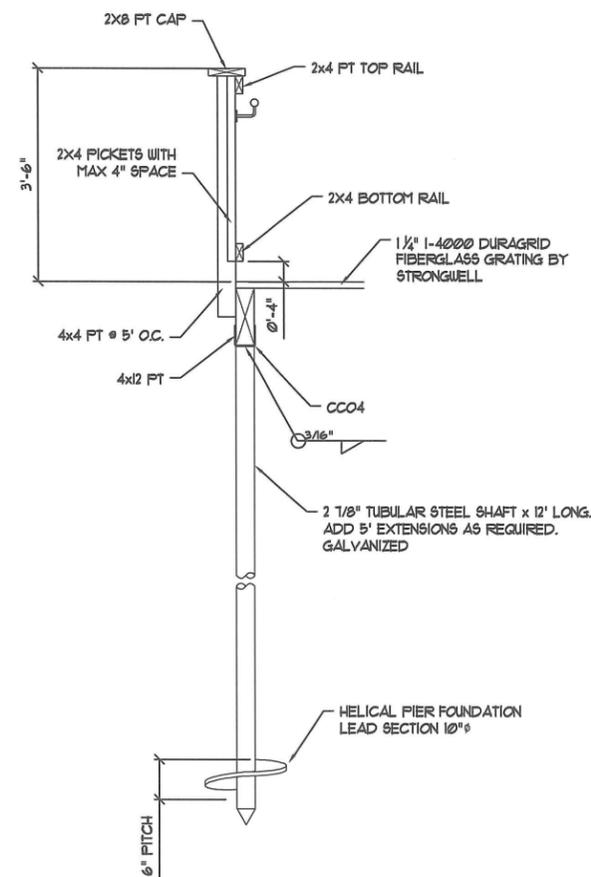
1 Wall Section
S4.2 Scale: 3/4" = 1'-0"



2 Wall Section
S4.2 Scale: 3/4" = 1'-0"



3 Peak Detail
S4.2 Scale: 3/4" = 1'-0"



4 Handrail Detail
S4.2 Scale: 3/4" = 1'-0"

Oien Associates, Inc.
Construction Management Engineering Inspection
Phone: (907) 464-8801
Fax: (907) 464-8802
1820 Haven Drive
Eagle River, AK 99571
Email: bob@oien.com

SCALE:	AS SHOWN
CONSTRUCTION RECORD:	FIELD BOOK
	STAKING
	FOREMAN
	AS-BUILT
	INSPECTOR



WASHETERIA AND WATER TANK
WASHETERIA WALL SECTIONS
CHEFORNNAK, ALASKA



BY	DATE
REVISION	

Project No.	63058	Designed	BCO	Drawn	REL	Approved	OAL
Date	6/13/16						

Sheet No. S4.2
SHEET OF