## BEFORE THE OFFICE OF TAX APPEALS STATE OF CALIFORNIA

In the Matter Appeal of	)		
Walden Structure, Inc.,	) OTA	No.	18010223
Appel I ant.	) ) )		
In the Matter Appeal of	)		
Charles Walden,	) OTA	No.	18010222
Appel I ant.	) ) )		
In the Matter Appeal of	.) )		
Charles Walden and Deborah Anderson,	) OTA	No.	18010221
Appel I ant.	) ) )		

TRANSCRIPT Of PROCEEDINGS

Van Nuys, California

Tuesday, August 21, 2018

Reported by: Dorothy M. Simpson Hearing Reporter

1	BEFORE THE OFFICE OF TAX APPEALS
2	STATE OF CALIFORNIA
3	
4	
5	In the Matter Appeal of )
6	Walden Structure, Inc., OTA No. 18010223
7	Appel I ant.
8	
9	In the Matter Appeal of )
10	Charles Walden, ) OTA No. 18010222
11	Appel I ant.
12	
13	)
14	Charles Walden and Deborah ) OTA No. 108010221 Anderson, )
15	Appellant. )
16	
17	
18	
19	
20	Transcript of proceedings, taken at 6150 Van Nuys
21	Boulevard, Auditorium, Van Nuys, California 91401,
22	commencing at 9:00 a.m. and concluding at 6:07 p.m. on
23	Tuesday, August 21, 2018, reported by Dorothy M.
24	Simpson, Hearing Reporter, in and for the State of
25	Cal i forni a.

1	APPEARANCES:	
2	Panel Lead:	Hon. Grant Thompson
3		Hon. Linda Cheng Hon. Douglas Bramhall
4		John Dies, Attorney at Law
5		Clay Hodges, Attorney at Law Edith Rodriguez, Paralegal
6		alliantgroup 3009 Post Oak, Suite 2000
7		Houston, Texas 713-350-3569
8		john. di es@alliantgroup.com
9	For the Respondent:	State of California Franchise Tax Board
10		BY: Carol yn Kuduk Jason Riley
11		Ray Rouse Teresa Wignall
12		TAX COUNSEL Legal Division
13		MS A260 P. O. Box 1720
14		Rancho Cordova, California 95741 916-845-2498
15		carol ynkuduk@ftb. ca. gov
16		Jeffrey Lucas Scott Hunzi ker
17		Jefferson Read
18		
19		
20		
21		
22		
23		
24		
25		

1	I NDEX	
2	WI TNESSES	PAGE
3	Charles Walden	9
4	Kevin Lord	103
5	Joel Minor	255
6	Robert Wonish	258
7		
8		
9		
10		
11	EXHI BI TS	
12		
13	(Appellant's Exhibits were receive	ed at page 7.)
14		
15	(Franchise Tax Board's Exhibits w	ere received at
16	page 8.)	
17		
18		
19		
20		
21		
22		
23		
24		
25		

1	Van Nuys, California; Tuesday, August 21, 2018
2	9: 00 a.m.
3	
4	JUDGE THOMPSON: All right. Let's go on the
5	record.
6	Mr. Dies, are you ready?
7	MR. DIES: Yes, sir. I am.
8	JUDGE THOMPSON: We are now on the record in the
9	Office of Tax Appeal Oral Hearing for the Appeals of
10	Walden Structures, Inc., Charles Walden and Deborah
11	Walden, Case Nos. 1801012123, 18010222, 1810221.
12	We're in Van Nuys, California. The date is
13	Tuesday, August 21st, 2018. The time is approximately
14	9: 02.
15	My name's Grant S. Thompson, and I am the
16	administrative law judge for this hearing, and my fellow
17	co-panelists today are Linda Cheng to my right and Doug
18	Bramhall to my left.
19	Franchi se Tax Board, could you please
20	introduce yourselves for the record?
21	MS. KUDUK: My name is Carolyn Kuduk.
22	MR. RILEY: Jason Riley.
23	MR. ROUSE: Ray Rouse.
24	MS. Wignall: Teri Wignall.
25	JUDGE THOMPSON: I think I might have been

1	mispronouncing it is it Kuduk?
2	MS. KUDUK: Kuduk.
3	JUDGE THOMPSON: Kuduk. My apologies.
4	MS. KUDUK: No worries.
5	JUDGE THOMPSON: And for Appellants, could you
6	identify yourselves for the record, please?
7	MR. HODGES: Yes. My name is Clay Hodges with
8	alliantgroup.
9	MR. DIES: John Dies, D-i-e-s.
10	MS. GONZALES: Edith Gonzales.
11	JUDGE THOMPSON: Your name again is Gonzales?
12	MS. GONZALES: Edith Gonzales.
13	JUDGE THOMPSON: Edith Gonzales.
14	And you are going to be leading the
15	presentation today?
16	MR. DIES: Yes, I am.
17	JUDGE THOMPSON: And the Franchise Tax Board,
18	Ms. Kuduk, are you going to be leading the presentation
19	today?
20	MS. KUDUK: I will being giving the opening and
21	cl osi ng.
22	JUDGE THOMPSON: Okay. And do you know who on your
23	team is going to question the witness? And it may vary.
24	That's fine.
25	MS. KUDUK: Jason Riley and Ray Rouse.

1	JUDGE THOMPSON: You want to spell Rouse?
2	MS. KUDUK: R-a-u-s-e.
3	MR. ROUSE: R-o-u-s-e.
4	MS. KUDUK: R-o-u-s-e.
5	JUDGE THOMPSON: Okay. Did you get all that?
6	THE REPORTER: (Nods head.)
7	JUDGE THOMPSON: This appeal involves Appellant's
8	claimed research and development credits.
9	The record is voluminous, but the parties have
10	agreed to resolve the appeal based on our determination
11	with respect to six sample projects.
12	The six sample projects are Bramasol, Welk
13	Resort, Mammoth Lakes Foundation Dorms, Mosque 1 and 2,
14	Geneentech, and Ynez Elementary.
15	As I will remind the parties throughout the
16	Appeal, we will need the parties to focus on the six
17	sample projects.
18	The issues on appeal are whether, with respect
19	to the six sample projects, the Appellants have
20	satisfied their burden of proving that:
21	A. Walden's activities constitute a qualified
22	research under Internal Revenue Code Section 41(d)(1),
23	such that Appellants are entitled to the claimed
24	California research credit.

Walden's activities are not excluded from

B.

25

1	the Research Credit as an adaptation of an existing
2	business component under Internal Revenue I.R.C. Section
3	41(d)(4) cap B and cap C; and
4	C. Walden's activities are not excluded from
5	the research credit as duplication of an existing
6	business component under I.R.C. Section 41 (d)(4)(c).
7	Without objection, the following documents are
8	hereby admitted into evidence for Franchise Tax Board:
9	The documentation supplied by Appellants with
10	their May 17th, 2017, Reply Brief, No. WSI13 through
11	WSI 572;
12	B. All documents attached to Appellant's
13	Appeal Letters; and
14	C. All documents attached to FTB's briefs.
15	And for Appellants, all documents listed in
16	its exhibit list.
17	FTB is not calling any witnesses today.
18	Appellants have brought several witnesses, but my
19	understanding is we will primarily hear testimony from
20	Mr. Walden, Mr. Lord, and Mr. Wonish.
21	We will begin with opening statements from
22	each party which should not exceed 10 to 15 minutes.
23	Then we will swear in Appellant's first
24	witness and begin hearing testimony. We anticipate that
25	we will hear several hours of testimony from Appellants'

1 wi tnesses. Then each party will have an opportunity to 2 present a closing argument, which should not exceed 3 approximately 30 minutes, and Appellant will have up to 4 5 10 minutes to rebut FTB's closing argument. I remind the parties that we are not a court. 6 7 Our proceedings are intended to be informal. I want this to be efficient. I'm going to try to keep it 8 9 moving, and I may refocus the parties on issues as necessary to make sure that we get all the facts we need 10 11 to make a good decision. Myself and my fellow panelists may ask 12 13 questions from time to time. We will try to do it in a way that doesn't break up the flow of the presentations, 14 but we just want to make sure we understand what you are 15 sayi ng. 16 All right. That's all I have in terms of an 17 18 intro. Do my co-panelists have anything to add to 19 that? 20 JUDGE BRAMHALL: 21 No. 22 JUDGE CHENG: No. 23 JUDGE THOMPSON: All right. Appellant, are you 24 ready for your opening statement? 25 MR. DIES: Yes, I am.

JUDGE THOMPSON: Let's get started.

MR. DIES: If you can't hear, will you throw a shoe or something and let me know? All right.

## OPENING STATEMENT

MR. DIES: Charlie Walden and the taxpayers in this matter have been waiting more than eight years to be heard, and on behalf the folks in the room, I want to thank you for your willingness to hear him in this important matter.

Mr. Walden has come here to ask the State of California to keep its promise. The promise was a simple one, really. If you do research, thus spurring innovation and the creation of technical jobs, the State will support your efforts in the form of a tax credit.

The evidence will show that Walden

Enterprises, and the taxpayers in this case, kept their

part of that bargain. They engaged in substantial

research, and in some cases, doing things no one in the

country had ever done before. They hired the brightest

minds in the industry, and the efforts of those minds at

one time employed hundreds of Californians. Even so,

tax credits from the years 2003 to 2006 remain in limbo.

The truth is, Honored Panel, that if I represented Ford, I wouldn't be here. These credits

would have been long paid with little contest. What is striking is that this case is in many ways, what the folks -- what is striking in this case that in many ways what these folks do is vastly more complicated.

Ford makes a product, a car, sometimes extraordinary cars that perform at a high level or can tow incredibly large payloads. Walden makes a product, buildings. Sometimes extraordinary buildings, like a hospital for the town of Joplin, ravaged by tornadoes, that was up and fully functioning in eight months, something that had never been been done before. Ford cars have custom electrical systems that have to operate lights and interior features such as radios. Walden's buildings have custom electrical systems that have to run entire facilities, from schools buried in icy mountains to PET scan machines in an oncology center. Some of Ford's vehicles can use the same chassis.

You may not know this, but Ford's Fox Chassis can be found in a Mustang, sedans, coupes, and even the Durango. If Walden made a custom building, it very often had to design a trailer chassis that took into consideration that particular building's dimensions and weight distribution.

Do I draw this comparison to say that Walden did more research than Ford? No. And that not

something I have to prove. But there is a certain disconnect in this case, and Ford provides a convenient comparison point.

The FTB has argued that Walden does not have a business component. No one who knows anything about the Research and Development Credit would doubt for a moment that when Ford makes a new or improved product, that product is their business component. Yet when Walden makes a new building with new features, a product they sell to customers, they do not have a business component?

Our new and improved products are clearly business components in the most basic sense of that definition. The FTB argues that Walden did not have uncertainty at the outset of its qualified projects. No one would argue that when Ford undertook a new engine design, it had uncertainty as to methods that it would use to handle for systems competing for space, such as electrical, cooling, or exhaust.

There is going to be uncertainty from an engineering standpoint as to the best ultimate design of that engine that can accommodate the competing need of these systems.

Yet there is doubt that when Walden -- there is doubt that Walden had uncertainty in the outset in

its methods or appropriate designs when they had to create the electrical cooling and plumbing systems all competing for the same space within a product they sold in the form of a modular building.

By the way, your new Ford is complete and ready for you drive off from the dealer conveniently, when paid for. Walden had to figure out how to build 16,000-square-foot buildings that could be carried on a street, under a bridge or set up in incredibly remote locations, sometimes in as fast as a weekend.

By the way, you will hear from Walden designers today about their uncertainties in these custom projects. But you don't just have to take their word for it.

Notice the number of iterations in these designs. If there were no uncertainty, these designs would only need to be drawn once. Notice the clouds we will show you, which all reflect revisions because the approach failed after being tested by engineering calculations or created a conflict or for some other reason wouldn't solve the design needs.

We will even show you change orders where the process went back to the drawing board after clearing these conflicts and the engineering calculations, only to discover in production that the approach did not

work.

No one who is certain about the best method or appropriate design would intentionally head in the wrong direction. In fact, Esteemed Panel, one of our six projects was so uncertain that Walden went through a nearly complete design process only to discover that the project was not feasible. It never got built. Their engineering time and efforts lost.

The FTB argues that Walden did not have a process of experimentation. This is a particularly puzzling position, because the FTB clearly concedes that Walden's work is technological in nature. In fact, the FTB has taken the position that Walden applies principles of engineering.

The process of experimentation in this context is very simple, ladies and gentlemen. The use of systematic trial and error modeling or simulation to overcome the uncertainties we just discussed. This is boiled down to its essence, the scientific method that each of us learned in school.

You start with a hypothesis as to how to solve a problem. You test that hypothesis. If it fails, you revise it and repeat the process until it is completed. That is precisely the systematic trial and error that was used by Walden in its designs.

Returning to our analogy, Ford's engineers would first sketch their basic design. Then using computer-aided modeling such as CAD, their various engineers would work through the options for placement of the various parts of the engine, checking for conflicts and other problems in this -- in the design, which would otherwise make it unworkable.

Then engineering calculations would be done to test the viability of the proposed designs to make sure that, in fact, the loads could be handled, electrical impulses could be met, dealt with, and so on. Only then might an attempt be made to build a prototype.

Compare this with Walden who sketched basic designs, refined them using computer-aided modeling and an iterate process where they worked through conflicts in the system including CAD. Engineering calculations were used to test the loads and the visibility -- viability of a design, only then to build a prototype.

There are arguments in the form of exclusion -- and I should mention this -- in some cases, even the process of building the prototype, it was discovered that the -- the design wouldn't work, and the process had to be repeated.

There are arguments in the form of exclusions that have also been offered by the FTB in this case,

which we will discuss in a moment, but if there is anything that comes from the incredible delay caused by this lengthy exam and the somewhat strange circumstances of the disbanding of the BOE, it is that each of you get the benefit of a, kind of, legal time machine. You see, since adopting Section 41 of the Internal Revenue Code with minor California changes in RTC 23609, the arguments made by the FTB in this case had already been made and lost. Each of you will get the benefit of an organized body of law on the subject.

An example of arguments already lost is the argument that Walden's engineering was routine. That is, it was common for those in the modular building industry to do such work in creating the product. This argument is not a novel approach by the FTB. In fact, for a period of time, it was all the rage with the IRS.

The argument went like this: If you build bridges, and the only engineering you do is the kind of engineering a bridge builder would use, it is routine and therefore it's excluded. No one ever said Ford's automotive engineering was routine because it was similar to that of other automotive companies and therefore excluded or that Ford suddenly had to make a toaster to qualify for this credit.

But that standard was applied to small and

medium businesses all over the country for a time. It was a kind of rebirth for something called the Discovery Rule, an IRS standard that said you had to increase or refine the very knowledge of an industry to qualify for this credit.

Congress and the Treasury snubbed this idea out in a matter of weeks, clearly stating that the work only needed to be new to that taxpayer and that this standard was an overreach, and they abolished it.

Notice the similarity, however, in this position with the notion of routine engineering, i.e., others in your engineering -- others in your industry doing this kind of stuff, so it does not qualify as research.

This is where the time machine comes. The IRS made this argument in a case called Suder that I tried in Dallas, Texas some time ago. They argued that a small phone company was using engineering that was routine and thus not qualified. Judge Vasquez's -- Judge Vasquez's opinion simply stated that the taxpayer need not reinvent a wheel to be engaged in R&D. Notice the danger of a routine engineering argument. It is a subjective sexiness test.

The actual four-part test that California adopted is objective. You either have a business

component or you don't. You either have a business component or you don't. You either have uncertainty at the outset or you don't. You either have systematic trial and error that you use to overcome that uncertainty, or you don't. And you either use principles of hard sciences or you don't.

It is dangerous to discredit to allow random field agents to decide on their own if there is some subjective increase in R&D to one taxpayer to its peer -- its peers.

Examples of unsexy research that have been recognized since the time the FTB took its position in this case include gearshift knobs, steering wheels. In a company called T G Missouri, these were found to be R&D, the iterate process of creating molds for them.

Apparently, Ford doesn't even have to make the whole car anymore. Hair dyes have been found to be qualified research, small business telephones.

Even here in California before the BOE, admittedly not precedential but still instructive, a case where a taxpayer made boxes and shipping materials, like Mr. Riley himself.

We expect that the FTB will continue to maintain that because there is some commonality in some of the products that Walden made, there is no research,

i.e., you have designed electrical systems or route trusses before so doing that task for a different building is not research.

And, again, this is an argument already settled in the time that has passed since this claim was made.

In the Trinity case, the IRS argued that
Trinity was not engaged in research because it had made
a number of hulls, engines, and cabins in prior boats
and asserted that the act of reconfiguring these parts
in new boats didn't count. The court in that case was
clear to say that this was not a fast food menu.

A change in the hull may require -- may impact the need for a change in different engines, or the weight distribution of a cabin may require an adjustment to the hull.

The court even went so far as to use the example of a change in the simple soda lines in the boat to argue that all of these changes affect the dynamics system, and the act of working through the impact of these systems is, in fact, R&D.

That is precisely what Walden has done here.

The FTB has last argued exclusions, adaptation, and duplication. Although through a quick scrutiny of the record in appeals, you will see that duplication was

actually not in the FTB's final position. We'll deal with it anyway, just to make sure we're on the same page.

Ironically, for adaptation to apply, there must be a prior business component that was adapted. It is internally inconsistent for the FTB to say both that Walden lacks a business component, and that its work is a mere adaptation of an existing business components.

Secondly, despite asserting adaptation, if this Esteemed Panel hears even a single example of a prior product that the FTB contends is adapted, it will be the first time.

In more than eight years to this day, not once, has anyone on behalf of the FTB actually connected any of the six projects we're here to discuss to a new product or prior product that was made. In our estimation, it would be patently unfair for them to come now and try to do this for first time without any prior warning to this taxpayer.

Instead, they have simply said you have engaged in adaptation. The same issues would apply to duplication, which, of course, requires a showing of reproduction of the exact business component. This Panel will simply not see that in this case.

Finally, if the Panel doesn't find these

2.0

arguments on adaptation and duplication persuasive, it need only look to a provision called TD9104 --

THE REPORTER: Sir, could you slow it down a little?

MR. DIES: I'm sorry. I'm trying to be mindful of time. I appreciate that -- okay.

For context, there was confusion among tax professionals. The credit clearly qualifies for those developing a new or improved business component. Yet there were exclusions for things like research after commercial production, which occurs when there is research after the product is already on the market. Taxpayers and professionals reasonably pointed out this inconsistency.

One part says you can improve a product and qualify, and then certain exclusions seem to indicate that if the improvements happened after you sold the product, it doesn't qualify.

TD9104 came out to address this, holding that if the four-part test is satisfied, these exclusions don't apply. Simply put, ladies and gentlemen, if we meet the four-part test improving our research, you needn't consider adaptation and modification, because the solution to adaptation and modification is proving that you have met the four-part test in the first place.

1 2

б

I have at this point likely worn each of you out with my pontifications from on high about the law, but I did it for a reason.

We expect the facts in this case to be largely undisputed.

There may be a statement here or there that research incurred in Camp Lejeune, or that Walden's name is not on an engineering document, and I look forward to responding to those things. We look forward to dealing with those issues as they arise.

Today you'll will hear from Charlie Walden, the founder of Walden Structures, himself a pioneer in the modular building business industry. He will introduce you to the company, walk you through a bit of its relevant history, and at a high level, introduce you to you the six projects that we have come here to discuss.

Among those projects, you will hear about

Mosque 1 and 2, an incredibly innovative modular design,
used to get American soldiers ready for real-world
situations they might encounter during military missions
in the Middle East.

You'll hear about Bramasol, which was an office structure that won modular industry awards for innovation after presenting a number of serious

challenges that Walden had never faced before.

You'll learn about Genentech, which was a massive oddly-shaped building for a pharmaceutical company that housed substantial amounts of technology. It required literally miles of cabling and cable trays that put incredibly high loads in the building itself to be incorporated in a modular building that could be used for five years, and when disconnected, be used in its separate component parts for some other purpose.

You'll hear about Welk Resort, which was a new home center that involved a number of changes that were completely different from anything that Walden had done in the past.

Ynez Elementary -- or Ynez (pronounces differently) Elementary was the first multi-story classroom environment Walden ever tried to build. It had a fire-rated corridor to protect the children which directly split the modlines, the places where the building was connected in the structure, and also had balconies on one side of the building that required substantial engineering from a stability standpoint.

And finally, you'll hear about Mammoth Lakes dormitory project deep in the mountains of one of the most seismically active locations in the world. The dorm was going to be subjected to nearly constant

movement of the earth, snow loads that were nearly three times greater than anything Walden had ever dealt with, and the requirement of a boiler and chiller system because of the extreme temperatures that Walden had never worked with.

Ultimately, in this most extreme example of uncertainty, after months of design work, the project had to be abandoned.

Then you will hear from Kevin Love, a modular specialist with over three decades of experience in designing and developing these structures. He'll cover the design process for Walden from acorn to oak tree, so that you can do a deeper dive into each of these six projects and the challenges that they presented.

He will also cover the various methodologies that they used to solve the problems. Mr. Love will talk about his work with others at the organization and how he worked with them to help calculate this credit.

Next, very briefly we think, you will hear from Joel Minor. Mr. Minor was the CFO of Walden, and we expect his testimony to be short. He will testify as to how it came to pass that Walden claimed this benefit, his role in facilitating the documentation of the benefit, and evidence that was gathered to support this credit.

1	Finally, and likely briefest of all, you will
2	hear from Mr. Bobby Wonish, a director at alliantgroup,
3	the tax consulting firm that assisted Walden in
4	calculating this credit. Mr. Wonish will cover the
5	process and methodology used, as well as the efforts
6	undertaken by the specialist who did the calculations.
7	Ladies and gentlemen, we don't have to be Ford
8	to get this credit. We don't have to reinvent the
9	wheel. And, frankly, we believe that you will see that
10	the work we did was not only admirable and an incredible
11	positive reflection of business in California, but
12	something that this credit was designed to incentavise.
13	Thank you for your time and attention, and we
14	look forward to speaking with you today.
15	JUDGE THOMPSON: Thank you very much for your
16	opening statement.
17	Franchise Tax Board, are you prepared for your
18	opening statement?
19	MS. KUDUK: Yes.
20	JUDGE THOMPSON: Please proceed.
21	MS. KUDUK: Good morning, Judge Thompson.
22	MR. DIES: I said Kevin Love. I meant Kevin Lord.
23	JUDGE THOMPSON: I wondered about that.
24	MR. DIES: There's not a different person here. We
25	brought a new stranger to you.

1	MR. HODGES: Kevin Love is a basketball player.
2	JUDGE THOMPSON: Are we doing okay without a
3	mi crophone?
4	THE REPORTER: On this side.
5	JUDGE THOMPSON: Okay.
6	THE REPORTER: She's going to be a problem.
7	JUDGE THOMPSON: Should we pause for a moment see
8	if we can get the microphone hooked up?
9	(Off the record).
10	JUDGE THOMPSON: Back on record. Were we actually
11	off the record? I'm not sure.
12	So Franchise Tax Board, you ready for your
13	opening statement?
14	MS. KUDUK: Yes.
15	JUDGE THOMPSON: All right.
16	
17	OPENING STATEMENT
18	MS. KUDUK: First, I'd like to apologize for being
19	a problem. Sorry about at that.
20	Good morning, Judge Thompson, Judge Bramhall,
21	and Judge Cheng. My name's Carolyn Kuduk.
22	Walden manufactures modular structures.
23	Appellants claimed California Research Credit on amended
24	returns for taxable years 2003, 2004, 2005, and 2006,
25	which are the taxable years at issue.

California conforms to Section 41 of the Internal Revenue Code through California Revenue and Taxation Code Section 23609.

At issue in this appeal is whether Appellants have substantiated that Walden's activities in the taxable years at issue are qualified research such that Appellants are eligible to take the California Research Credit. Specifically, did Appellants prove that Walden's activities met the four-part test of Section 41(d)(1), and did Appellants prove that Walden's activities were not excluded under Section 41(d)(4)?

To be qualified research, the activity must pass the Section 174 test, the technological in nature test, the business component test, and the process of experimentation test.

Appellants bring up the Discovery Rule in their opening statement. This rule is not at issue in this appeal as it was replaced by the technological in nature test, and the technological nature test, again, is not at issue in this appeal.

So Respondent has conceded that issue and Appellants just must prove three parts of the four-part test of Section 41(d)(4).

To be qualified research, the activity must not be an adaptation or duplication of an existing

business component.

To determine if Appellants are eligible for the California Research Credit, Appellants and Respondents have agreed to evaluate Appellants' claims for the credit based on six sample projects: The Mosque 1 and 2 projects, Ynez Elementary School project, Mammoth -- the Mammoth Lakes dorms, the Bramasol projects, Welk Resort, and the Genentech projects.

Here the evidence will show that in every one of these six projects, Appellants have failed to carry their burden of proof to show Walden performed qualified research in the taxable years at issue. The evidence will show that Respondent properly claimed -- or properly disallowed Appellants' claimed California Research Credit.

Today Respondent will discuss how Appellants' activities have failed three parts of the four-part test found in Section 41(d)(1).

Evidence will show that Walden's activities failed the Section 174 test because Walden did not have -- Walden did not have the type of uncertainty needed to pass the test.

The evidence will show that Appellants failed to identify Walden's business components.

The evidence will show that Walden failed the

2.8

1	process of experimentation tests, because the documents
2	Appellants provided did not prove that experimentation
3	occurred.
4	Moreover, evidence will show that Walden's
5	claimed activity is excluded by Internal Revenue Code
6	Section 41(d)(4).
7	Evidence will show that Appellants failed to
8	qualify for the credit because of Walden's modular
9	structures are an adaptation and/or a duplication of an
10	existing business component.
11	Today the facts and law will clearly show that
12	Appellants did not demonstrate that their activity was
13	qualified research. As Appellants have failed to prove
14	that they engaged in qualified research, Appellants
15	failed to prove entitlement to the California Research
16	Credit.
17	Respondent's determination must be upheld.
18	Thank you.
19	JUDGE THOMPSON: Thank you.
20	Okay. Mr. Dies, are you ready for with
21	your first witness?
22	MR. DIES: I am.
23	Charlie, would a mic help you, or do you think
24	you can be easily heard?
25	THE WITNESS: I don't know.

MR. DIES: I think he needs a mic. Oh, you got one right here. If she doesn't hear you it doesn't happen.

JUDGE THOMPSON: Before I swear you in, I want you to note a few things about your testimony.

We budgeted approximately two hours for your testimony, so I hope you will keep it focused to the extent you can on Walden's activity with respect to the six sample projects that the parties have agreed to.

If the testimony is repeating information we have already received or is not on point, I may stop you and try to direct it little bit. That's in your interest because if we are not gaining something that we don't already know, that's not good for you.

So if that happens, I don't want you to take offense. I'd ask you to remember, you know, I'm going to allow some leeway in your testimony, but we have a section today dedicated to legal arguments, which is the parties' closing arguments. So it's not fair to the other side if testimony takes the form of making legal arguments. So I want you to be sensitive to that.

What we need to hear from you and the other witnesses, as well, is as much factual information as we can get based on your experiences at Walden.

Do you have any questions?

MR. WALDEN: No, sir. No.

JUDGE THOMPSON: All right. Please raise your 1 right hand. 2 3 CHARLES WALDEN, 4 5 called as a witness on behalf of Appellant, after having been duly sworn by the Lead Panelist, was examined and 6 7 testified as follows: THE WITNESS: I do. 8 9 JUDGE THOMPSON: Thank you. And, your Honor, very briefly at the 10 MR. DIES: time that we did the allocations for these times I 11 anticipated that Mr. Walden's testimony would be a 12 13 little longer than it probably is going to be. JUDGE THOMPSON: 14 Okay. Mr. Lord was the actual project manager 15 MR. DI ES: on a lot of these projects. His testimony may actually 16 17 be longer than we anticipated. If it's okay with everyone, I might switch those times, just because he is 18 going to do the deeper dive into the specifics. 19 20 JUDGE THOMPSON: That sounds good. 21 MR. DIES: I just wanted to let you guys know that. JUDGE THOMPSON: Just to put a little detail on 22 23 that. I'm actually glad to hear you say that, I noticed -- you know, I'm looking forward to hearing from 24 Mr. Lord as well. 25

1	So let me just ask what was our initial time
2	estimate for
3	MR. DIES: I think it was hour and a half for
4	Mr. Lord and two hours for Mr. Walden.
5	JUDGE THOMPSON: Right.
6	MR. DIES: My thought is maybe switch those.
7	JUDGE THOMPSON: All right. Approximately an hour
8	and a half for you, Mr. Walden.
9	THE WITNESS: Okay.
10	JUDGE THOMPSON: Try to allow some leeway, not
11	precise, and then approximately two hours for Mr. Lord.
12	All right.
13	MR. DIES: All right.
14	JUDGE THOMPSON: Franchise Tax Board, is that okay
15	with you?
16	Okay. When you are ready, please proceed with
17	Mr. Walden.
18	
19	DIRECT EXAMINATION
20	BY MR. DIES:
21	Q Mr. Walden, can you please state your name for
22	the record?
23	A Charles Walden, Jr.
24	Q Spell that name for us just one time, if you
25	don't mind.

1	A Last name?
2	Q Spell your name.
3	A W-a-I-d-e-n.
4	Q Okay. And can you tell us a little bit about
5	yoursel f?
6	A In the industry, I assume?
7	Q Yes, sir.
8	A Basically, I got out of the Navy in 1979, and
9	I spent four years in the service as an air crewman, and
10	then while I was doing that, I also received two years
11	of education at the University of West Florida. I went
12	from there to Arizona University because that's where I
13	could get in-state tuition and took two years there. I
14	did not receive a degree.
15	I went immediately into the construction
16	business my father was a building contractor went
17	into the fixed construction business, ran that for a few
18	years, and then in 1977 made my first foray into the
19	modular business. We weren't a factory. We were doing
20	the site installation. We did site installations in
21	Ari zona.
22	In 1981, we moved that business to California,
23	and we began doing all sorts of defense work and large,
24	large complexes for
25	THE REPORTER: As what? I'm sorry.

1	THE WITNESS: And break and expanded military
2	presence.
3	It became a tremendous amount of work at
4	Vandenberg Air Force Base and Edwards Air Force Base.
5	All the military was going berserk, along with all the
6	suppliers, Martin Marietta, Boeing McDonnell Douglas,
7	all of everybody was going bananas. So this product
8	became very, very popular.
9	BY MR. DIES:
10	Q Mr. Walden, I'm going to ask you to do
11	something that's very hypocritical to me. Slow down if
12	you can.
13	A Sure. I was just getting going.
14	Q I know. It's going to be tough.
15	A Anyway, we were not manufacturing.
16	We approached the business from the field
17	side, from the installation and finish of the buildings.
18	We purchased the buildings and installed them.
19	In 1995, we and by the way, we did this
20	literally all over the world from the Virgin Islands to
21	Guam and Okinawa and Hawaii.
22	In 1995, we started a factory in Chino,
23	California. We subsequently moved that to a bigger
24	factory in in San Bernardino excuse me, in
25	Riverside, California, and then we added a second

1 factory in Mentone, California, which is adjacent to San Bernardi no. 2 So I have a long history. I'm in the Modular 3 Building Institute, the trade organization. I was a 4 5 board member for two years. I have been certified by the Veterans 6 7 Administration as a subject-matter expert. I have 8 spoken broadly and many times on this subject to all --9 everything from workmen's comp and liability companies to insurance companies to trade organizations and 10 11 general contractor groups. Basically, I've been running the company until 12 13 2014. We closed it in 2014. I now serve as a consultant to another manufacturer located in Perris, 14 Cal i forni a. 15 0 Okay. If -- if we can, I'd like to dive in 16 very briefly to a little bit of the subject matter you 17 just discussed. 18 You mentioned that you had done some work for 19 20 the military, but for the relevant time period we're 21 talking about, which, unless I say different, is '03 to ' 06. 22 23 What were -- what were, at a high level, the 24 kinds of modular projects that Walden was doing for 25 customers?

1	A Mostly office space, single and multi-story
2	office space at Edwards Air Force Base and at Vandenberg
3	Air Force Base.
4	Q 0kay.
5	A We put in the launch facility. We put in the
6	offices that support the launch facilities that were
7	supposed to occur at Vandenberg. We put in all the
8	developmental buildings over at Palmdale and at Edwards
9	Air Force Base for the B-1 and B-2 bomber.
10	Q Okay. There were also other military projects
11	that you guys worked on?
12	A Sure.
13	Q And we're going to talk about the Mosque
14	project later on, but that's an example of one of those?
15	A No. Those projects came later quite a bit
16	later than what I am talking about.
17	Q Well, that's why I want to make sure we're
18	tal ki ng about '03 to '06 2003 to 2006.
19	A I'm not sure of the date all those projects
20	were done.
21	Q Fair enough. Well, this isn't going to be pop
22	qui z.
23	Schools. Did you do any work with schools?
24	A Only on the installation side.
25	Q Okay. Let's do this. Let's talk briefly

1	about why somebody might want modular construction.
2	Why in other words, why not just do sticks and
3	stones? Why do I need a modular building if I am a
4	customer?
5	A Time and prices.
6	Q 0kay.
7	A They think it's much cheaper, and they need it
8	qui ckl y.
9	Q Okay. Can you give us an example of a project
10	that you had to design quickly for a customer?
11	A All of them.
12	Q Okay. Joplin, Missouri. Did you guys have a
13	challenge there?
14	A Yes.
15	Q Can you tell us very briefly about that?
16	A In May of 2008, a hurricane plus five
17	hurricane hit Joplin, Missouri, destroyed one of their
18	acute care hospitals. We were called in to see if we
19	can help them. The community was hugely underserved,
20	and patients were being delivered 100 miles just for
21	ordi nary servi ces.
22	And so, Mercy System the Mercy Medical
23	System stepped up and purchased a building from us,
24	150,000 square feet of acute care, four operating rooms,
25	full full C.T. scan. PET scan. everything

1	dialysis, pre-op, post-op. And they were certified for
2	open heart surgery.
3	We were able to design it and get approved and
4	build it and ship it from California to Missouri and
5	opened in eight and a half months.
6	Q Had anyone ever done anything like that
7	before?
8	A No.
9	Q Has Walden over the years received awards for
10	its innovation in modular construction?
11	A Yes. In every year in almost every category,
12	we have received awards.
13	Q Who is the entity who provides recognition for
14	folks in the modular business industry?
15	A It's called MBI, Modular Building Institute,
16	located in Virginia.
17	Q And can you tell us a little bit about the
18	kinds of awards that they issue to companies they find
19	to be innovative?
20	A Different categories, but they have a whole
21	process of going through and examining different
22	projects all over the country and selecting the very
23	best.
24	Various projects are chosen by size and
25	complexity and all sorts of reasons why they were

chosen. 1 Did Walden have a body of, sort of, standard 2 0 buildings someone could buy? In other words, if I just 3 wanted to go buy a random office, you know, a small 4 5 office space and put it in a location, did you guys have offerings for that? 6 7 Yes. We had stock buildings which were used 8 for -- mostly for construction sites. You see them at 9 almost every construction site. That represented a small -- 30, 35 percent of our business. 10 11 0kav. So 30 to 35 percent of your business would be, for lack of a better term, order 12 13 off-the-shelf-type stuff. I want this building. We will put it together and bring it out there? 14 Right. And in some cases, dealers would order 15 multiple of the same. 16 17 0 The remaining part of your business, 0kay. was that stock as well, or would those have been custom 18 desi gns? 19 20 Α Everything beyond that was all custom. 21 Q Okay. During your time at Walden, when you --22 from the time you started the company, what was your 23 role and function? What did you do there? I was primarily -- I was the C.E.O. of the 24 company, and I also did all the contact -- 99 percent of 25

the contact with the clients and the different projects. 1 Q And did you work in design and problem 2 0kay. solving as well based on your experience? 3 I rely on other people, but I was involved in 4 5 those conversations at a high level. 0 Did -- did Walden have a special niche 6 0kay. 7 in a sense -- how did you distinguish yourself from 8 competitors who did module work? 9 Α Well, it's a fairly -- it's a fairly close industry, not that many people. Only about three or 10 four manufacturers in California at this point, but it 11 was a very close industry. We were highly, highly -- we 12 were highly regarded and highly checked by your 13 14 performance in the past. Your history and your reputation means everything. 15 0 Tell us a little about Walden's capabilities 16 in terms of construction. How much could you build and 17 that kind of thing in your facilities during the time 18 period that we are talking about? 19 20 We probably -- we probably averaged -- we probably averaged about twenty -- 2,000 to 2500 square 21 22 feet per day through the facility. It could go as high 23 as 7,000 square feet. When we built the hospital, it was more than 7,000 square feet a day. 24 Q Can you tell us a little bit about 25 0kay.

1	how how we go from someone in Joplin saying, "I need
2	a hospital," through this process, actually manufacture
3	at a high level? We are going to dive into detail
4	l evel .
5	A Well, at a high level, they came to us with a
6	program design
7	Q 0kay.
8	A telling us what they wanted included in
9	this and what code was going to require. They provided
10	that through another architectural firm.
11	Q 0kay.
12	A We figured out how to build it.
13	Q And when you say you figured out how to build
14	it, these things were going to be carried over the road?
15	A Yes.
16	Q So who figured how to break the building apart
17	and so that it could be reconstructed and all of
18	that?
19	A It was all done as a cooperative effort we
20	were all involved in.
21	Q 0kay.
22	A Kevin Lord, who you are going to hear from,
23	the engine folks, everybody
24	Q The approach that would have been used on
25	these six projects, we're going to talk about today?

1	A Yes.
2	Q So at a high level, they tell you what they
3	want?
4	A And sometimes on the back of a napkin.
5	Q And then, I guess, preliminary drawings start?
6	A There's conversation and some pricing. We
7	just look into where it's going and things like that to
8	see if we are able to do it.
9	Q 0kay.
10	A Time line, and yes, the preliminary pricing.
11	Q And we are going to talk with the Panel in a
12	moment about some of the drawings and that kind of
13	thing. But once this thing was drawn, you guys were
14	also the manufacturer?
15	A Yes.
16	Q Okay. I'd like to draw your attention to
17	Exhi bi t 27, page 3.
18	JUDGE BRAMHALL: Just a second. That's Bates 2.
19	MR. DIES: Edith, that's the photos I'm not
20	sure. I may be off.
21	MS. GONZALES: Exhibit 20 and 20.
22	MR. DIES: No, no, no. Well, 23 is a presentation,
23	but there are photos in 23 of the manufacturer's
24	facilities.
25	Yes. If you can, can you zoom in on the

1	photos?
2	BY MR. DIES:
3	Q Mr. Walden, can you tell us what these
4	photographs are?
5	A I can't see the one on the Left.
6	MR. DIES: Is it all right if he steps up?
7	JUDGE THOMPSON: Yeah.
8	MR. DIES: You can step up there, or you can look
9	at her computer, whatever is easiest.
10	JUDGE THOMPSON: Exhibit 27?
11	MR. DIES: Yes. And, Edith, what's the Bates
12	number on that for the record?
13	MS. GONZALES: WSI-0212.
14	THE WITNESS: I think those are I'm not sure.
15	They may be classrooms. They are all similar. They are
16	either classrooms, or they could be I'm not sure
17	which project it is. The one on the right looks like a
18	contai ner.
19	BY MR. DIES:
20	Q My question was inartfully worded.
21	Are these your manufacturing facilities?
22	A Oh, yes.
23	Q So we're going to do something at a high
24	l evel .
25	These are the location where you would

1	actually build the different buildings that you were
2	going to later sell or ship to customers?
3	A Those are assembly lines for those two
4	locations.
5	Q And when you talk about an assembly line, do
6	we have different stations of people that are doing
7	different parts of the process?
8	A Yes.
9	Q And is that how you would you would move
10	parts of a hospital or a mosque, or whatever the case
11	may be, through your facility?
12	A Yes.
13	Q Okay. For demonstrative purposes now you
14	have got me spooked I want to look very quickly at a
15	couple of examples of your work on Exhibit 27.
16	believe these are pages 6, 7, and 8. Here we go.
17	This is this is called Southwest Marine.
18	Is this a modular building?
19	A Yes, it is.
20	Q So you guys assembled this thing in cases and
21	brought it out there and put it up?
22	A Yes, we did.
23	Q Okay. That's two stories?
24	A Yes.
25	Q Okay. A building like this is going to have

elevators and everything you see in a building like 1 that? 2 Yes. Α 3 MR. DIES: Okay. Can we see the next page? 4 Actually, skip one more, Edith. 5 BY MR. DIES: 6 7 Q This is a radiation oncology center? Α Yes. 8 Also modular? 9 Q Α Yes. 10 This is something you guys built in pieces? 11 Q Α Yes. 12 13 Q Okay. This was a cancer treatment facility? Yes, it is. 14 Α So something like this would have to have C.T. 15 0 16 scans and equipment and all that kind of stuff in it? 17 Α Yes. Okay. Very quickly, can we go to the next 18 Q one? 19 MR. ROUSE: Is Counsel going to -- I'm giving him 20 some Leeway, but I'm not sure. 21 MR. DIES: I actually -- I will quickly move in 22 that direction. 23 MR. ROUSE: Thank you. 24 MR. DIES: That's fine. Then let's do this. Let's 25

go to Mosque 1 and 2, which we have photographs of on 1 page 20, I believe. 2 BY MR. DIES: 3 0 Can you tell us what this is? 5 Α It's an emergency training facility located at Walden assisted the government in developing 6 29 Palms. 7 this technique for training -- training military 8 platoons before they went to Iraq. 9 0 And -- and we'll dive into greater detail in a moment in the Mosque Project, but tell me what you mean 10 by "we used this to train soldiers." Physically, what 11 happens at this location? 12 13 Α They actually try to design it and make it like an Iraqi community. 14 There are four or five different communities 15 There was a it represents: There's a soccer field. 16 17 commercial area. There was a rental area. Ιt incorporates concrete buildings, modular buildings and 18 -- and contain repurposing, and they bring -- they 19 20 actually have actors that come out that speak Farsi, and 21 they dress that way. They try to give real-time, real-life 22 23 experience in these areas. The idea is to show them techniques for being safe, techniques for looking for 24

It actually had tunnels between the buildings

25

someone.

1	where people the actors could go down and come up
2	some place else.
3	It was really to teach the soldiers that when
4	something is going wrong, they don't want to accelerate.
5	They don't want to make it worse. They want to find a
6	way to talk themselves out of situations instead of
7	shooting civilians.
8	Q Okay. And I think you said this was at 29
9	Palms, but you also did similar work at a place called
10	Camp Lejeune; is that right?
11	A Yes, we did.
12	MR. DIES: I think I think page 21, Edith that
13	exhi bi t.
14	BY MR. DIES:
15	Q Can you tell us what this is?
16	A It's an entry gate that you would see in
17	that you would see in Iraq. It would be a gate onto a
18	military base with security.
19	The two legs of the big arch are both
20	containers turned on end with another container resting
21	on top of it.
22	Q Okay. And we left this out, but in many
23	cases, these buildings are made of what? What are they
24	constructed with?

Contai ners.

Α

25

1	Q Tell me what you mean by "containers."
2	A Well, we take 20 by 40 or 20 by 20 overseas
3	shipping containers, and we completely repurpose them.
4	Q Okay. And you turn them into, I guess,
5	buildings that look like something we would see in a
6	town?
7	A Yes.
8	Q And we'll talk about the Mosque, but this gate
9	is actually made of those shipping containers?
10	A Yes.
11	Q Okay. All right.
12	MR. DIES: Thank you, Edith, for that, and we'll
13	show some more photos in a second.
14	BY MR. DIES:
15	Q Mr. Walden, I would like to briefly talk about
16	the folks on your staff that you use to design these
17	proj ects.
18	At a high level, how do you use people to
19	design and build structures that are customized for a
20	cl i ent?
21	A Well, Kevin Lord is the director of
22	engineering, and he has specialty groups work under him.
23	He also coordinates all the engineers that we bring on
24	staff to help us with specific projects.
25	Q 0kay.

1	A Structural, electrical, mechanical, they all
2	provide those services on a contract basis.
3	Q Okay. And so if one of your buildings has an
4	electrical system, Mr. Lord would work with the team
5	that handles that, for example?
6	A Yes. He was responsible for all departments,
7	all areas of design.
8	Q 0kay.
9	A Code compliant and workable.
10	Q All right. I would like to very briefly
11	direct your attention to Exhibit 11, talk a little bit
12	about the projects themselves, if that's all right.
13	A Okay.
14	Q This is for you, sir. She's going to have it
15	up there. I'll tell you if you need to point something
16	out for these folks. We can either zoom in on it or you
17	can go point at it on the screen.
18	A All right.
19	Q Can you tell us what I'm looking at there in
20	Exhibit 11 on that first page?
21	A It's an office building in Fremont,
22	California, it appears.
23	Q Okay. Is this, in fact, the Bramasol project,
24	which is one of our six projects?
25	A Yes, it is.

1	Q Okay. And if I can direct your attention to
2	the upper right-hand corner of that drawing on that
3	yeah, it's a drawing.
4	MR. DIES: Edith, can you zoom in on the upper
5	right-hand corner?
6	BY MR. DIES:
7	Q Upper right, sir.
8	A Yes.
9	Q Whose drawing is this?
10	A It's one of our Walden structures.
11	Q Okay. And this would have been something that
12	you folks put together?
13	A Yes.
14	MR. DIES: Okay. Edith, if you can, zoom and drop
15	down to the third box on the right-hand side. Highlight
16	that whole box.
17	BY MR. DIES:
18	Q So at this point in the process, we have our
19	time period; is that correct?
20	A Yes.
21	Q And what are these?
22	A These are revisions requested by the customer.
23	Q Okay. So these are changes to the design over
24	time?
25	A Yes.

1	MR. DIES: Okay. Edith, could you zoom out again
2	for me and zoom in on the actual main body of the
3	building itself?
4	BY MR. DIES:
5	Q We see little shapes in there that look like,
6	I call them "clouds," but they are little swirly lines
7	around vari ous objects?
8	A Yes.
9	Q What are those?
10	A Those are revisions.
11	Q These are parts of the design that had to be
12	changed?
13	A Yes.
14	Q Okay. You mentioned earlier that and I'm
15	going to ask you to go to the wall for this because
16	these guys are going have to try to see what we are
17	tal ki ng about.
18	You mentioned earlier that these things are
19	built in pieces?
20	A Yes.
21	Q How do you do that in the modular construction
22	business? How do you physically do that?
23	A As I mentioned, we do this as a very
24	collaborative effort by all the people working in the
25	factory and people who are designing and making this

1 right from a Code standpoint and from an operational standpoi nt. 2 In this particular case, this is a mateline 3 right here between two sections. This is a section --4 see a dotted line there? That's the mateline. 5 And this one is also a mateline. 6 7 And, for the record, there's kind of a 8 Morse-code-looking series of dots and dashes that go 9 across this building. Is that what you are talking about? 10 This? 11 Α Q Is this the matelines? 12 13 Α Yes. Okay. And when we talk about these things 14 Q being built in pieces, I guess, you would build a 15 section -- three different sections, and then when you 16 get to the site, put them together? Is that physically 17 how it works? 18 Yes, that's how it works. 19 Α 20 Q 0kay. JUDGE THOMPSON: This would be three containers? 21 THE WITNESS: These aren't containers. 22 These are 23 actually factory-built modular buildings. 24 JUDGE THOMPSON: Three separate components, the dotted lines, what's being made there? 25

1	THE WITNESS: From here to here is a modular
2	from here to here.
3	JUDGE THOMPSON: Okay.
4	THE WITNESS: And that would take up one work
5	station on the plant as it moved down the line in an
6	assembly process, this would be beside it, and this
7	would be beside that.
8	JUDGE THOMPSON: Okay. Three modules.
9	THE WITNESS: Yes, sir.
10	BY MR. DIES:
11	Q Then, I guess, the idea is this was a custom
12	project? Was this one of your stock projects?
13	A No, this was a custom project.
14	Q How do you know that?
15	A I just know that's not what we build. We
16	don't build multi-story buildings that look like this.
17	Q And each of those pieces you have just talked
18	about, how do get them where they are going?
19	A Ship them over the road with a wideload and
20	heavy hauler contractors.
21	Q Okay. Who makes the trailers for a custom
22	situation like this?
23	A We do.
24	Q And what factor I'm sorry. Tell me about
25	the trailer situation.

Τ	A These are nauted on carriers.
2	Q 0kay.
3	A There's a trailer hitch on it. It sits on the
4	back of the truck and goes down the road.
5	Q What does what does the challenge of
6	carrying these things over the road do in terms of
7	desi gn?
8	A Well, it has a lot factors. For instance,
9	where is it going? Over which roads is it going to use
10	to get there? How many bridges are there? You have to
11	special get transportation hours. There's lots of
12	factors there that are involved.
13	Q Why do we care if there are bridges?
14	A I'm sorry?
15	Q Sorry. I did it again.
16	Why do we care if there are bridges?
17	A Because these are over height. These are all
18	tall buildings, and depending on overall height, it
19	tells you how you can go.
20	Q Okay. So, I guess in some cases, that is a
21	design constraint you have to work with. If a customer
22	wants a certain height in the building, you have to
23	figure out how to do that in pieces that can go under a
24	bridge, for example?
25	A We have to determine the cost impact of that.

1	and then the customer gets to weigh we offer him
2	options to either lower the height of the building or
3	take a different route.
4	Q Was this Bramasol project that you have up
5	here on the screen one of the ones that you got a BMI
6	award for innovation on?
7	A I think so.
8	Q I said BMI. I meant MBI. Does that change
9	your answer?
10	A No.
11	MR. DIES: I'd like to skip ahead two pages,
12	please, Edith. I believe that is 0066; is that right?
13	MS. GONZALES: Correct.
14	BY MR. DIES:
15	Q Okay. Do you see the parapet in this drawing,
16	si r?
17	A Yes, I do.
18	Q For those of us who don't have engineering
19	backgrounds, I guess, first, what is a parapet?
20	A It's a straight wall that the customer wants
21	to have to make his building look taller or maybe to
22	hide mechanical equipment, those kinds of design
23	reasons.
24	Q Okay. And is there anything unique about this
25	parti cul ar parapet?

1	A It has a pretty significant structural impact.
2	Evidently it had a very heavy high wind loads, so it's
3	designed much more stiff and has a steel steel column
4	that keeps it in place once it's installed.
5	JUDGE THOMPSON: What page is this?
6	MR. DIES: This is page 0066. WSI on Exhibit is
7	it 11?
8	MS. GONZALES: 11.
9	MR. DIES: 11.
10	JUDGE THOMPSON: Okay. Thank you.
11	BY MR. DIES:
12	Q So how do you know tell me again where the
13	steel the steel structures are?
14	A Well, there's a column right there. It goes
15	up, and there's another one here at the end of the
16	building that goes up.
17	Q 0kay.
18	A I can't see that I don't know what the
19	spacing of the columns was.
20	Q Okay. Is this something that Walden had ever
21	dealt with before in terms of a parapet this high with
22	all these structural components?
23	A I don't recall it, no.
24	Q Okay. You said that one one of the issues
25	was wind loads. How do we know that there are high wind

1	loads in this drawing that we are looking at?
2	A Because the way it's based.
3	Q 0kay.
4	A It's could be a very simple process if it's
5	not a real high wind load area.
6	Q Okay. And from a design standpoint, what is
7	the what do you have to do to design for a high wind
8	load on a piece like this on a building?
9	A Well, you have to give a structural attachment
10	that can resist those loads, and that structural
11	attachment has to be tied to something, either the top
12	of the truss or the column or the additional column.
13	Q If we tie this thing to the truss, does it
14	change the properties of that truss from a structural
15	standpoi nt?
16	A Change the design, yes.
17	Q I'm sorry?
18	A Yes.
19	Q I missed the first part of the answer. You
20	say it changes the design?
21	A It does change the design.
22	Q Okay. And if I change the truss, will I
23	potentially change the way this structure works?
24	A Yes.
25	Q I want to shift to Exhibit 12. You can come

1	back here, Mr. Walden, if you want.
2	MR. DIES: Edith, if we can just look at that first
3	page of Exhibit 12.
4	BY MR. DIES:
5	Q Mr. Walden, at the bottom right-hand corner of
6	this, there on this exhibit, there is a statement
7	that says, "Production issued." Do you see that?
8	A Yes.
9	Q And what does what does that mean? What
10	does that tell us about these drawings? What kind of
11	drawings are these?
12	A These are production drawings.
13	Q And what are production drawings?
14	A The details have all been worked out, all the
15	Code compliances have been worked out, and we start to
16	build and order the materials.
17	Q So how are these drawings different than the
18	drawings we just saw in Exhibit 11?
19	A Those were probably schematic you mean the
20	ones we just
21	Q Yes, sir. The ones we just talked about, yes,
22	sir.
23	A I didn't see. They would not be different
24	until they are marked for production.
25	Q Well, I mean, what is the difference in terms

1	of what's contained in the drawings in Exhibit 11, which
2	say "Preliminary, not for construction," and the ones in
3	12 that are for production? Just at a high level
4	A It's the it's the same conclusions, but now
5	they are have been approved.
6	Q 0kay.
7	A The changes have been incorporated.
8	Q Okay. If I can shift your attention to the
9	upper right-hand section here of this, do we also have a
10	box called "Revisions"?
11	A Yes, we do.
12	Q And at this point how many revisions have been
13	made?
14	A Six.
15	Q Si x?
16	A Six.
17	Q And some of these revisions at the bottom say
18	WSI on them. Do you see that?
19	A Yes.
20	Q What does what does that mean?
21	A Well, it could mean two things. WSI may have
22	been a customer, William Scottsman.
23	Q 0kay.
24	A In this case it may have been something we
25	we did for our own purposes.

1	Q 0kay.
2	A It's only telling production be sure and look
3	out for these changes. There are other places those
4	things are noted.
5	Q Okay. Meaning the revisions?
6	A More details of those revisions
7	Q 0h, okay.
8	A on the plan, and, also, it came out of
9	Vi rgi ni a.
10	Q So let's take a look at that. If we can look
11	at WSI-0130, which is first drawing in Exhibit 12.
12	Do you have that in front of you, sir?
13	A Yes.
14	Q We see more clouds. Do you see those?
15	A Yes.
16	Q And what do these represent?
17	A Revisions.
18	Q Okay. At the time you start a project like
19	the Bramasol project, are you certain as to which
20	methods you are going to use to meet their needs?
21	A No.
22	Q At the time you start a project like the
23	Bramasol project, are you certain what the appropriate
24	design of that is going to be?
25	A No.

1	Q I want to shift actually, I'll do this with
2	Mr. Lord. I'll try to keep moving here.
3	After you finished this production design, and
4	you get these drawings built, what happens to these
5	drawings? Who uses them?
6	A Well, we use them in the field to install.
7	Q 0kay.
8	A Customer gets a copy of them to see what he
9	bought
10	Q 0kay.
11	A dealer, or William Scottsman in this case,
12	has to get a set.
13	Q Okay. The folks in your shop that are
14	building the actual building and all that
15	A Yes.
16	Q would they use these as well?
17	A Yes, they would.
18	Q How do they use these drawings?
19	A To get the dimensions, to get openings, to get
20	everything built. That is their instruction book and
21	notes that the associated notes, instruction book.
22	Q Okay. All right. I want to shift your
23	attention to the Mosque Project, Mosque 1 and 2.
24	A Okay.
25	0 And I'll show you page 7 of Exhibit 21. Can

1	you tell us what this is?
2	A A dome for the Mosque.
3	Q At the time who made this Mosque?
4	A I'm not sure.
5	Q I mean, who actually built the Mosque that I
6	am talking about here?
7	A We did.
8	Q "We" meaning Walden?
9	A "We" meaning Walden.
10	Q That's one of the things we have to be careful
11	for on the record like this. Pronouns can get tricky.
12	So I'm going to ask you an obvious question. I'm trying
13	to protect
14	At the time you guys did this Mosque, had you
15	ever built a dome like this before?
16	A No.
17	MR. DIES: Okay. I want to shift to WSI-0387 which
18	is in Exhibit 21 Edith I'm sorry Exhibit 20.
19	There we go.
20	BY MR. DIES:
21	Q What is depicted in this photograph?
22	A It's depicting the floor and the ceiling that
23	had to be cut out in circles to accommodate the Mosque
24	so that when we were done with it you could look up
25	through it all way to the top

1	Q Okay.
2	A from the first floor to the third.
3	Q 0kay.
4	A Or the second.
5	MR. DIES: And is this is it okay with you guys
6	if I approach these buildings these things to ask
7	questions?
8	JUDGE THOMPSON: Sure.
9	BY MR. DIES:
10	Q Is this structure that this gentleman is
11	standing in a shipping container you were talking about
12	earlier?
13	A Yes.
14	Q And and we're talking about, if you see a
15	barge that has hundreds of rectangular bricks on it that
16	carry all kinds of stuff, that's the shipping containers
17	we are talking about?
18	A Yes.
19	Q What are these things made out of?
20	A They are made they are built in Asia
21	most of them are built in Asia, and they use a panel
22	heavy metal panel, and they have some perimeter frame,
23	and they have columns and four corners.
24	Q Okay. And this hole that's in the shipping
25	container, what does that do to the structure of the

1	container itself?
2	A It loses all of its structure. It needs to be
3	completely redone in order to carry the loads.
4	Q Why?
5	A Because you've cut the mainframe out, it's
6	lost its diaphragm.
7	Q So
8	A The diaphragm container uses all of its
9	diaphragms to maintain strength.
10	Q And when you talk about diaphragms, are we
11	saying are we talking about the size of the
12	contai ner?
13	A No. We are talking about the area that the
14	we are talking about the area of the container that
15	keeps it from moving around.
16	Q Okay. And the idea was that you were going to
17	put that dome we just showed you on top of a hole like
18	this?
19	A Yes.
20	Q To build a Mosque?
21	A Yes.
22	Q And then if a soldier were entering that
23	Mosque to search it and walked into this section of the
24	building, they could look up, I guess, three stories and
25	see the dome just like an real Mosque?

1	A Yes.
2	Q I'd like to show you WSI-0390. Can you tell
3	us what is depicted in this photograph?
4	A That's the unit. You can see the crane hooks
5	and tethers on the crane, and it's being craned into
6	pl ace.
7	Q Okay. We have half a circle here. There
8	would be another unit that was opposite of that one? Is
9	that the idea?
10	A Yes.
11	Q Okay. You mentioned that the structure and
12	integrity of the shipping container is damaged when we
13	cut a big circle out of it like that?
14	A Yes.
15	Q What does Walden have to do to offset the
16	impact of that structural change?
17	A We had to reinforce it. We had to reinforce
18	it in order to go down the road. And once it was in
19	place, we cut that C channel that's closest to us out.
20	Q Okay. You had to so you had to do a
21	special design just to keep it together on the road?
22	A Yes, and lifting.
23	Q Oh. When you talk a C channel
24	A Yes.
25	Q is that this beam in the middle across the

1	semicircle?
2	A Yes.
3	Q Okay. And then, I think, you said you would
4	put this in place and then take that out?
5	A Yes.
6	Q Okay. What are these red beams that are
7	connecting sort of connecting the triangles at the
8	base of the container?
9	A Braces. Braces that are installed to replace
10	the shear that was lost.
11	Q An that was a design that that Walden came
12	up with to fix the weakness caused by cutting those
13	hol es?
14	A Yes.
15	Q And you would have had to test this with
16	engineering calculations and stuff?
17	A Yes.
18	Q And we'll talk about that in some detail in a
19	moment.
20	I want to shift to the Genentech project very
21	bri efl y.
22	By the way, while we are on the subject, at
23	the time you undertook to build the Mosque projects,
24	were you certain about which methods you were going to
25	use to build these things?

1	A No.
2	Q At the time Walden went to build these, were
3	you certain as to the appropriate design of a Mosque
4	made out of shipping containers?
5	A No.
6	Q Okay. We'll put in front of you Exhibit 22
7	very bri efly.
8	This is Genentech. Sir, if you can take a
9	look at Exhibit 22 and get a sense of the building we
10	are talking about. Are you familiar with who Genentech
11	is?
12	A Yes, I am.
13	Q Just at a high level, who is Genentech?
14	A A pharmaceutical company that one of the
15	factories is in just west of Sacramento.
16	MR. DIES: Okay. And, Edith, can you go to the
17	next page for me?
18	BY MR. DIES:
19	Q At a high level, what did Genentech ask you
20	guys to do?
21	A Large space, high ceilings, long spans. They
22	wanted as much open space as they could possibly get.
23	They would fulfill those with cubicles.
24	This was a new product they were working on.
25	They had a lot of employees and no place to put them.

1	Q Okay. And did this project house a
2	substantial amount of equipment computer equipment
3	technol ogy?
4	A Yes.
5	Q And were there unique cabling issues with this
6	particular building?
7	A They had very, very high requirements for
8	cable trays and cabling of all sorts that ran throughout
9	the building, and every location had to have connection
10	to all other locations.
11	Q Okay. Do you know when you built this
12	building what its intended useful life was for
13	Genentech?
14	A We knew it was a least fill.
15	Q What kind of difference does that make in this
16	process?
17	A We sold it to a leasing company who leased it
18	to Genentech.
19	Q Okay. What design constraints does a Leasing
20	company put on you when you build a building that they
21	are going to lease?
22	A Secondary uses. They want to be sure it can
23	be used for something else once it comes back.
24	Q Okay. So you had to not only design this to
25	meet the Genentech needs, but it had to be able to be

taken apart and then used separately? Tell me what that 1 means. 2 Well, this is -- I forget how many units, 23, 3 Α 26 units, something like that. 4 0 23. 5 So there's 23 units. They may want to use 6 7 five units that are four wide, or they may want to make 8 ten -- two buildings that are ten wide, or they may want 9 to make eleven buildings that are double wide. Two sections when I say double wide, that's 10 11 two sections could be separated, build a sidewall, and now you have a 24 by 72 as opposed -- so all these 12 13 buildings have to be self-supporting. They had to be -as far as mechanical and structural, they had to be all 14 self-supporting. 15 0 And you mentioned that this building is 16 Okay. tall as well? 17 Yes. 18 Α What difference does that make in the module 19 20 industry for your purposes? 21 Α Again, transportation is a big part of it. There's also wind loads and how you support it at that 22 23 height. 24 Q Okay. At the outset of this project, did you 25 have certainty as to what methods you were going to use

to design this particular space? 1 Α We -- these are -- this all comes from a 2 No. schematic idea, what they think, and how they think they 3 might use it. 4 It's pretty common in most construction 5 The owner comes and says we want to do this, 6 7 and these are our requirements. We need to have 8 nine-foot ceilings because the space is so large that if 9 you come down to something less than that, then it appears -- it becomes very myopic, not good working 10 conditions. 11 0 Did Walden -- did Walden have certainty as to 12 13 the appropriate design of this at the outset before you began to put your drawings together? 14 Α No. 15 0 How many revisions do we see in this 16 17 particular --18 Α This one has three. And this was just for this stage of the 19 drawing; is that correct? 20 Α Yes. 21 22 0 Does that mean there were only three revisions at all in the whole building? 23 Α 24 No. Okay. 25 Q

Α Maybe -- I'm not sure if it would help. Maybe 1 I'm going to confuse things. 2 Walden could bid this same building to a 3 number of different dealers who asked for it in a 4 5 different way. 0 And each different way would require 6 Okay. 7 different designs? Α Yes. 8 9 Q Okay. Let me ask you -- one of my colleagues just pointed out I did not ask these questions on 10 Bramasol. I'll be quickly -- I'll be quick. 11 In the Bramasol project, which was the one 12 with the parapet, the steel pump columns, did Walden 13 have certainty as to the methods it was going to use to 14 build those parapets at the time it undertook the 15 project? 16 17 Α No. In the Bramasol project, did Walden have 18 0 certainty as to the appropriate design for the trusses 19 and the supports and all these things to handle that 20 wind Ioad? 21 Α 22 No. All right. Very briefly, I want to move to 23 Q Ynez Elementary School. And, again, we'll dive into 24 25 some of the specifics with Mr. Lord, but at a high

level, I'd like to talk about the school. 1 Is that 20? Ynez 25 and 26. 2 Do you know at the time you start -- you 3 undertook to design Ynez Elementary School if Walden had 4 ever done a project like this before? 5 Α No. 6 No, you don't know? 7 Q We had not done a project like this. Α 9 Q 0kay. At the outset of the Ynez School project, did Walden have certainty as to the methods it 10 was going to use to solve the problems that the project 11 presented? 12 13 Α No. At the outset, did Walden know which 14 0 appropriate design it was going to use? 15 Α No. 16 Or what the appropriate design was? 17 0 No. Α 18 If I am trying to fire rate a corridor in a 19 20 modular building, what am I doing? Α You are protecting access and egress, exit --21 exit from the product in case the school catches on 22 23 fire, so you have to give children a way out. 24 Q 0kay. Meaning, that a hallway -- the fire 25 can't penetrate the corner -- the square -- the four

1	dimensions of that hallway in enough time for the kids
2	to get out of the school?
3	A Yes. They have so much time to get out.
4	Q Okay. And if we are talking about modular
5	construction, and that corridor is over the matelines,
6	which is where the two parts of the building meet, does
7	that create any challenges?
8	A Yes, because every 12 feet there is a line
9	that goes through to the roof. So you have to come up
10	with a U.L. approved assembly which allows us to do
11	that.
12	Q Why does why does that line every 12 feet
13	matter?
14	A Because it's very difficult to keep fire from
15	going through an opening. There's a separation between
16	the framing. And all you have is the drywall. That
17	doesn't qualify as protection.
18	Q Okay. In the interest of time, I am well,
19	we will deal with Welk Resort with Mr. Lord.
20	I want to shift finally with you, sir, to
21	Mammoth Lakes. This is a project which is depicted in
22	Exhi bi t 17.
23	At a high level, sir, can you tell us what the
24	Mammoth Lakes Project was?
25	A It's it's a lodging in Mammoth Lakes, one

1	of the highest earthquake areas in the world, excessive			
2	snow loads, high winds, bad weather, short building			
3	season.			
4	MR. DIES: Okay. And if we can shift to page 2 of			
5	that exhibit, Edith?			
6	BY MR. DIES:			
7	Q This is a dormitory?			
8	A Yes.			
9	Q The document said "Dormitory Project." That's			
10	not a scientific explanation for			
11	A It could be lodging or for housing.			
12	Q Oh, I'm okay. Why would they need a			
13	modular solution for a project like this in Mammoth			
14	Lakes?			
15	A Because building in Mammoth Lakes is so			
16	difficult, and they are underserved. And they were			
17	expecting on making it bigger			
18	THE REPORTER: I am sorry			
19	THE WITNESS: Sorry.			
20	BY MR. DIES:			
21	Q Why do I want to use a modular solution for			
22	Mammoth Lakes dormitories?			
23	A Well, it is very good solution for a short			
24	building season, because so much square footage can be			
25	completed and drive in in that short season.			

Q Why -- but why can so much be completed 0kay. 1 in a short time? What makes this different than a 2 sticks-and-stones approach? 3 Α We are delivering the project about 95 4 percent -- 90 to 95 percent complete. 5 0 6 0kay. 7 Each one of those sections on the interior is 95 percent complete. 8 9 Q 0kay. So there are toilets and everything already in the rooms, and you are basically just 10 stacking them on top of each other? 11 Α Yes. 12 13 Q Two-story --Α Yes. 14 0 -- design. 15 You mentioned something about snow loads. 16 17 Tell me a little bit about that with this project in this area. 18 In this particular -- in this particular 19 20 project, they stack the roofs. They brought in trusses. Their intention was to bring in trusses and stack them 21 inside our buildings. So we have to take those loads 22 23 from the end of our building down to the foundation and assist in the design of the foundation to carry those 24

25

I oads.

1	Q Okay. Did the building ever get built, sir?
2	A No.
3	Q Why not?
4	A I really don't have the exact answer, but it
5	was a very challenging building. Price just kept going
6	up. Architect did not cooperate to find reasons not to,
7	so it got canceled.
8	Q But ultimately, Walden went through much of
9	its design process for this just to discover that
10	ultimately it wasn't buildable?
11	A Yes.
12	Q At the time Walden undertook the Mammoth Lake
13	dormitories project, did it have certainties as to the
14	methods that were going to used to solve these problems
15	with snow loads and building in the mountains and
16	seismic?
17	A Only at only at a concept level.
18	Q Okay. And did Walden have certainty as to the
19	appropriate design the best appropriate design for
20	this structure before it began the process?
21	A No.
22	Q To your knowledge, had Walden ever built
23	anything like the Mammoth Lake dormitories for the kinds
24	of constraints being called for at the time it undertook
25	this project?

1	A No.			
2	Q Very quickly, sir, and we're actually making			
3	okay time.			
4	JUDGE BRAMHALL: Can I ask one question?			
5	MR. DIES: Yes.			
6	JUDGE BRAMHALL: I was unclear why it wasn't built.			
7	Was it the feasibility of the project or the cost of the			
8	proj ect?			
9	THE WITNESS: You know, we don't know. The owner			
10	just decided to pull the plug and didn't build it.			
11	We suspect a number of things, but they are			
12	just pure speculation.			
13	JUDGE BRAMHALL: All right. Thank you.			
14	BY MR. DIES:			
15	Q But to take into that, was was part of the			
16	issue that every time you began to solve these problems,			
17	cost went up?			
18	A That was part of it, yes.			
19	Q 0kay.			
20	JUDGE BRAMHALL: Good.			
21	MR. DIES: You know what I mean? I just want to			
22	make sure we're all on the			
23	BY MR. DIES:			
24	Q Okay. Very quickly. I want to introduce I			
25	want to you talk very briefly about a colleague named			

Kip Anderson, if that's all right. 1 Α Yes. 2 0 Can you tell us who Kip Anderson was? 3 Kip Anderson was a very dear friend of mine. 4 Α 5 He had been in the industry from about the same time, 1977. He came in to Walden Structures about 2003 or --6 7 I'm not sure of the time. Q 0kay. 9 Α And he helped develop a lot of these He had -- he brought some very unique skill processes. 10 11 He brought both structural skill sets and mechanical and electrical, and a wealth of experience 12 13 with high-end modular products. 14 Q And -- go ahead. So he was -- he was really like having almost 15 an advisory team on staff. And so he was very, very 16 17 helpful to Kevin and myself, and we would work these 18 things out. But he had a lot of input in how how to solve some of these issues that came up. 19 20 Q So -- so you mentioned Kevin being on the 21 engineering side. Which side of your process was Kip on? 22 23 Α He was over it all. 24 Q 0kay. 25 Α He ran it all. The plant -- he ran the plant

1	and the design and ran everything.
2	Q Okay. And and Mr. Anderson has passed; is
3	that correct?
4	A Yes, he did.
5	Q But at the time we are talking about, '03 to
6	'06, he would have been a person who was involved in all
7	these things?
8	A Every design meeting. Every design meeting
9	that occurred, he was probably involved in.
10	Q 0kay.
11	MR. DIES: May I just have two seconds to confer
12	with my colleague?
13	JUDGE THOMPSON: Okay.
14	MR. DIES: I may have a few redirect questions or
15	something like that, your Honor, but at this point
16	that's all I have for Mr. Walden.
17	JUDGE THOMPSON: Thank you. I appreciate the
18	discussion of the specific projects. I appreciate you
19	keeping the the discussion focused.
20	Yeah. Just just a comment. I'm hoping,
21	Mr. Walden, you will be able to stay around today.
22	THE WITNESS: Yes.
23	JUDGE THOMPSON: After we hear from Mr. Lord and
24	the witnesses, if possible, we may have questions. It
25	might be helpful if you could have Mr. Walden back.

1	MR. DIES: I believe we are all here today.
2	Mr. Minor, are you going to be here?
3	That shouldn't be an issue.
4	JUDGE THOMPSON: Ms. Kuduk, would a five-minute
5	break be helpful?
6	MS. KUDUK: Yes.
7	JUDGE THOMPSON: Why don't we do that? It would be
8	helpful to me as well.
9	We will get started at 10:40.
10	We are in recess.
11	(Off the record.)
12	JUDGE THOMPSON: All right. We are back on the
13	record.
14	So now, Mr. Walden, Franchise Tax Board
15	attorneys are going to have a chance to ask you
16	questi ons.
17	THE WITNESS: Sure.
18	JUDGE THOMPSON: And you may get some questions
19	from some of the Panel members as well. We may have
20	some questions after we hear some of the other
21	questi ons.
22	THE WITNESS: Okay.
23	JUDGE THOMPSON: Franchi se Tax Board, whenever you
24	are ready.
25	MR. ROUSE: I also have fast-talking problem. I'll

1	do my best.
2	MR. DIES: Trying to keep you on your toes this
3	morni ng.
4	
5	CROSS-EXAMINATION
6	BY MR. ROUSE:
7	Q Mr. Walden, good morning.
8	A Good morning.
9	Q I want to my questions are going to, kind
10	of, track what you just stated on direct examination,
11	and I'll have a few other ones, a few other outlining
12	questi ons.
13	Sir, when you were talking about your
14	background, you mentioned "fixed construction." What is
15	that?
16	A Site construction.
17	Q As opposed to the modular building?
18	A As opposed to modular, yes.
19	Q And you said the kinds of projects that you
20	did well, let me back up.
21	I'm going to use "you," but obviously I mean
22	the company. So I might say "you" or "your," but I am
23	referring to the company itself.
24	A Okay.
25	Q You said '03 to '06 you mostly did office

1	space at Air Force bases; is that correct?
2	A Yes.
3	Q Okay. And what did those building look like?
4	If you can just give a quick
5	A They would be I'm sorry. I didn't mean to
6	do that. I'm trying not to do that.
7	Q All right.
8	A So they would be very, very similar to what we
9	built for for for Genentech, except more in line
10	with what's easily shipped, strictly practical space.
11	There's no design component to them for that particular
12	product.
13	Q Well, I assume and you have to forgive me.
14	I'm not an engineer. I assume there's four walls, a
15	roof, and a floor?
16	A Yes.
17	Q What shape is it in? Is it rectangle?
18	Square?
19	A Normally rectangle.
20	Q Okay. And do you know the standard dimensions
21	of something like that?
22	A Normally 12 feet wide and 60 feet long.
23	Q Okay. And you say "normally." Were there
24	office spaces that you did at these Air Force bases that
25	deviated from that?

1	A In some cases, there were special-use
2	buildings for communications or other things that had to
3	be modified or done differently. We designed
4	differently, separately from the normal product.
5	Q So would that use something other than your
6	standard 12 by 60?
7	A In some cases.
8	Q All right. Would you consider that one of
9	your standard projects or one of your more complex
10	proj ects?
11	A We would consider that a more custom product.
12	Q All right. And you mentioned, you had used
13	the term "stock building" used for your construction
14	busi ness.
15	That office space that you just described that
16	the company would do at the Air Force bases, would that
17	be one of your stock buildings?
18	A More of a stock product, yes.
19	Q Not your 12 by 60?
20	A Yes.
21	Q Now, you already had those built in your
22	factory? Or was that something you had to put together
23	when the customer ordered it?
24	A No. We didn't build anything from stock. We
25	didn't build anything for inventory. We had no standing

inventory. 1 0 Okay. So if -- if I'm in the military, I come 2 3 to you, and I say, "Hey, I need office space. I want one of your standard units." Can you describe the 4 5 process the company would go through to provide that to me? 6 It would be -- it would be very similar to 7 other projects. 8 It would have to be looked at in size and 9 quantity, and then what we use, how we get enough shear 10 to hold the building. Again, where it was going, what 11 type of foundation, how long they were going to use it. 12 Those sorts of things. 13 0 But it would still be the 12 by 60 dimensions? 14 Α Yes. 15 0 Okay. So that is still -- you would actually 16 17 design that outright? Α Yes. 18 And send it to your -- as you call your 19 production team that would actually build the structure? 20 Α Well, it's as lot more coordinated than that 21 There's a lot more going on during the 22 conversation. 23 It's a very similar process each and every process. time. 24 25 All right. Between standard and complex? Q

1	A Yes.
2	Q All right. And you said your use of the stock
3	buildings was about 30 to 35 percent of your business?
4	A Strictly a guess.
5	Q Right. But in that range?
6	A It's a long time ago.
7	Q Okay. I think Mr. Lord said 40, but the same
8	range.
9	You mentioned your role at the company. You
10	said you were the C.E.O., and I believe you said 99
11	percent of your 99 percent of the contact with the
12	client came from you; is that accurate?
13	A I opened up most of the negotiations.
14	Q Okay. What was your, for lack of a better
15	phrase, your technical involvement in the project?
16	A The staff had been with me long enough to know
17	when I needed to be involved. And I watched the
18	production schedule. I watched I saw the production
19	growing, those kinds of things. I could see where
20	something was coming in.
21	Normally, if it was more complex, then the
22	customers would come to me even first and talk about it
23	conceptual I y.
24	Q Are you an engineer?
25	A No.

1	Q	Or an architect?
2	А	No.
3	Q	What is your
4	А	Contractor.
5	Q	Contractor. Construction industry; right?
6		Would you draw the designs at all?
7	А	I might. And I might dress up the napkin a
8	bi t.	
9	Q	And but you wouldn't do any of the
10	cal cul ati	ons, anything like that?
11	А	No, sir.
12	Q	Now, you mentioned the napkin. On the six
13	proj ects	we are dealing with here, I know the Mosque 1
14	and 2 pro	ject here, who was the client there? Do you
15	remember?	I think was it Allied Container?
16	А	Yes.
17	Q	And what do they do?
18	А	They they have a lot of military contacts.
19	In this p	articular case, they did a lot of site work and
20	prepared	adjacent and ancillary things as part of the
21	contract.	They would purchase the building from us and
22	sold them	to the government.
23	Q	Do they build their own modular structures?
24	А	No.
25	Q	What about William Scottsman?

1	A Same thing.
2	Q Okay. They are not the module builder?
3	A No.
4	Q And Performance Modular?
5	A Same thing.
6	Q So outside of maybe contracting with a company
7	like yours, do you know if they have any specific
8	activity that they do on their own? By "them," I mean
9	Allied Container and Performance Modular.
10	A Allied Container was a was only only was
11	a military provider of a number of different things, but
12	this these buildings are part of that.
13	Q When you say "provider," do they build
14	buildings for them?
15	A No, no. They don't build anything. They buy
16	from us. ACS buys those products from us, sells it to
17	the military. They do go and produce in some cases,
18	they go do on-site preparation. They in some cases,
19	they build the foundations.
20	They do other things, but it has nothing to
21	with modulars.
22	Q Okay. And Performance Modular, that is weird,
23	because they have modular. They don't build modular or
24	anythi ng?
25	A No.

1	Q What do they do?		
2	A The same exact thing. They are dealers. They		
3	have stock product. They deliver construction trailers		
4	and all those kinds of things. But because of that,		
5	they get a lot of people who know them, who would come		
6	to them wanting to do a custom building, or provide		
7	custom buildings. They don't build them.		
8	Q So essentially, these companies are general		
9	contractors?		
10	A They have a general contractor's license.		
11	Q Okay. What percentage of your business if		
12	you don't know, it's fine. What percent of your		
13	business consists of a customer coming directly to you		
14	to build complex projects?		
15	A I don't know.		
16	Q All right.		
17	On staying with the napkin theme.		
18	On all six of these projects, did the customer		
19	provide you with some type of drawing when they		
20	initiated the contact with you to let you know what they		
21	wanted?		
22	A I think it's appropriate to say some type of		
23	drawi ng.		
24	Q Okay. I assume they weren't napkins. Can you		
25	describe what kind of drawings you would get?		

1	A Every case is different. It could be could			
2	be eight and a half by eleven. It could be on a yellow			
3	pad. It could be on lot of things, especially with the			
4	military. The base commanders just saw something they			
5	wanted, and they had the budget to do it with these			
6	particular product the container product			
7	Q Yeah.			
8	A They said, "How could you do that?" That's			
9	how the Mosque came along.			
10	Q 0kay.			
11	A "We want to see this."			
12	Q Do you know whether we have those initial			
13	drawings that the customer would give you in our			
14	exhi bi ts here?			
15	A I don't know. I don't think so. I don't			
16	think we got them. Oh, we may have passed our hands,			
17	but we certainly don't have them.			
18	Q Oh, okay. You would have what would you			
19	have done with them?			
20	A With the project at all, we would convert it			
21	to something we could use to design.			
22	Q But the initial document, you would have just			
23	thrown that away?			
24	A Probably threw it away, and they probably came			
25	back later with a request for a quotation.			

1	Q So you don't remember specifically with				
2	respect to these six projects what you would have				
3	received initially, whether it would have been something				
4	more complicated like the drawing that we that				
5	Mr. Dies has been putting up here or whether it was				
6	something just on a yellow-sized legal pad?				
7	A No.				
8	Q Okay.				
9	JUDGE THOMPSON: Mr. Walden, you might pull the				
10	microphone a little closer to you.				
11	MR. DIES: I was thinking the same thing.				
12	BY MR. ROUSE:				
13	Q I know the logistics are difficult. I'm				
14	trying to look at you, and you are trying to look at me,				
15	I'm trying to look at you.				
16	You mentioned on the drawings that we looked				
17	at the portions of the drawings that had what Mr. Dies				
18	referred to as "clouds" represent revisions.				
19	A Yes, sir.				
20	Q And those are revisions. From what I assume,				
21	you are revising something, so there's something before				
22	that. What are you revising?				
23	A Well, once we have we have done the				
24	preliminary drawings, we send the revisions we send				
25	the preliminary drawings out to be signed off by the				

owner.

And so it could have been from the owner. The owner could have changed something or doorways or lights or all sorts of things.

It could also have been a result of getting the additional engineering to find out it wasn't what we thought it was.

Q Does the cloud tell us why the revisions were made?

A No.

O Is there anything on those drawings that we saw -- forgive me. I'm trying to be mindful of the time, so I'm referring to things in clumps. If there is any particular project you want to point out, let me know. I'm trying to lump as many things together so we can get through this.

Is there anything about the clouds that we saw on these diagrams that Mr. Dies put up on the wall that would indicate to us why the revisions were requested or why they were made?

A No.

Q So it's fair to say that the portions of the diagram that did not have clouds around them, there were no revisions to that portion; right?

A At that point, right.

1	Q All right. Can you explain to me again I				
2	think you defined it on direct examination, but I was a				
3	little confused. What is a parapet?				
4	A A parapet in this case, as it is applied here,				
5	is it's a screen wall that goes around the exterior of				
6	building for some reason, either because they want to				
7	make the building look taller, or because they want to				
8	protect it so no one can see the mechanical equipment,				
9	or they want to create a screen wall above the roof				
10	line.				
11	Q When you say a "screen wall," what what				
12	would be the purpose of a screen wall? What is a screen				
13	wall?				
14	A Well, that's that's that wall that's on the				
15	roof. It's a screen. It's a framed wall just like a				
16	wall below. It's an extension of the wall below.				
17	But it could be there for a technical reason.				
18	That building could have been set close to another				
19	building which requires fire separation 36 inches above				
20	the roof line.				
21	It could be lots of reasons.				
22	Q All right. With respect to the Bramasol case,				
23	I think that's the first project where you mentioned a				
24	parapet. Do you know why they wanted a parapet?				

25

A I think -- no. That one I don't know. I'm

1	sorry.			
2	Q No, don't apologize. To the extent you don't			
3	know, that's fine.			
4	And what is a truss?			
5	A A truss. A truss that we use for most of			
6	product is a is a specially designed open-web truss,			
7	has a steel core on the bottom and steel core on the			
8	top, and intermediate diagonals which were welded off to			
9	give it strength.			
10	Q Is that			
11	A And those wells and those angles are very,			
12	very specific to that truss and for that load and for			
13	that span.			
14	Q Is a truss is the term "truss" always used			
15	in terms of a developing a roof?			
16	A There is a roof that goes on top of the truss,			
17	yes.			
18	Q Okay. So I guess I'm picturing it like the			
19	truss that is the framing for the roof; is that fair or			
20	too vague?			
21	A It's the support. It's it's the support			
22	for the roof.			
23	Q 0kay.			
24	A Structural support.			
25	Q Okay. Do you have any idea what percentage of			

your projects that you did for these tax years '03 to 1 '06 had parapets? 2 Α No, I don't. 3 Do you know whether -- prior to the Bramasol 4 0 5 project, whether the company had constructed a parapet before? 6 7 No. I don't. Α In the audits -- FTB audits interview summary Q 8 9 with Mr. Lord, he mentioned a clear-span roof truss. and I think you just mentioned a clear-span roof truss. 10 11 Α Yes, sir. What is that in terms of -- I just asked you 12 Q what a truss is, but what is a clear span roof truss? 13 Well, let's use this office -- this building 14 Α we are sitting in right now. 15 0 Sure. 16 Between that column right there and this 17 Α column right here, that's a clear span. It has no 18 19 additional support. 20 Q Okay. And do you use that on all of your bui I di ngs? 21 22 We like to use it when we can. It makes the 23 building much more flexible. Do you know if it was used on these six 24 Q projects? 25

1	A No, I don't.			
2	Q So the six projects that we're talking about			
3	today, you would not consider your standardized			
4	projects; is that accurate?			
5	A Yes.			
6	Q Okay. So the documents for Bramasol,			
7	Genentech, and the Welk project mentioned a I think			
8	it said SPS-1000. Do you know what that is?			
9	JUDGE THOMPSON: Mr. Rouse, can you repeat what you			
10	just said?			
11	MR. ROUSE: It was Bramasol, Genentech, and Welk.			
12	BY MR. ROUSE:			
13	Q And the quote on all those was it was,			
14	those projects were based in part on SP which I			
15	believe stands for "structural package" S-1000.			
16	Do you know what that is?			
17	A I know we had structural packages, yes.			
18	Q Do you know what			
19	A I don't know specifically			
20	THE REPORTER: I'm sorry.			
21	THE WITNESS: I don't know specifically what that			
22	SP-1000 is for.			
23	BY MR. ROUSE:			
24	Q Does the stock project that you referenced			
25	earlier have a structural package number?			

A Yes.			
Q What is that?			
A I don't know. I don't know.			
Q Okay. It could be S-1000?			
A Could be.			
Q 0kay.			
A I think SP stands for special.			
Q Okay. So when a design says it's based on			
either a special package or structural package, as you			
referred to it earlier, what would that mean? Is that			
something that was already created and incorporated in			
this project?			
A It would mean it's not the standard product			
stock. We have a certain amount of buildings that are			
all the same. That is SP in my mind. I believe that is			
how we designated it's different than that.			
Q I think I'm getting confused.			
A Me too.			
Q And some of these questions may be for			
Mr. Lord. I'm trying to see what you know.			
But Bramasol, Welk, and Genentech say they are			
based in part on SPS-1000. Those I assume those			
projects were not done at the same time, so to the			
extent S-1000 was incorporated into the Bramasol			
Project, and it was also incorporated into a later			

1	project. Then what I guess I am asking you is that			
2	design for that S-1000 package would have already been			
3	created; right?			
4	A I don't know the answer to that.			
5	Q Okay. On the Bramasol project you mentioned			
6	you said the company never had to deal with a parapet of			
7	that type. You are not saying that they had never done			
8	parapets before. You are saying you had never designed			
9	that exact type of parapet before?			
10	A I believe that's true.			
11	Q All right. Also with respect to Bramasol,			
12	you in addition to the parapet, you also mentioned			
13	that you had to account for the wind load. What is			
14	"wind load"?			
15	A Depending on what location you are in in this			
16	country.			
17	The entire country has wind low charts that			
18	tell you how much load is going to go against the side			
19	of the building.			
20	Q Do you know if any projects before Bramasol			
21	whether or not you had to account for wind load with any			
22	part of the structure?			
23	A Yes.			
24	Q Okay. Is that a calculation that would need			
25	to be done to determine how to design that structure to			

1	account for the wind Load?			
2	A Yes.			
3	Q With respect to all of the projects, you			
4	said Mr. Dies asked you whether you were certain what			
5	the appropriate design would be, and you said no, you			
6	weren't certain; correct?			
7	A Yes.			
8	Q Why not?			
9	A Because there's too many variables. I don't			
10	have any answers.			
11	Q All right.			
12	A It's like asking me how much a house costs.			
13	Are we are talking about one in Newport Beach? Are we			
14	talking one in there's too many variables.			
15	It starts out conceptually.			
16	Q Were you			
17	A Broad numbers based on conception.			
18	Q Or even houses next door to each other, you			
19	may not know what they are worth.			
20	A Exactly.			
21	Q But you could probably find out; right?			
22	A I'm sorry?			
23	Q You could probably find out what a house is			
24	worth?			
25	A If you want to sell it, maybe, you can find			

out, yes. 1 And at some point you can find out whether you 2 0 can design this project that a customer is coming and 3 asking you to design? 4 5 Α Over a period of time, yes. All right. In general -- this may be a 6 0 7 question for Mr. Lord, but, in general, what information would you need to become certain about the appropriate 8 9 design of a complex project? Α We would have to go through the process. 10 11 0 And what would that process be? The process would be approaching all the 12 Α 13 different disciplines and looking at the process along with the owner to find out what they wanted. 14 So on all six of these projects, you received 15 0 some type of either schematic or drawing from the 16 17 customer; is that correct? 18 Α Yes. Some concept of what he wanted. 19 0kay. So at that point you knew what they 20 needed, what they were requiring, and it was your job to determine whether it could be done? 21 22 Α We basically use square footage and 23 requirements. And part of your job was to determine whether 24 Q 25 or not this design could be done within regulatory

1	requirements; is that correct?			
2	A Yes.			
3	Q And you had staff on hand that knew those			
4	requirements?			
5	A Yes. We have code books.			
6	Q Okay. So you could look in the books and			
7	decide or determine what what the requirements were			
8	based on what the customer has given you; right? because			
9	you have to coincide with the regulatory requirements			
10	with what the customer has given you for their			
11	requirements; right?			
12	A Yes.			
13	Q You had experienced engineers on your staff?			
14	A No. We had people experienced in building			
15	buildings, and we used outside engineers to do designs			
16	and calculations.			
17	Q So what you are saying is you did not employ			
18	engi neers?			
19	A No.			
20	Q All right. So you used outside engineers?			
21	A Yes.			
22	Q And they were independent contractors?			
23	A I'm sorry?			
24	Q They were independent contractors?			
25	A Yes.			

1	Q And did you have to have software?			
2	A No.			
3	Q That came from the engineers?			
4	A Not in that period of time.			
5	We had some basic elementary at that period			
6	of time, no, we just drew it.			
7	I don't know which version we had, but we			
8	didn't have what you are talking about, the versions			
9	they have today, we weren't even close to that.			
10	Q Was it called CAD?			
11	A I'm not sure.			
12	Q Okay. I think the documents refer to CAD			
13	software.			
14	A They are probably right.			
15	Q Okay. But you don't know for sure?			
16	A No.			
17	Q So the engineer that you would, I guess,			
18	hire well, let me back up.			
19	Was Mr. Lord your employee, or was he an			
20	independent contractor?			
21	A He was an employee.			
22	Q And he's an engineer?			
23	A No.			
24	Q He was not an engineer?			
25	A No.			

Q	He was director of engineering?	
А	Yes.	
Q	And he had people that worked under him?	
А	Yes.	
Q	So when you hired engineers, they reported to	
Mr. Lord?		
А	Mr. Lord oversaw their conversations, and	
what what they were directed to do and their fee		
schedul e.		
Q	Okay. So you had no engineers on your staff	
as employees?		
А	No, sir.	
Q	Did you have draftsmen that you employed?	
А	Yes.	
Q	Okay. What did the draftsmen do?	
А	I'm not sure. I don't know what you are	
asking me	·.	
Q	What was their job?	
А	They drew the drawings.	
Q	Okay. But they didn't do any of the	
cal cul ati ons?		
А	No.	
Q	So based on what the engineers gave them, they	
did the d	rawi ngs?	
А	Yes.	
	A Q A Q Mr. Lord? A what w schedule. Q as employ A Q A Q A Q A asking me Q A Q calculati A Q did the d	

So I'm -- I'm going to name off a couple -- a Q 1 few people here, and I'd like you to tell me whether 2 they were employees of your company or not. 3 Jeremy Ray Brown. 4 5 Α Yes, employee. 0 Jeremy, J-e-r-e-m-y, Ray, R-a-y, and Brown? 6 7 Did the company have something that you referred to as the Engineering Department? 8 9 Α Yes. Ms. Adrian Diaz, A-d-r-i-a-n, D-i-a-z. 10 Q I don't remember her. 11 Α Q Frederico Boquin, F-e-d-e-r-i-c-o, last name 12 13 B-o-q-u-i -n? I'm sorry. That's a question for Mr. Lord. 14 Α don't remember him. 15 0 Jerry Garcia? 16 17 Α I remember him. You do or don't? 18 0 19 Α Yes. Employee. Francisco Gaspar, G-a-s-p-a-r? 20 Q Α I don't remember. 21 22 0 Douglas Hicks, H-i-c-k-s. 23 Α I don't remember. And a Kevin Collins? 24 Q 25 Α Yes, he was an employee.

1	Q So Jeremy Ray Brown, Jerry Garcia, and Kevin
2	Collins you do remember being employees but not
3	engi neers?
4	A They are not engineers.
5	Q Okay. But you remember them being draftsmen?
6	A Yes.
7	JUDGE THOMPSON: It sounds like it would be
8	possible that Mr. Walden can come back up if there was
9	other questions after Mr. Lord's.
10	MR. DIES: Yes, sir.
11	MR. ROUSE: I think I only have a couple more
12	thi ngs.
13	BY MR. ROUSE:
14	Q What problems did you encounter with the Ynez
15	Elementary Project?
16	A Only one I remember specifically, was the
17	there was some site constraints. It was a single-story
18	building. I just changed it to a multi-story building,
19	and there was a corridor was the biggest issue.
20	Q Okay. And with Mammoth Mammoth Lakes, you
21	mentioned the snow Load problem. Were there any other
22	difficulties that you encountered at that project other
23	than the fact that it didn't get completed?
24	A They had a they wanted to use a very
25	sophisticated boiler system that we never had had

1	experience with.
2	There were other things like that they chose
3	that were appropriate for the area, but we never had any
4	experience doing that.
5	MR. ROUSE: Okay. Judge, that's all I have for
6	now.
7	JUDGE THOMPSON: Thank you. Any redirect?
8	MR. DIES: I think I'm going to take up most of the
9	redirect with Mr. Lord. We can always bring him back
10	and answer more questions.
11	JUDGE THOMPSON: Are there any questions from my
12	Co-panel s?
13	JUDGE CHENG: No.
14	JUDGE BRAMHALL: No.
15	JUDGE THOMPSON: Thank you very much.
16	PI ease proceed.
17	MR. DIES: Do you need to swear him in?
18	JUDGE THOMPSON: Thank you.
19	Could you raise your right hand?
20	
21	KEVIN LORD,
22	called as a witness on behalf of the Appellant, having
23	been first duly sworn by the Lead Panelist, was examined
24	and testified as follows:
25	THE WITNESS: I do.

1	JUDGE THOMPSON: Thank you.
2	
3	DIRECT EXAMINATION
4	BY MR. DIES:
5	Q Sir, could you tell us your name?
6	A My name is Kevin Lord.
7	MR. ROUSE: Can you speak out? It's hard to hear.
8	They have some noise going on.
9	I think they left.
10	JUDGE THOMPSON: Okay. Thank you for speaking up.
11	Mr. Lord, you want to keep the mike pretty
12	close, please, when you speak.
13	THE WITNESS: Okay.
14	BY MR. DIES:
15	Q Mr. Lord, can you tell us a little bit about
16	yourself and your background?
17	A Sure. Well, pretty much my entire career,
18	about 38 years, has been been spent in one shape or
19	form, modular.
20	The first 12 years of my career, I spent in
21	manufactured housing, site and modular construction.
22	And I spent the last 26 years working for various
23	companies on the commercial side of modular building
24	construction.
25	Q And

1	A Most most of my background is to do on the
2	drafting/engineering side, wide range understanding of
3	construction techniques and whatnot. Code
4	Q And, Mr. Lord, at a high level, I think you
5	were present when Mr. Walden was asked some questions
6	about engineering. Are you a P.E. licensed engineer?
7	A No, I'm not.
8	Q Does that mean you don't do engineering?
9	A Well, that's a pretty wide term. Most
10	certainly I do not perform calculations that we had
11	structural engineers perform for us.
12	Q Okay. But do you you oversaw a team called
13	the engineering team. What physically did those folks
14	do?
15	A Well, at a couple of different levels, so
16	during this time period, I was actually an engineering
17	manager. We had at multiple times during the
18	company, we had to sometimes as high as four engineer
19	managers. Under each engineering manager would be a
20	draftsman.
21	So after sometime in late 2006, 2007, I took
22	on the director of engineering position.
23	Q Okay. Mr. Walden was asked some questions
24	about whether we did our own drawings or had the ability
25	to draw or do CAD during this time period.

1	What was your memory with respect to the
2	technology you were using? What was available to you?
3	A We used a program called AutoCAD. And there's
4	various during the years, there's new levels of it
5	that comes out, but we used AutoCAD which is the
6	computer-assisted drafting.
7	Q And these drawings that have Walden's name on
8	them, who did these drawings?
9	A Our draftsmen.
10	Q At whose instructions?
11	A At the supervisors', so myself, Dan Lambert,
12	Kevi n Juhnke.
13	Q Can you spell Kevin Juhnke?
14	A J-u-h-n-k-e.
15	Q And we're going to go into some detail in a
16	moment, but the physical the physical items that
17	exist on Walden drawings would have been drawn by
18	employees at Walden at y'all's instruction, meaning the
19	supervi si ng engi neers?
20	A Yes.
21	Q Okay. If I can, in the interest of time, I'd
22	like to direct your attention to the actual design
23	process that Walden went through for its projects.
24	Actually, before I do that, I want to revisit
25	one other thing.

You heard some discussion about stock buildings?

A Yes.

Q These were the buildings going on construction sites and such?

A So from a very high level, Walden Construction was a wholesale manufacturer, so, in other words, we did not sell directly to retail. We sold to what we call dealers. So we had a lot of dealers. The dealers offered varying products anywhere from eight-by-twenty special-purpose commercial modular to double wides, triple wides, five wides, six wides. And -- and that's what we call stock product.

Q Okay. If you had already designed and drawn a building, put it together, and then made that part of your offering for those folks selling stock products, and someone came in and ordered another one of those, would we need new drawings or new things from you, your engineering team, and so on, or would they just build what they had already done?

A Well, it really -- there's a lot of -there's -- there's a lot of variables to that, so
depending on the time line, plans could -- code year
could have expired, so we may have had to have updated
plan.

1	So first off, it was our dealers that had the
2	standard offering of floor plans, what their building
3	looked like, what it included.
4	And so we had just files and files and files
5	of all of our dealers' standard products. So when a
6	dealer come to us and they wanted to buy a certain
7	product, oftentimes, we had that already developed.
8	Q 0kay.
9	A Not all the time.
10	Q Okay. You heard Bramasol, Genentech, and Welk
11	being compared to each other?
12	A Yes.
13	Q Are any of those three stock products?
14	A None whatsoever.
15	Q Are any of those three even similar?
16	A Only similarities that they most likely
17	transport on tires with a hitch.
18	Q So lumping them together under an SP-1000
19	label well let me back up.
20	Do you know what this SP-1000 label is that
21	was asked about?
22	A Yes, sir.
23	Q Tell us what that is.
24	A So in an overall scope, California Department
25	of Housing and Community Development, they allow us to

1 have a structural package on file. And the structural package could be whatever the manufacturer wants it to 2 be, but we had designed it to, basically, enable us to 3 quickly respond to customers for stock application. 4 5 So in that structural package, we had various types of construction for, say, a standard -- what we 6 7 called an outrigger chassis with a wood floor system. 8 We had a perimeter chassis system. We had clear-span 9 trusses. We had C channel clear-span C channel beams. So this would enable to us quickly respond to a 10 11 customer's needs. We had those on file. They were approved through the State of California through --12 13 and -- and it was the basis of allowing us to build what we call stock product. 14 Okay. You mentioned clear-span trusses. 15 0 There was also a bit of discussion about that. 16 If I take a 70-foot building and make it a 17 72-foot building, can I just add a foot on each end of 18 the truss? 19 20 Α No. 21 Q 0kay. 22 We would have to have had an engineer justify 23 through calculations appropriate member sizes. 24 Q So you could come up with an idea at work.

They had to test it with calculations?

1

Correct. Α

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Okay. And we'll do a deeper dive, but the Q idea here is next I want to go through the general design process, acorn to oak tree at Walden, and, hopefully, when we go to different projects, we can move through them more quickly having first understood that process. Okay.

In the very beginning of the process, you have your quote. Can you tell us what is going on at this stage?

Well, typically within one of our dealer -- or perhaps as Charlie had alluded to, we may get multiple requests for the same project. So -- and oftentimes, those dealers may take a different approach to that very They may choose to take some scope -same building. more scope on-site than another dealer would rather have us carry through the factory.

So our sales department would -- would -we had an administrator that she received all of RFQs. The RFQs would be distributed out amongst our sales staff. It may include a large set of specifications. It may a include a telephone conversation with those speci fi cati ons.

Sometimes we got a very legible set of plans or basic plans. Other times it was literally an

1	eight-and-a-half-by-eleven scale notebook that enabled
2	them to just depict in a single line in a very schematic
3	means of what they were looking for that building to
4	i ncl ude.
5	Q For the six projects we are talking about
6	today, Walden would have had to do their own custom
7	schematic design or design drawings?
8	A Yes.
9	Q Okay. So a customer may say, I need two
10	offices, some bathrooms, I need AC. It's going to be
11	located in Louisiana. There may be some wind issues or
12	something like that.
13	But the customer wasn't telling you here's how
14	to do the electric system, or here's how to create the
15	HVC or things of that nature?
16	A No.
17	Q Okay. So when they gave a drawing or a
18	concept, that is a starting point, for lack of a better
19	term?
20	A Itis.
21	Q Okay. So we go through the request for a
22	quote, and let's say they gave you an idea of what you
23	want to do what they want to do. I want to build a
24	dormitory project in the mountains in Mammoth Lake?

A All right.

1	Q Okay. What happens in the estimate phase?
2	What are you guys doing at that point?
3	A Well, we are not participating much. However,
4	the salesperson may ask questions of us on what he
5	should or not include.
6	Q 0kay.
7	A But really what they are doing is trying to
8	come up with an approximated cost.
9	Q 0kay.
10	A So we had a standard format sales template
11	that they used, and, oftentimes, it was checking boxes
12	and filling in specific pieces of information. One of
13	those would be area which may help them to determine a
14	roof Load.
15	Oftentimes, cities within just within a
16	city may have a non-snow load and a snow load area. So
17	that's where they may have to come to engineering to
18	find out, hey, does this building, you know, does this
19	area have a snow Load?
20	So we would have participated only in trying
21	to have help them complete a a or provide a
22	complete quotation that would give a basis of an
23	approximated cost to our dealer.
24	Q Okay. And then if the client or customer of
25	that dealer is interested in buying the product, we

begin design? 1 Normally we would get a P.O. or some 2 Α Ri ght. form of acknowledgement, you know, to move -- move 3 forward. 4 0 5 But the thing that Walden Structure is selling is a -- is a product. It's -- I'm buying a structure 6 7 from you I can use for some purpose? Α 8 Yes. 9 Q Okay. I'm going to hand you this, and this is Exhibit 11, and we've talked about this briefly with 10 11 Mr. Walden, and I would encourage you -- you've got the documents in front of you. If there is something you 12 13 want to point out, if you let us know, either Edith can zoom in or you can walk up to the -- to the 14 board and point it out if you want to. 15 There were some questions earlier about 16 Okay. the parapet. 17 18 Α Um-hum. Do you recall those questions? 19 0 Α I do. 20 Can you find in Exhibit 11 --21 Q JUDGE BRAMHALL: Which Exhibit is this? 22 23 MR. DIES: This is 11. JUDGE THOMPSON: Is it the Bramasol? 24 MR. DIES: 25 Yes, sir.

1	JUDGE BRAMHALL: Thank you.
2	BY MR. DIES:
3	Q Can you find in Exhibit 11 the actual
4	elevation of the parapet, show the folks what we are
5	tal ki ng about.
6	A Sure.
7	Q Do you know page number that is?
8	A It shows up on a couple of them. It starts,
9	first off, I mean, the first representation of it would
10	be on the roof section where it would just say we have a
11	parapet.
12	Q Okay. I'm talking about a physical picture I
13	can show people.
14	A Right. So we start to see images of it and
15	how are these may be depicted and various things.
16	But the parapets, I mean, from an overall
17	sense, we are going to look at the extra elevation.
18	That's going to that's going to show that at what
19	stage in time what the RFQ had told us to represent on
20	the plans.
21	MR. DIES: Okay. So, Edith, if you could pull up
22	WSI-0069 for me.
23	BY MR. DIES:
24	Q This is the Bramasol project; is that correct?
25	A Itis.

1	Q And just from an outsider's view, if I were
2	looking at the building, is this maybe one of the sides
3	of the facade that I say might see?
4	A Yes. It's actually four. That's representing
5	all four sides of the building.
6	Q Okay. And are the heights of this thing is
7	the same throughout?
8	A Not at all.
9	Q Okay. And how will you know that?
10	A Well, you would have to reference from the top
11	of your roof slope to the top of the parapet on various
12	areas of the building.
13	Q Okay. What does the difference in these
14	heights all over the building do to the roof structure
15	and how you design a building like this?
16	A Alot.
17	Q 0kay.
18	A Drastically affects the columns, how it bears
19	initially down on either the trestle and the launch to
20	the lines or down on the columns on the transverse lines
21	of of the structure.
22	Q Mr. Walden testified earlier about the fact
23	that because of the height of this proposed structure,
24	you couldn't carry it over the road as they wanted it to
25	look on this site; is that correct?

1	A That's correct.
2	Q Can you point out to us the part of this that
3	had to be added to the building?
4	A Yes.
5	Q I don't know if you want to step up here or
6	have her zoom in, but the part that had to be added to
7	the building, it couldn't go on trailer, for example?
8	A I think one important thing to point out, this
9	was a preliminary, not for construction set of plans,
10	and so this specific building changed throughout the
11	series of revisions.
12	So it's hard to see, but there's a dash line
13	here which is indicating our roof slope.
14	Q 0kay.
15	A So this portion from here, so about here is
16	the center of the building. You see this dash line
17	disappears into this line. So what this is representing
18	is that this section above this dash line, some part of
19	it or all of it is going to be built on-site.
20	Q Okay. And how do you account for the fact
21	that you are going to be adding structural membranes
22	on-site when you are designing a building like this?
23	A Well, it would be represented in detail
24	sheets other sheets than this. So, like I said, we
25	may have chosen and again, it all depends on the

height of the building.

What we try to do is -- first off, the dealer is so going to tell us do they want to ship the building at its lowest. Or do they want to build the minimal amount of construction on-site.

So with that information, we may choose to build the entire parapet, all four sides of the building on site, or we may decide build some of the parapet in the factory and the addition of it, the completion of it on-site.

- Q You mentioned that this was a preliminary drawing. I think you can tell that by looking at the -- that bottom corner there that says "Preliminary --
  - A Correct.
  - Q -- not for construction."

These are, for lack of a better term, initial concept drawings. This is just, kind of, how you are proposing to try to and solve some of these problems?

A Well, it may have been, and I'm not sure. If you scroll down just a little bit here, we can go to the revision box, and we see where we are at in the process.

So this is two stages after. So we would have been in a very preliminary nature right here. In other words, we got a sales quote, and our engineering group

1	developed the plans to the point of where we had
2	completed the the preliminary drawings.
3	Q 0kay.
4	A We were ready to go out for the customer to
5	get an initial feedback, initial view on did this did
6	we give them everything they wanted?
7	So then, oftentimes, we would get markups back
8	from our customer that may change a direction that we
9	were already given or add scopes.
10	Q Okay. And if a change is made, let's say they
11	add to the elevation of the parapet, what do you have to
12	do from an engineering and design standpoint?
13	A Well, it all depends on the height of it.
14	Q 0kay.
15	A Its location.
16	Q But you got to go back and factor that in and
17	make another pass at designing this thing?
18	A Sure.
19	Q I see that there are five boxes in that little
20	section for revisions?
21	A Correct.
22	Q Do we always get it done in five?
23	A No.
24	Q What happens if you have a sixth or eighth or
25	tenth revision?

1	A We start over at the top. So we will zero
2	we will start over with No. 6, 7, 8, 9, 10, and if we
3	went on beyond that, it would go to No. 11.
4	Q Okay. Is it common in your process in at
5	Walden to have multiple revisions for design and
6	engi neeri ng reasons?
7	A On custom buildings, yes. On stock product,
8	no.
9	Q Mr. Walden said this, but I want to make sure
10	you agree.
11	The six projects we are talking about, you do
12	not find to be stock buildings. These are custom
13	bui I di ngs?
14	A Very custom projects.
15	MR. DIES: Okay. If we can, Edith, I'd like to
16	shift to Exhibit 12 real quickly.
17	BY MR. DIES:
18	Q And if you could stay up there, that might
19	make it easier. I can point you to what I am asking
20	questions about.
21	On that first page I'm sorry. The next
22	page I need to be precise, first page of the
23	drawi ngs.
24	Who would have done these drawings?
25	A Well, so Walden Structure in overall at its

1	hi ghest level.
2	Q 0kay.
3	A And then we could even determine which
4	draftsman drew it.
5	MR. DIES: Okay. And and Edith, if you will,
6	zoom in on the the revision section.
7	BY MR. DIES:
8	Q We see some dates there. Do you know what
9	is what the per WSI, EG or T, means?
10	A Yes, these are No. 1, in a very general
11	sense, we are trying to define what occurred during a
12	specific revision.
13	When you would zoom in on clouds, you would
14	see a delta here. A delta would have a number inside of
15	it that would correspond to this one. So we knew on
16	10/21/05 that these were customer customer red lines.
17	Q 0kay.
18	A If you were to go clear down here to starting,
19	say, No. 3 we are still clarifying, and so months later,
20	we're into the next year, and now we're we're just
21	simply saying, "Oh, Eddie Garcia did this." He was EG.
22	Q 0kay.
23	A Another one down here, again, we're in the
24	customer development stage. Carson King drew these.
25	So now as we continue on down, now we're

1	seeing per WSIs. It's obvious that we have gotten the
2	structural engineer heavily involved.
3	Q 0kay.
4	A He's doing details, and so maybe we based
5	on if we could determine which cloud set here was No. 5.
6	We could see maybe it was structural elements. Maybe it
7	was a completion of the plans.
8	Q 0kay.
9	A You know, further down again, it's Walden's,
10	and it's simply telling the draftsman who worked on
11	thi s.
12	I do want to point out at this stage, we are
13	at a completion on the plan. So now we have a
14	production issue. We only have that once we have two
15	things: State approval and customer approval.
16	Q 0kay.
17	A So we have gone through all of their review.
18	We've gone through the State review. In the background,
19	our engineers have performed all the structural
20	cal cul ati ons.
21	Q Okay. I'm going to dive into some of the
22	answers that you provided there.
23	You have heard some discussion that one of the
24	challenges with the Bramasol project was the height of
25	the roof, the loads on the roof, truss design, and so on

1	from Mr. Walden?
2	A Correct.
3	Q All right. I don't want to reiterate all
4	that, but I did want to direct your attention to
5	WSI -0138.
6	MR. DIES: It's Exhibit 12. Sorry, Edith.
7	BY MR. DIES:
8	Q Okay. At the top there, do you see is that
9	bri dge-l ooki ng structure?
10	A This is our clear-span So that's the the
11	clear-span truss
12	A Yes, sir.
13	Q Okay. And at a high level, why is it so
14	challenging? What about this particular building made
15	this truss challenging?
16	A Well, there's several things. So on a
17	previous page, in the information we would have seen
18	that this was at a 30-pound snow level.
19	So the standard structural package that I
20	alluded to before was only developed for a very basic
21	wind load and a non-snow load. So, actually, we did
22	have a 20 we had a 30 PSF snow load truss, and, again
23	it could only be placed in certain areas.
24	Q 0kay.
25	A There's maps within the building codes that

1	tell us that here's your snow load areas. Here's high
2	wind and seismic Load areas.
3	Q And you talked about the the parapet and
4	the wind loads on the parapets and all that kind of
5	stuff. How does how does this truss design address
6	those challenges caused by the wind-load parapet?
7	A Well, so the higher you go with the parapets,
8	the more horizontal lateral loads come against wind
9	I oads.
10	Q 0kay.
11	A And, again, like I alluded to, we may have
12	chosen to build some of the parapet on-site and the
13	finalization of it on on construction that occurred
14	on-si te.
15	Q 0kay.
16	A That oftentimes even has a a negative
17	effect on the structure. It creates what the engineers
18	call an inch.
19	Q 0kay.
20	A I won't go into it, but all of these have an
21	effect on the truss.
22	The truss is, in the simplest form, only
23	supported at two points.
24	Q 0kay.
25	A We call that a clear span because it is

1	spanning the length of the building.
2	Q 0kay.
3	A The specific truss was a 14-foot-wide product.
4	Our standard structural package was 12 feet wide and
5	lower.
6	Q So what happens if we add two feet to the
7	truss?
8	A Well, an engineer would have to determine
9	that. I mean, in its simplest form, we would have to
10	redesign the truss because it's drawn in very specific
11	base sizes. Most of them are four foot. Oftentimes,
12	when we'll determine where we are going to put the
13	audi ti ng.
14	And I can't see really clearly. I think this
15	is a four-foot bay at the end.
16	Q Okay. So you are talking about the little
17	rectangular section of the truss?
18	A That's correct. We have we have a vertical
19	support, and very basic, it breaks the truss
20	structure again into smaller segments.
21	Q 0kay.
22	A This is the bottom port that Charlie alluded
23	to. We have a top port. It's two pieces.
24	Q 0kay.
25	A With each one of these vertical supports,

there is a diagonal. And that's the support of that 1 area within that vertical. 2 And I think you said earlier your team 3 0kay. would put together your proposed approach to solve this 4 5 problem, and then an engineer would have to run calcs to test this approach; is that correct? 6 7 Absolutely. Come up with specific numbers. All right. Let's look at Exhibit No. 13. Q 9 MR. DIES: And, Edith, if possible, go to the first page with the first page of 13 up. 10 BY MR. DIES: 11 Q Can you tell me what this document is? 12 13 Α So this would be an overall synopsis in engineering terms of -- of what are the loads? what's 14 the size of the building? and -- and -- and what are 15 they -- what are the -- the focus of what they are going 16 17 to do? So right off the bat, they are defining it's a 18 40-foot-wide, and it's 60-foot long. That's this 60 by 19 20 40, and generally there's three sections. There would 21 be two trusses along each one of those modlines, so we 22 are pointing out that the floor load was a 50 PSF, and 23 it's got a certain partition load on it. 24 Okay. I need you to go a higher level than 25 that. You dug a little deep in the woods for me. I'll

1	get you back there in a minute.
2	Who is Woods?
3	A Woods?
4	Q Wood Engineering.
5	A That's our Engineering Department.
6	Q Okay. So you would come up with a design, and
7	you would submit that to Wood and say, "Hey, is this
8	building going to fall if we make it like this? Would
9	you run some calcs to test our design?"
10	A Right.
11	Q Okay. If I can show WSI-0281 that's
12	Exhi bi t 13.
13	Is this an example of the calculations that
14	would apply to what we were just talking about?
15	A Itis.
16	Q Can you tell us briefly what we're looking at
17	here?
18	A Well, this is the the truss profile. And
19	in our specific instance, we were on a dual-slope truss.
20	It could have been a single-slope truss that got very
21	large at one end.
22	But, again, it's defined and got a four-foot
23	base. It's coming up with some loads here, and it's
24	starting to do calculations.
25	0 Okay. So just real quick at this point, at

1	this time, Walden had a theory about what would work for
2	the truss system. They submit it to Woods, and Woods
3	tested.
4	If the calculations say it works, what happens
5	then?
6	A Well, then he would oftentimes, that made
7	us have to go back and make changes to the plans, first
8	off.
9	Q 0kay.
10	A Inputting all of the specific number sizes
11	that he has just verified through calculations.
12	Q 0kay.
13	A So then we would provide a final set of plans.
14	He would finalize his calculations. He would stamp his
15	plans or his calculations stamp and sign and stamp
16	and sign our plans.
17	Q Okay. And so, if if if the approach you
18	want to take will not work you just told us if the
19	calculations support your approach. What happens if the
20	calculations say your approach will not work? Then what
21	do you have to do?
22	A Well, probably have conversations with the
23	engineer who would come up with a couple of scenarios.
24	Q 0kay.
25	A Oftentimes the engineering is being driven by

1	the customer, so it just all depends what didn't
2	work. If we were trying to stick with a say, a five
3	by three by three top cords, and he's saying, "Oh no.
4	That's got to be a six by four by half to support that
5	roof Load." That's big cost consequences.
6	So we may take that choice. We may take
7	another choice. Through conversations, he would
8	determine what's his next step.
9	Q So the method you are going to use to solve
10	that particular problem with the roof could be to change
11	the composition of the bigger steel, heavier steel,
12	more expensive steel?
13	A Correct.
14	Q Completely different structural approach?
15	A Could have been.
16	Q At that point, you don't you are trying to
17	design this. You are testing your calculations, but you
18	don't know which method you are going to use to solve
19	this particular problem?
20	A Correct.
21	Q 0kay.
22	A Nor the cost.
23	Q Okay. Let's throw a little monkey wrench into
24	the whole thing.
25	Suppose the client calls and says, "Hey, we

want to mount the AC unit on the roof." What does that 1 do to all this? 2 0 Well, that would be a big impact. 3 So this project did not have roof-mount HVCs, 4 5 but would have just further compounded all of the -- the specialty to it. 6 7 Okay. I appreciate you diving into that 8 detail for us. We're going to talk about some trusses 9 in some other ways, but I think we will be able to go faster because of that. I'm going shift. I'm going 10 11 back to Exhibit 12, which are the production issue 12 drawings in this case. Everybody is following along on TV, and I want 13 to point you to 0133. 14 MR. DIES: And, Edith, can you zoom in as best you 15 can? Let's do this. Oh, would you -- that's pretty 16 cool. I can use touch-screen technology. 17 This is crazy. 18 BY MR. DIES: 19 20 Q Can you tell us what this document is? 21 Α So we're looking at the floorplan, first off, 22 but we are looking at the electrical. This electrical 23 includes the electrical lighting, and it includes any receptacles that were in the walls, maybe receptacles 24 25 that were in the floors or ceiling.

1	It's got an electrical panel schedule, so
2	we're seeing only one panel schedule. I'm not super
3	familiar with this project. I think we only have one
4	electric panel.
5	Q 0kay.
6	A Typically, we would have an electrical panel
7	for each transportable section.
8	Q Okay. So if this building is like Mr. Walden
9	said before, you might have three independent panels?
10	A Right.
11	Q Okay. Let me ask you this: Did a customer
12	give you this information?
13	A No.
14	Q So this is something Walden would have come up
15	wi th?
16	A 100 percent.
17	Q Okay. And there was questions about Code
18	books. The Code books tell you what the limitations
19	are, but do the Code books tell you how to do this?
20	A No.
21	Q Now, what are the challenges of creating an
22	electrical system in a modular structure?
23	A Oh, many.
24	Q Give us a few.
25	A In its most simple form, what we're trying to

1	do is make it easy to build and easy to set up, so so
2	that we don't have problems going down the production
3	line, and so we don't have problems on the site.
4	So what we first off try to do is not have to
5	ship loose any of the products that would force the
6	dealer to have to site install them.
7	In this case, we had lights that occurred
8	right on the model. There's asterisks beside this. You
9	can't quite see that. It's losing insulation.
10	We try to keep from doing that. Oftentimes,
11	you can't because you have to light the corridors. So,
12	you know, what we are trying to do is keep keep the
13	electrical from crossing across a modline, if possible.
14	Q Why?
15	A Again, it's just simplification for for
16	construction and for its setup.
17	Q So you are creating in a typical modular
18	building, basically, separate electrical systems for
19	each of the component parts?
20	A Yes.
21	Q Okay. And then those those pieces have to
22	function together properly when everything is put
23	together?
24	A Correct.
25	Q Now I'm going to use a random scenario. Madam

CEO comes into the building every morning, and she
enters the front door, and she wants all the lights in
the building to come on when she turns on the lights.
If there are any unexpected visitors, she knows about
that. But we have three separate electrical systems.
How do you handle something like that?
A Through multiple crossovers.
Q Okay.
A Electrical connections would have to have been
made, and again, I can't tell from this level, but we
may have had lighting that was clear to the back door or
three-way switching, but but all it is, is just more
and more crossovers, more electrical connections that
have to be made on-site.
Q Okay. When we're talking about electrical
systems in a modular building, do we have
space-constraint issues?
A Sure.
Q Can you tell me a little bit about that?
A Well, I mean, sometimes a smaller room has
less electric, a larger room has more.
Q Let me try a different way.
If you are wiring things through the roof and
all that kind of stuff, you have a limited span of space

to work in with a modular building; correct?

1	A Correct.
2	Q And that's because you can't make them too
3	tall because you can't carry them over the road?
4	A Correct.
5	Q Okay. And there are other systems that are
6	competing for the same space?
7	A Exactly.
8	MR. DIES: Let's shift to the next page,
9	Miss Edith.
10	MR. DIES:
11	Q What is this drawing?
12	A So this is a mechanical page. What it is is
13	representing the heating and air conditioning in the
14	bui I di ng.
15	This building, I'm sure, was a dealer request
16	in an attempt to lower the cost of the building, wanted
17	two larger tonnage units, rather than a unit HVCU
18	unit on each half.
19	Q And from a design and engineering standpoint,
20	what challenge does that pose for you at Walden?
21	A Well, we have to we have to condition all
22	those rooms. And what's going to have to occur is
23	crossovers through the truss, so we have have
24	always we are always, you know, cognizant of of
25	how much air we need to take across to condition it

1	based on occupant Load. That that sometimes we
2	have to square it off instead being one large round.
3	But but like you said, it's how to they
4	come through the structural member.
5	Q Okay. Meaning, how do you run air ducts or
6	whatever?
7	A Exactly.
8	Q Carry the air in whatever direction?
9	A Right. Right.
10	Q And if this is a modline, it's got to happen
11	over the place where these two things join?
12	A Correct.
13	Q So we have two different parts competing for
14	the same space?
15	A Correct.
16	Q And if I changed the truss, what does that do
17	to your HVCU system?
18	A Well, it may not have an effect on it
19	Q 0kay.
20	A the truss.
21	Q Okay. If I change the placement of the truss
22	or the use of the truss from a clear span to a different
23	kind of truss, what impact might that have?
24	A This could have a big impact. So if we
25	we first off, wouldn't in a building this long, but

1	we have another roof that we call channel.
2	Q 0kay.
3	A It's a solid member.
4	Q 0kay.
5	A It's going to limit what crossovers you can
6	have that occur above the ceiling or yeah. Above the
7	ceiling below the roof deck.
8	Q If I change the electrical system, does that
9	impact AC?
10	A Yes.
11	Q If I change the AC system, does that impact
12	el ectri cal ?
13	A Yes.
14	Q So if the client hypothetically were to say,
15	take this from two AC units to three AC units because
16	the cost of working through that structural membrane was
17	too high, we have got to change the electrical system
18	and go back and redraw it?
19	A Correct.
20	Q Okay. Is your dynamic systems working or not
21	with each other?
22	Okay. I want to shift to the next page very
23	bri efl y.
24	JUDGE THOMPSON: What page is that again?
25	MR. DIES: I'm sorry. This was 0134.

1	JUDGE THOMPSON: Thank you.
2	BY MR. DIES:
3	Q And by the way, that HVC system has to go
4	above the ceiling, and your modular building can't be
5	very tall as well?
6	A Correct.
7	MR. DIES: Next page. Edith, if you could, zoom on
8	that bottom left corner.
9	BY MR. DIES:
10	Q First off, what are we looking at here on this
11	page? What are these drawings?
12	A This is our plumbing page where we are going
13	to represent our waste vent system and our supply water
14	system.
15	Q Okay. And what have we highlighted here with
16	this box?
17	A This is the hot and cold water system.
18	Q Is that is that supposed to be something
19	that is on the ground?
20	A No. But it definitely has a connection to the
21	water inlet on-site.
22	Q Okay. That's sort of what I am getting at
23	here. Is this the bottom of the building where the
24	plumbing comes in and out?
25	A This would have been within the floor cavity.

0 0kay. 1 This horizontal -- all of these pop through 2 Α that horizontal decking up into the walls --3 0 4 0kay. -- come up to the various fixtures where the 5 Α sinks and lavatories. 6 7 So when you designed this thing, it's got to 8 be pretty precise because they are going to set this 9 building on top of plumbing and other things; is that --Oftentimes, the dealer will already Α Correct. 10 11 know where the water inlet is going to be. Q 12 0kay. 13 Α So -- I mean, there's times when we have to take a water inlet clear to the opposite side of the 14 building just because that's where the water inlet was 15 on-site in relationship to the building. 16 17 0 What would that do to the design? Well, it -- larger cost, more pipe, more work, 18 Α 19 more crossovers. And -- I didn't ask this before, but if I make 20 0 21 a change -- we have multiple systems in the building 22 that you have talked about today. Does one or more 23 professional -- one or more professionals have to get together with CAD and check for conflicts in these 24 systems? 25

1	A Not not professionals, but we had four very
2	unique caliber of draftsmen that had basic knowledge to
3	dual design all these systems.
4	Q I guess what I am saying is we have to
5	systematically go through and say, "Okay. I have to
6	move this AC." What does that do to the electrical
7	system?
8	A We're looking at that, you know, in 3-D.
9	Q Okay. And if there is a conflict in 3-D in
10	this CAD modeling that you are using, what do you do?
11	A Start moving things.
12	Q Okay. I don't want to jump off of this too
13	quick, but in the Ynez School, we had 8,000, so we would
14	also have sprinkler systems?
15	A Yes.
16	Q Yes?
17	A My answer was yes.
18	Most classrooms nowadays require fire
19	spri nkl ers, yes.
20	Q And we will talk about that in a moment, but
21	that would be yet another thing we might have to fit in
22	this space that's competing with plumbing and electrical
23	and
24	A And be supported by it.
25	Q 0kay.

1	A Additional Loads on the truss.
2	Q Okay. The truss. You're right. The truss
3	has to carry that weight.
4	Okay. All right. And we went through the
5	calculations on the truss as an example earlier, but
6	each time you would come up with a design, before you
7	finalize that design, you would have to test that design
8	with someone like Woods to make sure the calculations
9	are going to work?
10	A Structurally, yes.
11	Q Structurally. So the different parts of it.
12	Okay. Thank you very much. Let's see.
13	Let me ask you this: Did you grab a design
14	from somewhere else and just slap it on here
15	A No.
16	Q to this building?
17	A No.
18	Q So, okay.
19	A Very rarely would two floor plans be alike.
20	We would have to redraw everything.
21	Q For the for the six projects we are talking
22	about today, would that be true?
23	A Oh, sure. Nothing was used across the board.
24	Q So if I were to say, "Did you build something
25	in 2001 that you cut and pasted into one of these," you

1	know right now that didn't happen?
2	A Well, for systems, I would say that's
3	that's accurate.
4	Q Now, I'm not saying you might not use some of
5	the things you learned along the process, but we're
6	talking about the ultimate design here. You are not
7	taking a design from a prior building and just slapping
8	it on there and okay.
9	0kay. Yes, sir?
10	MR. ROUSE: Can we get a verbal answer to that last
11	questi on?
12	JUDGE THOMPSON: No.
13	BY MR. DIES:
14	Q When we talk about seismic, there are a couple
15	of projects that have seismic issues?
16	Is that a "yes"? If you nod at me, it didn't
17	happen.
18	A Yes. I'm sorry.
19	Q It's okay. And I'll try to pay attention to
20	it.
21	Thank you, Counsel.
22	I want to direct your attention to WSI-0258,
23	which is Exhibit 13. And while Edith is pulling that
24	up, can you tell me from a structural standpoint the
25	challenges that seismic puts into there when you are

1	building a modular building as opposed to
2	sticks-and-stone construction?
3	A Well, modular building is probably going to
4	have much more forces put upon it than a conventionally
5	static building construction. It has to go down the
6	road and still stay, you know, a box, a 3-D structure.
7	Q Okay. So it's actually going through many
8	earthquakes all the way to the site?
9	A That is correct.
10	Q So, in some ways the seismic, what you are
11	dealing with, is not just the constraints, i.e., Mammoth
12	Lake where they have earthquakes almost daily or
13	whatever it's any building you make has to be able to
14	meet seismic constraints?
15	A Yes. By the Code. On maps, it tells us the
16	seismic activity for all of California.
17	Q And this is another way that your design would
18	have to be tested by getting calcs from an engineer such
19	as Louis?
20	A That's correct.
21	Q And we have 02 0258 here. Are these
22	seismic calculations, this page that you have?
23	A I'm not sure which page this is. This looks
24	like page 4 of the calculations. We're definitely
25	looking at wind on the parapets, seismic, so, ves. I

would say it's -- it's taking it all into account right 1 now. 2 0 And if -- if the building is otherwise 3 Okay. stable but doesn't meet the seismic calcs, what do we 4 do? 5 Going to have to make it stronger --6 Α 7 0 So that we don't have to deal with this later 8 on, Mammoth Lakes, which also had seismic issues, what 9 happens -- what happens when I pair a seismic problem with a snow-load problem? 10 11 Α It gets amplified. 12 Q Tell me what you mean. 13 Α In a specific instance, that was 161-pound 14 snow Load. Mammoth is very high altitude and could potentially have, you know, ten foot of snow sitting on 15 top of that roof. So the weight of that snow is 16 amplified in a seismic event where the building is 17 18 literally shaking sideways -- could have been shaking in 19 both directions at one time. 20 So as you bring that weight up, it's just 21 amplifying the effect on the building. 22 0 0kay. That is a design constraint that y'all 23 had never deal t with before? 24 Α Definitely not 161 PSF snow Load, yes.

All right.

Q

1	JUDGE THOMPSON: The snow was how much again?
2	THE WITNESS: 161, I believe it was.
3	BY MR. DIES:
4	Q I think in the in the meetings with the
5	FTB, you mentioned that this was three times the size of
6	any snow load you guys had ever dealt with?
7	A Correct.
8	Q All right. I want to shift now to our Mosque
9	projects, and because we've gone through their design
10	process in great detail.
11	I'm going to try to do this at a high level,
12	but would your Mosque projects follow the same design
13	process we just talked about?
14	A Yes.
15	Q Maybe, meaning meaning, initial preliminary
16	drawings been drawn. Somebody is good with them. We
17	start to formalize them. We test calculations with
18	engineers. We do production drawings and so on. Would
19	you have followed that process?
20	A Yes.
21	Q Okay. And for purposes of the record, when I
22	say "did you follow your design process," that's going
23	to be what I am meaning when we go through these
24	projects. I'm trying to keep us rolling here.
25	I want to show you the drawings in Exhibit

let's -- let's look at Exhibit 21, if I can find it. 1 MR. DIES: Edith, 21 -- those are the pictures? 2 Oh, those are the pictures. Okay. Actually, 3 we've already covered that. I'm going to go to Exhibit 4 18, page 1. I'm sorry. Sorry. That's going to be in 5 6 the drawings. 7 JUDGE BRAMHALL: Yeah, just getting this out of the 8 way. BY MR. DIES: 9 All right. I'm sorry. Go to the actual cover 0 10 11 page, if you don't mind. These are structural drawings that relate to the Mosque projects that we are calling 12 13 Mosque 1 and 2. Α Yes. 14 Now, this says, "Prepared by Allied 15 0 0kay. Container Systems." Do you see that? 16 17 Α I do. Have you had a chance to review these drawings 18 0 in connection with your interviews with the FTB and your 19 work to get ready for today? 20 Α Yes. 21 Whose drawings are these drawings? 22 0 Α Basically, Walden structures. 23 And how -- let me ask you this: I want to 24 show you page 18 -- I'm sorry -- Exhibit 18, page 43. 25

1	A VOICE: Say that again? It's not Bates?
2	BY MR. DIES:
3	Q So the Bates range we're going to be talking
4	about right now is WSI-0450 and 0452 and those of you
5	who are following along at home
6	But let's go back to I guess, first off,
7	you just said these these are drawings that were
8	created by Walden. How do you know that?
9	A Well, there's there's I mean, this is
10	our standard legend that we that put on almost every set
11	of plans.
12	Q And I'm going to just for the record, I'm
13	going to narrate some of this so it makes sense.
14	But you pointed to a small section with a
15	series of rectangles that have different patterns in
16	them?
17	A Yes.
18	Q This is a Walden Legend?
19	A Well, it is in general. And so
20	Q 0kay.
21	A it could be used for many things. In this
22	instance, it's what it's representing is different
23	types of wall construction.
24	Q Okay. Let's go the next page.
25	JUDGE THOMPSON: Which exhibit?

1	MR. DIES: It is Exhibit 18.
2	JUDGE THOMPSON: 18 and WSI-451?
3	JUDGE CHENG: 0450?
4	MR. DIES: Through 0452. Wait that's not 18, is
5	it? Oh, it's going to be challenge for you guys.
6	These are not these are it's going to be
7	343 pages into the document if you are looking at this
8	in yours. These these didn't come out sequentially
9	because the way they were produced in the underlying
10	audi t.
11	THE WITNESS: There is a point worth pointing out
12	here.
13	MR. DI ES: Okay.
14	THE WITNESS: Jeremy Brown
15	MR. DIES: That was what I was getting ready to
16	show you.
17	JUDGE THOMPSON: You guys are talking over each
18	other.
19	BY MR. DIES:
20	Q I'm sorry. You jumped the gun. I was going
21	to make that very dramatic.
22	A I'm sorry.
23	Q Who is Jeremy Brown?
24	A Jeremy Brown was one of our draftsmen at one
25	point and became an engineering manager at another point

1	on a military product.
2	Q Okay. So why would go to the upper right
3	corner of this drawing.
4	Why would Allied Container put its name on a
5	drawing that was drafted by Jeremy Brown?
6	A Probably to represent that they built it to
7	the government.
8	Q Okay. Now, what if the Marines find out that
9	they could go directly to you instead of going to Allied
10	Product? What are they going to do?
11	A Going to get it cheaper.
12	Q So if anyone tries to assert that Allied
13	Container did the fundamental design of this Mosque and
14	so on, would that be true?
15	A It's inaccurate.
16	Q Okay. Let's talk a little bit about the
17	features of this, and I covered some of them with
18	Mr. Walden, but I want to direct your attention to
19	Exhibit 18, 0469. It should say TYP door elevation.
20	MR. DIES: This is what it looks like, Edith.
21	JUDGE THOMPSON: Can you repeat that for me?
22	MR. DIES: Yes, sir. It is WSI-0469.
23	BY MR. DIES:
24	Q Okay. And I'll just do this. I'm not
25	fancy. All right.

1	Can you tell us what that is?
2	A So this is it an elevation of a breachable
3	door. In in urban warfare training, the soldiers
4	would so it's representing, like, perhaps a locked
5	door, so they are going breach that door.
6	So there were sacrificial elements to this. I
7	mean, it was the plywood that made the door surface. It
8	had a very strong structural frame around it, and so, I
9	mean, in a sense, it's store elevation of that
10	sacrificial door.
11	Q I'm going to an even higher level than that.
12	I I got to break in a door with a battering ram maybe
13	30, 40 times in a short period of time. Yes?
14	A Yes.
15	Q Okay. And if I keep buying doors every time I
16	do that and I'm your customer, I'm going to be
17	frustrated by that.
18	A That would probably be accurate.
19	Q So the was this project for the Marines?
20	A It was.
21	Q Okay. So the Marines said, "Make us a door we
22	can kick in multiple times
23	A Yes.
24	Q in training."
	And you guys had to create a prototype for

1	that?
2	A Yes.
3	Q Did you actually mockup this door and all that
4	stuff?
5	A Yes. Most likely.
6	Q Okay. So what I mean by that is independent
7	of plugging and playing this in various places in the
8	Mosque, you might have to build a mini structure, see if
9	the thing works before you propose it in a building like
10	thi s?
11	A And I'm not sure exactly what occurred.
12	Jeremy would have been in charge of that. I can't
13	answer that.
14	Q That's okay. I appreciate that.
15	Let me ask you this: What kinds of things are
16	those soldiers going to be doing in this Mosque at a
17	hi gh I evel?
18	A Well, so they we had I'm not sure which
19	one this is for okay. Okay. Camp Lejeune. So, it's
20	a very large base, first off, and for urban warfare
21	training, like Charlie said, so they are doing daytime,
22	nighttime, real-life experiences, tanks going down the
23	road, shooting off ammunition, helicopters above,
24	Nationals in Iraqi cars, and what not.
25	They are representing different scenario for

1	the troops to train in.
2	Q Okay. And if troops go and train in this
3	building one time, they know the flow of the building;
4	right? They know how it flows?
5	A They could, yes.
6	Q So the Marines made you have interchangeable
7	walls?
8	A Yes.
9	Q Okay. Tell me what that meant from a design
10	standpoi nt?
11	A Well, first off, it had to be strong enough
12	because you've got amped Marines running through these
13	with full packs on and all kinds of things going on in
14	their body.
15	So they had to be strong enough, number one,
16	to, you know and none of them were straight line
17	so, for instance, many of them were multi-stories, so
18	you could never see a set of stairs from the entry door.
19	You had to go to around a corner, Lean down around
20	another corner, so oftentimes those interior partitions
21	could have been hit by a soldier
22	Q 0kay.
23	A and they had to be strong enough to resist
24	that.
25	O Sure. And the walls have to be moveable.

1	They can't be load bearing; right?
2	A Correct.
3	Q So you would have had to design structurally
4	for that phenomenon
5	A Yes.
6	Q occurring?
7	A Yes.
8	Q Camp Lejeune is not in California last time I
9	checked?
10	A That is correct.
11	Q Where did the design and engineering and
12	problem solving that gave rise to this project come
13	from?
14	A From Walden Structures.
15	Q And where where, specifically, in the
16	uni verse?
17	A It depends on well, Southern California,
18	first off. And it could have occurred in Riverside, or
19	it could have occurred at Mentone.
20	Q But you are confident that the design and
21	development that happened here happened inside the
22	borders of the State of California?
23	A Absolutely of Walden structures.
24	Q Okay. I want to show you page 6 of Exhibit
25	18, which is WSI-0459.

1	Actually, let's skip two pages ahead of that,
2	0461.
3	Can you tell us what is depicted in this
4	drawi ng?
5	A Well, it's one section of a container
6	shipping container. Typical shipping container we use
7	was an eight foot wide basically, eight foot tall and
8	40 foot long.
9	Q Okay. And we have Mosque 1 and Mosque 2, kind
10	of, lumped together here, but are they the same
11	bui I di ng?
12	A No, they are not.
13	Q Okay. How are they different?
14	A Um
15	Q At a high level.
16	A I may I'm pretty sure Mosque 1 was for Camp
17	Lej eune, and that was a two-story structure. And then
18	we did one, if not two, at Range 215 which is 29 Palms,
19	which is a three-story.
20	Q 0kay.
21	A But I do know we had three stories on Camp
22	Lej eune as well.
23	Q Okay. I think we covered the challenges of
24	cutting holes in the floor. I don't want to go through
25	that again.

1	MR. DIES: Edith, can you pull up WSI-0420?
2	BY MR. DIES:
3	Q I don't have beautiful photographs of the
4	Mosque, but is this a depiction of one of the Mosques?
5	A It is. And this is actually a larger so,
6	if you were to look at this in plan view, there's
7	actually multiple buildings here.
8	So, this is a courtyard, so there is a large
9	square. This is one side of that courtyard. This is
10	the other side of that courtyard. Inside that courtyard
11	was a two-story structure. These were eight foot wide,
12	eight foot tall, and 40 foot long.
13	So we are looking at all I'm trying to say
14	is there's a couple of structures we are looking here.
15	The Mosque was a two-story structure set in a courtyard
16	with a dome on top of it.
17	Q Can you can you pretty quickly break down,
18	like, rail cars? I can see lots of squares, but, I
19	mean, we have lots of rail cars that are standing up end
20	to end. Help me, kind of, paint a picture.
21	A So this is an eight-foot-by-twenty-foot
22	container. It's turned on its end.
23	So this is eight foot. This is 20 feet long,
24	and it's standing upright. This is most likely two
25	and I'm not certain it's most likely a 40-foot

Τ	container and another 40-1001 container, and then
2	another eight foot it could be 20 let's see. This
3	is a 20. So this would be an eight foot by 20 standing
4	on its end.
5	Q Okay. At the time you undertook to build
6	Mosques 1 and 2, did you guys have certainty as to which
7	methodology you were going to use to configure these
8	rail cars and create this structure?
9	A No, other than perhaps a concept.
10	Q Okay. So they may say, "I want four columns
11	of courtyard and a three-story dome in the center," but
12	as far as figuring out how to do that with the materials
13	that were supplied, that was Walden?
14	A Walden.
15	Q Okay. Let's move to Genentech.
16	MR. DIES: You guys, it's 12:20. Do y'all this
17	is a before I don't think I'm going to do a ton of
18	time on Genentech. I am going to now start focusing on
19	the key challenges, but if y'all want to eat?
20	JUDGE THOMPSON: That sounds good.
21	MR. DIES: Okay.
22	JUDGE THOMPSON: Why don't we come back at 1:30?
23	Does that work for Appellant? Does it work for let's
24	do that.
25	MR. DIES: All right. Is it okay if we leave

1	materials in here? You are going stay here?
2	JUDGE BRAMHALL: I'll grab something and come back.
3	MR. DIES: No, no, no. I'm not going to pack this
4	stuff up.
5	JUDGE BRAMHALL: I have my stuff too.
6	MR. DIES: Okay. All right.
7	
8	(Recess at 12:22 p.m.)
9	
10	MR. DIES: Before we left off, we were going to
11	begin with the Genentech project, which I understand
12	we'll probably being pulling up for those of you who
13	have got stuff in front of you these are going to
14	generally be Exhibits 22, 23, 24.
15	And, Ms. Gonzales, can you pull up the first,
16	I guess, page WSI-0234 from Exhibit 22?
17	BY MR. DIES:
18	Q All right. And, Mr. Lord, we talked a little
19	bit about the Genentech project earlier when Mr. Walden
20	was here, but can you very briefly, sort of, remind us
21	what we were doing with this particular project?
22	A So a very irregular-shaped building. First
23	off, so matter of fact, I am going to go over there
24	in
25	Q Sure.

A This is only half of the building. So since it's so long, I think this is 96 feet long. We broke the building. This is one-half of the building. These are reg module, and this is another half of the building, longer modules. Then you have 70-foot modules that ran down that way.

It's a very irregular shape, which brings in all kinds of drag ties in the reiterate corners, just all kinds of special structural engineering.

Q Okay. Can you give us some examples of -- of that special structural engineering, maybe by pointing to the module, either on this page or on the next page, which is, I think, the other part --

A So this is called a reiterate corner, and what we are having to do is drag the diaphragm from this unit across into this unit, all pull together. So there was these series of double rafters with some real heavy-duty ties and all the modlines across here. Just one example of special engineering.

Q Okay. And we have talked some about clouds and some revisions before, and I don't want to just blow up that section, but that particular drawing that you have got here is a production drawing; is that correct, sir? Can you tell?

A Yes. It looks like it. Yes.

1	Q Okay. And there are four revisions in this
2	particular drawing?
3	A Yes.
4	Q Okay. And when we look at this layout, which
5	I think you said is one section of the floorplan, there
6	are a number of double diagrams that appear to be
7	electrical in nature?
8	A Well, no.
9	Q Okay. Tell me I'm going to stop being
10	the expert. What are the bumps in the A-frame?
11	A I'm sorry?
12	Q What are the clouds?
13	A The clouds are indicating added information at
14	a given time, so I can't see where the delta is at on
15	that, but somewhere there is
16	Q Let me let me go ahead.
17	A That
18	Q Is this
19	A That would key into wind.
20	Q 0kay.
21	A But I can't see what that reads.
22	Q Let me show you WSI-0236.
23	MR. DIES: It is on same exhibit. And, Edith, if
24	you could, just highlight a couple of clouded sections.
25	Let's do this. We have a section on the right-hand side

that says "roof system ridge beam." 1 Right there. 2 JUDGE THOMPSON: Can you repeat that page number 3 again for me, please? 4 MR. DIES: Yes, sir, WSI-0236. 5 BY MR. DIES: 6 7 So we have a cloud section around this part of 8 the drawing. Can you tell us what it appears to be 9 addressi ng? Well, so this is all structural information, Α 10 11 first off. And so with a delta No. 3, we key back to the revision box, which gives you the time. 12 But this is where -- so, evidently the 13 structural engineer has finished his calculations. 14 So now we are starting to bring the drawings up from 15 preliminary construction up to production stage. 16 17 0 0kay. Adding all the very specific information, we 18 are specifying the trusses, the C channel beams, and 19 certain modlines, channels of the back-to-back 20 21 connection, specifying the post. It just says "Post on the modlines," and we have given out post dimensions 22 23 here for production so they know how high to cut them. We've given out framing specifics for all the 24 rafters, the spacing of the rafters, specifying -- so 25

1	over to the left-hand side of that floorplan page, there
2	was a cloud where we added double rafters to support
3	fire sprinklers and cable trace support locations.
4	0 0kay.
5	A So much of this is well above our standard.
6	This is not a standard product.
7	And then we have a graded roof. So, pretty
8	much, all specialty structural information.
9	Q And I'm not going to switch it on the screen,
10	but Exhibit 23 is a series of the Wood engineering calcs
11	similar to those we talked about before. Do you see
12	that?
13	A Yes.
14	Q These would have been the calculations that
15	would have been done in the Genentech case to test the
16	design, and, if necessary, to make provisions?
17	A Exactly.
18	Q So you would have followed that same process?
19	A Yes.
20	Q Okay. There was some discussion earlier about
21	cabling and cable trays. Can you walk us through from
22	an engineering and design standpoint why that was a
23	challenge for you in the Genentech building?
24	A Well, what it's doing is adding additional
25	loads to the roof system. It it's going to support

1	off of the rafter that's going to run between the
2	trusses, but it's all going to come out and bear on the
3	trusses.
4	So there's where the trusses may have to have
5	been increased in depth as well as cord sizes, top to
6	bottom cord sizes, and potentially even for left and
7	diagonal material sizes.
8	Q Cable really that heavy?
9	A It can be when you have got hundreds of cables
10	together.
11	A cable tray typically is about 12 inches
12	it looks, kind of, like a ladder, and it supports off of
13	all-thread rods, off of double rafters in the roof
14	system.
15	There may be bundles of cable, you know, three
16	inches in diameter across a twelve-inch ladder, so it
17	could, you know, cumulatively add up to a lot of weight.
18	Q Okay. And had you dealt with cable tray
19	design and oddly-shaped building before in your work
20	before Walden?
21	A No, not specifically. We may have had cable
22	tray runs, but each one is going to be a specific
23	engineering review for the amount of cable expected in
24	it.
25	Q Okay. So you can't take a design from a prior

1	cable run and just drag it along the length of one of
2	these buildings?
3	A No, sir. Nor would it apply to trusses
4	speci fi cal I y.
5	Q Okay. I want you to show you Floorplan B,
6	Section Floorplan Floorplan B, which I think is
7	02345.
8	Do you see that, sir?
9	A I do. It's not very clear, but I can see it.
10	Q Is this the part of the electrical system
11	for the building?
12	A No. That is the floorplan. And, again, this
13	is representing structural changes.
14	Q 0kay.
15	A So you would have this plan in several pages
16	back. It would be in the E Series plans.
17	Q 0kay.
18	A The E-1 or E-2, maybe 3, 4.
19	Q Okay. I want to go back to W go forward or
20	WSI-0237 very quickly.
21	And at the very bottom there, there's a couple
22	of clouds drawn around some metal backing detail.
23	Can you tell us what's going on here?
24	A Here?
25	Q Yes, sir.

1	A Obviously or apparently, the customers had
2	some very special something furniture, cabinets
3	I'm not quite certain of it but had some very specific
4	requirements for backing.
5	So what we are representing here, we are
6	putting some, it looks like 30 gauge it's hard to
7	read but I think it says 12 inch by 30 gauge material
8	running across the top of the studs in very specific
9	areas.
10	Q At a high level, the customer wants to hang
11	something heavy from a wall?
12	A Yeah.
13	Q You are literally having to engineer that part
14	of the wall to be able to handle the load of what they
15	are trying to hang on it?
16	A Correct. Obviously, studs weren't sufficient
17	or or spacing wasn't appropriate, so we ordered solid
18	bl ocki ng.
19	Q Okay. I want to go to section or to page
20	0245. I'm not going to ask you to read each one of
21	those numbers.
22	Is this electrical?
23	A So what this is is the panel schedules
24	Q 0kay.
25	A of the building.

1	Q 0kay.
2	A Apparently so there was 18 electrical
3	panels on this building, maybe every other floor had
4	one, something like that.
5	And you can tell here that there was a series
6	of revisions which would correspond to these. So it was
7	revised multiple times once it was revised on Delta 1,
8	2, 3, 4, and 5.
9	Q Okay. And for the uninitiated, when you say
10	it was revised Delta 1, 2, 3, 4 and 5, there are some
11	triangles at the bottom of that?
12	A Yes.
13	Q These are what you are referring to as deltas?
14	A It's called a delta, yes.
15	Q And that would correspond to the revision
16	section up at the top?
17	A Yes.
18	Q Okay. So if if our Esteemed Panel wanted
19	to have some night reading and dive through these
20	drawings, they could actually track a particular
21	revision to a particular change in the engineering and
22	design by matching up the triangles with the numbers?
23	A Yes.
24	Q Okay. And I won't go through what we went
25	through earlier, but the engineering system design here

1	had to follow the same process as we have in other
2	cases?
3	A Yes.
4	Q There were HVAC challenges
5	THE REPORTER: What?
6	MR. DIES: I'm sorry.
7	BY MR. DIES:
8	Q We would have had plumbing issues and other
9	things as well?
10	A Yes.
11	Q And so all of those systems had to work
12	together?
13	A Yes.
14	Q And you had to systemically using CAD resolve
15	conflicts and things like with the computer modeling?
16	A Yes.
17	Q Come up with your preliminary design?
18	Engineers sign off on the parts that the
19	engineers sign off on or test with calcs?
20	A Yes.
21	Q Make changes if necessary?
22	A Correct.
23	Q And then finalize the design?
24	A Yes.
25	Q Now, we haven't talked about what happened

1	when you finalize a design. Does everything go as
2	pl anned?
3	A Not always.
4	Q Are there times when a design is approved,
5	Charlie's folks are in the shop building it, and you get
6	a call saying, "Cool drawing but this won't work"?
7	A Yes.
8	Q Okay. And what do you have to do in those
9	si tuati ons?
10	A Well, it just all depends on the situation.
11	Q 0kay.
12	A And it it doesn't just come from
13	fabrication. It could come from the customer. It could
14	come from a supplier issue. It could be a myriad of
15	issues. Whatever the specifics are, we would address
16	it.
17	Q And and the way you have to address that is
18	through a change order?
19	A Yes.
20	Q And we'll talk about those in a moment, but, I
21	guess, my point is, if a change order comes out and
22	says, "Make this 22 electrical boxes instead of 18," or
23	whatever, we've got to go back and reconfigure the
24	stuff, revisit it?
25	A Design it all and provide backup information

1	attached to that change order.
2	Q We have got to go back and systemically check
3	the conflicts the same way we did before and so on?
4	A Yes.
5	Q At the time that you undertook to design the
6	Genentech project, did you already know that you were
7	going to need 18 boxes with these specific
8	confi gurati ons?
9	A No.
10	Q Is that why it changed five times?
11	A I don't remember why, but it could have I
12	mean, again, a myriad of situations.
13	Q Okay. Okay. Let's shift to the Ynez
14	Elementary School. And that's going to be that one
15	is going to Exhibit 25 and 26.
16	Very quickly, you were present for
17	Mr. Walden's testimony about the fireproofing of the
18	corri dor?
19	A Yes.
20	Q The challenges that were presented by that?
21	A Yes.
22	Q To your knowledge, had Walden ever dealt with
23	that situation in this context before the Ynez School?
24	A Not to the best of my knowledge, no.
25	Q Without asking you a bunch of repeat

1	questions, do you agree with Mr. Walden's testimony how
2	you had to work through this process?
3	A Yes.
4	Q Okay. There were also some discussions about
5	challenges in the school related to balconies.
6	A Yes.
7	Q There was a balcony, I believe, on the right
8	side of the school.
9	Can you walk us through, in a modular context,
10	what a balcony does and how that can present a design
11	chal I enge?
12	A So you might be able to go to that last page.
13	I could, at least, graphically show where the balcony
14	occurred.
15	Q The last page of 26?
16	A I think it was.
17	Q It is going to be that's impressive. It's
18	going be WSI-0182?
19	A Right.
20	Q Is that do you have it in front of you
21	there?
22	A Yeah, it is.
23	Q 0kay.
24	A So what this is representing is the balcony
25	system, which is a cantilever situation on the second

story. The first story and the second story were likely the same configuration --

Q Okay.

A -- the balcony actually cantilevered out off of the structural members along these grid lines and supported this balcony.

So if you were to look at it as a cross-section, there was a walkway below this, so the balcony is going to allow exiting and egress out of the classrooms that are on the second story. It would support all those live loads.

Q Okay. And so what physically do you have to do to allow that to happen from a modular standpoint?

A Well, it's all structural engineering, but it's likely increased work sizes that cantilevered out, because it's not -- it's not supporting roof loads -- or it is supporting more loads because it's cantilevering off of this. It's not supported at the outer edge and likely these were concrete filled so, heavy dead inline loads.

Q Okay. Is this something that would have had to have happened in parts in manufacturing and in parts at the sites? Meaning, would some of this construction have had to have been built physically when they were there present?

1	A It it could have. I don't know the ins and
2	outs on this project. It wasn't one of my projects.
3	Q 0kay.
4	A If if this were a concrete floor system, it
5	could have been poured on-site, more than likely.
6	Q Do trusses have any impact on something like a
7	bal cony system?
8	A Um
9	Q Like, would the addition of the balcony
10	require you to change a truss?
11	A It could. This is Ynez school.
12	MR. ROUSE: It says "L.A. Unified School District."
13	MR. DIES: Yes, we can talk about that. We will
14	talk about that. Okay.
15	BY MR. DIES:
16	Q It does say L.A. Unified School District on
17	here. Can you walk us through that? What is L.A.
18	Unified School District?
19	A A great big school district, first. And so
20	there would be many, many schools within it.
21	Q Okay. Are there are there certain
22	protocols that Walden has to beat if they are going to
23	design a school in California?
24	A Yes.
25	Q Okay. And can you give some examples of

1	those?
2	A Yes. I briefly explained in our other product
3	line we call HCV Product, this is what we refer to as
4	DSA. So it's all approved through the Department of
5	School, I think, DSA I'm not quite sure what the
6	acronym stands for, but it's another agency.
7	Q Does that sound like Department of State
8	Archi tecture?
9	A Yes. Yes. That's right.
10	MR. DIES: For the record, Charlie whispered the
11	answer in my ear.
12	THE WITNESS: Correct.
13	BY MR. DIES:
14	Q 0kay.
15	A Soit's a different system. It's approved
16	through a very centralized approval, the DSA Department.
17	And it's different than CD approvals.
18	Q Okay. So when you design a school for them, I
19	see that, you know, sometimes we use these DSA terms and
20	that kind of thing. What you are denoting to the folks
21	who have to look at these drawings is we have to meet
22	the certain requirements they have given us?
23	A Yes.
24	Q So, for example, Charlie mentioned earlier,
25	   sprinklers may be required in all schools?

1	A Yes.
2	Q There was discussion about the fireproofing.
3	That's probably a requirement. The kids have at least
4	an hour to get out of the school if a fire were were
5	to attack it, that kind of thing?
6	A Yes. Especially in that that specific.
7	Q 0kay.
8	MR. ROUSE: I'm still a little confused. This is
9	for the Ynez project?
10	THE WITNESS: Right. John?
11	BY MR. DIES:
12	Q Yes, go ahead.
13	A So I kind of stopped short of completing that
14	thought process.
15	So one of the big differences is, is they
16	approved plans in what they call P.C. That's an
17	acronym. I believe it stands for precheck.
18	So we will have schools. They could be built
19	for up to a 96 by 40. We have two-story buildings of
20	varying lengths and sizes. So that's why you may see a
21	page with L.A.U.S.D. because this comes out of a P.C.
22	But then you'll get a very specific plan on
23	Ynez School.
24	Q 0kay.
25	A So that's why you can see different drawings.

1	One comes out of a P.C. set, which is more of it was
2	not a specialized design or or may not have been.
3	Whereas, maybe the information in the Ynez set was more
4	speci fi c.
5	JUDGE THOMPSON: Mr. Rouse, you'll have an
6	opportunity to cross
7	MR. ROUSE: All right.
8	BY MR. DIES:
9	Q The discussion of the corridor split over
10	modlines, is that an example of something that would
11	have been unusual as well? Yes?
12	A Not necessarily that but the back to front.
13	Q 0kay.
14	A So my understanding of this
15	Q 0kay.
16	A was in for some reason, I don't see that
17	set of plans, but I believe it was a two-story building,
18	and that's where that fire-grid corridor is in that
19	front back to front connection.
20	Q Okay. I want to direct your attention to
21	Exhibit 24. And can you tell us it's labeled at the
22	top "Internal Change Order"?
23	A Yes.
24	Q We talked a moment ago when we were dealing
25	with Genentech about change orders?

1	A Yes.
2	Q Can you tell us physically what's happening
3	with a change order like this?
4	A This so our mechanism to make changes to a set
5	of production plans that went on the floor to introduce
6	new information, changes that have occurred for whatever
7	reasons.
8	Q 0kay.
9	A So this was it was the standard form that
10	we did verbiage with. This maybe would have been,
11	again, accompanied normally would have been
12	represented here if it had attachments.
13	Q And would if necessary would new
14	drawings and calculations sometimes need to be done with
15	the change order?
16	A Yes, if necessary, if it involves structural.
17	Q One of the things I think was covered in the
18	site visit when we were there in 2011 is the notion that
19	sometimes fire sprinklers, and things like that, you
20	won't get specs back on those until we're way far down
21	the process on something like this?
22	A Possi bl e.
23	Q And so let's say the fire sprinklers in a
24	school like this, you are down the design process, and
25	then you get the detail as to what they are going to

1	demand for fire sprinklers.
2	Would we have to go back through to figure out
3	what to do from a design standpoint to allow for that?
4	A Yes. It would, at the very least, have to be
5	veri fi ed.
6	Q Okay.
7	A If the P.C. already had that capability, and
8	if not, we would have to do special calculations
9	addi ti onal .
10	Q Okay. And I'll just do a couple hypotheticals
11	here.
12	If, for example, the sprinklers added a load
13	to the roof, would you have to revisit structural calcs
14	to the roof?
15	A Yes.
16	Q Okay. And then if you run the calcs and it's
17	okay, you don't have to change the drawings and design;
18	is that a possible outcome?
19	A It's a possible outcome.
20	Q But if it does change the loads in a way that
21	makes a difference, we've got to go and revisit trusses
22	and things like that?
23	A Correct.
24	Q Okay.
25	JUDGE THOMPSON: When is P.C

So P.C. in the DSA use is precheck or THE WITNESS: 1 prechecked. 2 So it was, kind of, like standard plan 3 approval for different building configurations. 4 BY MR. DIES: 5 0 Would it be fair to say that that acts as a 6 7 starting point for you when you are going to do something custom like Ynez School? 8 9 Α Yes. Okay. When you guys were putting together the 10 0 design for the Ynez School, did you have uncertainties 11 as to which methods you were going to use to deal with 12 13 some of these issues? Α Yes. 14 Was the appropriate -- final appropriate 15 0 design obvious to you at the outset? 16 17 Α No. I want to shift gears next and talk about the 18 Welk Resort, and that is going to be found in Exhibits 19 14 and 15. 20 Can you tell us -- let's go to the first page 21 of the actual drawings, and I'll let you guys catch up. 22 23 Let me know when you've got it in front of you. you glad I bound these separately? Heavy. They looked 24 25 at me like I was crazy at the airport.

1	Okay. We've got in front of us the Welk
2	Resort.
3	Was this a new home center, sir?
4	A I believe it is, yes.
5	MR. DIES: Edith, can you zoom in on the actual
6	drawing itself, the layout?
7	BY MR. DIES:
8	Q And was this a custom project that you guys
9	undertook?
10	A Yes.
11	Q Can you tell us a little bit about the the
12	building and challenges that it presented?
13	A Yes. So, I mean, there's all kinds of
14	information that's represented here that would be
15	clearly obvious, but so we have normally, we would
16	have a roof slope that would bear from end wall to end
17	wall, and it would peak normally in the center. So this
18	we call a gable roof. It actually peaks in the center
19	of the building.
20	So there's all kinds of specialties that are
21	occurring in this building. First off, it's a 45-foot
22	building. That's a special design. We had 40 footers.
23	We may have had a 44 footer. We had a 60 footer, but we
24	certainly didn't have a 45 footer.
25	Q Okay. Let me show you page 5 of this exhibit.

1	You were talking about the gabled roof. Does this help
2	you, sort of, better articulate what we are dealing
3	wi th?
4	A Yes. We are representing that we have a
5	different roof system.
6	Q 0kay.
7	A To only bring to attention because it's
8	different than normal.
9	Q Okay. Separate engi neeri ng.
10	Would you have used a truss for this building?
11	A I'm not certain. I doubt it. We probably
12	used a C channel, just because it's a 45 foot.
13	Q 0kay.
14	A So in our standard structural package, we
15	would have beams that would have spanned 40 easily,
16	maybe a 42-foot span nothing at a 45-foot span.
17	Q How would you normally support a beam like
18	that in a gabled roof like this?
19	A Well, it could be supported with intermediate
20	posts, but in this application, the customer wanted
21	clear-span So these were supported at the very outside
22	ends of the building.
23	Q Does this building have a double door at the
24	entrance?
25	A It does.

1	Q And can you tell me from a design standpoint,
2	what is the significance of a double door going into
3	this resort center?
4	A So, your support posts are right here on
5	either side of this center, this modeling.
6	Q So you draw a center you've drawn a post
7	basically where the door is supposed to go?
8	A Right where it should have been, yes.
9	Q Okay. What did you do to address that
10	si tuati on?
11	A So very special engineering to do what we call
12	a cantilever header design. So we have a series of
13	posts that occur in the wall, and a large structural
14	steel beam comes across here. So cantilevers support
15	goes here. This beams is cantilevering out, bolted
16	together at the modline, and the same thing occurring on
17	the other half, being supported by post to post.
18	Q Can I ask you a favor? Can you switch sides
19	on this drawing? I think
20	A I don't know which is best.
21	Q I am scared if you point to those things, our
22	Judges may not be able to see what you are pointing to.
23	So you pointed to this canti what did you
24	call it? cantilevered
25	A Cantilevered. Cantilevered header design.

1	Q Okay. Would that have been something you
2	could use with a different building, or was this custom
3	to this situation?
4	A Well, it's custom in this situation because
5	it's like twice the span of what we perhaps have used
6	before.
7	Q Okay. And to do this a little more quickly,
8	you would have to do a preliminary design like this?
9	A Yes.
10	Q And is this the production line we are looking
11	at right now? Can you tell?
12	A I think it says production. I'm not sure.
13	It's hard to read.
14	JUDGE BRAMHALL: Yes.
15	BY MR. DIES:
16	Q There you go. The print is kind of tough.
17	There would have been a preliminary drawing.
18	We have gone through the same thought process, and
19	everything we just showed these folks a few times by
20	now?
21	A Yes.
22	Q Okay. And this also had what's called a
23	coffered ceiling?
24	A Yes.
25	Q Can I show you Exhibit 14, WSI-01508? Can you

1	see that?
2	Can you tell us what a coffered ceiling is?
3	A So this is a reflective ceiling plan. What we
4	are doing here is showing anything that's in the
5	building above four-foot height, specifically roof
6	framing and ceiling framing.
7	So what we are indicating here is that we have
8	got some odd shapes. So if we could read this, we would
9	see that this height ceiling here and these two here are
10	di fferent hei ghts.
11	Furthermore, you would see that the height of
12	this ceiling, there's a border occurring here, so the
13	coffer is, it is a term that, in very simple forms, is a
14	step-in ceiling heights.
15	So I think we may have had three different
16	ceiling heights in this building.
17	There's I think there's a cross-section
18	that actually shows that.
19	Q Is that common in modular design?
20	A No.
21	Q Okay. And what are the help us understand
22	at a high level what the engineering challenges are when
23	you are dealing with multiple ceiling heights in the
24	same structure in a modular context?
25	A Well, so, you would have different planes of

25

1	support for your ceiling. So we would have had a higher
2	ceiling support system at this outer border and then
3	another support system that occurred above it in this
4	inner especially here.
5	I'm not certain what's going on here, but
6	these are definitely the coffer ceiling.
7	Q 0kay.
8	A So two different support systems and it's all
9	hanging from the rafters.
10	Q Okay. Sort of in the interest of time, all
11	this stuff we've talked about with regards to electrical
12	systems plumbing, HVAC, would that apply to something
13	like this?
14	A Yes.
15	Q Would a coffered ceiling in a modular building
16	impact things like running HVAC?
17	A Yes.
18	Q Why?
19	A Less room to run to have less
20	interstitial space between the bottom of the rafter and
21	the top of the ceiling to run your ducts, flex ducts and
22	branch ducts and your registers.
23	Q Okay. So you would have systematically had to
24	walk through the configuration of all this stuff for
25	conflicts the same way we have been talking about

1	today
2	A Yes.
3	Q to try to solve that problem?
4	If I asked this, I apologize.
5	The calcs you did for changing the door
6	structure, the roofing, these other things, would have
7	gone to an engineer in the same way we have discussed?
8	A Yes.
9	Q And systematically if the engineer comes back
LO	and says this won't work, you are going to go back and
L1	revisit the drawings and keep doing that until we get to
L2	a place where we're production ready?
L3	A Yes.
L4	Q I want to shift gears now to Mammoth Lakes.
L5	JUDGE THOMPSON: Before we leave the coffer
L6	ceiling, why was the coffered ceiling needed?
L7	THE WITNESS: It's and here's the cross-section
L8	I was referring to.
L9	BY MR. DIES:
20	Q 0kay.
21	A So if you were to just look straight across
22	this and look at that cross-section, so this is that
23	lower ceiling. This is that higher ceiling. So, again,
24	a structural plane of support for this ceiling and a
25	second structural plane of support for this ceiling.

1	It was it's a new home sales center, and it
2	was just an architectural feature that the customer
3	wanted to, you know, a little bit of pizzazz.
4	Q Okay. So they may think it looks good, but
5	from an engineering standpoint, whether you like how it
6	looks or not, you have got to design around this?
7	A Yes.
8	Q Okay. At the time you undertook to build the
9	Welk Center, did you have certainty as to the methods
10	you were going to use to handle these coffered ceilings,
11	this different roof, and
12	A No.
13	Q Okay. Was it the most appropriate design
14	known to you at the time you undertook this project?
15	A No.
16	Q And did you systematically try to resolve
17	these things you didn't know by working through this
18	process we have discussed?
19	A Yes.
20	Q And the same way you would have on all six of
21	these projects?
22	A Yes.
23	Q Are we ready to move on to the Mammoth
24	Schools? I keep calling it Mammoth Schools. It's a
25	dormitory project. Mammoth Lake which is Exhibit 17.

1	And I want to be mindful and not repeat a bunch of stuff
2	that Charlie talked about or you have discussed.
3	We have already dealt with seismic. We've
4	already dealt with snow loads and how those two work
5	together. We have already dealt with the fact this is
6	being installed in a remote area with a short season, so
7	it had to happen quickly and the design implications of
8	all that.
9	A Yes.
10	Q I want to talk to you about weather.
11	Obviously is this a ski area in California?
12	A Yes.
13	Q From a weather standpoint, what are we looking
14	at in terms of the temperatures that this building has
15	got to be able to handle?
16	A Oh, probably well below zero.
17	Q Okay. In modular construction, does that
18	present a challenge?
19	A Not necessarily. But
20	Q 0kay.
21	A But the time in the year that you work and can
22	get foundations and whatnot has a great effect on it.
23	Q Okay. Let me ask you this: There's been some
24	discussion about a heater boiler system?
25	A Yes.

0 That was different here. Can you tell us a 1 little about that situation and why it presented a 2 challenge for Walden? 3 Well, just very different, first off. 4 Ιt 5 would have been a first time. And this is a very large project. I don't 6 7 know what the total square footage was, but it was a total of 72 units. Each one of these represents a unit. 8 9 This was one-half -- this is the first-story floor plan, second-story floor plan, and the roof. 10 So chiller system, it does two things. 11 heating, and it's cooling. So it could be used for 12 13 heating and cooling. It's also the best water supply. In this case, they were also going to use it 14 to heat the roof structure. This roof structure was a 15 truss system that was going to be site constructed and 16 set on top of the buildings that were fabricated in the 17 factory. 18 19 Again, extreme temperatures. There could be 20 ten foot of snow sitting up on top there, and the fire 21 sprinkler system running in those -- those trusses. 0kay. 22 0 And they were actually going to have some 23 24 ambient heating going with some radiation heat up there 25 with the -- with the boiler heating.

1	Q So that's to keep the sprinkler from freezing
2	over?
3	A Exactly.
4	Q And what kind of heating and AC systems would
5	you typically use in modular construction or at least
6	for Walden?
7	A Well, typically, an air conditioner or a heat
8	pump. And it would be an in-wall mount or roof-top
9	mount package unit.
10	Q Okay. How does something like that function
11	differently from the system you were going to have to be
12	working with here for the first time?
13	A That uses a refrigerant of whatever type to
14	produce heat and/or cold in an AC. It would have a heat
15	strip, so electrically charged heating element that a
16	fan blows air across.
17	So in this, it would be hot water that is
18	running through a series of pipes going to radiation
19	units. So they are I don't know whether they were
20	fan driven as well, but there are small heaters like you
21	would see on the East Coast. We don't see it too much
22	here on the West Coast, but it's a radiation heat
23	system.
24	Q 0kay.
25	A Rather than a fan-blown cooling system like we

have here. 1 0 Going back to this notion of the temperature 2 extremes that you have been dealing with in that area, 3 are there thermal properties of a modular structure that 4 had to be taken into consideration for something like 5 this? 6 7 Not unusual to static construction, maybe thicker walls? 8 We -- we have to abide to the same Codes that 9 Charlie, I think, called it static or conventional 10 construction. We're -- we're building to the same 11 Building Code. 12 13 0 0kay. And to the Model Energy Code. 14 Α So the fact that it's modular doesn't 15 necessarily mean it's worse or better. 16 17 0 Well, I guess what I am getting at, though, is what limitations do you have from a modular standpoint 18 that they don't have from a, sort of, sticks-and-stones 19 20 traditional construction perspective? Α Lots of crossovers what we call pre-modlines. 2.1 22 0 0kay. So you would not only have horizontal 23 Α crossovers between a level of construction, but then you 24 would also have to go vertical to get into the second 25

1	story and into the third story.
2	Q So keeping frigid air out of the connection
3	points, all of these different places where these 72
4	units are being put together, is something you guys are
5	going to have to design around?
6	A Yes.
7	Q And this had to meet certain energy efficiency
8	requirements as well; is that correct?
9	A Yes.
10	Q And did this project follow the same process
11	that we have discussed so far?
12	A Yes.
13	Q Okay. At the time you undertook to build the
14	Mammoth Lakes School, did you have certainties as to the
15	methods you were to use to solve some of these problems?
16	A No.
17	Q And did you systematically try to using
18	computer modeling, engineering calcs, and so on, test
19	your design to see if it would work?
20	A Yes.
21	Q And ultimately and, I think, Charlie
22	mentioned this the customer decided not to go through
23	with the project.
24	Do you have any extra information on the why
25	there?

1	A You know, I I remember a couple of
2	specifics. It's been so long now
3	Q 0kay.
4	A memory seems to fade a little bit.
5	I know cost was one of them. So the architect
6	continued to add features which the sales group had to
7	reprice, so it kept driving the price up.
8	There were even things like so this was
9	very I think this was I don't know for sure the
10	timeline, but so this architect was unfamiliar with
11	ADA requirements, and what it was going to do was
12	force we were going to have to have a design change
13	to the first story.
14	Five percent of the dorms were going to be a
15	different design from the remaining 95 percent of it.
16	Q And real quick, I think we all know what
17	you're talking about when you say the architect was not
18	familiar with the ADA requirements.
19	A Larger bathrooms, special shower fixtures,
20	larger rooms because of the turning radius for a person
21	that is wheelchair-bound to be able to access, you know,
22	turn and use the features of it.
23	Q From a from a modular standpoint, does it
24	create a problem if you have one unit stacked on a
25	different shape or differently configured unit below it?

1	A Very much so.
2	Q Okay. I think you said all these things
3	continued to add costs and suddenly became prohibitive?
4	A Yes.
5	Q That's part of the issues. All right, sir. I
6	think we have covered the six projects. You can
7	probably take a seat now. I think we'll be pointing to
8	a whole lot more that folks can't see.
9	I do want to talk to you very briefly about
10	some of the work that was done to gather this
11	information that went into the claiming of the credit,
12	if we can.
13	A Okay.
14	Q Your team is the engineering team?
15	A Yes.
16	Q And tell us the kinds of professionals you
17	have on that team?
18	A Very uni que staff.
19	So our draftsmen, first off, unlike many
20	architects may employ, they they have some talents
21	that are are that make them very valuable.
22	So in a typical project, we would give one
23	draftsman a projects, and he would work directly with a
24	supervisor. Depending on the size, it may be two
25	draftsmen, too much detail to do for one person.

1	But what I am trying to get at, is that person
2	would not just do the floor plan, architectural-type
3	detail. They would also do mechanical design,
4	electrical design, and plumbing designs.
5	So in those, we were using the Code books, and
6	there's given tables for flow values and pipe sizes and
7	slopes, and all of this stuff. And so what I am trying
8	to get at, our draftsmen were very much engineering,
9	if you will, but they weren't providing P.D. services.
10	We did engineering we did engineering on
11	every single project we did. We made our panel
12	schedules, we we, you know, did all the proper
13	calculations, all within Code allowances.
14	Q Okay. And then did you also know Mr. Kip
15	Anderson?
16	A Yes, sir.
17	Q Okay. What side of the house was he primarily
18	focused on at the time we are talking about the '03
19	to '06 period?
20	A When you say "the house"?
21	Q Walden I mean Walden's business. What was
22	he what was he overseeing Walden's business during
23	this period we are talking about?
24	A Kip oversaw everything.
25	Q Okay. In terms of construction, you have

manufacturing supervisors at Walden. Yes? 1 Α Yes. 2 0 Could you give me a sense of what those folks 3 might be doing? 4 5 Α Well, of course, they are taking our drawings in 2-D and building to them. 6 They also are a very 7 unique staff for the fact that we build on a -- what we 8 call a chassis. It has tires underneath it, and a hitch on the front of it, so it's elevated above the ground. 9 It's not fixed construction like this where you are 10 11 working at ground level. And the production line is constantly moving 12 13 so we are working at a very rapid pace. 0 And when problems arose with designs or 14 0kay. construction issues, who would -- who, with Walden, 15 worked together to walk through those problems and 16 17 i ssues? Engineers and production. 18 Α So physically what happens? Do you get 19 0 0kay. 20 in a room with these guys? I mean, help us understand, 21 you know, how you solve these problems. 22 Α They would bring an issue to our attention, 23 whatever that issue is, and, you know, it may take 24 multiple individuals to determine the change or maybe as simple as just writing a change order specifying some 25

1	small change, but but that's, you know, in the
2	simplest form. That's how we do would go about it.
3	Q Would your engineers also discuss
4	constructability issues with this team, kind of, when
5	they are in the process of putting together designs for
6	this stuff?
7	A From a structural standpoint, probably not.
8	Q Okay. How about we saw some production
9	drawings earlier when people are explaining things like
10	how to attach that parapet on the Bramasol project or
11	whatever.
12	Who at Walden would work on those things?
13	A Well, the engineering manager and the
14	draftsman and the structural engineer.
15	Q Okay. If I can, I'd like to shift your
16	attention to the time when Walden was gathering the
17	information to claim the credit we are talking about
18	here today.
19	A Okay.
20	Q Okay. Did you play a role in the gathering of
21	that information?
22	A Yes. I gathered it.
23	Q Okay. You gathered it for the folks you were
24	working with; is that fair to say?
25	A Yes. At Kip's direction. Normally, it was on

1	a yearly basis.
2	Q Okay. I want to show you Exhibit 10 very
3	bri efl y.
4	MR. DIES: And, guys, this is going to be in the
5	bi nder.
6	Edith, if you can zoom in. Let's go to the
7	next page. Zoom next on one of the calculations that
8	has a percentage.
9	BY MR. DIES:
10	Q So we have a large number of employees at
11	Walden; is that right?
12	A Yes.
13	Q But we only took a very small percentage of
14	the wages at Walden for the R & D credit; is that right?
15	A Yes.
16	Q And Mr. Minor is going to be talking just a
17	little bit about that in a moment.
18	Physically, how did it come to pass that you
19	identified well, we've got a 25 percent here next to
20	someone's wage. What were you doing to gather the
21	information as to that percentage?
22	A Well, on the labor side, I really didn't
23	participate much.
24	Q 0kay.
25	A It really would have been Kip that was

1	compiling that information for the production staff.
2	Q Right. And when we talk about the labor side
3	and the production staff, that's manufacturing
4	supervisors that's an example of that?
5	A That's one of them, yes.
6	Q Now, if we look through this document, there
7	are folks that have the title engineering next to them?
8	A Yes, absolutely.
9	MR. DIES: Edith, can you pull up an example?
10	BY MR. DIES:
11	Q The next page, let's go through
12	A VOICE: Robert Garcia should have it.
13	MR. DIES: What?
14	A VOICE: Garcia. Last name.
15	BY MR. DIES:
16	Q This is just an example so everybody knows
17	what we're talking about. We have this is Jeremy Ray
18	Brown
19	A Yes.
20	Q This is the same Jeremy Ray Brown that was on
21	the Allied Container drones?
22	A Yes.
23	Q But he worked for us?
24	A Yes.
25	Q You would have gathered information as to how

1	much of his time he spent designing projects?
2	A Yes.
3	Q Okay. And how would you know how much time
4	Jeremy spent doing this?
5	A Well, Jeremy was the only engineering manager
6	that we had for the military effort.
7	Q 0kay.
8	A So 100 percent of his time was spent on
9	military.
10	Q Okay. And you went through all of the folks
11	on what we have been calling the engineering team and
12	figured out what percentages of their time they were
13	spendi ng?
14	A Between Kip and I, yes.
15	Q Okay. Well and I'll get to Kip in a
16	moment. But I am focusing on the engineering team for
17	right now.
18	A Yes. Kip aided me in there. You know, I
19	would give an overall view of it, and we would have a
20	di scussi on.
21	Q Okay. So you guys collaborated to find out
22	what percentages you thought were reasonable based on
23	how you felt these folks spend their time?
24	A Yes.
25	Q And Kip then, also, did this very same

1	function for the folks that were manufacturing
2	supervi sors?
3	A Yes.
4	Q So he would focus on the amount of time they
5	were spending with design and fixing problems with
6	custom building, et cetera, and he put percentages next
7	to that?
8	A Yes.
9	Q And then y'all submitted that information to
10	alliantgroup to run some calculations?
11	A Yes.
12	Q I'll talk with Mr. Minor briefly in a moment.
13	But before these calculations actually went on
14	a tax return or anything else, did y'all have a chance
15	to see what the numbers were and what the percentages
16	were and so on?
17	A Definitely Joel would have. I don't know
18	whether that was my concern at that point
19	Q Sure.
20	A I was just doing as directed.
21	Q Fair enough. The R&D credit was not first and
22	foremost on your mind, I can imagine.
23	A Yes.
24	Q But at some point, you were provided with some
25	descriptions of how folks were spending their time with

1	percentage	es?
2	А	Yes.
3	Q	And you signed off on those descriptions for
4	those diff	Ferent folks?
5	А	Yes.
6	Q	Okay. Now, Mr. Minor signed off on some of
7	the ones f	for the manufacturing supervisors?
8	А	Yes.
9	Q	Do you know why that happened?
10	А	You know, I'm not certain of it.
11	Q	Okay. Then don't guess. We will ask
12	Mr. Minor.	
13		About you but you played a role in
14	gatheri ng	this information that was brought forward in
15	the credit	:?
16	А	Yes. From the engineering site especially.
17	Q	And for the folks that you put these
18	percentage	es next to, were you comfortable that these
19	numbers we	ere reasonable?
20	А	Yes.
21	Q	Okay. Did anybody ask you to raise a number
22	or make a	number higher in a way that you thought didn't
23	represent	how they were spending their time?
24	А	Not that I can remember. And I was in the
25	same room	with all of these individuals as well.

1	Q Okay. This is physically a collaborative
2	effort?
3	A Yes.
4	Q And then you also spent time actually on the
5	phone talking with the consulting firm as how to know
6	which time to focus on for purposes of these
7	percentages?
8	A Yes.
9	Q Okay. And we will talk to Mr. Wonish about
10	that in a moment.
11	Mr. Lord, I may have a few clean-up questions.
12	And I think that's all I have for you right now.
13	Did you guys want to look at cars? Or do you
14	think you are good still?
15	JUDGE THOMPSON: Mr. Rouse, you are going to be
16	doing the questioning. Do you have an estimate?
17	MR. ROUSE: Mr. Riley.
18	JUDGE THOMPSON: Mr. Riley?
19	MR. RILEY: 2:30. I would say, probably, take an
20	hour. We'll take we'll take our full amount of time
21	if you want to move cars now.
22	JUDGE THOMPSON: Okay. We'll recess, honestly,
23	until 20 minutes, hoping 15. It will probably be 20.
24	(Recess taken.)
25	///

1	JUDGE THOMPSON: Back on the record.
2	I think we are on the FTB's questioning.
3	
4	CROSS-EXAMINATION
5	BY MR. RILEY:
6	Q I'm Jason Riley, just for the record, again,
7	and to introduce myself to you, Mr. Lord.
8	I'm going to try and use Appellant's exhibits
9	to the extent I can. And I'm going to start with I'm
10	going to ask you to you flip to certain pages so you can
11	exam them, and hopefully the type is big enough, I mean,
12	these are nice, clear examples of the documents.
13	So if you could flip to Exhibit 16.
14	A Okay.
15	Q So there were two separate projects, two
16	separate buildings in this project, a 24 by 48 building
17	and a separate 24 by 60 building; correct?
18	A That is correct.
19	Q Yeah. Sorry. We're talking about the Welk
20	Proj ect.
21	A Ri ght. Ri ght.
22	MR. DIES: Since this witness has my copy, do y'all
23	mind if I stand over him? I promise not to make any
24	gestures or do anything weird.
25	MR. RILEY: Okay.

1	JUDGE THOMPSON: Thank you for checking.
2	BY MR. RILEY:
3	Q So is that correct?
4	A It is correct.
5	Q So let's look at Exhibit 16, and let's start
6	with the document related to the 12 by 60 building.
7	And is this your standard design unit, 12 by
8	60; correct?
9	A Well, this is a 24 by 60.
10	Q I'm sorry. So it's a 24 by 60. Does that
11	mean two 12 by 60 units?
12	A Yes.
13	Q And 12 by 60 is your basic standard design?
14	A Yes, it could be.
15	Q Okay. So when it says "Drawn by King," is
16	that Carson King?
17	A Yes.
18	Q And it's dated 12/21/2016.
19	A Yes.
20	Q And it appears at the top here it's kind of
21	obscured by binding it says there are seven sheets,
22	which are T-1, A-1 through 3, E-1, M-1 and WS-1?
23	A Okay.
24	Q And on Sheet T-1 it states that the codes
25	states the code cited, for example, the 1991 universal,

1	the UBC is that the 1991 Uniform Building Code?
2	A Yes.
3	Q I think I read somewhere that you have
4	exhaustive knowledge of the UBC; is that correct?
5	A Generally, yes.
6	Q Okay. So what about the next line? It says
7	structural system per specs and structural package
8	S-1000. So the specs, are those the sheets listed
9	above, T-1, A-1 through 3, E-1, M-1, and WS-1?
10	A Generally, yes.
11	Q Okay. So you' ve
12	A Based on those seven sheets, yes.
13	Q Okay. Is it also based on something called
14	Structural Package S-1000?
15	A Yes.
16	Q And is Structural Package S-1000 among the
17	documents here?
18	A No.
19	Q Is it among the documents you've reviewed
20	the documents for this hearing today; correct?
21	A Yes.
22	Q Is structural Package S-1000 among the
23	documents produced for this hearing, WSI-001 through
24	572?
25	A Not to the best of my knowledge.

1	Q Okay. Can you describe Structural Package
2	S-1000?
3	A I did briefly when I was talking up there. So
4	in the commercial modular, under HCD, we are allowed to
5	have a structural package on file. And that structural
6	package that I described earlier was, basically, to
7	provide to build standard product with, not specialized
8	product.
9	Q Okay. And does Structural Package S-1000
10	describe information relative to the construction of
11	this particular building?
12	A Perhaps, yes. Perhaps some sheets of it.
13	Q Okay. And this
14	JUDGE THOMPSON: Mr. Riley, are we on a specific
15	Bates number page?
16	MR. RILEY: Sorry. That's Exhibit 16, WSI-0164.
17	And I apologize. I think I skipped the 0164.
18	JUDGE THOMPSON: You may have said it, and I just
19	missed it.
20	JUDGE BRAMHALL: This box right here.
21	JUDGE THOMPSON: Okay.
22	MR. RILEY: It's very tiny in the corner.
23	JUDGE THOMPSON: Top right corner?
24	MR. RILEY: The Bates, yes. If you orient it, you
25	know, like this, landscape, it's the bottom right

1	corner.
2	JUDGE THOMPSON: Bottom right.
3	MR. RILEY: Is where the Bates number is.
4	JUDGE THOMPSON: So the S-1000?
5	MR. RILEY: I'm sorry. That was mid page. It's
6	under the building data on WSI-0164.
7	JUDGE THOMPSON: Okay.
8	MR. RILEY: It says "Code cited," and then it says,
9	"Structural System per specs and Structural Package
10	S-1000. "
11	JUDGE THOMPSON: I'm with you.
12	MR. RILEY: Okay. So
13	JUDGE THOMPSON: Thank you.
14	BY MR. RILEY:
15	Q And according to this document, it says that
16	production was issued, and there were no revisions;
17	correct?
18	A It appears so, yes.
19	Q Do you know when Structural Package S-1000 was
20	created?
21	A No, not specifically generally, yes.
22	But but, I don't know which. See, they expire every
23	14 months. Not certain. It would be this general time
24	peri od.
25	Q Okay. Do you know when Structural Package

S-1000 -- I mean, was it -- did you say you joined in 1 2003 or was that Mr. Anderson? 2 I'm not certain. I didn't say that. 3 actually started much earlier. 4 Okay. Let's go to Exhibit 16, Sheet A within 5 0 WSI-016, 0165 here. 6 7 Can you look at Detail 1, the floor plan. you see the little circle? It looks like a one over a 8 S-6.3. 9 Yes. Α 10 0 Does that stand for Detail 1 on Sheet No. 6.3? 11 6.3, yes. 12 Α Okay. The same question for Detail 8 with 13 Q respect to the shear wall legend. 14 Does Detail 5 over S-6.3, does that mean 15 detail 5 on Sheet 6.3? 16 17 Α Yes. Can you point out Detail 5 on Sheet S-6.3 in 18 0 Exhibit 16 document here? 19 Α 20 No. Is that because that detail is in another 21 0 document? 22 23 Α Yes, inside the structural package. It's Structural Package S-1000? 24 Q Α S-1000. 25

1	JUDGE THOMPSON: I apologize. Can you back up and
2	tell me where you are looking?
3	MR. RILEY: Oh, 165 is sorry. 163 is here.
4	There's a little circle at the bottom in the floor
5	plan I'm sorry the word "floor plan" is cut off by
6	the binding.
7	JUDGE THOMPSON: I see. I think. So SW
8	MR. RILEY: Right. So down here, there's a little
9	circle. The one underneath it says 6.S. 6.3.
10	JUDGE THOMPSON: Okay.
11	MR. RILEY: And, then again, with respect to the
12	shear wall legend I am referring to is Detail 8, which
13	is down here.
14	JUDGE THOMPSON: Okay.
15	MR. RILEY: And it's got these little circles with
16	the
17	JUDGE THOMPSON: Got you.
18	BY MR. RILEY:
19	Q Where was I? Okay.
20	So Sheet A-1, it also states that this modular
21	building was designed and built according to the
22	Structural Package S-1000. In up here in Detail A
23	where it says, "State of California," again, obscured a
24	little bit by the binding; correct?
25	A Yes.

1	Q So why aren't details such as the the one
2	over the S-6.3, why aren't they laid out in these specs?
3	A Because our production personnel had those
4	plans on file out on the floor.
5	0 0kay.
6	A As does the approval agency.
7	Q Okay. So this reference each of these
8	references would send somebody to a different document,
9	the Structural Package S-1000?
10	A Potentially, yes.
11	Q 0kay. Thank you.
12	Was Structural Package S-1000, was that
13	available to the structural engineer, Mr. Wood?
14	A Yes.
15	Q Still on Exhibit 16 on WSI-0164, Detail 2, it
16	lists the finish schedule. This appears to include the
17	siding and sheetrock and ceiling grid and shingles;
18	correct?
19	A Yes.
20	Q And Detail 3 is the paint color?
21	A Yes.
22	Q And Detail 4 is the doors?
23	A Yes.
24	Q And 5 is the windows?
25	A Yes.

1	Q Are these items things that are selected by
2	the client?
3	A Yes.
4	Q Okay. The No. 8, again, we are going to go
5	back to Detail No. 8, which is the shear wall and this
6	letter of requirements table. This table also has a
7	reference to S-6.3 and a Detail Detail 1 on sheet
8	S-7.1, Detail 3 Sheet on S-7.1 and Supplement No. 39.
9	Are these all references to Structural
10	Engineering Package I'm sorry to the S-1000?
11	A Yes.
12	Q Okay. And Supplement 39, is that referring to
13	Structural Engineering Supplement No. 39?
14	A I'm not certain. I'm not certain.
15	Q Okay. So the shear wall references, they are
16	not completely laid out in this document. Would you say
17	that these references are common in many of your modular
18	bui I di ngs?
19	A Ifit's a standard building, yes.
20	Q Okay. Is that's that.
21	Is there a Structural Engineering Supplement
22	specific to the 24 by 60 Welk building?
23	A I'm not certain.
24	Q But there's none listed in the where it
25	savs that it's constructed according to Structural

1	Package S-1000?
2	A Not apparent.
3	Q Okay. Okay. Let's move on to Exhibit 13.
4	Sorry. Exhibit Exhibit 14. Let's go to Exhibit 14,
5	which is the Welk Resort Group 24 by 45.
6	Again, on I'm looking at WSI-0156. The
7	title page here states that the structural system is per
8	specs and Structural Package S-1000 and Supplement No.
9	258; correct?
10	A Yes.
11	Q Under building data.
12	A Correct.
13	Q Okay. And the specs were drawn by E.G. Is
14	that Eduardo Garcia?
15	A Yes.
16	Q Okay. Please flip to Sheet A-1, which is
17	listed as WSI-157.
18	And, again, it's way up here in the binding,
19	but it says, "This modular building is designed and
20	built according to the Structural Package S-1000 and
21	Suppl ement No. 258?
22	A Yes.
23	Q Correct?
24	A Yes.
25	Q And does this refer to the same S-1000 as used

1	in the Welk Resort Group 24 by 60 foot building?
2	A Yes.
3	Q Okay. If we look at Detail 1 on Sheet A-1,
4	the floor plan, there are five references to details on
5	other sheets. And again, it's the floor is it lists
6	that up in the binding here.
7	There are there are four references to
8	Structural Package S-1000, one to the structural details
9	of Sheet SS-1 of these specs; correct?
10	A I'm not sure where you are referring to.
11	Q So I'm referring to so we have got one,
12	two, three, four references
13	A Okay.
14	Q to S-1000?
15	A Yes.
16	Q And one and I'm it's unclear on this
17	particular document. And I have I have a copy of
18	this document, a clearer copy if you need to use it.
19	JUDGE THOMPSON: We're on Bates 157?
20	MR. RILEY: Right. Okay.
21	THE WITNESS: Okay.
22	MR. RILEY: And one for Mr. Dies as well.
23	MR. DIES: Thank you.
24	JUDGE BRAMHALL: Thank you.
25	JUDGE THOMPSON: Thank you.

1	JUDGE CHENG: Thank you.
2	BY MR. RILEY:
3	Q Okay. And so Structural Details of Sheet SS-1
4	on these specs, that's the reference, so that's a
5	reference to WSI-0162 within Exhibit 14?
6	A Sorry. I didn't follow that whole thing.
7	Q I'm sorry. Is the detail that says one over
8	SS-1, is that an internal reference to WSI-0162, which
9	is Sheet No. SS-1 within Exhibit 14?
10	A Yes, I would say so.
11	Q 0kay.
12	JUDGE THOMPSON: Mr. Riley, I'm sorry. Can you
13	show me where you are at exactly?
14	MR. RILEY: I apologize. You've got those it's
15	this detail up here, this top detail.
16	JUDGE THOMPSON: That's on 157.
17	MR. RILEY: It's on 157. I think it's on 113 that
18	I printed out.
19	JUDGE THOMPSON: All right. And you're can you
20	point to it again, please?
21	MR. RILEY: It's right here.
22	JUDGE THOMPSON: Okay. On the Left the upper
23	left.
24	MR. RILEY: And then that is a reference, as
25	Mr. Lord said, to this page right here, SS-1.

1	BY MR. RILEY:
2	Q And we also have in within on page 0157,
3	we have Detail 8 which is the shear wall.
4	And are these the same references to 3 slash S
5	6.3, and 1 slash 6 S-6.3 as in the 24 by 60 building?
6	A You said 158?
7	Q I'm sorry. 1 S-6.3 oh. Oh, the page? I'm
8	sorry. WSI -157.
9	A Okay.
LO	Q With respect to the shear wall legend?
L1	A Okay. Yes.
L2	Q These are the same references to S-1000 to 3
L3	S-6.3 and 1 S-6.3 as in the 24 by 60 building?
L4	A I'm not certain, because it doesn't have the
L5	table there.
L6	If I'm not certain, I'll state that.
L7	Q Okay. So within the Detail 7 still on 157
L8	here Detail 7 it says "general notes" regarding the
L9	roof system. It states the ridge beam clear-span is a C
20	15 by 33.9 pound is this the the 48-foot ridge
21	beam used in the in this in this building?
22	A No. It's not a 48 foot. It's 45 foot.
23	Q So it's 45 foot, but is the entire building
24	I mean, it's labeled as a is there a 1.5-foot
25	overhang on each end to make a 48-foot beam?

1	I guess you might be able to see that in
2	A It does look like 18-inch overhangs, yes.
3	Q 0kay.
4	So it's a 45-foot box with a 48-foot roof?
5	Okay. Had Walden ever designed a C-15 times
6	33.9 pound beam in a 48-foot long roof before?
7	A No.
8	Q No.
9	Okay. Please turn to 158, WSI-158, the
10	reflected ceiling plan. Are Details 2 just please
11	note Details 2, 3, 5, and would you please turn to back
12	to sorry. I guess it's 16 so page WSI-0166.
13	A Is that in Supplement is that in 14?
14	Q No. It is in Supplement it appears to be
15	in Supplement 16 at 0166.
16	A Okay.
17	Q Are those reflected ceiling plan details the
18	same as in as Detail 2, Detail 3, and Detail 5 here?
19	A No. Not probably not Detail 2. It may be
20	similar. Detail 3 appears to be similar. Detail 4 is
21	di fferent.
22	Q 0kay.
23	A Did you say I'm sorry.
24	Q No, I didn't.
25	A Detail 5. Detail 5 is different.

_	
1	Q Detail 4 and Detail 6 are the same?
2	A No. 6 No. 6 and 4 are not the same.
3	Q Okay. So let's go to Exhibit 15. Oops.
4	So Exhibit 15, is this Structural Engineering
5	Supplement No. 258?
6	A I don't see Exhibit 15. I'm sorry. I was
7	looking for a tab. Excuse me. Okay. I'm sorry. I'm
8	on 15.
9	Q So page 0555?
10	A 0kay.
11	Q Is this Structural Engineering Supplement No.
12	258?
13	A Yes. It looks like it is.
14	Q Okay. And we've already addressed the
15	1.6-foot overhang. That's why that's the difference
16	between 48-foot references and 45-foot references.
17	Does could you please flip to WSI-0561,
18	which is Sheet Supplement, Sheet Supplement 258.
19	A 0kay.
20	Q Does this relate to the roof beam?
21	A Yes.
22	Q Is this Sheet 7, is this meant to calculate
23	the total Load upon the C-15 by 33.9-pound beam?
24	A Probably, but I'm not an engineer. Generally,
25	yes, I would say.

1	Q Are you required by Code to make dead load and
2	live load calculations?
3	A I don't know.
4	Q But you have exhaustive knowledge.
5	A I'm not an engineer.
6	Q Okay. Under would you agree that under
7	Section 1.1603.1 of the Uniform Building Code, building
8	shall be designed and constructed to sustain all dead
9	loads and all other loads specified within this chapter
10	and elsewhere in this code?
11	A That would be up to the engineer to determine.
12	That's why we have engineers.
13	Q Okay. And are these so are these
14	calculations meant to confirm the total load?
15	A I would imagine we did several things in this
16	suppl ement.
17	Q Do you know where you would find the values
18	for a C-15 by 33.9 pound beam for the variable the
19	values her for area depth, flange width, movement of
20	inertia? You received those from the manufacturer of
21	the beam?
22	A I would say it would come out of the steel
23	manual.
24	Q From, say, something from the AST Standards
25	and that the American Society for Testing Materials?

1	A Yes, I believe so.
2	Q Okay. The beam deflection equation which is
3	listed mid page on Sheet 7.
4	JUDGE THOMPSON: Bates 561?
5	MR. RILEY: Yes, we are still on 561.
6	BY MR. RILEY:
7	Q Did Walden develop this equation?
8	A No.
9	Q Did Mr. Wood, the structural engineer, develop
10	this equation?
11	A Yes.
12	Q He did develop this equation?
13	A Well, these are his calculations.
14	Q Okay. Was the beam so, do you know if the
15	beam deflection equation is a common equation known to
16	other engineers besides Mr. Wood?
17	A No.
18	Q You don't know?
19	A No. I mean, that's that's a wild question.
20	I'm not sure how to even answer that.
21	Q Is this
22	A Sayit again.
23	Q I'm sorry.
24	MR. DIES: Just to be honest, I don't really know
25	the protocol for objecting.

I would be uncomfortable with anybody asking 1 this witness what other engineers might know. 2 Do I object? 3 JUDGE THOMPSON: Sure. You can object. Were you 4 5 objecting based on lack of knowledge? Or what's your --Well, I think the question as posed is 6 MR. DIES: 7 "Do other engineers know how to use a beam deflection equation?" I don't know how this witness would have 8 9 knowledge what other engineers know. This witness is the head of their MR. RILEY: 10 11 Engineering Department and has interactions with 12 Mr. Wood, who Appellants have stated is their structural 13 engi neer. JUDGE BRAMHALL: He has answered he doesn't know. 14 MR. RILEY: Okay. 15 BY MR. RILEY: 16 17 0 So do you know, with the exception of the length of 45 feet and the "W" here, which is the 18 combination of service loads for -- the manufacturer 19 20 would have provided or the ASTM standards would have provi ded. 21 22 So those are the only two values that 23 Mr. Lord -- I'm sorry -- Mr. Wood would need to have provided in order to complete this calculation? 24

No, I don't know.

Α

25

1	Q You don't know. Okay. Is calculating the
2	deflection of a service is calculating this
3	deflection, is that a service requirement under the UBC?
4	A I don't know.
5	Q Was Walden uncertain as to whether calculating
6	the Load was a requirement under the Building Code?
7	A Well, that's why we have an engineer.
8	Q Okay. So I just want to confirm here. It
9	sounds like the structural engineer, Mr. Wood, would get
10	these values from the length from you, and the other
11	values from ASTM in order to make this calculation?
12	A I would agree.
13	Q Okay. Can you point to the other iterations
14	of this calculation within this Structural Engineering
15	Supplement No. 258?
16	A No.
17	Q Are iterations of this calculation within
18	Structural Engineering Supplement No. 258?
19	A Not here, no. These are the stamped version,
20	the final version.
21	Q Okay. Within Exhibit 15, can we turn to
22	WSI -0565
23	A Okay.
24	Q which is the lateral summary. It states
25	"Ref S-1000 Plans"?

1	A Yes.
2	Q Do items 1, 2, 4, 5, 6 and 6 all refer back
3	to the S-1000 as in Detail 3 S-711 is Detail 3 of Sheet
4	1 of Sheet 7 one of S-1000?
5	A Details 1, 2 did you say what was the
6	next ones?
7	Q I'm sorry. 1, 2, 4, 5, and 6.
8	A Okay. What do they do?
9	Q They all refer back to S-1000?
10	A Yes. So those are shear walls and roof
11	di agram.
12	Q Okay. Were you aware was Walden uncertain
13	as to whether you could make a 48-foot ridge beam?
14	A With that material?
15	Q You are uncertain about making a beam from
16	C-15 33 by 33.9-pound steel beam?
17	A Yes. Because it was not included in our
18	S-1000 package.
19	Q Okay. And nothing nothing existed in terms
20	of guidance with respect to that beam?
21	A Well, we had existing in the S-1000 packages
22	what it would support in a clear-span configuration.
23	Q Okay. But Walden had used a 48-foot beam
24	before the Welk Project; correct?
25	A I don't know. Doubtful, because we had

special calculations. 1 Okay. Could you -- I gave you that -- the 2 Q four sheets there. 3 Α Um-hum. 4 5 Q Could you turn to the second page of those sheets, which is -- sorry. Which should be --6 7 Α This is for different projects. 8 Q Right. So this says WSI-0079. 9 Α 0kay. It says the Shell Vacations office? Q 10 11 Α 0kay. And under "Roof System" under Detail 8 12 Q California, it says, "Ridge Beam 2." It says, "C-15 by 13 33.9 C channel and 48-foot length." 14 15 Α 0kay. Q Is that -- is that a C-15 by 33.9-pound beam, 16 17 another 48-foot length? Α It is. 18 19 0 0kay. JUDGE THOMPSON: Just slow down a little bit for --20 like I said, said the hearing reporter --21 22 MR. RILEY: 0kay. Sure. JUDGE THOMPSON: I'm looking at this, WSI-79. 23 Where exactly are we? 24 25 MR. RILEY: Right here.

1	JUDGE THOMPSON: Okay.
2	MR. RILEY: Column A under California, halfway down
3	it says, "Roof System."
4	JUDGE THOMPSON: Got you.
5	BY MR. RILEY:
6	Q Can you turn to the next page which is
7	WSI -0111.
8	I'm sorry. Back back one page.
9	And this document is dated February 1st, 2006.
10	That is WSI-0079, it's dated February 1st, 2006.
11	A Okay.
12	Q And WSI-0111 the next page. This is a
13	document dated 1/18/2016.
14	Does Detail 8 state that the ridge beam is
15	C-15 by 33.9-pound beam in 44-foot length?
16	A Yes. That's what it states.
17	Q Okay. And the next page, that is WSI-0082.
18	It's a document dated August 12th, 2005. Again, Detail
19	A in California, the ridge system, does it say
20	clear-span C Channel C-15 by 33.9-pound
21	THE REPORTER: Could you say that again? I'm
22	sorry.
23	BY MR. RILEY:
24	Q Under the ridge beam, clear-span C channel
25	C-15 by 33.9 pound?

1	A You are restating that for her? I thought I
2	already answered the question.
3	Q If you did
4	A Yes, it does.
5	Q And is the building length 48 feet, according
6	to the floor plan?
7	A Yes. It looks like it. Yeah.
8	Q Okay. And could you tell me who drew
9	WSI -0082?
10	A E.G., so Eddie Garcia.
11	Q Is that the Eddie Garcia that drew the 24 by
12	45-foot building?
13	A Yes.
14	Q So I'm now going to turn to the to Exhibit
15	29, which is not the drawings, so you can have a little
16	break from the drawings for a moment.
17	But on page WSI-0052, I think we've
18	established that this is your signature and that you
19	filled out the project questionnaire.
20	A I definitely signed it, yes.
21	Q Okay. You signed the document. Did you sign
22	it on 10/31/2008 as with the signatures on the previous
23	page?
24	A I'm not certain of the date. I don't see a
25	date.

1	Q So the	date would be on WSI-0051?
2	A Okay.	
3	Q And yo	u stated that you had no engineers in
4	the Engineering	Department?
5	A P.E. s	tamp engineers? That's correct.
6	Q They a	re draftsmen, but they are not
7	engi neers?	
8	A Correc	t.
9	Q And do	they have engineers' degrees?
10	A Some o	f them.
11	Q 0kay.	
12	A To wha	tever degree, drafting technician.
13	Q Do you	know if that is a bachelor of science
14	in engineering?	
15	A No, I	don't know.
16	Q And it	's your opinion, according to WSI-0052,
17	that the activit	y at that Walden's Engineering
18	Department perfo	rmed was drafting designs, developing
19	design schematic	s, and developing CAD drawings; correct?
20	A Yes.	
21	Q Isad	rafted design, is that another name for
22	a blueprint?	
23	A A blue	print is a type of a print.
24	Q Soac	olloquial blueprint, rather than an
25	actual old schoo	I French blueprint?

1	A A plan. I'll agree to that.
2	Q Okay. And is the design that a a
3	reproduction of technical drawing, an architectural
4	plan, an engineering design?
5	A It could be.
6	Q Okay. Are the Layout drawings of, for
7	example, the Welk 45 by sorry 24 by 45 building
8	are those we have been calling them specifications,
9	but are those CAD drawings?
10	A They were developed on CAD, yes.
11	Q And would you agree that a CAD drawing is
12	using a computer to draw or design anything?
13	A Sure. Yes.
14	Q Okay. How does a CAD drawing differ from a
15	hand-drawn design?
16	A You're using a computer with a mouse and
17	keypunch, and a hand drawing, you are drawing with paper
18	and straight edges and pencil.
19	Q It's simply using a computer to do the same
20	sort of a drawing?
21	A Okay. I guess.
22	Q How does a design differ from a design
23	schematic?
24	A I don't know.
25	Q How does a design schematic differ from a CAD

1	drawi ng?
2	A A schematic, I would think, would be, like, a
3	isometric or something. A schematic is normally not as
4	detailed as architectural plans are.
5	Q Okay. How is CAD drawing different from the
6	computer modeling that you stated that you performed?
7	A I don't remember stating CAD modeling, but, as
8	far as it being drawn in the computer in autoCAD
9	software, that's what we do or did.
10	Q So you don't consider the CAD drawing I
11	mean, it may have been Mr. Dies' words that it was
12	that CAD was computer modeling?
13	A Okay.
14	Q Do you agree with that, that a CAD drawing is
15	a computer modeling?
16	A In a general term, I guess, yes.
17	Q So with respect to the Welk 45 by 24
18	building 24 by 45 building, which came first the
19	draw the CAD drawing or the or Engineering
20	Supplement Structural Engineering Supplement 258?
21	A The CAD drafting would come first.
22	Q Okay. So I'm going to move on to the
23	Genentech project.
24	So I'm going ask you to look at Exhibit 22,
25	and I'd like you to look at page first, let's start

```
at page 237, the reflected ceiling plans Details 1
 1
      through 4.
 2
                Are those the same details as in the Welk 24
 3
      by 60 project?
 4
                So these are the details, Detail 1, Detail 2,
 5
      Detail 3, and 4?
 6
                Which Welk, 24 or 45 or --
 7
                24 by 60.
           Q
 9
           Α
                Which one is that? Is that 14? Which
      supplement is that?
10
           MR. HODGES: 24 by 60.
11
                                    16.
           THE WITNESS: Okay. So details 1, 2, 3, and 4 --
12
      BY MR. RILEY:
13
           0
                Yes.
14
                -- is your question?
15
           Α
           0
                Yes.
16
                Looks like similar, if not exact.
17
           Α
           JUDGE THOMPSON: Exhibit 22; correct?
18
19
           MR. RILEY:
                       Exhibit 22, page WSI-0237.
20
           JUDGE THOMPSON:
                            Thank you.
      BY MR. RILEY:
21
22
           0
                Okay. Please turn to the previous page,
      WSI -0236.
23
                And, again, it states way up in the binding it
24
      says, "This modular building designed and constructed
25
```

according to the structural package S-1000 and 1 supplement." Period. 2 The specs don't identify the supplement on 3 Sheet A-3 which is this WSI-0236. 4 I'm not seeing -- where are you? 5 I'm sorry. It's way up here, within the 6 0 7 binding of the exhibit. MR. DIES: You can rip it open if you need to. 8 We don't need it after this. 9 THE WITNESS: So what is your point? 10 BY MR. RILFY: 11 Q I'm asking if it says Supplement -- it says 12 there's a supplement, but there's not -- not one listed. 13 I'm just asking if that is a reference to 14 Supplement 178, which is Exhibit 23? 15 Α It should have been. 16 0 Should have been? 17 When I look at 03 -- 0232, it says 178. Α Soif 18 it's missing, I can't see it myself. 19 So let's, please -- please turn to 20 Q 0kay. Exhibit 23, which is Supplement 178 at page 0321. 21 Α 231. 22 23 0 0231. Within --24 Α Within the exhibit. It's Sheet 11. 25 Q

1	A Supplement 23?
2	Q Yeah. I'm sorry. It's Exhibit 23.
3	JUDGE THOMPSON: It's 0231.
4	BY MR. RILEY:
5	Q 0231 is the page.
6	A 0kay.
7	Q Here it says, "Sidewall bracing. See
8	supplement No. 13 for calculations."
9	Is this a reference to Structural Engineering
10	Supplement No. 13?
11	A I would assume so.
12	Q Is the reason that the there's simply a
13	reference to Supplement No. 13 for the calculations is
14	the reason that's it's not those calculations are not
15	listed here? Is that because they were previously done
16	in Supplement No. 13?
17	A Likely. I don't know for certain.
18	Q Okay. Do you know why okay. Let's see
19	here.
20	So this project involved miles of cabling in
21	the ceiling that created an additional load that needed
22	to be supported; correct?
23	A Yes. That's what John wrote.
24	Q Okay. So can you look back to Exhibit 23. So
25	the same exhibit and 0312. This page refers to the

1	roof, and there are two trusses referred to, a 55-foot
2	truss and 70-foot truss; correct?
3	A Yes.
4	Q With respect to the 55-foot truss, Supplement
5	178 states per S-8.0 plans.
6	Are the S-0.8 plans in this Supplement Sheet
7	8?
8	A No.
9	Q Where are they located?
10	A In S-1000.
11	Q Okay. Were they available to Walden and to
12	the structural engineer?
13	A Yes.
14	Q Okay. And Walden is claiming that there was
15	experimentation with respect to the 55-foot truss;
16	correct?
17	A The engineer would have verified it, yes.
18	Q So is verification, is that your is that
19	a that an experiment?
20	MR. DIES: I'm uncomfortable with questions about
21	the law, because experimentation means something under
22	Section 41 here
23	MR. RILEY: Okay. Withdrawn.
24	MR. ROUSE: They have been talking about certainty
25	all day, and that is also a technical legal term, and we

1	haven't objected.
2	So I'd I'd like just a little bit of leeway
3	on our side as well.
4	JUDGE THOMPSON: We can take it for what it's
5	worth, legal conclusions and factual testimony.
6	BY MR. RILEY:
7	Q So Walden is claiming that there was
8	experimentation with respect to the 55-foot truss?
9	A Within calculations, I would agree.
10	Q But those calculations are listed in they
11	are Located in S-1000; correct?
12	A He is saying for the two middle days. That's
13	all he's talking about there. The middle days of the
14	truss. He's not saying the entire truss.
15	Q Okay. Can you point out the calculations with
16	respect to the 55-foot truss? The Load on that within
17	this sheet here?
18	A No.
19	Q Okay. What about the 70-foot truss, says per
20	Supplement 115, 72-foot truss except off-foot offsets
21	peak.
22	That's a reference to look at the calculation
23	in the Structural Engineering Supplement 117; correct?
24	A 115.
25	Q Sorry. 115.

1	А	Yes.
2	Q	Did Walden supply Mr. Wood with Supplement No.
3	115?	
4	А	Mr. Wood developed all of the supplements.
5	Q	So that supplement was available to Mr. Wood
6	during th	is project?
7	А	Yes.
8	Q	And Structural Engineering Package S-1000 was
9	al so avai	lable to Mr. Wood?
10	А	Yes.
11	Q	And you are required by Code to make dead Load
12	and live	load calculations?
13	А	Again, that's in engineering.
14	Q	Is it
15	А	I don't do.
16	Q	Is it do you know is it sufficient that
17	Walden pr	eviously did the calculations and Structural
18	Suppl emen	t No. 115?
19	А	Not Walden Engineering. Wood Engineering
20	would hav	e.
21	Q	But he had previously had done that in
22	Structura	I Engineering Supplement 115?
23	А	He designed a truss, and what I read this to
24	say is he	is checking for cable trays.
25	Q	Okay. On that note, so, check cable trays.

1	This is a reference to the computer wiring and the
2	equipment that, quote, increased the load of the
3	trusses that is, that the trusses had to support, so
4	a new truss had been to be designed?
5	A It has been verified.
6	Q Okay. In Exhibit 23, is the extent of
7	Mr. Wood's calculation with respect to the support beam
8	load of the cable trays is at the following line on page
9	WSI-0312, the I guess that omega or W equals 12 per
10	linear foot and P equals 12 times 11.67 over 2?
11	A What page?
12	Q I'm sorry. It's the same page, 0312.
13	A Okay. I'm just not following where.
14	Q Apologies. So it's right under the words
15	"check cable trays."
16	A Okay.
17	Q Is that the extent of Mr. Wood's calculation
18	with respect to the support beam load of cable trays?
19	A I assume so. Again, I'm not an engineer.
20	Q Okay. And there's another note here it says,
21	"Not critical. 72-foot truss used for 70-foot span"?
22	A That's what it states, yes.
23	Q What does that mean, "not critical"? That the
24	total load was not critical?
25	A Apparently to him as long as we used a 72-foot

1	truss for a 70-foot span we were okay. 72-foot truss
2	would have had a larger core of materials.
3	Q And so the calculation done in Supplement No.
4	115 is sufficient here even with the inclusion of the
5	cable load tray?
6	A I I don't know. I would assume that's what
7	he is stating here.
8	Q 0kay. Thank you.
9	What about the so this sheet indicates that
10	the 70-foot truss is the same design as in Supplement
11	No. 117?
12	A 70-foot design
13	Q Sorry. I'm in Supplement 115.
14	A No.
15	Q No?
16	Q Supplement 115 is for a 72-foot truss.
17	Q But it's not critical that you use a shorter
18	truss than the 72-foot truss?
19	A We're using the materials for a 72-foot long
20	truss, larger materials in a 70 foot to support the
21	I oads.
22	Q Okay. Is the load from a cable tray, is that
23	a unique-type load within the ceiling?
24	A It was for this, yes. For this building, yes.
25	Q I mean, it so, for example, is a load from

a cable tray, is that different than, say, any other 1 load -- load for roof pebbles or any other load that you 2 would include in a roof? 3 It's an additional load. 4 5 0 It's an additional load, but it's -- any additional load? 6 7 Any additional load would have to be checked. Q Can you look at Exhibit 23, the summary 8 9 legend on sheet -- WSI-0326? JUDGE THOMPSON: 0326? 10 MR. RILEY: 11 0326. THE WITNESS: Okay. 12 BY MR. RILEY: 13 Is the line Ref S-1000 plan -- again, that's a 14 Q to have reference to Structural Package S-1000? 15 Α Yes. 16 0 And it's the same structural package 17 referenced in the Welk Project? Same --18 Yes. 19 Α -- S-1000. 20 Q Okay. Are details 4, 5, 7 -- 4, 5, 6, 7, 8, 21 and 9 all references to Structural Package --22 23 Structural, to the Structural Package S-1000? Α 24 No. Q No? 25

1	A These are specific requirements on those grid
2	lines but they reference, well
3	Q They reference?
4	A the S-1000.
5	Q Okay. And does Detail 10 refer back to Sheet
6	2 of the supplement, which in turn refers the refers
7	the reader to S-08, which we we established was
8	S-1000?
9	A Of what page now? Page 2?
10	Q Page 2 of this of this Structural
11	Engineering Supplement, which is 0321.
12	A That was that was Box 10, did you say?
13	Meaning
14	Q Detail 10.
15	A 0kay.
16	Q Box 10.
17	A Okay. Yes.
18	Q And Detail 13 also references back to Sheet 2
19	and refers the reader to Supplement No. 117 sorry,
20	115.
21	A To Supplement 115. I'm not certain of that.
22	It's saying a meeting with the truss grid line
23	7318 per Sheet 2 of the supplement.
24	MR. DIES: You're getting away from your mic.
25	That's okay.

1	THE WITNESS: Sorry.
2	So again ask the question again, please.
3	I'm sorry.
4	BY MR. RILEY:
5	Q Does Box 13 refer the reader back to Sheet 2
6	of this supplement, which in turn refers the reader to
7	Supplement No. 115?
8	A Yes.
9	Q Okay. Does Detail 14 refer refer to
10	Structural Engineering Supplement No. 37?
11	A Yes.
12	Q And does Detail 15 refer back to Sheet 11 of
13	this supplement, which in turns refers the reader back
14	to Structural Engineering Supplement No. 13?
15	A Yes.
16	Q 0kay.
17	A Sheet 10, I'm not certain of that. Yeah.
18	0kay. 13, yes.
19	Q Okay. Is it time? So, let's move on to the
20	Bramasol Project.
21	MR. DIES: Your Honor, I do have some concerns that
22	we have been at this for about an hour. We have only
23	covered two projects. I'm not y'all haven't kept me
24	on a clock, although I tried to be quick.
25	JUDGE THOMPSON: I would like to get to these

questions with respect to these projects, so, Mr. Riley, 1 2 if you can try to wrap it up. MR. RILEY: I think that now that we have 3 established what the nomenclature and what the symbols 4 5 mean, I think the things will move quicker. 6 JUDGE THOMPSON: Okay. Go ahead. 7 BY MR. RILFY: Exhibit 11. So on WSI-0064, which 8 Q Okay. 9 appears on the first sheet in this, within Exhibit 11, there appear to be many of the same references to 10 11 Structural Package S-1000 as in the Welk Project and the --12 THE REPORTER: Can you slow down? 13 BY MR. RILEY: 14 On Sheet A-1, which is WSI 0064, there appears 15 to be many of the same references to Structural Package 16 17 S-1000 as in the Welk Project and the Genentech Project 18 especially with respect to Detail 8 of the shear wall, 19 and the -- and in the general notes here, it says this 20 modular building is designed and built according to the 21 Structural Package S-1000 Supplement No. 243; correct? Α Correct. 22 Can we look at 0068? Does Sheet A-3.0, 23 Q Okay. 24 does this show a parapet? Α 25 Yes. It appears to show a parapet.

1	Q Can you determine the function of this parapet
2	from Looking at Sheet A-3.0?
3	A Function? It I guess, in the simplest
4	form, squares off the roof.
5	Q Okay. Do you remember telling the auditor at
6	the June site visit, June 2011, that this project
7	involved a huge parapet?
8	A No.
9	Q Okay. Do you recall telling the auditor
10	during the site visit that the Bramasol Project had a
11	marquee look on the front side of the building?
12	A It does. You are referencing a preliminary
13	set of plans. Perhaps if you look at the production
14	issue, you will see the difference.
15	Q I think we will get there.
16	A Okay.
17	Q Was the function of the parapet to enhance the
18	roof line?
19	A I don't know what was in the customer's mind.
20	It had a very specific look that they were trying to
21	achi eve.
22	Q Okay. Can you look at we're going compare
23	A-3, this of this sheet to A-3.1 and A-3.2 which are
24	WSI-0068 and 0070?
25	Can you tell me which among these three

1	drawings depicts the marquee look?
2	A Well, 0070.
3	Q Okay. But these are three different parapet
4	options depicted on these three sheets.
5	A Apparently.
6	Q Did Walden require the parapet?
7	A No. They are customer requests.
8	Q Okay. Do you recall the customer requesting
9	parapets of different heights?
10	A First off, this wasn't my project, so I don't
11	recall that.
12	Q 0kay.
13	A Obviously, we presented some information.
14	Q So was the customer uncertain as to which
15	parapet they wanted?
16	A I would agree that that's an accurate
17	assumption. I don't know. This is a surprise to me,
18	honestly.
19	Q So it does A-3, does this depict a typical
20	Walden parapet?
21	A It's a squared-off roof.
22	Q 0kay.
23	A I'll agree to that.
24	Q Does this parapet increase the apparent height
25	of the building?

1	A Yes, I would agree to that.
2	Q Does it improve the building's proportions?
3	A I don't know.
4	Q Does
5	A Aesthetically in one person's eye, perhaps.
6	Q Does it does hide the actual roof line?
7	A Yes.
8	Q Does it hide rooftop equipment?
9	A No. There was no rooftop equipment on this.
10	Q So can you flip back to 83.2, which is 0070.
11	A Okay.
12	Q Does the marquee depicted in 83.2 perform an
13	aesthetic function?
14	A I would agree to that, yeah.
15	Q In general, are parapets common architectural
16	features on commercial building?
17	A Commercial buildings? Sure.
18	Q Are parapets common on Walden's modular
19	structures?
20	A No.
21	Q Walden claimed the research credit for 67
22	non-military structures during the 2004 to 2006 taxable
23	years at issue. Do you know how many of those 67
24	non-military projects included parapets?
25	A No, I don't.

1	Q Would it surprise you to learn
2	A It's definitely not under S-1000.
3	Q Would it surprise you to learn that 33 of the
4	67 non-military projects included, quote, special
5	parapets?
6	A No.
7	Q No. Can you please look at Exhibit 12, which
8	depicts the ultimate design for which production was
9	issued in Bramasol?
LO	A Okay. Which page?
L1	Q At page I'm sorry. I have it listed as
L2	299, but I believe it is in this Exhibit 0132.
L3	A Okay.
L4	Q The ultimate design of the parapets included
L5	parapets of two, three, and five feet; correct?
L6	A Not not in those whole numbers, but there
L7	were certainly at least three different heights of
L8	parapet here.
L9	Q Because the parapets varied in size, they also
20	varied in weight. Would you agree with that?
21	A Yeah. Weight, yes.
22	Q Did the customer change its mind regarding the
23	height of the parapets?
24	A I would assume so.
25	Q Because of this difference in size and weight,

1	each parapet's contribution to the roof load needed to
2	be calculated separately; is that correct?
3	A Each one had to be analyzed, correct.
4	Q Is that a requirement of the Building Code?
5	A It didn't I would assume so, but it most
6	simply did not exist in S-1000.
7	Q You couldn't simply make one calculation for
8	the entire parapet because it varied in height; correct?
9	A I'm not an engineer, so I don't know if you
10	could simply make one calculation. I don't know.
11	Q Okay. But you would agree you are required by
12	Code to make dead load and live load calculations?
13	MR. DIES: We've, kind of, had this question a few
14	times.
15	THE WITNESS: I'm not an engineer, so
16	BY MR. RILEY:
17	Q Okay. Do you remember stating that Bramasol
18	required a volume of calculations
19	A No.
20	Q during the site visit?
21	A No.
22	Q Okay. Do you remember telling the auditor at
23	the June 22nd, 2011, site visit that Bramasol required
24	a, quote, a volume of calculations?
25	A No, I don't recall that.

1	0 0kay.
2	A Doesn't mean I didn't say it. I don't recall
3	it.
4	Q If you were to say it, a volume of
5	calculations, do you mean that there were a great many
6	calculations to make?
7	A Yeah.
8	Q That the calculations required a great deal of
9	effort to complete?
10	A In my estimation, yeah.
11	Q Would you describe the calculations as
12	compl ex?
13	A Certainly above my ability.
14	Q But is Mr. Wood a reasonably skilled
15	structural engineer?
16	A Yes. Very.
17	Q And Mr. Wood would know how to make these
18	complex calculations?
19	A Yes.
20	Q But it might take him a lot of effort?
21	A I would agree.
22	Q Okay. So let's move to the truss.
23	Had Walden ever made a 62-foot truss before?
24	A I don't know honestly. I would have to look
25	at the supplement to see what we what we looked at in

1	that engineering.
2	Q Okay. Let's turn to the supplement, which is
3	Exhibit 13. And if you could turn to page 0 okay.
4	So it's 0281 here.
5	A I'd say that's a bunch of pages. Okay.
6	Q It states the following: 62-foot truss Ref
7	Supplement 144 Sheets 13 to 24.
8	A Yes.
9	Q Correct?
10	A Yes.
11	Q And there are five other references here to
12	Structural Engineering Supplement 144?
13	A I don't see them all, but if you can point
14	them out to me.
15	JUDGE THOMPSON: Mr. Riley, some of the material
16	you're pulling is evidence that's in the entry record.
17	Is that that something you can flesh out in your closing
18	arguments?
19	THE WITNESS: So I do see five references.
20	MR. RILEY: Okay. So I will I will attempt to
21	speed it up, but I just want you to know what's in the
22	documents.
23	JUDGE THOMPSON: Right. To the extent you are
24	asking about his understanding of the projects, I
25	   understand. and. vou know.   do want to allow leeway.

and I understand where you are going with this. 1 But to the extent you are just wanting to walk 2 through the documents and indicate what's in the 3 documents and then make a legal argument with respect to 4 5 what's in the documents, that might be something that 6 could be accomplished during the closing. 7 So I hope -- I really don't want to shut you 8 I would like to speed it up a little bit --9 MR. RILEY: 0kay. JUDGE THOMPSON: -- with the focus on what he might 10 11 personally recollect as opposed to his reciting what we 12 can see in the documents. 13 BY MR. RILEY: Okay. So real quick, let's turn to page 296, 14 Q which is the final sheet of this, and this -- this 15 summary legend of the 40 by 62 Bramasol Project, it also 16 17 references S-1000. 18 Α Yes. 19 And much like the other two projects that 20 were -- that the summary Legend referenced the S-1000, 21 there are many details within it that reference Structural Package S-1000? 22 23 Α Yes. Q 24 Okay. Let's move on to the Mosque. 25 Do you recall -- and I'm going to actually

1	hand out a couple of photos that I want to look at.
2	JUDGE THOMPSON: Thank you.
3	JUDGE BRAMHALL: Thank you.
4	BY MR. RILEY:
5	Q So, Mr. Lord, this is the Mosque 1 and 2
6	Proj ect.
7	During the January 25th, 2011, site visit, do
8	you recall telling the auditor that the prototype for
9	the shipping container Mosque was developed in the year
10	2000?
11	A No, I don't recall that.
12	Q Okay. Do you remember telling the auditor the
13	Mosque Project was basically ocean containers modified?
14	A Basically. I don't recall that, but,
15	obviously, I said it.
16	Q Can you turn to Exhibit 20 at page WSI-412?
17	It might be listed the page might be listed at the
18	bottom of that.
19	A 0kay.
20	Q Does this photo depict sorry. It's stuck
21	together here. 412.
22	Does this photo depict stacks of trim prior to
23	installation from the Camp Lejeune Mosque?
24	A Yeah. Those are probably exterior trims.
25	Q Okay. Are those the same trim pieces that are

depicted in --1 And I apologize for this. I am going to ask 2 you to look at Exhibit 18, which is some of the 3 So Exhibit 18 at -- let's see here. 4 drawi ngs. 5 guess it's actually -- Exhibit 18 is a little bit out of order here, but -- so page 0447. It's Mosque trim 6 7 details, and it's towards -- it's actually towards the end of -- of Exhibit 18. 8 So Exhibit 18 is not in order, but it's 9 probably ten or so pages in. 10 0447. 11 Α Q 0447, the Mosque trim details. 12 13 Α This is 0447? Yes. 14 Q That what you are referring to? 15 Α Q That's the first page of Mosque trim. 16 Α 0kay. 17 Q Okay. Are these the same trim pieces that are 18 depicted on WSI-0452? 19 Α 20 I don't know. But these -- these are generally Mosque trim 21 Q pieces that were designed for the Camp Lejeune project? 22 23 Α These are generally trim pieces, and I 24 would agree these are probably modline and roof trim pi eces. 25

1	Q Okay. Can you look back at WSI-0527, which is
2	this depiction of the Mosque stacked up.
3	A Okay.
4	Q Does this photo show construction of the 29
5	Palms Mosque prior to the installation of trim pieces?
6	A Potentially, yeah. I think this is 29 Palms.
7	Q Okay. Let's see here. 5 and 27, okay.
8	Exhibit 21 where did that go? At 05 0527. I'm
9	sorry. I just asked that question.
10	Same exhibit. At 0542.
11	MR. DIES: Are these the pictures?
12	MR. RILEY: Yes. Sorry. It caught on my this
13	picture right here.
14	BY MR. RILEY:
15	Q This is WSI-0542. Does this photo show the
16	construction of the 29 Palms Mosque following the
17	installation of the trim pieces?
18	A We haven't gotten the picture yet. I don't
19	have the pictures yet.
20	Q The stack of photos I gave you, it's the last
21	page.
22	A Looks to be 29 Palms and looks like the trim
23	pieces were installed.
24	Q Okay. What is the function of these trim
25	pi eces?

1	A To close the gaps between between the
2	horizontal modlines and the vertical corners.
3	Q Is it something other than cosmetic?
4	A Cosmetic and semi keeping water out of the
5	i nteri or.
6	Q Okay. Do you recall stating that the Mosque
7	needed to have a weathered Look?
8	A No, but, obviously, we did that.
9	Q Okay. And if you look at WSI-0373 and 0375,
10	is this the weathered look?
11	A Yeah. It's texture going on.
12	Q And that's an application of the weathered
13	I ook?
14	A It looks like it, yes.
15	Q Okay. So we have got a couple of stipulations
16	in this case that John Miller was not a Walden employee,
17	and Matt Smith was not a Walden employee.
18	So if you could look at Exhibit 18 which is
19	the Mosque Structural Revision D.
20	A Yes.
21	Q And says it was drawn by Matt Smith?
22	A Okay.
23	Q So I guess I'm confused. Matt Smith is not a
24	Walden employee?
25	A Correct.

A That's what it says.  Q Structural engineering by J E S Enginee  Inc.  A Yes.  Q So Mr. Wood did not do the  A So do you notice that says "Civil engin  and land surveying"? Mr. Wood no, Mr. Wood di  do these calculations.  Q Okay. Can you look to there's a lot  them in here, my apologies.  Can you look to page 0434? I'm sorry,  O446 this document is titled "Window Design and  Framing."  A Okay.  Q And No. 1, typical door it says "typica  elevation.  A Okay.  A Okay.			
Q It also says, "Drawn by Matt Smith."  A That's what it says.  Q Okay. And prepared by Allied Container  A That's what it says.  Q Structural engineering by JES Enginee  Inc.  A Yes.  Q So Mr. Wood did not do the  A So do you notice that says "Civil engin  and land surveying"? Mr. Wood no, Mr. Wood di  do these calculations.  Q Okay. Can you look to there's a lot  them in here, my apologies.  Can you look to page 0434? I'm sorry,  Can you look to page 0434? I'm sorry,  O446 this document is titled "Window Design and  Framing."  A Okay.  Q And No. 1, typical door it says "typica  elevation," but I think it means typical window  elevation.  A Okay.  Q And it says that it was drawn by Matt S	1	Q	But he drew the documents?
A That's what it says.  Q Okay. And prepared by Allied Container A That's what it says.  Q Structural engineering by JES Enginee Inc.  A Yes.  Q So Mr. Wood did not do the A So do you notice that says "Civil engin and land surveying"? Mr. Wood no, Mr. Wood di do these calculations.  Q Okay. Can you look to there's a lot them in here, my apologies.  Can you look to page 0434? I'm sorry,  O446 this document is titled "Window Design and Framing."  A Okay.  Q And No. 1, typical door it says "typica elevation," but I think it means typical window elevation.  A Okay.  Q And it says that it was drawn by Matt S	2	Α	Definitely has their title on it.
O Okay. And prepared by Allied Container  A That's what it says.  O Structural engineering by J E S Enginee  Inc.  A Yes.  O So Mr. Wood did not do the  A So do you notice that says "Civil engin  and land surveying"? Mr. Wood no, Mr. Wood di  do these calculations.  O Okay. Can you look to there's a lot  them in here, my apologies.  Can you look to page 0434? I'm sorry,  O446 this document is titled "Window Design and  Framing."  A Okay.  O And No. 1, typical door it says "typica  elevation.  A Okay.  O And it says that it was drawn by Matt S	3	Q	It also says, "Drawn by Matt Smith."
A That's what it says.  Q Structural engineering by JES Enginee  Inc.  A Yes.  Q So Mr. Wood did not do the  A So do you notice that says "Civil engin  and land surveying"? Mr. Wood no, Mr. Wood di  do these calculations.  Q Okay. Can you look to there's a lot  them in here, my apologies.  Can you look to page 0434? I'm sorry,  O446 this document is titled "Window Design and  Framing."  A Okay.  Q And No. 1, typical door it says "typica  elevation.  A Okay.  A Okay.  Q And it says that it was drawn by Matt S	4	А	That's what it says.
O Structural engineering by J E S Enginee  Inc.  A Yes.  O So Mr. Wood did not do the  A So do you notice that says "Civil engin  and land surveying"? Mr. Wood no, Mr. Wood di  do these calculations.  O Okay. Can you look to there's a lot  them in here, my apologies.  Can you look to page 0434? I'm sorry,  O446 this document is titled "Window Design and  Framing."  A Okay.  O And No. 1, typical door it says "typical  elevation.  A Okay.	5	Q	Okay. And prepared by Allied Container.
Inc.  A Yes.  O So Mr. Wood did not do the  A So do you notice that says "Civil engin  and land surveying"? Mr. Wood no, Mr. Wood di  do these calculations.  O Okay. Can you look to there's a lot  them in here, my apologies.  Can you look to page 0434? I'm sorry,  O446 this document is titled "Window Design and  Framing."  A Okay.  O And No. 1, typical door it says "typica  elevation.  A Okay.  A Okay.  O And it says that it was drawn by Matt S	6	A	That's what it says.
9 A Yes. 10 Q So Mr. Wood did not do the 11 A So do you notice that says "Civil engin 12 and land surveying"? Mr. Wood no, Mr. Wood di 13 do these calculations. 14 Q Okay. Can you look to there's a lot 15 them in here, my apologies. 16 Can you look to page 0434? I'm sorry, 17 0446 this document is titled "Window Design and 18 Framing." 19 A Okay. 20 And No. 1, typical door it says "typica 21 elevation," but I think it means typical window 22 elevation. 23 A Okay. 24 Q And it says that it was drawn by Matt S	7	Q	Structural engineering by J E S Engineering,
10 Q So Mr. Wood did not do the  A So do you notice that says "Civil engin  and land surveying"? Mr. Wood no, Mr. Wood di  do these calculations.  Q Okay. Can you look to there's a lot  them in here, my apologies.  Can you look to page 0434? I'm sorry,  0446 this document is titled "Window Design and  Framing."  A Okay.  Q And No. 1, typical door it says "typica  elevation," but I think it means typical window  elevation.  A Okay.  Q And it says that it was drawn by Matt S	8	Inc.	
A So do you notice that says "Civil engin and land surveying"? Mr. Wood no, Mr. Wood di do these calculations.  Q Okay. Can you look to there's a lot them in here, my apologies.  Can you look to page 0434? I'm sorry,  O446 this document is titled "Window Design and Framing."  A Okay.  Q And No. 1, typical door it says "typica elevation," but I think it means typical window elevation.  A Okay.  Q And it says that it was drawn by Matt S	9	Α	Yes.
and land surveying"? Mr. Wood no, Mr. Wood di do these calculations.  Q Okay. Can you look to there's a lot them in here, my apologies.  Can you look to page 0434? I'm sorry,  0446 this document is titled "Window Design and Framing."  A Okay.  Q And No. 1, typical door it says "typica elevation," but I think it means typical window elevation.  A Okay.  Q And it says that it was drawn by Matt S	10	Q	So Mr. Wood did not do the
do these calculations.  Q Okay. Can you look to there's a lot them in here, my apologies.  Can you look to page 0434? I'm sorry,  0446 this document is titled "Window Design and Framing."  A Okay.  Q And No. 1, typical door it says "typica elevation," but I think it means typical window elevation.  A Okay.  Q And it says that it was drawn by Matt S	11	A	So do you notice that says "Civil engineering
14	12	and Land s	urveying"? Mr. Wood no, Mr. Wood did not
them in here, my apologies.  Can you look to page 0434? I'm sorry,  0446 this document is titled "Window Design and  Framing."  A Okay.  And No. 1, typical door it says "typica elevation," but I think it means typical window elevation.  A Okay.  A Okay.  A Okay.  A Okay.  A Okay.  A Okay.	13	do these c	al cul ati ons.
Can you look to page 0434? I'm sorry,  0446 this document is titled "Window Design and  Framing."  A Okay.  And No. 1, typical door it says "typica elevation," but I think it means typical window elevation.  A Okay.  A Okay.  A Okay.  A Okay.  A Okay.  A Okay.	14	Q	Okay. Can you look to there's a lot of
17 0446 this document is titled "Window Design and 18 Framing." 19 A Okay. 20 Q And No. 1, typical door it says "typica 21 elevation," but I think it means typical window 22 elevation. 23 A Okay. 24 Q And it says that it was drawn by Matt S	15	them in he	re, my apologies.
Framing."  A Okay.  And No. 1, typical door it says "typica elevation," but I think it means typical window elevation.  A Okay.  A Okay.  A Okay.  A Okay.  A Okay.	16	(	Can you look to page 0434? I'm sorry, 0446.
A Okay.  O And No. 1, typical door it says "typical elevation," but I think it means typical window elevation.  A Okay.  A Okay.  A Okay.  A Okay.	17	0446 this	document is titled "Window Design and
20 Q And No. 1, typical door it says "typica 21 elevation," but I think it means typical window 22 elevation. 23 A Okay. 24 Q And it says that it was drawn by Matt S	18	Frami ng. "	
elevation," but I think it means typical window elevation.  A Okay.  And it says that it was drawn by Matt S	19	А	0kay.
el evation.  A Okay.  And it says that it was drawn by Matt S	20	Q	And No. 1, typical door it says "typical door
A Okay.  O And it says that it was drawn by Matt S	21	el evati on,	" but I think it means typical window
Q And it says that it was drawn by Matt S	22	el evati on.	
	23	А	0kay.
A Okay.	24	Q ,	And it says that it was drawn by Matt Smith.
	25	А	0kay.

1	Q	And it was dated 11/7/2016.
2	А	All right.
3	Q	According to this document, what do you
4	know what	experiments Mr. Smith did performed with
5	respect to	o the half-moon window?
6	А	No.
7	Q	Can you turn please turn WSI-0472, which is a
8	document	entitled "Allied Containers half-moon window
9	detail."	So this document bears Walden Structures and
10	Construct	ion's mark; correct?
11	А	I'm still trying to find it.
12	Q	Sorry. It's the last second to the last
13	page.	
14	А	0kay.
15	Q	So again, it's for lack of a better term,
16	it's on Wa	alden Structure and Construction's stationery?
17	А	Yes.
18	Q	And it states, "Drawn by JB"?
19	А	Yes.
20	Q	Is that Walden engineer draftsman Jeremy
21	Brown?	
22	А	I believe so, yes.
23	Q	Do you know when this document was dated? It
24	says 11/1	6/16. Do you think it was actually drawn on
25	11/16/2010	6?

1	A No. Yes. Potentially. It certainly was not
2	drawn on 11/16/16, that's all I do know.
3	Q Does this sheet depict the same window as
4	depicted in 0446?
5	A I'm not certain of that. Which page was that
6	agai n?
7	Q Sorry. Page 0446. The one the typical
8	window elevation.
9	A No. It's not the same.
10	Q It's not the same?
11	A No.
12	Q Isit
13	A The dimensions are all different.
14	Q Is it off by half an inch?
15	A Some of them are. Nine and a half,
16	one-half
17	Q Three foot by two inches
18	(Si mul taneous di al ogue)
19	A the width is off by one-half inch. So no,
20	not the same detail.
21	Q Generally, it's virtually the same window?
22	A Generally, yes.
23	Q Off by an inch or so?
24	A Two inches in height.
25	JUDGE THOMPSON: Mr. Riley, how much farther do you

have? 1 So -- I'm trying -- I mean, I will --2 MR. RILEY: do you know how much time we actually have? Is anyone 3 keeping time? 4 JUDGE THOMPSON: You are about ten minutes over 5 your estimate. 6 7 Ten minutes over? MR. RILEY: JUDGE THOMPSON: That is an estimate, so -- I mean, 8 9 you are on the Mosque project now, and forgive me, but what projects do you have left? 10 We have Ynez and Mammoth. 11 MR. RILEY: JUDGE THOMPSON: 12 So --MR. RILEY: I'll finish -- if you give me five 13 minutes, I'll try to finish. I have one -- you know --14 To the extent that there's things 15 JUDGE THOMPSON: in the exhibits that they are pointing to, you know, 16 that's something you might be able to point out in your 17 18 closing and, you know, reserve your questions as best 19 you can to questions about his personal knowledge. 20 MR. RILEY: Okay. JUDGE BRAMHALL: I would like it if you wouldn't 21 rephrase his answers differently than he stated them. 22 23 Mr. RILEY: Apologies if I am doing that. Okay. JUDGE THOMPSON: I do want you to wrap it. 24 25 glad the parties are deep in the project.

1	Be careful what I ask for because that's a
2	good thing.
3	And for Appellants, you will have an
4	opportunity to redirect, and
5	MR. DIES: I don't expect to take any time with
6	that. I think I can handle this in closing.
7	JUDGE THOMPSON: Okay.
8	MR. DIES: I just want to make sure I don't get
9	shut off on a couple of the other things and we find
10	ourselves not finishing today.
11	JUDGE THOMPSON: That's like money in the bank.
12	BY MR. RILEY:
13	Q All right. Okay. With respect to Ynez
14	Elementary, you state that you didn't work on that
15	proj ect?
16	A That's correct. Nor much I didn't have
17	much to do in anything to do with DSA. That was Robert.
18	He was our specialist.
19	Q Okay. And did you happen to notice with
20	respect to the Ynez project that they had different
21	that the drawings that you were referring to earlier,
22	that they had different P.C. numbers?
23	A No, I didn't notice.
24	Q If
25	A That's not uncommon at all.

1	Q If it's the same project, it's it would
2	have a different P.C. number?
3	A Certainly. It could very easily. That
4	project had three different buildings which would have
5	had three different P.C.s.
6	JUDGE THOMPSON: I'm sorry. Could
7	MR. DIES: P.C. numbers.
8	JUDGE THOMPSON: Meaning what?
9	THE WITNESS: Precheck. I'm not extremely versed
10	on a very high level. DSA is a whole different approval
11	than HCDs. It varies.
12	I'm very familiar with the DSA was Rob's,
13	if you will. But so DSA has allows prechecks,
14	P. C. s.
15	BY MR. RILEY:
16	Q With respect to the Mammoth Mountain Project,
17	is there any indication within the documents that this
18	project made it to your structural engineer, Mr. Wood?
19	A I'm not certain of that. What what exhibit
20	would that be?
21	Q Mammoth is Exhibit 17.
22	A Well, he certainly wouldn't have finalized it.
23	I'll say that.
24	These are a combination of the architect's
25	plans and our plans. See, it doesn't have a cover

1	sheet. I don't see the reference. It certainly would
2	have referenced S-1000.
3	MR. RILEY: Okay. Thanks. With that, I'll
4	end.
5	JUDGE THOMPSON: Thank you, Mr. Riley.
6	Appellant, do you have any redirect?
7	MR. DIES: No, your Honor.
8	JUDGE THOMPSON: Okay.
9	MR. DIES: I'll take it up in close.
10	You guys need a comfort break?
11	JUDGE THOMPSON: I think we can march on. Who do
12	we have up next?
13	MR. DIES: Mr. Minor, but it's going to be very
14	fast, given the instructions you guys just kind of gave
15	us.
16	JUDGE THOMPSON: Maybe I should reiterate.
17	I think, just for the record, we all know that
18	we are focused on the requirements under the $41(d)(1)$ ,
19	and not cost nexus.
20	MR. DIES: Sure.
21	JUDGE THOMPSON: And I think we are in agreement on
22	that, just for the record, as it comes up.
23	MR. DIES: Mr. Minor, will you take a seat in the
24	hot spot?
25	THE WITNESS: All right.

1	JUDGE THOMPSON: I'm sorry. Please raise your
2	right hand.
3	
4	JOEL MINOR,
5	called as a witness on behalf of the Appellant, having
6	been sworn in by the Lead Panelist, was examined and
7	testified as follows:
8	THE WITNESS: Yes.
9	JUDGE THOMPSON: Thank you.
10	
11	DIRECT EXAMINATION
12	BY MR. DIES:
13	Q Mr. Minor, I just want to ask you a couple of
14	questions about Mr. Anderson, Kip Anderson.
15	Did you work closely with him?
16	A Very closely, yes.
17	Q Did you have personal knowledge as to
18	Mr. Anderson's familiarity with what the folks that were
19	manufacturi ng supervi sors were doi ng?
20	A Yes.
21	Q Okay. And how how aware was he of their
22	jobs and their specific roles and what they were doing?
23	A He met with them each individually for, you
24	know, several minutes a day at least
25	Q 0kay.

1	A and to direct them on what the day had
2	ahead of them.
3	Q And that would have been true during the '03
4	to '06 period?
5	A Yes.
6	Q You were a part of the process of information
7	to claim his benefit; is that correct, sir?
8	A Yes, sir.
9	Q Did you observe Mr. Anderson and Mr. Love
10	working together Lord I keep doing that. I'm
11	sorry Mr. Anderson and Mr. Lord working together as
12	far as the amount of time folks were spending doing
13	design and all these other things, putting those numbers
14	down?
15	A Yes.
16	Q And was it clear to you that Mr. Anderson, in
17	your interaction with him, was comfortable with the
18	numbers that were being used?
19	A Yes.
20	Q Okay. Mr. Anderson's name is not on Exhibit
21	1 Exhi bi t 29.
22	A Is that the payroll?
23	Q That is the signed descriptions of what folks
24	were doing.
25	Do you know why that is?

1	A Between the time that alliantgroup came out
2	and interviewed us all, we went through the
3	determination of percentages, and the time we finally
4	got to the point of documentation of the calculations,
5	Mr. Anderson passed away.
6	MR. DIES: Okay. That's all I have, your Honor.
7	JUDGE THOMPSON: Okay. Thank you.
8	FTB?
9	MR. ROUSE: No questions from FTB.
10	MR DIES: All right. Mr. Wonish.
11	JUDGE THOMPSON: Okay. Mr. Wonish.
12	
13	ROBERT WONI SH,
14	called as a witness on behalf of the Appellant, having
15	been sworn in by the Lead Panelist, was examined and
16	testified as follows:
17	THE WITNESS: I do.
18	JUDGE THOMPSON: Thank you.
19	Would you spell your last name?
20	THE WITNESS: W-o-n-i-s-h.
21	
22	DIRECT EXAMINATION
23	BY MR. DIES:
24	Q Mr. Wonish, very briefly introduce yourself
25	and tell us your role.

1	A Sure. My name is Robert Wonish. I am a
2	senior director. I work at alliantgroup. My role is
3	varied. I am an attorney. I represent taxpayers. I
4	also oversee quality control during different studies
5	and serve a lot of different roles.
6	l also represent taxpayers in administrative
7	processes like this, represented taxpayers in litigation
8	as well for Tax Court and Federal District courts across
9	the country.
10	Q For purposes of our discussion today, I want
11	to focus on alliantgroup's methodology during the
12	relevant time period very quickly.
13	Were you aware of alliant first of all, are
14	you aware of alliantgroup's methodology in general that
15	they have used over the years?
16	A Yes, I am.
17	Q How how long have you worked for them?
18	A Over 11 years.
19	Q Okay. So you were working at alliantgroup at
20	the time the work at issue would have been done here?
21	A Yes, I was.
22	Q Okay. You were familiar with the processes
23	that were used?
24	A Yes, sir.
25	Q And have you had an opportunity to review this

1	file, go over the information, and observe how this was
2	put together?
3	A I have.
4	Q Okay. And I guess from our standpoint, what I
5	would like the Panel to hear is, there is this test that
6	we have deal with called the "substantially-all test"
7	under the process of experimentation, and there is also
8	a rule called the "shrink-back rule."
9	Are you familiar with those two concepts?
10	A Yes.
11	Q Have you, in fact, taught people those two
12	concepts?
13	JUDGE THOMPSON: I do want to caution here, I mean,
14	in terms legal arguments an briefing
15	MR. DIES: I promise not to ask him what the law
16	says.
17	JUDGE THOMPSON: I understand too late. Go
18	forward.
19	MR. DIES: Literally we are nearly at the end of
20	this thing.
21	BY MR. DIES:
22	Q The question I want ask to you, sir, is what
23	adjustments were made for purposes of addressing
24	well, let me let me ask it this way: In the creation
25	of the calculation of this credit, what adjustments were

made to the wages, contractor costs, were relevant taking into consideration the substantially all rule and/or shrink back?

A The specific approach to shrinking back or identifying only the qualified activities to this taxpayer that made it to their return was to focus just on the qualified designed development phase of the project.

And to that end, from start to finish, apple
-- or acorn to tree, you could look at the project from
the -- the inception all way through construction.

And we haven't done that. We have focused just on the design development aspect of the architectural plans, schematics, design, the actual time that the engineering activity, drafting activities were taken.

To do that, we specifically looked at the people that were included in those phases and only identified those for calculation of the credit.

So we haven't taken or included any of the trades professionals that work for the company that did the welding, that did the actual construction, or did the aesthetic building of the project. We have only looked the engineering time up front with the design and development of the -- of the projects.

Q If -- if a person has -- we've shown some percentages, and I'm not going to pull all this up. But if a person has 45 percent next to their name, what would that tell you from an alliantgroup methodology standpoint in terms of what adjustments were made from the shrink back?

A So that would have looked at that person's activities and tried to identify for that person whether or not they had any nonqualified activities that needed to be excluded and withdrawn those those percentages and percent of their time. So we would have looked and said how much of their time was associated with the original design development phase of the project.

Q In the course of viewing these materials in terms of your familiarity with the case, were there projects that were excluded from alliantgroup's analysis?

A Sure. We excluded a vast number of the company's projects, the modular buildings, the types of activities that did not have custom one-off unique aspects.

The specific project lists were only identified when the company identify the specific unique aspects of that project, and focus in on the design time that would have been necessary to make those changes to

1	a typical or standard or modular building.
2	Q Hypothetically, if a project was something
3	that had been done before that didn't require
4	engineering time, would there have been any piece of
5	that that would have ended up in this calculation?
6	A No, there would not have.
7	MR. DIES: Okay. That is all I have, your Honors.
8	JUDGE THOMPSON: Franchi se Tax Board.
9	
10	CROSS-EXAMINATION
11	BY MR. RILEY:
12	Q I'll just just just a few quick
13	questions about the Exhibit 29 Project Cluster
14	Questi onnai re.
15	Did alliant sorry. Did alliantgroup draft
16	the project cluster questionnaire for Mr. Lord's
17	si gnature?
18	A We would have drafted the questionnaires as
19	part of the study process. So as we are gathering
20	evidence process and information from our client, we
21	would have drafted up a study or report or summary of
22	the information provided to us.
23	As part of our study process, we then provide
24	that to our client, allow them to review it, confirm the
25	facts and evidence contained within it, and verify.

1	Once they have done that, they would sign off
2	on it to verify the facts.
3	Q But you didn't draft it?
4	A I did not personally draft it.
5	Q 0kay.
6	A I don't know who did.
7	Q So with respect to Exhibit 29, the
8	Project Cluster Questionnaire on page WSI-0052
9	MR. DIES: If we could just give him a second to
10	have the exhibit in front of him.
11	THE WITNESS: Could you repeat that?
12	BY MR. RILEY:
13	Q Sure. Exhibit 29, WSI-0052.
14	A I have it in front of me.
15	Q It states non R&D activities, and then it
16	states all of the Engineering Department's time was
17	spent performing R&D activity; correct?
18	A Yes, it states that.
19	Q Okay. And your you stated that you were
20	familiar with the shrinking back rule?
21	A Yes.
22	Q If you applied the shrinking back rule to each
23	of the six projects at issue in this appeal, how is it
24	then that the Engineering Department's activities are
25	claimed at 100 percent in the cluster project

questi onnai re? 1 2 3 happened at the exam level. 4 5 6 7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. DIES: I will object to that, your Honors, because the agreement to limit this to six projects

These folks' time when it was claimed in these documents was claimed in connection with their global We're not saying 100 percent of their time fits these six projects. That's never been the position.

MR. RILEY: I'm sorry, but the -- the -- the document here it says all of the Engineering Department's time was spent performing R&D activities.

To the extent that we have shown through the evidence that some of that activity is not qualified research activities, I think we are entitled to point out that 100 percent of the Engineering Department's time was claimed as R&D activities.

JUDGE THOMPSON: We'll allow him to answer the question. You know, the substantially all with respect to all the activities is at issue --

MR. DIES: Sure.

JUDGE THOMPSON: -- and so, you know, he can respond, and we'll take a look at it and consider its submission.

Specifically, when you were looking THE WITNESS: at these projects, even if they bank off of an existing or prior project or the standard SP-1000, what you are looking at is did the company have to undertake a process of experimentation or process of evaluating one or more alternative -- and I don't want to lecture on the law so I will keep my answer narrow -- but you are looking at whether or not the time that they have to spend collectively -- not on an individual calculation, but collectively on a project -- had uncertainties that they were having to solve.

And from what I understand from the regulations, the experimentation, there's a specific example of a car manufacturer who has made cars before, but because of the environmental regulations, they had to change their exhaust system. And that caused them to change something else like their hood dimensions because the engine got bigger, and that caused them to do all these other activities.

And so they constantly kept having to do changes. Now, the bulk of the car stayed the same but the regulations the example specifically offered that that example was substantially all research, and they allowed it.

In context here, the testimony that our clients gave to us during the study process was the time that they were spending on a project was to make the

1	special collective changes that they needed to, and if
2	they changed the size of the building, if they changed
3	the shape of the roof, that has consequences on the
4	design. And so they go through an overall process for
5	the entire project not on an individual
6	calculation collectively on that project. Was that
7	time part of the experimentation?
8	And that is what we understood it to be, and
9	that's why we worked with them to verify that 100
10	percent of the engineer's time was qualified.
11	MR. RILEY: Okay. We're I think we're done.
12	Thanks.
13	JUDGE THOMPSON: So I have a question in terms of
14	methodology.
15	THE WITNESS: Yes, sir.
16	JUDGE THOMPSON: When Appellant is evaluating
17	whether qualified research occurred, my understanding,
18	based on the briefing, is that the universal activities
19	we would look at of Walden's activities with respect to
20	each project. Is that correct? Is it all the
21	activities? Is that that that, you know, with
22	respect to the project?
23	Or is it in the methodology, you only looked
24	at engineering and development activities?

THE WITNESS: We looked at all of the time

necessary and appropriate to complete the design, and get to that design so it could go off to construction and be built.

But we specifically tried to eliminate the

But we specifically tried to eliminate the actual welders and the plumbers and the actual people doing the cabling and actual construction of the project.

Since the time that this was filed under the T.G. Missouri or Trinity case, those activities of actually building a prototype, a one-off project can actually all be included.

And so, at this time because this case has taken a long time to proceed through the process, the taxpayer could be entitled to research credits for all the activities until the prototype is built, constructed, and you actually prove out the entire design.

In this context, the taxpayer shrunk back.

They didn't want to claim all the different construction activities. They just wanted to claim the specific engineering activities at the core of designing the changes to the structure.

JUDGE THOMPSON: In terms of the methodology, it sounds to me -- please correct me if I'm wrong -- you are saying that the remainder of activities, the

construction activities, would be a part of the activities of Walden in terms of producing the approved business component?

THE WITNESS: You could look at the entire finished business component as a finished product. What we looked at was just through the completed design phase of that. And that's why you have the cutoff at the end of the engineering group.

So if we just look at how much of the activities or how much of the experimentation was going on with the engineers, the draftsmen, the outside third party contractors, and the manufacturing supervisors that are doing the review work, all of that activity is part of the experimentation process.

And so we were entitled to claim 100 percent of those activities in that space. And so that's why you have the engineering group entirely qualified. You have allocations for the manufacturing supervisors who lent their experience to say, "Okay. You designed a great building, but it can't be built this way." or "You are going to have conflicts with the design here, here, and here, so you need to change your design."

So we shrunk back to that initial design phase until they completed their ultimate design of the project.

1	JUDGE THOMPSON: Thank you. You know, it's hard to
2	draw these boundaries in the testimony, so this may be
3	an area that's, presumably, without me saying anything,
4	you would go into it in closing.
5	MR. DIES: Absolutely.
6	JUDGE THOMPSON: It might be worth exploring.
7	MR. DIES: Absolutely.
8	JUDGE THOMPSON: That's all I have.
9	Do either of my co-panelists have any
10	questi ons?
11	JUDGE BRAMHALL: No.
12	JUDGE CHENG: No.
13	MR. DIES: You had mentioned needing potentially
14	Mr Mr. Lord, and
15	JUDGE THOMPSON: Mr. Welk.
16	I don't think, so. My co-panelists, anything?
17	JUDGE BRAMHALL: No.
18	JUDGE THOMPSON: And you are entitled, if you have
19	any further questions, I think, if you have any
20	questions of Mr. Wonish. If you have any redirect, or
21	the give you that opportunity.
22	
23	REDIRECT EXAMINATION
24	BY MR. DIES:
25	Q Well, let me ask you this, Mr. Wonish. From

the time that this transpired, since this credit was put 1 together, has the methodology used on this credit been 2 evaluated by courts? 3 Α It has. So the methodology approach has been 4 5 looked at by the courts in the Shami versus the Commissioner Case, Audio Technica versus the 6 Commissioner. There's been several times that this has 7 gone to trial and reviewed. I don't know how much the 8 9 Panel would like to hear about that. I'm not -- I'm not looking for a legal 0 10 11 argument except to say has any court said that that methodology, that is, interviewing folks, gathering that 12 13 data, shrinking back for that time is improper or not the best way to handle a situation like the 14 substantial all --15 MR. ROUSE: I'm going to object. 16 (Simul taneous dialogue) 17 MR. DIES: I can still say it too. I'm happy to 18 kind of let your know where we are coming from. 19 JUDGE THOMPSON: I asked it. 20 21 MR. DIES: Fair enough. Okay. Your Honors, do you want to break or 22 23 muscle through this? JUDGE THOMPSON: You know, we have nothing left 24 25 except for closing; right?

1	MR. DIES: Yes, your Honor.
2	JUDGE THOMPSON: On closing, I don't know.
3	Everybody in the room may not want to. I'm so I
4	thought maybe take a little break.
5	Maybe we would plan on a little longer for
6	closing? I'm looking at my Co-panel.
7	MR. BRAMHALL: My flight is at 9:25. I just have
8	to get to Burbank.
9	JUDGE THOMPSON: So, I just let's say we say
10	up to 30, up to 40, and, hopefully, you guys won't push
11	the boundary too much.
12	I really want to hear we a lot of new
13	information and testimony, and so I'm really looking
14	forward to hearing closing arguments.
15	And then in the same vein, you know, what if
16	we break until about ten to 5:00? Is that going to
17	put us too late?
18	MR. DIES: I don't have a flight. I'll tell you,
19	I've been living this case. I don't need a lot of time
20	to put this together, so the five or ten-minute comfort
21	break, we can
22	JUDGE THOMPSON: Okay. How about we break until
23	4:40, and we get started?
24	MR. DIES: Yeah. Quarter of.
25	JUDGE THOMPSON: Okay. Let's recess until 4:45,

and we will look forward to it. 1 (Recess taken.) 2 JUDGE THOMPSON: So we are back on record then. 3 CLOSING ARGUMENT 4 5 MR. DI ES: Your Honors, I want to say thanks for the time you gave us to you today to listen to us and 6 7 for giving Mr. Charlie Walden a chance to be heard. This is important stuff. He claimed this 8 9 credit eight years ago. And this is really the first time he's had a chance to get a full understanding of 10 what the Government's position is. It strikes me as 11 12 crazy, ladies and gentlemen. I will tell you I learned today what the FTB's 13 position was on adaptation. If you look in the writing, 14 if you look in the history, if you look in any of the 15 material that has been provided by the State of 16 California, I think you are going to have a hard time 17 finding S-1000, PS-1000. 18 So what happens? We come here today. 19 We hear 20 this argument, we point to documents that were never 21 requested by the FTB. We ask witnesses to refer to things that aren't part of the connection, and the 22 inference is just, sort of made, some of this stuff is 23 the same. 24

25

I can save you a bit of that inquiry, ladies

and gentlemen. A lot of stuff in our products may be the same, but that's not the test. That's not what adaptation is about.

I don't have to use a different length of beam in every one of my buildings, and Ford doesn't have to change the number of tires or wheels they put on a car. That is not the test. I don't have to show that every facet in every one of these projects is different.

It just strikes me as a little bit unfair that only now have we heard anything other than we have engaged in adaptation.

The argument was made -- you will find adaptation in the write-ups, and you've seen it. But I told you this morning, you won't see a single project that they have compared us to that says you stole this idea from that product; therefore, it was adaptation. That analysis has never been provided until today.

I think it would be patently unfair to this taxpayer to rule against them by virtue of adaptation of something they only learned about in the final day of hearing eight years after they claimed this benefit.

That's said, I think we win it anyway. I'm going to try to make it real easy for you guys. No one has disputed the fact that if we beat the four-part test under T.D. 9104, the adaptation exclusion doesn't apply.

So, the real question that you guys have to focus on today is did I get across the finish line on the four-part test? Because if the answer to that is yes, adaptation and duplication go away.

I just wanted to point that out because this is -- these arguments, you know, we didn't have an opportunity to bring some of these documents. This is literally the first we have heard about that position.

Ladies and gentlemen, I think you also have another benefit working for you in this case, and that is the circumstantial evidence. There is this notion that we are just saying we were uncertain. Right? I did ask them some direct questions.

In fairness to everybody in the room, they did track the language of the law. I did ask "Were you uncertain at the outset about the methods you were going to use to solve these problems?" And for every project, the witnesses said "yes."

I leave their credibility to you. I also ask if, as to each of these projects, there was uncertainty as to the appropriate design, and in each case, the witnesses that knew about the projects said "yes."

But I submit to you that you don't have to take their word for it. If they were certain about how to do these projects, if they were certain about how

make these projects work, we wouldn't have 85 pages of paper that we were lugging around, or they had to draw this stuff out and work through the process, wouldn't see multiple revisions, wouldn't see the testing in the form of the calculations from an engineer.

And we'll drive into the four-part test on each project in a moment.

But just to be clear, at a very high level, no one calls an engineer because they want to give their friend some money, and says, "Will you put some calculations together so I can pay you for absolutely no reason?"

If we didn't need these calculations, if we didn't need to prove up our design concepts, if we didn't need to test our hypotheses about whether the designs we were putting together for our clients would work, we wouldn't have had to do that work.

The circumstantial evidence is compelling with respect to certainty. It's compelling with respect to the process of experimentation. Right? That is -- I get this question a lot in R&D. But wait a minute. I don't have bunsen burners. I don't have white lab coats. And thank God -- thank goodness, the law doesn't require me to.

You know I have to do? I have to look at

alternatives. I have to have uncertainty about which alternative is the best. Using systematic trial and error, I have to weigh those alternatives until I come to a place where I had resolved that uncertainty. And then I have to do it in a way that creates a product, process, technique, software, and so on.

So the process of experimentation in this case occurs at many levels, ladies and gentlemen.

Again, out of mindfulness, I want to talk about this at a high level so I can move more quickly through the projects.

But when we first get that sketch from a client, get that idea from a client, Charlie mentioned yellow paper, and in some cases, we get something a little more precise. We are beginning our journey in the process of experimentation, because we had been asked to create a thing that we have never made before.

In every instance, you heard from the witnesses that there were aspects of these projects that they -- that Walden had never done before. Frankly, that's the reason we have drawings. If we had done it before, we wouldn't have needed to make new drawings.

All the drawings are dated. Every single one of the documents that you are looking at here have some reference to time.

So we had been asked to solve a problem that we had never solved before, hence the creation of these drawings. So in the very beginning, they recreated the preliminary drawings. These were our ideas about how we are going to attack a building for this client.

Now, this -- it's a hypothesis at best. We haven't proved a concept. We haven't solved a problem. We have a theory that this particular approach will work. And we do this at many levels. We do this with electrical. We do this with HVAC and heating. We do this with plumbing. We do this with the structural.

On top of that, we have to take into consideration what's going to happen to this product that we are making when we put it on the road.

Some of these products had to go many, many, many, many, many miles away from here and still be safely and completely assembled. They couldn't torque. They couldn't come off square. The couldn't change shape on the road. And we had to engineer and design them so that they wouldn't do that. Right?

So systematically, we are working through competing systems.

There was also a series of questions very near the end of the proceedings today where Counsel asked a question about, you know -- I just lost my train of

thought. Forgive me. I'll come back to it.

Let's go back to the systems. Each of these

systems -- oh, I know -- just took me a little while.

4 Forgive me.

Counsel asked a question about CAD. Is that really modeling? Right? So the guys are using those words. You think it's modeling. We had that exchange. You may remember it. It wasn't that long ago.

Let me submit to you why I think it is and why it I think it constitutes the process of experimentation. Because we are drawing something in virtual space, we were in a computer. We are trying to place objects in a particular location. I may have air handler, I may have a truss. I may have a sprinkler system.

And I put those objects in the location, and then I have to design other systems. And I may be designing five or six different systems, and I'm using CAD to put these things in approximate place and time. And you'll notice, there's dimensions all over the place on this stuff.

Well, when I go and check for conflicts, I have to systematically look at that drawing. I have to say, well, the air handler and this structural beam cannot occupy the same space. Einstein proved that a

I ong time ago. So one of them has to move. Which will
it be? And what are the consequences of moving each?

Okay. We'll move the air handler because this roof truss has to keep the building from caving in.

Well, what happens when we move that air handler? Are we putting a kink in it that's going to require more air flow?

Do we have to make a change in the design?

Where is that air handler relative to the other parts of the building? Am I hanging it on a modline as we saw with Bramasol? And what is the consequence of doing that? How am I going to cool two different units with this air handler?

What CAD does -- what the modeling does is it allows us to systematically manipulate all of these different systems to a point at which we can get all of them to work.

That, ladies and gentlemen, is the definition of trial and error. Right? This is not penicillin that accidentally found its way into a Petri dish on someone's sandwich. This is systematic trial and error, because when I make one change to my system, I have to evaluate the consequences of that change on every other aspect of the system.

Now, keep in mind, I'm still in virtual space.

Frankly, I'm probably still in a preliminary form of the drawings.

Now I go to my engineering folks. I think my structure works. But I don't know. If I knew, I don't have to go to my engineering folks. As Mr. Riley pointed out, if I already have a calculation for my engineer for very particular approach, I have no need to ask him to give me the same thing. I have uncertainty. I don't know if this structure is stable. I don't know if this parapet, which is undisputedly higher than any we had done before it, can handle the wind loads that are being called for. I don't know if I attach it to the building this way that there will be some other unexpected outcome.

And so we want calculations to test the approach that I put together. The engineer says one of two things: Yes, it works. In which case my hypothesis has be confirmed and my process of experimentation is nearly complete. It's not totally complete, but it's pretty close.

Or, no. In which I have to go back and start over again and come up with another approach. Doesn't mean the engineer isn't going to give me some ideas.

Doesn't mean the engineer won't say, "It fails, and it fails because of this reason," which I can then use to

try and solve the problem.

But it does mean that if the engineer says no,
I have to revisit systematically what I did to try to
fix the problem that the calculations have shown us
exist.

That is the process of experimentation. That is systematic trial and error.

Now, we get to the place of building this.

And you guys saw an example on the Mosque project where we had to create a special beam. We had cut so much out of these train -- shipping containers that they weren't -- they wouldn't hold themselves together internally.

And, by the way, that's not just on the road. That's not just this thing going to crimp and torque on the road and in on itself, but when we pick this up with cranes, if it is not structurally protected, it's going to fold in half.

Now, all of a sudden, I have got a product that has changed shape in a foreign state where the military has offered me a lot of money to build it because I didn't engineer around a problem that I didn't anticipate. Right?

And so even in construction, even in completing these prototypes, I am still evaluating

whether my design works. And the testimony was that are instances where we discover that our design won't work for any litany of reasons that caused us to revisit it.

Notice the Code is very clear on the life cycle of research and development. It starts at that dinner napkin prototype, and it doesn't stop until a very particular time, that is, when the product meets the client's functional and economic requirements.

Right? That is -- it's just not a subjective thing.

When do I have a product that does everything it was set out to do functionally and economically?

Now, notice in Mammoth Lake, we never got to that place. The product -- project died because we couldn't meet economic requirements, among other things. But that is the -- the -- the life cycle of research and development. And as Mr. Wonish alluded to, and there are plenty of cases that have talked about this, the creation of a prototype is, in fact, research and development.

Each of these buildings was unique. It doesn't mean they didn't have some of the same shear walls. It doesn't mean that they may not have had common C-beams.

But the specific systems employed in each of these buildings were unique to Walden, and the process

of testing their viability was not completed until I can turn a light switch on and the lights come on, and the AC comes on, and the building works and functions -- until my Marine could kick that door in 60 times and us not have to keep replacing the door mechanics. Right?

All of that stuff had to work and then when it worked -- and only then when it worked is our true process completed.

And so I submit to you, ladies and gentlemen, that you have heard a lot today, and particularly in cross-examination about isn't this supplement the same as that supplement? And isn't this beam the same as that beam?

But what you have not heard is that the challenges that we specifically referred to on each of the projects weren't unusual. No one has said that. No one has said you faced these precise challenges before. No one has said that we had already solved these problems. No has said that we -- or no one has countered our position that we were uncertain about the approach that we were taking.

And so, very quickly, I kind of want to go through these projects at a very high level, to walk you through the FTB's arguments, and, kind of, how we feel that we have addressed those arguments, if that works

for you.

Bramasol Project. We built a parapet. I will concede. It is stipulated by the parties that parapets exist. They are not uncommon in commercial buildings. But we had not a parapet like this. This one was different, and that is undisputed. Right? This one created a unique load which required us to solve problems. Did we use systematic trial and error? Absolutely.

You also heard testimony that the dimensions of this building were different. It's an interesting argument to say, "Don't you often work with 12 by 60 buildings?" And then to say, "A 24 by 60 building is just two 12 by 60 buildings stuck together." Really, it's not.

The testimony has shown you that if anything is true when we combine these things in unexpected ways, we change the system. We change the roof. We may change the HVAC. We may change a number of issues. So you don't just get to measure the outside of a rectangle as if we are in 7th grade geometry class and say the inquiry stops.

Here I have seen these numbers before. You've got to look at that system. Right? And so we design the interior of this thing, and the process of

experimentation that I have shown you is all of the systems being tested systematically, calculations that were presented to you guys making sure that they work.

And by the way, the testimony was that that process was followed on all six of these projects.

Admittedly, in Mammoth, the testimony was we're not sure if we got so far as the engineer. That one may have died before we were able to finish it.

And, by the way, you don't have to succeed in R&D to qualify for the credit. In fact, the credit was created to encourage innovation, which is, by definition, risky.

So, in Bramasol, the key issues were the parapets, the high wind loads, the construction methods; right? We mentioned to you that we had not done anything like this. It couldn't be shipped at its height which changed everything. We had three different heights.

There was a discussion of the calculations and the question was, "Was this a complex calculation?" The answer was, "I don't know." Right? But we had to test our approach for these three different heights of parapets, and an engineer's calculations said if you put this on a building, it won't cave in, or it won't hurt somebody, or it won't have a problem. And we finished

that project.

On the Mosque Project, the examples we use -- and there are a number of innovations in these -- there's a reference to -- there was a reference to some notes that were taken by the FTB examiner that said the first prototype for this was built in 2000.

I will tell you, I just believe that to be a typo. We have seen no evidence that any of these Mosques existed back then. If you look at our Mosque drawings, they are all dated the 2006 period. The design we are talking about, the design we claim, the design that we put together for you is dated during this period.

I'm not sure what a prototype is, but if we had already had a design, we wouldn't have needed to create these documents in 2006.

I am not suggesting that the agent was dishonest. I don't believe that -- that the evidence shows that there was a Mosque that existed in 2006.

Notice, also, if you go to these documents, if you choose to look at them, that each of the two Mosques are different. There are differences in configurations. There are differences in things like stairwells, relative differences between the parts of these things.

And all of that affects structural integrity of the

bui I di ng.

A number of limitations placed upon us by the fact that we had to use rail cars.

There's been some notion that some of the work that was done on the Mosque was aesthetic to try to make it look weathered. Aesthetic is not -- aesthetic developments are not a permitted purpose under the four-part test, but I would also submit to you that that's not been an exclusion that's has been argued as of yet. It would be brand new today, if they said that you should discount some of these because -- for aesthetic reasons. I'm unaware of any reference to that in the past.

Although I would tell you by purpose of our methodology, none of the time we took, none of the wages we claimed, none of the qualified research expenses we generated, had anything to do with making anything pretty. Right?

My folks don't care if it looks weathered.

Mr. Walden didn't say, "I like a red Mosque better than a blue Mosque," and spend a bunch of time arguing for that. Right? But the client said, "Make it look weathered." We made it look weathered. But that's not where the R&D is. The technician spraying whatever that is on that panel is not what we claimed.

Although, ironically, in T.G. Missouri, the new regs, and in the Trinity case, the new regs on supply costs basically codified Trinity and T.G. Missouri. Creation of a prototype all way through would count. This number would be much higher if we did this work now.

Just an aside, we also took no supply costs, and Trinity supply costs were awarded. That is the steel in the hulls.

Imagine what this credit would have if we had claimed supply costs. If Charlie had been able to jump in his time machine and seen the case load that you will have at your disposal, his credit would have actually been vastly higher.

And folks who do what he does now that are innovating and are doing new products, I think rightfully can claim those qualified research expenses. So that was the Mosque.

In Genentech, again, you may have some assertions that we had hung cable trays before, and I am not suggesting that we hadn't. But you heard no dispute that this was an oddly configured building, that the long shape of this was difficult.

Charlie mentioned that the client also wanted this building to be able to be taken apart and used

independently. You heard no dispute about whether there were challenges associated with that. There were no -- there were no questions on cross-examination about that topic.

But we had to build a building that could be purposed for Genentech and also repurposed at some later date and still have all of these independent systems that worked. So if I chopped off pieces of an electrical system, what was left still had to function independently.

And I think that's very important as we go through the engineering and design that's required here, because it's not good enough for me to just connect Unit 2 to Unit 3 and have a power supply on Unit 2. If Unit 3 is expected to stand alone at some other point, I've got to engineer for that.

So all of these limitations, all of these requirements that are put on us, require us to go through that process.

There has been some reference to the use of Codes, but they were engineering codes. Yes. There are. And they tell us what the rules are, but they don't tell us how to meet them.

There have been some notion of calculations.

Calculations are not new. They have been around since

4,000 B.C. in some form or another. But we don't have to reinvent math to qualify for this credit. The fact that we use known principles of science and engineering is a given. Why? Because if they were unknown, we couldn't use them.

In Genentech, the odd configurations, the cable trays, the demand on the roof, all of these things played a role, and none of that was disputed.

In Ynez Elementary, we focused on two specific challenges, the corridor, which was fireproofed or had to be fireproofed. You heard the problem of attaching modular buildings together. If there's any space at all, fire likes open space. It gets in these corridors, and our kids have a real problem.

With the balcony, you heard the challenges that that puts in terms of torque load on the walls.

And in all of these cases, you saw that we systematically attacked these things by drawing preliminary designs, evaluating them, putting all the systems in place that needed to be put in place, having an engineer bless those calculations by testing them from a physics standpoint, and then we would proceed to build. And that happened in Ynez Elementary as well.

In Welk -- this was a very interesting part of the discussion, particularly in the cross-examination.

All of it centered around the fact that we'd used this beam or that beam at some point in the past.

But you didn't hear anybody talk about the challenges with a high-gabled roof in this configuration. Right? That matters.

The system was different. You didn't hear anybody say these coffered ceilings weren't a challenge because we're lipping things at various levels and supporting them at various distances. You didn't hear any of that.

Again, the FTB didn't dispute that the things we said were challenging, were, in fact, challenging.

They just chose to point to some things that were common. I wouldn't be surprised if the shear wall existed, the same kind of shear wall in another building. Right?

And I wouldn't be surprised if Ford used the same metal in its F-150 as it does in its F-250. But I tell you, they are different vehicles. I would tell you that there's different engineering in those vehicles. I would tell you that the drawings are going to different. Right? And everything that's different about an F-250 versus and an F-150 is something that has to be specifically engineered.

For reference, while on the subject,

Mr. Wonish stole my thunder with an example from the regs about a car company. I want to give that to you so that you can find it if you would like to read it. It is 1.41-4(a)(8) example 4. It's good reading if you are looking for an exciting time. Right?

But essentially what it says is, changing the shape of a car hood, if that's necessary to take into consideration the difference in an exhaust design is, in fact, qualified activity. When we apply that to something like this case, when we applied it to Trinity, the boat case that I told you about, where the court said this is not a fast food menu, notice we found ourselves coming full circle. Right?

Instead of saying we have hulls, they are saying we have beams. Instead of saying we have cabins, they are saying we have shear walls. Instead of saying we have a motor that's going to drive this hull, they are saying we have used a calculation before in some other context. Right?

It is not at fast food menu. All of these things work together, and in these unique situations, we had to re-evaluate every single time.

So that example, I think, is very helpful.

We have not heard a ton about routine engineering, as that phrase is being used, and I think

it's a phrase that no one uses any more, and I'm very proud of my role in getting rid of that phrase, because I thought it undermined fundamentally the purpose of this credit.

But I do think you will hear things like,
"Engineers do this all the time." You may hear things
like, "Well, if you're in the modular business, you can
put pieces of buildings together." Right? You may hear
arguments that we had made roofs before. We had made
parapets before.

But none of this -- we just put wool on the sheep -- on the -- on the, sheep -- on the wolf. Right? You just changed the name. Instead of calling it routine engineering, we are just calling it something else. Right?

We don't have to suddenly make toasters after having made modular buildings for 30 years to suddenly qualify for this credit.

But if they say that there is some subjective level of uncertainty we have to achieve or some sexiness -- our parapet has to be "X" feet higher or we don't get to count that, they have reintroduced an element which has long been excluded under our case law.

Finally, we've got Mammoth Lake. And Mammoth Lake was a project that's, frankly, incredibly complex

for us in a number of ways. There wasn't a lot of discussion on Mammoth Lake. I think everyone agrees we never got to the final stages.

But you heard about the torque. It's caused by these seismic activities.

You heard about the snow loads, which were three times higher than anything we have ever done.

You heard about the combination of seismic and snow loads when together, basically, when you put a bunch of rocks on top, you know, on top of the building, when we shake it, the rocks are bouncing up and down trying to tear the building apart.

You heard about all that's included there.

There was some discussion about a heating and cooling system that we had never worked with that we were going to have to design modular buildings around.

When you think about a boiler system, when you think about a chiller system, you are thinking about major office buildings, schools, and other things that are permanent, fixed structures.

We were going to have to stack these units two deep and have a system that can feed them that way using heat and cool -- cooling that we had never dealt with before. Right? That's completely innovative for us.

And, in fact, again, we get to uncertainty.

The best evidence of uncertainty? It was a failure. 1 couldn't do this economically for what the client was 2 willing to pay despite all of our efforts. 3 Now, you guys, if you look at the Code, you 4 5 will see that there are actually three kinds of There's one called capability. Right? 6 uncertai nty. 7 There's one called methodology. And then there's one 8 called appropriate -- uncertainty as to appropriate 9 desi gn. I believe that every single one of our 10 11 projects had uncertainty as to methodology, and you have seen that uncertainty in the version of all of our 12 various changes, revisions, the things we have done. 13 Right? -- going back to the drawing board, computer 14 modeling, to calculations. 15 Uncertainty as to ultimate design -- or 16 appropriate design, you've seen the same thing. 17 18 -- the same kinds of evidence. And notice, the time here is critical. 19 20 time here is at the outset. These guys said we learned. 21 Hopefully, we learn, or we don't get paid. Kevin said eventually we overcome these uncertainties. 22 23 We don't have to have them throughout the

Ri ght?

We

It's just at the outset. It is when we

undertake to solve this problem for the client, do we

24

25

know which methods will solve all of these problems? Do we know what the appropriate design is going to be?

And I would submit to you that I only have to have one. If I have any one of these three uncertainties, I have met that test.

In the Mammoth Lake case, we also actually had uncertainties as to capability. If we had known when we started this work that we weren't capable of designing a building that could meet the economic requirements of our client, we would not have spent months and months and months trying to solve these problems.

So, again, you don't have to take our word for it. There's circumstantial evidence that, in fact, we had uncertainty in that case as to capability.

Now, we walked through the law. We've talked about the law. I do want to have a quick discussion on a few of the relevant cases, and I want to talk about the substantially all discussion, because I do think it's important for the analysis that you guys are going to be doing.

T.G. Missouri made molds. They made molds, and I mentioned this earlier, for car parts, you know, gearshift knobs, steering wheels. And the IRS didn't even argue that you had made a steering wheel before.

It was very clear that we when make a new

mold, we have go through that same process, shaping the thing, using the epoxy. If the epoxy doesn't work or the shape is not right, go back and revisit it. And it was pass after pass after pass after pass to create these molds.

It's interesting to me because it seems fundamentally pretty simple. I am pouring some sort of plastic or rubber or whatever I have working with into a shape, and I am making a gearshift knob.

And the IRS didn't even argue that the creation of that mold met the four-part test. Got a product? Gearshift knob. Uncertainty? Takes many passes to make these molds because I have to shave them and change the shape and keep working until it meets -- meets my specs. And then the process of experimentation was literally going through and changing these molds.

Finally, I use principles of engineering; obviously, I am using certain metals or certain epoxies or whatever I am using to make this stuff.

The IRS didn't even argue that. That's a fundamentally simpler kind of R&D than we are talking about in this case. And it provides, I think, clarity, as to how seriously you should take the position that we are not engaged in R&D.

In the Trinity case, we have talked a lot

about the detail, but a couple of small points, those folks were wiped out by Katrina. I mean, literally wiped out. The company was out of business. The case was actually brought by a bankruptcy trustee, who was trying to get credits to satisfy some of the debtors of Trinity.

Now, why does that matter? They had hardly no documents. They had -- literally had almost no documents. They had boats, and they had testimony of the folks who made those boats. Right?

I expect that you are going to hear some argument from the FTB that we have some incredible documentation requirement. I submit to you that we have actually provided documents on every one of these. We have shown the iteration. It's well beyond anything Trinity had, because they were wiped out. And the Court didn't have the benefit of shrinking back.

You will notice, if you read the Trinity case, that some of these boats were so wildly different, and the testimony was that these systems were so different that the Court said certainly more than 80 percent of this boat was different. R&D, off you go, and Trinity got 100 percent of those projects.

In some of the cases, the court said, "I can't get to 80 percent." Even then the Court didn't say

there wasn't R&D, but they said, "Unfortunately you have no documents. You have no evidence, so I don't have any means of quantifying the percentage that I should give you." And therefore, they disallowed certain -- certain of the projects.

In this case, we do have the documents. We do track this process. In fact, these documents are custom tailored to the specific changes that we were making on these particular buildings.

All of this reference to S-1000 and SP-1000 and all of these other things, those aren't part of this, because that was not part of the research. It's also not part of the credit. I didn't claim Kevin Lord's time for engineering the S-1000 or the SP-1000. Nobody took credit for that.

No one is asking to be paid for that in these tax years. We took credits. We took dollars. We took qualified research expenses for only those changes that were made in these systems that required them to do these designs, that required them to get engineers involved to test their calculations.

And that is the shrink back that the Court could not do in Trinity. So when you ask yourself if substantially all of the activities that were claimed in this case are, in fact, research and development

activities, you have your answer.

I don't have drywallers up here, even though some later cases would call these things prototypes, and they may qualify. I don't have electricians and plumbers and all these folks. The guy who was spraying the stuff to make the Mosque Looked weathered is not part of this credit.

We trailed all of that stuff back.

Mr. Anderson is not with us anymore, but you heard the testimony of three witnesses that these folks got together. They looked at the time that was spent doing new designs, solving the problems with these projects, and they estimated the percentage of time of these folks' time that was doing it.

You'll notice that the percentage is very high for the engineers. These guys are doing the drafting. They are draftsmen. That's literally what they do all day every day is try to solve these problems, literally by designing these systems.

are going to notice that they have smaller percentages.

Some are at 45. Some are at 75. And there are different numbers there. And that's because not all of their time was spent solving the types of problems, working on these unique issues, doing the kinds of

things that we're talking about here.

You heard Mr. Wonish say that we specifically removed all of the stock projects from the project list. So we would have asked the folks at Walden, "Which of these things had you made before? Give us a list of the projects that only had, either brand-new construction, you'd not done this before, or material, new, improvement, or features."

And that's where our project list came from.

So we scaled all of that stuff out of there. There were no repeats or rewrites in any of that stuff.

And then we asked those folks, "Okay. How much of the time was spent here?" Now, you heard from Mr. Love. You heard from Mr. Minor. And you heard about Mr. Kip's -- Mr. Anderson's involvement in that. And they estimated that time to the best of their ability. That is already factored in, the parts of the time which wouldn't qualify.

If you look at the wage allocation questionnaires, which are Exhibits 9 and 10, you will see that very few -- very few of the folks who work for this company had any allocation at all.

I do believe the numbers are around ten percent, meaning 90 percent of the folks who worked for this company don't -- in terms of wages -- don't have

1	any allocation whatsoever. We have not claimed their
2	activities. And the same for the contractors cost.
3	So so that's physically what we do. We
4	shrunk back. We focused on that part of the activity
5	which was R&D at its core, and that's all that we have
6	claimed today.
7	So substantially all of the activities that
8	show up in the form of qualified research expenses were,
9	in fact, the drafting and the design, the things that we
10	are talking about here.
11	I'm imagining there's some other important
12	pieces of case law and other facts that I have
13	neglected. I've done my best to present this evidence
14	to you.
15	Thank you so much for paying attention to us.
16	I understand I get just a few minutes to
17	remit.
18	JUDGE THOMPSON: Approximately ten minutes. Thank
19	you for that.
20	MR. DIES: Thank you.
21	JUDGE THOMPSON: Ms. Kuduk.
22	
23	CLOSING ARGUMENT
24	MS. KUDUK: So before I begin my closing argument
25	here, I would like us to take a second and pause and

think about what is at issue in this case. The question that is at issue in the case is: Were Walden's activities qualified research?

You have heard a lot of testimony today -extensive testimony -- about Walden's work in
constructing these six projects. The taxpayers do not
qualify for the California Research Credit for simply
any activity no matter how rigorous that activity was.
Taxpayers only qualify for the California Research
Credit for performing qualifying research.

Now, qualifying research is a defined term in Section 41 of the Internal Revenue Code. To be qualified research, the activity must meet the four-part test of Section 41(d)(a) and must not be excluded under Section 41(d)(4).

And I'm going to go ahead and read Section 41 of the Internal Revenue Code right now, because I believe we're getting a little confused on the language.

So Section 41(d)(1) -- yes. 41(d)(1) states:

"Qualified research defined: In general, the term qualified research means research with respect to which expenditures may be treated as expenses under Section 174, which is undertaken for the purpose of discovering information which is technological in nature and application of which is intended to be useful in the

development of a new or improved business component of 1 And substantially all the activities 2 the taxpayer. which constitute elements of a process of 3 experimentation for a purpose described in paragraph 3." 4 5 Which paragraph 3 is not relevant here. 6 So the issues in this appeal, as I said, is 7 whether Appellants have substantiated that the 8 activities Walden performed in the taxable years at 9 issues are qualified research and whether those activities are excluded from the California Research 10 Credit. 11 It's undisputed in the Internal Revenue Code 12 that a taxpayer who claims a tax credit must 13 14 substantiate entitlement to that credit. It's also undisputed that the Appellant has 15 the burden of proving entitlement to the California 16 17 Research Credit, and that case law and Treasury Regulations require the taxpayers to retain the records 18 19 necessary to substantiate that entitlement. 20 So Appellants have the burden to prove their entitlement to the California Research Credit. 21 22 Appellants have not substantiated the activities Walden 23 performed in the taxable years at issue are qualified

research as defined by the four-part test of Section

24

25

41(d)(1).

Moreover, the documents provided show Walden's activities are activities for which the California Research Credit is not allowed as defined by Internal Revenue Code Section 41(d)(4).

Now I'd like to take a moment to address

Appellants' statement that Appellants did not have the information about S-1000. The documents that were submitted today -- or submitted for this hearing today, were Appellants' documents. These documents were submitted to Respondent in a reply brief and were previously submitted at audit.

In my reply brief, I stated the submitted documents were not reliable. And I also stated that there was 874 pages of documentation that were submitted, but Appellants didn't explain the purpose of the submitted documents.

I still don't have that kind of analysis of why Appellants are eligible for a qualified -- a qualified -- why Appellants' activities are qualified research and why they are eligible for the California Research Credit.

The Treasury Regulation Section 41.41(4)(d) states that the taxpayer claiming credit under Internal Revenue Code must retain records in a sufficiently usable form and detail to substantiate that expenditures

claimed are eligible for the credit. Again, Appellants have not done that.

Literally, we had had to go through these documents, sort out which documents were for which project, go through the documents with a magnifying glass, and try to figure out what Appellants were trying to prove. That is not our burden. That is Appellants' burden, and they have not met it.

And specifically, in my stipulations sent to
Appellants before this hearing, I asked them to
stipulate what three projects were constructed according
to Structural Package S-1000. Those were their
documents. They should have known what Structural
Package S-1000 was. And we asked them to stipulate what
it was, or at least explain it.

So I am confused as why they would be surprised by this at this late in the game.

Further, in this appeal, Appellants failed three parts of the four-part test, and are not eligible to claim the California Research Credit.

They failed the process of experimentation test. The process of experimentation test is a three-part test. Substantially, all of the research activities must constitute elements of a process of experimentation for a permitted purpose relating to new

or improved function, performance, reliability, or quality.

I want to -- I want to go back to the actual Code, so -- okay. So substantially all the activities which constitute elements of process of experimentation for a permitted purpose.

We heard today that three of the projects that Appellants claim in this sample were based on structural package S-1000. Taxpayers claim that 100 percent of all the activities in each project is qualified research, and that no percent of the activities was not qualified.

Well, Bramasol and Genentech were based again on structural package S-1000, which is an existing business component. So we know part of those projects are not qualified which puts the taxpayer at less than 100 percent.

And we don't know if they met the substantially all percent requirement in the process of experimentation test. And it's their burden to prove it, and they have not proven that.

Further, Appellants have not provided documentation to show that a process of experimentation occurred. Appellants' activities were not as stated in Union Carbide, ordinary engineering activities that would have occurred, even if the taxpayer was not

conducting an experiment.

Shami tells us that Appellants must provide documentation that demonstrates qualified research to claim the California Research Credit. The documentation that Appellants provided did not demonstrate qualified research. Again, I have yet to have the Appellants state, "This was our business component, and this is how -- how we tested these business components."

In Foodum, taxpayers provide scientific letters, journals, publications, and U.S. patents, all proving that qualified research occurred.

In Union Carbide, the taxpayers' research documentation included presentations, email communications, lab data notes, and monthly reports in which the taxpayers actually recorded and listed problems to be solved.

Walden supplied blueprints and photos of the six projects and calculations that engineers performed to ensure that Walden's modular structures met standards outlined in the Uniform Building Code. They had CAD drawings which, in and of themselves, are not experimentation.

The documentations Appellants provided did not prove research as the taxpayers did in Foodum and Union Carbide but were merely blueprints, photos, and

calculations performed to ensure that Walden's modular structures met the standards of building codes. This does not document qualified research, but is merely routine engineering.

The blueprints, photos, and calculations did not evidence a process of experimentation. Appellant's documents do not show systematic tests of alternatives nor an evaluative process as required by Union Carbide.

Today Mr. Walden said the revisions in the plans could have come from owners' changes or could have come from Walden's own preferences or from additional engineering. However, Walden never determined which activities were customer driven or which activities were Walden driven or which activities were experimentation.

At best, the documents Walden provided did not show Walden tested a hypothesis, analyzed data, refined a hypothesis, and retested the hypothesis as required by Union Carbide.

Appellant's documentation did not show a systematic test of alternatives nor an evaluative process.

At best, Appellants' manufactured modular structures promote a set of available options followed by calculations required by applicable building codes.

And if the engineering calculations failed, there was no

testing. Walden then just employed other construction changes. There was no testing.

As Mr. -- as stated by Mr. Lord, if the engineering calculations failed, there was no testing. They just employed other constructional changes. This is routine engineering and not experimentation.

Appellants, in their opening statements, state their activities were the type of activities that Congress created this tax credit for. This is incorrect. Federal research credit was created to give taxpayers a credit for research connected with high technology, which Congress defined as chemists or physicians developing and testing a new drug or engineers who design a new computer system.

Congress enacted Section 41 because Congress was concerned that taxpayers were claiming the Federal Research Credit for virtually any expense related to product development.

The blueprints, the photos, and the engineering calculations shows activities which Walden claim California Research Credit are no different than any other construction project in which calculations are needed to complete the project.

It's Appellants' burdens to prove that Walden performed a process of experimentation. And Appellants

have not met that burden.

In regards to the Section 174 test, the -- to claim research credit, the activity must -- the term "qualified research" means research with respect to which expenditures may be treated as expenses under Section 174. To qualify, there must be uncertainty.

An engineer has certain information readily available to him, including his own experience, institutional knowledge, and, as we have seen, Walden created similar-type projects in -- previously, especially in regard to the Welk project.

The engineer -- specifically, Mr. Lord said an engineer blessed it, because he checked his notes and realized that he had done it before. Mr. Dies said that. Sorry.

An engineer, again, has certain knowledge available to him. He has institutional knowledge. He has the Uniform Business Code, and any project-specific plans and specifications provided by a third party, such as Walden's clients.

Walden's activities did not pass the Section 174 test because Walden had this type of information available at the beginning of the six projects. Treasury Regulation Section 1.41-4(a)(3) states:

"Uncertainty only exists if the information available to the taxpayer does not establish the capability or method for developing or improving the business component or the appropriate design of the business component. And a taxpayer must develop some information beyond the experience and knowledge. This is called statutory uncertainty."

Walden has stated its uncertainty at the beginning of each project was uncertainty over the optimal design, the capacity to balance the building components while maintaining project specifications, and the design methodology.

But, also, in regards to the Mammoth project, it was a question whether they could make a project that was price competitive. Mr. Walden has stated they could relieve themselves of that uncertainty through the process.

This colloquial uncertainty is not the type of statutory uncertainty that is needed by law to be eligible for the California Research Credit. To understand the difference, I'm going to give you a little scenario.

Imagine a cancer -- a scientist who goes to

work every day, who is testing to try to see if he can cure cancer. At the end of every day, he will have no idea if he cured cancer. He will have no idea if his process worked.

As opposed to Walden, which at the outset may not have definitively known how to build this building, but throughout a process, they would be able to -- they would know that it could be done.

So there was -- these are the two types of uncertainty and it's only the uncertainty of the cancer scientist that you can get the California Research Credit for.

Walden had the information available to manufacture the six sample projects. Walden could rely on the Uniform Business Code, engineering norms, client specifications, government codes, internal engineering packages such as S-1000, and other engineering packages to complete the project.

For the Welk Resort, Appellant stated Walden needed to develop a 48-foot beam which was shorter than the standard 60-foot beam. Walden had no need to conduct an experiment, but rather could resolve any issue by processing known and available information.

In fact, Walden used Structural Package S-1000 to complete projects similar to the Welk Project right

before the Welk Project was begun.

On August 12th, 2005, at the Phoenix Ranch School, Walden completed a project using a beam which was shorter than Walden's standard 60-foot beam.

On February 1st, 2006, two weeks before the Welk Project was begun, Walden began the Shell Vacation Project which used a 48-foot beam, the same size beam as the Welk Project.

Walden stated it needed to -- needed to experiment to determine how to make a structure with a 48-foot beam. Yet Walden made these same types of structures with the same size beam only two weeks before.

The type of uncertainty Appellants present is not statutory uncertainty, because Walden's own experience and other available information, such as projects with the same parameters, or almost the same parameters, provided the methodology for determining the appropriate building. it was not the type of uncertainty that is necessary to claim the California Research Credit.

So the third test that's at issue here is the Business Component Test. And again, I want to read the Business Component Test.

So Business Component Test, .

"The" -- "The activity means research which the application which is intended to be useful in the development of a new or improved business component of the taxpayer."

There tells us that Appellants need to identify their business component. However, I -- I still don't know what the business component is. The Appellants have failed to identify any specific process or product in the Mosque 1 or 2 project, the Ynez Elementary School Project, and the Mammoth Lakes Project.

I have yet to hear the Appellants say that is -- this was my business component in this project, and this is the experimentation I did to make a new business component or to improve a business component.

In testimony today, Appellants have stated that -- that this is our business component and the -- and -- yeah -- I have yet to hear what the business component is or what experiments they have done.

In documents given to FTB, Appellants stated that the business component is the process or technique of integrating all the project parameters into a fully-functional deliverable project. If that is the case, they wouldn't have met the substantially all requirement of the process of experimentation, because

we can't define what they did experimentation on.

Walden's vague and evasive description of their business components aren't sufficient to meet the business component test. In fact, the Mosque 1 and 2 Project -- in the Mosque 1 and 2 Project, there's a question whether Walden's employees produced the project.

Additionally, Appellants have submitted no documentation of what testing was done on the Mosque 1 and 2 Project. I am not sure if they tested the door. I'm not sure if they tested the building.

In fact, Walden never said what was the business component in any of their six projects.

Walden's activities in the Bramasol Project, the Welk Resort, and the Genentech Project did not pass the business component test, because Walden was not developing a new or improved business component, but merely recycling structures built on the S-1000 engineering packages and other previous structural supplements as Mr. Walden said.

Additionally, Walden had previously constructed the same type of structures as the 33 special parapets, like the parapet in Bramasol, and, as I mentioned before, the Shell Vacation Project. That came right before the Welk Project that had the same

48-foot beam.

Where a taxpayer fails a single part of the four-part test, the inquiry ends. Appellants don't qualify for the California Research Credit.

Appellants have also cited Suder, but we can distinguish case Suder, because the Suder court determined the taxpayer had -- had met the requirements of 41(d)(1); however, we've demonstrated a lack of the process of experimentation, a lack of identifiable business component, and a lack of uncertainty.

They have failed to meet Section 41(d)(1).

Also they have also done many of these projects before, meaning they had adapted many existing business component. This is a specific exclusion.

Further -- furthermore, Walden adapted an existing business component, and, therefore, its activities are activities for which the California Research Credit is not allowed.

Walden adapted current projects to customer specifications as demonstrated by their bidding process.

Walden priced projects on an initial plan, and then changed the price based on customer request and regulatory requirements. In fact, the blueprints provided, Walden asked its clients to review the dimensions to the consistency with your needs and

wi shes.

Walden's activities were like Example 6 in Treasury Regulation Section 1.41(4)(c)(10) where the rail car manufacturer sold a rail car with fewer seats than other models. Walden swapped a 60-foot long beam and replaced it with a 48-foot long beam, as in the Welk Project or designed the building where each unit was 72 feet long, rather than 60 feet long, as in the Genentech Project. Or designed a truss which was 14 feet by 62 feet, rather than the usual 12 feet by 60 feet, as the Bramhall Project.

Walden also adapted their structures from the existing business component engineering package S-1000 shown by Respondent, as in -- which was in their documents and which referenced -- which was referenced multiple times in previous projects.

In fact, Eduardo Garcia drew the Shell Vacation Project using a 48-foot truss just two weeks before Eduardo Garcia drew the Welk Project, also using a 48-foot truss. Adaptation of an existing business component is specifically excluded from the Research Credit under Section 41(d)(4).

Walden also duplicated existing business components which is specifically excluded by statute.

Again, in the Bramasol and the Welk Resort and the

Genentech Projects, they duplicated the specifications 1 and engineering package S-1000. 2 The Board of Equalization held in Appeal of 3 Aaron and Alysse Mandego that unsupported assertions 4 cannot satisfy a taxpayers' burden of proof. 5 Appellants have not proven that they met the 6 7 statutory requirements to claim the California Research 8 Despite the voluminous amount of documentation 9 provided and the extensive testimony, Appellants showed the six projects were complicated, but they didn't show 10 11 that they were qualified research. As a result, Respondent properly proposed tax 12 13 adjustment to disallow the California Research Credit 14 for the taxable years at issue. Respondent urges you to uphold the Notice of 15 Action. 16 MR. RILEY: Real quick. 17 And as to the TD 9104 --18 As to the what? 19 THE REPORTER: MR. RILEY: 20 Sorry. As to Mr. Dies' allegation 21 regarding Treasury Decision 9104, the taxpayer didn't get across the finish line with respect to Section 22 23 They didn't prove their -- their business 41(d)(1). 24 They didn't prove their process of components. 25 experimentation, and they didn't prove their

1	uncertai nty.
2	And on top of all that, it's adaptation, as we
3	showed through the cross-examination of their documents.
4	So, thank you.
5	JUDGE THOMPSON: Thank you. Okay. Thank you, Tax
6	Board.
7	Appellant, are you ready with rebuttal of
8	approximately ten minutes?
9	MR. DIES: I am.
10	JUDGE THOMPSON: Thought you might be.
11	
12	REBUTTAL
13	MR. DIES: I have a little bit to say, but I will
14	try to keep the pace in the same spot.
15	Business component. If you look at your
16	Stipulations in Stipulation P, the FTB has stipulated
17	that each discreet business component is a product. The
18	same folks that just told you they have no idea what our
19	business component is.
20	They have told you that S-1000 is a business
21	component, while at the same time telling you they have
22	no idea what our business component is.
23	They have told you that, well, in Bramasol and
24	Mammoth
25	A VOICE: Mammoth.

MR. DIES: It's not Mammoth. It's Genentech -- all adapt prior business components while still telling you they don't know what our business component is.

Both of those things can't be true. If I don't know what a business component is, I can't possibly know if someone has copied it.

Now, the -- it is true that the num -- that the letter S in the number 1000 do appear on our documents. But never once before today has anyone asserted that in any respect they support, prove, or support adaptation. There is no connection there.

And, frankly, these guys are arguing from a set of ghost documents that are not available to any of us right now in this proceeding.

I never told you that we don't know what S-1000 is. These guys made it. They know exactly what it is. All I told you is that this is the first time hearing that that is our adaptation. The argument has never been made before today, and I think you would be wrong to consider it.

I do think Mr. Riley and I agree on something, which is, if I prove the four-part test, you don't have to waste your time here.

Now, he says TD 9104 doesn't apply because I don't show business component, uncertainty, and process

experimentation. Right? But he seems to imply that if I do show those three, you won't have to worry about this. All I'm suggesting to you is, there are a number of internal inconsistencies in the position that is taken -- that has been taken by the Franchise Tax Board today.

A couple of quick points that were made for you guys. Bayer. The Bayer case tells us you have to identify the business component. Yes, it does. If you know anything about the fact -- background in that case, Bayer is a massive company with a massive number of new products.

When the IRS said, "Tell us what your business components are." They said, "We can't possibly do that." There are tens of thousands of them. We're not even going to try." The court said, "You don't get to do that. And very reasonably so, by the way.

If a taxpayer could get away with saying, "I don't have to tell you what my business component is, but you have to pay me," we would all have a problem.

Now, how are we different than Bayer? We have said from the beginning we make a product. Now, the reason I didn't bring my product here is because some of them are 16,000 square feet. I can't set it on this table. You can go out and touch it. It's a real thing.

It's an actual device. These Mosques exist in this 1 world. 2 The only thing that was never functionally 3 completed was the Mammoth Lake Project, and our idea was 4 5 to complete it. We wanted to complete it. We just weren't capable of completing it. 6 7 So our business component is and always was 8 the product that is represented by these documents. It's a school. It's a resort center. It's a dormitory 9 Right? That is our business component. 10 bui I di ng. 11 is a thing. They say all we have brought is blueprints and 12 13 photos, and I admit that that is true, because that is 14 all we could bring to show our business component. Let's talk about uncertainty for a moment. 15 Now I have to cure cancer. Apparently, if I am sitting 16 17 in my lab and I think I have done something that might 18 cure cancer, and I leave that lab that day not knowing it, by God, then I'm going research. You guys, I don't 19 20 have to cure cancer. 21 There's an example in the Regs that's a cheese I'm not making this up. It is 1.41-4(a)(8)22 bl ade. 23 Example 3. In that example, client makes -- they call it 24 a food process blade, but I think I'm going to go with 25

cheese because it sounds disgusting if we talk about it any other way. And they want to make a finer shredding blade. The challenge is, if I thin the materials or change the metals, the blade may break. How do I achieve that finer shred by changing out my blade? I've already got a cheese shredder. I just need to fix this blade.

That act of trying different blade configurations qualifies for this credit. And nobody had cancer cured by doing any of that. Right?

My uncertainty does not have to rise to that level.

The thing they say is, "Wait a minute. You are using things that are known." Yes, I am. Because if they are unknown, I can't use them. Right? Boeing can't get us to the moon right now, because they don't know how do that in a passenger vehicle. They know about planes.

The laws of physics haven't changed. They they know how lift works. They know how to run calcs. But understand if the test was to do R&D you couldn't use institutional knowledge, and the things that are known by engineers, no one in the world would qualify. How could you possibly engage in R&D on something you have no idea about? It's -- it's a silly

argument.

It's true, Mr. Walden said, "If I go through this process, I can overcome this uncertainty." Well, that's the whole point. I had uncertainty in the beginning, and this iterate trial-and-error process, this stepping back and forth and going through the different changes, manipulating these objects in virtual space to see if they are occupying the same area, changing out the systems saying, "Well, wait a minute. I've got to get cooling for three units out of two devices, so on."

All of that stuff is the process. And when I go through the process, I come out with an answer.

By the way, that's true for everybody else in the world.

We -- we also have this notion of uncertainty that -- that you don't have uncertainty if you use pieces of this. I told you you were going to hear about those 33 parapets. I guessed it. Right? I told you you were going to hear about that 48-foot beam.

You know what? My '78 Ford Granada was a beautiful vehicle, had exactly the same spark plugs as my 1980 Ford Pinto. The reason I know that is because when I wrecked the Pinto, I had to take the spark plugs out of it because I couldn't afford the spark plugs to

change in my own vehicle. Right? Now, we would never say, "Hey, wait a minute, Ford. You got the same spark plug here."

The fact that I have a beam in more than one building doesn't mean I'm not doing R & D. Right? The fact that other parapets exist does not mean I'm not doing R&D. That is not the test, because if that were the test, Boeing would have to find a way to make a plane without wings, because their last plane had wings.

They would have to find a way to make a, you know, a weapon system that launched missles, but it didn't launch missles because their last system launched missles.

There's going to be common interactions between the products. You're going to see these things. The fact there are things that exist in more of our buildings that we have made in the past does not mean that we are not engaged in research and development.

In terms of uncertainty, I have laid out what those were. They were process and design.

There is really cool example that was referenced about the rail car. And I want you guys to look that up, and we'll give you a citation, but it goes like this: I have space in my rail car, a bench for three people. And then I go, hey, in the next rail car

I want a bench to fit two people. Not R&D and they are right about that. That is not R&D. I didn't have to re-engineer the rail car. I didn't have to see what the physical structural dimensions of the two-seater bench from the loads they put on the rail car. I didn't have to do any of the iterate process that these documents prove that we did, which is why the rail car example doesn't apply here. Right?

If this were just a function, Kevin or somebody calling somebody saying, "Hey, move that light switch over two feet." That's not R&D. But that's not what we've claimed. That's not the dollars that we have asked for.

Now, the substantially all test on the process of experimentation is one of the last things I, kind of, want to cover with you guys.

They have said that substantially all of our activities must constitute a process of experimentation. Substantially all of the activities we claimed were involved in the new drafting, the new designing, the new creation of a product, process, or technique that was going to be used in our business.

We have followed the process of experimentation requirement with regard to the substantially-all rule because we have focused on those

activities which are, in fact, systematic trial and 1 2 error. There was a quotation read about Congress 3 saying that -- that -- that R&D credit should apply to 4 5 high engineering? 6 A VOI CE: High technology. MR. DIES: High technology. I'm sorry. I didn't 7 8 mean to misquote. 9 See that high technology? That's a sexiness This is not a sexiness test. We already have 10 test. 11 established that. High technology, apparently, if I 12 engineer a computer, by God, I get R&D. But If I 13 engineer a building that I have never made before, I don't? 14 Who gets to tell us what high technology is? 15 Are we going to trust a bunch of random FTB agents? If 16 so, when Farouk Shami claimed his hair dyes, they would 17 18 have said, "Wait a minute. My wife can get her hair 19 brown from something else. That's not high technology." 20 Ri ght? 21 Mr. Suder was a -- was a math -- a math 22 degree -- a math degree and he was a salesman. 23 started making phones because he thought he could do a 24 better job than somebody else. If the test was high 25 technology, a small business telephone is never going to

1	meet that test. You know why this was created? To
2	encourage innovation and create jobs.
3	California didn't adopt the R&D credit because
4	it loves its people. California adopted the R&D credit
5	because it's good for business. If I encourage
6	California businesses to hire people, I improve
7	California's economy. Right? If I do that, I am
8	encouraging them to be innovative. I accomplish the
9	goal of advancing technology in my own state.
10	By the way, many states in our country had
11	this very same credit, and most of them adopt Section 41
12	exactly for the same reason and most of them have the
13	rule, you just have to do it here. Right?
14	Only now, eight years later, we come here and
15	find out it's got to be high technology to qualify.
16	Ladies and gentlemen, that is not the test.
17	That has never been the test. Do not allow sexiness to
18	somehow be plugged into this.
19	And, Mr. Walden, I apologize. I am not saying
20	your products are not sexy. That's not my argument.
21	But my point here is, I don't have to meet
22	some subjective standard to get across the finish line.
23	So that's our position, guys.
24	I just want to look at my notes here a moment.
25	JUDGE THOMPSON: Okay.

MR. DIES: That's another thing. I appreciate -this is why I carry all these guys with me -- my own
entourage.

He has reminded me of a case I was sitting in the courtroom for -- Suder -- where the Court said you couldn't use institutional knowledge. In fact, he specifically said, "You can't use institutional knowledge to solve these problems." The quote we're looking for, if you want to Google the Suder reference, is Judge Vasquez and the phrase reinvent the wheel in the context of Suder. He will say a taxpayer need not do that stuff.

So you are going to find that -- that the fact that we had done a parapet before, doesn't exclude us from claiming research on another parapet. We don't have to reinvent the wheel.

Anything else?

Folks, thank you so much for your time. I know you wanted to knock this out in an afternoon. I know you have solved multi-million dollar tax disputes in a matter of fact of a few hours. This was just a hairy provision of the Code.

So thank you.

And thank you guys for your efforts as well.

JUDGE THOMPSON: I want to thank the parties --

1	both parties have done an excellent job on this, really
2	helped us understand the facts and legal issues, and I'm
3	glad we had the whole day, or it I think we needed
4	it it was well used.
5	Before I conclude the hearing, I want to check
6	with my panelists and see if they have any questions.
7	Mr. Bramhall, anything you want to ask?
8	MR. BRAMHALL: I would like both parties to address
9	one question.
10	If you satisfy the four-part test, does the
11	duplication issue go away? Or is that a fifth test?
12	That's my question.
13	MR. DIES: I'll let you go first, Mr. Riley.
14	MR. RILEY: So the adaptation and duplication and
15	exemptions or exceptions are both they are part of
16	the Code, and to date, I don't know that any Court has
17	ruled exclusively on an adaptation or duplication stand
18	al one.
19	But again, it's not, I mean, the Franchise Tax
20	Board's position is that in addition to not meeting
21	41(d)(1), they don't meet 41(d)(4). It's most clearly
22	expressed through an adaptation.
23	MS. KUDUK: They haven't met their burden to show
24	that they have passed the test. They have the burden.

25

MR. DIES: TD 9104 specifically says three

exclusions go away if the four-part test is met. 1 The first one is research after commercial 2 production. 3 Right? That one's gone. The second one is adaptation. 4 5 The third one is duplication. 6 It specifically says it in there. 7 Now, Counsel is correct. No court has said we 8 hereby find the facts that give rise to this situation 9 in this TD 9104 apply, therefore, A, B, C. But the reason they haven't had to do that is because people 10 11 don't argue that. As soon as TD 9104 came out and said 12 these three don't apply if you meet the four-part test, 13 we all had clarity, and no one made that argument 14 anymore. 15 MR. BRAMHALL: 0kay. MR. RILEY: If I may -- and yet the Treasury 16 Department, the Treasury Regulations have been updated 17 18 many times since TD 9104 came out, and those exemptions 19 are still in the Treasury regulations. 20 JUDGE THOMPSON: Okay. Ms. Cheng, any questions you might have? 21 22 JUDGE CHENG: I do have one. Now, Mr. Dies has mentioned that the business 23 24 component that Appellant is claiming is the -- their 25 product, basically the school, the resort, the mosques,

would that satisfy the business component part of the 1 test? 2 MR. RILEY: I'll let co-counsel handle that. 3 MR. ROUSE: When you say whether it would 4 Okay. 5 satisfactory the test, I think the problem we're having is the business component test? That's the match that 6 7 lights the fire, because all four elements of the 8 qualified activity test has to be met with each business 9 component. So whether they tell us in their brief, as 10 11 explained in our responses and at the site visit, the business component is, quote, "the process or technique 12 13 of integrating all the project parameters into a fully functional, deliverable product." 14 That's not consistent with bringing Mr. Wonish 15 in to sit there and say, Well, we're using the 16 shrink-back rule, and we only went up to the design 17 18 process. 19 And the reason it's important is because if 20 you have all the parameters of a fully-functional 21 deliverable product -- which is what they said in their 22 brief -- well, that affects the analysis of the 23 substantially all requirement. 24 Because now, with respect to substantially

all, we're talking about this whole room, the whole

25

But if they want to say, now it's just a product. 1 chair, so now we need to change our analysis. 2 Di d substantially all of their activity relate to qualified 3 research to the chair as opposed to this whole room? 4 5 So when you you say did they satisfy the business component, I think what Ms. Kuduk was saying 6 7 is, we don't know what they are claiming as their 8 business product, because what they came in here and 9 said is different from what they said in their brief, and in their stipulation when they say, "Oh, it's a 10 product, " I don't know what that means. 11 Is it the design product? 12 Is it the structural product? Because now 13 they are saying it's not a product because they said 14 their business quote only goes up to the design. 15 So I can't say whether it meets the test. l'm 16 just saying we're not sure what it is or if this is 17 18 consistent with what they say. Mr. Dies, you want to respond to 19 JUDGE CHENG: that? 20 MR. DIES: Sure. The definition of business 21 22 component is very broad. It just is. 23 When you have product, process, and technique, 24 you very often are going to have business components

25

that have overlaps.

Inventions also qualify. So consider, if I invented this cup, it's an invention that could be a business component, but it's also a product.

But in the course of inventing that, I would have had to have come about with process or technique for manufacturing that. Right? Any one of which would meet -- and what I would submit to you is, you know, I don't have to -- if I can give you a business component that is one of those things, I have given you a business component.

Now, I do think we have mixed burdens to some degree in the answer that you just heard. And -- in -- in the sense that now we're saying it's only the design.

The design is the only part of the creation of this business component that we are taking credits for. It does not -- we're not saying that the entire building is not the business component. We are saying if I go try to take credits for somebody who is nailing sheetrock on a wall, the FTB will properly come screaming. Those folks are not doing research.

So we have got to look at the business component, which is the school, and then we have got to look at the qualified research expenses within that business component that are actually qualified, that are substantially involved in the process of

1	experimentation. And that's what we have done here.
2	So even that description you read says we're
3	talking about a product.
4	If you look at the definition in the Code, it
5	says, undertaking a systematic approach of
6	trial-and-error to overcome uncertainty for the creation
7	of a business component to be used in your work. Right?
8	So I think that's what we've done, undertaken
9	to solve problems for a building a product that
10	and and we've done iterations and all these things to
11	try and get something to a client that will meet their
12	needs that we can sell and make money on it.
13	So that's why I think we think we need it, and
14	it's why I don't think we're being inconsistent.
15	JUDGE THOMPSON: Anything else?
16	MR. BRAMHALL: No.
17	JUDGE THOMPSON: All right. Thank you very much.
18	So at this point I'm closing the record, and
19	concluding the hearing.
20	And again, I want to thank everybody for
21	coming in, especially those who came from Texas.
22	And Mr. Bramhall and Ms. Cheng and I, we are
23	going to discuss the evidence and argument, and we'll
24	issue a written opinion, I anticipate within 100 days.
25	It will take us some time. We've got to try to come to

1	an agreement, and, you know, we're going to want to
2	review the transcript, and I'm happy we have an
3	extensive transcript, but it's just going to take us
4	some time to get through it.
5	MR. DIES: I understand.
6	JUDGE THOMPSON: So thank you very much.
7	This hearing is concluded.
8	
9	(Proceedings concluded at 6:07 p.m.)
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

1	<u>HEARING REPORTER'S CERTIFICATE</u>
2	
3	I, DOROTHY M. SIMPSON, HEARING REPORTER,
4	in and for the State of California do hereby certify:
5	That the foregoing transcript of
6	proceedings was taken down before me at the time and
7	place set forth, that the testimony and proceedings were
8	reported stenographically by me and later transcribed by
9	computer-aided transcription under my direction and
10	supervision, that the foregoing is a true record of the
11	testimony and proceedings taken at that time.
12	I further certify that I am in no way
13	interested in the outcome of said action.
14	I have hereunto subscribed my name this
15	7th day of September, 2018.
16	
17	Dorothy M. Simpson
18	DOROTHY M. SI MPSON
19	HEARING REPORTER
20	
21	
22	
23	
24	
25	