GREENBOOK Committee

Underground Materials and Methods Subcommittee September 17th, 2024 Meeting Minutes

UNDERGROUND MATERIALS AND METHODS SUBCOMMITTEE
September 17, 2024
11:00 a.m.
Via Microsoft Teams

1. Call meeting to order
    a. 11:02am

2. Self-introduction

    a. Chris Ampfer, WL Plastics
    b. Brett Fornelli – Underground Solutions
    c. Brooks Ryan – Unibel PVC
    d. Colin McCarter – LACounty
    e. David Wangerin – EJ
    f. Dickie Fernandez – OCSD
    g. Mark Gilgum – LA County San
    h. Jacquie Jaques – Sekisui
    i. Rob Huning – City of LA Design Standards
    j. Rowena Patenaude – Westlake Pipe & Fittings
    k. Raffie Yeremian – Bali/AGC
    l. Dan Zarraonandia – Precon
    m. Shannon – Precon
    n. Jeff Boschert - NCPI

3. Meeting minutes: http://www.greenbookspecs.org/minutes.asp
    a. JJ/ RY

4. Announcements Correspondence and Summary of GB meetings

    a. ASTM updates from Bill & Keegan 08/30/2024
    b. No Digg (Cal Poly Pomona 10/15)

5. Old Business
    a. 284UM - Part 5
        i. To List:
            1. 7.2 Folded & Reformed Liners – debate whether this is still relevant.
            2. 7.3 Fusible Solid-Wall Slipliners, Annulus Grouting – no update from JJ. City of LA provided input, and discussion.
            3. 7.4 Segmented Slipliners, Annulus Grouting -
        ii. Participants: Jacquie, Colin McCarter, Brett Fornelli.
    b. 332UM - 216-7 Causes for Rejection of PRCB (216-7)
    c. 338UM - HDPE Section 200
    d. 339UM - HDPE Section 500
    e. 346UM - Deflection Mandrel
        i. Updated version dated 7/17/2024, redributed with meeting minutes.
        ii.

6. Tracking List
    a. 331UM – at Editorial Committee
    b. 342UM - at Editorial Committee
7. New Business
    a. ASTM Updates:
        i. A819 is obsolete. A929 replaced A819
        ii. D1788 withdrawn in 1988. Possible that D3965 is appropriate as substitute (will need to update ABS classification specification language to 5-digit cell classification)
            1. See ASTM D4673
        iii. D2037 withdrawn in 1979. In the same table for Density, D1556 & D4564 have been withdrawn.
            1. Section 308-6.3
            2. Should be D2937 (Standard Test Method for Density of Soil in Place by the Drive-Cylinder Method)
        iv. F174 is a typo. Should be F714. **Note 2 of Table 500-5.7.1 needs to be revised. It should read "2". PS values are from ASTM F714 table X2.1. The Pipe Stiffness values should be looked at by the committee.
            1. Review with Change 284 –
    b. F1803, don't match, but not for direct ….

Next Meeting: October 15, 2024

2024 Greenbook Underground Materials & Methods Subcommittee Meetings:

~~Jan~~	~~Feb~~	~~Mar~~	~~April~~	~~May~~	~~Jun~~	~~Jul~~	~~Aug~~	~~Sep~~	Oct	Nov	
~~16~~	~~13~~	~~19~~	~~16~~	~~14~~	~~18~~	~~16~~	~~13~~	~~17~~	15	19	

Transcript

September 17, 2024, 6:02PM

Gean Na started transcription

Gean Na 0:03
All right.
This is our monthly meeting calling meeting to order at 11:02.
We'll do self introductions.
I will call you up.
Please respond and confirm your name and company or agency and I will write it down.
We'll go from the top today, starting with Chris Ampfer.

Ampfer, Chris 0:23
Chris Hanford, WL plastics.

Gean Na 0:26
Brett for Nelly.

Brett Fornelli 0:29
Brett for Nelly underground solutions.

Gean Na 0:32
I'm. I'm sorry, Brett. What company are you with?

Brett Fornelli 0:34
Underground solutions?

Gean Na 0:37
Well, ****.
Oh yeah, I remember emailing you the invitation. Welcome.

Brett Fornelli 0:41
Yeah. Appreciate it.

Gean Na 0:43
Brooks Ryan.

Brooks Ryan 0:45
Brooks Ryan.
Unable PVC pipe association.

Gean Na 0:49
Colin Mccarter, good morning, gene.

Colin McCarter 0:52
Colin Mccarter, La County public works.

Gean Na 0:55
County David wengeran.

David Wangerin 1:00
David Wanger with EJ. Vicky Fernandez.

Gean Na 1:06
And then.

Fernandez, Dickie 1:06
Thank you, Fernandez. Orange County sanitation district.

Gean Na 1:10
Mark killed them. Mark killed them.

Giljum, Mark 1:14
La County sanitation districts.

Gean Na 1:19
Jackie.

Jacquie Jaques 1:21
Say good morning, Jackie.
Jake was with Sekisui.

Gean Na 1:26
Rob, honey.

Rob Huning 1:28
Rob Hunting, City of LA design standards.

Gean Na 1:35
Rowena.

Rowena Patenaude (Guest) 1:38
Good morning. Rowena Patnode, Westlake pipe and fittings.

Gean Na 1:43
Westlake Pipe and fittings.
I'm definitely getting my fingers warmed up.
I thought I saw someone come in and disappear.
OK.
Guess not.
Rafi. Yeah, I I see there.
Oh, OK. Rafi calling Rafi.
Rafi, we can't hear you.
Hopefully you could hear us.
Check to Raffi what Bali construction, an AGC.
OK.

Raffie Yeremian 2:28
Hey, Gene, do you, can you hear me?

Gean Na 2:29
Yep, I hear you now.

Raffie Yeremian 2:30
OK, perfect. Thanks.
Hey, Rafael with the agency.

Gean Na 2:35
K good, is there anyone else they missed?
I think I cut everyone.
OK.
I moving on to meeting minutes.
I do hope they were posted.
I did not attend.
Last meeting last month's meeting.
Let me pull it up on the website.
I did speak with Jamie, who hosted the meeting for me.
I know she said that there was nothing moved.
Alright, I'm just checking their website to see that August is posted.
And.
Many minutes was brief, but I will share it anyways.
OK.
Hold on.
How do we get out of here?
OK.
Hopefully you guys could see this.
These are the brief meeting minutes from August's meeting.
It's mainly my agenda.
Attendance listed here.
Looks a lot like today's meeting.
Some announcements.
Is there a motion to approve August meeting minutes?
Any motion to approve August meeting minutes.

Jacquie Jaques 4:19
I'll make a motion to approve the August meeting notes.

Gean Na 4:23
Thanks, Jackie. Is there a second on that?

Raffie Yeremian 4:26
I'll second it.

Gean Na 4:29
Who? Who said that?
I didn't hear the name.

Raffie Yeremian 4:31
Rafi.

Gean Na 4:32
Thank you, rafi.
Jackie, your voice sounds like you're under the weather.
Hopefully you're OK.

Jacquie Jaques 4:38
I I sound more like my my colleague JD.
But it's getting better.
I'm. I'm still here.

Gean Na 4:46
Yeah, I'm suffering from my toddlers back to school bug that's going around too.
And and and all I can say is yay to getting sick again.
So I feel ya.

Jacquie Jaques 5:00
The fires have also had some impact on it too, so, but you know.

Gean Na 5:03
Oh yeah, I bet.
Dan, I saw that you joined.

Dan Zarraonandia 5:11
Yep, I'm here.

Gean Na 5:13
Oh, not yet.
Because OK, is anyone else that joined that I missed? I don't think so. OK.
Moving on to announcements and let me share that part of the screen.
Looks like someone just joined.
Looks like a Shannon joined.
Could be Shannon from Precon, but Hi Shannon, could you?

Shannon 5:44
It is Shannon from FRE con.

Gean Na 5:46
OK.
Got it.
OK. Moving on to announcements and then we'll into our changes.
There's, I know Chris is here, which is good at the main committee, perhaps maybe six months ago or so, they created a new subcommittee called the ASTM updates or whatever they're calling themselves.
Chris Hanford, who's here today, is chairing that group.
They haven't had their first meeting yet and I am helping with that to get that off the ground. But the reason why I'm bringing it up to you guys here today is there has been some work done by Bill Mahoney that works for B and I the pub.
Of greenbook and also Keegan, who is the chair of Greenbook. They've already identified several ASTMS that they've identified as being obsolete in greenbook, and so Keegan.
Identify three of EM that kinda belong in the underground world, so to speak.
And that's down here below. So we'll talk about them in new business.

I'll. I'll wait till then. But just wanted to give that quick announcement just in case some of you guys leave and also with that being said, if any of you hear about any old ASTMS or?
Perhaps maybe an ASTM updated that GREENBOOK should update to follow suit.
Please let us know.
Let's let this subcommittee know we could work on it.
Here we could inform Chris about it and and add it to the quote UN quote list.
But this is kind of the first effort at this that the kind of the committee is doing is identifying things that are clearly wrong or clearly replaced, et cetera.
So again, we'll talk about that later, but I just wanted everyone to hear that off the cusp.
As far as other announcements goes, I know there's a a note dig conference.
Jackie, that's something that you've gone to many times.
It's in our neck of the woods, so I I do encourage everyone to go.
Of course I'll be there myself.
It's a really great university that produces really great engineers and I'm saying all these nice things because I went there, but I'll be there.

JJ **Jacquie Jaques** 8:01
The program is really great.
We've got a great registration so far and they're also going to be highlighting very, very call some of the no dig conferences on the national level have these competitive products or innovative products. And we're going to have several of the last winners of the last four or five.
Years showcasing their products that won first place in the competition.
So there's a lot of good.
Ideas and networking that'll be forthcoming.

GN **Gean Na** 8:28
Thanks. Thanks Jackie.
And if this is just about a month from now, right.

JJ **Jacquie Jaques** 8:36
Sorry, get my voice back here. October 15th and 16th. The conference will be on the

15th. And if you're interested in taking one of the tarantulas courses that'll be offered for an additional fee on the 16th.

Gean Na 8:48
It's interesting that conflicts with our underground meeting here, so.
It's. Yeah, it's those two days.

Jacquie Jaques 8:53
You'll know where I'll be.
I'll be doing booth duty and and board duty.

Gean Na 8:57
2/3.
OK.
Well, you know, since we're on this now, I I do a plan to attend to the the conference, but I I still plan to host this meeting.
Unless 90% of the normal attendees here are going to be at the conference and unavailable.
Which I doubt.
So I'm going to have the meeting that day, everyone same time, same place, so to speak on the 15th.
You know, I obviously will step away from the conference a bit, but.
Yeah, if you guys.

Jacquie Jaques 9:30
I got the registration list this morning and there's a huge list of agency people from the city of LA County Department of Public Works, LA County Sand District and Orange County Sand District.

Gean Na 9:43
Sure. Yeah.
But yeah, I get.
I know I'm gonna.
I would imagine that, but I doubt everyone here is also going. So if you guys can unmute if you guys feel like we should move our greenbook meeting, please say so

right now.
If not, I will just keep it that same date and time at 11.

Jacquie Jaques 10:05
I would suggest moving at that again that just one individual.
So if everybody else is open for, we have better participation.

Gean Na 10:12
There's a lot of schedules and I try not to move it.
I'm not hearing anyone suggesting we move this meeting, so I'm just gonna keep it, guys.
Yeah, that's what we'll do.
OK.
Any other announcements you guys wanna announce to one another?
Looks like someone's joining us.
Caller announce themselves real quick, whoever called.
Do you wanna announce yourself in the 3789 number?
OK.
Go moving on to old.

+13*****89** 10:59
Hey, just starting.
Hey this Jeff Bosch. I cut the last part of that.

Gean Na 11:05
OK. Gotcha, Jeff.

+13*****89** 11:06
Each time late.

Gean Na 11:15
OK, moving on to old business item for a, this is change 284.
I don't know if Jamie had hosted another meeting to tackle this.
Has anyone here in in this subcommittee here been working with Jamie or I guess, Jackie on this in the past month?

Jacquie Jaques 11:40
Haven't we haven't had any meetings the last few weeks that I'm aware of.
I've done a lot of traveling though, but I haven't been involved in anything the last several weeks.

Gean Na 11:45
OK.
So so Jackie, help me out here.
What do you? Where do you think we're at right now with this change?
And what do you think our next steps are? Since you've been pretty involved with Jamie lately?

Jacquie Jaques 11:59
The fold in the forms specifically, I think there was just kind of some debate as to if it was still a relevant specification that was supposed to be kept in the book or not.

Gean Na 12:12
OK. And that that occurred at like a small task group level, right?

Jacquie Jaques 12:17
Yeah. And there were some question on that.
I don't have anything on the fusible solid wall slip liners or the segmented per southeast.
I could go back on some of the meeting notes. I think city of Los Angeles was providing a lot of expertise on that and that was also part of the discussion last month's meeting.

Gean Na 12:40
I think I was at that one.
And then how about this last 174 segment of slipliners anything?

Jacquie Jaques 12:45
Calling off the top of my head, I could not probably give you a really accurate update on that at this moment.

Gean Na 12:51
OK, it's not like you're sick or anything, Jackie.
Come on, work on your memory here.

Jacquie Jaques 12:55
You know this little foggy here, but if I come up with anything brilliant, I will let you know.

Gean Na 12:58
Yeah.
OK.
I.
I guess with that I personally will be a little little done with traveling after this week, so I'm gonna connect with Jamie.
I know she's not here with us today, but I'm gonna ask that we have another kind of focus meeting on Part 5.
I guess in the next week or two.
So either the end of September or beginning of October.
You know, just to keep this rolling.
I'm just looking for who wants to stay involved in this?
Could you guys kinda go unmute to let me know if you wanna be involved in helping us get this to the finish line?

Jacquie Jaques 13:43
I'll definitely continue my involvement. No worries.

Gean Na 13:48
Anybody else?
You do get paid very well.

Colin McCarter 13:52
This is this is Colin.
Yeah, I don't have a lot of technical knowledge in this, but I'm happy to help out

either at this point or at the editorial kinda end of business so.
Feel free to send me an invite.

Gean Na 14:07
Oh, could you guys still hear me?

Colin McCarter 14:11
Yes.

Gean Na 14:12
Oh, my computer, just black screen and came back. Colin, I heard you say that you're you're willing to help.
Not, not too much technical expertise, but willing to help, right?

Colin McCarter 14:24
Yeah. Yeah, either now or when it makes it to editorial, I mean.

Gean Na 14:24
OK.
Thank you.
OK.
I I do have some idea that I was hoping that I can chat with you after today's meeting or maybe this afternoon, but I'll call you or e-mail you later about that.

Colin McCarter 14:37
Sure.

Gean Na 14:38
Anybody else other than Jackie?

Brett Fornelli 14:41
This is this is Brett, and I'm in the same boat.
I'm I'm new to this but myself where I can draw in our our our VP technical standards as well.

Gean Na 14:51

OK, great. And Brett, I I'll keep it a 32nd download of what what this is about 284 is about the repair of pipe and this is a a a major change at the greenbook that that the committee hasn't worked on for like 10 years and.
I've been involved in it for the past three years and we've done a lot of work.
However, just like any construction project, the last 10% is the hardest.
So that's sort of where we're at.
We had a gentleman named named Dave Badgley that did a lot of the heavy lifting for us.
O we're just at that fine tooth comb point with this, and the important thing is that we don't release something in greenbook that has problems or creates problems, right?
So that's where we're at and we've sort of met maybe twice a month on it as a focused task group on it. But I would say we really just need a couple people to bring this home to the finish line.
So and if you want to talk more about it, Brett, we can talk after.
But I appreciate you volunteering.

Jacquie Jaques 15:57

You know, it's looking at by meeting us for Jamie, it looks like the last update that we got from her was on August 12th. And that was in preparation for our last month's meeting.
So that's the last changes that I received from her.

Gean Na 16:10

OK.
Yeah, you know, just thinking out loud, folks.
You know, we've obviously went into a virtual mode due to the pandemic in 2020 and there's been tons of discussion in meetings here.
I'm I'm kind of at a point where, like, maybe there needs to be a focus group that meets in person that needs to print some stuff on paper.
I'm of those types of people.
But something needs to happen and something needs to change to get this finished.
I think whatever we've been doing for the past couple years is not working.

So it's something like that, right? And and that's what I wanted to do to get this finished.
I I wish I could spend my like dedicated time on it, but I could only give so much time to it.
Oh yeah, that is.
That's my two cents here.
So for everyone that's involved or interested, I'm gonna ask Jamie to schedule another meeting and probably invite most of the folks here if you're welcome to join. And then we'll move forward in that fashion.

Jacquie Jaques 17:20
Just a suggestion.
I've been encouraging Jamie to come out to attend the West Conference any way that we can.
I know you don't want to change the date, but it'd be great if we could maybe do the focus group or small task group.
We can all meet together and if Colin is voluntary, maybe we can meet at La County Department of Public Works and maybe hash out some of the last details.

Gean Na 17:43
Yeah, I I love the sound of that.
So why don't we have a virtual meeting at the end of this month and and if that group's up for it, we can do something in person at that conference after or, you know, I know it's a 2 day conference or maybe something that LA County A.

Jacquie Jaques 17:59
Hi.

Gean Na 18:00
Good idea. I like that.

Jacquie Jaques 18:01
OK.

Gean Na 18:05

OK.
Anything else on on this on part 5 change 284.
Change 284 is like that. It's like that.
Thorn that you can't get out. That's what it.
That's what it is.
OK. Moving on to change 332, this was this was actually my item and I've been dragging my feet.
I will admit that just to give everyone an update on what this is, this is something that we approved about a year ago.
It was kicked editorial.
It was kicked back to us with a suggestion to.
Improve it by modifying.
The language in Part 3.
Which is the construction part.
So this is something that I need to do and I once I get to it I will present it back to this subcommittee, but I do not have anything other than that.
Moving on to change 338 and 339, I'll kind of talk about both of these. This was.
Proposed by Chris Adfer.
So I know the second change 339 we are folding Chris's proposed changes into change 284.
So Chris.
I I there's a part of me that doesn't want to create more work than there is, but.
There, there might be a chance that.
Your proposed changes, like solely in 339.
Should affect the old version of Greenbook in the event that 284 does not move forward.
Do you get? Do you get where? I'm coming out with this.

AC **Ampfer, Chris** 19:50
I guess.
But you know, I think I think 284 can get completed, so.
Are you saying that you want 339 to be separate than 284 or?

GN **Gean Na** 20:03
Maybe only because I've seen the track record of 284 not really get there now.

I love your optimism and I'm hopeful too, and I know it's not gonna get into the supplemental for next year and really are kind of our our, what's the term our our our goal here is to get this into the next edition, right?
So yeah, that gives us a good two years to work on 284.
And I and I, you know, it sounds easy to get this done in two years, but you know, this thing has been worked on for 10. So I I'd rather it just get folded into the 284 stuff too.
But perhaps what I'm saying Chris, is sometime next year in spring, if if we get that feeling of like hey, yeah, 284, hit another wall, it's not gonna happen, then maybe we should pivot your proposed change as like an independent change.
So I just wanted to leave that with you and you know we'll stay on it. But for now, let's work on getting 284 done. You know, so.

AC **Ampfer, Chris** 21:01
Yeah.
Alright.

GN **Gean Na** 21:07
Just just that those are my feelings and thoughts.
I guess I'm an emotional person today.
Do you have any anything new with 338?
This on 200.

AC **Ampfer, Chris** 21:18
No, I mean that that changes our as proposed for you know since January or February, whenever I propose them initially so.

GN **Gean Na** 21:28
OK. Point. Yeah. Let me pull that one up on the screen and it sounded like you, David.

DW **David Wangerin** 21:28
I mean, I have questions.

Gean Na 21:32
What the question.

David Wangerin 21:34
Correct. Specifically, we're gonna go back to our conversation regarding the table 207 or or section 207, dash 19.

Gean Na 21:44
OK. And sorry, which change are you referring to on your question?

David Wangerin 21:48
Well, it's section 2/07/19 and 338 section 200.

Gean Na 21:51
Oh, OK, let me pull it up and go ahead with. Go ahead with your question.
Let me pull up that section.

David Wangerin 22:04
Oh.
Obviously I see a lot of changes for the polyethylene, solid wall gravity pipe section.
As a manufacturer, I agree with with what's trying to be done. We need to update this to meet a lot of the things that are that are currently out.
In construction as well as office manufacturers as to what we're supplying the question I have is that it seems like we're.
We're eliminating some things that I don't understand why it's being eliminated.
So I would just like to go through that section as a whole to discuss it in greater detail.

Gean Na 22:45
OK.
Let me share my PDF and and which table specifically did you wanna look at together?

David Wangerin 22:55
Well, the section 2/07/19 that includes section the table 201720719.2.

Gean Na 23:03
207.
07/19/19 dash oh 19.2 David.

David Wangerin 23:12
2/07/19 and then the table is 2/07/19 point 2.

Gean Na 23:18
OK.
Well, I have it up on the wall.
And and this is the PDF version, not the struck out version.
But David, go ahead.
Go ahead with your comments. What I'll do with this version right here is I'll just redline it live so we could record our thoughts somewhere.

David Wangerin 23:36
OK.
First question I have obviously not familiar with it, but I see we've added a bunch of ASTM standards that weren't in the old one.

Gean Na 23:47
Mm hmm.

David Wangerin 23:47
And that's obviously the F1055, the F 1924, the F 1984. These are here for multiple fittings that you know, making sure that these are obviously being used by the agencies.
Clarifying the specification.
That would be the first one that's in 19.1.

Gean Na 24:05
Mm hmm.

David Wangerin 24:06
The next question I have is obviously the clarification regarding removal of the D 1248, which I understand is now considered a wire standard.
But then adding a cell classification of the 445574 C, which is a very specific classification that comes from D3350.

Gean Na 24:28
Could you?
Could you add some color to this?
Like, are you?
Are you saying that it should not be or just try to understand where you're coming from.

David Wangerin 24:34
So so I'm trying to understand as to why we're calling out the cell classification and then the table and the specific cell classifications start to contradict themselves.

Ampfer, Chris 24:49
I believe I believe if if you're the same individual last meeting or meeting before, that said, it contradicts itself and I believe I showed you proof that it does not contradict itself.
The classification 445574 C that table 20.
719-2 is exactly those parameters for which that cell classification stands for.

David Wangerin 25:14
OK.
So under D3350 for the very first classification or density density over class four is .947 to .955.

Ampfer, Chris 25:25
That's right, that's.

David Wangerin 25:26
And what do we have on the table?

Gean Na 25:32
That's one.

David Wangerin 25:35
OK.
I'm also going to clarify that WL Plastics has their own specification for PE4710 that calls out cell classification 445574 C and the gravity for your for your specific pipe is .960.

Ampfer, Chris 25:53
So that's after the color concentrate is added. The carbon black is added zero.

David Wangerin 25:59
But that's not shown in.
But can you see how that can be confusing?
Because that's not shown in this document anywhere. I understand that adding the carbon black increases the density completely, but we've now fallen outside these table classifications and the original numbers that were in the old table, the 941 to 959 originally came from that class.
Of the OR the.
What was it?
It was the 12401248.
So I understand where the old number came from.

Ampfer, Chris 26:29
So you can.
You're gonna have to face.

David Wangerin 26:30
I understand what we're trying to do with the new number, but we can't call it a specific cell and then contradict ourselves in the table.

Ampfer, Chris 26:32
You're gonna have to let me share my screen with.
There is no there is no contradiction to say.

David Wangerin 26:43
If you could explain it to me, I'd appreciate it.

Ampfer, Chris 26:46
Let me pull it up.

Gean Na 26:57
Chris, I unshared so you could pull up whatever thing you wanna share on your end.

Ampfer, Chris 27:05
Just give me a minute.

Gean Na 27:06
Sure.
And while Chris is pulling this up, I I I think forsake to leave a good cookie trail on some of our discussions and and and not to like repeat discussions at like future meetings.
On something like detailed like this that perhaps you know you know only two people in this meeting really understand.
It might be good, David, if you write an e-mail to to describe why it shouldn't be this way as such.
And and that way we can get something recorded.
And I think that'll be a good way to show that, you know, we did have this conversation in and some of us can digest it on our own, because I would say 90% of us can't keep up with you. And Chris 'cause, you know, you guys are.

David Wangerin 28:00
Yeah.

Gean Na 28:07

So such experts at this and you know, we're just kind of listening along, but I'm glad the conversation is happening.

David Wangerin 28:12
Chris, Chris is absolutely expert when it comes to plastic pipe.
I mean, I'm not.
I'm not denying that.

Gean Na 28:18
Hmm.

David Wangerin 28:18
I just, you know, I want to make sure that what we do, we do it right.

Gean Na 28:24
I appreciate that too. Go ahead, Chris.

Ampfer, Chris 28:28
So the cell classification for PE4710.
Is 444, so the first number is A4.
So you look here 4.
That's the density range .947 to .955.
Index the second number.

David Wangerin 28:49
We're denying that, Chris.

Ampfer, Chris 28:54
4.
K That's what.

David Wangerin 28:55
Correct. I understand how to read the table in self classification Chris.
What I'm saying is that in our table, after saying that that the material composition

has to comply with D3350 classification 445574 C.
That first thing the table does is allow a density at 941, which is below classification 4.

Gean Na 29:19
So it's just the the 1000 number.
It says 941 when it should say 947 and and Chris, could you help me understand why we use test method 4 to in in lieu of some of the other methods?

Ampfer, Chris 29:37
Test method four. What do you mean?

Gean Na 29:39
Well, in your table there your range is 947955 right?

Ampfer, Chris 29:45
Yeah.

Gean Na 29:46
Why are we using that column instead of column 1235678?

Ampfer, Chris 29:52
Because that's a cell classification for PE4710.
Excel classification for PE4710 is 4/4.
5574.
The 4:00 and 4:00 and 5:00 and 5:00.
And seven.
And four.

Gean Na 30:18
OK. Is are there any other errors that you saw, David, other than the seven and the one for density?

David Wangerin 30:24
Yeah. So one of the things I I would wanna talk about is that the classification also by classifying it as a 445574, you know, not that there's anything out there now. But if

you have a special condition C under the melt index that.
Is a flow calculation that has a density less than .15, but could have a a very have a have a local a flow rate of less than 4 gallons per. What is it 10 minutes?
It could technically fall underneath A5, but still meet the other conditions that we require for everything else on the table.
You get to the flexural modulus. It used to be 120.
I agree with Chris here where you know we should probably standardize that and make that towards what the manufacturers are applying the standards to. And if we're going to call it out, then it should be applied to that D3350 as that as that class cell.
Class 5 for flexural modulus not disagreeing with that.
Not not disagreeing with increasing the tensile strength.
I think that's a benefit.
Wondering why we're decreasing the elongation?
800% down to 400%. That would be a question as to as to why, why we're doing that instead of just accepting it Willy nilly? Brittleness.
Temperature of -180.
I can go to other manufacturers and they have that brittleness temperature on their -180.
Why? Why was that changed?
The Thermostability was something that we added new to there. As far as I can.
My research shows that that's a plastic pipe institute standard.
So the question is, it doesn't need to be included in the greenbook standard.
When we get to the pent hours, my question is, is that when we're looking at the pent hours, I understand the pent hours is part of the cell classification but previously in greenbook we we.
Called out the escr test, which is also listed under the 3350.
So why are we changing the testing standard? If it was a test, that was if it's the same test under D3350.
But why are we using pent hours instead of escr?
You kinda.
It's it's. I have questions as to why we're changing some of this when when is it is it that we're changing it for the benefit of greenbook because this reads like a playbook from?

Gean Na 32:31
Mm hmm.

David Wangerin 32:34
A specification sheet which I'm not saying is right or wrong, but there still has to be reasons behind why we add some of this stuff or why would change some of the numbers. That's how I approach it. When I try to change my the specifications related to my.
Products.
That would be the questions that and this is just a small section.
I saw that table and this is just a small section I haven't.
Obviously I didn't have access to all the. All the the changes prior to that and and you know, kudos to Chris.
I mean, I probably spent, you know, several hours just going through and pulling up the all the associated ASTM standards to make sure I understood it before I opened my mouth.

Ampfer, Chris 33:15
David, the only high density polyethylene resin is on the market right now is P4710 and that P/E 4710 is gonna meet this ASTM cell classification.
That is the resin that's being used to make the pipe.
Now, after the resin is transformed into the pipe with a addition of a carbon black compound, you know.
These parameters may change slightly, but this is the resin, the virgin resin.
This is the requirements for the virgin resin that's being used to make PE4710 pipe.

David Wangerin 33:50
So does D 1505 clarify that the density changes after you've added carbon black to the mix?

Ampfer, Chris 33:59
Is D 1505.
Are you talking about the ASTM test? No, no. Yeah.

David Wangerin 34:09
To test the density, does it?
Does it compensate the the approved density values for the additional carbon black?

Ampfer, Chris 34:16
So that's just a test method. D 1505 is just a test, so it doesn't talk about it, doesn't talk about the addition of carbon black or anything like that.

David Wangerin 34:19
Correct. To verify the density.
OK, so so how would how would a layman know that?
The addition of carbon black is going to raise the density outside of the parameters of Excel classification 445574 C.

Ampfer, Chris 34:36
This is a classification for the virgin resin.
It's not for the classification of the pipe.

David Wangerin 34:45
Going to say it complies with Astmd 3350 cell classification, 44574 C and then we're going to limit that condition by adding the table as a follow up and saying that the density has to be less than 955.

Ampfer, Chris 34:59
So again, the table 20719.2 is just a D duplication of what cell classification 445574 C is.
There is really no need for it if you have the standard, but you duplicate everything in here and in this greenbook because people don't have copies of D3350.

David Wangerin 35:14
But it's not a duplicate, it's it's.

Ampfer, Chris 35:25
And like I said, all PE4710 meet this cell classification until they come out with a

different resin.
Which at least I'm updating for something this P that Grade 34 has been made in.
Probably 30 years.
Would you prefer to leave something in? There's over 30 years old that's not being used versus what is currently being used.
I I just don't understand where you're coming from.

DW **David Wangerin** 35:51
Well, first of all, the tables, not a duplication of D3350.
There's values in the table that aren't listed in D3350.

AC **Ampfer, Chris** 35:58
I made a mistake there on a density.

DW **David Wangerin** 36:04
OK, so and I'm not.
I'm not trying to be critical.
I mean, I'm not trying to make you defensive either, but, but.

AC **Ampfer, Chris** 36:08
It sounds like, I mean I, I mean, I just don't understand.
I mean, you're you're accusing me of trying to pull one over on everybody, and I'm just trying to help out this, this greenbook.

DW **David Wangerin** 36:16
No, Chris, not at all.

AC **Ampfer, Chris** 36:17
I I just.

DW **David Wangerin** 36:18
Not at all.

AC **Ampfer, Chris** 36:18
I don't understand you.

David Wangerin 36:21
Chris, I make mistakes just like anybody else and and half of what we do is to fix mistakes that have made in pre in previous greenbooks.
That's exactly why you're that's exactly why you're asking for these changes and and you're getting upset that I saw a mistake.
And so I double checked all the rest of the work and and because I double checked all the rest of the work and I and now I'm asking questions I don't understand why.
I don't understand why that's an issue.
This this is exactly what this group is for.
So then, so then reality of it is, is that we wanna change that density value to the 947 to the 955.
But my question still gonna be is that?
The table is an additional restriction as currently written on on 2/07/19 point 2 material composition. So adding an additional restriction regardless of of the manufacturer that be like, that'd be like somebody coming up to me and and saying that that my iron needs to.
Be a 48 Class 35 and then writing Class 37 in in a in a table after the fact.

Gean Na 37:30
Yeah. So let me let me chime in a little bit here guys, because this this discussion is similar to some of the stuff that's happening in Part 5, which is.

David Wangerin 37:30
Isn't even.

Gean Na 37:42
As the Greenbook gained value by duplicating a table that's in ASTM and and I think both arguments win where.
The poor engineer or the poor inspector that doesn't have every ACE team in the world can just go to greenbook.
And then now they have a useful greenbook.
Because it has good information. On the flip side, it it could conflict or it doesn't really help.
So I I see both sides of kind of the discussion right now.

I would.
I would error on kinda just leaving the way the greenbook was as far as the formatting. You know, having the reference and the table and making sure that the the numbers are right.
David does raise good questions on some of the proposed changes.
I I something that jumped out as me at me looking at it now is like the elongation at break at 800% to 400%.
I I think, Chris, what we need is kind of a justification for that.
So that you know the subcommittee could could agree.

AC **Ampfer, Chris** 38:47
I mean, like I said it it it is what it is.
I mean that's that's what the.

GN **Gean Na** 38:51
What does it is what it is it means?
Are you saying that it's it's is?

AC **Ampfer, Chris** 38:53
You're you're you're asking me to say you're asking me to figure out why they you know, I have no idea.
The residents have changed, you know, since since.

GN **Gean Na** 39:01
I.
I know, Chris.
Are you saying that 400 to 800 is now shown in that ASTM?
Could you show us that and can you show us the ASTM? I think the problem is we don't all have this, this ASTM to see that right.
And I think that's just what we need.

AC **Ampfer, Chris** 39:35
Right here.

GN **Gean Na** 39:41

And it's going from 4 to 800. In the reference there is 6.7.
OK.
Thank you.

David Wangerin 39:51
But Gene, I'm gonna go back to, you know, the previous greenbook committee used 3350 and they had the addendums on to those standards with this table.
And so my question is, is why did we have it at 800 and is 800 something that should be maintained in that standard?

Ampfer, Chris 40:09
If you make it 800, you'll never get a PE4710 resin.
There's no one that can meet it.

David Wangerin 40:25
And you're the expert on that, Chris. I'm not.
I'm not denying that my my only question is, is that somebody in Rubik at some point in time decided that 800% was the proper was the proper measurement for that?

Ampfer, Chris 40:35
Because someone is sometimes just probably copied a number down from somewhere.

Gean Na 40:40
Chris, what about the old ASTM dial referenced in the old Greenbook language?
Do you know if that used to use a call out date?

Ampfer, Chris 40:46
That is an old wiring cable standard that was used for both wire the the polyethylene and covered wires.
And that has been used since, like the 1970s.

Gean Na 40:59
Hmm.

Yeah. And I and who knows right.
Who knows where that 800 came from, folks?
I wish everything was documented, but that's not gonna be possible.
I I think we're we're in a case right now where we have to rely on the SMEs.
Or the ASTM, right?
You know, from my perspective, it's all we can look at is 6.7 that says minimum of 400.
So unless any other agencies can chime in here that you know is an expert in this topic, I would say that we have to use minimum of 400.
Unless anyone could say otherwise.
OK.
Is there?
What else did did you catch David?

David Wangerin 41:48
The -180 to the -76 negative 60 'cause. I found some other spec sheets from other manufacturers that list -180.

Gean Na 41:57
OK.
So I guess the perspective could be Chris, I'm not attacking you here, but OK, Chris Amher is trying to, you know, build a spec that only his company can provide.
And of course, we can't do that, right?
And that was one of my oh, I know, I know, I know. I know guys.

David Wangerin 42:12
No, I'm not. I'm not.
No, not at all.

Ampfer, Chris 42:13
Apparently that's what David apparently that's what David thinks.

David Wangerin 42:13
I'm not. I'm not saying that.

Gean Na 42:16
I know guys.
I'm just saying that that's we want to be sure that we avoid that situation.

David Wangerin 42:18
Oh.

Gean Na 42:22
That's my comment there.
And that was going to be a question that I have for you as well, Chris, like and I appreciate your time and dedication to this, but we should probably also include some of your competitors.
To make sure there's kind of.

Ampfer, Chris 42:34
This has nothing to do with alveol plastics.
This is straight out of D3350.

Gean Na 42:38
OK. And and if that's the case, then I believe you, Chris, then that's good.
So David, you said that there's other manufacturer that has this different criteria.

David Wangerin 42:49
Yeah, I mean, I mean, I'll, I'll, I end up doing.

Gean Na 42:49
Right. But we can only look at the astms.

David Wangerin 42:51
Is that is that to kind of answer some of these questions without without having a Direct Line to Chris, is is I just look to see what other manufacturers are doing on top of what WL plastics are doing and to see this range of things that meet the.
PE4710 and the 445574 C that that's all I did.
All I was doing was comparing information from from other manufacturers spec

sheets to WL plastic spec sheets to what's been written to what's been proposed in the greenbook. That's all.

Gean Na 43:10
OK.
OK.
That's good due diligence. So where?

David Wangerin 43:19
So.

Gean Na 43:21
Where is this proposed change value, Chris?

Ampfer, Chris 43:32
What's he say asking about thermal stability?

David Wangerin 43:36
Brittleness, temperature, thermal, thermal stability? I I located in the Plastic Pipe Institute recommendation.

Gean Na 43:36
This wasn't in the table before.

Ampfer, Chris 43:43
That's also in D3350.
So you look and what do you wanna know?
The brittleness. Temperature.

Gean Na 44:13
I think I saw it.
It's your proposed is 180° now to 76.

David Wangerin 44:19
-180 to -76.

Ampfer, Chris 44:24
Right here.

Gean Na 44:26
But not warmer than -60 Celsius.
6.4.

David Wangerin 44:31
And that's fine.
I I I appreciate you showing me that. That's obviously something that I missed. All I was doing was looking at the different spec sheets and and once again the table is an addendum to the ASTM standard.
So somewhere down the line, at some point in time, somebody from Greenbook decided that they had to have that additional restriction above and beyond the D3350 standard.
That's all I'm saying.

Gean Na 44:56
Yeah, I mean that's possible, David. You know, I've I've seen that in other places too.
OK. Anything else?

David Wangerin 45:07
The thermal stability I found as a reference to plastic pipe but but Chris is saying it's indeed 3350.
So then we should be listing that.

Ampfer, Chris 45:15
Right here.

David Wangerin 45:16
Not necessarily as a test, but list that as you know.
The associated ASTM.

Gean Na 45:32

Can you go back to your proposed change? Chris, your word, doc.
Anything else, David, that we could look at?

David Wangerin 45:47
Yeah. Why? Why? Why did we remove the escr test and use the pen test when both are listed?
303350.

Rob Huning 45:57
Quick comment to you real quick, the thermal stability, it looks like that should be degrees Celsius based off the ASTM.
Astm was degree C and you have it here outside of the parentheses, which would mean it's degrees F Fahrenheit.
Yeah. So if you put the ASTM back up on the screen, you should be able to see that it's the grease C.

Gean Na 46:17
Yeah.
Yeah, 220.
And 6.3.

Ampfer, Chris 46:35
Oh yeah.
U.
So the oramanel stress crack resistant again that test.
It's been shown long time ago that it's not the best test for slow crack growth.
Resistance of polyethylene pipe.
The.
Accelerant that they use in.
Their cause?
Problems with the actual test and pent was found.
It was created. The pent test was created.
In 19.
97.
And.

Somewhere around that time, and has been found to be a much better test for slow crack growth resistance, so that's why.

David Wangerin 47:41
Well, the escr was just an old test that they allowed to live in the in the standard because people were still doing it that way.
I deal with the same thing in my industry.

Ampfer, Chris 47:48
You can still call it out. I mean, resin companies still test for it, but it's just not a good test for for a slow crack resistance.

Gean Na 47:58
Is it an option?
So it sounds like it's still an option, right?

Ampfer, Chris 48:02
It's an option within a cell classification. If you go back and look at a cell classification, it gives you both.

Gean Na 48:09
I.
I I err on leaving it still if it's still an option.

David Wangerin 48:21
I see.
I see where where Chris the issue you have here though is that you can't call out the 45445574 C and then use that as your as your testing option.

Ampfer, Chris 48:36
Correct.

David Wangerin 48:37
Because, because you're gonna that, that, that #7 in that cell classification is either gonna have to be a one through 4 or a, you know, well one through 3 for the escr or

a 5 through 7 where four technically allows you to do both. But I I.
See, I see his issue there and I see the reason why he's calling out.
Specifically the pent test.

Ampfer, Chris 48:59
That I think.
I don't think Iigapoul was even made anymore.
Think they outlawed it?

Gean Na 49:11
OK.
Gonna go back to the your your, your Word document, Chris.

David Wangerin 49:29
And I mean that.
That's that's all I really.
That's all I really checked. I mean, I'm not.
I'm not gonna sit here and go line for line on on everything.
It was just something stuck out to me and and I checked it that that's it. And and obviously I wanna make sure that we're we're not putting errors to be fixed later in the greenbook.

Gean Na 49:40
Yeah, no, this is great.
David, this is this is awesome. This is really.

David Wangerin 49:47
So that's.

Ampfer, Chris 49:49
Good catches I I didn't realize I had those mistakes.

Gean Na 49:53
Yeah, well, this is all good stuff.
Yeah, all good. OK.

Let's keep going.
Here is there anything else below this table?

David Wangerin 50:02
No, I didn't.
I didn't get a chance.
I don't have access to that table and I didn't a chance to grab anything else off of screen grab during the meeting.
It was just that one table stuck out to me.

Gean Na 50:11
Yeah. And I know, Chris.
He did strike out a lot of the terms used here and and you know.
Not saying we have to look at every strike out, but there is a lot that has changed and you know I I have not received any comments on it.
I I really wanna move this along, Chris.
So let's let's include some the the couple minor changes that you have here today and we'll distribute this for comments to the subcommittee.
And and heck, if there's no comments, we'll put this on a 30 day hold and vote for it on the following month.
But I just want everyone to know that there is a lot of changes that are proposed here.
So Chris, if you could just humor me for two more minutes. Just scroll through the entire document.
Don't don't read through it all, but just show everyone your your additional red lines and what we'll do. Everyone is we will send out the struck out version, this Word document version so that you guys can all see what is proposed to be changed.

David Badgley 51:19
I mean, this is day bad.
So the the I look at the the 1994 Green Book and all those figures have been in there since 94. But I know the residents have changed over the years, but I think that when they do that, they have to get a new greenbook.
Test Ed would be the the one that would know for that and and what those figures

are critical as a contractor is when we put something in and they take a sample, then we need to be able to meet those.

Gean Na 51:48
Mm hmm.

David Badgley 51:50
What those figures are?
What our pipe that we've actually installed, which is you know if we are adding carbon black and it changes what it is.
The the contractor's gonna check, or the agency's gonna check a sample of that pipe that we delivered to them.
We wanna make sure that that the figures that we've got are not just the resin, but yeah, maybe it's a wider range for the different manufacturers or they can all pass that.
But.
Make sure you know 'cause in the greenbook in the 500 section we've got three different places that where we've got high density polyethylene. We don't wanna get thrown off because the pipes doesn't meet the figures in that in that.

Gean Na 52:34
Of course.
Yeah, I couldn't agree with you more. Oh.
OK. You wanna just skim through to the end, Chris?
Any additional strikeouts or edits?
Oh, I remember talking to you about this too.
Your note there.
We definitely can't include a reference to a website here.

Ampfer, Chris 53:01
Alright, you wanna delete the blank?

Gean Na 53:08
Yeah, that's to answer your question.
Yes, but I'm trying to see if there's a way to keep the additional language there.

Jacquie Jaques 53:18
Hey, Gene, you were doing some fast scrolling here and I really appreciate gentlemen the the discourse and the conversation on this thing.
One thing that just popped out of me, and this is not my area of expertise by any means, but I saw that the testing was completely eliminated by the pager. So up and I was curious as to why.
Yeah, right here.

Ampfer, Chris 53:41
Section.

Jacquie Jaques 53:47
Is there a reason why this test is no longer applicable or testing method?

Ampfer, Chris 53:53
Astm F 714 pipe.
The manufacturer is going to follow all the test in in it.
There is not particularly an elevated temperature, sustained pressure test and F 714.

Jacquie Jaques 54:10
It be appropriate then just to refer to the ASTM and to that subsection you know for further testing data.

Ampfer, Chris 54:17
What what we're saying right here is is is that in the very beginning?
That it must comply with ASTM F 714.
When a manufacturer stamps the pipe, ASTM F 714, they certify that it complies with F714.
I can pull up F714 if you'd like.

Jacquie Jaques 54:42
I was just curious 'cause. I was wondering you know why no longer is being tested at an elevated temperature.
As you saying, that's no longer done.

Ampfer, Chris 54:49
So the elevator temperature sustained pressure test is required by manufacturers on a semi annual basis for continuous manufacturing to check the IT does not have to be done on every batch that that gets sent out.
It's a semiannual test that checks the production of the pipe.
And it's something that the quarterly people do anyway, so putting in it just seemed out of place.

Jacquie Jaques 55:23
Alright. Well thank you for that. I was just curious and those who know more comment on that.

Ampfer, Chris 55:24
It's something that you want it if you want to manufacture, you can ask for that information.

Jacquie Jaques 55:29
I'm sorry, pardon.

Ampfer, Chris 55:31
If you audit a manufacturer, you can ask for that information.

Jacquie Jaques 55:39
Right. Well, thank you for that.
Appreciate that.

Gean Na 55:52
Chris, can you go back to your chemical resistance reference to the PPI website?
Down below a little bit.
I don't know if you need that.
And you could weigh in if you do.
I I kind of feel that you can strike that sentence with a note, but if you feel like.

Ampfer, Chris 56:12
Some of the chemical resistance in physical testing so.

Gean Na 56:18
I just don't think we need the note.
I feel like we can just remove that proposed add.
Do you?
Do you feel like like whoever's gonna be performing and conducting these tests, though? They'll, they'll they'll know where to get it?
I just don't think the Greenbook needs to have that to say. Hey, how do you get this information?
No one thought I was crazy with that comment.
So OK, just delete that.
Just delete that empty line, but leave one space between that paragraph and the next section.
Yep. Perfect. OK.
Let's go down to the bottom.
If this applies to you, I don't think it does.
This is all 5 requests OK, so Chris, if you could do me a favor and just save as this document, put today's date and send that to me and then I will distribute this to the subcommittee.

Ampfer, Chris 57:27
OK.

Gean Na 57:29
David, I appreciate you actually looking at it.
We probably need that level of scrutiny and review for everything, so I thank you for that, yeah.
OK.
Yeah, Chris, just if you could unshare your screen and then again just put a date to that document and send it over please.
Thank you.
I'm glad we did that guys, I really AM.

Umm.
Too many things.
OK. And I know part 5 stuff, Chris.
It's kind of getting work done. I know we've had some meetings like I mentioned earlier, we'll call for another meeting, and if your section's involved in the discussion, which I imagine it will be, we'll talk about it then.
So moving on to.
Change 346.
This is deflection mandrel change.
That Jeff Bolcher Rep proposed after the previous version of this was deleted.
Jeff, are you still there with us?

+13*****89** 58:41
I'm here.
Can you hear me?

GN **Gean Na** 58:43
Yep, loud and clear.

+13*****89** 58:45
OK.

GN **Gean Na** 58:47
I believe II related this.

+13*****89** 58:48
Eagan.
Yeah, what you said.

GN **Gean Na** 58:50
Yeah, go ahead.

+13*****89** 58:52
I guess the the PDF that you sent with the meeting invite was the June version.

And then we had some discussion in July and then we added that paragraph that would that came out of the July meeting. We and then we reviewed it last month.

Gean Na 58:58
M.

+13*****89** 59:06
But what you sent out with this meeting invite was the the older, the older version. There was two changes since that was when we discussed both of these last month was.

Gean Na 59:16
OK.

+13*****89** 59:16
That the addition of the paragraph and then and it was the there was a big change with ASTM on July 9th.
And let's call in that e-mail. I guess you set the correspondence, but.
But I guess the the.

Gean Na 59:28
OK.
I think I have it.
Let me open it up here and then I will circulate this again.

+13*****89** 59:32
Yes.
OK.
Yeah, with the the newest one is dated July 17th.

Gean Na 59:36
And.

+13*****89** 59:40

It was the it's a word, doc, that has all the IT has all the commentary for the for the edit. Yeah.

Gean Na 59:45
I got it. Yeah.
OK.
Give me one second.
Let me just note that in my notes here.
July 17th.
Yeah. OK.

+13*****89** 1:00:01
Yeah, I sent it to you and Jamie after the last meeting on.
Well, I on the 13th of August.

Gean Na 1:00:09
OK.
I got it here.
I'm just putting that in my mini minutes that there is a revised version version that you just said.
Let me pull it up on the screen and we could look at it.

+13*****89** 1:00:17
OK. And I'm looking at it, but I'm, but I'm not.
On teams I dialed in so.

Gean Na 1:00:25
OK, so I have it up right now.
This is the your e-mail from in August and this Word document is dated July 17th, 2024.
The first page is the you know the cover page of the change and then down below.
Your revision attachment in redline.
So could you help me?
What the new paragraph is that you talked about?

+13*****89** 1:00:53
So the what we discussed last month, well there was two things.
Well, these.
These actually came out of the July meeting, but.
The two things if you go down to the third page.

Gean Na 1:01:05
OK.

+13*****89** 1:01:06
On the third page.
The big change there was the AST. MF679 was was deleted that that that was for larger diameter PVC that that was removed on July 9th and then all those larger diameters were incorporated with the existing D 3034. So all that.
Happened there.
The numbers all stayed the same. You know that that within the table the D34 PVC pipe.
It goes.
It it covers all those diameters.
So that's all that was changed there. And then if you Scroll down, the other change was.

Gean Na 1:01:44
One second.
One second, Jeff.
So you mentioned the ASTM 679, let's call it subsection has been deleted, right?

+13*****89** 1:01:53
Correct. But all the numbers stay.

Gean Na 1:01:54
OK.
So then.

+13*****89** 1:01:55
They just that section for D3034 just becomes bigger.
It starts at 6 inch and stops at 36 inch.

Gean Na 1:02:04
Oh, OK, I see what you're saying.

+13*****89** 1:02:07
Yeah, they they had.

Gean Na 1:02:07
So we just gotta change the lines on the table, OK.

+13*****89** 1:02:08
Yeah, they had, right.
Yeah, they had two different standards.
So you know D 3034 for years stopped at 15 and then F 679 started at 18 and went up.
They've incorporated all that into the one is what they did on July 9th.
So since this was first submitted in June, they made that change and I was, you know, I I went back to double check all the numbers again for like the 10th time and.

Gean Na 1:02:30
I follow.

+13*****89** 1:02:35
And figured out. Wait a minute, they they removed that standard.
No.

Gean Na 1:02:41
OK.
Just one second. I'm just gonna.

+13*****89** 1:02:41

But the numbers, yeah, the numbers that we've been looking at and I know they've been reviewed numerous times. So they haven't changed for eight months.

Gean Na 1:02:52
OK. One second folks, I'm just trying.

+13*****89** 1:02:53
Well, they haven't.
They haven't changed for 30 years.
Seen they haven't changed for 30 years, so.
Yeah.
And if you got the word file pulled up, it should all be spelled out in the in all the. All the commentary within the word file.

Gean Na 1:03:26
OK.
I'm just leaving a cookie trail here so we can get to the proposed changes and clean this up a bit, but I see what you're saying.
You're basically showing the ASTM D33 four size of six through 36, and get rid of the line work.

+13*****89** 1:03:39
Correct.

Gean Na 1:03:40
We'll clean it up.

+13*****89** 1:03:42
Correct.

Gean Na 1:03:43
But there is gonna be.
Yeah, I have a few nuanced questions real quick.
So if I get rid of that line that's above ASTM 679T1 Wall and this falls under St. 35, PS

46.
Is that right?

+13*****89** 1:04:04
That's correct.
Yes, correct.

Gean Na 1:04:06
OK.
OK.
Other than that, all these other changes were the ones that you had in the previous proposed change from the other change.

+13*****89** 1:04:28
And then I guess in, in, in June when this was, you know resubmitted.
You know, based on, I think we talked about that in June the the D 3262, which is the fiberglass pipe, you know these numbers can't be.
You can't go to the standard to get the numbers.
It's, you know, they don't list them.
They're different for every manufacturer, so you know, you know, we discussed that as a group and decide to strike all the numbers and then put in if you Scroll down to the next page at the very top.
What's in red? There would be new proposed text, and that's sort of the catch all.
But it basically says, you know, if there's if there's mandrel size is not shown for the whatever pipe that you're installing, you know the average ID for the purpose of determining the minimum outside damage. Mandrel shall be field measured. So you know using you know and that could.
Be cleaned up.
But we talked about it last month and and nobody had any problems with it, but I'd be open to if there's a better way to say it. Basically what that's saying is, hey, this is a catch all.
And and you know you need to measure, measure the and get a true ID of the pipe in the field and.
For the purposes of determining the the maximum OD of the mandrel or the bar, or if it's larger pipe, you know that I guess it it says Mandrel.

But it could be.
It could be the, you know, the one exam that are, you know, metal bar or minimum radius, rigid template etcetera. You know per the dimers bigger than 36.

Gean Na 1:06:09
So could we replace Mandrel with a better word or phrase then to apply for all sizes?

+13*****89** 1:06:16
Yeah, I think while I was while you guys were having the previous discussion, I was reading this again and I thought well, Mandrell probably should be changed to a different word that would incorporate either a mandrel or I guess if you look two sections down, gene, the seven.
.8 point 3.4 for you know, for pipe sizes bigger than 36, you know they spell out using a using a a metal bar.

Gean Na 1:06:41
Are.

+13*****89** 1:06:42
Or minimum radius rigid template or or a method approved by the engineer?

Gean Na 1:06:47
Yeah. OK.

+13*****89** 1:06:47
No.

Gean Na 1:06:47
So it's coming to me.
I think you're OK with leaving it as mandrel because this table, or at least this section, is specific to sizes.
I believe 36 and below or I'm sorry up to 24, right?

+13*****89** 1:07:00
Yeah.

Gean Na 1:07:01
So that table is only to 34.
Sorry, only to 24 on top of that, we do not need to talk about sizes 30, you know 273033 for example.
We don't.

+13*****89** 1:07:14
Yep.

Gean Na 1:07:14
Cause again, this whole Madrid thing only applies to diameters 24 and below.

+13*****89** 1:07:20
Well, that's what it says. I guess in 7.8 point, 3.2 is the, you know, the the section at the table is within, but you know.

Gean Na 1:07:28
Right. And that that's the case that that is where this table is.

+13*****89** 1:07:32
Right it is. It is.

Gean Na 1:07:35
So either the subheading here needs to change, or we need to strike anything bigger than 24 and I'm and I'm, you know, I'm just going with what's in front of me here.

+13*****89** 1:07:35
But it.
Alright.

Gean Na 1:07:47
I'm just sticking to the rules of the game. You know what I mean?

+13*****89** 1:07:51

Oh yeah.
Oh yeah, no, I'm with you.

Gean Na 1:07:52
Needs to be right.
So I'll I'll kind of ask the subcommittee right now.
And please chime in if you guys feel one way or the other.
Do you feel we should strike out anything that's bigger than 24 inches? Or change this range to include something up to 3033 or 36 or 48? And again, this is what this is when you would pull a mandrel, right?
That's that's what this section is about. Pulling mandrels to check for deflection.
If you're greater than a certain range, you you go inside with the bar.
Now I will chime in here a bit and say that if you can't go into the pipe, you need to pull a mandrel 'cause you can't fit in a 24 inch diameter pipe.
I don't care how skinny you are.

+13*****89** 1:08:46
Mm hmm.

Gean Na 1:08:47
Rafi, I see that your hand is up. Go ahead, Sir.

Raffie Yeremian 1:08:55
We have unibo here to weigh in on this at all.

Brooks Ryan 1:08:58
Uh, yeah, I'm here.

Raffie Yeremian 1:09:01
I I like to hear their take on it.

Ampfer, Chris 1:09:01
I.

Brooks Ryan 1:09:05

On.
Limiting the are you speaking about the 24 to 36 inch requirement or?

Raffie Yeremian 1:09:12
No, I'm just Peter.
I'm looking at the the shift the shift in, you know, going from.
Base Pipe ID to the average pipe Idi mean this this is again this is outside unless D 3034 is is changing, it's still outside of the of that and my my understanding.

Brooks Ryan 1:09:34
Yes, the national standards still go based on on average ID or base ID.
Sorry and the way we kind of see it is is generally again we recommend base ID, but any agency can be as as conservative with their own standards as they like.
Just Greenbook uses 5% as an example for deflection, while the national standard for that is 7 1/2%. So.
That's very much up to the agency.
We're just, we're just here to provide to provide support.

Raffie Yeremian 1:10:05
That's and that's where I think the issue lies.
I mean, so when I ask when I run these numbers over to churn and and our suppliers, they tell me that they do have these sizes and these are what they call 3% deflection gauges.
So effectively in their eyes you've just changed the standard from 5% to 3%.
So I think if we're gonna call it a 3% deflection test.
Then everyone has to agree that we want pipe to be built to a 3% deflection deflection standard and not a 5%.
It's got a different name, so I think we gotta call.
We gotta stick to the naming conventions that are in line with the national standards as per ASTM D 3034. So if we're going to call it.
7 1/2 percent. If we're going to call 5% or 3% because the city of LA also has a 3% deflection standard and they just call it a 3% deflection standard.
It's it's. It is what it is, right?
And if we're going to call it that, then we know what we're all building towards.
But if we're going to just change the numbers and call it 5%, it's not a true 5%

deflection deflection. So again, I I.
Again, we're we're flying in the face of a national standard here, and it's gonna create confusion. And the contractor is gonna have to bear the burden on this every time. And trying to explain why the pipe that they get that is built in 49 other States and. Shipped to California does not meet whatever standard that we have come up with here.

+13*****89** 1:11:41
Rafi, this isn't new.
There's many agencies across the entire country that use the average ID, and it's these numbers are directly from D3034 table one that's in the standard.
That's where these numbers come directly from.

GN **Gean Na** 1:11:58
Hey, let me let me chime in here a little bit guys.

+13*****89** 1:11:59
OK.

GN **Gean Na** 1:11:59
And then I'm. I'm trying to like take my my mind out of the like the.
What's the word here?
Like my tunnel vision out but.
This table does not apply to storm drain pipe.

+13*****89** 1:12:13
Operator.

GN **Gean Na** 1:12:14
It only applies to sewer, right?
I know we could all agree on that, and if you look at the table itself, it is at 3% deflection.
Now I know depending on the type of material could be three or five.
So I do see that.
So essentially PVC composite is 3 and anything else is five.

+13*****89** 1:12:36
And those numbers are 5.
They're yeah, they're 5% D 3034 CBC, those are 5%.

Gean Na 1:12:41
All of those are.
OK.

Brooks Ryan 1:12:44
PVC composites not in in question.
I don't think the 3034 is all solvable.

Gean Na 1:12:50
OK. And then but then when we get here over 12 to 30 it it goes to 4%.

+13*****89** 1:12:50
Yeah.
Yeah.

Gean Na 1:12:58
So that means those those mandrel sizes technically should be hit with a 4% and not A5.

+13*****89** 1:12:58
Correct.
That's what they are. Yeah, if you get your, if you get your calculator out, they if you go to D 3034 and you take the the OD minus the two wall thicknesses and then you multiply by .95 or .96 depending on the.

Gean Na 1:13:06
And that.

+13*****89** 1:13:20
Diameter. You're gonna get that exact number.

Gean Na 1:13:22
OK.
I'm glad I asked.

+13*****89** 1:13:25
Yeah. Yep.

Gean Na 1:13:26
And then I'll, Rafi, I'll. I'll give it a time here. 'cause, I I understand your position here and I'm glad you asked Brooks this and I and I guess because I get the opportunity to chair this subcommittee and they pay me very well for this by the way.
I I've kind of made comments to the main committee in the past about where we are here in this discussion.
And and I know it went away and it's back and and whatnot.

+13*****89** 1:13:52
None.
Yeah.

Gean Na 1:13:54
On this topic, I am going to lean on the voting members.
Of this subcommittee to help vote this because of the, let's say.
Since it's not unanimous.
So that's where I am with this folks.
It's this thing is not on a 30 day hold at the same time.
It's mature enough to be on a 30 day hold and then go to an official vote, but this sounds like.
There's not gonna be more changes than this at this time, and of course it could still change even if there's a 30 day hold.
But we need to make a decision as a group.
But because of the conflict and you know what?
Not I.
I am gonna ask voting Members to vote on this one.
That way.

That way Jeff doesn't show up with everyone that works at the National Pay Pipe Institute and all of his allies.
And you know, I I just wanna make sure that this is fair.

+13*****89** 1:14:55
Yeah.
We've only really got one.

RY **Raffie Yeremian** 1:14:57
If I may.

+13*****89** 1:14:58
We've only really got one been on here that uses PVC pipe and the numbers are using. Are the numbers that are proposed.

GN **Gean Na** 1:15:00
I'm sorry.
You were gonna say something too, and I think rah for you as well.

AC **Ampfer, Chris** 1:15:16
I didn't have anything to say.

GN **Gean Na** 1:15:18
Oh, OK.
I'm sorry, rafi. Go ahead.

RY **Raffie Yeremian** 1:15:22
Yeah, I again, I, you know we've we've talked for awhile on greenbook about trying to get wide adoption.
And being in line with, you know, trying to be in line with Caltrans and trying to get adoption across the board.

GN **Gean Na** 1:15:35
Yeah.

Raffie Yeremian 1:15:36

I mean if to me, when agency, when, when, when industry comes to greenbook, it's exactly what the first half of this meeting was about.
Hey, this material for whatever reason isn't nationally stalked anymore.
Or this resin is no longer available.
This is what's available out there, and the national standard is now changing to accommodate.
New manufacturing products, new new methods.
Maybe new new chemistry?
That old chemicals were bad for the environment, say, or something, and and and so now you have this evolution, if you will, of the industry.
And so greenbook evolves with it, right?
So and and and throughout it, we we remain agnostic to particular.
Means methods and.
And manufacturers, right?
So our our goal is to create inclusivity through the use of staying in line with the national standards.
So that in effect, you know, per our charter at greenbook, we are doing our best to hold down construction costs and and get wide adoption.

+13*****89** 1:16:33

No.

Raffie Yeremian 1:16:38

So what we want essentially in practice in my eyes, that means that a rack of pipe that is manufactured in North Dakota or Utah can come to California and be installed in the ground and meet the specifications of our AG.
Encies and and those should be in line with the national specifications because no one is going to create.
A special product just for California, right?
So with that, with that in mind, because we buy from a national market and we we we should be in line with national standards.
If we wanna create now, if an agency is proposing that, hey, we're not good with 5% deflection, we've discovered that it results in in bad infrastructure over 50 years and

we want 3% deflection, I'll say, OK.
That's a healthy conversation to have in terms of from an agency perspective, right? But from an industry perspective, to me, we should be evolving with whatever the industry is doing, which is why I keep asking for what is unibel and what is plastic pipes say about this.
Because this is their expertise, if you ask me.
Creating these different standards is doing nothing but muddying the waters.
You're going to get an IOR.
Who's going to open up the greenbook?
They're going to say I want this size mandrel. Our contractor Members are going to walk around and say, well, nobody makes these, I have to go get a custom manual migrate so.
Now I have to go pay for a custom mandrel I have to submit on a custom mandrel. I have to go through his manufacturing process.
All because we changed the number in here.
It doesn't meet the national standard, whereas I can go to any other supplier and get a mandrel that meets these things. And by the way, we're also changing the performance on the installation for the contractor.
We are essentially telling them that they have to build to a 3% standard.
It's like the difference between compacting the 90% and compacting the 95% depending on your soil types. It's a different amount of effort which.
Translates into money and time and costs, right?
So we're asking to build to a higher standard.

+13*****89** 1:18:40
Yeah.

RY **Raffie Yeremian** 1:18:41
So if we're gonna build to a higher standard and I wanna hear agencies say we want 3% deflection across the board, so. So my Members can voice their opinion about building to a 3% standard rather than building 2 of 3%. That's called 5%, right?
And furthermore, the last thing I'm gonna bring this up one more time is the understanding the intent of this of this coming from the Clay Pipe Institute.
Again, I mentioned the material agnostic right, we we install all materials regardless of where they're coming from.

But I just fundamentally have a problem with one manufacturer who is in competition or one product that is in competition with another submitting upon specifications that affect the specifying or use of another product.
To me, it just doesn't smack of Fairplay and and I believe that the intent of this ultimately is to show the use of plastic pipes, which I'm.
Is ultimately going to result in a burden that is shouldered by contractors because the agencies will stand by their specification. The manufacturers will stand by their ASTM standard and the contractor will be stuck in the middle. Resolving these differences and burying the burden and the cost. And my.
Members do not want that, so I will firmly vote against any any changes of this sort that are presented to committee.

Gean Na 1:20:09
There are kind of two levels of the proposed change.
One of them is the numbers like no one was able to compute and then the other part of this is the proposal from Jeff to go back to the whole average ID in lieu of base, right?
So I there's it's kind of A2 fold argument.
I just want to make sure that you're aware of that.
So let's assume this thing morphs one way or the other.
Whether we do nothing, whether we do something in the middle.
Or we do the proposed change that we have on the screen here.
I just wanna make sure that you and everyone else in the subcommittee knows that there's like a calculation error. And then there's also the whole, you know, proposed to go back to the original language in Greenbook that was there before. So just wanted to make that comment there.

+13*****89** 1:21:07
Yeah, this. Hey this.

Gean Na 1:21:07
I appreciate you weighing in and I think it's good points.

+13*****89** 1:21:11
It is, yeah.

Gean Na 1:21:12
Go ahead.

+13*****89** 1:21:13
Hey, this is Jeff.
And again, I can't put a hand up, but I'm on the phone.
But you know this this base ID versus average ID this discussion's been going on since I think the 80s when they first came out with the base ID which is in the appendix of of D 3034.
So you know this isn't anything new.
The Greenbook have the numbers that have been proposed here. They've had they had those numbers.
For probably close to 30 years, they they they were the numbers and you know they weren't the only ones.
You know the the mag in the in Arizona.
You know, San Antonio, Houston, American Water. You know, there's a whole bunch of them that don't allow this base ID.
And if you know, I don't know if I ever shared that with the whole group here.
But you know, there's a spreadsheet I put together. We we went to a bunch of dealers yards, you know, back when we were in the heat of this about six months ago and we measured.
Probably 60 different pipes from diameter, 6 inch up to.
No, I think we went up to about 15 inch, 6 inch to 15 inch from probably 6 different manufacturers. And you know if you physically measure those pipes, they measure pretty much exactly on you know the average ID. You know we measure the OD of the pipe or.
The diameter tape at a digital caliper measured wall thickness and if you crush the the physical measurements of that pipe.
They're pretty close to the numbers.
The proposed numbers for the greenbook.
The base idea is significantly smaller.
So you know the numbers are greenbook used to have and the numbers are even post. Now you know those are those are mandrel sizes based on the true physical dimension of the pipe which is filled right out in the in the standard D 3034 the base.

ID is a significantly larger number that allows for a whole lot more deflection than you think.
You're checking for A5 and you're really allowing 8.
Day 30.
When you've installed the pipe, that's really the nutshell of that whole thing.

Raffie Yeremian 1:23:30
I mean, I again if there's a problem with the national standard, I think it should be resolved in the dstm which are which the manufacturers use as their guideline and they they weigh in on that when when they.
When, when that's being drawn up and and they they they have a vote at that at that forum where they decide, you know, and I'm not going to pretend to know all the the various physical properties of plastic pipe and how it deflects and and how it you. Know how it reacts to different stresses.
But for whatever reason, that committee came up with the standard where they use the base ID and the average ID, and and they explain it all very clearly in the ASTM.
And again, I just go back to the fact that if we're moving away from that standard, we're moving away from the national standard. We are creating a friction point between us and the manufacturers who supply this material because they will only supply one type of material that me.

+13*****89** 1:24:20
Yeah.

Raffie Yeremian 1:24:25
A national standard, and if we choose to.
Create a more stringent standard.
We should call it that like we do in the sewer column where we say 3%.
And we shouldn't make it 3% in accordance with the national standard, so that everyone's on the same sheet of music and.

+13*****89** 1:24:43
Yeah.

Raffie Yeremian 1:24:45

Then there's no questions and we could debate.
Then we can debate the merits and costs of going to a 3% standard over a 5% standard.
But what?
We can't do is just create a 5% standard that does not match the 5% standard that is being held by everybody else across the nation.

Gean Na 1:25:04
No. We've kind of respond to you.
And I tried my best not to.
Kind of like jump into a discussion here and try to stay, you know, biased, but kind of what you just said there is whether or not the deflection values change, they design it to the same thing.
So this being in section 300, this is about the performance of the installation in lieu of the actual material.

+13*****89** 1:25:21
Yes.

Gean Na 1:25:27
So whether we change this, you know to average or base.
We're still going to get the exact same type of pipe.
This again.
This only affects the the level of erformance of installation.
This isn't going to change the way they sell the physical pipe or where they source the pipe.

+13*****89** 1:25:43
Thank you.

Gean Na 1:25:46
That this is about installation, and of course that's important to you, right?

+13*****89** 1:25:47
Yeah.

Gean Na 1:25:49
You're you're representing ADC.
But that's kind of my feedback.
To what you just said there.
The the pipes not going to change.

Raffie Yeremian 1:26:00
Understood. And I wholly agree, no one is going to change what they do on a national standard to to accommodate any any of us.
But if we are going to call something a 5% and everybody else in the nation is calling this 5% because they're going off the astmd 3034 standard and you know I've, I've shown it in these meetings over the past year, attorneys standard catalog cut. Sheets. I've gotten supplier recommendations from.

+13*****89** 1:26:25
Yeah.

Raffie Yeremian 1:26:27
All of our local suppliers.
I've got, you know, I've even reached and had a scene from the from otech churn. Give a presentation on how they determine the the the standard to which they build the deflection gauges, and they're the largest manufacturers deflection gauges. And yeah, there's always a caveat that we can.

+13*****89** 1:26:35
Everyone around.

Raffie Yeremian 1:26:48
Make anything custom.
Sure, we can do that. But but what is the gain? And I so that's a separate debate.
I think we should be debating the merits of do we want a tighter installation standard and then I I.

+13*****89** 1:26:56
Yeah.

Raffie Yeremian 1:27:00
But that really to be generated and driven by agency, right?
Rather than industry, right?
So if agencies are saying we want, you know, we wanna use the greenbook and we want the greenbook to reflect a higher standard of of of care in installation as long as that is in line with the STM.
So so simply, I would say that if we're going to do something that is actually a 3% deflection.
Per ASTM, then we call it a 3% deflection and we let the agencies.
Presented as such and sponsored as such, and then we can debate that and talk about that.
If we're gonna do it a 5% though, I I again, I go back to being in line with the national standard and being in line with ASTM.
That's all I'm saying.

Gean Na 1:27:48
If you have your hand up, you wanna go ahead.

Ampfer, Chris 1:27:52
I was just wanting to chime in and say that, you know PVC and HTV pipe are are made to O DS.
They're not made to ID.
So the OD tolerance, at least on polyethylene pipe is 5% and then has a wall thickness tolerance of 12%.
So the ID can vary based on you know you have a minimum wall thickness required for your different D Rs.
But that wall thickness or the ID will vary and in addition to that polyethylene pipe.
At the beads at the fusion joints where the ends are connected, there's gonna be internal fusion beads. So.
This whole thing of a mandrel in in polyethylene pipe, it should never be used in

polyethylene pipe.
So if you're going to do some type of requirement for deflection.

+13*****89** 1:28:46
Thank you.

Ampfer, Chris 1:28:47
You know they need you some type of a robotic thing that you know, there's a laser in profiling inside the pipe.

Gean Na 1:29:05
OK.
Well, I'm gonna just kinda put a pin on this right now, guys. You know, I I'm not gonna move this or kill this, right?
I'm gonna let.
You know, there's no proposal. You can put a put a hole to vote to kill it, or put a hole to vote to approve it. But as of right now, I'm not hearing anything, so I'm just gonna leave it here.

+13*****89** 1:29:20
Yeah.

Gean Na 1:29:25
Guys, we'll talk about it again next month.
I do appreciate everyone chiming in on this, but we'll leave it there.

Ampfer, Chris 1:29:33
I guess I guess I my question would be what's driving this?

Gean Na 1:29:36
Sure.

Ampfer, Chris 1:29:36
You know, pipe's been being put on the ground for how many years? And and now all of a sudden you're you're doing these deflection tests.

Gean Na 1:29:44
Oh, Chris, I wish you were at every meeting for the past year.
I'll give my like 30 second version of of the history of this so that everyone else doesn't get too annoyed by talking about this for too long.

+13*****89** 1:29:51
Yeah.

Gean Na 1:29:57
So this was proposed to be changed by someone from the Clay Pipe Institute and alerted us that there were issues in the numbers.
They he then found out that the changes that occurred in the greenbook, there was no record of it, it just changed.
But there's no record of the change.
The big change that the subcommittee identified was a nuanced word of base and average.
Again, this came from a competing organization, the Clay Pipe Institute, that's trying to change something.
What PVC and other plastics?
So there's that.
Now the numbers have problems in itself, right?
The numbers were never supposed to have changed in Greenbook in the past, but somehow it did.

+13*****89** 1:30:43
Good question.

Gean Na 1:30:46
In 2015, there was a quote UN quote overhaul of a change.
That it sounds like some of those changes happened in a vacuum, right?
There was no specific change number.
That said, we're gonna go from base ID to average ID or. Either way, there's no record of that. There was no change of that.
Now this this issue was presented to the City Ballet.

It was talked about here multiple times.
City City of LA is one of the supporting agencies of the change.
And then we have the discussion here.
And then we also have Rafi from AGC kind of speaking on the non industry non agency perspective, right as a contractor. But we've been talking about this since March of last year and and that's where we're at.
So I I again I wanna I wanna put a pin on this guys because we could talk about this forever.
I I would suggest that we talk about this one more time next month.
What a 30 day hold and vote to kill or approve or do something in between.
But I do not wanna continue this level of discussion through the end of 2024.
We need to make a decision.

+13*****89** 1:32:02
Agreed.

RY **Raffie Yeremian** 1:32:03
You know real quick I and I think you gave a pretty good summary there. But but I mean I think just to color it out a little bit.

+13*****89** 1:32:04
It's.

GN **Gean Na** 1:32:04
Yeah.
Of course, but.

+13*****89** 1:32:07
Yeah.

GN **Gean Na** 1:32:11
Yeah, go ahead.

RY **Raffie Yeremian** 1:32:12
If I could just just bring in a couple more details and this was introduced as one of

three measures from the Clay Pipe Institute, which also included a remand drilling of all pipes after after prior to the one year warranty period which old agencies were against.
And so were contractors.
It also included the introduction of an 18 leg mandrel which was a completely custom designed thing which again everybody was opposed to and I will say that you know everyone keeps talking about the city of Los Angeles on this thing, but they haven't really been, you know, Ed.
Arrington has has voiced an opinion once or twice on this matter in in the last year, but their name is not on any of the proposals or the amendments, nor have they stood up and said that we stand behind these changes.

+13*****89** 1:32:53
You know.

RY **Raffie Yeremian** 1:33:04
They have their own brownbook standard which simply says that the pipe has to be put as TMD 3034, but to a 3% standard.

+13*****89** 1:33:08
Yeah.

RY **Raffie Yeremian** 1:33:12
So they have addressed it already inside of the Brown book, but they've addressed it in my eyes, the city says we want it in a 3% standard per ASTM.

GN **Gean Na** 1:33:16
M.

RY **Raffie Yeremian** 1:33:22
So they've already addressed it. So I don't understand why that they need to come. You know, you know, come back to Greenbook and try to do it if other agencies aren't aren't on board and, you know, we've heard from.
We've heard from LA County sanitation.
We've heard from Orange County sanitation. Dickey has has thrown his opinion on

this and so is.
La County, san.
We we've talked about it and again I just think that we need to make sure that we're calling.
We're staying in line with the national terms, right, so that we are part of an actual standard.
So I I just want to make sure that we color in the rest of the, the the history there.

+13*****89** 1:33:59
Thank you.

GN **Gean Na** 1:34:00
Yeah. Thanks for adding that.
OK, my pin is in this, so to speak.
We have a couple more things that I wanna address in today's meeting.
Chris, if you could just put your hand down, unless you have to say something.
Bull Brooks Brooks, go ahead.

AC **Ampfer, Chris** 1:34:15
Oh, sorry, I I didn't alright.

BR **Brooks Ryan** 1:34:18
Sorry, I I just wanted to jump in really quick and I wanted to ask Jeff, this is more of a ancillary question related to this change and I'll probably get with him or e-mail him later for the the what was F 679, the larger diameter stuff.
18 through through 30 or 36 right now says only 40 PS Pipesive is 46 pipestep is.

+13*****89** 1:34:36
Previous.

BR **Brooks Ryan** 1:34:39
1:15 is equivalent to Dr.
35 it might be worth.
Including the values for that as well, whether maybe we do just the, the.
Tier 26, section 6 through 30 then or or the SDR 35 section 6 through.

3036 then just to to clarify that 'cause right now it it kind of leaves off that thicker wall that higher pipes stiffness version in that larger diameter.

+13*****89** 1:34:57
Umm.
Yeah, yeah.
No, I agree, Brooks.
You could add that it could be added to the table.
It it just never has been in the last 30 something years. So you know this all I did.

BR **Brooks Ryan** 1:35:15
Right. And I think that was that T wall.

+13*****89** 1:35:17
You know, all I did was was scratch the F 679. But if you wanted to add the the the 115 step pipe the SDR 26.
Yeah, that could be done as well. Agreed.

BR **Brooks Ryan** 1:35:31
E-mail you with some values for that or something like that, or I know I gotta do AI think you brought up the F679D3034 merger and I know we're bringing up ASTM changes later that I'm working on a proposal to to change.

+13*****89** 1:35:40
Love you too.

BR **Brooks Ryan** 1:35:44
The you know, just to harmonize F679 with 3034, that I'll probably transcend over to gene in the next month or two, hopefully get it in before the new addendum. But just to to eliminate references to.
F 679 and and replace with 33 before, so that could be part of that or or just part of this.
Either way, I figured that's more of a.
Clarification or thing than anything else.

Gean Na 1:36:08
Xbox.

+13*****89** 1:36:08
Sure, sounds good. Thanks.

Ampfer, Chris 1:36:10
Yeah.

Gean Na 1:36:10
I'm glad I I'm glad you're here.

David Badgley 1:36:11
Yeah, this is David.
Actually, we we ought to get vylon involved in this too, because they they're dealing with the larger diameter pipes to make sure that we're not writing one out or another on out.

Gean Na 1:36:24
Yeah, Dave, just just to comment on what you just said, this table does not apply to large diameter stuff.
Only the smaller diameter 24 inch and below. OK, I'm gonna. I'm gonna move the meeting, everyone, because we are running long already. And I'm sure everyone's hungry. If you've been eating lunch during the meeting.

David Badgley 1:36:35
I'm sorry. That's what you were saying.

Gean Na 1:36:47
I wish I was eating too.
Hopefully some some of you got a ha out of that.
Alright, I'm trying to pull the agenda.
OK.
Move it along, folks.

I I'm gonna skip over the tracking list because I I don't think we have time for that right now.
I do wanna address the ASTM updates with everyone and.
I did get this e-mail from Keegan along with Bill Mahoney and B and I, and just to recap, they are trying to clean up all the, you know, old, bad ASTM references.
So for those of you that are subject matter experts in your field, please tell me anything that you think needs to be corrected related to an ASTM reference.
But the ones that are currently identified is a SMA819.
This has to do with metals. 819 is obsolete and being replaced by A929OK.
I just wanna recap this and we can maybe dive into detail some other time.
As TMD 1788 was withdrawn in 1988.
But Keegan thought this was replaced by D 3965.
I believe it should be replaced by D 4673.
I'm not an expert.
I need to double check this.
To see if it's 46 or 70, sorry 4672 or 3965 one or the other.
So my hope is that someone here at the subcommittee could look into this, maybe do a control F into any time D 1718 was referenced and look read the actual section and see which ASTM is appropriate.
I will try to do it myself as well.
Moving on to the third item here.
D2037 withdraw.
3 decades ago.
And there's what in the same table for density. D1556 and D4565 have been withdrawn.
OK, good. If that's the case, then what does it need to be replaced with?
And that's the question that I have for myself and for the subcommittee.
I don't.
I don't recall off memory what that ASTM was.
Let me let me just Google it real quick.
This is the standard test methods for evaluating properties of wood based fiber and particle panel materials.
I I wonder if this is even an underground thing or not, but nevertheless that that this is what Keegan sent to us.
We need to do some more digging.

Does anyone know anything about this ASTM or this topic?
Here.
I seem not surprised that no one does. OK, the next item was F 174.
This was a typo.
It should be 714.
Fairly easy to fix this.
It should read.
And then there was a note, two Note 2 of Table F500 fives and one needs to be revised.
It should read two PS values are from ACMS 7/1 for table X21. The pipe stiffness values should be look at should be looked at by the committee.
So I guess what we could do here is look at this in the change 284.
Dave, I'm pinging you there. Chris. Hands up. Go ahead.

AC **Ampfer, Chris** 1:40:25
Yeah, I got a project currently in F714 to remove that pipe stiffness table so.

GN **Gean Na** 1:40:30
Oh, interesting.
Well, I don't want to do anything at greenbook. That's preemptive.
Of what ASTM might do, I I think what we we need to just do what's right, I mean the the typo is easy.
But I think we addressed this one with that committee that we will talk with until later later this month.

DW **David Wangerin** 1:40:59
Dean, real quick on that new business, 3. Regarding the is it the D 2037?

GN **Gean Na** 1:41:01
Mm hmm.
E 2037.

DW **David Wangerin** 1:41:09
The only reference I see to that in a quick search on the on my old version of the Green Book 2021 is in 308 Dash 6.3 subsurface data.

Gean Na 1:41:15
Mm hmm.

David Wangerin 1:41:20
And it does kind of line up where they talk about 1556 and what looks like 4564, not 4565 have been withdrawn, which leaves D 5195 is the only one in that table. But that's the only reference into.
All the greenbook that I see that standard.

Gean Na 1:41:37
What section is it in?

David Wangerin 1:41:39
308 Dash 6.3 let me check the new one.

Gean Na 1:41:44
3086.3.
This is a micro tunneling section.

David Wangerin 1:42:17
Yeah. I don't even see.
That section must have changed in 2024.

Gean Na 1:42:24
Yeah, I have it up right now too.

David Wangerin 1:42:26
Oh, do you?

Gean Na 1:42:26
So I let's do this 'cause I I'm trying to end the meeting for everyone's sanity sake here.

David Wangerin 1:42:33
I saw them.

Gean Na 1:42:34
Let me just show show this to everybody real quick on that since we're here.
OK. So 308 is micro tonelling everyone. And David, you said this was in 6.3.

David Wangerin 1:42:47
6.3 in the 2021 edition.

Gean Na 1:42:47
And they're.
OK. And then here on the newest one.
D 2037.
I don't see it.

David Wangerin 1:43:09
On in the 2024 be on page 475.
There it is.
It's right there in the density section.
That's the only reference I see in the old digital version that I have of the Green Book from 20/21.

Gean Na 1:43:27
OK.
Yeah. And I I question whether or not this is even close to the right number or not.
So more digging to be done.
We don't need to do it now, folks.
David, I appreciate you Googling quickly and what not.
We'll leave it there. I I think we just did a look into this entire section to see if we can just strike out D 2037 or not or see if there's a replacement.
But I'll I'll just leave it there, everyone and then.
Whoever is willing to look at this stuff, please come back with some Intel at the next meeting.

And Brooks, you know, for your end to you mentioned that you're gonna look at some.
Some updates to the some some of the old references. I appreciate that. That's the kind of stuff that we need to do here.

Brooks Ryan 1:44:17
Yes, no problem.
It's it's F 679 just got repealed, I guess would be the best way to put it in July and and so it's it's a very new old well new update I guess but but yeah, yeah 3034 kind of replaced it.

Gean Na 1:44:25
Oh, OK.
Yeah.

Brooks Ryan 1:44:30
They they up sizes. I was and I guess this is more of a question for when I submitted going to potentially include a note mentioning that since some pipe will still have print lines mentioning F679.
Until it's it's the shift has been fully made.
The the shift in the standards have fully been made, but if anyone has a pipe manufactured before July.
In their yard or something like that.
It might still reference the old standard, so if that's something that's doable that's mentioned just as a footnote or something like that, that would be great.
But I'll get into that once I've actually submitted the paperwork for it.

Gean Na 1:45:02
Yeah, I I think commentary is good.
I wish the Greenbook had a commentary section, just like some of the ashthil design manuals have.
Something like this?
I'm gonna let Keegan weigh in on.
But I I get it.
I I I would agree with you.

You don't wanna create conflict or you know and whatnot.
I I totally get it.
But I'm I'm hoping we could keep something like that in this next edition and then maybe in the 2028 we can strike it since it's no longer going to be applicable by then.
Maybe, right?

Brooks Ryan 1:45:34
That works for me.
Out of curiosity, do you know by chance when the plan for the addenda is if that's planned for next year or at some point?

Gean Na 1:45:43
So. So what's his name?
Bill said something about like having an addendum every year, and I thought, and historically, it's always been like 1 1/2 years, right?
Like in between the actual printed versions.
So I think that's what they're going to do.
I can ask the question this Thursday and let you guys know but.
Whatever addendum we have, or you know it, it would need to be done basically early next year to be released in a addendum, I think.

Brooks Ryan 1:46:14
That sounds good.
I think I might be on Thursdays too. If anyone, I guess is keeping track of stuff that went editorial 342, moved through editorial and they told me it should be either in in this month's main or or next month's main committee. So.

Gean Na 1:46:19
OK.
OK.

Brooks Ryan 1:46:28
Hooray.

Gean Na 1:46:30
Oh, you're talking about the one that I think they met last week, Brooks.

Brooks Ryan 1:46:34
They did. I I was part of that.

Gean Na 1:46:35
Oh good.
Great, actually.
OK.

Brett Fornelli 1:46:41
Seeing this is red at A at a quick request, I think this might be the the spot to to put it in there for further discussion, but this is for PVC close profile pipe. There's two sections because there's an open cut or open cut application has a bell.

Gean Na 1:46:46
Yeah.

Brett Fornelli 1:46:56
Speed, connection and then I slip one has a low profile connection. So two sections in the greenbook.
The they both refer to cell classes, but that they also refer to as TM F 1803 and the cell classes in that the STM standard don't match up.
They match up on the slip liner section but not on the direct bury.

Gean Na 1:47:21
OK.
I.
I I caught most of what you just said there, Brett.
Let's connect offline.
I can give you kind of a quick download. Yeah. Yeah, yeah.

Brett Fornelli 1:47:29
I can sit here.

Gean Na 1:47:30
And I'll I'll kind of show you how to submit changes too.

Brett Fornelli 1:47:32
Replay.

Gean Na 1:47:34
But yeah, let's connect online.
I'm glad you brought that up and this is the perfect time to bring that up. Bring it up.

Brett Fornelli 1:47:39
Perfect. I'll send you a follow up e-mail and discuss.

Gean Na 1:47:41
Great. OK, awesome.

Brett Fornelli 1:47:43
Thanks.

David Wangerin 1:47:43
Real, real quick. I think that D 2037 I think is a typo.
I think it should be D 2937.

Gean Na 1:47:55
2937 OK, you're you're good at Googling, David. You're you're you're great.
Let me let me.

David Wangerin 1:48:05
Well, it's easier 'cause. It's referenced in one of the other density standards, the 5195.
And then if you go back into greenbook, you actually see it is in greenbook then.

Gean Na 1:48:10
Yep.

David Wangerin 1:48:17
One other place in the backfill of trenches.

Gean Na 1:48:21
Probably right.
I just found it myself. OK, that's easy.
I could see a nine looking like a zero. I could see that.
Awesome. OK, that's all I have, folks. If you guys have any questions, you guys are always welcome to call me and I'll do my best to get back to you guys.
But apologize for running along here today, but I thought we had a good meeting.
We meet next in October 15th again.
That's the same time as the Noded conference.
I'll be there and I'm going to step away to have the meeting, unless all of you say that you're going to be at the meeting and we need to move the meeting.
But I will have the meeting on the 15th still.
OK, without with that, I appreciate the time everyone. You guys have a good rest of your week.
I'll see you guys next month.

Jacquie Jaques 1:49:12
Thanks gene.

Shannon 1:49:13
Thanks James.

Gean Na 1:49:13
Yeah. Bye everyone.

Jacquie Jaques 1:49:13
Bye bye. Thanks, gene.

DZ **Dan Zarraonandia** 1:49:13
Yeah, bye.

BF **Brett Fornelli** 1:49:14
Thank you.

Gean Na stopped transcription