Greenbook – 13 June 2021

Brooks Ryan – uni bell pvc pipe Assoc

Kent Carlson - NCPI

Allan Chui COLA

Ed Arrington – COLA

Dickie Fernandez – OCSD

Gean Na -

Jacob Monroe – ADS

Jamie Lienberger Lienberger and Assoc

Dan Zarranandia – pre con products

Dave Badgely - Badgely and Assoc

Edgar Benitez -

Raffi Yeremian - Bally Construction/ AGC

Steve Cooper – Uni Bell pvc pipe Assoc

Mark Giljum LACSD

David Wangerin - EJ

Andy DeSilva - OCSD

Call to Order 11:05 AM

Underground Materials and Methods Subcommittee

Self-Introduction

Feb Meeting minutes – KC motion to approve, and DB seconded.

MAY Meeting minutes JL Motion to approve and MG seconded.

Announcements and Summary –

GN: BNI is wanting a hard deadline on the Greenbook -updates done – we have JUNE and JULY – if we are not ready by next month, we will NOT be ready at all.

Main committee is waiting on the updates. The other things we are discussing and the things we have tabled, we need to start thinking about wrapping things up and getting things completed. Next month the Editorial will be meeting AFTER our meeting.

DB: spoke about upcoming meetings – conferences, Morro Bay and the Tri State in August. Vegas – Southpoint Casino.

KC to DB Question – will the speakers have a pass for the show? DB generally we do – KC: not last year KC to DB can you ask and find out DB: will find out and let KC know.

Old Business:

284 UM part 5 - pass out and send to the group - JL create a new version of it today and date it today and we will send it out! GN

321 UM Pickle jar test - at Editorial Committee GN suggests removing the N/A footnote and making it Footnote 2. GN Editorial will meet, and we will give this to them. RY: I was not active on Committee when this past; just to simply the work in the lab AC/RY

328 UM Barrel deflection – approve none opposed passed and moving on to Editorial.

329 UM Table 306-7 - changes seemed to occur with out a backstory or DNA to these changes – KC the changes occurred, and no one seems to know why – JL the findings of KC are accurate - we have a serious problem here- columns B C D are correct allowable % these are what should be IN Greenbook –

GN, I know we have staff from Unibell here – Brooks and Steve –

Brooks: we would be glad to send it to you and we will be glad to look at this and add corrections this, if need be, I am sure the ASTMs are correct. GN the deflections are in Greenbook and allowable.

EA: what is being questions that the table suggests the min dia is indicated in the table if you take set diameter and you compute deflection based on table 873.1 it will yield equivalent diameter is less than the original - when you compute that value and compare to the table it can yield a gap – to the person pulling the mandrel, the test could look passable and good, but yet the mandrel is under sized and the test is wrong –

KC: chart in greebook on screen KC go to the spreadsheet.

KC: SDR 26 6" for example – Kent explains - ASTM D3034 is for sewer

EA/KC discuss the mandrel and deflection.

EA: avg pipe dia – this table tells you minimum. KC EA you are saying the MIN is too small – this change is to make this table more consistent with the rest of the section.

EA: how do we know if the table is for sewer and not storm -

KC this table is for Sewer pipe – the ASTMs are for SEWER.

EA: what is 6.5% of nominal diameter

Its 5.12

Brooks – AVG inside dia and base inside dia – Greenbook asks for AVG and not base inside dia.

What is the base inside dia?

RY: it allows for KC: this is incorrect –

RY: we need to have Unibell, and other experts form a task force to get to the bottom of this and correct it.

EA: a base dia is new to me – never heard of that. The assumption being you protect the ovality of the pipe. KC: Greenbook is explicit about using the AVERAGE ID not the base dia

Brooks - Unibell Looks like ASTM3034 uses base.

EA: do you know why the Base dia is in the ASTM? STEVE, do you know? I will research this and get back to you, I am not disputing this.

EA base dia is new to me – this is something a supplier would look at for sure this would be good info to have for space volume etc. If you are a designer you would be looking at the average diameter of the pipe.

DW: we are defining the base diameter as the minimum diameter of the pipe.

KC the base diameter was found in the 1972 of the computed avg deflection during shipping, they took that and factored it into the formula.

DW: has nothing to do with the pipe quality or and no value, we may base calculus off an avg, we may be wrong,

KC: no that is not correct the AVG ID is what is used to use for flow etc.

Base is not used for flow etc.

EA: is there anything in ASTM that says BASE ID is to be used for sizing a mandrel?

KC: quotes appendixes 6 of ASTM3034 - mandrel - Greenbook says USE Average ID

RY: is not objecting to any changes whatever we make it should line up with the ASTM.

Table allows for the manufacturer's tolerance. What are we going to gain?

RY: also shares chart from Cherney mandrels whatever we use needs to line up

If we create something that does not line up, we have moved the product out of specification.

EA: reading ASTM3034 appendixes

KC: may apply a deflection as an example base ID is not quality control nor should it be used for flow.

EA: apply whatever deflection to whatever base ID –

KC: Base ID was computed over the time of transport -and might come in deformed. I believe historically who was someone checked pipe ID, we used AVG, and didn't calculate that the pvc was already deflected when it arrived.

KC someone back in 2012 someone changed these numbers to reflect BASE.

EA and you want the table to reflect AVG as in Greenbook – not the ASTM of BASE ID, and there is no record of it happening or who did it.

EA: what is more representative of what we are using now –

KC: AVG

EA: what is the Min mandrel we are suggesting now?

KC: any manufacturer will make any size mandrel you want to what you ask for

EA: to RY what mandrel size would you be using?

If we are going to use a mandrel based of base size – we need to do that.

EA: the global topic is, are we approving pipe we should not be?

KC: that is correct.

7.5% is max allowable deflection. How is that fair to plastic pipe people, when they are getting calls on over deflection. Using base ID makes the pipe void of the warranty,

EA: guys from Unibell you can see the conundrum we are in,

We are relying on information from the 1970's, does ASTM need to revisit this and what is the proper dia to be using.

GN: Let's have the reports submitted so we can let the subcommittee read and then out this on a 30-day hold.

RY: molds are there – building to the previous sizing? Or standard?

We need to be consistent with what is being supplied.

KC: in my opinion the big problem is there have been significant changes and they have not been tracked,

And Jamie saw the same thing, without any DNA –

EA: we want what we install and what is verified with the mandrel – appropriate tools and appropriate criteria the input that Unibell can give to this topic is good.

The potential that you could have been getting pipe that is bad.

AC: do we have the problem in the bigger pipe

KC there were never any studies done on larger diameter pipes.

AC: which number would it affect? ASTM3034 1%, up to 15"

TABLE this for 30 days

330UM Mandrel – TABLE for 30 days

331 UM 1 Mo warranty footnote – TABLE for 30 days

332 UM 216-7 Causes for rejection

GN: proposing to include language from ASHTO r73 – and previously sponsored and wants to sponsor again. ASHTO r73 is also applicable to BOX we have not used it for boxes.

EA: my suggestion I would desire that would be limited to Storm Drain if so yes, if being used for sewer then no

GN I would support that.

EA: is LA County sponsoring this -? Prior discussion — storm drain, exfiltration acceptable — concrete could accommodate it, sewage is corrosive - so I would say this be limited to storm water storm drain.

Noted –

R73 is for storm water.

GN I will take that into consideration and add that language.

And we propose in July – And then into a 30-day hold.

July 18