



September 6, 2016

Caitlin Cameron
City of Portland Planning Division
389 Congress Street
Portland, ME 04101

Re: Zero Canal Plaza Development
Level II Site Plan Application – Response to Comments

Dear Caitlin:

On behalf of Cow Plaza 1 LLC, we present the following responses to comments provided by staff and peer reviewers on the project. We have included each of the original questions below in italics.

Review Memos from Caitlin Cameron, dated 8/3/16

- *Provide more details on the following:*
 - *Solid waste/trash management – location and type of receptacles*
 - The enclosed plan shows proposed locations for trash receptacles. A cut sheet for the proposed receptacles is also enclosed.
 - *Photometric plan of site lighting*
 - A photometric plan is enclosed.
 - *Snow removal and/or storage plan*
 - The plaza owner will continue to contract with an outside contractor for the removal of snow from the plaza as they do currently. The contractor will use small-scale equipment within the plaza to clear all snow from the plaza to provide access between the existing and proposed buildings during the winter months.
 - *Location of bicycle parking*
 - Per the Code of Ordinances, for a project that requires 0 to 10 parking spaces, space for parking for two bicycles is required. A single bicycle rack with space for two bicycles will be provided on the site in the location as shown on the enclosed plan.
- *Comments submitted by Jeff Tarling/City Arborist*
 - *There is some concern about winter maintenance if no raised curb is to be provided around plaza trees – using magnesium chloride is preferred for salting to preserve the trees. The planting plan is approved with the condition that changes to the tree species or structural soil must be approved by the City Arborist.*
 - Extra care will be taken when clearing snow around the trees, and temporary tree protection during winter months will be provided as required. Preference will be given to magnesium chloride during winter months. The tree species that was selected is commonly utilized as an urban street tree, and within the plaza space, it will see less impact (salting, sidewalk plowing,



street plowing) than typically experienced when the trees are installed within a sidewalk. While it is not anticipated that the tree species will change, any changes will be submitted for approval by the City Arborist.

- *Comments submitted by Bruce Hyman/Planning/Transportation*
 - *Would prefer bicycle parking provided near each building entrance. If bicycle parking is to be provided in sidewalk, must meet Technical Manual standards; on private property, any specification is allowed.*
 - A single bicycle rack will be provided as shown on the enclosed plan.

B3 Design Review Memo from Caitlin Cameron, dated 7/22/16

- *Consider whether concrete of new structure should relate in color with granite pavers or concrete of surrounding Canal Plaza buildings. Review panel is not supportive of glazing that is flush with the plaza – for durability, plowing, and maintenance, a curb or otherwise elevated edge is suggested where glass is not directly on ground.*
 - The concrete and granite for the building and plaza have been selected to complement each other, as well as to provide some connection to the concrete on the surrounding buildings. While it is not clear from the scale of the renderings, the glass will be seated within a stainless steel-clad aluminum channel. This channel will provide protection of the base of the glazing. The layout of the glass fins will also provide protection for the wall glazing.
- *Glass transparency should be at a VT of 0.7 or close to. Interior shades should not be added to the design.*
 - The glass provided will have a transparency that is close to the recommended value. Interior shades will not be utilized such that full advantage can be taken of the transparency of the structure.
- *Will both entries be active?*
 - Both entries are anticipated to be active, but this will be somewhat dependent on the final use of the site.
- *More information is requested about lighting levels, trash receptacles, and bike parking.*
 - A photometric plan has been enclosed. A plan showing proposed trash receptacle locations and the location of the proposed bicycle parking is attached, as is a cut sheet of the proposed trash receptacles.

Engineering Review memo from Stephen Bushey, dated August 1, 2016

Drawing Sheet C-200

1. *The Plan indicates “Demolish” for anything in bold line work. Does Demolish mean remove and/or abandon in place?*

On Drawing Sheet C-200, the term “Demolish” includes the removal of all features. The words “and remove” has been added to provide additional clarity. The specific requirements of demolition and removal are also addressed in the construction specifications as part of the project Contract Documents.

2. *The Public Works Department should weigh in on the abandonment of the 12” SD off the Middle Street arterial. The plan calls for the placement of flowable fill in the pipe and capping.*



The PWD may want a masonry infill on the pipe entry into the existing CB or some other form of permanent blockage.

The notes provided for the existing catch basin include the installation of a masonry plug as part of the demolition.

- 3. It is unclear what is happening with the existing 8" SD from the existing CB located on the south side of 1 Canal Plaza that connects to the drain system within the West stair area. Does this line need to be maintained? If so, it should be verified there will be no conflict with the proposed Pipe CB2.*

The existing 8" SD connection will be maintained. Based on the existing inverts of the two connected catch basins and the inverts for the proposed Pipe CB2, the existing stormdrain will be lower than the proposed, and there will not be a conflict.

- 4. There is a CB within the West Stairs that doesn't show an outlet. The CB will be removed and we assume any SD will also be removed?*

The CB within the west stairs will be removed. A note has been added to field verify stormdrain connections prior to demolition. Field modifications will be made as necessary.

Drawing Sheet C-203

- 1. The structure Table appears to have a couple of inconsistencies. The Rim elev for CB1 seems too low. DB 3 should be added to the table. The rim for Ex CB2 should be 39.82' and that same structure has a number of pipes entering and exiting. The structure size is also unclear.*

The structure table has been updated with the correct CB 1 rim elevation, DB 3 information, and appropriate Ex CB2 information.

- 2. The ex CB1 on Union Street labeling is inconsistent between sheets C-100 and C-202. C203 suggests an invert into the structure at 35.50', however that is lower than the apparent invert out. C-202 likely is correct in indicating an invert out of 37.71'.*

The note provided on sheet C-203 was an error and has been corrected to be consistent with all other sheets and notations at 37.71.

- 3. The work limits may need to be expanded slightly on Union Street given the work to be performed. This includes removing and resetting of curb and concrete sidewalk reconstruction.*

Union Street is a moratorium street, and the intent is to maintain all impacts below grade and out of the street.

- 4. Will the proposed building in the plaza have any foundation drainage and if so, where will it tie into? Similarly the walls will have foundation drains that will need to tie into pipe or structures.*

Final foundation drain locations will be shown on the structural drawings. Final coordination of location will take place as part of construction drawing development.

- 5. The designer might consider simply changing the proposed CB2 structure to a drain manhole possibly, since it is unlikely to see much water entering into the structure, based on the proposed rim grade. A solid cover in front of an entrance may be more desirable rather than a grated opening.*

At this time, the intent is for the structure will remain as a catch basin inlet to provide drainage relief near the building as necessary.



6. The designer has used multiple slot drains within the stairs. These should work well. The designer might consider the use of similar slot or trench drains in the plaza area, in place of the 8" drain basins, perhaps for aesthetics and ability to capture water across a wider space. This is only a suggestion and it's understood that costs and other design decisions may preclude this approach.

Slot drains were considered for the plaza early as part of the design process, but were eliminated in favor of the drain basin alternative.

7. *Given the nature of the project, the need for water quality treatment from the plaza seems negligible in our opinion, and the drainage measures proposed are adequate to handle the collection and conveyance of runoff from within the plaza. The stormwater report outlines that there will be a very small increase in impervious area (<1,000 SF). We would support any waiver requirements that may be necessary on behalf of the applicant from both the water quantity (flooding) and water quality treatment standards on this basis. We trust the applicant will be required to execute the standard Stormwater Maintenance agreement and related conditions.*

Comment acknowledged, no response required.

Drawing Sheet C-204

1. *The proposed building will have utilities extending from 3 Canal Plaza. The PWD should weigh in on the ability to provide water service to the new building from 3 Canal Plaza. They may want a separate stand-alone service from the street. Similarly, the sewer service connection is also into 3 Canal Plaza. This seems acceptable however we are not aware of the City policy for similar sewer connection proposals.*

We are currently working with all utilities to verify capacity as well as the layout/design/location of the utility services. Middle Street is a moratorium street, so the intent is to keep the utilities out of the street. Verification will be provided to the City upon receipt. We ask that this verification of the final utility plan and ability to serve be a condition of approval for submission prior to issuance of a Building Permit.

2. *We note that this plan does indicate a 3" roof drain connection for the proposed building. The designer should provide calculations supporting this roof drain size.*

Manufacturer design guidelines were utilized to select roof drain sizing (see page 6 of this pdf: http://www.bestmaterials.com/PDF_Files/zurn-roof-drain-guide.pdf). A conservative precipitation rate of 4 inches per hour was selected based on the map provided in the reference. Based on the table in this reference, for this rainfall intensity, a 3" roof drain size provides adequate drainage for 2,200 SF of area, greater than the approximate 1,500 SF roof area of the proposed building.

Drawing Sheet L 1.0

1. *The designers should provide more information about the installation of any outdoor dining tables i.e. are these permanent or seasonal?*

The final selection of the tables will be someone dependent on the building tenant, but they are anticipated to be seasonal. The structural benches will provide permanent seating during all seasons.

2. *Will any bike racks or other site improvements besides benches be provided? Will there be provisions for trash/garbage containers in the plaza, at least seasonally when there may be some outdoor dining?*



The enclosed site features figure shows bike racks and trash containers. A cut sheet for the trash containers is also provided.

3. *Will structural soil be used within the planting zones to help with the tree growth?*

Structural soils will be utilized within the tree planting zones. The structural soils are being designed for inclusion in the final Construction Documents for the project.

4. *Is the applicant considering any irrigation system, besides that idea that the plaza runoff will be primarily directed towards the trees?*

An irrigation system has been considered, but is not included at this time.

Plan sheets C-200 and C-203 have been modified to reflect changes addressed from the above comments, and updated copies of the plans are enclosed, and will be uploaded to the EPlan project folder.

Please do not hesitate to contact me if you have any questions or require additional information.

Sincerely,

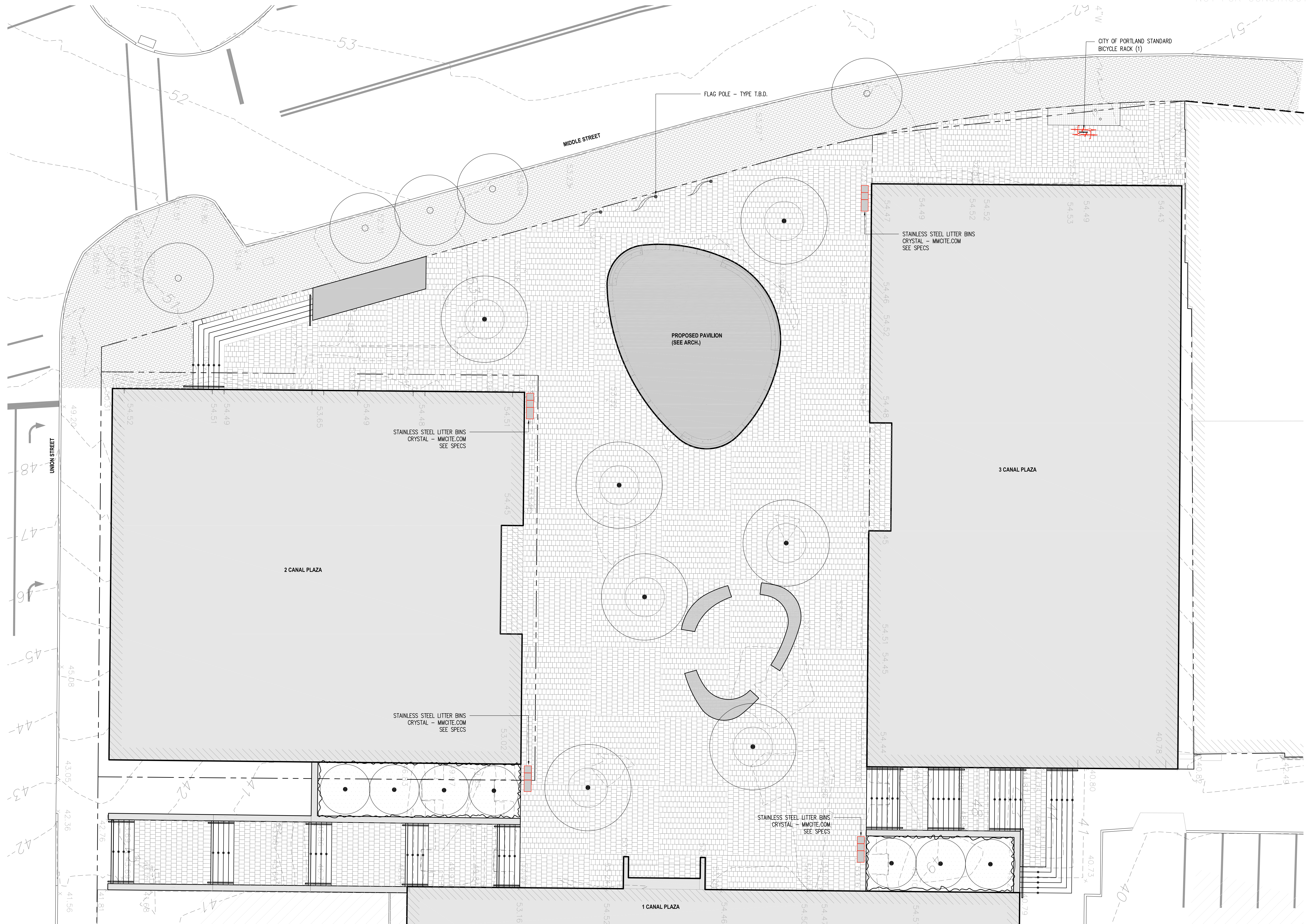
WOODARD & CURRAN INC.

A handwritten signature in blue ink that reads "Lauren Swett".

Lauren Swett, PE
Project Manager

Enclosures:

1. Site Features Plan
2. Trash Receptacle Cut Sheet
3. Photometric Plan
4. Sheet C-200 (updated)
5. Sheet C-203 (updated)



Canal Plaza

PHASE 1
Portland, Maine

REVISION:		
1 Schematic Design Paving Set - Phase 1		1/15/2016
2 Permit Set		6/17/2016
3		DATE
4		DATE
5		DATE
6		DATE

DATE OF ISSUE: _____
 PROJECT NUMBER: XX-XXX
 STATUS: _____
 SCALE: 1"=20'

crystal

EN

A fully enclosed all-steel litter bin of geometric shape and stable firm structure evokes the impression of a rather elegant bollard. Triple litter bin for sorted waste is a model which is in constant demand. Moreover, the version for dog excrements with integrated space for special plastic bags smartly addresses the current problem experienced by most contemporary cities. For smokers, a large ashtray is now available as well.

Steel structure treated with zinc coating and powder coating, stainless steel cigarette extinguisher, ashtray and liner made of zinc coated steel. Lockable door to be opened forwards. Ground anchoring.

FR

Cette corbeille fermée tout acier de forme géométrique élancée et de construction robuste évoque plutôt une borne élégante. La corbeille triple pour le tri de déchets est une variante de plus en plus demandée. On peut répondre à un problème devenu fréquent dans la plupart des villes par la version avec un espace intégré pour des sachets spéciaux permettant de collecter les excréments de chiens. Pour les fumeurs, un grand cendrier est maintenant disponible.

Le corps de cette corbeille est en acier galvanisé, thermolaqué suivant les coloris de la gamme L'été noir à cigarettes est en acier inoxydable, le cendrier et le réceptacle interne en tôle galvanisée. L'accès verrouillable s'ouvre par l'avant. Fixation par scellement.

DE

Der geschlossene Stahlabfallkorb in schlanker geometrischer Form mit stabiler Konstruktion erinnert eher an eine elegante Säule. Eine immer wieder gewünschte Variante ist der Dreier-Abfallkorb für eine sinnvolle Mülltrennung. Die Variante für Entsorgung von Hundekot reagiert mit integriertem Raum für spezielle Abfallbeutel auf aktuelles Problem der Mehrheit von häutigen Städten. Für Raucher steht nun auch ein großvolumiger Aschenbecher zur Verfügung.



Grundkörper aus verzinktem Stahlblech mit Pulvereinbrennlack beschichtet. Aschenbechereinsatz aus Edelstahl, Innenbehälter aus verzinktem Stahl. Mit verschließbarer, nach vorne aufgehender Tür. Möglichkeit einer stabilen Verankerung im Beton.





152 153
crystal

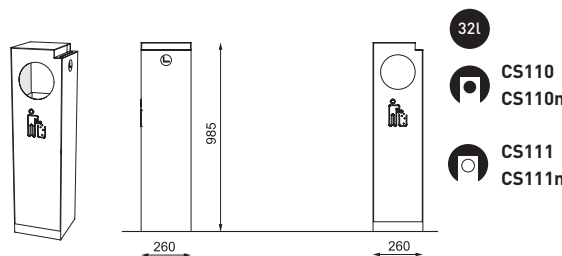
n – stainless steel / acier inoxydable / Edelstahl

-  drop-in area without cover / sans couvercle / ohne Regenschutz
-  drop-in area with cover / avec couvercle / mit Regenschutz

CS110 / 111

Litter bin
Corbeille
Abfallbehälter

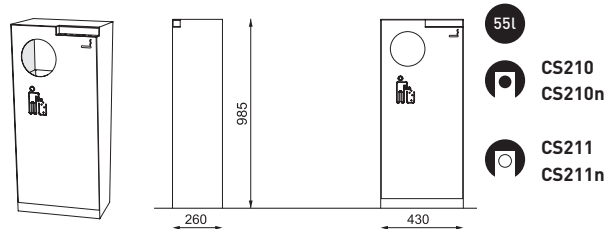
steel body, ashtray with stainless steel cigarette extinguisher
corps en acier, cendrier muni d'un éteignoir à cigarettes
Stahlkonstruktion, Aschenbecher aus Edelstahl



CS210 / 211

Litter bin
Corbeille
Abfallbehälter

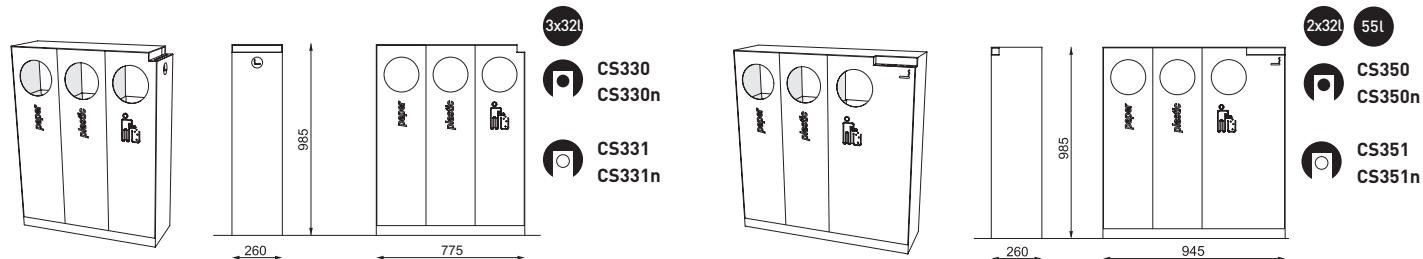
steel body, ashtray with stainless steel cigarette extinguisher
corps en acier, cendrier muni d'un éteignoir à cigarettes
Stahlkonstruktion, Aschenbecher aus Edelstahl



CS330 / 331 / 350 / 351

Triple litter bin for sorted waste
Corbeille tri sélectif 3 compartiments
Abfallbehälter für dreifache Mülltrennung

steel body, ashtray with stainless steel cigarette extinguisher
corps en acier, cendrier muni d'un éteignoir à cigarettes
Stahlkonstruktion, Aschenbecher aus Edelstahl



Revisions

Canal Zero

Canal Plaza,
Portland, ME

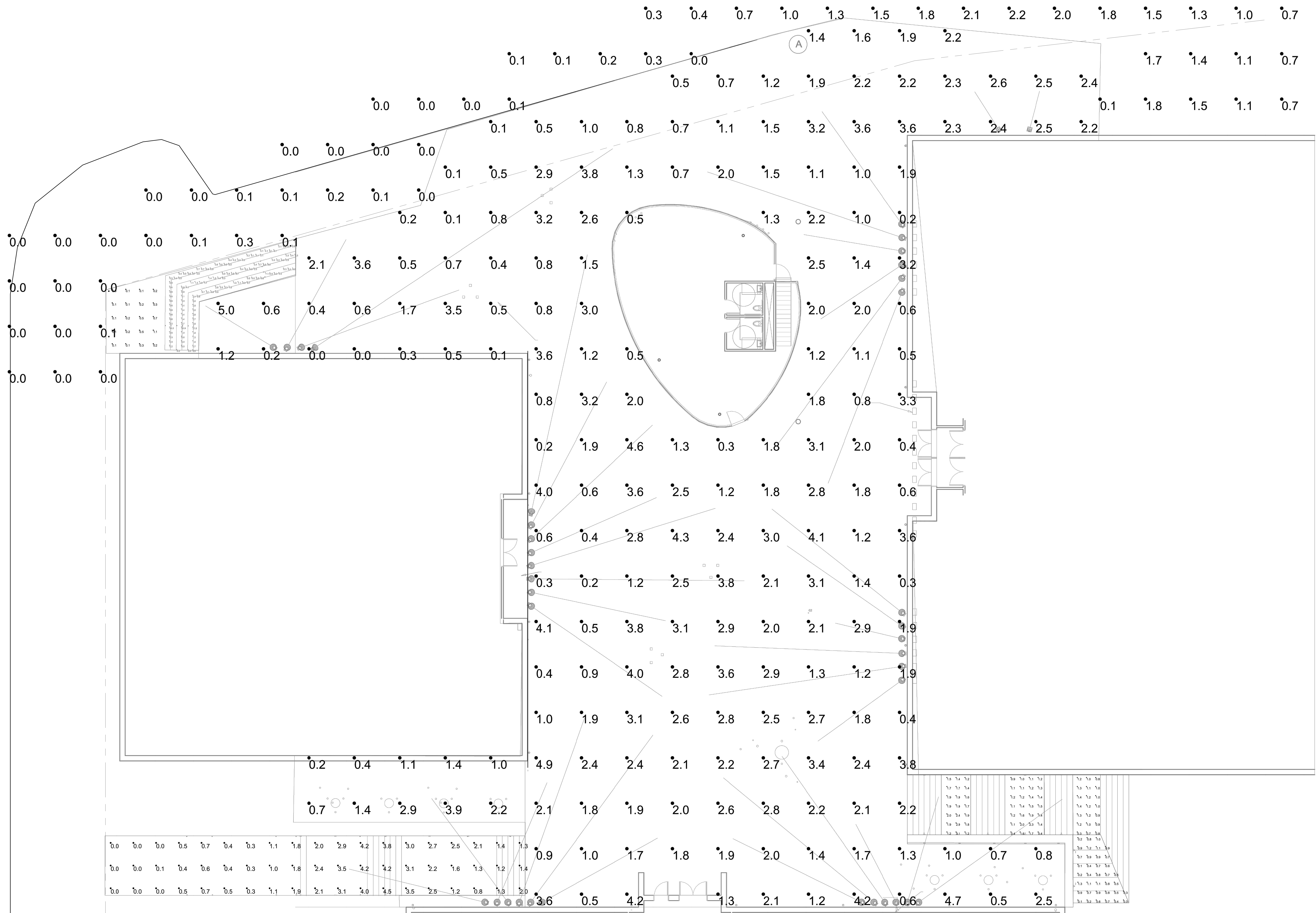
Date: 25 AUGUST 2016

Scale: NOT TO SCALE

Drawing Title:

Lighting
Calculations

LT.2



1 CANAL ZERO LIGHTING CALCULATION PLAN

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LAUREN LAJANE
SWETT
12288
PROJECT ENGINEER

6/21/2016

REV	REVISION	DATE	CHECKED BY	DATE
1	REVISED PER CITY COMMENTS	9/6/16	DAS	
	DESIGNED BY: LJS			
	DRAWN BY: JBC			

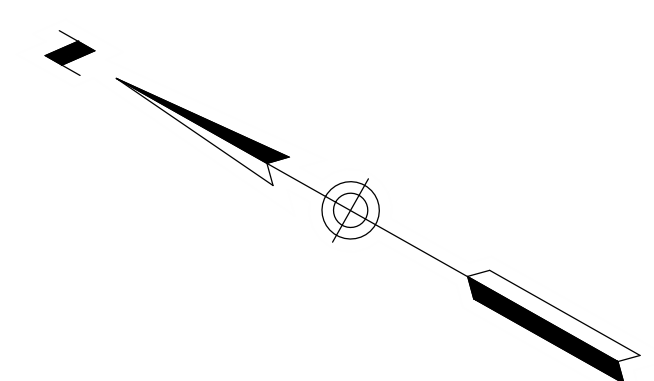
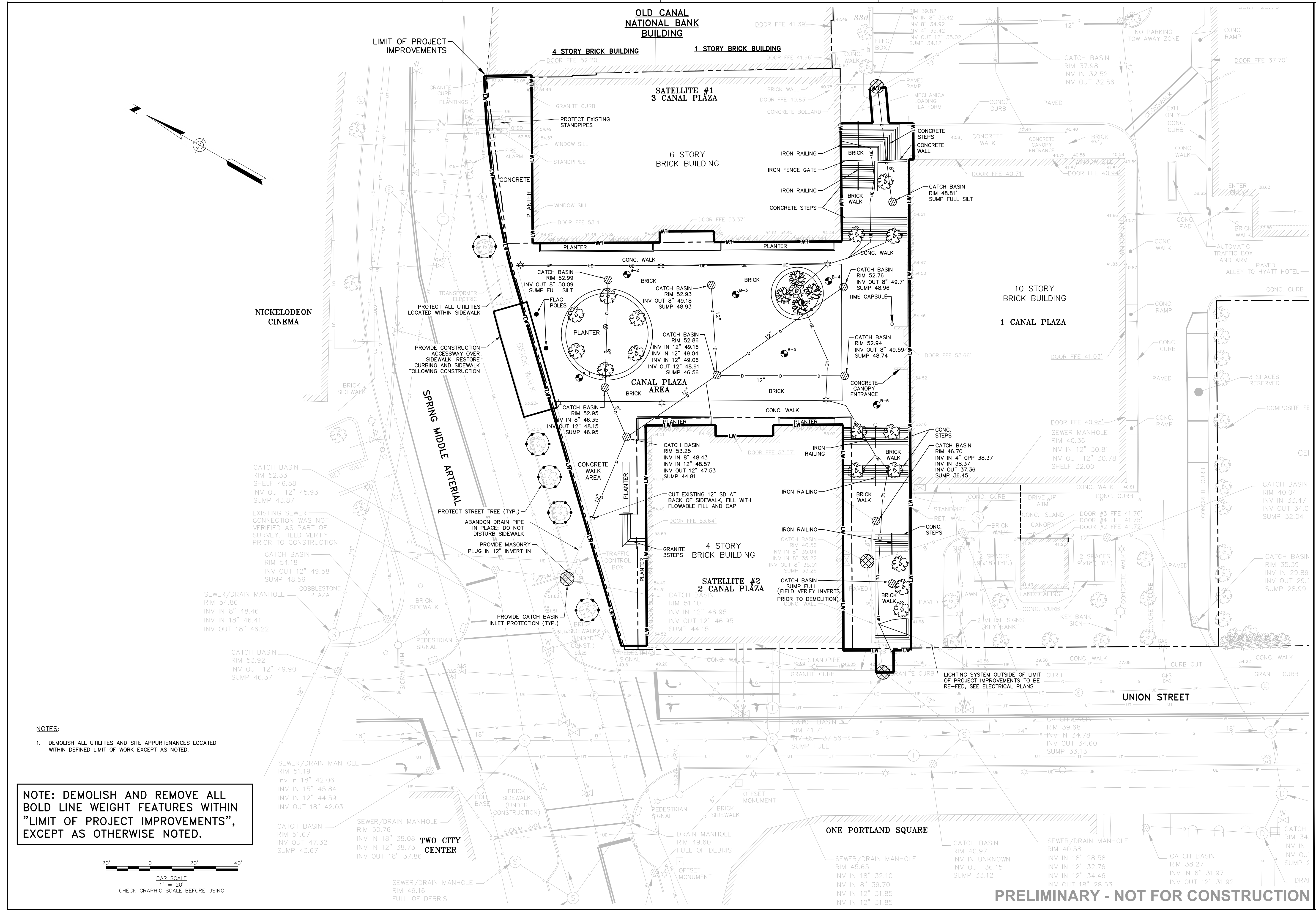
SITE DEMOLITION PLAN

CANALSTUDIO

ZERO CANAL PLAZA DEVELOPMENT

JOB NO.: 229311
DATE: JUNE 2016
SCALE: 1" = 20'
SHEET: 3 OF 10

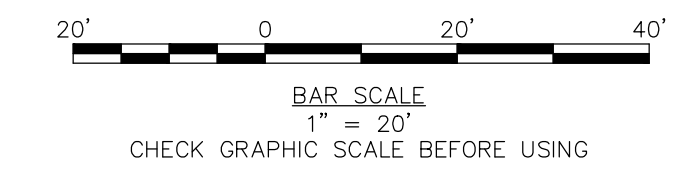
C-200



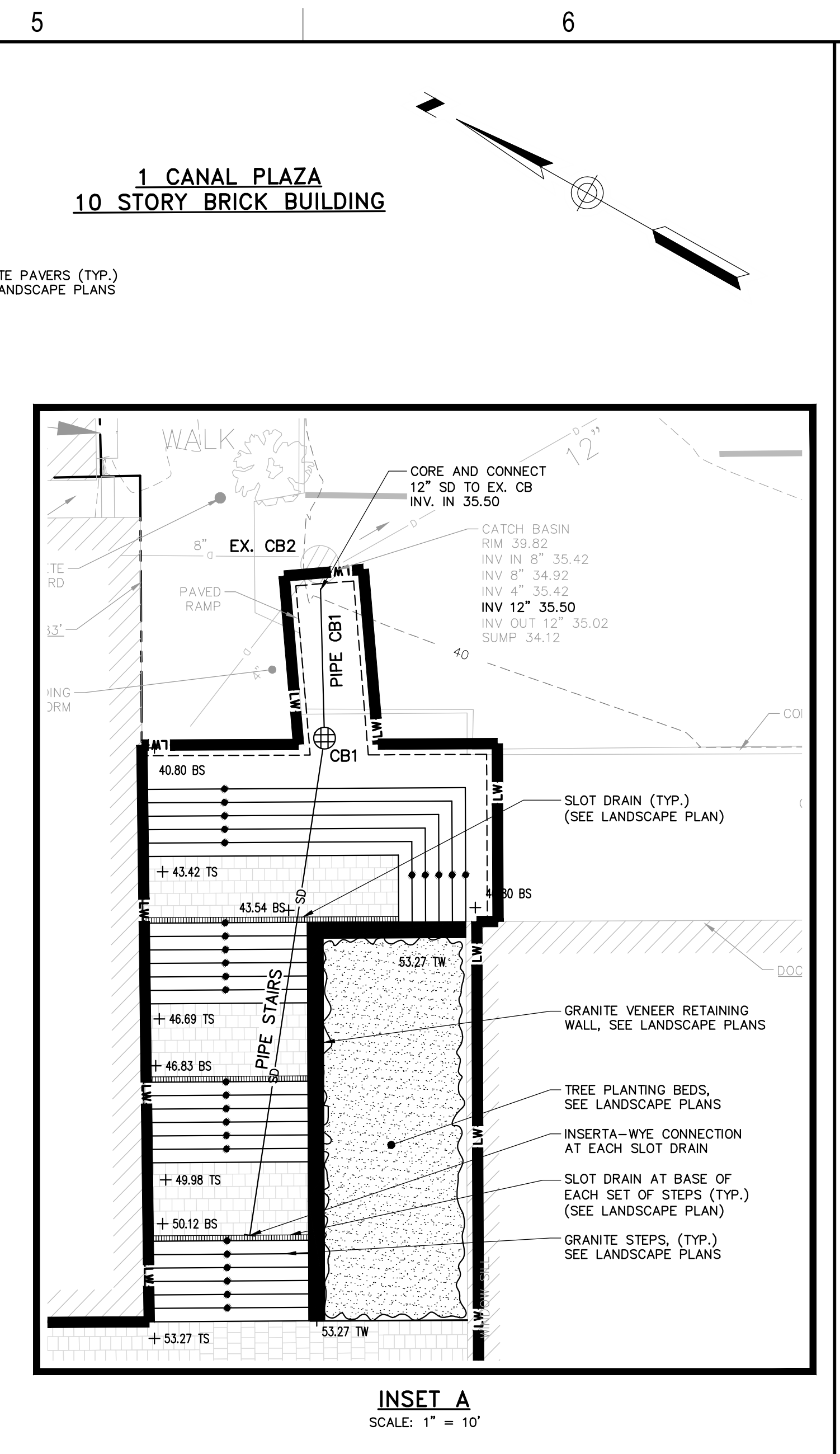
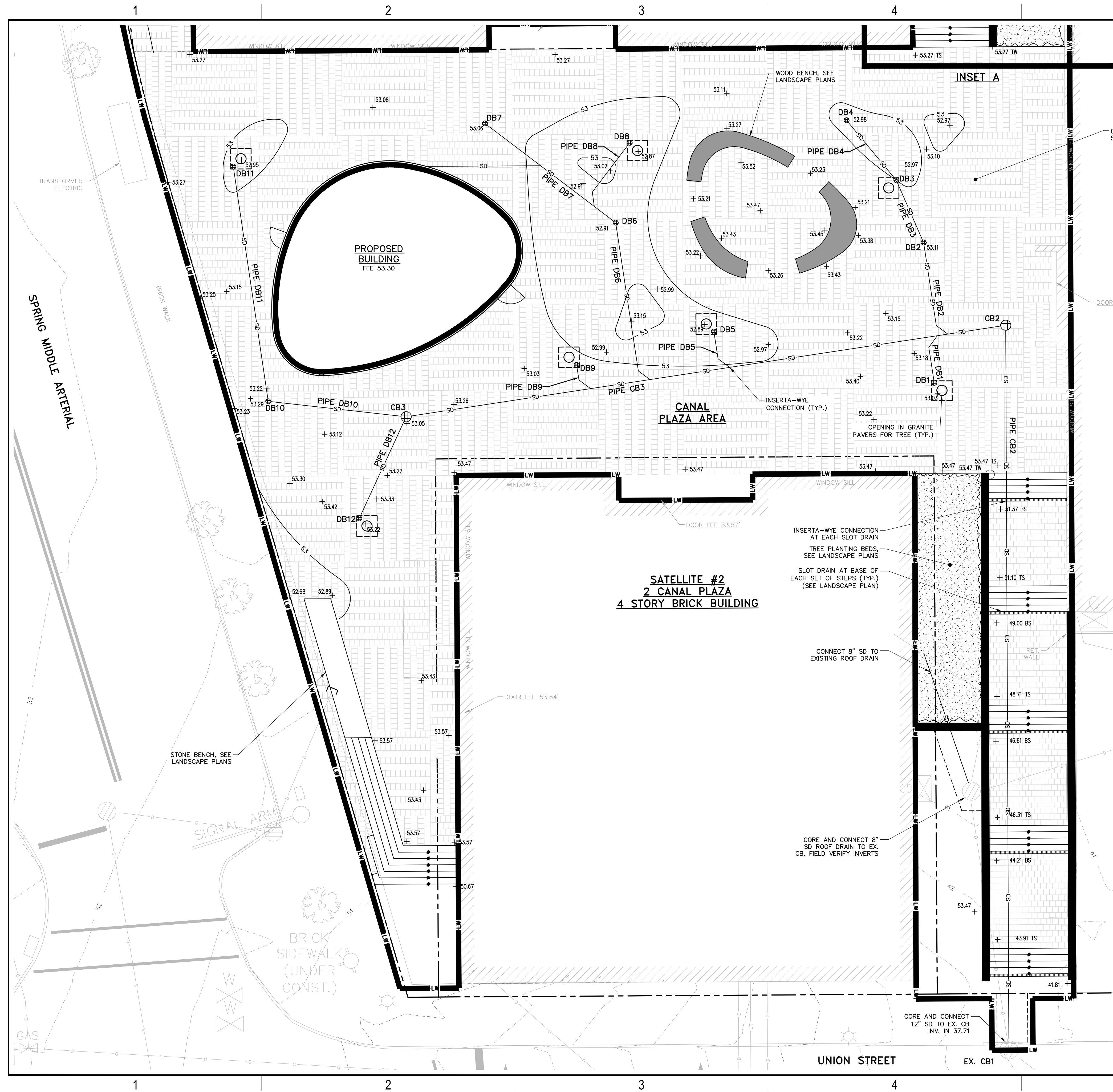
NOTES:

1. DEMOLISH ALL UTILITIES AND SITE APPURTENANCES LOCATED WITHIN DEFINED LIMIT OF WORK EXCEPT AS NOTED.

NOTE: DEMOLISH AND REMOVE ALL BOLD LINE WEIGHT FEATURES WITHIN "LIMIT OF PROJECT IMPROVEMENTS", EXCEPT AS OTHERWISE NOTED.



PRELIMINARY - NOT FOR CONSTRUCTION



STRUCTURE TABLE

NAME	DIA.	RIM	INV IN/SIZE/FROM	INV OUT/SIZE/TO
CB1	24"	40.78	35.75/12"SD/	35.65/12"SD/EX. CB2
CB2	24"	53.48	46.12/12"SD/CB3	46.02/12"SD/EX. CB1
CB3	24"	53.08	49.96/8"SD/DB10 49.96/8"SD/DB12	49.62/12"SD/CB2
DB1	8"	53.08		46.99/8"SD/
DB2	8"	53.11	46.97/8"SD/DB3	46.87/8"SD/
DB3	8"	53.00	47.19/8"SD/DB4	47.09/8"SD/DB2
DB4	8"	52.98		47.34/8"SD/DB3
DB5	8"	52.91		48.07/8"SD/
DB6	8"	52.91	48.91/8"SD/DB7	48.81/8"SD/
DB7	8"	53.06		49.22/8"SD/DB6
DB8	8"	52.91		49.11/8"SD/
DB9	8"	53.02		48.92/8"SD/
DB10	8"	53.24	50.31/8"SD/DB11	50.21/8"SD/CB3
DB11	8"	52.97		50.77/8"SD/DB10
DB12	8"	53.25		50.16/8"SD/CB3
EX. CB1	48"	41.71	37.71/12"SD/CB2	SEE PLAN VIEW FOR EXISTING INVERTS
EX. CB2	48"	39.82	35.50/12"SD/CB1	SEE PLAN VIEW FOR EXISTING INVERTS

PIPE TABLE

PIPE NAME	SIZE	LENGTH	SLOPE
PIPE CB1	12" SD	13'	0.0110
PIPE CB2	12" SD	139'	0.0600
PIPE CB3	12" SD	117'	0.0300
PIPE DB1	8" SD	9'	0.0100
PIPE DB2	8" SD	18'	0.0100
PIPE DB3	8" SD	13'	0.0100
PIPE DB4	8" SD	15'	0.0100
PIPE DB5	8" SD	7'	0.0100
PIPE DB6	8" SD	31'	0.0100
PIPE DB7	8" SD	31'	0.0100
PIPE DB8	8" SD	14'	0.0100
PIPE DB9	8" SD	5'	0.0100
PIPE DB10	8" SD	26'	0.0100
PIPE DB11	8" SD	46'	0.0100
PIPE DB12	8" SD	21'	0.0100
PIPE STAIRS	12" SD	46'	0.1500



PRELIMINARY - NOT FOR CONSTRUCTION

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6/21/2016

REV	REVISION	DATE
1	REVISED PER CITY COMMENTS	9/6/16

DESIGNED BY	CHECKED BY	DRAWN BY
LJS <td>DAS</td> <td>JBC</td>	DAS	JBC

ENLARGED PLAZA GRADING PLAN

CANALSTUDIO

ZERO CANAL PLAZA DEVELOPMENT

JOB NO.: 229311

DATE: JUNE 2016

SCALE: 1" = 10'

SHEET: 6 OF 10

C-203