



TR3: Technical Report  
Concrete Design Mix  
Must be typewritten.

☒ Orient and affix BIS  
job number label here ☒

The TR3 is required prior to permit

**1 Location Information** Required for all applications.

House No(s) 501

Street Name West 30th Street

Borough Manhattan

Block 702

Lot 50

BIN

CB No.

**2 Applicant Information - Licensed Concrete Testing Lab** Required for all applications.

Director Last Name Banerjee

Director First Name Debabrata

Director Middle Initial

Business Name Impact Concrete & Control Inspection Inc

Business Telephone (718) 939-7774

Business Address 15-46 129th Street

Business Fax (718) 939-6444

City College Point

State NY

Zip 11356

Mobile Telephone (917) 577-7540

E-Mail dbaner@gmail.com

Director's Lic. Number 081431

☒ P.E. ☐ R.A.

Concrete Testing Lab Lic. Number 000064

**3 Strength Requirements and Design** Required for all applications. Attach Trial Mixture Reports and/or Field Experience Results.

				Mix #1	Mix #2	Mix #3
Method of Determining Proportions (Trial Mixture and/or Field Experience)				<input checked="" type="checkbox"/> Trial Mix <input type="checkbox"/> Field Experience	<input type="checkbox"/> Trial Mix <input type="checkbox"/> Field Experience	<input type="checkbox"/> Trial Mix <input type="checkbox"/> Field Experience
Date Trial Mixture Performed				10-19-12		
Specified Strength ( $f'_c$ )				7200 PSI	PSI	PSI
Required Strength ( $f'_{cr}$ )				8420 PSI	PSI	PSI
Specified Test Age (Days)				28		
	Material Type	Material Source	ASTM Standard			
Cementitious #1 (lbs)	Cement	Lehigh-II	C-150	495 lbs.	lbs.	lbs.
Cementitious #2 (lbs)	Slag	Allcem	C-989	330 lbs.	lbs.	lbs.
Cementitious #3 (lbs)	Silica Fume	Euclid Microsilica	C-1240	0 lbs.	lbs.	lbs.
Fine Aggregate (lbs)	Sand	LI NATURAL	C-33	1065 lbs.	lbs.	lbs.
Coarse Aggregate #1 (lbs)	Stone #67	NYSAND & STON	C-33	1425 lbs.	lbs.	lbs.
Coarse Aggregate #2 (lbs)	Stone #8	NYSAND & STON	C-33	475 lbs.	lbs.	lbs.
Coarse Aggregate #3 (lbs)				lbs.	lbs.	lbs.
Amount of Water (gals)	Water	NYC	C94	31.0 gals.	gals.	gals.
Admixture #1 (oz)				oz	oz	oz
Admixture #2 (oz)		Euclid- Plastol 5000	C464	80.0 oz	oz	oz
Admixture #3 (oz)	HRWR	Eucon WO		18.0 oz	oz	oz
Other	Tags: 52721-60					
Water-Cement Ratio	Supplier can adjust	admixture per NYC		0.32		
Slump (inches $\pm$ tolerance)	DOB bulletin	2010-018		8" $\pm$ 1"	$\pm$	$\pm$
Air Content (% $\pm$ tolerance)	dated 06/18/10			2% $\pm$ 1.0	% $\pm$	% $\pm$
Unit Weight (lbs./ft <sup>3</sup> )				150. lbs./ft <sup>3</sup>	lbs./ft <sup>3</sup>	lbs./ft <sup>3</sup>

**4 Concrete Testing Lab Director's Statement and Signature** Required for all applications.

I hereby state that the information reported in section 3 above is correct and complete and that the tests reported in section 3 above were performed under my supervision in accordance with all applicable New York City Construction Code provisions, and Departmental rules.

Falsification of any statement is a misdemeanor and is punishable by a fine or imprisonment, or both.

It is unlawful to give to a city employee, or for a city employee to accept, any benefit, monetary or otherwise, either as a gratuity for properly performing the job or in exchange for special consideration. Violation is punishable by imprisonment or fine or both.

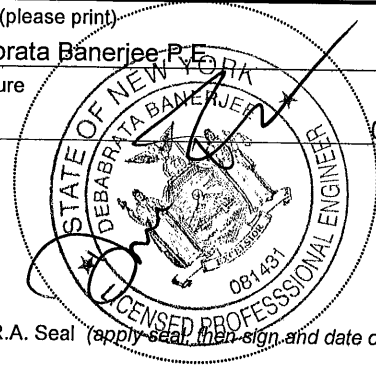
Name (please print)

Debabrata Banerjee P.E.

Signature

Date

07-30-13



P.E. / R.A. Seal (apply seal, then sign and date over seal)

**5 Concrete Producer's Statement and Signature** Required for all applications. Must be filled out by Owner of Production Facility.

I certify that the material type and source specified in section 3 above are available at my facility and that I will use such materials to produce the concrete mix(es) specified in section 3. I further certify that I will produce and deliver such mix(es) to the project site in accordance with the applicable code provisions of the NYC construction codes and that such mix(es) are appropriate for the placement conditions for the project identified in section 1 above (BC 1905.8.2).

Name (print) ANGEL DEPERINCA

Title OPER. MGR

Signature

Date 7/30/13

NRMCA Certification Expiration Date (BC 1905.8.2)

9/19/13

Business Name Empire transit Mix

Business Telephone (718) 384-3000

Business Address 430 Maspeth Avenue

Business Fax: 718 384 3113

City Brooklyn

State NY

Zip 11211

**6 Design Applicant's Statement and Signature** Required for all applications. Must be filled out by P.E./R.A. responsible for plans.

☐ I certify I have reviewed the concrete design mix(es) reported by the licensed testing lab and found them to be in compliance with the approved construction documents (BC 1905.6.3.3).

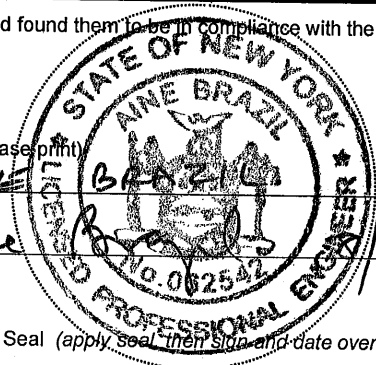
Name (please print)

ANGEL DEPERINCA

Signature

Date

7/19/13



P.E. / R.A. Seal (apply seal, then sign and date over seal)

**7 Building Owner's Statement and Signature** Required for all applications.

Falsification of any statement is a misdemeanor and is punishable by a fine or imprisonment, or both. It is unlawful to give to a city employee, or for a city employee to accept, any benefit, monetary or otherwise, either as a gratuity for properly performing the job or in exchange for special consideration. Violation is punishable by a fine or imprisonment, or both. I understand that if I am found after hearing to have knowingly or negligently made a false statement or to have knowingly or negligently falsified or allowed to be falsified any certificate, form, signed statement, application, report or certification of the correction of a violation required under the provisions of this code or of a rule of any agency, I may be barred from filing further applications or documents with the Department.

Name (print)

Title

Signature

Date

# IMPACT

**Concrete & Control Inspections, INC.**  
**15-46 129th Street, College Point, New York 11356**  
**Tel: (718) 939-7774 Fax: (718) 939-6444**

## CONCRETE MIX DESIGN REPORT

<b>CLIENT:</b>	Tutor Perini Building Corp 360 West 31 Street - Suite 1510 New York, NY 10001	<b>DATE:</b>	10/19/12
<b>Project:</b>	501 West 30 th Street	<b>LAB NO.:</b>	2012-10-19-12
<b>Supplier:</b>	Empire Transit Mix	<b>MIX TYPE:</b>	No Air Pump
		<b>METHOD:</b>	Trial
		<b>SAMPLED BY:</b>	Empire
		<b>Expire on:</b>	10/19/2013

7200 PSI +1420 Psi Normal wt Concrete/ Pump Mix @28 Days

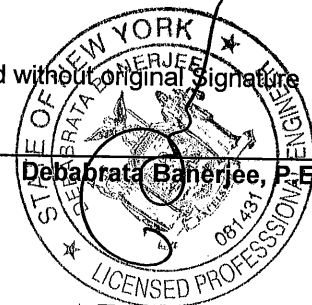
Product	Source & Type	ASTM	S.G.	NYS Source No.
Cement	Lehigh-II	ASTM C150	3.15	
Slag	Lehigh- Allcem	ASTM C989	2.88	-
Silica Fume	Euclid	ASTM C1240	2.20	-
Fine Agg.	L I Natural	ASTM C33	2.63	-
Coarse Agg.	NY Stand & Stone(#67)	ASTM C33	2.66	-
Coarse Agg.	NY Stand & Stone(#8)	ASTM C33	2.69	-
Water	NYC Potable	ASTM C94	1.00	-
Admixture 1		ASTM C260	1.03	-
Admixture 2	Euclid- Plastol 5000	ASTM C494	1.20	-
Admixture 3	Eucon WO			-

### Recommended Mix Design #1

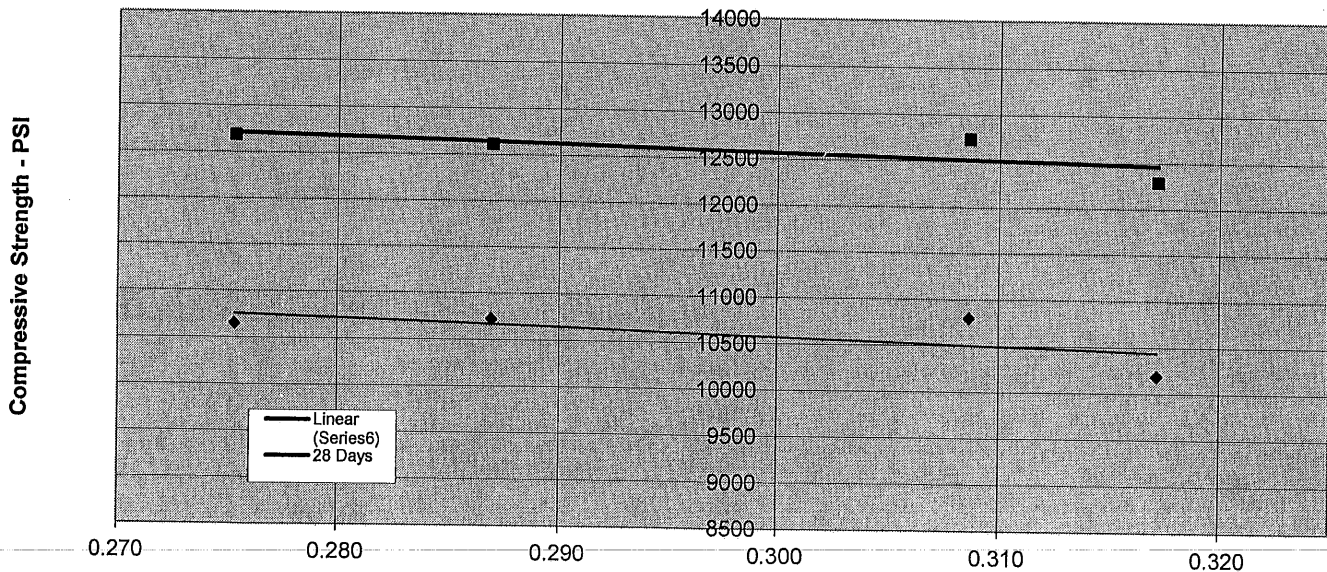
Cement (lbs.)	495
Slag (lbs.)	330
Microsilica (lbs.)	0
Fine Agg. (lbs)	1065
<b>#67</b> Coarse Agg. (lbs)	1425
<b>#8</b> Coarse Agg. (lbs)	475
Water (gals.)	31.0
Admixture 1 (oz.)	0.0
Admixture 2 (oz.)	80.0
Admixture 3 (oz.)	18.0
Slump (in.)	8"±1"
Air Content (%)	2 % +/-1.0%
U. Wt. P.C.F.	150.4
W/C Ratio	0.32

Supplier Can adjust Admixture per NYC DOB  
 Bulletin 2010-018 Dated 6/18/10  
 Air Entrainment Admixture can be adjusted  
 by supplier per NYC DOB bulletin 2010-018

Not Valid without original signature



## Compressive Strength vs. Water Cement Ratio



# IMPACT

**Concrete & Control Inspections, INC.**  
**15-46 129th Street, College Point, New York 11356**  
**Tel: (718) 939-7774 Fax: (718) 939-6444**

## CONCRETE MIX DESIGN REPORT

<b>CLIENT:</b>	Tutor Perini Building Corp 360 West 31 Street - Suite 1510 New York, NY 10001	<b>DATE:</b>	10/19/12
<b>PROJECT:</b>	501 West 30 th Street 0	<b>LAB NO.:</b>	2012-10-19-12
<b>SUPPLIER:</b>	Empire Transit Mix	<b>MIX TYPE:</b>	No Air Pump
		<b>METHOD:</b>	Trial
		<b>SAMPLED BY:</b>	Empire
		<b>DELIVERED BY:</b>	10/19/2013

**7200 PSI +1420 Psi Normal wt Concrete/ Pump Mix @28 Days**

### Aggregate Gradation Passing Percent Finer

Sieve Size	F.A.	C.A. #67	C.A. #8
2"			
1 1/2"		100.00	
1"		100.0	
3/4"		95.10	
1/2"		60.30	100
3/8"	100.0	44.40	91.1
# 4	95.5	9.7	18.5
# 8	87.9	2.6	3.9
# 16	80.4		2.4
# 30	56.8		
# 50	14.0		
# 100	1.6		
FM	2.64	6.48	5.841
Unit Weight Dry Rodded	102.0	101.4	102.2
Specific Gravity	2.63	2.66	2.689

Colometric Test

Plate # 1

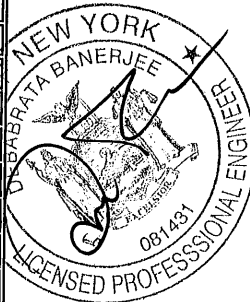
ed 75% #67 and 25% #8 Sto

### TRIAL MIXES - DRY BATCH WEIGHTS (lbs./Cubic Yards)

Point	Yield	Cement	Slag	Silica	F.A.	C.A.	C.A.	Water	Adx 1	Adx 2	Adx 3	Unit Wt.	Slump(in)	W/C	Air %
1	27.0	495	330	0	1065	1425	475	31.0	0.0	80.0	18.0	150.4	8.50	0.317	2.1
2	27.0	525	350	0	1000	1425	475	32.0	0.0	83.2	20.0	148.4	9.00	0.309	2.1
3	27.6	570	380	20	1000	1425	475	32.3	0.0	90.0	22.0	147.6	8.75	0.287	2.4
4	27.5	570	380	30	1000	1425	475	31.0	0.0	91.4	20.0	149.0	8.25	0.275	2.1

### COMPRESSIVE STRENGTH RESULTS (ASTM C39) - P.S.I. (4" x8" Cylinders)---

Point	w/c ratio	7 Days Results	Average	28 Days Results	Average
1	0.317	10223	10158	12056	12293
2	0.309	10839	10771	12374	12742
3	0.287	11055	10403	13330	12617
4	0.275	11026	10289	12770	12697
Point	w/c ratio	3 Days Results	Average	14 Days Results	Average
1	0.317	8067	7818		#DIV/0!
2	0.309	8281	8442		#DIV/0!
3	0.309	8640	9096		#DIV/0!
4	0.275	8852	9251		#DIV/0!
Point				56 Days Results	Average
1				12691	12819
2				11239	12267
3				13779	13582
4				13627	13507



Tag Used: 52721-60