

Edenton Street United Methodist Church

Raleigh, North Carolina

Proposed specification for a 5-manual and pedal
pipe organ by Orgues Létourneau Limitée

revised December 5, 2006

		Grand-Orgue	<i>pipes</i>	unenclosed
1.	16'	Montre	61	new, 70% tin
2.	8'	Montre	61	new, 70% tin
3.	8'	Flûte harmonique	61	new, harmonic at f30, wood and 56% tin
4.	8'	Salicional	61	<i>mf</i> , new, zinc and 56% tin
5.	8'	Bourdon	61	new, wood and 40% tin
6.	4'	Prestant	61	new, 70% tin
7.	4'	Flûte ouverte	61	new, 40% tin
8.	2 2/3'	Quinte	61	new, principal scale, 56% tin
9.	2'	Doublette	61	new, 56% tin
10.	1 3/5'	Tierce	61	new, principal scale, 56% tin
11.	2 2/3'	Fourniture V	305	new, 12-15-19-22-26, 56% tin
12.	1'	Cymbale III-IV	232	new, 22-26-29, 56% tin
13.	8'	Cornet V	220	new, from f20, mounted, 1-8-12-15-17, 40% tin
14.	8'	Trompette	66	new, harmonic at c37, Bertounèche shallots, 56% tin
15.	16'	Tuba magna	—	from Solo-Bombarde
16.	8'	Tuba mirabilis	—	from Solo-Bombarde
17.	4'	Cor harmonique	—	from Solo-Bombarde
18.	8'	Tubas III	—	from Solo-Bombarde
19.	8'	<i>Trompette en chamade</i>	—	<i>from Antiphonal</i>

1433

Tremulant
 Grand-Orgue 16'
 Grand-Orgue Unison Off
 Zimbelstern
 MIDI on Great

N.B. Stops in italics are prepared for only.

	Récit	<i>pipes</i>	enclosed
20.	16'	Flûte conique	61 <i>mp</i> , existing SW 16' Spitzflöte, revoiced
21.	8'	Principal	61 existing GT 8' Principal, revoiced
22.	8'	Bourdon	61 existing CH 8' Gedeckt (rescaled, 3 new pipes), revoiced
23.	8'	Gambe	61 <i>mf</i> , existing SW 8' Gambe, revoiced
24.	8'	Voix céleste	61 <i>mf</i> , existing SW 8' Gambe Celeste, revoiced
25.	4'	Octave	61 existing GT 4' Octave, revoiced
26.	4'	Flûte	61 new, 40% tin
27.	2 2/3'	Quinte	61 existing SW 2-2/3' Nazard, revoiced
28.	2'	Doublette	61 existing CH 2' Principal, revoiced
29.	2'	Flûte à bec	61 existing SW 2' Blockflöte, revoiced
30.	1 3/5'	Tierce	61 new, 40% tin
31.	1 1/3'	Larigot	61 existing POS II Sesquialtera (1st rank), revoiced
32.	2'	Plein jeu IV	244 new, 15-19-22-26, 56% tin
33.	16'	Basson	61 existing PD 16' Fagotto (5 new pipes), existing shallots, revoiced
34.	8'	Trompette	66 new, harmonic at c37, Bertounèche shallots, 56% tin
35.	8'	Hautbois	61 new, Bertounèche shallots, 56% tin
36.	8'	Vox Humana	61 existing SW 8' Musette, new English shallots, revoiced
37.	4'	Clairon	78 new, harmonic at c25, Bertounèche shallots, 56% tin

1303

Tremulant
 Récit 16'
 Récit Unison Off
 Récit 4'
 MIDI on Swell

N.B. Stops in italics are prepared for only.

	Positif	<i>pipes</i>	enclosed
38.	16'	Quintaton	61 existing GT 16' Quintaton, revoiced
39.	8'	Principal italien	61 new, narrow mouth, 56% tin
40.	8'	Flûte à cheminée	61 existing GT 4' Rohrflöte (12 new pipes), revoiced
41.	8'	Gemshorn	61 <i>mp</i> , existing CH 8' Gemshorn, revoiced
42.	8'	Gemshorn céleste	61 <i>mp</i> , existing CH 8' Gemshorn Celeste (7 new pipes), revoiced
43.	8'	Quintadena	61 existing POS 8' Quintflöte, revoiced
44.	4'	Octave	61 existing SW 4' Prestant, revoiced
45.	4'	Flûte à fuseau	61 existing SW 4' Koppelflöte, revoiced
46.	2 2/3'	Nasard	61 new, 40% tin
47.	2'	Flageolet	61 existing GT 2' Waldflöte, revoiced
48.	1 3/5'	Tierce	61 existing POS II Sesquialtera (2nd rank), revoiced
49.	1'	Sifflet	61 new, 40% tin
50.	2'	Fourniture III	183 existing SW III-rank Plein Jeu (recomposed), 15-19-22, 60 new pipes, revoiced
51.	2/3'	Cymbale II	122 existing CH II-rank Cymbale, 26-29, revoiced
52.	16'	Cor anglais	61 existing SW 16' Bassoon, existing shallots, revoiced
53.	8'	Trompette	66 existing ANT 8' Festival Trompette, existing shallots on reduced pressure, revoiced
54.	8'	Cromorne	61 new, Bertounèche shallots, 56% tin
55.	4'	Chalumeau	61 existing SW 4' Rohr Schalmey, new German shallots, revoiced
56.	8'	<i>Trompette en chamade</i>	— <i>from Antiphonal</i>

1286

Tremulant
 Positif 16'
 Positif Unison Off
 Positif 4'
 Harp (from Solo)
 Chimes (existing, rebuilt)
 Carillon
 MIDI on Choir

N.B. Stops in italics are prepared for only.

Solo-Bombarde		<i>pipes</i>	enclosed
57.	8'	Violoncelle	61 <i>f</i> , new, zinc and 56% tin
58.	8'	Flûte harmonique	61 new, harmonic at f30, wood
59.	8'	Viole d'orchestre	61 <i>f</i> , new, zinc and 56% tin
60.	8'	Viole céleste	61 <i>f</i> , new, zinc and 56% tin
61.	8'	Flûte douce	61 <i>pp</i> , new, zinc and 56% tin
62.	8'	Flûte céleste	54 <i>pp</i> , from g8, new, zinc and 56% tin
63.	4'	Flûte traversière	61 new, harmonic at f18, 56% tin
64.	2'	Piccolo harmonique	61 new, harmonic at f6, 56% tin
65.	8'	Clarinette	61 new, English shallots, 56% tin
66.	8'	Hautbois d'orchestre	61 existing CH 8' Oboe with rebuilt resonators, new English shallots, revoiced
67.	8'	Cor français	61 new, high pressure, Skinner shallots, 56% tin
68.	16'	Tuba magna	61 new, high pressure, harmonic at c37, English shallots, zinc and 56% tin
69.	8'	Tuba mirabilis	66 new, high pressure, harmonic at g20, English shallots, zinc and 56% tin
70.	4'	Cor harmonique	78 new, high pressure, harmonic at c13, English shallots, zinc and 56% tin
71.	8'	Tubas III	— derived from 16', 8' and 4' Tubas
72.	8'	Cornet V	— from Grand-Orgue
73.	8'	<i>Trompette en chamade</i>	— <i>from Antiphonal</i>

869

Tremulant
 Solo 16'
 Solo Unison Off
 Solo 4'
 Harp (existing, rebuilt)
 Chimes (from Choir)
 Carillon
 MIDI on Solo

N.B. Stops in italics are prepared for only.

		Antiphonal	<i>pipes</i>	unenclosed
74.	16'	<i>Bourdon</i>	61	<i>existing ANT 16' and 8' (Metal) Gedackt, revoiced</i>
75.	8'	<i>Montre</i>	61	<i>new, 70% tin</i>
76.	8'	<i>Flûte triangulaire</i>	61	<i>new, triangular section, inverted mouth, wood</i>
77.	4'	<i>Prestant</i>	61	<i>new, 56% tin</i>
78.	2'	<i>Fourniture IV</i>	244	<i>existing GT IV-rank Mixture, 15-19-22-26, revoiced</i>
79.	8'	<i>Trompette en chamade</i>	66	<i>new, Bertounèche shallots, 70% tin</i>

554

*Tremulant
 Antiphonal 16'
 Antiphonal Unison Off
 Antiphonal 4'
 MIDI on Antiphonal*

N.B. Stops in italics are prepared for only.

		Echo	<i>pipes</i>	enclosed
80.	8'	<i>Bourdon</i>	61	<i>existing GT 8' Bourdon, revoiced</i>
81.	8'	<i>Erzähler</i>	61	<i>pp, existing ANT 8' Erzähler, revoiced</i>
82.	8'	<i>Erzähler céleste</i>	61	<i>pp, new, zinc and 56% tin</i>
83.	4'	<i>Cor de nuit</i>	61	<i>existing CH 4' Blockflöte, revoiced</i>
84.	1 1/3'	<i>Larigot</i>	61	<i>existing ANT 2' Blockflöte, rescaled, revoiced</i>
85.	8'	<i>Hautbois</i>	61	<i>new, English shallots, 56% tin</i>

366

*Tremulant
 Echo 16'
 Echo Unison Off
 Echo 4'
 Harp (from Solo)
 Chimes (from Choir)
 Carillon*

N.B. Stops in italics are prepared for only.

		Pédale	<i>pipes</i>	unenclosed
86.	32'	Violonbasse	—	digital stop, full compass
87.	32'	Contre Bourdon	—	digital stop, full compass
88.	16'	Contrebasse	32	new, large scale, wood
89.	16'	Montre	—	from Grand-Orgue
90.	16'	Violon	32	existing PD 16' Violone, revoiced
91.	16'	Soubasse	32	new, large scale, wood
92.	<i>16'</i>	<i>Soubasse (Antiphonal)</i>	<i>32</i>	<i>existing PD 16' Bourdon, revoiced</i>
93.	16'	Flûte conique	—	from Récit
94.	<i>16'</i>	<i>Bourdon (Antiphonal)</i>	—	<i>from Antiphonal</i>
95.	16'	Quintaton	—	from Positif
96.	8'	Prestant	32	new, 70% tin
97.	8'	Violoncelle	32	existing PD 8' Spitzprincipal, revoiced
98.	8'	Flûte	32	wood and 40% tin
99.	8'	Flûte conique	—	from Récit 16' Flûte conique
100.	<i>8'</i>	<i>Bourdon (Antiphonal)</i>	—	<i>from Antiphonal</i>
101.	4'	Basse de chorale	32	new, 56% tin
102.	4'	Cor de nuit	32	new, narrow mouth, 40% tin
103.	5 1/3'	Gros Cornet II	64	12-17, two ranks from existing PD Mixture, revoiced
104.	2 2/3'	Fourniture III	96	new, 19-22-26, 56% tin

N.B. Stops in italics are prepared for only.

		Pédale	<i>pipes</i>	(continued)
105.	32'	Contre Bombarde	12	new, L./2 extension of 16' Bombarde, wood
106.	16'	Bombarde	32	new, Létourneau shallots, 56% tin
107.	16'	Basson	—	from Swell
108.	8'	Trompette	32	new, Bertounèche shallots, 56% tin
109.	4'	Clairon	32	new, Bertounèche shallots, 56% tin
110.	16'	Tuba magna	—	from Solo
111.	8'	Tuba mirabilis	—	from Solo
112.	4'	Cor harmonique	—	from Solo
113.	8'	<i>Trompette en chamade</i>	—	from Antiphonal

556

Tremulant (affects some 8' stops and all stops at 4' pitch or smaller)
 Chancel Pedal Stops Off
 Antiphonal Pedal Stops Off
 Harp (from Solo)
 Chimes (from Choir)
 MIDI on Pedal

N.B. Stops in italics are prepared for only.

Summary (including “prepared for” Antiphonal and Echo divisions):

Division	Manual	Stop Totals	Extended Stops	Borrowed Stops	Digital Stops	Ranks	Reused Ranks	Pipes
Grand-Orgue	II	19	0	5	0	25	0	1 433
Récit	III	18	0	0	0	21	12	1 303
Positif	I	19	0	1	0	21	16	1 286
Solo-Bombarde	IV	17	0	3	0	14	1	869
Antiphonal	V	6	0	0	0	9	6	554
Echo	V	6	0	0	0	6	4	366
Pedal	P	28	1	11	2	17	5	556
TOTALS		113	1	20	2	113	44	6 367

Compasses:

Manual keyboards: 61 notes (c¹ to c⁶¹)
 Pedalboard: 32 notes (c¹ to g³²)

Intermanual Couplers (on tilting tablets and stopknobs):

NB: Inter- and intramanual couplers will not affect the following stops: 8' Trompette en chamade, V Cornet, Harp, Carillon and Chimes.

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|----------------------|---------------------|---------------------------|-----------------------|-------------------------|-------------------|
| G-O to Pédale 8' | Récit to Pédale 8' | Positif to Pédale 8' | Solo to Pédale 8' | Antiphonal to Pédale 8' | Echo to Pédale 8' |
| | Récit to Pédale 4' | Positif to Pédale 4' | Solo to Pédale 4' | Antiphonal to Pédale 4' | Echo to Pédale 4' |
| Récit to G-O 16' | Positif to G-O 16' | Solo to G-O 16' | Antiphonal to G-O 16' | Echo to G-O 16' | |
| Récit to G-O 8' | Positif to G-O 8' | Solo to G-O 8' | Antiphonal to G-O 8' | Echo to G-O 8' | |
| Récit to G-O 4' | Positif to G-O 4' | Solo to G-O 4' | Antiphonal to G-O 4' | Echo to G-O 4' | |
| Récit to Positif 16' | Solo to Positif 16' | Antiphonal to Positif 16' | Echo to Positif 16' | | |
| Récit to Positif 8' | Solo to Positif 8' | Antiphonal to Positif 8' | Echo to Positif 8' | | G-O to Positif 8' |
| Récit to Positif 4' | Solo to Positif 4' | Antiphonal to Positif 4' | Echo to Positif 4' | | |
| | Echo to Récit 16' | | | | |
| Solo to Récit 8' | Echo to Récit 8' | Positif to Récit 8' | | | |
| | Echo to Récit 4' | | | | |
| G-O to Solo 8' | Récit to Solo 8' | Positif to Solo 8' | Antiphonal to Solo 8' | Echo to Solo 8' | |
| Pédale to Positif 8' | | | | | |
| Pédale to G-O 8' | | | | | |

Solid State Adjustable Combinations (with 256 levels of memory and Total Recall back-up system):

Grand-Orgue	1-2-3-4-5-6-7-8	Thumb
Récit	1-2-3-4-5-6-7-8	Thumb
Positif	1-2-3-4-5-6-7-8	Thumb
Solo-Bombarde	1-2-3-4-5-6-7-8	Thumb
Antiphonal	1-2-3-4	Thumb
Echo	1-2-3-4	Thumb
Pédale	1-2-3-4-5-6-7-8	Thumb and toe
General	1-2-3-4-5-6-7-8-9-10-11-12	Thumb and toe
Set (with key lock)		Thumb
General Cancel		Thumb
General Piston Sequencer	+ (up) and – (down)	Thumb and toe

Reversible Pistons:

Récit to Grand-Orgue		Thumb
Positif to Grand-Orgue		Thumb
Solo to Grand-Orgue		Thumb
Antiphonal to Grand-Orgue		Thumb
Echo to Grand-Orgue		Thumb
Récit to Positif		Thumb
Solo to Positif		Thumb
Antiphonal to Positif		Thumb
Echo to Positif		Thumb
Echo to Récit		Thumb
Antiphonal to Solo		Thumb
Echo to Solo		Thumb
Grand-Orgue to Pédale		Thumb and toe
Récit to Pédale		Thumb and toe
Positif to Pédale		Thumb and toe
Solo to Pédale		Thumb and toe
Antiphonal to Pédale		Thumb and toe
Echo to Pédale		Thumb and toe
Zimbelstern		Thumb
Violonbasse 32'		Thumb and toe
Bourdon 32'		Thumb and toe
Contre Bombarde 32'		Thumb and toe
Tutti (programmable)	<i>f – ff – fff</i>	Thumb and toe

Balanced Pedals:

Echo expression	Positif expression	Récit expression	Solo-Bombarde expression	Programmable Crescendo
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Additional Features:

- All Expression to Récit (on reversible thumbpiston in Swell piston slip and stopknob)

Technical Specifications

• Console – Section I:

- 1.1 The entire organ shall be played from a new five-manual and pedal console.
- 1.2 New manual keys will be built of narrow-grain Sitka spruce with an overlay of polished bone for the naturals and ebony for the accidentals. The manual compass will be 61 notes (c¹ to c⁶¹)
- 1.3 A new pedalboard shall be made with naturals of maple and accidentals of ebony. The pedalboard shall be to the AGO standard, with 32 notes (c¹ to g³²). The pedalboard's adjustable tension springs will be made of hardened steel.
- 1.4 The console will be equipped with high-quality electric drawknob units for the stops and intermanual couplers. A high-quality tilting tablet unit will be provided for the intramanual couplers above the uppermost manual.
- 1.4a The consoles will be equipped with high-quality round thumbpistons engraved in black.
- 1.5 A solid-state combination action by Solid State Organ Systems will be provided for both consoles.
- 1.5a The solid-state combination system will include a General Piston sequencer with + (up) and – (down) pistons positioned within appropriate reach of thumb and toe.
- 1.5b The solid-state combination system will include the following functions:
 - 256 levels of memory with digital control panel.
 - 8 pistons each for the Grand-Orgue, Récit, Positif, Solo and Pédale divisions.
 - 4 pistons each for the Antiphonal and Echo divisions.
 - 12 General pistons duplicated by toe pistons.
 - Total Recall, a USB memory stick-based system to save and restore memory levels.
 - Cancel and Set buttons.
- 1.5d The solid-state combination system will include three (3) “Tutti” settings programmable from the console.
- 1.5e The solid-state combination system will include a crescendo pedal, with one preset level and three levels programmable from the console. The four crescendo pedal settings will be independent from the combination action's 256 levels of memory.
- 1.6 Manual and pedal piston layout will be included in scaled drawings of the console to be provided for customer approval following signature of contract.
- 1.7 An adjustable music desk; an adjustable bench with backrest; a music desk light; and a pedalboard light shall be provided for the console.

• **Windchests (for an electric action organ) – Section II:**

- 2.1 The organ will be designed and built with electric slider wind chests.
- 2.2 Windchest frames will be made of American yellow poplar and hardwood laminates.
- 2.3 Toeboards will be made of kiln-dried solid hardwood and hardwood laminates.
- 2.4 Racks and stays will be made of kiln-dried solid hardwood and hardwood laminates.
- 2.5 Access panels will be made of kiln-dried solid woods and hardwood laminates.
- 2.6 Ample access will be provided for ease of maintenance and adjustment.
- 2.7 Support framing will be of solid wood and steel, with sufficient strength to prevent shifting or movement of any portion of the instrument.
- 2.8 Building frames will be assembled with bolts, screws, or other positive tensioning devices, and well-braced to limit sway and provide maximum stability.
- 2.8a All loads will have direct vertical support as the primary load-bearing structure; with such support rated to carry more than the anticipated load.

• **Winding and Mechanical – Section III**

- 3.1 The organ will be winded by Ventus silent blowers.
- 3.1a The blowers will supply an ample amount of wind to support the full organ.
- 3.1b The blowers will be equipped with silencing intake and output baffles.
- 3.1c The blowers will be located as close to the organ as possible and will draw air directly from the organ area.
- 3.2 The wind lines will be constructed of American yellow poplar.
- 3.3 Reservoirs will be of the single-folded type and of such size as to supply the full demand of air required under normal playing conditions.
- 3.3a Bellows leather shall be cowhide, glacé-tanned and grease-free.
- 3.4 Each reservoir will be provided with a curtain-valve regulator attached to the moving top to regulate the flow of air from the main supply trunk.
- 3.5 Expressive enclosures and shades will be built for maximum effectiveness, with the shades having a thickness of 1³/₄ ". Expression motors will be of the pneumatic whiffletree type with 16 stages.

• **Pipework – Section IV**

- 4.1 New pipework, as detailed in the stoplist, will be designed, scaled, and built to the specifications indicated. Metal pipes will be of lead and tin, with flute pipes having a higher lead content for a better quality flute sound. Wooden pipes will be of American yellow poplar, mahogany or cherry.
- 4.2 All pipework from the existing Möller instrument to be reused will be cleaned and repaired as necessary, and revoiced.
- 4.3 Where necessary, tuning scrolls will be cut and replaced with new tuning sleeves. In instances where tuning sleeves already exist, they will be replaced and/or adjusted as necessary.

- 4.4 All reed stops from the existing Möller instrument to be reused will be cleaned and revoiced using new tongues with new or existing shallots as specified above.

• **Voicing – Section V**

Preamble: One of the hallmarks of any Létourneau pipe organ — large or small, new or restored — is the sound. The Létourneau sound is achieved through the meticulous efforts of our voicing staff and their tireless quest for perfection.

- 5.1 Voicing and tonal finishing will be done in the organ's final location to ensure a flawless blend of sound with the room's acoustics.
- 5.2 After completion of tonal finishing, the organ will then be fine-tuned to concert pitch (A = 440 Hz @ 70 degrees F).

• **Casework – Section VI**

- 6.1 The organ cases housing the Great *and Antiphonal* division(s) will be made using the finest materials, and will be assembled using joinery techniques of the highest quality and stability. The casework shall be made from solid plainsawn red oak; other cuts and species of wood are available at a nominal cost.
- 6.2 Design elements will complement the architecture and decoration of the building; drawings will be submitted for the approval of the Church authorities prior to commencement of construction.

• **Purchaser Responsibility – Section VII**

Preamble: The purchaser will be responsible for the following items not included within the scope of this proposal.

- 7.1 Any changes to the church's electrical service to prepare for the new organ, including the provision of additional electrical circuits and conduits.
- 7.2 Preparation of the organ location, including clearing, cleaning, painting, plastering, or other maintenance requirements for the existing organ chambers. It is assumed there is a sturdy and level foundation for the organ.
- 7.3 Any applicable federal, state, and local taxes, fees or permits of any kind.
- 7.4 Any scaffolding or other hoisting equipment required during the installation process.
- 7.5 Any fees associated with the disposal of waste materials during the installation of the organ.

• **Warranty – Section VIII**

- 8.1 When completed, the organ will carry a ten (10) year warranty. All warranty coverage shall be dependent upon the continuation of regular, yearly maintenance services to be performed by the Builder or by a firm agreed upon by the Purchaser and the Builder.

Revised by Orgues Létourneau Limitée on December 5, 2006.