

901-2011 ADDENDUM 3

DESIGN-BUILD OF TRANSIT BUS PARKING AND SERVICING GARAGE

URGENT

**PLEASE FORWARD THIS DOCUMENT TO
WHOEVER IS IN POSSESSION OF THE
REQUEST FOR PROPOSAL**

ISSUED: January 24, 2012
BY: Dave Krahn, P.Eng.
TELEPHONE NO. (204) 453-2301

**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE REQUEST FOR PROPOSAL AND
SHALL FORM A PART OF THE CONTRACT
DOCUMENTS**

Template Version: Ar20070420

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Request for Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Proposal may render your Proposal non-responsive.

Clarification of Addendum 3: Various purposes, including design option to increase the size of the Main Garage, submission date extension, deletion of using recycled bus wash water, clarification of manufacturer warranties after one year warranty period, and updates for bus vehicle dimensions.

PART A – PROPOSAL SUBMISSION

Replace: 901-2011 Proposal Submission with 901-2011 Addendum 3 - Proposal Submission. The following is a summary of changes incorporated in the replacement Proposal Submission:

Form A: No changes. Note: An optional Joint Venture Form A is being provided for the convenience of Bidders at the end of this addendum.

Form B(R1): Added Item No. 13.

Form G2(R1) Revised Standby Letter of Credit Expiry date.

Page numbering on some forms may be changed as a result.

PART B – BIDDING PROCEDURES

Revise: B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, **February 14**, 2012.

Add: B23.9 Further to B23.5, the Total Bid Price shall be adjusted, if necessary, as follows:

- (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the Total Bid Price; or
- (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the Total Bid Price of all responsive Bidders will be adjusted by deducting item 13. Incremental Increase to Main Garage Capacity.

Page numbering may be changed as a result.

PART C – GENERAL CONDITIONS

Revise: C16.1: If the Contractor is delayed in the performance of the Work by reason of strikes, lock-outs (including lock-outs decreed for its members by a recognized contractors' association of which the Contractor is a member), an act of God, or any other cause which the Contractor satisfies the Contract Administrator to be **reasonably totally** beyond his control, the work schedule shall be adjusted by a period of time equal to the time lost due to such delays.

Replace: C17 with the following:

C17 INDEMNITY

- C17.1 The Contractor shall save harmless and indemnify the City against all costs, damages or expenses arising from actions, claims, demands and proceedings, by whomsoever brought, made or taken as a result of acts or omissions of the Contractor, his Subcontractors, employees or agents in the performance or purported performance of the Work, and more particularly from:
- (a) accidental injury to or death of any person whether retained by or in the employ of the Contractor or not, arising directly or indirectly by reason of the performance of the Work, or by reason of any trespass on or damage to property;
 - (b) damage to any property owned in whole or in part by the City, or which the City by duty or custom is obliged, directly or indirectly, in any way or to any degree, to construct, repair or maintain;
 - (c) damage to, or trespass or encroachment upon, property owned by persons other than the City;
 - (d) any claim for lien or trust claim served upon the City pursuant to The Builders' Liens Act;
 - (e) failure to pay a Workers Compensation assessment, or Federal or Provincial taxes;
 - (f) unauthorized use of any design, device, material or process covered by letters patent, copyright, trademark or trade name in connection with the Work;
 - (g) inaccuracies in any information provided to the City by the Contractor.
- C17.2 The City has the right, acting reasonably and upon notice to the Contractor, to settle any such action, proceeding, claim or demand and charge the Contractor with the amount so paid or to be paid in effecting a settlement.
- C17.3 The City and the Contractor agree that the applicable insurer will have a priority right to defend insured claims. Within fourteen (14) Calendar Days after the date on which the insurer is provided with a copy of the notice of claim, the insurer must advise the City and the Contractor if it intends to exercise its priority right to defend the claim.
- C17.4 In the event that the claim is settled by the insurer, all costs incurred in effecting the settlement are the responsibility of the Contractor and not the City.
- C17.5 In the event that the claim is unsuccessfully defended, either in whole or in part, then the City may charge the Contractor with the amount to be paid to satisfy the judgment or order.
- C17.6 The Contractor shall pay to the City the value of all legal fees and disbursements required to settle any such claim or to defend the City against any such claim, action, proceeding, claim or demand notwithstanding that the settlement or defence of the said action, proceeding, claim or demand was undertaken on behalf of the City by a salaried employee of the City.
- C17.7 If the Contractor fails to make any payment required to be made to the City pursuant to C17.2 and C17.3, the City shall be entitled to deduct the amount of such payment from any payment required to be made by the City to the Contractor under the Contract or take whatever other remedies against the Contractor that the City may have at law.

Page numbering may be changed as a result.

PART D – SUPPLEMENTAL CONDITIONS

Revise: D3.1 The estimated schedule for this project is as follows:

Phase	Approximate Date(s)
1. RFP Submission Deadline	February 14, 2012
2. Award of Contract	April 5, 2012
3. Critical Stage as listed in D21.1(a)	May 11, 2012
4. Substantial Performance	June 28, 2013
5. Total Performance	July 26, 2013
6. End of Warranty Period	June 28, 2014

Replace D16. INSURANCE

D16.1 The City shall provide and maintain the following owner controlled project insurance coverage to remain in place at all times during the performance of the Work:

Builder's Risk

D16.1.1 Builder's risk Insurance, insuring 100% of the **Contract Price**. The amount of the insurance will include the full value of property that is specified by the City to be incorporated into the project, up to a maximum loss limit of twenty million dollars (\$20,000,000).

D16.1.2 The policy will insure against all risk of direct loss or damage consistent with industry standard insurance policy wordings, and shall apply to all property in the course of construction, installation, testing and commissioning, reconstruction or repair that is owned by the Insureds or owned by others for which the Insured is held responsible.

D16.1.3 The Contractor shall be responsible for deductibles up to \$50,000 maximum of any one loss.

Wrap-up Liability.

D16.1.4 Wrap-up liability insurance in an amount of no less than ten million dollars (\$10,000,000) inclusive, covering bodily injury, personal injury, property damage and products and completed operations consistent with industry standard insurance policy wordings.

D16.1.5 The Contractor shall be responsible for deductibles up to \$50,000 maximum of any one loss.

D16.1.6 The City of Winnipeg will carry such insurance to cover the Owner, Construction Manager and all consultants and contractors as Insureds. Provision of this insurance by the City of Winnipeg is not intended in any way to relieve the Contractor from his obligations under the terms of the Contract. Specifically, losses relating to deductibles for insurance, as well as losses in excess of limits of coverage and any risk of loss that is not covered under the terms of the insurance provided by the City of Winnipeg remains with the Contractor.

D16.1.7 Wrap-up liability insurance shall be maintained from the date of the commencement of the Work until the date of Substantial Performance of the **Work** and shall include an additional 24 months completed operation coverage which will take affect after Substantial Performance. If Total Performance has not been met within the time period for which this insurance is purchased, the responsibility for payment of additional insurance premiums shall be transferred to the Contractor. The City may reduce any payment to the Contractor by the amount of such additional insurance premiums.

D16.2 The Contractor shall provide and maintain the following insurance coverage at all times during the performance of the **Work**.

General Liability

D16.2.1 General liability in an amount of no less than five million (\$5,000,000) inclusive per occurrence limit for bodily injury, personal injury, property damage, **with the City of Winnipeg added as an additional insured; such liability policy to also contain a cross-liability clause, non-owned automobile liability and products and completed operations cover, to remain in place at all times during the performance of the Work**, with a minimum five million (\$5,000,000) general aggregate.

Professional Liability

D16.2.2 Professional liability covering all architects, engineers, and other design professionals involved in the Project in an amount not less than five million (\$5,000,000.00) per claim subject to a minimum five million (\$5,000,000.00) annual aggregate and shall include an extended reporting period of not less than twelve (12) months from Substantial Performance.

Automobile Liability

D16.2.3 Automobile Liability Insurance on all vehicles owned, operated or licensed in the name of the Contractor in an amount of not less than five million dollars (\$5,000,000.00).

Contractor's Pollution Liability

D16.2.4 Contractor's pollution liability with a limit of \$1,000,000. Deductibles not to exceed \$25,000.

D16.3 The Contractor, and all Subcontractors are responsible for insuring their own equipment and tools used on the Project.

D16.4 In addition to the wrap-up liability insurance, all insureds named in the wrap-up insurance shall continue to carry general liability **insurance** for twelve months after the **Substantial Performance** of the **Work**.

D16.5 All policies shall be taken out with insurers duly licensed to carry on business in the Province of Manitoba or as determined to be acceptable by the Contract Administrator in consultation with the Insurance Supervisor of the City of Winnipeg.

D16.6 The Contractor shall not cancel, or cause any such policy or policies to lapse without a minimum thirty (30) days prior written notice to the City.

D16.7 The Contractor shall provide written notice to the City of Winnipeg of any material changes to their policies within thirty (30) days of the change taking effect.

D16.8 Upon execution of the Contract, the Contractor shall provide the City with certificates of insurance evidencing general liability, professional liability, automobile liability and any other insurance that would be appropriate to obtain prior to commencement of construction. These certificates shall be in a form satisfactory to the City Solicitor and will stipulate that the City will be notified of cancellation or termination (endeavouring to notify the City will not be acceptable). Certified copies of the applicable policies will follow within 60 days of actual commencement of construction.

D16.9 All policies shall be in a form satisfactory to the City of Winnipeg and shall be kept in full force during the Work. Performance Security.

Revise: D33.2.3

D33.2.3 Further to C13.3, manufacturer's warranties for fixtures, process equipment, or other features that are longer than that specified by D33.1 shall be **assigned to the City as indicated in D33.4. honoured and are exclusive to the overall warranty period.**

Add: D33.4

D33.4 Further to C13 and D33.1, the Contractor shall assign to the City all warranty rights related to parts or components supplied or manufactured by sub-contract pursuant to this Contract.

D33.4.1 The Contractor shall provide evidence of the assignment of warranty rights prior to commencing any Work, in accordance with D20.

D16.1.2 Further to D33.4, these Warranty provisions do not relieve the Contractor of Warranty obligations, pursuant to this Contract, that are not assigned.

Page numbering may be changed as a result.

PART E – SPECIFICATIONS

Revise: E1.2 The following Drawings are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
Figure 1	Existing Property Limits
Figure 2.1-R1	Existing Base Plan
Figure 2.2-R2	Existing Base Plan
Figure 3.1	Contour Plan
Figure 3.2	Contour Plan
Figure 4	Site Concept Diagram

Note: Revised drawings have been updated to include record drawings of communication conduits adjacent to the Southwest Rapid Transit Corridor.

Add: E2.2(a)(ii)

As of Addendum 3, CAD drawings include update of communication conduits adjacent to Southwest Rapid Transit Corridor, including connection point to Building A. Please contact the Contract Administrator identified in D5 of the Request for Proposal to obtain the revised CAD drawings.

Replace: E18.2 Refer to the suggested Space Function Relationship Diagram in Appendix E

Space Reference Number and Name	Approx. Square Feet
A-1.1(R2) Bus Service Bays (approximately 295 x 25)	7,375
A-2.1(R1) Main Garage (approximately 135 x 715)	96,525
A-2.2(R1) Bus Parking Assignment Kiosk	40
A-3.1(R2) Vehicle Inspection/Repair (approximately 280 x 20)	5,600
A-4.1(R1) Storage	2,700
A-5.1(R1) M&E Room	1,000
A-6.1(R1) Service Lunchroom	500
A-6.2(R1) Large Locker Room	300
A-6.3(R1) Small Locker Room	200
A-7.1(R1) Multi-use Space	1,500
A-7.2(R1) Large Change Room	500
A-7.3(R1) Small Change Room	300
A-8.1(R1) Dispatch Office/Drivers Waiting Area	2,000
E-1.1 Tank Farm (exterior space, 3,625 sf)	

Subtotal	118,540
Net to Gross Factor 15%	17,781
Total Estimate Interior Space	136,321

Replace: E18.2 (Replace the following Room Data Sheets).

A-1.1(R1) with A-1.1(R2)

A-3.1(R1) with A-3.1(R2)

Revise: E21.26.1(b)(vi)

Fare Drop Vault **Access Area**

Delete: E21.26.1(b)(ix)

Revise: E21.26.1(b)(x)

One bus washer (no high pressure sprays to prevent water ingress through windows and seams). **Preferred model:** PSECO Model DT412. **Alternative model: Ross & White Model BAR-1055-M.**

Revise: E21.26.1(b)(xi)

One bus interior cleaning system (includes air filtration and recycling). **Preferred model:** Ross & White Cyclone Vacuum Bus Interior Cleaning System (as per attached specifications). **Alternative model: Clean Air Technologies / Eurovac TVS-BEL-2336.**

Revise: E24.6.2(b)(i)

(i) A-1.1 Bus Service Bays:

- Provide Fuel Dispensing with modified OPW fuel nozzles same as existing.
- Provide Bus Washing similar to existing, c/w water, drain and rainwater harvesting. Bus Wash shall be a PSECO model DT412 in order to provide maintenance continuity.
 - **No recycling of bus wash water allowed.** ~~Buswash water recycling system must contain a dissolved salts removal capability~~
 - Alternate Ross and White Four **Brush Bus** Transit bus wash system Model BAR-1055 M
- Fluid top-up stations must have a 5 nozzle rack (2 @ engine oils, windshield washer fluid, diesel emission fluid/DEF, and 1 spare.).
 - Minimum 2 stations required.
- Provide Hot and Cold Water Hosebibbs. Minimum 6 locations.
- Provide Compressed Air Outlets. Minimum 6 locations.
- Provide Spot and Trench Drain Systems with oil and grit separators.
- Provide Drinking Fountain
- Plumbed Emergency Shower and Eye/Face Wash station

Revise: E24.9.3(b)(i)

(i) A-1.1 Bus Service Bays

- Make-up Air and Exhaust Air for General Fume and Odor Control
- Make-up Air and Exhaust Air for Diesel Refuelling Stations
- Make-up Air and Exhaust Air for Bus Wash Humidity Removal
- Make-up Air and Exhaust Air for Bus Drying System
 - Drying system for buses exiting washrack.
- Make-up Air and Exhaust Air for Bus **Vacuum Interior** Cleaning System
 - ~~Ross and White Cyclone Vacuum Bus Interior Cleaning System ICS-VA-30-23000 (including air filtration and recycling)~~

Revise: E25.1.4(i)

The Electrical Contractor will be responsible for designing and laying out the **electrical** systems subject to the Contract Administrator's review.

Replace: E25.5.8 Emergency Generator

- (a) Provide separate pricing for emergency generator.
- (b) The emergency generator shall be capable of handling all required life safety equipment loads and non - essential loads as required by the City:
 - (i) Bus Dispatcher's Office including lighting and all office equipment.
 - (ii) All Garage Door Operators.
 - (iii) UPS Loads.
 - (iv) Mechanical equipment vital to maintain normal operation of the facility.
 - (v) 50% of the lights in the Parking Garage area.
 - (vi) Lighting levels in all remaining areas of the building as per National Building Code (latest revision).
- (c) Provide separate auto transfer switches for each fire pump (where applicable), life safety system, non-life safety system.
- (d) The emergency set design and installation shall be conforming to classification and specification of CSA-C282-09 standard (Emergency Electrical Power Supply for Buildings) and CEC section 46.

Revise: E25.5.15(f)

New system to be tied to existing systems in **both existing Transit buildings. (Building A - Office/Datacenter/Maintenance Garage Building adjacent to Brandon Avenue, and Building B - Main Garage Building further to the north of the existing site. Buildings A and B.**

Delete: E25.5.22(a)

Delete: E25.5.26(a)

Add: E28. Incremental Increase to Main Garage Capacity

E28 INCREMENTAL INCREASE TO MAIN GARAGE CAPACITY

E28.1 The Transit Department may require additional bus parking capacity within the new Bus Parking and Servicing Garage.

E28.2 A design alternative is requested to increase the size of the (A-2.1) Main Garage to house approximately eighteen (18) additional (40') buses over the 135 (40') buses specified. Without limiting any innovation, the incremental increase requirement is calculated as follows:

- (a) The conceptual building layout as noted in the "Comments" section of A-2.1(R1) Main Garage suggests 9 rows of 15 buses each.
- (b) Based on setbacks, the Space Function Relationship Diagram in Appendix E, and Figure 4 – Site Concept Diagram, it is likely that the garage can only be expanded to the south of the Site.
- (c) Transit would prefer space for between 18 to 20 (40') buses. Hence, the conceptual building layout would be expanded to $9 * 2 = 18$ additional buses. Depending on the design, the number of additional buses may vary, but shall not be less than 18 (40') buses.

E28.3 Alterations to this request for proposal due to the incremental increase to Main Garage capacity include:

- (a) In general, where clauses indicate capacity for 135 buses, design for increased capacity as per E28.2.
- (b) Form B(R1): Prices - Incremental cost change due to the increase in Main Garage capacity shall be indicated in Item 13. Item 13 should include the cost of the additional Main Garage square footage, including any other price adjustment for alterations to Item 12, or any other Site design features including but not limited to watermain relocations.

- (c) Further to B15.3.2 (a), provide sufficient information to describe how the increase to the garage capacity will affect the design. It is expected that the main garage will increase in size such that major features such as the number of doors, or space function relationship of other rooms will remain unchanged, with expansion of the garage in one direction.
- (d) Further to B16, two full sets of drawings (design with main garage for 135 buses, plus design with main garage for approximately 153) are not required. Rather, drawings should illustrate the 135 bus capacity, plus conceptual plans indicating the impact to the building design and Site design if increased.
- (e) Further to D2.4, the expected Total Bid Price may increase depending on changes such as the incremental increase to Main Garage capacity, or other changes posted in Addendums.
- (f) Further to D3, the project timeline shall not be altered if the City elects to include the incremental increase.
- (g) Based on the assumptions in E28.2, Item 12. South Parking Lot on Form B(R1) may have to be reduced in size or eliminated completely. Note:
 - (i) Item 12 must still reflect the cost of the South Parking Lot as designed for the Main Garage with 135 bus capacity.
 - (ii) Further to E28.3(b), Item 13 should include the cost of the additional Main Garage square footage, including any other price adjustment for alterations to Item 12, or any other Site design features including but not limited to watermain relocations.
 - (iii) The Transit Department has previously submitted a Parking Management Plan to the Planning, Property, & Development Department that will allow for a variance (reduction) in parking for the project. While it is the responsibility of the Contractor to apply for permits and variances as per E5.1, the Contractor should be aware that reducing the size/eliminating the South Parking Lot will not be an issue in terms of the parking by-law.

Page numbering may be changed as a result.

APPENDICES

Replace: Appendix F – Typical Bus Dimensions with Appendix F(R1) Typical Bus Dimensions. Note: Replace appendix in its entirety. Revised turning radius for D40LFR (2010) and eliminated extraneous design vehicle information.

Replace: Appendix G – Equipment Information with Appendix G(R1) Equipment Information. Note: Replace appendix in its entirety. Removed bus wash equipment that recycles used bus wash water, or requires operating pressure above City water supply pressure levels.

GENERAL QUESTIONS AND RESPONSES

#	Question	Response
1	As the City of Winnipeg is providing both the Builders Risk and Wrap Up Policy, can we review the policy to see if there are any Difference in Conditions (DIC), from what is typically carried on a project. If there are areas where we feel there is unacceptable risk, our insurer may require us to purchase additional insurance.	The Contractor chosen and subsequently named on the policy, may be provided with a copy of the Policy for their review. Usually a Contractor can/will purchase difference in condition coverage through their existing policies to cover any gaps in coverage/deductible – without copies of each contract that they enter into and should consult with their Insurance Broker in this regard.
2	Can clause C10.2 be amended to include loss or damage caused by our own negligence?	This clause will not be changed. The Contractor is responsible for the Site during construction.

A-1.1(R4R2) (Addendum 3)
ROOM DATA SHEET
Preliminary Programming

Space Ref No.	Space Name	No. of Units	Approx.Net Area	Net Total	Location / Adjac
A-1.1(R4R2)	Bus Service Bays	1	7,375 s.f.	1	BRT side/ A-2.1 & E-1.1
Activity Description Fuelling, washing / drying, cleaning, fluid fill, fare revenue collection & advert replacement		Acoustic Treatment Sound Iso. <u>Yes</u> DBA <u>N/A</u> Sound Ins. <u>Yes</u> Rev. Time <u>Reduced.</u>		Occupancy / Loading Standards Up to (5) five staff at various locations	
Access Locked exterior, unrestricted interior man doors, secured garage doors (2)		Security Building perimeter security as per existing bus garage		Flexibility Single purpose space	
Structure Height <u>15</u> clr passage ft <u>20</u> clr w/s str ft Clear Span <u>minimal interior post or pillars</u> Floor Loading <u>industrial</u> psf Spec. Req. Structure must provide unobstructed single central bus lane		Environment Heating Temp. <u>18c</u> View Out Ext. <u>Yes</u> Humidity <u>Std</u> View Out Int. <u>Yes</u> View In <u>Yes</u> Spec. Req: Garage environment must have fume and odor control as well as humidity and temperature control		Equipment Floor anchored vault, Computer/printer, supervisors Plexiglas protected low partition desk enclosure, Fluid fill station, Cyclone Cleaner interior cleaning system, Bus Washer and Bus Dryer, fluids storage tanks in M&E room (see mechanical), 2 sets of single bus garage doors c/w automatic door actuators (see specs. & existing garage for complete list of requirements)	
Electrical Services Power <u>Yes</u> TV <u>No</u> Comp <u>Yes</u> AV <u>No</u> Tel <u>Yes</u> PA <u>Yes</u> CCTV <u>Yes</u> Wireless <u>Yes</u> Other for heavy draw equipment as specified		Illumination Ft. Candles <u>Std</u> Daylight <u>Yes</u> Flour. <u>Yes</u> Quartz <u>No</u> Incand. <u>No</u> Special <u>No</u> Other Task lighting at counter space as well as general lighting that will provide lighting between busses w/o causing canyon shadows		Room Finishes Floor: sealed concrete Walls: bottom 4 feet to be of robust construction, capable of resisting and redirecting a low speed bus impact Ceiling: exposed	
Mechanical Services Hot W. <u>Yes</u> Cold W. <u>Yes</u> Drain Floor Drain System c/w separator system Exhaust Diesel fume evacuation Air Std Other 6 compr. air drops, 6 hose bibs, drinking fountain, Emerg. Shwr/Eye/Face washer, hand wash sink, Infra-red heaters, rainwater harvest. Mechanical cooling not required. Free cooling may be considered, using fresh outside air or ground source cooling.		Comments Space divided into three sections, each of which must accommodate two busses in a single row: 1) fuel/fluids/revenue/advert. 2) cyclone cleaner, bus washer & dryer. 3) fluids storage All bidders will be responsible to attend existing bus garage to provide same type, quantity and quality of infrastructure, equipment, fitments, fixtures and furnishings as per existing bus garage unless otherwise specified. Fare collection safe to match existing. Area to accommodate 66"high X 38"wide X 41"deep Floor anchor vault located at midpoint between first and second bus front door sets on bus door side, Computer/printer area, 30 s.f. floor space for advertising sign storage at start of bays driver side of track. Signs approx. 6' wide, stored on edge. Power and data to be available at location of Floor anchored vault and computer area. Heat traced slab at exit and 20 feet beyond exit c/w catch basin for melt water. Fluids storage must be in separate M&E room along outside wall within this space which must have outside access and acoustic separation			

A-3.1(R4R2) (Addendum 3)
ROOM DATA SHEET
Preliminary Programming

Space Ref No.	Space Name	No. of Units	Approx.Net Area	Net Total	Location / Adjac
A-3.1(R4R2)	Vehicle Inspection / Repair	1	5,600 s.f.	1	LRC side/ A-2.1
Activity Description Limited maintenance & offline repair, secure cleaning, application of vinyl wrap advert.		Acoustic Treatment <u>Sound Iso.</u> <u>Yes</u> <u>DBA</u> <u>N/A</u> <u>Sound Ins.</u> <u>Yes</u> <u>Rev. Time</u> <u>Reduced</u>		Occupancy / Loading Standards Up to (3) three staff at various locations	
Access Locked exterior, unrestricted interior man doors, secured garage door (1)		Security Building perimeter security as per existing bus garage		Flexibility Single purpose space	
Structure <u>Height</u> <u>18</u> <u>clr passage ft</u> <u>20</u> <u>clr u/s str ft</u> <u>Clear Span</u> <u>minimal interior post or pillars</u> <u>Floor Loading</u> <u>industrial</u> <u>psf</u> Spec. Req. Structure must provide unobstructed single central bus lane		Environment <u>Heating Temp.</u> <u>18c</u> <u>View Out Ext.</u> <u>Yes</u> <u>Humidity</u> <u>Std</u> <u>View Out Int.</u> <u>Yes</u> <u>View In</u> <u>Yes</u> Spec. Req: Garage environment must have fume and odor control as well as humidity and temperature control		Equipment (see specs. & existing garage for complete list of requirements). Doors to permit forklift access.	
Electrical Services <u>Power</u> <u>Yes</u> <u>TV</u> <u>No</u> <u>Comp</u> <u>Yes</u> <u>AV</u> <u>No</u> <u>Tel</u> <u>Yes</u> <u>PA</u> <u>Yes</u> <u>CCTV</u> <u>No</u> <u>Wireless</u> <u>Yes</u> Other for heavy draw equipment as specified. 3 welding plugs		Illumination <u>Ft. Candles</u> <u>workshop</u> <u>Daylight</u> <u>Yes</u> <u>- clerestory</u> <u>Flour.</u> <u>Yes</u> <u>Quartz</u> <u>No</u> <u>Incand.</u> <u>No</u> <u>Special</u> <u>No</u> Other Task lighting at counter space as well as general lighting that will provide lighting between busses w/o causing canyon shadows		Room Finishes Floor: sealed concrete Walls: bottom 4 feet to be of robust construction, capable of resisting and redirecting a low speed bus impact Ceiling: exposed	
Mechanical Services <u>Hot W.</u> <u>Yes</u> <u>Cold W.</u> <u>Yes</u> <u>Drain</u> <u>Floor Drain System</u> <u>c/w separator system</u> Exhaust <u>Diesel fume evacuation</u> <u>Air</u> <u>Std</u> Other Providing winter heat curtains and summer A/C. High mounted tailpipe exhaust system on rail (Neiderman), handwash sink Mechanical cooling not required. Free cooling may be considered, using fresh outside air or ground source cooling.		Mechanical Services (cont'd): Local fume extraction unit, 4 Hose Bibs 4 compressed air drops, drinking fountain, Emerg. Shwr/eye/face washer, <u>Bulks fluids, waste oil and fluids dispensing reel type system</u> Comments Space could be 20 feet wide to accommodate a sing row of busses with access on both sides. 6 compressed air drops @ 40' apart. Outdoor drive-in.			