



COPY

July 3, 2008

Sherry L. Compton
US Army RDecom ACQ, CTR. – W911SR
Edgewood Contracting Division
Att: AMSRD-ACC-E/Bldg E4455
E5179 Hoadley Road
Aberdeen Proving Ground, MD 21020-5401

RE: W911SR-06-2-0001 - National Testbed for Safety, Security, and Rescue Tech.

Dear Ms. Compton:

I am writing to notify you that Dr. Robin Murphy, the Principal Investigator for the referenced project is leaving the University of South Florida to assume a position at Texas A&M University. In order to continue with the test bed facility the University is requesting to change the Principal Investigator to Dr. Rajiv V. Dubey, a tenured Professor and Chair of the Department of Mechanical Engineering in the College of Engineering. He is also the Director of Center for Rehabilitation Engineering and Technology.

Dr. Dubey's research interest and experience include rehabilitation robotics and telemanipulation systems' haptic interfaces and assistive devices for persons with disabilities; rehabilitation engineering; robotic/telerobotic applications in healthcare, space and undersea, nuclear waste management; smart electro-mechanical systems and mechatronics; dynamic systems and controls; and prosthetics and orthotics.

Dr. Dubey has received over \$13 million dollars in research funding as a PI in the last 20 years from various agencies including, NSF, NASA, and the US Department of Energy, and the US Department of Education. Therefore, he is very aware of federal contracting, compliance rules and regulations.

Dr. Dubey is very excited to have the opportunity to oversee the completion of the testbed as well as making it a productive facility.

Please let me know if you have any questions or need any additional information. I will be out of the office next Monday through Wednesday. If you need any additional information from my office, please contact Diego Vazquez at 813-974-2051.

Sincerely,

A handwritten signature in cursive script that reads "Priscilla Pope".

Priscilla Pope
Associate Vice President for Research

cc: Dr. Rajiv, Professor & Chair
Dr. Tom Weller, Associate Dean for Research

DIVISION OF SPONSORED RESEARCH
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(813) 974-2897 • (813) 974-4962 • <http://www.research.usf.edu>

Title: Rehabilitation and Assistive Technologies to Enhance the Quality of Life of Individuals with Disabilities

University: University of South Florida (USF)

Appropriations Bill: Department of Defense (DoD)

Agency/Account: Department of Defense – Military Amputee Research Program (MARF) of the Army Medical Research and Medical Command (MRMC), Telemedicine and Advanced Technology Research Center (TATRC), and Defense Advanced Research Projects Agency (DARPA)

Amount Requested FY 2009: \$2M

Previous Appropriations: \$1M, 2006

Partners: College of Engineering, College of Medicine - School of Physical Therapy & Rehabilitation Sciences, and College of Visual and Performing Arts.

Narrative: We propose to develop rehabilitation technology for individuals with reduced functional capabilities due to disability or traumatic injury. USF is uniquely qualified to lead the development of this technology due to strong interdisciplinary partnerships between Engineering (Robotics & Rehabilitation Engineering), Medicine (Physical Therapy & Rehabilitation Sciences) and Visual & Performing Arts. We have developed a plan in which engineers and scientists come together with clinicians, rehabilitation practitioners and artists to provide a unique structure for applied research and product development necessary for the high quality of life advocated by this project.

Opportunity and Need: There are 1.3 million persons in the U.S. living with a major limb amputation or limb deficiency. With the war on terror, traumatic amputations have accounted for 2.4% of all the wounded in action in Iraq and Afghanistan. Overall 50 million Americans have a disability – half are coping with severe disability. USF's partnerships with industry, St. Petersburg College of Orthotics & Prosthetics, Walter Reed Army Medical Center, VA hospital, Shiners' Hospital and members of the disability community make it a unique and ideal location to bring this technology to fruition.

Mission: The mission of the proposed project is to improve the quality of life, and increase independence and community reintegration of all across their lifespan through research, development, incorporation and commercialization of advanced innovative assistive and rehabilitative technologies for individuals with reduced functional capabilities due to aging, disability or traumatic injury – especially our country's wounded warriors.

Benefits: The most current data compiled in 2003 by the U.S. Department of Commerce Bureau of Industry and Security, states that assistive technologies revenues in the U.S. totaled \$2.87 billion in 1999. This number is growing at a rate of 15-20% annually. The state of Florida, due to its large population of military veterans and civilian retirees, exceeds the national average for the percent of its population considered disabled, including those with amputations requiring prosthetic, orthotic, and/or robotic services. This project will have an economic impact as follows: 1) increased employment among people with disabilities, 2) development of a highly skilled, high wage workforce, 3) increase of new high technology businesses in the Tampa Bay area, 4) technology transfer to similar products being developed in related industries, e.g., the automotive industry, 5) access to cutting edge technology, science, education and training, 6) rehabilitation engineering technology services provided for fee, and 7) establish USF and Tampa Bay as leaders in rehabilitative & assistive technologies.

Tasks: Requested appropriations will focus on developing ground-breaking assistive and rehabilitative technologies in these categories: 1) Mobility & Manipulation, 2) Communication & Sensory Aides, 3) Community & Environmental Access, 4) Rehabilitative Therapies, 5) Adapted Recreation, and 6) Societal Policy & Funding.

Sustained Support: The appropriation is expected to lead to self-sustaining funding after three years. The initial research and new infrastructure will facilitate sustainable competitive support from various government agencies such as DoD, DHS, DoE, NIDRR, NSF, NIH, NASA, and the private sector. The investigators have a strong track record in research and have received over \$12.5 million dollars as PIs in external competitive funding. Within five years, commercialization of new technologies will be an additional source of revenue for sustained support.

Contacts:

John Wiencek, Dean, College of Engineering; 813/ 974-3787; jwiencek@eng.usf.edu

Stephen K. Klasko, Dean, College of Medicine and VP Health Sciences; 813/974-0533; sklasko@health.usf.edu

Ronald L. Jones, Dean, College of Visual and Performing Arts; 813/974-2301; ronjones@arts.usf.edu

Rajiv Dubey, Chair, Department of Mechanical Engineering; 813/974-5619; dubey@eng.usf.edu

William S. Quillen, Director, School of Physical Therapy & Rehabilitation Sciences; 813/974-9863; wquillen@health.usf.edu

Budget Justification for "Rehabilitation and Assistive Technologies to Enhance the Quality of Life of Individuals with Disabilities"

The budget reflects the staffing and equipment needs to operate the proposed project in terms of research, training, and product development. The research, prototyping and testing equipment will assist in the successful realization of the project goals. The collaborators, College of Engineering (CoE), College of Medicine-School of Physical Therapy & Rehabilitation Sciences (SPT&RS), and College of Visual & Performing Arts (CVPA), have made significant commitments to this research through space, equipment and staff contributions. The requested direct costs include partial summer salary and benefits for the key personnel, post doctoral fellows, student support costs, equipment and supplies, travel and publication costs (see table below).

Senior and Other Personnel Salaries and Fringe Benefits:

The proposal will cover four post-doctoral fellows, sixteen graduate students (eight PhD level and eight MS level), and eight undergraduate students (12 months), distributed over three colleges. Also included are partial summer salaries for the senior personnel for the three colleges. Employee fringe benefits have been included along with the salary requests.

Equipment:

A total of \$142,500 for equipment is requested. This includes funds for prototyping and testing equipment necessary for the development of the assistive technologies. Funds for robotic and prosthetic hardware for analyzing new design concepts are included. Also included are resources for computers, fabrication materials, electronic and mechanical hardware, tools and software to build the devices. This equipment is necessary for the design and fabrication of the novel technologies.

Travel:

Budget is requested to support travel costs for personnel from the three colleges to attend professional conferences to present research results, and to meet with the grantor on a regular basis. Travel costs are estimated at \$750-\$1500 (including registration fees) per person per trip.

Other Direct Costs:

Resources are requested for CoE, SPT&RS, and CVPA for research related materials and supplies, and publication, documentation and dissemination costs. Tuition costs for the graduate students are requested in accordance with University of South Florida policy. Additionally, funds are asked for token human subject payments.















Facilities and Administrative Costs:

These costs are calculated at the university's approved on-campus research rate of 47% on a modified total direct cost base.

Personnel:	Senior Personnel	\$188,889
	Post Doctoral Fellow ⁴ (4 FTE)	\$220,000
	Graduate Students (14 FTE)	\$416,000
	Undergraduate Student (4 FTE)	\$40,000
	Technical Assistant (2 FTE)	\$120,000
	Administrative Assistant (1.5 FTE)	\$74,000
	Fringe Benefits	\$90,988
	Subtotal	\$1,149,876
Equipment:	CoE, SPT&RS, and CVPA	\$142,500
Travel:	Domestic	\$33,000
Other Direct Costs:	Materials, Supplies, and Publication	\$19,941
	Student Tuition	\$52,608
	Human Subject Testing	\$25,000
	Subtotal Other Direct Costs	\$97,549
Indirect Costs:	Rate - 47%	\$577,075
	Total	\$2,000,000

**Element 3:
Urban Design**

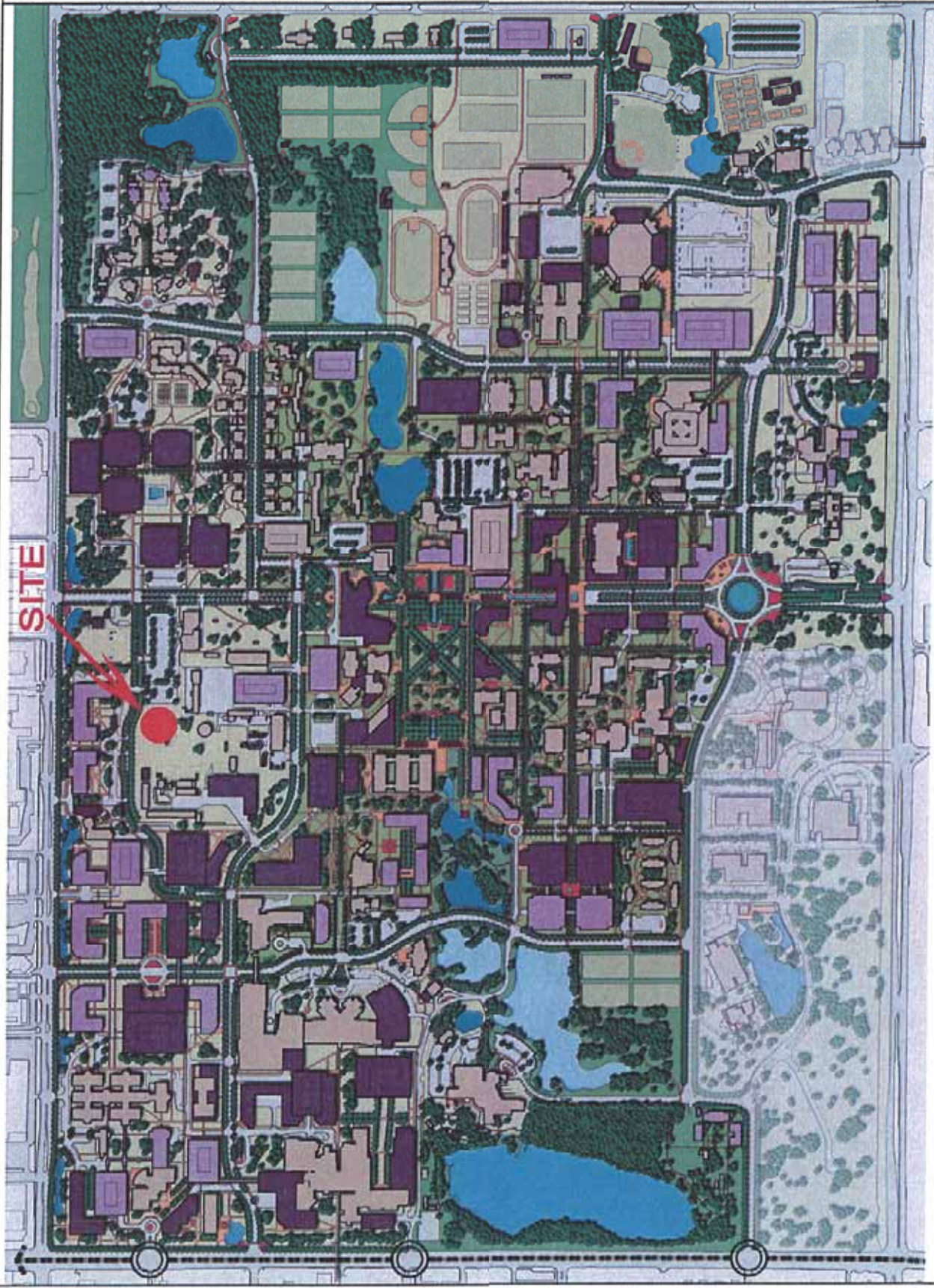
**Figure 3-3
Long-Range
Comprehensive Campus
Master Plan Illustrative**

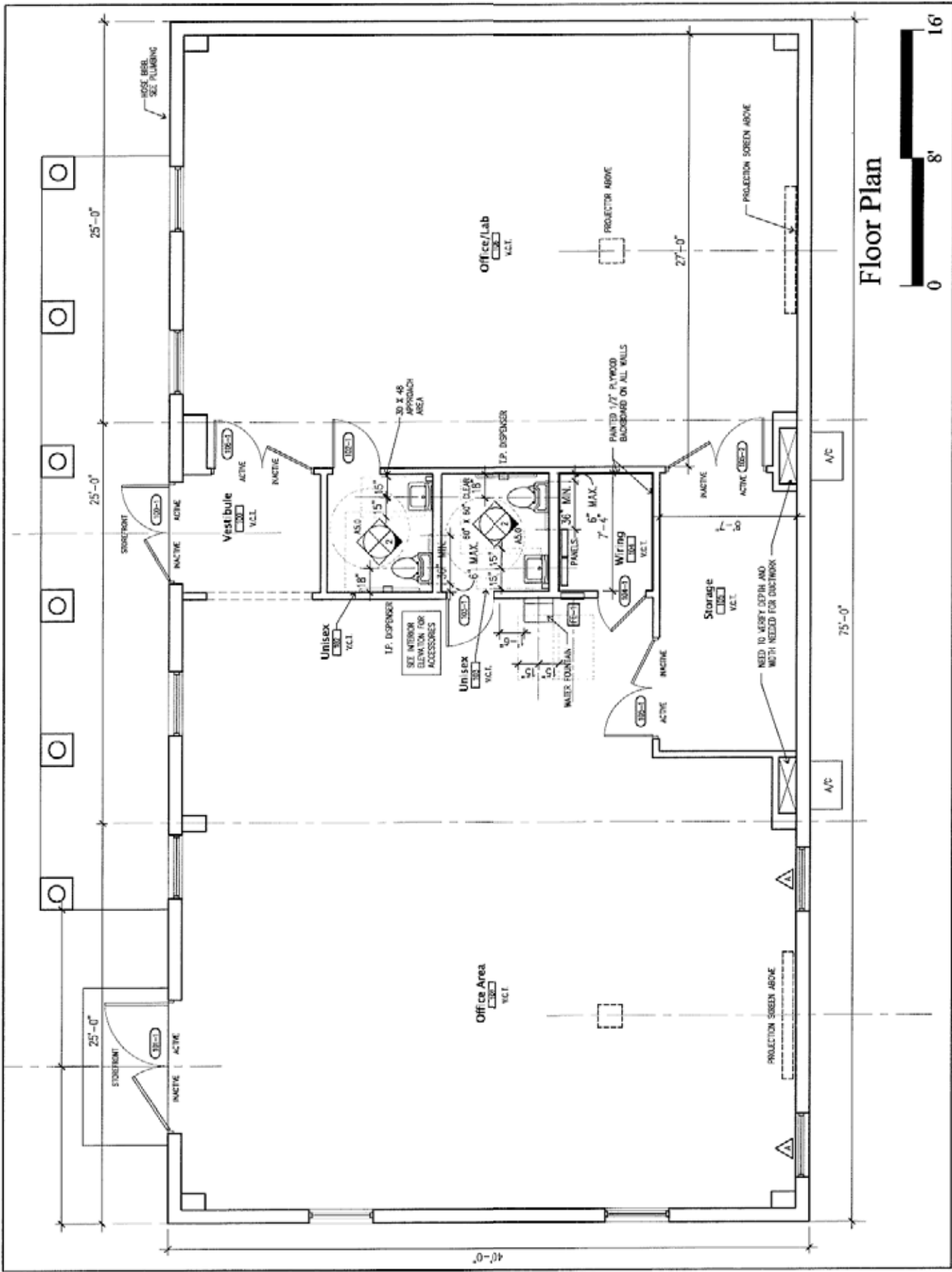
-  Existing Buildings
-  10-Year Proposed Buildings
-  Long-Range Proposed Buildings
-  Pedestrian Circulation
-  Signature Open Space
-  Informal Recreation
-  Signature Landscape Feature
-  Existing Stormwater Facilities
-  10-year Stormwater Facilities
-  10-year Alternate Stormwater Facility
-  Long-Range Stormwater Facilities
-  Water Feature
-  Proposed Light Rail Alignment (Long-Range, Tampa Rail Project)
-  Proposed Light Rail Station (Long-Range, Tampa Rail Project)

**2005 CAMPUS
MASTER PLAN
UPDATE**

**University of
South Florida
Tampa**

Amended February 2007





Floor Plan



25'-0"

25'-0"

25'-0"

40'-0"

27'-0"

75'-0"

HOSE REEL
SEE PLUMBING

STREETFRONT

STREETFRONT

Office/Lab
V.C.L.

Office Area
V.C.L.

Vestibule
ACTIVE
V.C.L.

Unisex
V.C.L.

Unisex
V.C.L.

Writing
V.C.L.

Storage
V.C.L.

Projection Screen Above

Projection Screen Above

Projector Above

30 x 48 APPROACH AREA

TP. DISPENSER

PAINTED 1/2" PLYWOOD BOARD ON ALL WALLS

SEE INTERIOR ELEVATION FOR ACCESSORIES

6" MAX. 80" x 80" CLEAR

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