COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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ALHAMBRA, CALIFORNIA 91803-1331
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P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: PD-5

January 27, 2005

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

FEDERAL TRANSIT ADMINISTRATION
ACCEPTANCE OF CONGESTION MITIGATION AIR QUALITY FUNDS THROUGH THE LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY FOR METRO RAPID BUS STOP SHELTERS
SUPERVISORIAL DISTRICTS 1, 2, 3, AND 4
3 VOTES

IT IS RECOMMENDED THAT YOUR BOARD:

1. Find that the installation of Metro Rapid Bus Stop Shelters is exempt from the provisions of the California Environmental Quality Act.

2. Accept $2,260,200 of Federal Congestion Mitigation Air Quality Improvement Program grant funding from the Los Angeles County Metropolitan Transportation Authority to design, engineer, fabricate, and install Metro Rapid Bus Stop Shelters at proposed bus stop locations within unincorporated County areas, and authorize the Acting Director of Pubic Works, or his designee, to expend $67,500 to purchase and install electrical meters at each bus stop shelter.

3. Authorize the Acting Director of Public Works, or his designee, to execute a cooperative agreement substantially similar to the enclosed agreement and to act as an agent for the County of Los Angeles when conducting business with the Los Angeles County Metropolitan Transportation Authority or other local jurisdictions regarding any and all matters related to this cooperative agreement, the Metro Rapid Bus Stop Shelter

Program, and associated agreements with local jurisdictions including signing associated agreements, amendments, and requests for reimbursement.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The Los Angeles County Metropolitan Transportation Authority (MTA) has notified Public Works that it will provide $2,260,200 under the Federal Congestion Mitigation Air Quality Improvement Program to design, engineer, fabricate, and install 45 Metro Rapid Bus Shelters in unincorporated County areas. The proposed shelters will be designed to use state-of-the-art technology to provide public transportation users with real-time readouts of oncoming Metro Rapid buses. Additionally, the shelters will provide protection from inclement weather and a large, easy-to-rea d map of the Metro Rapid Bus Corridor System.

The installation of these Metro Rapid Bus Stop Shelters will take place in two phases. The first phase of this project will include the installation of 11 Metro Rapid Bus Stop Shelters in the First Supervisorial District and 9 Metro Rapid Bus Stop shelters in the Second Supervisorial District.

The second phase of this project will include the installation of up to an additional 25 shelters at Metro Rapid Bus Stops within unincorporated County areas as additional Metro Rapid Bus routes are implemented within the First, Second, Third, and Fourth Supervisorial Districts. As a condition of the grant, the MTA has also required that we allow other local jurisdictions the opportunity to piggyback on our construction contracts to achieve better economies of scale. Amendments to the cooperative agreement will be required between the County and the MTA and new agreements with the local jurisdiction(s) to document the roles, responsibilities, and obligations in such a piggyback scenario.

The cooperative agreement requires that upon installation of the Metro Rapid Bus Stop Shelters, the County will be responsible for maintaining the shelters in a continual "like new" condition for ten years. The maintenance activities will include performing regular maintenance, such as cleaning the shelter, graffiti removal, weed abatement, and trash collection two times per week, and pressure washing the shelter and sidewalk area every six weeks. In addition, the County must respond to hazardous situations within two hours, to complaints within one day, and to additional requests for pressure washing of the shelter and sidewalk area around the shelter within one week. Public Works will provide an annual report to the MTA documenting maintenance activities. The County will also be required to stock five percent of the related parts, materials, and inventory as required for station replacement or repair relative to the number of shelters installed.

The Metro Rapid Bus Stop Shelters will include one panel for displaying advertising materials and one panel for displaying the Metro Rapid Corridor System map. In accordance with our License Agreement with Clear Channel Outdoor, Agreement No. 63885, we will assign the advertising rights to these shelters to Clear Channel Outdoor in exchange for them taking on the maintenance responsibilities and utility costs.

The MTA will be responsible for the maintenance of the variable message signs and any structural damage to the shelters.

Implementation of Strategic Plan Goals

This action is consistent with the County's Strategic Plan Goals of Service Excellence and Fiscal Responsibility by improving public transit services in unincorporated County areas and actively seeking external funding sources.

FISCAL IMPACT/FINANCING

There will be no impact to the County's General Fund. The total project cost is estimated to be $2,327,700 (to be adjusted for inflation) pending final bid prices. The Transit Enterprise Fund includes $1,000,000 for this project in its Fiscal Year 2004-05 budget for the first phase and $1,327,700 in the proposed Fiscal Year 2005-06 budget for the second phase.

The $2,260,200 Federal Congestion Mitigation Air Quality Improvement Program grant from the MTA will fully reimburse the Transit Enterprise Fund for costs incurred to design, engineer, fabricate, and install the shelters. The remaining $67,500 is the cost of procuring and installing electrical meters at each shelter. This cost will be funded by Proposition A Local Return Transit funds available in the Transit Enterprise Fund.

It is anticipated that there will be no costs to the County for the utilities and ongoing maintenance as the County will be delegating its responsibility for these items to our current advertising bus stop shelter company, which will use the advertising revenues generated from selling advertisement space in the bus stop shelters for these activities.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

On July 11, 2000, your Board approved guidelines to be followed when accepting grants of $100,000 or more. These guidelines include a requirement that County departments prepare a Grant Management Statement for your review prior to carrying out the activities covered under this grant. Accordingly, the Grant Management Statement for this grant is enclosed for your review.

ENVIRONMENTAL DOCUMENTATION

The California Environmental Quality Act requires public agency decision makers to document and consider the environmental implications of their action. The scope of work for this project includes the installation of 45 bus shelters at existing and proposed Metro Rapid Bus Stops throughout unincorporated County areas. The project qualifies for a categorical exemption pursuant to Section 15301(c) of the California Environmental Quality Act.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

The grant will enable Public Works to improve public transportation services in unincorporated County areas.

CONCLUSION

Please return three approved copies of this letter to Public Works.

Respectfully submitted,

DONALD L. WOLFE
Acting Director of Public Works

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Enc. 2

cc: Chief Administrative Office
County Counsel
Los Angeles County Metropolitan Transportation Authority

Los Angeles County Chief Administrative Office

Grant Management Statement for Grants $100,000 or More

Department: Public Works

Grant Project Title and Description

Metro Rapid Bus Stop Shelter Installation Project: Install 45 Metro Rapid Bus Stop Shelters throughout unincorporated County areas.

Funding Agency	**Program (Fed. Grant #/State Bill or Code #)**	**Grant Acceptance Deadline**
Federal Transit Administration	Federal Congestion Mitigation Air Quality Improvement Program	February 14, 2005

Total Amount of Grant Funding: $2,260,200	**County Match:** $67,500 (hard costs)	
Grant Period: 60 Months	**Begin Date:** Upon Acceptance of Grant	**End Date**: February 2015
Number of Personnel Hired Under This Grant: 0	**Full Time:** N/A	**Part Time:** N/A

Obligations Imposed on the County When the Grant Expires

Will all personnel hired for this program be informed this is a grant-funded program?	Yes___	No N/A
Will all personnel hired for this program be placed on temporary ("N") items?	Yes___	No N/A
Is the County obligated to continue this program after the grant expires?	Yes X*	No ___
If the County is not obligated to continue this program after the grant expires, the Department will:		
a.) Absorb the program cost without reducing other services	Yes___	No N/A
b.) Identify other revenue sources (describe below)	Yes___	No N/A
c.) Eliminate or reduce, as appropriate, positions/program costs funded by the grant.	Yes___	No N/A

Impact of additional personnel on existing space:

N/A

Other requirements not mentioned above:

* As a condition of grant acceptance, we are required to maintain the shelters for a 10 year term after installation is complete.

Department Head Signature_____ Date_____

COOPERATIVE AGREEMENT

by and between

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

and

COUNTY OF LOS ANGELES

This Cooperative Agreement (the "Agreement") is made and entered into as of _____, 2005 by and between the Los Angeles County Metropolitan Transportation Authority ("MTA") and the County of Los Angeles (the "County").

RECITALS:

A. On September 18, 2002, the MTA Board approved the Metro Rapid Five-Year Implementation Plan ("Five-Year Plan"). The Metro Rapid Stations ("Bus Shelters") are an integral part of the Five-Year Plan (Attachment 1)

B. The County desires to cooperate with the MTA to implement MTA's Five-Year Plan by facilitating the engineering, design/review, fabrication, construction, and installation of the 45 Bus Shelters within unincorporated County areas (the "Project").

C. The MTA will submit the preliminary engineering plans (Attachment 2) to the Director of the County of Los Angeles Department of Public Works, or his designee (the "Director") for review and approval.

D. The County is willing to incorporate the Director-approved Bus Shelter plans needed for MTA's Five-Year Plan into its Bus Shelter construction contracts subject to the terms and conditions herein.

E. The County will administer a minimum of two separate bid packages, the first two of which will begin to be administered in FY 05 and FY 06, to achieve cost efficiencies. The shelters included in the bid packages will follow the priority established by the Five-Year Plan and Implementation Schedule (Attachment 3) for the fabrication, construction, installation and maintenance of the Bus Shelters in the unincorporated areas of the County of Los Angeles.

F. Pending final bid price from the County, MTA is willing to reimburse the County up to Two million, two hundred sixty thousand and two hundred dollars and NO/100 ($2,260,200.00) ("Funds") for the Project needed for the MTA's Five-Year Plan, subject to the terms and conditions herein and MTA's acceptance of such bid price.

NOW, THEREFORE, the parties hereby agree as follows:

AGREEMENT:

1. Scope of Work.

   a. The County shall be responsible for reviewing, approving and accepting MTA's preliminary engineering plans and the fabrication, construction, installation, maintenance and repair of up to 45 Bus Shelters needed for MTA's Five-Year Plan in the unincorporated areas of the County of Los Angeles, as specified in the Implementation Schedule and Site Locations/Corridor maps (Attachment 4 and 4-A). The County is responsible for all negotiations pertaining to the fabrication and installation of the Bus Shelters. Bus Shelter construction (including canopy size) will be coordinated between the MTA and County to ensure compliance with MTA and County standards, MTA bus shelter design criteria, and ADA requirements. These plans will be submitted to the County's contractor according to priority established by MTA's Five-Year Implementation Schedule. One copy of each site location plan and one copy of the Bus Shelter engineering drawings will be provided to the MTA.

   b. The County will provide a final cost proposal and performance schedule to the MTA for negotiation and approval. The Project costs must be consistent with the scope of work and meet the design specifications required for fabrication and installation as described and specified in the Bus Shelter Design and Engineering Plans and Station Cost Estimate (Attachments 5).

   c. All Bus Shelters installed (including utility hookups) for use in the unincorporated areas of the County of Los Angeles are the property of the County of Los Angeles. The County will store or cause to be stored 5% of the station related parts and materials and inventory as required for station replacement or repair relative to the number of stations built. MTA, in coordination with the County, will establish and specify station layouts prior to the implementation date.

   d. The County shall be solely responsible for the on-going utility costs, maintenance and repair of the Bus Shelters, excluding changeable message signs, installed within the unincorporated areas of the County of Los Angeles. The County, either with its own forces or through its contractor, shall make routine maintenance calls on each Bus Shelter installed within the County's jurisdiction at a minimum of two times per week. In addition, the County shall respond within two hours to a hazardous situation (demolished station), complaint of lack of routine maintenance within one day, and request for pressure washing within one week. The Director, or his designee, shall make

from MTA Stops and Zones Department. At each maintenance call, the County, either with its own forces or through its contractor, shall clean, and wash each Bus Shelter and remove all graffiti, stickers, posters, litter, dust, dirt, and weeds; and service litter baskets within the entire bus station area. The County, either with its own forces or through its contractors, shall power wash each Bus Shelter canopy, top and bottom and sidewalks every six weeks. The County shall maintain the Bus Shelters in a continual "like new" condition for 10 years. After 10 years, the Bus Shelters condition shall be evaluated and each party's obligations to the Bus Shelters will be negotiable between the County and the MTA. This paragraph applies to all elements of the Bus Shelters installed within the unincorporated areas of the County of Los Angeles, including without limitation, the steel poles, canopy, advertising kiosk, flagpole, lean bars/seats, litter baskets, changeable message signs, light fixtures, and street I.D. stickers. Any advertising revenues generated by Bus Shelters shall belong to the County. A yearly report will be provided to MTA to document the maintenance activities. This provision shall survive termination of this Agreement.

e. MTA will be responsible to pay for the relocation costs of the local transit shelters that are part of the Metro Rapid Corridor program as requested by MTA staff, in coordination with the County Department of Public Works, to accommodate the transit priority system. The MTA will be solely responsible for the on-going costs associated with the maintenance, repair, and replacement of all changeable message signs. MTA shall have no obligation to pay for utility costs, including without limitations, electrical, and ongoing maintenance or ongoing repair costs of any Bus Shelter installed.

f. In the event that a Bus Shelter receives structural damage, MTA will pay for those capital costs associated with the structural integrity of the canopy, supporting steel poles, struts, ad kiosk, changeable message sign, lean bars/seats, and flagpole. County will provide MTA with a copy of any traffic accident reports prepared by the California Highway Patrol, Los Angeles County Sheriff's Department, or any other law enforcement agency related to incidents causing structural damage to a Bus Shelter. When these reports provide information on a responsible party for the damage incurred, County and MTA will coordinate their efforts to collect reimbursement for all response and repair costs incurred by County and MTA from the responsible party or his/her insurance provider.

g. During construction of Bus Shelters, the County shall furnish an inspector or other representative to perform the functions of an inspector. MTA may also furnish, at no cost to County, an inspector or other representative to inspect construction of Bus Shelters. Said inspectors shall cooperate and consult each other, but the orders of the County inspector to the contractor or any other person in charge of construction shall prevail and be final.

h. The MTA and the County desire that local jurisdictions have the opportunity to piggyback on the County's procurement process to achieve economy of scales that will benefit and facilitate the Metro Rapid Five-Year Implementation Plan. A separate agreement will be entered into between the County and the local jurisdiction(s) to document the party's roles and obligations in such a piggyback agreement.

2. Project Funding

a. The funding agency for the work to be performed under this Agreement is the Federal Transit Administration (FTA).

b. Two million, two hundred sixty thousand and two hundred dollars and NO/100 ($2,260,200.00) shall be used to pay for the work to be performed under this Agreement. For the first bid package, County agrees to present for MTA review and approval the final negotiated bid price for the fabrication, construction, and installation of twenty (20) Bus Shelters in unincorporated areas in the County pursuant to the Implementation Schedule and Station Cost Estimate. Upon review of the first bid price, MTA shall notify County whether it desires to continue and if so, the amount of funding available for the first bid package. In fiscal year 2006, MTA will notify the County regarding the balance of Funds available for the second bid package for the fabrication, construction, and installation of the remaining twenty-five (25) Bus Shelters. The County is not authorized to exceed such amount allocated by MTA for the first bid package and the second bid package without prior written approval by the MTA.

c. MTA and County acknowledge and agree that, notwithstanding any concurrences by the Federal Government in or approval of the solicitation or award of underlying contracts, absent the express written consent by the Federal Government, the Federal Government is not a party to this contact and shall not be subject to any obligations or liabilities to the parties, contractors, or any other party pertaining to any matter resulting from the underlying contracts.

d. County agrees to include the above clause 2c in each subcontract financed in whole or in part with Federal assistance provided by the FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

e. County desires that each shelter be connected to a power supply source that is separate from the existing street lighting system, the Highway Traffic Safety lighting system, and traffic signal electrical systems. Accordingly, County shall purchase electric meters from local power supply companies for installation at each shelter. The cost per meter is currently estimated to be One Thousand Five Hundred Dollars and NO/100 ($1,500.00). The

utility connection fee, the trenching, and the conduit will be paid by the MTA using the funds provided under this Agreement.

f. It is anticipated that federal funds and County Proposition A Local Return Transit funds will be used to fund the work to be performed under this Agreement. If the actual funding source changes at any time during the term of this Agreement, MTA will notify County of the new funding source(s) and the parties will amend this Agreement to reflect the new funding source(s), including any regulatory obligations that may be associated with the new funds.

3. Payment

a. The MTA shall reimburse the County an amount not to exceed Two million, two hundred sixty thousand and two hundred dollars and NO/100 ($2,260,200.00) for the Project in the unincorporated areas of the County of Los Angeles, as detailed in Attachments 4 and 4 A. The estimated unit price cost of each type of Bus Shelter is in Attachment 5.

b. Any change to the Scope of Work and/or cost must have the express prior written consent of the MTA. If County acts without MTA's written authorization, County shall be responsible for such unauthorized work.

c. County shall use the Funds received under this Agreement exclusively for the Scope of Work described in Section 1 above.

d. County shall submit monthly invoices to the MTA for all work performed under this Agreement with supporting documentation in a form acceptable to the MTA.

e. MTA shall review invoices and their supporting documentation for adequacy, accuracy, and completeness. Within ten (10) working days of receipt of an invoice, MTA shall either approve the invoice for payment or reject the invoice. If an invoice is rejected, it shall be returned to the County and County shall be informed of the reason for the invoice's rejection.

f. MTA shall pay County any approved invoices within 30 working days from the date MTA receives the invoice.

g. COUNTY, at any time, may, at its sole discretion, designate an alternative payment mailing address, if applicable. MTA shall be notified of such changes as provided in paragraph 9 k.

4. Term

The term of this Agreement shall commence on the date of execution and shall remain in effect until all work to be performed under this Agreement has been completed according to the scope of work but in no event shall the term extend beyond December 30, 2008, unless agreed to in writing by the parties or terminated earlier as provided for herein, except for shelter maintenance which includes the ongoing maintenance of the changeable message sign and repair obligations of those Bus Shelters, which shall remain in effect for the 10 year term.

5. Indemnification

a. Pursuant to the provision of Section 895.4 of the California Government Code, the County of Los Angeles agrees to indemnify, defend and hold the MTA and its officers, employees and agents harmless from all liability for damage, actual or alleged, to person or property arising out of or resulting from the County of Los Angeles' and /or its contractors and agents' acts or omissions in the performance of this Agreement. The provision shall survive termination of this Agreement.

b. Pursuant to the provision of Section 895.4 of the California Government Code, the MTA agrees to indemnify, defend and hold the County of Los Angeles and its officers, employees, agents, and special Districts harmless from all liability for damage, actual or alleged, to person or property to the extent arising out of or resulting from the MTA's and its agents' acts or omissions in the performance of this Agreement. This provision shall survive termination of this Agreement.

c. The County of Los Angeles will include in any agreements with its contractors or subcontractors an indemnity clause which will defend and hold the MTA and its officers, employees and agents harmless from all liability for damage, actual or alleged, to person or property arising out of or resulting from their contractor and its subcontractor's acts or omissions in the performance of this Agreement with respect to the Project.

d. In the event of third-party loss caused by negligence, wrongful act or omission of parties, each party shall bear financial responsibility in proportion to its percentage of fault as may be judicially determined. The provisions of California Civil Code Section 2778 regarding interpretation of indemnity agreements are hereby incorporated by reference.

6. Records/Audit.

a. County's expenditures pertaining to this Agreement shall be supported by properly executed documents evidencing in detail the nature of the charges. At such times and in such forms as either party may require, there shall be furnished to such party such statements, records, reports, data and information as the other party may request pertaining to matters covered by this Agreement. These records shall be made available to either party for copying, audit and inspection at any time during normal business hours.

b. All County records with regard to this Agreement shall be available for inspection and audit by MTA and its designee. County shall maintain records in their original form for a period of three years from the completion of the work performed under this Agreement.

c. County agrees to establish and maintain proper accounting procedures and cash management records and documents in accordance with Generally Accepted Accounting Principles (GAAP). The County shall reimburse MTA for any expenditure not in compliance with the Scope of Work and/or not in compliance with other terms and conditions as defined by this Agreement. County understands MTA intends to use federal dollars to fund its payment obligations hereunder and shall ensure the expenditure of the Funds is in compliance with federal guidelines. MTA shall consider the Federal Acquisition Regulations (FAR) in determining the reasonableness of costs incurred.

d. County shall cause its contractors and subcontractors to comply with the audit requirements contained herein. County shall cause its contractors and subcontractors to cooperate fully in furnishing or in making available to the MTA the records deemed necessary by the MTA auditors or authorized representatives to audit this Agreement.

e. In accordance with FTA regulations, the following access to records requirements apply to this Agreement:

1) he parties agree to provide the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the bidder which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Parties also agree to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to bidder's records and construction sites pertaining to a major capital project, as defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described in 49 U.S.C. 5307, 5309 or 5311.

2) Where any Purchaser which is the FTA Recipient or a subgrantee of the FTA Recipient enters into a contract for a capital project or improvement, as defined at 49 U.S.C. 5302(a)(1), through other than competitive bidding, the Contractor shall make available records related to the contract to the Purchaser, the Secretary of Transportation and the Comptroller General or any authorized officer or employee of any of them for the purposes of conducting an audit and inspection.

3) The parties agree to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

4) The parties agree to maintain all books, records, accounts and reports required under this contract for a period of not less than three (3) years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case parties agree to maintain same until the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto.

5) The inclusion of these requirements in subcontracts is required.

7. Disputes

a. Disputes arising in the performance of this contract, which are not resolved by agreement of the parties, shall be decided in writing by the MTA's Director of Regional Transit Planning. This decision shall be final and conclusive unless within ten (10) days from the date of receipt of its copy, County mails or otherwise furnishes a written appeal to the MTA's Chief Executive Officer (CEO). In connection with any such appeal, County shall be afforded an opportunity to be heard and to offer any evidence in support of its position. The decision of the MTA CEO shall be binding upon the County and the County shall abide by the decision.

b. Unless otherwise directed by the MTA, County shall continue to perform under this contract while matters in dispute are being resolved.

8. Termination

a. Either the MTA or County may terminate its obligations hereunder at any time, without cause, prior to initiating the Project, by providing not less than ten (10) calendar days advanced written notice of such intent to terminate to the other Party.

b. If this Agreement is terminated pursuant to Subsection (a) above, County shall

be paid its reasonable costs, including contract closeout costs, and on work performed up to the time of termination. County shall promptly submit its termination claim to MTA. If County has any property in its possession belonging to MTA, the County will account for the same and dispose of it in the manner MTA directs.

c. If the County does not deliver supplies or services in accordance with the Agreement delivery schedule, or if County fails to perform in the manner called for in the Agreement, or if the County fails to comply with any other provisions of the Agreement, MTA may terminate this Agreement for default. Termination shall be effected by serving a notice of termination on County, setting forth the manner in which County is in default. County will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.

   If it is later determined by MTA that the County had an excusable reason for not performing, such as a strike, fire, or flood, events which are not the fault of or are beyond the control of County, MTA, after setting up a new delivery of performance schedule, may allow the County to continue work, or treat the termination as a termination for convenience.

d. The MTA in its sole discretion may, in the case of a termination for breach or default, allow the County thirty (30) calendar days in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions. If County fails to remedy to MTA's satisfaction the breach or default or any of the terms, covenants, or conditions of this Agreement within thirty (30) calendar days after receipt by County of written notice from MTA setting forth the nature of said breach or default, MTA shall have the right to terminate this Agreement without any further obligation to County. Any such termination for default shall not in any way operate to preclude MTA from also pursuing all available rights and remedies under law or in equity against County for said breach or default.

e. In the event that MTA elects to waive its remedies for any breach by County of any covenant, term or condition of this Agreement, such waiver by MTA shall not limit MTA's remedies for any succeeding breach of that or of any other term, covenant, or condition of this Agreement.

f. Nothing herein shall be construed as relieving the County of its continuing ownership or maintenance obligations as contained with Section 1 above for any Bus Shelters installed prior to the termination of this Agreement.

9. Miscellaneous

a. This Agreement constitutes the entire agreement between the County and the MTA with respect to the work to be performed and all changes must be made in writing through mutual agreement prior to taking effect. Amendments must be in writing and properly executed by County and MTA. Such amendments may be executed by the Chief Executive Officer or his designee on behalf of MTA and the Director of County's Department of Public Works or his designee on behalf of County.

b. All parties to this Agreement shall comply with applicable Local, State and Federal laws and regulations with respect to contracts entered into in the implementation of the Scope of Work described in this Agreement.

c. County warrants and certifies that in the performance of this Agreement, it shall comply with all applicable statutes, rules, regulations and orders of the United States, the State of California, and the County of Los Angeles. County further warrants and certifies that it shall comply with new, amended or revised laws, regulations and/or procedures that apply to its performance under this Agreement. County further warrants and certifies that it shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in this Agreement as the same may be amended or promulgated from time to time during the term of this Agreement County's failure to so comply shall constitute a material breach of this contract.

d. The County and MTA shall comply with all relevant Local, State and Federal rules and regulations with respect to conflicts of interest.

e. Each party to this Agreement warrants that it has not paid or given or will not pay or give to any third person any money or other consideration for obtaining this Agreement.

f. Waivers of the provisions of this Agreement must be in writing and signed by the appropriate authorities of each party to this Agreement.

g. No waiver by any party or a breach of any provision of these conditions shall be deemed for any purpose to be a waiver or a breach of any other provision hereof or of a continuing or subsequent breach of the same provision.

h. Should any covenant, condition or provision herein contained be held to be invalid by final judgment in any court of competent jurisdiction, the invalidity of such covenant, condition or provision shall not in any way affect any other covenant, condition or provision herein contained.

i. This Agreement shall be governed by and construed in accordance with the laws of the State of California.

j. Time is of the essence.

k. The representatives of the County and the MTA who are authorized to administer this Agreement and to whom formal notices, demands and communication shall be given are as follows:

County of Los Angeles
Department of Public Works
900 So. Fremont Avenue, 11th Floor
Alhambra, CA 91803
Attn: Scott Schales, Assistant Division Engineer

Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
MS: 99-23-01
Los Angeles, CA 90012
Attn: Rex Gephart, Director of Regional Transit Planning

Monthly Reports and notices to MTA shall be mailed to:

Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012
Attention: Desiree Portillo Rabinov, Transportation Planning Manager
MS: 99-23-1

Invoices to MTA shall be addressed to:

Los Angeles County Metropolitan Transportation Authority
Accounts Payable
P.O. Box 512296
Los Angeles, CA 90051-0296
With a copy to: Desiree Portillo Rabinov, Transportation Planning Manager

l. The relationship of the parties under this Agreement is and at all time shall remain solely that of an independent contractor to each other. The parties do not undertake nor assume any responsibility or duty except as expressly provided for herein. Except as specifically provided in writing, none of the parties shall have any authority neither to act as an agent for the other nor to bind the other to any obligation.

10. FTA Requirements

a. Incorporation of Federal Transit Administration (FTA) Terms – The preceding provisions include, in part, certain Standard Terms and Conditions required by the United States Department of Transportation (USDOT), whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by USDOT, as set forth in FTA Circular 4220.1E, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. County shall not perform any act, fail to perform any act, or refuse to comply with any MTA requests which would cause MTA to be in violation of the FTA terms and conditions.

b. County acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, and USDOT regulations, "Program Fraud Civil Remedies," apply to its actions pertaining to this Agreement. Upon execution of this Agreement and underlying contracts, County certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contracts or the FTA assisted project for which the work under this Agreement is being performed. In addition to other penalties that may be applicable, County further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the County to the extent the Federal Government deems appropriate.

   County also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under authority of 49 U.S.C. 5307, the Government reserves the right to impose the penalties of 18 U.S.C. 1001 and 49 U.S.C. 5307(n)(1) on the County, to the extent the Federal Government deems appropriate.

   County agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified except to identify the subcontractor who will be subject to the provisions.

c. In accordance with Title VI of the Civil Rights Act, as amended, Section 303 of the Age Discrimination Act of 1975, as amended, Section 202 of the Americans with Disabilities Act of 1990, and Federal transit law, the County agrees that it will not discriminate against any employee or applicant for employment

because of race, color, creed, national origin, sex, age or disability. In addition, the County agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

The following equal employment opportunity requirements apply to this Agreement and all underlying contracts:

(1) Race, Color, Creed, National Origin, Sex – In accordance with Title VII of the Civil Rights Act, as amended, and Federal transit laws, the County agrees to comply with all applicable equal employment opportunity requirements of the U.S. Department of Labor (USDOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 CFR Parts 60 et seq., (which implement Executive Order No. 11246 relating to Equal Employment Opportunity as amended by Executive Order 11375), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. County agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the County agrees to comply with any implementing requirements FTA may issue.

(2) Age – In accordance with Section 4 of the Age Discrimination in Employment Act of 1967, as amended, and Federal transit law, County agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the County agrees to comply with any implementing requirements FTA may issue.

(3) Disabilities – In accordance with Section 102 of the Americans with Disabilities Act, as amended, the County agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," pertaining to employment of persons with disabilities. In addition, County agrees to comply with any implementing requirements FTA may issue.

County also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

d. County acknowledges that requirements for disadvantaged business enterprises (DBE) shall apply for all underlying contracts to this Agreement.

e. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form – LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, et seq.)]

The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

f. County agrees to comply with 49 U.S.C. 5323(j) and 49 CFR Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver.

County must submit to MTA the appropriate Buy America certification with all invoices on FTA-funded contracts, except those subject to a general waiver. Invoices that are not accompanied by a completed Buy America certification will be rejected.

g. County agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. County agrees to report each violation to MTA and understands and agrees that MTA will, in turn, report each violation as required to assure notification

to FTA and the appropriate EPA Regional Office. County also agrees to include these requirements in each underlying contract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

h. The County agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended, 42 U.S.C. 6962, including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

i. County agrees to comply with all mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

j. County agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. County agrees to report each violation to MTA and understands and agrees that MTA will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office. County also agrees to include these requirements in each underlying contract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

k. County agrees that any new structure or addition to an existing structure will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation Seismic Safety Regulations 49 CFR Part 41 and will certify to compliance to the extent required by the regulation. County also agrees to ensure that all work performed under this Agreement including work performed by contractors is in compliance with standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.

l. County agrees in all underlying contracts to require: a) to use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; b) to furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Marketing Development, Maritime Administration, Washington, DC 20590, and to the MTA; and c) to include these requirements in all

subcontracts issued pursuant to this Agreement when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

IN WITNESS WHEREOF, the parties have caused this Cooperative Agreement to be executed by their duly authorized representatives as of the date written above.

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

By: _____
Roger Snoble
Chief Executive Officer

COUNTY OF LOS ANGELES

By: _____
Donald L. Wolfe
Acting Director of Public Works

APPROVED AS TO FORM:

RAYMOND G. FORTNER, JR.
County Counsel

By: _____
Deputy

Attachment 1

Metro Rapid Five-Year Implementation Plan
Board Report

10

PLANNING AND PROGRAMMING COMMITTEE
September 18, 2002

10

Metropolitan
Transportation
Authority

One Gateway Plaza
Los Angeles, CA
90012-2952

SUBJECT: METRO RAPID FIVE-YEAR IMPLEMENTATION PLAN

ACTION: APPROVE IMPLEMENTATION OF THE METRO RAPID FIVE-YEAR IMPLEMENTATION PLAN

RECOMMENDATIONS

A. Adopt the Metro Rapid Five-Year Implementation Plan report findings and accelerated, phased countywide expansion plan (Attachment A);

B. Set aside $92.3 million of future regional funds to complete the Metro Rapid Five-Year Implementation Plan (Attachment A, Table 10);

C. Amend the FY 2003 Special Revenue budget to include $3.8 million for Phase II station construction. Funds are included in the FY 2002 Regional TIP for this purpose;

D. Authorize the Chief Executive Officer to negotiate and execute agreements with the local jurisdictions in each corridor so as to expedite deployment of the Five-Year Implementation Plan.

ISSUE

In February 2002, MTA adopted the Metro Rapid Expansion Program, a conceptual plan for expanding the Metro Rapid Demonstration Program. The Expansion Program recommended implementing countywide Metro Rapid service, and included a selection process for evaluating the merits of candidate corridors. To build on the program's success, the Board requested that staff develop an accelerated deployment plan and return to the Board for consideration.

Staff is presenting a Metro Rapid Five-Year Implementation Plan which recommends dedicating $92.3 million of regional funds to implement 24 lines on an accelerated schedule by 2008. This recommended funding will be used to construct bus signal priority, stations, and related communications equipment.

This Plan was developed following a rigorous selection process to identify both MTA and Municipal Operator corridors where Metro Rapid Program service would best meet the needs of transit patrons (Attachment A). Corridors were evaluated on the basis of existing success (current transit service), potential success (corridor transit potential), and the need for transit (corridor transit dependence). As a result of the

above process, 24 corridors have been identified for inclusion in the Metro Rapid Five-Year Implementation Plan.

POLICY IMPLICATIONS

The purpose of the Metro Rapid Five-year Implementation Plan is to introduce a new, high quality mode of transit that will offer faster travel choices for bus riders, especially the transit-dependent. The Metro Rapid Program is an integral part of the adopted Long Range Transportation Plan.

OPTIONS

Options considered include (1) continuing to operate Metro Rapid along the two demonstration corridors, but not expanding the Metro Rapid Program beyond these corridors, and (2) expanding the demonstration program with one or two additional corridors and evaluating the results of the expanded demonstration prior to recommending a countywide system expansion of the program. Option 1 is not recommended because of the success of the Metro Rapid Demonstration Program. Passenger travel times and service quality have been improved to the point that they are now noticed and appreciated by the public. Ridership has increased significantly as a result. Option 2 is not recommended because data from the two Demonstration lines was found to be more than adequate to develop reliable and consistent findings and recommendations.

FINANCIAL IMPACT

Operating and capital cost estimates presented in the Implementation Plan are predicated on the following assumptions.

Operating costs – Implementation of the Broadway and Vermont corridors in December 2002 is scheduled at approximately 5,300 revenue service hours ($1.1 million) more than pre-existing levels during FY 2003. Funds to implement these services are available within the existing FY 2003 budget.

When complete in FY 2008, the Implementation Plan provides a net increase of 15,646 annual revenue hours for the 24 expansion corridors over the pre-existing service levels in those corridors. This increase in service is within the levels assumed in the 10-year forecast. However, based on ridership increases experienced on the two Metro Rapid demonstration corridors, it is likely that additional capacity will be needed beyond the above funding. In such cases, staff will develop for Board consideration corridor-specific plans to cover the increase in operating costs.

Capital Costs – Capital cost estimates are derived from the Metro Rapid Demonstration Program. Given the same design and quality of station construction, the same bus signal priority and "next trip" display technology, and additional equipment to maintain and monitor each corridor, one-time capital costs associated with implementing the entire program are estimated at $110.5 million, escalated (Five-Year Implementation Plan, Table 10).

Funding for the continued implementation of Phase II is consistent with the 10-year financial forecast and included in the Long Range Transportation Plan but not in the MTA FY 2003 budget. Approval of this action would direct staff to include Phase II capital expenditures and revenues in MTA's Special Revenue budget. Approximately $4.5 million will be transferred from the MTA Capital budget since the assets constructed will not become MTA property. Additionally, the FY 2003 Budget does not include station construction expenditures and revenues for Phase II of $3.8 million that were approved by the State after the budget was prepared.

BACKGROUND

The Metro Rapid Demonstration Program has proven successful with the implementation of key attributes, including unique vehicle and station "branding", transit signal priority, special stations with "next trip" displays and information kiosks, and "rail-like" operating characteristics. This has resulted in passenger travel times reduced by approximately 25 percent and a nearly 40 percent increase in ridership, with one-third of the increase new to public transit. Based on this success, staff developed the Metro Rapid Expansion Program and presented it to the Board in February 2002. The Expansion Program identified the corridors which best met the programs' goals and objectives, and recommended a phasing plan designed to construct a network of Metro Rapid service over the next eleven years.

Accelerated Deployment

At the Board's request to accelerate deployment of the Metro Rapid Program, staff developed the Metro Rapid Five-year Implementation Plan (Attachment A). The Implementation Plan identifies the operating and capital costs associated with constructing and operating each corridor, and proposes a five-phase accelerated deployment schedule significantly shorter than that presented in the original Expansion Program. While significant staff work will be needed to refine the Plan as it moves forward to actual implementation, the accelerated schedule is achievable, contingent on resolving the following issues.

A construction and implementation critical path was developed for the initial phase of the Metro Rapid expansion program. Issues considered in the critical path included station design, fabrication, and installation; signal priority design, construction, and testing; vehicle procurement and make-ready; schedule development and operational training; marketing campaigns; and execution of the contracts and agreements necessary to fund the construction program. Two key elements in the critical path were the station construction and signal priority implementation schedules.

While it is unlikely that the station construction contract between the City of Los Angeles and MTA will be executed in time to complete construction prior to the opening of the first two expansion corridors planned for this December (Vermont and Broadway), it is expected that station development will keep pace with the Metro Rapid phased corridor implementation plan after that point.

The critical element in the Metro Rapid expansion schedule is the construction of bus signal priority in the City of Los Angeles, Los Angeles County, and other cities. The City of Los Angeles is currently capable of deploying approximately 20 miles of signal priority per year. The City believes, however, that they can double the current rate of construction *provided* that additional resources are made available either through LADOT in-house staffing or a contractor. Accelerated implementation of the Five-Year Implementation Plan is dependent on LADOT resolving this important issue.

The County of Los Angeles recently began bus signal priority construction along Whittier Boulevard as part of the Wilshire/Whittier Metro Rapid. The City of Beverly Hills will soon begin construction along Wilshire Boulevard, also as part of the Wilshire/Whittier Metro Rapid. Staff will work closely with the cities in each corridor to expedite bus signal priority construction as future corridors are implemented. Table 7 of the Five-Year Implementation Plan presents the accelerated deployment schedule.

Deployment Within Available Revenue

The Five-Year Implementation Plan assumes deployment of all Phase II Metro Rapid corridors within available operating revenues. In order to meet this financial objective, and taking into account the efficiency improvements resulting from both faster operating speeds and restructured operator schedules, the following modifications in Metro Rapid attributes were made. Staff will identify additional operating hours should ridership exceed the added capacity.

- *Seven Day Service* – the policy of providing Metro Rapid service seven days a week has been modified to allow deployment only within available revenue. In some cases, operation of six or seven day schedules is appropriate regardless of operating cost constraints; in other cases expansion to a seven day service is sound only if funds become available. The proposed span of Metro Rapid service recommends that 6 of the 24 Metro Rapid expansion corridors operate seven-days a week, 5 operate weekdays and Saturdays, 6 operate all-day on just weekdays, and 7 operate in just weekday peak periods.

- *Minimum Service Frequencies* – the Metro Rapid program calls for very frequent service as one of the basic attributes, with at least 10-minute peak and 12-minute off-peak service in order to attract riders. However, 19 of the planned 24 Metro Rapid expansion corridors will initially not meet these minimum standard frequencies. The impact of less frequent service will vary from corridor to corridor, but will result in less ridership growth until additional service can be added.

- *Service Capacity* – when implementing the Metro Rapid Demonstration Program, additional capacity was deployed from the outset. On one corridor (Ventura) this capacity was adequate for passenger needs. However, the second corridor (Wilshire/Whittier) has required ongoing increases in capacity to meet ridership growth. Expansion of Metro Rapid service within available operating revenue requires that each line be scheduled as close to existing hours as possible while

allowing the miles to increase due to increased operating speeds and schedule restructuring. It is anticipated that additional operating resources may be needed to meet ridership demand.

NEXT STEPS

Consistent with the proposed phasing plan, and working closely with each Service Sector, agreements will be executed with local jurisdictions to design and construct the signal priority and station elements of the program. To expedite implementation, staff will work with the Municipal Operators to accelerate those corridors which have been prepared for Metro Rapid deployment. Improvements to both the system attributes and operational performance of the program will be made, in part, based on the results of a recent MTA-sponsored Metro Rapid operator/customer survey. Consistent with the survey recommendations, staff will consider implementing one or more of the Metro Rapid attributes on other regional corridors in an effort to expand the program's qualities as quickly as possible. Staff will return to the Board with progress reports as Metro Rapid corridors are implemented.

ATTACHMENT

A. Metro Rapid Five-Year Implementation Plan

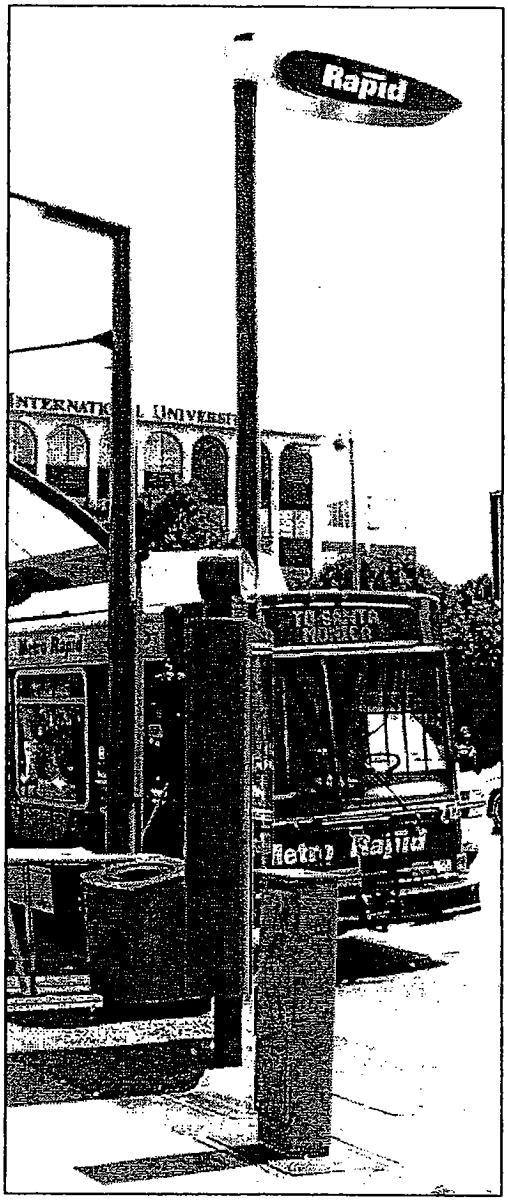
Prepared by: Rex Gephart, Project Manager
Long Range Planning & Coordination

James L. de la Loza
Executive Officer
Countywide Planning & Development

Roger Snoble
Chief Executive Officer

Attachment A

Metro Rapid
LOS ANGELES



Five Year Implementation Plan

Prepared by:

TMD TRANSPORTATION MANAGEMENT & DESIGN, INC.

August 2002

Metro Rapid
LOS ANGELES

Five Year Implementation Plan

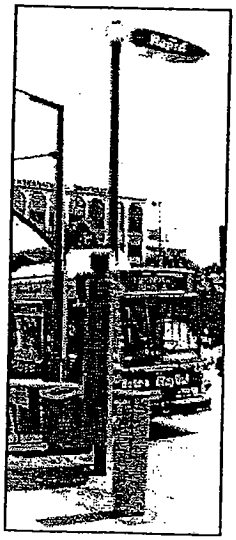
1 Five Year Implementation Plan Background

1.1 Metro Rapid Demonstration

In March 1999 the MTA Board of Directors approved a two-corridor Metro Rapid Demonstration Program based on a purpose and need assessment that followed a visit to the very successful system in Curitiba, Brazil, by some MTA Board members and staff. In June 2000, together with the San Fernando Valley extension of the Metro Red Line, MTA introduced Metro Rapid Lines 720 and 750 serving the Wilshire-Whittier and Ventura corridors, respectively. From the first day, the demonstration has proven successful with the implementation of key Metro Rapid attributes, including unique vehicle and station "branding", transit signal priority, special stations with "next trip" displays and information kiosks, and "rail-like" operating characteristics. This has resulted in passenger travel times reduced by at least 25 percent and a nearly 40 percent increase in ridership, with one-third of the increase new riders to public transit. MTA's Metro Rapid program has become a model for other transit systems in both North American and overseas.

1.2 Expansion Program

Based on this success, staff developed the Metro Rapid Expansion Program and presented it to the Board in February 2002. The Expansion Program identified over 20 corridors which best met the Metro Rapid program goals and objectives, and recommended a phasing plan designed to construct a network of Metro Rapid service over the next eleven years. The Board approved the expansion program for Metro Rapid, but requested an accelerated deployment of the Metro Rapid Program.



2 Accelerated Deployment

Working together with the City of Los Angeles, MTA has prepared an accelerated deployment Five Year Metro Rapid Implementation Plan. The Implementation Plan identifies the operating and capital costs associated with constructing and operating each corridor, and proposes an accelerated deployment schedule significantly shorter than that presented in the original Expansion Program. While significant staff work will be needed to refine the Plan as it moves forward to actual implementation, the accelerated schedule is achievable, contingent on resolving certain issues.

A construction and implementation critical path was developed for the initial phase of the Metro Rapid expansion program. Issues considered in the critical path included station design, fabrication, and installation; signal priority design, construction, and testing; vehicle procurement and make-ready; schedule development and operational training; marketing campaigns; and execution of the contracts and agreements necessary to fund the station construction and signal priority programs. The two key elements in the critical path were the station construction and signal priority implementation schedules.

2.1 Station Construction

It is unlikely that the station construction contract between the City of Los Angeles and MTA utilizing the City's new shelter advertising contractor, Viacom Decaux, will be executed in time to complete construction prior to the opening of the first two expansion corridors currently planned for December 2002. Consequently, it is recommended that implementation of these first two expansion lines move forward with temporary stations, as was done with the demonstration lines. It is expected that station development in the City of Los Angeles will keep pace with Metro Rapid corridor implementation after that point and will not be a further issue.

A second issue centers on construction of Metro Rapid stations in other cities and in the County of Los Angeles. To date, MTA has not constructed stations outside the City of Los Angeles, but is moving ahead with developing the necessary agreements to make this possible. It is anticipated that these agreements will be in place in time to meet station construction schedules for June and December 2003.

2.2 Signal Priority

The second issue in the Metro Rapid expansion schedule was found to be the signal priority construction schedule. To date, LADOT has installed and operated all of the transit signal priority, including certain areas outside of the City of Los Angeles under inter-local agreements. At the same time, MTA has been in the process of developing a test of an alternative transit priority system along a segment of Crenshaw Boulevard for the past several years and is likely to be ready for operational testing in 2003. Regardless, the Five Year Metro Rapid Implementation Plan calls for continued reliance on LADOT's highly successful signal priority system wherever feasible. The LADOT priority system has proven to be very reliable while achieving significant time savings for Metro Rapid without noticeable impact on other traffic and at minimal operating and capital cost.

LADOT is currently capable of deploying approximately 20 miles of signal priority per year. LADOT believes, however, that they can double the current rate of construction to over 40 miles annually provided that

additional resources are made available either through in-house staffing or a contractor. This accelerated rate of construction is anticipated to reduce the Metro Rapid deployment schedule from eleven years to six years (the current fiscal year, plus the next five), recognizing that the City of Los Angeles comprises only 2/3 of the entire 357 miles of planned Metro Rapid service.

2.3 Other Issues

The only other issue that had a possible impact on accelerated deployment was the availability of suitable transit vehicles for Metro Rapid service. Metro Rapid calls for operation of low-floor standard or high capacity buses. MTA has enough NABI low-floor CNG coaches, like those currently in operation of the Metro Rapid demonstration lines, to meet immediate term needs if they are "rebranded" and transferred to Metro Rapid. The high capacity vehicle procurement currently underway will provide the necessary vehicles for the balance of the five-year Metro Rapid implementation.

3 Operational Plan

The successful operation of the Phase I demonstration formed the basis of the operational elements for the Five Year Metro Rapid Implementation Plan. No fundamental changes are proposed.

3.1 Metro Rapid Attributes

Metro Rapid is defined by a number of attributes that contribute to its success, as shown below.

Attribute	Phase I Demonstration	Phase II
1. Frequent Service	Yes	Yes
2. Bus Signal Priority	Yes	Yes
3. Headway-based Schedules	Yes	Yes
4. Simple Route Layout	Yes	Yes
5. Less Frequent Stops	Yes	Yes
6. Integrated with Local Bus Service	Yes	Yes
7. Level Boarding and Alighting	Yes	Yes
8. "Branded" Buses and Stations	Yes	Yes

Attribute	Phase I Demonstration	Phase II
9. High Capacity Buses	No	Yes
10. Exclusive Lanes	No	Yes
11. All-Door Boarding	No	Yes

MTA reviewed the various attributes demonstrated in Phase I and those planned in Phase II to determine their continued viability.

The basic service attributes of frequent service, headway-based schedules, simple route layout, less frequent stops, integration with local bus service, and level boarding and alighting have all clearly resulted in a superior transit service based on customer, operator, and street supervisor reports. The remaining attributes involve additional capital investment by MTA and warrant additional discussion.

- Bus Signal Priority - analysis of LADOT's bus signal priority system indicates that it has improved running times by some 8-10 percent, while simultaneously improving headway reliability by actively minimizing vehicle bunching. Both faster and more reliable operations are major customer attractors that directly result in increased ridership and revenue. As well, the reduced round trip cycle times attributable to bus signal priority directly reduce operating and capital expenses. For instance, the speed improvement on Line 720 serving Wilshire-Whittier translates into running time savings of 10-12 minutes per round trip, reducing operating expenses by some $500,000 annually and eliminating the need for 3-5 peak vehicles, saving between $1.05 and $1.4 million in capital costs. This makes implementation of bus signal priority a very good return on investment for MTA.

- "Branded" Buses and Stations - MTA's original model for Metro Rapid was Curitiba, Brazil's now famous Bus Rapid Transit, which had "branded" services. The vehicle branding results in little capital cost, but requires MTA Operations and Maintenance to have two fleets ready every day, Metro Rapid and local. This has not been an issue as MTA Operations and Maintenance has done an excellent job in delivering the vehicles and service every day without increased cost. The "branded" stations have also received positive response from customers, operators, and street supervisors. The aspects most often cited: clear differentiation from local service, consistent with "rail-like" higher quality service including kiosks and "real-time" passenger information, longer distance visibility, station gates which help pre-queue

passengers for boarding and allow for more precise operator placement of the vehicle thereby minimizing dwell times, and few complaints from adjacent property owners. There also have been suggestions both internally and externally regarding ways to further refine the stations to make them even more effective. This is part of the five year implementation plan.

- High Capacity Buses – MTA commissioned a detailed review of the potential opportunities to use high capacity buses in both regular and Metro Rapid service. The report found that today's 45-foot buses and 60-foot articulated buses were mature cost-effective vehicles and had significant application for MTA in both Metro Rapid and regular operations. While the five year financial plan presented here is based on operation of the current 40-foot transit bus, the Plan will be updated for operation of high capacity vehicles as the availability and cost of these buses becomes known (MTA has just released a vehicle procurement for these buses).

- Exclusive Lanes – MTA in concert with the City of Los Angeles is initiating a test of exclusive lanes for Metro Rapid along Wilshire Boulevard in West Los Angeles. While it is clear that exclusive lanes will greatly help speed Metro Rapid service in congested areas, their benefit is less clear in areas of less or no congestion. While the Five Year Metro Rapid Implementation Plan presented here does not include exclusive lanes, the Plan will be updated based on the findings of the Wilshire test.

- All-Door Boarding – the MTA Universal Fare system includes the capability for boarding passengers with Smart Cards through the rear door(s). While expectations are that all-door boarding will reduce station dwell times, the benefit depends on passenger volumes. The Plan presented here does not include this capacity, but it will be considered once testing is undertaken. If there are significant benefits, then the Plan will be refined to include this capability for all-door boarding.

3.2 Metro Rapid Service Providers

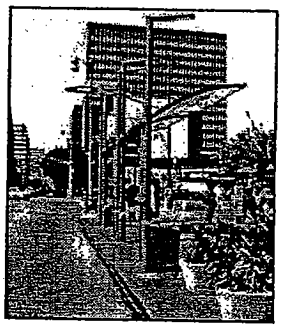
The Phase II Metro Rapid program calls for expansion of the service area to much of Los Angeles County. While most of the planned Metro Rapid services fall within MTA's historic service corridors, four lines do not and would be potential candidates for operation by municipal operators. The lines and likely operators are:

- Pico — Santa Monica Municipal Bus Lines
- Sepulveda — Culver City Municipal Bus Lines
- Torrance–Long Beach — Torrance Transit
- Lincoln — Santa Monica Municipal Bus Lines

This Plan calls for the same attributes, operating protocols, and branding to ensure a consistent "product" for the customer regardless of operator. MTA will be continuing to work closely with these Municipal operators regarding Metro Rapid implementation.

3.3 Deployment Within Available Revenue

Previous Board action provided funds for capital requirements, but did not include additional operating funds. Consequently, the Metro Rapid Implementation Plan assumes a deployment of Phase II corridors that is funded with available operating revenues. In order to meet this financial requirement, and taking into account the efficiency improvements resulting from both faster operating speeds and restructured operator schedules, the following modifications in Metro Rapid attributes were made:



- Seven Day Service – the policy of providing Metro Rapid service seven days a week has been modified to allow deployment only where appropriate from an operating cost standpoint. In some cases, operation of six or seven day schedules is appropriate regardless of operating cost constraints; in other cases expansion to a seven day service is sound only if funds become available. The proposed span of Metro Rapid service recommends that 6 of the 24 Metro Rapid expansion corridors operate seven-days a week, 5 operate weekdays and Saturdays, 6 operate all-day on just weekdays, and 7 operate in just weekday peak periods.

- Minimum Service Frequencies – the Metro Rapid program calls for very frequent service as one of the basic attributes, with at least 10-minute peak and 12-minute off-peak service in order to attract riders. However, 19 of the planned 24 Metro Rapid expansion corridors will not meet these minimum standard frequencies as currently proposed. The impact of less frequent service will vary from corridor to corridor, but will result in less ridership growth compared with the demonstration corridors which met the minimum requirements on opening day.

- Service Capacity – the Metro Rapid Demonstration Program deployed additional capacity from the outset. On one corridor (Ventura) this capacity was adequate for passenger needs. However, the second corridor (Wilshire/Whittier) has required ongoing increases in capacity to meet ridership growth.

Expansion of Metro Rapid service within available operating revenue requires that each line be scheduled as close to existing hours as possible while allowing the miles to increase due to increased operating speeds and schedule restructuring. It is anticipated that additional operating resources may be needed to meet ridership demand.

Implementation of Metro Rapid service attributes as originally adopted in the Long Range Transportation Plan (LRTP) will require additional resources. Given the need to work within existing budget limitations, the most likely source of these additional resources will be through service restructuring efficiencies achieved in conjunction with the Service Sectors and Area Teams.

3.4 Development of Corridor Service Plans

The expansion of Metro Rapid service calls for developing corridor service plans that efficiently utilize vehicle and labor resources in order to maximize service growth within existing operating revenue. To achieve this efficiency, the development of service plans for each corridor involves several essential steps:

- Review corridor ridership and characteristics to identify preliminary corridor alignment, station locations, and terminal sites.
- Continue policy whereby all station maintenance costs are funded through advertising and/or local jurisdictions.
- Review current service spans, frequencies, and running times
- Identify service periods during which Metro Rapid service would be provided (e.g., weekday peak, weekday midday, later evenings, Saturdays, and Sundays)
- Develop specific service frequencies by time of day and running times for both Metro Rapid and local services
- Prepare "pilot" Metro Rapid and local operating schedules for costing purposes (these will need considerable refinement for actual implementation)
- Determine service hours, miles, and peak vehicles by corridor and service type
- Determine additional TOS and BOC needs; plan calls for one dedicated TOS in the field during Metro Rapid operations and each BOC staff to handle 5-6 Metro Rapid lines when implementation is completed *(the investment in BOC/TOS support*

has proven to improve cost efficiency through the ability to maintain reduced running times and decreased vehicle bunching).

The service plans provided the basis for determining Metro Rapid operating and capital costs.

4 Proposed Metro Rapid Services

The proposed corridor services are those presented in the February 2002 Metro Rapid Expansion Program with three modifications based on continued refinement in developing the Implementation Plan.

- South Broadway
- Vermont
- Florence
- Van Nuys
- Soto
- Crenshaw-Rossmore
- Pico (*two branch line consolidated onto only the Pico corridor)*
- Santa Monica
- Hawthorne
- Long Beach Ave
- Hollywood-Fairfax-Pasadena
- Western
- Beverly
- Vernon-La Cienega
- Atlantic
- Central
- San Fernando-Lankershim *(San Fernando split into two lines)*
- West Olympic
- Garvey-Chavez
- Manchester
- San Fernando (south) *(San Fernando split into two lines)*
- Sepulveda (south)
- Torrance-Long Beach
- Lincoln

4.1 Corridor Characteristics and Phasing

The proposed corridor characteristics including length of the Metro Rapid line, number and type of stations, and average station spacing are presented in Table 1.

Table 1 also presents the Metro Rapid implementation groups in five phases. The phase groupings were based on:

- Phase IIA *Expand the network by introducing key connections*
- Phase IIB *Introduce Metro Rapid on some of the region's heaviest corridors while continuing development of the network*
- Phases IIC-IIE *Continue network development while focusing on major corridors*

4.2 Proposed Service Levels

The proposed Metro Rapid service is tailored to the current corridor needs while staying within available operating revenue. The proposed service spans and days of operation are presented in Table 2.

Table 3 presents the proposed service frequencies on each corridor. The frequencies shown are the combined local and Metro Rapid service and provide an indication of planned corridor capacity with Metro Rapid.

5 Metro Rapid Corridor Costs

Metro Rapid corridor operating and capital costs have been estimated based on the planned services and the facilities, vehicles, and staff needed to support the operation.

5.1 Service Requirements

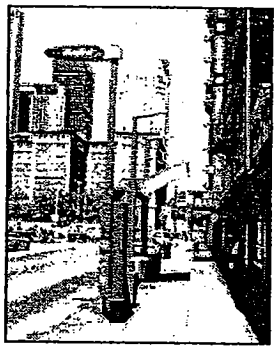


Table 4 presents the estimated service trips, revenue hours and miles, and peak vehicles required for the corridor, including both local and Metro Rapid services in comparison with current services. As well, Table 4 provides a breakout of peak and total Metro Rapid buses required by line.

The introduction of Metro Rapid will result in almost no change in peak vehicles and revenue hours, while providing a 9-10 percent increase in both service trips and revenue miles. This is the result of Metro Rapid's faster running.

5.2 Operating Costs

Table 5 indicates the estimated annual operating costs for each of the Metro Rapid corridors based on the most recent available MTA cost allocation model for marginal costing. The incremental operating cost of implementing Metro Rapid over the current service operation is also included, as well as the estimated cost of operations support staff, including bus operations control center and transit operations supervision.

Metro Rapid will result in an increase of approximately $11.6 million in additional annual costs for the 24 expansion lines. This will be offset by an additional $6.5 million in estimated new passenger revenue.

5.3 Capital Costs

Table 6 presents the estimated capital costs for Metro Rapid, including stations, signal priority, revenue and non-revenue vehicles, and expansion of the Bus Operations Control Center. The overall capital cost of $101.9 million is just over $250,000 per mile for the additional 357 miles included in the Metro Rapid expansion program.

6 Metro Rapid Implementation Phasing

The Metro Rapid corridor implementation was phased based on both network expansion needs and the goal of expediting deployment of Metro Rapid on the heaviest corridors. The expansion of the LADOT bus signal priority system also influenced the phasing by limiting the number of line miles installed annually. Table 7 presents the proposed Metro Rapid five year implementation phasing.

7 Metro Rapid Financial Plan

Based on the planned Five Year Implementation Plan for Metro Rapid, a financial plan was prepared.

Table 8 presents the annual operating costs.

Table 9 presents the annual capital costs.

Table 10 presents the annual funding requirements.

8 Metro Rapid Implementation

This Five Year Implementation Plan provides the initial groundwork for developing the full network of Metro Rapid services. There is much additional work and refinement that will take place prior to the actual startup of services:

- Finalize alignments, station locations, and end-of-line terminals, including station layouts
- Refine the original station design to improve effectiveness, increase deployment opportunities, and reduce operating and capital costs; develop final station construction plan
- Identify opportunities for exclusive lane segments
- Finalize signal priority and passenger information display technology throughout the system
- Construct stations and any exclusive lane segments

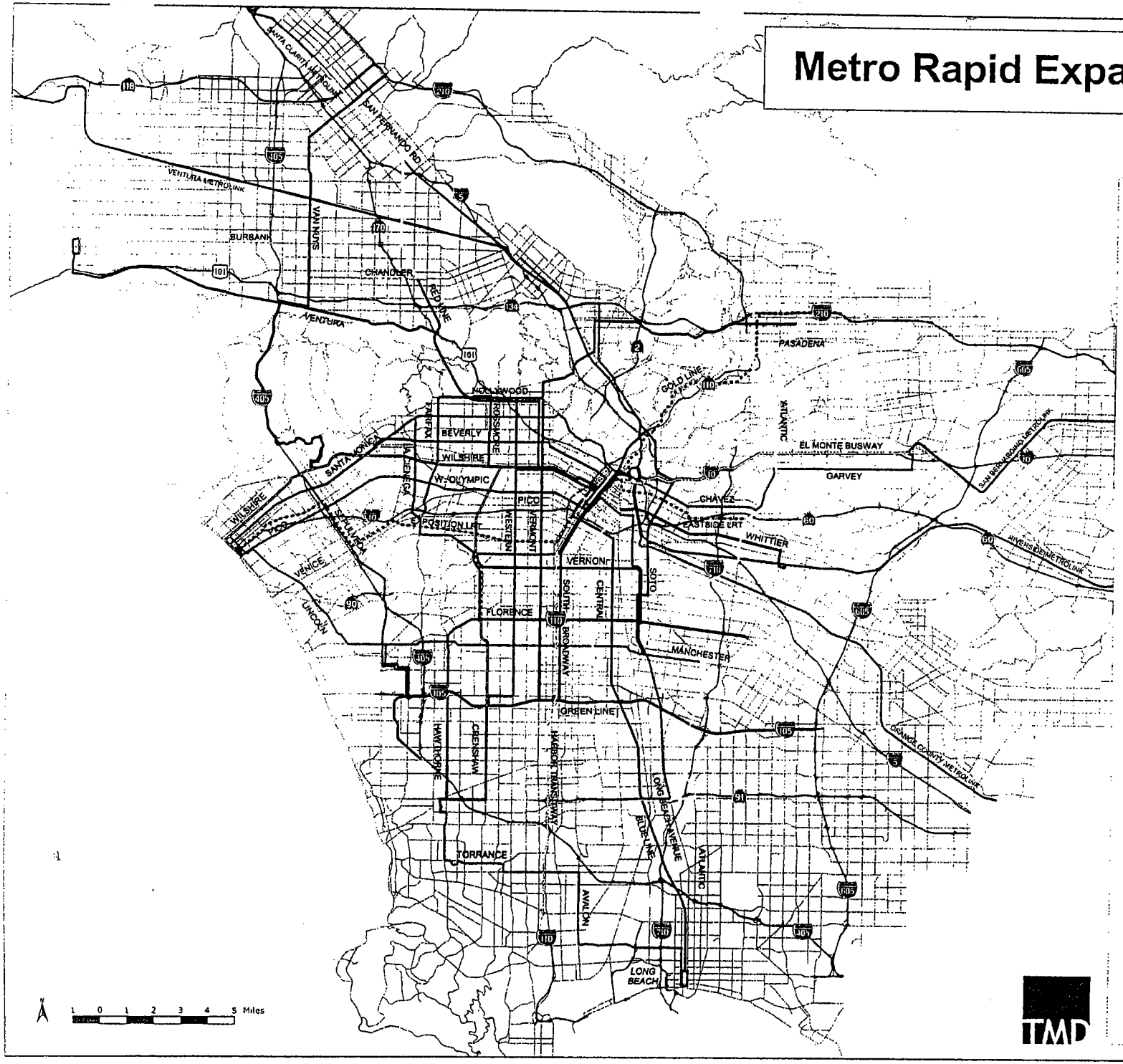
- Install signal priority and passenger information display technology
- Refine of draft operating schedules
- Secure and prepare the Metro Rapid fleet, including consideration of upcoming high capacity buses for Metro Rapid operation
- Select and train operations staff
- Secure all necessary agreements required for implementation

The schedule for implementation of Metro Rapid Phase IIA is at present:

- December 2002 – South Broadway and Vermont
- June 2003 – Florence and Van Nuys
- December 2003 – Soto and Crenshaw-Rossmore

Throughout the implementation process will be close coordination among MTA's Metro Rapid group, MTA's Service Sectors, municipal operators, and local jurisdictions.

Metro Rapid Expansion Program



Rapid

Metro Rapid Phase I
- Ventura
- Wilshire-Whittier

Metro Rapid Phase II A
- South Broadway
- Vermont
- Florence
- Van Nuys
- Soto
- Crenshaw-Rossmore

Metro Rapid Phase II B
- Pico
- Santa Monica
- Hawthorne
- Long Beach Blvd

Metro Rapid Phase II C
- Hollywood-Fairfax-Pasadena
- Western
- Beverly
- Vernon-La Cienega

Metro Rapid Phase II D
- Atlantic
- Central
- San Fernando-Lankershim
- West Olympic

Metro Rapid Phase II E
- Garvey-Chavez
- Manchester
- San Fernando (south)
- Sepulveda (south)
- Torrance-Long Beach
- Lincoln

Metro Rapid Transitways
Existing Proposed

Metro Rail
Existing Under Construction or Planned

Metro Link

TMD

Table 1
Metro Rapid Corridor Characteristics

	Metro Rapid Line	Line Miles	Station Pairs	Average Station Spacing (miles)
PHASE II A	South Broadway	10.5	16	0.66
	Vermont	11.9	17	0.70
	Florence	10.3	13	0.79
	Van Nuys	21.4	20	1.07
	Soto	10.0	15	0.67
	Crenshaw-Rossmore	18.8	22	0.85
PHASE II B	Pico	17.3	27	0.64
	Santa Monica	20.2	27	0.75
	Hawthorne	18.7	23	0.81
	Long Beach Blvd	15.3	23	0.67
PHASE II C	Hollywood-Fairfax-Pasadena	21.5	27	0.80
	Western	13.1	19	0.69
	Beverly	11.0	16	0.69
	Vernon-La Cienega	16.5	23	0.72
PHASE II D	Atlantic	25.1	27	0.93
	Central	10.6	13	0.81
	San Fernando-Lankershim	9.9	10	0.99
	West Olympic	12.1	21	0.58
PHASE II E	Garvey-Chavez	14.7	22	0.67
	Manchester	13.5	15	0.90
	San Fernando (south)	13.6	18	0.76
	Sepulveda (south)	12.8	16	0.80
	Torrance-Long Beach	15.6	20	0.78
	Lincoln	12.1	13	0.93
	Total Phase II	**356.5**	**460**	**0.78**

Table 2

Metro Rapid Corridor Proposed Service Spans

		Weekday Peak	Weekday Midday	Weekday Evening[1]	Saturday	Sunday
PHASE II A	South Broadway	X	X	X	X	X
	Vermont	X	X	X	X	X
	Florence	X	X		X	X
	Van Nuys	X	X	X	X	X
	Soto	X	X		X	
	Crenshaw-Rossmore	X	X			
PHASE II B	Pico	X	X	X	X	X
	Santa Monica	X	X	X	X	X
	Hawthorne	X	X		X	
	Long Beach Blvd	X	X		X	X
PHASE II C	Hollywood-Fairfax-Pasadena	X	X			
	Western	X	X	X	X	X
	Beverly	X				
	Vernon-La Cienega	X				
PHASE II D	Atlantic	X				
	Central	X				
	San Fernando-Lankershim	X	X			
	West Olympic	X	X			
PHASE II E	Garvey-Chavez	X	X		X	
	Manchester	X				
	San Fernando (south)	X	X			
	Sepulveda (south)	X				
	Torrance-Long Beach	X				
	Lincoln	X	X			

[1] *Weekday evening indicates service that operates after 9:00 pm.*

Table 3
Metro Rapid Corridor Frequency Comparison (in minutes)

	Metro Rapid Line	AM Peak				Off Peak				PM Peak				Saturday				Sunday			
		Existing	Proposed	Change	% Change	Existing	Proposed	Change	% Change	Existing	Proposed	Change	% Change	Existing	Proposed	Change	% Change	Existing	Proposed	Change	% Change
PHASE II A	South Broadway	2.7	2.6	0.1	4.3%	10.0	7.5	2.5	25.0%	3.6	3.3	0.2	4.8%	7.0	7.5	(0.5)	-7.1%	10.0	7.5	2.5	25.0%
	Vermont	3.0	2.9	0.1	4.8%	5.0	4.6	0.4	7.7%	3.0	2.9	0.1	4.8%	6.0	4.8	1.2	20.0%	7.5	6.7	0.8	11.1%
	Florence	5.5	5.5	0.0	0.0%	11.0	10.0	1.0	9.1%	6.0	6.0	0.0	0.0%	10.0	10.0	0.0	0.0%	10.0	10.0	0.0	0.0%
	Van Nuys	6.3	6.0	0.3	5.0%	12.0	8.6	3.4	28.6%	7.5	6.0	1.5	20.0%	12.0	8.6	3.4	28.6%	15.0	8.6	6.4	42.9%
	Soto	6.0	5.0	1.0	16.7%	9.0	8.6	0.4	4.6%	8.0	6.0	2.0	25.0%	12.0	10.0	2.0	16.7%				
	Crenshaw-Rossmore	6.2	6.0	0.2	3.6%	12.0	10.0	2.0	16.7%	6.0	5.5	0.5	9.1%								
PHASE II B	Pico	3.0	3.0	0.0	0.0%	7.5	6.7	0.8	11.1%	3.6	3.3	0.2	4.8%	6.0	6.0	0.0	0.0%	7.5	7.5	0.0	0.0%
	Santa Monica	3.4	2.9	0.5	15.2%	8.6	6.0	2.5	29.4%	3.8	3.3	0.4	11.1%	7.0	5.5	1.5	22.1%	7.5	5.5	2.0	27.3%
	Hawthorne	6.0	6.0	0.0	0.0%	10.0	8.6	1.4	14.3%	8.0	8.0	0.0	0.0%	10.0	8.6	1.4	14.3%				
	Long Beach Blvd	4.0	3.8	0.3	8.3%	8.6	7.6	1.0	11.8%	3.4	3.3	0.1	2.0%	8.0	7.5	0.5	6.3%	10.0	10.0	0.0	0.0%
PHASE II C	Hollywood-Fairfax-Pasadena	7.5	6.0	1.5	20.0%	12.0	10.0	2.0	16.7%	7.5	6.0	1.5	20.0%								
	Western	5.0	4.6	0.4	7.7%	6.0	5.4	0.6	9.6%	4.0	3.5	0.5	11.4%	6.0	6.0	0.0	0.0%	8.0	7.5	0.5	6.3%
	Beverly	6.5	6.0	0.5	7.7%					6.5	6.0	0.5	7.7%								
	Vermon-La Cienega	7.0	6.7	0.3	4.8%					7.0	6.7	0.3	4.8%								
PHASE II D	Atlantic	9.1	8.6	0.5	5.5%					10.0	8.6	1.4	14.3%								
	Central	4.0	4.0	0.0	0.0%					6.0	5.5	0.5	9.1%								
	San Fernando-Lankershim	5.0	3.3	1.7	33.3%	15.0	8.6	6.4	42.9%	8.0	4.4	3.6	44.4%								
	West Olympic	2.9	2.7	0.1	4.8%	8.0	7.5	0.5	6.3%	4.1	3.9	0.2	6.0%								
PHASE II E	Garvey-Chavez	4.5	3.4	1.1	23.8%	6.0	5.0	1.0	16.7%	4.0	3.9	0.1	3.2%	6.5	6.0	0.5	7.7%				
	Manchester	5.2	5.0	0.2	4.2%					6.0	6.0	0.0	0.0%								
	San Fernando (south)	6.0	5.6	0.4	6.3%	15.0	10.0	5.0	33.3%	8.5	8.0	0.5	7.1%								
	Sepulveda (south)	12.0	10.0	2.0	16.7%					12.0	10.0	2.0	16.7%								
	Torrance-Long Beach	15.0	12.0	3.0	20.0%					15.0	12.0	3.0	20.0%								
	Lincoln	10.0	10.0	0.0	0.0%	10.0	10.0	0.0	0.0%	10.0	10.0	0.0	0.0%								
	Averages	6.1	5.5	0.6	9.8%	9.7	7.9	1.8	18.6%	6.6	5.8	0.8	12.1%	8.2	7.3	0.9	11.0%	9.4	7.9	1.5	16.0%

Table 4
Corridor Service Requirement Comparison

	Metro Rapid Line	Corridor Daily Trips				Corridor Peak Vehicles				Annual Corridor Revenue Hours				Annual Corridor Revenue Miles				Required Metro Rapid Fleet			
		Existing	Proposed	Change	% Change	Existing	Proposed	Change	% Change	Existing	Proposed	Change	% Change	Existing	Proposed	Change	% Change	AM Peak	PM Peak	Spares (20%)	Total
PHASE II A	South Broadway	294	338	44	15.0%	45	43	(2)	-4.4%	123,047	132,378	9,332	7.6%	1,366,879	1,548,746	181,868	13.3%	22	20	5	27
	Vermont	455	515	60	13.2%	52	50	(2)	-3.8%	183,575	184,899	1,324	0.7%	1,891,100	2,182,790	291,690	15.4%	34	32	7	41
	Florence	242	269	27	11.2%	25	26	1	4.0%	99,813	101,271	1,358	1.4%	1,223,062	1,287,931	64,869	5.3%	9	10	2	12
	Van Nuys	204	256	52	25.5%	29	29	0	0.0%	112,379	110,510	(1,869)	-1.7%	1,457,281	1,576,246	118,965	8.2%	16	20	4	24
	Soto	267	304	37	13.9%	32	31	(1)	-3.1%	101,555	102,195	640	0.6%	1,000,927	1,112,225	111,298	11.1%	15	15	3	18
	Crenshaw-Rossmore	209	230	21	10.0%	33	31	(2)	-6.1%	105,280	105,815	536	0.5%	1,241,297	1,355,869	114,572	9.2%	16	18	4	22
PHASE II B	Pico	349	393	44	12.6%	60	62	2	3.3%	204,754	206,011	1,257	0.6%	2,000,721	2,231,879	231,158	11.2%	21	26	6	32
	Santa Monica	354	423	69	19.5%	55	54	(1)	-1.8%	216,705	207,935	(8,770)	-4.0%	2,255,599	2,556,986	301,387	13.4%	33	37	8	45
	Hawthorne	247	260	13	5.3%	42	33	(9)	-21.4%	140,910	139,799	(1,111)	-0.8%	1,582,090	1,641,151	59,062	3.7%	21	20	5	26
	Long Beach Blvd	311	334	23	7.4%	46	50	4	8.7%	163,621	166,808	3,187	1.9%	1,821,423	2,066,148	244,727	13.4%	20	23	5	28
PHASE II C	Hollywood-Fairfax-Pasadena	442	386	(56)	-12.7%	50	47	(3)	-6.0%	181,724	188,481	6,758	3.7%	1,809,161	2,091,104	281,942	15.6%	20	23	5	28
	Western	361	377	16	4.4%	36	37	1	2.8%	145,202	143,090	(2,112)	-1.5%	1,536,749	1,732,861	196,112	12.8%	18	23	5	28
	Beverly	390	390	0	0.0%	32	35	3	9.4%	107,769	108,432	663	0.6%	1,119,624	1,175,546	55,922	5.0%	8	8	2	10
	Vernon-La Cienega	176	187	11	6.3%	26	28	2	7.7%	91,253	91,508	255	0.3%	1,113,208	1,109,893	(3,315)	-0.3%	14	15	3	18
PHASE II D	Atlantic	142	154	12	8.5%	26	28	2	7.7%	88,071	88,224	153	0.2%	1,100,371	1,185,643	85,272	7.7%	13	15	3	18
	Central	184	219	35	19.0%	24	25	1	4.2%	74,634	76,037	1,403	1.9%	871,728	922,243	50,515	5.8%	10	10	2	12
	San Fernando-Lankershim		121	121			8	8			19,457	19,457			306,000	306,000		7	6	2	10
	West Olympic	346	369	23	6.6%	42	43	1	2.4%	108,815	114,970	6,358	5.9%	1,197,088	1,374,313	177,225	14.8%	15	15	4	22
PHASE II E	Garvey-Chavez	408	427	19	4.7%	45	44	(1)	-2.2%	192,770	178,776	(13,993)	-7.3%	2,224,855	2,173,891	(50,964)	-2.3%	17	20	4	24
	Manchester	178	185	7	3.9%	28	27	(1)	-3.6%	81,064	81,064	0	0.0%	1,016,283	1,026,993	10,710	1.1%	11	10	3	14
	San Fernando (south)	193	226	33	17.1%	37	31	(6)	-16.2%	120,556	113,084	(7,472)	-6.2%	1,719,031	1,648,141	(70,890)	-4.1%	12	14	3	17
	Sepulveda (south)	140	149	9	6.4%	15	15	0	0.0%	60,029	59,519	(510)	-0.8%	602,700	633,555	30,855	5.1%	6	6	2	8
	Torrance-Long Beach	130	130	0	0.0%	11	14	3	27.3%	51,912	48,597	(3,315)	-6.4%	690,071	684,206	(5,865)	-0.8%	4	4	1	5
	Lincoln	184	205	21	11.4%	17	18	1	5.9%	72,535	73,657	1,122	1.5%	810,139	911,042	100,904	12.5%	5	5	1	6
	Totals	6,206	6,847	641	10.3%	808	809	1	0.1%	2,827,871	2,843,517	15,646	0.6%	31,711,185	34,595,403	2,884,218	9.1%	372	400	89	495

Note: Hollywood-Fairfax-Pasadena Metro Rapid operates over a combination of Line 217-Fairfax and Lines 180/181-Hollywood-Pasadena; this results in 2 local trips combined into one longer Metro Rapid trip, reducing the number of trips, but not service.

Table 5
Annual Corridor Operating Cost Comparison

	Metro Rapid Line	Existing [1]	Proposed [2]	Net Change (Incremental Cost)	Percent Change
PHASE II A	South Broadway	$7,331,000	$8,484,000	$1,153,000	15.7%
	Vermont	$10,476,000	$11,555,000	$1,079,000	10.3%
	Florence	$6,017,000	$6,457,000	$440,000	7.3%
	Van Nuys	$6,929,000	$7,605,000	$676,000	9.8%
	Soto	$5,752,000	$6,186,000	$434,000	7.5%
	Crenshaw-Rossmore	$6,336,000	$6,726,000	$390,000	6.2%
PHASE II B	Pico	$11,620,000	$12,443,000	$823,000	7.1%
	Santa Monica	$12,329,000	$12,829,000	$500,000	4.1%
	Hawthorne	$8,307,000	$8,704,000	$397,000	4.8%
	Long Beach Blvd	$9,583,000	$10,454,000	$871,000	9.1%
PHASE II C	Hollywood-Fairfax-Pasadena	$10,236,000	$11,137,000	$901,000	8.8%
	Western	$8,297,000	$8,859,000	$562,000	6.8%
	Beverly	$6,185,000	$6,441,000	$256,000	4.1%
	Vernon-La Cienega	$5,528,000	$5,648,000	$120,000	2.2%
PHASE II D	Atlantic	$5,394,000	$5,860,000	$466,000	8.6%
	Central	$4,484,000	$4,731,000	$247,000	5.5%
	San Fernando-Lankershim	$0	$1,521,000	$1,521,000	N/A
	West Olympic	$6,482,000	$7,191,000	$709,000	10.9%
PHASE II E	Garvey-Chavez	$11,321,000	$10,950,000	($371,000)	-3.3%
	Manchester	$5,022,000	$5,122,000	$100,000	2.0%
	San Fernando (south)	$7,794,000	$7,516,000	($278,000)	-3.6%
	Sepulveda (south)	$3,372,000	$3,504,000	$132,000	3.9%
	Torrance-Long Beach	$3,202,000	$3,207,000	$5,000	0.2%
	Lincoln	$4,211,000	$4,633,000	$422,000	10.0%
Total Phase II Operating Cost [1,2]		**$166,208,000**	**$177,763,000**	**$11,555,000**	**7.0%**

[1] *Existing operating cost includes both local and limited services on the corridor in FY2002 dollars.*

[2] *Proposed operating cost includes both Metro Rapid and local services on the corridor in FY2002 dollars.*

Table 6
Corridor Capital Costs

	Metro Rapid Line	Stations [1]					Signal Priority			Revenue Vehicles			Ops Support	Line Capital Cost
		Single Gate	Single Gate Cost	Double Gate	Double Gate Cost	Cost	Line Miles	Ave Cost per Mile	Cost	40-foot Buses	40-ft Bus Cost	Cost	Cost	
PHASE II A	South Broadway	26	$54,900	4	$88,200	$1,780,200	10.5	$141,800	$1,486,000	(2)	$340,000	($680,000)	$214,000	$2,800,200
	Vermont	26	$54,900	6	$88,200	$1,956,600	11.9	$250,699	$2,983,000	(2)	$340,000	($680,000)	$339,000	$4,598,600
	Florence	24	$54,900	0	$88,200	$1,317,600	10.3	$155,157	$1,598,000	1	$340,000	$340,000	$44,000	$3,299,600
	Van Nuys	38	$54,900	0	$88,200	$2,086,200	21.4	$121,262	$2,600,000	0	$340,000	$0	$44,000	$4,730,200
	Soto	30	$54,900	0	$88,200	$1,647,000	10.0	$119,167	$1,194,000	(1)	$340,000	($340,000)	$214,000	$2,715,000
	Crenshaw-Rossmore	42	$54,900	0	$88,200	$2,305,800	18.8	$114,473	$2,152,000	(2)	$340,000	($680,000)	$44,000	$3,821,800
PHASE II B	Pico	36	$54,900	2	$88,200	$2,152,800	17.3	$102,631	$1,777,000	2	$340,000	$680,000	$44,000	$4,653,800
	Santa Monica	44	$54,900	4	$88,200	$2,768,400	20.2	$125,617	$2,537,000	(1)	$340,000	($340,000)	$44,000	$5,009,400
	Hawthorne	21	$54,900	0	$88,200	$1,152,900	18.7	$146,262	$2,734,000	(9)	$340,000	($3,060,000)	$214,000	$1,040,900
	Long Beach Blvd	28	$54,900	0	$88,200	$1,537,200	15.3	$149,983	$2,295,000	4	$340,000	$1,360,000	$44,000	$5,236,200
PHASE II C	Hollywood-Fairfax-Pasadena	52	$54,900	0	$88,200	$2,854,800	21.5	$134,112	$2,883,000	(3)	$340,000	($1,020,000)	$44,000	$4,761,800
	Western	31	$54,900	5	$88,200	$2,142,900	13.1	$256,231	$3,357,000	1	$340,000	$340,000	$44,000	$5,883,900
	Beverly	30	$54,900	0	$88,200	$1,647,000	11.0	$140,711	$1,548,000	3	$340,000	$1,020,000	$44,000	$4,259,000
	Vernon-La Cienega	34	$54,900	0	$88,200	$1,866,600	16.5	$182,279	$3,008,000	2	$340,000	$680,000	$44,000	$5,598,600
PHASE II D	Atlantic	52	$54,900	0	$88,200	$2,854,800	25.1	$162,117	$4,069,000	2	$340,000	$680,000	$44,000	$7,647,800
	Central	19	$54,900	0	$88,200	$1,043,100	10.6	$174,245	$1,842,000	1	$340,000	$340,000	$44,000	$3,269,100
	San Fernando-Lankershim	18	$54,900	0	$88,200	$988,200	9.9	$120,918	$1,197,000	8	$340,000	$2,720,000	$44,000	$4,949,200
	West Olympic	38	$54,900	2	$88,200	$2,262,600	12.1	$149,474	$1,809,000	1	$340,000	$340,000	$44,000	$4,455,600
PHASE II E	Garvey-Chavez	30	$54,900	0	$88,200	$1,647,000	14.7	$161,764	$2,378,000	(1)	$340,000	($340,000)	$44,000	$3,729,000
	Manchester	28	$54,900	0	$88,200	$1,537,200	13.5	$156,659	$2,115,000	(1)	$340,000	($340,000)	$44,000	$3,356,200
	San Fernando (south)	25	$54,900	4	$88,200	$1,725,300	13.6	$314,723	$4,280,000	(6)	$340,000	($2,040,000)	$44,000	$4,009,300
	Sepulveda (south)	24	$54,900	0	$88,200	$1,317,600	12.8	$120,918	$1,548,000	0	$340,000	$0	$44,000	$2,909,600
	Torrance-Long Beach	38	$54,900	0	$88,200	$2,086,200	15.6	$202,913	$3,165,000	3	$340,000	$1,020,000	$44,000	$6,315,200
	Lincoln	18	$54,900	0	$88,200	$988,200	12.1	$118,509	$1,434,000	1	$340,000	$340,000	$44,000	$2,806,200
	Total Phase II	**752**		**27**		**$43,666,200**	**356.5**	**$157,047**	**$55,989,000**	**1**	**$340,000**	**$340,000**	**$1,861,000**	**$101,856,200**

All capital costs in FY2002 dollars

[1] *These are individual stations; Table 1 shows station pairs. More than one Metro Rapid line may share a station; in these cases station costs are shown for the first line implemented.*

Table 7
Five Year Implementation Phasing

Metro Rapid Line	Total Miles of Metro Rapid Corridor						
	FY2002 – FY2003	FY2003 – FY2004	FY2004 – FY2005	FY2005 – FY2006	FY2006 – FY2007	FY2007 – FY2008	TOTAL
South Broadway	10.5						10.5
Vermont	11.9						11.9
Florence		10.3					10.3
Van Nuys		21.4					21.4
Soto		10.0					10.0
Crenshaw-Rossmore		18.8					18.8
Pico			17.3				17.3
SantaMonica			20.2				20.2
Hawthorne			18.7				18.7
Long Beach Blvd			15.3				15.3
Hollywood-Fairfax-Pasadena				21.5			21.5
Western				13.1			13.1
Beverly				11.0			11.0
Vernon-La Clenega				16.5			16.5
Atlantic					25.1		25.1
Central					10.6		10.6
San Fernando-Lankershim					9.9		9.9
West Olympic					12.1		12.1
Garvey-Chavez						14.7	14.7
Manchester						13.5	13.5
San Fernando (south)						13.6	13.6
Sepulveda (south)						12.8	12.8
Torrance-Long Beach						15.6	15.6
Lincoln						12.1	12.1
Total Phase II	**22.4**	**60.6**	**71.5**	**62.1**	**57.7**	**82.3**	**356.5**

Table 8

Five Year Plan Incremental Operating Costs[1]

	Metro Rapid Line	Incremental Operating Costs (FY2002 Dollars)					
		FY2002 – FY2003[2]	FY2003 – FY2004	FY2004 – FY2005	FY2005 – FY2006	FY2006 – FY2007	FY2007 – FY2008
PHASE II A	South Broadway	$576,500	$1,153,000	$1,153,000	$1,153,000	$1,153,000	$1,153,000
	Vermont	$539,500	$1,079,000	$1,079,000	$1,079,000	$1,079,000	$1,079,000
	Florence		$440,000	$440,000	$440,000	$440,000	$440,000
	Van Nuys		$676,000	$676,000	$676,000	$676,000	$676,000
	Soto		$434,000	$434,000	$434,000	$434,000	$434,000
	Crenshaw-Rossmore		$390,000	$390,000	$390,000	$390,000	$390,000
PHASE II B	Pico			$823,000	$823,000	$823,000	$823,000
	Santa Monica			$500,000	$500,000	$500,000	$500,000
	Hawthorne			$397,000	$397,000	$397,000	$397,000
	Long Beach Blvd.			$871,000	$871,000	$871,000	$871,000
PHASE II C	Hollywood-Fairfax-Pasadena				$901,000	$901,000	$901,000
	Western				$562,000	$562,000	$562,000
	Beverly				$256,000	$256,000	$256,000
	Vernon-La Cienega				$120,000	$120,000	$120,000
PHASE II D	Atlantic					$466,000	$466,000
	Central					$247,000	$247,000
	San Fernando-Lankershim					$1,521,000	$1,521,000
	West Olympic					$709,000	$709,000
PHASE II E	Garvey-Chavez						($371,000)
	Manchester						$100,000
	San Fernando (south)						($278,000)
	Sepulveda (south)						$132,000
	Torrance-Long Beach						$5,000
	Lincoln						$422,000
TOTAL PHASE II							
Incremental Operating Cost		**$1,116,000**	**$4,172,000**	**$6,763,000**	**$8,602,000**	**$11,545,000**	**$11,555,000**
Incremental Operating Revenue[3]		**$595,000**	**$2,321,000**	**$3,769,000**	**$5,122,000**	**$6,332,000**	**$6,480,000**
Net Required Operating Subsidy		**($521,000)**	**($1,851,000)**	**($2,994,000)**	**($3,480,000)**	**($5,213,000)**	**($5,075,000)**

[1] *Incremental operating cost is the differential of the proposed operating cost and the existing operating cost.*

[2] *FY2002-2003 costs reflect mid-year implementation of Metro Rapid service.*

[3] *Incremental operating revenue is the estimated increase in patronage times the average fare of $0.692.*

Table 9
Five Year Plan Capital Costs

	Metro Rapid Line	Capital Costs (FY2002 Dollars)					
		FY2002 FY2003	FY2003 FY2004	FY2004 FY2005	FY2005 FY2006	FY2006 FY2007	FY2007 FY2008
PHASE II A	South Broadway	$2,800,200					
	Vermont	$4,598,600					
	Florence		$3,299,600				
	Van Nuys		$4,730,200				
	Soto		$2,715,000				
	Crenshaw-Rossmore		$3,821,800				
PHASE II B	Pico			$4,653,800			
	Santa Monica			$5,009,400			
	Hawthorne			$1,040,900			
	Long Beach Blvd			$5,236,200			
PHASE II C	Hollywood-Fairfax-Pasadena				$4,761,800		
	Western				$5,883,900		
	Beverly				$4,259,000		
	Vernon-La Clenega				$5,598,600		
PHASE II D	Atlantic					$7,647,800	
	Central					$3,269,100	
	San Fernando-Lankershim					$4,949,200	
	West Olympic					$4,455,600	
PHASE II E	Garvey-Chavez						$3,729,000
	Manchester						$3,356,200
	San Fernando (south)						$4,009,300
	Sepulveda (south)						$2,909,600
	Torrance-Long Beach						$6,315,200
	Lincoln						$2,806,200
	Total Phase II	**$7,398,800**	**$14,566,600**	**$15,940,300**	**$20,503,300**	**$20,321,700**	**$23,125,500**

All costs are in FY2002 dollars.

Table 10

Metro Rapid Five-Year Implementation Plan
Capital Expenditure and Funding Plan FY 03-08
($ Escalated and in Millions)

Expenditure Plan	FY 03	FY 04	FY 05	FY 06	FY 07	FY08	FY09	FY10	Total
BSP Installation	4.570	7.884	9.975	11.770	9.915	16.921	-	-	61.035
Station Construction	3.821	7.688	8.126	9.279	7.949	10.549	-	-	47.413
TOS vans	0.088	0.186	0.191	0.196	0.201	0.309	-	-	1.171
BOCC/Other ITS Hardware	0.025	0.824	-	-	-	-	-	-	0.849
Total Expenditure	**8.504**	**16.583**	**18.293**	**21.245**	**18.064**	**27.779**	**-**	**-**	**110.468**

Funding Plan	Funding Source	FY 03	FY 04	FY 05	FY 06	FY 07	FY08	FY09	FY10	Total
BSP Installation	CFP	4.570	3.228	1.735	3.066	1.632	-	-	-	14.231
Station Construction[1]	Fed/Local	3.821	1.754	-	-	-	-	-	-	5.575
TOS vans	Local	0.088	-	-	-	-	-	-	-	0.088
BOCC/Other ITS Hardware[2]	Fed/Local	0.025	-	-	-	-	-	-	-	0.025
Long Range Plan (LRTP)	**Fed/Local**	-	-	**12.500**	**19.600**	**13.100**	**14.200**	**12.200**	**20.700**	**92.300**
Total Funding		**8.504**	**4.982**	**14.235**	**22.666**	**14.732**	**14.200**	**12.200**	**20.700**	**112.219**

Balance[3]	-	(11.601)	(4.058)	1.421	(3.332)	(13.579)	12.200	20.700	1.752

Notes:

1. *Approved as STIP funds in the 2001 Call for Projects (Board report November 2001). Project has since been funded with CMAQ.*
2. *Funding comes from FY02 carryover funds.*
3. *It is anticipated that internal fund transfers and other short-term financing mechanisms will be used to annually balance FY04-08 of the Five-Year Implementation Plan.*

Abbreviations:

BSP = Bus Signal Priority
TOS = Transit Operations Supervisor
BOCC = Bus Operations Control Center
ITS = Intelligent Transportation Systems
STIP = State Transportation Improvement Program
CMAQ = Congestion Mitigation and Air Quality Improvement Program
CFP = Call for Projects

Attachment 2

Metro Rapid Station Engineering Plans
And
Technical Specifications

Attachment 3

Metro Rapid Implementation Plan

METRO RAPID IMPLEMENTATION PLAN
Revised July 17, 2003
Miles Updated September 9, 2004

		Line #	CORRIDORS	TOTAL MILES OF METRO RAPID CORRIDORS													CUMULATIVE MILES
				FY00	FY03		FY04		FY05		FY06		FY07		FY08		
				JUN 00	DEC 02	JUN 03	DEC 03	JUN 04	DEC 04	JUN 05	DEC 05	JUN 06	DEC 06	JUN 07	DEC 07	JUN 08	
DEMO	1	720	Wilshire-Whittier	22.5													22.5
	2	750	Ventura	16.4													38.9
II-A	3	745	South Broadway		11.0												49.9
	4	754	Vermont		12.7												62.6
	5	711	Florence			12.3											74.9
	6	761	Van Nuys			22.0											96.9
	7	710	Crenshaw-Rossmore				18.2										115.1
	8	751	Soto					13.0									128.1
	9	705	Vernon-La Cienega					14.5									142.6
II-B	10	740	Hawthorne						18.7								161.3
	11	787	Hollywood-Fairfax-Pasadena						21.5								182.8
	12	760	Long Beach							15.3							198.1
	13	714	Beverly							11.0							209.1
	14	734	Sepulveda (north)							10.8							219.9
II-C	15	757	Western							[redacted]	13.1						233.0
	16	704	Santa Monica								20.2						253.2
	17	703	Lincoln									12.1					265.3
	18	741	Reseda									13.6					278.9
II-D	19	753	Central										10.6				289.5
	20	766	San Fernando-Lankershim										9.9				299.4
	21	730	Pico											17.3			316.7
	22	762	Atlantic											25.1			341.8
II-E	23	728	West Olympic												12.1		353.9
	24	770	Garvey-Chavez												14.7		368.6
	25	715	Manchester												13.5		382.1
	26	794	San Fernando (south)													13.6	395.7
	27	706	Sepulveda (south)													12.8	408.5
	28	709	Torrance-Long Beach													15.6	424.1
			TOTAL MILES	**38.9**	**23.7**	**34.3**	**18.2**	**27.5**	**40.2**	**37.1**	**33.3**	**25.7**	**20.5**	**42.4**	**40.3**	**42.0**	**424.1**
			Total Miles in the City of Los Angeles	30.7	22.4	25.7	11.2	17.0	24.8	23.0	24.0	22.0	17.4	14.4	20.2	19.6	272.4

[redacted] Mertro Orange Line - August 2005

28 Corridors, 1 Rapidway

34 Cities, 11 Unicorporated Areas

Mileage shown for implemented service from 424 Reports

Attachment 4

Metro Rapid Station Locations
And
Intersection Drawings

METRO RAPID STATION LOCATIONS IN L.A. COUNTY

ATTACHMENT 4
REVISED 9/9/04

Fiscal Year	Corridor	County Areas	Map Page	Station Location	Station	Direction/Station Type: North Single	North Double	South Single	South Double	East Single	East Double	West Single	West Double	Total Station	Notes
2000	Wilshire-Whittier	East L.A.	675 H1	W	Whitter - Oakford							1		1	EB for Discharge only
		East L.A.	635 H1	E-W	Whitter - Atlantic					1		1 B		2	
		East L.A.	635 F7	E-W	Whitter - Arizona					1		1		2	
		East L.A.	675 E7	E-W	Whitter - Herbert					1		1 B		2	
		East L.A.	675 D7	E	Whitter - Indiana					1				1	WB in City of L.A.
		Veterans Admin.	631 J4	E-W	Wilshire - VA Hospital (Bonsall)					1		1		2	
										5		5		10	
2003	Vermont	Athens	704 A4	S	Vermont - Century			1						1	NB in City of L.A.
		Athens	704 A7	S	Vermont - Green Line Station			1						1	
								2						2	
2003	Florence	Florence	674 J7	E	Florence - Pacific					1				1	WB in Huntington Park
		Florence	674 G7	E-W	Florence - Blue Line Station					1		1		2	
		Florence	674 E7	E	Florence - Central					1				1	WB in City of L.A.
										3		1		4	
2004	Crenshaw-Rossmore	El Camino Village	733 F5	S	Crenshaw - Manhattan Beach			1						1	
								1						1	
2004	Soto	Walnut Park	674 J7	S	Pacific - Florence			1						1	NB in Huntington Park
								1						1	
	SUBTOTAL FIRST BID PACKAGE							**4**		**8**		**6**		**18**	

Fiscal Year	Corridor	County Areas	Map Page	Station Location	Station	Direction/Station Type: North Single	North Double	South Single	South Double	East Single	East Double	West Single	West Double	Total Station	Notes
2006	Western	Athens	703 H6	N-W	Western - Imperial	1						1		2	
						1						1		2	
2006	Lincoln	Marina Del Rey	672 B7	S	Lincoln - Mindanao			1						1	NB in City of L.A.
								1						1	
2007	Central	Florence	674 E7	N	Central - Florence	1								1	SB in City of LA
		Florence	704 E7	N	Central - Manchester	1								1	SB in City of LA
		Florence	704 F7	E	Central - Imperial					1				1	NB in City of LA
						2				1				3	
2007	Atlantic	East L.A.	635 H6	N-S	Atlantic - Beverly	1		1						2	
		East L.A.	675 H1	N-S	Atlantic - Whittier	1		1						2	
		E. Rancho Domgz	735 D3	N	Atlantic - Rosecrans	1								1	SB in Compton
						3		2						5	
2008	Garvey-Chavez	City Terrace	635 G5	E-W	Cesar Chavez - Mednik					1		1		2	
		City Terrace	635 F5	E-W	Cesar Chavez - Eastern					1		1		2	
		City Terrace	635 D5	E-W	Cesar Chavez - Rowan					1		1		2	
		City Terrace	635 C5	E	Cesar Chavez - Indiana					1				1	WB in City of L.A.
										4		3		7	
2008	Manchester	Florence	704 G2	E-W	Manchester - Blue Line Station					1		1		2	
			704 E2	E	Manchester - Central					1				1	WB in City of L.A.
										2		1		3	
2008	Torrance - Long Beach		764 A6	E	Carson - Normandie					1				1	WB in City of L.A.
			764 B6	E-W	Carson - Vermont					1		1		2	
										2		1		3	
X	Reserved Stations													3	possible corridor modifications
	SUBTOTAL SECOND BID PACKAGE					**6**		**3**		**9**		**6**		**27**	

	GRAND TOTAL					**16**		**7**		**17**		**12**		**45**	

1 = Single Canopy Station
1B = 2-foot Canopy Station
0 = Long Beach Blvd. and Soto corridors share same southbound stop at Pacific/Florence. Thus only 1 station is needed.

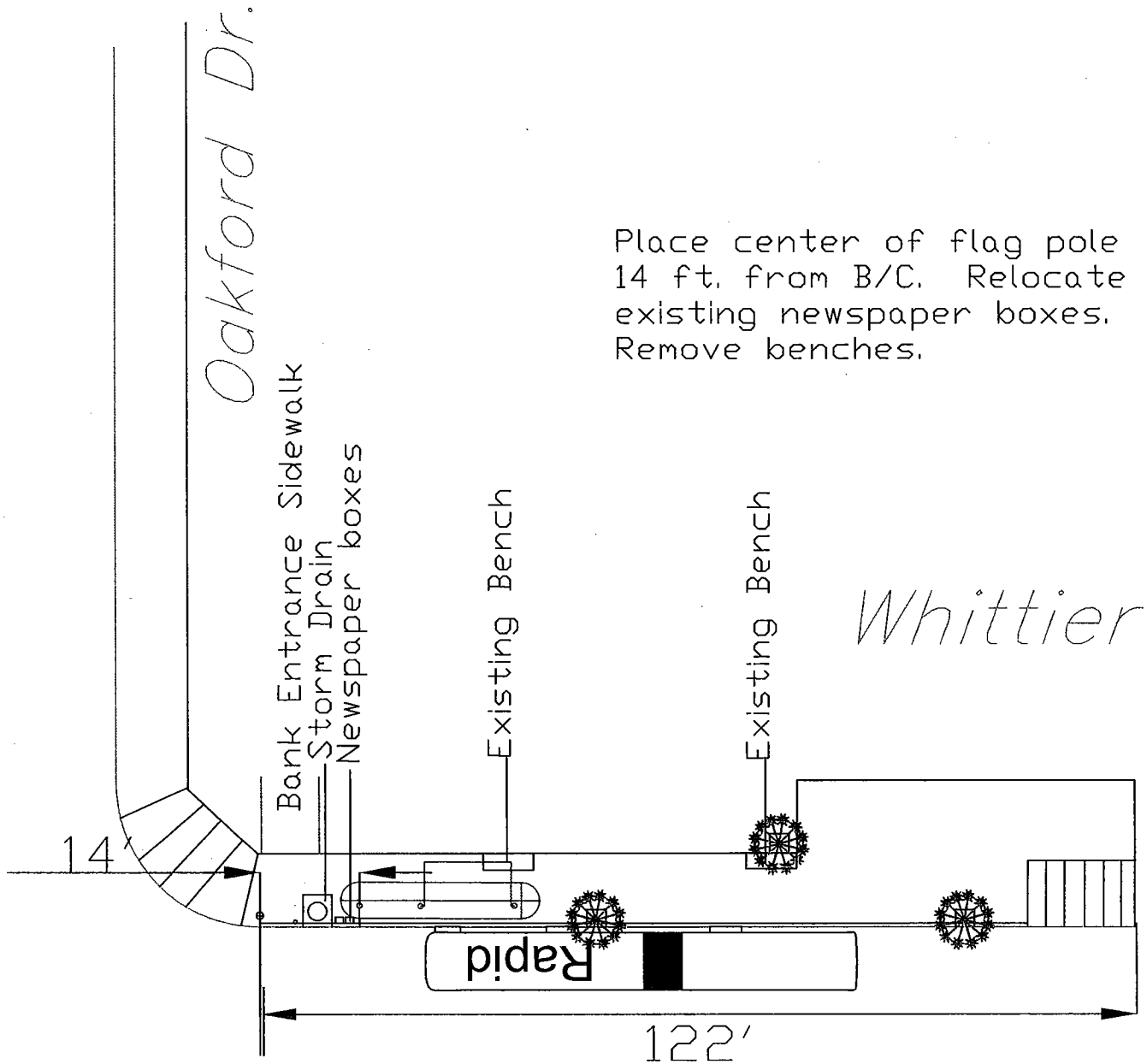
Attachment 4-A

First Bid Package

Station Layouts
And
Sidewalk Infrastructure

Line: ***Whilshire - Whittier***

Stop: **Whittier - Oakford Westbound**



Place center of flag pole 14 ft. from B/C. Relocate existing newspaper boxes. Remove benches.

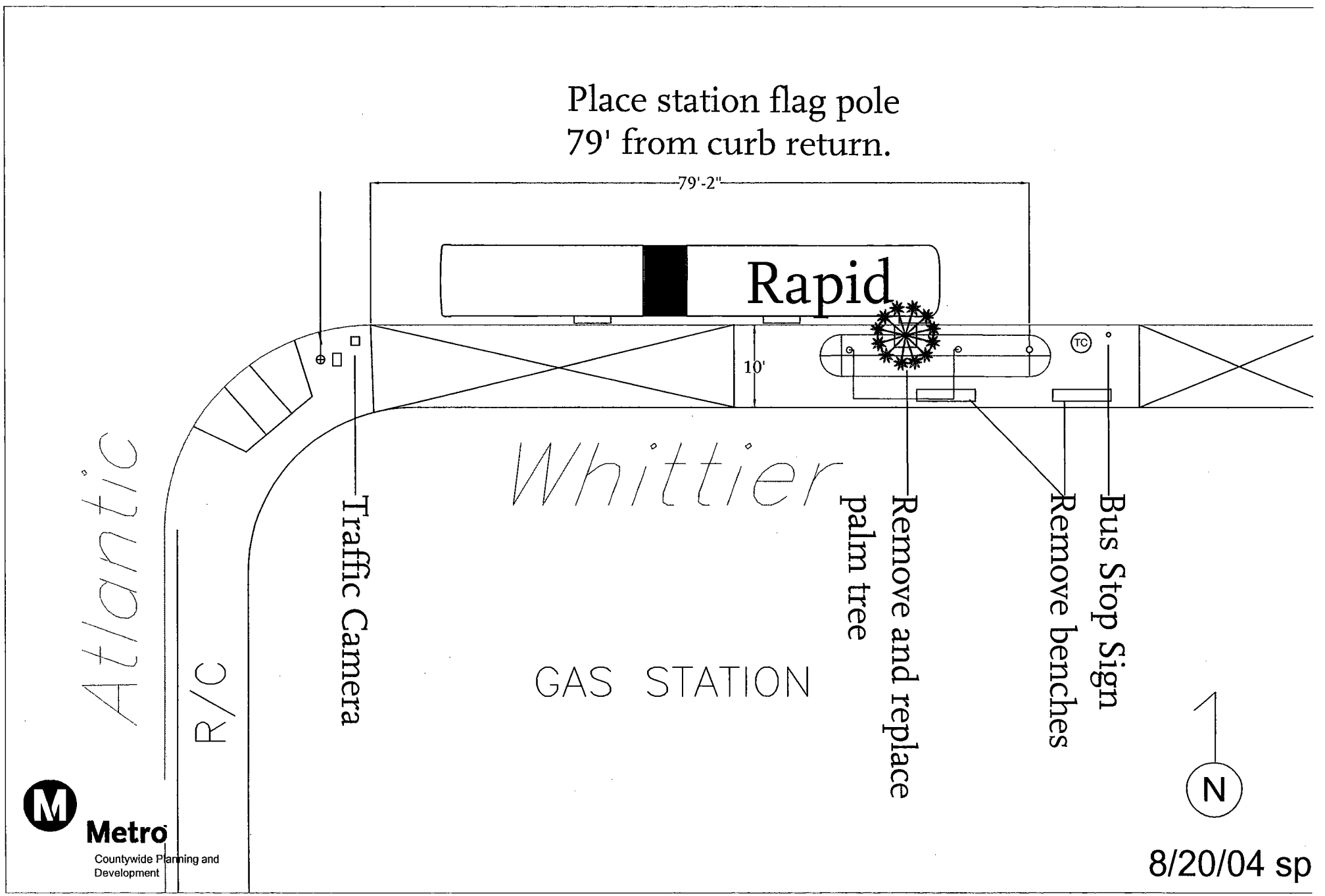
N

Metro
Countywide Planning and Development

8/9/04 sp

Line: ***Wilshire - Whittier***

Stop: **Whittier - Atlantic Eastbound**

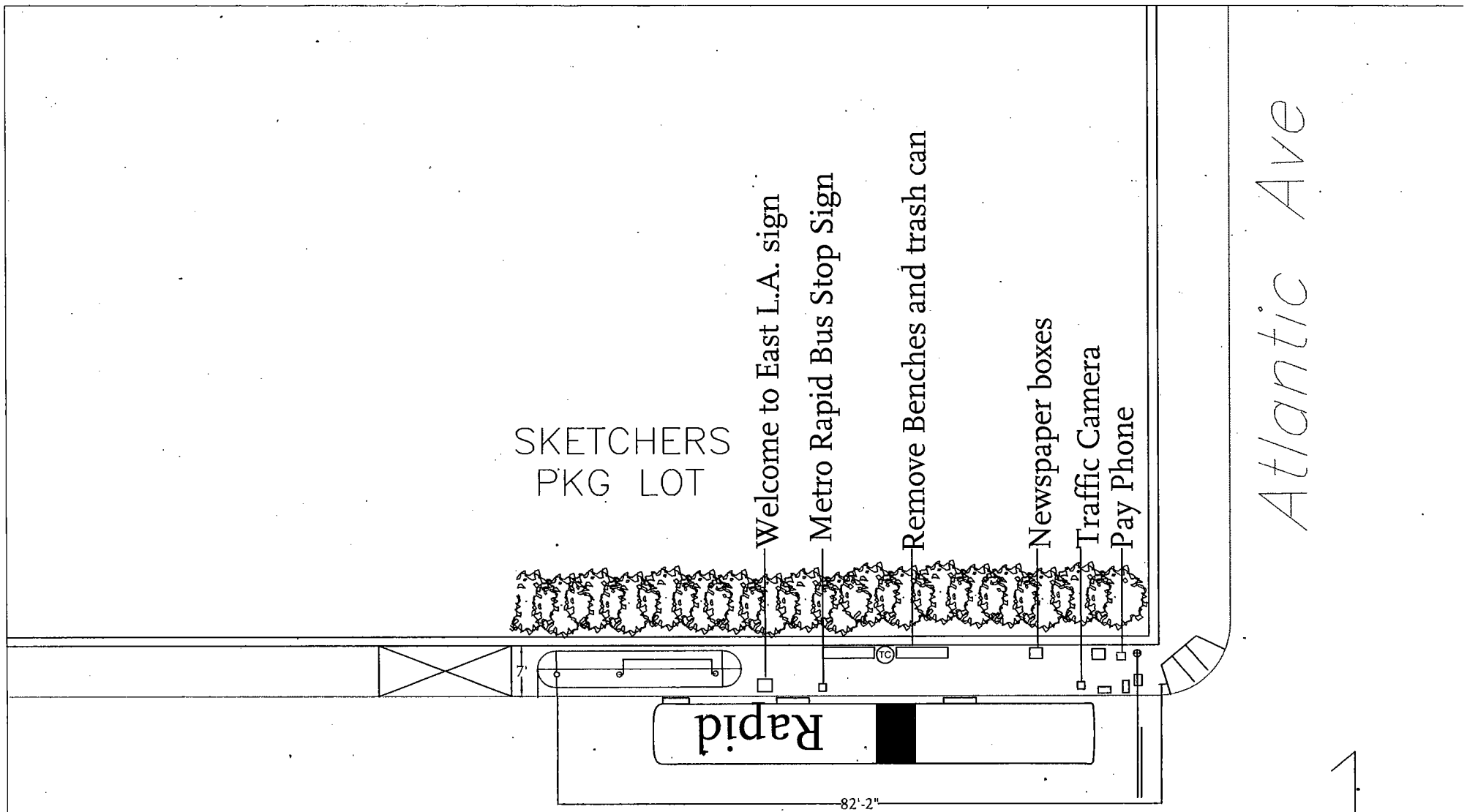


Metro
Countywide Planning and Development

8/20/04 sp

Line: ***Wilshire - Whittier***

Stop: **Whittier - Atlantic Westbound**

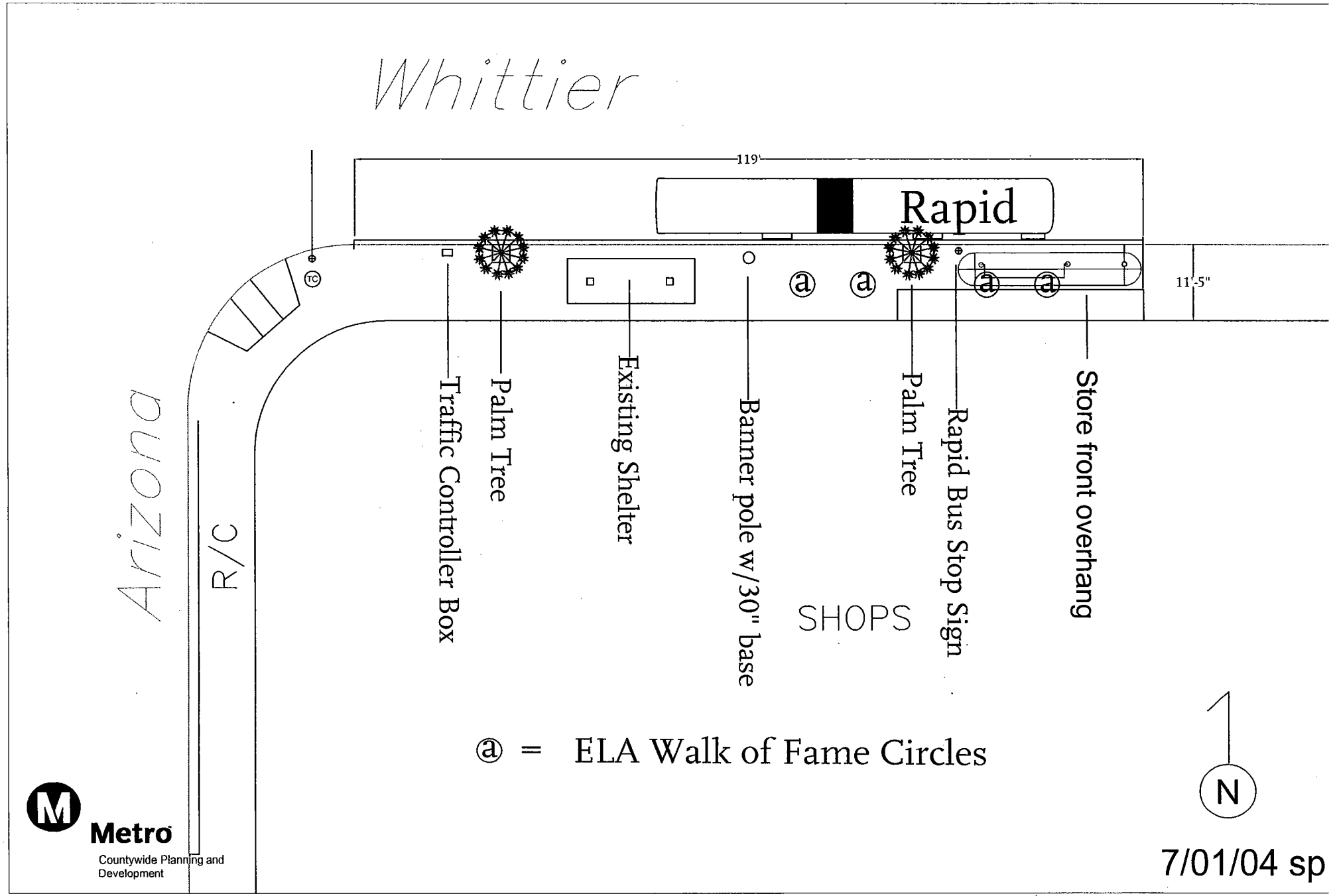


Metro
Countywide Planning and Development

8/20/04 sp

Line: ***Wilshire - Whittier***

Stop: **Whittier - Arizona Eastbound**

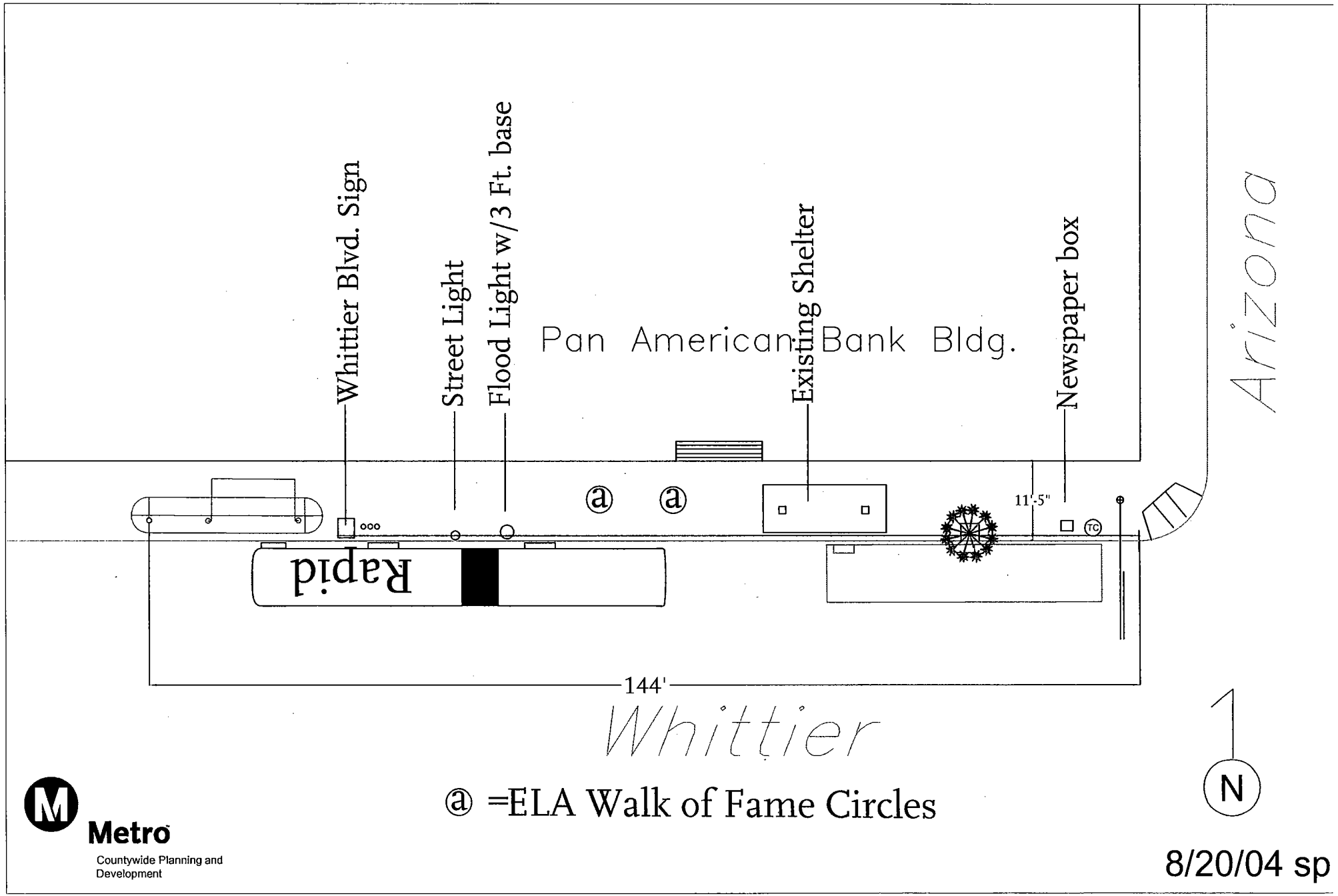


Metro
Countywide Planning and Development

7/01/04 sp

Line: ***Wilshire - Whittier***

Stop: **Whittier - Arizona Westbound**



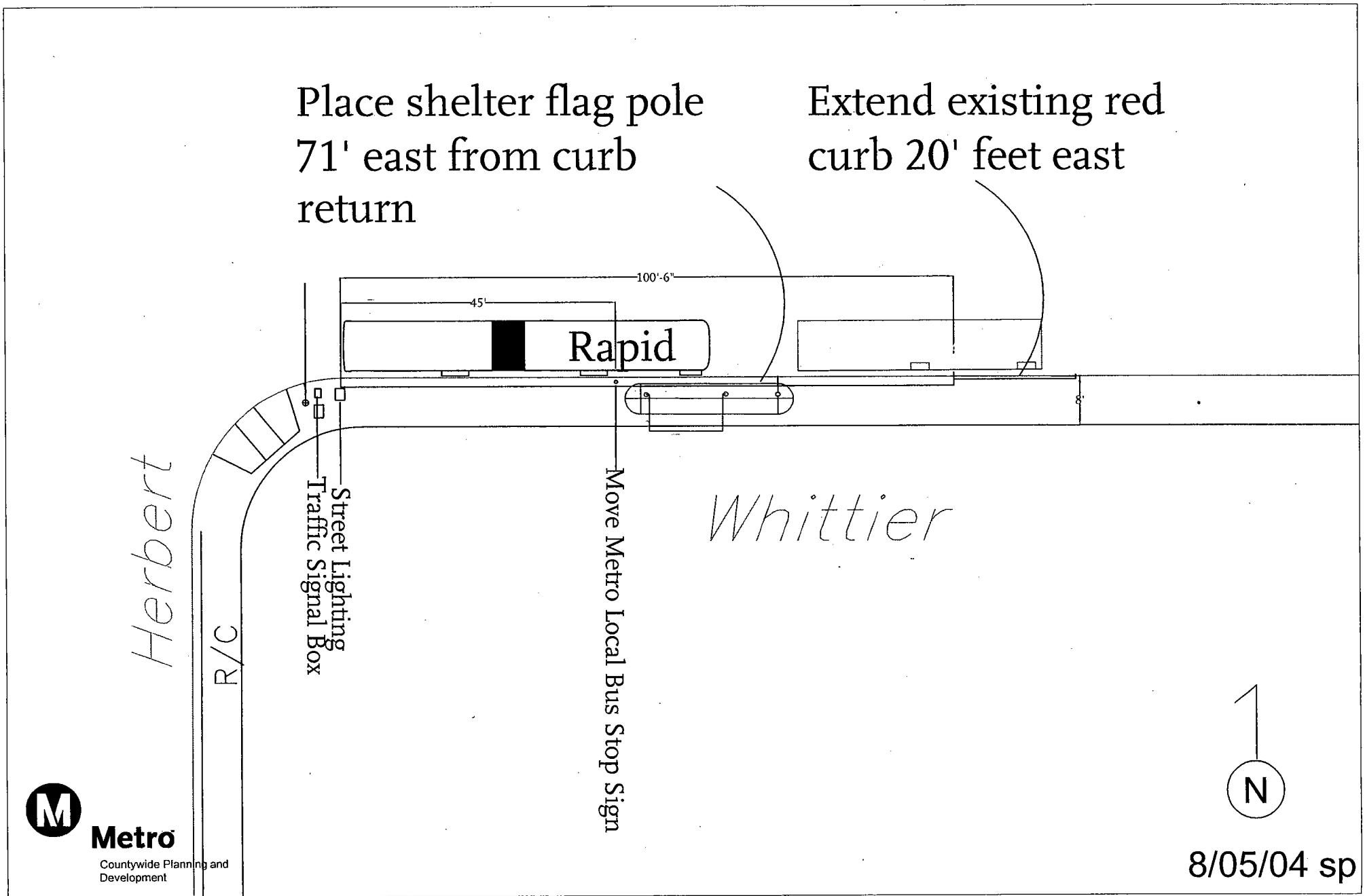
Metro

Countywide Planning and Development

8/20/04 sp

Line: ***Wilshire - Whittier***

Stop: **Whittier - Herbert Eastbound**

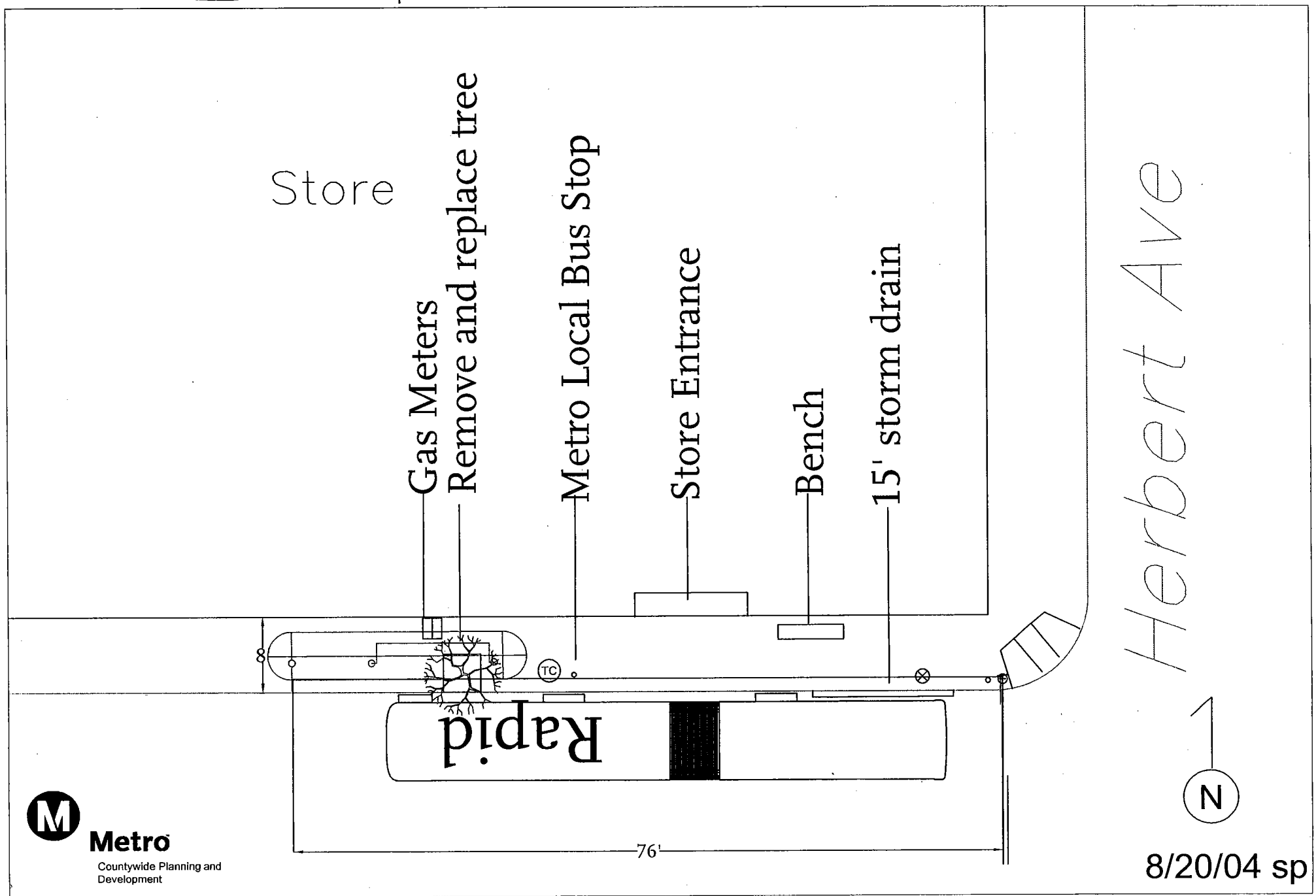


Metro
Countywide Planning and Development

8/05/04 sp

Line: ***Wilshire - Whittier***

Stop: **Whittier - Herbert Westbound**

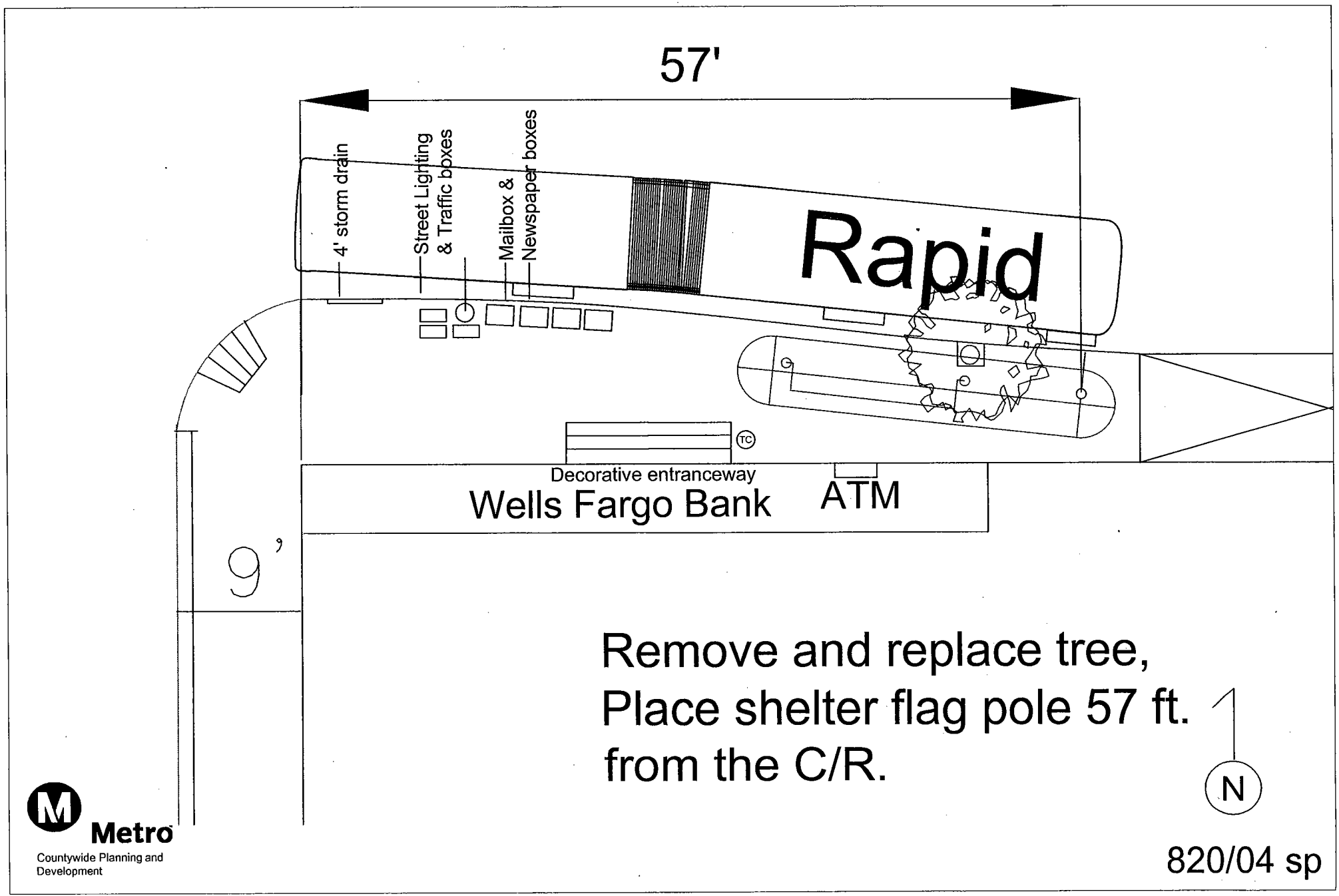


Metro
Countywide Planning and Development

8/20/04 sp

Line: ***Wilshire - Whittier***

Stop: **Whittier - Indiana Eastbound**

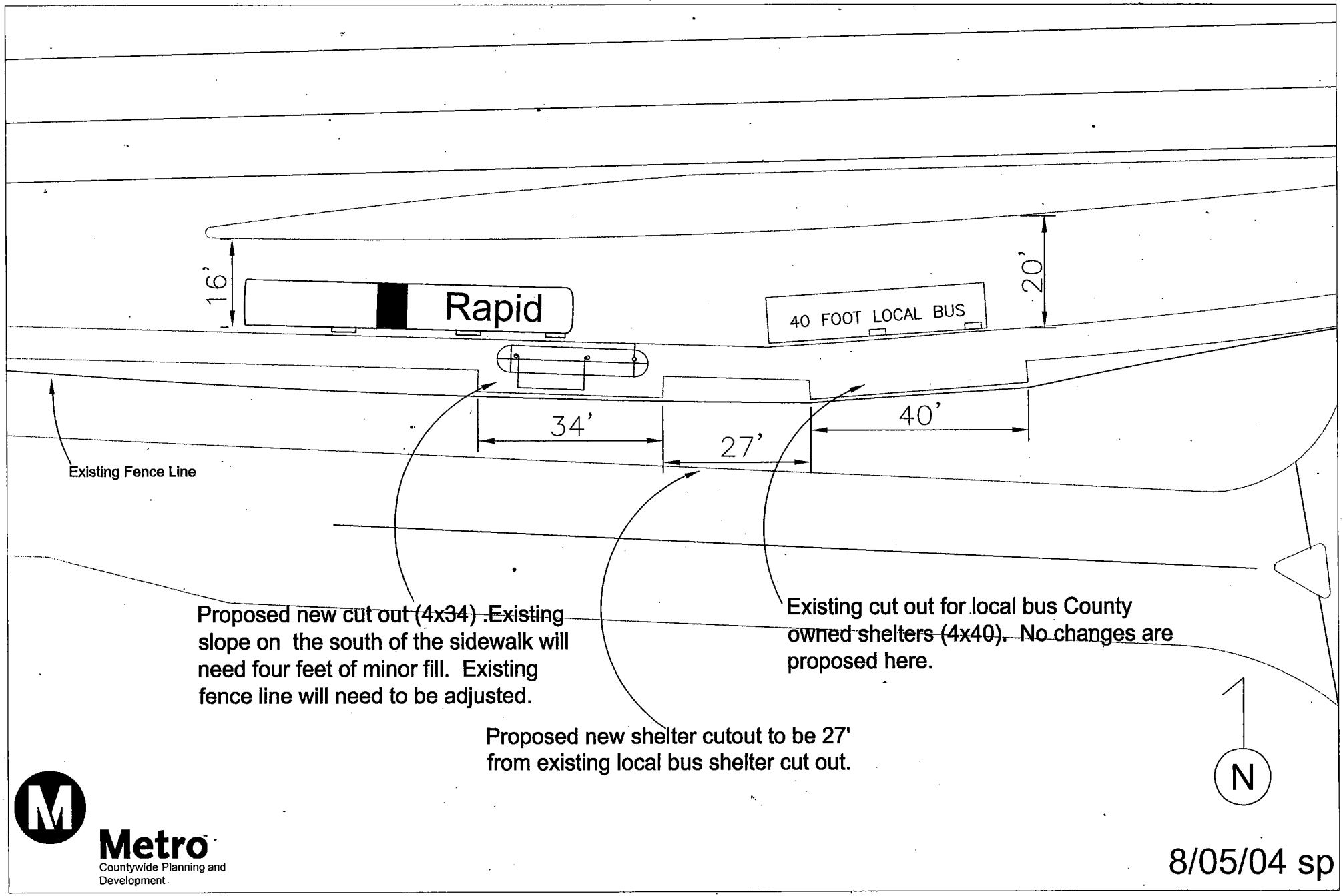


Metro
Countywide Planning and Development

820/04 sp

Line: ***Wilshire - Whittier***

Stop: **Wilshire - Veterans Hospital (Bonsall) Eastbound**



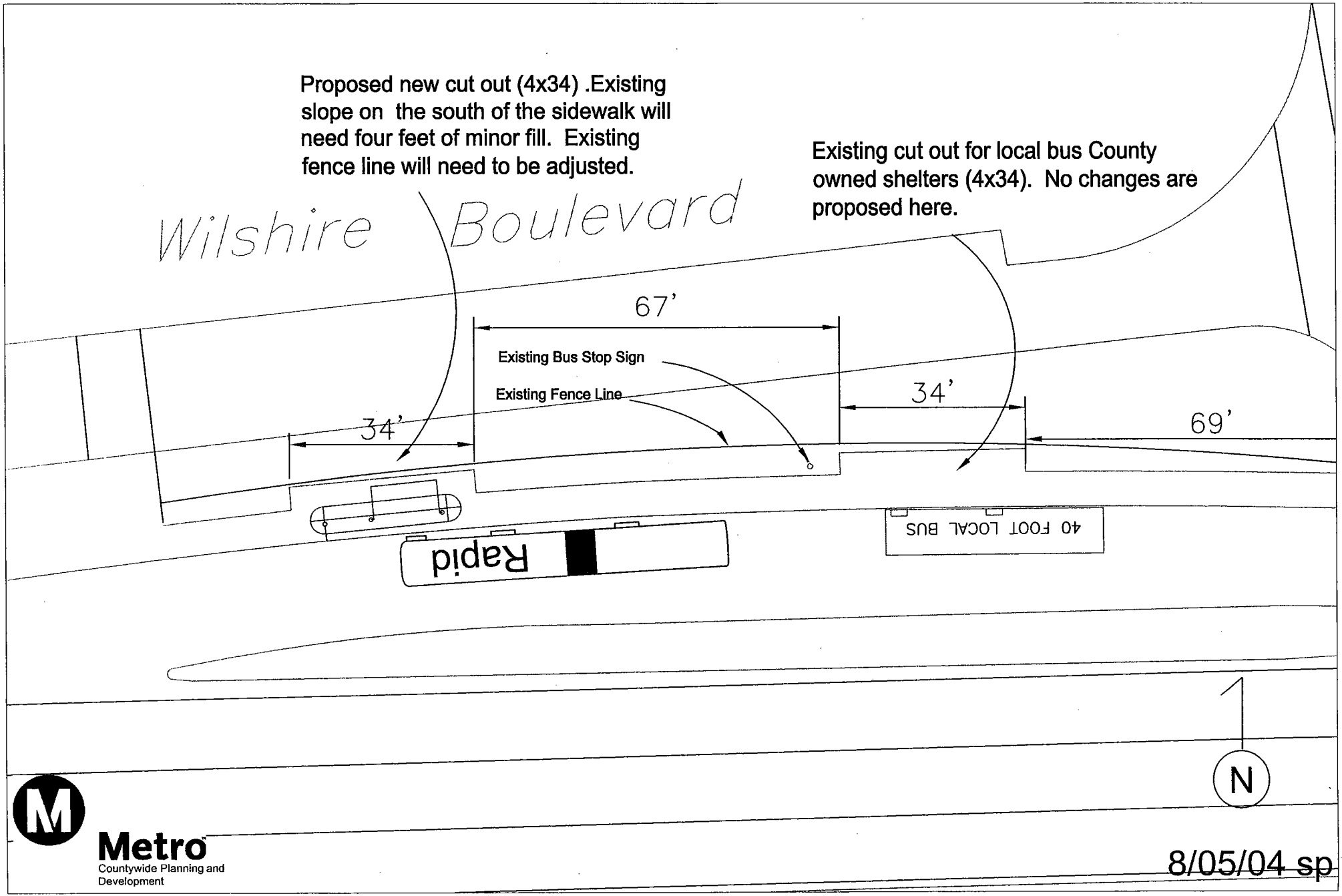
Metro
Countywide Planning and Development

8/05/04 sp

Rapid

Line: ***Wilshire - Whittier***

Stop: **Wilshire - Veterans Hospital (Bonsall) Westbound**



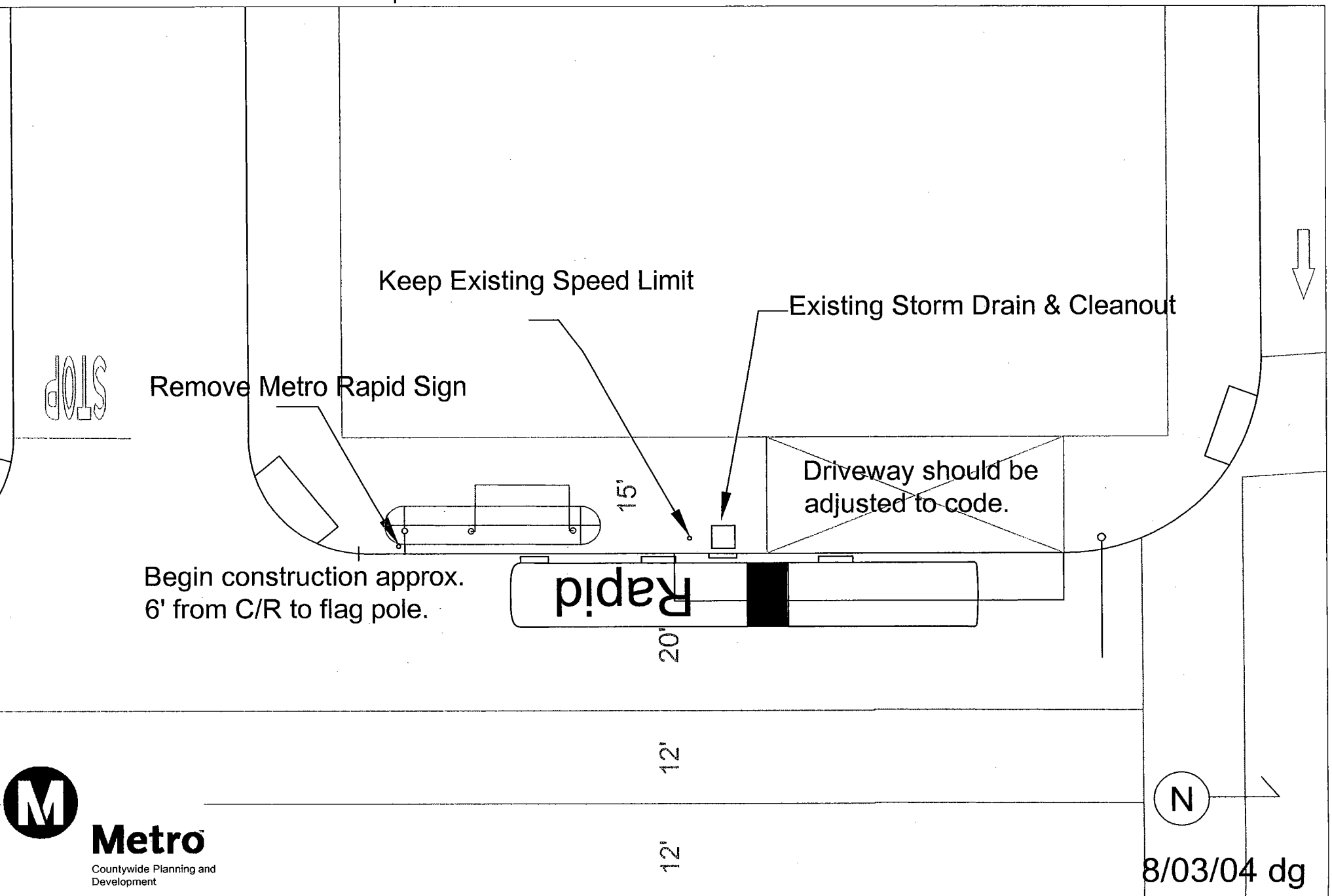
Metro
Countywide Planning and Development

8/05/04 sp

Rapid

Line: ***Vermont***

Stop: **Vermont - Century Southbound**



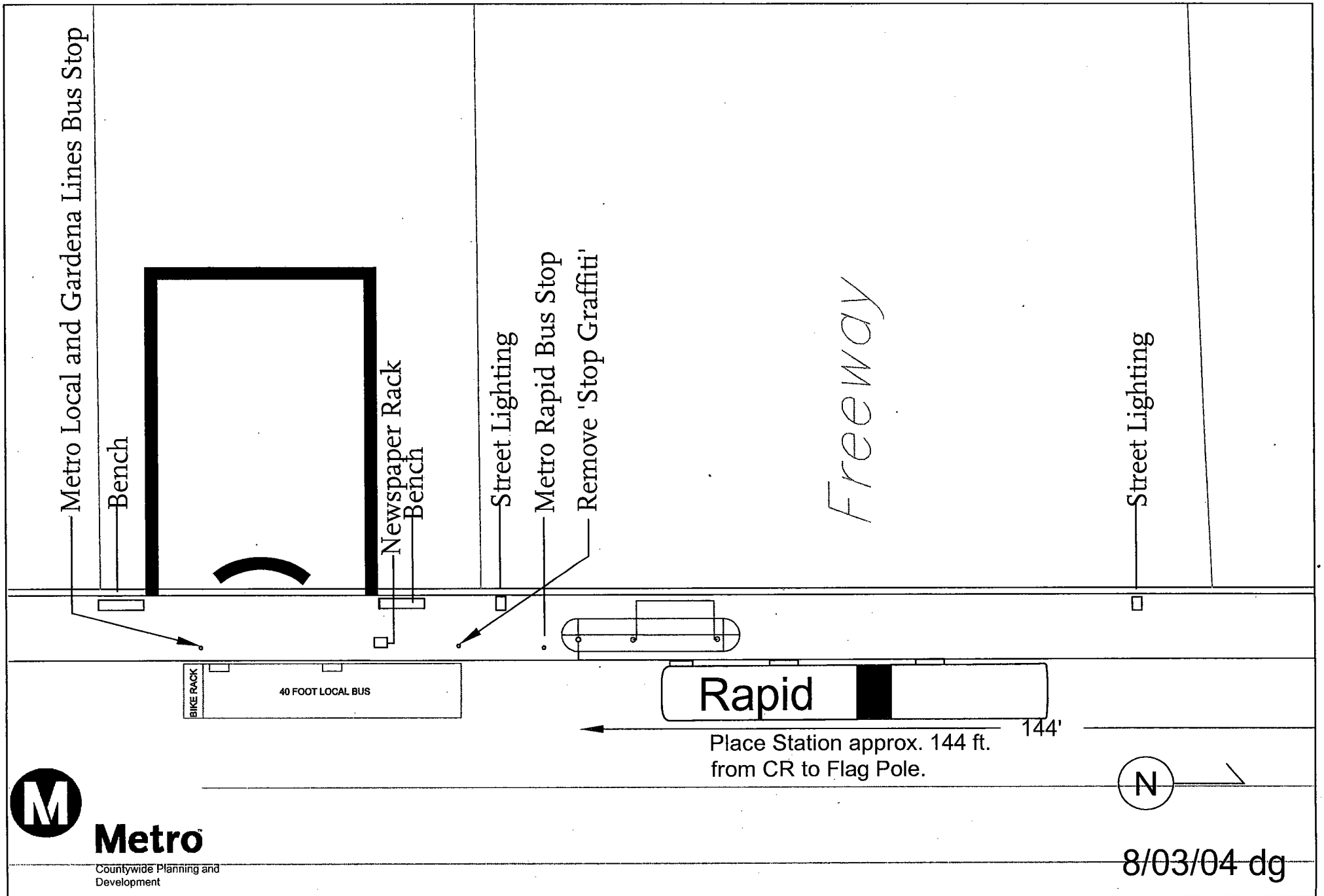
Metro

Countywide Planning and Development

8/03/04 dg

Line: ***Vermont***

Stop: **Vermont - Green Line Station, Southbound**



Metro

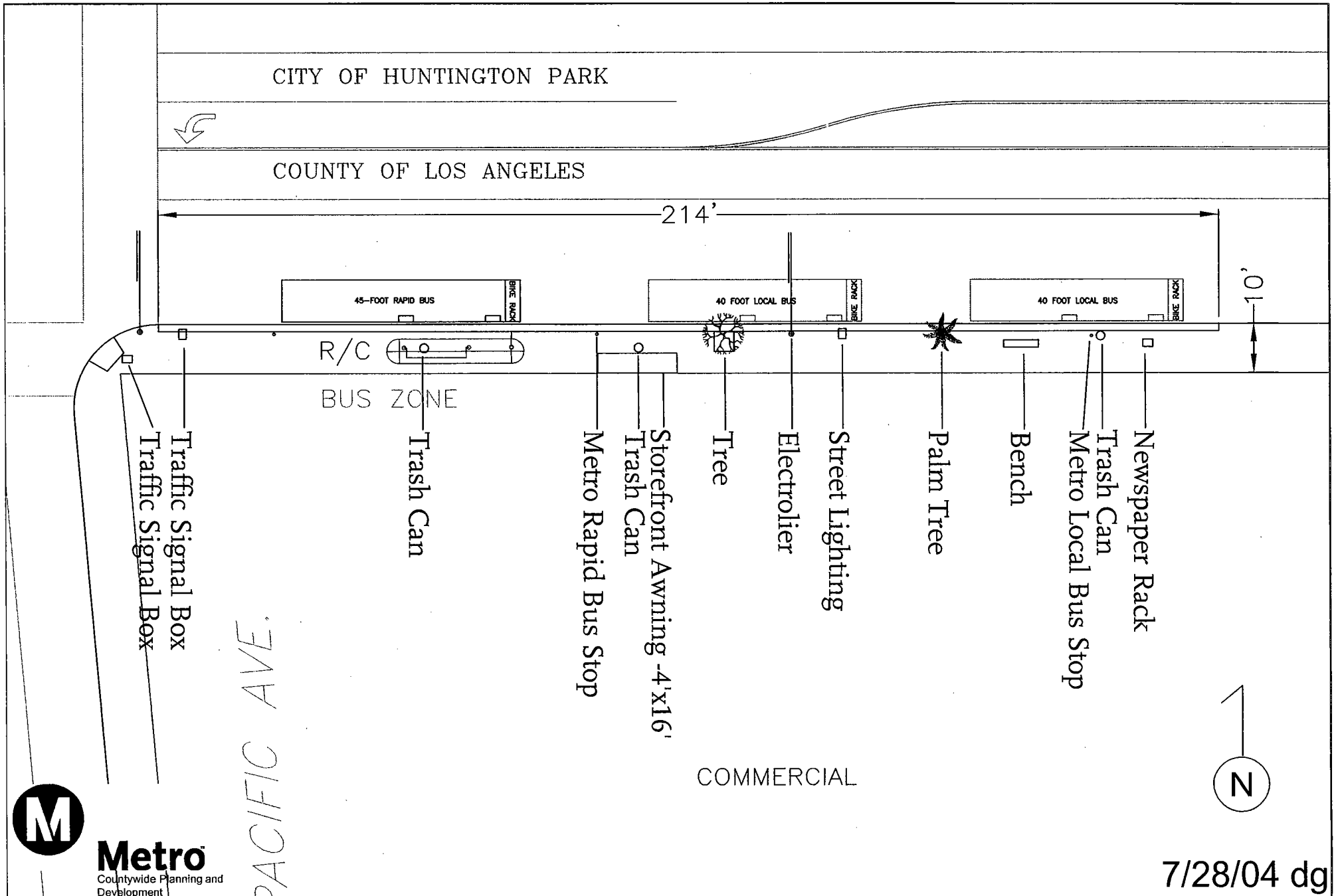
Countywide Planning and Development

8/03/04 dg

Rapid

Line: ***Florence***

Stop: **Florence - Pacific, Eastbound**

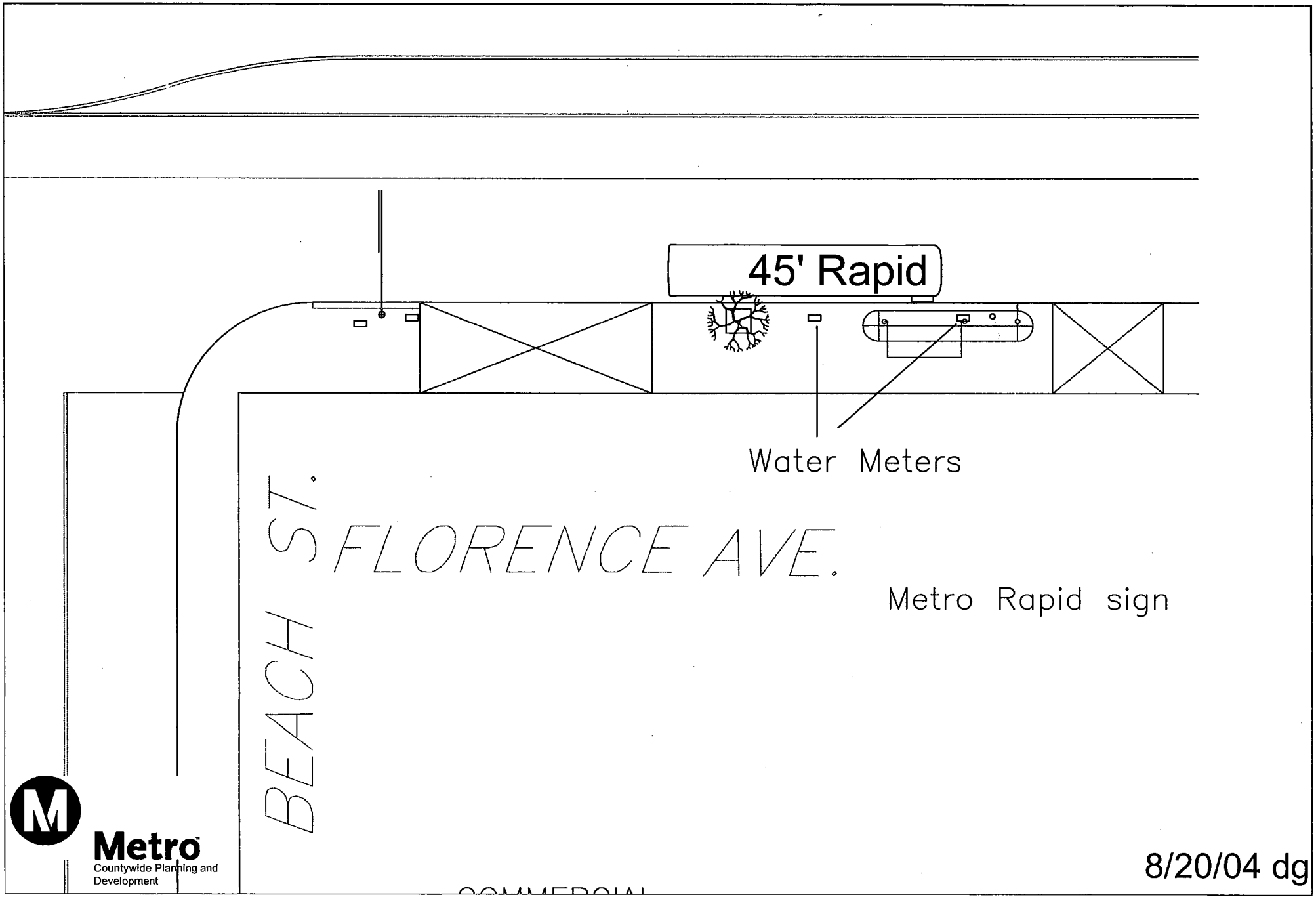


Metro
Countywide Planning and Development

7/28/04 dg

Line: ***Florence***

Stop: **Florence - Blue Line Eastbound**



Metro
Countywide Planning and Development

8/20/04 dg

Rapid

Line: ***Florence***

Stop: **Florence - Blue Line Station Westbound**

MEDICAL—BLDG

PARKING—LOT

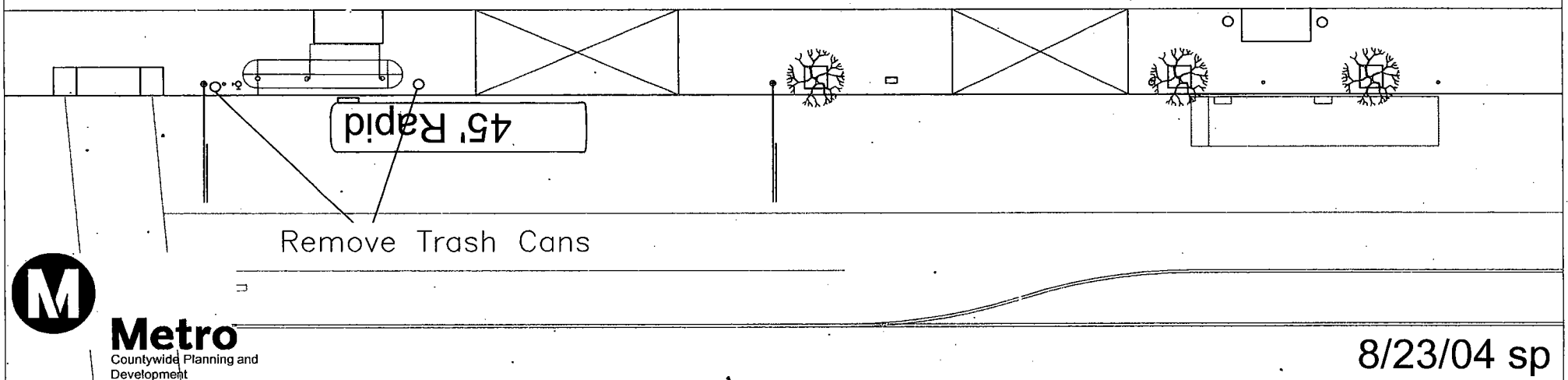
COMMERCIAL/INDUSTRIAL

Metro Rapid sign

Remove Existing bus shelter

Place local bus shelter and trash cans here

FLORENCE AVE.

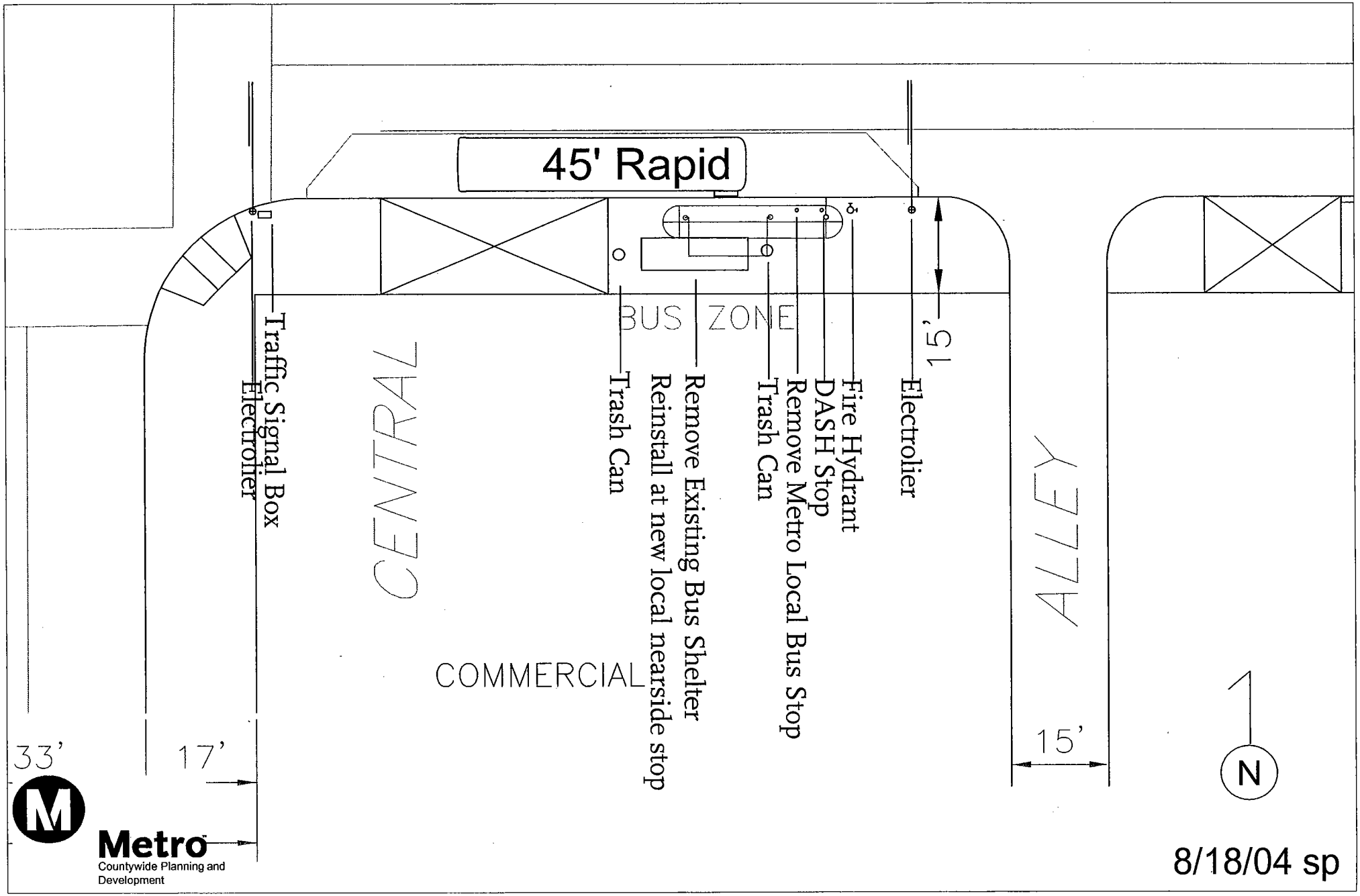


Metro
Countywide Planning and Development

8/23/04 sp

Line: ***Florence***

Stop: **Florence - Central Eastbound**

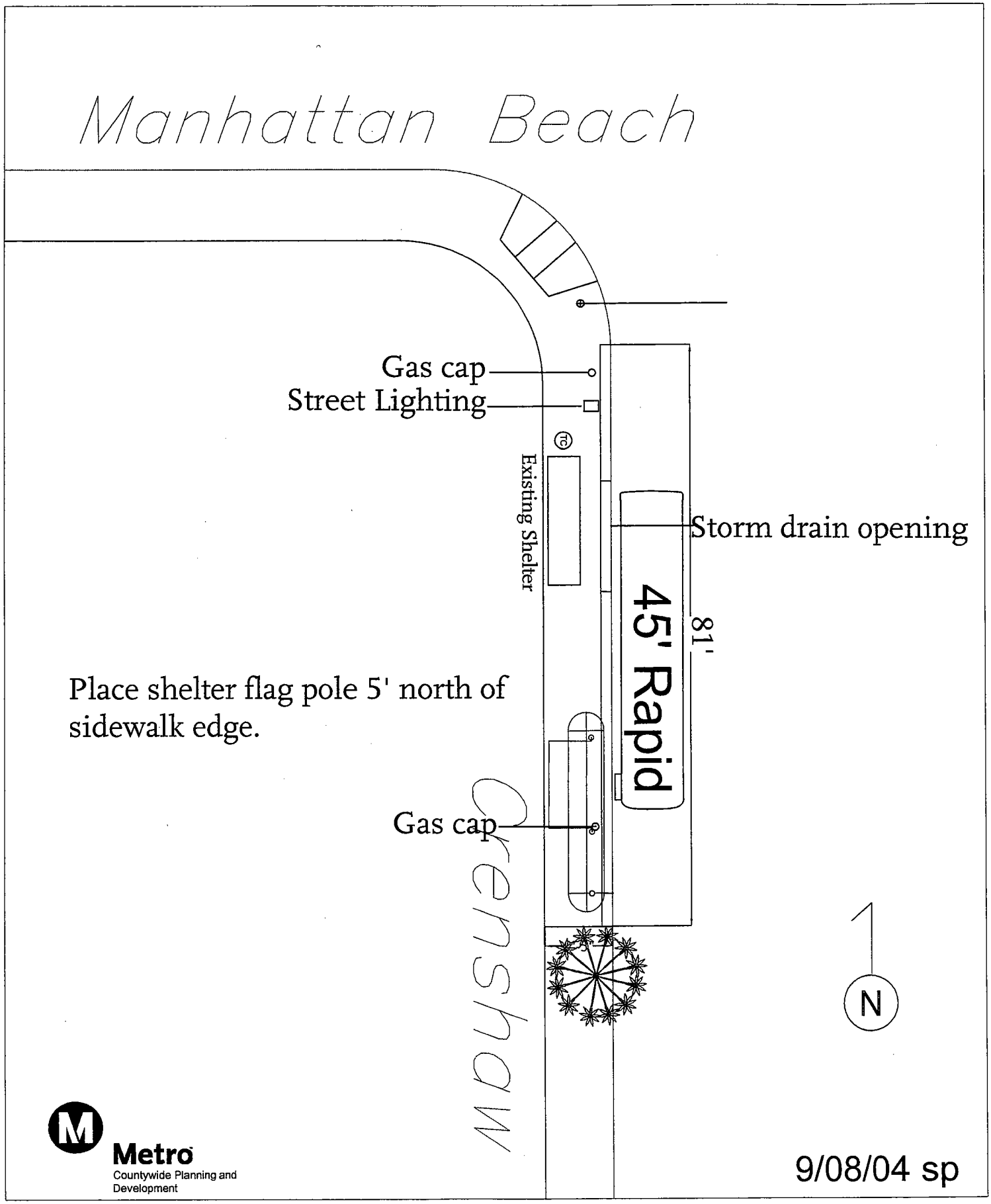


Metro
Countywide Planning and Development

8/18/04 sp

Line: **Crenshaw**

Stop: **Crenshaw - Manhattan Beach Southbound**



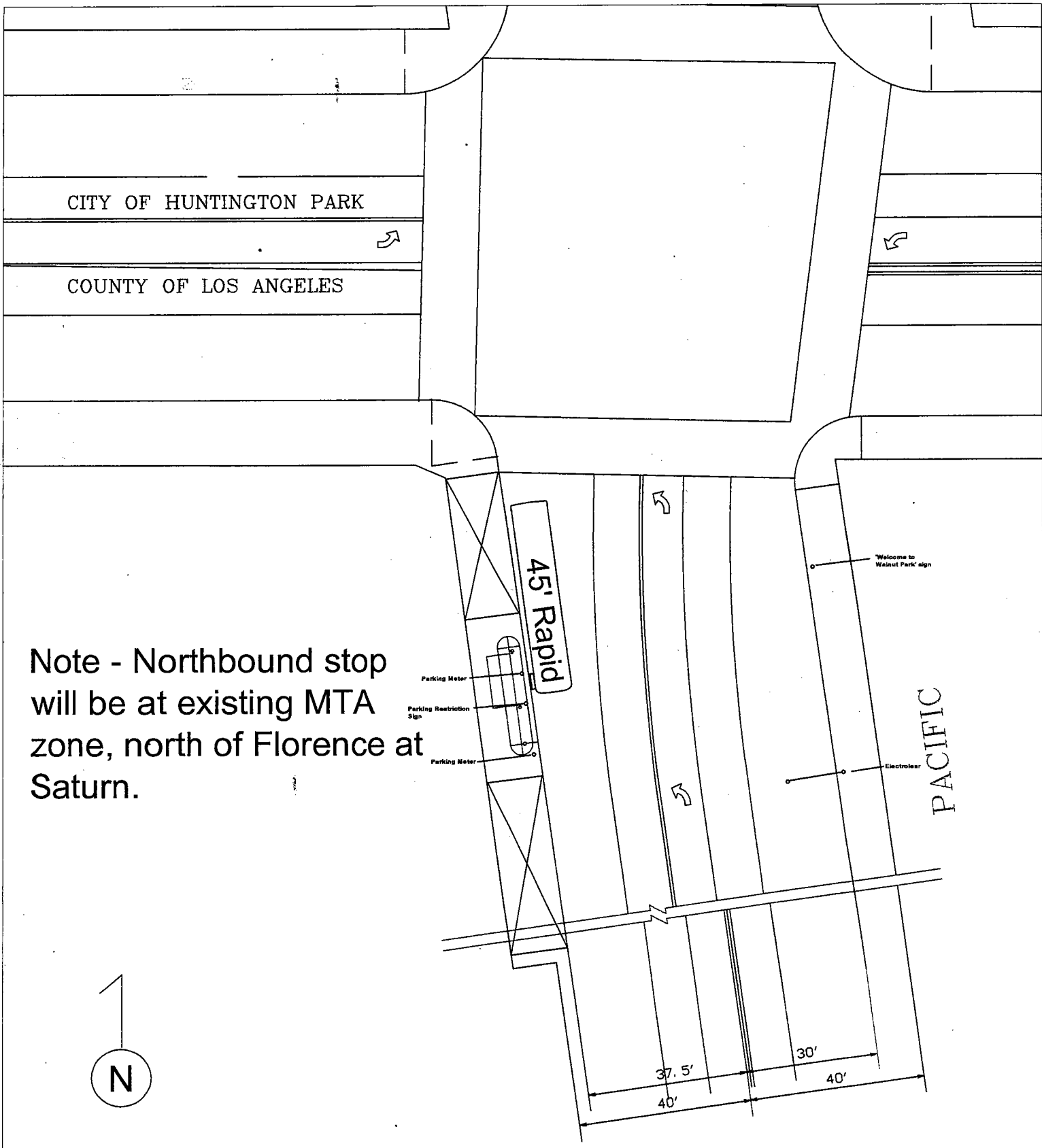
Metro
Countywide Planning and Development

9/08/04 sp

Rapid

Line: **Soto**

Stop: **Pacific - Florence Southbound**



Note - Northbound stop will be at existing MTA zone, north of Florence at Saturn.

N

Metro
Countywide Planning and Development

8/17/04 sp

Attachment 5

Cost Summary Estimate
Metro Rapid Shelter Program

COUNTY OF LOS ANGELES
METRO RAPID FIVE-YEAR IMPLEMENTATION PLAN
Rapid Transit Shelter Estimated Annual Fund Amount

PROJECT BUDGET ($)

METRO RAPID CORRIDORS		County Area	Miles	Single Canopy	Double Canopy	FY 2003-04		FY 2004-05		FY 2005-06		FY 2006-07		FY 2007-08		FY To Be Determined	TOTAL
						DEC 2003	JUN 2004	DEC 2004	JUN 2005	DEC 2005	JUN 2006	DEC 2006	JUN 2007	DEC 2007	JUN 2008		
Phase 1	Wilshire - Whittier	East L.A. and Veterans Admin.	22.5	10		491,600											491,600
	Existing Local Transit Shelter Relocation					4,000											4,000
Phase 2A	Vermont	Athens	12.7	2	-	98,320											98,320
	Florence	Florence	12.3	4	-	196,640											196,640
	Crenshaw - Rossmore	El Camino Village	18.2	1	-		49,160										49,160
	Soto	Walnut Park	13.0	1	-		49,160										49,160
	Existing Local Transit Shelter Relocation						16,000										16,000
Phase 2B	No Stations in LA County Unincorp.							N/A	N/A								-
Phase 2C	Western	Athens	13.1	2	-					98,320							98,320
	Lincoln	Marina Del Rey	12.1	1	-						49,160						49,160
	Existing Local Transit Shelter Relocation										8,000						8,000
Phase 2D	Central	Florence	10.6	3	-							147,480					147,480
	Atlantic	East L.A. and E. Rancho Domgz.	25.1	5	-								245,800				245,800
	Existing Local Transit Shelter Relocation												8,000				8,000
Phase 2E	Garvey - Chavez	City of Terrace	14.7	7	-									344,120			344,120
	Manchester	Florence	13.5	3	-									147,480			147,480
	Torrance - Long Beach		15.6	3	-										147,480		147,480
	Existing Local Transit Shelter Relocation														12,000		12,000
	**Future Stations Location To Be Determined*			3												147,480	147,480
TOTAL			**183**	**45**	**-**	**790,560**	**114,320**	**-**	**-**	**98,320**	**57,160**	**147,480**	**253,800**	**491,600**	**159,480**	**98,320**	**2,260,200**

* Estimated Cost for relocation of existing local transit shelters.
**Funds set aside for future station requests
N/A indicates no stations constructed in FY 05

September 9, 2004

Los Angeles County Metropolitan Transportation Authority

Rapid Bus Station Cost Estimate

Description	*Quantity*	*Units*	*Unit Cost*	*Total Cost*
Total Cost for Station Type				
Single Canopy Gate	42	EA	49,160	2,064,720
Future Stations, Locations To Be Determined	3	EA	49,160	147,480
				2,212,200
Relocation Local Shelter				**48,000**
Total	***45***			***2,260,200***

Prepared September 9, 2004

Los Angeles County Metropolitan Transportation Authority

Rapid Bus Station Cost Estimate

Description	*Quantity*	*Units*	*Unit Cost*	*Subtotal*	*Total Cost*
Single Canopy Gate					
Site Work					
Demolition & Site Preparation	1	LS	2,136	2,136	
Utility Relocation (Allowance)	1	LS	2,000	2,000	
Electrical Service and Signal Trench	100	LF	18	1,800	
Paving Allowance	1	LS	2,240	2,240	
					8,176
Umbrella Gates					
Concrete Foundation	2	EA	996	1,992	
Steel "H" Frame Structure w/Painted Steel Lean Bars	1	EA	15,080	15,080	
Translucent Roof Canopy Structure	1	EA	7,312	7,312	
Light Fixtures	2	EA	1,400	2,800	
Paining/Coating	1	LA	1,720	1,720	
					28,904
Map Kiosk					
Kiosk Footing (1 Map Kiosk Small Size)	0	EA	628	0	
Illuminated Display Panel w/Sign	1	EA	4,400	4,400	
					4,400
Other Freestanding Furnishings					
Flagpole Sign	1	EA	2,600	2,600	
Litter Baskets	1	EA	600	600	
Lean Bars	2	EA	600	1,200	
					4,400
Changeable Message Sign					
CMS Allowance	1	EA	2,800	2,800	
Architectural Aluminum Enclosure	1	EA	480	480	
					3,280
Total					***49,160***

Prepared September 9, 2004